Translated from vietnamese and complied to AdobePDF
by LithiumLi of *forum.astalavista.ms*.

Introduction

1.1 Introduction

- Dear You, are "in" in your book is **REA_UnPacKing Ebook,** this is a document of the forum **Reverse Engineering Association (REA)** of the articles related to field **Manual unpack** by members in BQT also has a brother in contributions during the time since the establishment of REA to the present. Variety of genres, rich in content, short, and animals with the appropriate "level" is that REA hope will achieve in this document.

- Looking back through time, REA has the step is quite long in Reverse. The success that REA have today are because of the contribution does not stop the rest of the members of the REA. The administrator (BQT) REA Thank and send the best wishes to all members involved and sticking with REA.

1.2 History development process REA

- This is not a document first REA general, before this document REA have the document as **REA-cRaCkErTeAm Tutorials, PE Tutorials, Reverse. Net Software, Tutorials v. IDA. Etc..** And the future expectation is there will be complete **OllyDbg Tutorials** J . With the document **REA_UnPacKing** hope this gives you the benefit of no less what the material above, but with many members participating REA sure many people still wonder REA got what? So I would mạn allowed on behalf of BQT REA brief summary of a few lines of the formation and development of the REA to the present. History is not to say about yourself that REA purpose here is to help members of the REA have more understanding of the formation of "the family" that you are attending.

- In the early days inceptive, REA is just a box of the **HVA.** Member of the box is not much (I also personally involved HVA since **13/07/2004).** At that time, this box operation brought heavy warez is calculated and a lack of depth technical Reverse, which may then the concept of RE is still doubtful. Activities mainly by box is to provide a crack for software that members of the HVA ask for help. This box to that time there was quite perplexed with text ... Request.

- Until tut series of **"How to become a cracker"** was born Cracking the box was moved to a new step parentheses. Turn other members that are now pillars of REA appear. Can say this is the golden period of the HVA Cracking box. Activities really exciting, tut the series was created across all sectors: patch, crack, keygen, unpack ... to excel in those named as Computer_Angel, Zombie, Moonbaby, RCA, Deux , hacnho, and infinite v. dqtln. v.. (and some other members but I do not remember).

- With developed more quickly requires a playground for Cracking the three members at that time is **Computer_Angel - Zombie - Moonbaby** offline after a meeting has decided to establish a separate forum, a playground of their own and separated from the box really Cracking of HVA. 3 admin REA's sit together and officially established with the domain name forum is **reafareastking** (domain name to remember it too difficult) and the REA was born from that.

- But was separated from HVA (a popular forum at that time) and work on a host's REA but still not so that going down. Confirm it is for the participation of a range of key members such as **RCA, Deux, LittleBoy, QHQCrker, benina, kienmanowar and the_Lighthouse.** Lao **hacnho** now also participate in discussions but REA aged and another member is **tlandn** a separate team get called **Vietnamese Cracking Team,** an independent Web site for Unpacking the domain is http://tothesky. U.S., members dqtln is also a member of good doctors but also biu busy with his team at the time, my memory is not mistaken deciduous (www.phudu.com) J .

- Living is a time and gradually to the stable REA suffered a big loss is **QHQCrker** members would withdraw from the REA (for personal reasons), member **the_Lighthouse** are living very well with the explosion many disappeared without a goodbye (cause I is not convenient to say here). However this time the REA welcoming a new member is **hoadongnoi,** this may say a woman who is very active and is only made to the REA J mod. Activities for a period of time following the REA to share hands member **Deux** is key, now the site is aged hacnho (tothesky.us) also attention but then it also must be accompanied by the feeding of regret many people, and **hacnho tlandn** of activities at REA as VIP members. Site of deciduous bác **dqtln** also departed, later doctors still do not know any other site again, just remember that the doctors also living in a time REA and Offline.

- REA of my time to join the official has taken a new domain (reaonline.net), I dropped in the box Cracking HVA a few times, I can remember times I reply article by a member with the nick is TQN members answer in this article about his Olly Anti com, just remember that after the items **TQN** reply that he has reg nick **(thangcuem)** to participate in the REA. With REA then really say that no more information about his TQN, but when he benina are wandering on the site outside the country see Nick TQN appear a lot to prove this is not the usual. He Benina immediately discuss with BQT seeking to enlist his TQN about living in REA. He is a member TQN older may equal or under his Benina (two did not know when he has offline age not nhỉ). Join a time he TQN from Nick thangcuem about TQN and VIP members of the REA. Now he has Benina gradually reduce the REA activities.

- Time activities follow REA welcoming the new members as **Thug4lif3** (forget to take the only time he's writing in this khúc), **Merc, light.phoenix, TrickyBoy, WhyNotBar, takada,** brother and many more and ... etc.. Thug is little writing but have broad knowledge, I have time to work with and Thug to present and future is still good brothers. Merc know my time to do a workshop with Thug, later in the Merc and Thug in the general level 3. At the par Merc REA is the capital of the speed with Soft keygen to dizziness. Light.phoenix is also a member of good, living seriously and have discussed the technical high also on the table by REA more gold in the Promotion admin Moonbaby have initiated. Two members can not follow is not to say that TrickyBoy and WhyNotBar, can say two members of REA emerging very rapidly after a series of tuts about Armadillo's aged in nho.Hien they are mod by REA. After the additional staff, the new mod hoadongnoi by REA start the work of individuals, gradually the regular activities in REA again.

- Computed at the time after lứa trickyboy, whynotbar, the REA takada welcoming some members also have many other factors such as quality **XIANUA, Moth, error, nhc1987,**

Akira, V. **mrangelx.** ... And

- After 4 years to work on a separate server, and former Admin Moonbaby Zombie has temporarily withdraw abandon the RCA, and Merc kienmanowar up to management (English Com is demanding he withdraw them not to hehe) to the time the current number of members of the REA has up to about 800 members. Can you ask a forum with about 800 members, the star called forum is exciting? Please answer the REA is now active in a number of rules is:
    - Quality over quantity: The members registered but not active within 1 month will be deleted from the database, as well as messages with chit chat, it will enable not exist in the REA.
    - No existing lessons Request: REA activities based on the sharing of knowledge is key, not the place to resolve the requirements individuals related Cracking / Unpacking. With these messages are the natural request were treated according to laws of the REA.
    - Activities under rules "family": When the REA is whether the level of your "high" in size to do what should probably just be used. "Glass on the franchise," "humble, very thà" rules are invariable by REA.

- Is the brief introduction and history of the establishment and development of REA. The hope was to bring you an overall look and use the referral back here for a little space for limited capital for the posts of technical Unpacking.

Body sent.
On behalf of BQT REA.

kienmanowar

Amardillo 4.xx-Patching Hardware Fingerprint (HWID)

Contents Table:

Tools: Hide OllyDBG + plugins, WinHex, ArmDetach 1.1

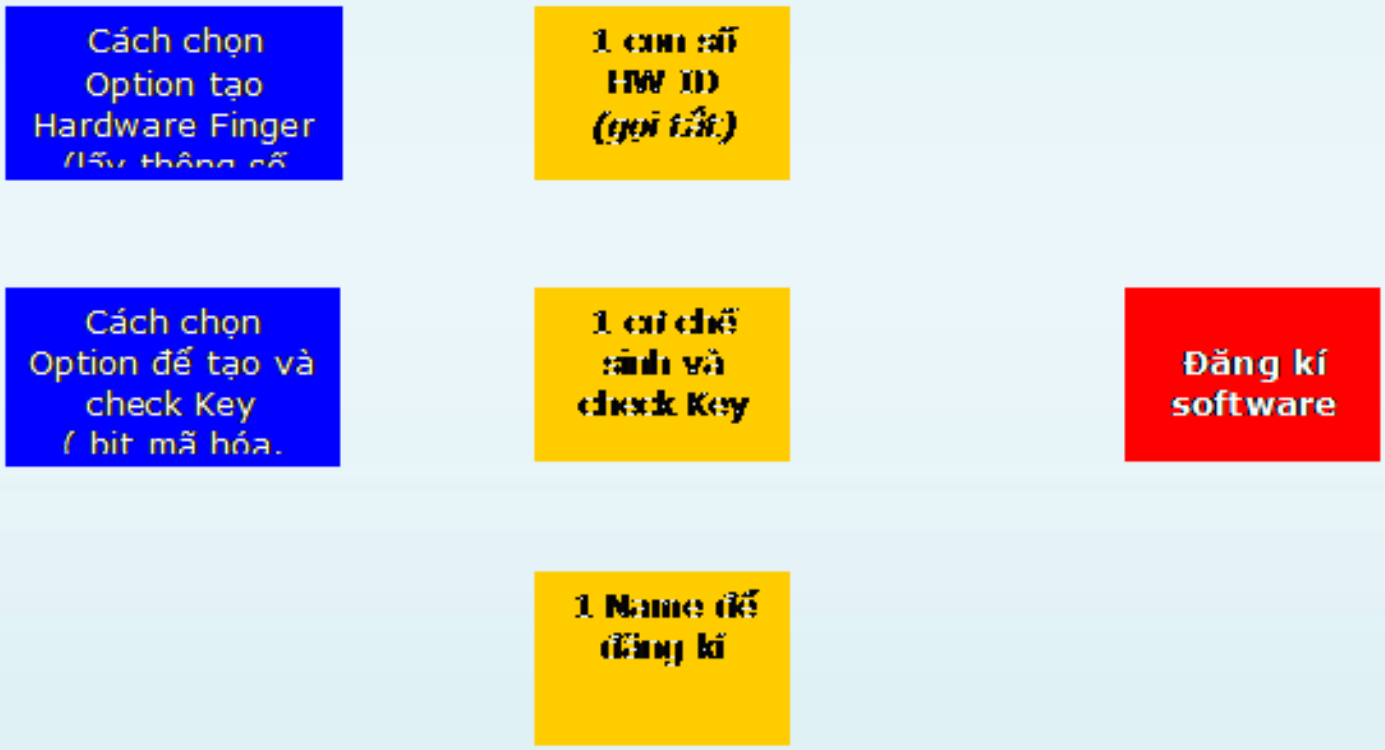
Skill Request: Using Basic Knowledge Olly + manual unpacking Armadillo.

I. Intro:

Hi all of you, after the World Cup flavor concentration specify that all the world enjoy, this is back on regular pace. Work, study, eat and play ... spare seat crack. J
Today tricky introduces a new way to patch Hardware Fingerprint Armadillo 4.xx. Method patch for version 1 is the author is mentioned (Armadillo Memory Patch Trick), this has not been used again.

Here please note that you, this document is only for reference, if someone misused to register illegal software, or other purposes is bad authors ko responsibility where nhé.

The Hardware Fingerprint is wai What? tricky in a tí nhé.
Armadillo just 1 packer has always help create mechanisms to register KEY software. If you try to pack a few files with Armadillo will have seen the creation KEY. With each choosing Option in the Armadillo, will be born an algorithm to create and check key.Nhung general picture is as follows:



As you see HW ID is an important part in the process of registration. But why have it? In the normalization of soft just Name + KEY is enough?
Assuming only Name + KEY, the version 1 software is registered, the software that may be registered in several other machines, which used to simply use the Key Name +. This is the manufacturers do not want to because they need the software sold by the copy on each machine. Thus was born HW ID, including at the Armadillo and protect others. HW ID is calculated from how to get the parameters of the hardware on your computer, can be that is the CPU, RAM, harddisk, ... but overlapping cases in the machine is very small, so does the probability 1 Name + KEY limited, it makes the production more assured.
However, what ko ko flawless. Whether HW ID on each machine born different, but if we have 1 HWID KEY + 1 + 1 Name was valid on 1 May that we can patch them into HWID HWID machines need to register, and of course KEY + name will go under the valid function to check key.
In addition, the number 1 or you wonder how to unpack 1 soft pack by armadillo while it require any key? Course is based on the above, it should at least 1 HWID KEY + 1 + 1 Name to register after the registration is valid, the code are completely unpack, we are new to OEP to dump. ... Etc. The format is quite soft as little as how to protect the type of "not see the soft side was demanding KEY" is just the type 1 or just unfinished. Or have in place ko ko KEY then read how Crack was, but because the seats do see how the soft Who is buying it. So a new type 1 KEY Trial is key, it helps us see the face of soft nose how, KEY but will expire within 1 certain number of days, then we must unpack before KEY expired or clear course in the Registry to xài from the beginning .. v.. v..
If you do not have the above, you temporarily forget to unpack it. Up to the time now, the computer does not play in the key check of the Armadillo. (As does the level of 10 to key, the brute force it

takes hundreds of years)
Say many things, now we see the method to patch HWID Armadillo 4.xx how nhé.

HWID for II.Patching packed dll:

Dll tricky to select examples before because if the dll lickerish. Exe as easy to do right? In this example, one pack of Ukhook40.dll file Unikey 4 beta. When running unikey.exe, dll load and requires the key:

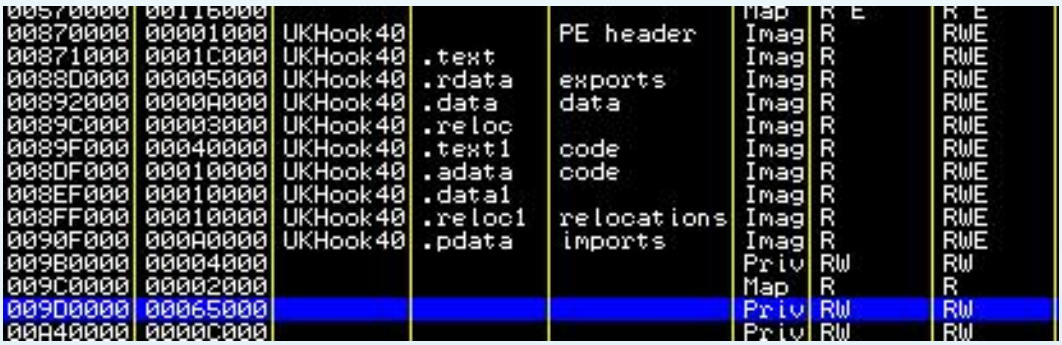
Okie, dom face each other for fun. Watch list shows the process unikey.exe 1 process, 1 dll UKHook40.dll the load, so this is dll protect standard form (the medical information of why the format ko protect Debug Blocker for the dll).
Okay, close to all, open up Olly <<ke payment of transmission kiếp Armadillo>. Load UKHook40.dll to:

Here ko mentioned to Hide Debug or configuration Olly nhé What more, you have to find ways IsDebugPresent Hide and OutputDebugStringA, as well as other bypass the Exception. Free of the stars click RUN (F9), Olly run circuit, springiness NAG Armadillo's key demands:

NAG has springiness, find time to see NAG this year in memory, back through Olly, Pause for the F12, Alt-K:

Select 1 of the line is highlighted, as they are under the area code of the key check NAG, double click on:

Based on Offset (your computer may be different), we see this area code outside the section of the dll files, view memory map (if necessary):



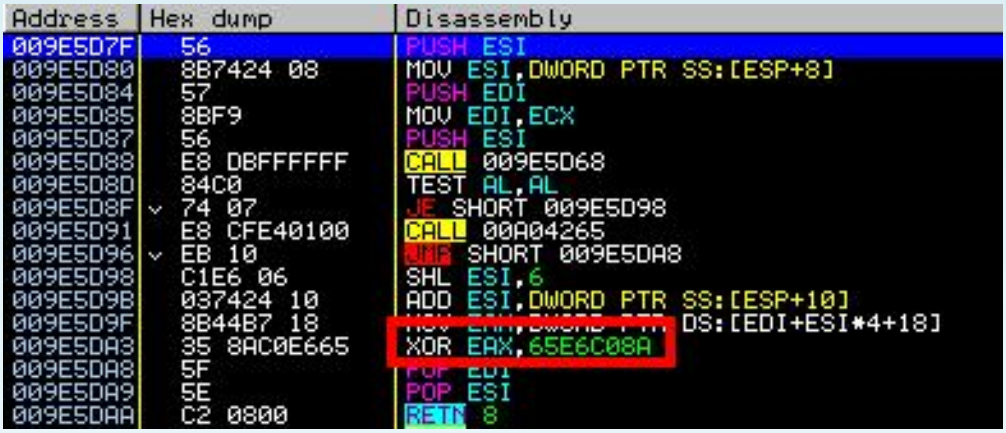
Back to this area code, click to select:

When the Search String, 1 string tricky found suspicious, the form%% It's like chain HWID we also see the form xxxx-xxxx. After many times BP set to test, was tricky to find out where 1 is very interesting:

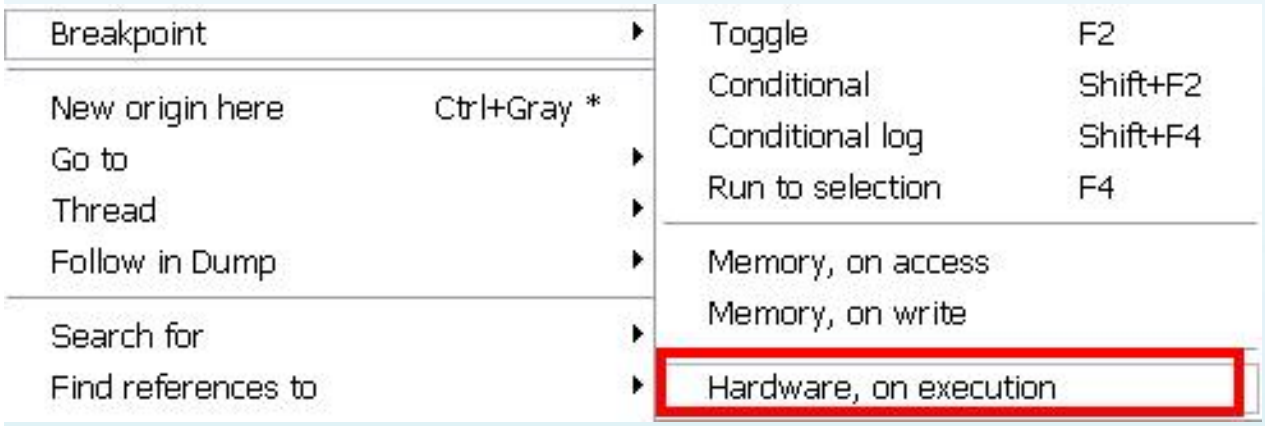
04X-04X appear more than once, but several positions makes it so interesting, you can search quickly by searching DATELASTRUN sequence as in the picture. Now Double Click on the series:

On it is 1 function call, we enter into, see:

Do not ask why the tricky bit, as above: "After many times BP set" should be found, the time you enter to function CALL in the image above, to this:

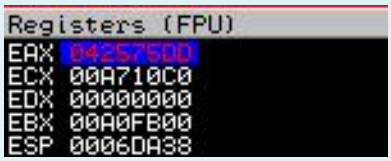


Asked order XOR EAX, [redacted] is át home items, time set on BP Hardware execution to it:



Ctrl-F2, restart again Olly you go. Then F9 to run, you will break at BP has set:

So we break here before NAG require ra.Gio F8 KEY springiness of a trace, dom through results EAX XOR command after me:



EAX = 042575DD. it is the Hardware ID is born on our (ko marked "-"). So we do need to know the specific process of calculating how HWID, only know me XOR command is the last step to make HWID to check the key. Hehe, you emerged the idea of what has not? then it is the right man, just patch me this command to MOV EAX, with xxxxxxxx xxxxxxxx Hardware ID is attached KEY + Name that we are on another machine. Asked command also take 5 bytes, so do not cause any benefit after patch. Ah, wen for HWID KEY + + Name not valid anymore, it's here:

HWID: 8300-4214
Name: REA CrAcKerTeAm
Key: 000003-1V3UNC-4FM85J-EYXFAQ-TCY9F2-GZPP29-BP9TAG-3F7DWR-XA2PJ9-M2BY8W-ATH9N0-392UY0-NTR7XW-H1U92Y

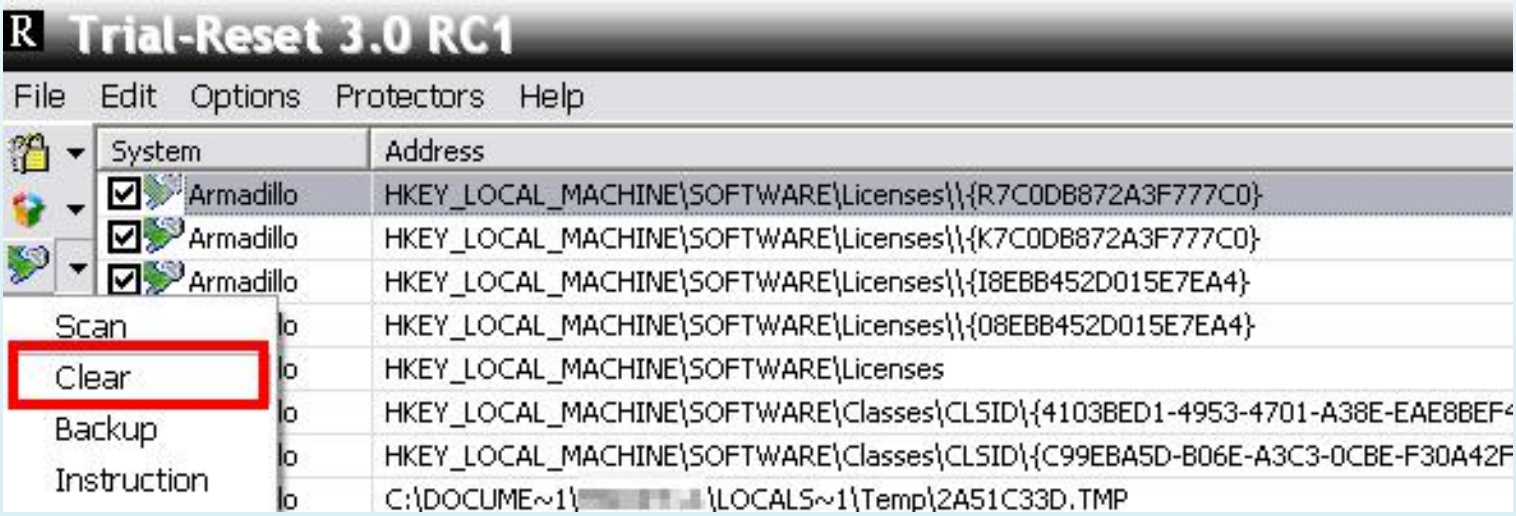
So time is on the patch command to me: MOV EAX, so it always returns HWID that we need, then set new Origin at me this command to run back and change the value of EAX:

Now, do not delete them farewell BP, subject to press F9 to run, you'll see it break here many times, to see HWID calculated multiple times, so if you do not patch that modify the value EAX hand, sure of you evil hands. Okie, after many times F9, you also to the NAG, and look to see:

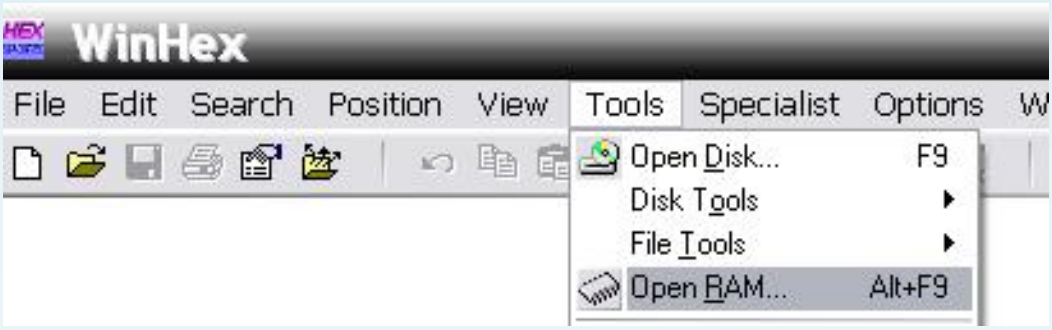
Hehe, HWID HWID is now on who should do so in tricky oi (specific Why are doctors). But we just changed the chain and the only HWID for bowel function to check the key do? Income + Name Key is to know now. After entering, we also see it back to me on command several times, under more difficult F9 small, as it demonstrated that the code key, it is always charged to the back several times. Finally, 1 notification unwind:

Is horror movie you have to do. J Hehehe. Now run to run again, it will also require ko key again, because key + name + HWID was stored in the Registry (of course can encrypt). Each run, it dom in the Registry, to see Okie ko han asked what police.
After Patch HWID for valid key, you can open to OEP's dll and unpack conducted as usual. Here we do not talk to unpack. Kĩ time to notice the times in order XOR Break on, the special 1 In particular, after entering valid key, the calculation is still HWID recalculate. This method makes Memory Patch Trick previously failed. Also making 1 cause it failed. You will go to know.
Now you open Trial Reset 3.0 RC1 that tricky attached. Click on the icon of Armadillo Scan to clear

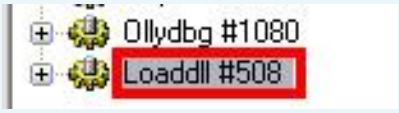
the course and registered in the Registry.
Note: if the computer has 1 software pack by Armadillo and it is registered may be lost after Clear Key. Backup should be the key if necessary Registry (backup based courses Trial Reset the scan)



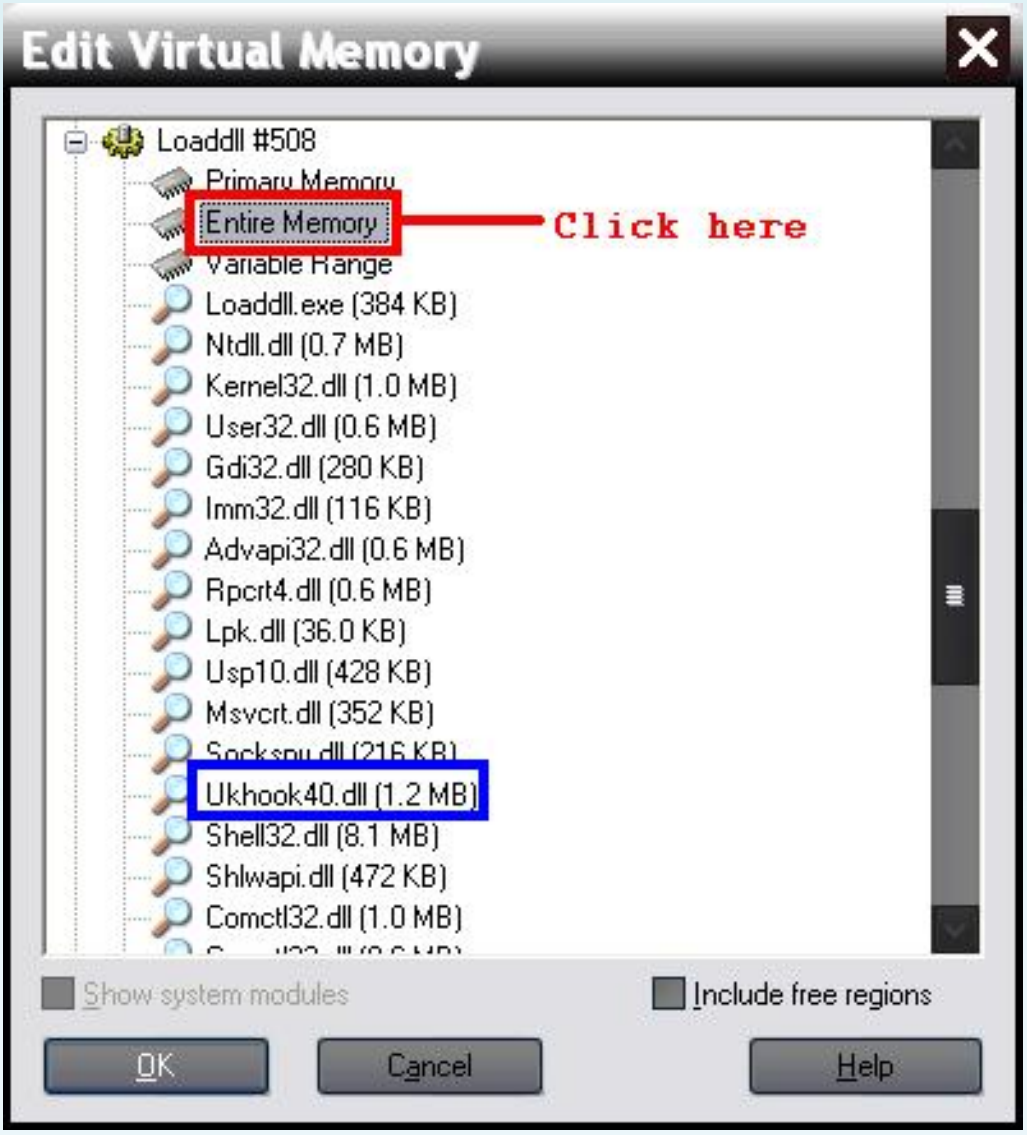
Once clear, the Unikey our return to the status has not registered, and it requires the same HWID KEY old. L No problem, that is what we want, as tricky to introduce the 1 patch more quickly with using Winhex, 1 tool mentioned in Memory Patch Trick.
But we still use Olly to run this dll, because some cases, assume we do have main. Exe dll to load out, it can be used to temporarily Olly load. After you load and run, does require KEY NAG. Keep it open Winhex up time. Select Tools à Open RAM (or press Alt + F9):



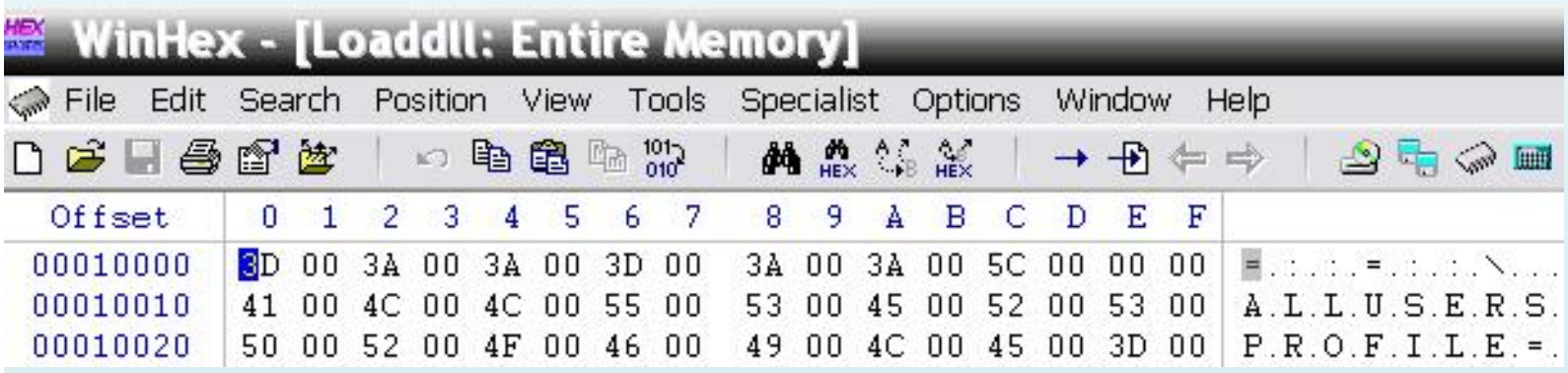
At Process list, select the process LoadDll by Olly:



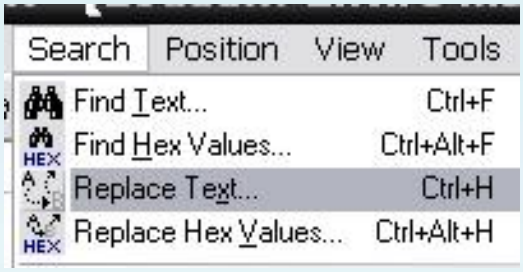
Assuming do here is by Olly LoadDll the Unikey you choose (if the main run. Exe outside Olly). Then click marked "+" next to point out, choose Entire



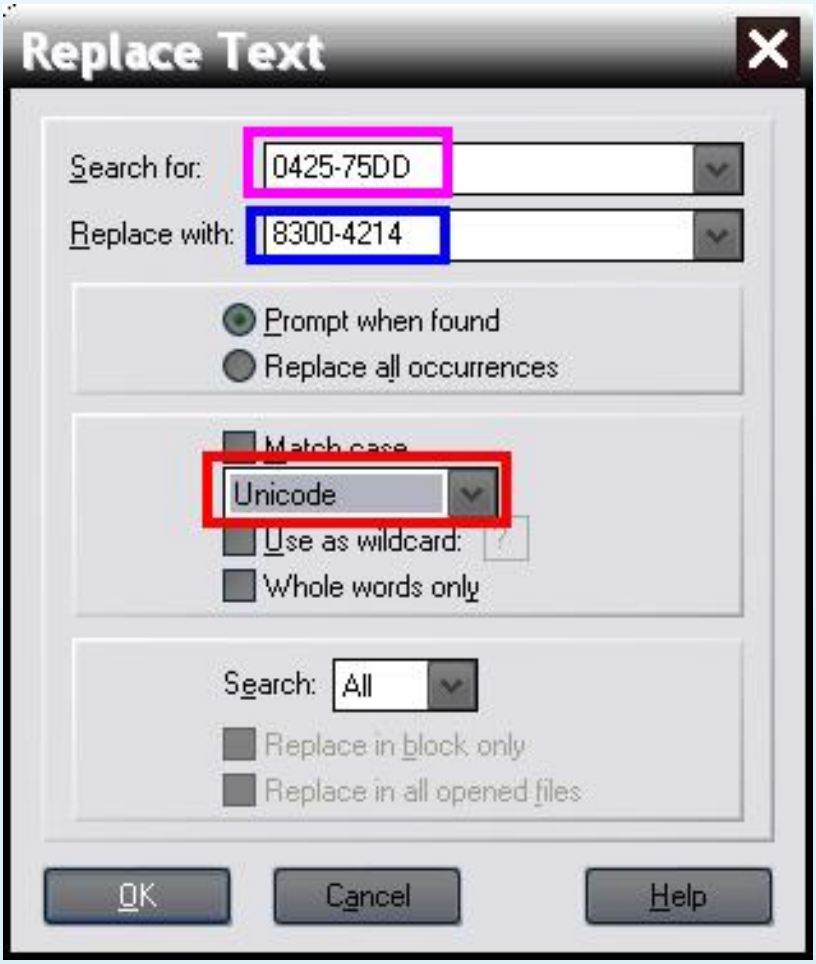
Now you see quite the same tut Memory Patch Trick, but tricky for you will see the difference. Once selected as the one to come:



In the old tut, we will search by Byte reverse HWID and replaced by Byte HWID accompanied by valid key. Ko It is also in ver 4.xx by Armadillo. Because now it Unicode text format but also ko byte Memory in normal again, this is also the reason that tricky 2 above. So choose à Replace Text Search:



Select Text format Unicode Search is needed, then fill HWID on Search box, complete with valid HWID KEY Replace the box:

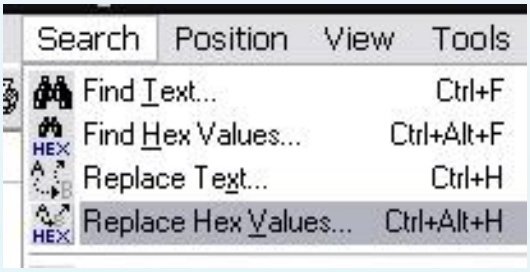


Click OK to see how many times Replace in memory:

Back found that HWID changed:

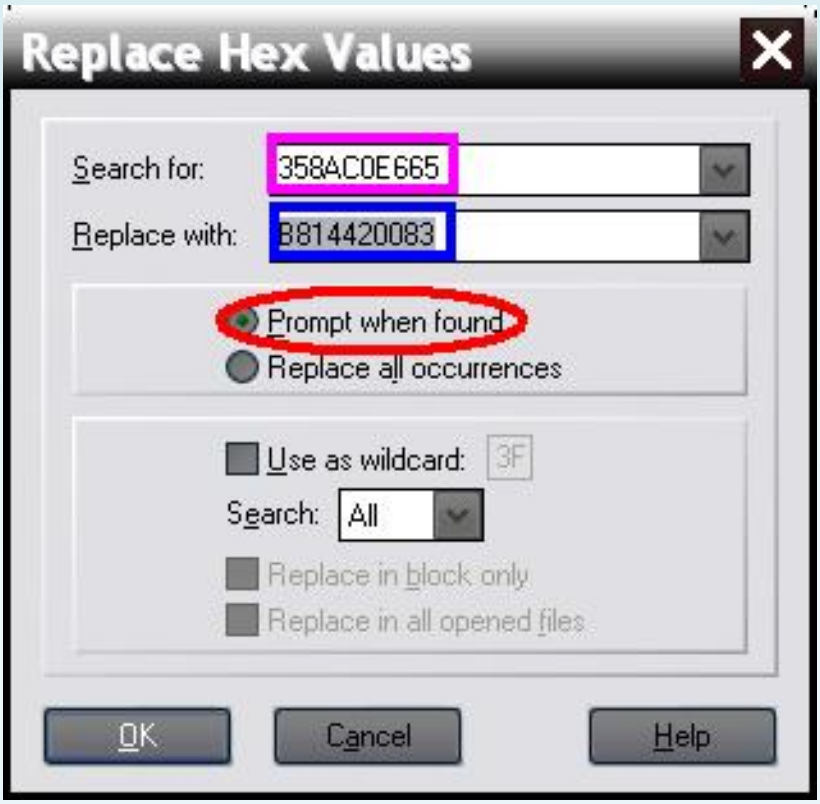
One more note, if you use the Winhex not actually registered, the Replace function to do work. At present of the Internet have Winhex keygen attached (ZWT group) but keygen that work effectively completed ko whole. Since when does the function of Winhex, the check will be Fake KEY check 1 again only key Xin really new xài be, or you need to patch more Winhex.
Back to the issue, as above, but change is HWID in memory, but after enter key, the students are still HWID recalculate, so we still have to order me Patch XOR EAX, 65E6C08A
There is only one patch in Winhex, hehehe. Forgot to say, the key questions in this command is the only, only exists only 1 question in this command Check the memory of the key, and more, in ver 4.xx of Armadillo (from 4.0-4.4) , have asked this command.
Any time that the question of Byte Opcode see this command:

As 358AC0E665. This is the reverse of bytes in memory. Should we just search in italy chang Winhex. Drag the scroll bar back to the top Memory for the search ko mistake, then select Search à Replace Hex Values:



Search is at the Byte 358AC0E665. Replace the box fill what? Sure we change the order using XOR What ko:

Based on HWID and Opcode of command, and vice versa as in the picture, you fill the box replace the Byte: B814420083, remember to select Prompt when found to occur less errors:



Click OK, and only 1 time Replace.

Now, enter the name still valid + Key call this:

HWID for III.Patching packed EXE:

Now the session. Exe. Tricky Pack 2 has the form, a Standard for unikey.exe file, the process is similar dll file, the only other time this man meat unikey.exe. Remember to use the Clean Clear Trial Reset will of course armadillo for the dll before making contact with. nhé exe.
Here tricky only guide you to the Patch 2: Debug Blocker has (or accompanied CopyMem) on unikey. exe. When run, it does 2 process:

And also require KEY:

Here again is 1 HWID other, easy to understand, because this is from HWID. Exe. Only to do it khùng or that the form FFFF-FFFF on tricky. On the other you will jog. However it ko important, the main change is to be accompanied by valid HWID KEY. Where we have this:

HWID: F9D0-F6CE
Name: REA CrAcKerTeAm
Key: 000014-XN0MTU-A92HZE-JYTM6H-ZFX8KE-ZU2N2C-QEZMV8-D9DRDT-GUMU5H-RD83PB

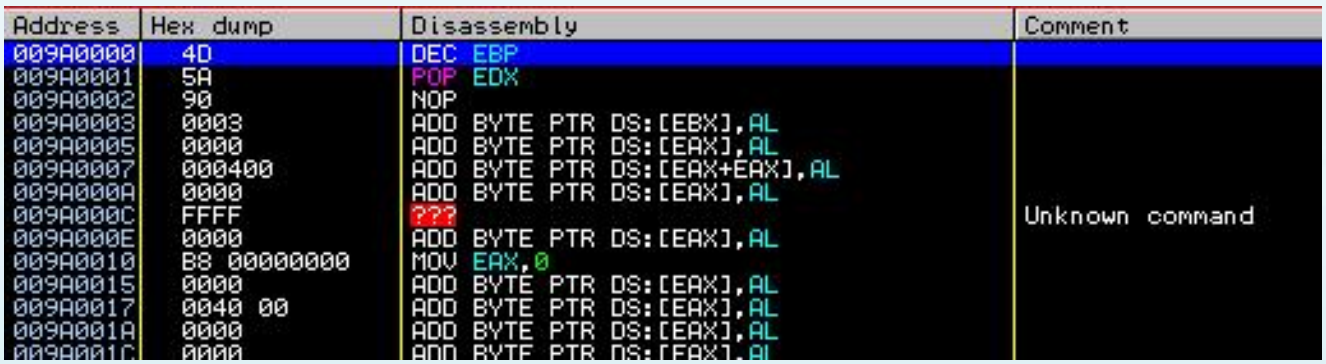
Okie, close to the end. Because here are 2 of the process Debug Blocker (ko concern is CopyMEM or do), we use 1.1 ArmDetach by RES) (Debug Blocker to defeat the fast. Drag the file to Unikey.exe ArmDetach you go:

Child process PID on your computer may be different. Now open up Olly (ko close ArmDetach) Attach Child Process:

F9 to run, then pause the F12, in order Follow dump - JMP, to correct EB FE 60 E8, we are:

Speaking brief because as you unpack the Armadillo. Now F9 run for running a circuit (as was hide and debug exception bypass). Key frames require flying. Back Olly. Pause F12, Alt-K is the same as in the dll, find the code of the key check:

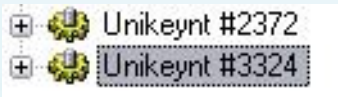
Double Click. Here to demonstrate the unique command of XOR above, you first pull up in this area remember 9A0000: (your computer may be different)



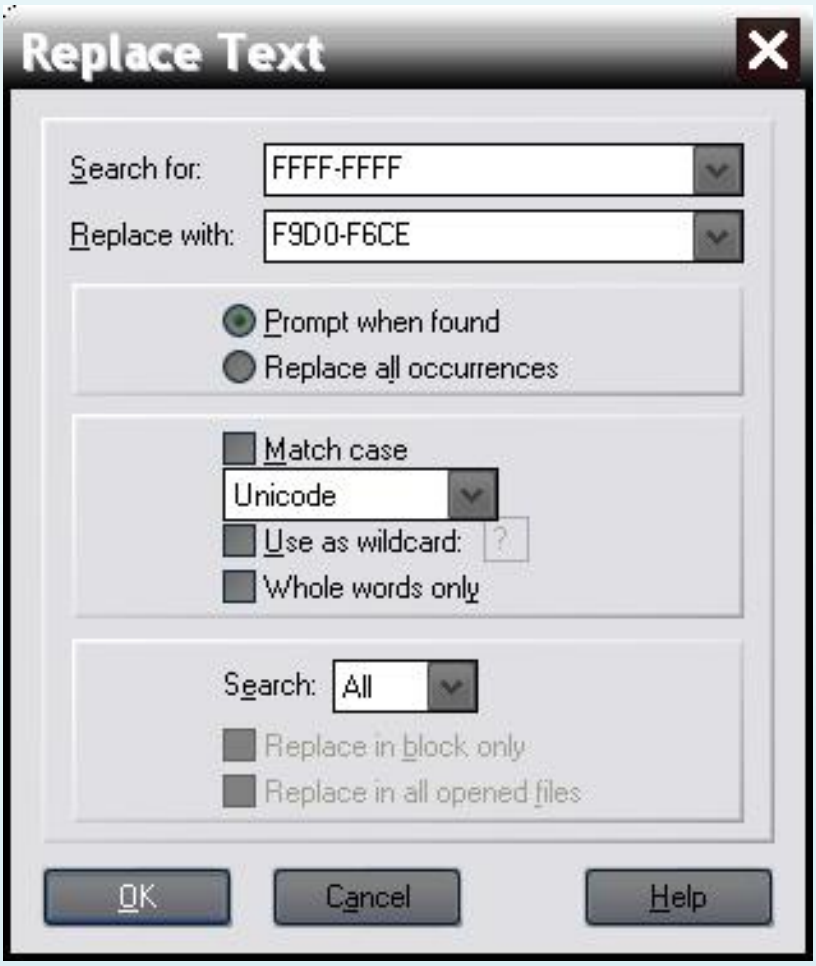
Ctrl-F command to search, fill XOR EAX, 65E6C08A

OK, it stops only at 1 time:

To do this it should say more. Tricky just want to prove the only order of questions. Now, Close up, we'll patch it with Winhex (winhex is the fastest method for this).
Olly Unikey.exe running out, the demands on the key, open Winhex. Open Tools à RAM. There is only 2 in the list Winhex process, and we always choose to process 2 (ko interested need ID)



Because process 2 sure Child process. Now everything was as normal as the dll, even HWID other alternative at this time. The first is for Unicode Text:



OK:

Continue to command XOR, here is the replacement bytes B8CEF6D0F9

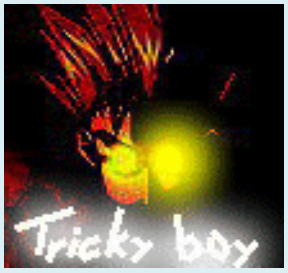
Load and Valid key Name:

So once the patch method HWID's Armadillo 4.xx (4.0-4.4)
Rationalization of the work to unpack the Armadillo dll in this tut, tut because of the hacnho respond before too hasty but forget a few things for Newbie. But consider this target has not found enough to create complete tut 1. See you after that (if possible)

IV.Ending:

Please note the 1 again, this document is only for reference, if someone misused to register illegal software, or other purposes is bad authors ko responsibility where nhé.

Sincere thanks:
The brother-in REA helped tricky in the study.
Typically hacnho series with tut unpack their super levels.
Uncle Why Not Bar for some tricky help pack the file Unikey
Takada has giùm test on the other bytes.
... And you all again.



Tàn Ma Kiem
(Written by Trickyboy)

Armadillo collect sand-stone

Armadillo 4.xx-Code Splicing tut!

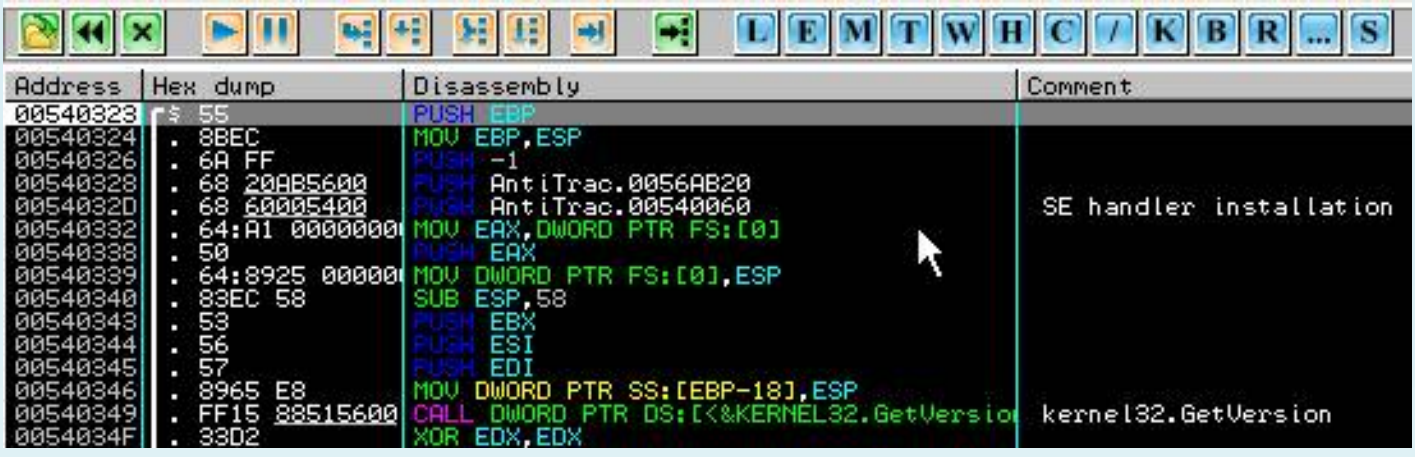
Target: Anti Tracks v5.6.1
ARM 4.xx-Code Splicing

Tools:

1.OllyDBG - The best config debugger for ArmMUP by hacnho.
2.LordPE 1.4 Deluxe
3.Import REConstructor 1.6 Final
4.ArmInline 0.6

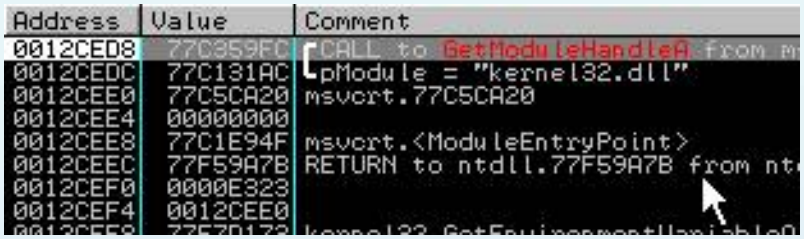
Unpacking

_Load On target:

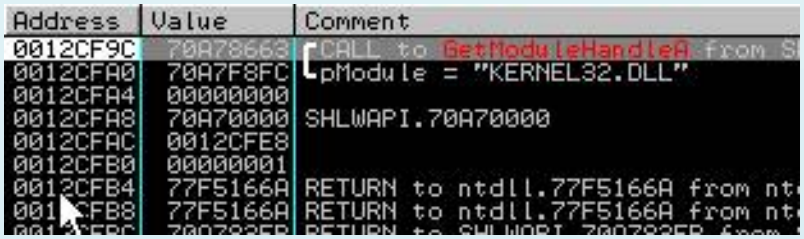


_HE GetModuleHandleA, Shift + F9:

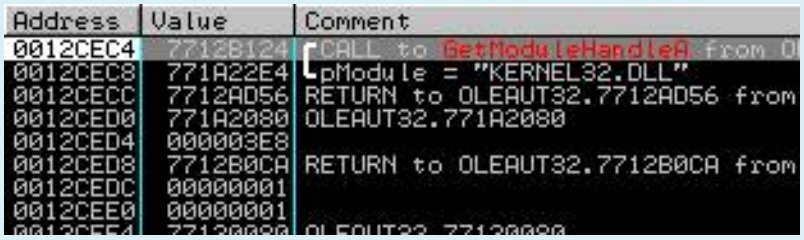
_Shift + F9 times 2:



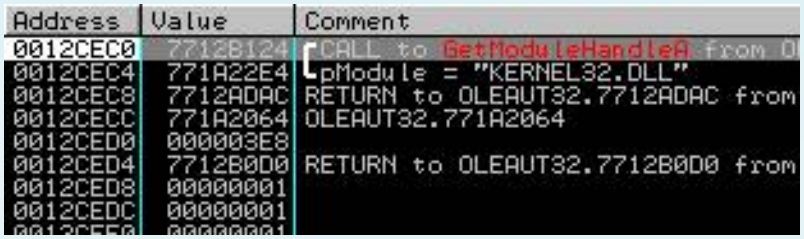
_Shift + F9 times 3:



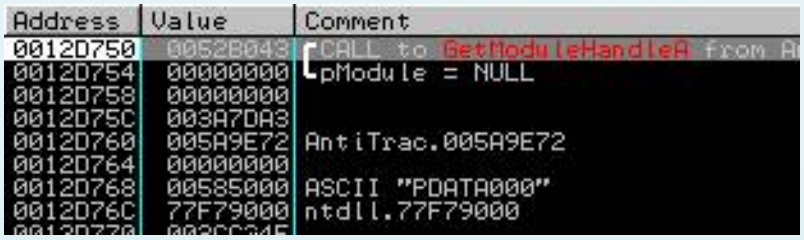
_Lan 4:



_Lan 5:



_Lan 6:



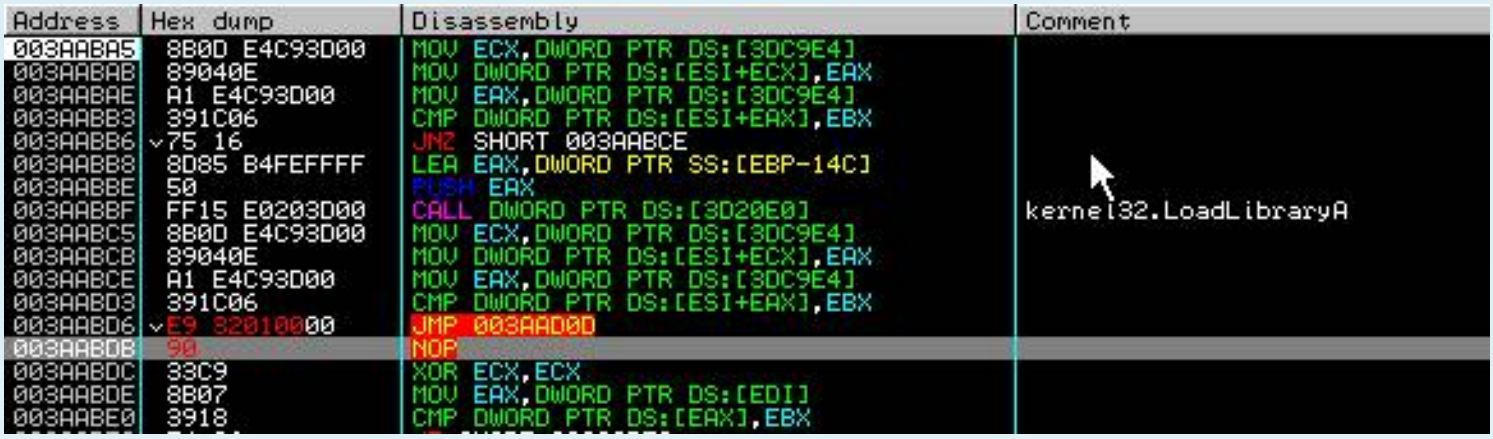
_Lan 7:

_Lan 8:

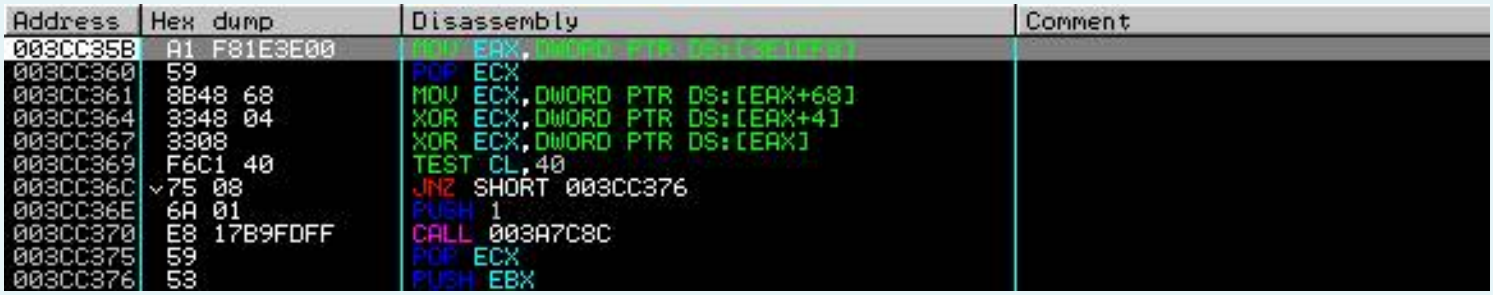
_Lan 9:

F8 _Nhan trace through RETN order, you will come:

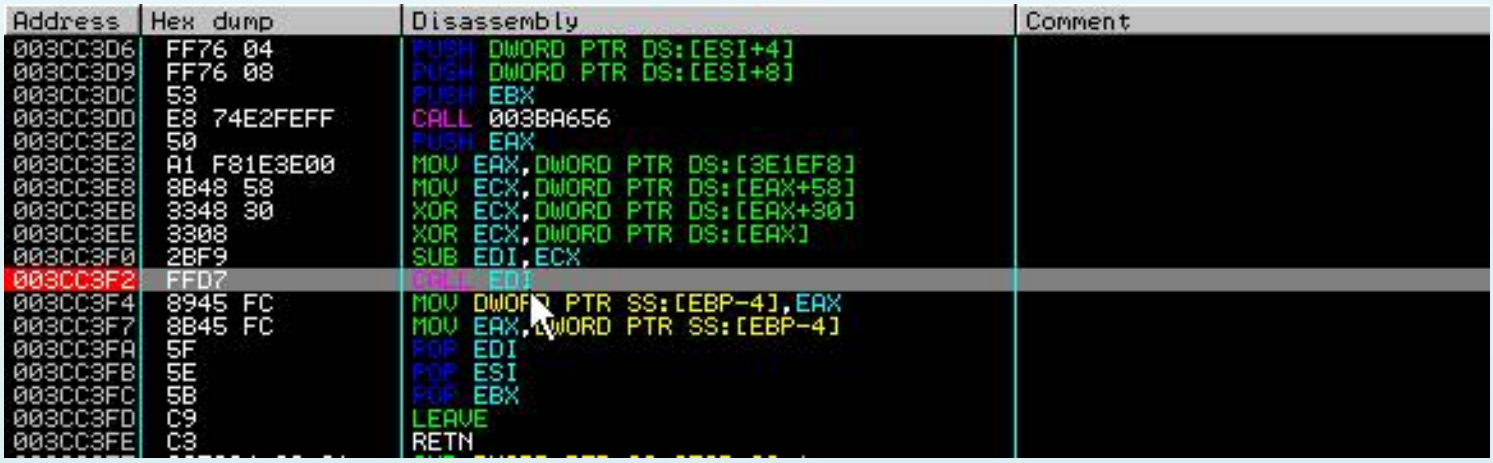
Jump _Magic, EB's patch:



_hd GetModuleHandleA, set breakpoint BP CreateThread, Shift + F9, Ctrl + F9, F8, Ctrl + F9, F8:



_Cuon Down:



_Nhan Call EDI in F2, F9, F7: OEP!

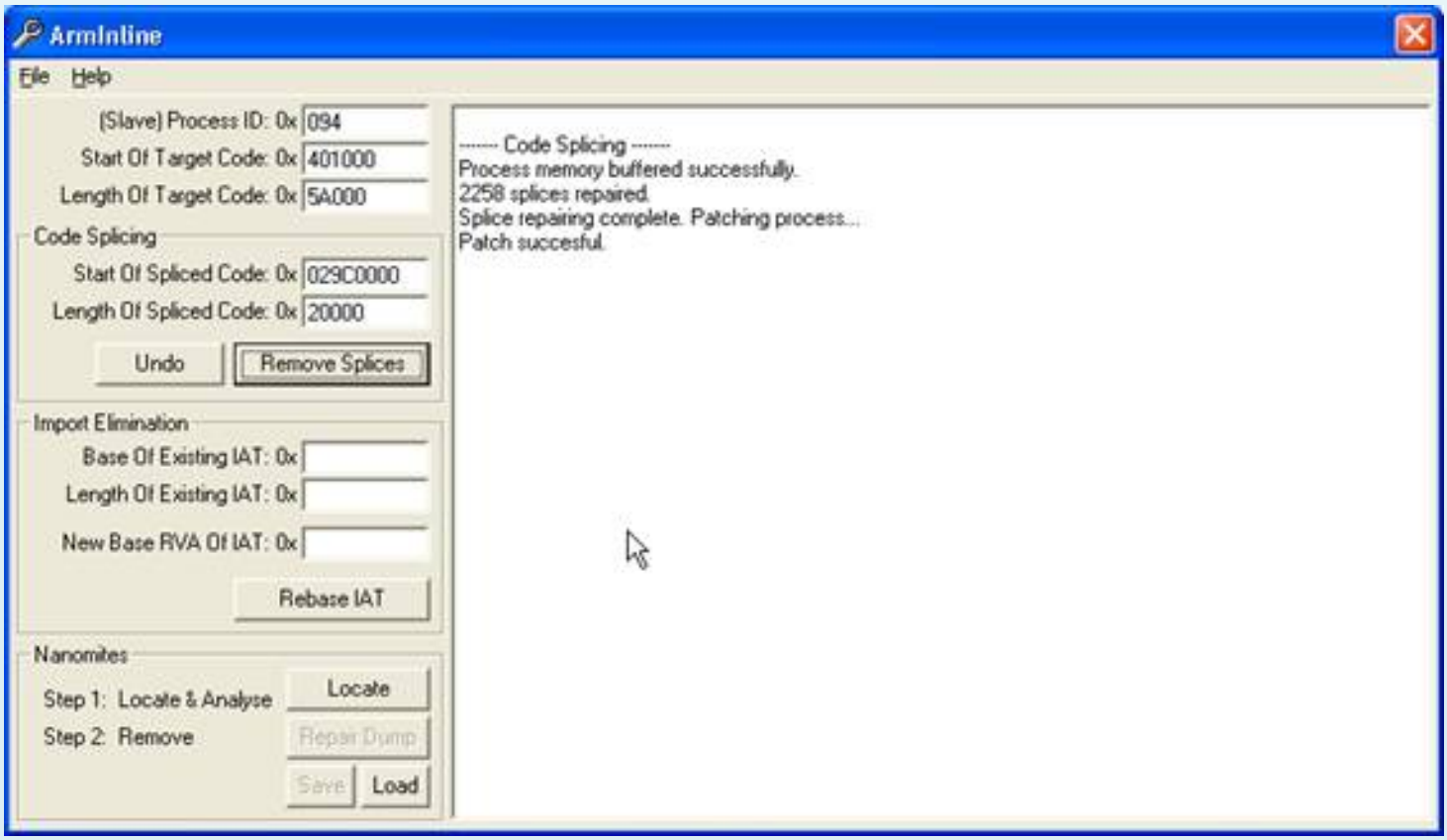
```
Address   Hex dump          Disassembly                              Comment
00401000  EB 10            JMP SHORT AntiTrac.00401012
00401002  66:623A          BOUND DI,DWORD PTR DS:[EDX]
00401005  43               INC EBX
00401006  2B2B             SUB EBP,DWORD PTR DS:[EBX]
00401008  48               DEC EAX
00401009  4F               DEC EDI
0040100A  4F               DEC EDI
0040100B  4B               DEC EBX
0040100C  90               NOP
0040100D -E9 B8B64500      JMP 0085C6CA
00401012  A1 ABB64500      MOV EAX,DWORD PTR DS:[45B6AB]
00401017  C1E0 02          SHL EAX,2
0040101A  A3 AFB64500      MOV DWORD PTR DS:[45B6AF],EAX
0040101F  52               PUSH EDX
00401020  6A 00            PUSH 0
00401022  E8 F3990500      CALL AntiTrac.0045AA1A                   JMP to kernel32.GetModuleHandl
00401027  8BD0             MOV EDX,EAX
00401029  E8 162F0400      CALL AntiTrac.00443F44
0040102E  5A               POP EDX
0040102F  E8 E29B0500      CALL AntiTrac.0045AC16                   JMP to CC3250MT.___CRTL_MEM_Us
00401034  E8 4F2F0400      CALL AntiTrac.00443F88
00401039  6A 00            PUSH 0
0040103B  E8 88300400      CALL AntiTrac.004440C8
```

_Ta Need to find signs of Splicing Code, Alt + M:

```
Address   Size      Owner     Section  Contains     Type  Ac
00482000  00001000  AntiTrac  .rdata                Imag  R
00483000  00009000  AntiTrac  .idata                Imag  R
0048C000  00081000  AntiTrac  .edata   exports      Imag  R
0050D000  00008000  AntiTrac  .reloc                Imag  R
00515000  00040000  AntiTrac  .text1   code         Imag  R
00555000  00010000  AntiTrac  .adata                Imag  R
00565000  00010000  AntiTrac  .data1   data,import  Imag  R
00575000  00010000  AntiTrac  .reloc1  relocations  Imag  R
00585000  00070000  AntiTrac  .pdata                Imag  R
005F5000  00080000  AntiTrac  .rsrc    resources    Imag  R
00680000  00006000                                  Map   R
00740000  00002000                                  Map   R
00750000  00103000                                  Map   R
00860000  000AE000                                  Map   R
00B60000  00001000                                  Priv  RW
00C60000  0000C000                                  Priv  RW
00C70000  00002000                                  Map   R
00C80000  0001A000                                  Priv  RW
00CA0000  000B7000                                  Priv  RW
00D64000  00002000                                  Priv  RW
00D80000  00006000                                  Priv  RW
00D90000  00003000                                  Priv  RW
00DD0000  00001000                                  Map   RW
00DE0000  00001000                                  Priv  RW
00FE0000  00001000                                  Priv  RW
00FF0000  00003000                                  Priv  RW
01000000  00010000                                  Priv  RW
01400000  00003000                                  Priv  RW
01440000  00003000                                  Priv  RW
01450000  00001000  BORLNDMM                        PE header  Imag  R
01451000  00004000  BORLNDMM  CODE     code         Imag  R
01455000  00001000  BORLNDMM  DATA     data         Imag  R
01456000  00001000  BORLNDMM  BSS                   Imag  R
01457000  00001000  BORLNDMM  .idata   imports      Imag  R
01458000  00001000  BORLNDMM  .edata   exports      Imag  R
01459000  00001000  BORLNDMM  .reloc   relocations  Imag  R
0145A000  00001000  BORLNDMM  .rsrc    resources    Imag  R
01460000  00002000                                  Map   R
01470000  00001000                                  Priv  RW
014F0000  00004000                                  Priv  RW
015F0000  00004000                                  Priv  RW
01790000  00002000                                  Map   R
0189D000  00003000                                  Priv  RW
029C0000  00020000                                  Priv  RW
32500000  00001000  CC3250MT                       PE header  Imag  R
32501000  00084000  CC3250MT  .text   code         Imag  R
32585000  0002C000  CC3250MT  .data   data         Imag  R
325B1000  00003000  CC3250MT  .tls                 Imag  R
```

Code Splicing

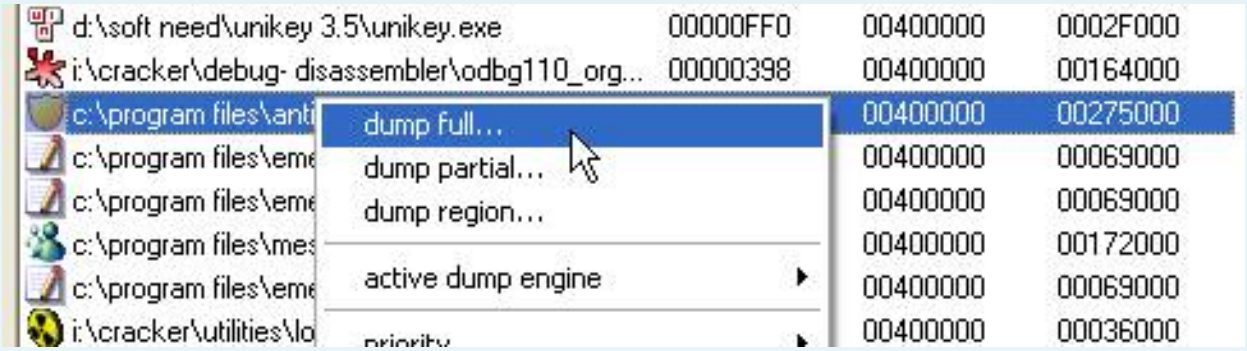
_Mo ArmInline and complete information as follows:



_Code Splicing die! We need to find the IAT. In 00401022, you follow in dump will find information IAT as follows:

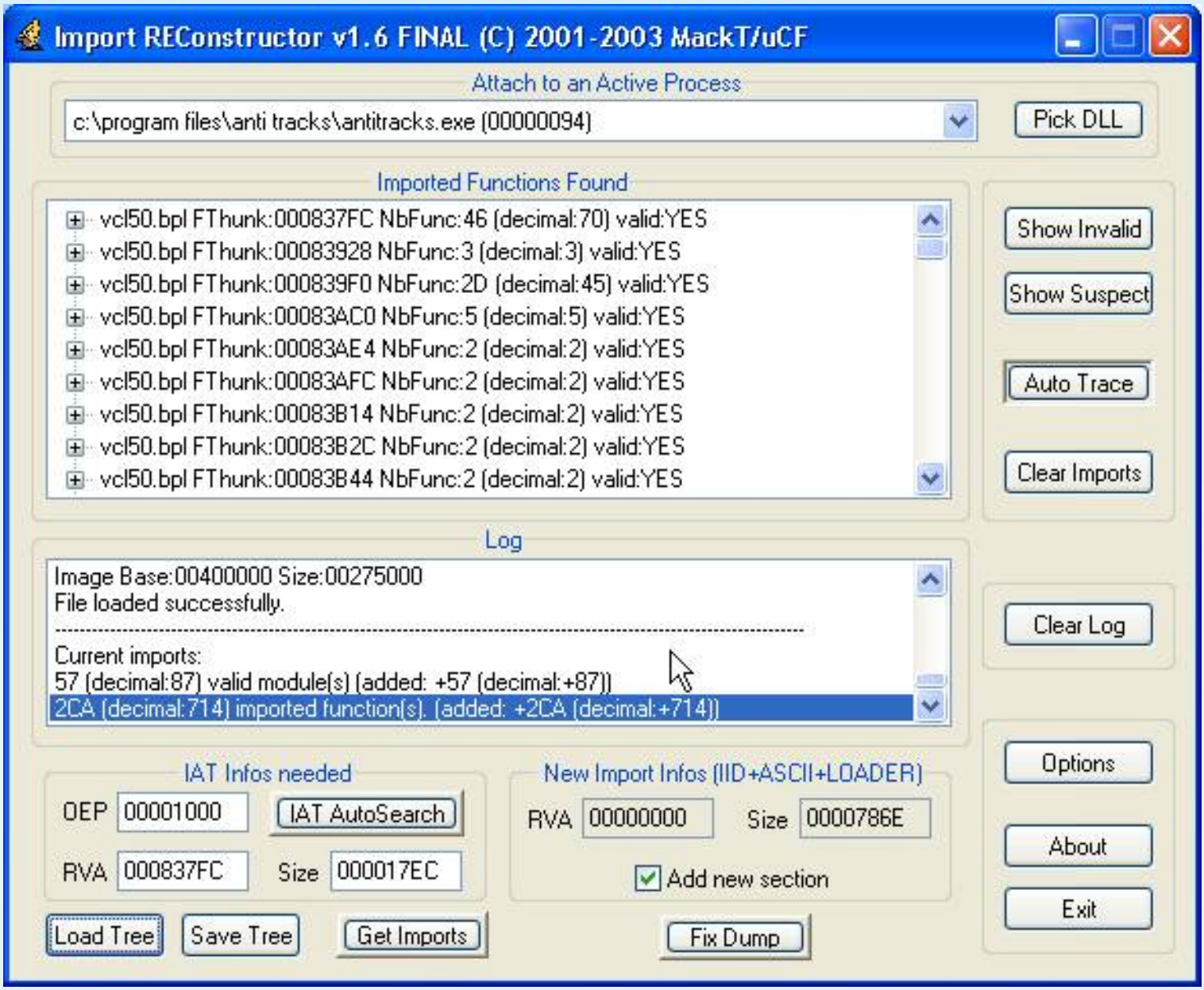
IAT Start: 004837FC 4000A314 VCL50. System @ @ initialization $ qqrv
IAT End: 00484FE8 7621F6C6 WININET.FindNextUrlCacheEntryA
IAT Len: 000017EC

Full _Dung LordPE dump:

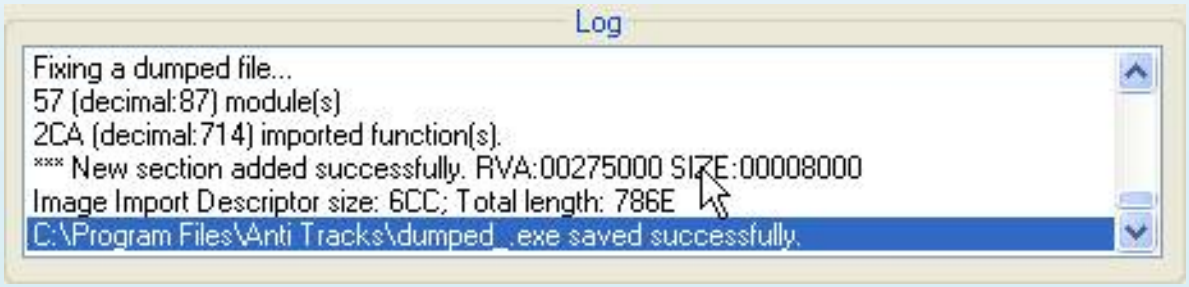


_Mo ImpREC, enter the following information:

OEP: 00001000
IATRVA: 000837FC
IATSize: 000017EC

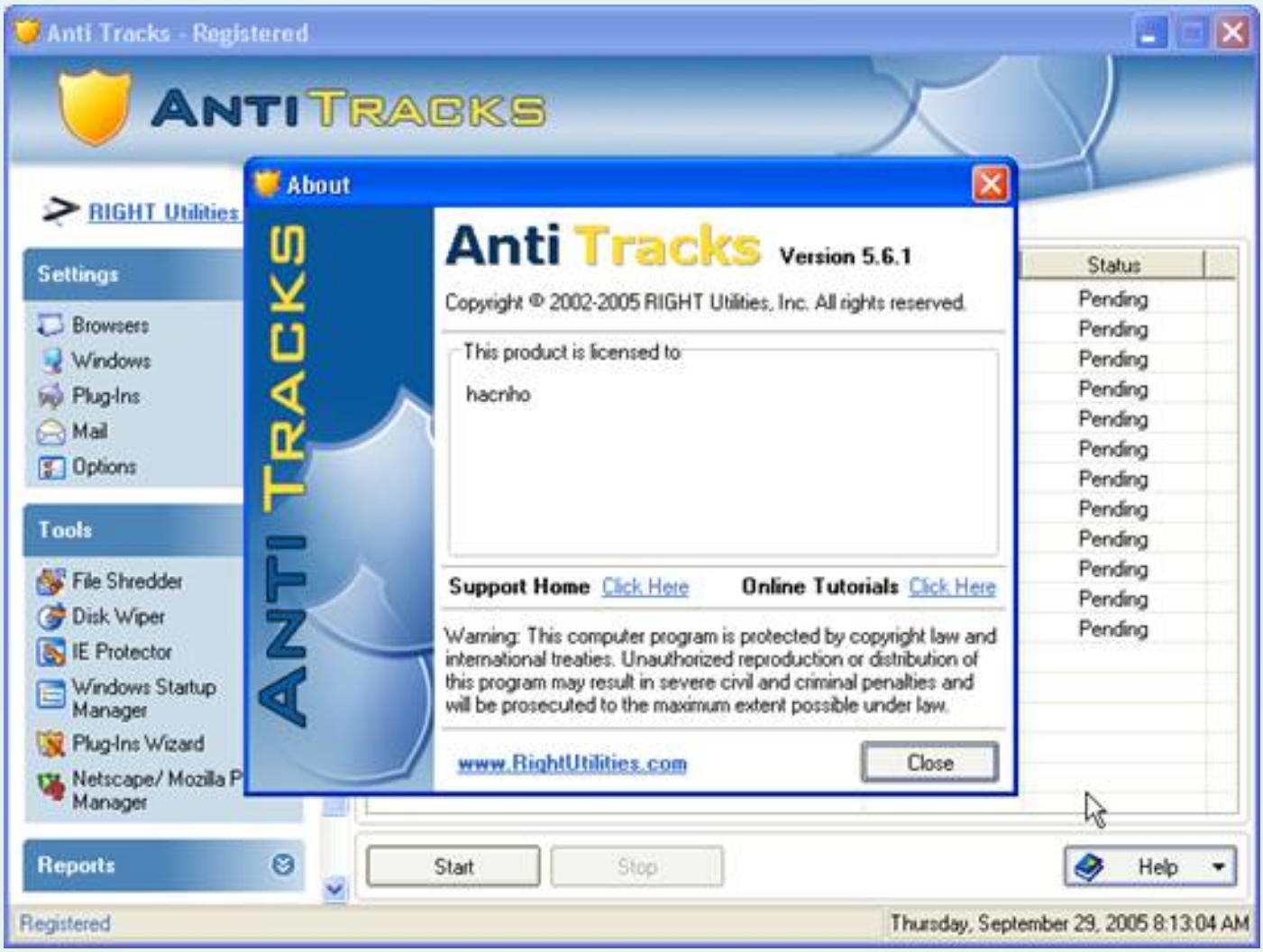


_Fix Dump:



_Detect With PeiD 0.93:

Run Try dumped.exe:



_Unpacked SuccessFul!
_Cracking:

User: hacnho
Serial: 071E-A123-AF7E-4850-ABC1-A3E5-0BF4-BBBD-4C18-A0A3-2498-7720-DCDB-E967

I. Conclusion

_For More tuts, please visit http://tinicat.de/hacnho

_Bye!

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, Madman_Hercules, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx OllyDBG of the authors and ArmInline

To be continued ...

Written by **hacnho** (tutorial date: VietNam 28/09/2005)

Armadillo & Macromedia Games

Contents Table:

Tools: Hide OllyDBG + plugins, LordPE, ImportREC 1.6, CFF Explorer

Skill Request: Basic Knowledge Using Olly + manual unpacking **Armadillo.**

I-Introduction:

Hi everybody, who are as like reading this document, I'm very interested in playing with Armadillo. I know that many had for this Tuts packer and greatly appreciate to Authors who wrote those tuts, they're so cool!
Today, I just write this doc to share some my small knowledge. Maybe I'm still a Newbie, hope it useful for someone . Ok, let's start!

II-Basic-Protection:

In this part, we'll defeat from OberonGames.com games, for example, I choose **"A Series of Unfortunate Events,"** you can download it from:

http://www.oberongames.com/exe/unfortunate_events-setup.exe?RefId=&origin=pgame_dl_u&ext=unfortunate_events-setup.exe

OberonMedia always have two files to run game. First is a file **launcher,** the shortcut is created on Desktop (after installed) to run it:

If you click **"Play Demo Now",** this second launcher will load the file (or **main file)** to run game. But you can run the second without launcher so you just defeat the main. Of course, both files use a same protection is Armadillo - Trial expired and if you will get over time limit.

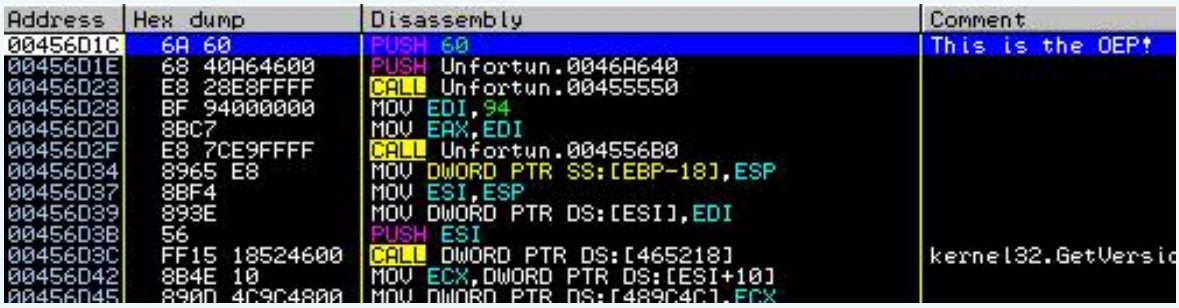
Load *"Unfortunate.exe"* into Olly, we stop at EP:

Oberon only use Armadillo - Standard Protection to protect their games. I will not explain more detail about this protection (as How to Bypass Anti-Debug?, Why check Ignore All Exceptions ...) because you can find a lot of

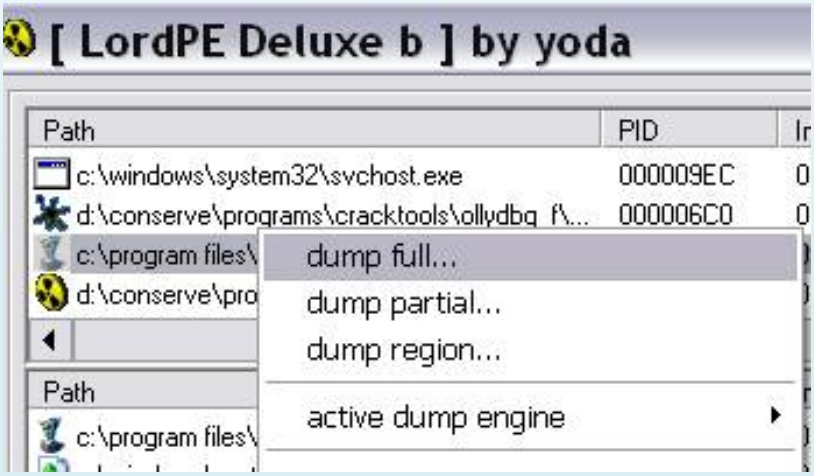
good tuts on other Team as ARTeam, snd, CrackLatinos ... And for unpacking - Standard protection, we should use Scripts to make it faster.

I recommend fly's script: **Armadillo V4.0-V4.4.Standard.Protection.osc,** It'sa one of best scripts to defeat armadillo-standard. Thanks guy for his hard work.

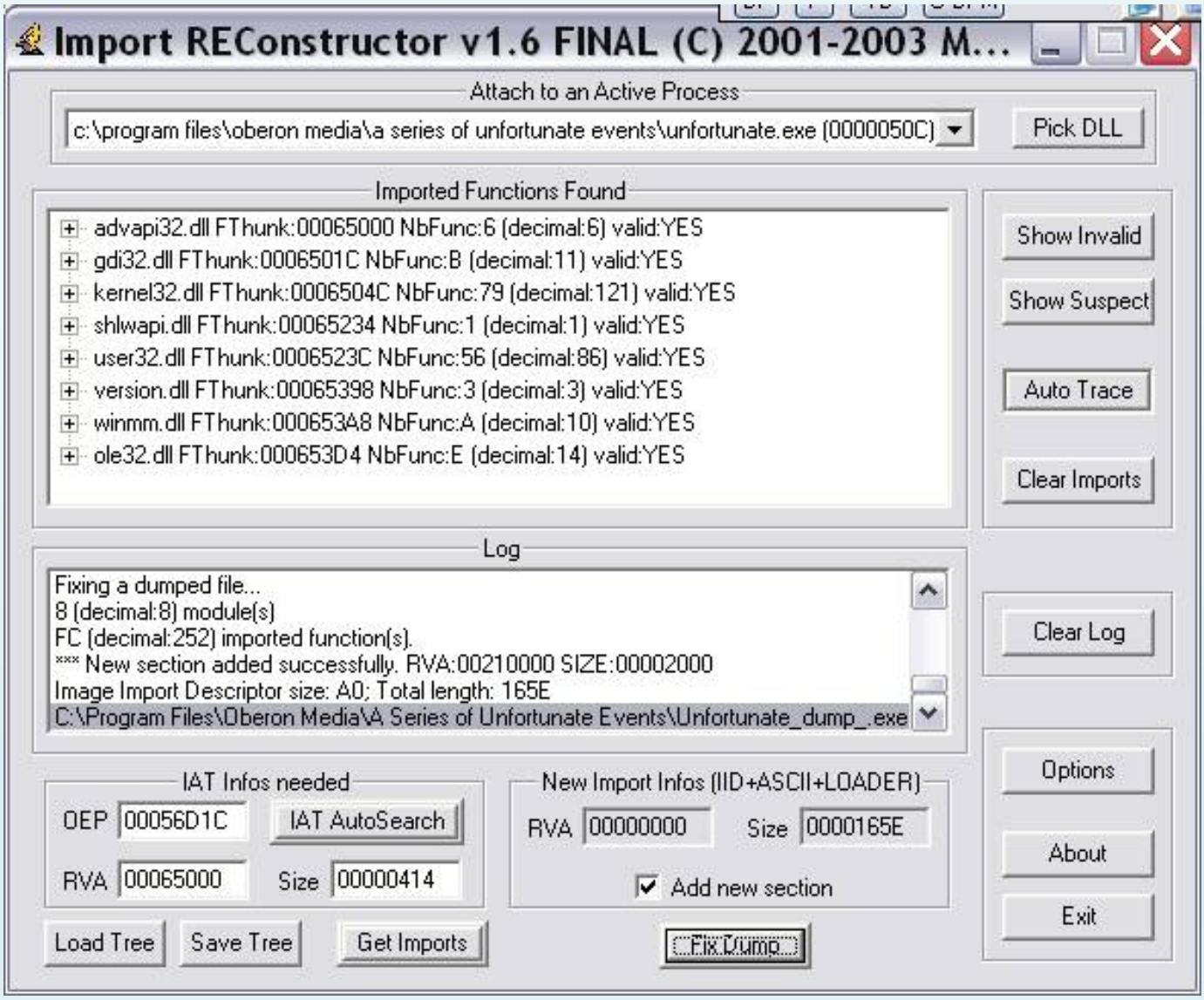
OK, run the script and fly's Stop at OEP:



Open LordPE to dump it:



Then fix IAT ImportREC by:



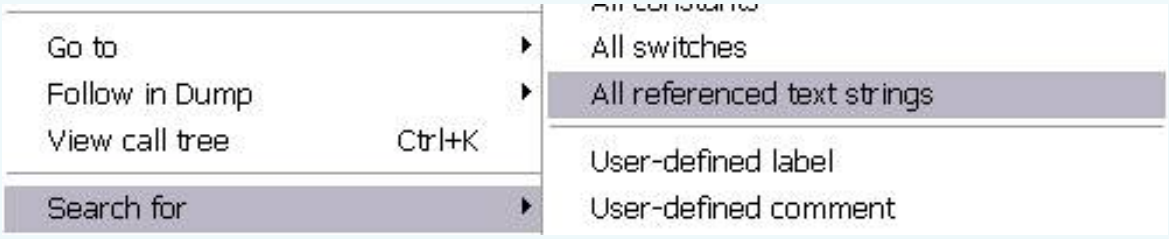
Reduce the file size by CFF Explorer (Delete useless sections), and do not forget BaseOfCode fixing:

Name	Virtual Size	Virtual Addr...	Raw Size	Raw Address
Byte[8]	Dword	Dword	Dword	Dword
.text	00063B54	00001000	00063B54	00001000
.rdata	0000E45E	00065000	0000E45E	00065000
.data	0002CA48	00074000	0002CA48	00074000
.text1	00030000	000A1000	00030000	000A1000
.adata	00010000	000D1000	00010000	000D1000
.data1	00020000	000E1000	00020000	000E1000
.pdata	00080000	00101000	00080000	00101000
.rsrc	0008F000	00181000	0008F000	00181000
.mackt	00002000	00210000	00002000	00210000

AddressOfEntryPoint	00000128	Dword	00056D1C
BaseOfCode	0000012C	Dword	00001000
BaseOfData	00000130	Dword	000E1000

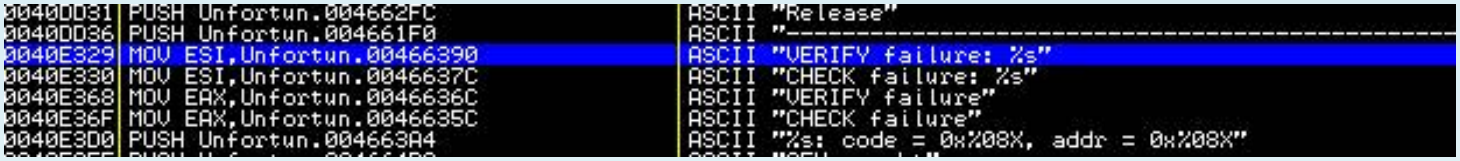
Save the file. But after that, run the file and it show a error message:

Do not afraid of that. We unpacked well. It's just a custom protection. OK, load the file into fixed Olly, stop at OEP, Search String: (Note: If you miss fixing BaseOfCode, you can not find exactly strings in Olly.)

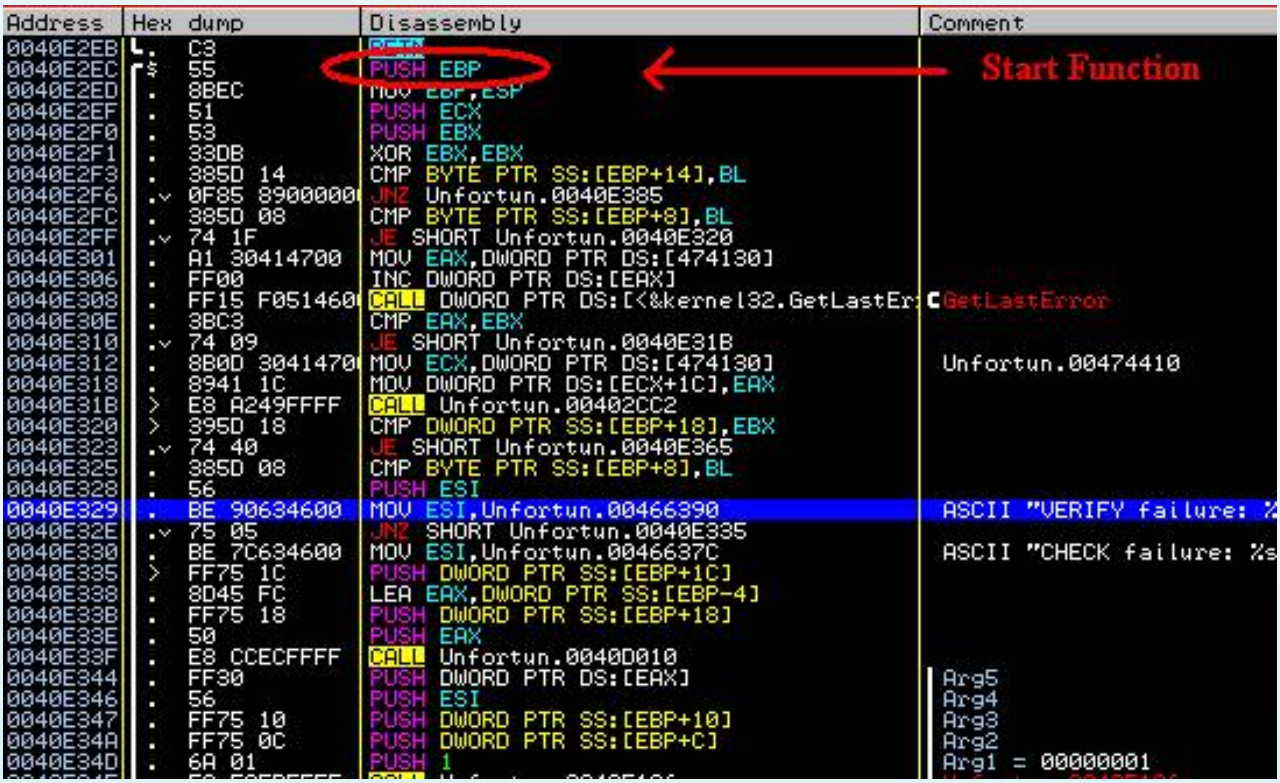


Type:

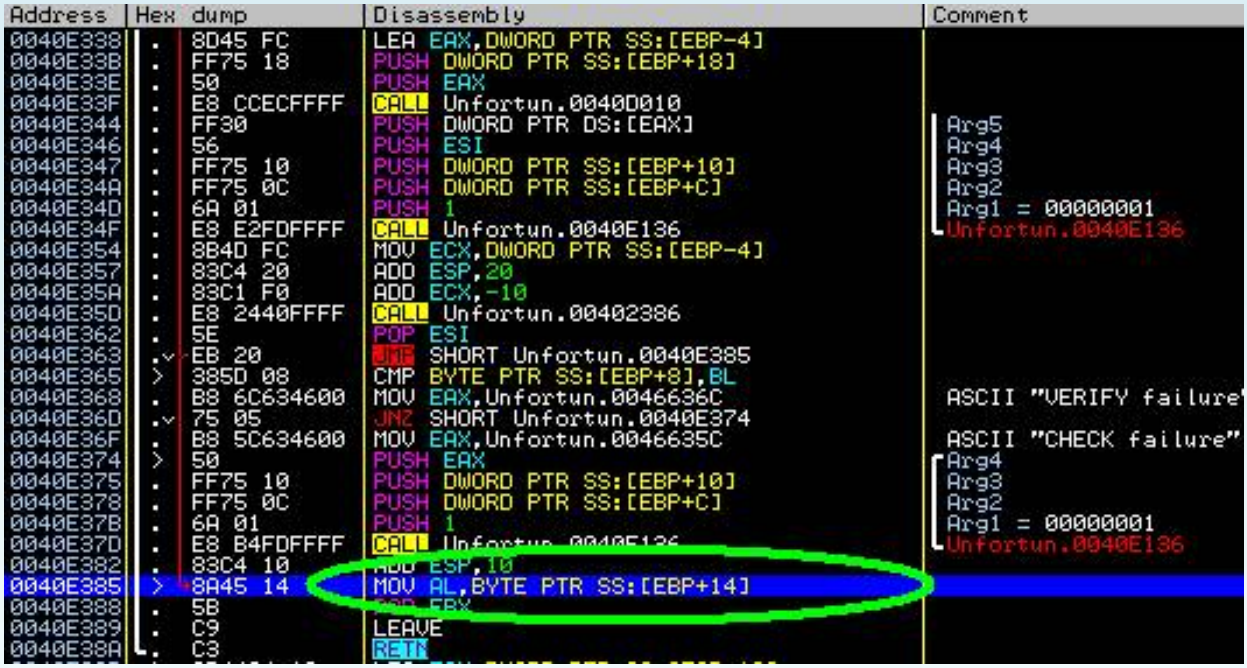
And go to here:



Enter it, and stop at:



Scroll up a bit, set Start BP on this function. When running, it will break on here many times, and I think this is a CHECK verify file. OK, Scroll down and find this command:



If this function return AL == 0, it will show above error message. So it simple to change:

Then Copy to executable -> Select and Save the file. Now run it, game will start without any NAG or Time Limit.
Good, you did it! This method can be used to defeat many games on Oberon. But it seem not make us excited. Let's go to next part to find more fun!

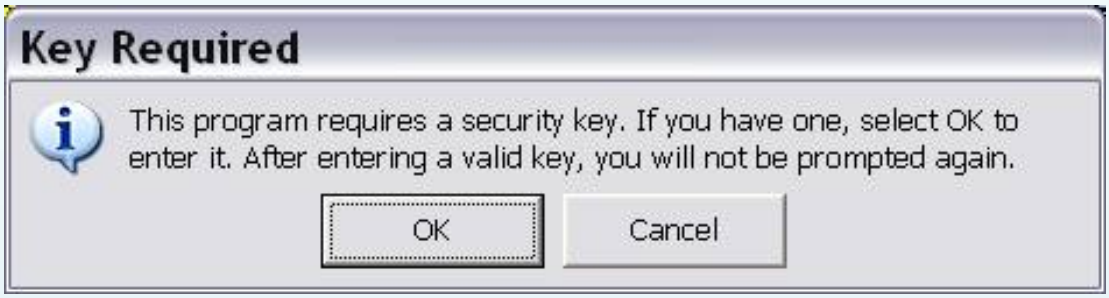
III-Advanced Protection:

This type protection is used for some games on Oberon and PlayFirst. For example, I choose **Inspector Parker** at Oberon. But now, it's not available on there. You can download it from:
http://download.shockwave.com/pub/inspectorparker/InstallInspectorParker.exe

Note: This is not not Game: Inspector Parker-Betrapped. Do not mistake that.

Parker also Inspecter use 2 files to run game. But main file is not same folder with a launcher. It's here: (Default)
C: \ Program Files \ Inspector Parker \ product

We run main file, and it show key request message:



As I known we can not unpack Armadillo app without a key if that request it before running. So close it and uninstall game now! Hehehe, just a joke. We'll open the launcher:

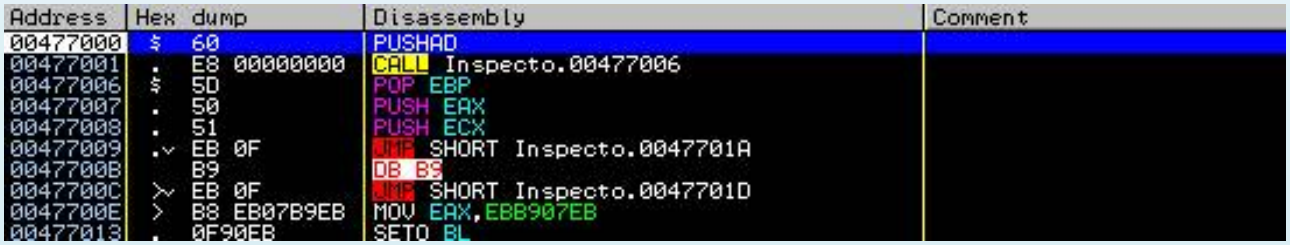
When you click **"Play",** launcher load main file and run game without key request message. Thinking a bit, we see that a trial launcher generated key and import to registry (expired after one runtime), after that, main file can

run without NAG. OK, we have two way to unpack in this case:

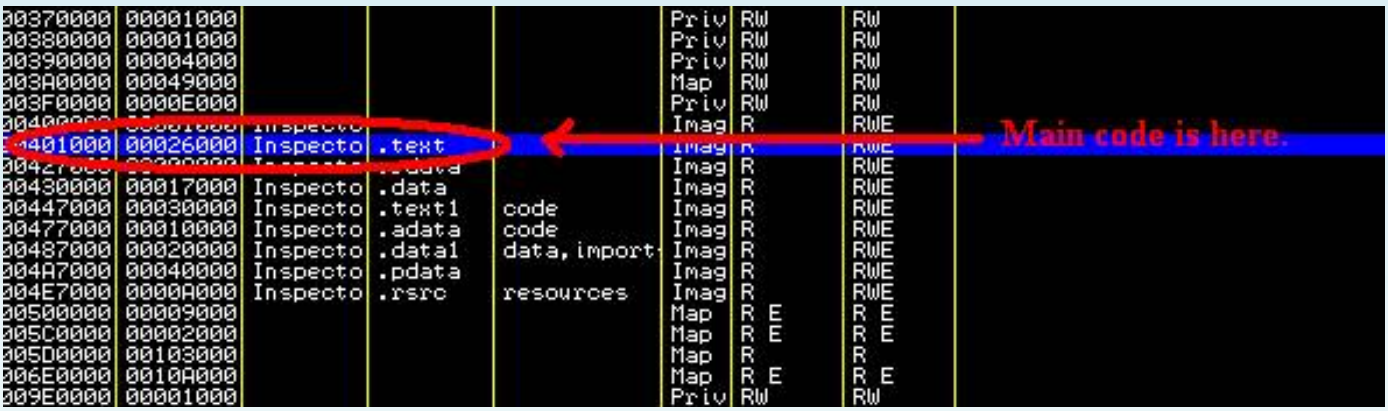
1.Leech trial launcher from key when it has generated key. Use it when main file ask and unpack it.
2.When launcher have finished creating and key trial before load main file, we stop it and unpack the main.

A-Fishing Trial Key:

With this game, I'll use first method. Now, load launcher *(Inspector Parker.exe)* into Olly:



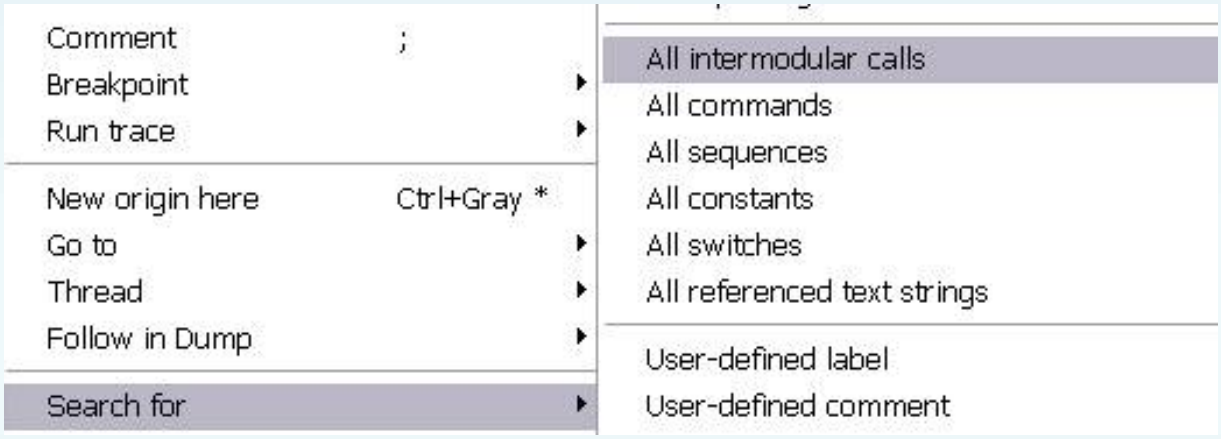
Hit Shift-F9 to run it, show the menu launcher same pic above. Come back Olly, Open Memory Map:



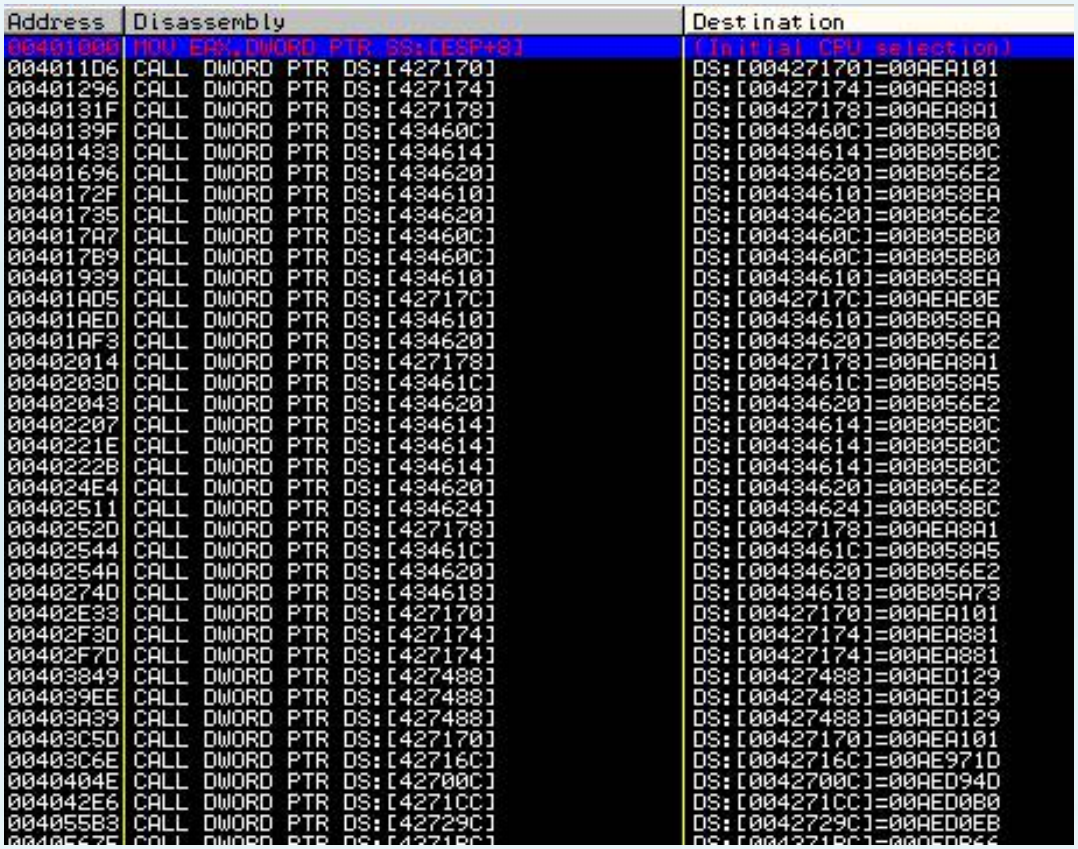
The launcher file is packed by Armadillo, after unpack code, main code is stored at section. Text. Ctrl-G **401,000** go to:

We're here:

Right-click - Search:

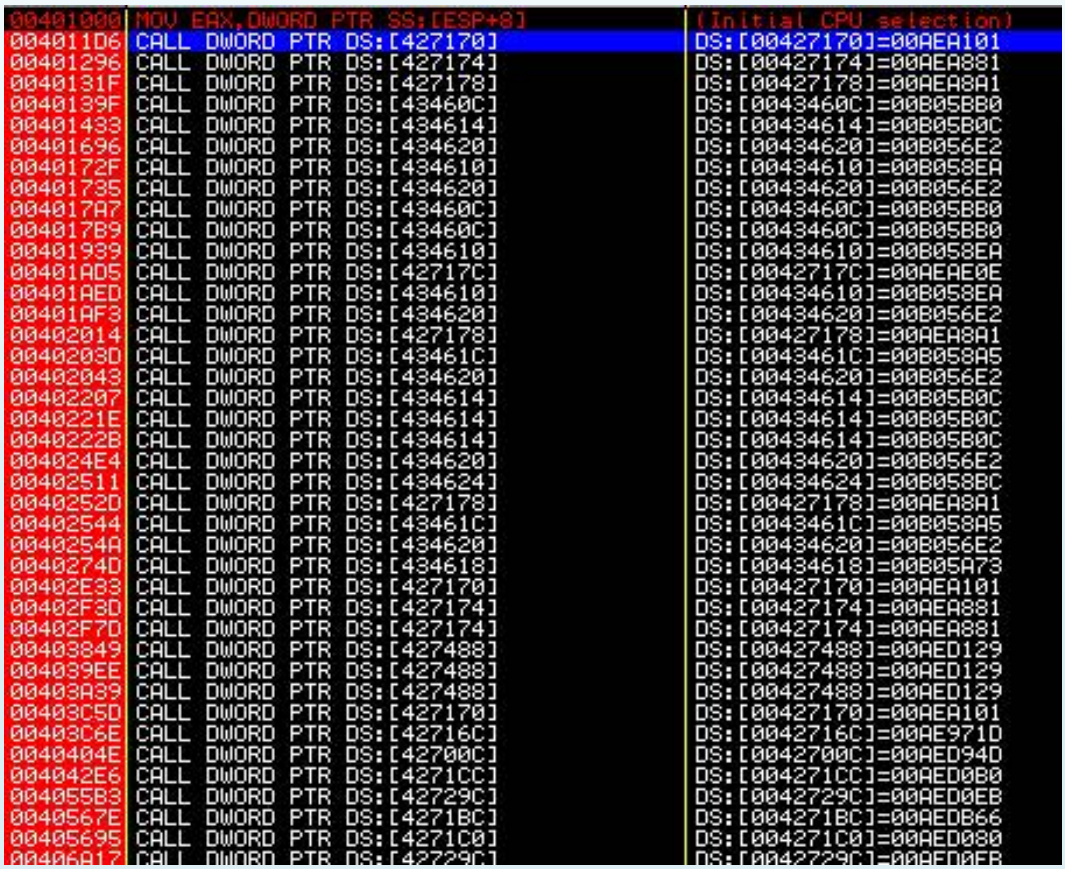


Click "**Destination**" to sort list:



We see that many Call to addresses in a section out of range file. This section are created to decrypt code for

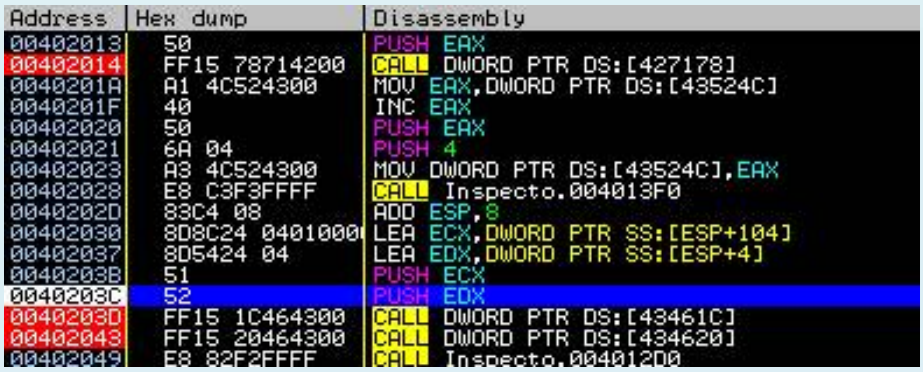
Armadillo. And I think it has some key functions generate trial from there. OK, we set all those BP CALL: (hehe, F2 hit more and more ..)



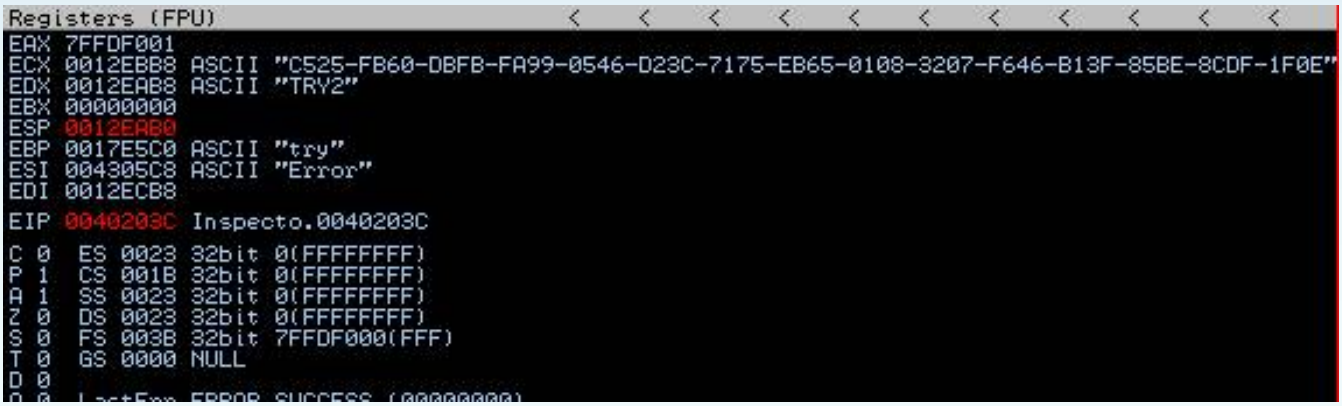
Why do I make that stupid? Because I do not know exactly which CALL can be fishing Key trial. But you'll see this result immediatelly. Switch to Shockwave menu and click **"Play":**

Olly break here:

Trace F8 to here: (if it at any other break when call tracing, and trace to continue RETN)

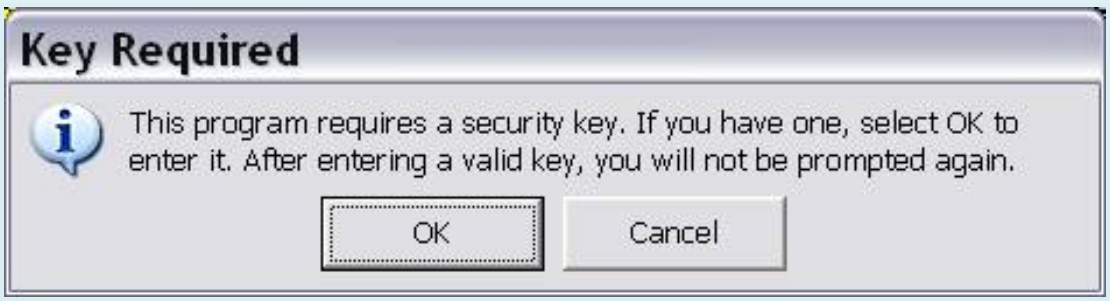


When stop at pic place as above, see Registers Window:



Hehe, EDX and ECX = Name = Trial Key. We'll use it mainly for file  . OK. Olly other Open, load main file *(Parker.exe):*

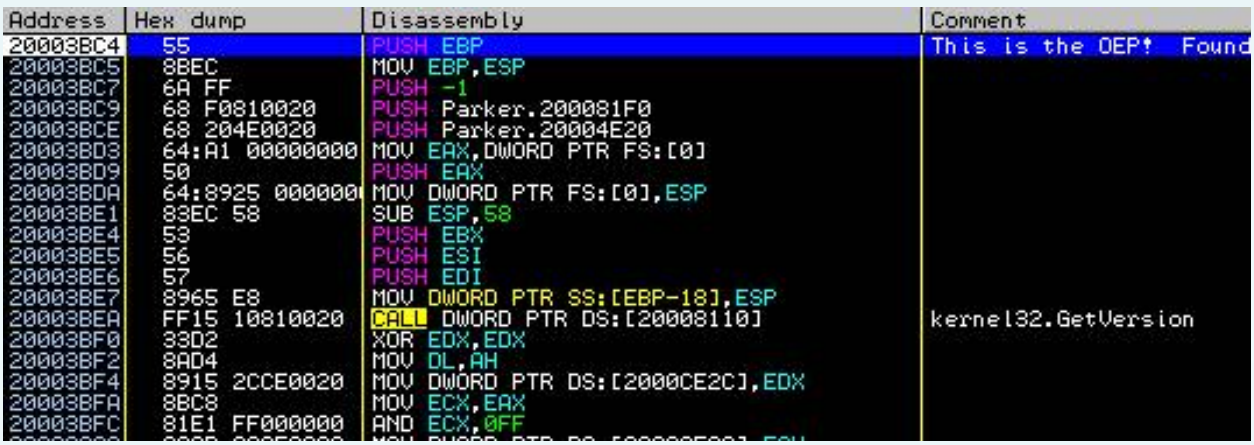
Use fly's script, it'll run until show message:



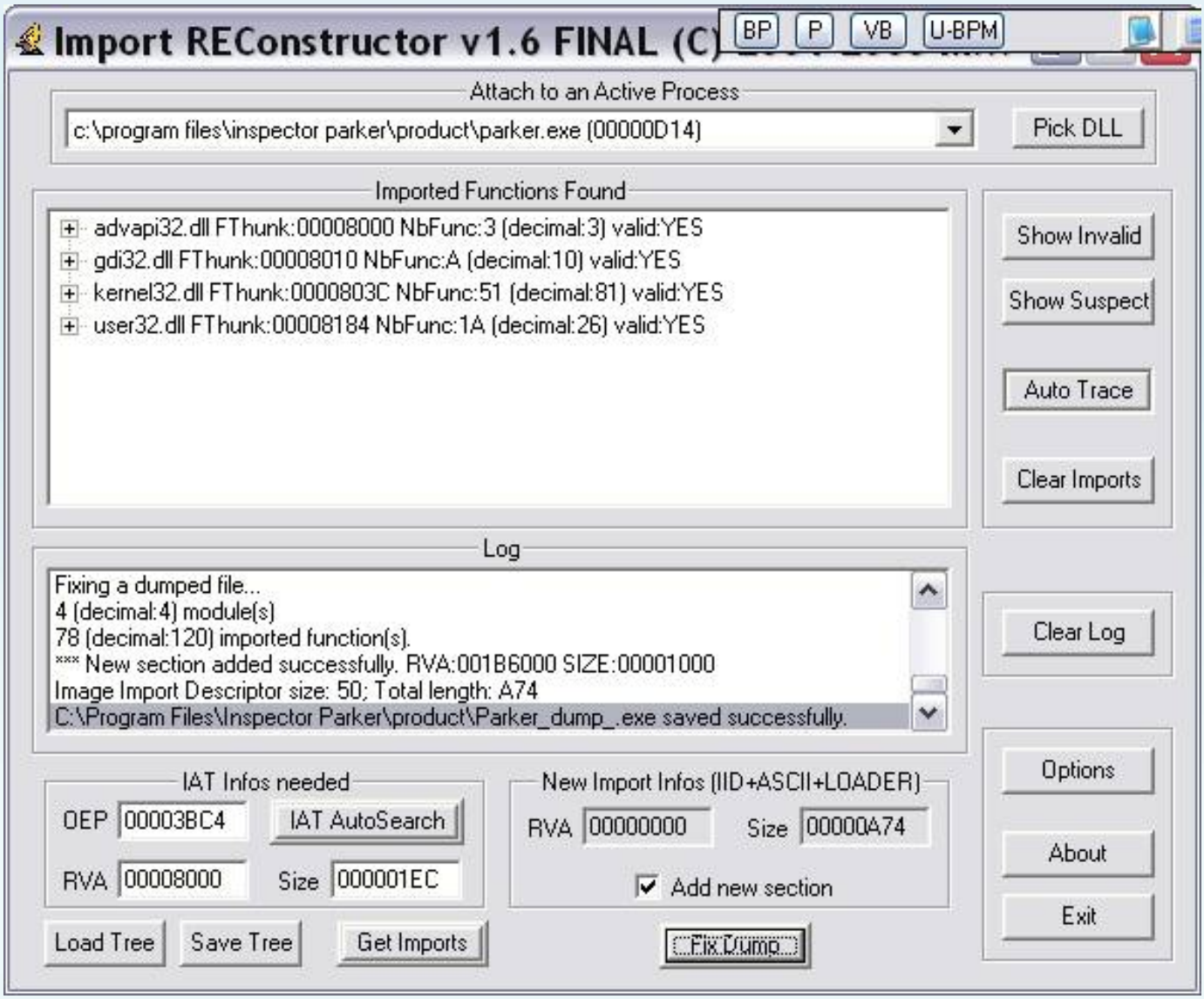
Which input data before you get:

OK:

Scripts will continue and finished at OEP:

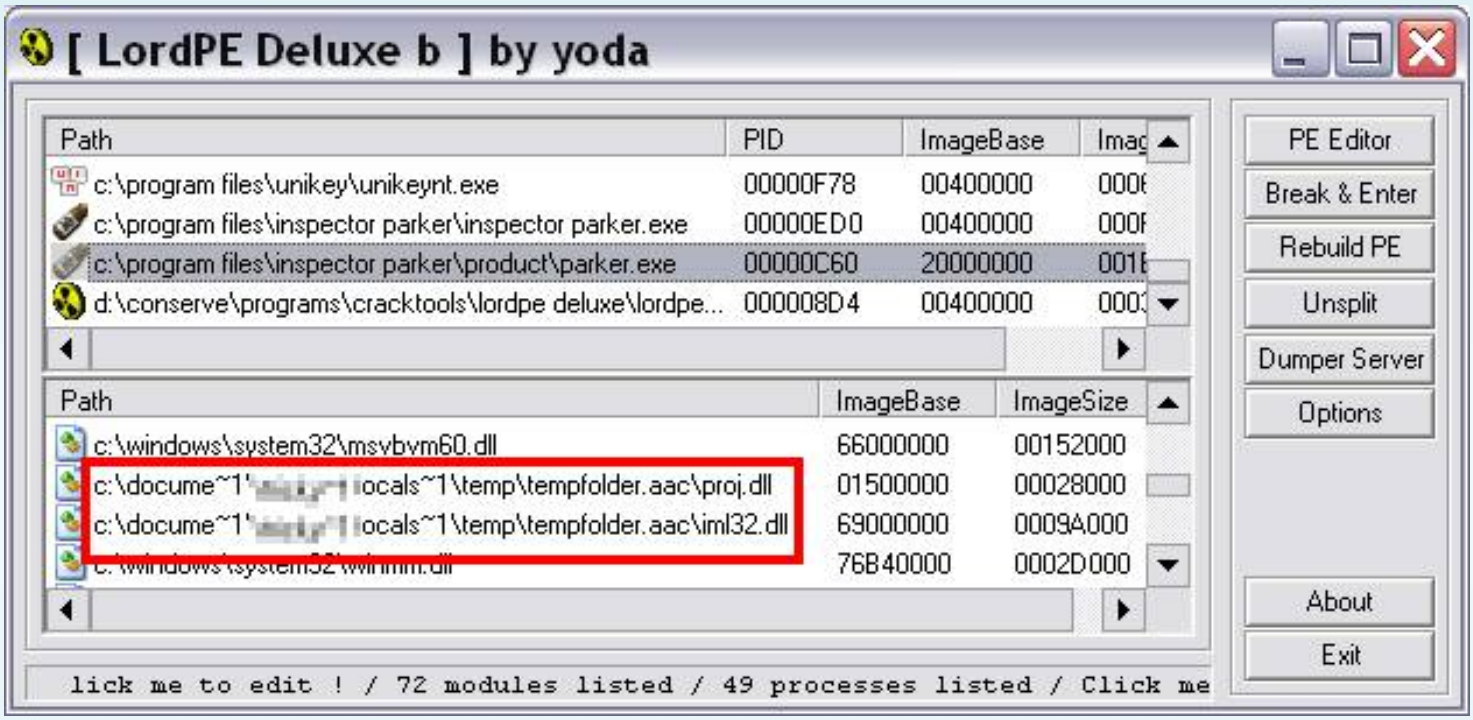


Dump it and fix IAT:

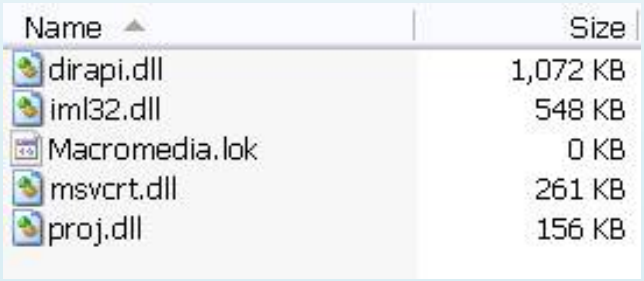


If you do not fix the script successfully, you should try fixing by manual MagicJump. Next step, all close, fixed file and run it show message:

Well, we miss some files when unpacking. Run launcher again and click **"Play"** to run main file. But do not Close Game. Hit Alt-Tab to Switch Out. LordPE open, view Module which are loaded by main file:



OK, we miss some file:



They are 4 modules of Macromedia Director. Copy all to same folder with a main file (do not need Macromedia.lok). After that, run the file again fixed and still show messages:

Hehe, that is the error message of Macromedia Director if you miss or Overlay Data Resource Change in something. In this case, after unpacking, we missed Overlay Data. I do not explain this, you should find some tuts about ActiveMark to undertand what is it.
I also note: Data Overlay of Macromedia Director does not like Overlay Data as of ActiveMark. It's really hard with me. I do not find it easily to paste into end of dump file. And when to write this doc, I still do not know how to find that. ***Hope have any body know about Overlay Director*** of ***Data and explain for me.***

But I know a way to fix that. See in main folder of files, you will find a file: "Parker.dcr". It'sa movie which is created by Macromedia Director. If you tried and learnt Director publish a file. Exe, you'll know that *. DCR files is like as Overlay Data. After publish. Exe files, you will not need it more. Hehe, the authors missed removing it. Now, create new *. ini file with Notepad by contents:

```
[Movies]
Movie01=Parker.dcr
```

This *. ini can be added more information but you just need that. Save the file with a name like as name of. Exe files.
Ex: If my file is fixed: *Parker_f.exe* my *. ini files will *Parker_f.ini* is. (Search more information about Director to understand it)

Okie, open the file again fixed, and games run well. Yeah! we solved a Game Director.
But with this method, you only do it if has just **one movie file** (and removing authors missed it). When it has more than one movie file (like as *Diner Dash* from PlayFirst game), you can not exactly add info to *. ini file. So you must know how to find Overlay Data.

Next part, we'll defeat a game on PlayFirst to go to End of this document. Relax a bit and GO GO GO!

B-Stop The launcher:

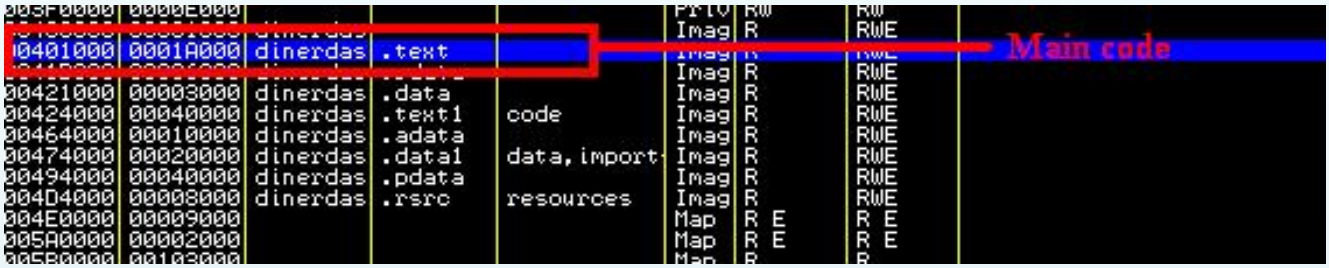
Now, our victim is **Diner Dash 2** (not Diner Dash 1) on PlayFirst. You can download it from:
http://www.playfirst.com:80/bits/Install_DinerDash2.EXE

It's similar as OberonGames, has two files: one launcher and one main file. Main file is installed at:
C: \ Program Files \ PlayFirst \ Diner Dash 2 \ game

The launcher also generate a Trial Key to load main file. But at this time, we'll stop it before main file is called. OK, load launcher into Olly:

Shift-F9 to run:

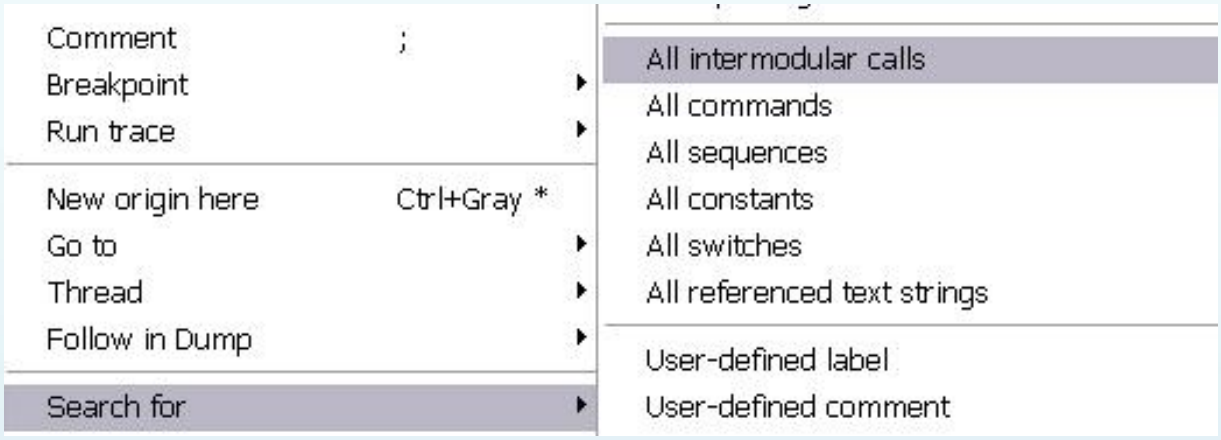
Switch to Olly, open Memory Map:

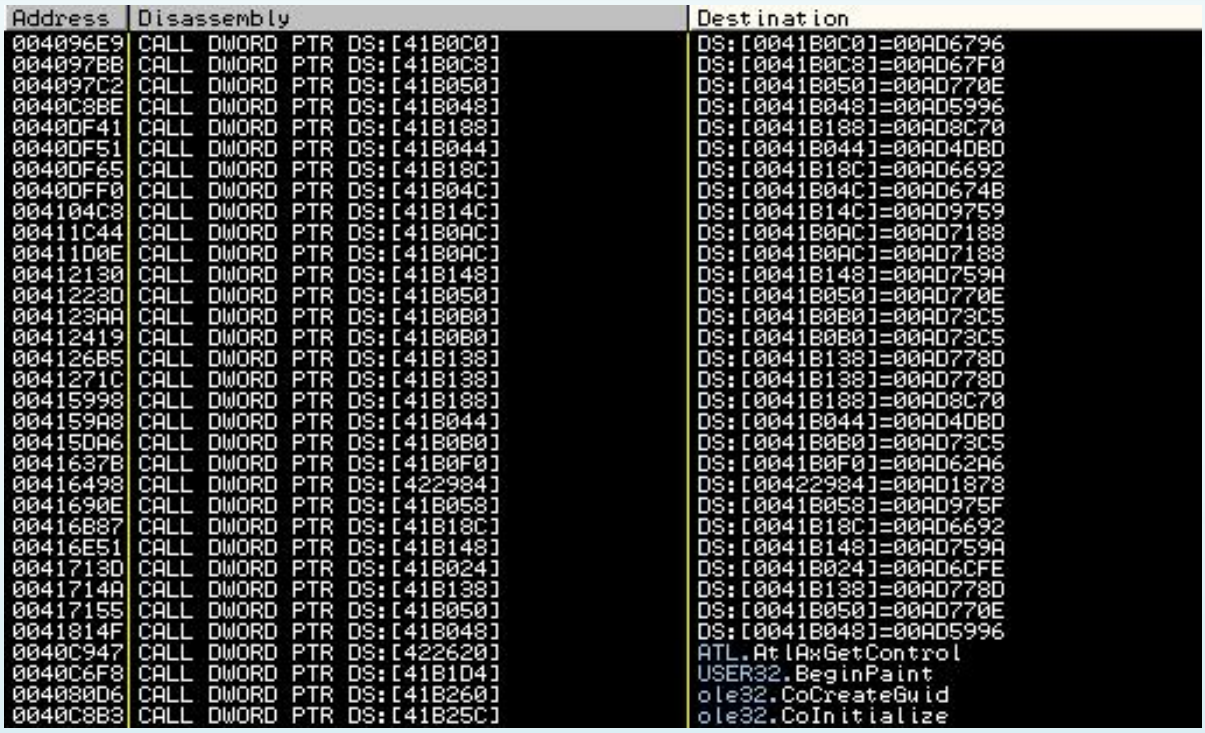


Goto:

At here:

Right Click, Search:

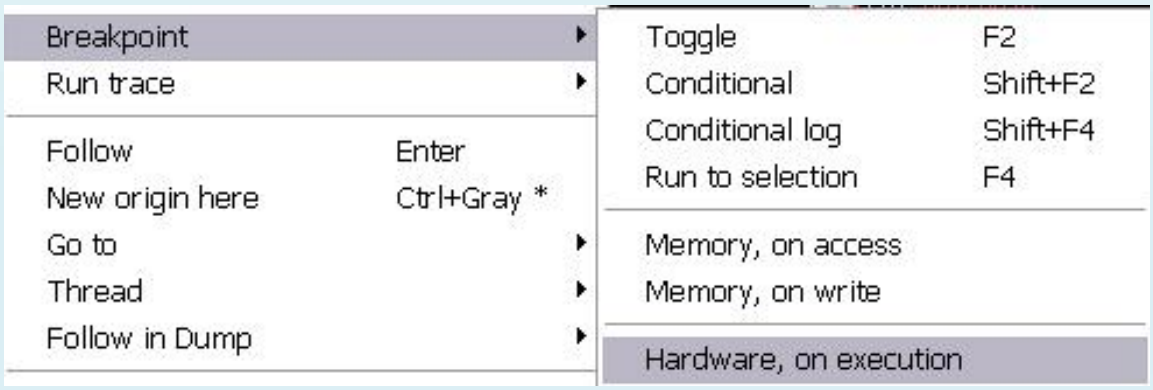




Do not set any F2 by BP, because it has Integrity Check. And as I said that we'll stop it before launcher call main file. Launcher use to call CreateProcessA main file, find it:

Enter this call:

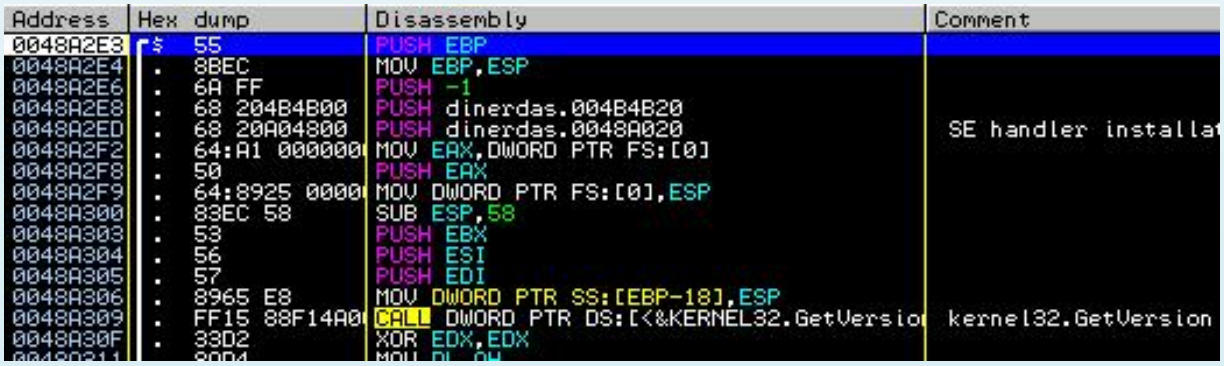
Right Click on this call, use to bypass Hardware Breakpoint Anti-BP of Integrity Check (do it for Safe):



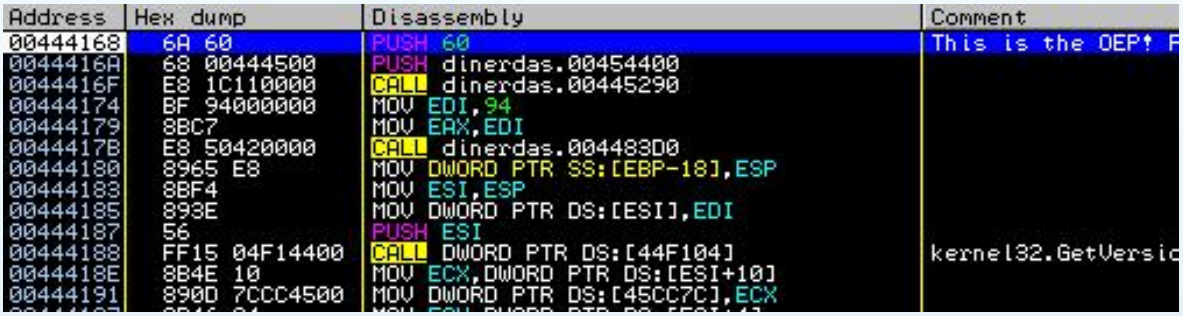
Now, Switch to Game Menu and click "Play":

Bread:

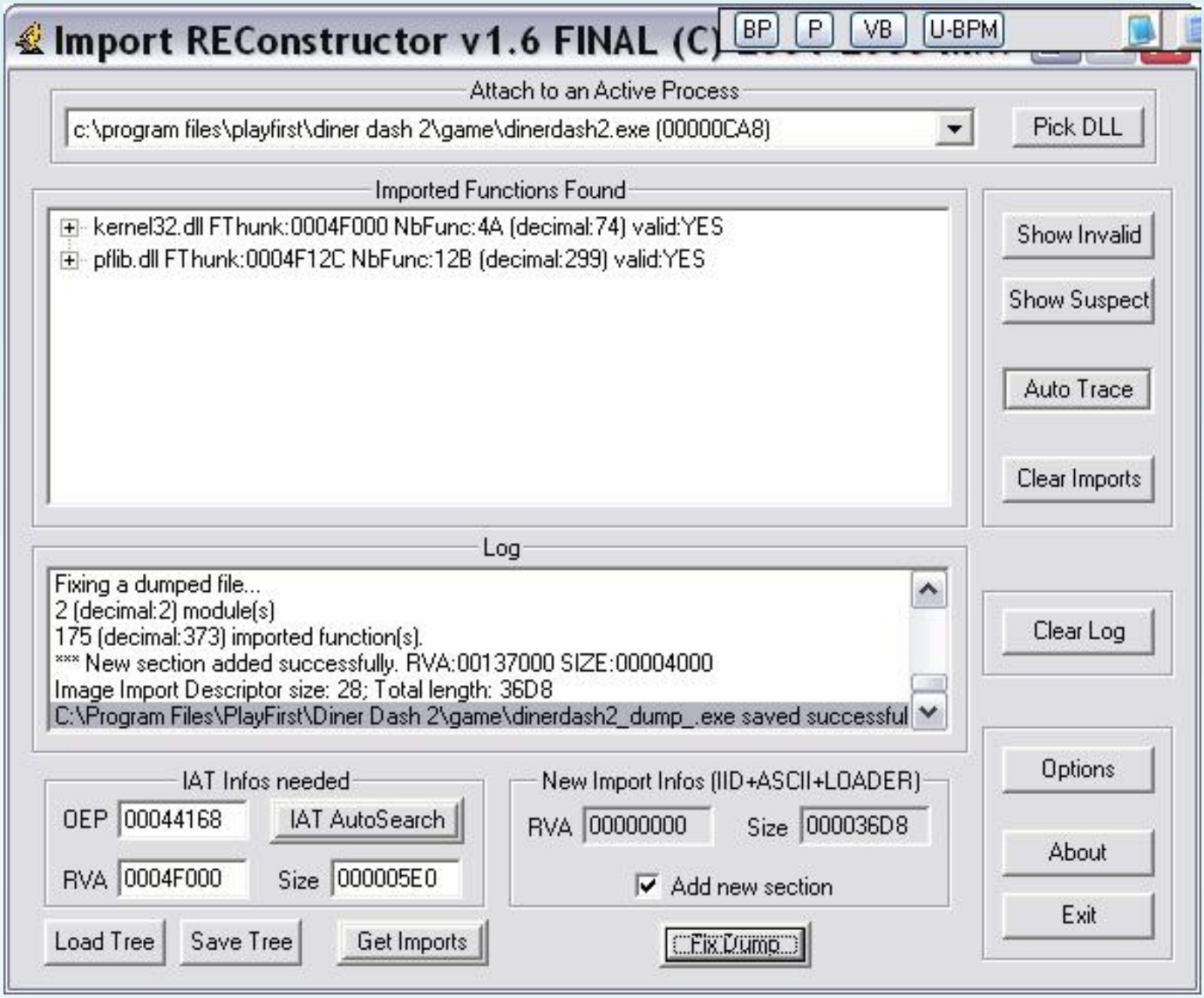
Call before CreateProcessA, the launcher has generated Trial Key. Then, we can unpack the main energy. Do not close this Olly, Olly and other open load main file:

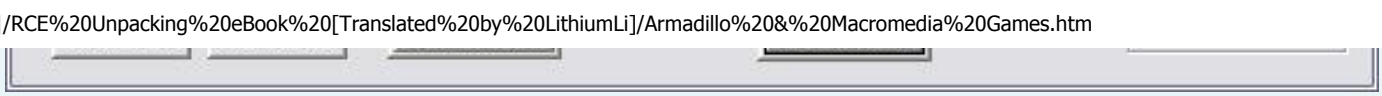


Use fly's script again (or use manual unpacking), stop it at OEP:



Dump it and fix IAT:





Ok, fixed the file and run game start .... DONE! (phewww ... do not need damn Overlay Data)

IV-Ending:

I do not like these games on this doc, just excited to playing with Armadillo. But if you like games, you should buy them. Authors worked hard and they should be paid for their work.

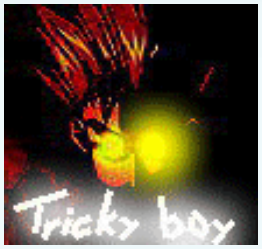
I tried my best but damn sorry for my english ! See ya next time.

Big thanks to:

All REA's members: Computer_Angel, Moonbaby, Zombie, hacnho, benina, kienmanowar, rongchaua, Deux, Merc, hoadongnoi, the_lighthouse, TQN, light.phoenix, hytkl, tlandn, hurt_heart, dzungltvn, Zoi, littleboy84, haule_nth, takada, Why not bar, iamidiot, Akira, dump, thienthandien, [kid], ...

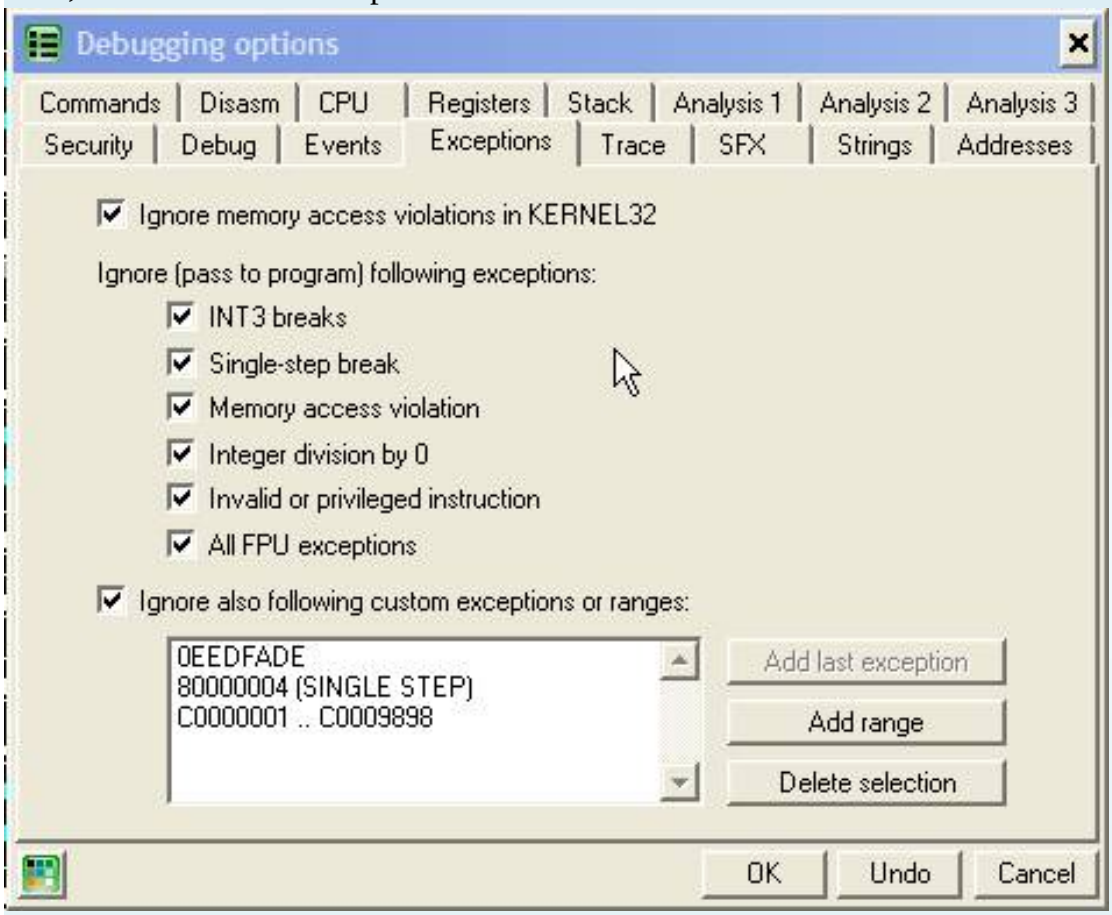
Special thanks to:

fly, stephenteh, Gabri3l, MaDMAn_H3rCuL3s, CondZero, Ricardo Narvaja + NCR, lena151, haggar, ARTeam, snd, RES, CrackLatinos, all unpack.cn ... Authors who created tools and you.

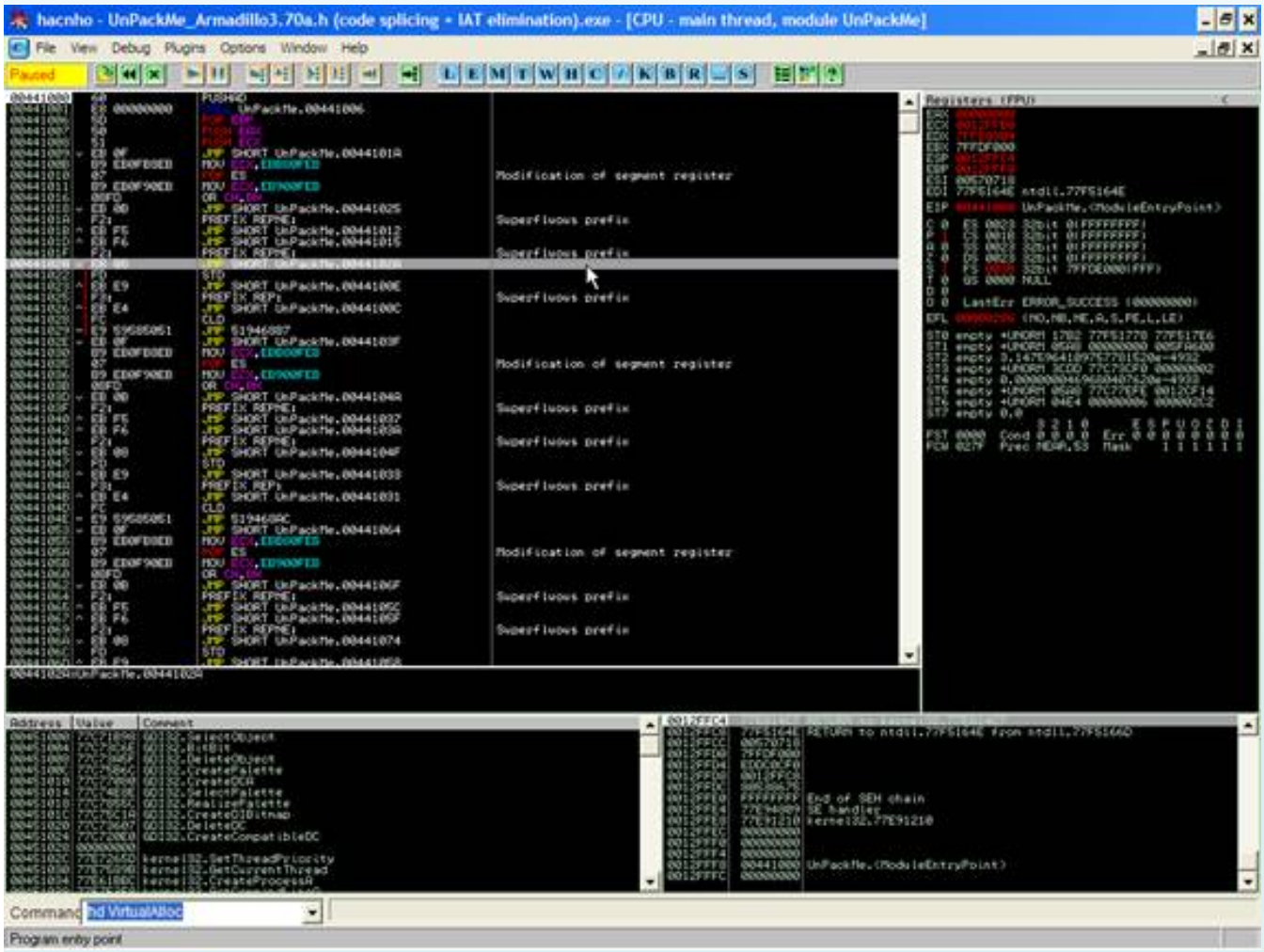


Written by Trickyboy - 2006
Welcome to www.reaonline.net

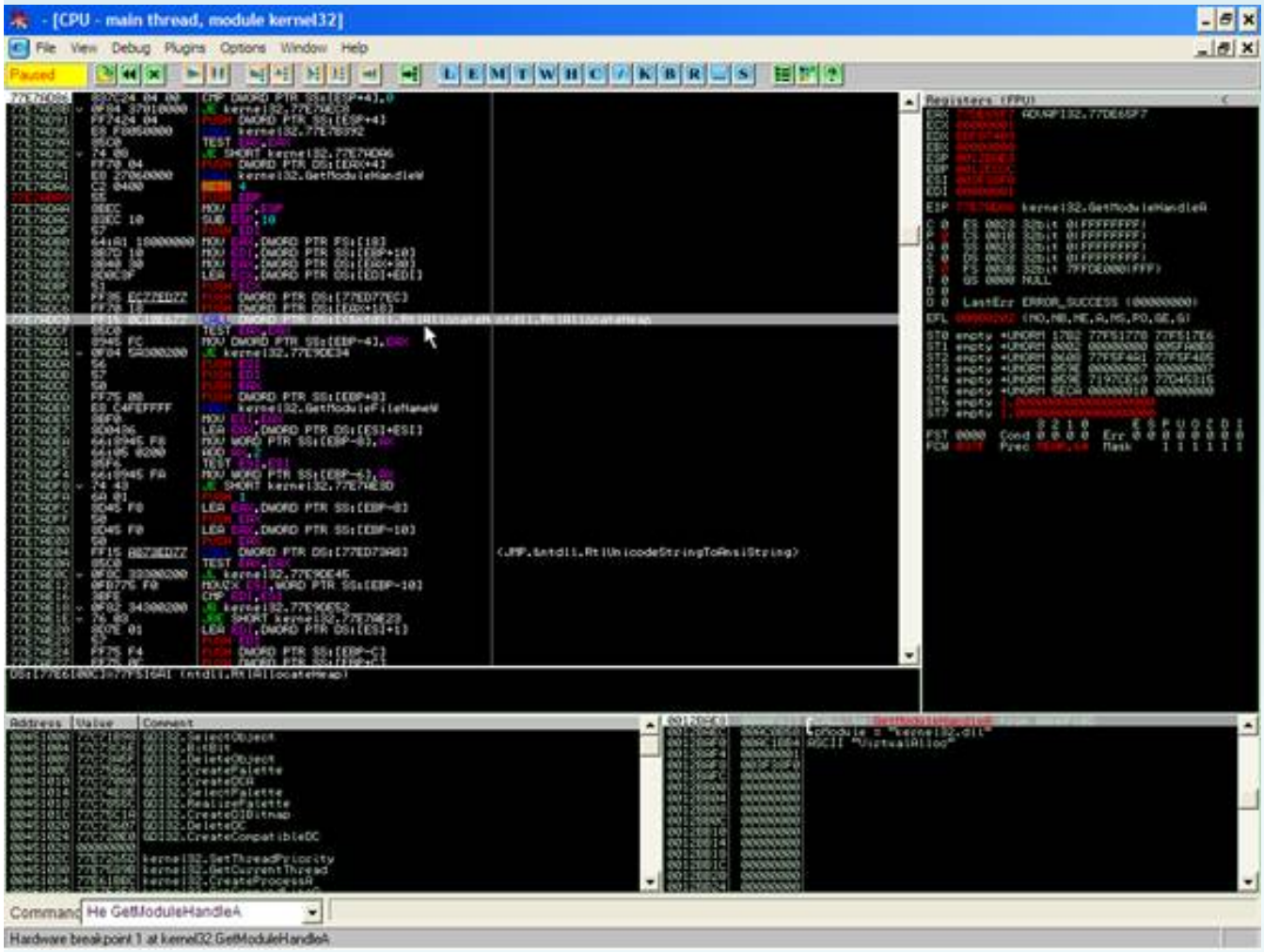
Target: UnPackMe_Armadillo3.70a.h (included in rar file)
Pack: Armadillo 3.70 with option Standard + Code Splicing + IAT elimination
Tools: Olly hacnho ImportREC + + + LordPE armInline 0.4.1 (inluded in rar file)
First, select all of the exception.



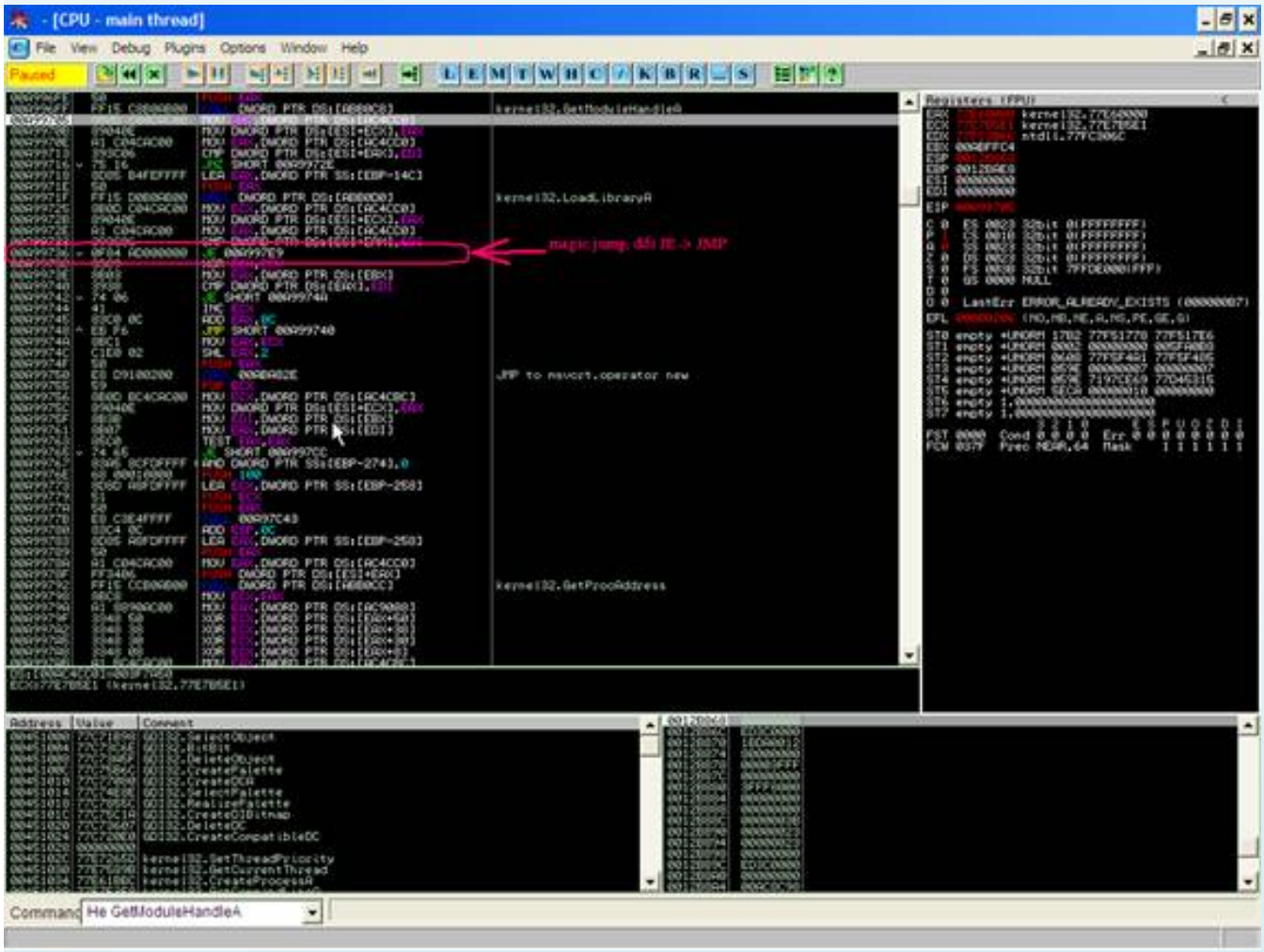
Start:
Olly _Load to target:



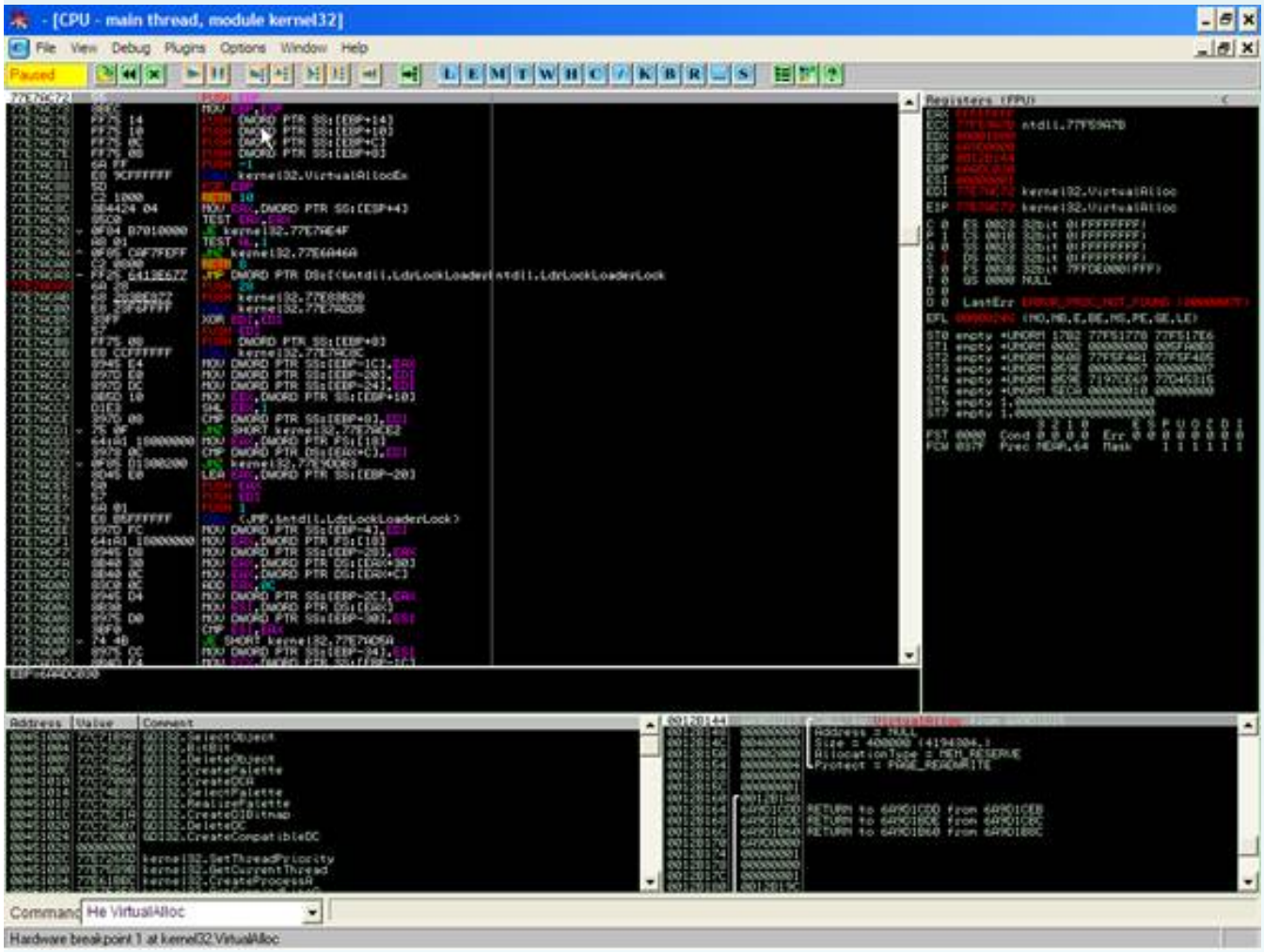
_ He GetModuleHandleA, Shift + F9, olly break:



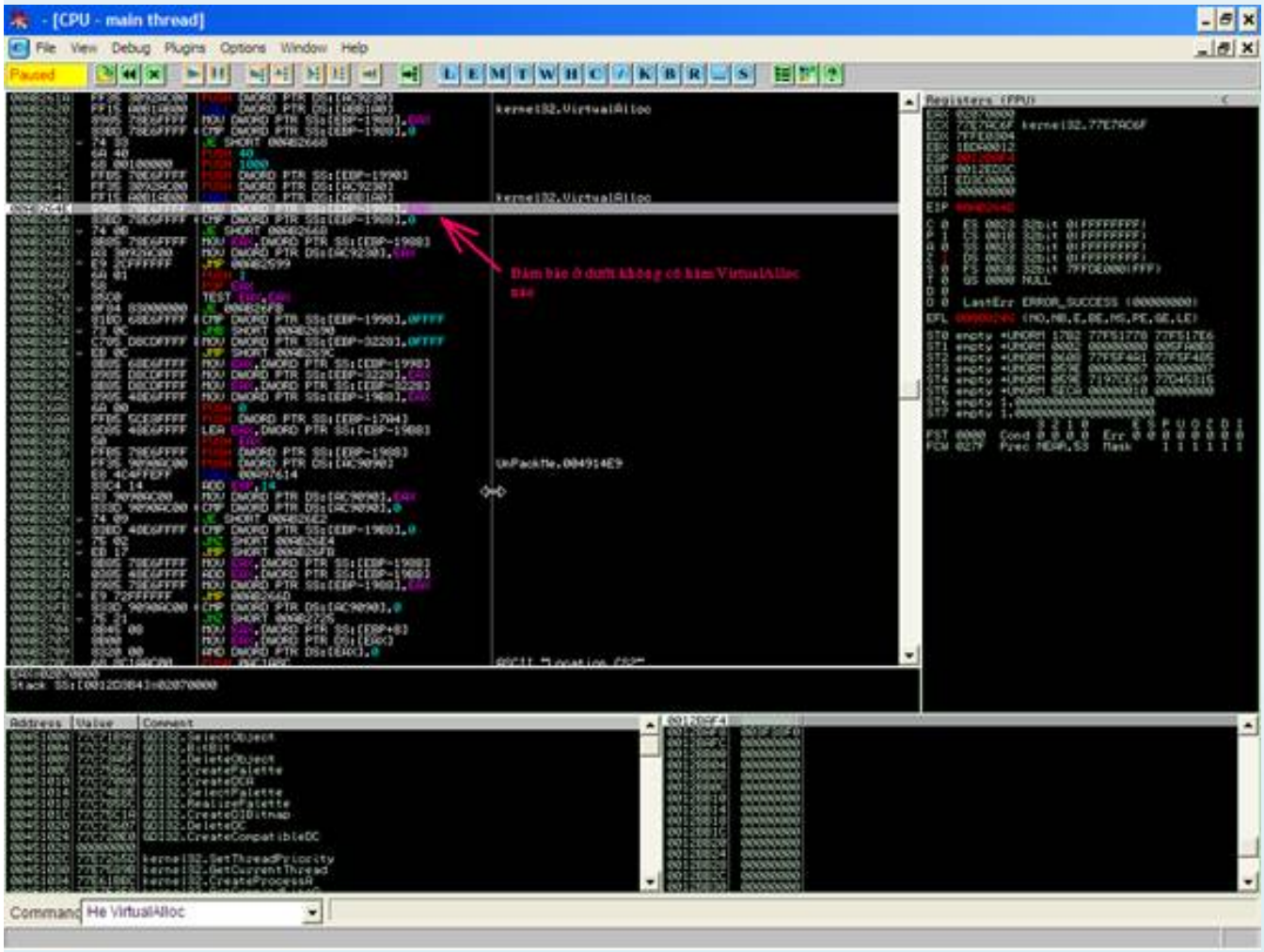
_Shift + F9, Shift + F9, ALT + F9, => magic jump



_Hd GetModuleHandleA, He VirtualAlloc, Shift + F9, olly break:



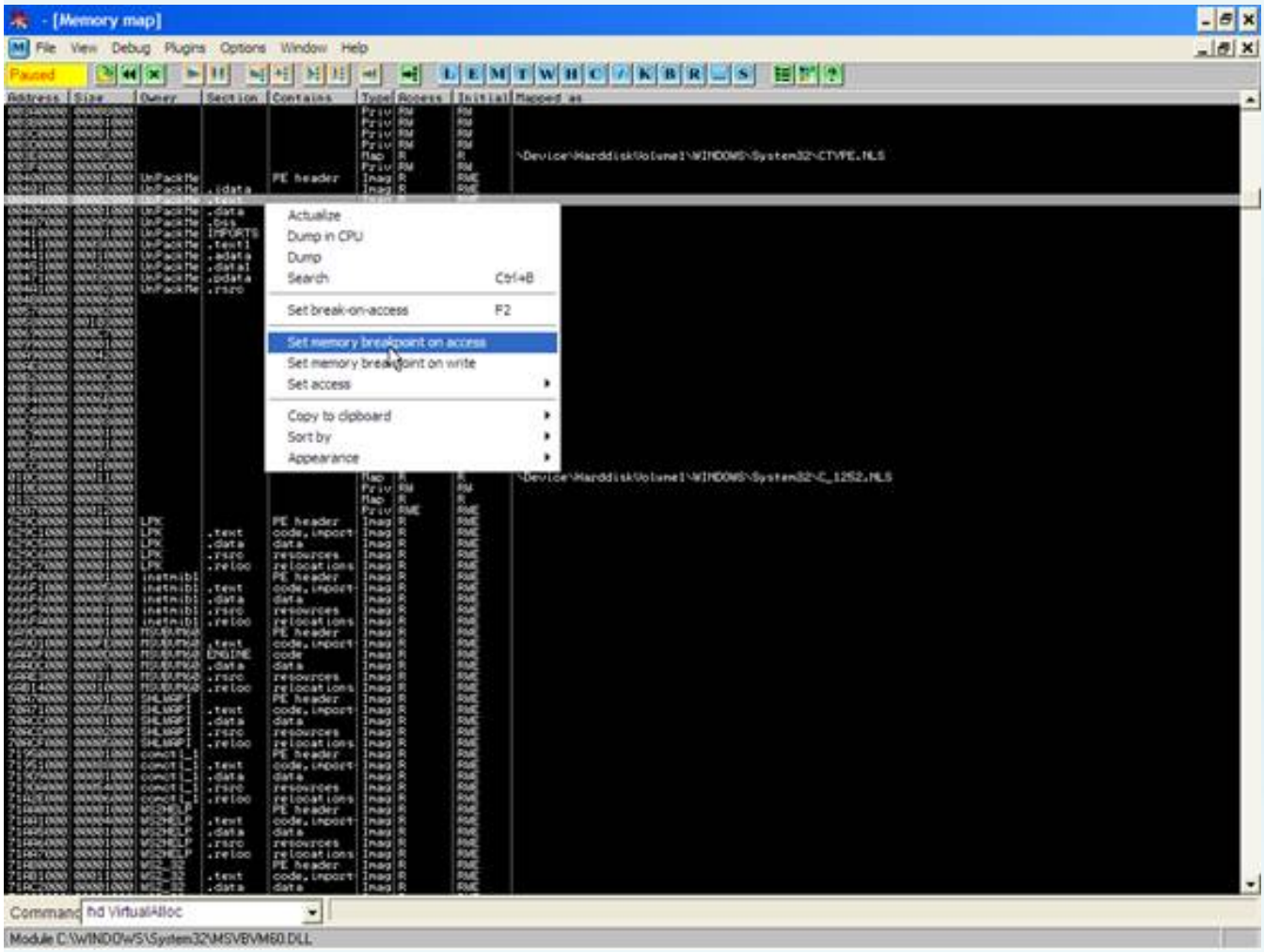
_ Shift + F9, Shift + F9, Shift + F9, Alt + F9,



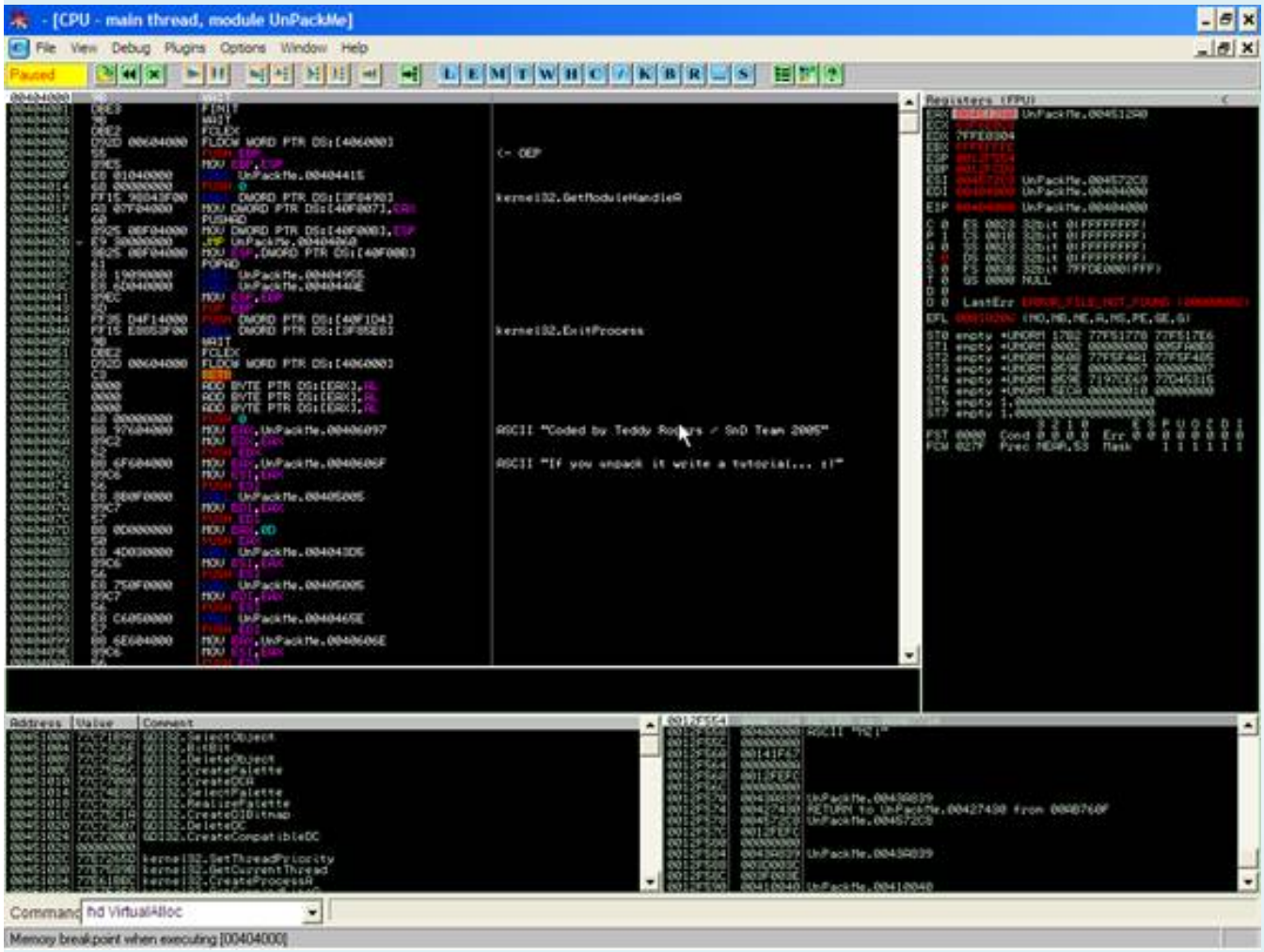
_ EAX now contains the address areas that will set arma stolen byte code of the original target, now we will redirect the region of 1 area is available in the file that we used to do (eg region. ADATA, is the area code contains the packer)

_Nhap Left mouse of EAX, Enter, then enter 441000 invisible, and OK.

_Ta Code Splicing defeat was, now we'll come to OEP. Hd VirtualAlloc, Alt + M, BP on access to the section. Text:



_ Shilf + F9, olly break:



_ OEP: 40400C.

We have magic patch jump to avoid destruction IAT, redirect Code Splicing (this you can always use the tool ArmInline). Now the IAT elimination.

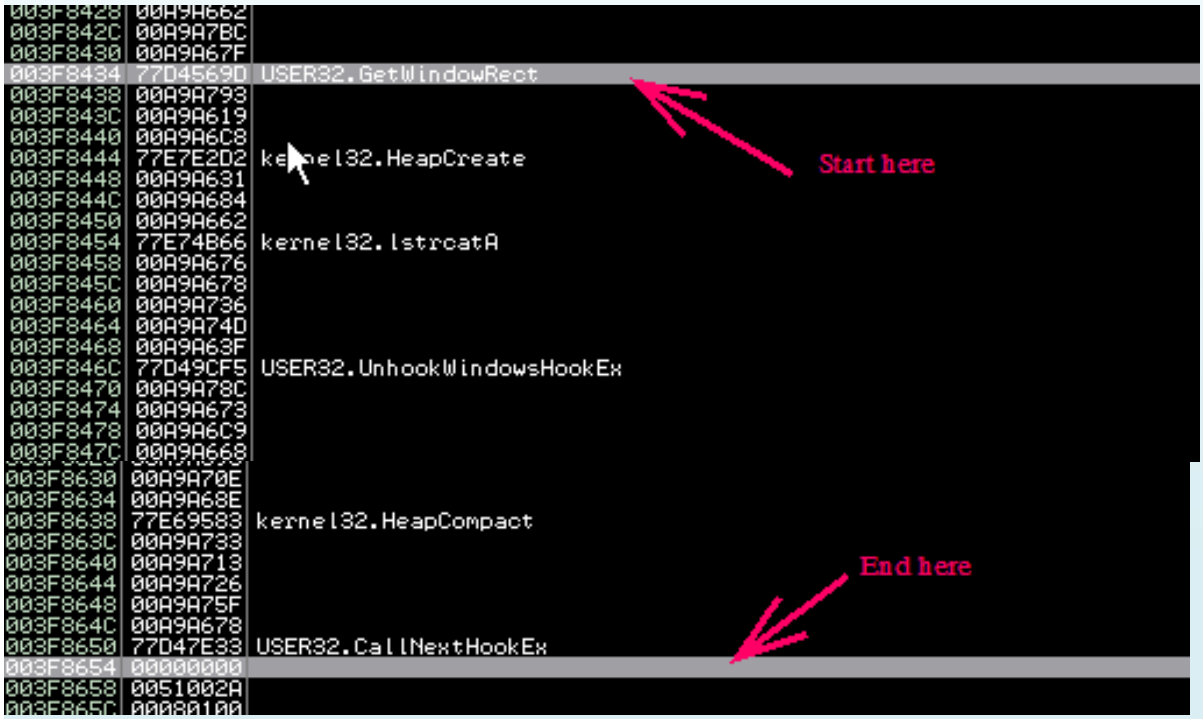
You refer to:

Import Address Table (IAT) elimination means that the protector has erased the IAT nice and clean from the protected exe, meaning all the strings and valid pointer locations and has put the API API elsewhere.Those pointers pointers are not the original calls at the APIs Redirected but in the memory locations that are allocated during the unpacking of the program (prog reaches till the OEP). Those memory locations are most of the time (I can say every time) in a lower memory location that the ImageBase to the exe make it harder to find and then with ImpRec probably use some Plug Reconstruct to them, as they are all invalid.The protector also changes the call dword ptr ds: [xxxxxxxx] calls in original code section of the exe (where xxxxxxxx is the location API where the pointer is valid before the packing, in the clear exe, in the clear meaning IAT). So the protector makes them into call dword ptr ds: [yyyyyyyy] where are the new yyyyyyyy Redirected pointers of APIs I said earlier.Of cource in [yyyyyyyy] the pointers are invalid, but the jumps at EIP [yyyyyyyy] codes are located where to dynamically re-create the original valid pointers, and then with a call register (where in the register is good valid pointer) the prog jamps at the API.Of cource it is not for each API Redirected like that, but is almost the same philosophy for all.

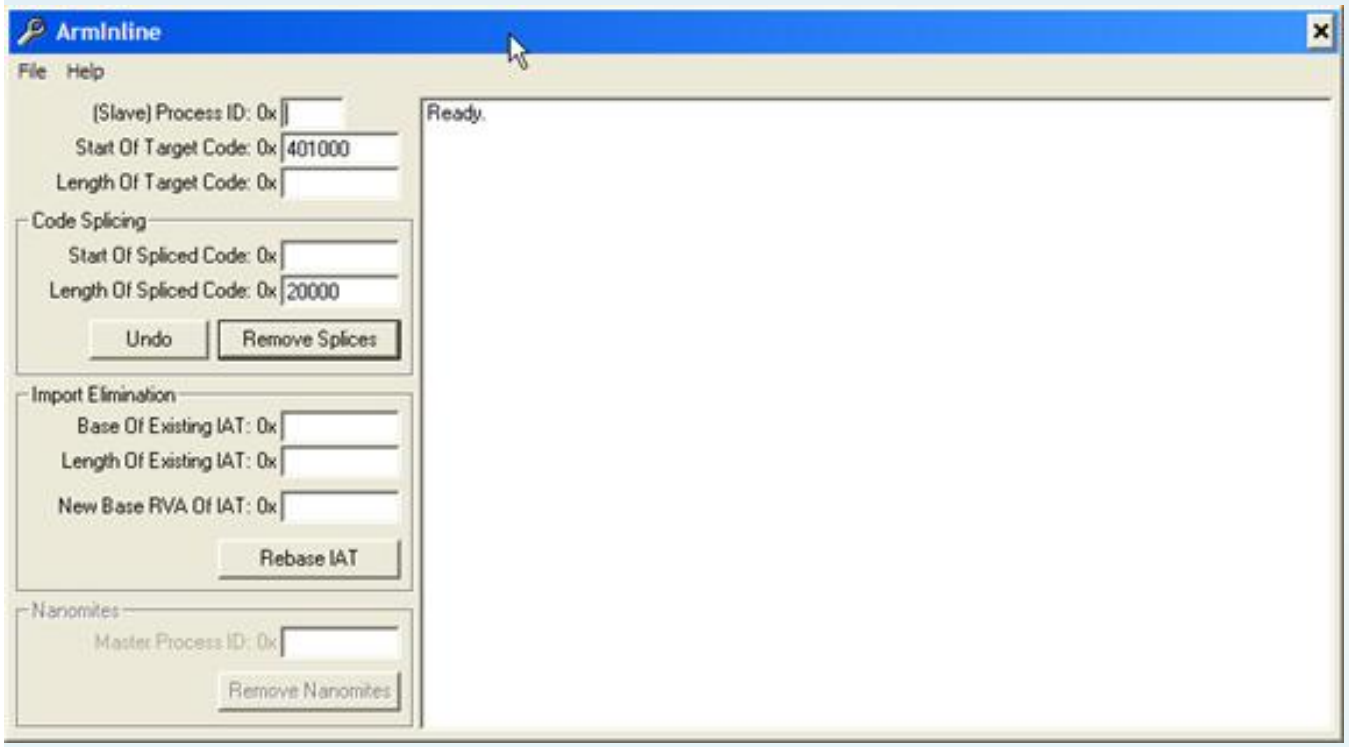
(Source: Armadillo IAT elimination + code by splicing KaGra)

Here:

_Neu Following in your dump, you will reach IAT:

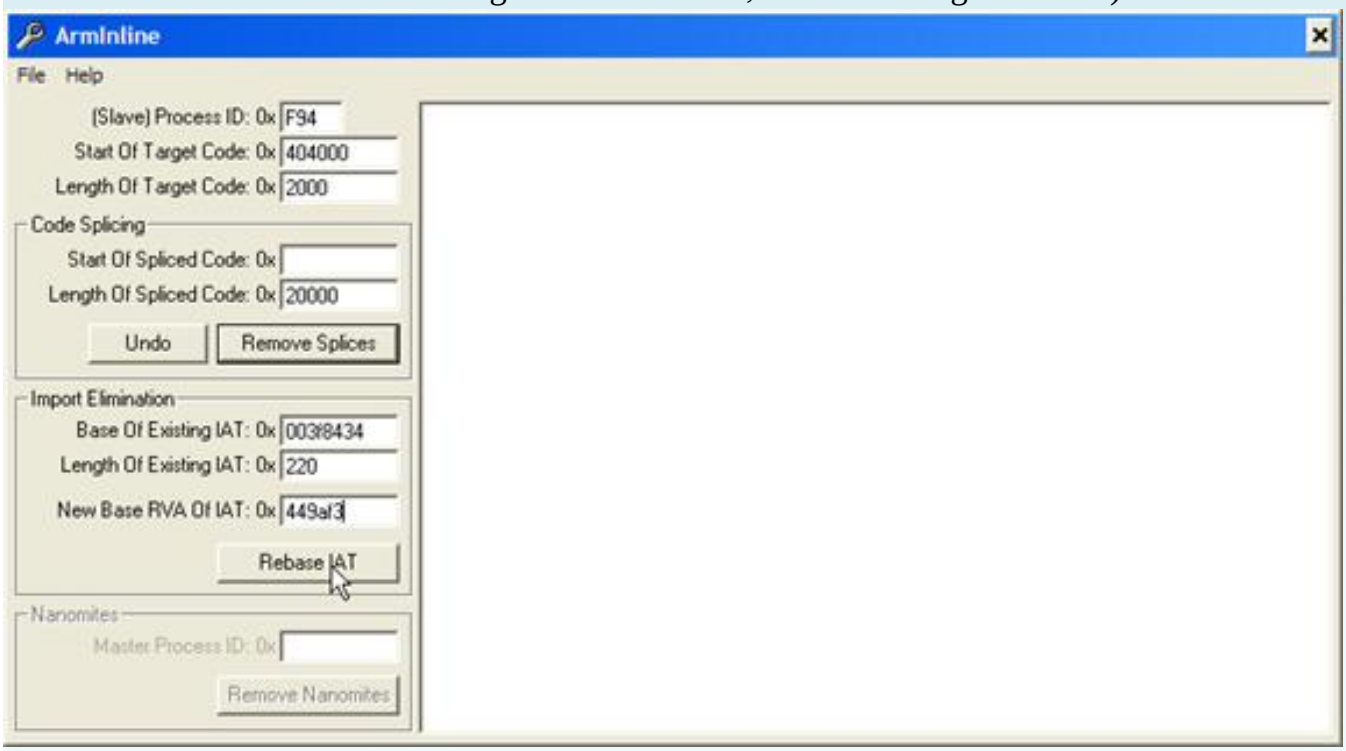


_Vay IAT:
Start: 003F8434 77D4569D USER32.GetWindowRect
Finish: 003F8654 00000000
Len = 3f8654 - 3f8434 = 220
_ Now run ArmInline:

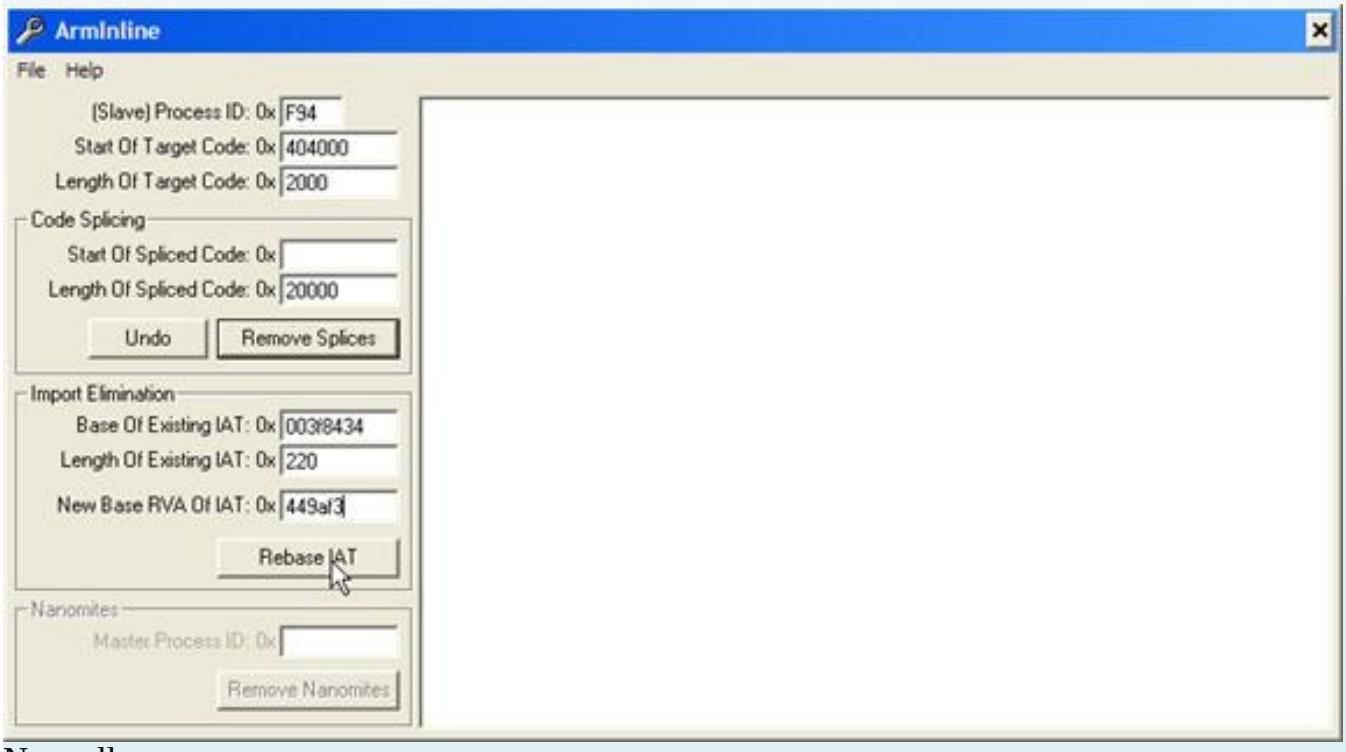


_ Fill in the boxes:
Process ID: PID your
Start of target code: RVA's section. Text (404000)
Length of target code: the length of the section. Text (2000)
In the Import elimination:
Existing Base of IAT: 003f8434
Length of existing IAT: 220

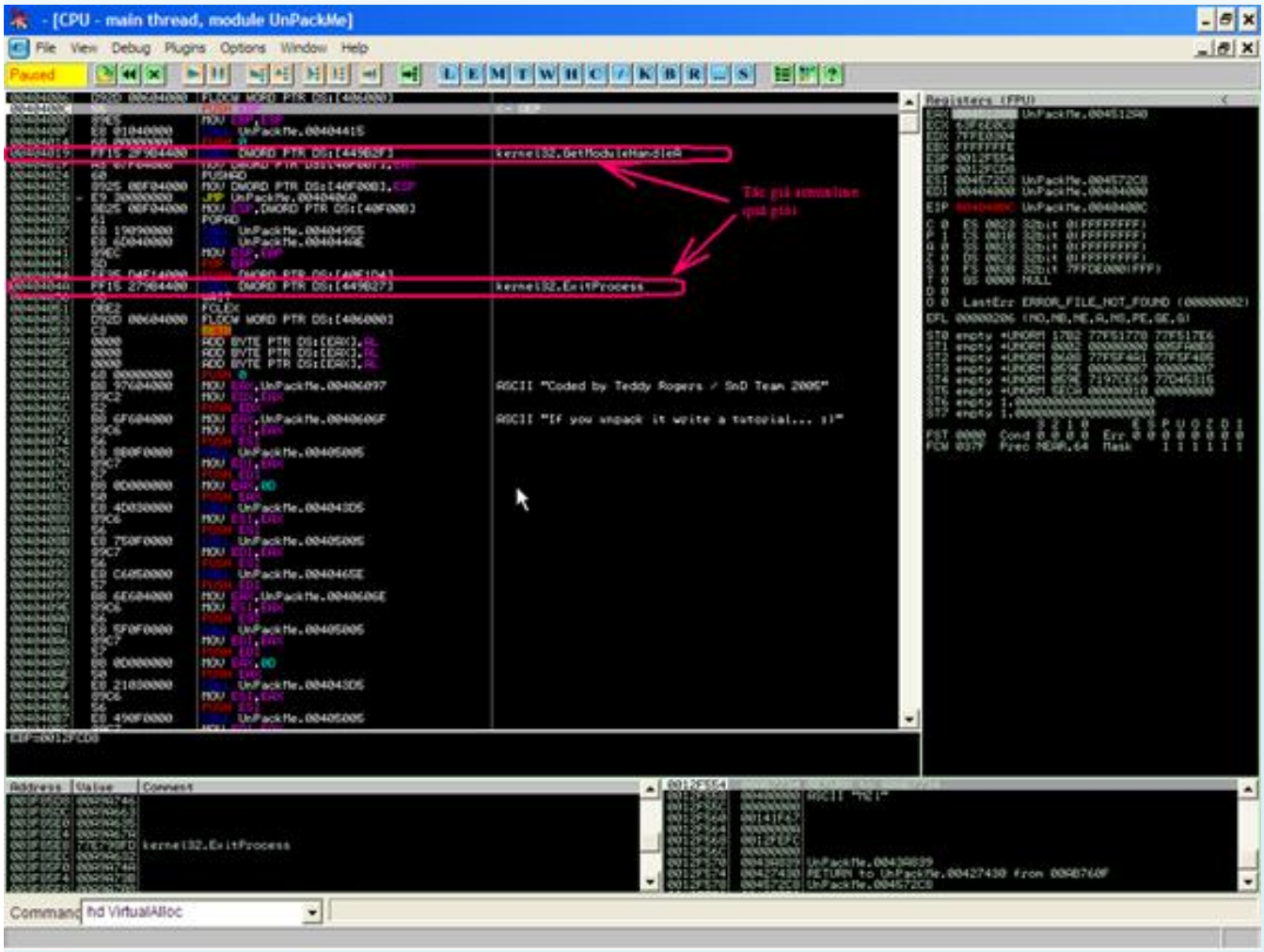
New base RVA of IAT: This you can find the cave 1 large> 220 bytes, then enter the address of the first cave. (I found section. ADATA about 1 large areas to bottom, corn on the right: 449af3)



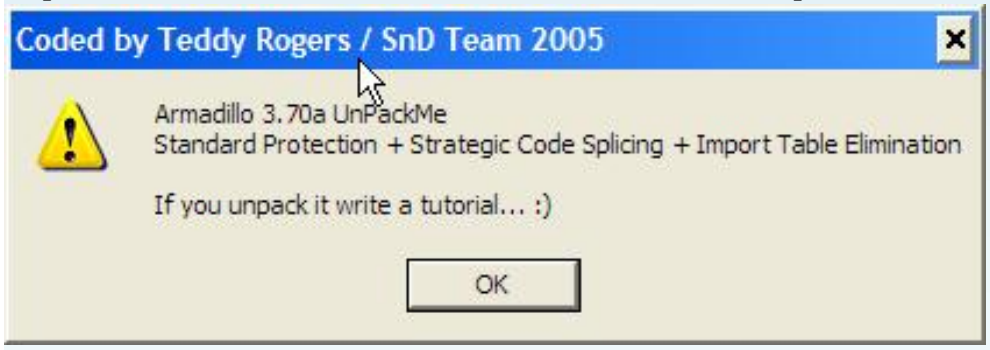
Rebase _Nhan IAT:



Now olly:



Open lordPE, full dump -> fix IAT:
ImportREC -> OEP: 400C -> IAT auto search -> Get imports -> fix dump -> done



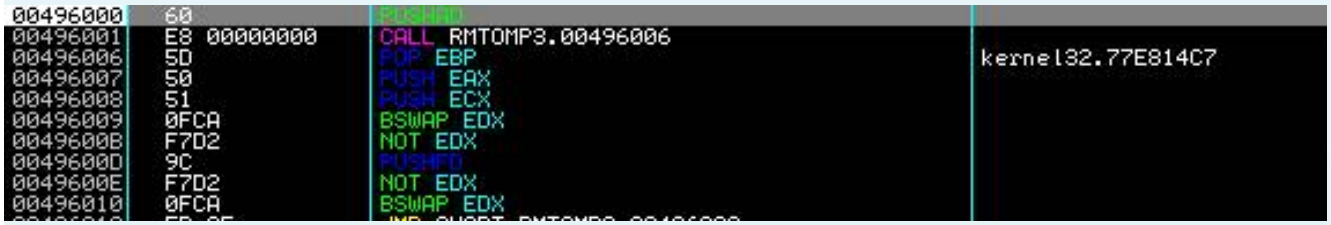
Armadillo 4.xx-Code Splicing (Other Method)

Why Not Bar

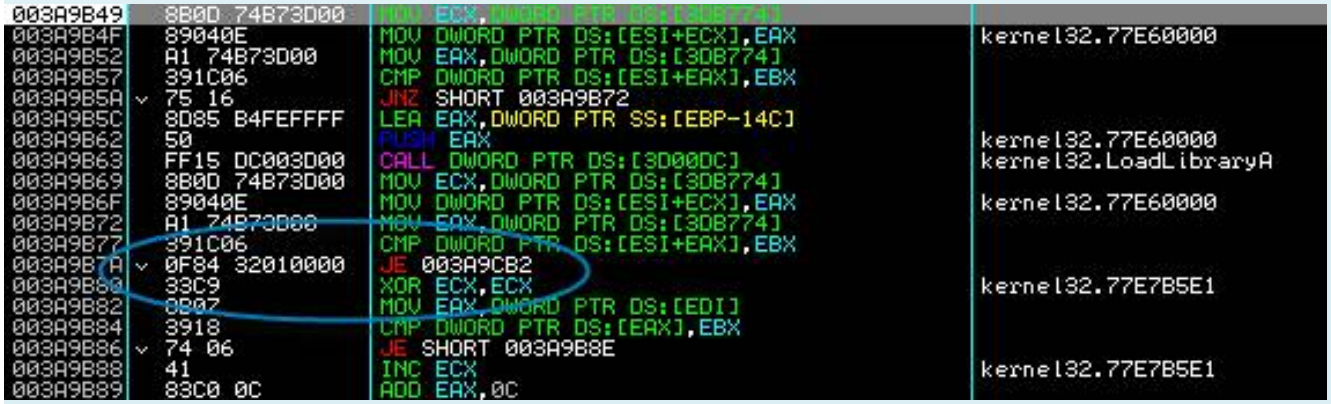
Target: RM to MP3 Converter v1.32 (target2 in Armdillo_tuts_6_exp by Hacnho)
Packer Armadillo 4.xx Code Splicing (anti-dump)!
Tools: OllyDbg (by hacnho), LordPE 1.4, 1.6 Import REConstructor

This is the first tut they write can be difficult to complete if there is anything wrong xót expect the medical sincere suggestions and to ignore. If you have a track and practice of the "secret Kiếp" unpack Armadillo's Hacnho really get it you know the Method Ma Su Additional HacNho presented. But in the West has its MaDMAn_H3erCuL3s of how to use format Code Splicing is Ta. No Fix Code Splicing What ráo Add 1 run section is delicious healthy. According to how you think how long the run is OK. You should also see the stars. To easily compare their use Target as RM to MP3 Converter v1.32 in Armdillo_tuts_6_exp.

_Nhu Usual we Load Target to Olly:



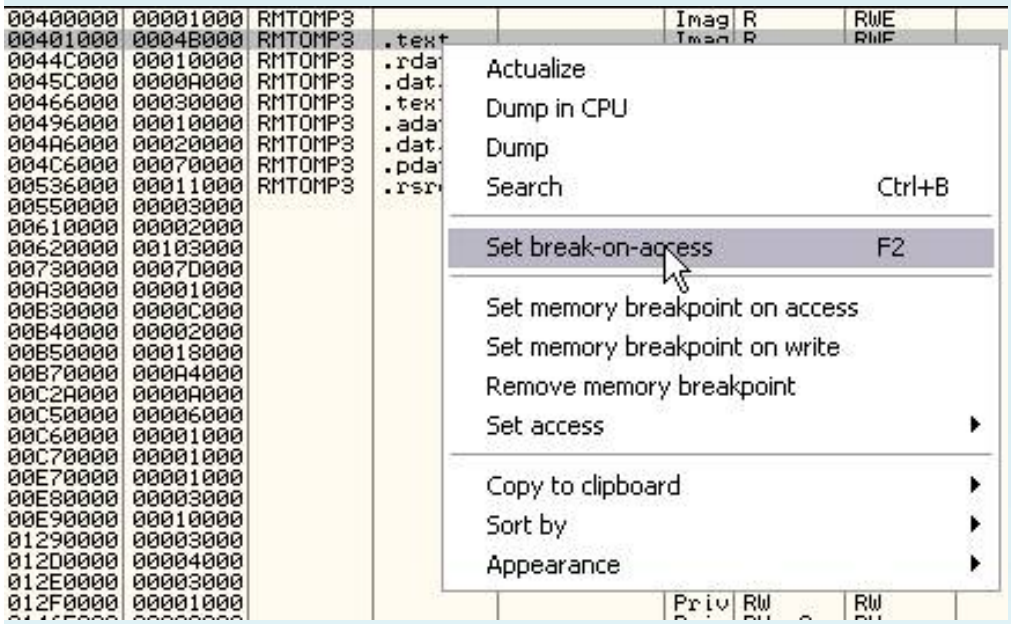
_Va To IAT has been completed we need to patch magic jump to quickly you can use the script (with the tut). Running Script finished you here:



_Patch To:

```
003A9B62   50              PUSH EAX                                 kernel32.77E60000
003A9B63   FF15 DC003D00   CALL DWORD PTR DS:[3D00DC]               kernel32.LoadLibraryA
003A9B69   8B0D 74B73D00   MOV ECX,DWORD PTR DS:[3DB774]
003A9B6F   89040E          MOV DWORD PTR DS:[ESI+ECX],EAX           kernel32.77E60000
003A9B72   A1 74B73D00     MOV EAX,DWORD PTR DS:[3DB774]
003A9B77   391C06          CMP DWORD PTR DS:[ESI+EAX],EBX
003A9B7A   E9 33010000     JMP 003A9CB2
003A9B7F   90              NOP
003A9B80   33C9            XOR ECX,ECX                              kernel32.77E7B5E1
003A9B82   8B07            MOV EAX,DWORD PTR DS:[EDI]
003A9B84   3918            CMP DWORD PTR DS:[EAX],EBX
003A9B86   74 06           JE SHORT 003A9B8E
003A9B88   41              INC ECX                                  kernel32.77E7B5E1
003A9B89   83C0 0C         ADD EAX,0C
003A9B8C   EB F6           JMP SHORT 003A9B84
003A9B8E   8BD9            MOV EBX,ECX                              kernel32.77E7B5E1
003A9B90   C1E3 02         SHL EBX,2
```

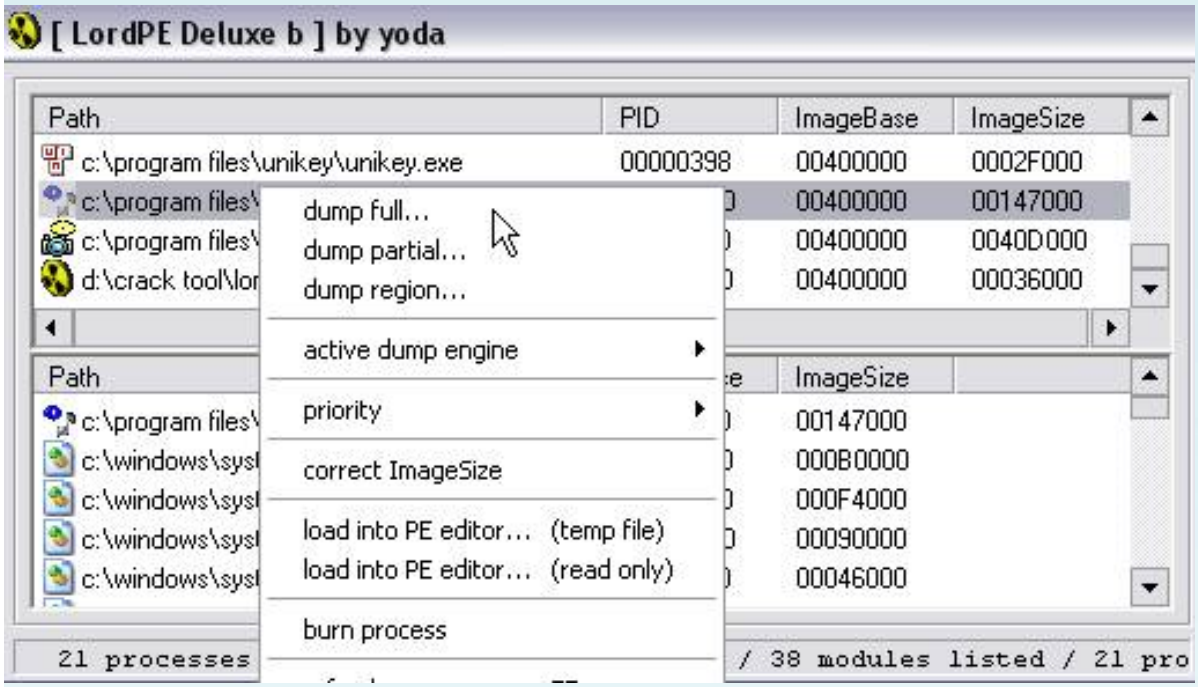
_Nhan Alt-M to window "Memory Map". Set in Breakpoint section. Text:



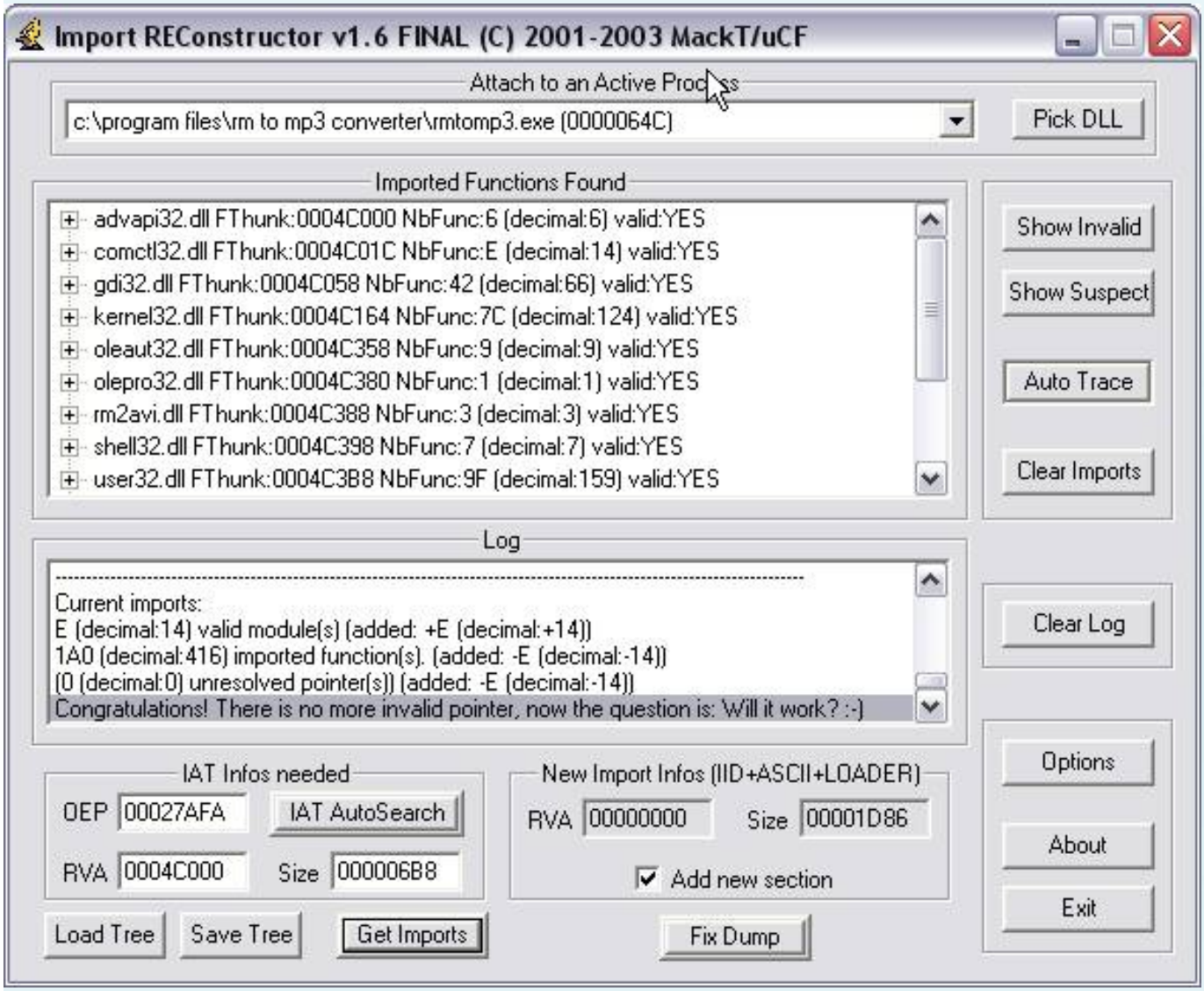
_Nhan Shift-F9. We here:

```
Address   Hex dump          Disassembly                              Comment
00427AFA   55              PUSH EBP
00427AFB   8BEC            MOV EBP,ESP
00427AFD   6A FF           PUSH -1
00427AFF   68 881B4500     PUSH RMTOMP3.00451B88
00427B04   68 A8AF4200     PUSH RMTOMP3.0042AFA8
00427B09   64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
00427B0F   50              PUSH EAX
00427B10   64:8925 000000( MOV DWORD PTR FS:[0],ESP
00427B17   83EC 58         SUB ESP,58
00427B1A   53              PUSH EBX
00427B1B   56              PUSH ESI
00427B1C   57              PUSH EDI
00427B1D   8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
00427B20   FF15 C4C14400   CALL NEAR DWORD PTR DS:[44C1C4]           kernel32.GetVersion
00427B26   33D2            XOR EDX,EDX
00427B28   8AD4            MOV DL,AH
00427B2A   8915 B8374600   MOV DWORD PTR DS:[4637B8],EDX
00427B30   8BC8            MOV ECX,EAX
```

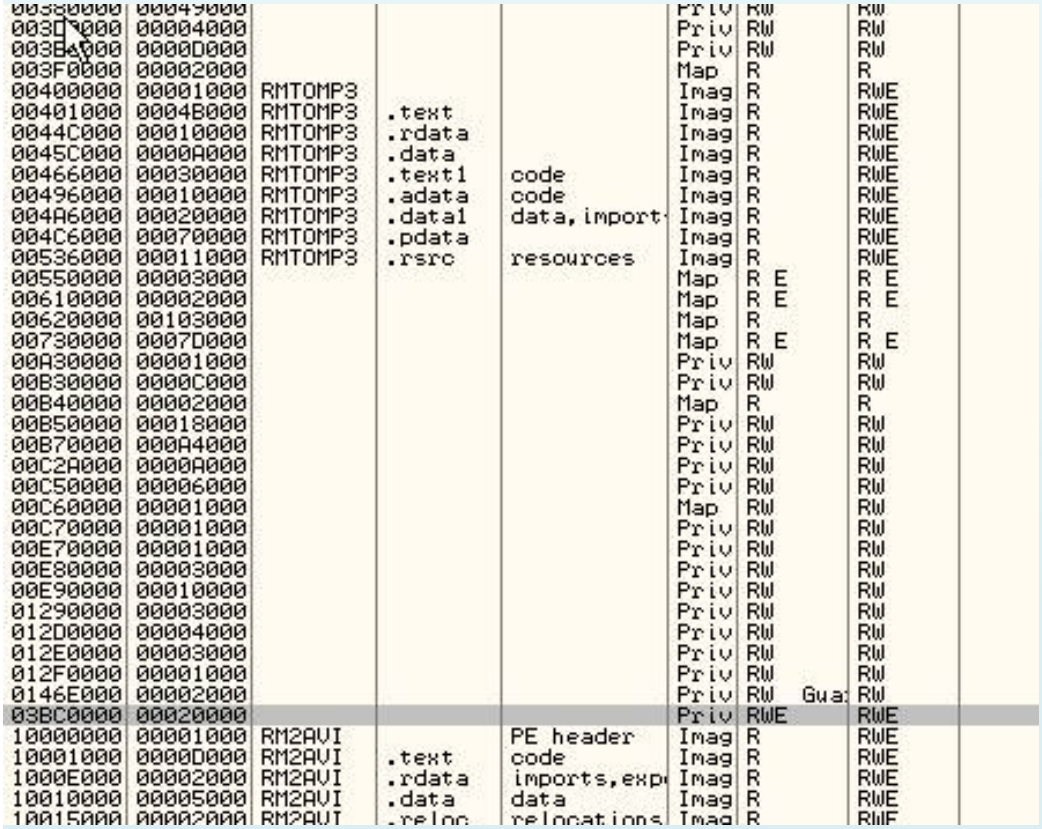
OEP: 00427AFA
_Bay Hours we used to dump LordPE Full. Open LordPE, dump:



Open Imprec, fill OEP: 27AFA. Click "IAT AutoSearch," OK, CutThunk (s), "Get Import":

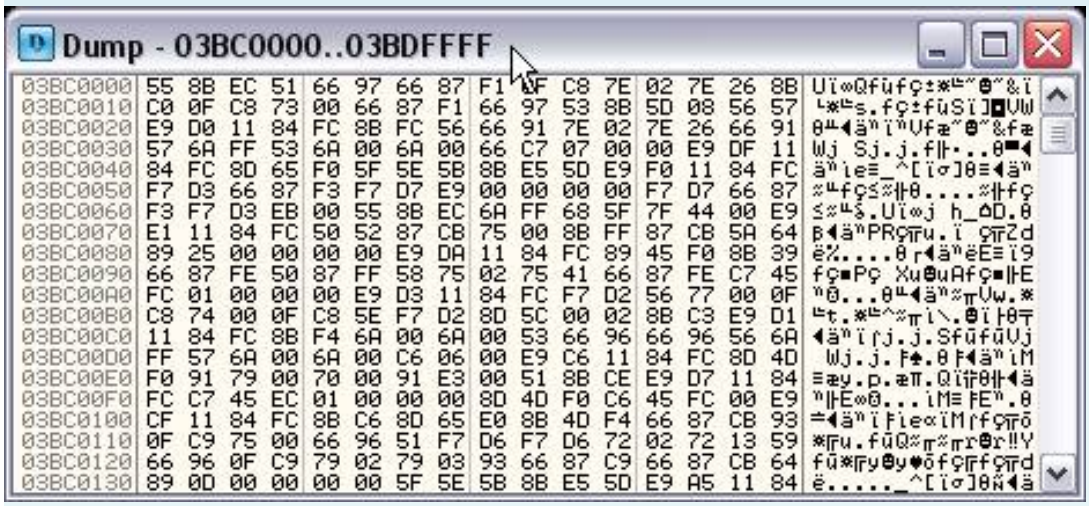


Fix dump, try Run and of course it does not run and I important steps, we need to find a cove Splicing of the Code. Section usually form 0xxx0000. View pictures that you will immediately stop:



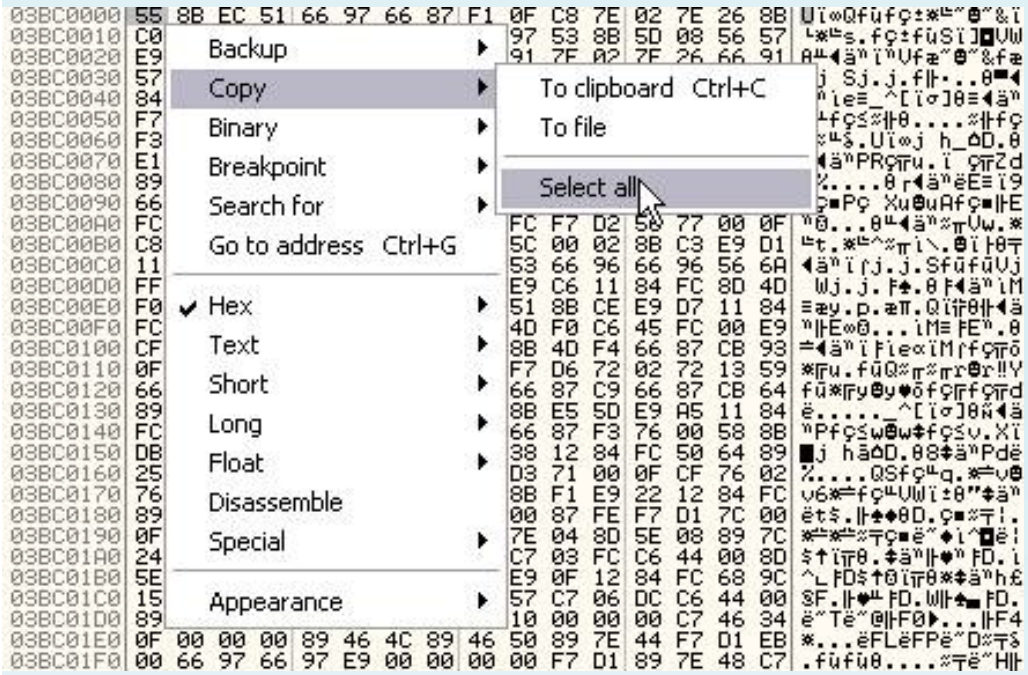
003B0000	00004000				Priv	RW		RW
003B4000	0000D000				Priv	RW		RW
003F0000	00002000				Map	R		R
00400000	00001000	RMTOMP3			Imag	R		RWE
00401000	0004B000	RMTOMP3	.text		Imag	R		RWE
0044C000	00010000	RMTOMP3	.rdata		Imag	R		RWE
0045C000	0000A000	RMTOMP3	.data		Imag	R		RWE
00466000	00030000	RMTOMP3	.text1	code	Imag	R		RWE
00496000	00010000	RMTOMP3	.adata	code	Imag	R		RWE
004A6000	00020000	RMTOMP3	.data1	data,import	Imag	R		RWE
004C6000	00070000	RMTOMP3	.pdata		Imag	R		RWE
00536000	00011000	RMTOMP3	.rsrc	resources	Imag	R		RWE
00550000	00003000				Map	R E		R E
00610000	00002000				Map	R E		R E
00620000	00103000				Map	R		R
00730000	0007D000				Map	R E		R E
00A30000	00001000				Priv	RW		RW
00B30000	0000C000				Priv	RW		RW
00B40000	00002000				Map	R		R
00B50000	00018000				Priv	RW		RW
00B70000	000A4000				Priv	RW		RW
00C2A000	0000A000				Priv	RW		RW
00C50000	00006000				Priv	RW		RW
00C60000	00001000				Map	RW		RW
00C70000	00001000				Priv	RW		RW
00E70000	00001000				Priv	RW		RW
00E80000	00003000				Priv	RW		RW
00E90000	00010000				Priv	RW		RW
01290000	00003000				Priv	RW		RW
012D0000	00004000				Priv	RW		RW
012E0000	00003000				Priv	RW		RW
012F0000	00001000				Priv	RW		RW
0146E000	00002000				Priv	RW	Gua	RW
03BC0000	00020000				Priv	RWE		RWE
10000000	00001000	RM2AVI		PE header	Imag	R		RWE
10001000	0000D000	RM2AVI	.text	code	Imag	R		RWE
1000E000	00002000	RM2AVI	.rdata	imports,exp	Imag	R		RWE
10010000	00005000	RM2AVI	.data	data	Imag	R		RWE
10015000	00002000	RM2AVI	.reloc	relocations	Imag	R		RWE

Double click on Address 03BC0000 Size = 00020000 =

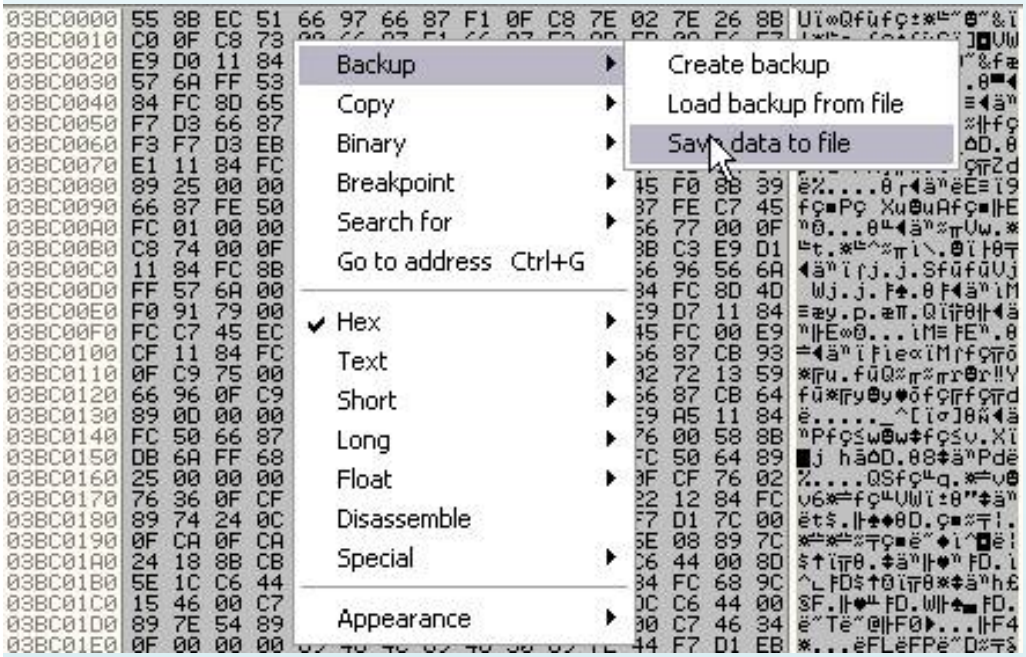


03BC0000	55	8B	EC	51	66	97	66	87	F1	0F	C8	7E	02	7E	26	8B
03BC0010	C0	0F	C8	73	00	66	87	F1	66	97	53	8B	5D	08	56	57
03BC0020	E9	D0	11	84	FC	8B	FC	56	66	91	7E	02	7E	26	66	91
03BC0030	57	6A	FF	53	6A	00	6A	00	66	C7	07	00	00	E9	DF	11
03BC0040	84	FC	8D	65	F0	5F	5E	5B	8B	E5	5D	E9	F0	11	84	FC
03BC0050	F7	D3	66	87	F3	F7	D7	E9	00	00	00	00	F7	D7	66	87
03BC0060	F3	F7	D3	EB	00	55	8B	EC	6A	FF	68	5F	7F	44	00	E9
03BC0070	E1	11	84	FC	50	52	87	CB	75	00	8B	FF	87	CB	5A	64
03BC0080	89	25	00	00	00	00	E9	DA	11	84	FC	89	45	F0	8B	39
03BC0090	66	87	FE	50	87	FF	58	75	02	75	41	66	87	FE	C7	45
03BC00A0	FC	01	00	00	00	E9	D3	11	84	FC	F7	D2	56	77	00	0F
03BC00B0	C8	74	00	0F	C8	5E	F7	D2	8D	5C	00	02	8B	C3	E9	D1
03BC00C0	11	84	FC	8B	F4	6A	00	6A	00	53	66	96	66	96	56	6A
03BC00D0	FF	57	6A	00	6A	00	C6	06	00	E9	C6	11	84	FC	8D	4D
03BC00E0	F0	91	79	00	70	00	91	E3	00	51	8B	CE	E9	D7	11	84
03BC00F0	FC	C7	45	EC	01	00	00	00	8D	4D	F0	C6	45	FC	00	E9
03BC0100	CF	11	84	FC	8B	C6	8D	65	E0	8B	4D	F4	66	87	CB	93
03BC0110	0F	C9	75	00	66	96	51	F7	D6	F7	D6	72	02	72	13	59
03BC0120	66	96	0F	C9	79	02	79	03	93	66	87	C9	66	87	CB	64
03BC0130	89	0D	00	00	00	00	5F	5E	5B	8B	E5	5D	E9	A5	11	84

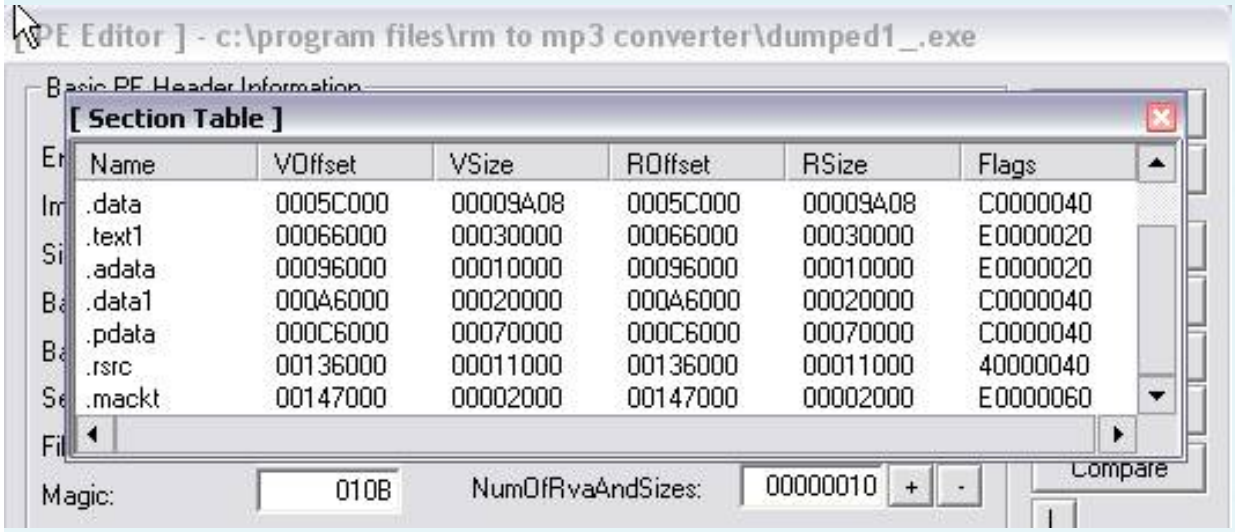
Select Copy / Select All



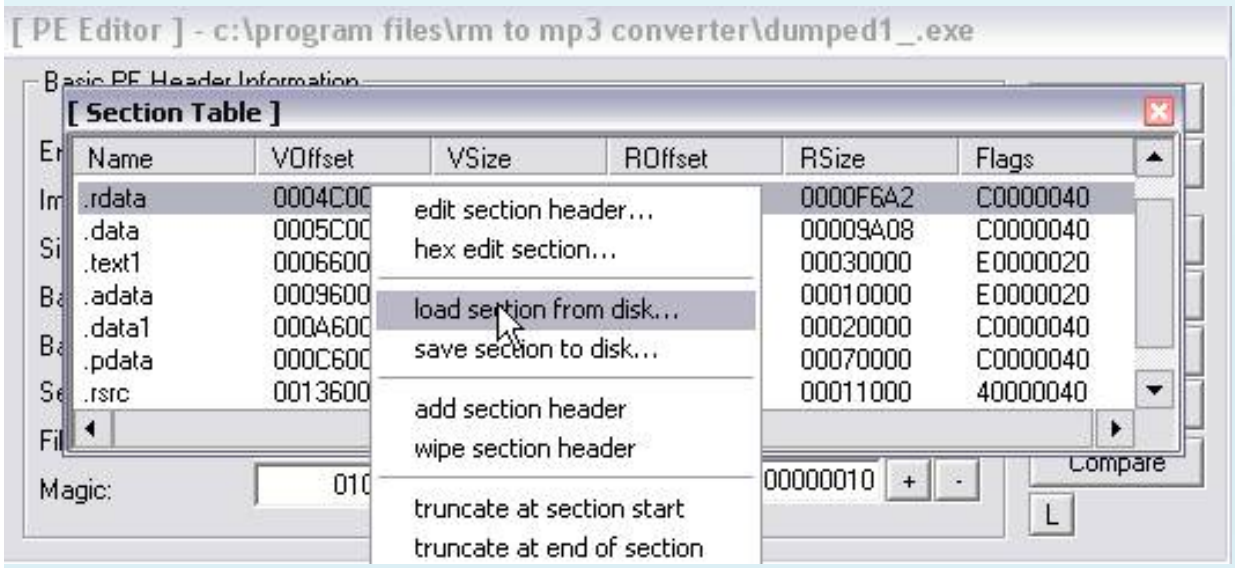
Chon Save data to file, save the file formats are *. mem, the machine is "_03BC0000.mem"



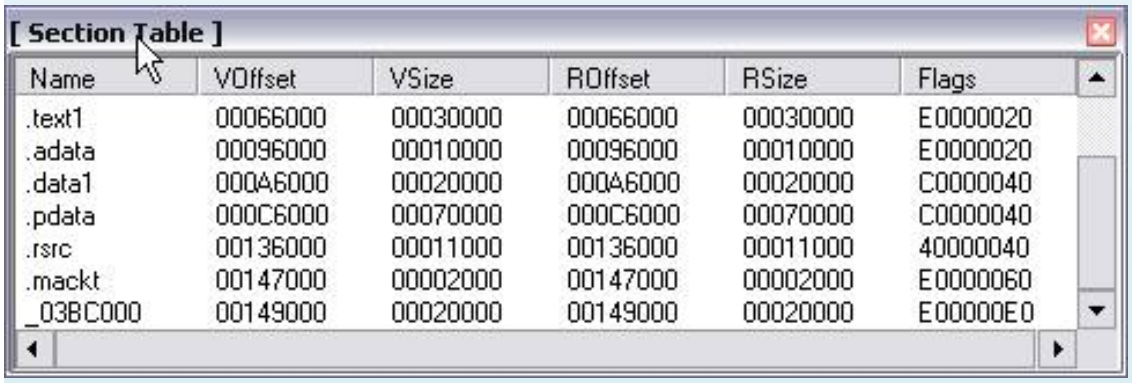
Open a new file dump fix completed by PE Editor's LordPE, click the button next to Section open window Section Table



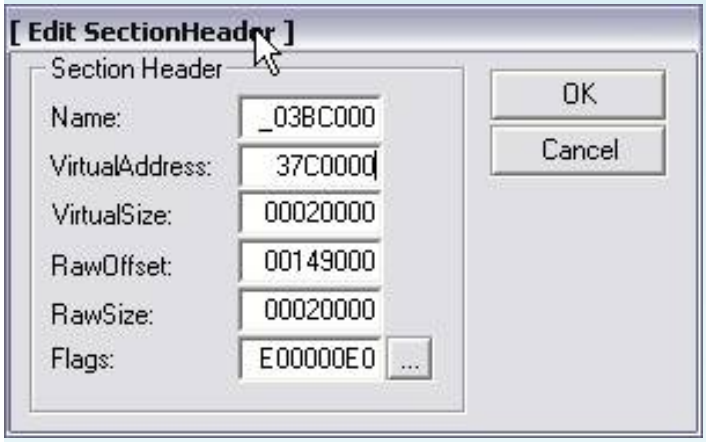
In Section Table window, click to select Load from disk section



Select _03BC0000.mem (your computer may be different)

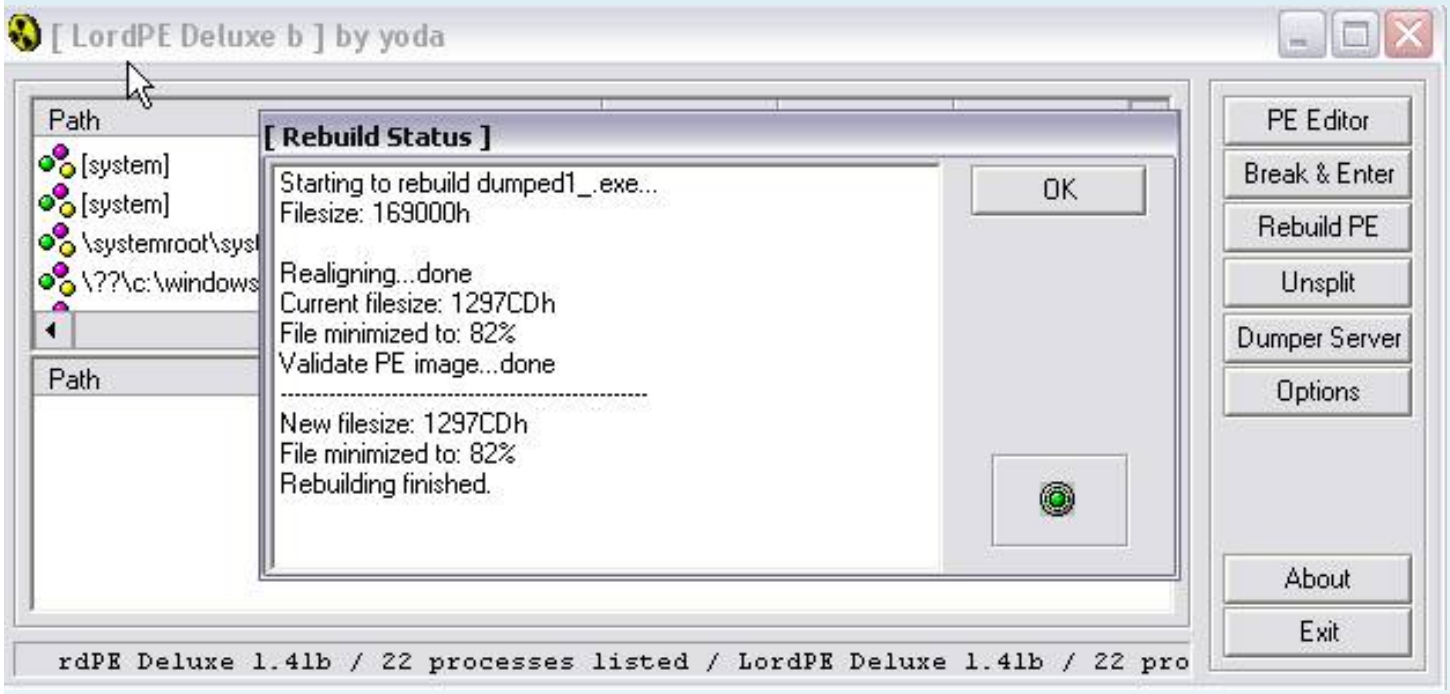


_Toi You need to source a bit more to the new Section to run lickerish: 03BC0000 - 400,000 = 37C0000. Then Save again. I may be more Newbie question number 400,000 in the first? Simply it is only with Image Base default is 400,000.



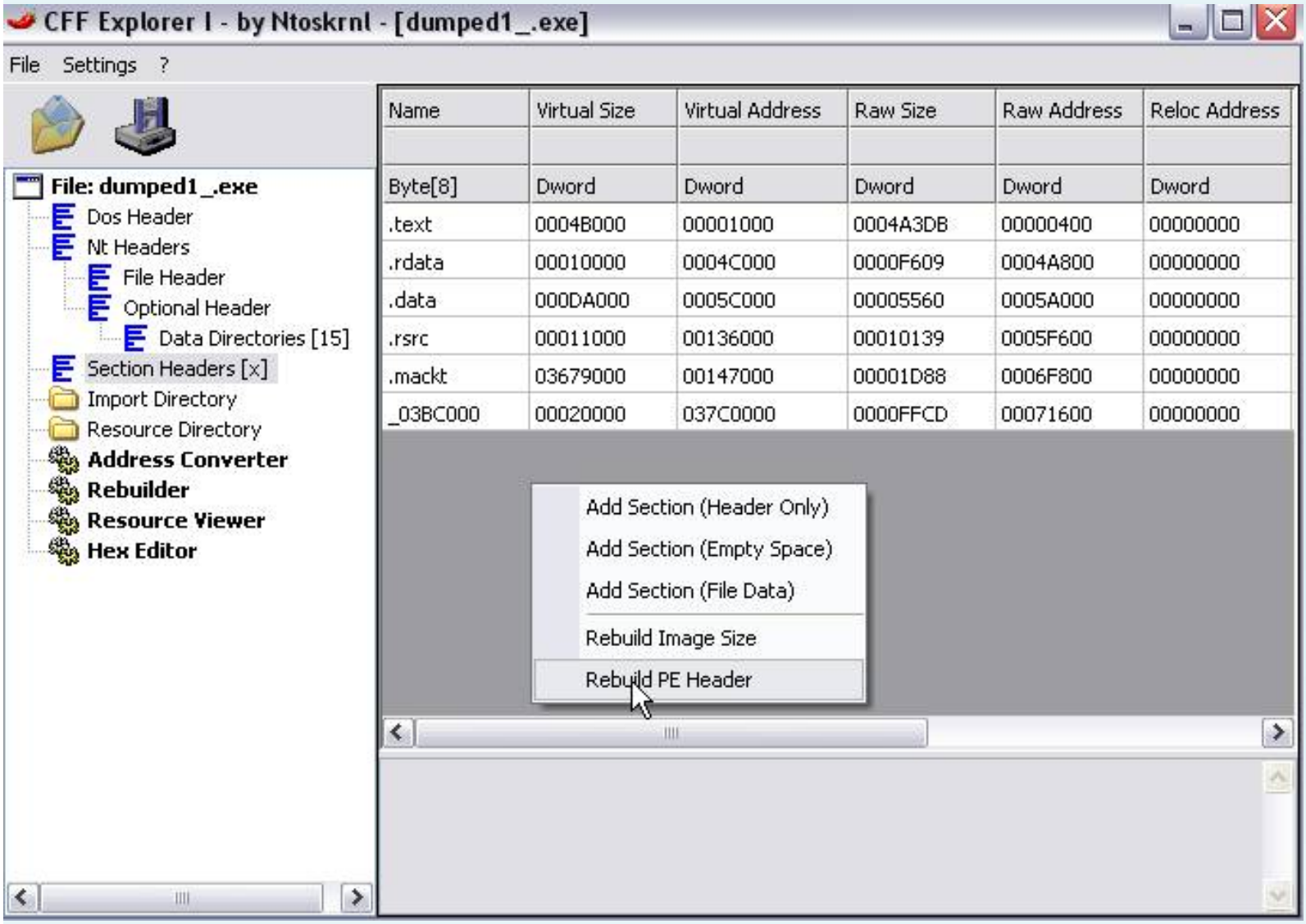
Test Run _ considered stars! What heaven up

_Uhm! Running LordPE rebuild PE à à select New File Save



_ Run again, hú complete run call. Unpack Done !!!!!!!!!!!!

If you want to collapse it again using the CFF Explorer remove Section legacy. Text1. ADATA. Data1. Pdata. Then click to select rebuild PE Header.



_Save The space is 517 KB

Have Fun!

Thanx To: Hacnho, MaDMAn_H3erCuL3s ... and You

Written by Why Not Bar (11-10-2005)

Armadillo 5.x dll - Visual.Assist.X.V10.4.1640 Build 2008.05.22
Author: Computer_Angel

Link: http://www.wholetomato.com/downloads/VA_X_Setup1640.exe
Size: 4:03 MB
Type: unpack / Patch
Protection: Armadillo 5.x dll
OS: Win9x/NT/2000/XP
Date: 2005-12-10
Homepage: http://www.wholetomato.com/index.html
Description: Visual Assist X dramatically reduces application development time with key new features and improvements to existing features in Visual Studio
Tools use: WinXP, OllyDBG, PEid, ArmInline, ImportREC, LordPE

1.Chinh in the henh Olly:
Use Phantom Plugin to hide Olly.

2.Find magic point:
Bp in OpenMutexA API, we break in:

```
7C80EC1B> 8BFF mov edi, edi
7C80EC1D 55 push ebp
7C80EC1E 8BEC mov ebp, esp
7C80EC20 51 push ecx
7C80EC21 51 push ecx
7C80EC22 837D 10 00 Cmp dword ptr [ebp +10], 0
7C80EC26 56 push esi
7C80EC27 0F84 7A500300 je 7C843CA7
```

Nhen through the stack:

```
0012E4F4 00B2903B / Call to OpenMutexA from 00B29035
0012E4F8 001F0001 | Access = 1F0001
0012E4FC 00000000 | Inheritable = false
0012E500 0012E7BC \ MutexName = "6D417F01: SIMULATEEXPIRED"
```

Clear bp, set in hwbp API VirtualAlloc.Ta break in:

```
7C809A81> 8BFF mov edi, edi
7C809A83 55 push ebp
```

```
7C809A84 8BEC mov ebp, esp
7C809A86 FF75 14 push dword ptr [ebp +14]
7C809A89 FF75 10 push dword ptr [ebp +10]
7C809A8C FF75 0C push dword ptr [ebp + C]
7C809A8F FF75 08 push dword ptr [ebp +8]
7C809A92 6A FF push -1
7C809A94 E8 09000000 call VirtualAllocEx
7C809A99 5D pop ebp
7C809A9A C2 1000 retn 10
```

Nhen through the stack:

```
001292C4 00B589BD / Call to VirtualAlloc from 00B589B7
001292C8 03260000 | 03260000 = Address
001292CC 0001FFC6 | Size = 1FFC6 (131,014.)
001292D0 00002000 | AllocationType = MEM_RESERVE
001292D4 00000040 \ Protect PAGE_EXECUTE_READWRITE =
```

Remember:
+ Address: 03260000 <- cove containing splicing code

Continue, hwbp clear, and set hwbp in API LoadLibraryA, we break in:

```
7C801D77> 8BFF mov edi, edi
7C801D79 55 push ebp
7C801D7A 8BEC mov ebp, esp
7C801D7C 837D 08 00 Cmp dword ptr [ebp +8], 0
7C801D80 53 push ebx
7C801D81 56 push esi
7C801D82 74 14 je short 7C801D98
```

Nhen through the stack:

```
00B3AB51 8945 FC mov dword ptr [ebp-4], eax; SHLWAPI.77F60000
00B3AB54 6A 01 push 1
FC 00B3AB56 8B45 mov eax, dword ptr [ebp-4]
00B3AB59 50 push eax
00B3AB5A E8 B1EDFFFF call 00B39910
00B3AB5F 83C4 08 add esp, 8
00B3AB62 EB 03 jmp short 00B3AB67
```

Continue Ctrl-F9, we have:

```
00B5A9BE 8985 90D4FFFF mov dword ptr [ebp-2B70], eax; SHLWAPI.77F60000
00B5A9C4 83BD 90D4FFFF 0> Cmp dword ptr [ebp-2B70], 0
00B5A9CB 0F85 A6000000 jnz 00B5AA77
00B5A9D1 83BD 90D4FFFF 0> Cmp dword ptr [ebp-2B70], 0
00B5A9D8 75 60 jnz short 00B5AA3A
```

Here, tem command "PUSH 100":

```
00B5AFAA 68 00010000 push 100
00B5AFAF 8D8D 40C1FFFF Lea ecx, dword ptr [ebp-3EC0]
00B5AFB5 51 push ecx
00B5AFB6 8B95 40C2FFFF mov edx, dword ptr [ebp-3DC0]
00B5AFBC 8B02 mov eax, dword ptr [edx]
00B5AFBE 50 push eax
00B5AFBF E8 4C7AFBFF call 00B12A10 <- magic point
00B5AFC4 83C4 0C add esp, 0C
00B5AFC7 8D8D 40C1FFFF Lea ecx, dword ptr [ebp-3EC0]
00B5AFCD 51 push ecx
00B5AFCE 8D95 50C2FFFF Lea edx, dword ptr [ebp-3DB0]
```

Take vro 00B12A10 call, we have:

```
00B12A10 55 push ebp
00B12A11 8BEC mov ebp, esp
00B12A13 83EC 2C sub esp, 2C
00B12A16 833D 00A6B800 0> Cmp dword ptr [B8A600], 0
00B12A1D 75 59 jnz short 00B12A78
00B12A1F C745 EC A7BC16F> mov dword ptr [ebp-14], F416BCA7
```

Thrnh source code:

```
00B12A10 C3 retn
00B12A11 8BEC mov ebp, esp
00B12A13 83EC 2C sub esp, 2C
00B12A16 833D 00A6B800 0> Cmp dword ptr [B8A600], 0
```

3. Tem OEP:

Back in the EIP, tem command asm "SALC":

```
00B5B3A1 E8 2AC30000 call 00B676D0
00B5B3A6 83C4 04 add esp, 4
00B5B3A9 EB 03 jmp short 00B5B3AE
00B5B3AB D6 salc
00B5B3AC D6 salc
00B5B3AD 8B8B 0D7C4CB9 mov ecx, dword ptr [ebx + B94C7C0D]
00B5B3B3 0089 8D28C1FF add byte ptr [ecx + FFC1288D], cl
```

JMP set break at the top of the SALC, clear hwbp, Shift-F9 to run to it, then Alt-M:

```
Memory map
Address Size Owner Section Contains Type Access Initial Mapped as
010A0000 00002000 Map R R
03260000 00020000 Priv RWE RE <- Splicing Memory
1ED00000 00001000 VA_X PE header IMAG R RWE
1ED01000 00281000 VA_X. RWE text IMAG R <- Set on bpm execute
1EF82000 00018000 VA_X CODE IMAG R RWE
1EF9A000 0009E000 VA_X. Rdata exports IMAG R RWE
1F038000 0002A000 VA_X. IMAG data data R RWE
1F062000 00001000 VA_X DATA IMAG R RWE
1F063000 00055000 VA_X BSS IMAG R RWE
1F0B8000 00042000 VA_X. Reloc IMAG R RWE
1F0FA000 00050000 VA_X. Text1 code IMAG R RWE
1F14A000 00010000 VA_X. ADATA code IMAG R RWE
1F15A000 00010000 VA_X. Data1 IMAG R RWE
1F16A000 00010000 VA_X. Reloc1 relocations IMAG R RWE
1F17A000 001B0000 VA_X. Pdata imports IMAG R RWE
1F32A000 00054000 VA_X. Rsrc resources IMAG R RWE
```

Set on execute in bpm. Text section, then press Shift-F9, we will stop at OEP:

```
1EF1D944 837C24 08 01 Cmp dword ptr [esp +8], 1
1EF1D949 75 05 jnz short 1EF1D950
1EF1D94B E8 59260100 call 1EF2FFA9
1EF1D950 FF7424 04 push dword ptr [ESP +4]
1EF1D954 8B4C24 10 mov ecx, dword ptr [esp +10]
1EF1D958 8B5424 0C mov edx, dword ptr [esp + C]
```

```
1EF1D95C E8 EDFEFFFF call 1EF1D84E
1EF1D961 59 pop ecx
1EF1D962 C2 0C00 retn 0C
```

4th process Splicing code:

Running Arminline, fill vro processID, the splicing code and memory size of it, click Remove Splices

5. Dump, fix IAT:

Dung LordPE dump, and fix IAT with Imprec:

6. Patch Vissual Assist:

From notification License / Error. Trace the contrary, we have:

```
. text: 1ED480E7 call sub_1ED01730
. text: 1ED480EC test BL, BL
. text: 1ED480EE jz short loc_1ED48130
. text: 1ED480F0 mov ecx, dword_1F04A1E0
. text: 1ED480F6 push 0; uType
. text: 1ED480F8 push offset aLicense; "License"
. text: 1ED480FD push offset aError; "Error"
. text: 1ED48102 push ecx; hWnd
. text: 1ED48103 call ds: __imp_MessageBoxA
```

Since then, the points tem's function check:

```
. text: 1ED47F80 push 0FFFFFFFFh
. text: 1ED47F82 push offset unk_1EF442A0
. text: 1ED47F87 mov eax, large fs: 0
. text: 1ED47F8D push eax
. text: 1ED47F8E sub esp, 34h
```

Patch thrnh:

```
mov eax, 1
retn
```

Game Over!

Armadillo dll - Unpacking and More

Contents Table:

Tools: Hide plugins OllyDBG + + Scripts, LordPE, ImportREC 1.6, CFF Explorer

Skill Request: Using Basic Knowledge Olly + manual unpacking Armadillo.

I-Intro & Preparation:

Hi everyone, today I tricky to complete more of tut unpack dll for Armadillo. Can you read each of the hacnho tut, tut of the MaDMaN ARTeam, or by the ICU Whiterat by tricky ... but at the tut then, a few points that do not make many say you're having trouble during unpack dll. It points out this very basic, the majority or be ignored, but i do with this article, hope you can confidently resolve dll's Armadillo. But before you go to the main issues, we need to review the format type Protect Standard, Code Splicing IAT and elimination of the dll, Armadillo applies only to protect this form.

Usually we only unpack the familiar hands of foreign tut, sometimes done in the beginning that you do not know what is. This is easy to change, we have an 1. On the other hand, if you look through the science , sometimes you xài a familiar formula that, solve a series of items that have never thought to demonstrate how to start? Every thinking person is found, the formula must have the xài Yes. However, if i could find himself "the truth", they at least must also understand the way that we have to find out and understand what they are doing.

From the back issues: Standard Protect What? Splicing or IAT code elimination is what?

Here if you would like to understand how fast and streamlined for not free of them:

Standard Protection

You see any PE file will need to IAT (more structured PE file). When the Pack, Armadillo will Encrypt to unpack time in memory, IAT will be so wrong with the original, some seats were destroyed by the Byte encryption. So when the dump at OEP, we just dump the IAT is the bay, while also ko Armadillo out how to decrypt it again. The IAT is canceled by one (or several) orders that do not jump to perform (or be does). Therefore, it should find Magic Jump to patch it always happens (or do not occur), then we will be the first original IAT.

Code Splicing

From the pictures we see after unpack in memory, the original code in the file, now has rock out another section, accompanied spam code (code meaningless, do not change the value of how to or write variables ...). In the file is replaced by the command Jump to code in that section (plus garbage code). Therefore, if you dump in the OEP, we just dump the command and lack Jump lose some of the very first code.
There are 2 ways to fix. The dump is one more section contains the code is missing, then connect it to the dump file was in OEP. 2 hours, according to our men Jump command, filter out spam code, copy and paste the code actually return in order to jump. In the hours are 1 tool to quickly ArmTool is, in 2 hours there ArmInline . According tricky, 2 hours or more, because it creates the same structure of the file before the pack. However, 1 month and to be less than survival.

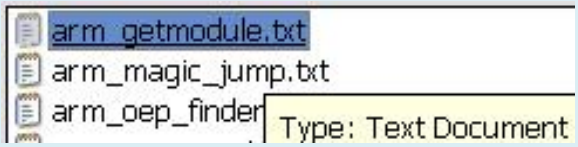
IAT elimination

2 models on the protection, you can quickly understand in this section. After unpack in memory, instead of the IAT is in the file, then the stone is out section 1 ko under other file. Should the dump, we are surviving the loss of the IAT. How to fix the same as in Splicing Code, section or dump it out, or bring back the value of 1 IAT section is available in the file, usually selected. ADATA. And candidates Incandescent is ArmInline because it works very fast and quite accurate.
But more needs to say, why is. ADATA? other section can be or do? Ah, the pack again, Armadillo create section for the unpack is. Text1. Reloc1. ADATA. Data1. Pdata. After unpack, the section that i have used more and section. ADATA have relatively large size compared to the original size of the IAT, it is often chosen as the place to redirect to the IAT. You can select any section which to redirect IAT, the free copy of it available to appropriate size of IAT. Bit more tricky for the man you will see.
Okie, Thanksgiving has enough items now xắn arms and carried unpack dll pack by Armadillo. Target kì this file is **UKHook40.DLL's** Unikey but the latest version 4 Unikey RC1.

II-Fix and Magic Jump Find OEP:

Dll file is as PE. EXE so you can load to unpack and Olly normal, it will have to borrow through LoadDLL created by Olly 1 Main. Exe to load it into memory.
What we started in EP, you have to Hide the Anti-Debug Armadillo's farewell (IsDebuggerPresent, OutputDebugStringA), check all ... Exception:

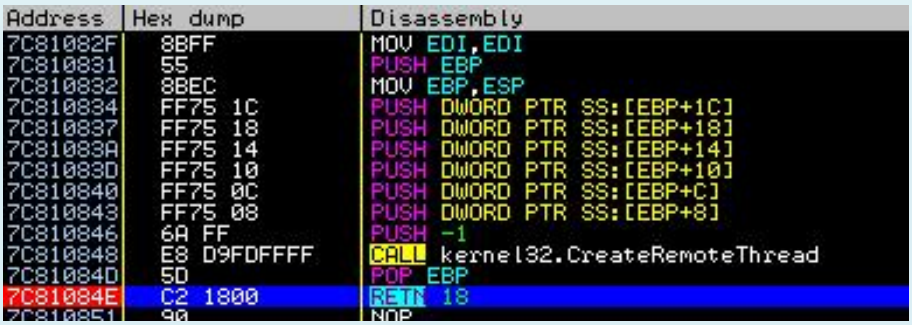
It can be used "he GetModuleHandleA" or scripts to fix Magic Jump. Here Scripts used for fast (as you are too familiar to you unpack this file. Exe):



After the script is finished running, magic jump found and fix:

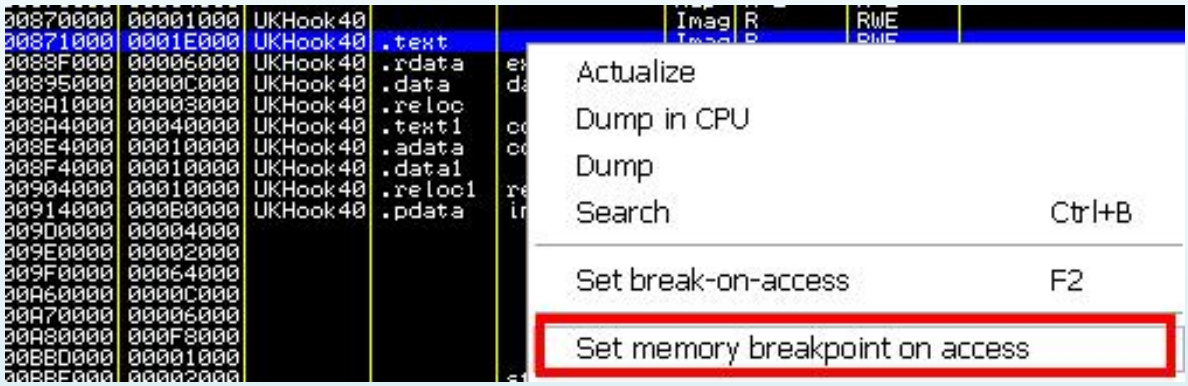
Hours Goto CreateThread to function, Ctrl-G:

To limit the Anti-Debug, we do not set at the top of BP function that should be set at the function that RETN command:



F9 to Break there. *If there is any machine running the script and then the crash, the resolution you nhé, can use the Trial Reset Scan file. Tmp the Armadillo and delete it and then try to run the script to see why.* Un-BP go, F7 (or F8) to return to:

This is the area code for decrypt the Armadillo. We do need more attention, it should also do more to trace tired, because the area code from this, the first value that it is access to OEP. Therefore, open to the Memory Map, set memory breakpoint on access at the section. Text:

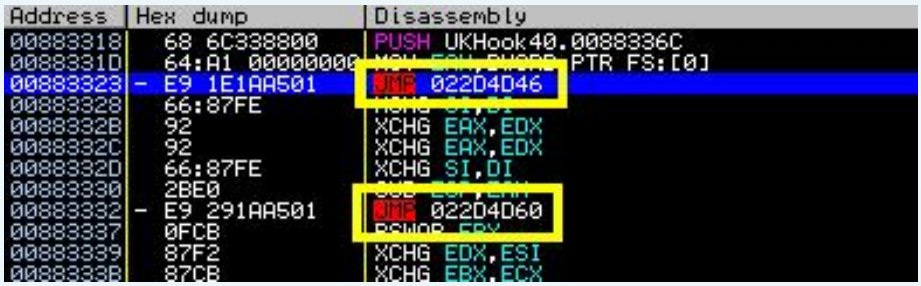


F9 a new, right OEP:

So have completed the fix to get Magic Jump Full IAT and OEP fast lệ.

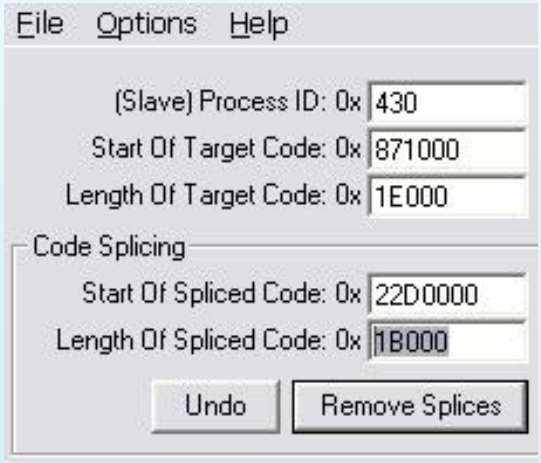
III-Find & Fix CodeSplicing:

Now we'll find out this dll protect with CodeSplicing (CP) or ko? How easy to find, *at the OEP, you just enter the command CALL nearby, if you see a command - JMP to offset an outside file ie it will have CP.* Here we enter on the command CALL OEP and found:

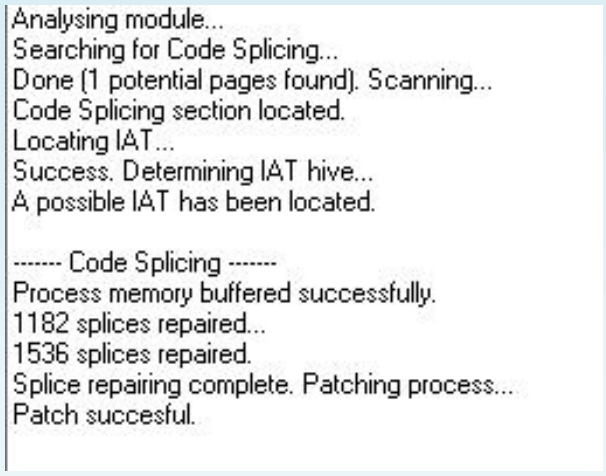


Two command JMP see in the picture is No. 2 in command of JMP to the outside section of the file containing the code was. We found the address 22Dxxxx form, open the memory map and find the section in this store Memory:

So address start of this section is 22D0000 and size is 1B000. There are many you understand CodeSplicing machines are always located in the same position and size is always 20,000. Here you know exactly how to find it then. Now open up ArmInline to fix, version 0.95 is tricky to use. Wait ArmInline get process list, select loaddll.exe, the modules section, select UKHook40.dll.
Then the parties Stocks get information that we find the comparison with the ArmInline, where it has taken the size of the Code Splicing, but we feel careful again to fix:



Now click the Remove Splices then. Fix lickerish, including any surviving command JMP:



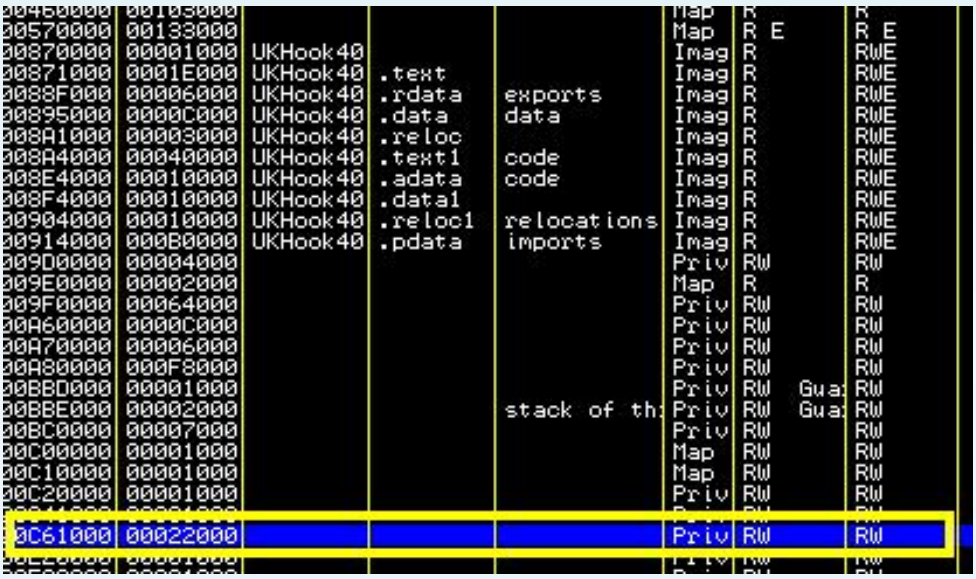
Okie, in the order we always fix it before the new Government to IAT elimination. Now continue nhé.

IV-Find & Fix IAT elimination:

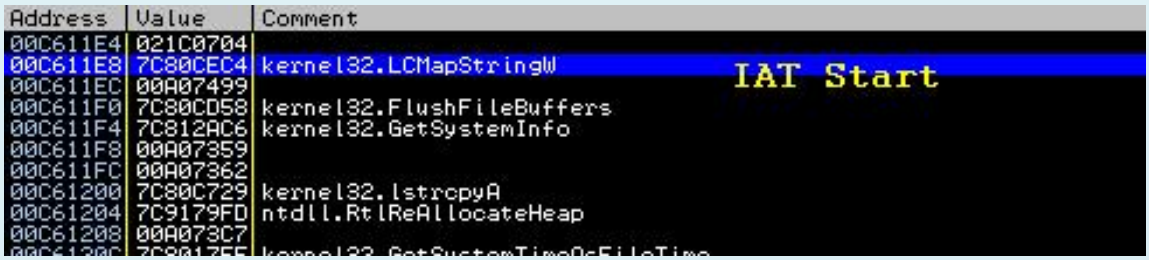
To check for IAT elimination or do, I mon men under the command CALL near OEP, until an order form found JMP [IAT] or CALL [IAT]. Here, from the OEP, to enter the command CALL 3:

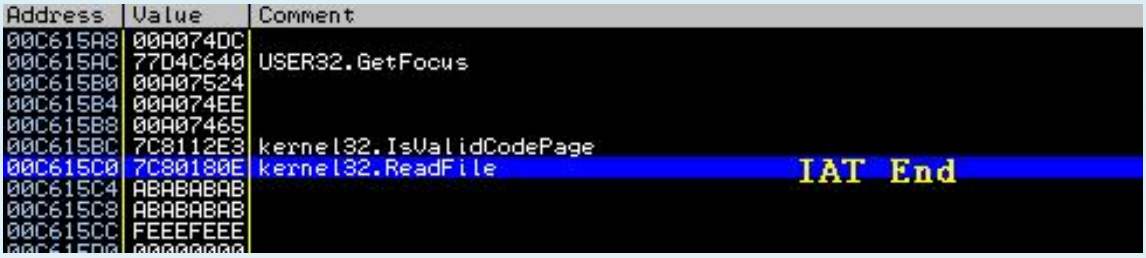
I see a command CALL [IAT]:

Address contains the IAT is located outside the area that memory to load the file. Memory View to see:

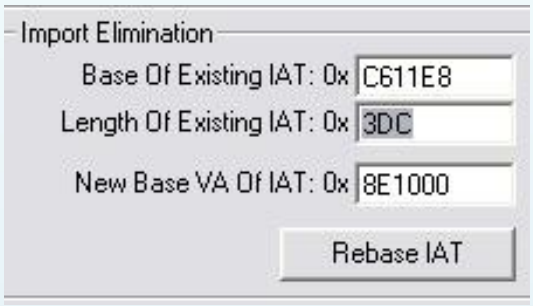


Therefore, it may conclude that there IAT elimination. Back on the CALL command, Click right, Follow dump it in, drag up and down for IAT Start and End:





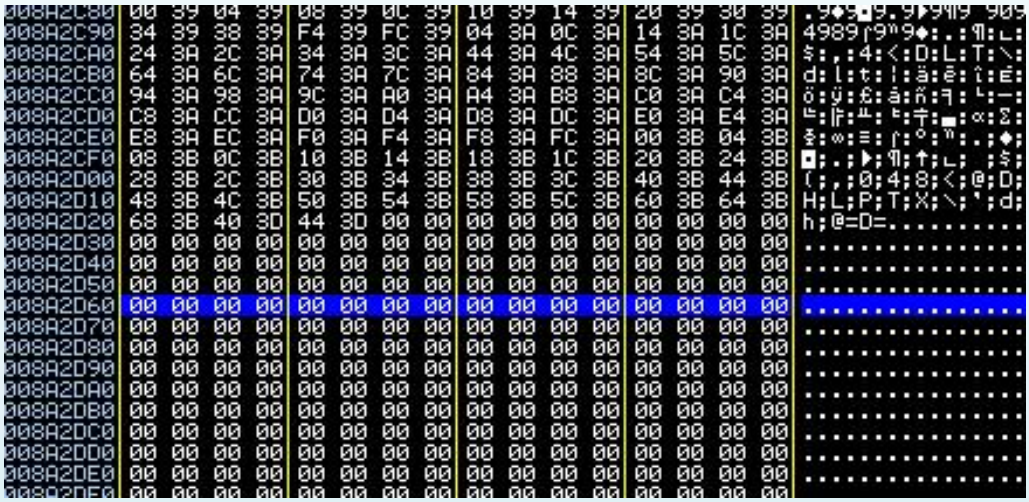
So in C611E8 IAT Start and End in C615C0. But for the length of the code contains IAT, we must get the address below IAT End to go except that C615C4 = Length - C611E8 = 3DC
Back ArmInline, to fill the IAT elimination but that it itself has not taken correctly, here is the Base (Start IAT) and Length:



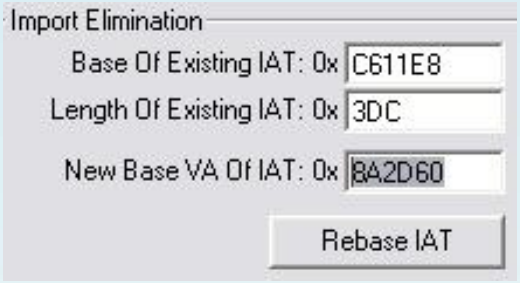
Now, use the box below, New Base, we will enter what is? As introduced at the beginning, you can select the section. ADATA size because it contains the balance in this IAT. But this kì we Crystal, looking for the more succinct. Olly Move over, open the Memory Map:

We see the golden bowl is the section will be removed after unpack dll. View the size of the container is only IAT 3DC (more space between meaningless), or size of it is smaller 3DC after redirect. But section. Reloc size with 3000, it is tricky and a lot space, Double Click it test (à select Hex Bytes ASCII 16):

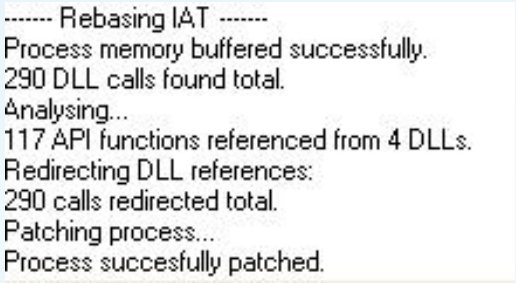
Drag down until you see the space:



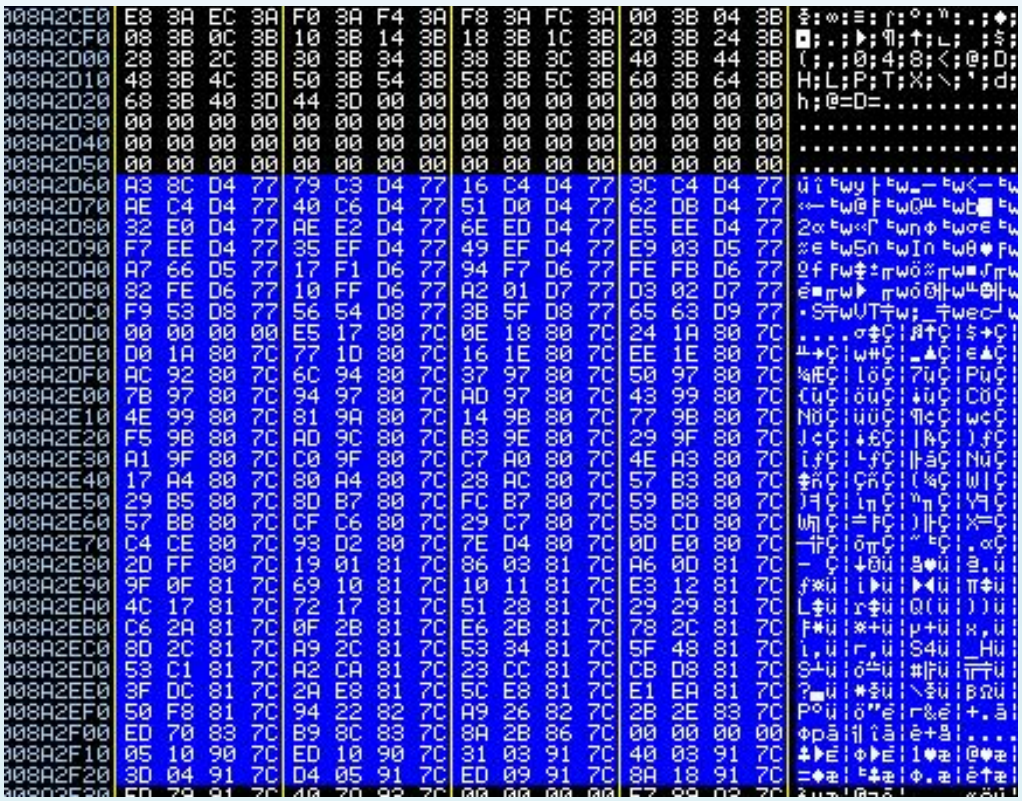
But a lot of space to the end of this section. And of course it larger 3DC. Tricky selection only begins to redirect IAT in 8A2D60. Remember that on you, the hours will offset nay other jog. Back ArmInline, enter New Base have chosen to:



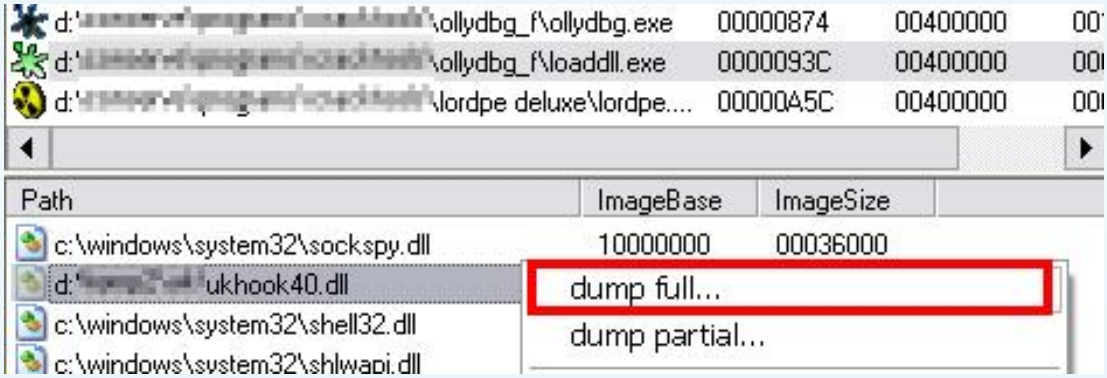
Can click Rebase IAT was then. Lickerish Redirect:



Close ArmInline go back section of the dump. Reloc this, we see Byte by IAT was to redirect:



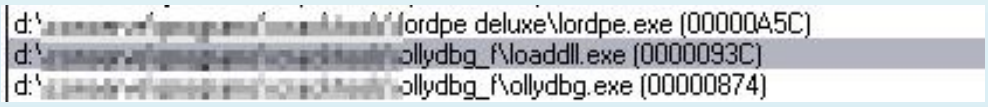
Okie, all healthy appetite, we open up and dump LordPE you go. Loaddll.exe Select the process and the modules below, choose UKHook40.dll (similar in choosing ArmInline). Click to full-dump in this module.



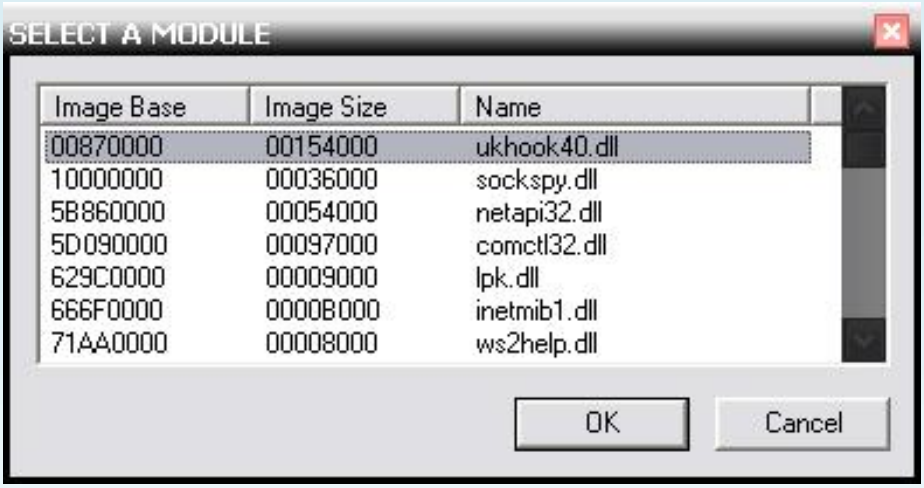
Save the file. (retain the Olly nhé)

V-Import rebuild:

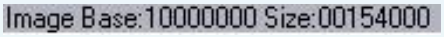
Open up ImportREC. Select loaddll.exe in the process list:



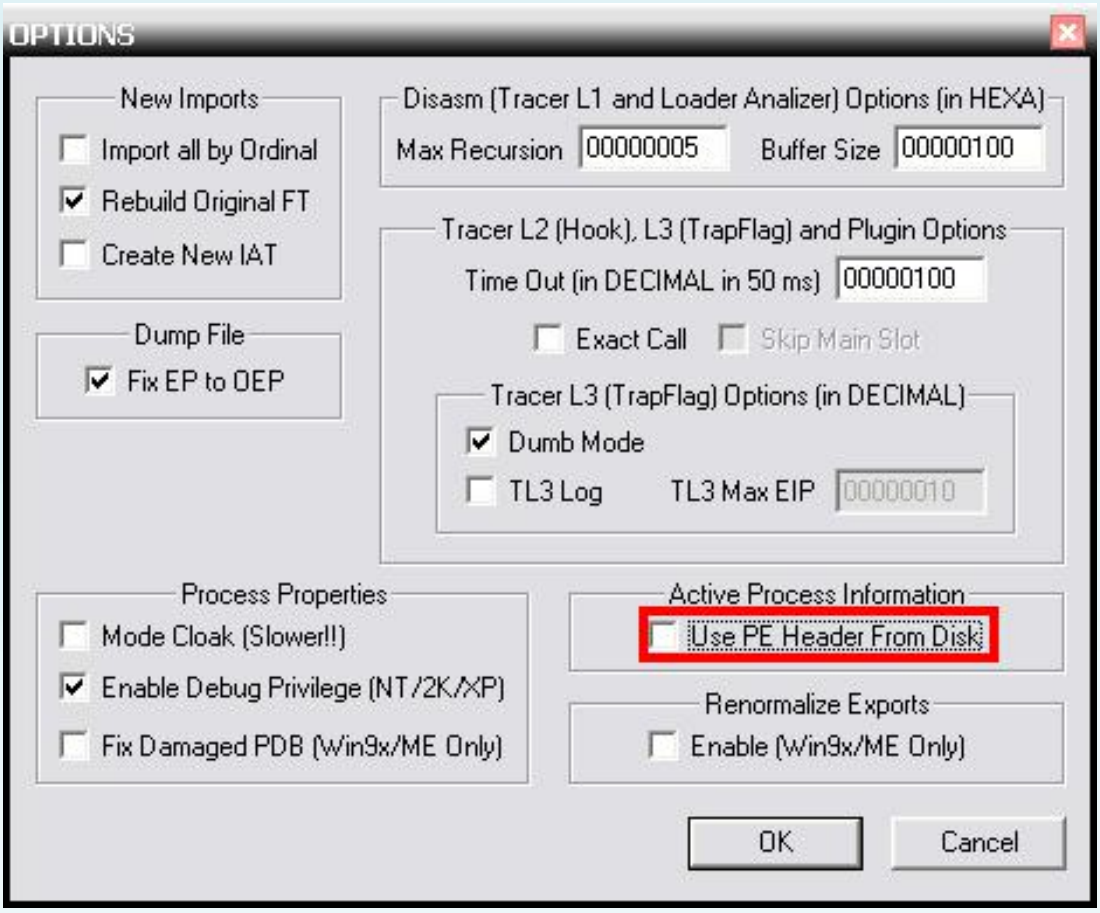
Then Click the button dll Pick:



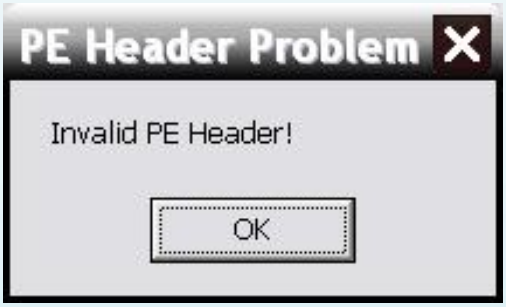
We see this time in memory of ImageBase UKHook40.dll is 870,000. But when it is OK:



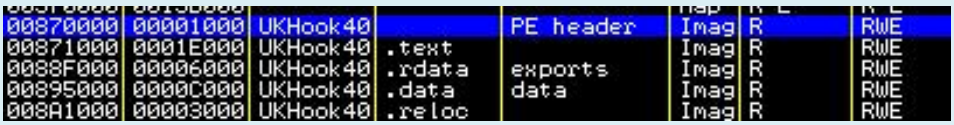
ImageBase = 10000000. Very simply, this is ImageBase original file this. ImportREC has obtained this information from the PE Header file on disk to do so in memory of the modules, so when calculating RVA to Fix Import, it is easy to frame and or error. Often you also having problems or where exactly do? Okie, we open up ImportREC Option:



In their place, you **uncheck** it. If you check there, ImportREC always get information from the PE header disk and calculates wrong. I just check in when unpack the file. Exe. Why? Because. Exe usually load into memory properly ImageBase with its original, but the dll ko. OK, one hour Pick dll to do:



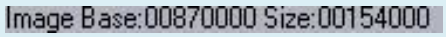
Now back to this notice. Easy to understand all, unpack the file. Exe, we check in on the Option and it always get information from PE Header file of the disc, the PE Header time in memory has been destroyed Armadillo when we go to OEP. Therefore ImportREC ko ImageBase get more time to load it into a file UKHook40.dll other Olly, open memory map, select PE Header intact xi:



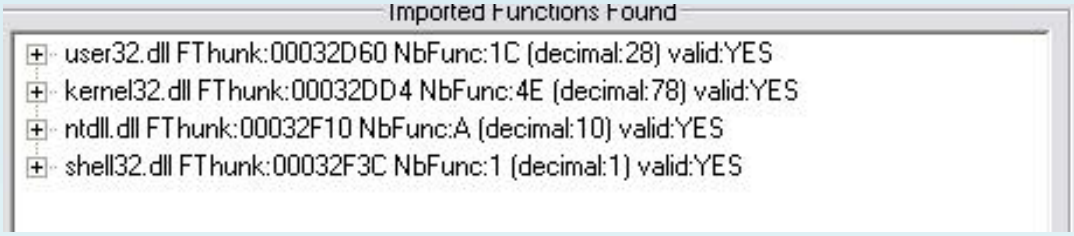
Double-click on it, to all bytes of this section, click Copy to Binary à :

Close this new Olly, Olly back old Open memory map, select the section at 870,000, to end this section and click to paste t h a t into Binary. PE header was back:

The above are familiar with each considered the beginning of the tut hacnho. Now switch ImportREC, dll Pick again:



Enter OEP = 8807E9 - 870,000 = 107E9.Nhan IAT Autostart and Import Get, get it healthy appetite:

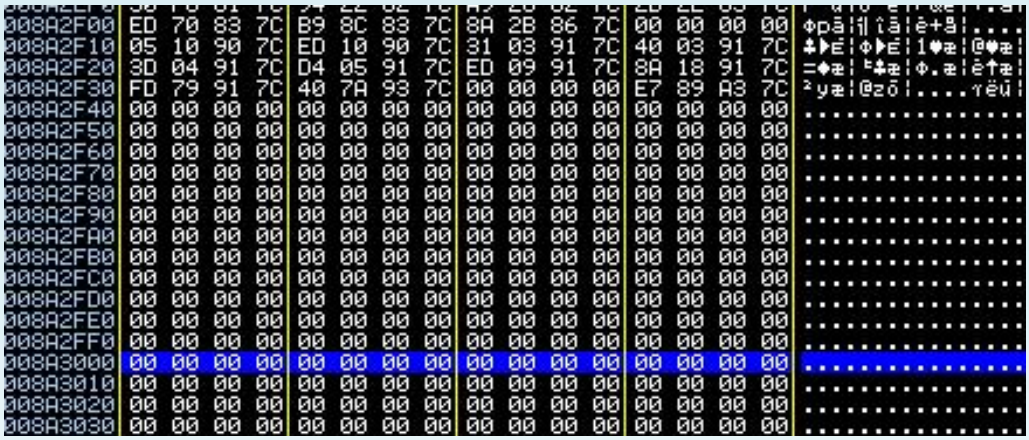


Now drilling Fix dump run. for us to this:

ImportREC will add 1 section. mackt to dump file if you check Add New section here. Section by ImportREC often add size to 4000, the balance of space after the Import and fix the IAT that ArmInline redirect *(if you can check Create New IAT).* But we really do need to check this Option. Now, notice that size ImportREC need to fix the dump file is AC4. We turn over in Olly memory map, select the section. Reloc (from the beginning now, Olly this hề Close nhé ko):

00570000	00172000				Map	R E	R E
00870000	00001000	UKHook40		PE header	Imag	R	RWE
00871000	0001E000	UKHook40	.text		Imag	R	RWE
0088F000	00006000	UKHook40	.rdata	exports	Imag	R	RWE
00895000	0000C000	UKHook40	.data	data	Imag	R	RWE
008A1000	00003000	UKHook40	.reloc		Imag	R	RWE
008A4000	00040000	UKHook40	.text1	code	Imag	R	RWE
008E4000	00010000	UKHook40	.adata	code	Imag	R	RWE
008F4000	00010000	UKHook40	.data1		Imag	R	RWE
00904000	00010000	UKHook40	.reloc1	relocations	Imag	R	RWE
00914000	000B0000	UKHook40	.pdata	imports	Imag	R	RWE

Double-click on it. Now we have to redirect ArmInline IAT to the space of this section, we continue to drag down the search for available:



008A2F00	ED	70	83	7C	B9	8C	83	7C	8A	2B	86	7C	00	00	00	00
008A2F10	05	10	90	7C	ED	10	90	7C	31	03	91	7C	40	03	91	7C
008A2F20	3D	04	91	7C	D4	05	91	7C	ED	09	91	7C	8A	18	91	7C
008A2F30	FD	79	91	7C	40	7A	93	7C	00	00	00	00	E7	89	A3	7C
008A2F40	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A2F50	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A2F60	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A2F70	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A2F80	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A2F90	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A2FA0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A2FB0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A2FC0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A2FD0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A2FE0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A2FF0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A3000	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A3010	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A3020	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
008A3030	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

Here 8A3000 selected for parity. From here to the last section, still larger size AC4 so we can get it as the "spawn of gold" for ImportREC. Back ImportREC fill:

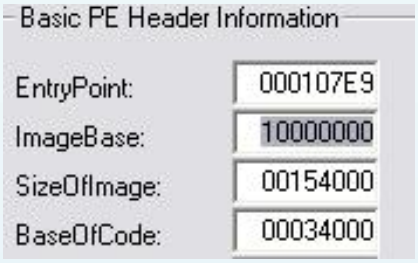
8A3000 - ImageBase: 870000 = 33000, which do not correct? Okie, Fix dump hours, select the dump file have now, Save lickerish. Close to all (including Olly).

LA-Fix ImageBase & Relocation:

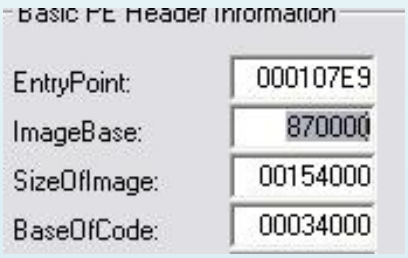
Hì hi, if the file. Exe is the last section was considered as completed. Now if you try to rename the dll file name similar to the original file and run it with Unikey.exe lickerish load or do? Or is what i see, or crash. But the best you do not try to run I do, have to restart the computer there.
Now would borrow materials PE File Kien he has to explain and concepts 2. First:

ImageBase: địa chỉ nạp "được ưu tiên" cho PE File. Lấy ví dụ : Nếu như giá trị trong trường này là 400000h, PE Loader sẽ cố gắng nạp file vào trong không gian địa chỉ ảo r bắt đầu tại 400000h. Từ "được ưu tiên" ở đây có nghĩa là PE Loader không thể nạp file t địa chỉ đó nếu như có một module nào khác đã chiếm giữ vùng địa chỉ này. 99 % các trường hợp giá trị của Imagebase luôn là 400000h

Remember now we dump in ImageBase 870,000, Import and fix that, should the need for adjustment ImageBase as the dump. Open up LordPE, PE Editor, select the file you just fix Import this:



Edit to 870,000:



Click Save, close LordPE, as a complete fix ImageBase. However, the file has not run well, we come to the concept 2:

Base Relocations Section :

Khi mà trình linker tạo ra một file Exe, nó chuẩn bị một nơi mà tại đó file sẽ được ánh vào trong bộ nhớ . Dựa trên điều này, trình linker sẽ đặt các địa chỉ thật của đoạn mã v những mục dữ liệu vào trong file thực thi. Nếu vì bất cứ lý do gì file thực thi kết thúc qu trình nạp ở một nơi nào đó nếu không trong phạm vi không gian địa chỉ ảo , thì những đ chỉ này sẽ bị trình linker đặt vào trong image không đúng. Thông tin được lưu trong Section .reloc cho phép trình PE loader fix những địa chỉ này trong loaded image vì vậy chúng sẽ tại chính xác. Một khác, nếu trình loader có thể nạp file tại những địa chỉ base address được thừa nhận bởi trình linker ,thì dữ liệu ở Section .reloc là không cần thiết v bị bỏ đi.

In the packer, most are compress / encrypt Relocation of the file. But at the Armadillo, it do not do it, just replace it with a Relocation to another for the packer. The section. Reloc1. Relocation section also contains the original. Reloc to do is encrypt anything. When the pack file. Exe, Armadillo Relocation is still to section.

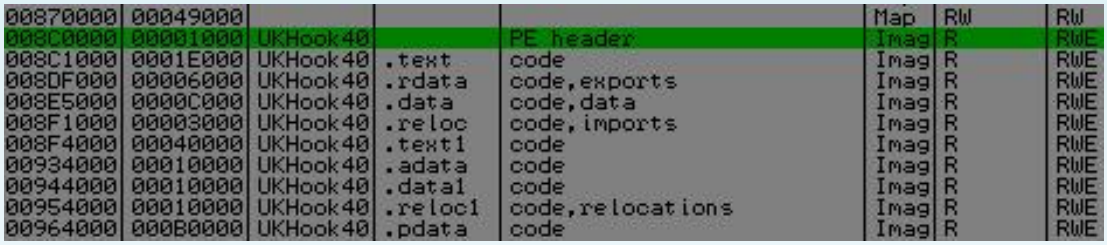
Reloc, but the dll, it does section. Reloc1. Should we need to properly fix the Relocation of the dll file after unpack. Now use Olly, load the file after the fix. Open memory map:

00870000	00001000	UKHook40		PE header	Imag	R	RWE
00871000	0001E000	UKHook40	.text		Imag	R	RWE
0088F000	00006000	UKHook40	.rdata	exports	Imag	R	RWE
00895000	0000C000	UKHook40	.data	data	Imag	R	RWE
008A1000	00003000	UKHook40	.reloc	imports	Imag	R	RWE
008A4000	00040000	UKHook40	.text1	code	Imag	R	RWE
008E4000	00010000	UKHook40	.adata	code	Imag	R	RWE
008F4000	00010000	UKHook40	.data1		Imag	R	RWE
00904000	00010000	UKHook40	.reloc1	relocations	Imag	R	RWE
00914000	000B0000	UKHook40	.pdata		Imag	R	RWE
009D0000	00004000				Priv	RW	RW

We found that, with Olly unpack that we use, this file is always load in ImageBase 870,000. Return to the main UPC. Enter function Call 3 under OEP, we see a call CALL [IAT] at this precise:

```
0088067D   E8 6E0C0000   CALL UKHook40.008812F0
00880682   8BF4          MOV ESI,ESP
00880684   56            PUSH ESI
00880685   C706 94000000 MOV DWORD PTR DS:[ESI],94
0088068B   FF15 A82E8A00 CALL DWORD PTR DS:[<&kernel32.GetVersio kernel32.GetVersionExA
00880691   85C0          TEST EAX,EAX
00880693   0F84 34010000 JE UKHook40.008807CD
00880699   8B4E 10       MOV ECX,DWORD PTR DS:[ESI+10]
```

Keep the load more files into a "fish and Olly." Here tricky selected by Olly Diablo, you can be home to one of the aged that down on. Why in particular, because it always load dll file to another ImageBase with Olly there:

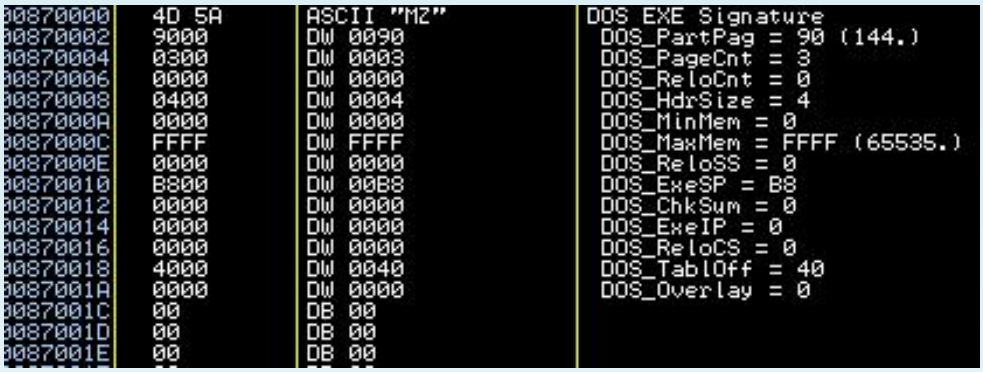


00870000	00049000				Map	RW	RW
008C0000	00001000	UKHook40		PE header	Imag	R	RWE
008C1000	0001E000	UKHook40	.text	code	Imag	R	RWE
008DF000	00006000	UKHook40	.rdata	code,exports	Imag	R	RWE
008E5000	0000C000	UKHook40	.data	code,data	Imag	R	RWE
008F1000	00003000	UKHook40	.reloc	code,imports	Imag	R	RWE
008F4000	00040000	UKHook40	.text1	code	Imag	R	RWE
00934000	00010000	UKHook40	.adata	code	Imag	R	RWE
00944000	00010000	UKHook40	.data1	code	Imag	R	RWE
00954000	00010000	UKHook40	.reloc1	code,relocations	Imag	R	RWE
00964000	000B0000	UKHook40	.pdata	code	Imag	R	RWE

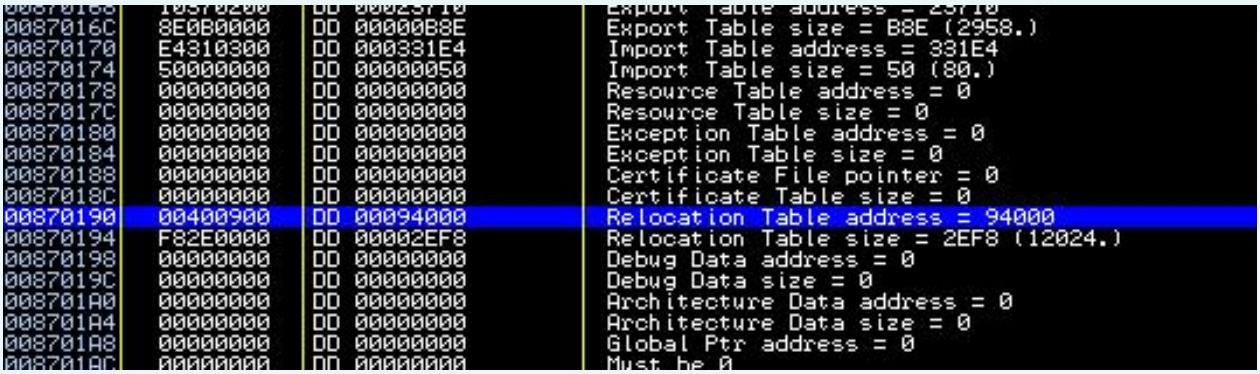
ImageBase = 8C0000. Since OEP, enter the function call 3, we see CALL [IAT] was wrong on this bet:

```
008D0668   55            PUSH EBP
008D0669   8BEC          MOV EBP,ESP
008D066B   8B45 0C       MOV EAX,DWORD PTR SS:[EBP+C]
008D066E   83F8 01       CMP EAX,1
008D0671   56            PUSH ESI
008D0672   0F85 E0000000 JNZ 008D0758
008D0678   B8 94000000   MOV EAX,94
008D067D   E8 6E0C0000   CALL 008D12F0
008D0682   8BF4          MOV ESI,ESP
008D0684   56            PUSH ESI
008D0685   C706 94000000 MOV DWORD PTR DS:[ESI],94
008D068B   FF15 A82E8A00 CALL DWORD PTR DS:[8A2EA8]
008D0691   85C0          TEST EAX,EAX
```

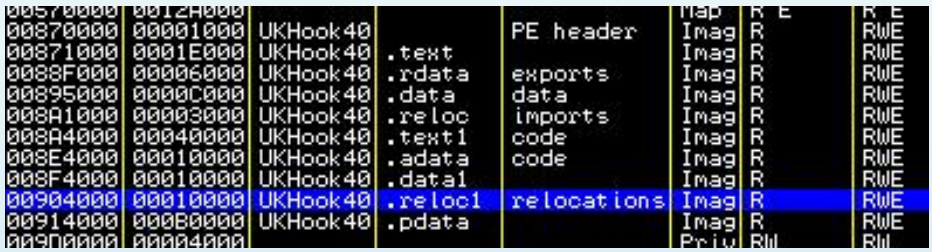
Based on explanations of concepts Relocation, sure you understand why? ImageBase now have another, but because Relocation should it be wrong ko load IAT right position. When you run the file that i have Olly, ImageBase then the other, IAT ko load is the right place, so do file will run, or run, but failed. Okie, Olly close of the Diablo. Back Olly there, select Memory in PE Header map:



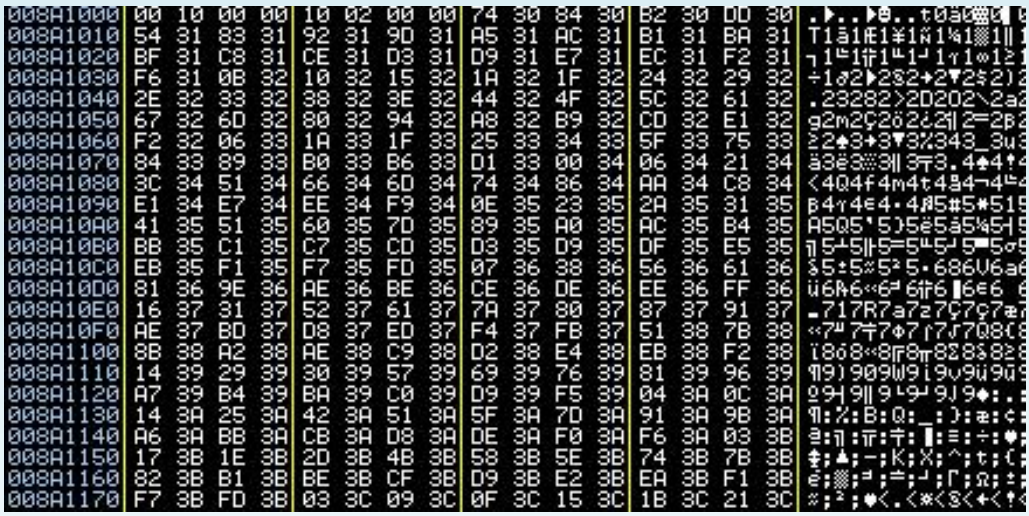
This is the DOS Signature. Depress until more information see this in the PE header:



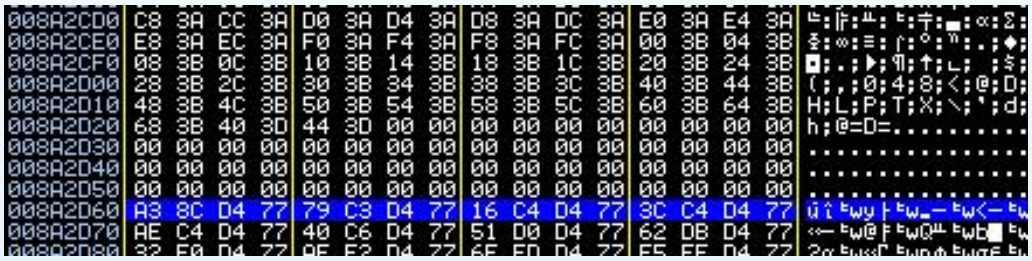
We found the address of Relocation is 94000 + 870000 = 904000, which is where the load section. Reloc1:



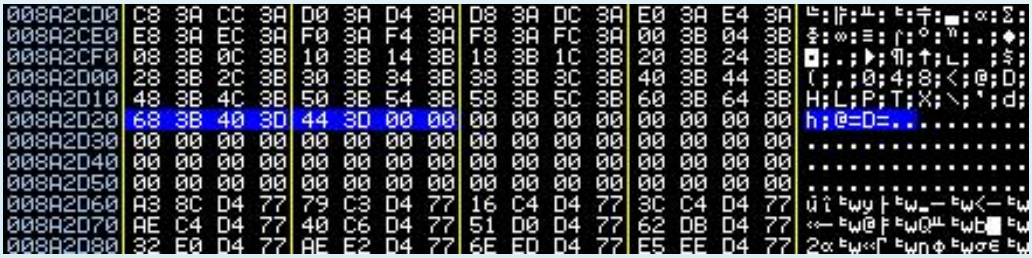
Now we must fix addresses turn right on Relocation of the original file. Double Click section. Reloc:



That is the data base Relocation. Vậy address begins in 8A1000. We also remember the first ArmInline have to redirect to the IAT in this section, the ImportREC again. Should be pulled down to the seats have redirect:



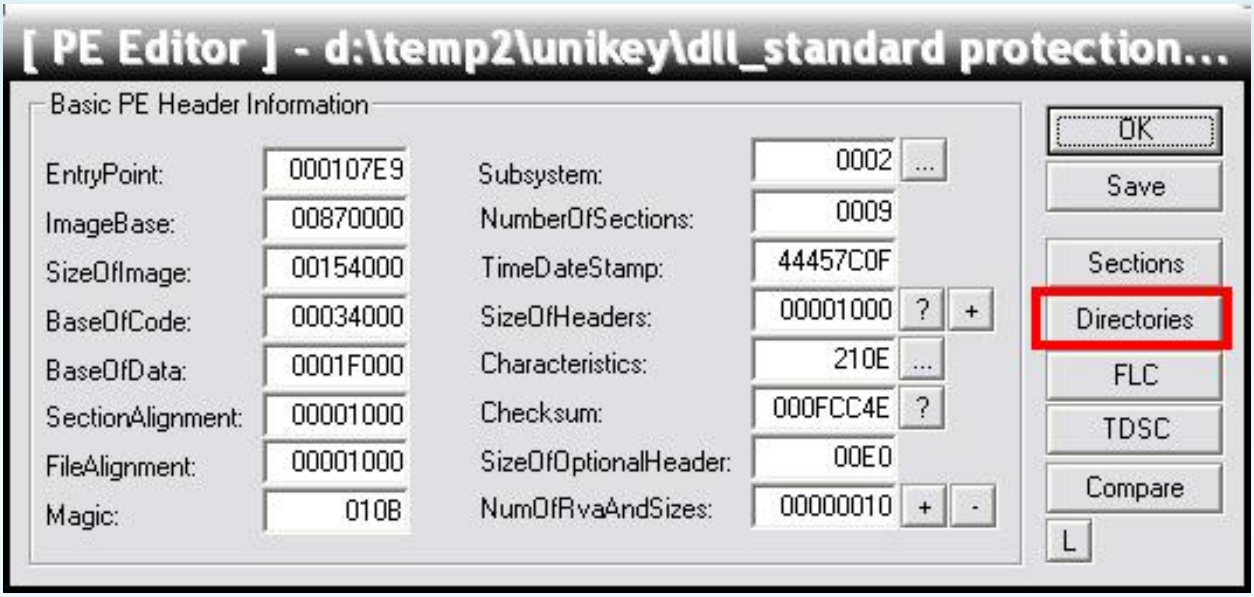
Counterclaim is already green redirect IAT. So the bytes on that end of Relocation:



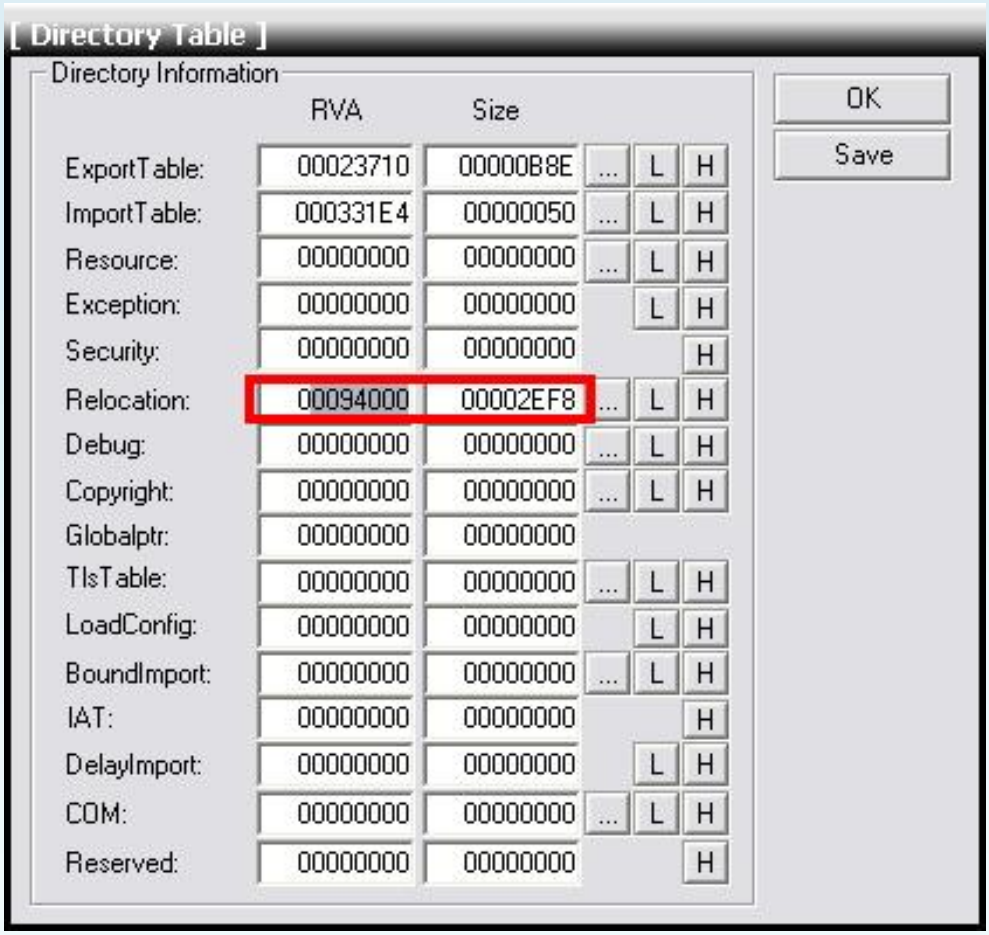
Relocation also get the same length IAT. Taken by the group DWORD (4 bytes), and except for the start. Here is where the end 8A2D27, should be taken 8A2D28 - 8A1000 = 1D28.

Note: The *start address and size of Relocation must absolutely correct*, if incorrectly can cause errors when the ability to run the file because the file will overwrite the load modules in the memory.

You can fix in Olly, but LordPE used for convenience. Olly to close, open LordPE à PE Editor (open file fix):



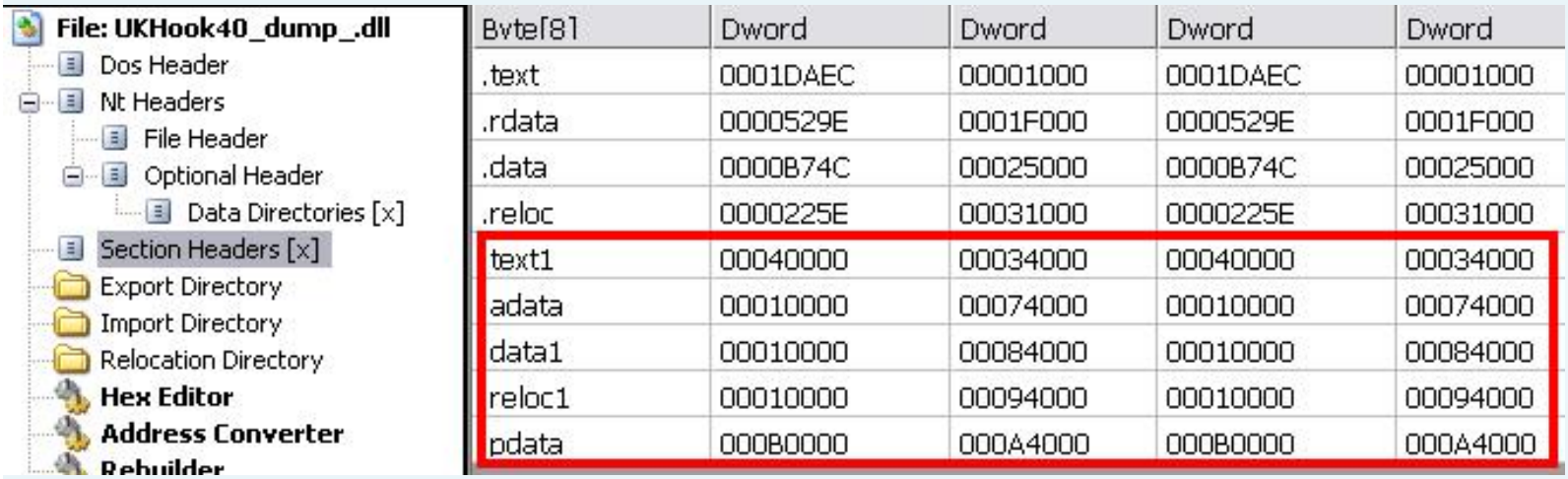
Select Directories:



You fix the RVA = 8A1000 - IamgeBase: 870000 = 31000. Size = 1D28. Save the file.
Now see the files have to rename UKHook40.dll not? If it is running Unikey.exe. It lickerish load.
Note: Some of the old Unikey as beta 4, if you do not use that fix Relocation UPX (or some other packer) pack dll file for reduced size. Unikey.exe run, it can load dll suon will. There is no misunderstandings can check the file size. Because UPX accidentally find and correct root Relocation encrypt it. So where do run error. **In most cases, we must always fix the Relocation dll unpack any time, whether any packer.**
Very fortunate that Armadillo ko hề Relocation should encrypt it easy fix. If the packer will encounter other problems to day. Now to our final stage.

VII Reduce-Size:

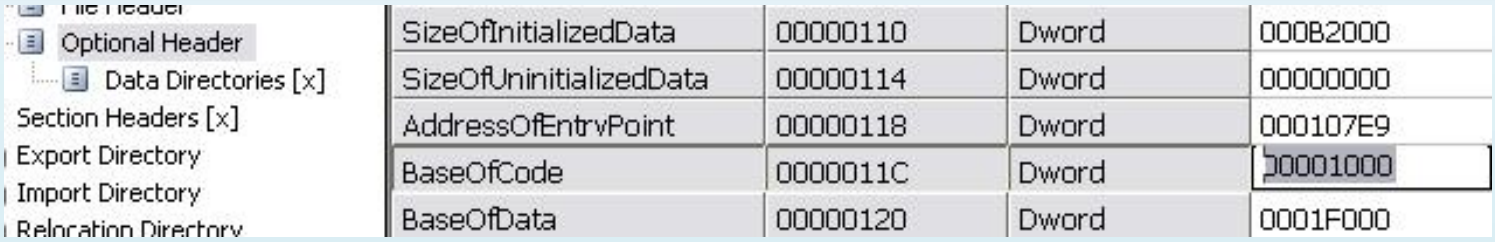
In fact also do what many do, open up CFF Explorer, open the file, delete all section:



File: UKHook40_dump_.dll
- Dos Header
- Nt Headers
  - File Header
  - Optional Header
    - Data Directories [x]
- Section Headers [x]
- Export Directory
- Import Directory
- Relocation Directory
- Hex Editor
- Address Converter
- Rebuilder

Byte[8]	Dword	Dword	Dword	Dword
.text	0001DAEC	00001000	0001DAEC	00001000
.rdata	0000529E	0001F000	0000529E	0001F000
.data	0000B74C	00025000	0000B74C	00025000
.reloc	0000225E	00031000	0000225E	00031000
text1	00040000	00034000	00040000	00034000
adata	00010000	00074000	00010000	00074000
data1	00010000	00084000	00010000	00084000
reloc1	00010000	00094000	00010000	00094000
pdata	000B0000	000A4000	000B0000	000A4000

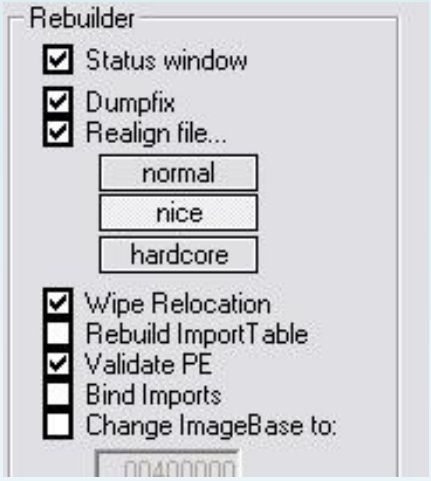
Because. ADATA do not redirect the IAT should delete that we do fear anything. Then edit Of Base Code for the right:



- Optional Header
  - Data Directories [x]
- Section Headers [x]
- Export Directory
- Import Directory
- Relocation Directory

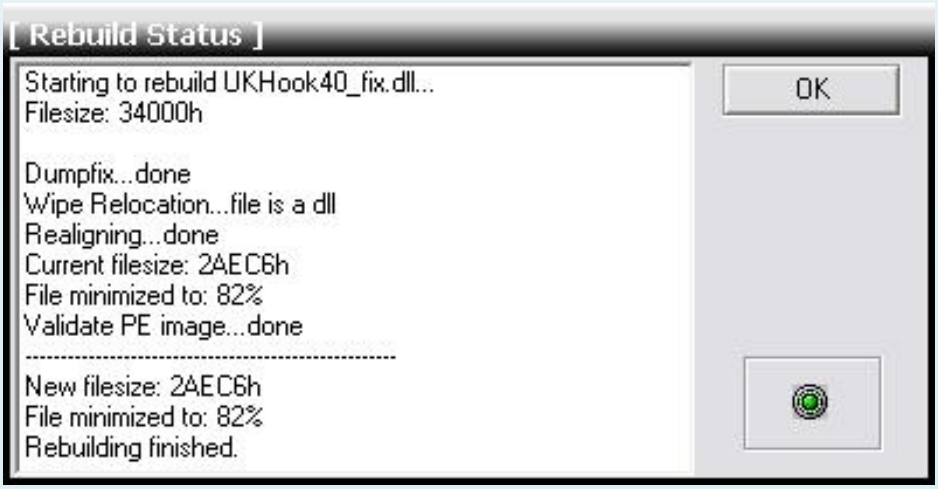
SizeOfInitializedData	00000110	Dword	000B2000
SizeOfUninitializedData	00000114	Dword	00000000
AddressOfEntryPoint	00000118	Dword	000107E9
BaseOfCode	0000011C	Dword	00001000
BaseOfData	00000120	Dword	0001F000

Save the file. To open more streamlined LordPE, the Option to rebuild:

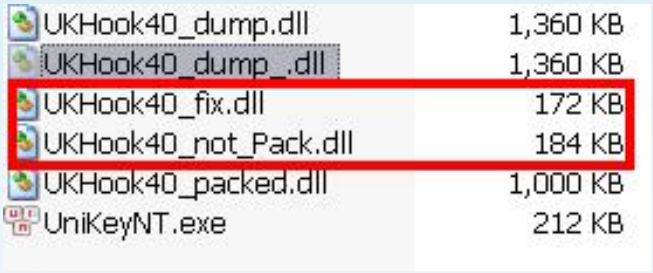


Rebuilder
- [x] Status window
- [x] Dumpfix
- [x] Realign file...
  - normal
  - nice
  - hardcore
- [x] Wipe Relocation
- [ ] Rebuild ImportTable
- [x] Validate PE
- [ ] Bind Imports
- [ ] Change ImageBase to:

Conduct rebuild the file after the fix:



Size after the collapse, but smaller than the original file is not pack:



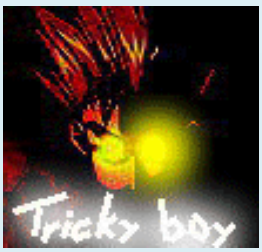
Rename, file and still be good Unikey.exe Load. Considered as completed for the unpack dll pack by Armadillo.

VIII-Ending:

Indeed unpack ko hề simply copy, Lam Hung huc 1 as the host, we need to master the basic knowledge. Hope you have a lot of things from this article.

Big Thanks to: fly [CUG], RES stephenteh () for helping.

Sincere thanks:
The brother-in REA helped tricky in the study.
Typically hacnho series with tut unpack their super levels.
Uncle Why Not Bar for some tricky help pack the file Unikey
... And you all again.



Tàn Ma Kiem

(Written by Trickyboy)

Armadillo Exact Version Location Tutorial

Two methods of manually Finding the exact version of an ARMADiLLO protected file

Target .....: **TARGET.EXE**
(http://www.absolutelock.de/construction/files/infobase/New/arma_version_location/Target.zip)
Protection ..: **ARMADiLLO v3.?**
Difficulty **Intermediate** ....:
Tools Needed:
1.) **Olly Debug**
Welcome! :)
This tut was written by: **MEPHiST0 (From Gods Unpacking site)**
Translated by: **kienmanowar**

Posts will be next to you just how to know the exact version of the Armadillo packer used to protect files. So first you download target used in this article was the first. Now Let's do it:) Enjoy!

Part 1:

Definition To Armadillo's version information

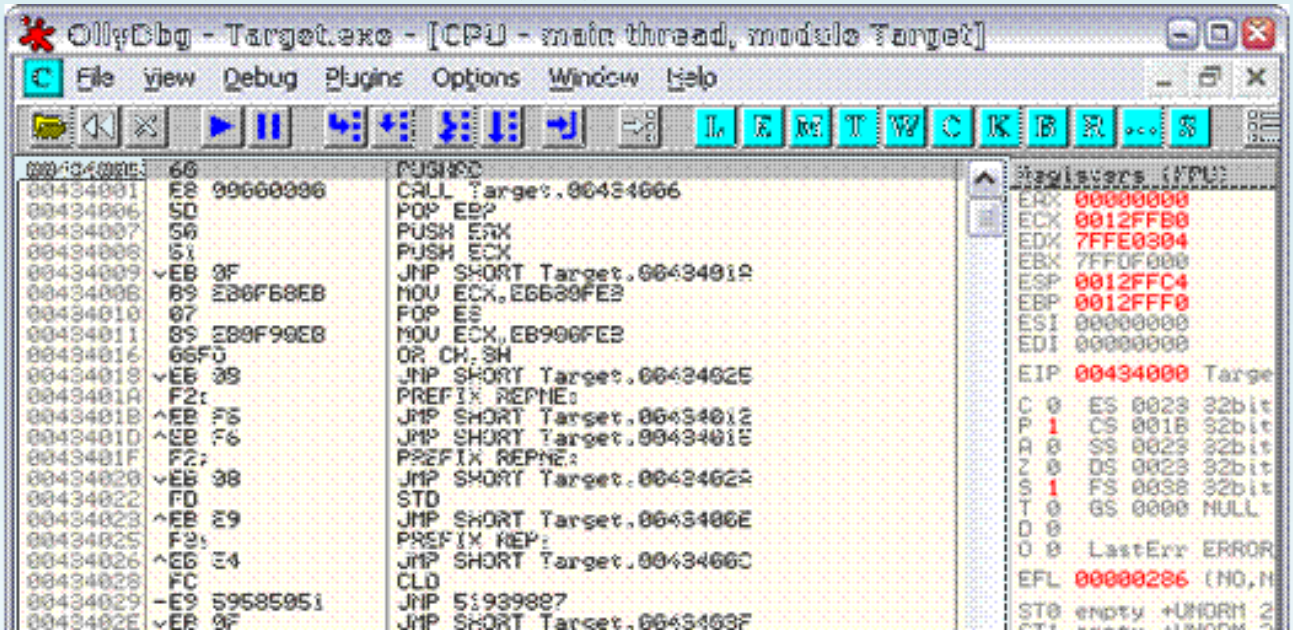
There are many of us (especially children) do not know how to find the exact version of the Armadillo. Some people back then that this can not be performed. This article will explain to you how to find the exact version of the Armadillo (the exact number to each child and not a word is still "x" odious). The method used in This was written to apply to **have Armadillo version 3.xx,** even with **Debug Blocker,** or **CopyMem2.** And also one more to say here is, at least you should know is how to unpack the Armadillo do before you read this article.

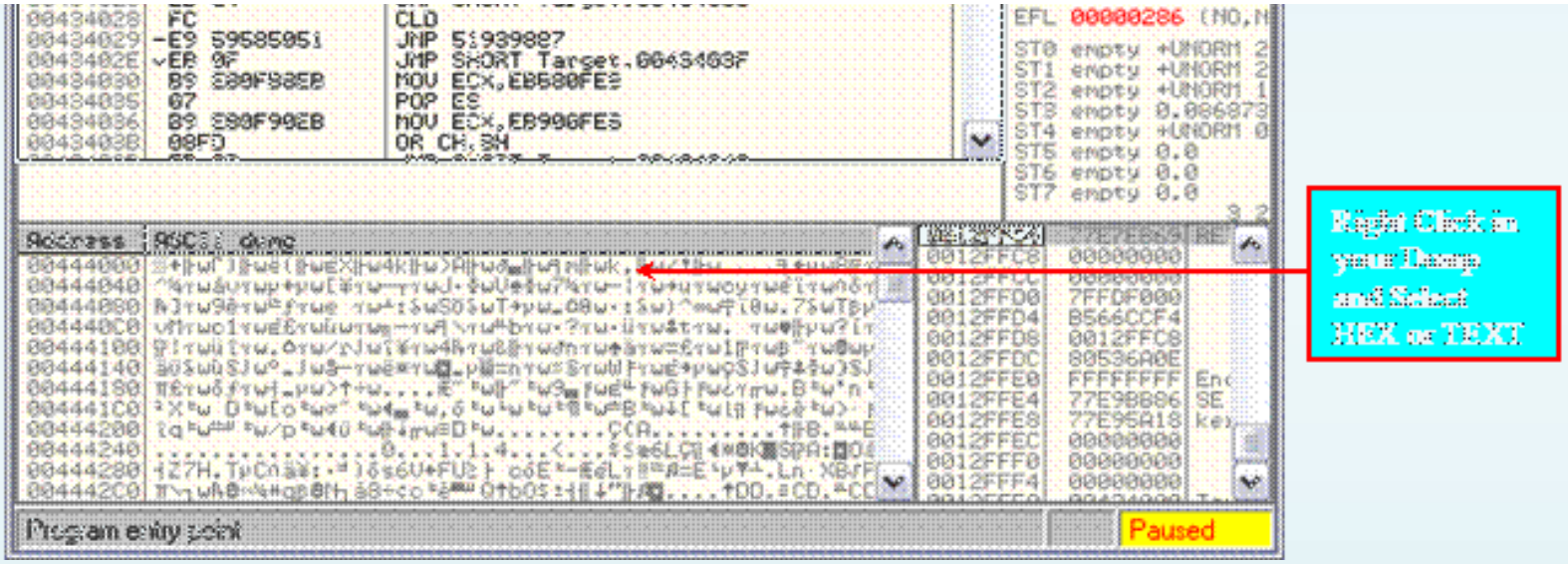
As you see in this article the author has attached a file Target.exe's authors, and this file is Protected by the Armadillo?.? :). After all read this article you must find out which version of the Armadillo's authors used to packed file. Exact number of versions of this (and sometimes build) are encrypted in the Armadillo.

Part 2:

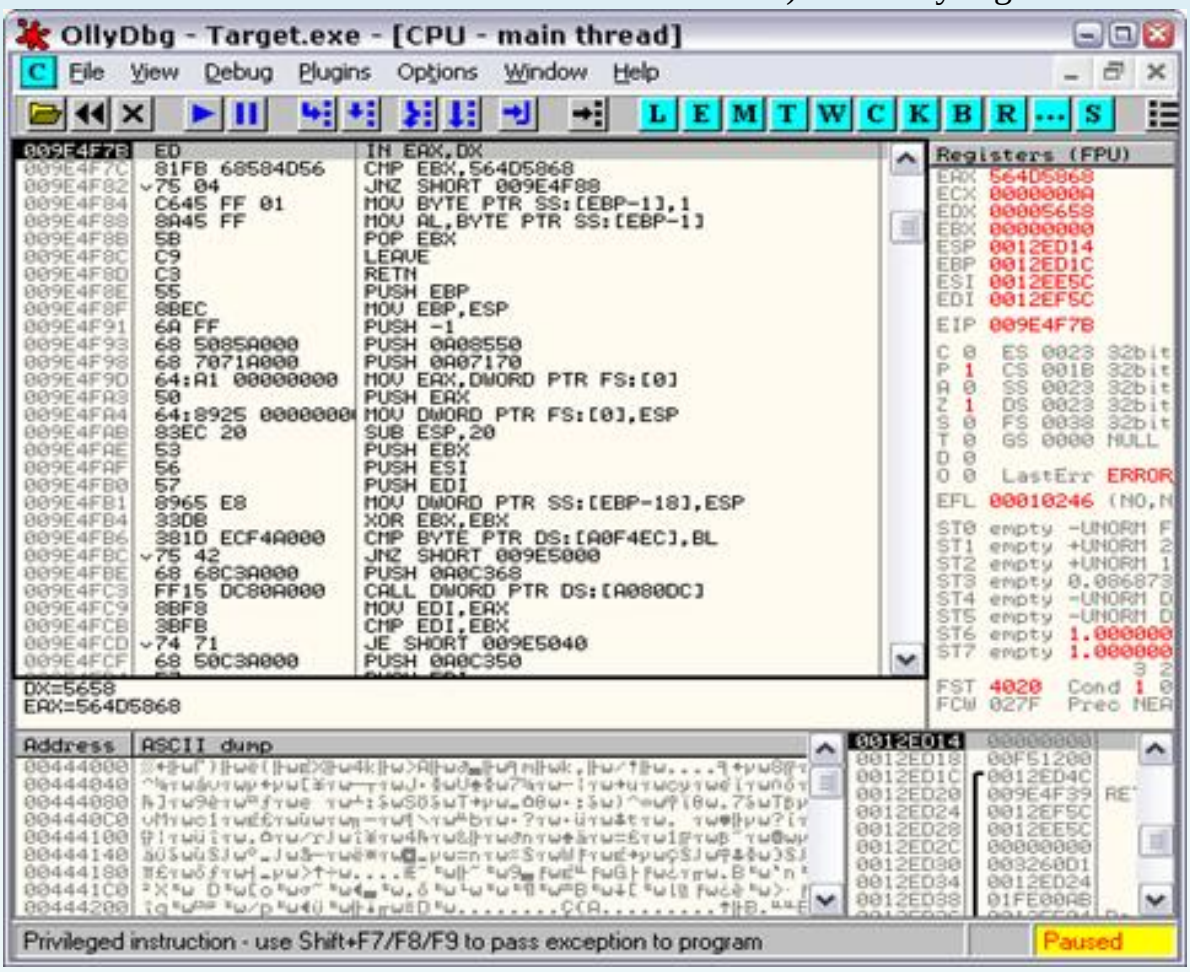
METHOD 1 - Finding Exact Armadillo's version

Oki .... we started nhé. First you load the file in Olly target.exe. After the load is finished we will be in **Point** of **Entry** Armadillo. Similarly Figure below:

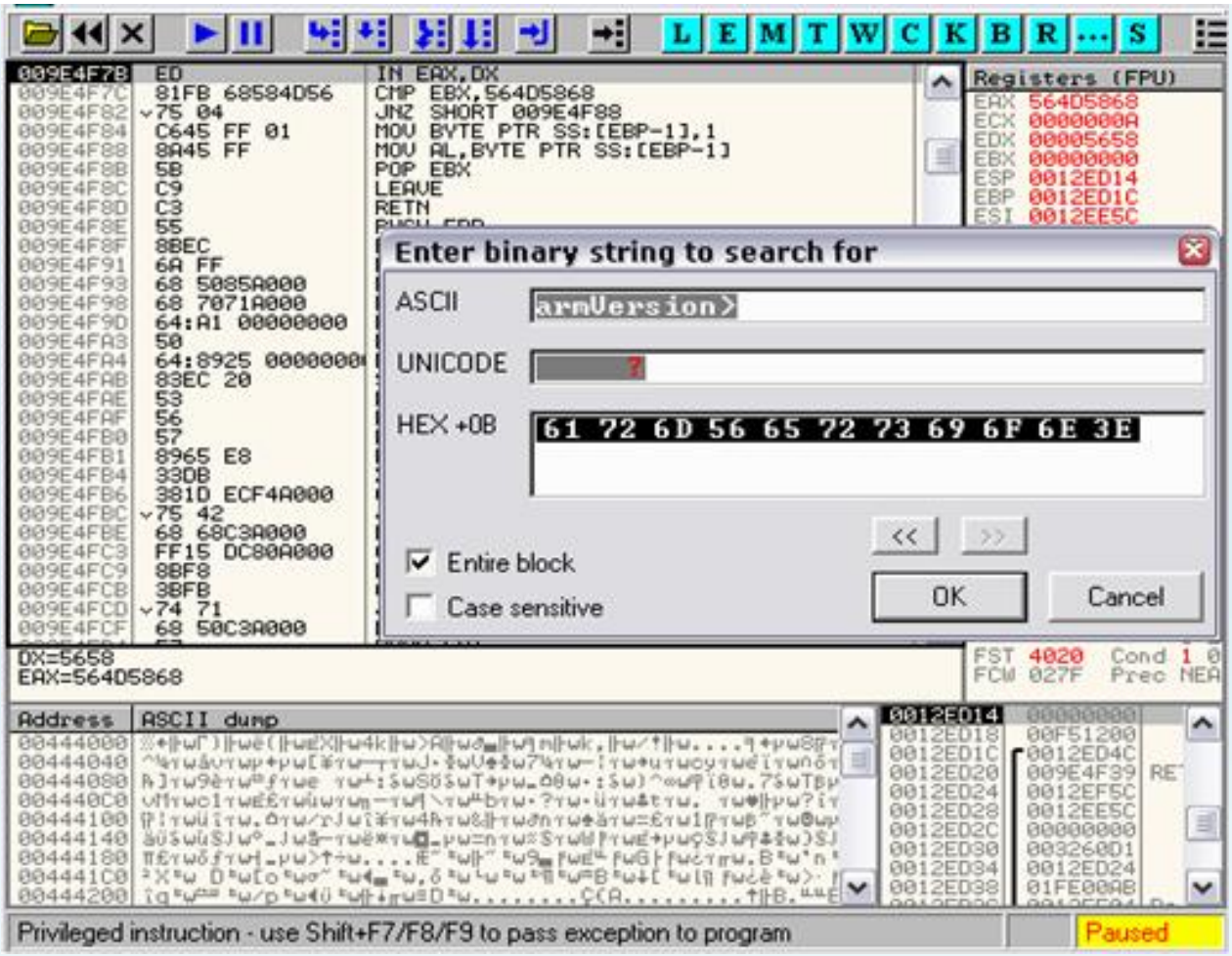




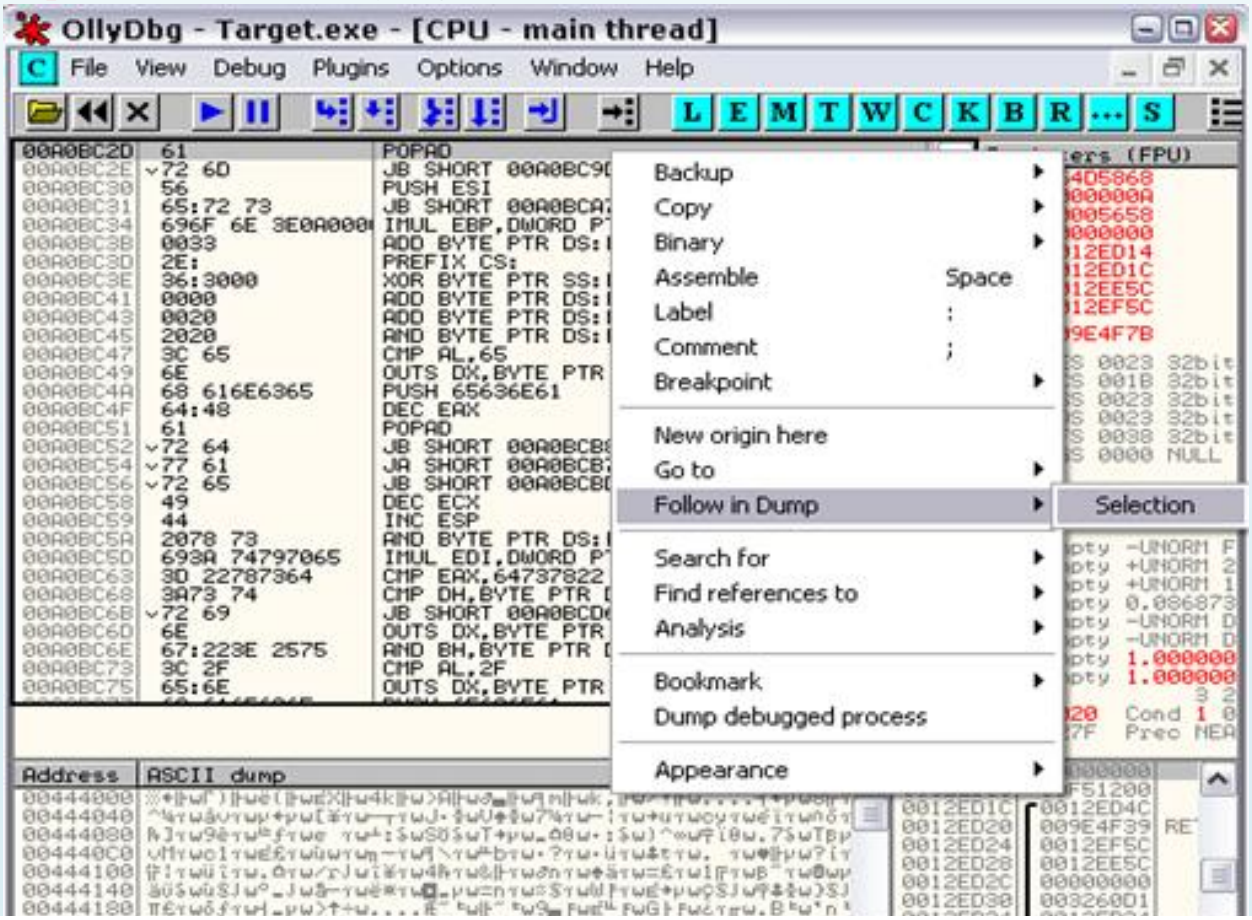
Now after you have selected one of two options is **HEX** or **TEXT** window dump ... ...
Next you press **Shift + F9 3 times** (in this case is 3 times, but she's the only hit 1 time only depending on each machine) and you will receive a 'privileged instruction. Now, the code of the file is Decrypted target. ext and we can find the exact version of the Armadillo:). Similarly Figure:

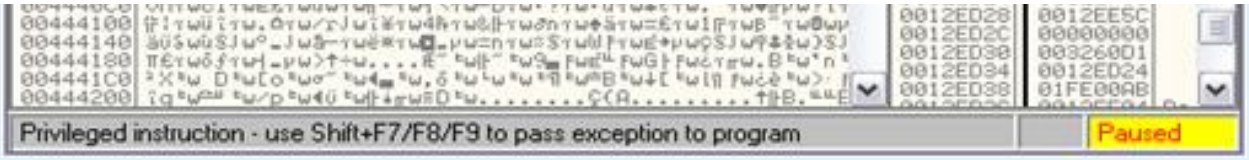


Oki, now at the main screen of you, press **Ctrl + B** to open a dialog box allows us to **search Binary strings** (Search binary sequence). In the ASCII text box you type the following: **armVersion>** similar image illustrated below:

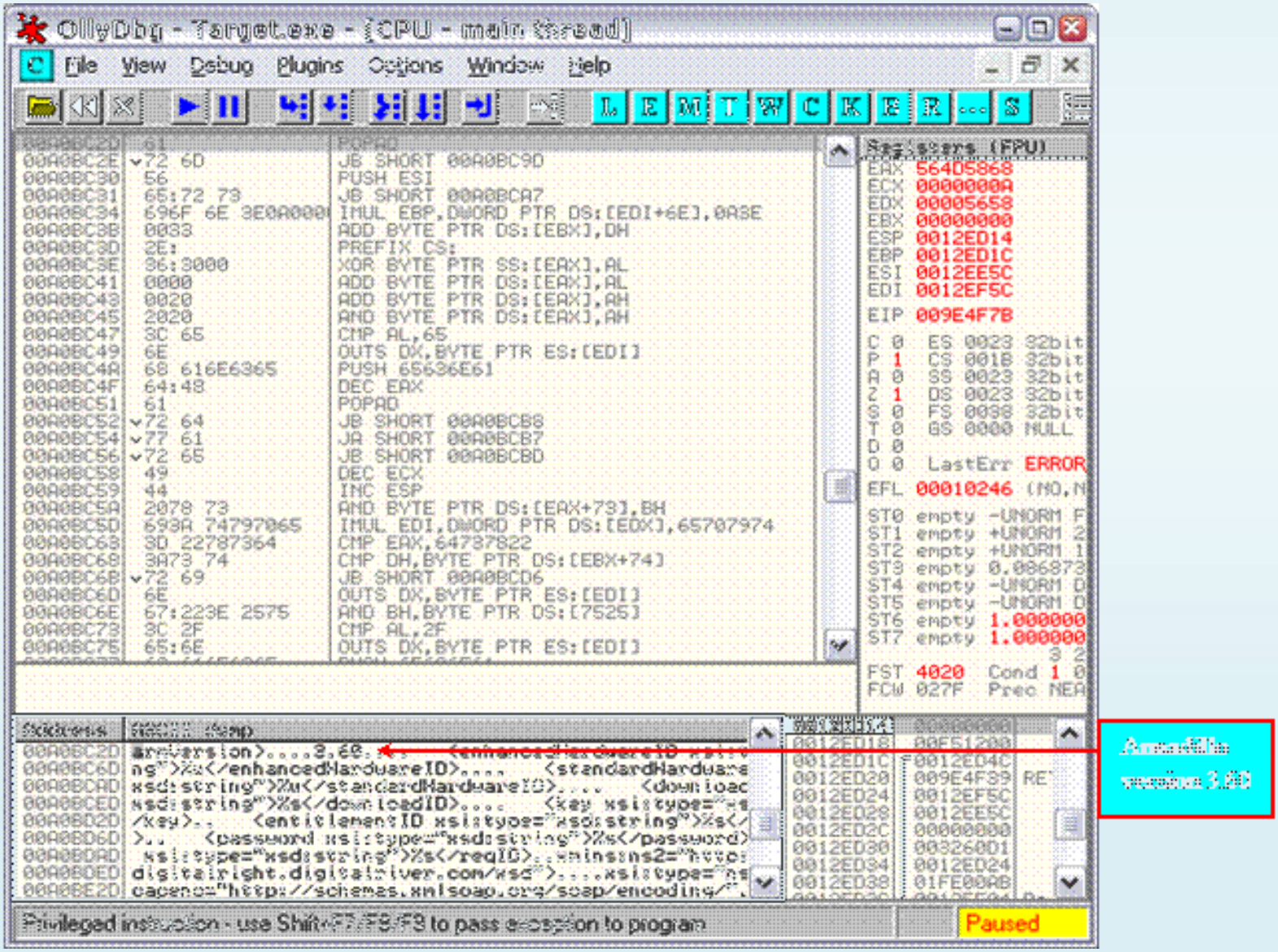


You must enter exactly as on it, after you enter finished click OK button. Hiiii it will take us to the Armadillo's Version. Next to go: the HIGHLIGHT FIRST BYTE> right click on it and choose **Follow in dump> Selection.** Similarly Figure below:





Kekeke ... . It is then the other, now you look down the window dump Window. We will see exactly Version of Armadillo lu lu it is growing very obnoxious:) Yeah! Similarly Figure below:



As you see above, we have the exact version of the Armadillo not appear characters an "x" is more obnoxious. Exe file here was protected by **Armadillo version 3.60.**

Part 3:

METHOD 2 - Finding Exact Armadillo's version

An easy way for you can find the exact version of the Armadillo:

When you find the **OEP,** and you have any **DUMPED** Armadillo Protected File v3.xx ... . We will open the file has been dumped in a HEX editor program (for example Hiew) and search **armVersion>** by searching by Ascii. This method will let us know the exact version of the Armadillo dumped in your file: D. But there are also the methods are not very effective. But way or another as long as our purpose is to be ... ENJOY: D

(~~)- Thanx All-oOo-oOo-(~ ~)

Armadillo v3.xx Manual Unpacking Tutorial for Windows XP

Manual Unpacking Armadillo Standard Protection + DEBUG blocker with OllyDbg then Patching Armadillo, so we can rebuild with imports ImpRec.

Target ... ...: FlashFavourite v1.31
Website ... . : Http://www.pipisoft.com/
Protection ... .. : Armadillo v3.60 + Debug Blocker.
Difficulty ... ... : Intermidiate / Difficult (know a little about debugging ....)
Tool Needed ...:

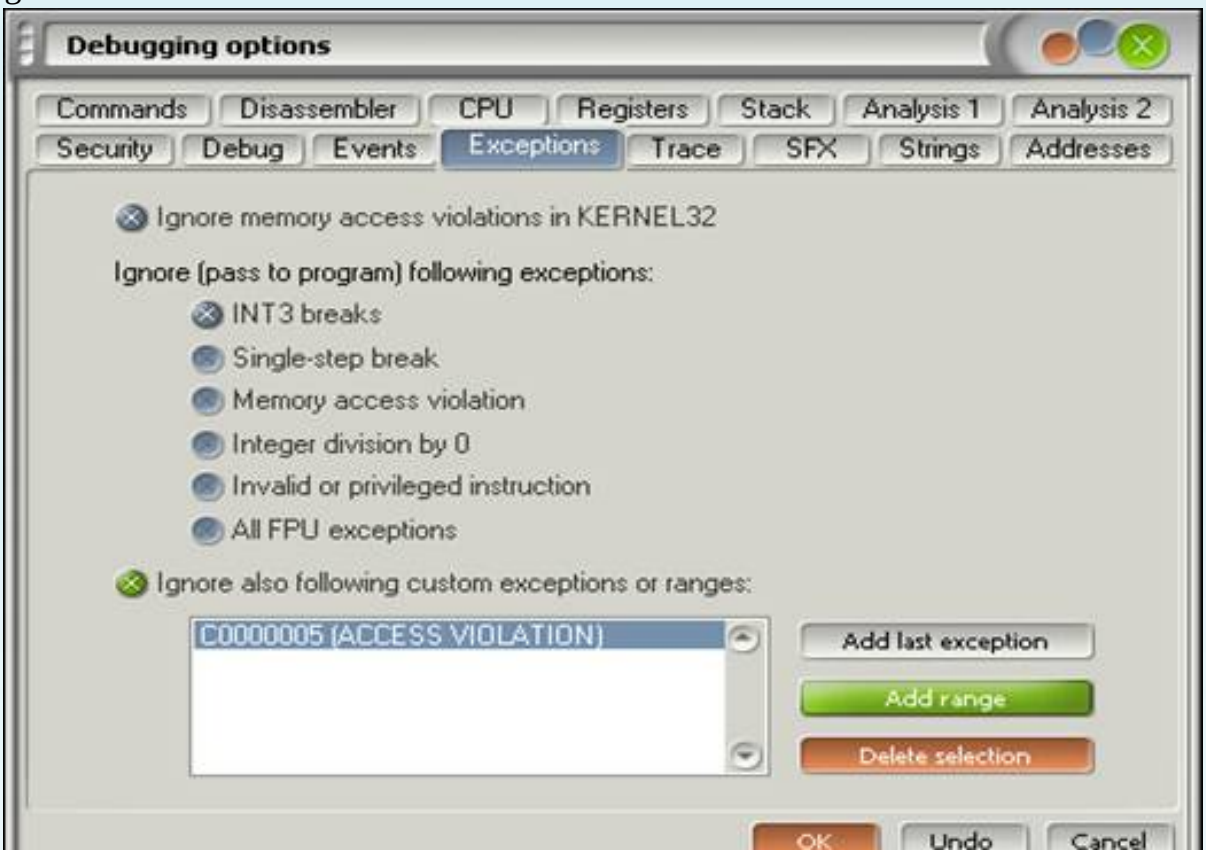
1. **Olly Dbg v1.08 or better**
2. **LordPE Deluxe**

Welcome! :)
This tut was written by: **MEPHiST0 (From Gods Unpacking site)**
Translated by: **kienmanowar**
This article will explain how a thorough through illustrated with detailed images, how to unpack armadillo v3 with debug blocker feature.

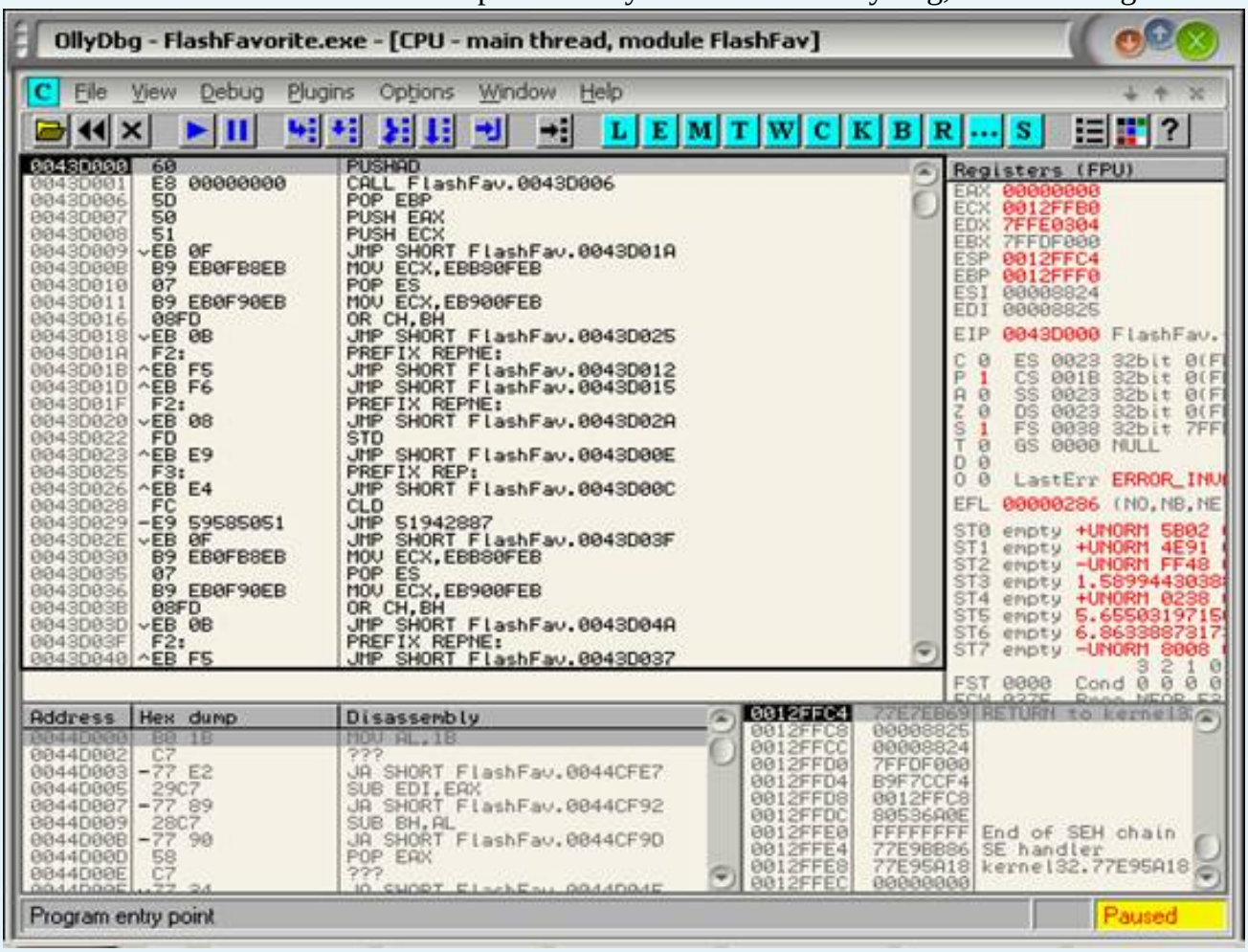
Part I:

Defeating Armadillo's Debug Blocker and reaching the Original Entry Point, and dumping.

-**** First ... Armadillo with Debug Feature Blocker is the location of two of the processing Father and Child. The word processor is a Father Loader - Process Child process is a normal file is protected by Armadillo.
-**** The address that we have been through Olly Debug is not the same. The Armadillo is newer v3.70 check Ollydbg.exe file - so you may want to change the name of Olly for this case. Method used to Unpacking Armadillo will be effective for all **Armadillo 3.xx version,** except **CopyMEM2 Custom** and other **features** used in the Armadillo.
-**** Next .... Armadillo many Access Violations (region are not allowed access), so you must configure in by Olly add more: **C0000005 (ACCESS VIOLATION)** to the exception list (exclusion list). To achieve this you run Olly up, then select **Options ---> Options debugging,** and select the **Exceptions tab** to configure Olly as in Figure below:

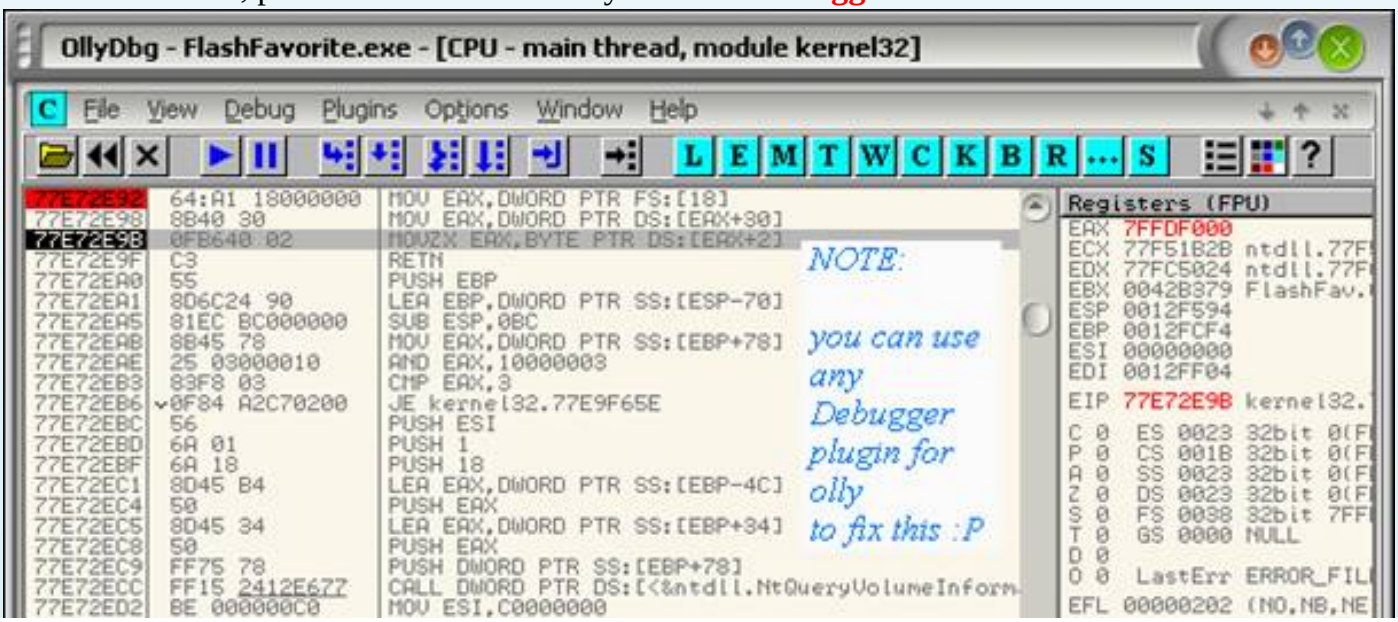


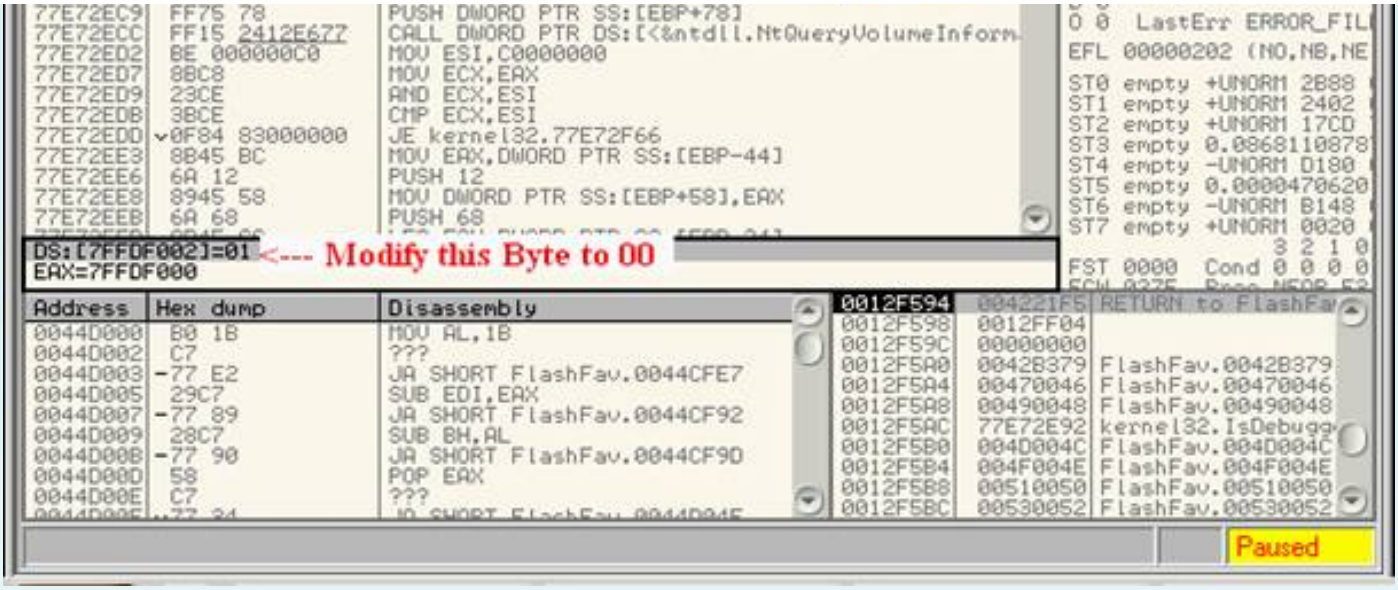
-**** Oki, now we will proceed with work Cracking target above. After such a configuration is done, we will load the file **FlashFavourite.exe** was protected by Armadillo in Olly dbg, similar to Figure below:



After -**** load complete file Olly will stop at **0043D000** such, this is the **Entry Point** of Entry Point Armadillo ... this actually the same as the Point of Entry when a file is Protected by ASPACK .. and some look like armadillo programs compiled C + + so ... But actually, this is the armadillo. Certainly Armadillo here will check the troubleshooting current (Prensent Debugger). Therefore, we then set in BP **IsDebuggerPresent** function **(or can use the Plugin and skip writing this ..):)**

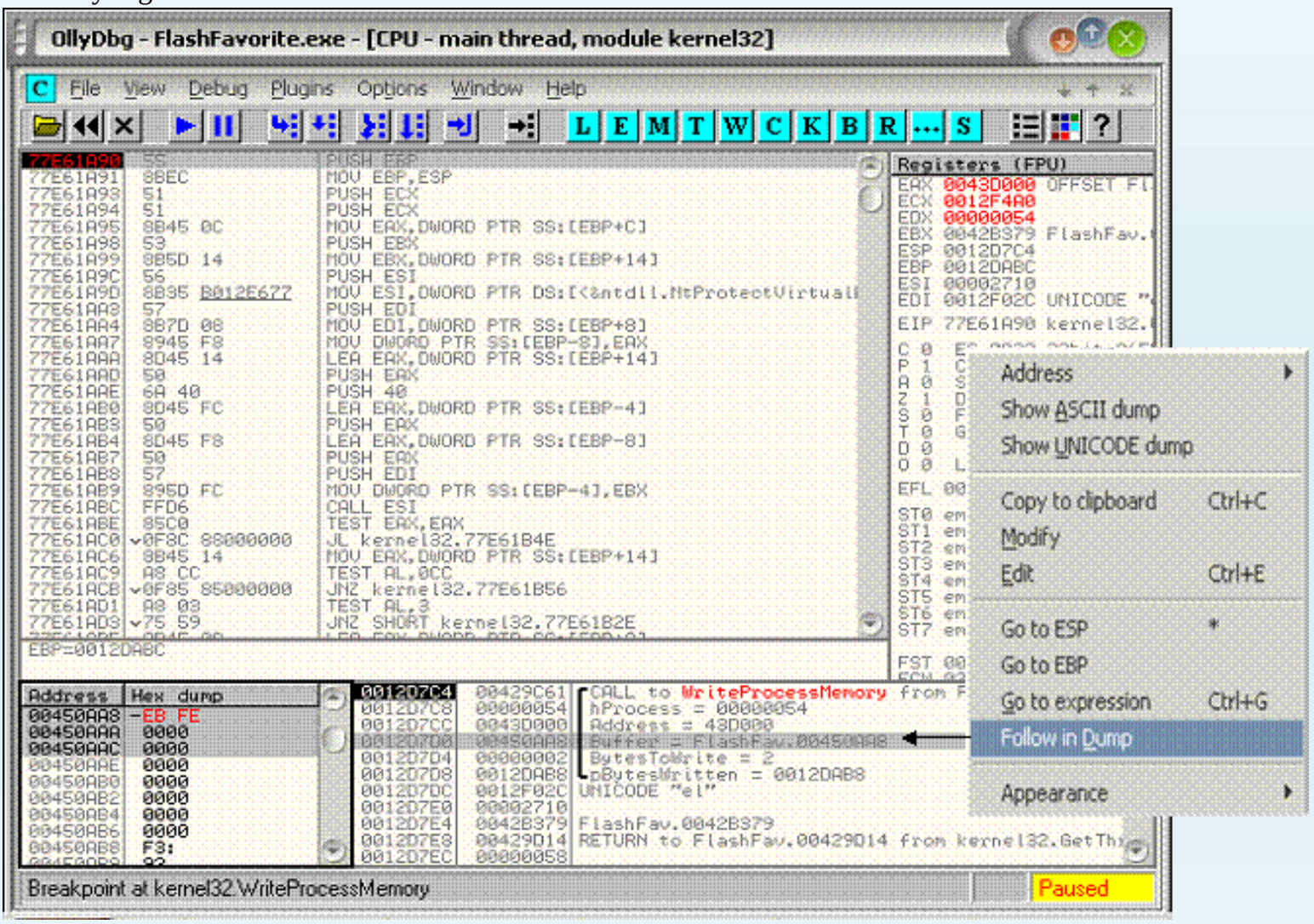
-**** After Set BP, press **Shift + F9 3 times** you will **IsDebuggerPresent** at Break:





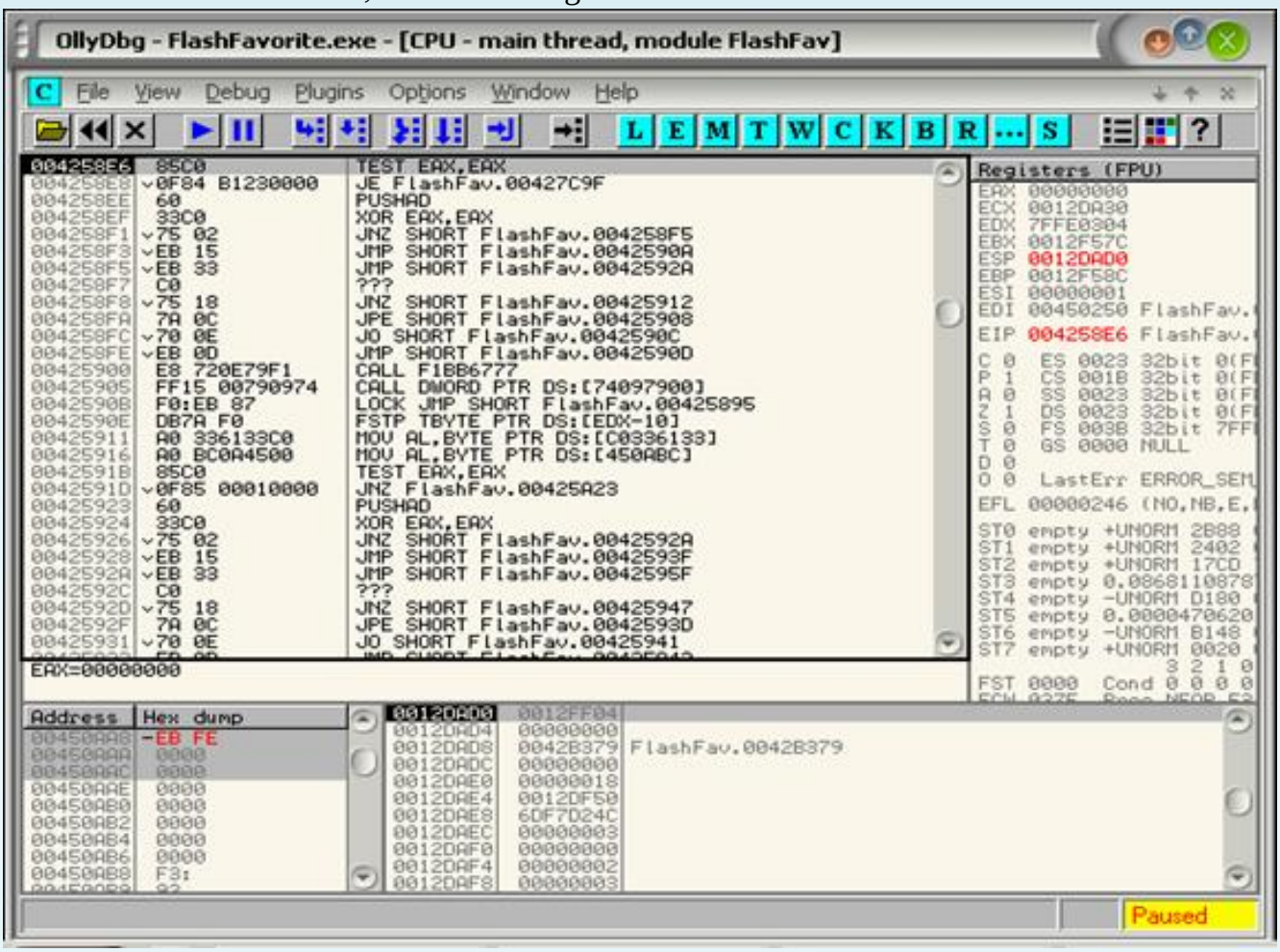
-**** Oki, now after we fix the test debugger, next we will conduct work to ignore (in other words is to avoid) Armadillo Debug Blocker feature. :) What we should do is make the Child Process Entry Point and endless loop (hex: EB FE). We search an endless loop so we can stop at Point of Entry Process Child:) and we can do this by using the API function is **WriteProcessMemory.**

-**** We set a break point in **the API** function **WriteProcessMemory** and run by pressing **Shift + F9,** you will receive an instruction (privileged instruction), just press Shift + F9 to ignore it. We'll Break in **WriteProcessMemory.** First, we break, it is no good, Break the next time we will have what we are looking for. Similarly Figure below:



-**** Break time this second, we will stop at the API function **WriteProcessMemory.** Please pay attention to window Stack Window:
Check out the BUFFER> writing the buffer is 2 bytes
Check out the Address> address is where writing is to buffer

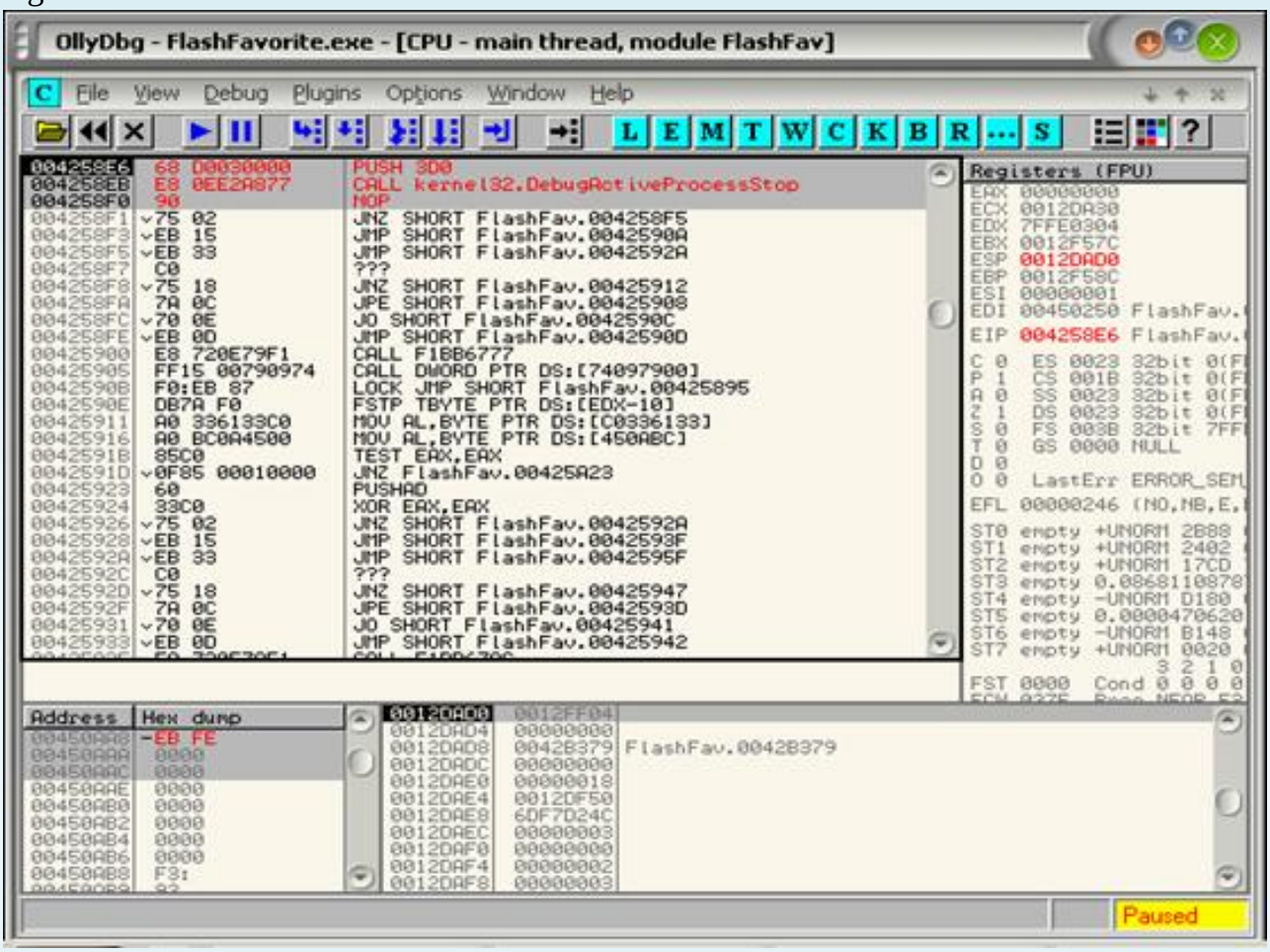
-**** Right Click Buffer similar image illustrated above, then select Follow in dump: 2 bytes are written, in my case it is 2 bytes: **60 E8** so keep in mind we get (we will have to write the 2 bytes to return to Child Process before when we want to Attach).
Oki -**** now we will edit 2 bytes **60 E8** window to dump Windows **EB FE (Jump EIP).** We make Buffer noted the order in dance forever Entry Point, so we can correct at Break Point of Entry Process Child:), like Figure above.
-**** Now, we have Point of Entry Process Child in a loop (loop) ... we will Attach Child Armadillo Process ... But do not allow us to Attach! Therefore we must stop ... Patch. Olly run by pressing the key combination **Shift + F9,** and while running, put in a BreakPoint **WaitForDebugEvent** function. (We will always break at the function **WaitForDebugEvent** because processing is located in a loop). When we Break in **WaitForDebugEvent** function, you press **Ctrl + F9** (Trace until RETN), a new line (new thread) will be created ...: P (it will say on the bottom of olly window.). Now we will use in order RETN from **WaitForDebugEvent** function, press F7 to trace into the RETN. **Make sure to write EAX value = 0 if you RETN from WaitForDebugEvent function,** you'll come to function TEST EAX, EAX like image illustrated below:



-**** Here we will assemble:
PUSH PID **(PID = Process ID)**
CALL DebugActiveProcessStop <thx winxp!>
You may have been accurate in **PID** Olly Dbg, by clicking File> Attach>

There we will have 2 files are running FlashFavourite - select get correct process that is not highlighted RED. This PID is that we need .. :)

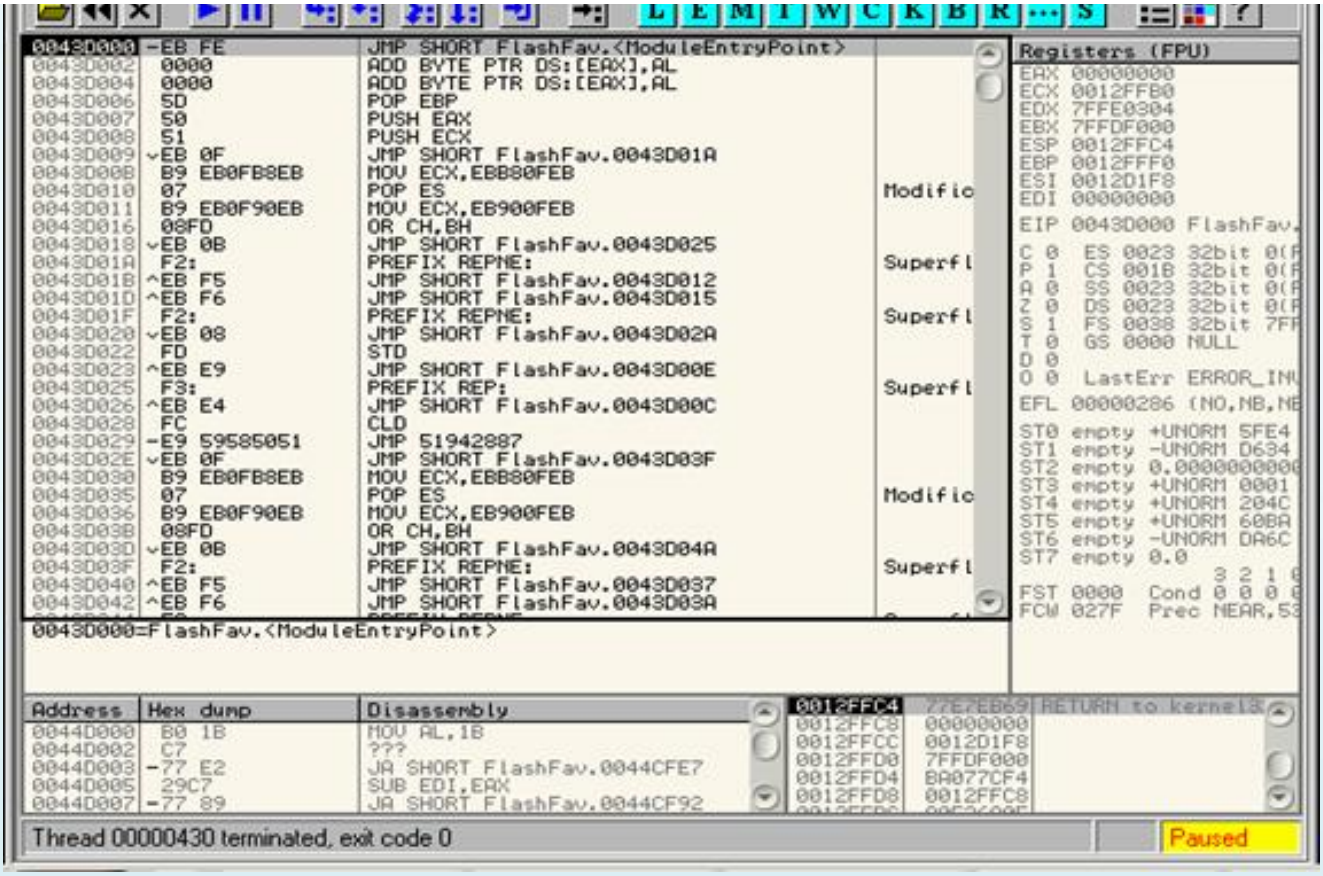
-**** In my case it's correct that I have PID is **03D0,** so assemble order to test the following **PUSH 03D0.** Similar images illustrated below:



Oki -**** Hmm, now after you edit the code like Figure above, followed by pressing **F8** for me to order **NOP** - and open a another Olly debug while others keep the window first Best (same as we open a screen text editor, while others have a screen is more work). Note the following when you can open your PC will slow the process ....: | Now at the screen Olly we just open it, you choose **File> Attach>** Process and you have to use PUSH (PID). When you Attach the screen Olly's finished, you will here in Olly (may be different in your computer):

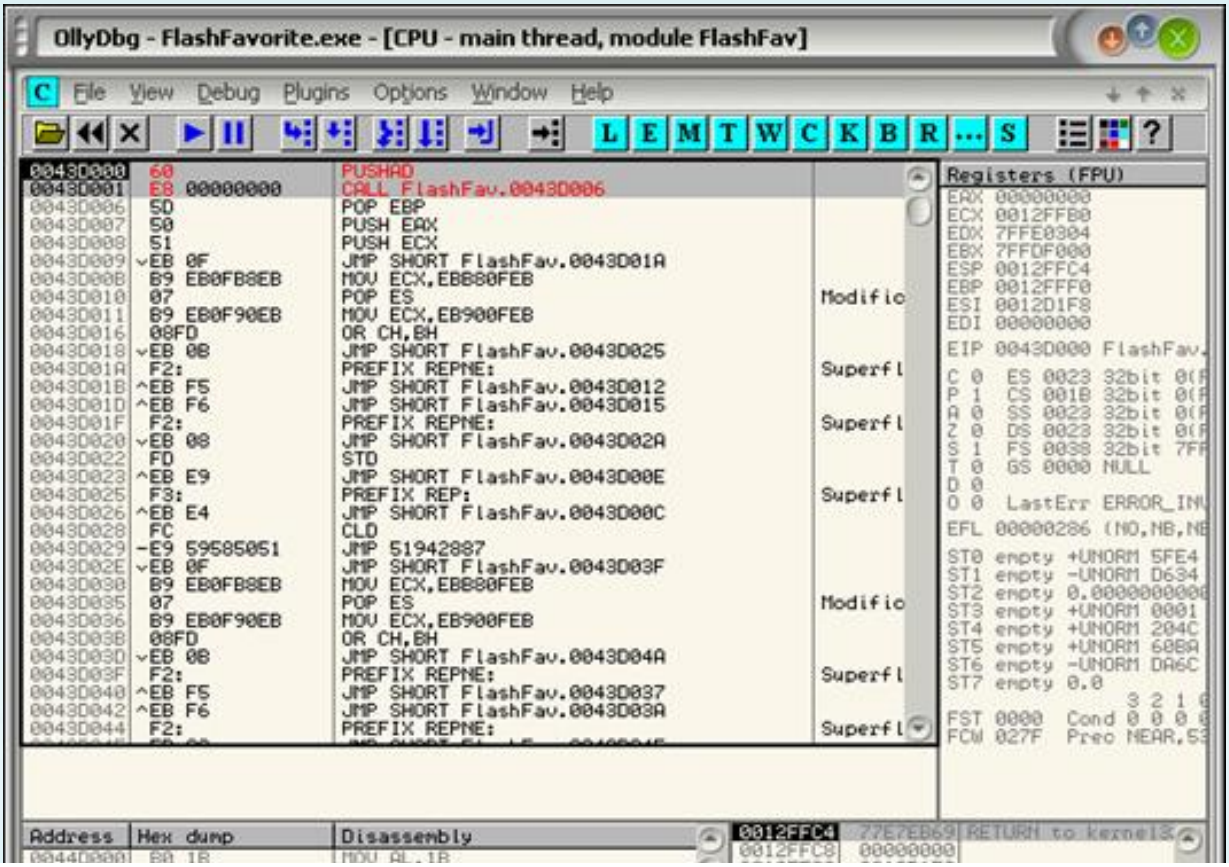
77F7F571 C3 RETN
77F7F572 8BFF MOV EDI, EDI
77F7F574 CC INT3
77F7F575 C3 RETN
77F7F576 8BFF MOV EDI, EDI
77F7F578 8B4424 04 MOV EAX, DWORD PTR SS: [ESP +4]
77F7F57C CC INT3
77F7F57D C2 0400 RETN 4
77F7F580 64: A1 18000000 MOV EAX, DWORD PTR FS: [18]

-**** Now you press **F9** to run and then press **F12** to pause, we'll stay in place of endless loop (Infinite Loop) that we set before! : D AKA: Child Process Entry Point. Similar images illustrated below:



-**** If Olly's screen is the same as illustrated by pictures of me on the Congratulations! You have excluded the Armadillo's Debug Feature Blocker. Now we will not do the Child in the process that has created Armadillo. Now it's just like a protection Armadillo normal.

Oki -**** stay in laos a cigarette that has (this author does not smoke them) and as the rest of this article we do with Standard Protection:). All that we must do is assemble **EB FE (JMP EIP)** return **Original Bytes.** You also remember what it is not? In my case it is **60 E8** .. So we change **the EB FE 60 E8** similar image illustrated below:



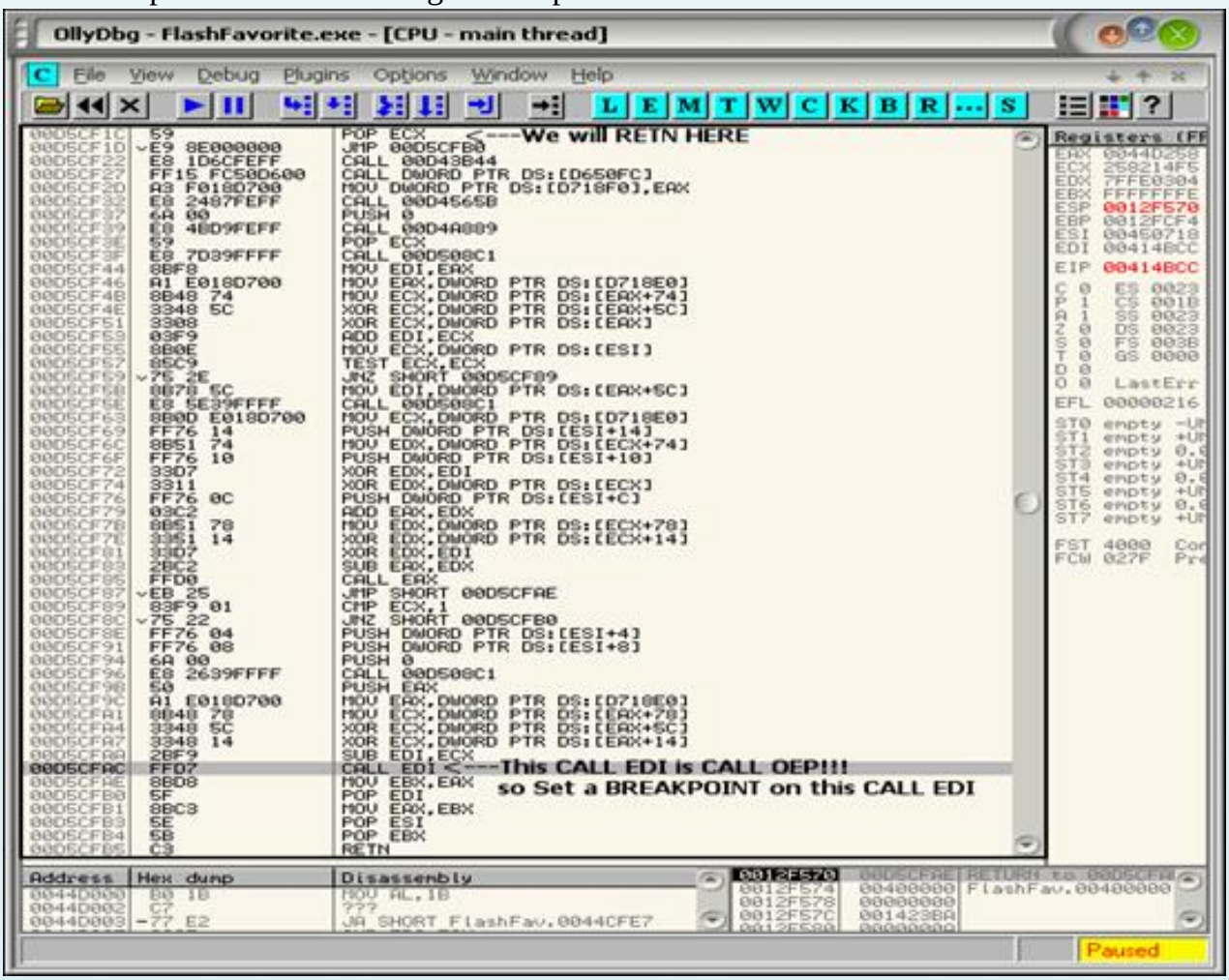
-**** Oki, after we change back to EIP JMP Original Bytes .. we will have IS Debugger Check in at certain Child Process. So we will set a BP in IsDebuggerPresent function (or use a plug in). Run by pressing **Shift + F9** until we Break in function, the function to fix that it once more for Child Process.

-**** Next we re-set at a BP function **CreatThread (some armadillo ... you have to break in function SetProcessWorkingSetSize).** We now run again by pressing **Shift + F9,** occasionally (in this case There is) we will see a Nag Screen and is **Armadillo's Time Trial Nag Screen:),** this is a good sign:) So when we dismantle it then the exe file will be cracked:) Pretty Much) (^ _ ^)

-**** Time when the Nag up, they click OK and we'll break in **CreatThread.** When you stop at **CreatThread,** press **Ctrl + F9** once, and you'll come to me lenh **RETN 18,** press **F7** to trace into the RETN ... .

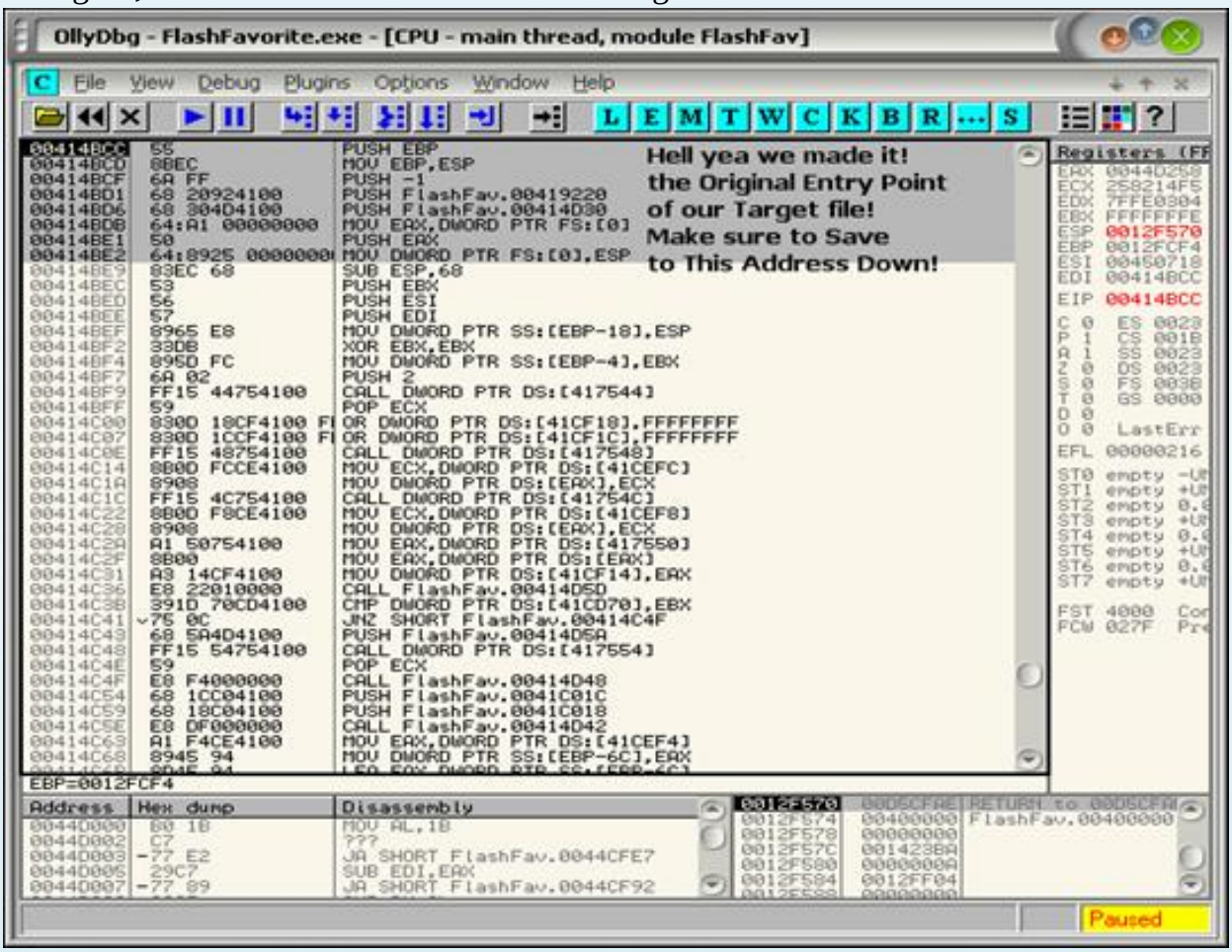
-**** We again return to the Armadillo's Code, and we are very close to the jaw Call ORIGINAL ENTRY POINT! We will stop at a code fiddling follows:

5e POP ESI
C9 LEAVE
C3 RETN
Trace into this RETN --^^^
And we will position the following similar pictures illustrated below:



-**** Set at a BP **Call EDI** functions, then press **F9** 1 times and they will function at Break **Call EDI.** When we break the function at the function that is called OEP function! : D. Now into the Trace Call this function by

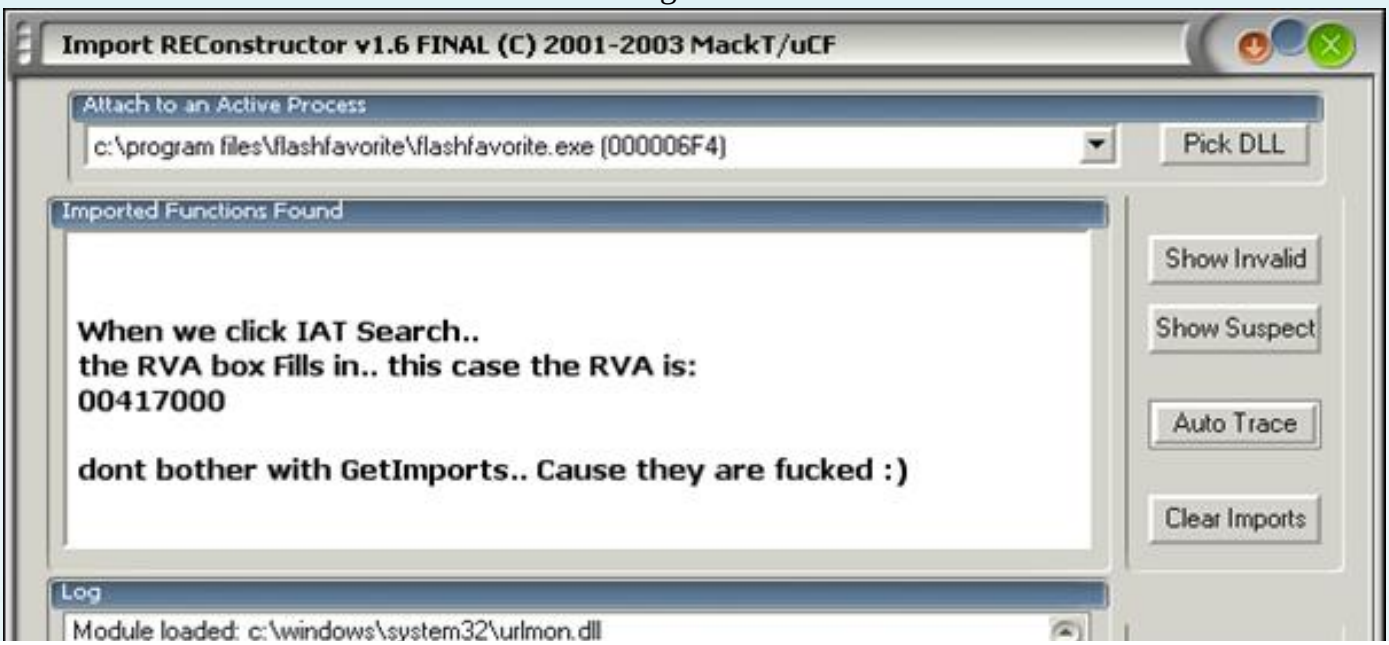
pressing **F7,** we'll come to a different code like Figure below:

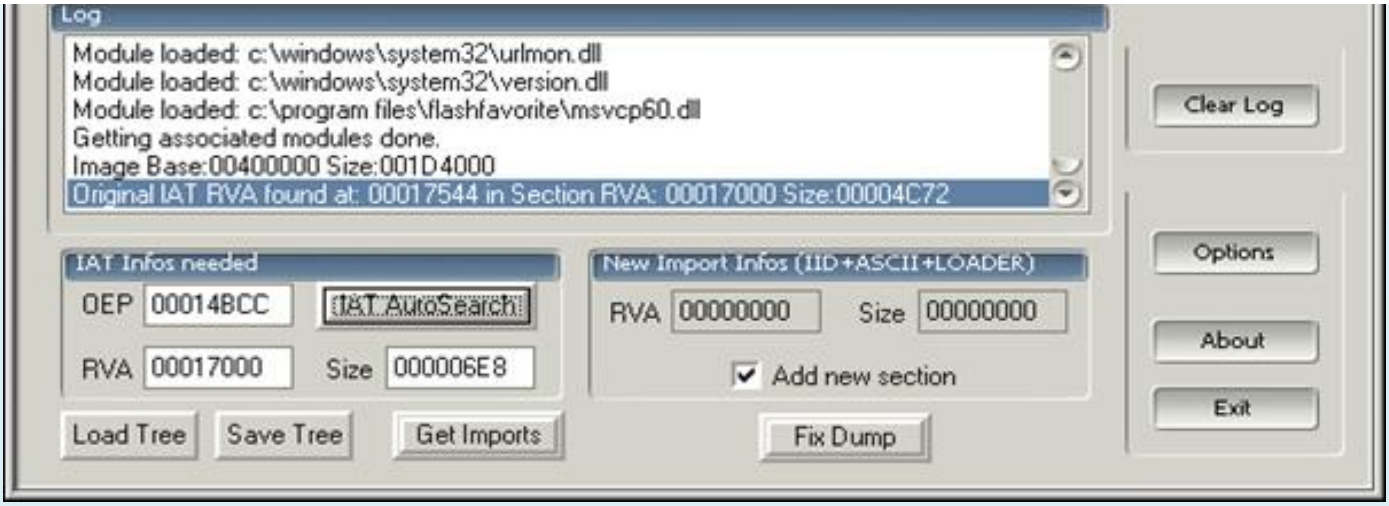


-**** YEAH ... that in the imagination: D .. We've been doing that. The Original Entry Point is **00414BCC.** Now we will conduct the next job is with this **dump** file **LordPE!** . We just keep Olly screen (do not close) .... Open up **LordPE,** Highlight **FlashFavourite.exe Correct Process ID** with you in Attach Olly. Right Click on the Correct Process, and **dump (Full) ...** and save the file has been dumped into the installation program.

-**** Congratulations! You just have OEP's armadillo + debug blocker rùi it; not the currency must not do ... .

-**** Hope you Olly still open, the next we run the program ImpRec. At screen ImpRec ... we choose to file **FlashFavourite.exe Correct Process ID.** Enter by OEP to measure the real OEP formula: **OEP in Olly - ImageBase 00414BCC = - = 00014BCC ImageBase.** We enter this value to the OEP in ImpRec, then Click to select **Auto Search IAT.** We will be similar to Figure below:





-**** Once we click to select IAT AutoSearch, next we will fill in values for RVA this case ... I is **RVA ImageBase + = 00017000 = 00417000.**

/ * Note: Always Save the RVA Address down. After you have the RVA ADDRESS you can close Imprec .. Now, I know its a Bitch ... but we will have to restart .. Crack and the Debug Blocker Again ... Make sure you file you Dumped from olly with LordPE.

Save OEP RVA and address in a text file ... ALL restart and Olly Debugs ...
(dont be confused, we will have to attack the debug blocker again tho (which sucks), in order to crack the Import methods of stealing armadillo.) * /

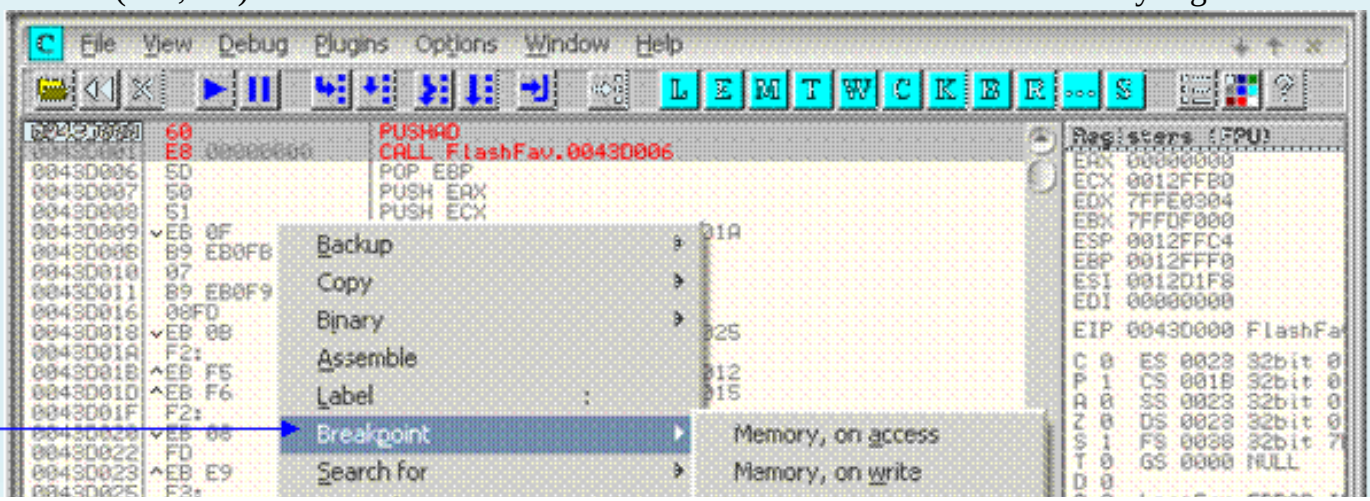
Part II:
Defeating Armadillo's Faking Import Methods and Reconstructing the ImpREC with Imports

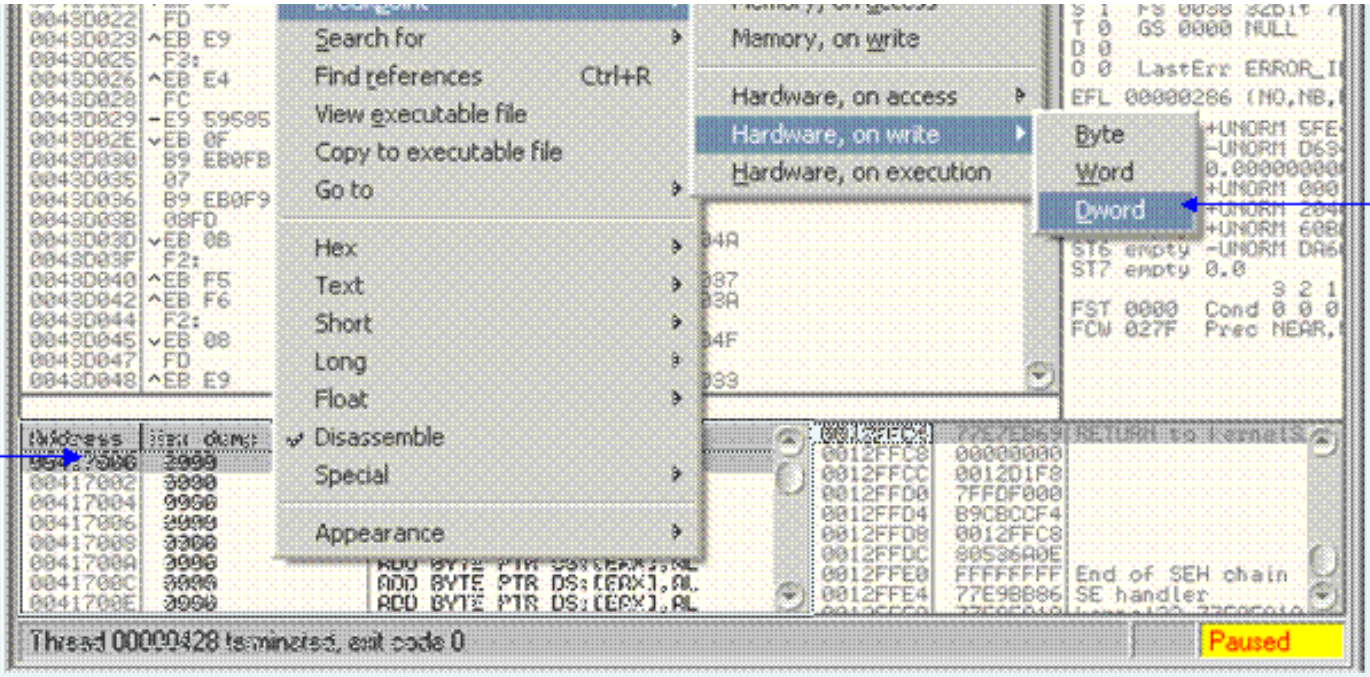
Some -**** Armadillo Patch can be easily ... I wrote all the directions for you to understand more clearly about Armadillo's Import Stealing .. Sometimes this accounts for very little time .... but also when you take a long time can find the place to patch.

-**** Most Armadillo have the same technical Patching we will discuss in this next section (sometimes with some technical Armadillo Patching quite a bit different), so part 2 of article writing will still be used more in the next period.

-**** Oki, in writing this we will need to add **Defeat Debug Blocker** again. So please proceed to the steps as said in part of the message (unless you no longer remember what they have done in the a:)). Now after you Attach to Process ID ... Correct Patch **EB FE E8** to **60** ... . blah blah ...

In -**** window dump Windows, and select Righclick Dissassemble to see in the dissassemble .... Press **Ctrl + G** in the window to open the dump Window Goto dialog box: type in RVA and we have been since the ImpRec ... before **you write it does not it?** Olly will bring us to address 417,000 ... .. Now we are again Right Click on the address RVA (417,000) selected **BeakPoint> Hardware> Write On> Dword.** Similarly Figure below:

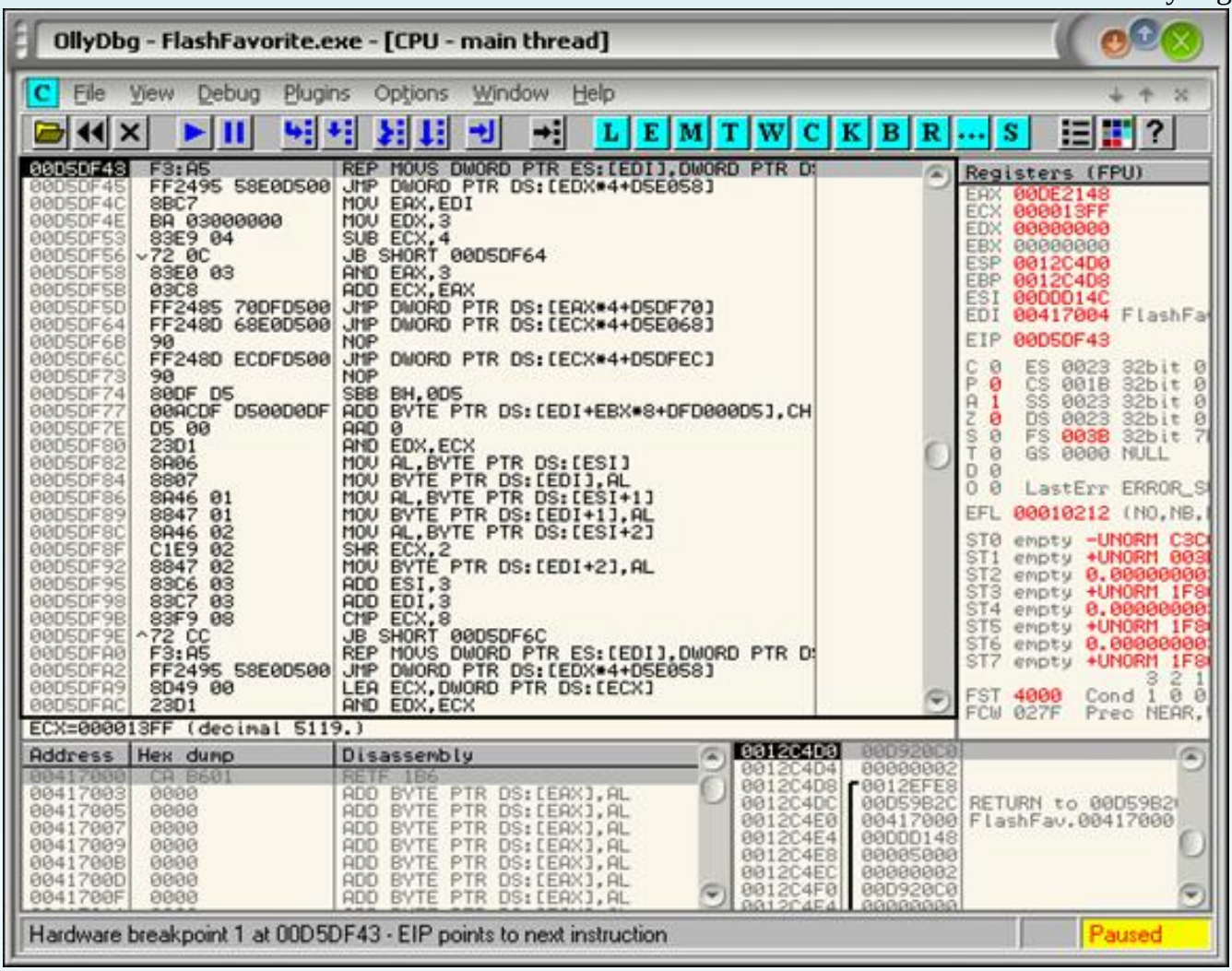




Oki -**** after you have set **hardware BREAKPOINT> on Write> Dword** at RVA (417,000 in this case ..) ... Remember that we still need to Fix function API IsDebuggerPresent .... So let's set in BP that function .. click **Shift + F9** until we break .... IsDebuggerPresent and Patch.

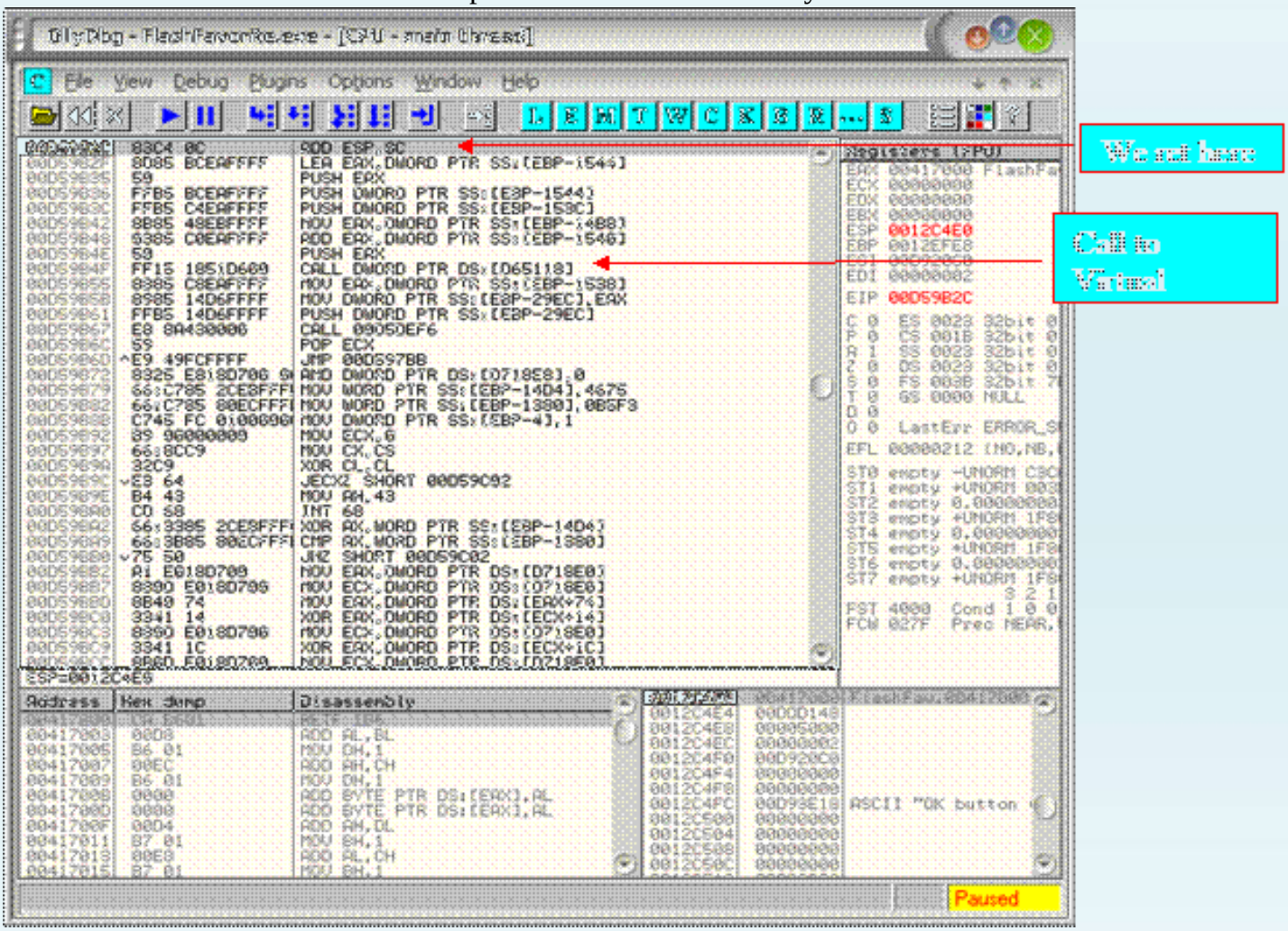
-**** Next press **Shift + F9** until we receive a notice Nag ... Click OK at Nag Screen ....

YES! We Break: **Hardware BreakPoint 1 at 00xxxxxx <address doesn't matter>.** Similarly Figure below:



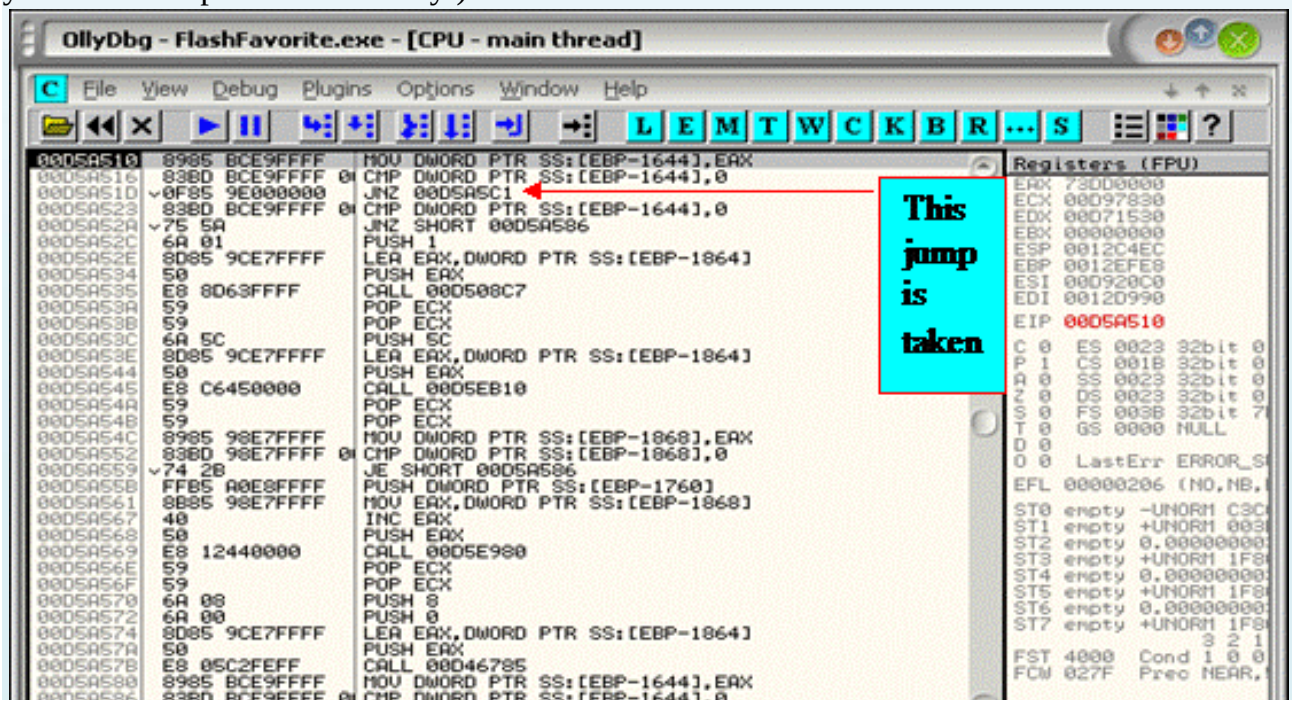
-**** The position that we need ... (not exactly where the armadillo steals imports ..). Press **Ctrl + F9** to Trace to

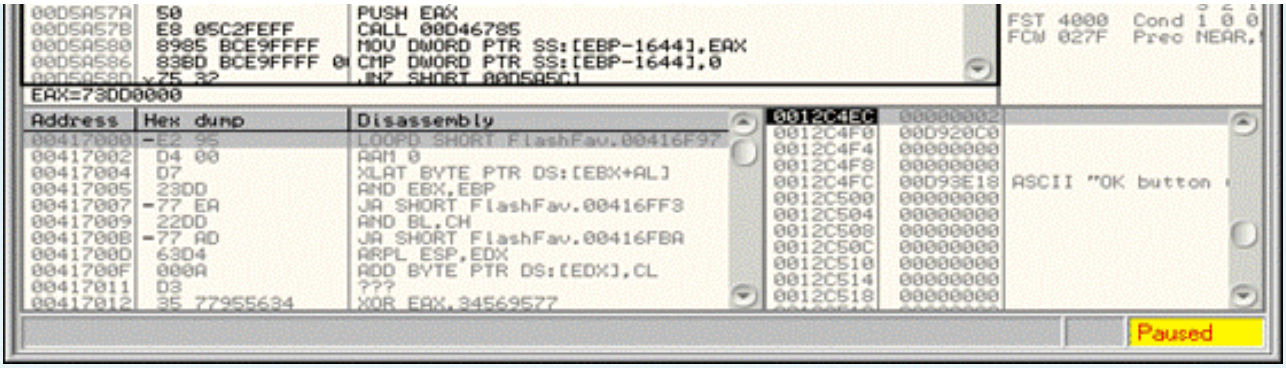
the nearest command **RETN** ... .. and press **F7** to Trace Into and you will be like illustrations below:



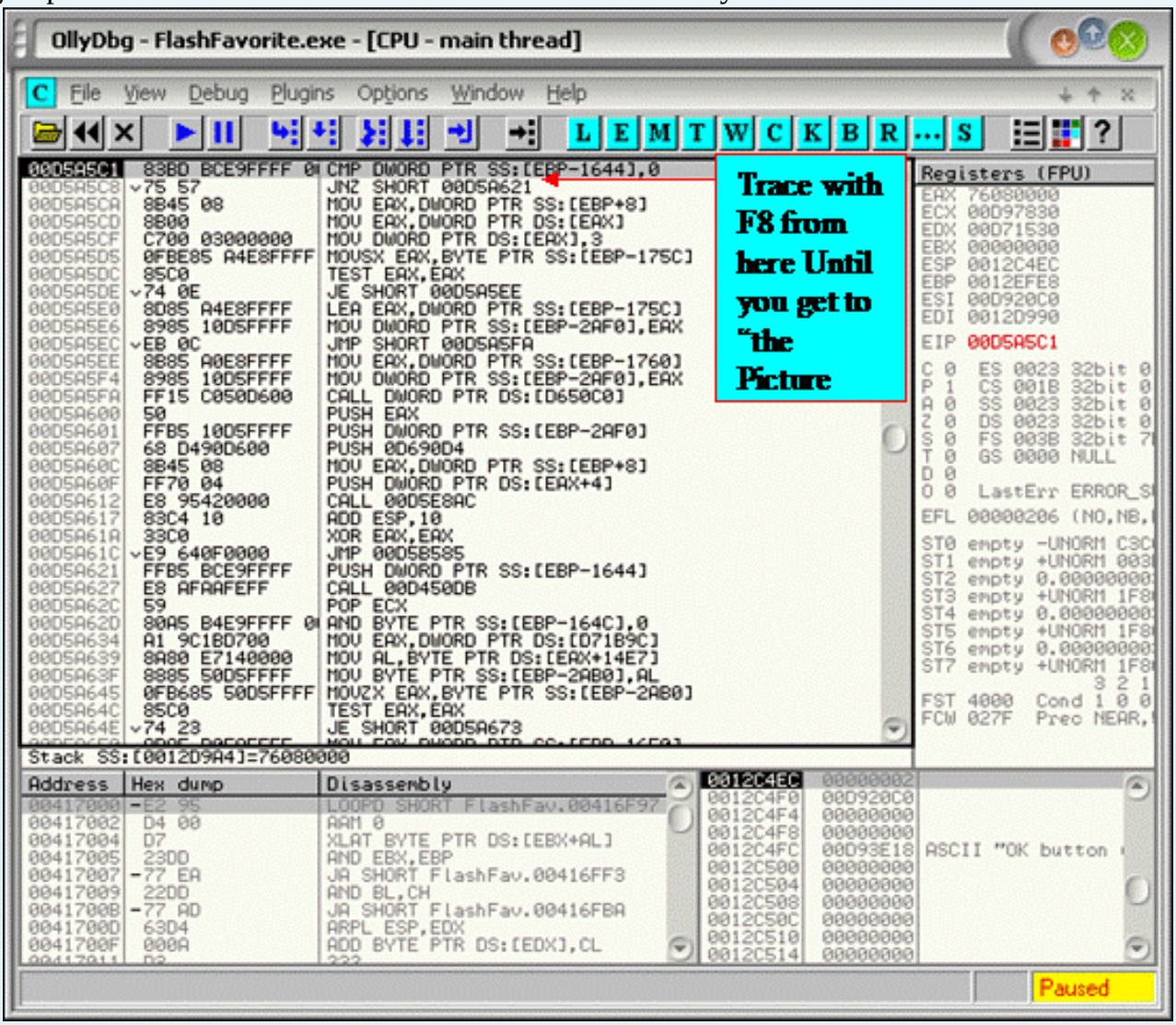
-**** Now ... When you get this in place in Armadillo, remember what the same ... (in most cases you can see a call to order me **VirtualProtect** after ADD ESP, 0C ..) this is easily the best to be recognized. (A lot of these patches are the same ... but some can be slightly differnt.).

-**** When we in the same image as illustrated above: press **Ctrl + F9** you can get access indoctrination or nothing ... Press F7 if you get **Access Violation.** If you receive a Hardware BP is the press **Ctrl + F9** ... how is .. you will end up here: eventually:)

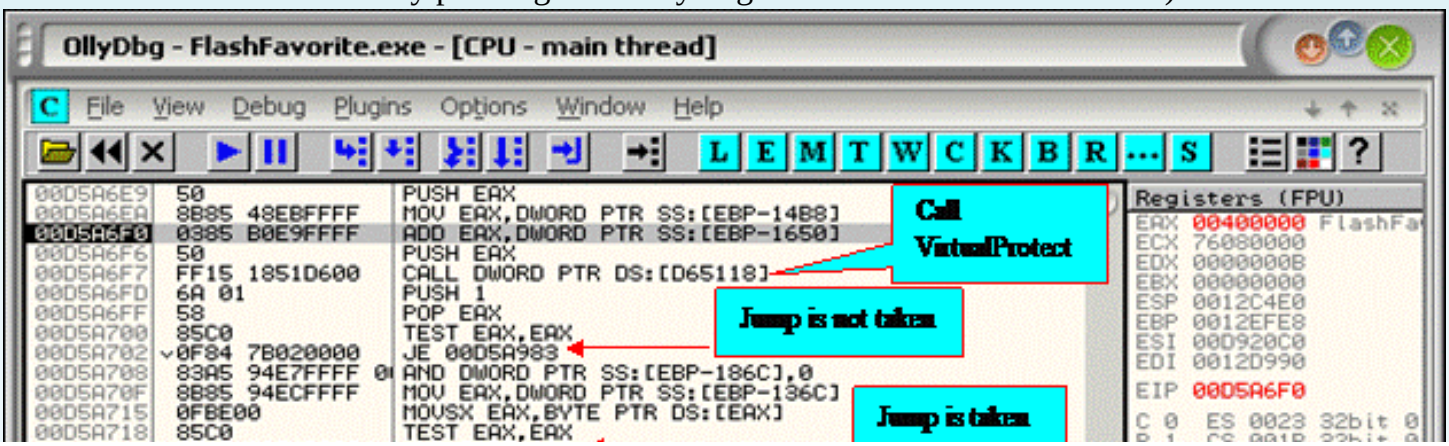


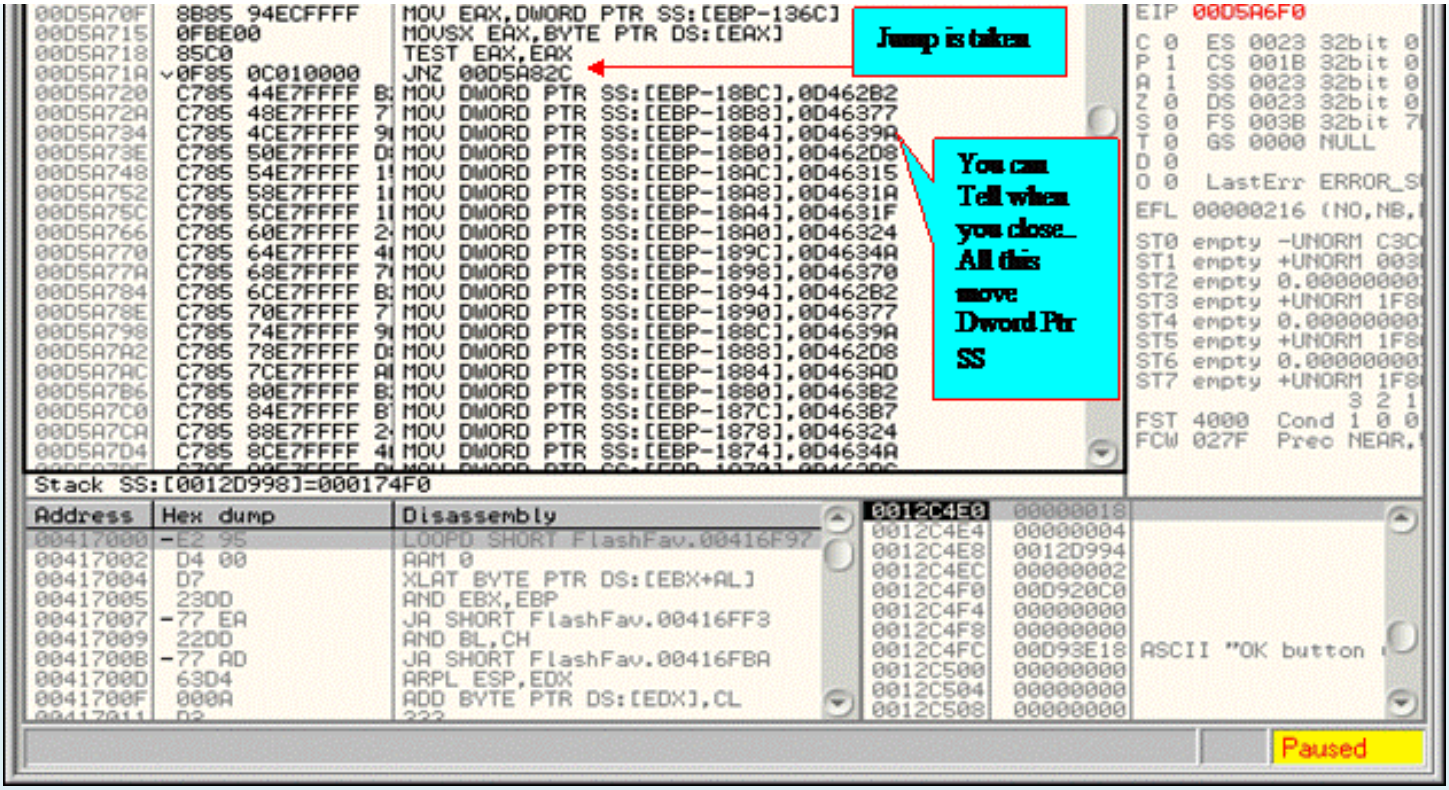


-**** We will be like on .. (in my case) you might break .. Further Ahead (1 picture down ..). Trace until having jumped the first order ... and it is taken .. so take it .. and you will be here: z

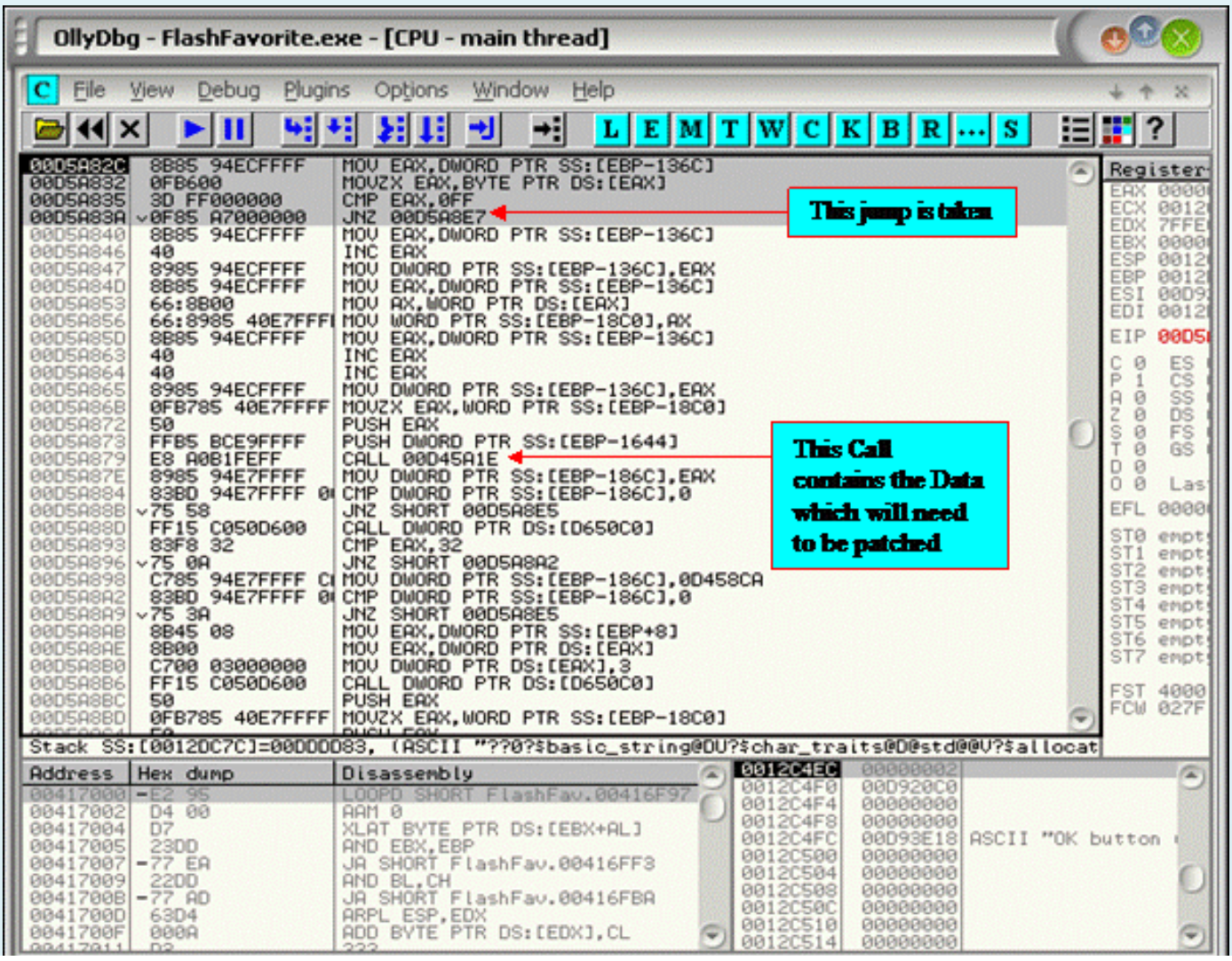


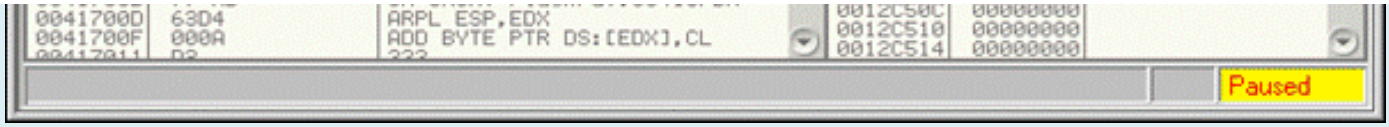
-**** So we continue Trace by pressing F8 until you get the same as here: Just do it:)





-**** Now is the finicky .. not to be mistake ... .. if you have previously made a few times and then ... this is as easy to eat cakes:) .. JNZ execute that in the picture above ...
And now you will be here:





-**** Technical method of Armadillo it is encrypted part of the code (Encrypts Part of this Code) ... and then in code .... Work on it simply will Armadillo is the code for you .. we'll patch in a dance party in order code is good code. You could observe Call function in Figure in:). You can get out is Decrytion Code because it has 3 commands around Call function that, by the order are:

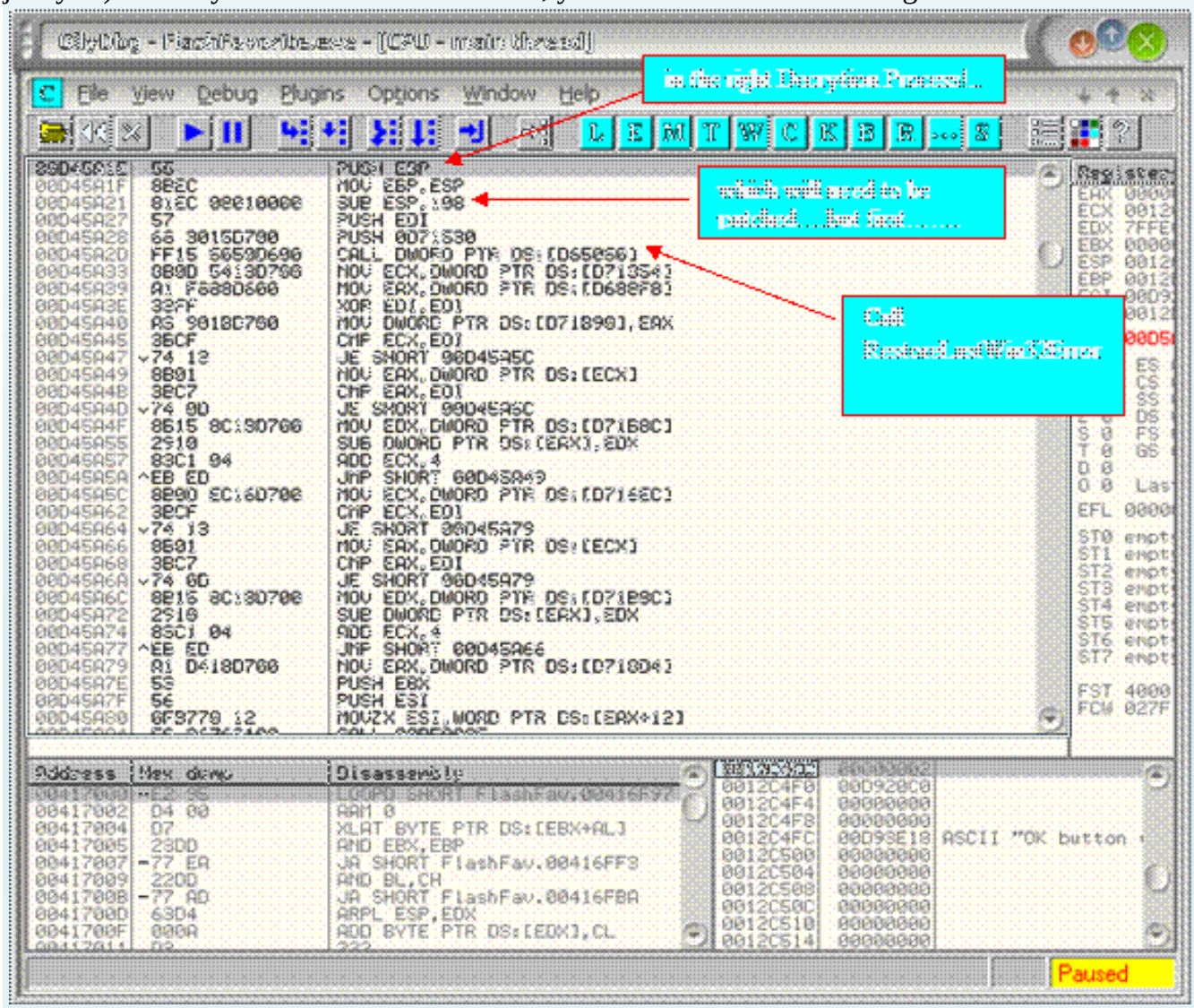
FFB5 BCE9FFFF **PUSH DWORD PTR SS: [EBP-1644]** <--

E8 A0B1FEFF CALL 00D45A1E

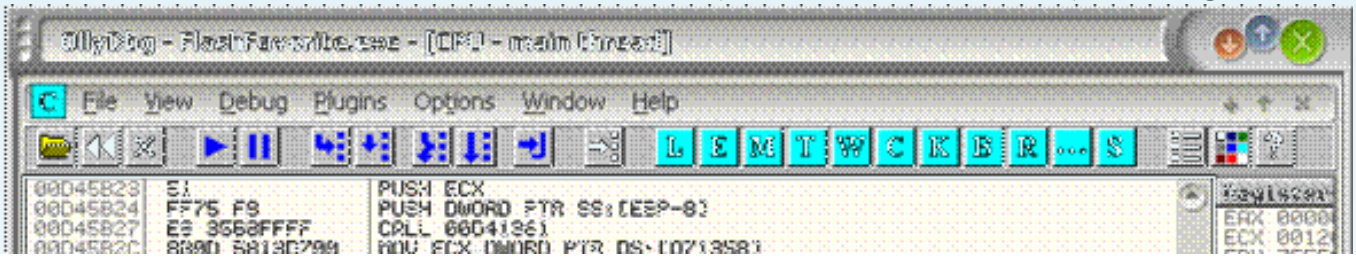
8985 94E7FFFF **MOV DWORD PTR SS: [EBP-186C], EAX** <--

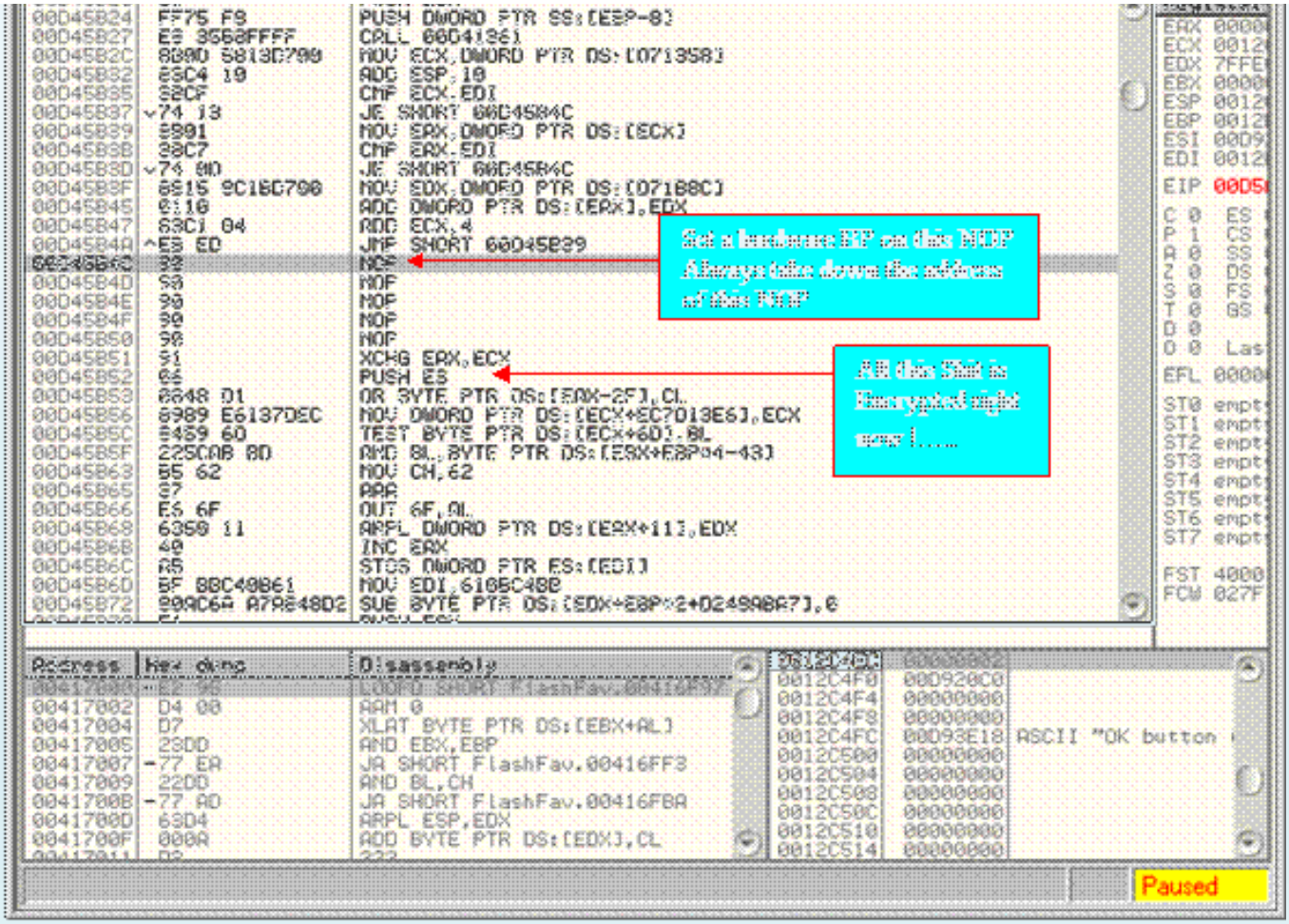
83BD 94E7FFFF **Cmp DWORD PTR SS: [EBP-186C], 0** <--

-**** The Call Decrytion where we need to patch Armadillo, so we restore Imports. Highlight the Call to function, and press Enter> Enter will follow the Call Address (because as you can see .. this is not call Executed just yet!). When you follow the instructions, you will here the same as Figure:



-**** Now when we were here ... All these jumps are just shit and shit decyrpting .. Therefore, in Olly we scroll down the mouse a bit until we see some order NOP (about 4 or 5 orders NOPs). Like Figure below:

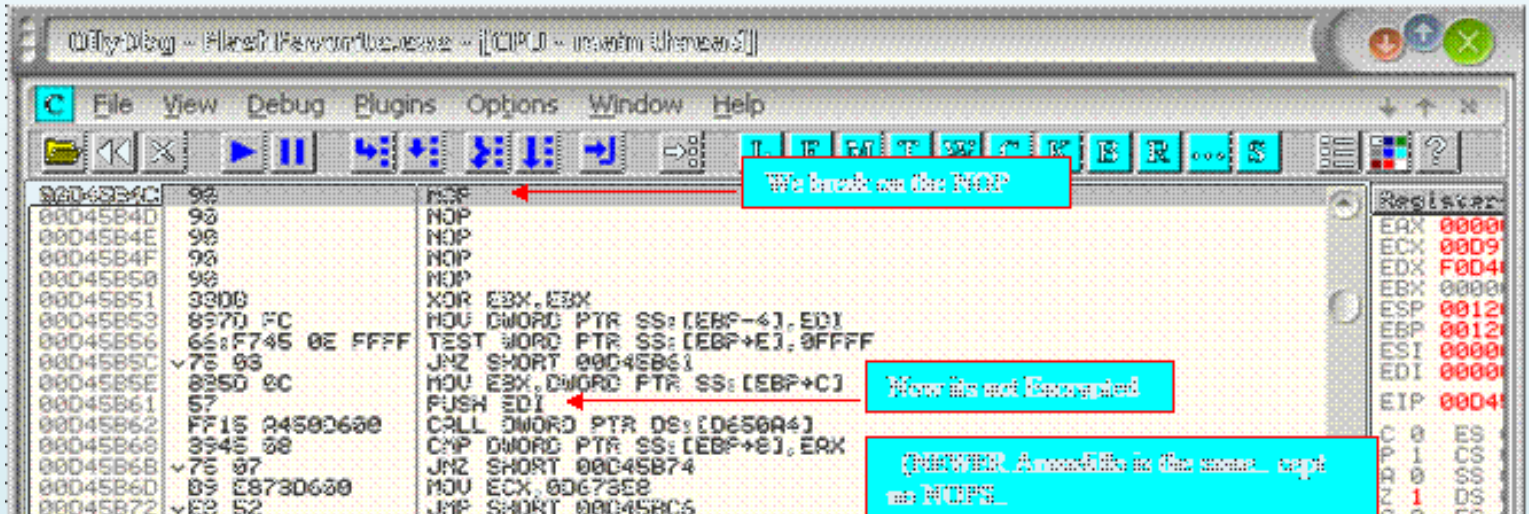


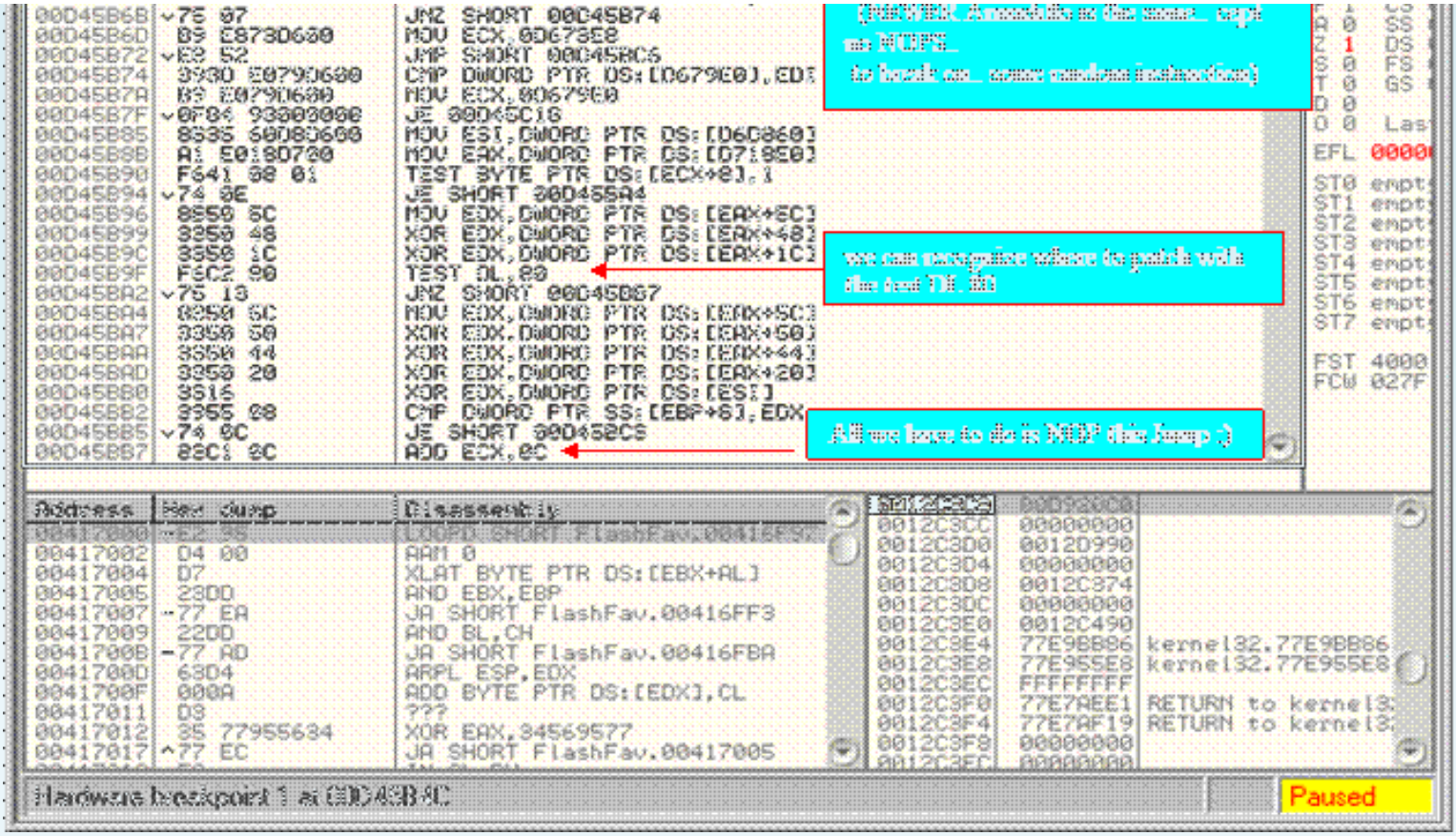


-**** Save the address of this command **NOP** ... (we'll call it: The Decryption NOP). That is the position we Patch Armadillo so we need to rebuild Imports by ImpRec tool. :). But the file that we are in a load that Olly Debug Blocker .. so we must set up a Hardware Child Process in BP, the hardware will not bpx Save ... So we need to save the address of the command by NOP by writing this address a text document. Next we press **Ctrl + F2** to Restart Olly again ..

-**** We must again Defeat Debug Blocker again .... Attach the child process and v. .... Now when we Attach Process Right, sure that we still need to Fix IsDebuggerPresent. So in the screen of Olly, we set up at a BP function IsDebuggerPresent ... .. (you wont break on it just yet ... if you do, patch it ..)

-**** Press **Shift + F9 2 times,** followed by pressing **Ctrl + G** and enter the address of Decryption Submit we have recorded a text document, then set up a Hardware in BP Decryption Submit this. Finally you press **Shift + F9** you will break in function IsDebuggerPresent ..: Fix IsDebuggerPresent so only the owner chần What else .. Once you Patching IsDebuggerPresent, continue to press **Shift + F9** to Run program, we will receive Nag is a screen, click OK, we'll break in Decryption NOP:). Similar images illustrated below:





-**** Now we can see orders jumped after testing ordered by **Test DL, 80.** 2 orders jumped below me Test command. So we or submit orders jumped JE. We conducted Patch dance in order to make Amardillo never interfere Imports:). Leaving us with about 6 to cut thunks

-**** We have to remove me from BP hardware orders submitted. You can make by clicking> Debug> Hardware Breakpoints in Olly.

Next -**** run by pressing Shift + F9 once

(READ FIRST):

(IN MOST CASES: When you make this patch, the EXE will not Run .. you will get a privileged instruction or somthing like that .. and you will then fix with imprec ..)

But in this case, our exe file will run after we Patch! SO! **We just unpacked Arma-Fucking-DILLO.** You still keep windows Olly đấy too? Do not Close:) s

-**** Now we open up ImpRec ... ..

1.) Enter the value OEP (00414BCC) - ImageBase = 00014BCC
2.) Click to select IAT AutoSearch
3.) Next click Get Imports (Now All the imports will be there! FUCKING HELL yea!)
4.) Select Show Invalid (Show invalid, select all invalid thunks)
5.) Right Click on the Invalid Thunks and select Cut Thunks

the invalid thunks are left by armadillo .. and are just surrounding the IAT ... (so just cut the remaining thunks)

-**** Now all are Thunks Valid! Finally we choose to click and select Fix dump dump file that we dump before!

-**** HMmmm We go to Olly and breathed a very deep .. to relax after a process of stress and fatigue ... then we run the file has Dumped + Import File Fixed up .... **HOLY fuck! RUNSS it!**

-**** I hope that with what they have trans will be a number of medical problems Armadillo v3! .. Due to limited capabilities should not translate correctly the steps of the author but they have tried hard to translate this article offers a little something for not only myself but for them all Members of the REA and BQT:) ... ... **Thanx 4**

All J

oOo GreetZ oOo and Special Thanks:

Computer_Angel, Moonbaby, Zombie, Benina, QhQcrker, RongChauA, Nini, Hoadongnoi, the_lighthouse, hacnho, Deux and all my friends ... . All REA 's member ... .

Thanx to -**- authors of this tut -**** -:**

Armadillo x.xx - collect sand stone

He backpack, I used to do arm as claimed chung steps to MUPing road. The new start-aged lovers of the tart surely not sure this bit and never sold the bags to first, why, because it is too sour, too spicy. I say I fear the thẳng SI, but I do thẳng Hai Hung is thẳng arm, she pretended that I rock eyelash bags, I did not fear in the complete end of IAT, which fix dump bong thẳng ImpREC it reports "Can not add any sections. Very interesting, I had to unpack many soft pack with arm but never dare to put pen to write a tut called unpack. I actually said, the manufacturer of the arm as it is insane. Who lives each ver it has more than a dozen options to protect the approximately 30 months to protect. How many it has not been back to New ver. Each home page on its bags blindfold to see dek dare. Hì huc forever with v4.05, khoai too light it up ver 4.10. Each ver it all add more new models that protect the excellent way the people . SecurityTeam parties have announced a bug's OllyDBG. The aged do not believe, as I read lười information about security, should a target load the bags onto Olly Shift + F9 it crash. I edit Options is the size. The following are ver apply bug (OutputDebugStringA API, arm function used to send the string Olly overflow error based caching, summer summer, the crash is) to make an anti-debug the arm. More in http://www.securiteam.com/windowsntfocus/5ZP0N00DFE.html

Currently on the NET about 100 tuts written arm, sufficient enough in style, but all originated from Cracks Latinos. Since then many tuts the cover again. Head of the mem ku Fly pier, then Exetools, Woodman, BoadAnticrack, UnpackingGOD, BIW, RET, ICU, ARTEAM, RES is next to last and snd tSRH, month tsrh insurance is not the best ever written only tuts unpack and release. At AVATAR / RES () is a group of emerging professional arm, both employers SoftwarePassport release ver is it release the patch inline line. Good boy! Vietnam also has its three aged write some tut unpack arm typically aged tlandn wrote the tut unpack crackme by VCT, aged trans Com a tut group Cracks Latinos, aged hhphong bags to put together written tut see: D. Today I Decision hear your baby sitting hoadongnoi cover all tut or to a general basic tut from easy to difficult for the aged convenient searching. All the tuts I have written this way to look at the bags, which means that many of the other org tut but reading performance in line, some months it written that there ulterior, dek read out many belgium. When you write a set of hands, I also know chả never complete new again. Each target I lost about 30 'to unpack + + photograph should think chả bít to ever ... ever!

I have a hand in her basement lang 50 tuts should also say ver arm which I was playing well;;). One before started to unpack your arm is to be patient and very privation, as if it was not clear what price you are out of place sitting not only publishing it on the ice for one. Remember to unpack only a passion is not the final points of cracking. If you unpack not only do not have the problem. Bags here, do not unpack the bags soft line to unpack her bags in: D.

To read the tut, asked to select Hide White Space in WinWord.

I. Tools used in this tut portfolio simply have only a few:

Patch-OllyDBG + + 2 hours **AntiDetectOlly_v2.2.4.exe** patch type anti debug I just said above. How to patch attached:

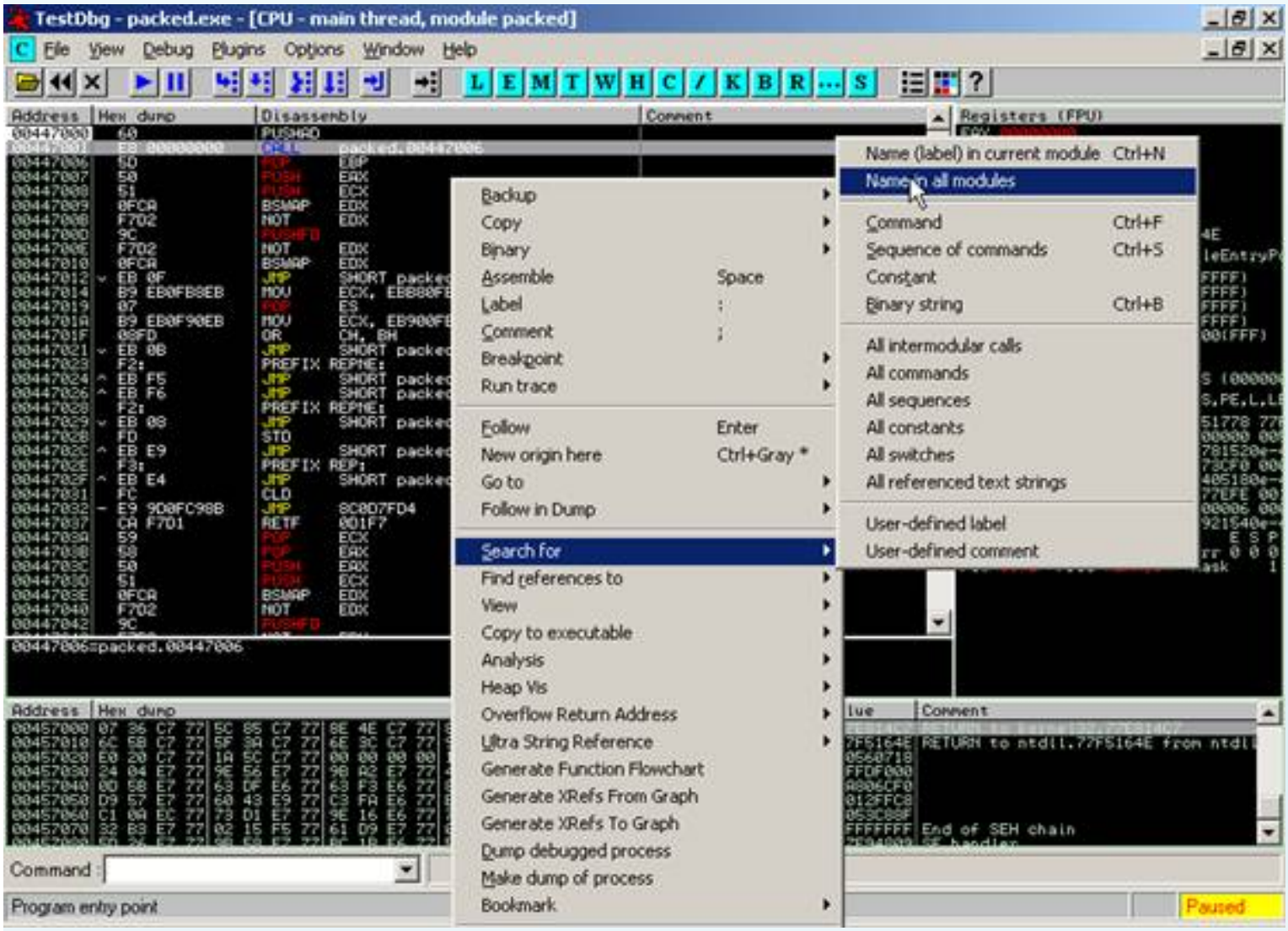
a.Cach 1:

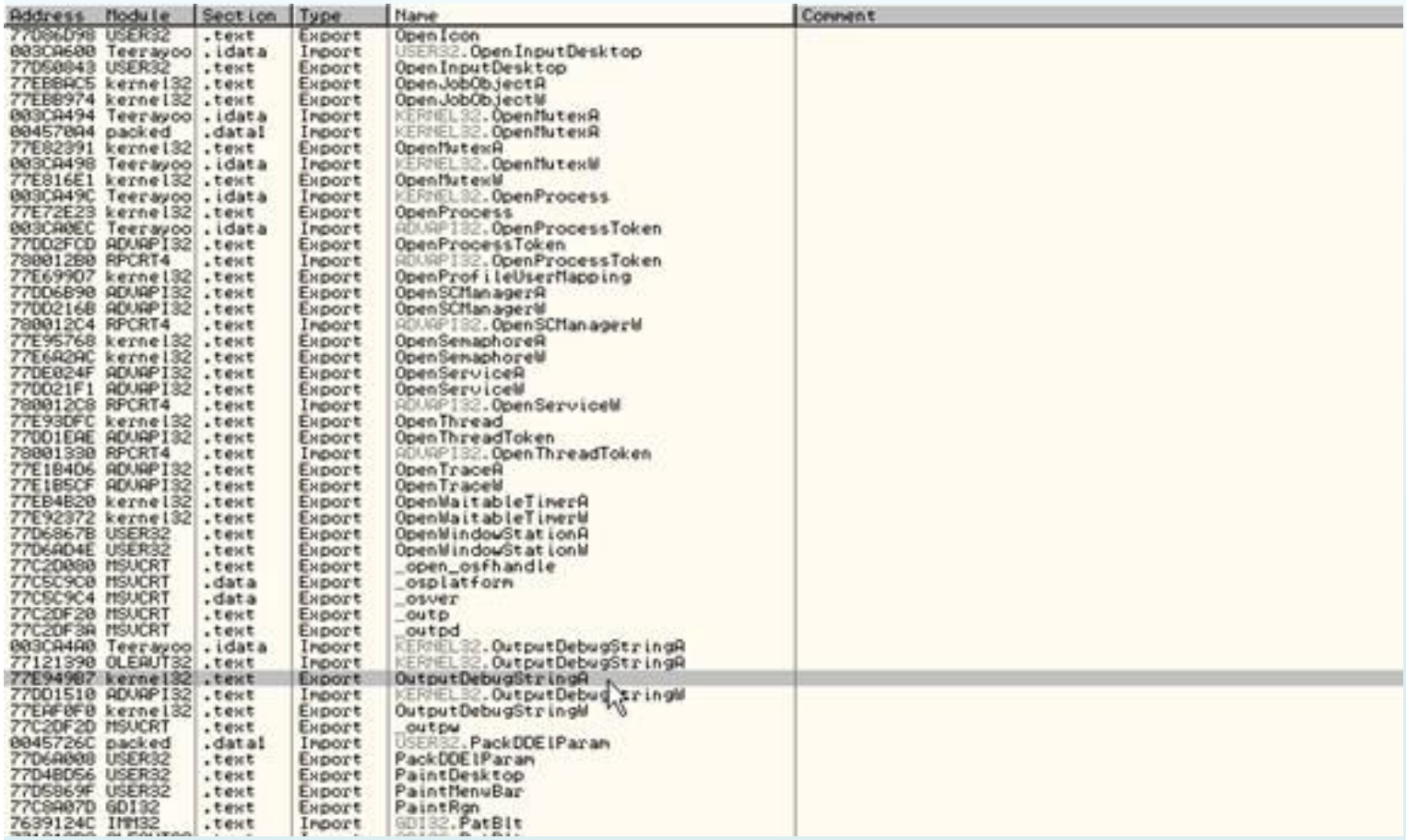
_Load OllyDBG on target. R-Click Search for select-> Names in all modules.

_Cuon Screen down **OutputDebugStringA** search function.

_Double Click on this you will function on the CPU window, you will at this address: **77E949B7> 68 2C020000 PUSH 22C**

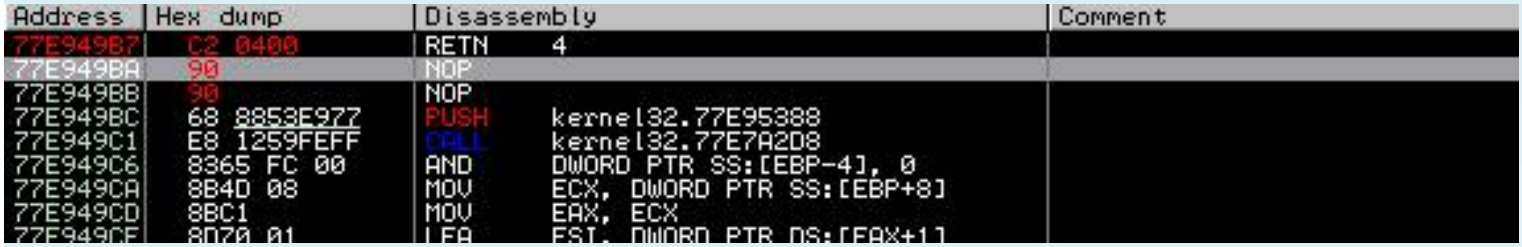
_Armadillo Will call this function, we must patch, assemble lines from **22C** to **PUSH RETN 4.** Done, see Figure attached:





Address	Module	Section	Type	Name	Comment
77D86D98	USER32	.text	Export	OpenIcon	
003CA600	Teerayoo	.idata	Import	USER32.OpenInputDesktop	
77D60843	USER32	.text	Export	OpenInputDesktop	
77EB8AC5	kernel32	.text	Export	OpenJobObjectA	
77EB8974	kernel32	.text	Export	OpenJobObjectW	
003CA494	Teerayoo	.idata	Import	KERNEL32.OpenMutexA	
00457004	packed	.datal	Import	KERNEL32.OpenMutexA	
77E82391	kernel32	.text	Export	OpenMutexA	
003CA498	Teerayoo	.idata	Import	KERNEL32.OpenMutexW	
77E816E1	kernel32	.text	Export	OpenMutexW	
003CA49C	Teerayoo	.idata	Import	KERNEL32.OpenProcess	
77E72E23	kernel32	.text	Export	OpenProcess	
003CA0EC	Teerayoo	.idata	Import	ADVAPI32.OpenProcessToken	
77DD2FCD	ADVAPI32	.text	Export	OpenProcessToken	
78001280	RPCRT4	.text	Import	ADVAPI32.OpenProcessToken	
77E69907	kernel32	.text	Export	OpenProfileUserMapping	
77DD6B90	ADVAPI32	.text	Export	OpenSCManagerA	
77DD2168	ADVAPI32	.text	Export	OpenSCManagerW	
780012C4	RPCRT4	.text	Import	ADVAPI32.OpenSCManagerW	
77E95768	kernel32	.text	Export	OpenSemaphoreA	
77E6A2AC	kernel32	.text	Export	OpenSemaphoreW	
77DE024F	ADVAPI32	.text	Export	OpenServiceA	
77DD21F1	ADVAPI32	.text	Export	OpenServiceW	
780012C8	RPCRT4	.text	Import	ADVAPI32.OpenServiceW	
77E93DFC	kernel32	.text	Export	OpenThread	
77DD1EAE	ADVAPI32	.text	Export	OpenThreadToken	
78001330	RPCRT4	.text	Import	ADVAPI32.OpenThreadToken	
77E184D6	ADVAPI32	.text	Export	OpenTraceA	
77E1B5CF	ADVAPI32	.text	Export	OpenTraceW	
77EB4B20	kernel32	.text	Export	OpenWaitableTimerA	
77E92372	kernel32	.text	Export	OpenWaitableTimerW	
77D6867B	USER32	.text	Export	OpenWindowStationA	
77D6AD4E	USER32	.text	Export	OpenWindowStationW	
77C2D080	MSVCRT	.text	Export	_open_osfhandle	
77C5C9C0	MSVCRT	.data	Export	_osplatform	
77C5C9C4	MSVCRT	.data	Export	_osver	
77C2DF20	MSVCRT	.text	Export	_outp	
77C2DF3A	MSVCRT	.text	Export	_outpd	
003CA4A0	Teerayoo	.idata	Import	KERNEL32.OutputDebugStringA	
77121390	OLEAUT32	.text	Import	KERNEL32.OutputDebugStringA	
77E949B7	kernel32	.text	Export	OutputDebugStringA	
77DD1510	ADVAPI32	.text	Import	KERNEL32.OutputDebugStringW	
77EAF8F0	kernel32	.text	Export	OutputDebugStringW	
77C2DF2D	MSVCRT	.text	Export	_outpw	
0045726C	packed	.datal	Import	USER32.PackDDElParam	
77D6A008	USER32	.text	Export	PackDDElParam	
77D48D56	USER32	.text	Export	PaintDesktop	
77D5869F	USER32	.text	Export	PaintMenuBar	
77C0A07D	GDI32	.text	Export	PaintRgn	
7639124C	IMM32	.text	Import	GDI32.PatBlt	

Address	Hex dump	Disassembly	Comment
77E949B7	68 2C020000	PUSH 22C	
77E949BC	68 8853E977	PUSH kernel32.77E95388	
77E949C1	E8 1259FEFF	CALL kernel32.77E7A2D8	
77E949C6	8365 FC 00	AND DWORD PTR SS:[EBP-4], 0	
77E949CA	8B4D 08	MOV ECX, DWORD PTR SS:[EBP+8]	
77E949CD	8BC1	MOV EAX, ECX	
77E949CF	8D70 01	LEA ESI, DWORD PTR DS:[EAX+1]	
77E949D2	8A10	MOV DL, BYTE PTR DS:[EAX]	
77E949D4	40	INC EAX	
77E949D5	84D2	TEST DL, DL	
77E949D7	^ 75 F9	JNZ SHORT kernel32.77E949D2	
77E949D9	2BC6	SUB EAX, ESI	
77E949DB	40	INC EAX	
77E949DC	8945 E0	MOV DWORD PTR SS:[EBP-20], EAX	
77E949DF	894D E4	MOV DWORD PTR SS:[EBP-1C], ECX	
77E949E2	8D45 E0	LEA EAX, DWORD PTR SS:[EBP-20]	
77E949E5	50	PUSH EAX	
77E949E6	6A 02	PUSH 2	
77E949E8	6A 00	PUSH 0	
77E949EA	68 06000140	PUSH 40010006	
77E949EF	E8 43EEFDFF	CALL kernel32.RaiseException	
77E949F4	834D FC FF	OR DWORD PTR SS:[EBP-4], FFFFFFFF	
77E949F8	E8 A259FEFF	CALL kernel32.77E7A39F	
77E949FD	C2 0400	RETN 4	
77E94A00	6A 57	PUSH 57	
77E94A02	E8 A959FEFF	CALL kernel32.77E7A3B0	
77E94A07	33C0	XOR EAX, EAX	
77E94A09	^ E9 2C90FEFF	JMP kernel32.77E7DA3A	
77E94A0E	6A FF	PUSH -1	
77E94A10	57	PUSH EDI	
77E94A11	6A FF	PUSH -1	
77E94A13	53	PUSH EBX	
77E94A14	6A 01	PUSH 1	
77E94A16	E8 FB7FFDFF	CALL kernel32.GetSystemDefaultLCID	
77E94A1B	50	PUSH EAX	



b.Cach 2:
_Buoc Such as 1,2,3
4 _Buoc patch instead of the 22C PUSH RETN4 we do the following:

_Xac The address of the function kernel32.OutputDebugStringA with APIAddress.

_Go To address both found, scroll down to find the screen to order the end of this function form:

77E949BA 33C0 XOR EAX, EAX
77E949BC 40 INC EAX
77E949BD C3 RETN;

3 _Binary copy lines. To top jaw, paste 4 bytes to Push 22C.

ImpREC 1.6-Final
1.0-APIAddress
- Re-Pair v0.6
Some target-(unpackme and soft).

II. Let's Unpacking.

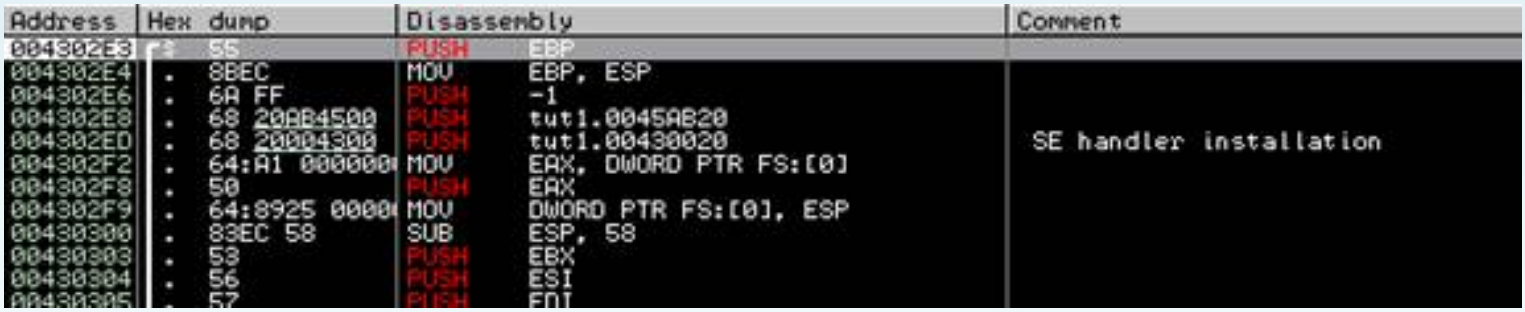
Speaking before one, in the following tuts I will not speak to the anti-antidebug again. The aged know from his duties when kernel patch load target. Under the order, I will write the first easy-tut, tuts hard to write the following. The tuts I have written sucessful unpack, rest assured, only the aged thằng unpack wrong but I do not write wrong.

Tut # 1: Armadillo 4.01a (Public Build-Trial Editon)

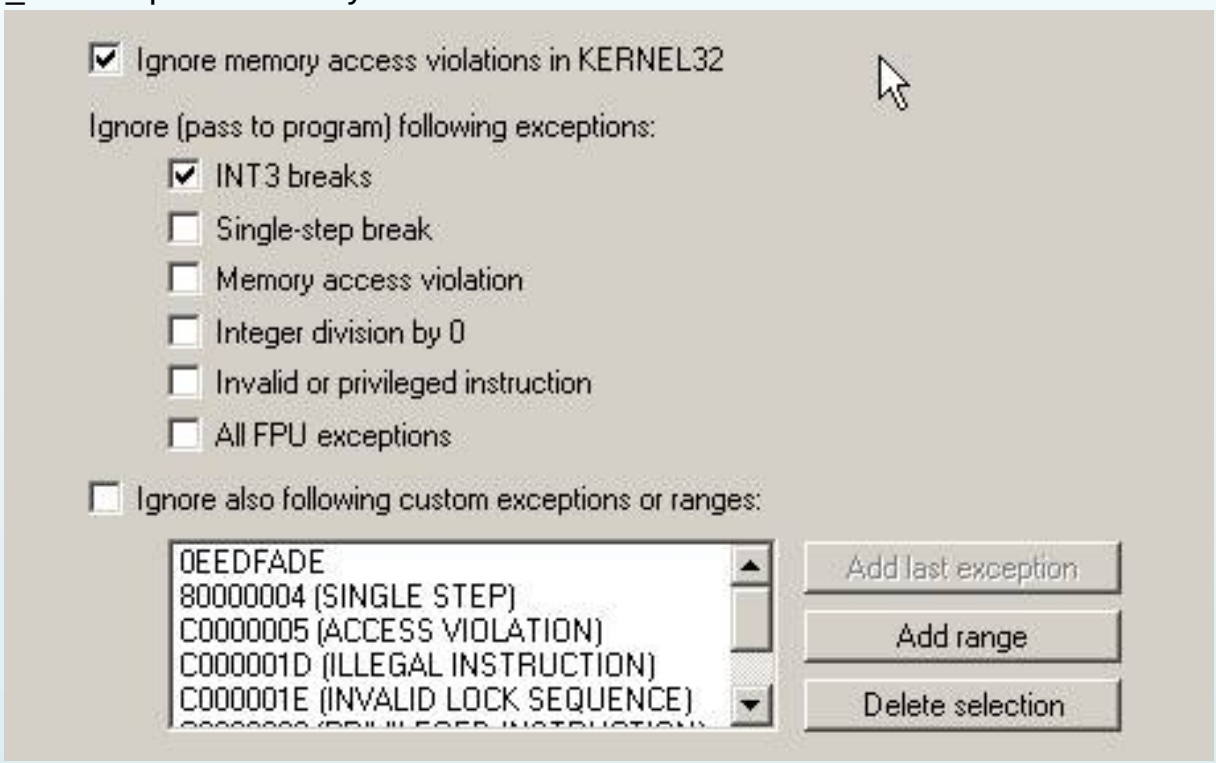
OPTIONS: Standard Protection, Enable import elimination, Enable strategic code

splicing, patching enable memory protections.

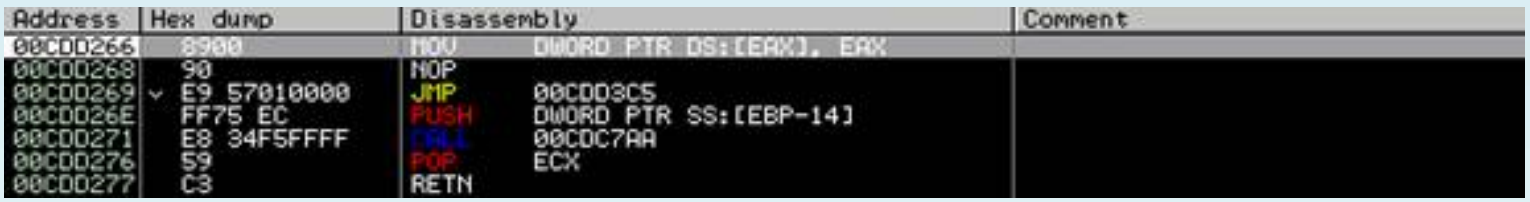
_Load OllyDBG on target:



_Chon Options in OllyDBG:

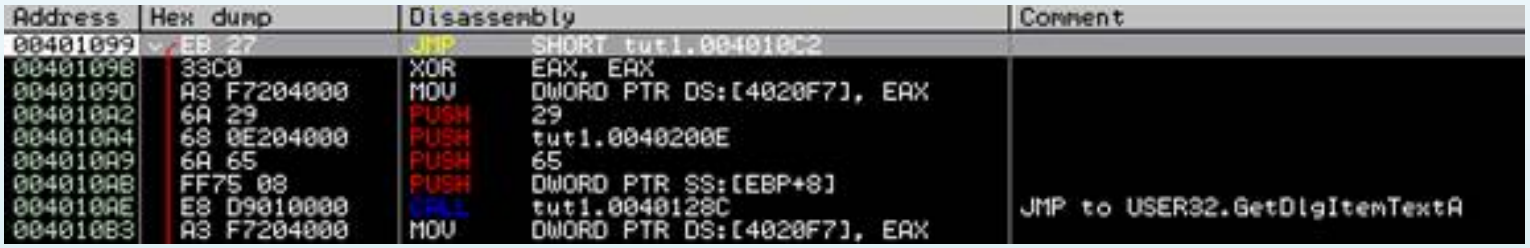


_Sau Patch the kernel, press Shift + F9 to here 29 times (30 times to jump to dll system, 31 fully run, the trial has informed the press OK to ignore, the regged is similar):

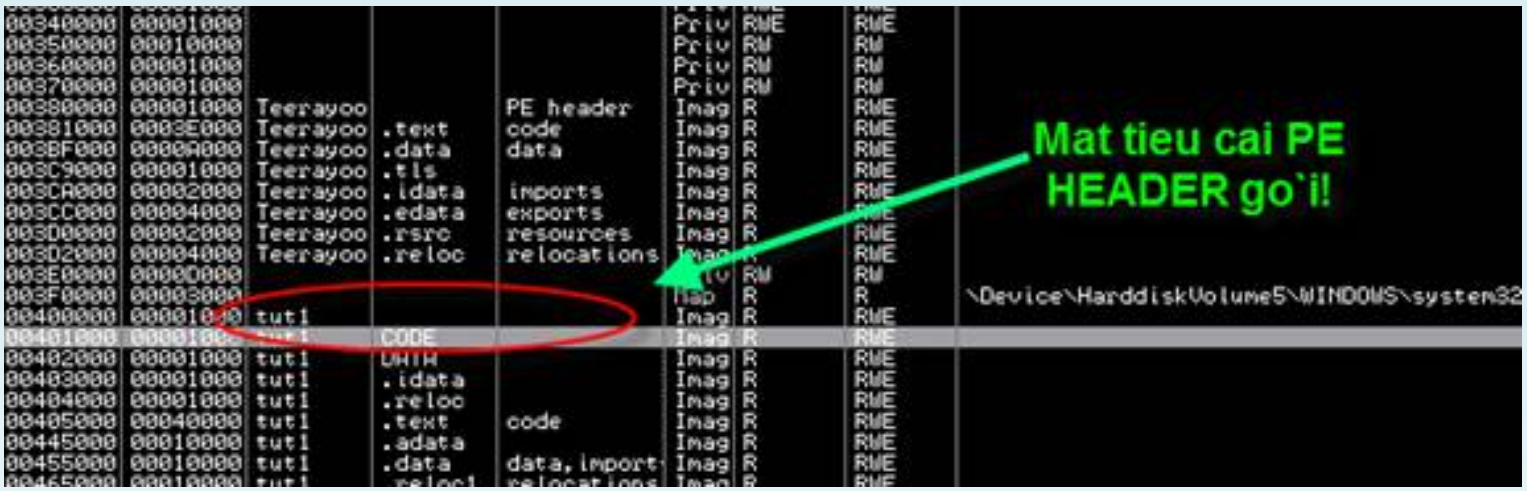


_Nhan Alt + M to mem map, select the section CODE set mem brkp access:

_Shift + F9: I OEP:



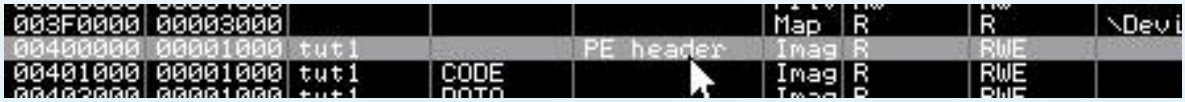
_Dump Us, stop stop, do not jump. Preview the skin. Alt + M, remove mem breakpoint and see:



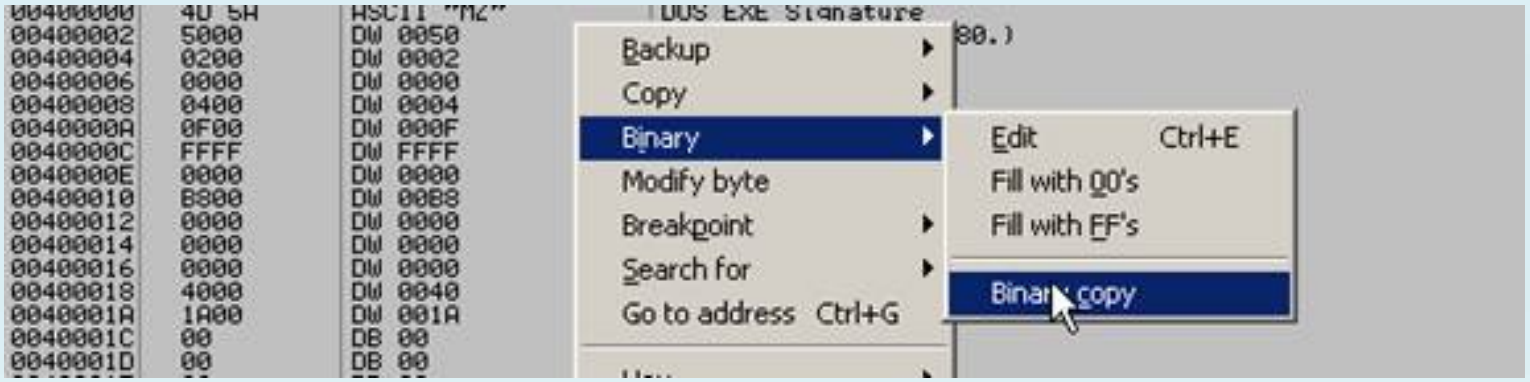
_Sao Up of coffee, they have set a new mem brkpoint they also see the word PE Header mù. Phone, adding that word to do so belgium hours. Hix, learn the process protect the Dillo, where they have this where I do, they only destroy full table of the PE header after dump completely: D. OK, open a OllyDBG other target tut1.exe load up, press Alt + M, double click on the line:

Memory map, item 28
Address = 00400000
Size = 00001000 (4096.)
Owner tut1 = 00400000 (itself)
Section =

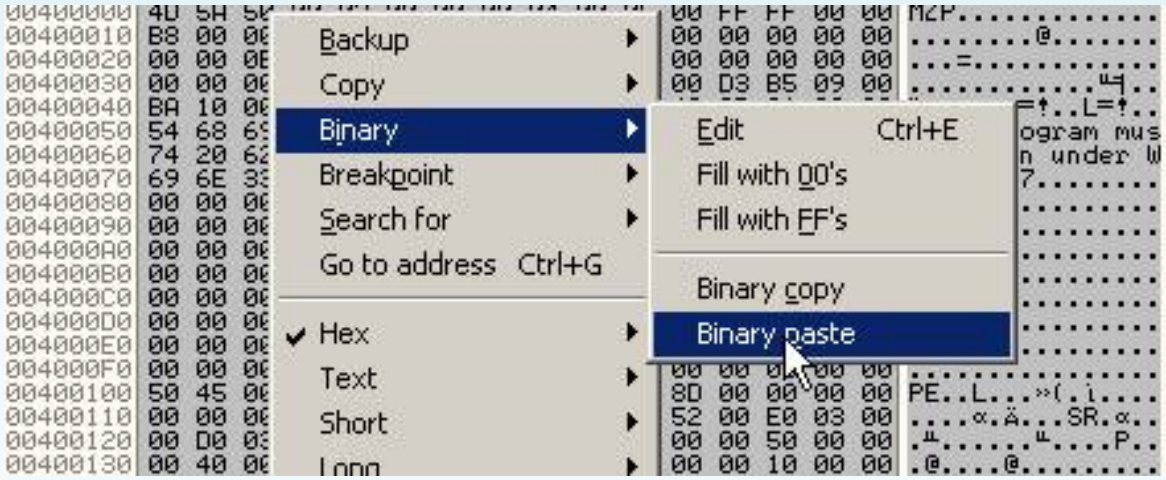
PE header contains =
Type = 01001002 IMAG
Access R =
Initial access = RWE



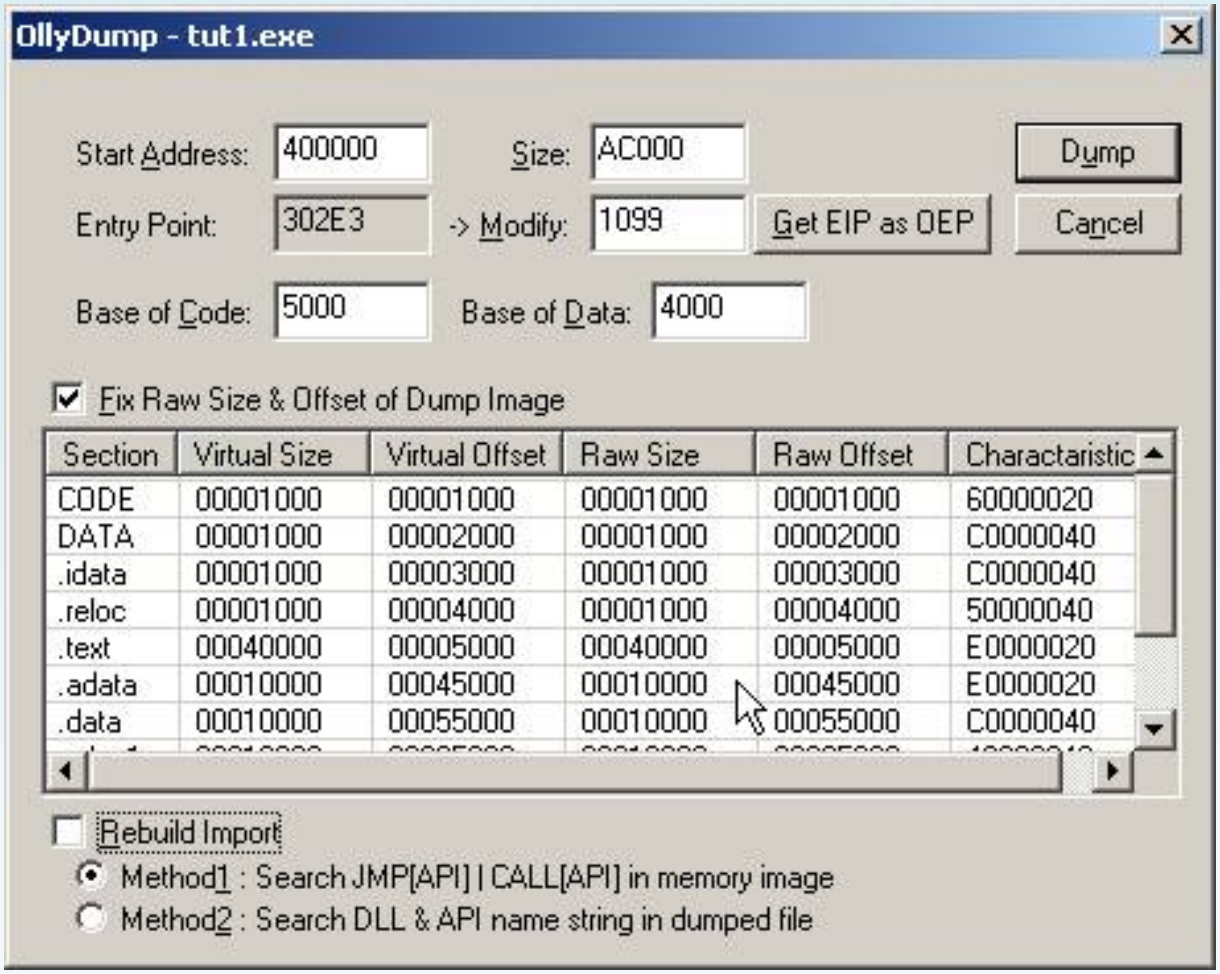
_Drag Mouse from the beginning to the end (400,000 ... 400FFF), select Copy Binary:



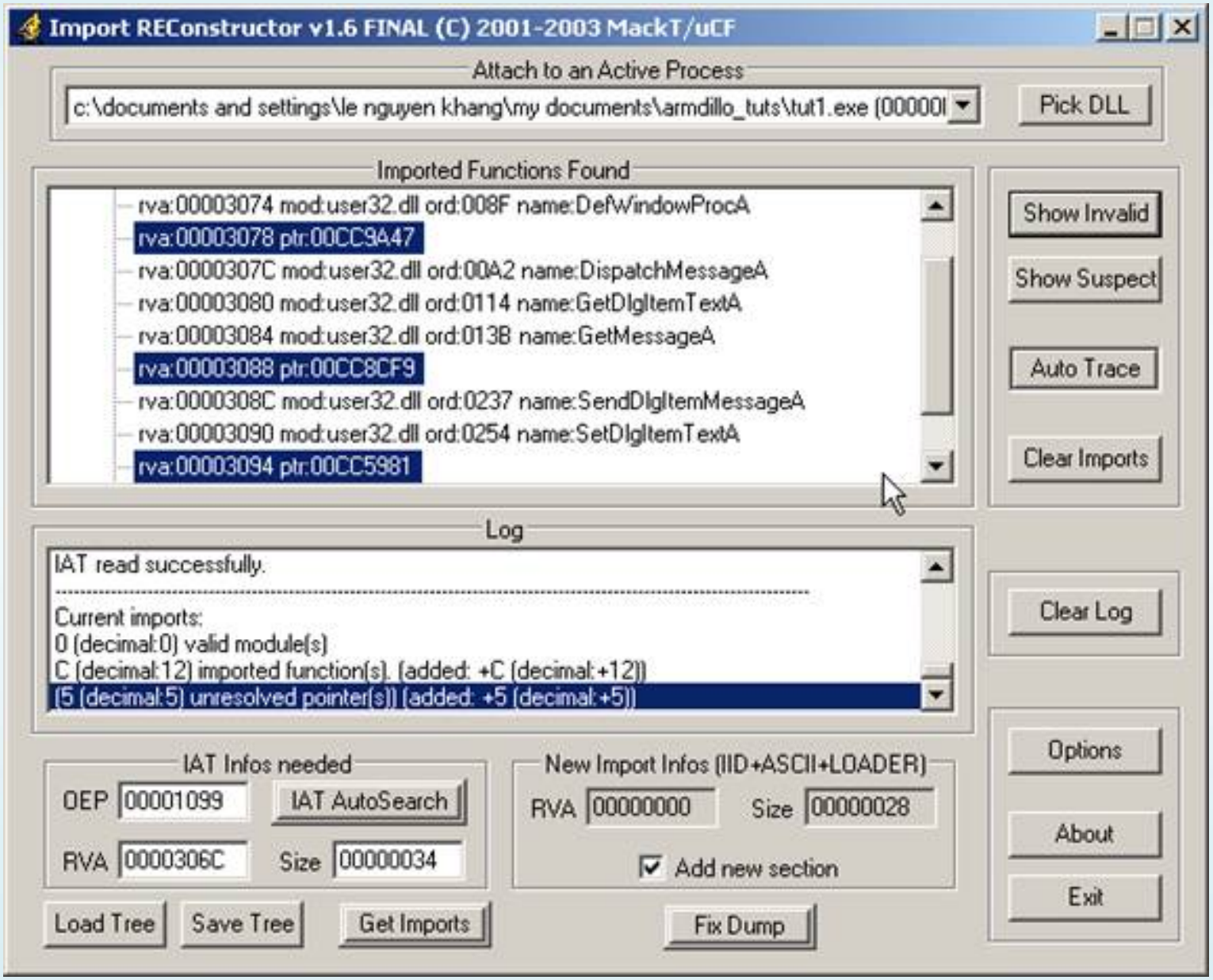
_Tro OllyDBG the original. Also double to 400,000 addresses, and drag the mouse to 400,000 ... 400FFF, select Binary paste:



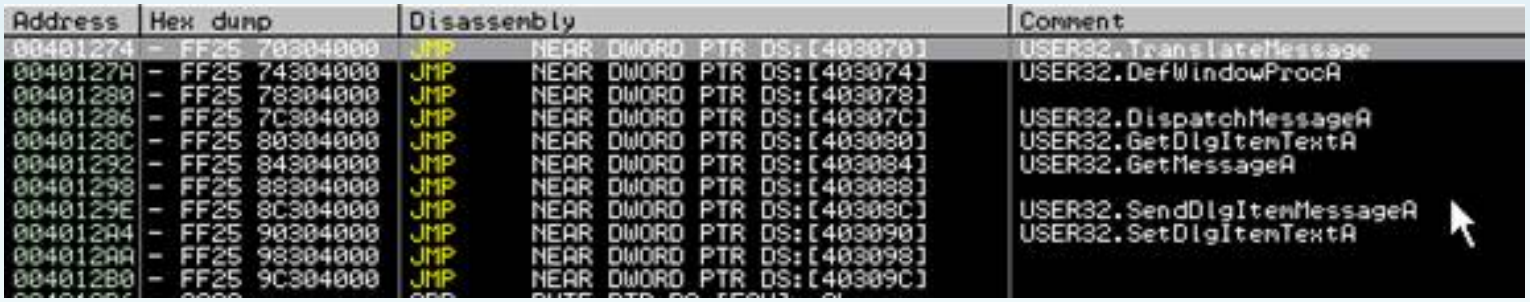
_Bay Dump hours only, select OllyDump:



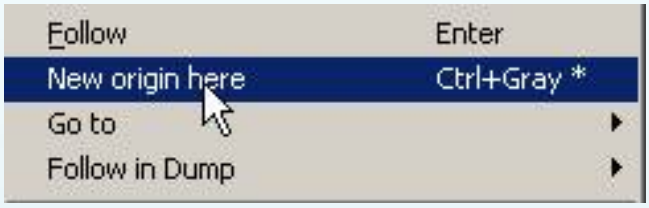
Fix IAT _Bi hours:



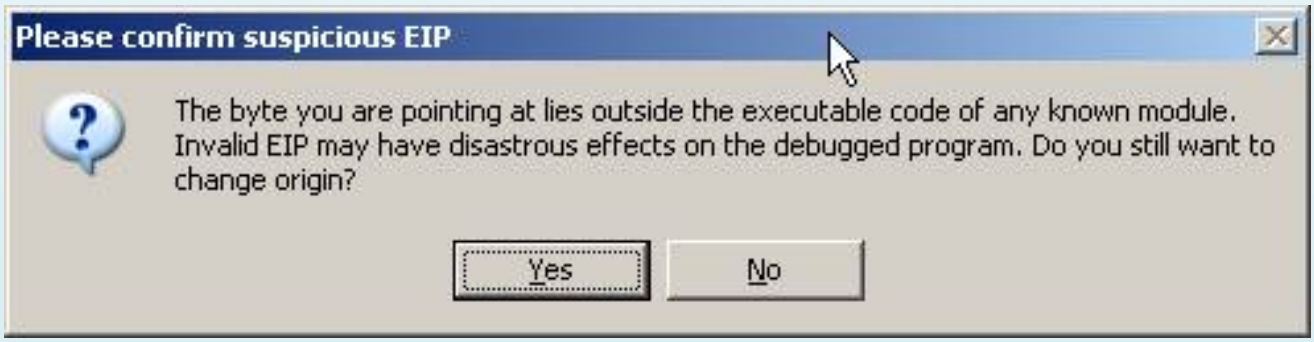
5 for _Co invalid. Cuts do not have records that Thunks bay nhe!
+00003078
+00003088
+00003094
+00003098
+0000309 C
_Tro OllyDBG again, scroll up the screen on the same type, Ctrl + B, enter FF25:



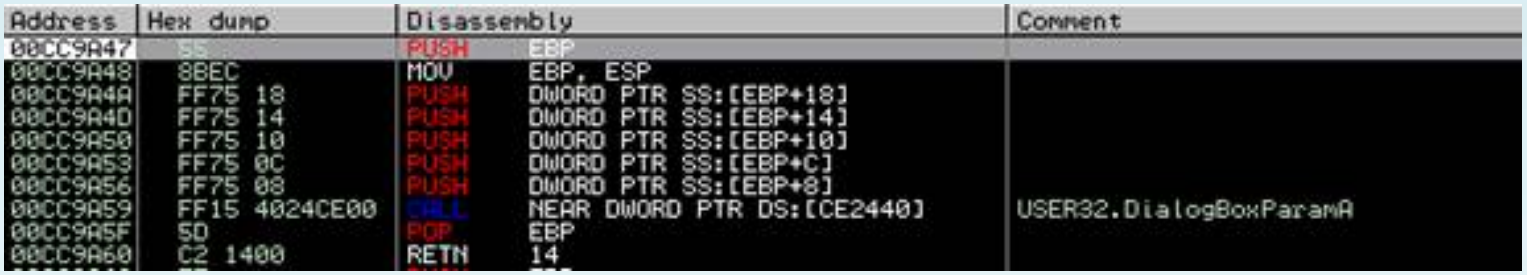
_Ta Beginning JMP NEAR DWORD PTR DS: [403078] (403078-400000 = 3078). R-click, choose:



_Ta To mind the value of **EIP 00401280 tut1.00401280:**



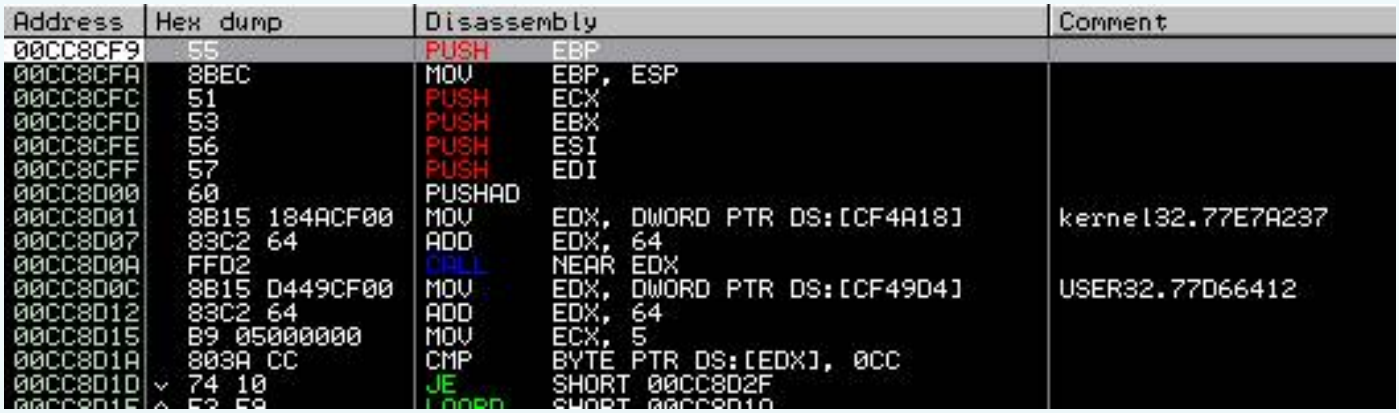
_Nhan F7. One is to:



_Nhan See from start to finish jaw function, no other function. That function is the need to find 00003078 user32.dll 009F DialogBoxParamA.

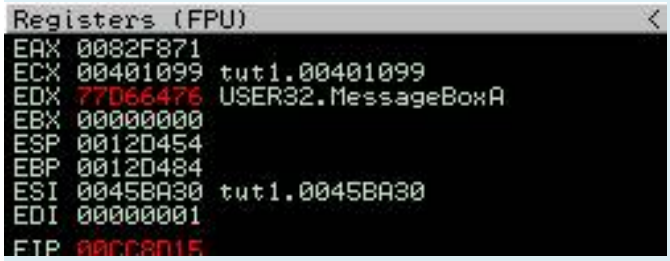
_Tro Address to 401,280, the second search function as similar to the one here:

00401298 - FF25 88304000 JMP NEAR DWORD PTR DS: [403088]

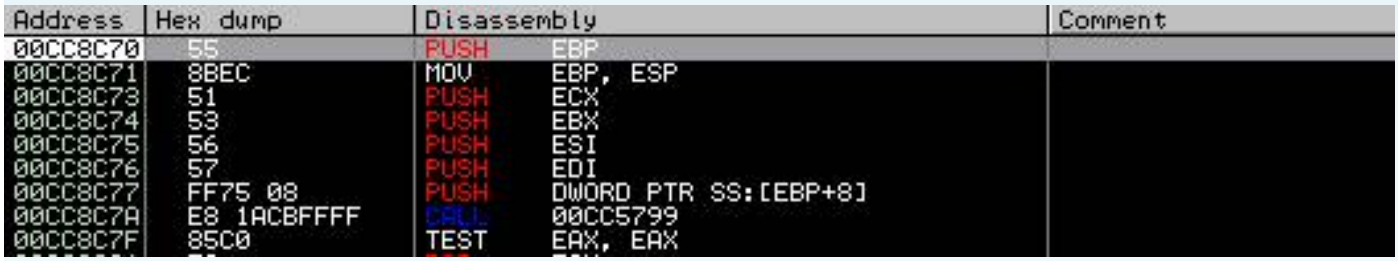


_Phew, Do not see anything, do not nản, you press F8 a few times, until the line:
00CC8D12 83C2 64 ADD EDX, 64
00CC8D15 B9 05000000 MOV ECX, 5

_Dom The Register window to see what has EDX is strange:



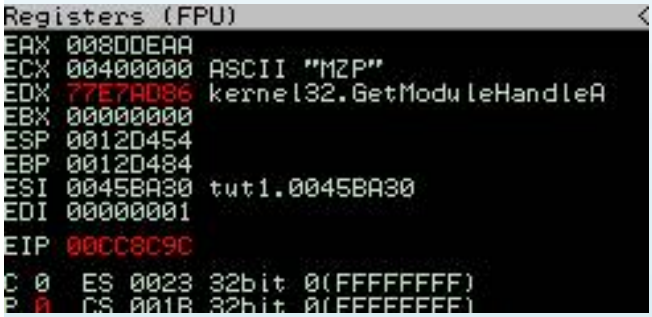
_Yeah, Here is the address of MessageBoxA function. Perhaps you ask, it is the function GetTickCount I do not choose, he he, including subliminal say anything, I try to select and then, crash when run.
_Tiep Continue to **00003094,** the hand kô find any, can Cut Thunk.
00003098 _Tiep to make similar, we find it is located at:
004012AA - FF25 98304000 JMP NEAR DWORD PTR DS: [403098]
_Set New origin, F7 at the following code:



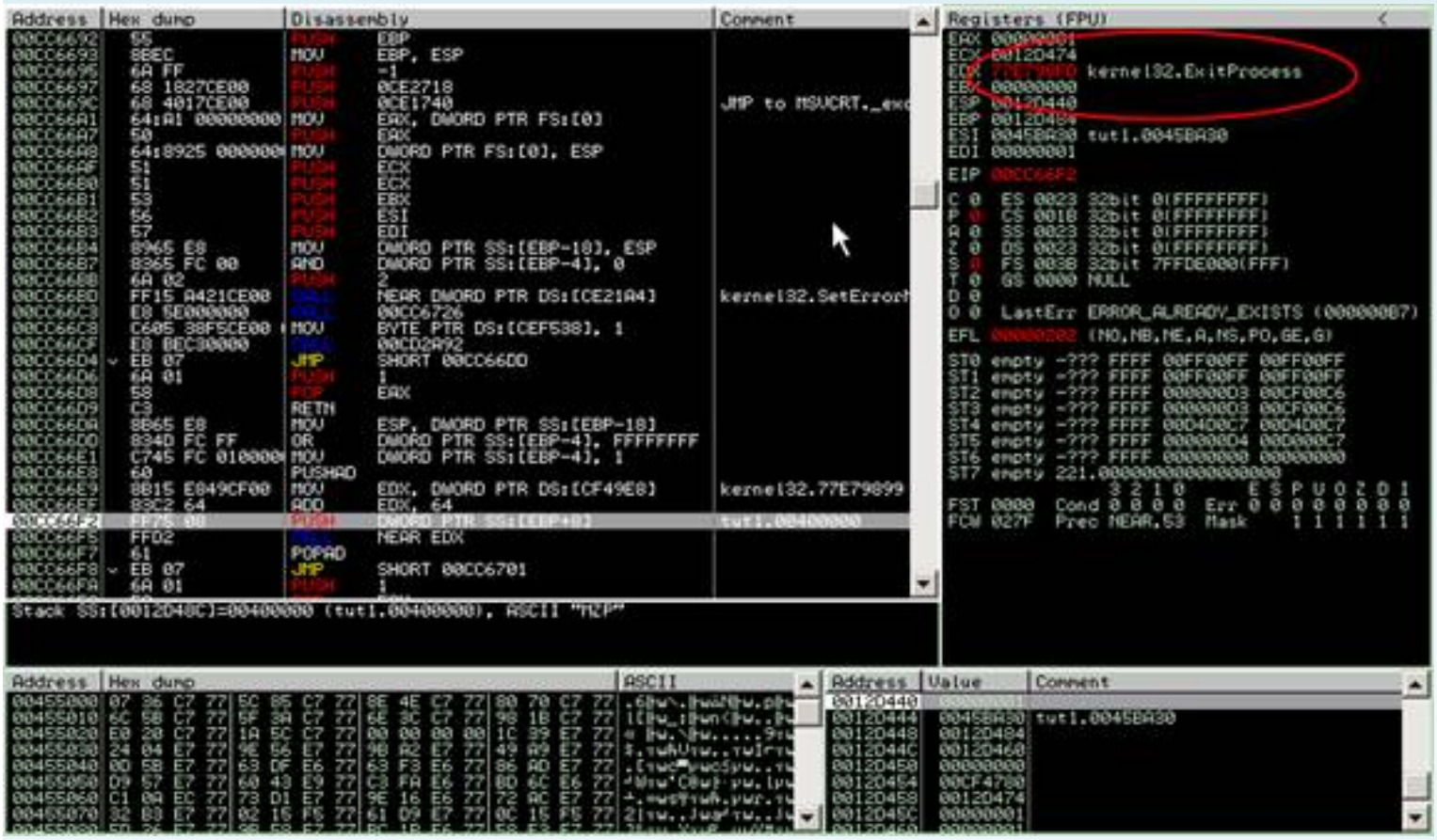
_Y On the chang, press F8 trace gradually:

00CC8C99 83C2 64 ADD EDX, 64
00CC8C9C B9 05000000 MOV ECX, 5
Cmp CC 00CC8CA1 803A BYTE PTR DS: [EDX], 0CC

_Tuong Automatically find the function: GetModuleHandleA



_Bay Hours last longer function, dom in IAT I see Thieu function exit, if the phang confident now that this function. But it does not find:
004012B0 - FF25 9C304000 JMP NEAR DWORD PTR DS: [40309C]
_Trace Last few lines of code we find the function:

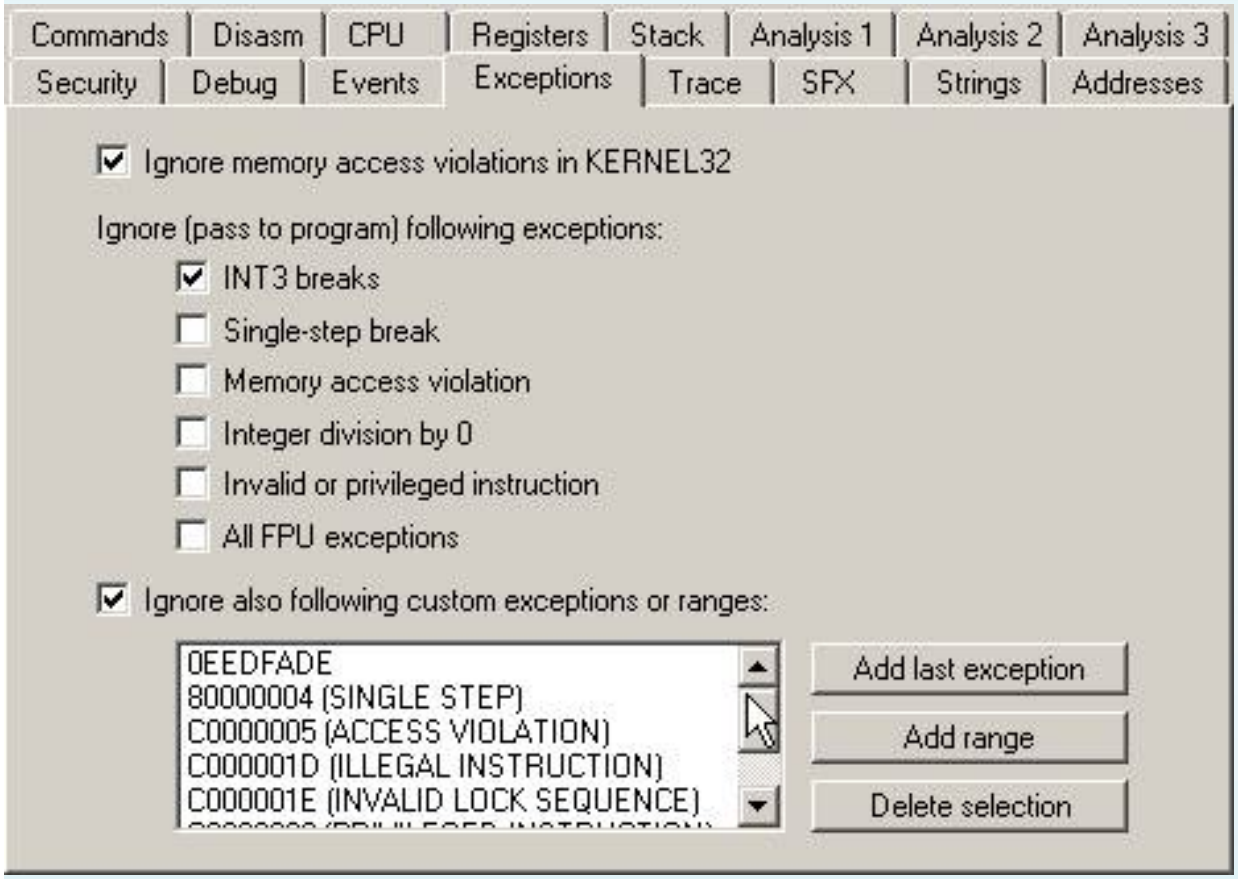


_Fix Dump, all worked. Sucessful unpack.

Tut # 2: Armadillo 4:05 - Registry Mechanic 5.0.0.142
Standard Protection

The meals I post an article on how to unpack only REA with tools and manual. There is a medical AM I try to unpack manually review. OK, today we will unpack this month.

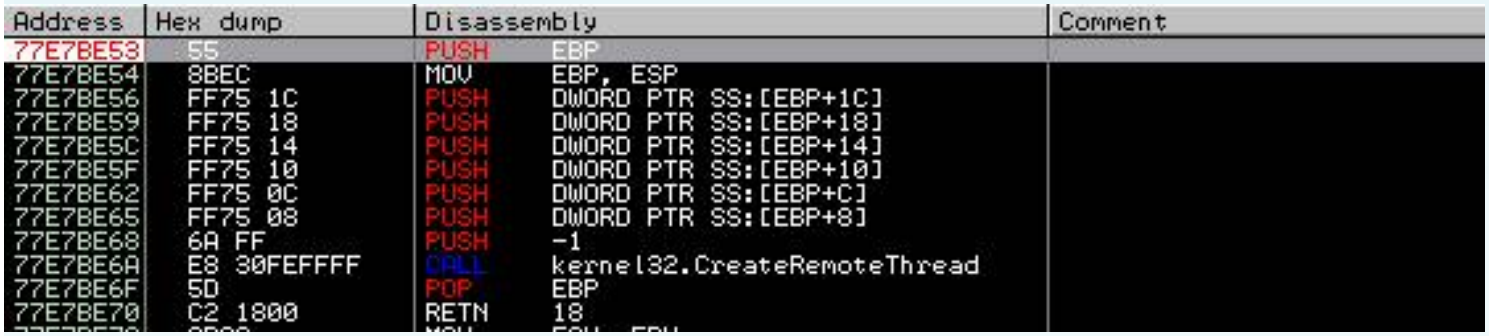
_Chinh In OllyDBG Options:



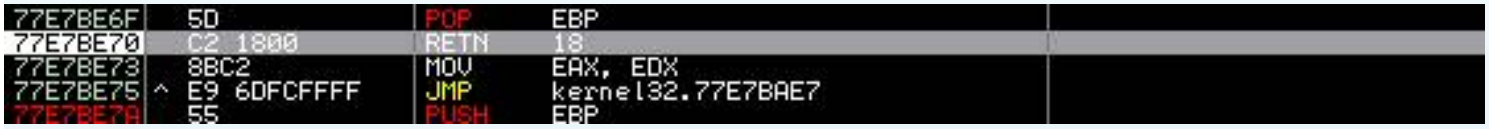
_Load OllyDBG on target:

Atl + F1 _Go, BP CreateThread enter:

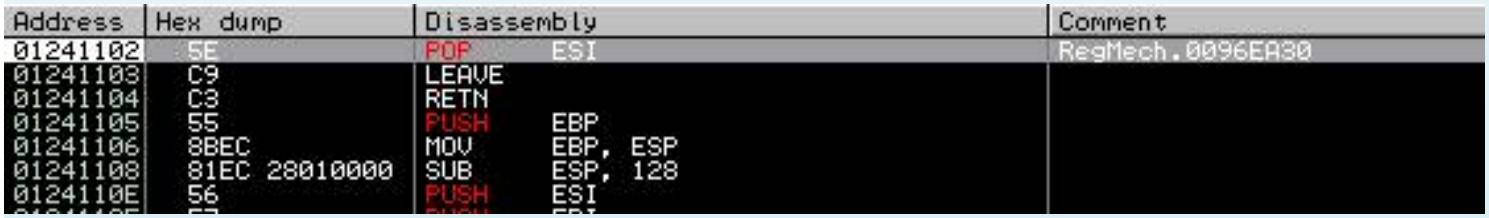
_Nhan Shift + F9:



_Nhan Ctrl + F9:



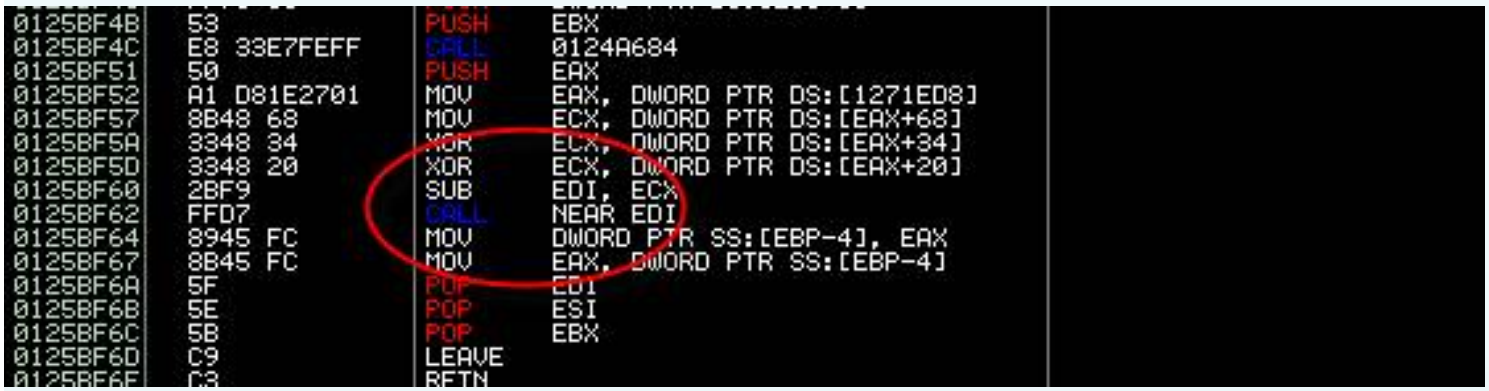
_Nhan F8:



_Lai Press Ctrl + F9:

_Nhan To F8:

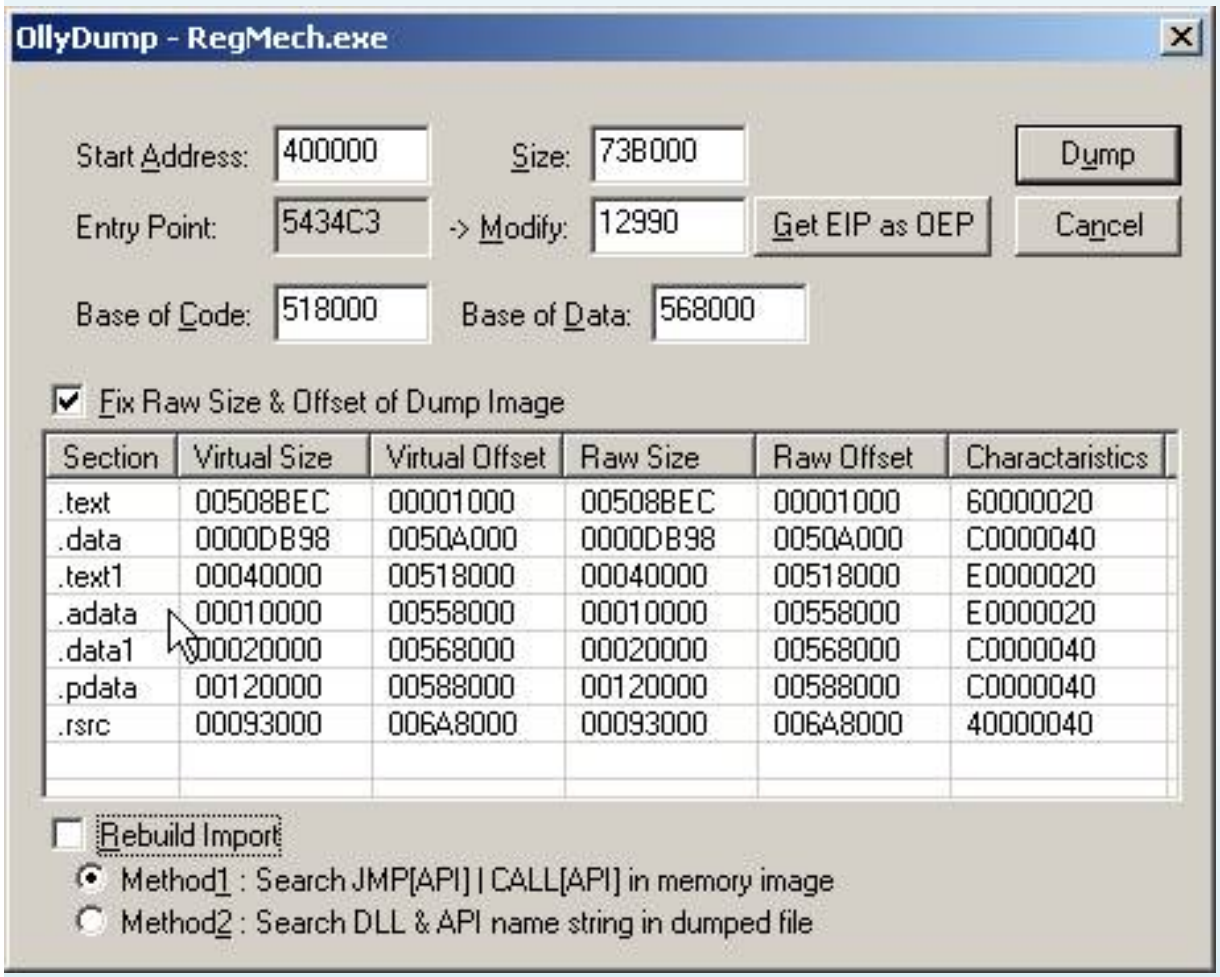
_Cuon Screen down hairbreadth decency Call for EDI:



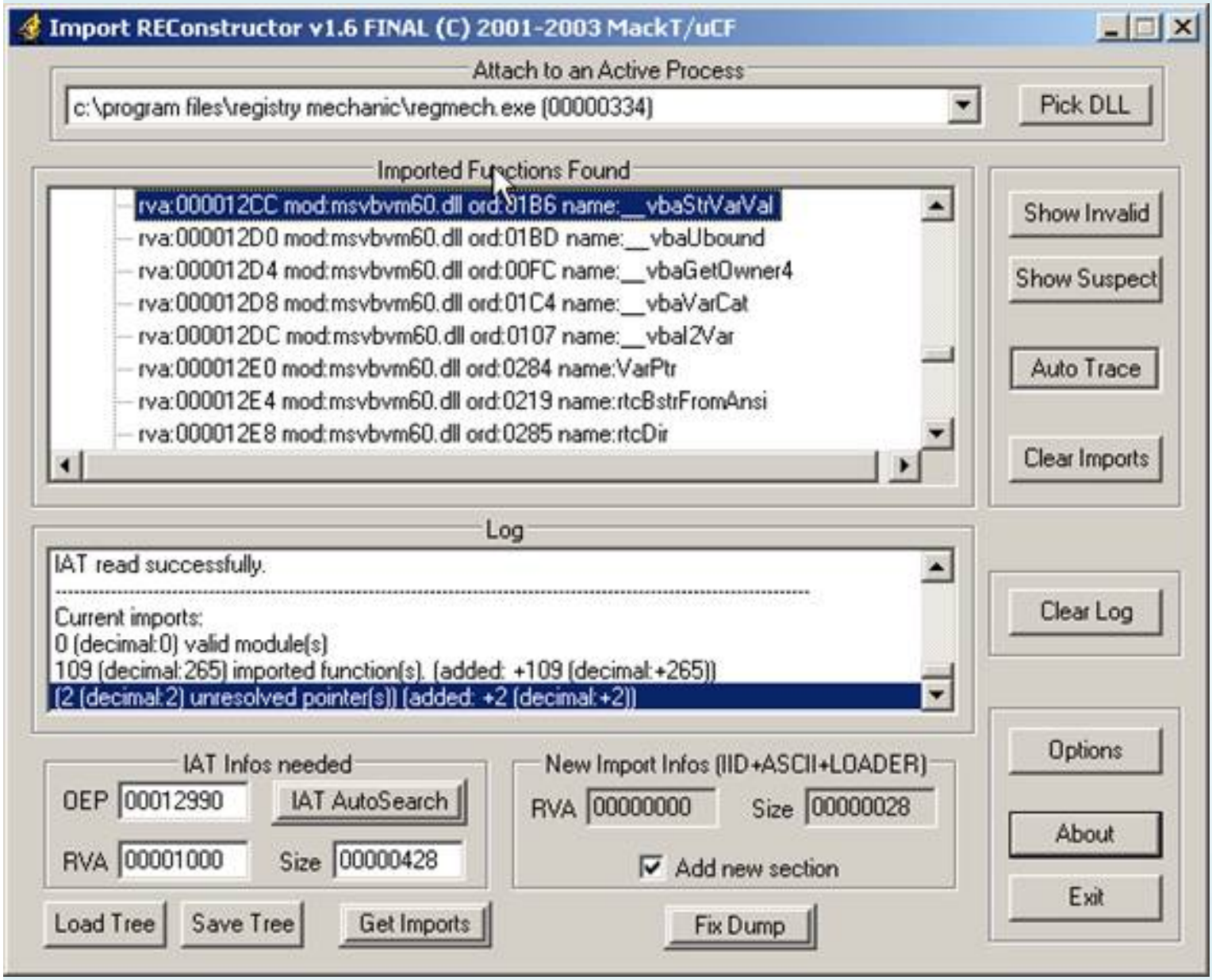
F2 _Nhan set breakpoint at **0125BF62 FFD7 CALL NEAR EDI,** press F9 to run, will Olly ice in 0125BF62, press F7 to our OEP, yeah!

Address	Hex dump	Disassembly	Comment
00412990	68 D8394100	PUSH RegMech.004139D8	
00412995	E8 F0FFFFFF	CALL RegMech.0041298A	
0041299A	0000	ADD BYTE PTR DS:[EAX], AL	
0041299C	68 00000030	PUSH 30000000	
004129A1	0000	ADD BYTE PTR DS:[EAX], AL	
004129A3	0060 00	ADD BYTE PTR DS:[EAX], AH	
004129A6	0000	ADD BYTE PTR DS:[EAX], AL	
004129A8	48	DEC EAX	
004129A9	0000	ADD BYTE PTR DS:[EAX], AL	
004129AB	00D3	ADD BL, DL	
004129AD	E4 1E	IN AL, 1E	I/O command
004129AF	94	XCHG EAX, ESP	
004129B0	D263 20	SHL BYTE PTR DS:[EBX+20], CL	
004129B3	4F	DEC EDI	
004129B4	8012 EB	ADC BYTE PTR DS:[EDX], 0EB	
004129B7	25 655B46E2	AND EAX, E2465B65	
004129BC	0000	ADD BYTE PTR DS:[EAX], AL	
004129BE	0000	ADD BYTE PTR DS:[EAX], AL	
004129C0	0000	ADD BYTE PTR DS:[EAX], AL	
004129C2	0100	ADD DWORD PTR DS:[EAX], EAX	
004129C4	0000	ADD BYTE PTR DS:[EAX], AL	
004129C6	0000	ADD BYTE PTR DS:[EAX], AL	
004129C8	0300	ADD EAX, DWORD PTR DS:[EAX]	

_Tro As tut on, open a Olly, target load, Binary copy PE header from the 400,000 ... 400FFF and paste. Then dump.



_Fix IAT:



_hai invalid children:
JMP NEAR DWORD PTR DS: [401048]
JMP NEAR DWORD PTR DS: [401420]
_Tu OEP, as opposed to end up, type Ctrl + F and enter JMP NEAR DWORD PTR DS: [401048]. We will go to address:
004125B8 - FF25 48104000 JMP NEAR DWORD PTR DS: [401048]
_Tai Ago, R-Click, select New from origine here. Press F7, to this:

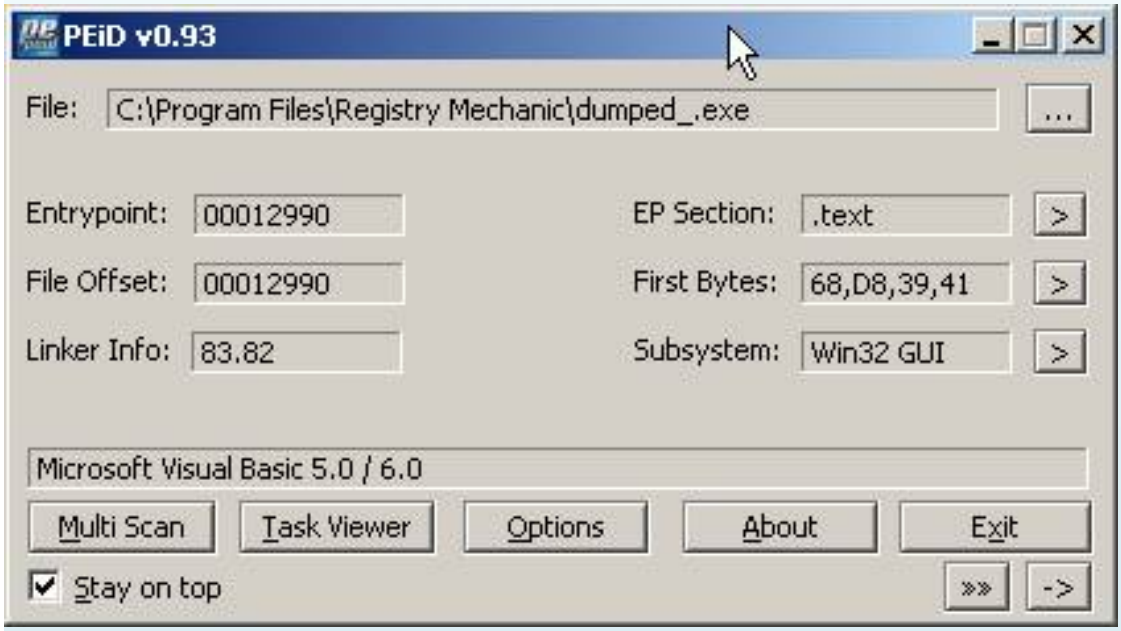
Address	Hex dump	Disassembly	Comment
0123F261	55	PUSH EBP	
0123F262	8BEC	MOV EBP, ESP	
0123F264	6A FF	PUSH -1	
0123F266	68 D8262601	PUSH 12626D8	
0123F26B	68 500D2601	PUSH 1260D50	JMP to MSVCRT._except_handl
0123F270	64:A1 00000000	MOV EAX, DWORD PTR FS:[0]	
0123F276	50	PUSH EAX	
0123F277	64:8925 000000(	MOV DWORD PTR FS:[0], ESP	
0123F27E	83EC 10	SUB ESP, 10	
0123F281	53	PUSH EBX	
0123F282	56	PUSH ESI	
0123F283	57	PUSH EDI	
0123F284	8965 E8	MOV DWORD PTR SS:[EBP-18], ESP	
0123F287	33F6	XOR ESI, ESI	
0123F289	68 64742601	PUSH 1267464	ASCII "MSVBVM60.DLL"
0123F28E	FF15 E8202601	CALL NEAR DWORD PTR DS:[12620E8]	kernel32.GetModuleHandleA
0123F294	85C0	TEST EAX, EAX	
0123F296	74 0E	JE SHORT 0123F2A6	
0123F298	68 58742601	PUSH 1267458	ASCII "__vbaEnd"
0123F29D	50	PUSH EAX	
0123F29E	FF15 EC202601	CALL NEAR DWORD PTR DS:[12620EC]	kernel32.GetProcAddress
0123F2A4	8BF0	MOV ESI, EAX	
0123F2A6	6A 02	PUSH 2	
0123F2A8	FF15 90212601	CALL NEAR DWORD PTR DS:[1262190]	kernel32.SetErrorMode
0123F2AE	8365 FC 00	AND DWORD PTR SS:[EBP-4], 0	
0123F2B2	85F6	TEST ESI, ESI	
0123F2B4	74 16	JE SHORT 0123F2CC	
0123F2B6	FFD6	CALL NEAR ESI	
0123F2B8	EB 12	JMP SHORT 0123F2CC	
0123F2BA	6A 01	PUSH 1	
0123F2BC	58	POP EAX	
0123F2BD	C3	RETN	
0123F2BE	8B65 E8	MOV ESP, DWORD PTR SS:[EBP-18]	

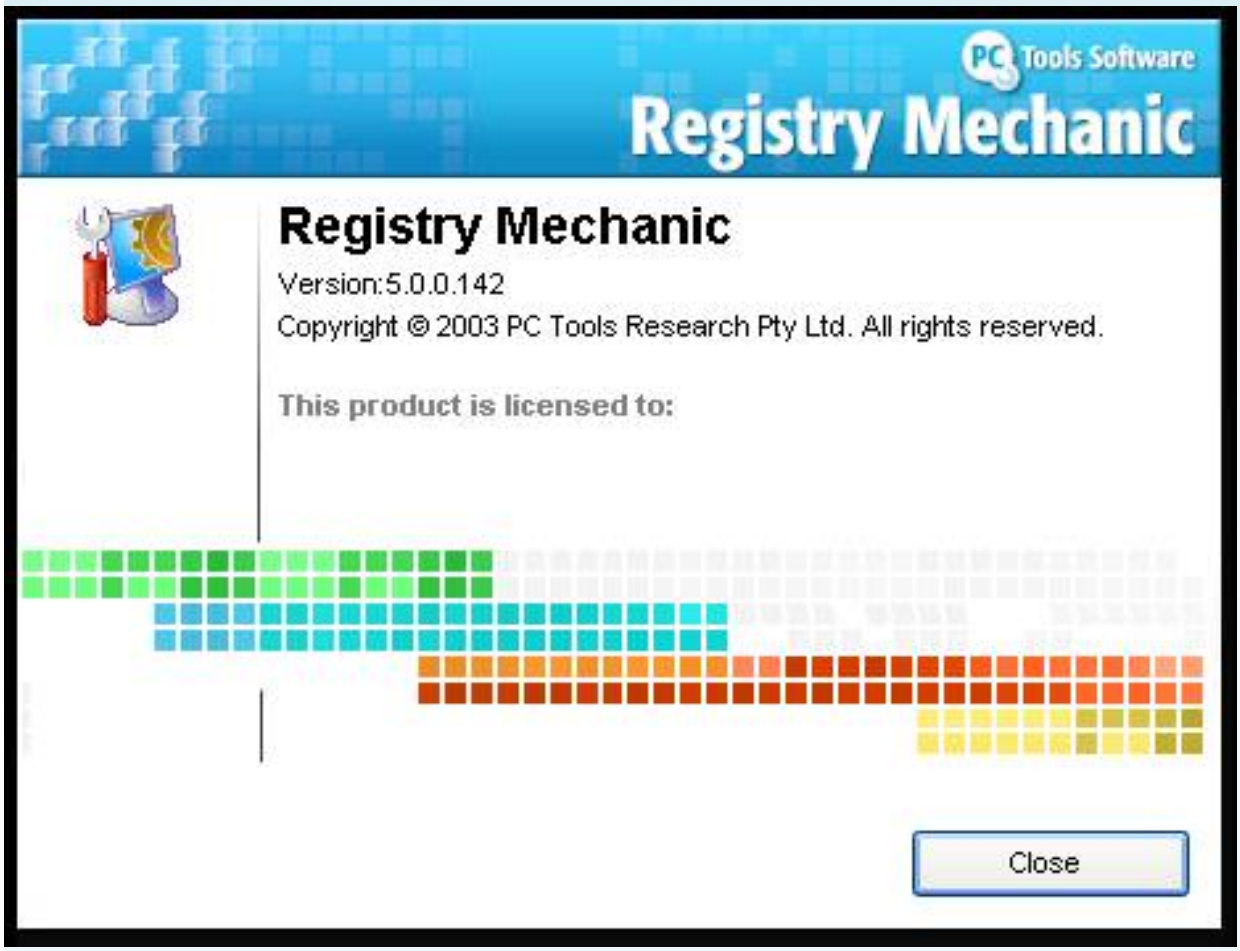
_Trace Down since we see from the beginning and end of the function, the function __vbaEnd (equivalent ExitProcess. Because the code with VB should we choose this function.

_Ham JMP NEAR DWORD PTR DS: [401420] should not exist Cut Thunk.

_Fix Done:

_Detect:



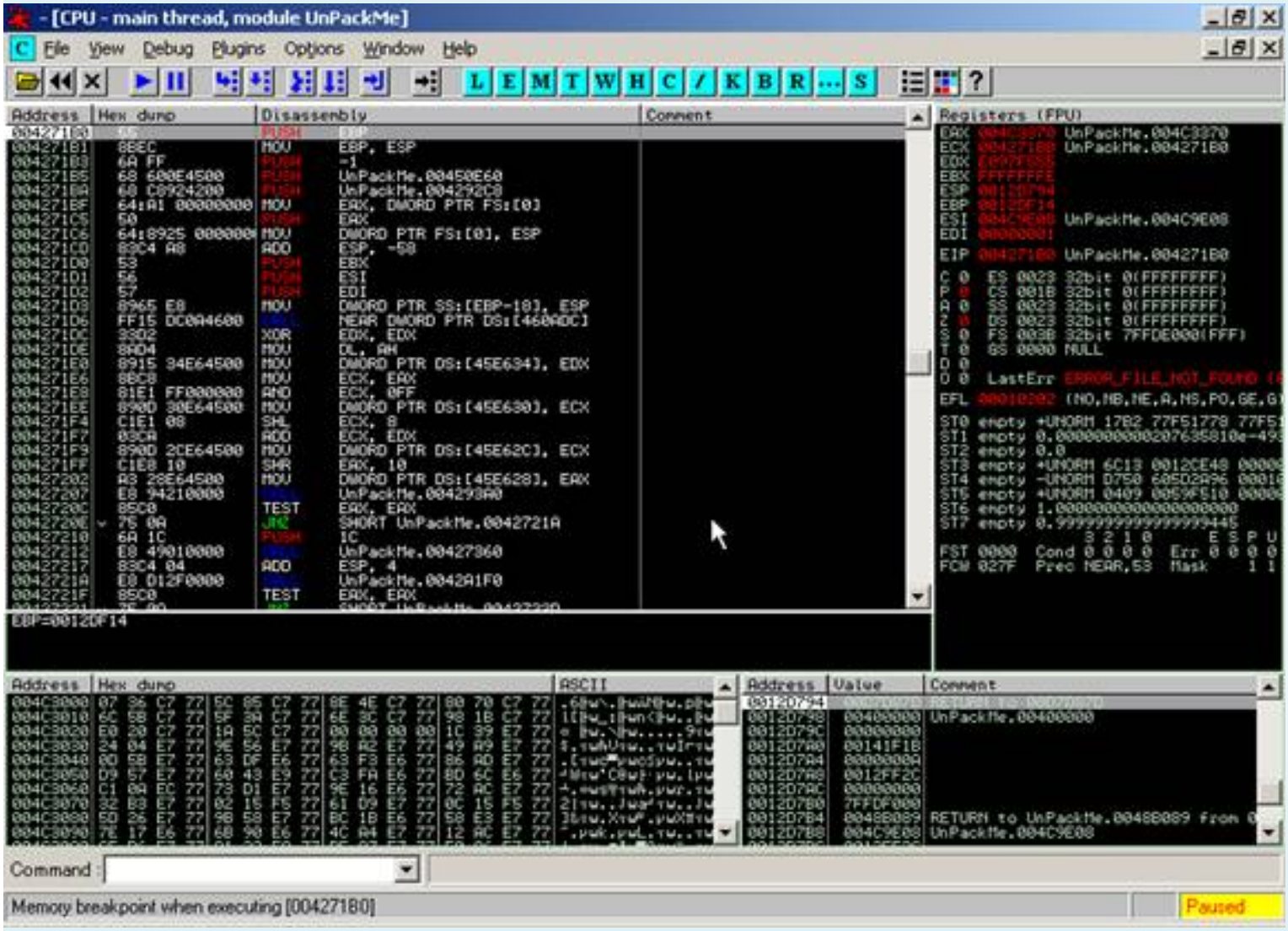


He Summer, after many nights of thinking, I think of new ways to call is accurate manual unpack protect the target with standard protection. Copyright @ hacnho, khua khua. The doctors read this tut can practice immediately. But the doctors read by tut ARTEAM also unpack a soft well with Registry Mechanic but even I, try to read that much arm dek also understand many belgium J. Attach target, dumped.exe, and dumped.exe tree for medical practice. Ah forget a note that when you open a copy to OllyDBG PE Header, complete copy it

to memory, not only is not ImpREC Attach the die.

Tut # 3: UnPackMe_Armadillo4.10.b
Standard Protection

This _Cai similar on the tut, it is important which method you choose, be slow and patience to find the OEP and fix IAT (about 24 functions). If successful you will be here:



Tut # 4: UnPackMe_Armadillo4.20.b

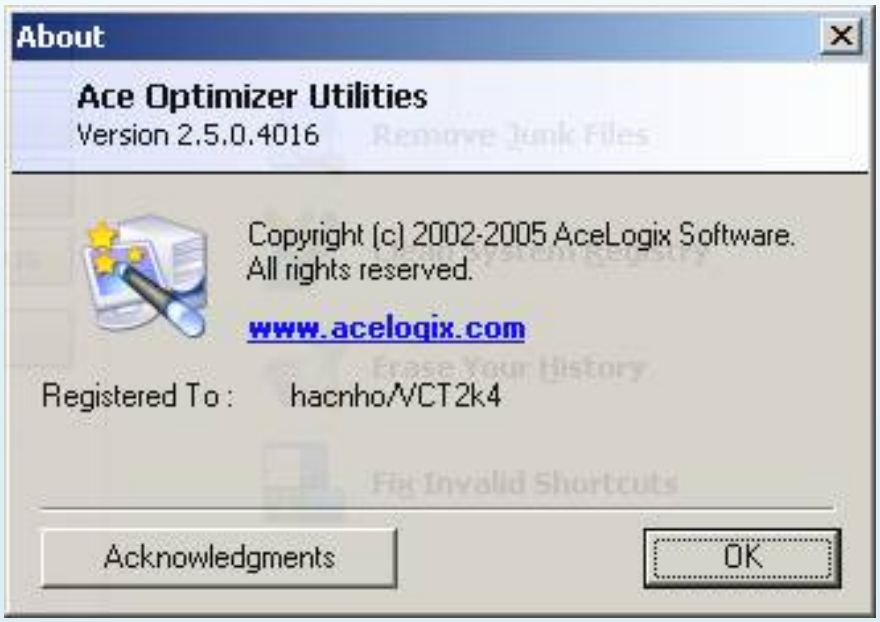
Standard Protection

_De Advanced skills, you unpack entirely in tut4 target.

III. **A result:**

That's all part of a standard protection. Hopefully, through this tut you can unpack to unpack and me being soft on the NET release. The form of this soft pack bags listed here:

Ace Utilities v2.5.0.4016 (Armadillo Standard)
http://www.acelogix.com



(showing the game. he he)

Advanced X Video Converter v3.9.32 (Armadillo Standard + elimination Import)
http://www.aoamedia.com

AoA DVD Ripper v3.75 (Armadillo Standard + elimination Import)
http://www.aoamedia.com

AVI / MPEG / RM / WMV joiner v4.81 (Armadillo Standard Code Splicing + + Import elimination)
http://www.boilsoft.com

BearShare Pro v4.7.1.1 (Armadillo Standard)
http://www.bearshare.com

Coding Workshop Ringtone Converter v5.2.4 (Armadillo Standard)
http://www.codingworkshop.com

Coding Workshop Polyphonic Wizard v4.0.3 (Armadillo Standard)
http://www.codingworkshop.com

File recover 5.0.1.15

http://www.pctools.com

HyperCam v2.11.00 (Armadillo Standard + elimination Import)
http://www.hyperionics.com

HyperSnap-DX v5.62.05 (Armadillo Standard + elimination Import)
http://www.hyperionics.com
Privacy Guardian 4.0.0.11
http://www.pctools.com

Registry Mechanic 5.0.0.14
http://www.pctools.com

Spyware Doctor 3.2.1
http://www.pctools.com

Spam Monitor 2.5
http://www.pctools.com

_Mot Tut simple with excess image. He he, sure of your target down on hearing xiu always tired. Wrote almost finished and then Serie # 2, but the ability to target, only for you to read this and then finished tut I write more. Lost 3h for the tut this hix. People write a tut for the cracking Nero you. Sure week after new bags up to the Serie # 2. Her only child that nhe. Belgium reported.

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini, hoadongnoi, hosiminh, Nilrem, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, anh_surprised ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx to authors of OllyDBG.

To be continued ...

Written by **hacnho** (tutorial date: Saigon 21/08/2005)

Armadillo collect sand-stone

Bug Fix in Series # 1!

QUOTE:

Re: Tuts: Armadillo collect sand-stone
Bó hands and then some .. ơi aged children to help.

-I have tried to try multiple times to target 3 (or 4) but not how to find out what function fully as he tlandn.

Here they give 2 in the Invalid ImportREC as examples:
--- 1:
rva: 00060ADC ptr: 00C2A12D

Search I-olly in order:
"CALL DWORD PTR DS: [460ADC]"

-I here:
Code:

00418E4A FF15 DC0A4600 CALL DWORD PTR DS: [460ADC]

Then New Origin here, then to the F7 Trace out:

Code:

00C2A12D A1 D06CC500 MOV EAX, DWORD PTR DS: [C56CD0] 00C2A132 C3 RETN

-So here it RETN tia then, I do find that nao.The function in file IAT.txt by an tlandn found that:
Code:

1 00060ADC kernel32.dll 01C8 GetVersion

--- 2:
rva: 00060B40 ptr: 00C2579D

Olly search in order:
"CALL DWORD PTR DS: [460B40]"

I here:
Code:

0040962C FF15 400B4600 CALL DWORD PTR DS: [460B40]

Then Trace F7 to go through a loop, then through:
Code:

00C257A8 8B35 5C32C400 MOV ESI, DWORD PTR DS: [C4325C]; ntdll.RtlEnterCriticalSection

then back to:
Code:

00C2593C 83C6 0C ADD ESI, 0C

at this value is to write:
Quote:
EAX 77DD0000 ADVAPI32.77DD0000
EDX F0C10000

Then try to buy Trace F8 to make here:
Code:

00C25A28 FFD7 CALL EDI; ntdll.RtlLeaveCriticalSection

Trace-back and then again to Terminate always.
The file in which IAT.txt to shareholders:
Code:

1 00060B40 kernel32.dll GetProcAddress 018A

-So he asked to do any wrong place? The more he can use any Tool to find the function or not based solely on experience, seeing the lack phac vao.Ma not the only place that Invalid, more seats also can not fix as the IAT's tlandn look forward to ... the answer soon, not sure if the networks have lost, then they dippy .....

Radio-always the Newbie:
Quote:
If the Search command (Ctrl-F):
Code:

JMP NEAR DWORD PTR DS: [XXXXXX]

Search or binary with String (Ctrl-B):
Code:

FF 25

but still much less Fix Invalid place of the scroll to the top of the Search and the command:
Code:

CALL DWORD PTR DS: [XXXXXX]

Search or Binary with chains:
Code:

FF 15

will find the place to Fix Invalid.

-Would the address is in Invalid ImportREC (Olly in memory plus 400,000) and Search by the corresponding order to avoid mistake.

-In the Search, so check with your Plugin Bookmark Olly.Cach do the following:

-When I was OEP (dump is completed, and prepare fix IAT), we will roll up on the line correct? Now Click to a right line, select Bookmarks -> Insert bookmark 0 to save the position in Bookmark only 0.
-Then start Search, for example with the command:

Code:

CALL DWORD PTR DS: [XXXXXX]

-The command that is, Click to a more Bookmark -> Insert bookmark 1.
-Then, hours New Origin, F7 to Trace, the function to find the appropriate back immediately by Click right, Bookmarks -> Go to bookmark 1 or 0 (depending how your Search).
-To remove the position at that store, Click right, Bookmarks -> Delete bookmark 0 or 1
-This helps you save time when Trace to the depth that want to turn out right.

He trickyboy this nhộn real, post messages to the village was also asked directions again;;). I have is a mistake in one. This bug is fixed. Read it for fun.

After reading the two of you I sure do not need to read this section but for those like the writing on bags. Very simple.

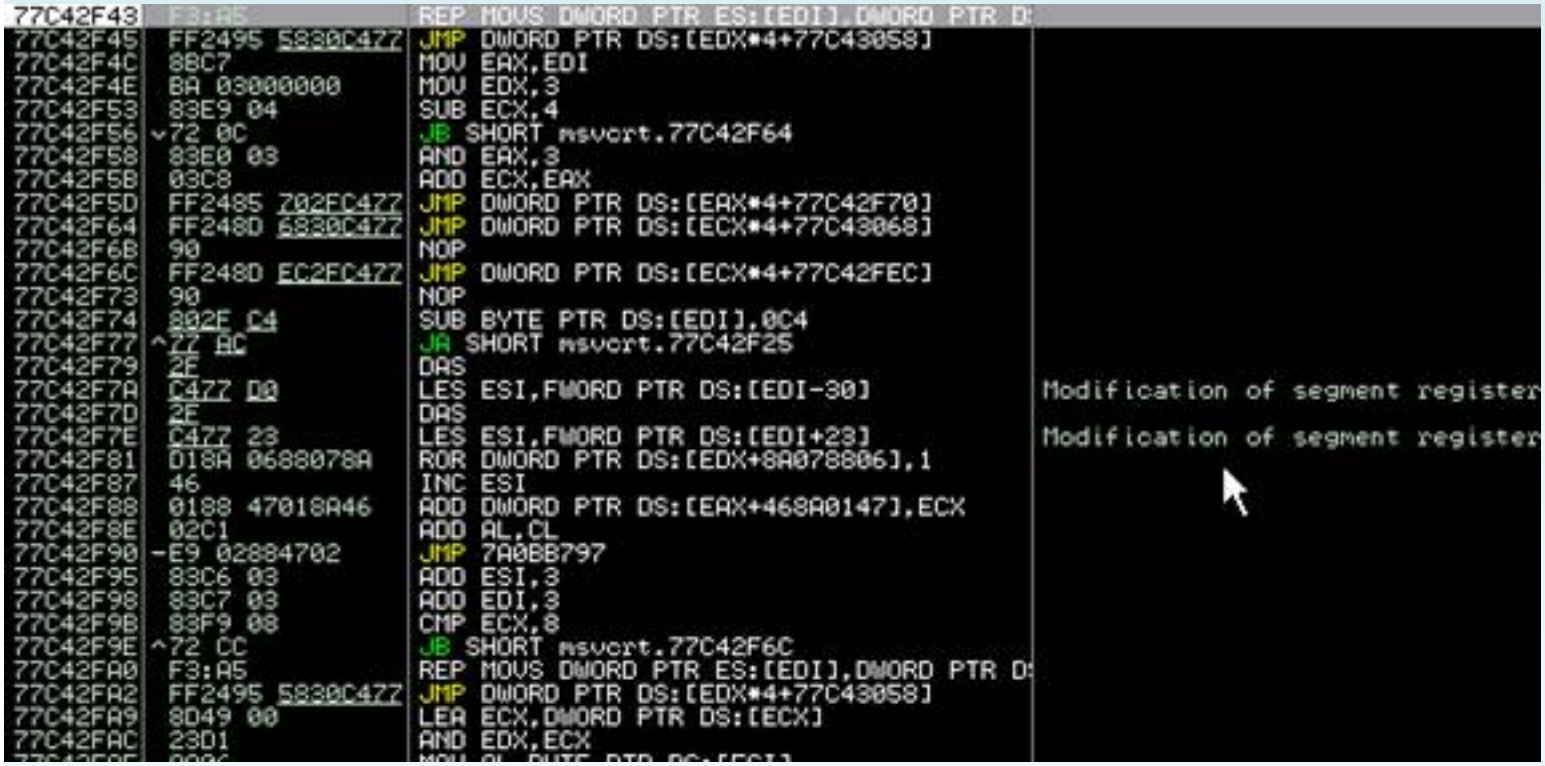
Tut # 3: UnPackMe_Armadillo4.10.b
Standard Protection

Olly _Load on target, press Alt + M placed on Breakpoint Memory Access. Press Shift + F9, jump to OEP.

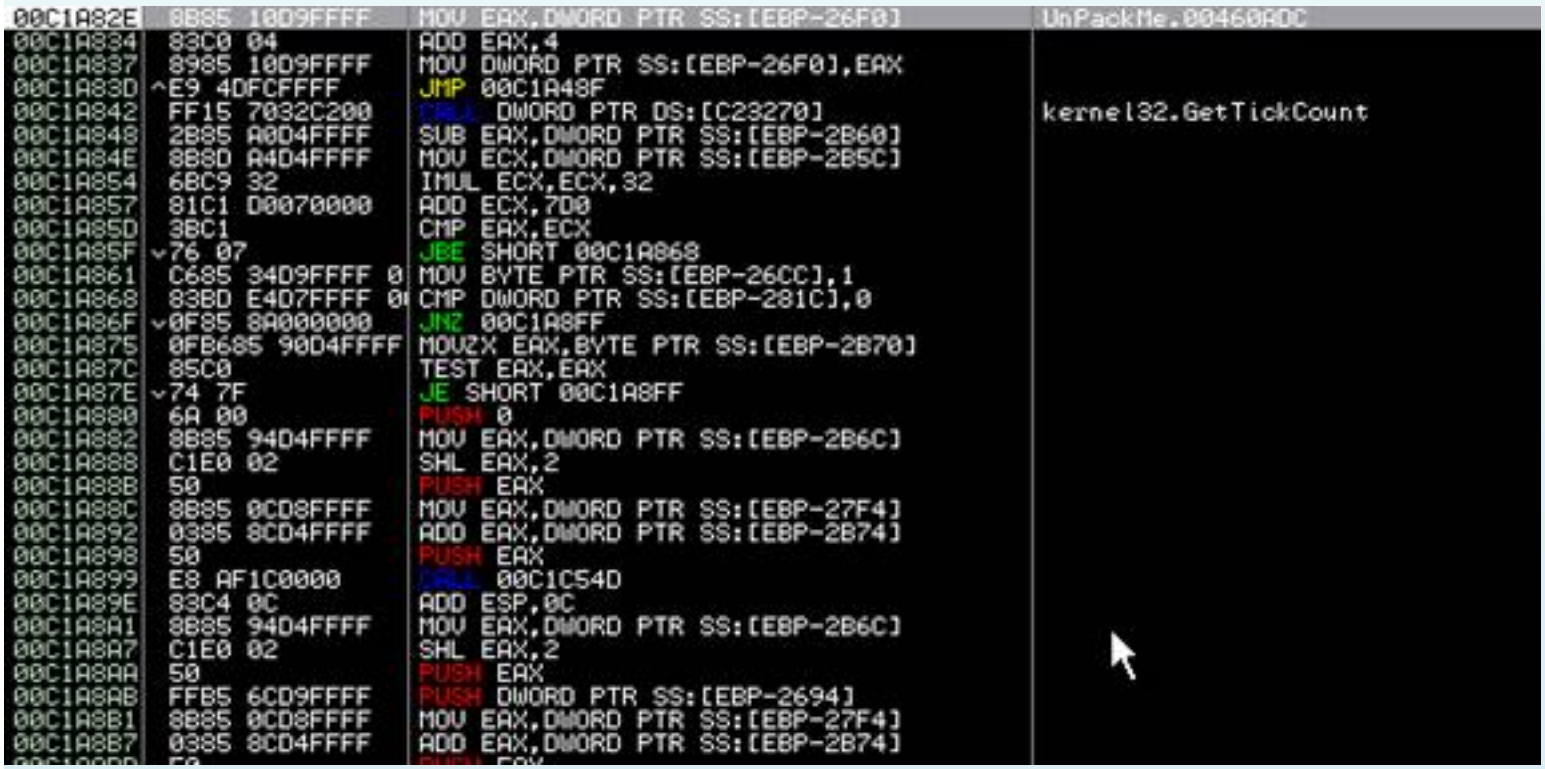
```
004271B0  55              PUSH EBP
004271B1  8BEC            MOV EBP,ESP
004271B3  6A FF           PUSH -1
004271B5  68 600E4500     PUSH UnPackMe.00450E60
004271BA  68 C8924200     PUSH UnPackMe.004292C8
004271BF  64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
004271C5  50              PUSH EAX
004271C6  64:8925 0000000 MOV DWORD PTR FS:[0],ESP
004271CD  83C4 A8         ADD ESP,-58
004271D0  53              PUSH EBX
004271D1  56              PUSH ESI
004271D2  57              PUSH EDI
004271D3  8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
004271D6  FF15 DC0A4600   CALL DWORD PTR DS:[460ADC]
004271DC  33D2            XOR EDX,EDX
004271DE  8AD4            MOV DL,AH
004271E0  8915 34E64500   MOV DWORD PTR DS:[45E634],EDX
004271E6  8BC8            MOV ECX,EAX
004271E8  81E1 FF000000   AND ECX,0FF
004271EE  890D 30E64500   MOV DWORD PTR DS:[45E630],ECX
004271F4  C1E1 08         SHL ECX,8
004271F7  03CA            ADD ECX,EDX
004271F9  890D 2CE64500   MOV DWORD PTR DS:[45E62C],ECX
004271FF  C1E8 10         SHR EAX,10
00427202  A3 28E64500     MOV DWORD PTR DS:[45E628],EAX
00427207  E8 94210000     CALL UnPackMe.004293A0
0042720C  85C0            TEST EAX,EAX
0042720E  75 0A           JNZ SHORT UnPackMe.0042721A
00427210  6A 1C           PUSH 1C
00427212  E8 49010000     CALL UnPackMe.00427360
00427217  83C4 04         ADD ESP,4
0042721A  E8 D12F0000     CALL UnPackMe.0042A1F0
```

_Ghi Remember DC0A4600 function 004271D6 FF15 CALL DWORD PTR DS: [460ADC]

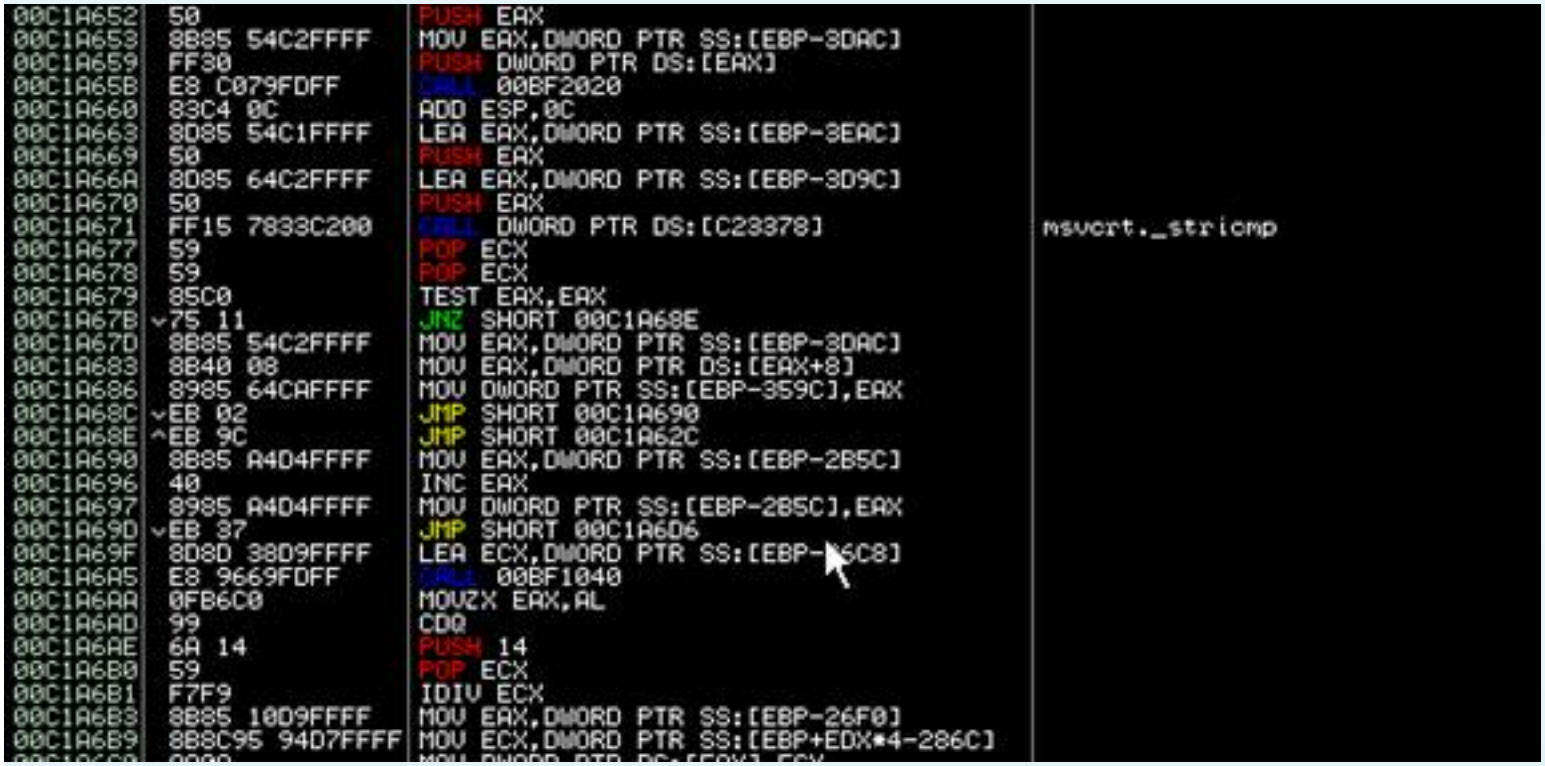
_ Ctrl + F2. Click Memory dump Windows, Ctrl + G, enter 460ADC, selected first 4 bytes, placed on HardwareBreakpoint write type DWord. Press Shift + F9:



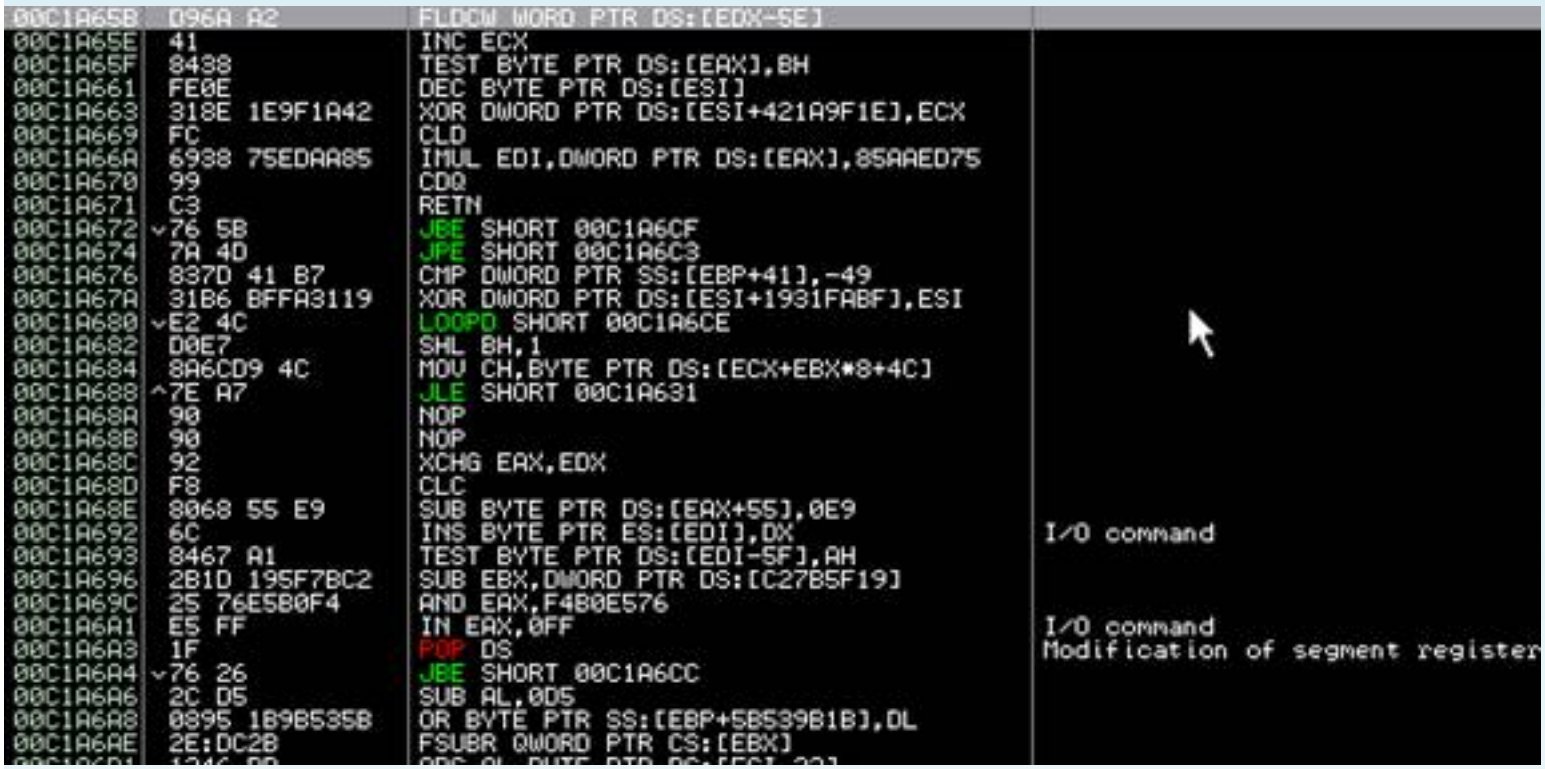
_Shift + F9 again:



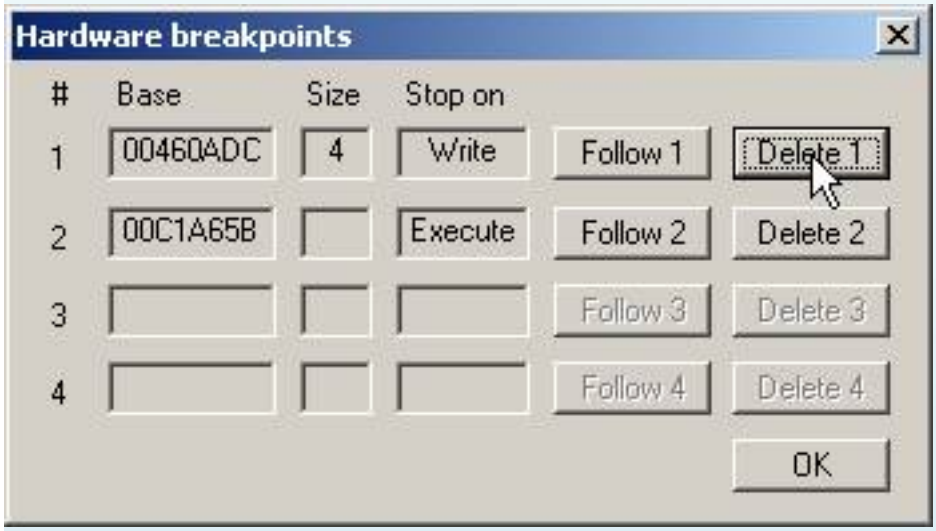
_Roi, A little mouse on the functions you see on Call stricmp function, note the address of it.



Olly _Restart again, through your window Memory dump, Ctrl + G, enter 460ADC, selected first 4 bytes, placed on HardwareBreakpoint write Word style. Press Shift + F9, the code window, press Ctrl + G to enter 00C1A65B:



__Tai 00C1A65B address, you must click, set a (HardwareBreakpoint on Excution):
_Nhu So we have two breakpoint, delete HarwareBreakpoint on Write:



_Nhan F9, you will jump to this code:

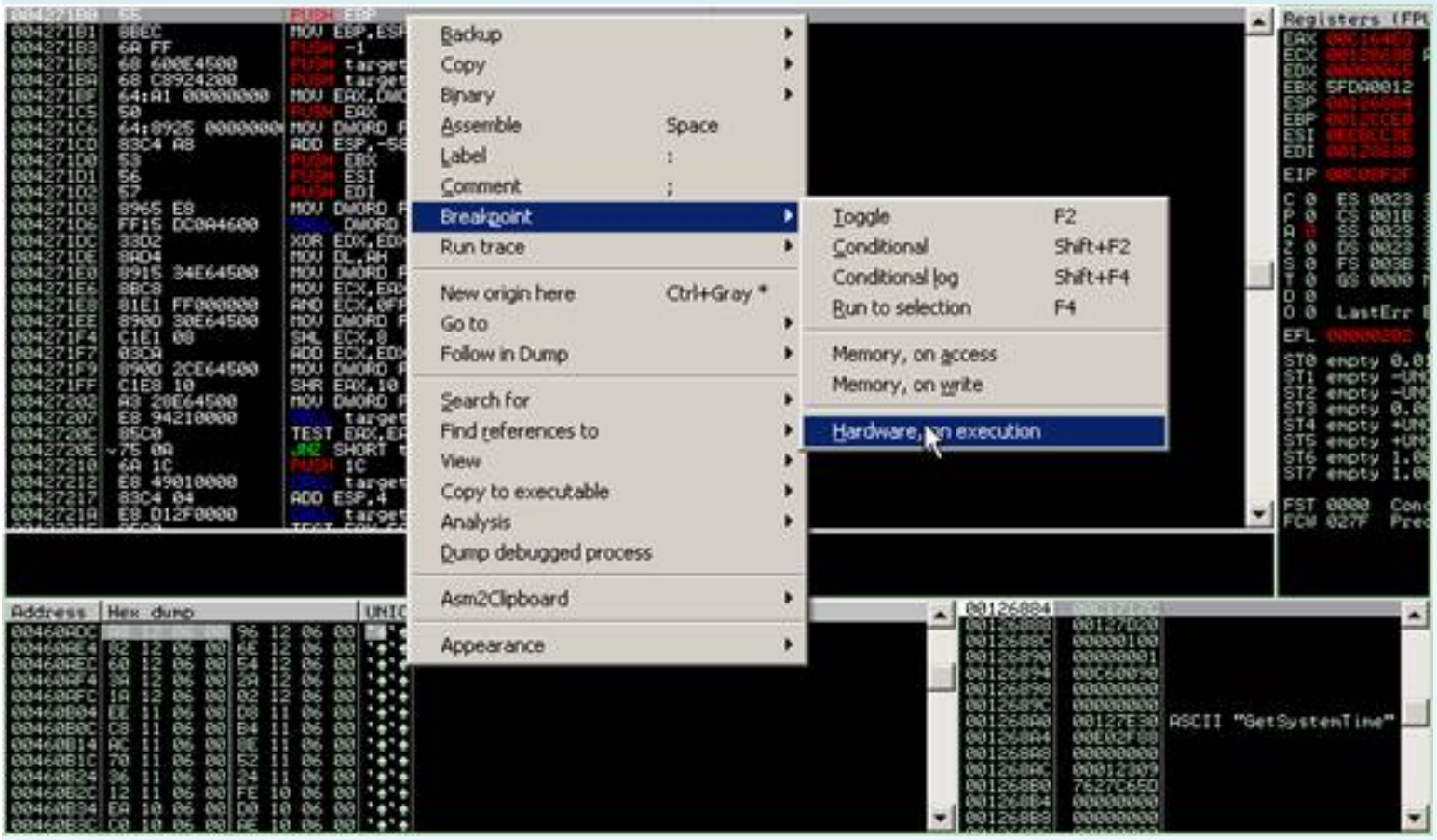
```
00C1A65B  E8 C079FDFF     CALL 00BF2020
00C1A660  83C4 0C         ADD ESP,0C
00C1A663  8D85 54C1FFFF   LEA EAX,DWORD PTR SS:[EBP-3EAC]
00C1A669  50              PUSH EAX
00C1A66A  8D85 64C2FFFF   LEA EAX,DWORD PTR SS:[EBP-3D9C]
00C1A670  50              PUSH EAX
00C1A671  FF15 7833C200   CALL DWORD PTR DS:[C23378]          msvcrt._strlcmp
00C1A677  59              POP ECX
00C1A678  59              POP ECX
00C1A679  85C0            TEST EAX,EAX
00C1A67B  75 11           JNZ SHORT 00C1A68E
00C1A67D  8B85 54C2FFFF   MOV EAX,DWORD PTR SS:[EBP-3DAC]
00C1A683  8B40 08         MOV EAX,DWORD PTR DS:[EAX+8]
00C1A686  8985 64CAFFFF   MOV DWORD PTR SS:[EBP-359C],EAX
00C1A68C  EB 02           JMP SHORT 00C1A690
00C1A68E  EB 9C           JMP SHORT 00C1A62C
00C1A690  8B85 A4D4FFFF   MOV EAX,DWORD PTR SS:[EBP-2B5C]
00C1A696  40              INC EAX
00C1A697  8985 A4D4FFFF   MOV DWORD PTR SS:[EBP-2B5C],EAX
00C1A69D  EB 37           JMP SHORT 00C1A6D6
00C1A69F  8D8D 38D9FFFF   LEA ECX,DWORD PTR SS:[EBP-2
00C1A6A5  E8 9669FDFF     CALL 00BF1040
00C1A6AA  0FB6C0          MOVZX EAX,AL
00C1A6AD  99              CDQ
00C1A6AE  6A 14           PUSH 14
00C1A6B0  59              POP ECX
00C1A6B1  F7F9            IDIV ECX
00C1A6B3  8B85 10D9FFFF   MOV EAX,DWORD PTR SS:[EBP-26F0]
00C1A6B9  8B8C95 94D7FFFF MOV ECX,DWORD PTR SS:[EBP+EDX*4-286C]
00C1A6C0  8908            MOV DWORD PTR DS:[EAX],ECX
00C1A6C2  8B85 10D9FFFF   MOV EAX,DWORD PTR SS:[EBP-26F0]
00C1A6C8  83C0 04         ADD EAX,4
```

_Chung We need to patch this function, enter at 000C1A65B E8 C079FDFF CALL 00BF2020 you jump into the jaw, Ctrl + E, the 55 to C3:

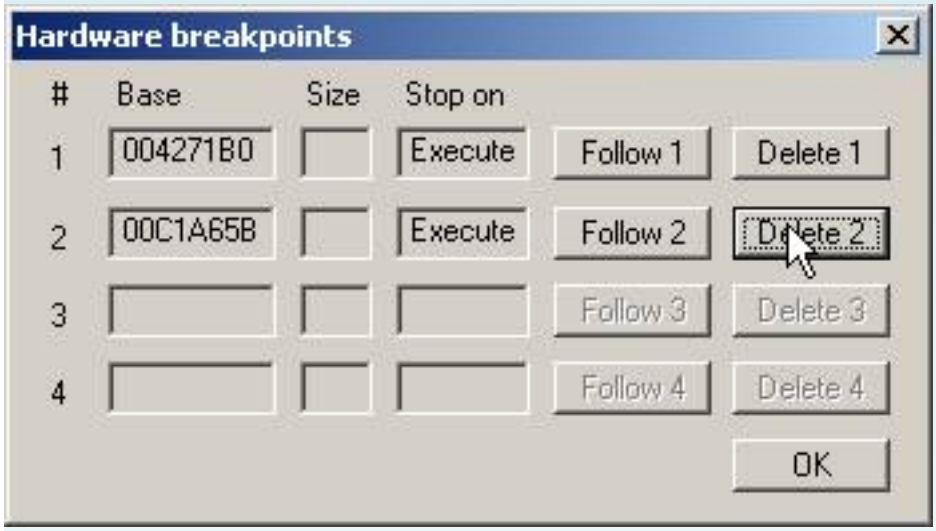
```
00BF2020  55              PUSH EBP
00BF2021  8BEC            MOV EBP,ESP
00BF2023  51              PUSH ECX
00BF2024  A1 70BBC200     MOV EAX,DWORD PTR DS:[C2BB70]
00BF2029  53              PUSH EBX
00BF202A  56              PUSH ESI
00BF202B  57              PUSH EDI
00BF202C  85C0            TEST EAX,EAX
00BF202E  75 37           JNZ SHORT 00BF2067
00BF2030  68 00010000     PUSH 100
```

```
00BF2020   C3            RETN
00BF2021   8BEC          MOV EBP,ESP
00BF2023   51            PUSH ECX
00BF2024   A1 70BBC200   MOV EAX,DWORD PTR DS:[C2BB70]
00BF2029   53            PUSH EBX
00BF202A   56            PUSH ESI
00BF202B   57            PUSH EDI
00BF202C   85C0          TEST EAX,EAX
00BF202E   75 37         JNZ SHORT 00BF2067
00BF2030   68 00010000   PUSH 100
```

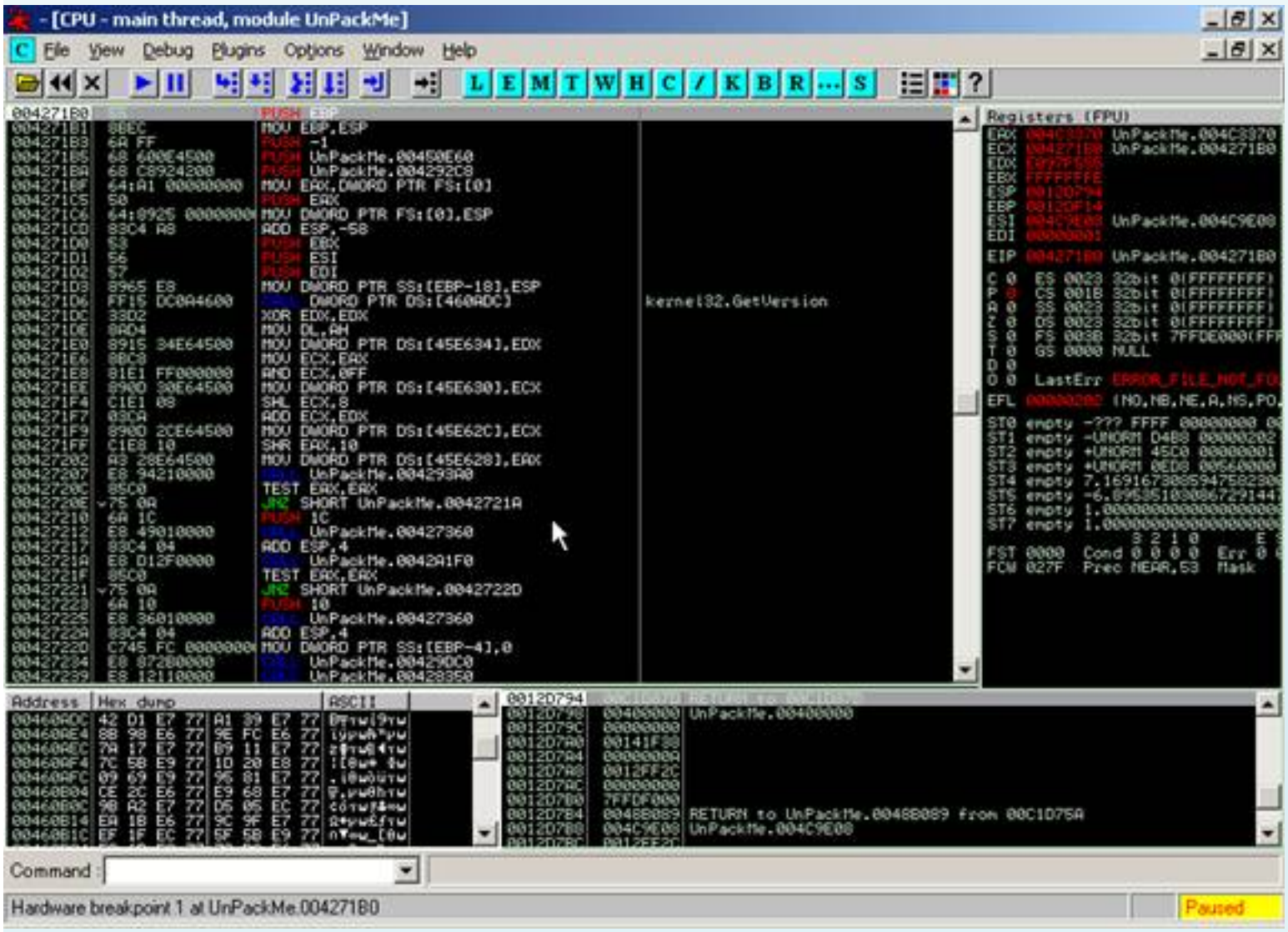
_Bam '-', Press Ctrl + G, enter the address of OEP: 4271B0, we also set a breakpoint HE:

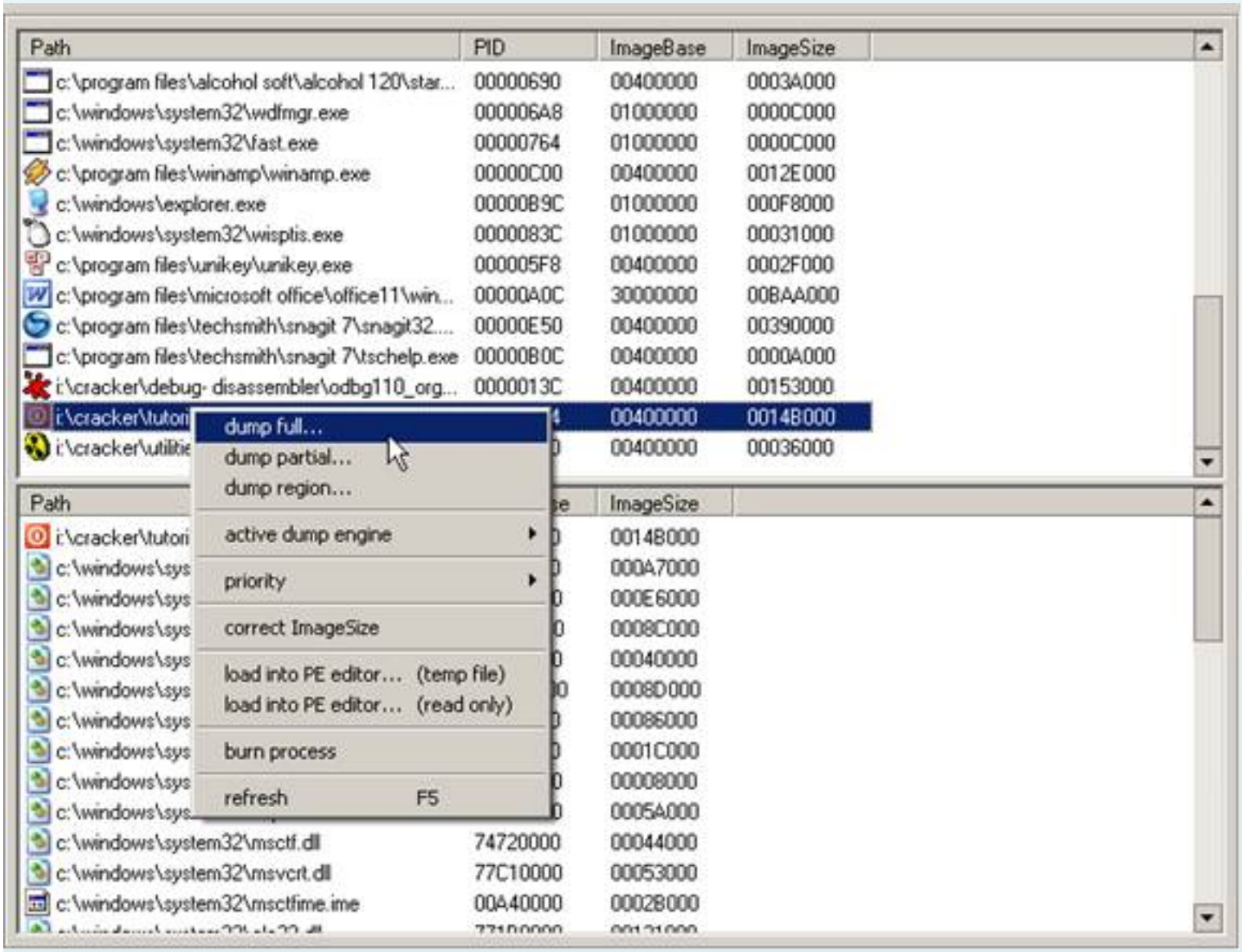


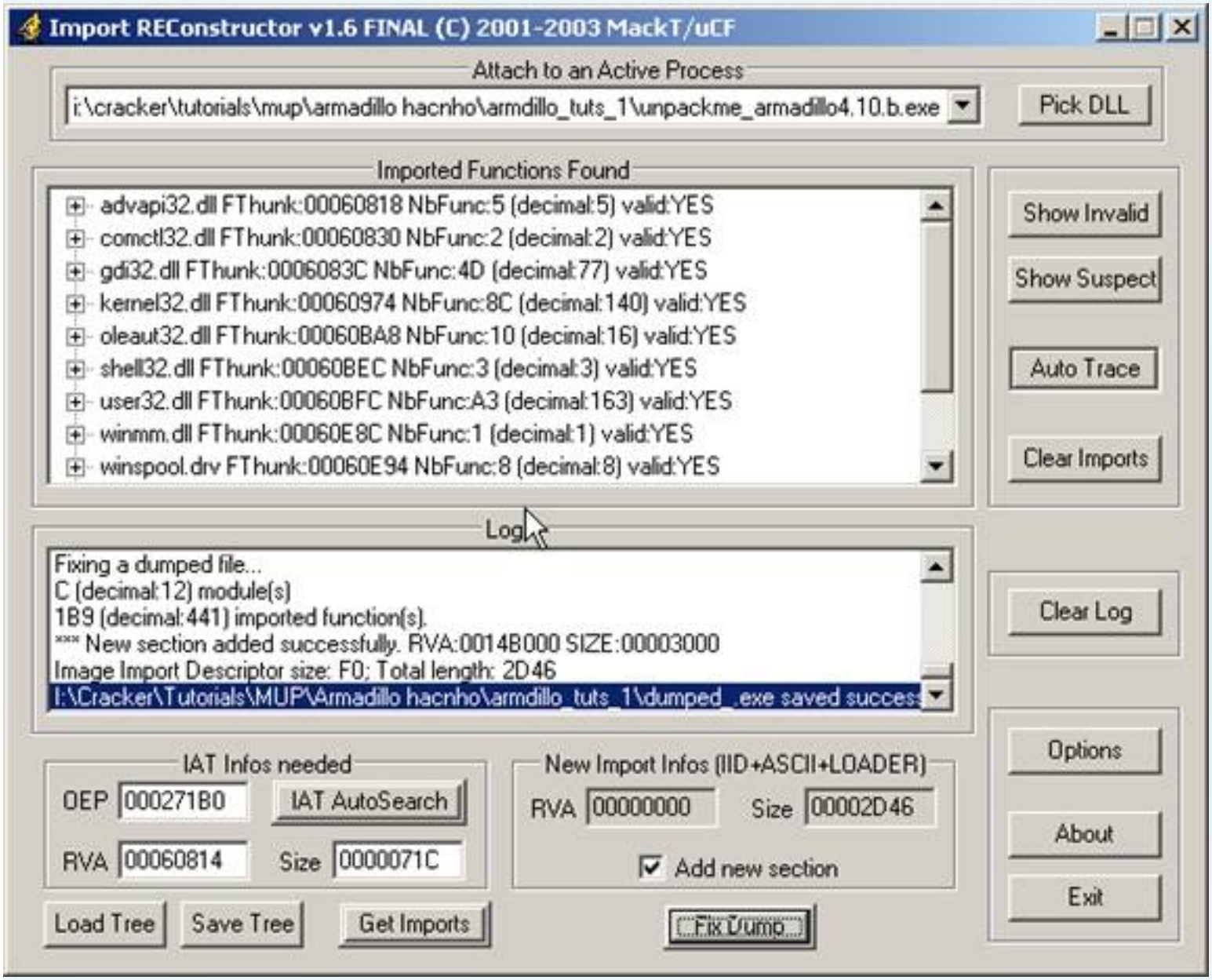
_Ban Again removed in HE 00C1A65B:



_Nhan '-', You return to the function 00C1A65B E8 C079FDFF CALL 00BF2020, press F9, you will break in with OEP Full IAT. Full dump with PETools, fix IAT normal thẳng cut out any invalid.




Path
PID
ImageBase
ImageSize
c:\program files\alcohol soft\alcohol 120\star... 00000690 00400000 0003A000
c:\windows\system32\wdfmgr.exe 000006A8 01000000 0000C000
c:\windows\system32\fast.exe 00000764 01000000 0000C000
c:\program files\winamp\winamp.exe 00000C00 00400000 0012E000
c:\windows\explorer.exe 00000B9C 01000000 000F8000
c:\windows\system32\wisptis.exe 0000083C 01000000 00031000
c:\program files\unikey\unikey.exe 000005F8 00400000 0002F000
c:\program files\microsoft office\office11\win... 00000A0C 30000000 00BAA000
c:\program files\techsmith\snagit 7\snagit32.... 00000E50 00400000 00390000
c:\program files\techsmith\snagit 7\tschelp.exe 00000B0C 00400000 0000A000
i:\cracker\debug- disassembler\odbg110_org... 0000013C 00400000 00153000
i:\cracker\tutori 00400000 0014B000
i:\cracker\utilitie 00400000 00036000
dump full...
dump partial...
dump region...
active dump engine
priority
correct ImageSize
load into PE editor... (temp file)
load into PE editor... (read only)
burn process
refresh F5
Path
ImageSize
i:\cracker\tutori 0014B000
c:\windows\sys 000A7000
c:\windows\sys 000E6000
c:\windows\sys 0008C000
c:\windows\sys 00040000
c:\windows\sys 0008D000
c:\windows\sys 00086000
c:\windows\sys 0001C000
c:\windows\sys 00008000
c:\windows\sys 0005A000
c:\windows\system32\msctf.dll 74720000 00044000
c:\windows\system32\msvcrt.dll 77C10000 00053000
c:\windows\system32\msctfime.ime 00A40000 00028000



Kiem Dumped.exe investigation file, run well. Good work, unpacked successful!

_That That we not get all the IAT len = 71C. Full IAT has 460F42-len = 460818 = 72A. Full IAT has attached this tut.

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini, hoadongnoi, dqtln, hosiminh, Nilrem, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, anh_surprised ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx to authors of OllyDBG.

To be continued ...

Written by **hacnho** (tutorial date: Saigon 25/08/2005)

Armadillo collect sand-stone

P han II Identification unpack + Debug Blocker type 1

I. Introduction:

Welcome to the first I only introduced through a standard model unpack Armadillo + dump anti, anti breakpoint, anti patch mem. This current form has two unpack. First is a paste in PE Header tut's bags, the second is to find MAGIC JUMP + patch that tlandn mentioned. In the process can unpack flexible switch. How to unpack this many variables that I do not have enough time to write all. You must choose to unpack a soft, patience is the virtue necessary to unpack armadillo.
In this tut I will guide you unpack a target to protect the Standard model + Debugblocker. Please see the type of Armadillo 4:30 Protect Pro Full version:

Method to unpack protect this type is known by only one and save people from the two men 1.x. pioneering work unpacker method is ArmKiller and [LUNAR_DUST]. On the NET now has two focuses of the forum trùm unpack armadillo is RCE Anticrack board and board. This method is popular on RCE, you can find in Woodmann.net read. Read more at:

http://www.woodmann.net/forum/forumdisplay.php?f=4

So DebugBlocker + II CopyMem What? Bít I do not say it correctly, but the experience is probably correct J :
_Khi Option we choose Debug-Blocker, the Armadillo will operate as it will create two on memory processes (process), the two called by the IT process is a role as a server, a process is created and managed by a server called a client. Calls by the cracker will have a divorce, a father is a child or a son. Progress parent will control the children in the debug mode, the load on it will create a Debug Events, then will joker unpack thẳng children, created for the children IAT, PE Header, sections by creating a temporary file (s ver 2.xx that before) or the treatment of memory and run it. We take this process to unpack it using the API are two breakpoint **WaitForDebugEvent** and **WriteProcessMemory.**

```
BOOL WriteProcessMemory (

HANDLE hProcess, / / handle to process whose memory is written to
LPVOID lpBaseAddress, / / address to start writing to
LPVOID lpBuffer, / / Pointer to buffer to write data to
DWORD nSize, / / number of bytes to write
LPDWORD lpNumberOfBytesWritten / / actual number of bytes written
);

BOOL WaitForDebugEvent (

LPDEBUG_EVENT lpDebugEvent, / / address of structure for event information
DWORD dwMilliseconds / / number of milliseconds to wait for event
);
```

II. Tools

1:10 OllyDBG with plugin: Hide Debugger 1.2.3f, Armadillo Process Detach Plugin v1.0, OllyDBG PE Dumper 3.0.3, Command Bar 3.10.109c has bug patch with RE-PAIR 0.6 + AntiDetectOlly_v2.2.4. It is important that you only use the plugin above, the other plugin please take away place. If you is not never Attach the child process, always hanging in Asia.

PE Tools v1.5.600.2005

Import REConstructor v1.6 FINAL

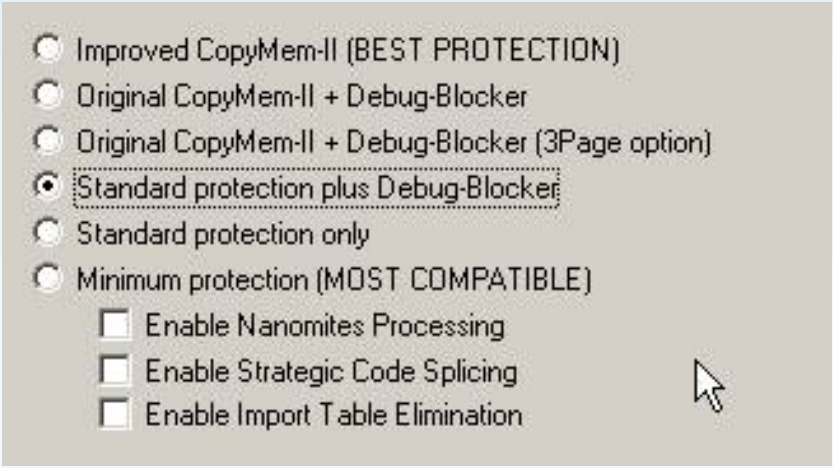
Debug blocker detect script I write for the media to determine the type protect this. How the script of this is quite simple: Find the signal ***0000C085*** file to determine. When xài must ignore all execptions.


```
/ / Scripts for OllyScript plugin by SHaG - http://ollyscript.apsvans.com
/ *
////////////////////////////////////////////// ////////////
/ / Armadillo's Debug Feature blocker or signal CopyMEM2 detective
/ / Author: hacnho from mod MEPHiST0s - ARMADiLLO Detective v1.00
/ / Email: hacnho@hotmail.com
/ / Website: http://tinicat.de/hacnho
/ / OS: WinXP Pro SP1, OllyDbg 1:10 Final, OllyScript v0.92
/ / ReLeAsE Date: 14 July 2005
////////////////////////////////////////////// ///////////
* /
```

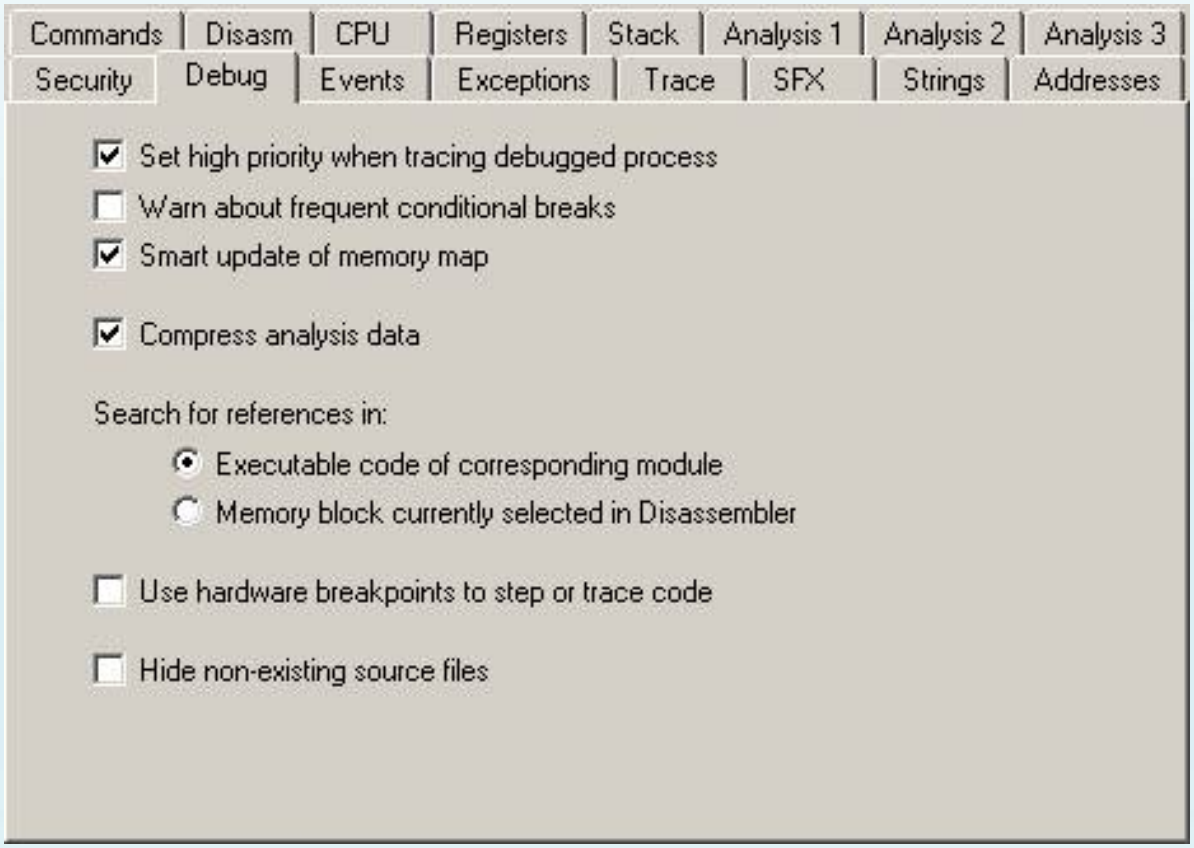
```
var signalcheck
var mem
var time
var nono


GPA "OpenMutexA", "kernel32.dll"
mov mem, $ RESULT
BP mem
esto
esto
rtr
STI
bc mem
GPA "time", "MSVCRT.dll"
mov time, $ RESULT
BP time
mov signalcheck, [eip]
and signalcheck, 0000FFFF
Cmp signalcheck, 0000C085 / / checking for debug blocker signal
je db

db:
jne nono
msg "This file is protected with Armadillo's Debug Feature blocker or CopyMEM II."
ret

nono:
msg "This file is protected with Armadillo's Debug Feature blocker or CopyMEM II."
ret
```

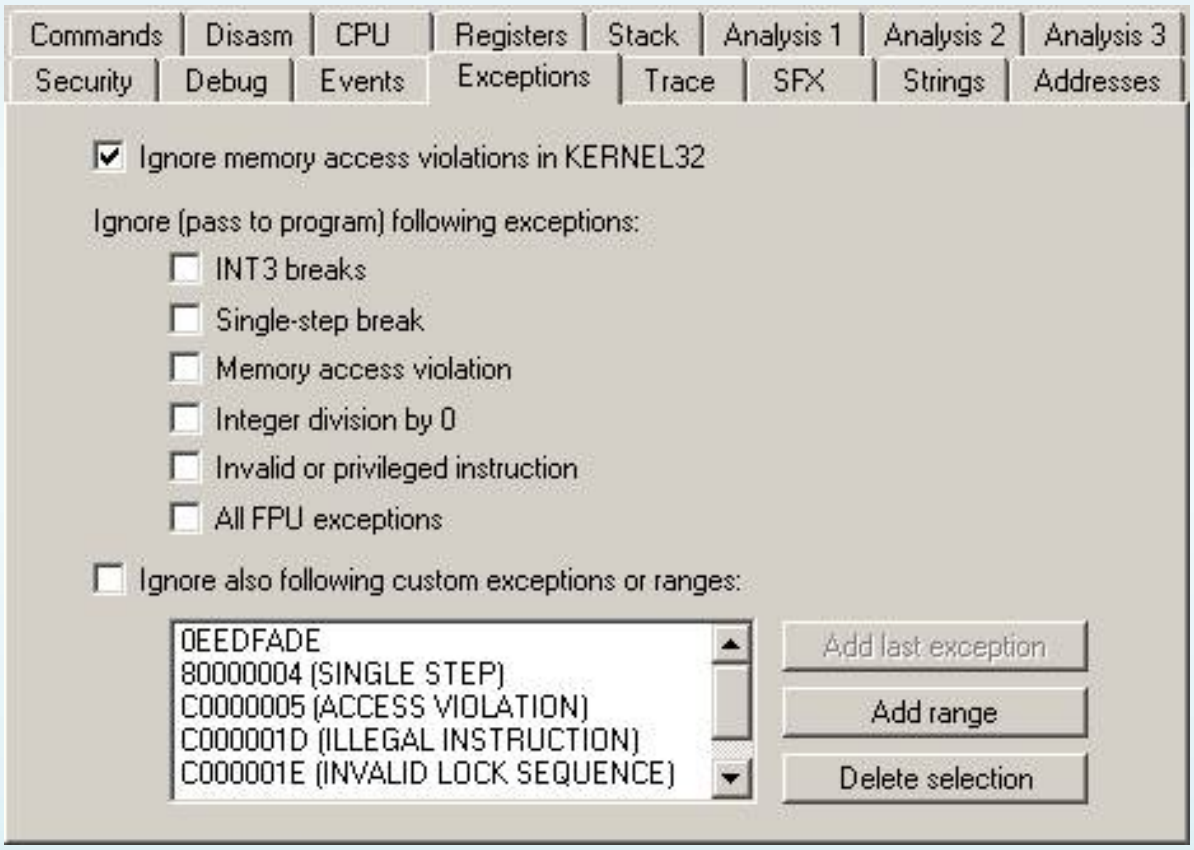
III. Manual Unpacking

TUT # 1: snd-UnPackMe_Armadillo4.00 Standard + Debug-Blocker

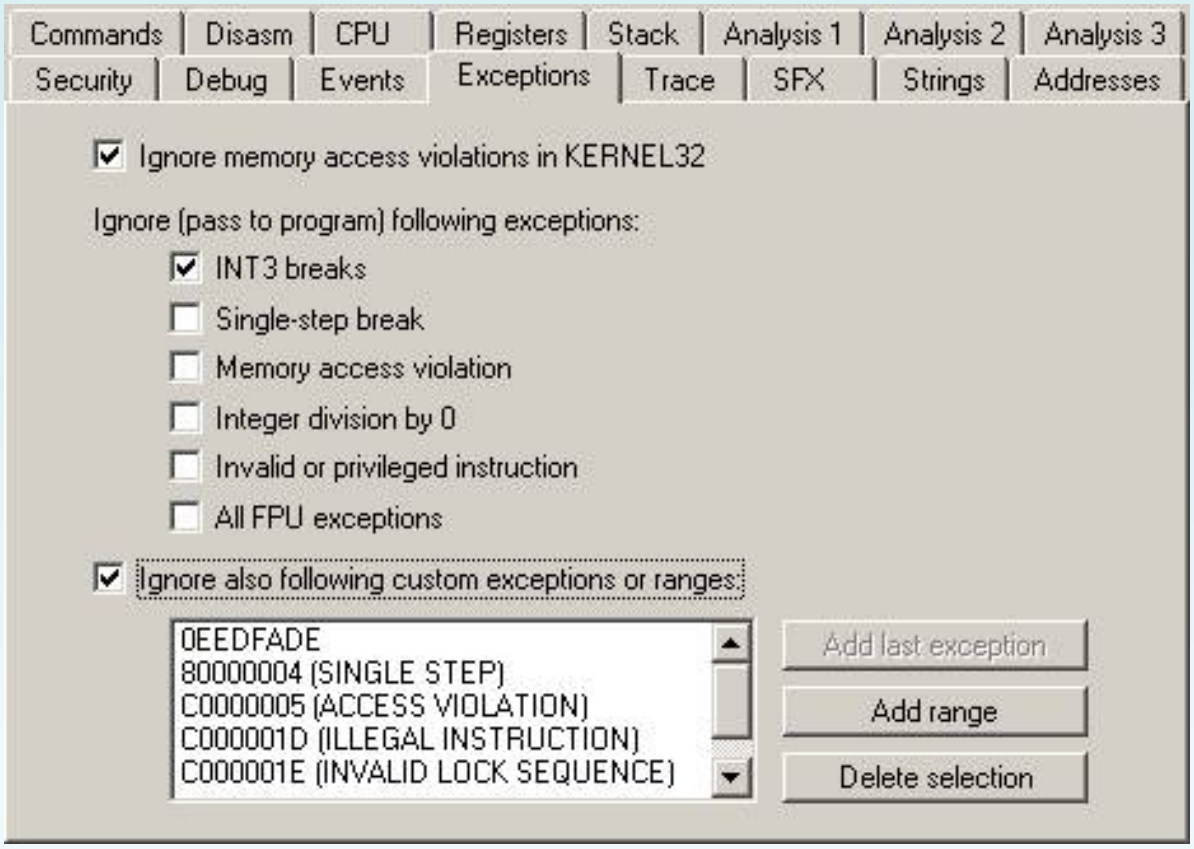


_Truoc All suggest you tune in Options OllyDBG as follows, if not will not Attach the child process:





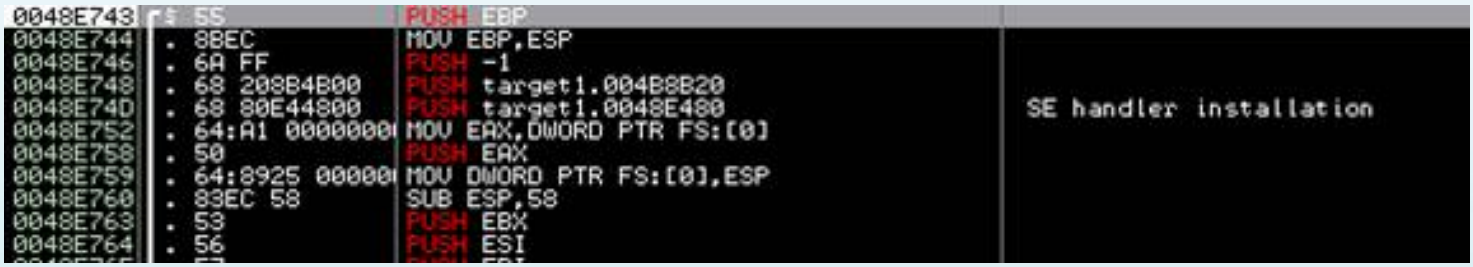
_Khi We work the process as the father on, when working with children is as follows:



_Co Three method to work on the parent process, use a script **arma_detach.osc,** using hand and Plugin: d. I just you to use your hands. The other two it is done automatically,

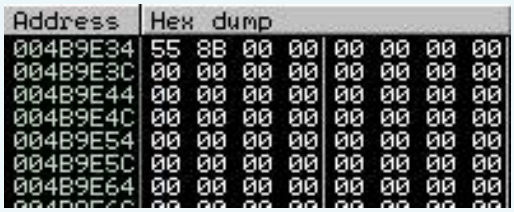
chả you need to do anything but crash quite a lot, use your hands to ensure food J .

*. After OllyDBG load used to target:



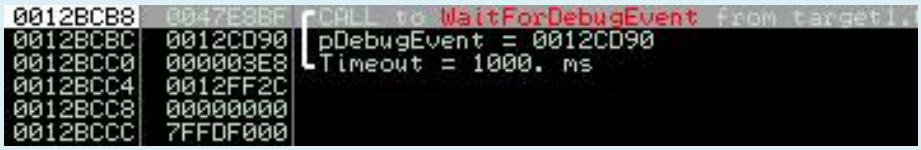
*. Set breakpoint WriteProcessMemory, Shift + F9 twice (as long as you target after we saw the window stack visible function WriteProcessMemory have to load our target is OK:

*. You pay attention to the Buffer, which will patch it to jump to the EIP. Now you must click on the Buffer, select Follow in dump. Through the window dump, you will see the following:



*. Two bytes of this block, Ctrl + E to revise **EB FE:**

*. Now you add a breakpoint again to hook the process I have said above, parents thẳng process will create a DebugEvent.Ok, BP WaitForDebugEvent, Shift + F9, Ctrl + F9, F7. Too dangerous: d.



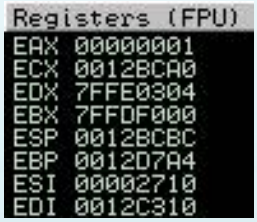
*. To have two method to assemble:

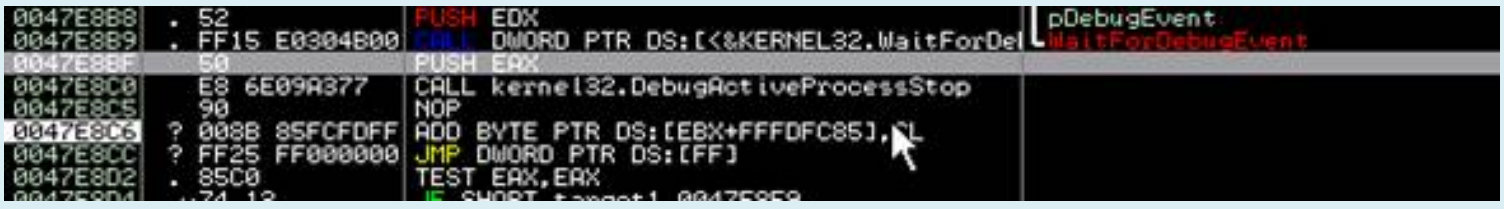
PUSH PID (PID = Process ID)
CALL DebugActiveProcessStop
NOP
You may have been accurate in PID Olly Dbg, by clicking File> Attach>
There we will have 2 files are running FlashFavourite - select get correct process that is not highlighted RED. This is the PID that we need ...

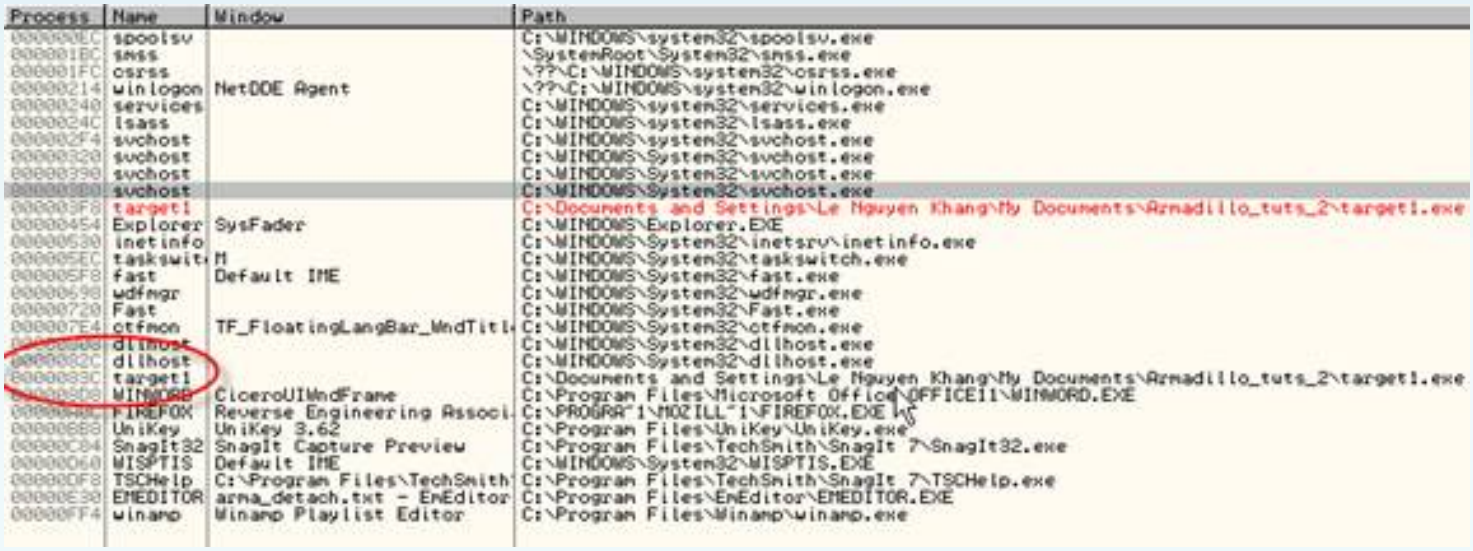
Or

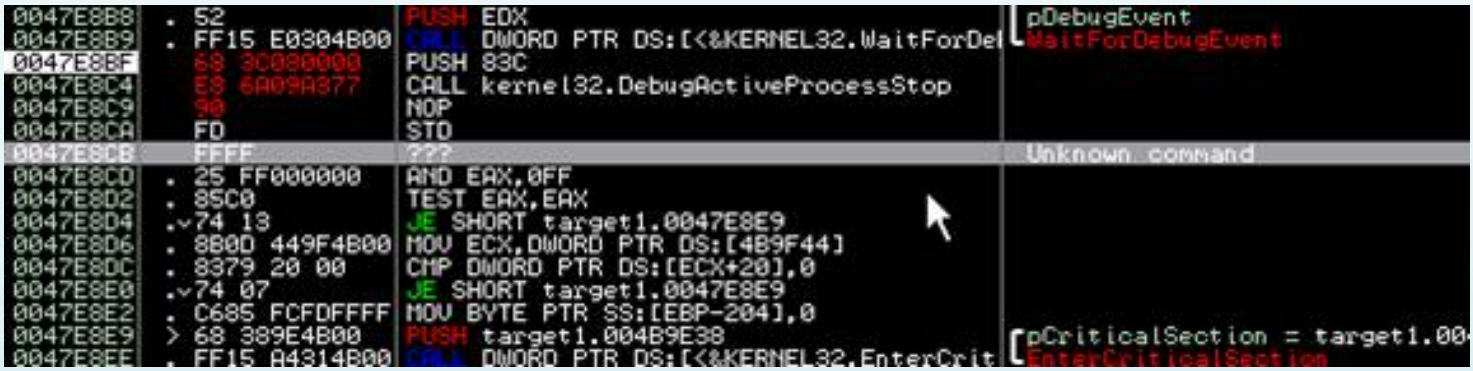
*/ * * 47E8BF / PUSH EAX*
*/ * * 47E8C0 / CALL kernel32.DebugActiveProcessStop*
*/ * * 47E8C5 / NOP*

(Value of EAX = 1).



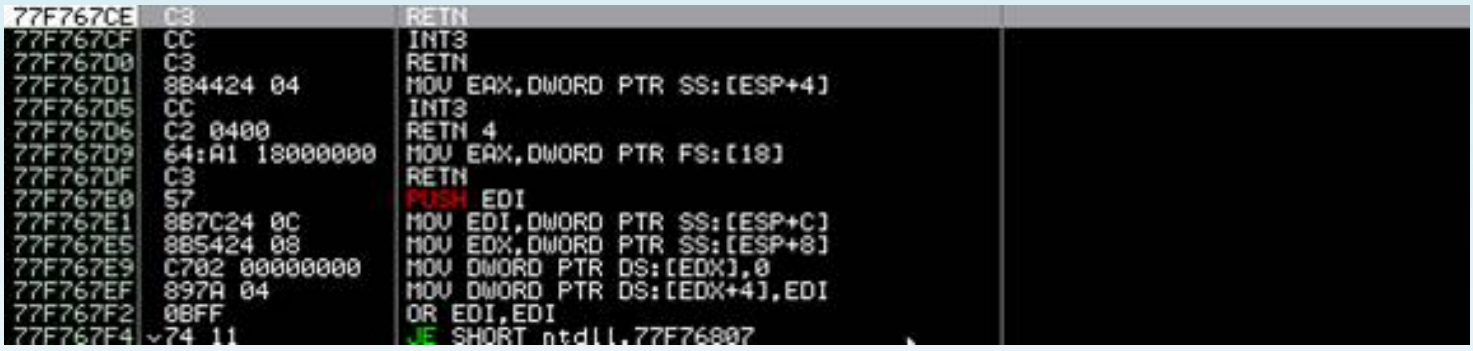




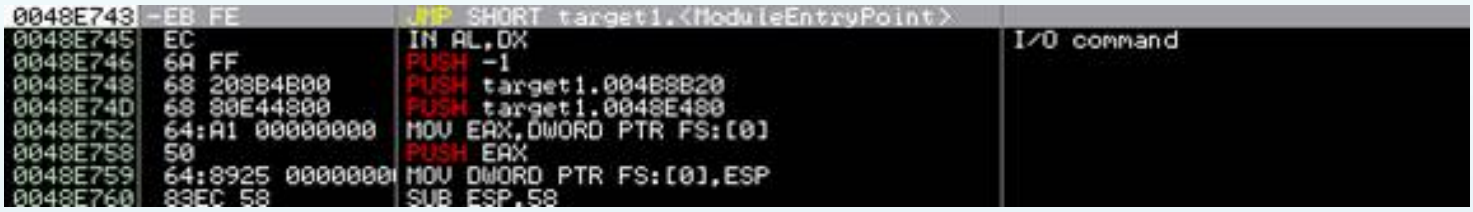


*. You press F8 to the filed, stop, the process of working on the parent process has been temporarily closed.

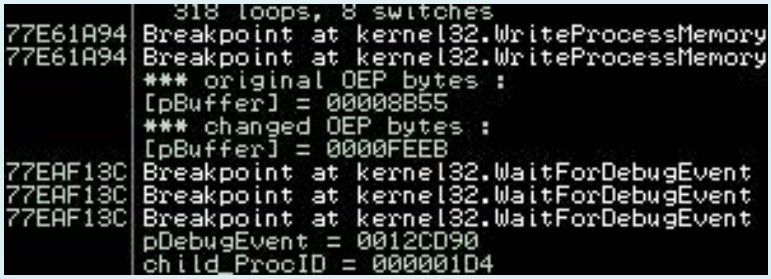
_Bay Time you open a window OllyDBG other, choose File-> Attach, select the process with PID like you find in (the bags are 83C). If you configure as above, the Attach a rup.



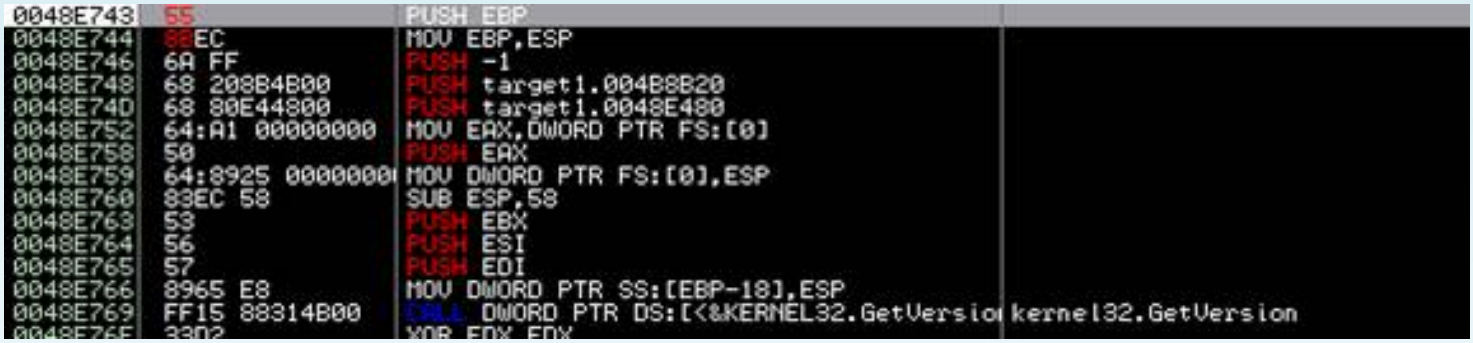
_Bay Time you edit the OPTIONS OllyDBG like above, press F9, then press F12.



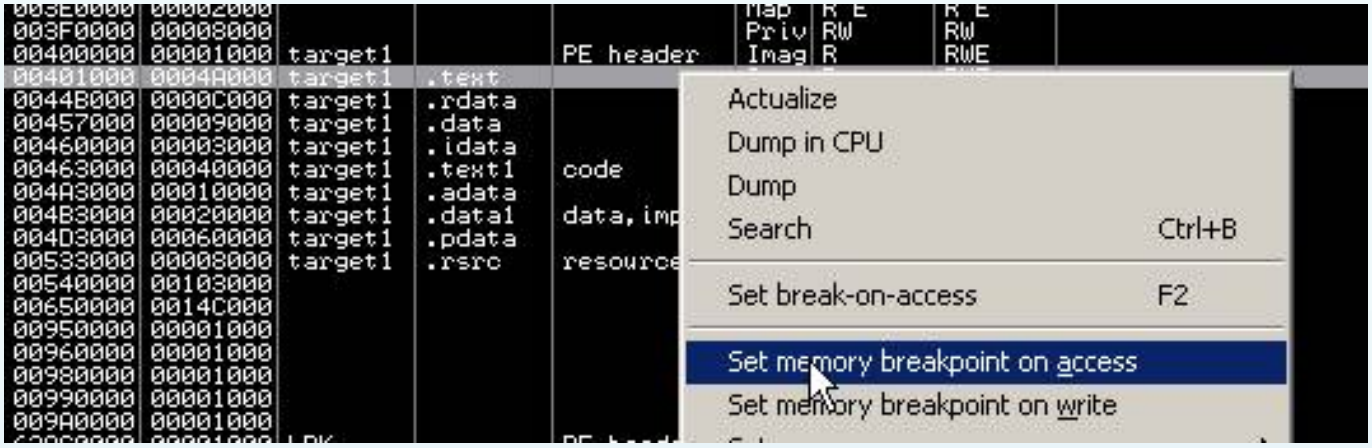
_Chac Certainly you remember just two bytes original patch above. If kô remember the last window is OllyDBG father debug process, click the button **L,** to review:



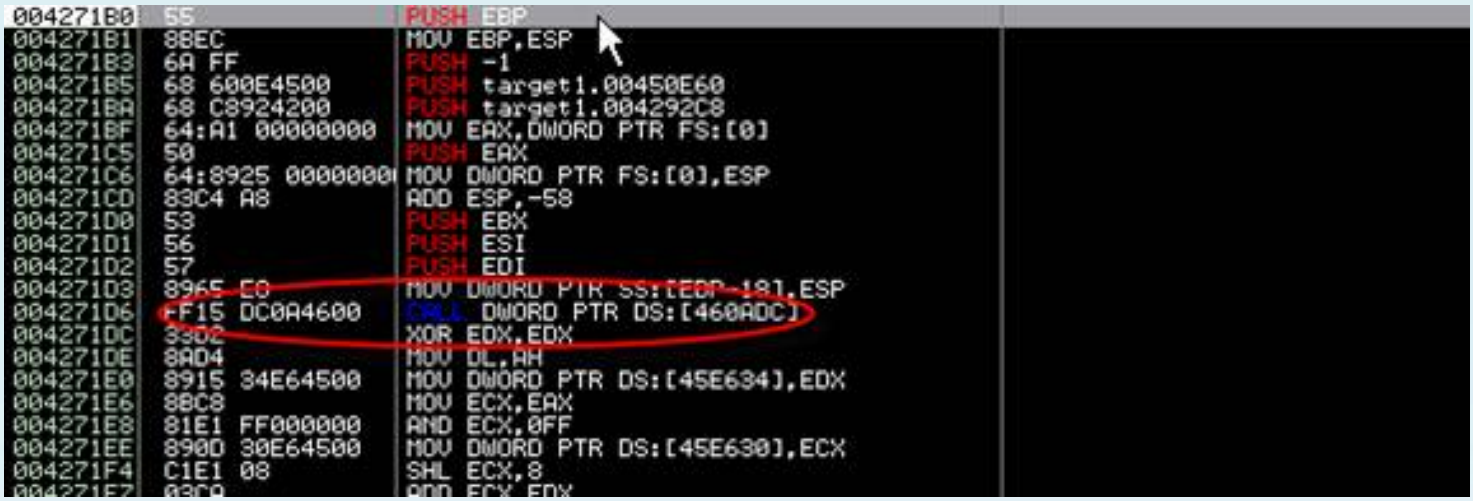
_OK, Org bytes is 558B. Back Olly debug the process, press Ctrl + E to edit **EB FE 55 8B.**



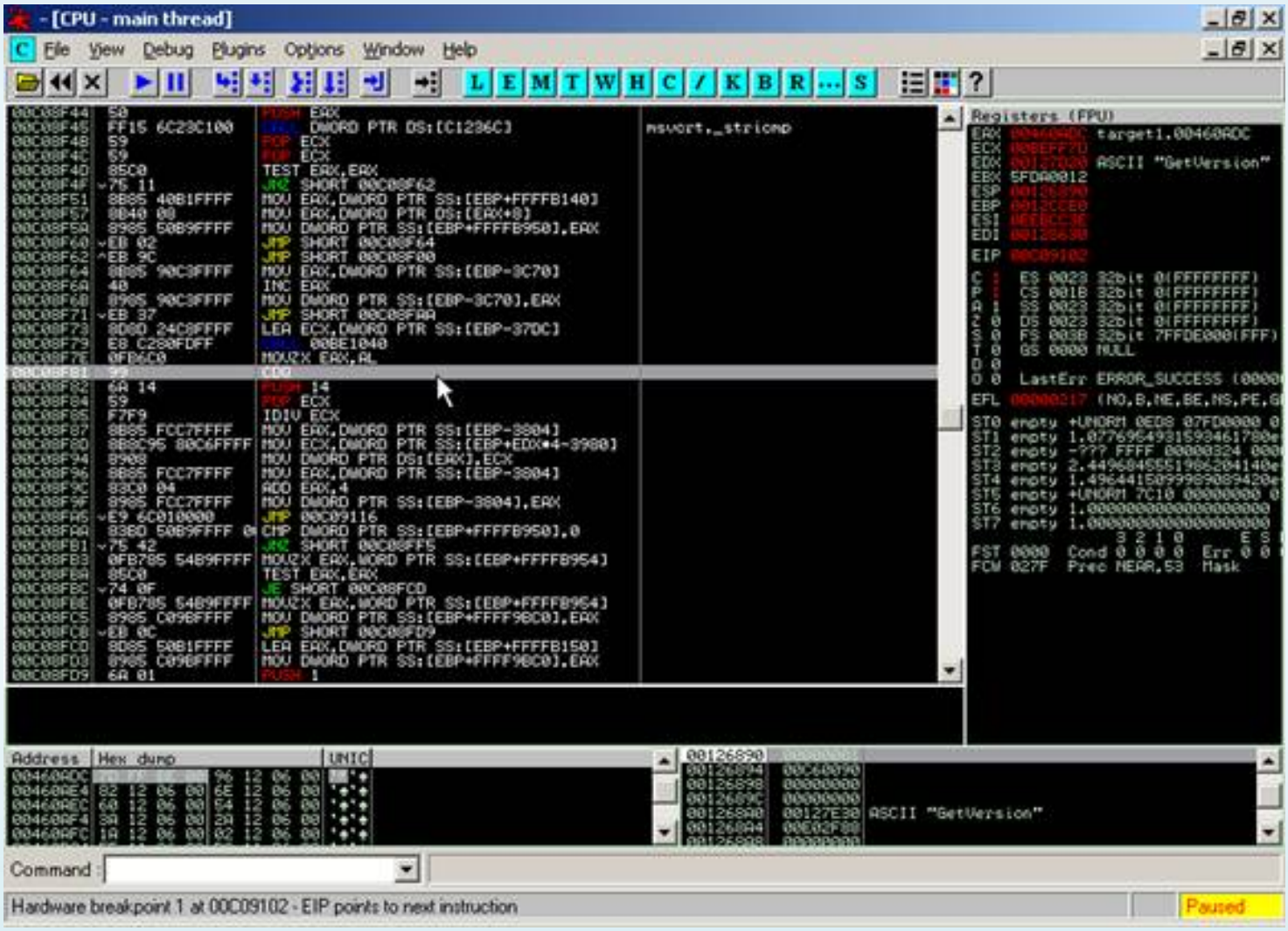
_Bay Time you press Alt + M to Memory Map, set breakpoint on memory access in text sections.



_Shift + F9, you will jump to OEP. To call out the function.



_Khoai Too, OEP to call. This return to fix Magic JUMP as standard version. To this you will have many ways to dump, fix IAT. How to paste PE Header, Find magic jump, plunging even as the parties MP2K, dek thèm ráo fix anything, to add a function to, so that also runs J. I previously had to guide you unpack a standard method, add this one more is done.
_ Okie, now you close the window OllyDBG of the process, the restart process OllyDBG father, as the steps similar to the patch org bytes 55 8B. Here you through the window Memory dump, Ctrl + G, enter 460ADC, selected first 4 bytes, set HardwareBreakpoint type DWord write on. Press Shift + F9 to run. Press Shift + F9 again you will here:

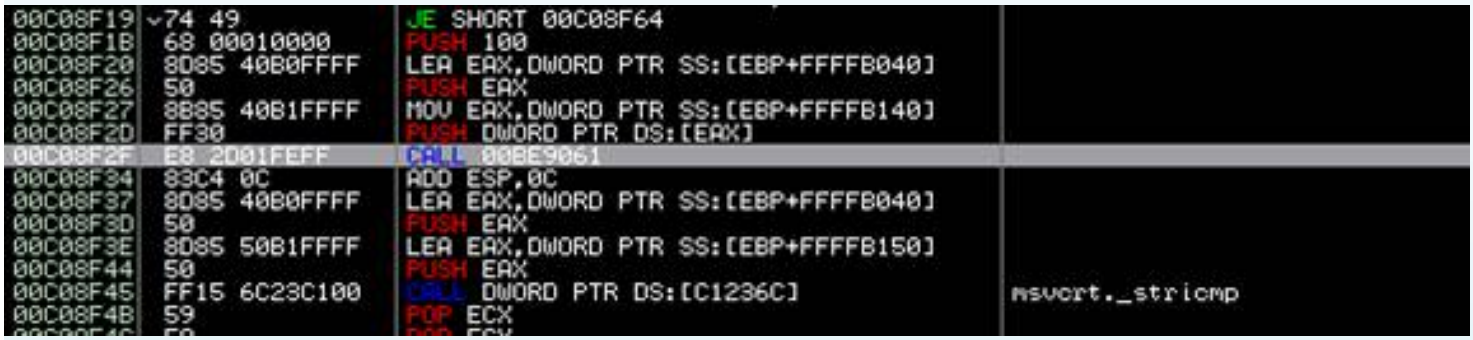


_Neu To do here, you have quite enough. Belgium now the code window, you scroll back up search functions

00C08F45 FF15 6C23C100 CALL DWORD PTR DS: [C1236C]; msvcrt._stricmp

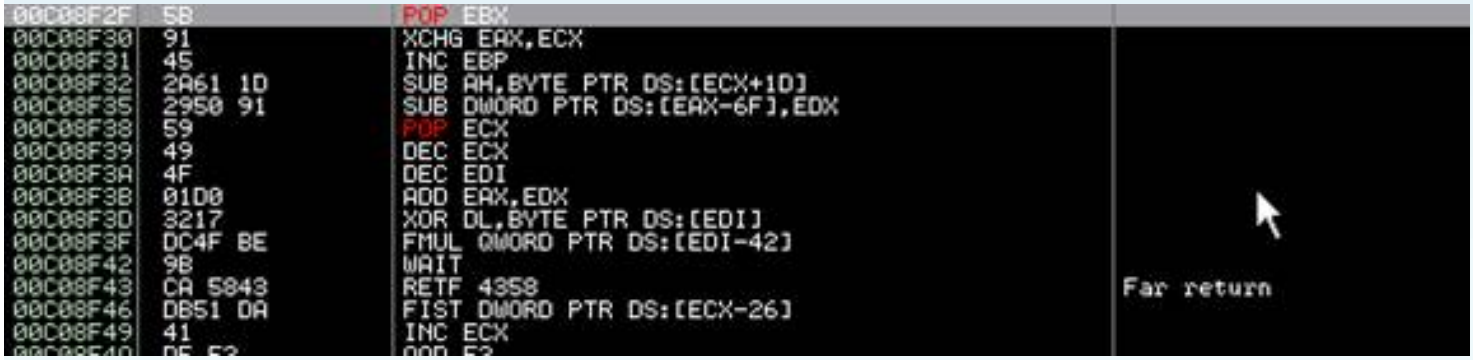
_ This is a sign for us to find Magic Jump. So what is the Magic Jump. Talk to Ardmadillo often heard of. Actually, the magic jump mechanism is protected by armadillo is it to have two IAT (Import Address Table). As usual it xài IAT fake, when the police to catch it in fact the IAT and the month is the magic of its huyet. Magic Jump have moved central role, helping armadillo easily switch between the two IAT. The mission of our finding is Magic Jump to fix it, we can help IAT origin. Very simple as the skipper J ...

_Roi, A little mouse on the functions you see on Call stricmp function, note the address of it.

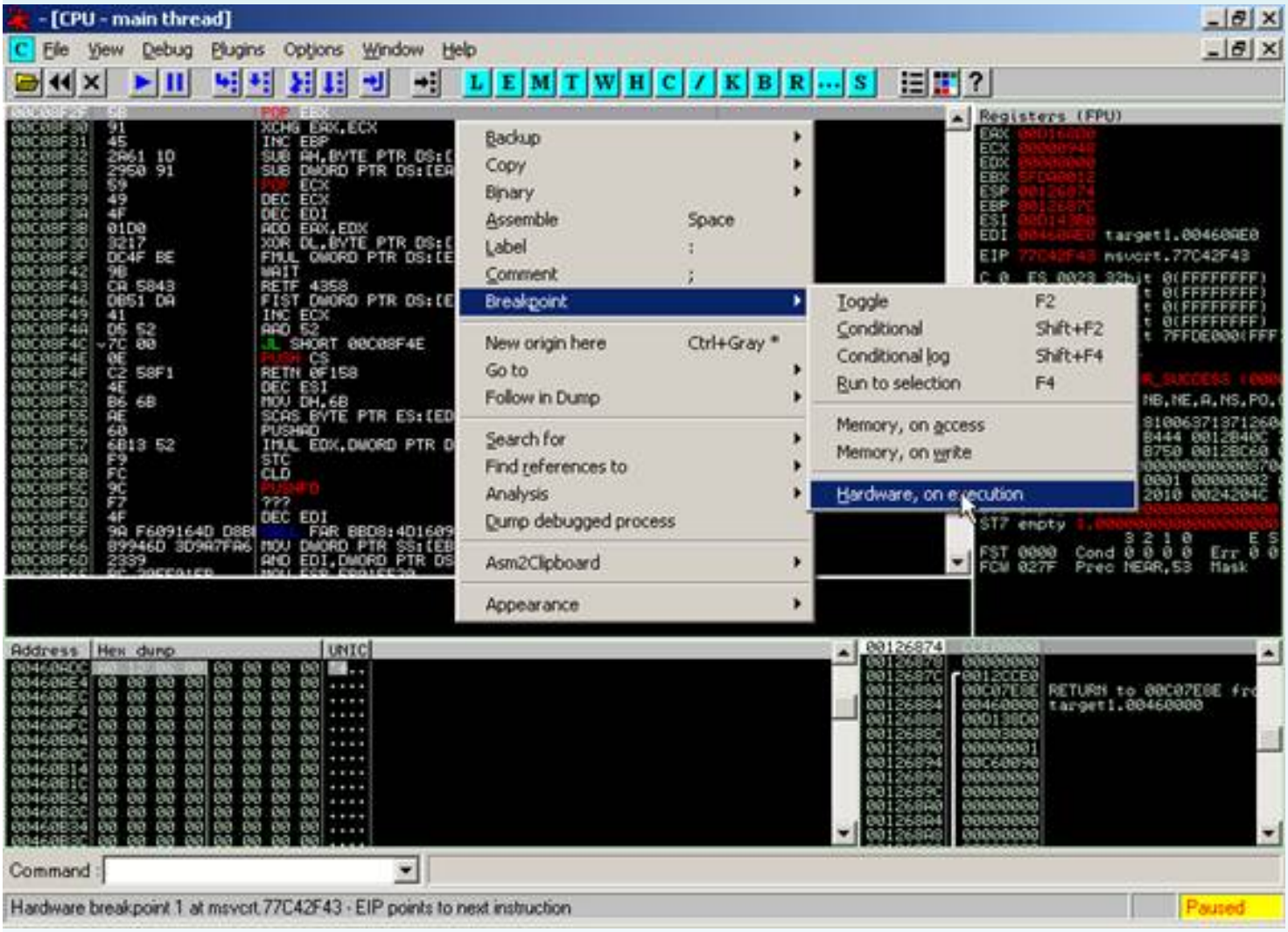


_Lap Again: now you close the window OllyDBG of the process, the restart process OllyDBG father, as the steps similar to the patch org bytes 55 8B. Here you through the window Memory dump, Ctrl + G, enter 460ADC, selected first 4 bytes, placed on HardwareBreakpoint write Word style. Press Shift + F9:

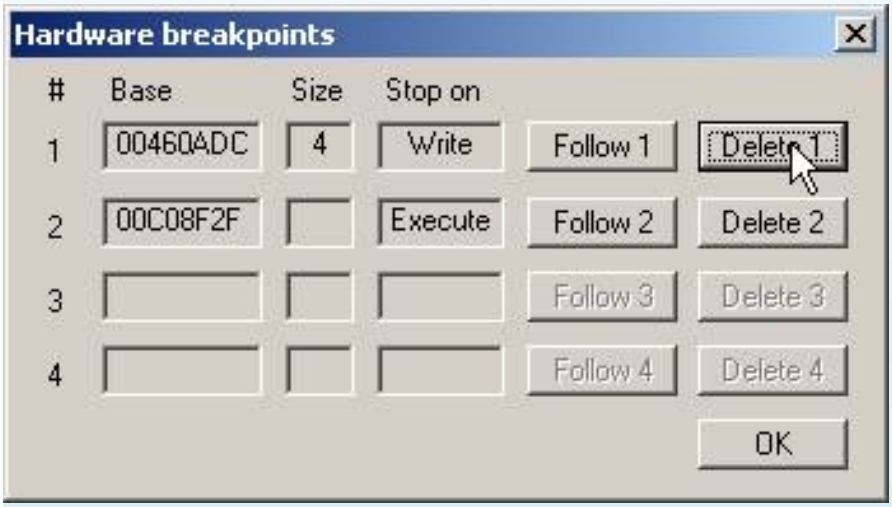
_ Here you press Ctrl + G, enter 00C08F2F, you will jump to this code:



_Tai 00C08F2F address, you must click, set a (HardwareBreakpoint on Excution):



_Nhu So we have two breakpoint, delete HarwareBreakpoint on Write:



_Nhan F9, you will jump to this code:

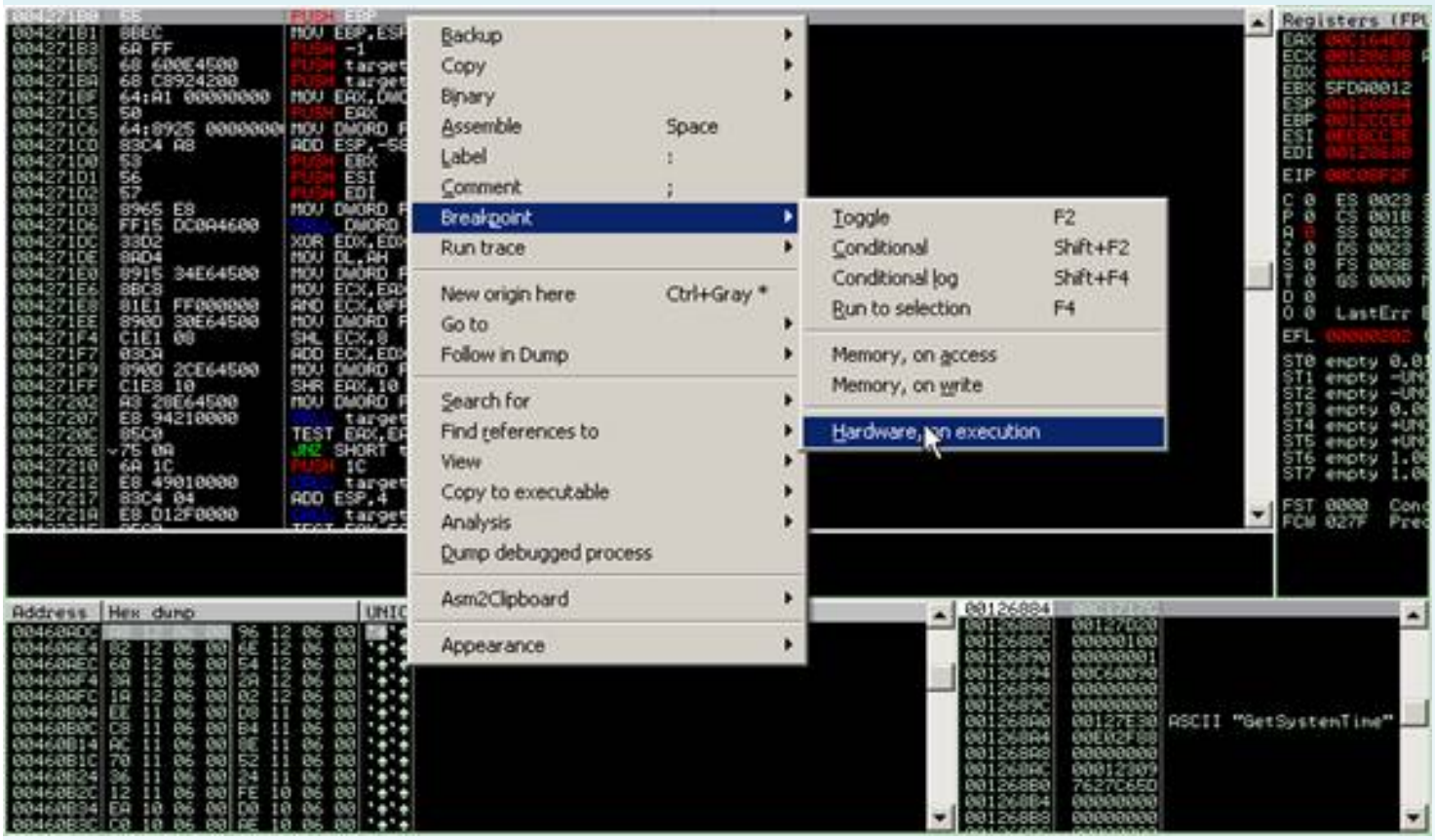
```
00C08F2F   E8 2D01FEFF     CALL 00BE9061
00C08F34   83C4 0C         ADD ESP,0C
00C08F37   8D85 40B0FFFF   LEA EAX,DWORD PTR SS:[EBP+FFFFB040]
00C08F3D   50              PUSH EAX
00C08F3E   8D85 50B1FFFF   LEA EAX,DWORD PTR SS:[EBP+FFFFB150]
00C08F44   50              PUSH EAX
00C08F45   FF15 6C23C100   CALL DWORD PTR DS:[C1236C]          msvcrt._stricmp
00C08F4B   59              POP ECX
00C08F4C   59              POP ECX
00C08F4D   85C0            TEST EAX,EAX
00C08F4F  ~75 11           JNZ SHORT 00C08F62
00C08F51   8B85 40B1FFFF   MOV EAX,DWORD PTR SS:[EBP+FFFFB140]
00C08F57   8B40 08         MOV EAX,DWORD PTR DS:[EAX+8]
00C08F5A   8985 50B9FFFF   MOV DWORD PTR SS:[EBP+FFFFB950],EAX
00C08F60  ~EB 02           JMP SHORT 00C08F64
00C08F62  ^EB 9C           JMP SHORT 00C08F00
```

_Chung We need to patch this function, enter at 00C08F2F E8 2D01FEFF CALL 00BE9061 you jump into the jaw, Ctrl + E, the 55 to C3:

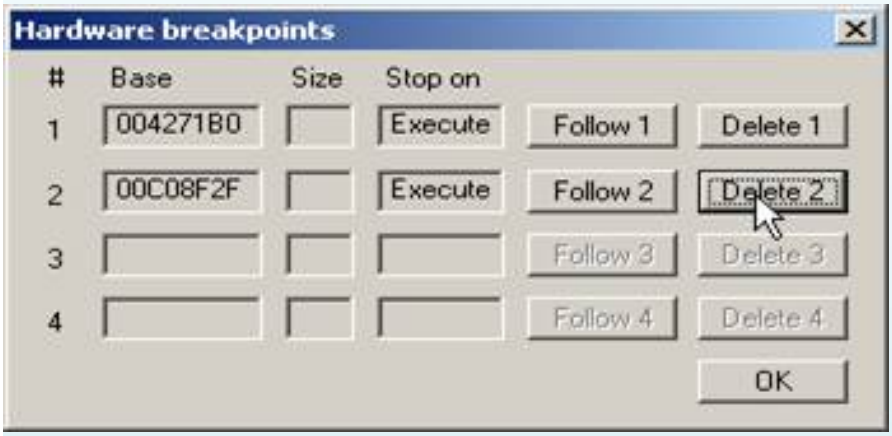
```
00BE9061   55              PUSH EBP
00BE9062   8BEC            MOV EBP,ESP
00BE9064   51              PUSH ECX
00BE9065   A1 04ADC100     MOV EAX,DWORD PTR DS:[C1AD04]
00BE906A   53              PUSH EBX
00BE906B   56              PUSH ESI
00BE906C   57              PUSH EDI
00BE906D   85C0            TEST EAX,EAX
00BE906F  ~75 37           JNZ SHORT 00BE90A8
00BE9071   68 00010000     PUSH 100
00BE9076   C745 FC 1C29864 MOV DWORD PTR SS:[EBP-4],4786291C
00BE907D   E8 C0830200     CALL 00C11442                       JMP to msvcrt.??2@YAPAXI@Z
```

```
00BE9061   C3              RETN
00BE9062   8BEC            MOV EBP,ESP
00BE9064   51              PUSH ECX
00BE9065   A1 04ADC100     MOV EAX,DWORD PTR DS:[C1AD04]
00BE906A   53              PUSH EBX
00BE906B   56              PUSH ESI
00BE906C   57              PUSH EDI
00BE906D   85C0            TEST EAX,EAX
00BE906F  ~75 37           JNZ SHORT 00BE90A8
00BE9071   68 00010000     PUSH 100
00BE9076   C745 FC 1C29864 MOV DWORD PTR SS:[EBP-4],4786291C
```

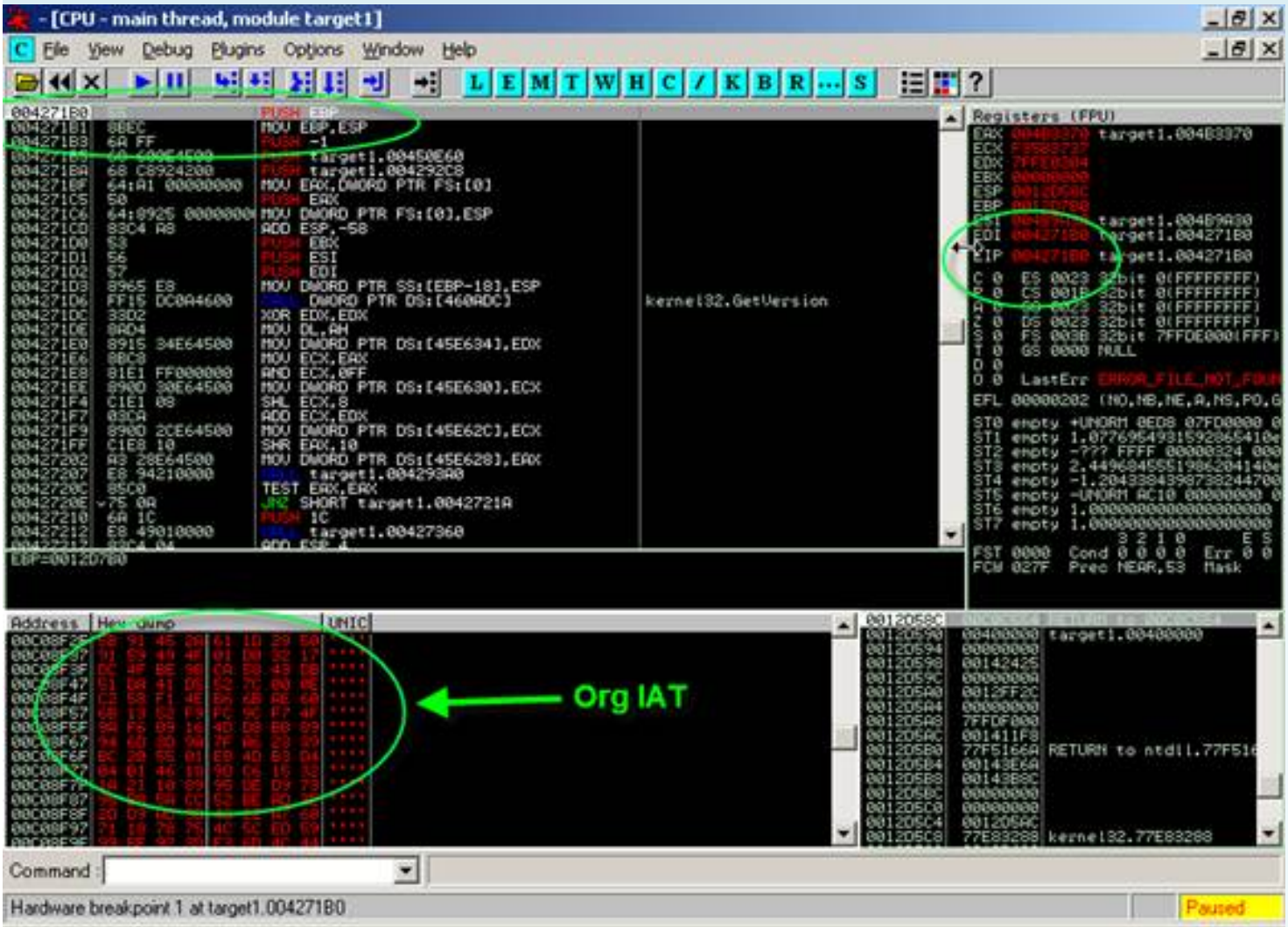
_Bam '-', Press Ctrl + G, enter the address of OEP: 4271B0, we also set a breakpoint HE:



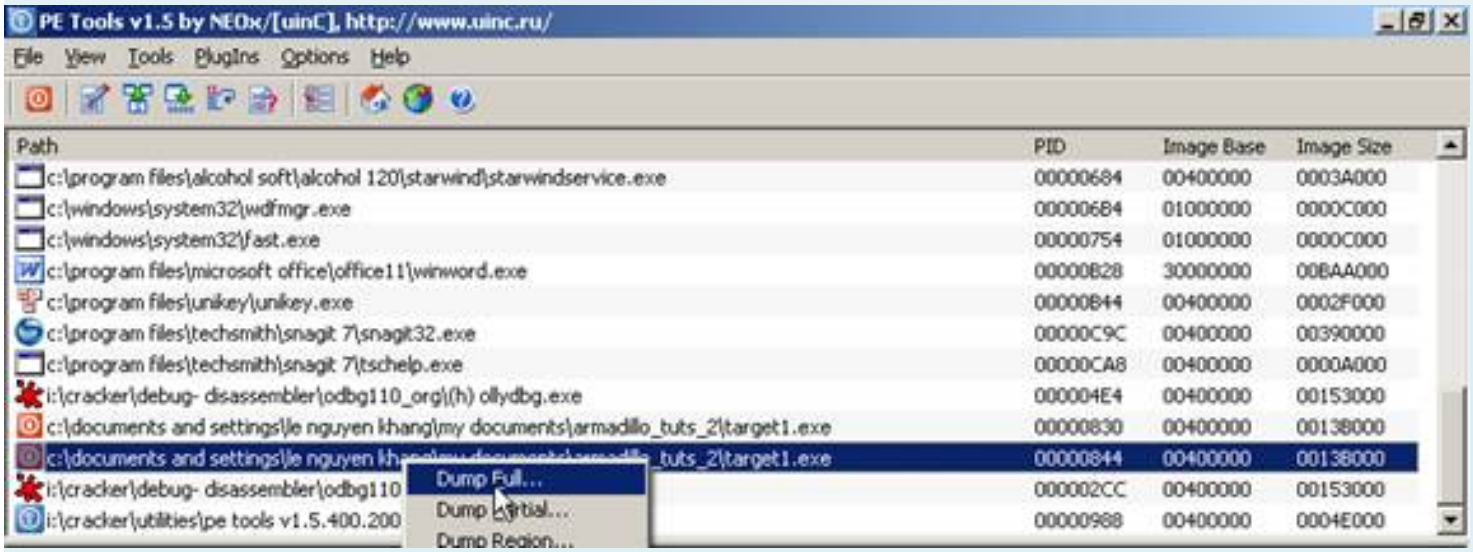
_Oai Too, but soon end and this tut, belgium time you remove HE 00C08F2F at:

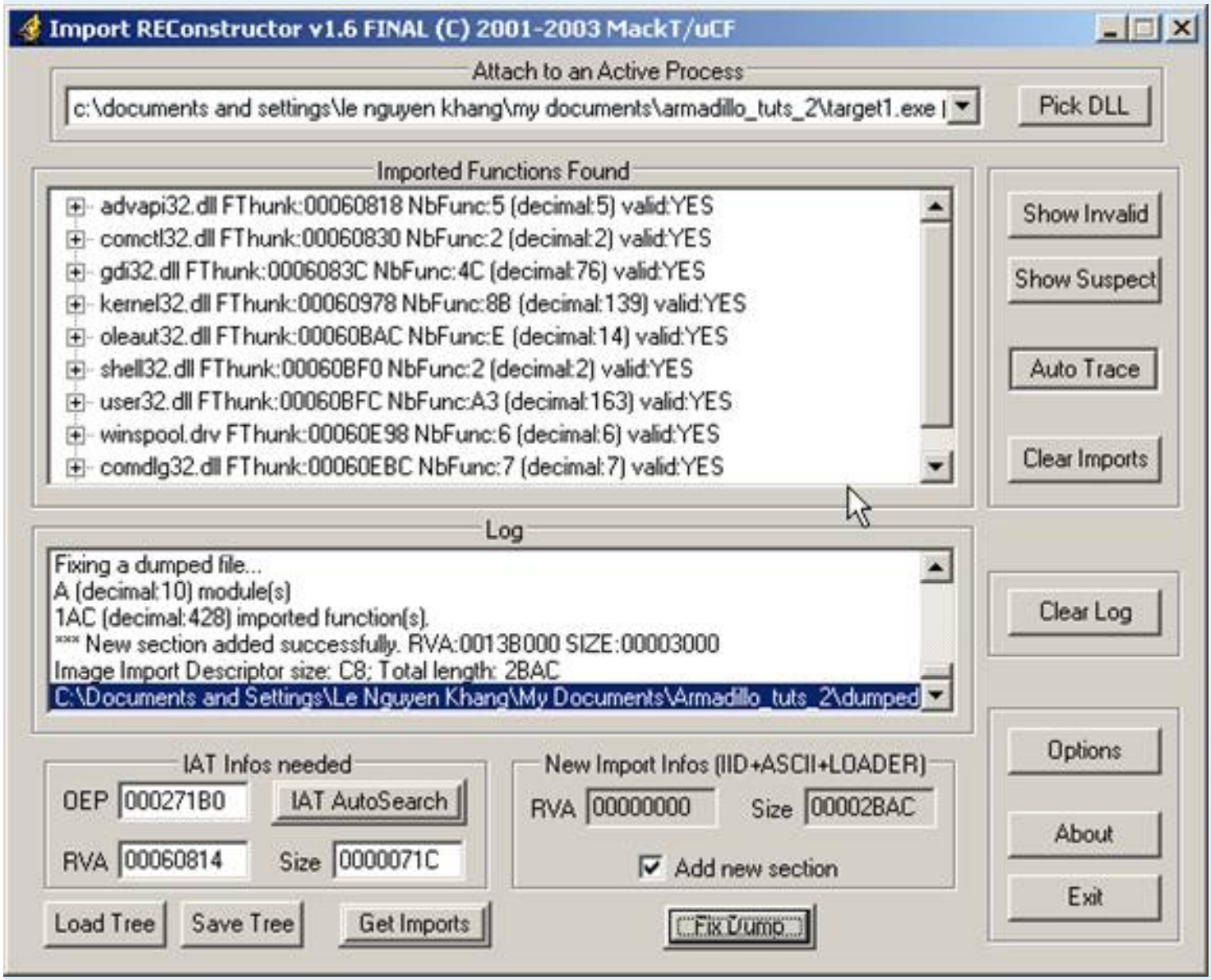


_Nhan '-', You return to the function 00C08F2F E8 2D01FEFF CALL 00BE9061, press F9, you'll break in:



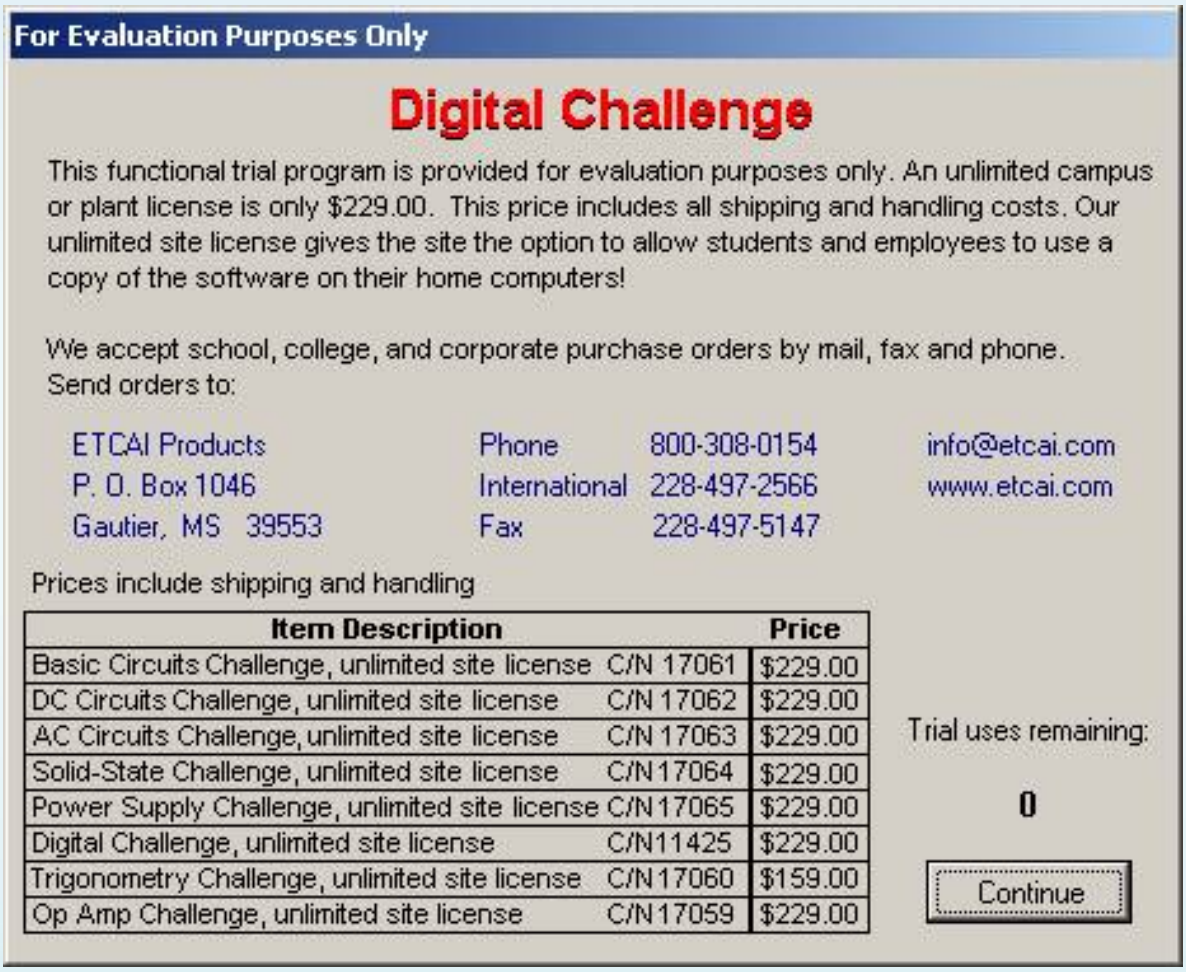
_Wow Now dump in FULL PETools, remember to choose the correct PID:





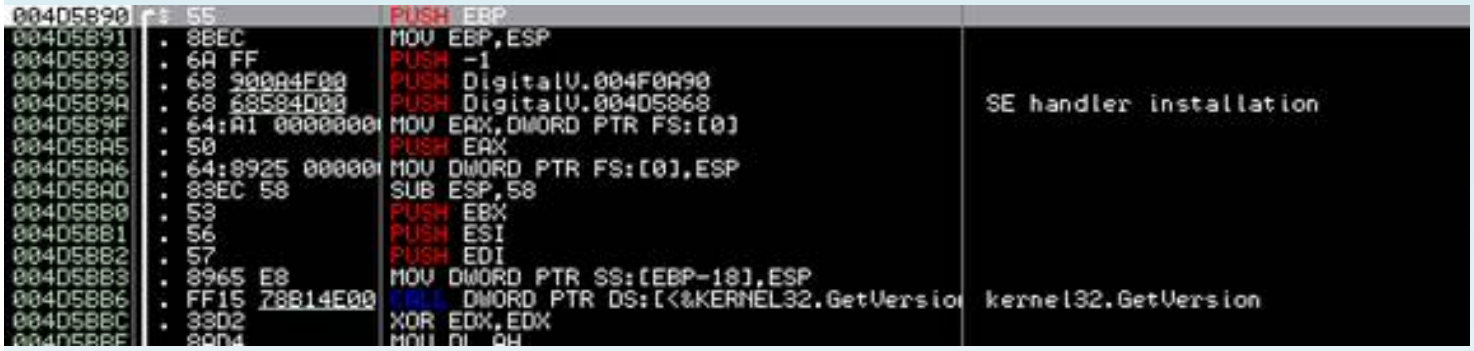
kiem dumped.exe investigation file, run well. Good work, unpacked successful!

TUT # 2: Evaluate Digital Challenge 4 - Armadillo 4.xx-Debug-blocker.



_Tut On our test on a target unpackme. Tut we test this on with a soft coding Delphi . Unpack only one other place, but the mind a bit. OK, go go go ...

_Load On target:



_Chung We will use the script for ceremony, the plugin menu, select arma_detach.osc scripts, OllyScript will change for our work by manually pass blocker Debug Feature. If you see the EAX = 1 is successful you have to remove Debug Blocker! Done, you'll stop here:

```
004C5F04    50              PUSH EAX
004C5F05    E8 29939E77     CALL kernel32.DebugActiveProcessStop
004C5F0A    90              NOP
004C5F0B  ? 0068 60         ADD BYTE PTR DS:[EAX+60],CH
004C5F0E  ? 194F 00         SBB DWORD PTR DS:[EDI],ECX
004C5F11  . FF15 A0B14E00   CALL DWORD PTR DS:[<&KERNEL32.EnterCrit  EnterCriticalSection
004C5F17  . 60              PUSHAD
004C5F18  . 33C0            XOR EAX,EAX
004C5F1A  .v75 02           JNZ SHORT DigitalV.004C5F1E
004C5F1C  .vEB 15           JMP SHORT DigitalV.004C5F33
004C5F1E  >vEB 33           JMP SHORT DigitalV.004C5F53
004C5F20    C0              DB C0
004C5F21  .v75 18           JNZ SHORT DigitalV.004C5F3B
004C5F23  . 7A 0C           JPE SHORT DigitalV.004C5F31
004C5F25  >70 0E            JO SHORT DigitalV.004C5F35
004C5F27  .vEB 0D           JMP SHORT DigitalV.004C5F36
004C5F29    E8              DB E8
004C5F2A    72              DB 72                        CHAR 'r'
004C5F2B    0E              DB 0E
```

```
Registers (FPU)
EAX 00000001
ECX 0012BCA0
EDX 7FFE0304
EBX 7FFDF000
ESP 0012BCBC
EBP 0012D7A4
ESI 00002710
EDI 0012C310
EIP 004C5F0B DigitalV.004C5F
C 0  ES 0023 32bit 0(FFFFFFF
```

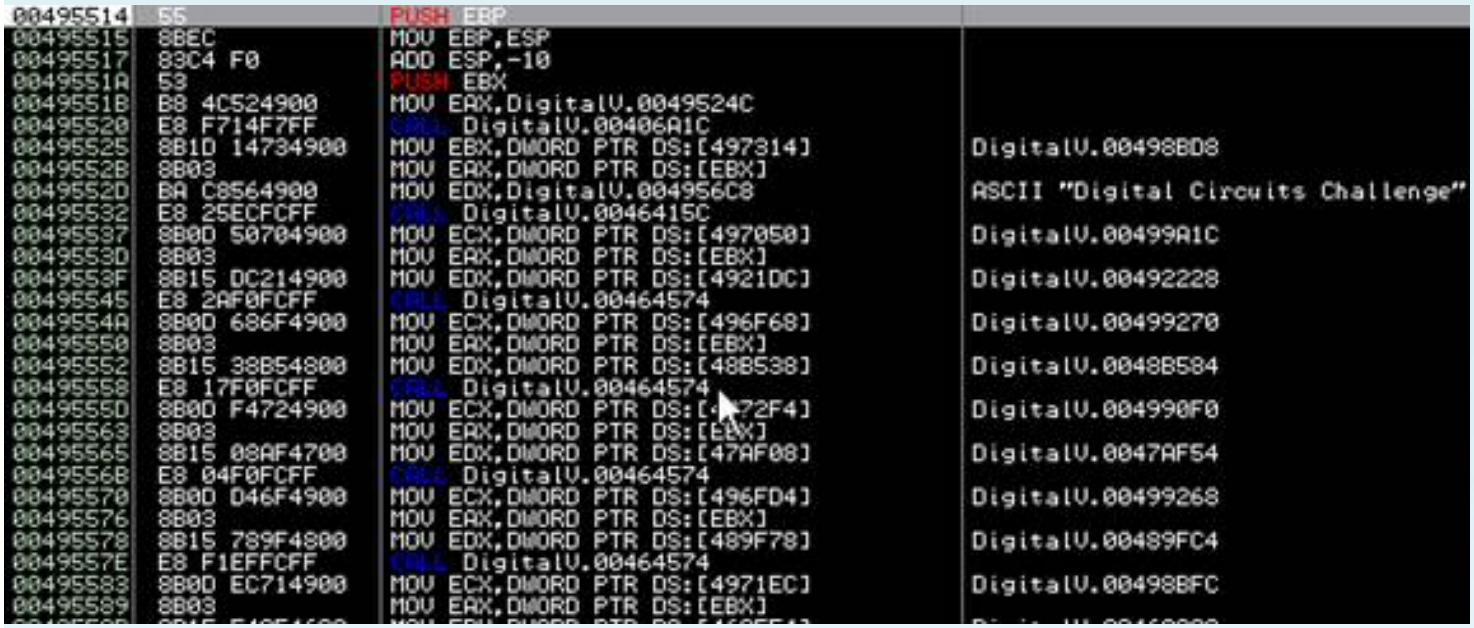
_Xem PID process is by how much, my B0C:

Process	Name	Window	Path
000001BC	smss		\SystemRoot\System32\smss.exe
000001FC	csrss		\??\C:\WINDOWS\system32\csrss.exe
00000214	winlogon	NetDDE Agent	\??\C:\WINDOWS\system32\winlogon.exe
00000240	services		C:\WINDOWS\system32\services.exe
0000024C	lsass		C:\WINDOWS\system32\lsass.exe
000002F4	svchost		C:\WINDOWS\system32\svchost.exe
00000320	svchost		C:\WINDOWS\System32\svchost.exe
00000388	svchost		C:\WINDOWS\System32\svchost.exe
000003C0	svchost		C:\WINDOWS\System32\svchost.exe
000003F8	UniKey	UniKey 3.62	C:\Program Files\UniKey\UniKey.exe
00000468	Explorer	SysFader	C:\WINDOWS\Explorer.EXE
00000488	spoolsv		C:\WINDOWS\system32\spoolsv.exe
0000050C	DkServic		C:\Program Files\Executive Software\Diskeeper\DkService.exe
0000052C	inetinfo		C:\WINDOWS\System32\inetsrv\inetinfo.exe
0000056C	MDM		C:\Program Files\Common Files\Microsoft Shared\VS7DEBUG\MDM.EXE
000005B8	taskswit	M	C:\WINDOWS\System32\taskswitch.exe
000005D0	sqlservr		C:\PROGRA~1\MI6841~1\MSSQL\binn\sqlservr.exe
000005D4	fast	Default IME	C:\WINDOWS\System32\fast.exe
000005F4	sqlmangr	SQL Server Service Manager	C:\Program Files\Microsoft SQL Server\80\Tools\Binn\sqlmangr.exe
00000654	StarWind		C:\Program Files\Alcohol Soft\Alcohol 120\StarWind\StarWindService.exe
0000067C	WISPTIS	Default IME	C:\WINDOWS\System32\WISPTIS.EXE
00000684	wdfmgr		C:\WINDOWS\System32\wdfmgr.exe
00000724	Fast		C:\WINDOWS\System32\Fast.exe
00000804	dllhost		C:\WINDOWS\System32\dllhost.exe
00000928	dllhost		C:\WINDOWS\System32\dllhost.exe
00000954	(h) OLLV	TestDbg - [CPU]	I:\Cracker\Debug- Disassembler\odbg110_org\(h) OLLVDBG.EXE
00000990	nsdto		C:\WINDOWS\System32\nsdto.exe
000004F8	DigitalV		C:\Program Files\ETCAI Products\Digital Challenge Evaluation\DigitalV4.exe
0000080C	DigitalV		C:\Program Files\ETCAI Products\Digital Challenge Evaluation\DigitalV4.exe
00000844	ctfmon	TF_FloatingLangBar_WndTitl	C:\WINDOWS\System32\ctfmon.exe
0000085C	winamp	Winamp Playlist Editor	C:\Program Files\Winamp\winamp.exe
00000C88	emeditor	temp1.txt - EmEditor	C:\Program Files\EmEditor\emeditor.exe
00000CE4	WINWORD	CiceroUIWndFrame	C:\Program Files\Microsoft Office\OFFICE11\WINWORD.EXE
00000D2C	SnagIt32	SnagIt Capture Preview	C:\Program Files\TechSmith\SnagIt 7\SnagIt32.exe
00000D3C	TSCHelp	C:\Program Files\TechSmith	C:\Program Files\TechSmith\SnagIt 7\TSCHelp.exe

_Mo A OllyDBG other up, Attach process with PID B0C, F9, F12 you here:

```
004D5B90  -EB FE            JMP SHORT DigitalV.<ModuleEntryPoint>
004D5B92    EC              IN AL,DX                     I/O command
004D5B93    6A FF           PUSH -1
004D5B95    68 900A4F00     PUSH DigitalV.004F0A90
004D5B9A    68 685B4D00     PUSH DigitalV.004D5B68
004D5B9F    64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
004D5BA5    50              PUSH EAX
004D5BA6    64:8925 0000000 MOV DWORD PTR FS:[0],ESP
004D5BAD    83EC 58         SUB ESP,58
004D5BB0    53              PUSH EBX
004D5BB1    56              PUSH ESI
004D5BB2    57              PUSH EDI
```

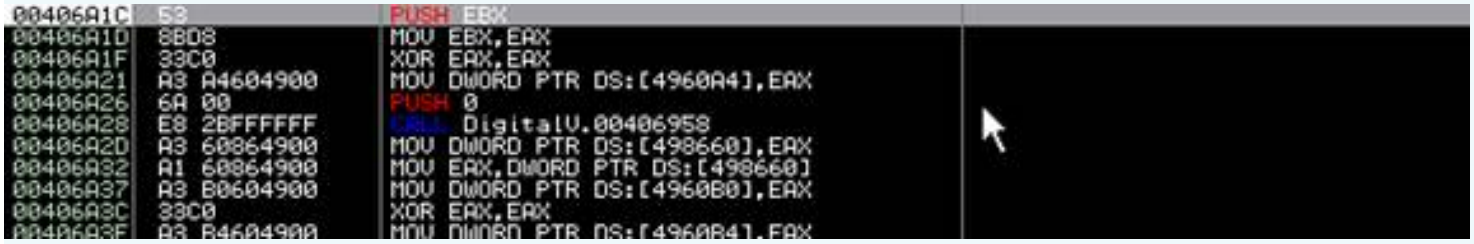
_Change EBFE to 558B, Alt + M, located on Access Memory Breakpoint in Sections code. Shift + F9 you to OEP:



_Nhieu The call too, for sure which. Then, we see the first Call.

00495520 E8 F714F7FF CALL DigitalV.00406A1C

_Khong As the tut, this soft bags not it bít Options How I used to find ways to IAT. Ok, press F8 trace down to 495,520, press F7 to jump to this function:



_Trace Down to function 00406A28 E8 2BFFFFFF CALL DigitalV.00406958, press F7 to trace into, we jump to the following code:

```
00406958 -FF25 64A24900   JMP DWORD PTR DS:[49A264]
0040695E   8BC0           MOV EAX,EAX
00406960 -FF25 60A24900   JMP DWORD PTR DS:[49A260]      kernel32.LocalAlloc
00406966   8BC0           MOV EAX,EAX
00406968 -FF25 5CA24900   JMP DWORD PTR DS:[49A25C]      kernel32.TlsGetValue
0040696E   8BC0           MOV EAX,EAX
00406970 -FF25 58A24900   JMP DWORD PTR DS:[49A258]      kernel32.TlsSetValue
00406976   8BC0           MOV EAX,EAX
00406978   50             PUSH EAX
00406979   6A 40           PUSH 40
0040697B   E8 E0FFFFFF     CALL DigitalV.00406960       JMP to kernel32.LocalAlloc
00406980   C3             RETN
00406981   8D40 00         LEA EAX,DWORD PTR DS:[EAX]
00406984   B8 10000000     MOV EAX,10
00406989   C3             RETN
0040698A   8BC0           MOV EAX,EAX
0040698C   53             PUSH EBX
0040698D   E8 F2FFFFFF     CALL DigitalV.00406984
00406992   8BD8           MOV EBX,EAX
00406994   85DB           TEST EBX,EBX
00406996 v74 36           JE SHORT DigitalV.004069CE
00406998   833D A4604900 FI CMP DWORD PTR DS:[4960A4],-1
0040699F v75 0A           JNZ SHORT DigitalV.004069AB
004069A1   B8 E2000000     MOV EAX,0E2
004069A6   E8 49E1FFFF     CALL DigitalV.00404AF4
004069AB   8BC3           MOV EAX,EBX
004069AD   E8 C6FFFFFF     CALL DigitalV.00406978
004069B2   85C0           TEST EAX,EAX
004069B4 v75 0C           JNZ SHORT DigitalV.004069C2
004069B6   B8 E2000000     MOV EAX,0E2
004069BB   E8 34E1FFFF     CALL DigitalV.00404AF4
004069C0 vEB 0C           JMP SHORT DigitalV.004069CE
```

_ This is the first order call to IAT, see the space where we see: [0049A264] = 00BFDC6B, does not exist a function for this jump in orders. Right-click in 00406958-FF25 64A24900 JMP DWORD PTR DS: [49A264], select Print Follow dump> Memory Address.

```
Address   Hex dump                 ASCII
0049A264  6B DC BF 00 E4 AA BF 00  k▄┐.Σ┐.
0049A26C  10 24 DD 77 9A 22 DD 77  ►$▌ wÜ"┘ w
0049A274  94 DD BF 00 36 AA BF 00  ö▌┐.6┐.
0049A27C  0A 4E E7 77 13 C4 BF 00  .N╫w‼─┐.
0049A284  12 AC E7 77 44 7F E7 77  ↕¼╫wD⌂╫w
0049A28C  72 AC E7 77 EA 1B E6 77  r¼╫wΩ←µw
0049A294  CF D2 E6 77 A6 9D E7 77  ╧╥µw¦¥╫w
0049A29C  D5 C5 BF 00 37 5E E7 77  ╒┼┐.7^╫w
0049A2A4  4C EF E7 77 26 C6 E6 77  L∩╫w&╞µw
0049A2AC  1F 5E E7 77 D6 C1 BF 00  ▼^╫w╓┴┐.
0049A2B4  A1 39 E7 77 3B DC BF 00  í9╫w;▄┐.
0049A2BC  8B 63 E7 77 54 AB BF 00  ïc╫wT½┐.
```

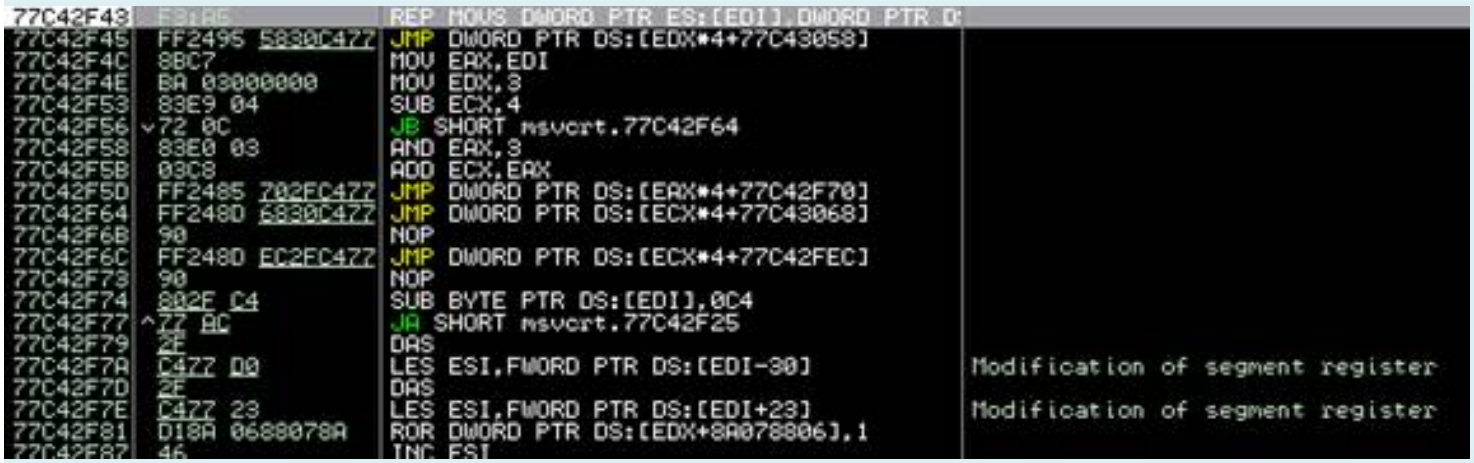
_Cuon Up until you get seats beginning of IAT.

```
Address   Hex dump                 ASCII
0049A144  00 00 00 00 00 00 00 00  ........
0049A14C  BE C6 09 00 00 00 00 00  ╛╞......
0049A154  00 00 00 00 00 00 00 00  ........
0049A15C  00 00 00 00 00 00 00 00  ........
0049A164  00 00 00 00 CA 25 F5 77  ....╩%Jw
0049A16C  90 56 F7 77 DE 55 F7 77  ÉV≈w▌U≈w
0049A174  45 A7 E7 77 CB 15 E8 77  E°╫w╦§$w
0049A17C  72 AC E7 77 A0 60 E7 77  r¼╫wá`╫w
0049A184  82 A6 E7 77 9B A2 E7 77  é¦╫w¢ó╫w
0049A18C  7F 61 E7 77 09 E7 BF 00  ⌂a╫w.╫┐.
0049A194  DF A7 E7 77 71 A6 E7 77  ▀°╫wq¦╫w
0049A19C  60 A6 E7 77 44 7F E7 77  `¦╫wD⌂╫w
0049A1A4  49 A9 E7 77 AF 9B E6 77  I⌐╫w»¢µw
```

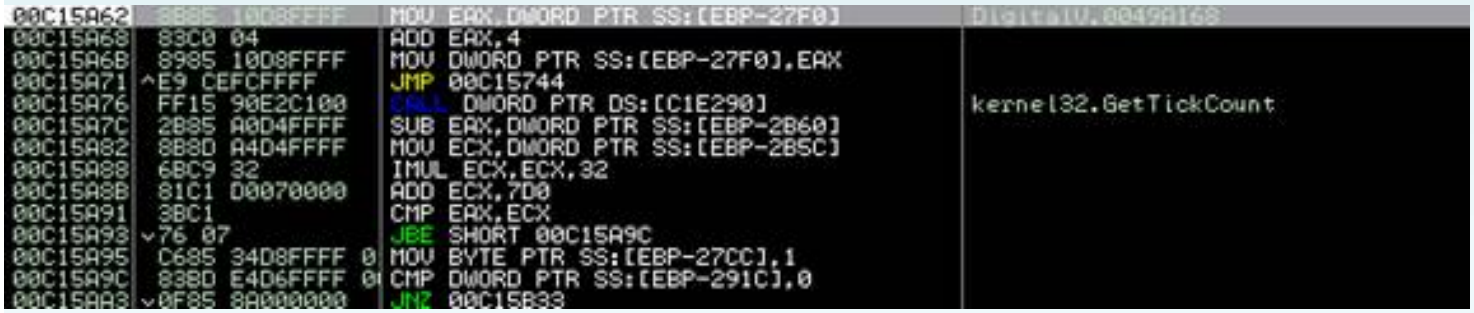
_Cuon Down to the meeting's end IAT.

_Do Long IAT = 49A893-49A168 = 72B

_Chung We need to set a breakpoint on Hardware Write, Dword at the start of the IAT 49A168. OllyDBG Close the window of the process, the restart process OllyDBG father, as the steps similar to the patch org bytes 55 8B. Here you through the window Memory dump, Ctrl + G, enter 49A168, selected first 4 bytes, placed on HardwareBreakpoint write Word style. Press Shift + F9 to run.



_ Press Shift + F9 again you will here:



_Cuon Mouse over for signs of magic jump:

```
00C158BB   8D85 58D1FFFF   LEA EAX,DWORD PTR SS:[EBP-2EA8]
00C158C1   50              PUSH EAX
00C158C2   8B85 58D2FFFF   MOV EAX,DWORD PTR SS:[EBP-2DA8]
00C158C8   FF30            PUSH DWORD PTR DS:[EAX]
00C158CA   E8 A826FEFF     CALL 00BF7F77
00C158CF   83C4 0C         ADD ESP,0C
00C158D2   8D85 58D1FFFF   LEA EAX,DWORD PTR SS:[EBP-2EA8]
00C158D8   50              PUSH EAX
00C158D9   FFB5 60D2FFFF   PUSH DWORD PTR SS:[EBP-2DA0]
00C158DF   FF15 48E3C100   CALL DWORD PTR DS:[C1E348]          msvcrt._stricmp
00C158E5   59              POP ECX
00C158E6   59              POP ECX
00C158E7   85C0            TEST EAX,EAX
00C158E9 v75 11            JNZ SHORT 00C158FC
00C158EB   8B85 58D2FFFF   MOV EAX,DWORD PTR SS:[EBP-2DA8]
00C158F1   8B40 08         MOV EAX,DWORD PTR DS:[EAX+8]
00C158F4   8985 64D2FFFF   MOV DWORD PTR SS:[EBP-2D9C],EAX
00C158FA v EB 02           JMP SHORT 00C158FE
00C158FC ^EB 9D            JMP SHORT 00C1589B
00C158FE   8B85 A4D4FFFF   MOV EAX,DWORD PTR SS:[EBP-2B5C]
00C15904   40              INC EAX
00C15905   8985 A4D4FFFF   MOV DWORD PTR SS:[EBP-2B5C],EAX
00C1590B   838D 64D2FFFF 0 CMP DWORD PTR SS:[EBP-2D9C],0
00C15912 v75 42            JNZ SHORT 00C15956
00C15914   0FB785 68D2FFFF MOVZX EAX,WORD PTR SS:[EBP-2D98]
00C1591B   85C0            TEST EAX,EAX
00C1591D v74 0F            JE SHORT 00C1592E
00C1591F   0FB785 68D2FFFF MOVZX EAX,WORD PTR SS:[EBP-2D98]
00C15926   8985 84BDFFFF   MOV DWORD PTR SS:[EBP+FFFFBD84],EAX
00C1592C v EB 0C           JMP SHORT 00C1593A
00C1592E   8B85 60D2FFFF   MOV EAX,DWORD PTR SS:[EBP-2DA0]
00C15934   8985 84BDFFFF   MOV DWORD PTR SS:[EBP+FFFFBD84],EAX
00C1593A   6A 01           PUSH 1
```

_Ghi Memory address of the command function call before msvcrt._stricmp is 00C158CA E8 A826FEFF CALL 00BF7F77.

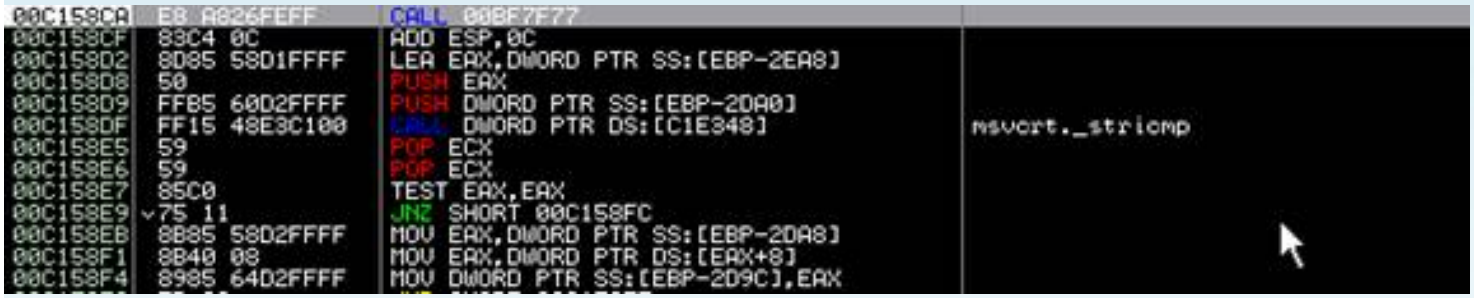
_Lap Again: now you close the window OllyDBG of the process, the restart process OllyDBG father, as the steps similar to the patch org bytes 55 8B. Here you through the window Memory dump, Ctrl + G, enter 49A168, selected first 4 bytes, placed on HardwareBreakpoint write Word style. Press Shift + F9.

```
77C42F43   F3:A5           REP MOVS DWORD PTR ES:[EDI],DWORD PTR D
77C42F45   FF2495 5830C477 JMP DWORD PTR DS:[EDX*4+77C43058]
77C42F4C   8BC7            MOV EAX,EDI
77C42F4E   BA 03000000     MOV EDX,3
77C42F53   83E9 04         SUB ECX,4
77C42F56 v72 0C            JB SHORT msvcrt.77C42F64
77C42F58   83E0 03         AND EAX,3
77C42F5B   03C8            ADD ECX,EAX
77C42F5D   FF2485 702FC477 JMP DWORD PTR DS:[EAX*4+77C42F70]
77C42F64   FF248D 6830C477 JMP DWORD PTR DS:[ECX*4+77C43068]
77C42F6B   90              NOP
77C42F6C   FF248D EC2FC477 JMP DWORD PTR DS:[ECX*4+77C42FEC]
```

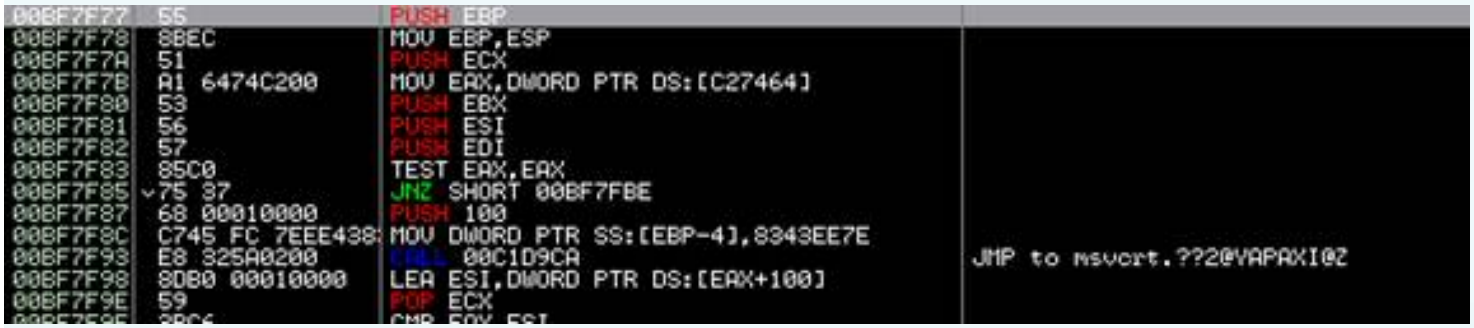
_ Here you press Ctrl + G, enter 00C158CA, you will jump to this code:

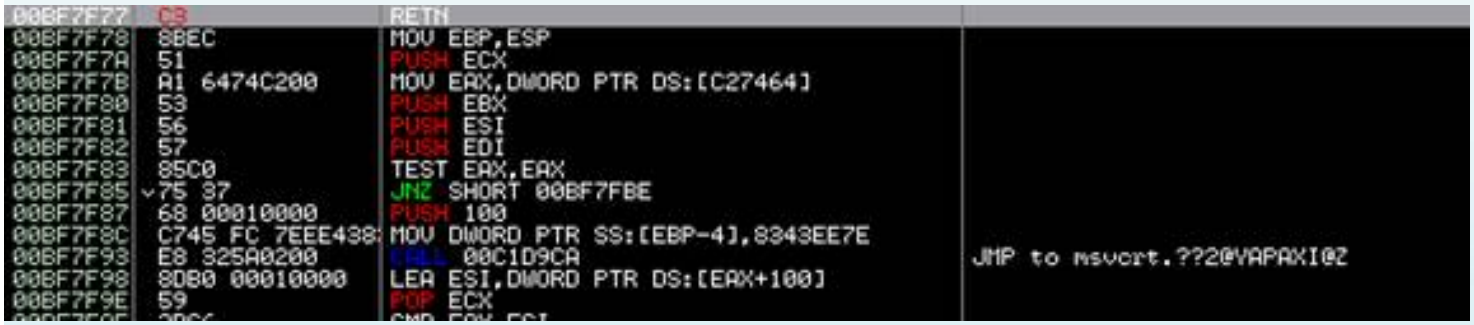
```
00C158CA   844A 43         TEST BYTE PTR DS:[EDX+43],CL
00C158CD   98              CWDE
00C158CE   5E              POP ESI
00C158CF   64:07           POP ES                          Modification of segment register
00C158D1   8C6F 60         MOV WORD PTR DS:[EDI+60],GS
00C158D4   C9              LEAVE
00C158D5 v EB 1E           JMP SHORT 00C158F5
00C158D7   E7 FB           OUT 0FB,EAX                     I/O command
00C158D9   C8 6F52AC       ENTER 526F,0AC
00C158DD   3F              AAS
00C158DE   2158 3D         AND DWORD PTR DS:[EAX+3D],EBX
00C158E1   A6              CMPS BYTE PTR DS:[ESI],BYTE PTR ES:[EDI
00C158E2   47              INC EDI
00C158E3   65:B9 F9E26AAC  MOV ECX,AC6AE2F9                Superfluous prefix
00C158E9 v76 22            JBE SHORT 00C1590D
00C158EB   32EB            XOR CH,BL
00C158ED   2D CB2C4F2B     SUB EAX,2B4F2CCB
00C158F2   D4 89           AAM 89
00C158F4   1F              POP DS                          Modification of segment register
```

_Tai 00C158CA address, you must click, set a (HardwareBreakpoint on Excution), now remove the breakpoint on write, press F9 to you here:

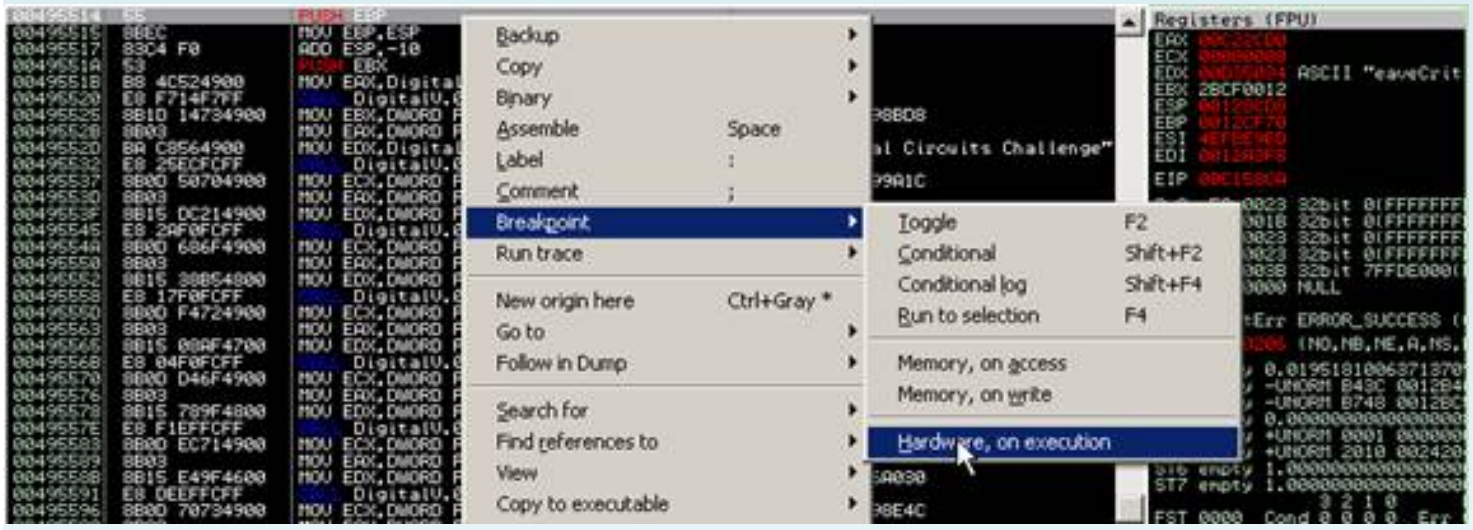


_Chung We need to patch this function, enter at 00C158CA E8 A826FEFF CALL 00BF7F77, you jump into the jaw, Ctrl + E, the 55 to C3:

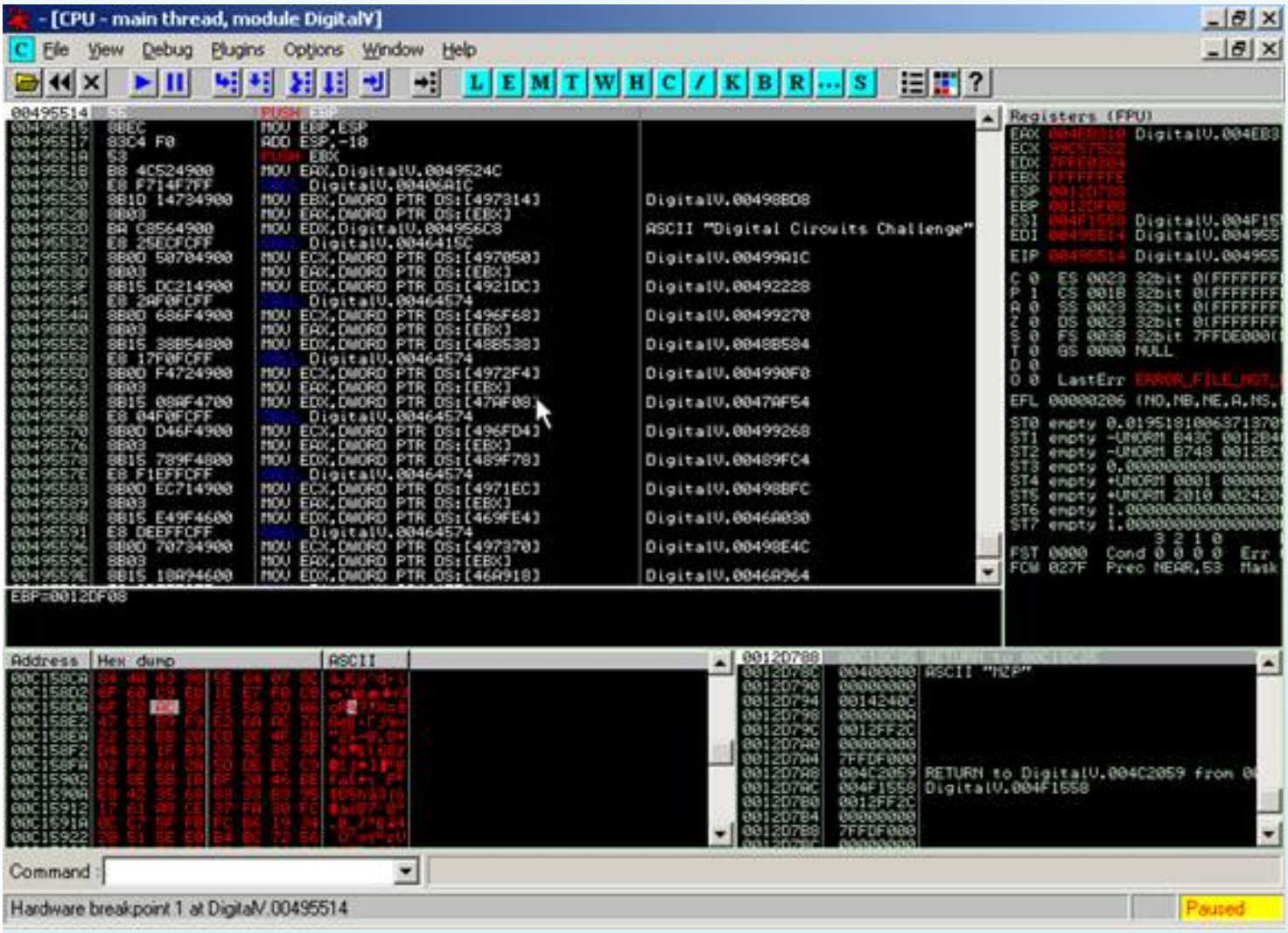




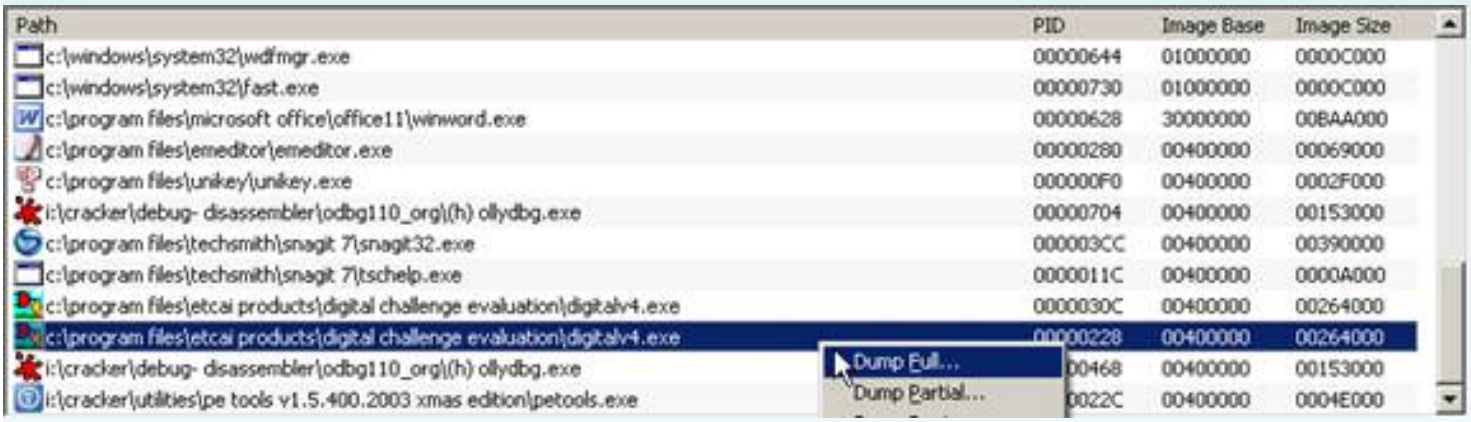
_Bam '-', Press Ctrl + G, enter the address of OEP: 495514, we also set a breakpoint HE:



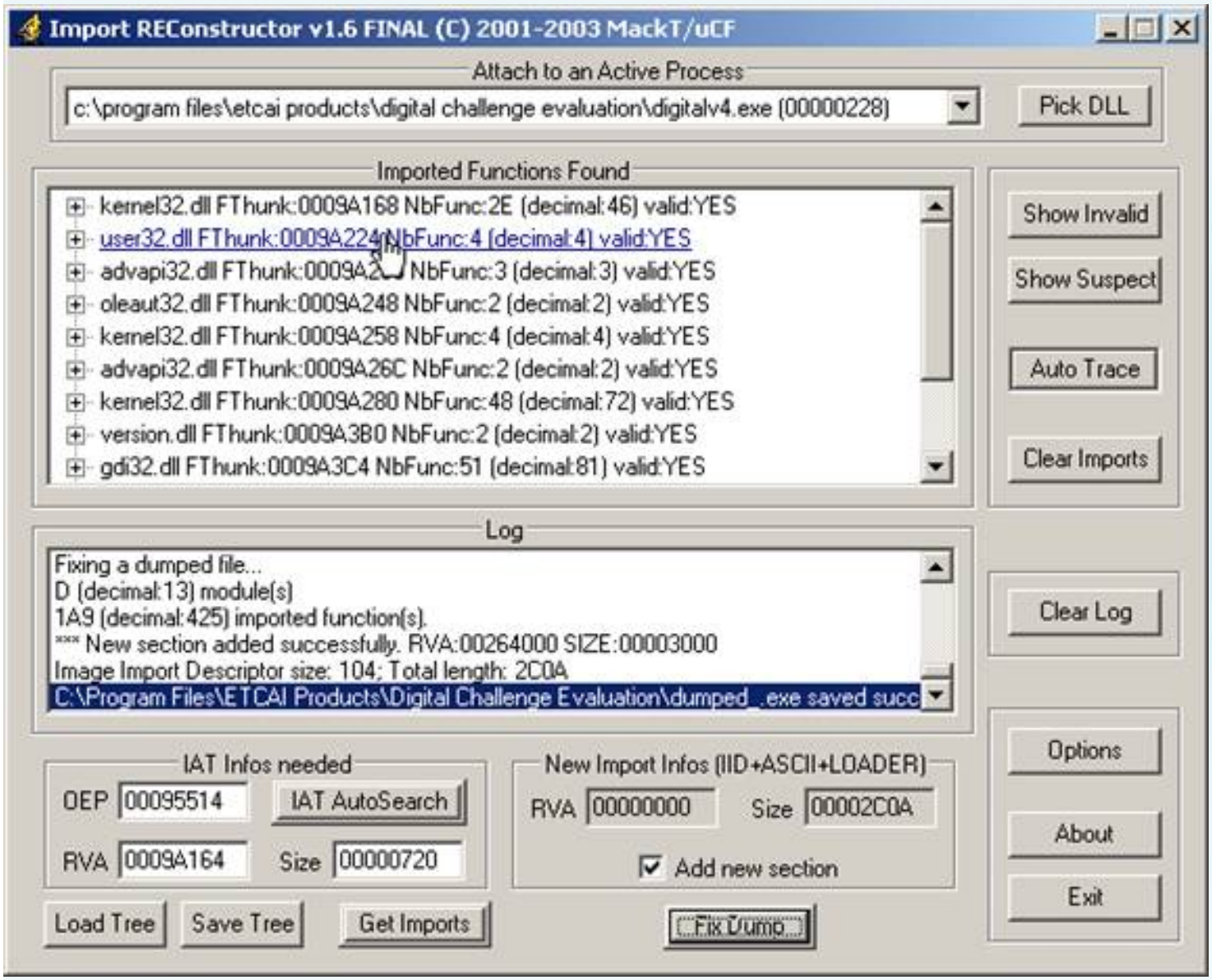
_Yeah, Yeah:



Full _PETools dump:



Fix IAT, Show Invalid, Thunks Cut. Run dumped.exe. Oh my God, it's run, before it is run, I run it before J.

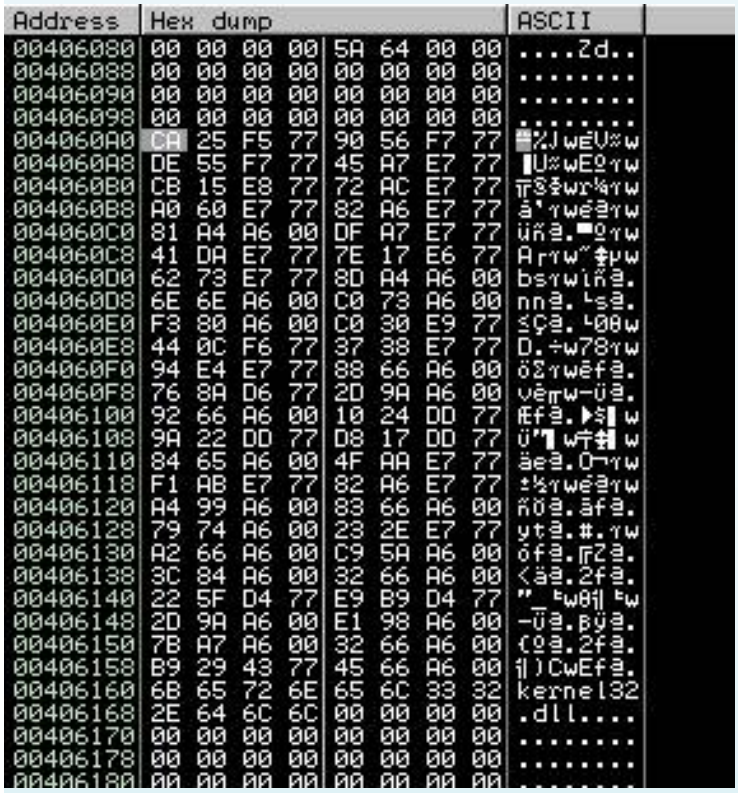


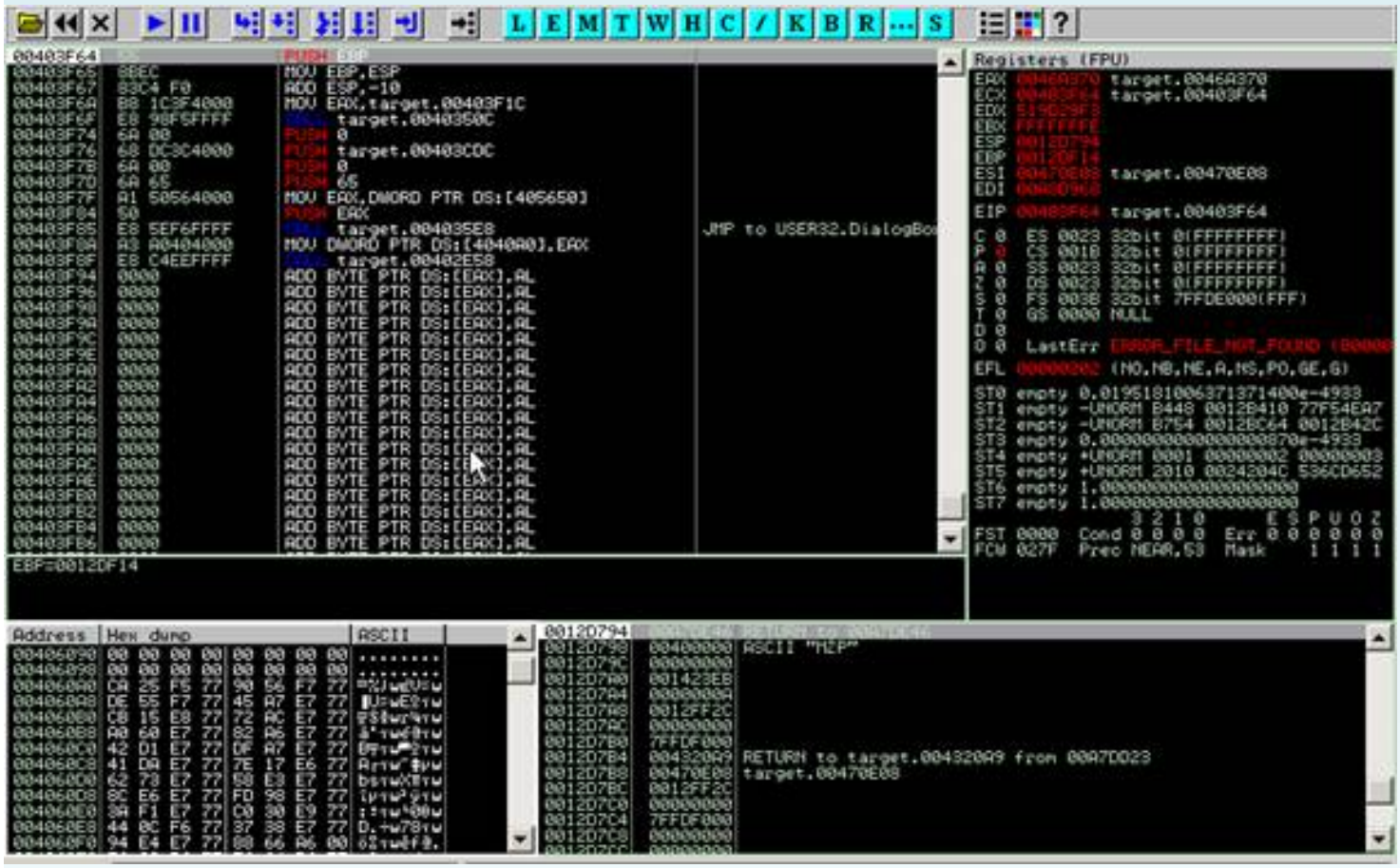
Success _Unpacked full.

TUT # 3: Destroy DWK 3.x - Armadillo 4.30-Debug-blocker.

_Nhan Opportunity to read the anti tut DWK's aged tlandn, I re-record a few old Delphi project, see this or that, I used Armadillo 4:30 Pro full pack with options as follows:

_Cai This completely aged can follow the method, even to trace OEP (of course must find real IAT) of aged dump it running again J.
_Các Aged how that last out this is OK:

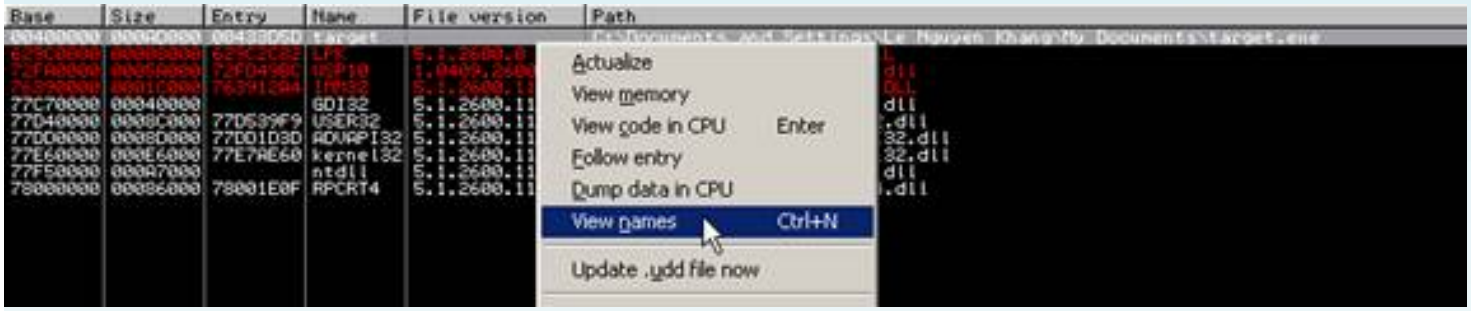




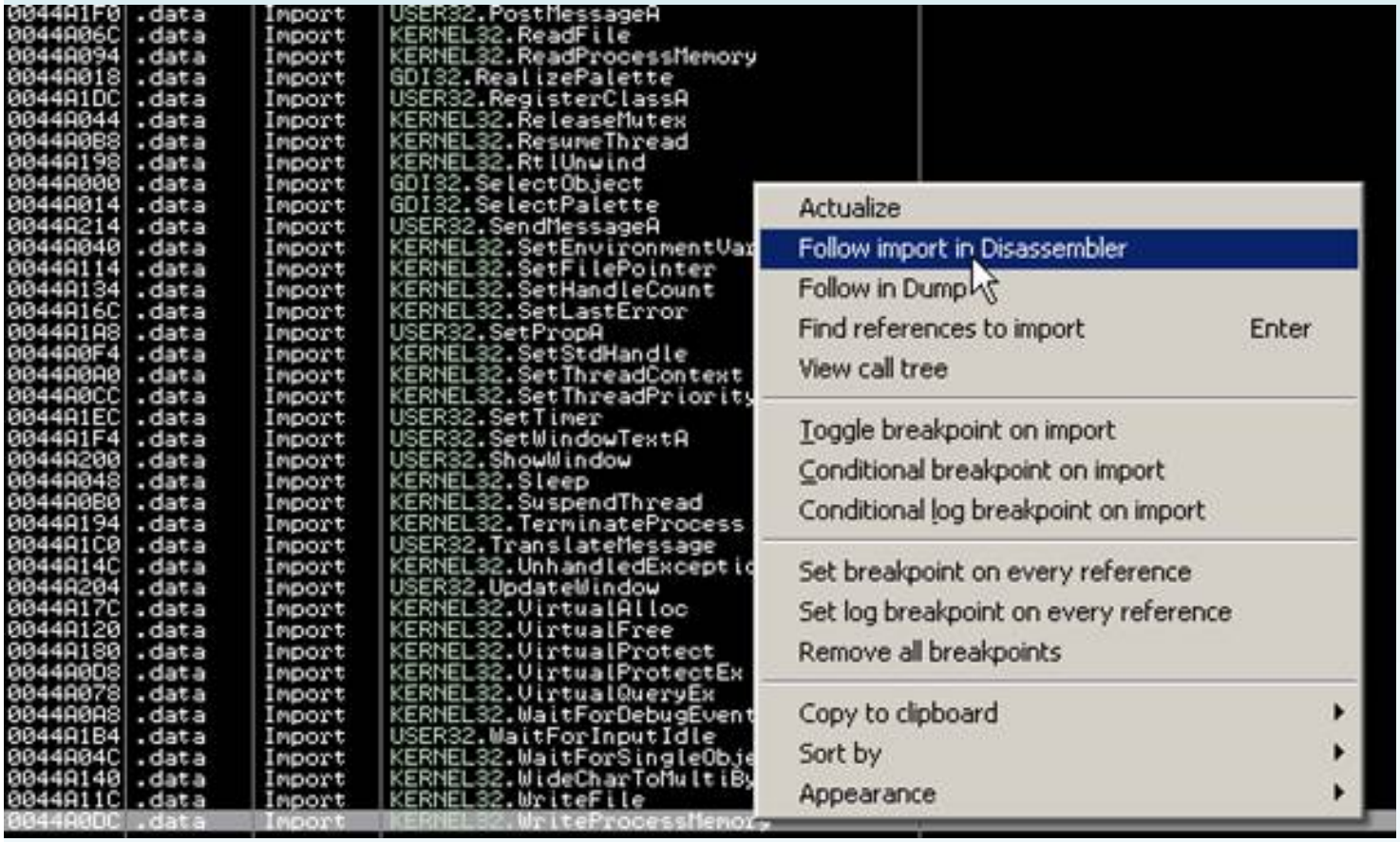
TUT # 4: Unpackme - Armadillo 4.10-Debug-blocker + 2 options.

_Cai Target actually unpack this type there is but it is quite trouble for the child. Part father we do completely the same as the tuts, but I want to introduce you to a different method also going to remove the idea is to debug blocker quite as long. If you want to choose the longer this approach.

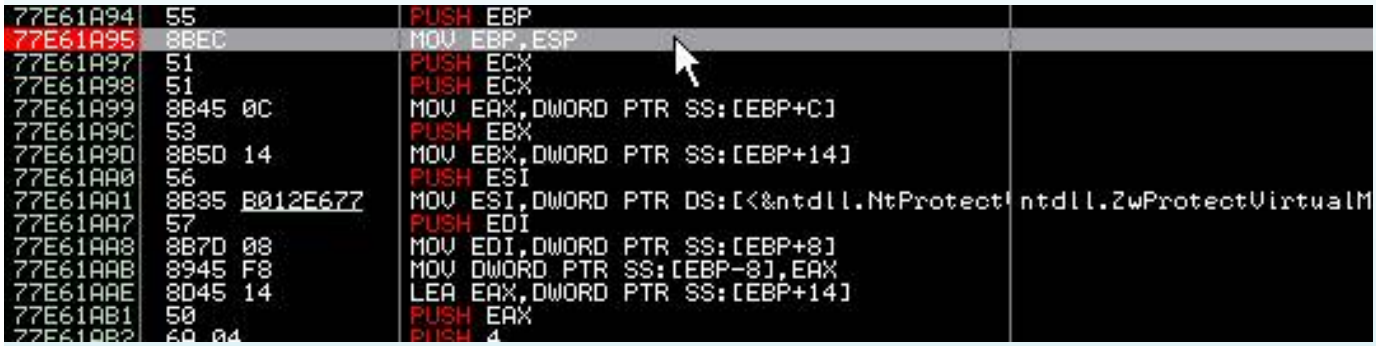
Olly _Load on target, press Alt + E, right click in modules target.exe select View Names.



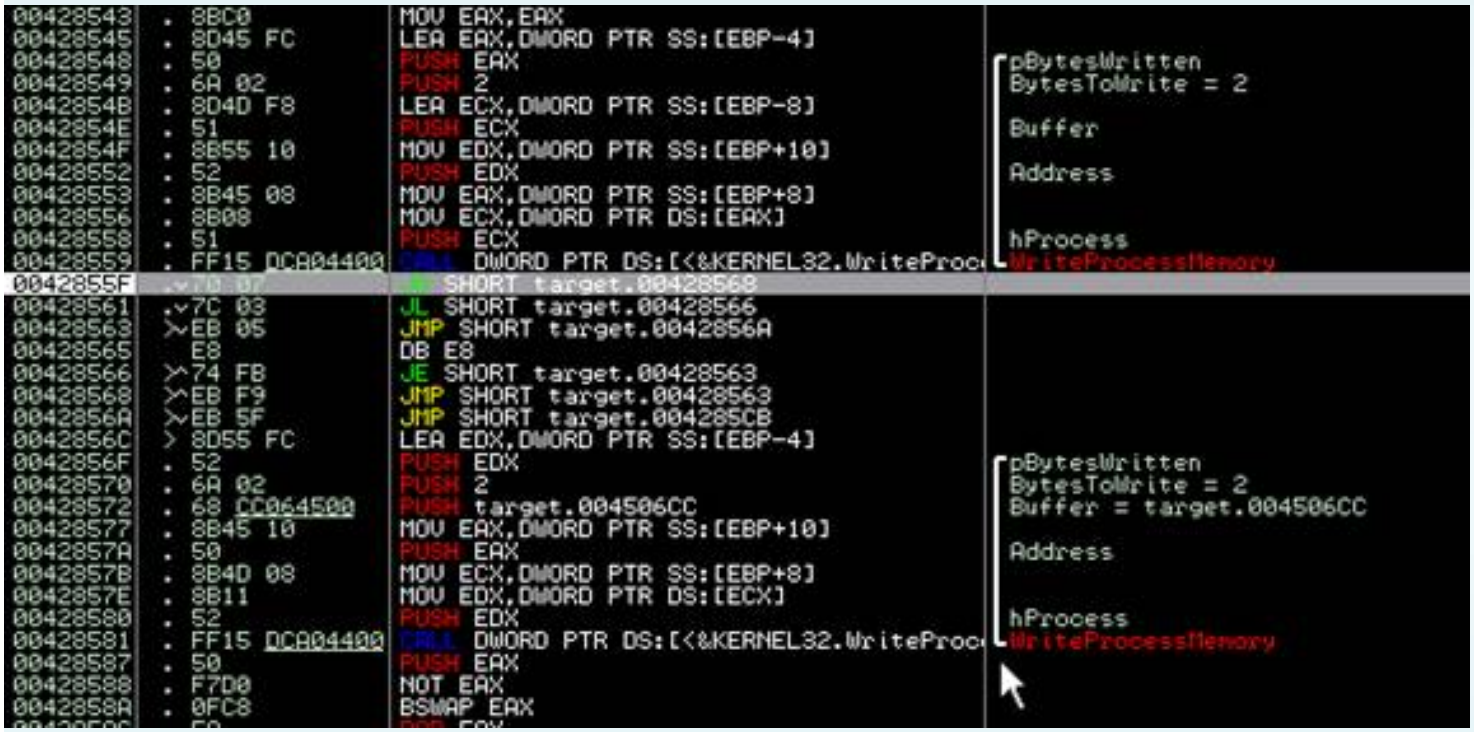
_Cuon Screen down WriteProcessMemory search function, right-click to select Import Follow in Disassembler.



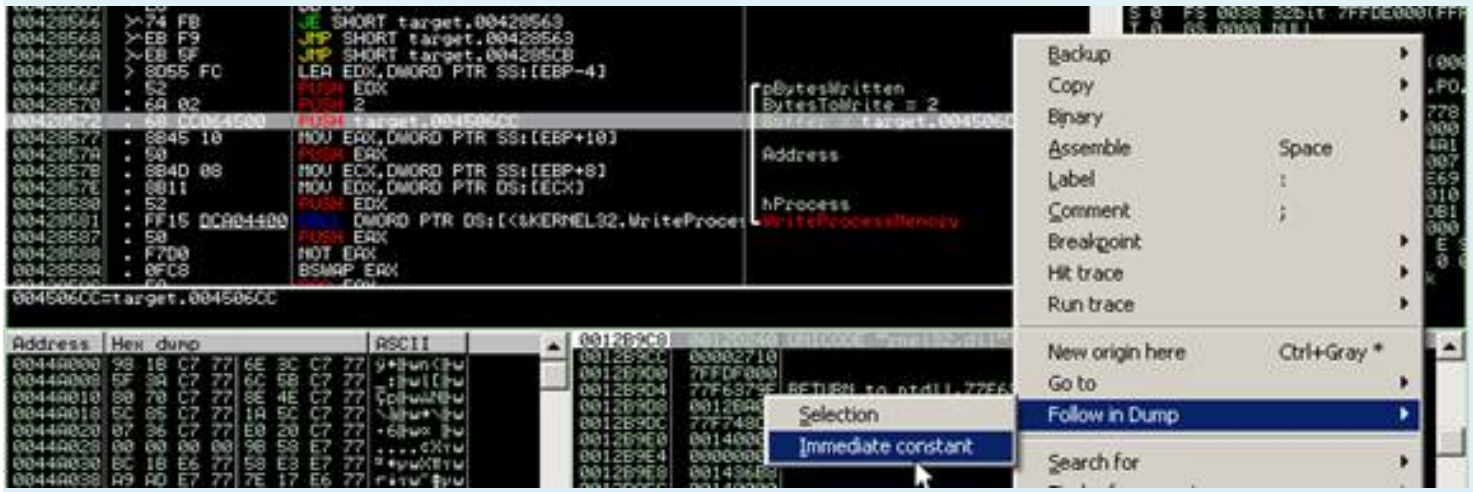
_Ban To be here, press F2 set breakpoint at 77E61A95 8BEC MOV EBP, ESP:



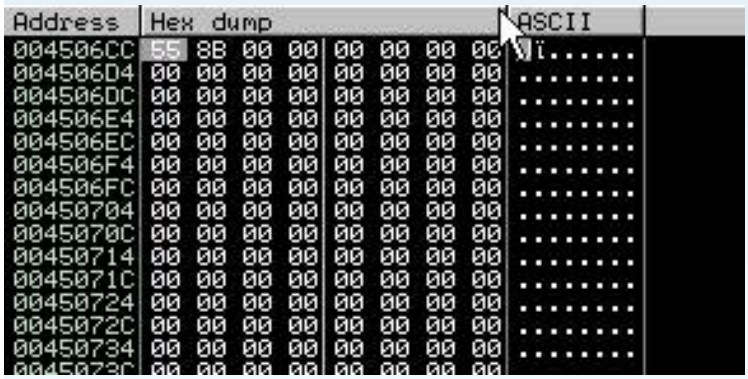
_ Shift + F9, Alt + F9 to you here:



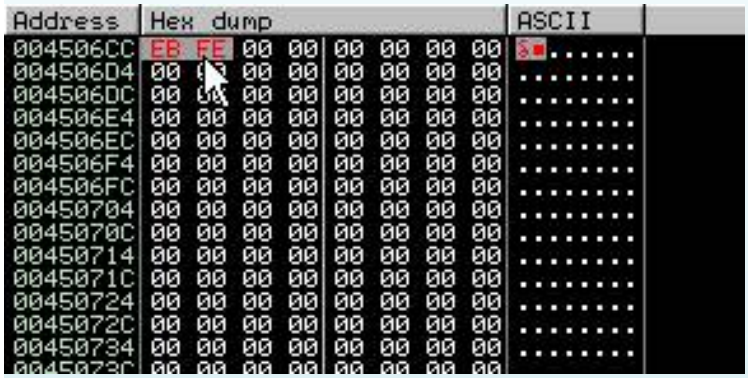
_ Click to select at **00428572** Follow in dump> Immediate constant:



_Nhin Down window dump we see:

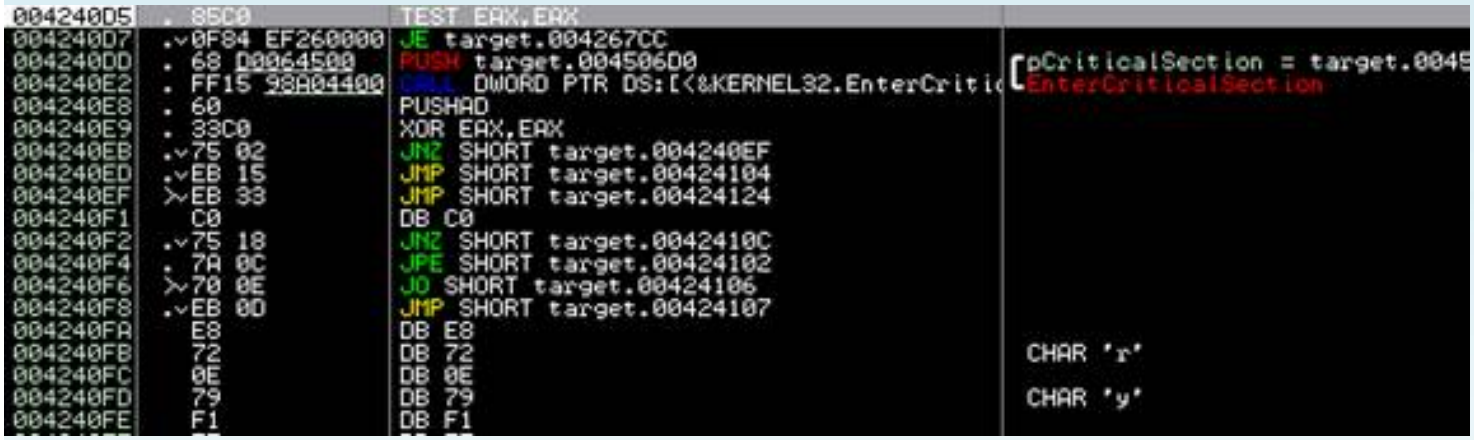


_Ta To **55 8B EB FE,:**

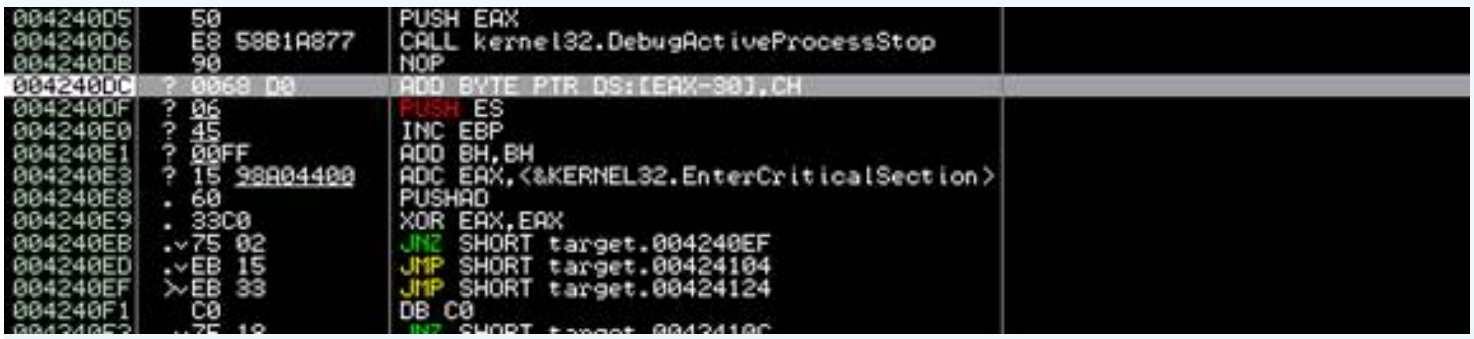


_Nhan F9 to run, while the program is running, press Alt + F1, enter WaitForDebugEvent:

_Olly Stop here in WaitForDebugEvent function, and we press Alt + F9, to here:



_Tro The same, press Space to assemble.



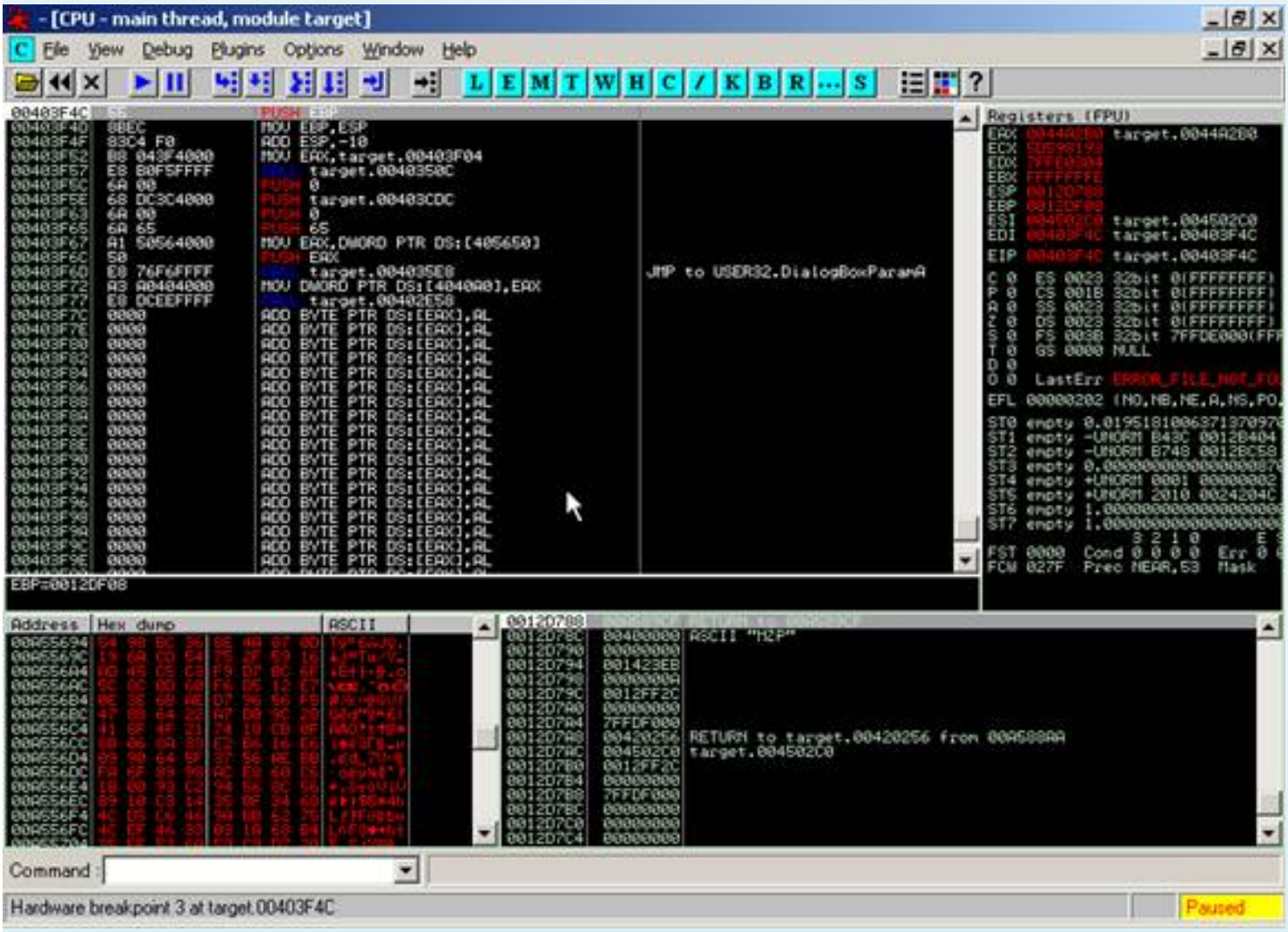
_Xu Complete joker, time directly to children, open up another one Olly, Attach, patch bytes, press Alt + F1 into BP CreateThread, Shift + F9, Ctrl + F9, F7, Ctrl + F9, F7. Done to you here:

```
00A5894B   6A 00            PUSH 0
00A5894D   C705 B432A600 A( MOV DWORD PTR DS:[A632B4],0A63FAC      ASCII "RC"
00A58957   E8 090DFEFF      CALL 00A39665
00A5895C   59               POP ECX
00A5895D   59               POP ECX
00A5895E   E8 DEFAFEFF      CALL 00A48441
00A58963   8BF8             MOV EDI,EAX
00A58965   A1 78C5A600      MOV EAX,DWORD PTR DS:[A6C578]
00A5896A   8B48 34          MOV ECX,DWORD PTR DS:[EAX+34]
00A5896D   3348 18          XOR ECX,DWORD PTR DS:[EAX+18]
00A58970   3348 14          XOR ECX,DWORD PTR DS:[EAX+14]
00A58973   03F9             ADD EDI,ECX
00A58975   8B0E             MOV ECX,DWORD PTR DS:[ESI]
00A58977   85C9             TEST ECX,ECX
00A58979   75 2F            JNZ SHORT 00A589AA
00A5897B   8B78 34          MOV EDI,DWORD PTR DS:[EAX+34]
00A5897E   E8 BEFAFEFF      CALL 00A48441
00A58983   8B0D 78C5A600    MOV ECX,DWORD PTR DS:[A6C578]      target.0044A2B0
00A58989   FF76 14          PUSH DWORD PTR DS:[ESI+14]
00A5898C   8B51 18          MOV EDX,DWORD PTR DS:[ECX+18]
00A5898F   FF76 10          PUSH DWORD PTR DS:[ESI+10]
00A58992   3351 14          XOR EDX,DWORD PTR DS:[ECX+14]
00A58995   FF76 0C          PUSH DWORD PTR DS:[ESI+C]
00A58998   33D7             XOR EDX,EDI
00A5899A   03C2             ADD EAX,EDX
00A5899C   8B51 44          MOV EDX,DWORD PTR DS:[ECX+44]
00A5899F   3351 40          XOR EDX,DWORD PTR DS:[ECX+40]
00A589A2   33D7             XOR EDX,EDI
00A589A4   2BC2             SUB EAX,EDX
00A589A6   FFD0             CALL EAX
00A589A8   EB 25            JMP SHORT 00A589CF
00A589AA   83F9 01          CMP ECX,1
00A589AD   75 22            JNZ SHORT 00A589D1
00A589AF   FF76 04          PUSH DWORD PTR DS:[ESI+4]
00A589B2   FF76 08          PUSH DWORD PTR DS:[ESI+8]
00A589B5   6A 00            PUSH 0
00A589B7   E8 85FAFEFF      CALL 00A48441
00A589BC   50               PUSH EAX
00A589BD   A1 78C5A600      MOV EAX,DWORD PTR DS:[A6C578]
00A589C2   8B48 44          MOV ECX,DWORD PTR DS:[EAX+44]
00A589C5   3348 40          XOR ECX,DWORD PTR DS:[EAX+40]
00A589C8   3348 34          XOR ECX,DWORD PTR DS:[EAX+34]
00A589CB   2BF9             SUB EDI,ECX
00A589CD   FFD7             CALL EDI
00A589CF   8BD8             MOV EBX,EAX
00A589D1   5F               POP EDI
00A589D2   8BC3             MOV EAX,EBX
00A589D4   5E               POP ESI
00A589D5   5B               POP EBX
```

_Call EDI is a signal jump to OEP. Press F2 set breakpoint at 00A589CD. Press Shift + F9, F7. He he, OEP.

```
00403F4C   55               PUSH EBP
00403F4D   8BEC             MOV EBP,ESP
00403F4F   83C4 F0          ADD ESP,-10
00403F52   B8 043F4000      MOV EAX,target.00403F04
00403F57   E8 B0F5FFFF      CALL target.0040350C
00403F5C   6A 00            PUSH 0
00403F5E   68 DC3C4000      PUSH target.00403CDC
00403F63   6A 00            PUSH 0
00403F65   6A 65            PUSH 65
00403F67   A1 50564000      MOV EAX,DWORD PTR DS:[405650]
00403F6C   50               PUSH EAX
00403F6D   E8 76F6FFFF      CALL target.004035E8
00403F72   A3 A0404000      MOV DWORD PTR DS:[4040A0],EAX
00403F77   E8 DCEEFFFF      CALL target.00402E58
00403F7C   0000             ADD BYTE PTR DS:[EAX],AL
00403F7E   0000             ADD BYTE PTR DS:[EAX],AL
00403F80   0000             ADD BYTE PTR DS:[EAX],AL
00403F82   0000             ADD BYTE PTR DS:[EAX],AL
00403F84   0000             ADD BYTE PTR DS:[EAX],AL
00403F86   0000             ADD BYTE PTR DS:[EAX],AL
00403F88   0000             ADD BYTE PTR DS:[EAX],AL
```

IAT _Fix do the same tut 2.



_Ok, Done.

TUT # 5: snd Unpackme - Armadillo 3.70a-Debug-blocker.

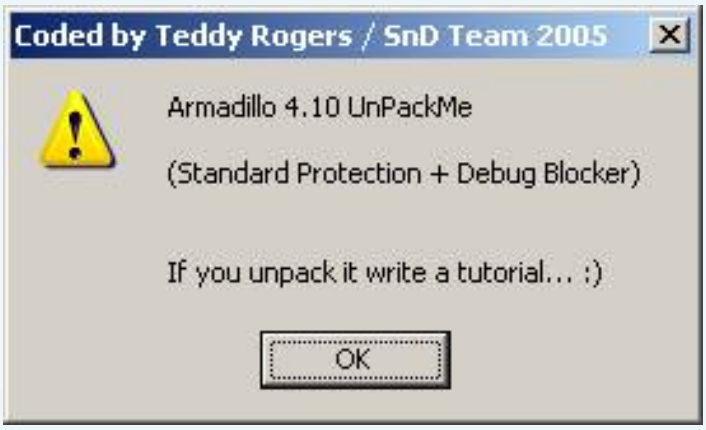
_Ban Own writing here!

TUT # 6: hacnho Unpackme - Armadillo 3.75a1-Debug-blocker.

_Ban Own writing here!

TUT # 7: snd Unpackme - Armadillo 4.10-Debug-blocker.

_Ban Own writing here!



_Ban Own writing here!

TUT # 8: snd Unpackme - Armadillo 4.20-Debug-blocker.

_Ban Own writing here!

IV. Conclusion

Hix, the finish is part of the format debug blocker. This format is the same wish, because I only cracked pub should test it all, touching soft Custom will build slightly different. Lost 3h to write this tut. I look after I mentioned to some form has added CopyMEM II. The past have sent you a soft seek help unpack bags, he sent to him this nọ, I unpack the complete return both a thank you can not, since it does not receive any request any! Who I send spam report that under L.

Wishing success. Appointment in the series with # CopyMem II.

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini, hoadongnoi, dqtln, hosiminh, Nilrem, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, anh_surprised ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx to authors of OllyDBG.

To be continued ...

Written by **hacnho** (tutorial date: Saigon 24/08/2005)

Armadillo collect sand-stone

Part 3: Unpacking Armadillo x.xx + = cracked!

I. Intro:

_Ta Meet again in this Section 3: In this tut we will handle with soft + upackme goals unpack Once cracked. This is version Expansion of the series 1 and series # # 2! Therefore Series # 4 will discuss CopyMemII. Single!

I do _Khi tut also has the video tut. If you want to be able to check rq the steps of their practice. Specify one that target all in all I test on all operating systems WindowsXP SP1. All are of relatively, hope you do not surprised to see the target does not run on your machine.

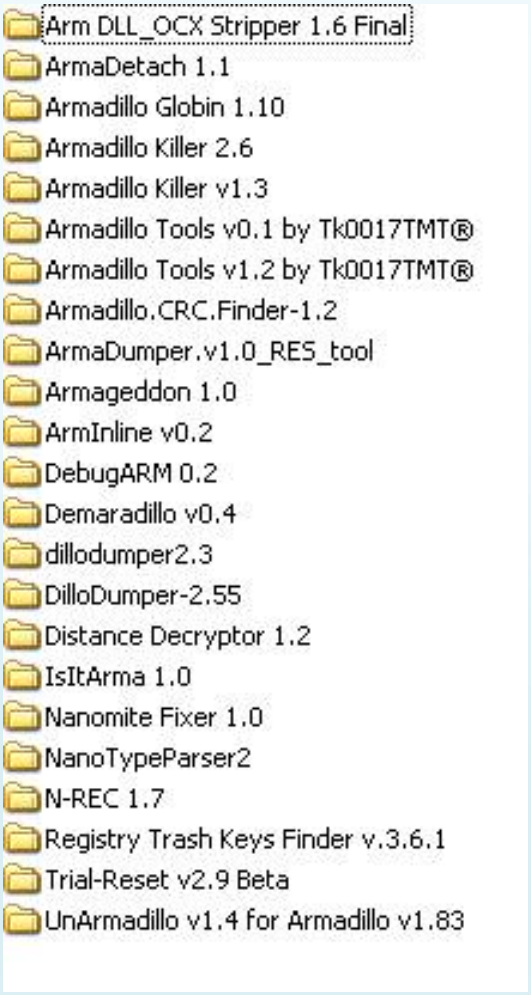
II. Tools:

1:10 OllyDBG with plugin: Hide Debugger 1.2.3f, Armadillo Process Detach Plugin v1.0, OllyDBG PE Dumper 3.0.3, Command Bar 3.10.109c has bug patch with RE-PAIR 0.6 + AntiDetectOlly_v2.2.4.

PE Tools v1.5.RC5.2005

Import REConstructor v1.6 FINAL

You have more questions about the tools I have not armadillo. Hi, please thưa that the Armadillo NET tools on my lot. You see the collection of tools I nhé. Rq like it in this topic, including AM or send YIM.

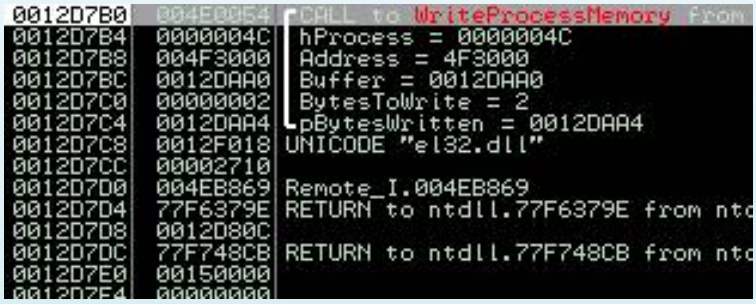


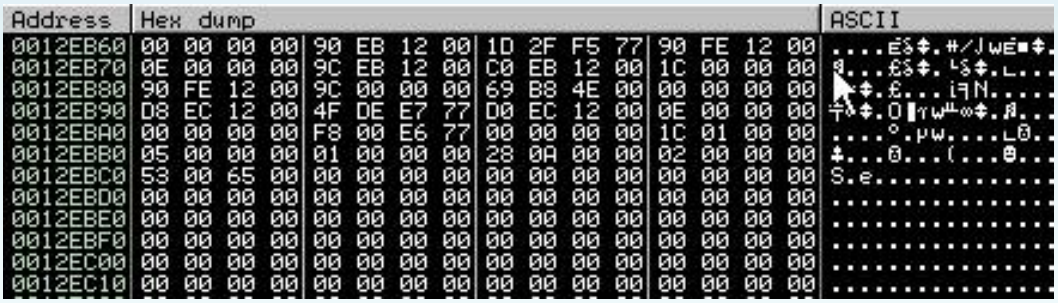
III. Unpacking

Target # 1: Remote Installer 1.3

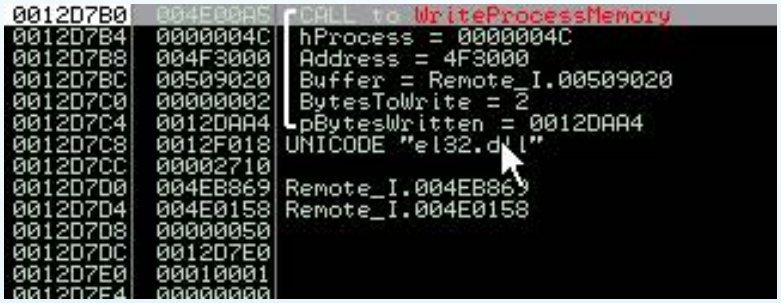
Olly _Load on target, set a breakpoint on excution: He WaitForDebugEvent. Press F9, we have:

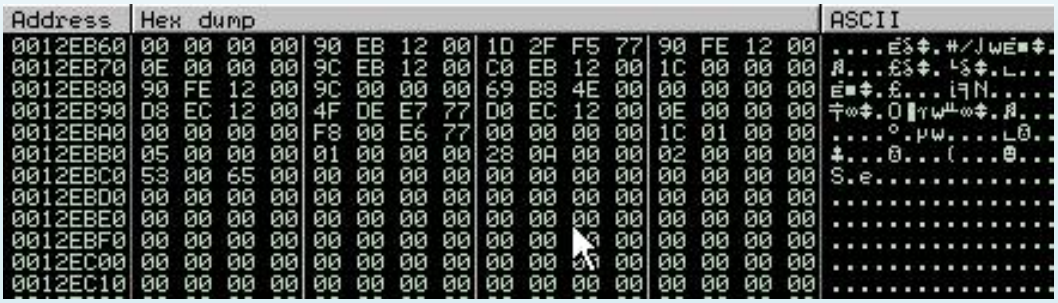
_Ghi Memory address 0012EB60. Ctrl + F2 restart, delete He, BP set WriteProcessMemory. Press F9:





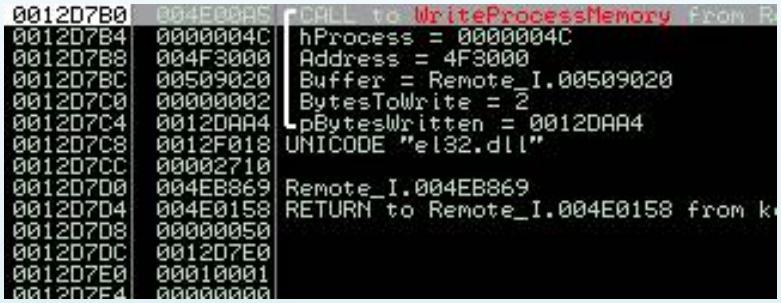
_F9 Times 2:



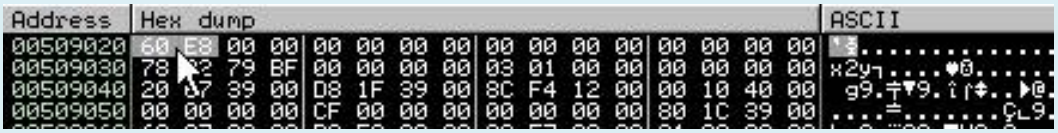


_F9 Times 3, program run entirely with the registered notice:

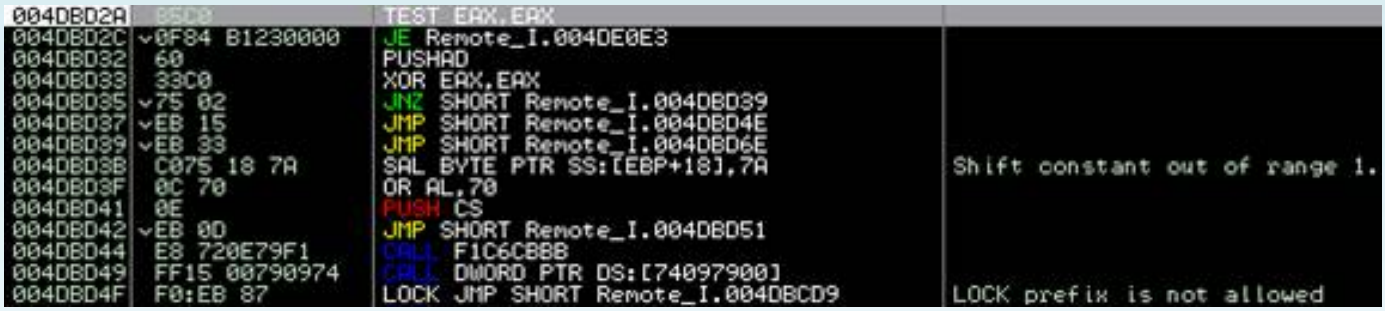
_Khua Khua, not listed on a 1000 bytes code has OEP. Yeah! The resolution of the court, not CopyMemII. You can read by tut sLayer/MP2k say this is a soft CopyMemII, I think kô to J ! Restart Olly, load target. Clear all breakpoint. Bp WriteProcessMemory, F9, F9:



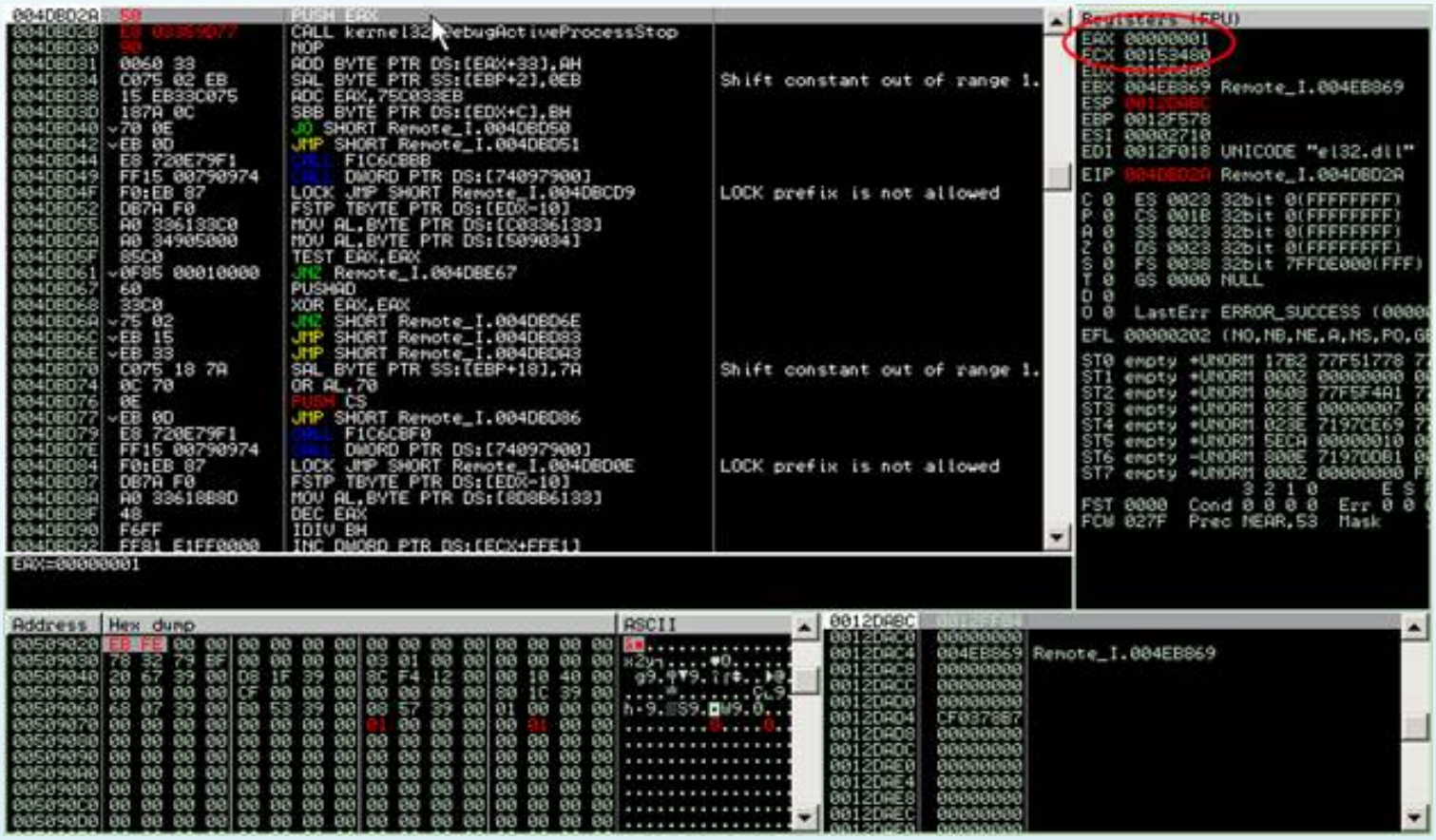
_Follow Dump in, change into 60E8 EBFE:



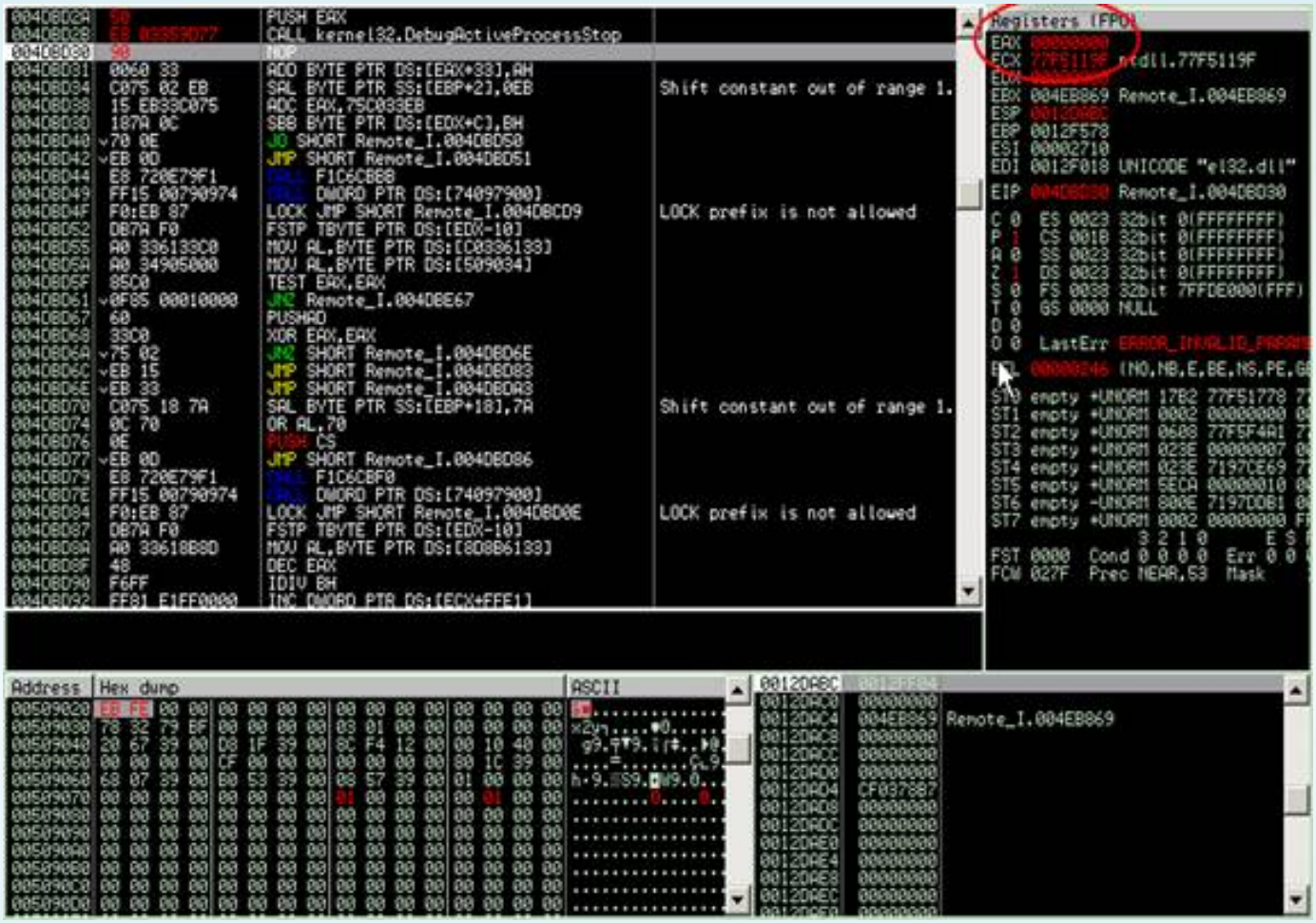
_Bp WaitForDebugEvent, F9, Ctrl + F9, F7:



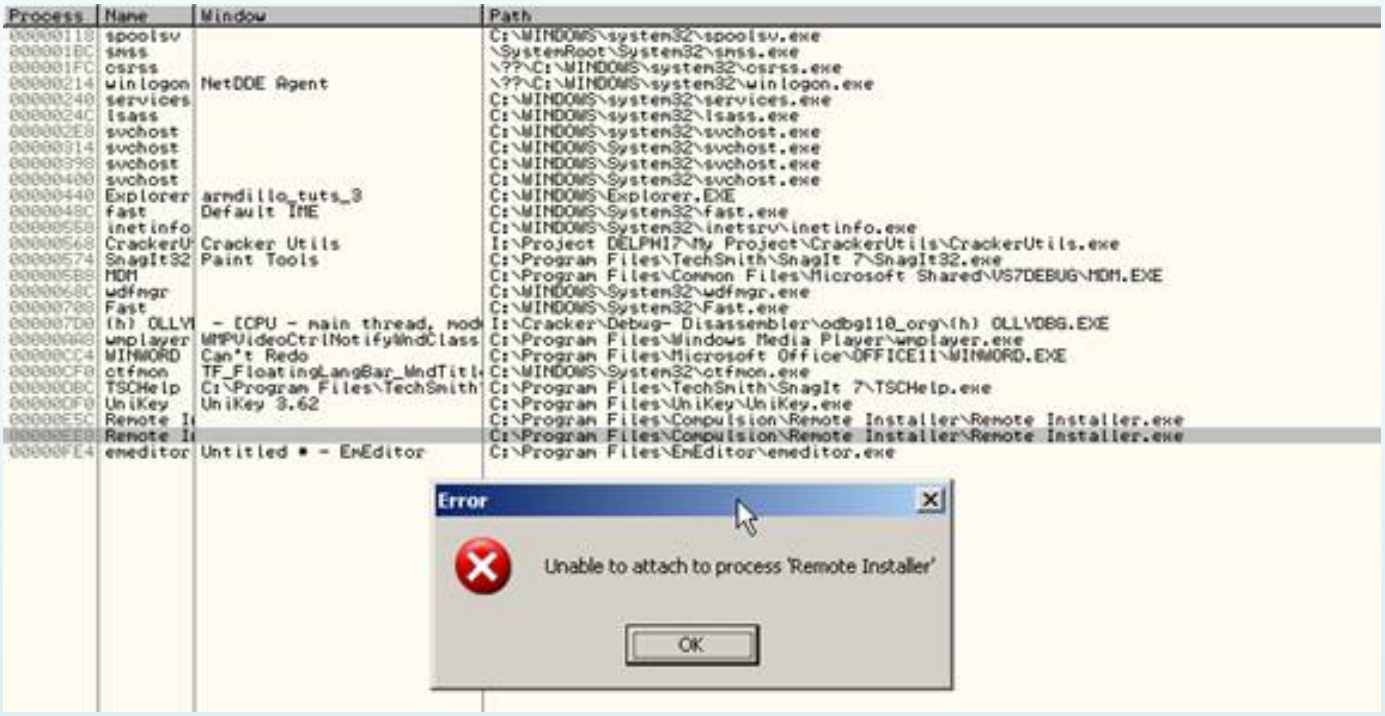
_Theo Old methods. Push EAX Call DebugActiveProcessStop, submitted. Record of EAX.

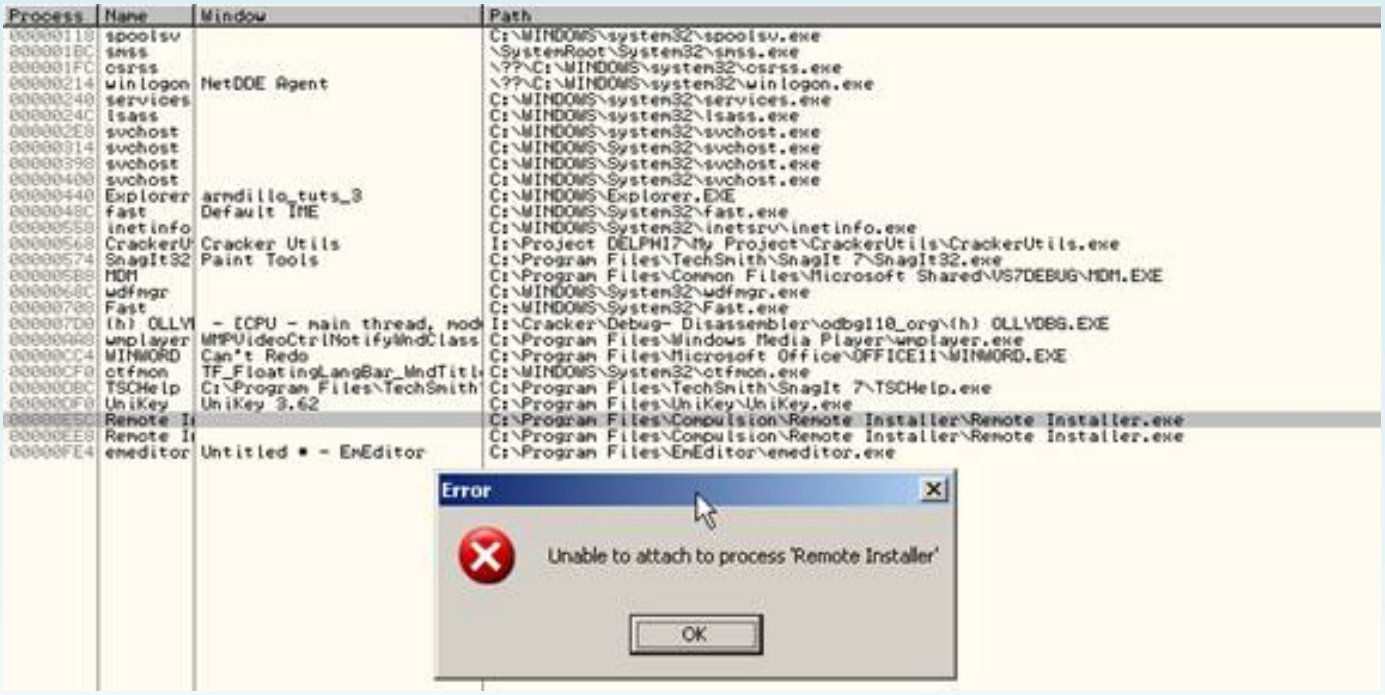


_Nhan F8, to trace 004DBD30 90 filed, hix review of EAX.

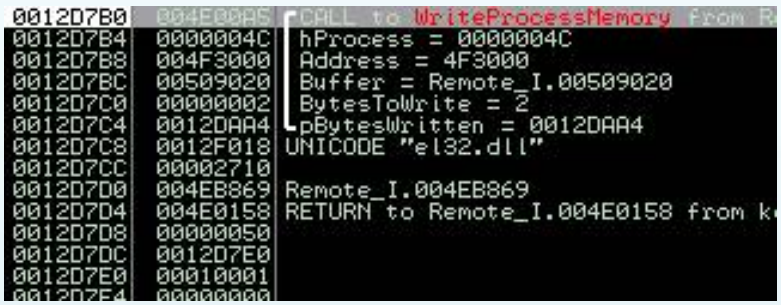


_Toi Ago, according to doctors lightphoenix EAX = 0 it is still Attach the MSDN's BillGates J. Ok, we see the child Attach:

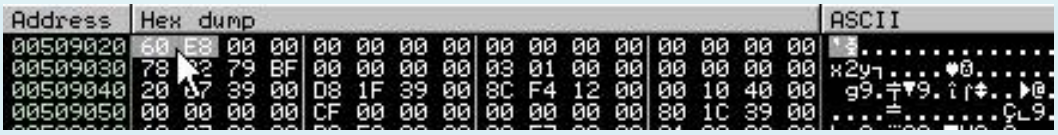




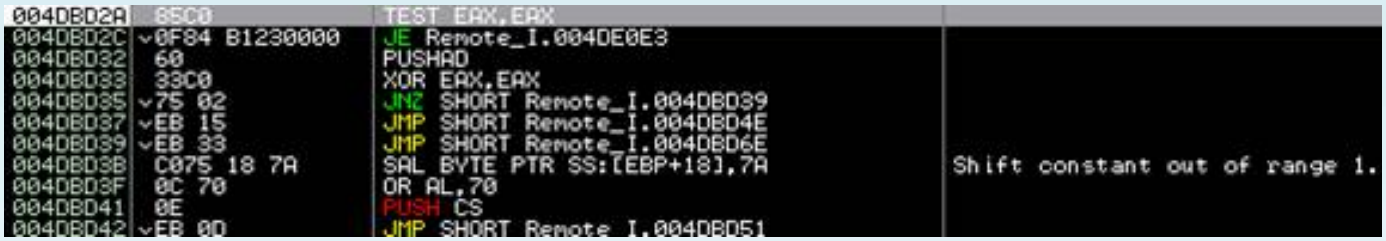
_Bay Time I pass by, Okie, I'll show you a way to pass by! Restart all again. Bp WriteProcessMemory, F9, F9:



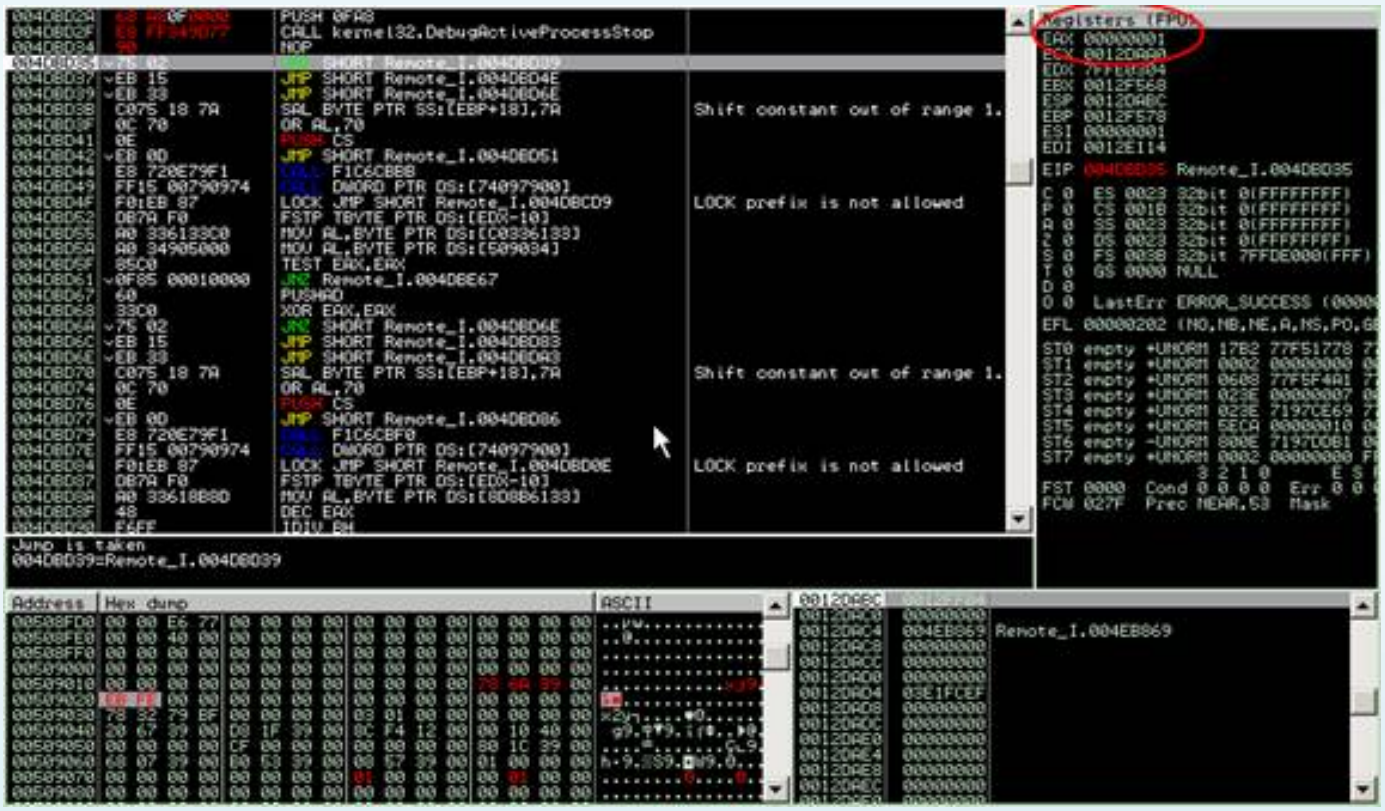
_Follow Dump in, change into 60E8 EBFE:



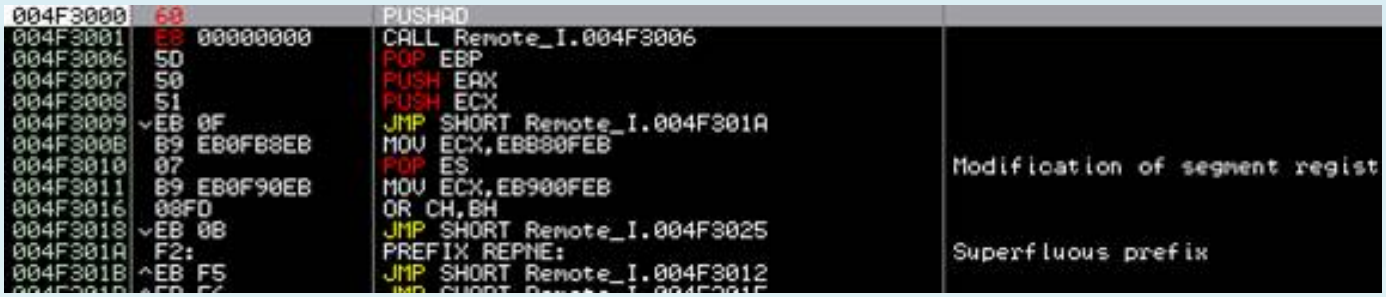
_O Code Window, Ctrl + G to enter: WaitForDebugEvent. Press F2 to set breakpoint, F9, Alt + F9.



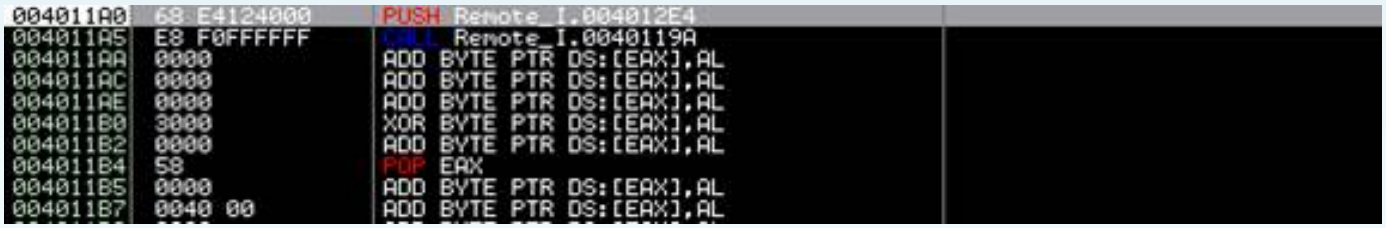
_Assemble To:



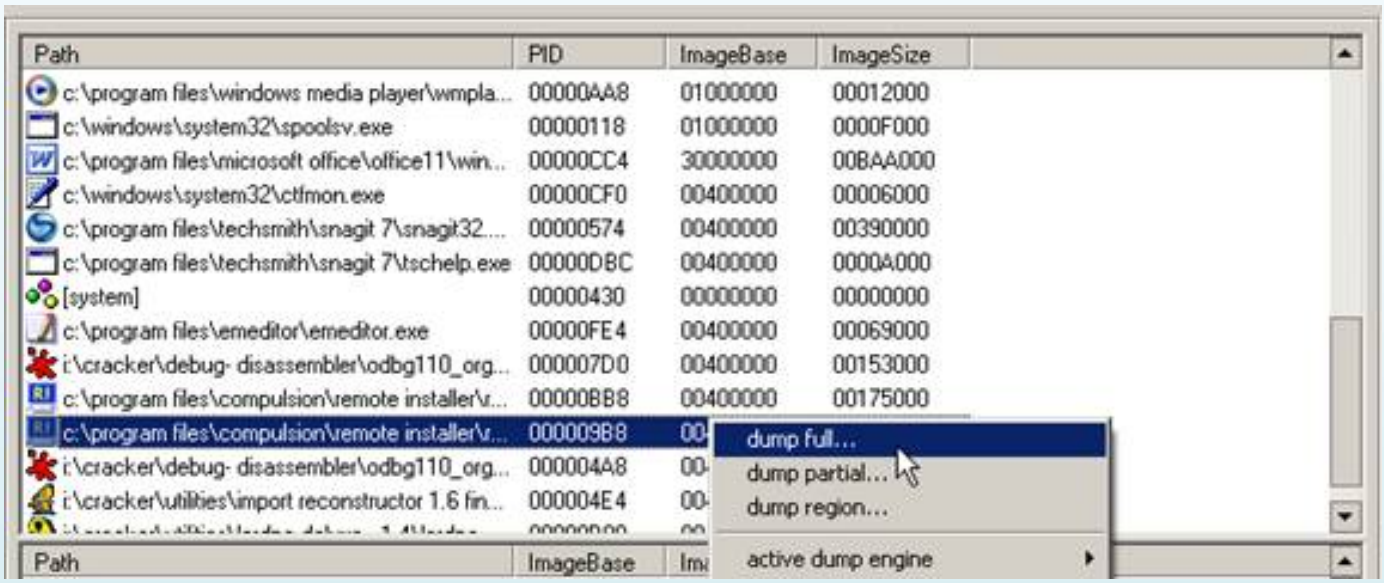
_Den Unpack this process took place normally. Attach child, F9, F12. Change to EBFE 60E8:



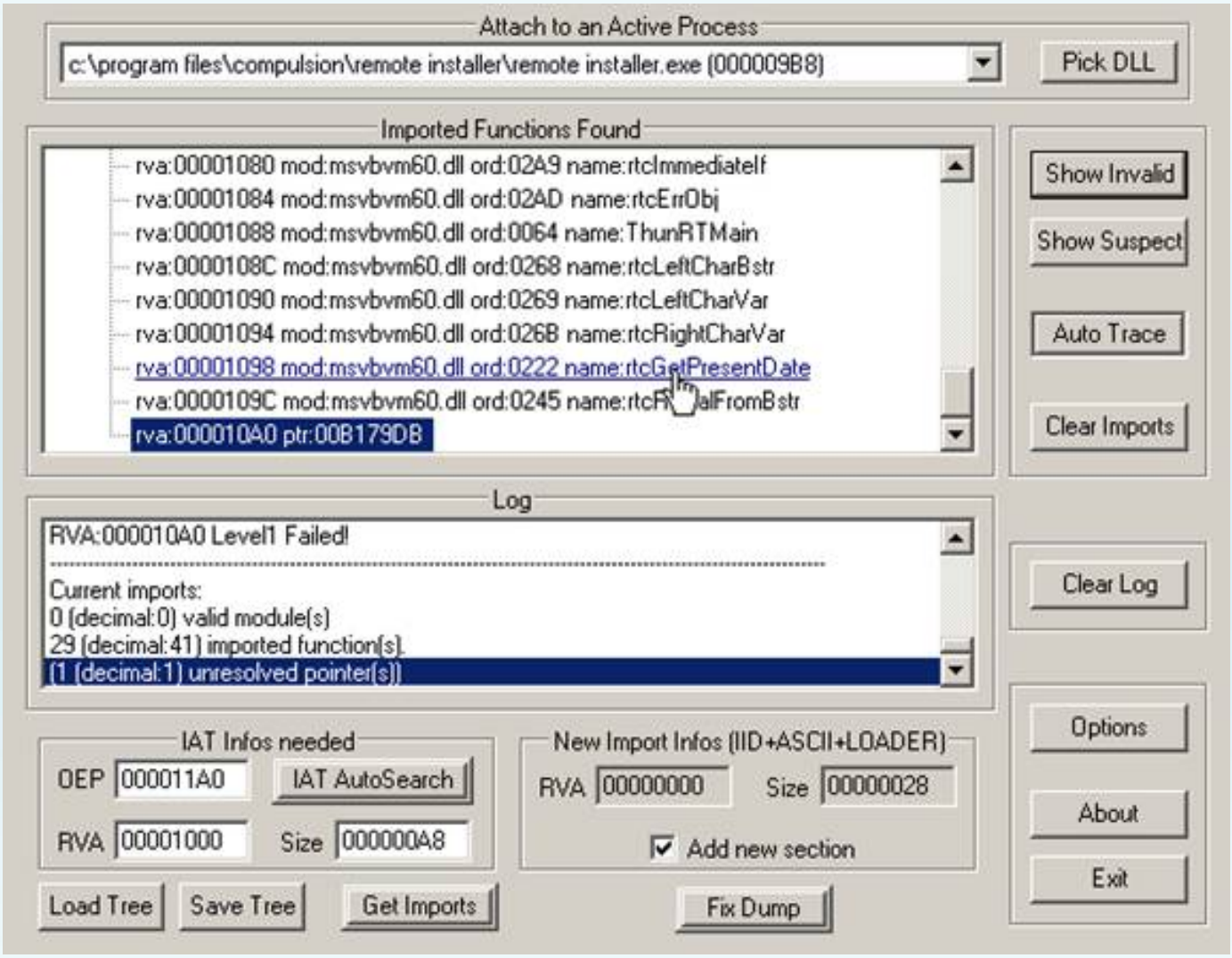
_Alt + M, Breakpoint On Memory Access, F9. OEP.



Full-LordPE dump:



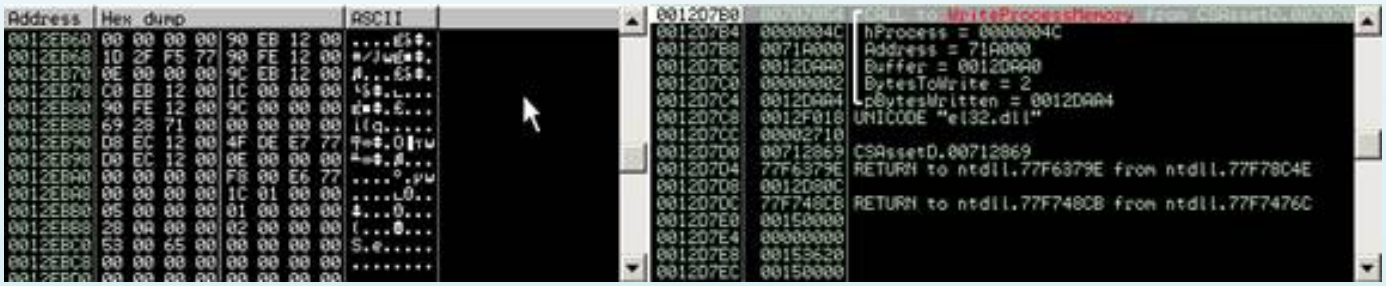
_IAT Fix:



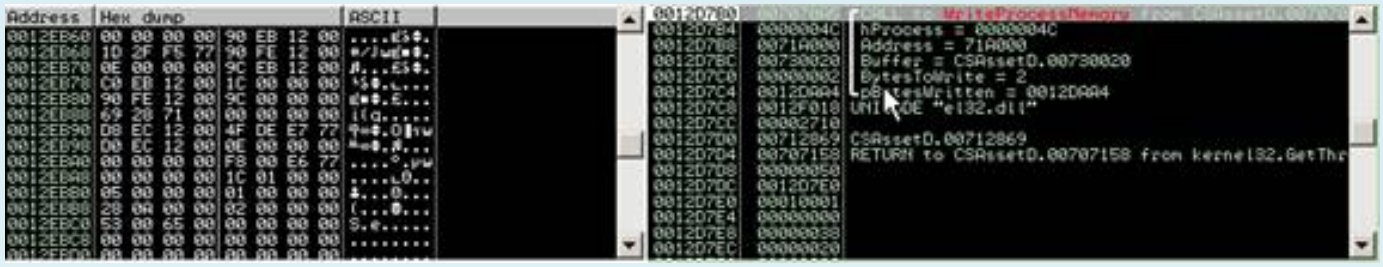
_1 Function invalid. We see the program in VB. I dump the data, load it on the run, yeah. But close it crash. IAT considered, find missing __vbaend function. Add the invisible. Fix dump. It's good run! No further notice anything. View:

1 _Hang this product is more AssetDB, shared a packer and this is CopyMemII. We will discuss this in soft series # 4. View:

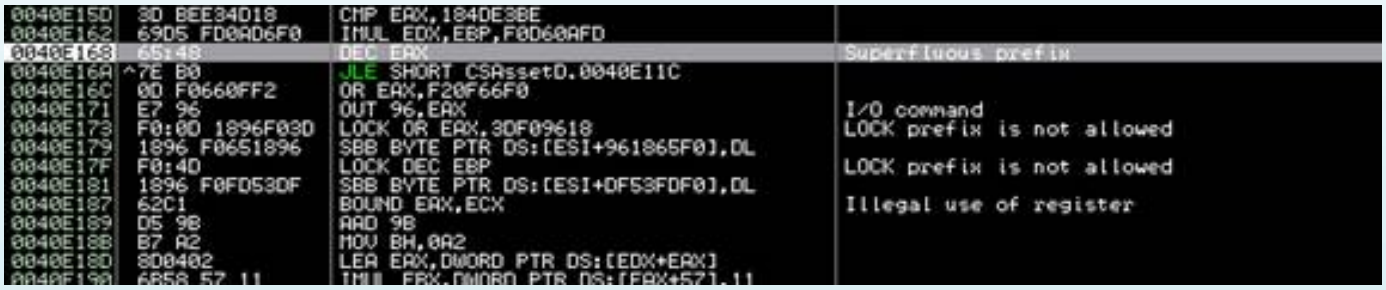
_F9 Hits 1:



_F9 Lan2:

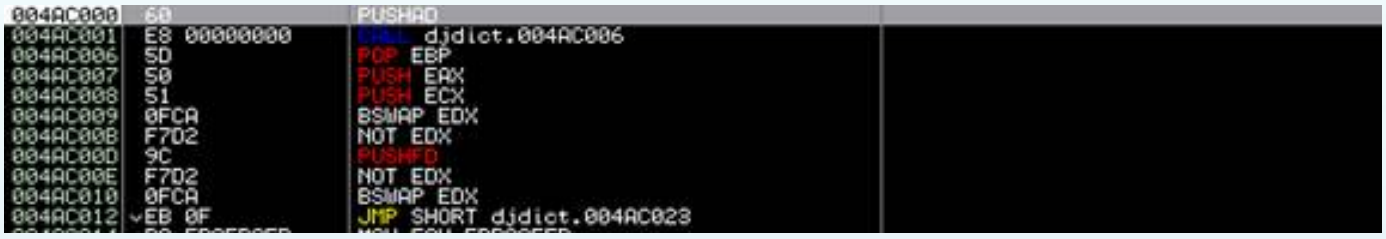


_F9 Times 3:



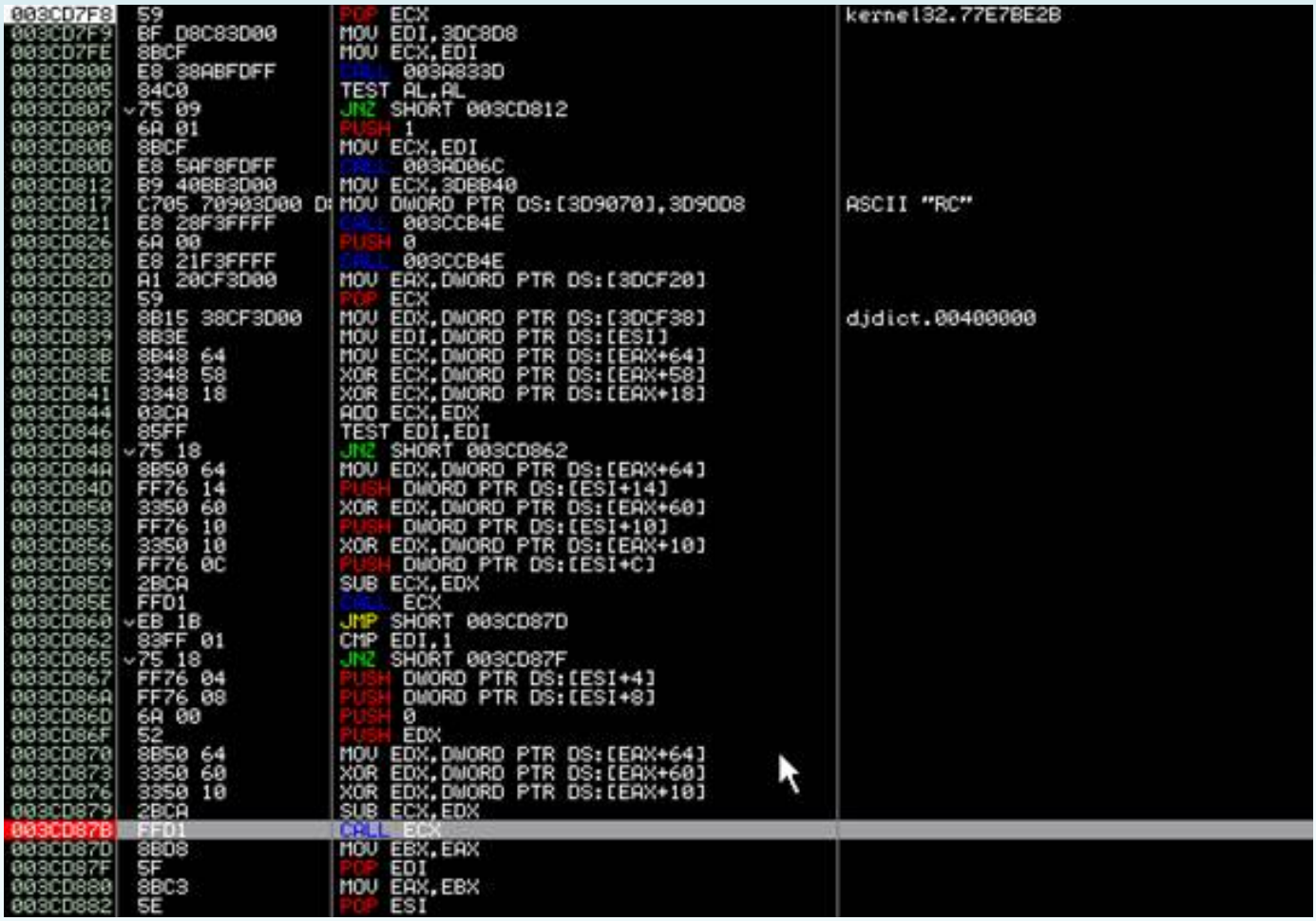
Target # 2: Declan's Japanese Dictionary - Armadillo 4.xx

_Load Target:

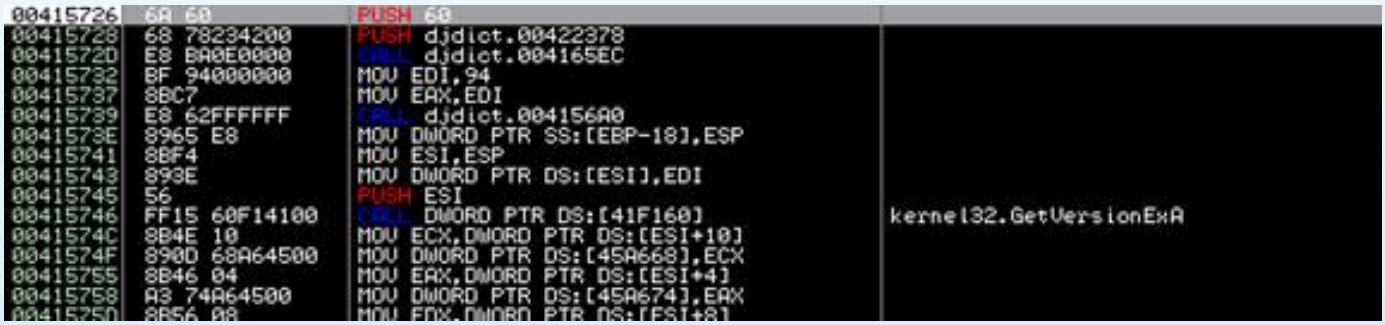


_Dang Standard should have two months to find OEP. A Alt + M, set breakpoint on memory

access. Second BP CreateThread, F9, Ctrl + F9, F7, Ctrl + F9, F7. Set break point in Call ECX, F9, F7:

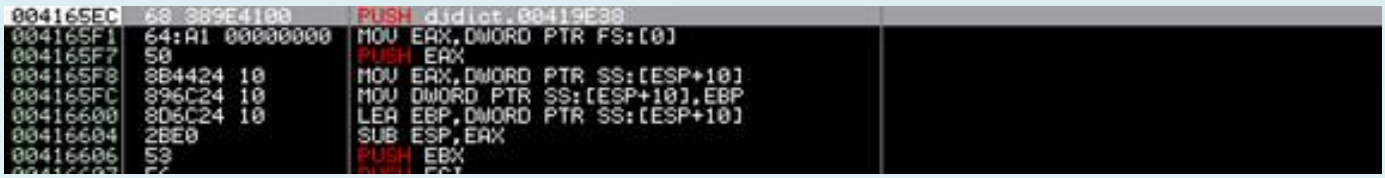


_OEP:

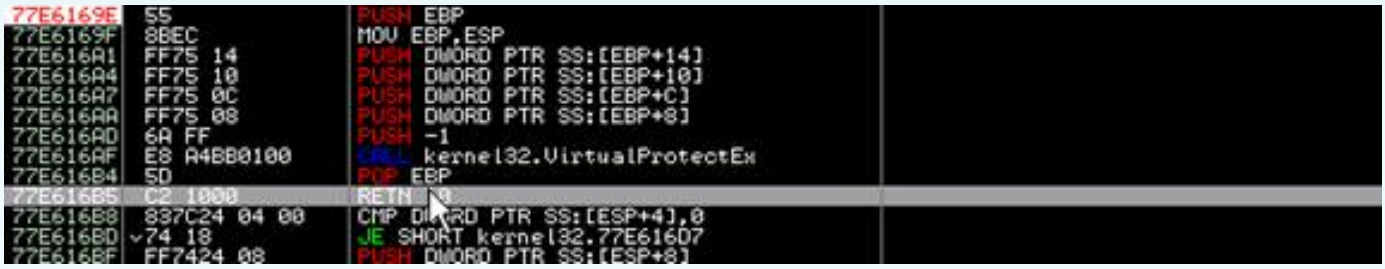


_Den Fix the IAT. We always like to trace function under Call first to find the OEP Jmp infinity method of Cracks by Latinos or VirtualProtect breakpoint.

_Cach First disable (After trace function to call):

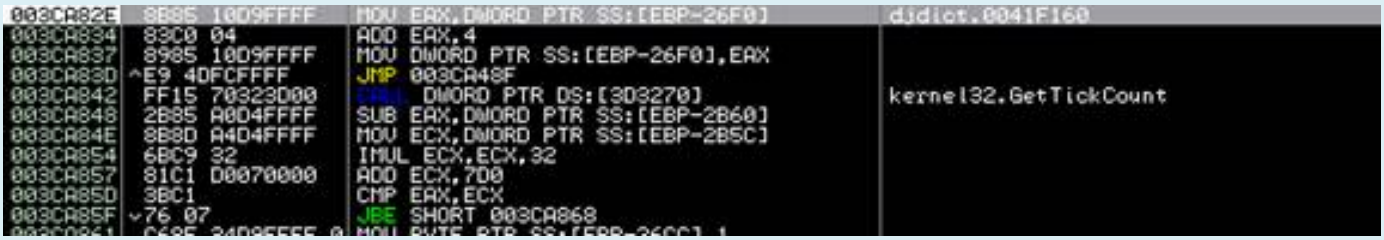


_Cach Second using BP VirtualProctect, Shift + F9 40 times more for the **100** J **Push**



_Hai Way I finished this way out of Vietnam Male ;;). You notice function: CALL DWORD PTR DS: [41F160]; kernel32.GetVersionExA not? I find it a valuable suspicious: **41F160.** Ok, restart again. Memory to dump Windows, Ctrl + G to enter 41F160, set Hardware Breakpoint Write on the Dword. Shift + F9:

_Shift + F9 times 2:



_Cuon Up a bit:

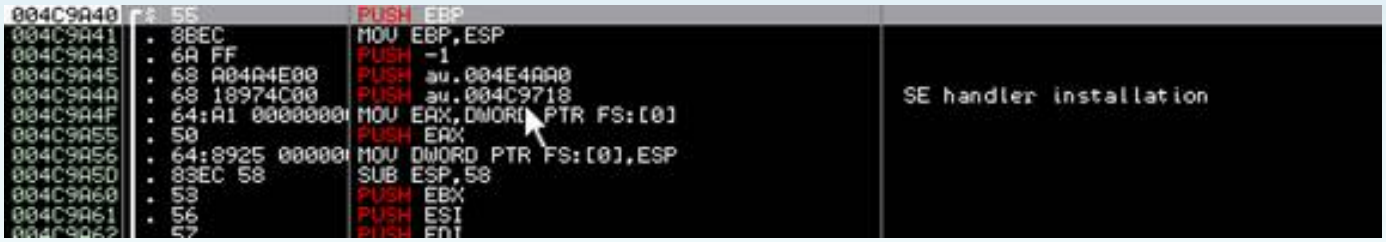
_Khua Khua, so how J portfolio. Similarly the tut before you unpack normal. Restart again, Shift + F9, enter 003CA65B, in which a. F9, to enter this function, 55 to C3 patch. Ctrl + G to enter address OEP 415,726, set in a, HE delete old. Press F9. Using LordPE dump, fix IAT, show invalid, Cut Thunks. Run test, cracked yeah!

_Các You all soft meat led to this, the same type!

Target # 3: Ace Utilities 2:50 - Armadillo 4.xx

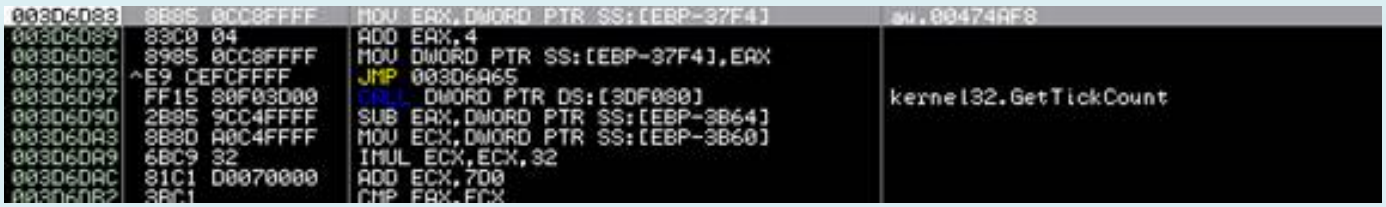
CRC check _Mot form of Armadillo. We unpacked using the error when run the file has been mod. Okie, we treat it!

_Load Target:

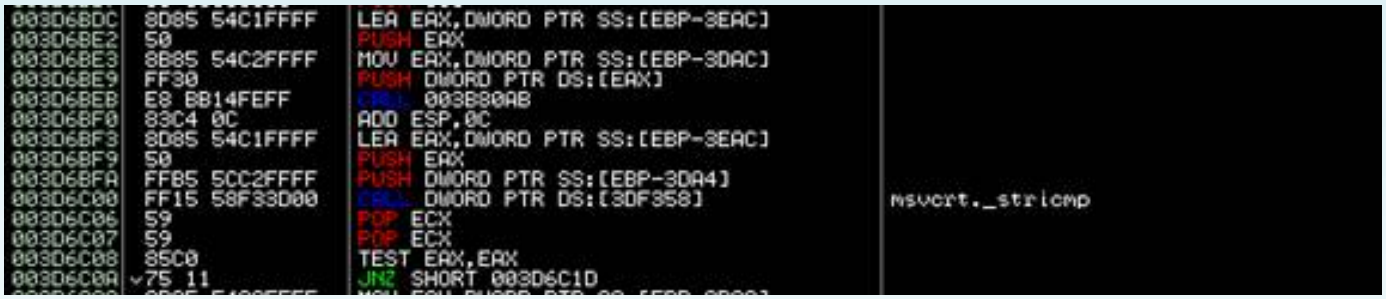


_ Alt + M, set breakpoint on memory access, F9. OEP:

_Ghi 474AF8 remember, Ctrl + F2, Memory window, Alt + F1, HW 474AF8, Shift + F9 2 times:

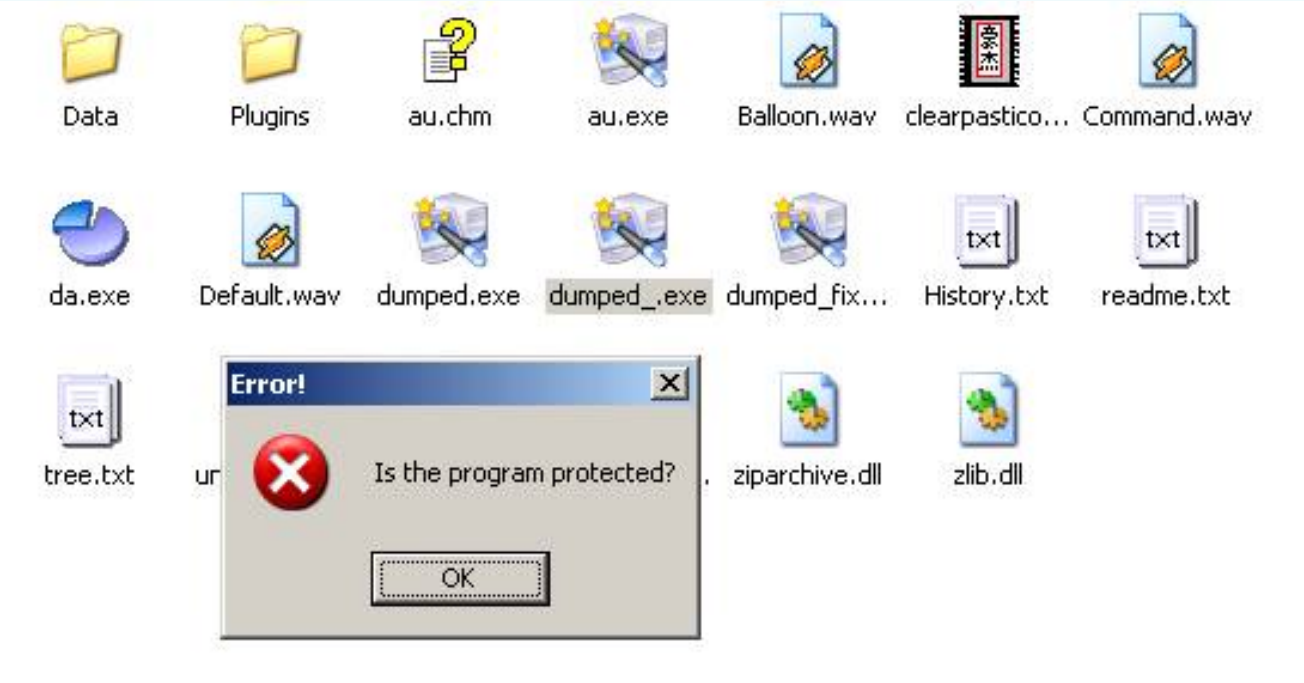


_Cuon Up:

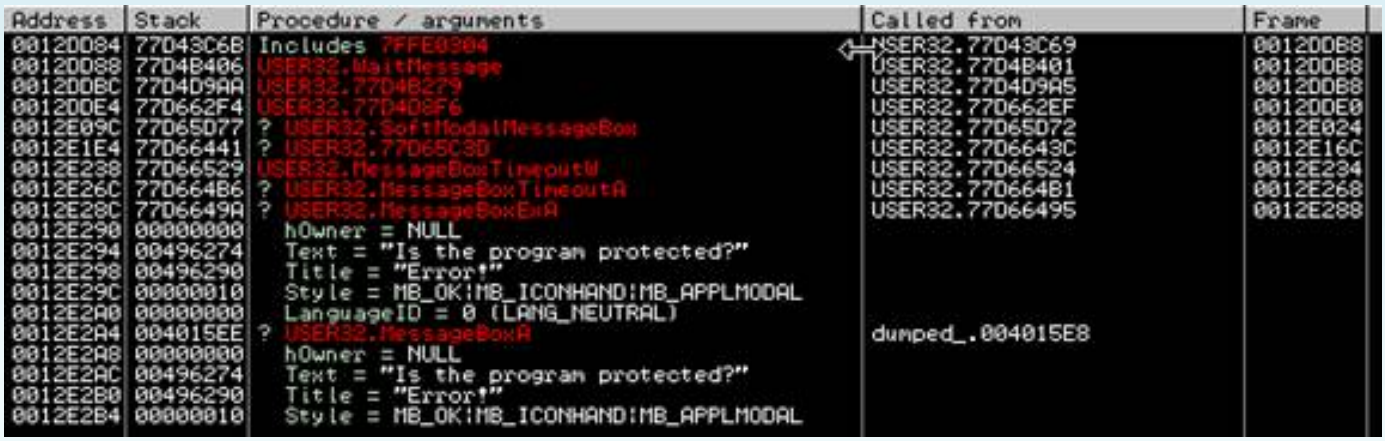


_Restart Again, Shift + F9, enter 003D6BEB, in which a. F9, to enter this function, 55 to C3 patch.

Ctrl + G to enter OEP 00467C23 address, set in a HE, HE delete old. Press F9. LordPE Using full dump, fix IAT, show invalid, Cut Thunks. Test Run:



Chung We need to pass by CRC check. Load up dumped.exe Olly. Press F9 to notice the error, press F12, press Alt + K.



We see _Chung nag known since dumped_.004015E8

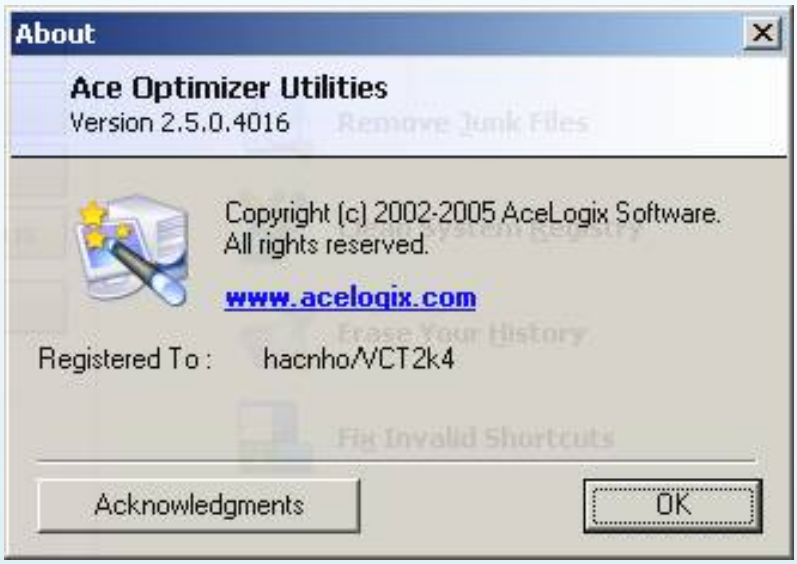
Call stack of main thread, item 14
Address = 0012E2A4
Stack = 004015EE
Procedure / arguments =? USER32.MessageBoxA
Called from dumped_.004015E8 =
_Tro The CPU, type Ctrl + G to 004015E8:

```
004015CE  53              PUSH EBX
004015CF  50              PUSH EAX
004015D0  68 98624900     PUSH dumped_.00496298                ASCII "CERTIFICATE"
004015D5  FFD6            CALL ESI
004015D7  85C0            TEST EAX,EAX
004015D9  75 41           JNZ SHORT dumped_.0040161C
004015DB  6A 10           PUSH 10
004015DD  68 90624900     PUSH dumped_.00496290                ASCII "Error!"
004015E2  68 74624900     PUSH dumped_.00496274                ASCII "Is the program protected?"
004015E7  50              PUSH EAX
004015E8  FF15 604E4700   CALL DWORD PTR DS:[<&user32.MessageBoxA USER32.MessageBoxA
004015EE  6A 00           PUSH 0
004015F0  8D8D 28FFFFFF   LEA ECX,DWORD PTR SS:[EBP-D8]
004015F6  E8 375E0000     CALL dumped_.00407432
004015FB  8D8D 28FFFFFF   LEA ECX,DWORD PTR SS:[EBP-D8]
00401601  C645 FC 03      MOV BYTE PTR SS:[EBP-4],3
```

Patch 004015D9 75 41 JNZ SHORT dumped.0040161C to:

```
004015CE  53              PUSH EBX
004015CF  50              PUSH EAX
004015D0  68 98624900     PUSH dumped_.00496298                ASCII "CERTIFICATE"
004015D5  FFD6            CALL ESI
004015D7  85C0            TEST EAX,EAX
004015D9  EB 41           JMP SHORT dumped_.0040161C
004015DB  6A 10           PUSH 10
004015DD  68 90624900     PUSH dumped_.00496290                ASCII "Error!"
004015E2  68 74624900     PUSH dumped_.00496274                ASCII "Is the program protected?"
004015E7  50              PUSH EAX
004015E8  FF15 604E4700   CALL DWORD PTR DS:[<&user32.MessageBoxA USER32.MessageBoxA
004015EE  6A 00           PUSH 0
004015F0  8D8D 28FFFFFF   LEA ECX,DWORD PTR SS:[EBP-D8]
004015F6  E8 375E0000     CALL dumped_.00407432
```

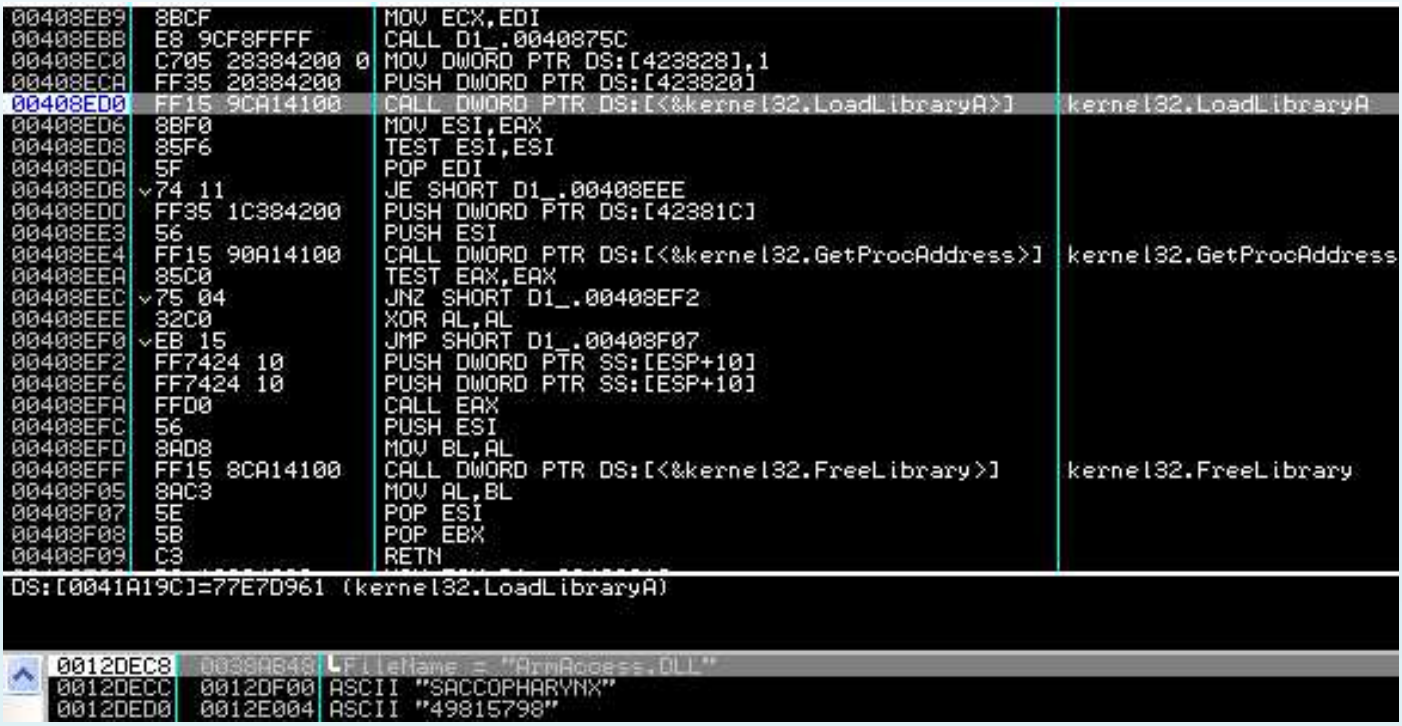
_ Copy to Excutable> Selection, Ctrl + E, re-change EB41 to 7541, save the file. Run test, cracked!



Target # 4: File recover 5.0 - Armadillo 4.xx

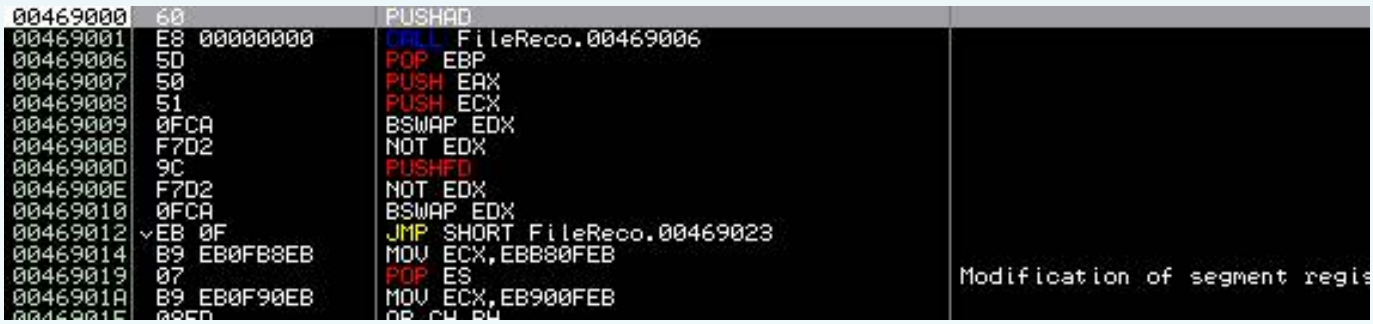
_Day Is a cracked-unpack other, after they registered but unpack requires a function ArmaAccess. Dll to run. Why do we require this file, when inserted into the pack armadillo soft this function, as we unpack grass function as it should require, not really function this role at all. There are two ways to handle them is to use our library are available on the homepage pub Armadillo to complete or we patch. This format will be unpacked after GetFileSizeA used to check size, if not true, LoadLibraryA ArmAccess.Dll file to load, via GetProcAddress to handle. We patch the GetProcAddress function.

FARPROC GetProcAddress (
HMODULE hModule, / / handle to dll modules
LPCSTR lpProcName / / name of function
);

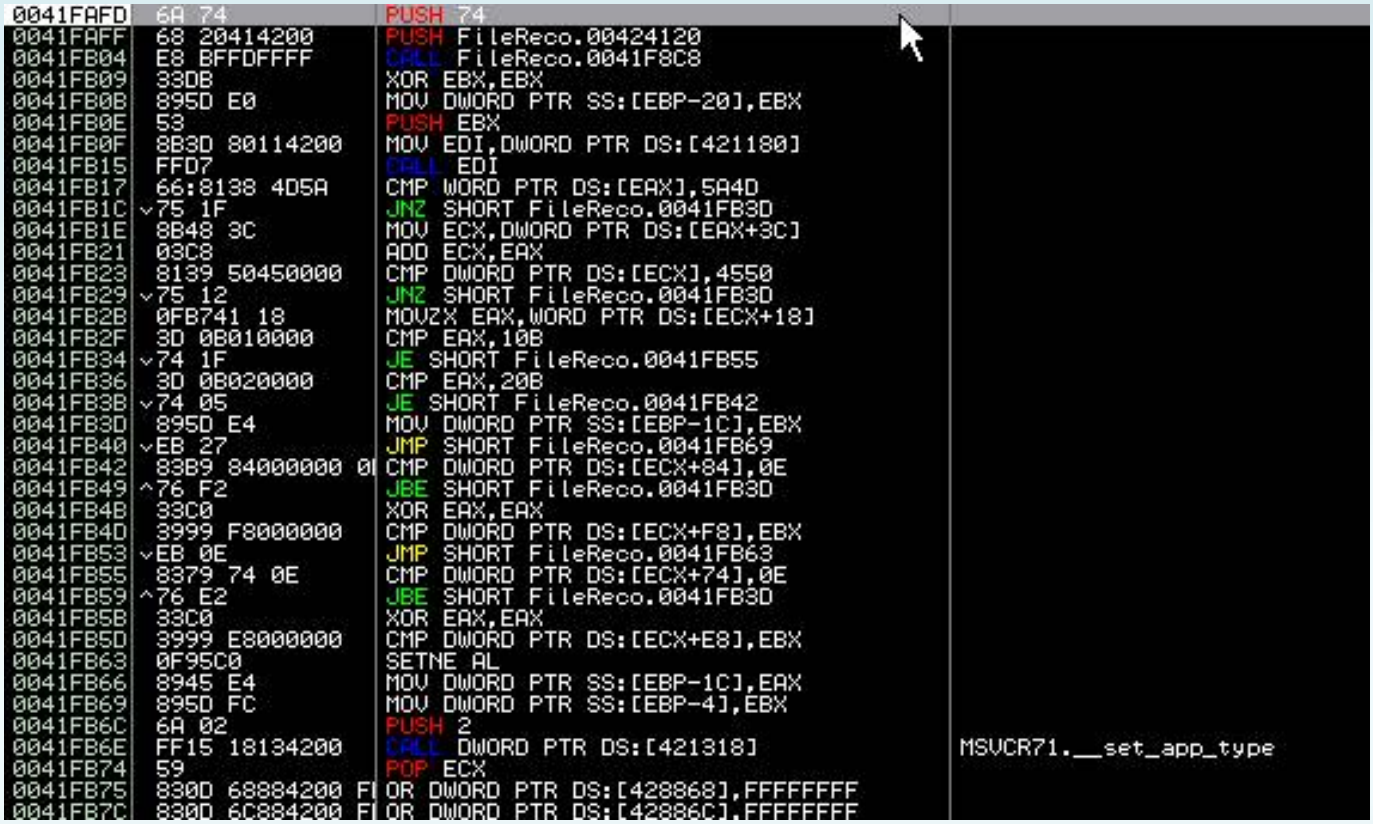


_Dang This very interesting, appointment of a tut other because it is quite long! Here I can you protect a soft style and we use the library available for cracked.

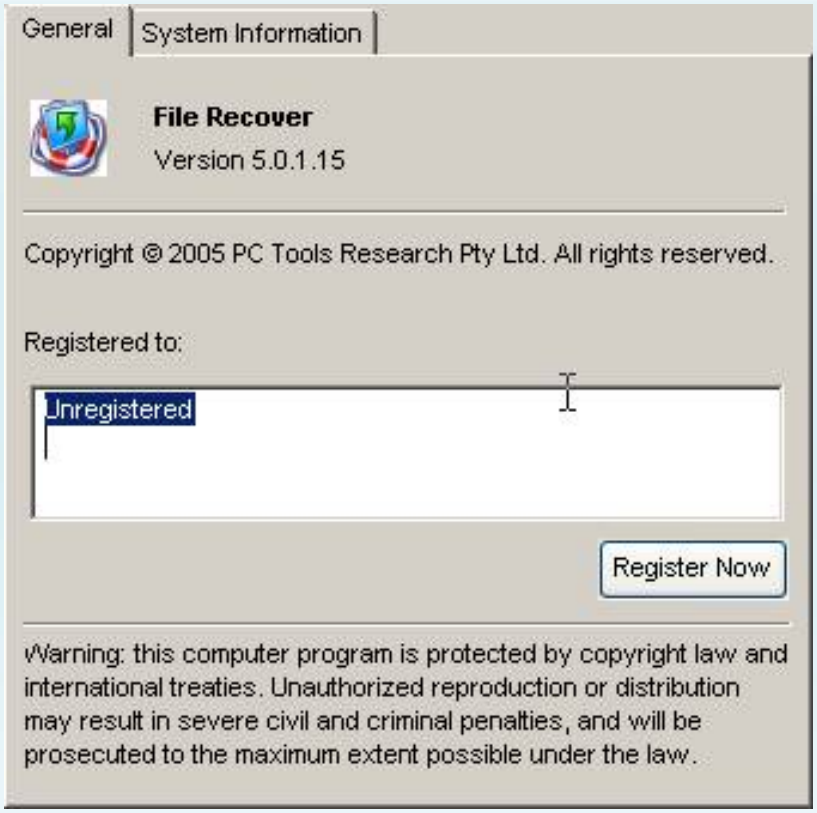
_Load Target:



_Alt + M, set breakpoint in text sections. F9, OEP:



-At 41FB6E, click to select Follow in dump> Memory Address. Set the HW Dword. Do the same steps above. Dump, Fix IAT. Copy the file to try ArmAcess.Dll Run:



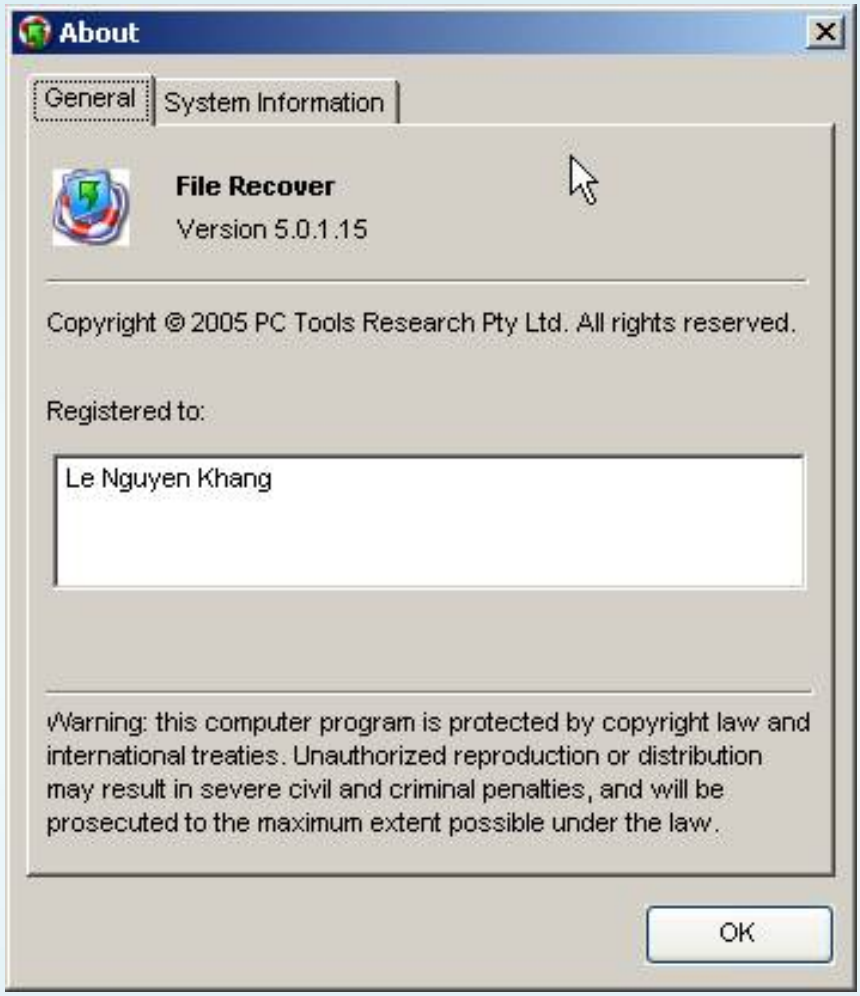
Van Not cracked open HexWorkShop dumped.exe load. Ctrl + F: unregistered

```
000215AC 556E 7265 6769 7374 6572 6564 0000 0000 5553 4552 Unregistered....USER
000215C0 4E41 4D45 0000 0000 5553 4552 4B45 5900 5245 474C NAME....USERKEY.REGL
000215D4 494D 5F4D 4158 4649 4C45 5300 4172 6D41 6363 6573 IM_MAXFILES.ArmAcces
000215E8 732E 646C 6C00 0000 4669 6C65 5265 636F 7665 7200 s.dll...FileRecover.
000215FC 4669 6C65 2052 6563 6F76 6572 0000 0000 5665 7269 File Recover....Veri
00021610 6679 4B65 7900 0000 496E 7374 616C 6C4B 6579 0000 fyKey...InstallKey..
00021624 4578 7069 7265 4375 7272 656E 744B 6579 0000 0000 ExpireCurrentKey....
00021638 7777 772E 7063 746F 6F6C 732E 636F 6D00 7777 772E www.pctools.com.www.
0002164C 7063 746F 6F6C 732E 636F 6D2F 7072 6F64 7563 742F pctools.com/product/
00021660 7375 7070 6F72 7400 7777 772E 7063 746F 6F6C 732E support.www.pctools.
```

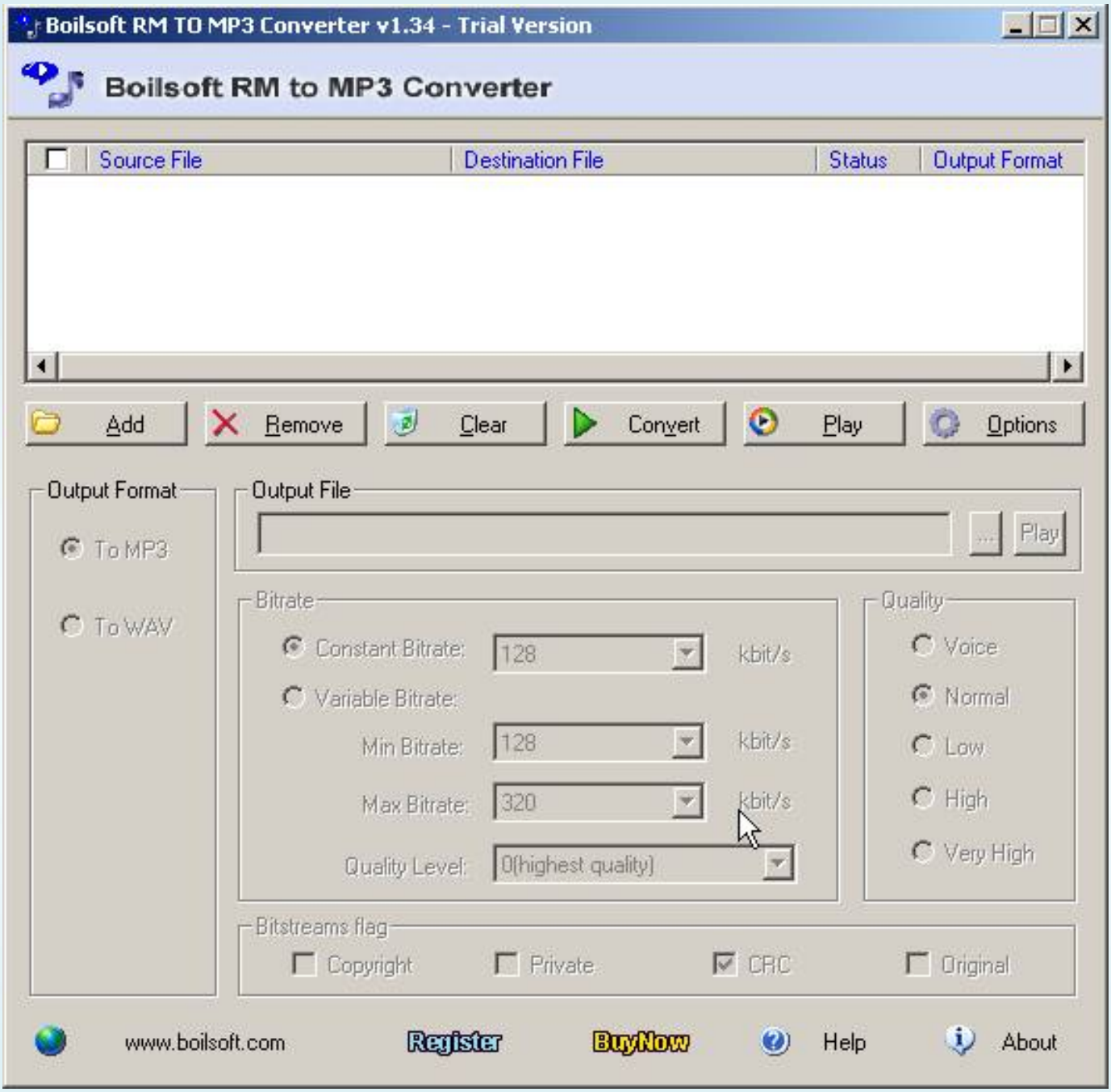
_Edit To:

```
000215AC 0000 0000 0000 0000 0000 0000 0000 0000 5553 4552 ..............USER
000215C0 4E41 4D45 0000 0000 5553 4552 4B45 5900 5245 474C NAME....USERKEY.REGL
000215D4 494D 5F4D 4158 4649 4C45 5300 4172 6D41 6363 6573 IM_MAXFILES.ArmAcces
000215E8 732E 646C 6C00 0000 4669 6C65 5265 636F 7665 7200 s.dll...FileRecover.
000215FC 4669 6C65 2052 6563 6F76 6572 0000 0000 5665 7269 File Recover....Veri
00021610 6679 4B65 7900 0000 496E 7374 616C 6C4B 6579 0000 fyKey...InstallKey..
00021624 4578 7069 7265 4375 7272 656E 744B 6579 0000 0000 ExpireCurrentKey....
00021638 7777 772E 7063 746F 6F6C 732E 636F 6D00 7777 772E www.pctools.com.www.
0002164C 7063 746F 6F6C 732E 636F 6D2F 7072 6F64 7563 742F pctools.com/product/
00021660 7375 7070 6F72 7400 7777 772E 7063 746F 6F6C 732E support.www.pctools.
00021674 636F 6D2F 6669 6C65 2D72 6563 6F76 6572 2F70 7572 com/file-recover/pur
00021688 6368 6173 6500 0000 4C69 7665 5570 6461 7465 2E65 chase...LiveUpdate.e
```

_Save, Edited open file:

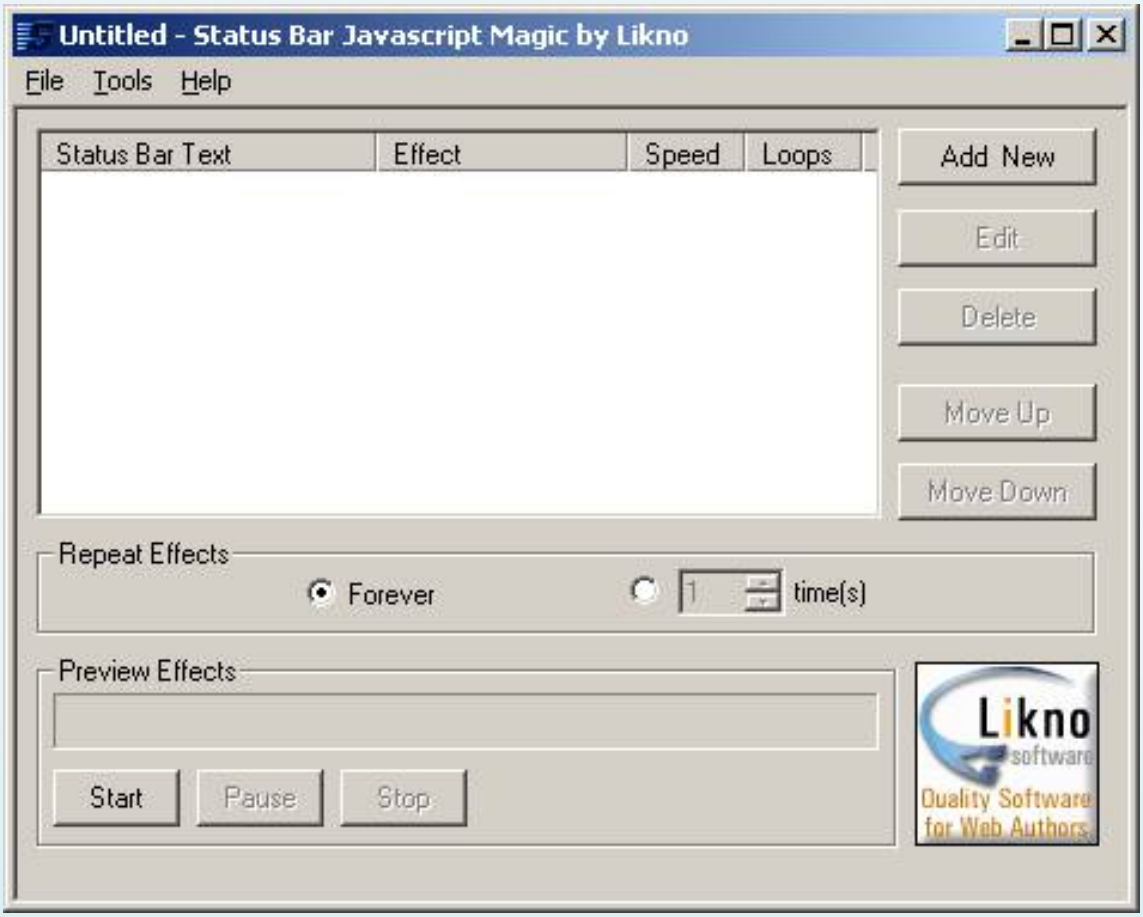


Target # 5: RM to MP3 Converter v1.32 - Armadillo 4.xx



_Ban His own practice.

Target # 6: Status Bar Javascript Magic version 1.0 - Armadillo 4.xx



_Cai Not you run 15 days. Remove it nhé!

II. Conclusion

_ Tut that this heart of some of you that I am, why medical instructions form push ebp without pushad form.
_Neu You have any soft pack with Armadillo please link to lenguyenkhang@gmail.com

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx to authors of OllyDBG.

To be continued ...

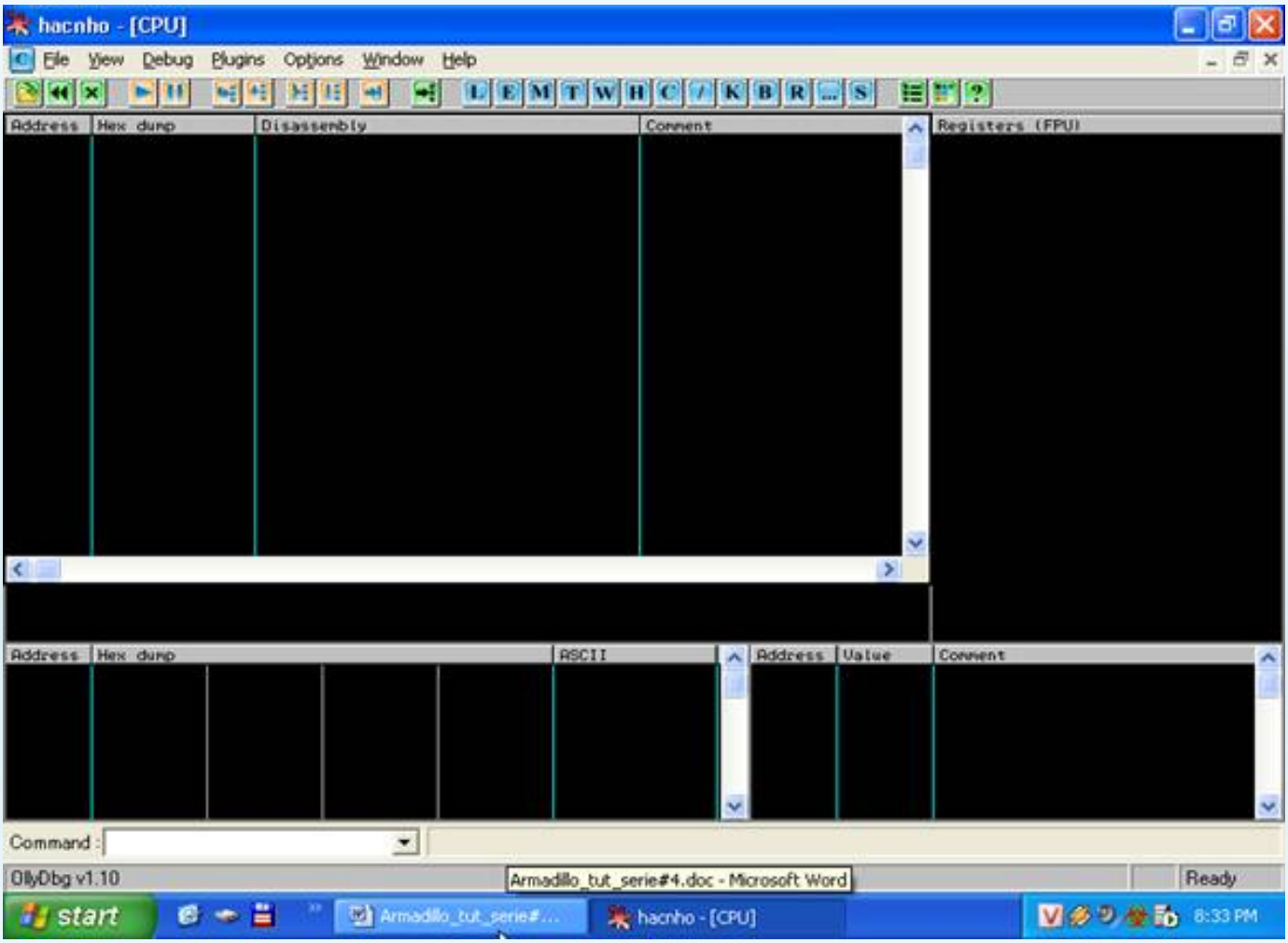
Written by **hacnho** (tutorial date: Tien Giang 1/09/2005)

Armadillo collect sand-stone

Section 4: Armadillo x.xx-blocker + Debug CopyMemII

I. Intro

_Tui Written to this the tut, tut by the old loss. In this tut we will learn about CopyMem protection. This is a very top. If you do well with this format you have nearly reached the Upper legacy of Armadillo Unpacking only the last floor is Nanomites. You know then debug blocker, but CopyMem you heard but not to understand what it is. And the fact that you can understand, but never started to unpack it all. In fact you are not good at that we have a psychological y. Play it to the Armadillo jitters, no need for it under any form! Like me that "a cat eating a mouse in 3 seconds, asked 30 children 30 cats eat mouse how many seconds?" Almost all the respondents is 30 seconds! You also see that, through 3 tut Armadillo and not just as hard not to think?
_ You Merc new share for a OllyDBG with the ultra cool mod by tSRH again. I also down about. This is not patch you should not be used to unpack Armadillo. That the author intervention raw bạo to Resource, the ulterior by ASPack pack, can not unpack. I must have made an interface similar to the share of Merce. This smooth running with Armadillo. This is a gift and my gift to you this last tut. After tut offline I have this job, sure to 1 again sit back with a new PC. When that hope to meet again for all you see is pro.



_ What is that so called CopyMEM protection and blocking debugger what does mean?

When an Armadillo protected Application starts executing, it also creates another process.This process is called child, and the first executed exe is called father.
So, when you will run it under Olly and check in process list, you will find two processes with the same name, with a different ID's. The red one in process list is the current proccess Olly debugs, and is the father, and the black one is the child.

So, debugger is actually blocking the Olly incapabillity of a Ring-3 debugger todebugg the child, which is the "real" actuall process that we want to make a dump, cause the child is a separate process created during runtime.

Now, when the father decides to create the child process, will allocate memory dynamically.The father will create the child with all the sections similar to him (cause is actually the same program) except two sections (maybe more in other applications): Code section.Of course, IAT section will also not be similar, cause in father is filled with 00's in the child if filled with Redirected calls.

At start, code section of child is filled with 00's. When the child has to start running from OEP, this will cause an exception to the father, cause as I said, in memory (code section) are 00's. The father will realize that and will copy the first 1000h bytes to the child. So, in this starting point, OEP will be between the memory locations that father is filling the original decrypted code.The father will also copy an encryption-decryption routine for this space in memory child, that will be responsible for encrypting during runtime of this code, when EIP of child will not be between the Ranges of just copied bytes.Then, father will copy the original 1000h bytes next to the child, and the next till it fills all of the code section child.Now, the child is to start running independant actually.So alone, runs the first block of 1000h bytes (OEP which is inside these bounds memory), and all other blocks of 1000h bytes are encrypted in child . If EIP passes the limits of that memory space (or a call or just a jmp code execution) the child 1000h bytes this encrypts and decrypts the blocks requested, that EIP now.And it is inside this thing continues till the exit of the program . So, cause memory copies of those that continually happen, and because it is the second version of that is called techik CP2 or Copymem2.

_Noi Short Defeat CopyMemII when we need to understand that the father will write 1000 bytes to the code. In this code, to buot must contain OEP. By algorithm traces necessary, we will determine the exact OEP. Good code this code. Dump and fix IAT as splicing form code.

II. Tools

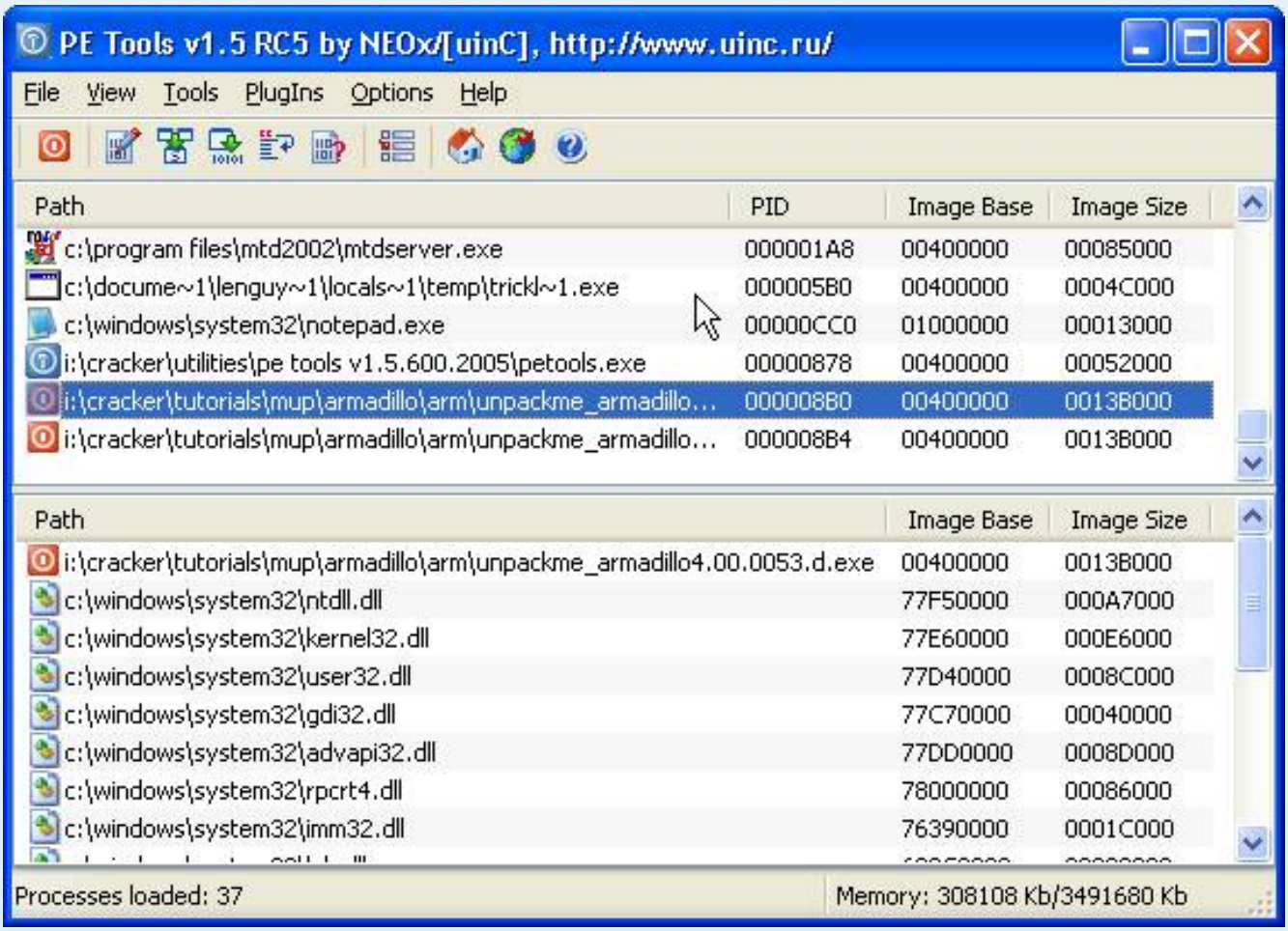
_Công Only need the tools are:
1.OllyDBG - The best config debugger for Armadillo unpacking by hacnho.
2.PETools 1.5RC5
3.Import REConstructor 1.6 Final
4. PUPE Suite 2005 - Universal Process Patcher Pro
5.EditPluss 2:20 Regged (thanx kienmanowar)
6.API Address 1.0

III. Unpacking

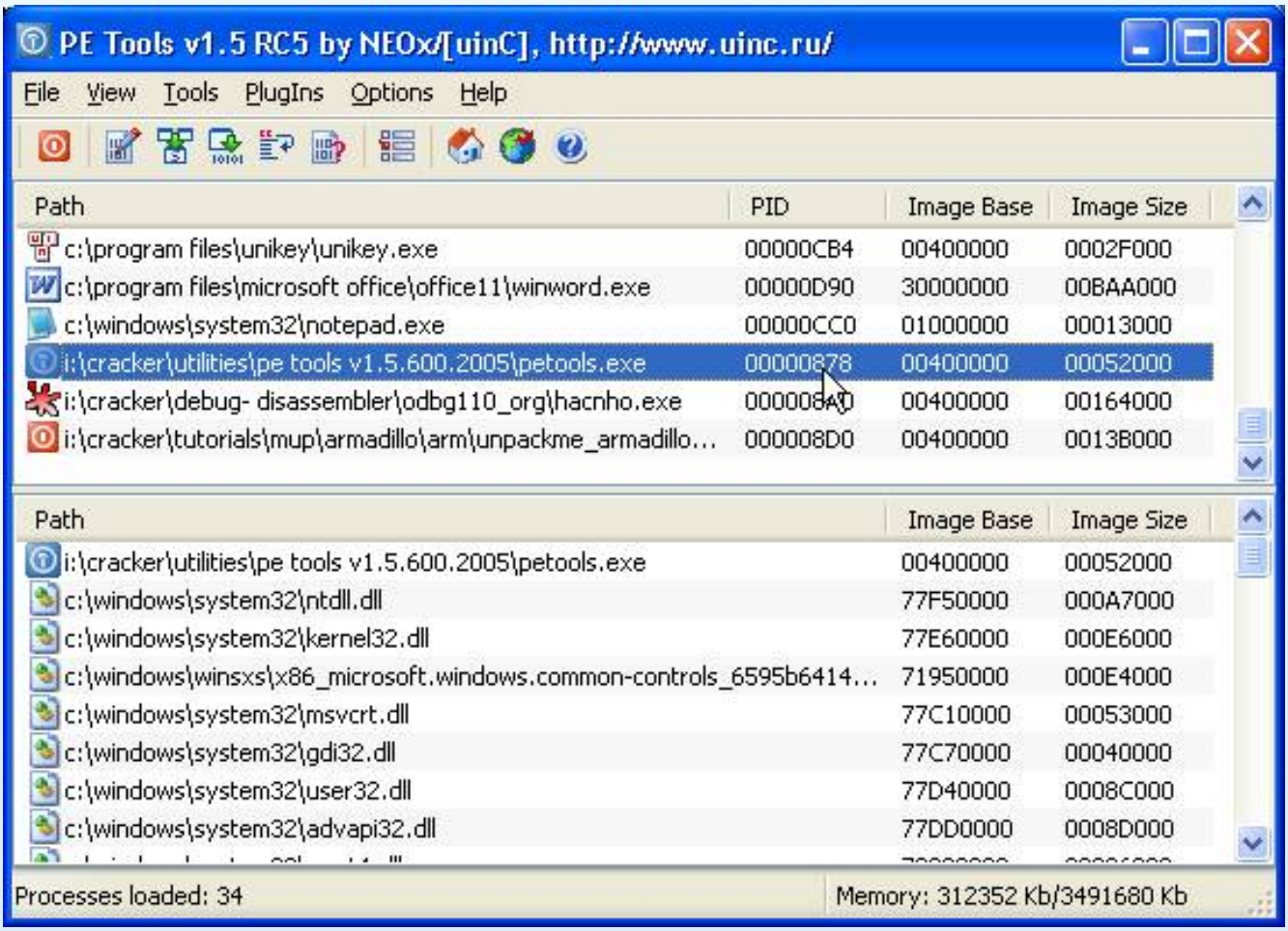
_Truoc Unpack the bags will protect an snd Unpackme this type.

Target # 1: snd-Unpackme Armadillo 4.xx

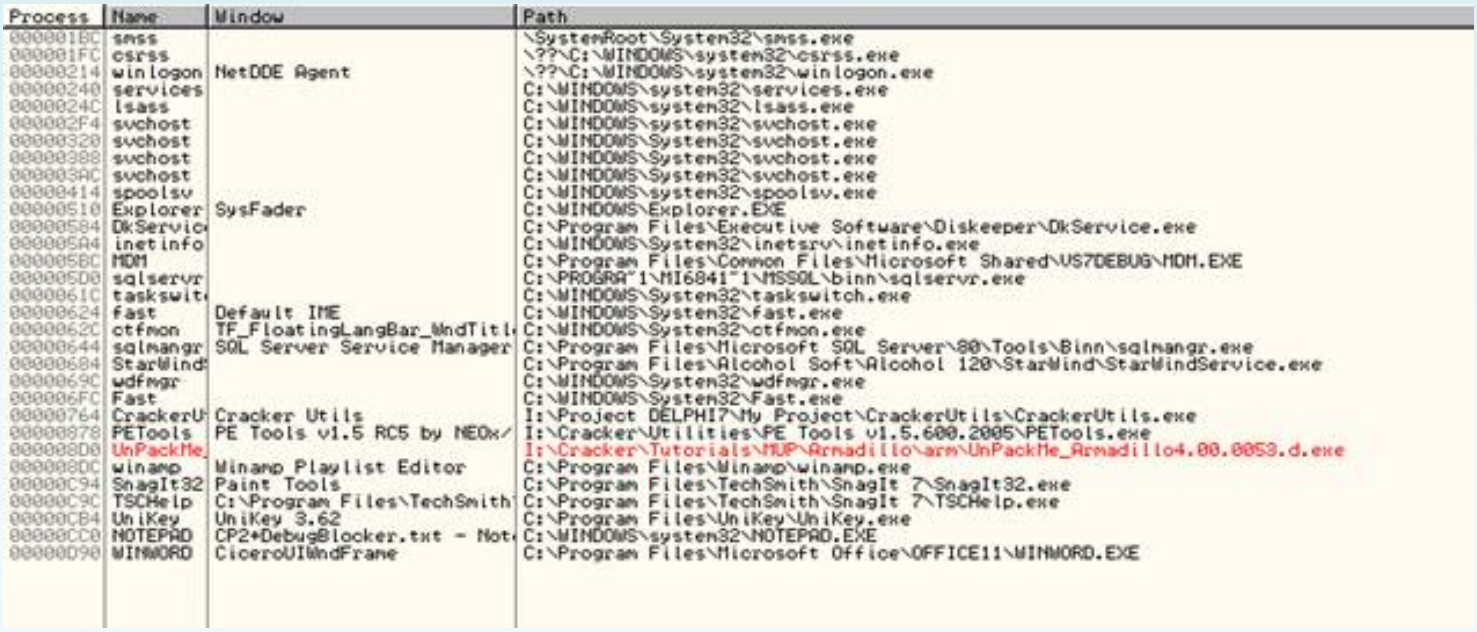
_Dau The first of CopyMemII is when you run your target EN, it will exist two process. View:



_Khi Olly load up the target about 1 up process:

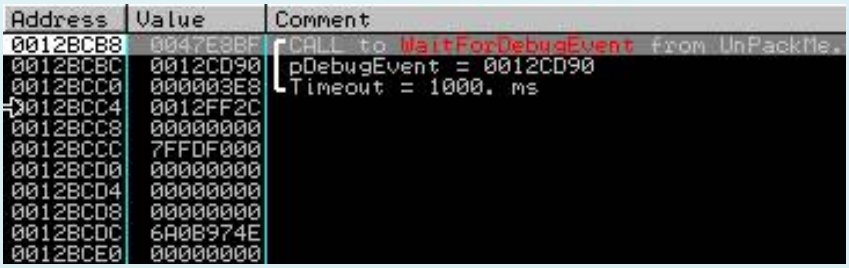


_Trong OllyDBG, Attach to the menu:

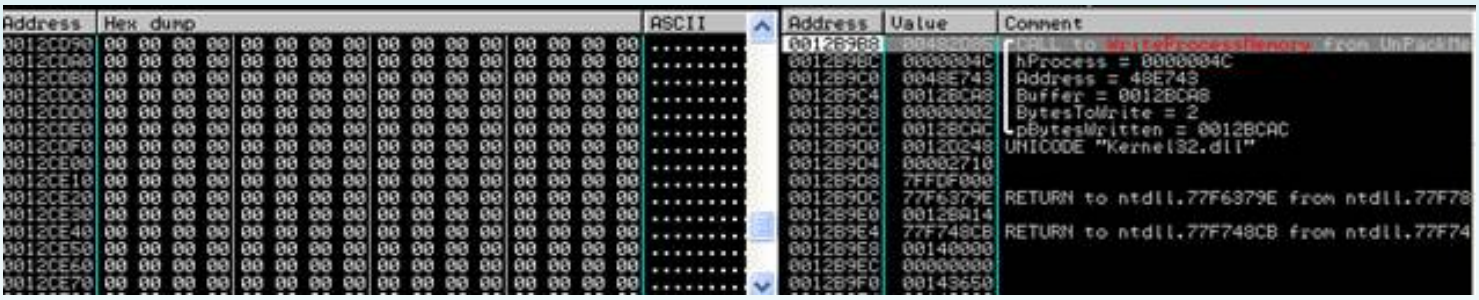


_Khi Begin to familiarize yourself with Armadillo, right on the Wealth is a soft-Lab Developer 3.0 mad I want to, you clearly see it has two process hat, do not Attach. Why so, why so: D. This is a feature of CopyMemII.
_Dau The second is our considered view it is 1000 bytes to write code that contains the child OEP process or not?

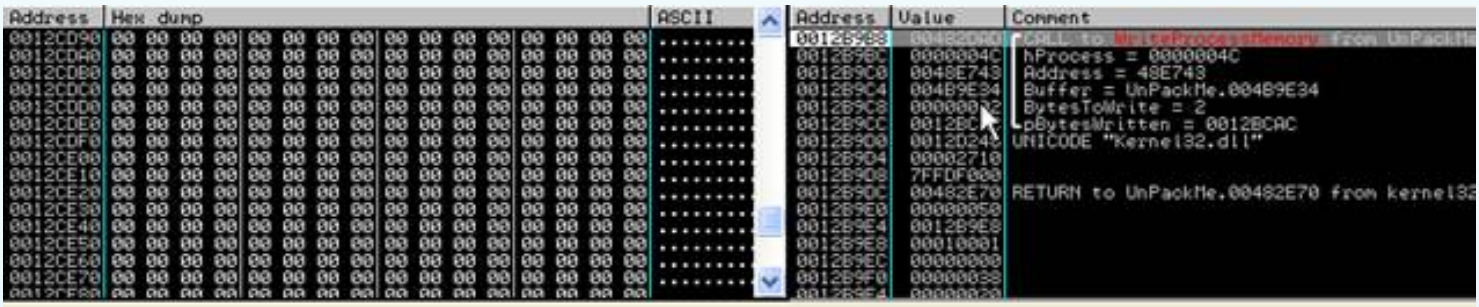
_Load Target to Olly. Alt + F1, BP WaitForDebugEvent. F9:



_Ta See address DebugEvent process by creating a father 0012CD90. Remember take it. Ctrl + F2 restart Olly, Alt + F1, BP WriteProcessMemory, Ctrl + G: 0012CD90. F9 first:

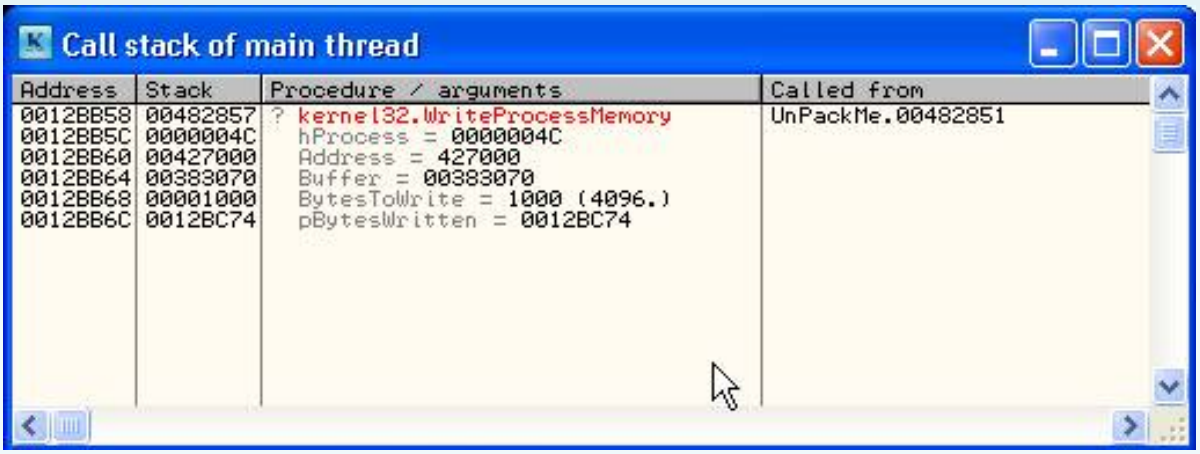


_F9 Second:



_F9 Third (to view more, select Long> Address).

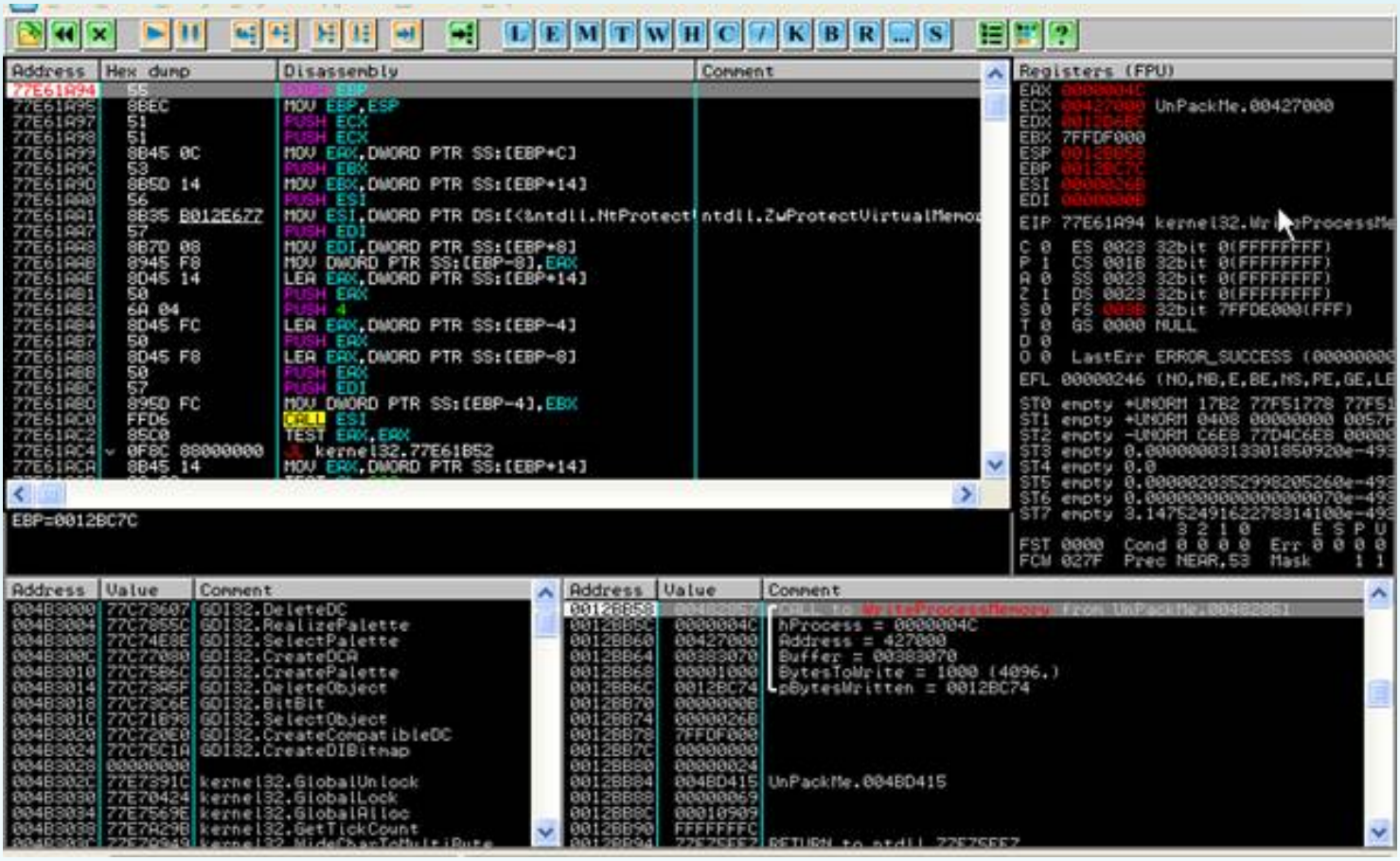
_Nhan Alt + K to stack we see:



What _Thay through this information. OEP we = 4271B0. Process father will write 1000 bytes to process from the start address 427000. Retrieved 4271B0-427000 = 1B0 <4096 t o 432 <1000. Clearly OEP lot in about 1000 bytes.

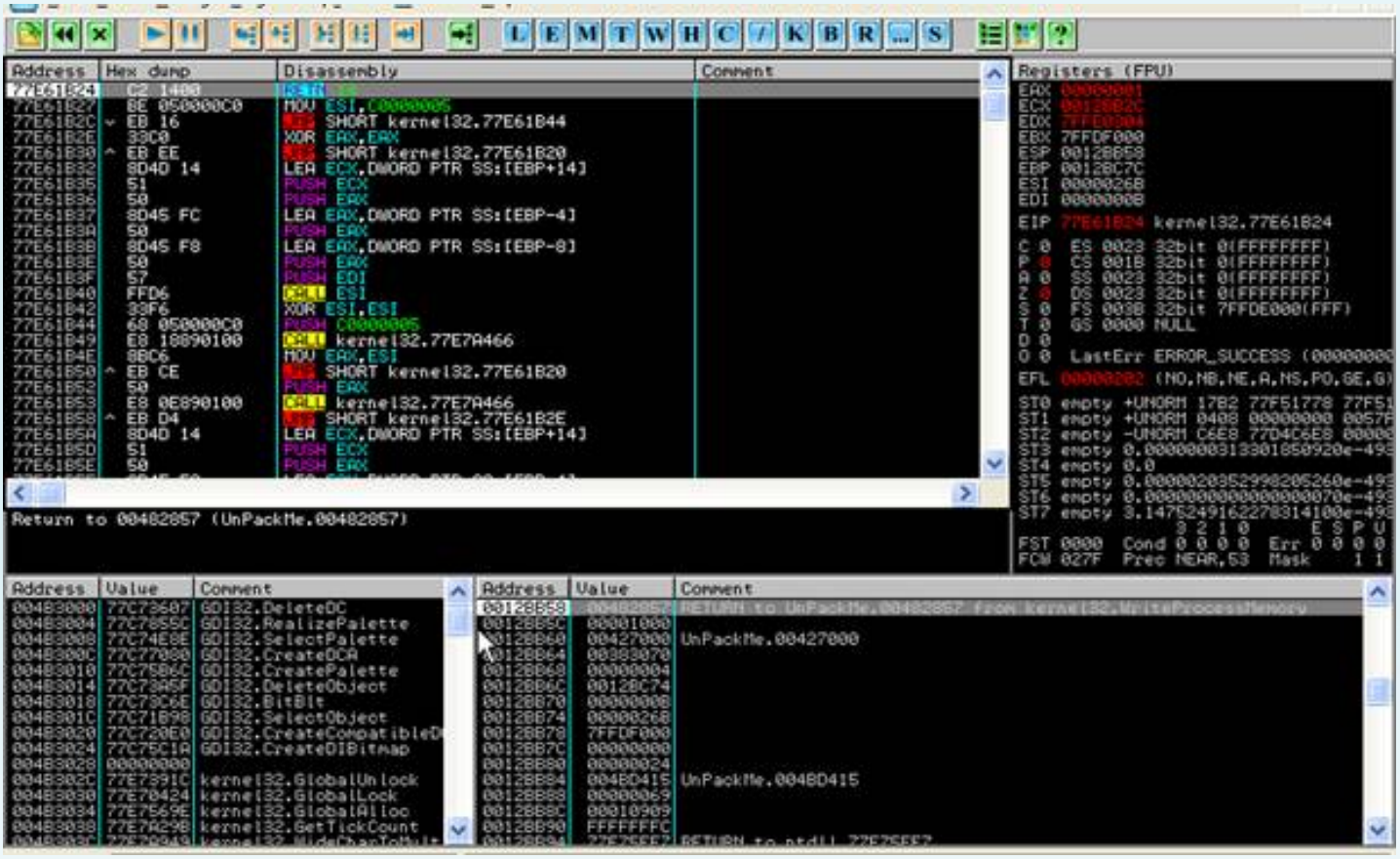
_Vay Function call to write this in 1000 where bytes. Need to know it to submit it: D.

_Tro The main problem! You are here:

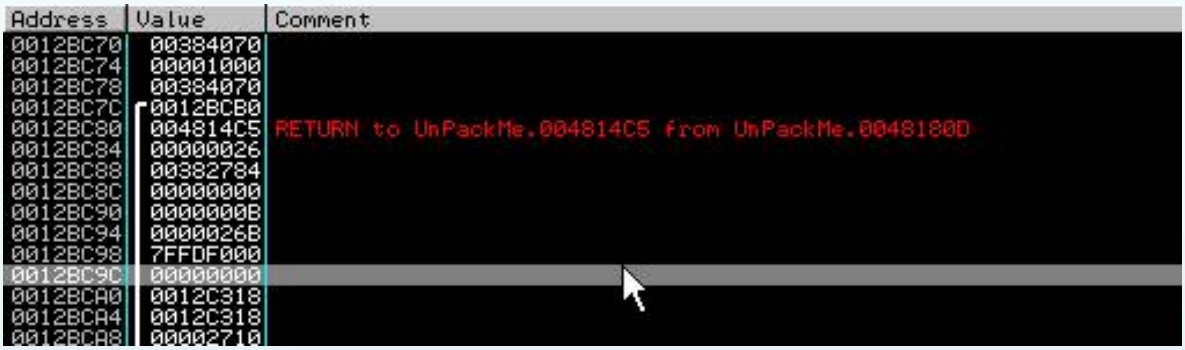


_Xoa Breakpoint WriteProcessMemory go: BC WriteProcessMemory. The purpose we need to find the call, temporarily called Magic Call .

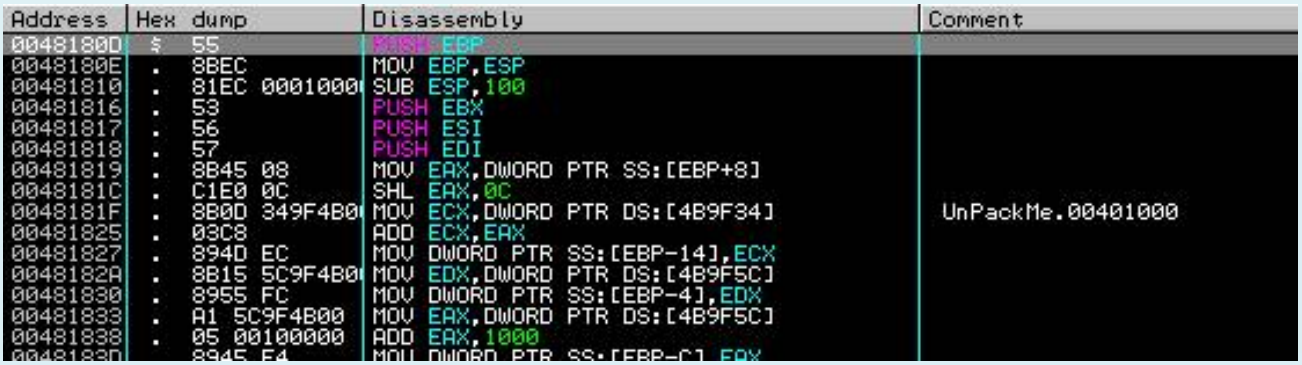
+ F9 _Ctrl execute till return. You will be here:



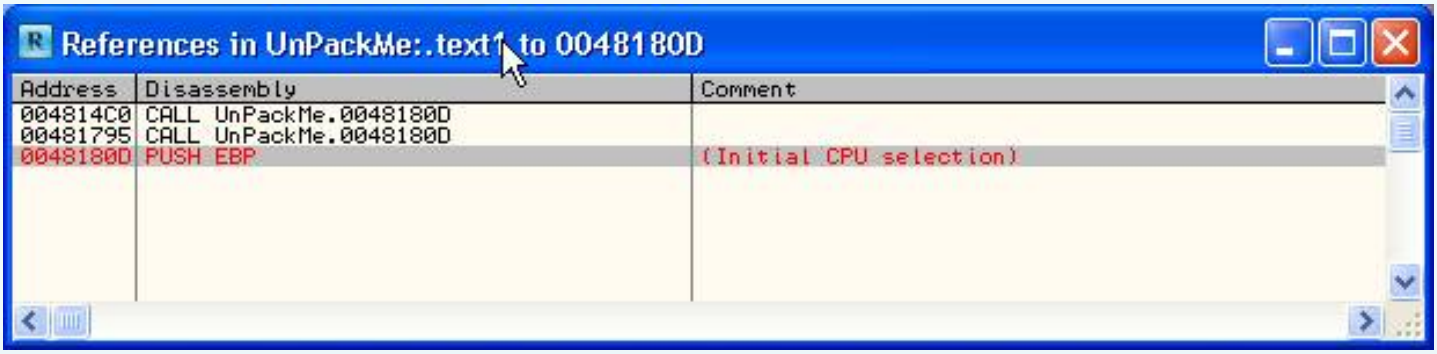
Stack area _Trong you roll the mouse to meet the second return from the first return is:
0012BB58 00482857 Return to UnPackMe.00482857 from kernel32 WriteProcessMemory
-We see the need to find is:



_Ghi Memory address 48180D. Back to the CPU, Ctrl + G: 48180D.



_Tai Why we do this. Understand that prior to 1000 bytes to write code can encrypt our OEP, WriteProcessMemory function should point to Call a function that I called Magic Call. Why do I Ctrl + F9 because I want the values returned by WriteProcess function. We need value for the first time I was about to write is 1000 bytes call (I F9 3 times, if you have not run any time they choose to return value 3). C'est trop simple: d.
_ After coming here, we need to know who point to address this (particular function call any point to this address, one of which is the magic call). At 48180D you press Ctrl + R:



_Vay Is the second call is in the service. According to the time you submit nhỉ now? NOP bay is to dust immediately. I also know which chả lun: D. Jokes phone, you also remember our return address not just find:

0012BC80 | 004814C5 Return to UnPackMe.004814C5 from UnPackMe.0048180D

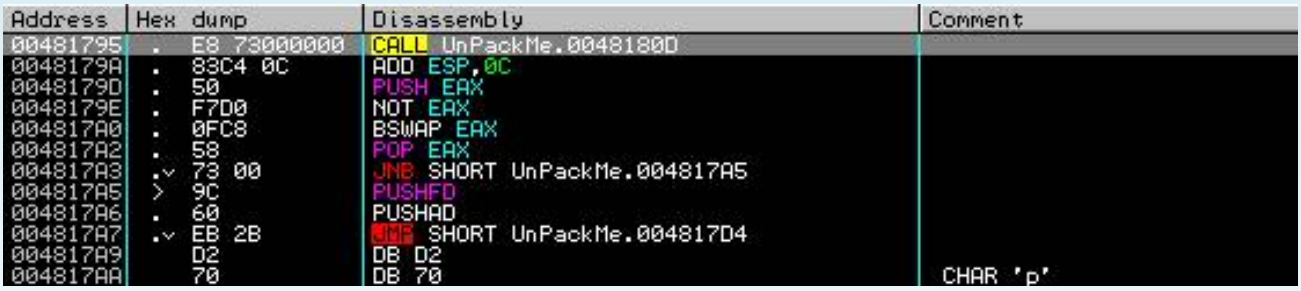
4814C5 _Thay have little relevance to what we choose it and what the charge! How can that be selected because it was called then, the need to destroy thẳng is 481,795. Hả too difficult to understand, very simple, like fig tree, the want bóp must springy, the leaderboard role intermediaries. Indeed, the value of only 4814C5 role intermediaries to function WriteProcessMemory called up. Key points are located at 481,795. You need to patch this place functions. Double click on

References in UnPackMe. Text1 to 0048180D, Item 1

Address = 00481795

Disassembly = CALL UnPackMe.0048180D

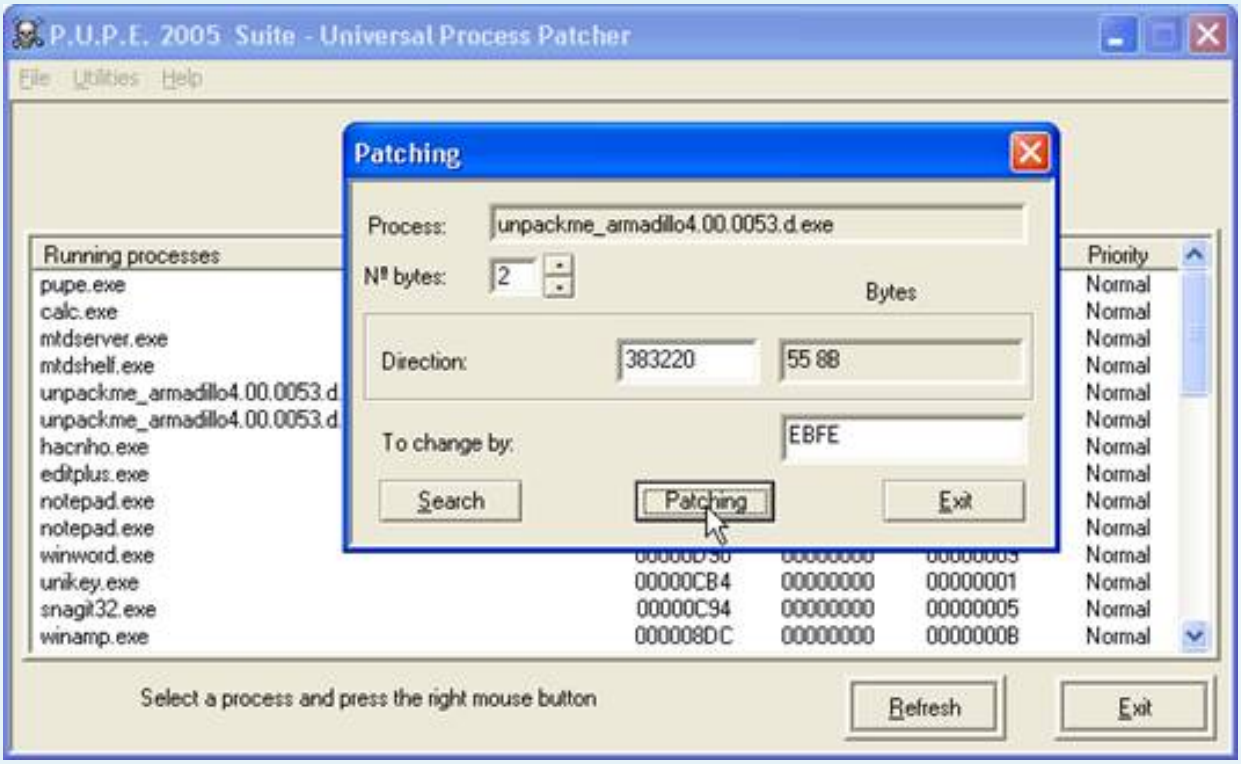
_Ta Here:



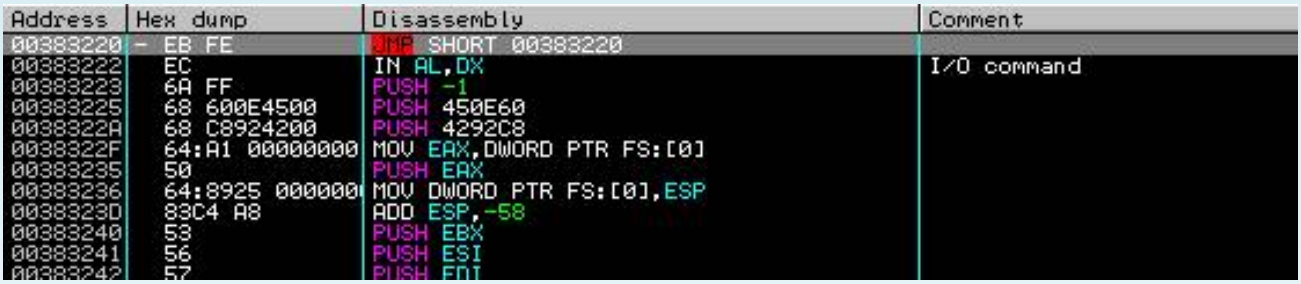
_Nop It:

```
Address   Hex dump          Disassembly                      Comment
00481795      90            NOP
00481796      90            NOP
00481797      90            NOP
00481798      90            NOP
00481799      90            NOP
0048179A  .   83C4 0C       ADD ESP,0C
0048179D  .   50            PUSH EAX
0048179E  .   F7D0          NOT EAX
004817A0  .   0FC8          BSWAP EAX
004817A2  .   58            POP EAX
004817A3  .v  73 00         JNB SHORT UnPackMe.004817A5
004817A5  >   9C            PUSHFD
004817A6  .   60            PUSHAD
004817A7  .v  EB 2B         JMP SHORT UnPackMe.004817D4
```

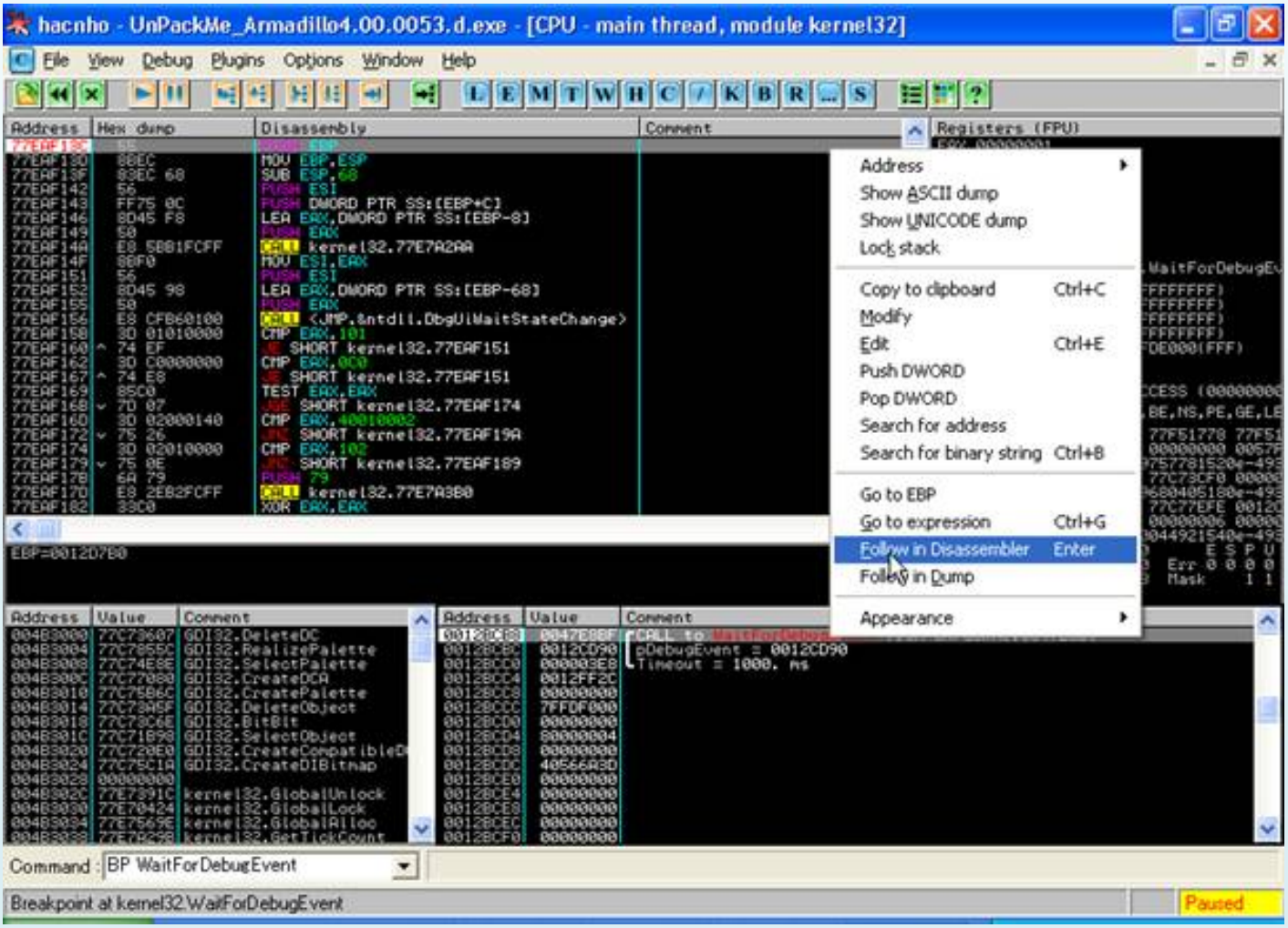
_Viec Need to do next is we sever the relationship between father and child by creating an endless repeats. How, Wow, the question is or. You also remember address Buffer contains bytes to patch the child does not, we will go to the point of entry for Buffer opcode Jump EIP as endless loop on this EP's buffer (ie, for it to jump itself J , jump hoài, jump forever to boot, tolerable). What is important is how to find EP. Fairly simple! You also remember I value except 4271b0-1b0 = 427000 is not? Public value to address Buffer to be one of the EP Buffer to patch. Thus we have 1B0 +383070 = 383220. Ctrl + G to address this patch, No no. No pro tí time. We are REA, we are pro J. Using the Tools to go pro, yeah! I used PUPE Suite 2005 - Universal Process Patcher.
_Mo Pupe up, other than normal when we choose Attach process without red color, but when this type of pro patch we need to know the red color of the PID process. After PID remember, right click in the process Pupe, select num Bytes of 2, enter the address of Buffer EP, click search, we need to patch into EBFE. Note, this is a very powerful tools by Game Cracking!



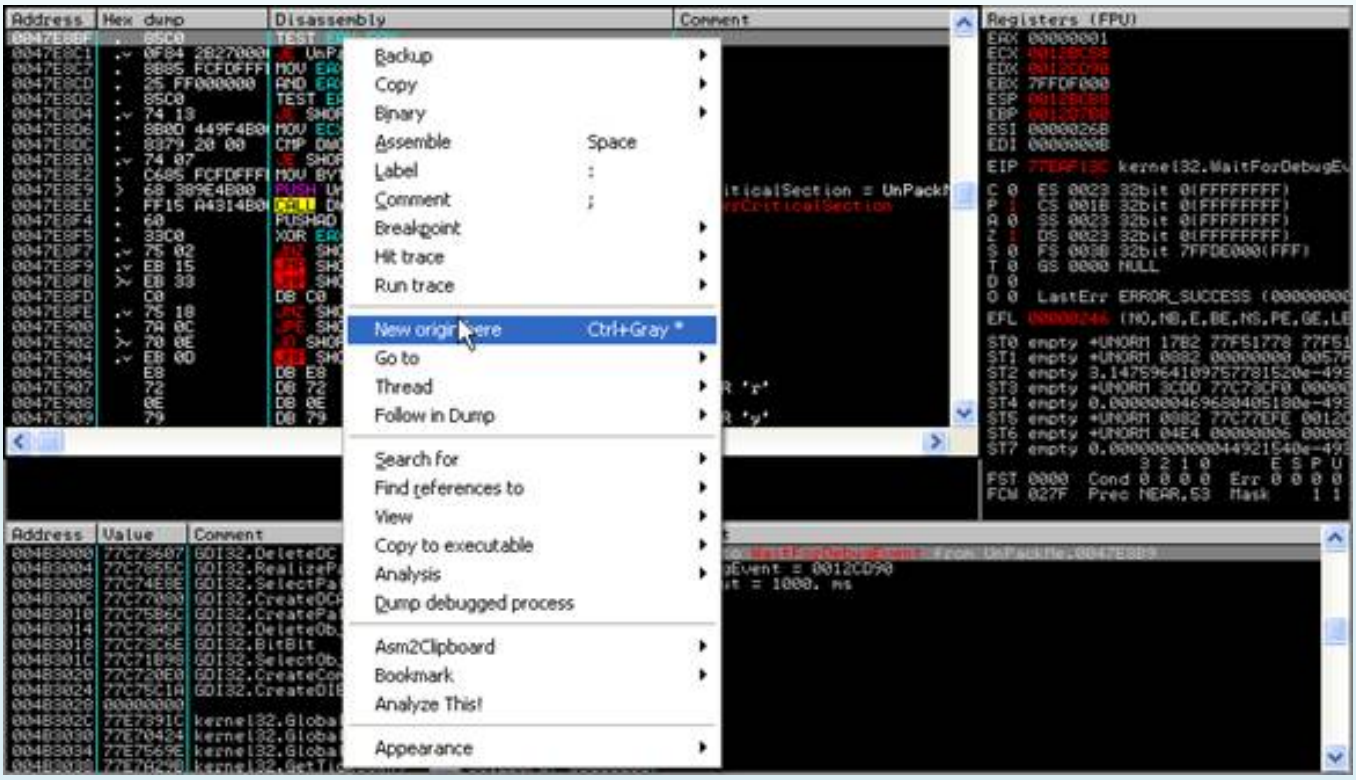
This _Luc at 383,220 will be replaced by:



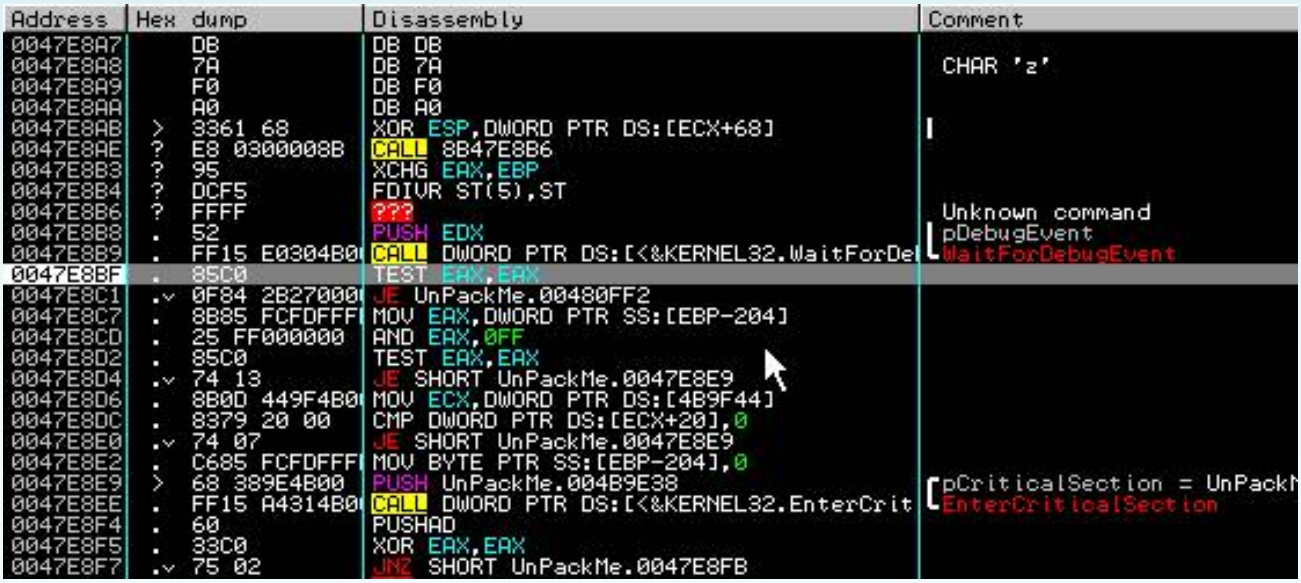
_Luc You have a breakpoint in the kernel32 WriteProcessMemory. Bc it, then set a breakpoint WaitForDebugEvent BP, F9.Tai address 0012BCBC [in Stack] -> right click> Follow in Disassembler.



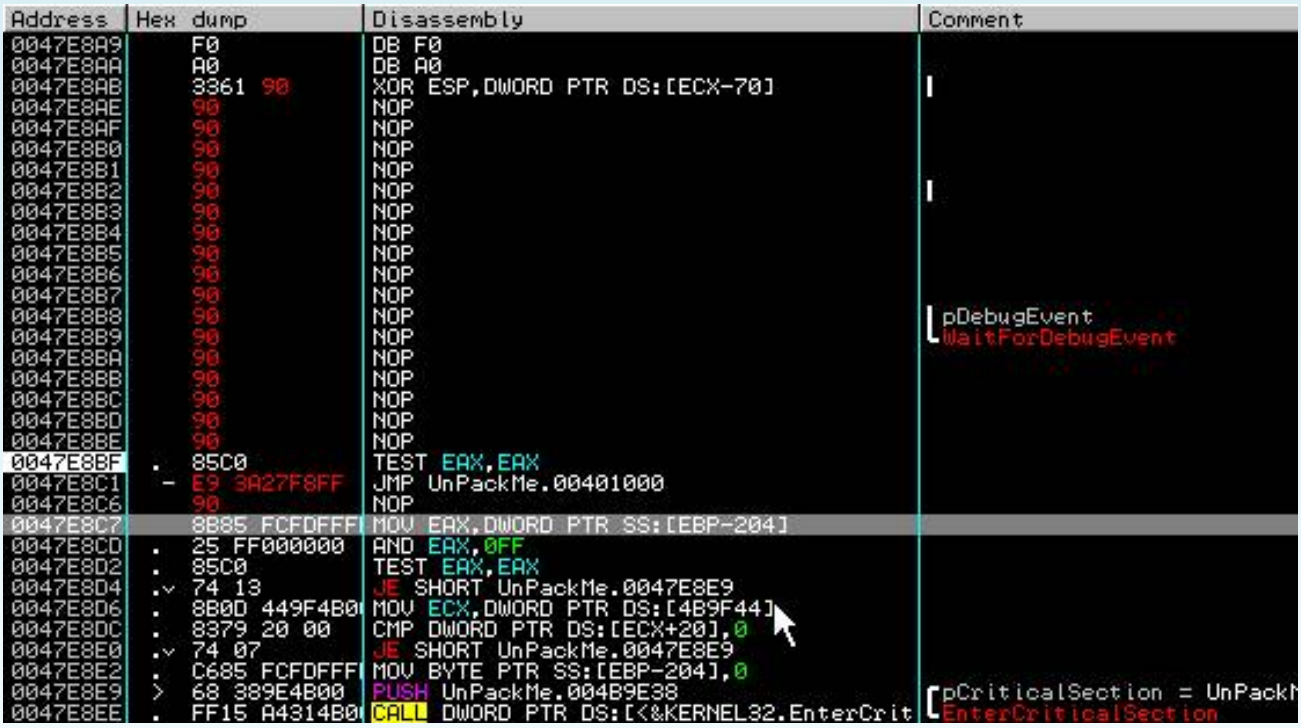
_Tai Here, it should set an origin here:



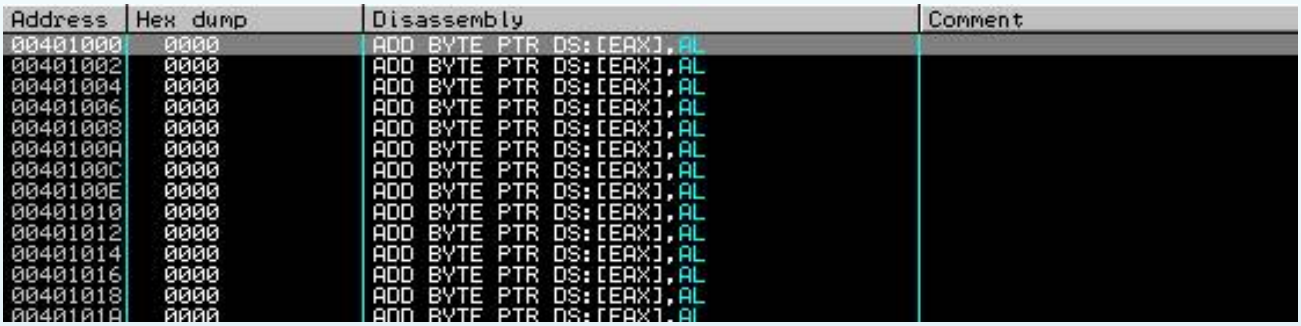
_Ta Found:



_Ta Areas need to create a memory to decrypt 1000 bytes and 47e8bf we will point to the area we are about to create a memory. And where in belgium nhỉ hours. You remember the image address 48180D Ko, I see an attractive 401,000. Ok, drilling created, we jump to what it was. Need patch đám code here so they make a single jump is to the memory of him. To jump into the grass as we need to clean đám code of WaitForDebugEvent function. You see the command test eax, eax a jump command. I Include a Vip Jump. We will dance to it EP area we will remember (here I get 401,000). OK, we patch as follows:



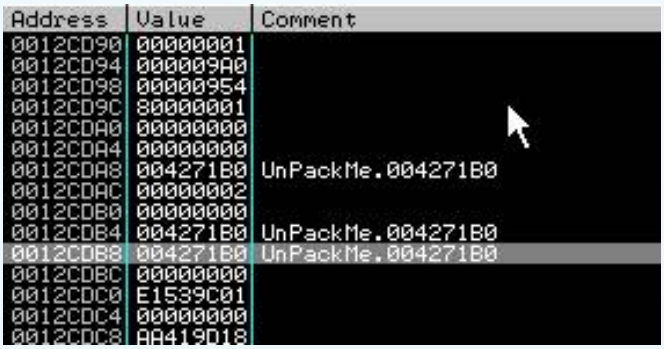
_Ok, Fly to 401,000 working phone: D.



_Uh, Which created what belgium hours, khua khua. Make sure you also fly the bags packages. Default!
_O Here are two ways to create a memory region, hix. It is using OpenMutexA and I just following months of OpenMutexA surely not be because I make lười J mutex.

00401000 60 PUSHAD
00401001 9C PUSHFD
*00401002 68 C8FB1200 PUSH 12FBC8; ASCII "5D4: AA2FD56DE" ***
00401007 33C0 XOR EAX, EAX
00401009 50 PUSH EAX
0040100A 50 PUSH EAX
0040100B E8 B5A6A577 CALL kernel32.CreateMutexA
00401010 9D POPFD
00401011 61 POPAD
00401012 - E9 7A13A677 JMP kernel32.OpenMutexA
00401017 90 NOP

_Dia Only 401,002 is the value of your mutex.
_Cach Second is as follows:



_Ban But also remember, Ok we have 3 addresses stored OEP:

0012CDA8 004271B0 UnPackMe.004271B0

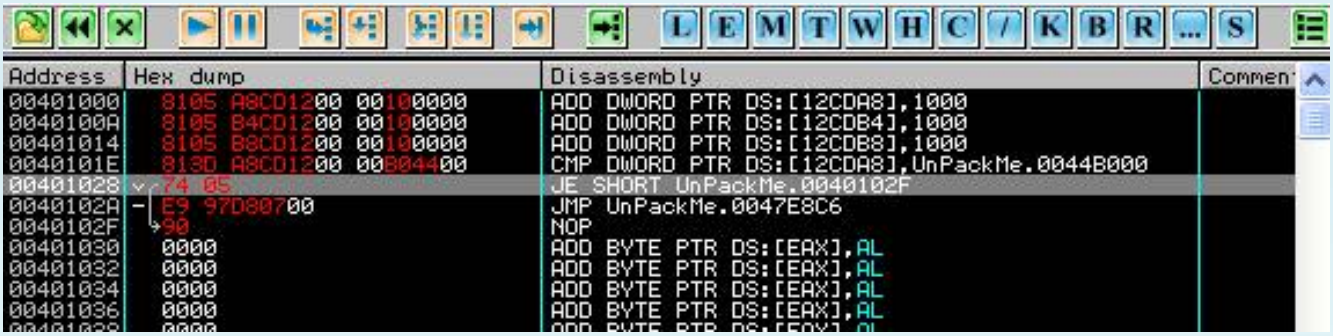
0012CDB4 004271B0 UnPackMe.004271B0

0012CDB8 004271B0 UnPackMe.004271B0

_Ta Need a jump command against the address we jump to NOP in order:

0047E8C6 90 NOP

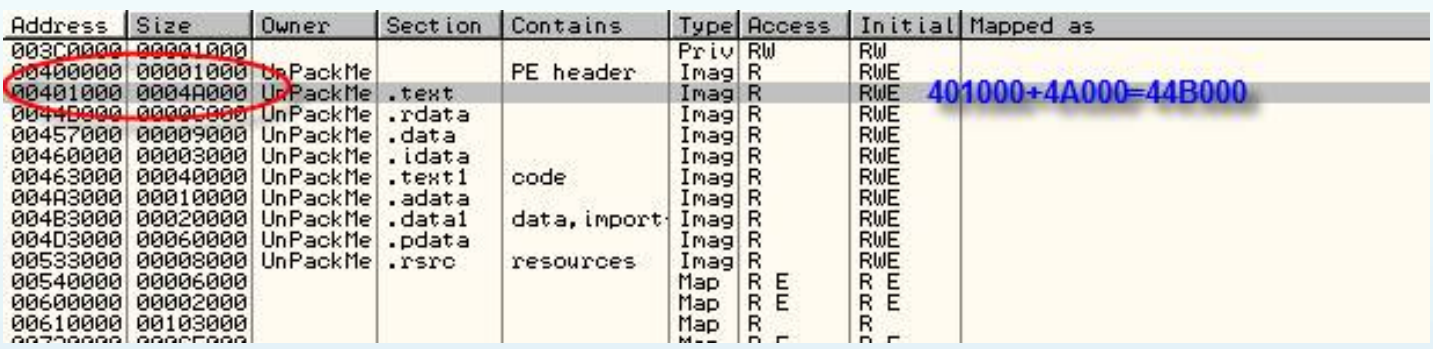
_Ta Command also need a jump Jump if Equal order to jump to the end Submit commands. Ok, I finished analyzing the patch as follows:



_Cung Have a patch is

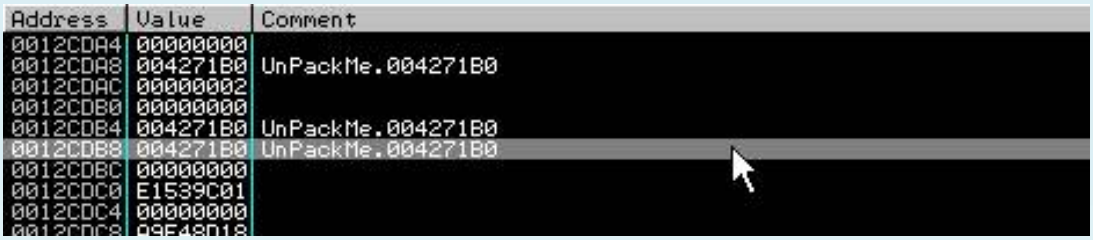
ADD DWORD PTR DS: [12CDA8], 1000
ADD DWORD PTR DS: [12CDB4], 1000
ADD DWORD PTR DS: [12CDB8], 1000
Cmp DWORD PTR DS: [12CDA8], UnPackMe.0044B000
JNZ UnPackMe. 0047E8C6
NOP

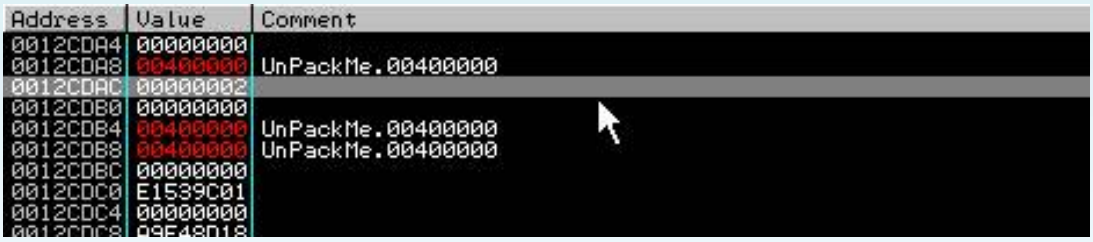
44B000 _Gia of where to see:



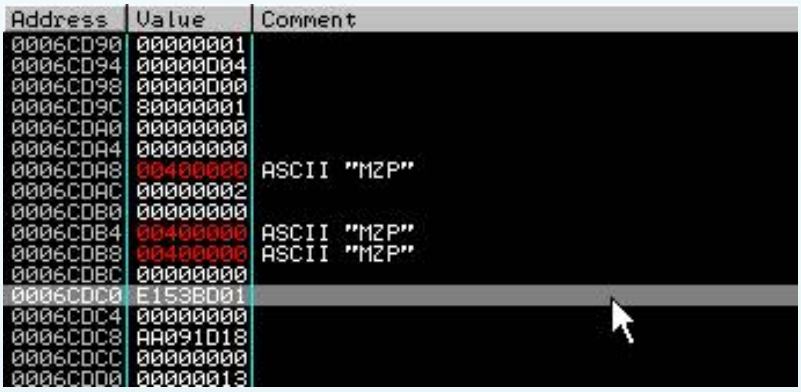
_O Target here is the VC (VB +, ASM, C) we should Cmp text section, individual Delphi we compare the section code.

_Sau The patch, patch continued in 3 addresses containing OEP:

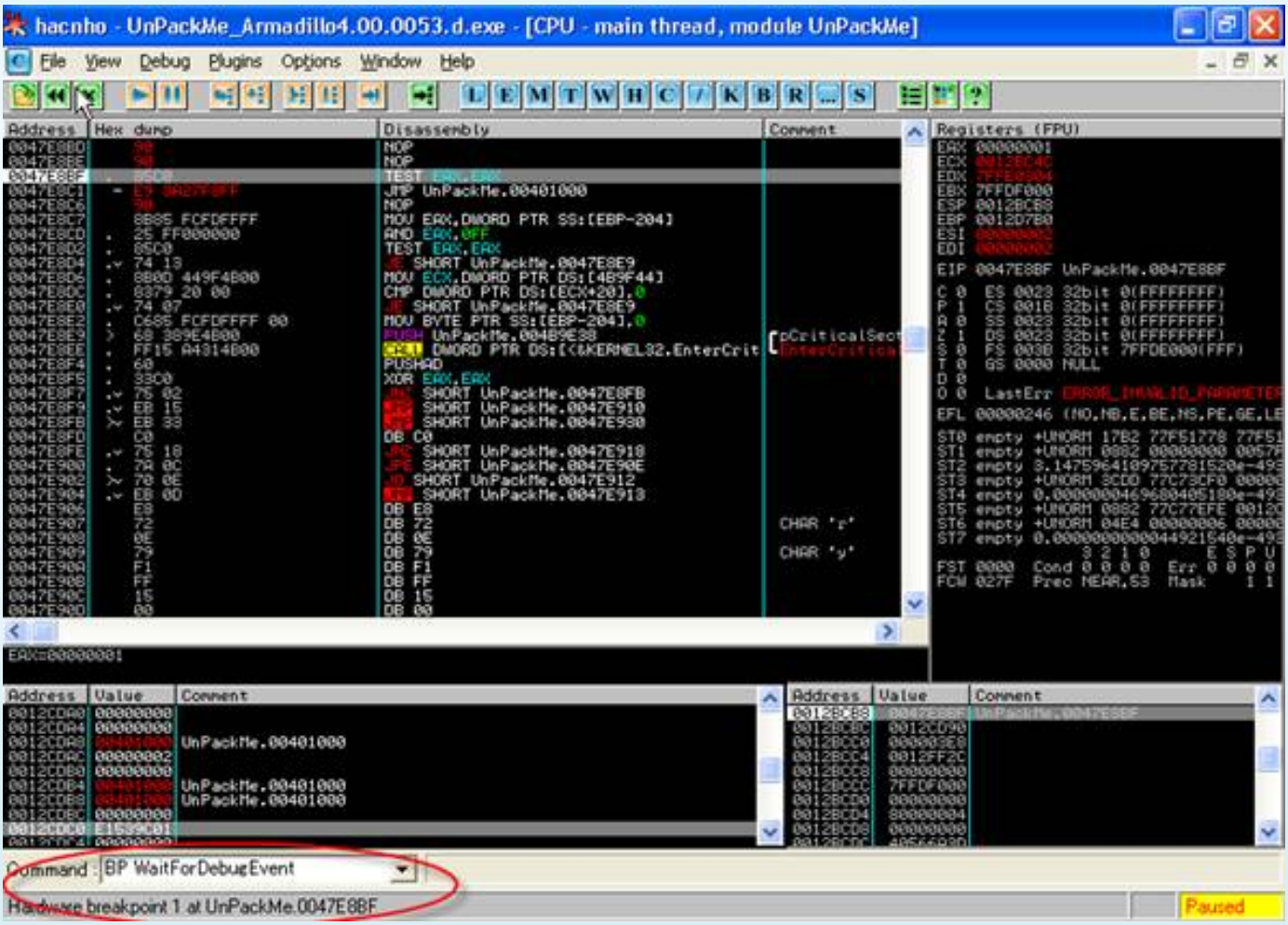




_Chung One patch to do so to sign MZP:

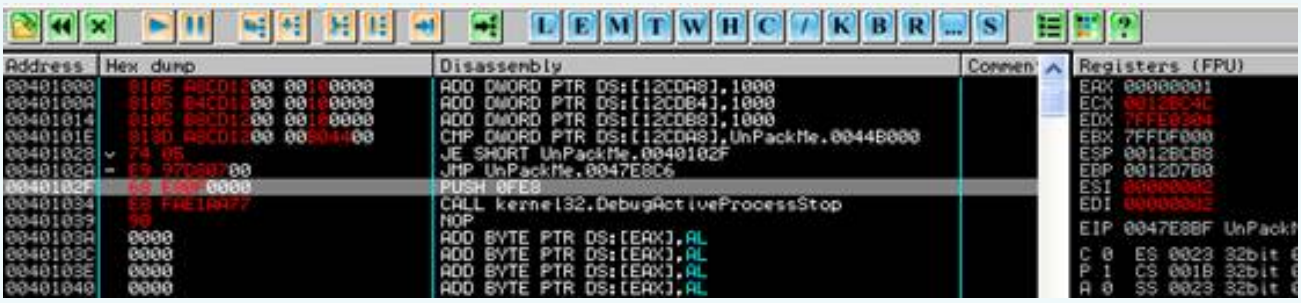


_Yeah Yeah, CopyMemII ôi, they spend calling. Once the patch is finished as you Ctrl + G to address 47E8BF a hardware breakpoint set here. Press F9 to run:

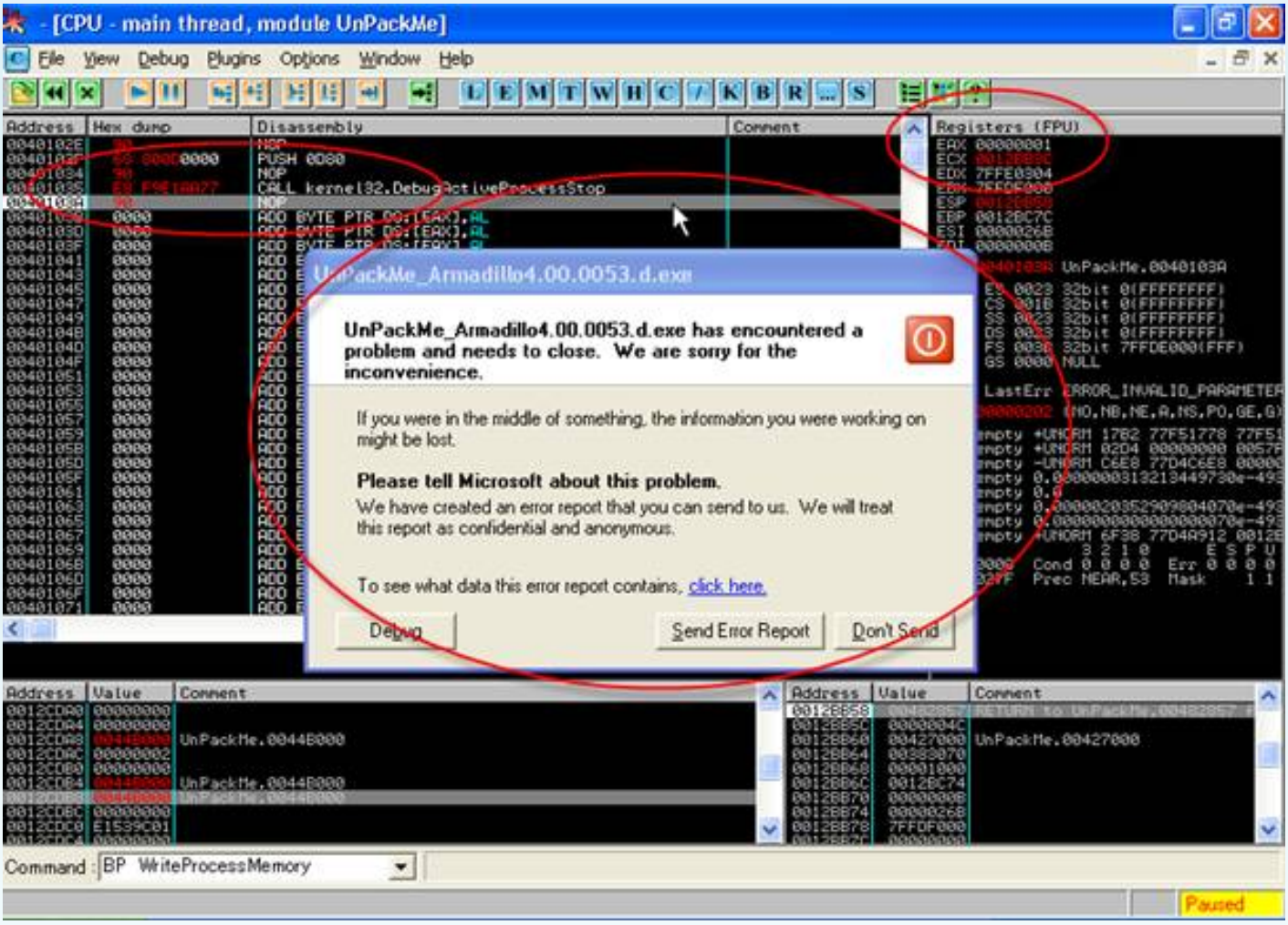


_Quay To 401,000, we pass by debug blocker:

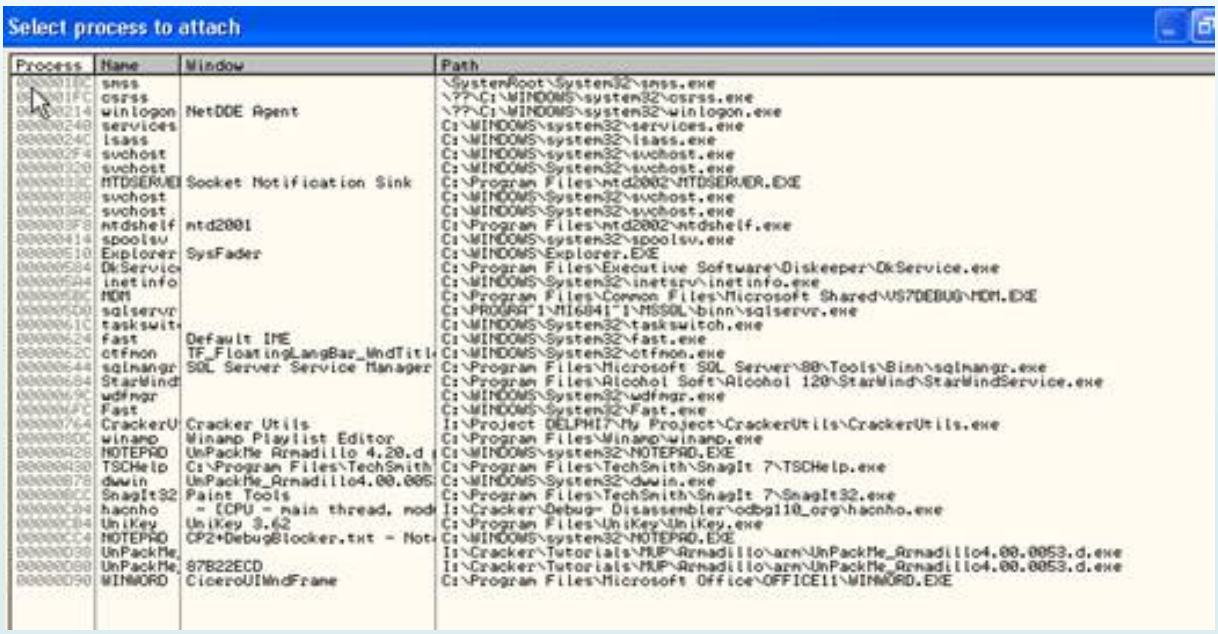
401025 _Tai address, we pass by as usual:



_Nhan F9, you will stop in HE. Press F8 when the last from the following functions nop Call DebugActiveProcessStop, I run on it not eax = 1 is the gateway to, hix, yeah, not by 0. Ka Ka, AC: A crash notification, and then I die:

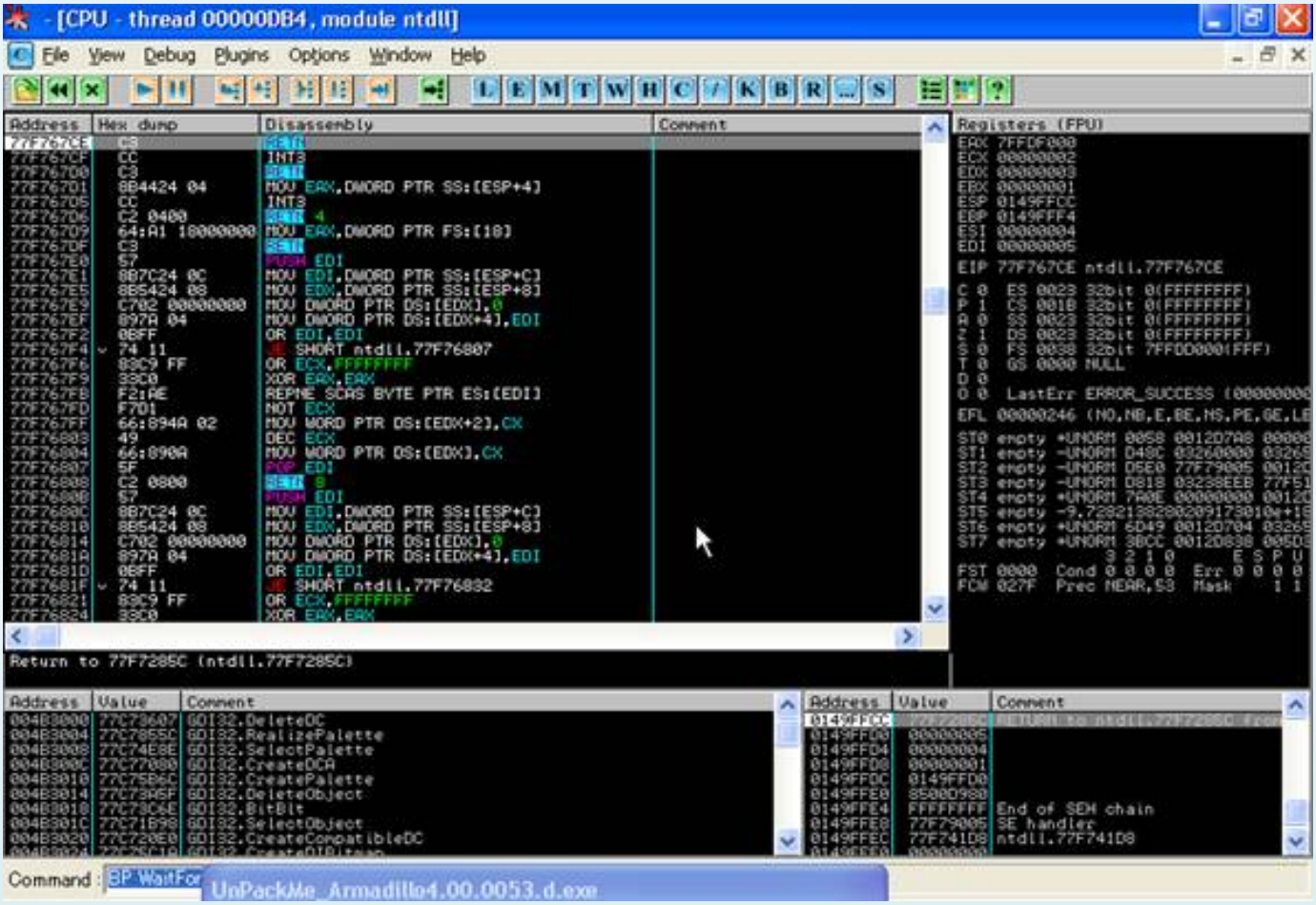


_Kha Kha, choc you please stop, CopyMem official went to dust. Debug Thẳng Blocker also xách package follow. The crash is informed by sharing with our hands đấy! Khua khua. Do not close, forget it. Open a OllyDBG other, Attach.

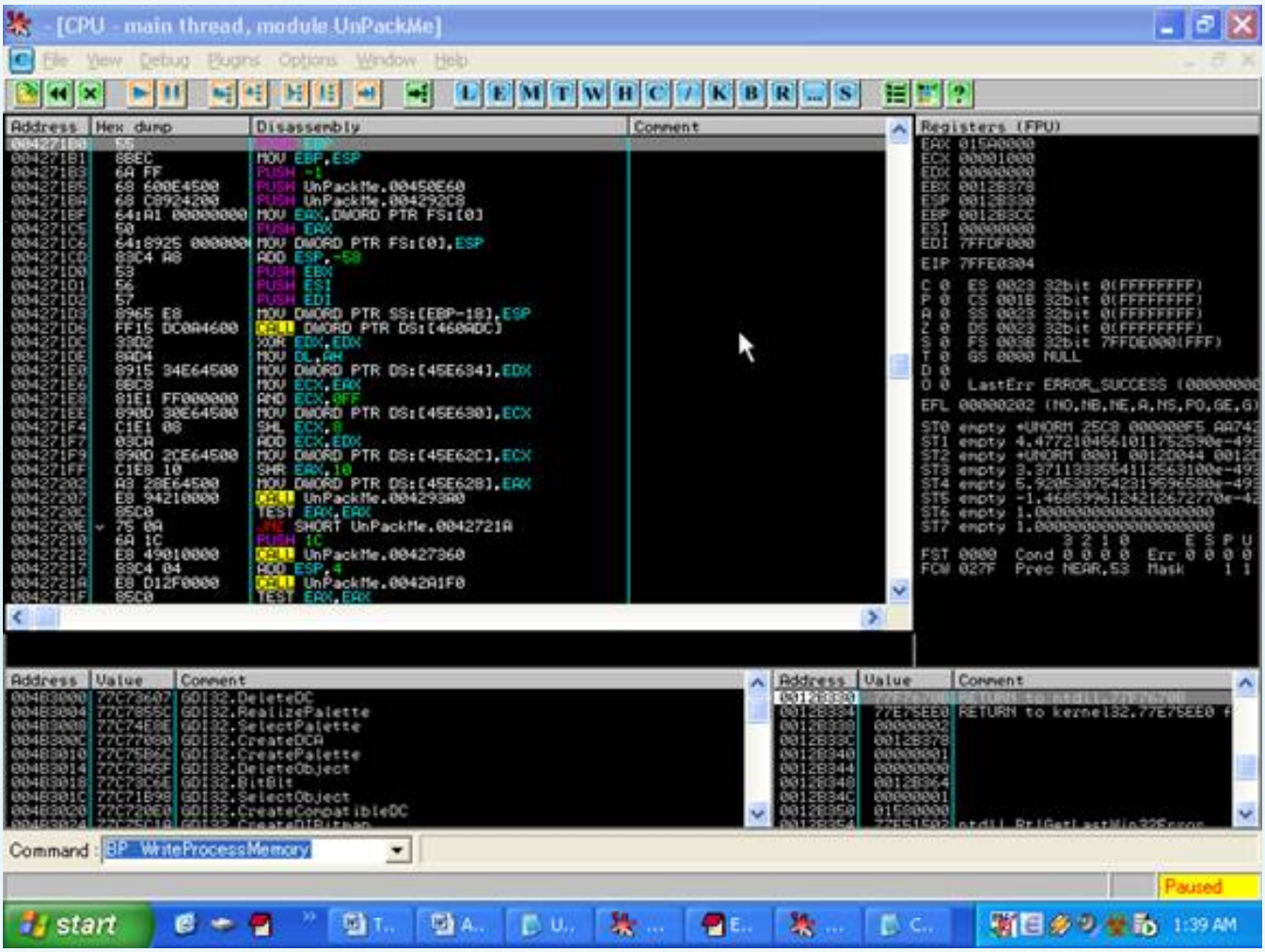


_Neu You do as I follow the steps above you will see two up process, you would share with mud.

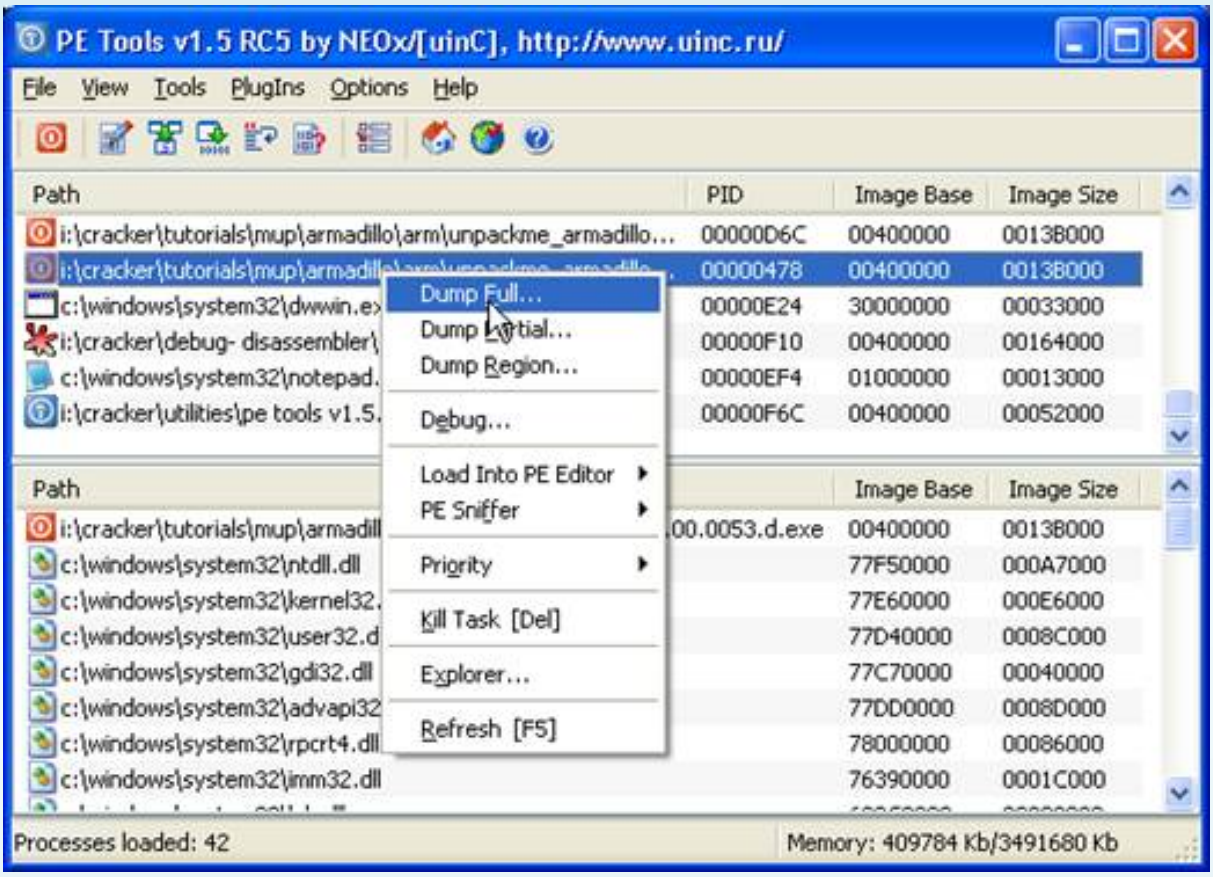
Redo nhé! Who is to do here, the doctors always to the J.



_F9, F12, Oh, we are stopping the process decrypt your father then! Congratulation! OEP was returned form its true!



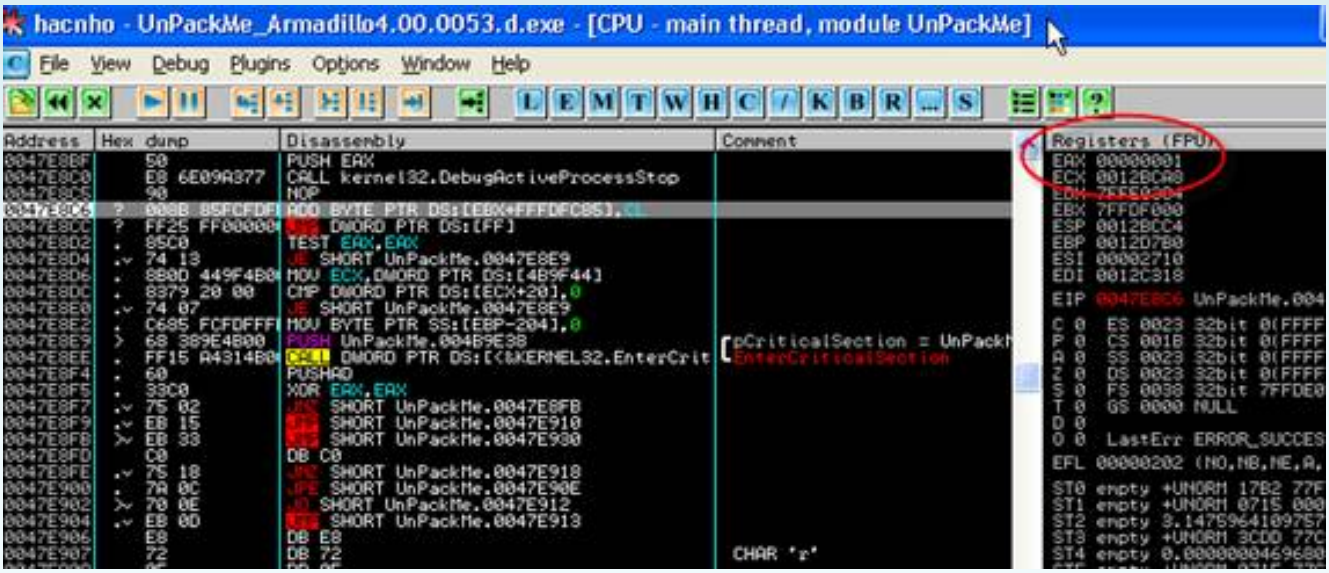
_Tai Here we dum full.



Important not least as we fix IAT.

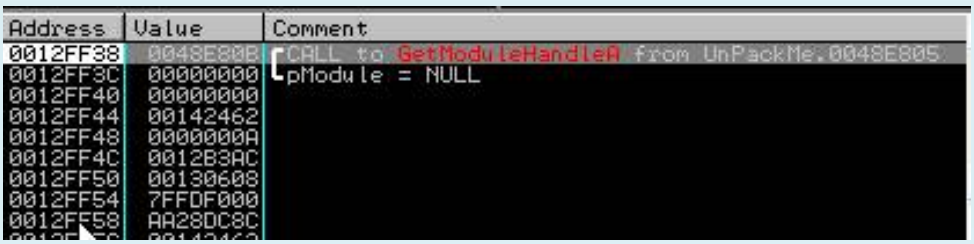
_Sau When full dump, hix hix, I unpack itself this right unpackme 5 minutes. Write tut 2h the doctors take you. With the children and then finish writing. Overwrite them are too painful, so too lười hours, travel to take the café. 2.30h gòi morning!

Olly _Dong all, boot machine sure to eat J. Load the target. By pass process as usual (I have used months post or simply use the script).

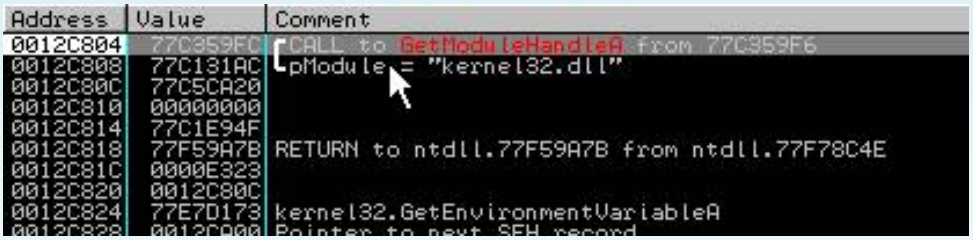


_Attach, Select the correct PID, F9, F12, change into bytes EBFE 558B.

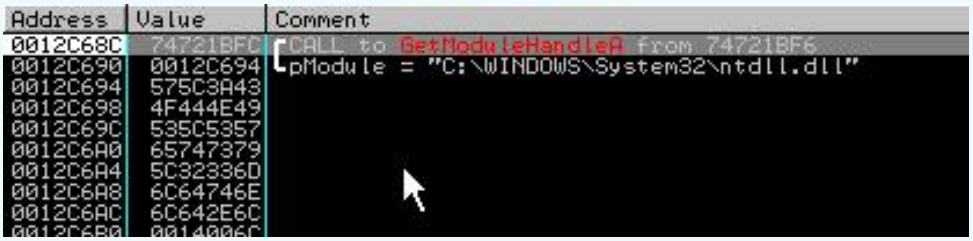
_Alt + F1: HE GetModuleHandleA. F9 first:



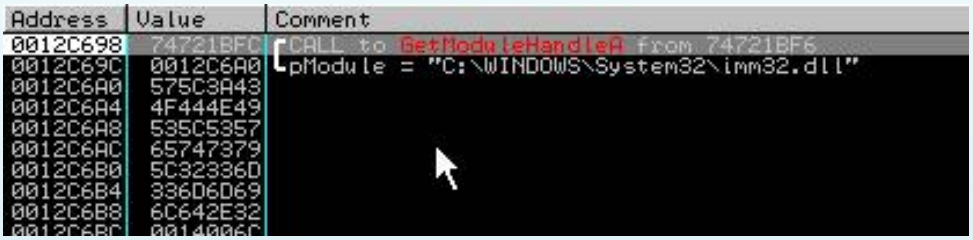
_F9 Times 2:



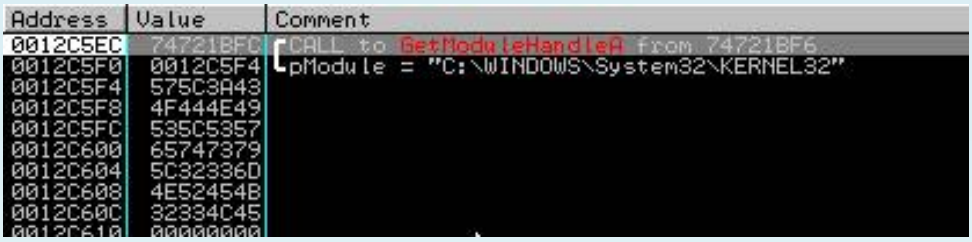
_F9 Times 3:



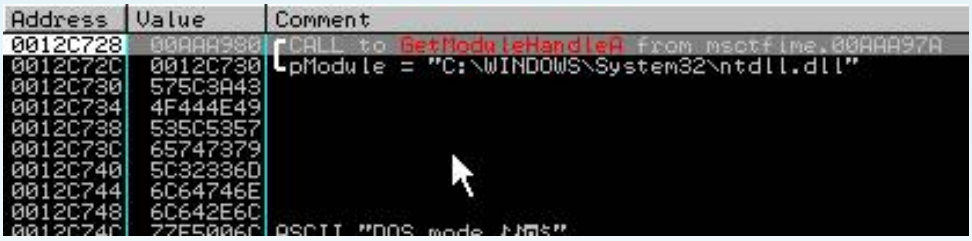
_F9 Times 4:



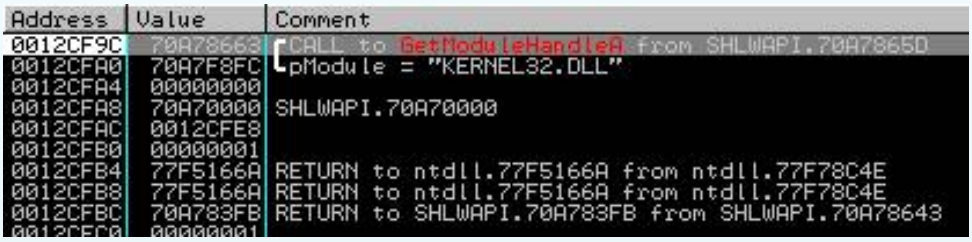
_F9 Times 5:



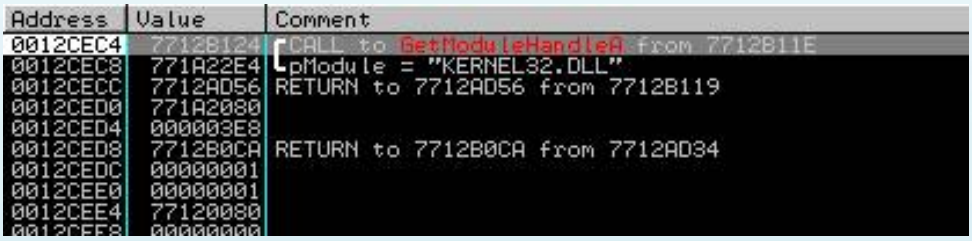
_F9 Times 6:



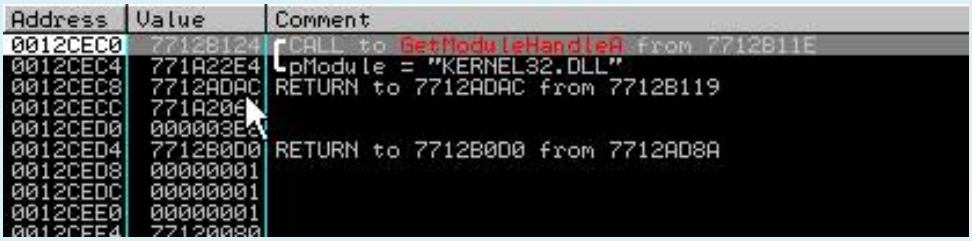
_F9 Times 7:



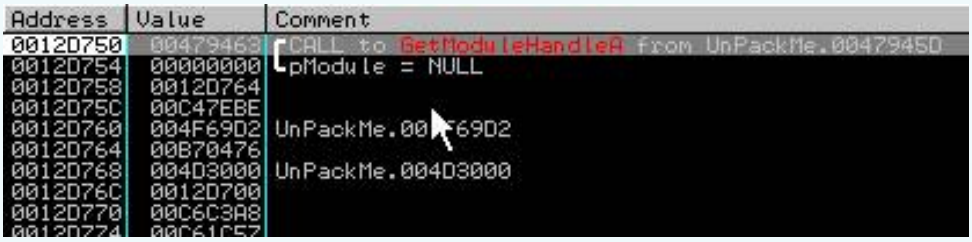
_F9 Times 8:



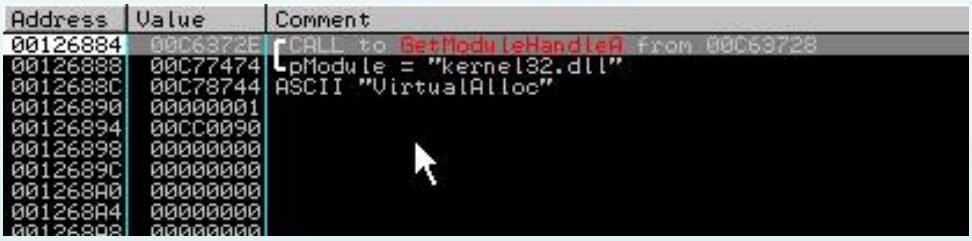
_F9 Times 9:



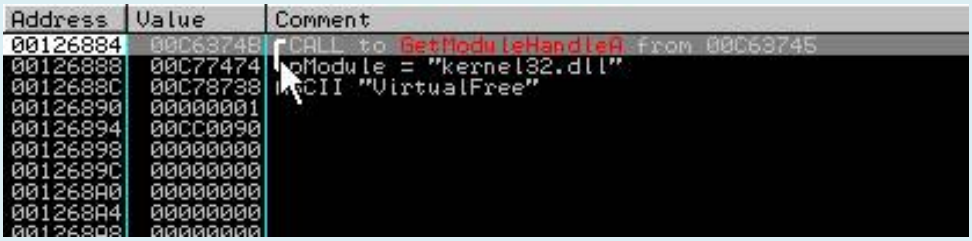
_F9 Times 10:



_F9 Times 11:

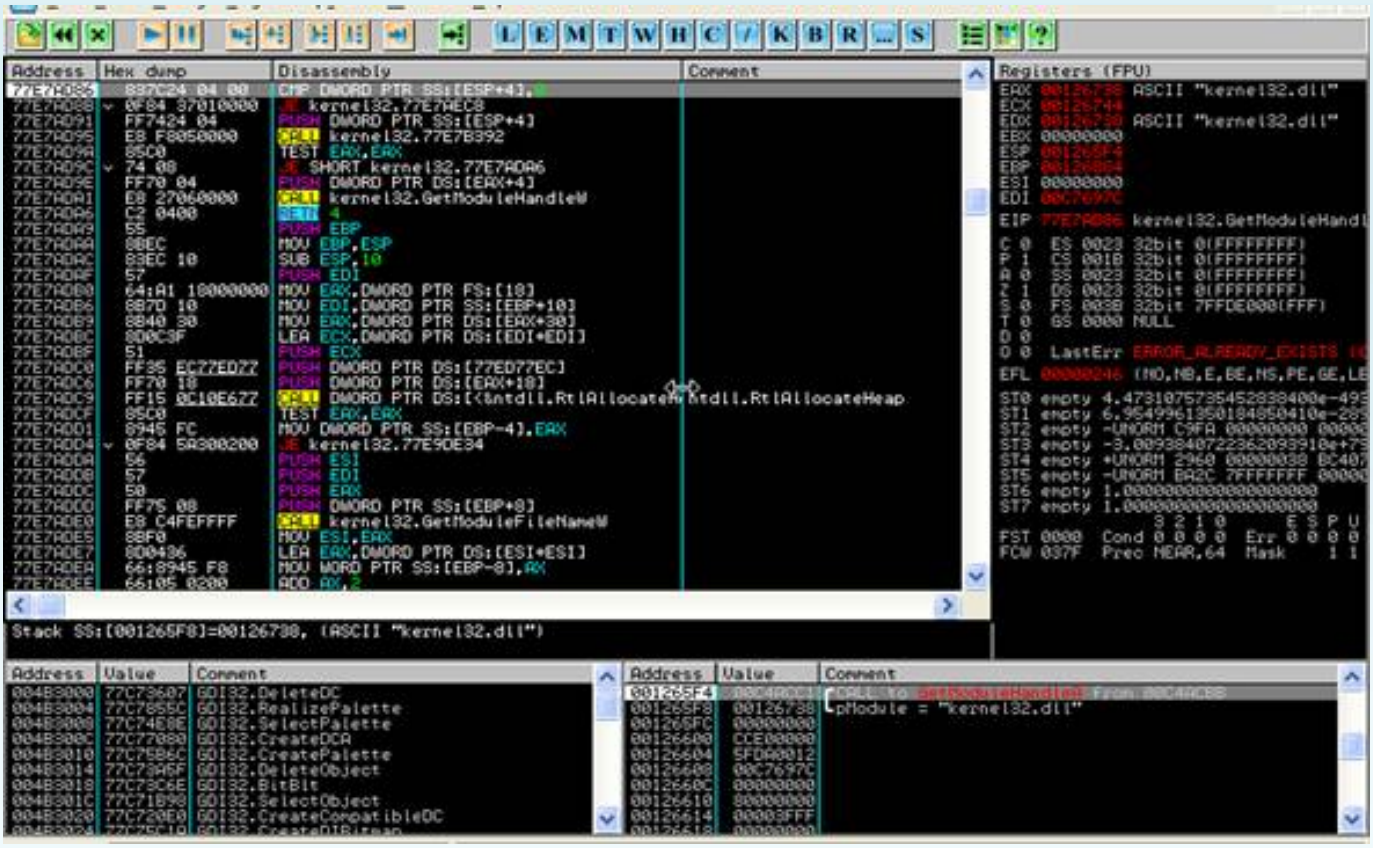


_F9 Times 12:

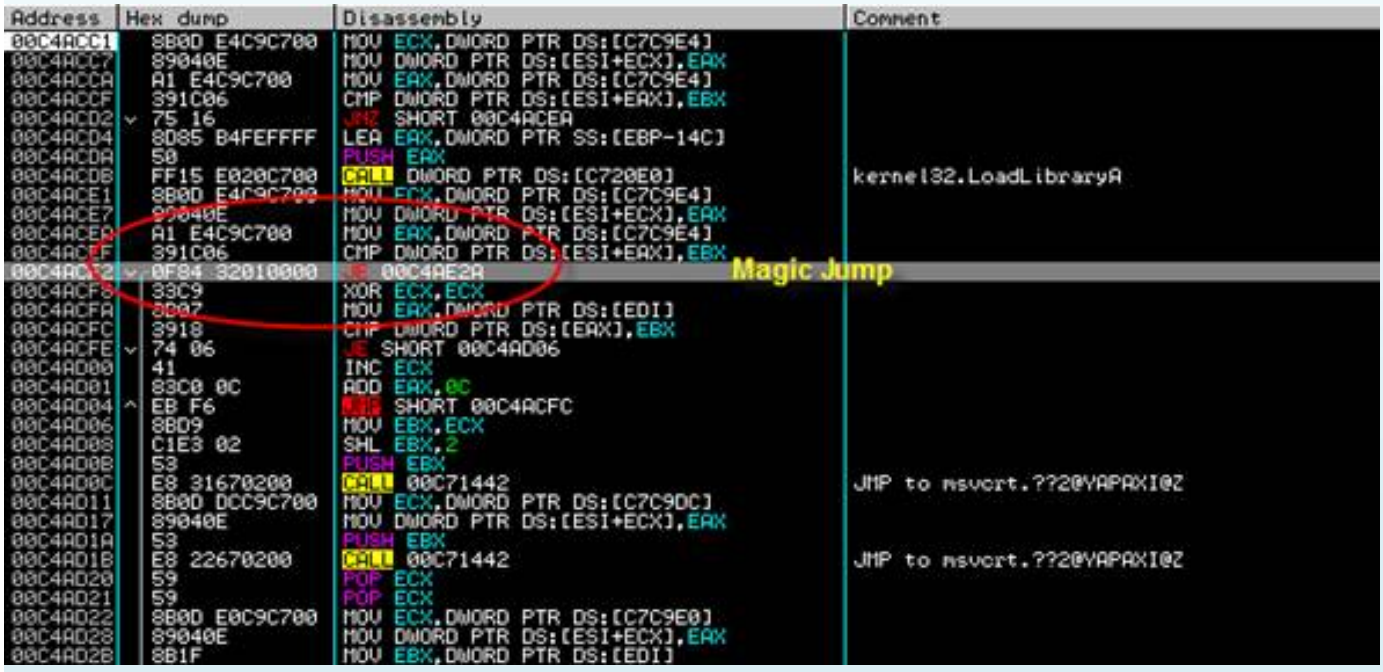


_F9 Last

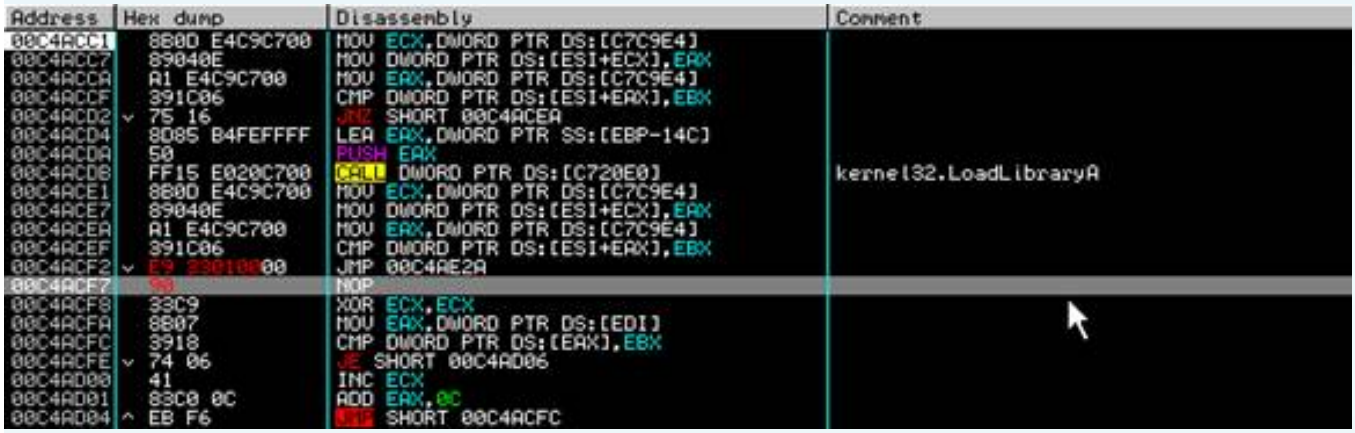
_Nhan Shift + F9 you will pass by here:



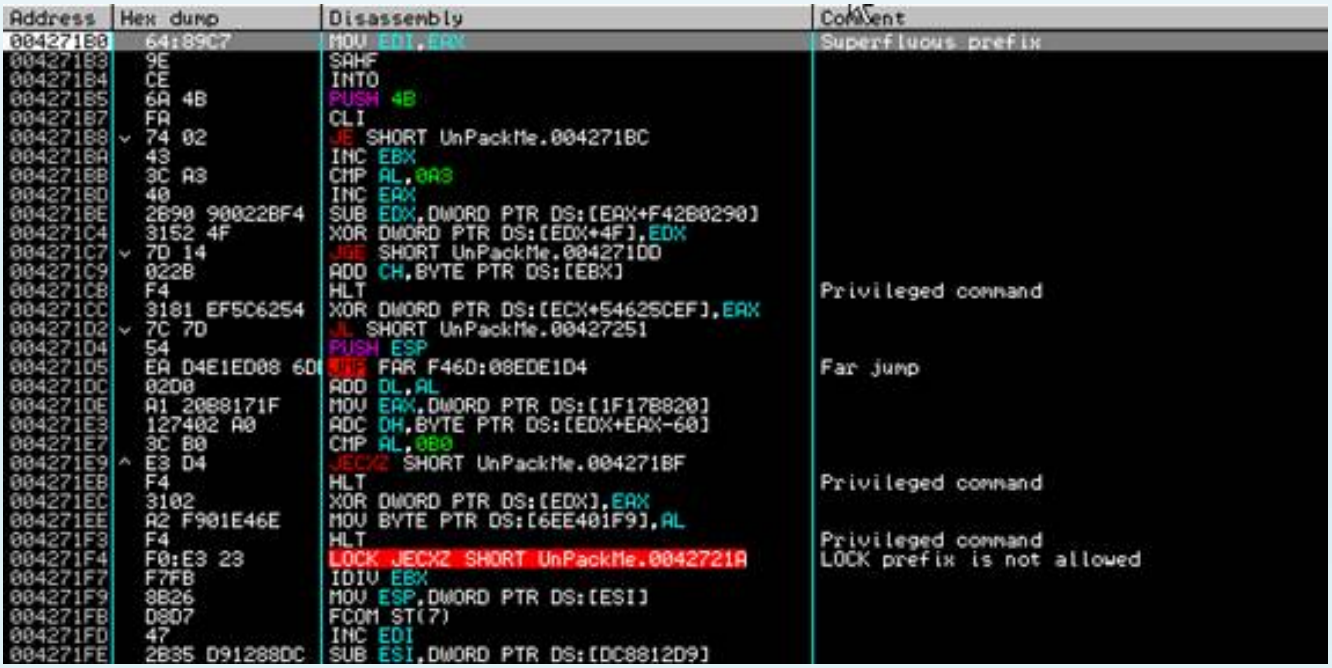
_Nhan F8 to trace 77E7ADA6 C2 0400 RETN 4: you will go to this code:



_Nhu So we have a magic jump **00C4ACF2 / 0F84 32010000 JE 00C4AE2A**
Patch it **00C4AE2A Jump:**

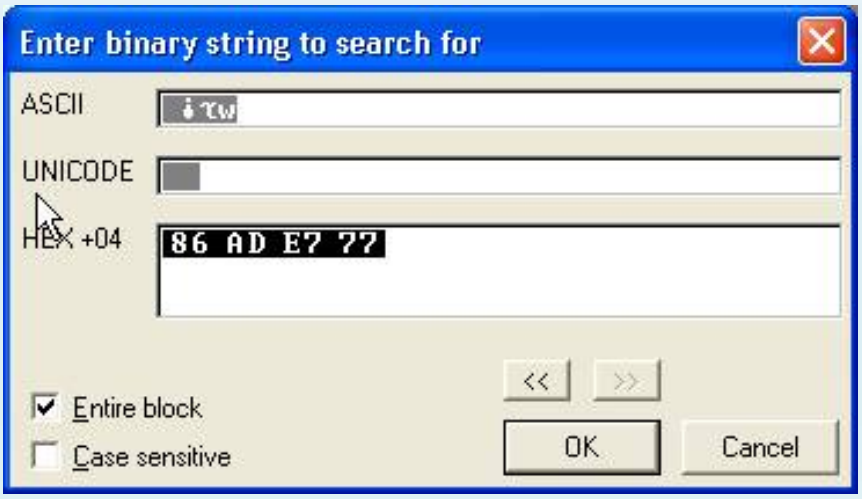


_Alt + M, memory breakpoint on access:

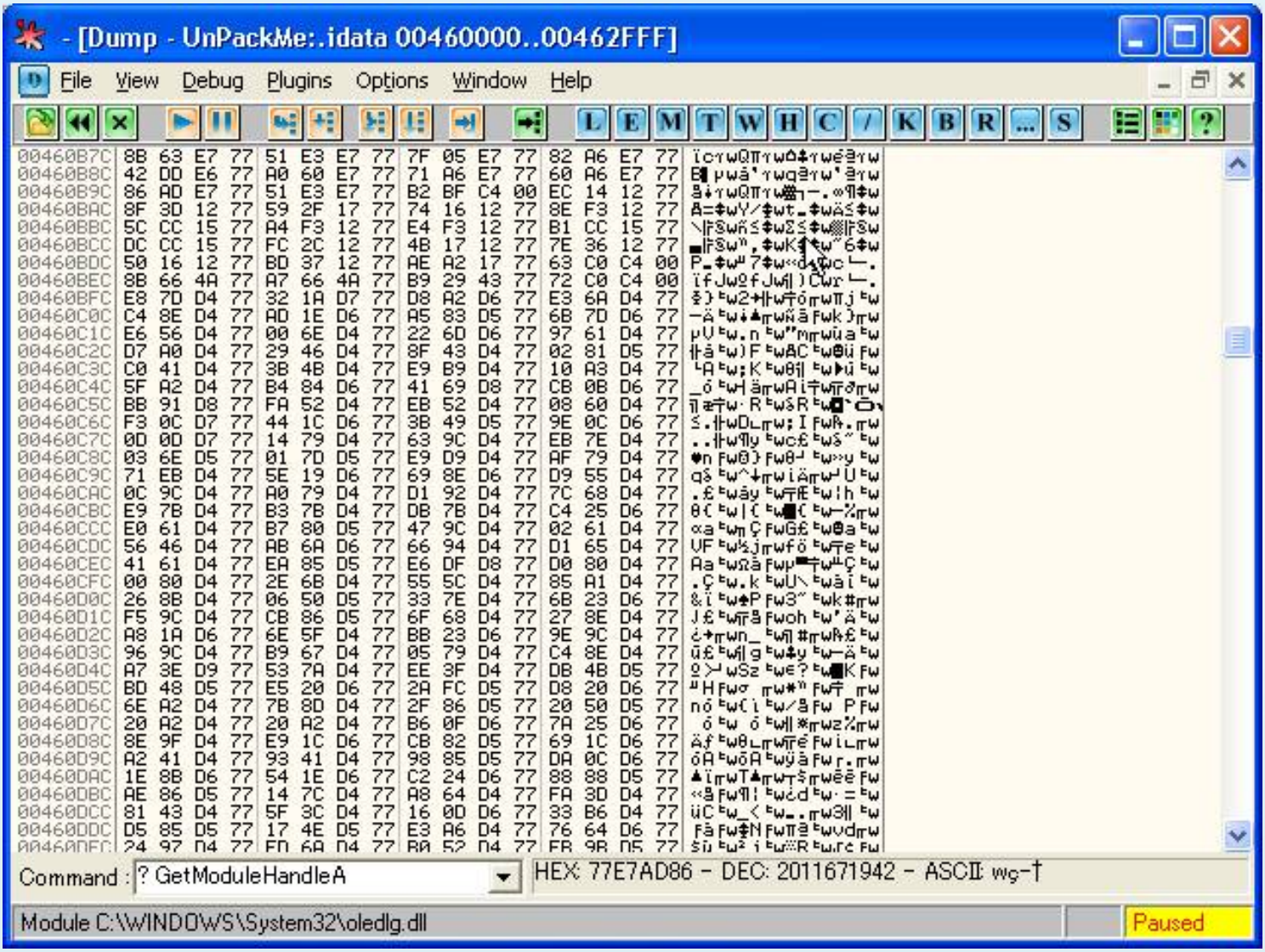


_Chung We are to OEP has been encrypted. Address to use the API function GetModuleHandleA code:

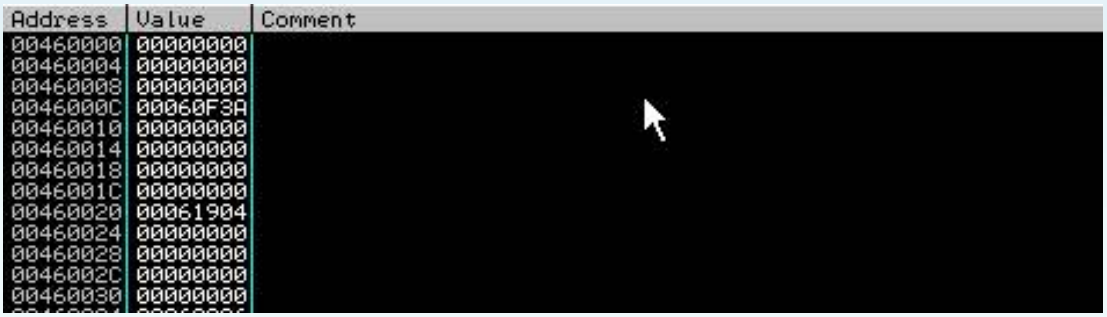
_Ok And address of the function 77E7AD86, back OllyDBG, Alt + M, Ctrl + B to enter the address of the function GetModuleHandleA reverse is **86 AD E7 77**



_Ta'll Stop here:

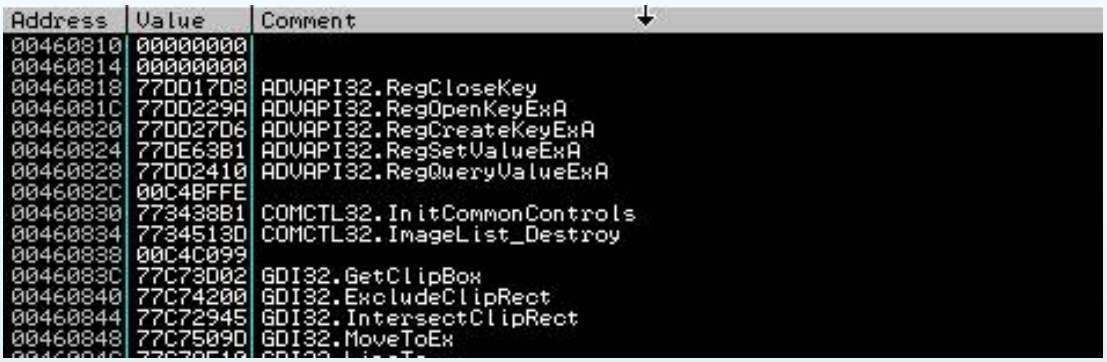


_Vao Dump Windows, Ctrl + G to enter 460000:



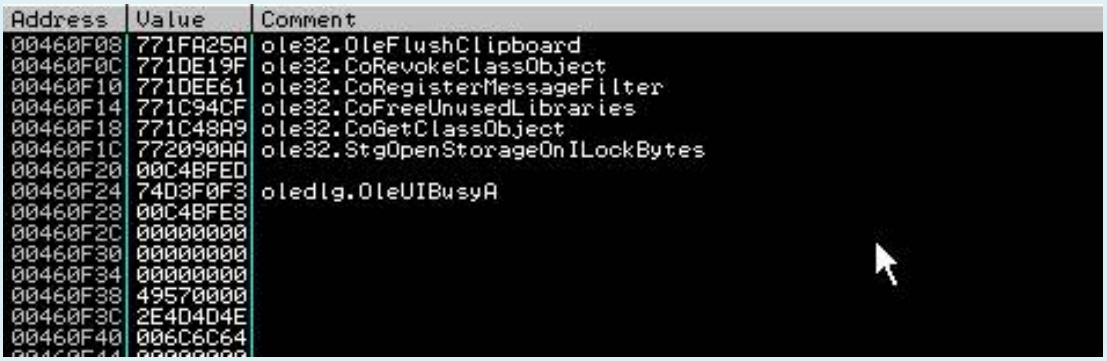
Address	Value	Comment
00460000	00000000	
00460004	00000000	
00460008	00000000	
0046000C	00060F3A	
00460010	00000000	
00460014	00000000	
00460018	00000000	
0046001C	00000000	
00460020	00061904	
00460024	00000000	
00460028	00000000	
0046002C	00000000	
00460030	00000000	

_Cuon Down to having been the first function:



Address	Value	Comment
00460810	00000000	
00460814	00000000	
00460818	77DD17D8	ADVAPI32.RegCloseKey
0046081C	77DD229A	ADVAPI32.RegOpenKeyExA
00460820	77DD27D6	ADVAPI32.RegCreateKeyExA
00460824	77DE63B1	ADVAPI32.RegSetValueExA
00460828	77DD2410	ADVAPI32.RegQueryValueExA
0046082C	00C4BFFE	
00460830	773438B1	COMCTL32.InitCommonControls
00460834	7734513D	COMCTL32.ImageList_Destroy
00460838	00C4C099	
0046083C	77C78D02	GDI32.GetClipBox
00460840	77C74200	GDI32.ExcludeClipRect
00460844	77C72945	GDI32.IntersectClipRect
00460848	77C7509D	GDI32.MoveToEx

Start _Vay IAT starting 460818
_Cuon Down to the final function:

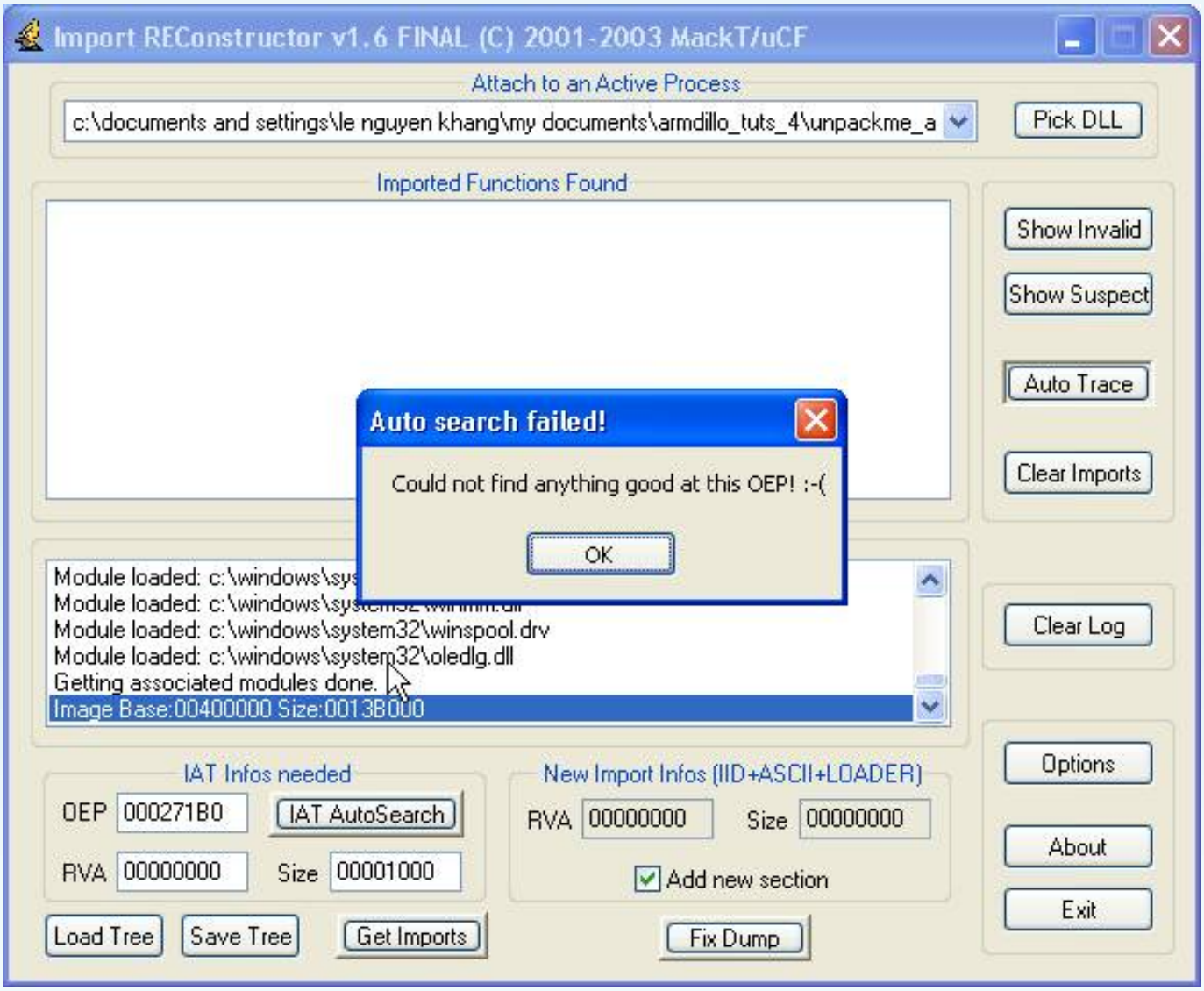


Address	Value	Comment
00460F08	771FA25A	ole32.OleFlushClipboard
00460F0C	771DE19F	ole32.CoRevokeClassObject
00460F10	771DEE61	ole32.CoRegisterMessageFilter
00460F14	771C94CF	ole32.CoFreeUnusedLibraries
00460F18	771C48A9	ole32.CoGetClassObject
00460F1C	772090AA	ole32.StgOpenStorageOnILockBytes
00460F20	00C4BFED	
00460F24	74D3F0F3	oledlg.OleUIBusyA
00460F28	00C4BFE8	
00460F2C	00000000	
00460F30	00000000	
00460F34	00000000	
00460F38	49570000	
00460F3C	2E4D4D4E	
00460F40	006C6C64	

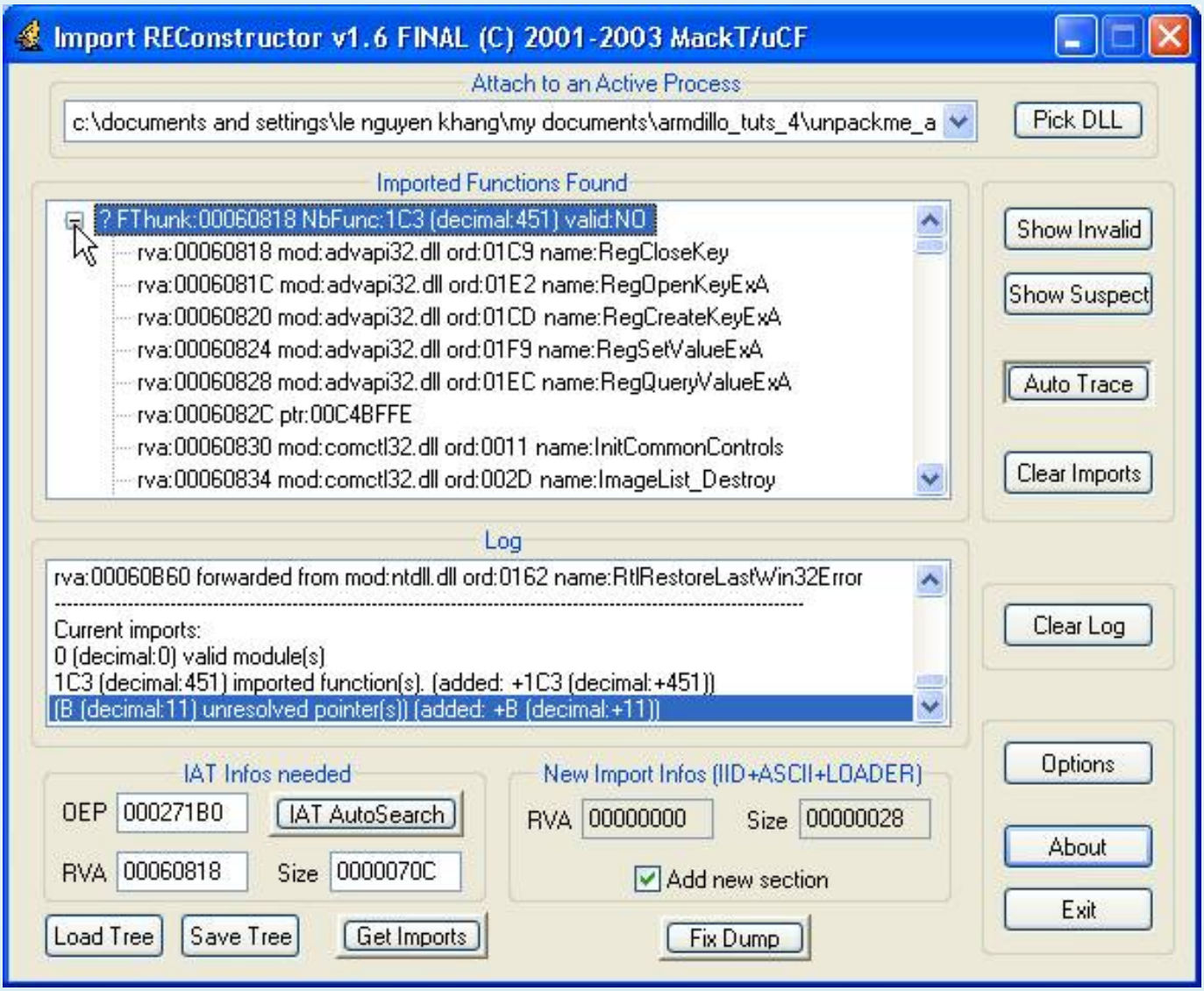
End _Vay IAT is 460F24.
IAT _Vay length = 460F24 = 460818-70C
_Nhu So we have the results:

OEP: 000271B0
IATRVA: 00060818
IATSize: 0000070C

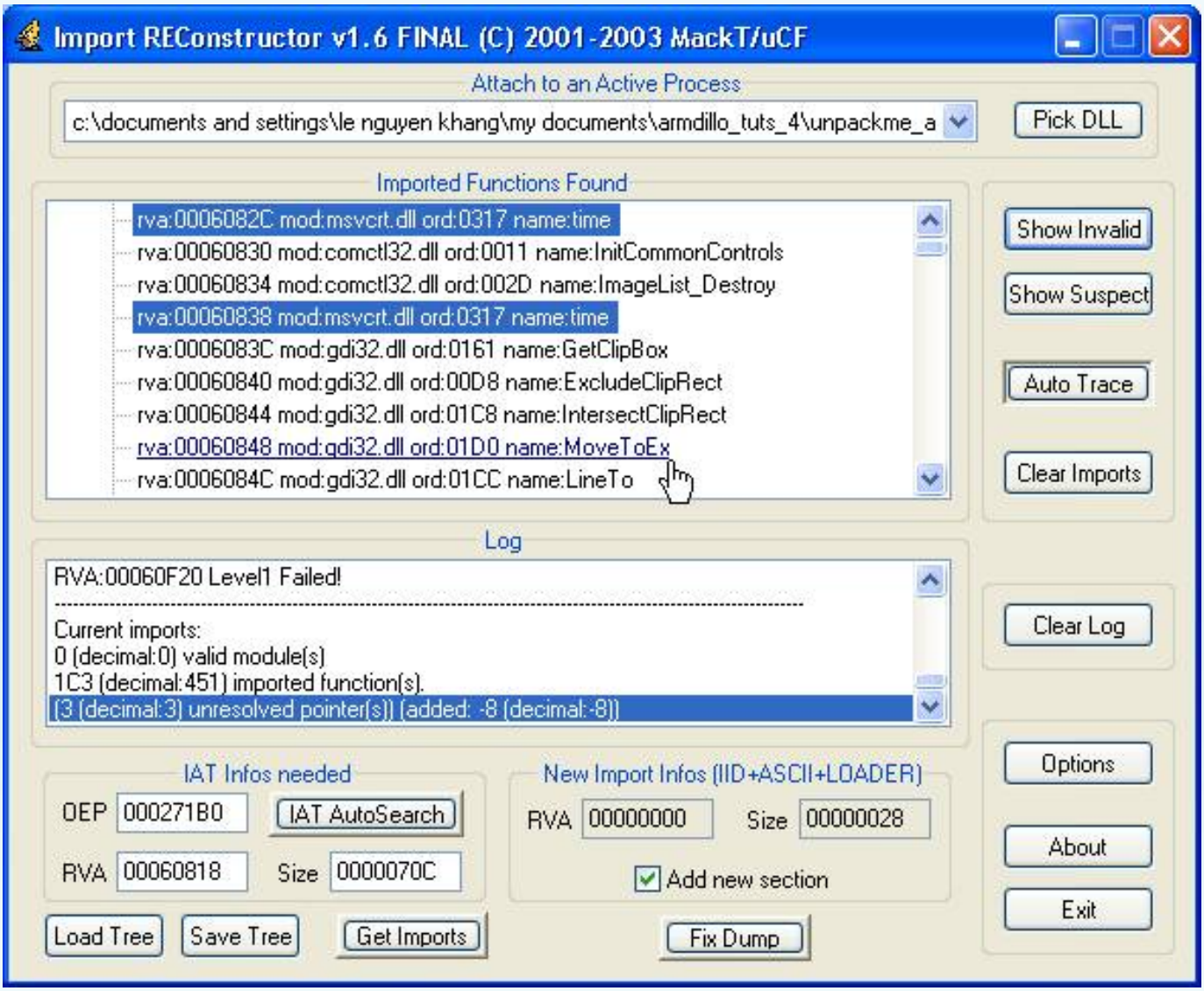
_De OllyDBG resources, open up ImportREC, select PID process coincides with the process, try to hit enter IAT IAT Auto Search see why:

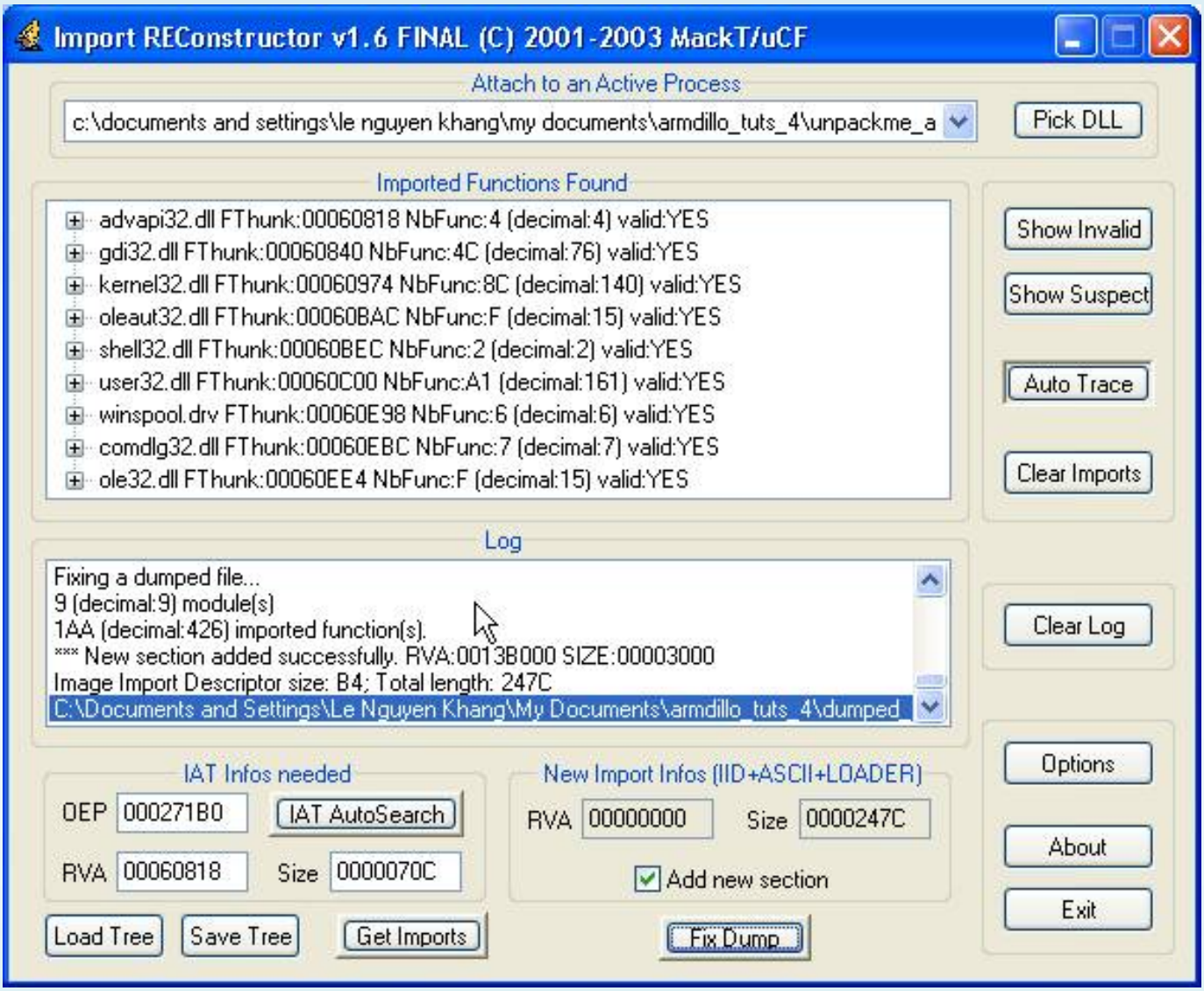


_Duoc Then, enter the information in the press to go Get Imports:

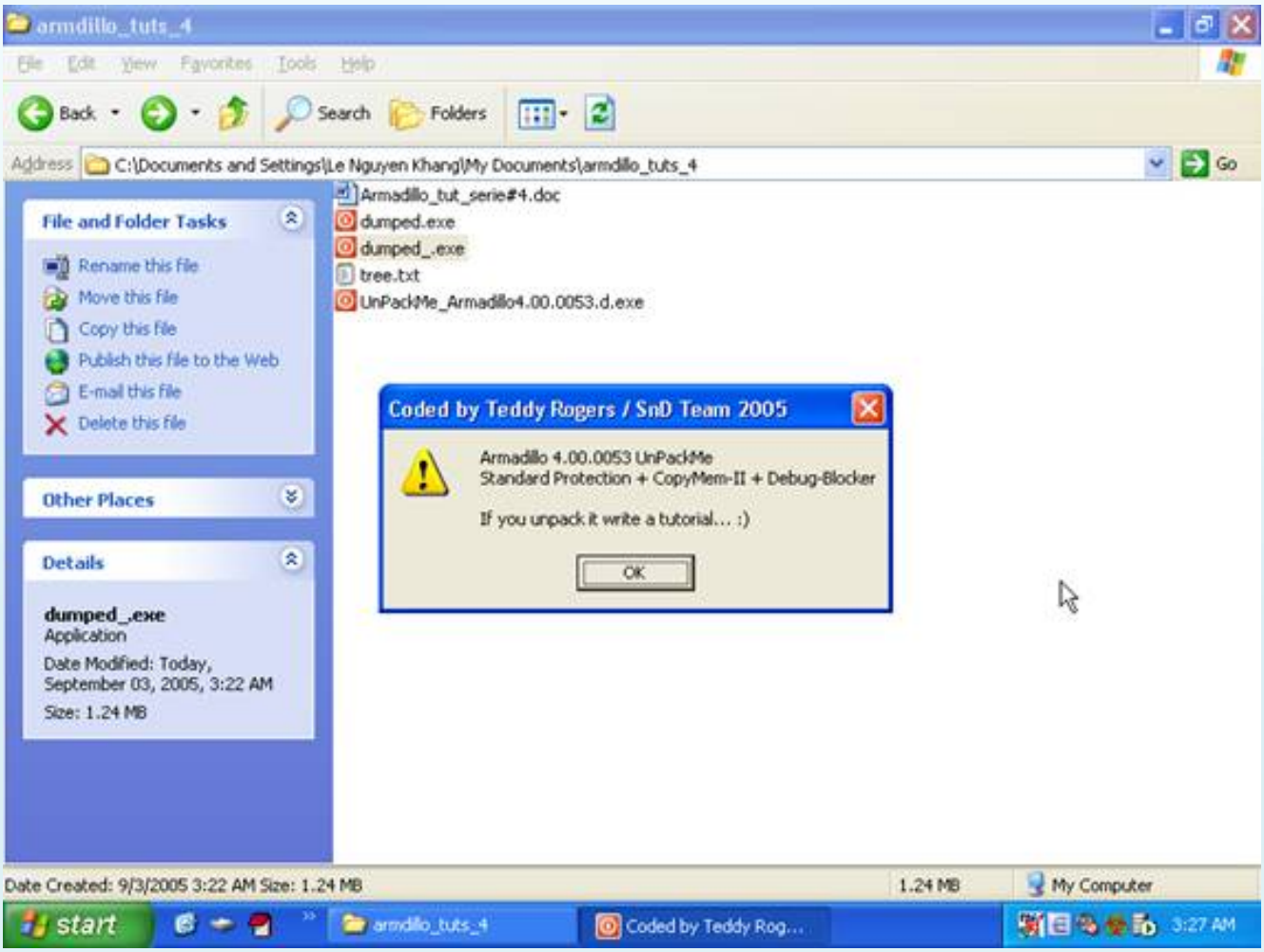


_Show Invalid, Cut thunks, fix dump:


Import REConstructor v1.6 FINAL (C) 2001-2003 MackT/uCF
Attach to an Active Process
c:\documents and settings\le nguyen khang\my documents\armdillo_tuts_4\unpackme_a
Pick DLL
Imported Functions Found
rva:0006082C mod:msvcrt.dll ord:0317 name:time
rva:00060830 mod:comctl32.dll ord:0011 name:InitCommonControls
rva:00060834 mod:comctl32.dll ord:002D name:ImageList_Destroy
rva:00060838 mod:msvcrt.dll ord:0317 name:time
rva:0006083C mod:gdi32.dll ord:0161 name:GetClipBox
rva:00060840 mod:gdi32.dll ord:00D8 name:ExcludeClipRect
rva:00060844 mod:gdi32.dll ord:01C8 name:IntersectClipRect
rva:00060848 mod:gdi32.dll ord:01D0 name:MoveToEx
rva:0006084C mod:gdi32.dll ord:01CC name:LineTo
Show Invalid
Show Suspect
Auto Trace
Clear Imports
Log
RVA:00060F20 Level1 Failed!
Current imports:
0 (decimal:0) valid module(s)
1C3 (decimal:451) imported function(s).
(3 (decimal:3) unresolved pointer(s)) (added: -8 (decimal:-8))
Clear Log
IAT Infos needed
OEP 000271B0
IAT AutoSearch
RVA 00060818
Size 0000070C
New Import Infos (IID+ASCII+LOADER)
RVA 00000000
Size 00000028
Add new section
Options
About
Exit
Load Tree
Save Tree
Get Imports
Fix Dump

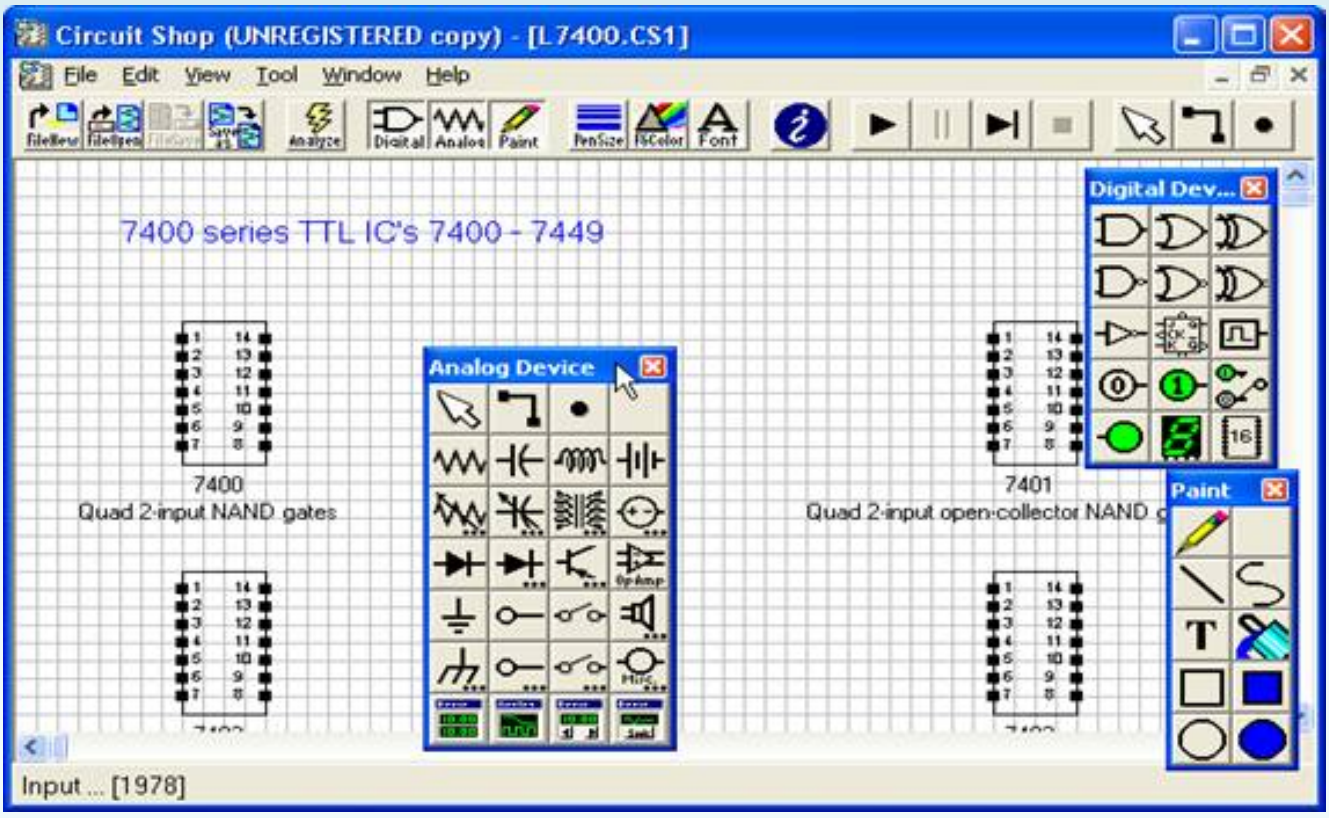


Giai The most important: Run dumped.exe



28 pages _ to protect a headache as the unpacker. But also think, you must not!

Target # 2: Circuit Shop - Armadillo 4.xx

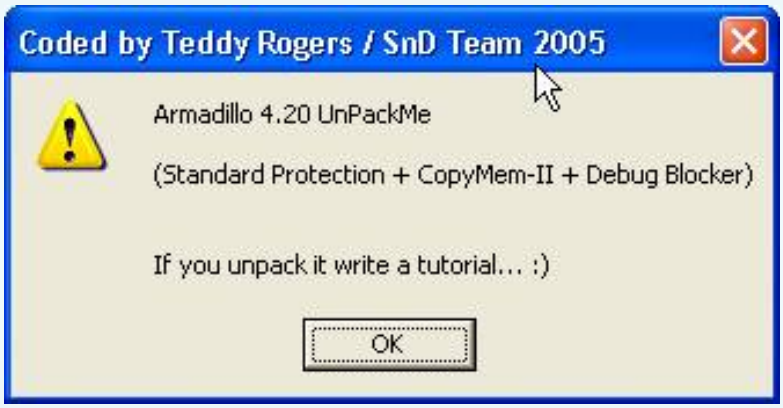


__Ban Own writing, if not involved in this topic.

Target # 3: snd-Unpackme Armadillo 4.10a

_Ban Own writing, if not involved in this topic.

Target # 4: snd-Unpackme Armadillo 4:20



_Ban Own writing, if not involved in this topic.

IV. Conclusion

_Tuan Later I go down to Western markets surveyed call (this sếp few bags of party mut season packages. Khua khua khua) so I offline a few weeks. I re ngộ you Nanomites with her children.
_Tai I do not write much tut only write one, Dear CopyMem type that has only one style and a way like this only. I test call, will post after the expansion of tut, now it's too long not to stand again.
_Trong Time I go, there are also sure to discuss with his children, he Com do not close topic nhé!
_Ba The gambling people want to blindfold them. Yes, they post pictures of children 5 years prior to her baby with drug see: D. Con baby she stands next time it is about to have her husband call, do not ask her children. J of child offenders. He re the baby is a good brother's children. Brother rowlock that;;).

Mỏi got legs throughout the holiday heaven
Blue eyes see some of the same sea
Places where only see swordsman
Know where to find us a dance

Make Ma General structure Loses

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx OllyDBG of the authors.

To be continued ...

Written by **hacnho** (tutorial date: Tien Giang 3/09/2005)

MUP arm 4.xx Method by other hacnho

I was reading a tut by Madman. So, the tut is greate, but i have an other method for unpack the software of this corpt.

Tools: OllyDBG best config by hacnho, LordPE, and ImpREC WARK

Target: XVideoConverter 3.9.37

_Load Target into OllyDBG:

```
004788C3> / $ 55 PUSH EBP
004788C4 |. 8BEC MOV EBP, ESP
004788C6 |. 6A FF PUSH -1
004788C8 |. 68 88214A00 PUSH XVideoCo.004A2188
004788CD |. 68 00864700 PUSH XVideoCo.00478600; SE handler installation
```

_Bp CreateThread, Shift + F9, Ctrl + F9, F8, Ctrl + F9, F8:

```
003B980F 59 POP ECX; kernel32.7C8107FD
003B9810 BF 10893C00 MOV EDI, 3C8910
003B9815 8BCF MOV ECX, EDI
003B9817 E8 03E9FDFF CALL 0039811F
003B981C 84C0 TEST AL, AL
003B981E 75 09 JNZ SHORT 003B9829
003B9820 6A 01 PUSH 1
003B9822 8BCF MOV ECX, EDI
003B9824 E8 B93BFEFF CALL 0039D3E2
003B9829 B9 F04C3D00 MOV ECX, 3D4CF0
003B982E C705 30423C00 8> MOV DWORD PTR DS: [3C4230], 3C5E84
003B9838 E8 15380000 CALL 003BD052
003B983D 6A 00 PUSH 0
003B983F E8 0E380000 CALL 003BD052
003B9844 59 POP ECX
003B9845 33C9 XOR ECX, ECX
003B9847 380D 348F3C00 Cmp BYTE PTR DS: [3C8F34], CL
003B984D 75 36 JNZ SHORT 003B9885
003B984F A1 5C8F3C00 MOV EAX, DWORD PTR DS: [3C8F5C]
003B9854 53 PUSH EBX
003B9855 8B48 50 MOV ECX, DWORD PTR DS: [EAX +50]
```

```
003B9858 894D 08 MOV DWORD PTR SS: [EBP +8], ECX
003B985B 8B78 54 MOV EDI, DWORD PTR DS: [EAX +54]
003B985E 3378 38 XOR EDI, DWORD PTR DS: [EAX +38]
003B9861 8B58 68 MOV EBX, DWORD PTR DS: [EAX +68]
003B9864 3358 20 XOR EBX, DWORD PTR DS: [EAX +20]
003B9867 8D4D 08 LEA ECX, DWORD PTR SS: [EBP +8]
003B986A 3378 1C XOR EDI, DWORD PTR DS: [EAX +1 C]
003B986D 3358 18 XOR EBX, DWORD PTR DS: [EAX +18]
003B9870 033D 748F3C00 ADD EDI, DWORD PTR DS: [3C8F74]; XVideoCo.00400000
003B9876 E8 8577FDFF CALL 00391000
003B987B 33D2 XOR EDX, EDX
003B987D F7F3 DIV EBX
003B987F 8B0C3A MOV ECX, DWORD PTR DS: [EDX + EDI]
003B9882 5B POP EBX
003B9883 03D7 ADD EDX, EDI
003B9885 A1 5C8F3C00 MOV EAX, DWORD PTR DS: [3C8F5C]
003B988A 3148 50 XOR DWORD PTR DS: [EAX +50], ECX
003B988D A1 5C8F3C00 MOV EAX, DWORD PTR DS: [3C8F5C]
003B9892 3148 50 XOR DWORD PTR DS: [EAX +50], ECX
003B9895 A1 5C8F3C00 MOV EAX, DWORD PTR DS: [3C8F5C]
003B989A 8B16 MOV EDX, DWORD PTR DS: [ESI]
003B989C 8B48 5C MOV ECX, DWORD PTR DS: [EAX +5 C]
003B989F 3348 44 XOR ECX, DWORD PTR DS: [EAX +44]
003B98A2 3348 18 XOR ECX, DWORD PTR DS: [EAX +18]
003B98A5 030D 748F3C00 ADD ECX, DWORD PTR DS: [3C8F74]; XVideoCo.00400000
003B98AB 85D2 TEST EDX, EDX
003B98AD 75 18 JNZ SHORT 003B98C7
003B98AF 8B50 6C MOV EDX, DWORD PTR DS: [EAX +6 C]
003B98B2 FF76 18 PUSH DWORD PTR DS: [ESI +18]
003B98B5 3350 18 XOR EDX, DWORD PTR DS: [EAX +18]
003B98B8 FF76 14 PUSH DWORD PTR DS: [ESI +14]
003B98BB 3350 14 XOR EDX, DWORD PTR DS: [EAX +14]
003B98BE FF76 10 PUSH DWORD PTR DS: [ESI +10]
003B98C1 2BCA SUB ECX, EDX
003B98C3 FFD1 CALL ECX
003B98C5 EB 1D JMP SHORT 003B98E4
003B98C7 83FA 01 Cmp EDX, 1
003B98CA 75 1B JNZ SHORT 003B98E7
003B98CC FF76 04 PUSH DWORD PTR DS: [ESI +4]
003B98CF 8B50 6C MOV EDX, DWORD PTR DS: [EAX +6 C]
```

```
003B98D2 3350 18 XOR EDX, DWORD PTR DS: [EAX +18]
003B98D5 FF76 08 PUSH DWORD PTR DS: [ESI +8]
003B98D8 3350 14 XOR EDX, DWORD PTR DS: [EAX +14]
003B98DB 6A 00 PUSH 0
003B98DD FF76 0C PUSH DWORD PTR DS: [ESI + C]
003B98E0 2BCA SUB ECX, EDX
003B98E2 FFD1 CALL ECX
003B98E4 8945 FC MOV DWORD PTR SS: [EBP-4], EAX
003B98E7 8B45 FC MOV EAX, DWORD PTR SS: [EBP-4]
```

_Set Breakpoint here:
003B98E2 FFD1 CALL ECX

_Press F9, F7: OEP:

```
004274C2 55 PUSH EBP
004274C3 8BEC MOV EBP, ESP
004274C5 6A FF PUSH -1
004274C7 68 08C84200 PUSH XVideoCo.0042C808
004274CC 68 48764200 PUSH XVideoCo.00427648; JMP to msvcrt._except_handler3
004274D1 64: A1 00000000 MOV EAX, DWORD PTR FS: [0]
004274D7 50 PUSH EAX
004274D8 64:8925 0000000> MOV DWORD PTR FS: [0], ESP
004274DF 83EC 68 SUB ESP, 68
004274E2 53 PUSH EBX
004274E3 56 PUSH ESI
004274E4 57 PUSH EDI
004274E5 8965 E8 MOV DWORD PTR SS: [EBP-18], ESP
004274E8 33DB XOR EBX, EBX
004274EA 895D FC MOV DWORD PTR SS: [EBP-4], EBX
004274ED 6A 02 PUSH 2
004274EF FF15 58C64200 CALL DWORD PTR DS: [42C658]; msvcrt.__set_app_type
004274F5 59 POP ECX
```

_ You see the special signal:

004274EF FF15 58C64200 CALL DWORD PTR DS: [42C658]; msvcrt.__set_app_type

_In Dump Window: Ctrl + G: 42C658, Set breakpoint on write, dword

_Ctrl + F2 to restart: Shift + F9

```
77C46FA3 F3: A5 REP MOVS DWORD PTR ES: [EDI], DWORD PTR DS>
77C46FA5 FF2495 B870C477 JMP DWORD PTR DS: [EDX * 4 +77 C470B8]
77C46FAC 8BC7 MOV EAX, EDI
77C46FAE BA 03000000 MOV EDX, 3
77C46FB3 83E9 04 SUB ECX, 4
77C46FB6 72 0C JB SHORT msvcrt.77C46FC4
```

_Shift + F9 again:

```
003B6C7D 8B85 14DBFFFF MOV EAX, DWORD PTR SS: [EBP-24EC]; XVideoCo.0042C658
003B6C83 83C0 04 ADD EAX, 4
003B6C86 8985 14DBFFFF MOV DWORD PTR SS: [EBP-24EC], EAX
003B6C8C ^ E9 4DFCFFFF JMP 003B68DE
003B6C91 FF15 84E23B00 CALL DWORD PTR DS: [3BE284]; kernel32.GetTickCount
```

_Scroll Down until you see:

```
003B6AA8 FF30 PUSH DWORD PTR DS: [EAX]
003B6AAA E8 26650000 CALL 003BCFD5
003B6AAF 83C4 0C ADD ESP, 0C
003B6AB2 8D85 0CC4FFFF LEA EAX, DWORD PTR SS: [EBP-3BF4]
003B6AB8 50 PUSH EAX
003B6AB9 8D85 1CC5FFFF LEA EAX, DWORD PTR SS: [EBP-3AE4]
003B6ABF 50 PUSH EAX
003B6AC0 FF15 84E33B00 CALL DWORD PTR DS: [3BE384]; msvcrt._stricmp
```

_Do You see the special call

003B6AAA E8 26650000 CALL 003BCFD5

_Ctrl + F2, Shift + F9, in CPU Window: Ctrl + G: 003B6AAA, set a breakpoint here on Execution: HE 003B6AAA. Delete hardware breakpoint on write. F9 you still here:

```
003B6AAA E8 26650000 CALL 003BCFD5
003B6AAF 83C4 0C ADD ESP, 0C
003B6AB2 8D85 0CC4FFFF LEA EAX, DWORD PTR SS: [EBP-3BF4]
003B6AB8 50 PUSH EAX
003B6AB9 8D85 1CC5FFFF LEA EAX, DWORD PTR SS: [EBP-3AE4]
```

```
003B6ABF 50 PUSH EAX
```

Call at the _Enter 003B6AAA:

```
003BCFD5 55 PUSH EBP
003BCFD6 8BEC MOV EBP, ESP
003BCFD8 51 PUSH ECX
003BCFD9 A1 204D3D00 MOV EAX, DWORD PTR DS: [3D4D20]
003BCFDE 53 PUSH EBX
003BCFDF 56 PUSH ESI
003BCFE0 57 PUSH EDI
```

_Change 55 to C3:

```
003BCFD5 C3 RETN
003BCFD6 8BEC MOV EBP, ESP
003BCFD8 51 PUSH ECX
003BCFD9 A1 204D3D00 MOV EAX, DWORD PTR DS: [3D4D20]
003BCFDE 53 PUSH EBX
003BCFDF 56 PUSH ESI
```

_Ctrl + G: Enter the address of OEP:

```
004274C2 55 PUSH EBP
004274C3 8BEC MOV EBP, ESP
004274C5 6A FF PUSH -1
004274C7 68 08C84200 PUSH XVideoCo.0042C808
004274CC 68 48764200 PUSH XVideoCo.00427648; JMP to msvcrt._except_handler3
```

_Set A Breakpoint here on execution, delete the breakpoint at 003B6AAA. F9, you break at the OEP. Now, open the LordPE. Choose the process XVideoConverter.exe, Full dump.

_Open ImpREC, enter the OEP, IAT Auto Search. Show Invalid, Cut Thunk, fix dump.

_Now The most important step is: Open Wark (can found at wasm.ru). Choose Utilities, Stuff PE, PE Header rebuild. Now run the target. Yeah, it Run ...

_Unpacked Success

_The Lesson for learning: Bro Madman was found a new ways for PE rebuild. This is Wark. Do

not need for change size PE Header

_Best Regards

_PS: Dumped the files can found at hxxp: / / tinicat.de / hacnho

Mỏi got around the foot of heaven
Doi blue eyes of some high sea
Places where only see swordsman
NRO know where tem for the dance

Make Ma General structure Loses

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, Teerayoot, Ferrari, MaDMAn_H3rCuL3s, ThunderPWR, Kruger, Kelvin, Devilz, NXL ... and you!
Special Thanx Cracks Latinos.
Merci FFF, RiF, N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!
Thanx OllyDBG of the authors.

Armadillo collect sand-stone

Part 6: Armadillo 4.xx-Standard Protection other way

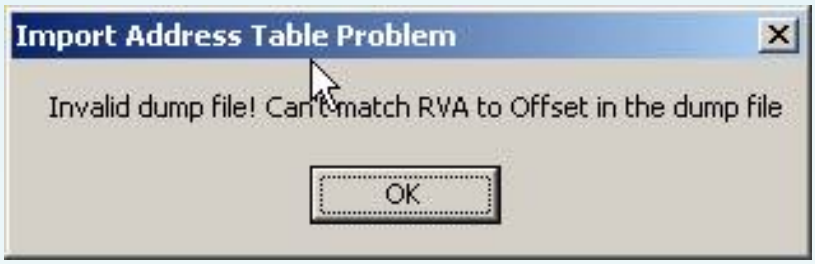
I. Intro

_Toi Through too sad, with all the clothes to wear (a few meals now than under this rain, it is not exposed to dry) bags run about 120 trees Tien Giang get it. Available opportunity to REA Too see the topic is a model to protect that ARTeam also Giò vắt to run the Import Table elimination. Very sour but it is very unpack Khoai. Tomorrow I am running back down, go with the bittorent hgame coming down is completed, I should write a sad paradox that this series # 6. Although when writing this line not imagine I'll write a tut tut like this, but that when finished reading this tut you will answer the questions they post today on this topic, and I will certainly suffering because of the wonders of the L . How to unpack this and the TBN EN nobody likes to why but I know some chả pa China Khoai use. I sinh foreign capital should also do not like the place because the bít TQ few words to the front without reading the charge, just like with the baby from place to stop you because "You do ơi, giùm to their children in Austria in the J ... ", you probably did not sit right im not: D. Khua khua, we start all, to discuss how this itch I have such as requisite way down calme, calme down!

_De Identify signs of Armadillo's Splicing Feature Code is:

003C53D5 8985 DCAEFFFF MOV DWORD PTR SS: [EBP + FFFFAEDC], EAX
8985 # 83BD ???????? ???????? 0074? #

_Dau Brand awareness of Armadillo's Import Feature elimination is difficult to identify but the experience when I met you three cases as follows, is a destination market Armadillo's Import and elimination Feature Code Splicing:



II. Tools

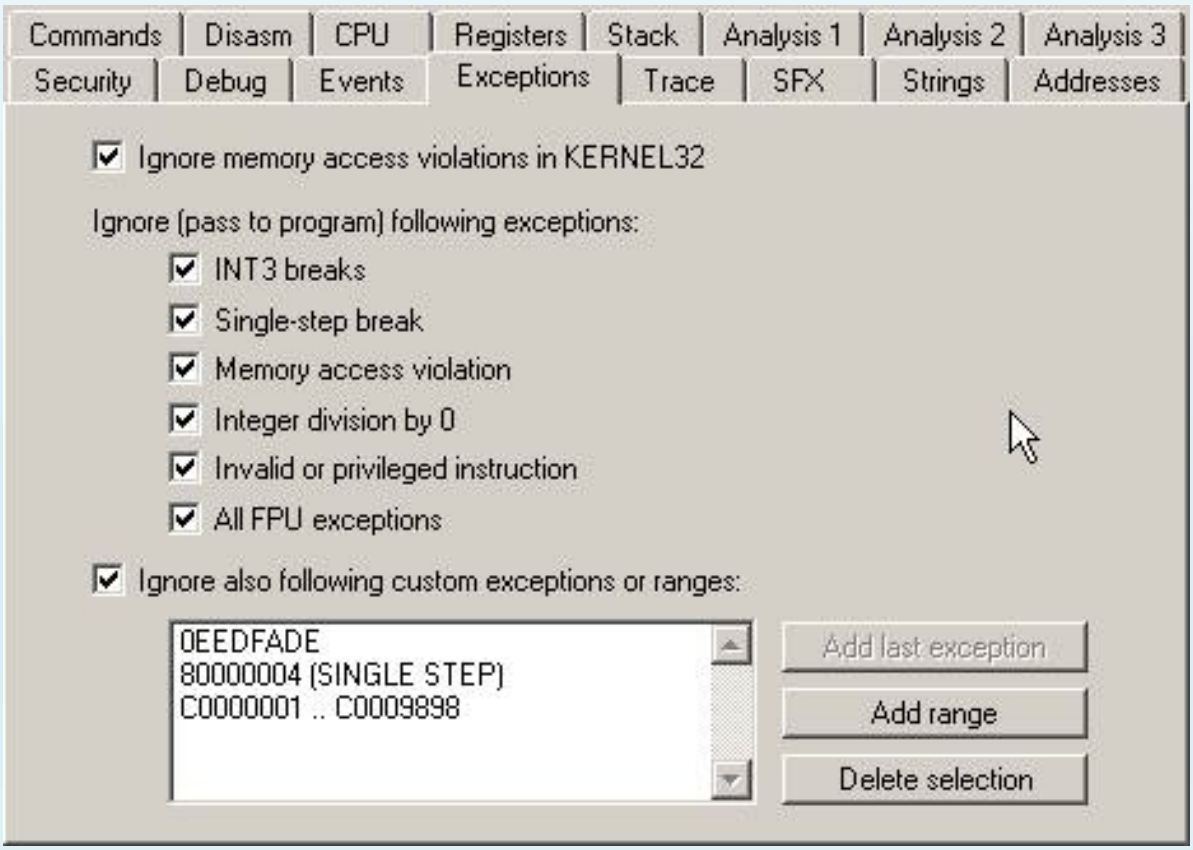
_Công Only need the tools are:

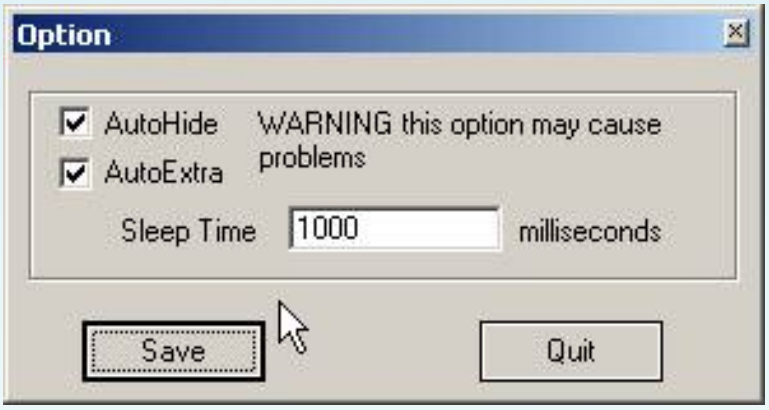
1.OllyDBG - The best config debugger for ArmMUP by hacnho.
2.LordPE 1.4 Deluxe
3.Import REConstructor 1.6 Final
4.API Address 1.0

III. Unpacking

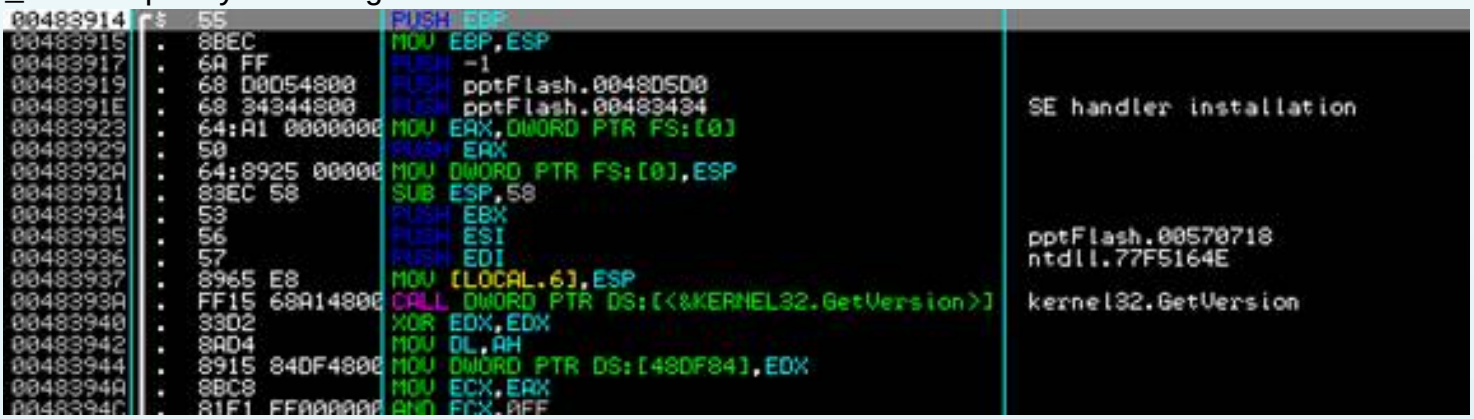
Target # 1: PowerPoint to Flash 1.67-Armadillo 4.xx + IAT elimination

_Config Plugin:

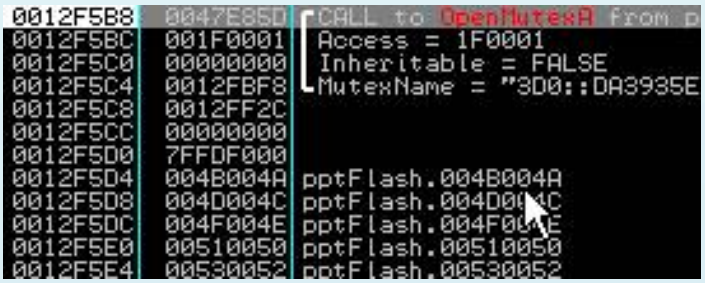

Commands
Disasm
CPU
Registers
Stack
Analysis 1
Analysis 2
Analysis 3
Security
Debug
Events
Exceptions
Trace
SFX
Strings
Addresses
Ignore memory access violations in KERNEL32
Ignore (pass to program) following exceptions:
INT3 breaks
Single-step break
Memory access violation
Integer division by 0
Invalid or privileged instruction
All FPU exceptions
Ignore also following custom exceptions or ranges:
0EEDFADE
80000004 (SINGLE STEP)
C0000001 .. C0009898
Add last exception
Add range
Delete selection

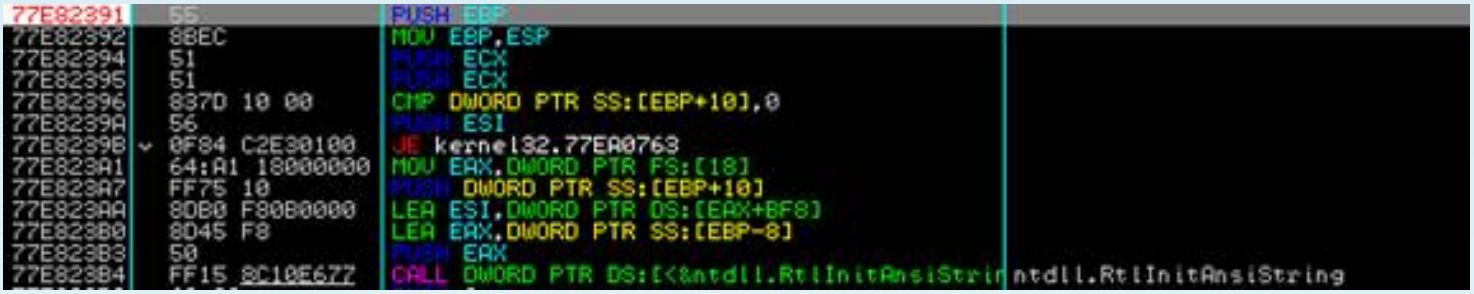

Option
AutoHide
AutoExtra
WARNING this option may cause problems
Sleep Time
1000
milliseconds
Save
Quit

_ Load up OllyDBG target:



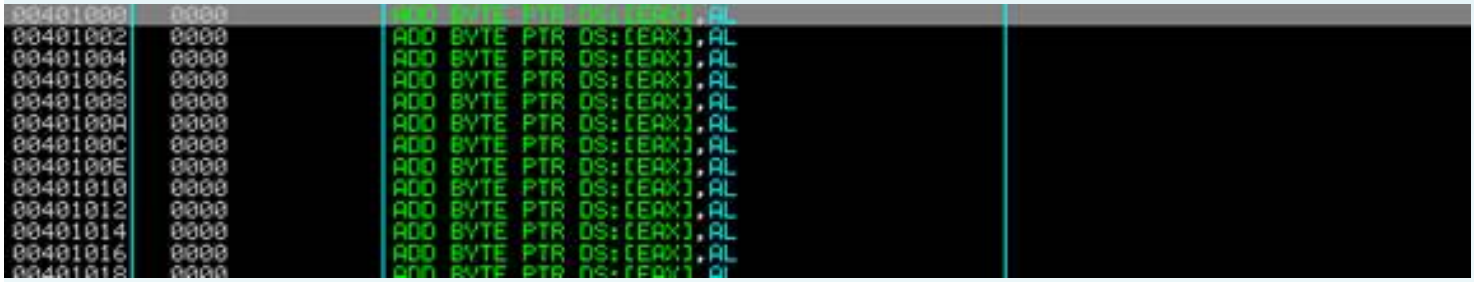
_Ta Need for a mutex, set a breakpoint in the function OpenMutexA: BP OpenMutexA, press F9:





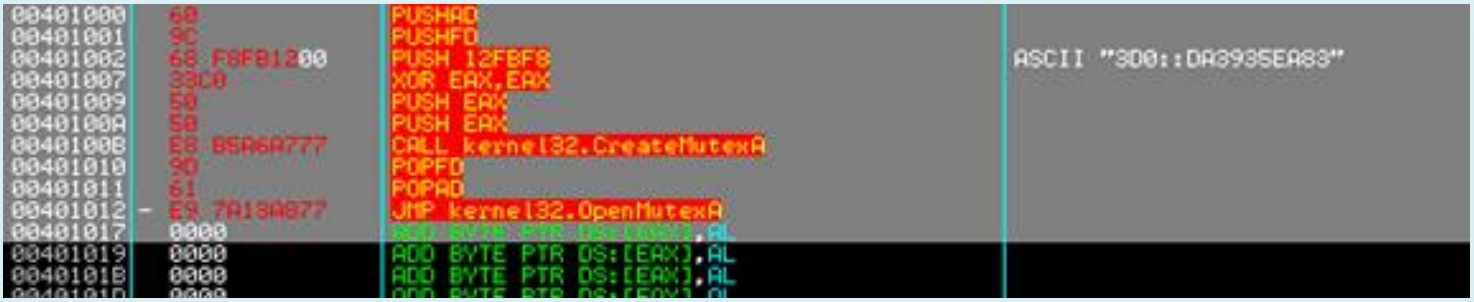
_Nhu So we have 0012F5C4 0012FBF8 \ MutexName = "3D0: DA3935EA83".

_Ctrl + G to enter the address memory area: **401,000**

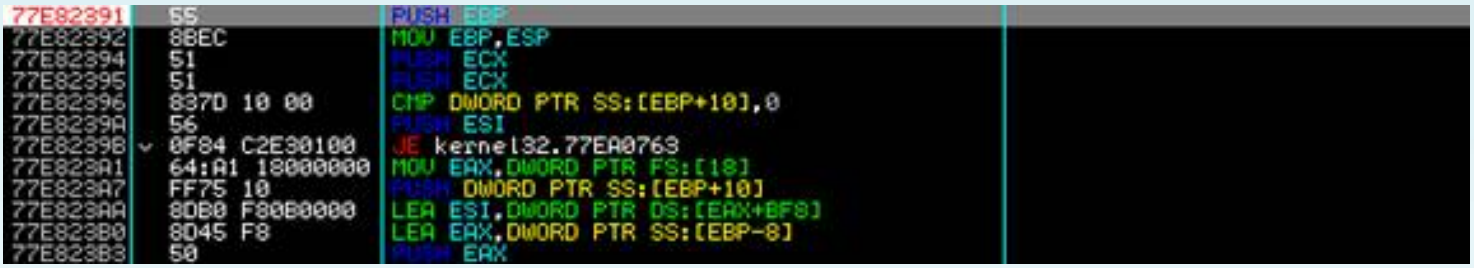


_Ctrl + E to edit as follows:

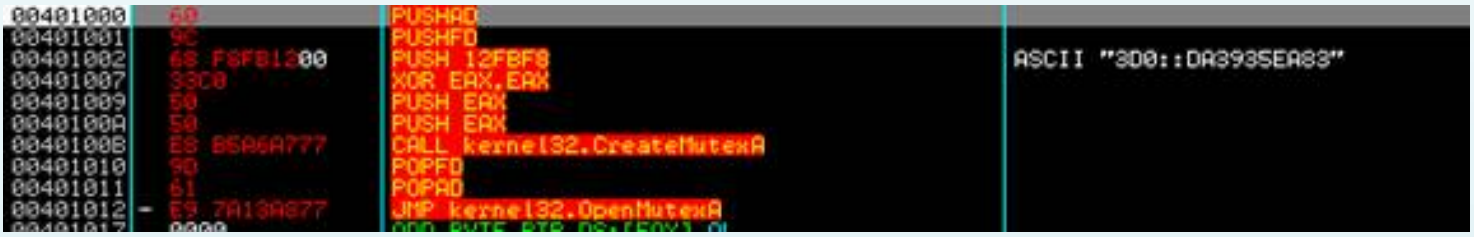
/ * 401000 * / PUSHAD
/ * 401001 * / PUSHFD
/ * 401002 * / PUSH 12FBF8
/ * 401007 * / XOR EAX, EAX
/ * 401009 * / PUSH EAX
/ * * 40100A / PUSH EAX
/ * * 40100B / CALL kernel32.CreateMutexA
/ * 401010 * / POPFD
/ * 401011 * / POPAD
/ * 401012 * / JMP kernel32.OpenMutexA
/ * 401017 * / ADD BYTE PTR DS: [EAX], AL



_ At 401,000 you please press F9 right once! You will return:

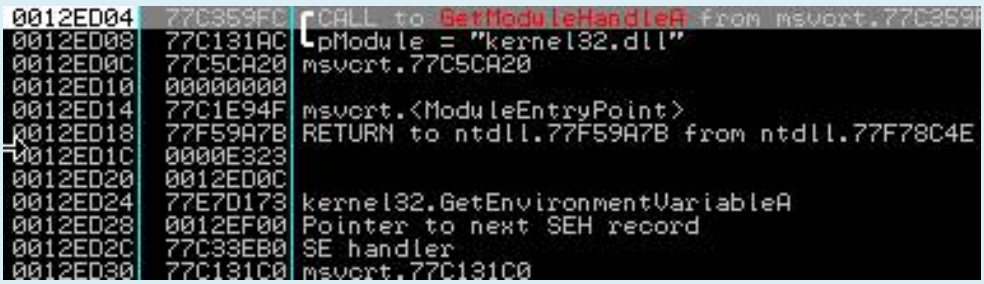


_Ctrl + G to the address 401000, Ctrl + * set at 401,000 new origin:

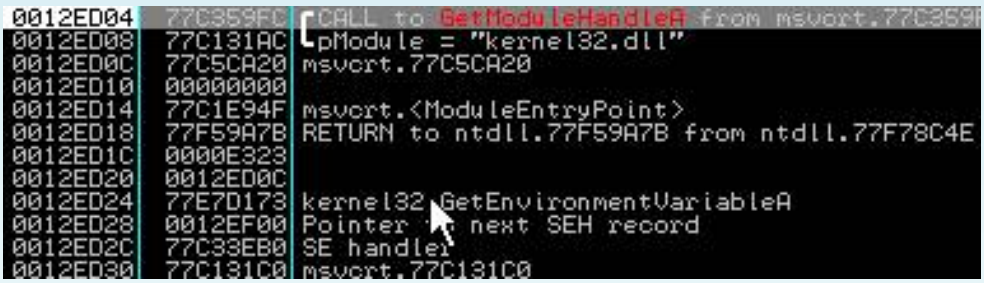


_Neu Do not correct you will not be implemented GetModuleHandleA function, Okie, now you press Alt + F1: BC OpenMutexA, BP GetModuleHandleA.

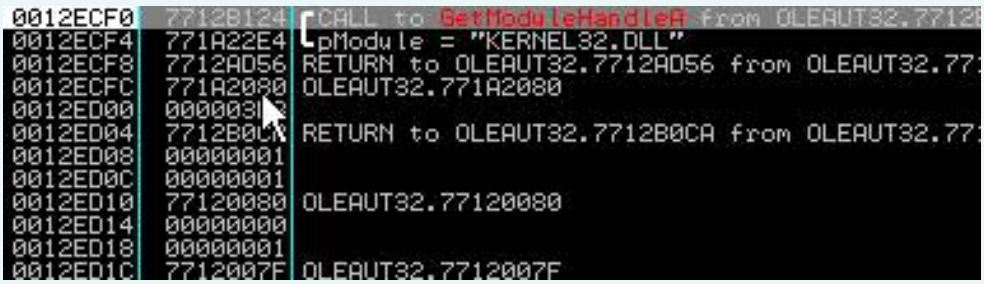
_F9 Time 1:



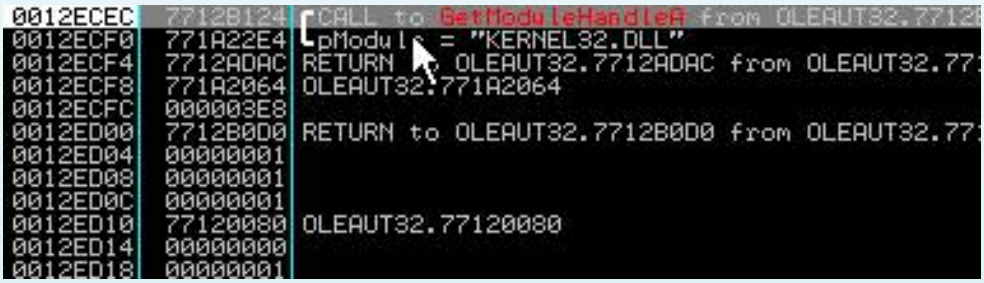
_F9 Times 2:



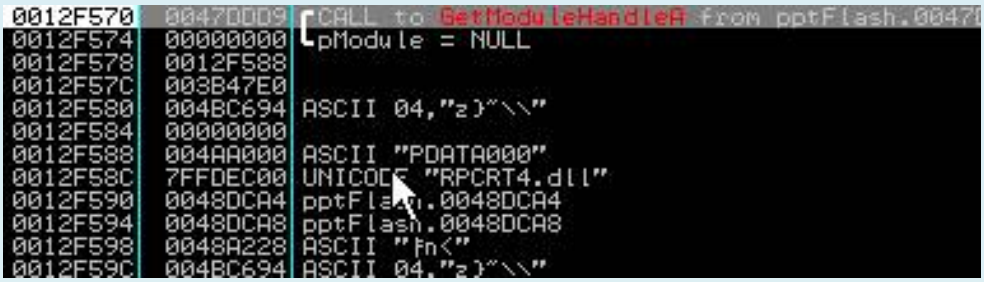
_F9 Times 3:



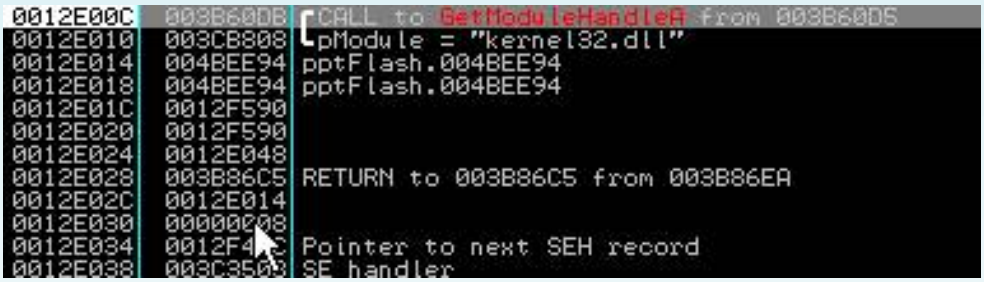
_F9 Times 4:



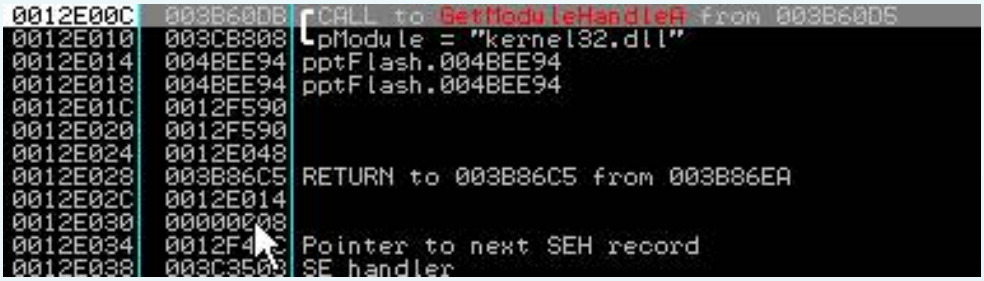
_F9 Times 5:



_F9 Times 6:

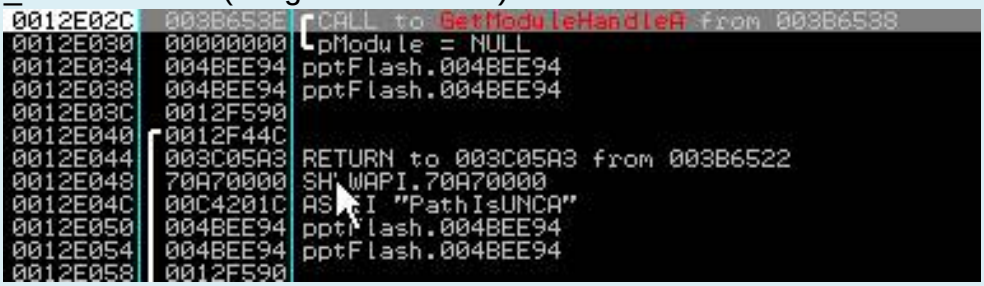


_F9 Times 7:

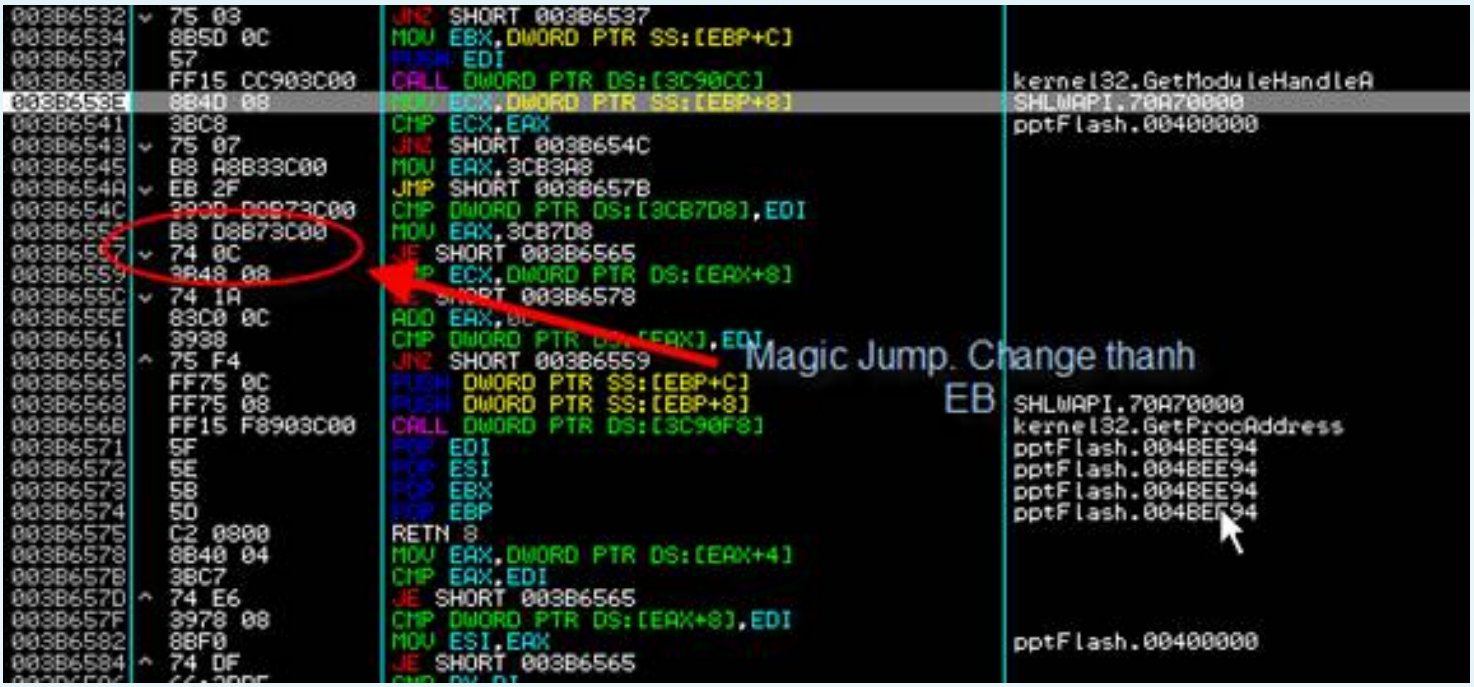


_ F9 times 8:

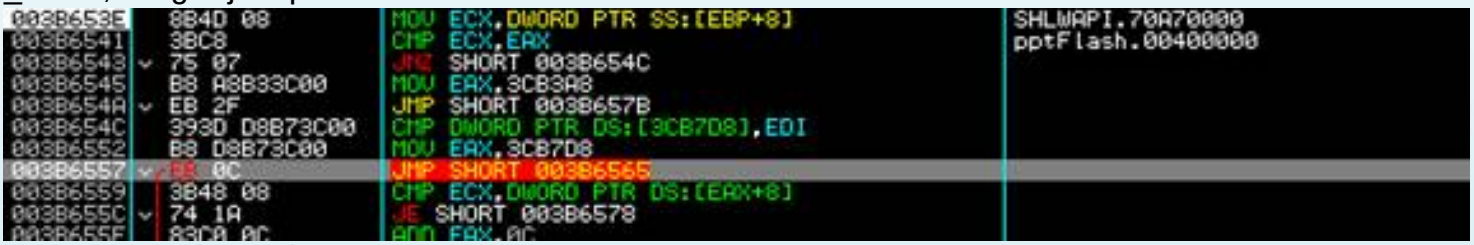
_F9 Times 9 (J good number):



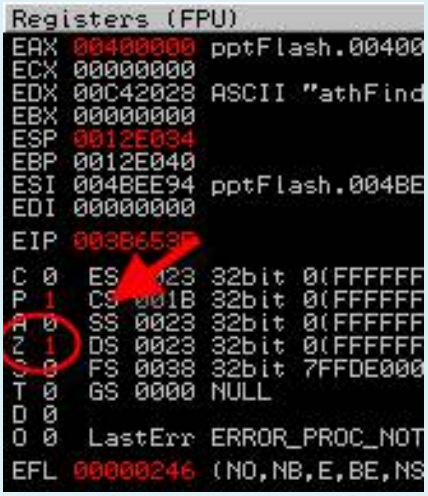
_Khi Press F9 to here, you press Alt + F9 execute Till User Code:



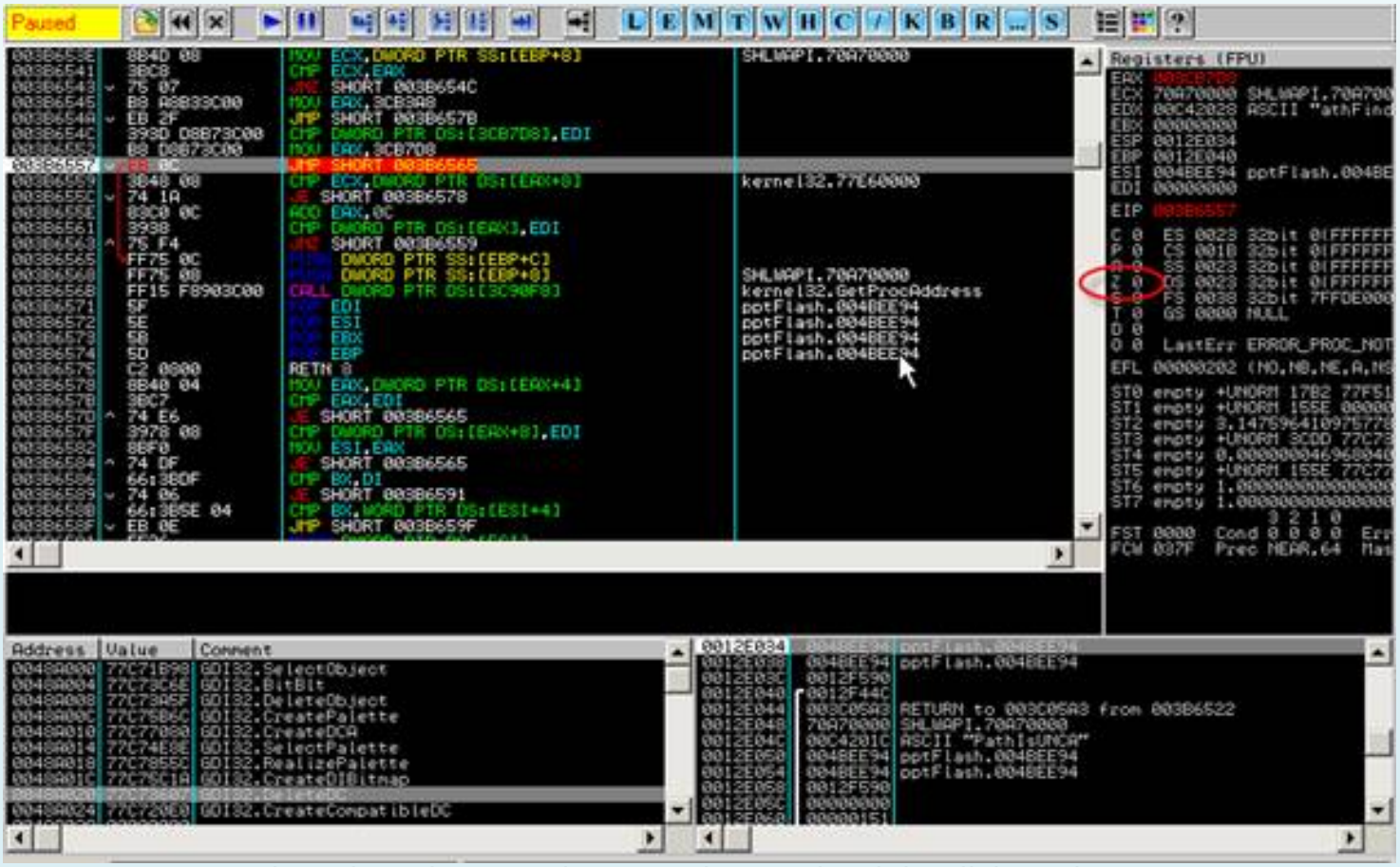
_Yeah, Magic jump!



_Ban Look through FPU:



_Co Z is 1, we started to trace magic jump it changed to 0:

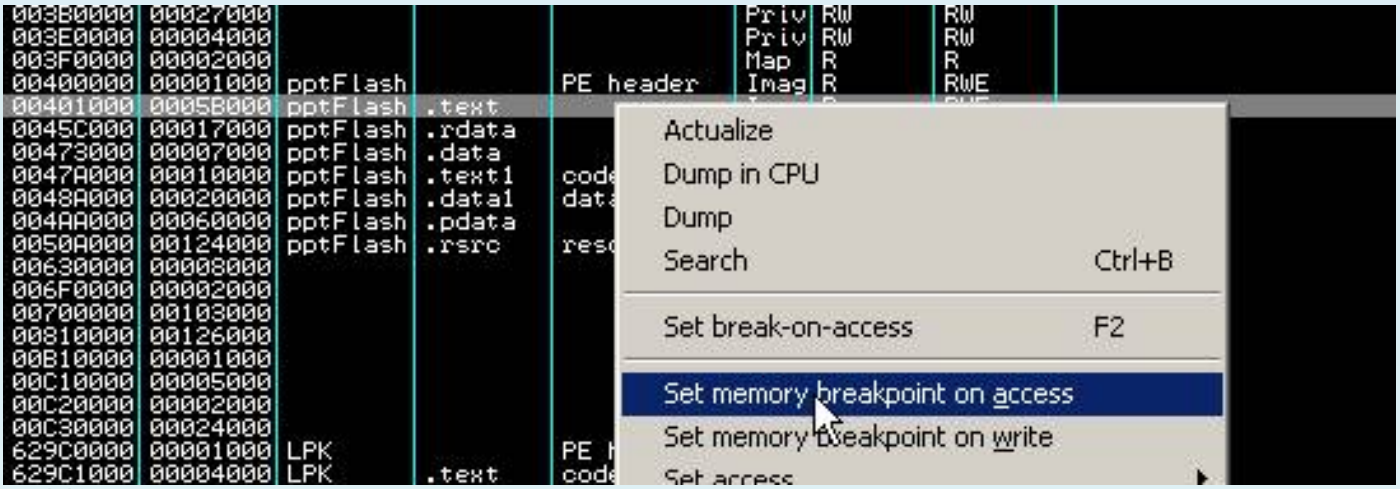


_Buoc Important here is: When you jump to the magic, right click at the Z:

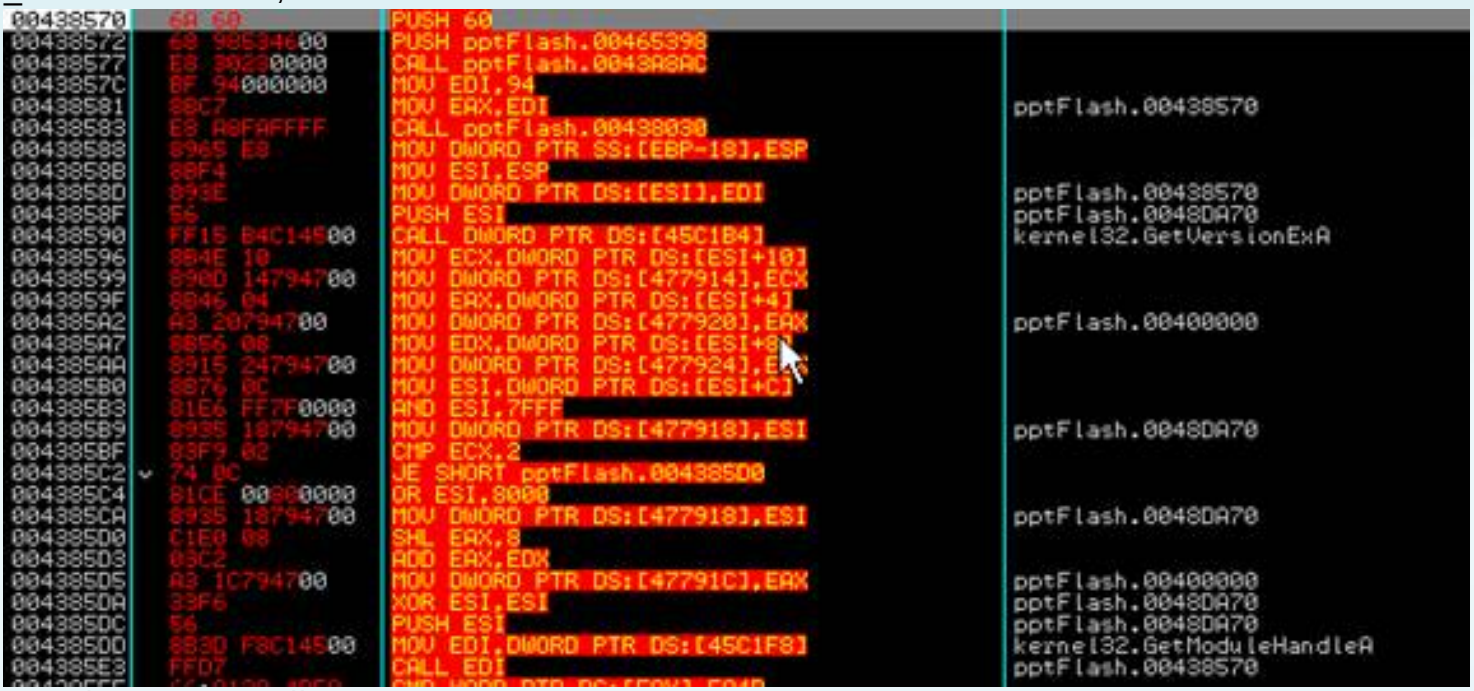
_Set:

_Nhan Alt + F1: BC GetModuleHandleA

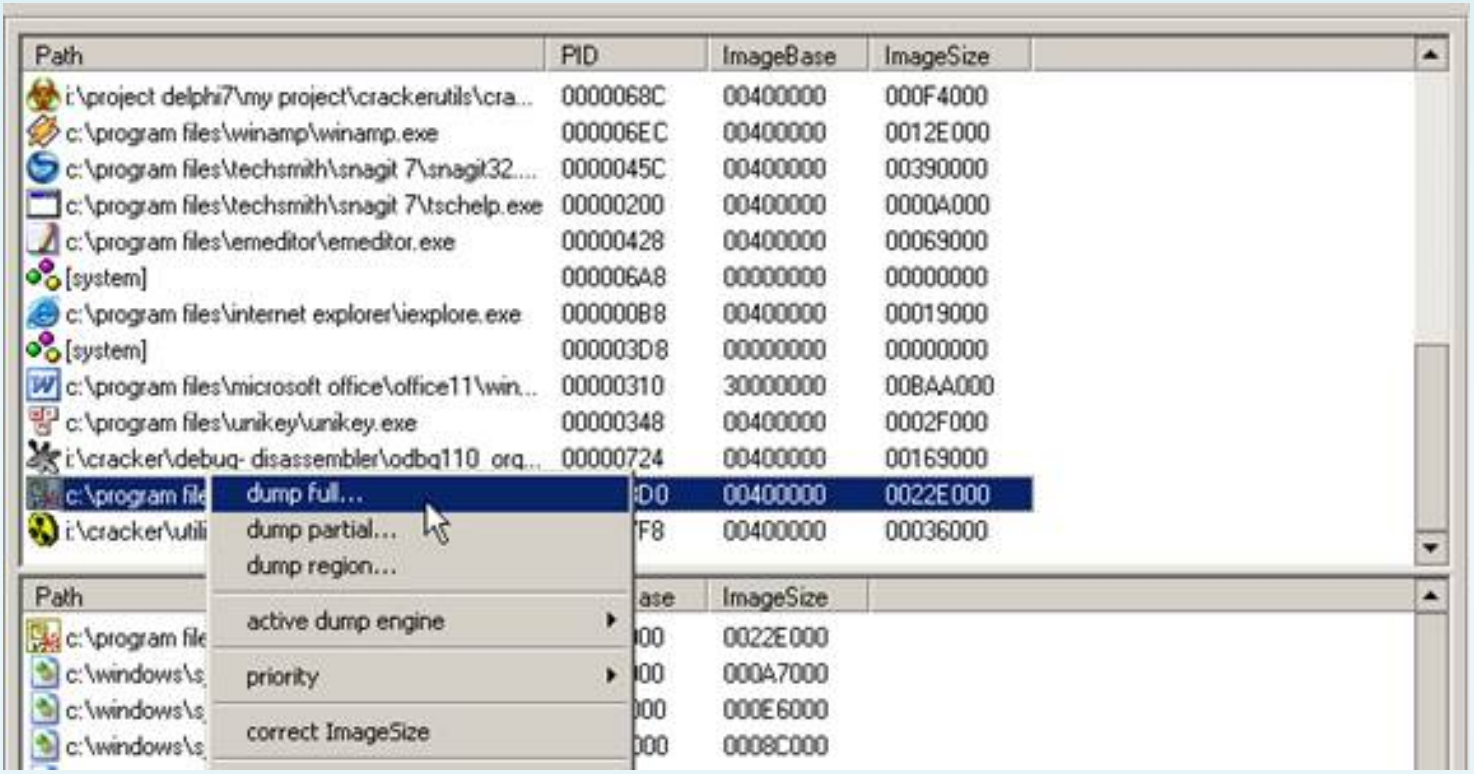
_Okie, Now you press Alt + M:



_Shift + F9: OEP, wow!

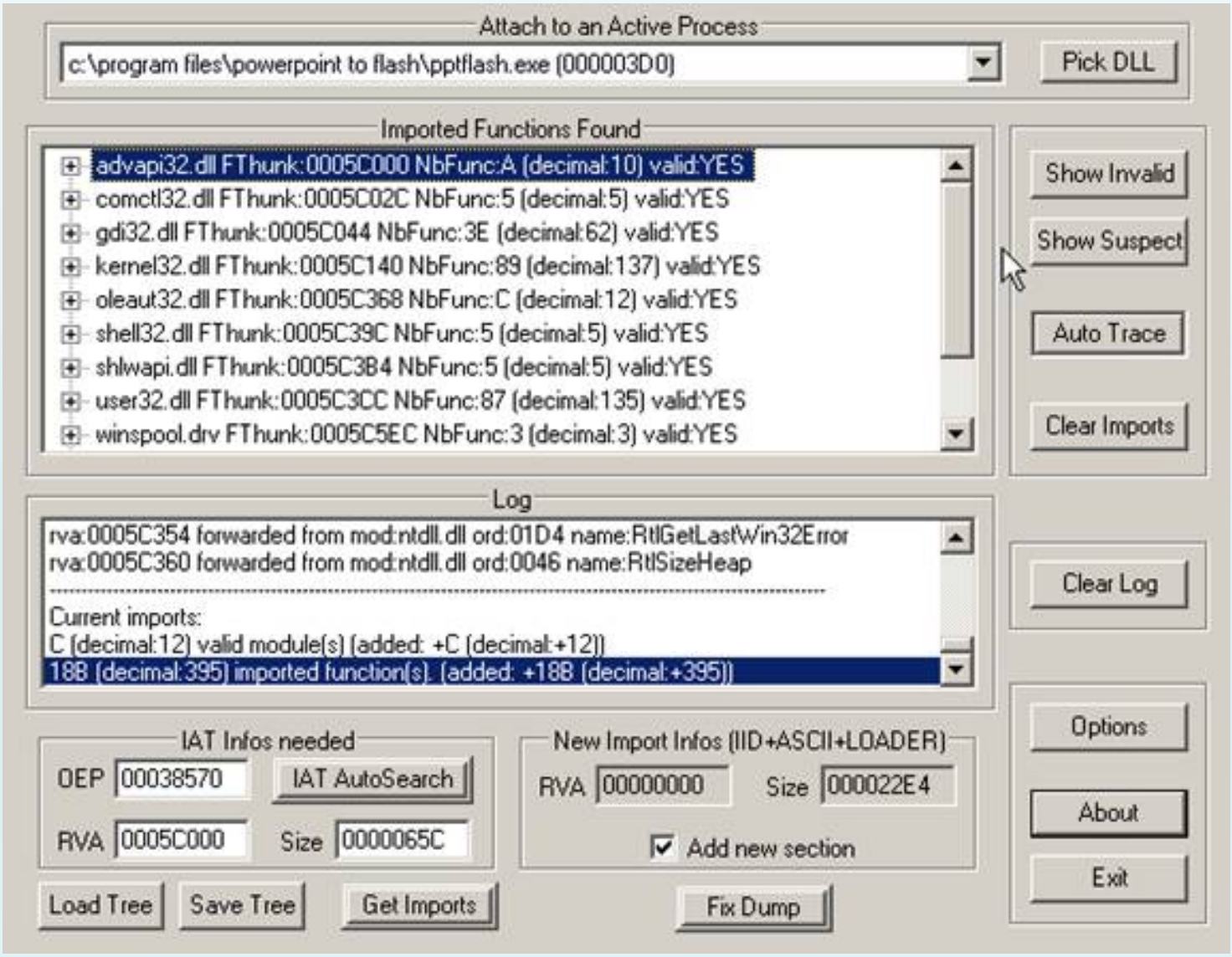


_Lord PE DumpFull:

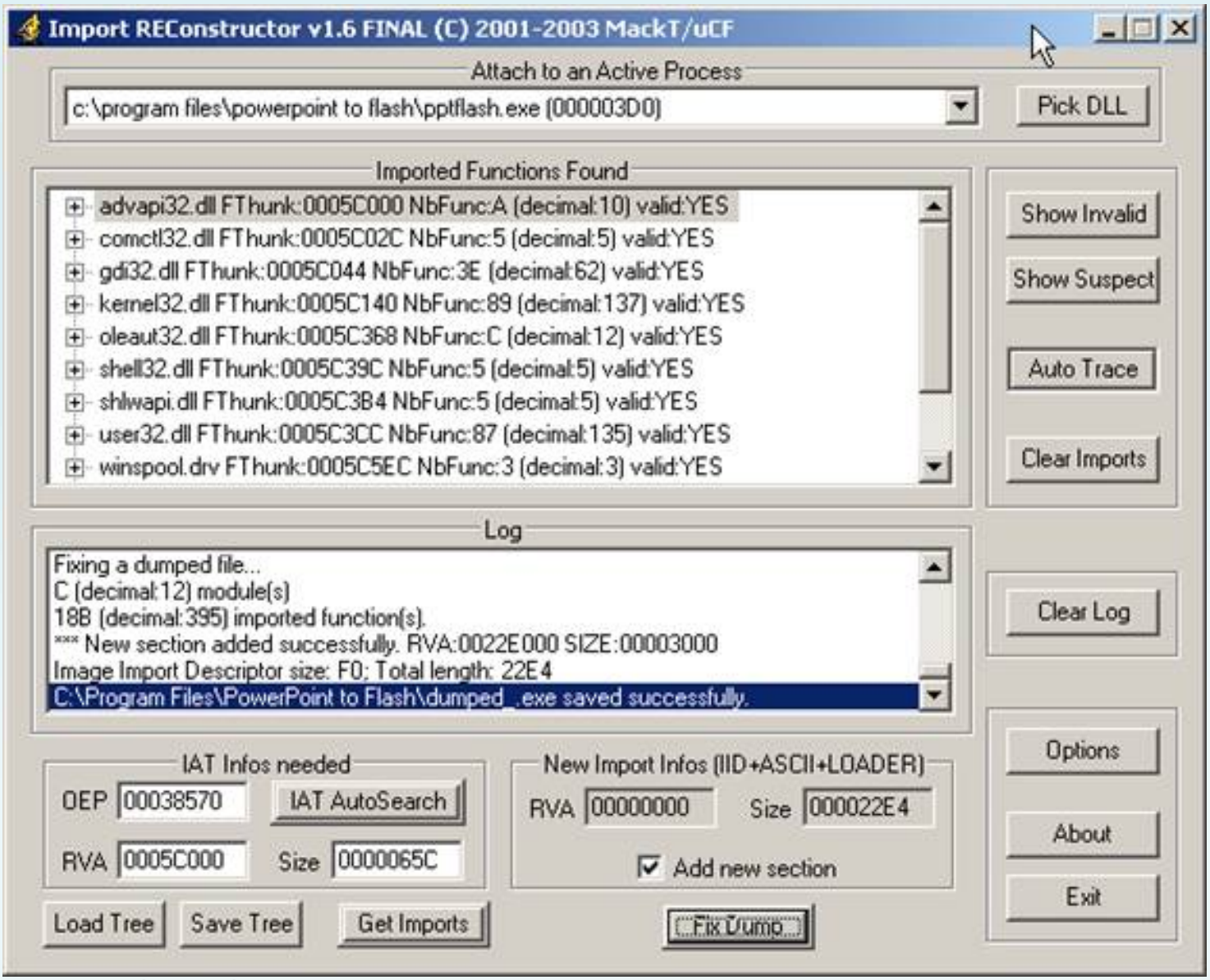

Path
PID
ImageBase
ImageSize
i:\project delphi7\my project\crackerutils\cra...
0000068C
00400000
000F4000
c:\program files\winamp\winamp.exe
000006EC
00400000
0012E000
c:\program files\techsmith\snagit 7\snagit32....
0000045C
00400000
00390000
c:\program files\techsmith\snagit 7\tschelp.exe
00000200
00400000
0000A000
c:\program files\emeditor\emeditor.exe
00000428
00400000
00069000
[system]
000006A8
00000000
00000000
c:\program files\internet explorer\iexplore.exe
000000B8
00400000
00019000
[system]
000003D8
00000000
00000000
c:\program files\microsoft office\office11\win...
00000310
30000000
00BAA000
c:\program files\unikey\unikey.exe
00000348
00400000
0002F000
i:\cracker\debug- disassembler\odbg110_org...
00000724
00400000
00169000
c:\program file
dump full...
dump partial...
dump region...
active dump engine
priority
correct ImageSize
00400000
0022E000
i:\cracker\utili
00400000
00036000
Path
ImageSize
c:\program file
0022E000
c:\windows\s
000A7000
c:\windows\s
000E6000
c:\windows\s
0008C000

_ImpREC:


Found something!
Found address which may be in the Original IAT. Try 'Get Import'.
(If it is not correct, try RVA: 0005C000 Size:00016552)
OK



Invalid _Nothing, yeah!

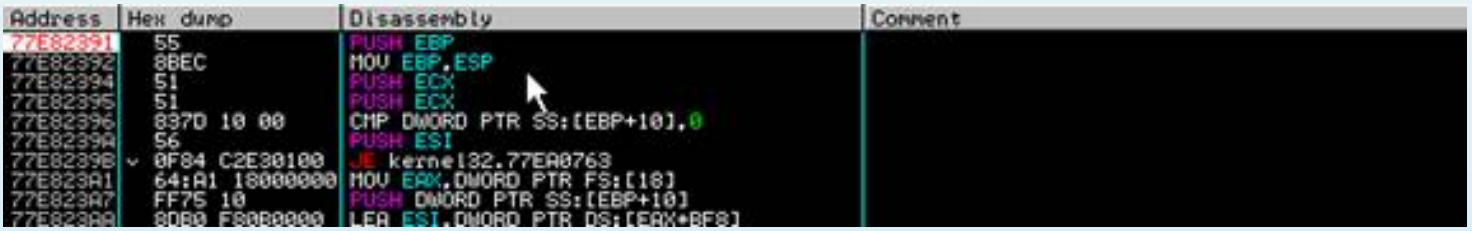


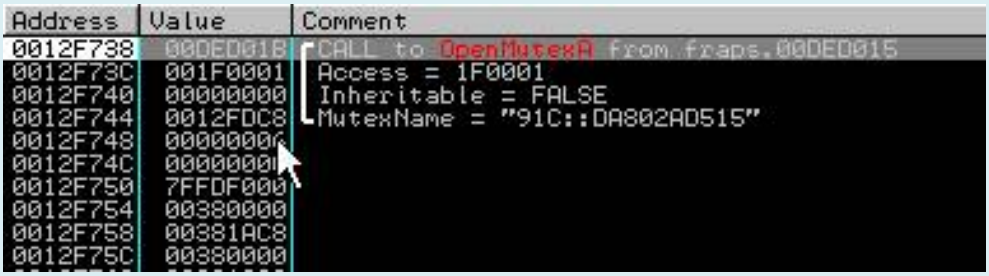
Run Try dumped.exe:

Target # 2: FRAPS 2.6.4-Armadillo 4.xx + IAT elimination + Code Splicing

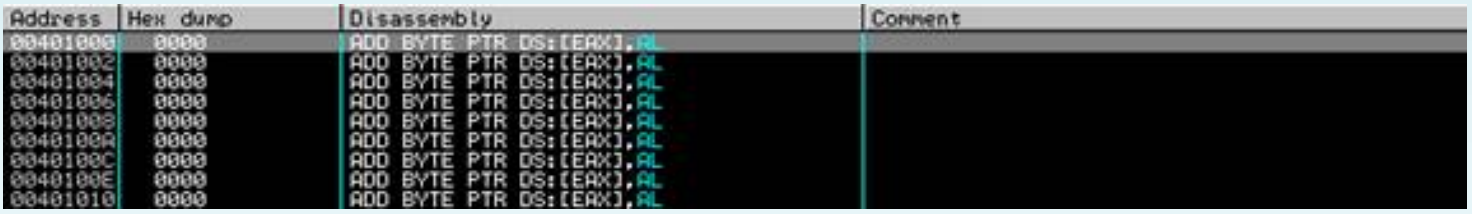
_Load OllyDBG on target:

_Ta Need for a mutex, set a breakpoint in the function OpenMutexA: BP OpenMutexA, press F9

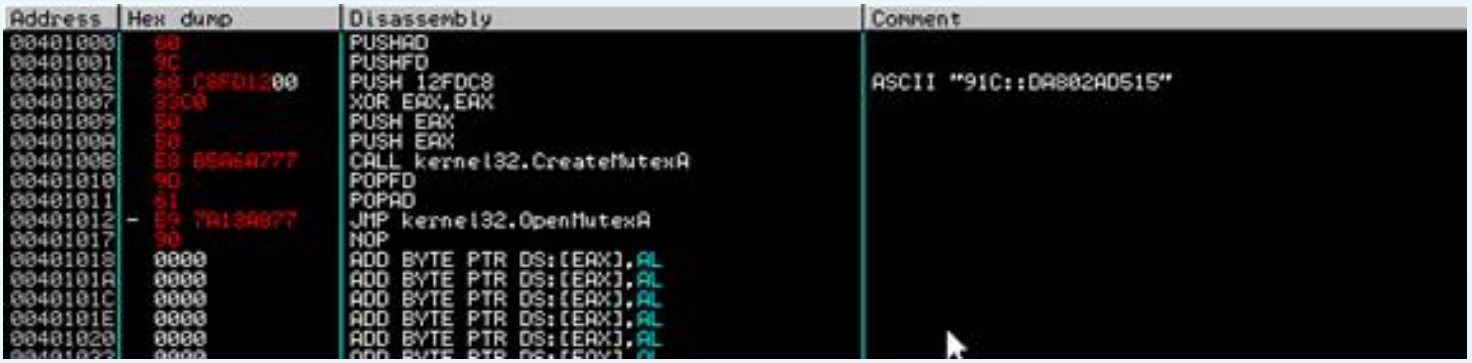




_Ok, So we have: 0012F744 0012FDC8 \ MutexName = "638:: DA802AD515"
_Ctrl + G to enter the address memory area: **401,000**

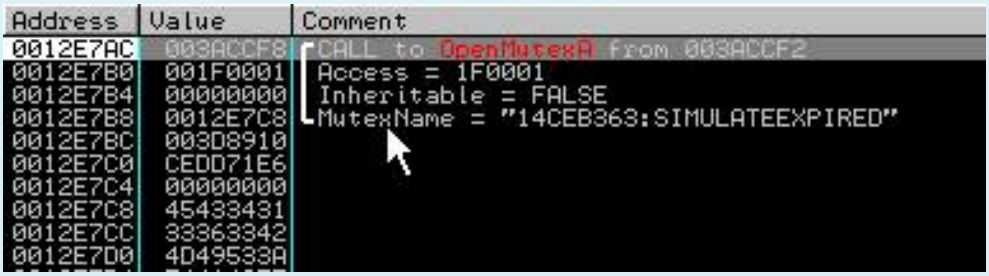


_Ctrl + E to edit as follows:



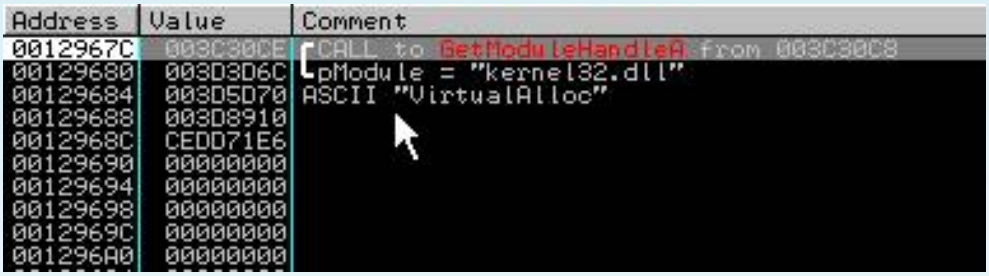
PUSH is _Dong 12FDC8 address Mutex: 0012F744 0012FDC8 \ MutexName = "638:: DA802AD515".

_Nhan F9:



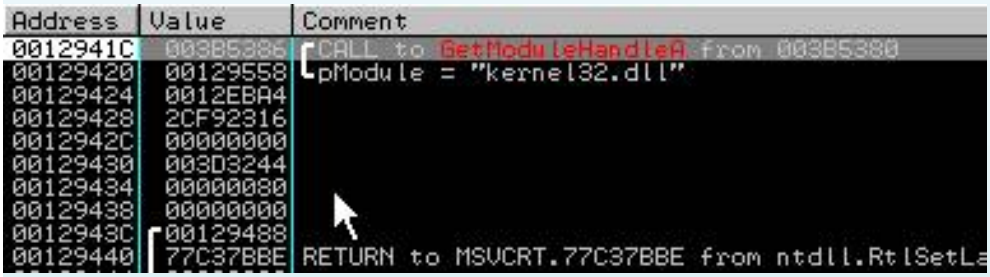
_Xoa OpenMutexA breakpoint. Ctrl + G, enter GetModuleHandleA, press F2 to set a.

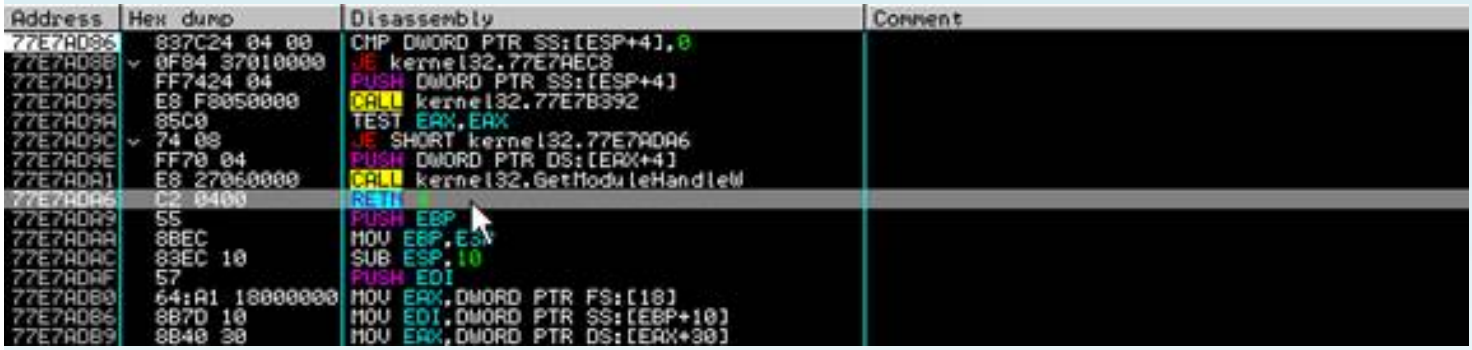
_F9 Time 1:



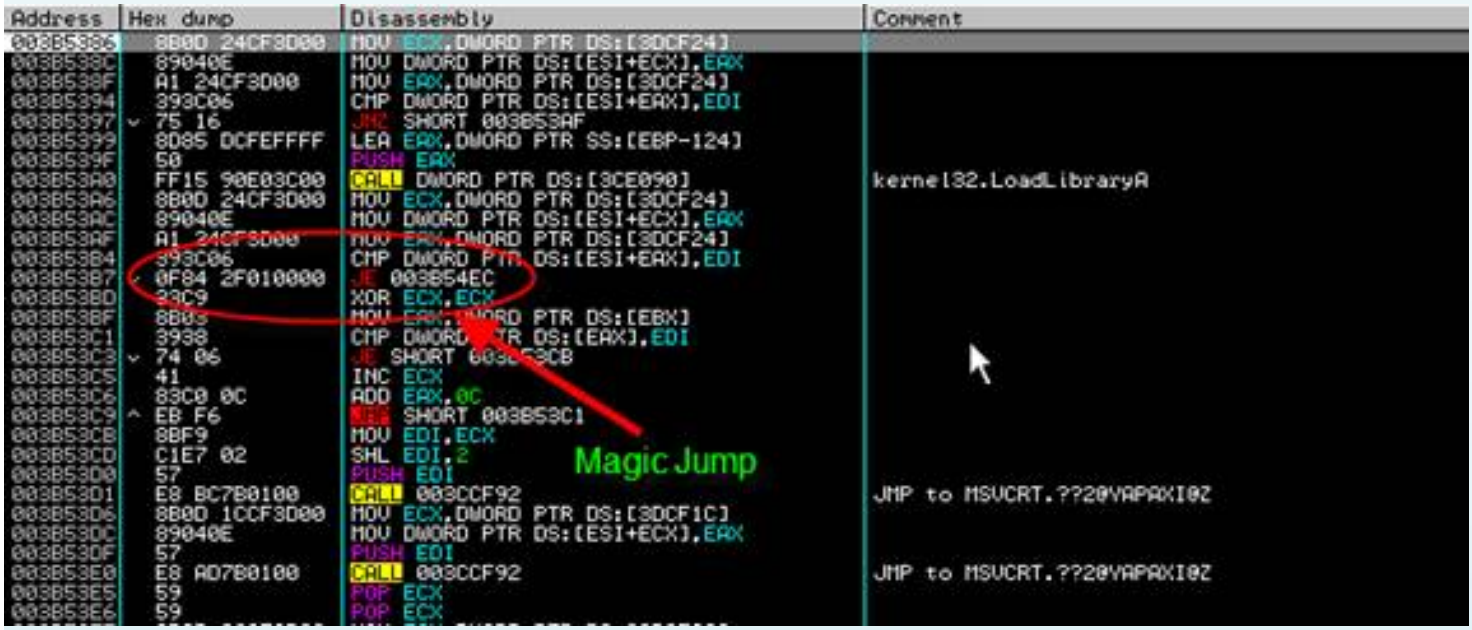
_Lan 2:

_Lan 3:

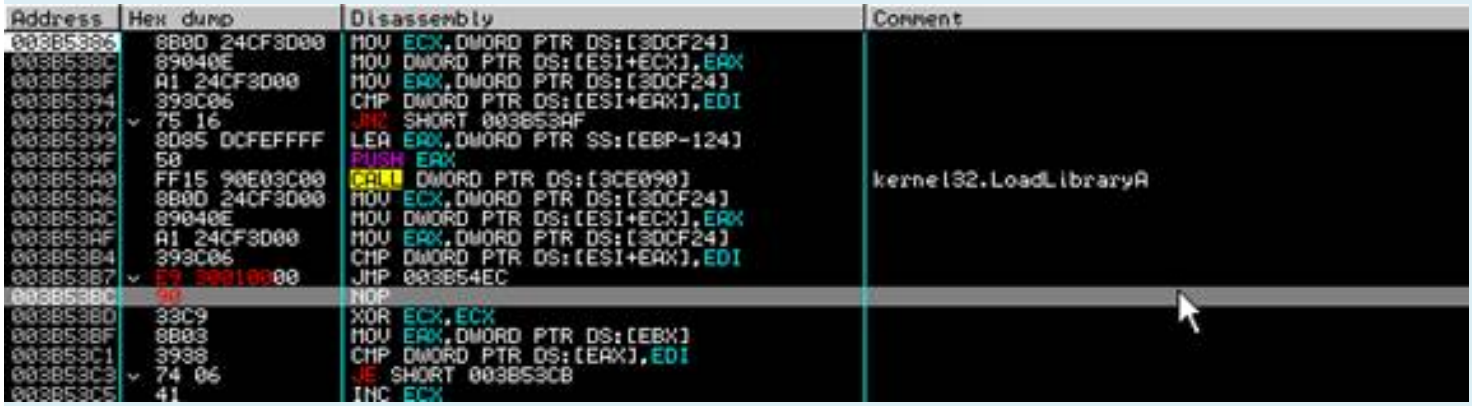




_Tro The CPU, press F8 function trace down through RETN4



_Patch To 003B54EC Jmp:

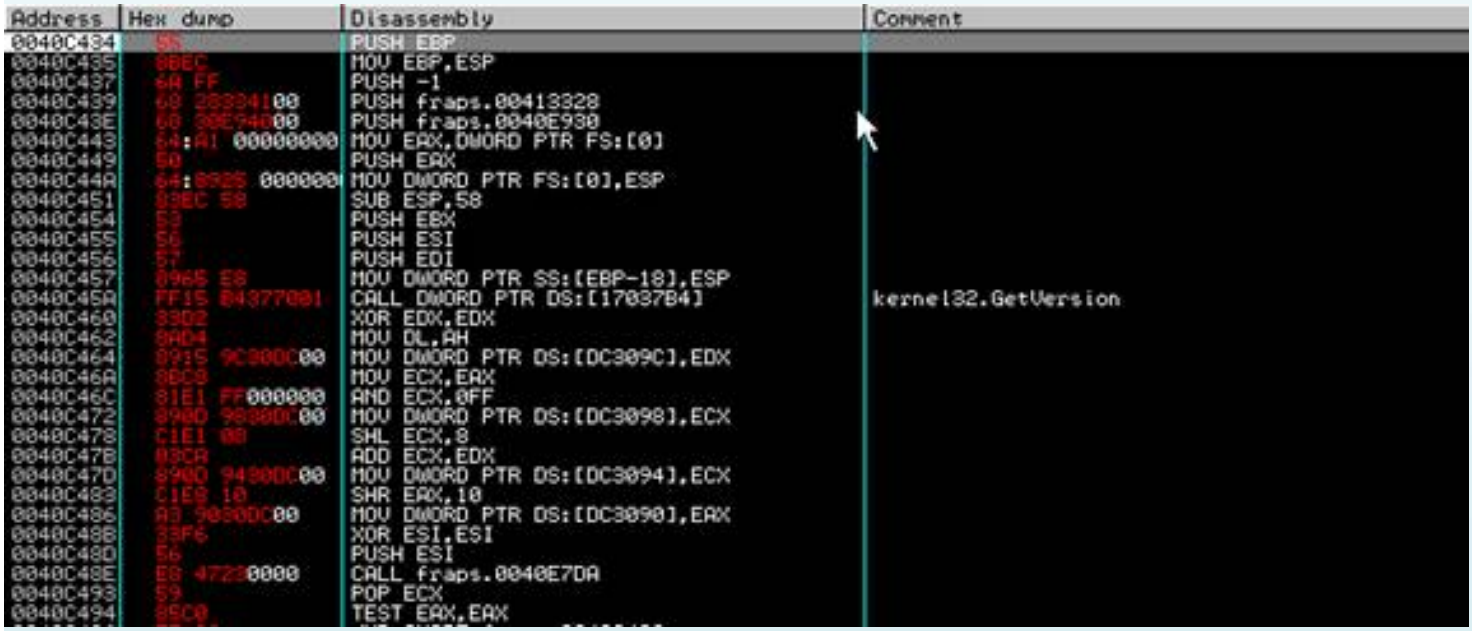


_Hd GetModuleHandleA, press Alt + M, set breakpoint on access at 401,000

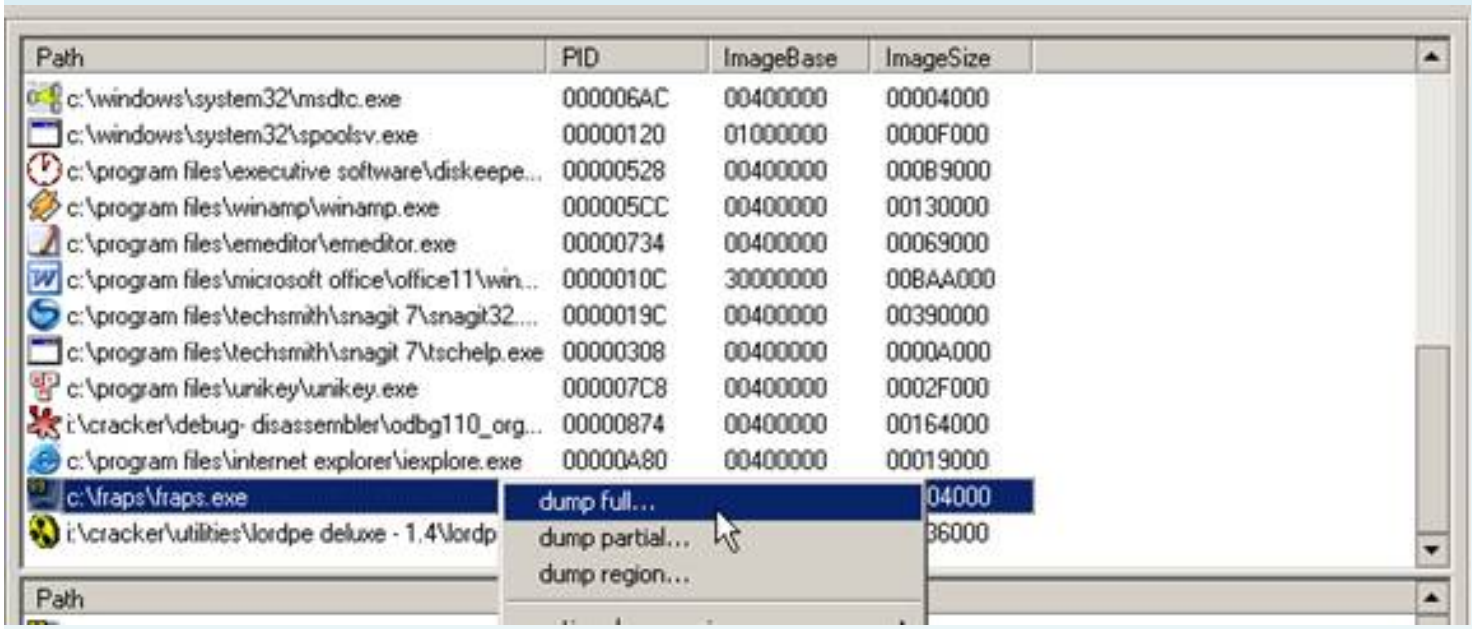
Memory map, item 22
Address = 00401000
Size = 00012000 (73728.)
Owner = 00400000 fraps
Section =. text
Type = 01001002 IMAG

Access R =
Initial access = RWE

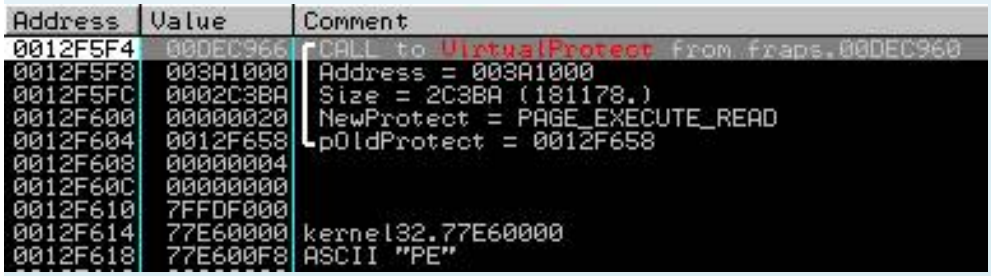
_F9 2 times:



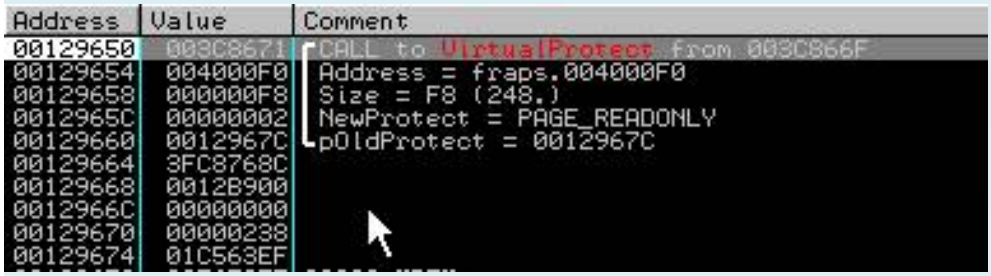
_Yeah, OEP! Dump only:

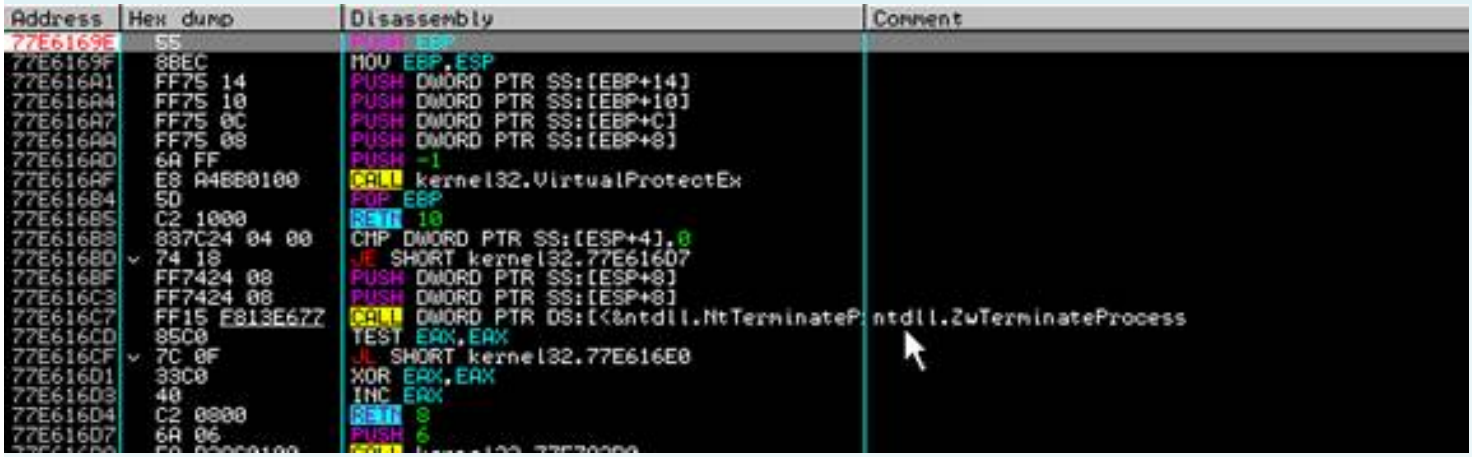


_Tiep To remove the old breakpoint, set breakpoint: BP VirtualProtect. F9:

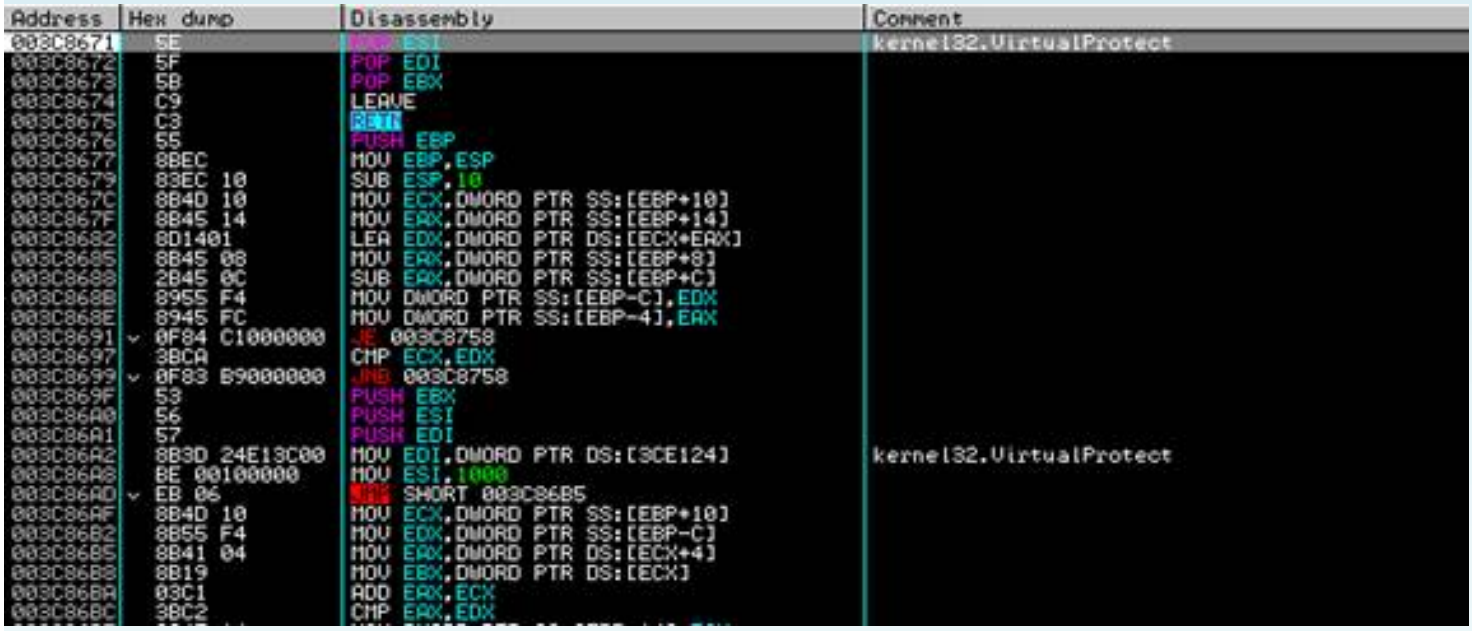


_F9 To run it, remember the last time F9. My time here is 18:



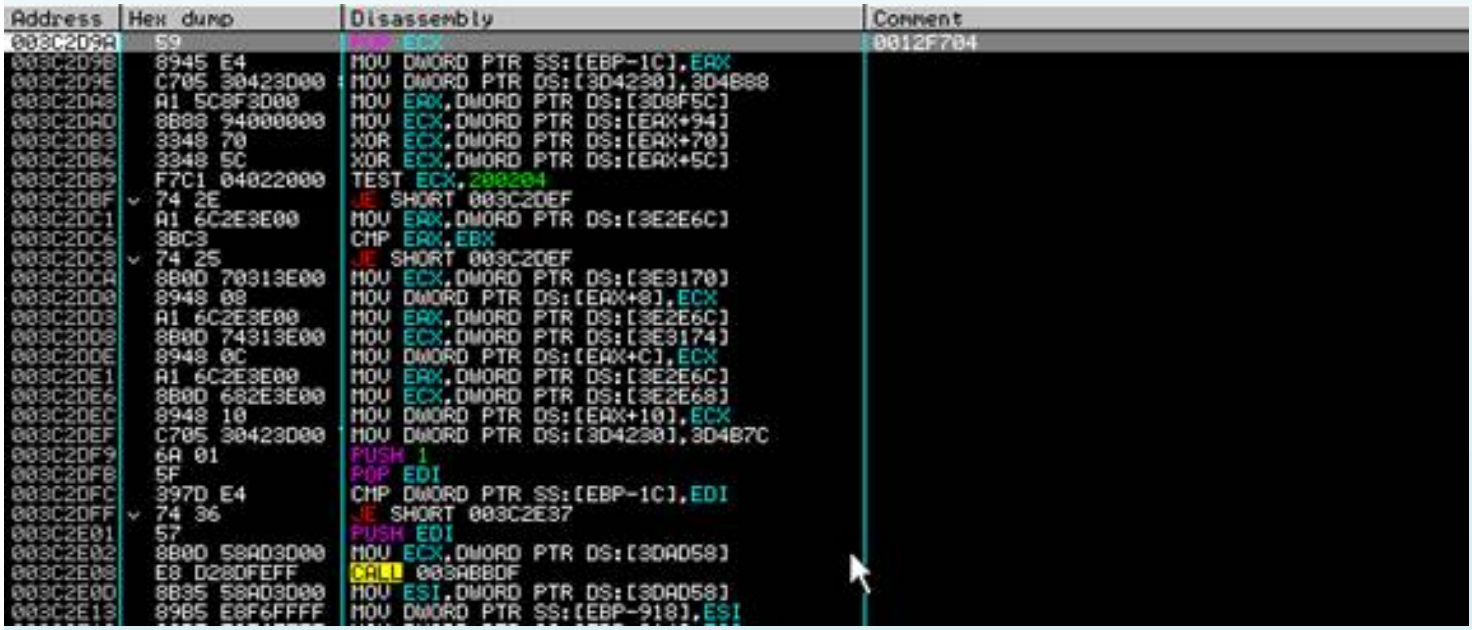


_Tro The CPU, press F8 trace down the last return:

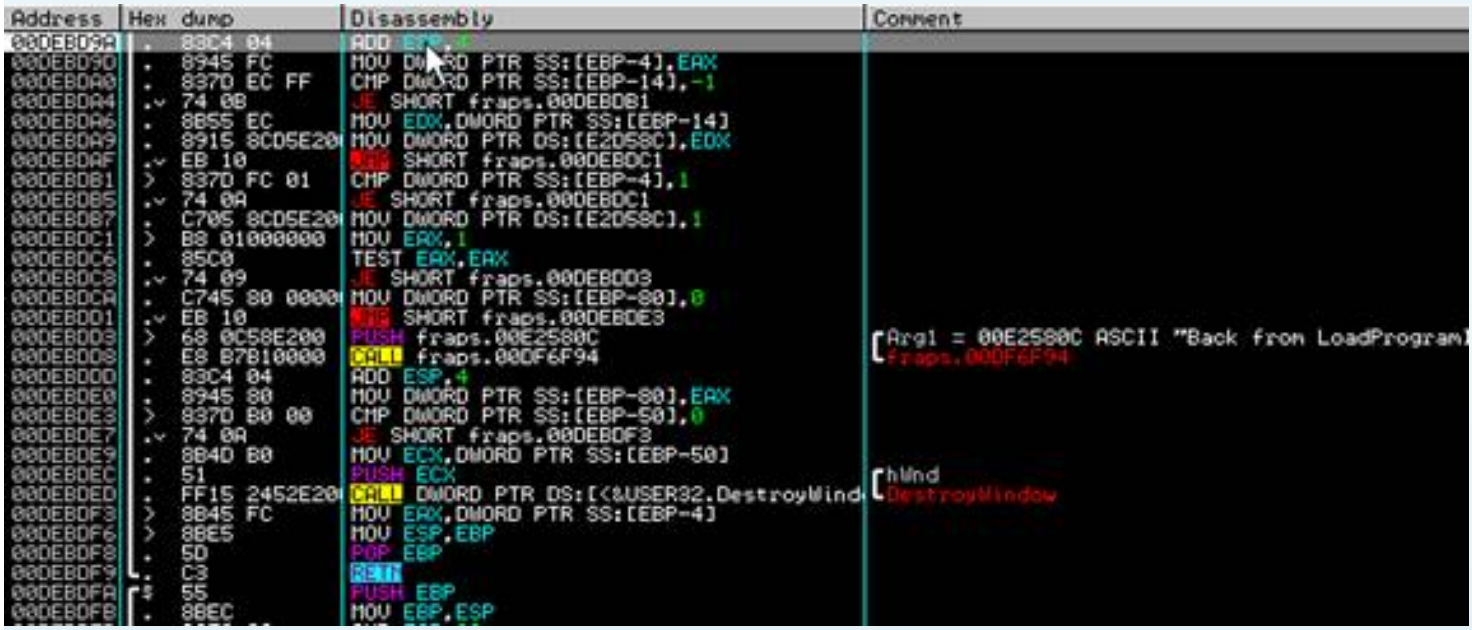


_Co Do not get used to, yeah, defeat successful:

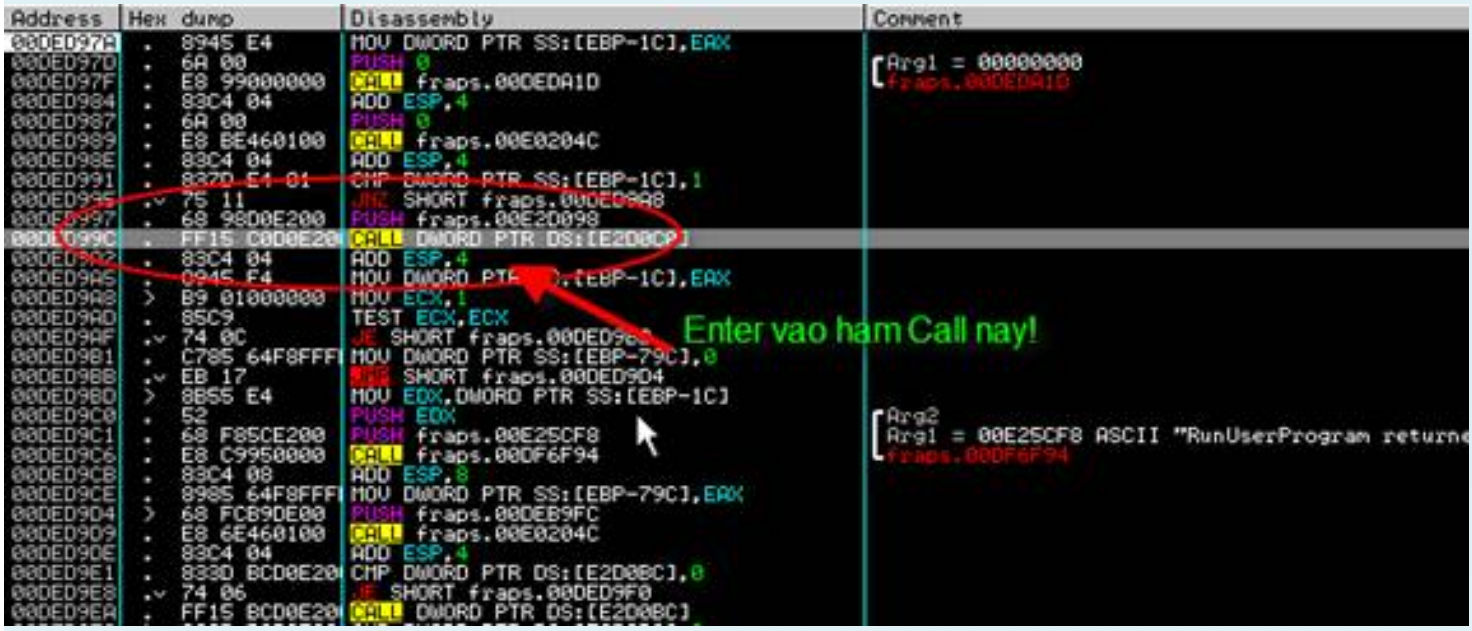
_Ctrl + F9, F8:



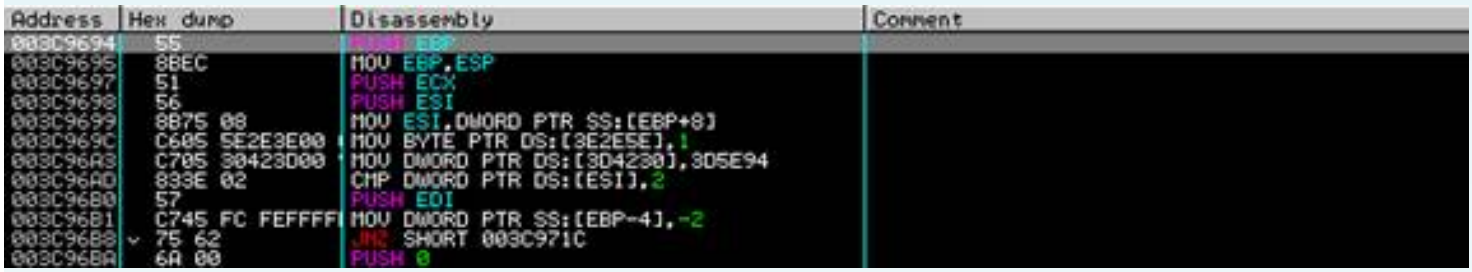
_Tiep The Ctrl + F9, F8 to you here:



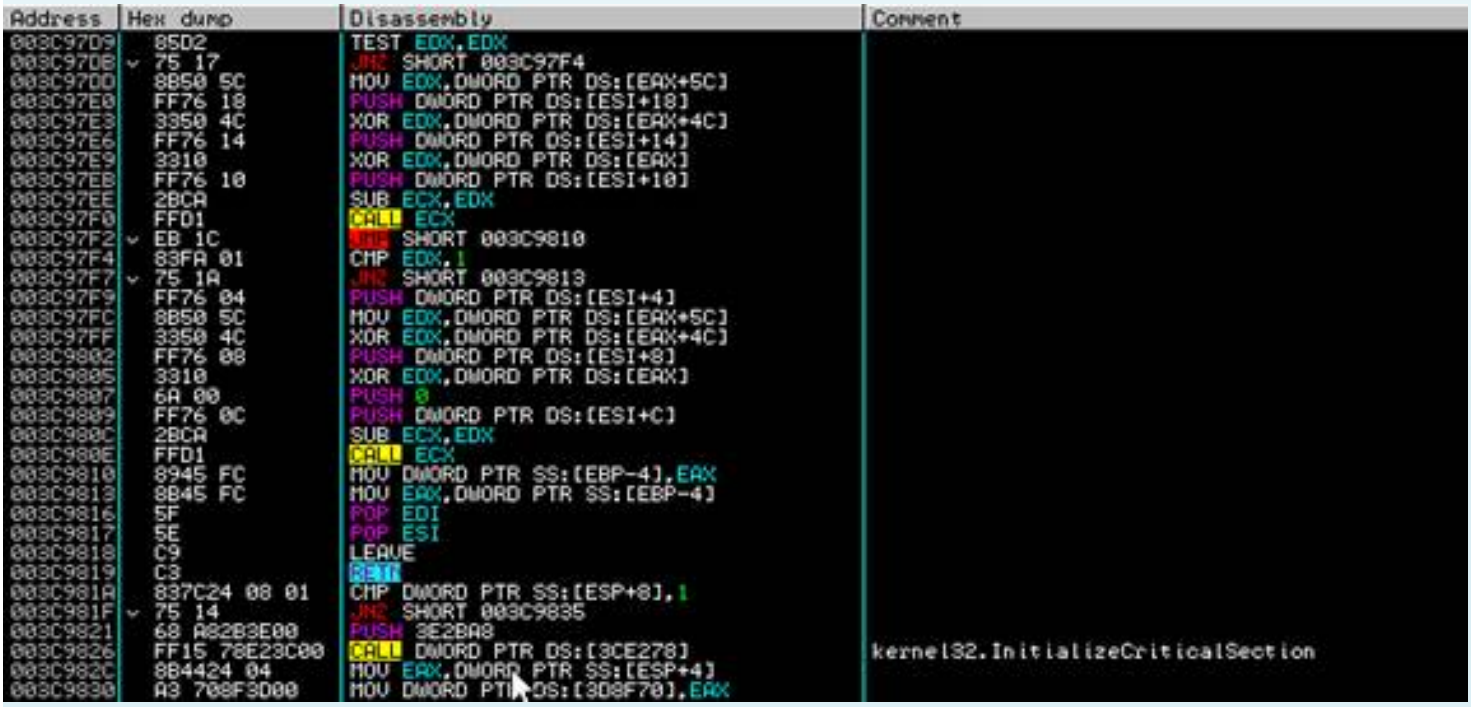
_Ctrl + F9, F8:



_Toi Here:

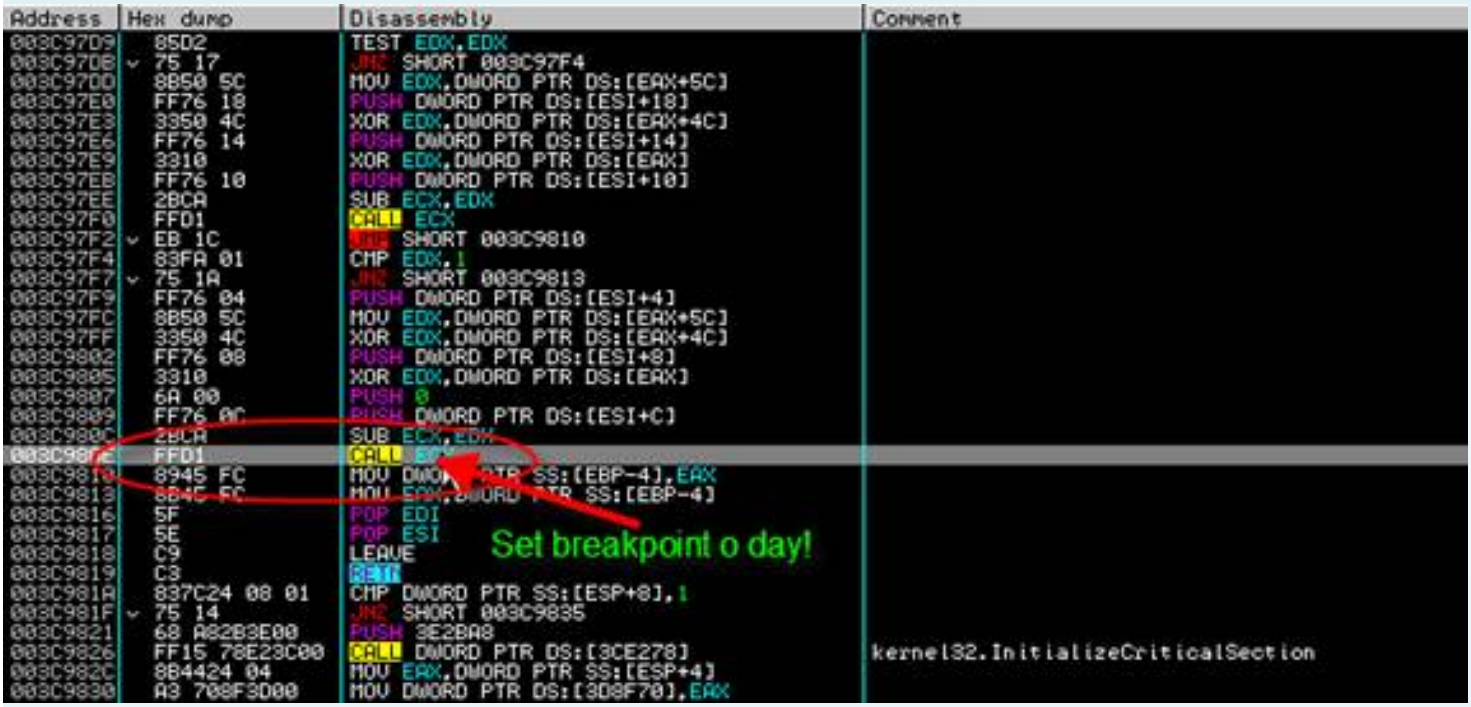


_Cuon Down to see the beautiful signs:



Address	Hex dump	Disassembly	Comment
003C97D9	85D2	TEST EDX,EDX	
003C97DB	75 17	JNZ SHORT 003C97F4	
003C97DD	8B50 5C	MOV EDX,DWORD PTR DS:[EAX+5C]	
003C97E0	FF76 18	PUSH DWORD PTR DS:[ESI+18]	
003C97E3	3350 4C	XOR EDX,DWORD PTR DS:[EAX+4C]	
003C97E6	FF76 14	PUSH DWORD PTR DS:[ESI+14]	
003C97E9	3310	XOR EDX,DWORD PTR DS:[EAX]	
003C97EB	FF76 10	PUSH DWORD PTR DS:[ESI+10]	
003C97EE	2BCA	SUB ECX,EDX	
003C97F0	FFD1	CALL ECX	
003C97F2	EB 1C	JMP SHORT 003C9810	
003C97F4	83FA 01	CMP EDX,1	
003C97F7	75 1A	JNZ SHORT 003C9813	
003C97F9	FF76 04	PUSH DWORD PTR DS:[ESI+4]	
003C97FC	8B50 5C	MOV EDX,DWORD PTR DS:[EAX+5C]	
003C97FF	3350 4C	XOR EDX,DWORD PTR DS:[EAX+4C]	
003C9802	FF76 08	PUSH DWORD PTR DS:[ESI+8]	
003C9805	3310	XOR EDX,DWORD PTR DS:[EAX]	
003C9807	6A 00	PUSH 0	
003C9809	FF76 0C	PUSH DWORD PTR DS:[ESI+C]	
003C980C	2BCA	SUB ECX,EDX	
003C980E	FFD1	CALL ECX	
003C9810	8945 FC	MOV DWORD PTR SS:[EBP-4],EAX	
003C9813	8B45 FC	MOV EAX,DWORD PTR SS:[EBP-4]	
003C9816	5F	POP EDI	
003C9817	5E	POP ESI	
003C9818	C9	LEAVE	
003C9819	C3	RETN	
003C981A	837C24 08 01	CMP DWORD PTR SS:[ESP+8],1	
003C981F	75 14	JNZ SHORT 003C9835	
003C9821	68 A82B3E00	PUSH 3E2BA8	
003C9826	FF15 78E23C00	CALL DWORD PTR DS:[3CE278]	kernel32.InitializeCriticalSection
003C982C	8B4424 04	MOV EAX,DWORD PTR SS:[ESP+4]	
003C9830	A3 708F3D00	MOV DWORD PTR DS:[3D8F70],EAX	

_Yeah Yeah! Now, set the breakpoint at:

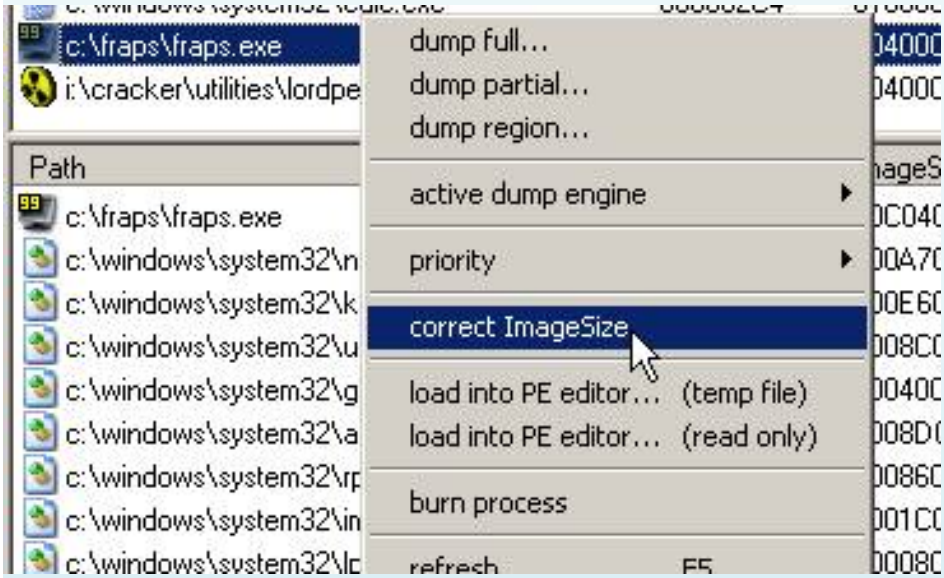


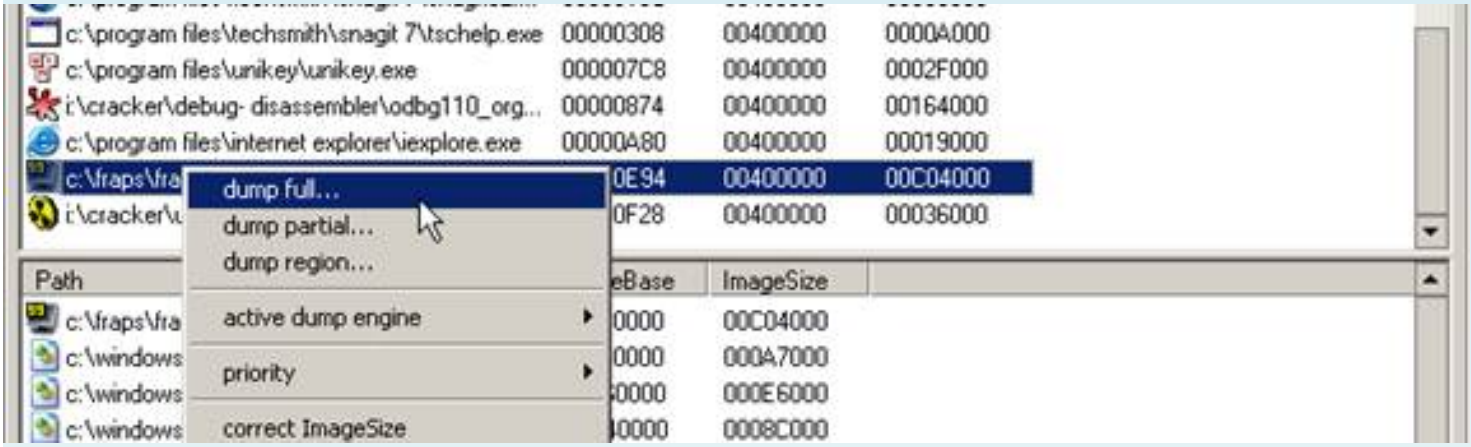
Address	Hex dump	Disassembly	Comment
003C97D9	85D2	TEST EDX,EDX	
003C97DB	75 17	JNZ SHORT 003C97F4	
003C97DD	8B50 5C	MOV EDX,DWORD PTR DS:[EAX+5C]	
003C97E0	FF76 18	PUSH DWORD PTR DS:[ESI+18]	
003C97E3	3350 4C	XOR EDX,DWORD PTR DS:[EAX+4C]	
003C97E6	FF76 14	PUSH DWORD PTR DS:[ESI+14]	
003C97E9	3310	XOR EDX,DWORD PTR DS:[EAX]	
003C97EB	FF76 10	PUSH DWORD PTR DS:[ESI+10]	
003C97EE	2BCA	SUB ECX,EDX	
003C97F0	FFD1	CALL ECX	
003C97F2	EB 1C	JMP SHORT 003C9810	
003C97F4	83FA 01	CMP EDX,1	
003C97F7	75 1A	JNZ SHORT 003C9813	
003C97F9	FF76 04	PUSH DWORD PTR DS:[ESI+4]	
003C97FC	8B50 5C	MOV EDX,DWORD PTR DS:[EAX+5C]	
003C97FF	3350 4C	XOR EDX,DWORD PTR DS:[EAX+4C]	
003C9802	FF76 08	PUSH DWORD PTR DS:[ESI+8]	
003C9805	3310	XOR EDX,DWORD PTR DS:[EAX]	
003C9807	6A 00	PUSH 0	
003C9809	FF76 0C	PUSH DWORD PTR DS:[ESI+C]	
003C980C	2BCA	SUB ECX,EDX	
003C980E	FFD1	CALL ECX	
003C9810	8945 FC	MOV DWORD PTR SS:[EBP-4],EAX	
003C9813	8B45 FC	MOV EAX,DWORD PTR SS:[EBP-4]	
003C9816	5F	POP EDI	
003C9817	5E	POP ESI	
003C9818	C9	LEAVE	
003C9819	C3	RETN	
003C981A	837C24 08 01	CMP DWORD PTR SS:[ESP+8],1	
003C981F	75 14	JNZ SHORT 003C9835	
003C9821	68 A82B3E00	PUSH 3E2BA8	
003C9826	FF15 78E23C00	CALL DWORD PTR DS:[3CE278]	kernel32.InitializeCriticalSection
003C982C	8B4424 04	MOV EAX,DWORD PTR SS:[ESP+4]	
003C9830	A3 708F3D00	MOV DWORD PTR DS:[3D8F70],EAX	

_F9, F8. Congratulation, has to OEP. Khua khua!.

```
Address   Hex dump          Disassembly                          Comment
0040C434    55              PUSH EBP
0040C435    8BEC            MOV EBP,ESP
0040C437    6A FF           PUSH -1
0040C439    68 28334100     PUSH fraps.00413328
0040C43E    68 30E94000     PUSH fraps.0040E930
0040C443    64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
0040C449    50              PUSH EAX
0040C44A    64:8925 000000  MOV DWORD PTR FS:[0],ESP
0040C451    83EC 58         SUB ESP,58
0040C454    53              PUSH EBX
0040C455    56              PUSH ESI
0040C456    57              PUSH EDI
0040C457    8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
0040C45A    FF15 2C3F7001   CALL DWORD PTR DS:[1703F2C]
0040C460    33D2            XOR EDX,EDX
0040C462    8AD4            MOV DL,AH
0040C464    8915 9C30DC00   MOV DWORD PTR DS:[DC309C],EDX
0040C46A    8BC8            MOV ECX,EAX
0040C46C    81E1 FF000000   AND ECX,0FF
0040C472    890D 9830DC00   MOV DWORD PTR DS:[DC3098],ECX
0040C478    C1E1 08         SHL ECX,8
0040C47B    03CA            ADD ECX,EDX
0040C47D    890D 9430DC00   MOV DWORD PTR DS:[DC3094],ECX
0040C483    C1E8 10         SHR EAX,10
0040C486    A3 9030DC00     MOV DWORD PTR DS:[DC3090],EAX
0040C48B    33F6            XOR ESI,ESI
0040C48D    56              PUSH ESI
0040C48E    E8 47230000     CALL fraps.0040E7DA
0040C493    59              POP ECX
0040C494    85C0            TEST EAX,EAX
0040C496    75 08           JNZ SHORT fraps.0040C4
0040C498    6A 1C           PUSH 1C
0040C49A    E8 00000000     CALL fraps.0040C54F
0040C49F    59              POP ECX
```

_Lord PE, dump Full, done!

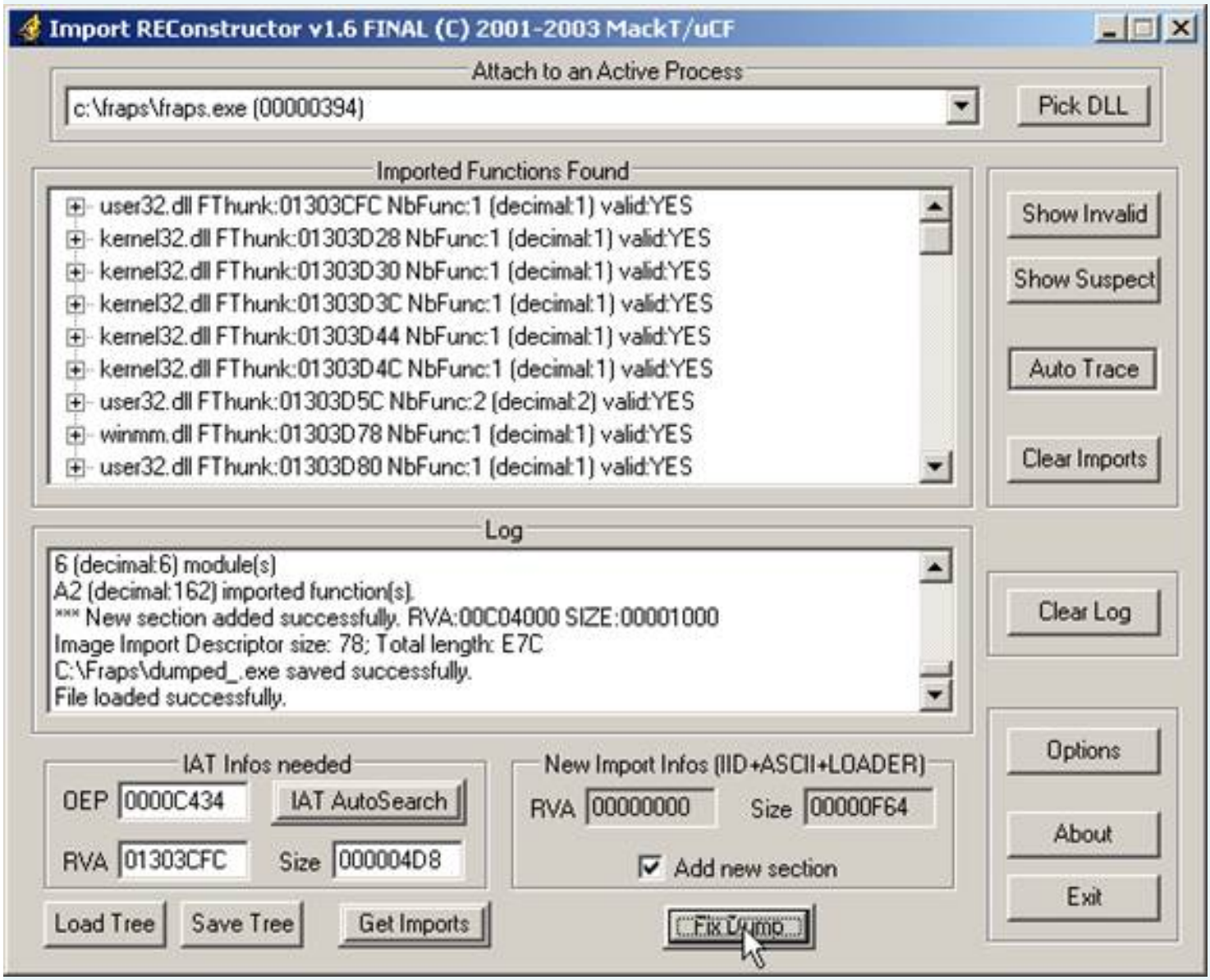




_IAT:

IAT Start: 01703584 77D49724 USER32.LoadIconA
IAT End: 01703A5C 77E7F02E kernel32.SetFilePointer
Len: 4D8

_Show Invalid, Fix dump! Run!



IV. Conclusion

_Hy Expectations you satisfied with this tut! See Series # 7. Is probably not have this series, but because you have not found free of this type should I always do! Bye!

Mỏi got legs throughout the holiday heaven
Blue eyes see some of the same sea
Places where only see swordsman
Know where to find us a dance
Make Ma General structure Loses

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx OllyDBG of the authors.

To be continued ...

Written by **hacnho** (tutorial date: Tien Giang 16/09/2005)

Armadillo collect sand-stone

Series # 6 Exp: Armadillo 4.xx-Code Splicing

I. Intro

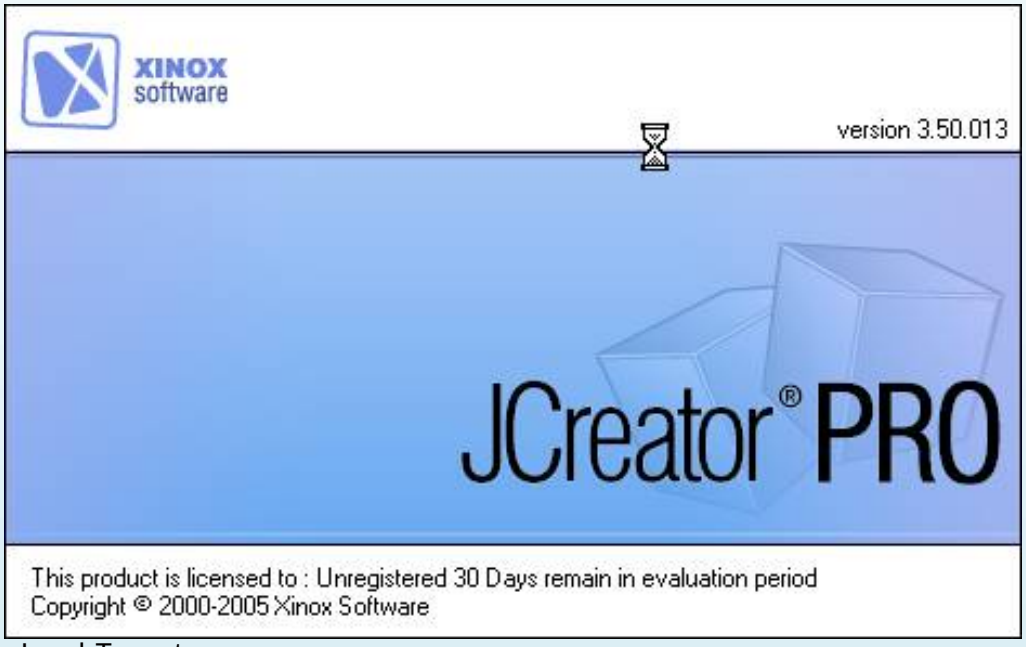
Nry _Phan I will guide you in a different format unpack Code Splicing! I read in the topic have lr number you only ask questions you have not mr NRO post len ge mr you the knowledge through a series of tut nry. You expect the contribution of bri clause written by each person in a while.

II. Tools

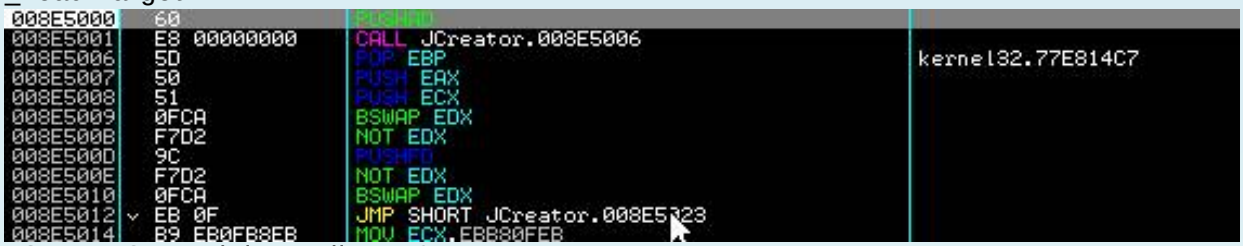
1.OllyDBG - The best config debugger for ArmMUP by hacnho.
2.LordPE 1.4 Deluxe
3.Import REConstructor 1.6 Final
4.API Address 1.0

III. Unpacking

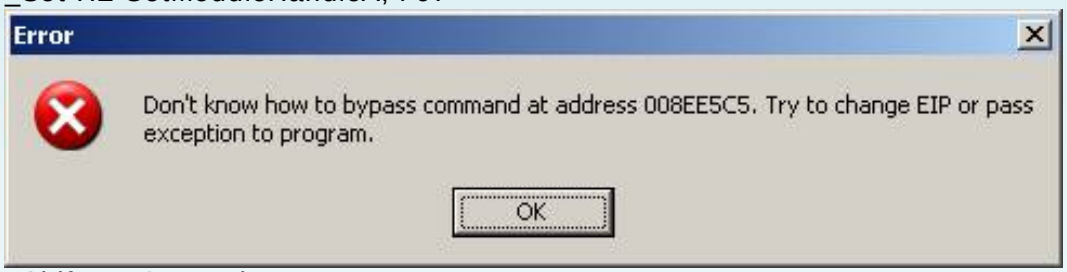
Target # 1: JCreator Pro ™ 3:50 **- 3.xx Code Splicing (anti-dump)!**



_Load Target:



_Set HE GetModuleHandleA, F9:



_Shift + F9 pass by:

```
77E7AD86   837C24 04 00   CMP DWORD PTR SS:[ESP+4],0
77E7AD8B ~ 0F84 37010000  JE kernel32.77E7AEC8
77E7AD91   FF7424 04      PUSH DWORD PTR SS:[ESP+4]
77E7AD95   E8 F8050000    CALL kernel32.77E7B392
77E7AD9A   85C0           TEST EAX,EAX                          ADVAPI32.77DE65F7
77E7AD9C ~ 74 08          JE SHORT kernel32.77E7ADA6
77E7AD9E   FF70 04        PUSH DWORD PTR DS:[EAX+4]
77E7ADA1   E8 27060000    CALL kernel32.GetModuleHandleW
77E7ADA6   C2 0400        RETN 4
77E7ADA9   55             PUSH EBP
77E7ADAA   8BEC           MOV EBP,ESP
77E7ADAC   83EC 10        SUB ESP,10
77E7ADAF   57             PUSH EDI
77E7ADB0   64:A1 18000000 MOV EAX,DWORD PTR FS:[18]
```

```
00127A6C  003D51E0  ┌CALL to GetModuleHandleA from 003D51DA
00127A70  003E8BAC  │pModule = "kernel32.dll"
00127A74  003E9CC4  ASCII "VirtualAlloc"
00127A78  003EC8D8
00127A7C  77F75690  ntdll.RtlLeaveCriticalSection
00127A80  00000000
00127A84  00000000
00127A88  00000000
00127A8C  00000000
00127A90  00000000
```

_Shift + F9 times 2:

```
00127A6C  003D51F0  ┌CALL to GetModuleHandleA from 003D51F7
00127A70  003E8BAC  │pModule = "kernel32.dll"
00127A74  003E9CB8  ASCII "VirtualFree"
00127A78  003EC8D8
00127A7C  77F75690  ntdll.RtlLeaveCriticalSection
00127A80  00000000
00127A84  00000000
00127A88  00000000
00127A8C  00000000
00127A90  00000000
```

_Shift + F9 times 3:

```
001277D0  003C4E69  ┌CALL to GetModuleHandleA from 003C4E63
001277D4  00127920  │pModule = "kernel32.dll"
001277D8  0012CC3C
001277DC  BDCE3161
001277E0  00000000
001277E4  003E809C
001277E8  CDD0004A
001277EC  00000000
001277F0  80000000
001277F4  00003FFF
```

_Atl + F9:

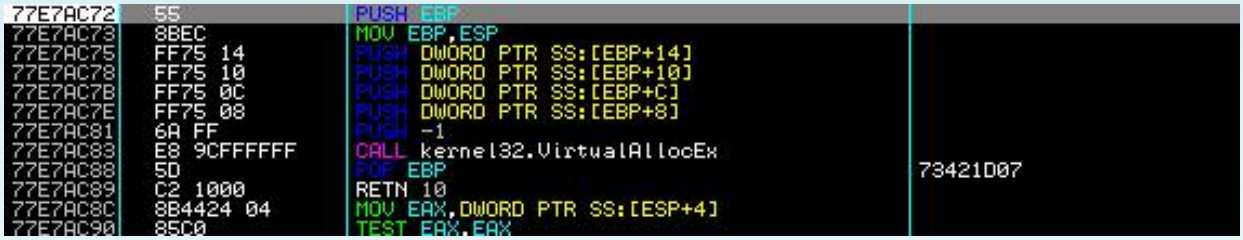
```
003C4E69   8B0D AC0D3F00  MOV ECX,DWORD PTR DS:[3F0DAC]
003C4E6F   890408         MOV DWORD PTR DS:[ESI+ECX],EAX        kernel32.77E60000
003C4E72   A1 AC0D3F00    MOV EAX,DWORD PTR DS:[3F0DAC]
003C4E77   391C06         CMP DWORD PTR DS:[ESI+EAX],EBX
003C4E7A ~ 75 16          JNZ SHORT 003C4E92
003C4E7C   8D85 B4FEFFFF  LEA EAX,DWORD PTR SS:[EBP-14C]
003C4E82   50             PUSH EAX                              kernel32.77E60000
003C4E83   FF15 B4323E00  CALL DWORD PTR DS:[3E32B4]            kernel32.LoadLibraryA
003C4E89   8B0D AC0D3F00  MOV ECX,DWORD PTR DS:[3F0DAC]
003C4E8F   890408         MOV DWORD PTR DS:[ESI+ECX],EAX        kernel32.77E60000
003C4E92   A1 AC0D3F00    MOV EAX,DWORD PTR DS:[3F0DAC]
003C4E97   391C06         CMP DWORD PTR DS:[ESI+EAX],EBX
003C4E9A ~ 0F84 2F010000  JE 003C4FCF
003C4EA0   33C9           XOR ECX,ECX                           kernel32.77E7B5E1
003C4EA2   8B07           MOV EAX,DWORD PTR DS:[EDI]
003C4EA4   3918           CMP DWORD PTR DS:[EAX],EBX
003C4EA6 ~ 74 06          JE SHORT 003C4EAE
003C4EA8   41             INC ECX                               kernel32.77E7B5E1
003C4EA9   83C0 0C        ADD EAX,0C
003C4EAC ^ EB F6          JMP SHORT 003C4EA4   Magic Jump
003C4EAE   8BD9           MOV EBX,ECX                           kernel32.77E7B5E1
003C4EB0   C1E3 02        SHL EBX,2
```

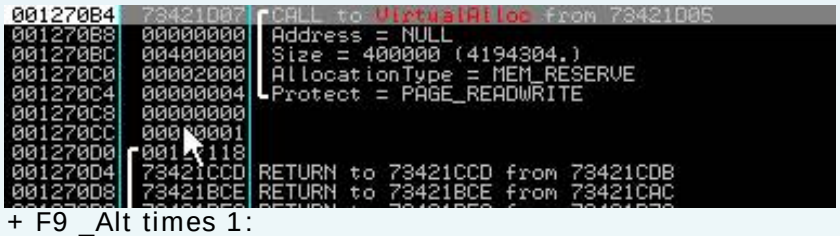
_Change JE thrnh JMP!

```
003C4E69   8B0D AC0D3F00  MOV ECX,DWORD PTR DS:[3F0DAC]
003C4E6F   890408         MOV DWORD PTR DS:[ESI+ECX],EAX        kernel32.77E60000
003C4E72   A1 AC0D3F00    MOV EAX,DWORD PTR DS:[3F0DAC]
003C4E77   391C06         CMP DWORD PTR DS:[ESI+EAX],EBX
003C4E7A ~ 75 16          JNZ SHORT 003C4E92
003C4E7C   8D85 B4FEFFFF  LEA EAX,DWORD PTR SS:[EBP-14C]
003C4E82   50             PUSH EAX                              kernel32.77E60000
003C4E83   FF15 B4323E00  CALL DWORD PTR DS:[3E32B4]            kernel32.LoadLibraryA
003C4E89   8B0D AC0D3F00  MOV ECX,DWORD PTR DS:[3F0DAC]
003C4E8F   890408         MOV DWORD PTR DS:[ESI+ECX],EAX        kernel32.77E60000
003C4E92   A1 AC0D3F00    MOV EAX,DWORD PTR DS:[3F0DAC]
003C4E97   391C06         CMP DWORD PTR DS:[ESI+EAX],EBX
003C4E9A ~ E9 30010000    JMP 003C4FCF
003C4E9F   90             NOP
003C4EA0   33C9           XOR ECX,ECX                           kernel32.77E7B5E1
003C4EA2   8B07           MOV EAX,DWORD PTR DS:[EDI]
003C4EA4   3918           CMP DWORD PTR DS:[EAX],EBX
003C4EA6 ~ 74 06          JE SHORT 003C4EAE
```

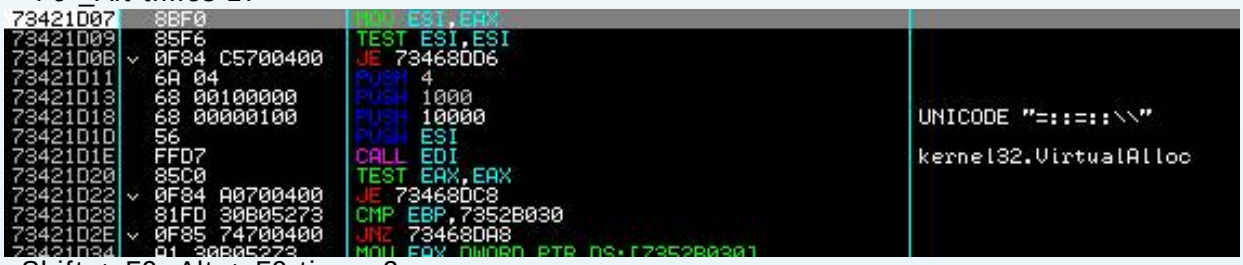
_Xoa Breakpoint: hd GetModuleHandleA

_Set Breakpoint he VirtualAlloc, F9:

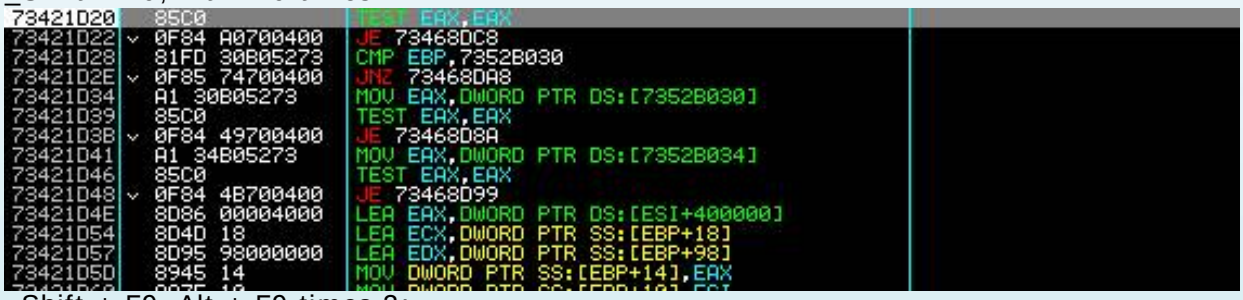




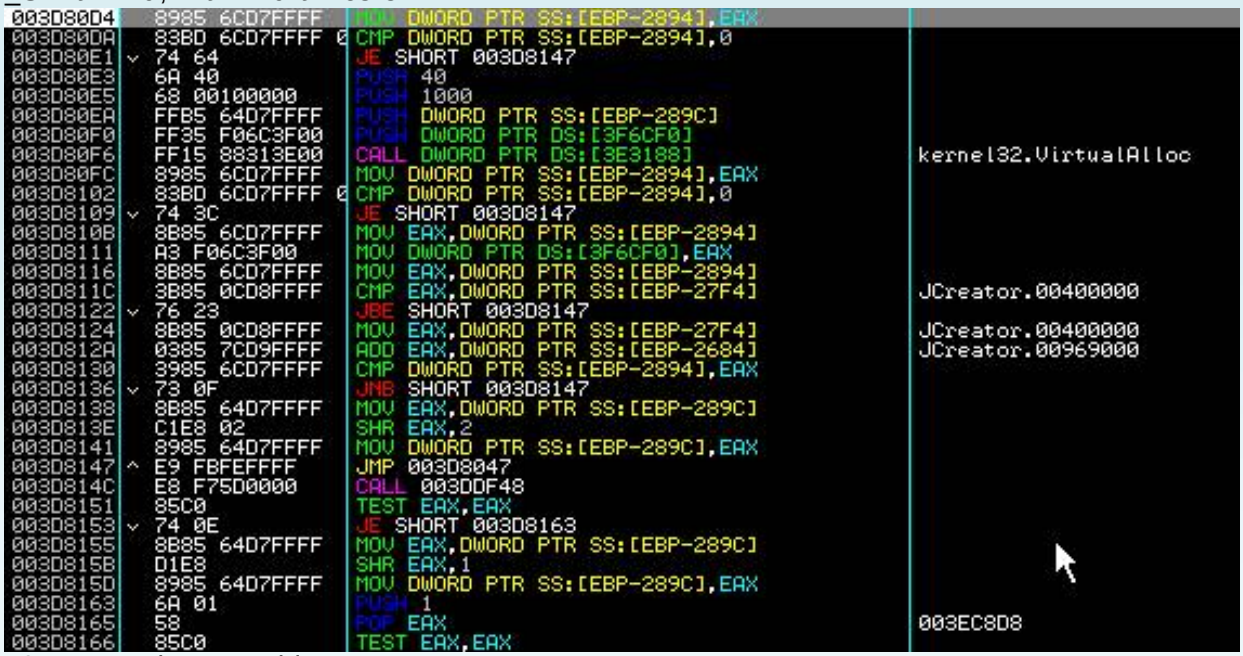
+ F9 _Alt times 1:



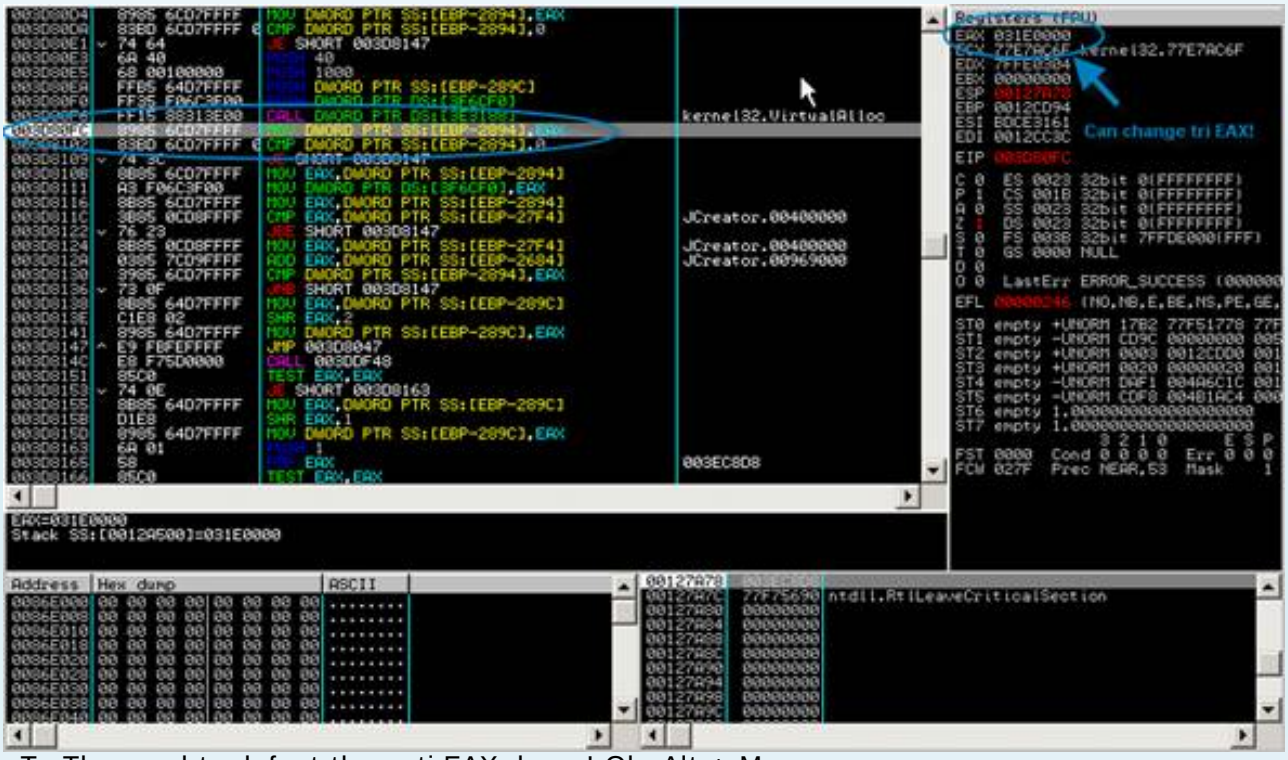
_Shift + F9, Alt + F9 times 2:



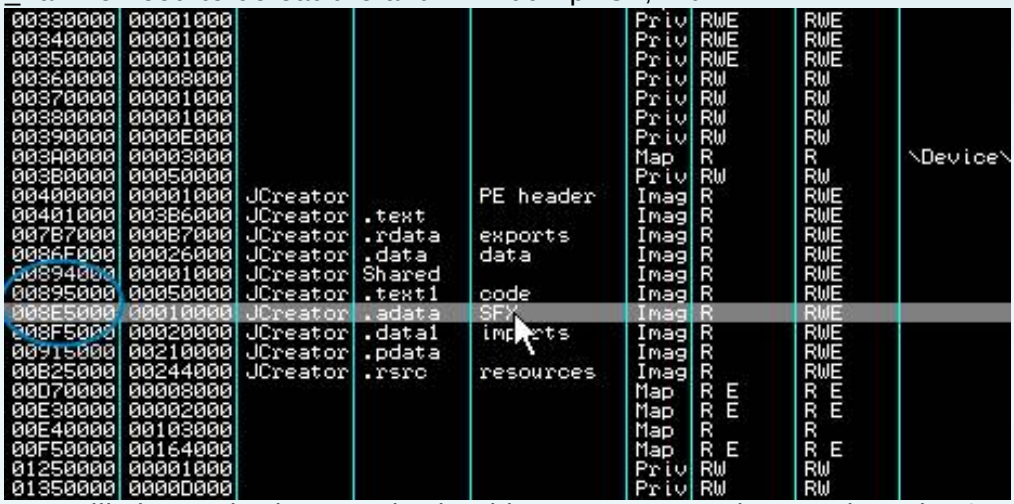
_Shift + F9, Alt + F9 times 3:



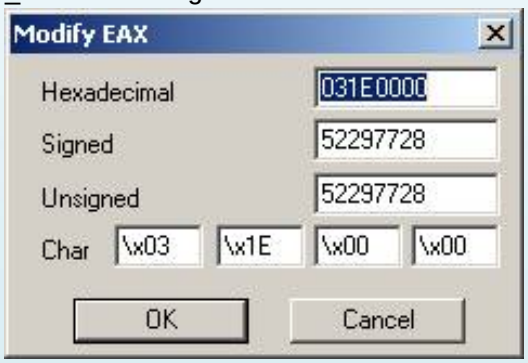
F8 _Trace down to this:

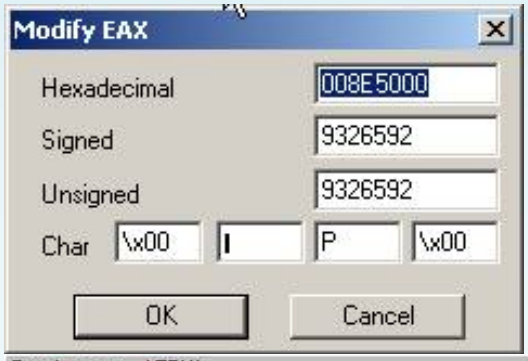


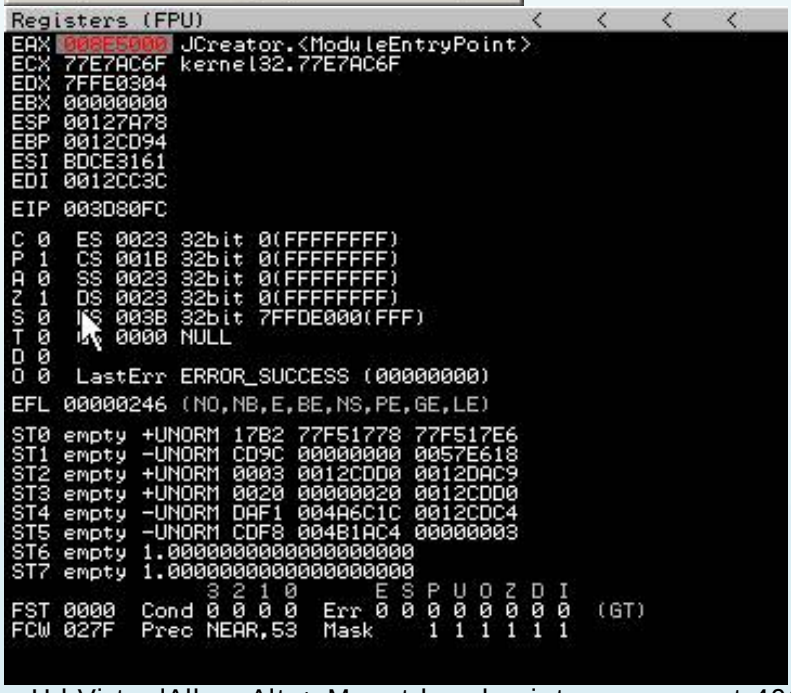
_Ta The need to defeat the anti EAX dump! Ok, Alt + M:



_Ta Will change in the EAX thrnh address ADATA section. Back to the CPU, FPU Double click vro change:

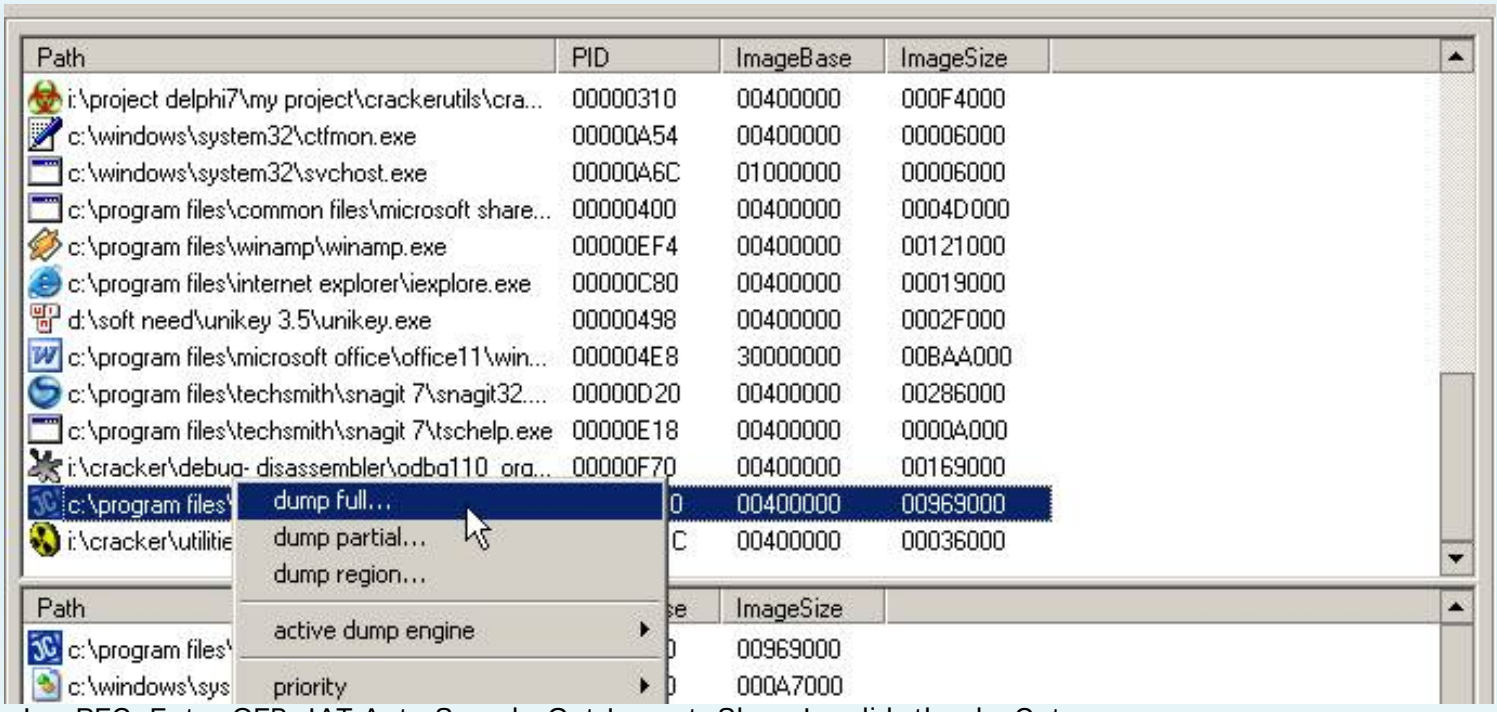




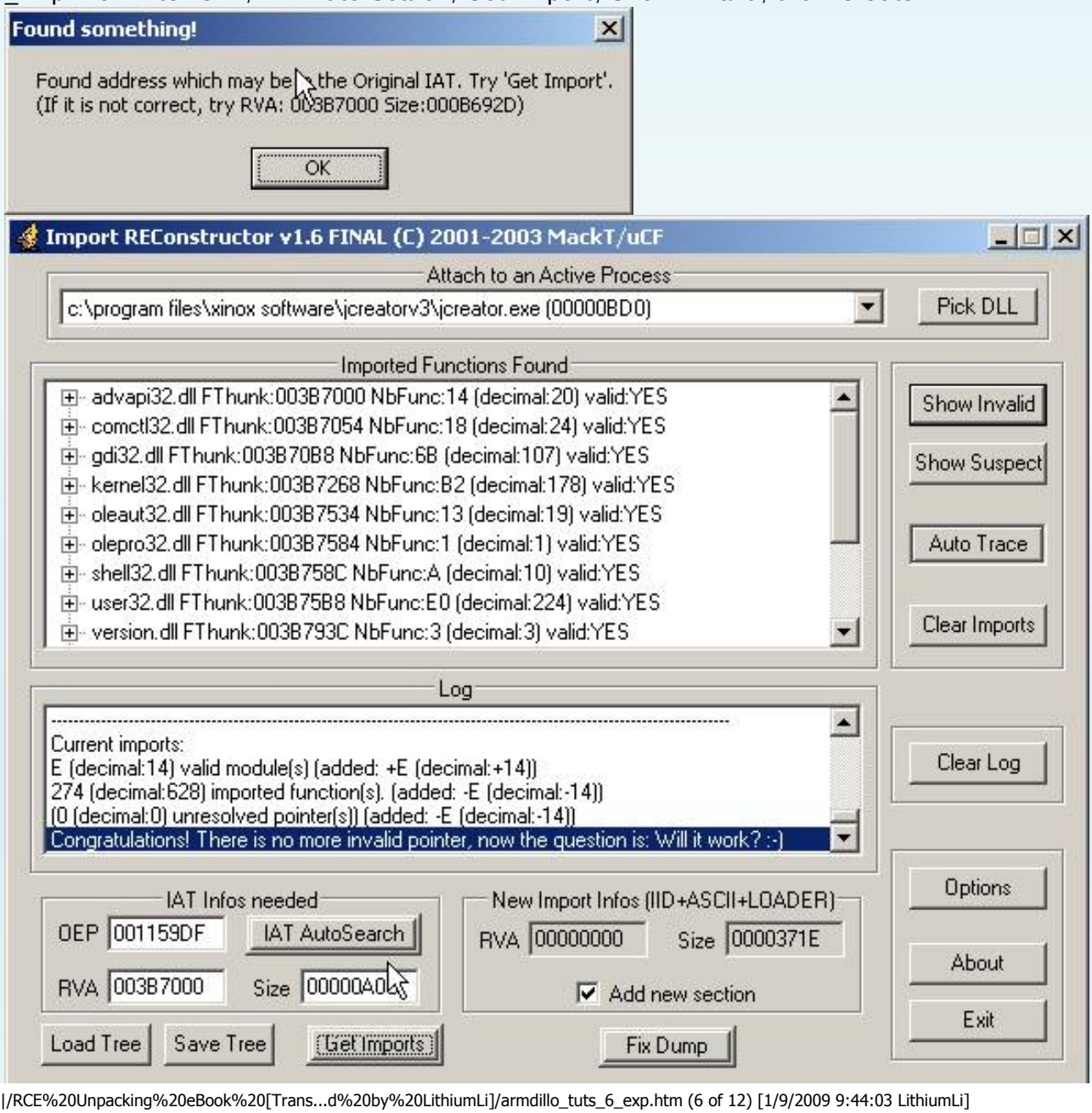


_ Hd VirtualAlloc, Alt + M, set breakpoint on access at 401,000 sections of text, F9, OEP:

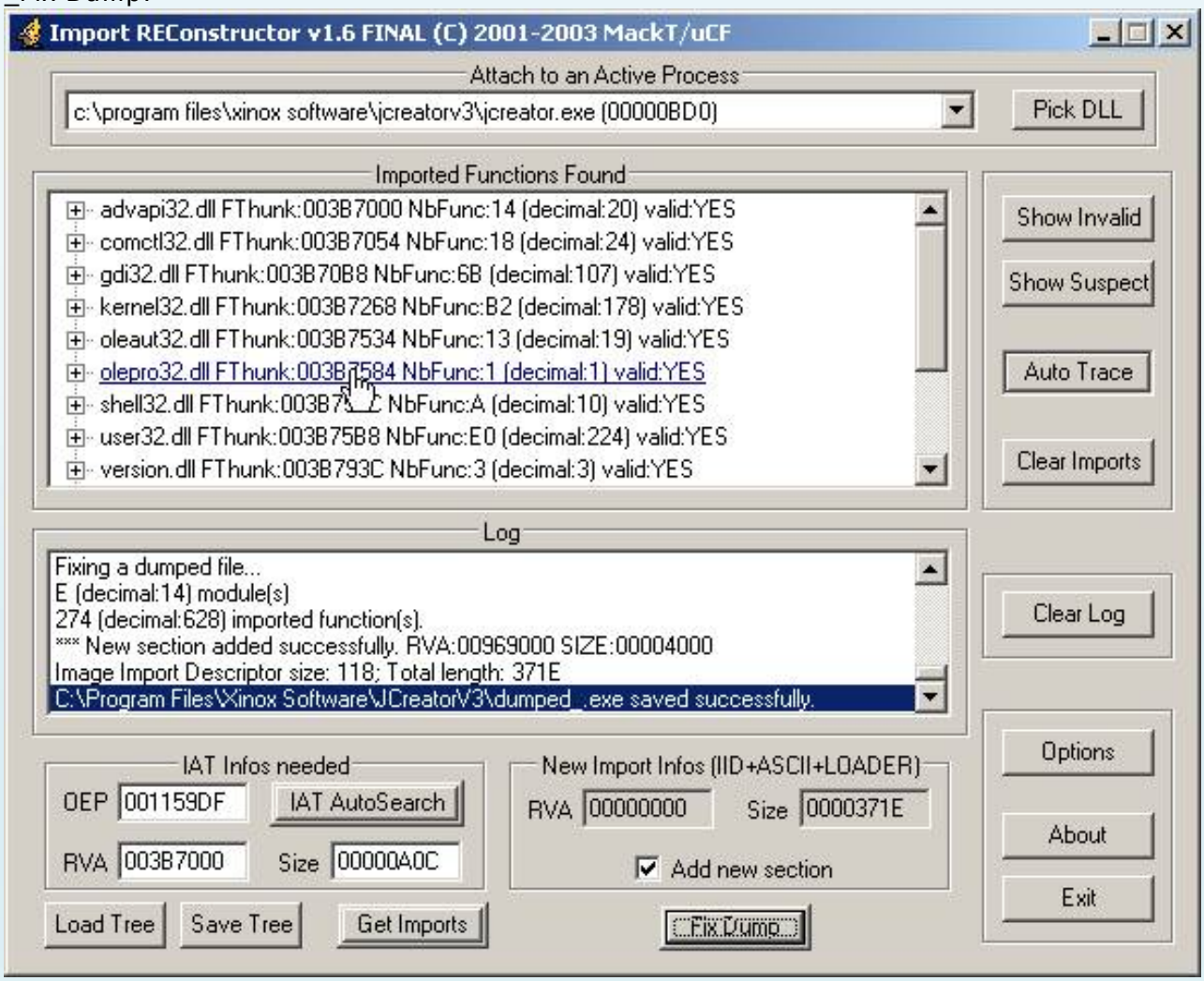
_LordPE DumpFull:



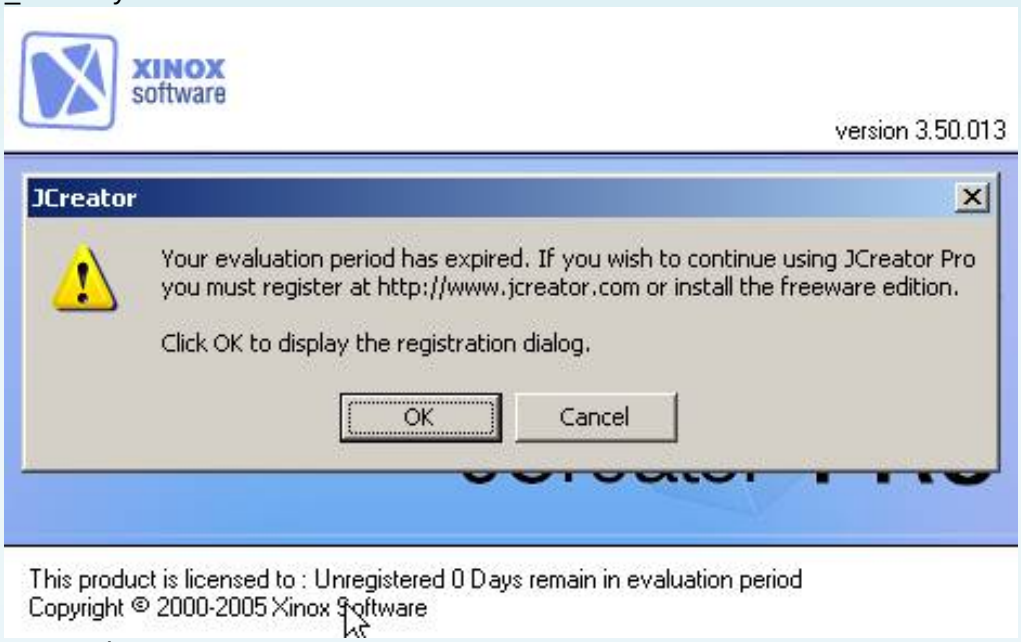
_ImpREC. Enter OEP, IAT Auto Search, Get Import, Show Invalid, thunks Cuts:



_Fix Dump:

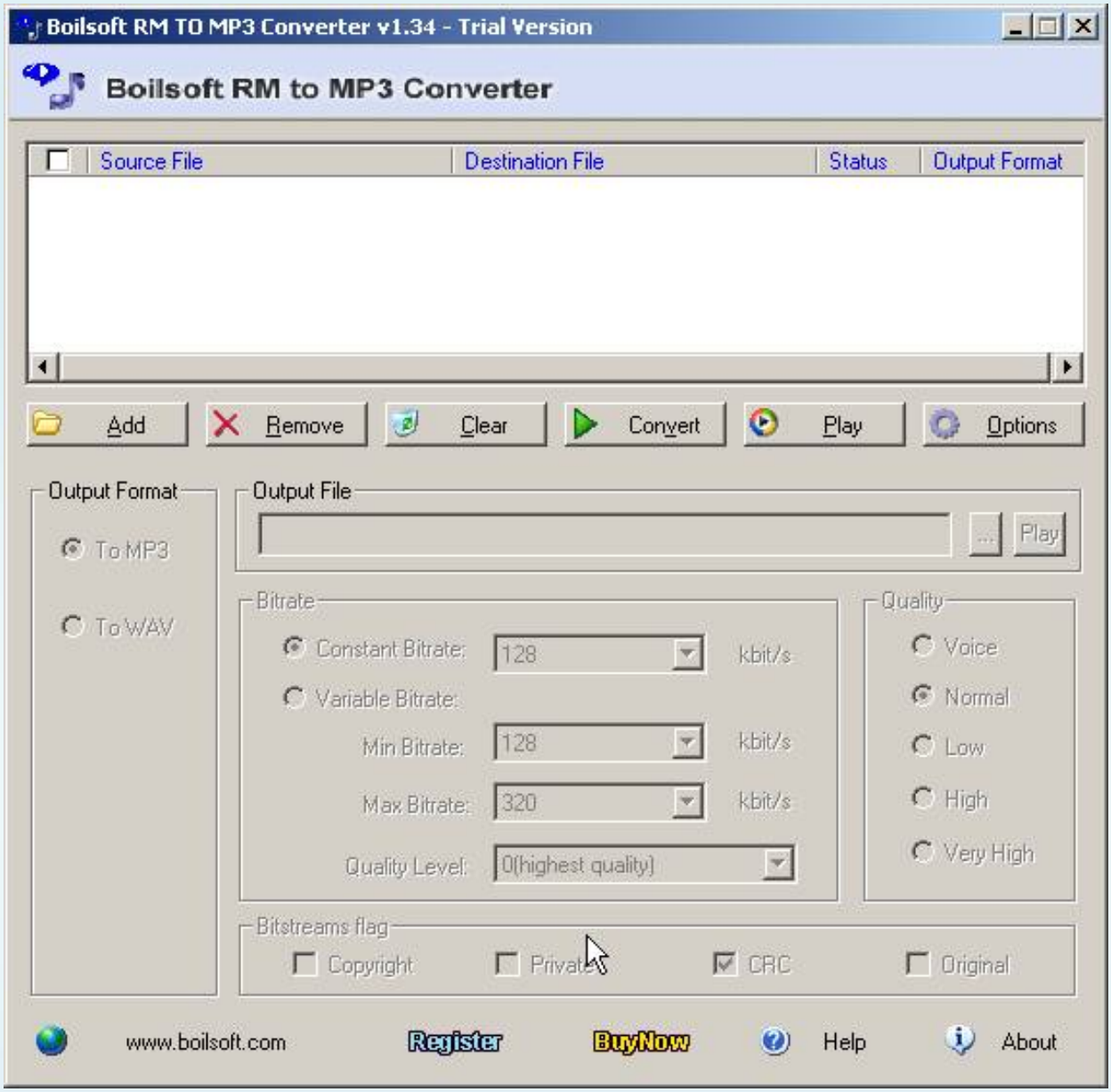


_Run Try:



_Unpack Done!

Target # 2: RM to MP3 Converter v1.32 **- 3.xx Code Splicing (anti-dump)!**



_Load Target:

```
00496000   60              PUSHAD
00496001   E8 00000000     CALL RMTOMP3.00496006
00496006   5D              POP EBP                  kernel32.77E814C7
00496007   50              PUSH EAX
00496008   51              PUSH ECX
00496009   0FCA            BSWAP EDX
0049600B   F7D2            NOT EDX
0049600D   9C              PUSHFD
0049600E   F7D2            NOT EDX
00496010   0FCA            BSWAP EDX
```

_he GetModuleHandleA, Shift + F9 3 times:

```
77E7AD86   837C24 04 00    CMP DWORD PTR SS:[ESP+4],0
77E7AD8B   0F84 37010000   JE kernel32.77E7AEC8
77E7AD91   FF7424 04       PUSH DWORD PTR SS:[ESP+4]
77E7AD95   E8 F8050000     CALL kernel32.77E7B392
77E7AD9A   85C0            TEST EAX,EAX
77E7AD9C   74 08           JE SHORT kernel32.77E7ADA6
77E7AD9E   FF70 04         PUSH DWORD PTR DS:[EAX+4]
77E7ADA1   E8 27060000     CALL kernel32.GetModuleHandleW
77E7ADA6   C2 0400         RETN 4
77E7ADA9   55              PUSH EBP
001278E0   003A9B43        CALL to GetModuleHandleA from 003A9B43
001278E4   00127A24        pModule = "kernel32.dll"
001278E8   00000000
001278EC   CE300000
001278F0   417B0012
001278F4   003D57C4
001278F8   00000000
001278FC   80000000
00127900   00003FFF
00127904   00000000
```

F8 _Nhan trace through RETN4 hrm:

```
003A9B49   8B0D 74B73D00   MOV ECX,DWORD PTR DS:[3DB774]
003A9B4F   89040E          MOV DWORD PTR DS:[ESI+ECX],EAX      kernel32.77E60000
003A9B52   A1 74B73D00     MOV EAX,DWORD PTR DS:[3DB774]
003A9B57   391C06          CMP DWORD PTR DS:[ESI+EAX],EBX
003A9B5A   75 16           JNZ SHORT 003A9B72
003A9B5C   8D85 B4FEFFFF   LEA EAX,DWORD PTR SS:[EBP-14C]
003A9B62   50              PUSH EAX                            kernel32.77E60000
003A9B63   FF15 DC003D00   CALL DWORD PTR DS:[3D00DC]          kernel32.LoadLibraryA
003A9B69   8B0D 74B73D00   MOV ECX,DWORD PTR DS:[3DB774]
003A9B6F   89040E          MOV DWORD PTR DS:[ESI+ECX],EAX      kernel32.77E60000
003A9B72   A1 74B73D00     MOV EAX,DWORD PTR DS:[3DB774]
003A9B77   391C06          CMP DWORD PTR DS:[ESI+EAX],EBX
003A9B7A   0F84 32010000   JE 003A9CB2
003A9B80   33C9            XOR ECX,ECX                         kernel32.77E7B5E1
003A9B82   8B07            MOV EAX,DWORD PTR DS:[EDI]
003A9B84   3918            CMP DWORD PTR DS:[EAX],EBX
003A9B86   74 06           JE SHORT 003A9B8E
003A9B88   41              INC ECX                             kernel32.77E7B5E1
003A9B89   83C0 0C         ADD EAX,0C
```

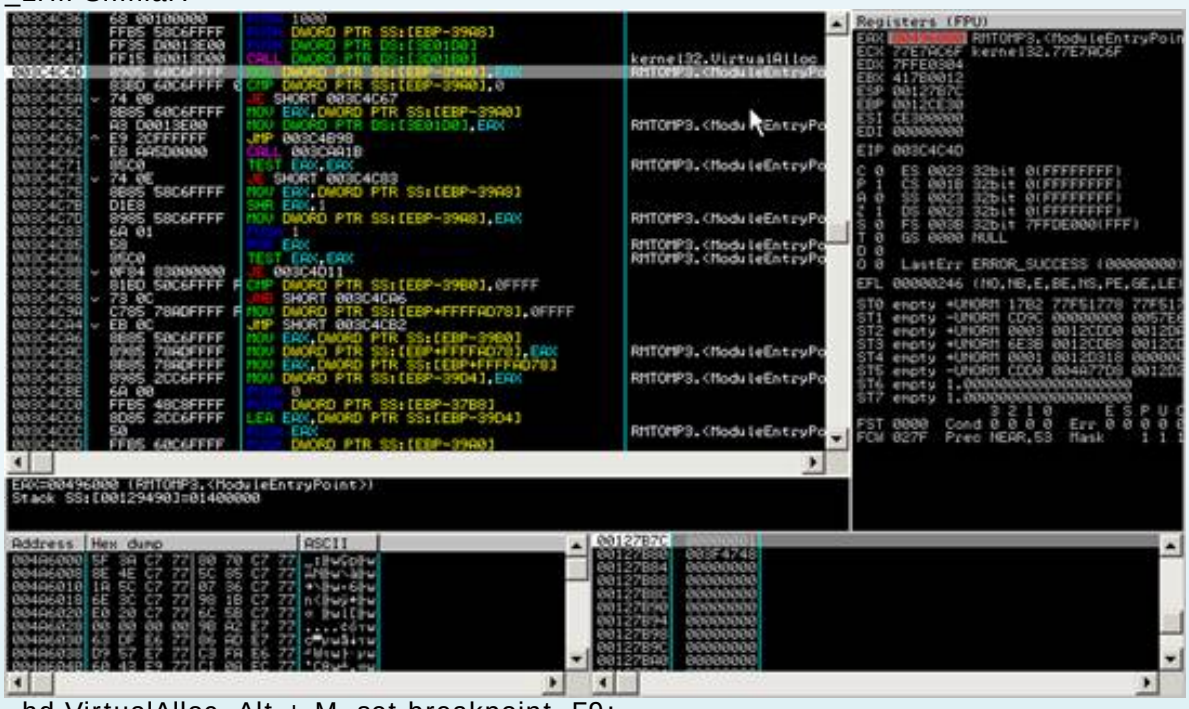
_Patch Thrnh JMP:

```
003A9B62   50              PUSH EAX                            kernel32.77E60000
003A9B63   FF15 DC003D00   CALL DWORD PTR DS:[3D00DC]          kernel32.LoadLibraryA
003A9B69   8B0D 74B73D00   MOV ECX,DWORD PTR DS:[3DB774]
003A9B6F   89040E          MOV DWORD PTR DS:[ESI+ECX],EAX      kernel32.77E60000
003A9B72   A1 74B73D00     MOV EAX,DWORD PTR DS:[3DB774]
003A9B77   391C06          CMP DWORD PTR DS:[ESI+EAX],EBX
003A9B7A   E9 33010000     JMP 003A9CB2
003A9B7F   90              NOP
003A9B80   33C9            XOR ECX,ECX                         kernel32.77E7B5E1
003A9B82   8B07            MOV EAX,DWORD PTR DS:[EDI]
003A9B84   3918            CMP DWORD PTR DS:[EAX],EBX
003A9B86   74 06           JE SHORT 003A9B8E
003A9B88   41              INC ECX                             kernel32.77E7B5E1
003A9B89   83C0 0C         ADD EAX,0C
003A9B8C   EB F6           JMP SHORT 003A9B84
003A9B8E   8BD9            MOV EBX,ECX                         kernel32.77E7B5E1
003A9B90   C1E3 02         SHL EBX,2
```

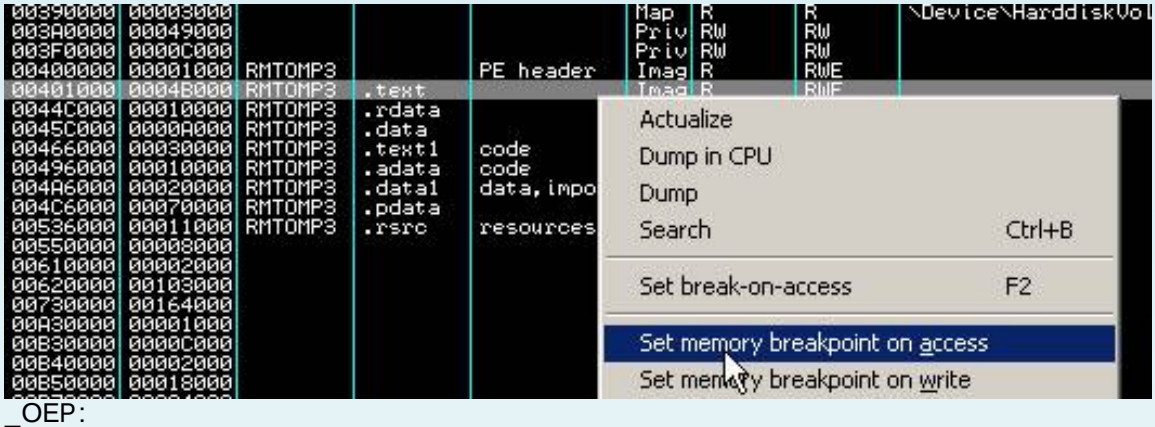
_hd GetModuleHandleA, he VirtualAlloc:

```
003C4C25   8985 60C6FFFF   MOV DWORD PTR SS:[EBP-39A0],EAX
003C4C2B   83BD 60C6FFFF 0 CMP DWORD PTR SS:[EBP-39A0],0
003C4C32   74 33           JE SHORT 003C4C67
003C4C34   6A 40           PUSH 40
003C4C36   68 00100000     PUSH 1000
003C4C3B   FFB5 58C6FFFF   PUSH DWORD PTR SS:[EBP-39A8]
003C4C41   FF35 D0013E00   PUSH DWORD PTR DS:[3E01D0]
003C4C47   FF15 B0013D00   CALL DWORD PTR DS:[3D01B0]          kernel32.VirtualAlloc
003C4C4D   8985 60C6FFFF   MOV DWORD PTR SS:[EBP-39A0],EAX
003C4C53   83BD 60C6FFFF 0 CMP DWORD PTR SS:[EBP-39A0],0
003C4C5A   74 0B           JE SHORT 003C4C67
003C4C5C   8B85 60C6FFFF   MOV EAX,DWORD PTR SS:[EBP-39A0]
003C4C62   A3 D0013E00     MOV DWORD PTR DS:[3E01D0],EAX
003C4C67   E9 2CFFFFFF     JMP 003C4B98
003C4C6C   E8 AA5D0000     CALL 003CAA1B
003C4C71   85C0            TEST EAX,EAX
003C4C73   74 0E           JE SHORT 003C4C83
003C4C75   8B85 58C6FFFF   MOV EAX,DWORD PTR SS:[EBP-39A8]
003C4C7B   D1E8            SHR EAX,1
003C4C7D   8985 58C6FFFF   MOV DWORD PTR SS:[EBP-39A8],EAX
003C4C83   6A 01           PUSH 1
003C4C85   58              POP EAX
003C4C86   85C0            TEST EAX,EAX
003C4C88   0F84 03000000   JE 003C4D11
003C4C8E   81BD 50C6FFFF F CMP DWORD PTR SS:[EBP-39B0],0FFFF
003C4C98   73 0C           JAE SHORT 003C4CA6
003C4C9A   C785 78AFFFFF F MOV DWORD PTR SS:[EBP+FFFFAF78],0FFFF
003C4CA4   EB 0C           JMP SHORT 003C4CB2
003C4CA6   8B85 50C6FFFF   MOV EAX,DWORD PTR SS:[EBP-39B0]
003C4CAC   8985 78AFFFFF   MOV DWORD PTR SS:[EBP+FFFFAF78],EAX
003C4CB2   8B85 78AFFFFF   MOV EAX,DWORD PTR SS:[EBP+FFFFAF78]
003C4CB8   8985 2CC6FFFF   MOV DWORD PTR SS:[EBP-39D4],EAX
003C4CBE   6A 00           PUSH 0
003C4CC0   FFB5 48C8FFFF   PUSH DWORD PTR SS:[EBP-37B8]
003C4CC6   8D85 2CC6FFFF   LEA EAX,DWORD PTR SS:[EBP-39D4]
003C4CCC   50              PUSH EAX
003C4CCD   FFB5 60C6FFFF   PUSH DWORD PTR SS:[EBP-39A0]
```

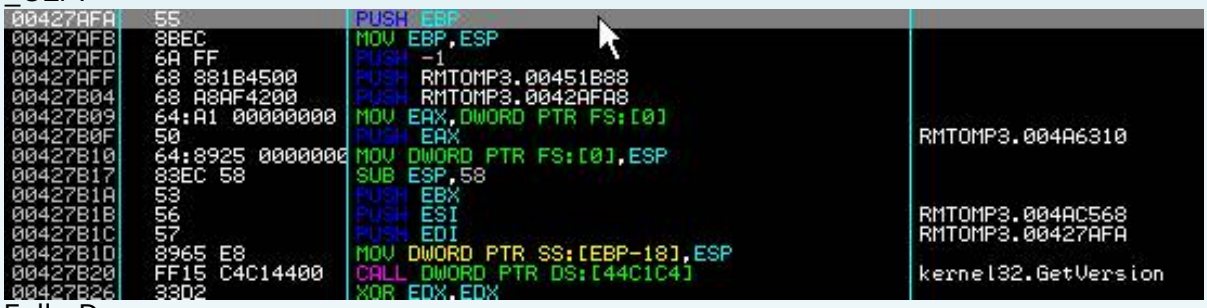
_Lrm Similar:



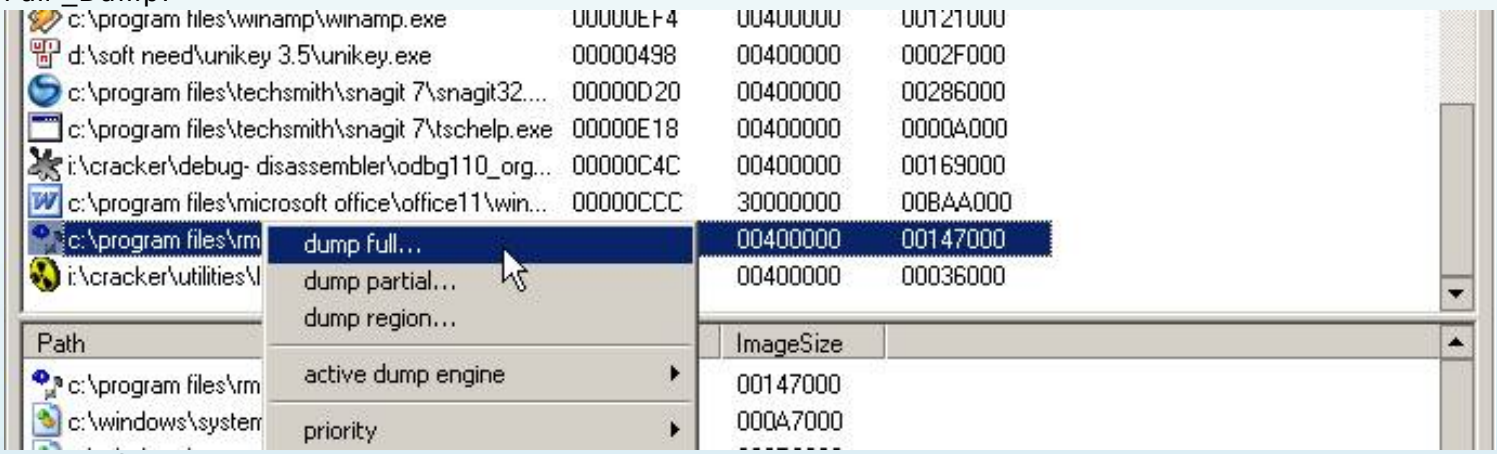
_hd VirtualAlloc, Alt + M, set breakpoint. F9:



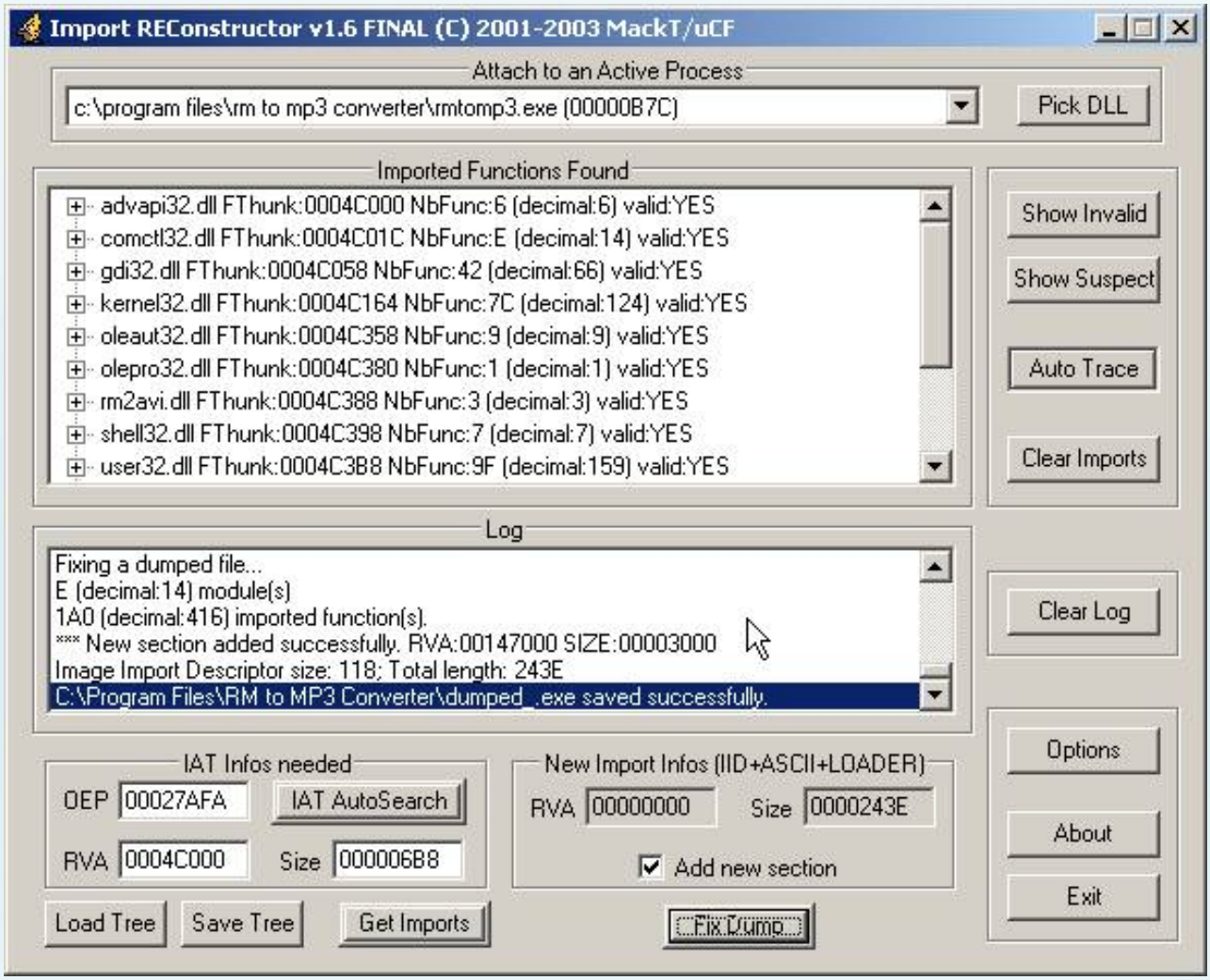
_OEP:



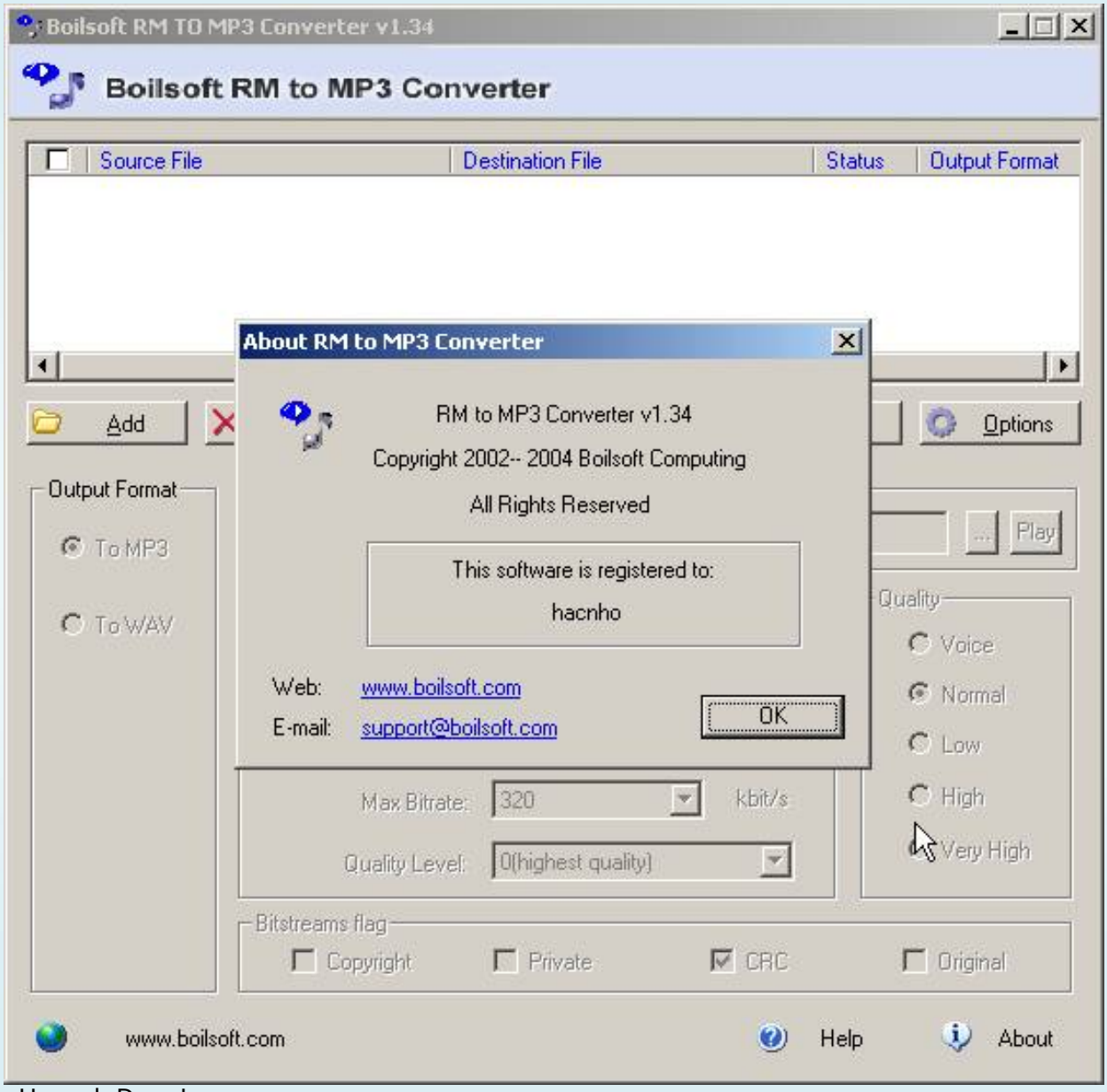
Full _Dump:



_ImpREC:


Import REConstructor v1.6 FINAL (C) 2001-2003 MackT/uCF
Attach to an Active Process
c:\program files\rm to mp3 converter\rmtomp3.exe (00000B7C)
Pick DLL
Imported Functions Found
advapi32.dll FThunk:0004C000 NbFunc:6 (decimal:6) valid:YES
comctl32.dll FThunk:0004C01C NbFunc:E (decimal:14) valid:YES
gdi32.dll FThunk:0004C058 NbFunc:42 (decimal:66) valid:YES
kernel32.dll FThunk:0004C164 NbFunc:7C (decimal:124) valid:YES
oleaut32.dll FThunk:0004C358 NbFunc:9 (decimal:9) valid:YES
olepro32.dll FThunk:0004C380 NbFunc:1 (decimal:1) valid:YES
rm2avi.dll FThunk:0004C388 NbFunc:3 (decimal:3) valid:YES
shell32.dll FThunk:0004C398 NbFunc:7 (decimal:7) valid:YES
user32.dll FThunk:0004C3B8 NbFunc:9F (decimal:159) valid:YES
Show Invalid
Show Suspect
Auto Trace
Clear Imports
Log
Fixing a dumped file...
E (decimal:14) module(s)
1A0 (decimal:416) imported function(s).
*** New section added successfully. RVA:00147000 SIZE:00003000
Image Import Descriptor size: 118; Total length: 243E
C:\Program Files\RM to MP3 Converter\dumped_.exe saved successfully.
Clear Log
IAT Infos needed
OEP 00027AFA
IAT AutoSearch
RVA 0004C000
Size 000006B8
New Import Infos (IID+ASCII+LOADER)
RVA 00000000
Size 0000243E
Add new section
Options
About
Exit
Load Tree
Save Tree
Get Imports
Fix Dump

_Run Try:



_Unpack Done!

IV. Conclusion

After having _Hen tut! Bye ...

_Tang Of the property of ngry month old henh plate. I remember cnn or they forgot!

EeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx OllyDBG of the authors.

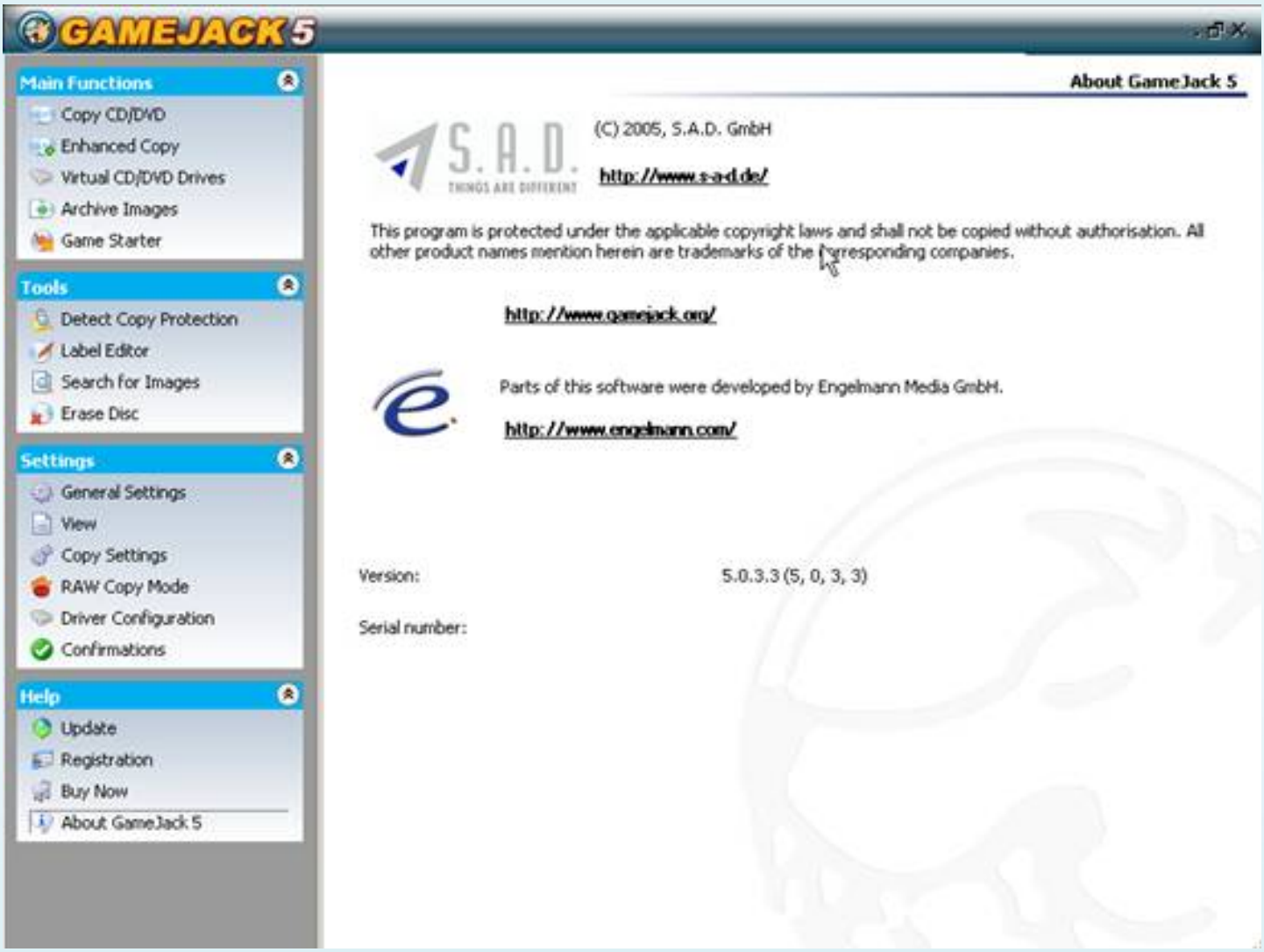
To be continued ...

Written by **hacnho** (tutorial date: Hong Source 17/09/2005)

Armadillo collect sand-stone

Series # 7: Armadillo 4.xx-Code Splicing + IAT Redirect

Target: GameJack ™ v5.0.3.3



I. Intro

Hello all, in this tut, I'll explaint a way for a target unpack use options Code Splicing Importable and elimination! So easy. Ok, we gooooooooo!

II. Tools

1.OllyDBG - The best config debugger for ArmMUP by hacnho.
2.LordPE 1.4 Deluxe
3.Import REConstructor 1.6 Final
4.API Address 1.0
5.Arma Inline 0:41
6.Wark 1.3

III. Unpacking

_Load Target into OllyDBG:

```
004F4000   60              PUSHAD
004F4001   E8 00000000     CALL GameJack.004F4006
004F4006   5D              POP EBP
004F4007   50              PUSH EAX
004F4008   51              PUSH ECX
004F4009   0FCA            BSWAP EDX
004F400B   F7D2            NOT EDX
004F400D   9C              PUSHFD
004F400E   F7D2            NOT EDX
004F4010   0FCA            BSWAP EDX
004F4012 v EB 0F           JMP SHORT GameJack.004F4023
004F4014   B9 EB0FB8EB     MOV ECX,EBB80FEB
004F4019   07              POP ES
004F401A   B9 EB0F90EB     MOV ECX,EB900FEB
004F401F   08FD            OR CH,BH
004F4021 v EB 0B           JMP SHORT GameJack.004F402E
004F4023   F2:             PREFIX REPNE:
```

_Set A breakpoint at API GetModuleHandleA. Shift F9. we still here:

```
77E7AD86   837C24 04 00    CMP DWORD PTR SS:[ESP+4],0
77E7AD8B v 0F84 37010000   JE kernel32.77E7AEC8
77E7AD91   FF7424 04       PUSH DWORD PTR SS:[ESP+4]
77E7AD95   E8 F8050000     CALL kernel32.77E7B392
77E7AD9A   85C0            TEST EAX,EAX
77E7AD9C v 74 08           JE SHORT kernel32.77E7ADA6
77E7AD9E   FF70 04         PUSH DWORD PTR DS:[EAX+4]
77E7ADA1   E8 27060000     CALL kernel32.GetModuleHandleW
77E7ADA6   C2 0400         RETN 4
77E7ADA9   55              PUSH EBP
77E7ADAA   8BEC            MOV EBP,ESP
77E7ADAC   83EC 10         SUB ESP,10
77E7ADAF   57              PUSH EDI

00127958   00DC5822  CALL to GetModuleHandleA from 00DC5822
0012795C   00DD9BAC  pModule = "kernel32.dll"
00127960   00DDAE48  ASCII "VirtualAlloc"
00127964   77F75690  ntdll.RtlLeaveCriticalSection
00127968   00DDD968
0012796C   00000000
00127970   00000000
00127974   00000000
00127978   00000000
0012797C   00000000
00127980   00000000
```

_Shift + F9:

```
00127958   00DC5822  CALL to GetModuleHandleA from 00DC5822
0012795C   00DD9BAC  pModule = "kernel32.dll"
00127960   00DDAE48  ASCII "VirtualAlloc"
00127964   77F75690  ntdll.RtlLeaveCriticalSection
00127968   00DDD968
0012796C   00000000
00127970   00000000
00127974   00000000
00127978   00000000
0012797C   00000000
00127980   00000000
```

_Shift + F9:

```
001276BC   00DB5257  CALL to GetModuleHandleA from 00DB5251
001276C0   0012780C  pModule = "kernel32.dll"
001276C4   0012CB28
001276C8   4B2B1385
001276CC   00000000
001276D0   00DD9084
001276D4   CDF8004B
001276D8   00000000
001276DC   80000000
001276E0   00003FFF
001276E4   00000000
```

_That The time for us to say! Now, with Trace down F8 to RETN4

```
77E7AD86   837C24 04 00    CMP DWORD PTR SS:[ESP+4],0
77E7AD8B v 0F84 37010000   JE kernel32.77E7AEC8
77E7AD91   FF7424 04       PUSH DWORD PTR SS:[ESP+4]
77E7AD95   E8 F8050000     CALL kernel32.77E7B392
77E7AD9A   85C0            TEST EAX,EAX
77E7AD9C v 74 08           JE SHORT kernel32.77E7ADA6
77E7AD9E   FF70 04         PUSH DWORD PTR DS:[EAX+4]
77E7ADA1   E8 27060000     CALL kernel32.GetModuleHandleW
77E7ADA6   C2 0400         RETN 4
77E7ADA9   55              PUSH EBP
77E7ADAA   8BEC            MOV EBP,ESP
77E7ADAC   83EC 10         SUB ESP,10
77E7ADAF   57              PUSH EDI
77E7ADB0   64:A1 18000000  MOV EAX,DWORD PTR FS:[18]
```

_You Still here:

```
00DB5257   8B0D 3C1EDE00    MOV ECX,DWORD PTR DS:[DE1E3C]
00DB525D   89040E           MOV DWORD PTR DS:[ESI+ECX],EAX
00DB5260   A1 3C1EDE00      MOV EAX,DWORD PTR DS:[DE1E3C]
00DB5265   391C06           CMP DWORD PTR DS:[ESI+EAX],EBX
00DB5268 v 75 16            JNZ SHORT 00DB5280
00DB526A   8D85 B4FEFFFF    LEA EAX,DWORD PTR SS:[EBP-14C]
00DB5270   50               PUSH EAX
00DB5271   FF15 B842DD00    CALL DWORD PTR DS:[DD42B8]
00DB5277   8B0D 3C1EDE00    MOV ECX,DWORD PTR DS:[DE1E3C]
00DB527D   89040E           MOV DWORD PTR DS:[ESI+ECX],EAX
00DB5280   A1 3C1EDE00      MOV EAX,DWORD PTR DS:[DE1E3C]
00DB5285   391C06           CMP DWORD PTR DS:[ESI+EAX],EBX
00DB5288 v 0F84 2F010000    JE 00DB53BD
00DB528E   33C9             XOR ECX,ECX
00DB5290   8B07             MOV EAX,DWORD PTR DS:[EDI]
00DB5292   3918             CMP DWORD PTR DS:[EAX],EBX
00DB5294 v 74 06            JE SHORT 00DB529C
00DB5296   41               INC ECX
00DB5297   83C0 0C          ADD EAX,0C
00DB529A ^ EB F6            JMP SHORT 00DB5292
00DB529C   8BD9             MOV EBX,ECX
00DB529E   C1E3 02          SHL EBX,2
00DB52A1   53               PUSH EBX
00DB52A2   E8 8BDD0100      CALL 00DD3032
00DB52A7   8B0D 341EDE00    MOV ECX,DWORD PTR DS:[DE1E34]
00DB52AD   89040E           MOV DWORD PTR DS:[ESI+ECX],EAX
```

Magic Jump!

_We Have to patch the JE to JMP:

```
00DB5277   8B0D 3C1EDE00    MOV ECX,DWORD PTR DS:[DE1E3C]
00DB527D   89040E           MOV DWORD PTR DS:[ESI+ECX],EAX
00DB5280   A1 3C1EDE00      MOV EAX,DWORD PTR DS:[DE1E3C]
00DB5285   391C06           CMP DWORD PTR DS:[ESI+EAX],EBX
00DB5288 v E9 30010000      JMP 00DB53BD
00DB528D   90               NOP
00DB528E   33C9             XOR ECX,ECX
00DB5290   8B07             MOV EAX,DWORD PTR DS:[EDI]
00DB5292   3918             CMP DWORD PTR DS:[EAX],EBX
00DB5294 v 74 06            JE SHORT 00DB529C
00DB5296   41               INC ECX
00DB5297   83C0 0C          ADD EAX,0C
00DB529A ^ EB F6            JMP SHORT 00DB5292
00DB529C   8BD9             MOV EBX,ECX
```

_Now, Hd GetModuleHandleA, set a breakpoint at API VirtualAlloc: he VirtualAlloc, Shift + F9:

```
00126FA0   73421D07  CALL to VirtualAlloc from 73421D05
00126FA4   00000000  Address = NULL
00126FA8   00400000  Size = 400000 (4194304.)
00126FAC   00002000  AllocationType = MEM_RESERVE
00126FB0   00000004  Protect = PAGE_READWRITE
00126FB4   00000000
00126FB8   00000001
00126FBC   00127004
00126FC0   73421CCD  RETURN to 73421CCD from 73421CDB
00126FC4   73421BCE  RETURN to 73421BCE from 73421CAC
00126FC8   73421B50  RETURN to 73421B50 from 73421B7C
77E7AC72   55        PUSH EBP
77E7AC73   8BEC      MOV EBP,ESP
77E7AC75   FF75 14   PUSH DWORD PTR SS:[EBP+14]
77E7AC78   FF75 10   PUSH DWORD PTR SS:[EBP+10]
77E7AC7B   FF75 0C   PUSH DWORD PTR SS:[EBP+C]
77E7AC7E   FF75 08   PUSH DWORD PTR SS:[EBP+8]
77E7AC81   6A FF     PUSH -1
77E7AC83   E8 9CFFFFFF  CALL kernel32.VirtualAllocEx
77E7AC88   5D        POP EBP
77E7AC89   C2 1000   RETN 10
77E7AC8C   8B4424 04 MOV EAX,DWORD PTR SS:[ESP+4]
77E7AC90   85C0      TEST EAX,EAX
77E7AC92 v 0F84 B7010000  JE kernel32.77E7AE4F
77E7AC98   A8 01     TEST AL,1
77E7AC9A ^ 0F85 CAF7FEFF  JNZ kernel32.77E6A46A
```

_Alt + F9:

```
73421D07   8BF0          MOV ESI,EAX
73421D09   85F6          TEST ESI,ESI
73421D0B   0F84 C5700400 JE 73468DD6
73421D11   6A 04         PUSH 4
73421D13   68 00100000   PUSH 1000
73421D18   68 00000100   PUSH 10000
73421D1D   56            PUSH ESI
73421D1E   FFD7          CALL EDI
73421D20   85C0          TEST EAX,EAX
73421D22   0F84 A0700400 JE 73468DC8
73421D28   81FD 30B05273 CMP EBP,7352B030
73421D2E   0F85 74700400 JNZ 73468DA8
73421D34   A1 30B05273   MOV EAX,DWORD PTR DS:[7352B030]
73421D39   85C0          TEST EAX,EAX
```

_Shift + F9, Alt + F9:

```
73421D20   85C0          TEST EAX,EAX
73421D22   0F84 A0700400 JE 73468DC8
73421D28   81FD 30B05273 CMP EBP,7352B030
73421D2E   0F85 74700400 JNZ 73468DA8
73421D34   A1 30B05273   MOV EAX,DWORD PTR DS:[7352B030]
73421D39   85C0          TEST EAX,EAX
73421D3B   0F84 49700400 JE 73468D8A
73421D41   A1 34B05273   MOV EAX,DWORD PTR DS:[7352B034]
73421D46   85C0          TEST EAX,EAX
73421D48   0F84 4B700400 JE 73468D99
73421D4E   8D86 00004000 LEA EAX,DWORD PTR DS:[ESI+400000]
73421D54   8D4D 18       LEA ECX,DWORD PTR SS:[EBP+18]
73421D57   8D95 98000000 LEA EDX,DWORD PTR SS:[EBP+98]
73421D5D   8945 14       MOV DWORD PTR SS:[EBP+14],EAX
```

_Shift + F9, Alt + F9:

```
00DC871C   8985 6CD7FFFF MOV DWORD PTR SS:[EBP-2894],EAX
00DC8722   83BD 6CD7FFFF 00 CMP DWORD PTR SS:[EBP-2894],0
00DC8729   74 64         JE SHORT 00DC878F
00DC872B   6A 40         PUSH 40
00DC872D   68 00100000   PUSH 1000
00DC8732   FFB5 64D7FFFF PUSH DWORD PTR SS:[EBP-289C]
00DC8738   FF35 807DDE00 PUSH DWORD PTR DS:[DE7D80]                GameJack.004B0000
00DC873E   FF15 8C41DD00 CALL DWORD PTR DS:[DD418C]                kernel32.VirtualAlloc
00DC8744   8985 6CD7FFFF MOV DWORD PTR SS:[EBP-2894],EAX
00DC874A   83BD 6CD7FFFF 00 CMP DWORD PTR SS:[EBP-2894],0
00DC8751   74 3C         JE SHORT 00DC878F
00DC8753   8B85 6CD7FFFF MOV EAX,DWORD PTR SS:[EBP-2894]
00DC8759   A3 807DDE00   MOV DWORD PTR DS:[DE7D80],EAX
00DC875E   8B85 6CD7FFFF MOV EAX,DWORD PTR SS:[EBP-2894]
00DC8764   3B85 0CD8FFFF CMP EAX,DWORD PTR SS:[EBP-27F4]           GameJack.00400000
00DC876A   76 23         JBE SHORT 00DC878F
00DC876C   8B85 0CD8FFFF MOV EAX,DWORD PTR SS:[EBP-27F4]           GameJack.00400000
```

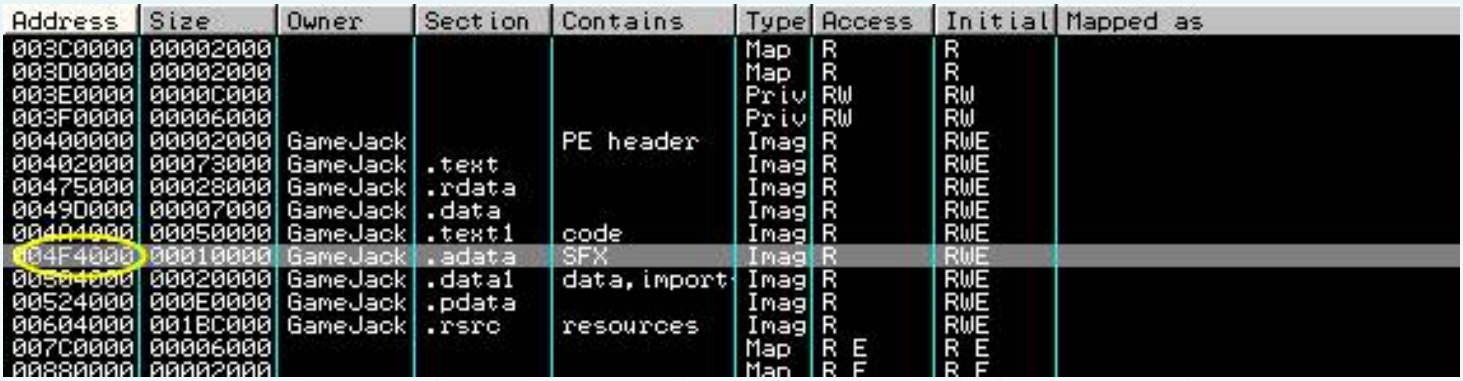
_Now, Trace down with a pass by the F8 Function VirtuallAlloc:

```
00DC871C   8985 6CD7FFFF MOV DWORD PTR SS:[EBP-2894],EAX
00DC8722   83BD 6CD7FFFF 00 CMP DWORD PTR SS:[EBP-2894],0
00DC8729   74 64         JE SHORT 00DC878F
00DC872B   6A 40         PUSH 40
00DC872D   68 00100000   PUSH 1000
00DC8732   FFB5 64D7FFFF PUSH DWORD PTR SS:[EBP-289C]
00DC8738   FF35 807DDE00 PUSH DWORD PTR DS:[DE7D80]
00DC873E   FF15 8C41DD00 CALL DWORD PTR DS:[DD418C]                kernel32.VirtualAlloc
00DC8744   8985 6CD7FFFF MOV DWORD PTR SS:[EBP-2894],EAX
00DC874A   83BD 6CD7FFFF 00 CMP DWORD PTR SS:[EBP-2894],0
00DC8751   74 3C         JE SHORT 00DC878F
00DC8753   8B85 6CD7FFFF MOV EAX,DWORD PTR SS:[EBP-2894]
00DC8759   A3 807DDE00   MOV DWORD PTR DS:[DE7D80],EAX
00DC875E   8B85 6CD7FFFF MOV EAX,DWORD PTR SS:[EBP-2894]
00DC8764   3B85 0CD8FFFF CMP EAX,DWORD PTR SS:[EBP-27F4]           GameJack.00400000
00DC876A   76 23         JBE SHORT 00DC878F
```

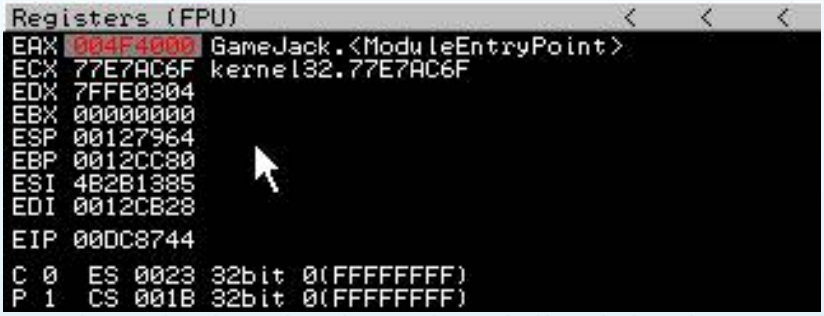
_Then You see in the FPU:

```
Registers (FPU)
EAX 03510000
ECX 77E7AC6F kernel32.77E7AC6F
EDX 7FFE0304
EBX 00000000
ESP 00127964
EBP 0012CC80
ESI 4B2B1385
EDI 0012CB28

EIP 00DC8744

C 0  ES 0023 32bit 0(FFFFFFFF)
P 1  CS 001B 32bit 0(FFFFFFFF)
A 0  SS 0023 32bit 0(FFFFFFFF)
Z 1  DS 0023 32bit 0(FFFFFFFF)
S 0  FS 003B 32bit 7FFDE000(FFF)
T 0  GS 0000 NULL
D 0
O 0  LastErr ERROR_SUCCESS (00000000)
```

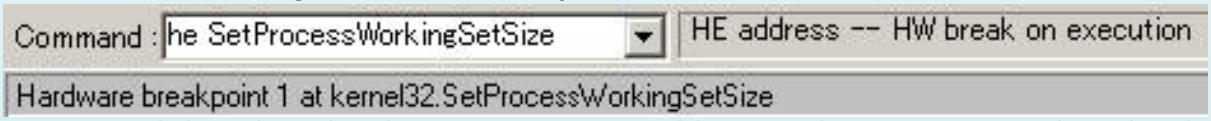
_the value of EAX contain the code to destroy our IAT. We must change this value to a real memory section of the arm. Now, Alt + M to go memory window:



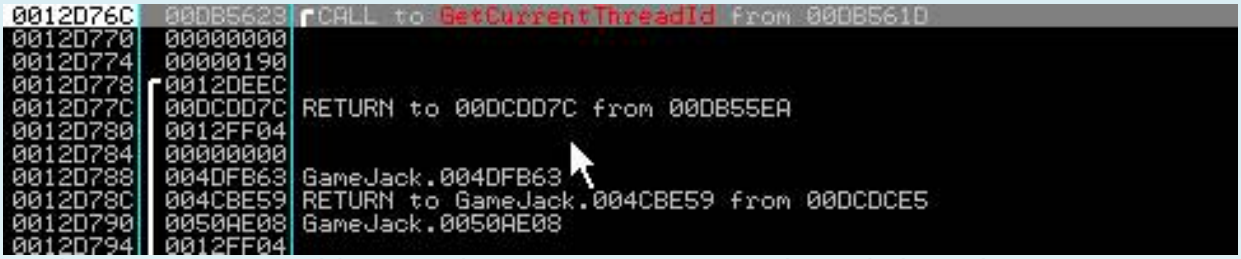
_Ok, Address 4F4000 we choose to save the code. Go to Windows FPU! Change to EAX 4F4000.



_ Delete the breakpoint: VirtualAlloc hd. Ok, now the code is splicing die. We must find the OEP. Ok, set a breakpoint at API SetProcessWorkingSetSize: he SetProcessWorkingSetSize. F9: OllyDBG ice:



_Do Not delete breakpoint SetProcessWorkingSetSize. Now set a breakpoint other: he GetCurrentThreadId. F9:



_Hd SetProcessWorkingSetSize, HD GetCurrentThreadId. Ctrl + F9, F8:

Dow _Trace to RETN with F8:

```
00DCDD7C   6A 00                    PUSH 0
00DCDD7E   E8 91D8FEFF              CALL 00DBB614
00DCDD83   59                       POP ECX
00DCDD84   BF 68D9DD00              MOV EDI,0DDD968
00DCDD89   8BCF                     MOV ECX,EDI
00DCDD8B   E8 4FA4FDFF              CALL 00DA81DF
00DCDD90   84C0                     TEST AL,AL
00DCDD92 v 75 09                    JNZ SHORT 00DCDD9D
00DCDD94   6A 01                    PUSH 1
00DCDD96   8BCF                     MOV ECX,EDI
00DCDD98   E8 7FF3FDFF              CALL 00DAD11C
00DCDD9D   B9 D0CCDD00              MOV ECX,0DDCCD0
00DCDDA2   C705 70A0DD00 5CAFDD00   MOV DWORD PTR DS:[DDA070],0DDAF5C
00DCDDAC   E8 6F520000              CALL 00DD301F
```

_Scroll Down until you see:

```
00DCDDD1 v 75 18                    JNZ SHORT 00DCDDEB
00DCDDD3   8B50 38                  MOV EDX,DWORD PTR DS:[EAX+38]
00DCDDD6   FF76 18                  PUSH DWORD PTR DS:[ESI+18]
00DCDDD9   3350 0C                  XOR EDX,DWORD PTR DS:[EAX+C]
00DCDDDC   FF76 14                  PUSH DWORD PTR DS:[ESI+14]
00DCDDDF   3350 04                  XOR EDX,DWORD PTR DS:[EAX+4]
00DCDDE2   FF76 10                  PUSH DWORD PTR DS:[ESI+10]
00DCDDE5   2BCA                     SUB ECX,EDX
00DCDDE7   FFD1                     CALL ECX
00DCDDE9 v EB 1D                    JMP SHORT 00DCDE08
00DCDDEB   83FA 01                  CMP EDX,1
00DCDDEE v 75 1A                    JNZ SHORT 00DCDE0A
00DCDDF0   FF76 04                  PUSH DWORD PTR DS:[ESI+4]
00DCDDF3   8B50 38                  MOV EDX,DWORD PTR DS:[EAX+38]
00DCDDF6   3350 0C                  XOR EDX,DWORD PTR DS:[EAX+C]
00DCDDF9   FF76 08                  PUSH DWORD PTR DS:[ESI+8]
00DCDDFC   3350 04                  XOR EDX,DWORD PTR DS:[EAX+4]
00DCDDFF   6A 00                    PUSH 0
00DCDE01   FF76 0C                  PUSH DWORD PTR DS:[ESI+C]
00DCDE04   2BCA                     SUB ECX,EDX
00DCDE06   FFD1                     CALL ECX
00DCDE08   8BD8                     MOV EBX,EAX
00DCDE0A   5F                       POP EDI
00DCDE0B   8BC3                     MOV EAX,EBX
00DCDE0D   5E                       POP ESI
00DCDE0E   5B                       POP EBX
```

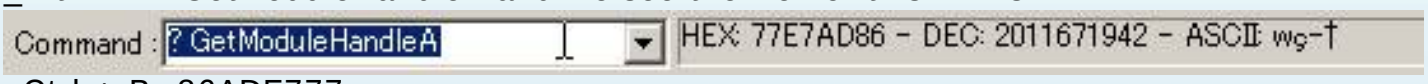
_What Do you think about this, me, I think J OEP. Now, press F2 at the ECX at DCDE06 Call. F9, and F7: OEP. Congratulation!

```
0046B54E   6A 74                    PUSH 74
0046B550   68 E0694700              PUSH GameJack.004769E0
0046B555   E8 1A020000              CALL GameJack.0046B774
0046B55A   33DB                     XOR EBX,EBX
0046B55C   895D E0                  MOV DWORD PTR SS:[EBP-20],EBX
0046B55F   53                       PUSH EBX
0046B560   8B3D DC574700            MOV EDI,DWORD PTR DS:[4757DC]
0046B566   FFD7                     CALL EDI
0046B568   66:8138 4D5A             CMP WORD PTR DS:[EAX],5A4D
0046B56D v 75 1F                    JNZ SHORT GameJack.0046B58E
0046B56F   8B48 3C                  MOV ECX,DWORD PTR DS:[EAX+3C]
0046B572   03C8                     ADD ECX,EAX
```

_Now The very important step: Defeat Import elimination. We use the Arma Inline 0:41. But, before. We have to find some info to add into Inline arm. Now, Alt + M, click at section:

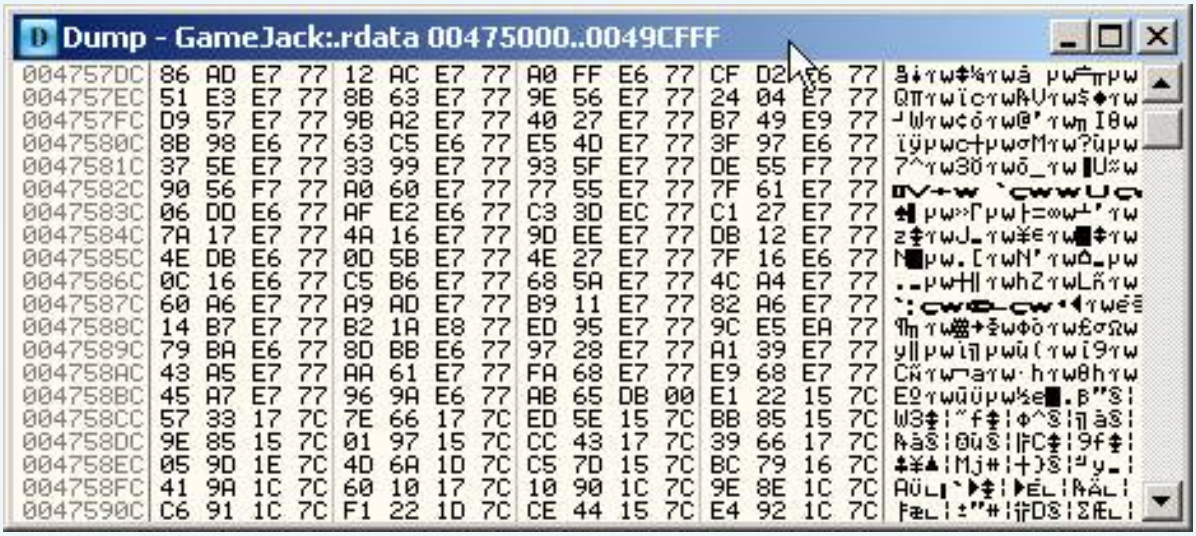
Memory map, item 26
Address = 00400000
Size = 00002000 (8192.)
Owner = 00400000 GameJack (itself)
Section =
Type = 01001002 IMAG
Access R =
Initial access = RWE

_Alt + F1? GetModuleHandleA and we see the Hex of this API is:

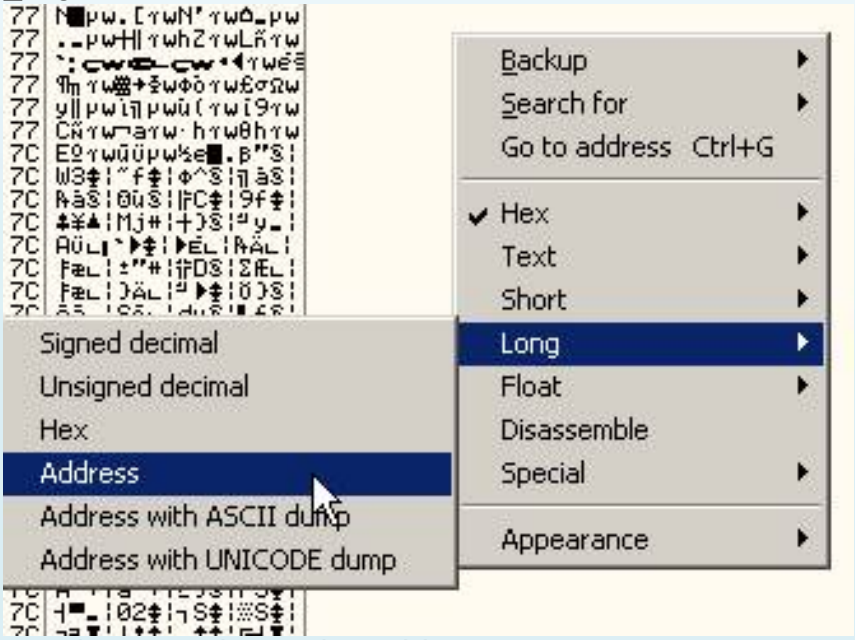


_Ctrl + B: 86ADE777:

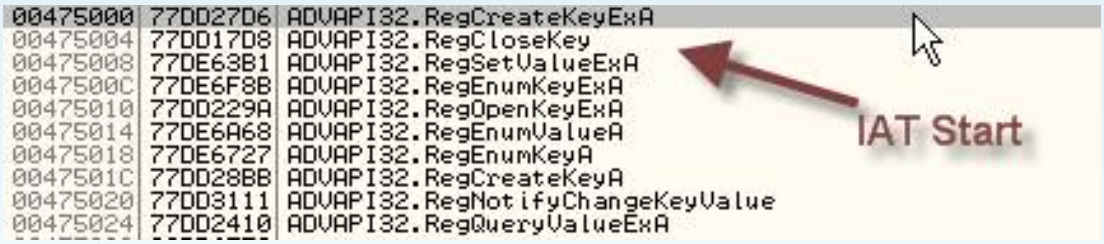
_And We found:



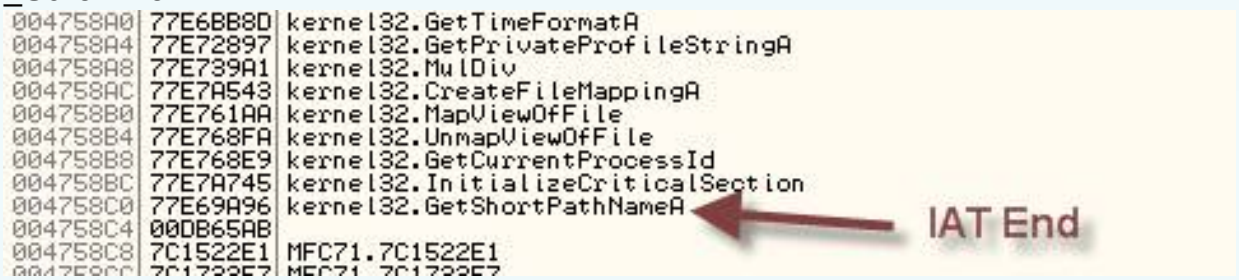
_Right Click:



_And IAT we have the table:



_Scroll Down:



_Total:

OEP: 46B54E:

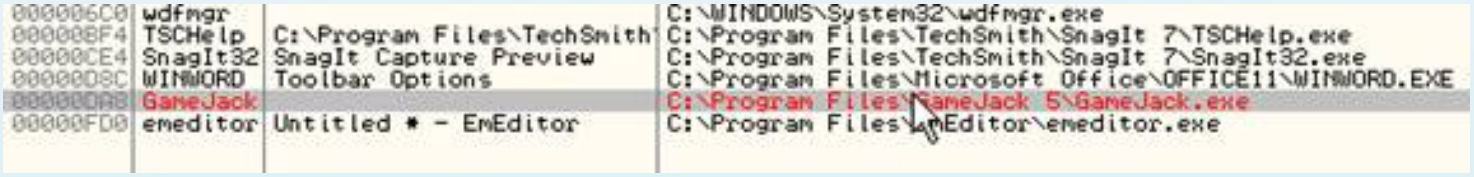
IAT Start: 00475000

IAT End: 004758C0

IAT Ireland: 8C0

_Ok, Fire up and fill arm Inline:

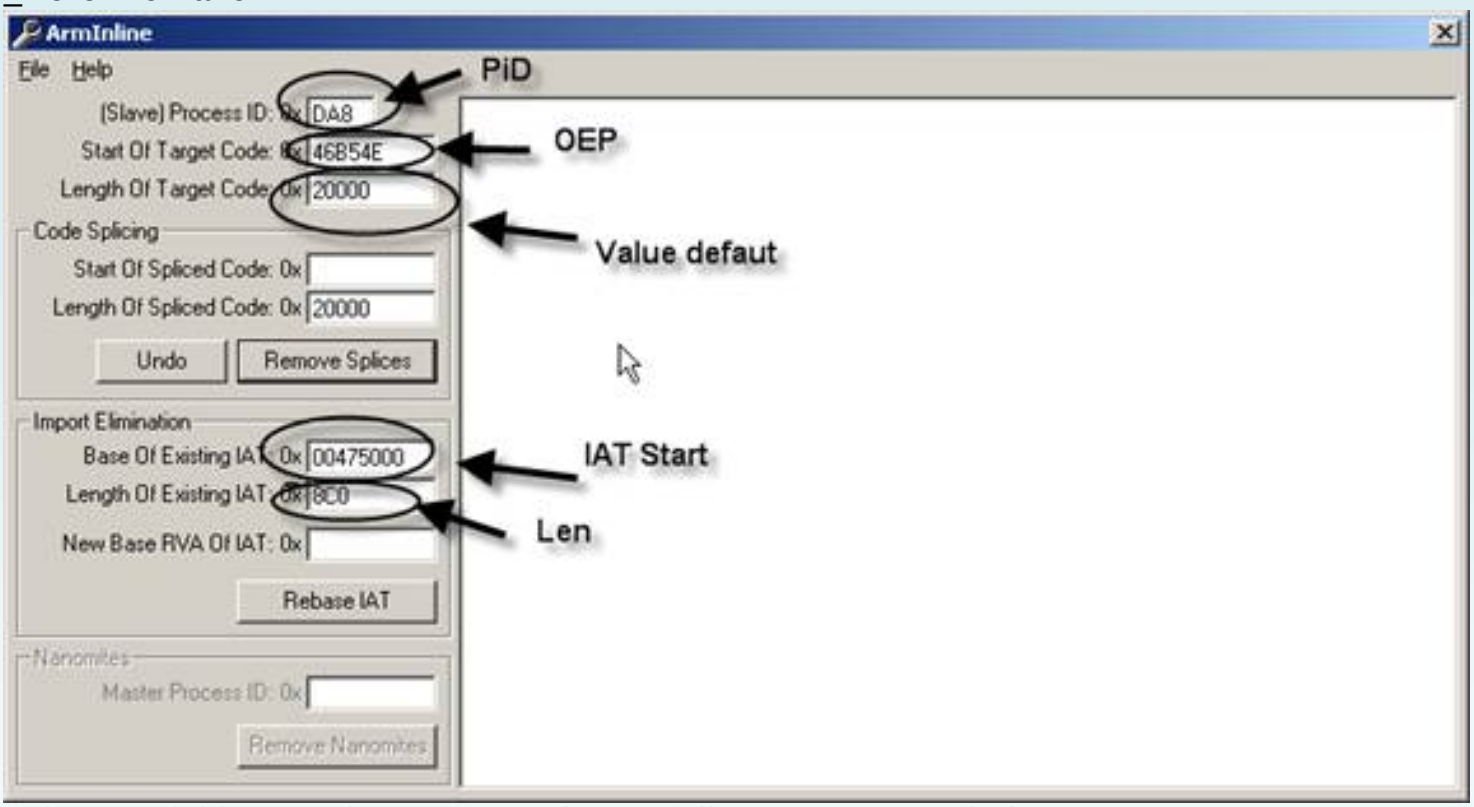
1.PiD:



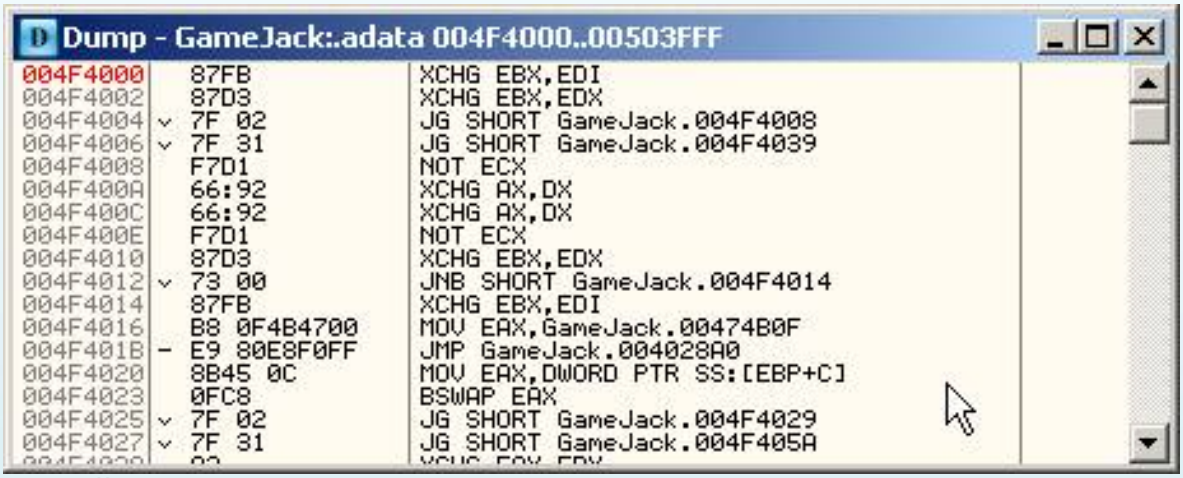
2. OEP: 46B54E:

3. IAT Start: 00475000

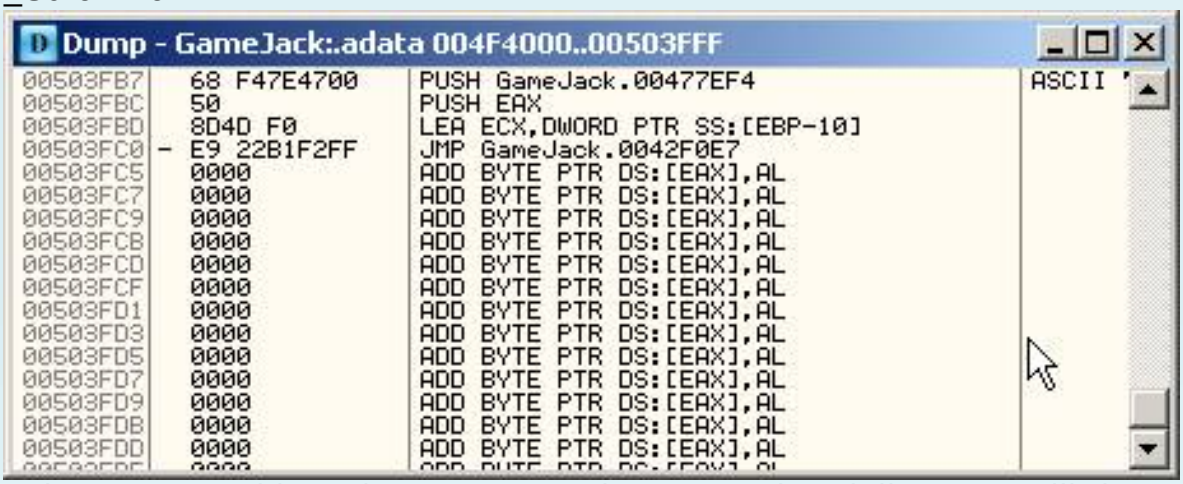
_Here We have:



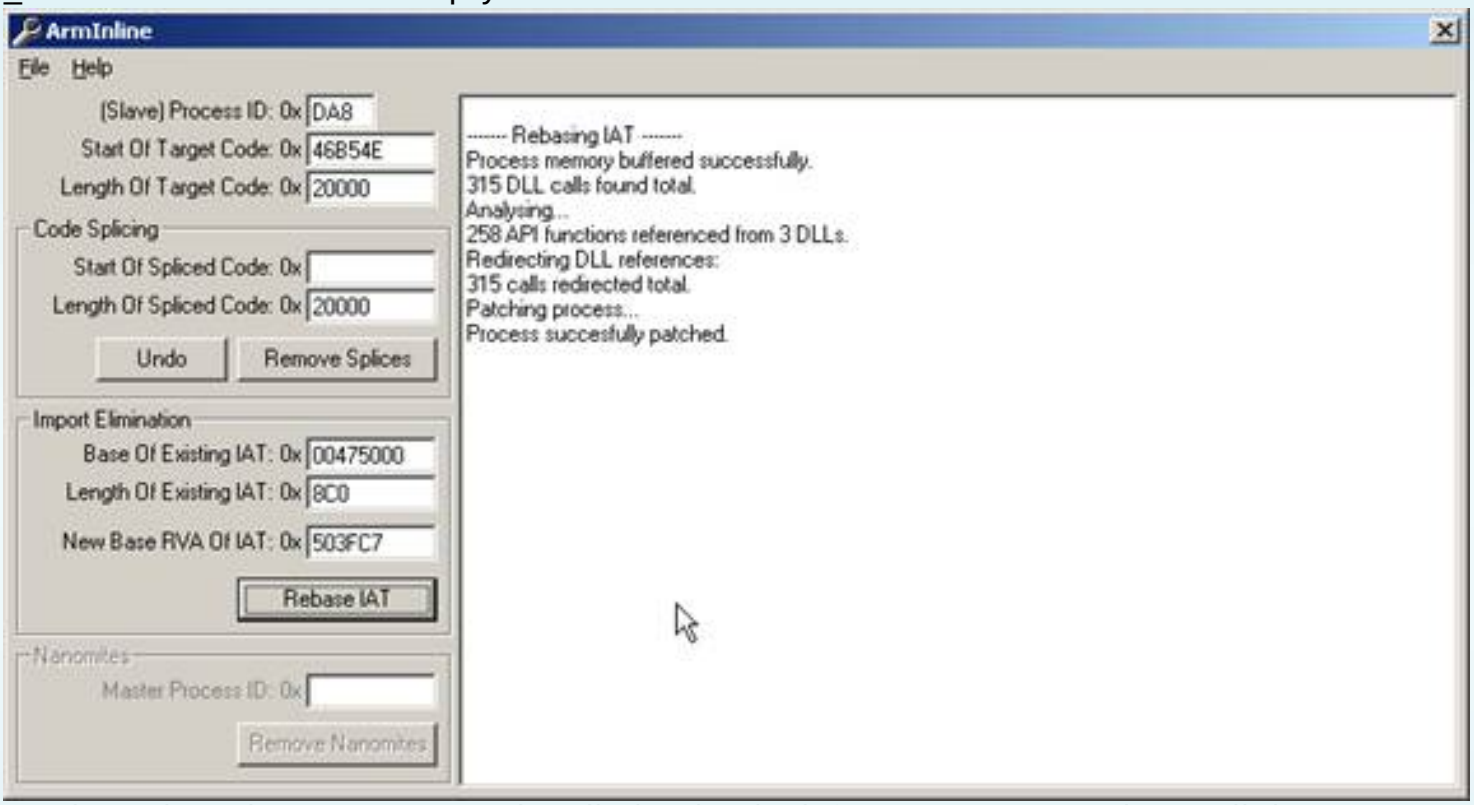
_The Special is: new base to contain our full IAT. We must find a cave memory. Now, back Olly, Alt + M, Double click at sections. ADATA



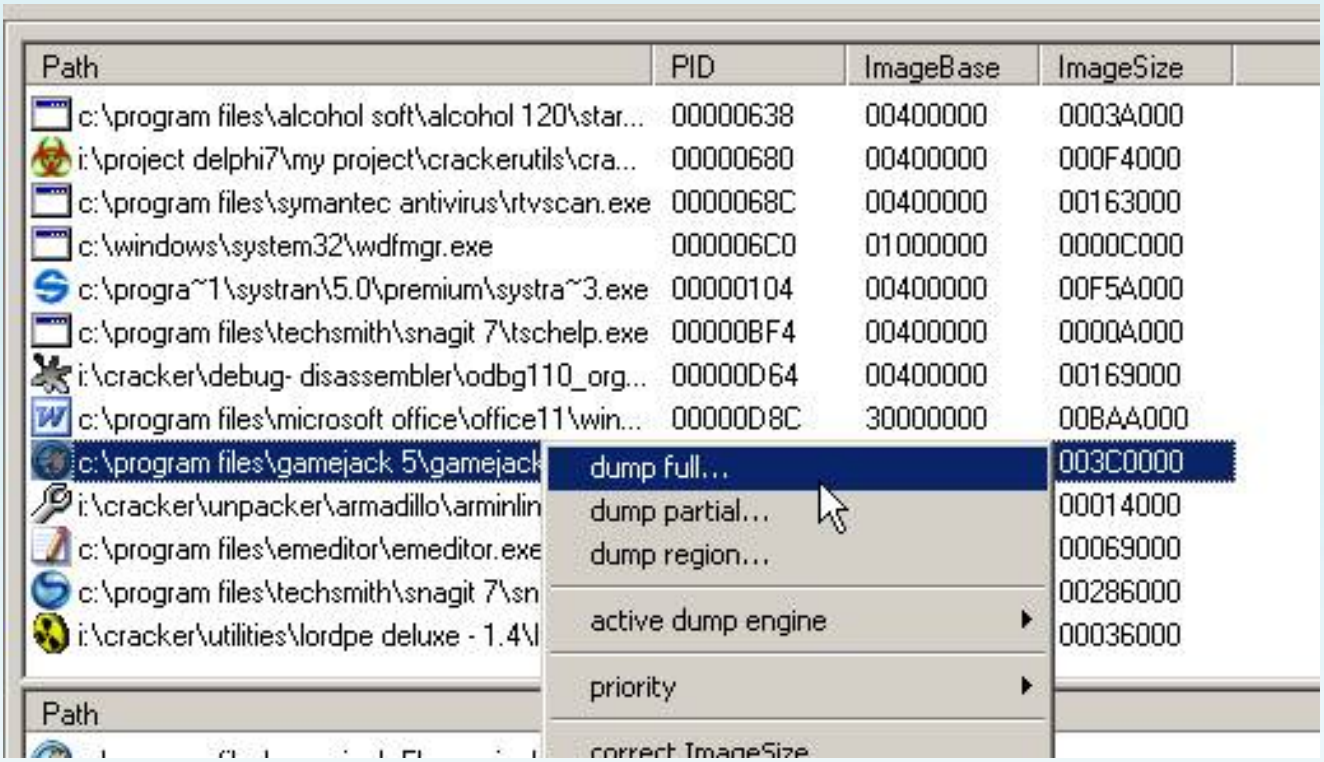
_Scroll Down:



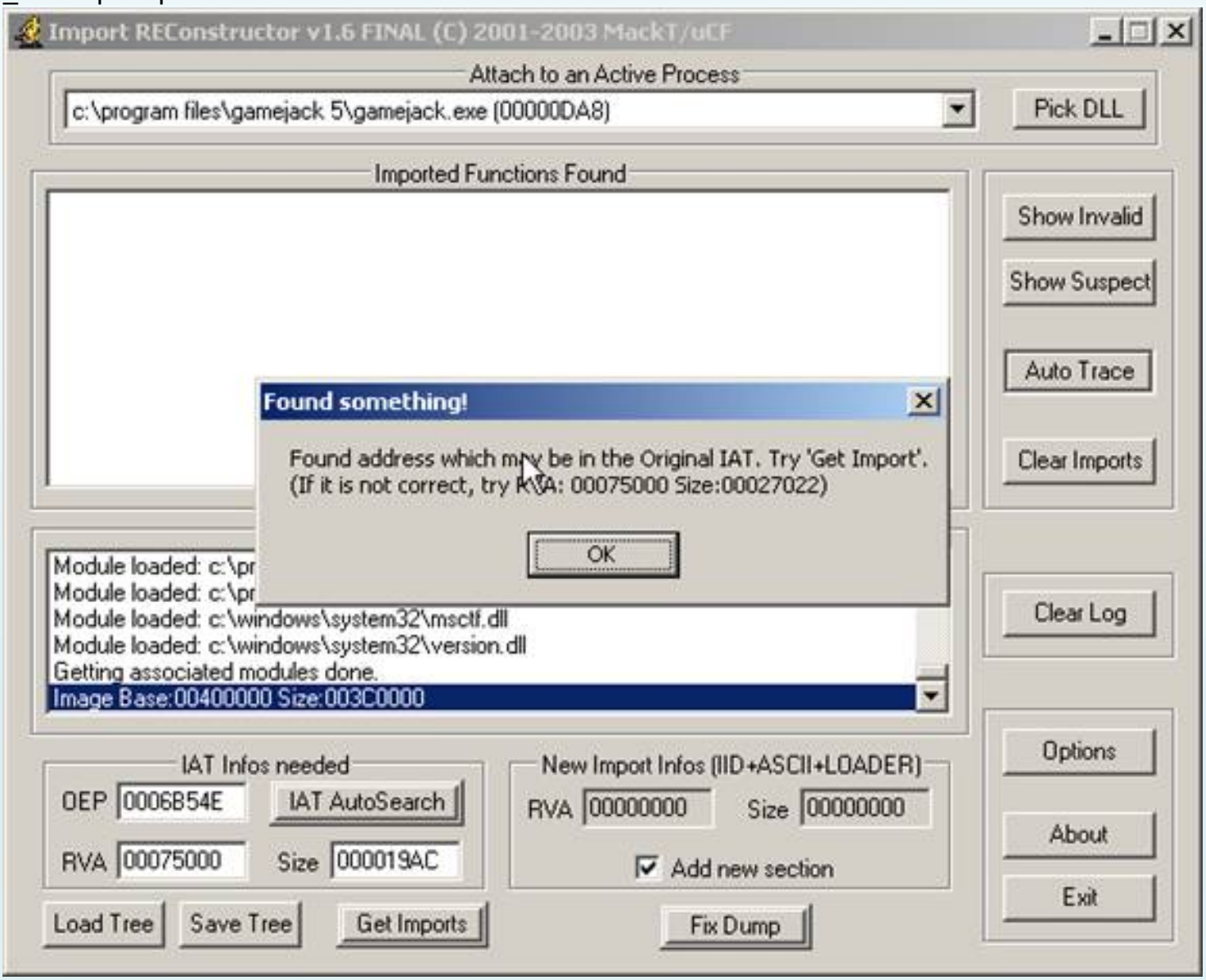
_The 503FC7 address is empty. We choose! Back to inline arm. Fill the address.



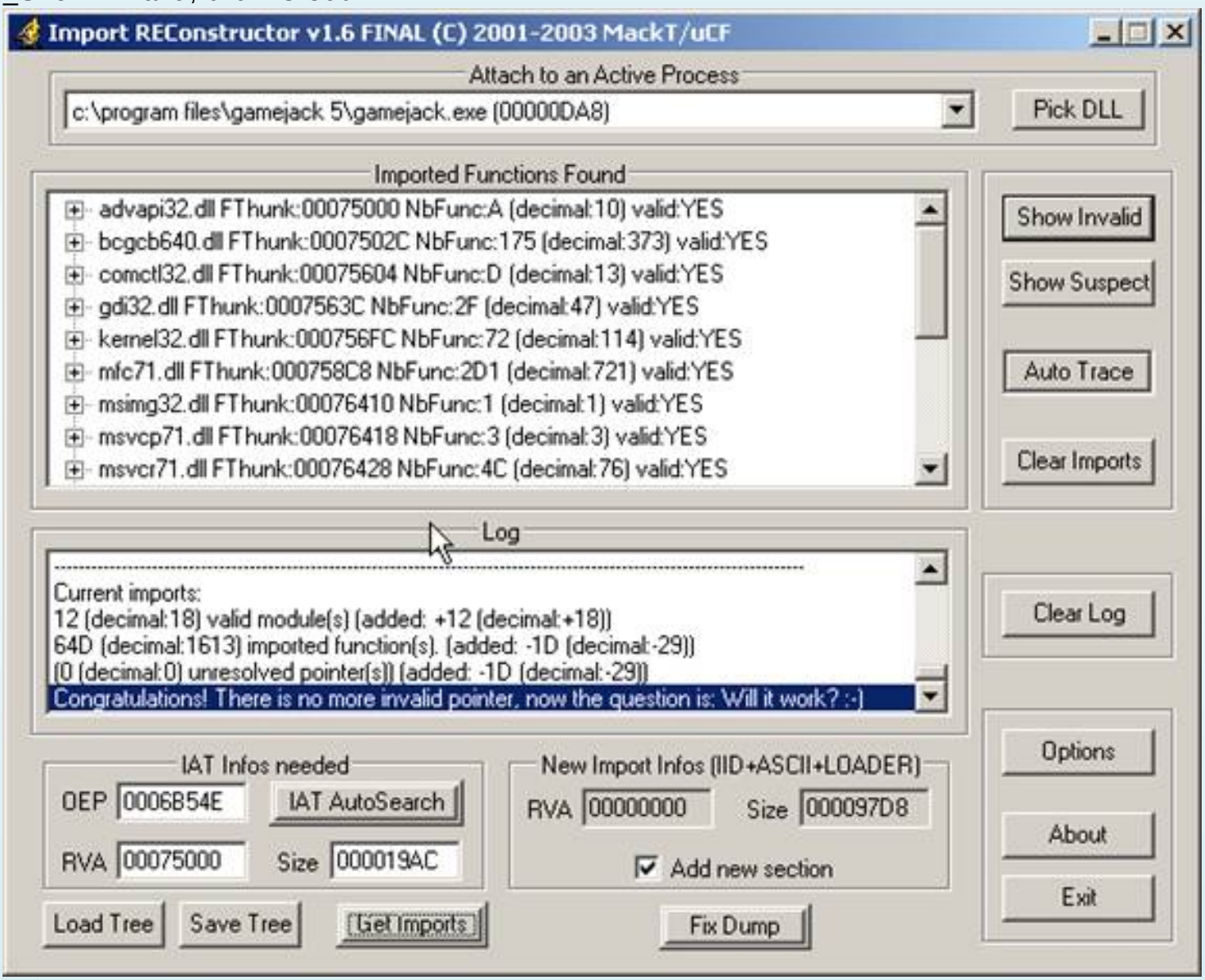
_Lady And Genlement: Import the elimination is defeat. Now use LordPE, Full dump:



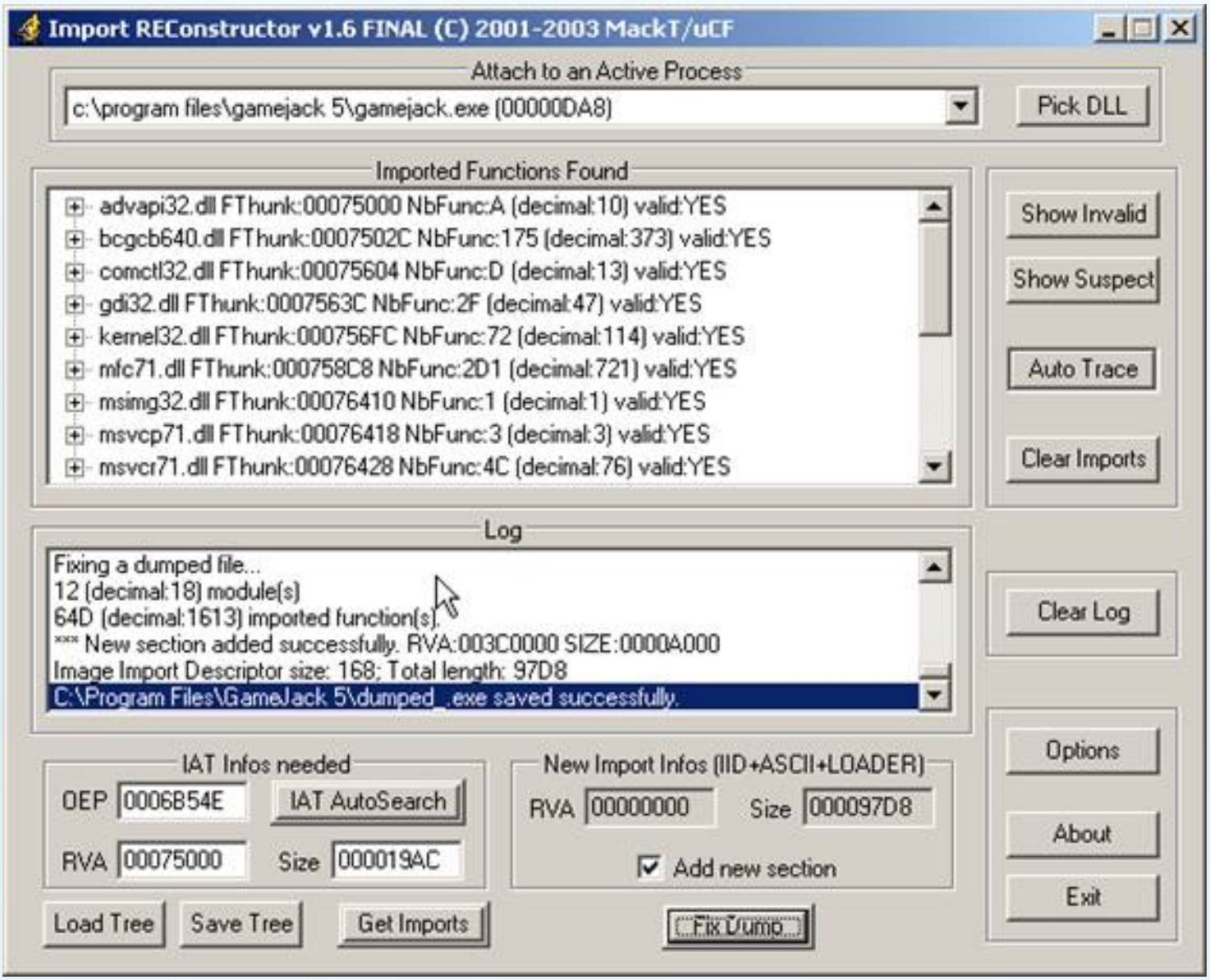
_Fire Up ImpREC:



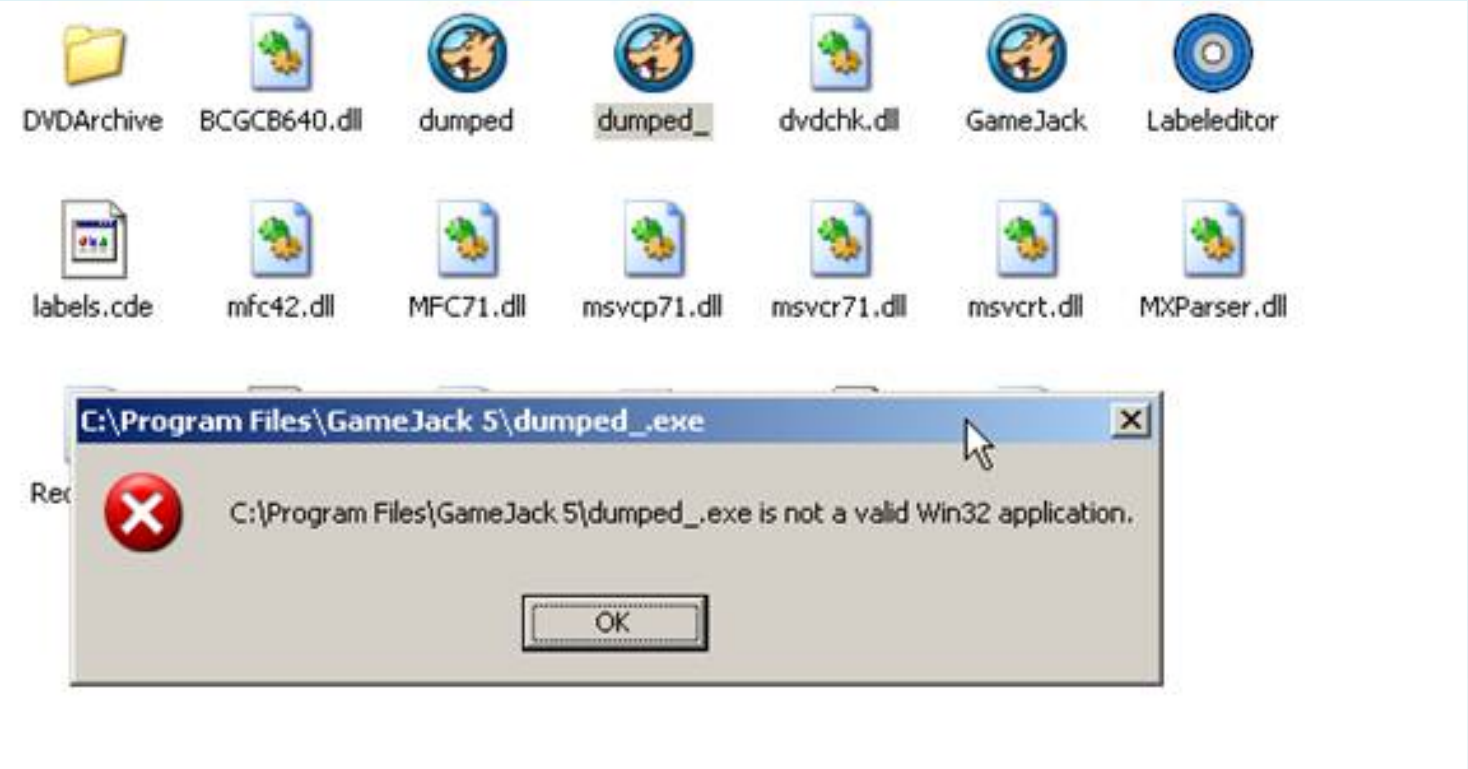
_Show Invalid, thunks Cut:



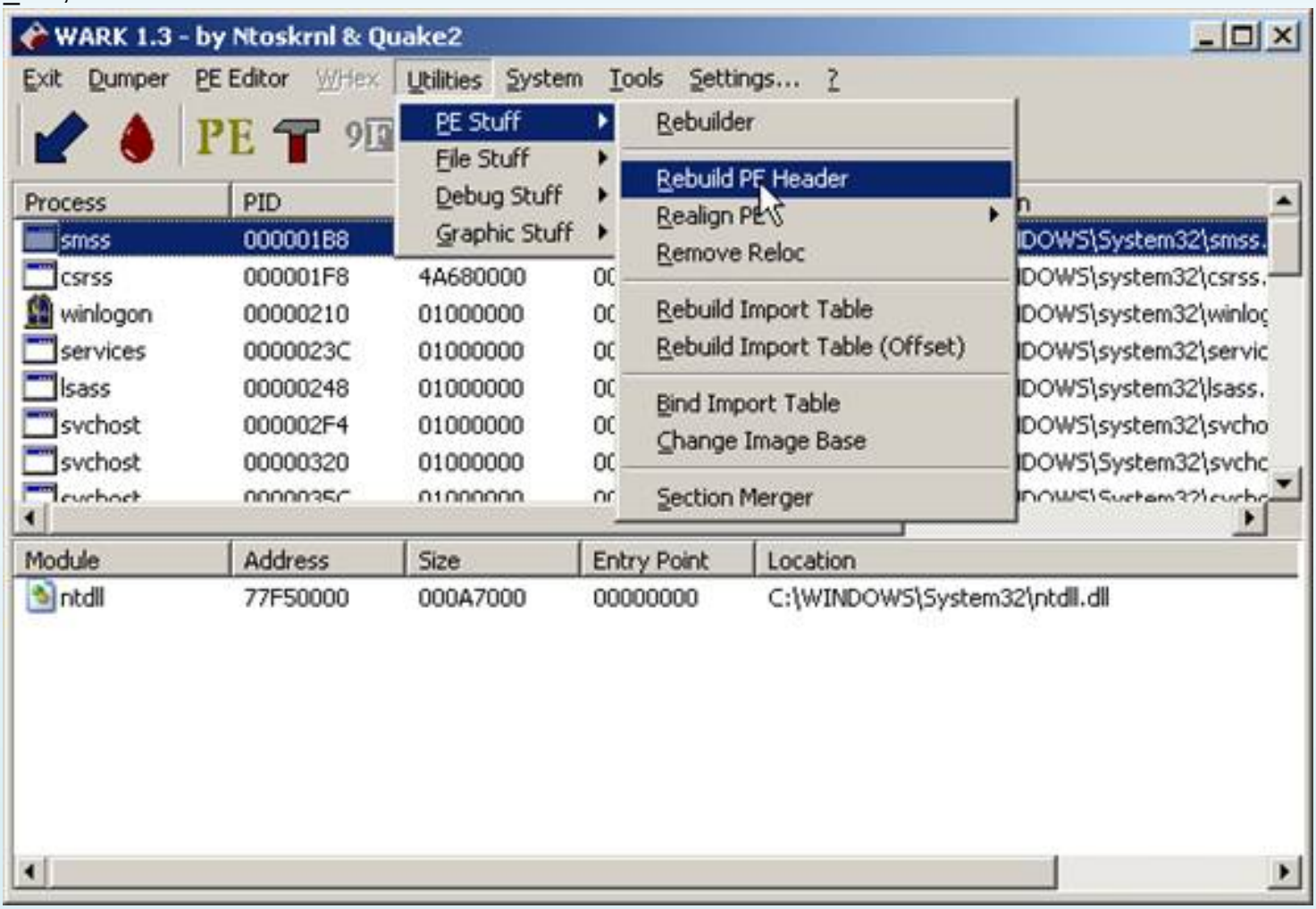
_Fix Dump:



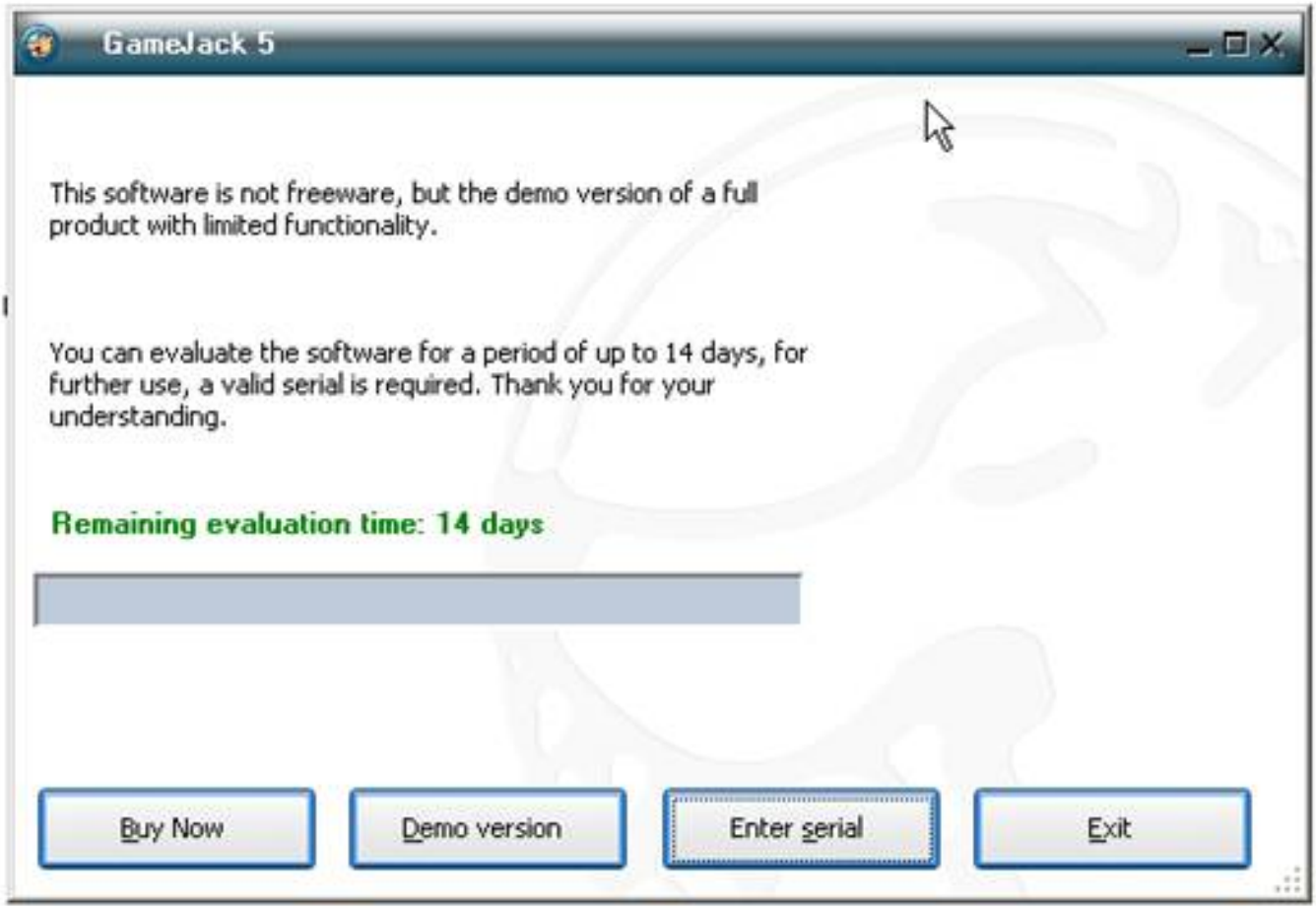
Now, Run the target dumped.exe:



_Oh, Now. 1.3 Use Wark:



Run Dumped.exe again!



_Unpacked SuccessFul! Done ...
_Cracking:
User: Registered
Serial: 4A7SQ5-7K56XM-F2KN05-47ZMD6-32S97C

IV. Conlusion

So easy, huh?

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, Madman_Hercules, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx OllyDBG of the authors.

To be continued ...

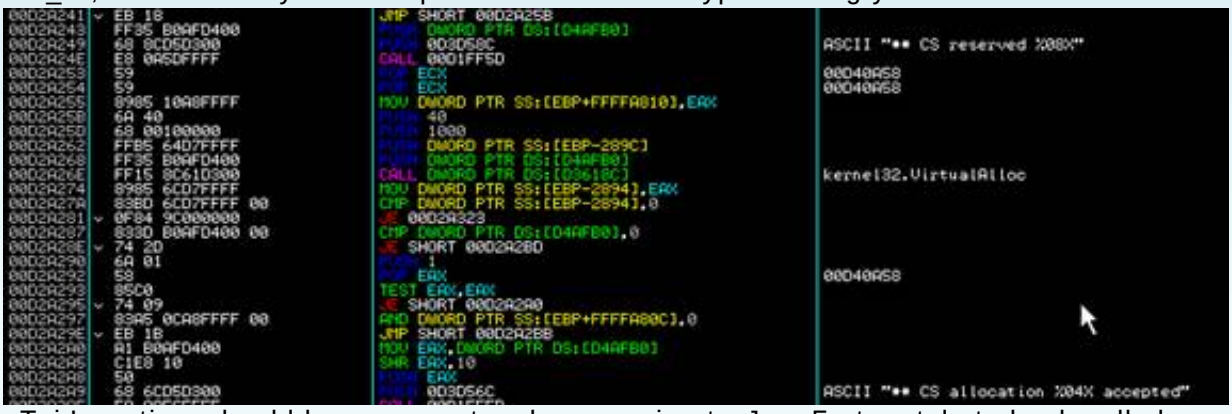
Written by **hacnho** (tutorial date: VietNam 18/09/2005)

Armadillo collect sand-stone

Series # 7 Exp: Armadillo 4.xx-Code Splicing with other Method

I. Intro

All _Hi, some meals you have questions about this type of thing you have to do RM to MP3:



_Tui Less time should be aware network processing to J . Fortunately today handle bags are a target italy chang so. Just 15 seconds, I settled this issue. Mong iamidiot pa satisfy nhé!

I. **Tools**

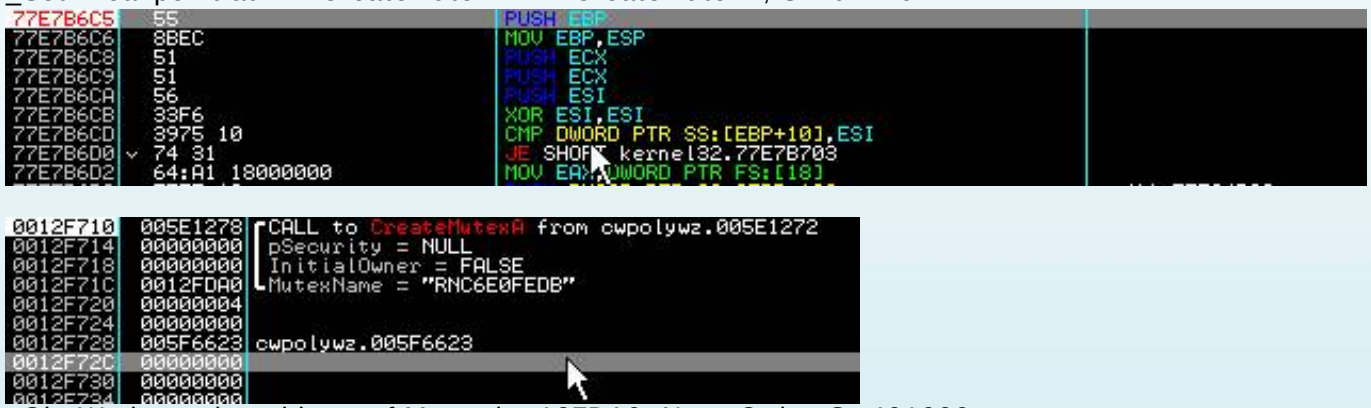
1.OllyDBG - The best config debugger for ArmMUP by hacnho.
2.LordPE 1.4 Deluxe
3.Import REConstructor 1.6 Final

II. Unpacking

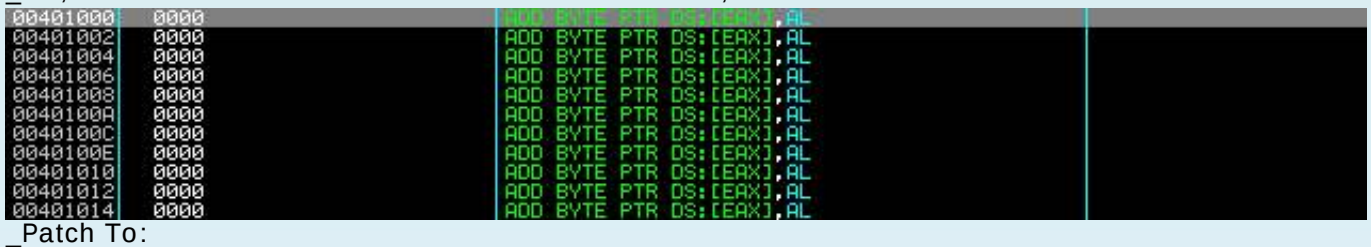
Target: Zephirous Keygenme 3

_Load Target into OllyDBG:

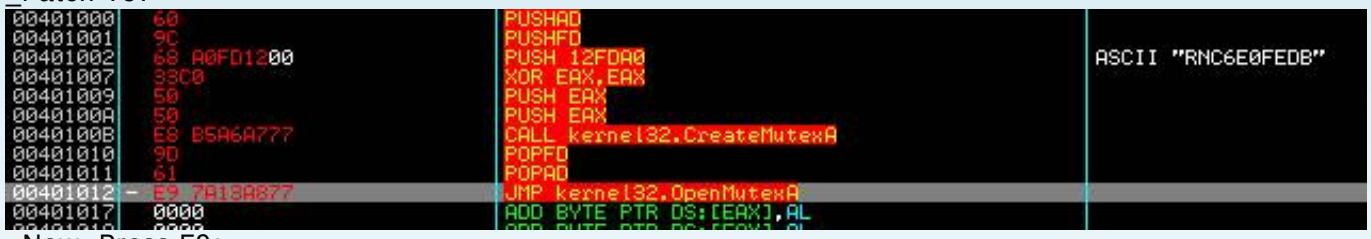
_Set Breakpoint at API CreateMutexA: BP CreateMutexA, Shift + F9:



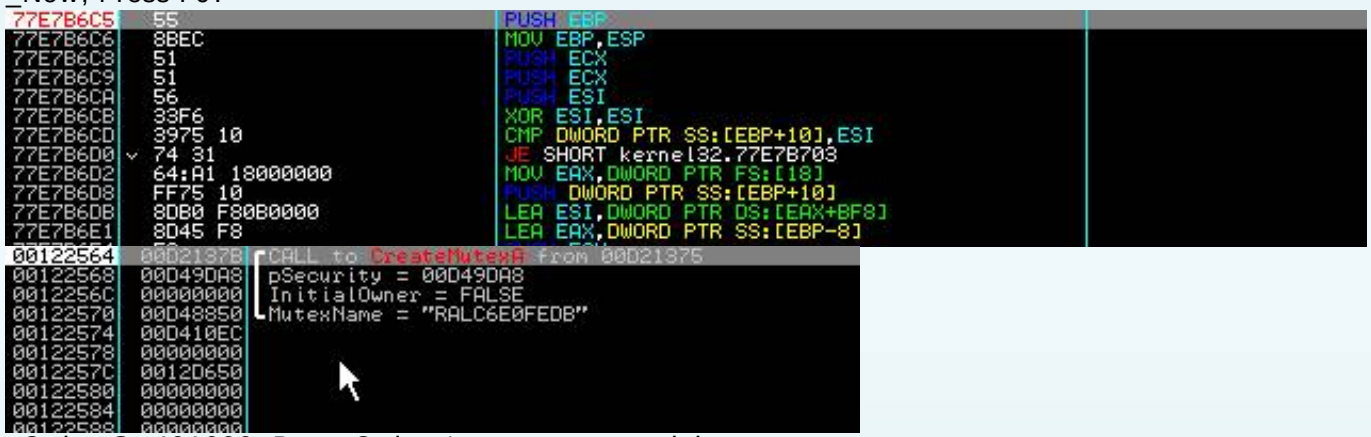
_Ok, We have the address of Mutex is: 12FDA0. Now, Ctrl + G: 401000:



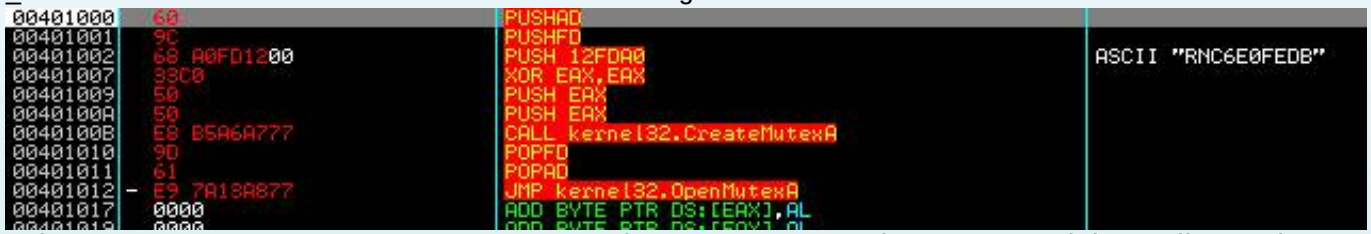
_Patch To:



_Now, Press F9:

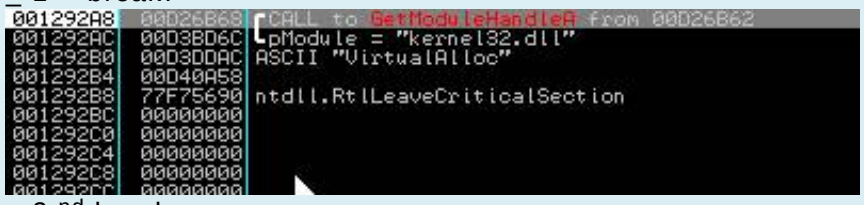


_Ctrl + G: 401000. Press Ctrl + * to set a new origin:

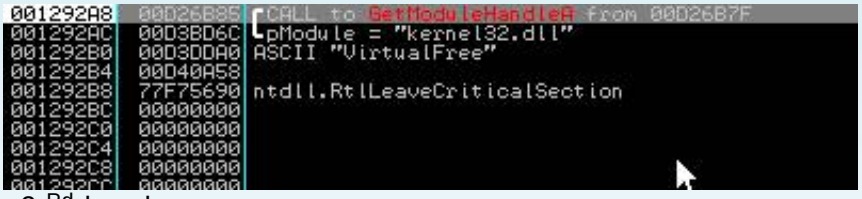


_Then, BC CreateMutexA. Now put on BP Hardware ** ** execution on GetModuleHandleA and press F9:

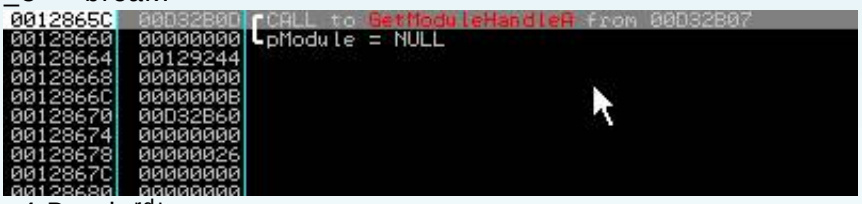
_ 1 st break:



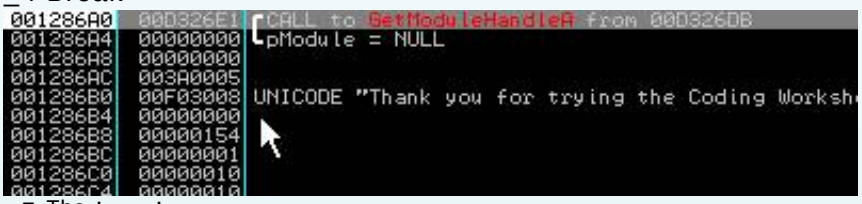
_ 2 nd break:



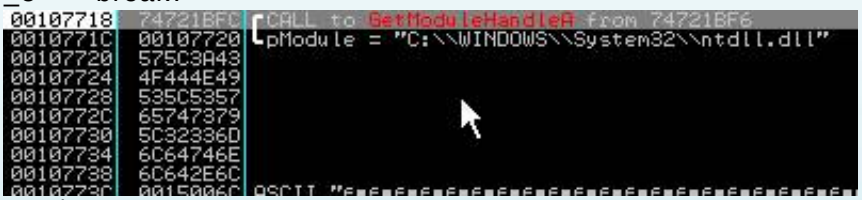
_3 Rd break:



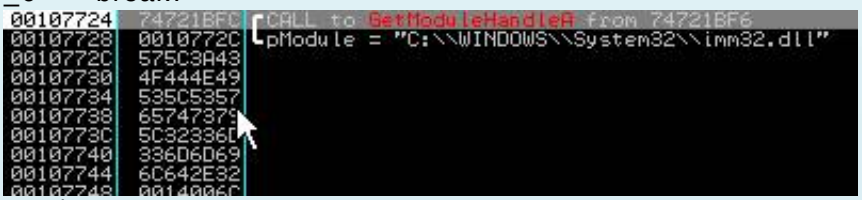
_4 Break rd:



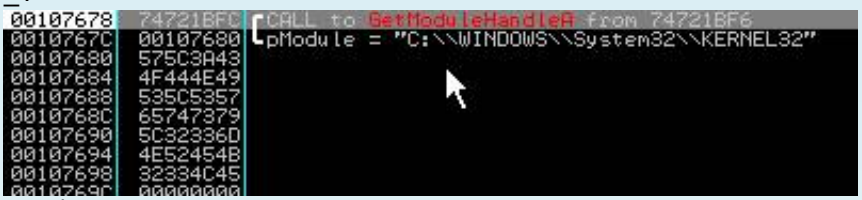
_5 The break:



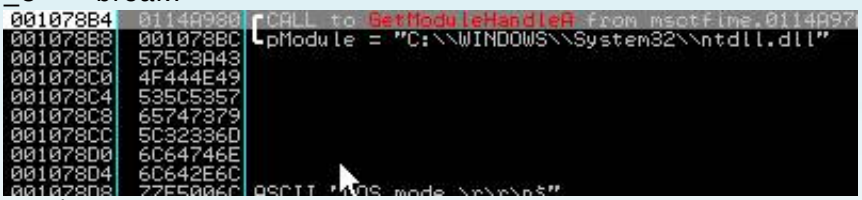
_6 The break:



_7 The



_8 The break:

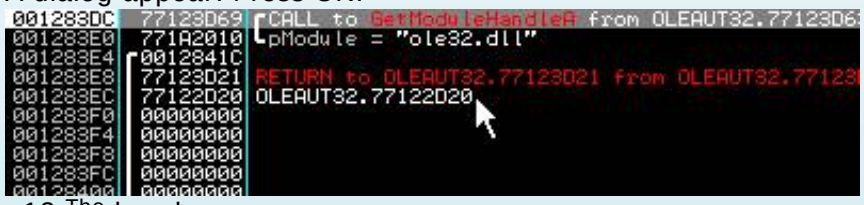


_9 The break:

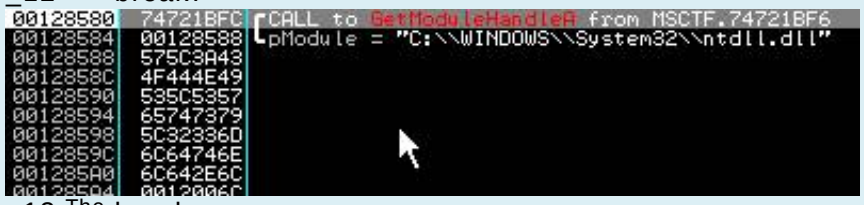
_10 The break:

_11 The break:

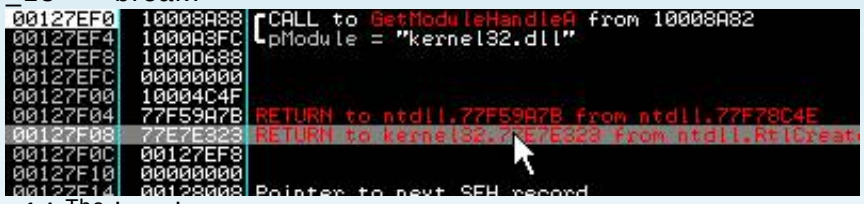
A dialog appear. Press OK:



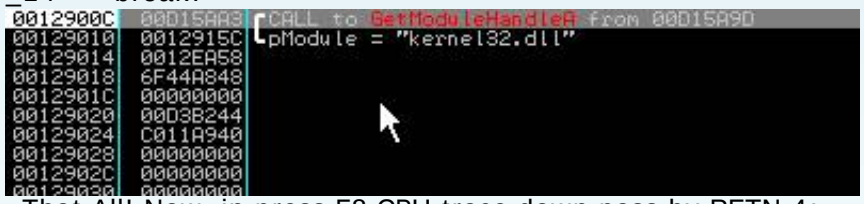
_12 The break:



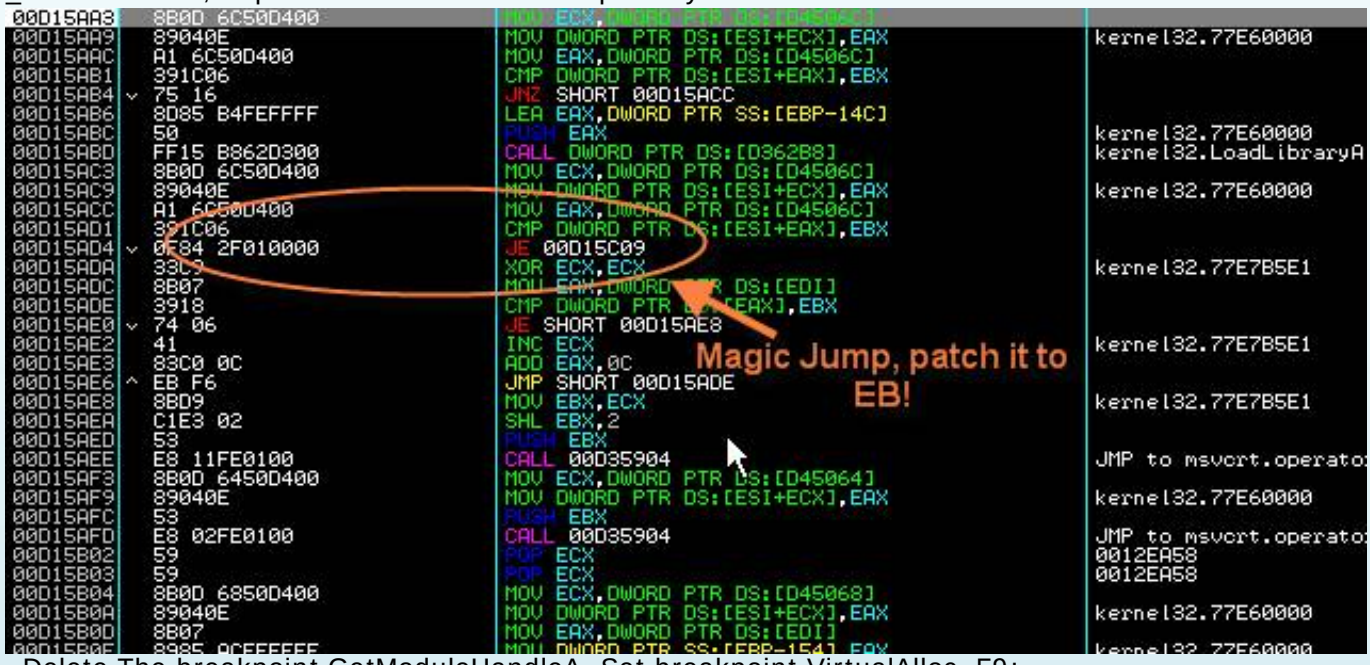
_13 The break:



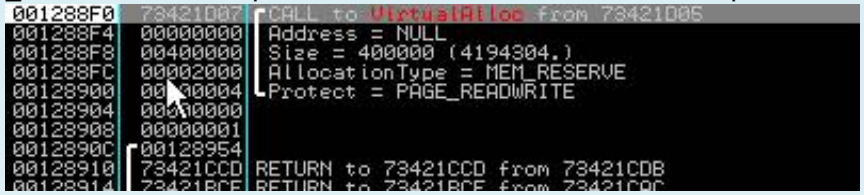
_14 The break:

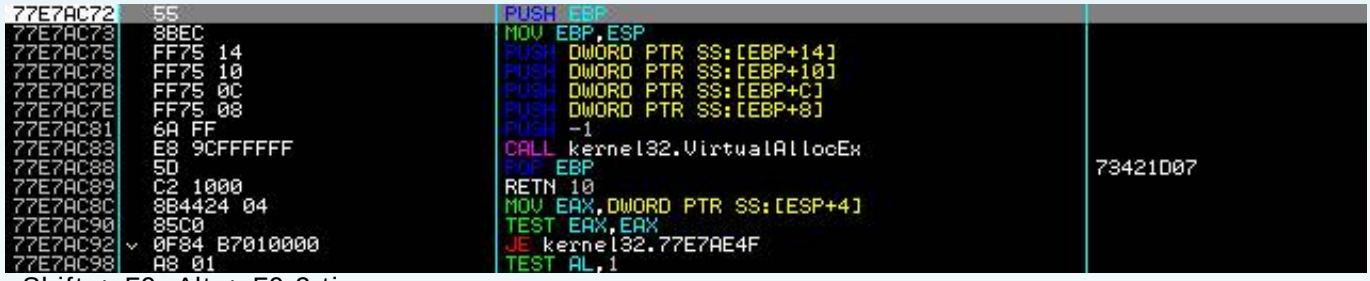


_That All! Now, in press F8 CPU trace down pass by RETN 4:

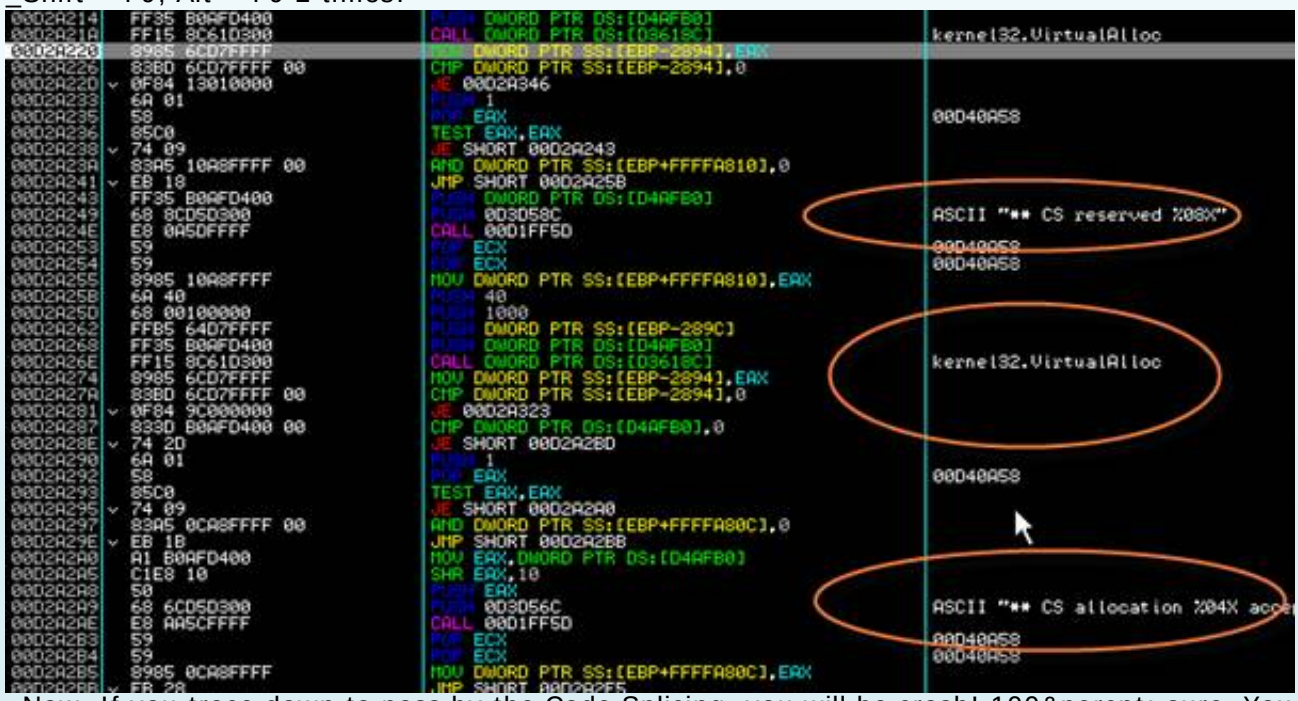


_Delete The breakpoint GetModuleHandleA. Set breakpoint VirtualAlloc, F9:



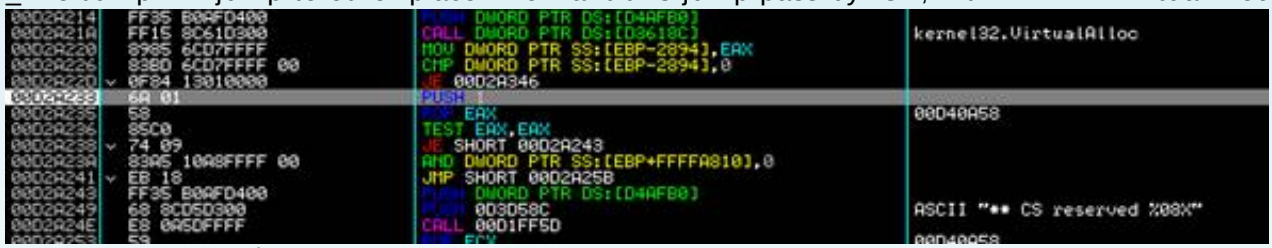


_Shift + F9, Alt + F9 2 times:



_Now, If you trace down to pass by the Code Splicing, you will be crash! 100% sure. You must follow my method. Now with trace down F8 to:

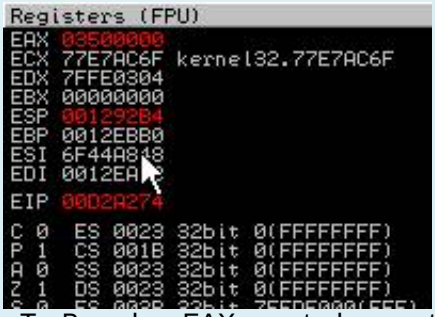
_The Jump will jump to other place. We want this jump pass by. OK, Alt + F1: HD VirtualAlloc:



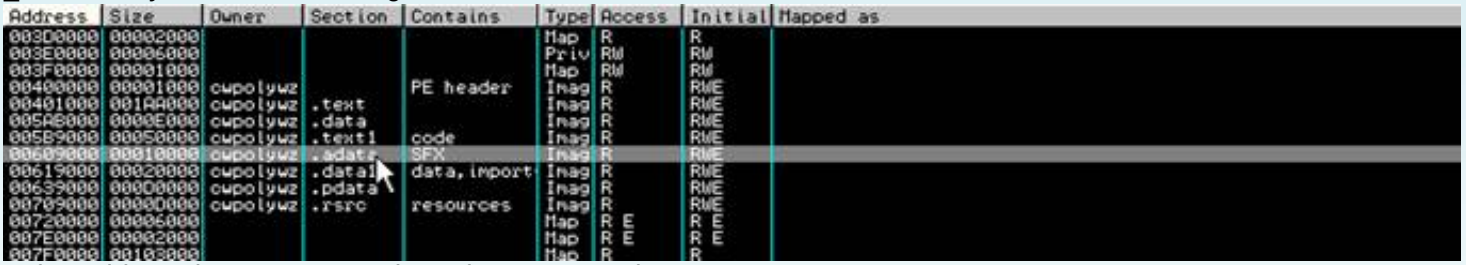
_By Pass OK. Continue to trace:

00D2A26E FF15 8C61D300 CALL DWORD PTR DS: [D3618C]; kernel32.VirtualAlloc

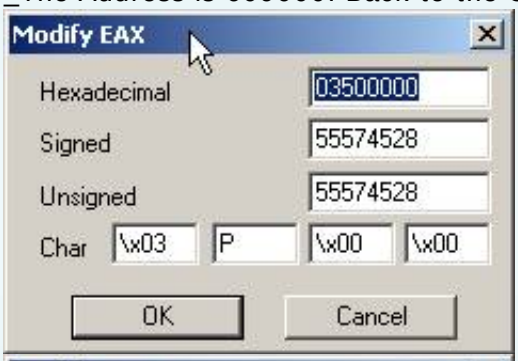
IN _See FPU Register:



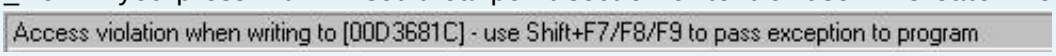
_To Pass by, EAX must change the address of the sections. ADATA. Alt + M:

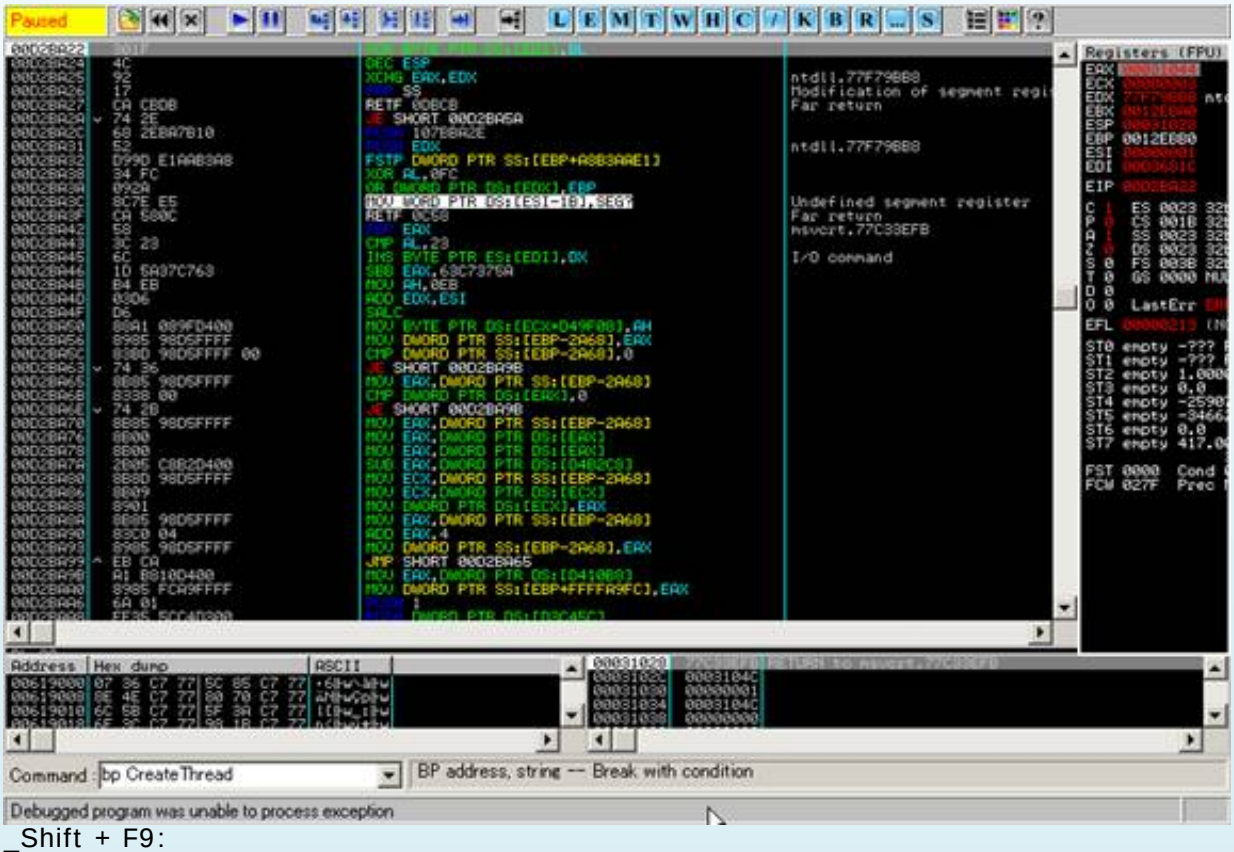


_The Address is 609000. Back to the CPU. Set it:



_Now If you press Alt + M set breakpoint section of text or use BP CreateThread. You will see:





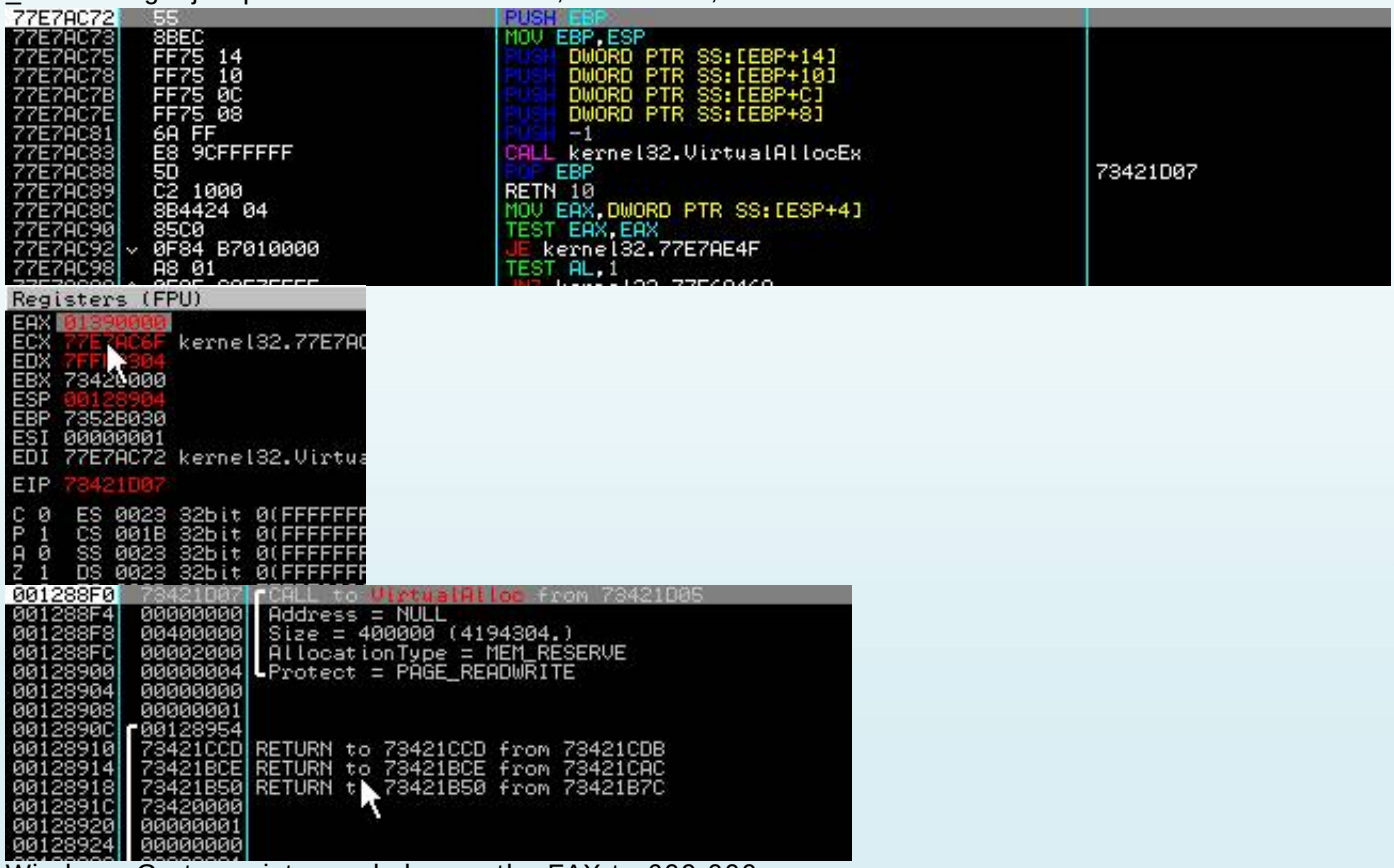
_Shift + F9:

_Why Crash? Because OllyDBG stack overflow in!
_Too Bad. It's crash. Hix, please Ctrl + F2 restart all task and do it again. You must repeat all step and stop when you set HE GetModuleHandleA. If you do not like press Shift + F9 many times. You can use this script:

```
/ * Magic Jump Finder Scripts * /

var GetModuleHandleA

GPA "GetModuleHandleA", "kernel32.dll"
mov GetModuleHandleA, $ RESULT

bphws GetModuleHandleA, "x"
repeat:
esto
rtu
find eip, # 0F84 ??????????????????? 74 ?????????? EB? #
Cmp $ result, 0
je repeat
bphwc GetModuleHandleA
ret
```

_After Shift + F9 or use script to find magic jump, you still here:

_Patch Magic jump. Then he Virtual Alloc, Shift + F9, Alt + F9 one time!



Window _Go to register and change the EAX to 609,000.

```
Registers (FPU)
EAX 00609000 cwpolywz.<ModuleEntryPoint>
ECX 77F59A7B ntdll.77F59A7B
EDX 00001800
EBX 73420000
ESP 001286F0
EBP 7352B8C0
ESI 00000001
EDI 77E7AC72 kernel32.VirtualAlloc

EIP 77E7AC72 kernel32.VirtualAlloc

C 0  ES 0023 32bit 0(FFFFFFFF)
P 1  CS 001B 32bit 0(FFFFFFFF)
A 0  SS 0023 32bit 0(FFFFFFFF)
Z 1  DS 0023 32bit 0(FFFFFFFF)
S 0  FS 003B 32bit 7FFDE000(FFF)
T 0  GS 0000 NULL
D 0
O 0  LastErr ERROR_PROC_NOT_FOUND (0000007F)

EFL 00000246 (NO,NB,E,BE,NS,PE,GE,LE)

ST0 empty -??? FFFF 00000000 FF010101
ST1 empty -??? FFFF 00000000 FF010101
ST2 empty -??? FFFF 00000000 00000000
ST3 empty -??? FFFF 00000000 00000000
ST4 empty -NAN FFFF FF010101 FF010101
ST5 empty -??? FFFF 00000000 00000000
ST6 empty -??? FFFF 00000000 00000000
ST7 empty 417.00000000000000000
               3 2 1 0      E S P U O Z D I
FST 0000  Cond 0 0 0 0  Err 0 0 0 0 0 0 0 0  (GT)
FCW 037F  Prec NEAR,64  Mask    1 1 1 1 1 1
```

_Hd VirtualAlloc. BP CreateThread. Shift + F9. Oh, yeahhhhhhhhh, not crash!

```
77E7BE53   55              PUSH EBP
77E7BE54   8BEC            MOV EBP,ESP
77E7BE56   FF75 1C         PUSH DWORD PTR SS:[EBP+1C]      cwpolywz.005E1B9
77E7BE59   FF75 18         PUSH DWORD PTR SS:[EBP+18]
77E7BE5C   FF75 14         PUSH DWORD PTR SS:[EBP+14]
77E7BE5F   FF75 10         PUSH DWORD PTR SS:[EBP+10]
77E7BE62   FF75 0C         PUSH DWORD PTR SS:[EBP+C]
77E7BE65   FF75 08         PUSH DWORD PTR SS:[EBP+8]
77E7BE68   6A FF           PUSH -1
77E7BE6A   E8 30FEFFFF     CALL kernel32.CreateRemoteThread
77E7BE6F   5D              POP EBP                         00D1BFF9
77E7BE70   C2 1800         RETN 18

0012F6D4   00D1BFF9  CALL to CreateThread from 00D1BFF8
0012F6D8   00000000  pSecurity = NULL
0012F6DC   00000000  StackSize = 0
0012F6E0   00D1C8B9  ThreadFunction = 00D1C8B9
0012F6E4   00000000  pThreadParm = NULL
0012F6E8   00000000  CreationFlags = 0
0012F6EC   0012F6F8  pThreadId = 0012F6F8
0012F6F0   00000004
0012F6F4   00621098  cwpolywz.00621098
0012F6F8   00000001
0012F6FC   0012F714
0012F700   00D30358  RETURN to 00D30358 from 00D1BF51
0012F704   00000000
0012F708   00000004
```

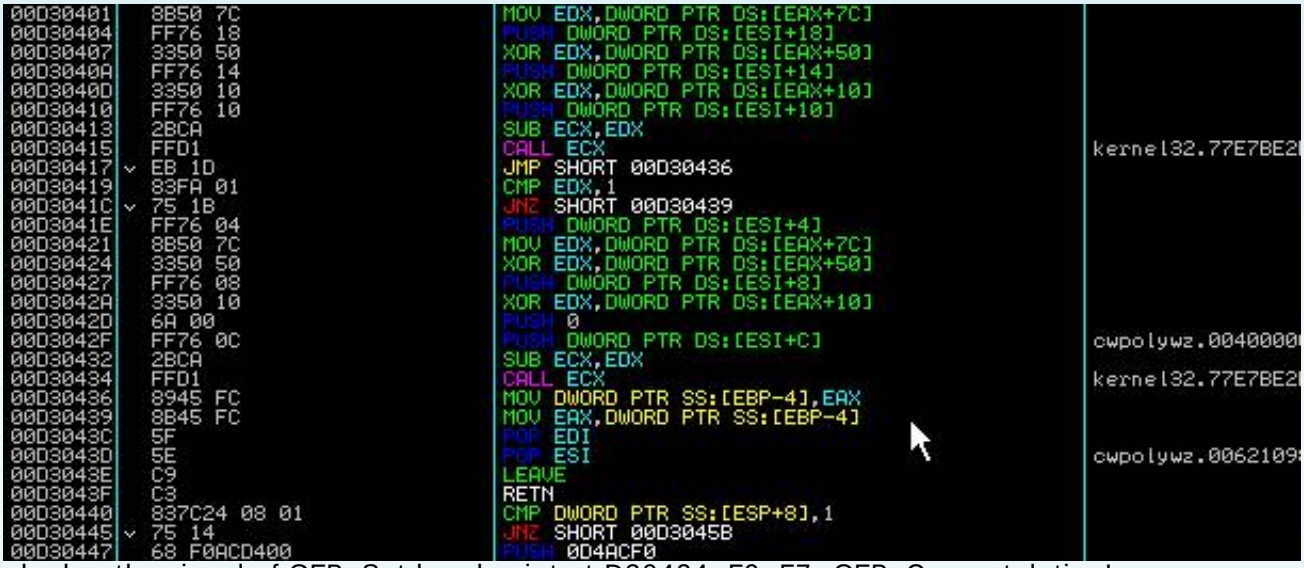
_Ctrl + F9, F8:

```
00D1BFF9   5F              POP EDI
00D1BFFA   5E              POP ESI
00D1BFFB   C9              LEAVE
00D1BFFC   C3              RETN
00D1BFFD   55              PUSH EBP
00D1BFFE   8BEC            MOV EBP,ESP
00D1C000   81EC 28010000   SUB ESP,128
00D1C006   56              PUSH ESI
00D1C007   57              PUSH EDI
00D1C008   BE E4BDD300     MOV ESI,0D3BDE4                 ASCII "MainClass"
00D1C00D   8DBD D8FEFFFF   LEA EDI,DWORD PTR SS:[EBP-128]
```

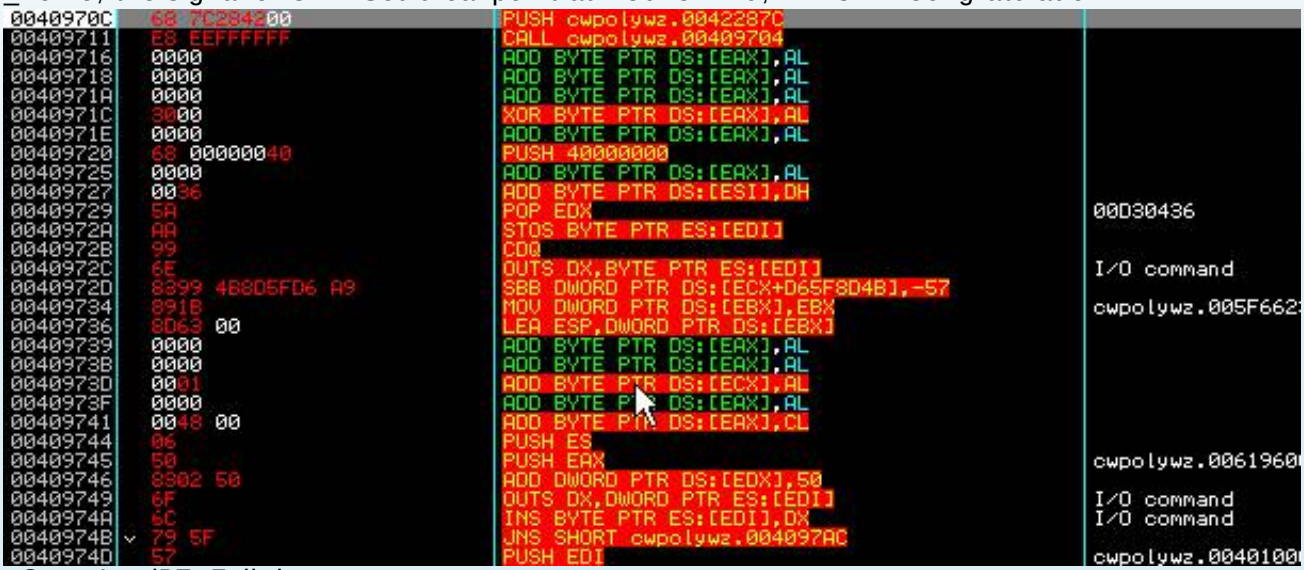
_Ctrl + F9, F8 again:

```
00D30358   59              POP ECX                         kernel32.77E7BE2
00D30359   BF 580AD400     MOV EDI,0D40A58
00D3035E   8BCF            MOV ECX,EDI
00D30360   E8 9B7DFDFF     CALL 00D08100
00D30365   84C0            TEST AL,AL
00D30367   75 09           JNZ SHORT 00D30372
00D30369   6A 01           PUSH 1
00D3036B   8BCF            MOV ECX,EDI
00D3036D   E8 77D3FDFF     CALL 00D0D6E9
```

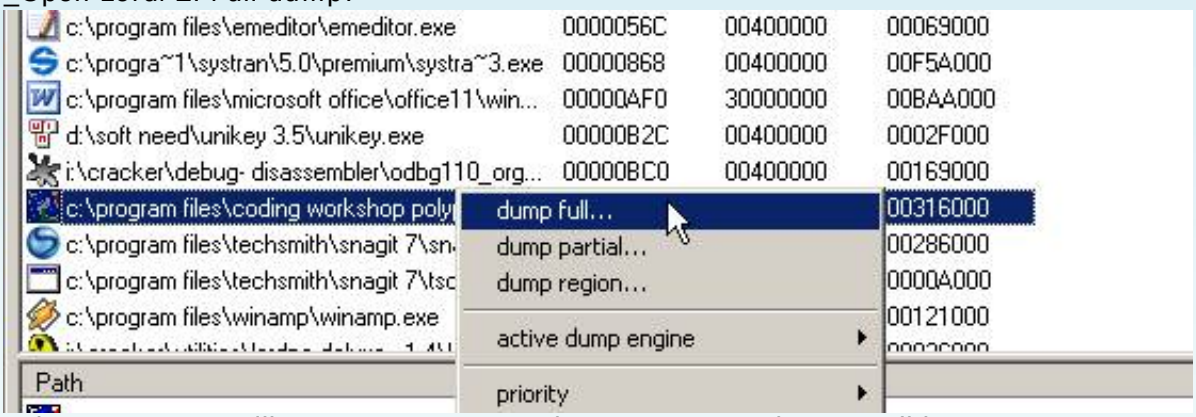
_Scroll Down:



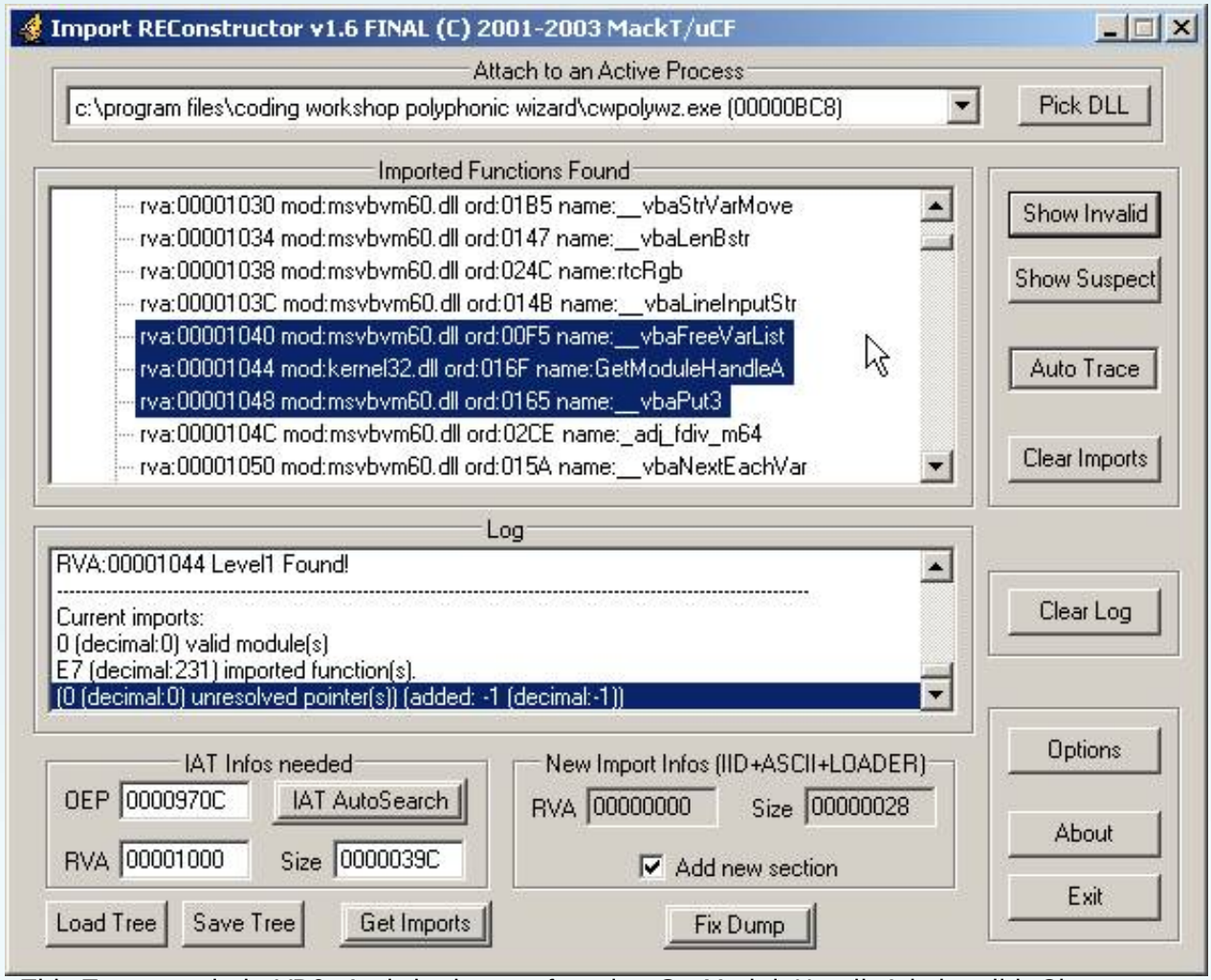
_he he, the signal of OEP. Set breakpoint at D30434. F9, F7: OEP. Congratulation!



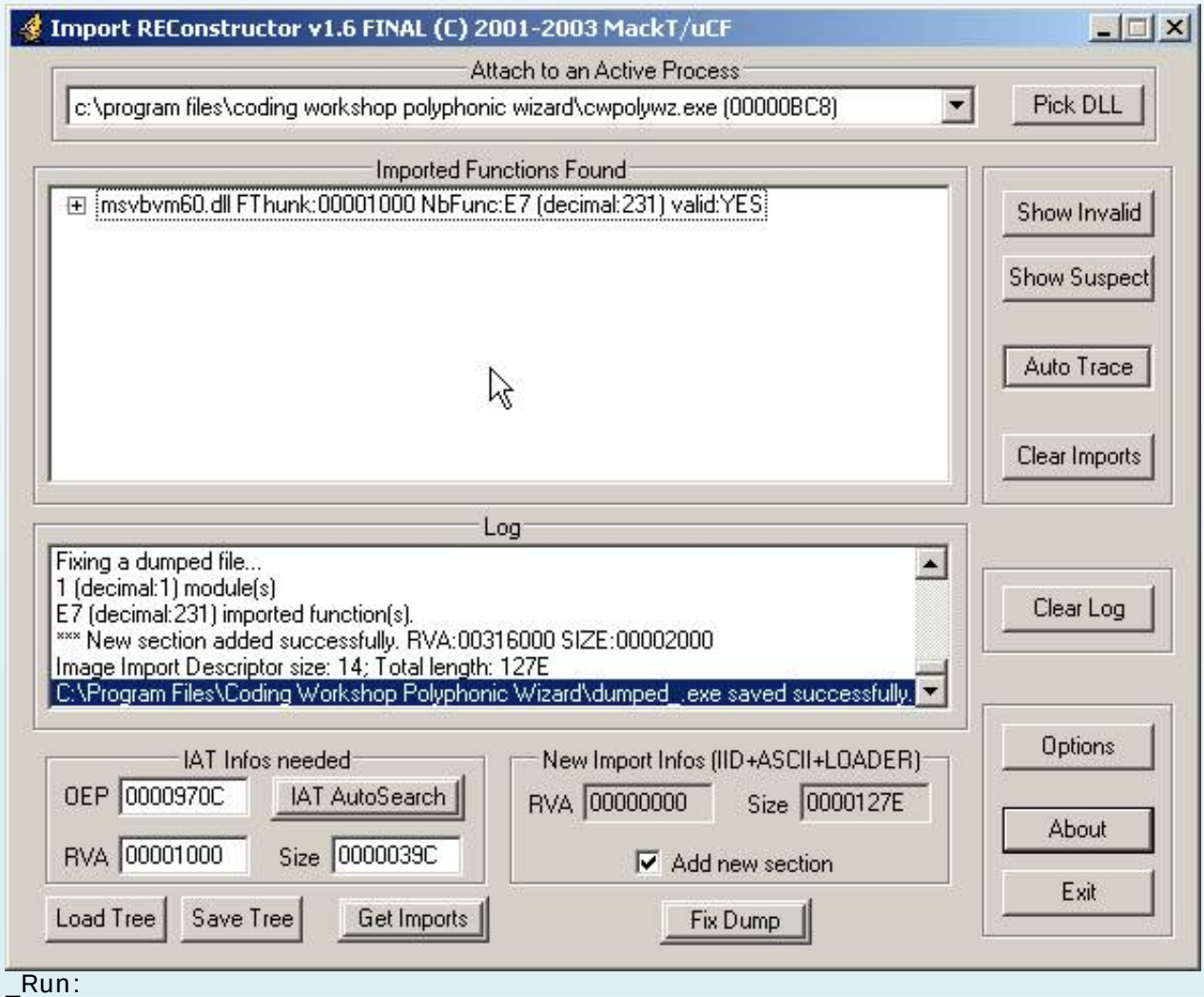
_Open LordPE. Full dump:



_Fire Up Imprec, Fill OEP, IAT auto search. Get Import, Show Invalid:



_This Target code in VB6. And the import function GetModuleHandleA is invalid. Change to __vbaEnd. Cuts thunks.

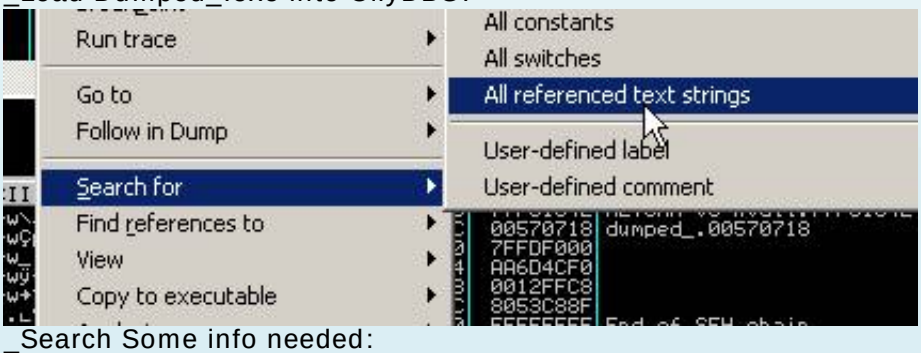

Import REConstructor v1.6 FINAL (C) 2001-2003 MackT/uCF
Attach to an Active Process
c:\program files\coding workshop polyphonic wizard\cwpolywz.exe (00000BC8)
Pick DLL
Imported Functions Found
msvbvm60.dll FThunk:00001000 NbFunc:E7 (decimal:231) valid:YES
Show Invalid
Show Suspect
Auto Trace
Clear Imports
Log
Fixing a dumped file...
1 (decimal:1) module(s)
E7 (decimal:231) imported function(s).
*** New section added successfully. RVA:00316000 SIZE:00002000
Image Import Descriptor size: 14; Total length: 127E
C:\Program Files\Coding Workshop Polyphonic Wizard\dumped_.exe saved successfully.
Clear Log
IAT Infos needed
OEP 0000970C
IAT AutoSearch
RVA 00001000
Size 0000039C
New Import Infos (IID+ASCII+LOADER)
RVA 00000000
Size 0000127E
Add new section
Options
About
Exit
Load Tree
Save Tree
Get Imports
Fix Dump

_Run:

_Unpacked Successful!

III. Cracking

Load Dumped.exe into OllyDBG:



_Search Some info needed:

Address	Disassembly	Text string
004F3290	PUSH dumped_.0043BE7C	UNICODE "Options"
004F34B7	PUSH dumped_.0043BBC4	UNICODE "Open"
004F350D	MOV DWORD PTR SS:[EBP-40],dumped_.0043B	UNICODE "Start preview"
004F3563	MOV DWORD PTR SS:[EBP-40],dumped_.0043B	UNICODE "Start preview"
004F396E	MOV DWORD PTR SS:[EBP-DC],dumped_.0043C	UNICODE "7601 single developer license"
004F3A37	MOV EDX,dumped_.0043C190	UNICODE "1 September 2005"
004F3F70	MOV EDX,dumped_.0043C7A0	UNICODE "Coding Workshop Polyphonic Wizard v4"
004F3FEA	PUSH dumped_.0043C80C	UNICODE " : Development Copy"
004F406F	PUSH dumped_.0043C838	UNICODE "Version: "
004F416C	PUSH dumped_.0043C850	UNICODE "Build date: "
004F41F7	PUSH dumped_.0043C870	UNICODE "Coding Workshop"
004F424D	PUSH dumped_.0043C894	UNICODE "Polyphonic Wizard"
004F456D	PUSH dumped_.0043C8DC	UNICODE "TM"
004F45C3	PUSH dumped_.0043C8E8	UNICODE "EXPIRED"
004F47E7	PUSH dumped_.0043C948	UNICODE "OK"
004F48D5	PUSH dumped_.0043C954	UNICODE "Registered Software "
004F4988	PUSH dumped_.0043C9B0	UNICODE "USERNAME"
004F49AB	PUSH dumped_.0043C984	UNICODE "Registered copy - "
004F4B4D	MOV DWORD PTR SS:[EBP-DC],dumped_.0043C	UNICODE "Status: Registered"
004F4D02	PUSH dumped_.0043C9F4	UNICODE "This software has not been registered (trial remaining:"
004F4D2E	PUSH dumped_.0043CA68	UNICODE " days)."
004F4E07	MOV DWORD PTR SS:[EBP-EC],dumped_.0043C	UNICODE "Trial version in use for "
004F4E42	MOV DWORD PTR SS:[EBP-FC],dumped_.0043C	UNICODE " day(s)."
004F4F11	MOV DWORD PTR SS:[EBP-DC],dumped_.0043C	UNICODE "Status: Trial Copy"
004F4FFF	PUSH dumped_.0043CAF4	ASCII 03,"«↔"

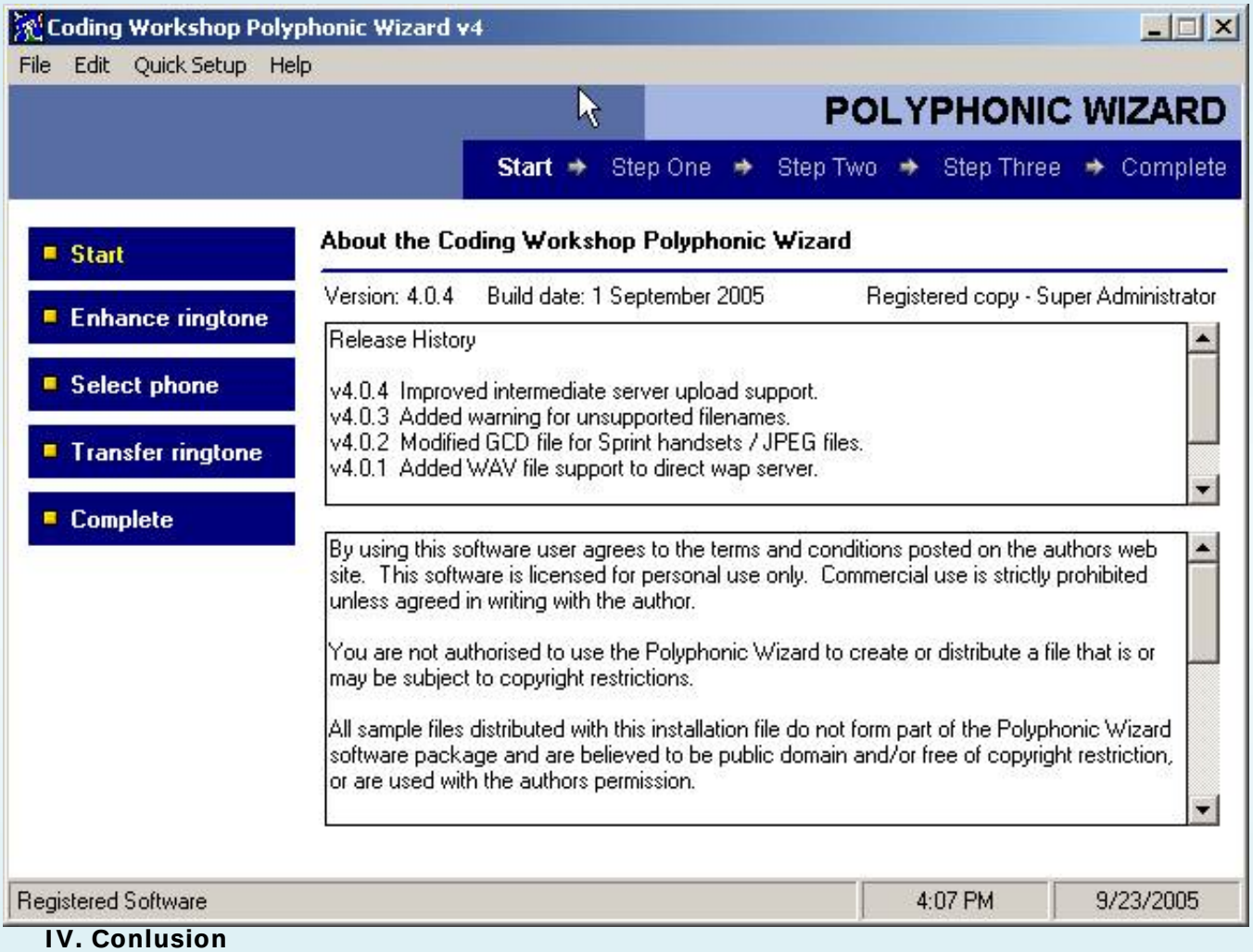
_Set A breakpoint at function __vbastrcmp. Press F9:

```
004F47D6   D7                  XLAT BYTE PTR DS:[EBX+AL]
004F47D7   00E8                ADD AL,CH
004F47D9   6B4D F1 FF          IMUL ECX,DWORD PTR SS:[EBP-F],-1
004F47DD   C745 FC 28000000    MOV DWORD PTR SS:[EBP-4],28
004F47E4   FF75 D8             PUSH DWORD PTR SS:[EBP-28]
004F47E7   68 48C94300         PUSH dumped_.0043C948                    UNICODE "OK"
004F47EC   E8 A34CF1FF         CALL <JMP.&msvbvm60.__vbaStrCmp>
004F47F1   85C0                TEST EAX,EAX
004F47F3   0F85 FC030000       JNZ dumped_.004F4BF5
004F47F9   C745 FC 29000000    MOV DWORD PTR SS:[EBP-4],29
004F4800   90                  NOP
004F4801   90                  NOP
004F4802   90                  NOP
004F4803   90                  NOP
004F4804   90                  NOP
004F4805   E8 3E4DF1FF         CALL <JMP.&msvbvm60.__vbaSetSystemError>
004F480A   C745 FC 2A000000    MOV DWORD PTR SS:[EBP-4],2A
004F4811   68 E0BD4300         PUSH dumped_.0043BDE0
```

_Change JNZ to JZ.

```
004F47D6   D7                  XLAT BYTE PTR DS:[EBX+AL]
004F47D7   00E8                ADD AL,CH
004F47D9   6B4D F1 FF          IMUL ECX,DWORD PTR SS:[EBP-F],-1
004F47DD   C745 FC 28000000    MOV DWORD PTR SS:[EBP-4],28
004F47E4   FF75 D8             PUSH DWORD PTR SS:[EBP-28]
004F47E7   68 48C94300         PUSH dumped_.0043C948                    UNICODE "OK"
004F47EC   E8 A34CF1FF         CALL <JMP.&msvbvm60.__vbaStrCmp>
004F47F1   85C0                TEST EAX,EAX
004F47F3   0F84 FC030000       JE dumped_.004F4BF5
004F47F9   C745 FC 29000000    MOV DWORD PTR SS:[EBP-4],29
004F4800   90                  NOP
004F4801   90                  NOP
004F4802   90                  NOP
004F4803   90                  NOP
004F4804   90                  NOP
004F4805   E8 3E4DF1FF         CALL <JMP.&msvbvm60.__vbaSetSystemError>
004F480A   C745 FC 2A000000    MOV DWORD PTR SS:[EBP-4],2A
```

_Done:



IV. Conlusion

Bye!

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, Madman_Hercules, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx OllyDBG of the authors.

To be continued ...

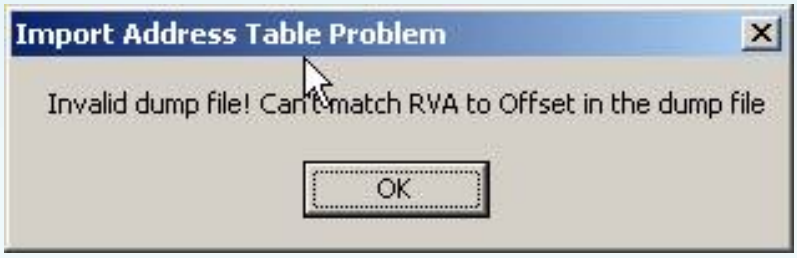
Written by **hacnho** (tutorial date: VietNam 23/09/2005)

Armadillo collect sand-stone

Picture Ripper 3: Armadillo 4.xx-Import + Nanomites Complete elimination tut!

I. Intro:

_Salut Tout le monde, now in the Net, I found some software was packed with options and Import Code Splicing elimination. And we can not unpack because the import was make in memory, I call this IAT is: Virtual IAT. Armadillo make Memory in the IAT and software to redirect. So, we can not use this because when IAT fix dump our dumped file, imprec show a dialog:



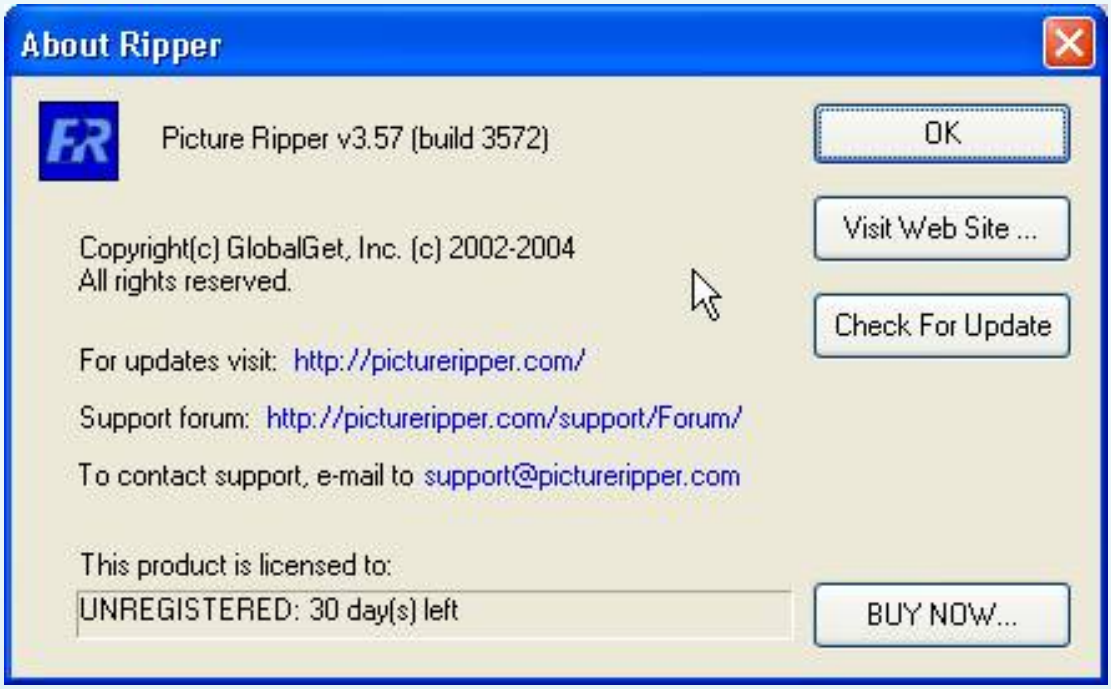
_It's A blessing when Admirallo make a very very good tools is: ArmaInline (the newest version is 0.6). ArmaInline appear before, I was found just one method redirect the virtual IAT by **Ricardo Narvaja** in the tuts *(203-ARMADILLO CON DESTRUCCION DE TABLA parte 1 R 208-ARMADILLO CON DESTRUCCION DE TABLA Y FINAL PARTE 6)* with the target HyperSnap-DX.v5.60! But think in this method only for pro and not for beginner!
_In Exetools Forum, I was published an article called: Code Splicing + IAT elimination. Sorry my blunder! And now, I complete a written tut for this options. I'll do my best to make this tut become very easy for every body! Ok, the end of Intro. Go go go!

II. Tools

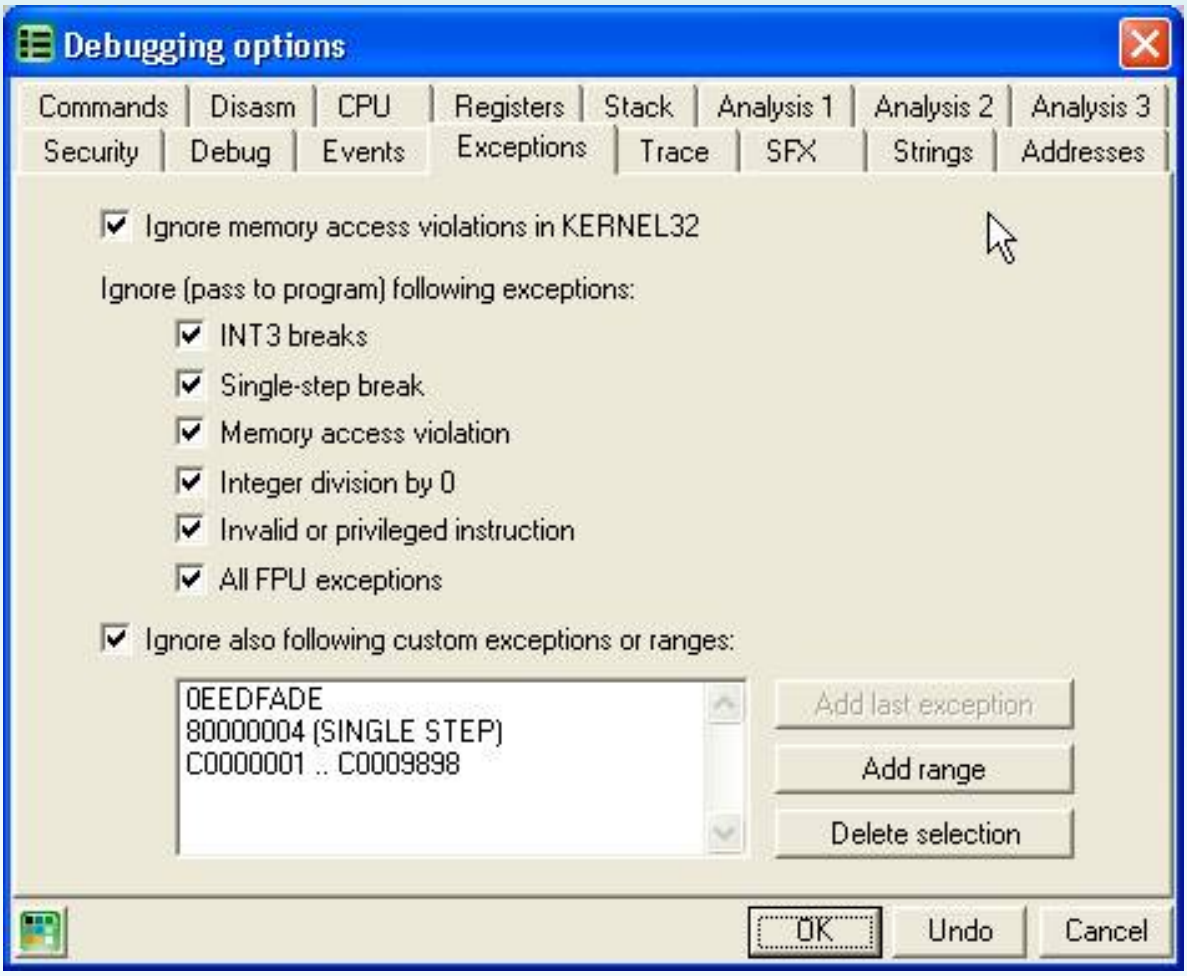
1.OllyDBG - The best config debugger for ArmMUP by hacnho.
2.LordPE 1.4 Deluxe
3.Import REConstructor 1.6 Final
4.ArmInline 0.71

III. Unpacking

Target: Picture Ripper 3:57 build 3572
ARM Debug 4.xx-Blocker IAT elimination + + + Anti Breakpoint Nanomites



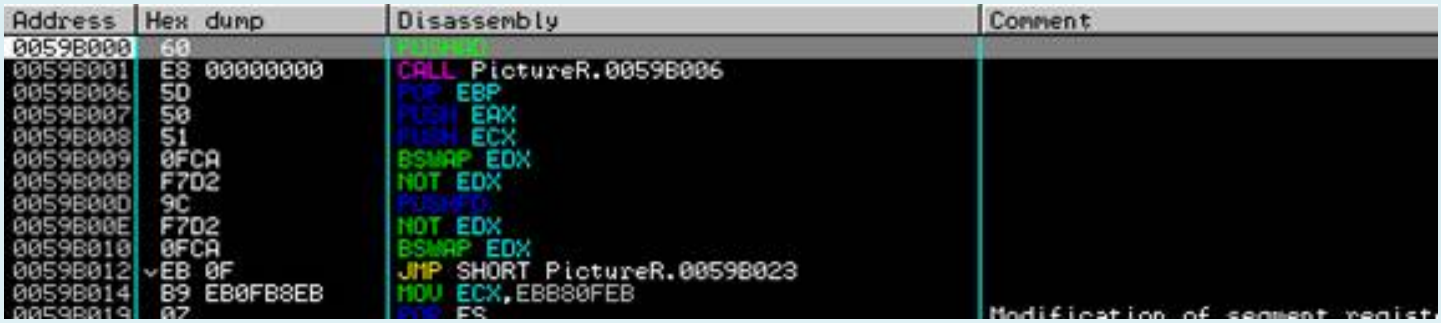
_Setting OllyDBG:



_Detect Target:

_

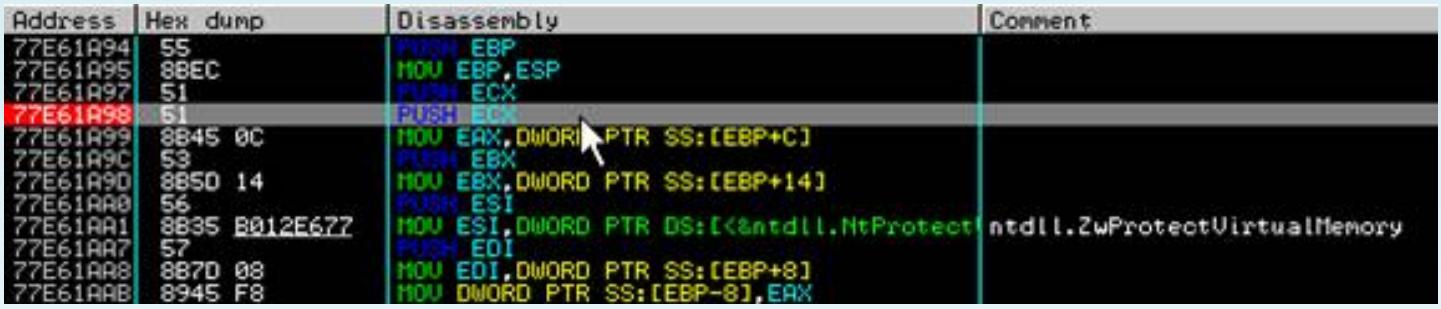
_Ok, Load into OllyDBG target:



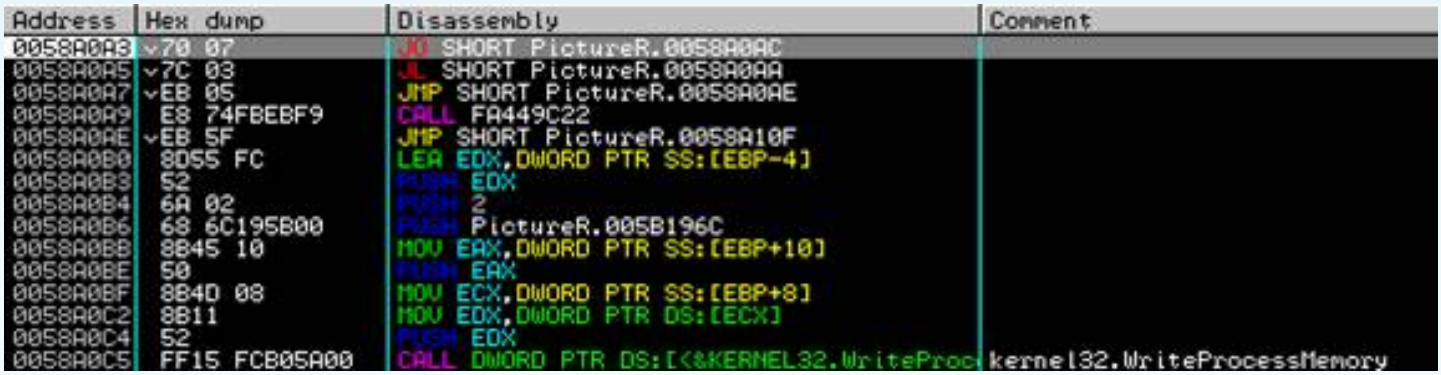
_bp WriteProcessMemory, Shift + F9:

_It's Crash. Oh, I think this target anti-bp! Ok. We must pass by the debug option by hand blocker. Ctrl + F2 restart target. Ctrl + G: WriteProcessMemory:

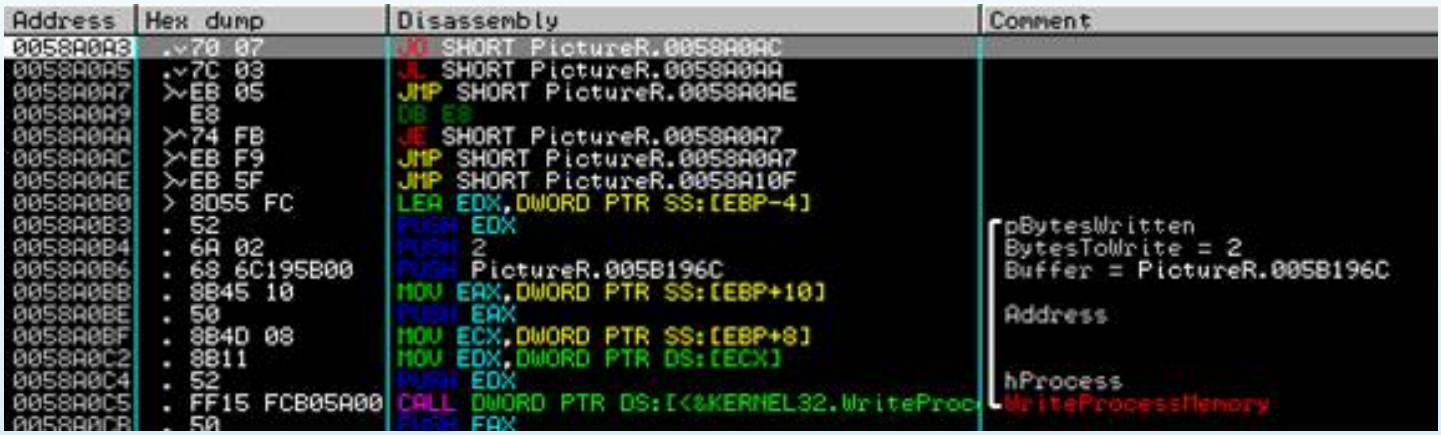
F2 _Press set a breakpoint at:



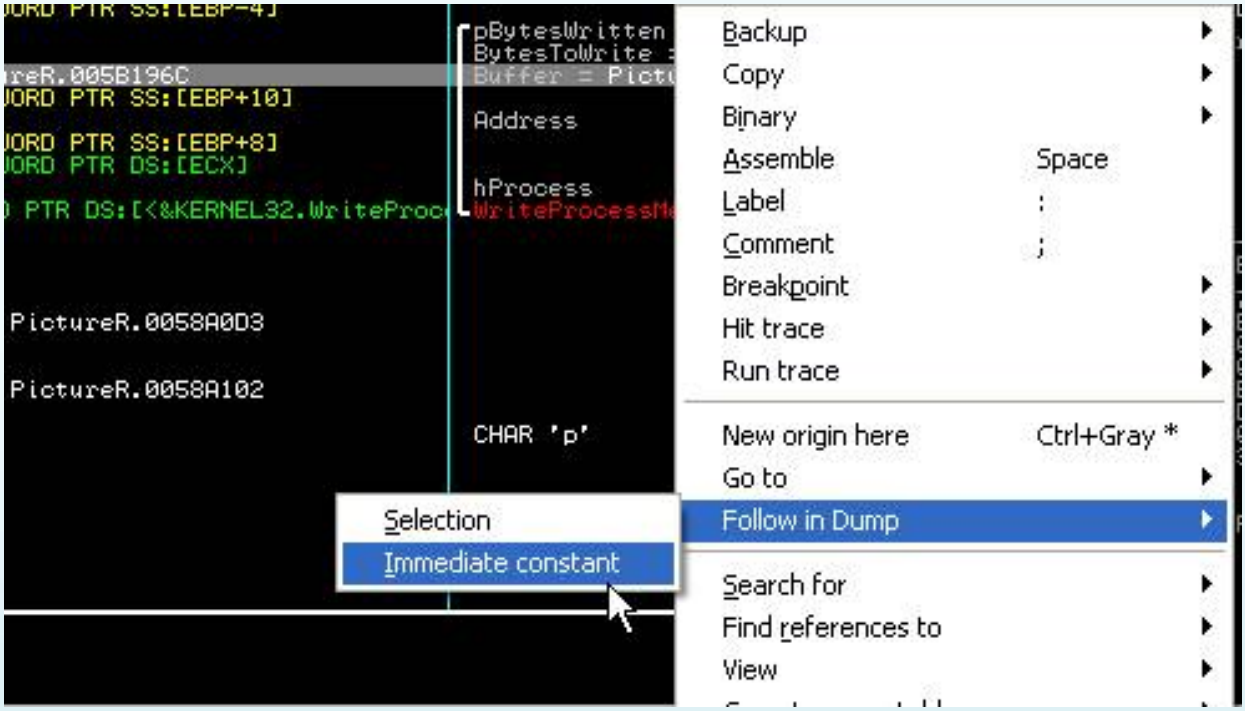
_Shift + F9, yeap. J OllyDBG break. Now, press Alt + F9:



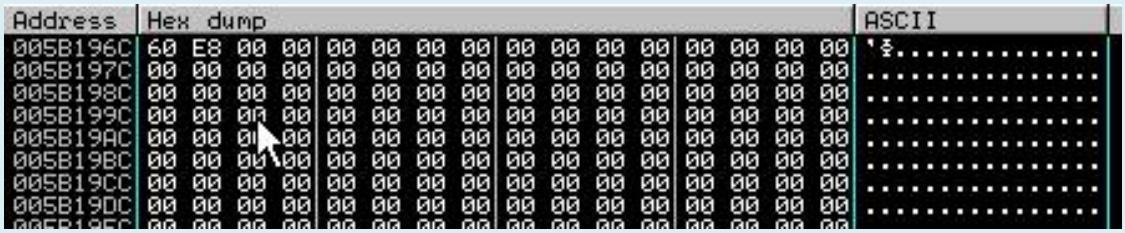
_Nothing Interest. Ok, Ctrl + A:



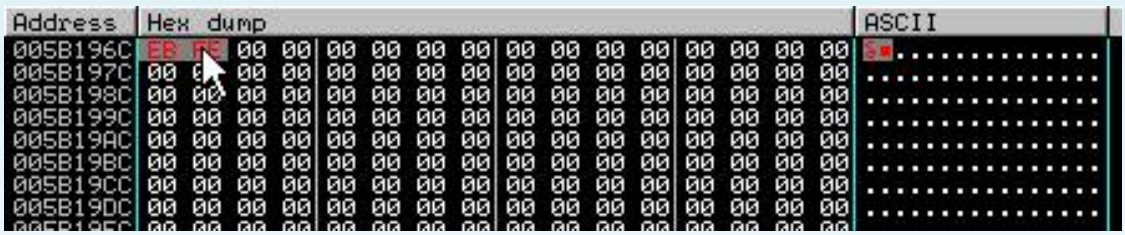
_Yeah! Ok, then right click at the buffer and follow in dump> Inmmediate Constant:



_Look Dump in Windows:

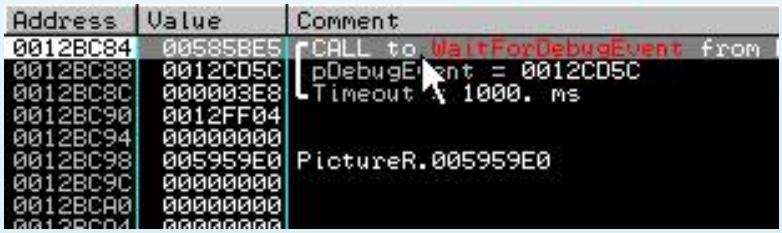


_Next, Ctrt + E: 60E8 to change EBFE:

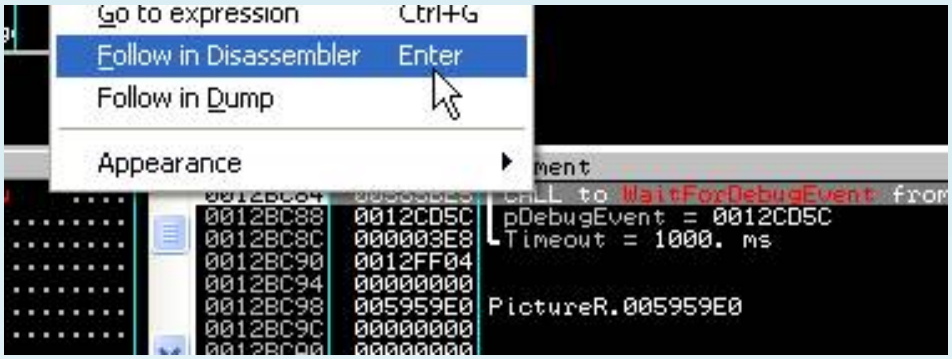


_Following, You set a breakpoint at API WaitForDebugEvent! Alt + F1: BP WaitForDebugEvent (Remember delete the breakpoint at Push ECX)! Attention, set breakpoint before WaitForDebugEvent, you must press F9 one time! If no, the child will be suppend:

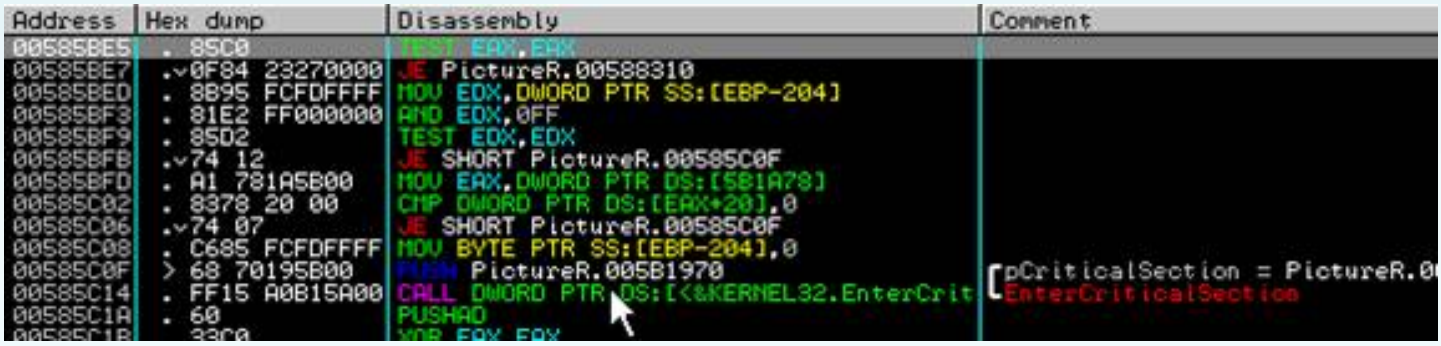
_Shift + F9, look in the Stack Window:



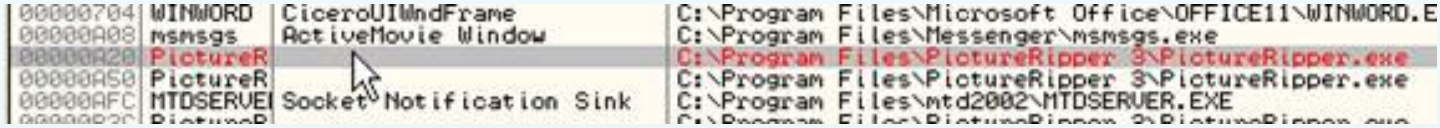
Disassembler _Follow in simple or press Ctrl + F9, F8



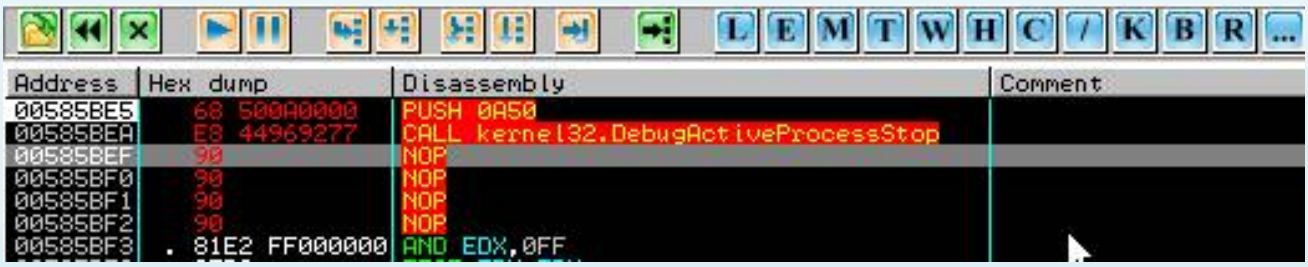
_You Still here:



_Look Attach the Window:

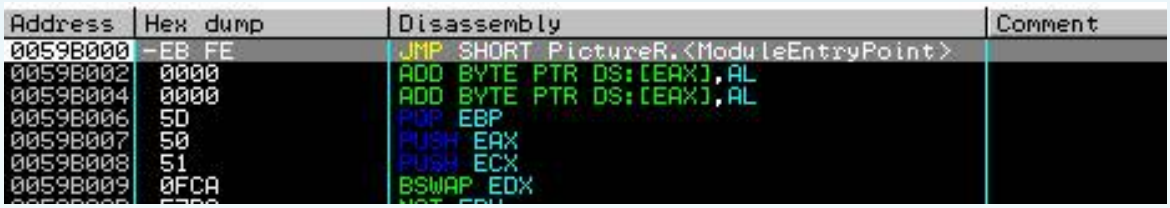


_Close Attach the Window, to patch:



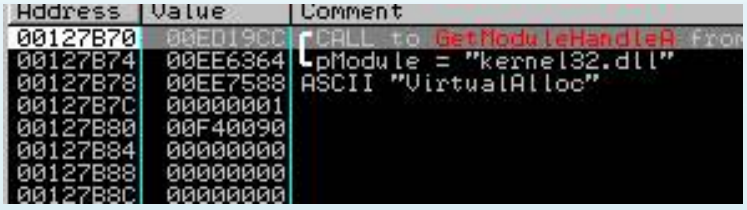
_Press F8, trace down:

_Done! By Debug pass blocker successful! Continued, Fire Up a OllyDBG, Attach the child, F9, F12:



_Change EBFE to 60E8:

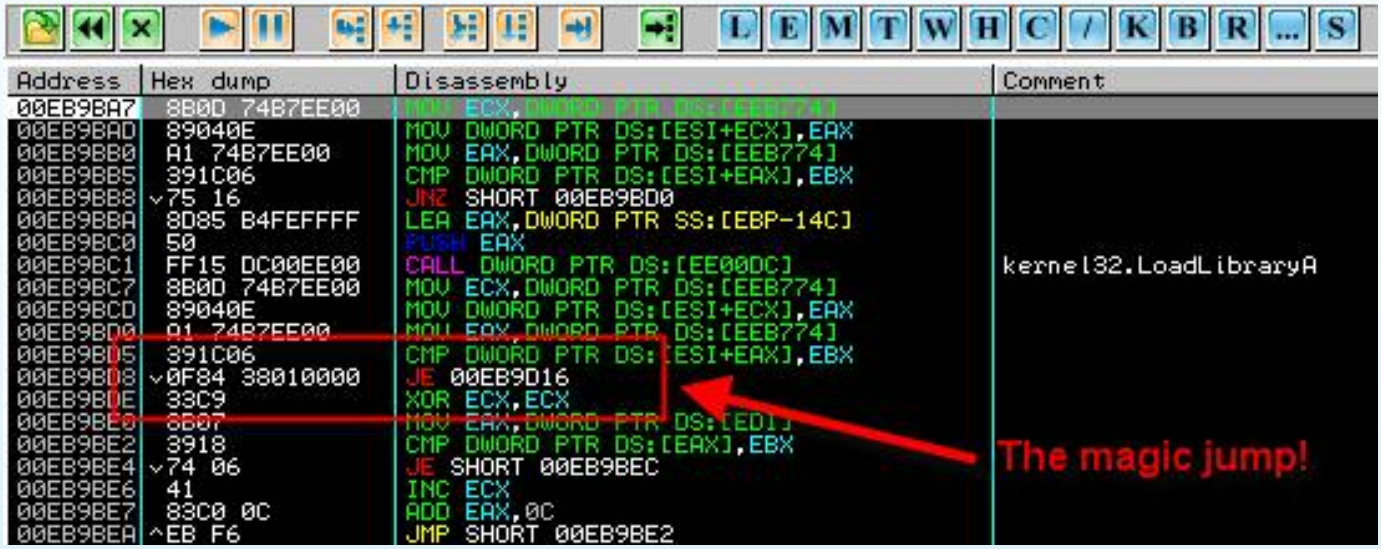
_The Next step is magic patch jump and find OEP. Ok, now, press Alt + F1: He GetModuleHandleA, Shift + F9 first time:



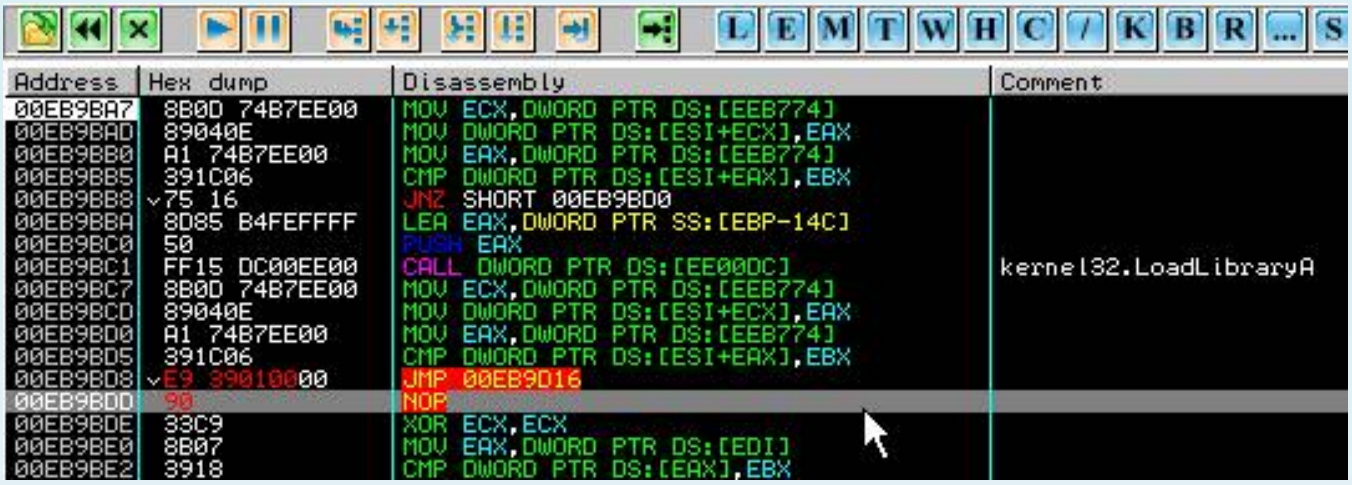
_ 2 nd:

_3 Rd:

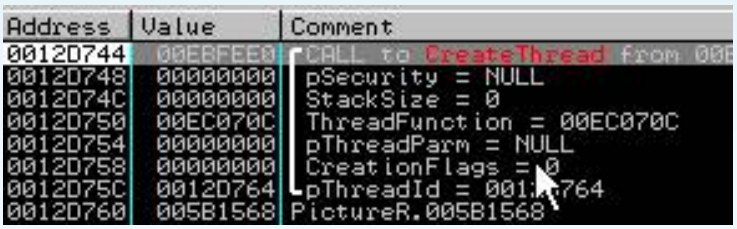
_Trace Down F8 with the Return and you here at:



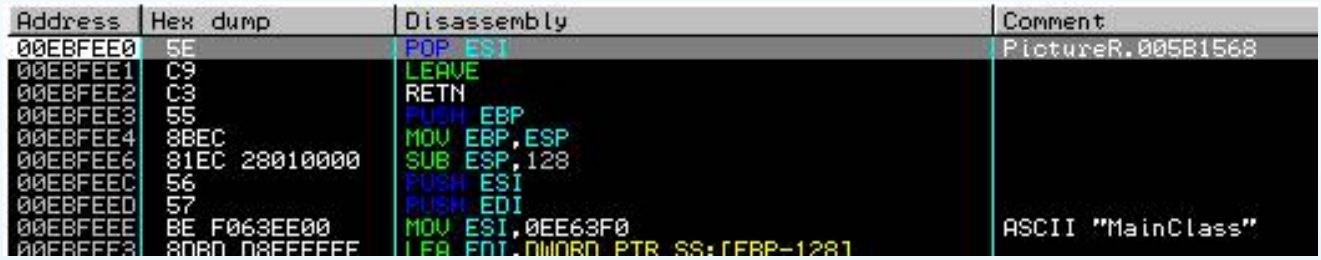
_Change It to EB:



_Now We find J OEP. Hd GetModuleHandleA, BP CreateThread, Shift + F9:

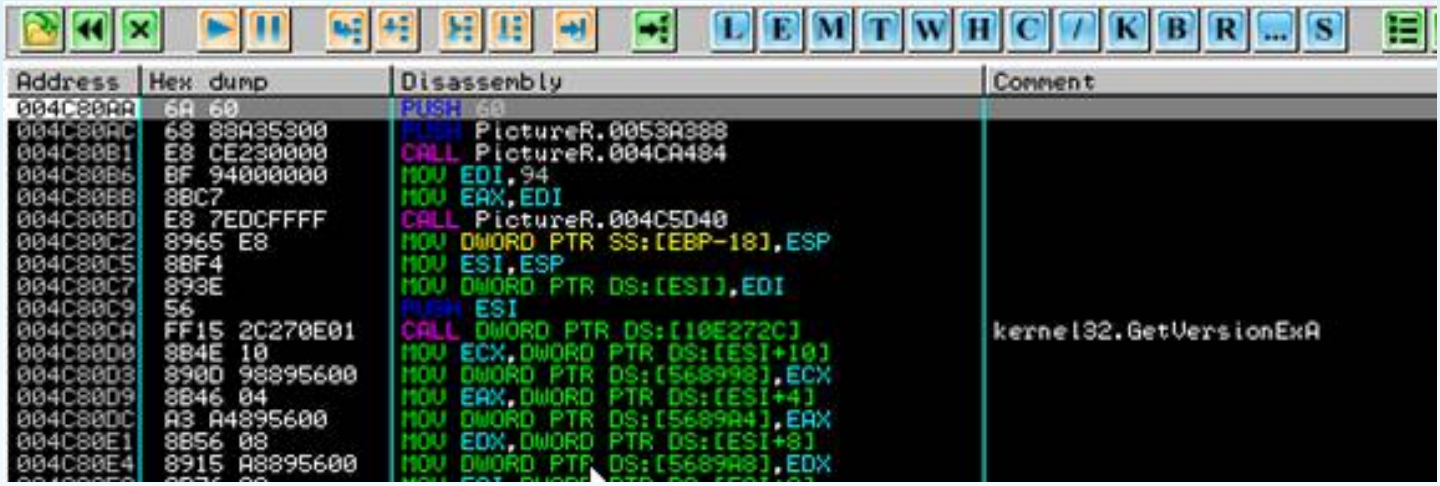


_Ctrl + F9, F8:



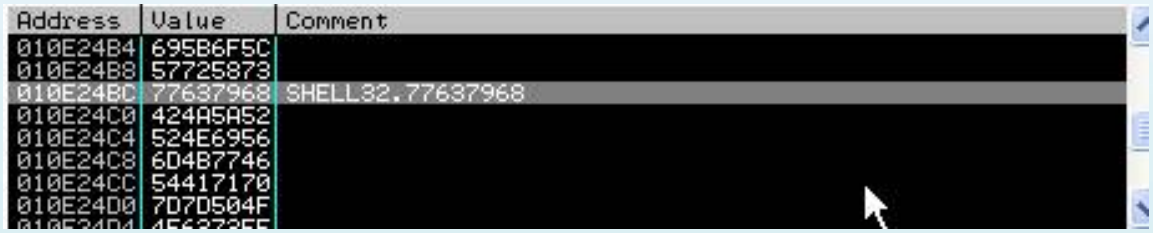
_Again, Ctrl + F9, F8, Scroll down the signal of OEP:

_Press Call EDI at F2, F9, F7: OEP J !

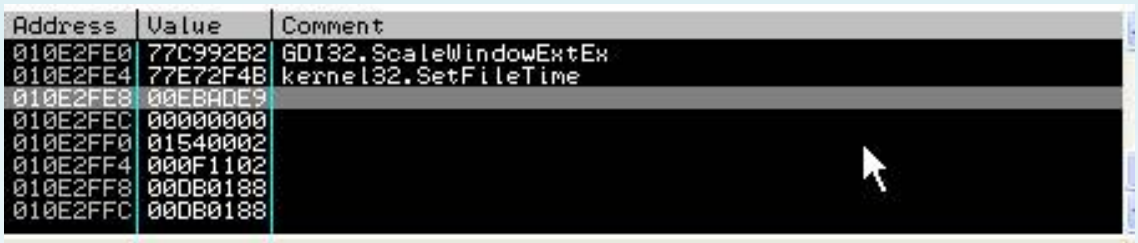


_This Is the signal of Import elimination. We must redirect it to a real cave memory! But the first step is to find the IAT. At the API GetVetsionA, Follow in dump> Memory Address, and we have the IAT:

_IAT Start:



_IAT End:



_Total We have:

IAT Start: 010E24BC 77637968 SHELL32.77637968

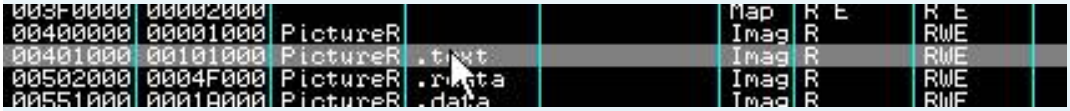
IAT End: 010E2FE4 77E72F4B kernel32.SetFileTime

IAT Len: 010E2FE4-010E24BC = B28

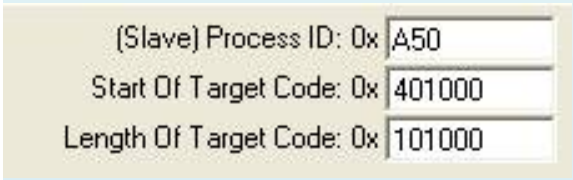
OEP: C80AA
PID: 07F8

_Is Now, we must redirect the IAT to a Virtual Real IAT. ArmInline fire up and fill in:

PID: 0A50
Start Of Target Code: 401000: this is the address sections of text:

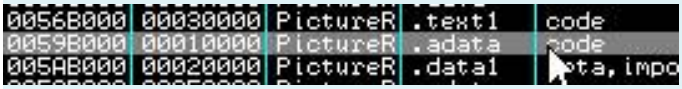


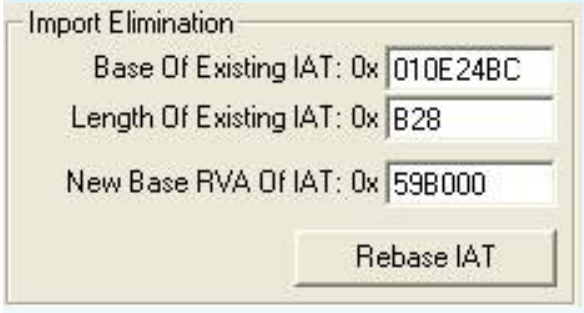
Length Of Target Code: 101000: Size of text sections:



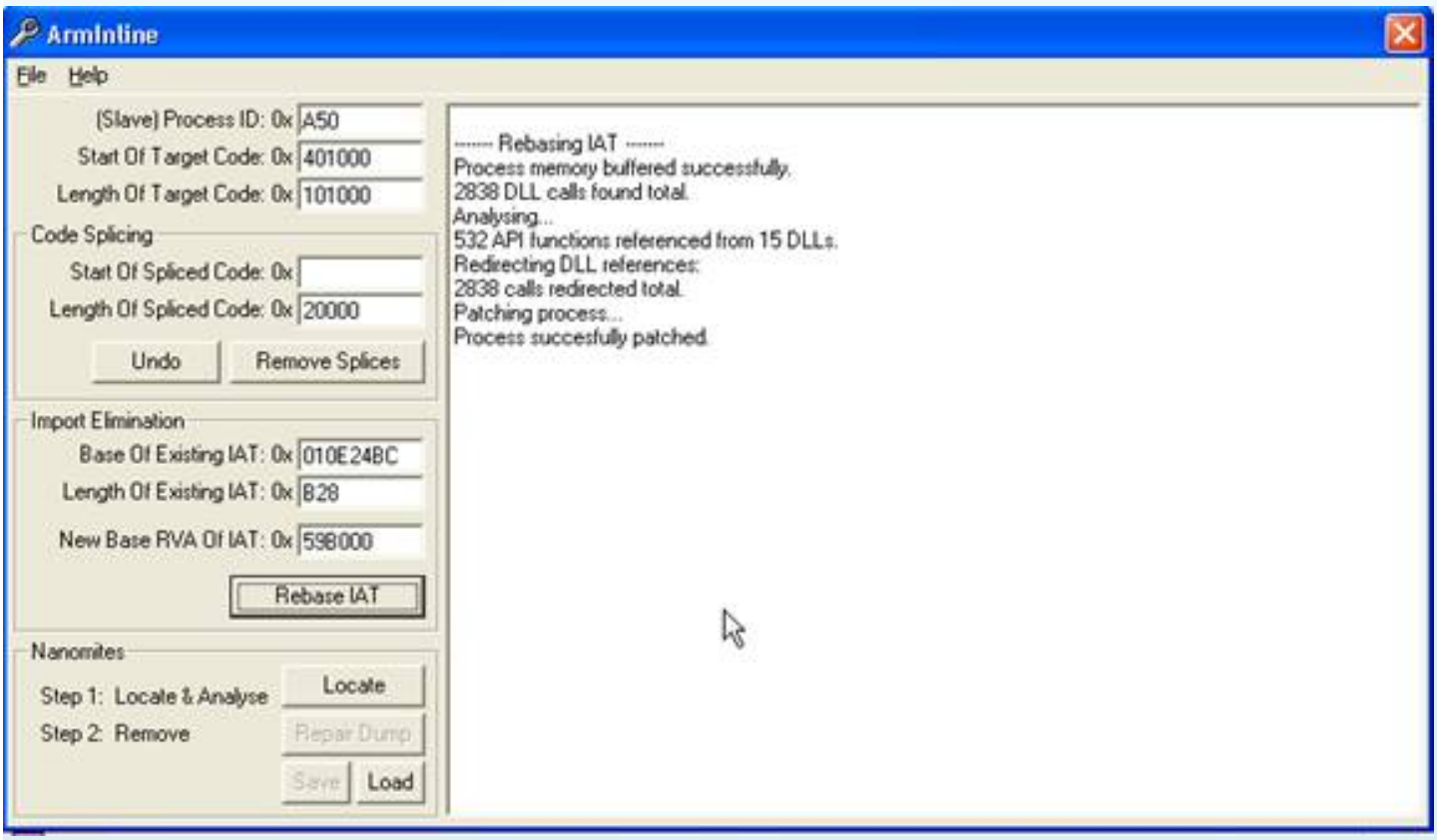
_In The table IAT elimination fill in:

Base Of Existing IAT: IAT Start: 010E24BC 77637968 SHELL32.77637968
Length Of Existing IAT: IAT Len: 010E2FE4-010E24BC = B28
New Base RVA of IAT: We choose the section. ADATA to redirect the IAT: 59B000

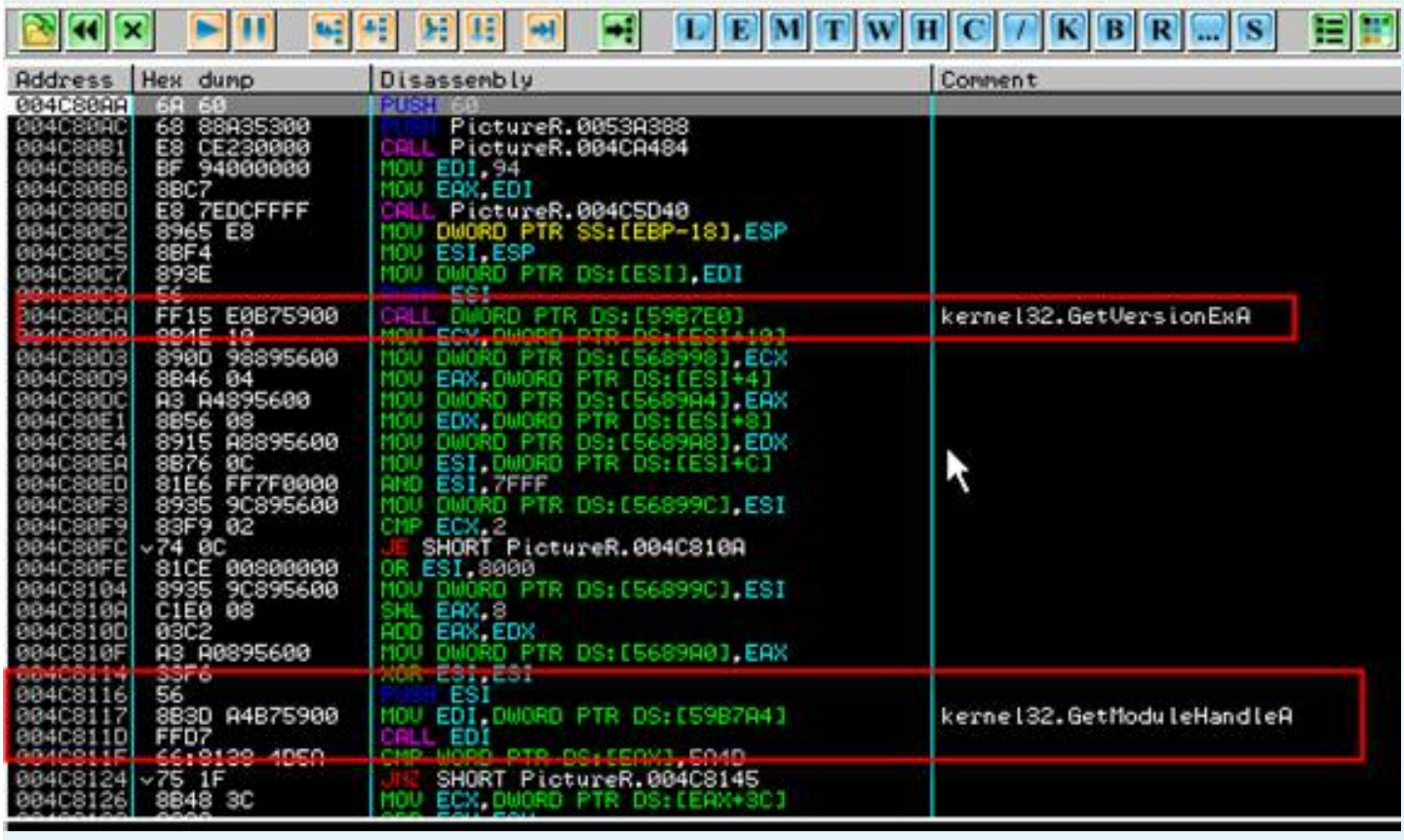




_Ok, Done, click Rebase IAT, and here we are:

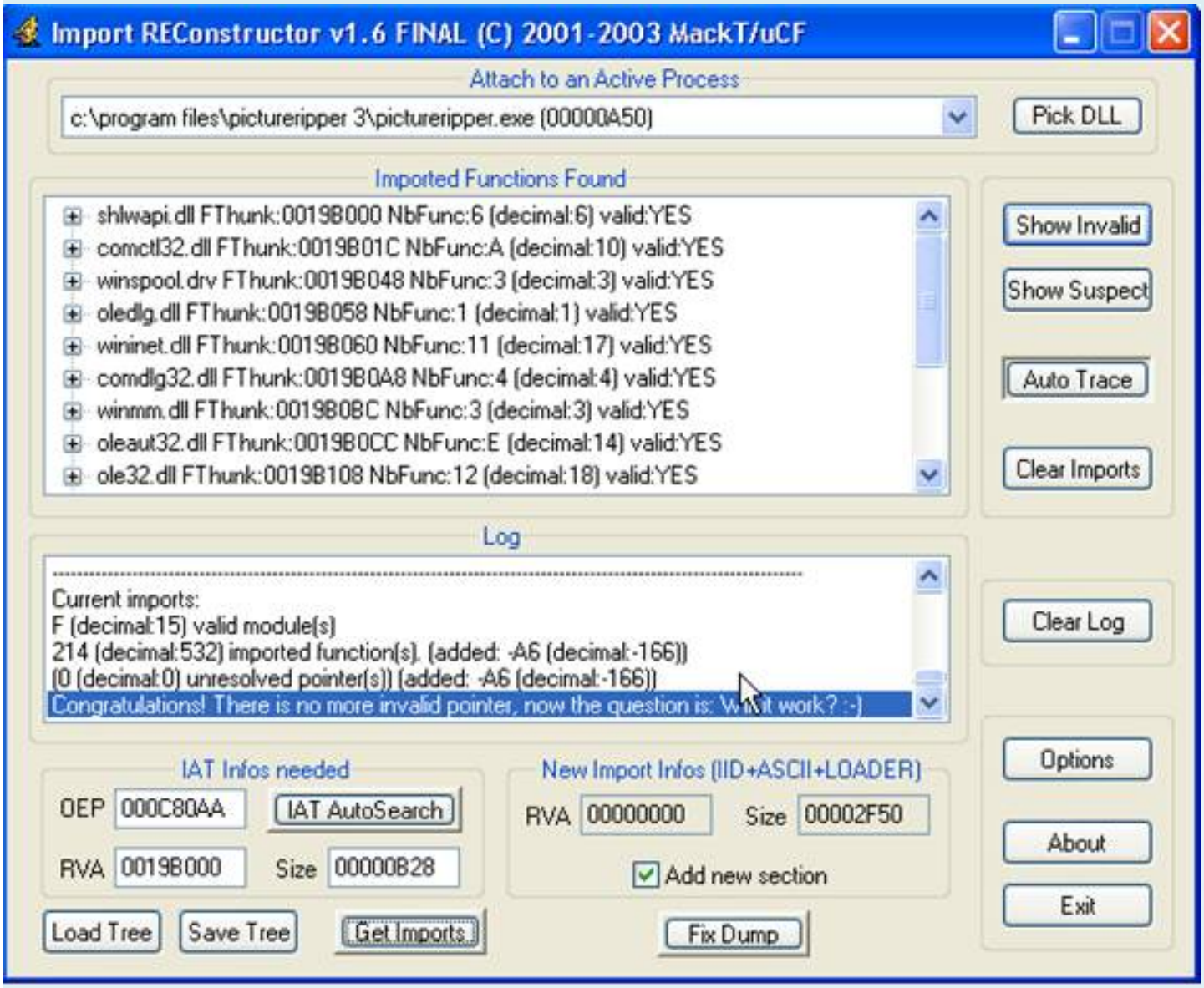


_Go Back to the CPU, and we see the IAT is successful redirect:

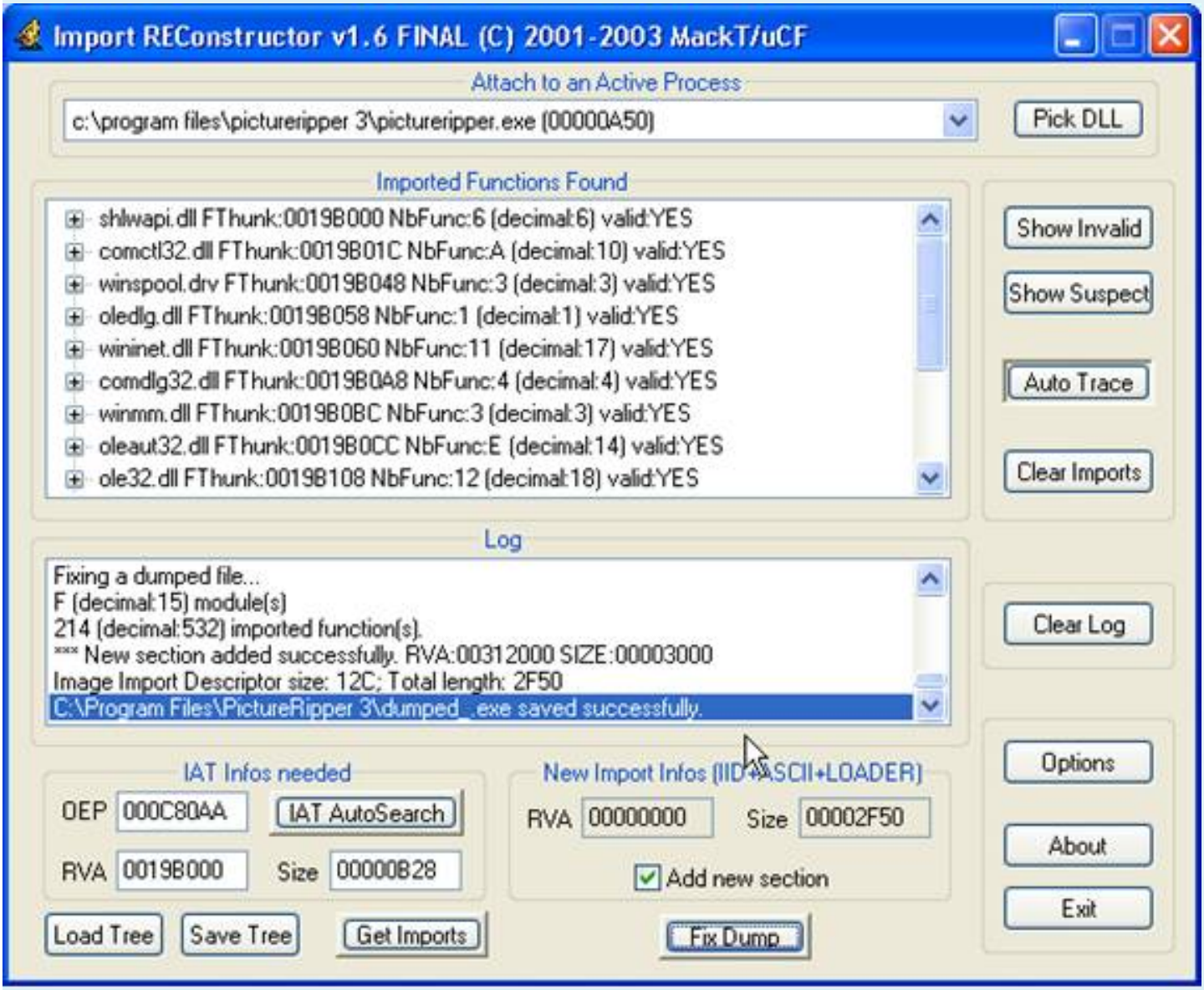


_Use LordPE and Full dump:

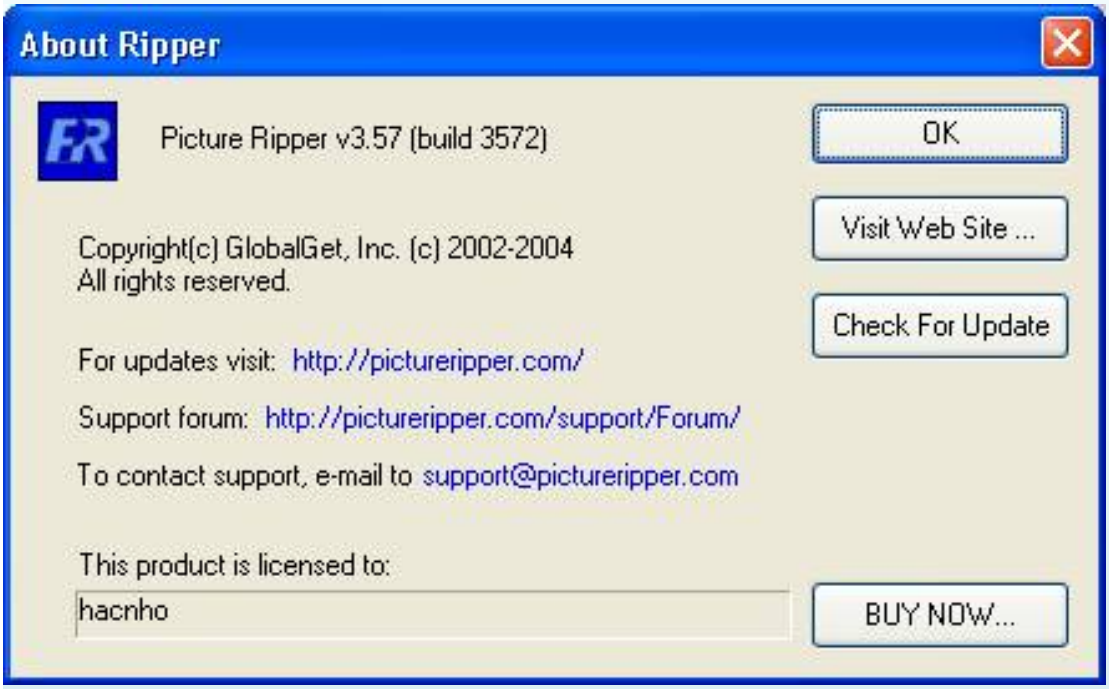
_Fire Up Imprec, fill OEP, IAT Auto Search, GetImport, Show Invalid, Thunks Cuts:



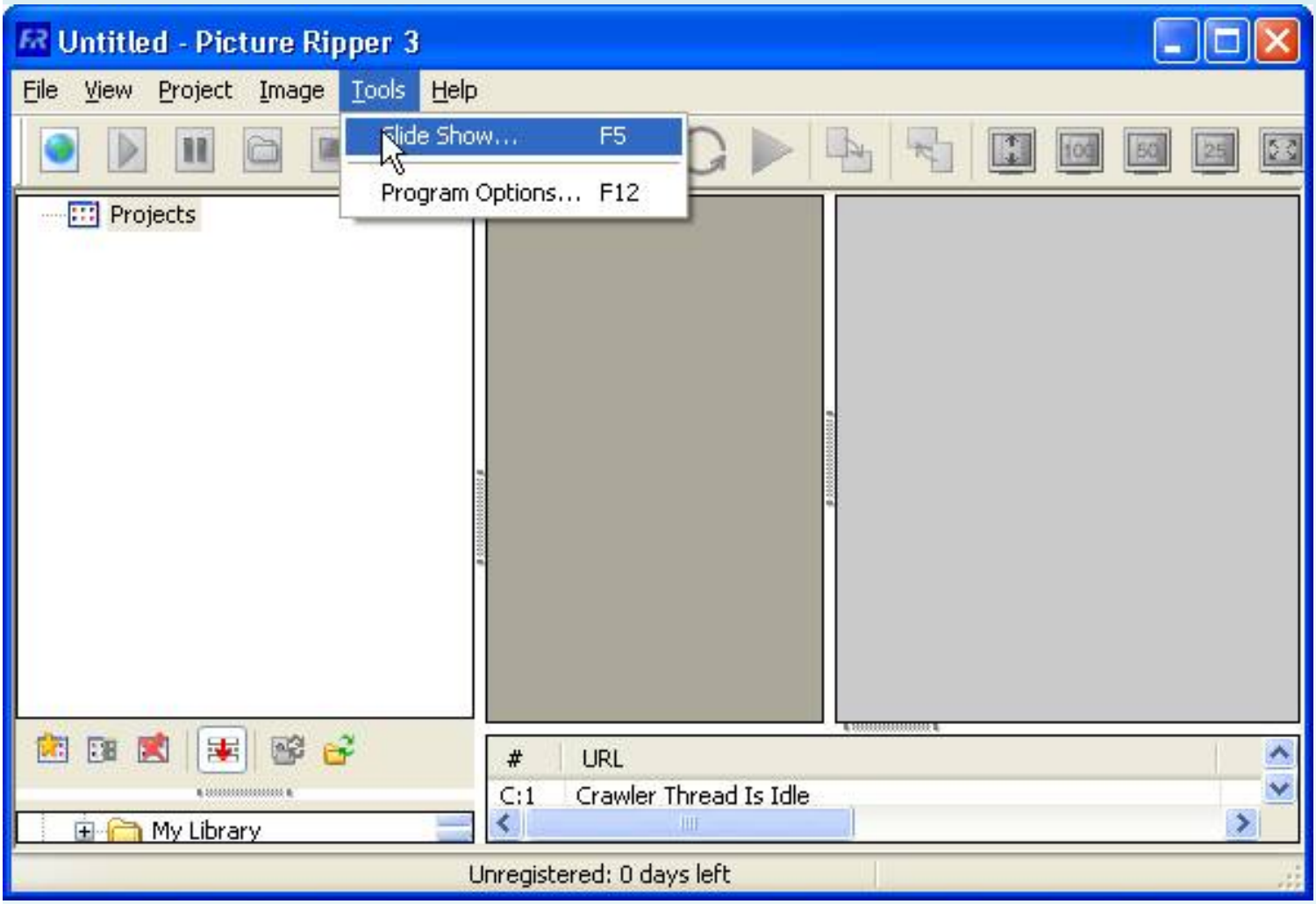
_Fix Dump:



Run Dumped.exe:

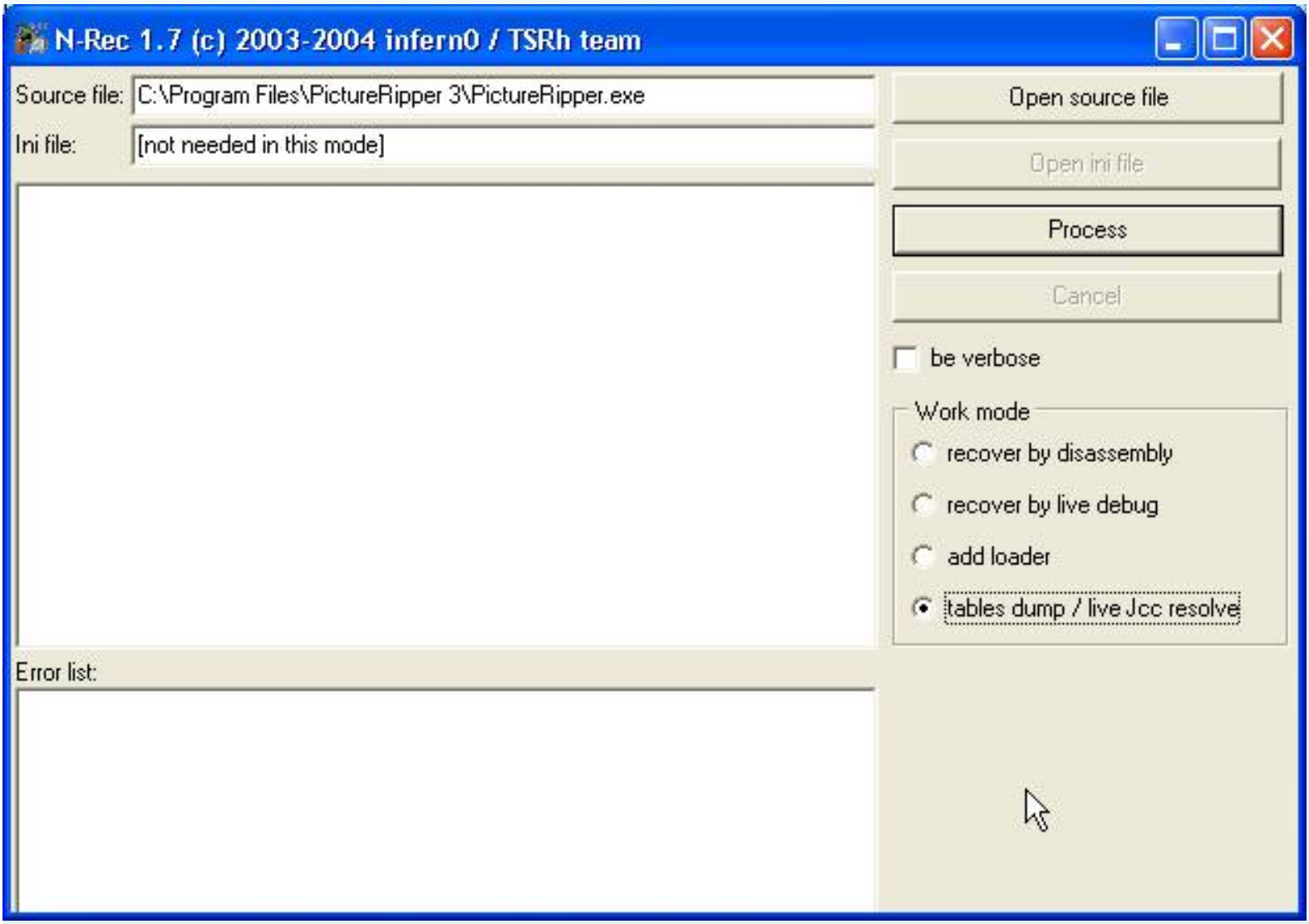


_So When we try to open the Options menu:

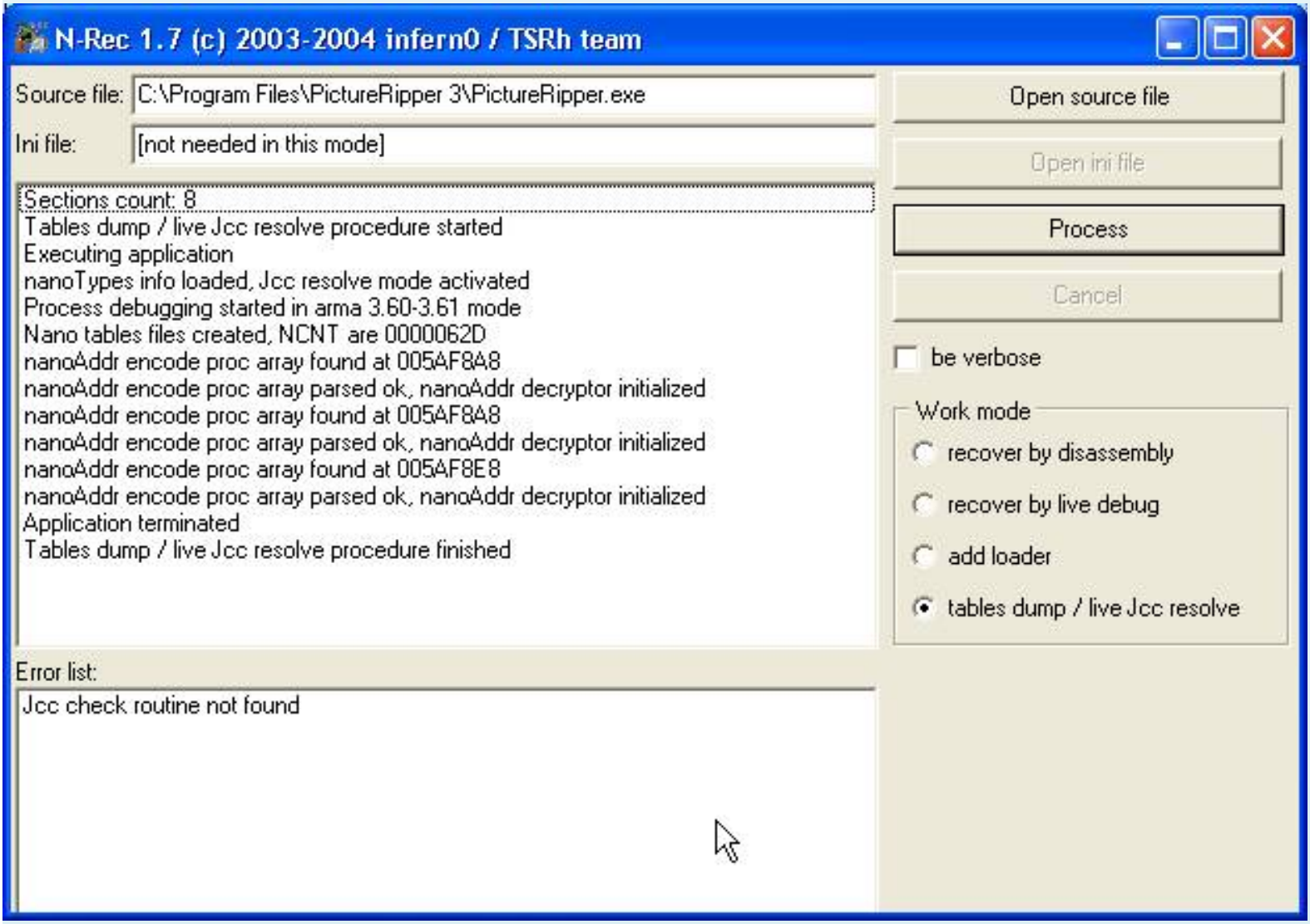


_We Crash:

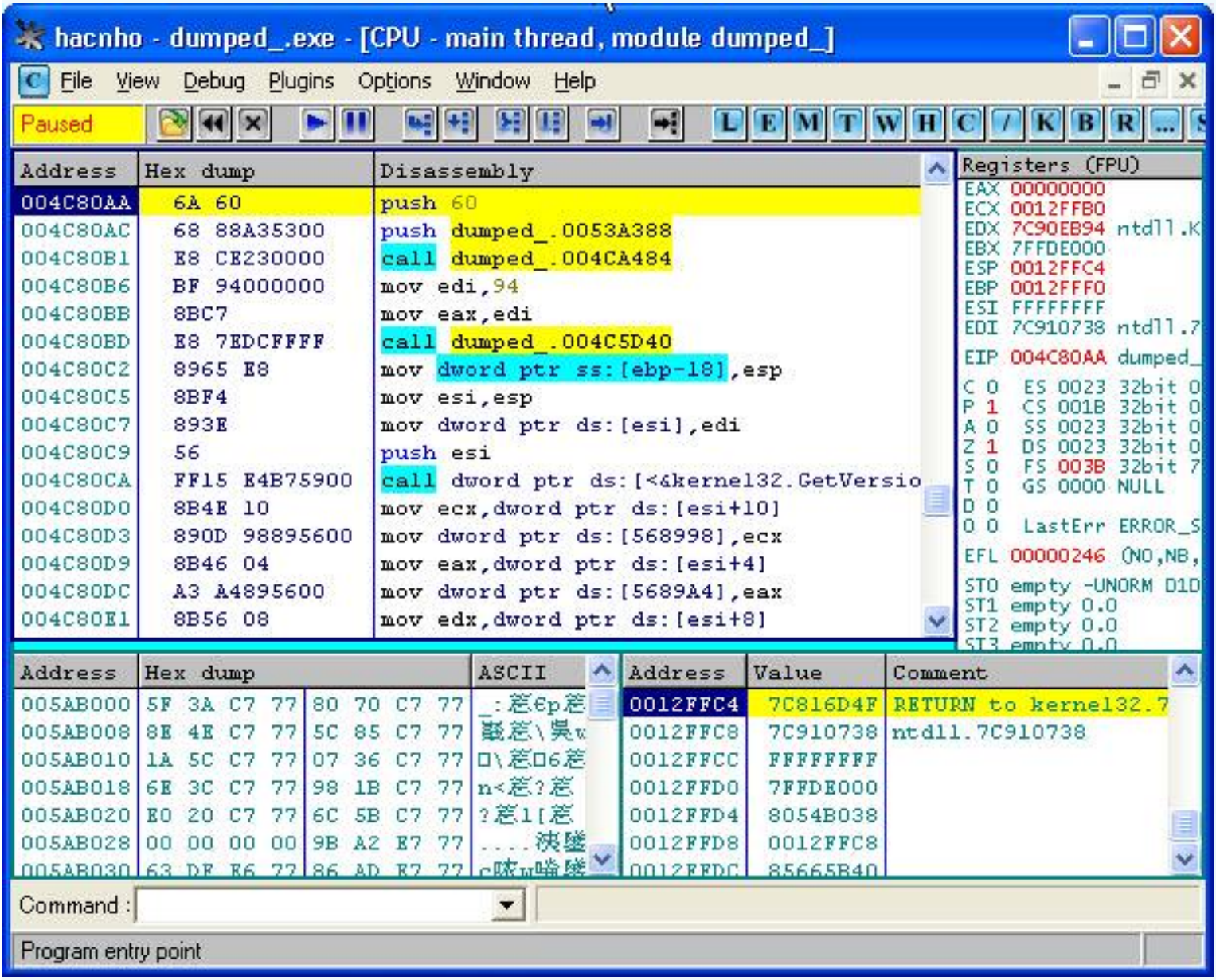
_Ok, Le analyze this crash. Load N-REC to:



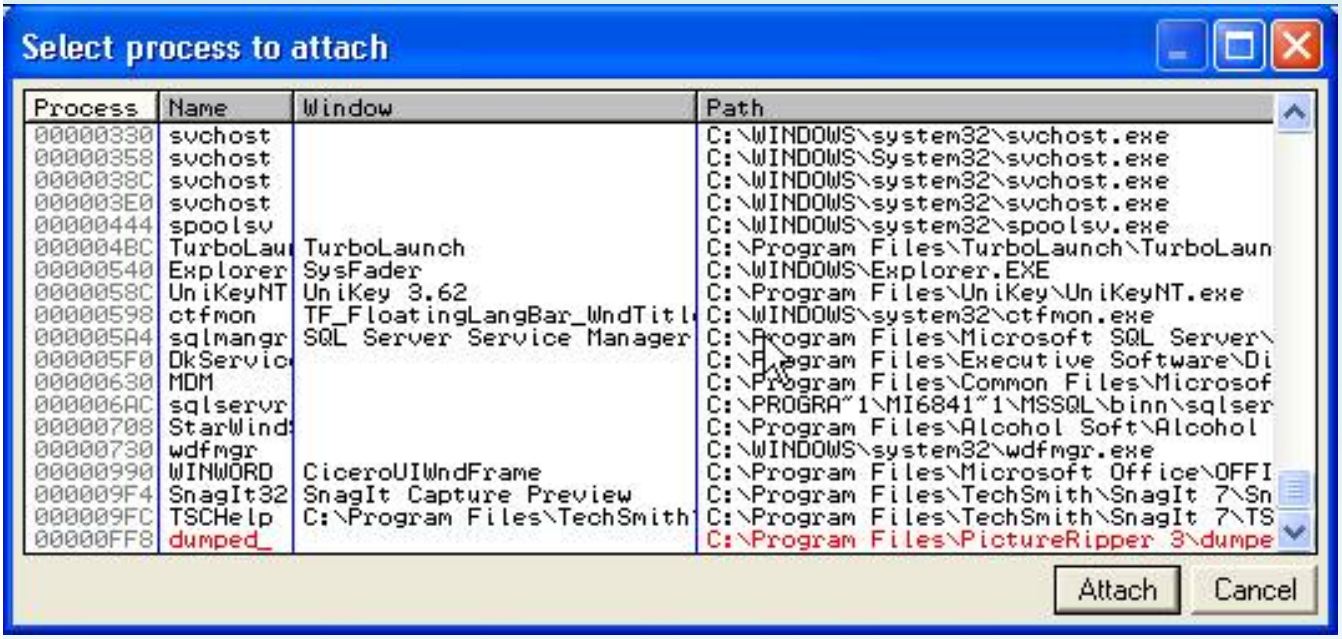
_And We found the CC:



We Use ArmInline 0.71 to fix Nanomites, ok, to load dumped.exe OllyDBG:

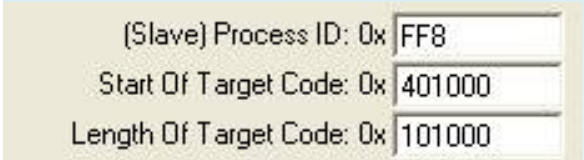


_View PID and text sections:

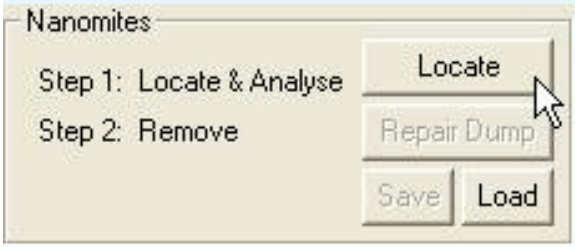


Address	Size	Owner	Section	Contains	Type	Access	Initial	Mapped as
00150000	0002D000				Priv	RW	RW	
00250000	00006000				Priv	RW	RW	
00260000	00003000				Map	RW	RW	
00270000	00016000				Map	R	R	\Device\HarddiskVolume5\WIND
00290000	0003D000				Map	R	R	\Device\HarddiskVolume5\WIND
002D0000	00041000				Map	R	R	\Device\HarddiskVolume5\WIND
00320000	00006000				Map	R	R	\Device\HarddiskVolume5\WIND
00330000	00041000				Map	R	R	
00380000	00001000				Priv	RWE	RWE	
00390000	00001000				Priv	RWE	RWE	
003A0000	00004000				Priv	RW	RW	
003B0000	00003000				Map	R	R	\Device\HarddiskVolume5\WIND
003C0000	00008000				Priv	RW	RW	
003D0000	00001000				Priv	RW	RW	
003E0000	00001000				Priv	RW	RW	
003F0000	00003000				Priv	RW	RW	
00400000	00001000	dumped_		PE header	Imag	R	RWE	
00401000	00101000	dumped_	.text		Imag	R	RWE	
00502000	0004F000	dumped_	.rdata		Imag	R	RWE	
00551000	0001A000	dumped_	.data		Imag	R	RWE	
0056B000	00030000	dumped_	.text1	code	Imag	R	RWE	
0059B000	00010000	dumped_	.adata	code	Imag	R	RWE	
005AB000	00020000	dumped_	.data1	data	Imag	R	RWE	
005CB000	000F0000	dumped_	.pdata		Imag	R	RWE	
006BB000	00057000	dumped_	.rsrc	resources	Imag	R	RWE	
00712000	00003000	dumped_	.mackt	imports	Imag	R	RWE	
00720000	00005000				Map	R E	R E	
007E0000	00002000				Map	R E	R E	
007F0000	00103000				Map	R	R	
00900000	000A4000				Map	R E	R E	
00C00000	00002000				Map	R	R	
00C10000	00002000				Map	R	R	
00C20000	00001000				Priv	RW	RW	
00CC0000	00002000				Map	R	R	
629C0000	00001000	LPK		PE header	Imag	R	RWE	
629C1000	00005000	LPK	.text	code,import	Imag	R	RWE	
629C6000	00001000	LPK	.data	data	Imag	R	RWE	
629C7000	00001000	LPK	.rsrc	resources	Imag	R	RWE	
629C8000	00001000	LPK	.reloc	relocations	Imag	R	RWE	

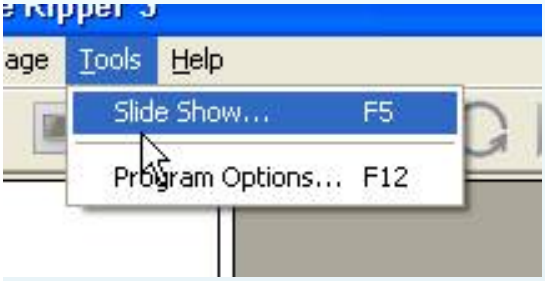
_Fill In ArmInline 0.71:



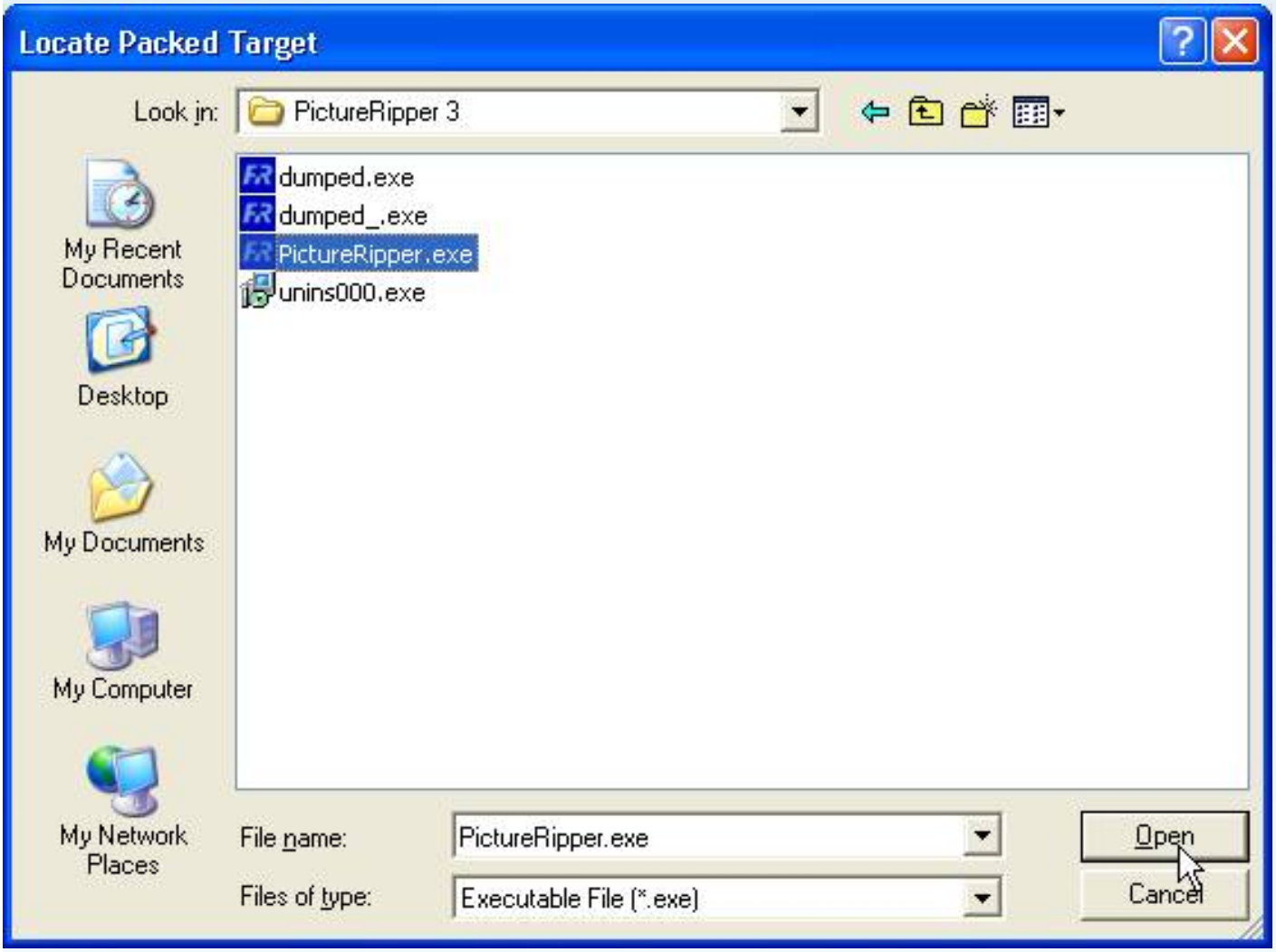
_Click Locate:



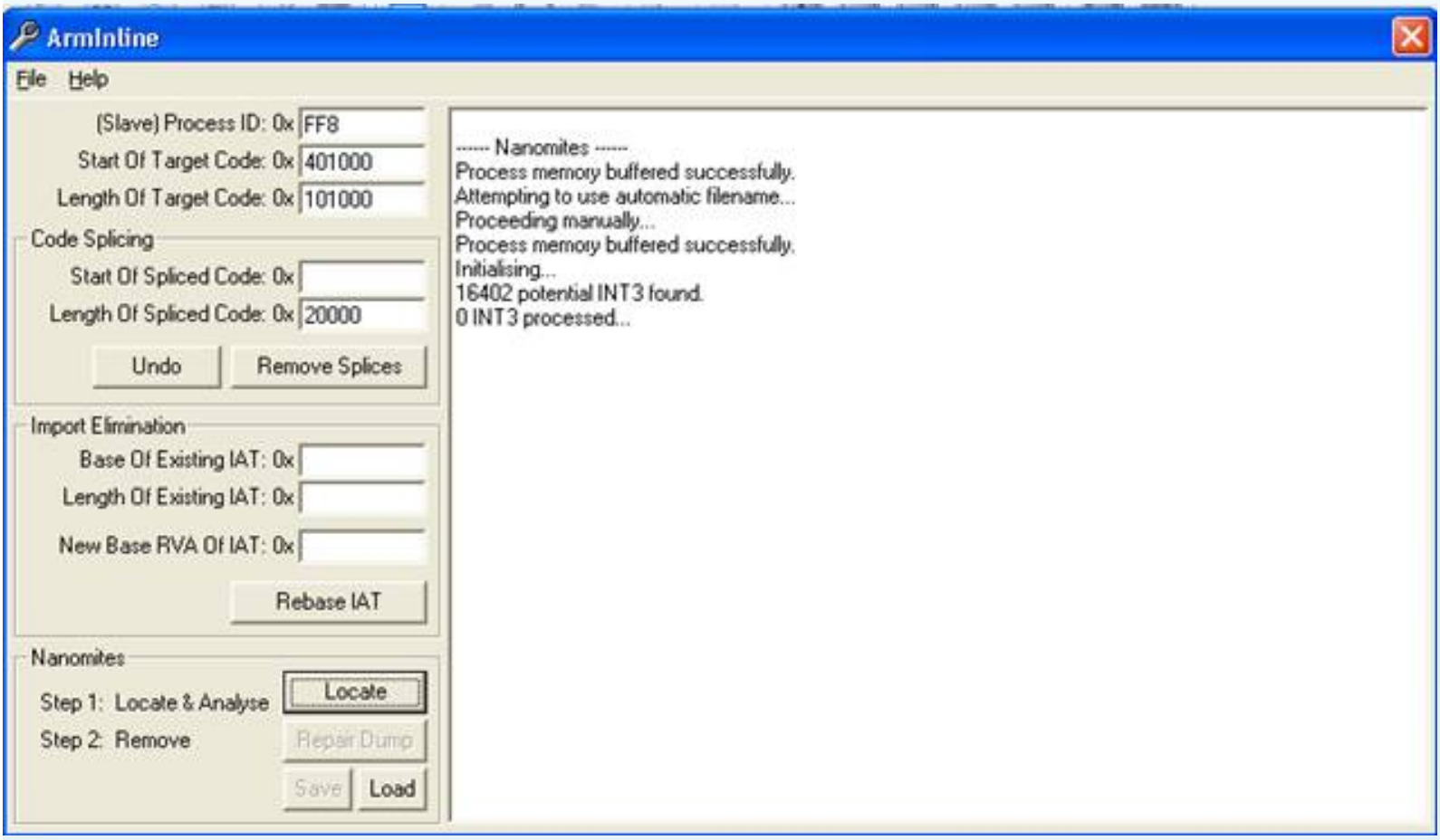
_Then Back to PictureRipper3:



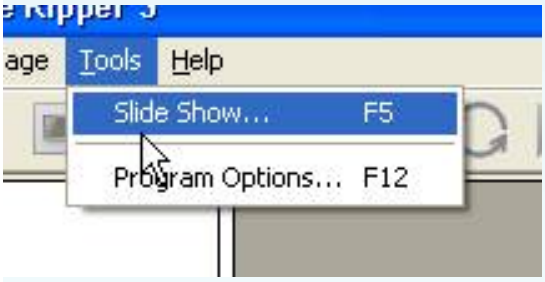
_Now In ArmInline: Load packet target:



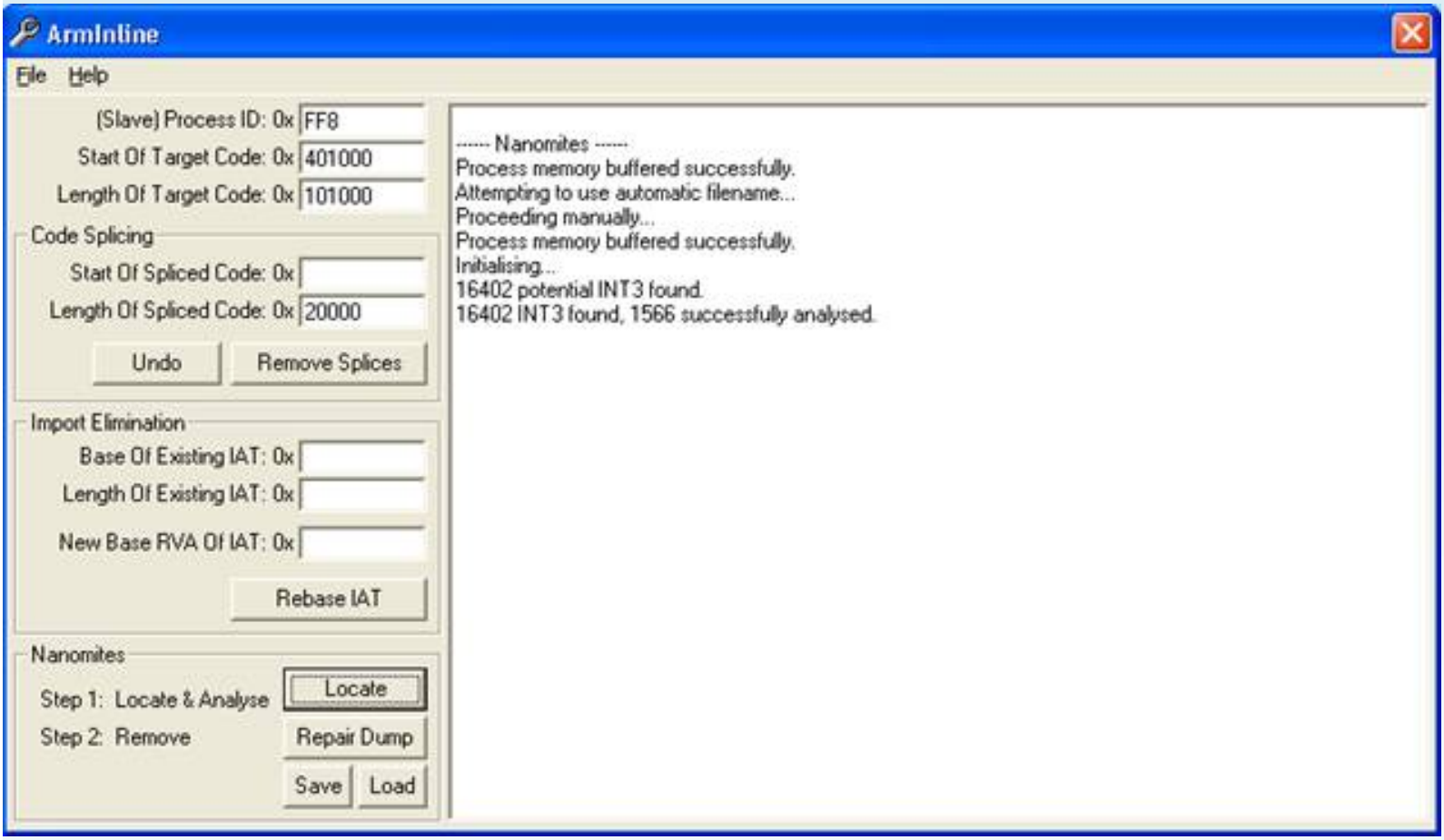
_We Choose the file PictureRipper.exe then:



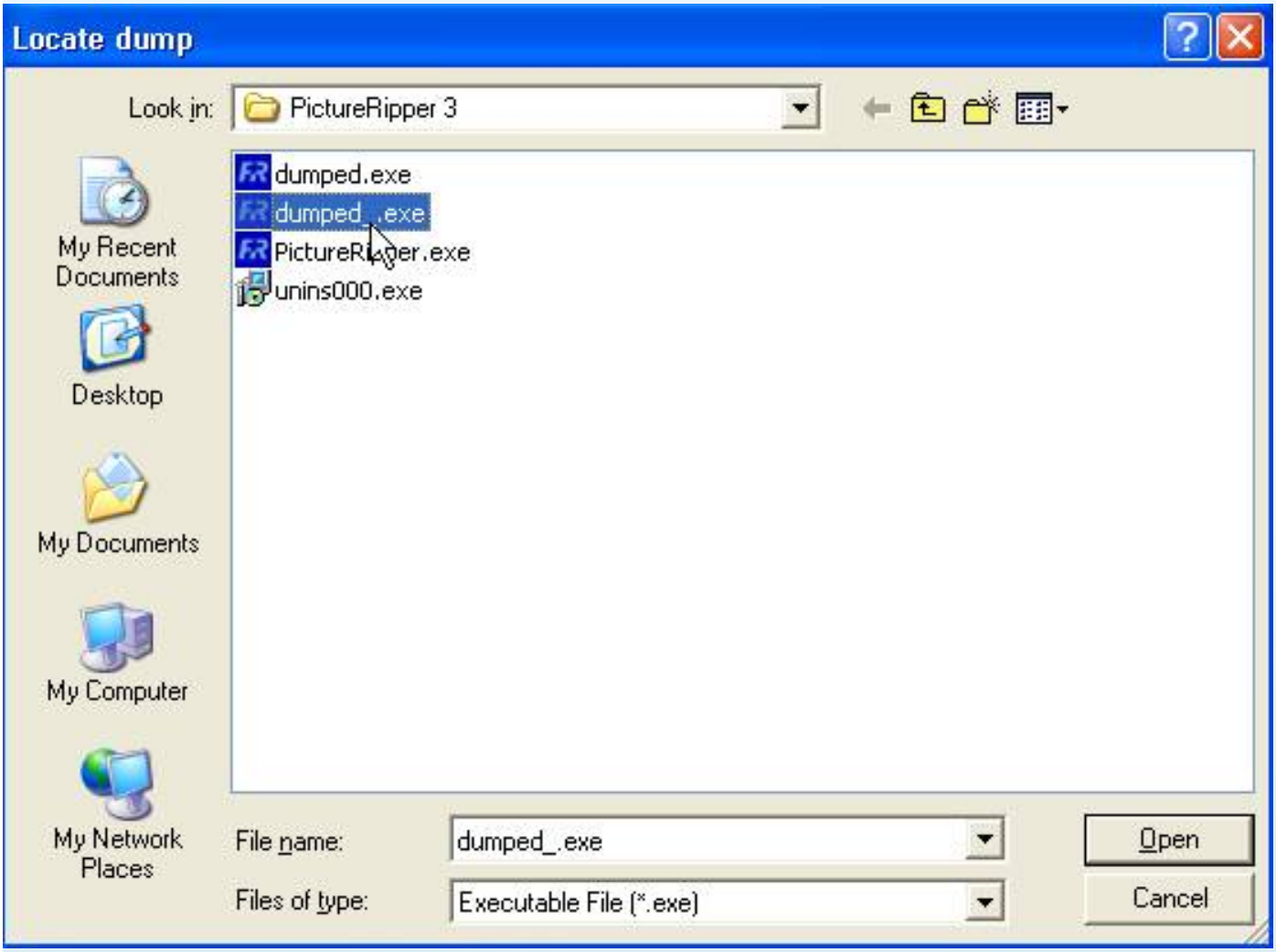
_Back To PictureRipper:



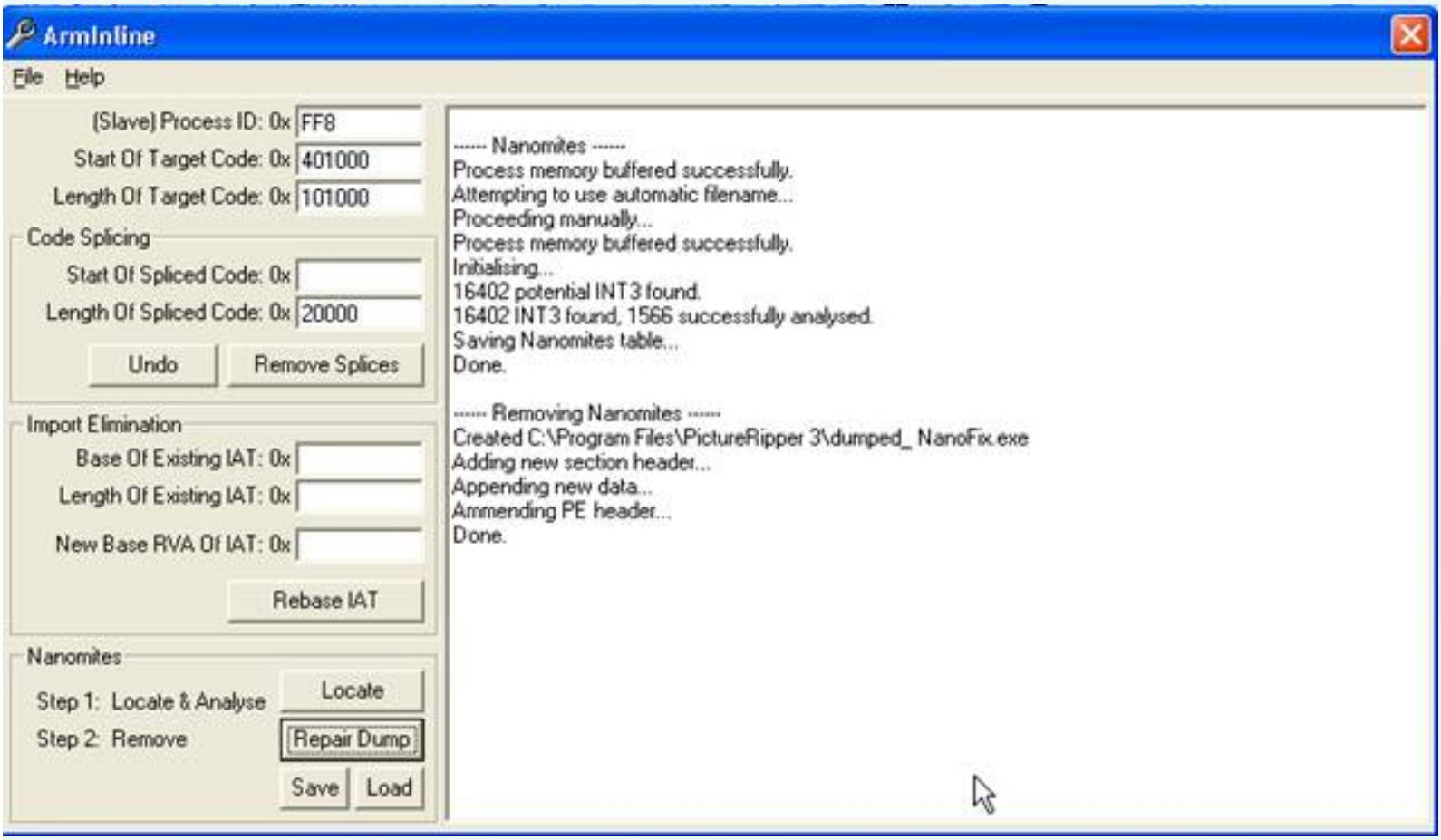
_Now:



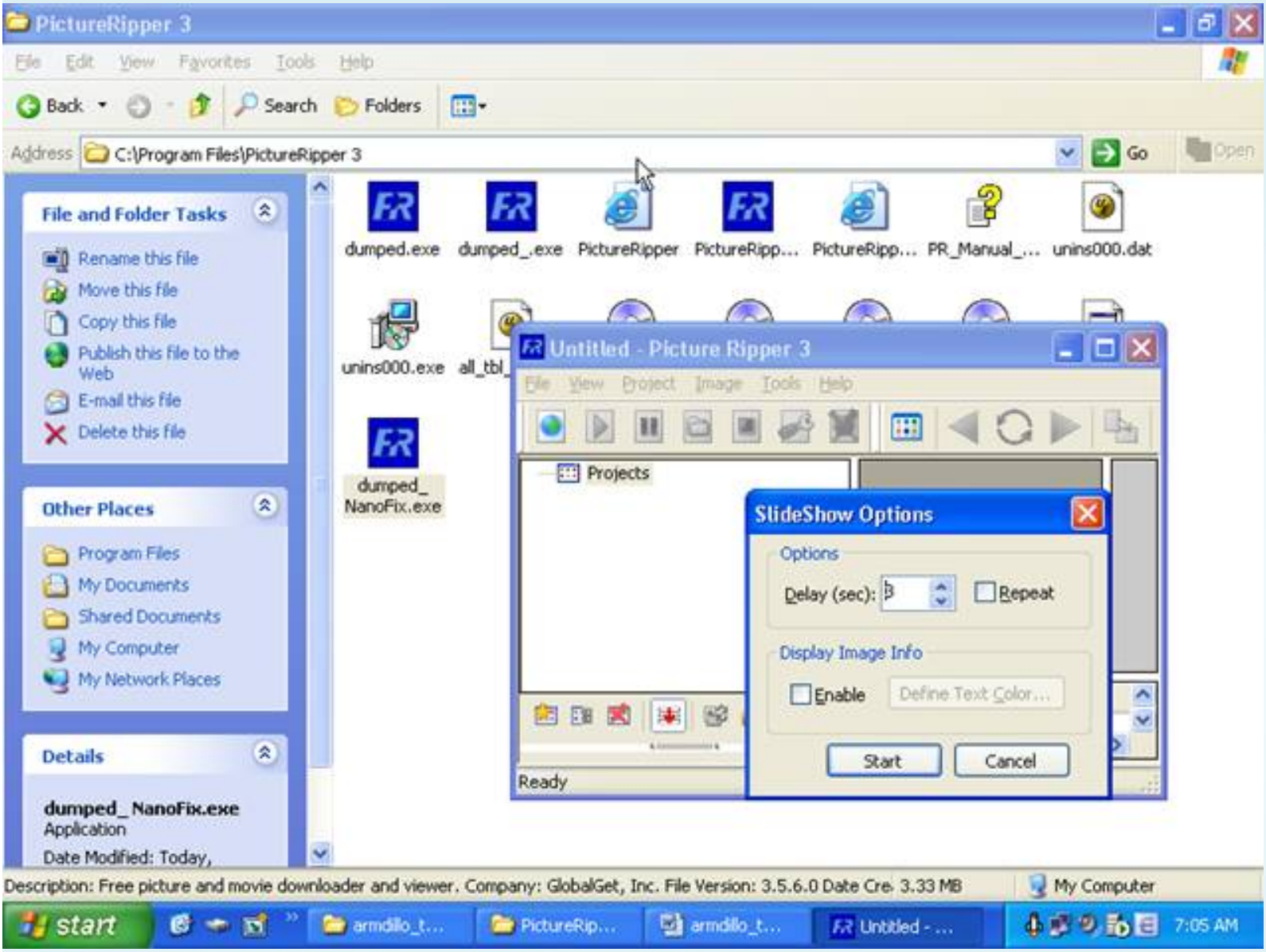
_Now You can save the NanoTable. Next. Click Repair dump:


Locate dump
Look in:
PictureRipper 3
dumped.exe
dumped_.exe
PictureRipper.exe
unins000.exe
My Recent Documents
Desktop
My Documents
My Computer
My Network Places
File name:
dumped_.exe
Files of type:
Executable File (*.exe)
Open
Cancel

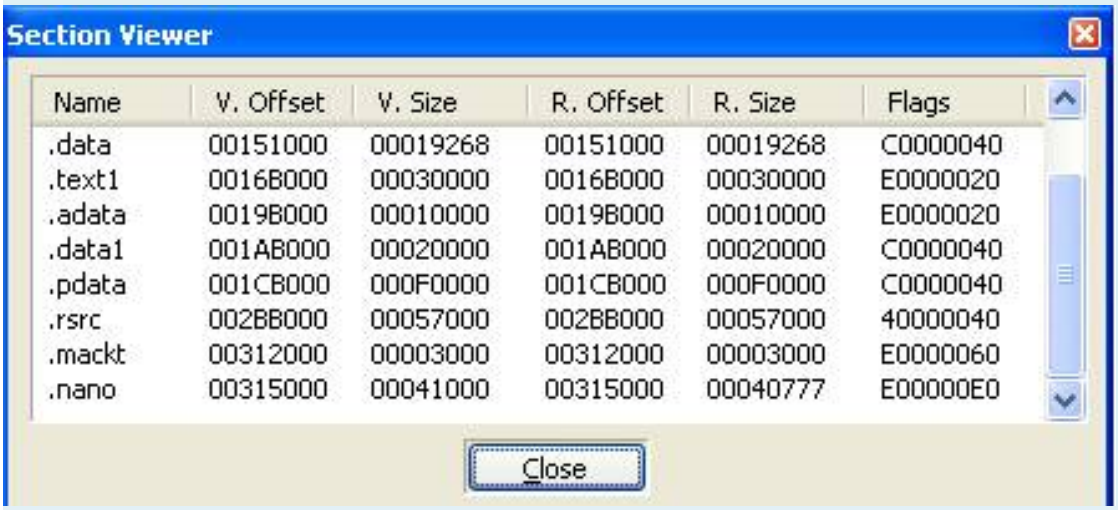
_Ok:

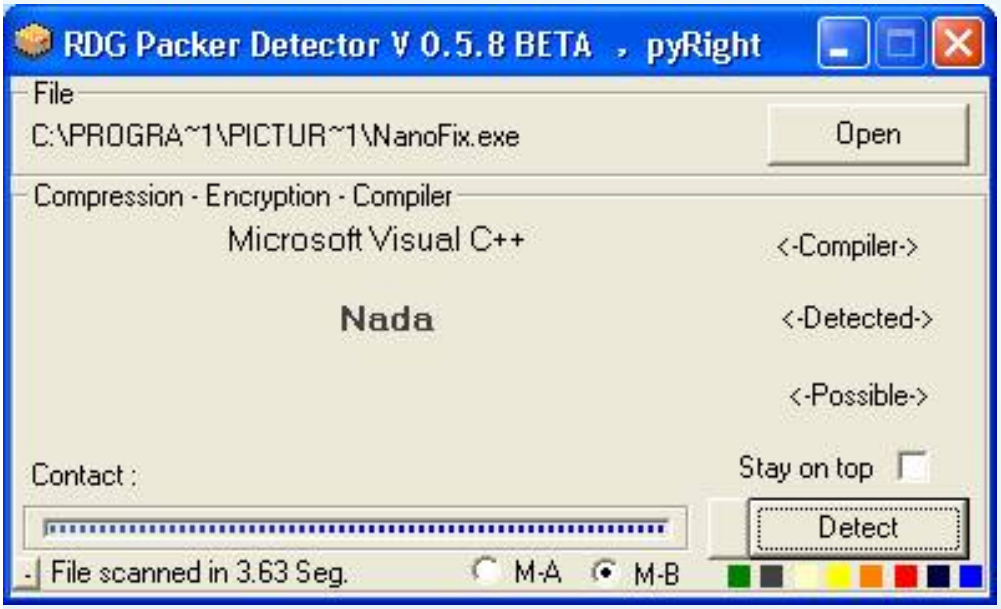


Run Dumped NanoFix.exe file, go to Options menu:



_Unpacked Successful!





IV. Conclusion

_For More tuts, please visit http://tinicat.de/hacnho or http://hacnho.exetools.com

_Bye!

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, MaDMAn_H3rCul3s, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light, iamidiot, WhyNotBar, trickyboy, Merc ... and you!

Special Thanx Cracks Latinos.

Thanx OllyDBG of the authors.

To be continued ...

Written by **hacnho** (tutorial date: VietNam 25/10/2005)

Sa they are a nui

One lost a child

The miraculous Lu

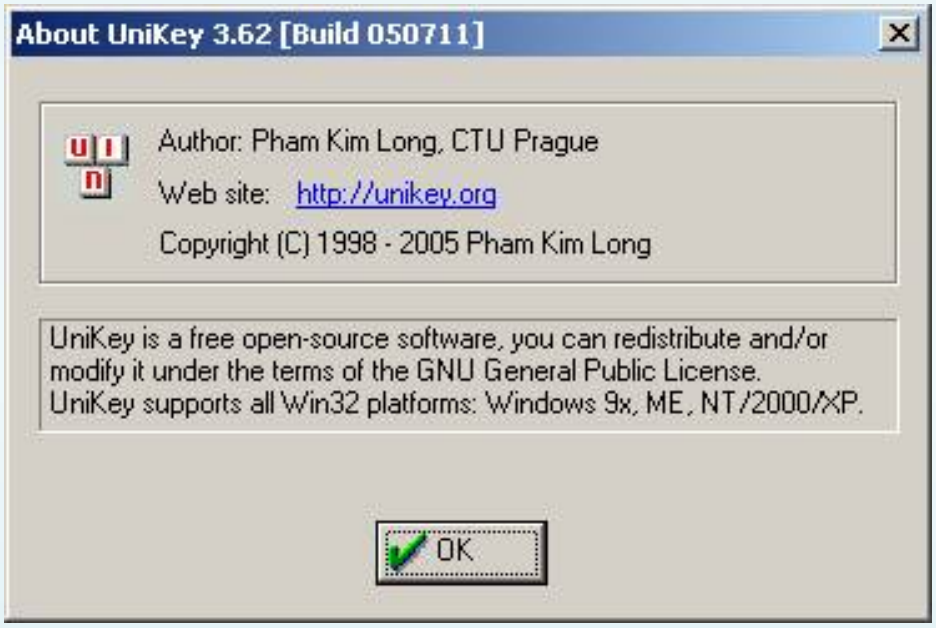
Integration hunger Giang Ho

Armadillo collect sand-stone

Series # 9: Armadillo 4.xx-dll files

I. Intro

_Chao Her children, this is a tut tut to the end. In this tut I will discuss a form to protect the dll called na conduct a library of links. Some software does not protect dll protect in the main program. Of course dll can not be run direct to unpack the problem. We can not load up debugger modules that must be through the intermediary debug. Luckily, OllyDBG generated LoadDLL.exe role to a process mapped to the dll that we want to unpack! To illustrate this tut for my use UNIKEY 3.62 latest version not pack (the old versions are PeCompact pack with 1.84 or 2:00 and I have been clean meat J) ! Ok, we only started!

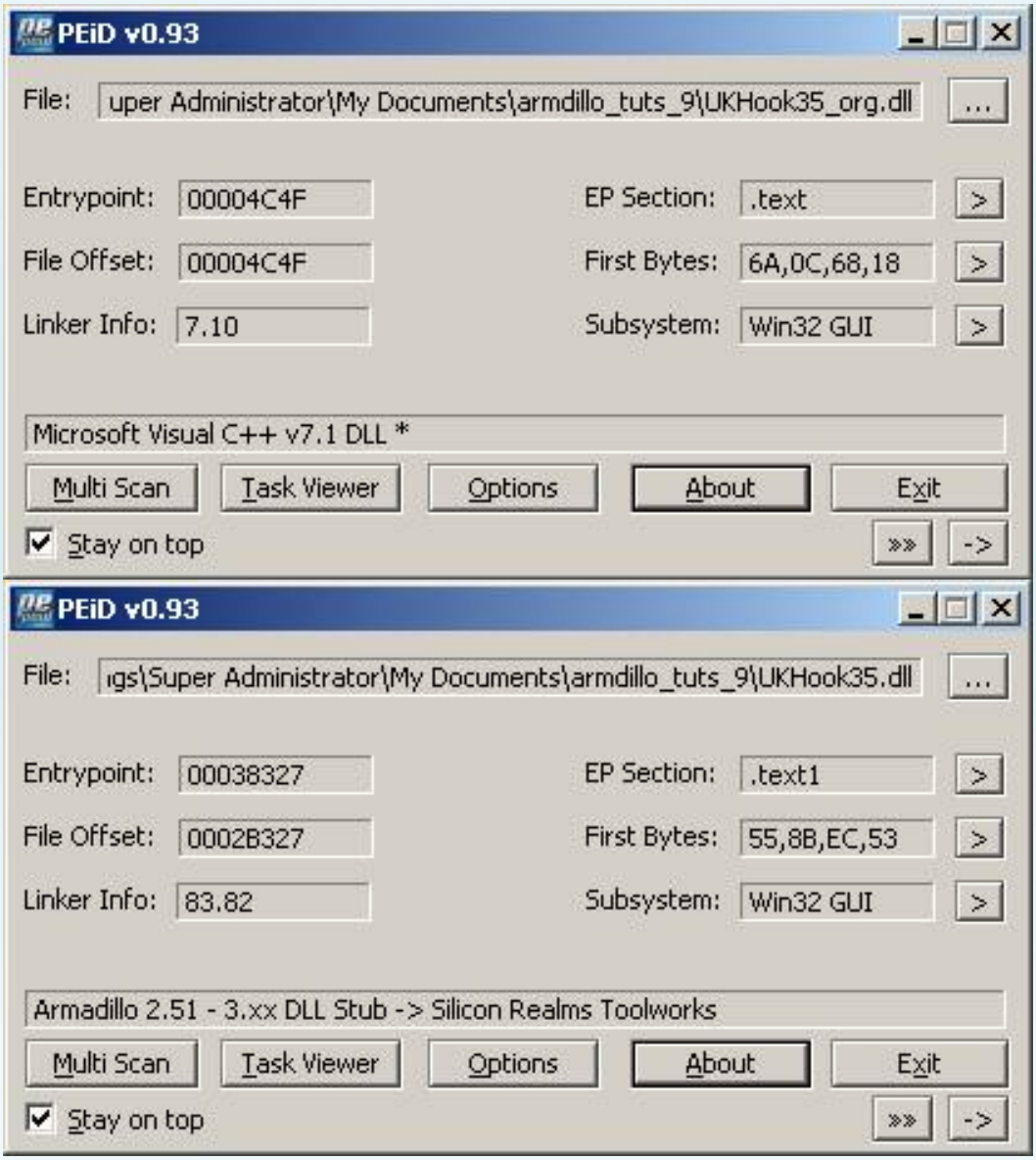


II. Tools:

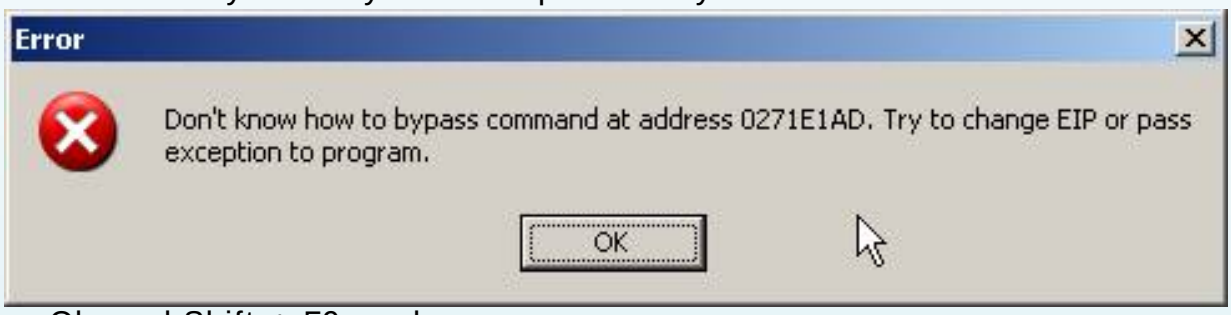
1.OllyDBG - The best config debugger for ArmMUP by hacnho.
2.LordPE 1.4 Deluxe
3.Import REConstructor 1.6 Final

III. Unpacking

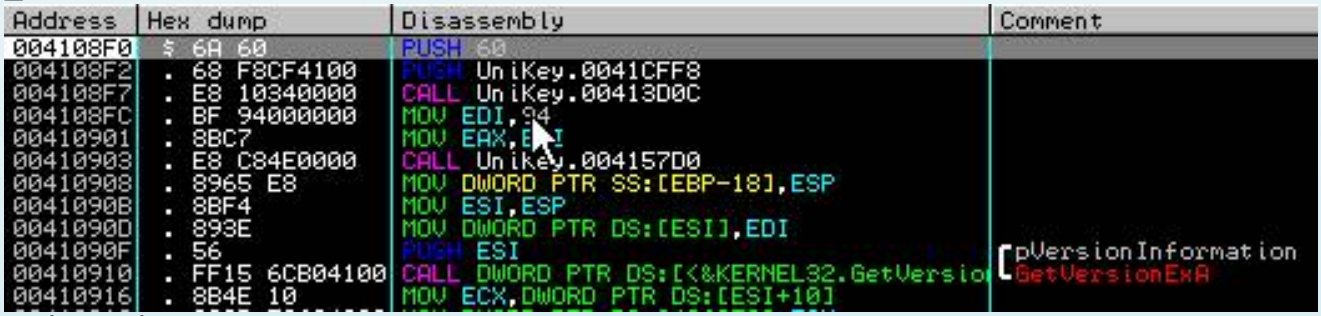
_Chuong The main Unikey will reference a dll is UKHook35.dll. I will use the Armadillo 4:20 to Build Public pack with options



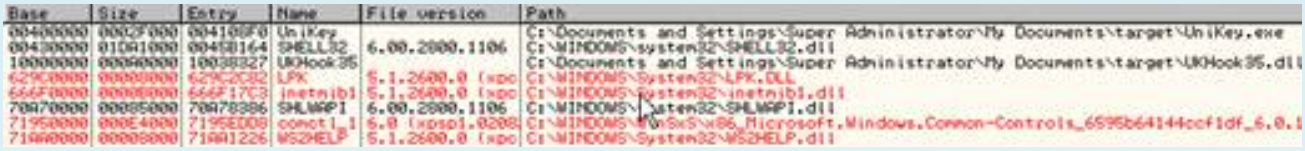
_Sau File UKHook35.dll pack when I started the file UniKey.exe run, run good! Ok, you load the file onto Unikey.exe OllyDBG. A report of OllyDBG:



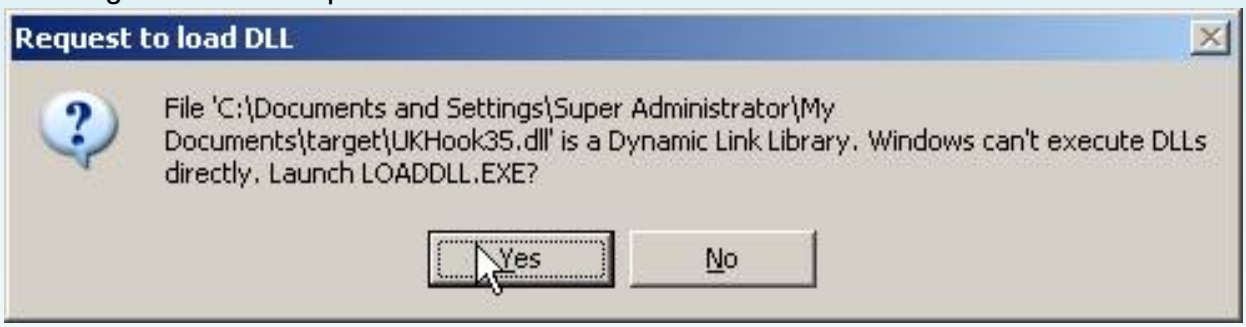
_Nhan Ok, and Shift + F9 me here:



_Nhan Alt + E:

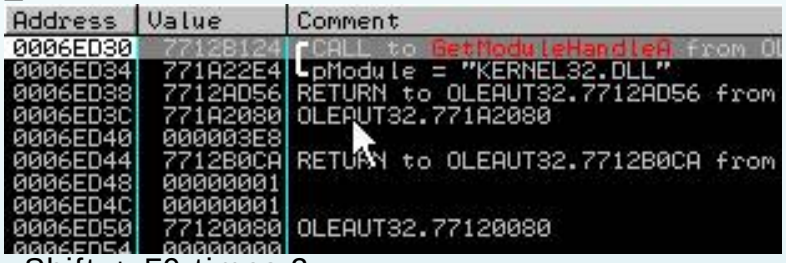


_Ok, Close the window OllyDBG, you load the file directly onto UKHook35.dll Olly, a message will show up:

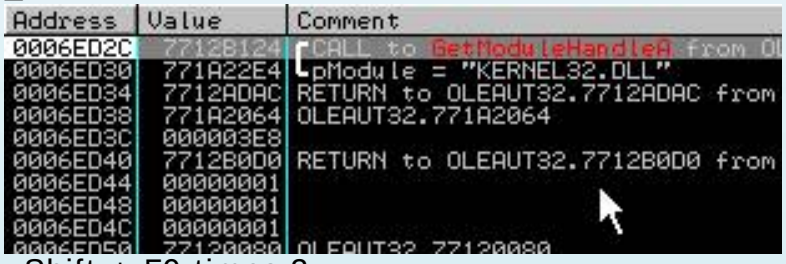


Yes you will _Nhan here:

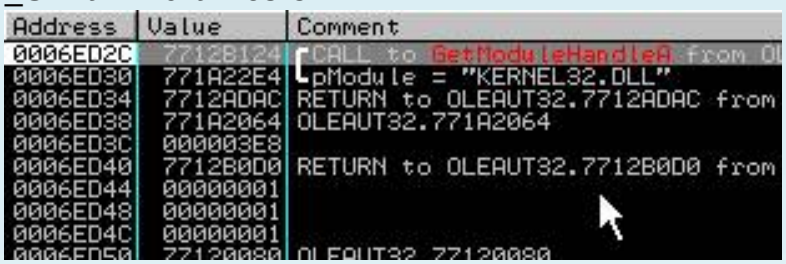
_Nhan Alt + F1 to enter HE GetModuleHandleA, Shift + F9:



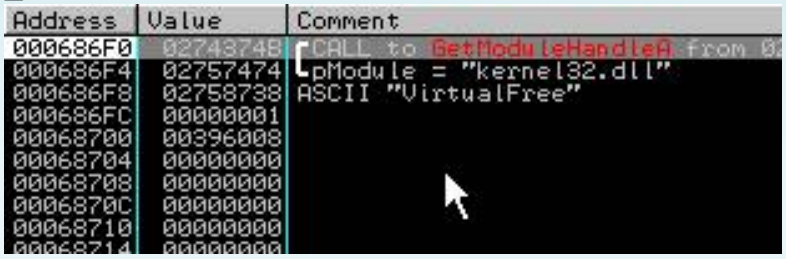
_Shift + F9 times 2:



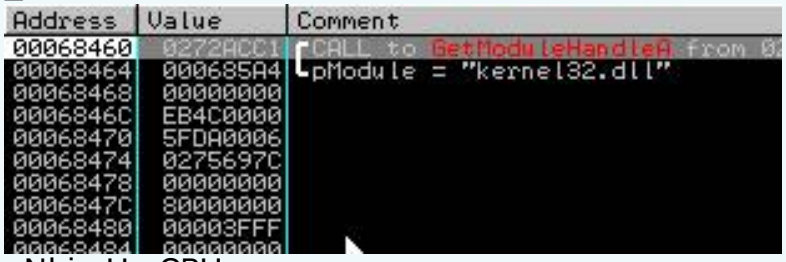
_Shift + F9 times 3:



_Lan 4:

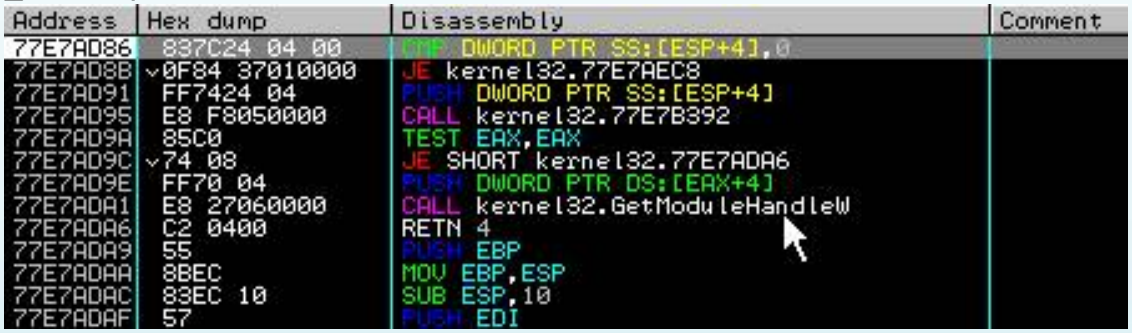


_Lan 5:



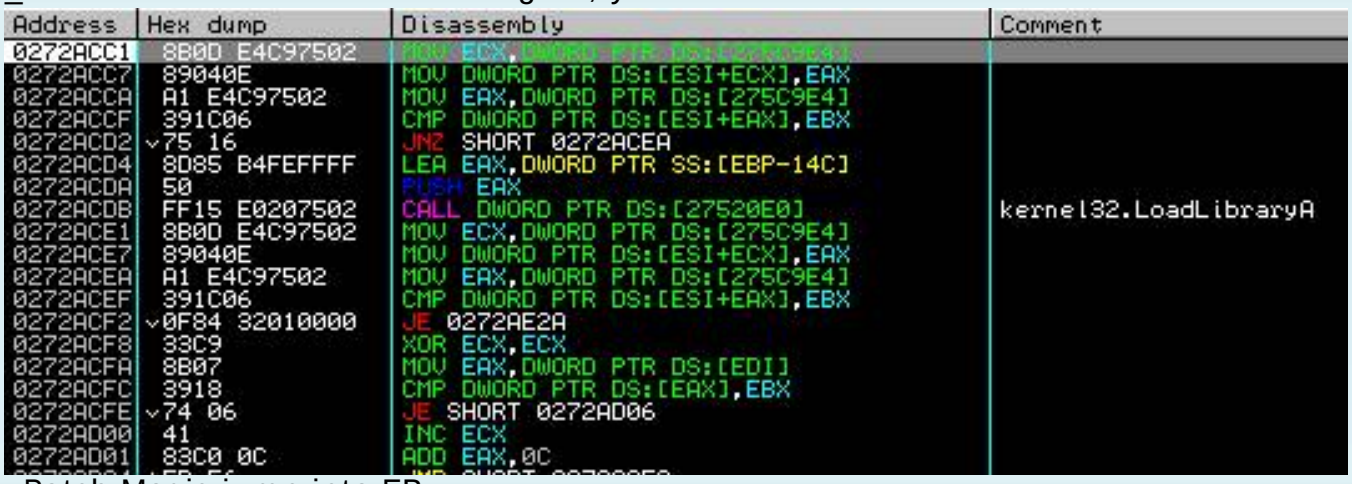
Address	Value	Comment
00068460	0272ACC1	CALL to GetModuleHandleA from 02
00068464	000685A4	pModule = "kernel32.dll"
00068468	00000000	
0006846C	EB4C0000	
00068470	5FDA0006	
00068474	0275697C	
00068478	00000000	
0006847C	80000000	
00068480	00003FFF	

_Nhin Up CPU:



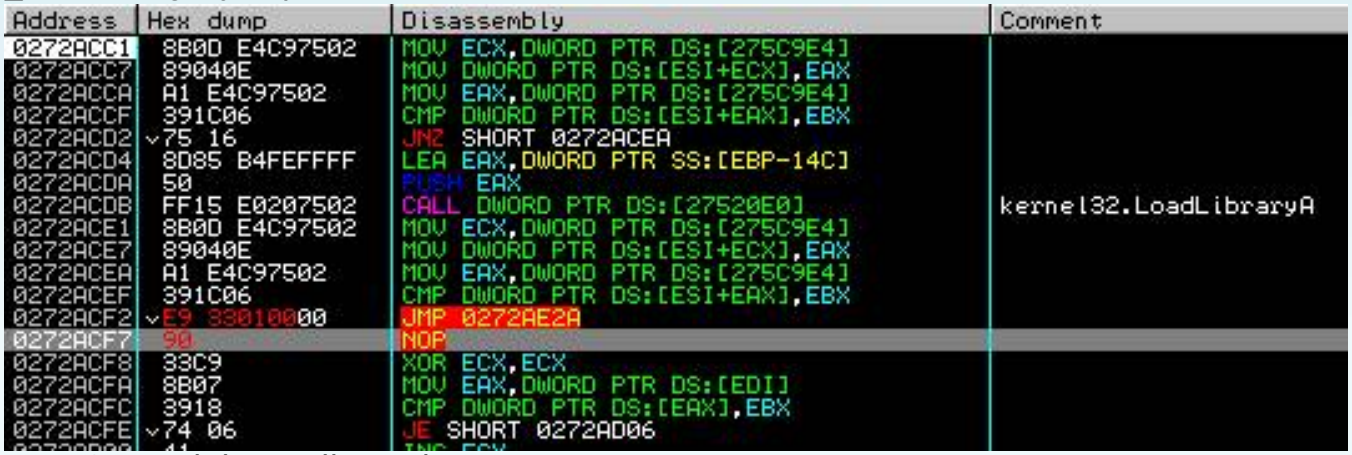
Address	Hex dump	Disassembly	Comment
77E7AD86	837C24 04 00	CMP DWORD PTR SS:[ESP+4],0	
77E7AD8B	0F84 37010000	JE kernel32.77E7AEC8	
77E7AD91	FF7424 04	PUSH DWORD PTR SS:[ESP+4]	
77E7AD95	E8 F8050000	CALL kernel32.77E7B392	
77E7AD9A	85C0	TEST EAX,EAX	
77E7AD9C	74 08	JE SHORT kernel32.77E7ADA6	
77E7AD9E	FF70 04	PUSH DWORD PTR DS:[EAX+4]	
77E7ADA1	E8 27060000	CALL kernel32.GetModuleHandleW	
77E7ADA6	C2 0400	RETN 4	
77E7ADA9	55	PUSH EBP	
77E7ADAA	8BEC	MOV EBP,ESP	
77E7ADAC	83EC 10	SUB ESP,10	
77E7ADAF	57	PUSH EDI	

_Bam F8 RETN trace down through 4, you will here:



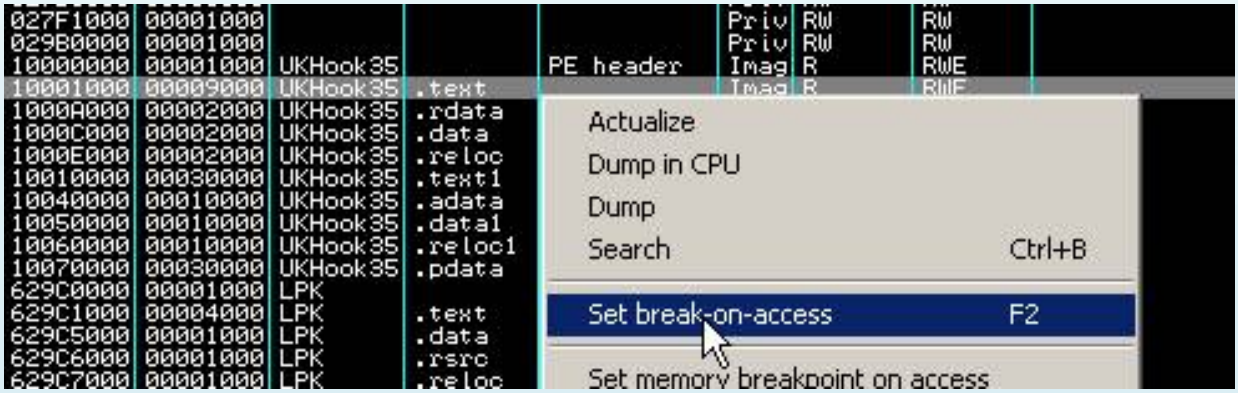
Address	Hex dump	Disassembly	Comment
0272ACC1	8B0D E4C97502	MOV ECX,DWORD PTR DS:[275C9E4]	
0272ACC7	89040E	MOV DWORD PTR DS:[ESI+ECX],EAX	
0272ACCA	A1 E4C97502	MOV EAX,DWORD PTR DS:[275C9E4]	
0272ACCF	391C06	CMP DWORD PTR DS:[ESI+EAX],EBX	
0272ACD2	75 16	JNZ SHORT 0272ACEA	
0272ACD4	8D85 B4FEFFFF	LEA EAX,DWORD PTR SS:[EBP-14C]	
0272ACDA	50	PUSH EAX	
0272ACDB	FF15 E0207502	CALL DWORD PTR DS:[27520E0]	kernel32.LoadLibraryA
0272ACE1	8B0D E4C97502	MOV ECX,DWORD PTR DS:[275C9E4]	
0272ACE7	89040E	MOV DWORD PTR DS:[ESI+ECX],EAX	
0272ACEA	A1 E4C97502	MOV EAX,DWORD PTR DS:[275C9E4]	
0272ACEF	391C06	CMP DWORD PTR DS:[ESI+EAX],EBX	
0272ACF2	0F84 32010000	JE 0272AE2A	
0272ACF8	33C9	XOR ECX,ECX	
0272ACFA	8B07	MOV EAX,DWORD PTR DS:[EDI]	
0272ACFC	3918	CMP DWORD PTR DS:[EAX],EBX	
0272ACFE	74 06	JE SHORT 0272AD06	
0272AD00	41	INC ECX	
0272AD01	83C0 0C	ADD EAX,0C	

_Patch Magic jump into EB:



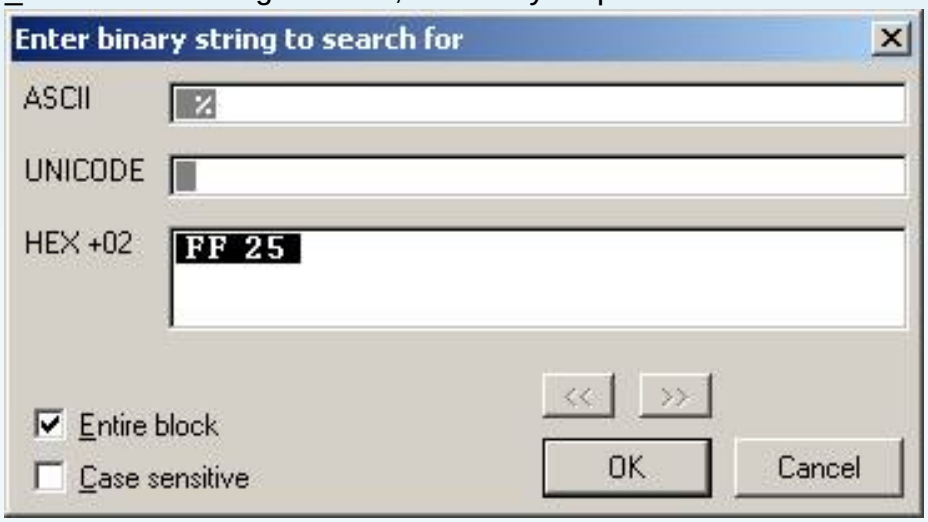
Address	Hex dump	Disassembly	Comment
0272ACC1	8B0D E4C97502	MOV ECX,DWORD PTR DS:[275C9E4]	
0272ACC7	89040E	MOV DWORD PTR DS:[ESI+ECX],EAX	
0272ACCA	A1 E4C97502	MOV EAX,DWORD PTR DS:[275C9E4]	
0272ACCF	391C06	CMP DWORD PTR DS:[ESI+EAX],EBX	
0272ACD2	75 16	JNZ SHORT 0272ACEA	
0272ACD4	8D85 B4FEFFFF	LEA EAX,DWORD PTR SS:[EBP-14C]	
0272ACDA	50	PUSH EAX	
0272ACDB	FF15 E0207502	CALL DWORD PTR DS:[27520E0]	kernel32.LoadLibraryA
0272ACE1	8B0D E4C97502	MOV ECX,DWORD PTR DS:[275C9E4]	
0272ACE7	89040E	MOV DWORD PTR DS:[ESI+ECX],EAX	
0272ACEA	A1 E4C97502	MOV EAX,DWORD PTR DS:[275C9E4]	
0272ACEF	391C06	CMP DWORD PTR DS:[ESI+EAX],EBX	
0272ACF2	E9 33010000	JMP 0272AE2A	
0272ACF7	90	NOP	
0272ACF8	33C9	XOR ECX,ECX	
0272ACFA	8B07	MOV EAX,DWORD PTR DS:[EDI]	
0272ACFC	3918	CMP DWORD PTR DS:[EAX],EBX	
0272ACFE	74 06	JE SHORT 0272AD06	

_HD GetModuleHandleA, Alt + M:

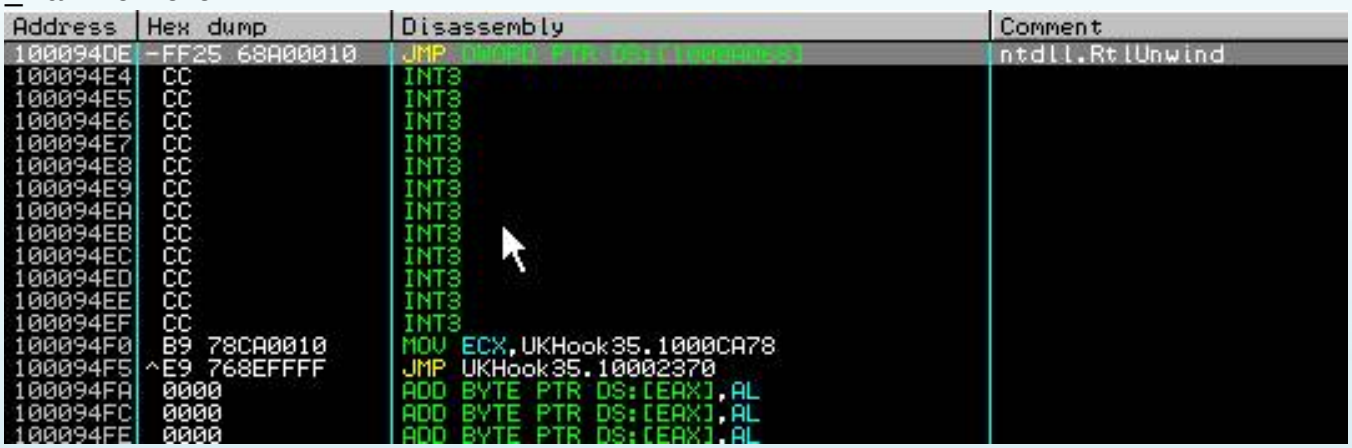


_Shift + F9: OEP:

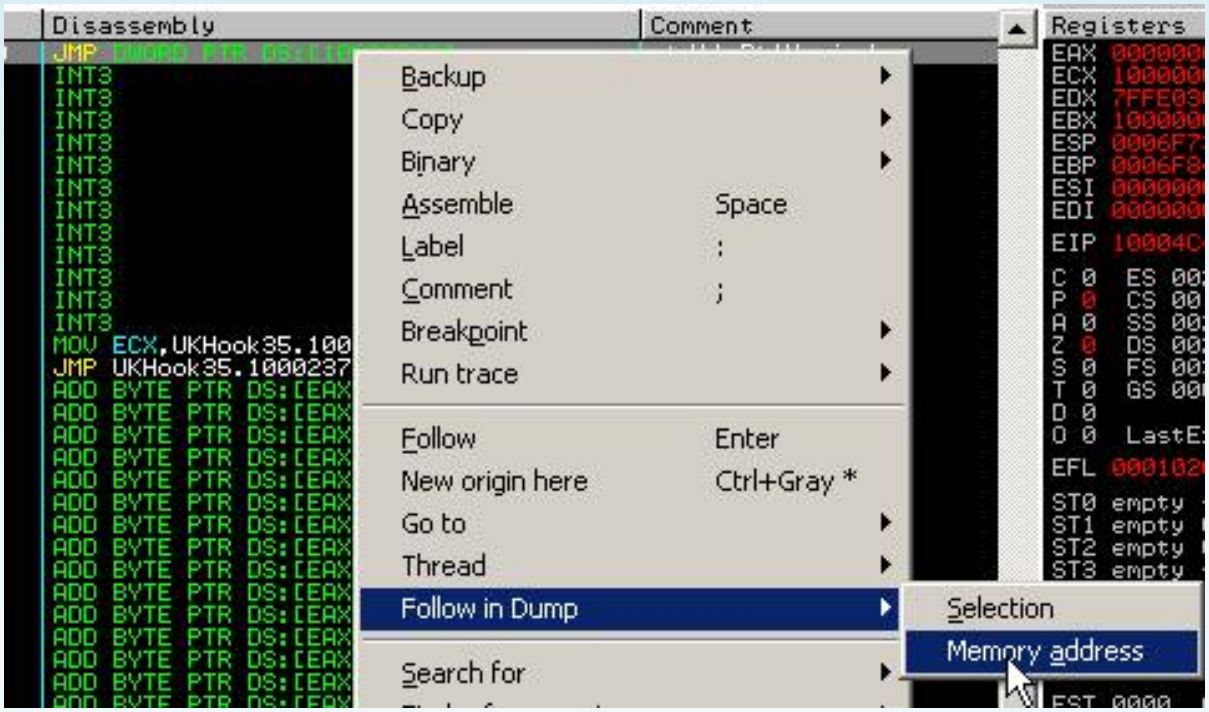
_Ta Start looking for IAT, in OEP you press Ctrl + B:



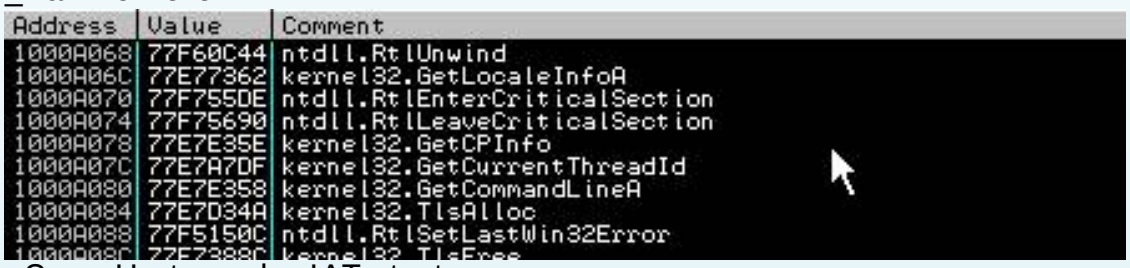
_Ban To here:



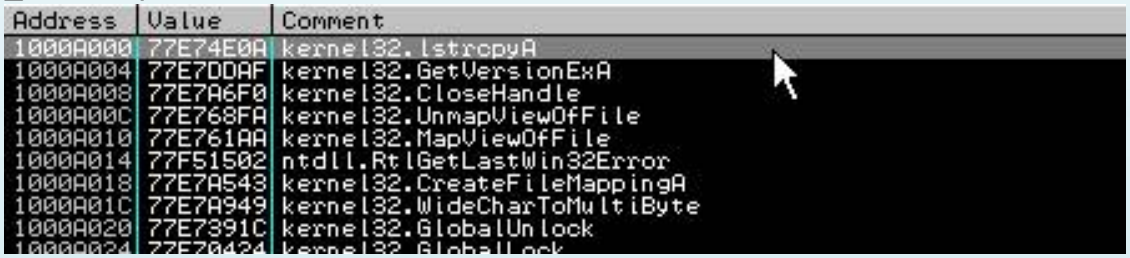
_Right Click:



_Ban To here:



_Cuon Up to make IAT start:



_Cuon Down search IAT End:

_Tom The information we have:

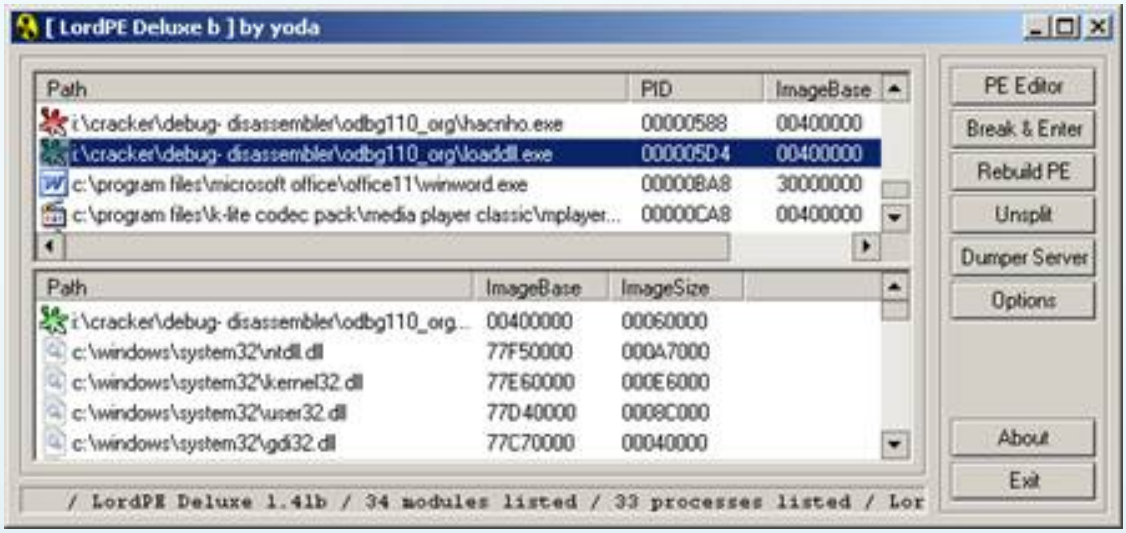
OEP: 4C4F:

IAT Start: 1000A000 77E74E0A kernel32.lstrcpyA

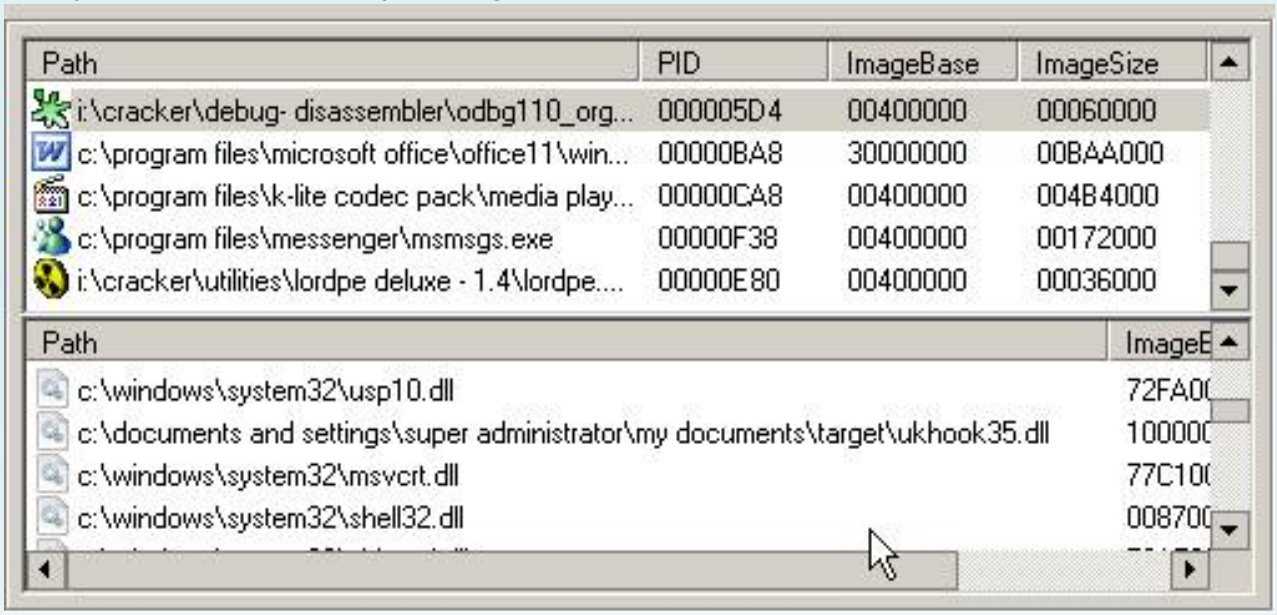
IAT End: 1000B058 77206465 OLE32.77206465

IAT Len: 1058

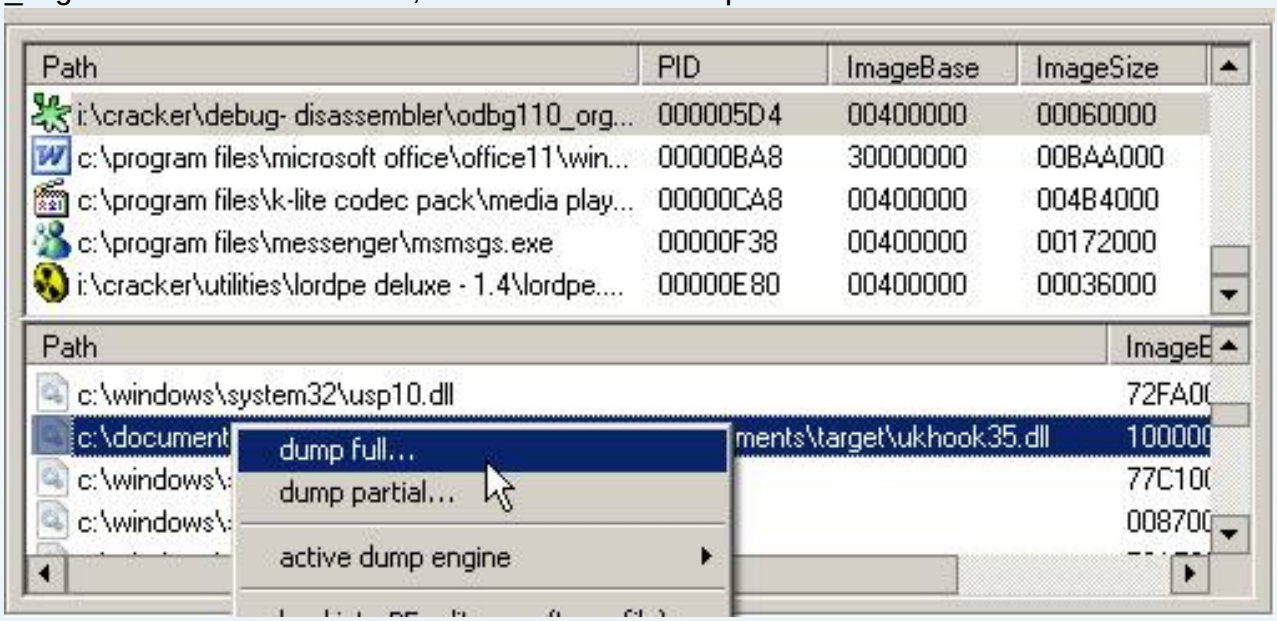
_Bay Hours Alt + C back position OEP, you open LordPE:



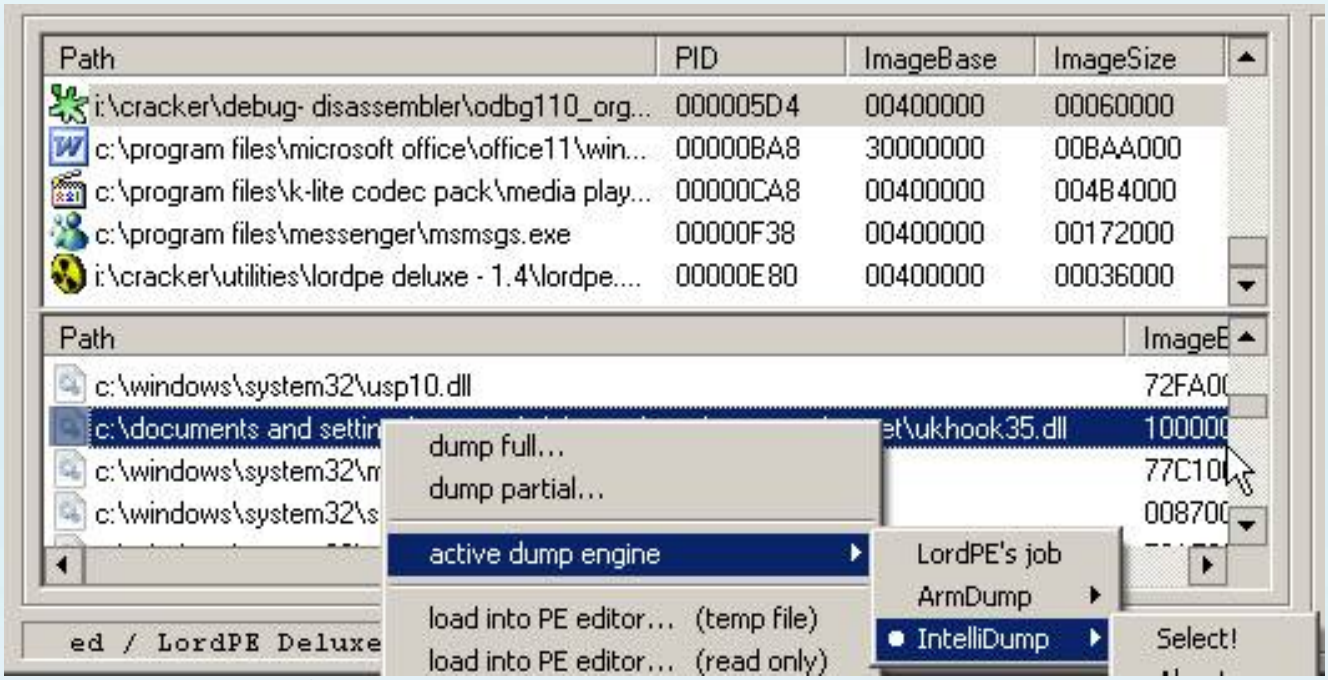
_Di Course, we can not see the process dll list. Do we use LoadDLL made reference to the process UKHook35 dll. You click on loaddll.exe process, look in the module's window to see many modules that are pointing to loaddll.exe, scroll down to see UKHook.dll modules:



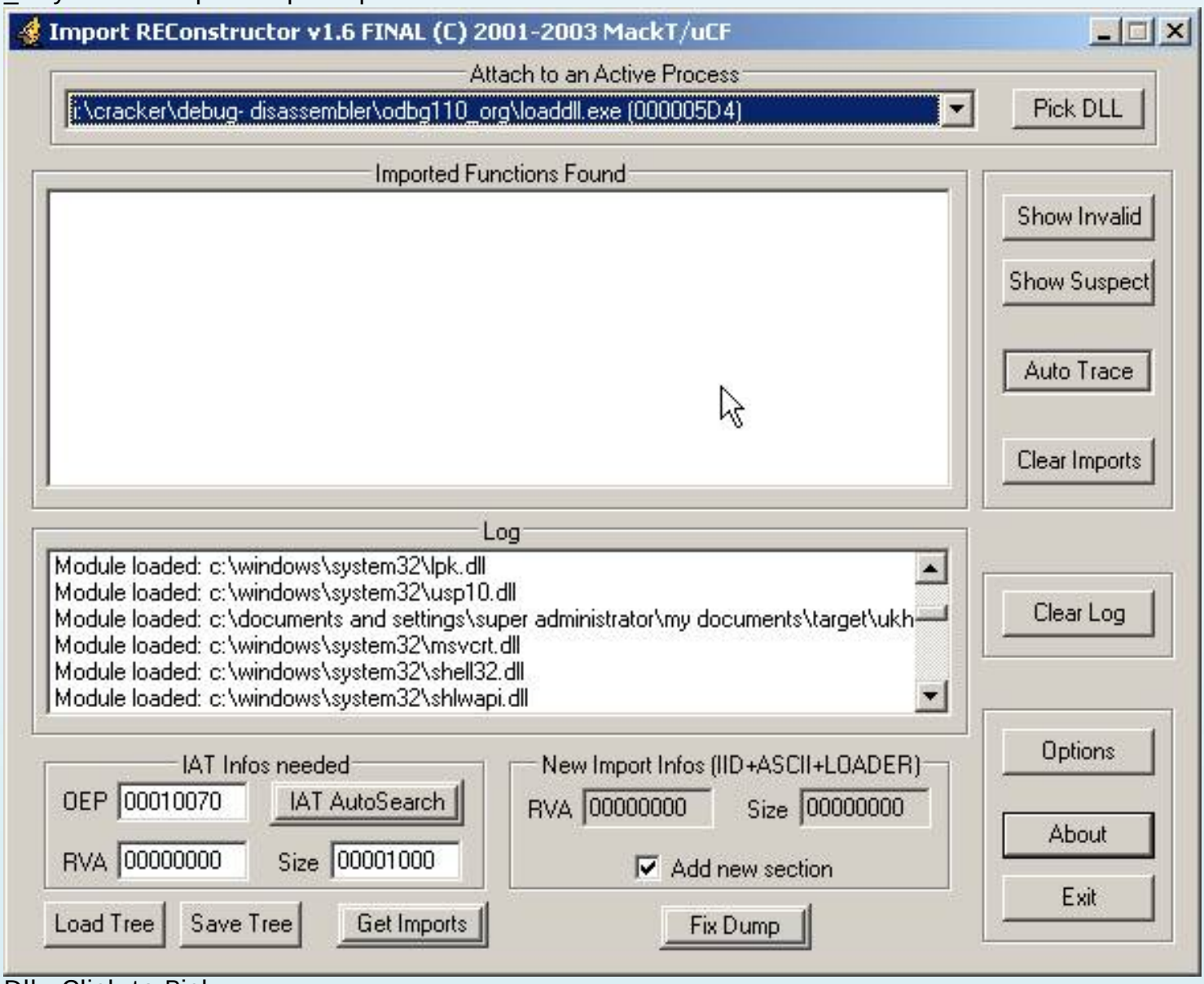
_Righ Click in this module, select the full dump:



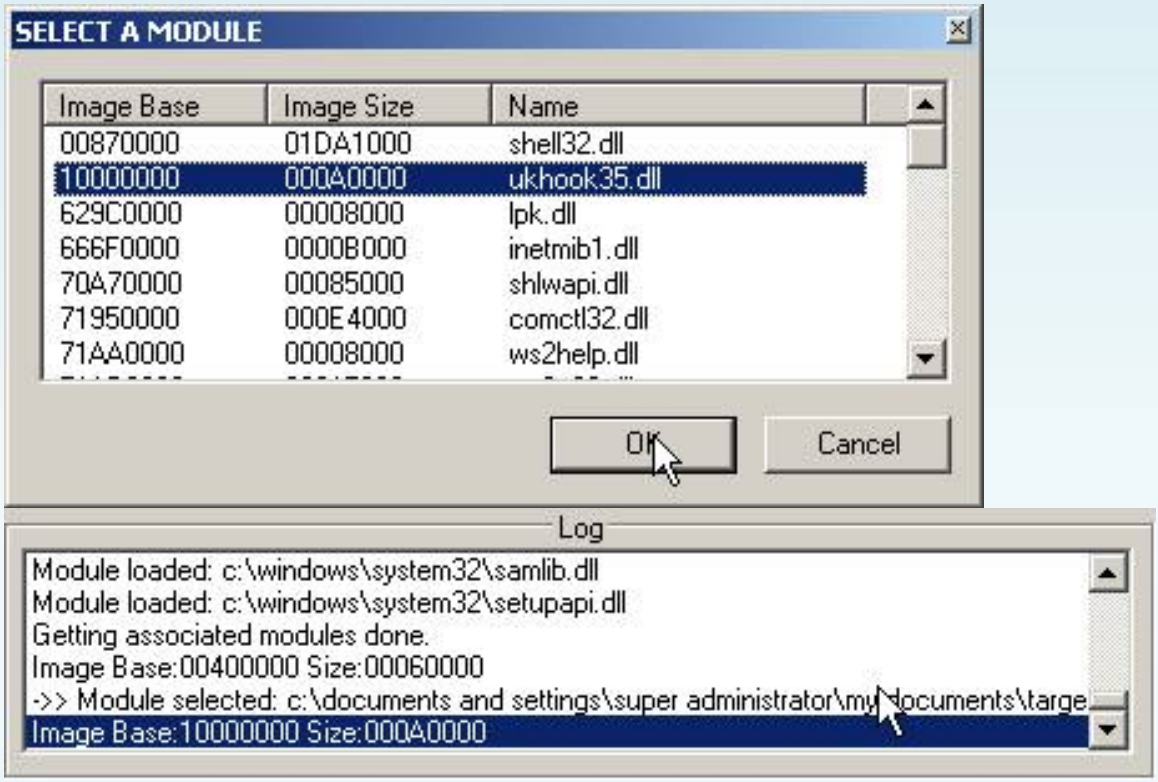
_Nho Select dump dump Intelligent Engine is:



_Bay Hours ImpREC open up:

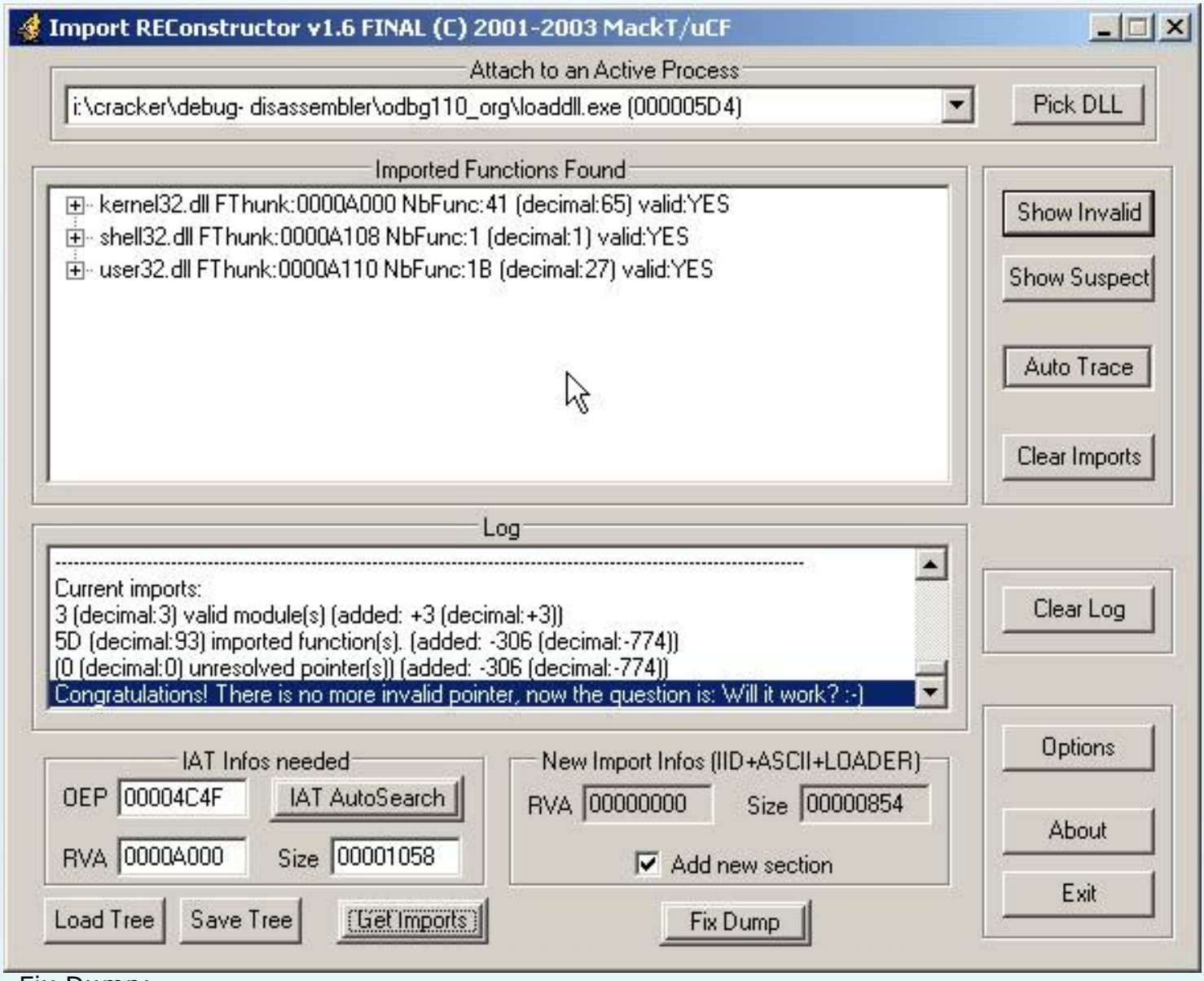


Dll _Click to Pick:

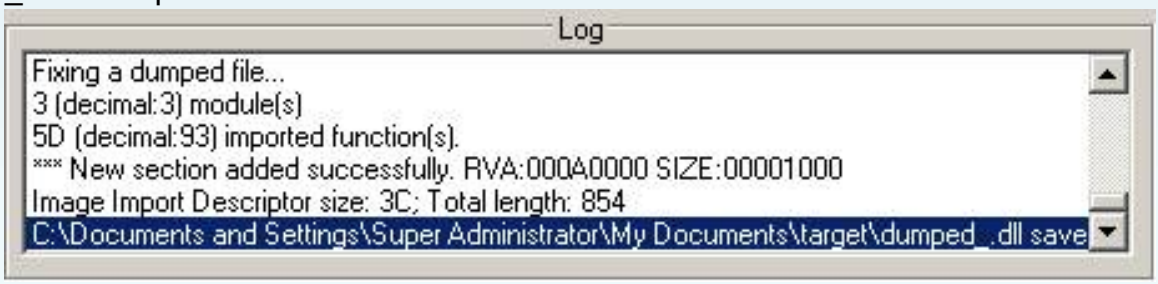


_Dien Information

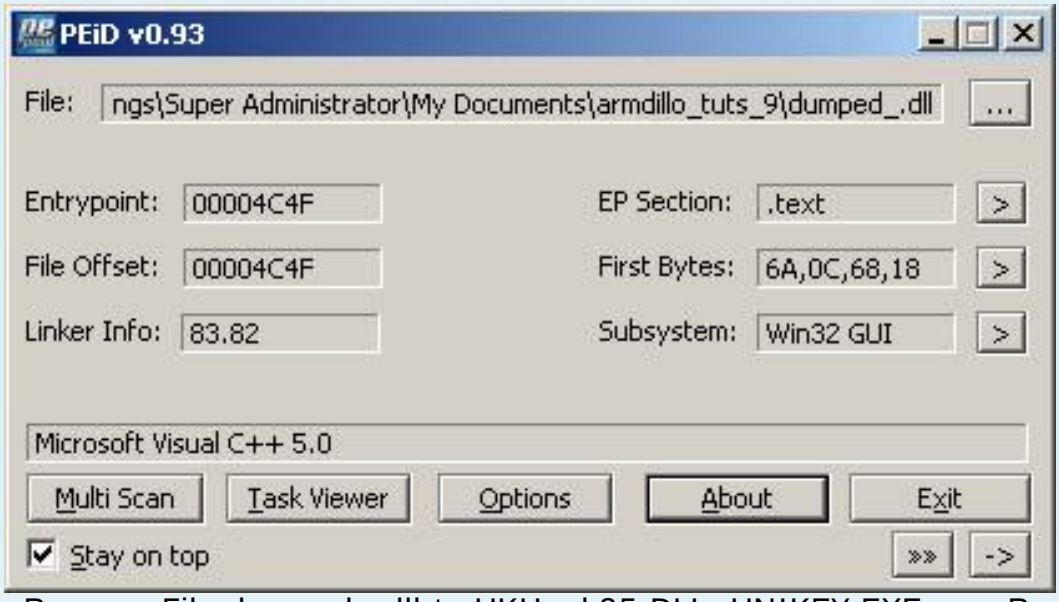
_Get Import:



_Fix Dump:



_Detect:



Rename File dumped.dll to UKHook35.DLL, UNIKEY.EXE run. Run good!

_Unpacked Done!

IV. Conclusion

_For More tuts, please visit http://tinicat.de/hacnho

_Bye!

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, MaDMAn_H3rCuL3s, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx OllyDBG of the authors and ArmInline

To be continued ...

Written by **hacnho** (tutorial date: VietNam 29/09/2005)

Reverse Engineering Association

SoftWare

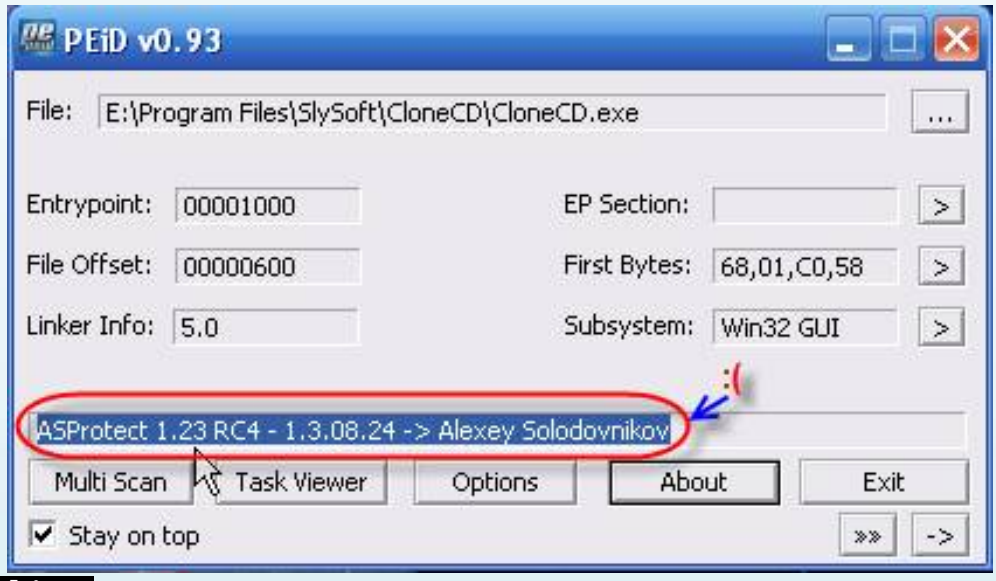
Homepage: www.slysoft.com
Production: SlySoft,
Software: CloneCD v4.3.1.7
Copyright by: Copyright © 2003 SlySoft Inc.. All Rights Reserved.
Type: Time Trial
Packed: 1:23 ASProtect RC4 - 1.3.08.24 -> Alexey Solodovnikov
Language :
Crack Tool: 1:10 OllyDbg, PEiD 0.93, ImportREC v1.6F
Unpack: Manual

CloneCD v4.3.1.7

CloneCD is the ideal tool to make backup copies of your music-or data CDs, regardless if they are copy protected or not! CloneCD's award-winning user interface copies almost any CD in just a few mouse clicks!

I - Information:

- Hic is soft on this before I have pretty much grace it with it, remember the original thua ngơ ngac after it installed open PEiD to detect them, hic see Asprotect found that both poignant. I replied that SuperNewbie, hiii until now I also still in progress on such teo time :-). Fossick REA in the day that is not reaonline.net as now, the site of grapes and aged on the Net, which is the default Stolen bytes, Anti-Debug, Fix v. dump. V. .., reading is not available I always close the hiiii, and the Soft we also dispose xó not. It did not want to find out what Asprotect, but again the more poignant when later I touched the Armadillo. Is "to avoid having Dưa empty coconut shell."
- After several days gác pen today, I earned the tut the `CracksLatinos.` Riu not dare to dance through the eyes but also for workers mạn written permission for his children are in any situation "tit right eye, the red eye as I left. "
- Hic reinstall programs, use **PeiD v0.93** we know the program is packed with **ASProtect 1:23 RC4 - 1.3.08.24 -> Alexey Solodovnikov.** Hiiii they met again later to dispose of many xó but found it difficult to describe lang lang :-). Do not know they love you no longer remember more tolerable.



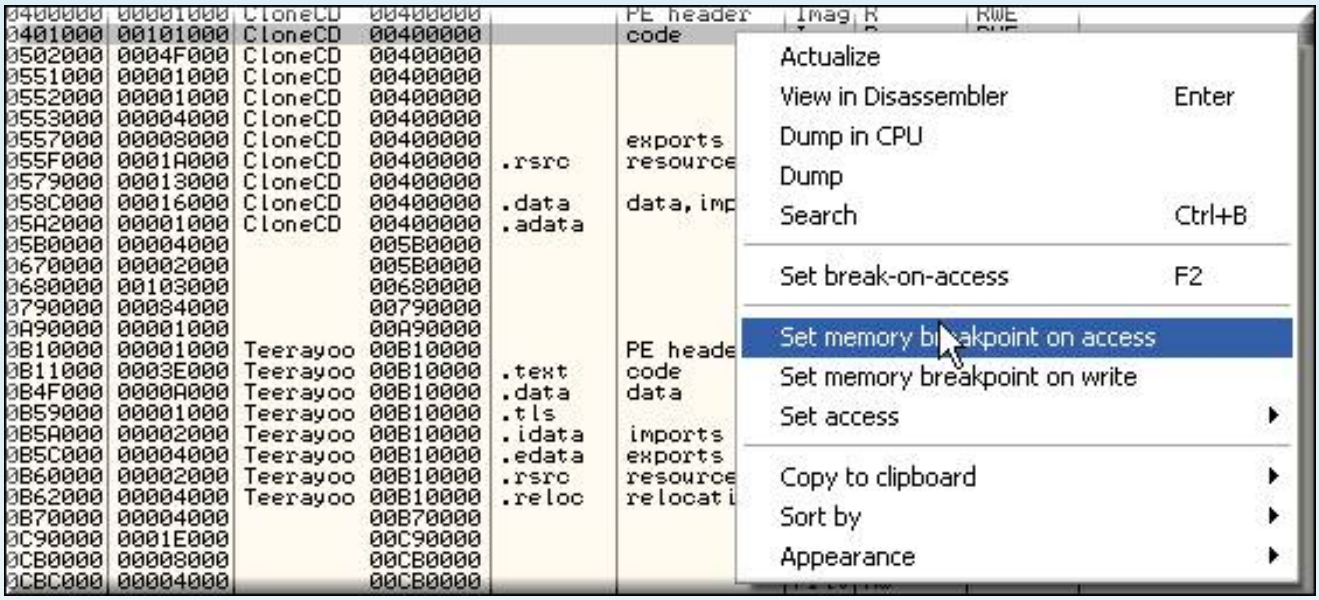
II - Manual Unpacking:

- Load the program in Olly, we will stop here in Olly:

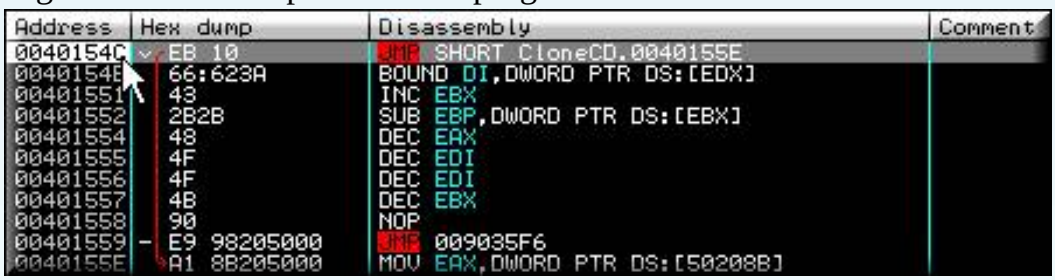
- Press **F9** to Run program, we will Break Exception in first

- Continue to press **Shift + F9** to bypass all Exception until the Run toan.Dong complete the count the number of clicks, in my case is 27 times the Run program completely. Now press **Ctrl + F2** Restart to the program, press **F9** to Run. Then press **Shift + F9** 26 times we here in Olly:

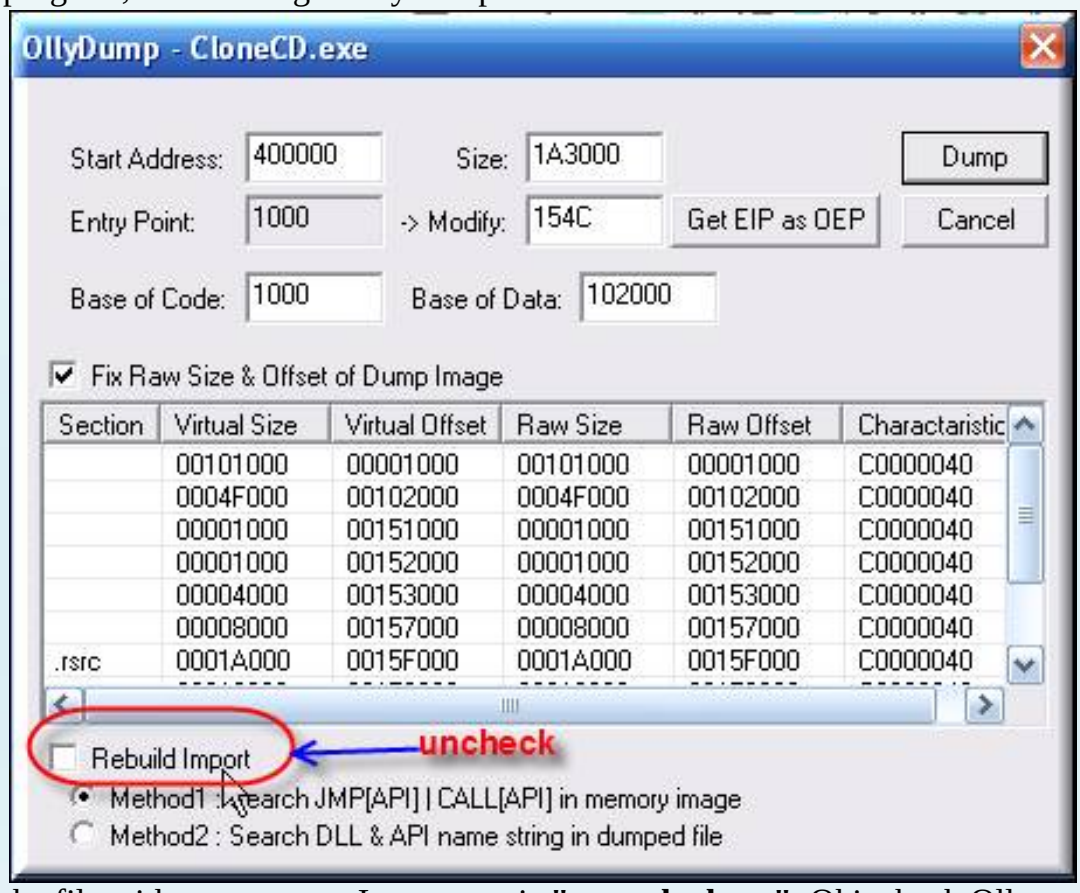
- Press **Shift + F7** 1 times, then press **Alt + M** to open the window Memory. We will set a **Break point** in the Code **on Access** section as follows:



- Press **F9** to Run program. We will stop at the OEP program.

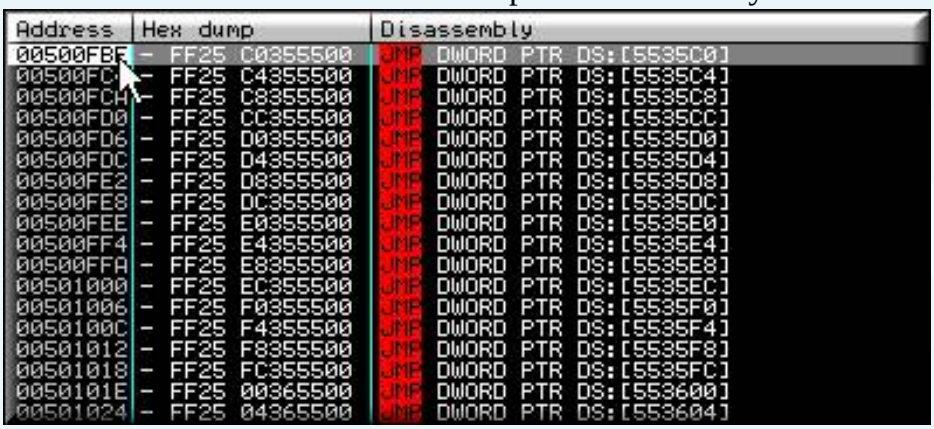


- Here, drag up a bit, and observed that the program does not have the missing bytes so we concluded that in the case of this child, we do not need to search for "Stolen Bytes. OEP our time is **40154C - 400,000 = 154C.** Now we will dump the program, use the Plugin OllyDump we are as follows:

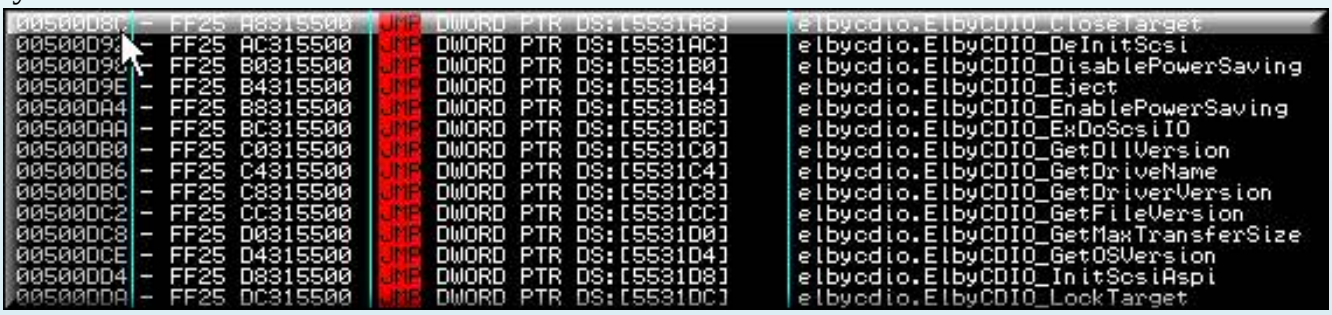


- Dump and Save the file with a name any. In my case is **"unpacked.exe".** Okie, back Olly, press **F7** to Trace a

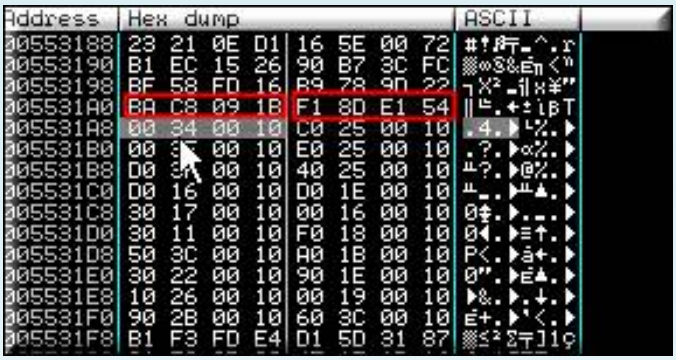
paragraph until we Trace Call to order the first one to be in position after Olly:



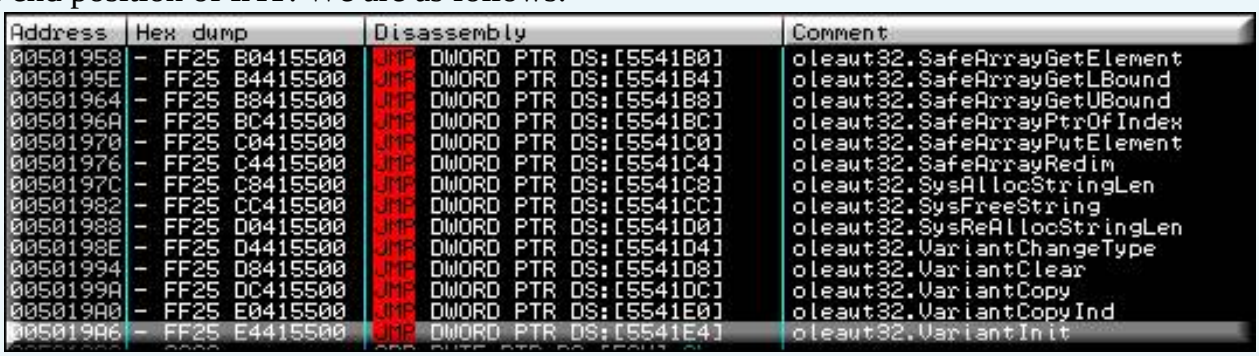
- This order is the first call to IAT, see the space where we see: DS: **[005535C0] = 00CA1C64,** does not exist a function for this jump in orders. Scroll mouse over until we meet orders **JMP DWORD PTR DS: [55xxxx]** first. In my case are:



- At **00500D8C** based on, we must click and select "**Follow in dump -> Memory Address.**" In the window dump we will be as follows:

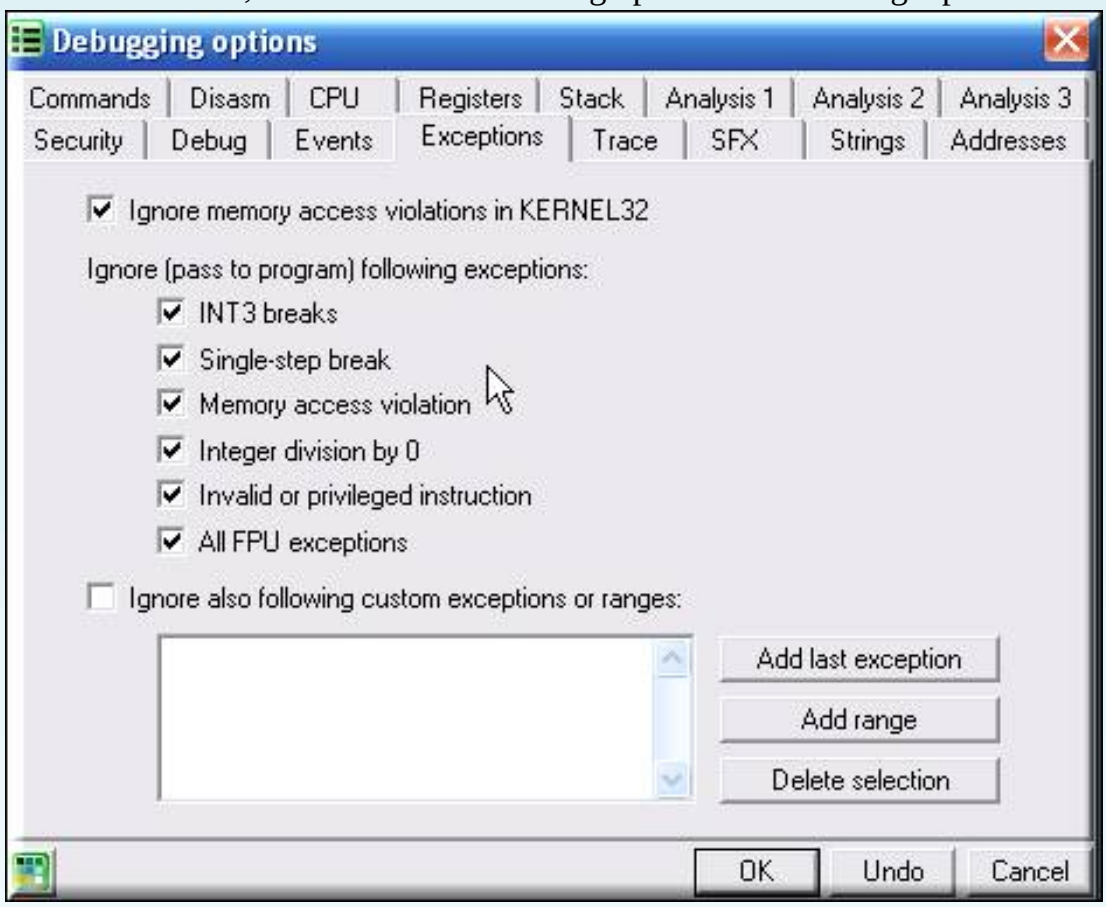


- To make sure the view **005531A8** have to address is the start of the IAT not we do the following. At 4 bytes **005531A0** selected, press **Ctrl + R** to see this reference to any order, the results I have are empty, similar to **005531A4.** So the conclusion is **005531A8** address start of IAT. Continue on the window of CPU Olly drag us down to the end position of IAT. We are as follows:

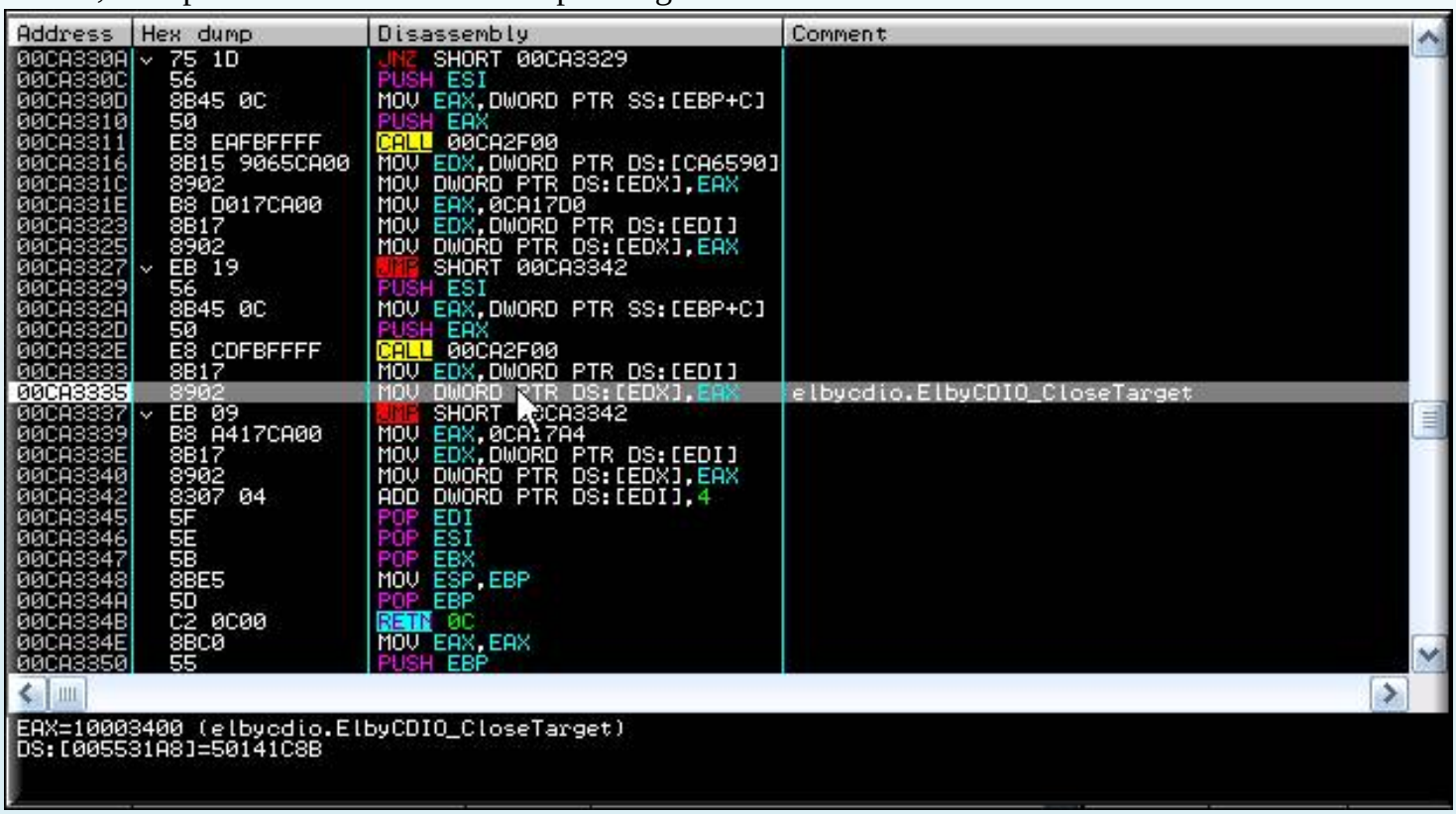


- Tolerable in **005019A6 Follow** me choose **Print dump -> Memory Address.** You can check them **005541E4** see is the address last IAT not. After the process we have been on the length of the IAT is **005541E4 - 005531A8 = 103C.** Hic hard too :-)

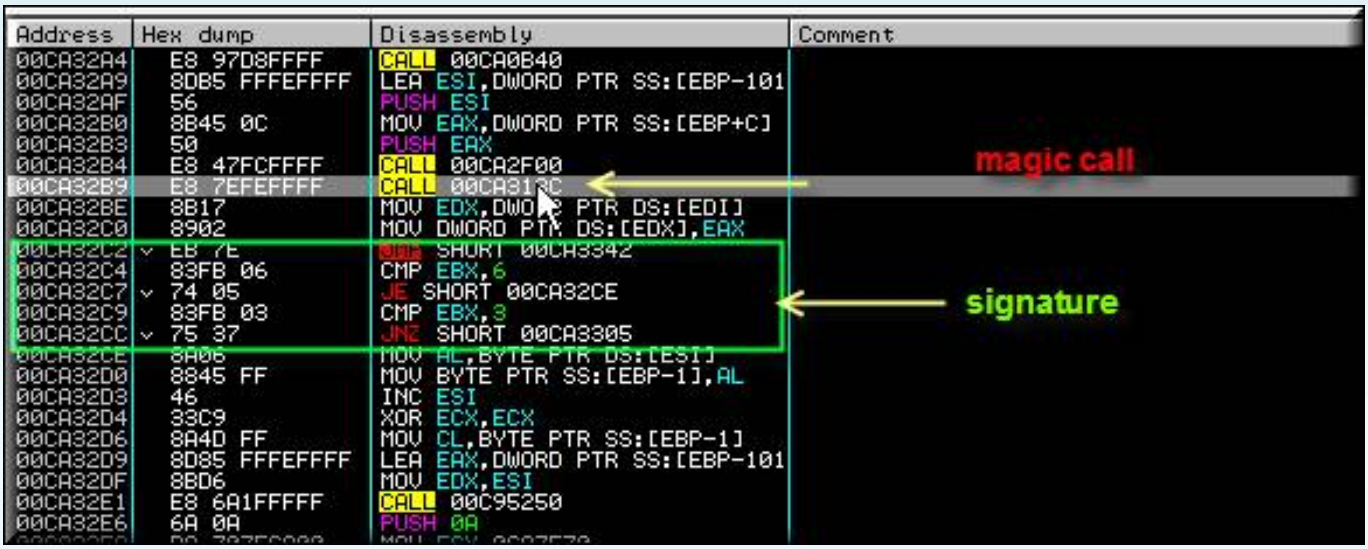
- Okie Next we must find the Magic Call. Press **Ctrl + F2,** press **F9,** we will stop at the first exception. Here, we too Memory dump window, press **Ctrl + G** to enter **005531A8.** Select the first 4 bytes and set a **Breakpoint on write.** Press **Shift + F7** 1 times, then select the following options in the Debug Options:



- Click OK, then press **F9** to Run. Continue pressing **F9** a few times we will Ice here:



- Scroll mouse over a little to find the location of Magic Call we will be as follows:

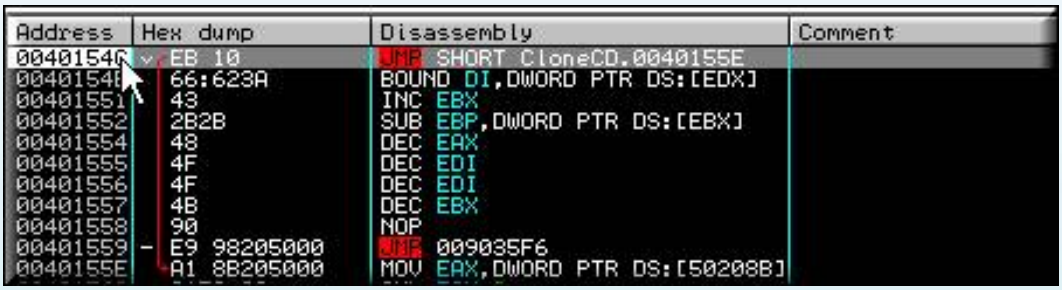


- The address is Magic **00CA32B9** Call, remember this. Now we Restart the Olly, configure the Debug Options -> Exceptions to the 2 first choice, uncheck the first time, press **F9** to run, in CPU window press **Ctrl + G** and enter the address of Magic Call. At the Magic Call BP is set by pressing **F2** and submit Call this command:

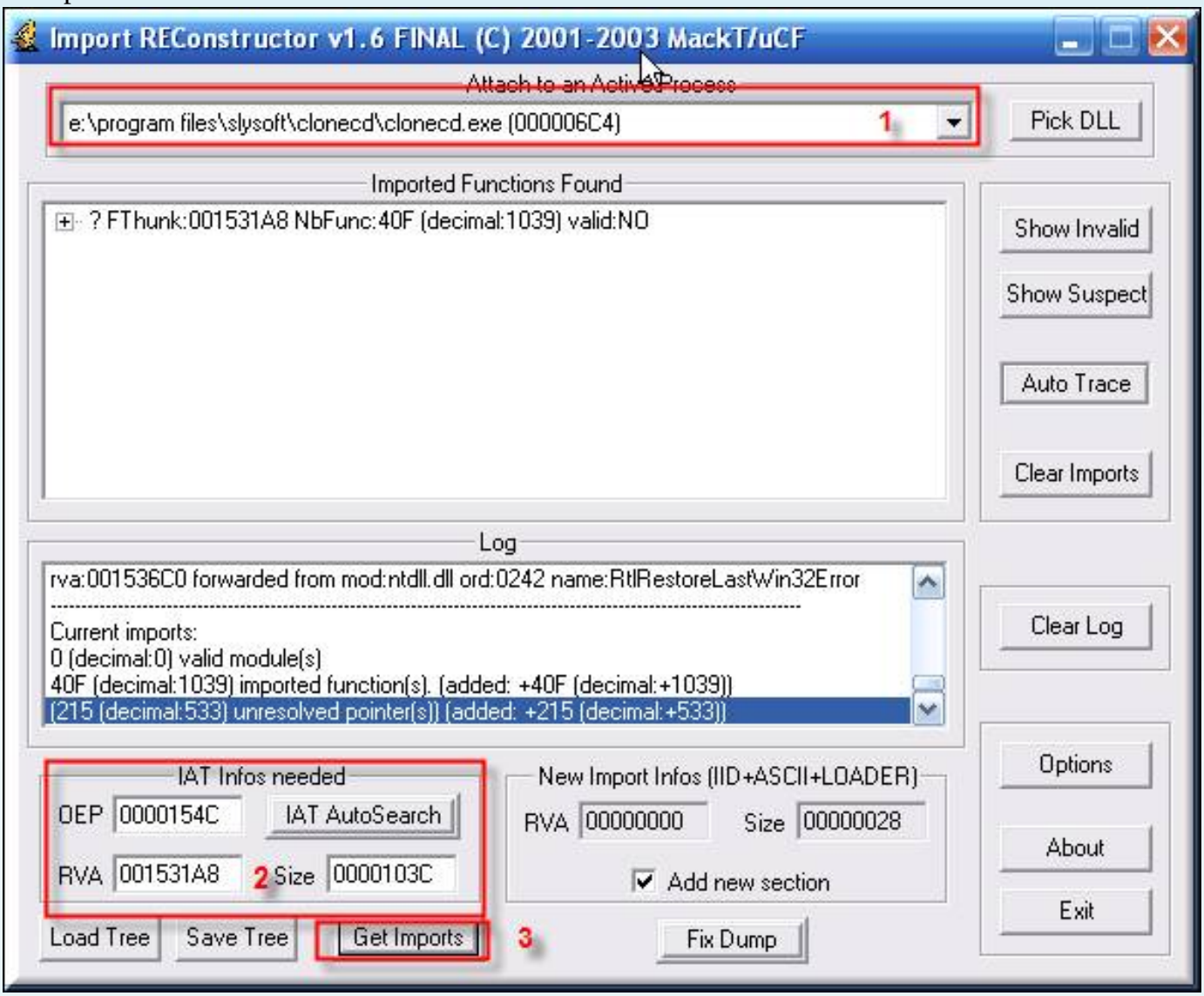
- Time to configure the Debug Options as I said before, according to press **Shift + F7** and finally press **F9** Ice in our seats that we have set BP.
- Next we Trace with **F7** until we observed that the following signs:

- OK we put in place a BP has ordered **POPAD.** Press **F9** to run, we at Ice Magic's Call, BP delete this and continue to press **F9** we will stop at **POPAD.** Deleted at the BP POPAD, configure the Debug Options -> Exceptions to top 2 choices, click **"-"** back in place to submit. Here we do the following:

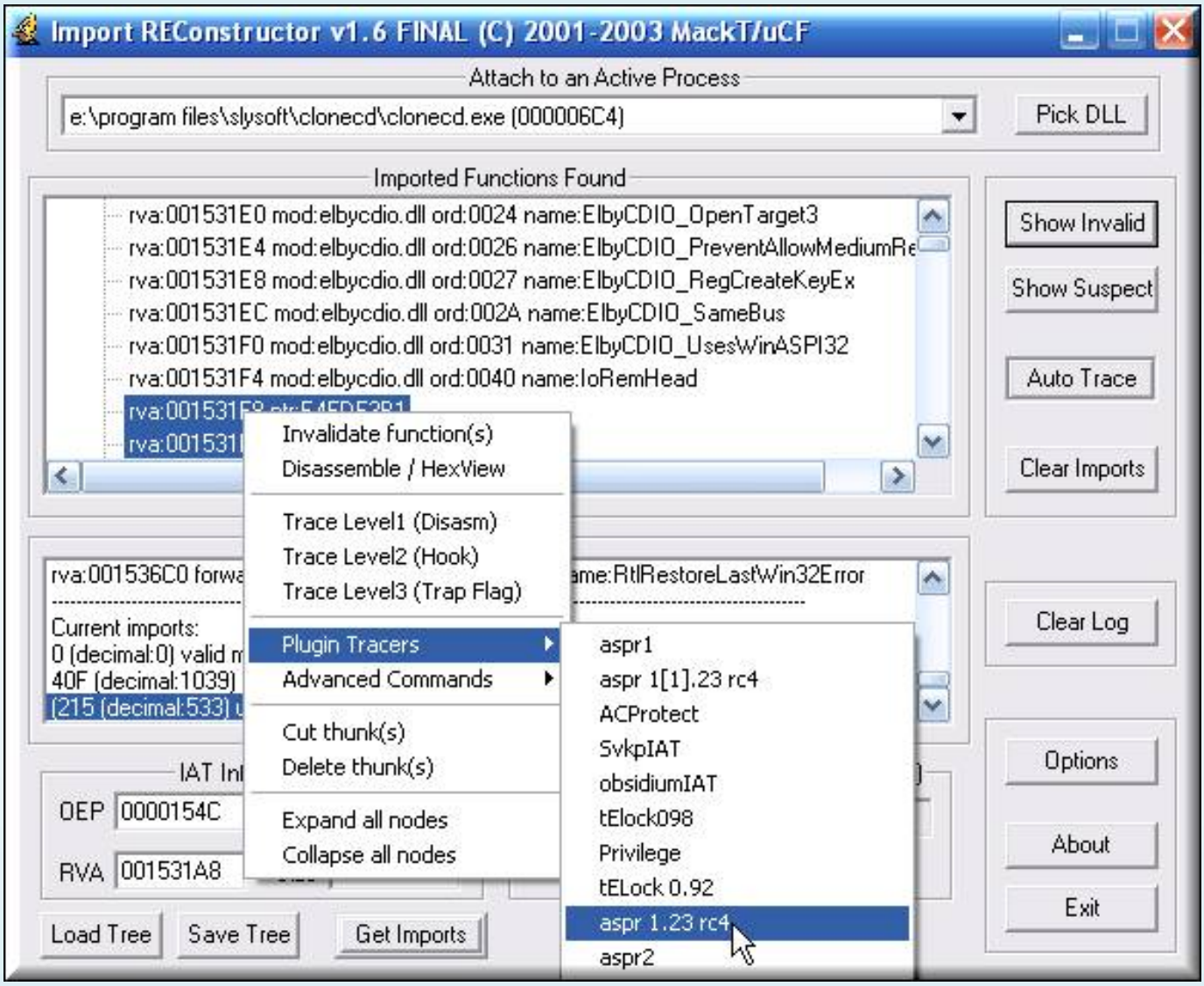
- Press **F9** to Run, then press **Shift + F9** 7 (8 if the Run entirely). Next press **Shift + F7, Alt + M** to open the Memory Window, located at BP Code Section. Press **F9,** we stopped at the OEP.



- Ac I khùng coming here this month rùi that, a few more sure I again beating the keyboard. Fortunately we are here to Fix IAT was then. **ImportREC** open up, select Process and enter information like Figure below and click Get Imports:



- Click Show Invalid, we also see many Invalid Thunks. Mouse right at the Invalid and use plug-in:



- Is still a lot Unresolved Pointers. However we Cut Thunks and conducted Fix IAT. Select File unpacked.exe to Fix IAT. Import Rec will save with the name after unpacked_.exe.

- Hic is moments from the best, hiiii câm see any mouse that falter:). Close ImportRec and Olly. Run the file to try unpacked_.exe. Passable coffee too, roaring run it:

- Use PeiD to check again, hiii we are as follows:

III - End of tut:

- Finished - September 20, 2005

--++--==[Greatz thanks to]==--++--

- Thank to my family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Hoadongnoi, Nini, Merc ... all REA's members, HacNho, RongChauA, Deux, tlandn, dqtln, CracksLatinos, ARTEAM .... all my friend, and you.

Special thanks to --++--==[ ]==--++--

coruso_trac, patmsvn, trm_tr v. .. v.. all brothers in VSEC.

>>>> If you have any suggestions, comments or corrections email me: **kienbigmummy [at] gmail.com**

REVERSE ENGINEERING ASSOCIATION

http://www.reaonline.net

Inline patching Asprotect 2.x

ThunderPwr (ARTeam)

0. INTRODUCTION

This article is written just to clarify the steps that must be conducted to make technical Inline Patching for the program compressed by Asprotect; angle from a more general, we can understand more about the target Inline Patching.

Inline patching is not a simple way that can be used to modify behavior of the program, technical because this requires a good knowledge about the protection of the compression, but after gradually coming to have be easily expanded with the compression of the other.

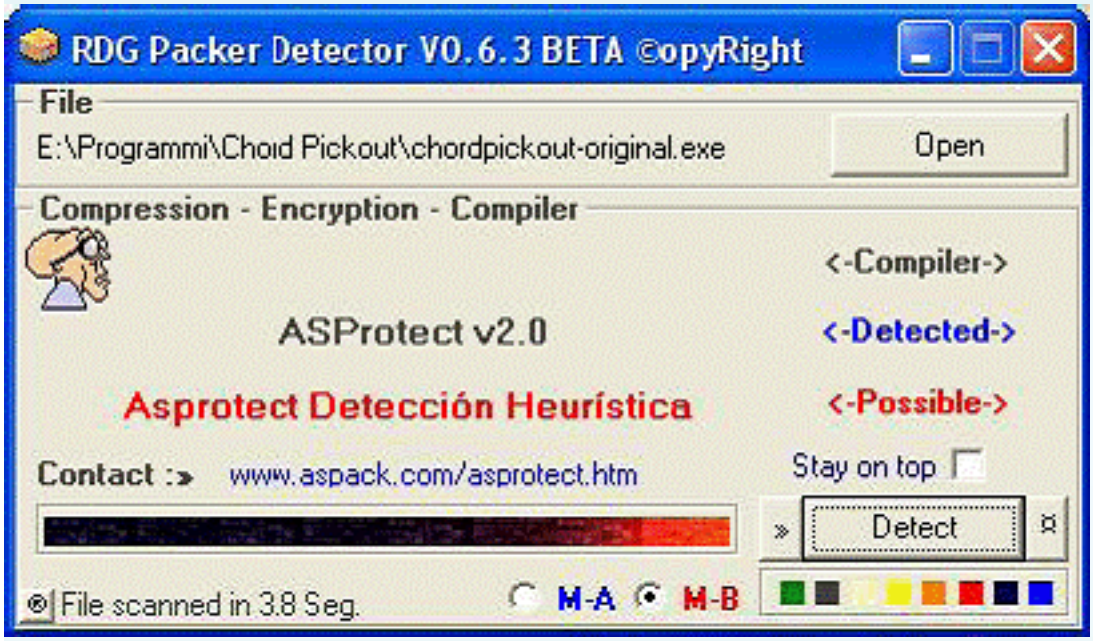
To better understand this technique, you can use a real example, I try to Chord Pickout 1.5. You can download here www.chordpickout.com

All information in this tut to serve in academic research on protection from the protection.

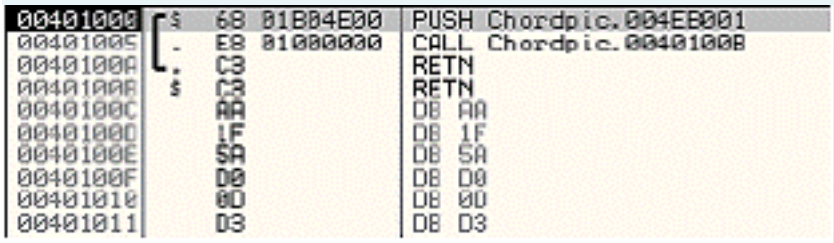
All the information contained in this tutorial does not have to be used in order to use in illegal way copyrighted and protected software. All the info in this tutorial must be used in order to only better know the protection scheme used from this particular protection. It is not encouraged therefore to the use of these information for illicit or various scopes different than the pure study.

1st PACKER Analysis (reversing stage)

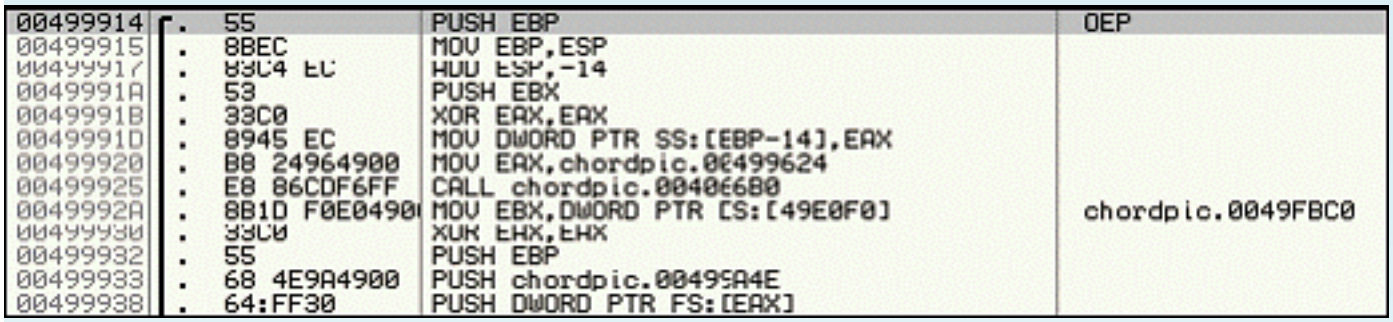
You use the scanner to check enforcement program is compressed or not



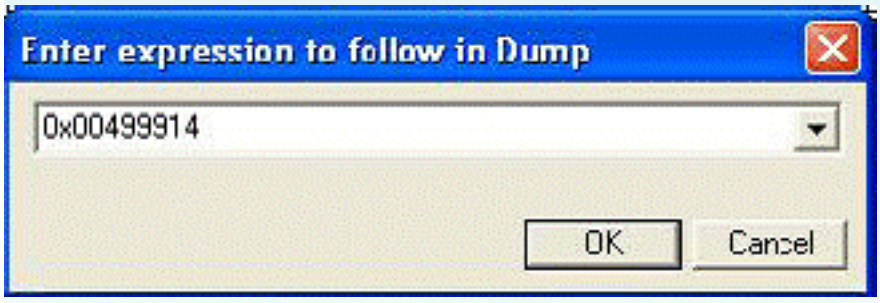
This is often to do as well as to consider a direct Entry point structure similar to each Asprotect target.



We must find the OEP of the application. This depends on the packer. For Asprotect we use methods and exceptions as follows:

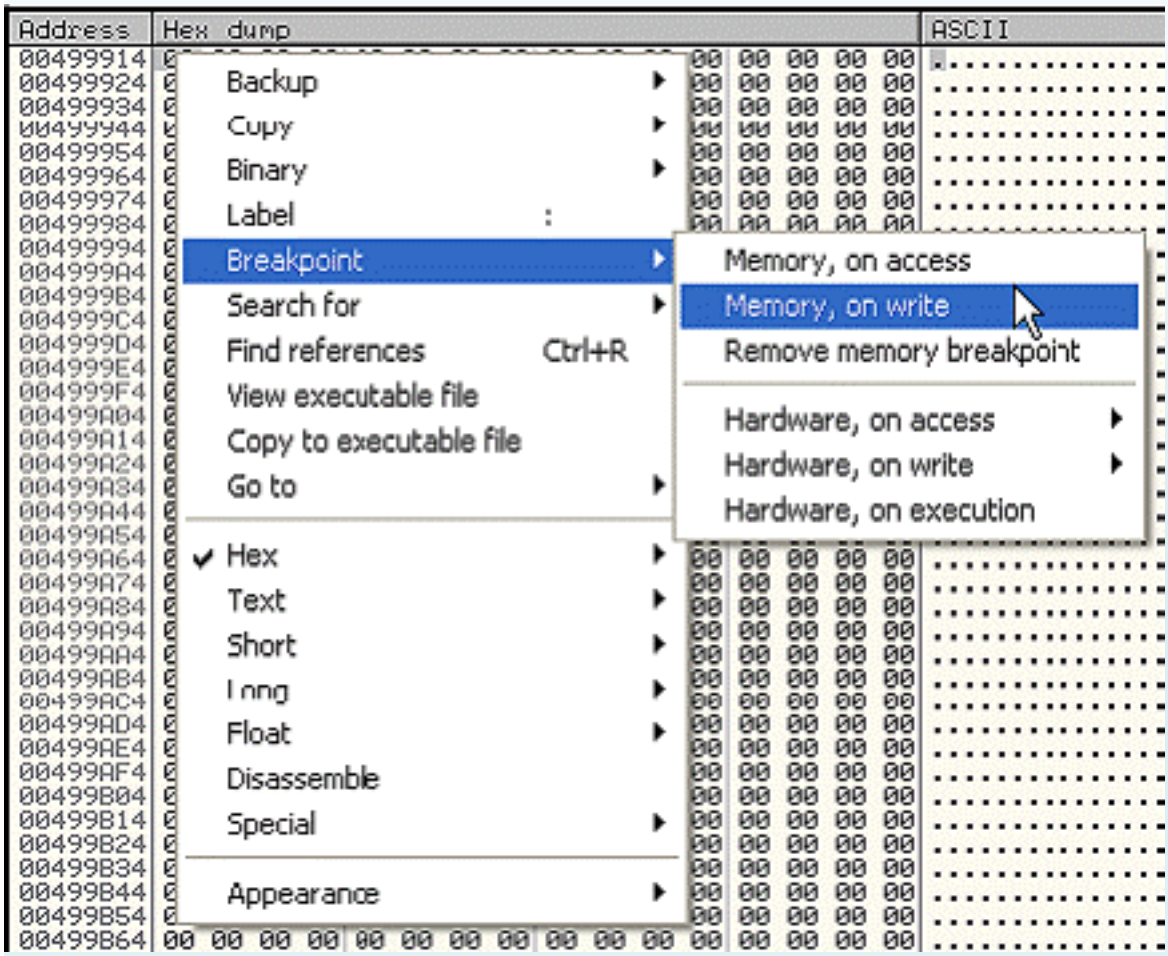


Now restart target and look at the window dump Olly, press Ctr + G and to address: 0x00499914, we try to review the area remember this:

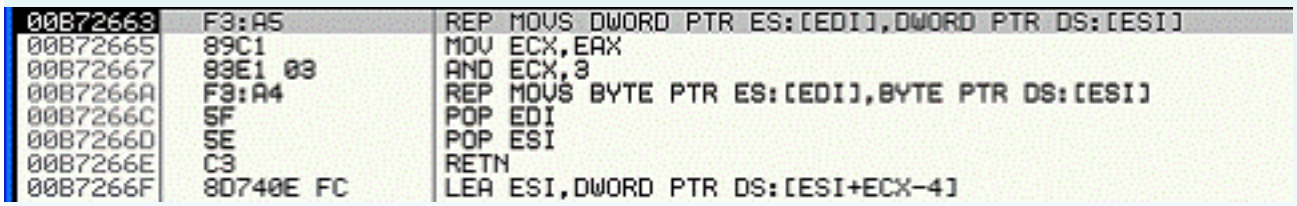


All addresses are from OEP contains 00 BYTE because the code of the program to decompress

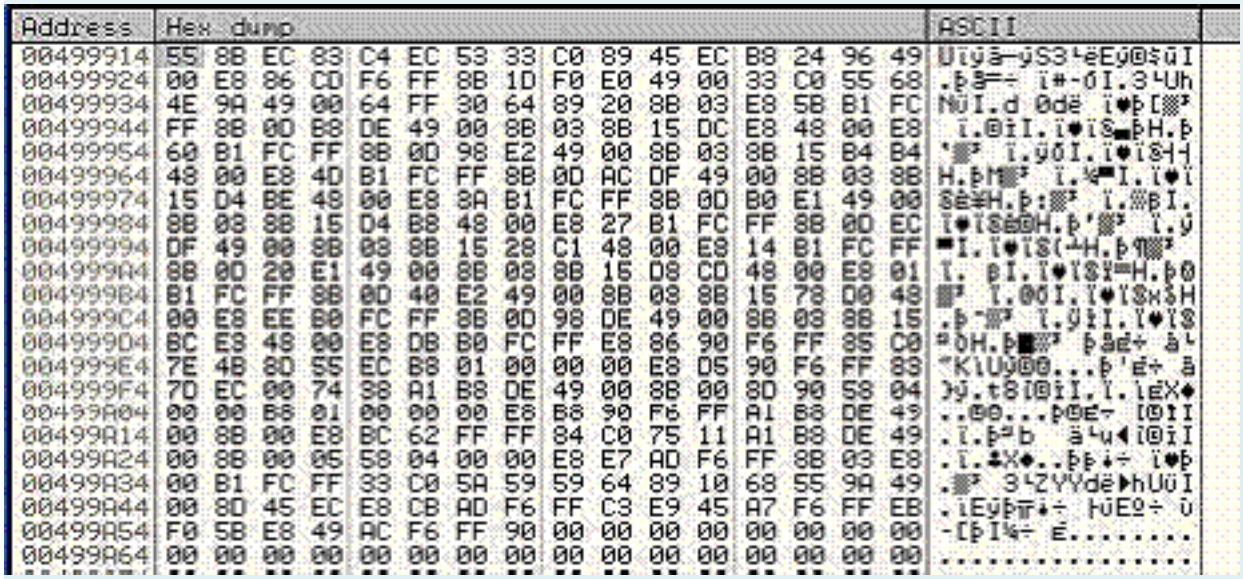
from the packer stub, place a breakpoint on memory, to write on the btye at the address identified:



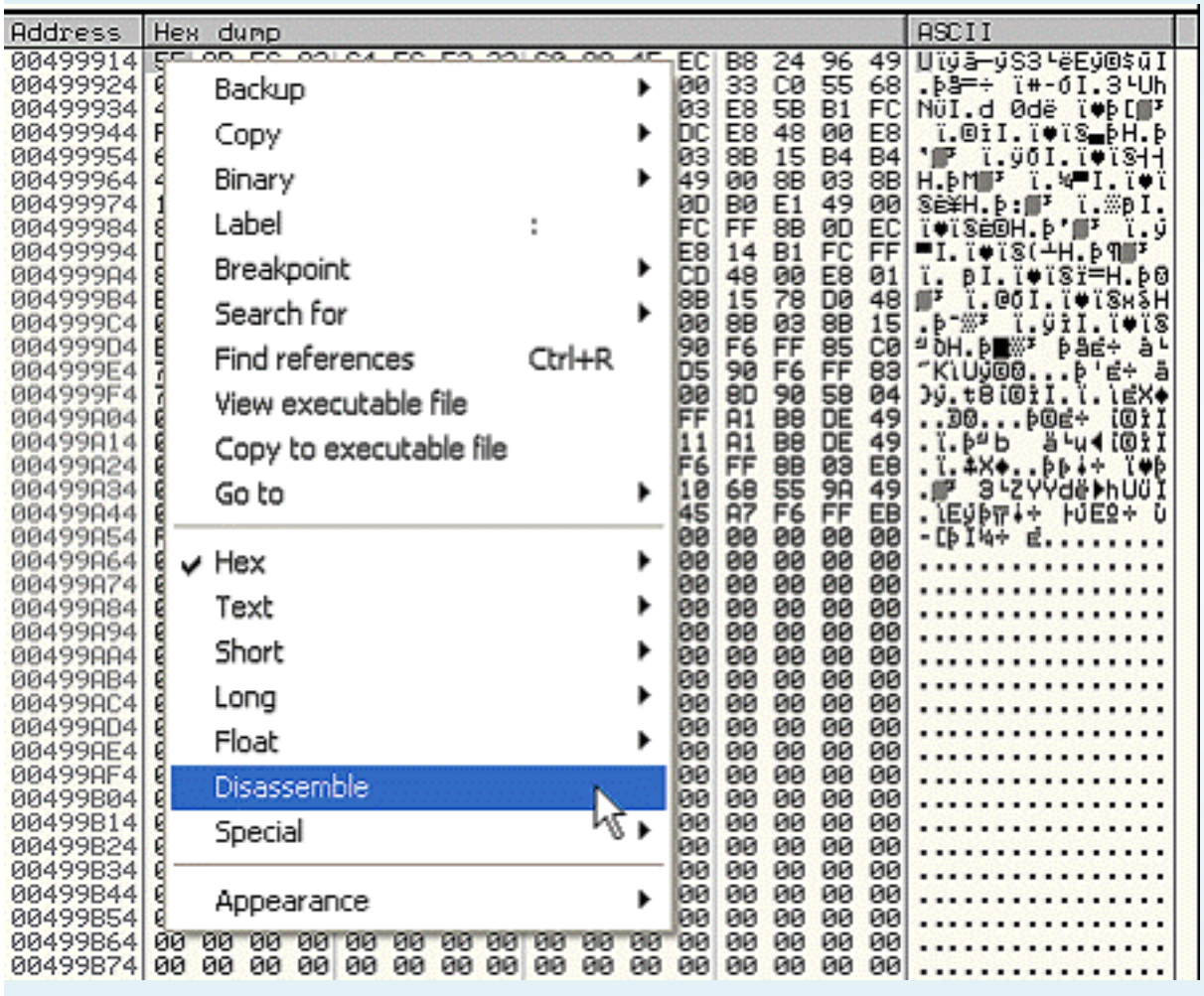
Now press ALT + O to view Obtions and check all the exceptions (exceptions), then press Shift + F9. After a while Olly will stop at this code:



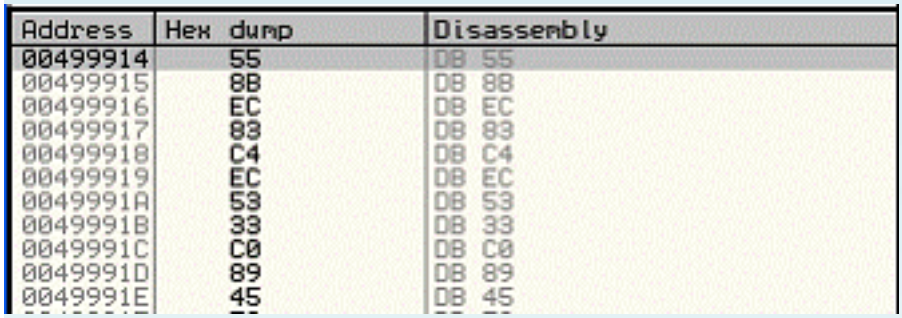
Press F8 to implement in the loop, then look in the window to dump:



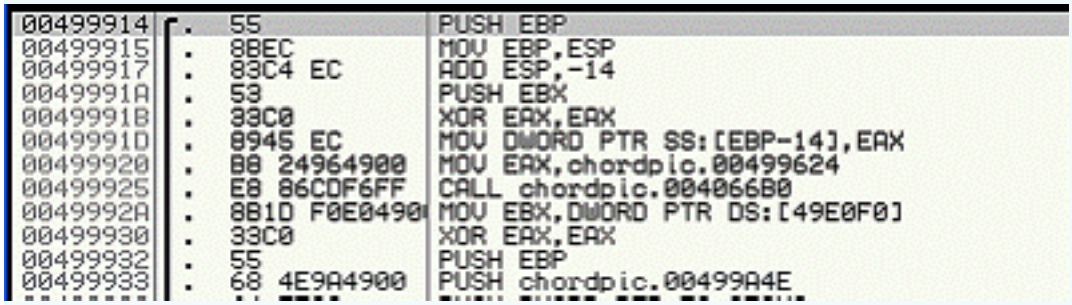
Diassembled view:



We have:



Code obvious unclear because Olly can not describe (analyze) code from the action of the load the first time because the code is not decompress from packer stub. Therefore, in the code window, click Crl + G and the address from where we start describing it (0x00499914) and press Enter, then press Crl + A to make the code description:



Bingo, the code is just decompress and in accordance with which we have found the following steps to use methods of exceptions:

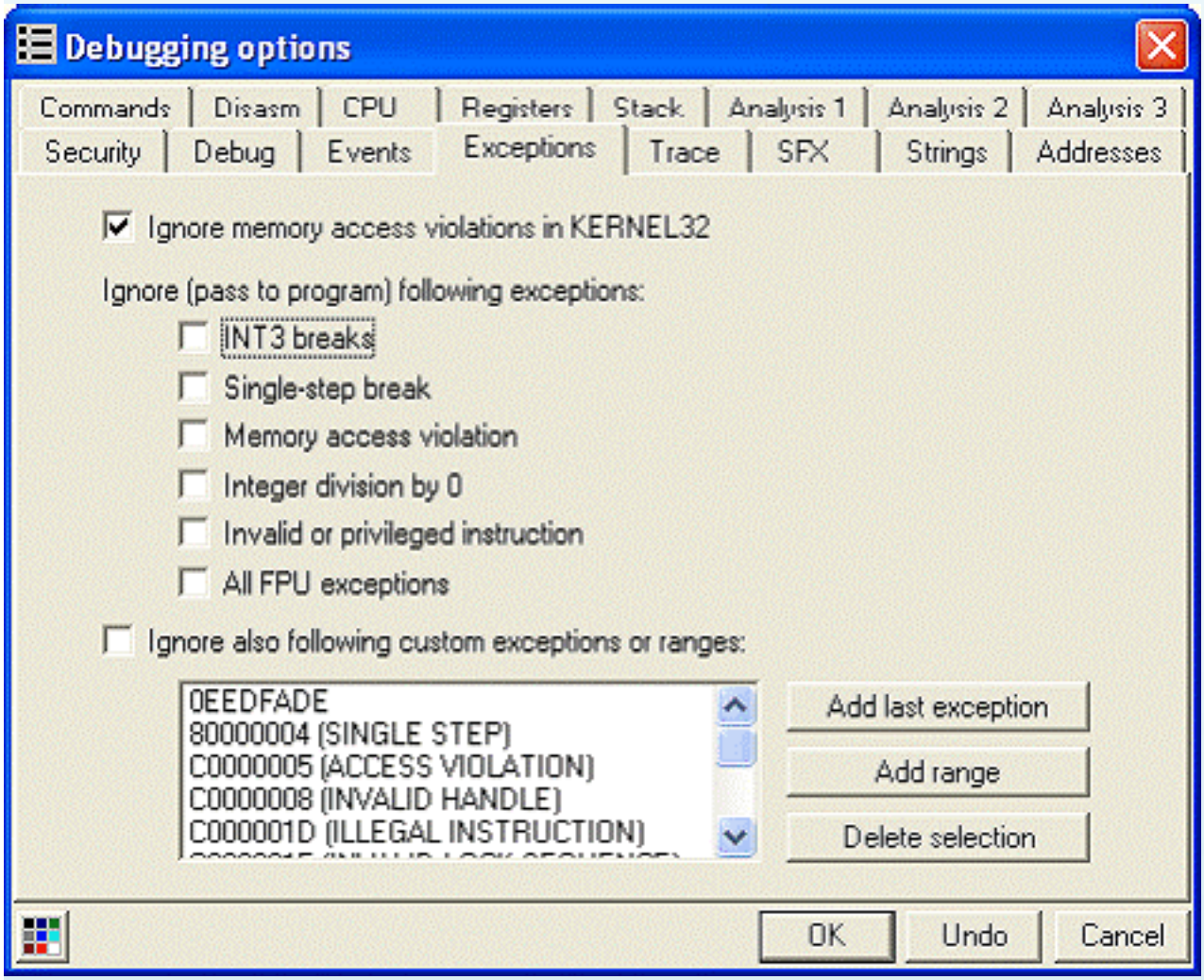
At that point, we know to write code to OEP occur from a region of memory later, press Alt + M:

The region is not dependent on the existing section on the disk because it is not created in the first PE-header, making this the packer demand system memory (active) and then fill code that will be thi.Boi areas because of this memory will be installed at run time (runtime) so we can not find it when the destination (target) to load the Entry Point, but we know when and in time which code is located to explore it through Inline code. To do this, we must know is simply the reverse of the packer.

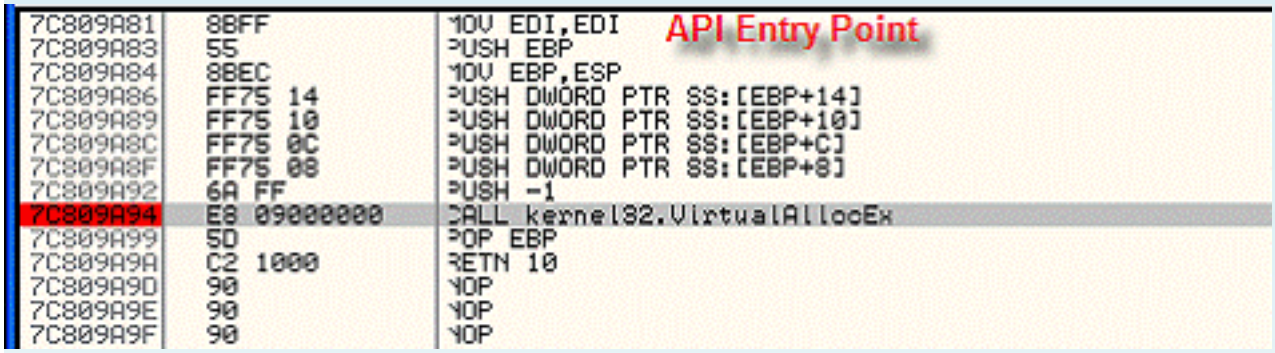
The first will then search for some of the stub from EntryPoint Asprotect where occur simultaneously to save to memory for the first time to locate.

Restart the destination Crt + F2.

Uncheck all exceptions:



Click Crl + G and on VirtualAlloc (API function is required levels of memory to the system, the API is used by many the packer and of course that Asprotect. Set breakpoint as follows:



Press Shift + F9 and Olly will break in this API, press ALT + F9 to return a call this API function, and also see the address of memory allocated in the record EAX:

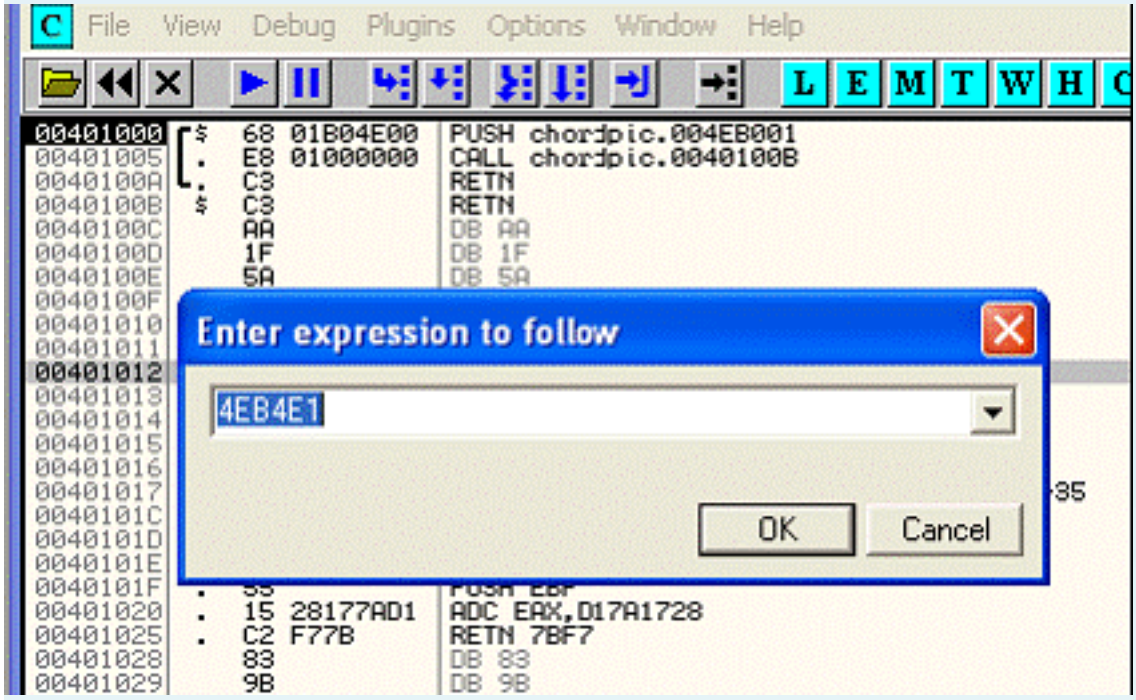
```
004EB4C1   43              INC EBX
004EB4C2   BB 3219122A     MOV EBX,2A121932
004EB4C7   00B2 5C332589   ADD BYTE PTR DS:[EDX+8925335C],DH
004EB4CD   A5              MOVS DWORD PTR ES:[EDI],DWORD PTR DS:[ESI]
004EB4CE   290400          SUB DWORD PTR DS:[EAX+EAX],EAX
004EB4D1   006A 40         ADD BYTE PTR DS:[EDX+40],CH
004EB4D4   68 00100000     PUSH 1000
004EB4D9   FFB5 00040000   PUSH DWORD PTR SS:[EBP+400]
004EB4DF   6A 00           PUSH 0
004EB4E1   FF95 F0030000   CALL NEAR DWORD PTR SS:[EBP+3F0]      Richiama VirtualAlloc per la prina volta
004EB4E7   8985 CC010000   MOV DWORD PTR SS:[EBP+1CC],EAX
004EB4ED   8B9D 00040000   MOV EBX,DWORD PTR SS:[EBP+400]
004EB4F3   039D 0D040000   ADD EBX,DWORD PTR SS:[EBP+40D]
004EB4F9   50              PUSH EAX
004EB4FA   53              PUSH EBX
```

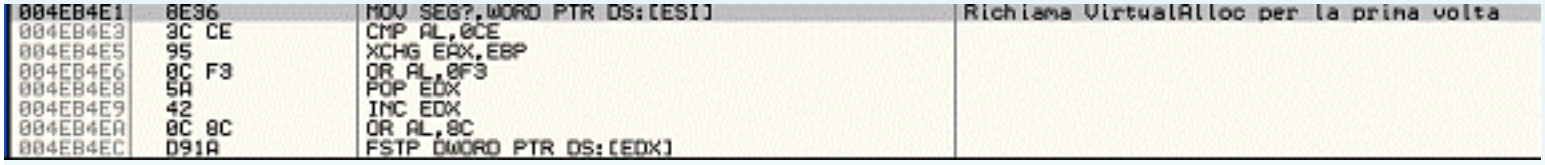
Note the value of EAX may be different in your computer. My 0x00B30000

chart in memory (memory map) of the (ALT + M) we see are as follows:

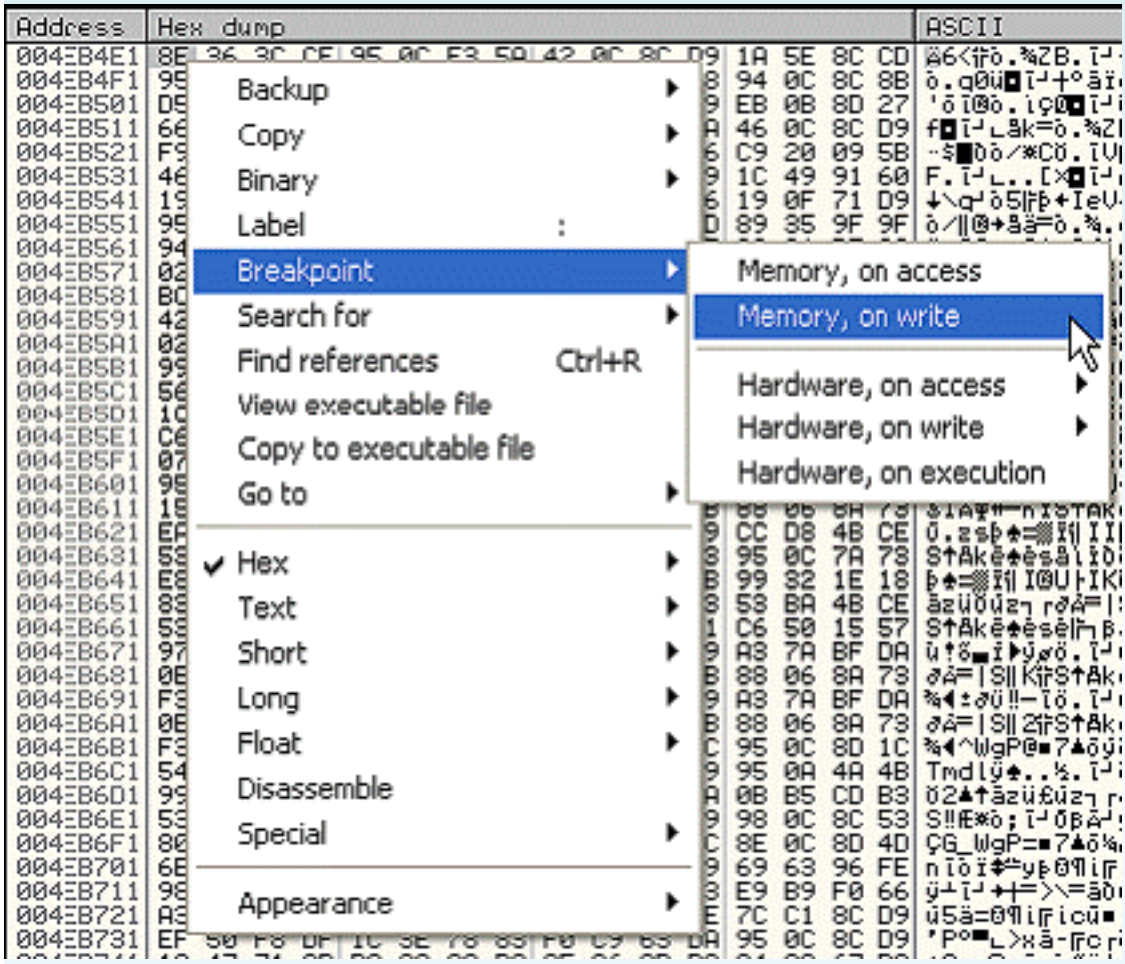
```
003F0000 00002000                          Map  R E    R E
00400000 00001000 chordpic                 Imag R      RWE
00401000 00099000 chordpic                 Imag R      RWE
0049A000 00005000 chordpic                 Imag R      RWE
0049F000 00002000 chordpic                 Imag R      RWE
004A1000 00003000 chordpic                 Imag R      RWE
004A4000 00001000 chordpic                 Imag R      RWE
004A5000 00001000 chordpic                 Imag R      RWE
004A6000 00001000 chordpic                 Imag R      RWE
004A7000 0000A000 chordpic                 Imag R      RWE
004B1000 0003A000 chordpic .rsrc   resources Imag R      RWE
004EB000 00022000 chordpic .data   imports,rel Imag R    RWE
00500000 00001000 chordpic .adata          Imag R      RWE
00510000 00103000                          Map  R      R
00620000 00001000                          Priv RW     RW
00630000 00129000                          Map  R E    R E
00930000 00001000                          Priv RW     RW
00940000 00004000                          Priv RW     RW
00950000 00003000                          Map  R      R      \Device\HarddiskVolume1\WINDOWS\system32\ctype.nls
00960000 00003000                          Priv RW     RW
00970000 00002000                          Map  R      R
00980000 00001000                          Priv RW     RW
00A30000 00004000                          Priv RW
00B30000 00033000                          Priv RWE    RWE
011A0000 00002000                          Map  R      R
5A000000 00001000 swpg             PE header Imag R      RWE
5A001000 00012000 swpg     CODE    code      Imag R      RWE
5A013000 00001000 swpg     DATA    data      Imag R      RWE
5A014000 00001000 swpg     BSS               Imag R      RWE
5A015000 00001000 swpg     .idata  imports   Imag R      RWE
5A016000 00001000 swpg     .reloc  relocations Imag R    RWE
5A017000 00001000 swpg     .rsrc   resources Imag R      RWE
5F000000 00001000                          Priv RWE    RWE
```

We note this code and then contact the OEP decompression time is not present, which means that in mind this area is built with a class code that are not decompress then we must find no.Ta again to see if a function called VirtuallAlloc first time this has been available in the program EntryPoint or not? Or is the class through a code and then another to turn a new call this function. Click CRL + F2, on the address at a function called on 0x004EB4E1





We have seen a difference, so Asprotect enforcement decrypt the code before the call VirtuallAlloc function, then we must find where this code (ie the code with calls VirtuallAlloc) recorded. We do the following: Olly restart the memory and setting breakpoints in a position 0x004EB4E1.



Press Shift + F9 and Olly 0x004EB13F at the end, next to is if a call is to decrypt

Continue to restart Olly and Entry Point to see what we have at 004EB142 (I do not know yet what is so keep), F7 We will see at once that we're in a cycle lặp decompression,

```
004EB0F6    81C3 74080000   ADD EBX,874
004EB0FC    BF F8DF4C62     MOV EDI,624CDFF8
004EB101    2BD2            SUB EDX,EDX
004EB103    81EE C23C2260   SUB ESI,60223CC2
004EB109    FF34 1A         PUSH DWORD PTR DS:[EDX+EBX]     LOOP START
004EB10C    59              POP ECX
004EB10D    E8 0D000000     CALL chordpic.004EB11F
004EB112    41              INC ECX
004EB113    E6 27           OUT 27,AL                       I/O command
004EB115    D4 7D           AAM 7D
004EB117 ^  72 C3           JB SHORT chordpic.004EB0DC
004EB119    40              INC EAX
004EB11A ^  79 BE           JNS SHORT chordpic.004EB0DA
004EB11C    1F              POP DS                          Modification of segment register
004EB11D    6C              INS BYTE PTR ES:[EDI],DX        I/O command
004EB11E    90              NOP
004EB11F    66:8BF9         MOV DI,CX
004EB122    5E              POP ESI
004EB123    81E9 7C9A3773   SUB ECX,73379A7C
004EB129    52              PUSH EDX
004EB12A    8AE1            MOV AH,CL
004EB12C    5E              POP ESI
004EB12D    81E9 05BFA677   SUB ECX,77A6BF05
004EB133    81E9 5A0B1143   SUB ECX,43110B5A
004EB139    51              PUSH ECX
004EB13A    BE FF2D774A     MOV ESI,4A772DFF
004EB13F    8F0413          POP DWORD PTR DS:[EBX+EDX]
004EB142    E8 0F000000     CALL chordpic.004EB156
004EB147    1BB8 91F6F764   SBB EDI,DWORD PTR DS:[EAX+64F7F691]
004EB14D    CD 82           INT 82
004EB14F    93              XCHG EAX,EBX
004EB150    D0C9            ROR CL,1
004EB152    CE              INTO
004EB153    EF              OUT DX,EAX                      I/O command
004EB154    FC              CLD
004EB155    90              NOP
004EB156    66:BF A6C8      MOV DI,0C8A6
004EB15A    5E              POP ESI
004EB15B    66:BE DF97      MOV SI,97DF
004EB15F    83EA 03         SUB EDX,3
004EB162    66:BE 719D      MOV SI,9D71
004EB166    4A              DEC EDX
004EB167    66:81DE E2E2    SBB SI,0E2E2
004EB16C    81FA 78F8FFFF   CMP EDX,-788
004EB172 v  0F85 3C000000   JNZ chordpic.004EB1B4           Non eseguito alla fine del loop
004EB178    E8 13000000     CALL chordpic.004EB190          Primo salto per fine loop
004EB17D    CF              IRETD
004EB17E    5C              POP ESP
004EB17F    65:3AEB         CMP CH,BL                       Superfluous prefix
004EB182    48              DEC EAX
004EB183 v  E1 06           LOOPDE SHORT chordpic.004EB18B
004EB185    C7              ???                             Unknown command
004EB186    F4              HLT                             Privileged command
004EB187    1D 92636019     SBB EAX,19606392
004EB18C    90              NOP
004EB18D    90              NOP
004EB18E    90              NOP
004EB18F    90              NOP
004EB190    E8 0D000000     CALL chordpic.004EB1A2
004EB195    51              PUSH ECX
004EB196    B6 B7           MOV DH,0B7
004EB198    24 8D           AND AL,8D
004EB19A    42              INC EDX
004EB19B    53              PUSH EBX
004EB19C    90              NOP
004EB19D    898E AFBC4568   MOV DWORD PTR DS:[ESI+6845BCAF],ECX
004EB1A3    A8 20           TEST AL,20
004EB1A5 v  E1 35           LOOPDE SHORT chordpic.004EB1DC
004EB1A7    5E              POP ESI
004EB1A8    5E              POP ESI
004EB1A9    5F              POP EDI
004EB1AA v  E9 1B000000     JMP chordpic.004EB1CA           USCITA DAL LOOP
004EB1AF    F9              STC
004EB1B0    3E:9F           LAHF                            Superfluous prefix
004EB1B2    EC              IN AL,DX                        I/O command
004EB1B3    90              NOP
004EB1B4    80D4 F0         ADC AH,0F0
004EB1B7 ^  E9 4DFFFFFF     JMP chordpic.004EB109           LOOP END
004EB1BC    EE              OUT DX,AL                       I/O command
004EB1BD    8F              ???                             Unknown command
004EB1BE    1C 25           SBB AL,25
004EB1C0    FA              CLI
004EB1C1    AB              STOS DWORD PTR ES:[EDI]
```

Point end loop can be located at 0x004EB1AA. A Set breakpoints at this address and press Shift + F9, we see Olly will stop at that position and we look a bit position that this command will jump jump.

```
004EB0F6    81C3 74080000   ADD EBX,874
004EB0FC    BF F8DF4C62     MOV EDI,624CDFF8
004EB101    28D2            SUB EDX,EDX
004EB103    81EE C23C2260   SUB ESI,60223CC2
004EB109    FF341A          PUSH DWORD PTR DS:[EDX+EBX]     LOOP START
004EB10C    59              POP ECX
004EB10D    E8 0D000000     CALL chordpic.004EB11F
004EB112    41              INC ECX
004EB113    E6 27           OUT 27,AL                       I/O command
004EB115    D4 7D           AAM 7D
004EB117 ^  72 C3           JB SHORT chordpic.004EB0DC
004EB119    40              INC EAX
004EB11A ^  79 BE           JNS SHORT chordpic.004EB0DA
004EB11C    1F              POP DS                          Modification of segment register
004EB11D    6C              INS BYTE PTR ES:[EDI],DX        I/O command
004EB11E    90              NOP
004EB11F    66:0BF9         MOV DI,CX
004EB122    5E              POP ESI
004EB123    81E9 7C9A3773   SUB ECX,73379A7C
004EB129    52              PUSH EDX
004EB12A    8AE1            MOV AH,CL
004EB12C    5E              POP ESI
004EB12D    81E9 05BFA677   SUB ECX,77A68F05
004EB133    81E9 5A0B1143   SUB ECX,43110B5A
004EB139    51              PUSH ECX
004EB13A    BE FF2D774A     MOV ESI,4A772DFF
004EB13F    8F0413          POP DWORD PTR DS:[EBX+EDX]
004EB142    E8 0F000000     CALL chordpic.004EB156
004EB147    1B88 91F6F764   SBB EDI,DWORD PTR DS:[EAX+64F7F691]
004EB14D    CD 82           INT 82
004EB14F    93              XCHG EAX,EBX
004EB150    D0C9            ROR CL,1
004EB152    CE              INTO
004EB153    EF              OUT DX,EAX                      I/O command
004EB154    FC              CLD
004EB155    90              NOP
004EB156    66:BF A6C8      MOV DI,0C8A6
004EB15A    5E              POP ESI
004EB15B    66:BE DF97      MOV SI,97DF
004EB15F    83EA 03         SUB EDX,3
004EB162    66:BE 719D      MOV SI,9D71
004EB166    4A              DEC EDX
004EB167    66:81DE E2E2    SBB SI,0E2E2
004EB16C    81FA 78F8FFFF   CMP EDX,-788
004EB172 v  0F85 3C000000   JNZ chordpic.004EB1B4           Non eseguito alla fine del loop
004EB178    E8 13000000     CALL chordpic.004EB190          Primo salto per fine loop
004EB17D    CF              IRETD
004EB17E    5C              POP ESP
004EB17F    65:3AEB         CMP CH,BL                       Superfluous prefix
004EB182    48              DEC EAX
004EB183 v  E1 06           LOOPDE SHORT chordpic.004EB18B
004EB185    C7              ???                             Unknown command
004EB186    F4              HLT                             Privileged command
004EB187    1D 92636019     SBB EAX,19606392
004EB18C    90              NOP
004EB18D    90              NOP
004EB18E    90              NOP
004EB18F    90              NOP
004EB190    E8 0D000000     CALL chordpic.004EB1A2
004EB195    51              PUSH ECX
004EB196    B6 B7           MOV DH,0B7
004EB198    24 8D           AND AL,8D
004EB19A    42              INC EDX
004EB198    53              PUSH EBX
004EB19C    90              NOP
004EB19D    898E AFBC4568   MOV DWORD PTR DS:[ESI+6845BCAF],ECX
004EB1A3    A8 20           TEST AL,20
004EB1A5 v  E1 35           LOOPDE SHORT chordpic.004EB1DC
004EB1A7    5E              POP ESI
004EB1A8    5E              POP ESI
004EB1A9    5F              POP EDI
004EB1AA v  E9 1B000000     JMP chordpic.004EB1CA           USCITA DAL LOOP
004EB1AF    F9              STC
004EB1B0    3E:9F           LAHF                            Superfluous prefix
004EB1B2    EC              IN AL,DX                        I/O command
004EB1B3    90              NOP
004EB1B4    80D4 F0         ADC AH,0F0
004EB1B7 ^  E9 4DFFFFFF     JMP chordpic.004EB109           LOOP END
004EB1BC    EE              OUT DX,AL                       I/O command
```

```
004EB1B4    80D4 F0          ADC AH,0F0
004EB1B7 ^  E9 4DFFFFFF      JMP chordpic.004EB109          LOOP END
004EB1BC    EE               OUT DX,AL                      I/O command
004EB1BD    8F               ???                            Unknown command
004EB1BE    1C 25            SBB AL,25
004EB1C0    FA               CLI
004EB1C1    AB               STOS DWORD PTR ES:[EDI]
004EB1C2    08A1 C687B4DD    OR BYTE PTR DS:[ECX+DDB487C6],AH
004EB1C8    52               PUSH EDX
004EB1C9    2366 81          AND ESP,DWORD PTR DS:[ESI-7F]
004EB1CC    DFC5             FFREEP ST(5)
004EB1CE    9C               PUSHFD
004EB1CF    E8 0F000000      CALL chordpic.004EB1E3
```

Giio now, Reatart Olly, then implement the position 0x004EB1AA:

```
004EB1AA  v E9 1B000000      JMP chordpic.004EB1CA          USCITA DAL LOOP
004EB1AF    F9               STC
004EB1B0    3E:9F            LAHF                           Superfluous prefix
004EB1B2    EC               IN AL,DX                       I/O command
004EB1B3    B5 80            MOV CH,80
004EB1B5    D4 F0            AAM 0F0
004EB1B7 ^  E9 4DFFFFFF      JMP chordpic.004EB109          LOOP END
004EB1BC    EE               OUT DX,AL                      I/O command
004EB1BD    8F               ???                            Unknown command
004EB1BE    1C 25            SBB AL,25
004EB1C0    FA               CLI
004EB1C1    AB               STOS DWORD PTR ES:[EDI]
004EB1C2    08A1 C687B4DD    OR BYTE PTR DS:[ECX+DDB487C6],AH
004EB1C8    52               PUSH EDX
004EB1C9    2341 E6          AND EAX,DWORD PTR DS:[ECX-1A]
004EB1CC    CE               INTO
004EB1CD    F3:              PREFIX REP:                    Superfluous prefix
004EB1CE  v 77 4D            JA SHORT chordpic.004EB21D
004EB1D0    FF2D D8643A56    JMP FAR FWORD PTR DS:[563A64D8]  Far jump
004EB1D6    1C 4B            SBB AL,4B
004EB1D8    17               POP SS                         Modification of segment register
004EB1D9    0258 D7          ADD BL,BYTE PTR DS:[EAX-29]
004EB1DC    B2 6E            MOV DL,6E
004EB1DE    54               PUSH ESP
004EB1DF    230F             AND ECX,DWORD PTR DS:[EDI]
004EB1E1    9A 10B6D73A D8   CALL FAR 64D8:3AD7B610        Far call
004EB1E8    EF               OUT DX,EAX                     I/O command
004EB1E9    31C8             XOR EAX,ECX
```

We see the code more clear, this means that the order was not jumping to have the program at EntryPoint, and it also go to the last loop encoding first. This is a heiu very good for us because this is the cursor re-navigate to my area code patching us, then we **recorded this address.**

END OF THE Loop # 1 (redirection # 1): 0x004EB1AA
ORIGINAL instruction: JMP 0x004EB1CA

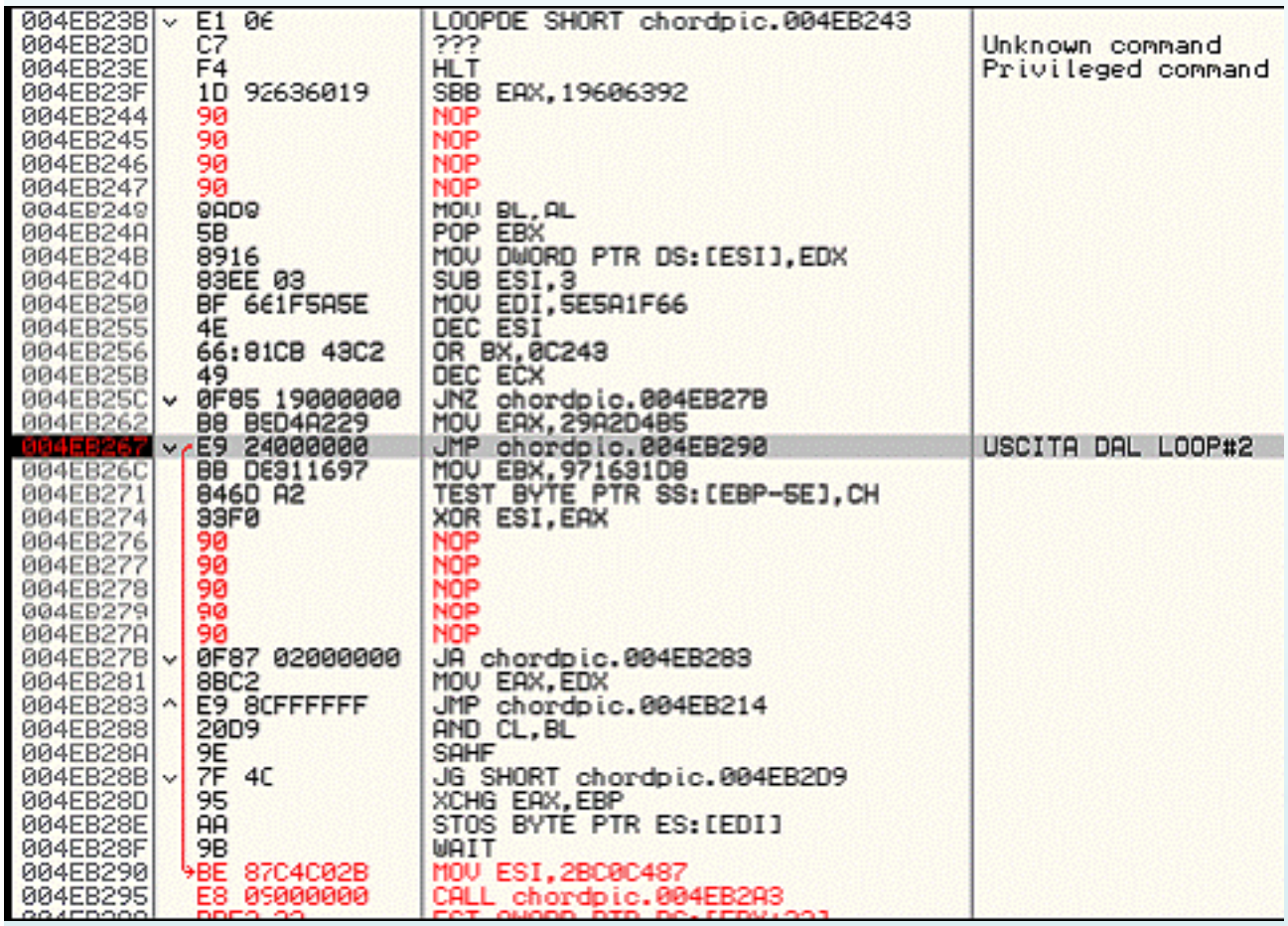
After implementation loop, we must also check if the code in the address of a VirtualAlloc API first recorded or not.

Then press Crl + G and 0x004EB4E1, this code is not decrypt, then we F7, through some of the directives we will face a loop with the new code decryt disorder.

```
004EB1B7 ^  E9 4DFFFFFF      JMP chordpic.004EB109          LOOP END
004EB1BC    EE               OUT DX,AL                      I/O command
004EB1BD    8F               ???                            Unknown command
004EB1BE    1C 25            SBB AL,25
004EB1C0    FA               CLI
004EB1C1    AB               STOS DWORD PTR ES:[EDI]
004EB1C2    08A1 C687B4DD    OR BYTE PTR DS:[ECX+DDB487C6],AH
004EB1C8    52               PUSH EDX
004EB1C9    90               NOP
004EB1CA    66:81DF C59C     SBB DI,9CC5
004EB1CF    E8 0F000000      CALL chordpic.004EB1E3
004EB1D4    4B               DEC EBX
004EB1D5    2841 E6          SUB BYTE PTR DS:[ECX-1A],AL
004EB1D8    27               DAA
004EB1D9    D4 7D            AAM 7D
004EB1DB ^  72 C3            JB SHORT chordpic.004EB1A0
004EB1DD    40               INC EAX
```

```
004EB1DB  ^ 72 C3          JB SHORT chordpic.004EB1A0
004EB1DD    40             INC EAX
004EB1DE  ^ 79 BE          JNS SHORT chordpic.004EB19E
004EB1E0    1F             POP DS                      Modification of segment register
004EB1E1    6C             INS BYTE PTR ES:[EDI],DX    I/O command
004EB1E2    90             NOP
004EB1E3    51             PUSH ECX
004EB1E4    E8 0C000000    CALL chordpic.004EB1F5
004EB1E9    04 ED          ADD AL,0ED
004EB1EB    22B3 70E96E0F  AND DH,BYTE PTR DS:[EBX+F6EE970]
004EB1F1    9C             PUSHFD
004EB1F2    A5             MOVS DWORD PTR ES:[EDI],DWORD PTR
004EB1F3    7A 2B          JPE SHORT chordpic.004EB220
004EB1F5    66:8BDE        MOV BX,SI
004EB1F8    58             POP EAX
004EB1F9    5B             POP EBX
004EB1FA    5E             POP ESI
004EB1FB    B0 7E          MOV AL,7E
004EB1FD    81C6 7C070000  ADD ESI,77C
004EB203    80F7 93        XOR BH,93
004EB206    68 B1010000    PUSH 1B1
004EB20B    81E3 8516025A  AND EBX,5A021685
004EB211    59             POP ECX
004EB212    8ADD           MOV BL,CH
004EB214    FF36           PUSH DWORD PTR DS:[ESI]
004EB216    B0 5A          MOV AL,5A
004EB218    5A             POP EDX
004EB219    81C2 5B6F3451  ADD EDX,51346F5B
004EB21F  v 0F83 05000000  JNB chordpic.004EB22A
004EB225    53             PUSH EBX
004EB226    80C4 30        ADD AH,30
004EB229    5B             POP EBX
004EB22A    81F2 F853A348  XOR EDX,48A353F8
004EB230    81C2 D180F01A  ADD EDX,1AF080D1
004EB236    E8 0D000000    CALL chordpic.004EB248
004EB23B  v E1 06          LOOPDE SHORT chordpic.004EB243
004EB23D    C7             ???                         Unknown command
004EB23E    F4             HLT                         Privileged command
004EB23F    1D 92636019    SBB EAX,19606392
004EB244    90             NOP
004EB245    90             NOP
004EB246    90             NOP
004EB247    90             NOP
004EB248    8AD8           MOV BL,AL
004EB24A    5B             POP EBX
004EB24B    8916           MOV DWORD PTR DS:[ESI],EDX
004EB24D    83EE 03        SUB ESI,3
004EB250    BF 661F5A5E    MOV EDI,5E5A1F66
004EB255    4E             DEC ESI
004EB256    66:81CB 43C2   OR BX,0C243
004EB25B    49             DEC ECX
004EB25C  v 0F85 19000000  JNZ chordpic.004EB27B
004EB262    B8 B5D4A229    MOV EAX,29A2D4B5
004EB267  v E9 24000000    JMP chordpic.004EB290       USCITA DAL LOOP#2
004EB26C    BB D8311697    MOV EBX,971631D8
004EB271    846D A2        TEST BYTE PTR SS:[EBP-5E],CH
004EB274    33F0           XOR ESI,EAX
004EB276    90             NOP
004EB277    90             NOP
004EB278    90             NOP
004EB279    90             NOP
004EB27A    90             NOP
004EB27B  v 0F87 02000000  JA chordpic.004EB283
004EB281    8BC2           MOV EAX,EDX
004EB283  ^ E9 8CFFFFFF    JMP chordpic.004EB214
004EB288    20D9           AND CL,BL
004EB28A    9E             SAHF
004EB28B  v 7F 4C          JG SHORT chordpic.004EB2D9
004EB28D    95             XCHG EAX,EBP
004EB28E    AA             STOS BYTE PTR ES:[EDI]
004EB28F    9B             WAIT
004EB290    BA E5429C47    MOV EDX,479C42E5
004EB295    C585 5C7CBD1A  LDS EAX,FWORD PTR SS:[EBP+1ABD7C5C] Modification of segment register
```

In 004EB267 position is the position loop end, continue to set a breakpoints on this address (F2) and press Shift + F9 to implement all the ttat repeats quickly.

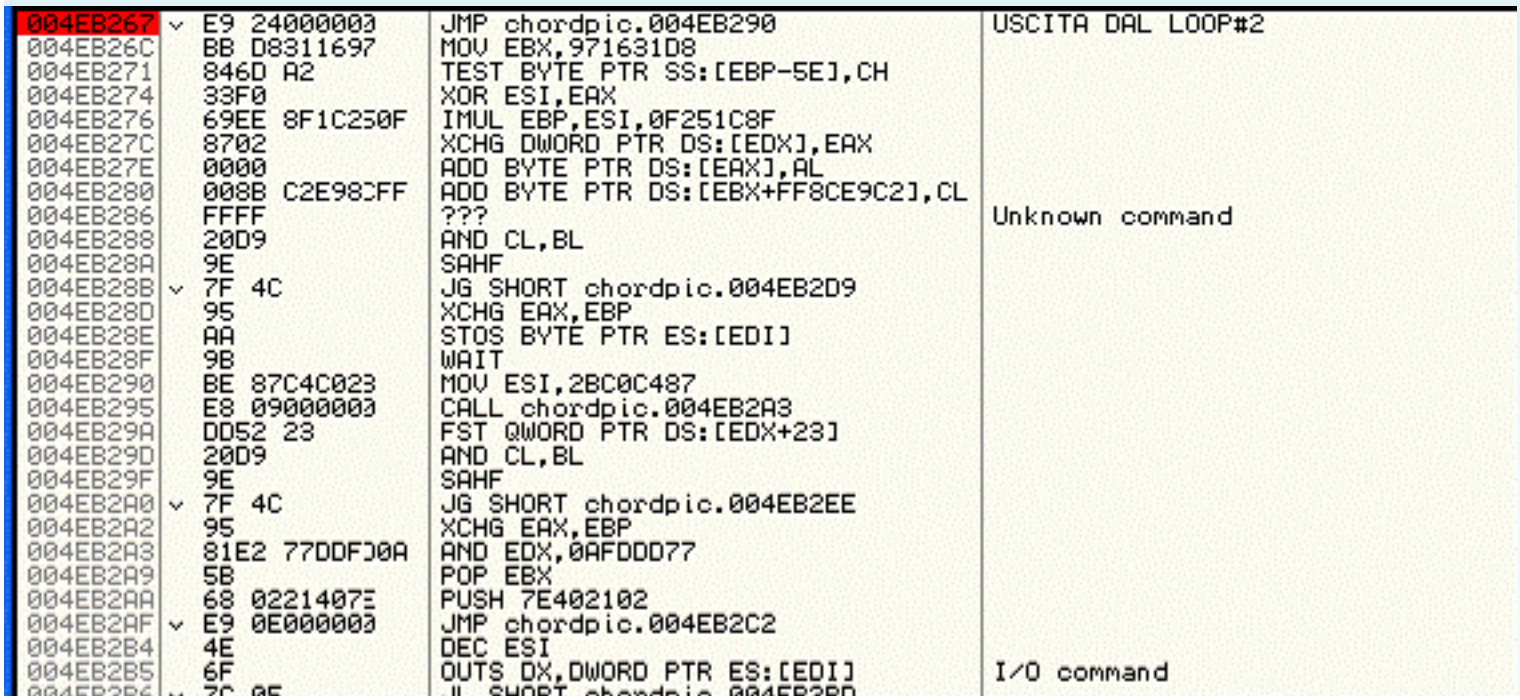


So we also note recorded the address, where the point to our code.

END OF THE Loop # 2 (redirection # 2): 0x004EB267
Instruction ORIGINATES added: JMP 0x004EB290

Then we also do first time, see the API considered VirtualAlloc Caller appear or not, and did not see it appear, so we continue with the fire again:

We have a loop other decryption:



```
004EB2B4    4E              DEC ESI
004EB2B5    6F              OUTS DX,DWORD PTR ES:[EDI]          I/O command
004EB2B6  v 7C 05           JL SHORT chordpic.004EB2BD
004EB2B8    5A              POP EDX
004EB2B9    8B68 81         MOV EBP,DWORD PTR DS:[EAX-7F]
004EB2BC    26:67:14 BD     ADC AL,0BD                          Superfluous prefix
004EB2C0    B2 03           MOV DL,3
004EB2C2    58              POP EAX
004EB2C3    81C3 B5060300   ADD EBX,6B5
004EB2C9    2BFF            SUB EDI,EDI
004EB2CB    B8 F170BA61     MOV EAX,61BA70F1
004EB2D0    8B0C3B          MOV ECX,DWORD PTR DS:[EBX+EDI]      INIZIO DEL LOOP#3
004EB2D3    66:81DE AE38    SBB SI,38AE
004EB2D8    81F1 F09DD73D   XOR ECX,3DD79DF0
004EB2DE    81DA 6B18CC6F   SBB EDX,6FCC186B
004EB2E4    81C1 698F8D1E   ADD ECX,1E8D8F69
004EB2EA    81E8 128EB370   SUB EAX,70B38E12
004EB2F0    81E9 EE3D2E38   SUB ECX,382E3DEE
004EB2F6    81F6 0C6A4C13   XOR ESI,134C6A0C
004EB2FC    51              PUSH ECX
004EB2FD    0FB7F3          MOVZX ESI,BX
004EB300    8F043B          POP DWORD PTR DS:[EBX+EDI]
004EB303    66:81E6 1051    AND SI,5110
004EB308    66:81F2 4B28    XOR DX,284B
004EB30D    81EF 41BB3515   SUB EDI,1535BB41
004EB313    0FB7D2          MOVZX EDX,DX
004EB316    81C7 3DBB3515   ADD EDI,1535BB3D
004EB31C    0FB7F3          MOVZX ESI,BX
004EB31F    81FF 20FAFFFF   CMP EDI,-5E0
004EB325  v 0F85 19000300   JNZ chordpic.004EB344
004EB32B    8BC6            MOV EAX,ESI
004EB32D  v E9 41000000     JMP chordpic.004EB373               USCITA DAL LOOP#3
004EB332    22B3 70E96E0F   AND DH,BYTE PTR DS:[EBX+F6EE970]
004EB338    9C              PUSHFD
004EB339    A5              MOVS DWORD PTR ES:[EDI],DWORD PTR
004EB33A    7A 2B           JPE SHORT chordpic.004EB367
004EB33C    8821            MOV BYTE PTR DS:[ECX],AH
004EB33E    46              INC ESI
004EB33F    07              POP ES                              Modification of segment register
004EB340    34 5D           XOR AL,5D
004EB342    90              NOP
004EB343    90              NOP
004EB344  v 0F84 14000300   JE chordpic.004EB35E
004EB34A    53              PUSH EBX
004EB34B  v E9 0D000000     JMP chordpic.004EB35D
004EB350    91              XCHG EAX,ECX
004EB351    F6F7            DIV BH
004EB353    64:CD 82        INT 82                              Superfluous prefix
004EB356    93              XCHG EAX,EBX
004EB357    D0C9            ROR CL,1
004EB359    CE              INTO
004EB35A    EF              OUT DX,EAX                          I/O command
004EB35B    FC              CLD
004EB35C    90              NOP
004EB35D    58              POP EAX                             chordpic.004EB94F
004EB35E  ^ E9 6DFFFFFF     JMP chordpic.004EB2D0
004EB363    E8 01A6E794     CALL 95365969
004EB368    3D 32830039     CMP EAX,39008332
004EB36D  ^ 7E DF           JLE SHORT chordpic.004EB34E
004EB36F    2C F5           SUB AL,0F5
004EB371    8AFB            MOV BH,BL
004EB373    9E              SAHF
004EB374    25 77247595     AND EAX,96752477
004EB379    A4              MOVS BYTE PTR ES:[EDI],BYTE PTR DS
```

Applied as before, a set breakpoints on addresses exit loop and press Shift + F9 to address deen just set breakpoints.

```
004EB30D   81EF 41BB3515   SUB EDI,1535BB41
004EB313   0FB7D2          MOVZX EDX,DX
004EB316   81C7 3DBB3515   ADD EDI,1535BB3D
004EB31C   0FB7F3          MOVZX ESI,BX
004EB31F   81FF 20FAFFFF   CMP EDI,-5E0
004EB325 v 0F85 19000000   JNZ chordpic.004EB344
004EB32B   8BC6            MOV EAX,ESI
004EB32D v E9 41000000     JMP chordpic.004EB373          USCITA DAL _OOP#3
004EB332   22B3 70E96E0F   AND DH,BYTE PTR DS:[EBX+F6EE970]
004EB338   9C              PUSHFD
004EB339   A5              MOVS DWORD PTR ES:[EDI],DWORD PTR
004EB33A   7A 2B           JPE SHORT chordpic.004EB367
004EB33C   8821            MOV BYTE PTR DS:[ECX],AH
004EB33E   46              INC ESI
004EB33F   07              POP ES                         Modification of segment register
004EB340   34 5D           XOR AL,5D
004EB342   90              NOP
004EB343   90              NOP
004EB344 v 0F84 14000000   JE chordpic.004EB35E
004EB34A   53              PUSH EBX
004EB34B v E9 0D000000     JMP chordpic.004EB35D
004EB350   91              XCHG EAX,ECX
004EB351   F6F7            DIV BH
004EB353   64:CD 82        INT 82                         Superfluous prefix
004EB356   93              XCHG EAX,EBX
004EB357   D0C9            ROR CL,1
004EB359   CE              INTO
004EB35A   EF              OUT DX,EAX                     I/O command
004EB35B   FC              CLD
004EB35C   90              NOP
004EB35D   58              POP EAX
004EB35E ^ E9 6DFFFFFF     JMP chordpic.004EB2D0
004EB363   E8 01A6E794     CALL 95365969
004EB368   3D 92090099     CMP EAX,99000992
004EB36D ^ 7E DF           JLE SHORT chordpic.004EB34E
004EB36F   2C F5           SUB AL,0F5
004EB371   8AFB            MOV BH,BL
004EB373 v E9 09000000     JMP chordpic.004EB381
004EB378   5D              POP EBP
004EB379   D2A3 A0591EFF   SHL BYTE PTR DS:[EBX+FF1E59A0],CL
004EB37F   CC              INT3
004EB380   15 E80F0000     ADC EAX,0FE8
```

We note also recorded the address, where the point to our code.

END OF THE Loop # 3 (redirection # 3): 0x004EB32D
ORIGINAL instruction: JMP 0x004EB373

Continue to look at the view has not found 004EB4E1 appear. we continue to test fire.

We have a loop more

```
004EB32D v E9 41000000     JMP chordpic.004EB373          USCITA DAL LOOP#3
004EB332   22B3 70E96E0F   AND DH,BYTE PTR DS:[EBX+F6EE970]
004EB338   9C              PUSHFD
004EB339   A5              MOVS DWORD PTR ES:[EDI],DWORD PTR
004EB33A   7A 2B           JPE SHORT chordpic.004EB367
004EB33C   8821            MOV BYTE PTR DS:[ECX],AH
004EB33E   46              INC ESI
004EB33F   07              POP ES                         Modification of segment register
004EB340   34 5D           XOR AL,5D
004EB342   D2A3 0F841400   SHL BYTE PTR DS:[EBX+14840F],CL
004EB348   0000            ADD BYTE PTR DS:[EAX],AL
004EB34A   53              PUSH EBX
004EB34B v E9 0D000000     JMP chordpic.004EB35D
004EB350   91              XCHG EAX,ECX
004EB351   F6F7            DIV BH
004EB353   64:CD 82        INT 82                         Superfluous prefix
004EB356   93              XCHG EAX,EBX
004EB357   D0C9            ROR CL,1
004EB359   CE              INTO
004EB35A   EF              OUT DX,EAX                     I/O command
004EB35B   FC              CLD
004EB35C   8558 E9         TEST DWORD PTR DS:[EAX-17],EBX
004EB35F   6D              INS DWORD PTR ES:[EDI],DX      I/O command
004EB360   FFFF            ???                            Unknown command
004EB362   FFE8            JMP FAR EAX                    Illegal use of register
004EB364   01A6 E7943D32   ADD DWORD PTR DS:[ESI+323D94E7],ES
```

```
004EB362    FFE8            JMP FAR EAX                             Illegal use of register
004EB364    01A6 E7943D32   ADD DWORD PTR DS:[ESI+323D94E7],ES
004EB36A    8300 39         ADD DWORD PTR DS:[EAX],39
004EB36D  ^ 7E DF           JLE SHORT chordpic.004EB34E
004EB36F    2C F5           SUB AL,0F5
004EB371    8AFB            MOV BH,BL
004EB373  v E9 09000000     JMP chordpic.004EB381
004EB378    5D              POP EBP
004EB379    D2A3 A0591EFF   SHL BYTE PTR DS:[EBX+FF1E59A0],CL
004EB37F    CC              INT3
004EB380    90              NOP
004EB381    E8 0F000000     CALL chordpic.004EB395
004EB386    1BB8 91F6F764   SBB EDI,DWORD PTR DS:[EAX+64F7F691
004EB38C    CD 82           INT 82
004EB38E    93              XCHG EAX,EBX
004EB38F    D0C9            ROR CL,1
004EB391    CE              INTO
004EB392    EF              OUT DX,EAX                              I/O command
004EB393    FC              CLD
004EB394    90              NOP
004EB395  v 0FAF 03000000   JG chordpic.004EB39F
004EB39B    0FBFF8          MOVSX EDI,AX
004EB39E    59              POP ECX
004EB39F    66:BF 7E9A      MOV DI,9A7E
004EB3A3    81C1 C9050000   ADD ECX,5C9
004EB3A9    0F8A 02000000   JPE chordpic.004EB3B1
004EB3AF    8AF1            MOV DH,CL
004EB3B1    68 4A010000     PUSH 14A
004EB3B6    58              POP EAX
004EB3B7    BE 657B2843     MOV ESI,43287B65
004EB3BC    8B19            MOV EBX,DWORD PTR DS:[ECX]              INIZIO DEL LOOP#4
004EB3BE    8BD7            MOV EDX,EDI
004EB3C0    81F3 0F27B513   XOR EBX,13B5270F
004EB3C6    66:BA 6062      MOV DX,6260
004EB3CA    81F3 9C63A21A   XOR EBX,1AA2639C
004EB3D0    66:8BFA         MOV DI,DX
004EB3D3    81EB A5212678   SUB EBX,782621A5
004EB3D9    66:81DE B65C    SBB SI,5CB6
004EB3DE    53              PUSH EBX
004EB3DF    66:81F7 8934    XOR DI,3489
004EB3E4    8F01            POP DWORD PTR DS:[ECX]
004EB3E6    81EE 9AA34F6F   SUB ESI,6F4FA39A
004EB3EC    81E9 A8D4641F   SUB ECX,1F64D4A8
004EB3F2    BF 5493861D     MOV EDI,1D869354
004EB3F7    81C1 A4D4641F   ADD ECX,1F64D4A4
004EB3FD    68 4302604B     PUSH <B600243
004EB402    81C7 BB764D47   ADD EDI,474D76BB
004EB408    5E              POP ESI
004EB409    48              DEC EAX
004EB40A  ^ 0F85 ACFFFFFF   JNZ chordpic.004EB3BC
004EB410    E8 12000000     CALL chordpic.004EB427                    USCITA DAL LOOP#4
004EB415    A2 33F069EE     MOV BYTE PTR DS:[EE69F033],AL
004EB41A    8F              ???                                     Unknown command
004EB41B    1C 25           SBB AL,25
004EB41D    FA              CLI
004EB41E    AB              STOS DWORD PTR ES:[EDI]
004EB41F    08A1 C687B4DD   OR BYTE PTR DS:[ECX+DDB487C6],AH
004EB425    52              PUSH EDX
004EB426    2366 8B         AND ESP,DWORD PTR DS:[ESI-75]
004EB429    F1              INT1
004EB42A    5E              POP ESI
004EB42B    E8 00000000     CALL chordpic.004EB430
004EB430    5D              POP EBP
004EB431    5B              POP EBX
004EB432    895D 5B         MOV DWORD PTR SS:[EBP+5B],EBX
004EB435    5B              POP EBX
```

How like the F2 at the end loop, the Shift + F9. continue to note:

END OF THE Loop # 4 (redirection # 4): 0x004EB410
ORIGINAL Instruction: 0x004EB427

Finally, it also appears to 004EB4E1 a VirtualAlloc API function calls.

Known, here we laam steps:

1. We are in the position of the packer Entrypoint.
2. Loop decryption 1 implementation, the cursor exit loop in 004EB1AA
3. Loop decryption 2 implementation, the cursor exit loop in 004EB267
4. Loop decryption 3 implementation, the cursor exit loop in 004EB32D
5. Loop decryption 4th implemented, the cursor exit loop in 004EB410
6. We see the appearance cualoi VirtualAlloc API function calls appear 0x004EB4E1

List breakpoints:

Address	Module	Active	Disassembly	Comment
004EB1AA	chordpic	Always	JMP chordpic.004EB1CA	USCITA DAL LOOP#1
004EB267	chordpic	Always	JMP chordpic.004EB290	USCITA DAL LOOP#2
004EB32D	chordpic	Always	JMP chordpic.004EB373	USCITA DAL LOOP#3
004EB410	chordpic	Always	CALL chordpic.004EB427	USCITA DAL LOOP#4

Then, we will trace the meeting who called VirtualAlloc API function

```
004EB4D9    FFB5 00040000   PUSH DWORD PTR SS:[EBP+400]
004EB4DF    6A 00           PUSH 0
004EB4E1    FF95 F0030000   CALL NEAR DWORD PTR SS:[EBP+3F0]      Richiama VirtualAlloc per la prima volta
004EB4E7    8985 CC010000   MOV DWORD PTR SS:[EBP+1CC],EAX
004EB4ED    8B9D 00040000   MOV EBX,DWORD PTR SS:[EBP+400]
004EB4F3    039D 0C040000   ADD EBX,DWORD PTR SS:[EBP+40C]
004EB4F9    50              PUSH EAX
004EB4FA    53              PUSH EBX
004EB4FB    E8 04010000     CALL chordpic.004EB604
004EB500    6A 40           PUSH 40
004EB502    68 00100000     PUSH 1000
004EB507    FFB5 00040000   PUSH DWORD PTR SS:[EBP+400]
004EB50D    6A 00           PUSH 0
004EB50F    FF95 F0030000   CALL NEAR DWORD PTR SS:[EBP+3F0]      Richiama Virtual Alloc per la seconda volta
004EB515    8985 31040000   MOV DWORD PTR SS:[EBP+431],EAX       EAX = indirizzo sezione a run-tine che scrive OEP
004EB51B    8985 D0010000   MOV DWORD PTR SS:[EBP+1D0],EAX
004EB521    64:67:A1 0000   MOV EAX,DWORD PTR FS:[0]
004EB526    8985 2D040000   MOV DWORD PTR SS:[EBP+42D],EAX
004EB52C    8B55 5B         MOV EDX,DWORD PTR SS:[EBP+5B]
004EB52F    8B85 D0010000   MOV EAX,DWORD PTR SS:[EBP+1D0]
004EB535    8902            MOV DWORD PTR DS:[EDX],EAX
004EB537    8B85 00040000   MOV EAX,DWORD PTR SS:[EBP+400]
004EB53D    8942 04         MOV DWORD PTR DS:[EDX+4],EAX
004EB540    8D85 9F030000   LEA EAX,DWORD PTR SS:[EBP+39F]
004EB546    8B40 55         MOV EAX,DWORD PTR DS:[EAX+55]
004EB549    8942 08         MOV DWORD PTR DS:[EDX+8],EAX
004EB54C    8B85 EC030000   MOV EAX,DWORD PTR SS:[EBP+3EC]
004EB552    8942 10         MOV DWORD PTR DS:[EDX+10],EAX
004EB555    8B85 E8030000   MOV EAX,DWORD PTR SS:[EBP+3E8]
004EB558    8942 14         MOV DWORD PTR DS:[EDX+14],EAX
004EB55E    8B95 CC010000   MOV EDX,DWORD PTR SS:[EBP+1CC]
004EB564    BB F0010000     MOV EBX,1F0
004EB569    887C1A 0C       MOV EDI,DWORD PTR DS:[EDX+EBX+C]
004EB56D    08FF            OR EDI,EDI
004EB56F  v 74 1E           JE SHORT chordpic.004EB58F
004EB571    884C1A 10       MOV ECX,DWORD PTR DS:[EDX+EBX+10]
004EB575    08C9            OR ECX,ECX
004EB577  v 74 11           JE SHORT chordpic.004EB58A
004EB579    03BD D0010000   ADD EDI,DWORD PTR SS:[EBP+1D0]
004EB57F    88741A 14       MOV ESI,DWORD PTR DS:[EDX+EBX+14]
004EB583    03F2            ADD ESI,EDX
004EB585    C1F9 02         SAR ECX,2
004EB588    F3:A5           REP MOVS DWORD PTR ES:[EDI],DWORD PTR DS:[ESI]
004EB58A    83C3 28         ADD EBX,28
004EB58D  ^ EB DA           JMP SHORT chordpic.004EB569
004EB58F    8B85 CC010000   MOV EAX,DWORD PTR SS:[EBP+1CC]      Fine loop scrittura area a  run-time
004EB595    50              PUSH EAX
004EB596    8B95 D0010000   MOV EDX,DWORD PTR SS:[EBP+1D0]
004EB59C    52              PUSH EDX
004EB59D    8B18            MOV EBX,DWORD PTR DS:[EAX]
004EB59F    03DA            ADD EBX,EDX
004EB5A1    8B85 E4030000   MOV EAX,DWORD PTR SS:[EBP+3E4]
004EB5A7    8903            MOV DWORD PTR DS:[EBX],EAX
004EB5A9    8B85 E8030000   MOV EAX,DWORD PTR SS:[EBP+3E8]
004EB5AF    8943 04         MOV DWORD PTR DS:[EBX+4],EAX
004EB5B2    8B85 EC030000   MOV EAX,DWORD PTR SS:[EBP+3EC]
004EB5B8    8943 08         MOV DWORD PTR DS:[EBX+8],EAX
004EB5BB    5F              POP EDI
004EB5BC    5E              POP ESI
004EB5BD    8046 04         MOV EAX,DWORD PTR DS:[ESI+4]
004EB5C0    03C7            ADD EAX,EDI
004EB5C2    8985 C7010000   MOV DWORD PTR SS:[EBP+1C7],EAX
004EB5C8    8B55 5B         MOV EDX,DWORD PTR SS:[EBP+5B]
004EB5CB    8B85 C7010000   MOV EAX,DWORD PTR SS:[EBP+1C7]
004EB5D1    8942 0C         MOV DWORD PTR DS:[EDX+C],EAX
004EB5D4    8D9D 0C040000   LEA EBX,DWORD PTR SS:[EBP+40C]
004EB5DA    53              PUSH EBX
004EB5DB    6A 00           PUSH 0
```

Order Push 0BA1000 first order RETN, this will navigate the jump to new locations are identified. But there are also interesting points when you look at the command PUSH 8000 because it can recover in EDI address background of new memory areas are located.

You can implement the financial navigate to patching code in our use of the command BYTE PUSH 8000

ABSOLUTE ADDRESS (redirection # 5): 0x004EB5E8
ORIGINAL Instruction: PUSH 8000 -> 0x68 0x00 0x80 0x00 0x00

Now from here I will talk about its offset address 00BA1000.

We begin in code Decompression for OEP.

```
00BA1000    90              NOP                                      Entry point
00BA1001    60              PUSHAD
00BA1002    E8 40060000     CALL 00BA1647
00BA1007    EB 44           JMP SHORT 00BA104D
00BA1009    0000            ADD BYTE PTR DS:[EAX],AL
00BA100B    0000            ADD BYTE PTR DS:[EAX],AL
00BA100D    0000            ADD BYTE PTR DS:[EAX],AL
00BA100F    0000            ADD BYTE PTR DS:[EAX],AL
00BA1011    87DB            XCHG EBX,EBX
00BA1013    90              NOP
00BA1014    0000            ADD BYTE PTR DS:[EAX],AL
00BA1016    0000            ADD BYTE PTR DS:[EAX],AL
00BA1018    0000            ADD BYTE PTR DS:[EAX],AL
00BA101A    0000            ADD BYTE PTR DS:[EAX],AL
00BA101C    0000            ADD BYTE PTR DS:[EAX],AL
00BA101E    0000            ADD BYTE PTR DS:[EAX],AL
00BA1020    0000            ADD BYTE PTR DS:[EAX],AL
00BA1022    0000            ADD BYTE PTR DS:[EAX],AL
00BA1024    0000            ADD BYTE PTR DS:[EAX],AL
00BA1026    0000            ADD BYTE PTR DS:[EAX],AL
00BA1028    0000            ADD BYTE PTR DS:[EAX],AL
00BA102A    0000            ADD BYTE PTR DS:[EAX],AL
00BA102C    0000            ADD BYTE PTR DS:[EAX],AL
00BA102E    1003            ADC BYTE PTR DS:[EBX],AL
00BA1030    0000            ADD BYTE PTR DS:[EAX],AL
00BA1032    0000            ADD BYTE PTR DS:[EAX],AL
00BA1034    0000            ADD BYTE PTR DS:[EAX],AL
00BA1036    0000            ADD BYTE PTR DS:[EAX],AL
00BA1038    0000            ADD BYTE PTR DS:[EAX],AL
00BA103A    0000            ADD BYTE PTR DS:[EAX],AL
00BA103C    0000            ADD BYTE PTR DS:[EAX],AL
00BA103E    0000            ADD BYTE PTR DS:[EAX],AL
00BA1040    0000            ADD BYTE PTR DS:[EAX],AL
00BA1042    0000            ADD BYTE PTR DS:[EAX],AL
00BA1044    0000            ADD BYTE PTR DS:[EAX],AL
00BA1046    0000            ADD BYTE PTR DS:[EAX],AL
00BA1048    0000            ADD BYTE PTR DS:[EAX],AL
00BA104A    0000            ADD BYTE PTR DS:[EAX],AL
00BA104C    90              NOP
00BA104D    BB 44294400     MOV EBX,442944
00BA1052    03DD            ADD EBX,EBP
00BA1054    2B9D 71294400   SUB EBX,DWORD PTR SS:[EBP+442971]
00BA105A    83BD D8304400   CMP DWORD PTR SS:[EBP+4430D8],0
00BA1061    899D 2F2E4400   MOV DWORD PTR SS:[EBP+442E2F],EBX
00BA1067    0F85 3E050000   JNZ 00BA15AB
00BA106D    8D85 E0304400   LEA EAX,DWORD PTR SS:[EBP+4430E0]
```

Looking at the code offset 0x002663, we see the code here is quite different than the code we see the beginning of the description of us, because we must also step by step through several layers before decompression when reaching code unpack all code for the program.

```
00B72663    01D9            ADD ECX,EBX
00B72665    3D B4944CE6     CMP EAX,364C94B4
00B72669    48              DEC EAX
00B7266A    98              CWDE
00B7266B    2C 44           SUB AL,44
00B7266D    CB              RETF                                     Far return
00B7266E    E8 3403230A     CALL 0ADA29A8
00B72673    C545 A3         LDS EAX,FWORD PTR SS:[EBP-5D]            Modification of segment register
00B72676    44              INC ESP
00B72677    74 24           JE SHORT 00B7269D
00B72679    188D 533CE246   SBB BYTE PTR SS:[EBP+46B23C53],CL
00B7267F    06              PUSH ES
```

We continue to describe the code in chi0x00BA1007, we have a function called on VirtualAlloc 0x00BA10C4, then we will have a loop to decrypt noted that other code.

```
00BA10D6   50              PUSH EAX
00BA10D7   53              PUSH EBX
00BA10D8   E8 74050000     CALL 00BA1651
00BA10DD   68C8            MOV ECX,EAX
00BA10DF   808D 452A4400   LEA EDI,DWORD PTR SS:[EBP+442A45]
00BA10E5   8085 75294400   MOV ESI,DWORD PTR SS:[EBP+442975]
00BA10EB   F3:A4           REP MOVS BYTE PTR ES:[EDI],BYTE PTR DS:[ESI]   Decritta il codice che segue da 0x00BA1101
00BA10ED   8085 75294400   MOV EAX,DWORD PTR SS:[EBP+442975]
00BA10F3   68 00000000     PUSH 0000
00BA10F8   6A 00           PUSH 0
00BA10FA   50              PUSH EAX
00BA10FB   FF95 7D294400   CALL NEAR DWORD PTR SS:[EBP+44297D]
00BA1101   8085 512C4400   LEA EAX,DWORD PTR SS:[EBP+442C51]
00BA1107   50              PUSH EAX                               0x00BA130D -> offset 0x0031300
00BA1108   C3              RETN
00BA1109   0000            ADD BYTE PTR DS:[EAX],AL
00BA110B   0000            ADD BYTE PTR DS:[EAX],AL
```

Now, we must be coming to a new offset 0x0031303D.

Here we can point to the code patching our

Offset (redirection # 6): 0x00310F3
ORIGINAL Instruction: PUSH 8000 -> 0x68 0x00 0x80 0x00 0x00

Looking a bit through offset 0x002663 window dump Olly's view is considered to decrypt not, of course not, we continue thui.

RETN to F7, F8, teip to trace, is to offset 0x0031343, have found a VirtualAlloc API function calls in offset 0x0031343

```
00BA130B   0000            ADD BYTE PTR DS:[EAX],AL
00BA130D   8B9D 552A4400   MOV EBX,DWORD PTR SS:[EBP+442A55]
00BA1313   0BDB            OR EBX,EBX
00BA1315   74 0A           JE SHORT 00BA1321
00BA1317   8B03            MOV EAX,DWORD PTR DS:[EBX]
00BA1319   8785 592A4400   XCHG DWORD PTR SS:[EBP+442A59],EAX
00BA131F   8903            MOV DWORD PTR DS:[EBX],EAX
00BA1321   8DB5 712A4400   LEA ESI,DWORD PTR SS:[EBP+442A71]
00BA1327   833E 00         CMP DWORD PTR DS:[ESI],0
00BA132A   0F84 D3000000   JE 00BA1403
00BA1330   8DB5 712A4400   LEA ESI,DWORD PTR SS:[EBP+442A71]
00BA1336   8B46 04         MOV EAX,DWORD PTR DS:[ESI+4]
00BA1339   6A 04           PUSH 4
00BA133B   68 00100000     PUSH 1000
00BA1340   50              PUSH EAX
00BA1341   6A 00           PUSH 0
00BA1343   FF95 79294400   CALL NEAR DWORD PTR SS:[EBP+442979]   call to VirtualA
00BA1349   8985 75294400   MOV DWORD PTR SS:[EBP+442975],EAX
00BA134F   56              PUSH ESI
00BA1350   8B1E            MOV EBX,DWORD PTR DS:[ESI]
00BA1352   039D D8304400   ADD EBX,DWORD PTR SS:[EBP+4430D8]
00BA1358   50              PUSH EAX
00BA1359   53              PUSH EBX
00BA135A   E8 F2020000     CALL 00BA1651
00BA135F   80BD 70294400   CMP BYTE PTR SS:[EBP+442970],0
00BA1366   75 4C           JNZ SHORT 00BA13B4
00BA1368   FE85 70294400   INC BYTE PTR SS:[EBP+442970]
00BA136E   8B3E            MOV EDI,DWORD PTR DS:[ESI]
00BA1370   03BD D8304400   ADD EDI,DWORD PTR SS:[EBP+4430D8]
00BA1376   FF37            PUSH DWORD PTR DS:[EDI]
00BA1378   C607 C3         MOV BYTE PTR DS:[EDI],0C3
00BA137B   FFD7            CALL NEAR EDI
00BA137D   8F07            POP DWORD PTR DS:[EDI]
00BA137F   50              PUSH EAX
00BA1380   51              PUSH ECX
00BA1381   56              PUSH ESI
00BA1382   53              PUSH EBX
00BA1383   8BC8            MOV ECX,EAX
00BA1385   83E9 06         SUB ECX,6
00BA1388   8BB5 75294400   MOV ESI,DWORD PTR SS:[EBP+442975]
00BA138E   33DB            XOR EBX,EBX
00BA1390   0BC9            OR ECX,ECX
00BA1392   74 1C           JE SHORT 00BA13B0
00BA1394   78 1A           JS SHORT 00BA13B0
00BA1396   AC              LODS BYTE PTR DS:[ESI]
00BA1397   3C E8           CMP AL,0E8
00BA1399   74 08           JE SHORT 00BA13A3
00BA139B   3C E9           CMP AL,0E9
00BA139D   74 04           JE SHORT 00BA13A3
```

```
00BA1399  v 74 08          JE SHORT 00BA13A3
00BA139B    3C E9          CMP AL,0E9
00BA139D  v 74 04          JE SHORT 00BA13A3
00BA139F    43             INC EBX
00BA13A0    49             DEC ECX
00BA13A1  ^ EB ED          JMP SHORT 00BA1390
00BA13A3    291E           SUB DWORD PTR DS:[ESI],EBX
00BA13A5    83C3 05        ADD EBX,5
00BA13A8    83C6 04        ADD ESI,4
00BA13AB    83E9 05        SUB ECX,5
00BA13AE  ^ EB E0          JMP SHORT 00BA1390
00BA13B0    5B             POP EBX
00BA13B1    5E             POP ESI
00BA13B2    59             POP ECX
00BA13B3    58             POP EAX
00BA13B4    8BC8           MOV ECX,EAX
00BA13B6    8B3E           MOV EDI,DWORD PTR DS:[ESI]
00BA13B8    03BD D8304400  ADD EDI,DWORD PTR SS:[EBP+4430D8]
00BA13BE    8BB5 75294400  MOV ESI,DWORD PTR SS:[EBP+442975]
00BA13C4    C1F9 02        SAR ECX,2
00BA13C7    F3:A5          REP MOVS DWORD PTR ES:[EDI],DWORD PTR DS:[ESI]   Scrittura codice
00BA13C9    8BC8           MOV ECX,EAX
00BA13CB    83E1 03        AND ECX,3
00BA13CE    F3:A4          REP MOVS BYTE PTR ES:[EDI],BYTE PTR DS:[ESI]
00BA13D0    5E             POP ESI
00BA13D1    8B85 75294400  MOV EAX,DWORD PTR SS:[EBP+442975]
00BA13D7    68 00800000    PUSH 8000
00BA13DC    6A 00          PUSH 0
00BA13DE    50             PUSH EAX
00BA13DF    FF95 7D294400  CALL NEAR DWORD PTR SS:[EBP+44297D]
00BA13E5    83C6 08        ADD ESI,8
00BA13E8    833E 00        CMP DWORD PTR DS:[ESI],0
00BA13EB  ^ 0F85 45FFFFFF  JNZ 00BA1336
00BA13F1    8B9D 552A4400  MOV EBX,DWORD PTR SS:[EBP+442A55]
00BA13F7    0BDB           OR EBX,EBX
00BA13F9  v 74 08          JE SHORT 00BA1403
00BA13FB    8B03           MOV EAX,DWORD PTR DS:[EBX]
00BA13FD    8785 592A4400  XCHG DWORD PTR SS:[EBP+442A59],EAX
00BA1403    8B95 D8304400  MOV EDX,DWORD PTR SS:[EBP+4430D8]
00BA1409    8B85 512A4400  MOV EAX,DWORD PTR SS:[EBP+442A51]
00BA140F    2BD0           SUB EDX,EAX
00BA1411  v 74 75          JE SHORT 00BA1488
```

Continue F8 to offset 00BA13C9, here we have found a loop decryption.

Again, note the address has ordered PUSH 8000, can point to the code of patching it.

Offset (redirection # 7): 0x00313D7
Instruction ORIGINATES added: PUSH 8000 -> 0x68 0x00 0x80 0x00 0x00

Press F8 code will be written

```
Address   Hex dump      Disassembly                                  Co
00B72663    F3:A5       REP MOVS DWORD PTR ES:[EDI],DWORD PTR DS:[ESI]
00B72665    89C1        MOV ECX,EAX
00B72667    83E1 03     AND ECX,3
00B7266A    F3:A4       REP MOVS BYTE PTR ES:[EDI],BYTE PTR DS:[ESI]
00B7266C    5F          POP EDI
00B7266D    5E          POP ESI
00B7266E    C3          RETN
00B7266F    8D740E FC   LEA ESI,DWORD PTR DS:[ESI+ECX-4]
```

Continue gradually, we will go to the code with the IAT, we have 2 loop mixed.

```
00BA1494    03F2            ADD ESI,EDX
00BA1496    8B46 0C         MOV EAX,DWORD PTR DS:[ESI+C]        inizio loop esterno
00BA1499    85C0            TEST EAX,EAX
00BA149B  v 0F84 0A010000   JE 00BA15AB
00BA14A1    03C2            ADD EAX,EDX
00BA14A3    8BD8            MOV EBX,EAX
00BA14A5    50              PUSH EAX                            None API
00BA14A6    FF95 EC314400   CALL NEAR DWORD PTR SS:[EBP+4431EC] call to kernel32.GetModuleHandleA
00BA14AC    85C0            TEST EAX,EAX
00BA14AE  v 75 07           JNZ SHORT 00BA1487
00BA14B0    53              PUSH EBX
00BA14B1    FF95 F0314400   CALL NEAR DWORD PTR SS:[EBP+4431F0]
00BA14B7    8985 4D294400   MOV DWORD PTR SS:[EBP+44294D],EAX
00BA14BD    C785 51294400   MOV DWORD PTR SS:[EBP+442951],0
00BA14C7    8B95 D8304400   MOV EDX,DWORD PTR SS:[EBP+4430D8]  inizio loop interno
00BA14CD    8B06            MOV EAX,DWORD PTR DS:[ESI]
00BA14CF    85C0            TEST EAX,EAX
00BA14D1  v 75 03           JNZ SHORT 00BA14D6
00BA14D3    8B46 10         MOV EAX,DWORD PTR DS:[ESI+10]
00BA14D6    03C2            ADD EAX,EDX
00BA14D8    0385 51294400   ADD EAX,DWORD PTR SS:[EBP+442951]
00BA14DE    8B18            MOV EBX,DWORD PTR DS:[EAX]
00BA14E0    8B7E 10         MOV EDI,DWORD PTR DS:[ESI+10]
00BA14E3    03FA            ADD EDI,EDX
00BA14E5    03BD 51294400   ADD EDI,DWORD PTR SS:[EBP+442951]
00BA14EB    85DB            TEST EBX,EBX
00BA14ED  v 0F84 A2000000   JE 00BA1595
00BA14F3    F7C3 00000080   TEST EBX,80000000
00BA14F9  v 75 04           JNZ SHORT 00BA14FF
00BA14FB    03DA            ADD EBX,EDX
00BA14FD    43              INC EBX
00BA14FE    43              INC EBX
00BA14FF    53              PUSH EBX
00BA1500    81E3 FFFFFF7F   AND EBX,7FFFFFFF
00BA1506    53              PUSH EBX                            none API di cui si cerca l'indirizzo
00BA1507    FFB5 4D294400   PUSH DWORD PTR SS:[EBP+44294D]
00BA150D    FF95 E8314400   CALL NEAR DWORD PTR SS:[EBP+4431E8] call to kernel32.GetProcAddress
00BA1513    85C0            TEST EAX,EAX
00BA1515    5B              POP EBX
00BA1516  v 75 6F           JNZ SHORT 00BA1587
00BA1518    F7C3 00000080   TEST EBX,80000000
00BA151E  v 75 19           JNZ SHORT 00BA1539
00BA1520    57              PUSH EDI
00BA1521    8B46 0C         MOV EAX,DWORD PTR DS:[ESI+C]
00BA1524    0385 D8304400   ADD EAX,DWORD PTR SS:[EBP+4430D8]
00BA152A    50              PUSH EAX
00BA152B    53              PUSH EBX
00BA152C    8D85 53314400   LEA EAX,DWORD PTR SS:[EBP+443153]
00BA1532    50              PUSH EAX
00BA1533    57              PUSH EDI
00BA1534  v E9 99000000     JMP 00BA15D2
00BA1539    81E3 FFFFFF7F   AND EBX,7FFFFFFF
00BA153F    8B85 DC304400   MOV EAX,DWORD PTR SS:[EBP+4430DC]
00BA1545    3985 4D294400   CMP DWORD PTR SS:[EBP+44294D],EAX
00BA154B  v 75 24           JNZ SHORT 00BA1571
00BA154D    57              PUSH EDI
00BA154E    8BD3            MOV EDX,EBX
00BA1550    4A              DEC EDX
00BA1551    C1E2 02         SHL EDX,2
00BA1554    8B9D 4D294400   MOV EBX,DWORD PTR SS:[EBP+44294D]
00BA155A    8B7B 3C         MOV EDI,DWORD PTR DS:[EBX+3C]
00BA155D    8B7C3B 78       MOV EDI,DWORD PTR DS:[EBX+EDI+78]
00BA1561    035C3B 1C       ADD EBX,DWORD PTR DS:[EBX+EDI+1C]
00BA1565    8B0413          MOV EAX,DWORD PTR DS:[EBX+EDX]
00BA1568    0385 4D294400   ADD EAX,DWORD PTR SS:[EBP+44294D]
00BA156E    5F              POP EDI
00BA156F  v EB 16           JMP SHORT 00BA1587
00BA1571    57              PUSH EDI
00BA1572    8B46 0C         MOV EAX,DWORD PTR DS:[ESI+C]
00BA1575    0385 D8304400   ADD EAX,DWORD PTR SS:[EBP+4430D8]
00BA157B    50              PUSH EAX
00BA157C    53              PUSH EBX
00BA157D    8D85 A4314400   LEA EAX,DWORD PTR SS:[EBP+4431A4]
00BA1583    50              PUSH EAX
00BA1584    57              PUSH EDI
00BA1585  v EB 4B           JMP SHORT 00BA15D2
00BA1587    8907            MOV DWORD PTR DS:[EDI],EAX          Scrive l'indirizzo risolto dell'API
00BA1589    8385 51294400   ADD DWORD PTR SS:[EBP+442951],4      Si sposta nella prossina entry da scrivere
00BA1590  ^ E9 32FFFFFF     JMP 00BA14C7                        continua loop interno
00BA1595    8906            MOV DWORD PTR DS:[ESI],EAX
00BA1597    8946 0C         MOV DWORD PTR DS:[ESI+C],EAX
00BA159A    8946 10         MOV DWORD PTR DS:[ESI+10],EAX
00BA159D    83C6 14         ADD ESI,14
00BA15A0    8B95 D8304400   MOV EDX,DWORD PTR SS:[EBP+4430D8]
00BA15A6  ^ E9 EBFEFFFF     JMP 00BA1496                        continua loop esterno
00BA15AB    8B85 652A4400   MOV EAX,DWORD PTR SS:[EBP+442A65]
00BA15B1    50              PUSH EAX
00BA15B2    0385 D8304400   ADD EAX,DWORD PTR SS:[EBP+4430D8]
```

Decode the API will be recorded from 0x002C104 offset, and end position loop is 0x00315AB

```
00B9C0F8  00000000
00B9C0FC  00000000
00B9C100  00000000
00B9C104  7C809737  kernel32.GetCurrentThreadId
00B9C108  7C92188A  ntdll.RtlDeleteCriticalSection
00B9C10C  7C9110ED  ntdll.RtlLeaveCriticalSection
00B9C110  7C911005  ntdll.RtlEnterCriticalSection
00B9C114  7C809FA1  kernel32.InitializeCriticalSection
00B9C118  7C809B14  kernel32.VirtualFree
00B9C11C  7C809A81  kernel32.VirtualAlloc
00B9C120  7C8099CD  kernel32.LocalFree
00B9C124  7C8099BD  kernel32.LocalAlloc
00B9C128  7C80B859  kernel32.VirtualQuery
00B9C12C  7C80A0C7  kernel32.WideCharToMultiByte
00B9C130  7C809CAD  kernel32.MultiByteToWideChar
00B9C134  7C80C6E0  kernel32.lstrlenA
00B9C138  7C810311  kernel32.lstrcpynA
00B9C13C  7C80C729  kernel32.lstrcpyA
00B9C140  7C801D4F  kernel32.LoadLibraryExA
00B9C144  7C80A405  kernel32.GetThreadLocale
00B9C148  7C801EEE  kernel32.GetStartupInfoA
```

Some next steps we will keep to the process of the classic ASPACK.

```
00BA1583    50              PUSH EAX
00BA1584    57              PUSH EDI
00BA1585  v EB 4B           JMP SHORT 00BA15D2
00BA1587    8907            MOV DWORD PTR DS:[EDI],EAX          Scrive l'indirizzo risolto dell'API
00BA1589    8385 51294400   ADD DWORD PTR SS:[EBP+442951],4      Si sposta nella prossima entry da scrivere
00BA1590  ^ E9 32FFFFFF     JMP 00BA14C7                        continua loop interno
00BA1595    8906            MOV DWORD PTR DS:[ESI],EAX
00BA1597    8946 0C         MOV DWORD PTR DS:[ESI+C],EAX
00BA159A    8946 10         MOV DWORD PTR DS:[ESI+10],EAX
00BA159D    83C6 14         ADD ESI,14
00BA15A0    8B95 D8304400   MOV EDX,DWORD PTR SS:[EBP+4430D8]
00BA15A6  ^ E9 EBFEFFFF     JMP 00BA1496                        continua loop esterno
00BA15AB    8B85 652A4400   MOV EAX,DWORD PTR SS:[EBP+442A65]
00BA15B1    50              PUSH EAX
00BA15B2    0385 D8304400   ADD EAX,DWORD PTR SS:[EBP+4430D8]
00BA15B8    5B              POP EBX
00BA15B9    0BDB            OR EBX,EBX
00BA15BB    8985 112F4400   MOV DWORD PTR SS:[EBP+442F11],EAX     Scrive l'indirizzo a cui saltare
00BA15C1    61              POPAD
00BA15C2  v 75 08           JNZ SHORT 00BA15CC
00BA15C4    B8 01000000     MOV EAX,1
00BA15C9    C2 0C00         RETN 0C
00BA15CC    68 00000000     PUSH 0
00BA15D1    C3              RETN
00BA15D2    8B85 DC304400   MOV EAX,DWORD PTR SS:[EBP+4430DC]
```

We trace, tase shows deim kahc duoc fold them.

```
00BA1587    8907            MOV DWORD PTR DS:[EDI],EAX          Scrive l'indirizzo risolto dell'API
00BA1589    8385 51294400   ADD DWORD PTR SS:[EBP+442951],4      Si sposta nella prossima entry da scrivere
00BA1590  ^ E9 32FFFFFF     JMP 00BA14C7                        continua loop interno
00BA1595    8906            MOV DWORD PTR DS:[ESI],EAX
00BA1597    8946 0C         MOV DWORD PTR DS:[ESI+C],EAX
00BA159A    8946 10         MOV DWORD PTR DS:[ESI+10],EAX
00BA159D    83C6 14         ADD ESI,14
00BA15A0    8B95 D8304400   MOV EDX,DWORD PTR SS:[EBP+4430D8]
00BA15A6  ^ E9 EBFEFFFF     JMP 00BA1496                        continua loop esterno
00BA15AB    8B85 652A4400   MOV EAX,DWORD PTR SS:[EBP+442A65]
00BA15B1    50              PUSH EAX
00BA15B2    0385 D8304400   ADD EAX,DWORD PTR SS:[EBP+4430D8]
00BA15B8    5B              POP EBX
00BA15B9    0BDB            OR EBX,EBX
00BA15BB    8985 112F4400   MOV DWORD PTR SS:[EBP+442F11],EAX     Scrive l'indirizzo a cui saltare
00BA15C1    61              POPAD
00BA15C2  v 75 08           JNZ SHORT 00BA15CC
00BA15C4    B8 01000000     MOV EAX,1
00BA15C9    C2 0C00         RETN 0C
00BA15CC    68 DC89B900     PUSH 00B989DC
00BA15D1    C3              RETN
00BA15D2    8B85 DC304400   MOV EAX,DWORD PTR SS:[EBP+4430DC]
```

Navigation to our code is placed here 0x00315C1 offset.

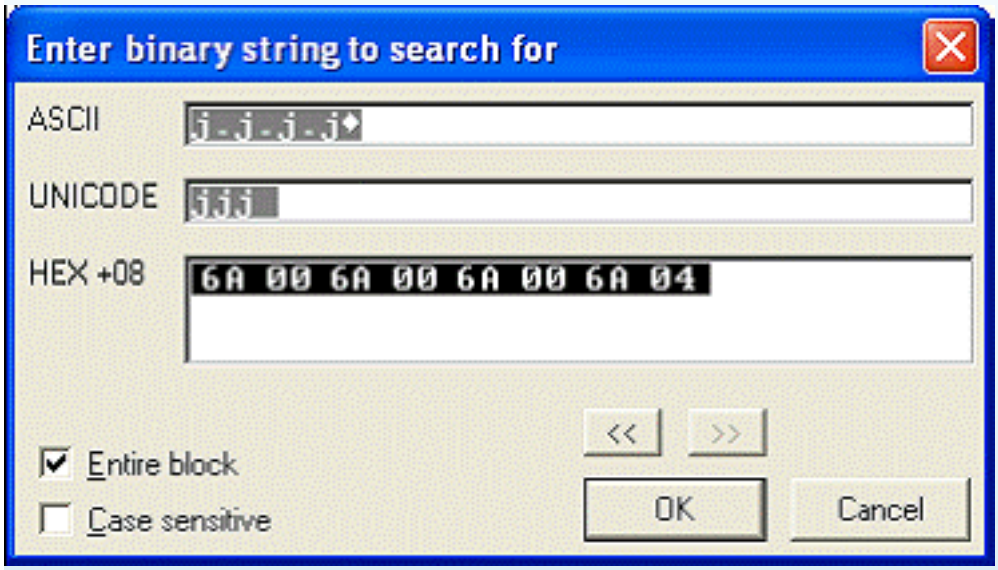
Offset (redirection # 8): 0x00315C1
ORIGINAL Instruction: POPAD / JNZ

```
00B989DC   55            PUSH EBP                          chordpic.004EB430
00B989DD   8BEC          MOV EBP,ESP
00B989DF   83C4 B4       ADD ESP,-4C
00B989E2   B8 D487B900   MOV EAX,0B987D4
00B989E7   E8 50CCFDFF   CALL 00B7563C
00B989EC   E8 DBAAFDFF   CALL 00B734CC
00B989F1   8D40 00       LEA EAX,DWORD PTR DS:[EAX]
00B989F4   0000          ADD BYTE PTR DS:[EAX],AL
00B989F6   0000          ADD BYTE PTR DS:[EAX],AL
00B989F8   0000          ADD BYTE PTR DS:[EAX],AL
00B989FA   0000          ADD BYTE PTR DS:[EAX],AL
```

I put a break on the breakpoints Hardware offset 0x00289DC will save time when Olly restart.

Now is the time to say CRC checking (check sovereignty on the hard disk).

Click CRL B + on the binary:

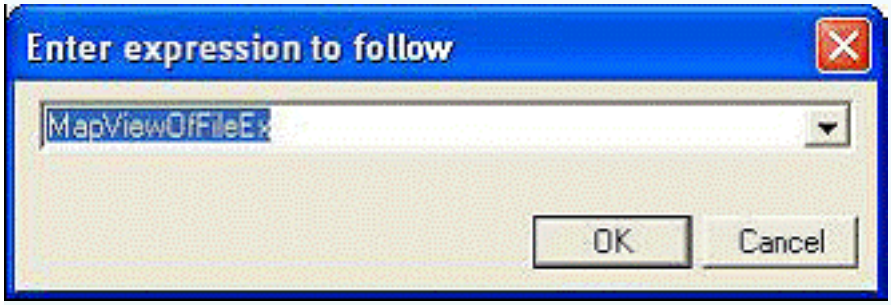


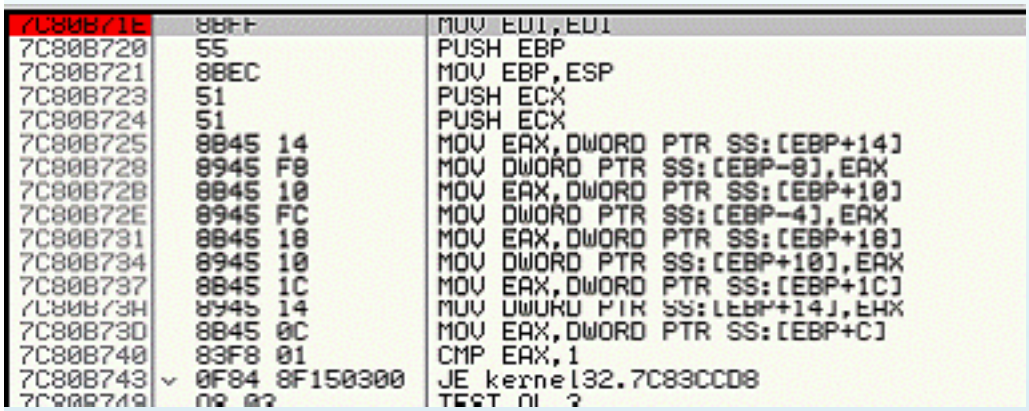
Click OK, we are taught to, offset 0018662.

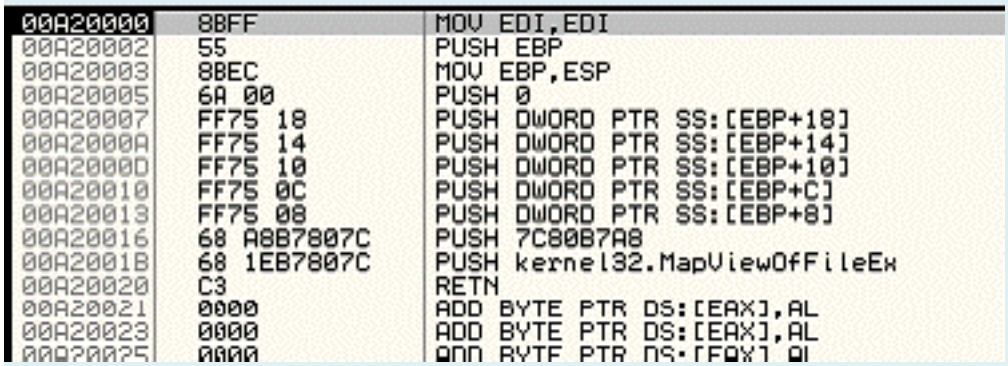
```
00B88650   8B40 18          MOV EAX,DWORD PTR DS:[EAX+18]
00B88653   FFD0              CALL NEAR EAX
00B88655   833D 14B4B900 (   CMP DWORD PTR DS:[B9B414],0
00B8865C   0F84 66040000     JE 00B88AC8
00B88662   6A 00             PUSH 0
00B88664   6A 00             PUSH 0
00B88666   6A 00             PUSH 0
00B88668   6A 04             PUSH 4
00B8866A   A1 14B4B900       MOV EAX,DWORD PTR DS:[B9B414]
00B8866F   50                PUSH EAX
00B88670   A1 E497B900       MOV EAX,DWORD PTR DS:[B997E4]
00B88675   8B40 08          MOV EAX,DWORD PTR DS:[EAX+8]
00B88678   FFD0              CALL NEAR EAX
00B8867A   8BD8              MOV EBX,EAX
00B8867C   50                PUSH EAX
00B8867D   E8 4A010000       CALL 00B887CC
```

Code this relationship to the mapped file through MapViewOfFileEx function that is called by CALL EAX directives.

Set break points in MapViewOfFileEx function.







We hold that end, then we repeat the implementation until we meet in the code (using a combination ALT + M break on access on running and then ALT + F9 and Shift + F9), then we can find the key point then we have the image files are mapped into memory, you use procedure nhie search to find the key point.

In Asprotect, MapViewOfFile API used to create image files on the hard drive of us, the test will detect a code that replaced just been recorded by a hardcode way. Check this check the original file.

NOTE for ***MapViewOfFile***

From the MSDN it is had:

MapViewOfFile

The **MapViewOfFile** function maps a view of a file mapping into the address space of a calling process.

To specify a suggested base address for the view, use the MapViewOfFileEx function. However, this practice is not recommended.

```
LPVOID MapViewOfFile(
  HANDLE hFileMappingObject,
  DWORD dwDesiredAccess,
  DWORD dwFileOffsetHigh,
  DWORD dwFileOffsetLow,
  SIZE_T dwNumberOfBytesToMap
);
```

PUSH 4 sets up the flag for the modalities of access to the area that contains the file image (mapping) to value FILE_MAP_READ, we must have the way to modify the byte inside of the mapped image in order to fake ASProtect and show that the file was not modified. In order to do this we must change the attribute of access to FILE_MAP_COPY that correspond to the value 0x01, therefore we will have to replace the original PUSH 4 with a new PUSH 1 and later restore the original code to avoid other detection from ASProtect.

FILE_MAP_COPY = 0x01
FILE_MAP_WRITE = 0x02
FILE_MAP_READ = 0x04

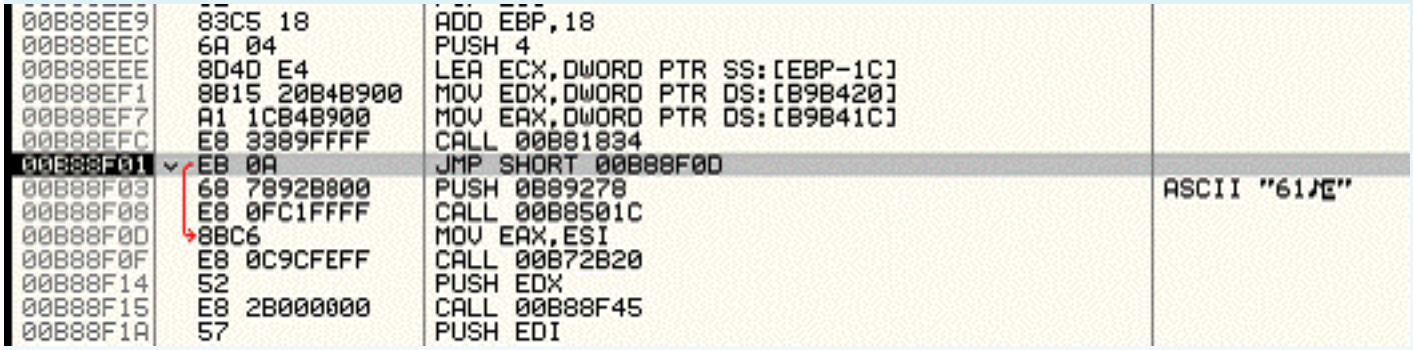
Value	Meaning
FILE_MAP_WRITE	Read/write access. The mapping object must be created with PAGE_READWRITE protection. A read/write view of the file is mapped.
FILE_MAP_READ	Read-only access. The mapping object must be created with PAGE_READWRITE or PAGE_READONLY protection. A read-only view of the file is mapped.
FILE_MAP_COPY	Copy-on-write access. The mapping object must be created with PAGE_WRITECOPY protection. The system commits physical storage from the paging file at the time that **MapViewOfFile** is called. The actual physical storage is not used until a thread in the process writes to an address in the view. At that time, the system copies the original page to a new page that is backed by the paging file, maps the page into the process address space, and changes the page protection to PAGE_READWRITE. The threads in the process can access only the local copy of the data, not the original data. If the page is ever trimmed from the working set of the process, it can be written to the paging file storage that is committed when **MapViewOfFile** is called. This process only allocates physical memory when a virtual address is actually written to. Changes are never written back to the original file, and are freed when the thread in your process unmaps the view. Paging file space for the entire view is committed when copy-on-write access is specified, because the thread in the process can write to every single page. Therefore, enough physical storage space must be obtained at the time **MapViewOfFile** is called.
FILE_MAP_EXECUTE	Execute access. Code can be run from the mapped memory. The mapping object must be created with PAGE_EXECUTE_READWRITE or PAGE_EXECUTE_READ access. **Windows Server 2003 and Windows XP:** This feature is not available until Windows XP SP2 and Windows Server 2003 SP1.

Order PUSH 4 position OFFSET is 0x0018669, and we will re-navigate after MaViewOfFile

enforcement.

Offset (redirection # 9): 0x001867A
ORIGINAL instruction: MOV EBX, EAX
Redirection code into the cave we will first use the value which is in EAX since the content of this registry base supplies the address from where it begins the mapping file in memory.

After a few trace what we came here:



We gradually tieop axis after the test and after a few other trace our final round to that code decompression program.

```
00B890C6    C600 CF          MOV BYTE PTR DS:[EAX],0CF
00B890C9 v  EB 71            JMP SHORT 00B8913C
00B890CB    E8 7494FEFF      CALL 00B72544                    Inizio loop
00B890D0    8BF0             MOV ESI,EAX
00B890D2    8B03             MOV EAX,DWORD PTR DS:[EBX]
00B890D4    0345 E8          ADD EAX,DWORD PTR SS:[EBP-18]
00B890D7    8945 FC          MOV DWORD PTR SS:[EEP-4],EAX
00B890DA    8B4B 04          MOV ECX,DWORD PTR DS:[EBX+4]
00B890DD    8BD6             MOV EDX,ESI
00B890DF    8B45 FC          MOV EAX,DWORD PTR SS:[EBP-4]
00B890E2    E8 4DEFFFFF      CALL 00B88034
00B890E7    8B7B 04          MOV EDI,DWORD PTR DS:[EBX+4]
00B890EA    8A45 FC          MOV AL,BYTE PTR SS:[EBP-4]
00B890ED    8B15 5497B900    MOV EDX,DWORD PTR DS:[B99754]
00B890F3    8802             MOV BYTE PTR DS:[EDX],AL
00B890F5    8BC7             MOV EAX,EDI
00B890F7    8B15 6C97B900    MOV EDX,DWORD PTR DS:[B9976C]
00B890FD    8802             MOV BYTE PTR DS:[EDX],AL
00B890FF    807D F7 00       CMP BYTE PTR SS:[EBF-9],0
00B89103 v  75 1E            JNZ SHORT 00B89123
00B89105    C645 F7 01       MOV BYTE PTR SS:[EBF-9],1
00B89109    56               PUSH ESI
00B8910A    8B75 FC          MOV ESI,DWORD PTR SS:[EBP-4]
00B8910D    83C6 14          ADD ESI,14
00B89110    FF36             PUSH DWORD PTR DS:[ESI]
00B89112    C606 C3          MOV BYTE PTR DS:[ESI],0C3
00B89115    FFD6             CALL NEAR ESI
00B89117    8F06             POP DWORD PTR DS:[ESI]
00B89119    5E               POP ESI
00B8911A    8BD7             MOV EDX,EDI
00B8911C    8BC6             MOV EAX,ESI
00B8911E    E8 75F0FFFF      CALL 00B88198
00B89123    8BCF             MOV ECX,EDI
00B89125    8BD6             MOV EDX,ESI
00B89127    8B45 FC          MOV EAX,DWORD PTR SS:[EBP-4]
00B8912A    E8 8DC7FEFF      CALL 00B758BC                    Decomprime il codice
00B8912F    8B53 04          MOV EDX,DWORD PTR DS:[EBX+4]
00B89132    8BC6             MOV EAX,ESI
00B89134    E8 2394FEFF      CALL 00B7255C
00B89139    83C3 0C          ADD EBX,0C
00B8913C    8B43 04          MOV EAX,DWORD PTR DS:[EBX+4]
00B8913F    85C0             TEST EAX,EAX
00B89141 ^  77 88            JA SHORT 00B890CB                Continua il loop
00B89143    837D F0 00       CMP DWORD PTR SS:[EEP-10],0      Fine loop
00B89147 v  74 08            JE SHORT 00B89151
00B89149    8B45 F0          MOV EAX,DWORD PTR SS:[EBP-10]
00B8914C    8B55 EC          MOV EDX,DWORD PTR SS:[EBP-14]
00B8914F    8910             MOV DWORD PTR DS:[EFX],EDX
00B89151    B8 03000000      MOV EAX,3
```

Address	Hex dump	Disassembly	Comment
00499914	55	DB 55	CHAR 'U'
00499915	8B	DB 8B	
00499916	EC	DB EC	
00499917	83	DB 83	
00499918	C4	DB C4	
00499919	EC	DB EC	
0049991A	53	DB 53	CHAR 'S'
0049991B	33	DB 33	CHAR '3'
0049991C	C0	DB C0	
0049991D	89	DB 89	
0049991E	45	DB 45	CHAR 'E'
0049991F	EC	DB EC	

To see the code of Olly's code window, CRL + G on the address of the OEP, then CRL + A

```
00499914  .  55           PUSH EBP
00499915  .  8BEC         MOV EBP,ESP
00499917  .  83C4 EC      ADD ESP,-14
0049991A  .  53           PUSH EBX
0049991B  .  33C0         XOR EAX,EAX
0049991D  .  8945 EC      MOV DWORD PTR SS:[EBP-14],EAX
00499920  .  B8 24964900  MOV EAX,chordpic.00499624
00499925  .  E8 86CDF6FF  CALL chordpic.00406680
0049992A  .  8B1D F0E0490 MOV EBX,DWORD PTR DS:[49E0F0]    chordpic.0049FBC0
00499930  .  33C0         XOR EAX,EAX
00499932  .  55           PUSH EBP
00499933  .  68 4E9A4900  PUSH chordpic.00499A4E
```

Well, to trace axis, ignoring the performance and you can see a loop test to detect memory patching.

```
0087CED7    83FB 40         CMP EBX,40
0087CEDA  v 7C 14           JL SHORT 0087CEF0
0087CEDC    8BD7            MOV EDX,EDI
0087CEDE    8BC6            MOV EAX,ESI
0087CEE0    8B08            MOV ECX,DWORD PTR DS:[EAX]
0087CEE2    FF51 14         CALL NEAR DWORD PTR DS:[ECX+14]
0087CEE5    83C7 40         ADD EDI,40
0087CEE8    83EB 40         SUB EBX,40
0087CEEB    83FB 40         CMP EBX,40
0087CEEE  ^ 7D EC           JGE SHORT 0087CEDC              Loop lettura codice per verifica CRC
0087CEF0    8B0424          MOV EAX,DWORD PTR SS:[ESP]      chordpic.<ModuleEntryPoint>
0087CEF3    03C5            ADD EAX,EBP
0087CEF5    8D56 08         LEA EDX,DWORD PTR DS:[ESI+8]
0087CEF8    8BCB            MOV ECX,EBX
0087CEFA    E8 5157FFFF     CALL 00872650
0087CEFF    5A              POP EDX
0087CF00    5D              POP EBP
0087CF01    5F              POP EDI
0087CF02    5E              POP ESI
0087CF03    5B              POP EBX
0087CF04    C3              RETN
0087CF05    8D40 00         LEA EAX,DWORD PTR DS:[EAX]
```

Then a bit we will g9en a beautiful location other, this check point is 45. The check will check the code is decompress. If you patch the target truoc this test will occur error.

```
00B8A32F    8B00            MOV EAX,DWORD PTR DS:[EAX]
00B8A331    03C7            ADD EAX,EDI
00B8A333    8B5424 0C       MOV EDX,DWORD PTR SS:[ESP+C]
00B8A337    E8 D873FFFF     CALL 00B81714
00B8A33C    8BE8            MOV EBP,EAX                     EAX = 5A935349
00B8A33E    892D 3CB4B900   MOV DWORD PTR DS:[B9B43C],EBP
00B8A344    3B6C24 10       CMP EBP,DWORD PTR SS:[ESP+10]   [ESP+10]=5A935349 (CRC)
00B8A348  v 74 0C           JE SHORT 00B8A356
00B8A34A    68 DCA3B800     PUSH 0B8A3DC                    ASCII "45♪■"
00B8A34F    E8 C8ACFFFF     CALL 00B8501C
00B8A354  v EB 12           JMP SHORT 00B8A368
00B8A356    8B4424 0C       MOV EAX,DWORD PTR SS:[ESP+C]
00B8A35A    A3 38B4B900     MOV DWORD PTR DS:[B9B438],EAX
00B8A35F    8B4424 08       MOV EAX,DWORD PTR SS:[ESP+8]
00B8A363    A3 34B4B900     MOV DWORD PTR DS:[B9B434],EAX
```

CRC will be stored in a short position in the ratings [ESP +10] and the target is 5A935349.

```
0012FF50  00000000
0012FF54  00400000  ASCII "MZP"
0012FF58  00001000
0012FF5C  00098C00
0012FF60  5A935349  CRC
0012FF64  0012FF98
0012FF68  00B70000
0012FF6C  00B30000
```

Now you can patch in position 0x0048CB79 only after a check this, the program will run well and the patch will work.

```
0048CB67    .  B0 EC        MOV AL,0EC
0048CB69    .  CD 45        INT 45
0048CB6B    >  E8 C0F9FFFF  CALL chordpic.0048C530
0048CB70    .  84C0         TEST AL,AL
0048CB72       90           NOP                             PATCH: NOP
0048CB73       90           NOP
0048CB74    .  A1 ECDD4900  MOV EAX,DWORD PTR DS:[49DDEC]
0048CB79       C600 00      MOV BYTE PTR DS:[EAX],0         PATCH: FORCE 0
0048CB7C    >  A1 ECDD4900  MOV EAX,DWORD PTR DS:[49DDEC]
0048CB81    .  803800 00    CMP BYTE PTR DS:[EAX],0
0048CB84    .v 0F84 F2000000 JE chordpic.0048CC7C           LOOK AT THIS :-)
0048CB8A    .  33DB         XOR EBX,EBX
0048CB8C    .  8D5D F8      LEA EDX,DWORD PTR SS:[EBP-8]
0048CB8F    .  A1 E4E14900  MOV EAX,DWORD PTR DS:[49E184]
```

Next to this, we can use the check after patching, then we write the pointer to the last offset in 0x001A356.

Offset (redirection # 10): 0x001A356
ORIGINAL instruction: MOV EAX, DWORD [ESP + C]

2. Inline PATCHING

Giola now time to write the code for the inline patching and memory areas suitable to all daon the code.

Using. ADATA section are not sure, you do not charge and it will

This is the impact of integrity check. Because when MapViewOfFile enforcement, Asprotect will submit to. ADATA the giaa of zero, so we will have to check the area are Asprotect use and re-directed to the address used when checking Asprotect finished the last byte.

Making this analysis the first free area it turns out from the address 0x0050DCD6, this will be theaddress to redirect which ***MapViewOfFile*** after the execution.

We write code patching follows:

004EB1AA JMP chordpic .0050 D100; Redirection from 1 to cave hardcoded jump
0050D100 MOV DWORD PTR DS: [4EB267], 21EA3E9; Cave 1
0050D10A JMP chordpic.004EB1CA
0050D10F MOV DWORD PTR DS: [4EB32D], 21DECE9; Cave 2
0050D119 JMP chordpic.004EB290
0050D11E MOV DWORD PTR DS: [4EB410], 21D18E9; Cave 3
0050D128 JMP chordpic.004EB373
0050D12D MOV DWORD PTR DS: [4EB410], 12E8; Cave 4 (restoration of the original code of the call)
0050D137 MOV DWORD PTR DS: [4EB5E8], 21B59E9; Redirection to the cave 5
0050D141 JMP chordpic.004EB410
ChordPickout ASProtect inline patching tutorial ThunderPwr of ARTeam 05/08/2006
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0050D146 MOV DWORD PTR DS: [4EB5E8], 800,068; Cave 5 (restoration of the code PUSH 8000)
0050D150 MOV DWORD PTR DS: [50DFFC], EDI; Storage for the base address (at the end of the area)
0050D156 MOV DWORD PTR DS: [EDI +310 F3], 50D16E68; Redirection to the cave 6
0050D160 MOV WORD PTR DS: [EDI +310 F7], 0C300

0050D169 JMP chordpic.004EB5E8
0050D16E PUSHAD; Cave 6 (Save the target context)
0050D16F PUSHFD
0050D170 MOV EAX, DWORD PTR DS: [50DFFC]; Load the base address
0050D175 MOV DWORD PTR DS: [EAX +310 F3], 800,068; Restoration PUSH 8000 (offset 310F3)
0050D17F MOV BYTE PTR DS: [EAX +310 F7], 0
0050D186 MOV BYTE PTR DS: [EAX +310 F8], 6A
0050D18D MOV DWORD PTR DS: [EAX +313 D7], 50D1B268; It goes next to PUSH 8000 (offset 313D7) for cave 7
0050D197 MOV WORD PTR DS: [EAX +313 DB], 0C300
0050D1A0 ADD EAX, 310F3; Calculate the return address
0050D1A5 MOV DWORD PTR DS: [50D1AD], EAX
0050D1AA POPFD
0050D1AB POPAD
0050D1AC PUSH 0
0050D1B1 RETN
0050D1B2 PUSHAD; Cave 7
0050D1B3 PUSHFD
0050D1B4 MOV EAX, DWORD PTR DS: [50DFFC]
0050D1B9 MOV DWORD PTR DS: [EAX +313 D7], 800,068; Restoration PUSH 8000 to offset one 313D7
0050D1C3 MOV BYTE PTR DS: [EAX +313 DB], 0
0050D1CA MOV BYTE PTR DS: [EAX +313 DC], 6A
0050D1D1 MOV DWORD PTR DS: [EAX +315 C1], 50D1F668; Cave 8 goes to the POPAD (offset 315C1) for cave 8
0050D1DB MOV WORD PTR DS: [EAX +315 C5], 0C300
0050D1E4 ADD EAX, 313D7; Calculate the return address
0050D1E9 MOV DWORD PTR DS: [50D1F1], EAX
0050D1EE POPFD
0050D1EF POPAD
0050D1F0 PUSH 0
0050D1F5 RETN
0050D1F6 PUSHAD; Cave 8
0050D1F7 PUSHFD
0050D1F8 MOV EAX, DWORD PTR DS: [50DFFC]
0050D1FD MOV DWORD PTR DS: [EAX +315 C1], B8087561; Restoration POPAD / JNZ to offset one 315C1
0050D207 MOV WORD PTR DS: [EAX +315 C5], 1
0050D210 MOV BYTE PTR DS: [EAX +18669], 1; Patch 4 to the PUSH PUSH 1 (offset 18669)
0050D217 MOV DWORD PTR DS: [EAX +1867 A], 50DCD668; It goes to MOV EBX, EAX for cave 9
0050D221 MOV WORD PTR DS: [EAX +1867 E], 0C300
0050D22A ADD EAX, 315C1; Calculates the return address
0050D22F MOV DWORD PTR DS: [50D237], EAX

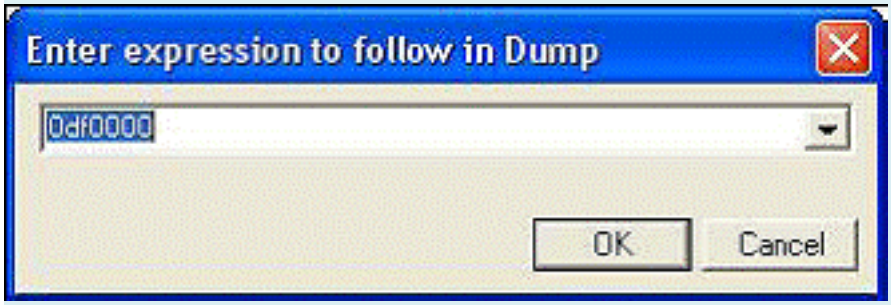
0050D234 POPFD
0050D235 POPAD
0050D236 PUSH 0BE13D7
0050D23B RETN

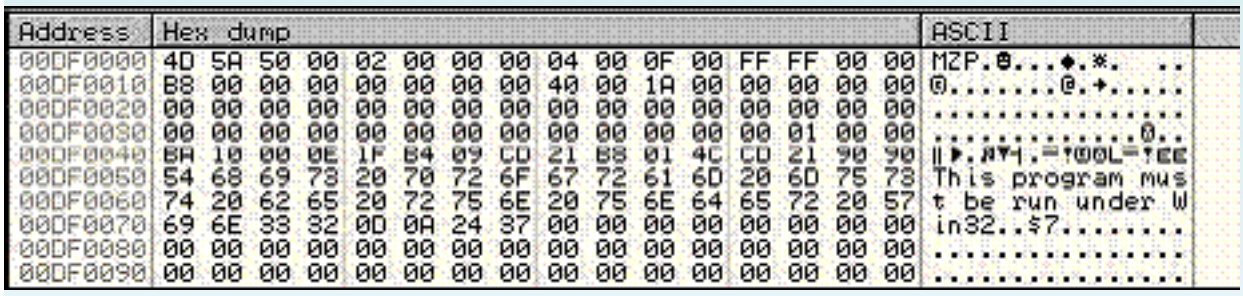
Now we have also executed the ***MapViewOfFile,*** the first within the ***area. ADATA*** section has been erased from ASProtect, then the cave 9 redirection will have to be made jumping the address **0x0050DCD6.**

When we're into the cave 9, since we've EAX in the base address of the file mapping image we've to restore the image into the RAW for the ***SIZE. ADATA*** section and restore the code of the first which is hardcoded jump to the address 0x004EB267.

The offset for the first JMP redirection into the image file mapping is easy to find, into the OllyDbg dump window-press CTRL + G and write the address which is in EAX (in my case 0x00D70000) then Press OK:

(Note: the remainder is determined to offset the cave patching, khaa also understandable that I bê original, the desire for medical information because of fatigue).

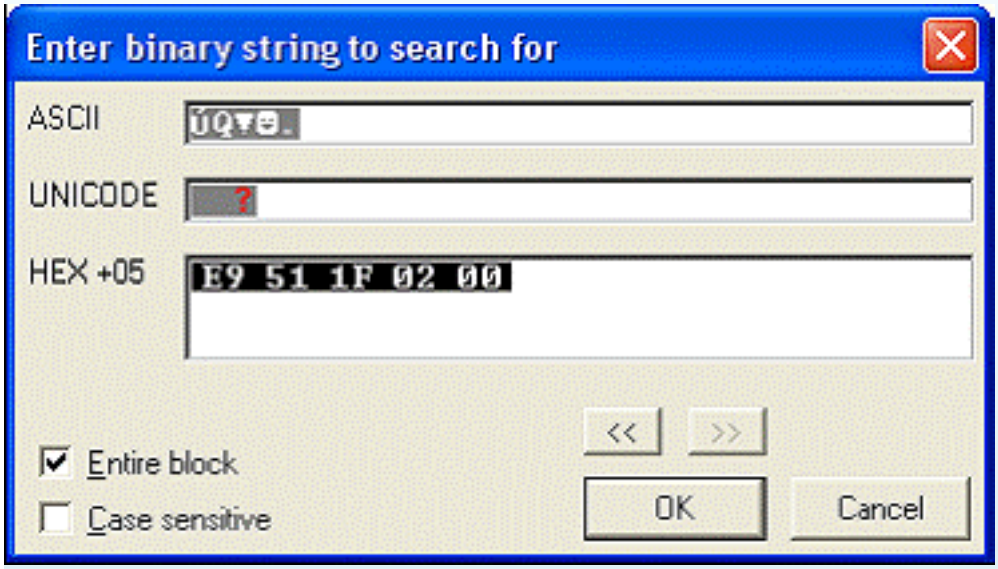




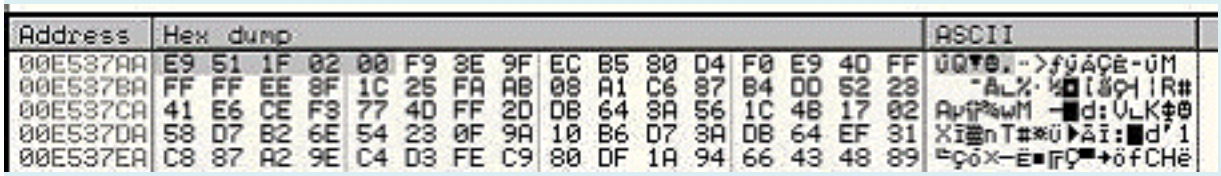
Address	Hex dump	ASCII
00DF0000	4D 5A 50 00 02 00 00 00 04 00 0F 00 FF FF 00 00	MZP.☻...♦.☼. ..
00DF0010	B8 00 00 00 00 00 00 00 40 00 1A 00 00 00 00 00	©.......@.→.....
00DF0020	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	....
00DF0030	00 00 00 00 00 00 00 00 00 00 00 00 00 01 00 00	............☺...
00DF0040	BA 10 00 0E 1F B4 09 CD 21 B8 01 4C CD 21 90 90	‖►.▲▼┤.═!©☺L═!ÉÉ
00DF0050	54 68 69 73 20 70 72 6F 67 72 61 6D 20 6D 75 73	This program mus
00DF0060	74 20 62 65 20 72 75 6E 20 75 6E 64 65 72 20 57	t be run under W
00DF0070	69 6E 33 32 0D 0A 24 37 00 00 00 00 00 00 00 00	in32..$7........
00DF0080	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	....
00DF0090	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00	....

then press Ctrl + B and write the pattern that we have to search to looking for the JMP offset (also remember to check the ***entire block):***

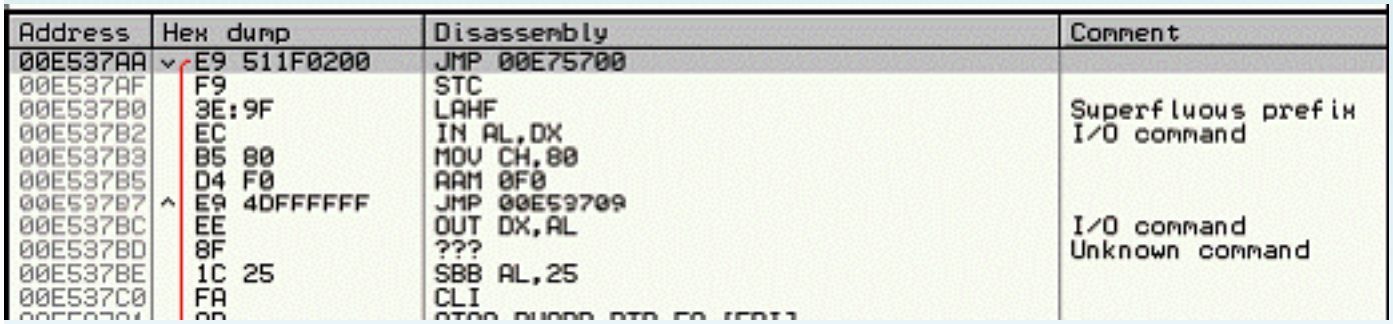
JMP 0050D100 -> E9 51 1F 02 00



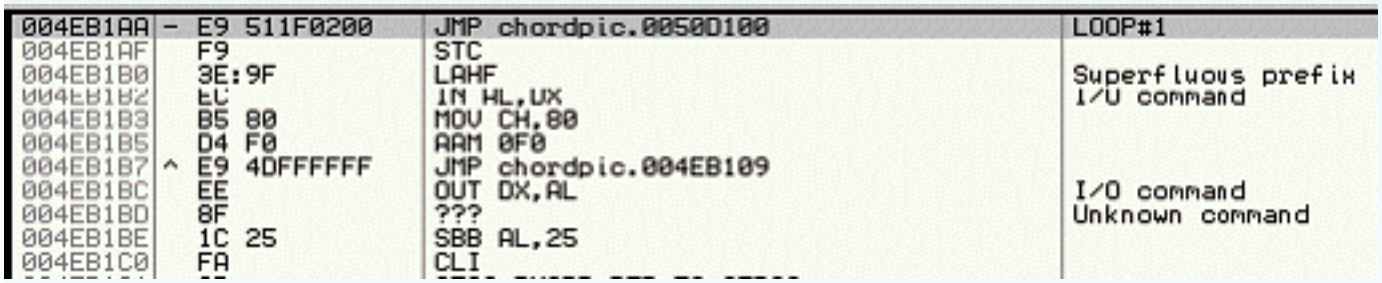
Press OK:



In order to see the code right click -> Disassemble:



Well done, this is the code that we're searching for.



To modify the code in order to restore the first jump in the image file is therefore found to offset **0x00637AA.**
Now we can write the code for the first cave 9.

0050DCD6 MOV BYTE PTR DS: [EAX +399], 0; Cave 9 (restores size of given raw)
0050DCDD MOV DWORD PTR DS: [EAX +637 AA], 1BE9; It restores first jump

Now we've restored the image file mapped in memory, remains to put the next redirection

just
after checking the memory.
Below the full code for cave 9:

```
0050DCD6 MOV BYTE PTR DS: [EAX +399], 0; Cave 9 (restores size of given raw)
0050DCDD MOV DWORD PTR DS: [EAX +637 AA], 1BE9; It restores first jump
0050DCE7 PUSHAD
0050DCE8 PUSHFD
0050DCE9 MOV EAX, DWORD PTR DS: [50DFFC]; It loads the base address
0050DCEE MOV BYTE PTR DS: [EAX +18669], 4; PUSH 1 -> 4 PUSH
0050DCF5 MOV DWORD PTR DS: [EAX +1867 A], E850D88B; It restores MOV EBX, EAX
0050DCFF MOV WORD PTR DS: [EAX +1867 E], 14A
0050DD08 MOV DWORD PTR DS: [EAX +1 A356], 50DD2D68; Redirezione to cave 10
0050DD12 MOV WORD PTR DS: [EAX +1 A35A], 0C300
0050DD1B ADD EAX, 1867A; it calculates the return address
0050DD20 MOV DWORD PTR DS: [50DD28], EAX
0050DD25 POPFD
0050DD26 POPAD
0050DD27 PUSH 0
0050DD2C RETN
```

From the previous analysis we know that we have to skip the check before 45 apply our patches
then we can write our last cave code.

```
0050DD2D PUSHAD; Cave 10
0050DD2E PUSHFD
0050DD2F MOV EAX, DWORD PTR DS: [50DFFC]
0050DD34 MOV DWORD PTR DS: [EAX +1 A356], 0C24448B
0050DD3E MOV WORD PTR DS: [EAX +1 A35A], 38A3
0050DD47 MOV WORD PTR DS: [48CB72], 9090; Patch 1
0050DD50 MOV BYTE PTR DS: [48CB7B], 0; Patch 2
0050DD57 ADD EAX, 1A356
0050DD5C MOV DWORD PTR DS: [50DD64], EAX
0050DD61 POPFD
0050DD62 POPAD
0050DD63 PUSH 0
0050DD68 RETN
```

That's all.

ThunderPwr of ARTeam

Thanks to all ARTeam and special thanks goes to John and H3rCul3S Madman Who for

The tutorial on ASProtect inline technique. Also great thanks to Ricardo Narvaja Cracks and all Latinos group. Thanks to that you have read all the tutorial.

Solving ASProtect 2.0 (build 2.63 alpha)

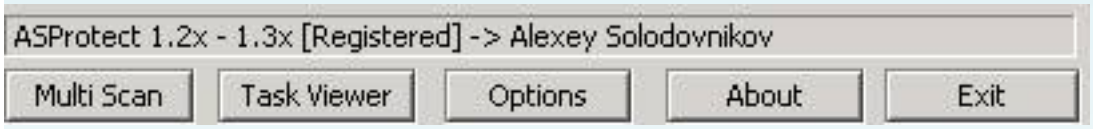
Since the ver Asprotect 1:23 cracker RC4 be the home we reconcile the ear 1 (1 may matter of personality makeup Aspr 1:23 RC4 of the experts as Moonbabe, Zombie ...), the author has asprotect more significant changes in methods of Aspr protect. Some changes, such as:
Protection mechanism OEP better
Stolen bytes instructions à Stolen
Change the encryption IAT.

Within the framework of this message, I would slide technical basis to reconcile the encryption of IAT Asprotect 2.0 alpha (while the remaining part is very easy, you or research-based knowledge from existing asprotect 1.23).

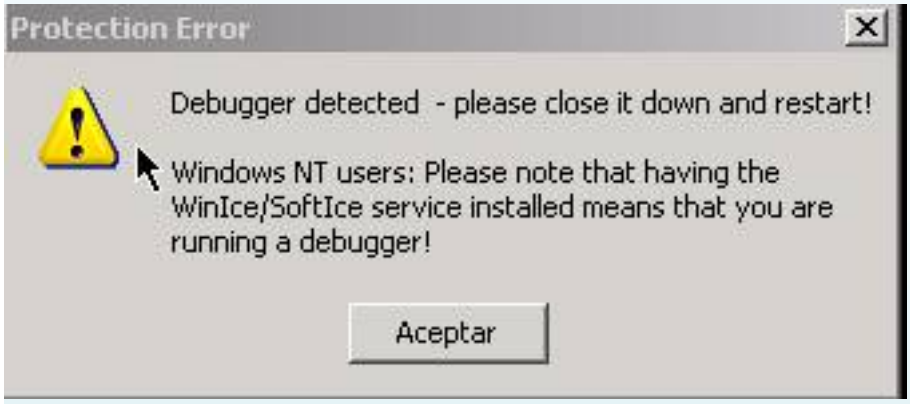
1. Preparing:
First, I search the audience, the program 1 crackme of small prdx (crackME 3). Use Aspr 2.0 with the following parameters:

and the mode is:

After protect finished, use PeID to check:



2. Beginning on
Crackme3.exe to load in Olly, F9 to run, I see it appear:



Aspr can detect a debugger running, press Ctrl-F2 to load up the program, the plugin IsDebuggerPresent to leave to be detected.
Still the old methods, implementers with Shift-F9, the program will stop, the exception error, the next Shift-F9 to continue, the exception to the end (exception is the position as the stop, then when the next shift-F9, the program will be run, o need to shift the half-F9).

We in this position:

```
00936807   C700 7F0677B9   MOV DWORD PTR DS:[EAX],B977067F
0093680D   FB              STI
0093680E   2D F8868BEF     SUB EAX,EF8B86F8
00936813   B7 FA           MOV BH,0FA
00936815   EB 01           JMP SHORT 00936818
00936817   6967 64 8F0600  IMUL ESP,DWORD PTR DS:[EDI+64],68F
```

Now, set memory access breakpoint on the section of the code trinh.Nhan F9 to run it will stop in:

```
004085A0   55              PUSH EBP
004085A1   8BEC            MOV EBP,ESP
004085A3   83C4 F0         ADD ESP,-10
004085A6   B8 60854000     MOV EAX,crackME.00408560
004085AB   E8 B0C4FFFF     CALL crackME.00404A60
```

Hooray, this is the original OEP program.
To this step, you use 1 of the dump file as LordPe, Procdum to dump files crackme3.exe dumped. exe.

Programs after unpack current still has not run the IAT are already encrypted, so I need to earn how to resolve it. Principle is original, save asprotect will keep the value of the original IAT, then in the process, it will encrypt this IAT values correspond. And in the process called ham, will through 1 ham process of freedom Asprotect restore the original values.

```
004085A0   55              PUSH EBP
004085A1   8BEC            MOV EBP,ESP
004085A3   83C4 F0         ADD ESP,-10
004085A6   B8 60854000     MOV EAX,crackME.00408560
004085AB   E8 B0C4FFFF     CALL crackME.00404A60
```

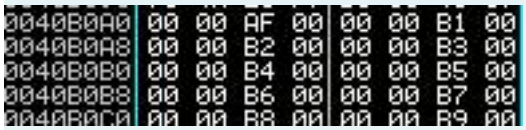
```
004085BE   E8 01C6FFFF   CALL crackME.00404BC4   JMP to user32.MessageBoxA
004085C3   E8 40FFFFFF   CALL crackME.00408508
```

Scroll down below 1 billion, we see the API MessageBoxA, to address 404BC4 to view the content IAT has already flowers.

```
00404B14 - FF25 C0B14000   JMP DWORD PTR DS:[40B1C0]
00404B1A   8BC0            MOV EAX,EAX
00404B1C - FF25 BCB14000   JMP DWORD PTR DS:[40B1BC]
00404B22   8BC0            MOV EAX,EAX
00404B24 - FF25 B8B14000   JMP DWORD PTR DS:[40B1B8]
00404B2A   8BC0            MOV EAX,EAX
00404B2C - FF25 B4B14000   JMP DWORD PTR DS:[40B1B4]
00404B32   8BC0            MOV EAX,EAX
00404B34 - FF25 B0B14000   JMP DWORD PTR DS:[40B1B0]
00404B3A   8BC0            MOV EAX,EAX
00404B3C - FF25 ACB14000   JMP DWORD PTR DS:[40B1AC]
00404B42   8BC0            MOV EAX,EAX
00404B44 - FF25 A8B14000   JMP DWORD PTR DS:[40B1A8]
00404B4A   8BC0            MOV EAX,EAX
00404B4C - FF25 A4B14000   JMP DWORD PTR DS:[40B1A4]
00404B52   8BC0            MOV EAX,EAX
00404B54 - FF25 A0B14000   JMP DWORD PTR DS:[40B1A0]
00404B5A   8BC0            MOV EAX,EAX
00404B5C - FF25 9CB14000   JMP DWORD PTR DS:[40B19C]
00404B62   8BC0            MOV EAX,EAX
00404B64 - FF25 98B14000   JMP DWORD PTR DS:[40B198]
00404B6A   8BC0            MOV EAX,EAX
00404B6C - FF25 94B14000   JMP DWORD PTR DS:[40B194]
00404B72   8BC0            MOV EAX,EAX
00404B74 - FF25 90B14000   JMP DWORD PTR DS:[40B190]
00404B7A   8BC0            MOV EAX,EAX
00404B7C - FF25 8CB14000   JMP DWORD PTR DS:[40B18C]
00404B82   8BC0            MOV EAX,EAX
00404B84 - FF25 88B14000   JMP DWORD PTR DS:[40B188]
00404B8A   8BC0            MOV EAX,EAX
00404B8C - FF25 84B14000   JMP DWORD PTR DS:[40B184]
00404B92   8BC0            MOV EAX,EAX
00404B94 - FF25 80B14000   JMP DWORD PTR DS:[40B180]
00404B9A   8BC0            MOV EAX,EAX
00404B9C - FF25 7CB14000   JMP DWORD PTR DS:[40B17C]
00404BA2   8BC0            MOV EAX,EAX
00404BA4 - FF25 D4B14000   JMP DWORD PTR DS:[40B1D4]   user32.CharNextA
00404BAA   8BC0            MOV EAX,EAX
00404BAC - FF25 D8B14000   JMP DWORD PTR DS:[40B1D8]   user32.CharToOemA
00404BB2   8BC0            MOV EAX,EAX
00404BB4 - FF25 D0B14000   JMP DWORD PTR DS:[40B1D0]   user32.GetSystemMetrics
00404BBA   8BC0            MOV EAX,EAX
00404BBC - FF25 CCB14000   JMP DWORD PTR DS:[40B1CC]   user32.LoadStringA
00404BC2   8BC0            MOV EAX,EAX
00404BC4 - FF25 C8B14000   JMP DWORD PTR DS:[40B1C8]   user32.MessageBoxA
```

hm .. we need to find the location of ham IAT encryption. To do that, we need to determine where values, as well as the length of the IAT. Use 1 xiu craftsmanship (please read the post about 1:23 RC4 asprotect old) we find

<u>Beginning:</u> 040B0A0

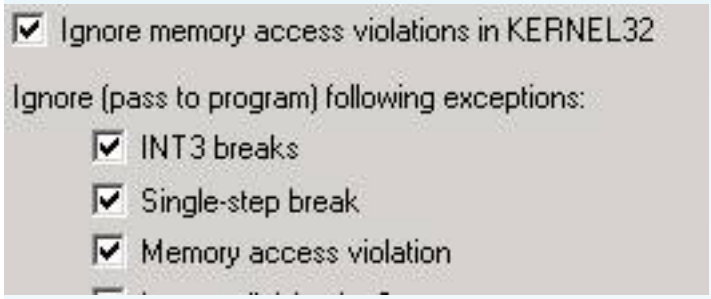


End: 040B1D8

Length: 138

3. IAT solving encrypted:

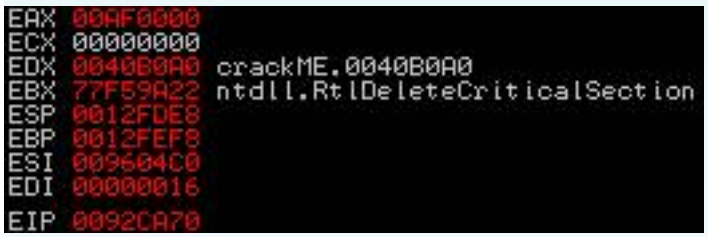
Ctrl-F2 load up the program, establish parameters of Ollt as follows (check out ignore)



Now Set hardware breakpoint in the region through the first IAT = 40B0A0, and set breakpoint on memmory access in 40B0A0. The reason for .. This is because in fact that, if only 1 set of 2 test program will o stop any point that we need both. Then press F9 to run.

I stop here, at the current location, we have not seen EAX value of element in the IAT has been that and are prepared to be assigned to the region through the IAT.

Look at the structure segment order, we find completely disagree with how the flowers have the torng asprotect 1:23 RC4 ---> disappear. But not after, while desperate distress, I look at the window registry info:

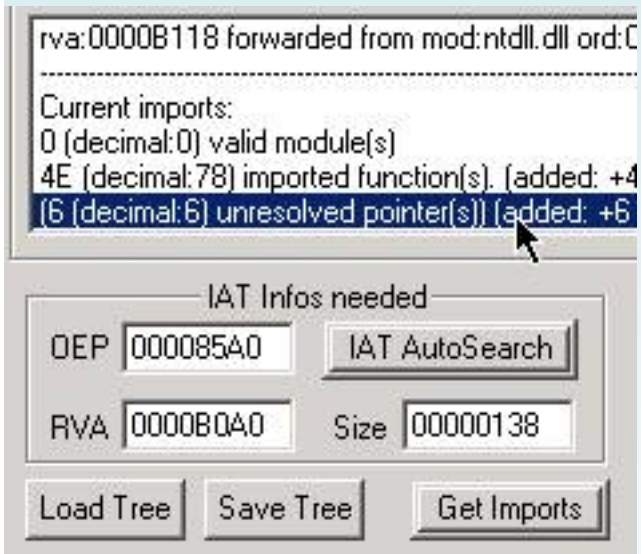


EBX not value your API ---> is no. As a result, at the current location, EAX less value after the encryption of EBX. So we modify the 1,

to the value recorded on IAT value is always true.

Now we must return to the heart after encryption is completed, the trace segment 1 is to:

Set breakpoint here and press F9 to running the program. After the stop at breakpoint already set, we dumg Imprec to restore IAT.
Imprec load up, fill in value in the heart



Human GetImport to IAT. Then Fix the dump, select File dumped.exe to complete the process.

Armadillo collect sand-stone

AutoPlay Media Studio 6.0 <|> ARM 4.xx - Standard Protection + IAT elimination

1. **Intro**

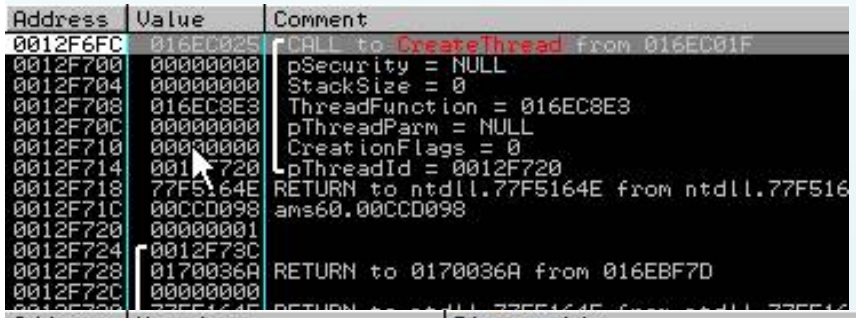
_Cai This soft, I buy new is down, the USB each time I was online I clean it occupies 512MB disk for a movie so afraid J soft from heavy 20MB up! See also soft happy meat it should be fun to watch her children play! Now, a new professional updatesoft bít bọn contains soft down and release the AllInOne make their product. Mk, I hate to some form of this warez group: D. Only to discuss this in more than hot: P. You only unpack this soft!

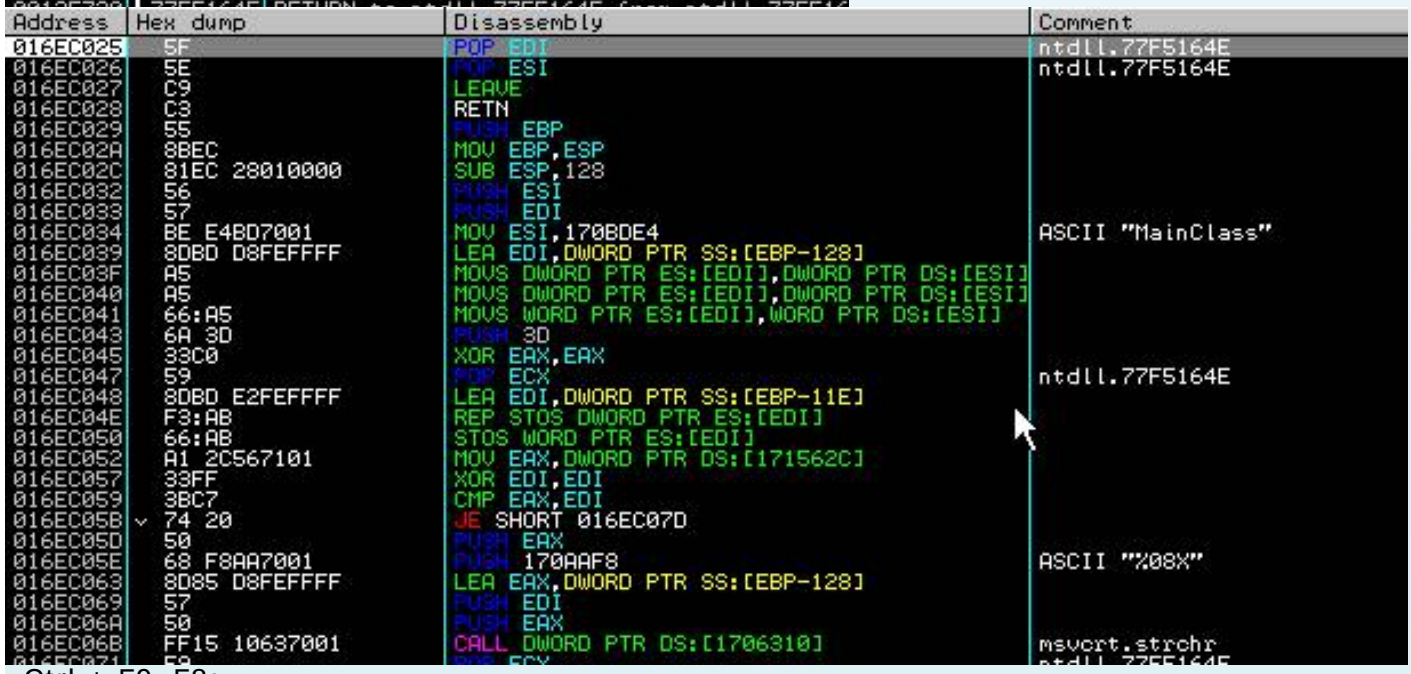
2. **Tools**
   1. OllyDBG - The best config debugger for ArmMUP by hacnho.
   2. LordPE 1.4 Deluxe
   3. Import REConstructor 1.6 Final
3. **Unpacking**

_Load Target:

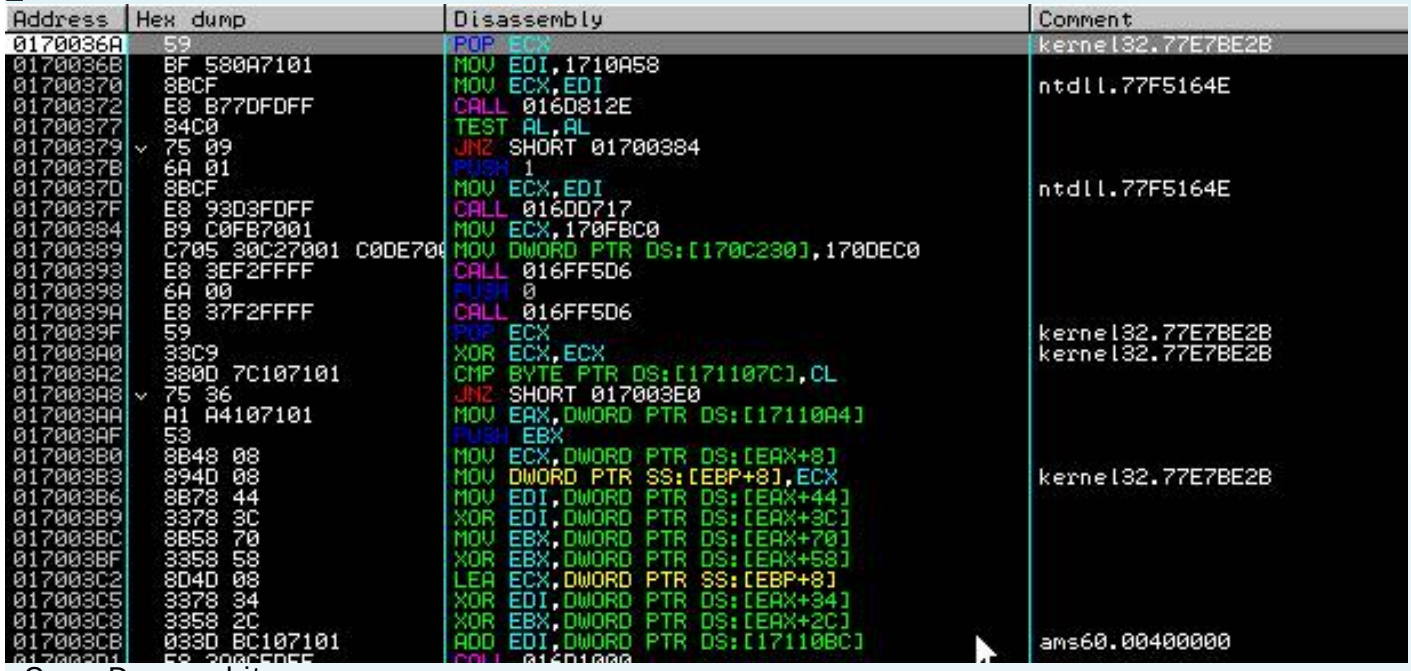
```
Address   Hex dump          Disassembly                              Comment
00CA26D3  r$  55            PUSH EBP
00CA26D4  .   8BEC          MOV EBP,ESP
00CA26D6  .   6A FF         PUSH -1
00CA26D8  .   68 88C1CC00   PUSH ams60.00CCC188
00CA26DD  .   68 1024CA00   PUSH ams60.00CA2410                      SE handler installation
00CA26E2  .   64:A1 00000000 MOV EAX,DWORD PTR FS:[0]
00CA26E8  .   50            PUSH EAX
00CA26E9  .   64:8925 00000000 MOV DWORD PTR FS:[0],ESP
00CA26F0  .   83EC 58       SUB ESP,58
00CA26F3  .   53            PUSH EBX
00CA26F4  .   56            PUSH ESI                                 ams60.00570718
00CA26F5  .   57            PUSH EDI                                 ntdll.77F5164E
00CA26F6  .   8965 E8       MOV DWORD PTR SS:[EBP-18],ESP
00CA26F9  .   FF15 8851CC00 CALL DWORD PTR DS:[<&KERNEL32.GetVersion>] kernel32.GetVersion
00CA26FF  .   33D2          XOR EDX,EDX
00CA2701  .   8AD4          MOV DL,AH
00CA2703  .   8915 14D8CC00 MOV DWORD PTR DS:[CCD814],EDX
00CA2709  .   8BC8          MOV ECX,EAX
00CA270B  .   81E1 FF000000 AND ECX,0FF
00CA2711  .   890D 10D8CC00 MOV DWORD PTR DS:[CCD810],ECX
00CA2717  .   C1E1 08       SHL ECX,8
00CA271A  .   03CA          ADD ECX,EDX
00CA271C  .   890D 0CD8CC00 MOV DWORD PTR DS:[CCD80C],ECX
00CA2722  .   C1E8 10       SHR EAX,10
00CA2725  .   A3 08D8CC00   MOV DWORD PTR DS:[CCD808],EAX
00CA272A  .   33F6          XOR ESI,ESI                              ams60.00570718
00CA272C  .   56            PUSH ESI                                 ams60.00570718
00CA272D  .   E8 78160000   CALL ams60.00CA3DAA
00CA2732  .   59            POP ECX                                  kernel32.77E814C7
00CA2733  .   85C0          TEST EAX,EAX
00CA2735  .   7E 02         JNZ SHORT ams60.00CA2739
```

_Bp CreateThread, F9, Ctrl + F9, F8:





_Ctrl + F9, F8:



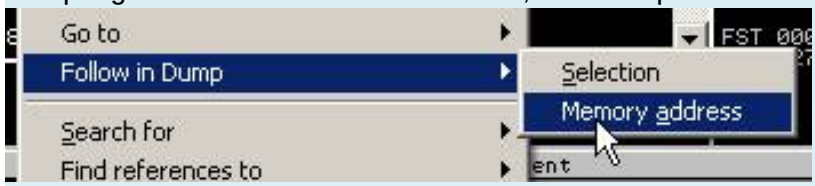
_Cuon Down a bit:

```
Address   Hex dump          Disassembly                          Comment
01700409    85D2            TEST EDX,EDX
0170040B  v 75 18           JNZ SHORT 01700425
0170040D    8B50 50         MOV EDX,DWORD PTR DS:[EAX+50]
01700410    FF76 18         PUSH DWORD PTR DS:[ESI+18]
01700413    3350 2C         XOR EDX,DWORD PTR DS:[EAX+2C]
01700416    FF76 14         PUSH DWORD PTR DS:[ESI+14]
01700419    3350 04         XOR EDX,DWORD PTR DS:[EAX+4]
0170041C    FF76 10         PUSH DWORD PTR DS:[ESI+10]
0170041F    2BCA            SUB ECX,EDX
01700421    FFD1            CALL ECX                             kernel32.77E7BE2B
01700423  v EB 1D           JMP SHORT 01700442
01700425    83FA 01         CMP EDX,1
01700428  v 75 1B           JNZ SHORT 01700445
0170042A    FF76 04         PUSH DWORD PTR DS:[ESI+4]
0170042D    8B50 50         MOV EDX,DWORD PTR DS:[EAX+50]
01700430    3350 2C         XOR EDX,DWORD PTR DS:[EAX+2C]
01700433    FF76 08         PUSH DWORD PTR DS:[ESI+8]
01700436    3350 04         XOR EDX,DWORD PTR DS:[EAX+4]
01700439    6A 00           PUSH 0
0170043B    FF76 0C         PUSH DWORD PTR DS:[ESI+C]            ams60.00400000
0170043E    2BCA            SUB ECX,EDX
01700440    FFD1            CALL ECX                             kernel32.77E7BE2B
01700442    8945 FC         MOV DWORD PTR SS:[EBP-4],EAX
01700445    8B45 FC         MOV EAX,DWORD PTR SS:[EBP-4]
01700448    5F              POP EDI                              ntdll.77F5164E
01700449    5E              POP ESI                              ams60.00CCD098
0170044A    C9              LEAVE
0170044B    C3              RETN
0170044C    837C24 08 01    CMP DWORD PTR SS:[ESP+8],1
01700451  v 75 14           JNZ SHORT 01700467
```

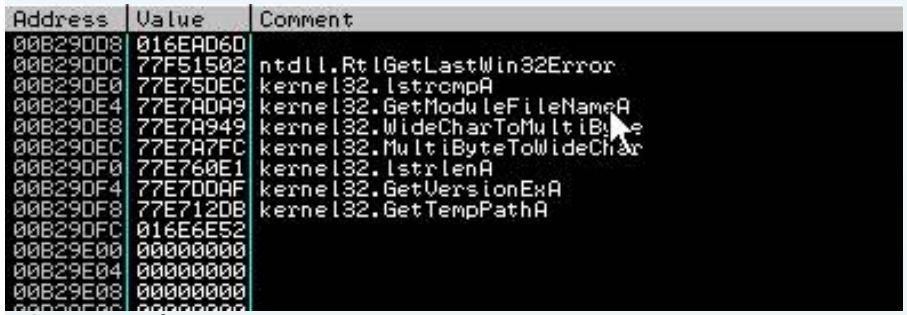
_Dat Call ECX breakpoint in the second, F9, F7 OEP: J

```
Address   Hex dump          Disassembly                          Comment
0076D84D    55              PUSH EBP
0076D84E    8BEC            MOV EBP,ESP
0076D850    6A FF           PUSH -1
0076D852    68 28C29C00     PUSH ams60.009CC228
0076D857    68 685F7700     PUSH ams60.00775F68
0076D85C    64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
0076D862    50              PUSH EAX                             ams60.00CC560C
0076D863    64:8925 00000000 MOV DWORD PTR FS:[0],ESP
0076D86A    83EC 58         SUB ESP,58
0076D86D    53              PUSH EBX
0076D86E    56              PUSH ESI                             ams60.00CCD098
0076D86F    57              PUSH EDI                             ams60.00401000
0076D870    8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
0076D873    FF15 D89DB200   CALL DWORD PTR DS:[B29DD8]
0076D879    33D2            XOR EDX,EDX
0076D87B    8AD4            MOV DL,AH
0076D87D    8915 C0EFB000   MOV DWORD PTR DS:[B0EFC0],EDX
0076D883    8BC8            MOV ECX,EAX                          ams60.00CC560C
0076D885    81E1 FF000000   AND ECX,0FF
0076D88B    890D BCEFB000   MOV DWORD PTR DS:[B0EFBC],ECX        ams60.0076D84D
0076D891    C1E1 08         SHL ECX,8
0076D894    03CA            ADD ECX,EDX
0076D896    890D B8EFB000   MOV DWORD PTR DS:[B0EFB8],ECX        ams60.0076D84D
0076D89C    C1E8 10         SHR EAX,10
0076D89F    A3 B4EFB000     MOV DWORD PTR DS:[B0EFB4],EAX        ams60.00CC560C
0076D8A4    6A 01           PUSH 1
0076D8A6    E8 486D0000     CALL ams60.007745F3
0076D8AB    59              POP ECX                              01700442
0076D8AC    85C0            TEST EAX,EAX                         ams60.00CC560C
0076D8AE  v 75 08           JNZ SHORT ams60.0076D8B8
```

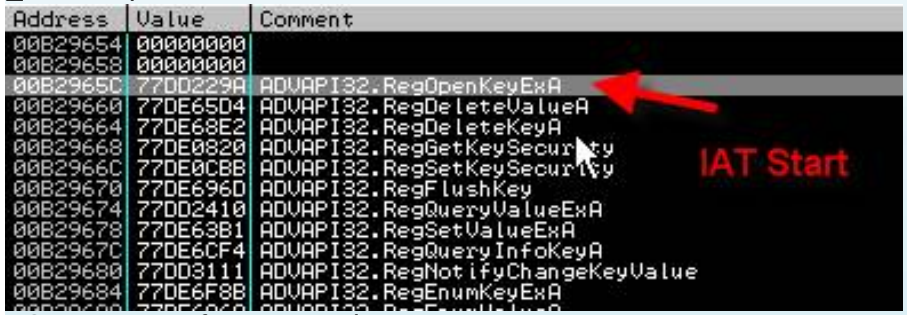
_Dom D89DB200 line 0076D873 FF15 CALL DWORD PTR DS: [B29DD8] we now bít IAT elimination J statistics. Wait tí resolve it later, we need to patch magic jump to avoid the damage of the IAT is, to cause the program to crash! At 0076D873, we dump Follow Print> Memory Address:



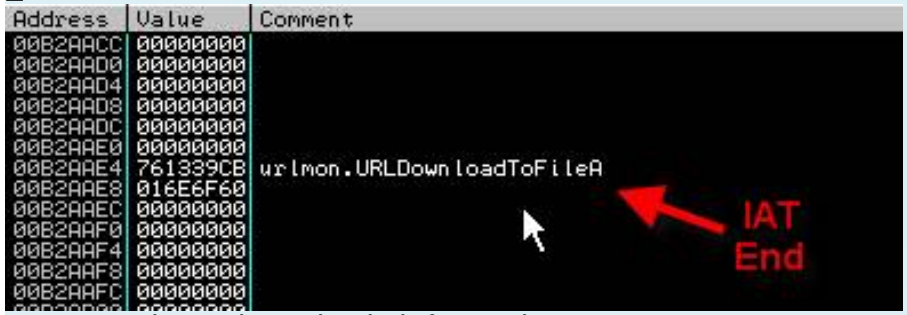
_Trong Window dump Window:



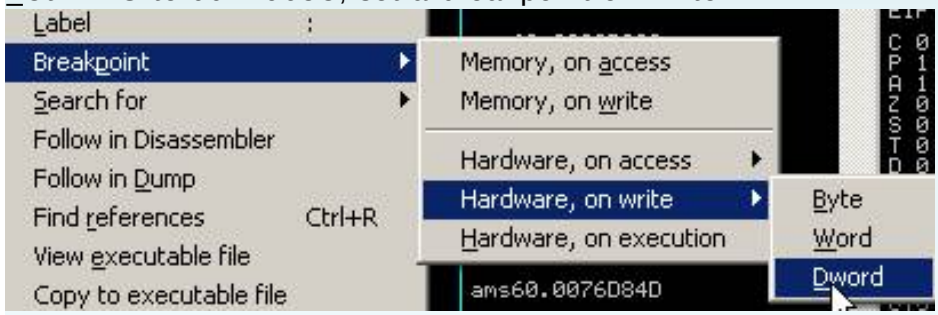
_Cuon Up for IAT start:



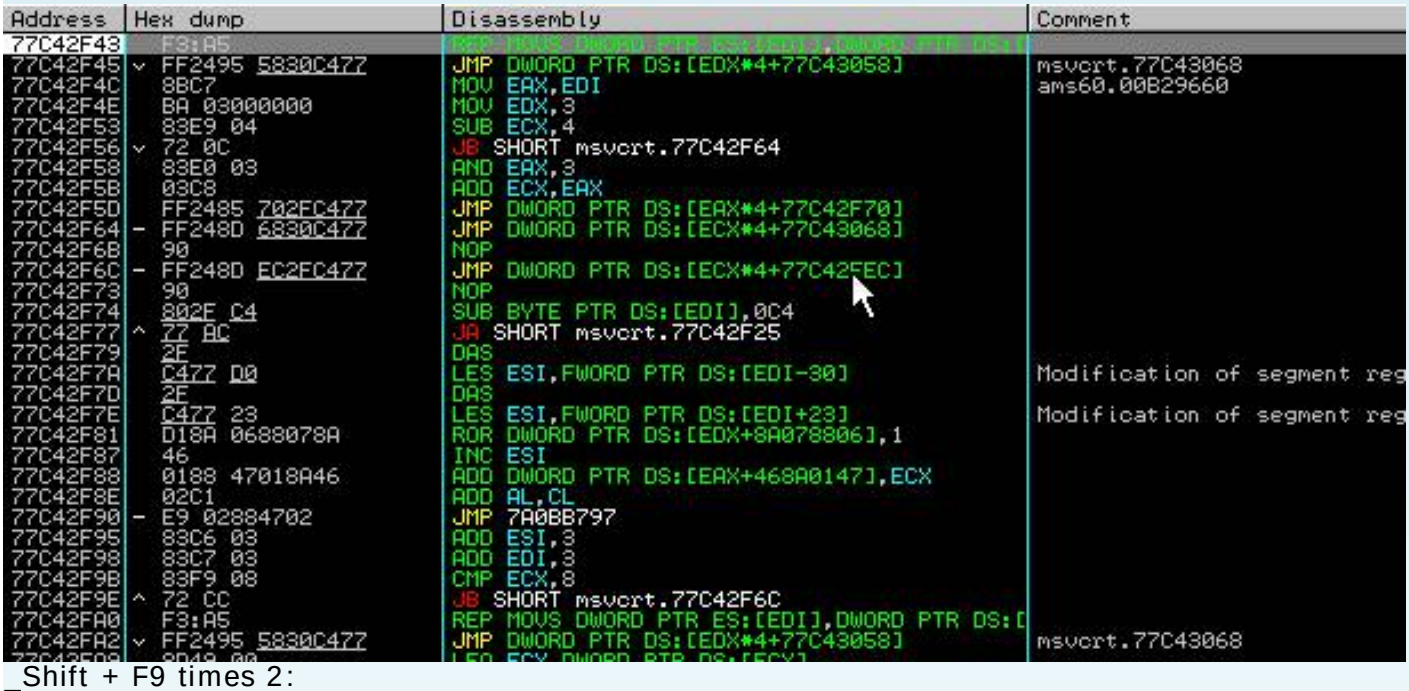
_Cuon Down for IAT End:



_Tom Again we have basic information:
IAT Start: 00B2965C 77DD229A ADVAPI32.RegOpenKeyExA
IAT End: 0B2AAE4 761339CB urlmon.URLDownloadToFileA
IAT Len: 1488
_Ctrl + G to 00B2965C, set a breakpoint on write:

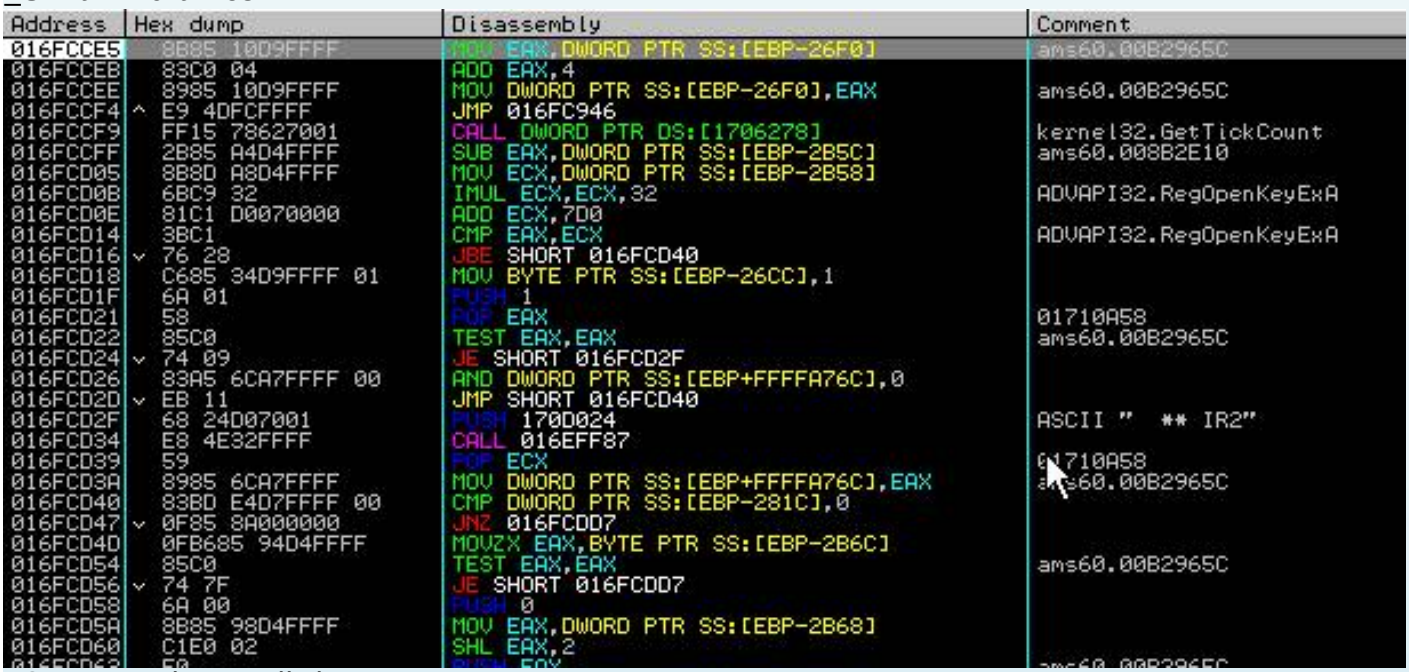


_Ctrl Restart + F2, Shift + F9:



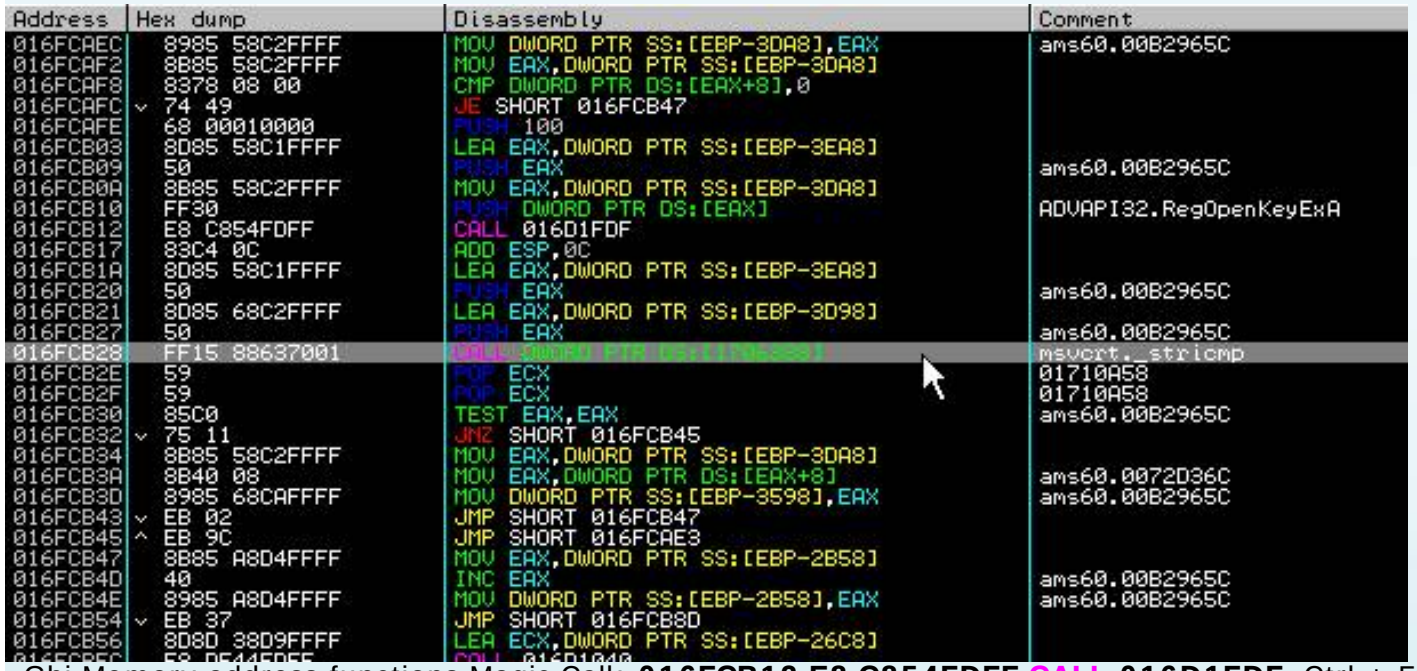
Address	Hex dump	Disassembly	Comment
77C42F43	F3:A5	REP MOVS DWORD PTR ES:[EDI],DWORD PTR DS:[	
77C42F45	FF2495 5830C477	JMP DWORD PTR DS:[EDX*4+77C43058]	msvcrt.77C43068
77C42F4C	8BC7	MOV EAX,EDI	ams60.00B29660
77C42F4E	BA 03000000	MOV EDX,3	
77C42F53	83E9 04	SUB ECX,4	
77C42F56	72 0C	JB SHORT msvcrt.77C42F64	
77C42F58	83E0 03	AND EAX,3	
77C42F5B	03C8	ADD ECX,EAX	
77C42F5D	FF2485 702FC477	JMP DWORD PTR DS:[EAX*4+77C42F70]	
77C42F64	FF248D 6830C477	JMP DWORD PTR DS:[ECX*4+77C43068]	
77C42F6B	90	NOP	
77C42F6C	FF248D EC2FC477	JMP DWORD PTR DS:[ECX*4+77C42FEC]	
77C42F73	90	NOP	
77C42F74	802E C4	SUB BYTE PTR DS:[EDI],0C4	
77C42F77	77 AC	JA SHORT msvcrt.77C42F25	
77C42F79	2E	DAS	
77C42F7A	C477 D0	LES ESI,FWORD PTR DS:[EDI-30]	Modification of segment reg
77C42F7D	2E	DAS	
77C42F7E	C477 23	LES ESI,FWORD PTR DS:[EDI+23]	Modification of segment reg
77C42F81	D18A 0688078A	ROR DWORD PTR DS:[EDX+8A078806],1	
77C42F87	46	INC ESI	
77C42F88	0188 47018A46	ADD DWORD PTR DS:[EAX+468A0147],ECX	
77C42F8E	02C1	ADD AL,CL	
77C42F90	E9 02884702	JMP 7A0BB797	
77C42F95	83C6 03	ADD ESI,3	
77C42F98	83C7 03	ADD EDI,3	
77C42F9B	83F9 08	CMP ECX,8	
77C42F9E	72 CC	JB SHORT msvcrt.77C42F6C	
77C42FA0	F3:A5	REP MOVS DWORD PTR ES:[EDI],DWORD PTR DS:[	
77C42FA2	FF2495 5830C477	JMP DWORD PTR DS:[EDX*4+77C43058]	msvcrt.77C43068

_Shift + F9 times 2:



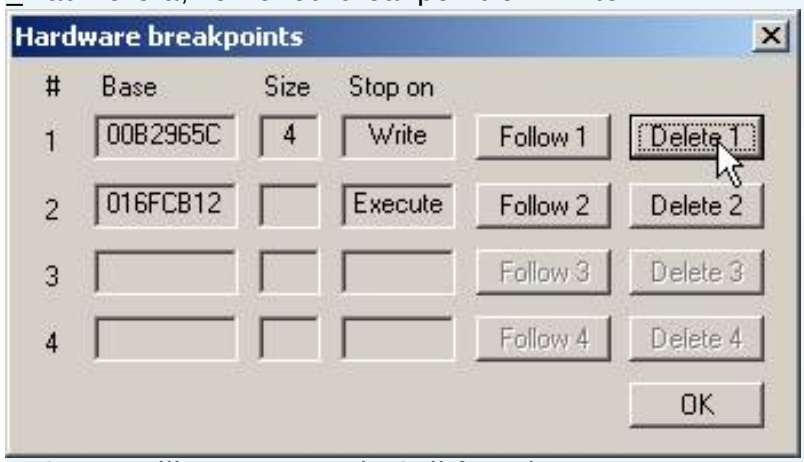
Address	Hex dump	Disassembly	Comment
016FCCE5	8B85 10D9FFFF	MOV EAX,DWORD PTR SS:[EBP-26F0]	ams60.00B2965C
016FCCEB	83C0 04	ADD EAX,4	
016FCCEE	8985 10D9FFFF	MOV DWORD PTR SS:[EBP-26F0],EAX	ams60.00B2965C
016FCCF4	E9 4DFCFFFF	JMP 016FC946	
016FCCF9	FF15 78627001	CALL DWORD PTR DS:[1706278]	kernel32.GetTickCount
016FCCFF	2B85 A4D4FFFF	SUB EAX,DWORD PTR SS:[EBP-2B5C]	ams60.008B2E10
016FCD05	8B8D A8D4FFFF	MOV ECX,DWORD PTR SS:[EBP-2B58]	
016FCD0B	6BC9 32	IMUL ECX,ECX,32	ADVAPI32.RegOpenKeyExA
016FCD0E	81C1 D0070000	ADD ECX,7D0	
016FCD14	3BC1	CMP EAX,ECX	ADVAPI32.RegOpenKeyExA
016FCD16	76 28	JBE SHORT 016FCD40	
016FCD18	C685 34D9FFFF 01	MOV BYTE PTR SS:[EBP-26CC],1	
016FCD1F	6A 01	PUSH 1	
016FCD21	58	POP EAX	01710A58
016FCD22	85C0	TEST EAX,EAX	ams60.00B2965C
016FCD24	74 09	JE SHORT 016FCD2F	
016FCD26	83A5 6CA7FFFF 00	AND DWORD PTR SS:[EBP+FFFFA76C],0	
016FCD2D	EB 11	JMP SHORT 016FCD40	
016FCD2F	68 24D07001	PUSH 170D024	ASCII " ** IR2"
016FCD34	E8 4E32FFFF	CALL 016EFF87	
016FCD39	59	POP ECX	01710A58
016FCD3A	8985 6CA7FFFF	MOV DWORD PTR SS:[EBP+FFFFA76C],EAX	ams60.00B2965C
016FCD40	83BD E4D7FFFF 00	CMP DWORD PTR SS:[EBP-281C],0	
016FCD47	0F85 8A000000	JNZ 016FCDD7	
016FCD4D	0FB685 94D4FFFF	MOVZX EAX,BYTE PTR SS:[EBP-2B6C]	
016FCD54	85C0	TEST EAX,EAX	ams60.00B2965C
016FCD56	74 7F	JE SHORT 016FCDD7	
016FCD58	6A 00	PUSH 0	
016FCD5A	8B85 98D4FFFF	MOV EAX,DWORD PTR SS:[EBP-2B68]	
016FCD60	C1E0 02	SHL EAX,2	

_Cuon Up above a little:

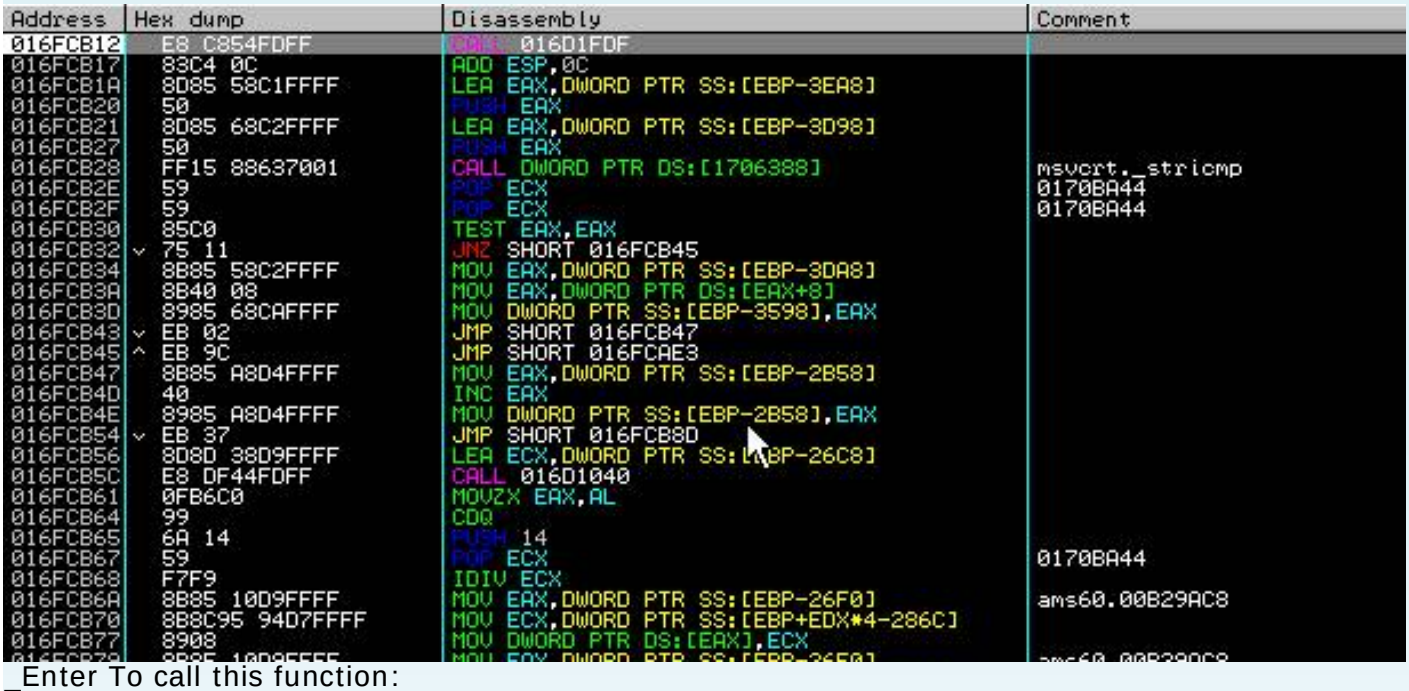


_Ghi Memory address functions Magic Call: **016FCB12 E8 C854FDFF CALL 016D1FDF,** Ctrl + F2 to restart, Shift + F9. Ctrl + G: 016FCB12, to here:

_Dat Here a, removed breakpoint on Write:

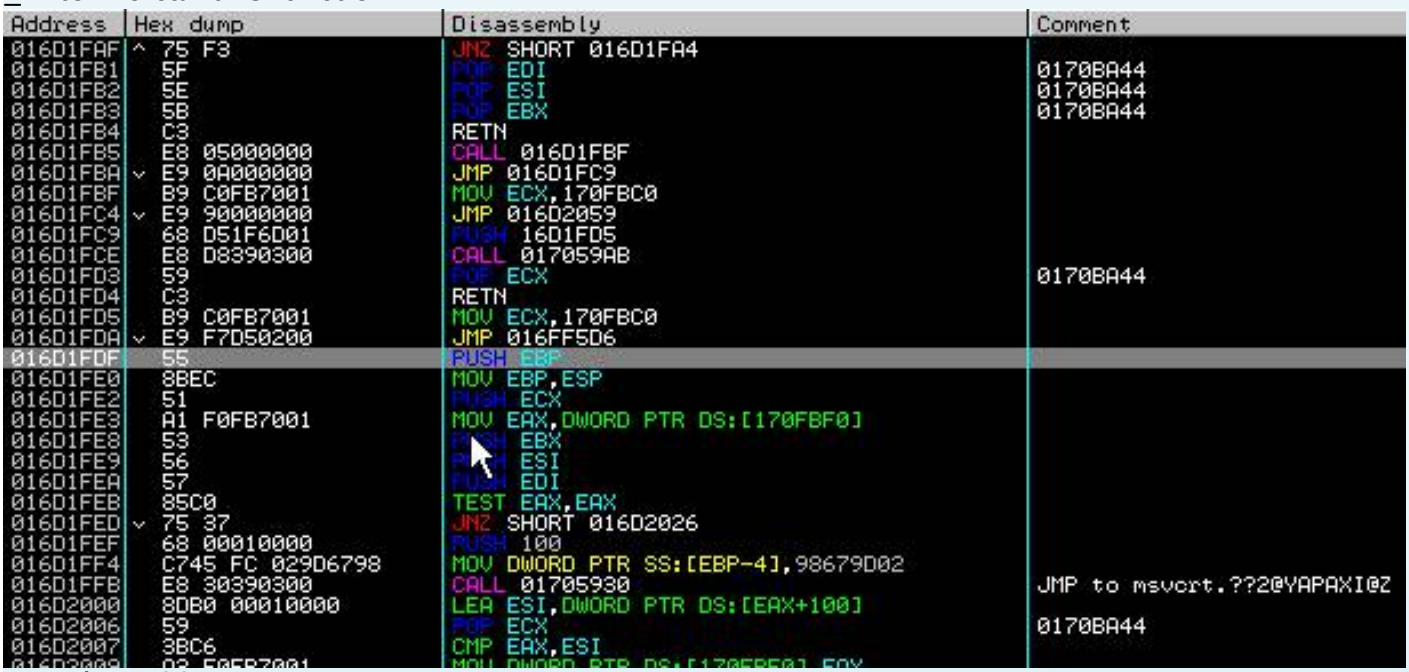


_F9, We will stop at Magic Call functions:



Address	Hex dump	Disassembly	Comment
016FCB12	E8 C854FDFF	CALL 016D1FDF	
016FCB17	83C4 0C	ADD ESP,0C	
016FCB1A	8D85 58C1FFFF	LEA EAX,DWORD PTR SS:[EBP-3EA8]	
016FCB20	50	PUSH EAX	
016FCB21	8D85 68C2FFFF	LEA EAX,DWORD PTR SS:[EBP-3D98]	
016FCB27	50	PUSH EAX	
016FCB28	FF15 88637001	CALL DWORD PTR DS:[1706388]	msvcrt._stricmp
016FCB2E	59	POP ECX	0170BA44
016FCB2F	59	POP ECX	0170BA44
016FCB30	85C0	TEST EAX,EAX	
016FCB32	75 11	JNZ SHORT 016FCB45	
016FCB34	8B85 58C2FFFF	MOV EAX,DWORD PTR SS:[EBP-3DA8]	
016FCB3A	8B40 08	MOV EAX,DWORD PTR DS:[EAX+8]	
016FCB3D	8985 68CAFFFF	MOV DWORD PTR SS:[EBP-3598],EAX	
016FCB43	EB 02	JMP SHORT 016FCB47	
016FCB45	EB 9C	JMP SHORT 016FCAE3	
016FCB47	8B85 A8D4FFFF	MOV EAX,DWORD PTR SS:[EBP-2B58]	
016FCB4D	40	INC EAX	
016FCB4E	8985 A8D4FFFF	MOV DWORD PTR SS:[EBP-2B58],EAX	
016FCB54	EB 37	JMP SHORT 016FCB8D	
016FCB56	8D8D 38D9FFFF	LEA ECX,DWORD PTR SS:[EBP-26C8]	
016FCB5C	E8 DF44FDFF	CALL 016D1040	
016FCB61	0FB6C0	MOVZX EAX,AL	
016FCB64	99	CDQ	
016FCB65	6A 14	PUSH 14	
016FCB67	59	POP ECX	0170BA44
016FCB68	F7F9	IDIV ECX	
016FCB6A	8B85 10D9FFFF	MOV EAX,DWORD PTR SS:[EBP-26F0]	ams60.00B29AC8
016FCB70	8B8C95 94D7FFFF	MOV ECX,DWORD PTR SS:[EBP+EDX*4-286C]	
016FCB77	8908	MOV DWORD PTR DS:[EAX],ECX	

_Enter To call this function:

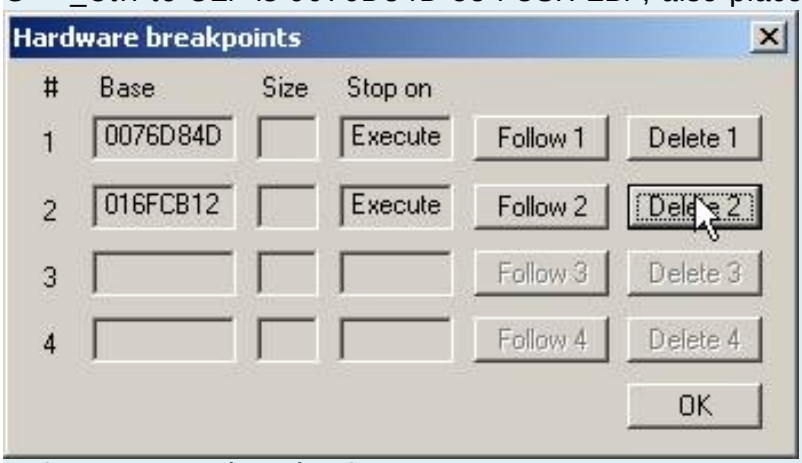


Address	Hex dump	Disassembly	Comment
016D1FAF	75 F3	JNZ SHORT 016D1FA4	
016D1FB1	5F	POP EDI	0170BA44
016D1FB2	5E	POP ESI	0170BA44
016D1FB3	5B	POP EBX	0170BA44
016D1FB4	C3	RETN	
016D1FB5	E8 05000000	CALL 016D1FBF	
016D1FBA	E9 0A000000	JMP 016D1FC9	
016D1FBF	B9 C0FB7001	MOV ECX,170FBC0	
016D1FC4	E9 90000000	JMP 016D2059	
016D1FC9	68 D51F6D01	PUSH 16D1FD5	
016D1FCE	E8 D8390300	CALL 017059AB	
016D1FD3	59	POP ECX	0170BA44
016D1FD4	C3	RETN	
016D1FD5	B9 C0FB7001	MOV ECX,170FBC0	
016D1FDA	E9 F7D50200	JMP 016FF5D6	
016D1FDF	55	PUSH EBP	
016D1FE0	8BEC	MOV EBP,ESP	
016D1FE2	51	PUSH ECX	
016D1FE3	A1 F0FB7001	MOV EAX,DWORD PTR DS:[170FBF0]	
016D1FE8	53	PUSH EBX	
016D1FE9	56	PUSH ESI	
016D1FEA	57	PUSH EDI	
016D1FEB	85C0	TEST EAX,EAX	
016D1FED	75 37	JNZ SHORT 016D2026	
016D1FEF	68 00010000	PUSH 100	
016D1FF4	C745 FC 029D6798	MOV DWORD PTR SS:[EBP-4],98679D02	
016D1FFB	E8 30390300	CALL 01705930	JMP to msvcrt.??2@YAPAXI@Z
016D2000	8DB0 00010000	LEA ESI,DWORD PTR DS:[EAX+100]	
016D2006	59	POP ECX	0170BA44
016D2007	3BC6	CMP EAX,ESI	

_Patch To C3:

```
Address   Hex dump          Disassembly                              Comment
016D1FAF  ^ 75 F3           JNZ SHORT 016D1FA4
016D1FB1    5F              POP EDI                                  0170BA44
016D1FB2    5E              POP ESI                                  0170BA44
016D1FB3    5B              POP EBX                                  0170BA44
016D1FB4    C3              RETN
016D1FB5    E8 05000000     CALL 016D1FBF
016D1FBA  v E9 0A000000     JMP 016D1FC9
016D1FBF    B9 C0FB7001     MOV ECX,170FBC0
016D1FC4  v E9 90000000     JMP 016D2059
016D1FC9    68 D51F6D01     PUSH 16D1FD5
016D1FCE    E8 D8390300     CALL 017059AB
016D1FD3    59              POP ECX                                  0170BA44
016D1FD4    C3              RETN
016D1FD5    B9 C0FB7001     MOV ECX,170FBC0
016D1FDA  v E9 F7D50200     JMP 016FF5D6
016D1FDF    C3              RETN
016D1FE0    8BEC            MOV EBP,ESP
016D1FE2    51              PUSH ECX
016D1FE3    A1 F0FB7001     MOV EAX,DWORD PTR DS:[170FBF0]
016D1FE8    53              PUSH EBX
016D1FE9    56              PUSH ESI
016D1FEA    57              PUSH EDI
016D1FEB    85C0            TEST EAX,EAX
016D1FED  v 75 37           JNZ SHORT 016D2026
016D1FEF    68 00010000     PUSH 100
016D1FF4    C745 FC 029D6798 MOV DWORD PTR SS:[EBP-4],98679D02
016D1FFB    E8 30390300     CALL 01705930                            JMP to msvcrt.??2@YAPAXI@Z
016D2000    8DB0 00010000   LEA ESI,DWORD PTR DS:[EAX+100]
016D2006    59              POP ECX                                  0170BA44
016D2007    3BC6            CMP EAX,ESI
```

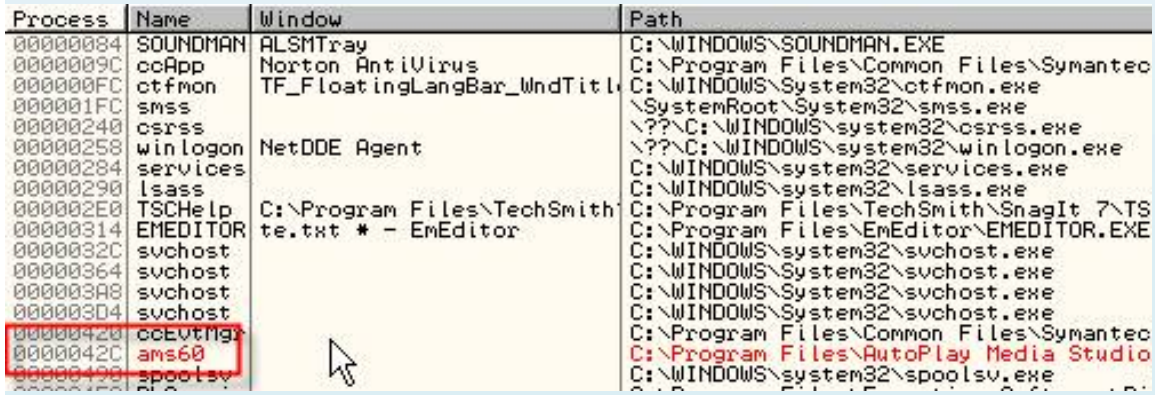
G + _Ctrl to OEP is 0076D84D 55 PUSH EBP, also placed a clear HE Magic's Call:



_F9 We stopped at the OEP:

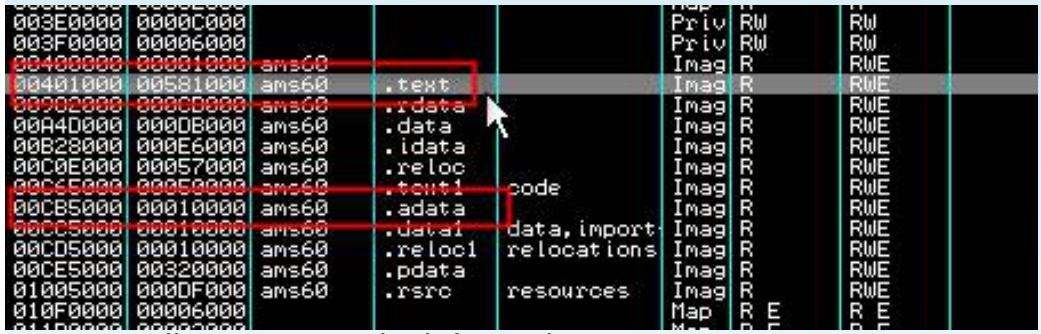
```
Address   Hex dump          Disassembly                              Comment
0076D84D    55              PUSH EBP
0076D84E    8BEC            MOV EBP,ESP
0076D850    6A FF           PUSH -1
0076D852    68 28C29C00     PUSH ams60.009CC228
0076D857    68 685F7700     PUSH ams60.00775F68
0076D85C    64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
0076D862    50              PUSH EAX                                 ams60.00CC560C
0076D863    64:8925 00000000 MOV DWORD PTR FS:[0],ESP
0076D86A    83EC 58         SUB ESP,58
0076D86D    53              PUSH EBX
0076D86E    56              PUSH ESI                                 ams60.00CCD098
0076D86F    57              PUSH EDI                                 ams60.00401000
0076D870    8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
0076D873    FF15 D89DB200   CALL DWORD PTR DS:[B29DD8]               kernel32.GetVersion
0076D879    33D2            XOR EDX,EDX
0076D87B    8AD4            MOV DL,AH
0076D87D    8915 C0EFB000   MOV DWORD PTR DS:[B0EFC0],EDX
0076D883    8BC8            MOV ECX,EAX                              ams60.00CC560C
0076D885    81E1 FF000000   AND ECX,0FF
0076D88B    890D BCEFB000   MOV DWORD PTR DS:[B0EFBC],ECX            ams60.0076D84D
0076D891    C1E1 08         SHL ECX,8
0076D894    03CA            ADD ECX,EDX
0076D896    890D B8EFB000   MOV DWORD PTR DS:[B0EFB8],ECX            ams60.0076D84D
0076D89C    C1E8 10         SHR EAX,10
0076D89F    A3 B4EFB000     MOV DWORD PTR DS:[B0EFB4],EAX            ams60.00CC560C
0076D8A4    6A 01           PUSH 1
0076D8A6    E8 486D0000     CALL ams60.007745F3
0076D8AB    59              POP ECX                                  01700442
0076D8AC    85C0            TEST EAX,EAX                             ams60.00CC560C
0076D8AE  v 75 08           JNZ SHORT ams60.0076D8B8
```

_Den Redirect the IAT elimination, we need to collect the necessary information:
PID:



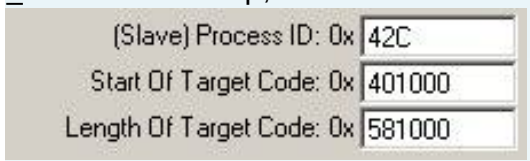
Process	Name	Window	Path
00000084	SOUNDMAN	ALSMTray	C:\WINDOWS\SOUNDMAN.EXE
0000009C	ccApp	Norton AntiVirus	C:\Program Files\Common Files\Symantec
000000FC	ctfmon	TF_FloatingLangBar_WndTitl	C:\WINDOWS\System32\ctfmon.exe
000001FC	smss		\SystemRoot\System32\smss.exe
00000240	csrss		\??\C:\WINDOWS\system32\csrss.exe
00000258	winlogon	NetDDE Agent	\??\C:\WINDOWS\system32\winlogon.exe
00000284	services		C:\WINDOWS\system32\services.exe
00000290	lsass		C:\WINDOWS\system32\lsass.exe
000002E0	TSCHelp	C:\Program Files\TechSmith	C:\Program Files\TechSmith\SnagIt 7\TS
00000314	EMEDITOR	te.txt * - EmEditor	C:\Program Files\EmEditor\EMEDITOR.EXE
0000032C	svchost		C:\WINDOWS\system32\svchost.exe
00000364	svchost		C:\WINDOWS\System32\svchost.exe
000003A8	svchost		C:\WINDOWS\System32\svchost.exe
000003D4	svchost		C:\WINDOWS\System32\svchost.exe
00000420	ccEvtMgr		C:\Program Files\Common Files\Symantec
0000042C	ams60		C:\Program Files\AutoPlay Media Studio
00000490	spoolsv		C:\WINDOWS\system32\spoolsv.exe

. text. ADATA:

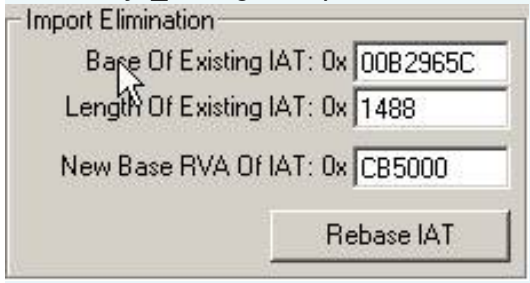


003E0000	0000C000				Priv	RW	RW
003F0000	00006000				Priv	RW	RW
00400000	00001000	ams60			Imag	R	RWE
00401000	00581000	ams60	.text		Imag	R	RWE
00982000	000CD000	ams60	.rdata		Imag	R	RWE
00A4D000	000DB000	ams60	.data		Imag	R	RWE
00B28000	000E6000	ams60	.idata		Imag	R	RWE
00C0E000	00057000	ams60	.reloc		Imag	R	RWE
00C65000	00050000	ams60	.text1	code	Imag	R	RWE
00CB5000	00010000	ams60	.adata		Imag	R	RWE
00CC5000	00010000	ams60	.data1	data,import	Imag	R	RWE
00CD5000	00010000	ams60	.reloc1	relocations	Imag	R	RWE
00CE5000	00320000	ams60	.pdata		Imag	R	RWE
01005000	000DF000	ams60	.rsrc	resources	Imag	R	RWE
010F0000	00006000				Map	R E	R E

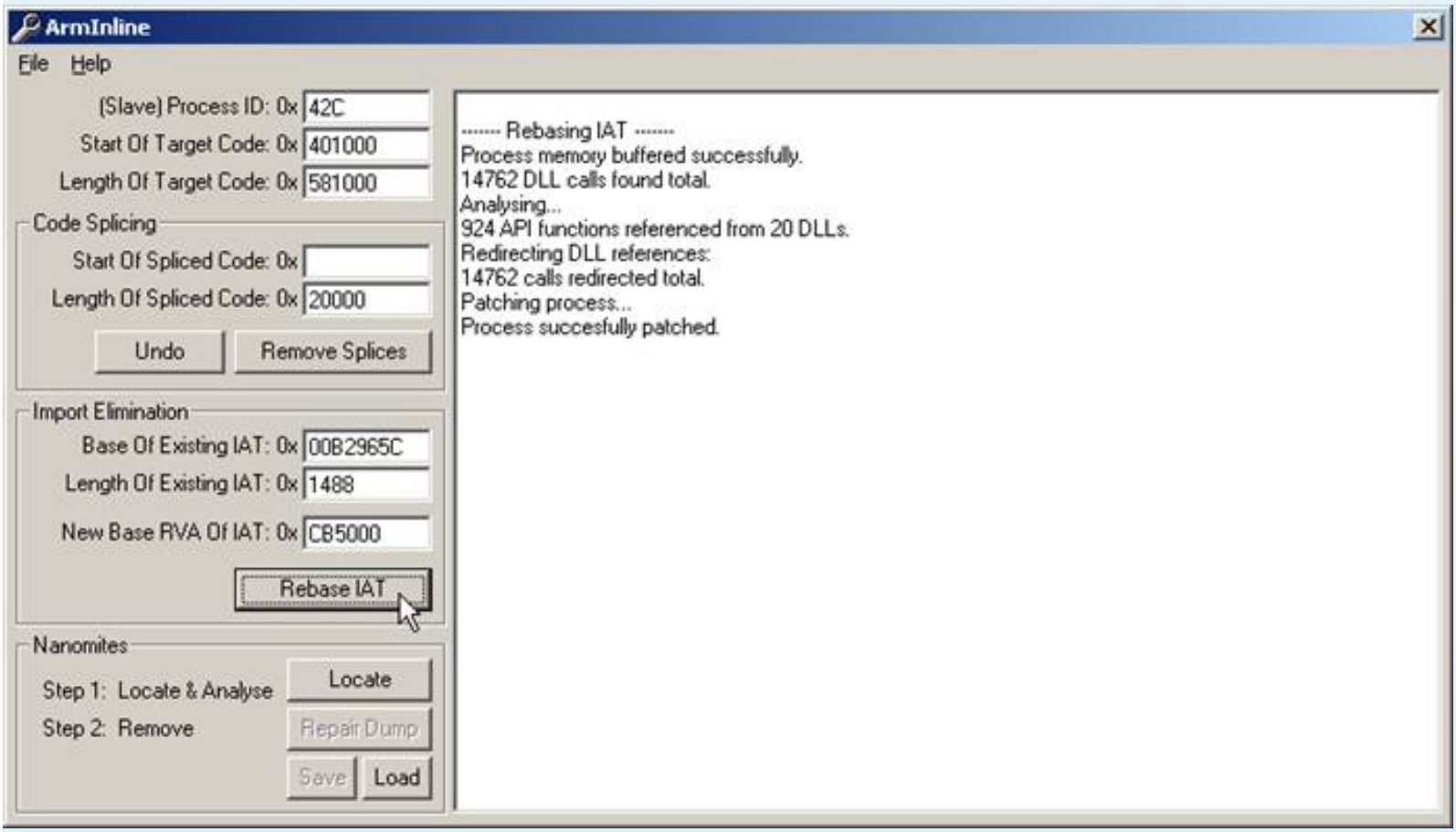
_Mo ArmInline up, enter the information process:



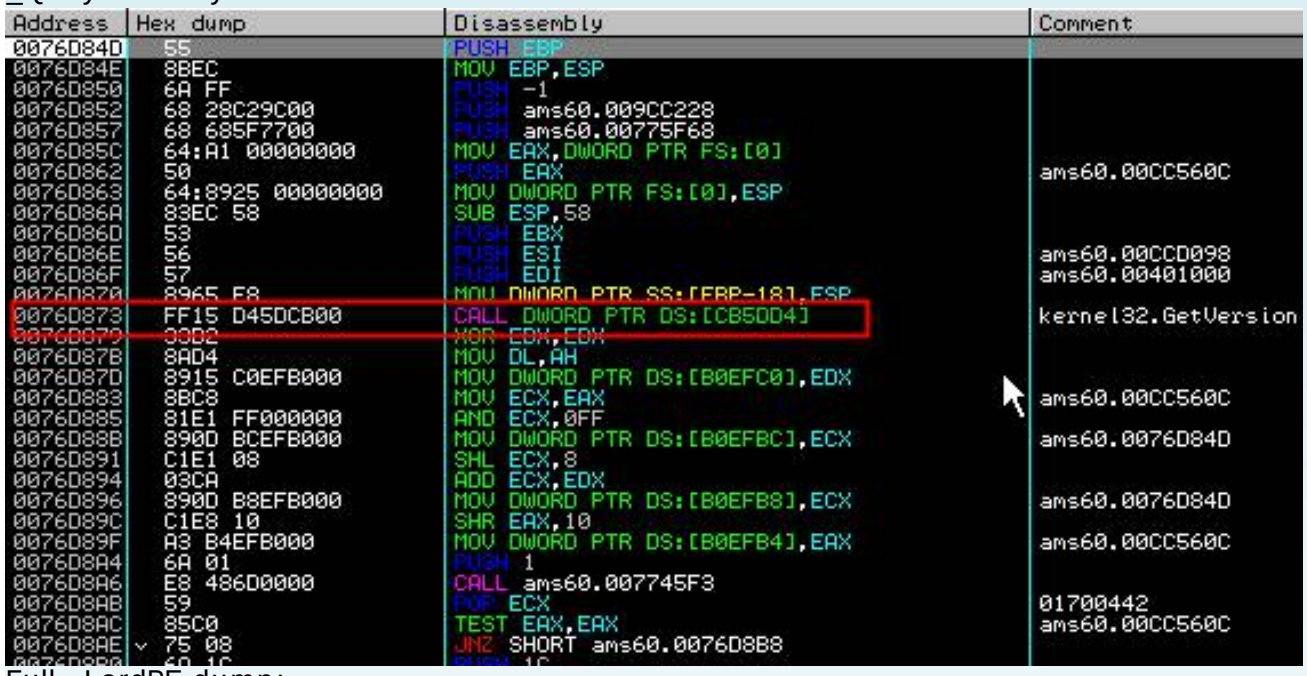
IAT entry _Trong complete elimination as follows:



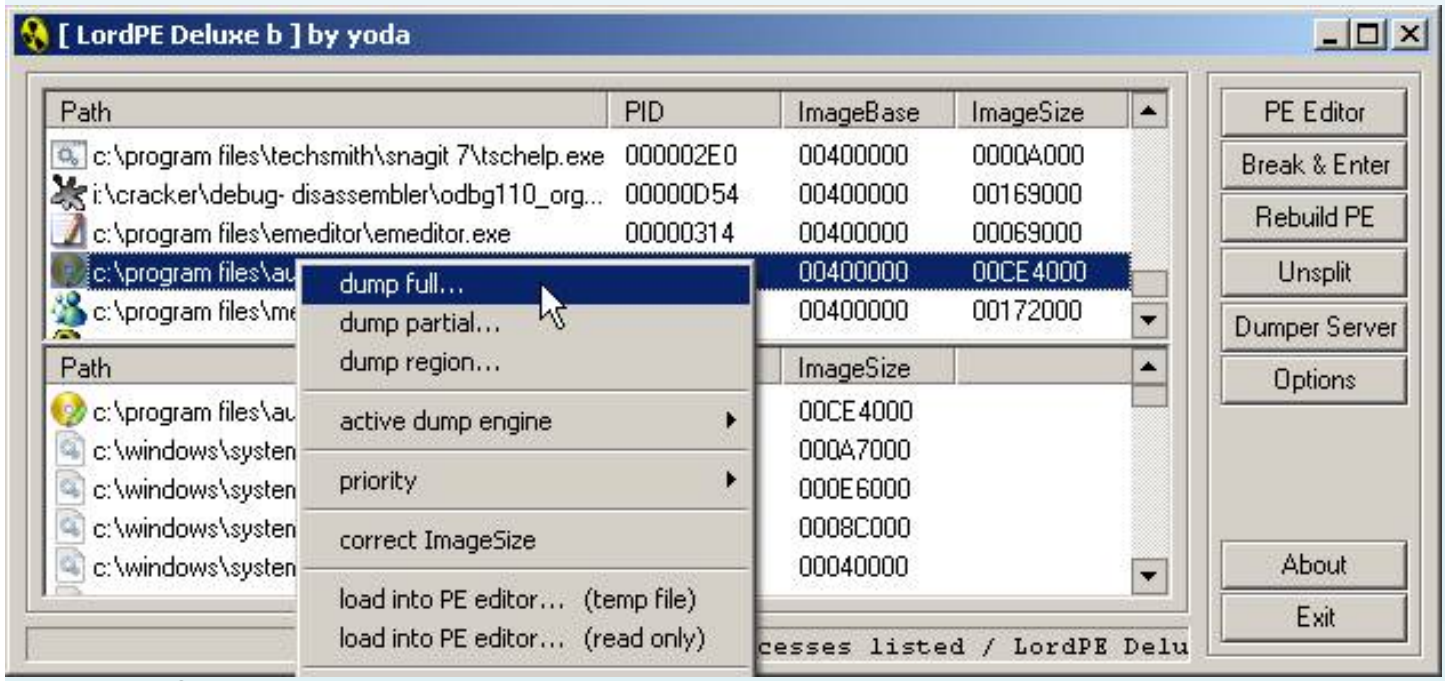
Rebase _Nhan IAT:



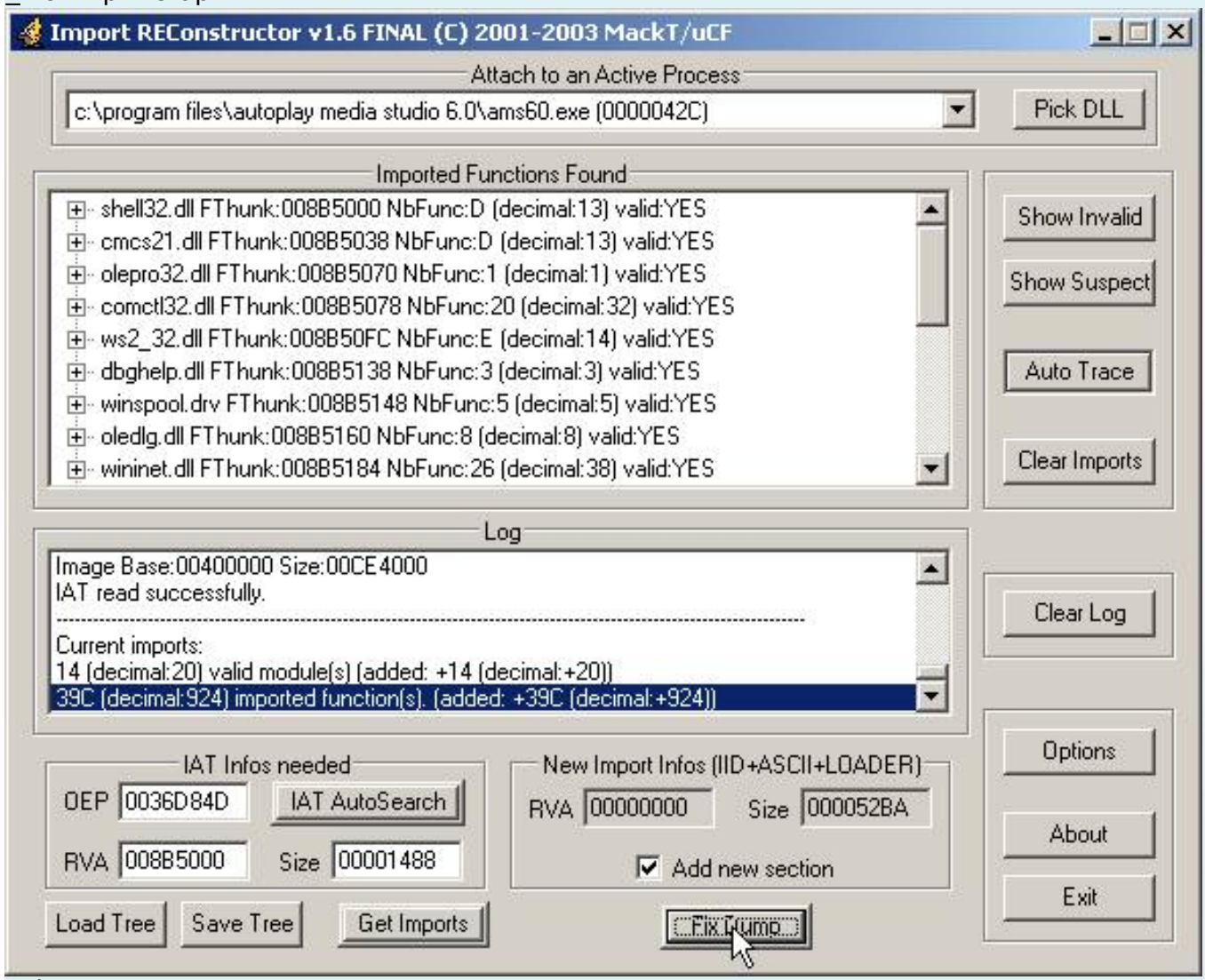
_Quay The OllyDBG:



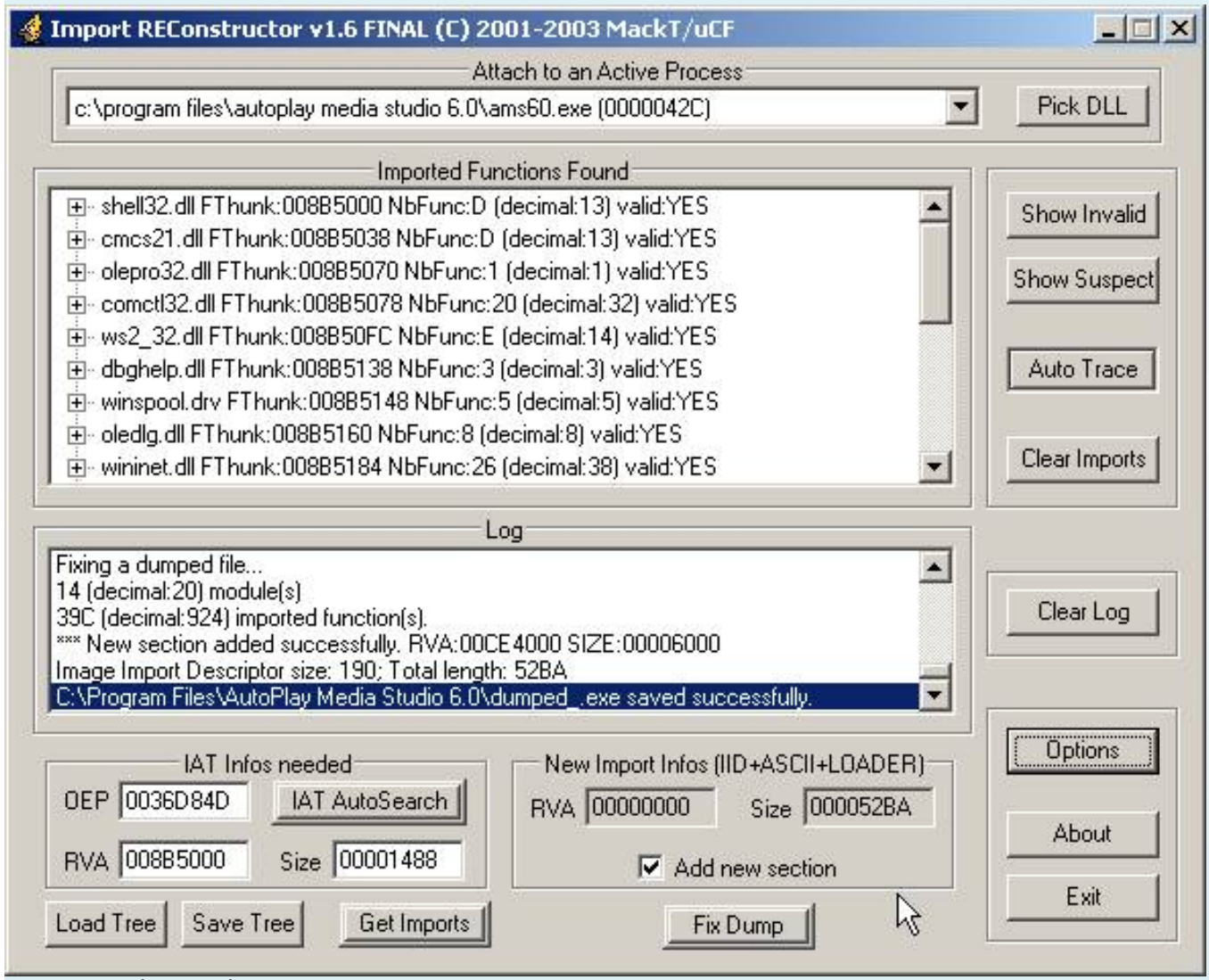
Full _LordPE dump:



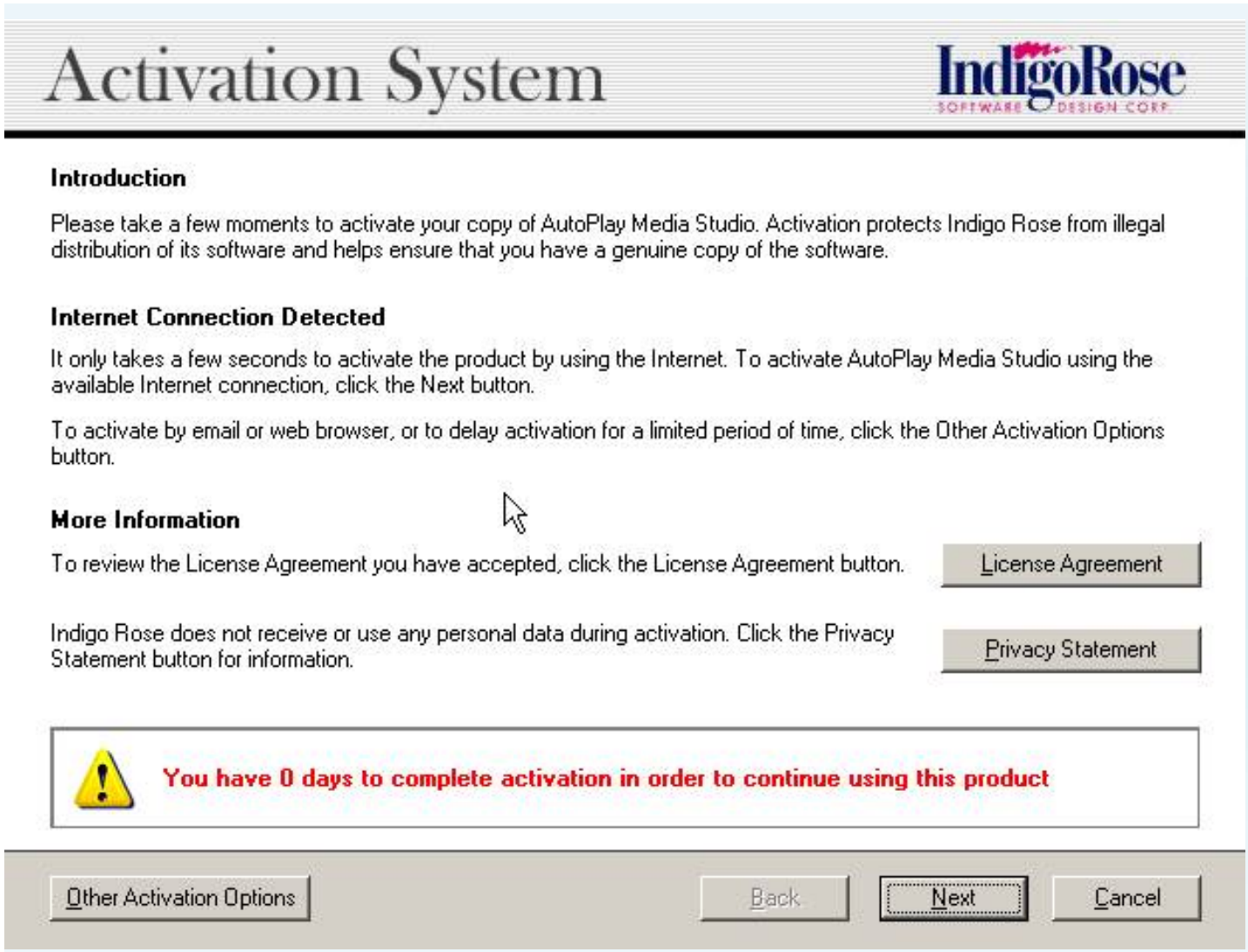
_Mo ImpREC up:



_Fix Dump:



Run Try dumped.exe:



Ro That you have not unpack, but 7 days, months where good run but it expired. Otpimize the only one that has dumped.exe file:

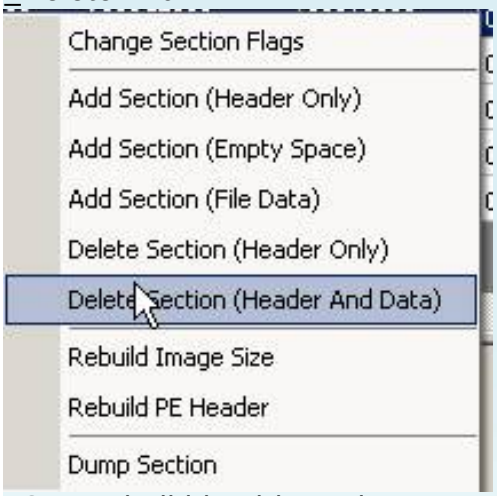
CFF Explorer I - by Ntoskrnl - [dumped_.exe]

File Settings ?

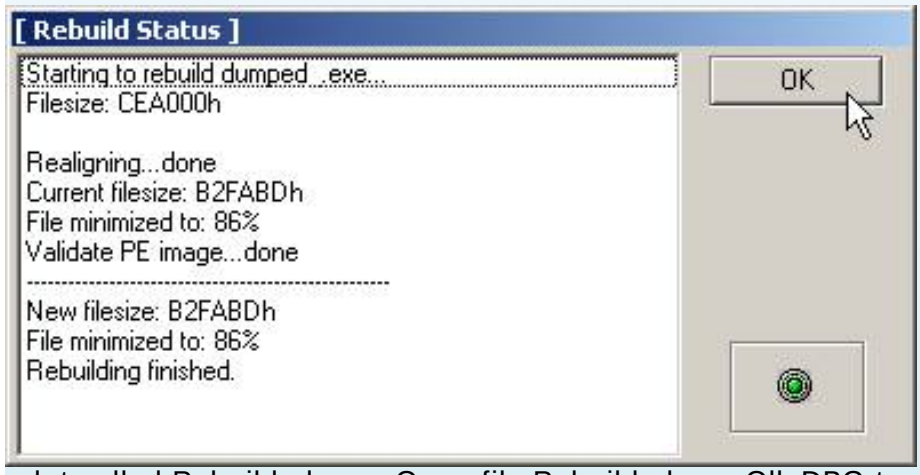
File: dumped_.exe
- Dos Header
- Nt Headers
  - File Header
  - Optional Header
    - Data Directories [15]
- Section Headers [x]
- Import Directory
- Resource Directory
- **Address Converter**
- **Rebuilder**
- **Resource Viewer**
- **Hex Editor**

Name	Virtual Size	Virtual Address	Raw Size	Raw Address	Reloc Address
Byte[8]	Dword	Dword	Dword	Dword	Dword
.text	00580CDC	00001000	00580CDC	00001000	00000000
.rdata	000CABFC	00582000	000CABFC	00582000	00000000
.data	000DA908	0064D000	000DA908	0064D000	00000000
.idata	000E5F01	00728000	000E5F01	00728000	00000000
.reloc	000568BD	0080E000	000568BD	0080E000	00000000
.text1	00050000	00865000	00050000	00865000	00000000
.adata	00010000	008B5000	00010000	008B5000	00000000
.data1	00010000	008C5000	00010000	008C5000	00000000
.reloc1	00010000	008D5000	00010000	008D5000	00000000
.pdata	00320000	008E5000	00320000	008E5000	00000000
.rsrc	000DF000	00C05000	000DF000	00C05000	00000000
.mackt	00006000	00CE4000	00006000	00CE4000	00000000

_Delete End:



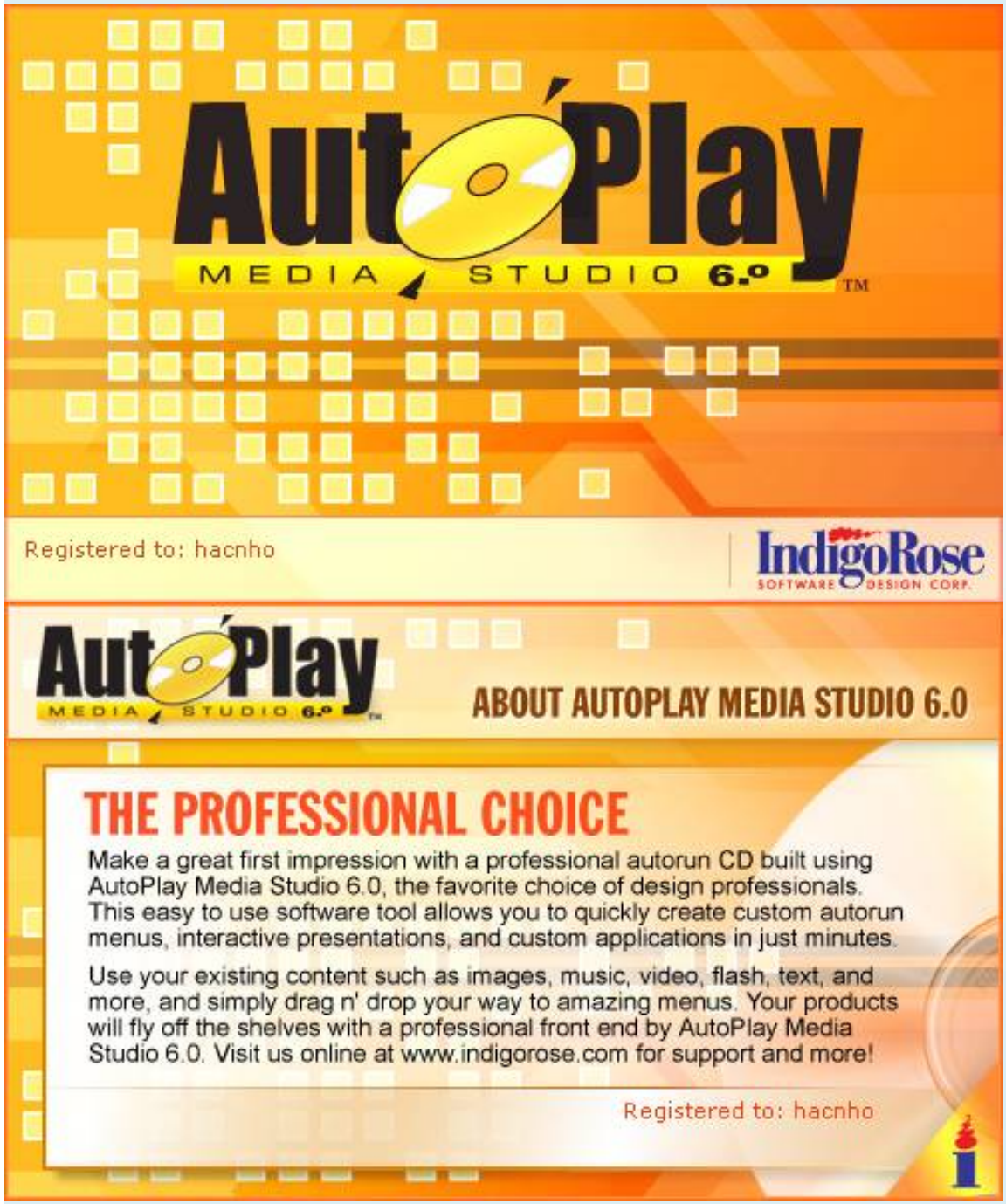
_Sau Rebuild it with LordPE:



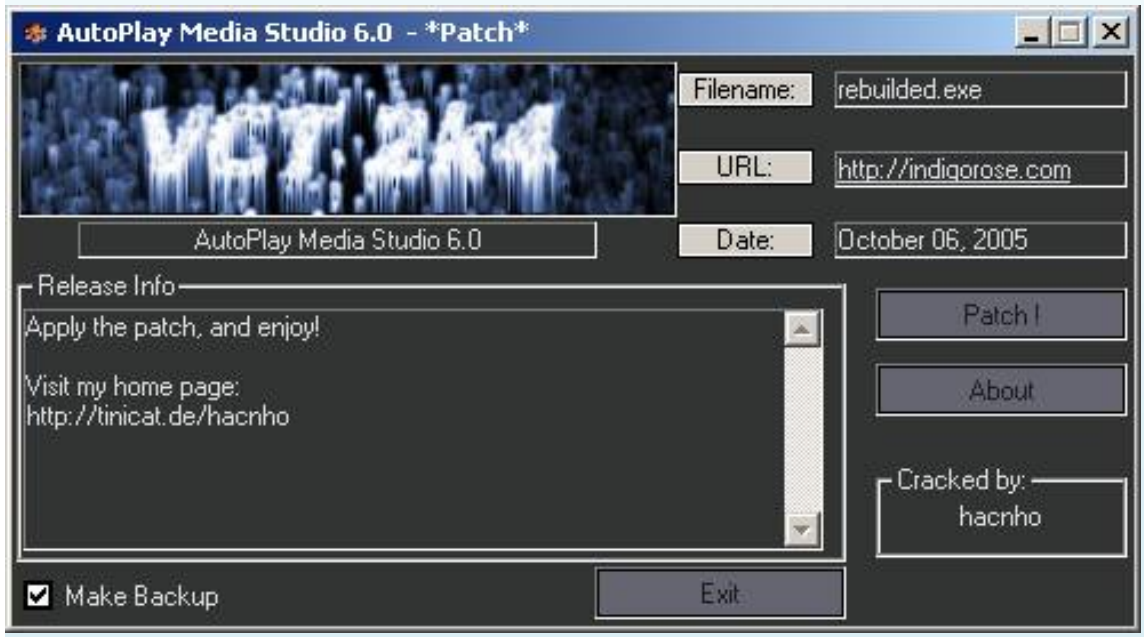
_dat called Rebuilded.exe. Open file Rebuilded.exe OllyDBG to search:

Address	Disassembly	Text string
004C478B	PUSH rebuilde.00A57080	ASCII "♪@♪@%s:♪@%s"
004C493A	PUSH rebuilde.00A57090	ASCII "Invalid activation code."
004C4B13	PUSH rebuilde.00A57078	ASCII "Submit failed: %s"
004C5154	PUSH rebuilde.00A572CC	ASCII "Elapsed Time: %.2d:%.2d"
004C55B5	PUSH rebuilde.00A572E8	ASCII "You have %d days to complete activation in order to continue using this product"
004C57A0	PUSH rebuilde.00A57348	ASCII "\License.txt"
004C57BC	PUSH rebuilde.00A4E580	ASCII "open"
004C5900	PUSH rebuilde.00A57358	ASCII "\Data\Privacy.txt"
004C591C	PUSH rebuilde.00A4E580	ASCII "open"
004C5E9F	PUSH rebuilde.00A560BC	ASCII "Invalid Activation Code"
004C60E0	PUSH rebuilde.00A57370	ASCII "http://www.indigorose.com/route.php?pid=ams60activate"
004C60E5	PUSH rebuilde.00A4E580	ASCII "open"
004C6441	PUSH rebuilde.00A572E8	ASCII "You have %d days to complete activation in order to continue using this product"
004C66B0	PUSH rebuilde.00A57348	ASCII "\License.txt"
004C66CC	PUSH rebuilde.00A4E580	ASCII "open"
004C6810	PUSH rebuilde.00A57358	ASCII "\Data\Privacy.txt"
004C682C	PUSH rebuilde.00A4E580	ASCII "open"
004C6985	PUSH rebuilde.00A574D8	ASCII "Resolving address..."
004C698C	PUSH rebuilde.00A574C4	ASCII "Address resolved"
004C6993	PUSH rebuilde.00A574A8	ASCII "Connecting to server..."
004C699A	PUSH rebuilde.00A5748C	ASCII "Connection established"
004C69A1	PUSH rebuilde.00A57474	ASCII "Sending request..."
004C69A8	PUSH rebuilde.00A57464	ASCII "Request sent"
004C69AF	PUSH rebuilde.00A57448	ASCII "Waiting for response..."
004C69B6	PUSH rebuilde.00A57430	ASCII "Response received"
004C69BD	PUSH rebuilde.00A57414	ASCII "Closing connection..."
004C69C4	PUSH rebuilde.00A573FC	ASCII "Connection closed"
004C69CB	PUSH rebuilde.00A573E8	ASCII "Handle created"
004C69D2	PUSH rebuilde.00A573D8	ASCII "Handle closed"
004C69D9	PUSH rebuilde.00A573C0	ASCII "Operation complete"
004C69E0	PUSH rebuilde.00A573B0	ASCII "Working..."
004C6DC8	PUSH rebuilde.00A51A54	ASCII "Unknown"
004C6DE2	PUSH rebuilde.00A51A54	ASCII "Unknown"
004C6DEE	PUSH rebuilde.00A51A54	ASCII "Unknown"
004C6F6E	PUSH rebuilde.00A575A0	ASCII "Invalid serial number. Please re-install the product and try again."
004C6F8C	PUSH rebuilde.00A57584	ASCII "Invalid Serial Number"
004C7057	PUSH rebuilde.00A57574	ASCII "Thank You!"
004C706D	PUSH rebuilde.00A57510	ASCII "We appreciate you taking the time to activate this copy of AutoPlay Media Studio."
004C7095	PUSH rebuilde.00A574F4	ASCII "Activation Failed"
004C726D	PUSH rebuilde.00A57600	ASCII "USERNAME"
004C7282	PUSH rebuilde.00A575F4	ASCII "USERKEY"
004C72ED	PUSH rebuilde.00A57614	ASCII "IR_CERTIFICATE"
004C7307	PUSH rebuilde.00A5760C	ASCII "PERM"
004C736D	PUSH rebuilde.00A57650	ASCII "INVALIDKEY"
004C737F	PUSH rebuilde.00A57640	ASCII "Unregistered"
004C73F0	PUSH rebuilde.00A57634	ASCII "EXPIRED"
004C741B	PUSH rebuilde.00A57628	ASCII "DAYSLEFT"
004C759F	PUSH rebuilde.00A57660	ASCII "Are you are sure that you want to exit AutoPlay Media Studio?"

_Sau A fuzzy quật J : We run Rebuilded_patched.exe file:


AutoPlay
MEDIA STUDIO 6.0
Registered to: hacnho
IndigoRose
SOFTWARE DESIGN CORP.
AutoPlay
MEDIA STUDIO 6.0
ABOUT AUTOPLAY MEDIA STUDIO 6.0
THE PROFESSIONAL CHOICE
Make a great first impression with a professional autorun CD built using AutoPlay Media Studio 6.0, the favorite choice of design professionals. This easy to use software tool allows you to quickly create custom autorun menus, interactive presentations, and custom applications in just minutes.
Use your existing content such as images, music, video, flash, text, and more, and simply drag n' drop your way to amazing menus. Your products will fly off the shelves with a professional front end by AutoPlay Media Studio 6.0. Visit us online at www.indigorose.com for support and more!
Registered to: hacnho

_Day A patch:



_Ban Patch this private not public! Like the mail to send bags!
_Unpacked SuccessFul!

4. **Conclusion**

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, Madman_Hercules, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx OllyDBG of the authors.

To be continued ...

Written by **hacnho** (tutorial date: VietNam 06/10/2005)

Basic steps in the process unpack!

The ray can ask me bac much about this, really did not have 1 set method called for it. The Department, have been able to unpack the new packer test any one must go through these steps:

1.Hoc question, see the high degree of cracker in the world who can not unpack success. If you already have heart test that school ... see how dominant they find OEP, fix IAT ... How would. Then unpack from mo based on the know, do as many hands as familiar, the more experience. (Typically, as packer Asprotect maximum unpack more than 200 soft, full format, all types).

2.Tu seeking packer, pack your own files already know and find the OEP. From that can draw, but common to find OEP, IAT. (eg as to unpack SVKP 1.3, maximum download this packer, self pack file notepad.exe then find your file has OEP pack)

OEP 3.Cac heart is the most fundamental, individual orders trace 1, until I OEP. Additionally level must know the number 1 france antidebug obtain the program or content so that children know that against.

Bac 4.Co number 1 question, how is that biet OEP, which would provide thưa is only guesswork. When bac've worked with 1 large number of files, will have 1 bac feelings (which is called also MO) is OEP. In fact, with the current Translation as Delphi, VC + +, BC + + ... OEP commercial competition started with orders balance stack is simple:

```
PUSH EBP
MOV EBP, ESP
...
```

So when traders trace order to meet that test we should save y.

5.Viec fixed IAT. Also do not have the general france not. Currently, you I also use 1 of the tool is 2 Imprec (or ReVirgin). This is a tool to help you fix IAT easily without the need to understand about intimate PE Header.

Here is a simple example to describe the steps that have been mentioned above:
---------- ----------

I - Find OEP:

- Use PEiD we know is the program is using ***ASPack*** Pack ***2.1 -> Alexey Solodovnikov.***
- Load up the program with Olly. Select No (not Analysis). I will come:

CODE

```
0051F001> 60
PUSHAD <== We

here
0051F002 E8
72050000 CALL

AutoStar.0051F579
```

- Press **F8** one command line to the next. In the book **Registers (FPU)** we have to lick your mouse in the value **ESP** and **Follow Indump.**
- **Hex dump** window will switch to new window. Select **the first 4 bytes** of this window and **lick your mouse to** select **BreakPoint ==> Hardware, on access ==> Dword.** Then press **F9** to us:

CODE

```
0051F4F4 / 75 08
JNZ SHORT
AutoStar.0051F4FE

<== We here
0051F4F6 | b8
01000000 MOV

EAX, 1
0051F4FB | C2

0C00 RETN 0C
0051F4FE \ 68
00104000 PUSH

AutoStar.00401000
0051F503 C3 RETN
<=== Push F8
coming here and

Push F8 again
```

- Then we will come:

CODE

```
00401000 A1
78834900
MOV EAX,
DWORD PTR
DS:
[498378]
<== We here
```

- **Note:** After coming here is not using the mouse or do anything on the screen move up and down
- Then select the next **Plugins ==> Olly dump ===> dump debugged process.** After you select will be completed at the **Entry Point** in the box -> **Modify** is the value of the **OEP.** We save this value. Lick OK and save as you like (the extension is. Exe).

II - Find and RVA RVA size:

- You will find two ways: (1) **IAT Auto Search,** and (2) **Manual**
- You should find using **IAT Auto Search** for more quickly.
- However, in some cases **IAT Auto Search** can not find out **RVA RVA** and **size** so we must be heart by **Manual.**

II.1 - Content IAT Auto Search:

- Stay in the program, the program **ImportREC v1.6** load the file, change the value **OEP** we just find the above.
- The **IAT Auto Search**
- Trade should we change the last two of **RVA to RVA Size 00** and we should increase slightly
- Then **Get** the **Imports,** the next **Show Invalid,** then the **Trace level 1 (disasm).**
- Finally **Fix** the **dump.** Select the file that you get saved above.
- **Fix** then **dump** (file with the fix is a new file is created above).
- I will be a new file. If nothing special examination FILE has been successfully unpack.

II.2 - Manual:

- Stay in main screen. Press **Ctrl-B** screen in **the CPU,** and go to the **FF 25,** then press **Ctrl-L** continue to find code to the like this:

CODE

```
00497284 -
FF25
34214B00
JMP DWORD
PTR DS:
[4B2134];
advapi32.
GetUserNameA
```

- Press **Ctrl-L** to find out the code Similarly. In the heart, note the largest value **max** and **min** in most small **DS: [4B2134].**
- So we have:
OEP = value we find the above
RVA = min - 400,000
Size = max - min ==> usually increases slightly

- Use **Import REConstructor v1.6F © 2001-2003** load file.
- Complete the value calculation above the **IAT infos needed.** Then **Get** the **Imports,** the next **Show Invalid,** then the **Trace level 1 (disasm).**
- After the trace is complete, the next **Show Invalid,** then the next **Show Invalid,** and the **Cut thunks.**
- **Fix** then **dump** (file with the fix is a new file is created above).
- I will be a new file. If nothing special examination FILE has been successfully unpack.

III - How clean and reduce the file size after unpack:

- To improve our conduct over the cleaning and reduce the file size of the file after **Fix dump** (to file as small as possible. However, if you do not like you can ignore).
- To implement this process we use **LordPE Delux v1.4.** Load up the program, select **rebuild PE.** Select File **Fix** we **dump** on, lick the **Open** and we have a complete new file to run CRACK.
- Check the file with **PEiD,** we know the language of the program.

IV - Note:

- The instructions on here to correct **most cases** encountered in the SOFTWARE or CRACKME.
- Some special cases we need to initiate a slightly different take slightly. However the basic steps do not have the difference.

- Address in the instructions may vary, but you should save italy ac me to order. The question this order can not be different.

Bypass Registration EncryptPE V2.2007 (WhynotBar)

_Dùng UltraEdit mở "**EncryptPE V2.2007.exe**"

```
00000250h: 4550453A20456E637279707450452056 ; EPE: EncryptPE V
00000260h: 322E323030372E31322E312C20436F70 ; 2.2007.12.1, Cop
00000270h: 797269676874202843292057465300000 ; yright (C) WFS..
00000280h: 486F6D65506167653A207777772E656E ; HomePage: www.en
00000290h: 637279707470652E636F6D0000000000 ; cryptpe.com.....
000002a0h: 454D61696C3A2077667323656E637279 ; EMail: wfs#encry
000002b0h: 707470652E636F6D0000000000000000 ; ptpe.com........
```

_OK...Nó protect bằng **EncryptPE V2.2007.12.1**. Load vào **Olly** và **Shift+F9**

```
00405000 > 60 PUSHAD
00405001 9C PUSHFD
00405002 64:FF35 0000000>PUSH DWORD PTR FS:[0]
00405009 E8 1B020000 CALL EncryptP.00405229
```

_ **Shift+F9** Run soft, **Alt+F1**, **BP ExitProcess** và press OK

```
0012FA58 711F74A0 /CALL to ExitProcess from V2200712.711F749B
0012FA5C 00000000 \ExitCode = 0
0012FA60 71206ABF RETURN to V2200712.71206ABF from V2200712.711F7488
0012FA64 0012FC58 Pointer to next SEH record
```

_Follow in Disassembler, Search Text String và nhập vào **".Key"**

```
1205DAE MOV EAX,V2200712.712060EC ASCII "-UNEPEREG"
1205DE5 MOV EAX,V2200712.71206100 ASCII "/UNEPEREG"
1206205 CMP DWORD PTR DS:[71225718 ASCII "MZP"
1206490 MOV EDX,V2200712.712073E4 ASCII "EncryptPE "
120659C PUSH V2200712.71207400 ASCII "npggnt.des"
1206788 MOV EDX,V2200712.71207414 ASCII "TEncryptPEForm"
1206A89 PUSH V2200712.7120745C ASCII ")<"
1206CBD MOV ECX,V2200712.71207474 ASCII ".key"
1206D5B MOV ECX,V2200712.71207474 ASCII ".key"
1206FC6 MOV EDX,V2200712.71207490 ASCII "NOSYSDLLS"
1207077 MOV EAX,V2200712.712074B0 ASCII ",NOSYSDLLS,"
120755E MOV EDX,V2200712.71207980 ASCII "宋体"
1207A4C MOV EDX,V2200712.71207C30 ASCII "Thank You."
1207ACB MOV EAX,V2200712.71207C50 ASCII "://"
```

_Ok...Set **HE 71207077**

```
71207077 B8 B0742071 MOV EAX,V2200712.712074B0 ; ASCII ",NOSYSDLLS,"
```

```
7120707C E8 8BE0F1FF CALL V2200712.7112510C
```

_**Ctrl+F2**, **F9** dừng tại HWB vừa mới Set

```
71207077 B8 B0742071 MOV EAX,V2200712.712074B0 ; ASCII ",NOSYSDLLS,"
===>Pause here
7120707C E8 8BE0F1FF CALL V2200712.7112510C
71207081 85C0 TEST EAX,EAX
71207083 0F9FC0 SETG AL
71207086 8B55 FC MOV EDX,DWORD PTR SS:[EBP-4]
71207089 8882 52030000 MOV BYTE PTR DS:[EDX+352],AL
7120708F 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
71207092 8A90 52030000 MOV DL,BYTE PTR DS:[EAX+352]
71207098 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
7120709B 8B80 94030000 MOV EAX,DWORD PTR DS:[EAX+394]
712070A1 E8 DE9EFFFF CALL V2200712.71200F84
712070A6 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
712070A9 8B80 00030000 MOV EAX,DWORD PTR DS:[EAX+300]
712070AF 8378 0C 01 CMP DWORD PTR DS:[EAX+C],1
712070B3 75 2E JNZ SHORT V2200712.712070E3 ; ===Jump Set AL=0
712070B5 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
712070B8 8B90 7C030000 MOV EDX,DWORD PTR DS:[EAX+37C]
712070BE 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
712070C1 8B80 18030000 MOV EAX,DWORD PTR DS:[EAX+318]
712070C7 E8 9896F7FF CALL V2200712.71180764 ; ===>Check Key
712070CC 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
712070CF 8B90 7C030000 MOV EDX,DWORD PTR DS:[EAX+37C]
712070D5 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
712070D8 8B80 20030000 MOV EAX,DWORD PTR DS:[EAX+320]
712070DE E8 8196F7FF CALL V2200712.71180764 ; ===>Check Key
712070E3 837D F8 00 CMP DWORD PTR SS:[EBP-8],0
712070E7 74 29 JE SHORT V2200712.71207112 ; ===>Jump Set AL=1
712070E9 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
712070EC 8B80 00030000 MOV EAX,DWORD PTR DS:[EAX+300]
712070F2 8378 0C 01 CMP DWORD PTR DS:[EAX+C],1
712070F6 74 0F JE SHORT V2200712.71207107
712070F8 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
712070FB 8B80 24030000 MOV EAX,DWORD PTR DS:[EAX+324]
71207101 8378 30 64 CMP DWORD PTR DS:[EAX+30],64
71207105 75 0B JNZ SHORT V2200712.71207112
71207107 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
7120710A 8B10 MOV EDX,DWORD PTR DS:[EAX]
7120710C FF92 E8000000 CALL NEAR DWORD PTR DS:[EDX+E8] ; ===>Call NAG Reg
71207112 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
71207115 8B80 24030000 MOV EAX,DWORD PTR DS:[EAX+324]
7120711B 33D2 XOR EDX,EDX
7120711D E8 8686F5FF CALL V2200712.7115F7A8
71207122 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
```

```
71207125 8B80 00030000 MOV EAX,DWORD PTR DS:[EAX+300]
7120712B 8378 0C 01 CMP DWORD PTR DS:[EAX+C],1
7120712F 75 24 JNZ SHORT V2200712.71207155 ; ===>Jump Set AL=1
71207131 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
71207134 8B80 24030000 MOV EAX,DWORD PTR DS:[EAX+324]
7120713A BA 01000000 MOV EDX,1
7120713F E8 7486F5FF CALL V2200712.7115F7B8
71207144 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
71207147 8B90 24030000 MOV EDX,DWORD PTR DS:[EAX+324]
7120714D 8B45 FC MOV EAX,DWORD PTR SS:[EBP-4]
71207150 E8 43F0FFFF CALL V2200712.71206198 ; ==>Check Key
71207155 A1 583F2271 MOV EAX,DWORD PTR DS:[71223F58]
```

_Nếu làm đúng như trên nhấn F9 soft sẽ Run hoàn toàn. Nhấn Ctrl+G nhập vào 401000, **Search All intermodular Calls**

```
00401000 PUSH ES (Initial CPU selection)
0040116D CALL EncryptP.00401160 MSVBVM60.ThunRTMain
00401CC4 CALL FF405CE7
0040238F CALL NEAR DWORD PTR DS:[40 MSVBVM60.rtcMsgBox
004023AE CALL NEAR DWORD PTR DS:[40 MSVBVM60.__vbaVarMove
004023C6 CALL NEAR DWORD PTR DS:[40 MSVBVM60.__vbaFreeVarList
004023EB CALL NEAR DWORD PTR DS:[40 MSVBVM60.__vbaFreeVarList
004023F8 CALL NEAR DWORD PTR DS:[40 MSVBVM60.__vbaFreeVar
```

_Ok, set 1 HWB tại OEP và làm lại các bước trên.

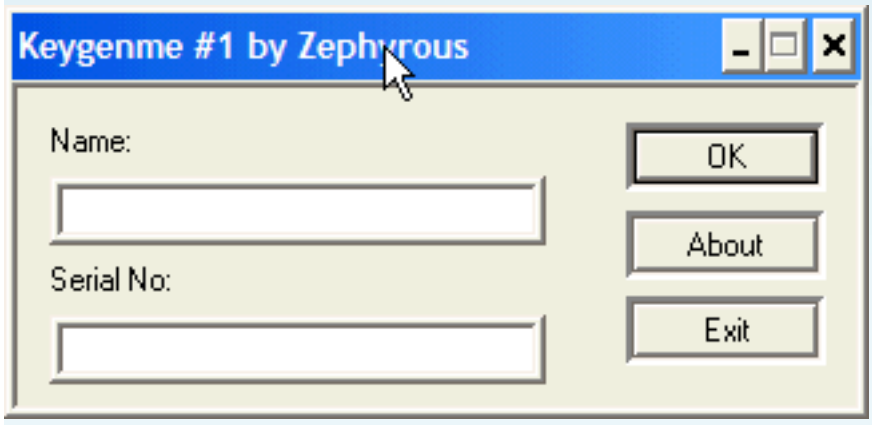
```
00401160 - FF25 6C104000 JMP NEAR DWORD PTR DS:[40106C]
00401166 0000 ADD BYTE PTR DS:[EAX],AL
00401168 68 A81B4000 PUSH EncryptP.00401BA8 ; ===>This is OEP
0040116D E8 EEFFFFFF CALL EncryptP.00401160
```

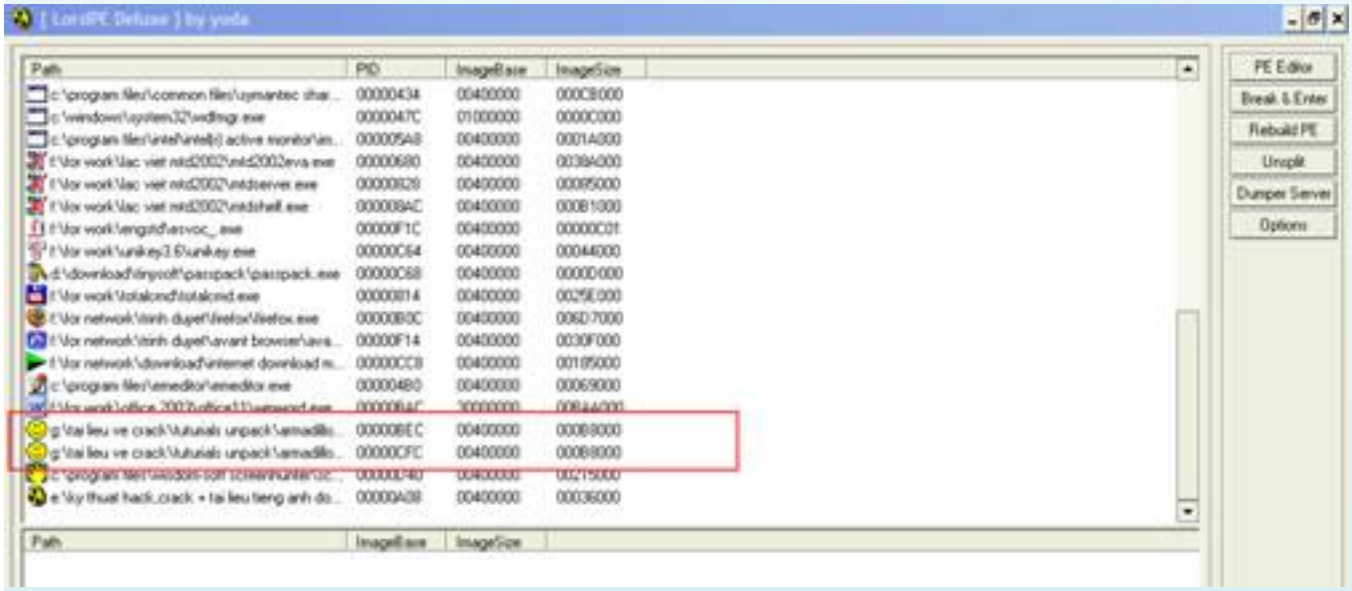
_Tiến hành Dump và Fixed Dump như bình thường. Test thử thấy Run tốt. Dùng CFF xóa Section **EPE1** đi cho nhẹ và Save lại.

Source: http://www.reversing.be/forum/viewtopic.php?t=287 **(Fisker** to thank **for sharing this)**
Target: Armadillo 4.30a debugblocker.exe (included in rar file)
Tool: Olly (edited by hacnho), lordPE, ImportREC.

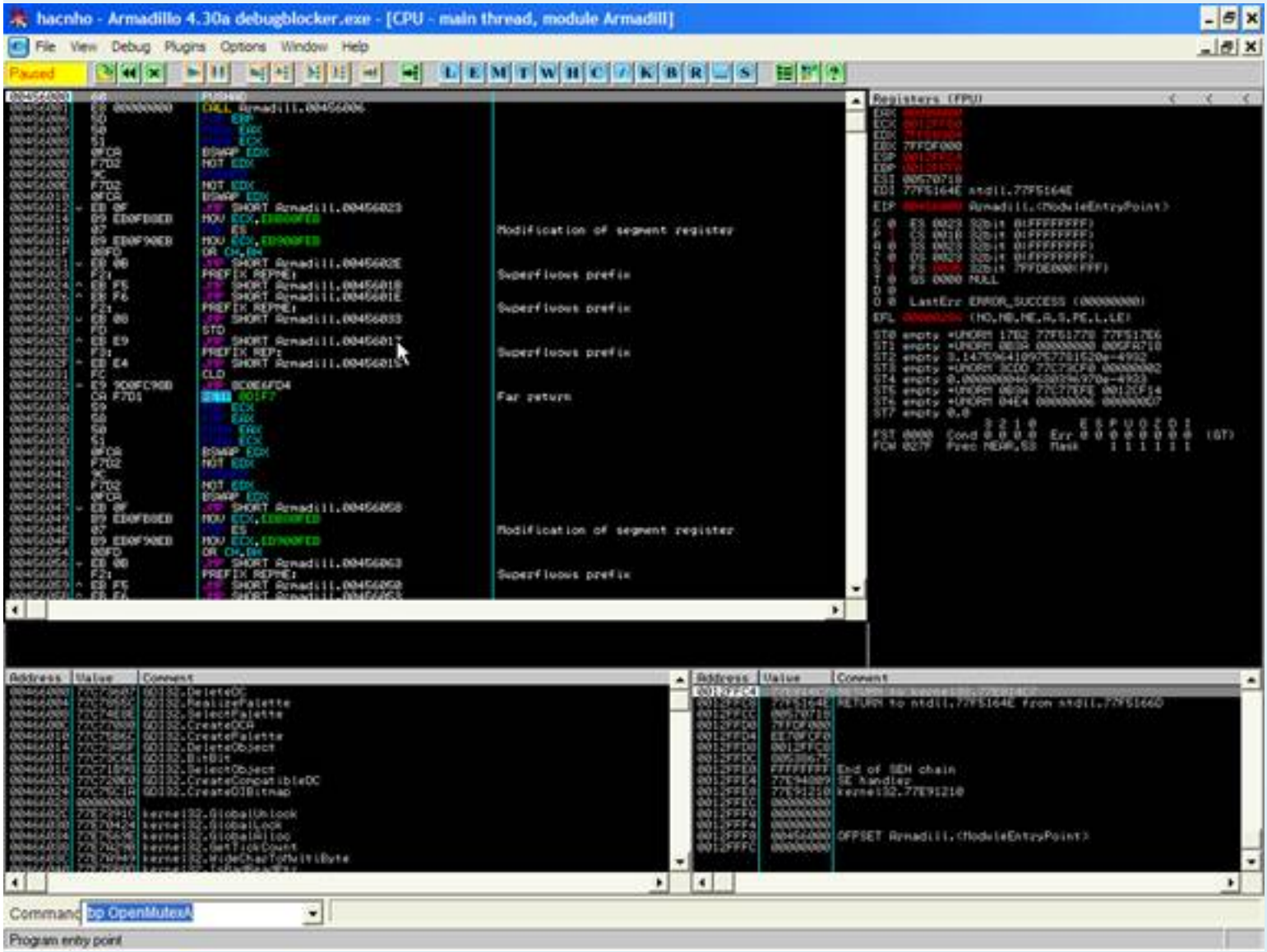
Target this pack by 4:30 armadillo standard + debugblocker.

_Chay Normal:

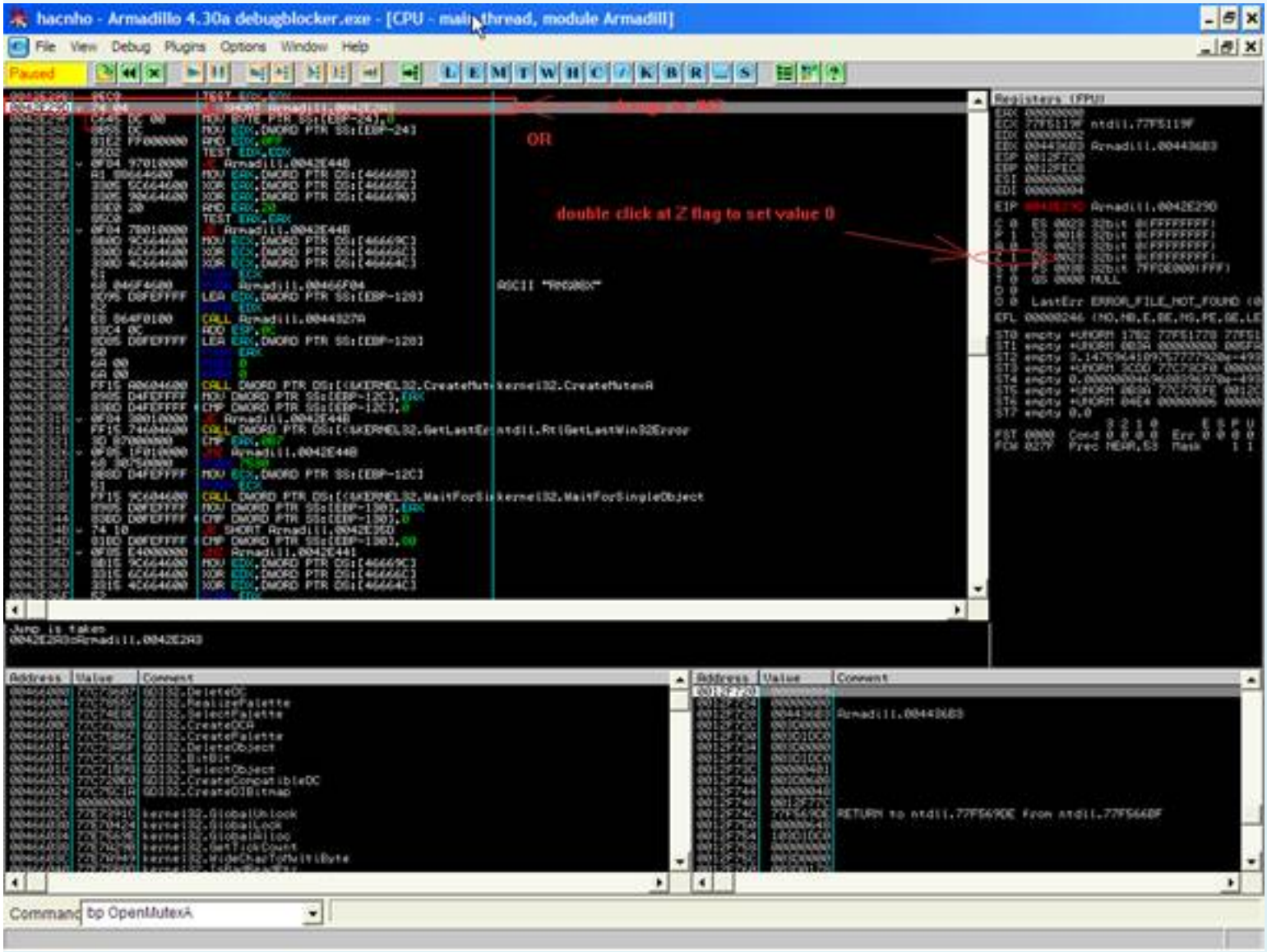




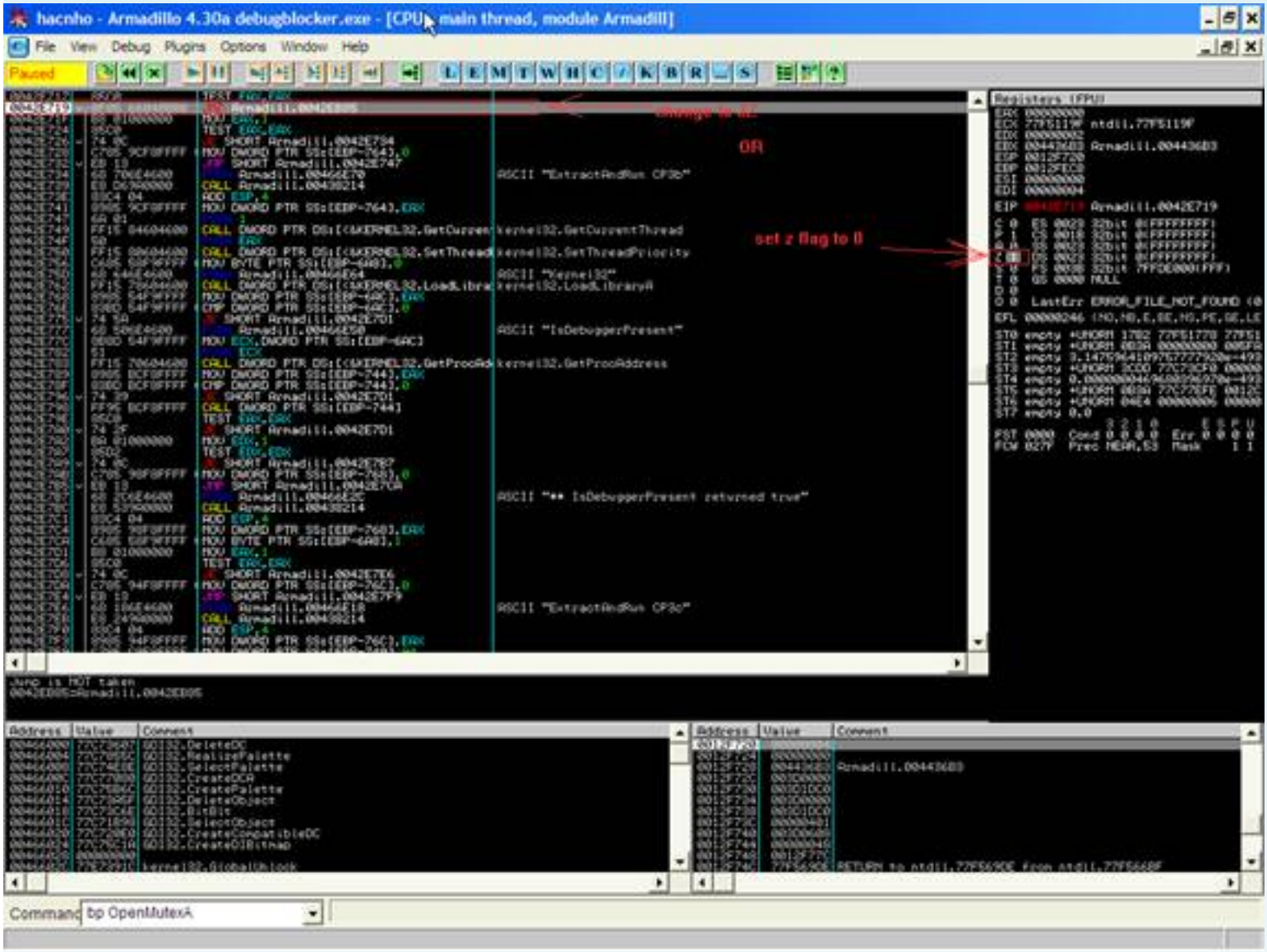
Olly _Load target of:



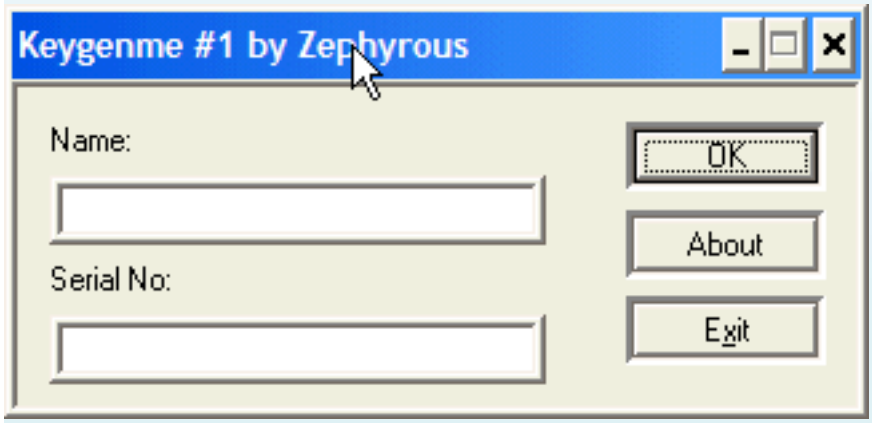
_bp OpenMutexA => F9 => Olly break => Alt + F9, F8:

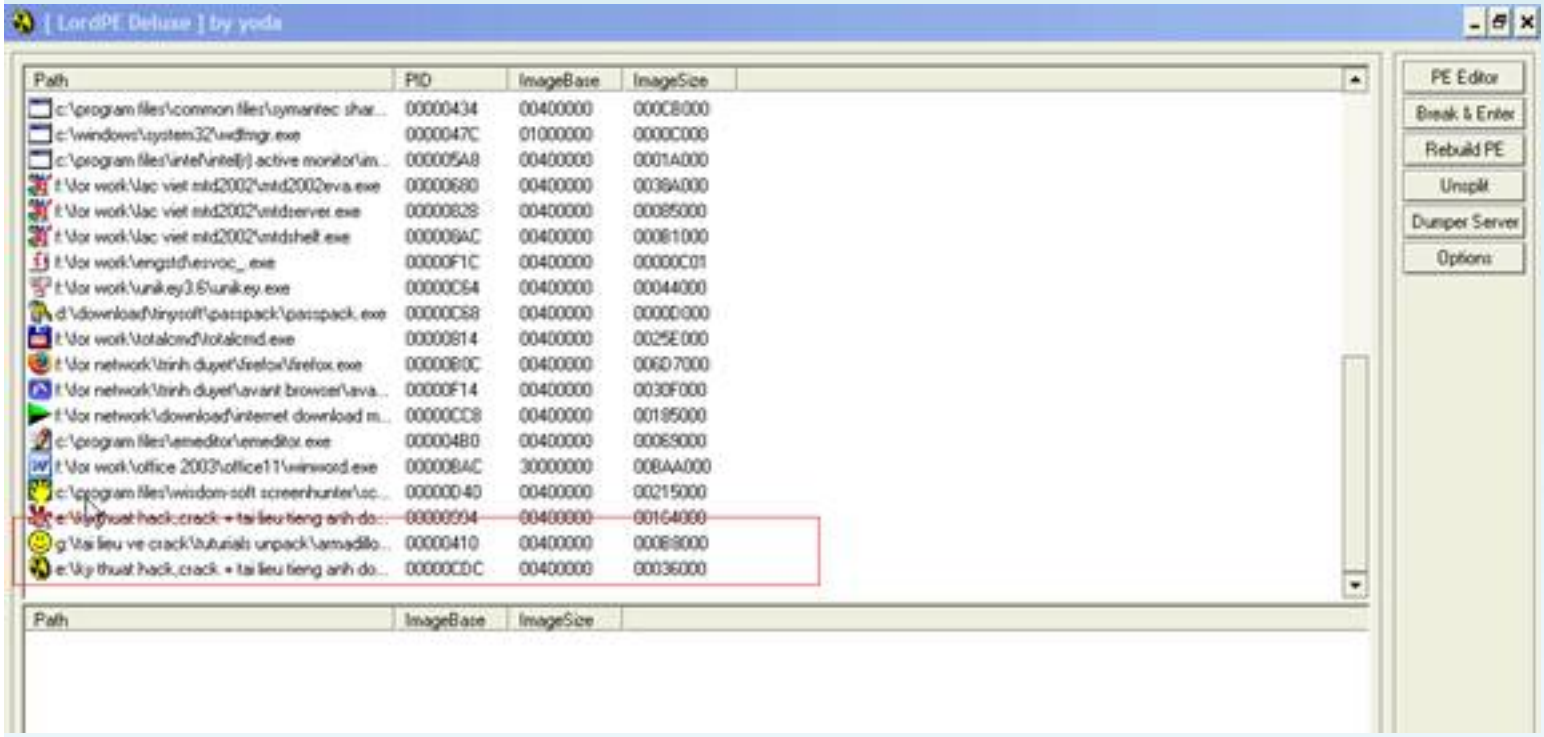


_F9 Play again, olly break, Alt + F9, F8:



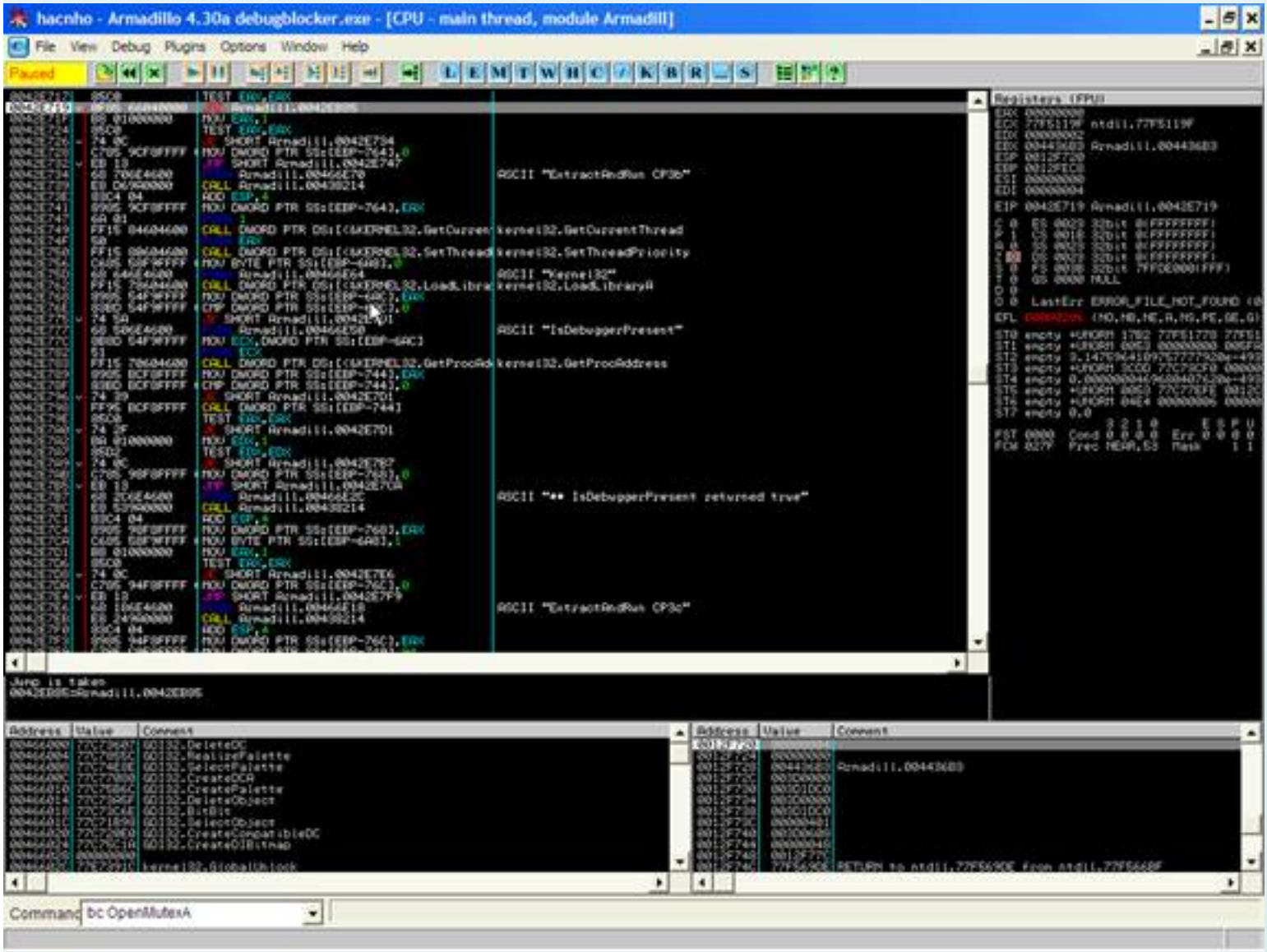
_bc OpenMutexA, F9, the nag, OK:



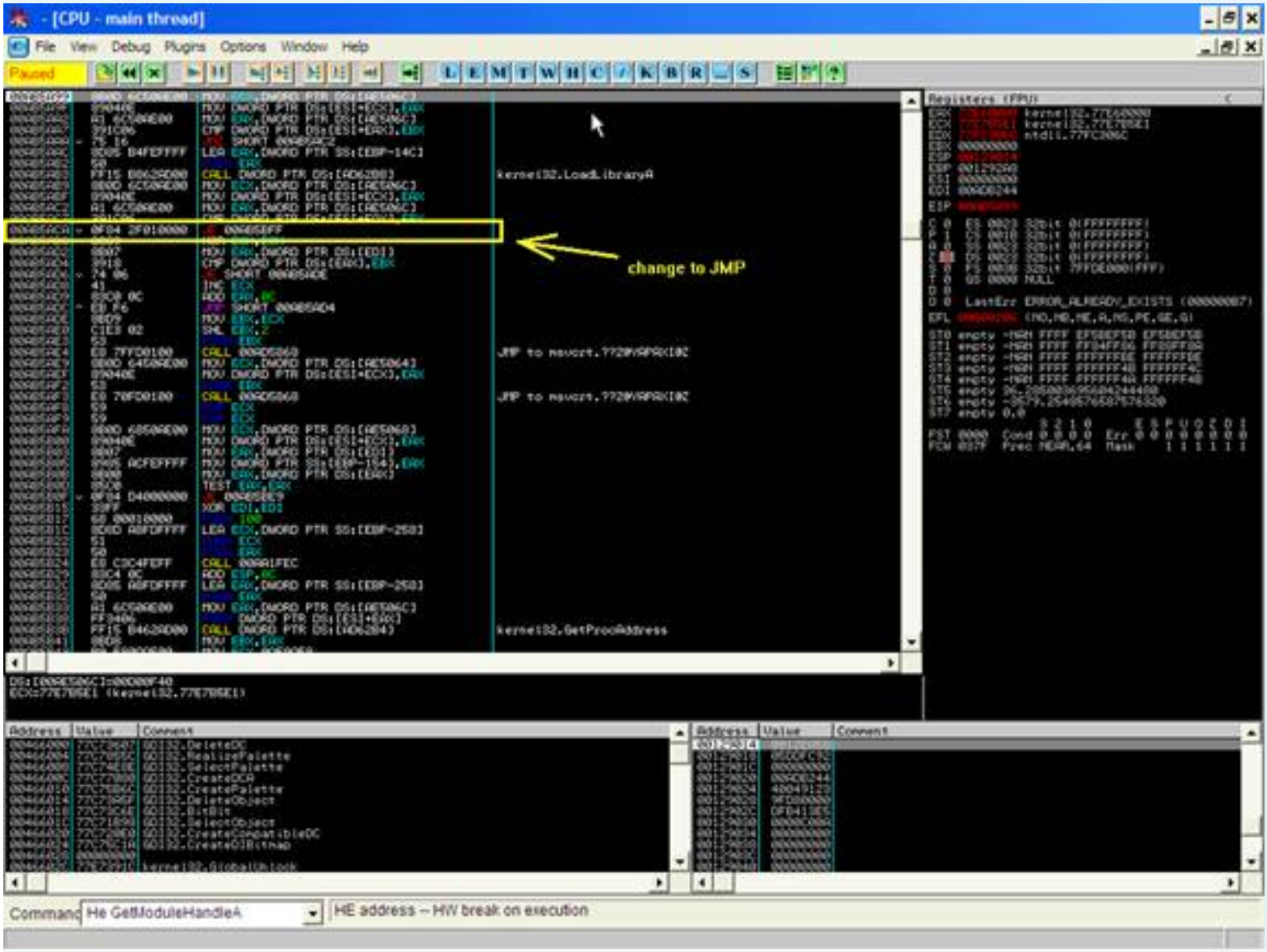


_ As the authors say, the following steps on the patch unpack as usual for the standard. Here are the steps of the child:

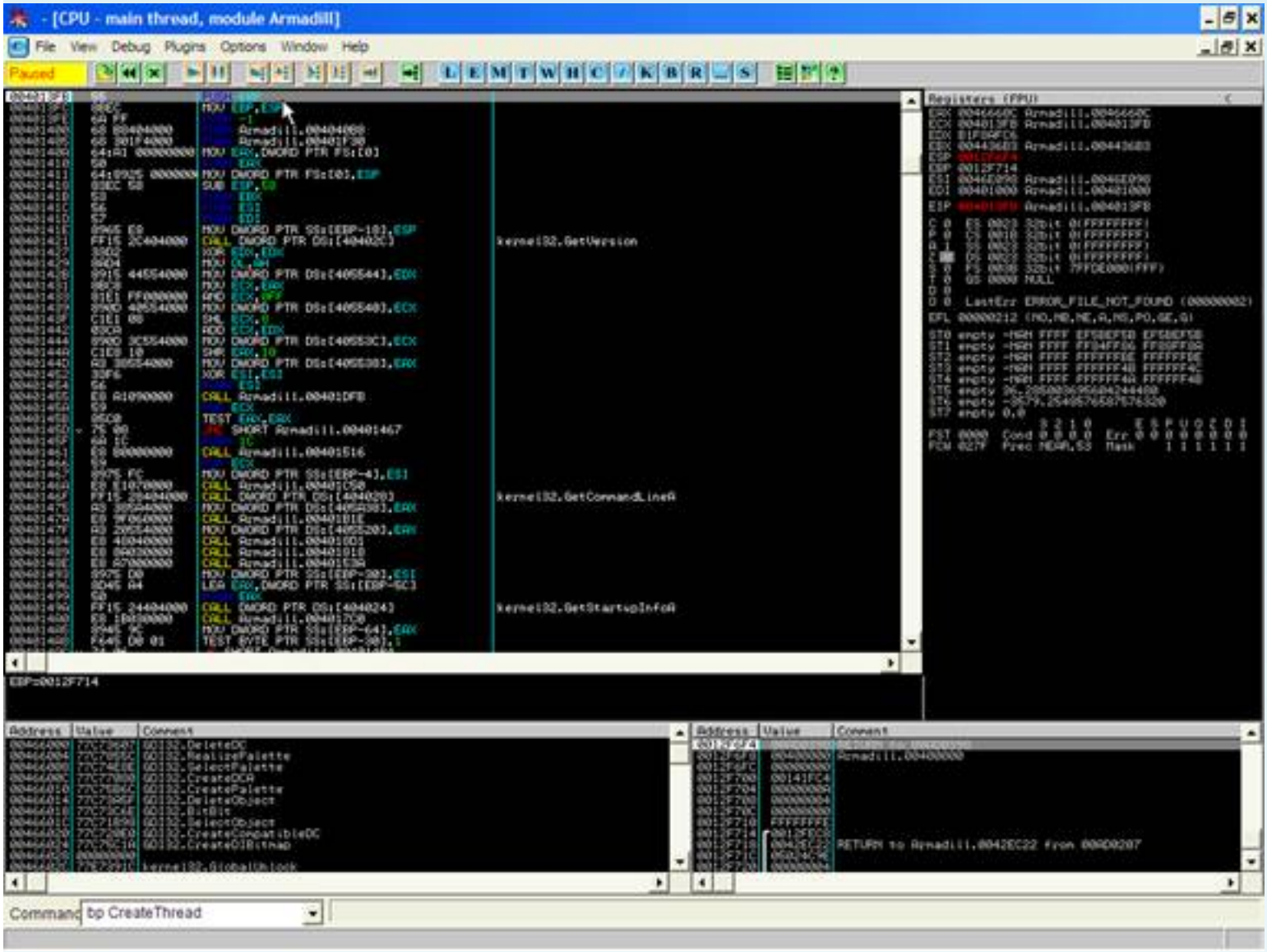
_ Load target of olly, BP OpenMutexA, F9, Alt + F9, F8, as the patch, the more F9, Alt + F9, F8, as the patch, BC OpenMutexA. She here:



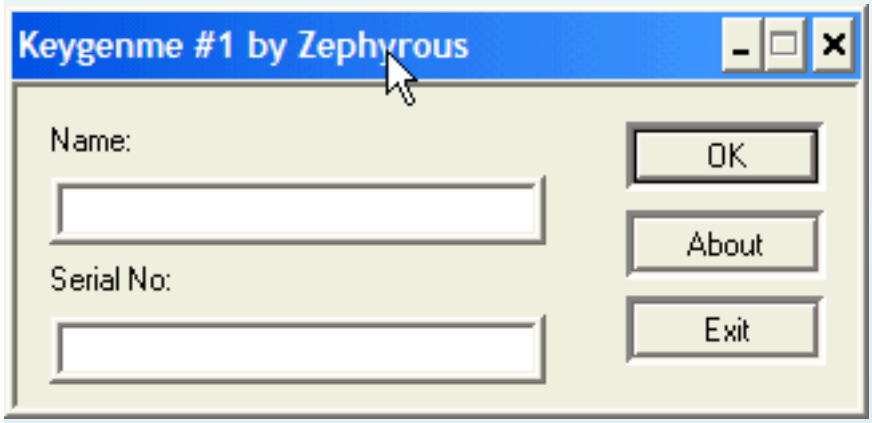
_ Now is the magic fix jump: F9, nag appear, click OK drilling, Olly invisible: He GetModuleHandleA, OK nag, olly break, Alt + F9:



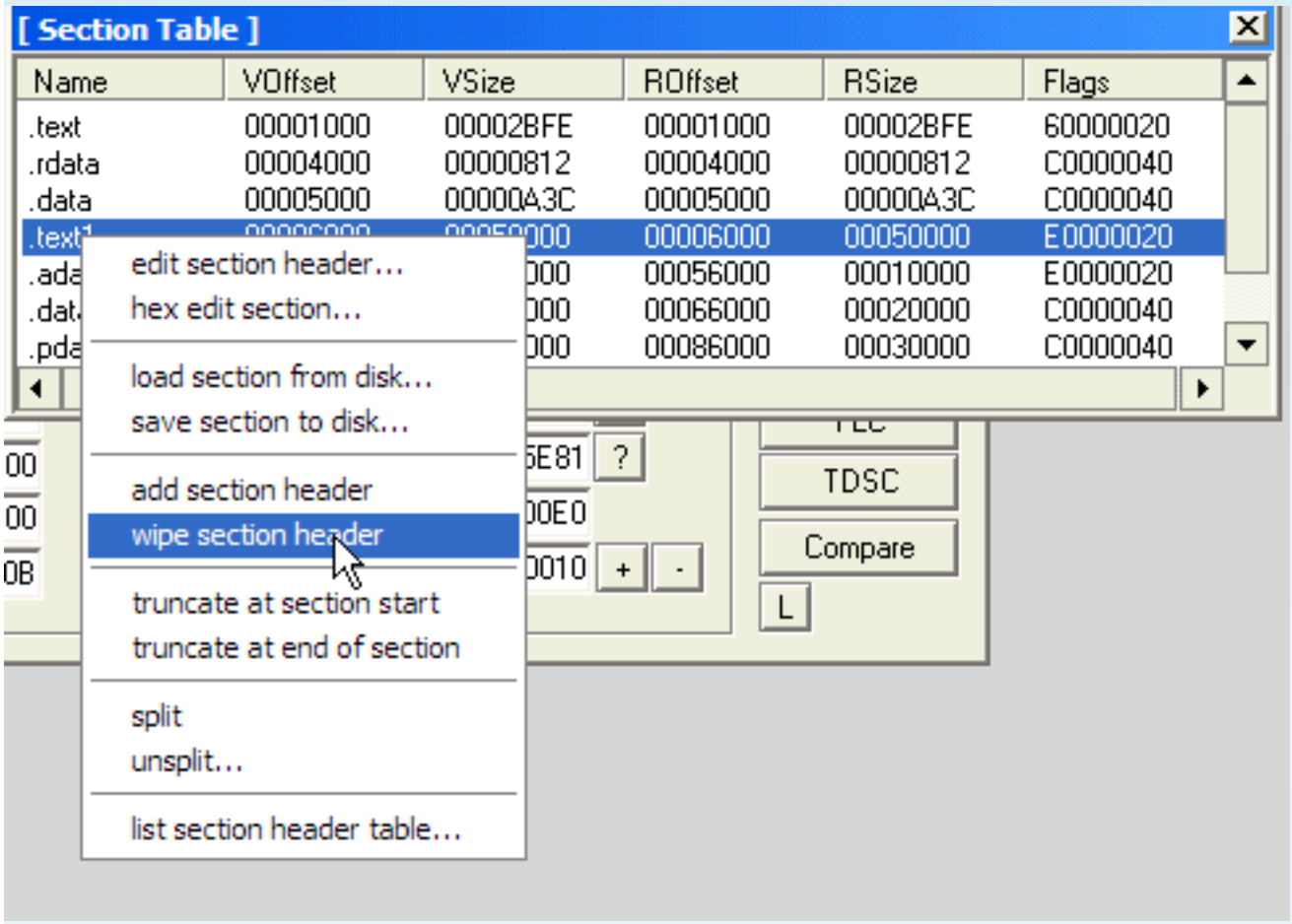
_ After patch magic jump: hd GetModuleHandleA, BP CreateThread, F9, olly break, Ctrl + F9, Ctrl + F9, set breakpoint in order ECX last call, F9, F7 -> OEP:



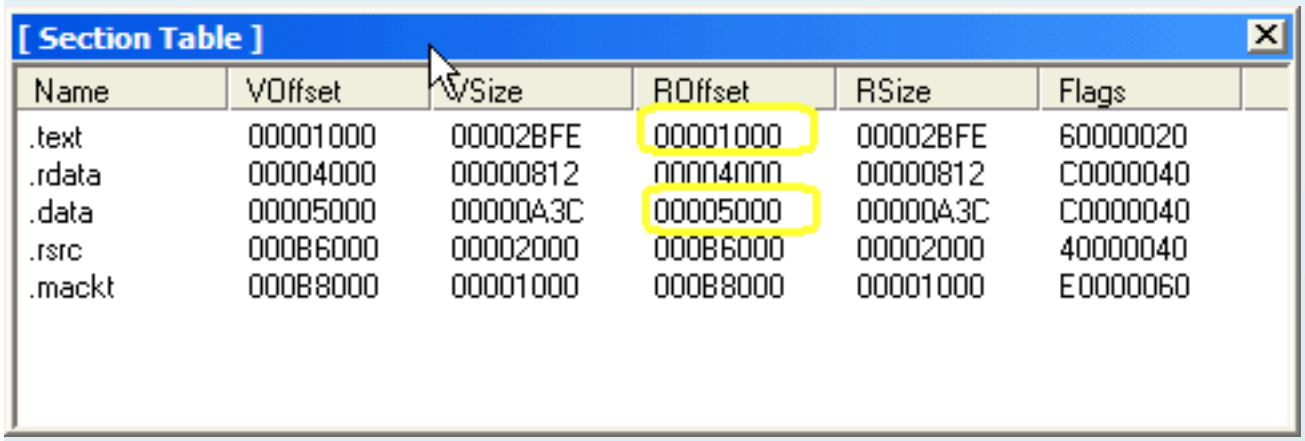
_Dump With lordPE, fix IAT with ImportREC, try running:



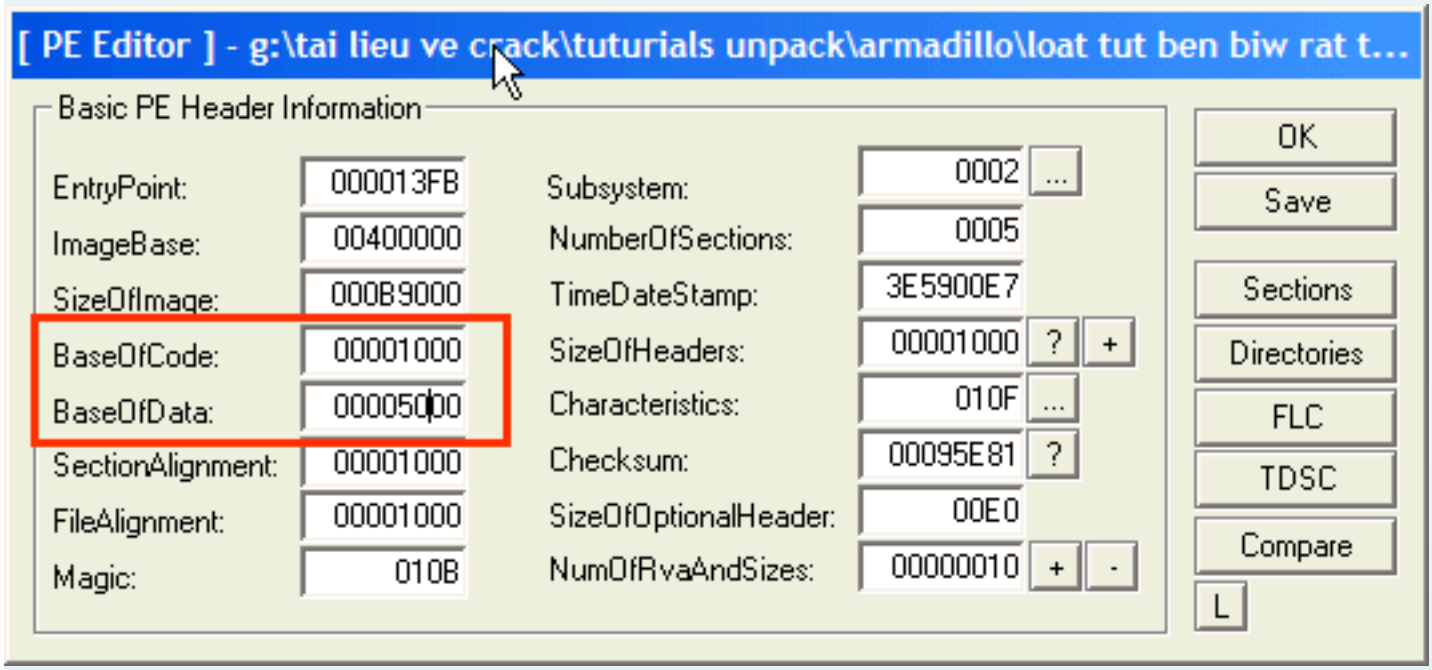
Ok, File dumped. Exe take 740 KB, we must reduce the size of it:
_load this invaluable PE file editor of lordPE => sections:



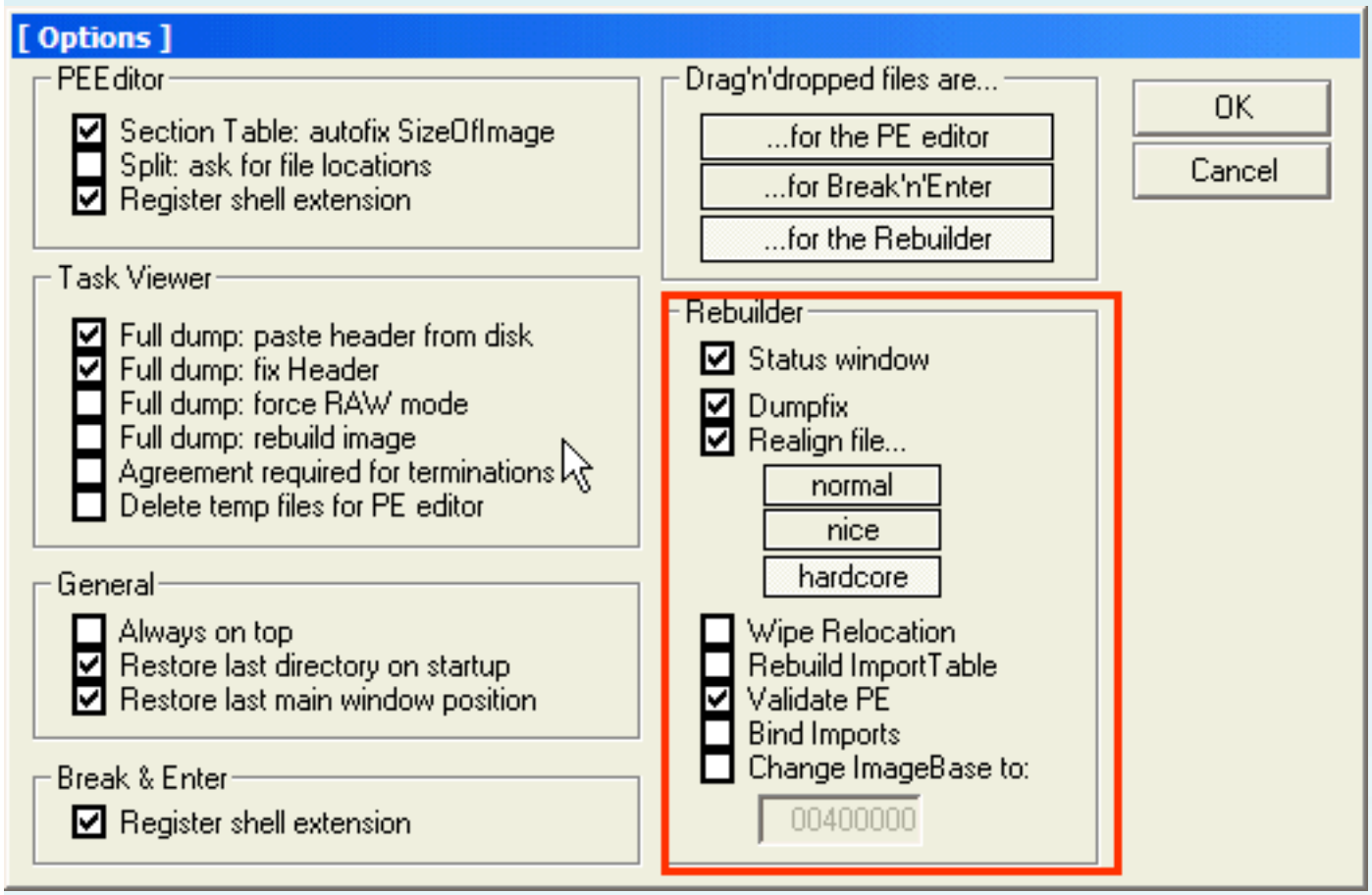
_Ta Turn wipe the section header section. Text1. ADATA. Data1. Pdata.



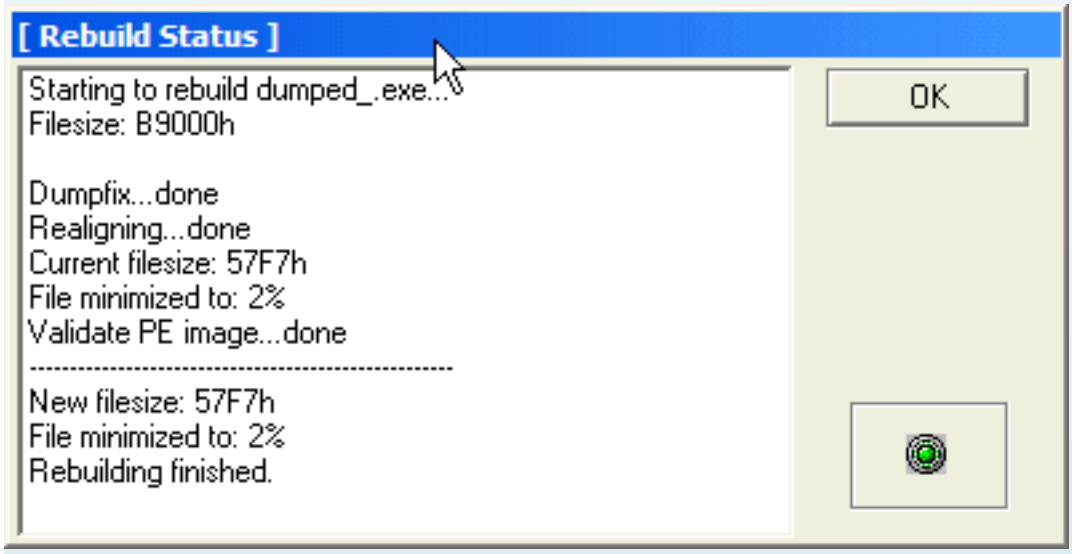
_Dong On the table since we know the value of code base and data base of:



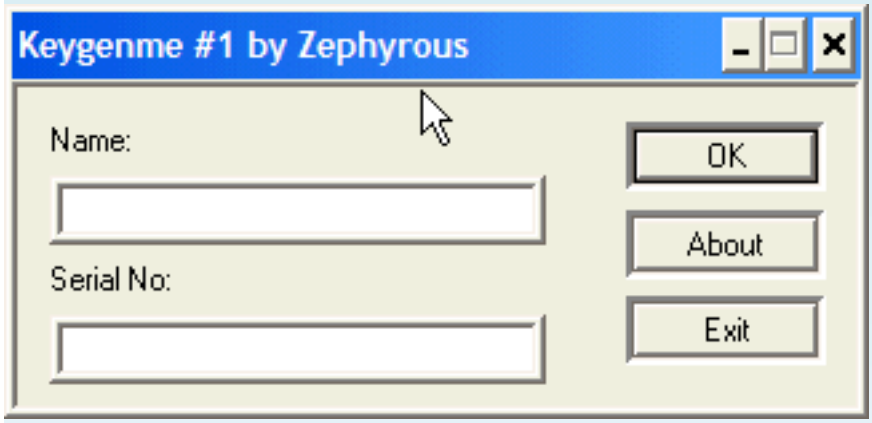
_Save, OK, and the option in lordPE:



_Rebuild PE:



_ File dumped_.exe now have more than 20KB, run test:



_Done

+ + + [Armadillo _CodeSplicing the French --- Ta (Evil)]+++ Method

- Welcome Newbie perimeter in REA and aged bay long now enthralled track series jewel "Armadillo - collect sand stone" of the hacnho about unpack Armadillo. Tut Through this series, many people have multiple Also search of new, filled with aged Available for joy, surprise, the man has become crazy wild trains by entering the code, they have special children when they were removing the chiêu Terminate. Wiuewi As we have time crying, are laughing at, happy sad confused, and even the mouse is always a dear in the strength of the throw it on the screen. (>..<)

- Now when Tàn per training programs to expand 7 (Tut7_exp) of the hacnho. Tàn Mo was crying 2 times already. Khóc first time after many nights that do not swallow the floating leg of this dish, even when Coding Workshop Polyphonic Wizard expiration of training, per Tàn also still not yet been any further steps. Buồn owner of Ah, what is sad when any one is the one to fail and leave behind a Target ridiculous insult ... embracing furniture expectation that Tàn per was wandering for days, not to know on that night, until at the Cuu wifeless About ...

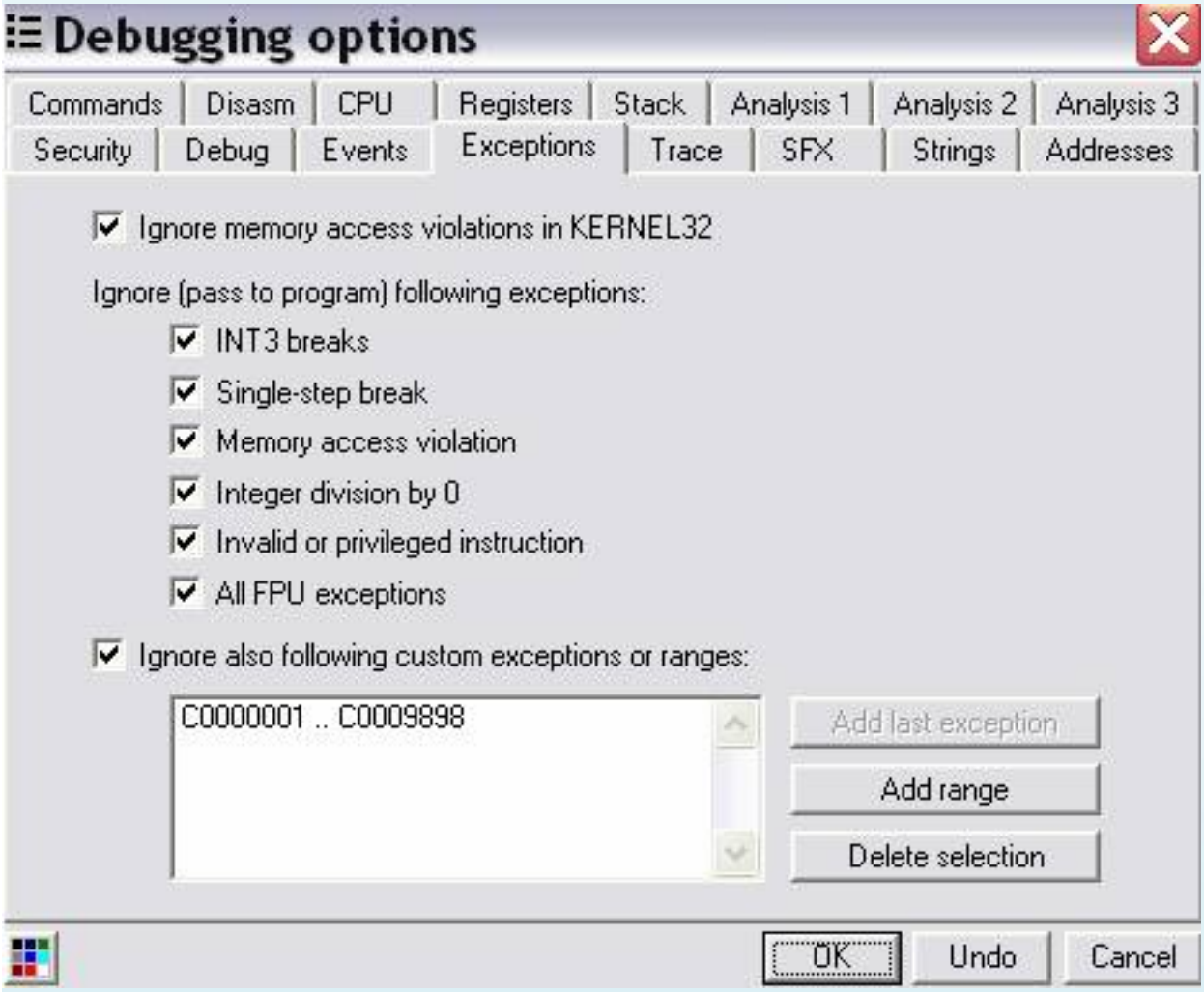
- Read stories interviews, per Tàn know where it is red, but in the beginning but now what Wiuewi we take every step to leg, oiiiiiii ... .. the landscape in front of a rainy night ... the whole disc is a CD the CD Hgame flight from agreeing on heaven, full color enough style, not the spirit of kip5 Tàn reopened see the hacnho flying on heaven, the airport has just kick search of 99 to four rival Hgame. Blood hot Tàn per person boil, open and kick your feet up, laos before the throat of search tools that help. enlist in the Crack NoCD Hgame is a way in red Earn Game Spirit Pho. But the image hacnho such as film, as in every way by Mo is just leave it, is, through the surf, surf through gently and leave on a per numerous search tectonics, that is not true of us 99. Then the drop in your voice with a cold smile cause "Khua ... Sub khua death, by the way quite yet, but no doors with Patch_Uncensored_Hgame 99 of our first. " Then a space hỗn Available, awareness Tàn per liem gradually ... ...

- Then Tàn per well bừng province, open to understand that if you follow any particular path is available as gradually losing the style of the open. And if you want miles on foot strike list, open to the ngộ something it really new. Finally Mo has Also, the real ngộ perimeter and then you, at this time was crying per second 2 ... Then, open back and a roof to live battlefield:

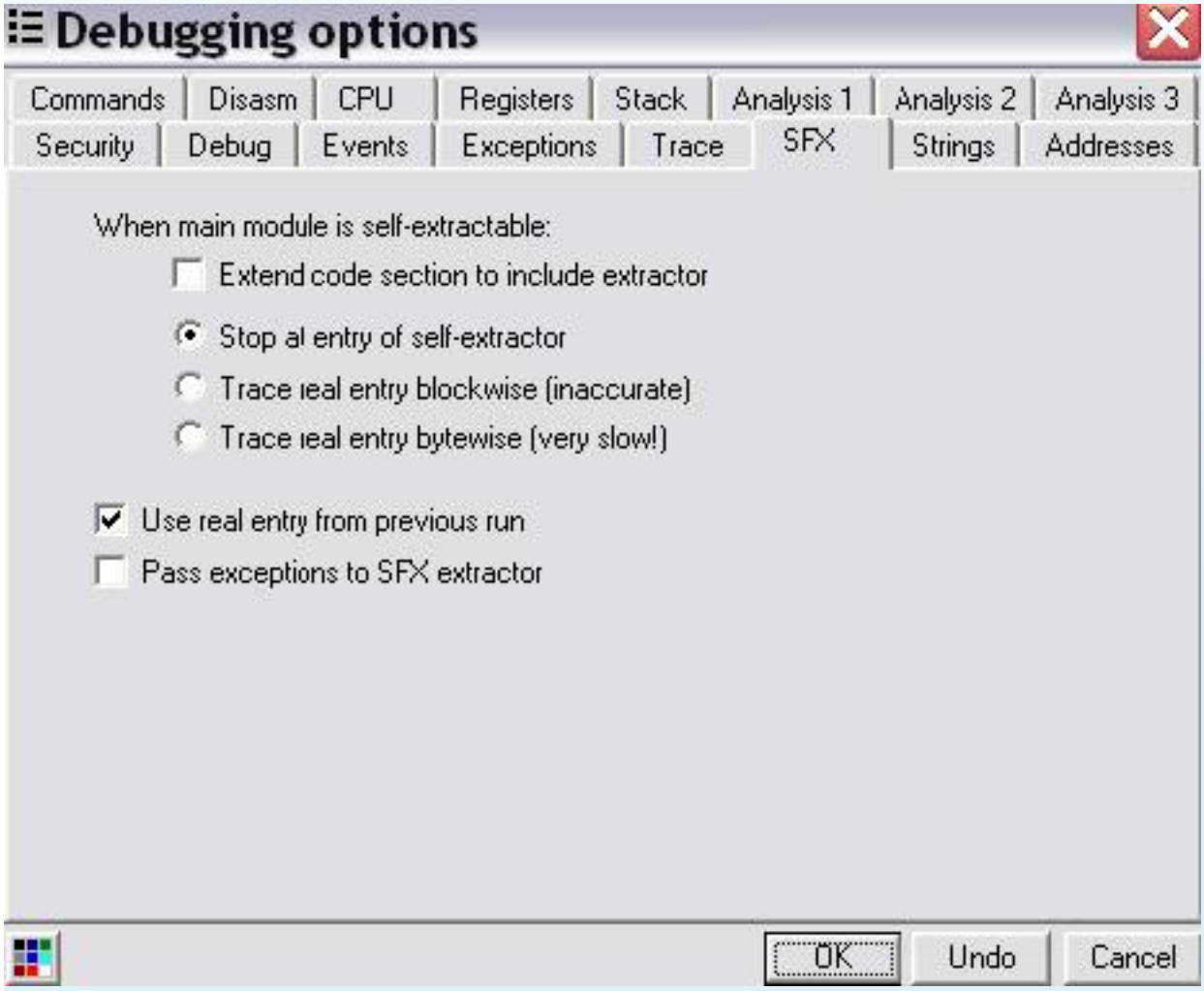
Coding Workshop Polyphonic Wizard

-Tools: OllyDbg 1:10, OllyDump plugin, Cmdbar, HideDebugger, ImportREC 1.6
-Protection: Armadillo 4.x.x_CodeSplicing

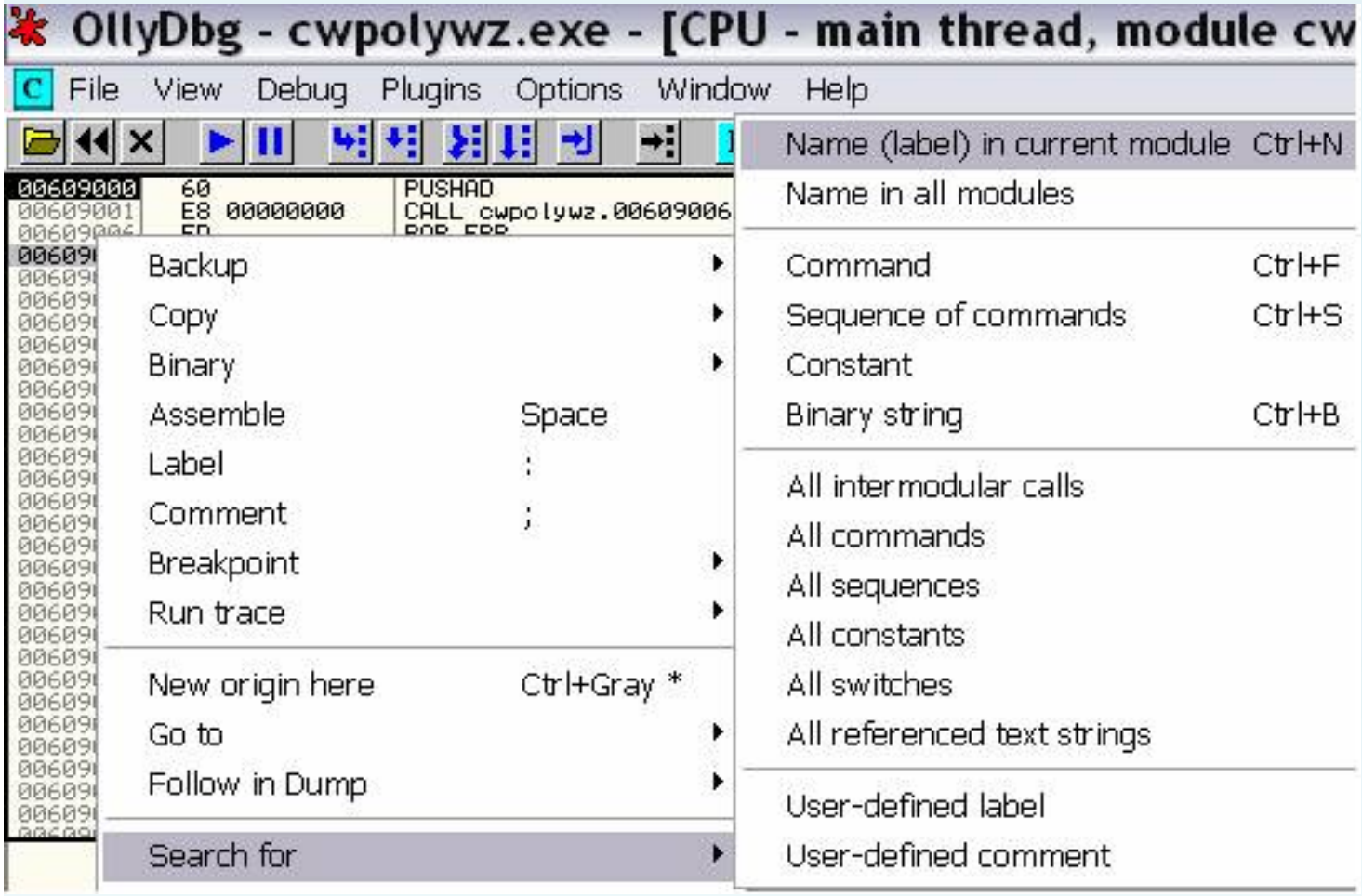
- Exceptions to entry / Option in Olly such nè:



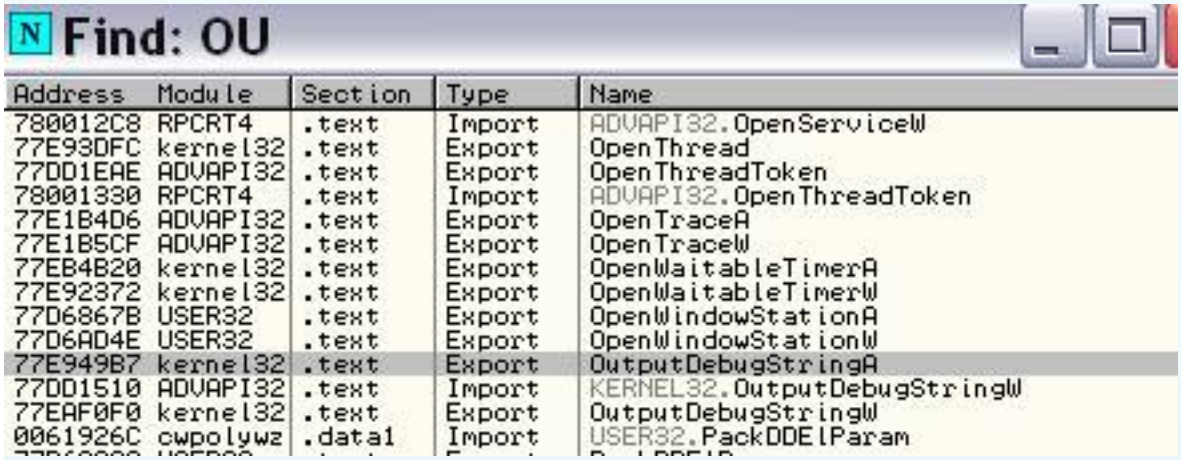
- And that SFX (Trace it to the fast), all as a normal standard Olly.



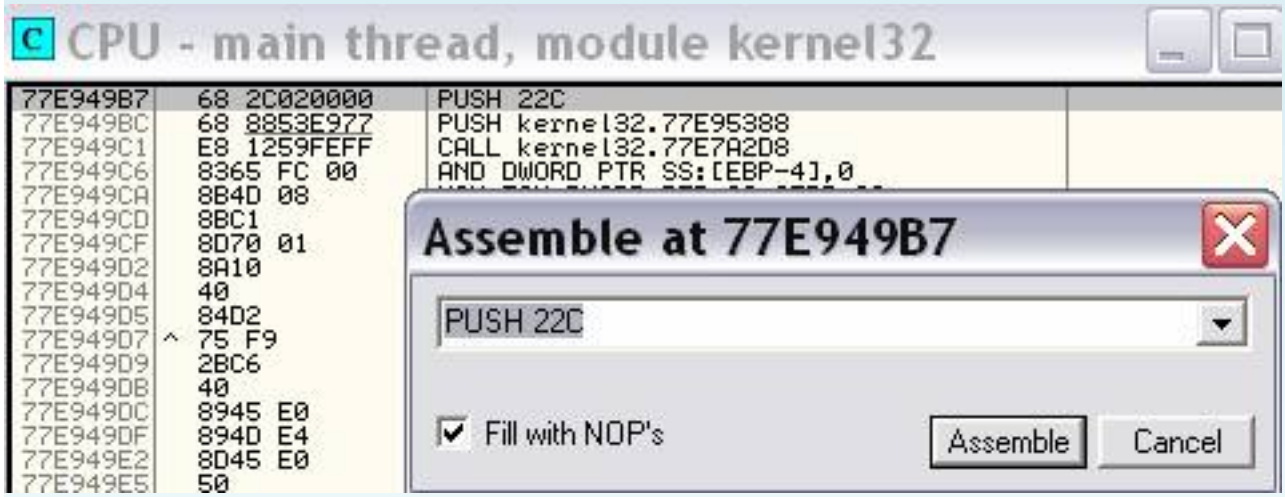
- Break the perimeter of the Armadillo please use more plugin *HideDebugger* home. Besides more Plugin *Cmdbar* or *Cmdline* as possible.
- Load the target time to time, zeo zeo zeo. The need to do before with soft pack with Armadillo is treated aged *OutputDebugStringA* ago (when i need more). Click to Search for ---- Name in all modules:



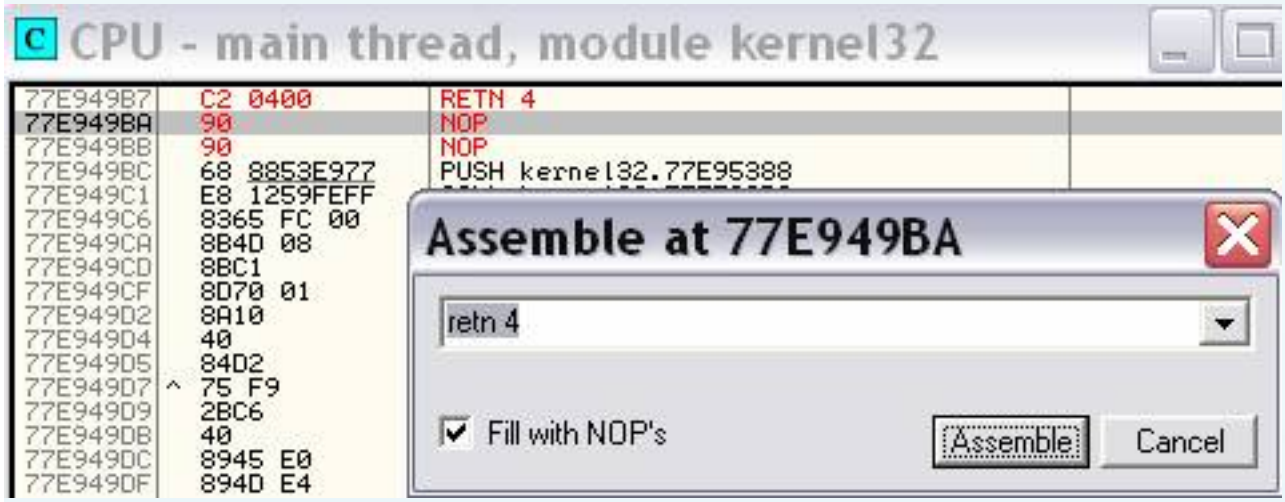
- Type O and U, to:



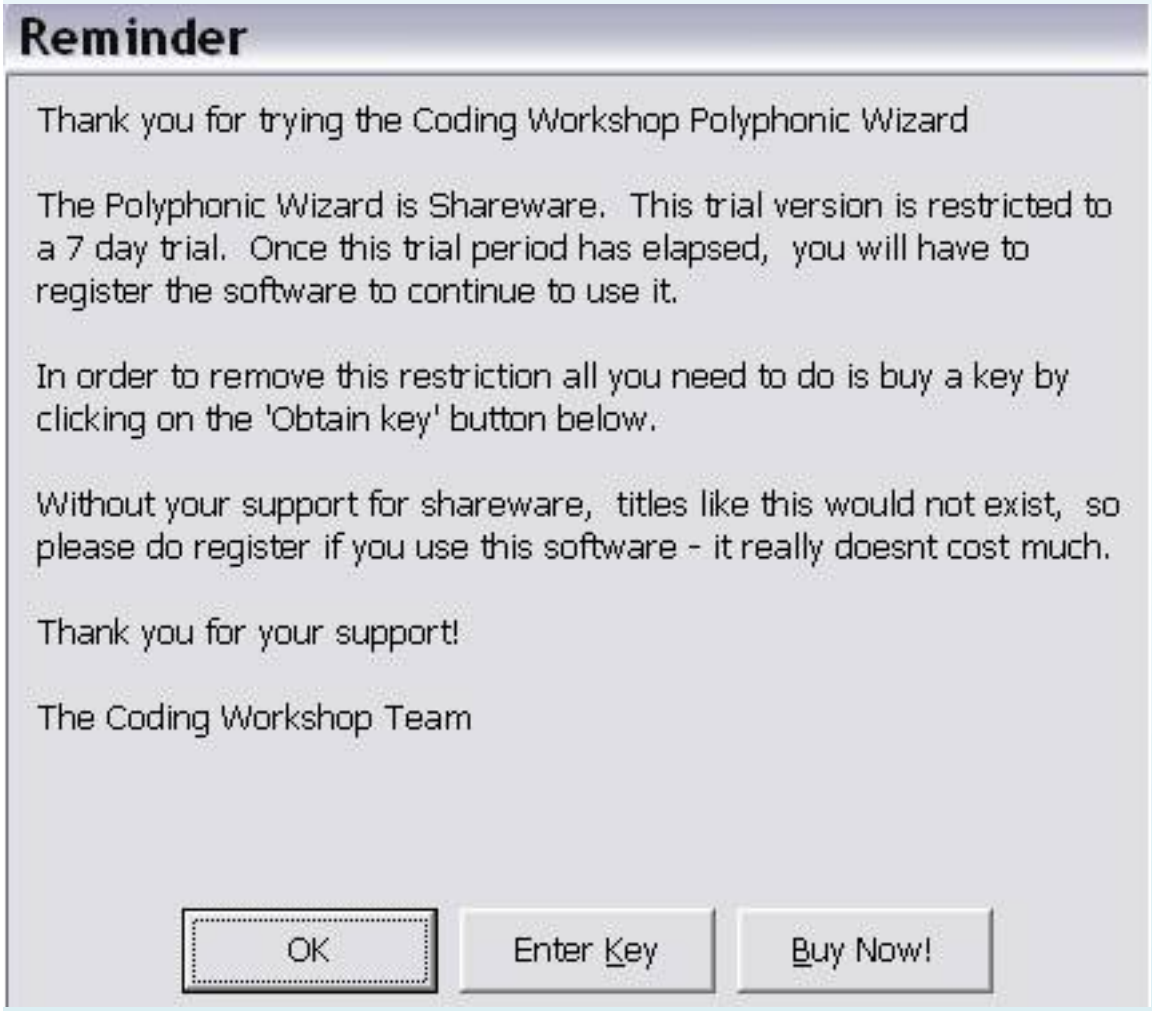
- Enter or double click on the patch:



- City:



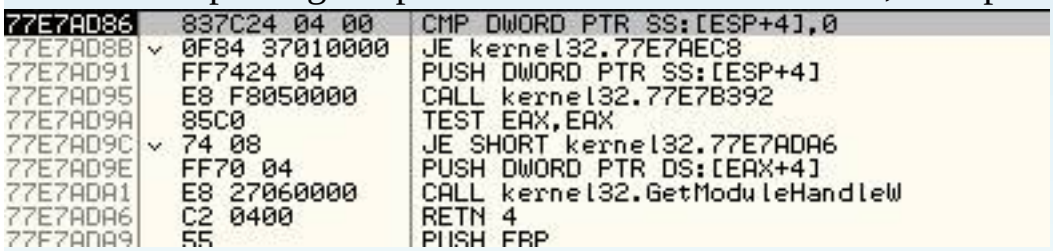
- Now is the right of BP OpenMutexA ---> patch tum lum then he GetModuleHandleA ---> Shift-F9 tum lum. How is the due Tàn adipose on the filing, but do not understand it any cruise (whether P4 1.4Ghz). Be Open for Shift-F9 (or F9) to target it to run.
- OA .. bust a way of such bu:



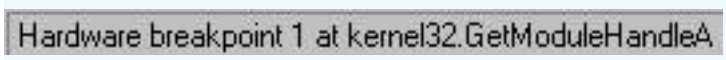
- Rub, at this dose per building, so before pressing OK GetModuleHandleA then he must be put down, but how soft the mound again for re re, click OK to Hồng. Tàn Open to the framework is that the bottom is Olly window is working. Mo hit a play on the OK button and then use it Lang Three of fast quick jump through the window click Olly, press F12 now. Soft stop of a time ko né. Open type of cancer he GetModuleHandleA to Enter *Cmdbar* à :

(as if this way they do is just follow the way of hacnho)

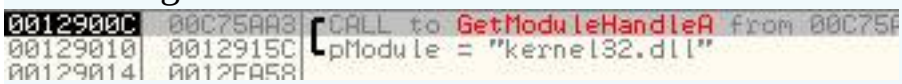
- Scenario repeating the perimeter and we Shift-F9 one, it stops at:



- Look down:

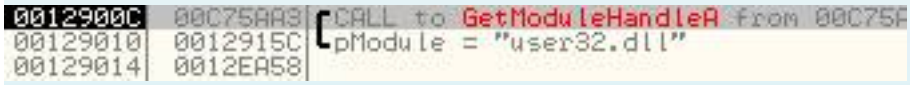


See-through:



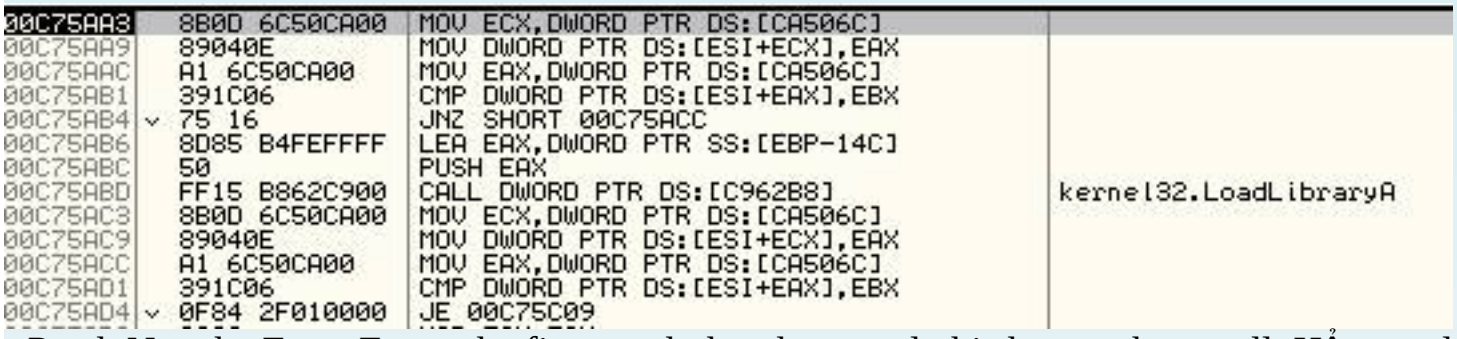
- Now, the key issue lies here. Under the right scenario we must command *RETN* Trace through

the bottom and then in, find *cú kì jump Dieu (Magic Jump) JE* and *JMP* patch to correct? But in listening nè, text you ever try to trace, then press Shift-F9, then trace back to, press Shift-F9, trace back to. ... so this is the time for us to go through what he kì What I jumped a few times . But when we patch *JE JMP* is *t h a t* has changed the structure of the program too much, easily lead to the integration OverFlow.Thuc we just jumped at it once it does it. Now perimeter Trace is in the Mo àh like quay. Continue on the steps, time press Shift-F9 a more elementary parents to see this *"user32.dll":*



- Then, press Ctrl-F9 to RETN:

- F8 (or F7) in one:



- Patch Now ha From From, the first patch that they aged, this has per hour call, Hổng understand them. Every Trace F8 from jumping down to his kì that:

See-through FPU nè:

```
EAX 00ED3BC8
ECX 00ED3BC8
EDX 77FC306C ntdll.77FC306C
EBX 00000000
ESP 00129014
EBP 001292A8
ESI 00000004
EDI 00C9B250
EIP 00C75AD4

C 0  ES 0023 32bit 0(FFFFFFFF)
P 1  CS 001B 32bit 0(FFFFFFFF)
A 0  SS 0023 32bit 0(FFFFFFFF)
Z 0  DS 0023 32bit 0(FFFFFFFF)
S 0  FS 003B 32bit 7FFDE000(FFF)
T 0  GS 0000 NULL
D 0
O 0  LastErr ERROR_PROC_NOT_FOUN
```

Z= 0 change to 1

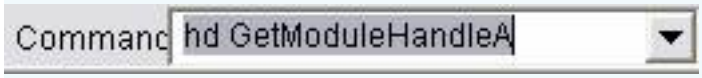
Co-Z is 0. Demonstrated steps it will not dance. So they want to skip the first patch should do more, you double-click to enable this flag to 1:

```
C 0  ES 0023 32bit 0(FFFFFFFF)
P 1  CS 001B 32bit 0(FFFFFFFF)
A 0  SS 0023 32bit 0(FFFFFFFF)
Z 1  DS 0023 32bit 0(FFFFFFFF)
S 0  FS 003B 32bit 7FFDE000(FFF)
T 0  GS 0000 NULL
```

- Then try the F8 Trace considered, he jumped and then, still go ha:

```
00C75C09   83C7 0C          ADD EDI,0C
00C75C0C   89BD 78FDFFFF    MOV DWORD PTR SS:[EBP-288],EDI
00C75C12   83C6 04          ADD ESI,4
00C75C15   395F FC          CMP DWORD PTR DS:[EDI-4],EBX
00C75C18 ^ 0F85 49FEFFFF    JNZ 00C75A67
00C75C1E v EB 03            JMP SHORT 00C75C23
00C75C20   D6               SALC
00C75C21   D6               SALC
00C75C22   8F               ???                          Unknown command
00C75C23   8B0D 249FCA00    MOV ECX,DWORD PTR DS:[CA9F24]
00C75C29   3BCB             CMP ECX,EBX
00C75C2B v 74 13            JE SHORT 00C75C40
00C75C2D   8B01             MOV EAX,DWORD PTR DS:[ECX]
```

- Now GetModuleHandleA all the known benefits for retired GetModuleHandleA HD:



- Whether it a new salt is salt, he VirtualAlloc:

- Shift-F9 any time 1:

```
77E7AC72   55               PUSH EBP
77E7AC73   8BEC             MOV EBP,ESP
77E7AC75   FF75 14          PUSH DWORD PTR SS:[EBP+14]
77E7AC78   FF75 10          PUSH DWORD PTR SS:[EBP+10]
77E7AC7B   FF75 0C          PUSH DWORD PTR SS:[EBP+C]
77E7AC7E   FF75 08          PUSH DWORD PTR SS:[EBP+8]
77E7AC81   6A FF            PUSH -1
77E7AC83   E8 9CFFFFFF      CALL kernel32.VirtualAllocEx
77E7AC88   5D               POP EBP
77E7AC89   C2 1000          RETN 10
```

- Alt-F9 times 1:

```
73421D07   8BF0             MOV ESI,EAX
73421D09   85F6             TEST ESI,ESI
73421D0B v 0F84 C5700400    JE 73468DD6
73421D11   6A 04            PUSH 4
73421D13   68 00100000      PUSH 1000
73421D18   68 00000100      PUSH 10000
73421D1D   56               PUSH ESI
73421D1E   FFD7             CALL EDI
```

- Shift-F9 times 2:

```
77E7AC72   55              PUSH EBP
77E7AC73   8BEC            MOV EBP,ESP
77E7AC75   FF75 14         PUSH DWORD PTR SS:[EBP+14]
77E7AC78   FF75 10         PUSH DWORD PTR SS:[EBP+10]
77E7AC7B   FF75 0C         PUSH DWORD PTR SS:[EBP+C]
77E7AC7E   FF75 08         PUSH DWORD PTR SS:[EBP+8]
77E7AC81   6A FF           PUSH -1
77E7AC83   E8 9CFFFFFF     CALL kernel32.VirtualAllocEx
77E7AC88   5D              POP EBP
77E7AC89   C2 1000         RETN 10
```

Alt-F9-time 2:

```
73421D20   85C0            TEST EAX,EAX
73421D22   0F84 A0700400   JE 73468DC8
73421D28   81FD 30B05273   CMP EBP,7352B030
73421D2E   0F85 74700400   JNZ 73468DA8
73421D34   A1 30B05273     MOV EAX,DWORD PTR DS:[7352B030]
73421D39   85C0            TEST EAX,EAX
73421D3B   0F84 49700400   JE 73468D8A
73421D41   A1 34B05273     MOV EAX,DWORD PTR DS:[7352B034]
73421D46   85C0            TEST EAX,EAX
73421D48   0F84 4B700400   JE 73468D99
```

- One Alt-F9 to see the same scenario can not, just too gòi the Shift-F9 times 3:

```
77E7AC72   55              PUSH EBP
77E7AC73   8BEC            MOV EBP,ESP
77E7AC75   FF75 14         PUSH DWORD PTR SS:[EBP+14]
77E7AC78   FF75 10         PUSH DWORD PTR SS:[EBP+10]
77E7AC7B   FF75 0C         PUSH DWORD PTR SS:[EBP+C]
77E7AC7E   FF75 08         PUSH DWORD PTR SS:[EBP+8]
77E7AC81   6A FF           PUSH -1
77E7AC83   E8 9CFFFFFF     CALL kernel32.VirtualAllocEx
77E7AC88   5D              POP EBP
77E7AC89   C2 1000         RETN 10
```

- Zun then home, Alt-F9 viewed 3 times, chaaa ... .. I got:

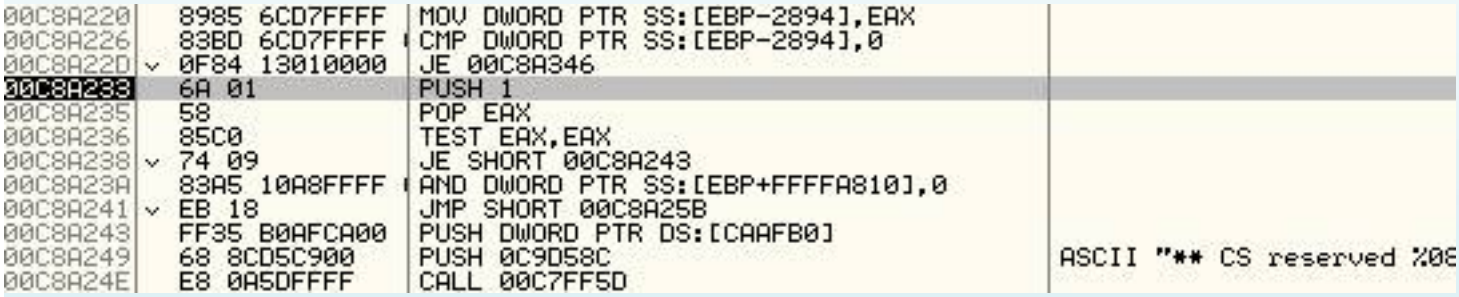
```
00C8A220   8985 6CD7FFFF   MOV DWORD PTR SS:[EBP-2894],EAX
00C8A226   83BD 6CD7FFFF   CMP DWORD PTR SS:[EBP-2894],0
00C8A22D   0F84 13010000   JE 00C8A346
00C8A233   6A 01           PUSH 1
00C8A235   58              POP EAX
00C8A236   85C0            TEST EAX,EAX
00C8A238   74 09           JE SHORT 00C8A243
00C8A23A   83A5 10A8FFFF   AND DWORD PTR SS:[EBP+FFFFA810],0
00C8A241   EB 18           JMP SHORT 00C8A25B
00C8A243   FF35 B0AFCA00   PUSH DWORD PTR DS:[CAAFB0]
00C8A249   68 8CD5C900     PUSH 0C9D58C                    ASCII "** CS reserved %08
00C8A24E   E8 0A5DFFFF     CALL 00C7FF5D
00C8A253   59              POP ECX
00C8A254   59              POP ECX
00C8A255   8985 10A8FFFF   MOV DWORD PTR SS:[EBP+FFFFA810],EAX
00C8A25B   6A 40           PUSH 40
00C8A25D   68 00100000     PUSH 1000
00C8A262   FFB5 64D7FFFF   PUSH DWORD PTR SS:[EBP-289C]
00C8A268   FF35 B0AFCA00   PUSH DWORD PTR DS:[CAAFB0]
00C8A26E   FF15 8C61C900   CALL DWORD PTR DS:[C9618C]      kernel32.VirtualAlloc
00C8A274   8985 6CD7FFFF   MOV DWORD PTR SS:[EBP-2894],EAX
00C8A27A   83BD 6CD7FFFF   CMP DWORD PTR SS:[EBP-2894],0
00C8A281   0F84 9C000000   JE 00C8A323
```

- Calm, open break was crying because this place nè, hours perimeter Trace F8 to play two here:

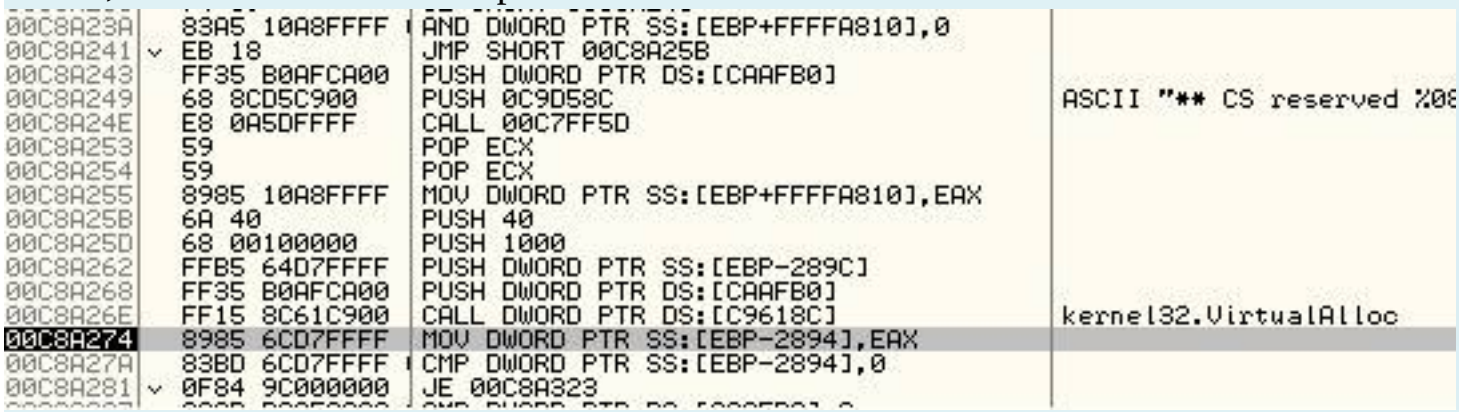
```
00C8A220   8985 6CD7FFFF   MOV DWORD PTR SS:[EBP-2894],EAX
00C8A226   83BD 6CD7FFFF   CMP DWORD PTR SS:[EBP-2894],0
00C8A22D   0F84 13010000   JE 00C8A346
00C8A233   6A 01           PUSH 1
00C8A235   58              POP EAX
00C8A236   85C0            TEST EAX,EAX
00C8A238   74 09           JE SHORT 00C8A243
00C8A23A   83A5 10A8FFFF   AND DWORD PTR SS:[EBP+FFFFA810],0
00C8A241   EB 18           JMP SHORT 00C8A25B
00C8A243   FF35 B0AFCA00   PUSH DWORD PTR DS:[CAAFB0]
00C8A249   68 8CD5C900     PUSH 0C9D58C                    ASCII "** CS reserved %08
00C8A24E   E8 0A5DFFFF     CALL 00C7FF5D
```

- At this very tron or three, look through the Zero flag zum home:

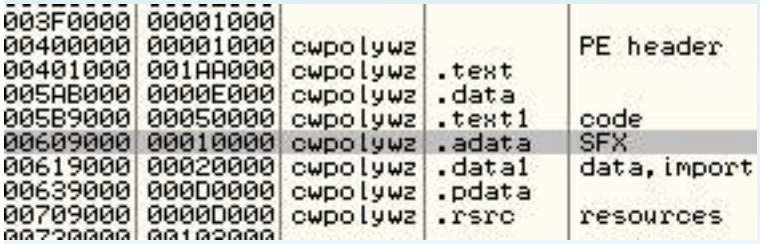
- When it switched on 1, time is not. And what we need is 0 (if not then we turn from 1 to 0). In steps of 0 per by pressing F8 should continue, it does not jump AAAAA bay, a happy 2 home *(where text can be Click to just below the leng JE, select New Origin also):*



- Now, more indifferent to the press:



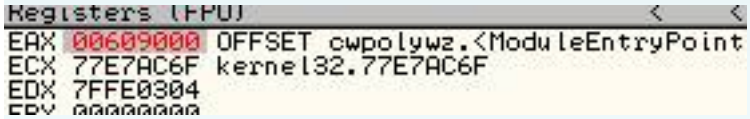
- Apply to any scenario, see the Alt-M seats. ADATA things, remember what má 609000:



- Then change the value in EAX home:

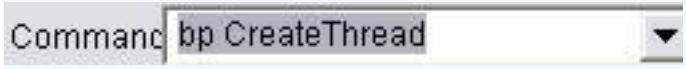
- City:

- It is OK:

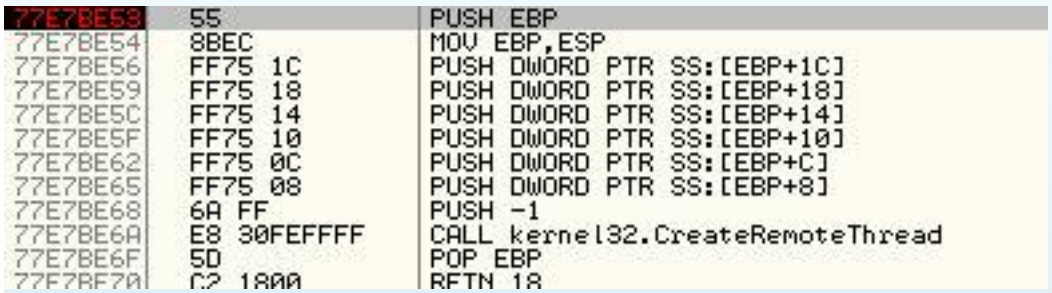


- A primary salt exit, hd VirtualAlloc *(relinquish, but parents do not níu)*

- A primary example is salt, BP CreateThread *(^ 0 ^) Ho Ho Ho Ho*



- Shift-F9 to some parents, while waiting for something more, he ... he ... it ... it stops ka, hú uuuuuuu ....:



- Scenario click Next, remember to remove Breakpoint, then Ctrl-F9:

```
77E7BE53   55              PUSH EBP
77E7BE54   8BEC            MOV EBP,ESP
77E7BE56   FF75 1C         PUSH DWORD PTR SS:[EBP+1C]
77E7BE59   FF75 18         PUSH DWORD PTR SS:[EBP+18]
77E7BE5C   FF75 14         PUSH DWORD PTR SS:[EBP+14]
77E7BE5F   FF75 10         PUSH DWORD PTR SS:[EBP+10]
77E7BE62   FF75 0C         PUSH DWORD PTR SS:[EBP+C]
77E7BE65   FF75 08         PUSH DWORD PTR SS:[EBP+8]
77E7BE68   6A FF           PUSH -1
77E7BE6A   E8 30FEFFFF     CALL kernel32.CreateRemoteThread
77E7BE6F   5D              POP EBP
77E7BE70   C2 1800         RETN 18
```

-F8 (or F7):

```
00C7BFF9   5F              POP EDI
00C7BFFA   5E              POP ESI
00C7BFFB   C9              LEAVE
00C7BFFC   C3              RETN
```

-Ctrl-F9:

```
00C7BFF9   5F              POP EDI
00C7BFFA   5E              POP ESI
00C7BFFB   C9              LEAVE
00C7BFFC   C3              RETN
```

-F8:

```
00C90358   59              POP ECX
00C90359   BF 580ACA00     MOV EDI,0CA0A58
00C9035E   8BCF            MOV ECX,EDI
00C90360   E8 9B7DFDFF     CALL 00C68100
00C90365   84C0            TEST AL,AL
00C90367   75 09           JNZ SHORT 00C90372
```

- Pull-down search *RETN* first, look up the nearest thằng *CALL, CALL* is *ECX,* set a Breakpoint:

```
00C90434   FFD1            CALL ECX
00C90436   8945 FC         MOV DWORD PTR SS:[EBP-4],EAX
00C90439   8B45 FC         MOV EAX,DWORD PTR SS:[EBP-4]
00C9043C   5F              POP EDI
00C9043D   5E              POP ESI
00C9043E   C9              LEAVE
00C9043F   C3              RETN
```

- Shift-F9, it stops at Breakpoint has just set, remove it to do, then F7 *(F7 remember)* to one. What's more beautiful than OEP. OEP is only the most beautiful in the history of ancient unpack from metal :

```
00409708   68 7C284200     PUSH cwpolywz.0042287C
00409711   E8 EEFFFFFF     CALL cwpolywz.00409704
00409716   0000            ADD BYTE PTR DS:[EAX],AL
00409718   0000            ADD BYTE PTR DS:[EAX],AL
0040971A   0000            ADD BYTE PTR DS:[EAX],AL
0040971C   3000            XOR BYTE PTR DS:[EAX],AL
0040971E   0000            ADD BYTE PTR DS:[EAX],AL
00409720   68 00000040     PUSH 40000000
00409725   0000            ADD BYTE PTR DS:[EAX],AL
00409727   0036            ADD BYTE PTR DS:[ESI],DH
```

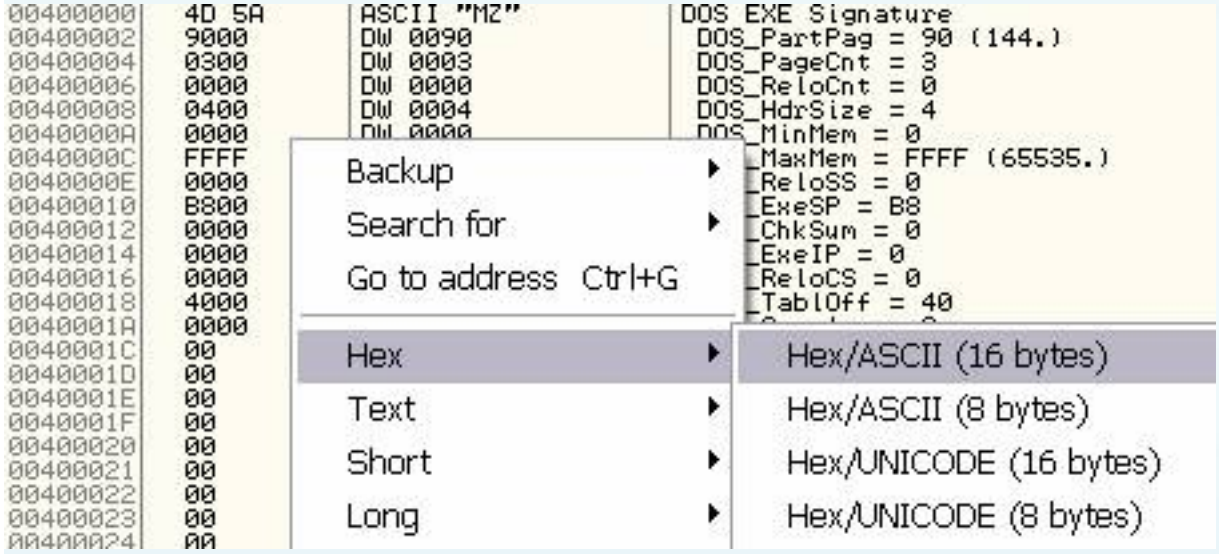
- I'm here Tàn per apologize perimeter home, in the machine's per-term use of the soft This is called the đành thằng through the fall in borrowing, in which it was crazy, run-PE Lord is natural to Close (run also the PEID) and much more crazy things, PE-Tool is run, but do not believe per month. Finally Tàn Open Contacts dump by the loss wholesale, used OllyDump Plugin and follow the traditional *fix PE Header.* Mo open Olly other one, to target Load, Alt-M date here:

```
00400000 00001000 cwpolywz                PE header  Imag R  RWE
00401000 001AA000 cwpolywz .text                     Imag R  RWE
005AB000 0000E000 cwpolywz .data                     Imag R  RWE
005B9000 00050000 cwpolywz .text1   code             Imag R  RWE
00609000 00010000 cwpolywz .adata   SFX              Imag R  RWE
00619000 00020000 cwpolywz .data1   data,import     Imag R  RWE
00639000 000D0000 cwpolywz .pdata                    Imag R  RWE
00709000 0000D000 cwpolywz .rsrc    resources        Imag R  RWE
```

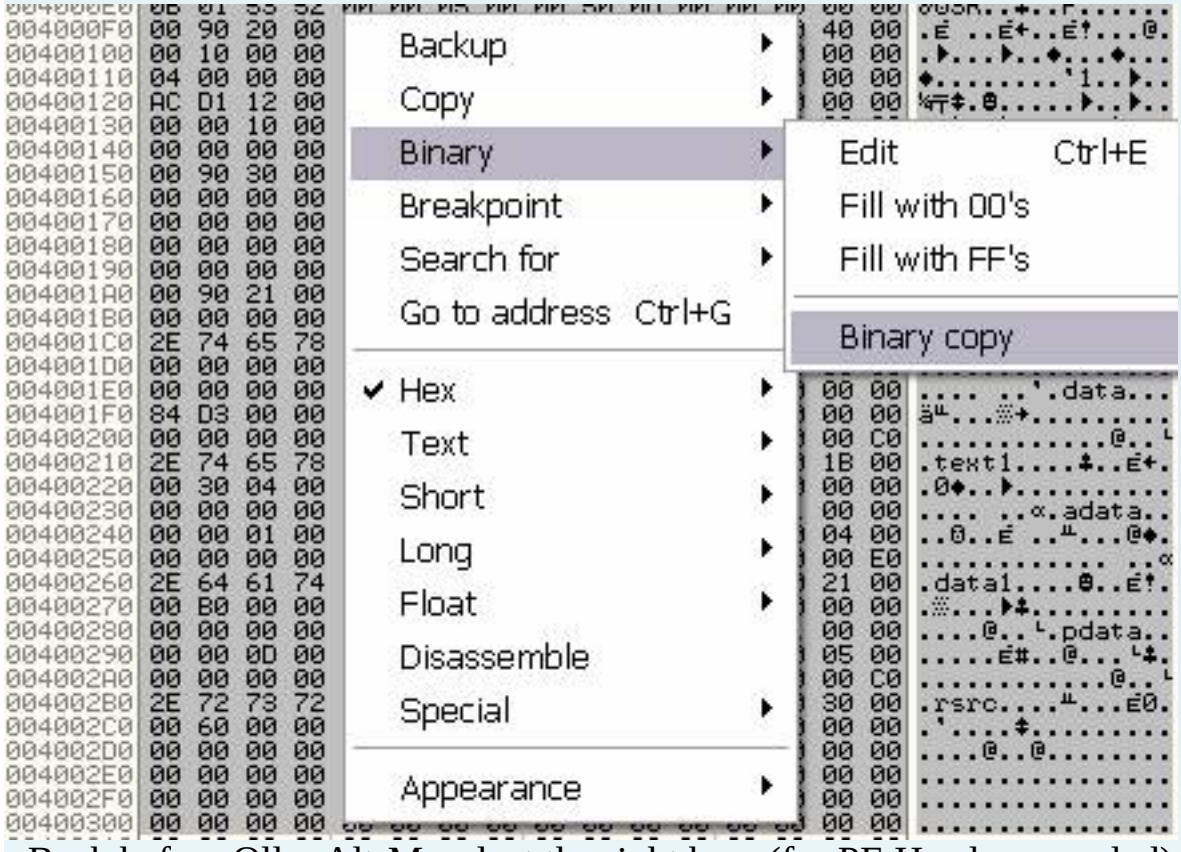
- Double-Click to see:

```
00400000   4D 5A      ASCII "MZ"      DOS EXE Signature
00400002   9000        DW 0090          DOS_PartPag = 90 (144.)
00400004   0300        DW 0003          DOS_PageCnt = 3
00400006   0000        DW 0000          DOS_ReloCnt = 0
00400008   0400        DW 0004          DOS_HdrSize = 4
0040000A   0000        DW 0000          DOS_MinMem = 0
0040000C   FFFF        DW FFFF          DOS_MaxMem = FFFF (65535.)
0040000E   0000        DW 0000          DOS_ReloSS = 0
00400010   B800        DW 00B8          DOS_ExeSP = B8
00400012   0000        DW 0000          DOS_ChkSum = 0
00400014   0000        DW 0000          DOS_ExeIP = 0
00400016   0000        DW 0000          DOS_ReloCS = 0
00400018   4000        DW 0040          DOS_TablOff = 40
0040001A   0000        DW 0000          DOS_Overlay = 0
0040001C   00          DB 00
```

- Click the right, select Hex à Hex / ASCII (16 bytes):



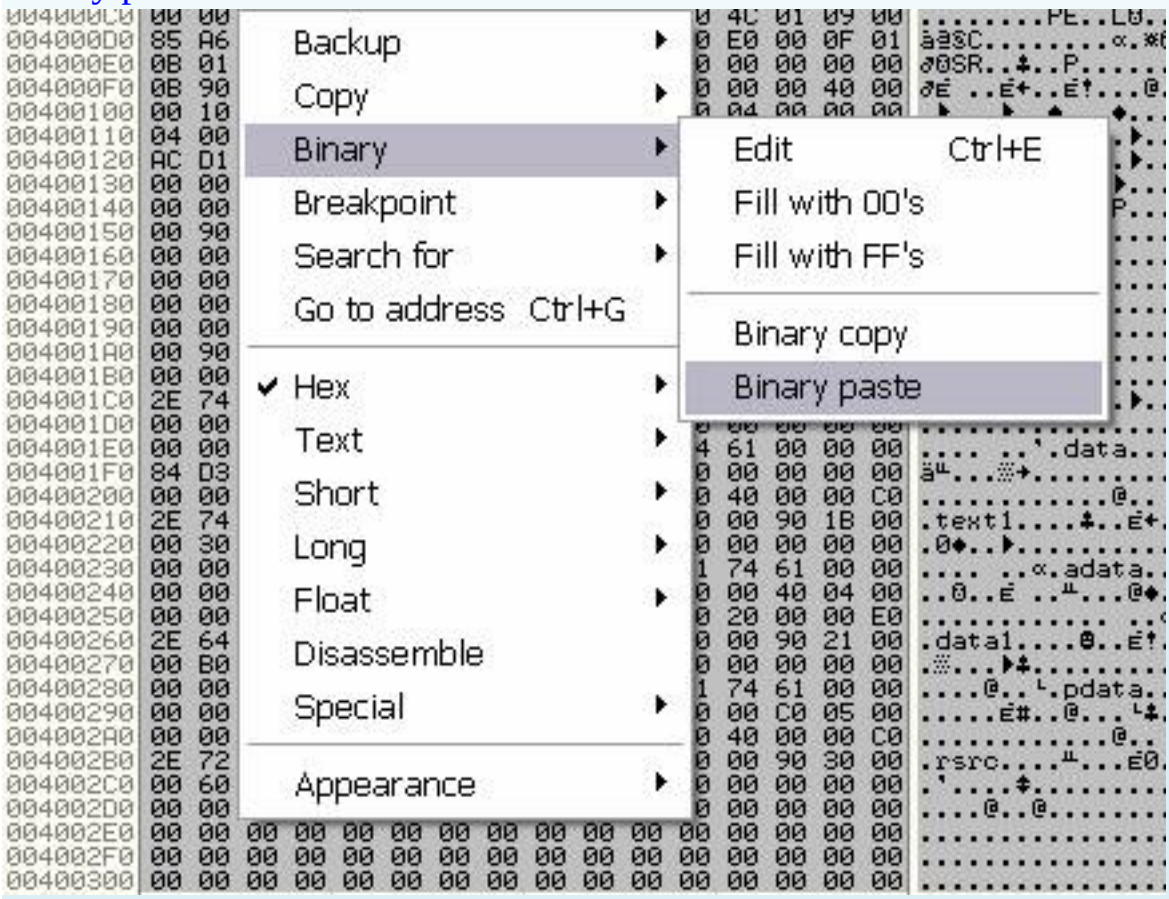
- Then Tàn motor from top to 400,300. It's the only word you choose the value only, where 400,300 to as much as it (from top to bottom also). Click to Binary Binary copy t h a t :



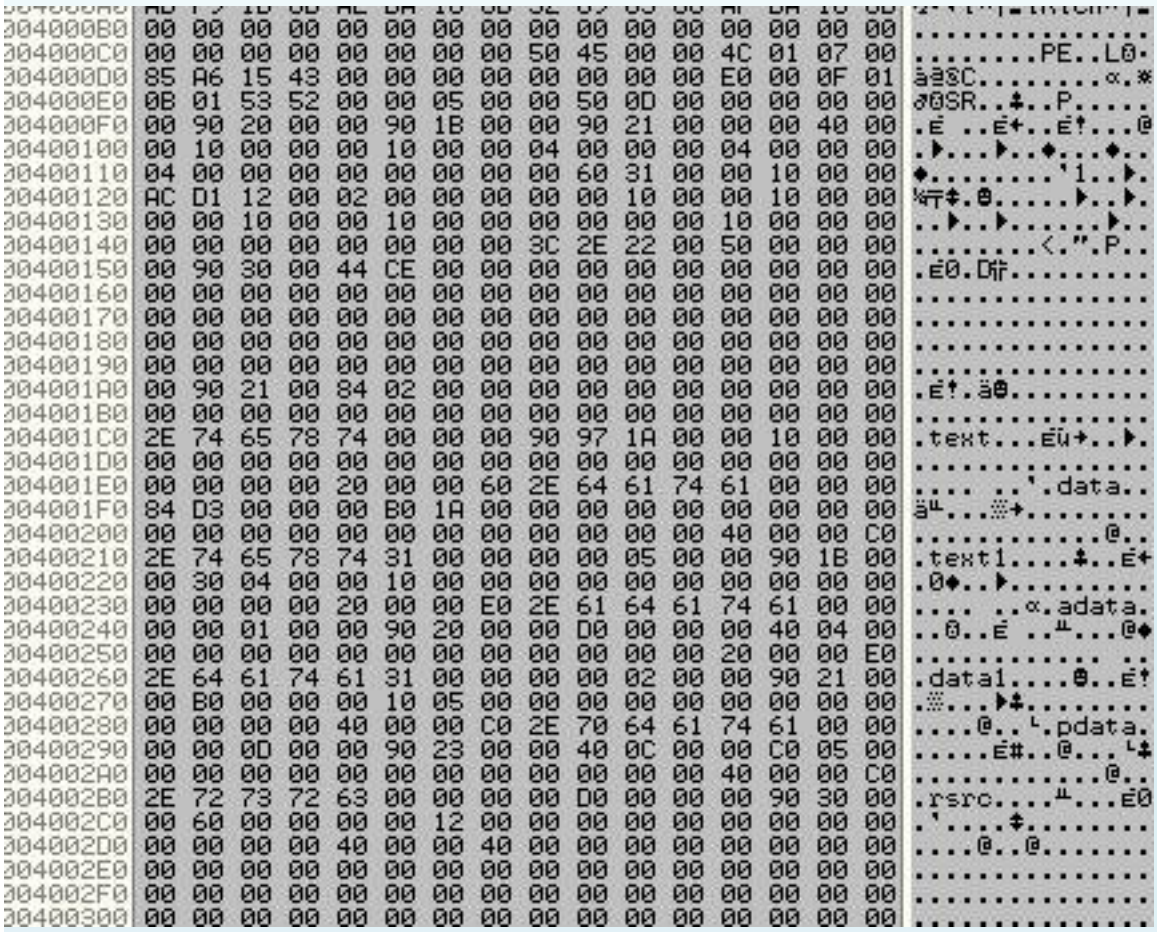
- Back before Olly, Alt-M, select the right here (for PE Header canceled):

00400000	00001000	cwpolywz			Imag	R	RWE
00401000	001AA000	cwpolywz	.text		Imag	R	RWE
005AB000	0000E000	cwpolywz	.data		Imag	R	RWE
005B9000	00050000	cwpolywz	.text1	code	Imag	R	RWE
00609000	00010000	cwpolywz	.adata	SFX	Imag	R	RWE
00619000	00020000	cwpolywz	.data1	data,import	Imag	R	RWE
00639000	000D0000	cwpolywz	.pdata		Imag	R	RWE
00709000	0000D000	cwpolywz	.rsrc	resources	Imag	R	RWE

- Double-Click, also from the first bowl to 400,300. Click the image to be, t h a t Binary Binary paste:

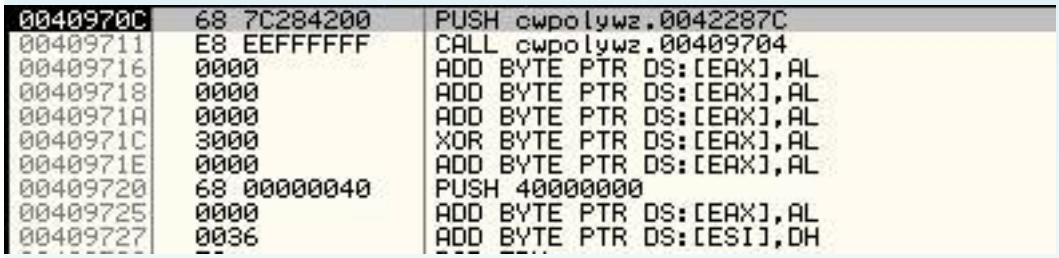


- Paste is completed *(closed Olly 2 called it):*



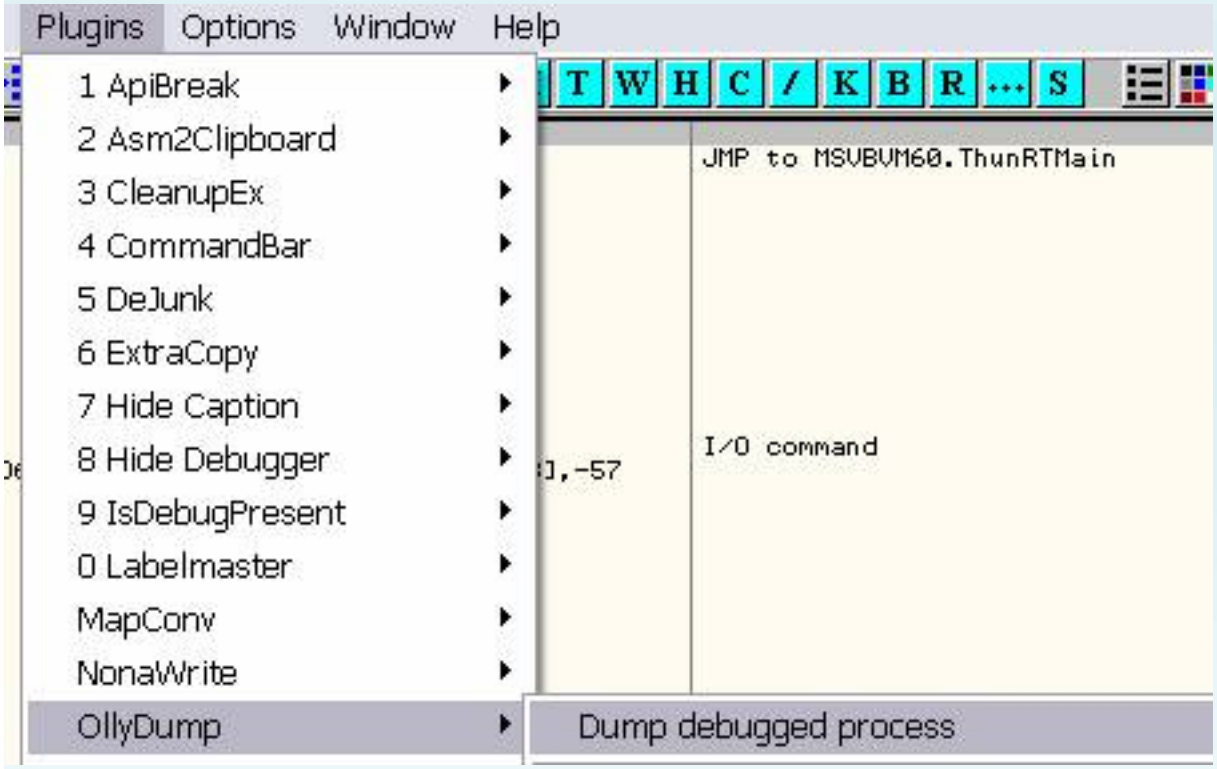
```
004000B0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
004000C0 00 00 00 00 00 00 00 00 50 45 00 00 4C 01 07 00 ........PE..L0·.
004000D0 85 A6 15 43 00 00 00 00 00 00 00 00 E0 00 0F 01 à¦§C........∝.*
004000E0 0B 01 53 52 00 00 05 00 00 50 0D 00 00 00 00 00 ♂0SR..♣..P.....
004000F0 00 90 20 00 00 90 1B 00 00 90 21 00 00 00 40 00 .É ..É←..É!...@.
00400100 00 10 00 00 00 10 00 00 04 00 00 00 04 00 00 00 .►...►..♦...♦...
00400110 04 00 00 00 00 00 00 00 00 60 31 00 00 10 00 00 ♦........`1..►.
00400120 AC D1 12 00 02 00 00 00 00 00 10 00 00 10 00 00 ¼╤↕.☻.....►..►.
00400130 00 00 10 00 00 10 00 00 00 00 00 00 10 00 00 00 ..►..►.....►...
00400140 00 00 00 00 00 00 00 00 3C 2E 22 00 50 00 00 00 ........<."·P...
00400150 00 90 30 00 44 CE 00 00 00 00 00 00 00 00 00 00 .É0.D╬..........
00400160 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00400170 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00400180 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00400190 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
004001A0 00 90 21 00 84 02 00 00 00 00 00 00 00 00 00 00 .É!.ä☻..........
004001B0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
004001C0 2E 74 65 78 74 00 00 00 90 97 1A 00 00 10 00 00 .text...Éù→..►.
004001D0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
004001E0 00 00 00 00 20 00 00 60 2E 64 61 74 61 00 00 00 .... ..`.data...
004001F0 84 D3 00 00 00 B0 1A 00 00 00 00 00 00 00 00 00 ä╙...▒→........
00400200 00 00 00 00 00 00 00 00 00 00 00 00 40 00 00 C0 ............@..└
00400210 2E 74 65 78 74 31 00 00 00 00 05 00 00 90 1B 00 .text1.....♣..É←.
00400220 00 30 04 00 00 10 00 00 00 00 00 00 00 00 00 00 .0♦..►.........
00400230 00 00 00 00 20 00 00 E0 2E 61 64 61 74 61 00 00 .... ..∝.adata..
00400240 00 00 01 00 00 90 20 00 00 D0 00 00 00 40 04 00 ..☺..É ..╨...@♦.
00400250 00 00 00 00 00 00 00 00 00 00 00 00 20 00 00 E0 ............ ..∝
00400260 2E 64 61 74 61 31 00 00 00 00 02 00 00 90 21 00 .data1....☻..É!.
00400270 00 B0 00 00 00 10 05 00 00 00 00 00 00 00 00 00 .▒...►♣.........
00400280 00 00 00 00 40 00 00 C0 2E 70 64 61 74 61 00 00 ....@..└.pdata..
00400290 00 00 0D 00 00 90 23 00 00 40 0C 00 00 C0 05 00 .....É#..@...└♣.
004002A0 00 00 00 00 00 00 00 00 00 00 00 00 40 00 00 C0 ............@..└
004002B0 2E 72 73 72 63 00 00 00 00 D0 00 00 00 90 30 00 .rsrc....╨...É0.
004002C0 00 60 00 00 00 00 12 00 00 00 00 00 00 00 00 00 .`....↕.........
004002D0 00 00 00 00 40 00 00 40 00 00 00 00 00 00 00 00 ....@..@........
004002E0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
004002F0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
00400300 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................
```

- Now back window CPU:

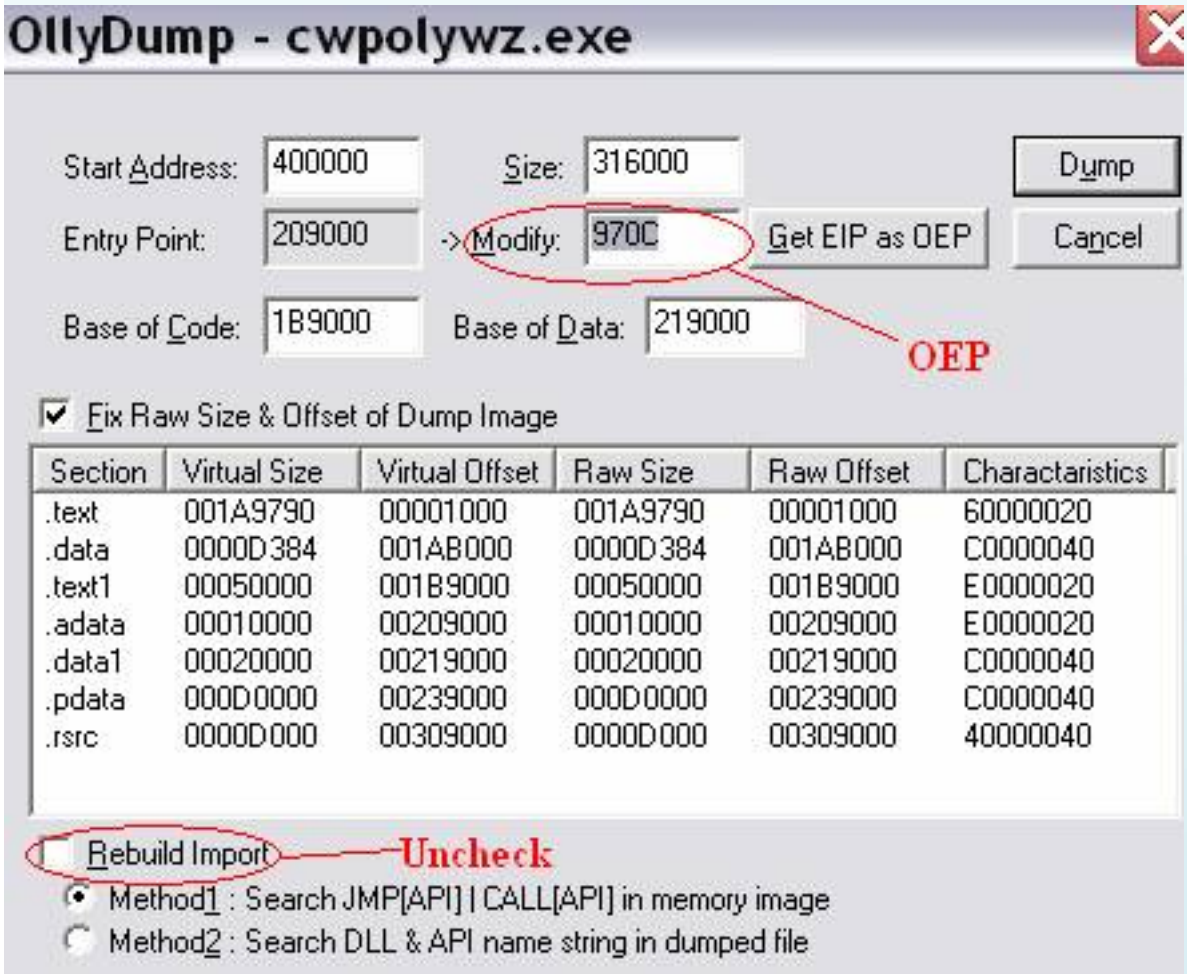


```
0040970C   68 7C284200     PUSH cwpolywz.0042287C
00409711   E8 EEFFFFFF     CALL cwpolywz.00409704
00409716   0000            ADD BYTE PTR DS:[EAX],AL
00409718   0000            ADD BYTE PTR DS:[EAX],AL
0040971A   0000            ADD BYTE PTR DS:[EAX],AL
0040971C   3000            XOR BYTE PTR DS:[EAX],AL
0040971E   0000            ADD BYTE PTR DS:[EAX],AL
00409720   68 00000040     PUSH 40000000
00409725   0000            ADD BYTE PTR DS:[EAX],AL
00409727   0036            ADD BYTE PTR DS:[ESI],DH
```

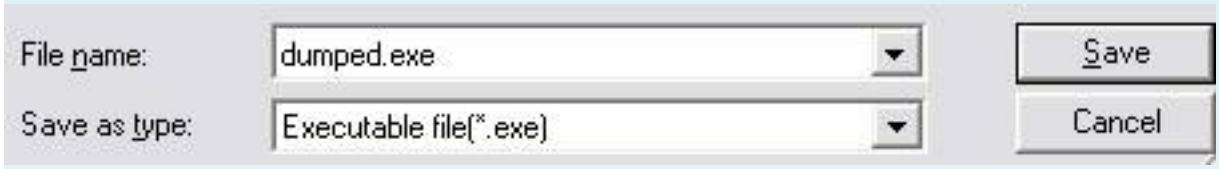
- Select OllyDump the Plugin:



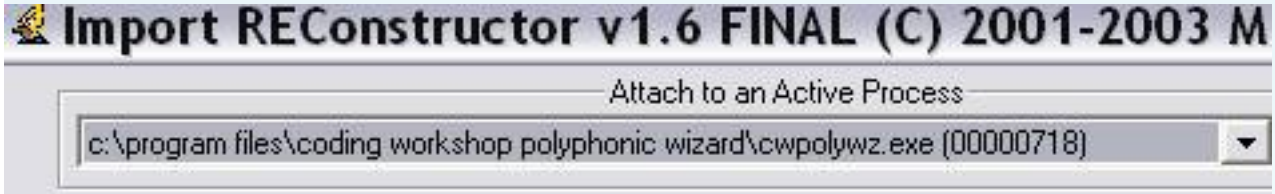
- Do not check rebuild Import seats, considered the OEP has not considered accurate
OEP = 40970C - 400,000 = 970C:



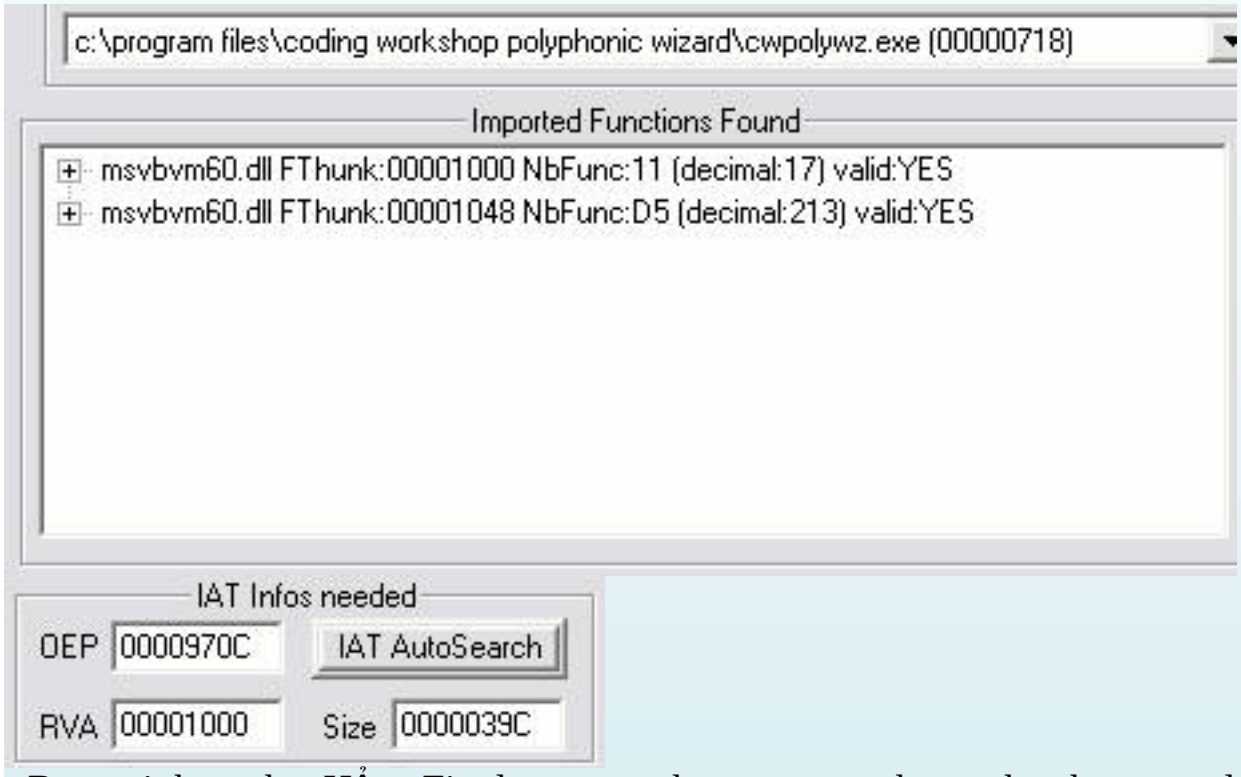
- Click dump, named as, Tàn tump dumped.exe:



- Open up ImportREC, ôi the computer that is always Crash ImportREC the nen per pair for the speakers it is associated, select target are handled:

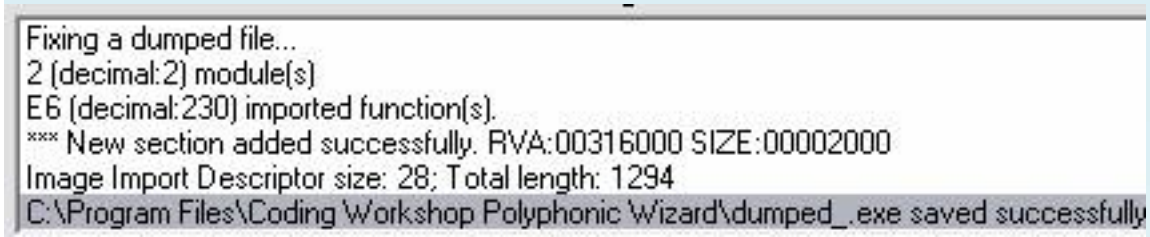


- OEP = 970C, IAT AutoSearch click, then click Show Invalid, heaven .. it OK not always hú ka:



- But wait but what Hồng Fix dump, watch power goes home, he choose to dump at this time:

-Still no sign of any bad, all Okie:



- Running a considered, (>..<): oach

- Hong stars, signs is good here, think ArmAccess.dll to do the same directory, run again considered the:

- Hu Viá, unpack finished gòi home, which is the way of lowering the per Tàn Son Attorney General that it is now.
- Now the king is the ArmAccess.dll not know Tàn per treatment, expect a large perimeter only help. And Crack this month not to open the training to come. Hì hì ...
- Code occasion of this training is complete, we boil the month:

RM to MP3 Converter

-Tools: OllyDbg 1:10, OllyDump plugin, Cmdbar, HideDebugger, ImportREC 1.6
-Protection: Armadillo 4.x.x_CodeSplicing

- He he, as applied by the way hacnho the Ministry is already under our hands. But infected people in the house because we are only points each month. Known today, 2 dozen of the time. ... Cheng cheng cheng
- Load and edit the Target Option as the home.
- *OutputDebugStringA* way of beating competitor has.

Done-gòi then he GetModuleHandleA:

- Shift-F9 things. Lão this is quite a run, then stop:

```
00127B70  00AC194E  CALL to GetModuleHandleA
00127B74  00AD6364  pModule = "kernel32.dll"
00127B78  00AD7588  ASCII "VirtualAlloc"
```

- Press Shift-F9 again see the father:

```
00127B70  00AC196B  CALL to GetModuleHandleA
00127B74  00AD6364  pModule = "kernel32.dll"
00127B78  00AD757C  ASCII "VirtualFree"
```

- Just in the leg and then in the Shift-F9 and more:

```
001278E0  00AA9B49  CALL to GetModuleHandleA
001278E4  00127A24  pModule = "kernel32.dll"
```

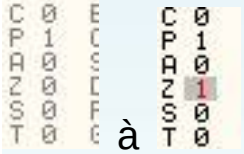
- Okie call, here Tàn per nose look to go home, Trace F8 to RETN:

```
77E7AD86    837C24 04 00    CMP DWORD PTR SS:[ESP+4],0
77E7AD8B  v 0F84 37010000   JE kernel32.77E7AEC8
77E7AD91    FF7424 04       PUSH DWORD PTR SS:[ESP+4]
77E7AD95    E8 F8050000     CALL kernel32.77E7B392
77E7AD9A    85C0            TEST EAX,EAX
77E7AD9C  v 74 08           JE SHORT kernel32.77E7ADA6
77E7AD9E    FF70 04         PUSH DWORD PTR DS:[EAX+4]
77E7ADA1    E8 27060000     CALL kernel32.GetModuleHandleW
77E7ADA6    C2 0400         RETN 4
```

- Always call in, F8. Then F8 to trace, to this:

```
00AA9B62    50              PUSH EAX
00AA9B63    FF15 DC00AD00   CALL DWORD PTR DS:[AD00DC]      kernel32.LoadLibraryA
00AA9B69    8B0D 74B7AD00   MOV ECX,DWORD PTR DS:[ADB774]
00AA9B6F    89040E          MOV DWORD PTR DS:[ESI+ECX],EAX
00AA9B72    A1 74B7AD00     MOV EAX,DWORD PTR DS:[ADB774]
00AA9B77    391C06          CMP DWORD PTR DS:[ESI+EAX],EBX
00AA9B7A  v 0F84 32010000   JE 00AA9CB2
00AA9B80    33C9            XOR ECX,ECX
```

- Look through the help FPU per:

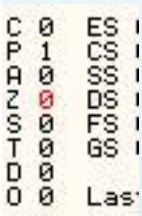


- Flag Z has not enabled us to 1, the pop-up. Then he GetModuleHandleA removed. Then he salt to salt VirtualAlloc:

- Shift-F9 3 and always do, and then Alt-F9 to go. Then F8 to trace here:

```
00AC4C25    8985 60C6FFFF   MOV DWORD PTR SS:[EBP-39A0],EAX
00AC4C2B    83BD 60C6FFFF   CMP DWORD PTR SS:[EBP-39A0],0
00AC4C32  v 74 33           JE SHORT 00AC4C67
00AC4C34    6A 40           PUSH 40
00AC4C36    68 00100000     PUSH 1000
00AC4C3B    FFB5 58C6FFFF   PUSH DWORD PTR SS:[EBP-39A8]
00AC4C41    FF35 D001AE00   PUSH DWORD PTR DS:[AE01D0]
00AC4C47    FF15 B001AD00   CALL DWORD PTR DS:[AD01B0]      kernel32.VirtualAlloc
00AC4C4D    8985 60C6FFFF   MOV DWORD PTR SS:[EBP-39A0],EAX
```

- Look through the vision through:



- Unlock the Z's of 0 to re health, secure home to trace, to:

```
00AC4C25   8985 60C6FFFF   MOV DWORD PTR SS:[EBP-39A0],EAX
00AC4C2B   83BD 60C6FFFF   CMP DWORD PTR SS:[EBP-39A0],0
00AC4C32   74 33           JE SHORT 00AC4C67
00AC4C34   6A 40           PUSH 40
00AC4C36   68 00100000     PUSH 1000
00AC4C3B   FFB5 58C6FFFF   PUSH DWORD PTR SS:[EBP-39A8]
00AC4C41   FF35 D001AE00   PUSH DWORD PTR DS:[AE01D0]
00AC4C47   FF15 B001AD00   CALL DWORD PTR DS:[AD01B0]      kernel32.VirtualAlloc
00AC4C4D   8985 60C6FFFF   MOV DWORD PTR SS:[EBP-39A0],EAX
00AC4C53   83BD 60C6FFFF   CMP DWORD PTR SS:[EBP-39A0],0
00AC4C5A   74 0B           JE SHORT 00AC4C67
```

- Edit the value in EAX to do (remember Alt-M to consider home), is 496,000:

- Yes:

```
EAX 00496000 RMTOMP3.<ModuleEntryPo
ECX 77E7AC6F kernel32.77E7AC6F
EDX 7FFE0304
EBX 417B0012
ESP 00127B7C
EBP 0012CE30
ESI CE300000
EDI 00000000

EIP 00AC4C4D
```

- Delete HD VirtualAlloc. Now click BP CreateThread to do. Then Shift-F9 and father ko nhé Terminate:

```
77E7BE53   55              PUSH EBP
77E7BE54   8BEC            MOV EBP,ESP
77E7BE56   FF75 1C         PUSH DWORD PTR SS:[EBP+1C]
77E7BE59   FF75 18         PUSH DWORD PTR SS:[EBP+18]
77E7BE5C   FF75 14         PUSH DWORD PTR SS:[EBP+14]
77E7BE5F   FF75 10         PUSH DWORD PTR SS:[EBP+10]
77E7BE62   FF75 0C         PUSH DWORD PTR SS:[EBP+C]
77E7BE65   FF75 08         PUSH DWORD PTR SS:[EBP+8]
77E7BE68   6A FF           PUSH -1
77E7BE6A   E8 30FEFFFF     CALL kernel32.CreateRemoteThread
77E7BE6F   5D              POP EBP
77E7BE70   C2 1800         RETN 18
77E7BE73   8BC2            MOV EAX,EDX
```

Every as-usual, BP chỗ delete this, Ctrl-F9:

```
77E7BE53   55              PUSH EBP
77E7BE54   8BEC            MOV EBP,ESP
77E7BE56   FF75 1C         PUSH DWORD PTR SS:[EBP+1C]
77E7BE59   FF75 18         PUSH DWORD PTR SS:[EBP+18]
77E7BE5C   FF75 14         PUSH DWORD PTR SS:[EBP+14]
77E7BE5F   FF75 10         PUSH DWORD PTR SS:[EBP+10]
77E7BE62   FF75 0C         PUSH DWORD PTR SS:[EBP+C]
77E7BE65   FF75 08         PUSH DWORD PTR SS:[EBP+8]
77E7BE68   6A FF           PUSH -1
77E7BE6A   E8 30FEFFFF     CALL kernel32.CreateRemoteThread
77E7BE6F   5D              POP EBP
77E7BE70   C2 1800         RETN 18
77E7BE73   8BC2            MOV EAX,EDX
```

- F8:

```
00AAFE76   5E              POP ESI
00AAFE77   C9              LEAVE
00AAFE78   C3              RETN
```

- Ctrl-F9:

```
00AAFE76   5E              POP ESI
00AAFE77   C9              LEAVE
00AAFE78   C3              RETN
00AAFE79   55              PUSH EBP
```

- F8:

```
00ACA186   A1 2800AE00     MOV EAX,DWORD PTR DS:[AE0028]
00ACA18B   59              POP ECX
00ACA18C   8B48 50         MOV ECX,DWORD PTR DS:[EAX+50]
00ACA18F   3348 38         XOR ECX,DWORD PTR DS:[EAX+38]
00ACA192   3348 34         XOR ECX,DWORD PTR DS:[EAX+34]
00ACA195   F6C1 40         TEST CL,40
```

- Pull-down search commands nearly thăng CALL RETN first. It set for a BP:

```
00ACA223   FFD7            CALL EDI
00ACA225   8BD8            MOV EBX,EAX
00ACA227   5F              POP EDI
00ACA228   8BC3            MOV EAX,EBX
00ACA22A   5E              POP ESI
00ACA22B   5B              POP EBX
00ACA22C   C3              RETN
```

- Shift-F9, stop it right:

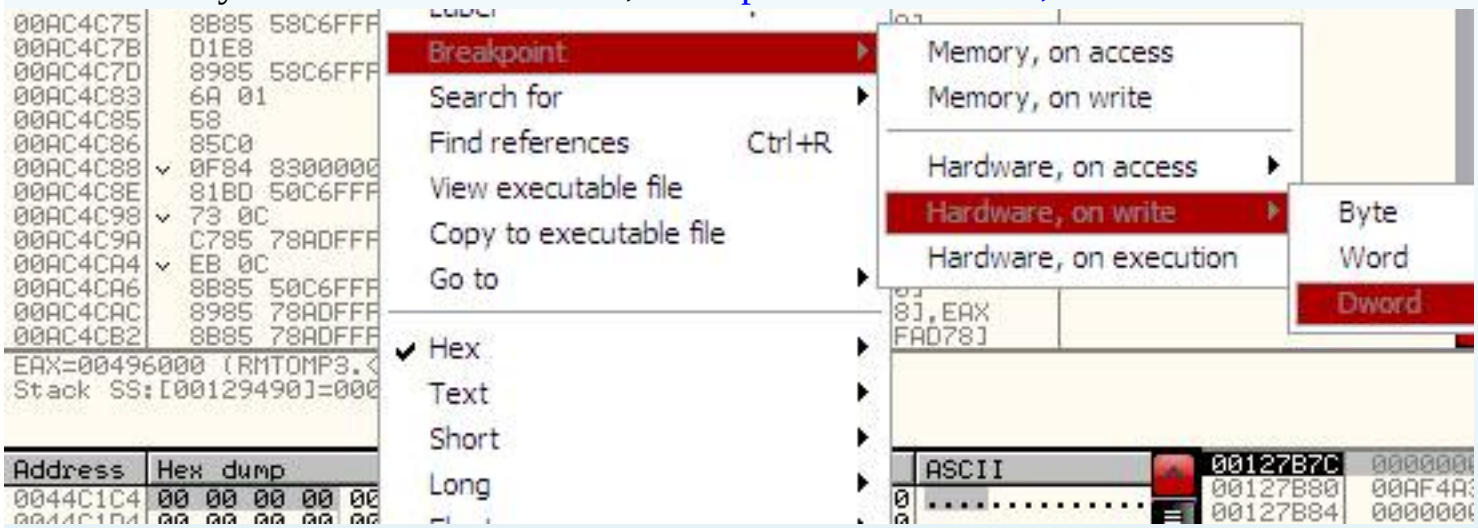
```
00ACA223   FFD7            CALL EDI
00ACA225   8BD8            MOV EBX,EAX
00ACA227   5F              POP EDI
00ACA228   8BC3            MOV EAX,EBX
00ACA22A   5E              POP ESI
00ACA22B   5B              POP EBX
00ACA22C   C3              RETN
```

- Delete BP seats that go, then to F7, Bummmm:

```
00427AFA   55              PUSH EBP
00427AFB   8BEC            MOV EBP,ESP
00427AFD   6A FF           PUSH -1
00427AFF   68 881B4500     PUSH RMTOMP3.00451B88
00427B04   68 A8AF4200     PUSH RMTOMP3.0042AFA8
00427B09   64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
00427B0F   50              PUSH EAX
00427B10   64:8925 000000( MOV DWORD PTR FS:[0],ESP
00427B17   83EC 58         SUB ESP,58
00427B1A   53              PUSH EBX
00427B1B   56              PUSH ESI
00427B1C   57              PUSH EDI
00427B1D   8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
00427B20   FF15 C4C14400   CALL DWORD PTR DS:[44C1C4]      kernel32.GetVersion
00427B26   33D2            XOR EDX,EDX
```

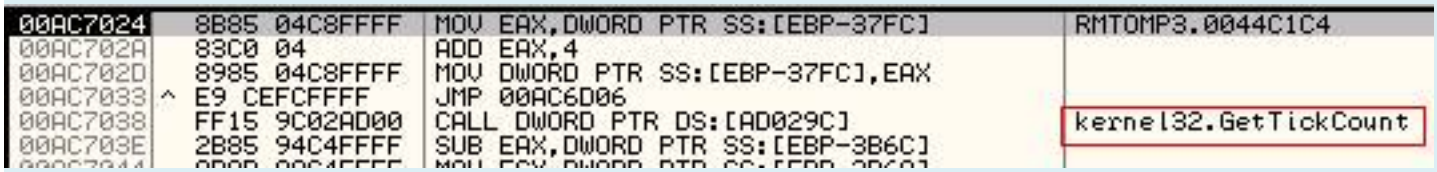
- The OEP ship, Lord hours if used full-PE and then dump Fix IAT with ImportREC when the crash will be run. Why crash? I think she is also a jump Magic is not processed. So to that time under the command CALL OEP kia (kernel32.GetVersion), small home 44C1C4 perimeter. Also remember to always OEP home.
- Restart the Olly, they do not have labels, training martial but suffered extreme aiiiii .. ..
- Follow from top to bottom, until the correct value in EAX completed, hd VirtualAlloc.
- In the window Hex, Ctrl-G, type in the address:

- Then to 4 Byte first and then to Click, Breakpoint à Hardware, on Write a Dword:

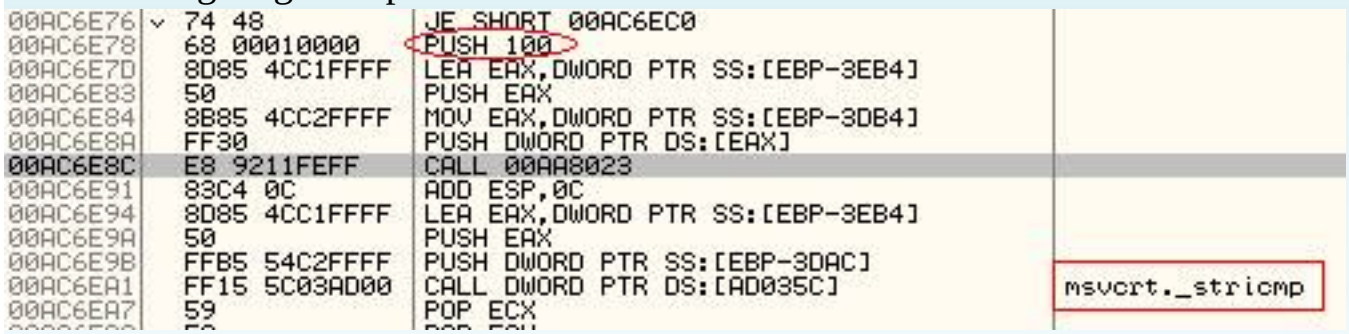


- Shift-F9 stop it:

- Shift-F9 is 2 times:

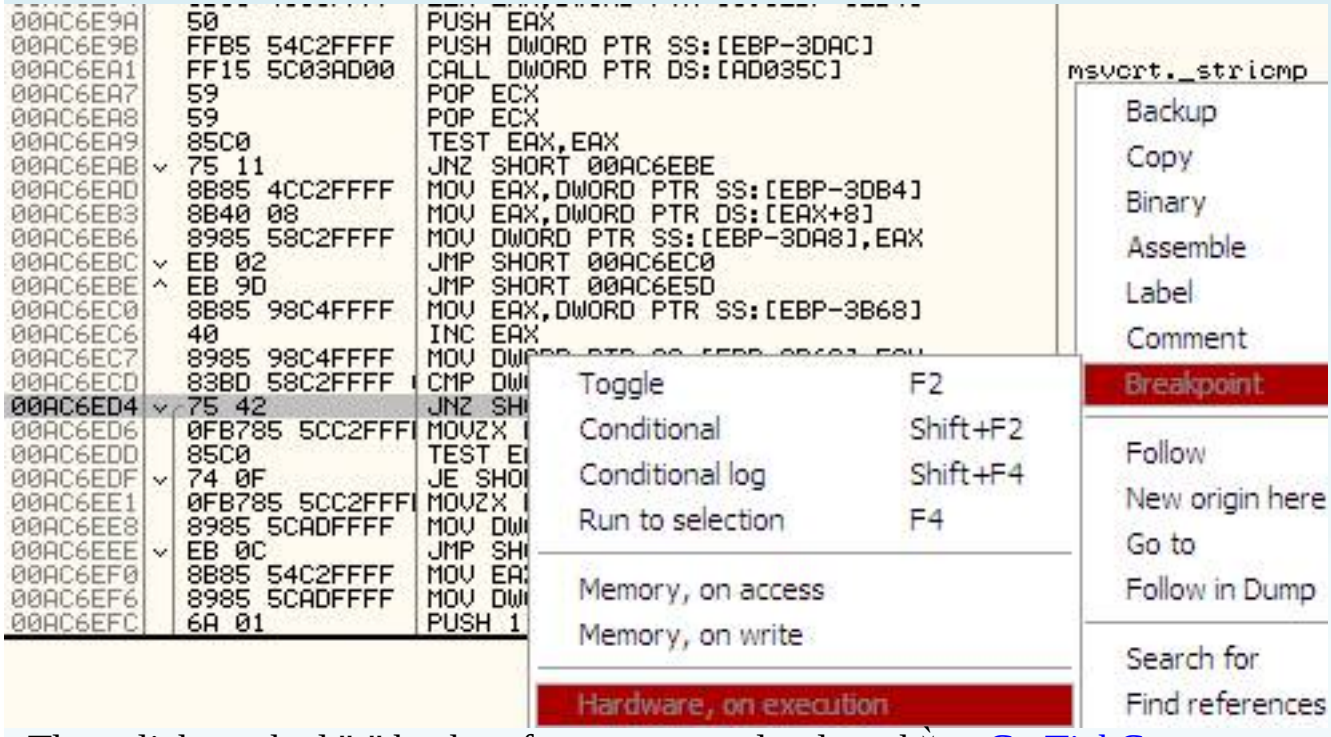


- Look GetTickCount ko, if read Chapter 1 of the hacnho then it will be very aged very happy there. Hì hi. Hoik find the msvcrt._stricmp, PUSH see above 100, then under the command CALL enough signs ship.

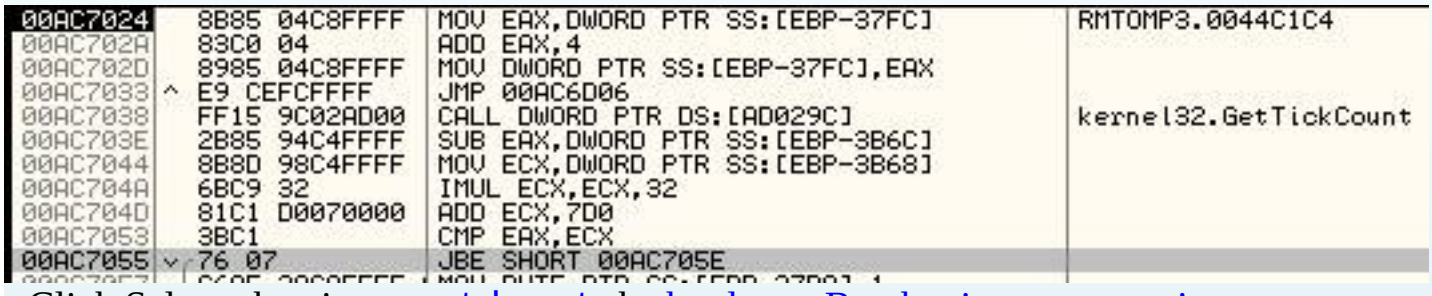


- The time that memory address of this CALL command, and then Restart the Tàn per maroon WA. From here, open to look down to see the little ni:

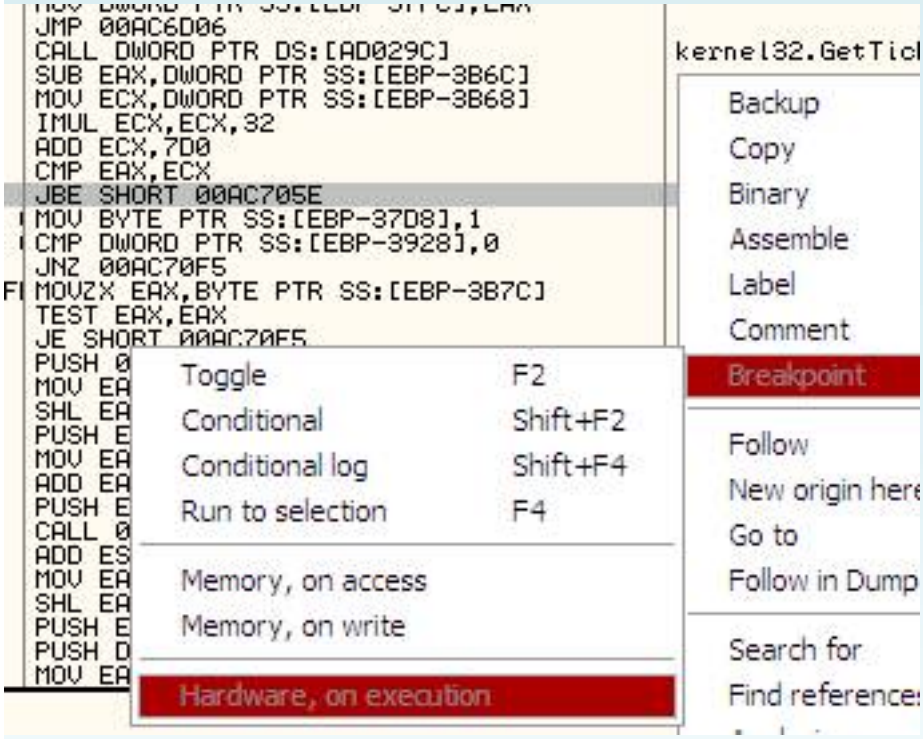
- Select the command JNZ 2 under the msvcrt._stricmp, then Click right, Breakpoint à Hardware, on execution:



- Then click marked "-" back to front seats, under dom thằng GetTickCount, see command JBE ko:

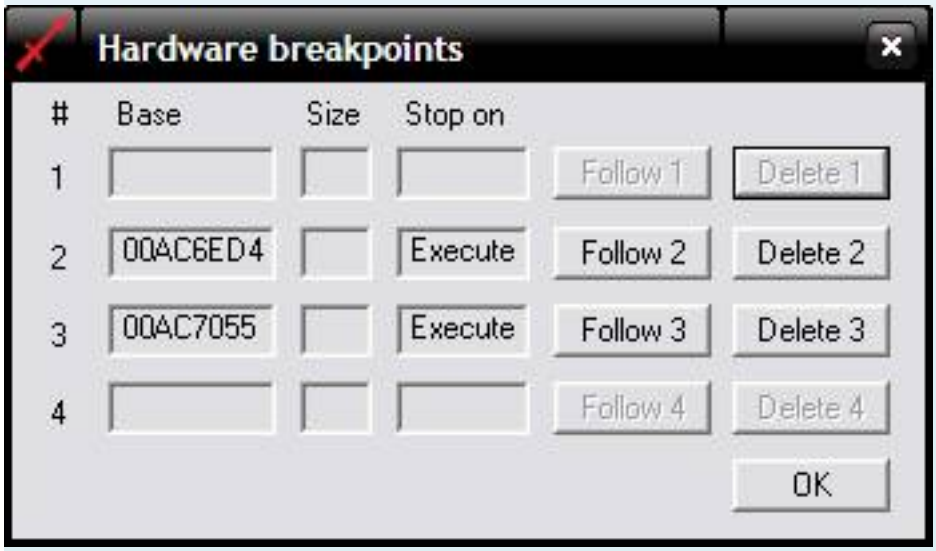


- Click Select, then it must, t h a t the hardware Breakpoint, on execution:

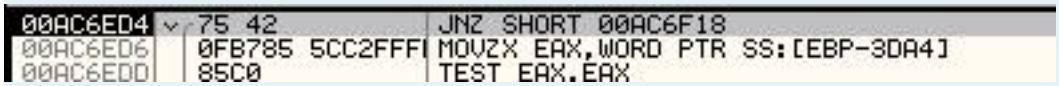


- Delete HW BP admits to:

- Clear Finish:



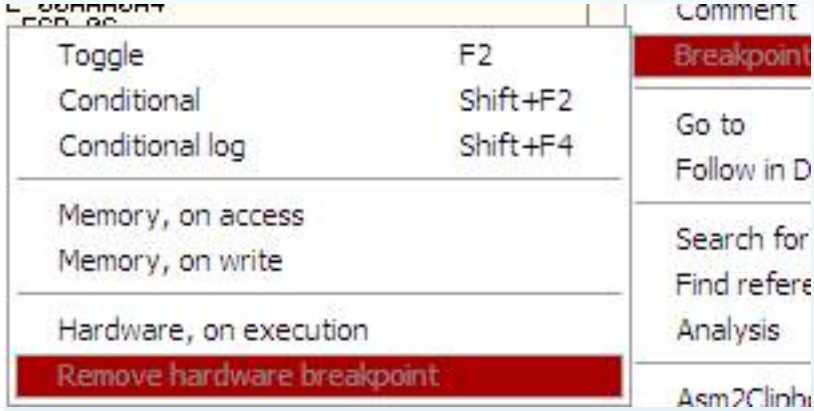
- Now Shift_F9 to:



- Edit it as follows:

- Done a salt:

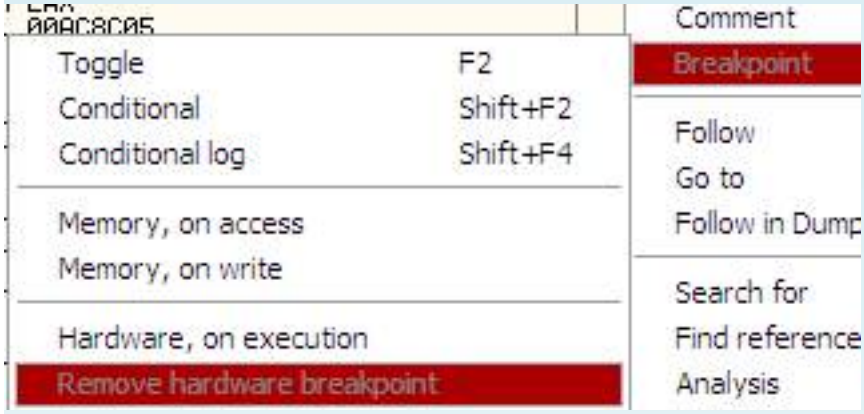
- Remove HW BP place this (to the NOP small line 2):



- Shift-F9 to primary salt 2:

- Patch it:

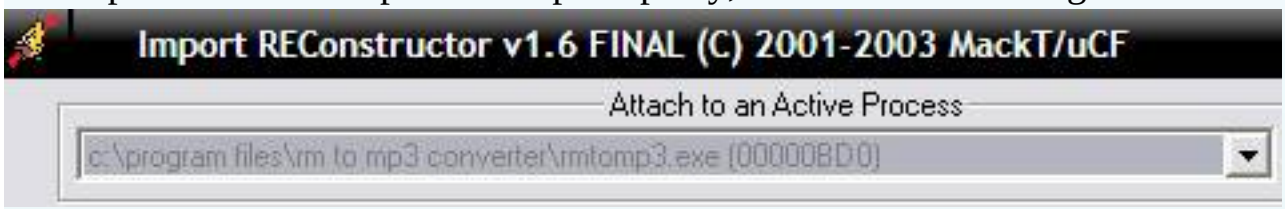
- Ha. Cú this is the same jump kì is cú jump final is always small, remove HW BP place this:



- Now F9 him to run, it failed to place it, oach crash:

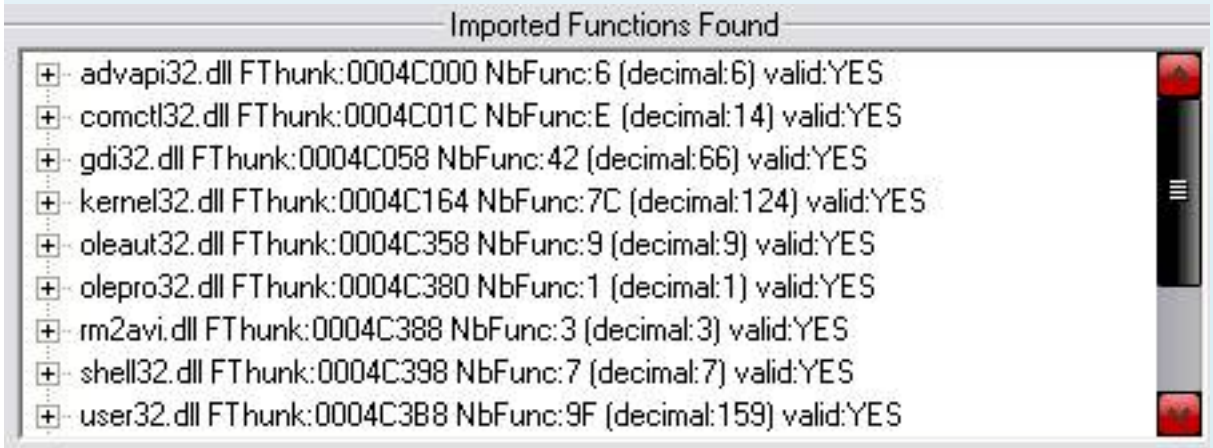
- No problem, calm. Olly resources for the Lord to dump full-Pe to do. Now Mo is with the

computer should be used this month. I also better perimeter nhỉ?
- Dump the finished ImportREC open up any, should select the target A:

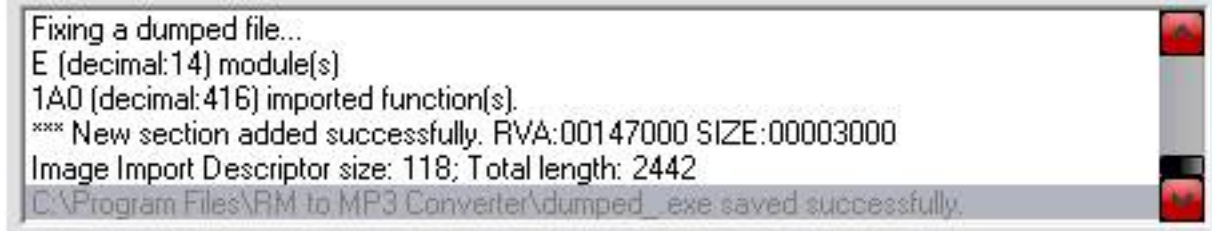


- The OEP not remember, is 400,000 less 27AFA, then fill IAT Auto Search:

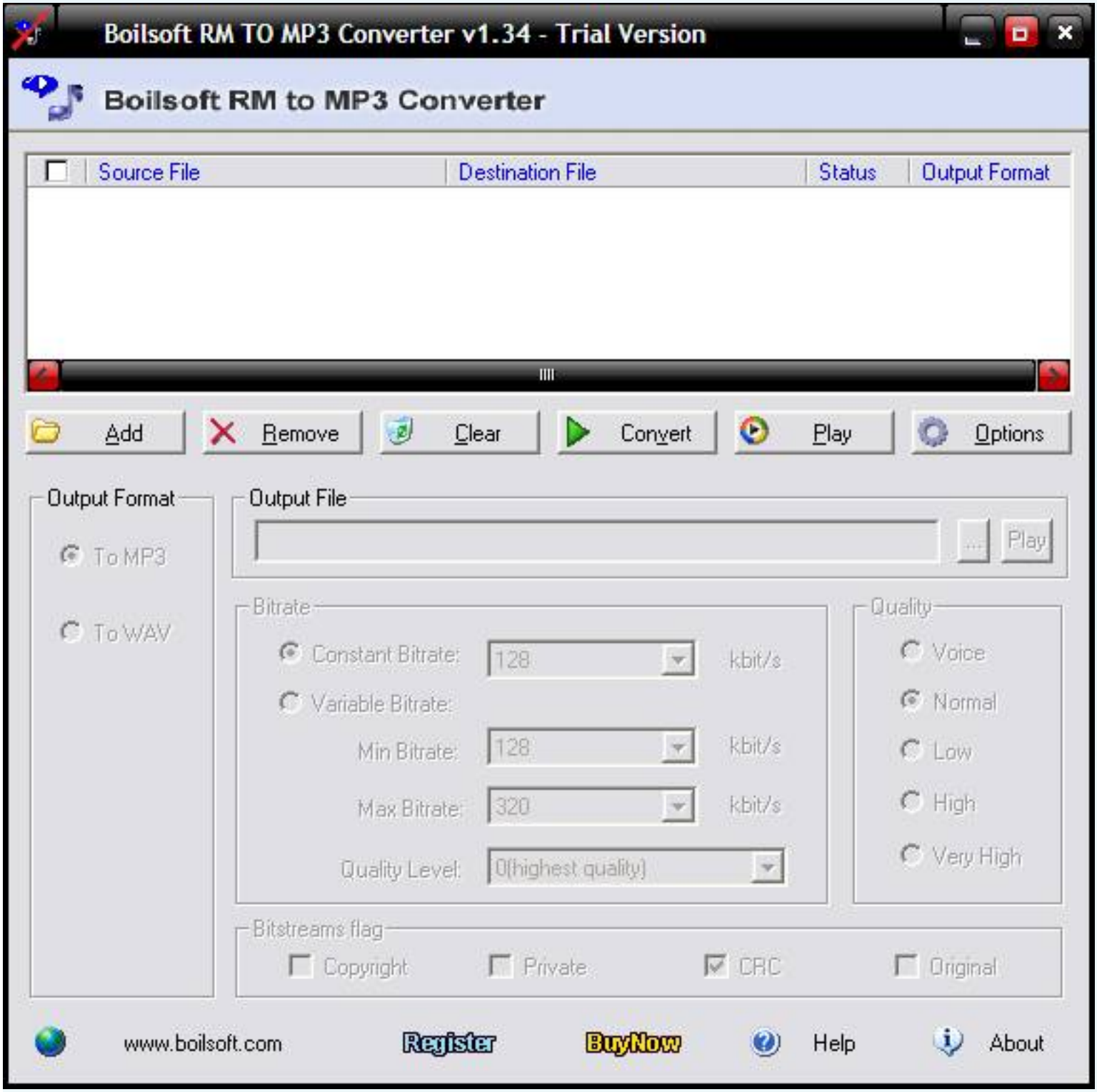
- The Show Invalid à thunk Cut (s), then, salt is salt of their way:



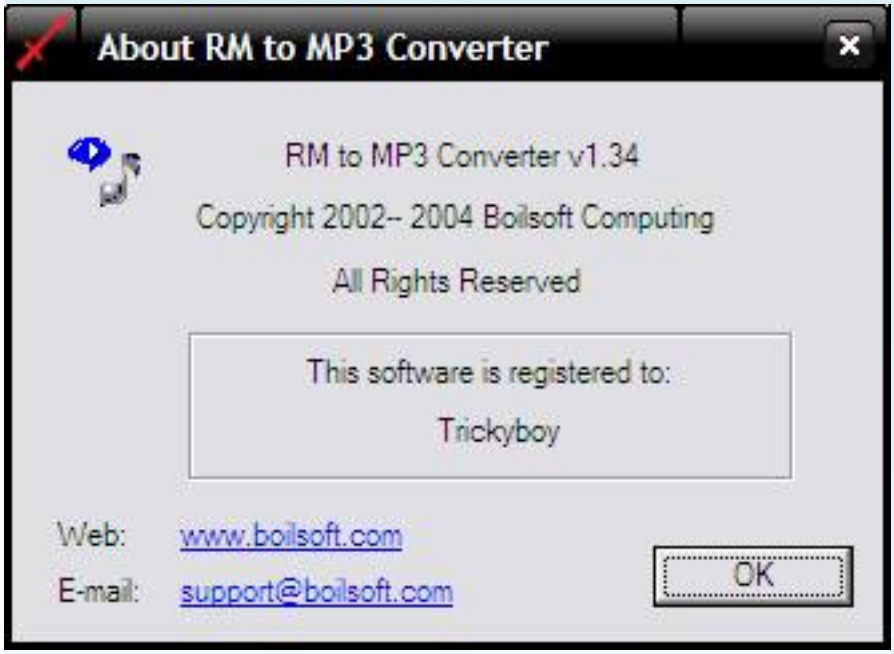
- The afternoon we put her into the river always, Fix dump, dump him choose at this time:



- From Ừ, any newspaper is to go successfully, a thằng any food Crash chairs the line Ah, Dang Cam chairs nè. RUN things considered, close your eyes .... Yawn only one:



- Number see open, running gòi hì hi. Quay through a back, naturally this is the table, AC:



- What is the per Tàn completed in time know Armadillo_Code --- Ta Splicing of Justice. The Ta it real. When you open a photograph on file of (at xuc Polyphonic), Pink is filled with machines that "monitor" the the file. doc up by 11 per MB. Who code down on hix hix. chiêu Although this is not in Ta Kiem Blood epiphyte's natural for anonymous stars but he needs to open holes for feedback, chán chairs. Thôi on the home, Capture the few pictures for the aged that home.
- Ta lesson this time the legal focus key way in which per temporarily called "Jump by Z". The day, per well is expected to be Newbie "to" more of the new Armadillo thằng this, then remember to know per home. ^ 0 ^ Respiratory Ho Ho! From from ...

- Sincerely thank you for Admin, Mod, and all members of the REA.

- Especially as he hacnho (in particular he called).

- Thanx to:

- MaDMAn_H3rCuL3s (I hate this guy)

- Ricardo Narvaja (I like this guy)

- And you ...

Search by ngoay is (written by): Trickyboy (self Wiuewi)

Import elimination Debugblocker + + Nanomites

SoftWare : **Picture Ripper 3**

Packed : *Armadillo 4.xx - Debugblocker elimination + + Import Nanomites*

Crack Tool *1.* *OllyDBG by hacnho.*

2. LordPE Deluxe 1.4-by yoda

3. Import REConstructor 1.6 Final

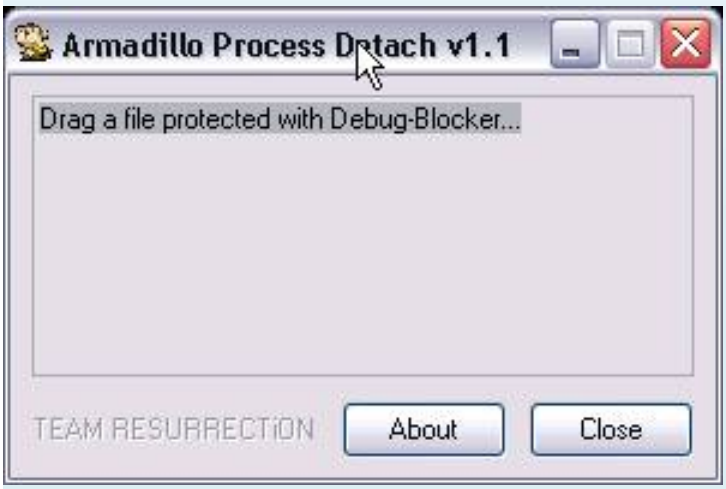
4. ArmInline 0.71

5. ArmaDetach 1.1

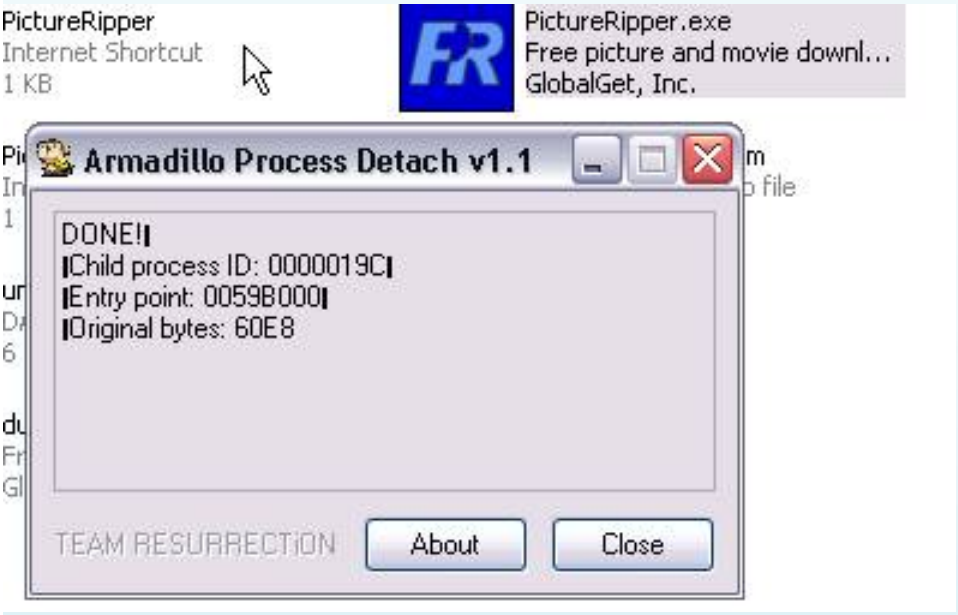
Author : *Why Not Bar*

_Tut Before the target Movie Collector 4.4 can not do much Uncle Done! Not know where the errors started? But they are all Done. Bua this, they conducted with thằng Picture Ripper 3 Hacnho he has meat and then write a tut. I write TUT with the purpose to Uncle reference and comparison only. By To pass blocker they use Debug Tool for fast *ArmaDetach 1.1.*

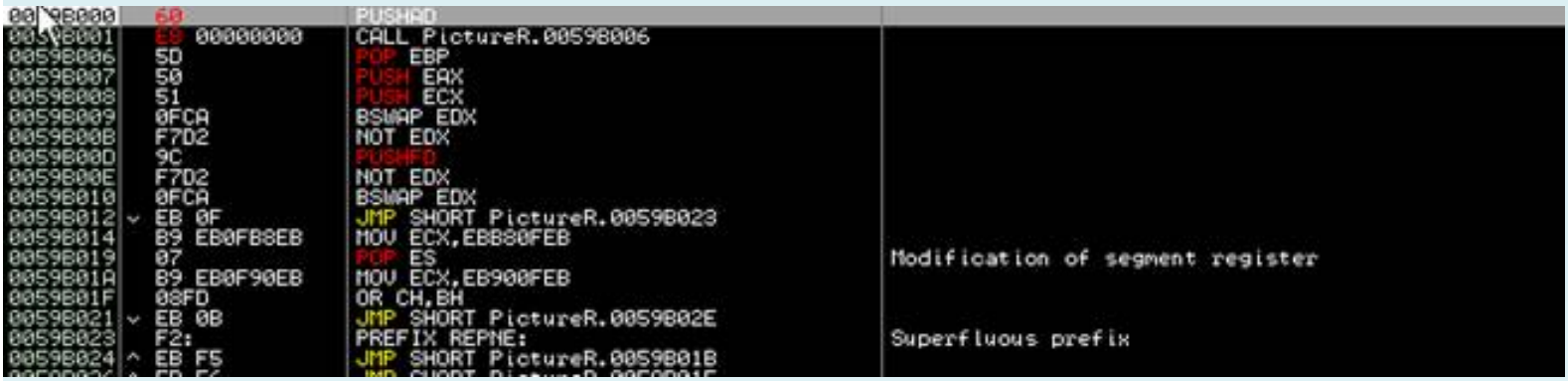
_Chay *ArmaDetach 1.1:*



_Keo File "PictureRipper.exe" and released into the window



Attach _Chay olly and Child, F9, F12 and patch as follows:



_Chay Scripts "Armadillo Standard unpack"

Import _Bay hours to *elimination.* Use ArmInline 0.71 to Fix but first we need to find IAT
IAT start: 00F4D038

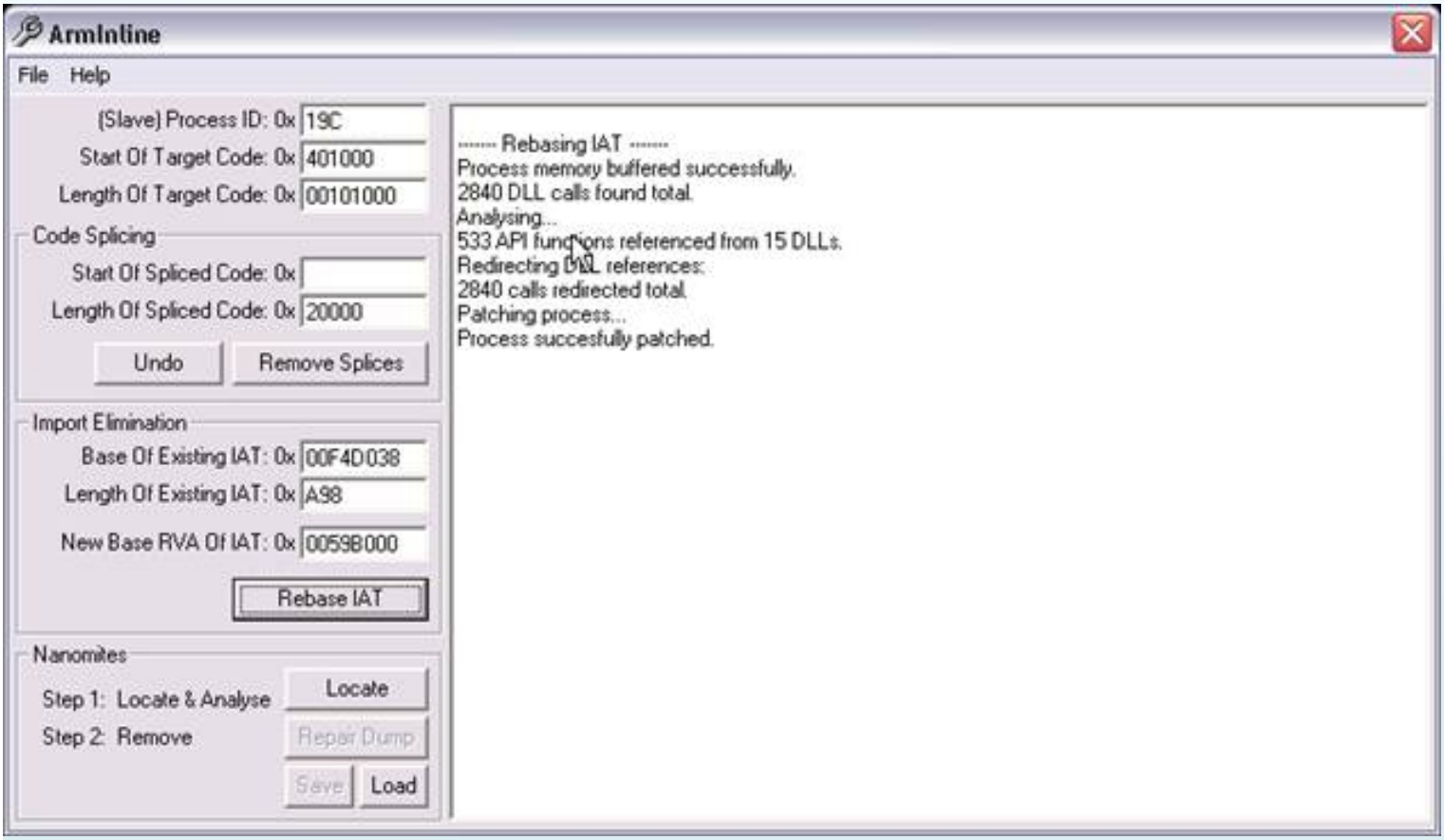
```
00F4D030 00000000
00F4D034 00000000
00F4D038 14010154
00F4D03C 010C01BB
00F4D040 77D4D16F USER32.GetTopWindow
00F4D044 7C937A40 ntdll.RtlUnwind
00F4D048 77F19012 GDI32.ExtTextOutA
00F4D04C 7C826F4B kernel32.GetTimeFormatA
00F4D050 77D53A2F USER32.GetScrollInfo
00F4D054 77D4902C USER32.SetScrollInfo
00F4D058 77D52316 USER32.RegisterClassA
00F4D05C 77D4C48A USER32.IsIconic
00F4D060 00E10E29
```

IAT end: 00F4DAD0

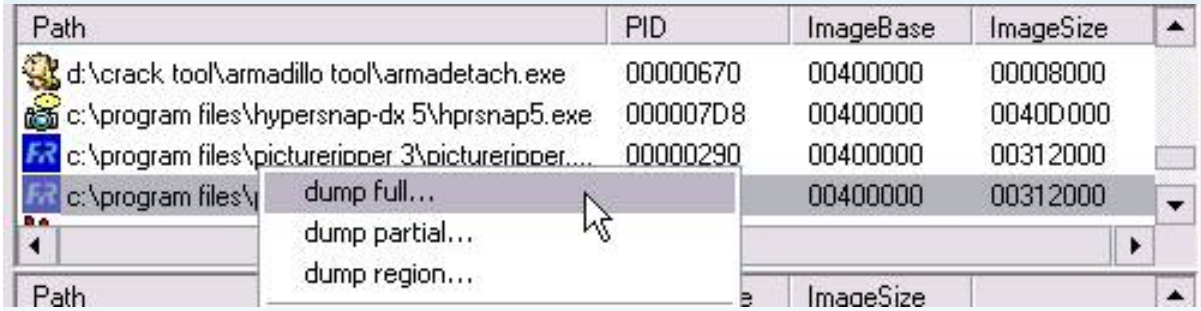
```
00F4DAC0 7C80D47E kernel32.GetLocaleInfoA
00F4DAC4 77F19D07 GDI32.LineTo
00F4DAC8 77F3C433 GDI32.ScaleWindowExtEx
00F4DACC 7C81F955 kernel32.SetFileTime
00F4DAD0 00E1AD09
00F4DAD4 0000000
00F4DAD8 015400A9
00F4DADC 010C10E7
00F4DAE0 00FB0910
00F4DAE4 00DA0178
```

Len: A98

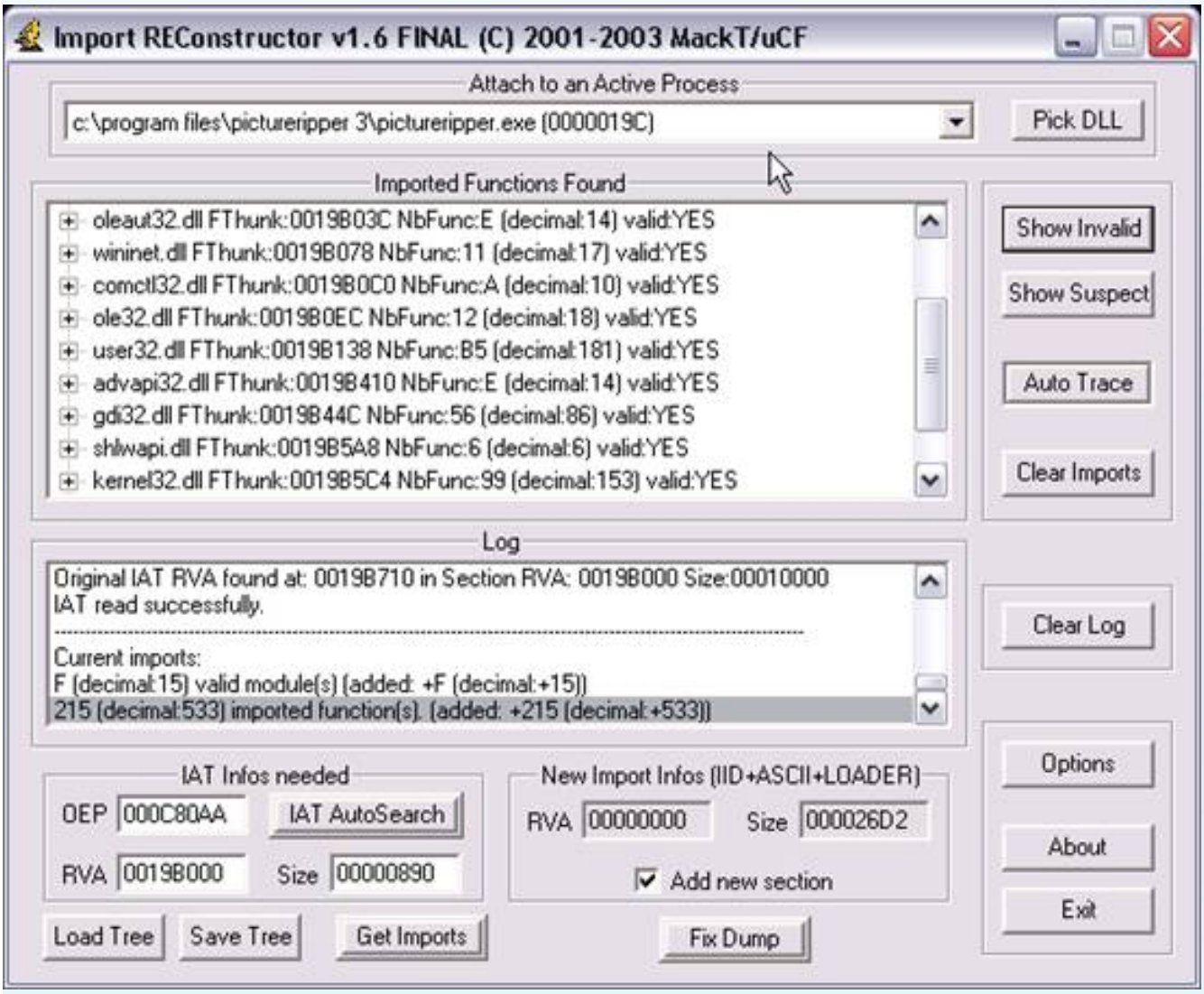
_Chay ArmInline and enter the number and press Rebase IAT



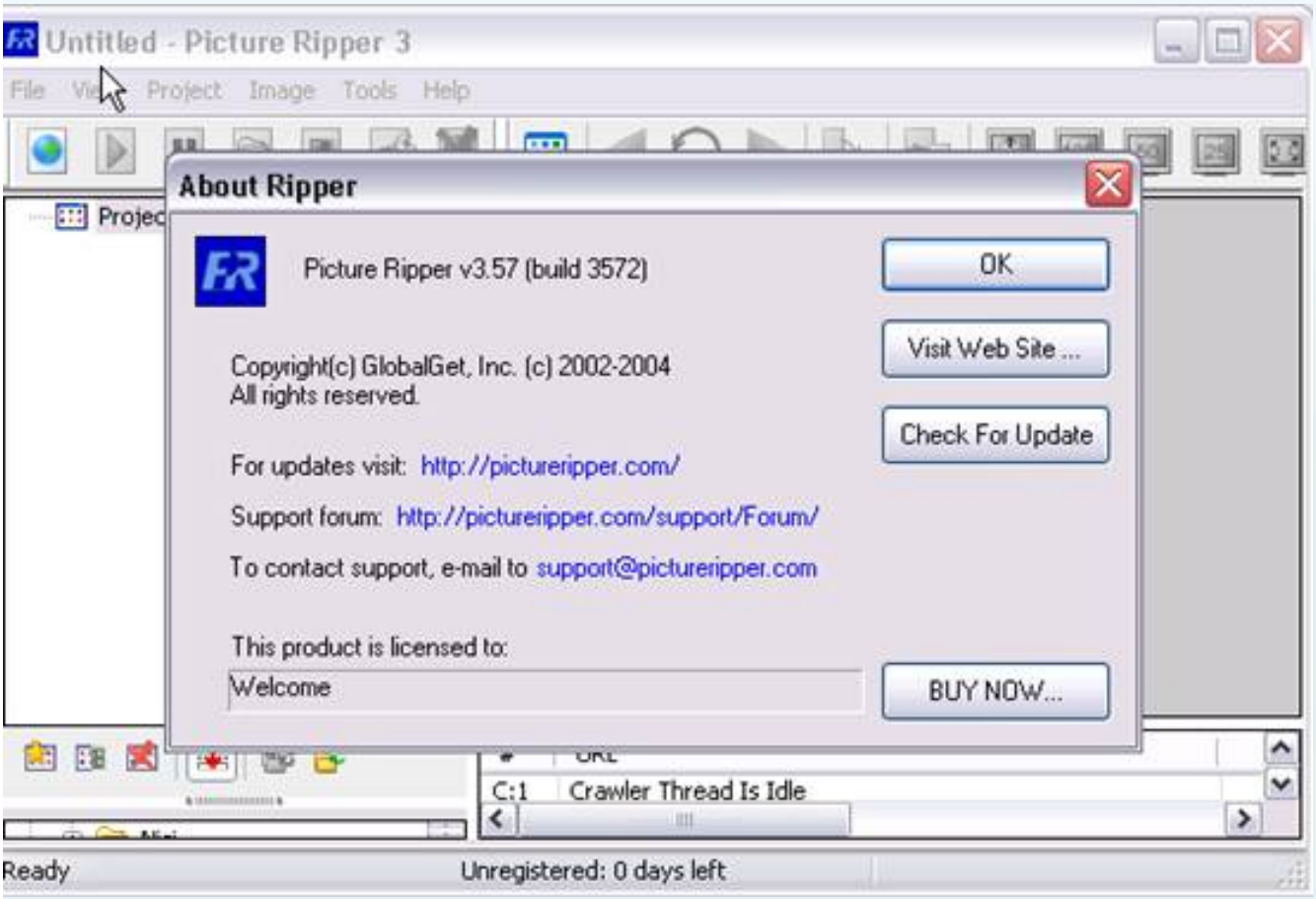
_Dung LordPE Full dump



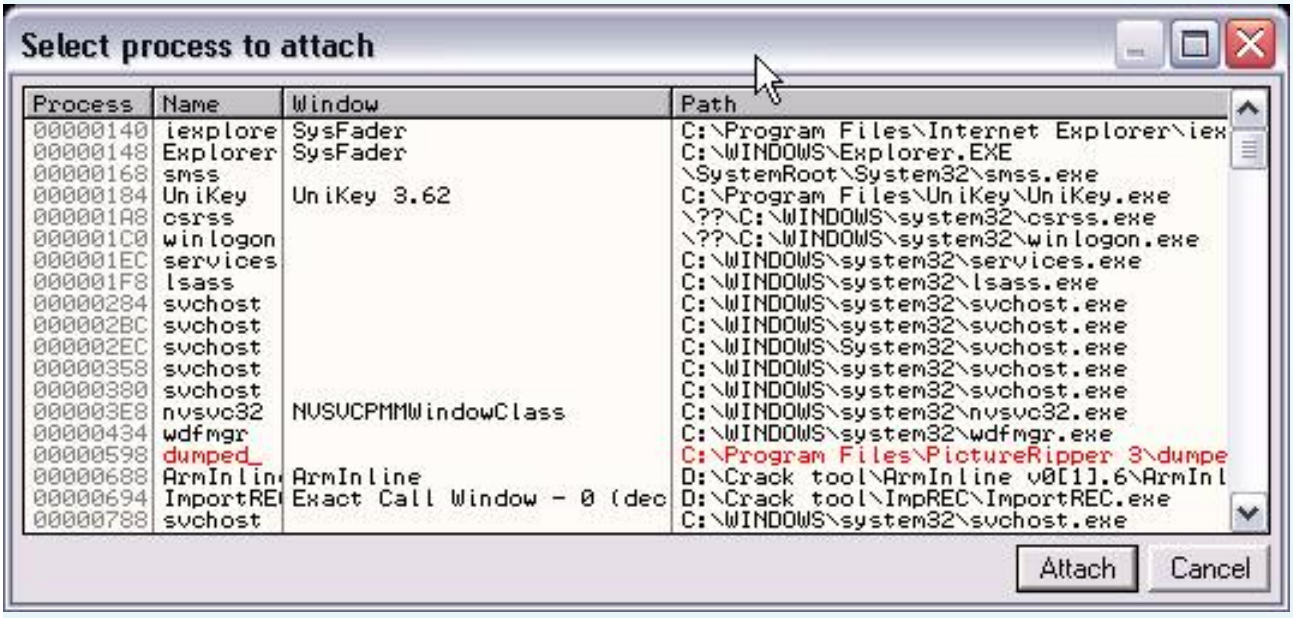
_Bay Hours and fill open ImportREC parameters:

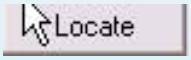


_Fix Dump to try and Run

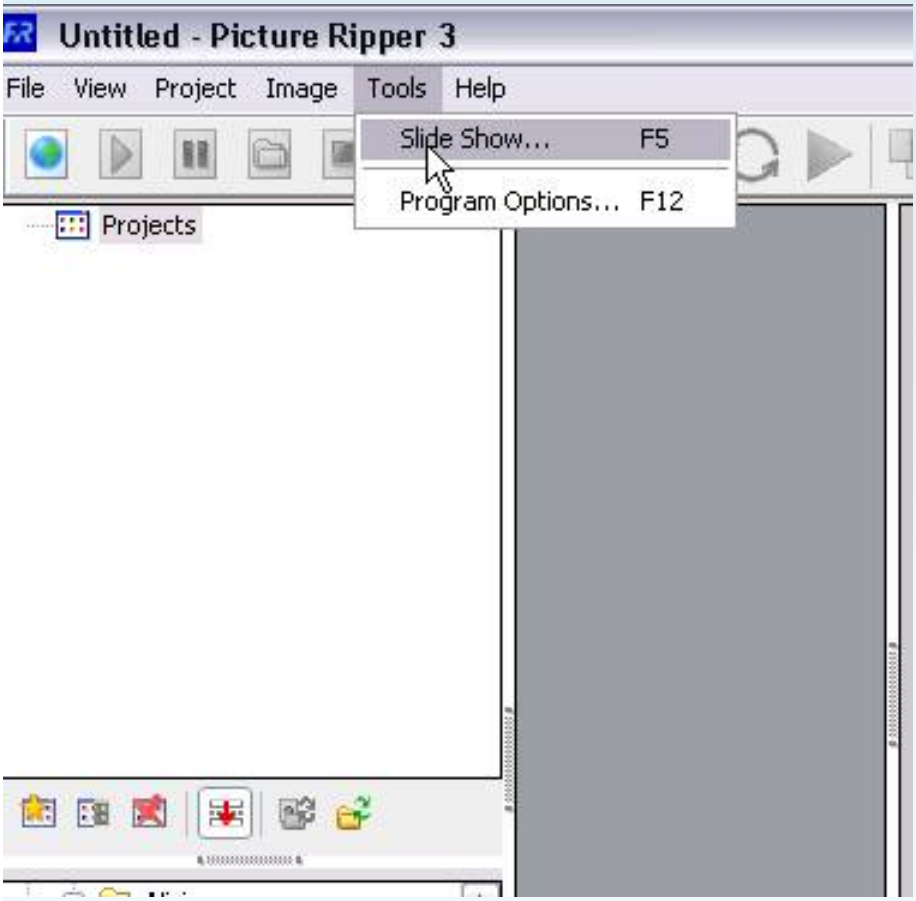


OK Gòi! Now to *Nanomites.* The doctors then they do not know the children but this was! Now, we close ArmaDetach and Olly again. Then, Load File "dumped.exe" Olly to see PID is how much.

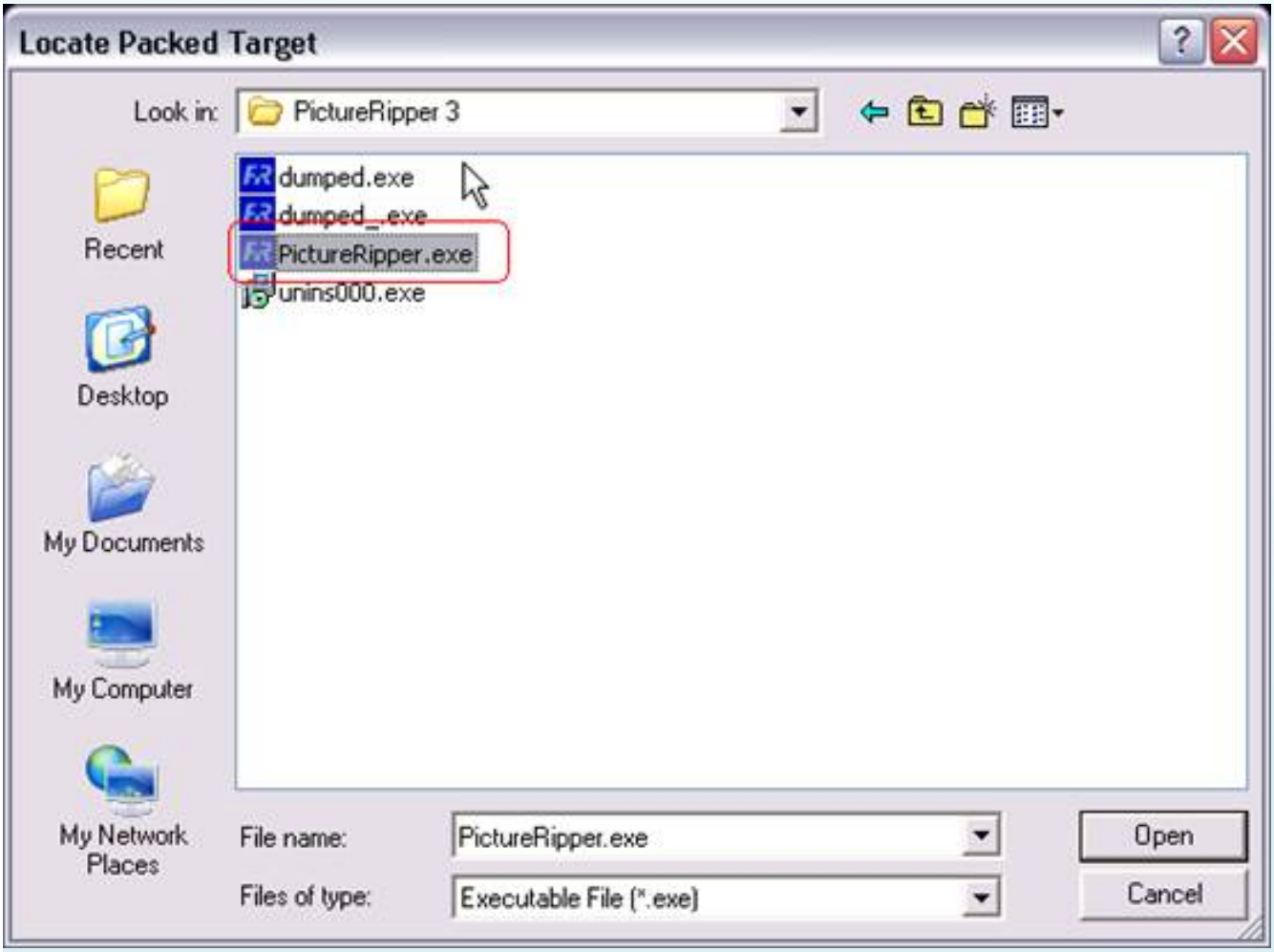


_Dien PID to ArmInline, click 

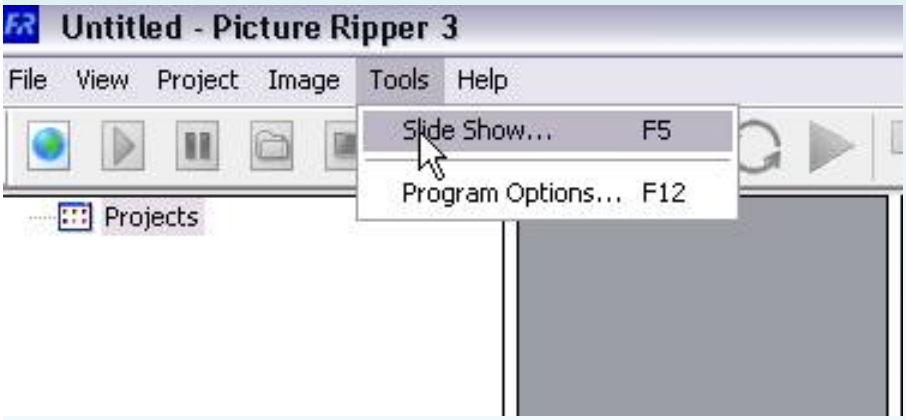
, Programs you choose and run as follows:



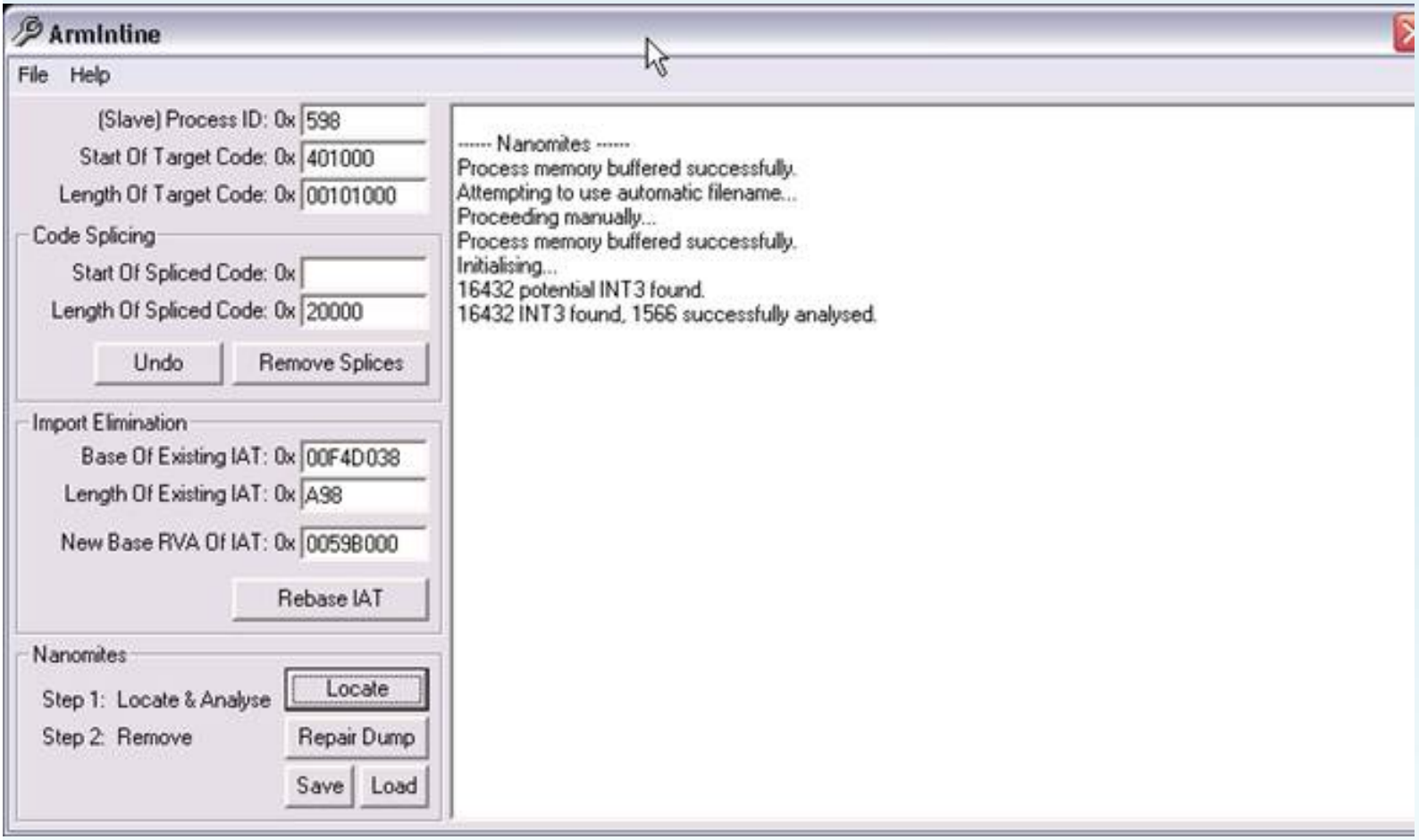
_tiep by selecting "PictureRipper.exe"



Run to the _Chuong 1 again and choose as you now:

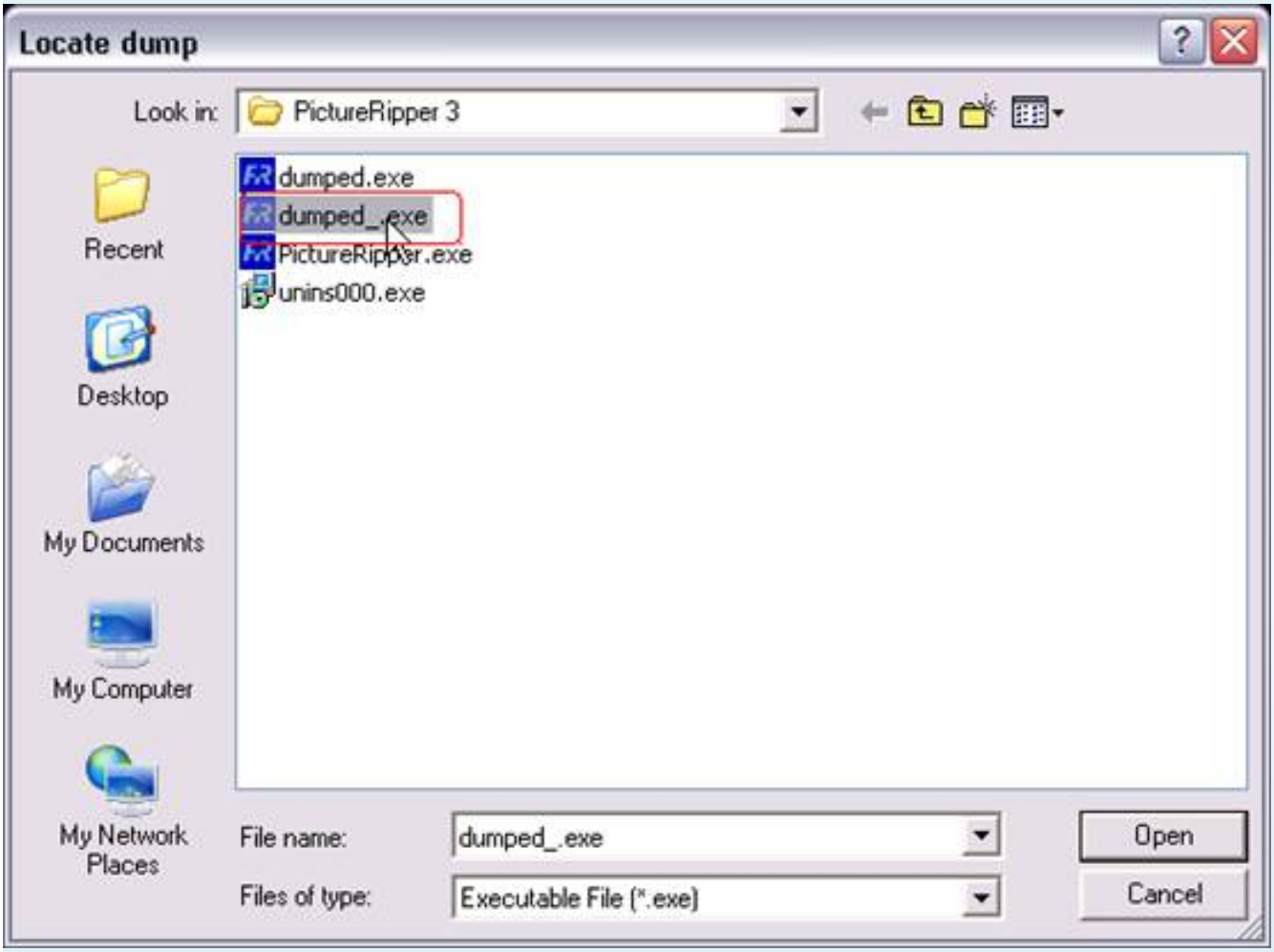


_Khi This, the window we see ArmInline as follows

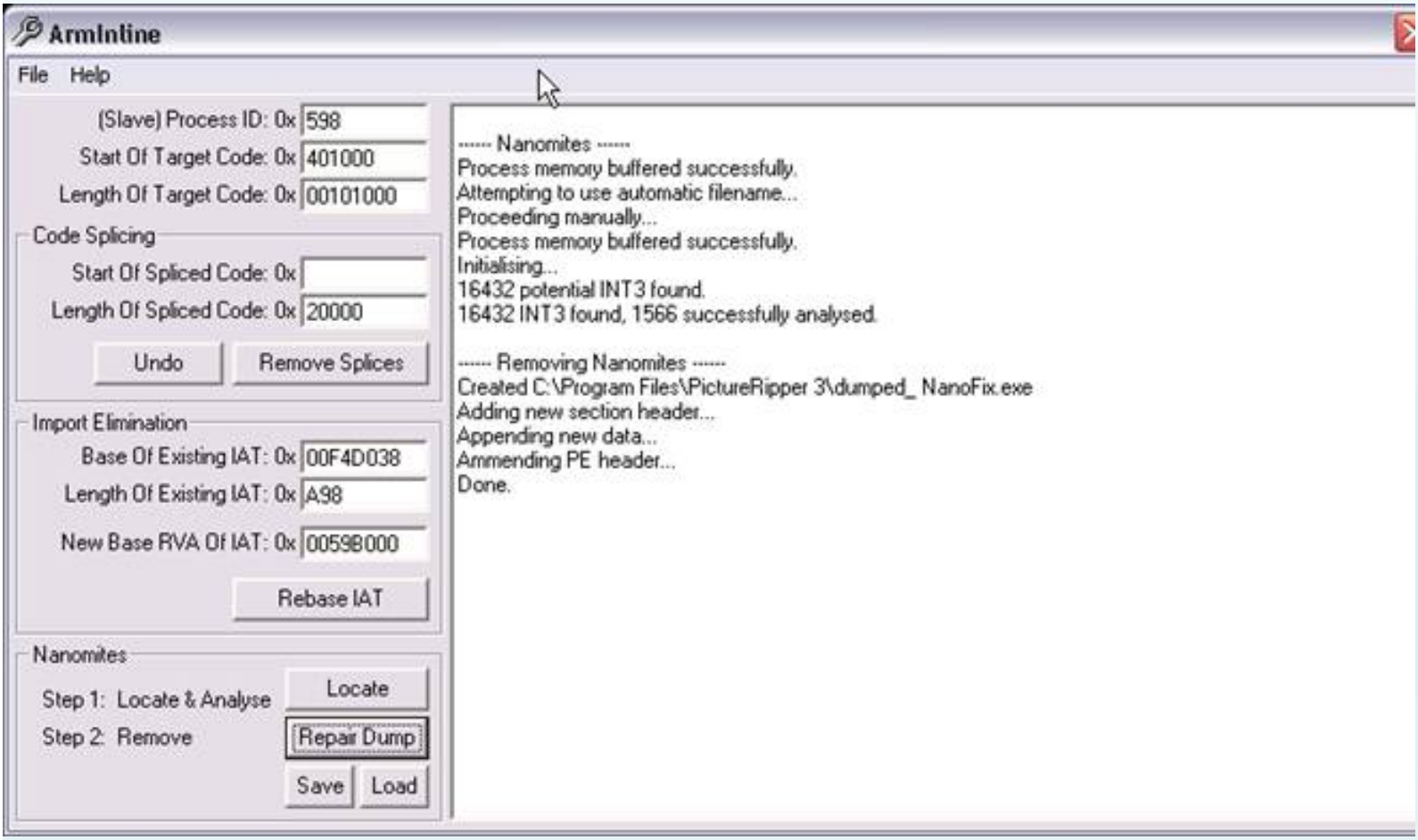


_Tiep To hit us 

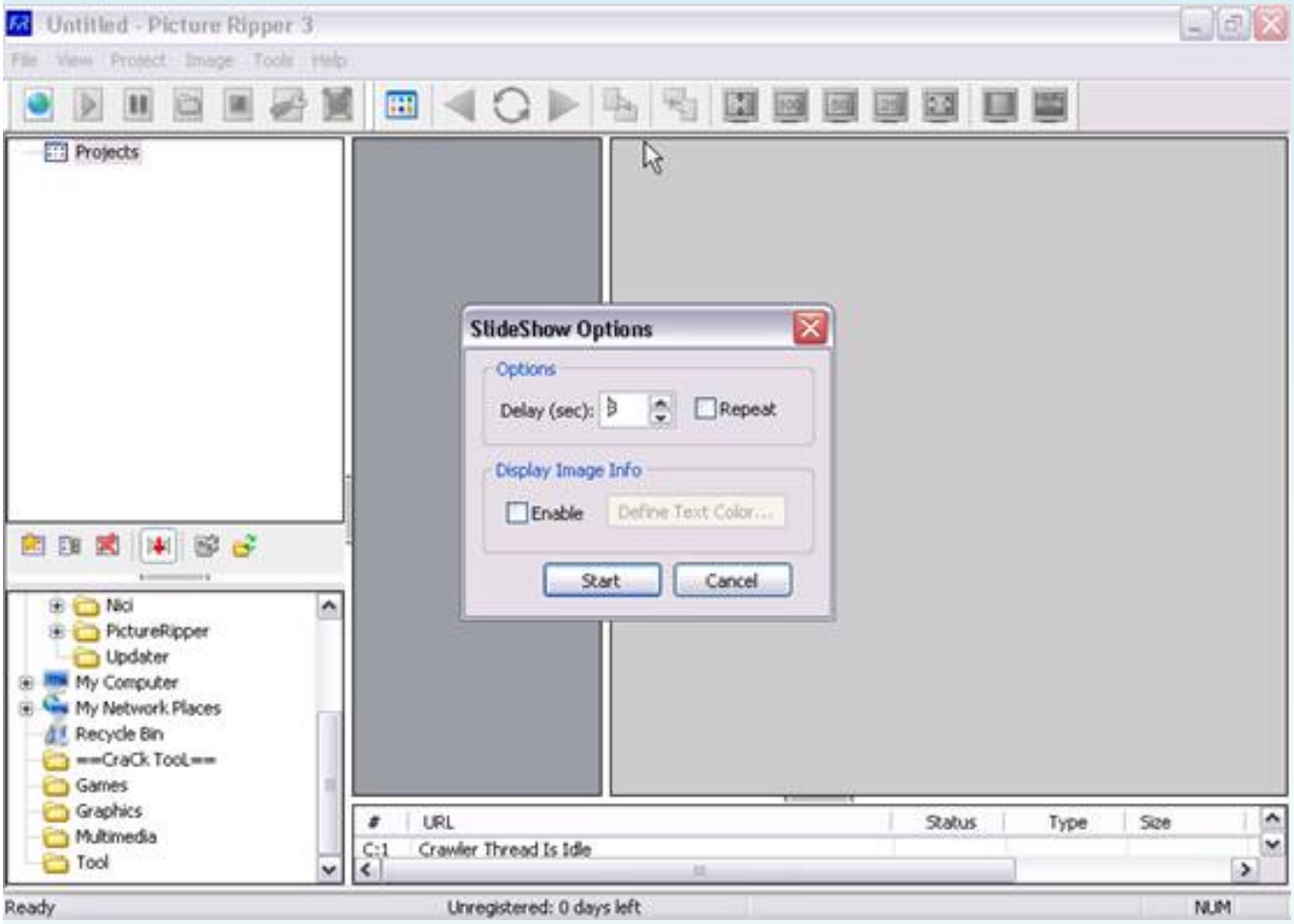
and select the file "dumped_.exe"



_ArmInline Was then kìa Done!



Nhu The doctors found it, very fast right? Test Run file "dumped NanoFix.exe" see the stars.



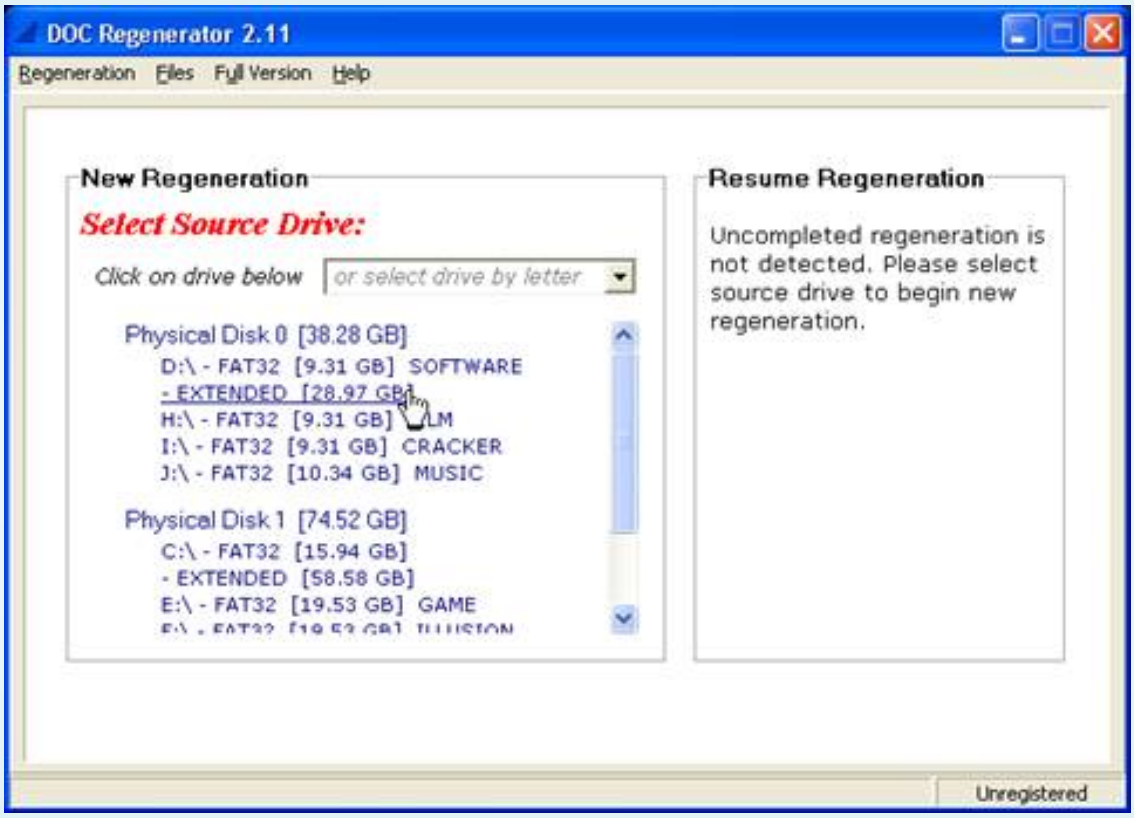
_He He! Done unpack. Chúc of Uncle successful home!

Written by Why Not Bar

Armadillo collect sand-stone

Target: DOC Regenerator v2.11

Debug Blocker + Hardware Finger Print



I. Tools

1.OllyDBG - The best config debugger for ArmMUP by hacnho.
2.LordPE 1.4 Deluxe
3.Import REConstructor 1.6 Final

II. Unpacking

_Kiem Investigation:

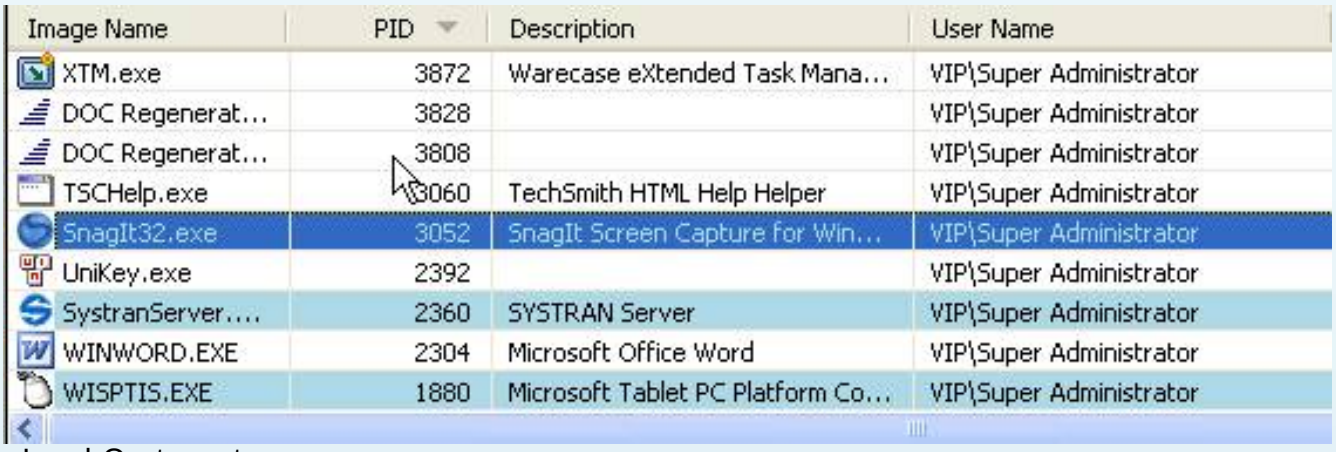
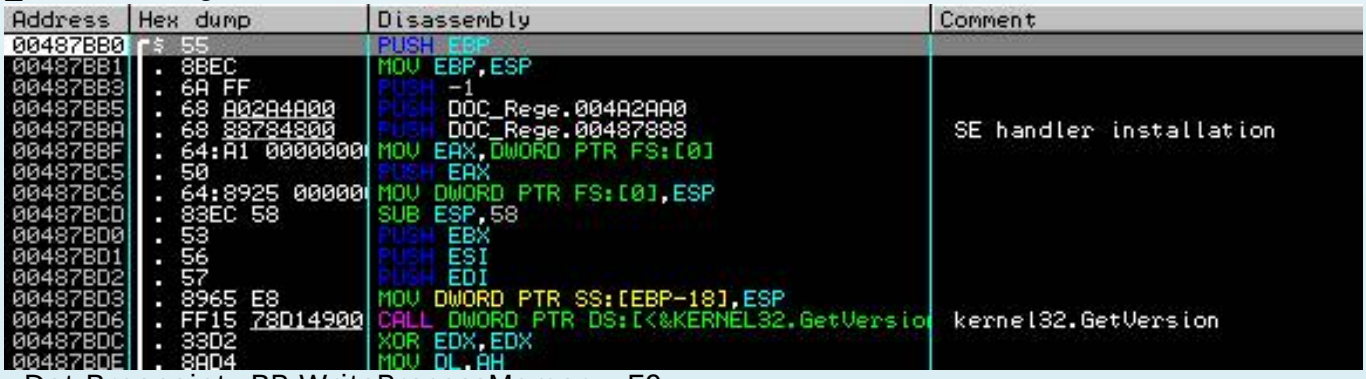


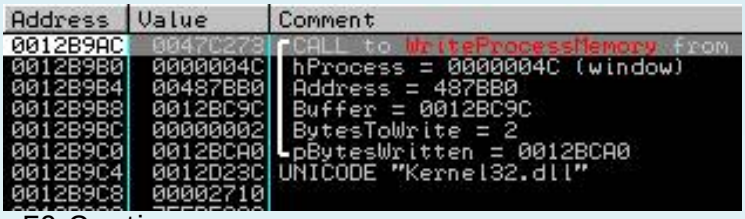
Image Name	PID	Description	User Name
XTM.exe	3872	Warecase eXtended Task Mana...	VIP\Super Administrator
DOC Regenerat...	3828		VIP\Super Administrator
DOC Regenerat...	3808		VIP\Super Administrator
TSCHelp.exe	3060	TechSmith HTML Help Helper	VIP\Super Administrator
SnagIt32.exe	3052	SnagIt Screen Capture for Win...	VIP\Super Administrator
UniKey.exe	2392		VIP\Super Administrator
SystranServer....	2360	SYSTRAN Server	VIP\Super Administrator
WINWORD.EXE	2304	Microsoft Office Word	VIP\Super Administrator
WISPTIS.EXE	1880	Microsoft Tablet PC Platform Co...	VIP\Super Administrator

_Load On target:



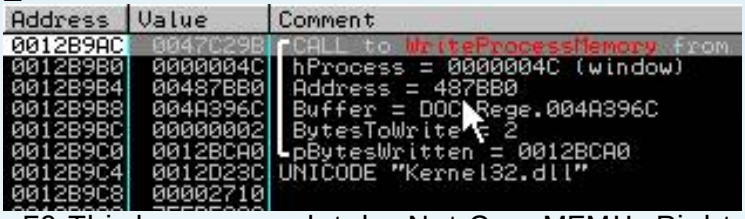
Address	Hex dump	Disassembly	Comment
00487BB0	$ 55	PUSH EBP	
00487BB1	. 8BEC	MOV EBP,ESP	
00487BB3	. 6A FF	PUSH -1	
00487BB5	. 68 A02A4A00	PUSH DOC_Rege.004A2AA0	
00487BBA	. 68 88784800	PUSH DOC_Rege.00487888	SE handler installation
00487BBF	. 64:A1 0000000(	MOV EAX,DWORD PTR FS:[0]	
00487BC5	. 50	PUSH EAX	
00487BC6	. 64:8925 00000(	MOV DWORD PTR FS:[0],ESP	
00487BCD	. 83EC 58	SUB ESP,58	
00487BD0	. 53	PUSH EBX	
00487BD1	. 56	PUSH ESI	
00487BD2	. 57	PUSH EDI	
00487BD3	. 8965 E8	MOV DWORD PTR SS:[EBP-18],ESP	
00487BD6	. FF15 78D14900	CALL DWORD PTR DS:[<&KERNEL32.GetVersio	kernel32.GetVersion
00487BDC	. 33D2	XOR EDX,EDX	
00487BDE	. 8AD4	MOV DL,AH	

_Dat Breapoint: BP WriteProcessMemory. F9:



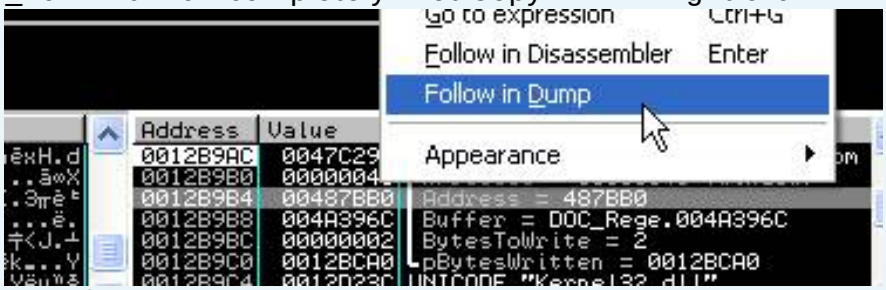
Address	Value	Comment
0012B9AC	0047C273	CALL to WriteProcessMemory from
0012B9B0	0000004C	hProcess = 0000004C (window)
0012B9B4	00487BB0	Address = 487BB0
0012B9B8	0012BC9C	Buffer = 0012BC9C
0012B9BC	00000002	BytesToWrite = 2
0012B9C0	0012BCA0	pBytesWritten = 0012BCA0
0012B9C4	0012D23C	UNICODE "Kernel32.dll"
0012B9C8	00002710	

_F9 Continue:

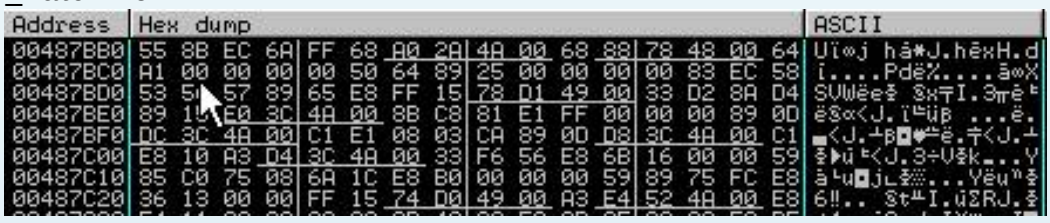


Address	Value	Comment
0012B9AC	0047C29B	CALL to WriteProcessMemory from
0012B9B0	0000004C	hProcess = 0000004C (window)
0012B9B4	00487BB0	Address = 487BB0
0012B9B8	004A396C	Buffer = DOC_Rege.004A396C
0012B9BC	00000002	BytesToWrite = 2
0012B9C0	0012BCA0	pBytesWritten = 0012BCA0
0012B9C4	0012D23C	UNICODE "Kernel32.dll"
0012B9C8	00002710	

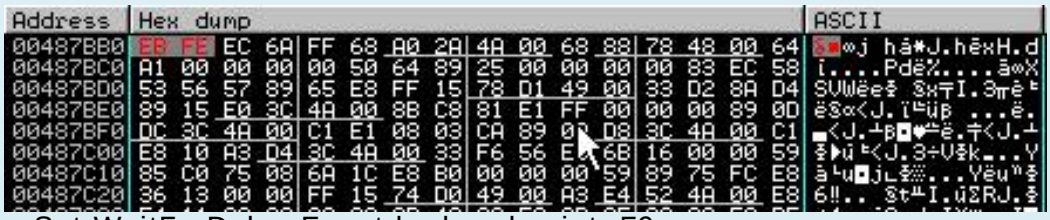
_F9 Third: run completely. Not CopyMEMII. Right click:



_Patch To:

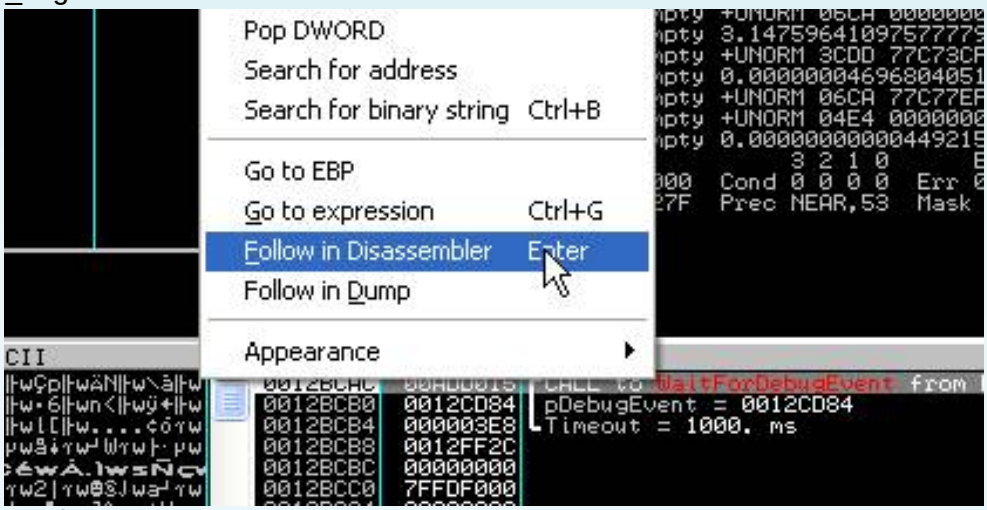


Address	Hex dump	ASCII
00487BB0	55 8B EC 6A FF 68 A0 2A 4A 00 68 88 78 48 00 64	Uï«j há*J.hêxH.d
00487BC0	A1 00 00 00 00 50 64 89 25 00 00 00 00 83 EC 58	í....Pdë%....â«X
00487BD0	53 56 57 89 65 E8 FF 15 78 D1 49 00 33 D2 8A D4	SVWëe§ §x╤I.3╥è╘
00487BE0	89 15 E0 3C 4A 00 8B C8 81 E1 FF 00 00 00 89 0D	ë§«<J.ï╚üß ...ë.
00487BF0	DC 3C 4A 00 C1 E1 08 03 CA 89 0D D8 3C 4A 00 C1	▄<J.┴ß◘♥ë.╪<J.┴
00487C00	E8 10 A3 D4 3C 4A 00 33 F6 56 E8 6B 16 00 00 59	§►ú╘<J.3÷V§k...Y
00487C10	85 C0 75 08 6A 1C E8 B0 00 00 00 59 89 75 FC E8	à└u◘j∟§▒...Yëu╒§
00487C20	36 13 00 00 FF 15 74 D0 49 00 A3 E4 52 4A 00 E8	6‼.. §t╨I.ú∑RJ.§

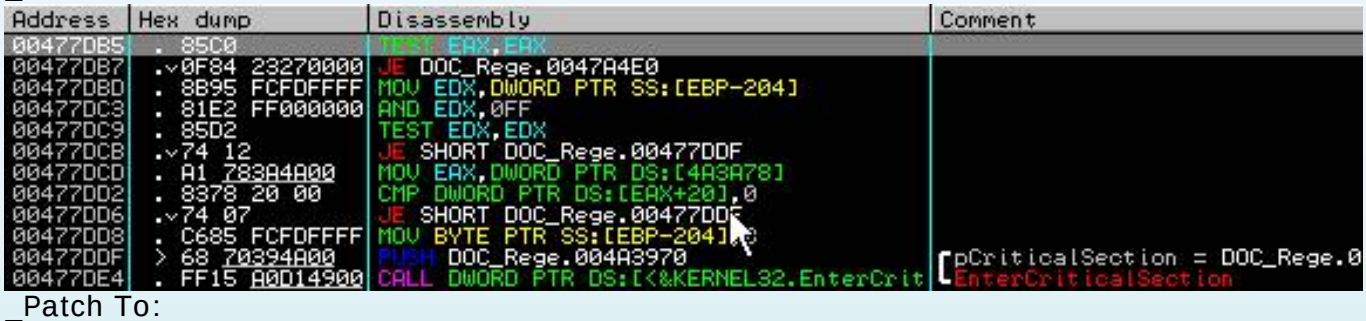


_ Set WaitForDebugEvent bp breakpoint. F9:

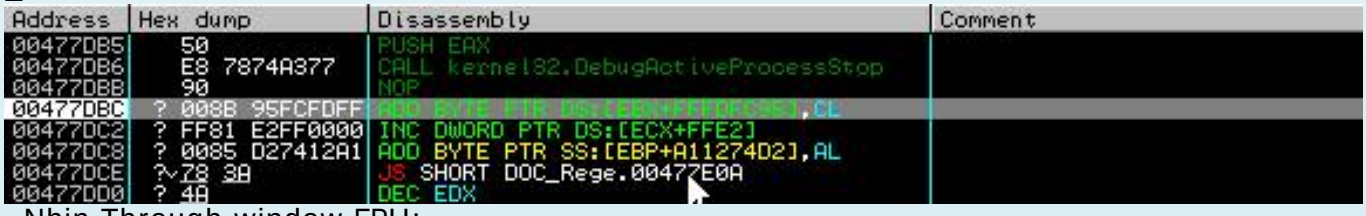
_Right Click in 12BCAC:



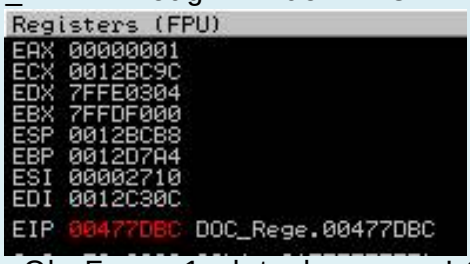
_Toi Here:



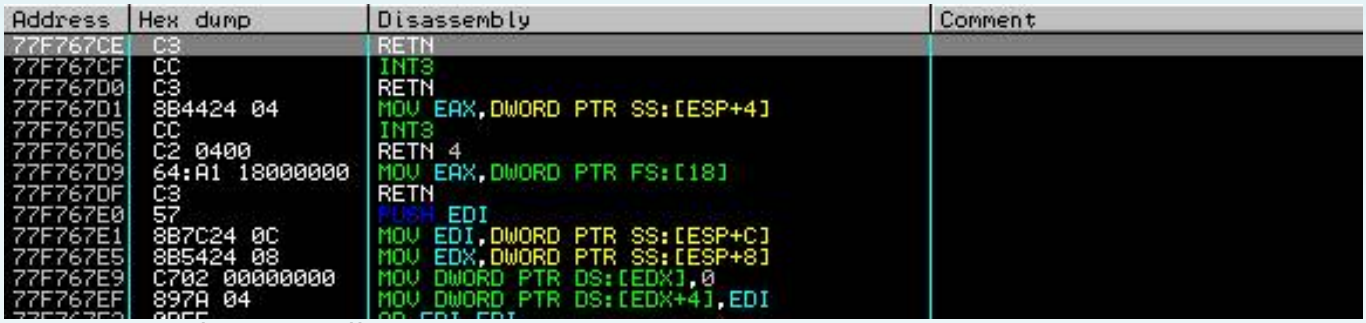
_Patch To:



_Nhin Through window FPU:

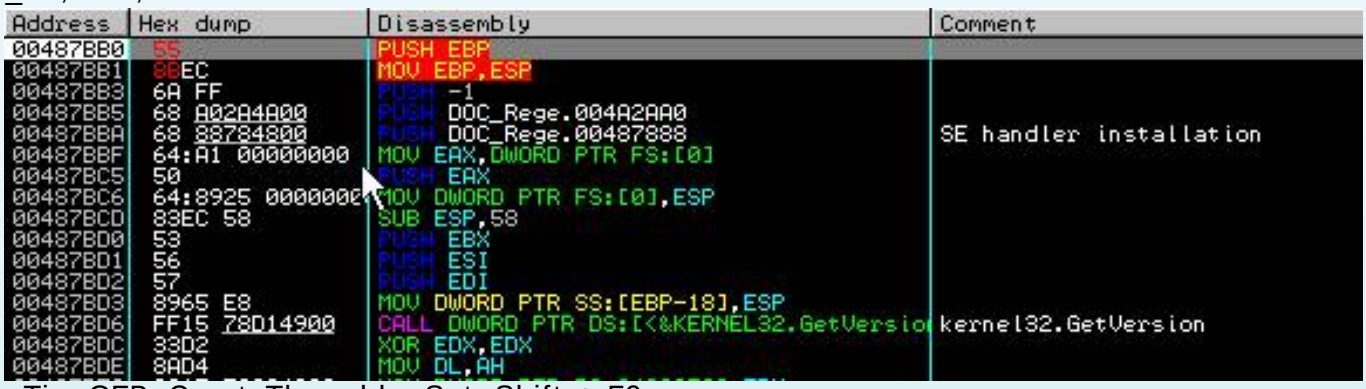


_Ok, Eax = 1, detach success! Open a second OllyDBG: Attach.



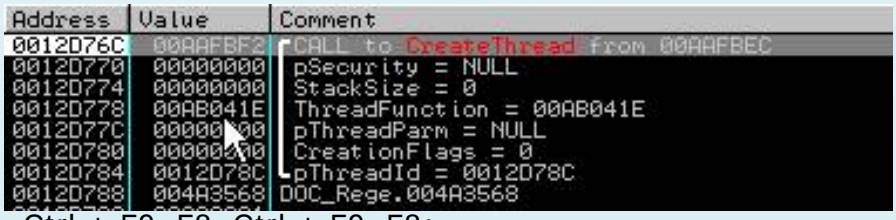
Address	Hex dump	Disassembly	Comment
77F767CE	C3	RETN	
77F767CF	CC	INT3	
77F767D0	C3	RETN	
77F767D1	8B4424 04	MOV EAX,DWORD PTR SS:[ESP+4]	
77F767D5	CC	INT3	
77F767D6	C2 0400	RETN 4	
77F767D9	64:A1 18000000	MOV EAX,DWORD PTR FS:[18]	
77F767DF	C3	RETN	
77F767E0	57	PUSH EDI	
77F767E1	8B7C24 0C	MOV EDI,DWORD PTR SS:[ESP+C]	
77F767E5	8B5424 08	MOV EDX,DWORD PTR SS:[ESP+8]	
77F767E9	C702 00000000	MOV DWORD PTR DS:[EDX],0	
77F767EF	897A 04	MOV DWORD PTR DS:[EDX+4],EDI	

_F9, F12, Ctrl + E to edit EBFE 558B:



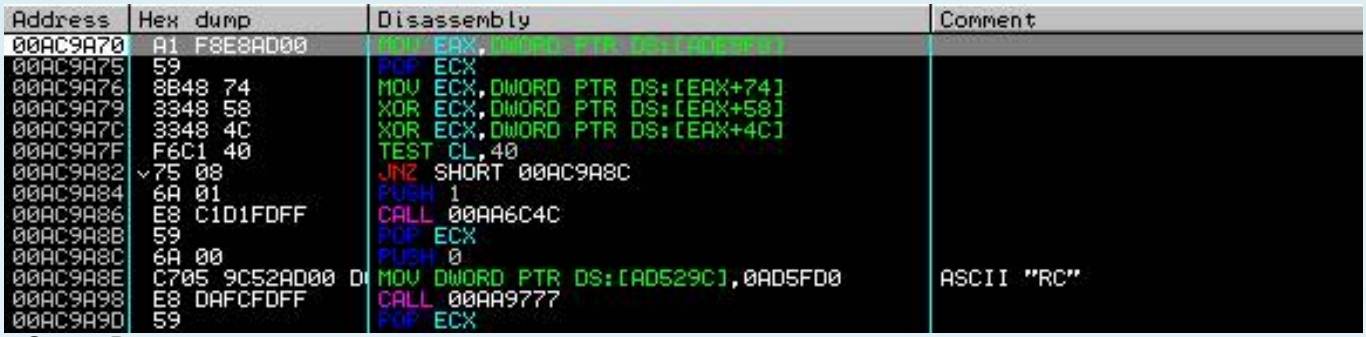
Address	Hex dump	Disassembly	Comment
00487BB0	55	PUSH EBP	
00487BB1	8BEC	MOV EBP,ESP	
00487BB3	6A FF	PUSH -1	
00487BB5	68 A02A4A00	PUSH DOC_Rege.004A2AA0	
00487BBA	68 88784800	PUSH DOC_Rege.00487888	SE handler installation
00487BBF	64:A1 00000000	MOV EAX,DWORD PTR FS:[0]	
00487BC5	50	PUSH EAX	
00487BC6	64:8925 000000(	MOV DWORD PTR FS:[0],ESP	
00487BCD	83EC 58	SUB ESP,58	
00487BD0	53	PUSH EBX	
00487BD1	56	PUSH ESI	
00487BD2	57	PUSH EDI	
00487BD3	8965 E8	MOV DWORD PTR SS:[EBP-18],ESP	
00487BD6	FF15 78D14900	CALL DWORD PTR DS:[<&KERNEL32.GetVersio	kernel32.GetVersion
00487BDC	33D2	XOR EDX,EDX	
00487BDE	8AD4	MOV DL,AH	

_Tim OEP. CreateThread bp Set, Shift + F9:



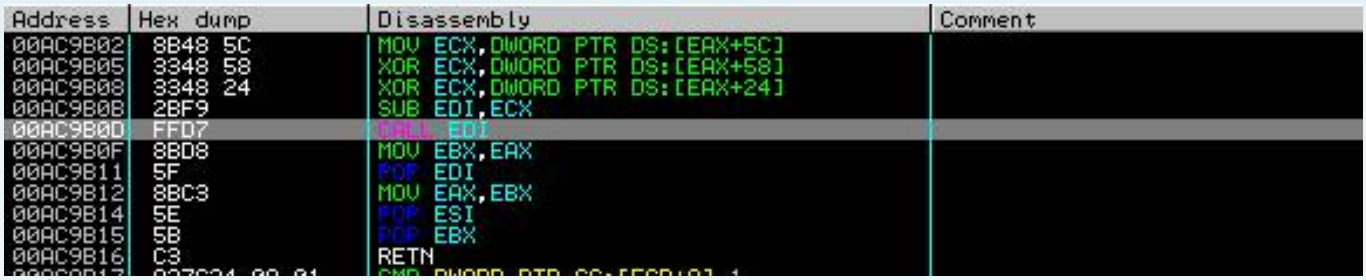
Address	Value	Comment
0012D76C	00AAFBF2	CALL to CreateThread from 00AAFBEC
0012D770	00000000	pSecurity = NULL
0012D774	00000000	StackSize = 0
0012D778	00AB041E	ThreadFunction = 00AB041E
0012D77C	00000000	pThreadParm = NULL
0012D780	00000004	CreationFlags = 0
0012D784	0012D78C	pThreadId = 0012D78C
0012D788	004A3568	DOC_Rege.004A3568

_Ctrl + F9, F8, Ctrl + F9, F8:



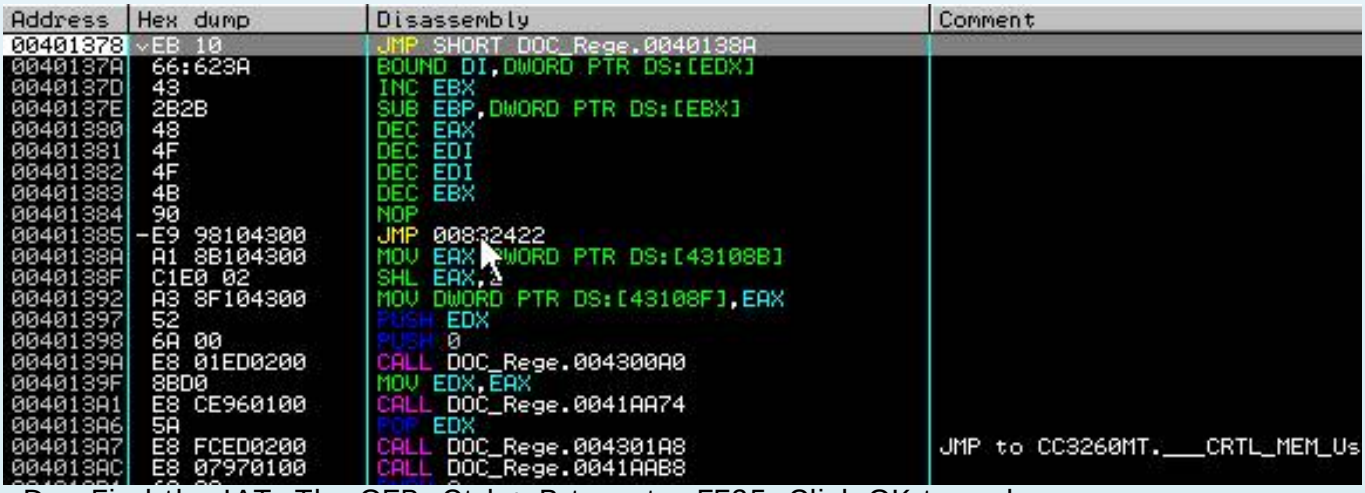
Address	Hex dump	Disassembly	Comment
00AC9A70	A1 F8E8AD00	MOV EAX,DWORD PTR DS:[ADE8F8]	
00AC9A75	59	POP ECX	
00AC9A76	8B48 74	MOV ECX,DWORD PTR DS:[EAX+74]	
00AC9A79	3348 58	XOR ECX,DWORD PTR DS:[EAX+58]	
00AC9A7C	3348 4C	XOR ECX,DWORD PTR DS:[EAX+4C]	
00AC9A7F	F6C1 40	TEST CL,40	
00AC9A82	75 08	JNZ SHORT 00AC9A8C	
00AC9A84	6A 01	PUSH 1	
00AC9A86	E8 C1D1FDFF	CALL 00AA6C4C	
00AC9A8B	59	POP ECX	
00AC9A8C	6A 00	PUSH 0	
00AC9A8E	C705 9C52AD00 D(	MOV DWORD PTR DS:[AD529C],0AD5FD0	ASCII "RC"
00AC9A98	E8 DAFCFDFF	CALL 00AA9777	
00AC9A9D	59	POP ECX	

_Cuon Down:

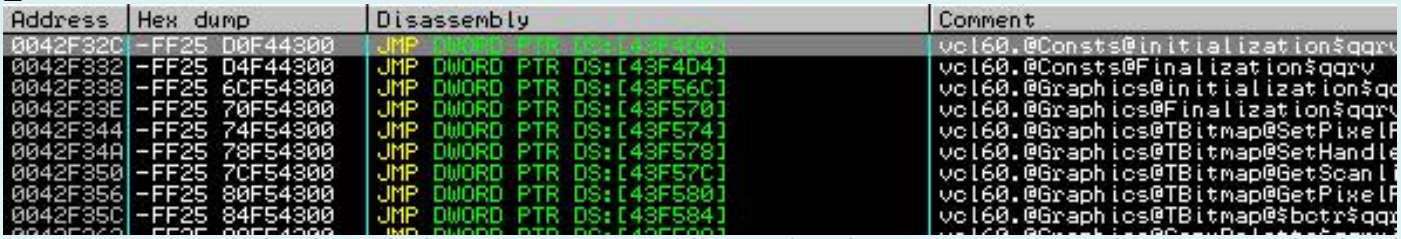


Address	Hex dump	Disassembly	Comment
00AC9B02	8B48 5C	MOV ECX,DWORD PTR DS:[EAX+5C]	
00AC9B05	3348 58	XOR ECX,DWORD PTR DS:[EAX+58]	
00AC9B08	3348 24	XOR ECX,DWORD PTR DS:[EAX+24]	
00AC9B0B	2BF9	SUB EDI,ECX	
00AC9B0D	FFD7	CALL EDI	
00AC9B0F	8BD8	MOV EBX,EAX	
00AC9B11	5F	POP EDI	
00AC9B12	8BC3	MOV EAX,EBX	
00AC9B14	5E	POP ESI	
00AC9B15	5B	POP EBX	
00AC9B16	C3	RETN	

_Nhan Here F2, F9, F7: OEP:



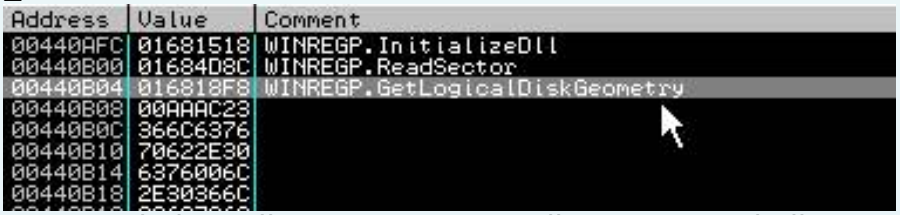
_Den Find the IAT: The OEP: Ctrl + B to enter FF25. Click OK to us here:



IAT _Du guess is in the mind 43FXXX. Here Follow Print dump> Memory Address, we obtained information as follows:

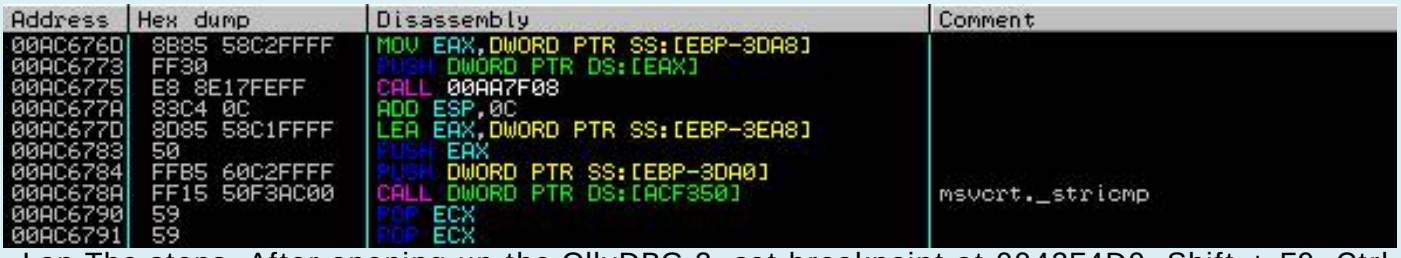
IAT Start:

_IAT End:



_Dong Window OllyDBG 2. Restart OllyDBG 1, as similar steps to debug by pass blocker. Open OllyDBG 2, In dump window: Ctrl + G 0043F4D0, Set breakpoint on write. Shift + F9 2 times to me here:

_Cuon Up. Remember 0040139A.



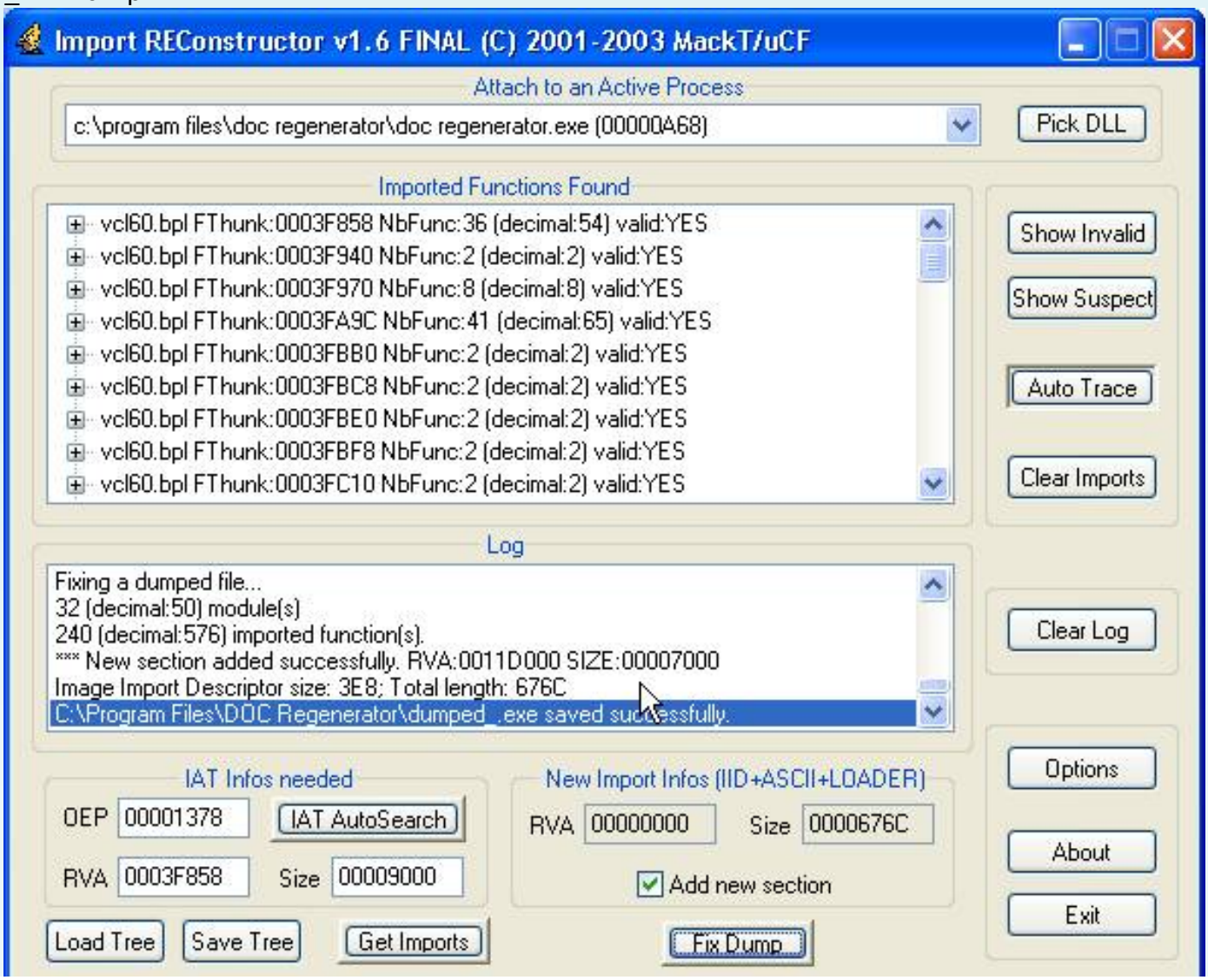
_Lap The steps. After opening up the OllyDBG 2, set breakpoint at 0043F4D0, Shift + F9. Ctrl + G 00AC6775, he set one here, F9, break, go to the function call, edit 55 to C3. Ctrl + G to OEP. Set

in a he. F9.

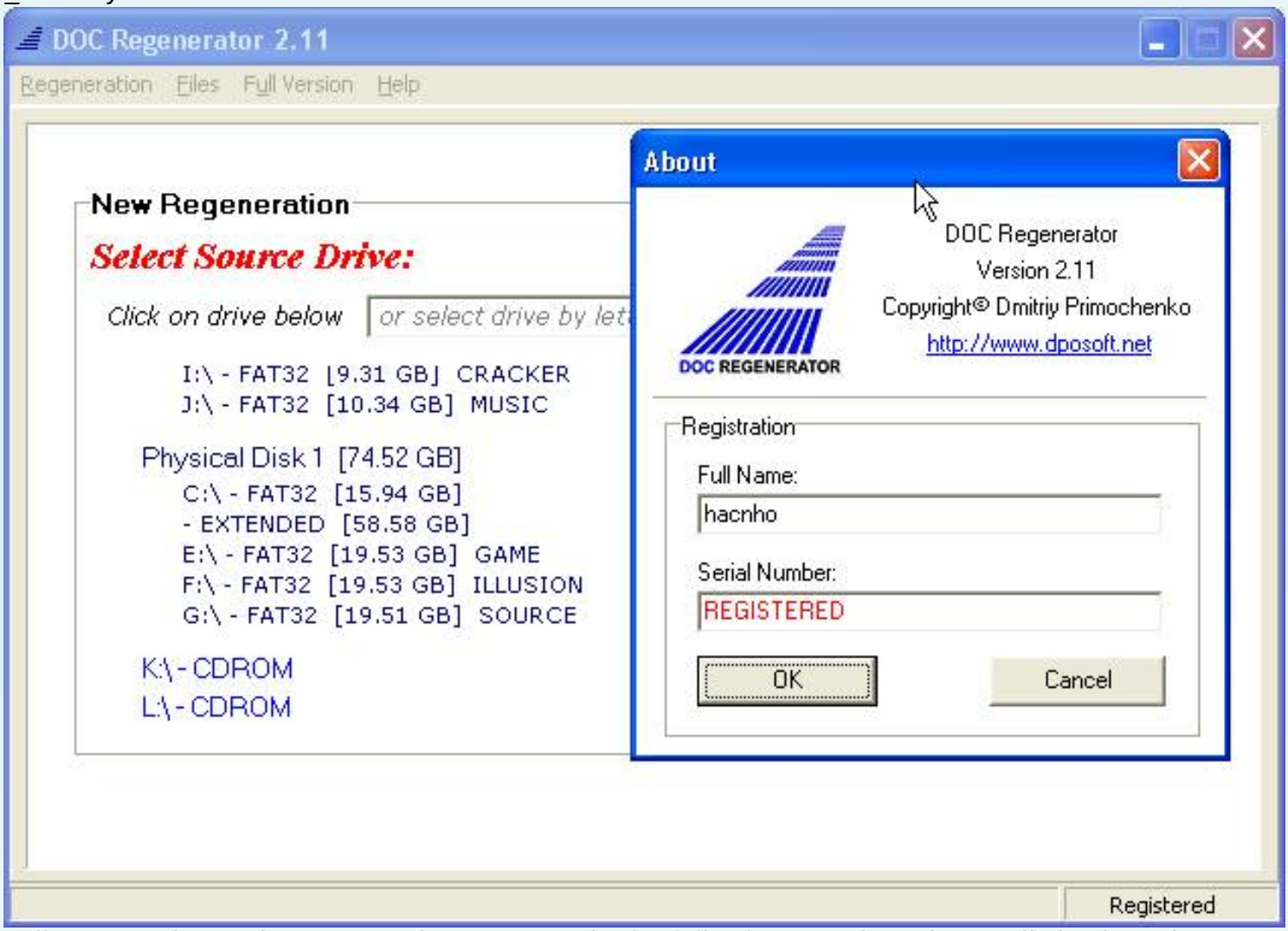
```
Address   Hex dump          Disassembly                          Comment
00401378  EB 10            JMP SHORT DOC_Rege.0040138A
0040137A  66:623A          BOUND DI,DWORD PTR DS:[EDX]
0040137D  43               INC EBX
0040137E  2B2B             SUB EBP,DWORD PTR DS:[EBX]
00401380  48               DEC EAX
00401381  4F               DEC EDI
00401382  4F               DEC EDI
00401383  4B               DEC EBX
00401384  90               NOP
00401385  -E9 98104300     JMP 00832422
```

_ LordPE, Full dump. ImpREC. Enter information OEP, IAT auto search, you receive:

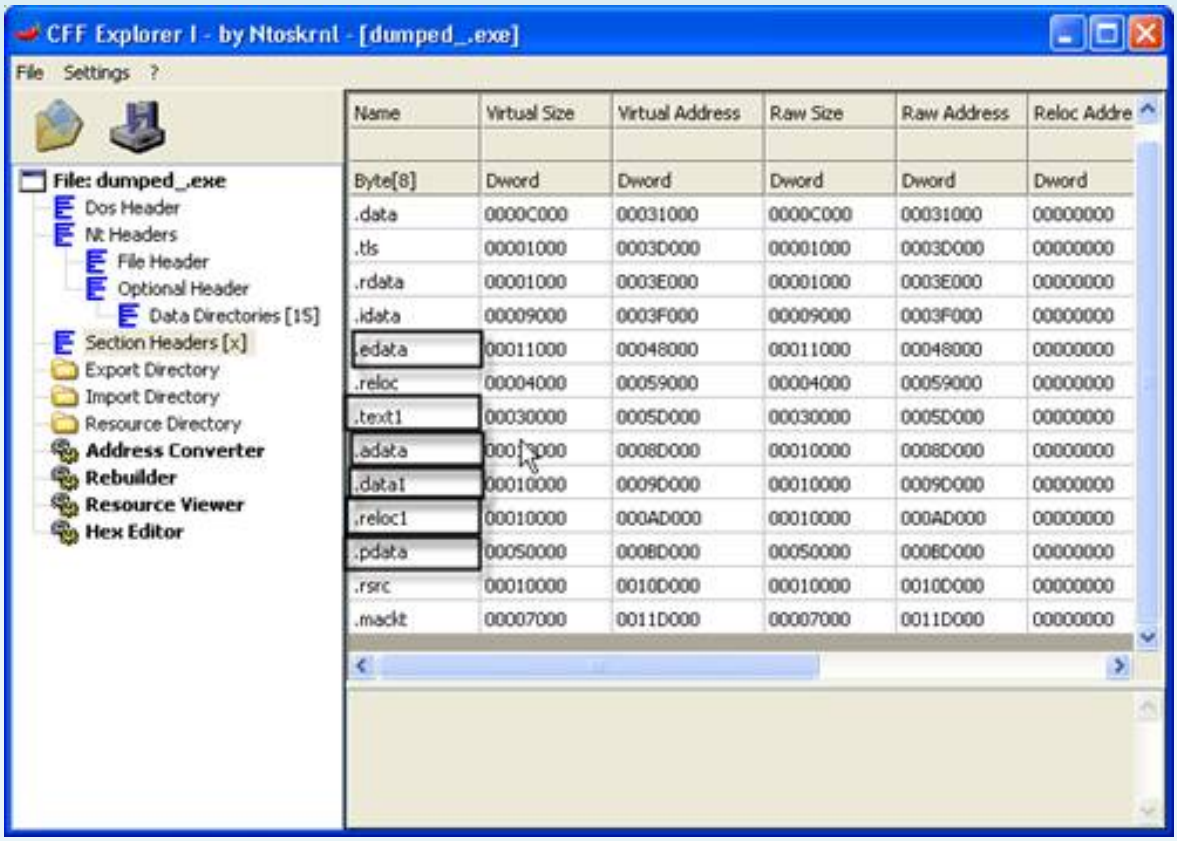
_Bo Last Show Invalid, Thunks Cut. Fix Dum try and run, Crash! Lack of function. ImpREC Open again, enter information such as table notification requirements or enter exactly as follows:
OEP: 00001378
IATRVA: 0003F4D0
IATSize: 000012AC
_Fix Dump:



_Run Try:



File Dumped.exe have great size. You can do the following month to the small size by using CFF Explorer:


CFF Explorer I - by Ntoskrnl - [dumped_.exe]
File Settings ?
File: dumped_.exe
Dos Header
Nt Headers
File Header
Optional Header
Data Directories [15]
Section Headers [x]
Export Directory
Import Directory
Resource Directory
Address Converter
Rebuilder
Resource Viewer
Hex Editor
Name Virtual Size Virtual Address Raw Size Raw Address Reloc Addre
Byte[8] Dword Dword Dword Dword Dword
.data 0000C000 00031000 0000C000 00031000 00000000
.tls 00001000 0003D000 00001000 0003D000 00000000
.rdata 00001000 0003E000 00001000 0003E000 00000000
.idata 00009000 0003F000 00009000 0003F000 00000000
.edata 00011000 00048000 00011000 00048000 00000000
.reloc 00004000 00059000 00004000 00059000 00000000
.text1 00030000 0005D000 00030000 0005D000 00000000
.adata 00010000 0008D000 00010000 0008D000 00000000
.data1 00010000 0009D000 00010000 0009D000 00000000
.reloc1 00010000 000AD000 00010000 000AD000 00000000
.pdata 00050000 000BD000 00050000 000BD000 00000000
.rsrc 00010000 0010D000 00010000 0010D000 00000000
.mackt 00007000 0011D000 00007000 0011D000 00000000

_Done!

MUP: Follow the ExeCryptor_2.2.x_2.3.x (tut's Evolution)

kienmanowar

Thread RLPack Com's exciting too, but the king is thằng EC Test try for the aged by tut Evolution at the time not. But then have the Moth try try, hehe Moth they should not kill thread that still run delicious:)). But mainly dicuss this article is follow the steps in the Evolution of the aged. Introduction to the EC and its features, the tools attached to perform the MUP brother read in tut.Thread only focus on how the aged Evolution made. Brothers have ideas what the comment nhé!

1. Find information about the Compiler:

This is the first step and is also a very important step to open to OEP based on standard procedures of the compiler, so the need to understand the information needed before further implementation.
Run the file by ExeCryptor pack, then open LordPE process to select and choose **Imagesize Correct.** Note recorded information that LordPE provided. If lack not achieved this step will not be able to create a raw dump. Next LordPE used to dump full program, then use the detector to search for information about the target. RDG will use the results are quite accurate. Through detect this we will know the information about the compiler is more accurate. Then will learn about the structure of the EP (Delphi, VC + +) to find the OEP.

2. Search OEP and OEP near procedure:

There are many ways to find the OEP the best way is to analyze the procedure in the target and to nearly EP. This can be applied to all the protectors. Before the start I wanted to make everything very clearly, so I will try to explain how how to find the OEP for the compilers different ... we are currently working with Delphi Compiler , is the task we are trying to get to the OEP. To be able to find the OEP of the other compilers more the ***Appendix A.***

Standard Dephi OEP:

```
PUSH EBP  ← OEP
MOV EBP,ESP
ADD ESP,-10
MOV EAX, address  ← this instruction is the first really needed to make program works
CALL Sysinit::initexe Procedure  ← this is the first procedure of ANY Delphi program
MOV EAX,DWORD PTR DS:[dword]
MOV EAX,DWORD PTR DS:[EAX]
CALL procedure1
MOV ECX,DWORD PTR DS:[dword]
MOV EAX,DWORD PTR DS:[dword]
MOV EAX,DWORD PTR DS:[EAX]
MOV EDX,DWORD PTR DS:[dword]
CALL procedure2
MOV EAX,DWORD PTR DS:[dword]
MOV EAX,DWORD PTR DS:[EAX]
CALL procedure3
CALL procedure4
```

Image is a typical example for Delphi EP, noted that all the Delphi have at least one function CALL first nhau. Nhu same way that we are sure that the function **sysinit: initexe** will be implemented in the program, so if you find it in our target then we will find the OEP quickly. If we go deeper into the function **Sysinit:** 2 **initexe** the ability that we found as follows:

For the target form Delphi 4-5

```
PUSH EAX
PUSH 0
CALL GetModuleHandleA ← this call to GetModuleHandleA will be important
MOV EDX,dword1
PUSH EDX
MOV DWORD PTR DS:[dword2],EAX
MOV DWORD PTR DS:[EDX+4],EAX
MOV DWORD PTR DS:[EDX+8],0
MOV DWORD PTR DS:[EDX+C],0
CALL procedure1
POP EDX
POP EAX
CALL procedure2
RETN
```

For the target form Delphi 6-7

```
PUSH EBX
MOV EBX,EAX
XOR EAX,EAX
MOV DWORD PTR DS:[dword1],EAX
PUSH 0
CALL GetModuleHandleA ← this call to GetModuleHandleA will be important
MOV DWORD PTR DS:[dword2],EAX
MOV EAX,DWORD PTR DS:[dword3]
MOV DWORD PTR DS:[dword4],EAX
XOR EAX,EAX
MOV DWORD PTR DS:[dword5],EAX
XOR EAX,EAX
MOV DWORD PTR DS:[dword6],EAX
CALL procedure1
MOV EDX,dword7
MOV EAX,EBX
CALL procedure2
POP EBX
RETN
```

Depending on the type of target that we rely on to search through GetModuleHandleA function. Load the file has been in full dump Olly, press *Ctrl + G*, type in 401000 then analyze code starting with the address. Next find all intermodular call, sorted by name and find all functions GetModuleHandleA (as it usually refers 2). If the function Follow Call will have code as follows:

```
00406EBC. 50 PUSH EAX
00406EBD. 6A 00 PUSH 0; / pModule = null
00406EBF. E8 F8FEFFFF CALL dumped.00406DBC \ GetModuleHandleA
00406EC4. THREE 08414D00 MOV EDX, dumped.004D4108
00406EC9. 52 PUSH EDX
00406ECA. 8905 DC744D00 MOV DWORD PTR DS: [4D74DC], EAX
00406ED0. 8942 04 MOV DWORD PTR DS: [EDX +4], EAX
00406ED3. C742 08 00000> MOV DWORD PTR DS: [EDX +8], 0
00406EDA. C742 0C 00000> MOV DWORD PTR DS: [EDX + C], 0
00406EE1. E8 8AFFFFFF CALL dumped.00406E70
00406EE6. 5A POP EDX
00406EE7. 58 POP EAX
00406EE8. E8 3FCBFFFF CALL dumped.00403A2C
00406EED. C3 RETN
```

If the form on the right as it is are the functions **Sysinit: initexe Procedure.** To be able to find the OEP, then we

must see the OEP in the form of a target not protect. Almost 95% are similar to the illustrations above and it is usually near the end of the code section! How to find the OEP in our target? Very simply, in our Olly mouse scroll down the code and find the section to the string "ExeCryptor" (press Ctrl + B and sample: 45 91 3D 6F 43 52 5F 35). After finding out this is translated to 1 billion by the OEP program.

```
004D2AAC \ 20274D00 DD dumped.004D2720
004D2AB0 00 DB 00
004D2AB1 00 DB 00
004D2AB2 00 DB 00
004D2AB3 00 DB 00
004D2AB4 70274D00 DD dumped.004D2770
```

3. Dump program:
As we have on the 2 address important program that is, OEP and Sysinit: initexe procedure. Work next week will automatically as what we did when unpack a target that is at the dump near OEP. To do this, there are a lot of different methods, for example, we get the program loaded into Olly and try to remove the anti-debug. Some Scripts help us to bypass the anti-debug but when they work is not always accurate. Normally I use another way to the dump site near the OEP, and that is the simplest way that I want to present in this article.

Because we know the location of the functions need to know (Sysinit: initexe), and we also make sure it was implemented at the same time it is also close to OEP, so we can change a few bytes in the position where it starts and then Attach process, implementation and dump v.. v.. In the case of our target, the procedure Sysinit: Initexe start address is: 0x00406EBC and we have information about it as follows:

```
00406EBC. 50 PUSH EAX
00406EBD. 6A 00 PUSH 0; / pModule = null
00406EBF. E8 F8FEFFFF CALL dumped.00406DBC \ GetModuleHandleA
00406EC4. THREE 08414D00 MOV EDX, dumped.004D4108
```

The work to be done now is what?
Very simply, we need a loader so that it will wait until the program is completely unpacked in memory and then conducted two bytes in patch 0x00406EBC: 50 6A ---> EB FE.
When we conducted this month patch program will fall on state repeats endlessly at start of Sysinit: initexe, and so we can conduct dump file is close to places of OEP. To be able to create a loader is generally the best way is that you have to code for yourself, but remember that if you decide to create a separate tool you need to pay attention to the EC anti-debug tricks, because if you make a simple way the program you can terminate within a few seconds. ***More and six B to better understand how to break the anti-debug and run by the EC Debugger in the program (in particular in Olly)***

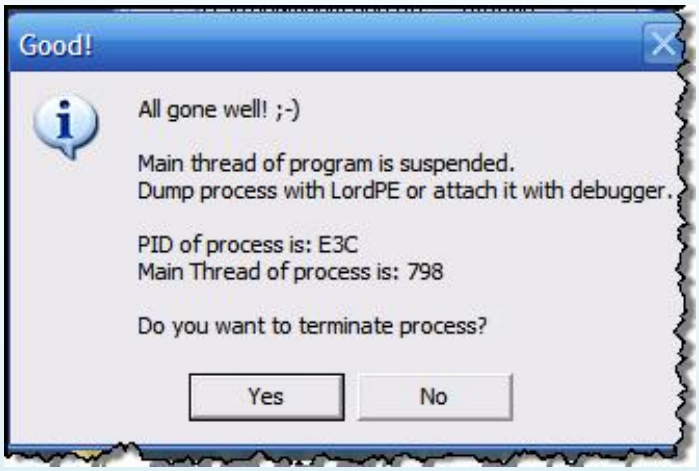
The creation of loader different each time we perform a file unpack any really is not possible and take a long time so I wrote 2 program allows us to find OEP easily that ko difficult time. It is *"EC Procedure Finder 1.0"* and *"EC 1.0 OEP Break."* Part I will be more guidance to use this tool 2.

First open EC 1.0 Procedure Finder, click Browse and select our target. The two requirements address the "Base of Code" and "Size of Code". For the two values we open this file is in LordPE protect and search for information in the Sections. Image Base because of the program is 0x0040000, we have 2 values that we need for the EC is Procedure Finder, for example:

Base of Code (VA) = 401000
Size of Code = D3000

Enter two values on to, then press Go, do not worry if you open the program, this completely thuong.Sau that average (depending on the processor's speed and size of code) you will receive the following :

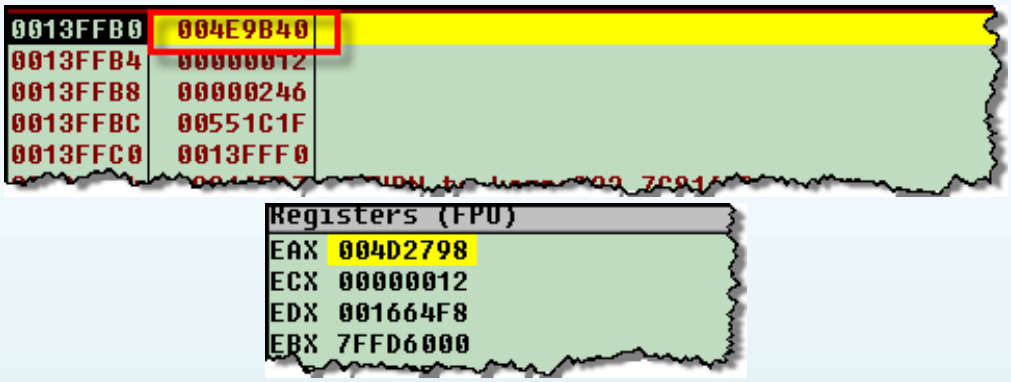
Through analysis of the above, we already know this, but because this is a message and I have to explain what I've learned in the process of unpacking this program .... in other cases you can always use the tool to find without having to step analysis manually as above. Now we want to how to dump the program from 0x00406EBC, this fully achieved if you follow Appendix B but not really necessary because we have a second to make this job for us. Now open the "EC 1.0 OEP Break" and select the target, enter the value that we are on, press Go and wait a while until the notice:



Now programs we stopped at the position close to OEP and this can be completed without using the debugger. Thong to report on the show to see our information on PID and Main Thread of the process, the this value is really do need however they can still be useful for me .... Now we click on it because I want at the dump before I close it:). Attach the program to Olly, the Attach fully implemented correctly! Now you will stop me in command after JMP Attach completed, the next press Shift + F9 to program implementation by the toan.Tiep press Pause and return to Main Thread which now has been suspend (resume again this thread), then open the window seat CPU main thread, we here in Olly:

```
00406EBC 50 PUSH EAX
00406EBD 6A 00 PUSH 0
00406EBF E8 F8FEFFFF CALL 00406DBC
00406EC4 THREE 08414D00 MOV EDX, 4D4108
00406EC9 52 PUSH EDX
```

Wow! We have the right where we need to, will now conduct target dump site is close to OEP! Dump programs use memory OllyDump plugin and select "Import rebuild," save as optional. Ok, we've implemented in the dump file is near the most OEP, the next record is about to write and EAX Stack value, then we will need it:



Address on the Stack is necessary because, based on which we know the return address of Sysinit: initexe. The value of EAX to write is very important because it will be used to later if we want to rebuild the code at the OEP, and it also helps you find the address of the OEP of the program. Summarized again in this step will be:

Return from Sysinit Address: initexe: 0x004E9B40
Value of EAX: 0x004D2798

Ok, so we have a dump file is ... due as expected. Section next to rebuild the import, but not close it for Olly stop at on.

4. Rebuid Imports

Previously we had to dump positions near OEP, but clearly it will not work until we fix what some thu.Viec first, like any unpack any steps that we need to build the table of the IAT. To do this, there are 2 different methods are:

1. Use of Deroko plugin (this plugin is used in ImpRec)
2. Use of Scripts PEKill

Both are on the way very well, but to make a quick I choose the second, also because of the reasons is our Olly is still open and hold the first step so we can complete the that does not encounter problems. However, before you can use this script is the one to provide information about the IAT IAT start and end. For this value is completely can read directly from the memory through Olly or use for a ImpRec automatically. Here I use ImpRec, open process in place and ImpRec 0x1000 as OEP RVA (may also include real found OEP), click Auto Search IAT we are as follows:

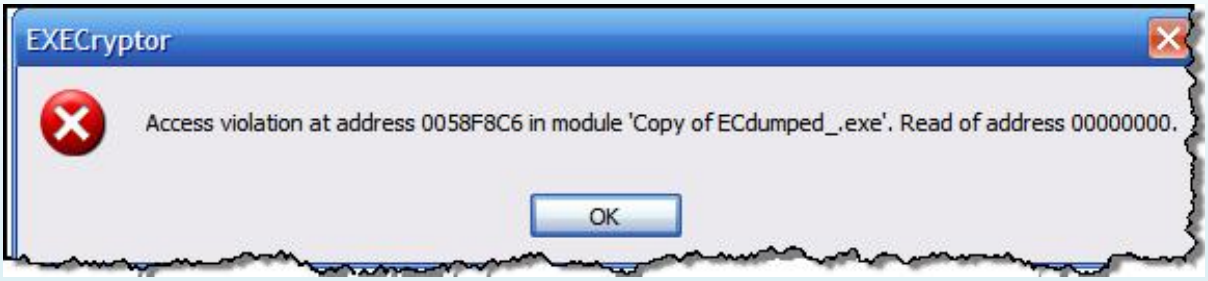
VA Start of IAT is: 004DD164
VA End of IAT is: 004DD164 + 828 = 004DD98C

Ok now open PEKill's script through an editor and change the two values that we've found in the script. After the edit is done, we go back and make Olly run this script to recover the whole of the IAT. Wait a while to finish the complete script (depending on the speed of your computer). After the IAT are full, we will fix the dumped file. ImportRec open up, select Process and complete information about OEP. Next click Get Imports ... all imports were completely resolve including GetProcAddress function to emulate by the EC. Click Fix and dumped dump file to fix IAT.

5. Fix TLS PE and Directory

Ok, we fix almost all programs and almost completely unpack and can be implemented (but is only on our servers), but before you take the next step we need to adjust a few prices LordPE therapy. Open the dump file import fix in the PE Editor. Value must correct here is BaseOfCode (0x1000 into edit and save again). Next to the Sections and record information. "Rdata" section. You interested in it because of the value of Delphi this is exactly the value of RVA TLS Directory. The reason that we open the Directories and change the value of the TLS RVA value of that. Rdata we have above. Finally Save the file, so that we have completed the fix PE.
Remember that fix the exact value of the TLS is very important, but not all programs are using it, but for the product / program code with Borland TLS is always used. Because this reason, if you unpack a program code with Borland C + + or Borland Delphi, please remember to fix the value of TLS with the value of RVA. Rdata section. But if you unpack the program is not how to fix Borland the best is set the entire value of the TLS (RVA and size) to 0 ... remember this is very important, because if you do not fix TLS by the EC will be implemented before the OEP and programs to our enforcement is not right and therefore we will have difficulty in debug the program

6. Set the correct OEP or rebuild a piece of it
Remember back in the first one found by the OEP, which is in step 2 we have found is 0x004D2AB8. Therefore we need to revise the value of the Entry Point 0x000D2AB8 with LordPE, the program will run immediately but .....: | This time we will encounter an error as follows:



If in the process of implementation that you encounter this error, please do not worry too, is a mechanism of anti-debug EC we will find ways to bypass them in the next. The most important part is we have run the file is dumped. As said in the introduction, they do not need Moth defeat the anti-debug thằng that fix is in addr 0x0058F8C6 program will run as normal. However, the objective of the dicuss as mentioned is to follow the steps of aged Evolution so I will not go off as Moth: D.

I want to show you another way, because in the EC to unpack, we do not want is to find the OEP of the program by simply want the best, but also restore a part of the original OEP. This result is not hard to do but need to observe the fine plus the appendix A to solve the problem. In this article, the EP by the Delphi compiler as we know Delphi 4 / 5 of that OEP will form similar to the following:

```
PUSH EBP  ← OEP
MOV EBP,ESP
ADD ESP,-0C
MOV EAX, address  ← this instruction is the first really needed to make program works
CALL SysinitProcedure  ← this is the first procedure of ANY Delphi program
...
```

Observations on the Figure, you notice that these values need to find we have found in Section 3. Based on these values as we rebuild the following:

```
PUSH EBP  ← OEP
MOV EBP,ESP
ADD ESP,-0C
MOV EAX, 004D2798  ← the value of EAX when entering the SysInit::initexe procedure
CALL 00406EBC  ← call to SysInit::initexe
```

OK next to what? We need to rebuild all the other parts of the OEP? If you enough patience and time is completely possible, but it is not necessary and even the very time, can be difficult ... the best method is to order a dance Return directly to the functions Sysinit Address: initexe. Finally we OEP will be as follows:

```
 PUSH EBP
MOV ESP, EBP
ADD ESP, -10
MOV EAX, 004D2798
CALL 00406EBC
JMP 004E9B40
```

So to be able to rebuild the code this we need a space just enough to perform. Here I choose 0x004D2B48 and fix them.

```
004D2B34  . FFFFFFFF      DD FFFFFFFF
004D2B38  . 0A000000      DD 0000000A
004D2B3C  . 45 58 45 43 7 ASCII "EXECryptor",0
004D2B47    00            DB 00
004D2B48  $ 55            PUSH EBP
004D2B49  . 8BEC          MOV EBP,ESP
004D2B4B  . 83C4 F0       ADD ESP,-10
004D2B4E  . B8 98274D00   MOV EAX,dumped_.004D2798
004D2B53  . E8 6443F3FF   CALL dumped_.00406EBC
004D2B58  .-E9 E36F0100   JMP dumped_.004E9B40
004D2B5D    00            DB 00
```

After you edit the code as the one to save what has changed, then use LordPE and fix the value of EP D2B48. Then try to run the program.

In fact I see no need to fix this khúc, older Moth straight addr fix that indoctrination is sticky. However, a stranger is not to fix them is not break in CreateThread API to kill the thread. I try try to stay by the EP D2AB8, then Bp in CreateThread not.

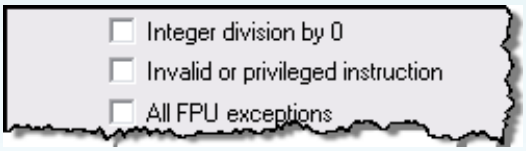
7.Defeating Anti-Debug:

Usually when a file was unpack, you will not have any one of any anti-debug and fix has the file will run normally without problems. But the EC is the other, even when you completely remove the packing layer, but when the program will still fail and do not work properly.

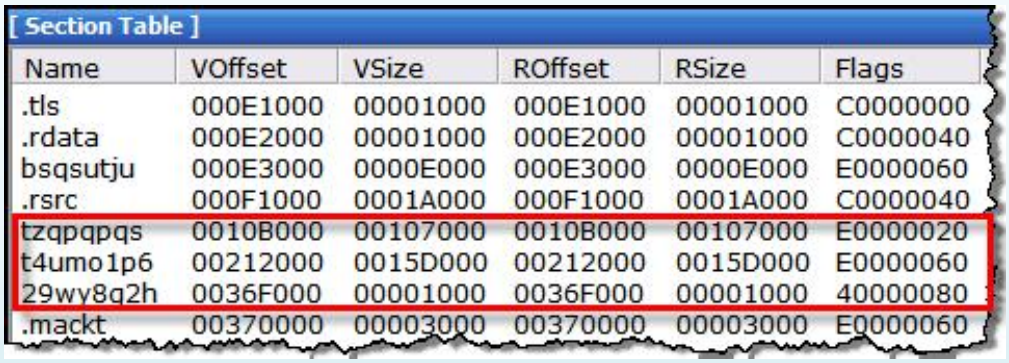
The reason this problem is whether we unpack the target, but even how to go when the EC code is implemented in different places in the program which means that EC can create protection thread, search for the debuggers and the implementation of which we never expected. : (

Naturally, we must completely leave out the mechanism to protect this to complete the unpack as well as to have a perfect file.

As I said above, the protection that EC use is to create threads of protection so if we find out how it is we can run the program normally, at least on Our machine. To do the first configuration we have the Olly, select the Exceptions follows:

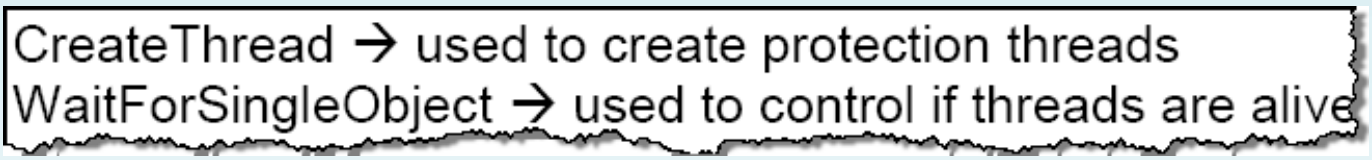


However, before the file to load dumped Olly, we need to make some changes in the section of the file. Open file dump fix was in LordPE, to the sections and drag down to the last:

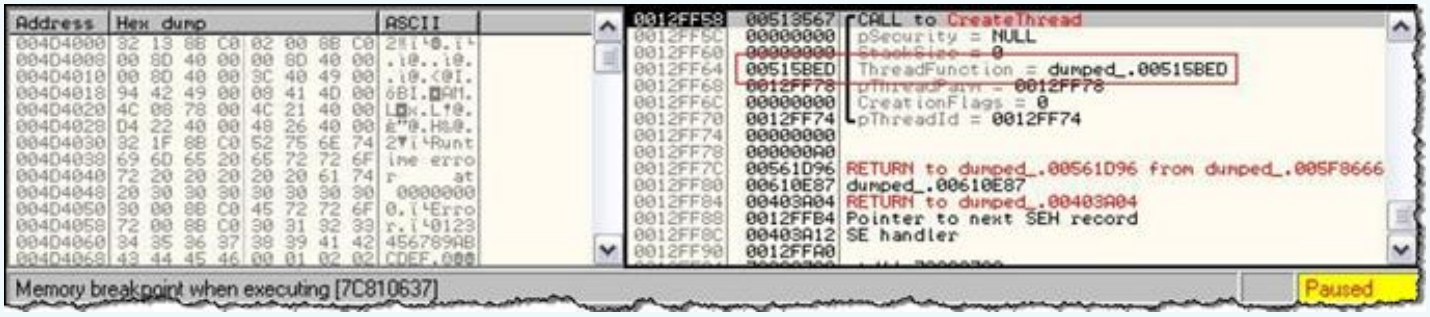


Name	VOffset	VSize	ROffset	RSize	Flags
.tls	000E1000	00001000	000E1000	00001000	C0000000
.rdata	000E2000	00001000	000E2000	00001000	C0000040
bsqsutju	000E3000	0000E000	000E3000	0000E000	E0000060
.rsrc	000F1000	0001A000	000F1000	0001A000	C0000040
tzqpqpqs	0010B000	00107000	0010B000	00107000	E0000020
t4umo1p6	00212000	0015D000	00212000	0015D000	E0000060
29wy8q2h	0036F000	00001000	0036F000	00001000	40000080
.mackt	00370000	00003000	00370000	00003000	E0000060

We must identify the sections added by the EC, the EC will contain code. If mup many of you will see to that. "Rsrc" section is the final section of the Delphi, and ". Mackt" section is by ImportRec added. So clearly that the 3 sections in the two section. "Rsrc" and ". Mackt" are the main sections of the EC more vao.Nhiem that we need to do is move them into 3 sections 1, this is too simple. You get a total of Vsize of 3 sections, then correct the value that we have to Vsize Rsize and sections of the first, we wipe the last 2 sections below it.
Ok, after merge the sections into one, we open up and Olly programs to load. I will stop at the EP, now we will kill the threads, so we need to know the API function that EC use:



First we put a memory in me BP's first order CreateThread function and press F9 to implement the program. To that Olly will stop a number of memory when reading, you just press F9 to see when the Status bar by Olly appeared the *"Memory breakpoint when executing"* the time to look at the Stack window:



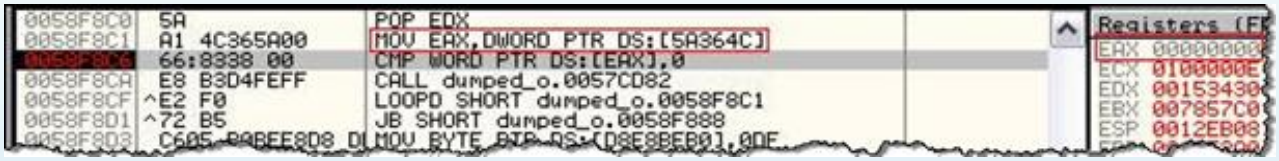
To fold for red, the value of this function are described by thread implementation that will be created, so if we stop it, the thread will not do anything. Ok, through CPU window and press Ctrl + G , followed by entering the value we find the will to get to the code. So there how do we kill duocc thread.Rat simply found the order is first order with a CALL command RETN (better is the change in RETN 4).

After the patch is finished, save the file and the file to load Olly.Neu we try to implement the program at this time it will not implement itself and it is "close by." Why? To find out the cause is set to a Memory BP

in WaitForSingleObject function and press F9. To appear when *"Memory executing breakpoint when it* stopped, looked through the window Stack:

The value of Timeoout this time is infinite, so the program will wait for an object .. but this object is created by thread protection. Do we kill thread protection, object will never be created and therefore the program will not start, so we must make way? Tolerable Evolution has aged a day of heaven and the aged we discovered that the value Timeout nau was set by me Push command -1. Therefore we need to find all the commands Push -1. Open Memory Map window, follow the EC section and find all the commands Push-1.Tiep theo set a BP on every command in order to restart and Olly.

Press F9 to implement the program, then stop when Olly only change the -1 to Push Push 0. This is not fixed it depends on the different target. After you have finished editing the save a file to another file to run the test. Immediately we failed to meet the Access indoctrination, recorded address that notification was sold. Load program to set and Olly bp at finding and implementing programs to stop in place when we set BP.



Note red seats fold, read the fix in tut's aged Evolution fix.Sau to complete the fix, try the test file was run fix it lickerish !!!!!!!! Finish this stage is then unpack the files can only be implemented on our computer but can not run on other machines.

Appendix: Run on target Debugger

In the first I did not count for much to EC anti-debug tricks is because there have been many articles explaining how to bypass, even had to have 2, 3 scripts (which I especially like the script of Haggar) can achieve this. One important than all that in about 90% of cases we do not need to run target in the debugger, simply by creating a loader to break in or use OEP 2 tools were above .. .. this will save much time, simply and quickly.

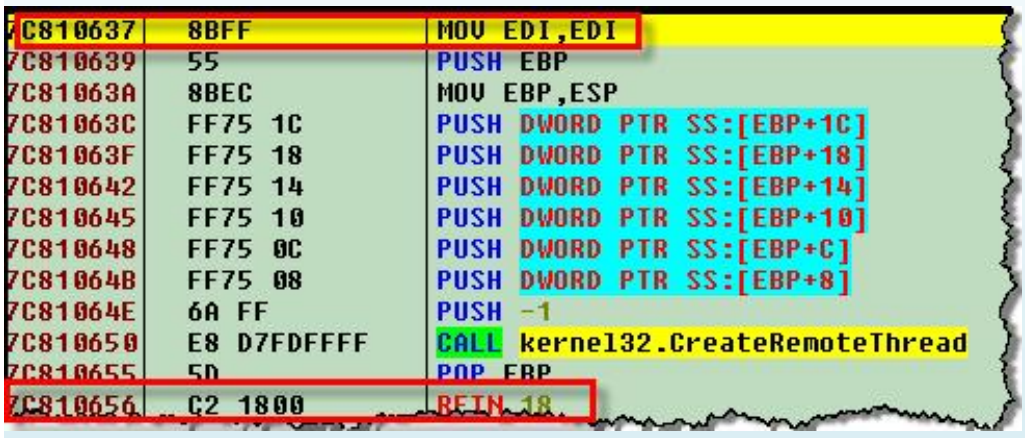
As I said in the previous section, the protection of the EC is based very much on protection threads that have been implemented before and during implementation of the program. So the only thing we need to do to be able to run the target of a break in olly threads. There are some other tips that small EC to use anti-debug, but we will use a plugin to overcome the present procedure nay.Dau first we use a program through Olly may face as the EC or OllyICe Olly ExeCryptor.

Olly Now we open up and refine the options of HideOD plugin as follows:

Next edit Olly to stop at "Breakpoint System" rather than in "Entry point of main module" (This is because if you try to stop at the packer's EP EC TLS function will be implemented and the anti - debug will detect Olly, so we need action before implementation Function TLS). Now, you can follow the steps to run different programs. I will explain how the fastest point of the load toi.Dau Olly to target and then remove the BP System (If you do not remove the program to be close less than 1 second):

Then we observe and think a bit about threads ..... There are two questions need to set answer:
1. A Thread is created like?
2. How to prevent it created?

The questions really easy answer, a thread is created using "CreateThread" API "or" CreateRemoteThread "API or" zwCreateThread "API. It is fortunate I absolutely sure that the EC uses only function "CreateThread" to create mechanisms to protect its (Protection threads).
To hand over the EC and not to create threads it is very simple, completely made by me to hook the first order function "CreateThread". In Olly we observe the code in CreateThread addr, we found as follows:



I found this function from the start mov edi, edi -> 18 Ret. What we need to do to stop the implementation of the code is modified MOV EDI, EDI's RET 18 and so EC will not be creating more threads. If the target is to protect equal version to version 2.2.9, the following steps to edit this is absolutely can run programs and unpack without problems.

However the version we are working as 2.3.x and this is the final so we will encounter some problems occur suddenly during the run target. Yes that's right, if you try to implement the program now it will stop after a few seconds and code enforcement is interrupted ... Why?
This is because there is a procedure that EC used to control the threads are alive, and if the threads have been stopped or terminated, the implementation process will stop.

The reason this is quite the gian.Phien the last EC use some "events" in the implementation of the program, and for each (not all) thread is creating a new event will also be created. So the problem is the EC would like to control if the thread is 1 exist, will wait event has been created ... and simply thread if not created, the event is not generated and therefore the will wait. waiting in endless time: (. Fortunately in this case we can make a hook procedure simple to solve this problem. It functions as a "WaitForSingleObject" will be used to life event. View code is as follows:

```
7C802520   8BFF            MOV EDI,EDI
7C802522   55              PUSH EBP
7C802523   8BEC            MOV EBP,ESP
7C802525   6A 00           PUSH 0
7C802527   FF75 0C         PUSH DWORD PTR SS:[EBP+C]
7C80252A   FF75 08         PUSH DWORD PTR SS:[EBP+8]
7C80252D   E8 0E000000     CALL kernel32.WaitForSingleObjectEx
7C802532   5D              POP EBP
7C802533   C2 0800          RETN 8
```

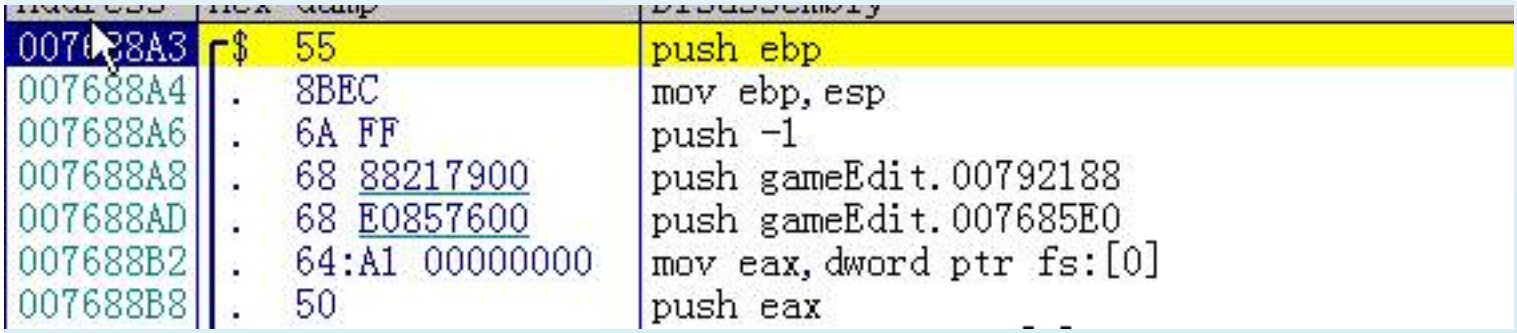
Here is the correct MOV EDI, EDI to RETN 8. Too simple:).

CopyMemII + Debugblocker

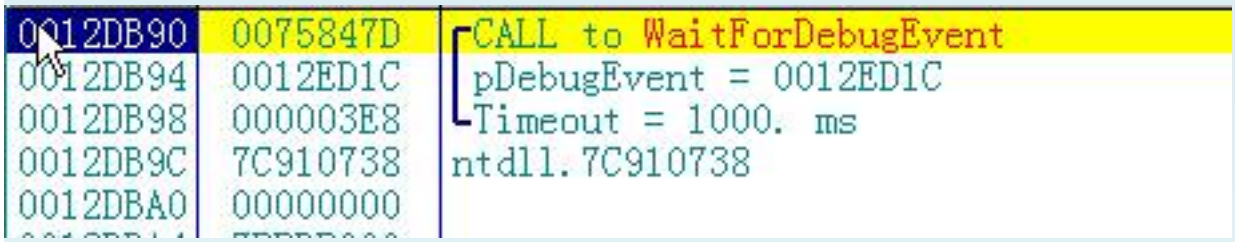
Target : Game Editor 1.3.2
Hompage: http://game-editor.com
Crack Tool : 1.OllyDBG 2005
2. LordPE Deluxe 1.4-by yoda
3.Import REConstructor 1.6 Final
Author : Why Not Bar

With Game Editor 1.3.2 this looks like any gambling problems must unpack! Uncle children because they have written tut guide. With this Target only CopyMemII + Debugblocker no Nano but the difficulty here lalam how to earn the IAT is OK Full stop! With how common it is difficult to succeed. Therefore we must use as a dose of the network to search for the Full IAT. Uncle The practice will only understand ...

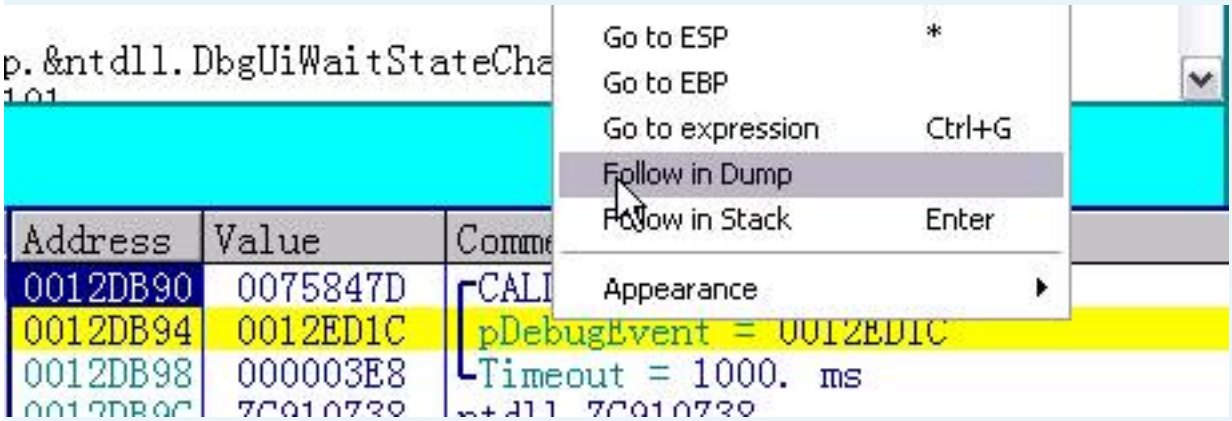
_ Target Load:



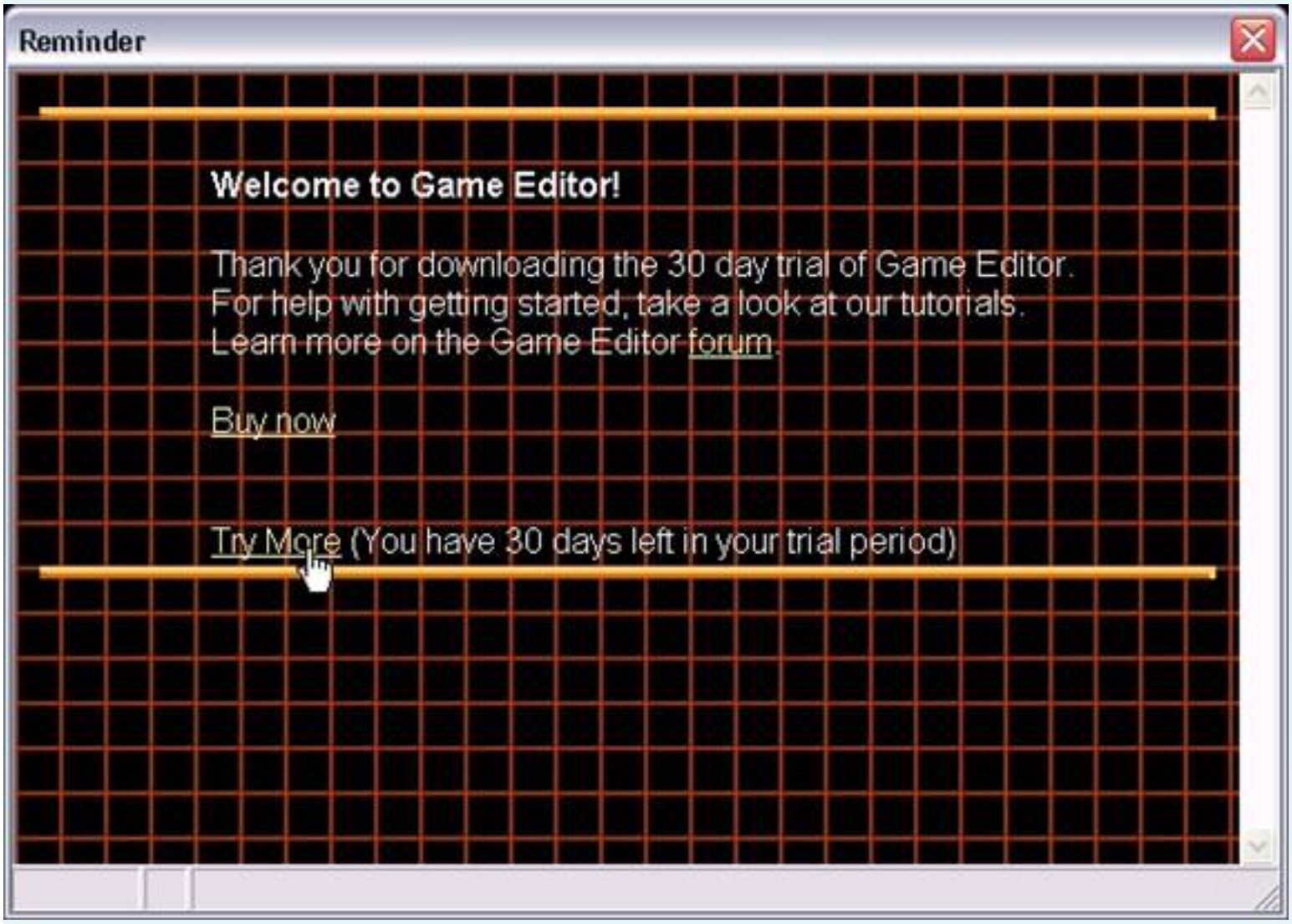
_Alt + F1, BP WaitForDebugEvent and press F9 Stack window we see as follows:



_Chon Like



Next BC WaitForDebugEvent, BP WriteProcessMemory, press F9, 1 Nag prompt appears



_Nhan "More Try" and you will see the following:

Address	Value	Comment
0012ED30	00000000	
0012ED34	005D6105	gameEdit.005D6105
0012ED38	00000002	
0012ED3C	00000000	
0012ED40	005D6105	gameEdit.005D6105
0012ED44	005D6105	gameEdit.005D6105

Address	Value	Comment
0012D9FC	0075C947	CALL to WriteProcessMemory from gameE
0012DA00	00000048	hProcess = 00000048 (window)
0012DA04	005D6000	Address = 5D6000
0012DA08	0036D008	Buffer = 0036D008
0012DA0C	00001000	BytesToWrite = 1000 (4096.)
0012DA10	0012DB40	pBytesWritten = 0012DB40

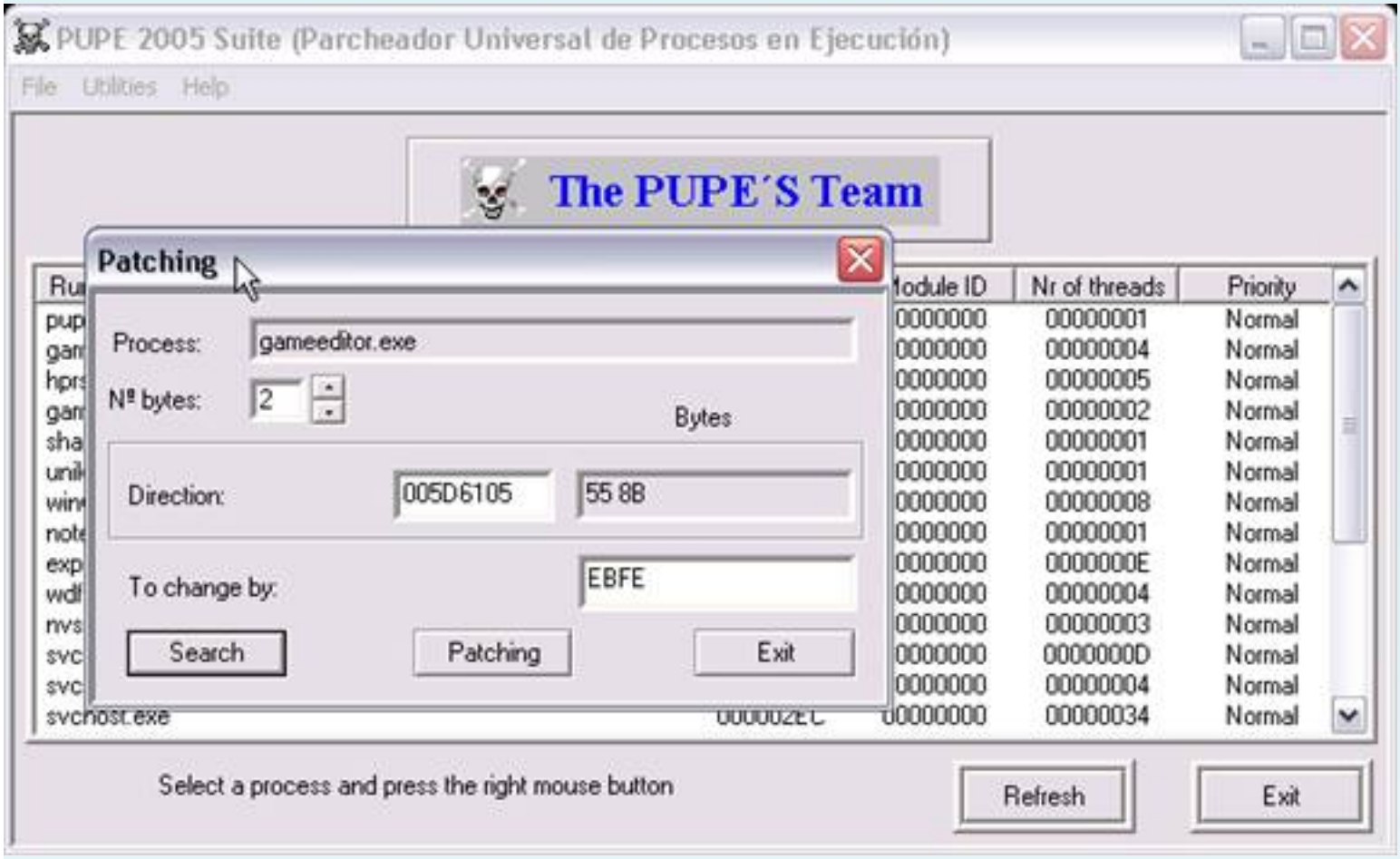
_ Ctrl + F9, in the Stack you roll the mouse to meet the second return from the return first and we are

0012DB40	00001000	
0012DB44	0036E008	
0012DB48	0012DB88	
0012DB4C	0075B3F2	RETURN to gameEdit.0075B3F2 from gameEdit.0075B778
0012DB50	000001D5	
0012DB54	0036B744	

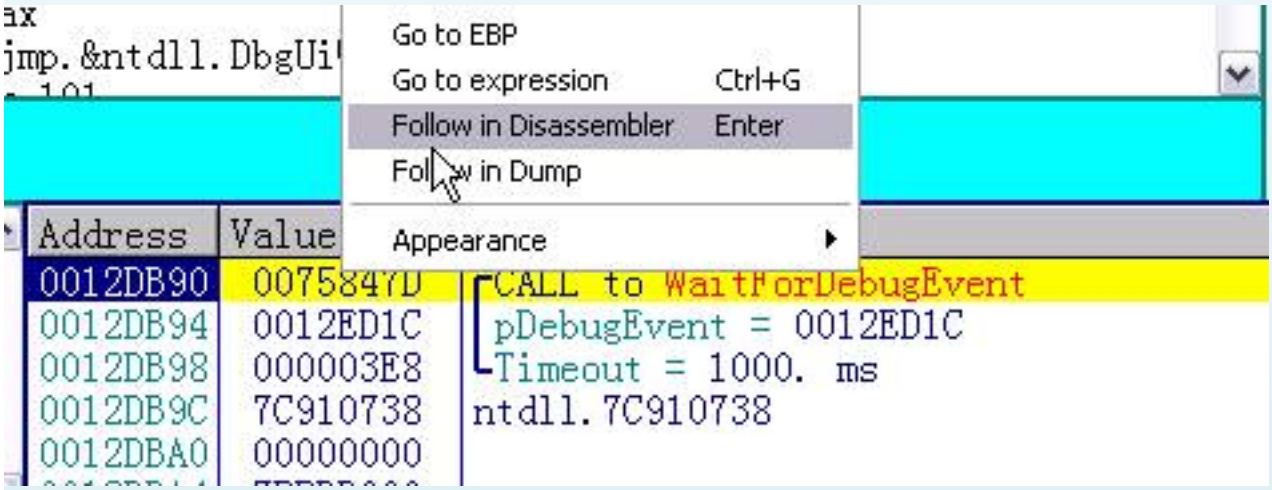
_ Back to the CPU, Ctrl + G: 0075B778, Ctrl + R, select the command Call 2 Double-click on it and submit lenh Call this as follows:

0075B6FF	.	50	push eax
0075B700		90	nop
0075B701		90	nop
0075B702		90	nop
0075B703		90	nop
0075B704		90	nop
0075B705	.	83C4 0C	add esp, 0C
0075B708	.	50	push eax
0075B709	.	F7D0	not eax

_ Open PuPe and enter as follows:

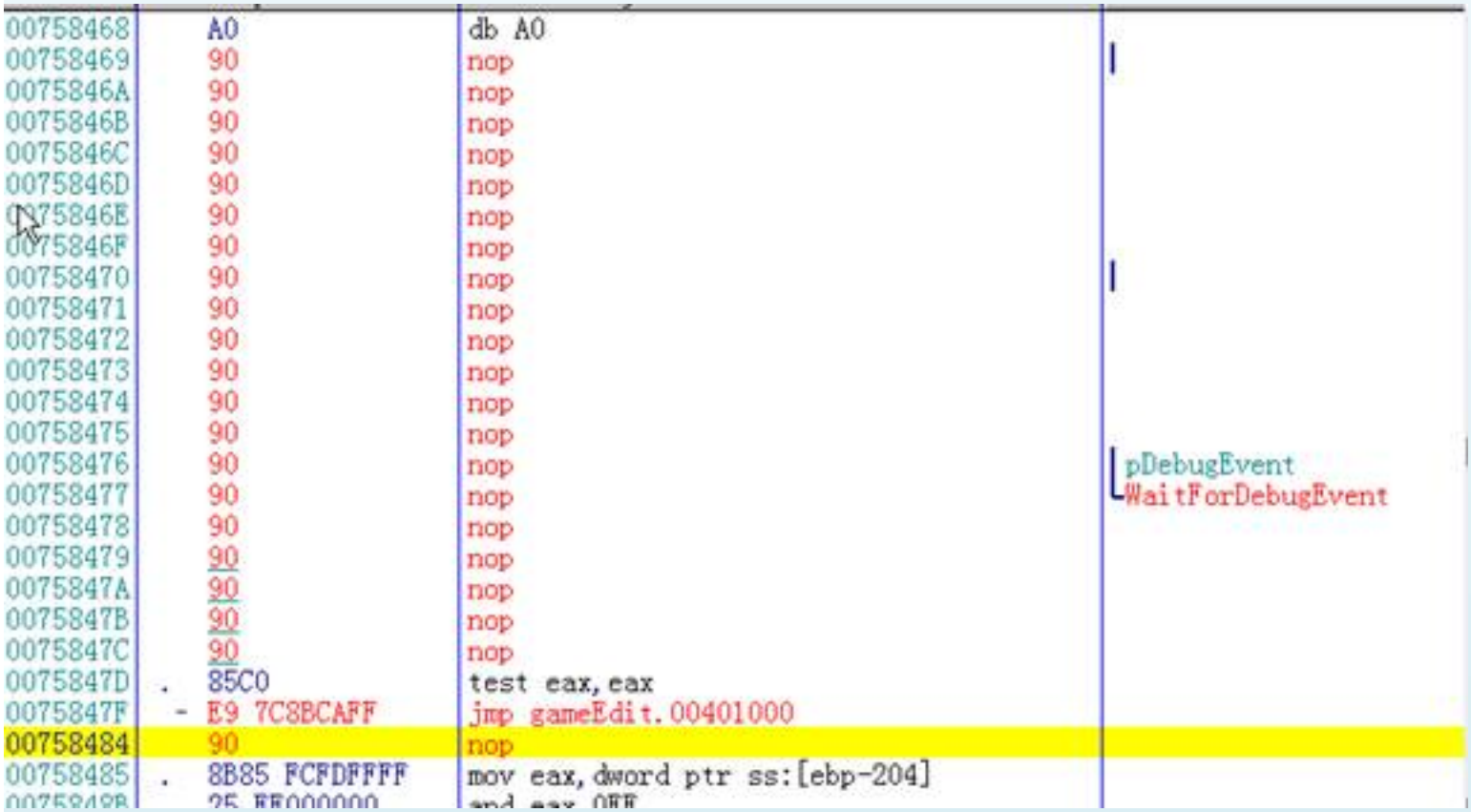


_ Click Patching, you have a breakpoint in the kernel32 WriteProcessMemory. Bc it, then set a breakpoint bp WaitForDebugEvent, F9. At 0012DB90 [in Stack] -> right click> Follow in Disassembler.

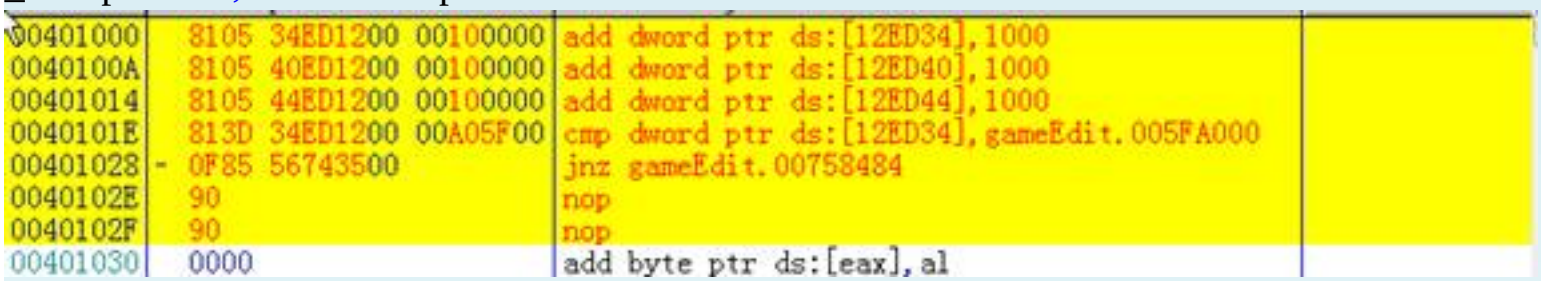


_ Need to set an origin here:

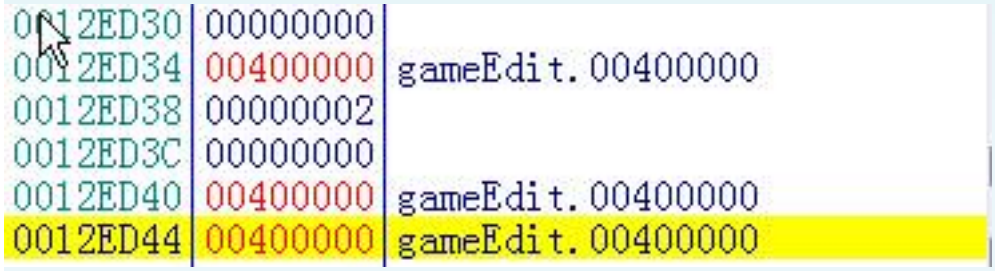
_ And patch as follows:



_ Jump to 401,000 and the patch:

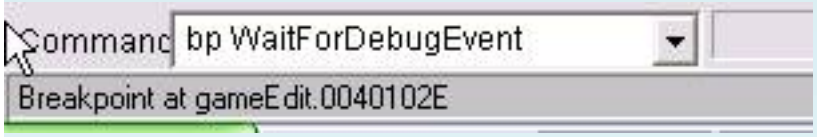


_ Continue in 3 patch addresses containing OEP:



_ Set 1 breakpoint in 0040102E Press F9 to run

_Nhan F9 to run



_ Now we pass by debug blocker

```
00401000    8105 34ED1200 00100000  add dword ptr ds:[12ED34],1000
0040100A    8105 40ED1200 00100000  add dword ptr ds:[12ED40],1000
00401014    8105 44ED1200 00100000  add dword ptr ds:[12ED44],1000
0040101E    813D 34ED1200 00A05F00  cmp dword ptr ds:[12ED34],gameEdit.005FA000
00401028  - 0F85 56743500           jnz gameEdit.00758484
0040102E    68 C0070000             push 7C0
00401033    E8 5993457C             call kernel32.DebugActiveProcessStop
00401038    90                      nop
00401039    90                      nop
0040103A    0000                    add byte ptr ds:[eax],al
```

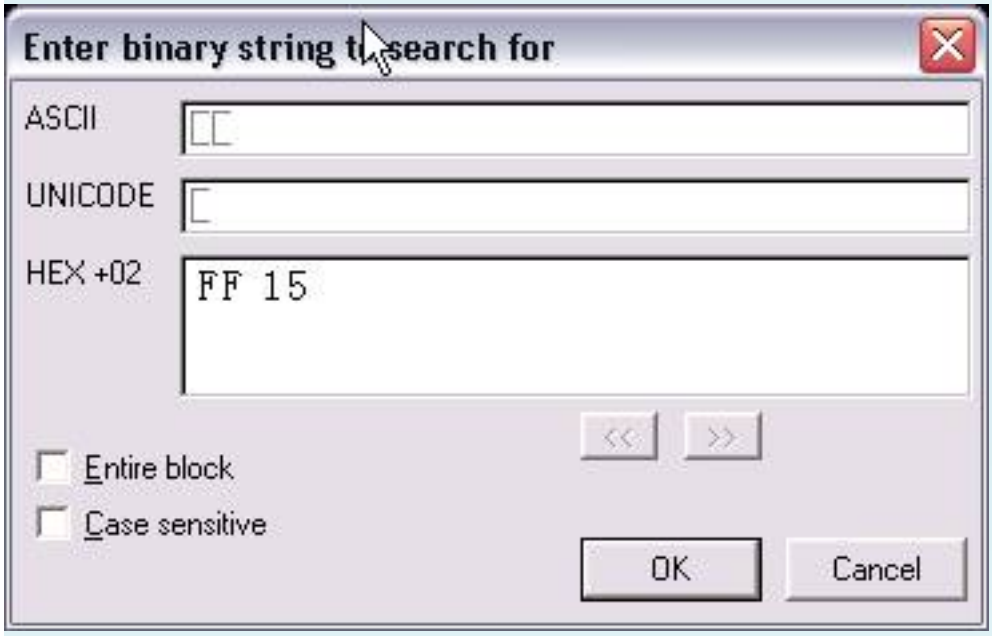
_ Press F8 when past nop after the function Call debugActiveProcessStop

```
Address   Hex dump              Disassembly                                  Com  Registers (FP
00401000    8105 34ED1200 00100000  add dword ptr ds:[12ED34],1000           EAX 00000001
0040100A    8105 40ED1200 00100000  add dword ptr ds:[12ED40],1000           ECX 00129C5C
00401014    8105 44ED1200 00100000  add dword ptr ds:[12ED44],1000           EDX 7C90EB94
0040101E    813D 34ED1200 00A05F00  cmp dword ptr ds:[12ED34],gameEdit.005FA000  EBX 7FFDB000
00401028  - 0F85 56743500           jnz gameEdit.00758484                    ESP 00129C7C
0040102E    68 C0070000             push 7C0                                 EBP 0012F73C
00401033    E8 5993457C             call kernel32.DebugActiveProcessStop     ESI 00001D5F
00401038    90                      nop                                      EDI 0000000F
00401039    90                      nop
```

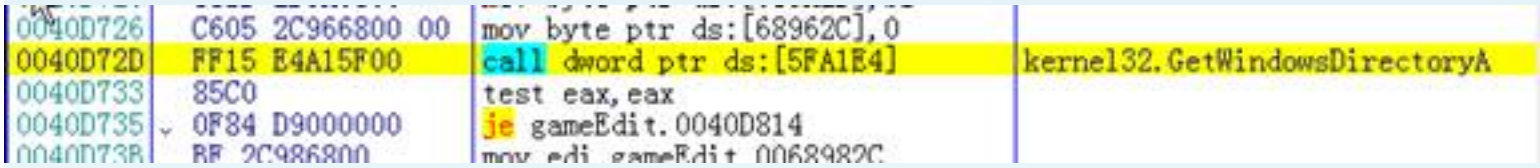
_Nhin See EAX = 0000001 is please send! Open a OllyDBG other, Attach. F9, F12 and patch as follows:

```
005D6105    55                      push ebp
005D6106    8BEC                    mov ebp,esp
005D6108    6A FF                   push -1
005D610A    68 00076200             push gameEdit.00620700
005D610F    68 307C5D00             push gameEdit.005D7C30
005D6114    64:A1 00000000          mov eax,dword ptr fs:[0]
```

_ Now we determine the start and IAT IAT End. Scroll mouse on top of the screen, press Ctrl + B and type FF15:

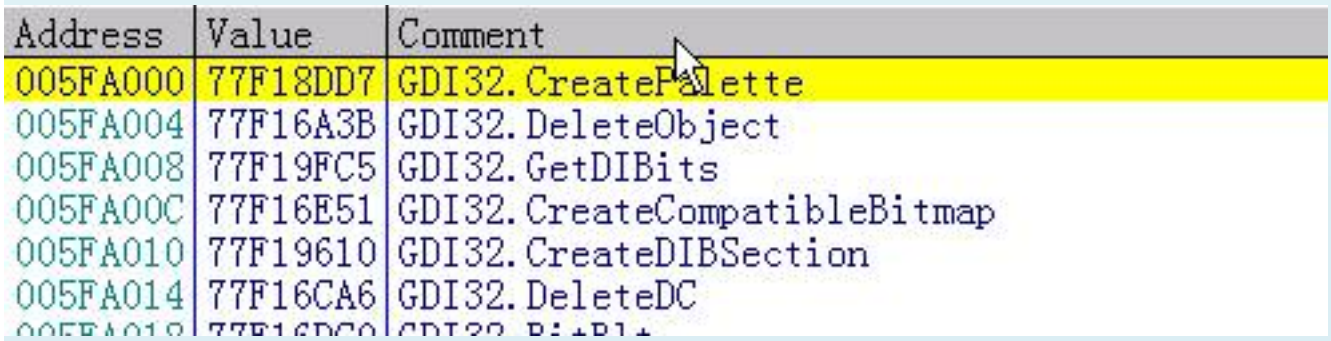


1 _Ok you to play here



_Các You should remember this API function to little more we find IAT full easily. Remember completed as selected pictures:

_Trong Window dump Scroll to find IAT start:



_Cuon To find IAT end:

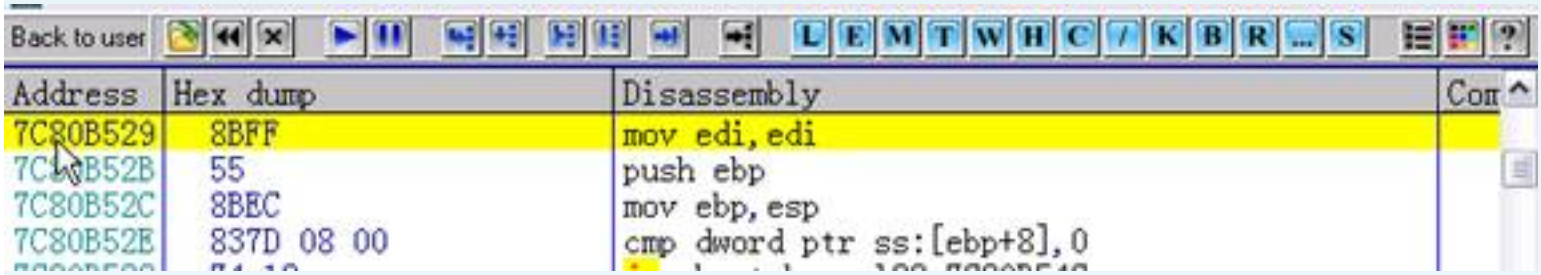
Address	Value	Comment
005FA3C0	71AB4FD4	ws2_32.gethostbyname
005FA3C4	00EB6F18	
005FA3C8	763B311E	comdlg32.GetOpenFileNameA
005FA3CC	763C7CD8	comdlg32.GetSaveFileNameA
005FA3D0	00EB6F2B	
005FA3D4	00000000	

_ The next step we find IAT full and paste into the IAT is only OK. ArmaDetach 1.1 Open and Drag "gameEditor.exe" released into the window to see the program as follows:

_ Open 1 Olly again and select the process ID and Child Attach. F9, F12, to patch 558B

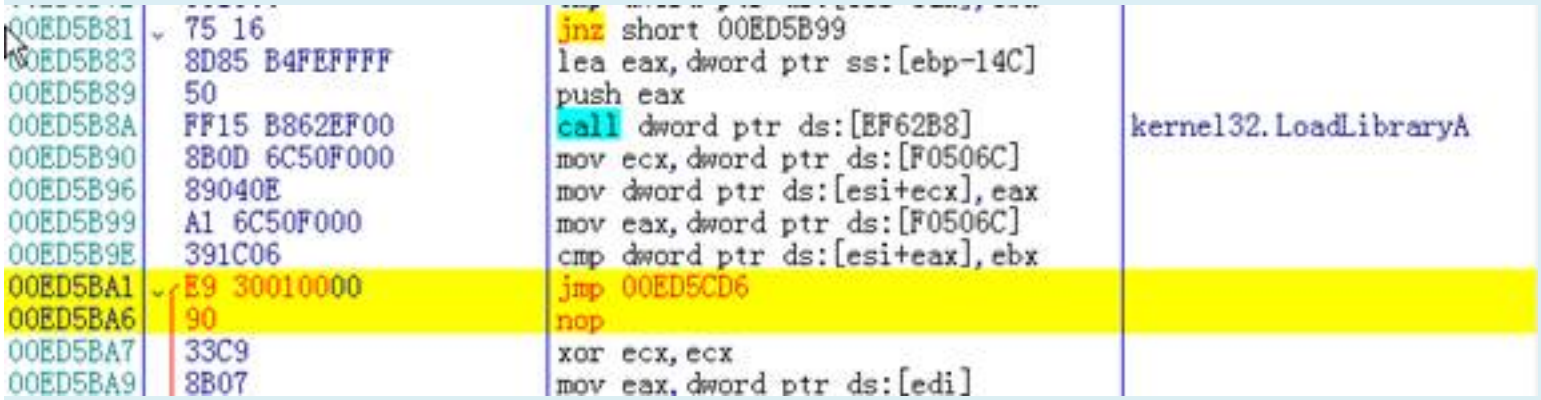
```
007688A3   55              push ebp
007688A4   8BEC            mov ebp,esp
007688A6   6A FF           push -1
007688A8   68 88217900     push gameEdit.00792188
007688AD   68 E0857600     push gameEdit.007685E0
```

_ Use OllyScript 0.92 Script run "Magic Jump Finder Script.txt." Running the 1 to the NAG Reminder, click "More try to run more. But if you wait for it to run more to ensure that tomorrow morning. But it does the as follows:

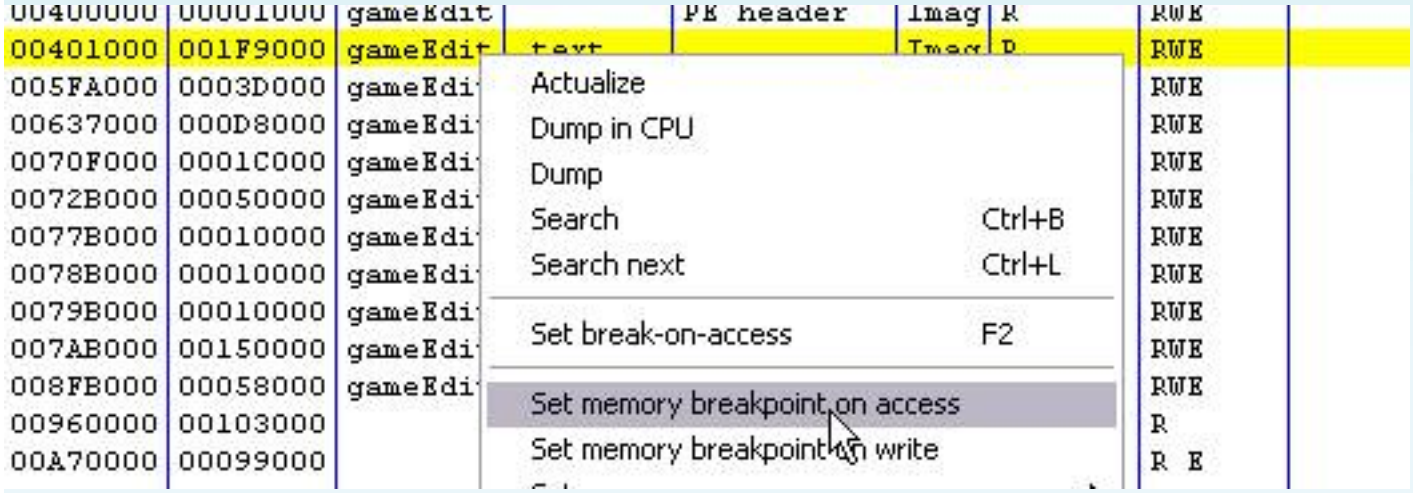


_nen chance network press F12 to 1. Ha ha

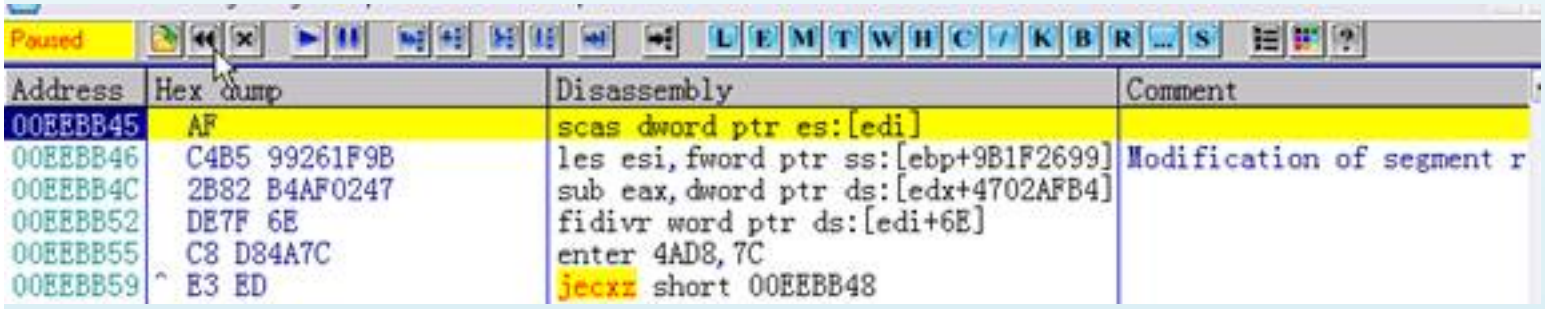
I finished _Ok Patch Magic Jump as usual:



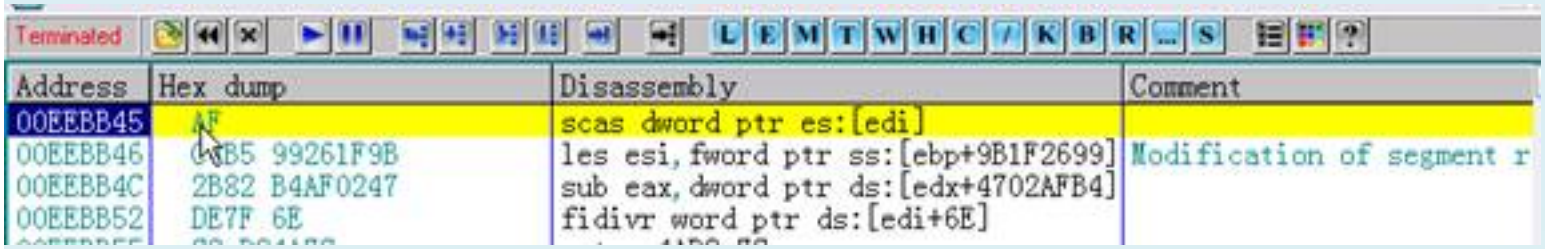
_Alt + M, and select the image:



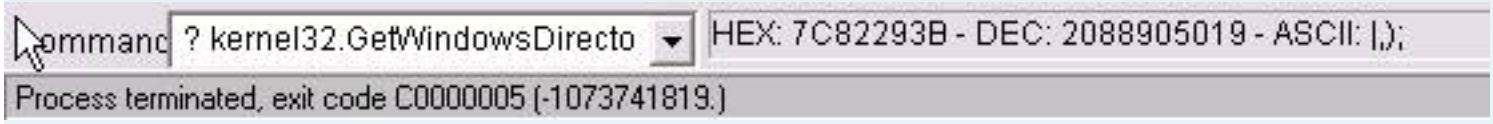
_Shift + F9, hic hic, Pause it here:



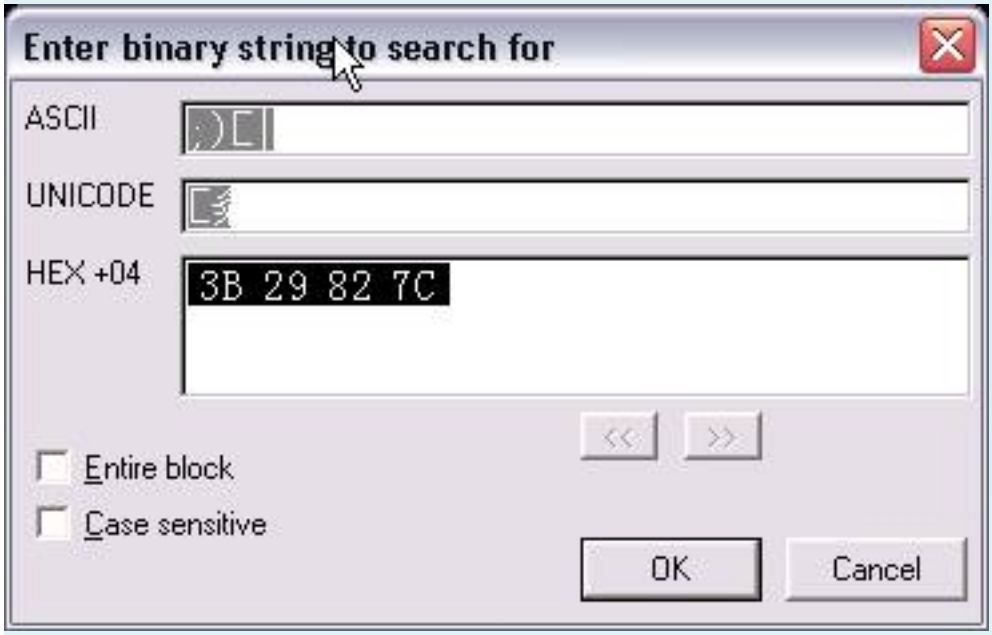
2 _Lieu network of press Shift + F9 and 1 more



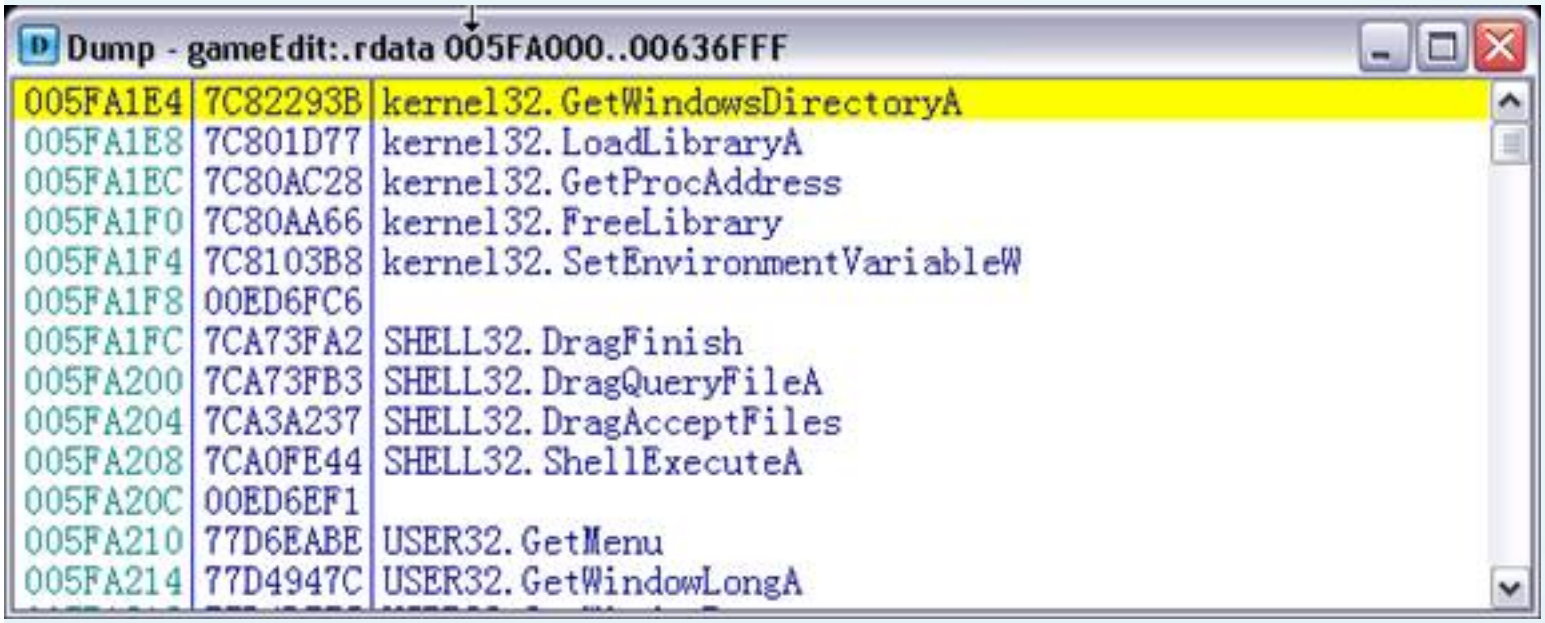
_Dung Hoảng. Grandparent shelves it, because we only need to find the IAT full stop to the OEP Crash or have anything important first, you should not. You also remember Ham API "kernel32. GetWindowsDirectoryA" they remind you remember when this? OK, Alt + F1 and enter the following:



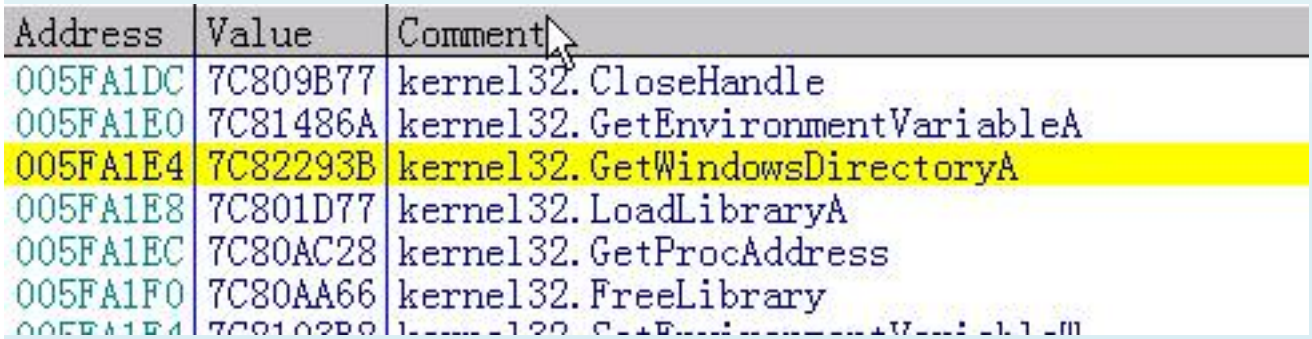
_Alt + M, Ctrl + B, reverse the number again as follows:



_ OK to you here:



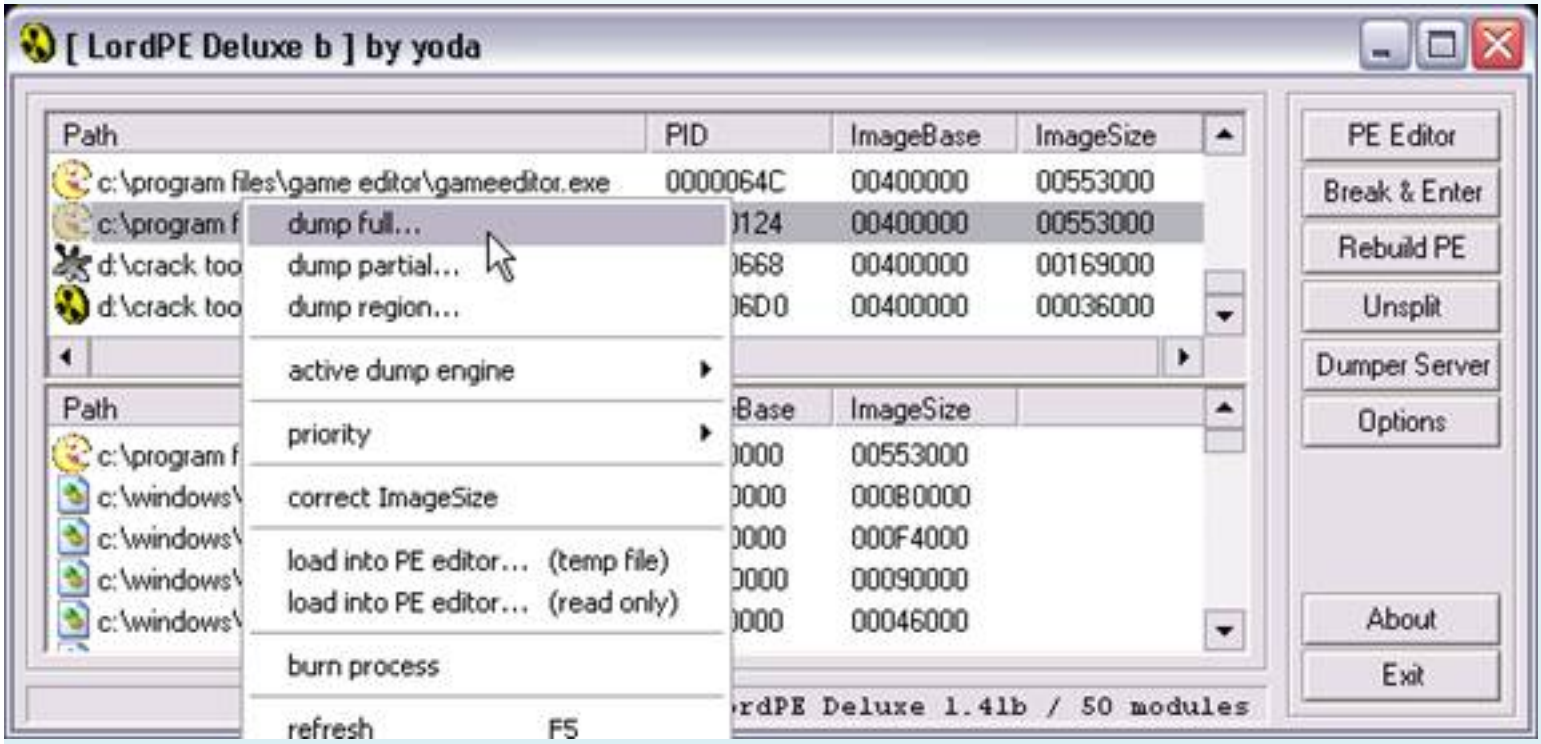
_ Alt + C, in the window dump press Ctrl + G and enter 005FA1E4



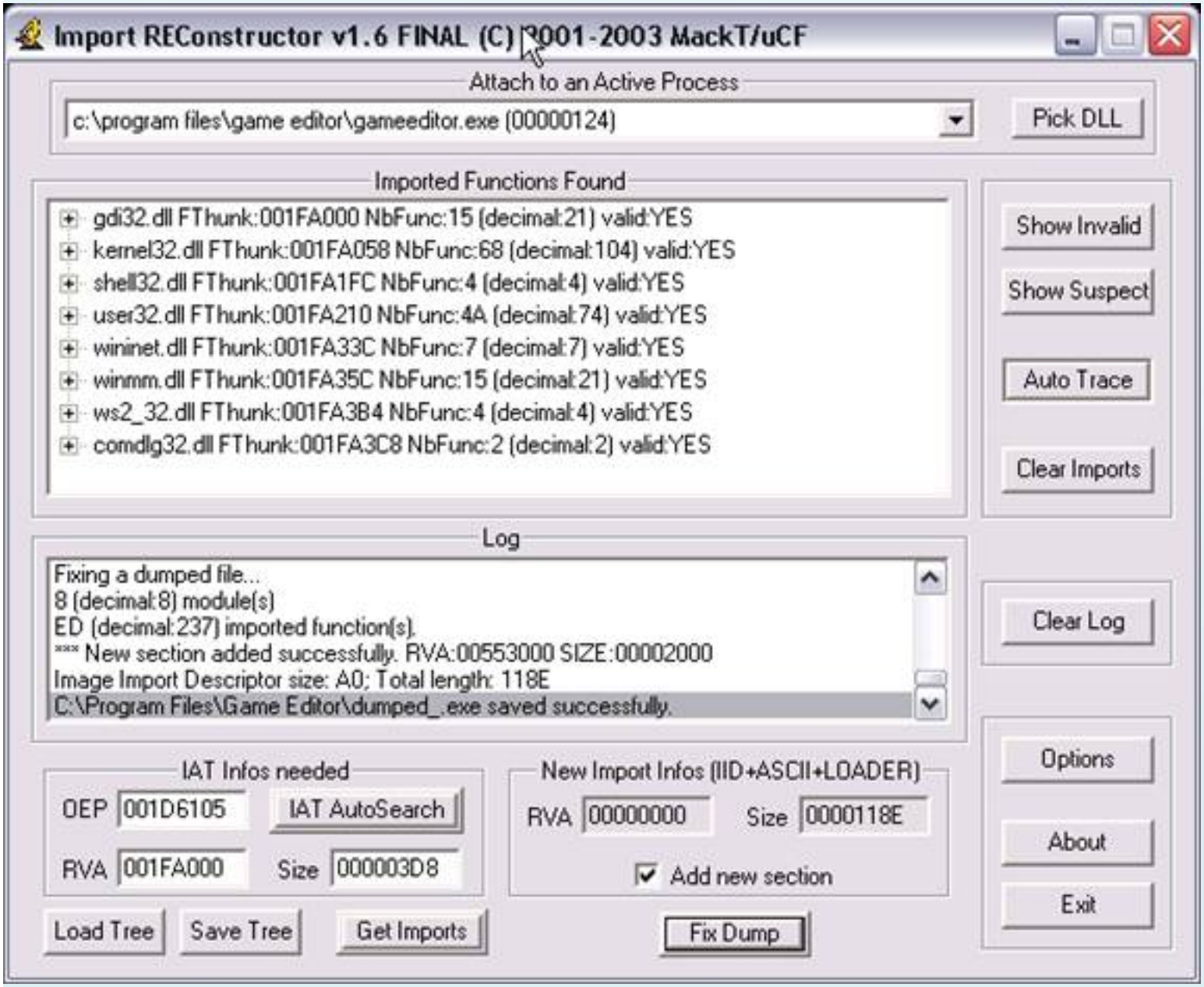
_ Of the IAT from start to IAT End then click Binany \ Binany Copy and Paste on the IAT is not yet fully complete. After Paste you will find the No. 1 function:

Address	Value	Comment
005FA070	7C80C6E0	kernel32.lstrlenA
005FA074	7C80C729	kernel32.lstrcpyA
005FA078	7C801A24	kernel32.CreateFileA
005FA07C	7C80B529	kernel32.GetModuleHandleA
005FA080	7C80B357	kernel32.GetModuleFileNameA
005FA084	7C80CC67	kernel32.SetThreadPriority

_Nhu So we are plunging the right direction and has been FIX IAT. Now, dump Full stop! Use LordPE. Remember to choose the correct PID home!



_ Open ImportREC fill and dump Fix



_ Run the file to try "dumped_.exe". Ohh, lickerish Run, no more NAG Reminder

This _Toi as unpack Done! Crack and the franchise for you. Target is also very easy Crack! File cracked themselves with the tut

Bye! I look back!

Written by Why Not Bar

Armadillo collect sand-stone

GetRight - 5.0 Final <|> ARM 2.xx-3.xx - Debug Blocker + CopyMem

1. **Intro:**

_Hi All, the process unpack this soft nothing difficult, just the place to make the target, Hung huc buffaloes as I was a new error target this midstream disk in 1000 near my CD!

2. **Tools:**

    1.OllyDBG - The best config debugger for ArmMUP by hacnho.
    2.LordPE 1.4 Deluxe
    3.Import REConstructor 1.6 Final

3. **Unpacking**

_Truoc All we need to identify signs of Debug Blocker:

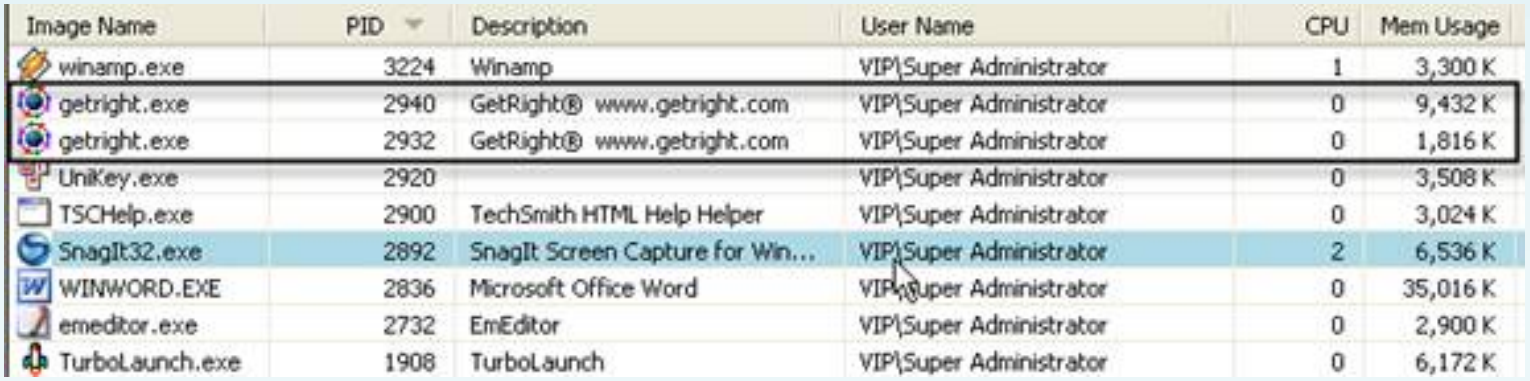
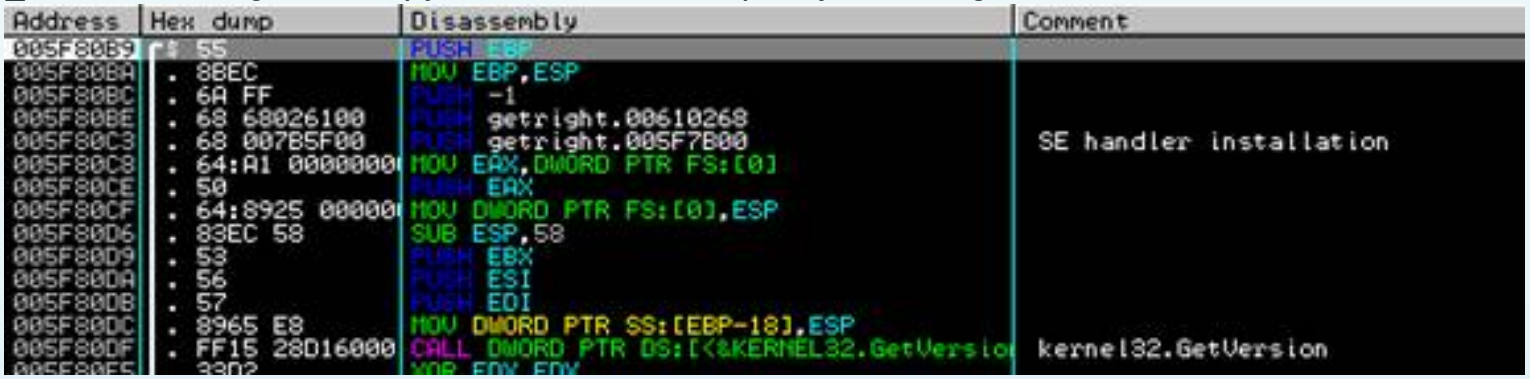


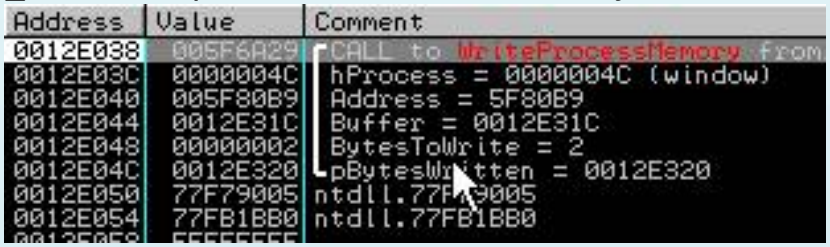
Image Name	PID	Description	User Name	CPU	Mem Usage
winamp.exe	3224	Winamp	VIP\Super Administrator	1	3,300 K
getright.exe	2940	GetRight® www.getright.com	VIP\Super Administrator	0	9,432 K
getright.exe	2932	GetRight® www.getright.com	VIP\Super Administrator	0	1,816 K
UniKey.exe	2920		VIP\Super Administrator	0	3,508 K
TSCHelp.exe	2900	TechSmith HTML Help Helper	VIP\Super Administrator	0	3,024 K
SnagIt32.exe	2892	SnagIt Screen Capture for Win...	VIP\Super Administrator	2	6,536 K
WINWORD.EXE	2836	Microsoft Office Word	VIP\Super Administrator	0	35,016 K
emeditor.exe	2732	EmEditor	VIP\Super Administrator	0	2,900 K
TurboLaunch.exe	1908	TurboLaunch	VIP\Super Administrator	0	6,172 K

_Sau Detect signs of CopyMEM. First, load up OllyDBG target:



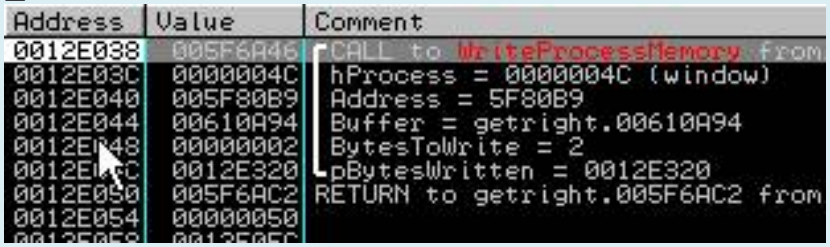
Address	Hex dump	Disassembly	Comment
005F80B9	55	PUSH EBP	
005F80BA	8BEC	MOV EBP,ESP	
005F80BC	6A FF	PUSH -1	
005F80BE	68 68026100	PUSH getright.00610268	
005F80C3	68 007B5F00	PUSH getright.005F7B00	SE handler installation
005F80C8	64:A1 0000000(	MOV EAX,DWORD PTR FS:[0]	
005F80CE	50	PUSH EAX	
005F80CF	64:8925 00000(	MOV DWORD PTR FS:[0],ESP	
005F80D6	83EC 58	SUB ESP,58	
005F80D9	53	PUSH EBX	
005F80DA	56	PUSH ESI	
005F80DB	57	PUSH EDI	
005F80DC	8965 E8	MOV DWORD PTR SS:[EBP-18],ESP	
005F80DF	FF15 28D16000	CALL DWORD PTR DS:[<&KERNEL32.GetVersio	kernel32.GetVersion
005F80E5	33D2	XOR EDX,EDX	

_Dat Breakpoint WriteProcessMemory, Shift + F9:



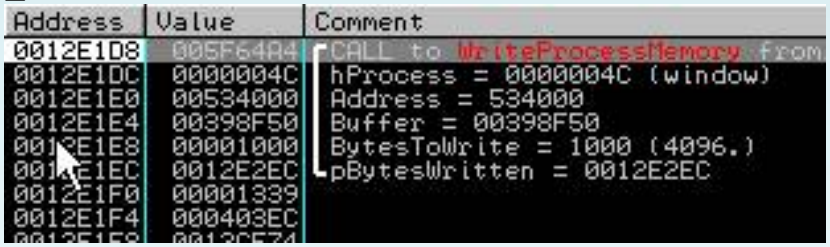
Address	Value	Comment
0012E038	005F6A29	CALL to WriteProcessMemory from
0012E03C	0000004C	hProcess = 0000004C (window)
0012E040	005F80B9	Address = 5F80B9
0012E044	0012E31C	Buffer = 0012E31C
0012E048	00000002	BytesToWrite = 2
0012E04C	0012E320	pBytesWritten = 0012E320
0012E050	77F79005	ntdll.77F79005
0012E054	77FB1BB0	ntdll.77FB1BB0

_Lan 2:



Address	Value	Comment
0012E038	005F6A46	CALL to WriteProcessMemory from
0012E03C	0000004C	hProcess = 0000004C (window)
0012E040	005F80B9	Address = 5F80B9
0012E044	00610A94	Buffer = getright.00610A94
0012E048	00000002	BytesToWrite = 2
0012E04C	0012E320	pBytesWritten = 0012E320
0012E050	005F6AC2	RETURN to getright.005F6AC2 from
0012E054	00000050	

_Lan 3:

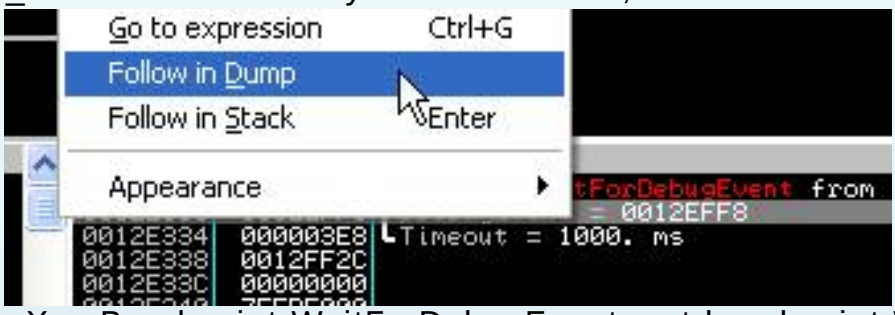


Address	Value	Comment
0012E1D8	005F64A4	CALL to WriteProcessMemory from
0012E1DC	0000004C	hProcess = 0000004C (window)
0012E1E0	00534000	Address = 534000
0012E1E4	00398F50	Buffer = 00398F50
0012E1E8	00001000	BytesToWrite = 1000 (4096.)
0012E1EC	0012E2EC	pBytesWritten = 0012E2EC
0012E1F0	00001339	
0012E1F4	000403EC	

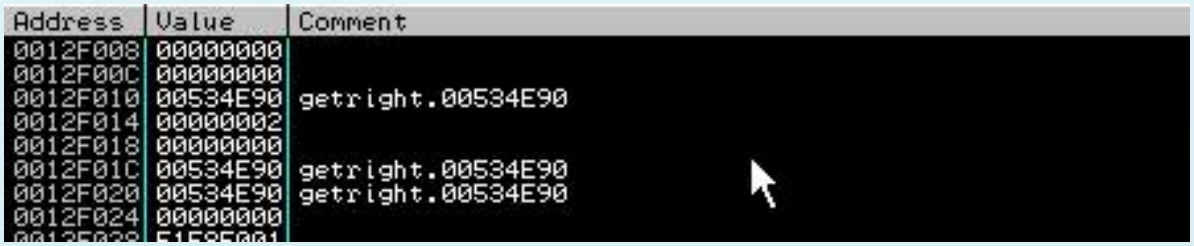
_Yeap, J CopyMEM. We need to determine OEP! Set breakpoint at API WaitForDebugEvent! Bp WaitForDebugEvent, F9:

Address	Value	Comment
0012E32C	005F451D	CALL to WaitForDebugEvent from
0012E330	0012EFF8	pDebugEvent = 0012EFF8
0012E334	000003E8	Timeout = 1000. ms
0012E338	0012FF2C	
0012E33C	00000000	
0012E340	7FFDF000	
0012E344	0012E3B8	
0012E348	C0150008	

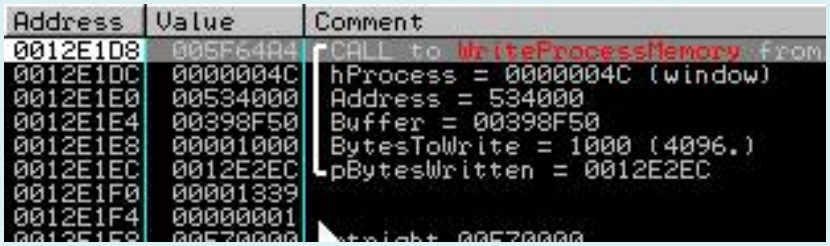
_Ghi 12EFF8 memory. F2 restart Ctrl, Alt + F1: BP WaitForDebugEvent, Follow in dump:



_Xoa Breakpoint WaitForDebugEvent, set breakpoint WriteProcessMemory, F9! We have OEP = 534E90!



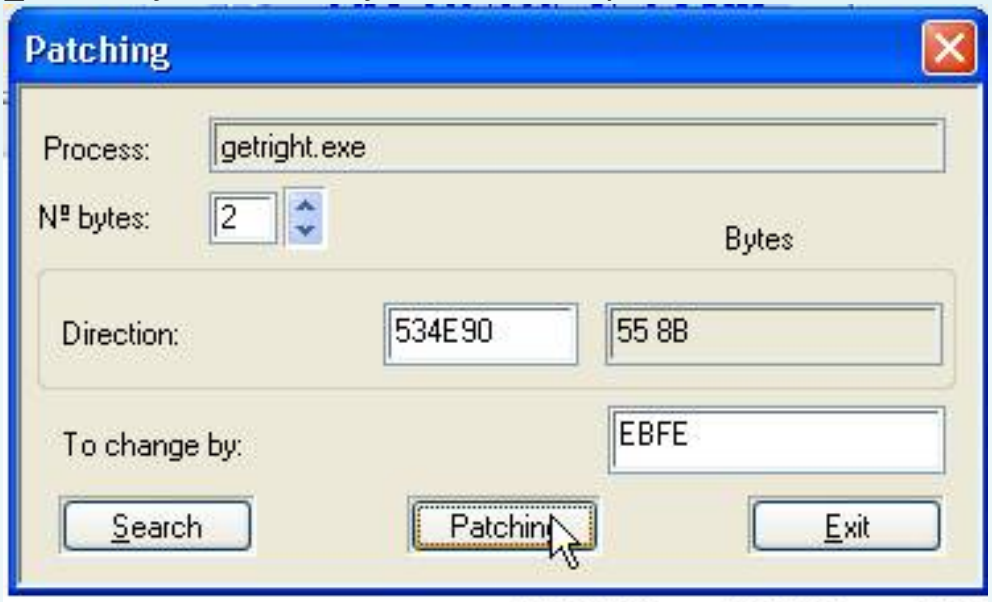
_Chung We need to find MagicCall, but first we need to patch EP's Child Process again, note the stack:



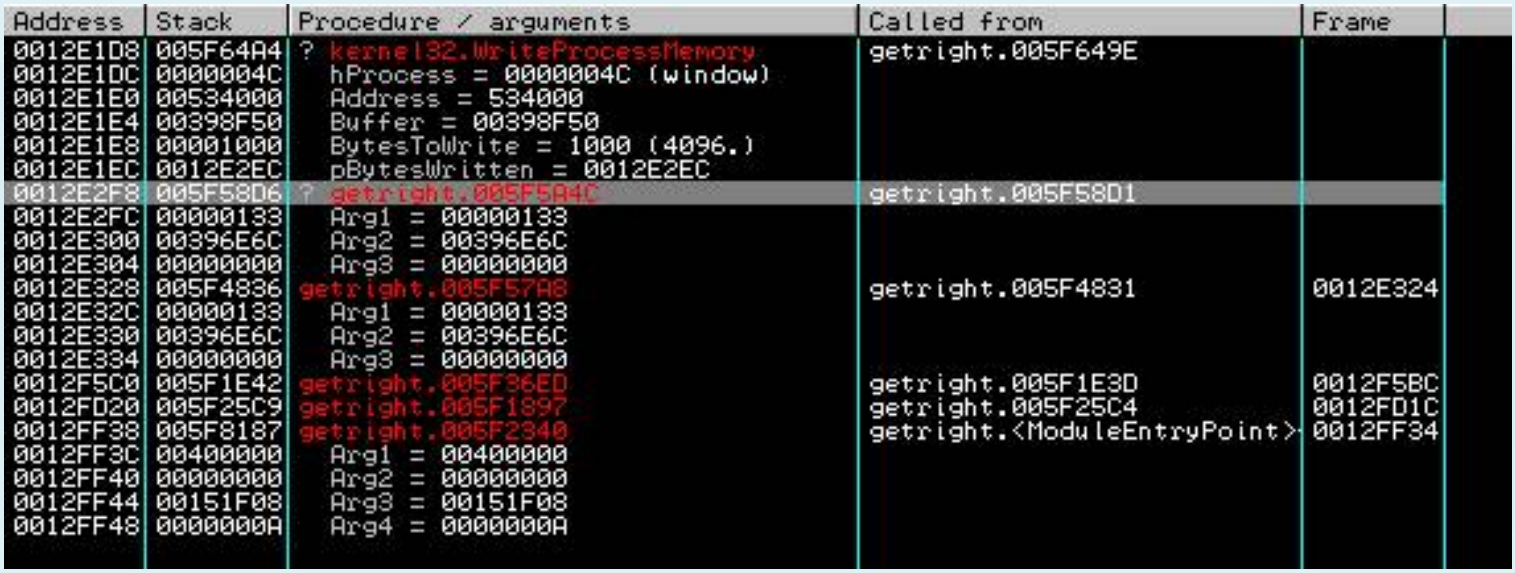
_Ta Information need attention are:

_OEP = 534E90

_O Here you can use your hands to patch, but I khoái used for pro PUPE J .

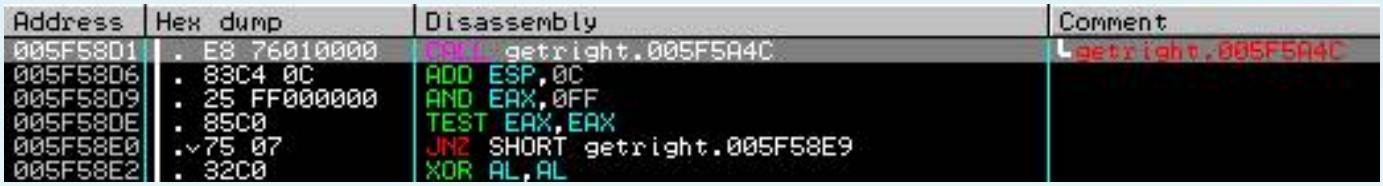


_OK Have time to find MagicCall, Alt + K Stack to see why:



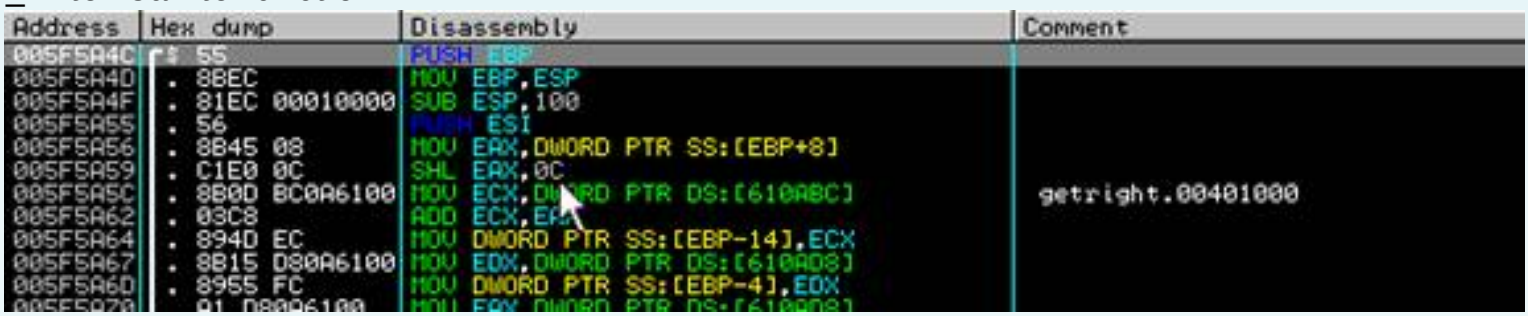
Address	Stack	Procedure / arguments	Called from	Frame
0012E1D8	005F64A4	? kernel32.WriteProcessMemory	getright.005F649E	
0012E1DC	0000004C	hProcess = 0000004C (window)		
0012E1E0	00534000	Address = 534000		
0012E1E4	00398F50	Buffer = 00398F50		
0012E1E8	00001000	BytesToWrite = 1000 (4096.)		
0012E1EC	0012E2EC	pBytesWritten = 0012E2EC		
0012E2F8	005F58D6	? getright.005F5A4C	getright.005F58D1	
0012E2FC	00000133	Arg1 = 00000133		
0012E300	00396E6C	Arg2 = 00396E6C		
0012E304	00000000	Arg3 = 00000000		
0012E328	005F4836	getright.005F57A8	getright.005F4831	0012E324
0012E32C	00000133	Arg1 = 00000133		
0012E330	00396E6C	Arg2 = 00396E6C		
0012E334	00000000	Arg3 = 00000000		
0012F5C0	005F1E42	getright.005F36ED	getright.005F1E3D	0012F5BC
0012FD20	005F25C9	getright.005F1897	getright.005F25C4	0012FD1C
0012FF38	005F8187	getright.005F2340	getright.<ModuleEntryPoint>	0012FF34
0012FF3C	00400000	Arg1 = 00400000		
0012FF40	00000000	Arg2 = 00000000		
0012FF44	00151F08	Arg3 = 00151F08		
0012FF48	0000000A	Arg4 = 0000000A		

_Double Click here:



Address	Hex dump	Disassembly	Comment
005F58D1	. E8 76010000	CALL getright.005F5A4C	getright.005F5A4C
005F58D6	. 83C4 0C	ADD ESP,0C	
005F58D9	. 25 FF000000	AND EAX,0FF	
005F58DE	. 85C0	TEST EAX,EAX	
005F58E0	.v75 07	JNZ SHORT getright.005F58E9	
005F58E2	. 32C0	XOR AL,AL	

_Enter Call to function:



Address	Hex dump	Disassembly	Comment
005F5A4C	r$ 55	PUSH EBP	
005F5A4D	. 8BEC	MOV EBP,ESP	
005F5A4F	. 81EC 00010000	SUB ESP,100	
005F5A55	. 56	PUSH ESI	
005F5A56	. 8B45 08	MOV EAX,DWORD PTR SS:[EBP+8]	
005F5A59	. C1E0 0C	SHL EAX,0C	
005F5A5C	. 8B0D 8C0A6100	MOV ECX,DWORD PTR DS:[610A8C]	getright.00401000
005F5A62	. 03C8	ADD ECX,EAX	
005F5A64	. 894D EC	MOV DWORD PTR SS:[EBP-14],ECX	
005F5A67	. 8B15 D80A6100	MOV EDX,DWORD PTR DS:[610AD8]	
005F5A6D	. 8955 FC	MOV DWORD PTR SS:[EBP-4],EDX	
005F5A70	. A1 D80A6100	MOV EAX,DWORD PTR DS:[610AD8]	

_Ctrl + R:

Address	Disassembly	Comment
005F58D1	CALL getright.005F5A4C	
005F5A24	CALL getright.005F5A4C	
005F5A4C	PUSH EBP	(Initial CPU selection)

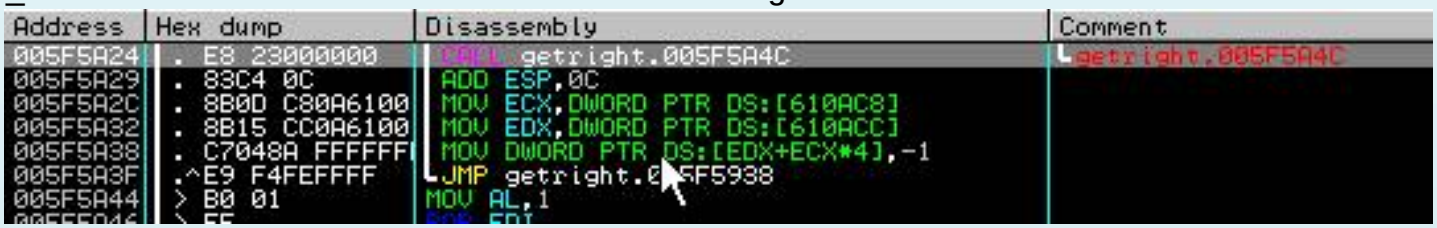
_Ta See magic call is:

References in getright. Text1 to 005F5A4C, Item 1

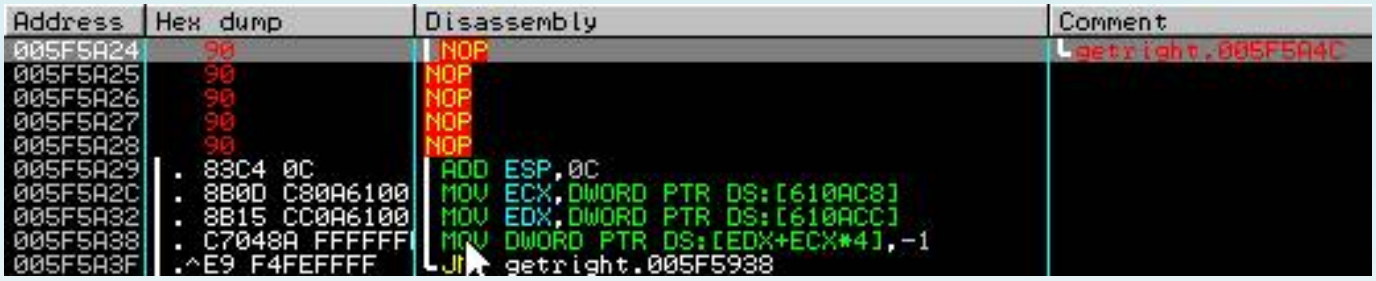
Address = 005F5A24

Disassembly = CALL getright.005F5A4C

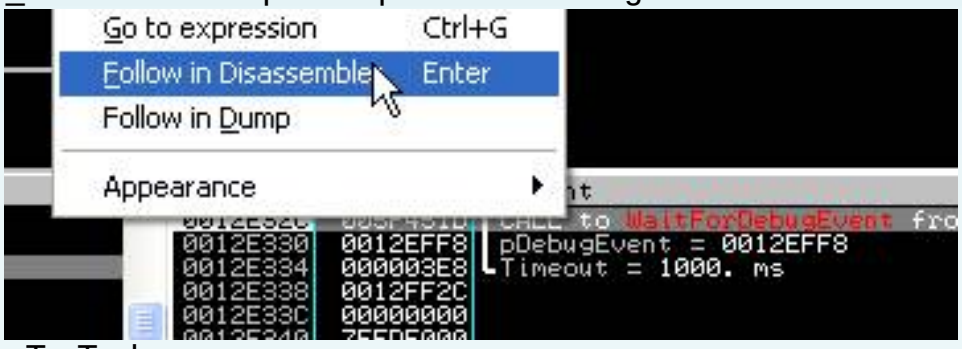
_Vi Stars? View tut 4! You need to submit it again:



Address	Hex dump	Disassembly	Comment
005F5A24	. E8 23000000	CALL getright.005F5A4C	getright.005F5A4C
005F5A29	. 83C4 0C	ADD ESP,0C	
005F5A2C	. 8B0D C80A6100	MOV ECX,DWORD PTR DS:[610AC8]	
005F5A32	. 8B15 CC0A6100	MOV EDX,DWORD PTR DS:[610ACC]	
005F5A38	. C7048A FFFFFF	MOV DWORD PTR DS:[EDX+ECX*4],-1	
005F5A3F	.^E9 F4FEFFFF	JMP getright.005F5938	
005F5A44	> B0 01	MOV AL,1	
005F5A46	> 5E	POP EDI	

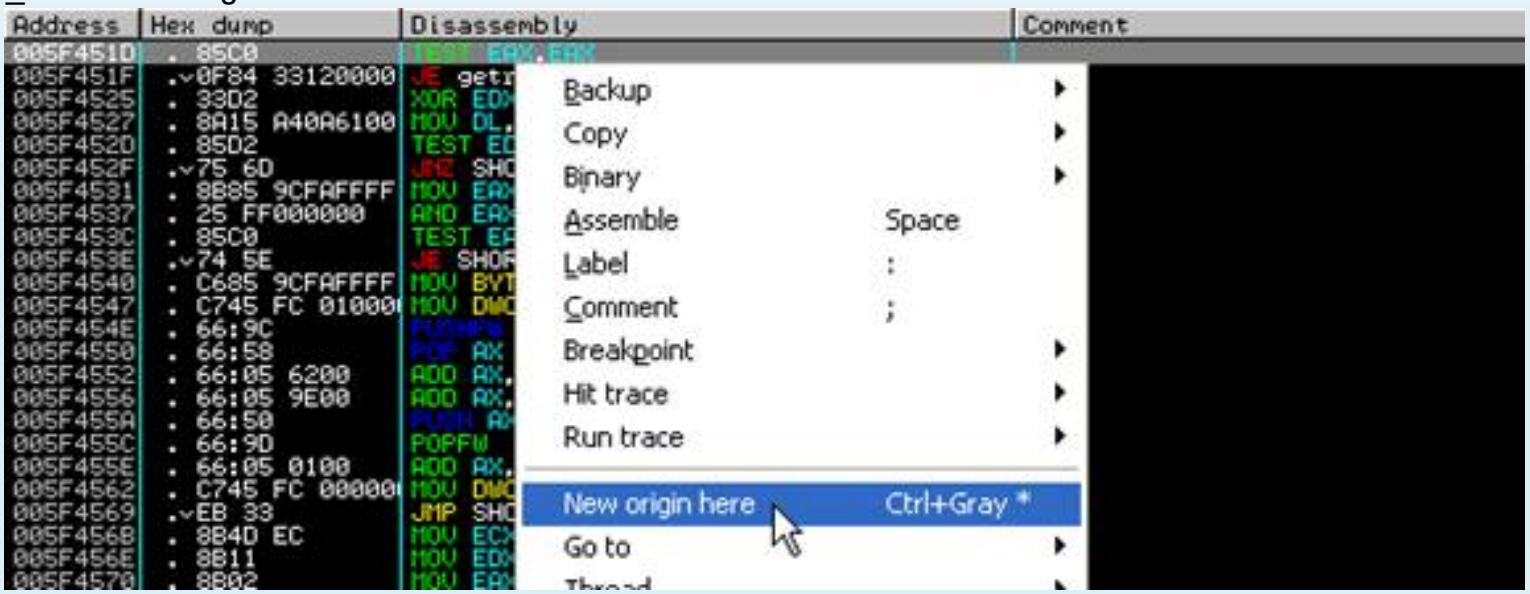


_Dat The breakpoint bp WaitForDebugEvent! F9:

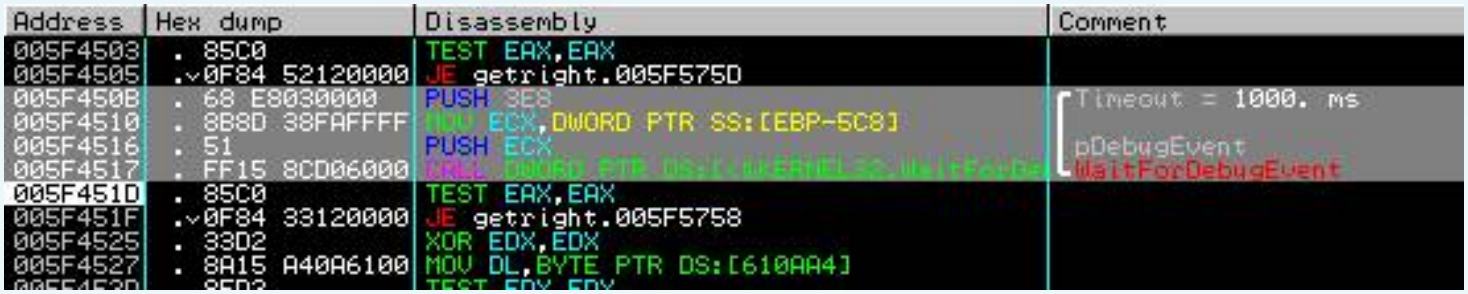


_Ta To here:

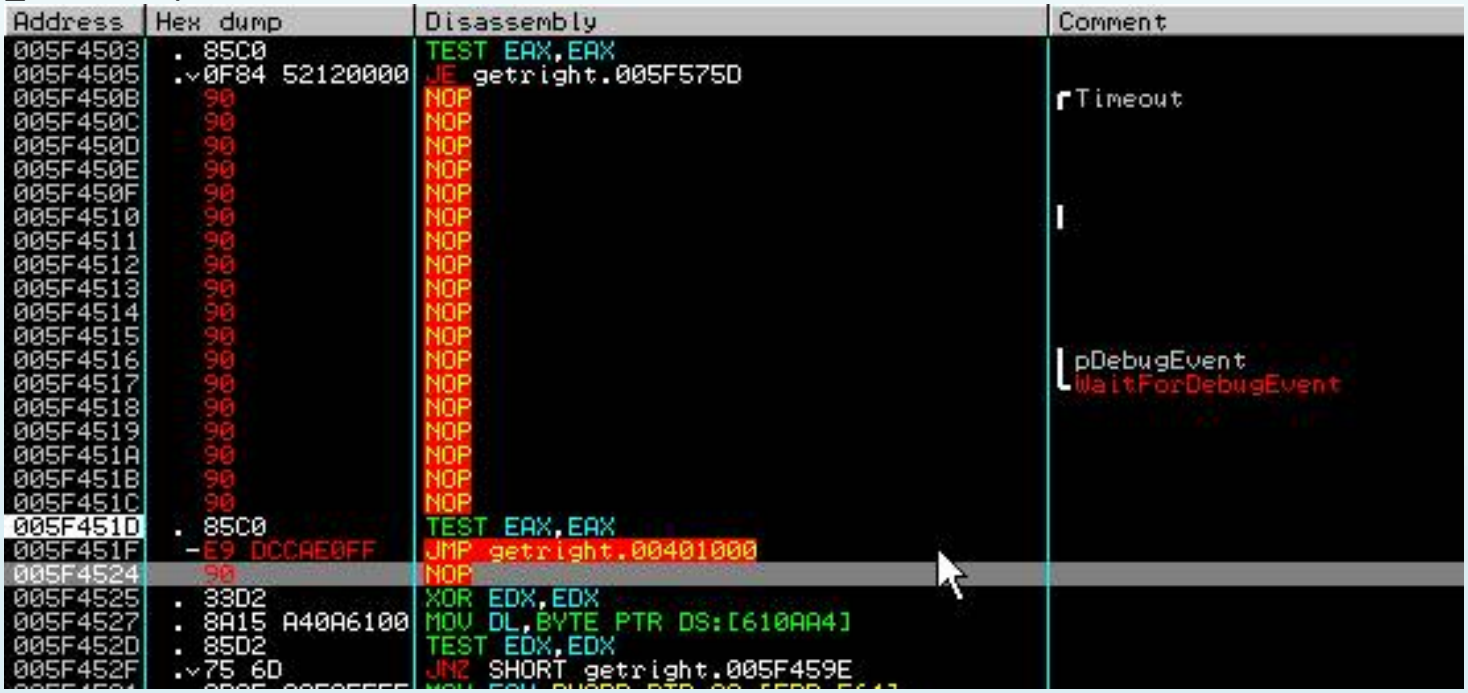
_Set New origin in here: Ctrl + *:



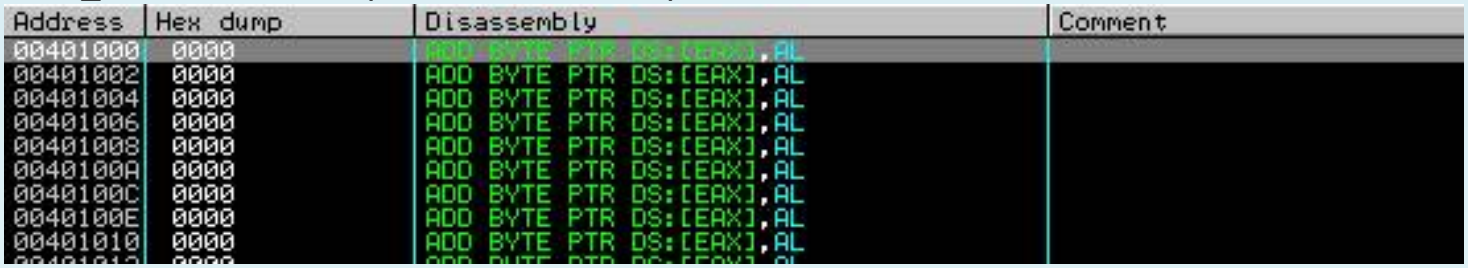
_Truoc The patch:



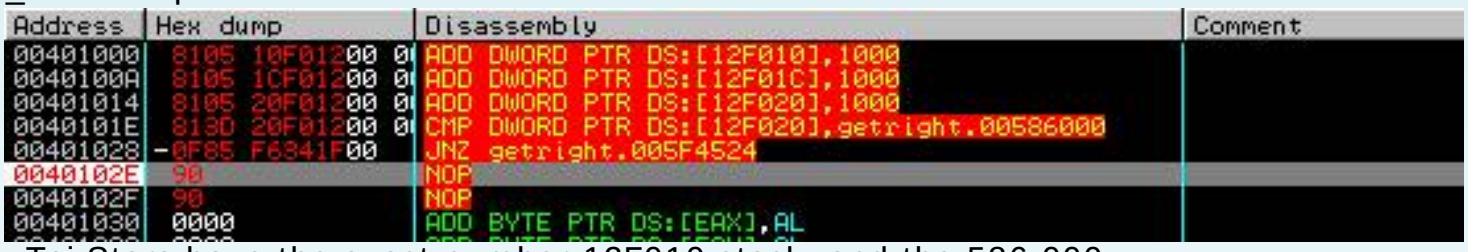
_Sau The patch:



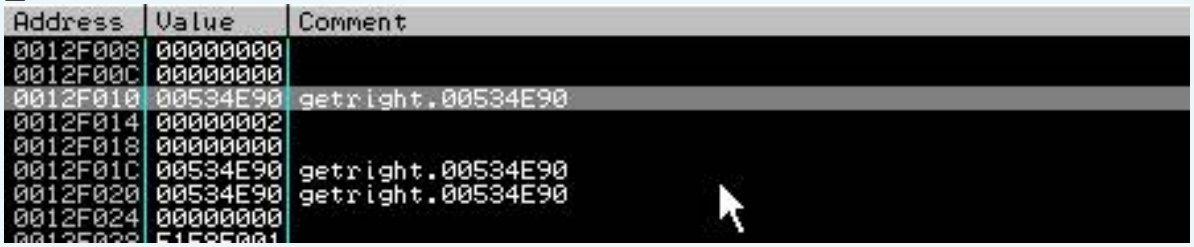
G + _Ctrl 401,000 to patch. Before the patch:

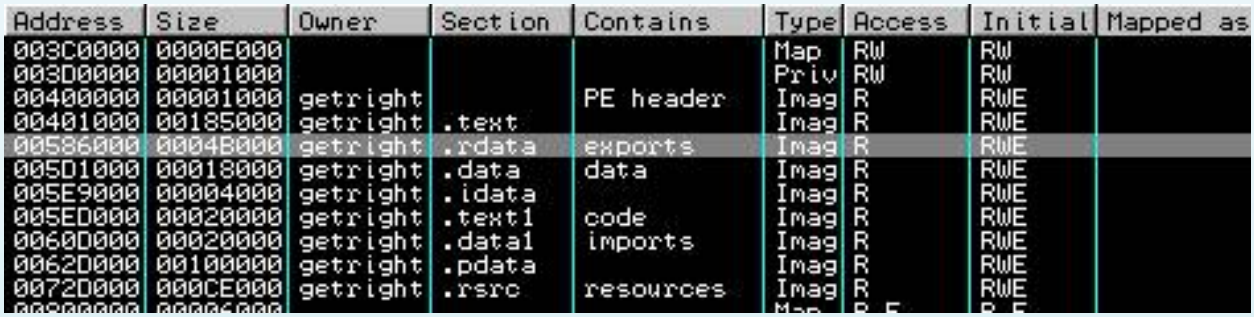


_Sau The patch:



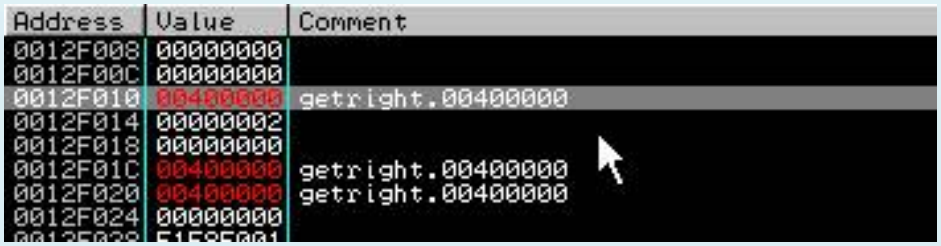
_Tai Stars have the exact number 12F010 stack, and the 586,000:





Address	Size	Owner	Section	Contains	Type	Access	Initial	Mapped as
003C0000	0000E000				Map	RW	RW	
003D0000	00001000				Priv	RW	RW	
00400000	00001000	getright		PE header	Imag	R	RWE	
00401000	00185000	getright	.text		Imag	R	RWE	
00586000	0004B000	getright	.rdata	exports	Imag	R	RWE	
005D1000	00018000	getright	.data	data	Imag	R	RWE	
005E9000	00004000	getright	.idata		Imag	R	RWE	
005ED000	00020000	getright	.text1	code	Imag	R	RWE	
0060D000	00020000	getright	.data1	imports	Imag	R	RWE	
0062D000	00100000	getright	.pdata		Imag	R	RWE	
0072D000	000CE000	getright	.rsrc	resources	Imag	R	RWE	

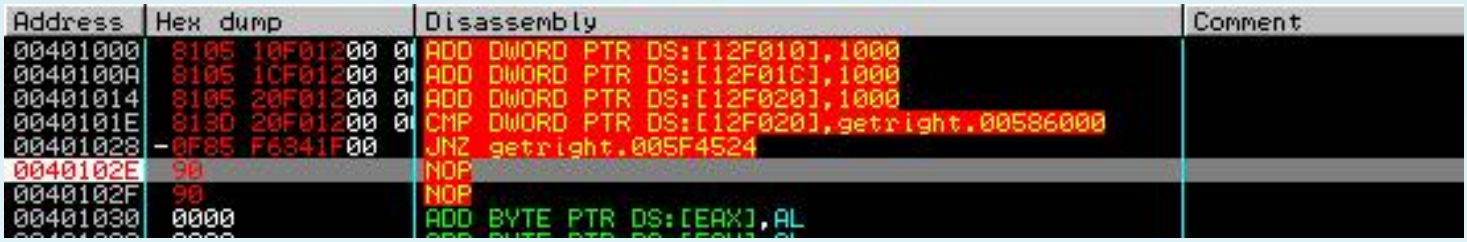
_Patch The stack:



Address	Value	Comment
0012F008	00000000	
0012F00C	00000000	
0012F010	00400000	getright.00400000
0012F014	00000002	
0012F018	00000000	
0012F01C	00400000	getright.00400000
0012F020	00400000	getright.00400000
0012F024	00000000	

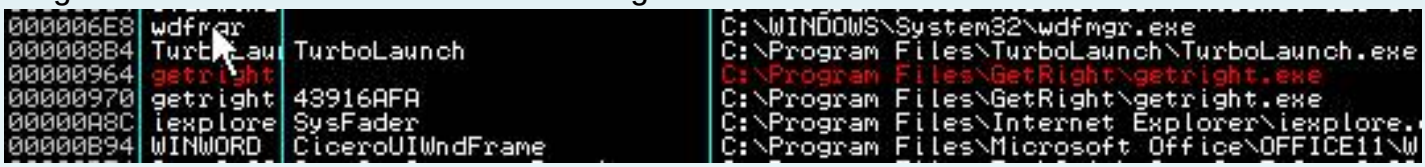
_Dat A breakpoint at 40102E, F9:

_Toi Here:



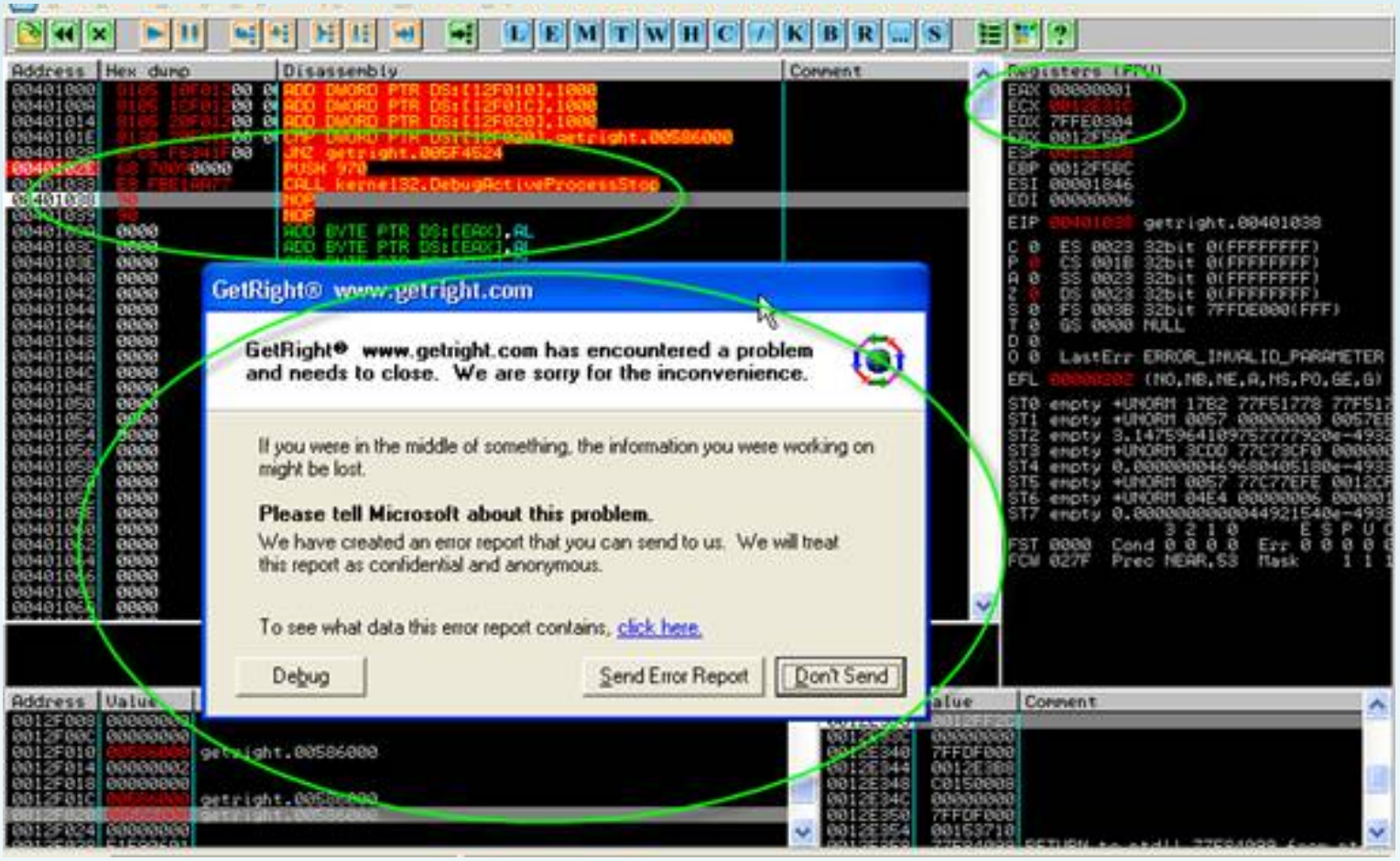
Address	Hex dump	Disassembly	Comment
00401000	8105 10F01200 0(	ADD DWORD PTR DS:[12F010],1000	
0040100A	8105 1CF01200 0(	ADD DWORD PTR DS:[12F01C],1000	
00401014	8105 20F01200 0(	ADD DWORD PTR DS:[12F020],1000	
0040101E	813D 20F01200 0(	CMP DWORD PTR DS:[12F020],getright.00586000	
00401028	-0F85 F6341F00	JNZ getright.005F4524	
0040102E	90	NOP	
0040102F	90	NOP	
00401030	0000	ADD BYTE PTR DS:[EAX],AL	

_Chung We continue to remove the debug blocker!

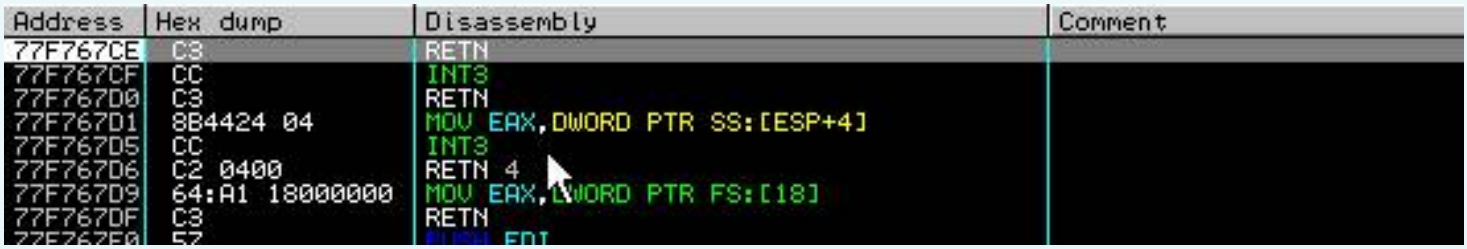


000006E8	wdfmgr		C:\WINDOWS\System32\wdfmgr.exe
000008B4	TurboLaun	TurboLaunch	C:\Program Files\TurboLaunch\TurboLaunch.exe
00000964	getright		C:\Program Files\GetRight\getright.exe
00000970	getright	43916AFA	C:\Program Files\GetRight\getright.exe
00000A8C	iexplore	SysFader	C:\Program Files\Internet Explorer\iexplore.
00000B94	WINWORD	CiceroUIWndFrame	C:\Program Files\Microsoft Office\OFFICE11\W

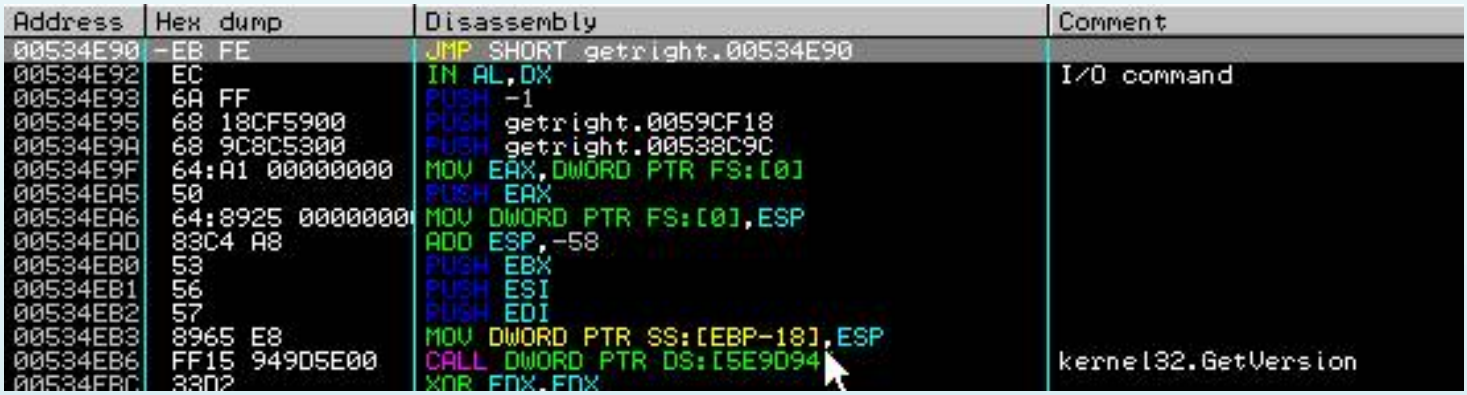
_Tiep Continue to patch:



_Done! Open a OllyDBG other, Attach!

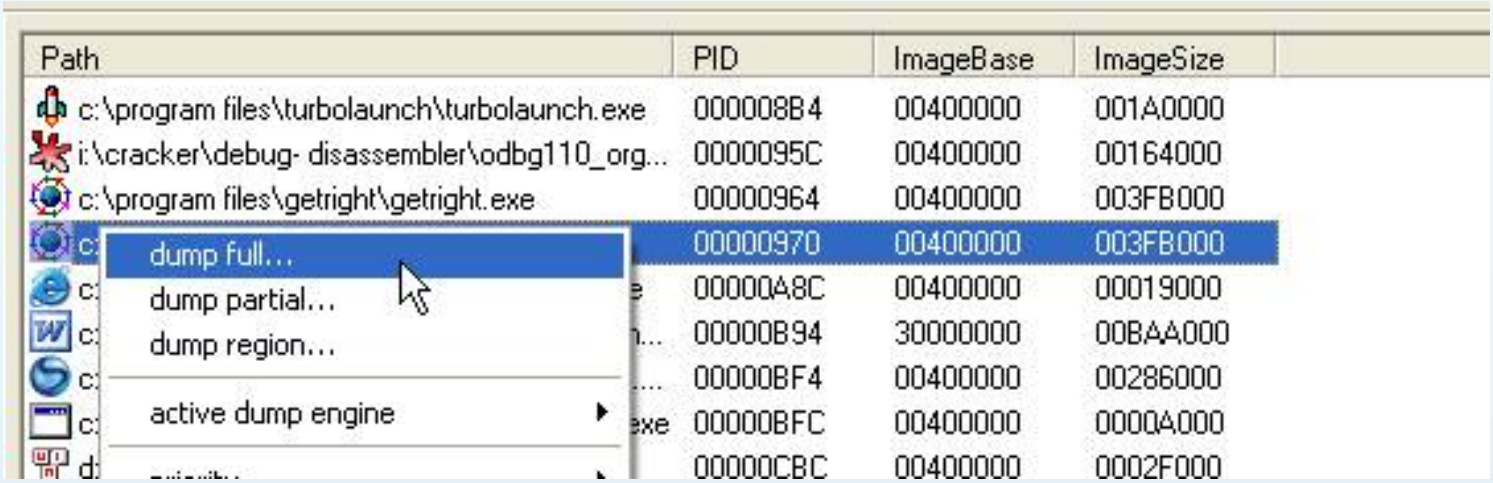


_F9, F12:



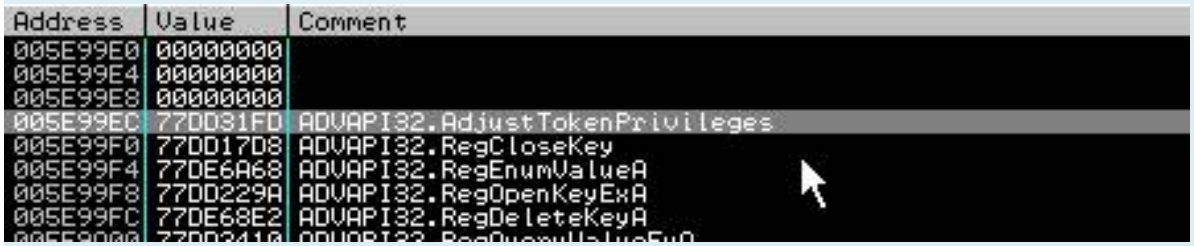
_Patch To 558B:

Full _Dump:

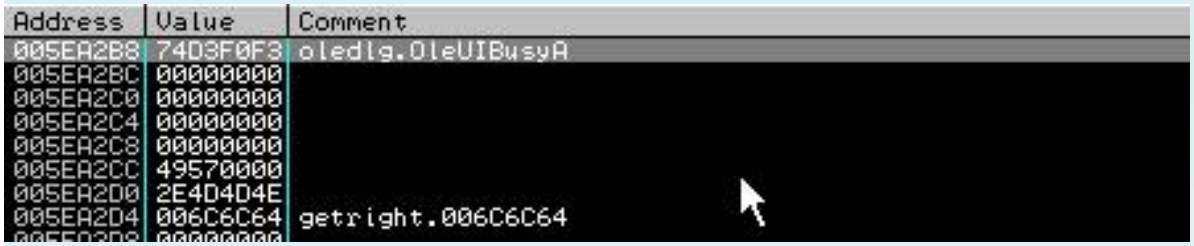


_Sau Dump when finished, we started the process of finding and Fix IAT dump! At:
00534EB6 FF15 949D5E00 CALL DWORD PTR DS: [5E9D94]; kernel32.GetVersion
_Ban Follow in dump, Memory Address, we will have IAT Info as follows:

_IAT Start:

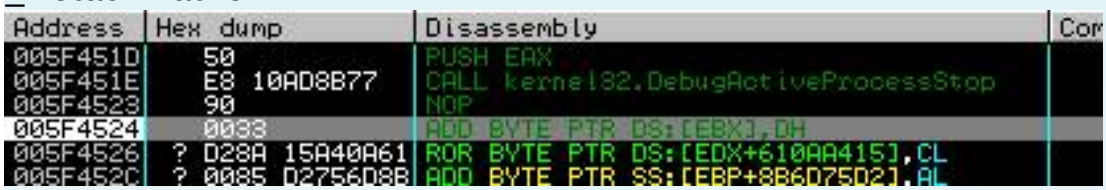


_IAT End:

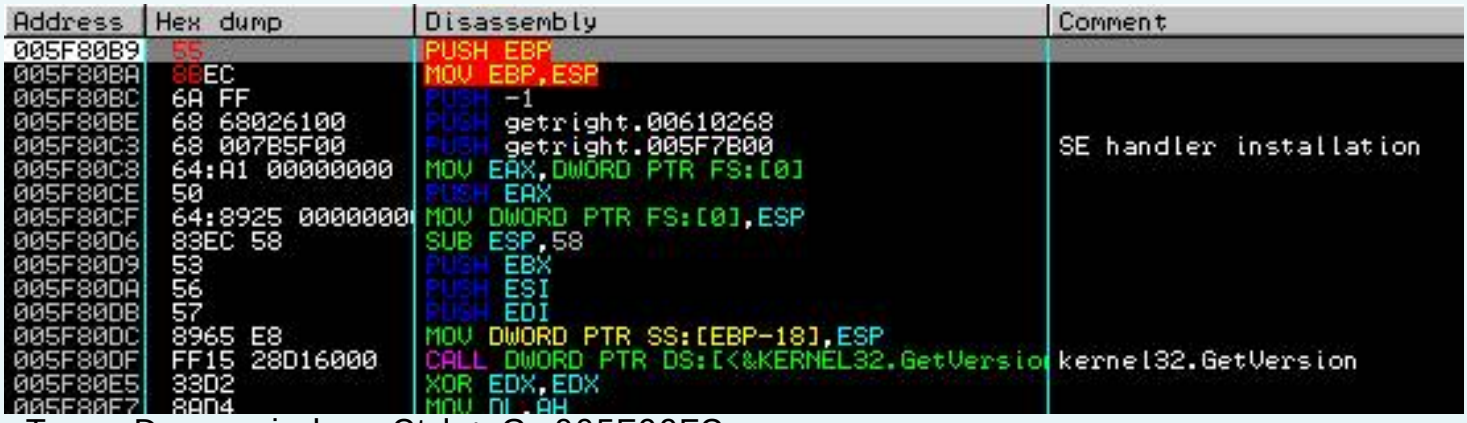


_IAT Len = 8CC! OK, Ctrl + F2 Restart all!

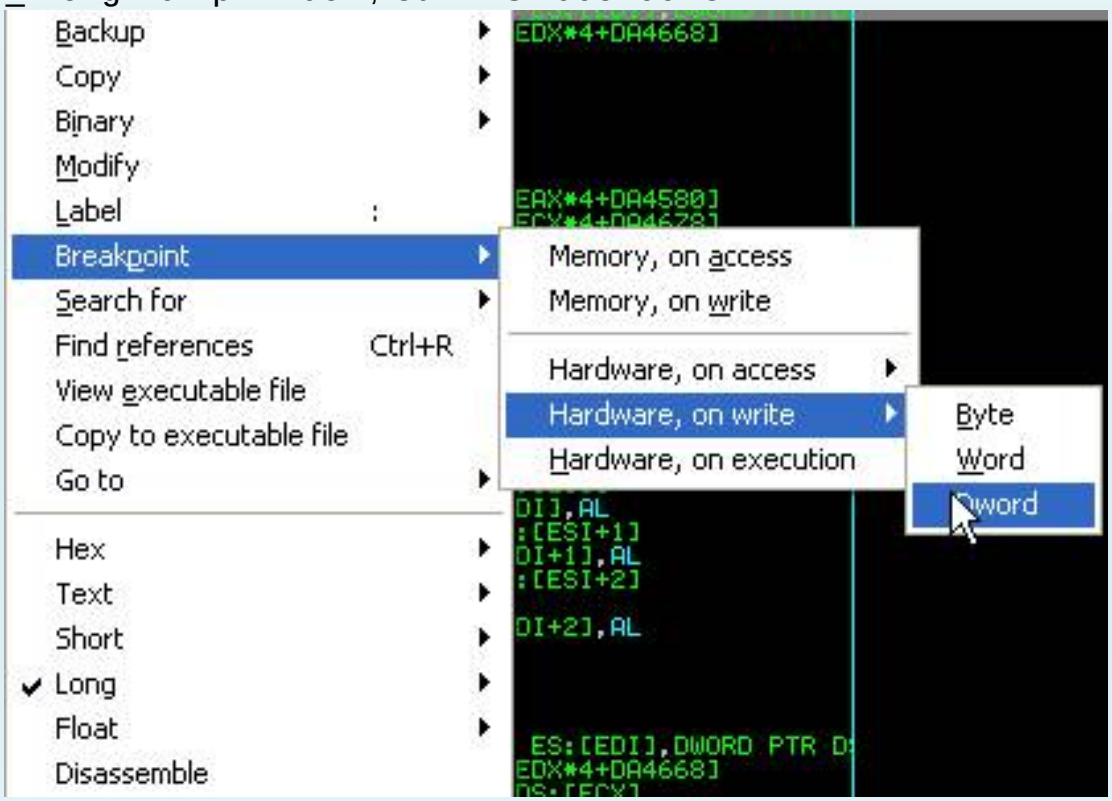
_Detach Father:



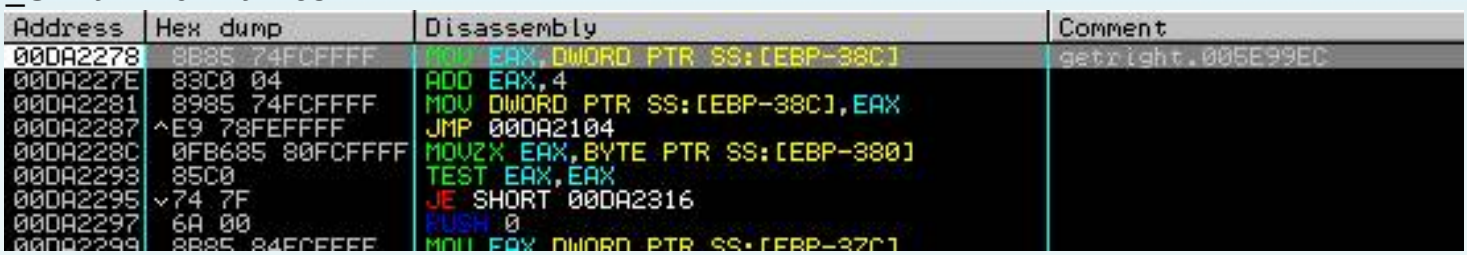
_Attach Child:



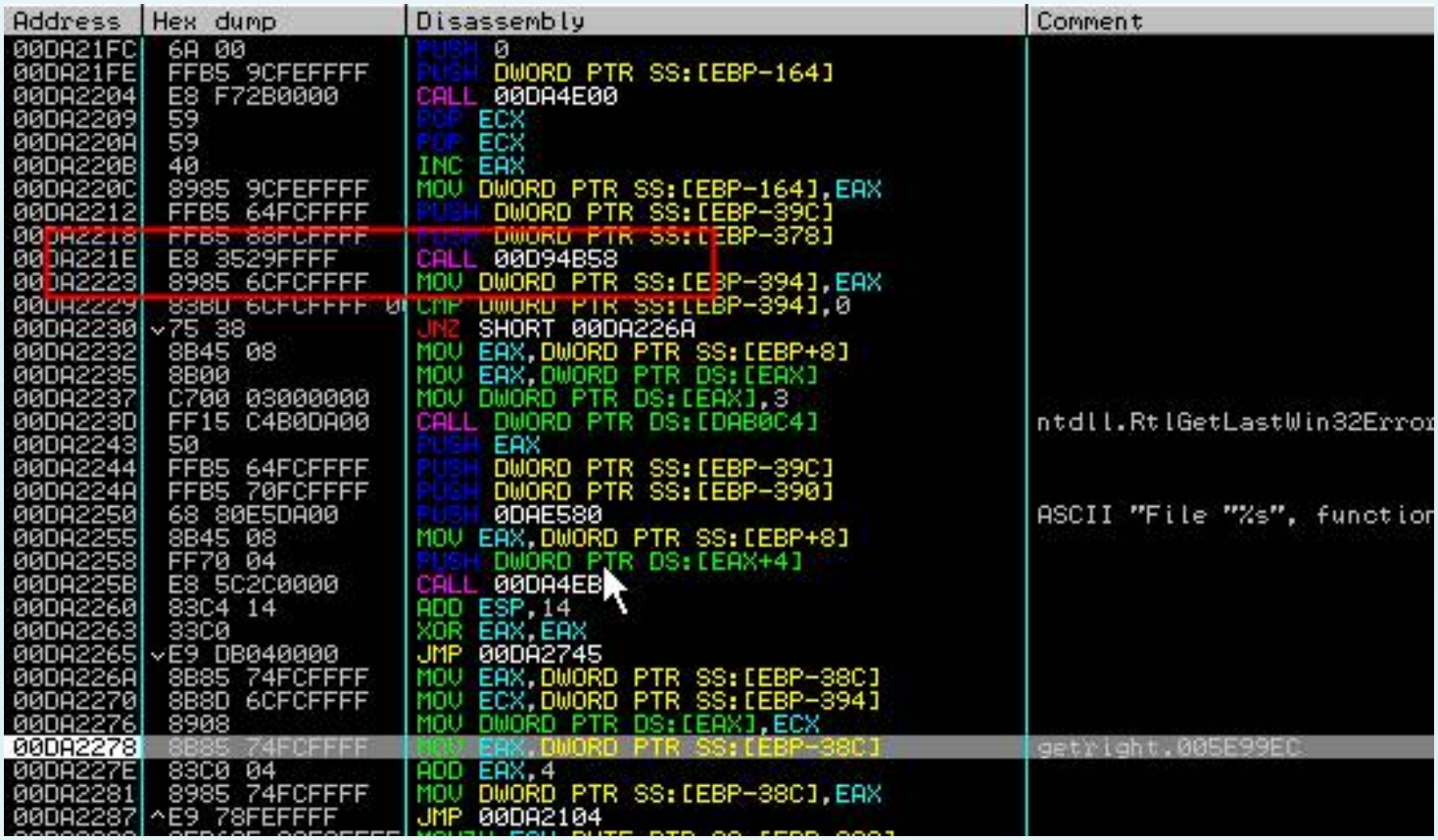
_Trong Dump window, Ctrl + G: 005E99EC:



_Shift + F9 2 times:

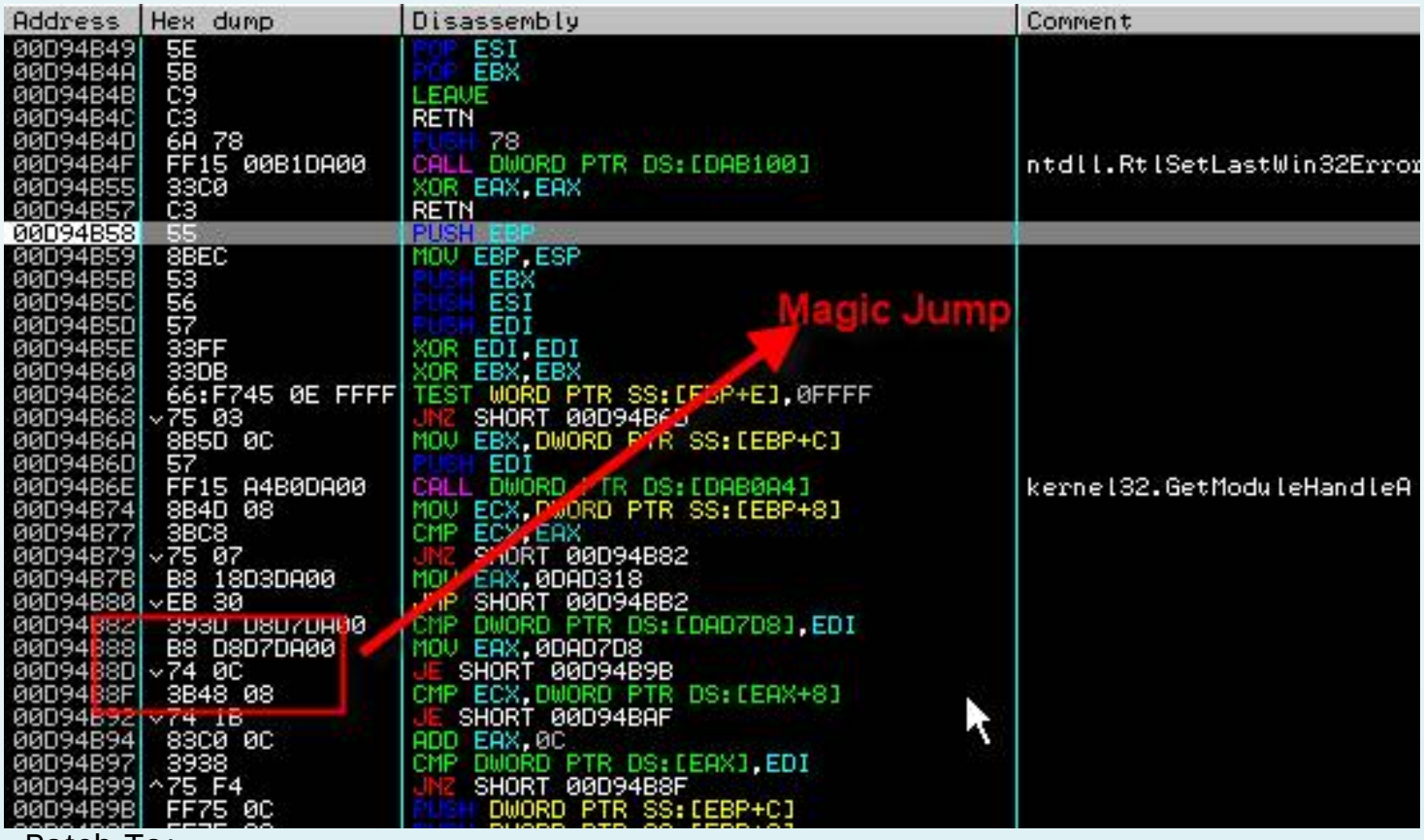


_Cuon Upturn for signs of MagicJump:



```
Address   Hex dump          Disassembly                          Comment
00DA21FC  6A 00             PUSH 0
00DA21FE  FFB5 9CFEFFFF     PUSH DWORD PTR SS:[EBP-164]
00DA2204  E8 F72B0000       CALL 00DA4E00
00DA2209  59                POP ECX
00DA220A  59                POP ECX
00DA220B  40                INC EAX
00DA220C  8985 9CFEFFFF     MOV DWORD PTR SS:[EBP-164],EAX
00DA2212  FFB5 64FCFFFF     PUSH DWORD PTR SS:[EBP-39C]
00DA2218  FFB5 88FCFFFF     PUSH DWORD PTR SS:[EBP-378]
00DA221E  E8 3529FFFF       CALL 00D94B58
00DA2223  8985 6CFCFFFF     MOV DWORD PTR SS:[EBP-394],EAX
00DA2229  83BD 6CFCFFFF 0   CMP DWORD PTR SS:[EBP-394],0
00DA2230  75 38             JNZ SHORT 00DA226A
00DA2232  8B45 08           MOV EAX,DWORD PTR SS:[EBP+8]
00DA2235  8B00              MOV EAX,DWORD PTR DS:[EAX]
00DA2237  C700 03000000     MOV DWORD PTR DS:[EAX],3
00DA223D  FF15 C4B0DA00     CALL DWORD PTR DS:[DAB0C4]           ntdll.RtlGetLastWin32Error
00DA2243  50                PUSH EAX
00DA2244  FFB5 64FCFFFF     PUSH DWORD PTR SS:[EBP-39C]
00DA224A  FFB5 70FCFFFF     PUSH DWORD PTR SS:[EBP-390]
00DA2250  68 80E5DA00       PUSH 0DAE580                         ASCII "File "%s", function
00DA2255  8B45 08           MOV EAX,DWORD PTR SS:[EBP+8]
00DA2258  FF70 04           PUSH DWORD PTR DS:[EAX+4]
00DA225B  E8 5C2C0000       CALL 00DA4EBC
00DA2260  83C4 14           ADD ESP,14
00DA2263  33C0              XOR EAX,EAX
00DA2265  E9 DB040000       JMP 00DA2745
00DA226A  8B85 74FCFFFF     MOV EAX,DWORD PTR SS:[EBP-38C]
00DA2270  8B8D 6CFCFFFF     MOV ECX,DWORD PTR SS:[EBP-394]
00DA2276  8908              MOV DWORD PTR DS:[EAX],ECX
00DA2278  8B85 74FCFFFF     MOV EAX,DWORD PTR SS:[EBP-38C]       getright.005E99EC
00DA227E  83C0 04           ADD EAX,4
00DA2281  8985 74FCFFFF     MOV DWORD PTR SS:[EBP-38C],EAX
00DA2287  E9 78FEFFFF       JMP 00DA2104
```

F2 _Nhan set a breakpoint in this function Call!



```
Address   Hex dump          Disassembly                          Comment
00D94B49  5E                POP ESI
00D94B4A  5B                POP EBX
00D94B4B  C9                LEAVE
00D94B4C  C3                RETN
00D94B4D  6A 78             PUSH 78
00D94B4F  FF15 00B1DA00     CALL DWORD PTR DS:[DAB100]           ntdll.RtlSetLastWin32Error
00D94B55  33C0              XOR EAX,EAX
00D94B57  C3                RETN
00D94B58  55                PUSH EBP
00D94B59  8BEC              MOV EBP,ESP
00D94B5B  53                PUSH EBX
00D94B5C  56                PUSH ESI
00D94B5D  57                PUSH EDI
00D94B5E  33FF              XOR EDI,EDI
00D94B60  33DB              XOR EBX,EBX
00D94B62  66:F745 0E FFFF   TEST WORD PTR SS:[EBP+E],0FFFF
00D94B68  75 03             JNZ SHORT 00D94B6D
00D94B6A  8B5D 0C           MOV EBX,DWORD PTR SS:[EBP+C]
00D94B6D  57                PUSH EDI
00D94B6E  FF15 A4B0DA00     CALL DWORD PTR DS:[DAB0A4]           kernel32.GetModuleHandleA
00D94B74  8B4D 08           MOV ECX,DWORD PTR SS:[EBP+8]
00D94B77  3BC8              CMP ECX,EAX
00D94B79  75 07             JNZ SHORT 00D94B82
00D94B7B  B8 18D3DA00       MOV EAX,0DAD318
00D94B80  EB 30             JMP SHORT 00D94BB2
00D94B82  393D D8D7DA00     CMP DWORD PTR DS:[DAD7D8],EDI
00D94B88  B8 D8D7DA00       MOV EAX,0DAD7D8
00D94B8D  74 0C             JE SHORT 00D94B9B
00D94B8F  3B48 08           CMP ECX,DWORD PTR DS:[EAX+8]
00D94B92  74 1B             JE SHORT 00D94BAF
00D94B94  83C0 0C           ADD EAX,0C
00D94B97  3938              CMP DWORD PTR DS:[EAX],EDI
00D94B99  75 F4             JNZ SHORT 00D94B8F
00D94B9B  FF75 0C           PUSH DWORD PTR SS:[EBP+C]
```

Magic Jump

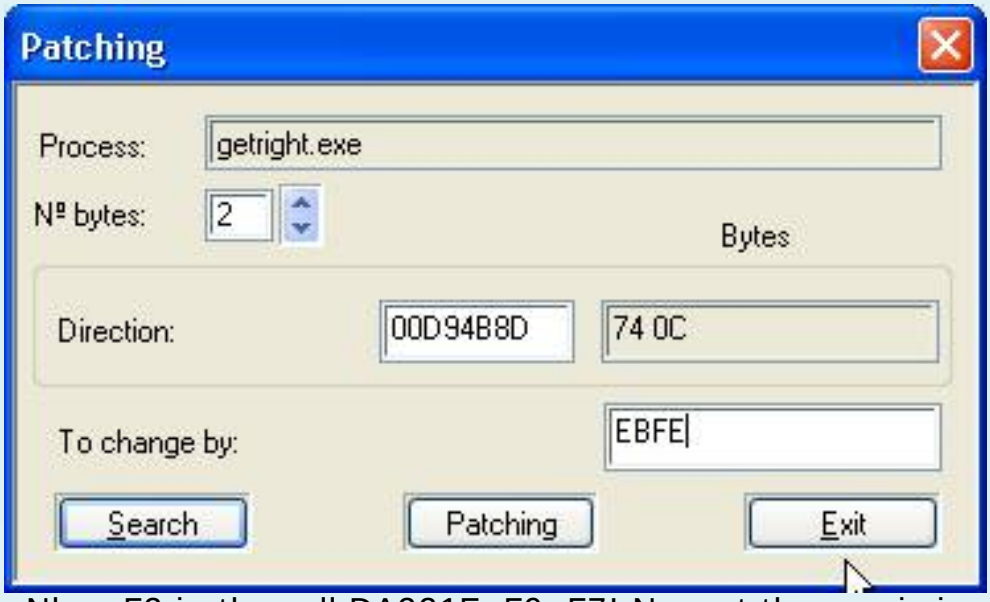
_Patch To:

```
Address   Hex dump          Disassembly                          Comment
00D94B58  55               PUSH EBP
00D94B59  8BEC             MOV EBP,ESP
00D94B5B  53               PUSH EBX
00D94B5C  56               PUSH ESI
00D94B5D  57               PUSH EDI
00D94B5E  33FF             XOR EDI,EDI
00D94B60  33DB             XOR EBX,EBX
00D94B62  66:F745 0E FFFF  TEST WORD PTR SS:[EBP+E],0FFFF
00D94B68  75 03            JNZ SHORT 00D94B6D
00D94B6A  8B5D 0C          MOV EBX,DWORD PTR SS:[EBP+C]
00D94B6D  57               PUSH EDI
00D94B6E  FF15 A4B0DA00    CALL DWORD PTR DS:[DAB0A4]           kernel32.GetModuleHandleA
00D94B74  8B4D 08          MOV ECX,DWORD PTR SS:[EBP+8]
00D94B77  3BC8             CMP ECX,EAX
00D94B79  75 07            JNZ SHORT 00D94B82
00D94B7B  B8 18D3DA00      MOV EAX,0DAD318
00D94B80  EB 30            JMP SHORT 00D94BB2
00D94B82  393D D8D7DA00    CMP DWORD PTR DS:[DAD7D8],EDI
00D94B88  B8 D8D7DA00      MOV EAX,0DAD7D8
00D94B8D  EB 0C            JMP SHORT 00D94B9B
00D94B8F  3B48 08          CMP ECX,DWORD PTR DS:[EAX+8]
00D94B92  74 1B            JE SHORT 00D94BAF
00D94B94  83C0 0C          ADD EAX,0C
00D94B97  3938             CMP DWORD PTR DS:[EAX],EDI
00D94B99  75 F4            JNZ SHORT 00D94B8F
00D94B9B  FF75 0C          PUSH DWORD PTR SS:[EBP+C]
00D94B9E  FF75 08          PUSH DWORD PTR SS:[EBP+8]
00D94BA1  E8 41000000      CALL 00D94BE7
00D94BA6  59               POP ECX
00D94BA7  59               POP ECX
00D94BA8  5F               POP EDI
00D94BA9  5E               POP ESI
00D94BAA  5B               POP EBX
00D94BAB  5D               POP EBP
```

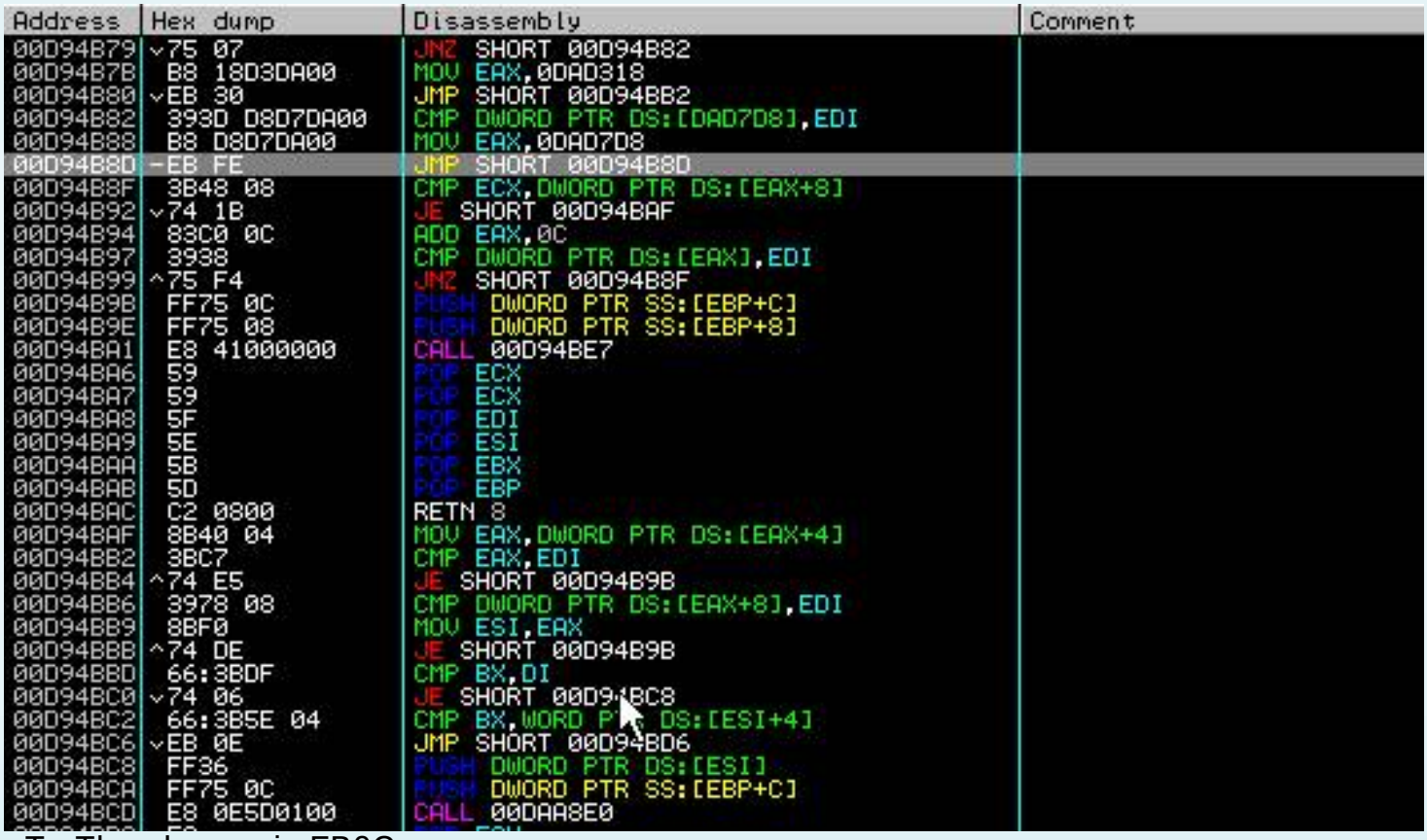
_Delete All breakpoint, F9, the OEP has been encrypted!

```
Address   Hex dump          Disassembly                          Comment
00534E90  44               INC ESP
00534E91  B8 A504EE5B      MOV EAX,5BEE04A5
00534E96  51               PUSH ECX
00534E97  A1 483321F2      MOV EAX,DWORD PTR DS:[F2213348]
00534E9C  9D               POPFD
00534E9D  60               PUSHAD
00534E9E  49               DEC ECX
00534E9F  0AB0 33496E11    OR DH,BYTE PTR DS:[EAX+116E4933]
00534EA5  632D E7343349    ARPL WORD PTR DS:[493334E7],BP
00534EAB  6E               OUTS DX,BYTE PTR ES:[EDI]            I/O command
00534EAC  11B0 8DC64265    ADC DWORD PTR DS:[EAX+6542C68D],ESI
00534EB2  1E               PUSH DS
00534EB3  E7 74            OUT 74,EAX                           I/O command
```

F2 + _Ctrl restart all! After set breakpoint at start IAT, Shift + F9 2 times you Ctrl + G: 00D94B8D, patch or use the EBFE PUPE:

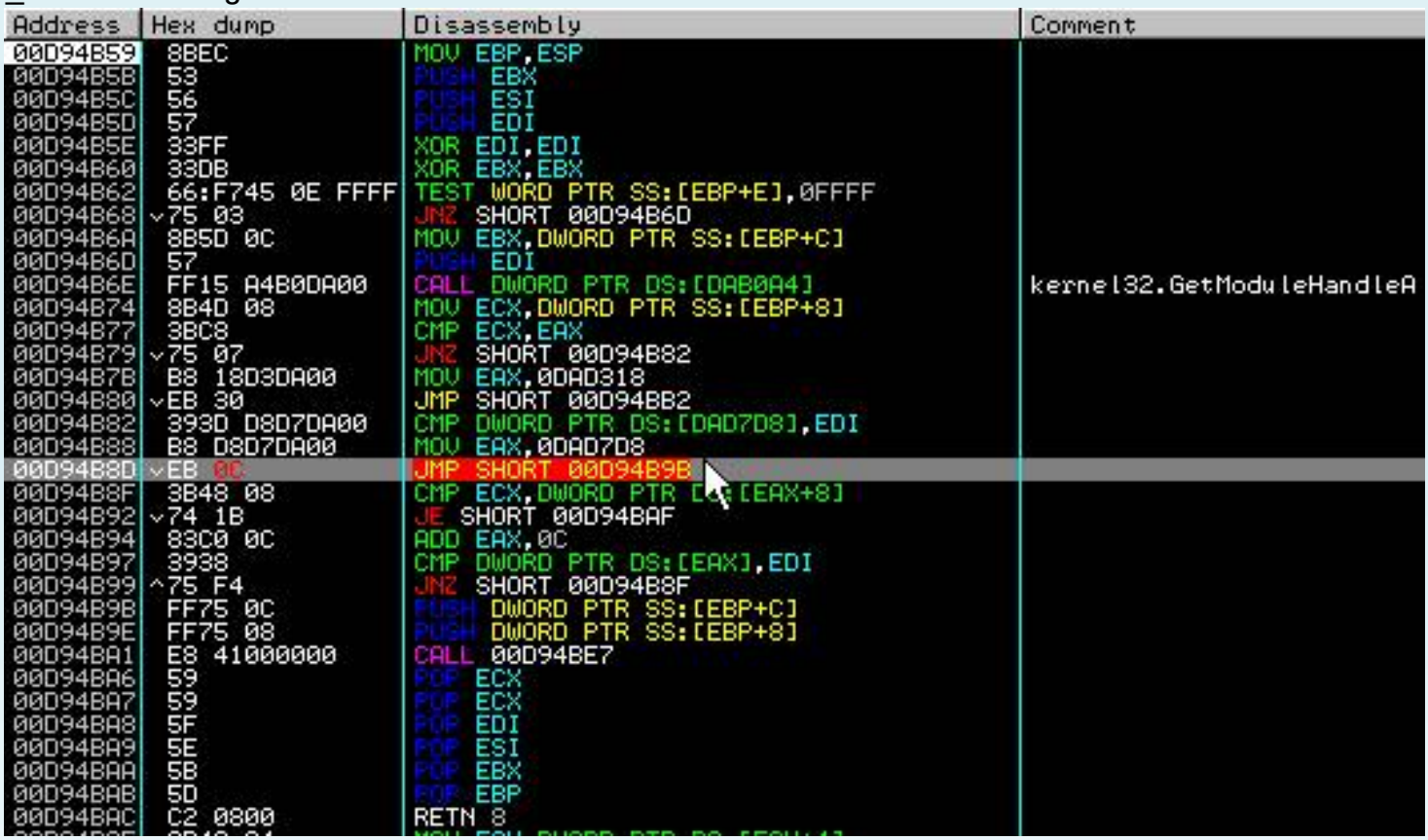


_Nhan F2 in the call DA221E, F9, F7! Now at the magic jump is:



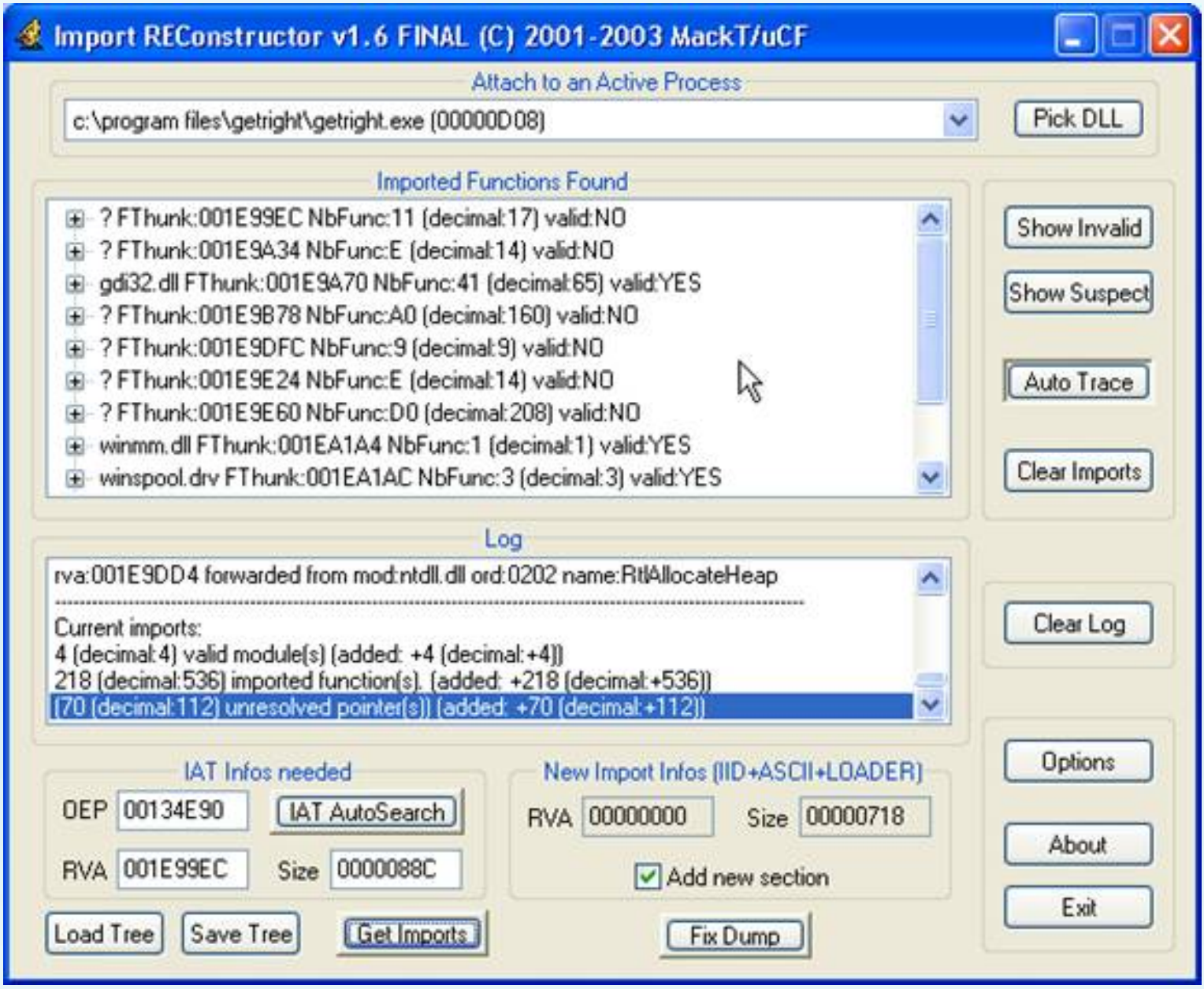
Address	Hex dump	Disassembly	Comment
00D94B79	v75 07	JNZ SHORT 00D94B82	
00D94B7B	B8 18D3DA00	MOV EAX,0DAD318	
00D94B80	vEB 30	JMP SHORT 00D94BB2	
00D94B82	393D D8D7DA00	CMP DWORD PTR DS:[DAD7D8],EDI	
00D94B88	B8 D8D7DA00	MOV EAX,0DAD7D8	
00D94B8D	-EB FE	JMP SHORT 00D94B8D	
00D94B8F	3B48 08	CMP ECX,DWORD PTR DS:[EAX+8]	
00D94B92	v74 1B	JE SHORT 00D94BAF	
00D94B94	83C0 0C	ADD EAX,0C	
00D94B97	3938	CMP DWORD PTR DS:[EAX],EDI	
00D94B99	^75 F4	JNZ SHORT 00D94B8F	
00D94B9B	FF75 0C	PUSH DWORD PTR SS:[EBP+C]	
00D94B9E	FF75 08	PUSH DWORD PTR SS:[EBP+8]	
00D94BA1	E8 41000000	CALL 00D94BE7	
00D94BA6	59	POP ECX	
00D94BA7	59	POP ECX	
00D94BA8	5F	POP EDI	
00D94BA9	5E	POP ESI	
00D94BAA	5B	POP EBX	
00D94BAB	5D	POP EBP	
00D94BAC	C2 0800	RETN 8	
00D94BAF	8B40 04	MOV EAX,DWORD PTR DS:[EAX+4]	
00D94BB2	3BC7	CMP EAX,EDI	
00D94BB4	^74 E5	JE SHORT 00D94B9B	
00D94BB6	3978 08	CMP DWORD PTR DS:[EAX+8],EDI	
00D94BB9	8BF0	MOV ESI,EAX	
00D94BBB	^74 DE	JE SHORT 00D94B9B	
00D94BBD	66:3BDF	CMP BX,DI	
00D94BC0	v74 06	JE SHORT 00D94BC8	
00D94BC2	66:3B5E 04	CMP BX,WORD PTR DS:[ESI+4]	
00D94BC6	vEB 0E	JMP SHORT 00D94BD6	
00D94BC8	FF36	PUSH DWORD PTR DS:[ESI]	
00D94BCA	FF75 0C	PUSH DWORD PTR SS:[EBP+C]	
00D94BCD	E8 0E5D0100	CALL 00DAA8E0	

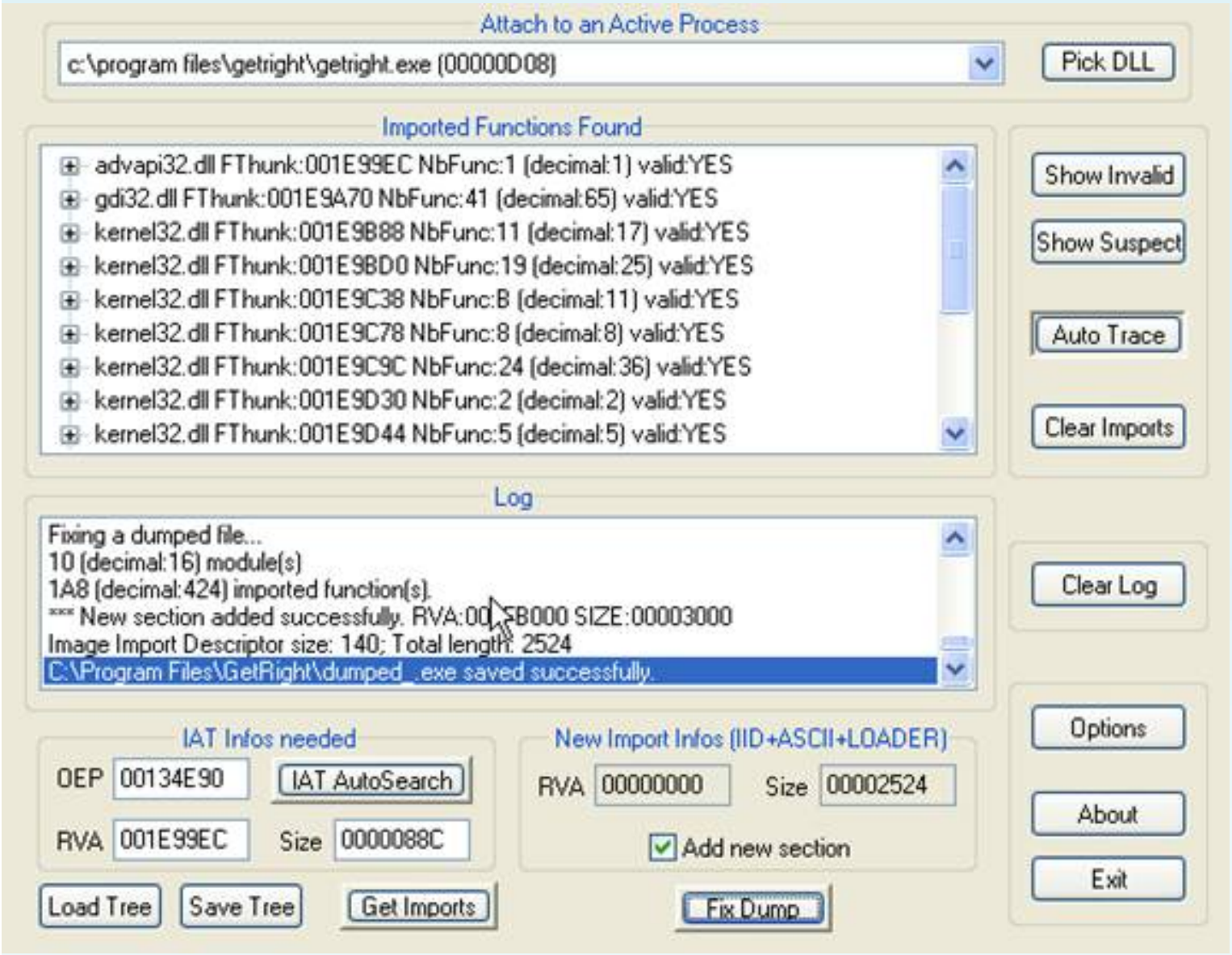
_Ta The change is EB0C:



Address	Hex dump	Disassembly	Comment
00D94B59	8BEC	MOV EBP,ESP	
00D94B5B	53	PUSH EBX	
00D94B5C	56	PUSH ESI	
00D94B5D	57	PUSH EDI	
00D94B5E	33FF	XOR EDI,EDI	
00D94B60	33DB	XOR EBX,EBX	
00D94B62	66:F745 0E FFFF	TEST WORD PTR SS:[EBP+E],0FFFF	
00D94B68	v75 03	JNZ SHORT 00D94B6D	
00D94B6A	8B5D 0C	MOV EBX,DWORD PTR SS:[EBP+C]	
00D94B6D	57	PUSH EDI	
00D94B6E	FF15 A4B0DA00	CALL DWORD PTR DS:[DAB0A4]	kernel32.GetModuleHandleA
00D94B74	8B4D 08	MOV ECX,DWORD PTR SS:[EBP+8]	
00D94B77	3BC8	CMP ECX,EAX	
00D94B79	v75 07	JNZ SHORT 00D94B82	
00D94B7B	B8 18D3DA00	MOV EAX,0DAD318	
00D94B80	vEB 30	JMP SHORT 00D94BB2	
00D94B82	393D D8D7DA00	CMP DWORD PTR DS:[DAD7D8],EDI	
00D94B88	B8 D8D7DA00	MOV EAX,0DAD7D8	
00D94B8D	vEB 0C	JMP SHORT 00D94B9B	
00D94B8F	3B48 08	CMP ECX,DWORD PTR DS:[EAX+8]	
00D94B92	v74 1B	JE SHORT 00D94BAF	
00D94B94	83C0 0C	ADD EAX,0C	
00D94B97	3938	CMP DWORD PTR DS:[EAX],EDI	
00D94B99	^75 F4	JNZ SHORT 00D94B8F	
00D94B9B	FF75 0C	PUSH DWORD PTR SS:[EBP+C]	
00D94B9E	FF75 08	PUSH DWORD PTR SS:[EBP+8]	
00D94BA1	E8 41000000	CALL 00D94BE7	
00D94BA6	59	POP ECX	
00D94BA7	59	POP ECX	
00D94BA8	5F	POP EDI	
00D94BA9	5E	POP ESI	
00D94BAA	5B	POP EBX	
00D94BAB	5D	POP EBP	
00D94BAC	C2 0800	RETN 8	

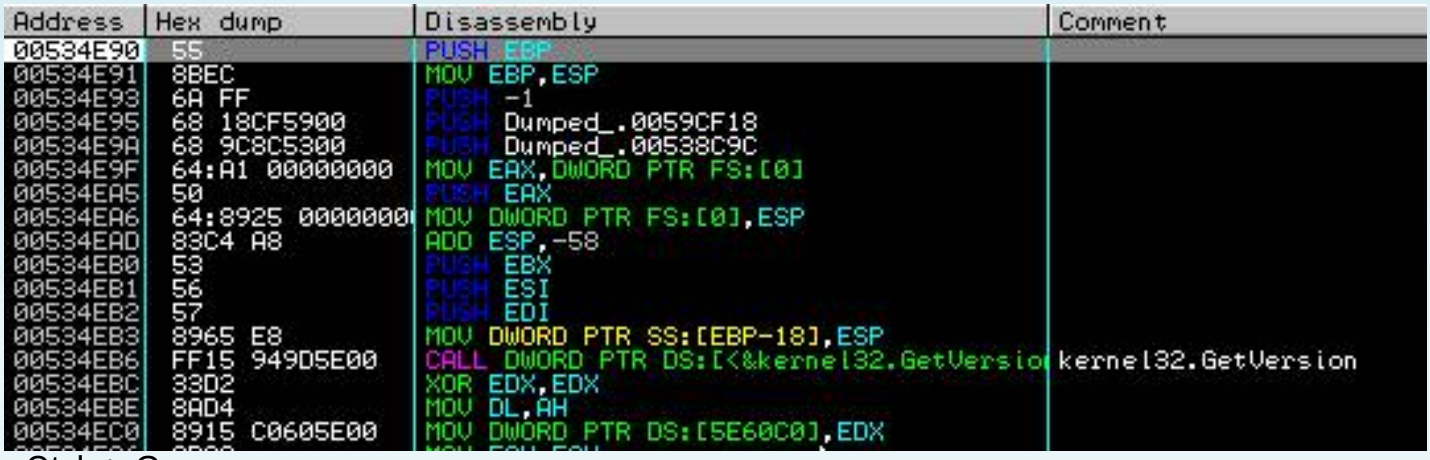
_Magic Patched Jump! Now open up ImpREC, enter the following information, Get Import, Show Invalid, Thunks Cuts, Fix dump:


Import REConstructor v1.6 FINAL (C) 2001-2003 MackT/uCF
Attach to an Active Process
c:\program files\getright\getright.exe (00000D08)
Pick DLL
Imported Functions Found
? FThunk:001E99EC NbFunc:11 (decimal:17) valid:NO
? FThunk:001E9A34 NbFunc:E (decimal:14) valid:NO
gdi32.dll FThunk:001E9A70 NbFunc:41 (decimal:65) valid:YES
? FThunk:001E9B78 NbFunc:A0 (decimal:160) valid:NO
? FThunk:001E9DFC NbFunc:9 (decimal:9) valid:NO
? FThunk:001E9E24 NbFunc:E (decimal:14) valid:NO
? FThunk:001E9E60 NbFunc:D0 (decimal:208) valid:NO
winmm.dll FThunk:001EA1A4 NbFunc:1 (decimal:1) valid:YES
winspool.drv FThunk:001EA1AC NbFunc:3 (decimal:3) valid:YES
Show Invalid
Show Suspect
Auto Trace
Clear Imports
Log
rva:001E9DD4 forwarded from mod:ntdll.dll ord:0202 name:RtlAllocateHeap
Current imports:
4 (decimal:4) valid module(s) (added: +4 (decimal:+4))
218 (decimal:536) imported function(s). (added: +218 (decimal:+536))
[70 (decimal:112) unresolved pointer(s)] (added: +70 (decimal:+112))
Clear Log
IAT Infos needed
OEP 00134E90
IAT AutoSearch
RVA 001E99EC
Size 0000088C
New Import Infos (IID+ASCII+LOADER)
RVA 00000000
Size 00000718
Add new section
Options
About
Exit
Load Tree
Save Tree
Get Imports
Fix Dump



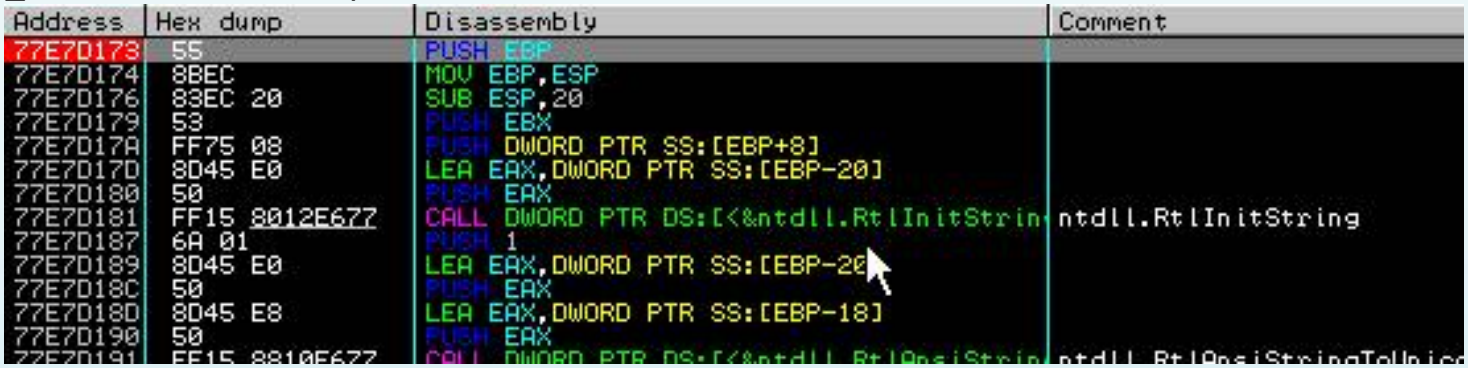
_Done: Run the test considered! : P!

Ac, Load the file onto dumped.exe OllyDBG:

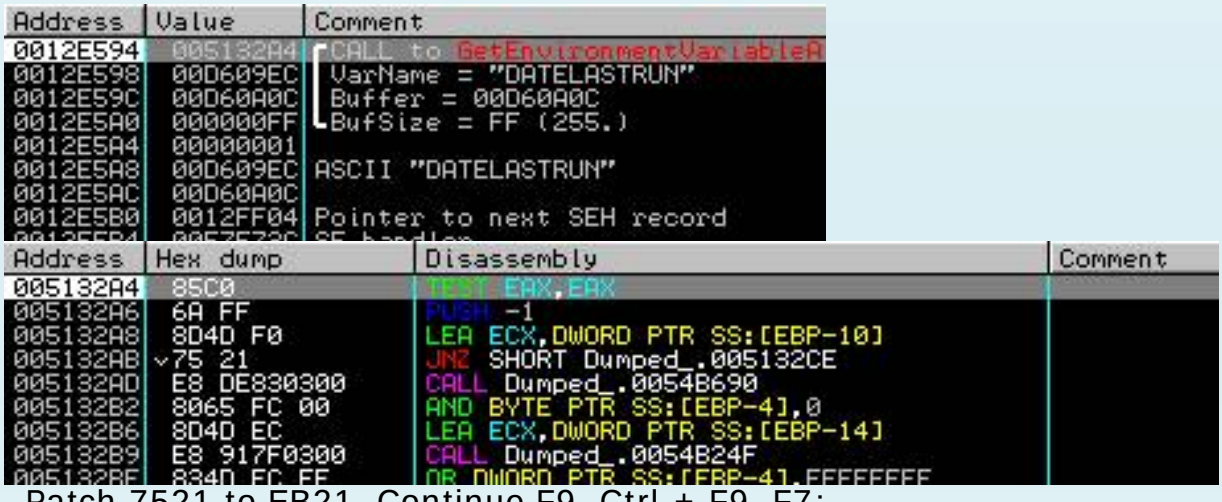


_Ctrl + G:

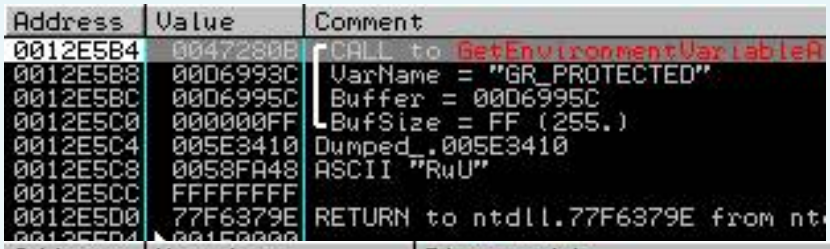
_Toi And set a breakpoint:



_F9, Ctrl + F9, F7, and to this:

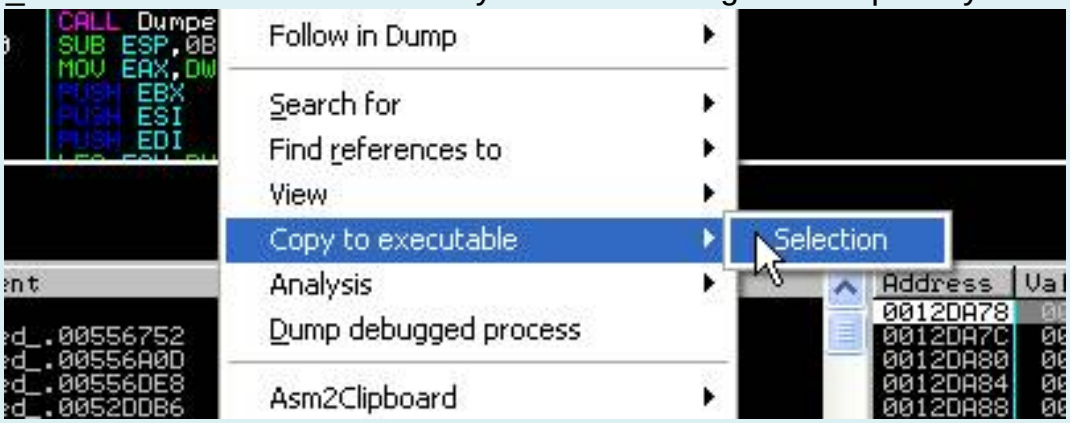


_Patch 7521 to EB21. Continue F9, Ctrl + F9, F7:

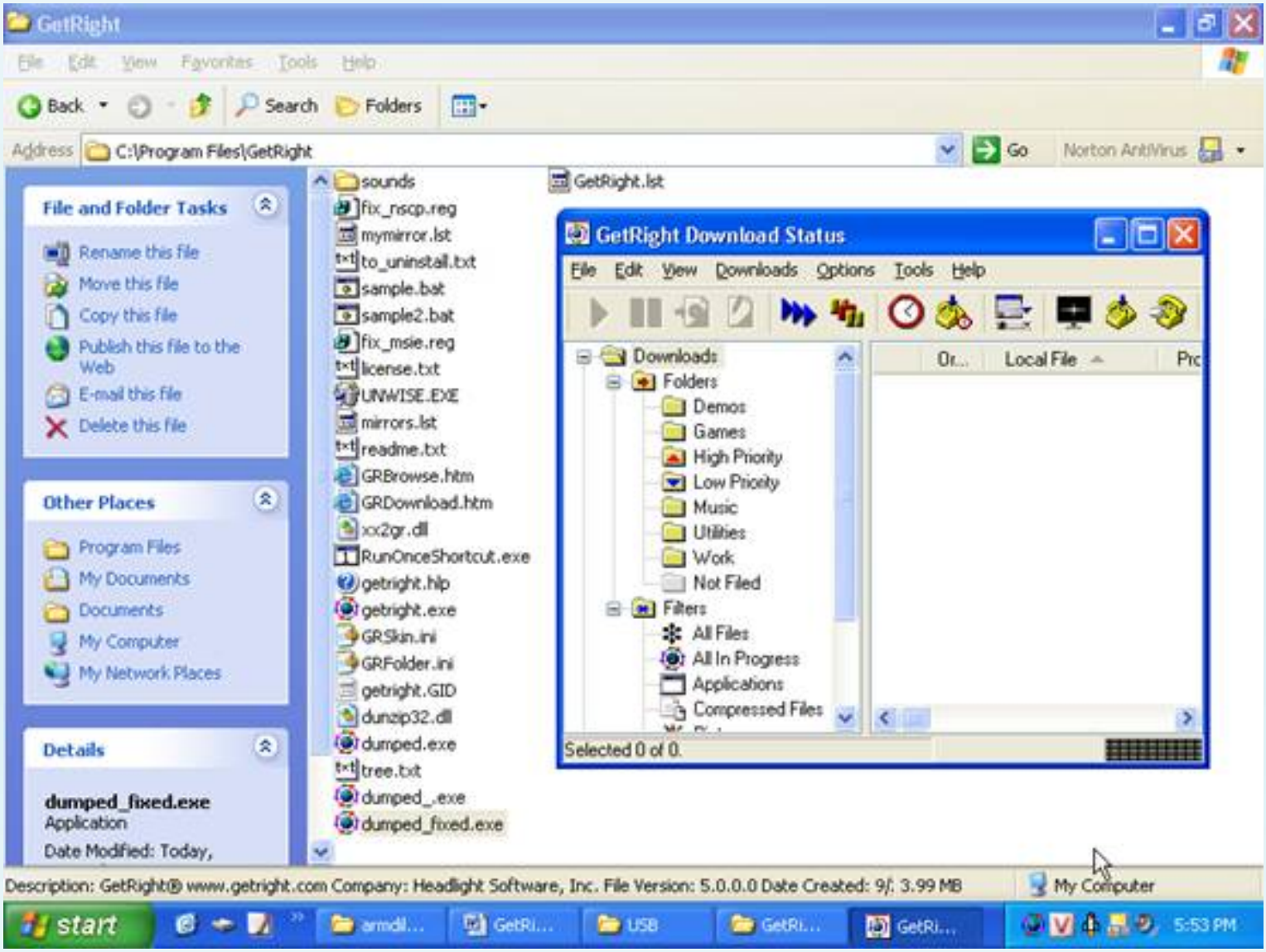


_Patch 7537 to EB37. Continue, F9, Ctrl + F9, F7:

_Lai Patch 7536 to EB36! If you do run it again completely. Ok:



_Save The dumped_fixed.exe



_Unpacked Done!

Conlusion I.

Bye!

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, Madman_Hercules, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

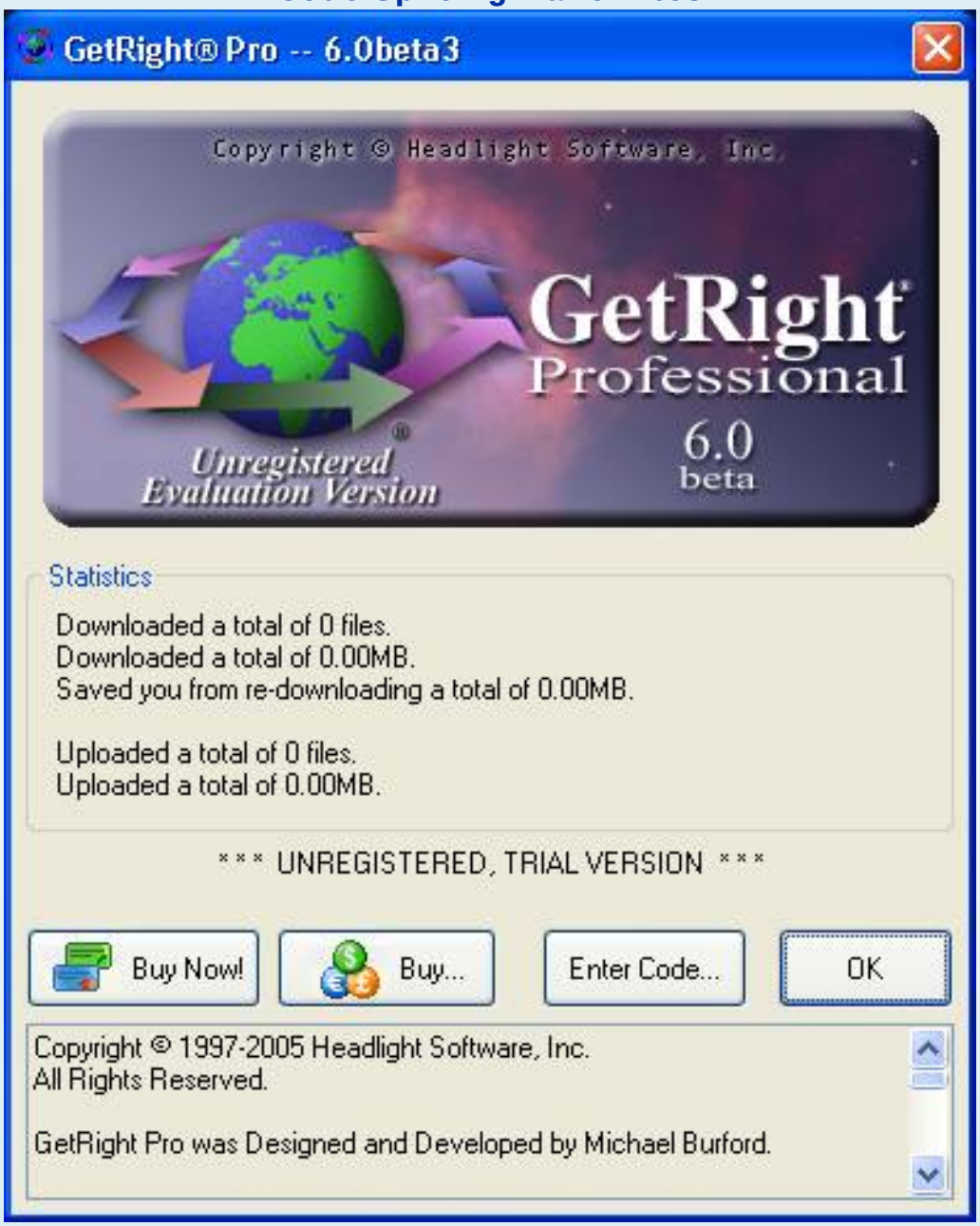
Thanx OllyDBG of the authors.

To be continued ...

Written by **hacnho** (tutorial date: VietNam 28/09/2005)

Armadillo collect sand-stone

GetRight - 6.0 Beta 3 <|> ARM 4.xx - Debug Blocker + Anti BP IAT elimination + + + Code Splicing Nanomites



I. Intro

_Sau To do about GetRight5 tut, you can ask me to do tut GetRight 6.0 beta 3. Ok, as your mind!

II. Tools

1.OllyDBG - The best config debugger for ArmMUP by hacnho.
2.LordPE 1.4 Deluxe
3.Import REConstructor 1.6 Final

III. Unpacking

_Detect Target:

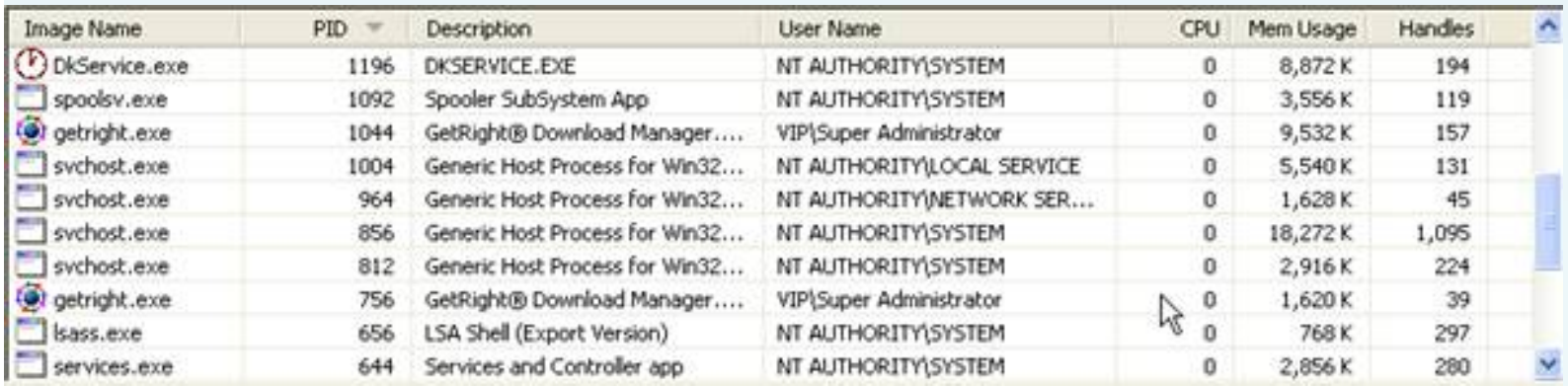


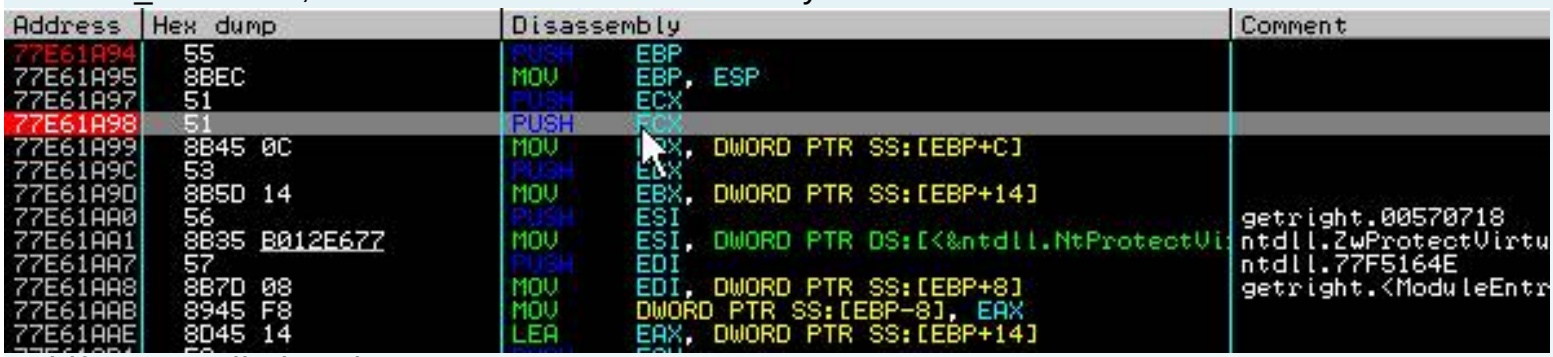
Image Name	PID	Description	User Name	CPU	Mem Usage	Handles
DkService.exe	1196	DKSERVICE.EXE	NT AUTHORITY\SYSTEM	0	8,872 K	194
spoolsv.exe	1092	Spooler SubSystem App	NT AUTHORITY\SYSTEM	0	3,556 K	119
getright.exe	1044	GetRight® Download Manager....	VIP\Super Administrator	0	9,532 K	157
svchost.exe	1004	Generic Host Process for Win32...	NT AUTHORITY\LOCAL SERVICE	0	5,540 K	131
svchost.exe	964	Generic Host Process for Win32...	NT AUTHORITY\NETWORK SER...	0	1,628 K	45
svchost.exe	856	Generic Host Process for Win32...	NT AUTHORITY\SYSTEM	0	18,272 K	1,095
svchost.exe	812	Generic Host Process for Win32...	NT AUTHORITY\SYSTEM	0	2,916 K	224
getright.exe	756	GetRight® Download Manager....	VIP\Super Administrator	0	1,620 K	39
lsass.exe	656	LSA Shell (Export Version)	NT AUTHORITY\SYSTEM	0	768 K	297
services.exe	644	Services and Controller app	NT AUTHORITY\SYSTEM	0	2,856 K	280

_Load Target:

Address	Hex dump	Disassembly	Comment
006A7000	60	PUSHAD	
006A7001	E8 00000000	CALL getright.006A7006	
006A7006	5D	POP EBP	kernel32.77E814C7
006A7007	50	PUSH EAX	
006A7008	51	PUSH ECX	
006A7009	0FCA	BSWAP EDX	
006A700B	F7D2	NOT EDX	
006A700D	9C	PUSHFD	
006A700E	F7D2	NOT EDX	
006A7010	0FCA	BSWAP EDX	
006A7012	EB 0F	JMP SHORT getright.006A7023	
006A7014	B9 EB0FB8EB	MOV ECX, EBB80FEB	
006A7019	07	POP ES	Modification of se

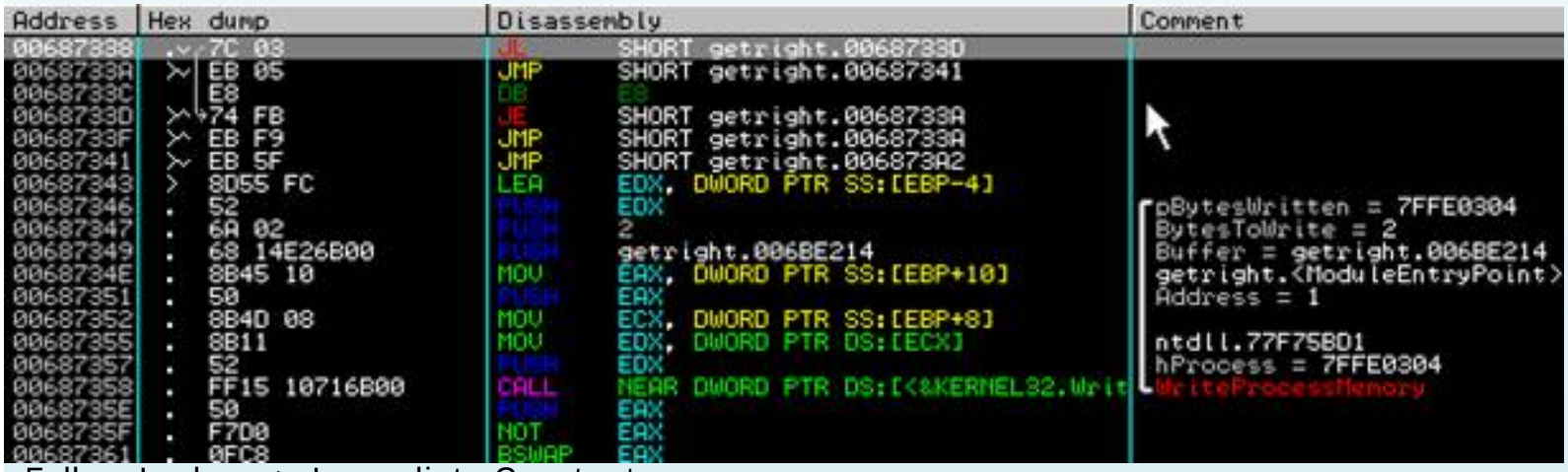
_Alt + F1, BP set WriteProcessMemory, Shift + F9:

Restart _Ctrl + F2, Ctrl + G: WriteProcessMemory:

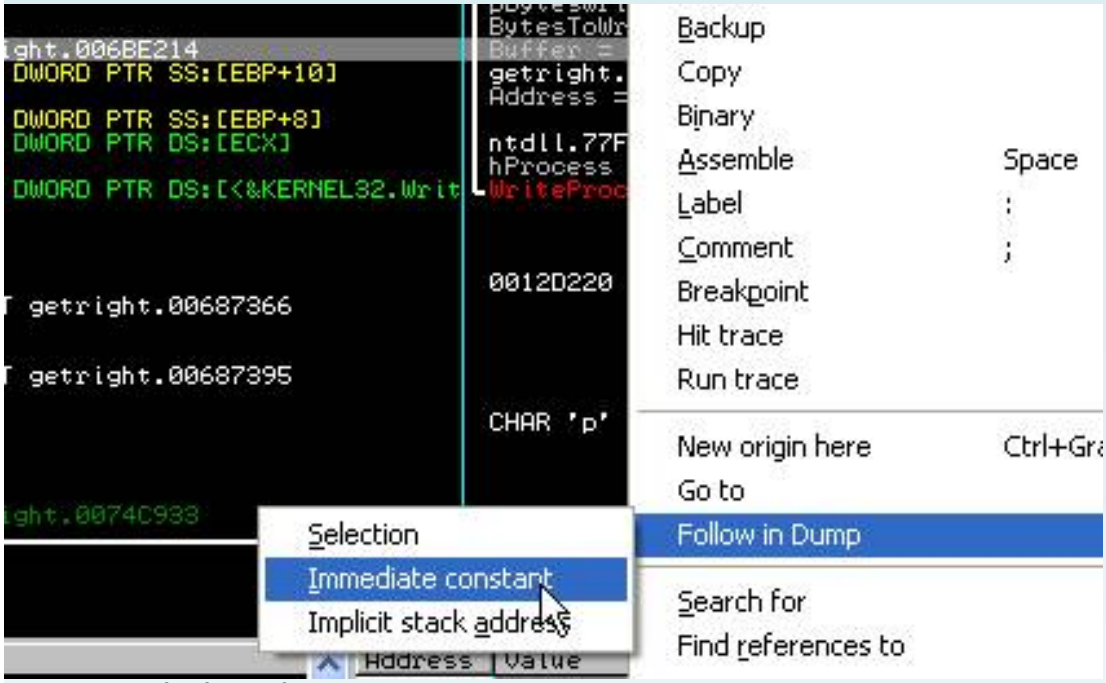


Address	Hex dump	Disassembly	Comment
77E61A94	55	PUSH EBP	
77E61A95	8BEC	MOV EBP, ESP	
77E61A97	51	PUSH ECX	
77E61A98	51	PUSH ECX	
77E61A99	8B45 0C	MOV EAX, DWORD PTR SS:[EBP+C]	
77E61A9C	53	PUSH EBX	
77E61A9D	8B5D 14	MOV EBX, DWORD PTR SS:[EBP+14]	
77E61AA0	56	PUSH ESI	getright.00570718
77E61AA1	8B35 B012E677	MOV ESI, DWORD PTR DS:[<&ntdll.NtProtectVi	ntdll.ZwProtectVirtu
77E61AA7	57	PUSH EDI	ntdll.77F5164E
77E61AA8	8B7D 08	MOV EDI, DWORD PTR SS:[EBP+8]	getright.<ModuleEntr
77E61AAB	8945 F8	MOV DWORD PTR SS:[EBP-8], EAX	
77E61AAE	8D45 14	LEA EAX, DWORD PTR SS:[EBP+14]	

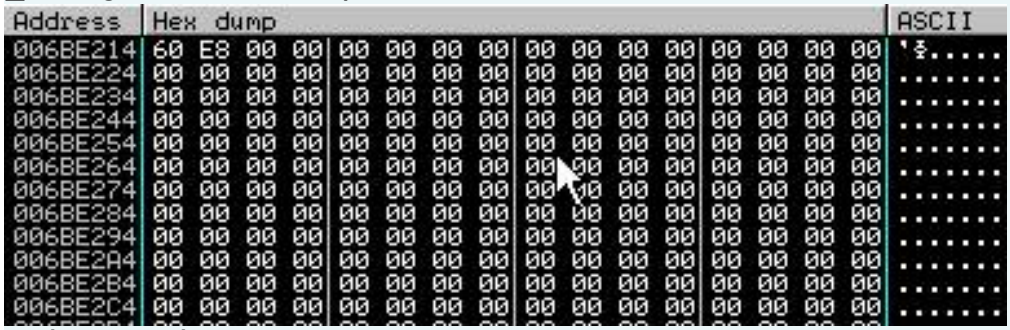
_Shift + F9, olly break:



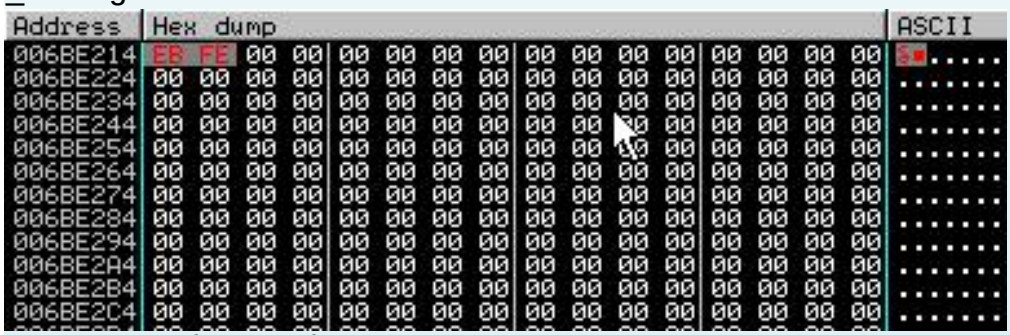
_Follow In dump> Immediate Constant:



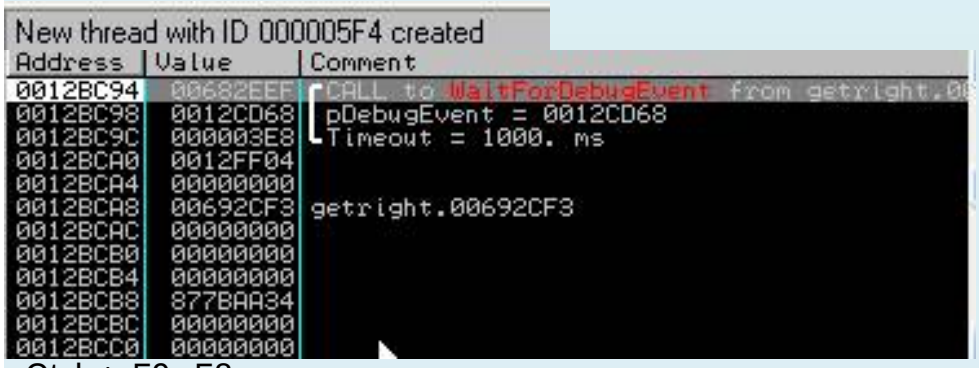
_Trong Window dump:



_Change The EBFE:



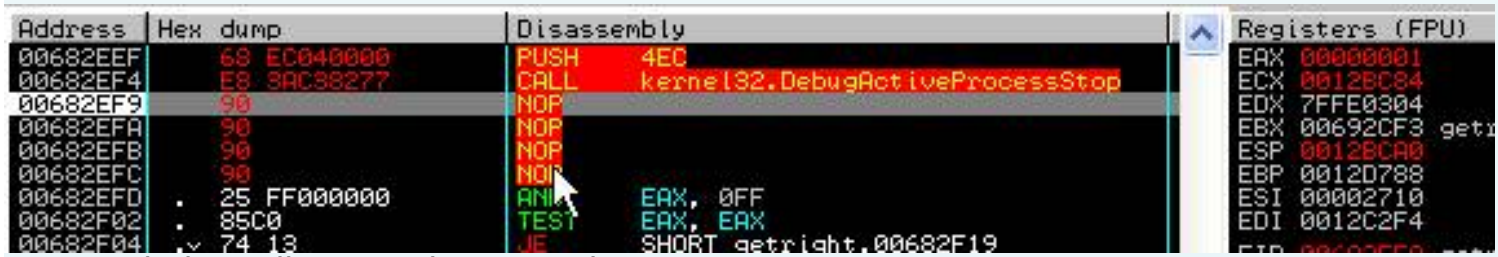
_F9, BP WaitForDebugEvent:



_Ctrl + F9, F8:

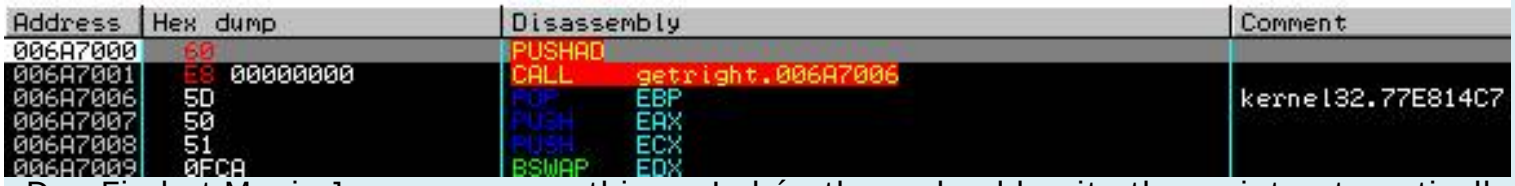
_Patch To:

_F8 Trace through:



_Mo A window OllyDBG other, Attach, F9, F12:

_Patch To:



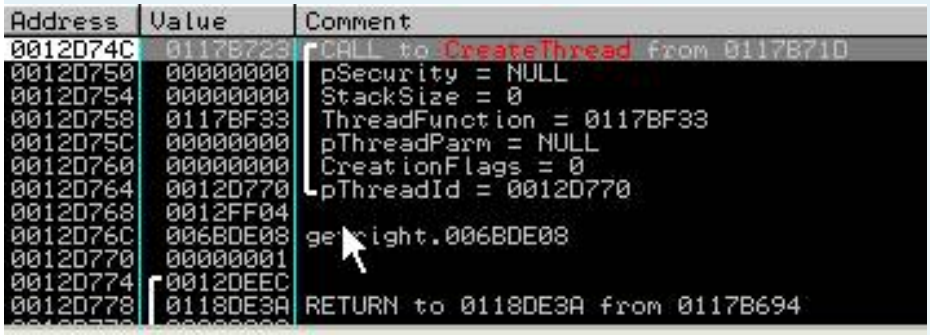
_Den Find at Magic Jump, as many things, I chán then, should write the script automatically find and fix Magic Jump always right is neat bu J

```
var GetModuleHandleA
var AddressOfMagicJump
var LenOfMagicJump

GPA "GetModuleHandleA", "kernel32.dll"
```

```
mov GetModuleHandleA, $ RESULT

bphws GetModuleHandleA, "x"
repeat:
esto
rtu
find eip, # 0F84 ????????????????? 74 ?????????? EB? #
Cmp $ result, 0
je repeat
bphwc GetModuleHandleA

mov AddressOfMagicJump, $ RESULT
mov LenOfMagicJump, AddressOfMagicJump
add LenOfMagicJump, 2
mov LenOfMagicJump, [LenOfMagicJump]
inc LenOfMagicJump
mov [AddressOfMagicJump], 0E9
inc AddressOfMagicJump
mov [AddressOfMagicJump], LenOfMagicJump

CMT $ result, "<- MagicJump fixed"
msg "MagicJump fixed! Now, the next step is yours: OEP Finder!"
ret
```

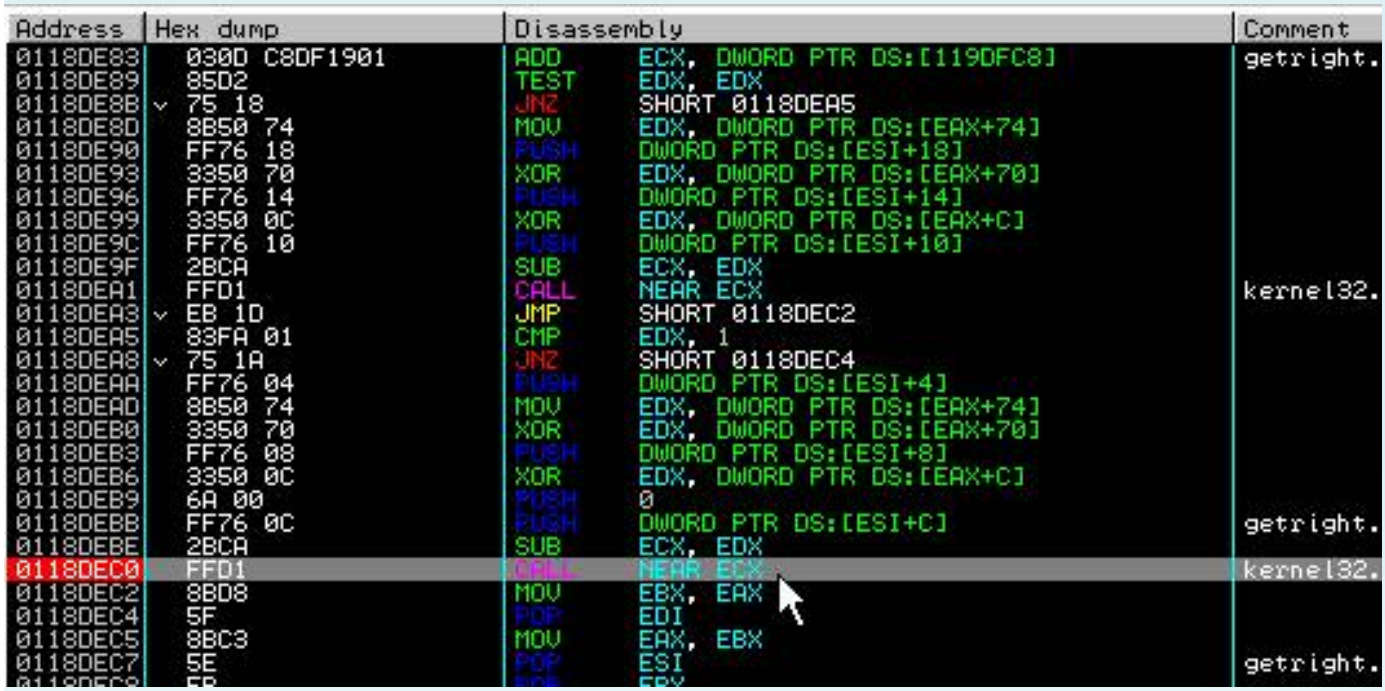
_Sau When running the script:

CreateThread _Dat breakpoint:



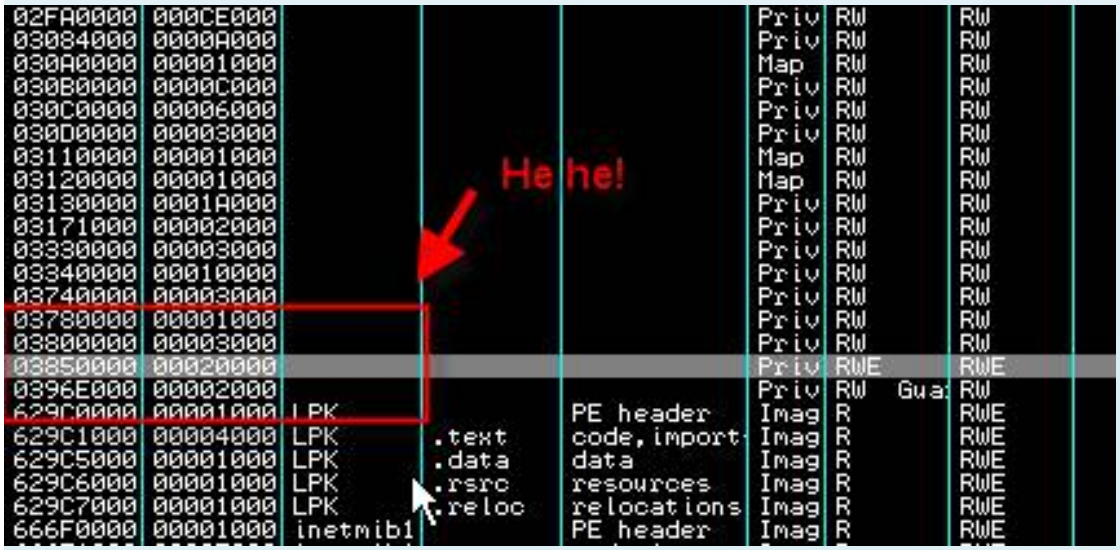
_Ctrl + F9, F8:

_Ctrl + F9, F8. Scroll down a little:

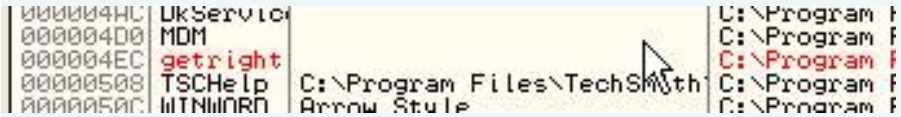


_F9, F7: OEP:

_Dom The address of the function GetVersion bít immediately IAT elimination J . Phone, so it is quiet there, fix what has Splicing Code. Alt + M to find signs of Splicing Code:

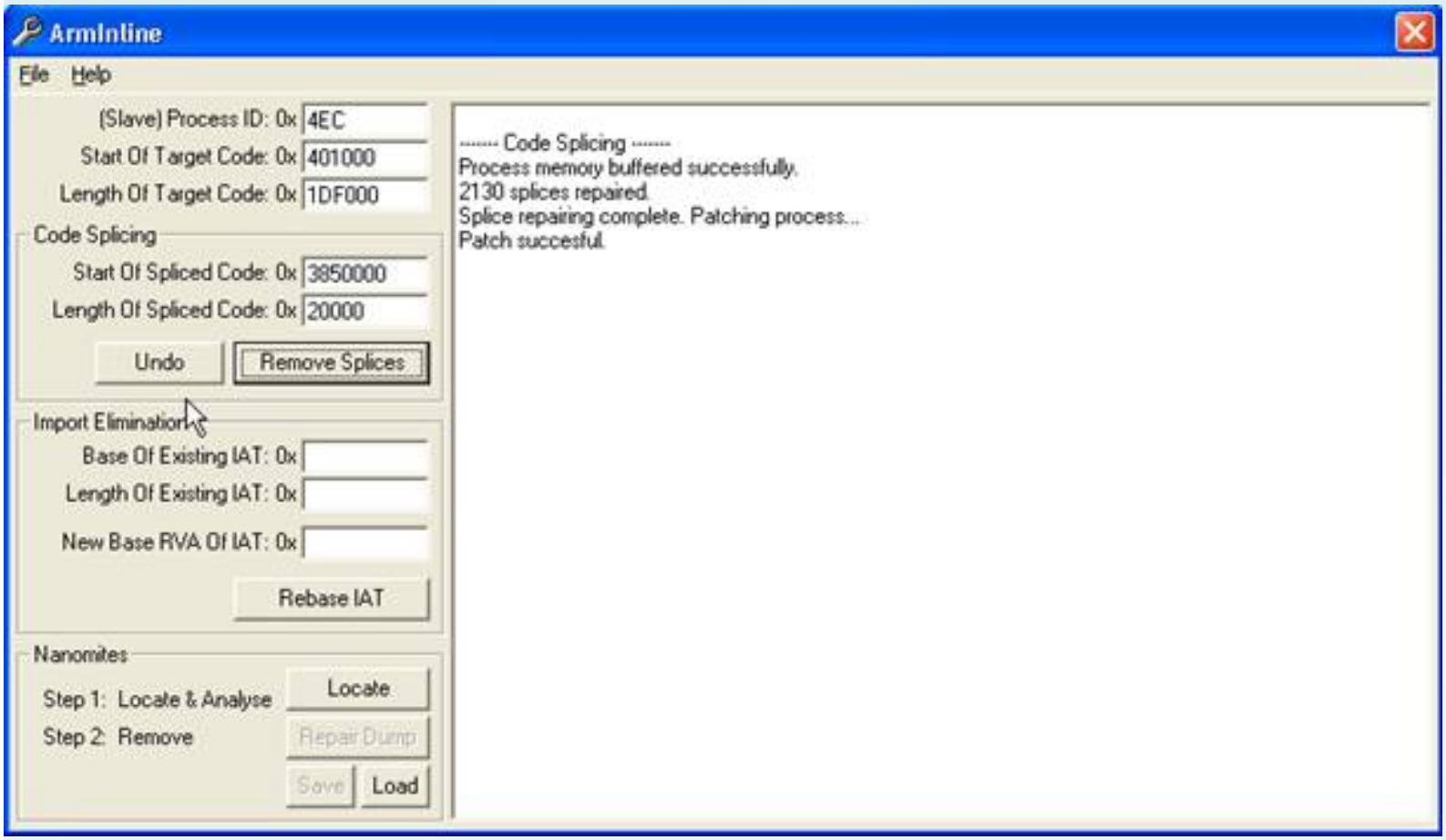


Address	Size	Owner	Section	Contains	Type	Acces
00290000	00034000				Map	R
002D0000	00041000				Map	R
00320000	00006000				Map	R
00330000	00005000				Map	R E
003F0000	00002000				Map	R E
00400000	00001000	getright			Imag	R
00401000	001DF000	getright	.text		Imag	R
005E0000	0005C000	getright	.rdata	exports	Imag	R
0063C000	0001B000	getright	.data	data	Imag	R
00657000	00050000	getright	.text1	code	Imag	R
006A7000	00010000	getright	.adata	SFX	Imag	R
006B7000	00020000	getright	.data1	imports	Imag	R
006D7000	00240000	getright	.pdata		Imag	R
00917000	002B5000	getright	.rsrc	resources	Imag	R



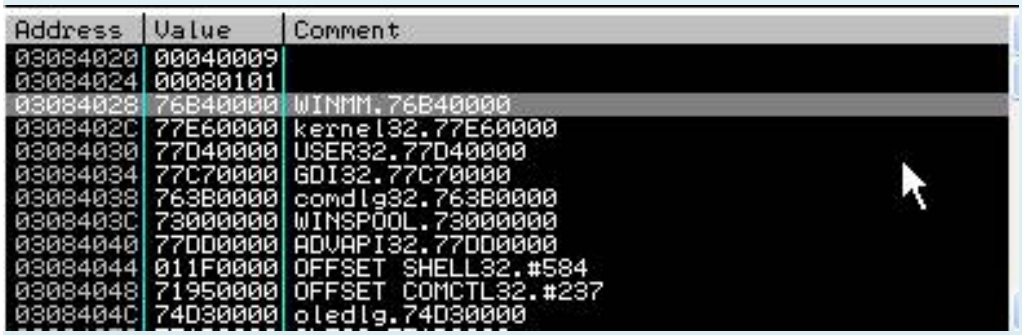
_Mo The ArmInline out, fill in information as follows:

Remove _Click Splices:



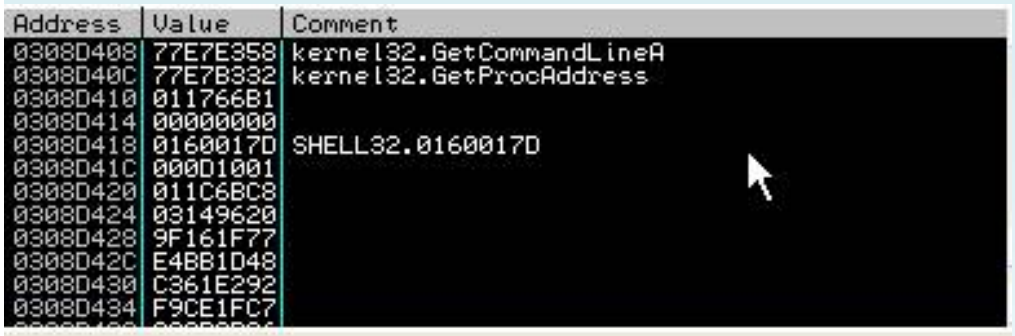
_Tim IAT Info:

IAT Start:



Address	Value	Comment
03084020	00040009	
03084024	00080101	
03084028	76B40000	WINMM.76B40000
0308402C	77E60000	kernel32.77E60000
03084030	77D40000	USER32.77D40000
03084034	77C70000	GDI32.77C70000
03084038	763B0000	comdlg32.763B0000
0308403C	73000000	WINSPOOL.73000000
03084040	77DD0000	ADVAPI32.77DD0000
03084044	011F0000	OFFSET SHELL32.#584
03084048	71950000	OFFSET COMCTL32.#237
0308404C	74D30000	oledlg.74D30000

IAT End:



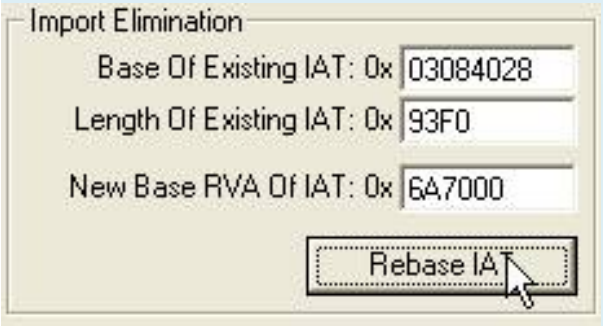
Address	Value	Comment
0308D408	77E7E358	kernel32.GetCommandLineA
0308D40C	77E7B332	kernel32.GetProcAddress
0308D410	011766B1	
0308D414	00000000	
0308D418	0160017D	SHELL32.0160017D
0308D41C	000D1001	
0308D420	011C6BC8	
0308D424	03149620	
0308D428	9F161F77	
0308D42C	E4BB1D48	
0308D430	C361E292	
0308D434	F9CE1FC7	

_Ta Are:

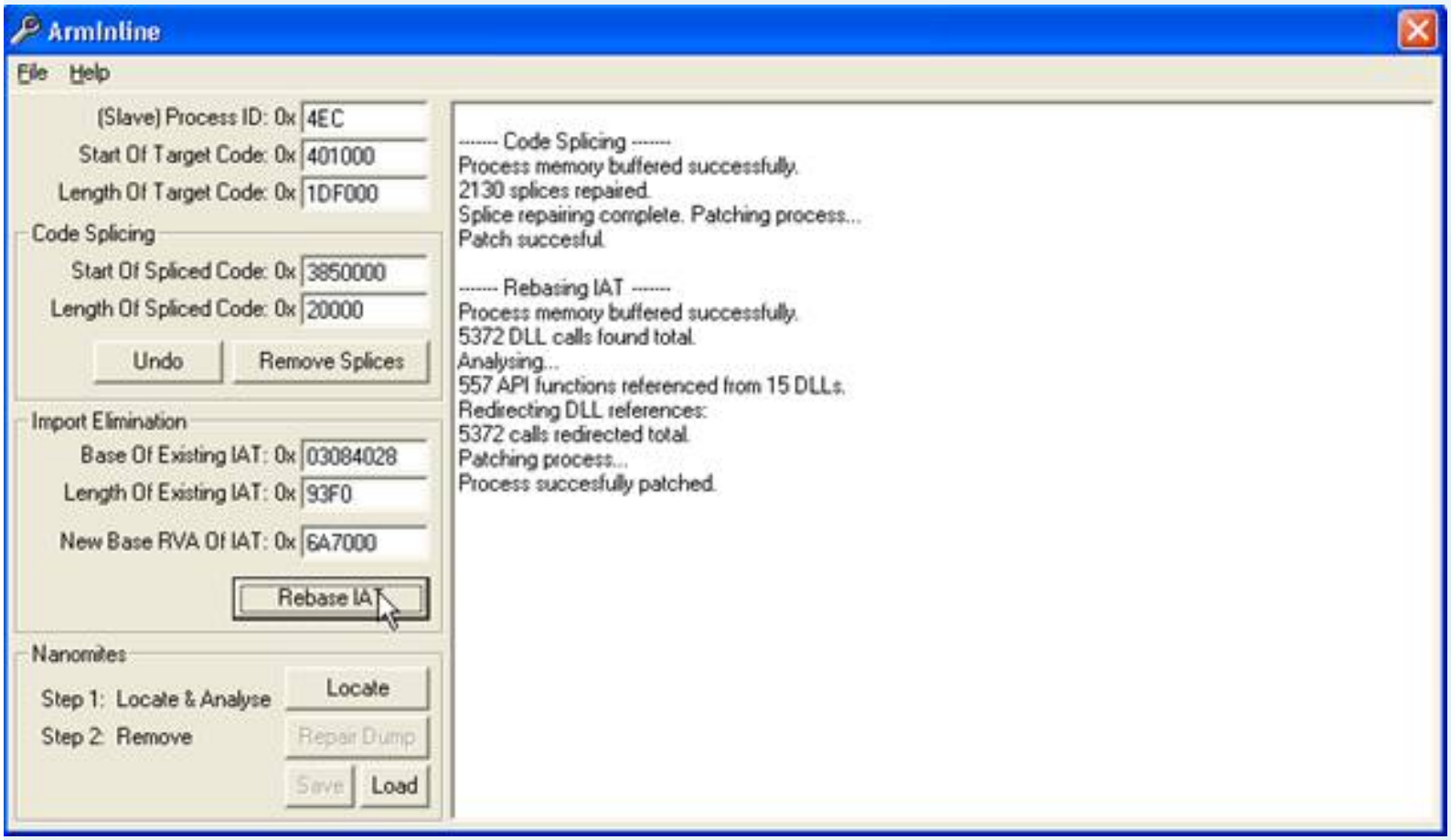
IAT Start: 03084028 76B40000 WINMM.76B40000
IAT End: 0308D418 0160017D SHELL32.0160017D
IAT Len: 93F0

Address	Size	Owner	Section	Contains	Type	Access	Initi
00290000	00034000				Map	R	R
002D0000	00041000				Map	R	R
00320000	00006000				Map	R	R
00330000	00005000				Map	R E	R E
003F0000	00002000				Map	R E	R E
00400000	00001000	getright			Imag	R	RWE
00401000	001DF000	getright	.text		Imag	R	RWE
005E0000	0005C000	getright	.rdata	exports	Imag	R	RWE
0063C000	0001B000	getright	.data	data	Imag	R	RWE
00657000	00050000	getright	.text1	code	Imag	R	RWE
006A7000	00010000	getright	.adata	SFX	Imag	R	RWE
006B7000	00020000	getright	.data1	imports	Imag	R	RWE
006D7000	00240000	getright	.pdata		Imag	R	RWE
00917000	002B5000	getright	.rsrc	resources	Imag	R	RWE
00BD0000	00103000				Map	R	R
00CE0000	00008000				Priv	RW	RW

_Dien To ArmInline:

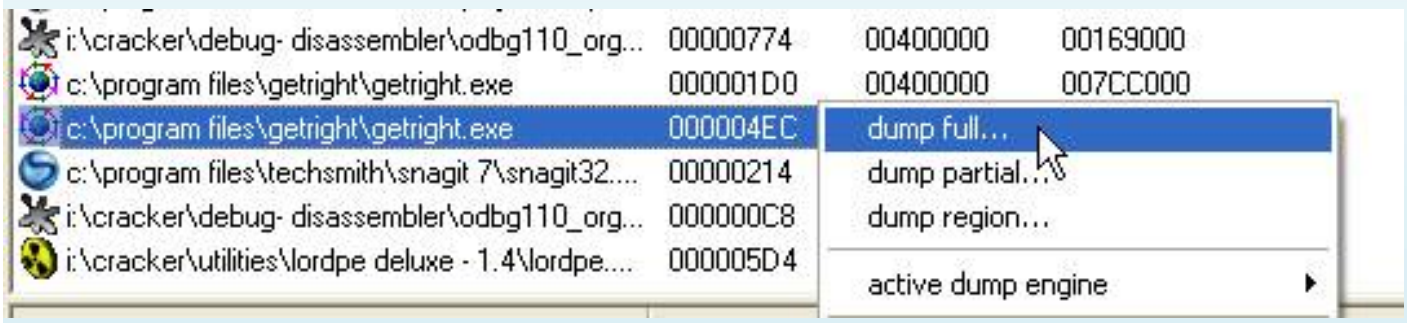


Rebase _Click IAT:

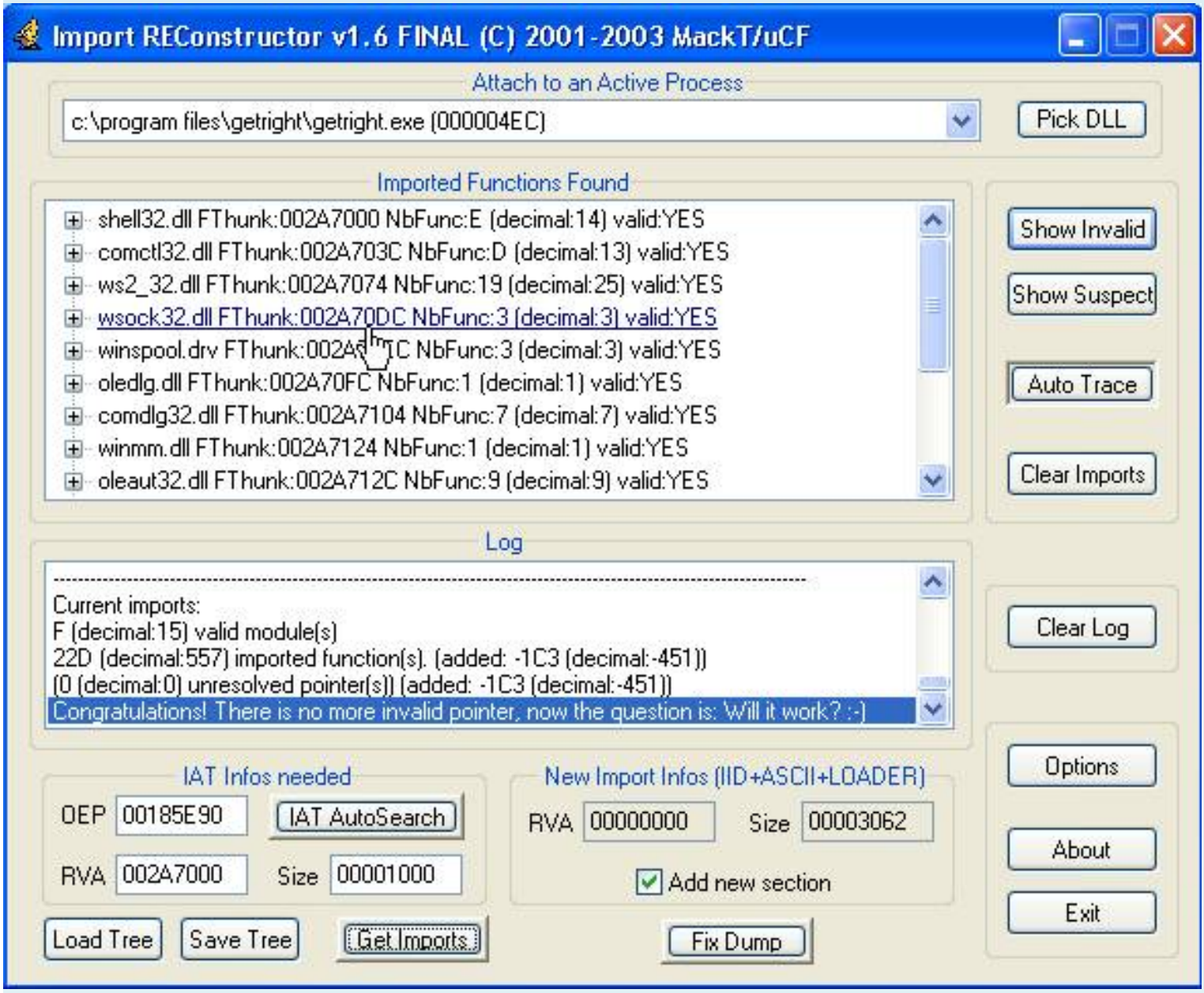


_Quay Back to the CPU:

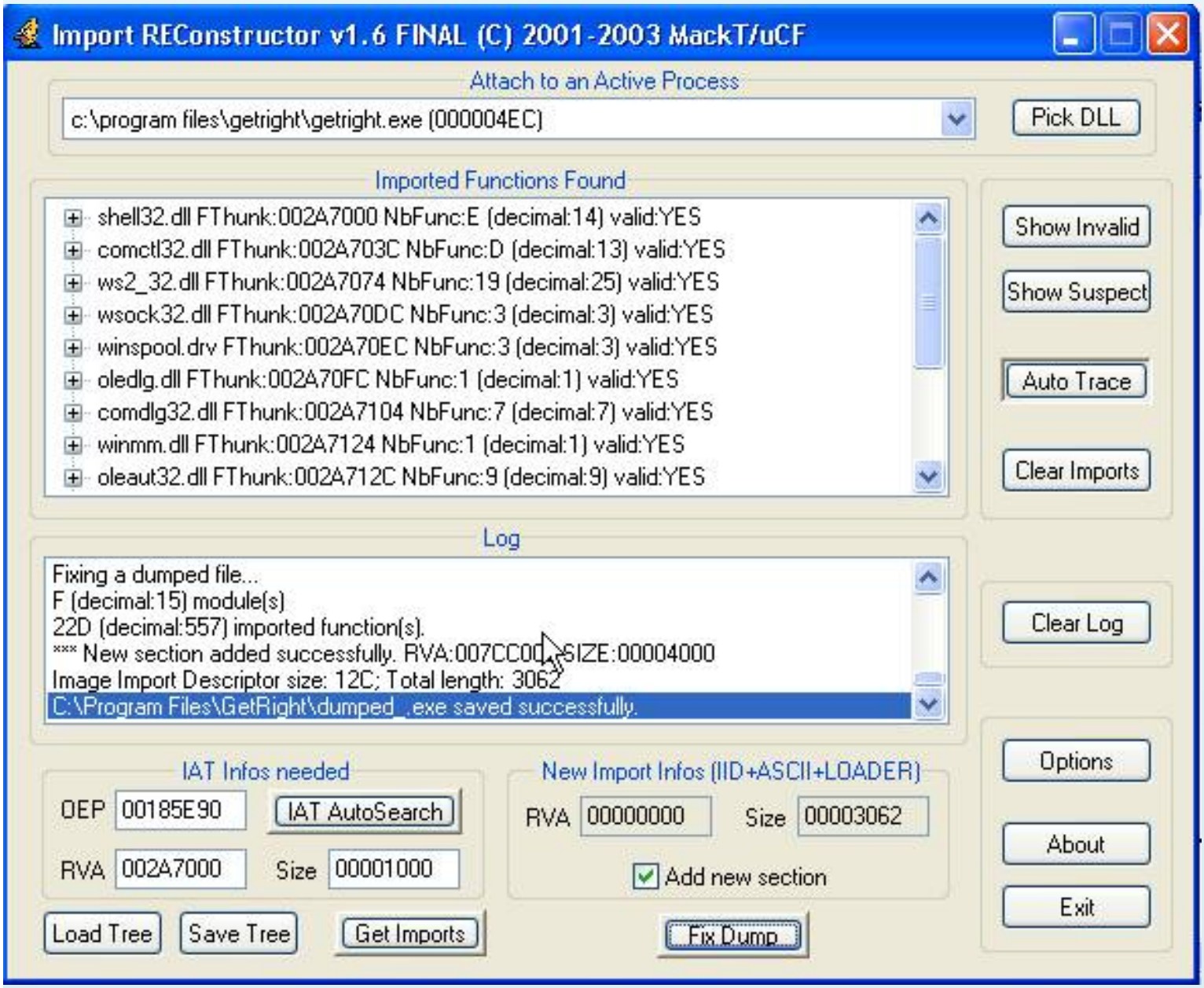
Full _LordPE dump:



_Mo ImpREC and filled as follows:


Import REConstructor v1.6 FINAL (C) 2001-2003 MackT/uCF
Attach to an Active Process
c:\program files\getright\getright.exe (000004EC)
Pick DLL
Imported Functions Found
shell32.dll FThunk:002A7000 NbFunc:E (decimal:14) valid:YES
comctl32.dll FThunk:002A703C NbFunc:D (decimal:13) valid:YES
ws2_32.dll FThunk:002A7074 NbFunc:19 (decimal:25) valid:YES
wsock32.dll FThunk:002A70DC NbFunc:3 (decimal:3) valid:YES
winspool.drv FThunk:002A
C NbFunc:3 (decimal:3) valid:YES
oledlg.dll FThunk:002A70FC NbFunc:1 (decimal:1) valid:YES
comdlg32.dll FThunk:002A7104 NbFunc:7 (decimal:7) valid:YES
winmm.dll FThunk:002A7124 NbFunc:1 (decimal:1) valid:YES
oleaut32.dll FThunk:002A712C NbFunc:9 (decimal:9) valid:YES
Show Invalid
Show Suspect
Auto Trace
Clear Imports
Log
Current imports:
F (decimal:15) valid module(s)
22D (decimal:557) imported function(s). (added: -1C3 (decimal:-451))
(0 (decimal:0) unresolved pointer(s)) (added: -1C3 (decimal:-451))
Congratulations! There is no more invalid pointer, now the question is: Will it work? :-)
Clear Log
IAT Infos needed
OEP 00185E90
IAT AutoSearch
RVA 002A7000
Size 00001000
New Import Infos (IID+ASCII+LOADER)
RVA 00000000
Size 00003062
Add new section
Options
About
Exit
Load Tree
Save Tree
Get Imports
Fix Dump

_Fix Dump:



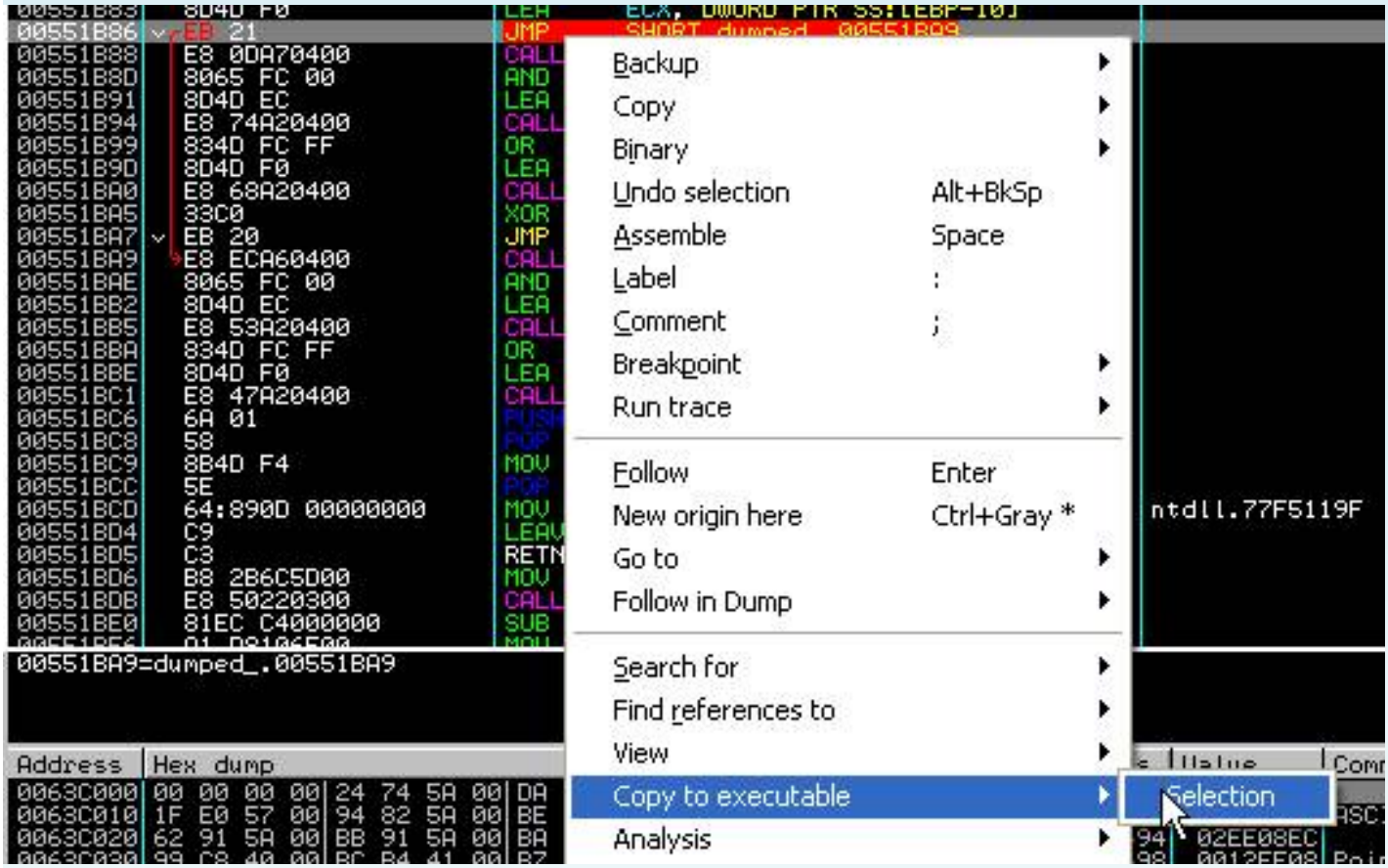
Run Try dumped.exe:

Merde, Italy chang he thắng it is 5.0. OK, dumped.exe Load up, Ctrl + G:

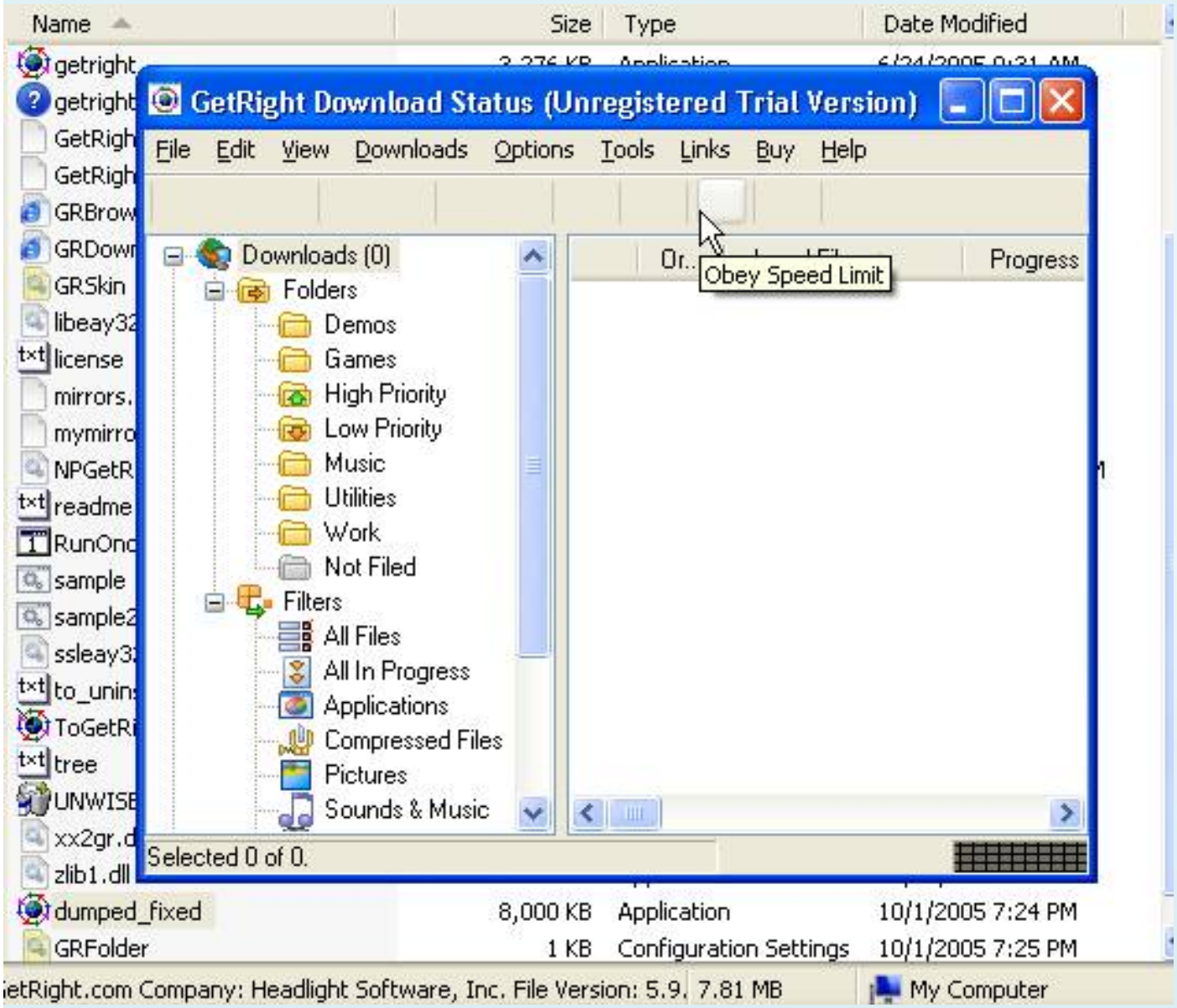
_Toi Here:

_Sau When pressing F2 set breakpoint here, F9, Ctrl + F9, F7:

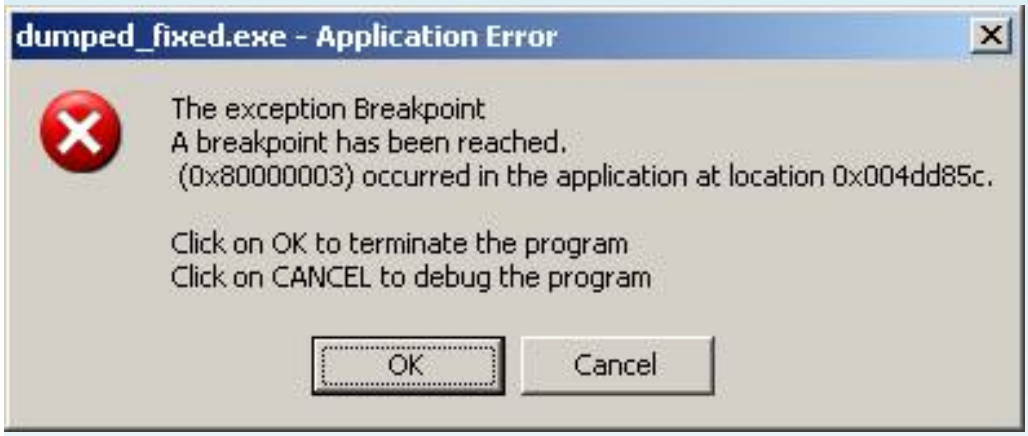
_Patch To:



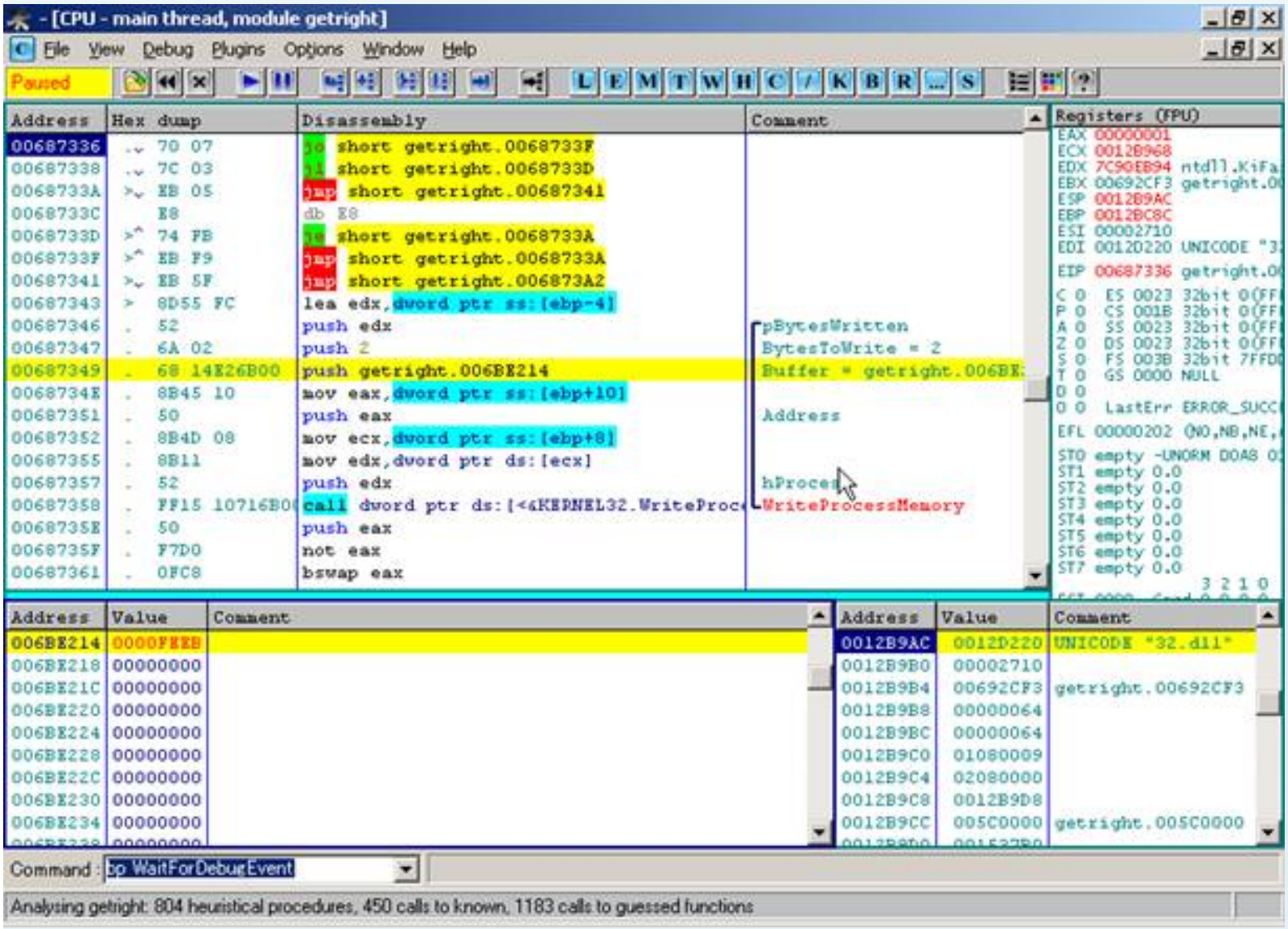
_Save Again, run, still crash. Continue load just save the file, do the steps similar to the run completely! Save as dumped_fixed! You try to run after 5 times dumped_fixed.exe patch file:

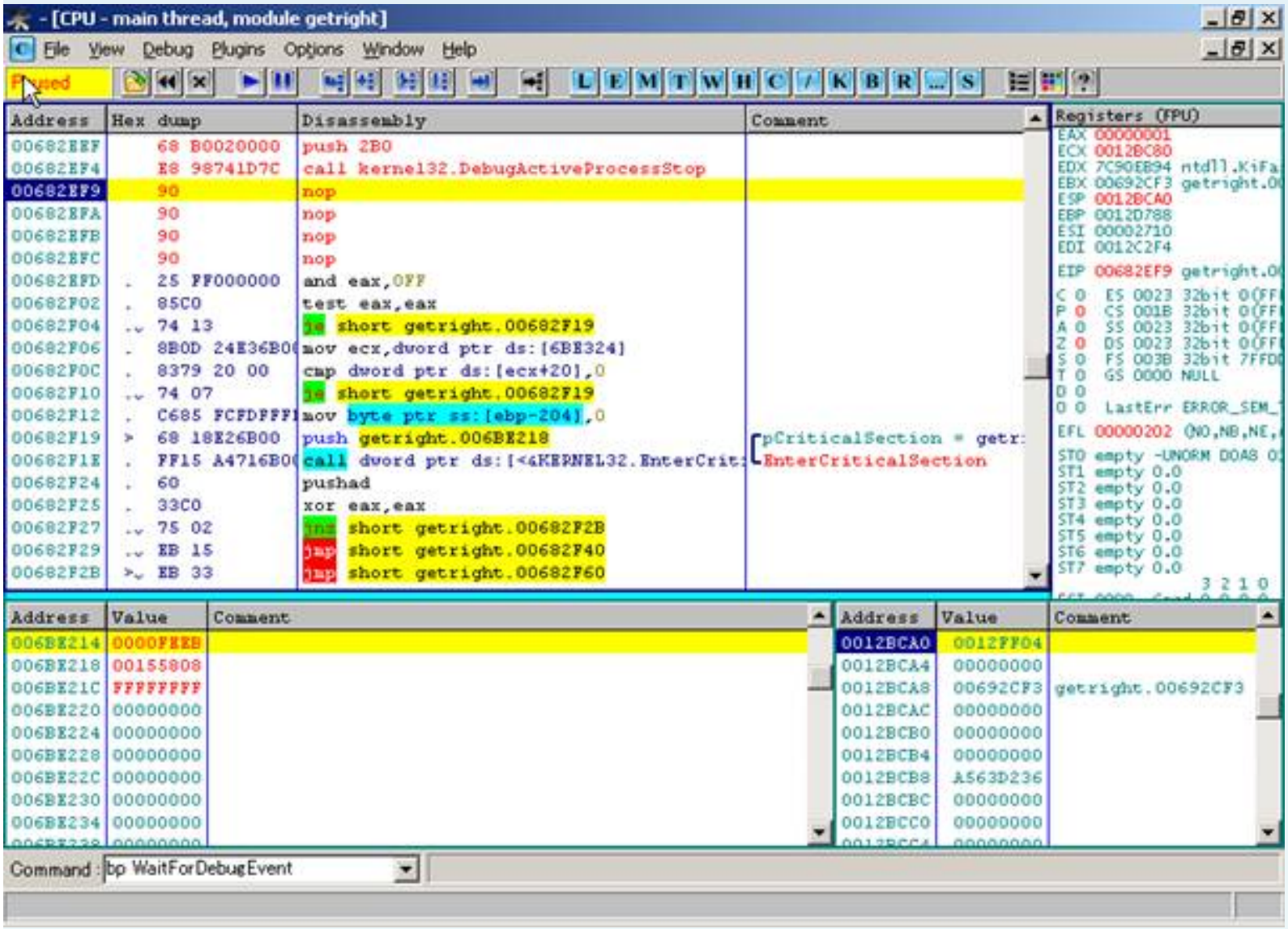


_Sau When running, close the crash:

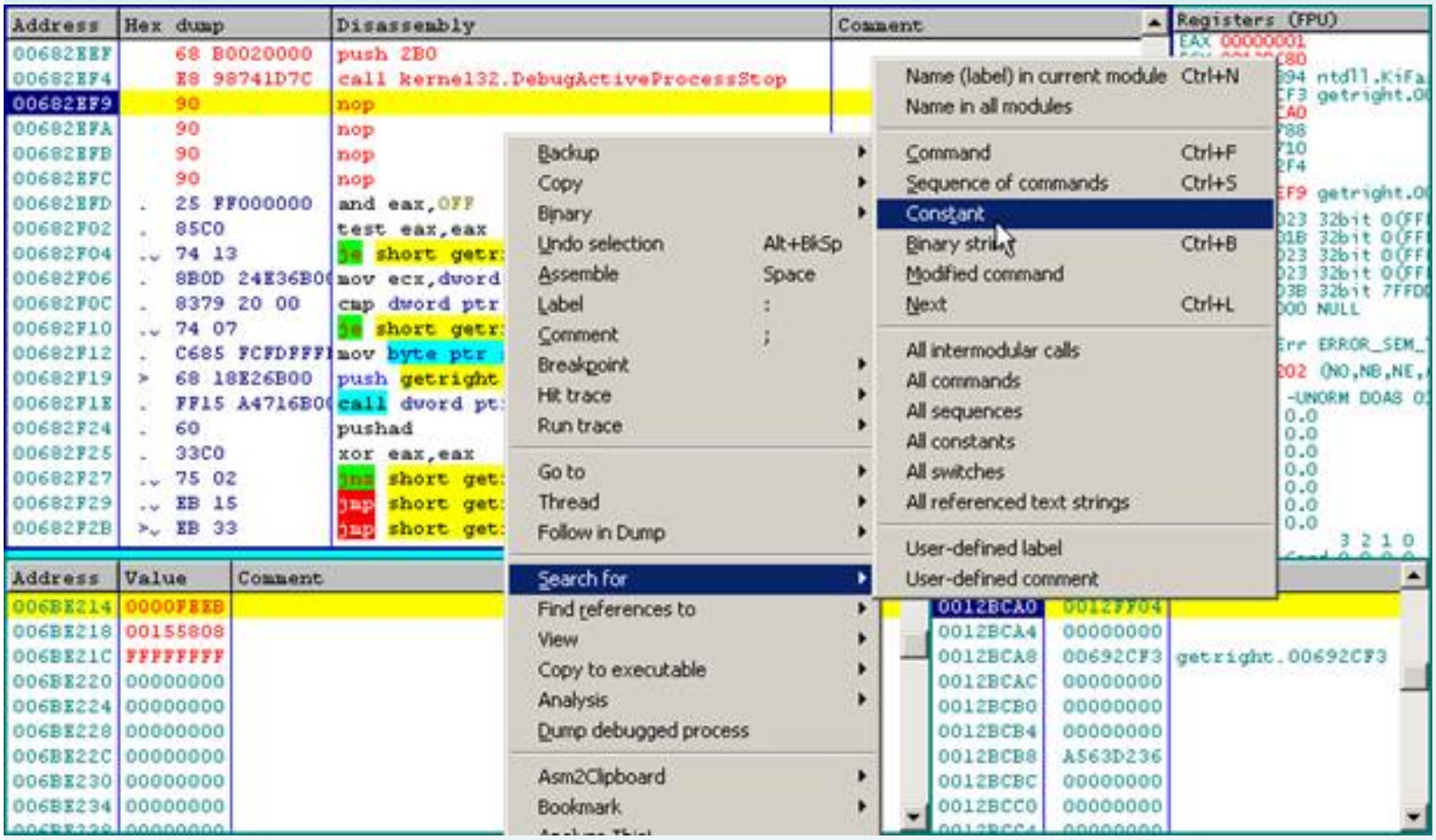


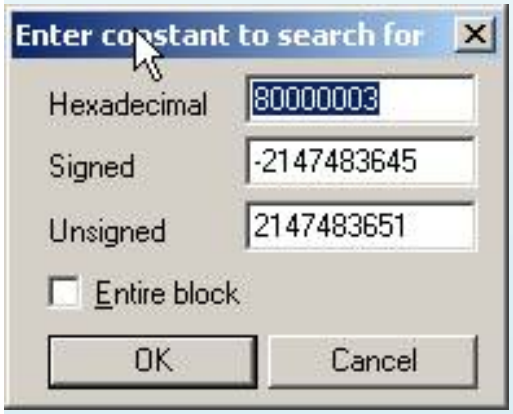
_ You should check with Nano or not? EtRight.exe G Load up OllyDBG. DebugBlocker defeat by hand:


- [CPU - main thread, module getright]
File View Debug Plugins Options Window Help
Paused
Address Hex dump Disassembly Comment
00687336 70 07 jo short getright.0068733F
00687338 7C 03 jl short getright.0068733D
0068733A EB 05 jmp short getright.00687341
0068733C E8 db E8
0068733D 74 FB je short getright.0068733A
0068733F EB F9 jmp short getright.0068733A
00687341 EB 5F jmp short getright.006873A2
00687343 8D55 FC lea edx,dword ptr ss:[ebp-4]
00687346 52 push edx pBytesWritten
00687347 6A 02 push 2 BytesToWrite = 2
00687349 68 14E26B00 push getright.006BE214 Buffer = getright.006BE
0068734E 8B45 10 mov eax,dword ptr ss:[ebp+10]
00687351 50 push eax Address
00687352 8B4D 08 mov ecx,dword ptr ss:[ebp+8]
00687355 8B11 mov edx,dword ptr ds:[ecx]
00687357 52 push edx hProces
00687358 FF15 10716B0 call dword ptr ds:[<&KERNEL32.WriteProc WriteProcessMemory
0068735E 50 push eax
0068735F F7D0 not eax
00687361 0FC8 bswap eax
Registers (FPU)
EAX 00000001
ECX 0012B968
EDX 7C90EB94 ntdll.KiFa
EBX 00692CF3 getright.0
ESP 0012B9AC
EBP 0012BC8C
ESI 00002710
EDI 0012D220 UNICODE "3
EIP 00687336 getright.0
C 0 ES 0023 32bit 0(FF
P 0 CS 001B 32bit 0(FF
A 0 SS 0023 32bit 0(FF
Z 0 DS 0023 32bit 0(FF
S 0 FS 003B 32bit 7FFD
T 0 GS 0000 NULL
D 0
O 0 LastErr ERROR_SUCC
EFL 00000202 (NO,NB,NE,
STO empty -UNORM DOA8 0
ST1 empty 0.0
ST2 empty 0.0
ST3 empty 0.0
ST4 empty 0.0
ST5 empty 0.0
ST6 empty 0.0
ST7 empty 0.0
3 2 1 0
Address Value Comment
006BE214 0000FEEB
006BE218 00000000
006BE21C 00000000
006BE220 00000000
006BE224 00000000
006BE228 00000000
006BE22C 00000000
006BE230 00000000
006BE234 00000000
Address Value Comment
0012B9AC 0012D220 UNICODE "32.dll"
0012B9B0 00002710
0012B9B4 00692CF3 getright.00692CF3
0012B9B8 00000064
0012B9BC 00000064
0012B9C0 01080009
0012B9C4 02080000
0012B9C8 0012B9D8
0012B9CC 005C0000 getright.005C0000
Command : bp WaitForDebugEvent
Analysing getright: 804 heuristical procedures, 450 calls to known, 1183 calls to guessed functions



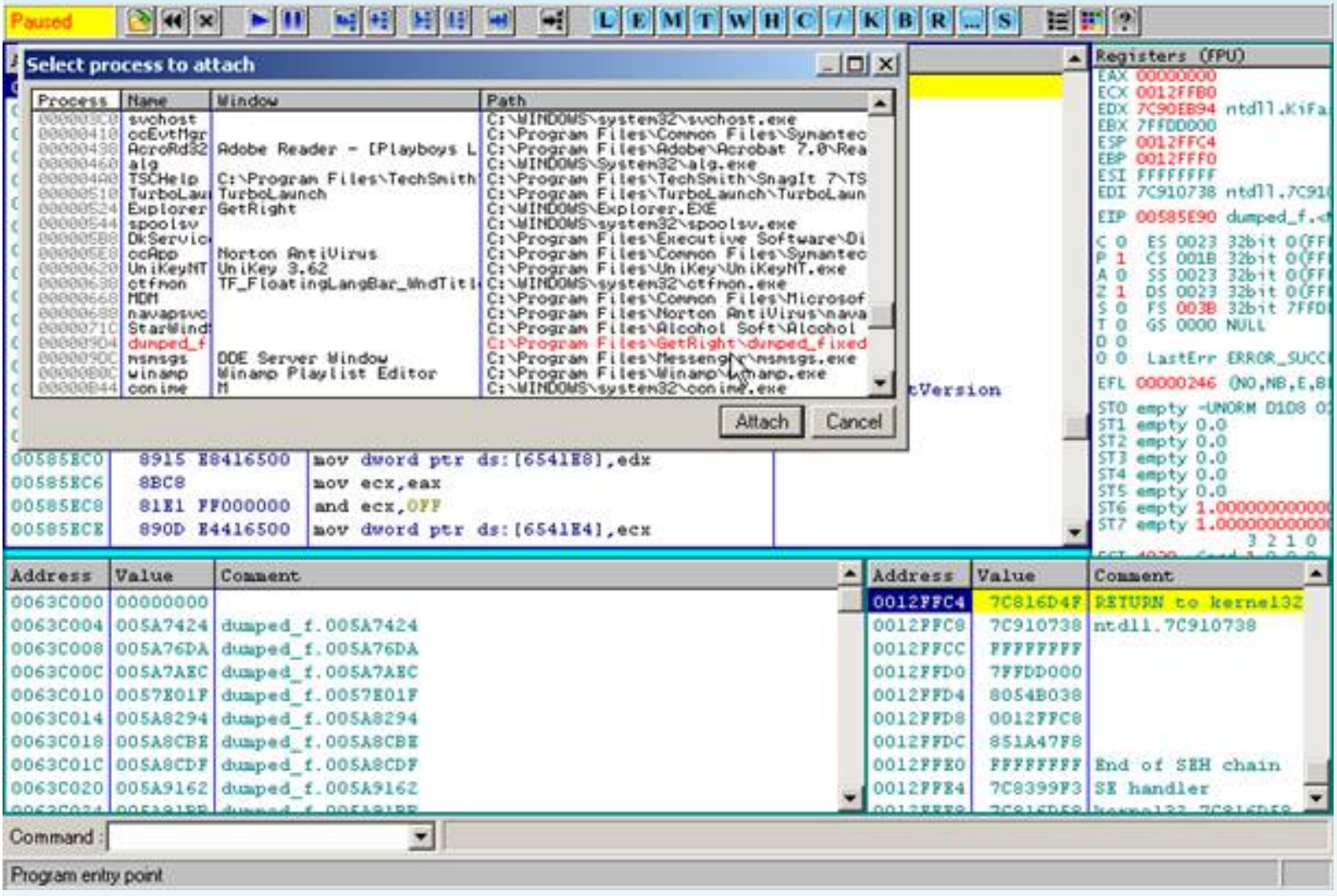
_Can Find signs of INT3:

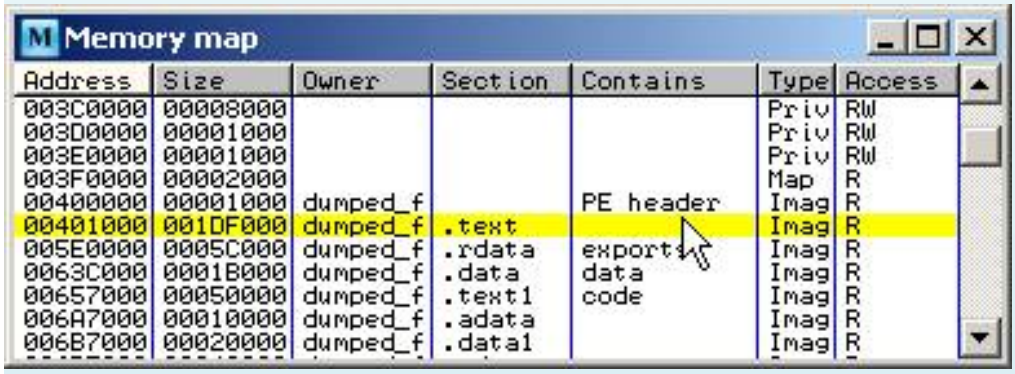

Address
Hex dump
Disassembly
Comment
Registers (FPU)
Backup
Copy
Binary
Undo selection Alt+BkSp
Assemble Space
Label :
Comment ;
Breakpoint
Hit trace
Run trace
Go to
Thread
Follow in Dump
Search for
Find references to
View
Copy to executable
Analysis
Dump debugged process
Asm2Clipboard
Bookmark
Name (label) in current module Ctrl+N
Name in all modules
Command Ctrl+F
Sequence of commands Ctrl+S
Constant
Binary string Ctrl+B
Modified command
Next Ctrl+L
All intermodular calls
All commands
All sequences
All constants
All switches
All referenced text strings
User-defined label
User-defined comment
Address
Value
Comment


Enter constant to search for
Hexadecimal 80000003
Signed -2147483645
Unsigned 2147483651
Entire block
OK
Cancel

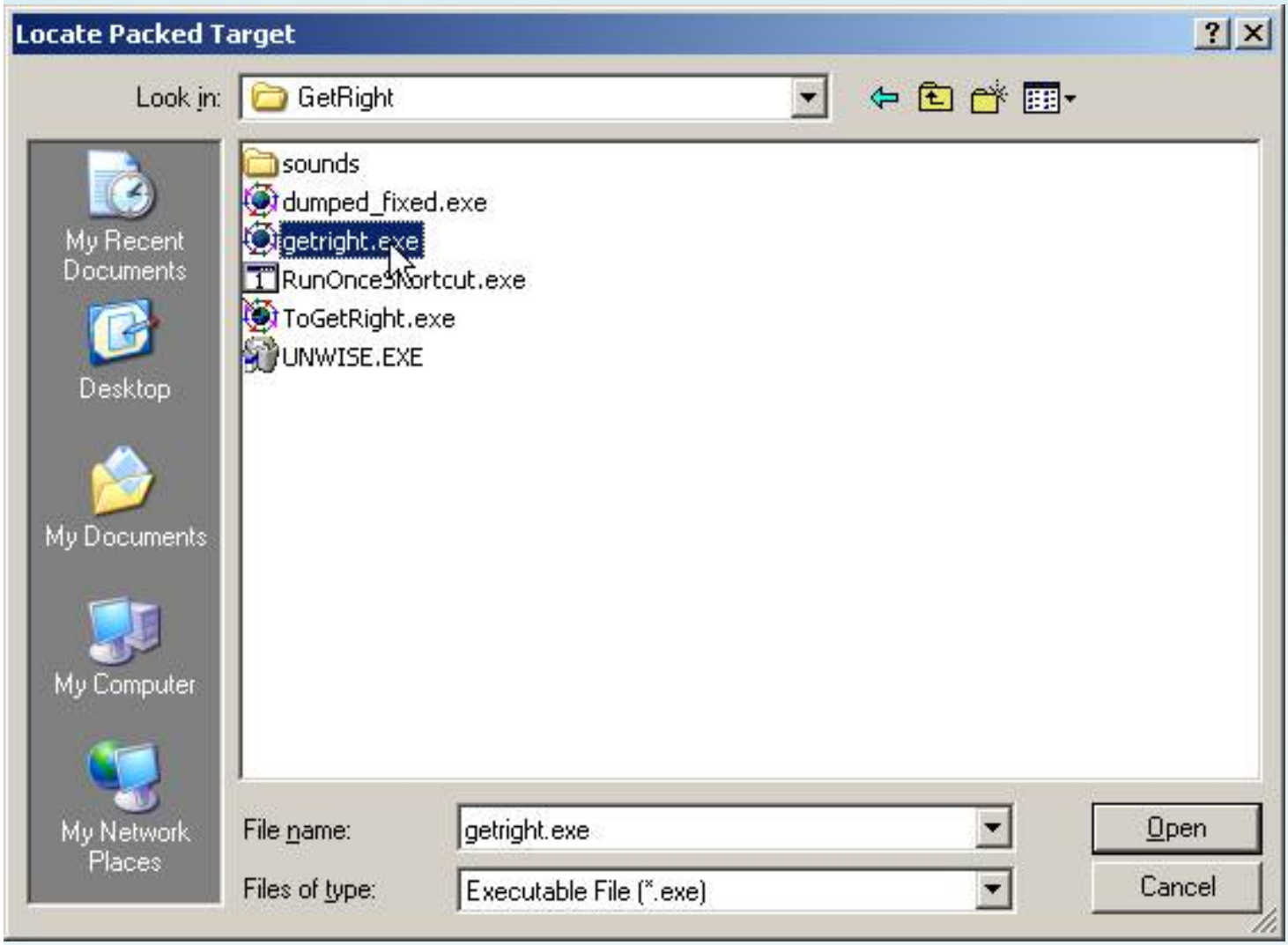
```
Address   Hex dump     Disassembly                          Comment
00683BB4  .  E8 01ED0000  call getright.006928BA
00683BB9  .  83C4 14      add esp,14
00683BBC  .  68 00000500  push 50000                       Style = MB_OK|MB_APPLMOI
00683BC1  .  6A 00        push 0                           Title = NULL
00683BC3  .  8D8D D0EEFFFI lea ecx,dword ptr ss:[ebp-1130]
00683BC9  .  51           push ecx                         Text
00683BCA  .  6A 00        push 0                           hOwner = NULL
00683BCC  .  FF15 28726B0( call dword ptr ds:[<&USER32.MessageBoxA>  MessageBoxA
00683BD2  >v E9 AB0B0000  jmp getright.00684782
00683BD7  >  8B15 D8736B0( mov edx,dword ptr ds:[6B73D8]
00683BDD  .  81F2 0300008( xor edx,80000003                OxCC
00683BE3  .  3995 D4F5FFFI cmp dword ptr ss:[ebp-A2C],edx
00683BE9  .v 0F85 3D0B000( jnz getright.0068472C
00683BEF  .  C785 88EEFFFI mov dword ptr ss:[ebp-1178],10
00683BF9  .  A1 D8736B00  mov eax,dword ptr ds:[6B73D8]
00683BFE  .  3305 7C736B0( xor eax,dword ptr ds:[6B737C]
00683C04  .  3305 AC736B0( xor eax,dword ptr ds:[6B73AC]
00683C0A  .  8985 8CEEFFFI mov dword ptr ss:[ebp-1174],eax
00683C10  .  8B0D DC736B0( mov ecx,dword ptr ds:[6B73DC]
00683C16  .  330D A8736B0( xor ecx,dword ptr ds:[6B73A8]
```

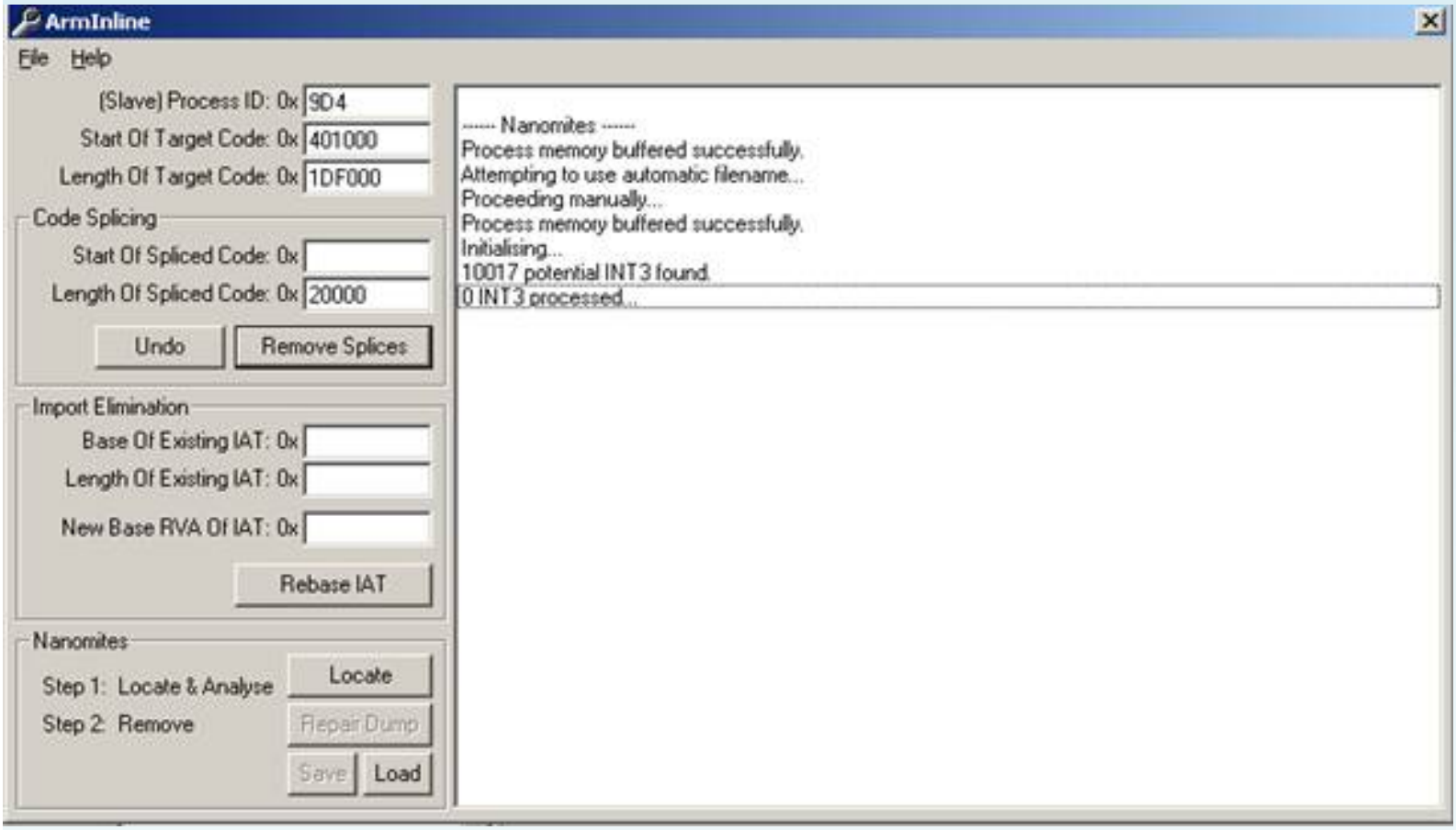
_Load Dumped_fixed.exe up OllyDBG, find information about PID, Sections text:



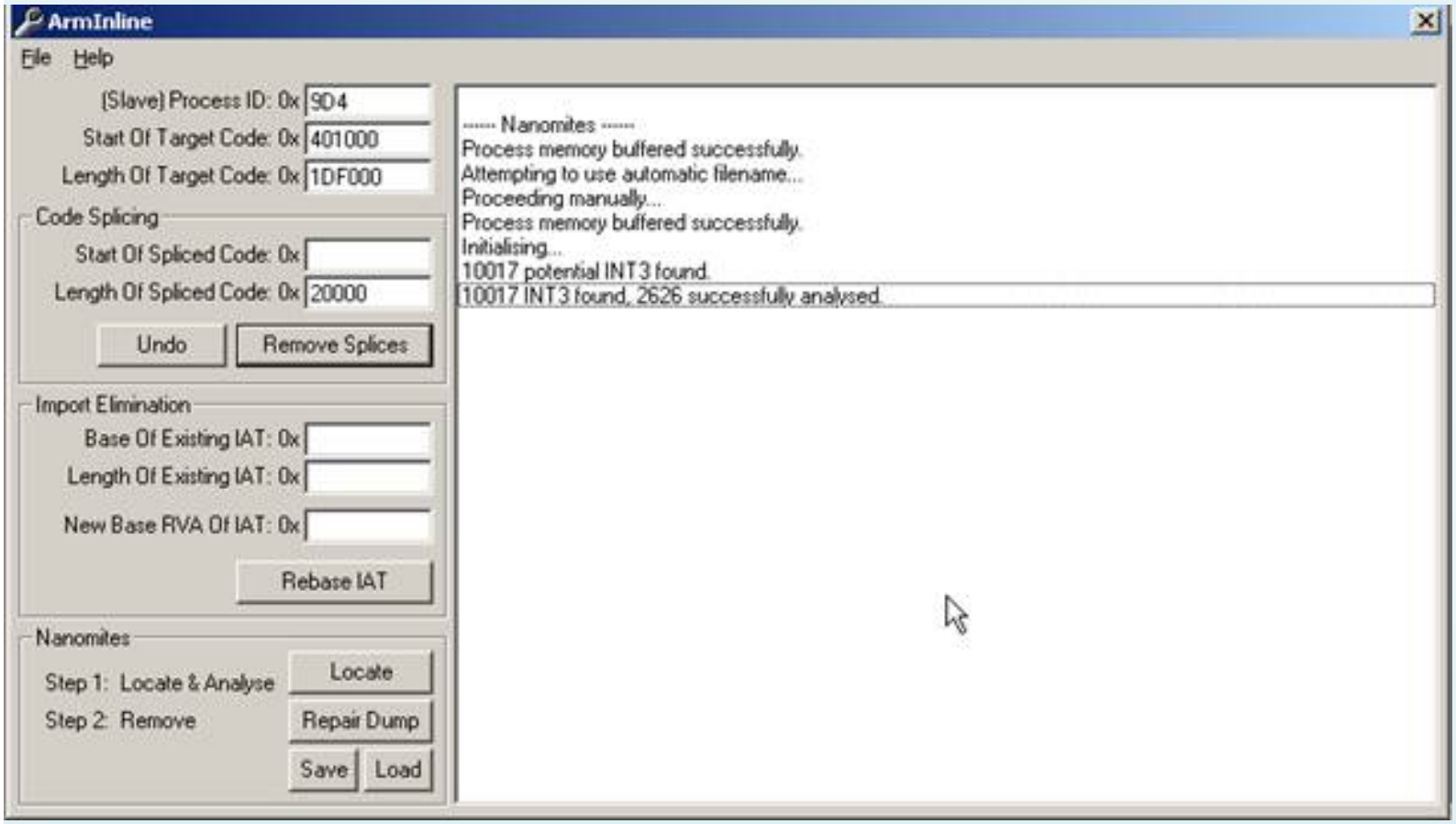


_Mo ArmInline up, enter the number you need. Click locate, and then close the file to the GetRight ArmInline load up, load packed target:

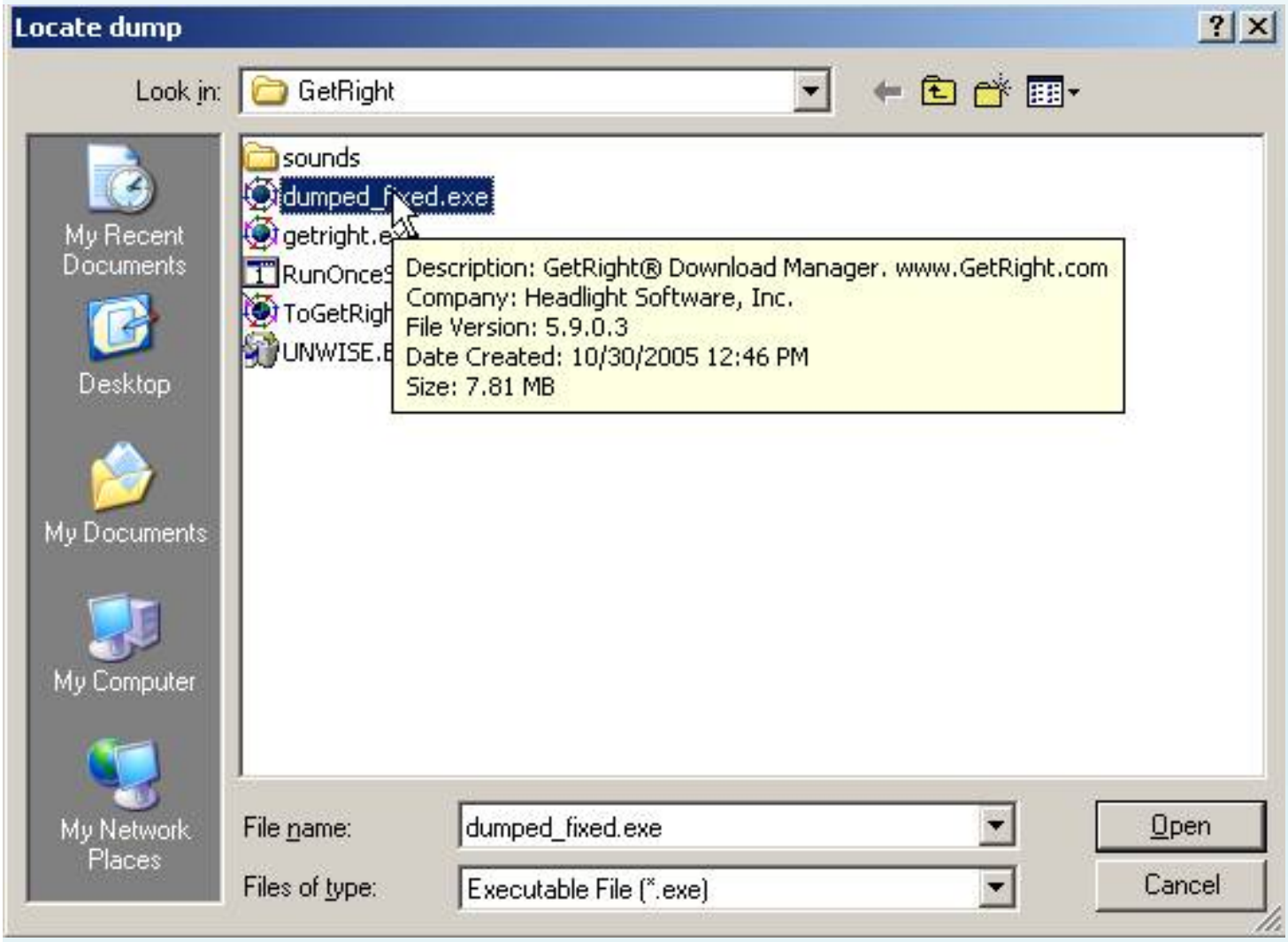


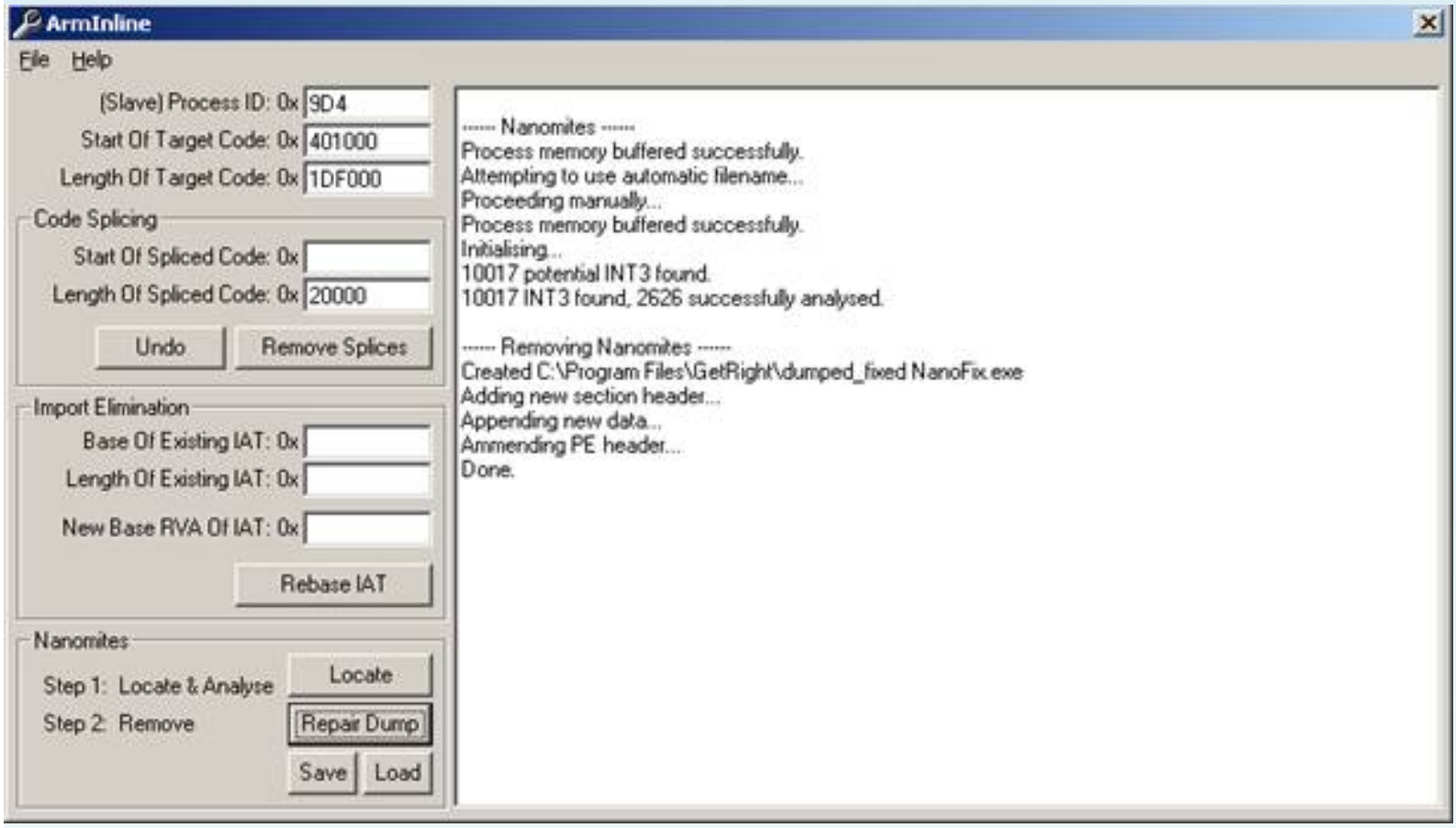


GetRight _Lai close again.


ArmInline
File Help
(Slave) Process ID: 0x 9D4
Start Of Target Code: 0x 401000
Length Of Target Code: 0x 1DF000
Code Splicing
Start Of Spliced Code: 0x
Length Of Spliced Code: 0x 20000
Undo
Remove Splices
Import Elimination
Base Of Existing IAT: 0x
Length Of Existing IAT: 0x
New Base RVA Of IAT: 0x
Rebase IAT
Nanomites
Step 1: Locate & Analyse
Locate
Step 2: Remove
Repair Dump
Save
Load
------ Nanomites ------
Process memory buffered successfully.
Attempting to use automatic filename...
Proceeding manually...
Process memory buffered successfully.
Initialising...
10017 potential INT3 found.
10017 INT3 found, 2626 successfully analysed.

_Repair Dump:


Locate dump
Look in:
GetRight
sounds
dumped_fixed.exe
getright.e
RunOnceS
ToGetRigh
UNWISE.E
Description: GetRight® Download Manager. www.GetRight.com
Company: Headlight Software, Inc.
File Version: 5.9.0.3
Date Created: 10/30/2005 12:46 PM
Size: 7.81 MB
My Recent Documents
Desktop
My Documents
My Computer
My Network Places
File name:
dumped_fixed.exe
Files of type:
Executable File (*.exe)
Open
Cancel



_Run Dumped_fixed NanoFix.exe:

_Unpacked Successful!

IV. Conclusion

_For More tuts, please visit http://tinicat.de/hacnho or http://hacnho.exetools.com

_Bye!

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, MaDMAn_H3rCul3s, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light, iamidiot, WhyNotBar, trickyboy, Merc ... and you!

Special Thanx Cracks Latinos.

Thanx OllyDBG of the authors.

To be continued ...

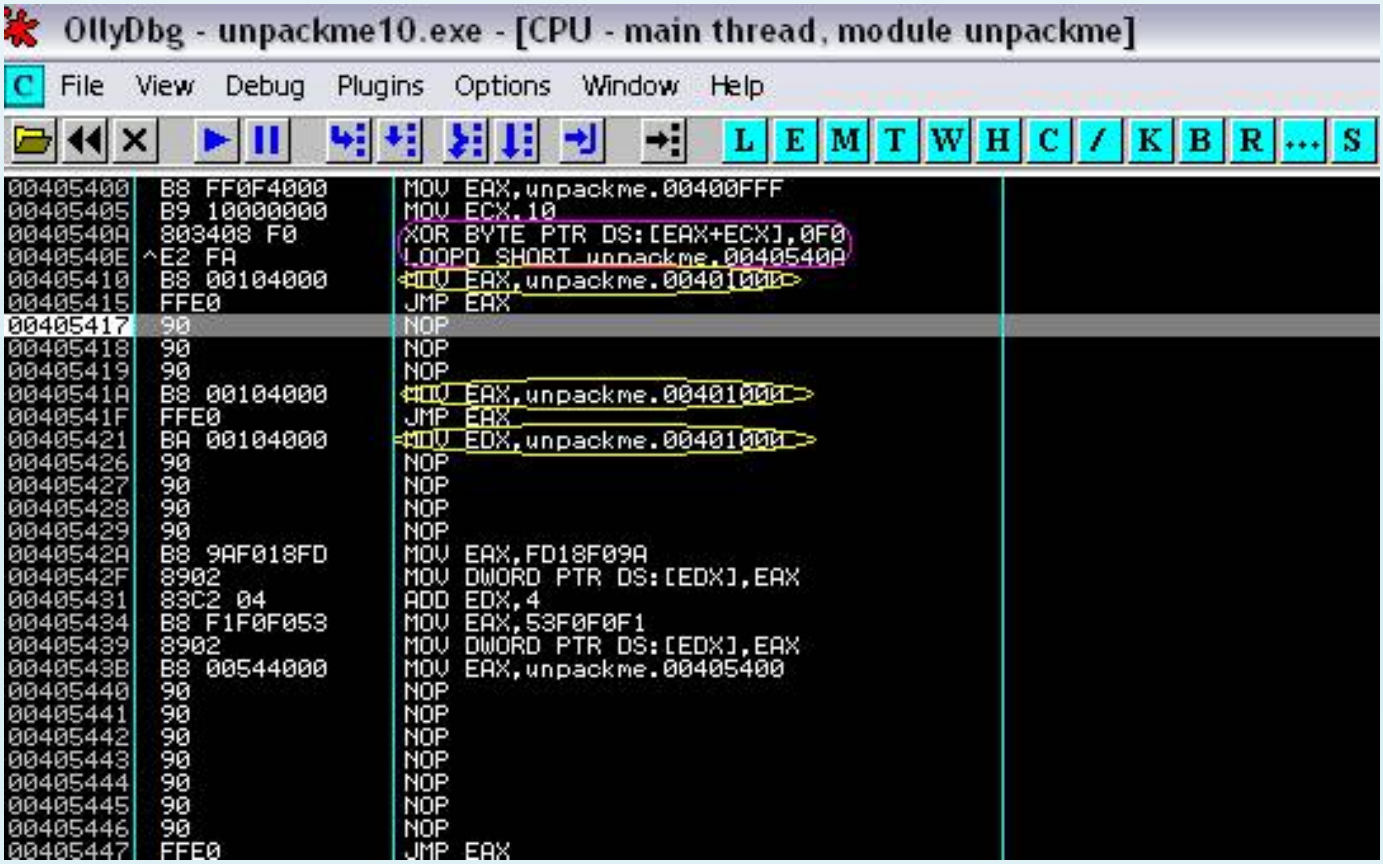
Written by **hacnho** (tutorial date: VietNam 25/10/2005)

How to unpack AHTeam EP Protector 0.3 Private Special Build

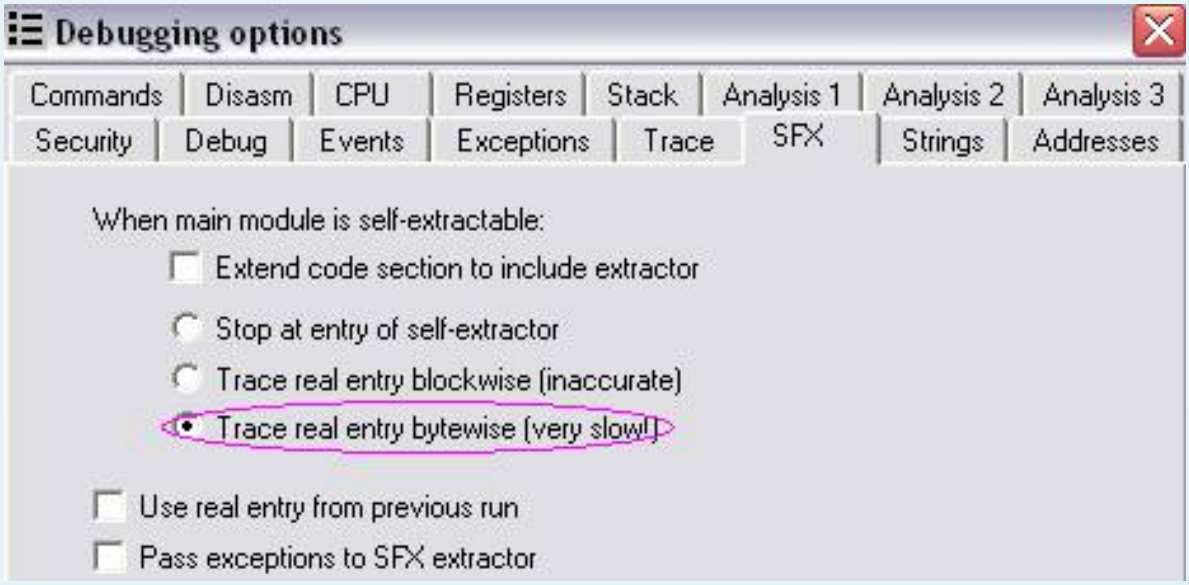
by dqtln from Phudu Cracker Team
Vietnam 2004
http://www.phudu.com

Victim: unpackme10 packed with 3.1 PEncrypt Final, **AHTeam EP Protector 0.3 Private Special Build**
Homepage: http://www.tothesky.us
Tools: 1:10 OllyDbg, PEiD 0.92, LordPE Deluxe, 0.3 unPEncrypt by snaker [UG2002]
Unpack the file: unpackme10.exe
Unpacked by dqtln

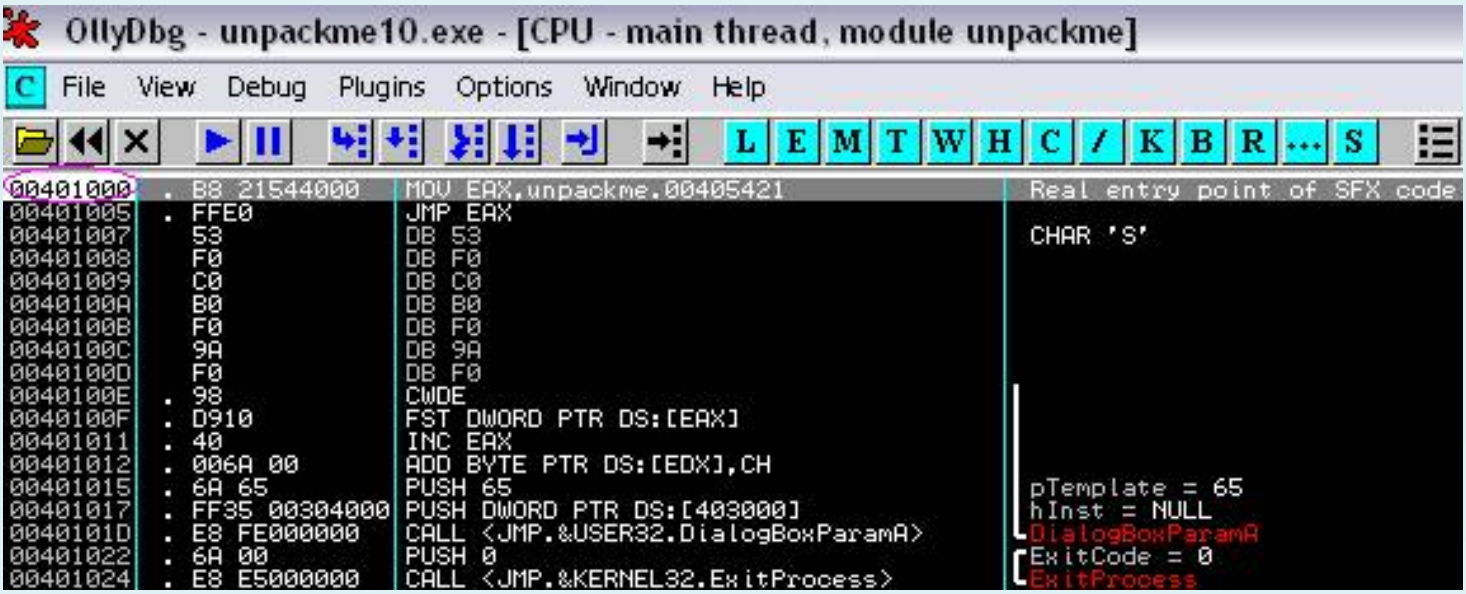
PEiD used to check, receive and Nothing found OEP = 401029 ... PEiD because it does not know not to believe that it OEP found ... unpackme load up in OllyDbg will stop at the Entry Point EP = 405417 ... there are many ways to recognize the program is protected by AHTeam EP Protector ... EP is now in bytes of 90, where it commands a xor bytes, as soon as the command xor loop back to the command xor



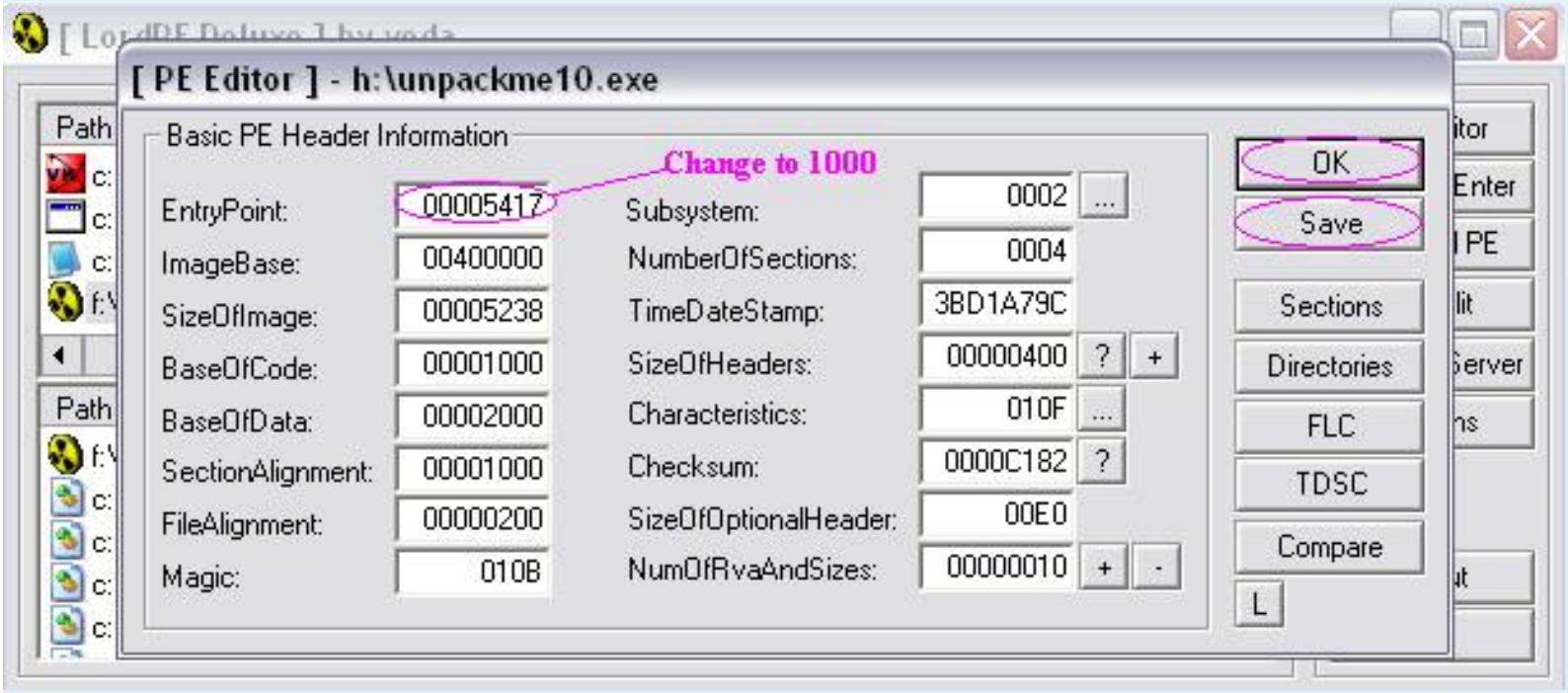
configuration as OllyDbg following



load back in OllyDbg unpackme we will stop at OEP = 401000



here if you dump, fix IAT ... dumped_.exe click the file, nothing happens all ... use PEiD view the file dumped_.exe know pack PEncrypt 3.1 Final -> junkcode ... lol, unpack fail if OEP find itself by setting breakpoint, and then to 401,000 ... by trace down through some of the 401,002 now in the resolution refers to the code call kernel32.GetModuleHandleA ... dump, fix IAT, dumped_.exe click, nothing happens ... use PEiD view the file dumped_.exe TASM32/MASM32 know ... lol, we unpack fail notice that the code started from the 401,000 PEiD entry point to know the program is compressed using PEncrypt 3.1 Deluxe Final LordPE use change Entry Point to 401,000, click Save, click OK

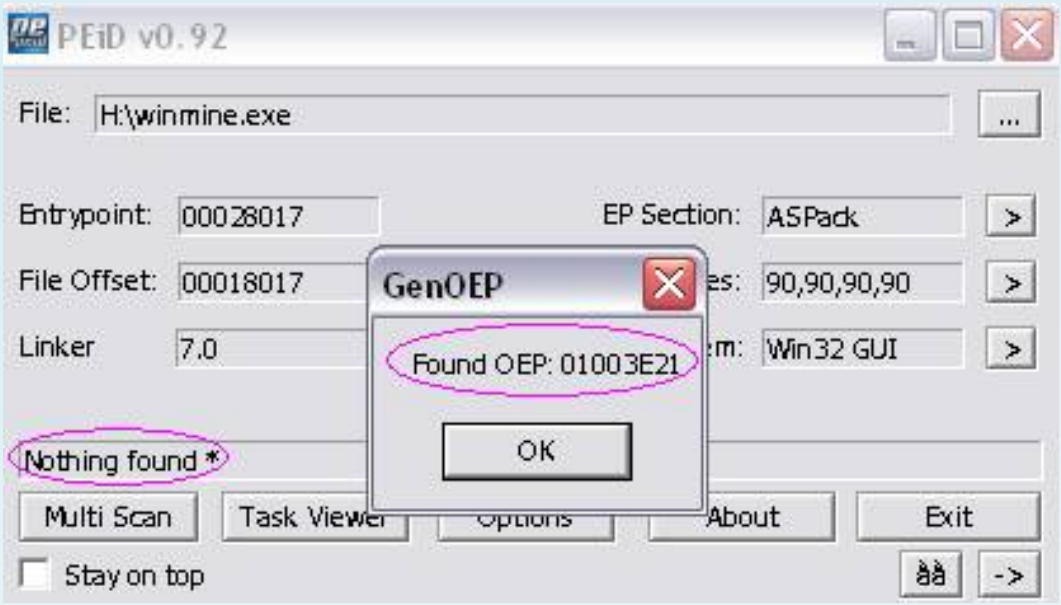


unPEncrypt used by 0.3 snaker [UG2002] unpackme10 to unpack the file ... new file to run well, PEiD TASM32/MASM32 said ... thằng AHTeamEPProtector also often only, or in that it is encrypted by EP packer, then encryption is always OEP of the program if the packer in its list

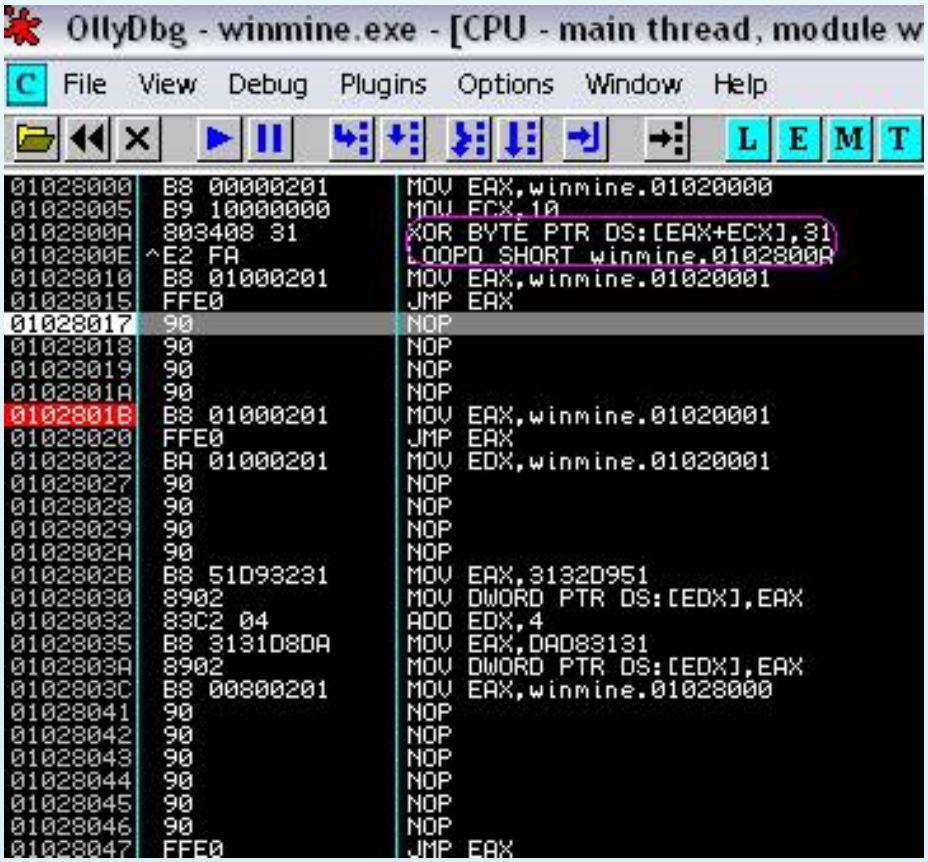
....

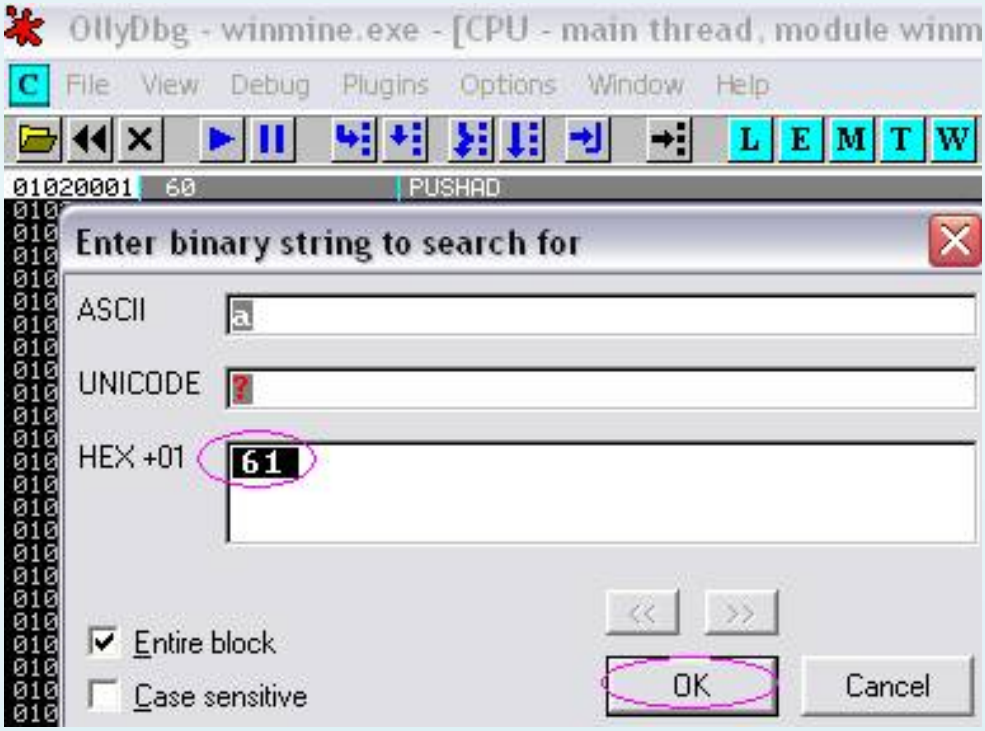
Victim: Minesweeper 5.1 packed with ASPack 2:12, EP AHTeam private Protector 0.3 Special Build
Homepage: Copyright © 1981-2001 Microsoft Corporation by Robert Donner and Curt Johnson
Tools: 1:10 OllyDbg, PEiD 0.92, LordPE Deluxe, Import REConstructor 1.6 Final
Unpack the file: winmine.exe
Unpacked by dqtln

WinXP SP1 winmine.exe file is compressed using ASPack dqtln 2:12 and then used to AHTeam EP Protector 0.3 Private Special Build ... PEiD for OEP = 10003E21

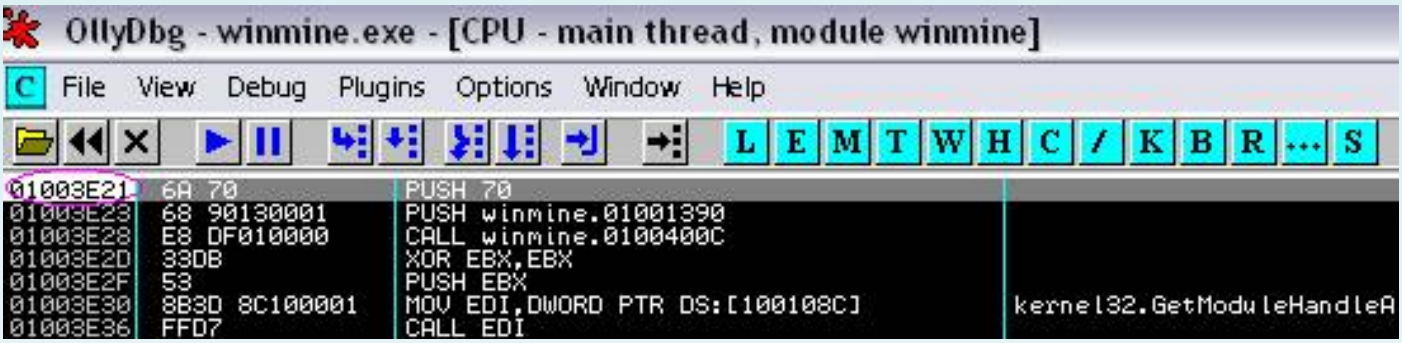


OllyDbg winmine load in, we stopped at the Entry Point 1028017 ... set breakpoint at 102801B, F9 to run, to step over PUSHAD at 1,020,001 ... press Ctrl + B to enter 61, Ctrl + L for POPAD

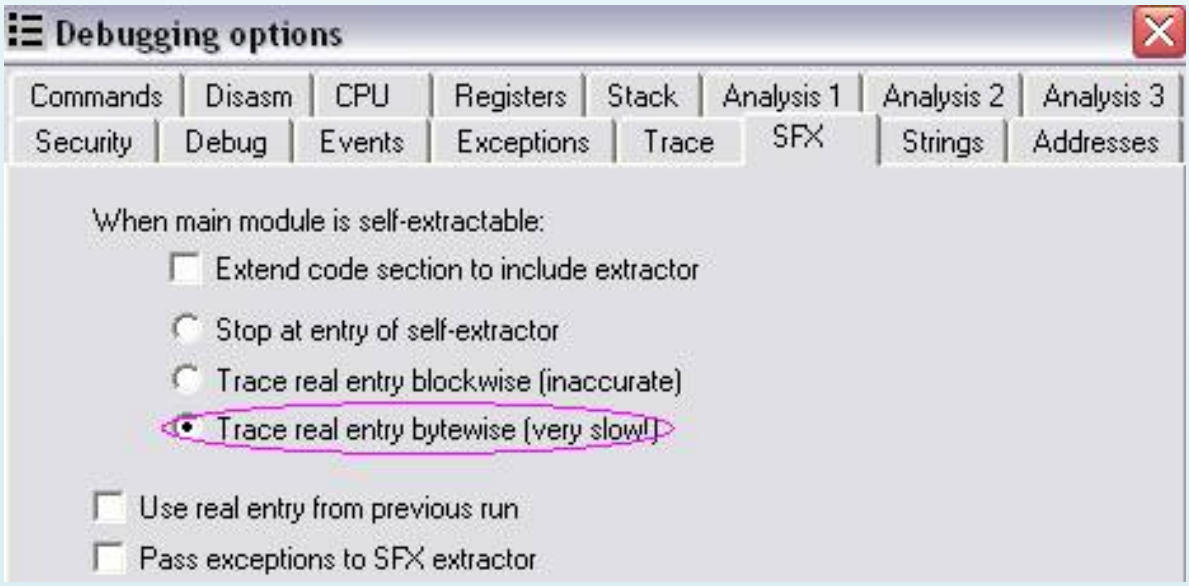




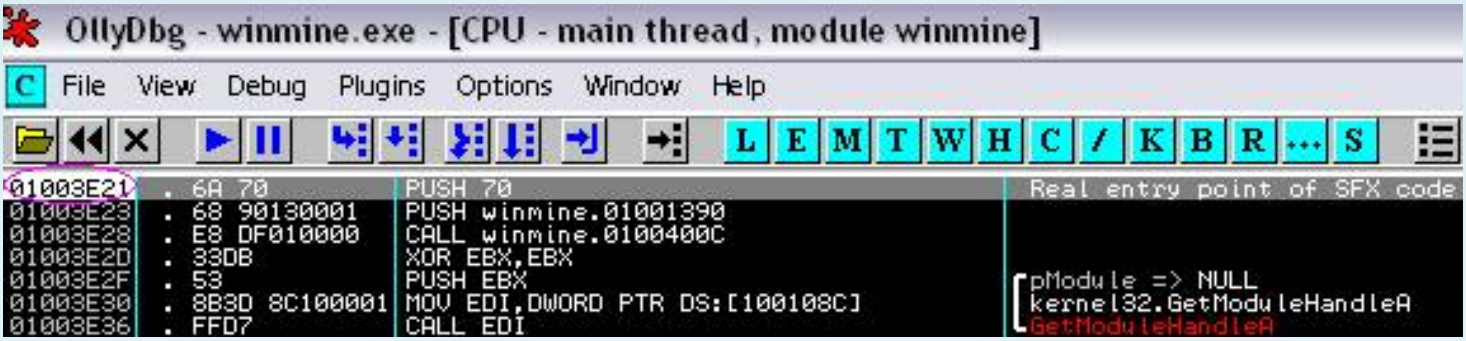
set breakpoint at POPAD in 10203AF, press F9 to run, over the last step we will RETN to OEP in 1003E21



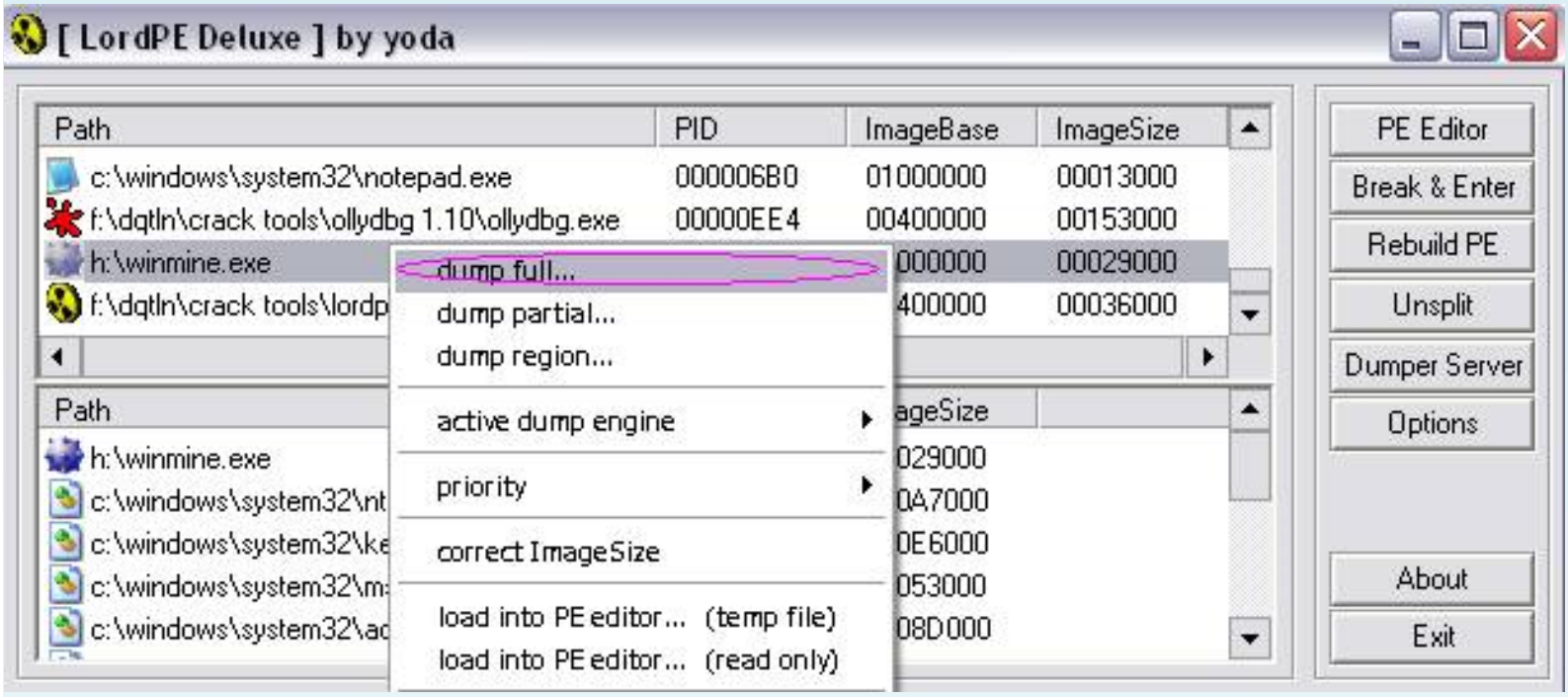
configuration as OllyDbg following



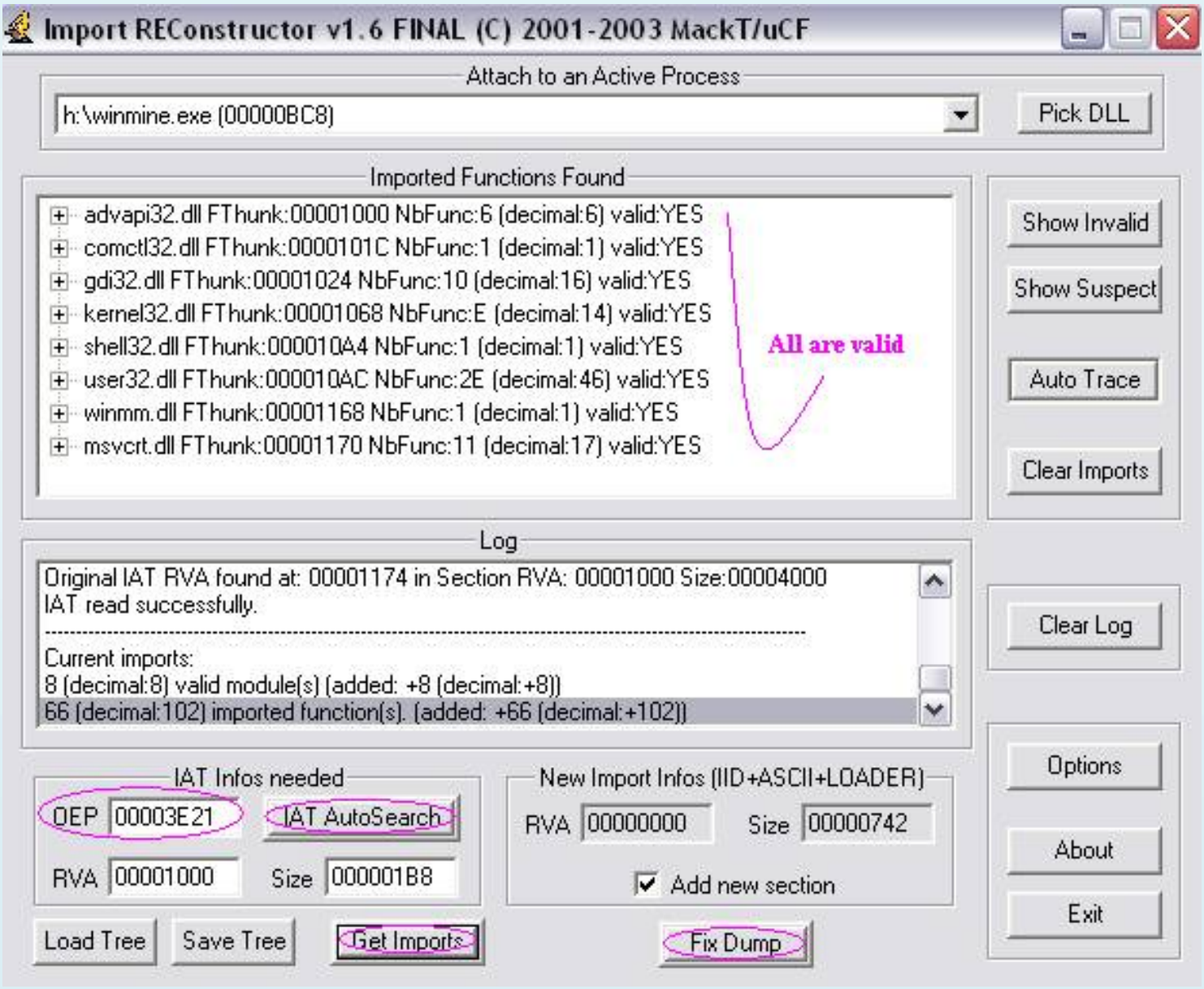
winmine load in OllyDbg and wait a bit to the right will OEP = 1003E21



generally have more ways to find out ... OEP OEP at LordPE Deluxe is used to create files dumped. exe



we need to use Import REConstructor to fix errors ... changes OEP = 3E21 ... IAT AutoSearch click, click Get more Imports and finally click Fix dump, select File dumped.exe to create the file dumped_.exe



create a new file to run well, can use LordPE Deluxe press rebuild PE to reduce the file size ... italy do chang as ASPack unpack ... problem for the packer in not thằng AHTeamEPProtector ... so through this tutorial we learn how to unpack AHTeamEPProtector, a program change or quite EP

greetings
If you have questions, Remarks about this tutorial, mail me
dqtln@phudu.com

How to unpack AntiCrack Protector

by dqtln from Phudu Team
Vietnam 2005
www.phudu.com

Victim: Cool Color Picker 1.1 packed with AntiCrack Protector 1.0x
www.color-picker.net
Homepage: .....
Tools: 1:10 OllyDbg, PEiD 0.93, LordPE Deluxe, Final Import REConstructor 1.6, 1.4 IsDebuggerPresent OllyDbgPlugin
Unpack the file: ColorPicker.exe
10h57 AM Thursday 17 February 2005
PEiD know we use the compression with **AntiCrack Protector 1.0x -> RISCO Software Inc..** , Click Generic OEP Finder exit PEiD always, lol
load the program in OllyDbg, press F9 to run, press Shift + F9 a few times we get "Process terminated, exit code 80", the program does not run anymore ... load the program in OllyDbg, select Plugins / IsDebugPresent / Hide, press F9 to run, press Alt + M to enable Memory map window, set breakpoint ... perform a basic task for the OEP OllyDbg always out, lol, months where it is more anti than it is to use CreateToolhelp32Snapshot API to do this, see the MSDN for more details ... we need to do is not to use the API CreateToolhelp32Snapshot configuration OllyDbg: Options / debugging options/Exceptions/INT3 breaks ... load the program in OllyDbg, right click / Search for / name in all modules, find CreateToolhelp32Snapshot API, double-click on it, we found as follows

```
77E92ED1> 55 PUSH
EBP
77E92ED2 8BEC MOV
EBP, ESP
.......... here
are some
lines ..........
77E92F33 8BF0 MOV
ESI, EAX
77E92F35 85F6
TEST ESI, ESI
77E92F37 0F8C
F4E50000 JL
kernel32.77EA1531
77E92F3D 8B45 0C
MOV EAX, DWORD
PTR SS: [EBP + C]
77E92F40 5e POP
ESI
77E92F41 C9 LEAVE
```

```
77E92F42 C2 0800
RETN 8
```

we need to kill this API, the following changes

```
77E92ED1>
55 PUSH
EBP
77E92ED2
5D POP
EBP
77E92ED3
33C0 XOR
EAX, EAX
77E92ED5
C2 0800
RETN 8
```

select Plugins / IsDebugPresent / Hide, press F9 to run, press Alt + M to enable Memory map window ... Search with the Owner is ColorPic, Contains the code, right-click to select Set memory breakpoint on access ... close window again OllyDbg, press Shift + F9 one time only one day to OEP = 41A4C9

```
0041A4C9 68 28F34300 PUSH ColorPic.0043F328 => OEP
0041A4CE 68 58DC4100 PUSH ColorPic.0041DC58
.......... here are some lines ..........
0041A4E7 8965 E8 MOV DWORD PTR SS: [EBP-18], ESP
0041A4EA FF15 50B24300 CALL DWORD PTR DS: [43B250]; kernel32.GetVersion
```

IAT dump & fix, it is easy

dqtln write this article by article AntiCrack Protector 1.0x manually unpack tutorial by KaGra thanks KaGra

greetings

If you have questions, Remarks about this tutorial, mail me

dqtlncrk@gmail.com

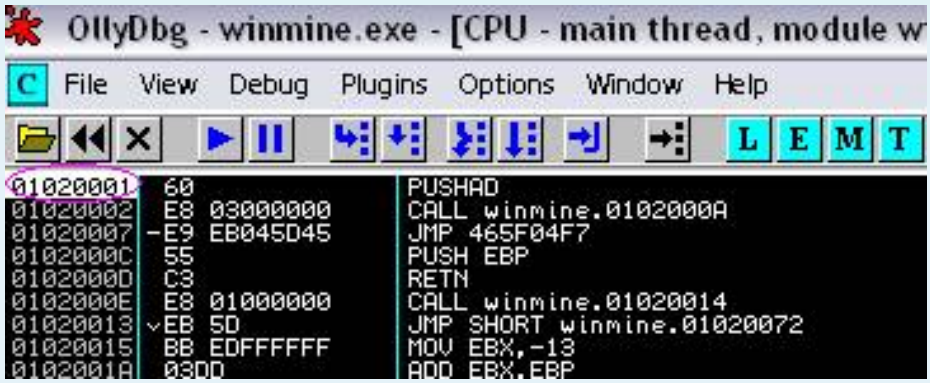
How to unpack ASPack

by dqtln from Phudu Cracker Team
Vietnam 2004
http://www.phudu.com

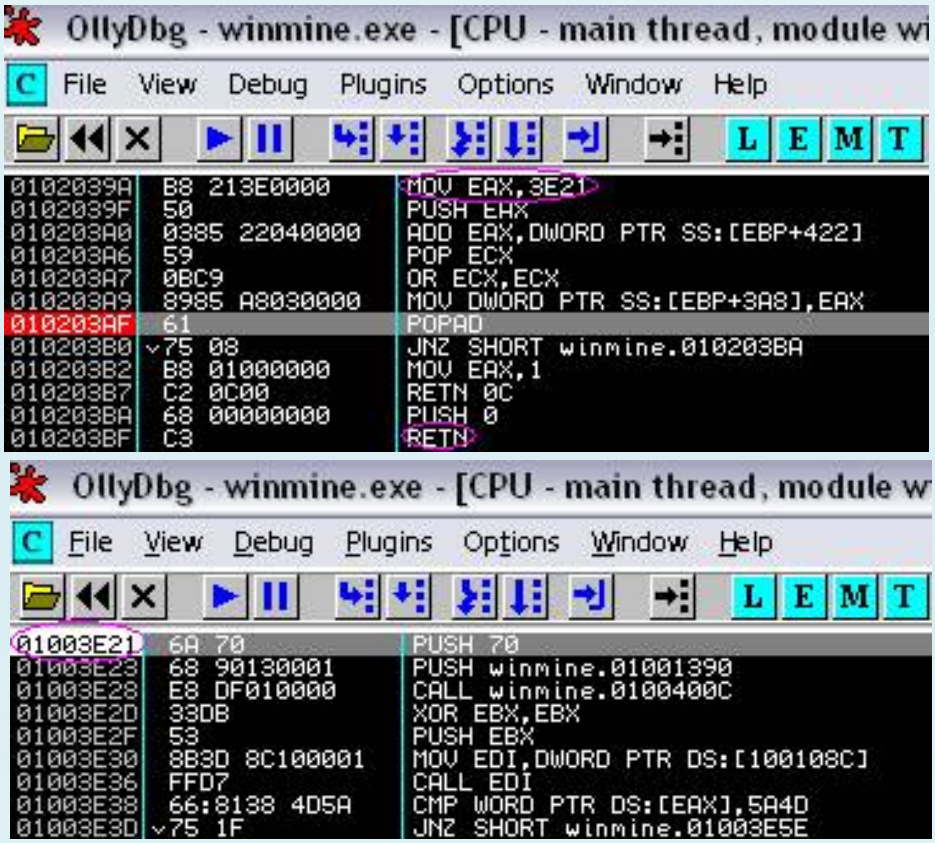
Victim: Minesweeper 5.1 packed with ASPack 2:12
Homepage: Copyright © 1981-2001 Microsoft Corporation by Robert Donner and Curt Johnson
Tools: 1:10 OllyDbg, PEiD 0.92, LordPE Deluxe, Import REConstructor 1.6 Final
Unpack the file: winmine.exe
Unpacked by dqtln

Previous dqtln has a lot of tutorials unpack but has not attached, make it difficult to understand for beginners ... the time is now free to write back dqtln all accompanied by pictures and programs have been compressed you to easily practice ... mine-clearing game WindowXP SP1 was dqtln itself again with ASPack 2:12 -> Alexey Solodovnikov ... to unpack it is very easy, as appropriate similar unpack UPX is Okie ... PEiD does see some information, we know OEP = 1003E21

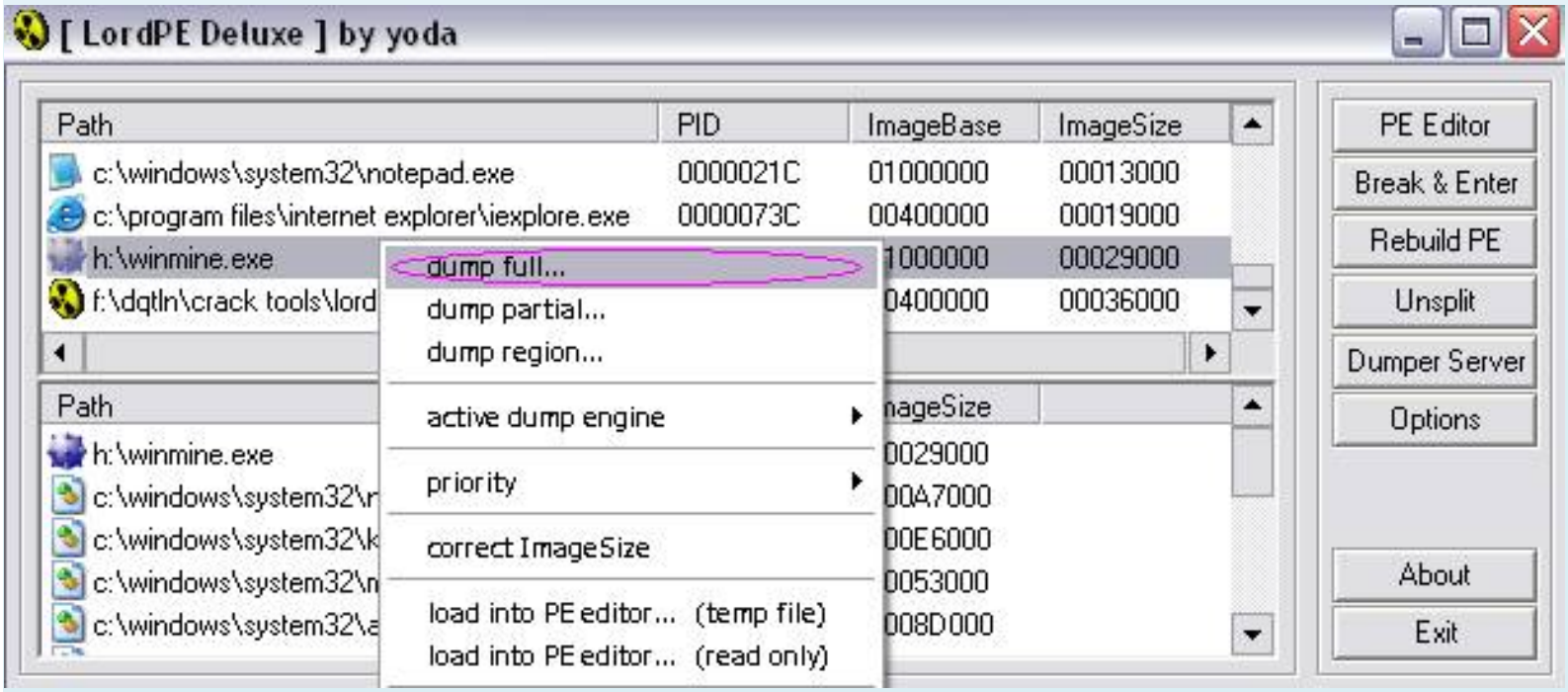
load up the program in OllyDbg receive compressed code? , Select it ... we stopped at ENTRY POINT at 1020001



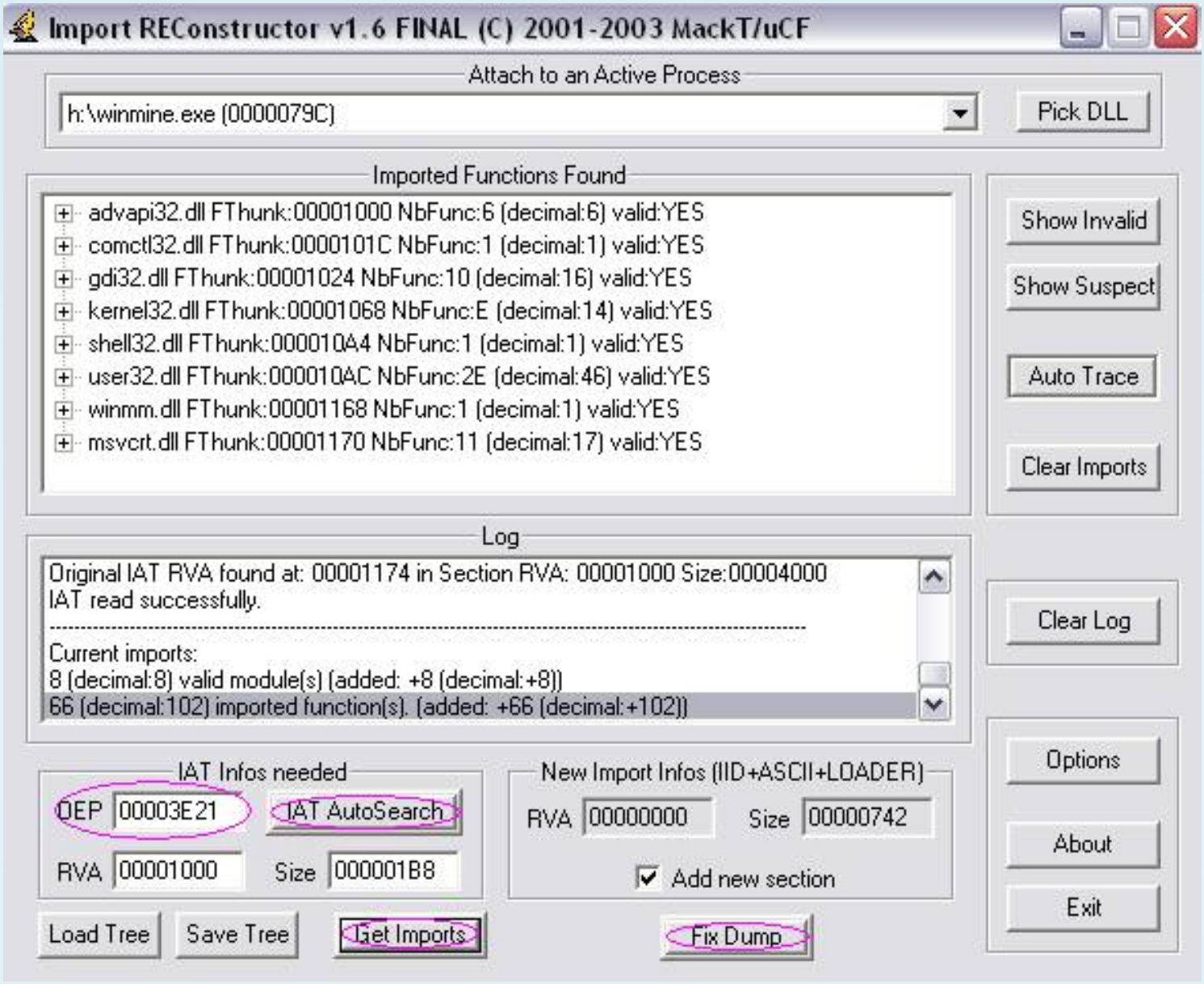
move down the order to find POPAD, CtrlB enter 61 for faster ... set break point at which, F9 to run, trace down through the command will RETN to OEP



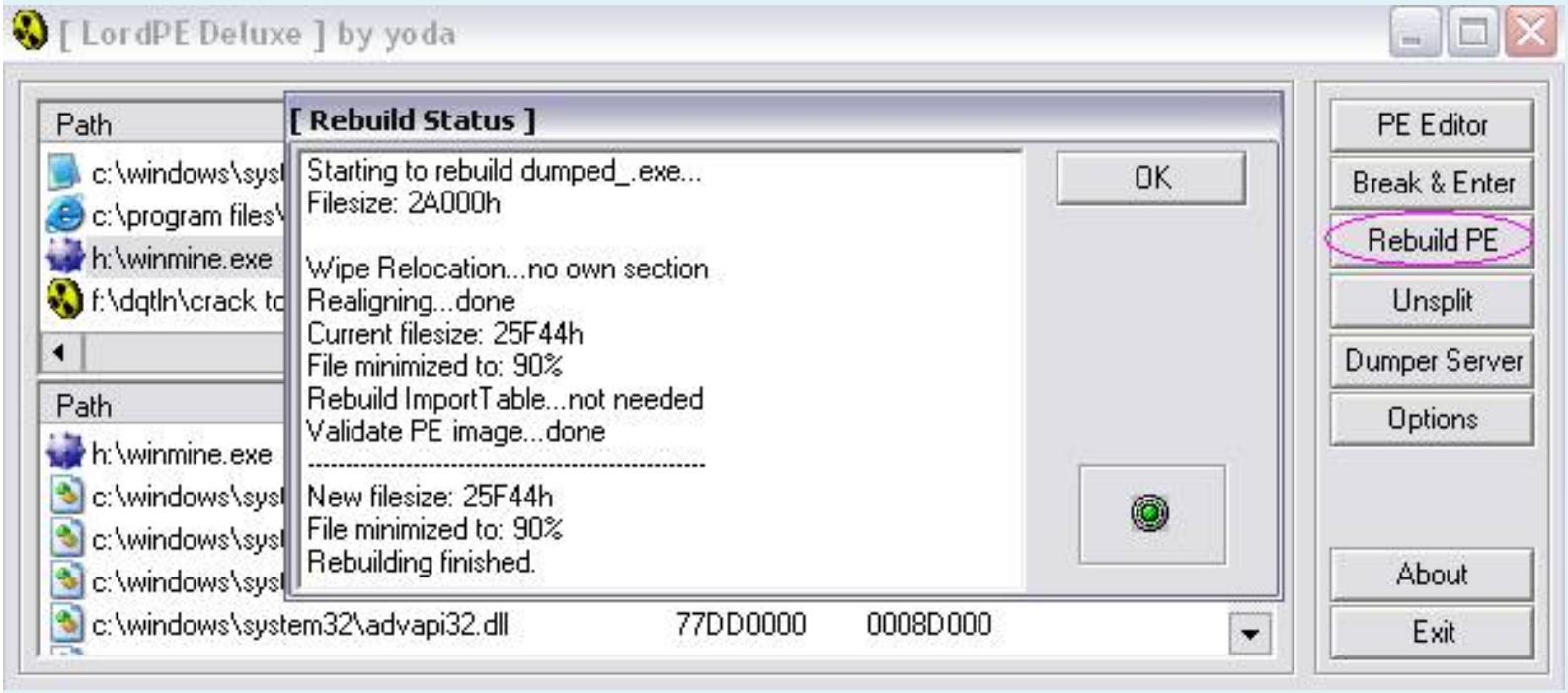
we find the OEP = 1003E21 same PEiD ... here used to LordPE Deluxe memory dump file created as dumped.exe following



run file dumped.exe drilling because it will crash ... we need to use Import REConstructor to fix errors, usually a fix Import API's Table ... changes OEP = 3E21 ... IAT AutoSearch click, click Get more Imports and finally click Fix dump, select File dumped.exe to create the file dumped_.exe



test file dumped_.exe see good work ... normal after the dump file typically has the code of garbage packer, we can use Deluxe LordPE to reduce the size of the file



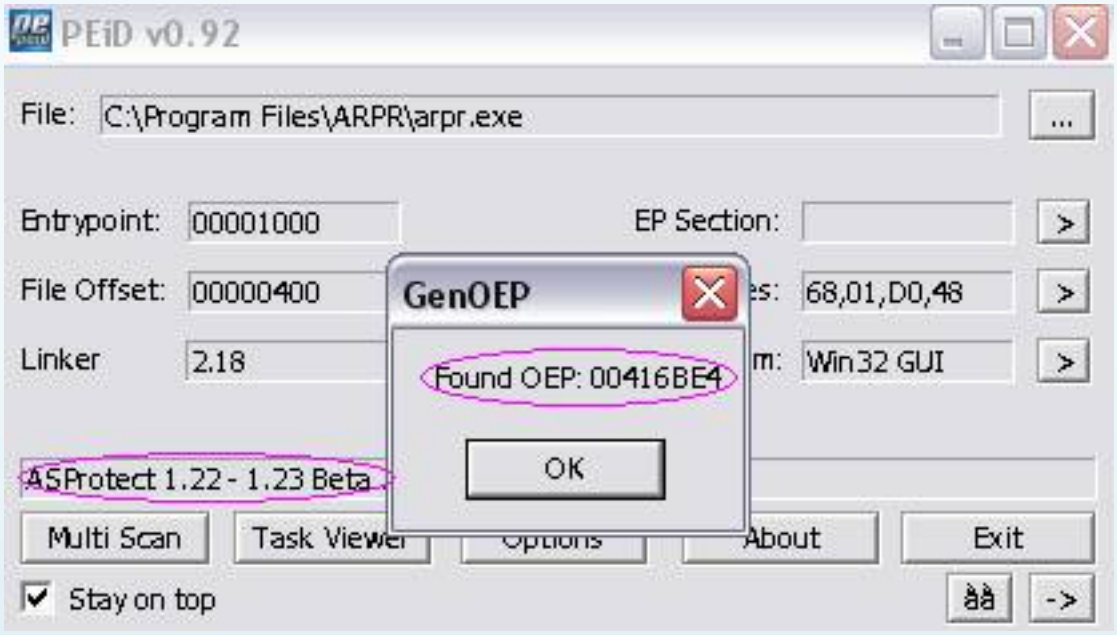
so we have learned how to unpack ASPack finished ... This way you can unpack all ASPack version of the current ... future is not known because employers write ASPack has ASProtect quite formidable that the

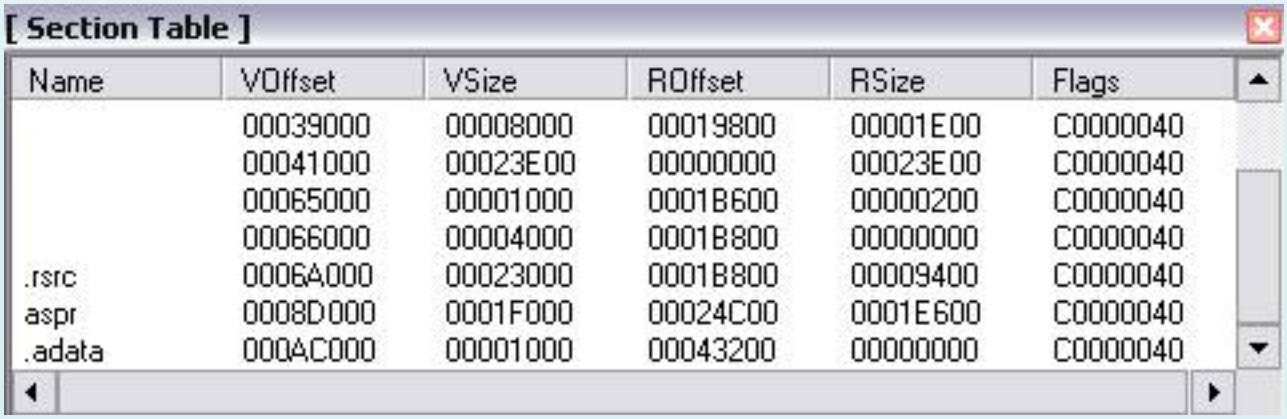
greetings
If you have questions, Remarks about this tutorial, mail me
dqtln@phudu.com

How to unpack ASProtect

by dqtln from Phudu Team
Vietnam 2004
http://www.phudu.com

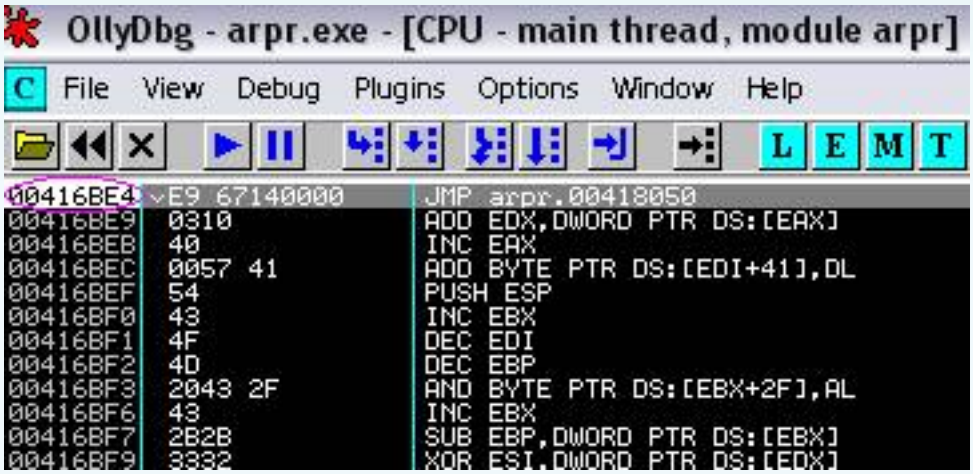
Victim: Advanced RAR Password Recovery 1:50 build packed with 7 ASProtect 1:22 to 1:23 Beta 21 -> Alexey Solodovnikov
http://www.elcomsoft.com/arpr.html
Homepage: http://www.aspack.com
Tools: 1:10 OllyDbg, PEiD 0.92, LordPE Deluxe, Import REConstructor 1.6 Final
Unpack the file: arpr.exe
Unpacked by dqtln
12h40 am Thursday December 30 2004
PEiD we use programs that are compressed using ASProtect 1:22 to 1:23 Beta 21, OEP = 47B920 LordPE and Deluxe for the Flags of the following





load the program in OllyDbg, press the Shift + F9 until the program runs ... load it in OllyDbg, press Shift + F9 to-1 times before running the program, press Alt + M to enable Memory map window ... Search with the Owner is arpr, Contains the code, right-click to select Set memory breakpoint on access ... close window again OllyDbg, press Shift + F7, press F9, we stopped at

the OEP = 416BE4 ... here is the need to find OEP, above all do not have 00 bytes ... this month without Stolen Bytes



here used LordPE Deluxe memory dump file created dumped.exe ... Import using IAT REConstructor fix, but most will not file to run as good as we expected ... may file dumped_.exe run but click on the Register, the program will error ... we need to find accurate RVA and Size in OllyDbg, we are stopped at the OEP = 416BE4, press Ctrl + B to enter FF 25, press Ctrl + L several times we came here

00434F92 -FF25 70774300 JMP DWORD PTR DS:[437770] 00434F98 -FF25 CC764300 JMP DWORD PTR DS:[4376CC] 00434F9E -FF25 68764300 JMP DWORD PTR DS:[437668] 00434FA4 -FF25 34764300 JMP DWORD PTR DS:[437634] 00434FAA -FF25 78774300 JMP DWORD PTR DS:[437778] 00434FB0 -FF25 C8774300 JMP DWORD PTR DS:[4377C8] 00434FB6 -FF25 C0774300 JMP DWORD PTR DS:[4377C0] 00434FBC -FF25 C4764300 JMP DWORD PTR DS:[4376C4] 00434FC2 -FF25 08764300 JMP DWORD PTR DS:[437608] 00434FC8 -FF25 94774300 JMP DWORD PTR DS:[437794] 00434FCE -FF25 B4774300 JMP DWORD PTR DS:[4377B4] 00434FD4 -FF25 B0774300 JMP DWORD PTR DS:[4377B0] 00434FDA -FF25 8C774300 JMP DWORD PTR DS:[43778C] 00434FE0 -FF25 2C774300 JMP DWORD PTR DS:[43772C] 00434FE6 -FF25 2C764300 JMP DWORD PTR DS:[43762C] 00434FEC -FF25 1C764300 JMP DWORD PTR DS:[43761C] 00434FF2 -FF25 20774300 JMP DWORD PTR DS:[437720] 00434FF8 -FF25 BC774300 JMP DWORD PTR DS:[4377BC] 00434FFE -FF25 84764300 JMP DWORD PTR DS:

find JMP DWORD PTR DS: [smallest] and JMP DWORD PTR DS: [most] ... RVA think the start and Size

RVA = 3751C, Size = 437964 = 448-43751c

IAT fix the following

greetings
If you have questions, Remarks about this tutorial, mail me
dqtlncrk@gmail.com

How to unpack Asprotect 1:23 rc4 series # 1

Name soft: Bad Copy Pro ver 3.72
Cracker: Computer_Angel
Level: average

I. Tool needed:
_ Ollydbg (debugger tool)
_ Lord-Pe (tool to dump file)
_ Imprec 1.6

II.Cach initiate:

Find OEP:

1. Olly Badcopy.exe to load, the shift-F9 to run the program, reality will automatically be stopped again by the point by exception asprotect generated. The number of night-shift F9 from the original time to time for the message that xxx program run entirely. Xxx number that I received record here is 27, ie 27 times after the shift-F9 test program will run.

2. Load up Indeed, the shift-F9 exactly 26 times, then press Shift F7. Press Alt-M to open the window on the **Memory.** Earn memory segment is available Owner "Badcopy" and contains the "codes". Set **on break point** at which **memory access.**

3. Close window memory again, continue to return to the CPU window, press F9, we stop at the following code:

```
00406EE0-FF25 78B2B700 JMP DWORD PTR DS: [B7B278] <------ here
00406EE6 8BC0 MOV EAX, EAX
00406EE8-FF25 74B2B700 JMP DWORD PTR DS: [B7B274]
00406EEE 8BC0 MOV EAX, EAX
00406EF0-FF25 70B2B700 JMP DWORD PTR DS: [B7B270]
00406EF6 8BC0 MOV EAX, EAX
00406EF8-FF25 6CB2B700 JMP DWORD PTR DS: [B7B26C]
```

visible on the top 1 xiu, we see

```
00406ECA E8 09A5FFFF CALL BadCopy.004013D8
00406ECF A3 38705000 MOV DWORD PTR DS: [507038], EAX
00406ED4 E8 F7A4FFFF CALL BadCopy.004013D0
00406ED9 A3 30705000 MOV DWORD PTR DS: [507030], EAX
```

```
00406EDE C3 RETN
00406EDF 90 NOP
```

so sure this can o is OEP ct.Cau question of why so predicted would later I will specify.

Human F8 to jump out of the address **00406EE0,** we again address 15xxxxxxx, then press F9 we will stop at **00406FB5**

```
00406FA7 33C0 XOR EAX, EAX
00406FA9 A3 0C775000 MOV DWORD PTR DS: [50770C], EAX
00406FAE 6A 00 PUSH 0
00406FB0 E8 2BFFFFFF CALL BadCopy.00406EE0
00406FB5 A3 14775000 MOV DWORD PTR DS: [507714], EAX;
BadCopy.00400000 here <------
00406FBA A1 14775000 MOV EAX, DWORD PTR DS: [507714]
00406FBF A3 B4105000 MOV DWORD PTR DS: [5010B4], EAX
00406FC4 33C0 XOR EAX, EAX
00406FC6 A3 B8105000 MOV DWORD PTR DS: [5010B8], EAX
00406FCB 33C0 XOR EAX, EAX
00406FCD A3 BC105000 MOV DWORD PTR DS: [5010BC], EAX
00406FD2 E8 C1FFFFFF CALL BadCopy.00406F98
00406FD7 THREE B0105000 MOV EDX, BadCopy.005010B0
00406FDC 8BC3 MOV EAX, EBX
00406FDE E8 65D7FFFF CALL BadCopy.00404748
00406FE3 5B POP EBX
00406FE4 C3 RETN
```

similar to above, look up 1 xiu we again confirm that this is o OEP. Use F8 to trace to order **RETN.** When return from our RET at **005008CC**

```
005008CC B0 01 MOV AL, 1 <----- here
005008CE 84C0 TEST AL, AL
005008D0 74 59 JE SHORT BadCopy.0050092B
005008D2 A1 64605000 MOV EAX, DWORD PTR DS: [506064]
005008D7 8B00 MOV EAX, DWORD PTR DS: [EAX]
005008D9 E8 DA0DF7FF CALL BadCopy.004716B8
005008DE A1 64605000 MOV EAX, DWORD PTR DS: [506064]
005008E3 8B00 MOV EAX, DWORD PTR DS: [EAX]
```

```
005008E5 BA 38095000 MOV EDX, BadCopy.00500938; ASCII "BadCopy
Pro"
```

1 xiu look up, we have:

```
005008B3 0000 ADD BYTE PTR DS: [EAX], AL
005008B5 0000 ADD BYTE PTR DS: [EAX], AL
005008B7 003405 50000000 ADD BYTE PTR DS: [EAX +50], DH
005008BE 0000 ADD BYTE PTR DS: [EAX], AL
005008C0 0000 ADD BYTE PTR DS: [EAX], AL
005008C2 0000 ADD BYTE PTR DS: [EAX], AL
005008C4 0000 ADD BYTE PTR DS: [EAX], AL
005008C6 00?
005008C7 E8 D866F0FF CALL BadCopy.00406FA4 <------ OEP
```

OEP is so **5008C7.** Asprotect characteristics is that it will be able to remove 1 of the first byte of the main program and replace it with the value 00, so when you look at the top of the characters have 00 consecutive, I guess that was the exact OEP CT of the original.

Dump file and fix IAT:

1. In the reality that at the one to initiate the dump file, the lordpe, select process and full dump.

2. Continue with Olly, use the Search String Binary, search string of binary "FF 25", we find to be interrupted

```
00401268-FF25 2CB2B700 JMP DWORD PTR DS: [B7B22C]; kernel32.
CreateFileA here <-----
0040126E 8BC0 MOV EAX, EAX
00401270-FF25 28B2B700 JMP DWORD PTR DS: [B7B228]
00401276 8BC0 MOV EAX, EAX
00401278-FF25 24B2B700 JMP DWORD PTR DS: [B7B224]
0040127E 8BC0 MOV EAX, EAX
00401280-FF25 20B2B700 JMP DWORD PTR DS: [B7B220]
00401286 8BC0 MOV EAX, EAX
00401288-FF25 1CB2B700 JMP DWORD PTR DS: [B7B21C]
0040128E 8BC0 MOV EAX, EAX
```

As a result, we predicted the IAT program starts B7Bxxx

3. Running **Imprec.exe** start to recover IAT, selected process is Badcopy,
RVA enter value = 400000 = B7B000-77B000
OEP = 400000 = 5008C7-1008C7
People Get Imports button to load the values in which IAT Imprec find out.

4. Click on the button "Show Invalid", the invalid import function will display in the window functions.Nhan imported mouse to measure the function, select TraceLevel 1
Imprec will find out the number 1 is the basic API, but still remaining 1 so that the API level Trace Level 1 is not resolved. One roster select individual desire, the right mouse, choose Disassembler / Hex View
With that function when selecting this function, we received notification "Read error" This means that this is o function which Imprec message nhâm, we use the cut thunk (s) to delete it. With the view that function is, we will use the Plugins tracer to identify ham.

This self-compliance on the steps until completely fix all the ham in the table.
(Note, have 1 ham position **0077B3A0** that function tracer in imprec not get out. FreeResource That's ham, but the reason why I know this? You could see the conditions Disassemble the function of this .

```
01551CF0 push ebp
01551CF1 mov ebp, esp
01551CF3 mov eax, [1557E24] / / DWORD value: 00132F68
01551CF9 pop ebp
01551CFA retn 4
```

push on, well done again pop out, and liver ebp = esp stack that balance, and outside the liver only 1 value that is to eax ----> FreeResource ham.)

Once completed, the button "Fix dump", select the file is the file that you just dump out on the steps.
After completing this step, we already have 1 file.exe complete. However, reality can to run need to take the next step.

Find Stolen bytes:

1. Run the file just fix above (dumped_.exe), CT was crash -> program to deliver olly (please call window is **(1)),** as well as open 1 window program olly half (this is called window **(2)),** load the file badcopy not to unpack.

2. In the window **(2),** made the operation similar to the heart OEP, we will stop at locations before OEP xiu 1, which is:

```
00406FB5 A3 14775000 MOV DWORD PTR DS: [507714], EAX;
BadCopy.00400000 here <------
00406FBA A1 14775000 MOV EAX, DWORD PTR DS: [507714]
00406FBF A3 B4105000 MOV DWORD PTR DS: [5010B4], EAX
00406FC4 33C0 XOR EAX, EAX
00406FC6 A3 B8105000 MOV DWORD PTR DS: [5010B8], EAX
00406FCB 33C0 XOR EAX, EAX
00406FCD A3 BC105000 MOV DWORD PTR DS: [5010BC], EAX
00406FD2 E8 C1FFFFFF CALL BadCopy.00406F98
00406FD7 THREE B0105000 MOV EDX, BadCopy.005010B0
00406FDC 8BC3 MOV EAX, EBX
00406FDE E8 65D7FFFF CALL BadCopy.00404748
00406FE3 5B POP EBX
00406FE4 C3 RETN
```

continue to trace **00406FDC.**

3. Back to the window **(1),** trace the function first, and keep until the similar in the window **(2),** at locations **00406FDC.** I noticed the value in **(2)** EBX time is **50055C** , and in **(1)** is 0. Look up above the function where we see

```
00406FA4 / $ 53 PUSH EBX
00406FA5 |. 8BD8 MOV EBX, EAX <--------- look here
00406FA7 |. 33C0 XOR EAX, EAX
00406FA9 |. A3 0C775000 MOV DWORD PTR DS: [50770C], EAX
00406FAE |. 6A 00 PUSH 0; / pModule = null
00406FB0 |. E8 2BFFFFFF CALL <JMP.&kernel32.GetModuleHandleA> \
GetModuleHandleA
00406FB5 |. A3 14775000 MOV DWORD PTR DS: [507714], EAX
00406FBA |. A1 14775000 MOV EAX, DWORD PTR DS: [507714]
00406FBF |. A3 B4105000 MOV DWORD PTR DS: [5010B4], EAX
00406FC4 |. 33C0 XOR EAX, EAX
00406FC6 |. A3 B8105000 MOV DWORD PTR DS: [5010B8], EAX
00406FCB |. 33C0 XOR EAX, EAX
00406FCD |. A3 BC105000 MOV DWORD PTR DS: [5010BC], EAX
00406FD2 |. E8 C1FFFFFF CALL dumped_.00406F98
00406FD7 |. THREE B0105000 MOV EDX, dumped_.005010B0
```

```
00406FDC |. 8BC3 MOV EAX, EBX
00406FDE |. E8 65D7FFFF CALL dumped_.00404748
00406FE3 |. 5B POP EBX
00406FE4 \. C3 RETN
```

we see in **00406FA5 is MOV EBX, EAX,** as a result, the initial value is the EAX.Dong window **(2)** away.

4.Quay back to reality and have fixed dump. (window **(1))**

```
005008B8 34055000 DD dumped_.00500534
005008BC 0000 ADD BYTE PTR DS: [EAX], AL
005008BE 0000 ADD BYTE PTR DS: [EAX], AL
005008C0 0000 ADD BYTE PTR DS: [EAX], AL
005008C2 0000 ADD BYTE PTR DS: [EAX], AL
005008C4 0000 ADD BYTE PTR DS: [EAX], AL
005008C6 00?
005008C7> E8 D866F0FF CALL dumped_.00406FA4 current <---- OEP
005008CC. B0 01 MOV AL, 1
005008CE. 84C0 TEST AL, AL
```

OEP on the current is 11 bytes 0, asprotect characteristics is to remove the first byte of the program and replace the bytes = 0, then in the process create, asprotect will restore the bytes and implementers no. So we called the byte is lost **stolen bytes.**

The program was compile by VC + +, VB, Delphi ... are start using

```
PUSH EBP
MOV EBP, ESP
```

We move to the vet to **005008BC,** asm order go to:

```
PUSH EBP
MOV EBP, ESP
ADD ESP, 0C-<--- number of stolen bytes
MOV EAX, 50055C
```

we see the order on just khit with byte 0, o children at all about balance.

5. Must click, select "Copy to executable", "All modification"

Then select Copy all torng dialog. In just a new window opens, right click, select Save the file, the file is named dumped_2.exe

6. Now, in addition to the functions of PEEditor LordPe, choose File dumped_2.exe, at entrypoint, revise **OEP is 005008BC -400000 = = 001008BC.** Save again.

7. Run the file has unpack (dumped_2.exe)..... File run better but still not crack crack.Cac steps would automatically make you the next.

How to unpack Asprotect 1:23 rc4 Series # 2

Name soft: Chronograph 3.1
Cracker: Computer_Angel
Level: DE

I. Tool needed:
_ Ollydbg (debugger tool)
_ Lord-Pe (tool to dump file)
_ Imprec 1.6

II.Cach initiate:

Find OEP:
1. Olly Chrono.exe to load, the **shift-F9** to run the program, reality will automatically be stopped again by the point by exception asprotect generated. The number of **night-shift F9** from the original time to time for the message that xxx program run entirely. Xxx number that I received record here is 17, ie 17 times after the shift-F9 test program will run.

2. Load up Indeed, the **shift-F9** exactly 16 times, then press **Shift F7.** Press **Alt-M** to open the window on the **Memory.** Earn memory segment is available Owner "Chrono" and contains the "codes". Set **on break point** at which **memory access.**

3. Close window memory again, continue to return to the CPU window, press **F9,** we stop at the following code:

```
00401989 0000 ADD BYTE PTR DS: [EAX], AL
0040198B 0000 ADD BYTE PTR DS: [EAX], AL
0040198D 0000 ADD BYTE PTR DS: [EAX], AL
0040198F 00?
00401990 EB 10 JMP SHORT chrono.004019A2 here <----
00401992 66:623 A BOUND DI, DWORD PTR DS: [EDX]
00401995 43 INC EBX
00401996 2B2B SUB EBP, DWORD PTR DS: [EBX]
00401998 48 DEC EAX
00401999 4F DEC EDI
0040199A 4F DEC EDI
0040199B 4B DEC EBX
```

so OEP is 00401990. Asprotect characteristics is that it will be able to remove 1 of the first byte

of the main program and replace it with the value 00, so when you look at the top of the characters have 00 consecutive, I guess that was the exact OEP CT of the original.

Dump and fix IAT:

1. Content Lordpe, full dump process chrono files dumped.exe.

2. Then the next Imprec to fix IAT. Select chrono process is, go to **OEP 00401990-400000 = = 1990.** The button "Autosearch IAT, imprec will automatically find and RVA area size for us. Here, I get results is RVA = 001FF414, size = 248

3. However, we do not choose RVA = 001FF414 that is selected 001FF000 for sure, and size is selected in 2000. Normally size = 1000 is very large but when the functions IAT Autosearch "imprec how you know the maximum size is 4000, so we spread the size 2000 for sure. Human button "Get Imports".

4. With that mind function **RVA: xxxxxxx ptr: yyyyyyyyyyy, with interest yyyyyyy** too large ----> disassembler can not we can be cut thunk (s) to leave it because this is data "RAC" is not function.

5. It has heart function **RVA: 001FF138 ptr: 4BFE24** disassembler when we have the following code:

```
004BFE24 dec eax
004BFE25 or al, EB
004BFE27 pop edi
004BFE28 mov eax, [ebp-C]
004BFE2B inc dword ptr [eax +8]
004BFE2E mov eax, [ebp-C]
004BFE31 inc dword ptr [eax + C]
004BFE34 jmp short 004BFE87
Cmp 004BFE36 byte ptr [ebp-5], 0
004BFE3A je short 004BFE44
004BFE3C mov eax, [ebp-C]
```

----> Here is that the code of the function 1 asprotect ---> unpack when the will o be used half ---> may be removed by using cut thunk (s)

6. The remaining function, we roster use the **tracer level 1 to find the API,** if tracer level 1 in the heart, is the next **tracer** plugin \ **asprotect 1:22** to find the API. If so, how the jam you'll also find the desire to be with 2 technical now.

Italy 7.Luu case following extras:

a) It has heart function **RVA: 001FF47C ptr: D31CF0,** when we are dissasmble

```
00D31CF0 push ebp
00D31CF1 mov ebp, esp
00D31CF3 mov eax, [D37E24] / / DWORD value: 00151EE0
00D31CF9 pop ebp
00D31CFA retn 4
```

This is ham FreeResource API, you DoubleClick to establish a name for it.

b) It has heart function **RVA: 001FF494 and RVA: 001FF498** when identifying are paid about GetCurrentProcessId is, we consider ham 2 code:

```
RVA: 001FF494:
00D31CB8 mov eax, [D37E18] / / DWORD value: FFFFFFFF
00D31CBD retn

RVA: 001FF498:
00D31CC0 mov eax, [D37E20] / / DWORD value: 00000200
00D31CC5 retn
```

It is potentially 1 ham is ham and 1 GetCurrentProcess is GetCurrentProcessId, the france try Tolerance is selected above and is GetCurrentProcess next GetCurrentProcessId

After you have finished repairing all ham in the table import functions, the button "fix dump" file and select dumped.exe created above to fix.
-> Imprec program will create a new file name 1 is dumped_.exe

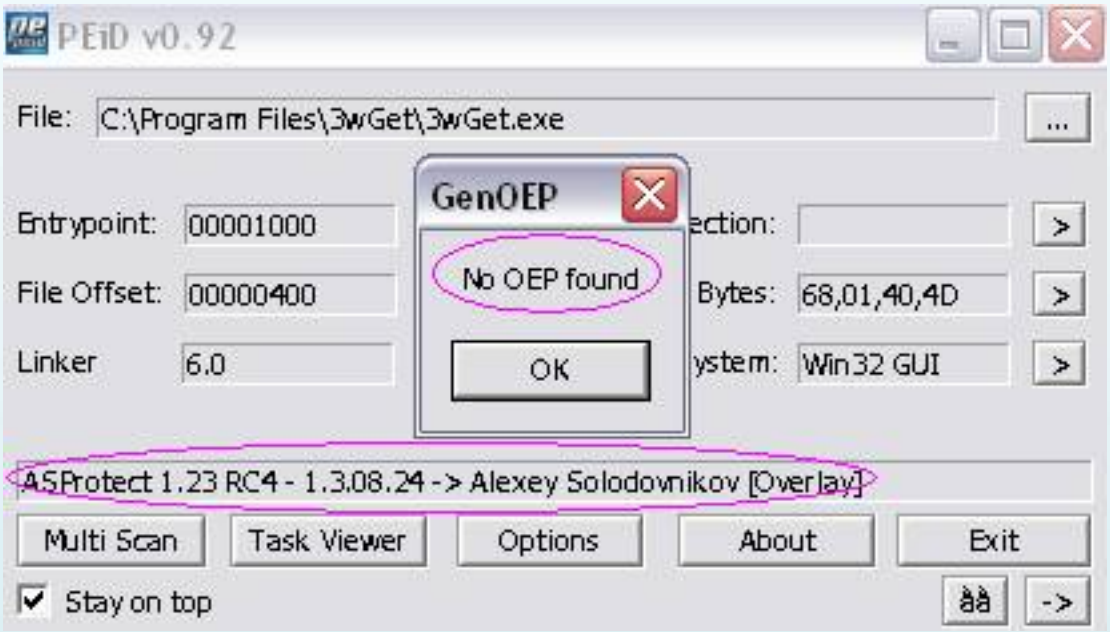
Results:

Just a test file fix, you see reality better run, the PEID identify test to see how is Borland C + + 1999
-> Unpack our successful reality. Here as in the asprotect stolen bytes as in # 1 so we ignored the interruption recovery stolen bytes .

How to unpack ASProtect

by dqtln from Phudu Cracker Team
Vietnam 2004
http://www.phudu.com

Victim: 3wGet 1.5 build 151 packed with ASProtect 1:23 RC4 - 1.3.08.24 -> Alexey Solodovnikov [Overlay]
from http://www.3wget.com
Homepage: http://www.aspack.com
Tools: 1:10 OllyDbg, PEiD 0.92, LordPE Deluxe, Import REConstructor 1.6 Final
Unpack the file: 3wGet.exe
Unpacked by dqtln
improved cup divertissement as deepen this month ... alcohol seems he is too excited packer this quite formidable đấy ... now the network has many mup ASProtect, however the problem is finding Stolen Bytes is not clear ... dqtln will help you resolve this issue
PEiD we use programs that are compressed using ASProtect 1:23 RC4 - 1.3.08.24 -> Alexey Solodovnikov [Overlay] and LordPE Deluxe for the Flags of the following



[Section Table]

Name	VOffset	VSize	ROffset	RSize	Flags
	00001000	00080000	00000400	0002A600	C0000040
	00081000	0001B000	0002AA00	00006E00	C0000040
	0009C000	00004000	00031800	00001200	C0000040
.rsrc	000A0000	00034000	00032A00	00034000	C0000040
.multi	000D4000	00014000	00066A00	00013600	C0000040
.adata	000E8000	00001000	0007A000	00000000	C0000040

Finding the OEP

load the program in OllyDbg, press the Shift + F9 until the program runs ... load it in OllyDbg, press Shift + F9 to-1 times, before the run, we stop at the following code

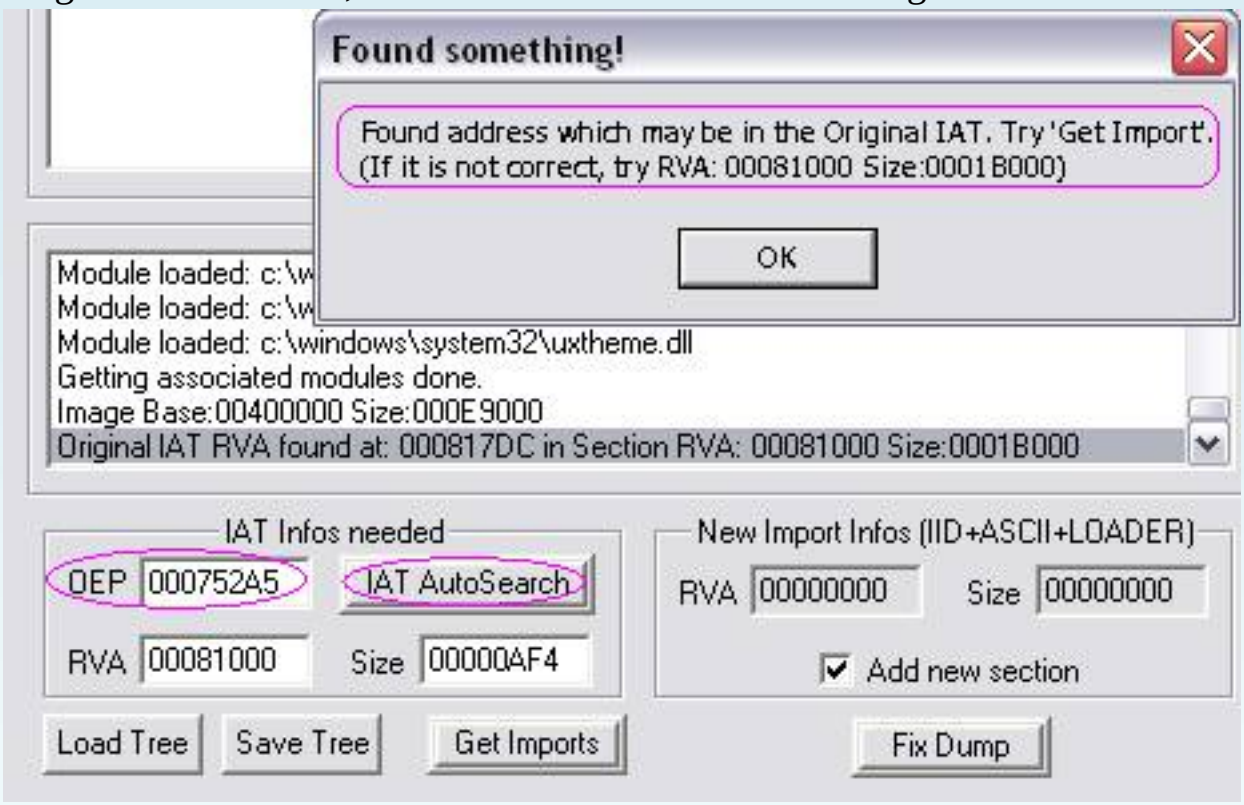
```
00AA39EC 3100 XOR DWORD
PTR DS: [EAX], EAX => you
are here
00AA39EE 64:8 F05 00000000
POP DWORD PTR FS: [0]
..................... here
are some
lines ....................
00AA3A23 FF75 F0 PUSH
DWORD PTR SS: [EBP-10]
00AA3A26 FF75 EC PUSH
DWORD PTR SS: [EBP-14]
C3 RETN 00AA3A29 => set
breakpoint here
```

set break points at RETN order, press Shift + F9, more pressing Alt + F1, command TC EIP <900000, press ENTER and wait a little will to OEP = 4752A5

```
00475278 0000 ADD BYTE PTR
DS: [EAX], AL
0047527A 0000 ADD BYTE PTR
DS: [EAX], AL
..................... here
are some
lines ....................
004752A0 0000 ADD BYTE PTR
DS: [EAX], AL
004752A2 0000 ADD BYTE PTR
DS: [EAX], AL
004752A4 00
004752A5 FF15 DC174800
CALL DWORD PTR DS:
[4817DC]; msvcrt.
__set_app_type
004752AB 59 POP ECX
004752AC 830D 70FA4900 FF
OR DWORD PTR DS: [49FA70],
FFFFFFFF
004752B3 830D 74FA4900 FF
OR DWORD PTR DS: [49FA74],
```

```
FFFFFFFF
004752BA FF15 E0174800
CALL DWORD PTR DS:
[4817E0]; msvcrt.
__p__fmode => you are here
OEP
```

pretty much have to find ways to OEP, dqtln will present more hours more
load the program in OllyDbg, press the Shift + F9 until the program runs ... load it in OllyDbg, press Shift + F9 to-1 times, before running the program, press Shift + F7 and then Alt + M to enable Memory map window ... Search with the Owner is 3wGet, Contains the code, right-click to select Set memory breakpoint on access ... close window again OllyDbg, press F9, we stopped at the OEP = 4752A5 ... count of bytes on the OEP we have seen all 45 bytes 00
here used to create LordPE Deluxe dumped.exe file ... Import REConstructor to use to fix errors ... changes OEP = 752A5, click IAT AutoSearch as following

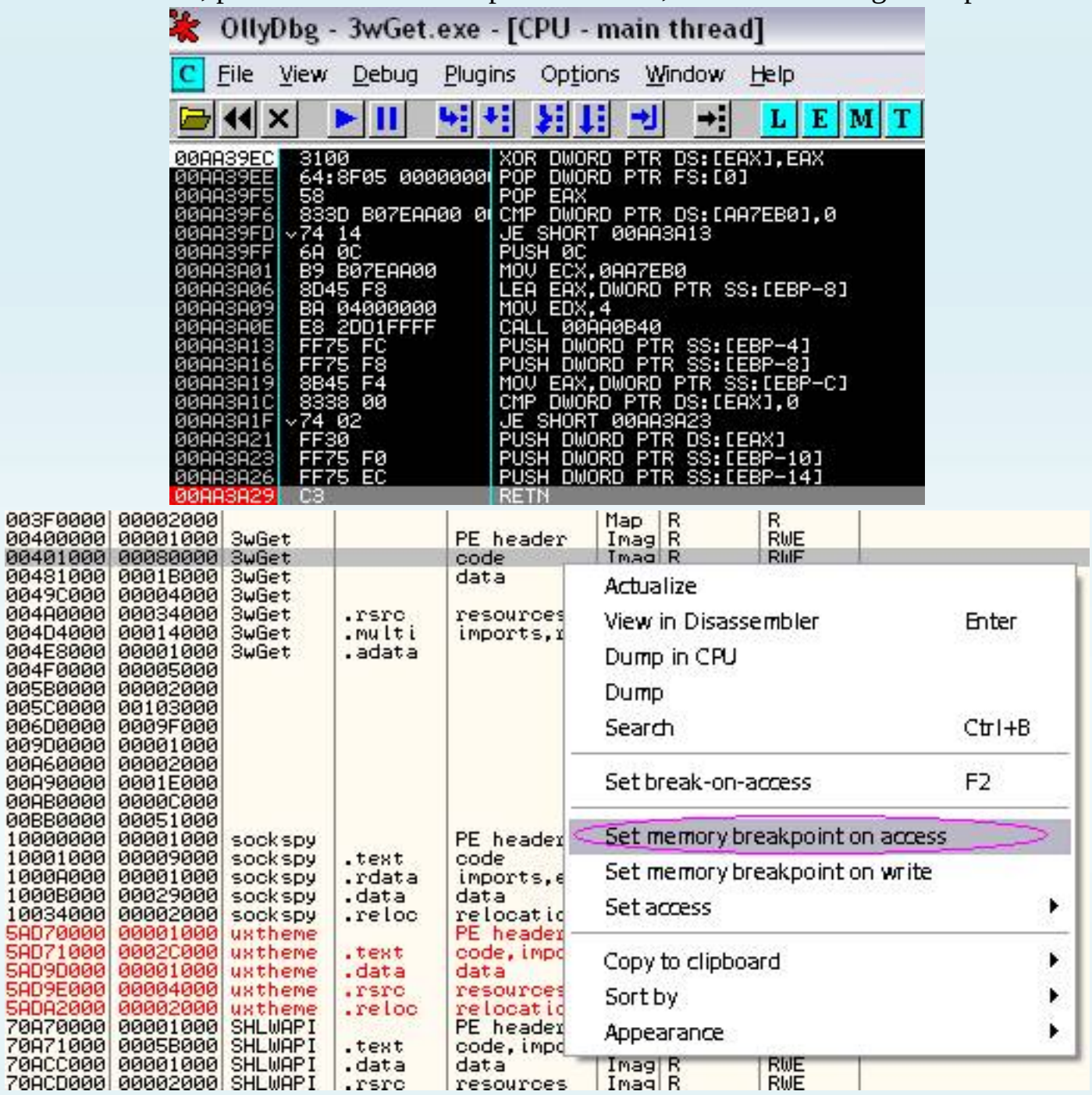


Import REConstructor we try to RVA: 81000 Size: 1B000 ... Size: 1B000 is too large, if you like it just try ... here dqtln get Size = E90 ... then click Get Imports ... Functions are pretty much not to fix ... Show Invalid clicks, right-click on the rva not fix, select Trace Level1, Import REConstructor will fix some basic Funtions ... Show more Invalid clicks, right-click on the rva not fix, select Plugin Tracers / ASProtect or Plugin Tracers 1:22 / 1:23 ASProtect RC4 depending on what you are ok
Functions of the Import REConstructor not fix is the code of the garbage packer, right click select Cut thunk (s) to remove it and then click Next Fix dump, select File dumped.exe to create the file

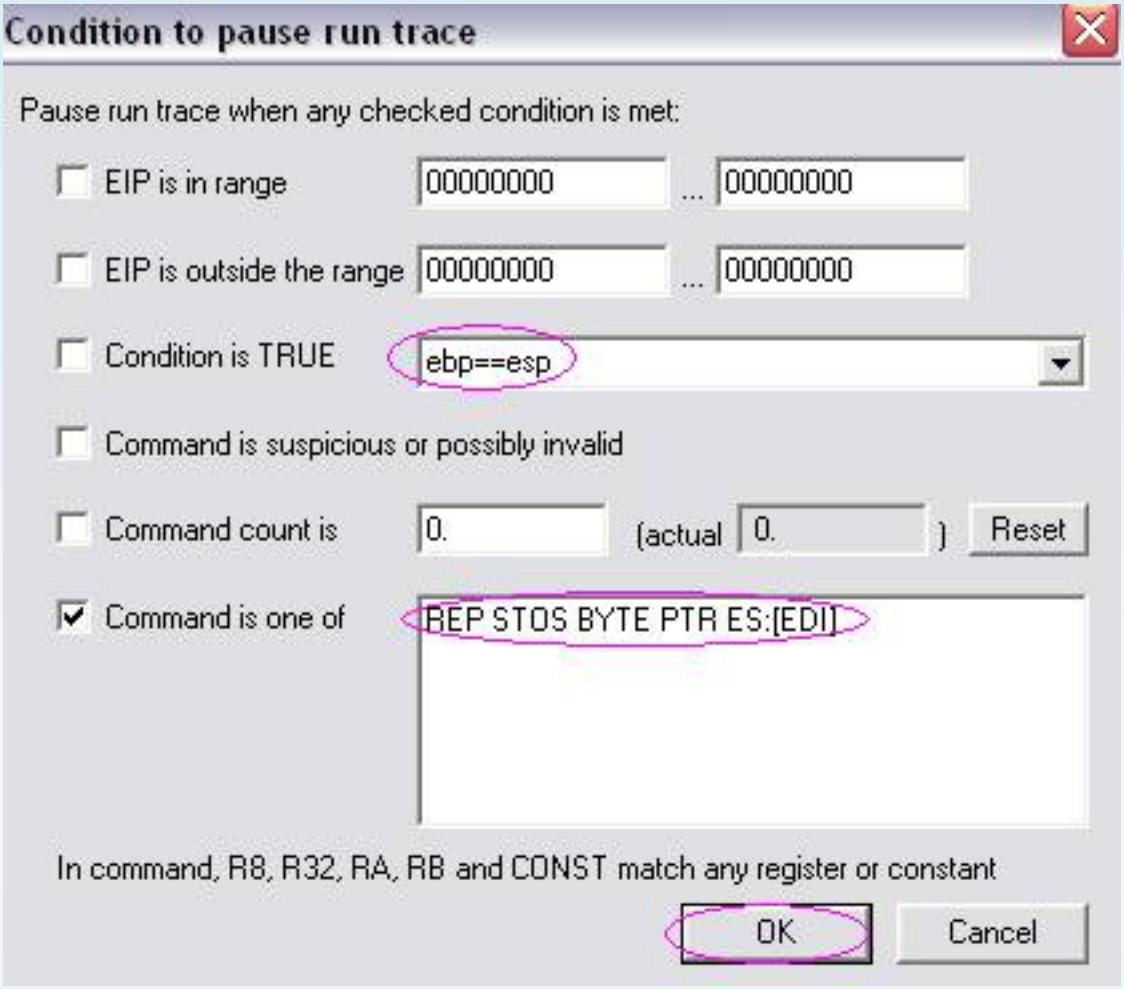
dumped_.exe ... create a new file is not run, we need to find to fix Stolen Bytes

Stolen Bytes

load the program in OllyDbg, press Shift + F9 to-1 times before running the program, set break points at RETN order, press Shift + F9 ... to press Alt + M, set the following breakpoint



close window Memory map, press Ctrl + T command REP STOS BYTE PTR ES: [EDI] like



click OK, press Ctrl + F11 to wait a bit and we code to the

```
00AB5CEB
F3: AA
REP STOS
BYTE PTR
ES:
[EDI] =>
you are
here
00AB5CED
9D POPFD
00AB5CEE
5F POP
EDI
00AB5CEF
59 POP
ECX
00AB5CF0
```

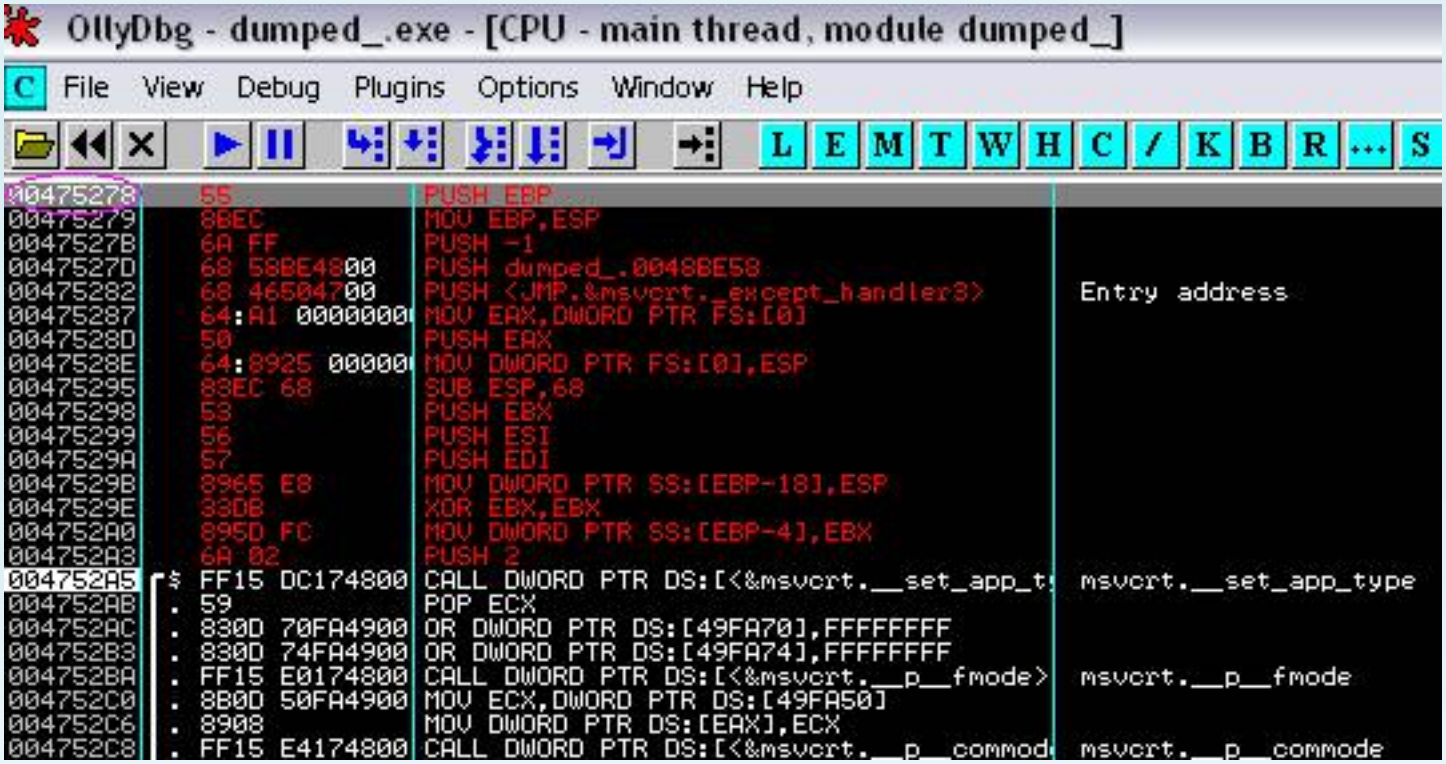
C3 RETN

here select View / Run trace, dragging down the bottom, note the value ebp = esp

```
00AB78C7 ADC ESI,9320CB10                ESI=5F562A59
00AB78CD PREFIX REPNE:
00AB78D1 SUB ESI,DWORD PTR SS:[ESP+38]   ESI=5F161A59
00AB78D5 POP ESI                         ESP=0012FFC4, ESI=77F5166A
00AB78D6 PREFIX REP:
00AB78DB PUSH EBP                        ESP=0012FFC0
00AB78DC MOV EBP,ESP                     EBP=0012FFC0
00AB78DE PUSH -1                         ESP=0012FFBC
00AB78E0 PUSH 48BE58                     ESP=0012FFB8
00AB78E5 PUSH 475046                     ESP=0012FFB4
00AB78EA MOV EAX,DWORD PTR FS:[0]        EAX=0012FFE0
00AB78F0 PREFIX REP:
00AB78F5 PUSH EAX                        ESP=0012FFB0
00AB78F6 MOV DWORD PTR FS:[0],ESP
00AB78FD SUB ESP,68                      ESP=0012FF48
00AB7900 PREFIX REP:
00AB7905 PUSH EBX                        ESP=0012FF44
00AB7906 PREFIX REP:
00AB790B PUSH ESI                        ESP=0012FF40
00AB790C PREFIX REP:
00AB7911 PUSH EDI                        ESP=0012FF3C
00AB7912 MOV DWORD PTR SS:[EBP-18],ESP
00AB7915 XOR EBX,EBX                     EBX=00000000
00AB7917 MOV DWORD PTR SS:[EBP-4],EBX
00AB791A PUSH 2                          ESP=0012FF38
```

....

edit the file as follows dumped_.exe



Deluxe LordPE use change Entry Point EP = EP = 752A5 to 75,278 ... save your changes ... PE rebuild to reduce the file size ... belgium hours dumped_.exe file running good conduct can crack

greetings

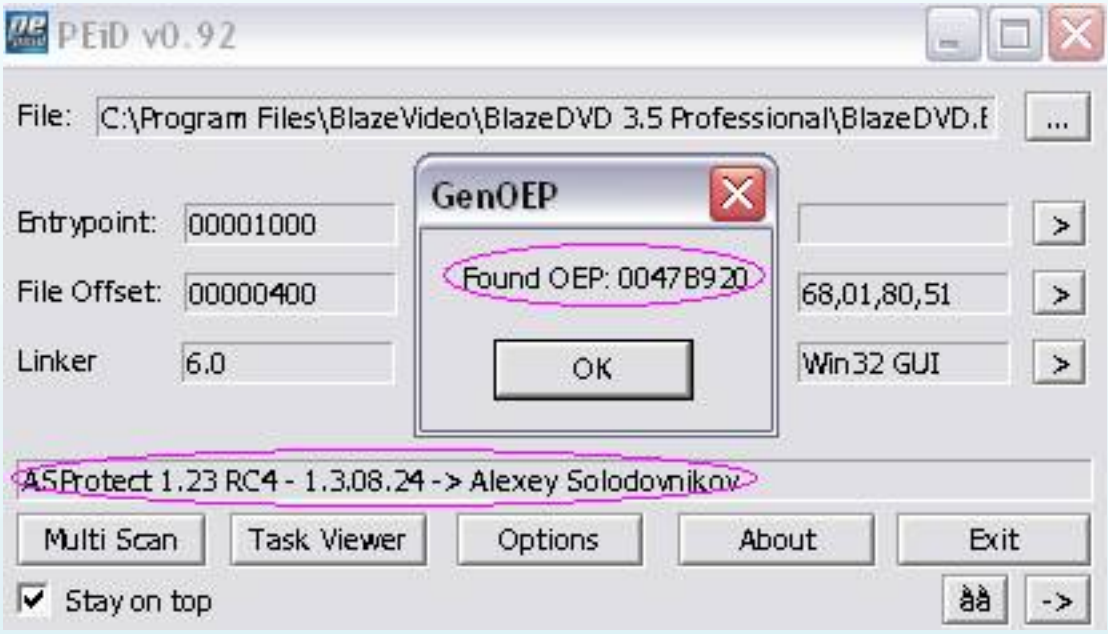
If you have questions, Remarks about this tutorial, mail me

dqtlncrk@gmail.com

How to unpack ASProtect

by dqtln from Phudu Cracker Team
Vietnam 2004
http://www.phudu.com

Victim: BlazeDVD 3.5 Professional packed with ASProtect 1:23 RC4 - 1.3.08.24 -> Alexey Solodovnikov from http://www.blazevideo.com
Homepage: http://www.aspack.com
Tools: 1:10 OllyDbg, PEiD 0.92, LordPE Deluxe, Import REConstructor 1.6 Final
Unpack the file: BlazeDVD.EXE
Unpacked by dqtln
11h37 AM Thursday December 19 2004
PEiD we use programs that are compressed using ASProtect 1:23 RC4 - 1.3.08.24 -> Alexey Solodovnikov, OEP = 47B920 (which the flight) and LordPE Deluxe for the Flags of the following



[Section Table]

Name	VOffset	VSize	ROffset	RSize	Flags
	00001000	000A2000	00000400	00040E00	C0000040
	000A3000	00003000	00041200	00001800	C0000040
	000A6000	0001F000	00042A00	00008E00	C0000040
	000C5000	0001A000	0004B800	00004600	C0000040
.rsrc	000DF000	00039000	0004FE00	00008200	C0000040
.data	00118000	0001F000	00058000	0001EA00	C0000040
.adata	00137000	00001000	00076A00	00000000	C0000040

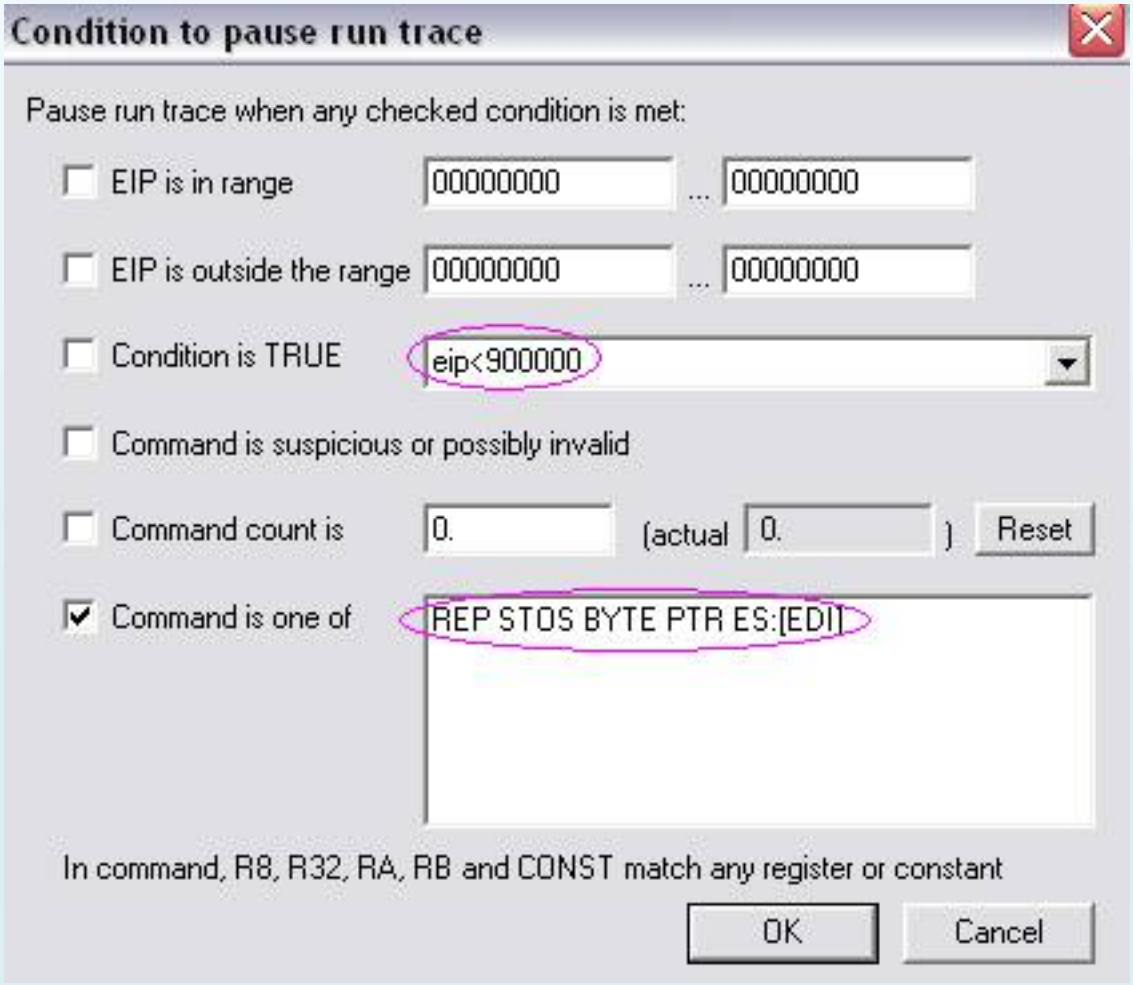
load the program in OllyDbg, press the Shift + F9 until the program runs about 29 times the OllyDbg notification header problems, not the stars ... load it in OllyDbg, press Shift + F9 to-1 times, before the run, we stop at the following code

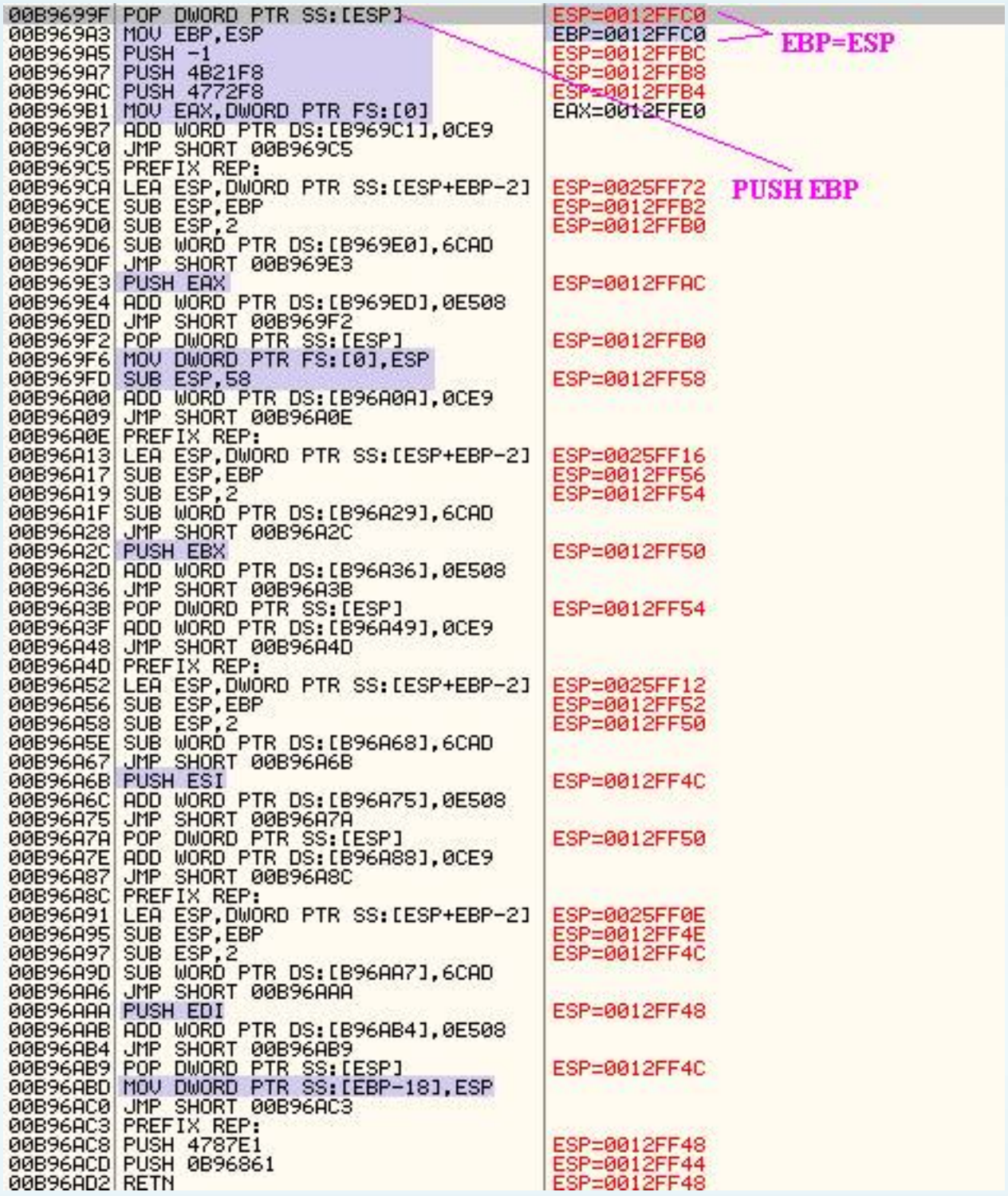
```
00B839EC 3100 XOR DWORD
PTR DS: [EAX], EAX => are
here
00B839EE 64:8 F05 00000000
POP DWORD PTR FS: [0]
..................... here
are some
lines .....................
00B83A26 FF75 EC PUSH
DWORD PTR SS: [EBP-14]
C3 RETN 00B83A29 => set
breakpoint here
```

set break points at RETN order, press Shift + F9, press Alt + F1 command all eip <900,000, hit enter and wait a bit to the right will OEP = 4787E1 ... above 00 is 38 bytes, 38 stolen bytes

```
004787BB 0000 ADD BYTE PTR
DS: [EAX], AL
004787BD 0000 ADD BYTE PTR
DS: [EAX], AL
..................... here
are some
lines .....................
004787DF 0000 ADD BYTE PTR
DS: [EAX], AL
004787E1 FF15 44634A00
CALL DWORD PTR DS:
[4A6344] => are here OEP
004787E7 33D2 XOR EDX, EDX
004787E9 8AD4 MOV DL, AH
004787EB 8915 38BF4D00 MOV
DWORD PTR DS: [4DBF38],
EDX
```

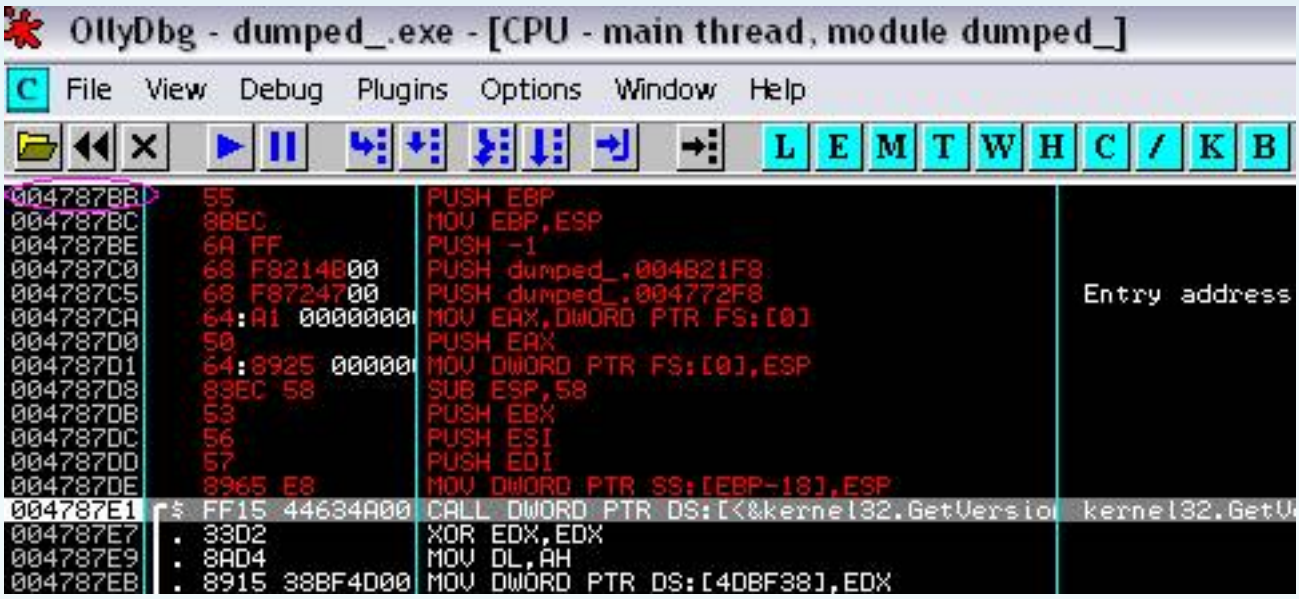
Stolen find Bytes tutorial as 12, see pictures


Condition to pause run trace
Pause run trace when any checked condition is met:
EIP is in range
00000000
...
00000000
EIP is outside the range
00000000
...
00000000
Condition is TRUE
eip<900000
Command is suspicious or possibly invalid
Command count is
0.
(actual
0.
)
Reset
Command is one of
REP STOS BYTE PTR ES:[EDI]
In command, R8, R32, RA, RB and CONST match any register or constant
OK
Cancel




```
00B9699F  POP DWORD PTR SS:[ESP]                    ESP=0012FFC0
00B969A3  MOV EBP,ESP                               EBP=0012FFC0
00B969A5  PUSH -1                                   ESP=0012FFBC
00B969A7  PUSH 4B21F8                               ESP=0012FFB8
00B969AC  PUSH 4772F8                               ESP=0012FFB4
00B969B1  MOV EAX,DWORD PTR FS:[0]                  EAX=0012FFE0
00B969B7  ADD WORD PTR DS:[B969C1],0CE9
00B969C0  JMP SHORT 00B969C5
00B969C5  PREFIX REP:
00B969CA  LEA ESP,DWORD PTR SS:[ESP+EBP-2]          ESP=0025FF72
00B969CE  SUB ESP,EBP                               ESP=0012FFB2
00B969D0  SUB ESP,2                                 ESP=0012FFB0
00B969D6  SUB WORD PTR DS:[B969E0],6CAD
00B969DF  JMP SHORT 00B969E3
00B969E3  PUSH EAX                                  ESP=0012FFAC
00B969E4  ADD WORD PTR DS:[B969ED],0E508
00B969ED  JMP SHORT 00B969F2
00B969F2  POP DWORD PTR SS:[ESP]                    ESP=0012FFB0
00B969F6  MOV DWORD PTR FS:[0],ESP
00B969FD  SUB ESP,58                                ESP=0012FF58
00B96A00  ADD WORD PTR DS:[B96A0A],0CE9
00B96A09  JMP SHORT 00B96A0E
00B96A0E  PREFIX REP:
00B96A13  LEA ESP,DWORD PTR SS:[ESP+EBP-2]          ESP=0025FF16
00B96A17  SUB ESP,EBP                               ESP=0012FF56
00B96A19  SUB ESP,2                                 ESP=0012FF54
00B96A1F  SUB WORD PTR DS:[B96A29],6CAD
00B96A28  JMP SHORT 00B96A2C
00B96A2C  PUSH EBX                                  ESP=0012FF50
00B96A2D  ADD WORD PTR DS:[B96A36],0E508
00B96A36  JMP SHORT 00B96A3B
00B96A3B  POP DWORD PTR SS:[ESP]                    ESP=0012FF54
00B96A3F  ADD WORD PTR DS:[B96A49],0CE9
00B96A48  JMP SHORT 00B96A4D
00B96A4D  PREFIX REP:
00B96A52  LEA ESP,DWORD PTR SS:[ESP+EBP-2]          ESP=0025FF12
00B96A56  SUB ESP,EBP                               ESP=0012FF52
00B96A58  SUB ESP,2                                 ESP=0012FF50
00B96A5E  SUB WORD PTR DS:[B96A68],6CAD
00B96A67  JMP SHORT 00B96A6B
00B96A6B  PUSH ESI                                  ESP=0012FF4C
00B96A6C  ADD WORD PTR DS:[B96A75],0E508
00B96A75  JMP SHORT 00B96A7A
00B96A7A  POP DWORD PTR SS:[ESP]                    ESP=0012FF50
00B96A7E  ADD WORD PTR DS:[B96A88],0CE9
00B96A87  JMP SHORT 00B96A8C
00B96A8C  PREFIX REP:
00B96A91  LEA ESP,DWORD PTR SS:[ESP+EBP-2]          ESP=0025FF0E
00B96A95  SUB ESP,EBP                               ESP=0012FF4E
00B96A97  SUB ESP,2                                 ESP=0012FF4C
00B96A9D  SUB WORD PTR DS:[B96AA7],6CAD
00B96AA6  JMP SHORT 00B96AAA
00B96AAA  PUSH EDI                                  ESP=0012FF48
00B96AAB  ADD WORD PTR DS:[B96AB4],0E508
00B96AB4  JMP SHORT 00B96AB9
00B96AB9  POP DWORD PTR SS:[ESP]                    ESP=0012FF4C
00B96ABD  MOV DWORD PTR SS:[EBP-18],ESP
00B96AC0  JMP SHORT 00B96AC3
00B96AC3  PREFIX REP:
00B96AC8  PUSH 4787E1                               ESP=0012FF48
00B96ACD  PUSH 0B96861                              ESP=0012FF44
00B96AD2  RETN                                      ESP=0012FF48
```

after dumped and fixed IAT, edit image files as follows dumed_.exe and Deluxe LordPE change Entry Point EP = EP = 787E1 to 787BB ... save your changes ... PE rebuild to reduce the file size ... belgium hours dumped_.exe file running good conduct can crack

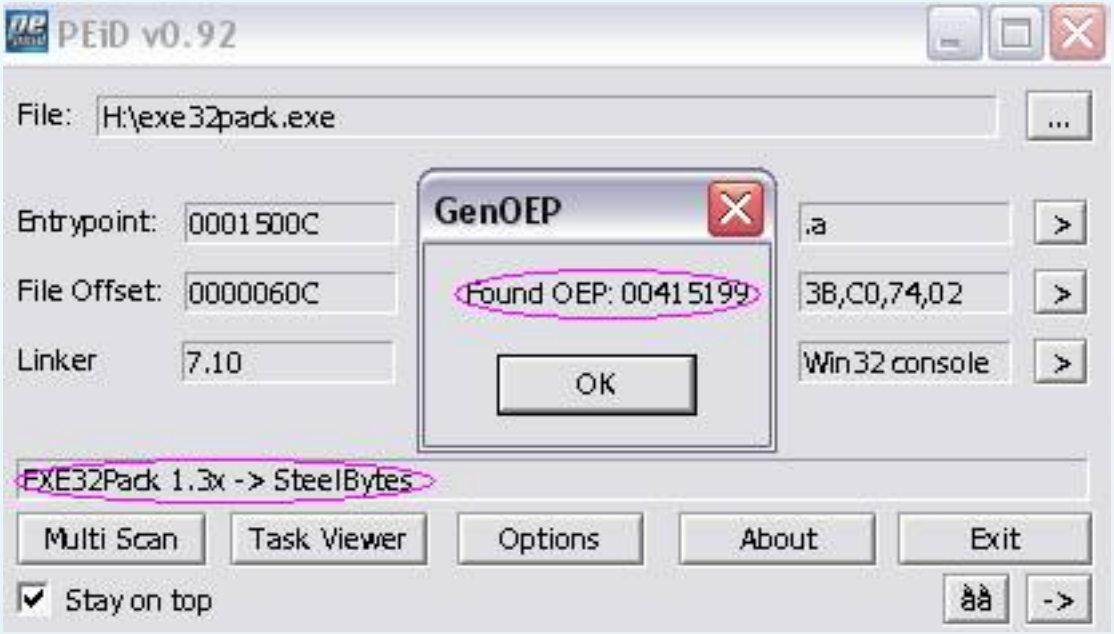


greetings
If you have questions, Remarks about this tutorial, mail me
dqtlncrk@gmail.com

How to unpack exe32pack

by dqtln from Phudu Team
Vietnam 2005
http://www.phudu.com

Victim: exe32pack 1:42
Homepage: http://www.steelbytes.com
Tools: 1:10 OllyDbg, PEiD 0.92, LordPE Deluxe, Import REConstructor 1.6 Final
Unpack the file: exe32pack.exe
Unpacked by dqtln
12h30 am Thursday January 03 2005
PEiD we use programs that are compressed using EXE32Pack 1.3x -> SteelBytes, OEP = 415,199 (which the flight) and LordPE Deluxe for the Flags of the following



[Section Table]

Name	VOffset	VSize	ROffset	RSize	Flags
.text	00001000	0000D71E	00000000	00000000	C0000080
.rdata	0000F000	0000190E	00000000	00000000	C0000080
.data	00011000	00002C08	00000000	00000000	C0000080
.rsrc	00014000	00000440	00000200	000003F0	400000C0
.a	00015000	0000D0ED	00000600	0000ABF9	600000E0

load the program in OllyDbg, we must press F8 mỏi hand to run new programs ... setting breakpoint on JE orders, if any orders jumped repeating the breakpoint is set under the command ... after a very long time, we will take command JMP EAX finally ... it jump to OEP đấy
however dqtln have found ways to help OEP faster hehe ... after stops in EP, press Ctrl + B, enter 8F 85, we came here

```
004150DF 8F85
273C4000 POP
DWORD PTR SS:
[EBP +403 C27] =>
are here, set
breakpoint here
004150E5 3BF6 Cmp
ESI, ESI
004150E7 74 02 JE
SHORT
exe32pac.004150EB
```

breakpoint in the set, press F9 ... remove breakpoint ... press Ctrl + B, enter FF E0, we came here

```
0041513A 83FF E0
Cmp EDI, -20 =>
are here
0041513D 0050 01
ADD BYTE PTR
DS: [EAX +1], DL
00415140 000E
ADD BYTE PTR
DS: [ESI], CL
00415142 7F 00 JG
SHORT
exe32pac.00415144
```

press Ctrl + G, enter the 41513B, an increase the value that we see as follows

```
0041513B FFE0
JMP EAX => are
here, set breakpoint
here
0041513D 0050 01
ADD BYTE PTR
DS: [EAX +1], DL
00415140 000E
ADD BYTE PTR
DS: [ESI], CL
00415142 7F 00 JG
SHORT
exe32pac.00415144
```

breakpoint in the set, press F9 ... remove breakpoint ... press F8 one time only ... press Ctrl + B, enter FF E0, press Ctrl + L until OllyDbg report found no more, we found as follows

```
0042015A
BF
FFE0B801
MOV EDI,
1B8E0FF
=> are here
0042015F
0000 ADD
BYTE PTR
DS: [EAX],
AL
00420161
003B ADD
BYTE PTR
DS: [EBX],
BH
C9 LEAVE
00420163
```

press Ctrl + G, enter the 42015B, an increase the value that we see as follows

```
0042015B FFE0
JMP EAX => are
here, set breakpoint
here
0042015D b8
01000000 MOV
EAX, 1
00420162 3BC9
Cmp ECX, ECX
00420164 74 02 JE
SHORT
exe32pac.00420168
```

breakpoint in the set, press F9 ... remove breakpoint ... press F8 one time only one day to OEP = 407F0E ... & dumped fixed the IAT as easy tutorials before ... unpack dqtln tried many programs written in MASM, TASM, Visual C + + is compressed using exe32pack 1:42 by this are all ok ... seem not exe32pack 1:42 program should be written in VB, not very clear

greetings

If you have questions, Remarks about this tutorial, mail me
dqtlncrk@gmail.com

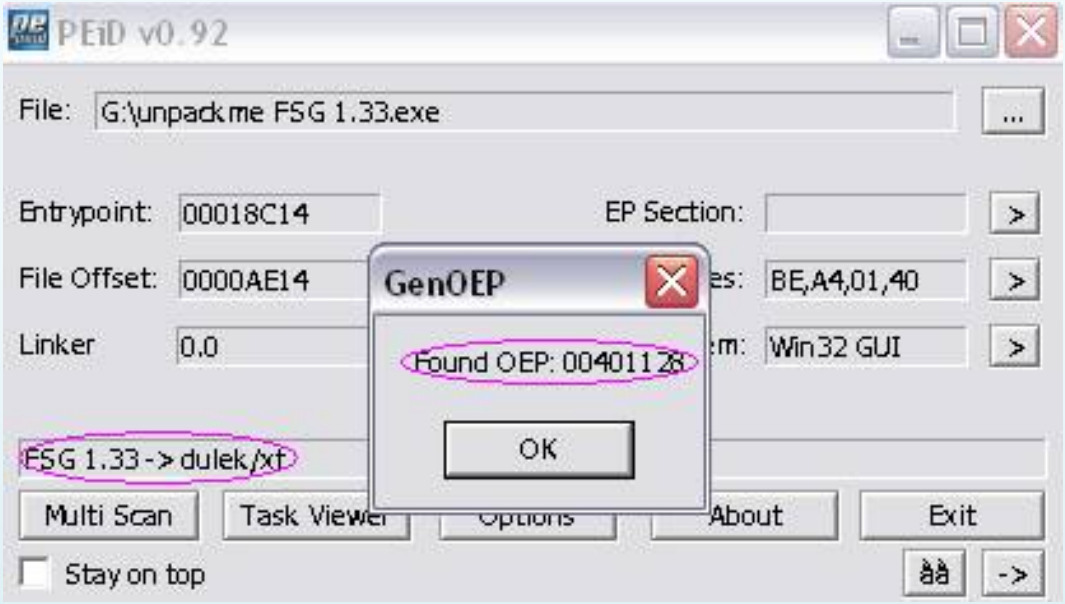
How to unpack FSG

by dqtln from Phudu Cracker Team

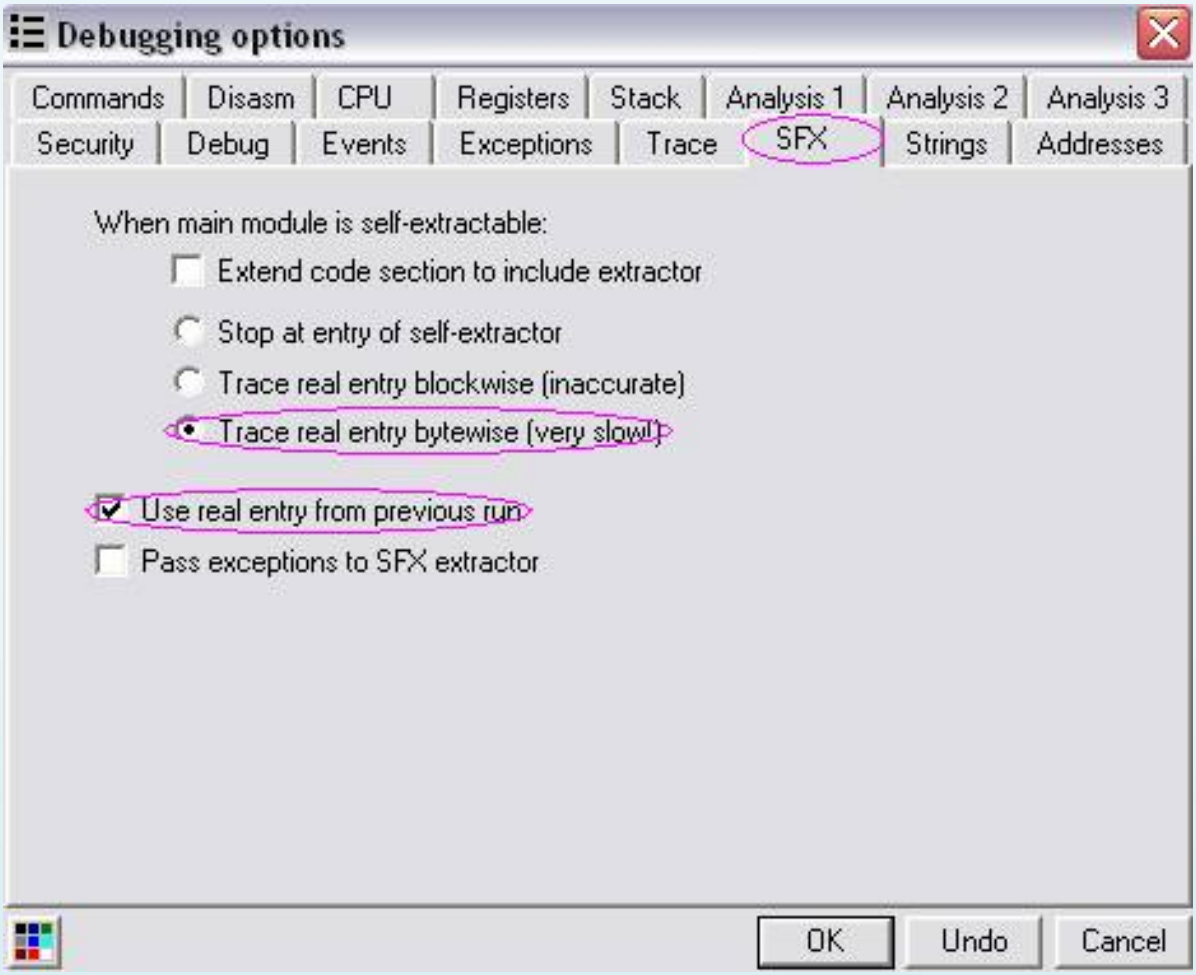
Vi

Homepage: http://www.phudu.com
Tools: 1:10 OllyDbg, PEiD 0.92, LordPE Deluxe, Import REConstructor 1.6 Final
Unpack the file: unpackme FSG 1.33.exe
Unpacked by dqtln

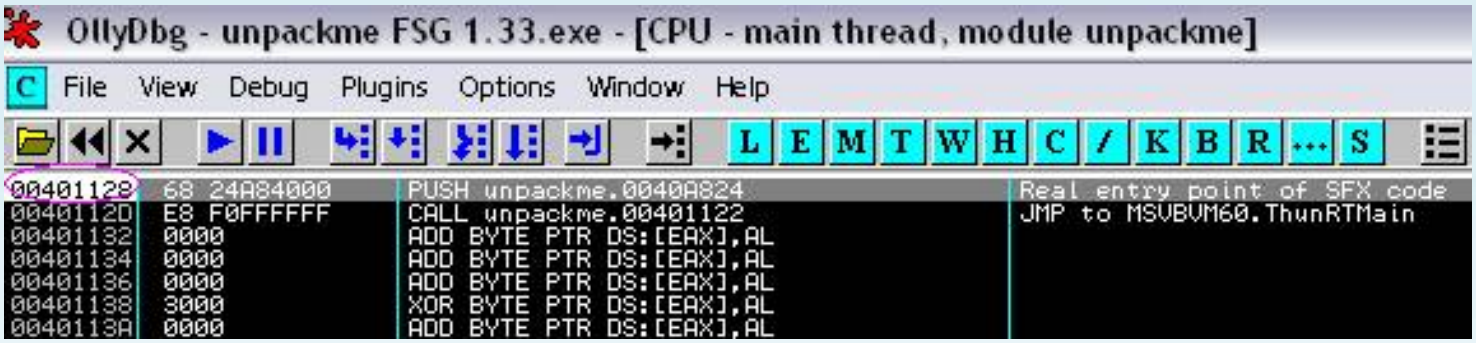
PEiD we use programs that are compressed with FSG 1:33 -> dulek / XT and OEP = 401128



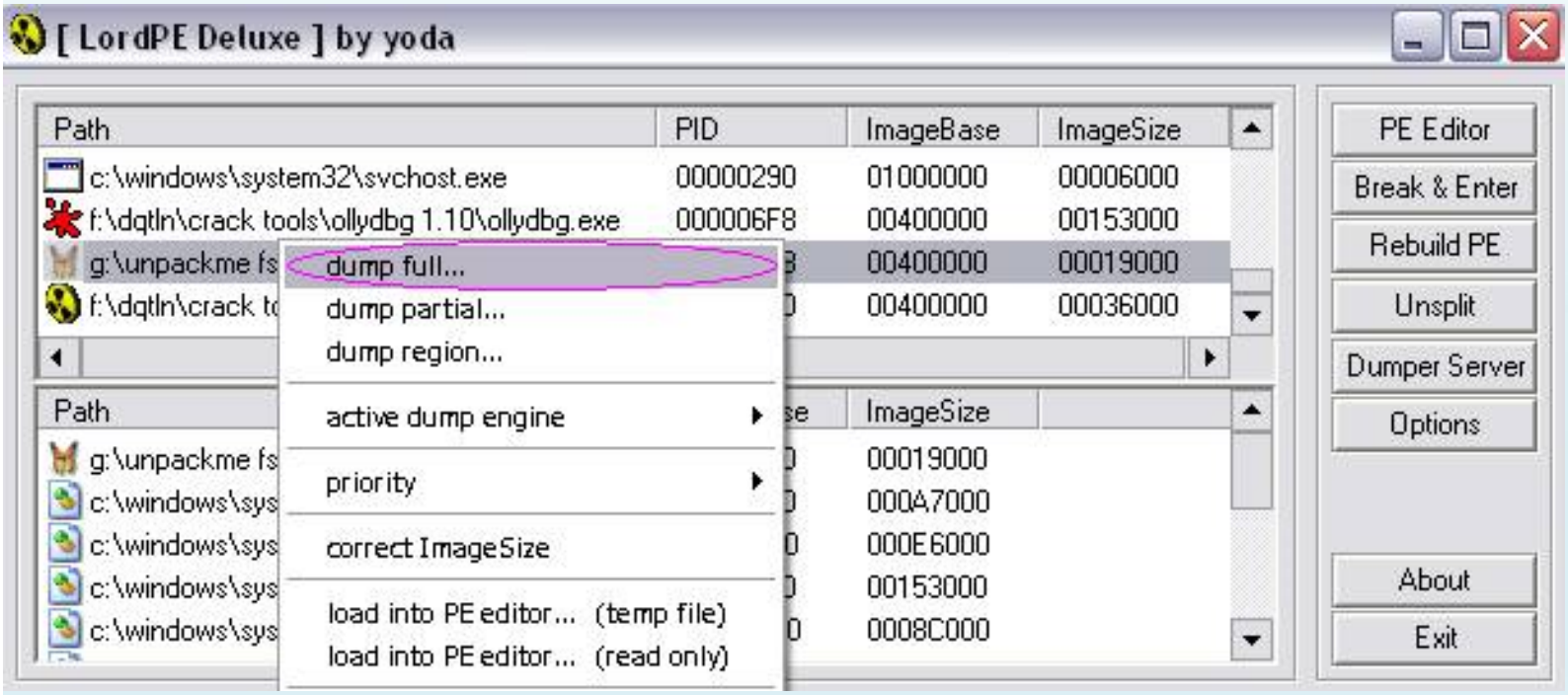
OllyDbg configuration as follows



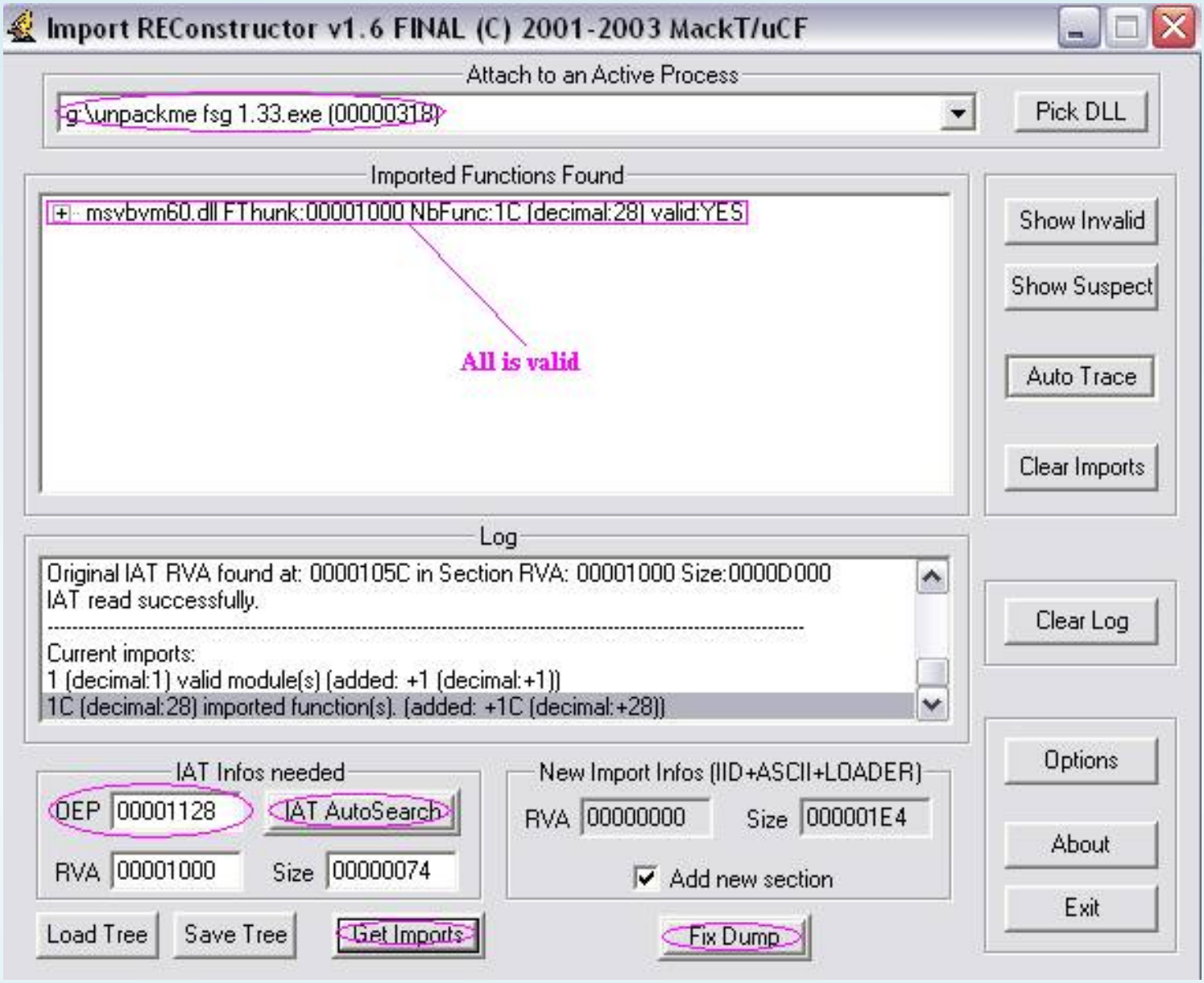
unpackme load in OllyDbg and wait a little, we will stop at OEP = 401128



here used LordPE Deluxe memory dump file created dumped.exe the following



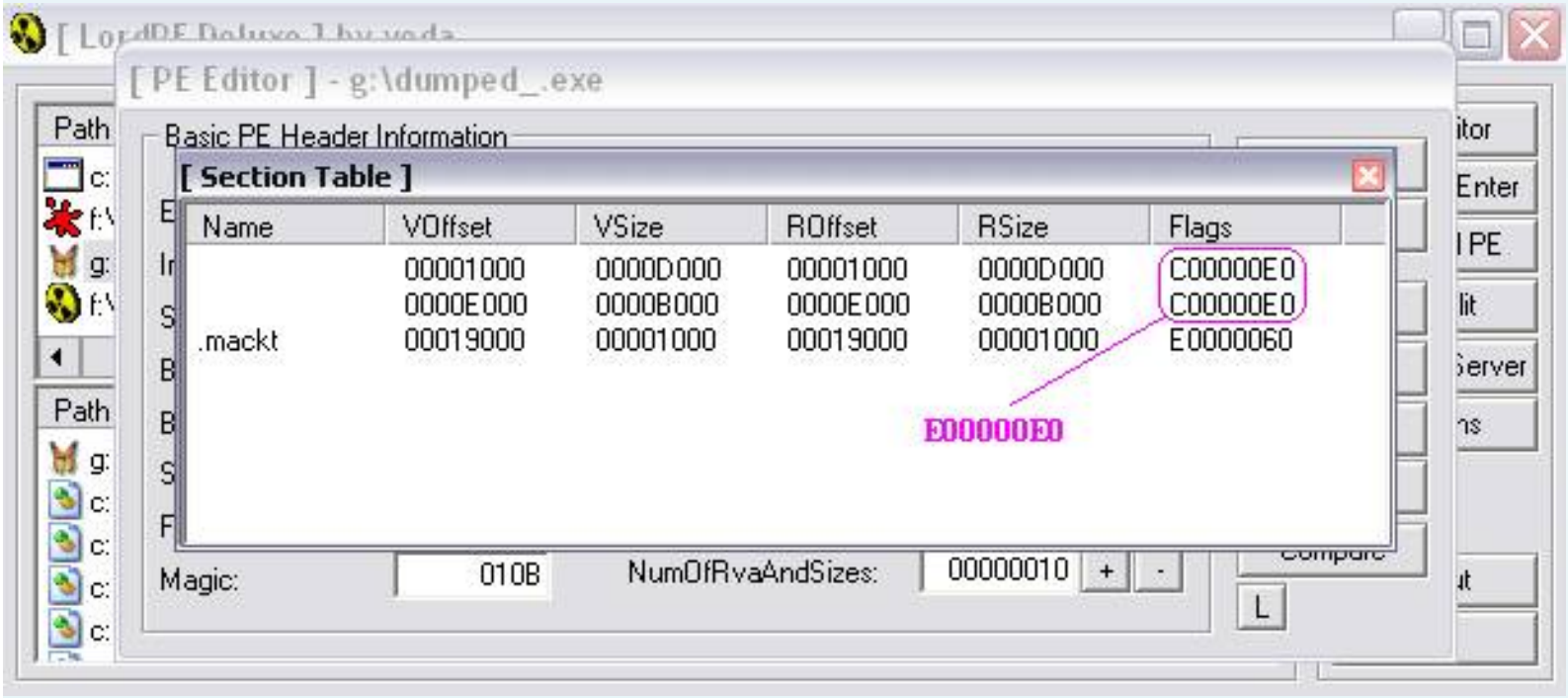
run file dumped.exe drilling because it will crash ... we need to use Import REConstructor to fix errors ... changes OEP = 1128 ... IAT AutoSearch click, click Get more Imports and finally click Fix dump, select File dumped.exe to create the file dumped_.exe



test file dumped_.exe see good work ... normal after the dump file typically has the code of garbage packer, we can use Deluxe LordPE to reduce the size of the file ... however when clicking rebuild PE program will crash ... we need to change all of the Flags

Tweaking the dump

IMAGE_SCN_CNT_CODE 0x00000020 Section contains executable code
IMAGE_SCN_CNT_INITIALIZED_DATA 0x00000040 Section contains initialized data
IMAGE_SCN_CNT_UNINITIALIZED_DATA 0x00000080 Section contains uninitialized data
IMAGE_SCN_MEM_EXECUTE 0x20000000 Section can be executed as code
IMAGE_SCN_MEM_READ 0x40000000 Section can be read
IMAGE_SCN_MEM_WRITE 0x80000000 Section can be written to
0x20 + 0x40 + 0x80 + 0x20000000 + 0x40000000 + 0x80000000 = 0xE00000E0
Deluxe uses LordPE press PE Editor, select File dumped_.exe, click the button to change the Sections and the Flags, click Save, OK, such as following



here you can click rebuild PE to reduce the file size ... Actually, the steps are not needed for our program just run and debug can proceed to crack ... however, learn some knowledge is better: D ... so through our tutorials to learn how to unpack FSG 1:33, a file compression program exe good and free ... FSG - F [AST] S [mall] G [ood]

greetings
If you have questions, Remarks about this tutorial, mail me
dqtln@phudu.com

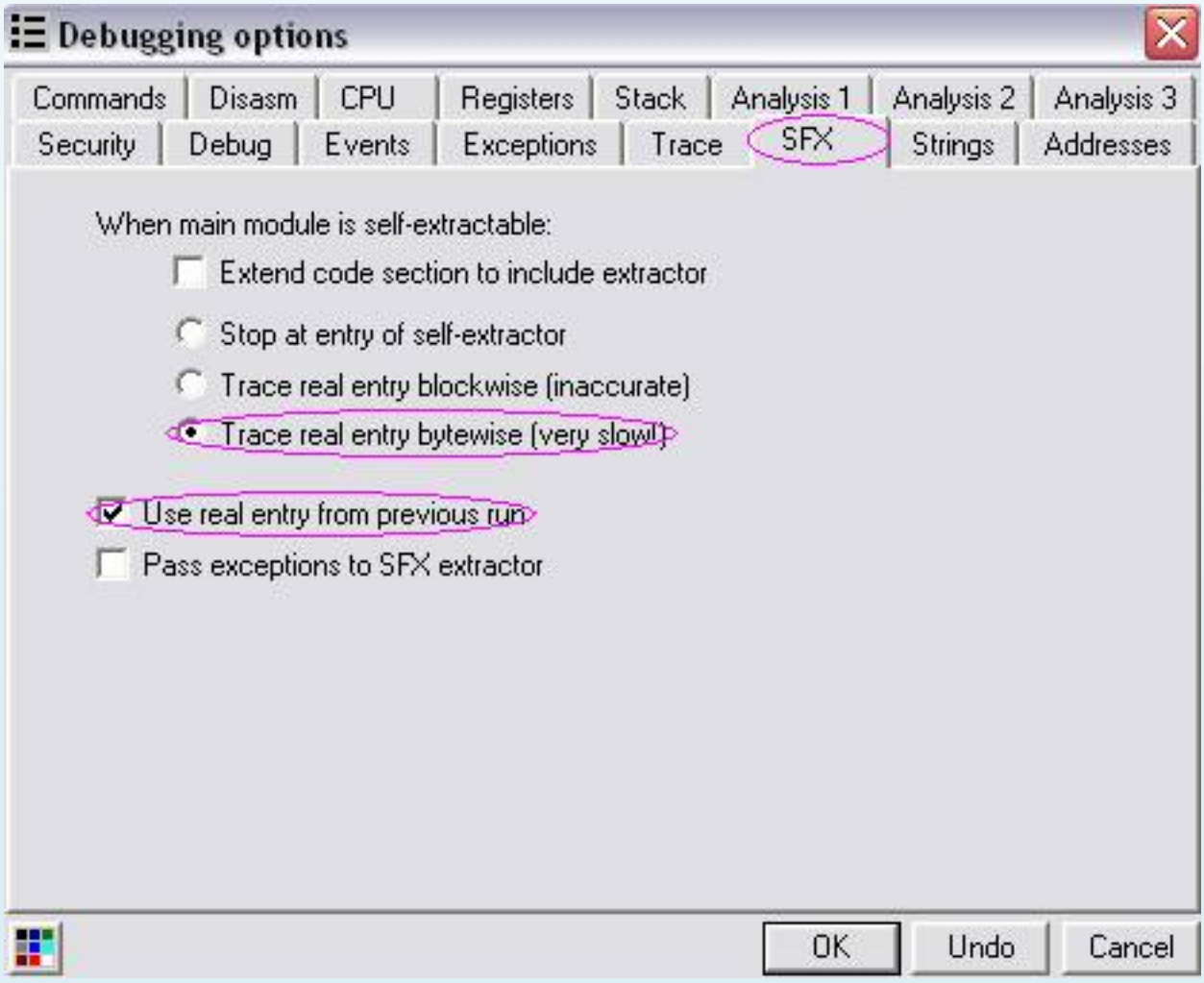
How to unpack FSG

by dqtln from Phudu Cracker Team
Vietnam 2004
http://www.phudu.com

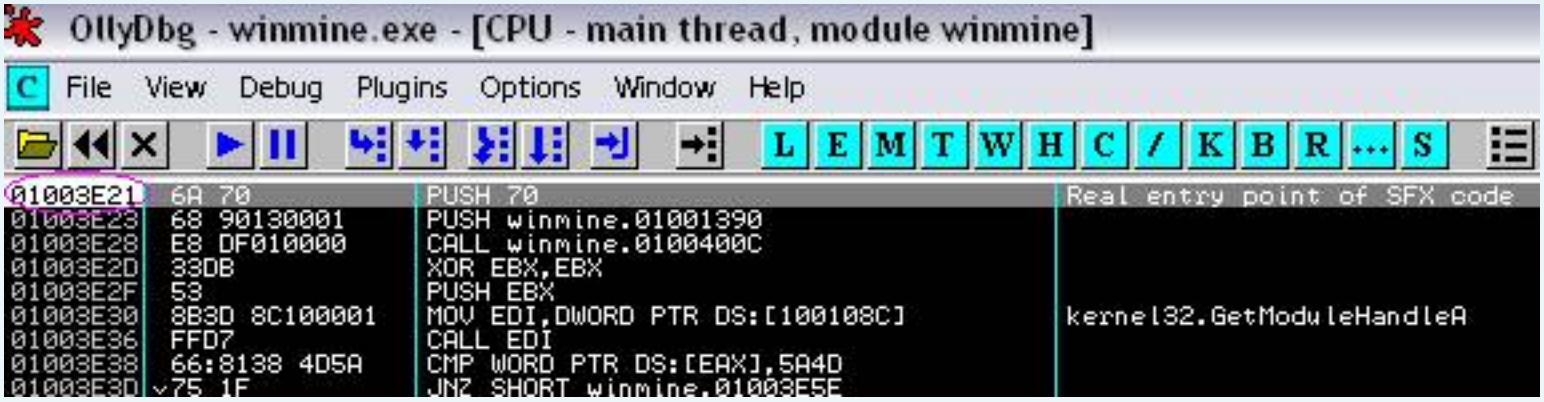
Victim: Minesweeper 5.1 packed with FSG 2.0
Homepage: Copyright © 1981-2001 Microsoft Corporation by Robert Donner and Curt Johnson
Tools: 1:10 OllyDbg, PEiD 0.92, LordPE Deluxe, Import REConstructor 1.6 Final
Unpack the file: winmine.exe
Unpacked by dqtln
first we need to add the following code into the file of PEiD 0.92 userdb.txt to identify it FSG 2.0

```
[FSG 2.0 -> bart / XT]
signature = 87 25? ? ? ? 61 94 55 A4 B6 80 FF 13 73 F9 33 C9 FF 13 73 16 33 C0
FF 13 73 1F B6 80 41 B0
ep_only = true
```

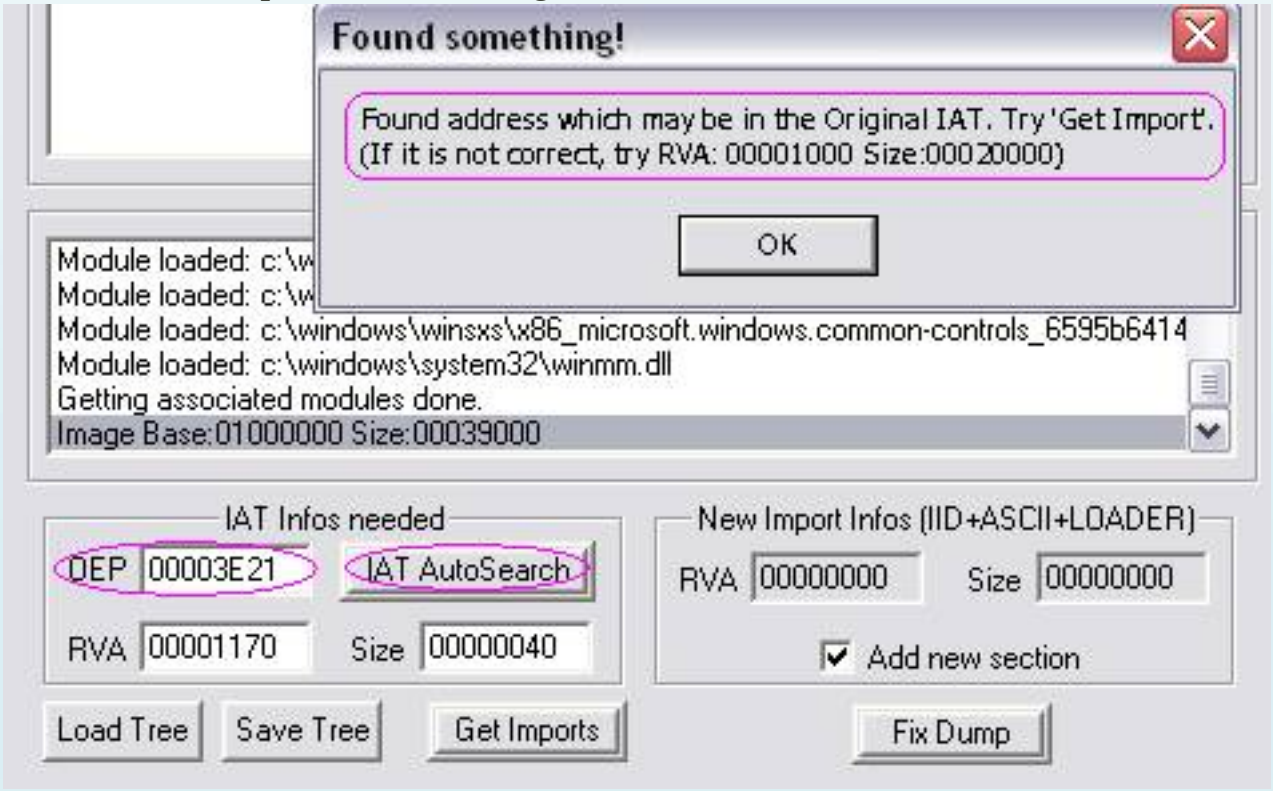
PEiD we use programs that are compressed with FSG 2.0 -> bart / XT and receive not find OEP so we will find it in OllyDbg ... configuration as OllyDbg following



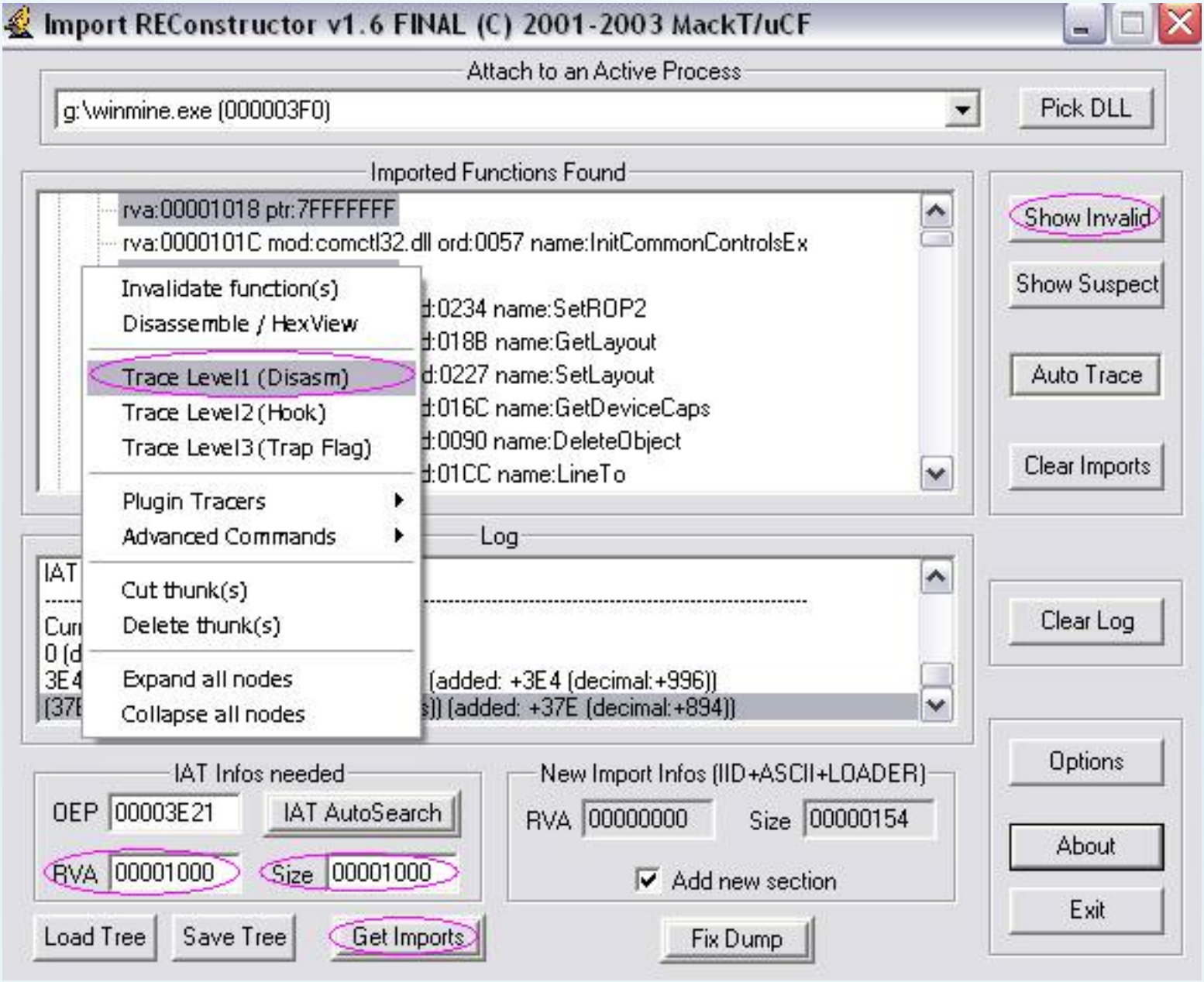
winmine load in OllyDbg and wait a little, we will stop at OEP = 1003E21



here used LordPE Deluxe memory dump file created dumped.exe ... run file dumped.exe drilling because it will crash ... we need to use Import REConstructor to fix errors ... changes OEP = 3E21 ... IAT AutoSearch press as following



if you still do before the tutorial is not ... Import REConstructor we try to RVA: 1000 Size: 20000 ... Size: 20000 is too large, if you like it just try ... here dqtln get Size = 1000 ... then click Get Imports ... Functions are pretty much not to fix ... click ... Show Invalid right click on the rva not fix, select Trace Level1 as following



Import of functions that are REConstructor not fix the code of the garbage packer, right click select Cut thunk (s) to remove it and then click Next Fix dump, select File dumped.exe to create the file dumped_.exe ... check file dumped_.exe running well, but quite large in size by the lot code refuse ... can use LordPE Deluxe, rebuild PE reduce the file size ... so through this tutorial we learn how to unpack FSG 2.0, a file compression program exe good and free ... FSG - F [AST] S [mall] G [ood]

greetings

If you have questions, Remarks about this tutorial, mail me

dqtln@phudu.com

How to unpack PELock

by dqtln from Phudu Team
Vietnam 2005
www.phudu.com

Victim: softwares packed with 1.0x PELock
Homepage: www.pelock.prv.pl
Tools: 1:10 OllyDbg, PEiD 0.93, Final Import REConstructor 1.6, 1.4 IsDebuggerPresent OllyDbgPlugin
Unpack the file: unpackme1.exe
8h06 am Thursday 26 February 2005
PEiD we use programs that are compressed using **PELock 1.0x -> Bartosz Wojcik** ... load the program in OllyDbg press F9, then Shift + F9, try clicking the dqtln 1h also not eat none, including the removal of much of OllyDbgOptions ... Actually, the API IsDebuggerPresent use it to check for program debug running or not, if it has not escaped notice or such other programs that make us always receive each hand ah IsDebuggerPresent used for anti OllyDbgPlugin 1.4 if you have it ... if not do the following load the program in OllyDbg, Right Click / Search for / name in all modules, to find the API IsDebuggerPresent, double click on it, we will come here

```
77E72740> 64: A1 18000000 MOV EAX, DWORD PTR FS: [18] => you are here, set breakpoint here
77E72746 8B40 30 MOV EAX, DWORD PTR DS: [EAX +30]
77E72749 0FB640 02 MOVZX EAX, BYTE PTR DS: [EAX +2] => eax = 0 if not debug the program, now in its 1
77E7274D C3 RETN
```

after the set break points in 77E72740, press F9, OllyDbg will end ... remove breakpoint, press F8 to see it 77E72749 will bring value to 1 to record eax, ie programs are run debug ... change the value 0, then press F9 ... continue to press the Shift + F9 until the program runs ... do the above steps, press Shift + F9 to-1 before running the program, we found as follows

```
00324986 8900 MOV DWORD PTR DS: [EAX], EAX => you are here
00324988 EB 03 JMP SHORT 0032498D
0032498A
```

```
DBE3
FINIT
0032498C
61 POPAD
0032498D
EB 02 JMP
SHORT
00324991
0032498F
CD 20 INT
20
00324991
EB 02 JMP
SHORT
00324995
```

here, press Alt + M, set the memory breakpoint tutorials before ... Return to the main window OllyDbg, press Shift + F9 one time only one to OEP = 401002, this is only a temporary stop OEP, OEP has actually encrypted

```
00401000 05 82 =>
OEP has actually
encrypted ... 2 Stolen
Bytes
00401002? E8
CF040000 CALL
unpackme.004014D6
=> OEP
00401007? A3
CA204000 MOV
DWORD PTR DS:
[4020CA], EAX
0040100C. 6A 00
PUSH 0
0040100E. 68
E3204000 PUSH
unpackme.004020E3;
ASCII "No need to
disasm the code!"
00,401,013th E8
76040000 CALL
```

```
unpackme.0040148E
```

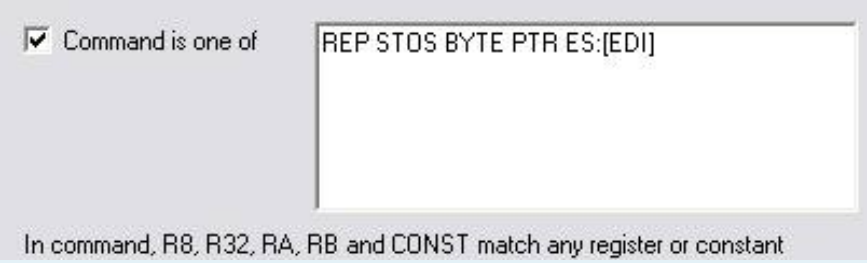
OEP at press Ctrl + B to enter FF 25 for rva start and size as the previous tutorials, we are results
OEP: 401002
IATRVA: 403184
IATSize: 104
OEP at OllyDump 2.21.108 OllyDbgPlugin used to create a memory dump file dumped.exe ... here if you use Import REConstructor IAT to fix the many that IAT Import REConstructor not fix the ... there are several ways fix manually but will be quite long, but what is applicable to many REConstructor Import packer that does not fix because you do not trace through this API in OllyDbg, dqtln will be presented later this month

Next we find Stolen Bytes, this step is very important

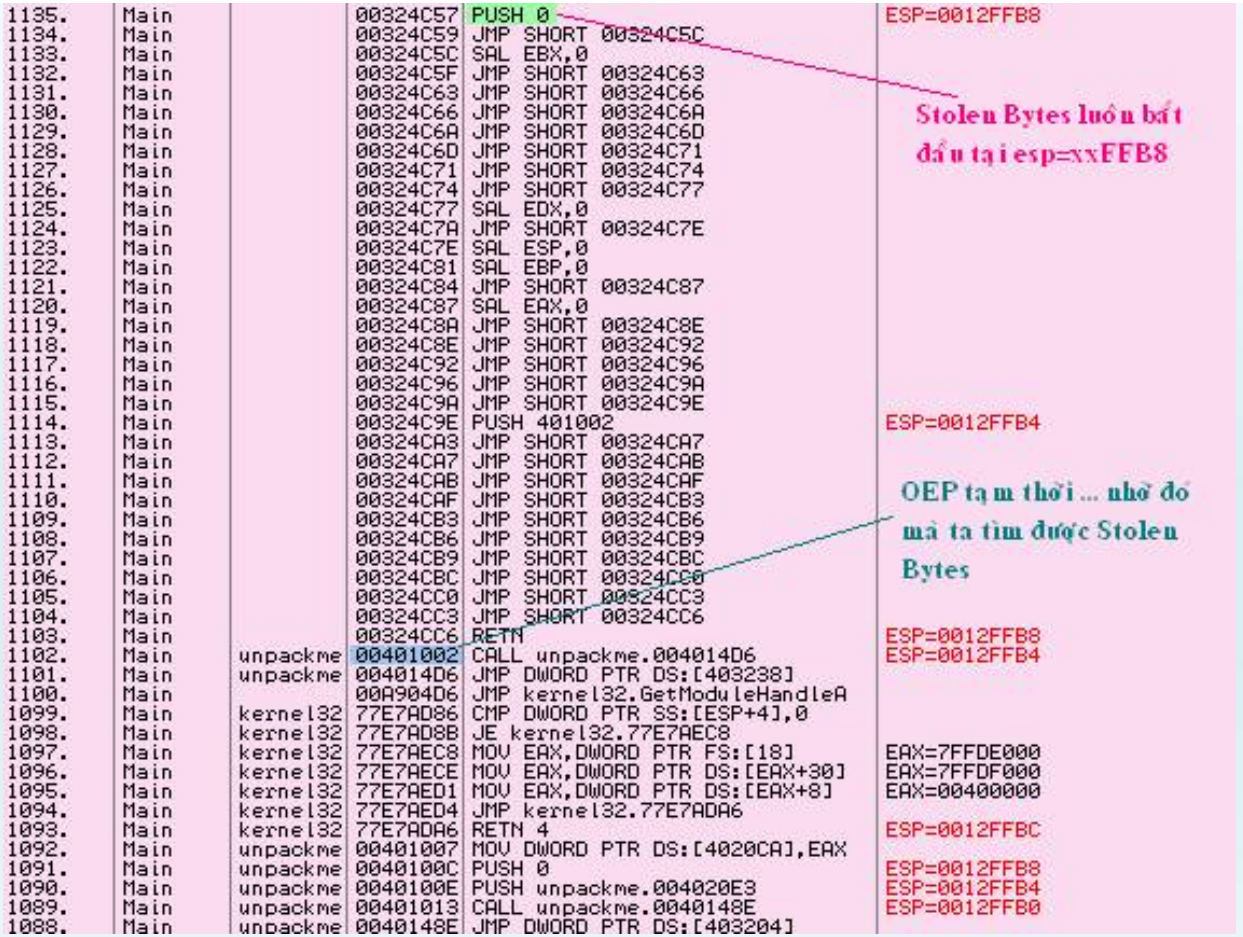
implementation of the above steps, press Shift + F9 to-1 before running the program, we found as follows

```
00324986 8900 MOV DWORD PTR DS: [EAX], EAX => you are here
00324988 EB 03 JMP SHORT 0032498D
0032498A DBE3 FINIT
0032498C 61 POPAD
0032498D EB 02 JMP SHORT 00324991 => set breakpoint here
0032498F CD 20 INT 20
00324991 EB 02 JMP SHORT 00324995
```

set break points in 32498D, press Shift + F9, delete breakpoint ... press Ctrl + T and then enter REP STOS BYTE PTR ES: [EDI] as the following



click OK again OllyDbg main window, press Ctrl + F11 and wait a bit ... OllyDbg when stopped, click View / Run trace we see as follows



so we found Stolen Bytes: PUSH 0 ... dqtln try to do with programs written in MASM, TASM the Stolen Bytes is always PUSH 0

Next we fix IAT using OllyDbg trace through the API to Import REConstructor be identified

configuration OllyDbg: Options / Exceptions / Memory Access indoctrination ... load the program in OllyDbg, anti API IsDebuggerPresent memory, press Shift + F9 to-1 times before to run the program, we found as follows

```
00322EC5 F7F1 DIV ECX => you are here
00322EC7 202B AND BYTE PTR DS: [EBX], CH
00322EC9 C9 LEAVE
..... here are some lines .....
00322ED5 EB 02 JMP SHORT 00322ED9 => set breakpoint here
00322ED7 E5 00 IN EAX, 0; I / O command
```

set break points in 322ED5, press Shift + F9, delete breakpoint ... press Ctrl + F6 enter C1 B 80, we see the following

```
00323B5B F6C1 80 TEST CL, 80 => are here
00323B5E EB 02 JMP SHORT 00323B62
00323B60 CD 20 INT 20
```

00323B62 EB 02 JMP SHORT 00323B66

at 323B5B, Right Click / Breakpoint / Hardware, on execution ... press F9 and then change the value to record the CL 80

continue to do so until the program runs ... Import REConstructor use the following fix

why IATSize = 108 while the one found IATSize = 104 ... the fix is done, load the fix was in the fix we find OllyDbg RVA final fix should not we increase 4 units for more REConstructor Import fix all

greetings

If you have questions, Remarks about this tutorial, mail me

dqtlncrk@gmail.com

How to unpack PESpin

by dqtln from Phudu Team
Vietnam 2005
www.phudu.com

Victim: softwares packed with **0.3 PESpin**
Homepage: pespin.w.interia.pl
Tools: OllyDbg 1:10, OllyDump 2.21.108 OllyDbgPlugin, Import REConstructor 1.6 Final
Unpack the file: winmine.exe XP SP1
12h58 am Tuesday 18 April 2005

```
[PESpin 0.3 -> cyberbob]
signature = EB 01 68 60 E8 00 00 00 00 8B 1C 24 83 C3 12 81 2B E8 B1 06 00 FE 4B FD 82 2C 24 B7 CD 46 00 0B
ep_only = true
```

configuration OllyDbg: Options / debugging options/Exceptions/INT3 breaks ... load the program in OllyDbg, press F8 2 times we came here

```
0102008A 60
PUSHAD
0102008B E8
00000000 CALL
winmine.01020090
=> you are here
01020090 8B1C24
MOV EBX,
DWORD PTR SS:
[ESP]
01020093 83C3 12
ADD EBX, 12
01020096 812B
E8B10600 SUB
DWORD PTR DS:
[EBX], 6B1E8
```

look through the window Registers (FPU), ESP = 6FFA4 see ... note this value, we will use it ... press Shift + F9 until you see the following code

```
010001D9 FFFF? ; Unknown command
=> you are here
010001DB FFFF? ; Unknown command
010001DD FFFF? ; Unknown command
010001DF FFFF? ; Unknown command
```

press Alt + F1, BP LoadLibraryA command, Enter ... OllyDbg again, press Shift + F9, we found as follows

```
77E7D961> 837C2404 00 Cmp DWORD PTR SS: [ESP +4], 0
=> you are here
77E7D966 53 PUSH EBX
77E7D967 56 PUSH ESI
77E7D968 74 19 JE SHORT kernel32.77E7D983
77E7D96A 68 443EE877 PUSH kernel32.77E83E44; ASCII "twain_32.dll"
77E7D96F FF7424 10 PUSH DWORD PTR SS: [ESP +10]
```

```
77E7D973 FF15
9813E677 CALL
DWORD PTR DS:
[<& ntdll._strcmpi>];
ntdll._stricmp
..... here are some
lines .....
77E7D98B E8
B1FFFFFF CALL
kernel32.
LoadLibraryExA
77E7D990 5e POP
ESI
77E7D991 5B POP
EBX
77E7D992 C2 0400
RETN 4
```

remove breakpoint, press F8 over command RETN 4, we found as follows

```
01020A4D 85C0
TEST EAX, EAX;
msvcrt.77C10000
=> you are here
01020A4F 0F84
28060000 JE
winmine.0102107D
01020A55 50 PUSH
EAX
01020A56 E8
C5FCFFFF CALL
winmine.01020720
```

the code in the API will take place ... you find the command JMP DWORD PTR SS: [ESP-4] by pressing Ctrl + B to enter FF6424FC, more pressing Ctrl + L ... order to find the 3rd stop, under the command will order the FAR JMP EAX, we found as follows

```
01020B53 FF6424 FC JMP DWORD PTR SS: [ESP-4] => you are here
01020B57 FFE8 FAR JMP EAX; Illegal use of register
01020B59 0300 ADD EAX, DWORD PTR DS: [EAX]
01020B5B 0000 ADD BYTE PTR DS: [EAX], AL
01020B5D EB 04 JMP SHORT winmine.01020B63
```

press F2 set points in the end, press F9, remove break points (Hardware can put on in the execution) ... move to the morning to order FAR JMP EAX, press Ctrl + E, enter 90EB19 (this change is the default for PESpin 0.3), we found as follows

```
01020B53 FF6424 FC JMP DWORD PTR SS: [ESP-4]; winmine.01020B73 => you are here ... after the break point set, this command will jump to 1020B73 ... it can jump to 1020B58, but with this file is not packed with file ... if it jumps to the 1020B58 we change it to jump on the correct order by FAR JMP EAX to order new OpCodes
```

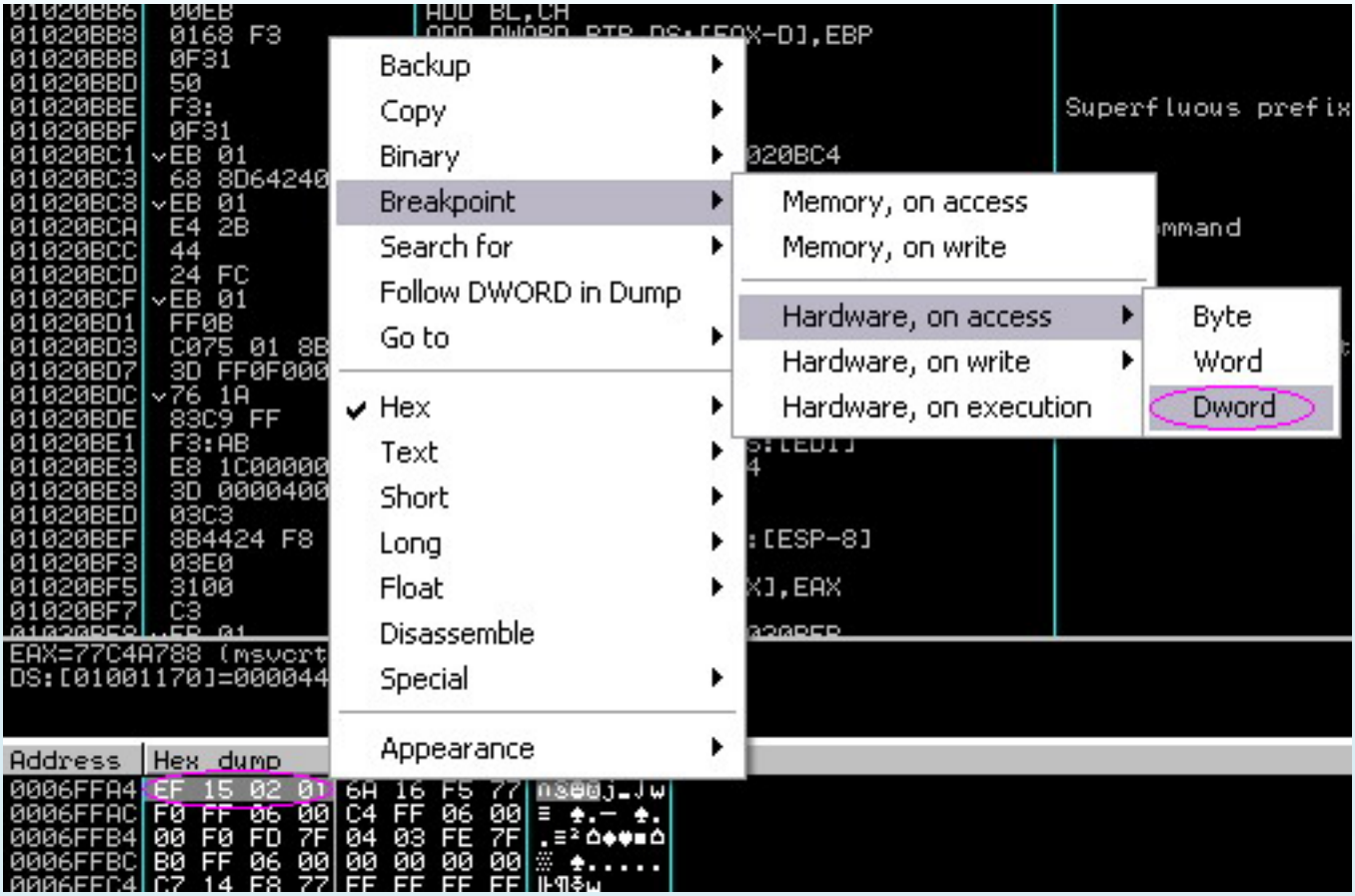
```
90EB19
01020B57 90 NOP
01020B58 EB 19
JMP SHORT
winmine.01020B73
01020B5A 0000
ADD BYTE PTR
DS: [EAX], AL
01020B5C 00EB
ADD BL, CH
01020B5E 04 0F
ADD AL, 0F
01020B60 ^ EB FB
JMP SHORT
winmine.01020B5D
```

press F8 to see the following ... command attention MOV DWORD PTR DS: [EDX], EAX ... OpCodes: 8902

```
01020B73 8902
MOV DWORD PTR
DS: [EDX], EAX;
msvcrt._controlfp =>
you are here ... with
some other files are
compressed, there is
order Call, please
change it to
8902909090
01020B75 EB 01
JMP SHORT
winmine.01020B78
4B DEC EBX
01020B77
01020B78 83C2 04
ADD EDX, 4
01020B7B ^ E9
26FFFFFF JMP
winmine.01020AA6
=> jump back to
continue in the API
```

```
code
01020B80 E8
83661000 CALL
01127208
01020B85 74 01 JE
SHORT
winmine.01020B88
01020B87 C483
C614E987 LES
EAX, FWORD PTR
DS: [EBX +87
E914C6];
modification of
segment register
01020B8D FE? ;
Unknown command
01020B8E FFFF? ;
Unknown command
01020B90 C9
LEAVE
```

you also remember that the value ESP dqtln above ... but the window Hex dump (bottom left), press Ctrl + G to enter and set the breakpoint 6FFA4 as following



after set breakpoint, press F9 will come

01020C0D 6A 70 PUSH 70 => you are here, Stolen Bytes first such
01020C0F EB 01 JMP SHORT winmine.01020C12
01020C11 90 NOP
01020C12 68 90130001 PUSH winmine.01001390
01020C17 EB 01 JMP SHORT winmine.01020C1A
01020C19 ^ E2 E8 LOOPD SHORT winmine.01020C03
01020C1B ED IN EAX, DX; I / O

command
01020C1C 33FE
XOR EDI, ESI
01020C1E FF33
PUSH DWORD
PTR DS: [EBX]
01020C20 DBEB
FUCOMI ST, ST (3)
01020C22 01B2
53EB0115 ADD
DWORD PTR DS:
[EDX +1501 EB53],
ESI
01020C28-E9
0332FEFF JMP
winmine.01003E30
=> jump to OEP
temporary, 1003E30
first byte is 00,
started at 1003E21

here OllyDump 2.21.108 OllyDbgPlugin used to dump the memory ... Import open REConstructor fix IAT, easy because the API Open code
OEP REConstructor = Import 1020C0D - 20C0D = 1000000
RVA = 1000
Size = 1B8
this packed with files Import REConstructor know we have to RVA and Size is correct ... Other files are packed we will have to find Rva and Size in a new (old way to find FF 25 as the first tutorials were no longer useful packer with this) ... please wait in the other tutorials
after IAT fix, run the file, unpack the whole ... however 1020C0D OEP OEP is not original, if you want to edit the original OEP (in fact do not need the steps below) to find the following Stolen Bytes
at 1020C0D PUSH has ordered 70 Stolen Bytes is the first ... JMP command the next (with other OpCodes E9), or submit your 3 bytes as follows

```
01020C0D 6A 70
PUSH 70 => Stolen
Byte
01020C0F 90 NOP
01020C10 90 NOP
01020C11 90 NOP
01020C12 68
90130001 PUSH
winmine.01001390
=> Stolen Byte
01020C17 90 NOP
01020C18 90 NOP
01020C19 90 NOP
01020C1A E8
ED33FEFF CALL
winmine.0100400C
=> Stolen Byte
01020C1F 33DB
XOR EBX, EBX =>
Stolen Byte
01020C21 90 NOP
01020C22 90 NOP
01020C23 90 NOP
01020C24 53 PUSH
EBX => Stolen Byte
01020C25 90 NOP
01020C26 90 NOP
01020C27 90 NOP
01020C28-E9
0332FEFF JMP
winmine.01003E30
=> jump to OEP
temporary, the
original OEP
1003E21
```

1003E21 to change the Stolen Bytes we see the same match ... dump & fix IAT as the
This is a packer to unpack ... now many packer has the encryption APIs are in
thanks **fly & David**

greetings

If you have questions, Remarks about this tutorial, mail me

dqtlncrk@yahoo.com

How to unpack Petite

by dqtln from Phudu Team
Vietnam 2005
http://www.phudu.com

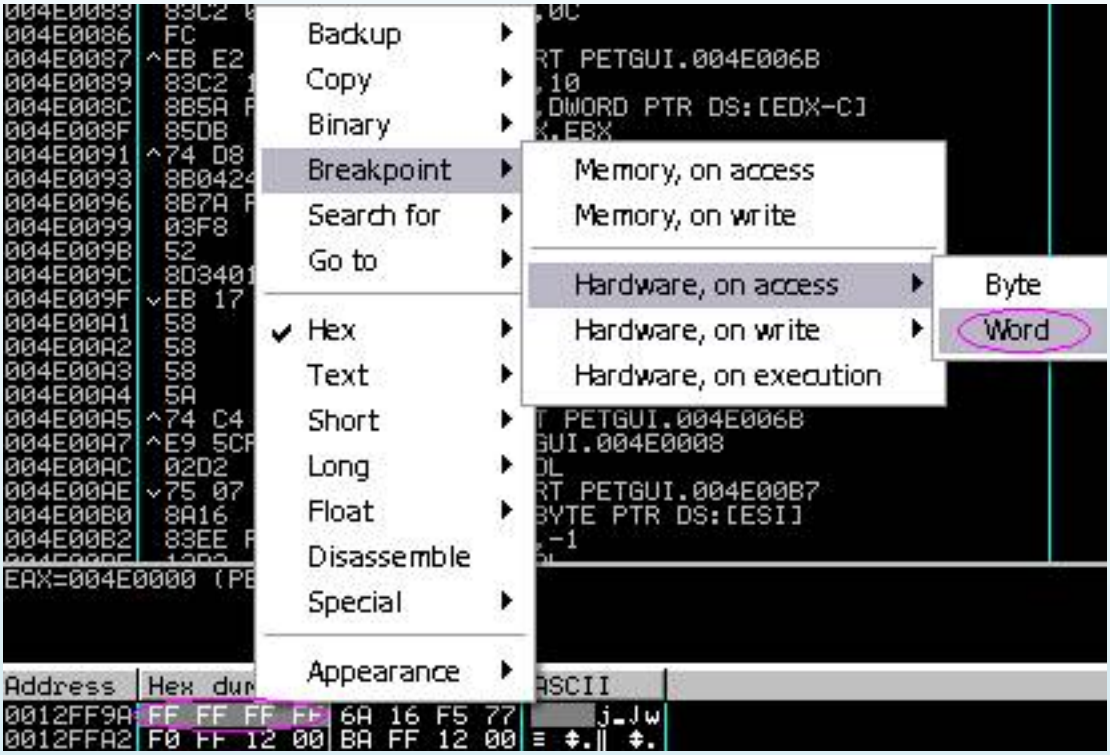
Victim: Petite 2.2
Homepage: http://www.un4seen.com/petite
Tools: 1:10 OllyDbg, PEiD 0.92, LordPE Deluxe, Import REConstructor 1.6 Final
Unpack the file: PETGUI.EXE
Unpacked by dqtln
3h06 AM Tuesday 10 January 2005
PEiD use and LordPE Deluxe informations know ... OEP = 40D3BE - incorrect

[Section Table]

Name	VOffset	VSize	ROffset	RSize	Flags
	00001000	000DE000	00000600	0000CC00	E0000060
	000DF000	00001000	0000D200	00000724	C0000040
	000E0000	000003A2	00000200	00000400	E2000060

load program in OllyDbg, the land at Entry Point EP = 4E0042 ... set breakpoint at PUSHAD, run F9, F8 PUSH EAX arrive ... Right Click ESP / Follow in dump ... Set Breakpoint / Hardware, on access / Word

```
004E0042> b8
00004E00 MOV
EAX,
PETGUI.004E0000
=> land here
004E0047 68
F3534100 PUSH
PETGUI.004153F3
004E004C 64: FF35
00000000 PUSH
DWORD PTR FS:
[0]
004E0053 64:8925
00000000 MOV
DWORD PTR FS:
[0], ESP
004E005A 66:9 C
PUSHFW
004E005C 60
PUSHAD => set
breakpoint here
004E005D 50 PUSH
EAX => F8 arrive
here
004E005E 33DB
XOR EBX, EBX
```



Press F9, Shift + F9, Shift + F9 ... u arrive here

```
004E003D 66:9 D POPFW => land here
004E003F 83C4 08 ADD ESP, 8
004E0042>-E9 31D5F2FF JMP
PETGUI.0040D578 => jump OEP
..... .....
0040D578 55 PUSH EBP => = OEP 40D578
0040D579 8BEC MOV EBP, ESP
0040D57B 6A FF PUSH -1
0040D57D 68 80434100 PUSH
PETGUI.00414380
0040D582 68 78FF4000 PUSH
PETGUI.0040FF78
0040D587 64: A1 00000000 MOV EAX, DWORD
PTR FS: [0]
```

IAT dump & fix now, it's very easy

greetings

If you have questions, Remarks about this tutorial, mail me

dqtlncrk@gmail.com

Armadillo collect sand-stone

Hyperonics.HyperSnap-DX.v5.63.01.ENG <|> ARM 4.xx - Standard Protection + IAT elimination + Code Splicing

_Hi All, the soft nry to capture henh, I tenh flags lum it. Go try cri, forked arm lr children. He he, hearing it all!

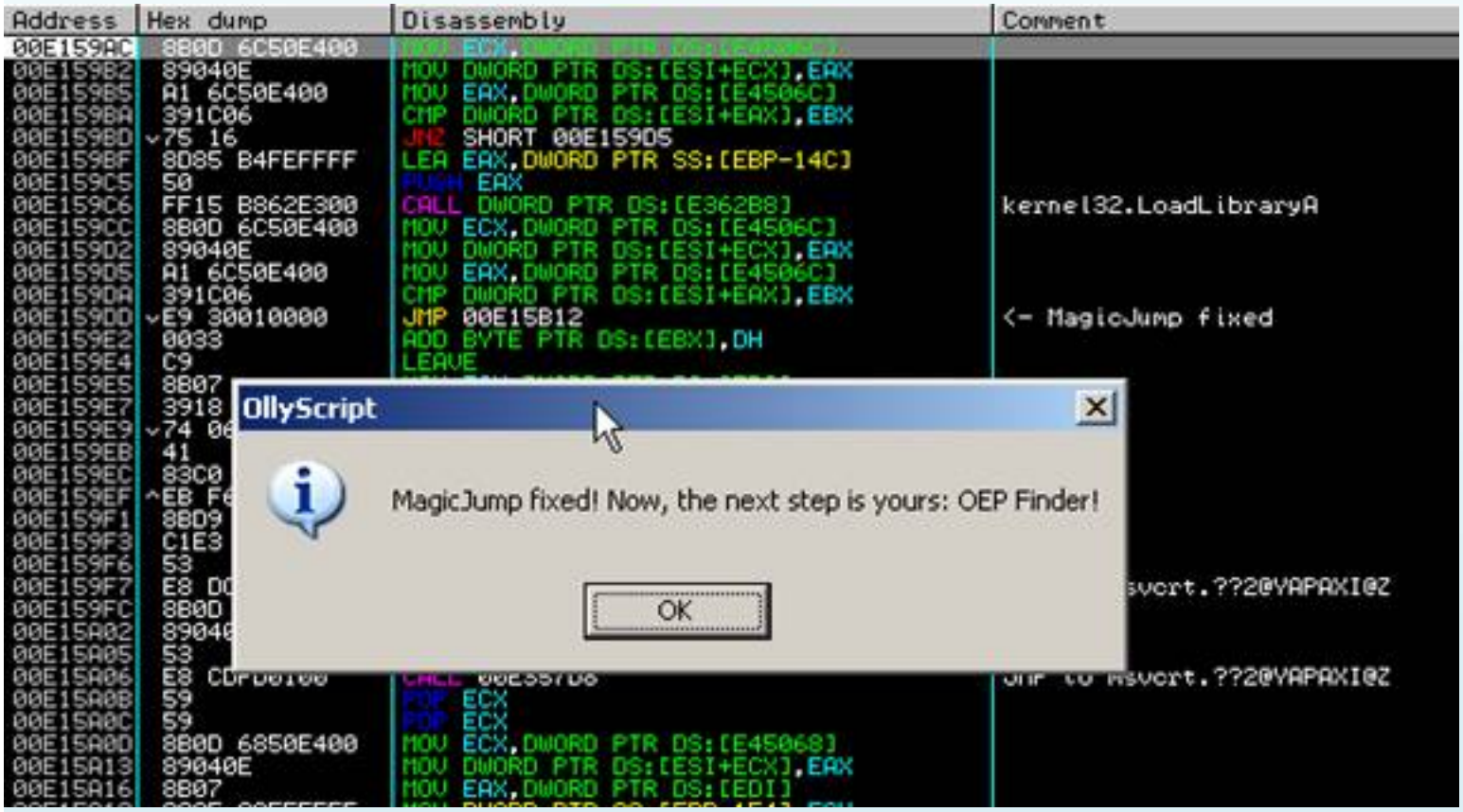
_Load Target:

```
Address   Hex dump          Disassembly                          Comment
00699000  60                PUSHAD
00699001  E8 00000000       CALL HprSnap5.00699006
00699006  5D                POP EBP
00699007  50                PUSH EAX
00699008  51                PUSH ECX
00699009  0FCA              BSWAP EDX
0069900B  F7D2              NOT EDX
0069900D  9C                PUSHFD
0069900E  F7D2              NOT EDX
00699010  0FCA              BSWAP EDX
00699012  EB 0F             JMP SHORT HprSnap5.00699023
00699014  89 EB0FB8EB       MOV ECX,EBB80FEB
00699019  07                POP ES                               Modification of segment regist
0069901A  89 EB0F90EB       MOV ECX,EB900FEB
0069901F  08FD              OR CH,BH
00699021  EB 0B             JMP SHORT HprSnap5.0069902E
00699023  F2:               PREFIX REPNE:                        Superfluous prefix
00699024  EB F5             JMP SHORT HprSnap5.0069901B
00699026  EB F6             JMP SHORT HprSnap5.0069901E
00699028  F2:               PREFIX REPNE:                        Superfluous prefix
00699029  EB 08             JMP SHORT HprSnap5.00699033
0069902B  FD                STD
0069902C  EB E9             JMP SHORT HprSnap5.00699017
0069902E  F3:               PREFIX REP:                          Superfluous prefix
0069902F  EB E4             JMP SHORT HprSnap5.00699015
00699031  FC                CLD
00699032  E9 9D0FC98B       JMP 8C329FD4
00699037  CA F7D1           RETF 0D1F7                           Far return
0069903A  59                POP ECX
0069903B  58                POP EAX
0069903C  50                PUSH EAX
0069903D  51                PUSH ECX
0069903E  0FCA              BSWAP EDX
00699040  F7D2              NOT EDX
```

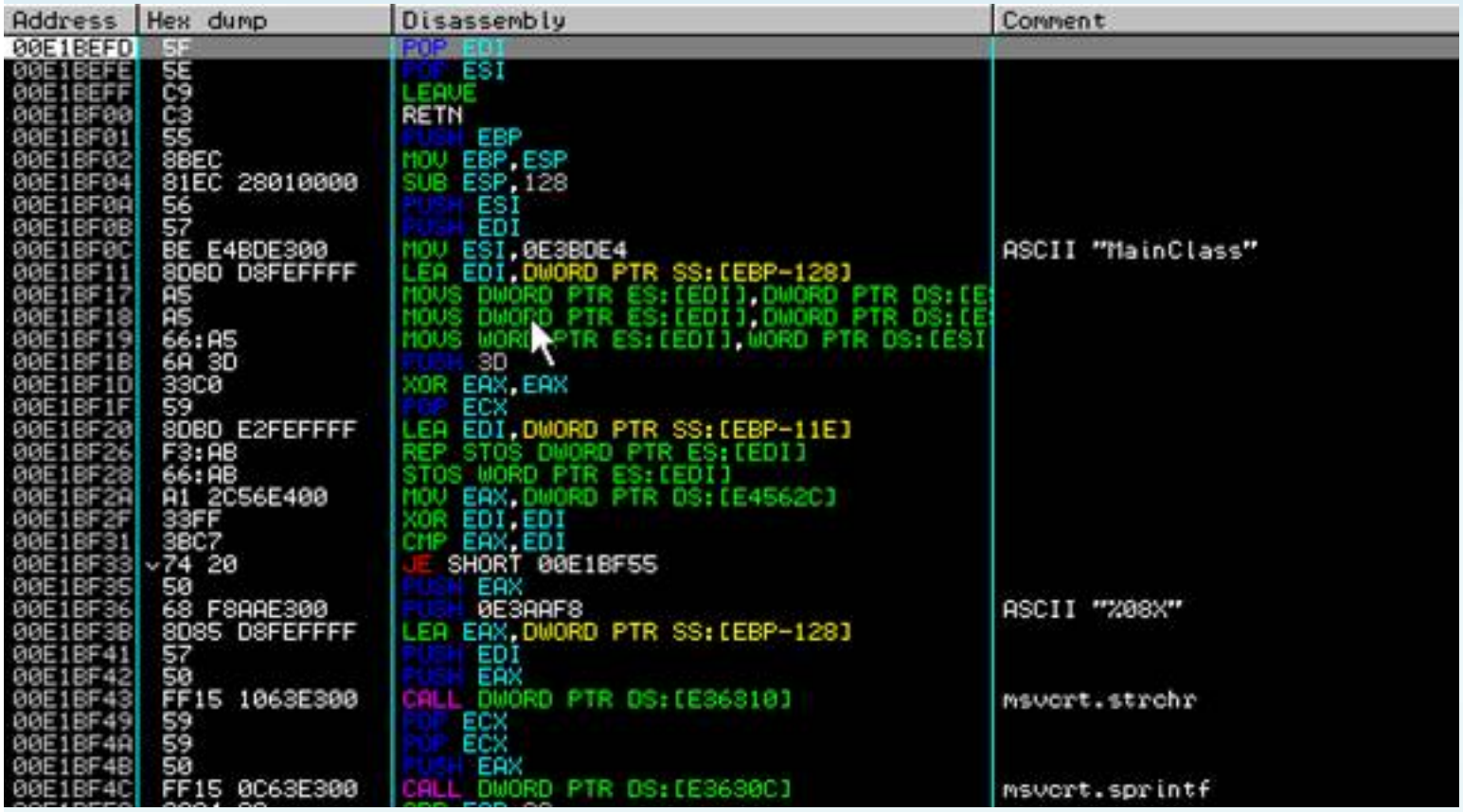
Nry _Chay scripts to fix tem and Magic Jump to lệ:

```
var GetModuleHandleA
var AddressOfMagicJump
var LenOfMagicJump

GPA "GetModuleHandleA", "kernel32.dll"
mov GetModuleHandleA, $ RESULT

bphws GetModuleHandleA, "x"
repeat:
esto
rtu
find eip, # 0F84 ???????????????????? 74 ?????????? EB? #
Cmp $ result, 0
je repeat
bphwc GetModuleHandleA

mov AddressOfMagicJump, $ RESULT
mov LenOfMagicJump, AddressOfMagicJump
add LenOfMagicJump, 2
mov LenOfMagicJump, [LenOfMagicJump]
inc LenOfMagicJump
mov [AddressOfMagicJump], 0E9
inc AddressOfMagicJump
mov [AddressOfMagicJump], LenOfMagicJump
CMT $ result, "<- MagicJump fixed"
msg "MagicJump fixed! Now, the next step is yours: OEP Finder!"
ret
```

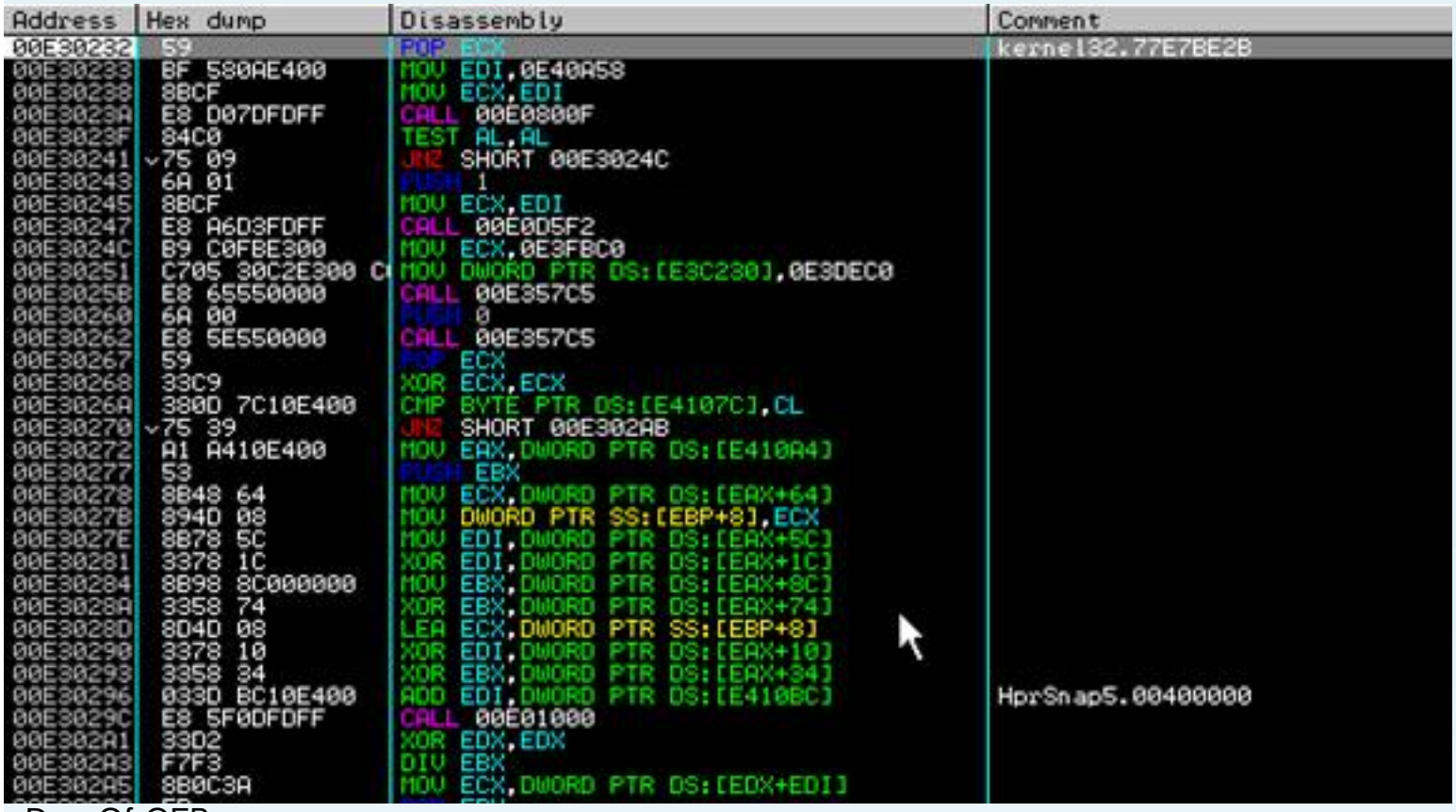
_Sau When running the script:



CreateThread _Dat breakpoint, Shift + F9, Ctrl + F9, F8:

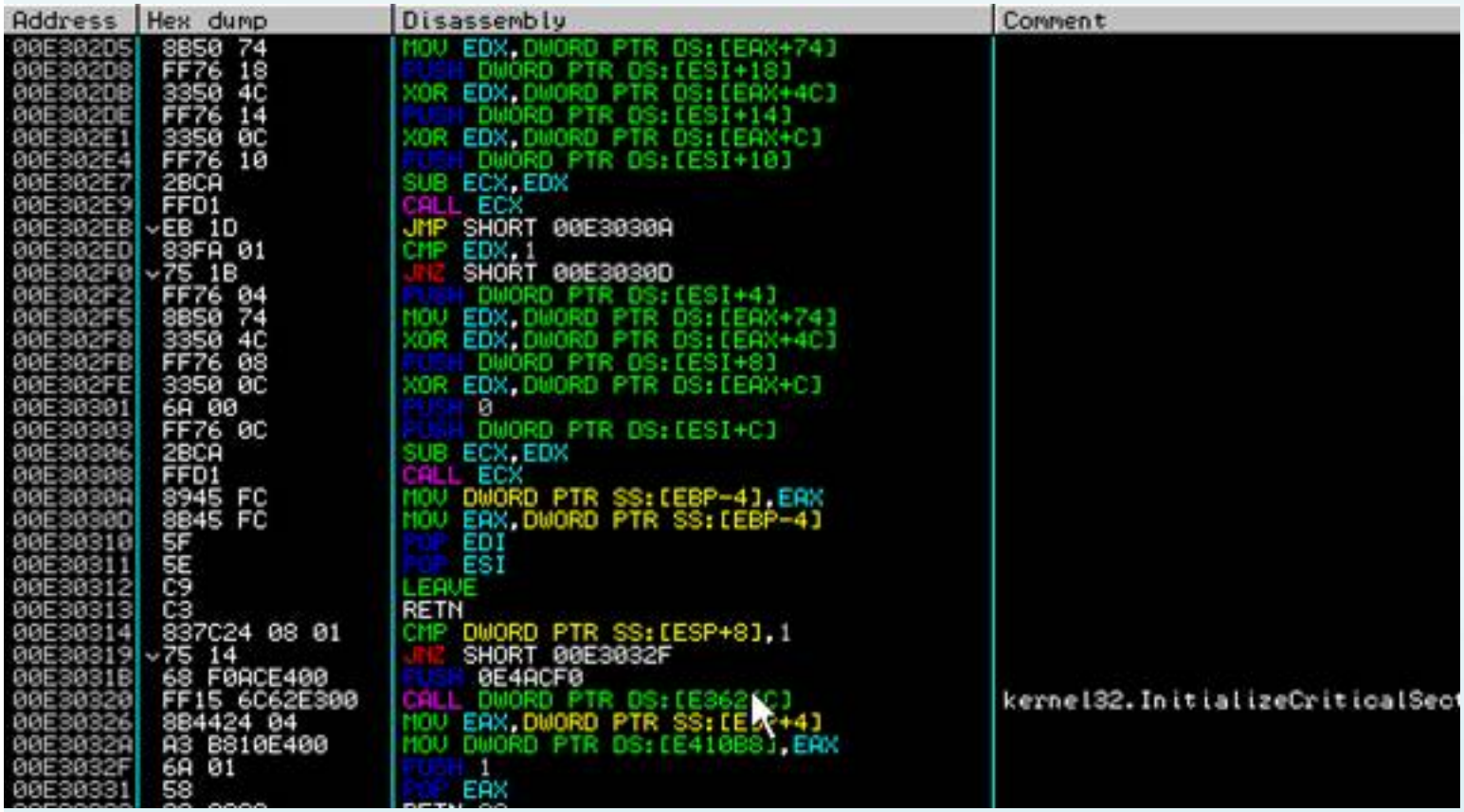


_Ctrl + F9, F8:



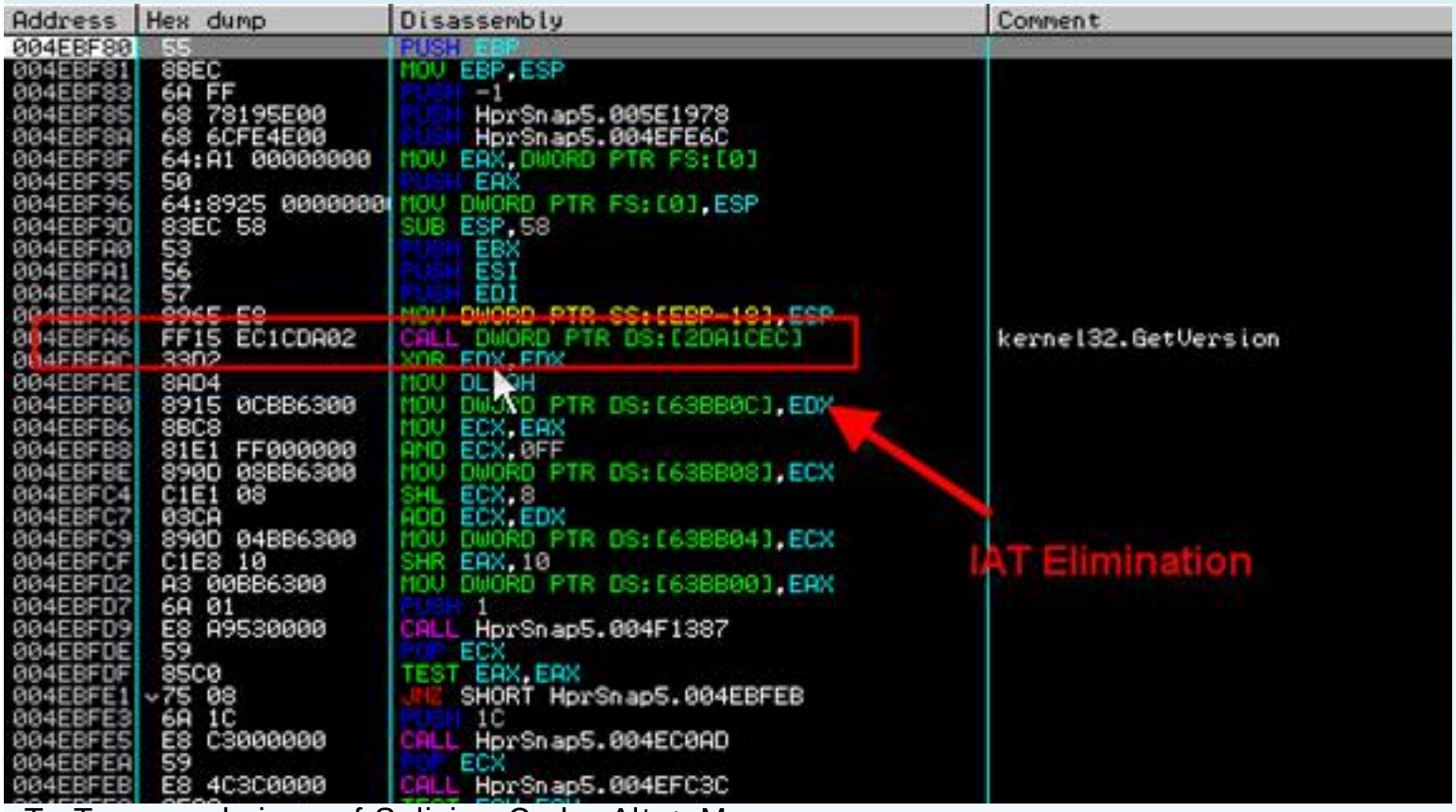
Address	Hex dump	Disassembly	Comment
00E30232	59	POP ECX	kernel32.77E7BE2B
00E30233	BF 580AE400	MOV EDI,0E40A58	
00E30238	8BCF	MOV ECX,EDI	
00E3023A	E8 D07DFDFF	CALL 00E0800F	
00E3023F	84C0	TEST AL,AL	
00E30241	75 09	JNZ SHORT 00E3024C	
00E30243	6A 01	PUSH 1	
00E30245	8BCF	MOV ECX,EDI	
00E30247	E8 A6D3FDFF	CALL 00E0D5F2	
00E3024C	B9 C0FBE300	MOV ECX,0E3FBC0	
00E30251	C705 30C2E300 C0	MOV DWORD PTR DS:[E3C230],0E3DEC0	
00E3025B	E8 65550000	CALL 00E357C5	
00E30260	6A 00	PUSH 0	
00E30262	E8 5E550000	CALL 00E357C5	
00E30267	59	POP ECX	
00E30268	33C9	XOR ECX,ECX	
00E3026A	380D 7C10E400	CMP BYTE PTR DS:[E4107C],CL	
00E30270	75 39	JNZ SHORT 00E302AB	
00E30272	A1 A410E400	MOV EAX,DWORD PTR DS:[E410A4]	
00E30277	53	PUSH EBX	
00E30278	8B48 64	MOV ECX,DWORD PTR DS:[EAX+64]	
00E3027B	894D 08	MOV DWORD PTR SS:[EBP+8],ECX	
00E3027E	8B78 5C	MOV EDI,DWORD PTR DS:[EAX+5C]	
00E30281	3378 1C	XOR EDI,DWORD PTR DS:[EAX+1C]	
00E30284	8B98 8C000000	MOV EBX,DWORD PTR DS:[EAX+8C]	
00E3028A	3358 74	XOR EBX,DWORD PTR DS:[EAX+74]	
00E3028D	8D4D 08	LEA ECX,DWORD PTR SS:[EBP+8]	
00E30290	3378 10	XOR EDI,DWORD PTR DS:[EAX+10]	
00E30293	3358 34	XOR EBX,DWORD PTR DS:[EAX+34]	
00E30296	033D BC10E400	ADD EDI,DWORD PTR DS:[E410BC]	HprSnap5.00400000
00E3029C	E8 5F0DFDFF	CALL 00E01000	
00E302A1	33D2	XOR EDX,EDX	
00E302A3	F7F3	DIV EBX	
00E302A5	8B0C3A	MOV ECX,DWORD PTR DS:[EDX+EDI]	

_Dau Of OEP:

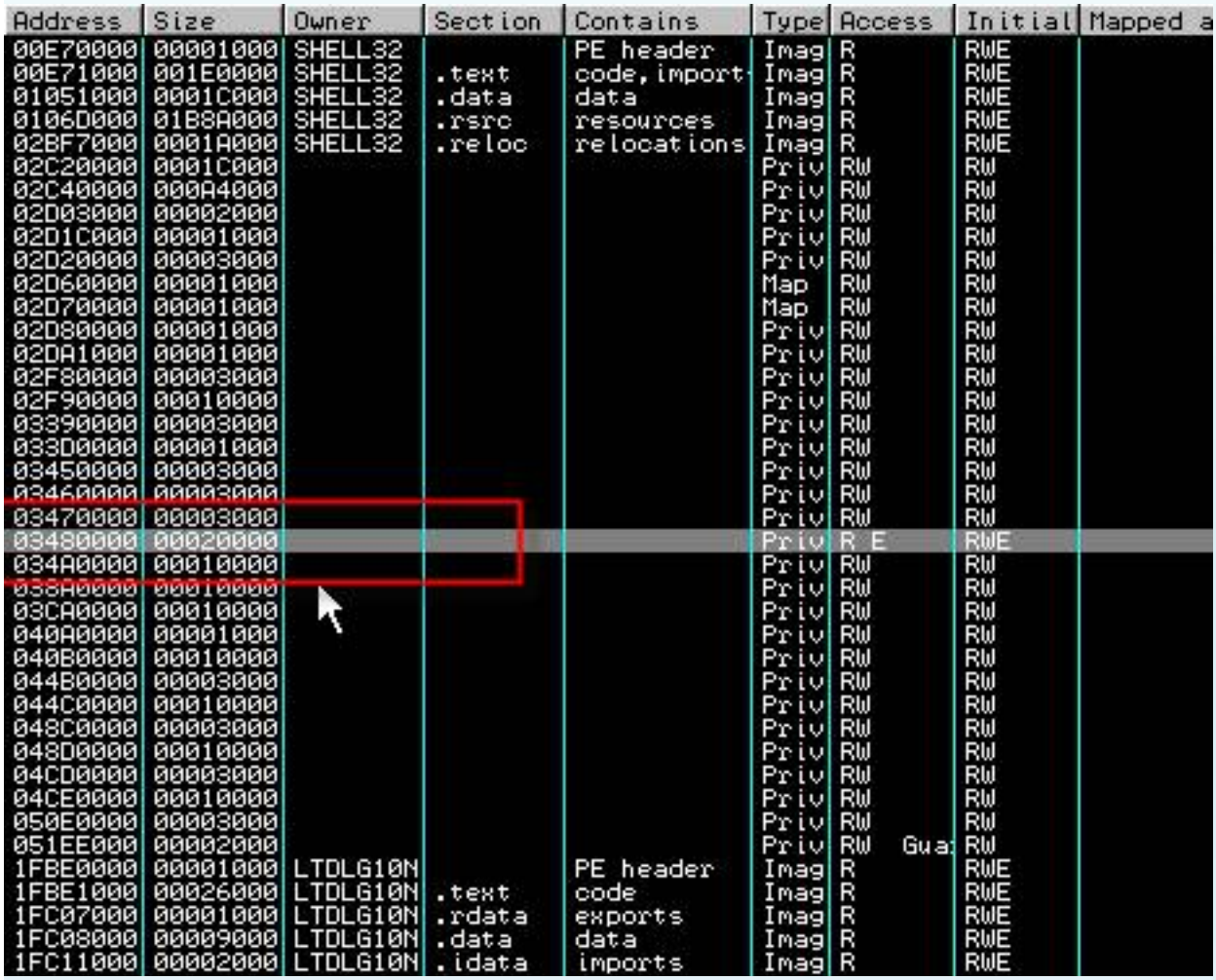


Address	Hex dump	Disassembly	Comment
00E302D5	8B50 74	MOV EDX,DWORD PTR DS:[EAX+74]	
00E302D8	FF76 18	PUSH DWORD PTR DS:[ESI+18]	
00E302DB	3350 4C	XOR EDX,DWORD PTR DS:[EAX+4C]	
00E302DE	FF76 14	PUSH DWORD PTR DS:[ESI+14]	
00E302E1	3350 0C	XOR EDX,DWORD PTR DS:[EAX+C]	
00E302E4	FF76 10	PUSH DWORD PTR DS:[ESI+10]	
00E302E7	2BCA	SUB ECX,EDX	
00E302E9	FFD1	CALL ECX	
00E302EB	EB 1D	JMP SHORT 00E3030A	
00E302ED	83FA 01	CMP EDX,1	
00E302F0	75 1B	JNZ SHORT 00E3030D	
00E302F2	FF76 04	PUSH DWORD PTR DS:[ESI+4]	
00E302F5	8B50 74	MOV EDX,DWORD PTR DS:[EAX+74]	
00E302F8	3350 4C	XOR EDX,DWORD PTR DS:[EAX+4C]	
00E302FB	FF76 08	PUSH DWORD PTR DS:[ESI+8]	
00E302FE	3350 0C	XOR EDX,DWORD PTR DS:[EAX+C]	
00E30301	6A 00	PUSH 0	
00E30303	FF76 0C	PUSH DWORD PTR DS:[ESI+C]	
00E30306	2BCA	SUB ECX,EDX	
00E30308	FFD1	CALL ECX	
00E3030A	8945 FC	MOV DWORD PTR SS:[EBP-4],EAX	
00E3030D	8B45 FC	MOV EAX,DWORD PTR SS:[EBP-4]	
00E30310	5F	POP EDI	
00E30311	5E	POP ESI	
00E30312	C9	LEAVE	
00E30313	C3	RETN	
00E30314	837C24 08 01	CMP DWORD PTR SS:[ESP+8],1	
00E30319	75 14	JNZ SHORT 00E3032F	
00E3031B	68 F0ACE400	PUSH 0E4ACF0	
00E30320	FF15 6C62E300	CALL DWORD PTR DS:[E362[illegible]C]	kernel32.InitializeCriticalSect
00E30326	8B4424 04	MOV EAX,DWORD PTR SS:[E[illegible]+4]	
00E3032A	A3 B810E400	MOV DWORD PTR DS:[E410B8],EAX	
00E3032F	6A 01	PUSH 1	
00E30331	58	POP EAX	

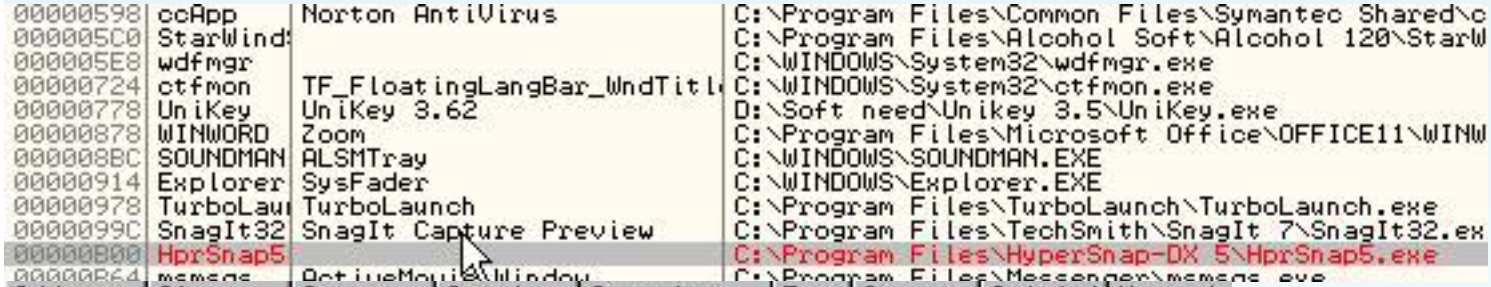
_Dat Breakpoint in 00E30308 FFD1 CALL ECX, F9, F7: J OEP



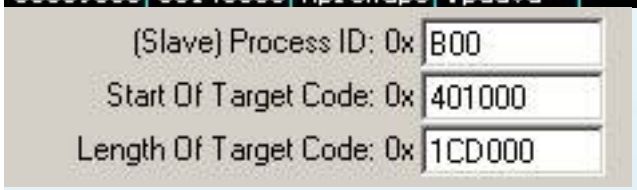
_Ta Tem need signs of Splicing Code, Alt + M:



_Mo ArmInline and complete information about the Code Splicing:

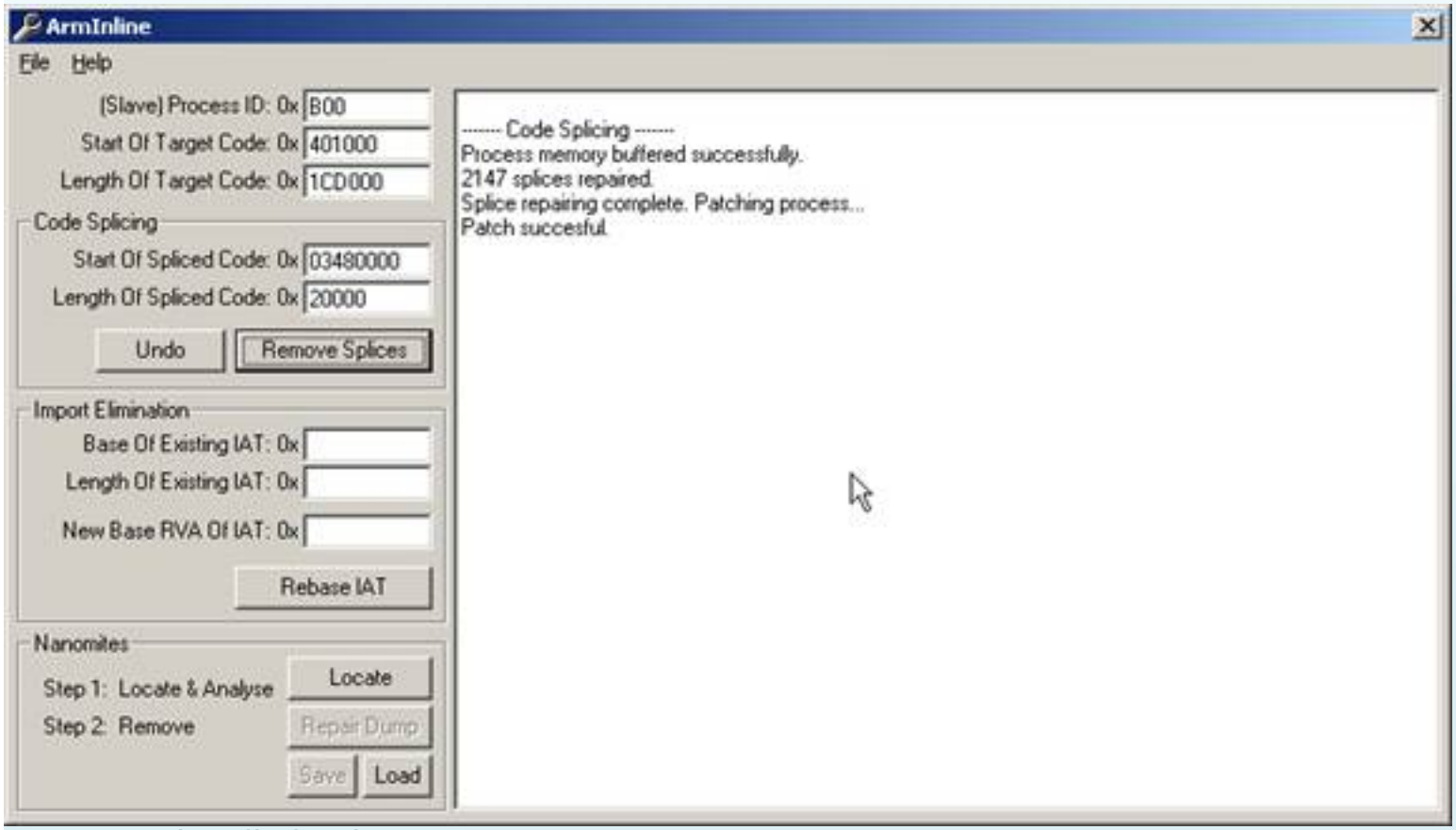


Address	Size	Owner	Section	Contains	Type	Access	Initial	Mapped
003C0000	00002000				Map	R	R	
003D0000	00002000				Map	R	R	
003E0000	0000C000				Priv	RW	RW	
003F0000	00006000				Priv	RW	RW	
00400000	00001000	HprSnap5			Imag	R	RWE	
00401000	001CD000	HprSnap5	.text		Imag	R	RWE	
005CE000	00041000	HprSnap5	.rdata	exports	Imag	R	RWE	
0060F000	00009000	HprSnap5	.data	data	Imag	R	RWE	
00648000	00001000	HprSnap5	MY_DATA1		Imag	R	RWE	
00649000	00050000	HprSnap5	.text1	code	Imag	R	RWE	
00699000	00010000	HprSnap5	.adata	SFX	Imag	R	RWE	
006A9000	00020000	HprSnap5	.data1	imports	Imag	R	RWE	
006C9000	00140000	HprSnap5	.pdata		Imag	R	RWE	



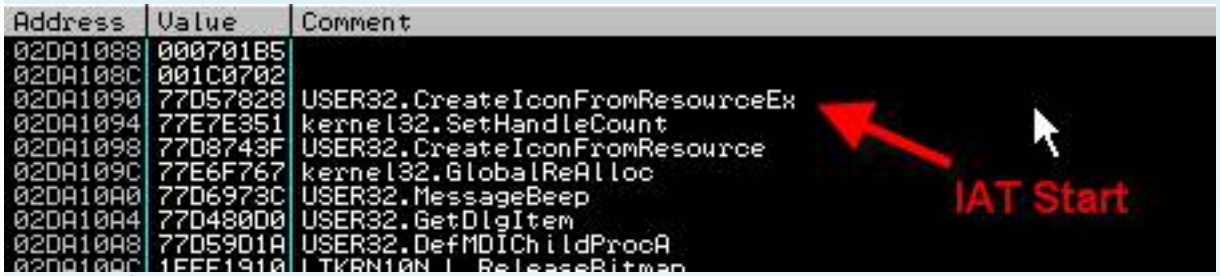
_Dien Vro Slicing the Code:

Remove _Nhan Splices:



IAT _Den the elimination:

IAT Start:



IAT End:

_Ta Are:

OEP: 000EBF80

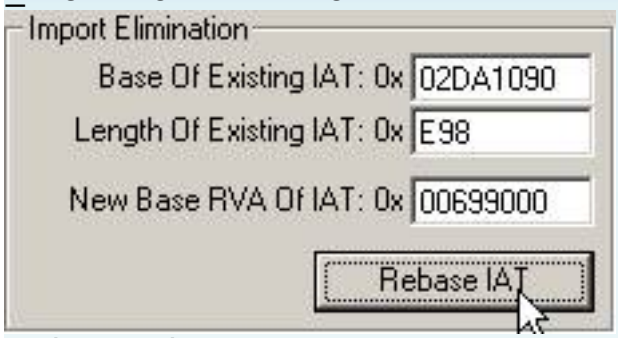
IATRVA: 00299000

IATSize: 00000E98

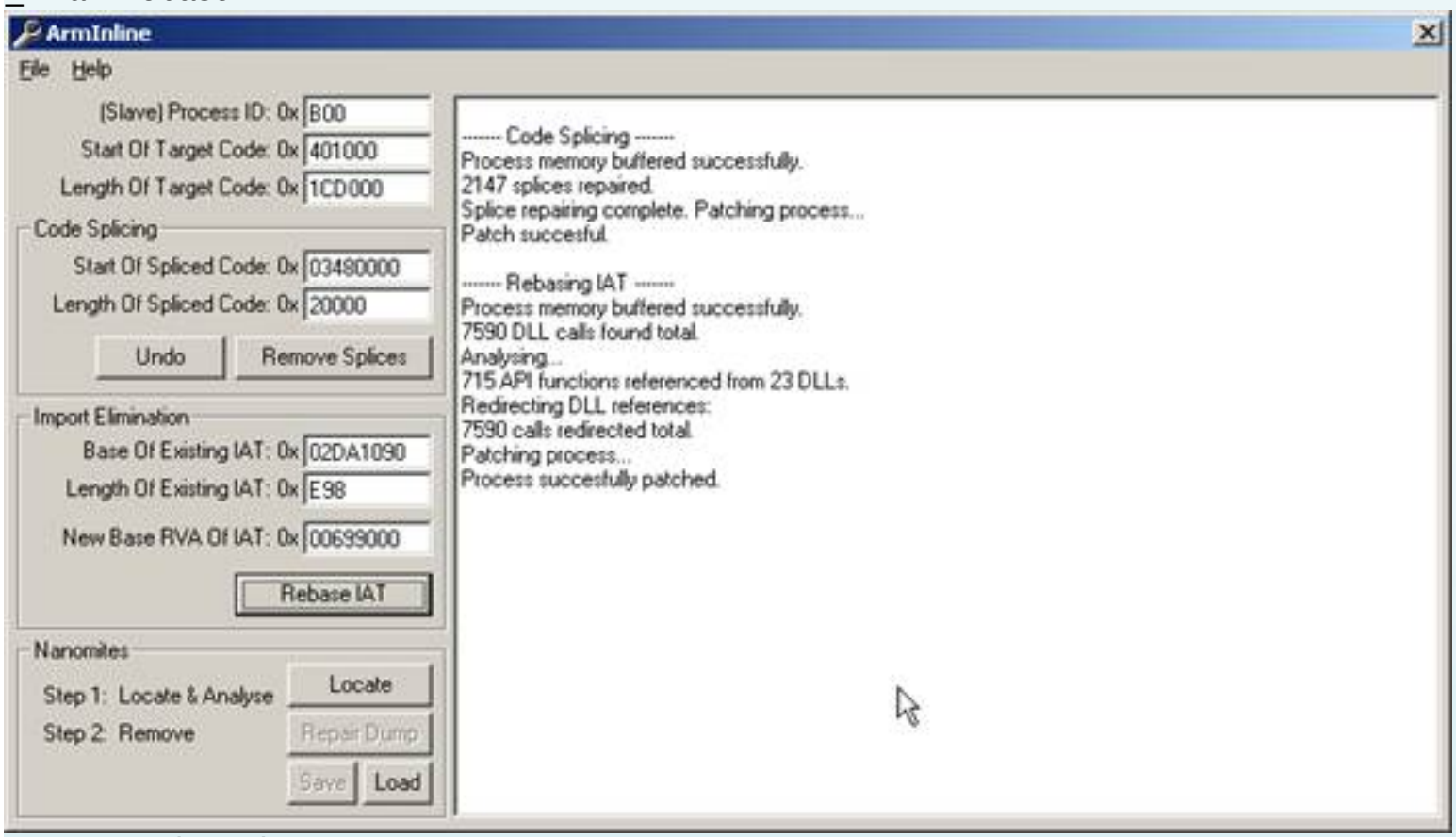
_Sections. ADATA:

Address	Size	Owner	Section	Contains	Type	Access	Initial	Mapped as
003A0000	00003000				Map	R	R	\Device\Ha
003B0000	0000E000				Priv	RW	RW	
003C0000	00002000				Map	R	R	
003D0000	00002000				Map	R	R	
003E0000	0000C000				Priv	RW	RW	
003F0000	00006000				Priv	RW	RW	
00400000	00001000	HprSnap5			Imag	R	RWE	
00401000	001CD000	HprSnap5	.text		Imag	R	RWE	
005CE000	00041000	HprSnap5	.rdata	exports	Imag	R	RWE	
0060F000	00039000	HprSnap5	.data	data	Imag	R	RWE	
00648000	00001000	HprSnap5	MY_DATA1		Imag	R	RWE	
00649000	00050000	HprSnap5	.text1	code	Imag	R	RWE	
00699000	00010000	HprSnap5	.adata	SFX	Imag	R	RWE	
006A9000	00020000	HprSnap5	.data1	imports	Imag	R	RWE	
006C9000	00140000	HprSnap5	.pdata		Imag	R	RWE	
00809000	00008000	HprSnap5	.rsrc	resources	Imag	R	RWE	
00820000	00005000				Map	R E	R E	
008E0000	00002000				Map	R E	R E	
008F0000	00103000				Map	R	R	

_Dien Vro ArmInline:



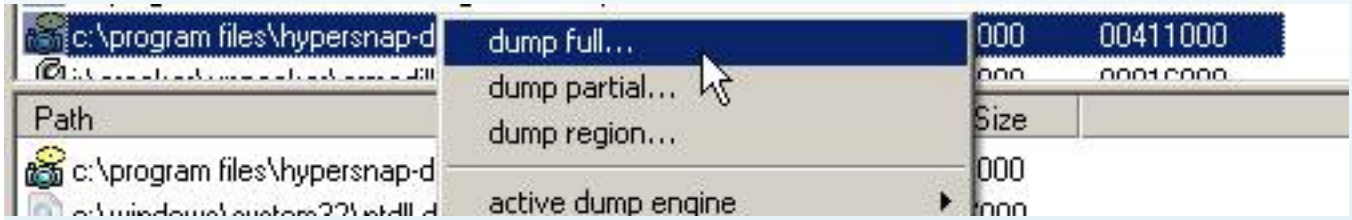
_Nhan RebaseIAT:



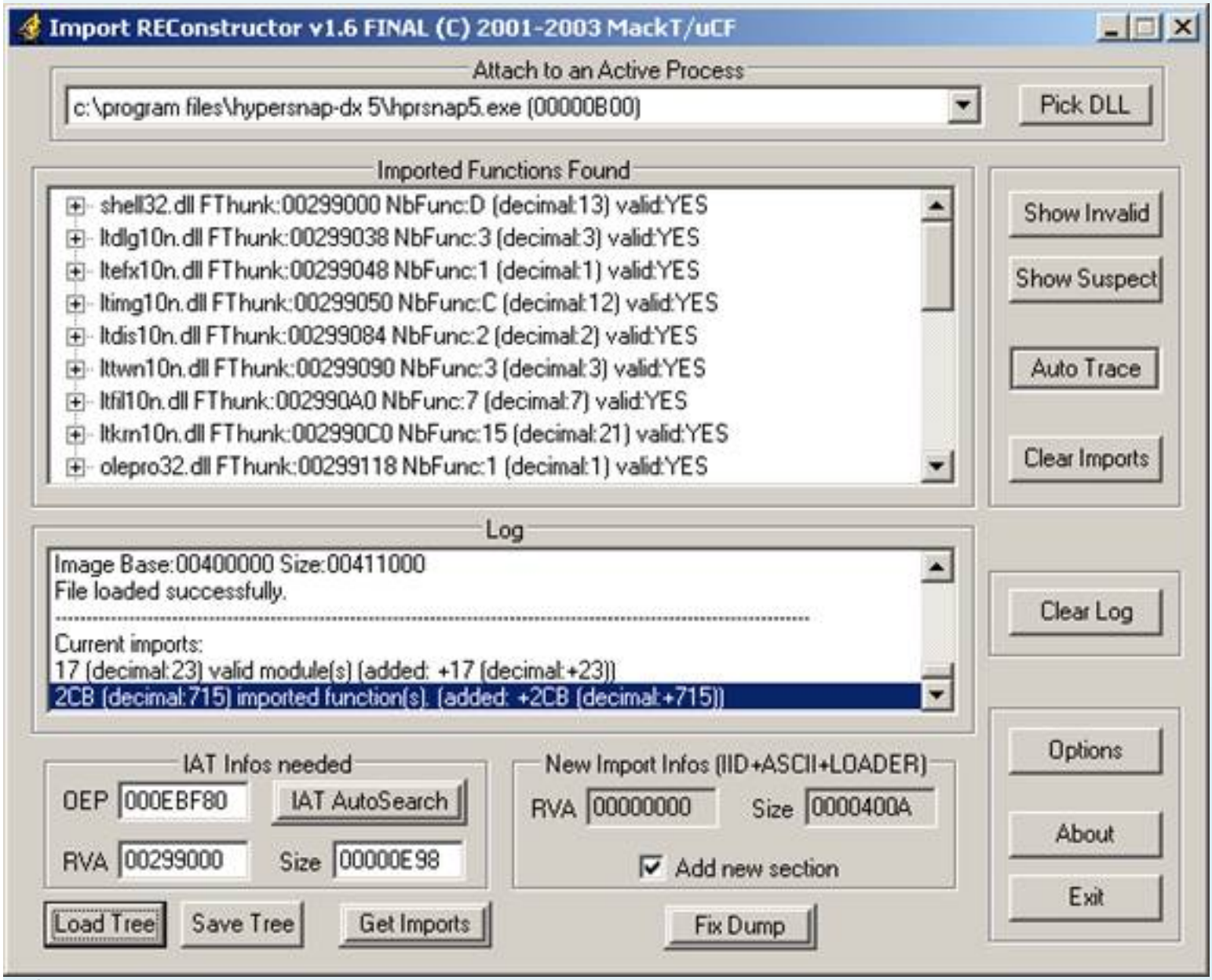
_Quay Back to the CPU:

```
Address   Hex dump          Disassembly                              Comment
004EBF80  55               PUSH EBP
004EBF81  8BEC             MOV EBP,ESP
004EBF83  6A FF            PUSH -1
004EBF85  68 78195E00      PUSH HprSnap5.005E1978
004EBF8A  68 6CFE4E00      PUSH HprSnap5.004EFE6C
004EBF8F  64:A1 00000000   MOV EAX,DWORD PTR FS:[0]
004EBF95  50               PUSH EAX
004EBF96  64:8925 0000000( MOV DWORD PTR FS:[0],ESP
004EBF9D  83EC 58          SUB ESP,58
004EBFA0  53               PUSH EBX
004EBFA1  56               PUSH ESI
004EBFA2  57               PUSH EDI
004EBFA3  8965 E8          MOV DWORD PTR SS:[EBP-18],ESP
004EBFA6  FF15 8C9A6900    CALL DWORD PTR DS:[699A8C]               kernel32.GetVersion
004EBFAC  33D2             XOR EDX,EDX
004EBFAE  8AD4             MOV DL,AH
004EBFB0  8915 0CBB6300    MOV DWORD PTR DS:[63BB0C],EDX
004EBFB6  8BC8             MOV ECX,EAX
004EBFB8  81E1 FF000000    AND ECX,0FF
004EBFBE  890D 08BB6300    MOV DWORD PTR DS:[63BB08],ECX
004EBFC4  C1E1 08          SHL ECX,8
004EBFC7  03CA             ADD ECX,EDX
004EBFC9  890D 04BB6300    MOV DWORD PTR DS:[63BB04],ECX
004EBFCF  C1E8 10          SHR EAX,10
004EBFD2  A3 00BB6300      MOV DWORD PTR DS:[63BB00],EAX
004EBFD7  6A 01            PUSH 1
004EBFD9  E8 A9530000      CALL HprSnap5.004F1387
004EBFDE  59               POP ECX
004EBFDF  85C0             TEST EAX,EAX
004EBFE1  75 08            JNZ SHORT HprSnap5.004EBFEB
004EBFE3  6A 1C            PUSH 1C
004EBFE5  E8 C3000000      CALL HprSnap5.004EC0AD
004EBFEA  59               POP ECX
004EBFEB  E8 4C3C0000      CALL HprSnap5.004EFC3C
```

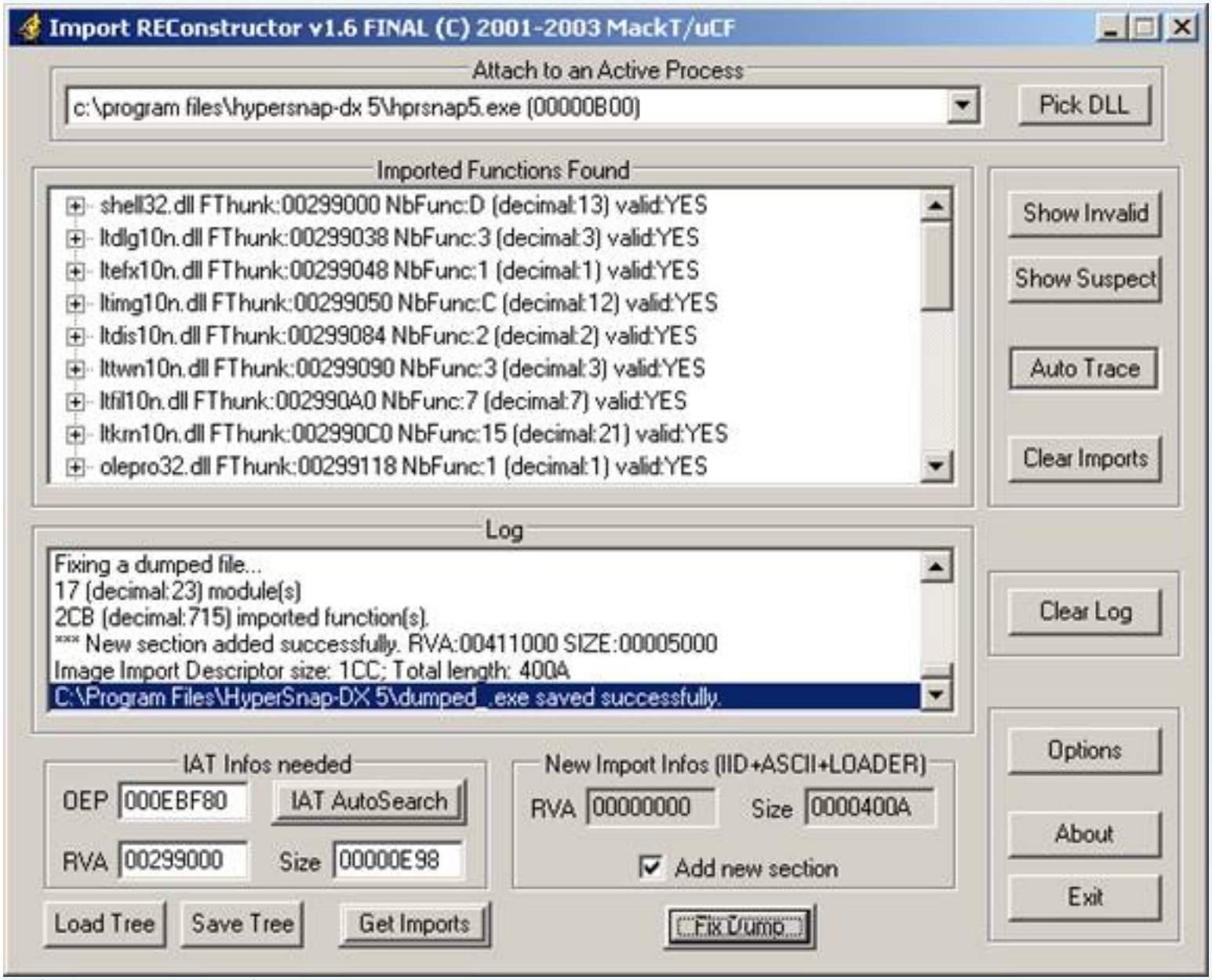
Full _LordPE dump:



_Mo ImpREC:


Import REConstructor v1.6 FINAL (C) 2001-2003 MackT/uCF
Attach to an Active Process
c:\program files\hypersnap-dx 5\hprsnap5.exe (00000B00)
Pick DLL
Imported Functions Found
shell32.dll FThunk:00299000 NbFunc:D (decimal:13) valid:YES
ltdlg10n.dll FThunk:00299038 NbFunc:3 (decimal:3) valid:YES
ltefx10n.dll FThunk:00299048 NbFunc:1 (decimal:1) valid:YES
ltimg10n.dll FThunk:00299050 NbFunc:C (decimal:12) valid:YES
ltdis10n.dll FThunk:00299084 NbFunc:2 (decimal:2) valid:YES
lttwn10n.dll FThunk:00299090 NbFunc:3 (decimal:3) valid:YES
ltfil10n.dll FThunk:002990A0 NbFunc:7 (decimal:7) valid:YES
ltkrn10n.dll FThunk:002990C0 NbFunc:15 (decimal:21) valid:YES
olepro32.dll FThunk:00299118 NbFunc:1 (decimal:1) valid:YES
Show Invalid
Show Suspect
Auto Trace
Clear Imports
Log
Image Base:00400000 Size:00411000
File loaded successfully.
Current imports:
17 (decimal:23) valid module(s) (added: +17 (decimal:+23))
2CB (decimal:715) imported function(s). (added: +2CB (decimal:+715))
Clear Log
IAT Infos needed
OEP 000EBF80
IAT AutoSearch
RVA 00299000
Size 00000E98
New Import Infos (IID+ASCII+LOADER)
RVA 00000000
Size 0000400A
Add new section
Options
About
Exit
Load Tree
Save Tree
Get Imports
Fix Dump

_FixDump:



Chay Try Dumped.exe

_OK, Has remove the time trial!
_Unpacked Successful!

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, MaDMAn_H3rCul3s, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx OllyDBG of the authors.

To be continued ...

Written by **hacnho** (tutorial date: VietNam 07/10/2005)

Inline Patching Ap Document to PDF Converter v3.0.0

I. Software Introduction:

Homepage: http://www.adultpdf.com/products/doctopdf/index.html

Software: Ap Document to PDF Converter v3.0.0

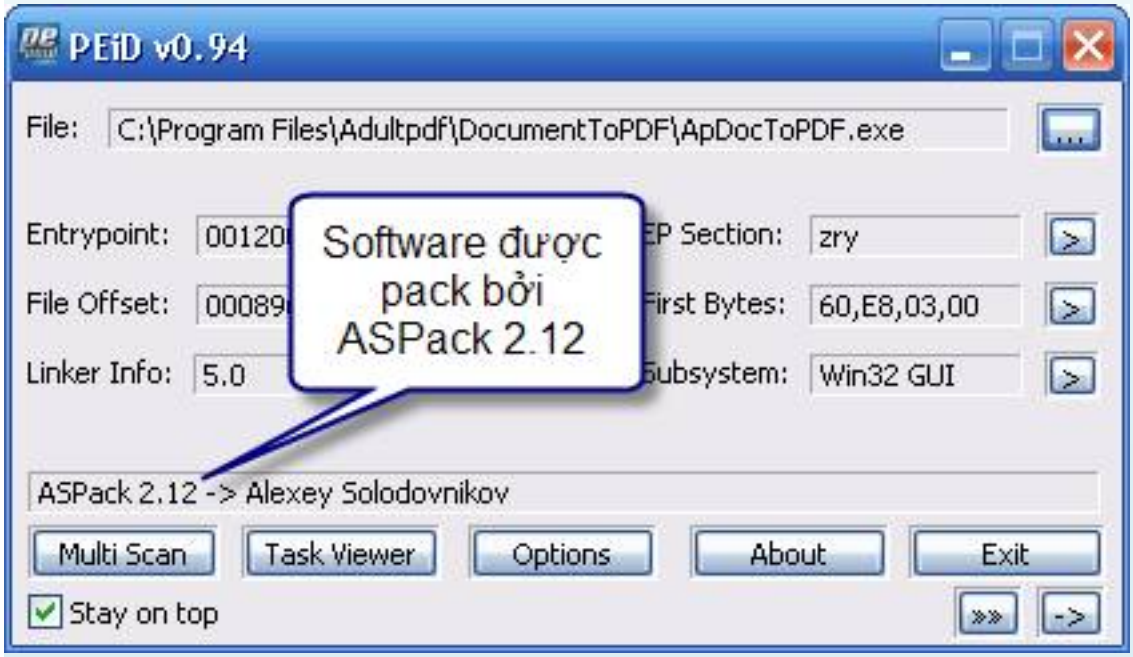
Crack tools: 1:10 OllyDbg, PEiD v 0.94

Information:

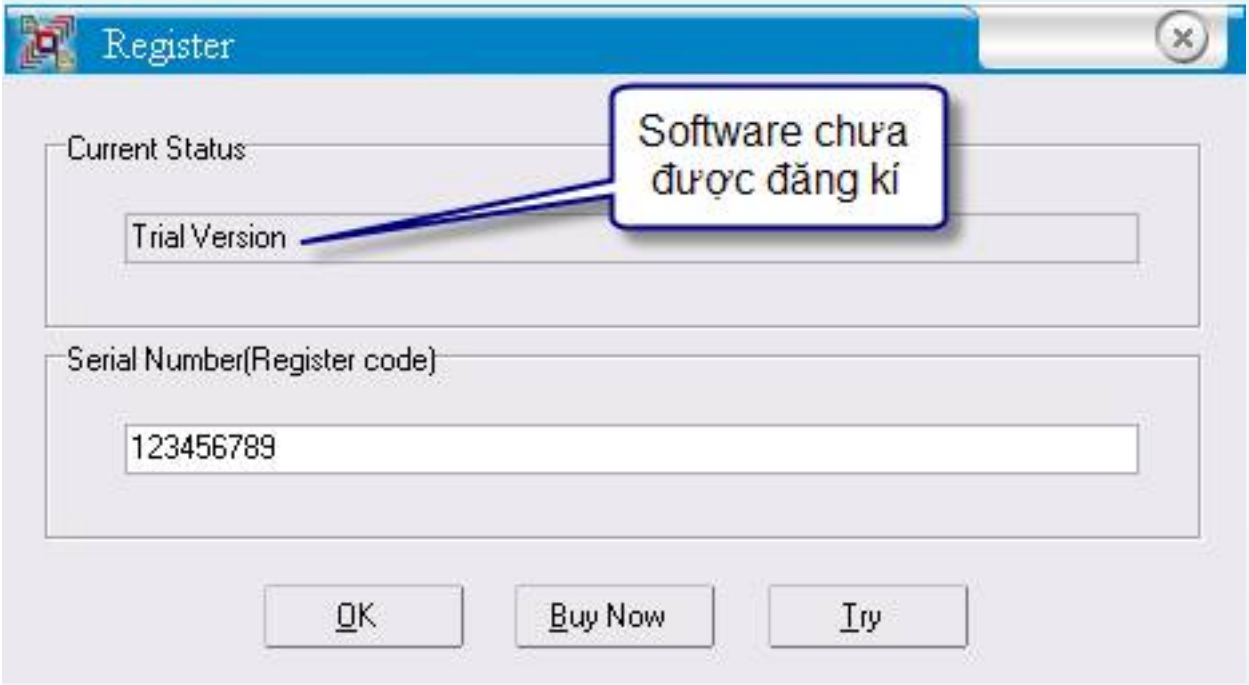
> AP toPDF Document Converter is a powerful document to PDF converter, the converter allows you to convert over hundreds of windows printable documents, such as doc, xls, ppt, txt, pdf, html etc, to searchable PDF document. The converter can be used as a PDF writer or PDF creator from any application as soon as it supports printing. It does not need any software support, such as Adobe Acrobat, Acrobat Reader, etc..

II. Information:

We all know before you crack the software, you need to know which software is written in any language, there is not ... to pack from which to crack the method appropriate to help the crack is convenient and fast . For example, a software is written in Visual Basic SmartCheck we should use to debug or software that is written in. NET is not used OllyDbg to be treated. The software knows that pack / protect with packer is the information very important because it helps us Newbie orientation in the Manual Unpacking. There are many tools as possible as this task: PEiD, RDG Packer Detector. In this tut I use to scan files PEiD ApDocToPDF.exe:



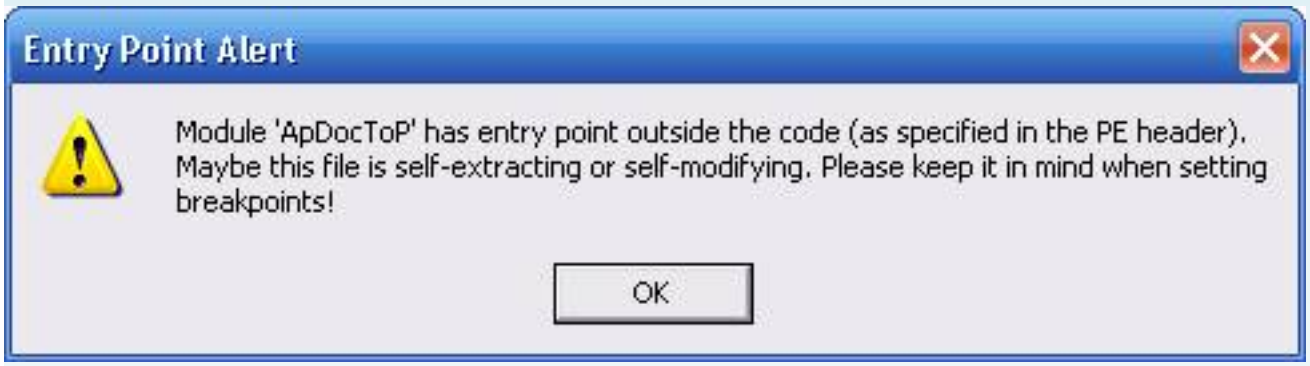
Test program and Fake Serial: 123456789



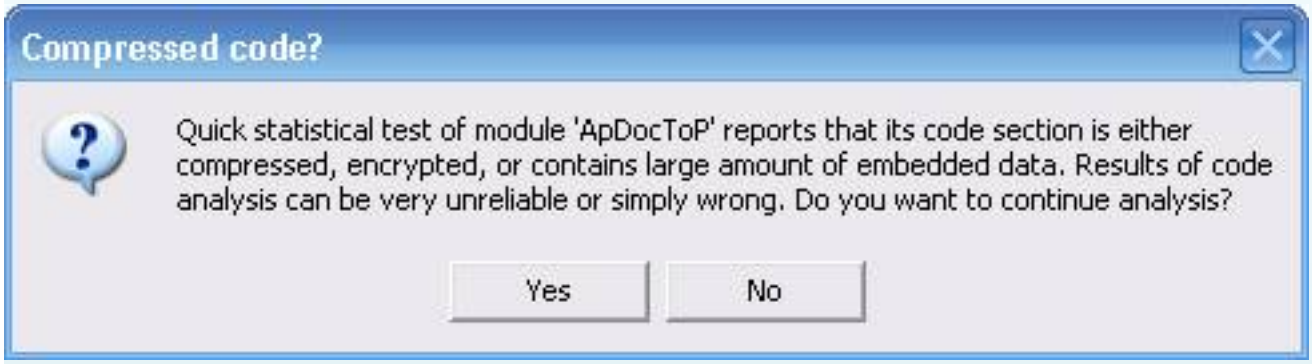
Click OK, our results are:

III. Unpacking:

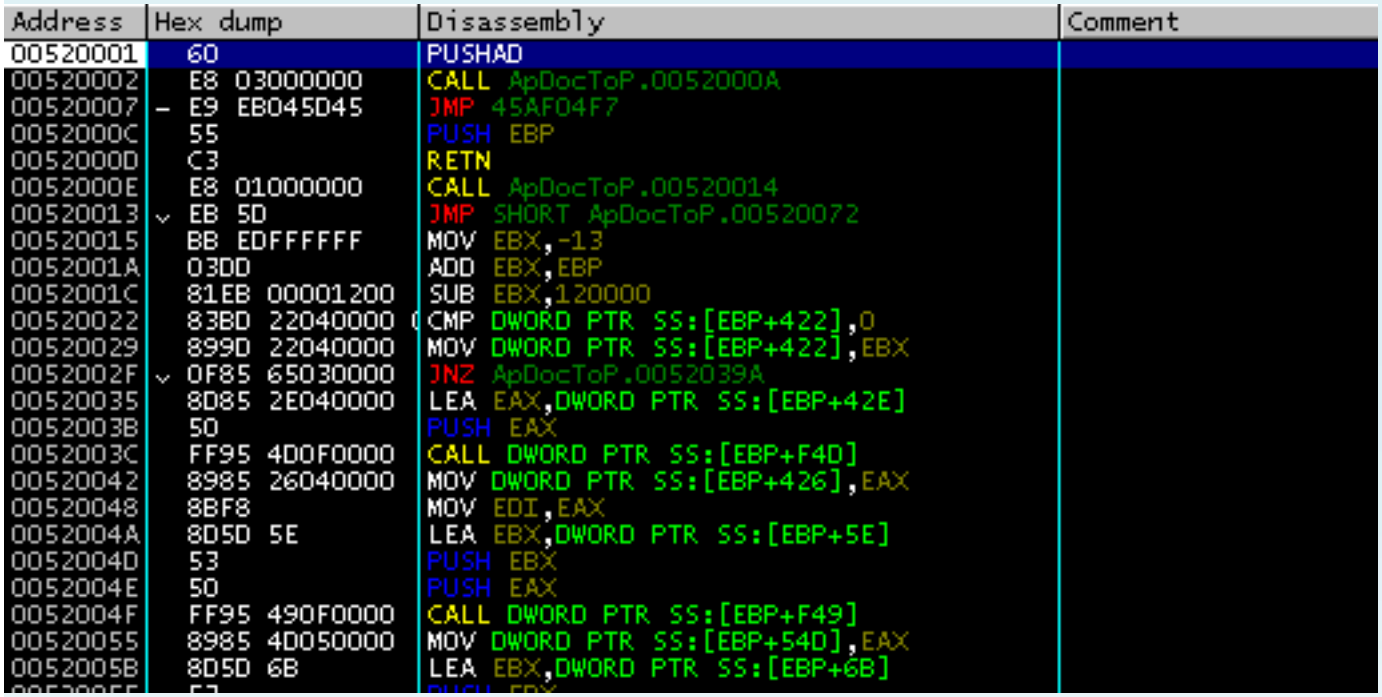
The unpack ASPack quite easily because it is a Packer, not a Protecter. That means that in addition to the pack to make it smaller in size, ASPack not accompanied by the code or anti-debug destroyed IAT (Import Address Table) of the original. Now we use OllyDbg ApDocToPDF file to load, we encountered notified by Olly:



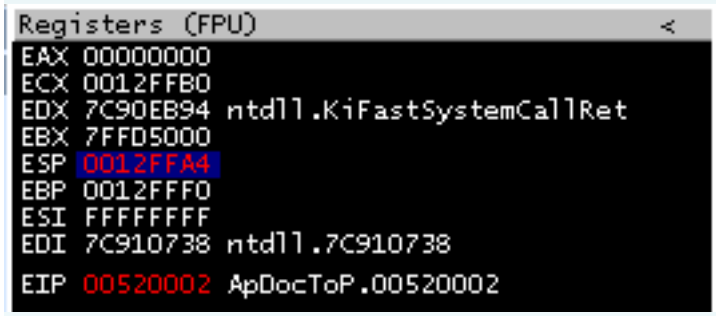
Click OK to ignore, we again encountered a message again:



Click Yes to continue, we will come EP (Entry Point) program:



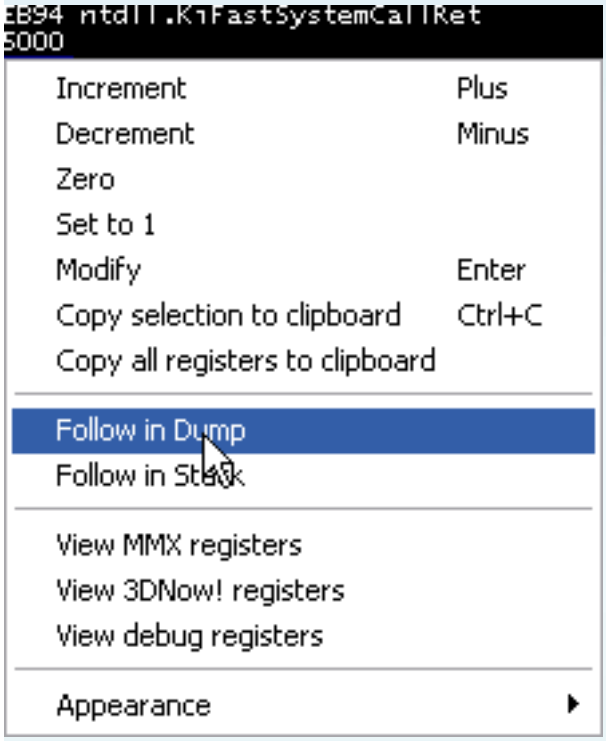
Press F8 and look at the window Registers:



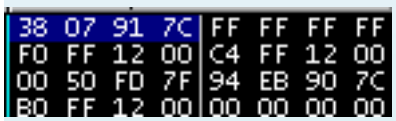
And Stack window:

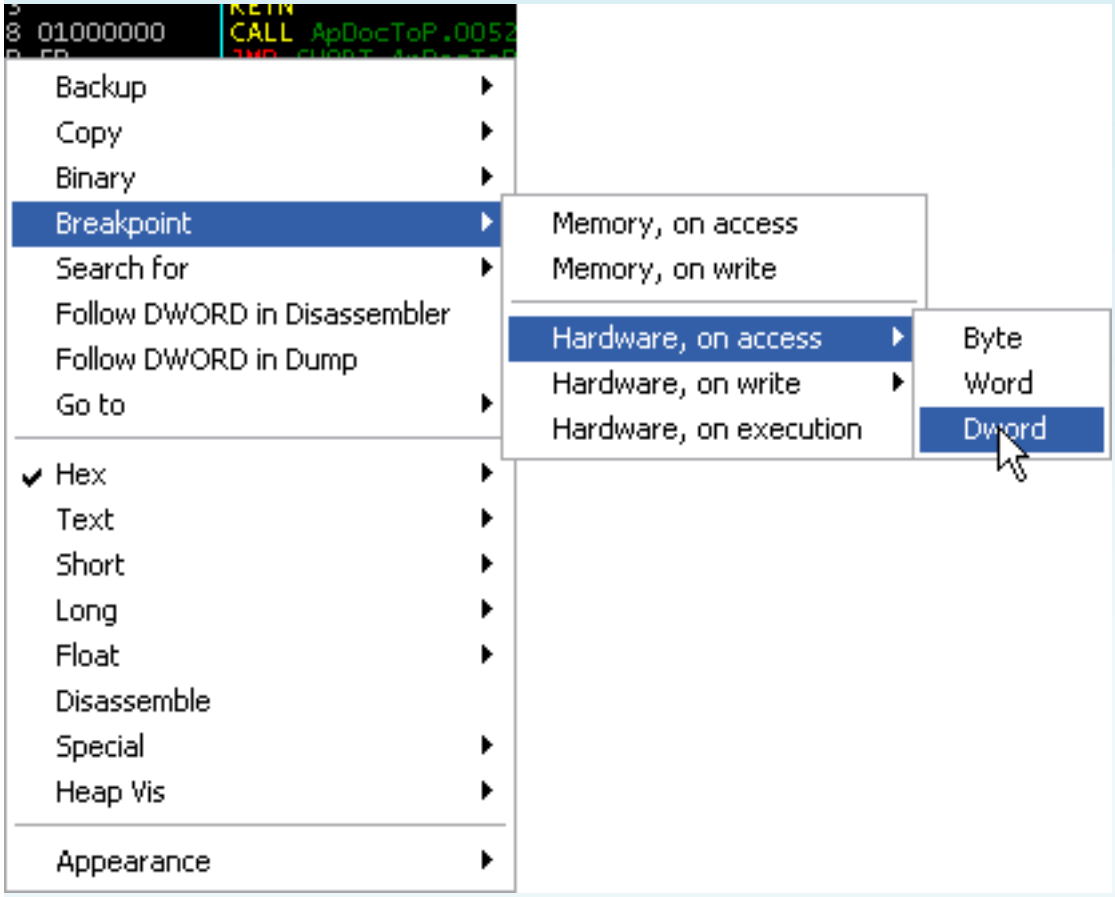
Address	Value	Comment
0012FFA4	7C910738	ntdll.7C910738
0012FFA8	FFFFFFFF	
0012FFAC	0012FFF0	
0012FFB0	0012FFC4	
0012FFB4	7FFD5000	
0012FFB8	7C90EB94	ntdll.KiFastSystemCallRet
0012FFBC	0012FFB0	
0012FFC0	00000000	
0012FFC4	7C816D4F	RETURN to kernel32.7C816D4F
0012FFC8	7C910738	ntdll.7C910738
0012FFCC	FFFFFFFF	
0012FFD0	7FFD5000	
0012FFD4	8054B038	
0012FFD8	0012FFC8	

Before the implementation of the code shall unpack the program in memory, the push all written to the stack for the purpose of preserving the bar record. Therefore, when done to unpack the program will restore all to write this. So to the OEP (Original Entry Point) we do the following: Click on the right to write ESP, Select Follow in dump:

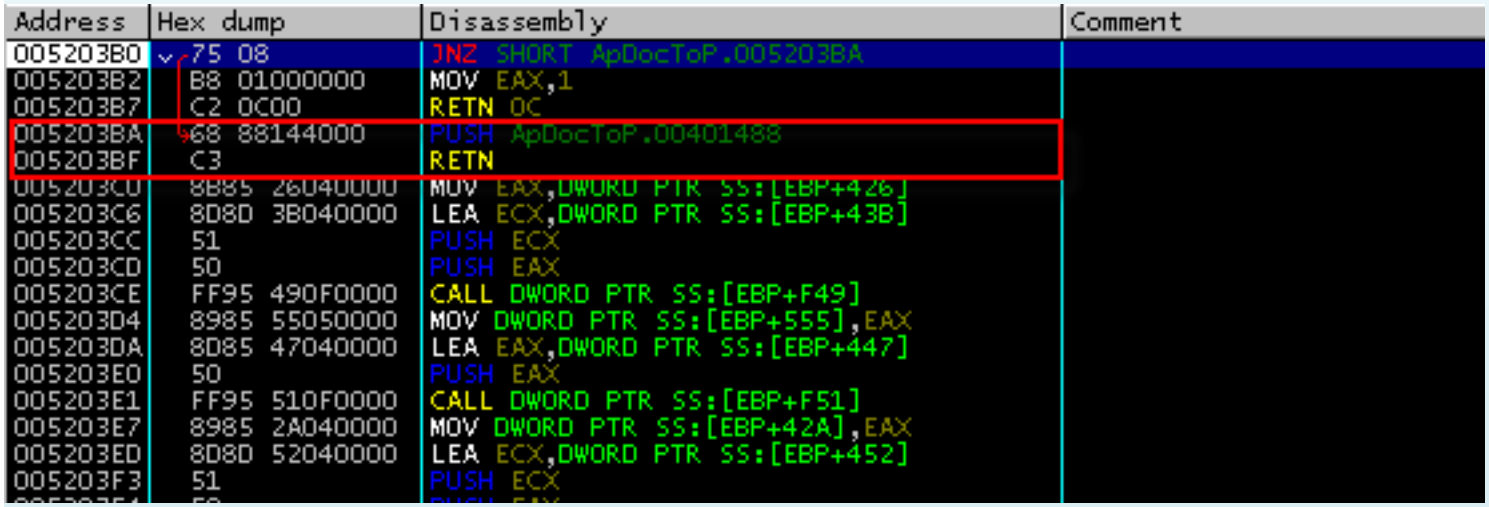


At the dump window, highlight the first 4 bytes and Right Click, select the Hardware Breakpoint à , à On Access Dword:





Press F9 to run, Olly break here:



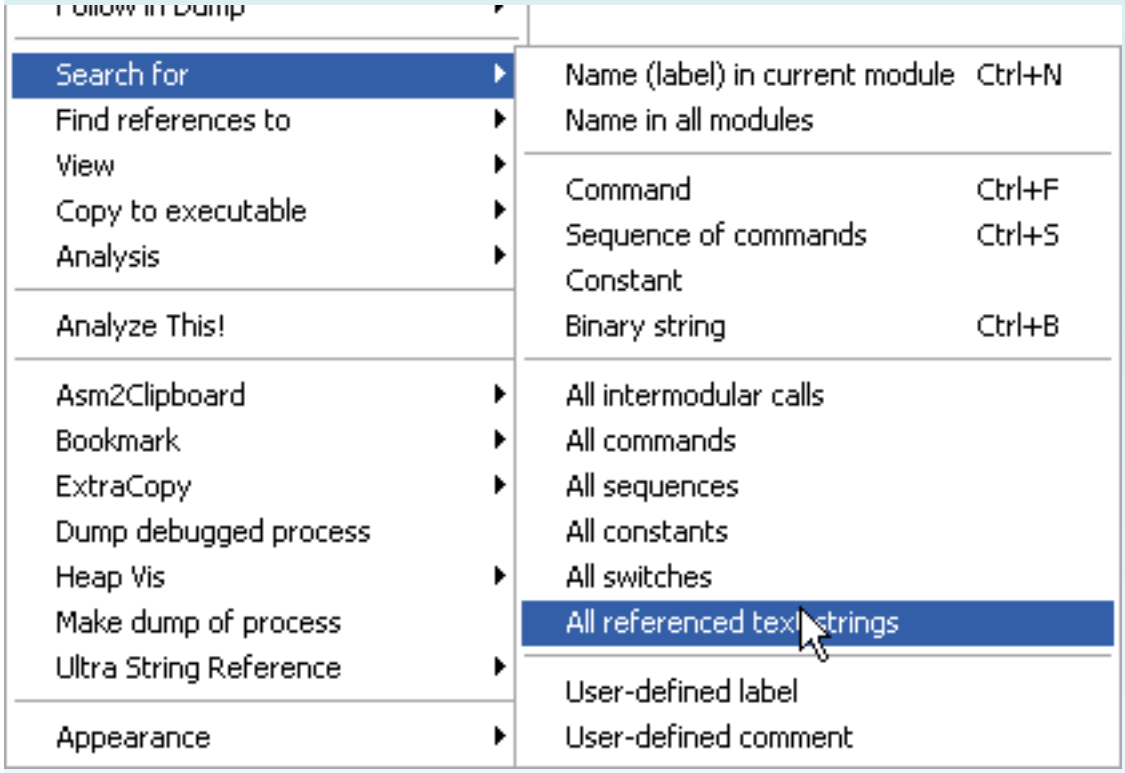
Continue pressing F8 three times more to be one of the OEP:

```
Address   Hex dump          Disassembly                              Comment
00401488  .v EB 10          JMP SHORT ApDocToP.0040149A
0040148A     66             DB 66                                    CHAR 'f'
0040148B     62             DB 62                                    CHAR 'b'
0040148C     3A             DB 3A                                    CHAR ':'
0040148D     43             DB 43                                    CHAR 'C'
0040148E     2B             DB 2B                                    CHAR '+'
0040148F     2B             DB 2B                                    CHAR '+'
00401490     48             DB 48                                    CHAR 'H'
00401491     4F             DB 4F                                    CHAR 'O'
00401492     4F             DB 4F                                    CHAR 'O'
00401493     4B             DB 4B                                    CHAR 'K'
00401494     90             NOP
00401495     E9             DB E9
00401496     98304C00       DD OFFSET ApDocToP.___CPPdebugHook
0040149A  > ↳A1 8B304C00    MOV EAX,DWORD PTR DS:[4C308B]
0040149F  .  C1E0 02        SHL EAX,2
004014A2  .  A3 8F304C00    MOV DWORD PTR DS:[4C308F],EAX
004014A7  .  52             PUSH EDX
004014A8  .  6A 00          PUSH 0                                   pModule = NULL
004014AA  .  E8 81060C00    CALL ApDocToP.004C1B30                   GetModuleHandleA
004014AF  .  8BD0           MOV EDX,EAX
004014B1  .  E8 06250B00    CALL ApDocToP.004B39BC
004014B6  .  5A             POP EDX
```

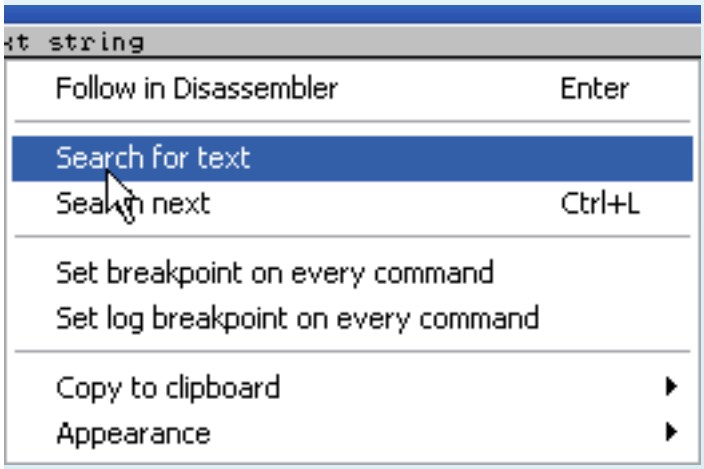
Now we can dump the file and fix IAT Hoanh to unpack the process. However, this article is about technical Inline Patching so I will not do so.

IV. Finding where to patch:

Continue, we will need to find patch. Right-click in the Disassembly window and select Search for All referenced text strings:

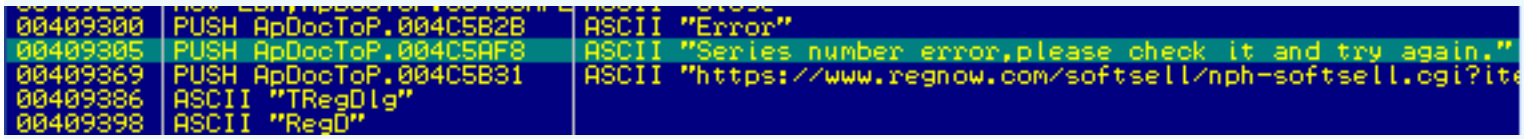


In the window string Text: Right Click, select Search for text:



Enter: "Series number error"

Click OK to me for this:



Double click on the line is to highlight it here:

```
004092FC  .v EB 35        JMP SHORT ApDocToP.00409333
004092FE  >  6A 10        PUSH 10
00409300  .  68 2B5B4C00  PUSH ApDocToP.004C5B2B      ASCII "Error"
00409305  .  68 F85A4C00  PUSH ApDocToP.004C5AF8      ASCII "Series number error,
0040930A  .  8BC3         MOV EAX,EBX
0040930C  .  E8 8B4A0800  CALL ApDocToP.0048DD9C
00409311  .  50           PUSH EAX                    hOwner
00409312  .  E8 E18F0B00  CALL ApDocToP.004C22F8      MessageBoxA
00409317  .  FF4D F0      DEC [LOCAL.4]
```

Scroll to the top is a bit far:

We see here if the value AL other 1, the command will jump to JNZ badboy, conversely will call goodboy. So, make sure check function Serial address at 00,409,188 (on my computer, your computer may be different). To check the serial functions we highlight the "Call ApDocToP.00409188" and press Enter or click the keyboard Ctrl + G and then enter the address of the function check serial is 00409188, we will be here to:

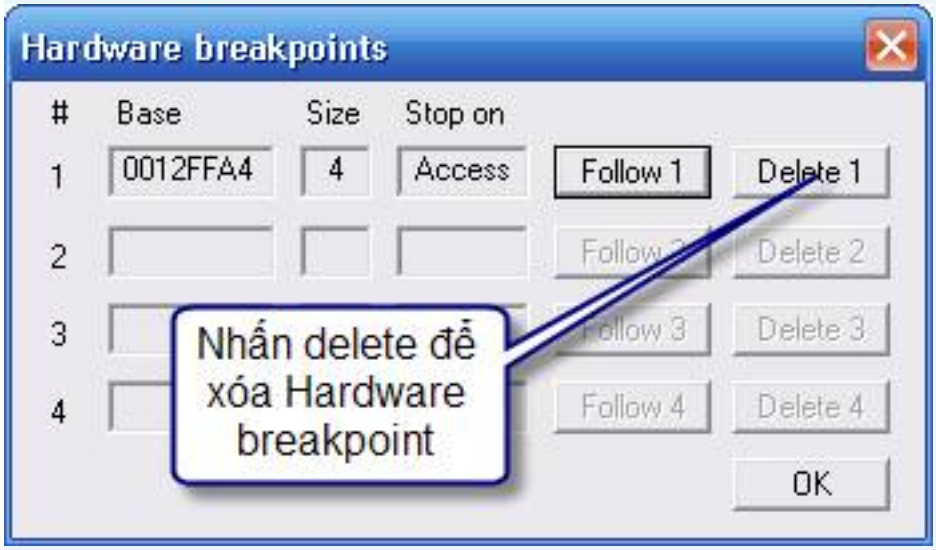
```
Address   Hex dump    Disassembly              Comment
00409188  r$  55      PUSH EBP
00409189  .   8BEC    MOV EBP,ESP
0040918B  .   53      PUSH EBX
0040918C  .   56      PUSH ESI
0040918D  .   57      PUSH EDI
0040918E  .   8B5D 0C MOV EBX,[ARG.2]
00409191  .   85DB    TEST EBX,EBX
00409193  .v  74 0C   JE SHORT ApDocToP.004091A1
00409195  .   53      PUSH EBX
00409196  .   E8 E5AD0A00 CALL ApDocToP.004B3F80
```

What we need is the implementation of this function, the value of AL must be 1. There are many different patch to achieve the purpose, for I will be streamlined patch at the beginning of this function as follows:

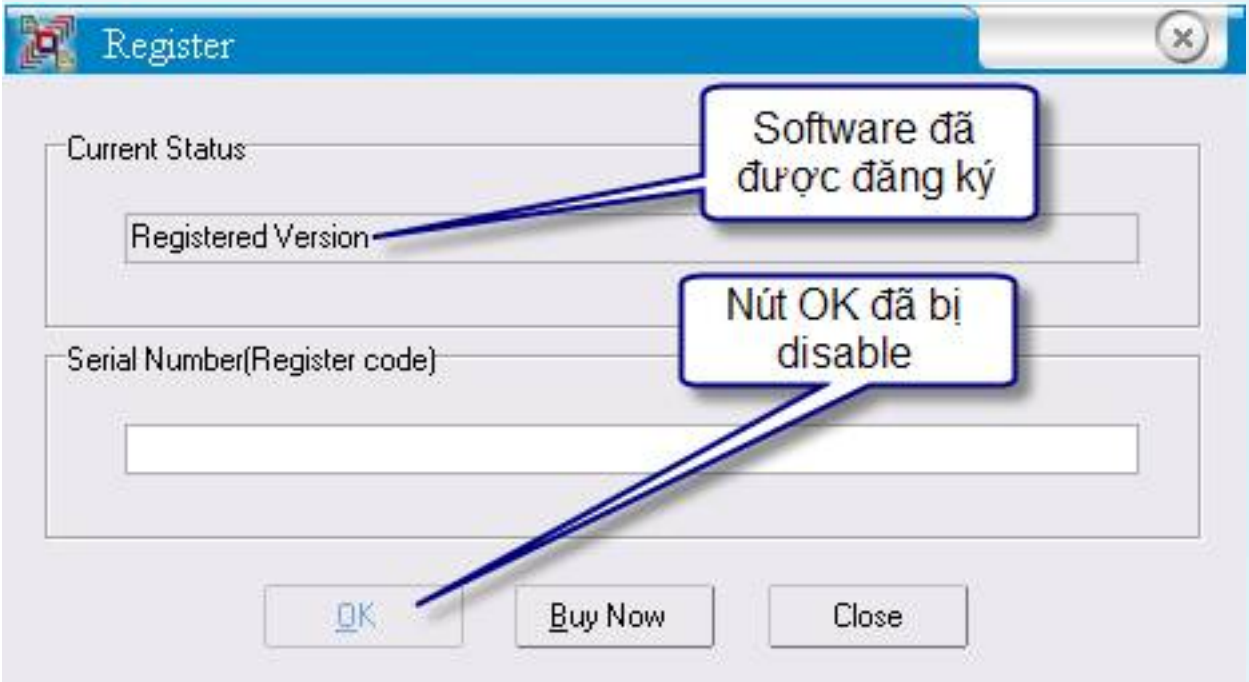
```
MOV AL , 1
RETN
```

```
00409188    B0 01       MOV AL,1
0040918A    C3          RETN
0040918B  . 53          PUSH EBX
0040918C  . 56          PUSH ESI
0040918D  . 57          PUSH EDI
```

Note: To edit the code you want to highlight the command line and click edit spacebar or can use a plugin is very useful NonaWrite. However, tut this is quite simply that I do not use it. Now we run the test program to try, in OllyDbg to Debug menu and then select the Hardware breakpoint:



After deleting Hardware Breakpoint, press F9 to run the program. The program will skip the window to register. On the Help menu, select register ...

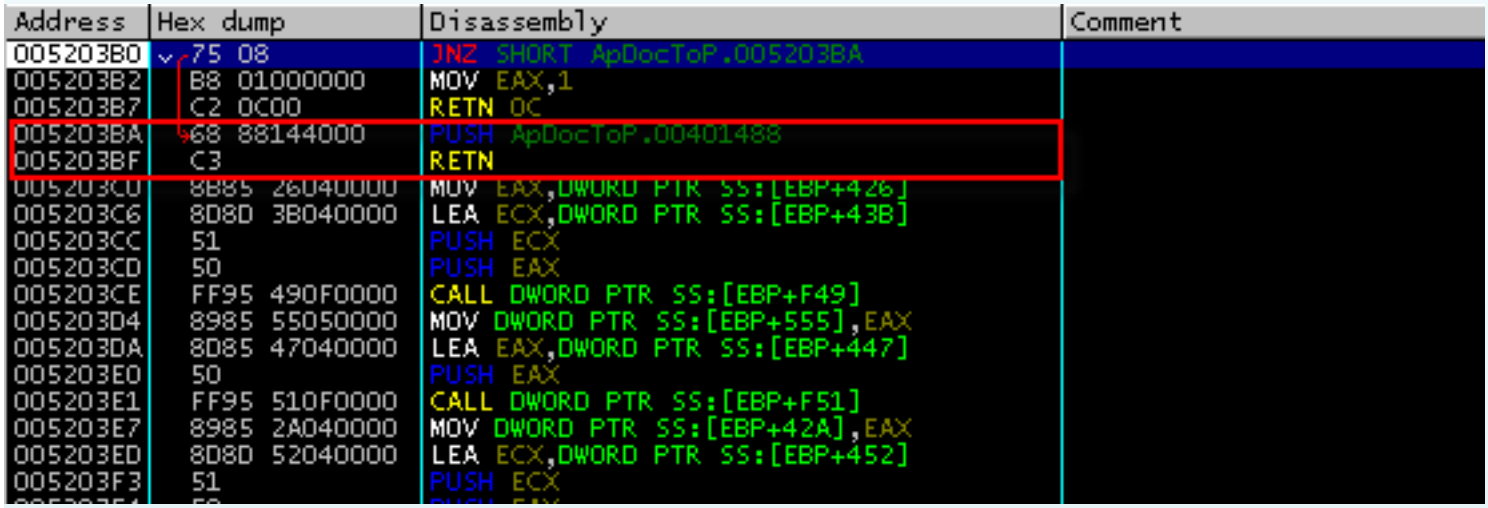


Therefore, we need to inline patch three bytes at address 00409188 from 55 to 8B EC B0 01 C3.

You remember the value of this little will to use it in the Inline patching.

V. Inline Patching:

Press Ctrl + F2 to restart the program. Steps Unpacking the same until coming here:



To now unpack the code has completed the process in memory unpack. For two command line that follows:

PUSH ApDocToP.00401488

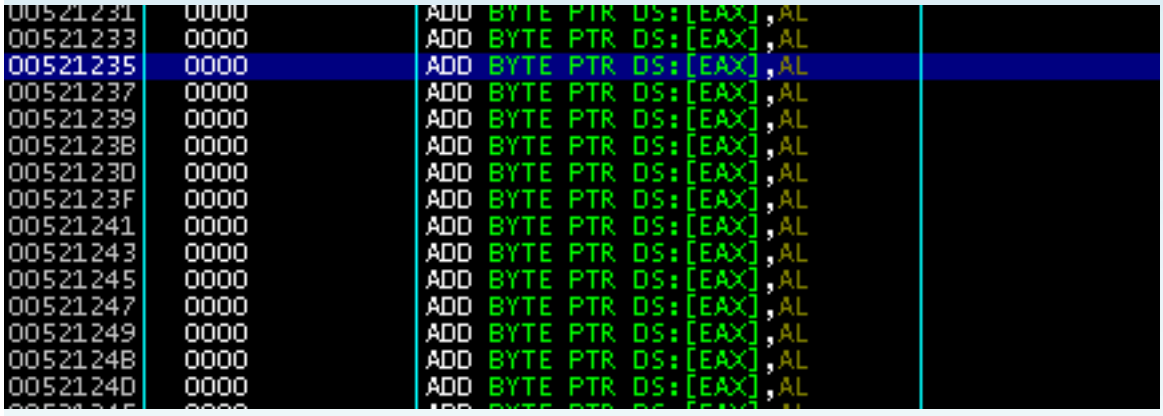
RETN

They mean equivalent to the command:

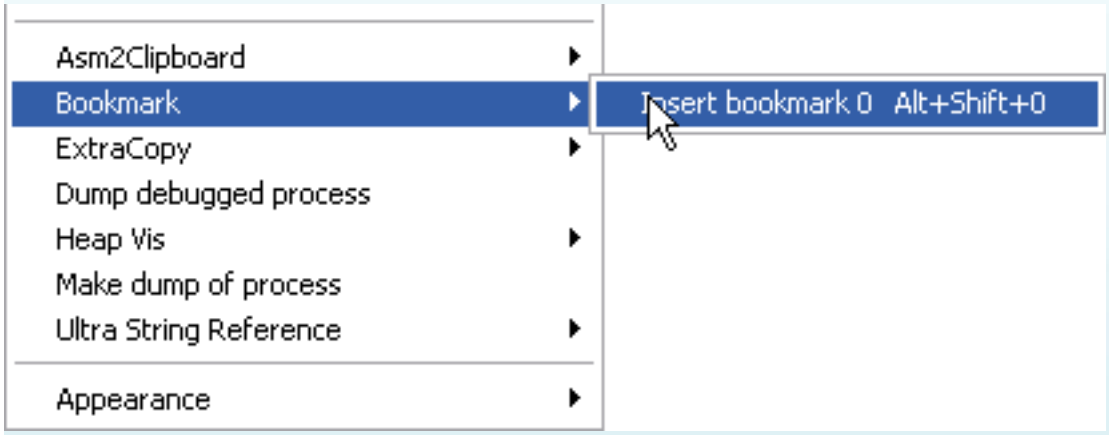
JMP ApDocToP.00401488

That is to jump to the OEP program. Address of the command line:

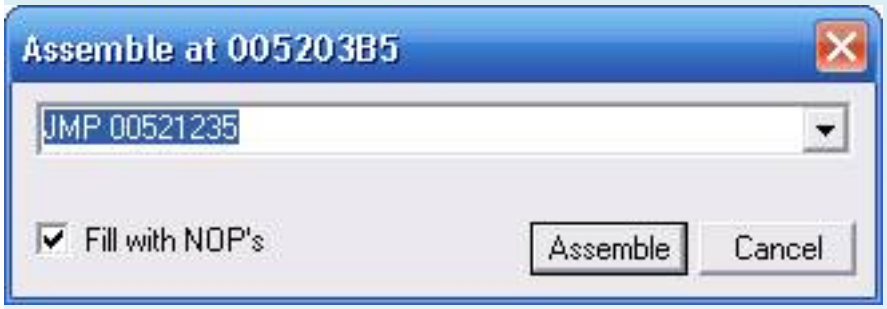
PUSH ApDocToP.00401488 is 005203BA. You remember the bit to little more we will use to inject the code. Before you jump to OEP of the program will perform inline patch. First, we need a code space to work, so the code is called code cave. In the window Disassembly we move down the search until the code is appropriate, I choose to start code at 00521235:

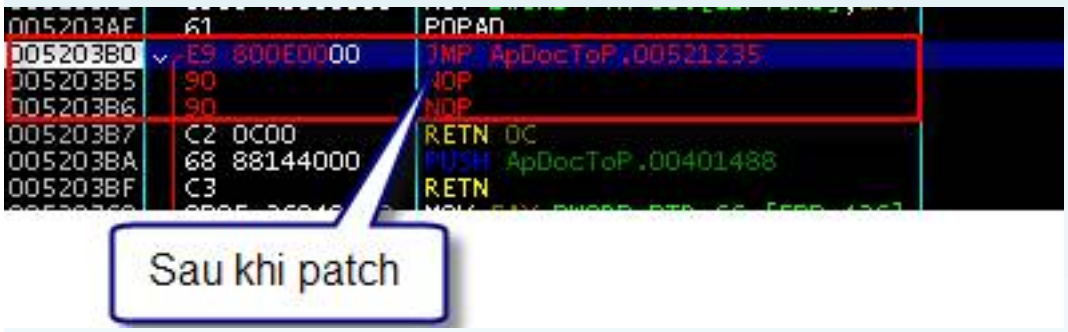


Check back for sure, right click on the desired address mark and then select Insert bookmark Bookmark à 0

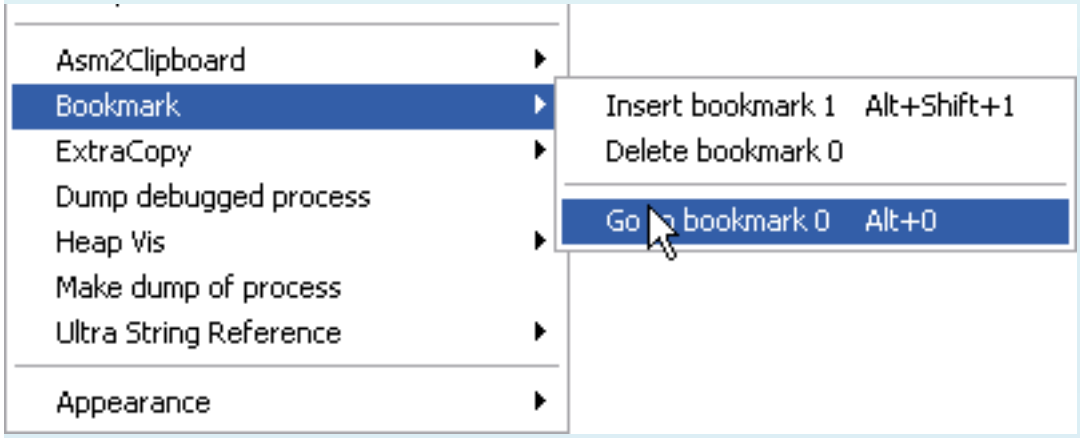


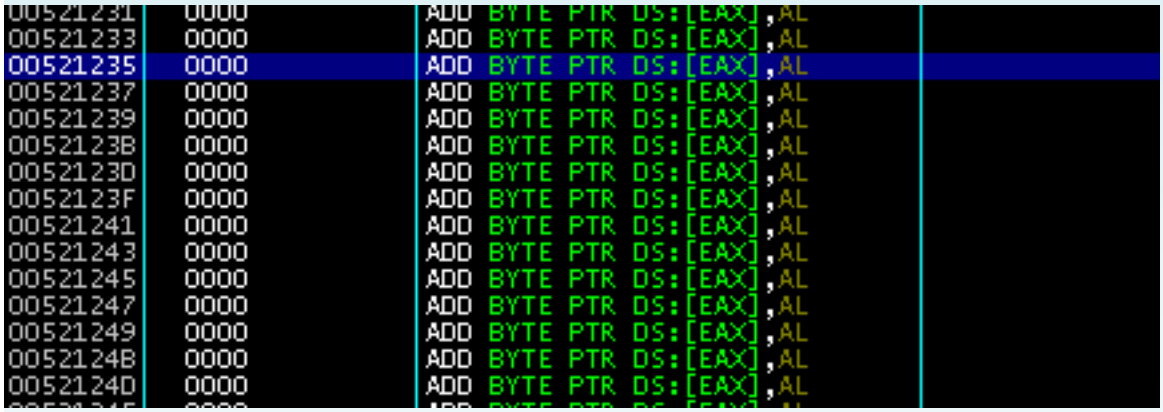
Note: you need a plugin Bookmark to perform this function.
Press * to return to where the break is, from the patch
JNZ SHORT 005203BA
the JMP 00521235



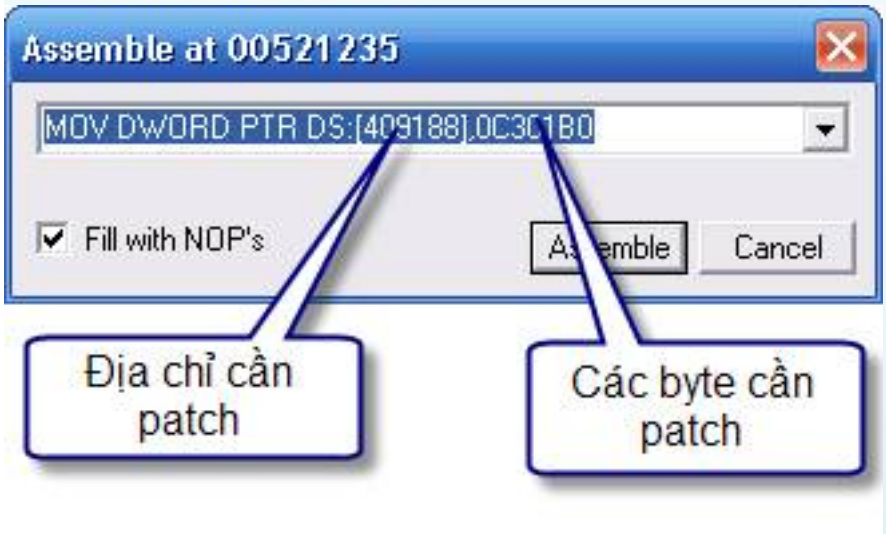


Back code our cave by: Disassembly window, right click and choose Bookmark à Go to bookmark 0

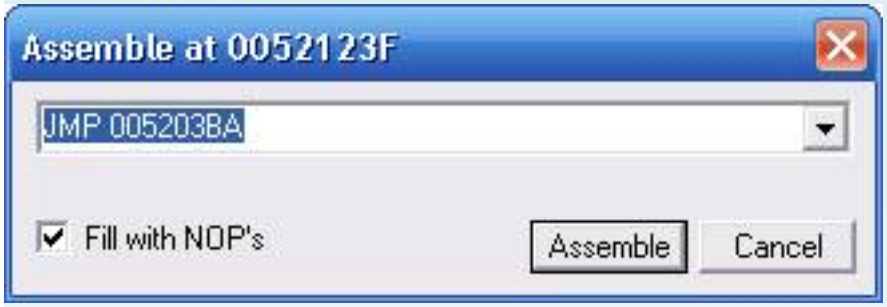




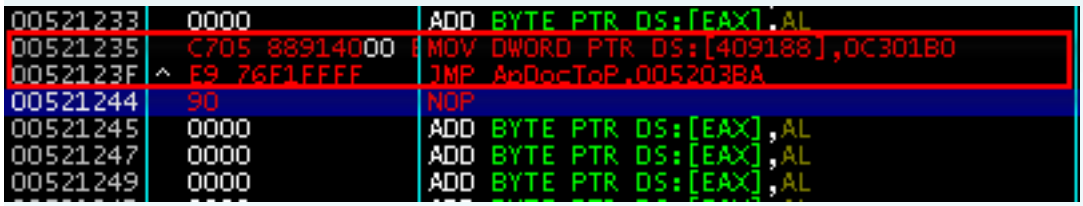
Press Spacebar to edit code, we start to inject code:



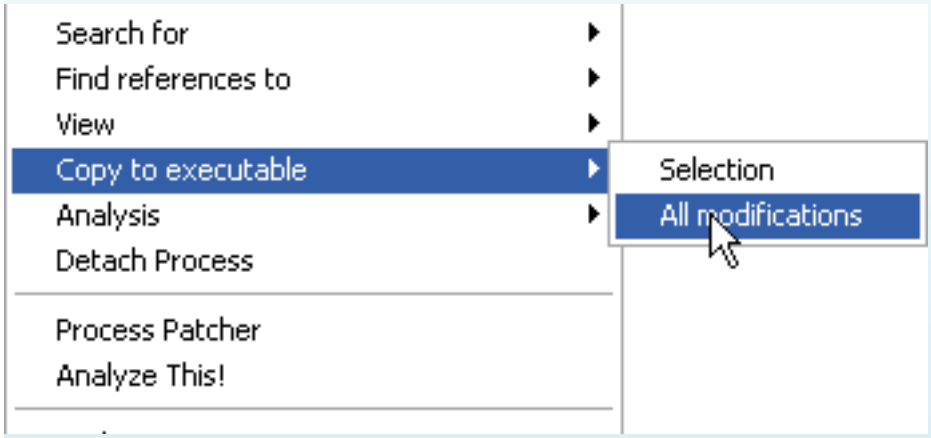
You also remember the values that I ask all of you remember it? First is the address of the function and check the serial 00409188 bytes we want to overwrite in this address is B0 01 C3.
To overwrite the value in this address 00409188 we use:
MOV DWORD PTR DS: [409188], 0C301B0
After the implementation of inline patching we need to address 005203BA from which to jump to the OEP and perform tasks that it must do:



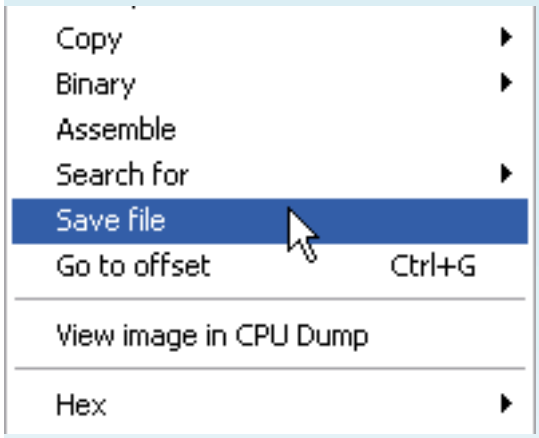
Results we have:

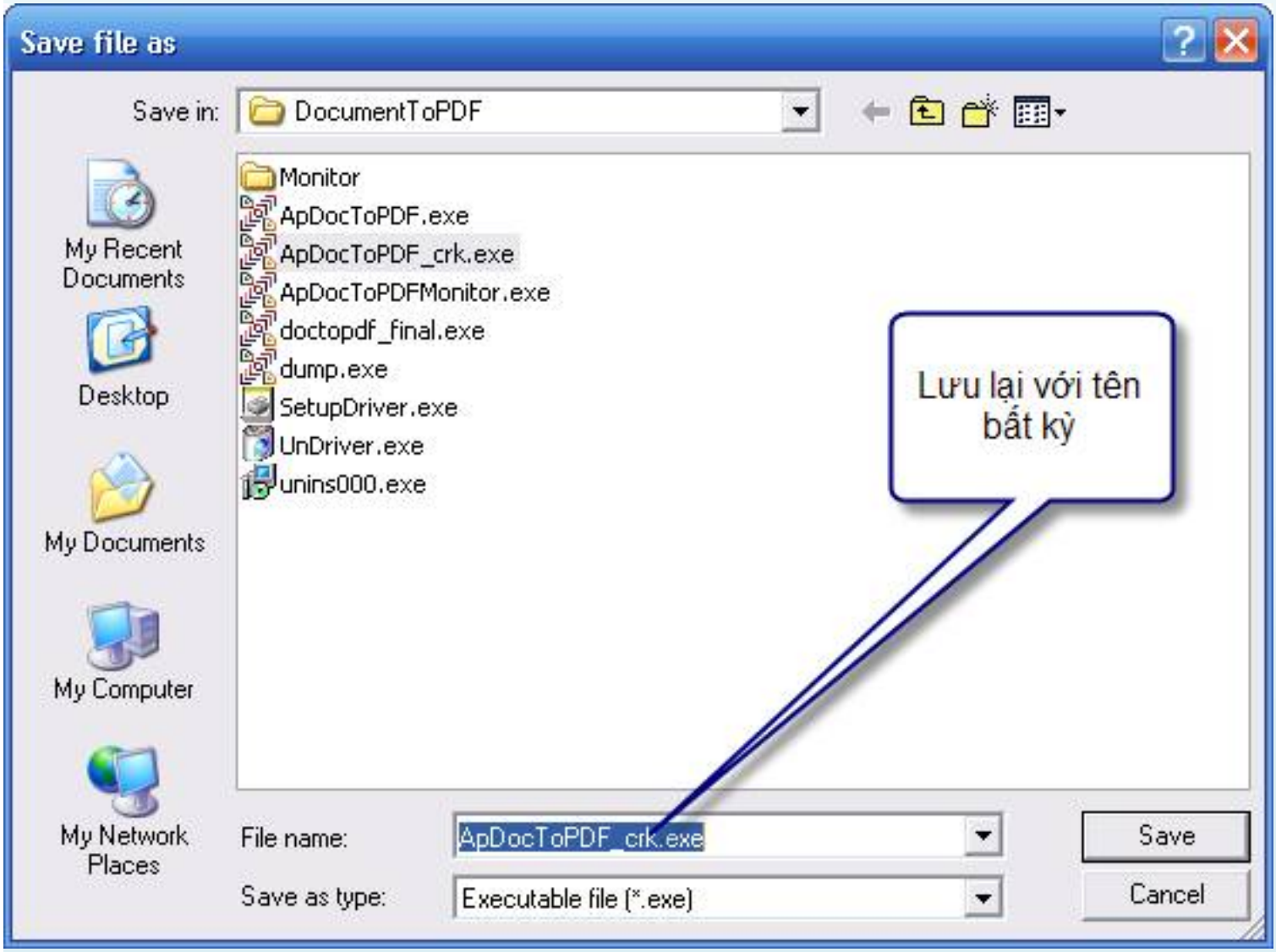


Save the changes in our ways: in the Disassembly window, Right Click and select Copy to All modifications à excutable



In the new window on the Right Click, select Save File





VII. Testing:

Back to Olly, press F8 twice will come:

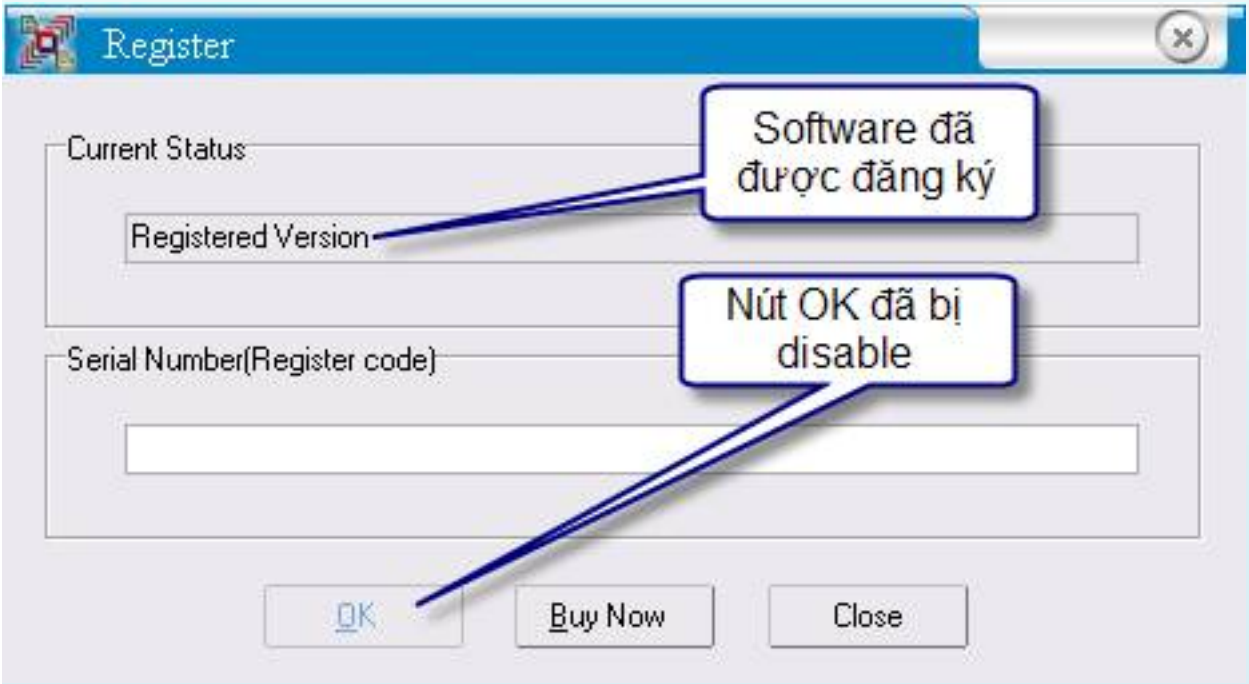
```
00521235   C705 88914000 MOV DWORD PTR DS:[409188],0C301B0
0052123F ^ E9 76F1FFFF   JMP ApDocToP.005203BA
00521244   90            NOP
00521245   0000          ADD BYTE PTR DS:[EAX],AL
00521247   0000          ADD BYTE PTR DS:[EAX],AL
```

That is just done command: MOV DWORD PTR DS: [409188], 0C301B0

Press the key combination Ctrl + G to type address 00409188 function is to check serial:

```
Address  Hex dump     Disassembly
00409188   B0 01      MOV AL,1
0040918A   C3         RETN
0040918B   0056 57    ADD BYTE PTR DS:[ESI+57],DL
0040918E   8B5D 0C    MOV EBX,DWORD PTR SS:[EBP+C]
00409191   85DB       TEST EBX,EBX
00409193 v 74 0C      JE SHORT ApDocToP.004091A1
```

We see results as you like. Press F9 to run (remember to remove Hardware Breakpoint), then on the Help menu, select the register:



Now we've done technical Inline Patching then that. Wishing you happy.

VIII. The end:

This is the first hand-tut's what they should have errors, please ignore all the while only in the wrong place.

Special thanks to Hacnho, MoonBaby, Benina, Kienmanowar and RongChauA who've writen tuts very good for newbies (Continue in the future?).

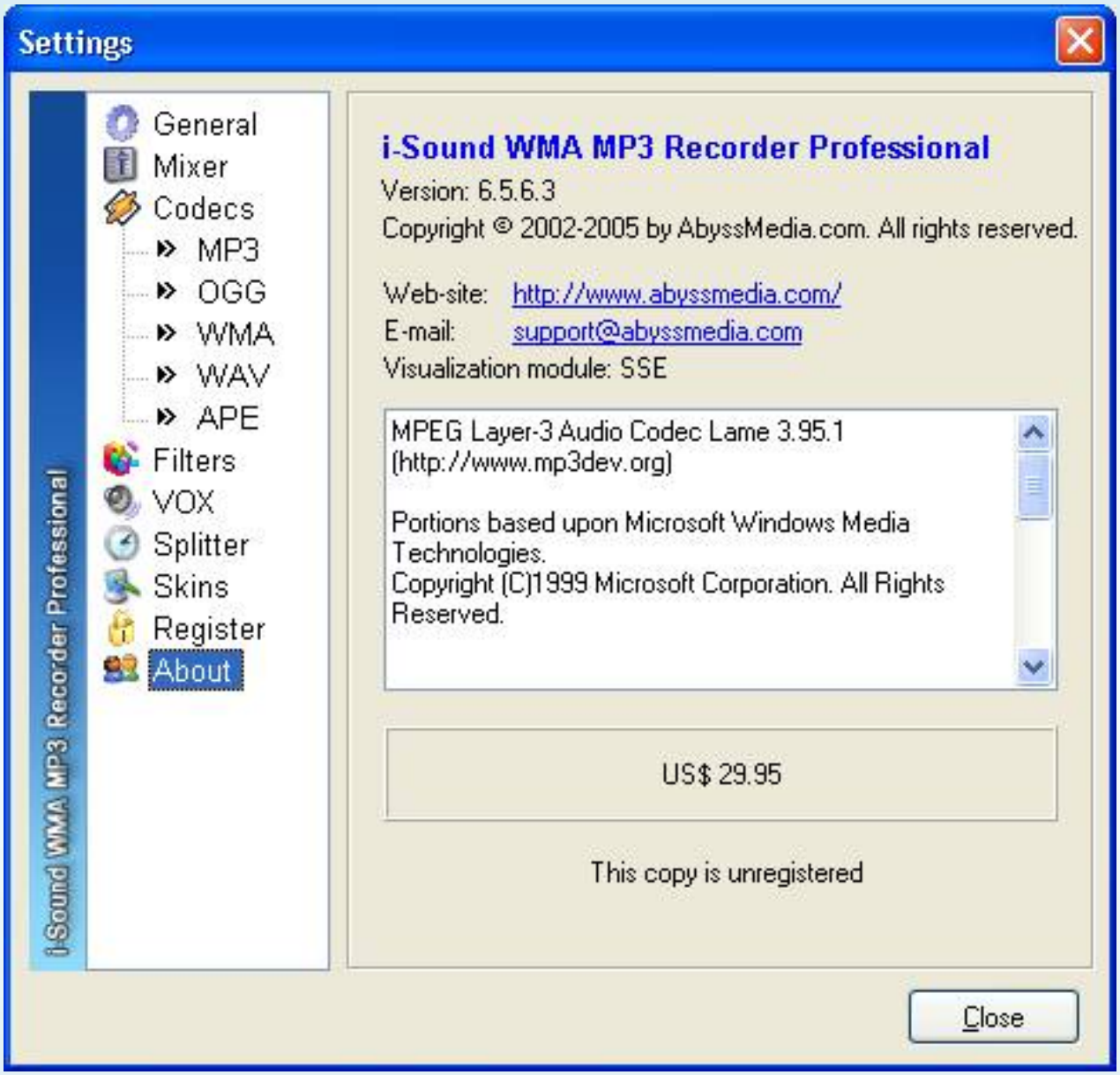
Thanks to all REA's member.

And of course I want to thank you for read it.

ERROR

7 / 6 / 2007

Inline Patching use APE + Dup 2:10 for UPX



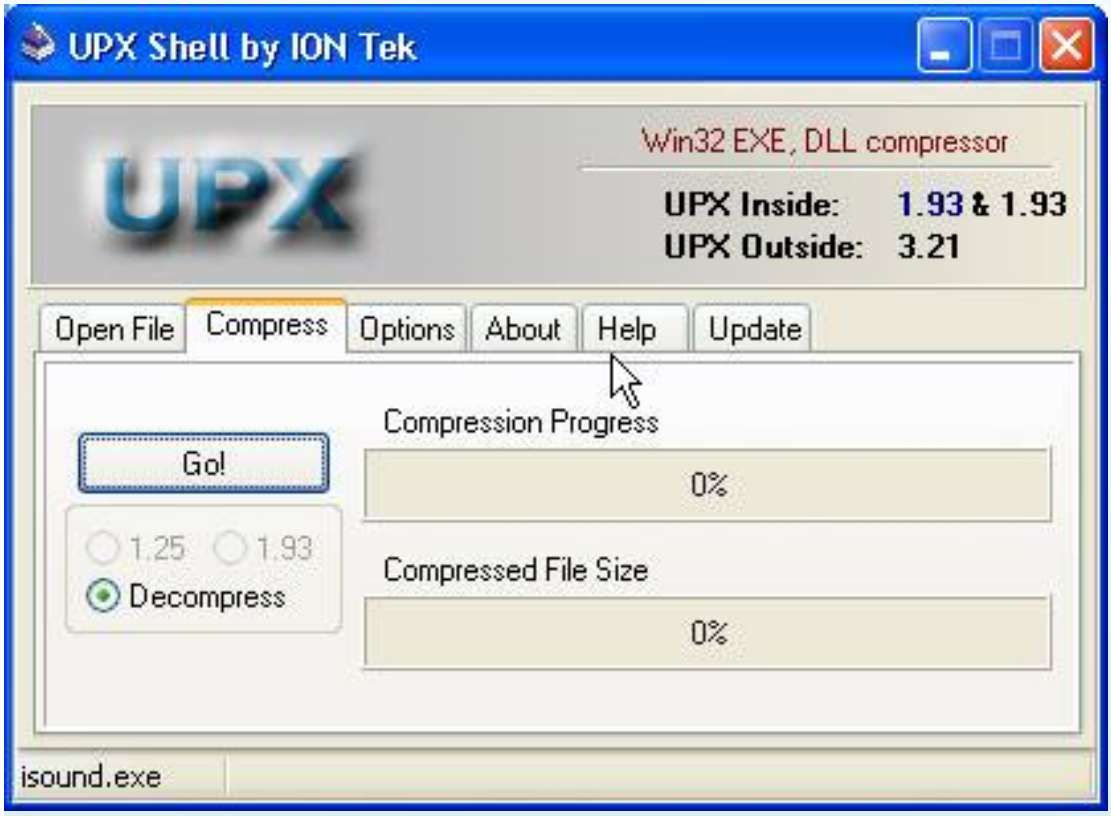
_He He, greeting relatives, I'm walking this voice training for the company going I have a karaoke contest in the hands of gold should I make a soft sound to get the mic with the trees

and out guitare team's 3 J . When this soft down, I forget beng finding lech crack the glass cracking it. Seeing this is a problem that little brother, we should mention I do mạn allowed the tut this. Make sure her child is also clear is what inline patching. Unlike normal patching files on the file. Packed files have three months to crack, one we unpack it and then finished it meat, is it we MUP to OEP, looking for signs of patch, then we create a loader, the third is how we live patch to file packed. In this way the three months to patch directly packed file is the most pro. Why? First, we avoid the large size release accompanied by unpacked.cracked. file, as the second we avoid the situation Cmp J and a reason it is ... lười J .

_Nguyen Principles of patching Inline (or a term is Code Injection redirection or Code) is we need to find placements patch, then we create a partition on the memory process. Remember this region include several billion as CRC check patch, patch code, several orders jump to OEP. Then we redirect to the real OEP program a jump command. From here we proceed patch target, then we redirect the area of memory. Since the area is sure to jump to the EP's packer. Argentina is conduct, and many other cases. Today health than many we had Ape inline quite a patcher or Ap0x support a variety packer, regret that not only support for ASProtect L and Armadillo. In this article I will illustrate how to use the patcher this target with a simple packer is UPX 1.93w!

_Truoc All we detect target:

_Unpack:



_Chuong The written Borlan Delphi7:

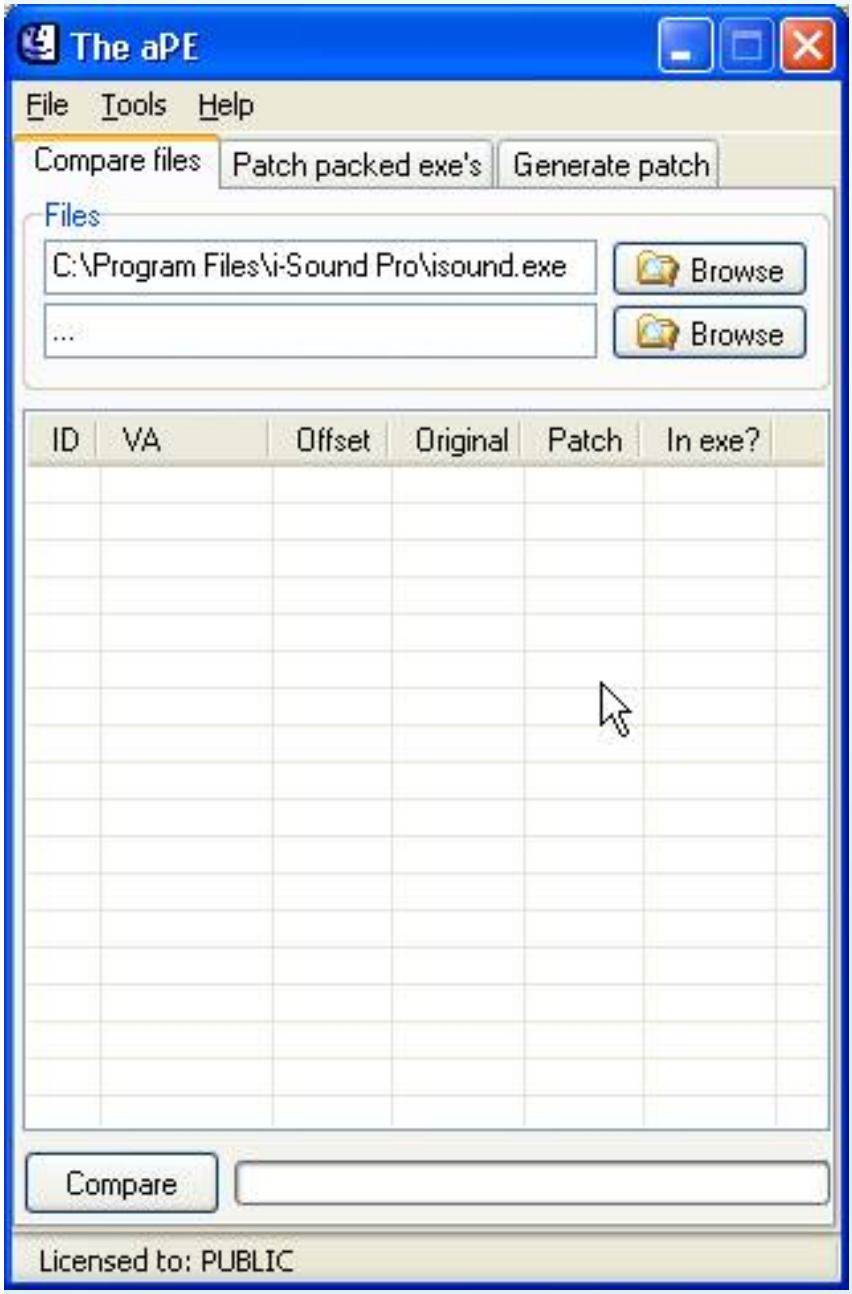
_Cracking:

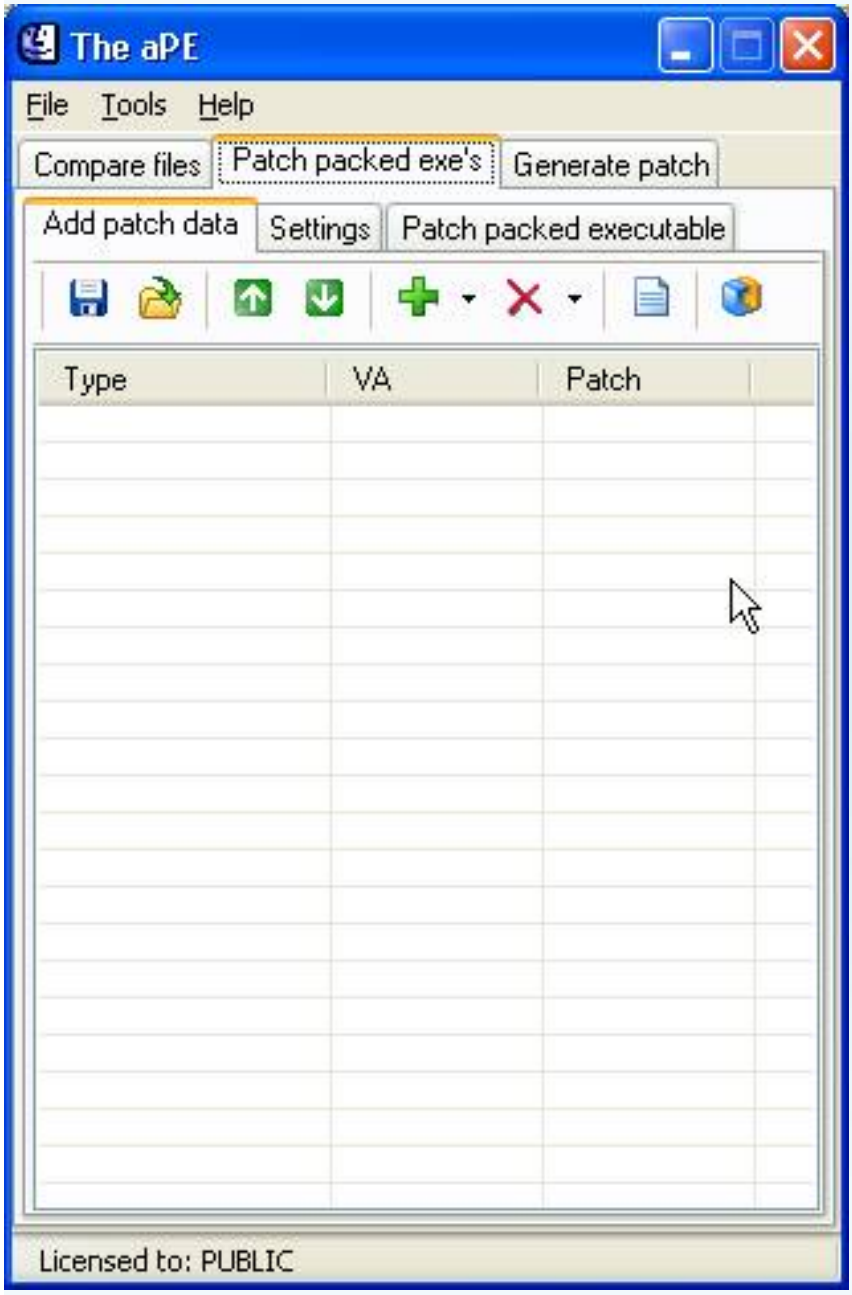
```
:004D0A0A A1E01D4E00              mov eax, dword ptr [004E1DE0]
:004D0A0F 8B00                    mov eax, dword ptr [eax]
:004D0A11 E816530000              call 004D5D2C
:004D0A16 84C0                    test al, al
:004D0A18 7512                    jne 004D0A2C

* Possible StringData Ref from Code Obj ->"This copy is unregistered"
                                  |
:004D0A1A BA740E4D00              mov edx, 004D0E74
:004D0A1F 8B83E4040000            mov eax, dword ptr [ebx+000004E4]
:004D0A25 E8E2A2F9FF              call 0046AD0C
:004D0A2A EB6E                    jmp 004D0A9A

* Referenced by a (U)nconditional or (C)onditional Jump at Address:
|:004D0A18(C)
|
->:004D0A2C 8B0D141D4E00          mov ecx, dword ptr [004E1D14]
:004D0A32 8B490D                  mov ecx, dword ptr [ecx+0D]
:004D0A35 8D8598FEFFFF            lea eax, dword ptr [ebp+FFFFFE98]

* Possible StringData Ref from Code Obj ->"Registered to  "
                                  |
:004D0A3B BA980E4D00              mov edx, 004D0E98
:004D0A40 E8AB49F3FF              call 004053F0
:004D0A45 8B9598FEFFFF            mov edx, dword ptr [ebp+FFFFFE98]
:004D0A4B 8B83E4040000            mov eax, dword ptr [ebx+000004E4]
:004D0A51 E8B6A2F9FF              call 0046AD0C
:004D0A56 33D2                    xor edx, edx
:004D0A58 8B83AC040000            mov eax, dword ptr [ebx+000004AC]
:004D0A5E E899A1F9FF              call 0046ABFC
:004D0A63 33D2                    xor edx, edx
:004D0A65 8B83C4040000            mov eax, dword ptr [ebx+000004C4]
:004D0A6B E88CA1F9FF              call 0046ABFC
```

_Patch To:

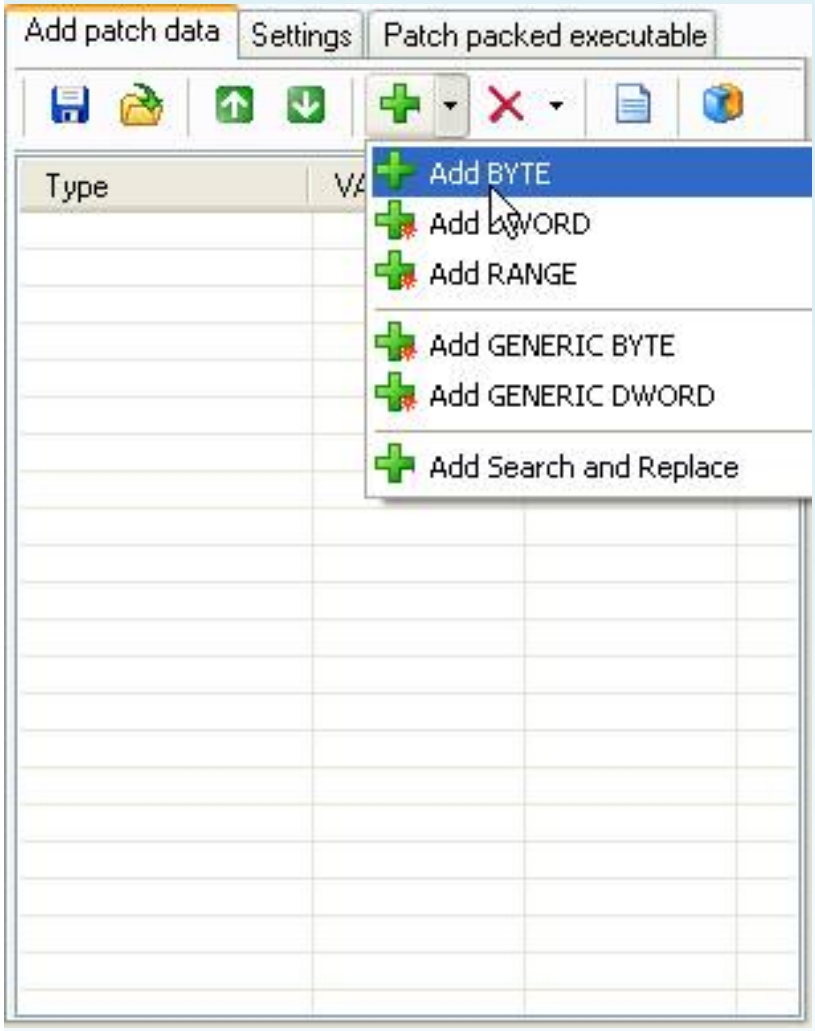
```
:004D0A0A A1E01D4E00              mov eax, dword ptr [004E1DE0]
:004D0A0F 8B00                    mov eax, dword ptr [eax]
:004D0A11 E816530000              call 004D5D2C
:004D0A16 84C0                    test al, al
:004D0A18 EB12                    jmp 004D0A2C

* Possible StringData Ref from Code Obj ->"This copy is unregistered"
                                   |
:004D0A1A BA740E4D00              mov edx, 004D0E74
:004D0A1F 8B83E4040000            mov eax, dword ptr [ebx+000004E4]
:004D0A25 E8E2A2F9FF              call 0046AD0C
:004D0A2A EB6E                    jmp 004D0A9A

* Referenced by a (U)nconditional or (C)onditional Jump at Address:
|:004D0A18(U)
|
->:004D0A2C 8B0D141D4E00          mov ecx, dword ptr [004E1D14]
:004D0A32 8B490D                  mov ecx, dword ptr [ecx+0D]
:004D0A35 8D8598FEFFFF            lea eax, dword ptr [ebp+FFFFFE98]

* Possible StringData Ref from Code Obj ->"Registered to  "
                                   |
:004D0A3B BA980E4D00              mov edx, 004D0E98
:004D0A40 E8AB49F3FF              call 004053F0
:004D0A45 8B9598FEFFFF            mov edx, dword ptr [ebp+FFFFFE98]
:004D0A4B 8B83E4040000            mov eax, dword ptr [ebx+000004E4]
:004D0A51 E8B6A2F9FF              call 0046AD0C
:004D0A56 33D2                    xor edx, edx
:004D0A58 8B83AC040000            mov eax, dword ptr [ebx+000004AC]
:004D0A5E E899A1F9FF              call 0046ABFC
:004D0A63 33D2                    xor edx, edx
:004D0A65 8B83C4040000            mov eax, dword ptr [ebx+000004C4]
:004D0A6B E88CA1F9FF              call 0046ABFC
```

_Do File is unpacked. The problem is we need to patch the packed file. Ok, let's open up aPE, the tab packed exe's Patch:


The aPE
File Tools Help
Compare files
Patch packed exe's
Generate patch
Files
C:\Program Files\i-Sound Pro\isound.exe
Browse
...
Browse
ID VA Offset Original Patch In exe?
Compare
Licensed to: PUBLIC

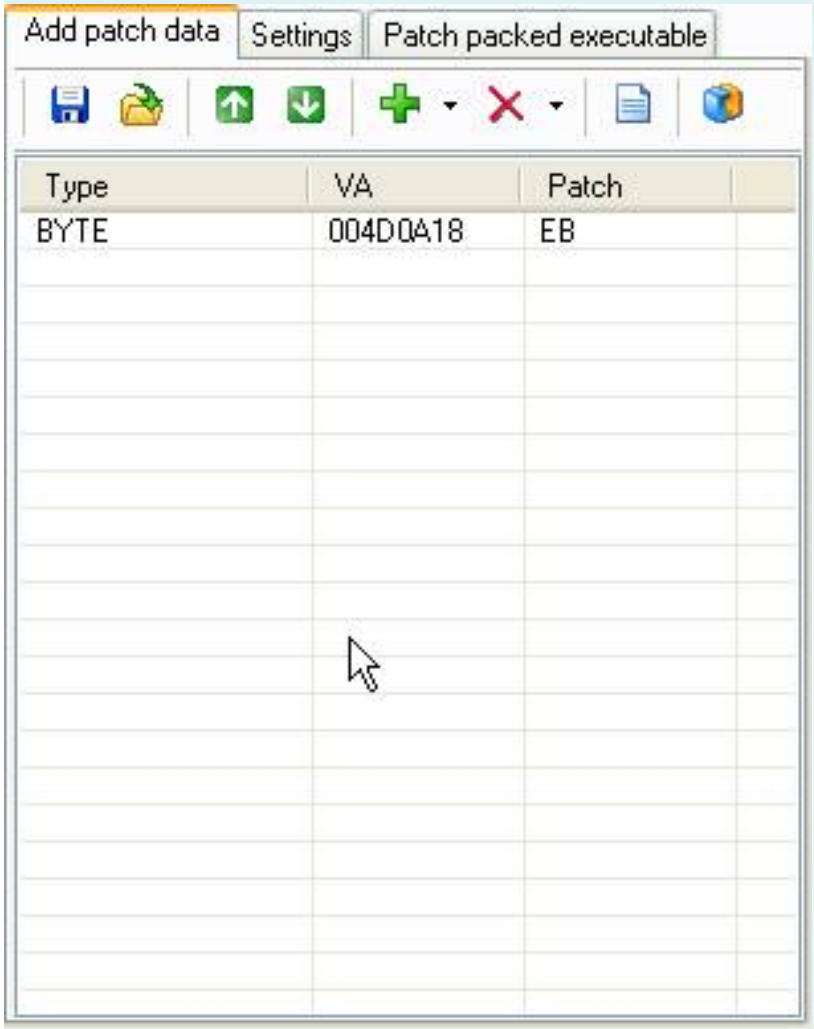

The aPE
File Tools Help
Compare files
Patch packed exe's
Generate patch
Add patch data
Settings
Patch packed executable
Type
VA
Patch
Licensed to: PUBLIC

_Add Bytes:

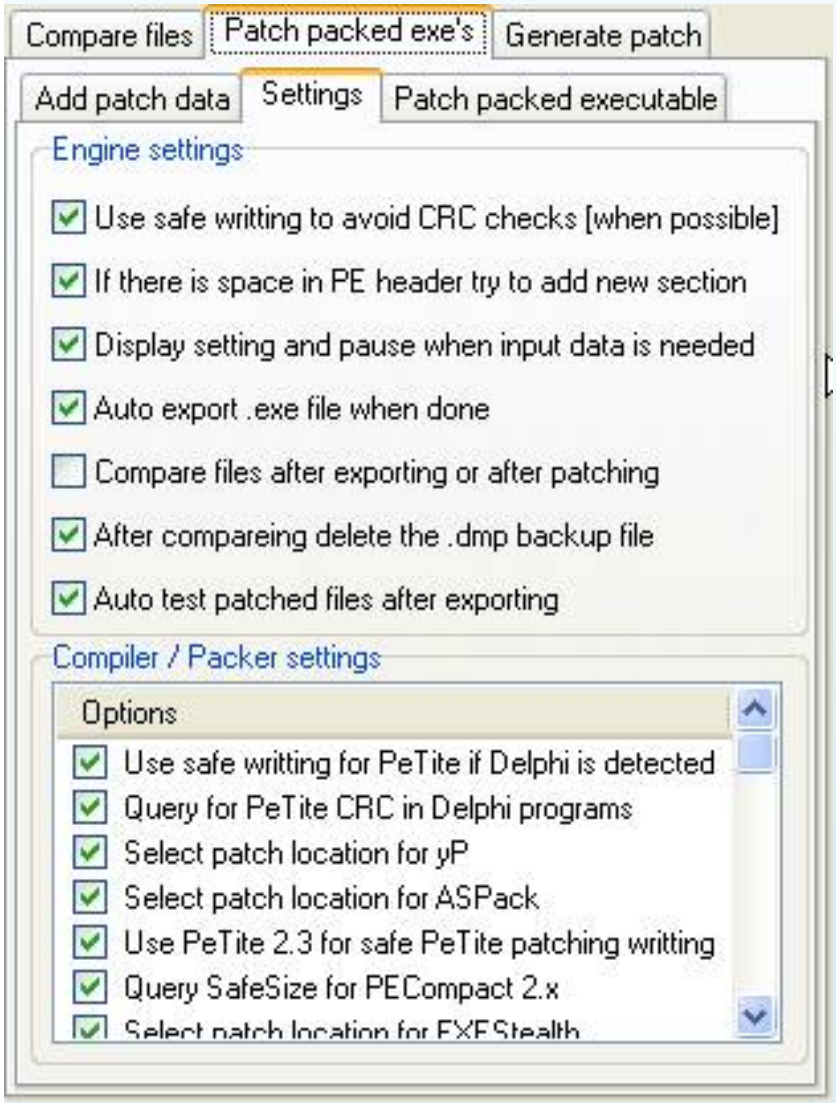

Add patch data
Settings
Patch packed executable
Type
Add BYTE
Add DWORD
Add RANGE
Add GENERIC BYTE
Add GENERIC DWORD
Add Search and Replace


Enter VA
VA adress is:
4D0A18
OK
Cancel

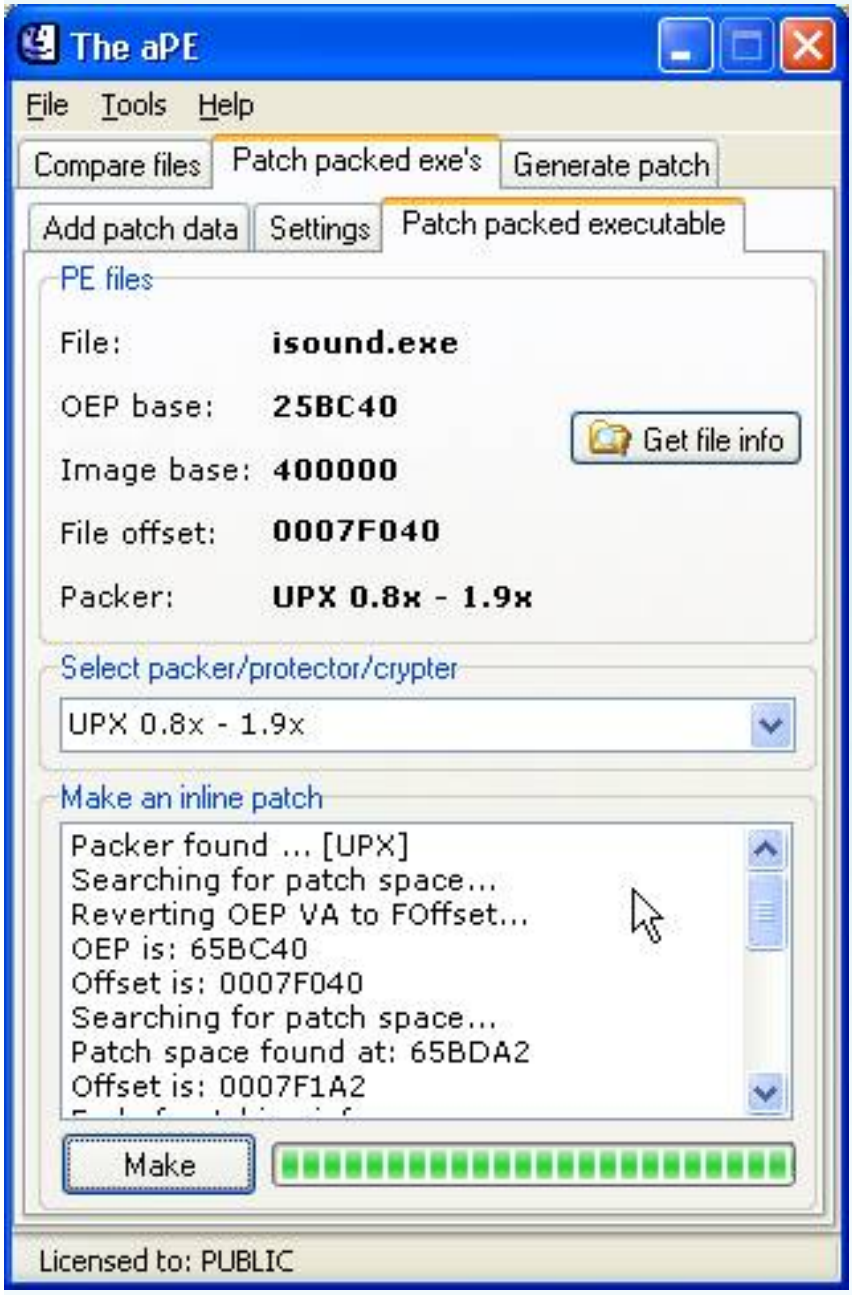

Enter patch
Patch byte is:
EB
OK
Cancel



_Qua Setting tab:

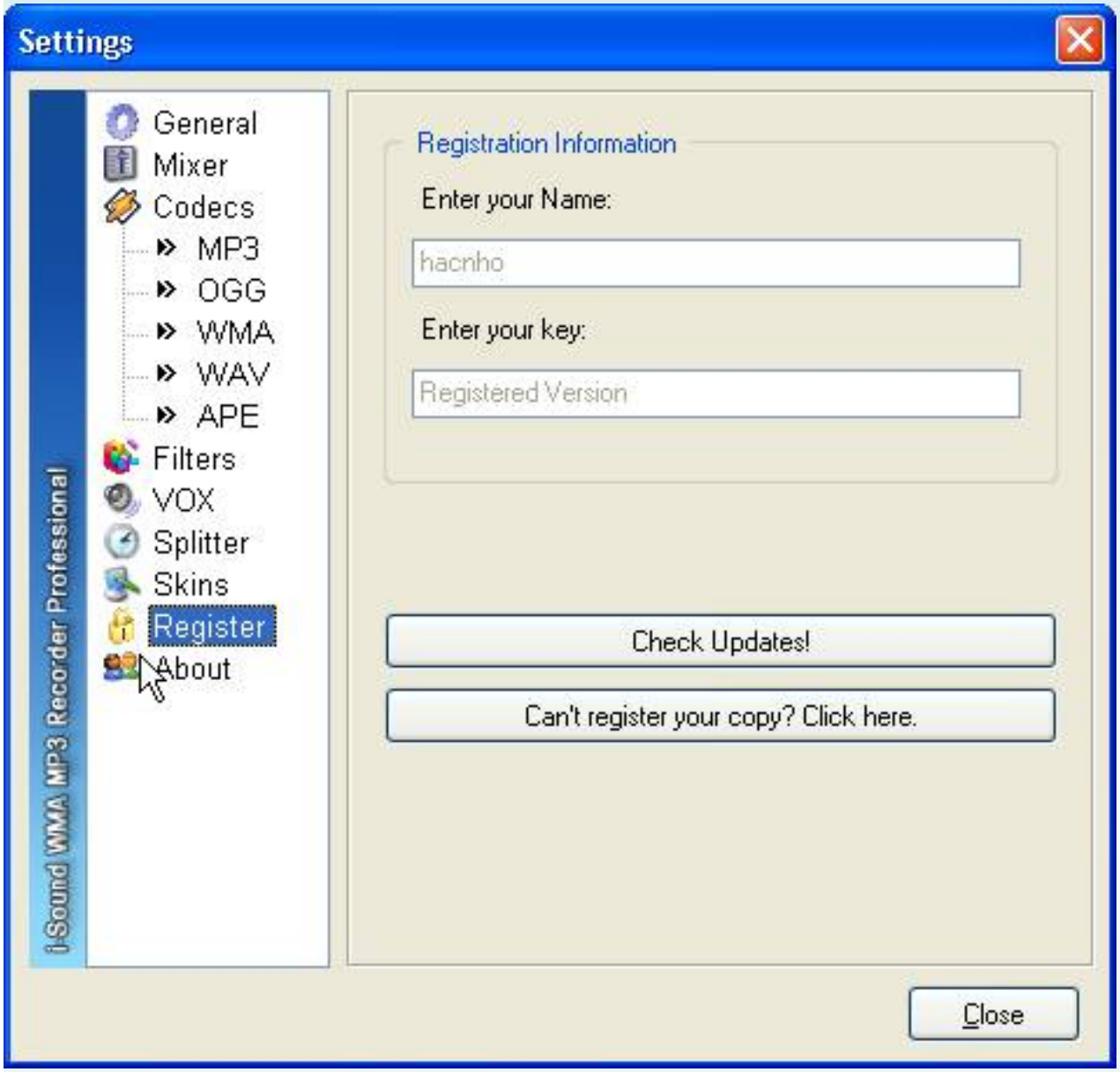


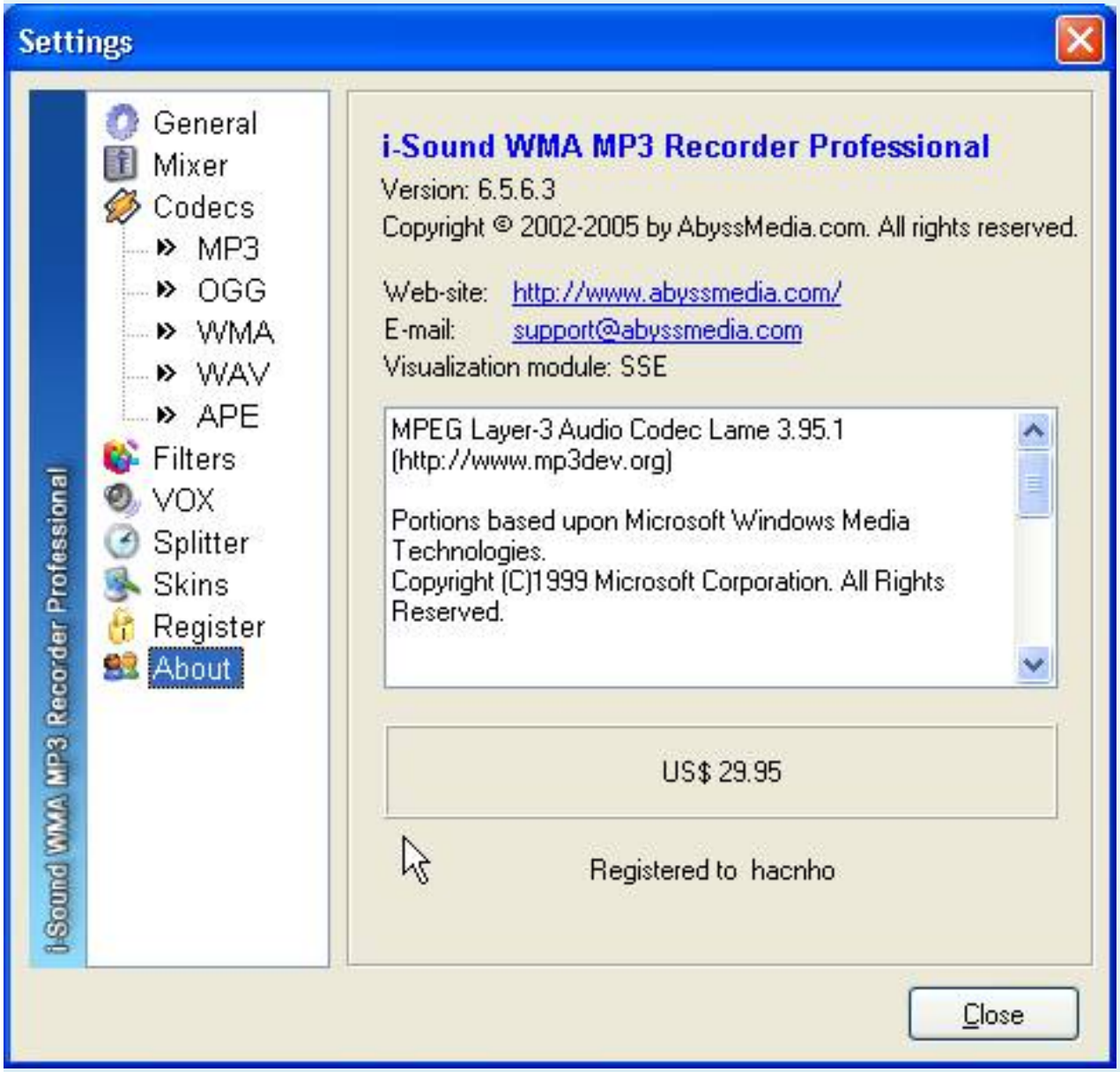
Patch tab _Qua packed executable, Get Info File, select the UPX packer, make click, save again:



_Run Patched.exe will be error message:

_Ta Patched.exe to rename isound.exe. Test Run:


Settings
General
Mixer
Codecs
MP3
OGG
WMA
WAV
APE
Filters
VOX
Splitter
Skins
Register
About
iSound WMA MP3 Recorder Professional
Registration Information
Enter your Name:
hacnho
Enter your key:
Registered Version
Check Updates!
Can't register your copy? Click here.
Close



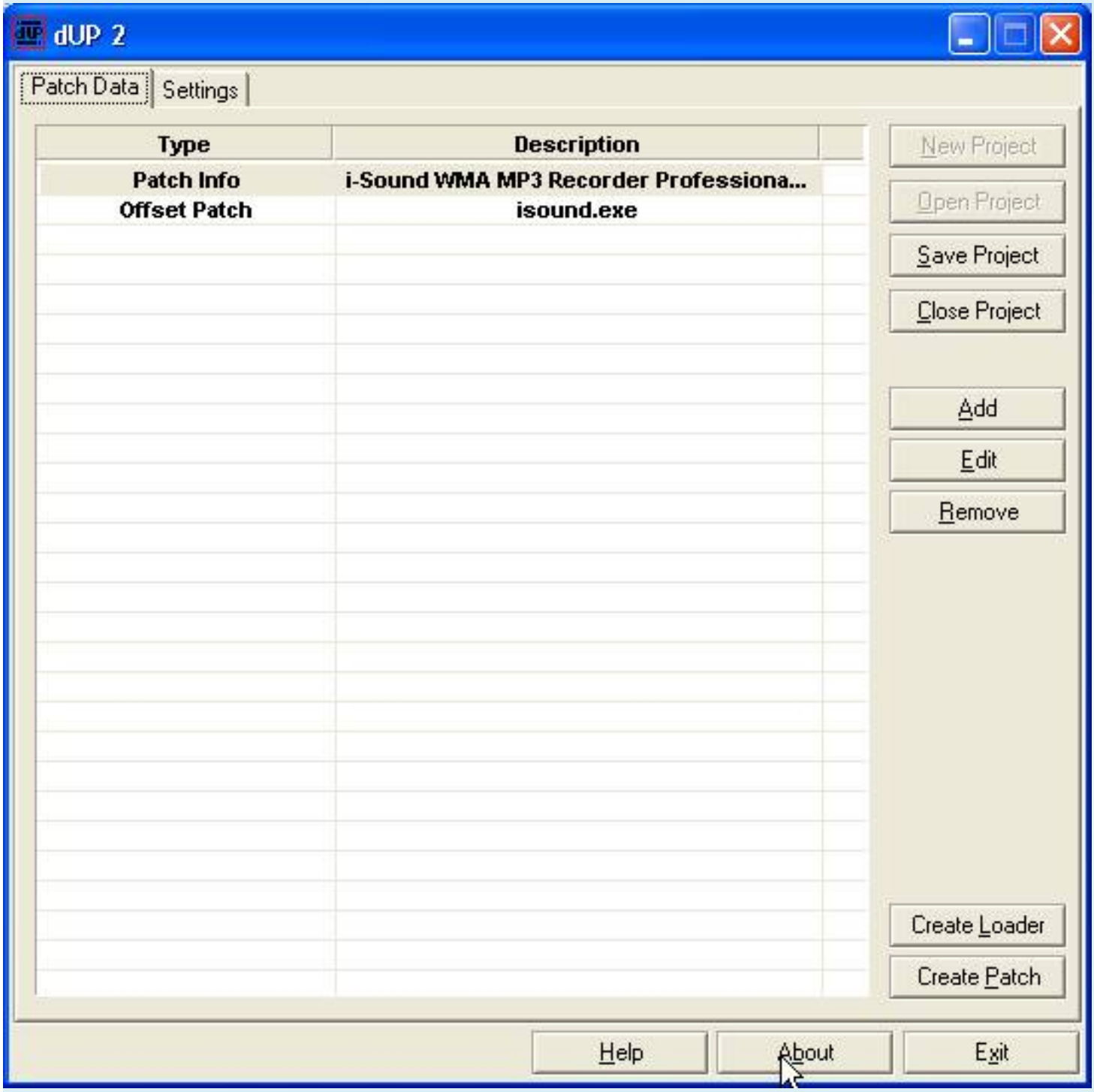
_Xem Log:

```
Packer found ... [UPX]
Searching for space patch ...
OEP VA reverting to FOffset ...
OEP is: 65BC40
Offset is: 0007F040
Searching for space patch ...
Patch space found at: 65BDA2
Offset is: 0007F1A2
End of patching info ...
Begin patching ...
Make backup files ...
Patching at JMP offset: 0007F1A2
Loading ... JMP to OEP
OEP JMP is: FFE815AC
OEP is: 004DD354
```

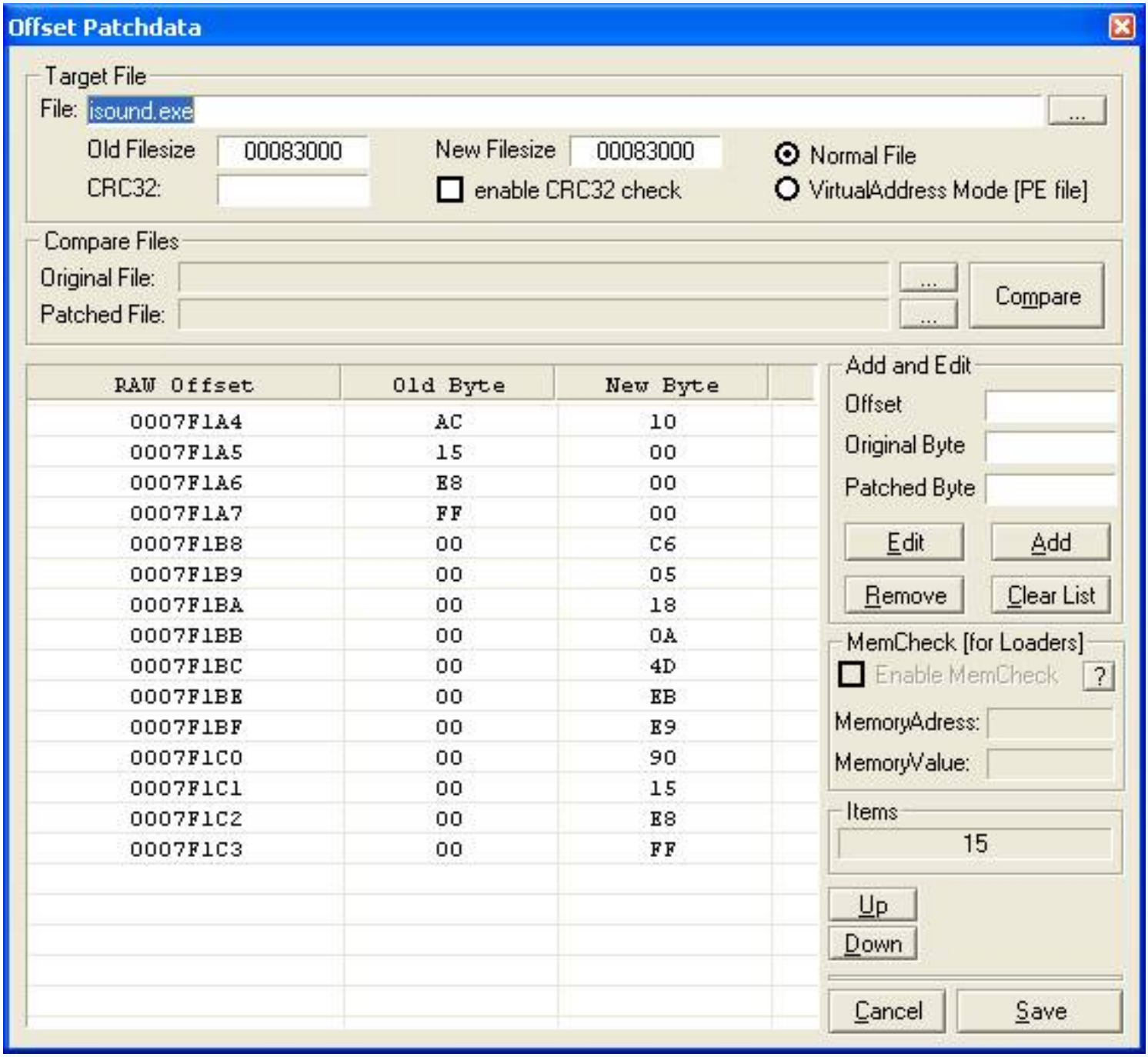
```
Inserting patch code ...
Writing new JMP OEP to ...
BOEP temp: 004DD354
Closing files ...
Compareing files ...

_Xem Script:

echo.:: The official aPE. asf script::.
echo
Packer echo ..... UPX
echo Version (s) ..... 1.2x - 1.9x
Written by echo ..... ap0x
Web-site echo ..... http://ap0x.headcoders.net
echo Date ..... 6/17/2005
echo
check UPX 0.8x - 1.9x
jne @ end1
@ begin
reopen
Seek 61
jne @ end2
save eip, sdata1
add eip, 1
Goto eip
readd dword
Invert dword
add eip, dword
Goto sdata1
save eip, sdata2
add sdata2, 4
echov OEP is sdata2!
save sdata3, sdata1
add sdata1, 7
Goto sdata1
save sdata1, 00
save sdata4, 00
@ doread
add sdata1, 1
readb dword
Cmp sdata1, 30
je @ dowrite3
Cmp dword, sdata4
je @ doread
jmp @ dowrite2
@ dowrite
patch
writeb 68
writed sdata2
```

```
writeb C3
exit
@ dowrite2
save sdata1, sdata3
add sdata3, 12
Goto sdata1
writeb E9
wjmp sdata1, sdata3
Goto sdata3
jmp @ dowrite
@ dowrite3
save sdata1, sdata3
Goto sdata1
jmp @ dowrite
@ end1
msgyn selected file might not be UPX packed. Do you want to continue?
je @ begin
exit
@ end2
noexport
echo
echo but not detected UPX version 1.2x - 1.9x!
echo
exit
```

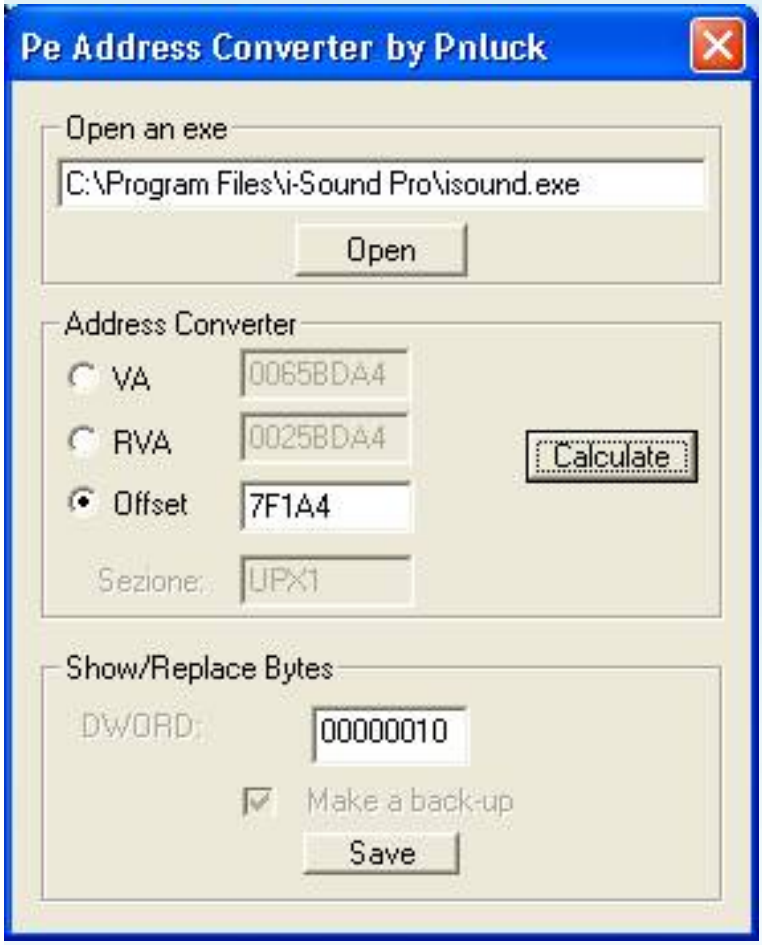
_Dung DUP 2:10 to patcher:


dUP 2
Patch Data
Settings
Type
Description
Patch Info
i-Sound WMA MP3 Recorder Professiona...
Offset Patch
isound.exe
New Project
Open Project
Save Project
Close Project
Add
Edit
Remove
Create Loader
Create Patch
Help
About
Exit

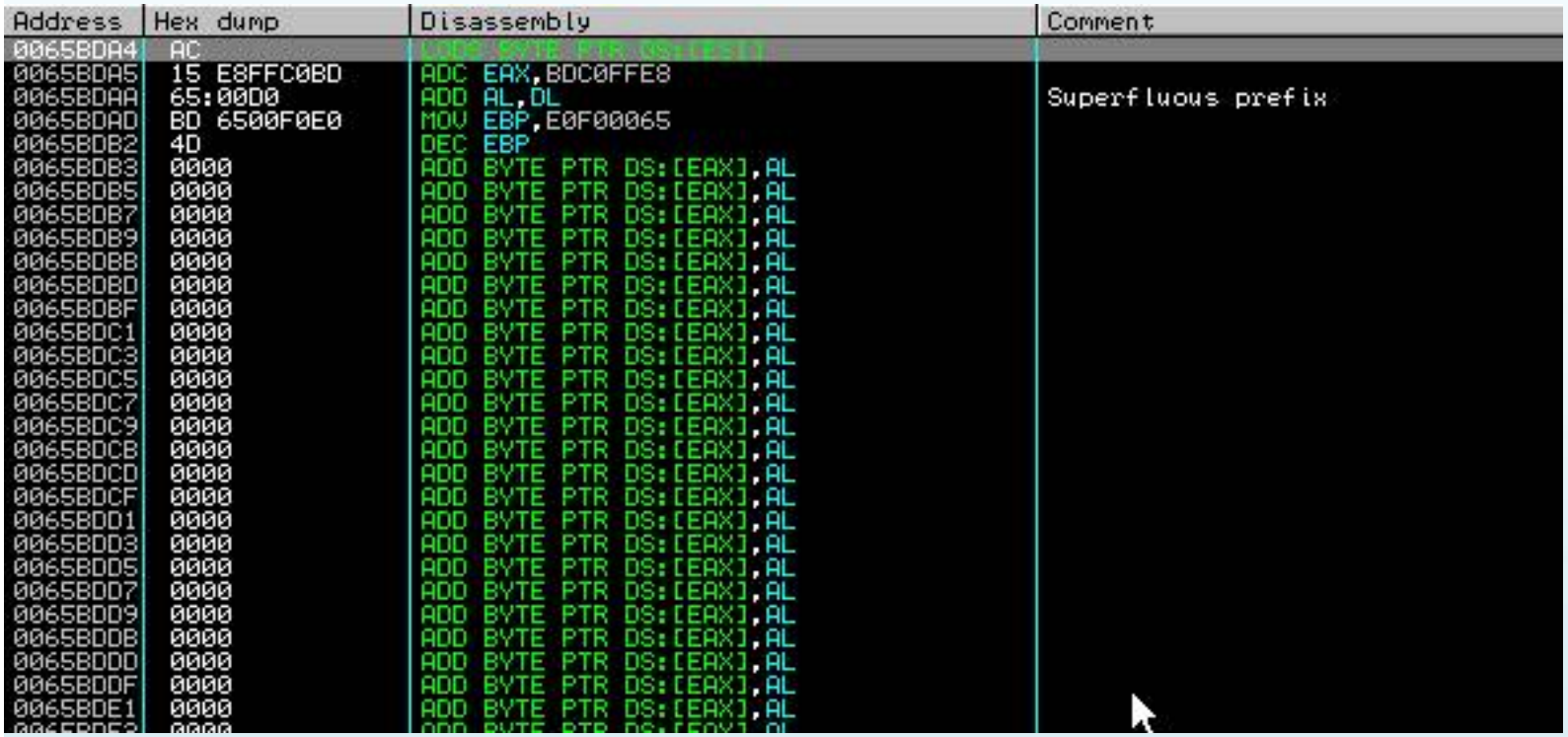
_Xem Table by Dup compare the two files:

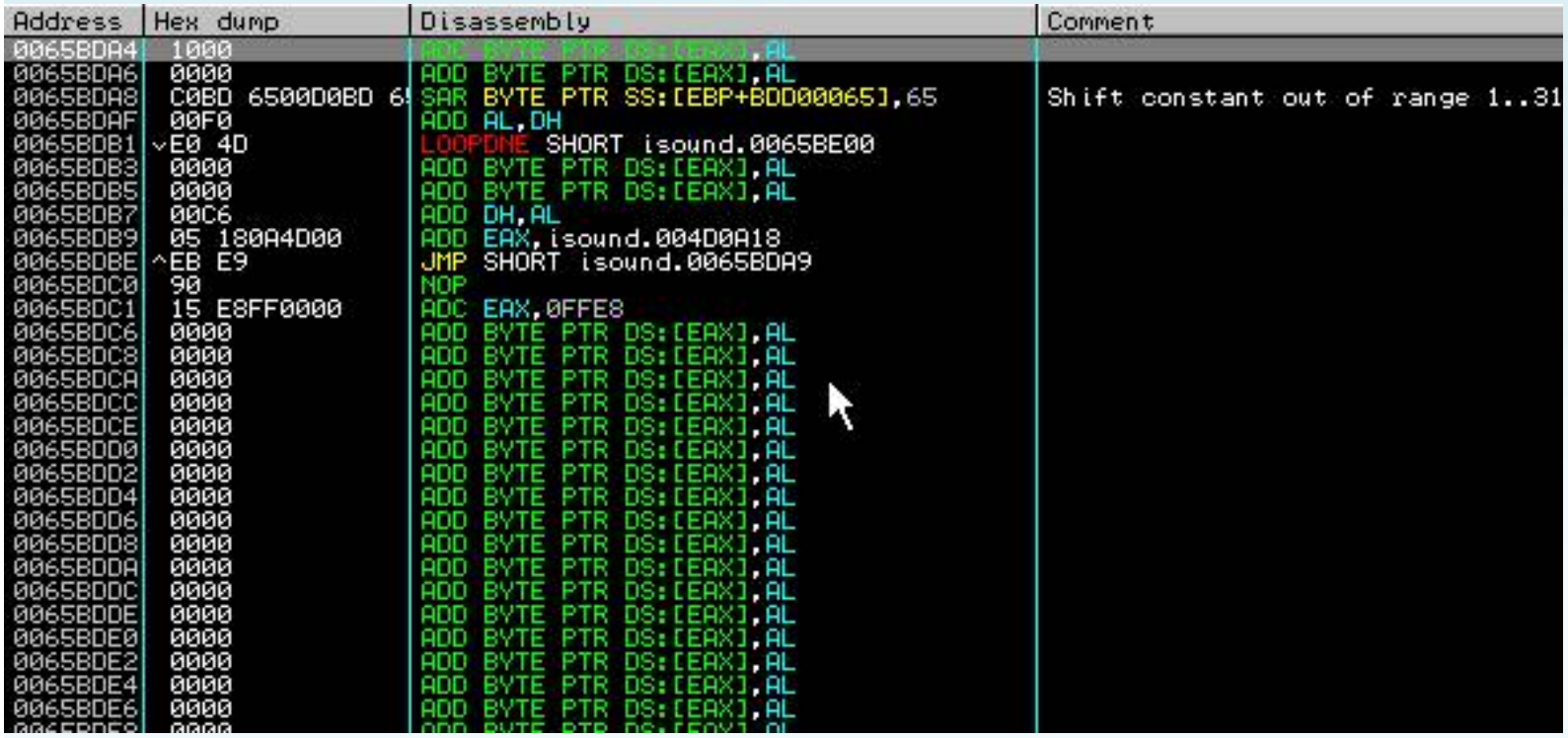


_Ta See patcher patch directly into the packed file with the Offset from 007F1A4. We need to learn about this patch. Olly only in support and the command Ctrl + G so we need to change to VA:



_Gia Of VA is 0065BDA4. Ok, load the file has two patch up org and Olly we compare:





_Unpacked.Cracked.by.hacnho

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, MaDMAn_H3rCul3s, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light ... and you!

Special Thanx Cracks Latinos.

Thanx OllyDBG of the authors.

To be continued ...

*Written by **hacnho** (tutorial date: VietNam 12/10/2005)*

InsaneFIDO's UnWrapME

Author: Computer_Angel

Target: http://crackmes.de/users/insanefido/insanefidos_unwrapme/
Using similar concept to the wrapper Reflexive wrapper used on games but I hope it is a little more difficult to reverse than that. On the Windows XP unwrapped file should display the XP theme. Coded on XPSP2, may not work with W2000 but I hope it does.

Difficulty: 3 - Getting harder
Platform: Windows 2000/XP only
Language: Unspecified / other

Target includes 2 files: Insane.exe and F1D0.dat. No signs are packed.

Insane.exe: File Implementation
F1D0.dat: File seems to be implemented, however, completely wrong PEHeader (may be due to intentionally sabotage the)

Test Insane.exe, and observations in the Task Manager, found out Insane.exe have 1 new process has been created in the "My Documents \ Angel \ Local Settings \ Temp \ ~ FD33C. Tmp. -> Predicting: Insane.exe 1 will create a new file based on F1D0.dat (can be encrypted). And then Create a new process. Load Insane.exe in olly and observations. The program will break at TLS. OEP's program is at 401,000.

```
00401000> E8 660D0000 CALL Insane.00401D6B
00401005 46 INC ESI
```

We try to find Intermodular All calls by Insane.exe and found IAT deleted 0

```
00401D72 - FF25 00204000 JMP DWORD PTR DS: [402000]
00401D78 - FF25 04204000 JMP DWORD PTR DS: [402004]
00401D7E - FF25 08204000 JMP DWORD PTR DS: [402008]
00401D84 - FF25 0C204000 JMP DWORD PTR DS: [40200C]
00401D8A - FF25 10204000 JMP DWORD PTR DS: [402010]
00401D90 - FF25 14204000 JMP DWORD PTR DS: [402014]
00401D96 - FF25 18204000 JMP DWORD PTR DS: [402018]
00401D9C FF25 1C204000 JMP DWORD PTR DS: [40201C]
00401DA2 - FF25 20204000 JMP DWORD PTR DS: [402020]
00401DA8 - FF25 24204000 JMP DWORD PTR DS: [402024]
00401DAE - FF25 28204000 JMP DWORD PTR DS: [402028]
00401DB4 FF25 2C204000 JMP DWORD PTR DS: [40202C]
00401DBA - FF25 30204000 JMP DWORD PTR DS: [402030]
00401DC0 - FF25 34204000 JMP DWORD PTR DS: [402034]
00401DC6 - FF25 38204000 JMP DWORD PTR DS: [402038]
```

```
00401DCC FF25 3C204000 JMP DWORD PTR DS: [40203C]
00401DD2 - FF25 40204000 JMP DWORD PTR DS: [402040]
00401DD8 - FF25 44204000 JMP DWORD PTR DS: [402044]
00401DDE - FF25 48204000 JMP DWORD PTR DS: [402048]
00401DE4 - FF25 4C204000 JMP DWORD PTR DS: [40204C]
00401DEA FF25 50204000 JMP DWORD PTR DS: [402050]
00401DF0 FF25 54204000 JMP DWORD PTR DS: [402054]
00401DF6 FF25 58204000 JMP DWORD PTR DS: [402058]
00401DFC FF25 5C204000 JMP DWORD PTR DS: [40205C]
00401E02 - FF25 60204000 JMP DWORD PTR DS: [402060]
00401E08 - FF25 64204000 JMP DWORD PTR DS: [402064]
00401E0E - FF25 68204000 JMP DWORD PTR DS: [402068]
00401E14 FF25 6C204000 JMP DWORD PTR DS: [40206C]
00401E1A FF25 70204000 JMP DWORD PTR DS: [402070]
00401E20 FF25 74204000 JMP DWORD PTR DS: [402074]
00401E26 FF25 78204000 JMP DWORD PTR DS: [402078]
00401E2C FF25 7C204000 JMP DWORD PTR DS: [40207C]
00401E32 FF25 80204000 JMP DWORD PTR DS: [402080]
00401E38 FF25 84204000 JMP DWORD PTR DS: [402084]
00401E3E FF25 8C204000 JMP DWORD PTR DS: [40208C]
```

If you run the program entirely in F9, and review Intermodular calls, you'll see:

```
00401D72 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401D78 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401D7E FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401D84 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401D8A FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401D90 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401D96 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401D9C FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DA2 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DA8 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DAE FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DB4 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DBA FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DC0 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DC6 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DCC FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DD2 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DD8 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DDE FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DE4 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
```

```
00401DEA FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DF0 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DF6 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401DFC FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401E02 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401E08 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401E0E FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401E14 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401E1A FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401E20 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401E26 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401E2C FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401E32 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401E38 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
00401E3E FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
```

So you need to find where Insane.exe start implementing the action changes. Okie, set hw break on memory write at 00401D72 (DWORD). And run the program again, we will:

```
00401CE5> BD 0E1D4000 MOV EBP, Insane.00401D0E; Write Viatualize IAT
00401CEA 892D 40454000 MOV DWORD PTR DS: [404540], EBP
00401CF0 BD 40454000 MOV EBP, Insane.00404540
00401CF5 8B35 50394000 MOV ESI, DWORD PTR DS: [403950]
00401CFB 8A06 MOV AL, BYTE PTR DS: [ESI]
00401CFD 3C FF Cmp AL, 0FF
00401CFF 75 0C JNZ SHORT Insane.00401D0D
00401D01 46 INC ESI
00401D02 C606 15 MOV BYTE PTR DS: [ESI], 15
00401D05 46 INC ESI
00401D06 892E MOV DWORD PTR DS: [ESI], EBP
00401D08 83C6 04 ADD ESI, 4
^ EE 00401D0B EB JMP SHORT Insane.00401CFB
00401D0D C3 RETN
```

This is func implement the above changes. Also, see the code of

```
00401DBA FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
```

We have:

```
00401D0E 64:8 B2D 0800000> MOV EBP, DWORD PTR FS: [8]
00401D15 5e POP ESI
00401D16 83EE 06 SUB ESI, 6
```

```
00401D19 A1 50394000 MOV EAX, DWORD PTR DS: [403950]
00401D1E 2BF0 SUB ESI, EAX
00401D20 8BC6 MOV EAX, ESI
00401D22 25 FF000000 AND EAX, 0FF
00401D27 33DB XOR EBX, EBX
00401D29 B3 06 MOV BL, 6
00401D2B F6F3 DIV BL
00401D2D C0E0 02 SHL AL, 2
00401D30 8BF0 MOV ESI, EAX
00401D32 81FE 88000000 Cmp ESI, 88
00401D38 7C 1A JL SHORT Insane.00401D54
00401D3A 83C6 04 ADD ESI, 4
00401D3D 8B1D 58454000 MOV EBX, DWORD PTR DS: [404558]; USER32.7E410000
00401D43 0335 60454000 ADD ESI, DWORD PTR DS: [404560]
00401D49 8B36 MOV ESI, DWORD PTR DS: [ESI]
00401D4B 8975 10 MOV DWORD PTR SS: [EBP +10], ESI
00401D4E 015D 10 ADD DWORD PTR SS: [EBP +10], EBX
00401D51 FF65 10 JMP DWORD PTR SS: [EBP +10]
00401D54 0335 60454000 ADD ESI, DWORD PTR DS: [404560]
00401D5A 8B06 MOV EAX, DWORD PTR DS: [ESI]
00401D5C 8945 10 MOV DWORD PTR SS: [EBP +10], EAX
00401D5F A1 50454000 MOV EAX, DWORD PTR DS: [404550]
00401D64 0145 10 ADD DWORD PTR SS: [EBP +10], EAX
00401D67 FF65 10 JMP DWORD PTR SS: [EBP +10]
00401D6A C3 RETN
```

This can be called by the API emulation Insane.exe. So difficult points when analyzing Insane.exe the API is hidden loss, instead it is a call to the API function Emulation.Tuy course, if the notice:

```
00401D51 FF65 10 JMP DWORD PTR SS: [EBP +10]
```

and:

```
00401D67 FF65 10 JMP DWORD PTR SS: [EBP +10]
```

Then restore the IAT for easy analysis is not difficult. Try to change EIP 1 in emulation of the API, for example, we choose:

```
00401D78 FF15 40454000 CALL DWORD PTR DS: [404540]; Insane.00401D0E
```

Menu select "New origin here to set EIP in 00401D78, from which to trace through the" JMP DWORD PTR SS: [EBP +10] "the value [EBP +10] will actually contain the API we need to find.
Thus, to restore the IAT, we do the following:

1st Set 0040101C break in (the function of the changing IAT).
2. When the break, we turn the EIP to execute commands emulation API.
3rd to Trace, to meet the instruction "JMP DWORD PTR SS: [EBP +10]," read value [EBP +10], will be the original API
4. Implementation of editing the IAT, the original point to the API.

To hand it is very tired, so I recommend that you use the script (OllyDBGScript) to help implement the action repeated this.

```
var cur_eip
var top_vir_iat
var iat_top

init:
bphwcall
bc

start:
BP 00401D51
bpgoto 00401D51, iat_addr_found_handler
BP 00401D67 / /
bpgoto 00401D67, iat_addr_found_handler
BP 0040101C / / after_write_virtualize_handle
esto
mov cur_eip, eip
mov top_vir_iat, [403950]
alloc 1000
mov iat_top, $ RESULT

iat_begin:
mov eip, top_vir_iat
Cmp [top_vir_iat], 0
je the_end

find_real_api:
exec
pushad
pushfd
ende
esto

iat_addr_found_handler:
mov tmp, ebp
```

add tmp, 10
mov [iat_top], [tmp]
mov [top_vir_iat +1], 25.1
mov [top_vir_iat +2], iat_top
add iat_top, 4
add top_vir_iat, 6
exec
popfd
popad
ende
jmp iat_begin

the_end:
mov eip, cur_eip
bc
ret

Thus, when run this script is completed, IAT has been restored, this will help very much to see and analyze code.

Dumped and learn.

After IAT fix, I would use the IDA Hexrays +. Talk about a Hexrays 1 plugin and help against asm code -> C + +, in 1 cases it helps our code easier to read, not only is really the C + + code completely. Insane_fix_iat.exe Load to IDA, and hexrays, we will have an overview of the program. First, Insane will create 1 files in temp folder as above, then run this executable file through the API CreateProcessA:

StartupInfo.cbReserved2 = 512;
StartupInfo.lpReserved2 = (LPBYTE) lpAddress;
CreateProcessA (ApplicationName, 0, 0, 0, 1, 3U, 0, 0, & StartupInfo, & ProcessInformation);

Note 1: CreateProcessA known to CreationFlags = DEBUG_PROCESS | DEBUG_ONLY_THIS_PROCESS (3U).

And then create 1 loop:

```
while (1)
(
WaitForDebugEvent (& DebugEvent, Infinite);
if (DebugEvent.dwDebugEventCode == EXIT_PROCESS_DEBUG_EVENT)
(
CloseHandle (handle_process_dword_4038F4);
UnmapViewOfFile (lpBaseAddress);
VirtualFree (lpAddress, 0x100u, 0x4000u);
GetExitCodeProcess (ProcessInformation.hProcess, & ExitCode);
```

```
GetExitCodeThread (ProcessInformation.hThread, & dword_404548);
TerminateThread (ProcessInformation.hThread, dword_404548);
TerminateProcess (ProcessInformation.hProcess, ExitCode);
CloseHandle (ProcessInformation.hThread);
CloseHandle (ProcessInformation.hProcess);
lstrcpy (CmdLine, PathName);
lstrcat (CmdLine, "winstat.bat");
dword_404568 = CreateFileA (CmdLine, 0x40000000u, 0, 0, 2u, 0x80u, 0);
sub_401E3E (& unk_404204, "del&percnt; s \ r \ .. nmove&percnt; s \ r \ ndel. \ \&percnt;
s", ApplicationName, CmdLine, "winstat.bat");
v8 = lstrlen (& unk_404204);
WriteFile (dword_404568, & unk_404204, v8, & NumberOfBytesWritten, 0);
CloseHandle (dword_404568);
WinExec (CmdLine, 0);
ExitProcess (0);
)
if (DebugEvent.dwDebugEventCode == CREATE_PROCESS_DEBUG_EVENT)
(
handle_process_dword_4038F4 = (HANDLE) DebugEvent.u.Exception.ExceptionRecord.ExceptionFlags;
hThread = DebugEvent.u.Exception.ExceptionRecord.ExceptionRecord;
process_id_dword_4038F8 = DebugEvent.dwProcessId;
thread_id_dword_4038FC = DebugEvent.dwThreadId;
Goto continue_dbg;
)
if (DebugEvent.dwDebugEventCode == EXCEPTION_DEBUG_EVENT)
(
if (DebugEvent.u.Exception.ExceptionRecord.ExceptionCode == EXCEPTION_BREAKPOINT)
(
ContinueDebugEvent (DebugEvent.dwProcessId, DebugEvent.dwThreadId, DBG_CONTINUE);
)
else
(
if (DebugEvent.u.Exception.ExceptionRecord.ExceptionCode! = EXCEPTION_SINGLE_STEP)
Goto continue_dbg;
Context.ContextFlags = 65537;
GetThreadContext (hThread, & Context);
if (Context.Eip == 0x40100B)
(
WriteProcessMemory (handle_process_dword_4038F4, off_40391C, "jFjh | | IH, 1u,
& NumberOfBytesWritten);
dword_403914 = (LPCVOID) dword_40390C;
* (_DWORD *) (* MK_FP (__FS__, 8) + 80) = v7ffe0000;
by
```

```
(
ReadProcessMemory (handle_process_dword_4038F4, dword_403914, & byte_40394C, 1u,
& NumberOfBytesWritten);
byte_40394C = (stru_4030C0.anonymous_3 ^ (unsigned __int8) ((stru_4030C0.anonymous_1
^ (unsigned __int8) ((stru_4030C0.gap_0 [0] ^ (unsigned __int8) byte_40394C) -
stru_4030C0.anonymous_0))
- Stru_4030C0.anonymous_2))
- Stru_4030C0.anonymous_4;
WriteProcessMemory (
handle_process_dword_4038F4,
(LPVOID) dword_403914 + +,
& byte_40394C,
1u,
& NumberOfBytesWritten);
)
while ((signed int) dword_403914 <(signed int) 0x401380u);
Context.Eip = 0x40100Au;
SetThreadContext (hThread, & Context);
ReadProcessMemory (handle_process_dword_4038F4, off_403934, & dword_404534, 4u,
& NumberOfBytesWritten);
V2 = (char *) dword_403904 + dword_403930;
while (1)
(
v3 = v2;
ReadProcessMemory (handle_process_dword_4038F4, v2, & unk_404D88, 1u, & NumberOfBytesWritten);
if (unk_404D88! = -1)
break;
v9 = (char *) v3 + 2;
V10 = (char *) v3 + 2;
ReadProcessMemory (handle_process_dword_4038F4, v9, & unk_404D70, 4u, & NumberOfBytesWritten);
dword_404D80 = dword_404534 + unk_404D70;
WriteProcessMemory (handle_process_dword_4038F4, V10, & dword_404D80, 4u,
& NumberOfBytesWritten);
V2 = (char *) V10 + 4;
)
dword_4034E4 = (int) lpBaseAddress;
v4 = dword_4034E4;
v5 = 0;
by
(
* (* _BYTE) V4 = (stru_4030BA.anonymous_3 ^ (unsigned __int8) ((stru_4030BA.anonymous_1
^ (unsigned __int8) ((stru_4030BA.gap_0 [0] ^ * (* _BYTE) v4) - stru_4030BA.anonymous_0))
- Stru_4030BA.anonymous_2))
- Stru_4030BA.anonymous_4;
```

```
+ + v4;
+ + v5;
)
while (v5 <= dword_4034EC);
FlushViewOfFile (lpBaseAddress, 0);
)
else
(
if (Context.Eip == 0x40102B)
(
- Context. Eip;
SetThreadContext (hThread, & Context);
WriteProcessMemory (handle_process_dword_4038F4, off_403918, & aJsjhLh [1], 1u,
& NumberOfBytesWritten);
WriteProcessMemory (handle_process_dword_4038F4, off_40391C, "jFjh | | IH, 0x1Eu,
& NumberOfBytesWritten);
WriteProcessMemory (handle_process_dword_4038F4, off_403908, "jFjh | | IH, 0x250u,
& NumberOfBytesWritten);
)
else
(
if (Context.Eip == (_DWORD) loc_4010C5)
(
- Context. Eip;
SetThreadContext (hThread, & Context);
WriteProcessMemory (handle_process_dword_4038F4, off_403920, & aJsjhLh [7], 1u,
& NumberOfBytesWritten);
)
else
(
if (Context.Eip == 0x4010EF)
(
- Context. Eip;
SetThreadContext (hThread, & Context);
WriteProcessMemory (handle_process_dword_4038F4, off_403924, & aJsjhLh [4], 1u,
& NumberOfBytesWritten);
VirtualProtectEx (handle_process_dword_4038F4, dword_403904, 0x400u, 1u, & flOldProtect);
VirtualProtectEx (handle_process_dword_4038F4, off_403928, 0x200u, 0x10u, & flOldProtect);
)
)
)
)
dword_4034D4 = v7ffe0000;
ContinueDebugEvent (DebugEvent.dwProcessId, DebugEvent.dwThreadId, DBG_CONTINUE);
```

```
)
)
else
(
continue_dbg:
dword_4034D4 = v7ffe0000;
ContinueDebugEvent (DebugEvent.dwProcessId, DebugEvent.dwThreadId, DBG_EXCEPTION_NOT_HANDLED);
)
)
```

View a code in the loop, we can say as follows:
Insane.exe (The father) called --- (debug mode) -> ~ DFxxx.tmp (the child), the exception from the child will be born Insane.exe (CT father) process.
Observations code, we see the exception that the program will create:
CREATE_PROCESS_DEBUG_EVENT, EXCEPTION_DEBUG_EVENT, E XIT_PROCESS_DEBUG_EVENT.
And the process is in the EXCEPTION_DEBUG_EVENT.

If you have used to nanomites armadillo in the format will see the process is very familiar. It can be understood as follows:
1.Chuong the children will be removed to No. 1 instruction, instead of instruction is able to create debug exception (INT1, INT3, etc. ...)
2.Khi the children run to the instructions this exception will occur again and pause
3.Chuong the parents will take exception from the child and handling: instruction to edit -> new instruction, eip change of the child, ignore errors, etc. ..
So with the way the parents always have the + running parallel each other.

Back to the dump file is, Insane.exe Load to Olly, the first one will break in CreateProcessA and run the program, we break in:

```
0012FF98 00401153 / Call to CreateProcessA from Insane.0040114E
0012FF9C 00403F3C | ModuleFileName = "C: \ DOCUME ~ 1 \ ANGEL ~ 1 \ locals ~ 1 \ Temp \
~ DF3BF9.tmp"
0012FFA0 00000000 | CommandLine = null
0012FFA4 00000000 | pProcessSecurity = null
0012FFA8 00000000 | pThreadSecurity = null
0012FFAC 00000001 | InheritHandles = TRUE
0012FFB0 00000003 | CreationFlags = DEBUG_PROCESS | DEBUG_ONLY_THIS_PROCESS
0012FFB4 00000000 | pEnvironment = null
0012FFB8 00000000 | CurrentDir = null
0012FFBC 00403570 | pStartupInfo = Insane.00403570
0012FFC0 004035B4 \ pProcessInfo = Insane.004035B4
0012FFC4 7C816FD7 Return to kernel32.7C816FD7
```

Therefore, we only need to "C: \ DOCUME ~ 1 \ ANGEL ~ 1 \ locals ~ 1 \ Temp \ ~ DF3BF9.tmp" and copy this file, rename it to unwrap.exe. This is the original file unwrap.exe. Try running unwrap.exe -> Exception error: D. From here, we find out, the father (Insane.exe) to record what the children. Since the source code, we must know breakpoint at API WriteProcessMemory. Running back Insane.exe, we have:

```
0012FFAC 00401358 / Call to WriteProcessMemory from Insane.00401353
0012FFB0 00000034 | 00000034 hProcess = (Window)
0012FFB4 0040100A | Address = 40100A
0012FFB8 004034C5 | Buffer = Insane.004034C5
0012FFBC 00000001 | BytesToWrite = 1
0012FFC0 00404508 \ pBytesWritten = Insane.00404508
0012FFC4 7C816FD7 Return to kernel32.7C816FD7
```

With:
Address: Adress contains almost write in the child
BytetoWrite: number of bytes to write
Buffer: contains bytes to write.
...
And will break many times more so.
Again, as dozens of times hands as of 1 positive image, I will still use scripts to monitor the implementation, as well as using scripts to create 1 to fix the scripts of children.

```
var first

init:
bc
GPA "WriteProcessMemory", "kernel32.dll"
bp $ RESULT
bpgoto $ result, writemem_handler
wrt "fix_insane_dump.txt Auto ","// gen demo script \ r \ n"
mov first, 0
esto

writemem_handler:
Cmp first, 0
jne next
mov first, 1
GPA "WriteProcessMemory", "kernel32.dll"
bc $ RESULT
alloc 1000
mov hmem, $ RESULT
mov tmp, hmem
add tmp, 22
mov [hmem], 609C6A006A016800000000FF351C394000FF35F4384000E80A1EB4FF9D6100000000EBFE # #
mov [hmem +7], tmp, 4
```

```
mov tmp_eip, eip
mov tmp, hmem
add tmp, 01e
BP tmp
mov eip, hmem
esto
bc eip
mov eip, tmp_eip
free hmem, 1000
GPA "WriteProcessMemory", "kernel32.dll"
bp $ RESULT
bpgoto $ result, writemem_handler

Next:
mov addr, [ESP +8]
mov buf, [esp +0 C]
mov size, [esp +10]
Cmp size, 4
jbe type_1
jmp type_2

type_1:
mov value, [buf], size
Cmp value, 0F1
je skip_type_1
eval "mov [addr ()], (value), (size)"
wrta "fix_insane_dump.txt, $ RESULT
esto

skip_type_1:
esto

type_2:
eval "addr (). bin"
dm buf, size, $ RESULT
eval "lm (addr) (size), (addr). bin"
wrta "fix_insane_dump.txt, $ RESULT
esto
```

When you run this script, the information recorded in the child will be recorded by 2 ways:
1st Record <= 4 bytes, perform assigned command script = normal.
2nd Writing> 4 bytes, the buffer dump file, then load and use the cmd script.

Summary of what has been achieved in this section:
1. Mechanism of the father-child Insane.exe
2. Unwrap.exe File
3rd script to monitor memory write operation to the children

4th Scripts perform tasks write to the children (3 to gen).

Unwrap Fix, fix iat.

From the article, we have unwrap.exe, however, to implement fully the need to edit.
View code from the 2 above, we know:
a. Program to implement the 0x40100B -> create exception.
b. The father will write mem to 1 series of the program, track the genetic script, we see particular since
40100A-40137F,
Then, continue to overwrite iat jmp address from 40131E-401390.
c. Write to 0x1E bytes 40100A <- works to remove, break old code after going through -> complicate the dump.
d. Write to 402,060 bytes 0x250 <-? unknown reasons
e. Write 4010C4 and 68 at C7 in 4010EE.

Therefore, load unwrap.exe to Olly, we have:

```
00401000> 68 3C304000 PUSH unwrap.0040303C
00401005 E8 8E030000 CALL <JMP.&kernel32.GetStartupInfoA>
0040100A F1 INT1
0040100B 93 XCHG EAX, EBX
0040100C 5B POP EBX
0040100D BE 24 AND AL, 0BE
0040100F 93 XCHG EAX, EBX
00401010 93 XCHG EAX, EBX
00401011 1E PUSH DS
00401012 9F LAHF
00401013 - E3 D3 JECXZ SHORT unwrap.00400FE8
00401015 93 XCHG EAX, EBX
00401016 C593 DBC883D3 LDS EDX, FWORD PTR DS: [EBX + D383C8DB]; modification of
segment register
0040101C 93 XCHG EAX, EBX
0040101D C593 DB93E3D3 LDS EDX, FWORD PTR DS: [EBX + D3E393DB]; modification of
segment register
00401023 93 XCHG EAX, EBX
C89FE3D3 BA 00401024 MOV EDX, D3E39FC8
00401029 93 XCHG EAX, EBX
0040102A A4 MOVS BYTE PTR ES: [EDI], BYTE PTR DS: [ESI]
```

at

```
0040100A F1 INT1
```

instruction has been changed to create exception.Nhu so we will run the script from the gen 2 (Appendix 1).

However only one run to the end b), because khúc after quite short and can manually duoc.Run script, copy the already write -> new file: Unwrap_1.exe

Load Unwrap_1.exe, to olly, view intermodular calls:

```
0040131C FF25 94070200 JMP DWORD PTR DS: [20794]
00401322 FF25 88070200 JMP DWORD PTR DS: [20788]
00401328 FF25 8C070200 JMP DWORD PTR DS: [2078C]
0040132E FF25 90070200 JMP DWORD PTR DS: [20790]
00401334 FF25 D8070200 JMP DWORD PTR DS: [207D8]
0040133A FF25 D4070200 JMP DWORD PTR DS: [207D4]
00401340 FF25 D0070200 JMP DWORD PTR DS: [207D0]
00401346 FF25 CC070200 JMP DWORD PTR DS: [207CC]
0040134C FF25 B4070200 JMP DWORD PTR DS: [207B4]
00401352 FF25 B0070200 JMP DWORD PTR DS: [207B0]
00401358 FF25 DC070200 JMP DWORD PTR DS: [207DC]
0040135E FF25 B8070200 JMP DWORD PTR DS: [207B8]
00401364 FF25 BC070200 JMP DWORD PTR DS: [207BC]
0040136A FF25 C0070200 JMP DWORD PTR DS: [207C0]
00401370 FF25 C4070200 JMP DWORD PTR DS: [207C4]
00401376 FF25 C8070200 JMP DWORD PTR DS: [207C8]
0040137C FF25 A8070200 JMP DWORD PTR DS: [207A8]
00401382 FF25 A4070200 JMP DWORD PTR DS: [207A4]
00401388 FF25 A0070200 JMP DWORD PTR DS: [207A0]
0040138E FF25 9C070200 JMP DWORD PTR DS: [2079C]
```

I come off as completely ko signs have anything to open, and the original unwrap.exe can not run that i have the father. And if the father, then how do debug, Attach ... be.
I say that the secret is completely in the difficult things lo wise, I think now 1 to technical for the ancient armadillo shake lơ past, which is the API DebugActiveProcessStop.
My mind is so: when the program run entirely, since that is when the father, I will call the API "DebugActiveProcessStop" with a processid parameters of the child. So then we can Attach to see .. and some interesting information in the process.
Conducted as follows:
1. Load Insane.exe to olly
2nd F9 to run completely.
3rd to

```
0040115F 833D 90384000 0> Cmp DWORD PTR DS: [403890], 5
00401166 0F85 26010000 JNZ Insane.00401292
```

Break at 0040115F, wait 1 billion, will see olly break. Even this position, you type in asm:

```
push processid
call DebugActiveProcessStop
```

Then press F8 to step through the order 2, so from now Insane.exe and the process of it do what is the relationship with each other again. So we gently Attach to the children, and over 401,000. From here, we make the calls intermodular find:

```
0040131C - FF25 94070200 JMP DWORD PTR DS: [20,794]; gdi32.BitBlt
00401322 - FF25 88070200 JMP DWORD PTR DS: [20,788]; gdi32.CreateCompatibleDC
00401328 - FF25 8C070200 JMP DWORD PTR DS: [2078C]; gdi32.DeleteDC
0040132E - FF25 90070200 JMP DWORD PTR DS: [20,790]; gdi32.SelectObject
00401334 - FF25 D8070200 JMP DWORD PTR DS: [207D8]; USER32.BeginPaint
0040133A - FF25 D4070200 JMP DWORD PTR DS: [207D4]; USER32.CreateDialogParamA
00401340 - FF25 D0070200 JMP DWORD PTR DS: [207D0]; USER32.DialogBoxParamA
00401346 - FF25 CC070200 JMP DWORD PTR DS: [207CC]; USER32.EndDialog
0040134C - FF25 B4070200 JMP DWORD PTR DS: [207B4]; USER32.EndPaint
00401352 - FF25 B0070200 JMP DWORD PTR DS: [207B0]; USER32.GetClientRect
00401358 - FF25 DC070200 JMP DWORD PTR DS: [207DC]; USER32.InvalidateRect
0040135E - FF25 B8070200 JMP DWORD PTR DS: [207B8]; USER32.LoadBitmapA
00401364 - FF25 BC070200 JMP DWORD PTR DS: [207BC]; USER32.ReleaseCapture
0040136A - FF25 C0070200 JMP DWORD PTR DS: [207C0]; USER32.SendMessageA
00401370 - FF25 C4070200 JMP DWORD PTR DS: [207C4]; USER32.SetCapture
00401376 - FF25 C8070200 JMP DWORD PTR DS: [207C8]; USER32.UpdateWindow
0040137C - FF25 A8070200 JMP DWORD PTR DS: [207A8]; kernel32.ExitProcess
00401382 - FF25 A4070200 JMP DWORD PTR DS: [207A4]; kernel32.GetModuleHandleA
00401388 - FF25 A0070200 JMP DWORD PTR DS: [207A0]; kernel32.GetStartupInfoA
0040138E - FF25 9C070200 JMP DWORD PTR DS: [2079C]; kernel32.Sleep
```

Too healthy, it was available in the region is to remember 20788c and copy this entire IAT (binary).

```
F0 5F F1 77 6F 6E F1 77 80 5B F1 77 89 6F F1 77 00 00 00 00 42 24 80 7C EE 1E 80 7C A1 B6 80 7C
DA CD 81 7C 00 00 00 00 AE B6 41 7E 1D B6 41 7E F0 54 42 7E EA D6 41 7E 83 F3 42 7E CE D6 41 7E
F9 D7 41 7E C9 59 42 7E 0C B1 43 7E A3 C7 43 7E 09 B6 41 7E F5 B5 41 7E
```

Now back with unwrap_1.exe, we have the IAT, to fix, can be used manually, but I calculate capital Grid, Khoai automatically so the script to a script to fix the iat.
Ideas such as the following:

1. 1 Create a new memory area (eg 870000)
2. Write table IAT get in on how to begin to offset a 88
3. Read iat jmp addr old.
4. And value to the FF (only get first byte) and then calculate the position of IAT addr.
5. Write iat jmp addr.

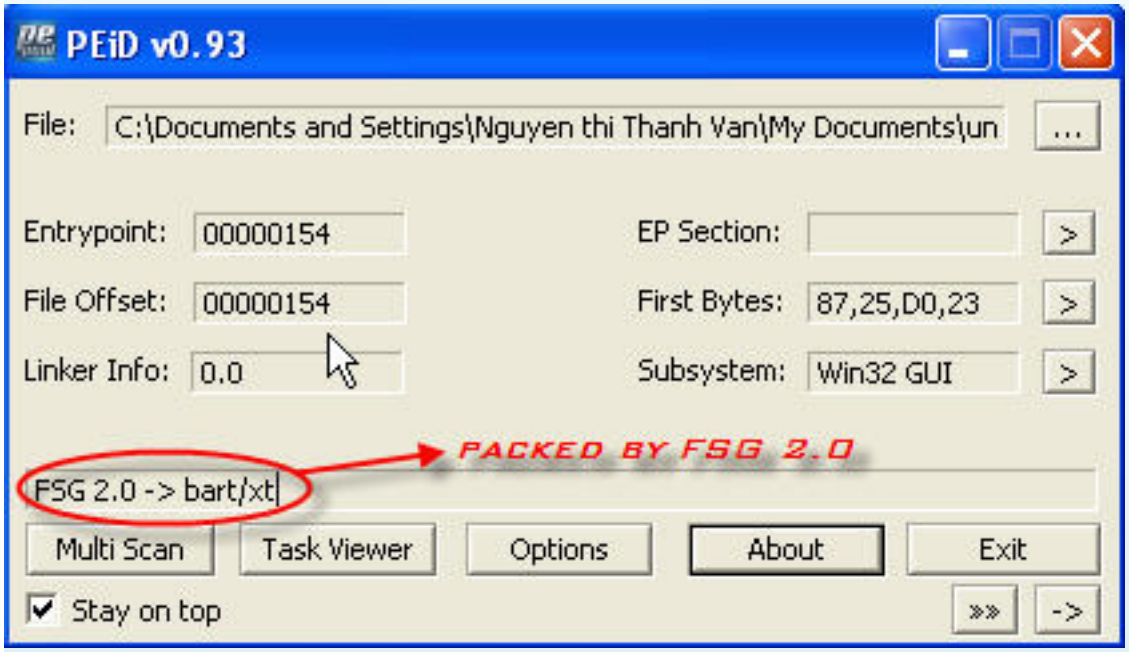
Script as follows:

```
init:
alloc 1000
mov top_iat, $ RESULT
mov top_jmp, 0040131C

start:
mov [top_iat +88]
#
F05FF1776F6EF177805BF177896FF17700000000004224807CEE1E807CA1B6807CDACD817C00000000AEB6417E1DB6417EF054427EEAD6417E83F3427ECED6417EF9D7417
EC959427E0CB1437EA3C7437E09B6417EF5B5417E #
process_jmp_iat:
Cmp [top_jmp], 0
je the_end
mov tmp_addr, [top_jmp +2], 4
and tmp_addr, FF
add tmp_addr, top_iat
mov [top_jmp +2], tmp_addr
add top_jmp, 6
jmp process_jmp_iat

the_end:
ret
```

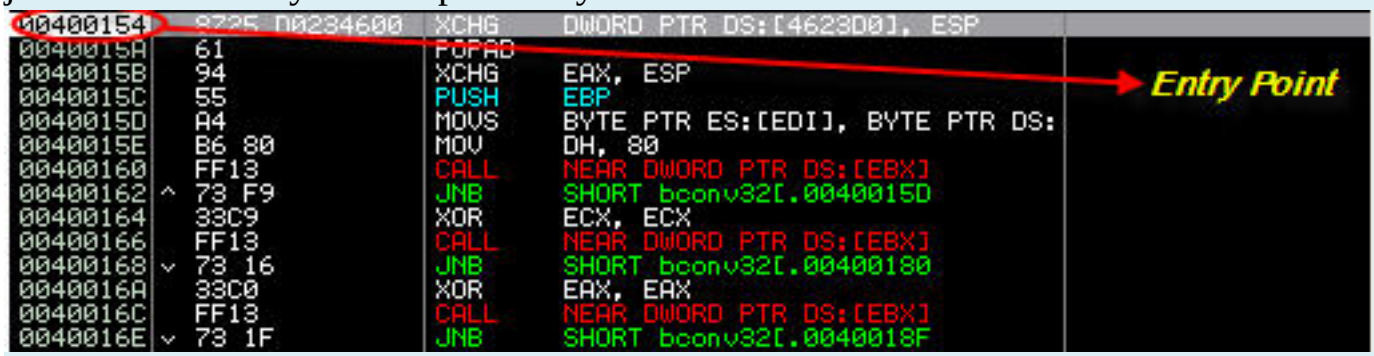
To this, the work is nearly complete, 1 fix only a few more seats (in the scripts that have gen), which I also work full time then, so ... the rest own people handling small. What can post questions: D
Wishing you happy 1 day ... hehehehe

Game Over!

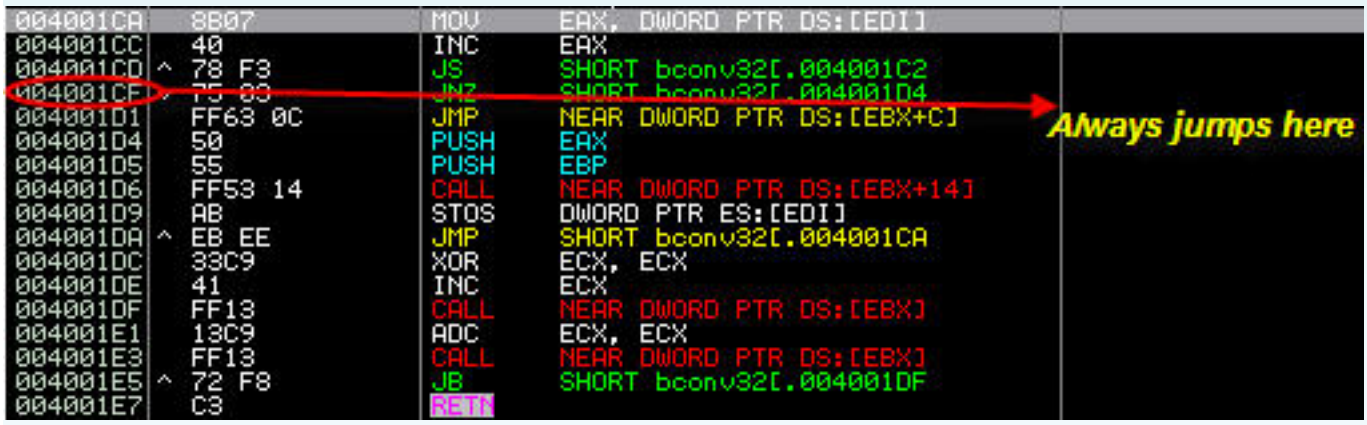
Translated and written by: hoadongnoi
Author: *Marcus*
Information: Unpacking for Newbie
Target: **Hexworkshop Base Converter**
Available: http://www.reaonline.net
Tools: Ollydbg, PEID, Import Reconstructor
Protection: **FSG 2.0**
Level: Beginner
Category: Manual unpacking
Introduction:
As its name ***Hexworkshop Base converter*** is 1 converter tools for the data types such as byte, unsigned byte, short, unsigned short, long, ... Converter between us Hex, decimal, Binary. Original file not packed, but Target was packed with ***FSG*** to ***2.0*** for this tut. Now! Let's go!
Used to Detect ***v0.93 Peid*** we have the following information:



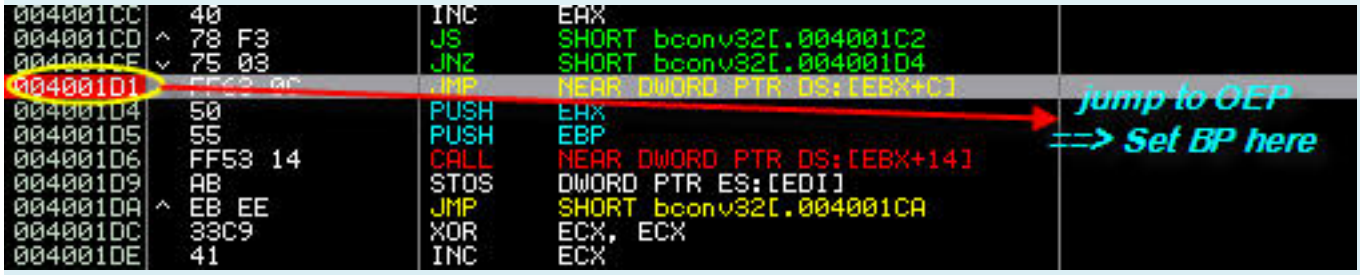
The target was the author packed with ***FSG 2.0 -> bar / XT.*** Load it in Olly, Olly if any notice, just click OK. Olly will stop at EntryPoint:



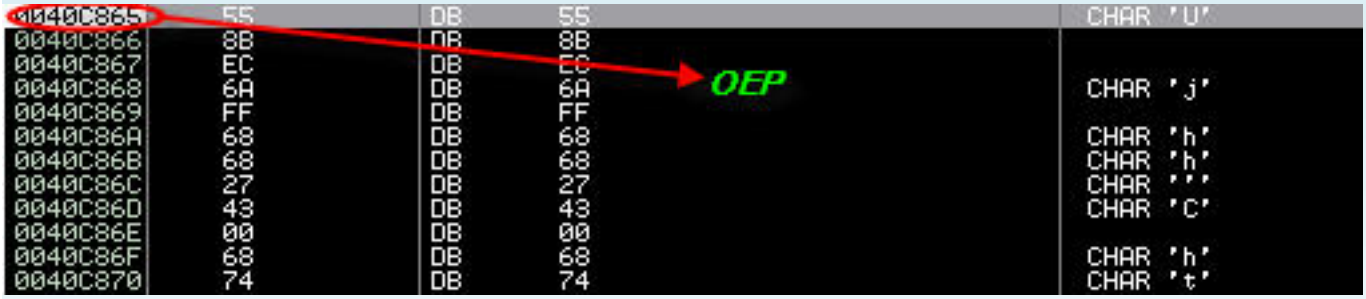
Normally we will have 2 hours to unpack FSG. That is to use tools to unpack & unpack manually. In this tut we will only consider how to unpack manually. Now if you use F8 to trace you'll see it has 1 loop forever. At the last place where the end of the loop, looking down slightly less than 1 you will find:



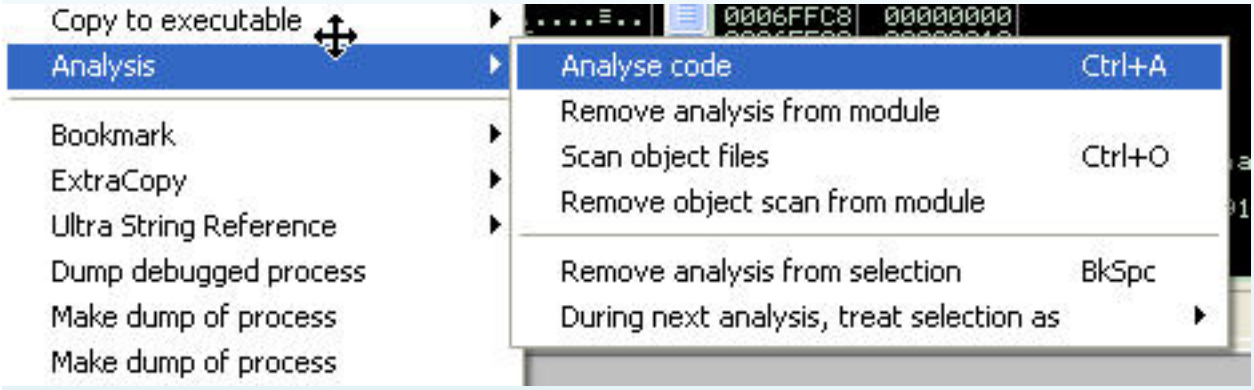
You will have the question is why I know that, Well, now you set BP at JMP this order:
004001DA ^ \ EE EB JMP SHORT bconv32 [.004001 CA ==> Set BP here
Then press F9 to Run, Olly ice will set points in the BP. Press F8 to see you will have 1 loop forever, and always command JNZ SHORT jump to 1, it ignored orders JMP before it
004001D1 FF63 0C JMP NEAR DWORD PTR DS: [EBX + C]
JMP command and this seems to do is never done. So we try to think it always perform JNZ orders to 1 address to check what it is & what to do but never implemented the command JMP
004001CF / 75 03 JNZ SHORT bconv32 [.004001 D4 ==> **checks is all done? If yes then dont jump and go to next address**
004001D1 | FF63 0C JMP NEAR DWORD PTR DS: [EBX + C] ==> **Jump to the OEP**
Since then we understand that address: "004001D1" is the address to jump to OEP ==> Set BP at JMP lenh this:



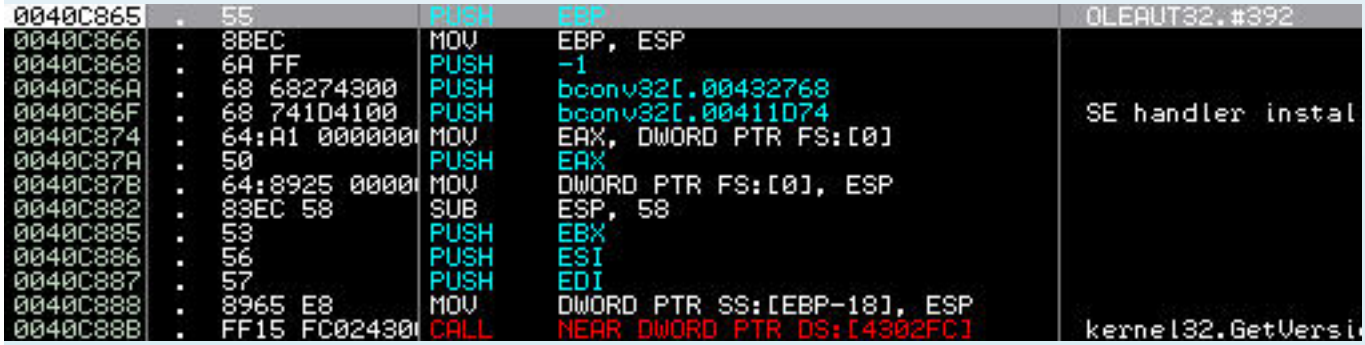
Press F9 (Run), Olly will be ice at the BP. Using F8 (1 time) to trace more. Wow, they will have to be OEP



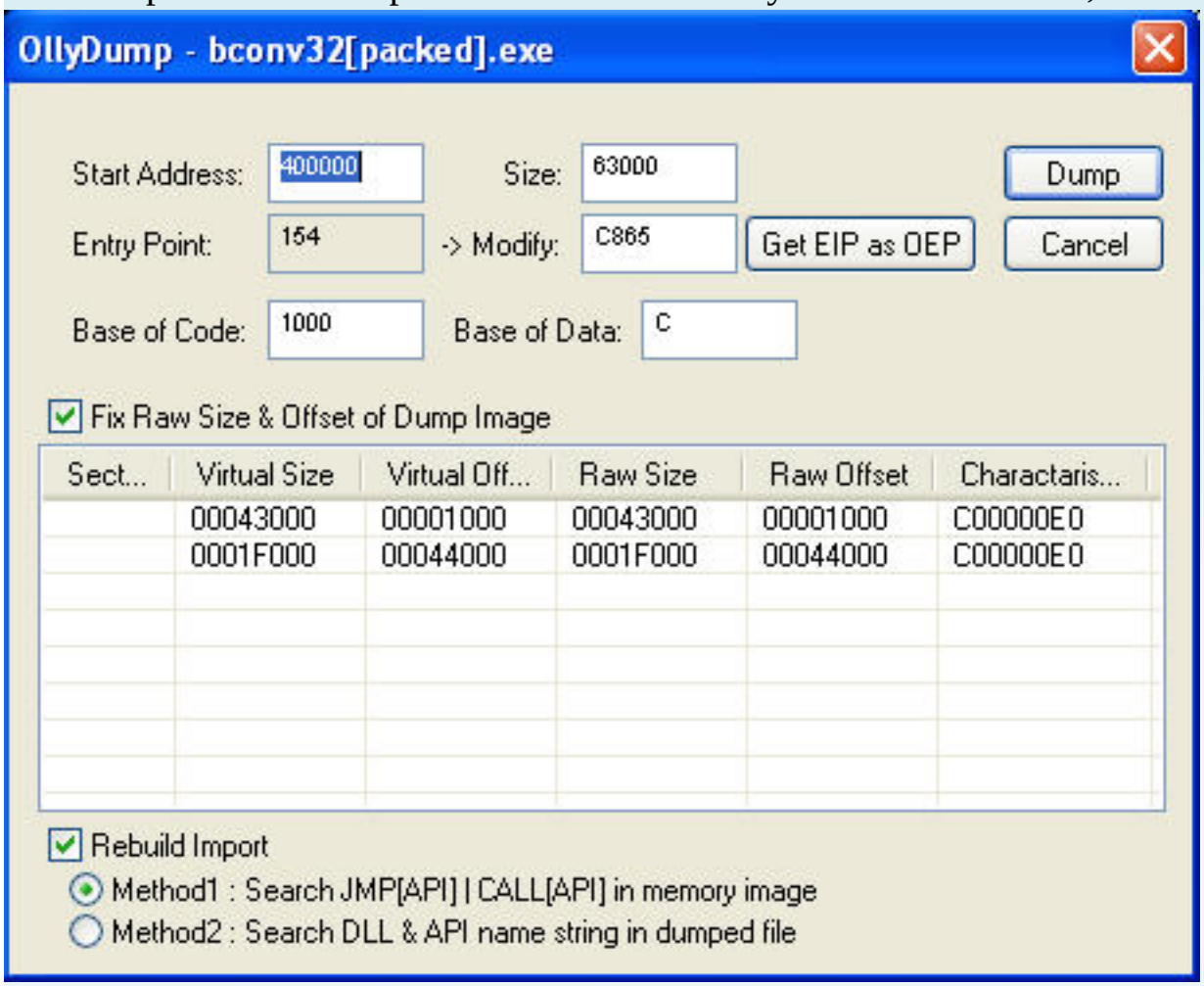
Click to select Analysis / Analyse code:



You will see the real code in it:

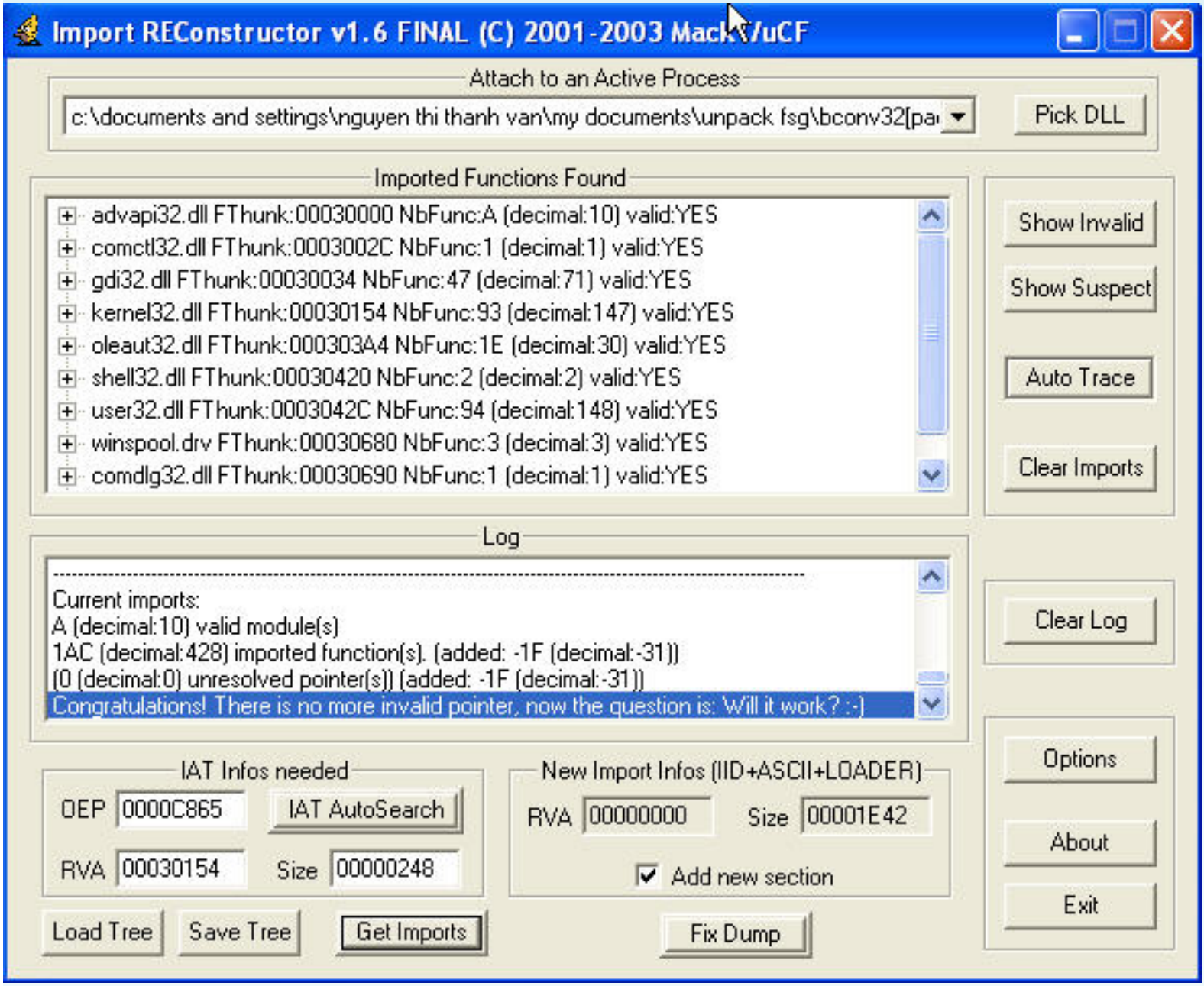


Now we proceed to dump the value in the Modify is 0040C865 - 400,000 = C865



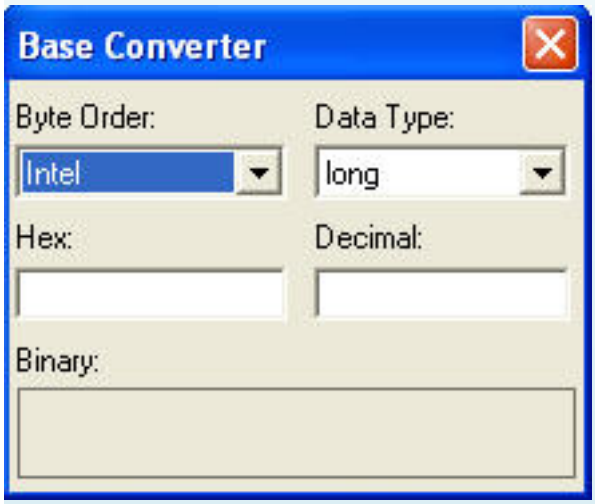
Do not jump to Olly, now we will rebuild Import table with Imprec:
IAT autosearch Click, click Get Imports. Rollover to highlight, click to select commands Advance / Get Api calls, click Show Invalid, more mouse click to select Cut Thunk (s). As

follows:



Click Fix to dump, then select the file you dump it with Olly

Done



Have fun! J

Greetz to thank: My family, Computer_Angel, Moonbaby, Zombie_Deathman, HacNho, Benina, RongChauA, Kienmanowar, TQN, QHQCrker, Littleboy, The_lighthouse, dqtln, tlandn, ectlong, Nini ..... and ARTeam, ExeTools .... all my friend, and YOU!

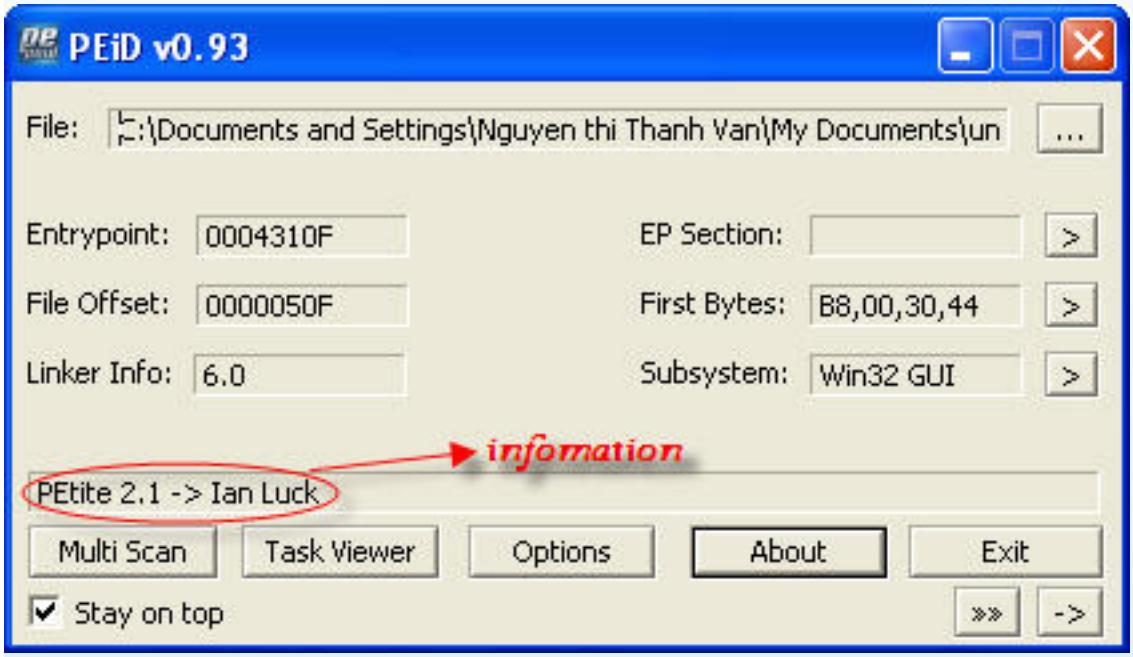
Reverse Engineering Association

http://www.REAonline.net

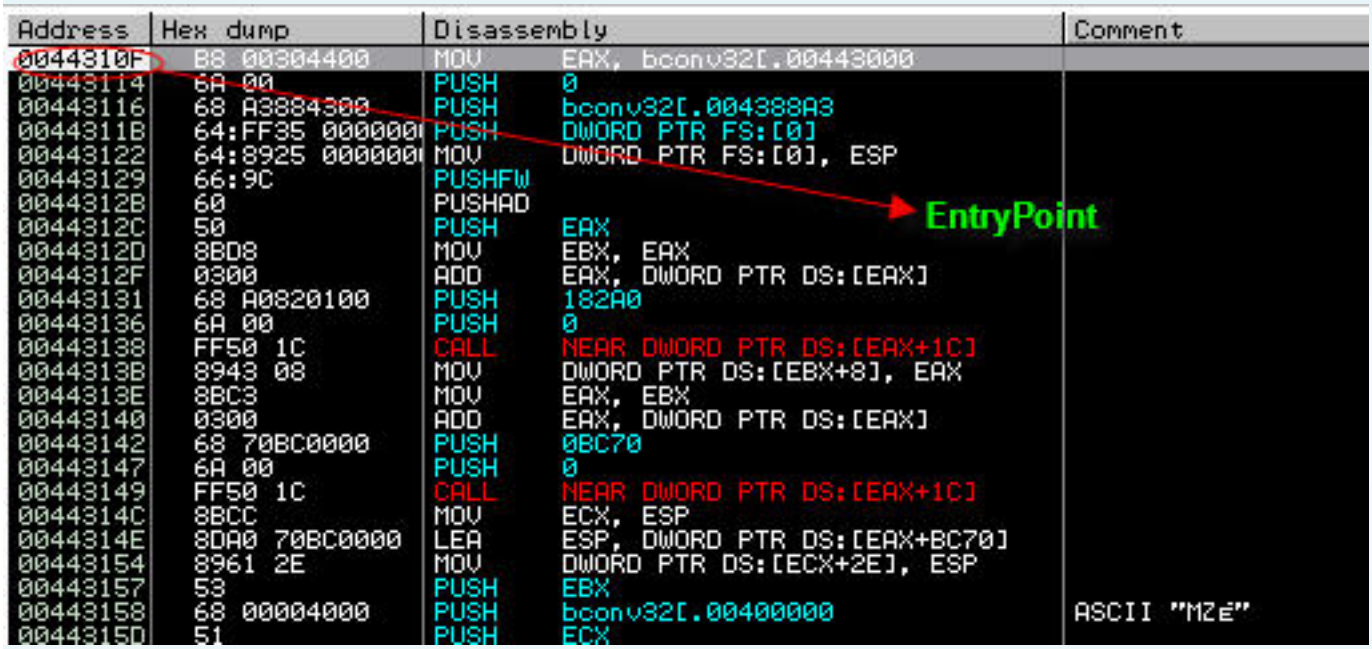
***hoadongnoi** from REA*

17/5/2004

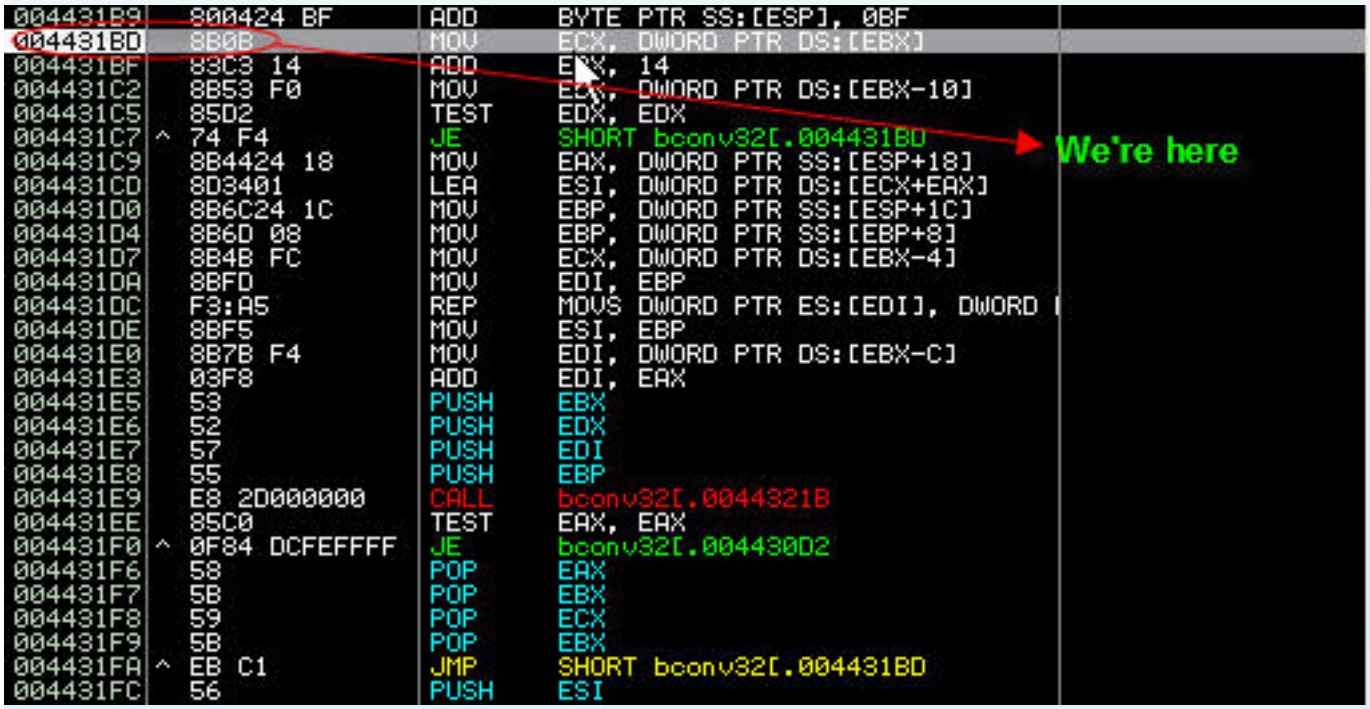
Translated and written by: hoadongnoi
Author: *Marcus*
Information: Unpacking for Newbie
Target: **Hexworkshop Base Converter**
Available: http://www.reaonline.net
Tools: Ollydbg, PEID, Import Reconstructor
Protection: **Petite 2.3**
Level: Beginner
Category: Manual unpacking
Introduction:
As its name ***Hexworkshop Base converter*** is 1 converter tools for the data types such as byte, unsigned byte, short, unsigned short, long, ... Converter between us Hex, decimal, Binary. But the important this is tut we learned how to unpack Petite 2.3 with Manual how. Now, let's go!
Used to Detect ***v0.93 Peid*** we have the following information:



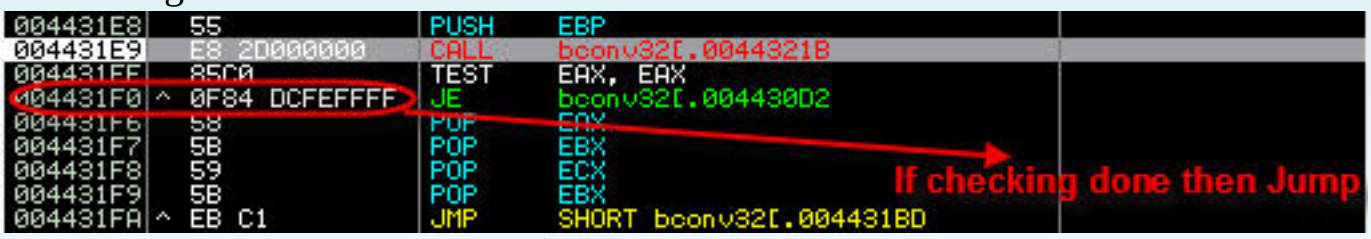
The target was the author packed with ***Petite 2.3*** Peid but then the report is ***Petitle 2.1.*** oh! ko problems go away, it is still meat as usual. Load it in Olly, Olly if any notice, just click OK. Select No Analysis, Olly will stop at EntryPoint:



Now, our Strick is here, now we will have to find Decryption. We hit the F8 until we see 1 code as follows:



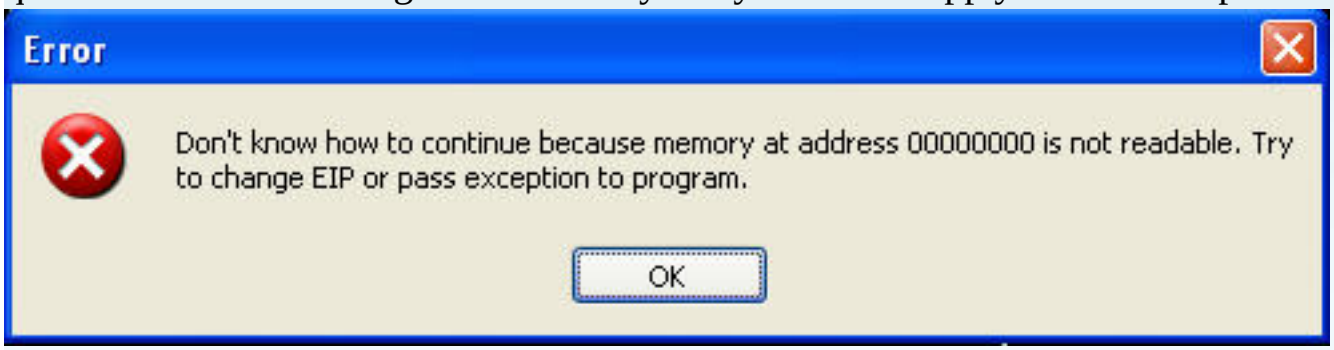
Press F8 again a few more we will come here:



JE commands it will Jump to the following code:

```
004430D2   8B6424 24      MOV     ESP, DWORD PTR SS:[ESP+24]
004430D6   8B0424         MOV     EAX, DWORD PTR SS:[ESP]
004430D9   83C4 26        ADD     ESP, 26
004430DC   8D90 01010000  LEA     EDX, DWORD PTR DS:[EAX+101]
004430E2   83C4 0C        ADD     ESP, 0C
004430E5   6A 10          PUSH    10
004430E7   8BD8           MOV     EBX, EAX
004430E9   66:05 FA00     ADD     AX, 0FA
004430ED   50             PUSH    EAX
004430EE   52             PUSH    EDX
004430EF   6A 00          PUSH    0
004430F1   8B1B           MOV     EBX, DWORD PTR DS:[EBX]
004430F3   FF13           CALL    NEAR DWORD PTR DS:[EBX]
004430F5   6A FF          PUSH    -1
004430F7   FF53 0C        CALL    NEAR DWORD PTR DS:[EBX+C]
004430FA   45             INC     EBP
004430FB   52             PUSH    EDX
004430FC   52             PUSH    EDX
004430FD   4F             DEC     EDI
004430FE   52             PUSH    EDX
004430FF   2100           AND     DWORD PTR DS:[EAX], EAX
00443101   43             INC     EBX
00443102   6F             OUTS    DX, DWORD PTR ES:[EDI]          I/O command
00443103 v 72 72          JB      SHORT bconv32[.00443177
00443105 v 75 70          JNZ     SHORT bconv32[.00443177
00443107 v 74 20          JE      SHORT bconv32[.00443129
00443109   44             INC     ESP
0044310A   61             POPAD
0044310B v 74 61          JE      SHORT bconv32[.0044316E
0044310D   2100           AND     DWORD PTR DS:[EAX], EAX
0044310B v 74 61          JE      SHORT bconv32[.0044316E
0044310D   2100           AND     DWORD PTR DS:[EAX], EAX
0044310F   B8 00304400    MOV     EAX, bconv32[.00443000
00443114   6A 00          PUSH    0
00443116   68 A3884300    PUSH    bconv32[.004388A3
0044311B   64:FF35 000000 PUSH    DWORD PTR FS:[0]
00443122   64:8925 000000 MOV     DWORD PTR FS:[0], ESP
00443129   66:9C          PUSHFW
0044312B   60             PUSHAD
0044312C   50             PUSH    EAX
0044312D   8BD8           MOV     EBX, EAX
0044312F   0300           ADD     EAX, DWORD PTR DS:[EAX]
```

Here we see 2 orders PUSHFW and PUSHAD, such proven record has to be loaded, so we will question whether it will get out how. If you try to run the app you'll see it reported error:



Press Ctrl + F2 to load the target again to Olly, press F9 to run, press Shift + F9 to 2 times, then look back up a little over 1, we will see the following code:

```
004430EE   52              PUSH    EDX
004430EF   6A 00           PUSH    0
004430F1   8B1B            MOV     EBX, DWORD PTR DS:[EBX]
004430F3   FF13            CALL    NEAR DWORD PTR DS:[EBX]
004430F5   6A FF           PUSH    -1
004430F7   FF53 0C         CALL    NEAR DWORD PTR DS:[EBX+C]
004430FA   45              INC     EBP
004430FB   52              PUSH    EDX
004430FC   52              PUSH    EDX
004430FD   4F              DEC     EDI
004430FE   52              PUSH    EDX
004430FF   2100            AND     DWORD PTR DS:[EAX], EAX
00443101   43              INC     EBX
00443102   6F              OUTS    DX, DWORD PTR ES:[EDI]      I/O command
00443103 ^ 72 FB           JB      SHORT bconv32[.00443100
00443105   07              POP     ES                          Modification of se
00443106   5F              POP     EDI
00443107   F3:AA            REP     STOS BYTE PTR ES:[EDI]
00443109   61              POPAD
0044310A   66:9D           POPFW
0044310C   83C4 0C         ADD     ESP, 0C
0044310F - E9 5197FCFF     JMP     bconv32[.0040C865
00443114 - E9 61E6A277     JMP     kernel32.DeleteFileA
00443119 - E9 16F1A377     JMP     kernel32.GetFullPathNameA
0044311E - E9 28FEA277     JMP     kernel32.SetFileTime
00443123 - E9 8995A277     JMP     kernel32.UnlockFile
00443128 - E9 D067A377     JMP     kernel32.ExitProcess
0044312D - E9 0507A377     JMP     kernel32.RaiseException
00443132 - E9 3129A377     JMP     kernel32.GetLocalTime
00443137 - E9 7CE5A177     JMP     kernel32.TerminateProcess
```

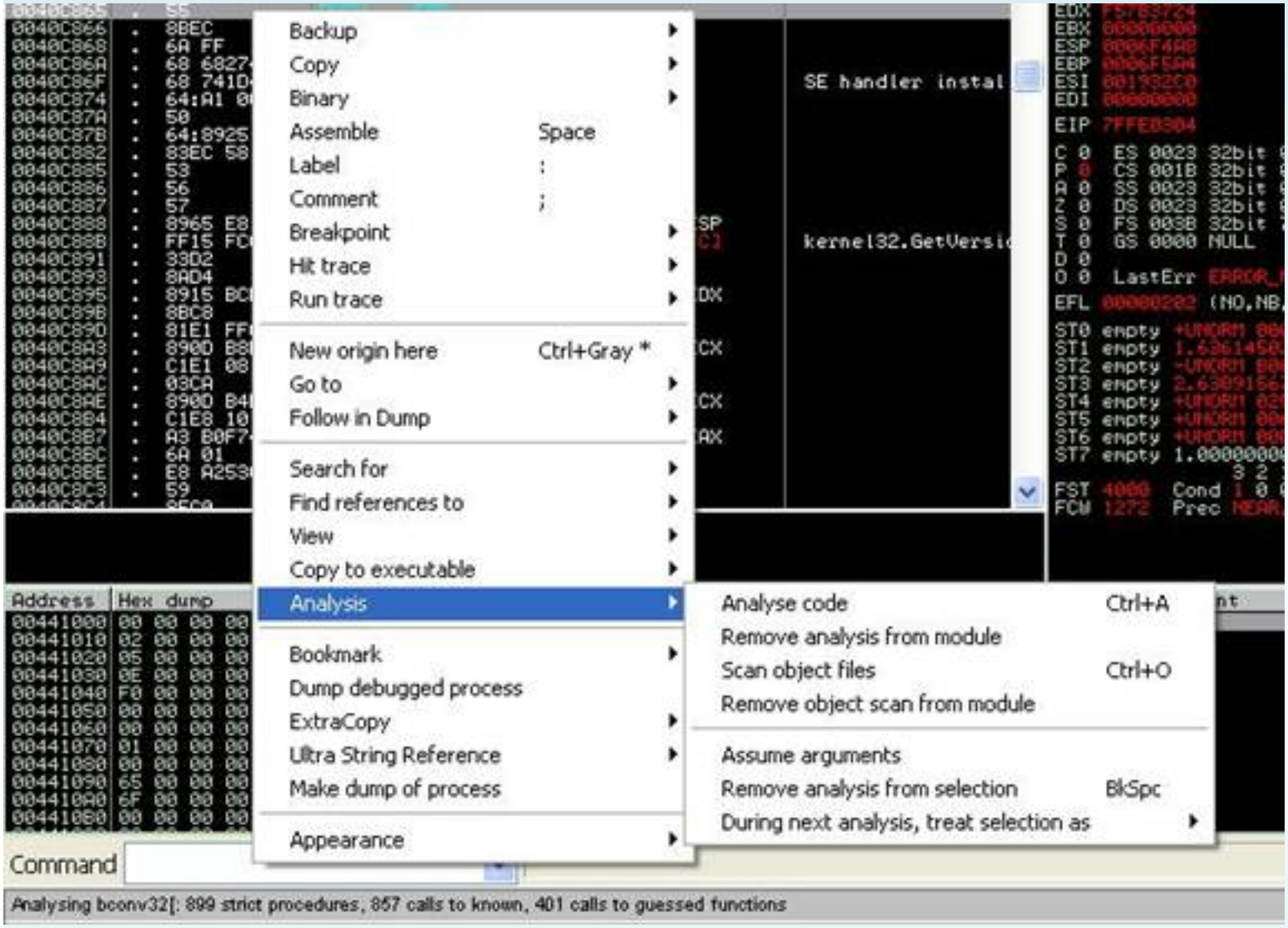
Wow here we found that 2 commands PUSHFW PUSHAD and has been converted into 2 commands POPFW and POPAD. And here we see the code it was like Pop:

```
00443109   61              POPAD
0044310A   66:9D           POPFW
0044310C   83C4 0C         ADD     ESP, 0C
0044310F - E9 5197FCFF     JMP     bconv32[.0040C865
```

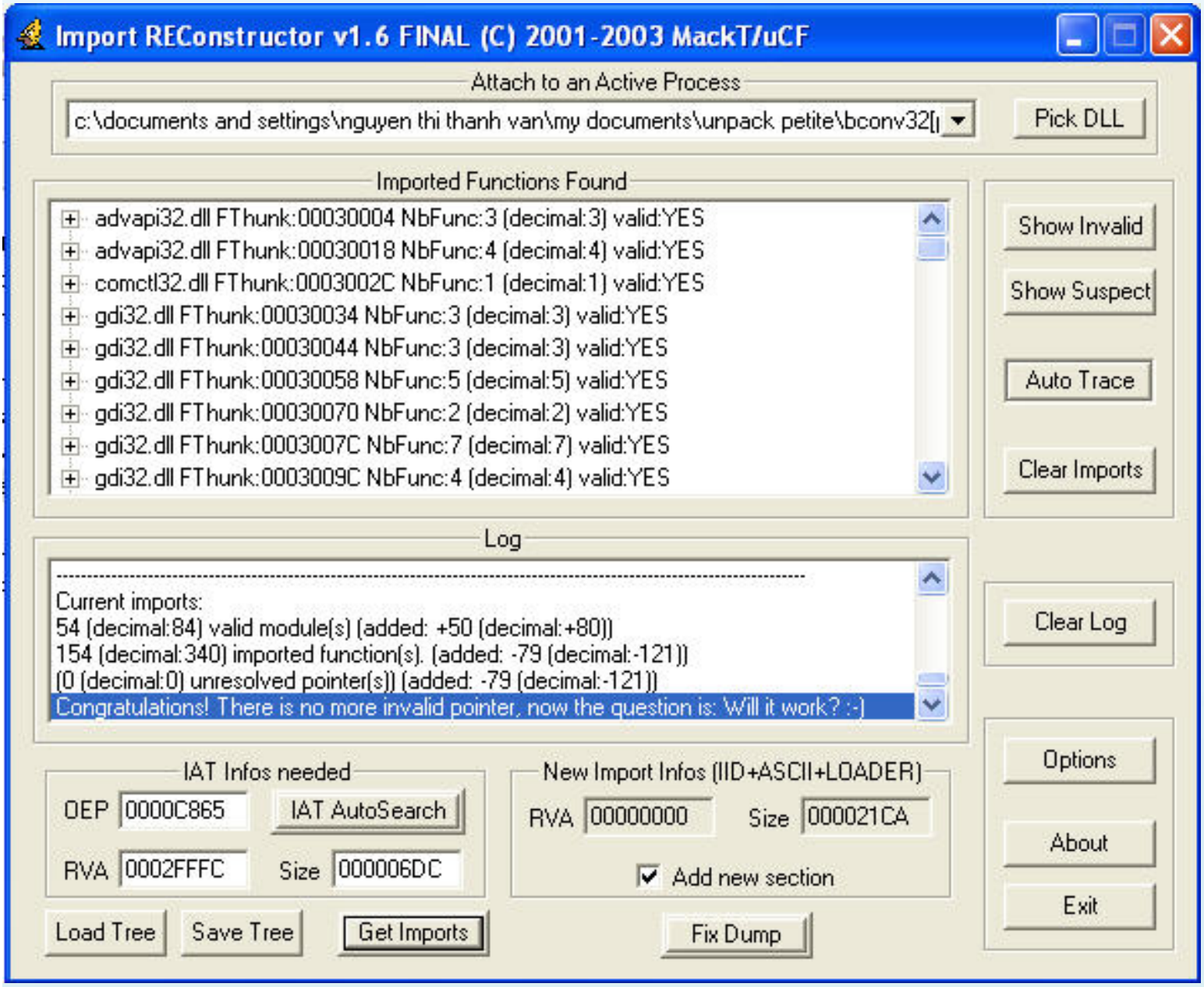
Now set to vet the morning at the Jump command and press Enter, we will come here, real code:

```
0040C864   .  C3           RETN
0040C865   .  55           PUSH    EBP                         OEP
0040C866   .  8BEC         MOV     EBP, ESP
0040C868   .  6A FF        PUSH    -1
0040C86A   .  68 68274300  PUSH    bconv32[.00432768
```

The OEP. Click to select Analysis / Analise code:



Now we run the dump, in Olly we choose OllyDump / dump debugged process and dump it.
Then we rebuild the Imprec:
Click IAT autosearch
Click Get Imports
Go to the window highlight the text show
Right click>>>> Advance commands>>>> get the API calls
Click Show Invalid
Go to the window
Right click>>> Cut chunk (s).
One result is like the image below



Then choose to Fixdump, select save as to just dump file.

Done!

Have fun! J

Greetz to thank: My family, Computer_Angel, Moonbaby, Zombie_Deathman, HacNho, Benina,

RongChauA, Kienmanowar, TQN, QHQCrker, Littleboy, The_lighthouse, dqtln, tlandn, ectlong, Nini ..... and ARTeam, ExeTools .... all my friend, and YOU!

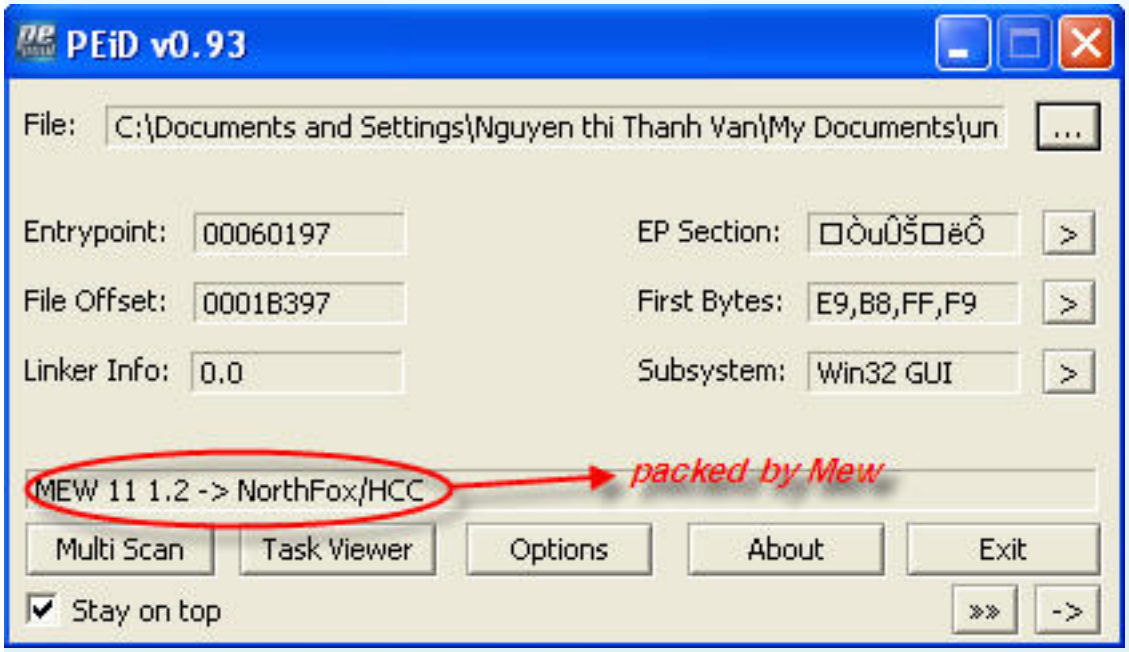
Reverse Engineering Association

http://www.REAonline.net

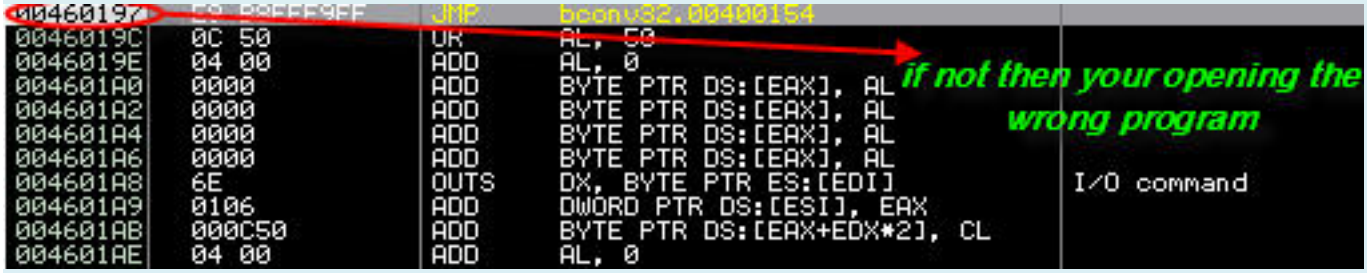
***hoadongnoi** from REA*

12/5/2004

Translated and written by: hoadongnoi
Author: *Marcus*
Information: Unpacking for Newbie
Target: **Hexworkshop Base Converter**
Available: http://www.reaonline.net
Tools: Ollydbg, PEID, Import Reconstructor
Protection: **Mew 11 SE v1.2**
Level: Beginner
Category: Manual unpacking
Introduction:
As its name ***Hexworkshop Base converter*** is 1 converter tools for the data types such as byte, unsigned byte, short, unsigned short, long, ... Converter between us Hex, decimal, Binary.
Original file not packed, but Target was packed with Mew 11 SE v1.2 is to serve for this tut.
Now! Let's go!
Used to Detect ***v0.93 Peid*** we have the following information:



The target was the author packed with ***Mew 11 1.2 -> NorthFox / HCC.*** Load it in Olly, you'll see Olly stop order in 1 Jump



To view the command Jump this it will jump to where we go press F8, then we will see the following code:

```
00400154   BE 1C504400    MOV     ESI, bconv32.0044501C
00400159   8BDE           MOV     EBX, ESI
0040015B   AD             LODS    DWORD PTR DS:[ESI]
0040015C   AD             LODS    DWORD PTR DS:[ESI]
0040015D   50             PUSH    EAX
0040015E   AD             LODS    DWORD PTR DS:[ESI]
0040015F   97             XCHG    EAX, EDI
00400160   B2 80          MOV     DL, 80
00400162   A4             MOVS    BYTE PTR ES:[EDI], BYTE PTR DS:
00400163   B6 80          MOV     DH, 80
00400165   FF13           CALL    NEAR DWORD PTR DS:[EBX]
00400167 ^ 73 F9          JNB     SHORT bconv32.00400162
```

Drag the mouse pointer to the little under 1 will order Return to me by this code. Set in the BP

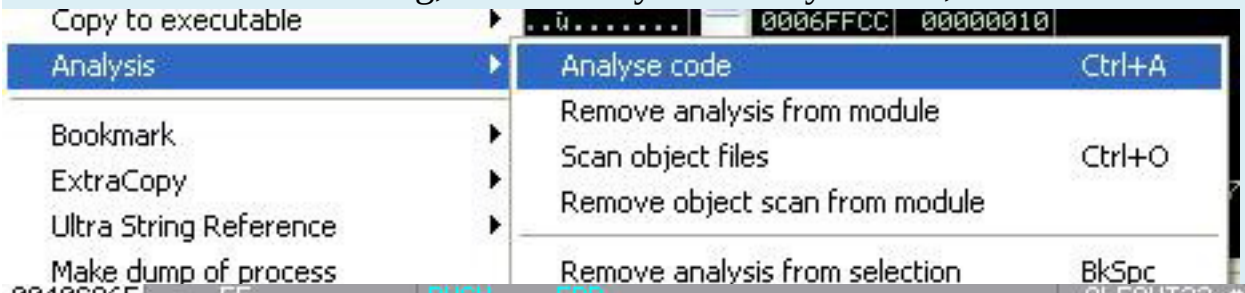
```
004001F8   AB             STOS    DWORD PTR ES:[EDI]
004001F9   85C0           TEST    EAX, EAX
004001FB ^ 75 E5          JNZ     SHORT bconv32.004001E2
004001FD   C3             RETN
004001FE   0000           ADD     BYTE PTR DS:[EAX], AL
00400200   0000           ADD     BYTE PTR DS:[EAX], AL
00400202   0000           ADD     BYTE PTR DS:[EAX], AL
00400204   0000           ADD     BYTE PTR DS:[EAX], AL
00400206   0000           ADD     BYTE PTR DS:[EAX], AL
00400208   0000           ADD     BYTE PTR DS:[EAX], AL
```

Set BP here

Press F9 to run the program. Olly will ice at BP we've set. Use F8 to trace, we will be up to code follows:

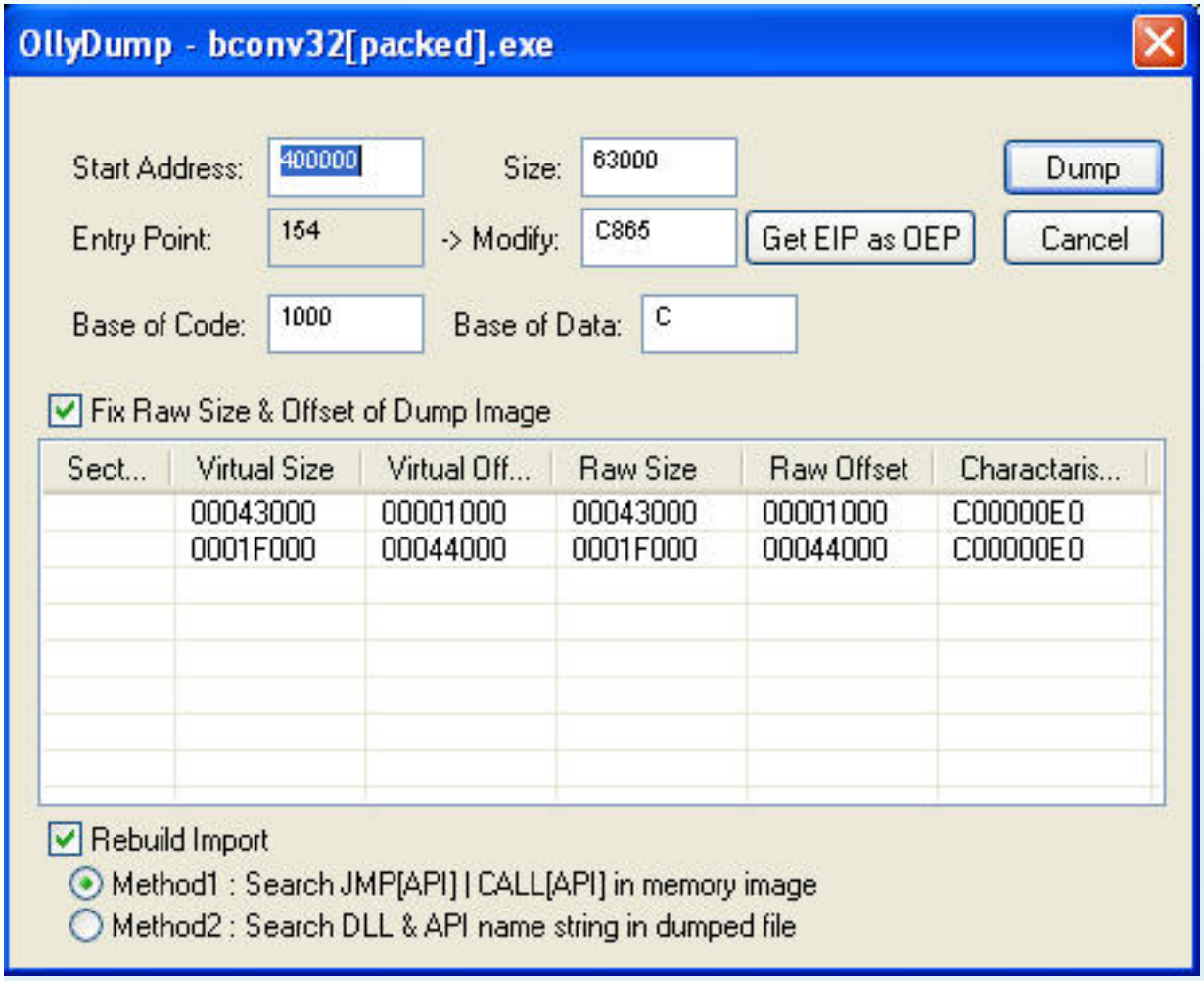
```
0040C865    55      DB    55      CHAR 'U'
0040C866    8B      DB    8B
0040C867    EC      DB    EC
0040C868    6A      DB    6A      CHAR 'j'
0040C869    FF      DB    FF
0040C86A    68      DB    68      CHAR 'h'
0040C86B    68      DB    68      CHAR 'h'
0040C86C    27      DB    27      CHAR '''
0040C86D    43      DB    43      CHAR 'C'
0040C86E    00      DB    00
0040C86F    68      DB    68      CHAR 'h'
0040C870    74      DB    74      CHAR 't'
```

Click to vet in the morning, select Analysis / Analyse code, it will be to the real code that:

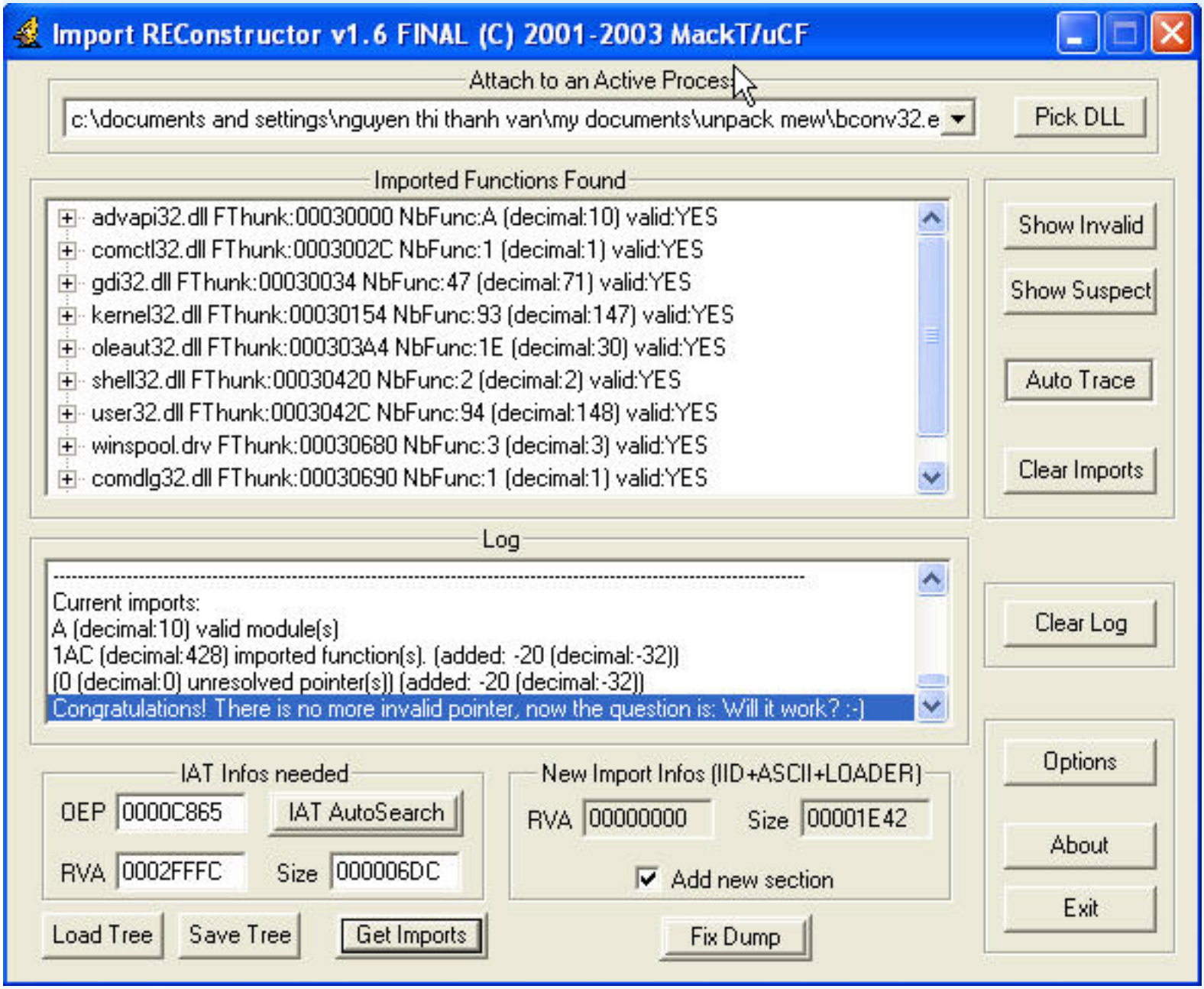



```
0040C865  .  55          PUSH    EBP                    OLEAUT32.#392
0040C866  .  8BEC        MOV     EBP, ESP
0040C868  .  6A FF       PUSH    -1
0040C86A  .  68 68274300 PUSH    bconv32.00432768
0040C86F  .  68 741D4100 PUSH    bconv32.00411D74       SE handler instal
0040C874  .  64:A1 0000000( MOV  EAX, DWORD PTR FS:[0]
0040C87A  .  50          PUSH    EAX
0040C87B  .  64:8925 0000( MOV   DWORD PTR FS:[0], ESP
0040C882  .  83EC 58     SUB     ESP, 58
```

Now we proceed to dump the value in the Modify is 0040C865 - 400,000 = C865



Do not jump to Olly, now we will rebuild Import table with Imprec:
IAT autosearch Click, click Get Imports. Rollover to highlight, click to select commands Advance / Get Api calls, click Show Invalid, more mouse click to select Cut Thunk (s). As follows:



Click Fix to dump, then select the file you dump it with Olly

Done

Have fun! J

Greetz to thank: My family, Computer_Angel, Moonbaby, Zombie_Deathman, HacNho, Benina, RongChauA, Kienmanowar, TQN, QHQCrker, Littleboy, The_lighthouse, dqtln, tlandn, ectlong, Nini ..... and ARTeam, ExeTools .... all my friend, and YOU!

Reverse Engineering Association

http://www.REAonline.net

hoadongnoi from REA

17/5/2004

Manual Fixing IAT - NTKRNL Packer

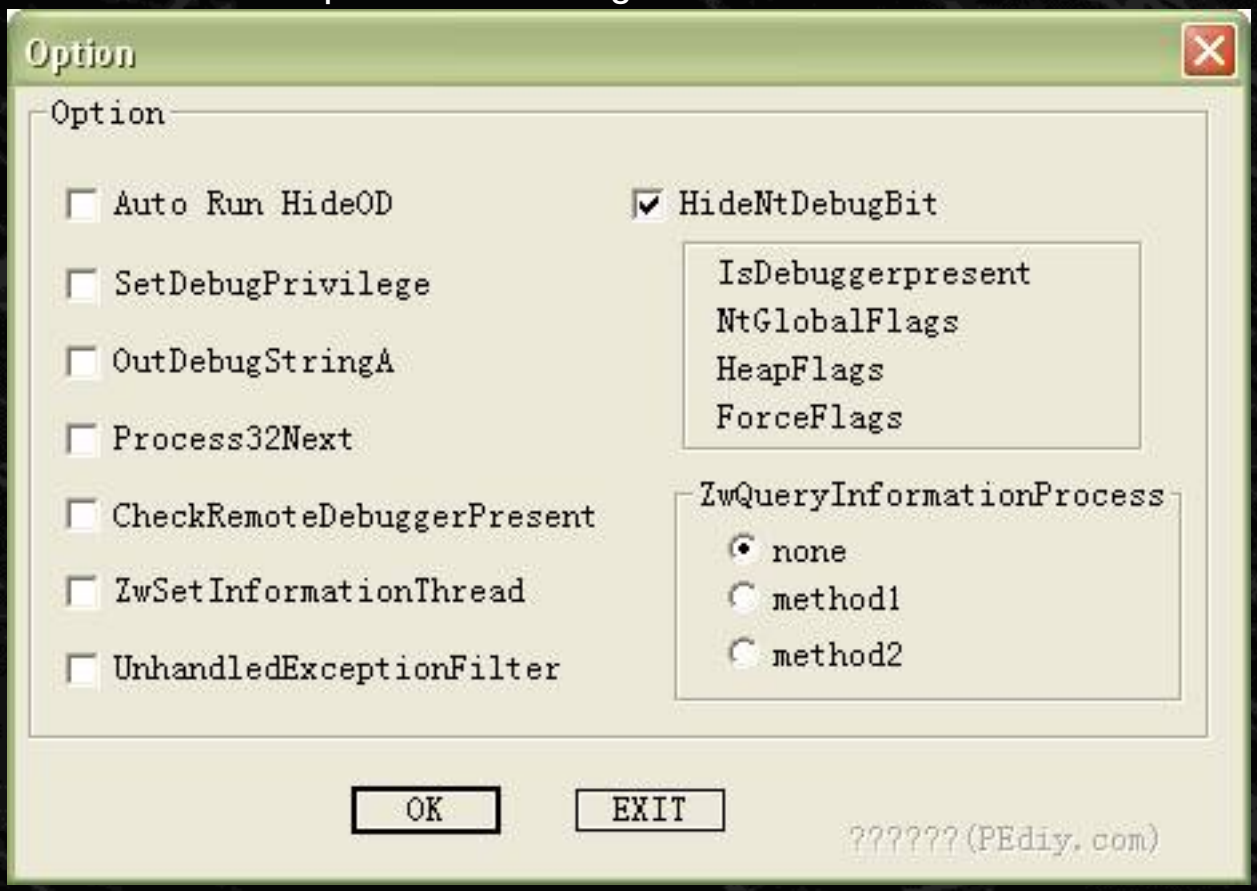
I. Introdution:

Welcome k0n pa, a long time but they do not interfere reverse tool. Dom Banner on the other is the brain child bik first Mụ mam muss, school ko lo school, worry sweetheart ko ah, hix hix. Natural tut just read his opinion, hand itch day chả they are also a few stories not done with the packer NTKRNL, tut the reversing.be children read but also each time that the drone can do as follow tut ... Now Fortunately tut by playing him in the work. But to say they want to do is dump file that is IAT's packer fix this today, brothers and we do not fix that xài plugin nhé: D.
Target is unpackme code and have the pack, down here:
http://reaonline.net/forum/showthread.php?t=4626
Now the GOOOOOOOO ....

II.Config Olly:

English children do not remember what the desire xài mod Olly is too much nhé. Mod multiple sources to make it before this packer. She new test through Olly OllyShadow often are both. Option for Olly as he is presented

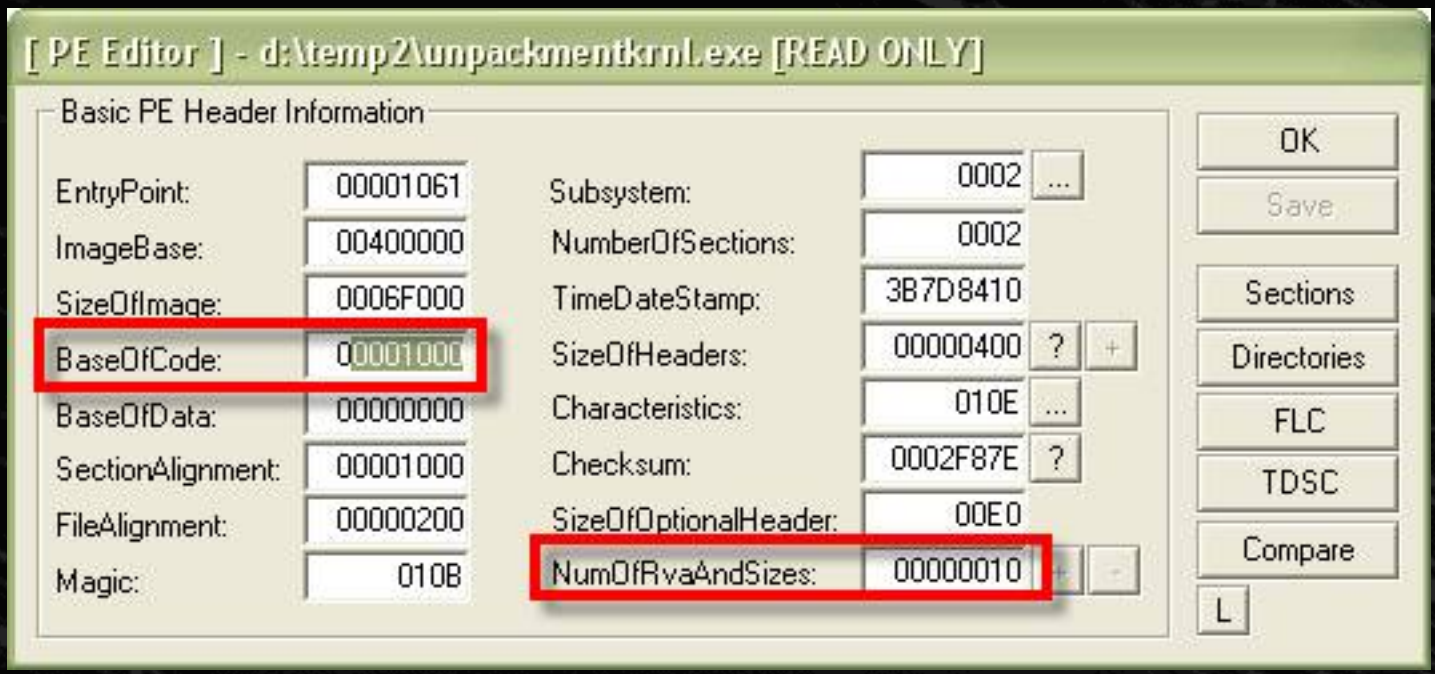
in, check all exception, add more to HideOD plugin. That's enough, and how to fix IAT also thanks 1 part HideOD again.



III.Find OEP:

This also does not need to say much because they only focus on only fix IAT. This is the summary:

1. Fix the PE header:



Using LordPE fix the image above. (If you use often Olly), Olly has the

mod is not necessary.

2. Target load, stop at EP:

```
Address   | Hex dump     | Disassembly
00401061 U  68 79CB4100    PUSH UnpackMe.0041CB79
00401066    E8 01000000    CALL UnpackMe.0040106C
0040106B    C3             RETN
0040106C    C3             RETN
0040106D    8C36           MOV WORD PTR DS:[ESI],SEG?
0040106F    5B             POP EBX
00401070    0AEF           OR CH,BH
```

3. Hide in HideOD Plugin.

4. F9 Run, break:

```
Address   | Hex dump     | Disassembly
00330000    C3             RETN
00330001    0000           ADD BYTE PTR DS:[EAX],AL
00330003    0000           ADD BYTE PTR DS:[EAX],AL
```

5. Change C3 à CC. RETN Because this is the exception to the packer, to detect debugger, INT3 to change to more normal 1 exception, the trick is how packer 1 delicious fresh, and the unpack continue impartiality.

6. After the change, BP LoadLibraryA, F9, break:

```
Address   | Hex dump     | Disassembly
7C801D77 k  8BFF           MOV EDI,EDI
7C801D79    55             PUSH EBP
7C801D7A    8BEC           MOV EBP,ESP
7C801D7C    837D 08 00     CMP DWORD PTR SS:[EBP+8],0
7C801D80    53             PUSH EBX
7C801D81    56             PUSH ESI
7C801D82  v 74 14          JE SHORT kernel32.7C801D98
7C801D84    68 C0E0807C    PUSH kernel32.7C80E0C0
```

Images break on Win XP SP1 and SP2 will vary jog.

7. Leave here to BP, Alt-F9 to return to the program code:

```
Address   | Hex dump     | Disassembly
0041F5F7    FF75 F4        PUSH DWORD PTR SS:[EBP-C]
0041F5FA    E8 FA000000    CALL UnpackMe.0041F6F9
0041F5FF    85C0           TEST EAX,EAX
0041F601  v 74 77          JE SHORT UnpackMe.0041F67A
0041F603    8BF8           MOV EDI,EAX
0041F605    8B4D F8        MOV ECX,DWORD PTR SS:[EBP-8]
0041F608    8B11           MOV EDX,DWORD PTR DS:[ECX]
```

8. Pull down to find RETN 4, BP set, F9, break:

```
0041F694    8B45 EC        MOV EAX,DWORD PTR SS:[EBP-14]
0041F697    8BE5           MOV ESP,EBP
0041F699    5D             POP EBP
0041F69A    C2 0400        RETN 4
0041F69D    55             PUSH EBP
0041F69E    8BEC           MOV EBP,ESP
0041F6A0    83C4 B0        ADD ESP,-50
```

9. Leave BP, F7 (or F8) to return to

10. Search CALL EAX just below:

```
Address   Hex dump          Disassembly
0041F3D9    8945 C4         MOV DWORD PTR SS:[EBP-3C],EAX
0041F3DC    8B45 F4         MOV EAX,DWORD PTR SS:[EBP-C]
0041F3DF    0340 3C         ADD EAX,DWORD PTR DS:[EAX+3C]
0041F3E2    8D58 28         LEA EBX,DWORD PTR DS:[EAX+28]
0041F3E5    8B40 28         MOV EAX,DWORD PTR DS:[EAX+28]
0041F3E8    0345 F4         ADD EAX,DWORD PTR SS:[EBP-C]
0041F3EB    C703 00000000   MOV DWORD PTR DS:[EBX],0
0041F3F1    8B5D F4         MOV EBX,DWORD PTR SS:[EBP-C]
0041F3F4    035B 3C         ADD EBX,DWORD PTR DS:[EBX+3C]
0041F3F7    66:F743 16 0020 TEST WORD PTR DS:[EBX+16],2000
0041F3FD  v 74 10           JE SHORT UnpackMe.0041F40F
0041F3FF    6A 00           PUSH 0
0041F401    6A 01           PUSH 1
            FF75 F4         PUSH DWORD PTR SS:[EBP-C]
0041F406    FFD0            CALL EAX
            8BF0            MOV ESI,EAX
0041F40A  v 74 03           JE SHORT UnpackMe.0041F40F
0041F40C    8B45 F4         MOV EAX,DWORD PTR SS:[EBP-C]
```

11. Running to CALL EAX, F7 go invisible:

```
Address   Hex dump          Disassembly
003A1E4C    6A 0C           PUSH 0C
003A1E4E    68 C06B3900     PUSH 396BC0
003A1E53    E8 742B0000     CALL 003A49CC
003A1E58    33C0            XOR EAX,EAX
003A1E5A    40              INC EAX
003A1E5B    8945 E4         MOV DWORD PTR SS:[EBP-1C],EAX
003A1E5E    8B75 0C         MOV ESI,DWORD PTR SS:[EBP+C]
```

12. Ctrl-B command find JMP EAX through byte group: 61 FF E0
13. Search times to 2:

```
0039B353    83C4 3C         ADD ESP,3C
0039B356    A1 68983A00     MOV EAX,DWORD PTR DS:[3A9868]
0039B35B    894424 1C       MOV DWORD PTR SS:[ESP+1C],EAX
0039B35F    61              POPAD
0039B360  v FFE0            JMP EAX
0039B362    5F              POP EDI
0039B363    5E              POP ESI
0039B364    5B              POP EBX
0039B365    5D              POP EBP
0039B366    C3              RETN
```

14. BP set at JMP EAX, F9, the flash screen, break. F7 to OEP:

```
Address   Hex dump          Disassembly
004017A0    55              PUSH EBP                    OEP
004017A1    8BEC            MOV EBP,ESP
004017A3    6A FF           PUSH -1
004017A5    68 30214200     PUSH UnpackMe.00422130
004017AA    68 A0364000     PUSH UnpackMe.004036A0
004017AF    64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
004017B5    50              PUSH EAX
004017B6    64:8925 00000000 MOV DWORD PTR FS:[0],ESP
004017BD    83C4 A4         ADD ESP,-5C
004017C0    53              PUSH EBX
004017C1    56              PUSH ESI
004017C2    57              PUSH EDI
004017C3    8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
004017C6    FF15 48A24200   CALL DWORD PTR DS:[42A248]
004017CC    A3 607D4200     MOV DWORD PTR DS:[427D60],EAX
004017D1    A1 607D4200     MOV EAX,DWORD PTR DS:[427D60]
004017D6    C1E8 08         SHR EAX,8
```

Done. Start time fix IAT minutes.

IV.Fix IAT:

1. Analyze:

There are many ways to find places to save IAT we know. FF 25 hours of 1 very quickly (or go to the right under CALL OEP):

Address	Hex dump	Disassembly
0040165D	CC	INT3
0040165E	CC	INT3
0040165F	CC	INT3
00401660	FF25 54A34200	JMP DWORD PTR DS:[42A354]
00401666	FF25 50A34200	JMP DWORD PTR DS:[42A350]
0040166C	FF25 4CA34200	JMP DWORD PTR DS:[42A34C]
00401672	FF25 48A34200	JMP DWORD PTR DS:[42A348]
00401678	FF25 44A34200	JMP DWORD PTR DS:[42A344]
0040167E	FF25 40A34200	JMP DWORD PTR DS:[42A340]
00401684	FF25 3CA34200	JMP DWORD PTR DS:[42A33C]
0040168A	FF25 38A34200	JMP DWORD PTR DS:[42A338]
00401690	FF25 34A34200	JMP DWORD PTR DS:[42A334]
00401696	FF25 30A34200	JMP DWORD PTR DS:[42A330]
0040169C	FF25 2CA34200	JMP DWORD PTR DS:[42A32C]
004016A2	FF25 28A34200	JMP DWORD PTR DS:[42A328]
004016A8	FF25 24A34200	JMP DWORD PTR DS:[42A324]
004016AE	FF25 20A34200	JMP DWORD PTR DS:[42A320]
004016B4	FF25 1CA34200	JMP DWORD PTR DS:[42A31C]
004016BA	FF25 18A34200	JMP DWORD PTR DS:[42A318]
004016C0	FF25 14A34200	JMP DWORD PTR DS:[42A314]
004016C6	FF25 10A34200	JMP DWORD PTR DS:[42A310]
004016CC	FF25 0CA34200	JMP DWORD PTR DS:[42A30C]
004016D2	FF25 08A34200	JMP DWORD PTR DS:[42A308]
004016D8	CC	INT3

Follow in dump à Memory Address:

Address	Value	Comment
0042A1DC	00000000	
0042A1E0	00000000	
0042A1E4	00000000	
0042A1E8	00F40A50	IAT Start
0042A1EC	00F40AD4	
0042A1F0	00F40B58	
0042A1F4	00F40BDC	
0042A1F8	00F40C60	
0042A1FC	00F40CE4	
0042A200	00F40D68	
0042A204	00F40DEC	
0042A208	00F40E70	
0042A20C	00F40EF4	
0042A210	00F40F78	
0042A214	00F40FFC	
0042A218	00F41080	
0042A21C	00F41104	
0042A220	00F41188	
0042A224	00F4120C	
0042A228	00F41290	
0042A22C	00F41314	
0042A230	00F41398	

Address	Value	Comment
0042A30C	00F40084	
0042A310	00F40108	
0042A314	00F4018C	
0042A318	00F40210	
0042A31C	00F40294	
0042A320	00F40318	
0042A324	00F4039C	
0042A328	00F40420	
0042A32C	00F404A4	
0042A330	00F40528	
0042A334	00F405AC	
0042A338	00F40630	
0042A33C	00F406B4	
0042A340	00F40738	
0042A344	00F407BC	
0042A348	00F40840	
0042A34C	00F408C4	
0042A350	00F40948	
0042A354	00F409CC	IAT End
0042A358	00000000	
0042A35C	00000000	
0042A360	00000000	

Tentatively identified as such. Next time we will find exactly through NTKRNL always.

To find out, the IAT has been encrypt both father mistake again any function L . Now we return to OEP, see CALL function just below:

```
Address   Hex dump          Disassembly
004017A0    55              PUSH EBP
004017A1    8BEC            MOV EBP,ESP
004017A3    6A FF           PUSH -1
004017A5    68 30214200     PUSH UnpackMe.00422130
004017AA    68 A0364000     PUSH UnpackMe.004036A0
004017AF    64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
004017B5    50              PUSH EAX
004017B6    64:8925 00000000 MOV DWORD PTR FS:[0],ESP
004017BD    83C4 A4         ADD ESP,-5C
004017C0    53              PUSH EBX
004017C1    56              PUSH ESI
004017C2    57              PUSH EDI
004017C3    8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
004017C6    FF15 48A24200   CALL DWORD PTR DS:[42A248]
004017CC    8B 607D4200     MOV DWORD PTR DS:[427D60],EAX
004017D1    A1 607D4200     MOV EAX,DWORD PTR DS:[427D60]
004017D6    C1E8 08         SHR EAX,8
004017D9    25 FF000000     AND EAX,0FF
004017DE    A3 6C7D4200     MOV DWORD PTR DS:[427D6C],EAX
```

I trace this to CALL F7 and go invisible, is the IAT decrypt:

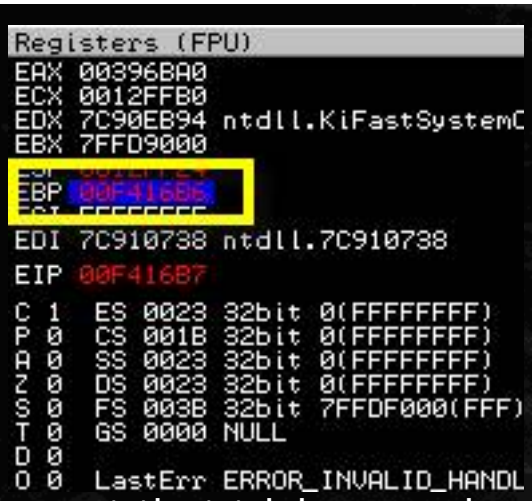
```
Address   Hex dump          Disassembly
00F416B0    60              PUSHAD
00F416B1    E8 00000000     CALL 00F416B6
00F416B6    5D              POP EBP
00F416B7    81ED 8F8F3900   SUB EBP,398F8F
00F416BD    FFB5 01903900   PUSH DWORD PTR SS:[EBP+399001]
00F416C3    FFB5 05903900   PUSH DWORD PTR SS:[EBP+399005]
00F416C9    FFB5 09903900   PUSH DWORD PTR SS:[EBP+399009]
00F416CF    FFB5 F98F3900   PUSH DWORD PTR SS:[EBP+398FF9]
00F416D5    FFB5 FD8F3900   PUSH DWORD PTR SS:[EBP+398FFD]
00F416DB    E8 08000000     CALL 00F416E8
00F416E0    894424 1C       MOV DWORD PTR SS:[ESP+1C],EAX
00F416E4    61              POPAD
00F416E5  - FFE0            JMP EAX
00F416E7    C3              RETN
00F416E8    55              PUSH EBP
00F416E9    8BEC            MOV EBP,ESP
00F416EB    83C4 FC         ADD ESP,-4
00F416EE    2B65 14         SUB ESP,DWORD PTR SS:[EBP+14]
00F416F1    8965 FC         MOV DWORD PTR SS:[EBP-4],ESP
00F416F4    8B4D 14         MOV ECX,DWORD PTR SS:[EBP+14]
```

This section arising randomly in memory, each machine can do the same offset

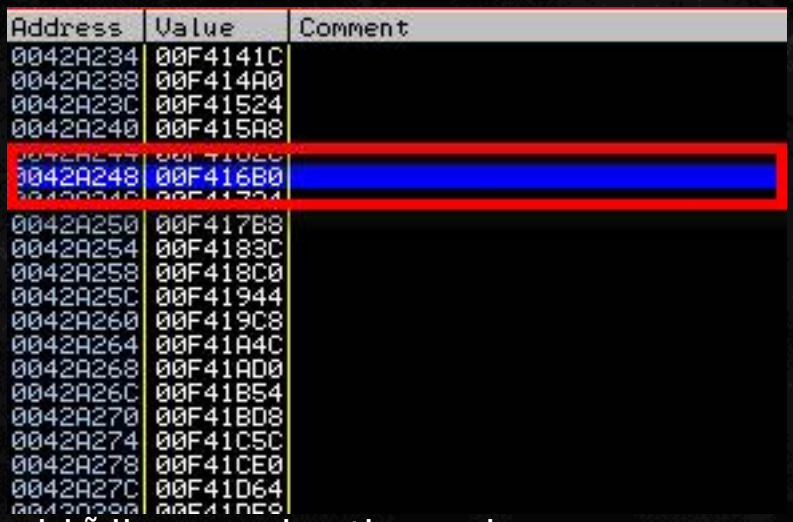
Trace from F7 to immediately order SUB:

```
Address   Hex dump          Disassembly
00F416B0    60              PUSHAD
00F416B1    E8 00000000     CALL 00F416B6
00F416B6    5D              POP EBP
00F416B7    81ED 8F8F3900   SUB EBP,398F8F
00F416BD    FFB5 01903900   PUSH DWORD PTR SS:[EBP+399001]
00F416C3    FFB5 05903900   PUSH DWORD PTR SS:[EBP+399005]
00F416C9    FFB5 09903900   PUSH DWORD PTR SS:[EBP+399009]
00F416CF    FFB5 F98F3900   PUSH DWORD PTR SS:[EBP+398FF9]
```

Dom through register, see the value in EBP:



After analysis, try try again, get that trick see value here, except to the 6 to 1 in value encrypt IAT: F416B6 - 6 = F416B0



And we also observed kĩ lines under the code:

British children get the value at which nhé. Now continue to Trace CALL immediately below, we go F7 invisible:

They go down immediately under the code, trace back to here:

```
00F416E8   55              PUSH EBP
00F416E9   8BEC            MOV EBP,ESP
00F416EB   83C4 FC         ADD ESP,-4
00F416EE   2B65 14         SUB ESP,DWORD PTR SS:[EBP+14]
00F416F1   8965 FC         MOV DWORD PTR SS:[EBP-4],ESP
00F416F4   8B4D 14         MOV ECX,DWORD PTR SS:[EBP+14]
00F416F7   8B75 10         MOV ESI,DWORD PTR SS:[EBP+10]
00F416FA   8B7D FC         MOV EDI,DWORD PTR SS:[EBP-4]
00F416FD   F3:A4           REP MOVS BYTE PTR ES:[EDI],BYTE PTR DS:[ESI]
00F416FF   FF75 FC         PUSH DWORD PTR SS:[EBP-4]
00F41702   FF55 18         CALL DWORD PTR SS:[EBP+18]
00F41705   FF75 FC         PUSH DWORD PTR SS:[EBP-4]
```

Meet REP must wa F8 to trace the ceremony, and then again several F8 wa CALL, stop at:

```
Address    Hex dump        Disassembly
00F416FA   8B7D FC         MOV EDI,DWORD PTR SS:[EBP-4]
00F416FD   F3:A4           REP MOVS BYTE PTR ES:[EDI],BYTE PTR DS:[ESI]
00F416FF   FF75 FC         PUSH DWORD PTR SS:[EBP-4]
00F41702   FF55 18         CALL DWORD PTR SS:[EBP+18]
00F41705   FF75 FC         PUSH DWORD PTR SS:[EBP-4]
00F41708   FF75 0C         PUSH DWORD PTR SS:[EBP+C]
00F4170B   FF55 08         CALL DWORD PTR SS:[EBP+8]
00F4170E   50              PUSH EAX
00F4170F   8B7D FC         MOV EDI,DWORD PTR SS:[EBP-4]
00F41712   8B4D 14         MOV ECX,DWORD PTR SS:[EBP+14]
00F41715   32C0            XOR AL,AL
00F41717   F3:AA           REP STOS BYTE PTR ES:[EDI]
00F41719   58              POP EAX
```

Dom through register (or content at the line):

```
EAX 7C8111DA kernel32.GetVersion
EDX 7C97C0D8 ntdll.7C97C0D8
EBX 7FFD8000
ESP 0012FEF8 ASCII "GetVersion"
EBP 0012FF08
ESI 00F502BC
EDI 0012FF04

EIP 00F4170E

C 0  ES 0023 32bit 0(FFFFFFFF)
P 0  CS 001B 32bit 0(FFFFFFFF)
A 0  SS 0023 32bit 0(FFFFFFFF)
Z 0  DS 0023 32bit 0(FFFFFFFF)
S 0  FS 003B 32bit 7FFDF000(FFF)
T 0  GS 0000 NULL
D 0
O 0  LastErr ERROR_INVALID_HANDLE

EFL 00000202 (NO.NB.NE.A.NS.PO.GE
```

Hehe, this is already EAX 1 contains real value in IAT (Ham GetVersion often called the first of OEP's program code in VC). Offset contain it before the program is offset pack contains encrypt value that we found above.
Okie, so ask questions, this is the only decrypt IAT value for this? To test our back seats near OEP CALL:

```
Address    Hex dump        Disassembly
004017C1   56              PUSH ESI
004017C2   57              PUSH EDI
004017C3   8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
004017C6   FF15 48A24200   CALL DWORD PTR DS:[42A248]
004017CC   A3 607D4200     MOV DWORD PTR DS:[427D60],EAX
004017D1   A1 607D4200     MOV EAX,DWORD PTR DS:[427D60]
004017D6   C1E8 08         SHR EAX,8
004017D9   25 FF000000     AND EAX,0FF
004017DE   A3 6C7D4200     MOV DWORD PTR DS:[427D6C],EAX
004017E3   8B0D 607D4200   MOV ECX,DWORD PTR DS:[427D60]
```

BP set just below this CALL, F9 to exit from the other end to decrypt lệ. Now, right next to trace CALL immediately below:

```
Address   Hex dump          Disassembly
004017FE    0315 6C7D4200   ADD EDX,DWORD PTR DS:[427D6C]
00401804    8915 647D4200   MOV DWORD PTR DS:[427D64],EDX
0040180A    A1 607D4200     MOV EAX,DWORD PTR DS:[427D60]
0040180F    C1E8 10         SHR EAX,10
00401812    25 FFFF0000     AND EAX,0FFFF
00401817    A3 607D4200     MOV DWORD PTR DS:[427D60],EAX
0040181C    6A 00           PUSH 0
0040181E    E8 0D1C0000     CALL UnpackMe.00403430
00401823    83C4 04         ADD ESP,4
00401826    85C0            TEST EAX,EAX
00401828  v 75 0A           JNZ SHORT UnpackMe.00401834
0040182A    6A 1C           PUSH 1C
0040182C    E8 FF000000     CALL UnpackMe.00401930
00401831    83C4 04         ADD ESP,4
```

F7 go invisible:

```
Address   Hex dump          Disassembly
00403430    55              PUSH EBP
00403431    8BEC            MOV EBP,ESP
00403433    6A 00           PUSH 0
00403435    68 00100000     PUSH 1000
0040343A    33C0            XOR EAX,EAX
0040343C    837D 08 00      CMP DWORD PTR SS:[EBP+8],0
00403440    0F94C0          SETE AL
00403443    50              PUSH EAX
00403444    FF15 A4A24200   CALL DWORD PTR DS:[42A2A4]
0040344A    8B0D 00F44200   MOV ECX,DWORD PTR DS:[42F400]
00403450    8B09            MOV ECX,DWORD PTR DS:[ECX]
00403452    894D FC         MOV DWORD PTR SS:[EBP-4],ECX
00403455    833D 54954200 00 CMP DWORD PTR DS:[429554],0
0040345C  v 75 04           JNZ SHORT UnpackMe.00403462
0040345E    6A 01           PUSH 1
00403460    FF55 FC         CALL DWORD PTR SS:[EBP-4]
```

1 CALL IAT again just below, then trace back F7 to go ...:

```
Address   Hex dump          Disassembly
00F4228C    60              PUSHAD
00F4228D    E8 00000000     CALL 00F42292
00F42292    5D              POP EBP
00F42293    81ED 8F8F3900   SUB EBP,398F8F
00F42299    FFB5 01903900   PUSH DWORD PTR SS:[EBP+399001]
00F4229F    FFB5 05903900   PUSH DWORD PTR SS:[EBP+399005]
00F422A5    FFB5 09903900   PUSH DWORD PTR SS:[EBP+399009]
00F422AB    FFB5 F98F3900   PUSH DWORD PTR SS:[EBP+398FF9]
00F422B1    FFB5 FD8F3900   PUSH DWORD PTR SS:[EBP+398FFD]
00F422B7    E8 08000000     CALL 00F422C4
00F422BC    894424 1C       MOV DWORD PTR SS:[ESP+1C],EAX
00F422C0    61              POPAD
00F422C1  - FFE0            JMP EAX
00F422C3    C3              RETN
```

Haha, still remember the value that trick to make you say, here is to see that the offset decrypt the other, but also the content on the chang italy, similar to the value, and the CALL to code under the same again. So can form ideas decrypt the code 1 and đấy.

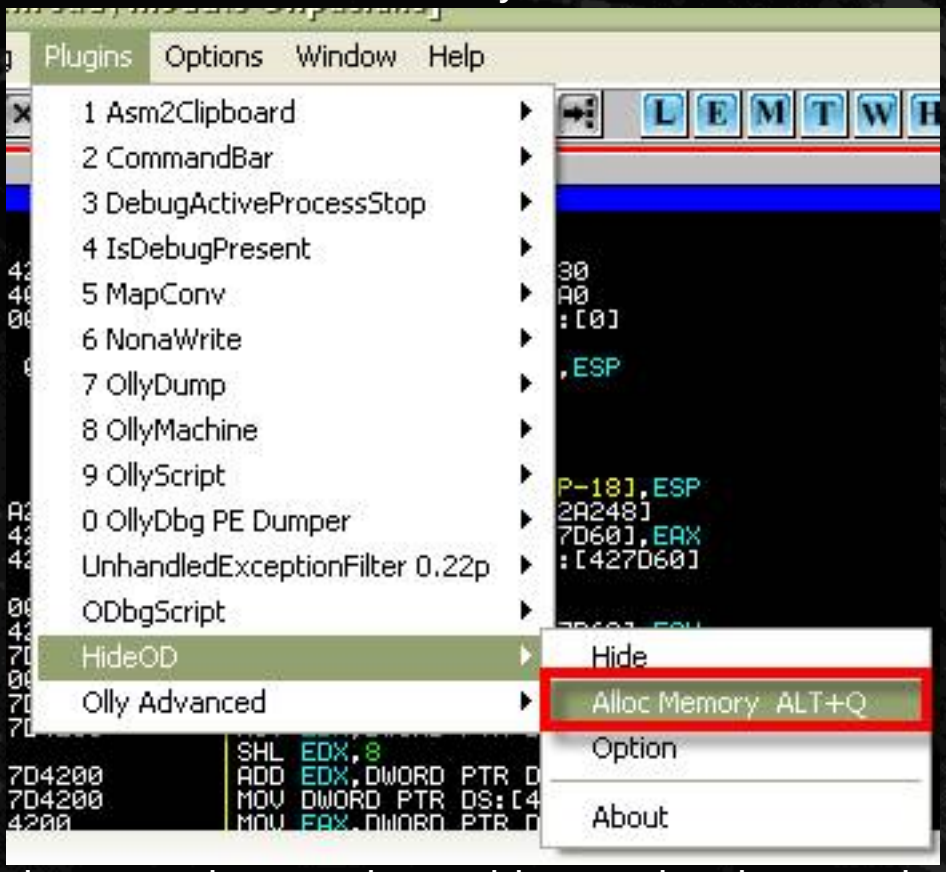
2. Code:

The trick for you to imagine before:

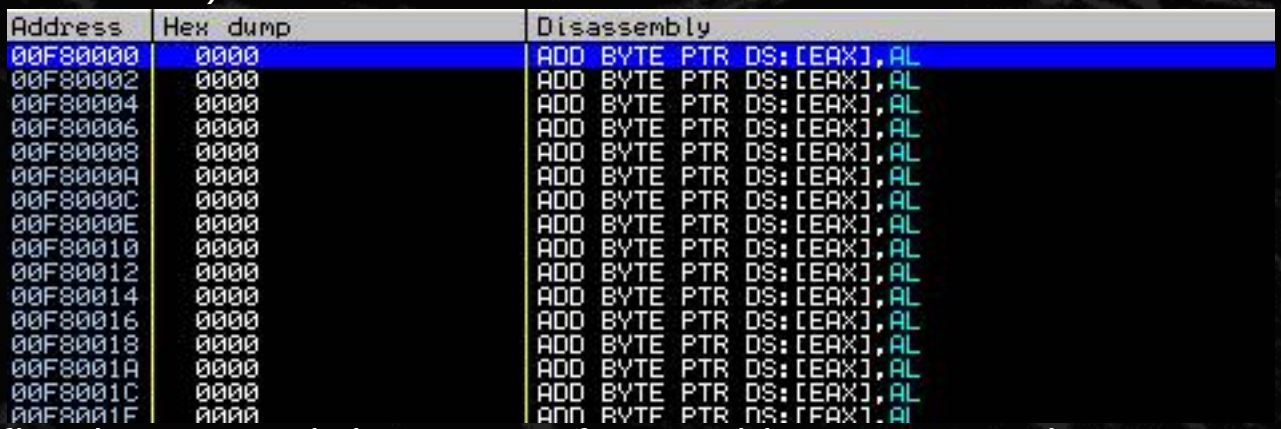
1. First, the value of EBP order to trace the SUB 1 is equal in value encrypt IAT + 6 more.
2. The value of the decrypt all the same should be able to use it to decrypt the entire IAT
3. Encrypt the value in increasing IAT (+84 h), offset increased IAT (+4 h). Enough information to create a loop.
4. Valid Ham will draw me in order PUSH EAX. So the code to the legs is sufficient.

Now we go into the code of this. Suppose we just break in and find

OEP. 1 Create a blank area in memory HideOD:



Memory area is created on each machine each other, each time is different. And now, on a trick F80000 (default size by creating a HideOD 3000h). Goto One to:



The first is to record the status of several key wan to write:

```
00F80000 PUSHAD
```

Next is to save the status of existing stack, as in the decrypt, Stack been changed quite nhìu (ko rules are clear):

```
00F80001 MOV DWORD PTRDS: [F81000], ESP
```

ESP keep the stack pointer to save it is saved with the status of stack. Cove HideOD generated 3000h size should F81000 also in that, do touch someone, we use it instead for 1 Byte 4 variables to store value of ESP.

Now move offset by IAT Start of EBX, began creating loop:

```
00F80007 MOV EBX, 42A1E8
```

42A1E8 the IAT đấy Start. Need he considered them self again. The value is important here, because we need it for the EBP:

```
00F8000C MOV EBP, DWORD PTR DS: [EBX]
00F8000E ADD EBP, 6
```

The more like a 6, and start from the legs decrypt code:

```
00F80011 SUB EBP, 398F8F
00F80017 PUSH DWORD PTR SS: [EBP +399001]
00F8001D PUSH DWORD PTR SS: [EBP +399005]
00F80023 PUSH DWORD PTR SS: [EBP +399009]
00F80029 PUSH DWORD PTR SS: [EBP +398 FF9]
00F8002F PUSH DWORD PTR SS: [EBP +398 FFD]
00F80035 CALL 00F8003A
00F8003A PUSH EBP
00F8003B MOV EBP, ESP
00F8003D ADD ESP, -4
00F80040 SUB ESP, DWORD PTR SS: [EBP +14]
00F80043 MOV DWORD PTR SS: [EBP-4], ESP
00F80046 MOV ECX, DWORD PTR SS: [EBP +14]
00F80049 MOV ESI, DWORD PTR SS: [EBP +10]
00F8004C MOV EDI, DWORD PTR SS: [EBP-4]
00F8004F REP MOVS BYTE PTR ES: [EDI], BYTE PTR DS: [ESI]
00F80051 PUSH DWORD PTR SS: [EBP-4]
00F80054 CALL DWORD PTR SS: [EBP +18]
00F80057 PUSH DWORD PTR SS: [EBP-4]
00F8005A PUSH DWORD PTR SS: [EBP + C]
00F8005D CALL DWORD PTR SS: [EBP +8]
```

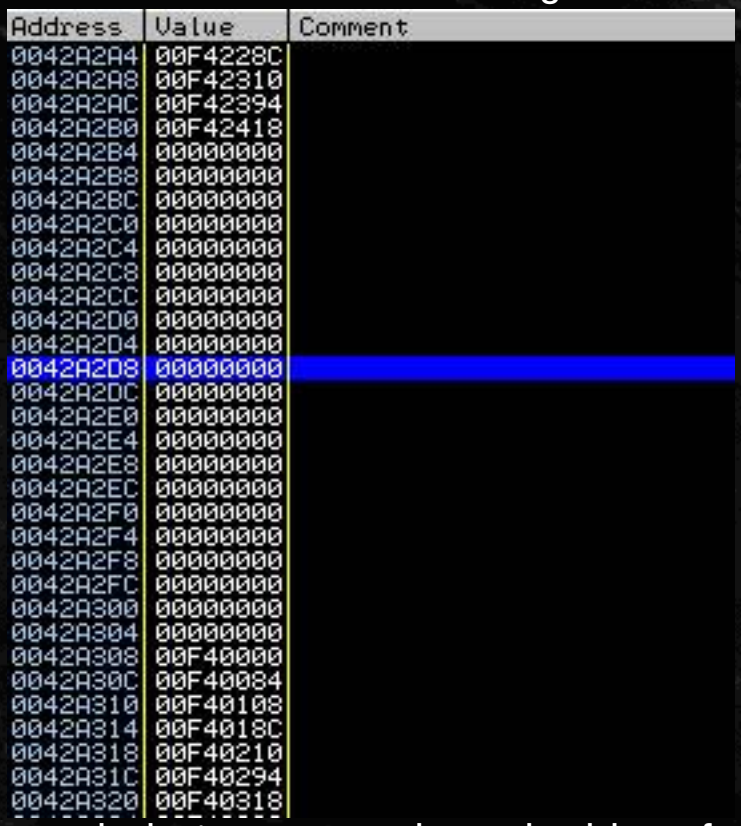
Place 00F80035 CALL 00F8003A call the code immediately below it, because the copy is made for the same decrypt, it must not modify, balanced stack very tired: D

Complete a call CALL bottom is the original value of 1 IAT transfer of EAX we should not need to copy the code below khúc. Now the conditions to create loop, repeating the code for all IAT.

```
00F80060 MOV DWORD PTR DS: [EBX], EAX
00F80062 ADD EBX, 4
Cmp 00F80065 EBX, 42A358
00F8006B JE SHORT 00F80085
Cmp 00F8006D DWORD PTR DS: [EBX], 0F40000
00F80073 JL SHORT 00F80062
00F80075 Cmp DWORD PTR DS: [EBX], 0F43000
```

```
JG 00F8007B SHORT 00F80062
00F8007D MOV ESP, DWORD PTR DS: [F81000]
00F80083 JMP SHORT 00F8000C
00F80085 MOV ESP, DWORD PTR DS: [F81000]
00F8008B POPAD
```

We saved by Import Value to correct location of its origin (EBX now still hold offset in IAT). Then gradually increase to the EBX. Compare see used IAT End or not? If this is the end to decrypt IAT, if not consider the content viewed here are valid or not, not necessarily because of any increase is offset to the right place to save the IAT. Dom again:



Address	Value	Comment
0042A2A4	00F4228C	
0042A2A8	00F42310	
0042A2AC	00F42394	
0042A2B0	00F42418	
0042A2B4	00000000	
0042A2B8	00000000	
0042A2BC	00000000	
0042A2C0	00000000	
0042A2C4	00000000	
0042A2C8	00000000	
0042A2CC	00000000	
0042A2D0	00000000	
0042A2D4	00000000	
0042A2D8	00000000	
0042A2DC	00000000	
0042A2E0	00000000	
0042A2E4	00000000	
0042A2E8	00000000	
0042A2EC	00000000	
0042A2F0	00000000	
0042A2F4	00000000	
0042A2F8	00000000	
0042A2FC	00000000	
0042A300	00000000	
0042A304	00000000	
0042A308	00F40000	
0042A30C	00F40084	
0042A310	00F40108	
0042A314	00F4018C	
0042A318	00F40210	
0042A31C	00F40294	
0042A320	00F40318	

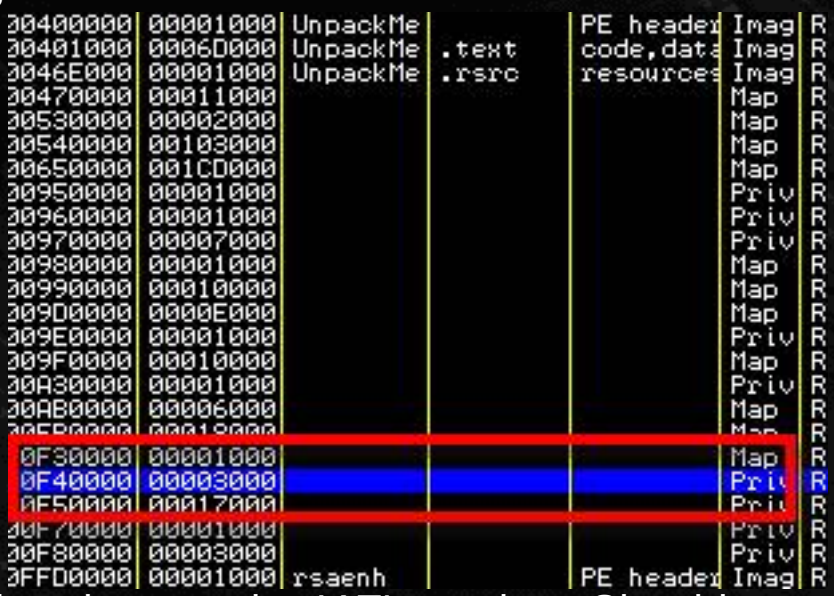
Region IAT ko continuously between can be valuable refuse or null. So how many consider valid. The first code of the trick is bám conditions encrypt IAT + 84h increased, but that is offset IAT to increase the rate of value to encrypt IAT. Dom's still on, we see the offset in the IAT has value smaller than offset the above.

Eg offset 42A308> offset 42A2B0. But value is F40000 <F42418.

Should be used if conditions +84 h increases, you must run the code several times with each region IAT. Here trick improvement, considering the value of the other

```
Cmp 00F8006D DWORD PTR DS: [EBX], 0F40000
00F80073 JL SHORT 00F80062
00F80075 Cmp DWORD PTR DS: [EBX], 0F43000
JG 00F8007B SHORT 00F80062
```

Why are 2 of the gold bowl? View area remember Alt-M:



00400000	00001000	UnpackMe		PE header	Imag R
00401000	0006D000	UnpackMe	.text	code,data	Imag R
0046E000	00001000	UnpackMe	.rsrc	resources	Imag R
00470000	00011000				Map R
00530000	00002000				Map R
00540000	00103000				Map R
00650000	001CD000				Map R
00950000	00001000				Priv R
00960000	00001000				Priv R
00970000	00007000				Priv R
00980000	00001000				Map R
00990000	00010000				Map R
009D0000	0000E000				Map R
009E0000	00001000				Priv R
009F0000	00010000				Map R
00A30000	00001000				Priv R
00AB0000	00006000				Map R
0F30000	00001000				Map R
0F40000	00003000				Priv R
0F50000	00017000				Priv R
00F70000	00001000				Priv R
00F80000	00003000				Priv R
3FFD0000	00001000	rsaenh		PE header	Imag R

This is a small region decrypt the IAT's packer. Should encrypt the contents of the IAT also located in this area: D. So 2 values on the offset and the end of it, hehe. There are many ways and is only 1 month only. If the value in IAT lot from this region is one that is touching garbage or null (the value problems of this region is quite low ỏi), and any further increase offset IAT up until valid, loop started again. When completed, the return POPAD content than the original record. This is the result of the following code:

Address	Hex dump	Disassembly
00F80000	60	PUSHAD
00F80001	8925 0010F800	MOV DWORD PTR DS:[F81000],ESP
00F80007	BB E8A14200	MOV EBX,42A1E8
00F8000C	8B2B	MOV EBP,DWORD PTR DS:[EBX]
00F8000E	83C5 06	ADD EBP,6
00F80011	81ED 8F8F3900	SUB EBP,398F8F
00F80017	FFB5 019039 00	PUSH DWORD PTR SS:[EBP+399001]
00F8001D	FFB5 059039 00	PUSH DWORD PTR SS:[EBP+399005]
00F80023	FFB5 099039 00	PUSH DWORD PTR SS:[EBP+399009]
00F80029	FFB5 F98F3900	PUSH DWORD PTR SS:[EBP+398FF9]
00F8002F	FFB5 FD8F3900	PUSH DWORD PTR SS:[EBP+398FFD]
00F80035	E8 00000000	CALL 00F8003A
00F8003A	55	PUSH EBP
00F8003B	8BEC	MOV EBP,ESP
00F8003D	83C4 FC	ADD ESP,-4
00F80040	2B65 14	SUB ESP,DWORD PTR SS:[EBP+14]
00F80043	8965 FC	MOV DWORD PTR SS:[EBP-4],ESP
00F80046	8B4D 14	MOV ECX,DWORD PTR SS:[EBP+14]
00F80049	8B75 10	MOV ESI,DWORD PTR SS:[EBP+10]
00F8004C	8B7D FC	MOV EDI,DWORD PTR SS:[EBP-4]
00F8004F	F3:A4	REP MOVS BYTE PTR ES:[EDI],BYTE PTR DS:[ESI]
00F80051	FF75 FC	PUSH DWORD PTR SS:[EBP-4]
00F80054	FF55 18	CALL DWORD PTR SS:[EBP+18]
00F80057	FF75 FC	PUSH DWORD PTR SS:[EBP-4]
00F8005A	FF75 0C	PUSH DWORD PTR SS:[EBP+C]
00F8005D	FF55 08	CALL DWORD PTR SS:[EBP+8]
00F80060	8903	MOV DWORD PTR DS:[EBX],EAX
00F80062	83C3 04	ADD EBX,4
00F80065	81FB 58A34200	CMP EBX,42A358
00F8006B	v 74 18	JE SHORT 00F80085
00F8006D	813B 0000F400	CMP DWORD PTR DS:[EBX],0F40000
00F80073	^ 7C ED	JL SHORT 00F80062
00F80075	813B 0030F400	CMP DWORD PTR DS:[EBX],0F43000
00F8007B	^ 7F E5	JG SHORT 00F80062
00F8007D	8B25 0010F800	MOV ESP,DWORD PTR DS:[F81000]
00F80083	^ EB 87	JMP SHORT 00F8000C
00F80085	8B25 0010F800	MOV ESP,DWORD PTR DS:[F81000]
00F8008B	61	POPAD

Remember that being in the OEP, we Goto come to code. Now set in New Origin first code, and set in order BP NOP after POPAD. F9 to run this code. Break in the filed, the IAT results decrypt:

Address	Value	Comment
0042A1DC	00000000	
0042A1E0	00000000	
0042A1E4	00000000	
0042A1E8	7C80DDF5	kernel32.GetCurrentProcess
0042A1EC	7C809B47	kernel32.CloseHandle
0042A1F0	7C812641	kernel32.FlushFileBuffers
0042A1F4	7C81D2CB	kernel32.SetStdHandle
0042A1F8	7C810B8E	kernel32.SetFilePointer
0042A1FC	7C80A490	kernel32.GetStringTypeW
0042A200	7C838974	kernel32.GetStringTypeA
0042A204	7C80CCA8	kernel32.LCMapStringW
0042A208	7C838D50	kernel32.LCMapStringA
0042A20C	7C809BF8	kernel32.MultiByteToWideChar
0042A210	7C9179FD	ntdll.RtlReAllocateHeap
0042A214	7C809A51	kernel32.VirtualAlloc
0042A218	7C9105D4	ntdll.RtlAllocateHeap
0042A21C	7C8127A7	kernel32.GetOEMCP
0042A220	7C809915	kernel32.GetACP
0042A224	7C812E76	kernel32.GetCPInfo
0042A228	7C85EB9B	kernel32.HeapValidate
0042A22C	7C809E01	kernel32.IsBadReadPtr
0042A230	7C809E79	kernel32.IsBadWritePtr

Region 1

Address	Value	Comment
0042A2AC	7C809AE4	kernel32.VirtualFree
0042A2B0	7C937A40	ntdll.RtlUnwind
0042A2B4	00000000	
0042A2B8	00000000	
0042A2BC	00000000	
0042A2C0	00000000	
0042A2C4	00000000	
0042A2C8	00000000	
0042A2CC	00000000	
0042A2D0	00000000	
0042A2D4	00000000	
0042A2D8	00000000	
0042A2DC	00000000	
0042A2E0	00000000	
0042A2E4	00000000	
0042A2E8	00000000	
0042A2EC	00000000	
0042A2F0	00000000	
0042A2F4	00000000	
0042A2F8	00000000	
0042A2FC	00000000	
0042A300	00000000	
0042A304	00000000	
0042A308	7E4263F9	USER32.EndDialog
0042A30C	7E43B12C	USER32.DialogBoxParamA
0042A310	7E41DAD2	USER32.DestroyWindow
0042A314	7E41D4D6	USER32.DefWindowProcA
0042A318	7E41B5F9	USER32.BeginPaint
0042A31C	7E41B69E	USER32.GetClientRect
0042A320	7E43C6EA	USER32.DrawTextA
0042A324	7E41B60D	USER32.EndPaint

Region 2

Them. What to do next is anyone know, write more redundant and the trick has đuối ... hehe

V. Ending:

The code on the trick has improved while writing this article, because the old code to the long ơi, time found errors, hehe. But this type of improvement is quite cui corn, who are in the high security would only help. Let the items

that also more than 4 hours, including time again failed the test, not important in the training run training, fix dump, which is we understand each line of code. Thank he was in the recall tí inspiration for the children this. Now back to trick Đống project with vẩn's kì ago, hix hix, nhảm is the writing, do report back on, pa k0n chào nhé.

Big thanks to:

All REA's members: Computer_Angel, Moonbaby, Zombie, hacnho, benina, kienmanowar, rongchaua, Deux, Merc, hoadongnoi, the_lighthouse, TQN, light.phoenix, hytkl, tlandn, hurt_heart, dzungltvn, Zoi, littleboy84, haule_nth, takada, Why not bar, iamidiot, Akira, dump, thienthandien, [kid], ...

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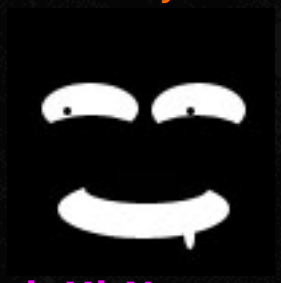


Trick Xi News - 2oo7

M a n u a l R e m o v i n g V i s u a l P r o t e c t 3 . 5 . 4

I -- Print d o t r u c t i o n:

Hi everyone, today our brothers together **Manual Removing Visual Protect Version 3.5.4.** Protect this type now has a lot to use new protection for their Soft. And of course want to be Soft Crack is using **Visual** Protect **Protect** the first you must remove the protection of this ... we started ...

I I -- Tools & Ta g e r t:

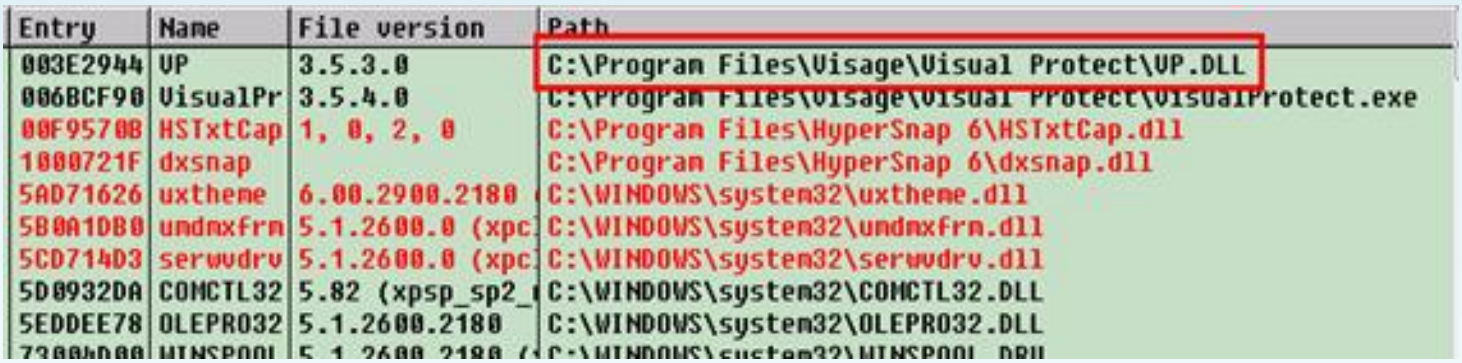
- **T oo L and P lug i n c a n d ứng:**
  - **O LLY DBG1.10**
  - **Lor dPE1.4**
  - **I mp O R T R E C1.6f**
  - **RDG P ACK D e r e c t e r to v0.6.4**
- **One g e r t:** ***ual V i s e P rot ct3.5.4***
  h tt p: / / ag es www.vi s o f t. c o m

I II - F ind OEP & D u m p F I L E:

_ As usual use **RDG Packer Detector v0.6.4** scan target

_OK, Load **OllyDBG** on target and we stop here:

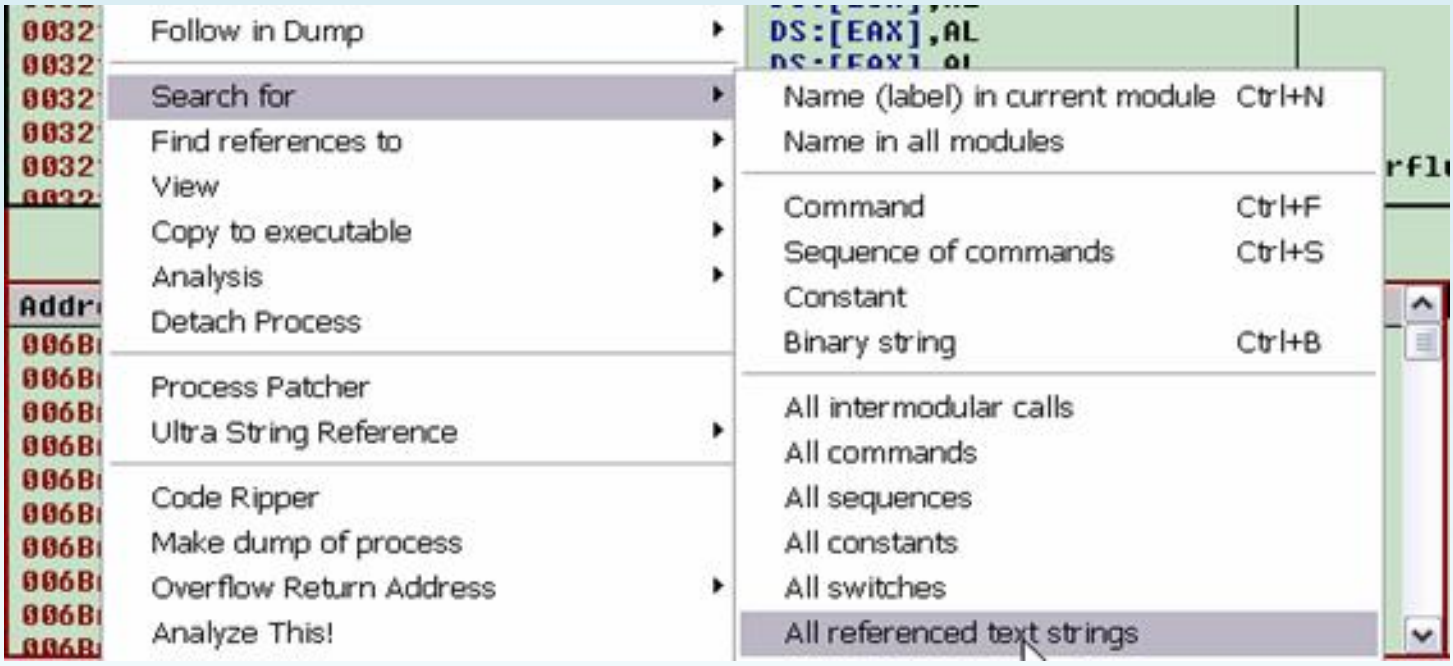
_Press **Alt + E**



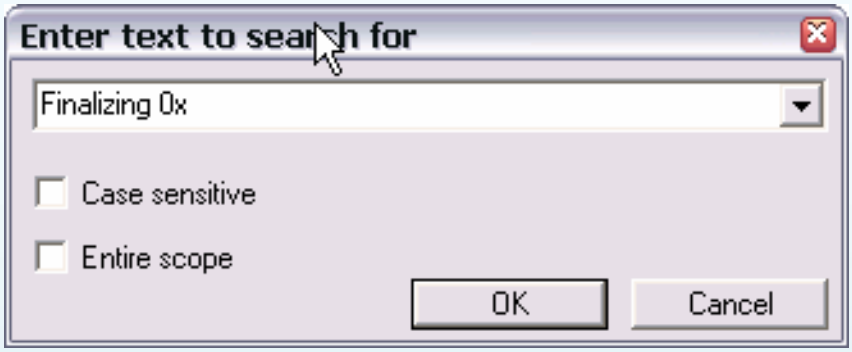
_Double click **VP.DLL**

```
00321000   04 10        ADD AL,10
00321002   3200          XOR AL,BYTE PTR DS:[EAX]
00321004   0307          ADD EAX,DWORD PTR DS:[EDI]
00321006   42            INC EDX
00321007   6F            OUTS DX,DWORD PTR ES:[EDI]      I/O command
00321008   6F            OUTS DX,DWORD PTR ES:[EDI]      I/O command
00321009   6C            INS BYTE PTR ES:[EDI],DX        I/O command
0032100A   65:61          POPAD                           Superfluous prefix
0032100C   6E            OUTS DX,BYTE PTR ES:[EDI]       I/O command
0032100D   0100          ADD DWORD PTR DS:[EAX],EAX
0032100F   0000          ADD BYTE PTR DS:[EAX],AL
00321011   0001          ADD BYTE PTR DS:[ECX],AL
```

_ Press **F10** and **Search String**



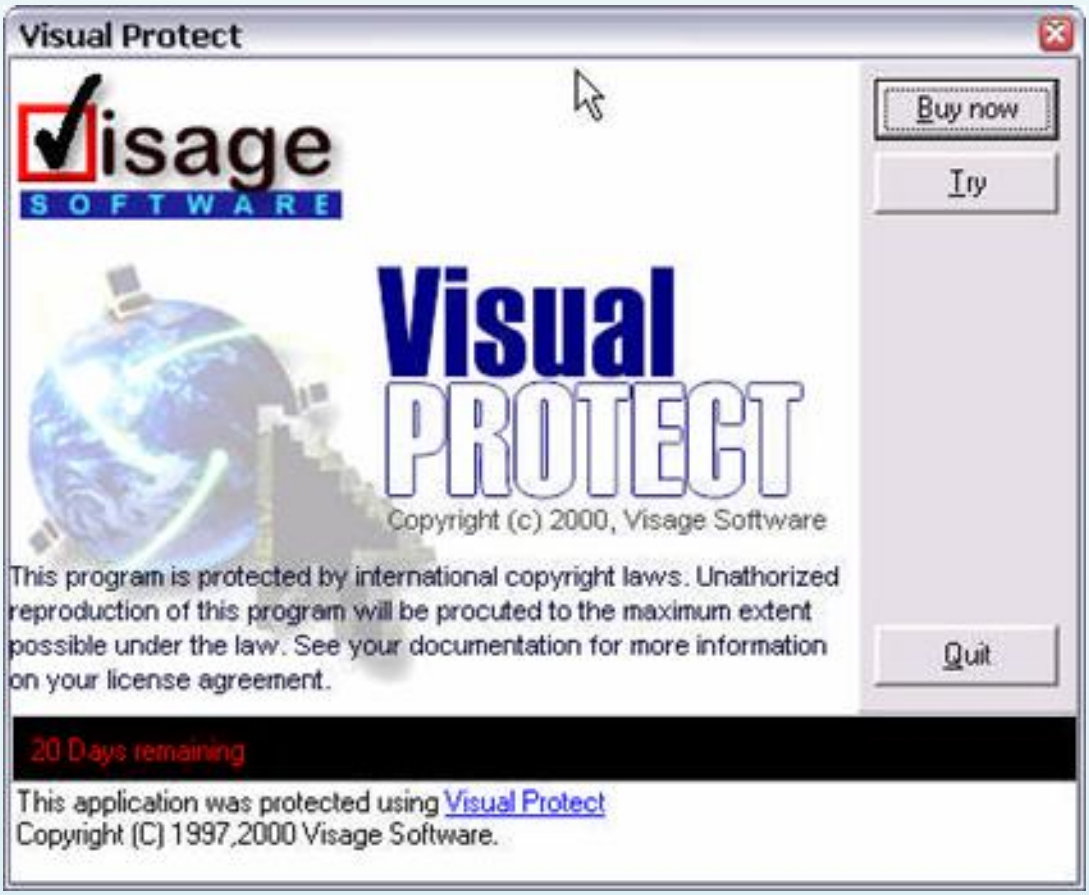
_Nhap To **"Finalizing 0x"** *(you complete framework for the Arab world and the Soft Protect this form)*



_ Click OK and press **F2** to **003C5FDD** Set 1 BP

```
003C5D75 MOV EAX,VP.003C6A8C  ASCII "SetEnvironment"
003C5E0F MOV EDX,VP.003C6AA8  ASCII "ExitProcess VPCRCMatch=False CrashMeDate<>0 "
003C5E42 MOV EAX,VP.003C6AE0  ASCII "Uncomress Sections"
003C5E6E MOV EAX,VP.003C6AFC  ASCII "Rellocation"
003C5EA6 MOV EAX,VP.003C6B10  ASCII "VC ImportTable Win NT 4.0/Windows 9.x"
003C5EB8 MOV EAX,VP.003C6B40  ASCII "Delphi ImportTable"
003C5F18 MOV EDX,VP.003C6B5C  ASCII "CodeCRCMatch False "
003C5F9B MOV EDX,VP.003C6B78  ASCII "CodeCRCMatch False"
003C5FDD MOV EDX,VP.003C6B94  ASCII "Finalizing 0x"
003C6033 MOV EDX,VP.003C6B94  ASCII "Finalizing 0x"
003C6087 MOV EDX,VP.003C6C1C  ASCII "'#13'"
003C60E3 MOV EDX,VP.003C6C1C  ASCII "'#13'"
003C60F3 MOV EDX,VP.003C6C90  ASCII " (0)"
003C614F MOV EDX,VP.003C6C1C  ASCII "'#13'"
```

_ Press **F9,** and Soft Run appear **NAG**



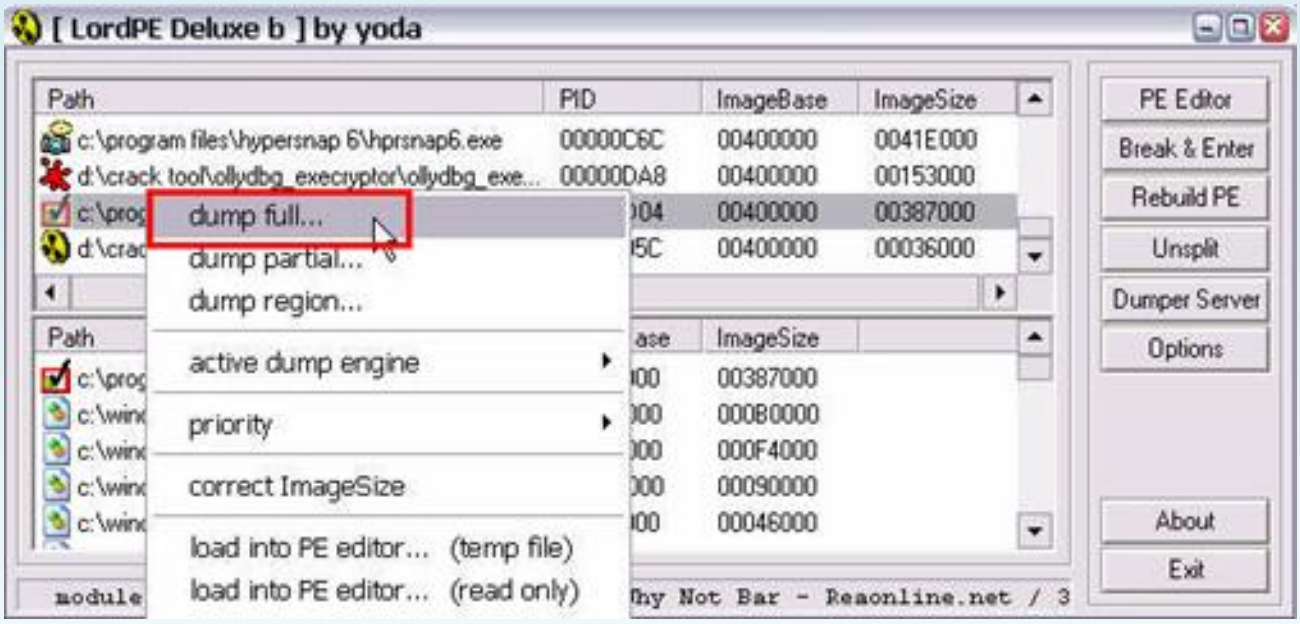
_ Click the **"Try"** and we will stop at just **Set BP**

```
003C5FC7   B8 08000000     MOV EAX,8
003C5FCC   E8 AF2FF6FF     CALL VP.00328F80
003C5FD1   8B8D 58FAFFFF   MOV ECX,DWORD PTR SS:[EBP-5A8]
003C5FD7   8D85 5CFAFFFF   LEA EAX,DWORD PTR SS:[EBP-5A4]
003C5FDD   BA 946B3C00     MOV EDX,VP.003C6B94          ASCII "Finalizing 0x"
003C5FE2   E8 B5E8F5FF     CALL VP.0032489C
003C5FE7   8B85 5CFAFFFF   MOV EAX,DWORD PTR SS:[EBP-5A4]
003C5FED   E8 46BCFFFF     CALL VP.003C1C38
003C5FF2   FF65 FC         JMP NEAR DWORD PTR SS:[EBP-4]
003C5FF5   6A 00           PUSH 0
003C5FF7   E8 C00CF6FF     CALL VP.00326CBC
003C5FFC   E9 C6040000     JMP VP.003C64C7
```

_ Trace **F8** to 5 times you will be to **OEP**

```
0066B508   55              PUSH EBP                     ===>OEP
0066B509   8BEC            MOV EBP,ESP
0066B50B   83C4 F0         ADD ESP,-10
0066B50E   B8 D0AC6600     MOV EAX,VisualPr.0066ACD0
0066B513   E8 E8BCD9FF     CALL VisualPr.00407200
0066B518   A1 34D86700     MOV EAX,DWORD PTR DS:[67D834]
0066B51D   8B00            MOV EAX,DWORD PTR DS:[EAX]
0066B51F   E8 301EE2FF     CALL VisualPr.0048D354
0066B524   A1 34D86700     MOV EAX,DWORD PTR DS:[67D834]
0066B529   8B00            MOV EAX,DWORD PTR DS:[EAX]
0066B52B   BA B0B56600     MOV EDX,VisualPr.0066B5B0    ASCII "Visual Protect"
0066B530   E8 D318E2FF     CALL VisualPr.0048CE08
0066B535   8B0D 50D56700   MOV ECX,DWORD PTR DS:[67D550] VisualPr.0068DA78
```

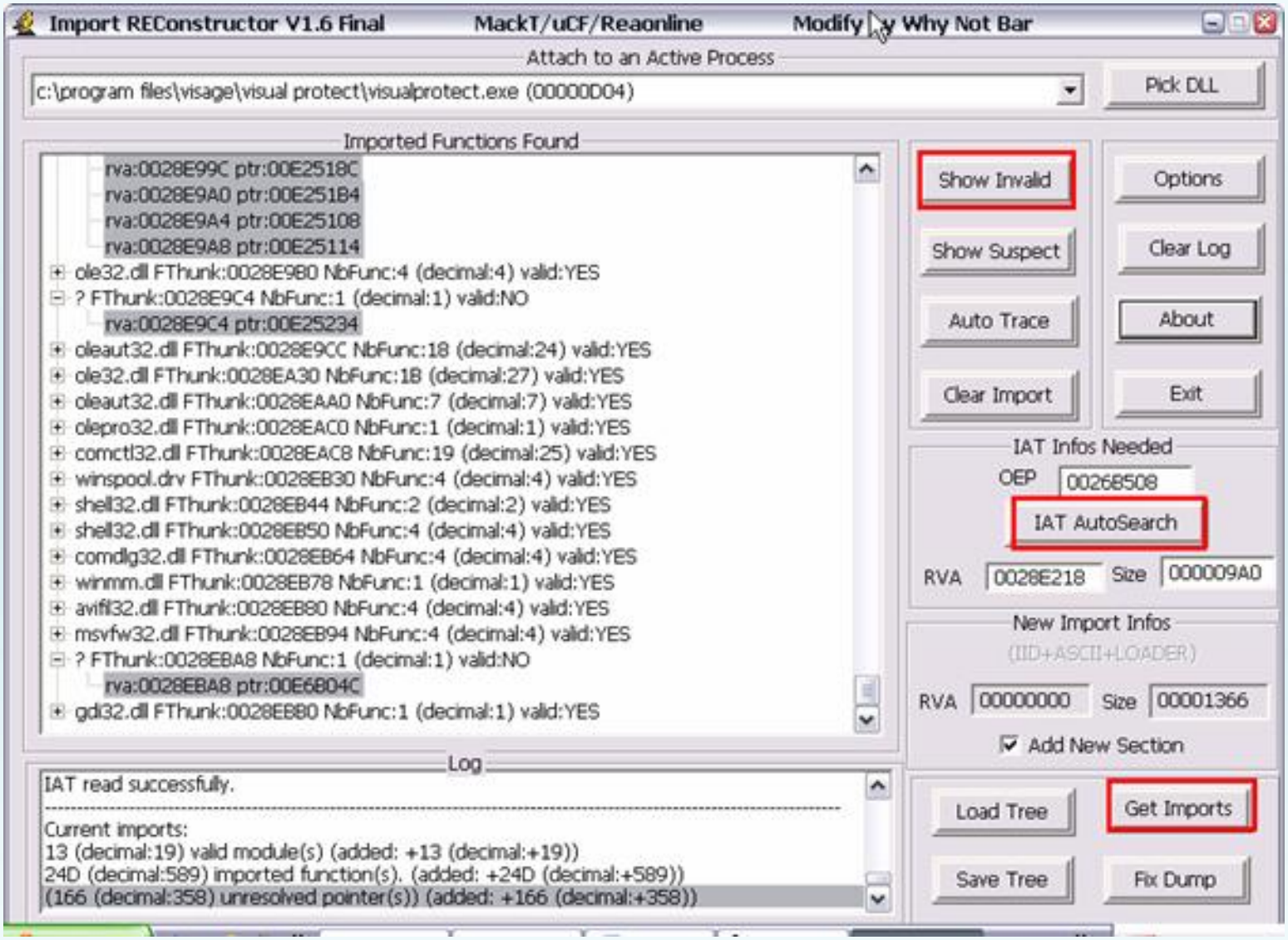
_ M in **Lor dPE** and **Full dump**



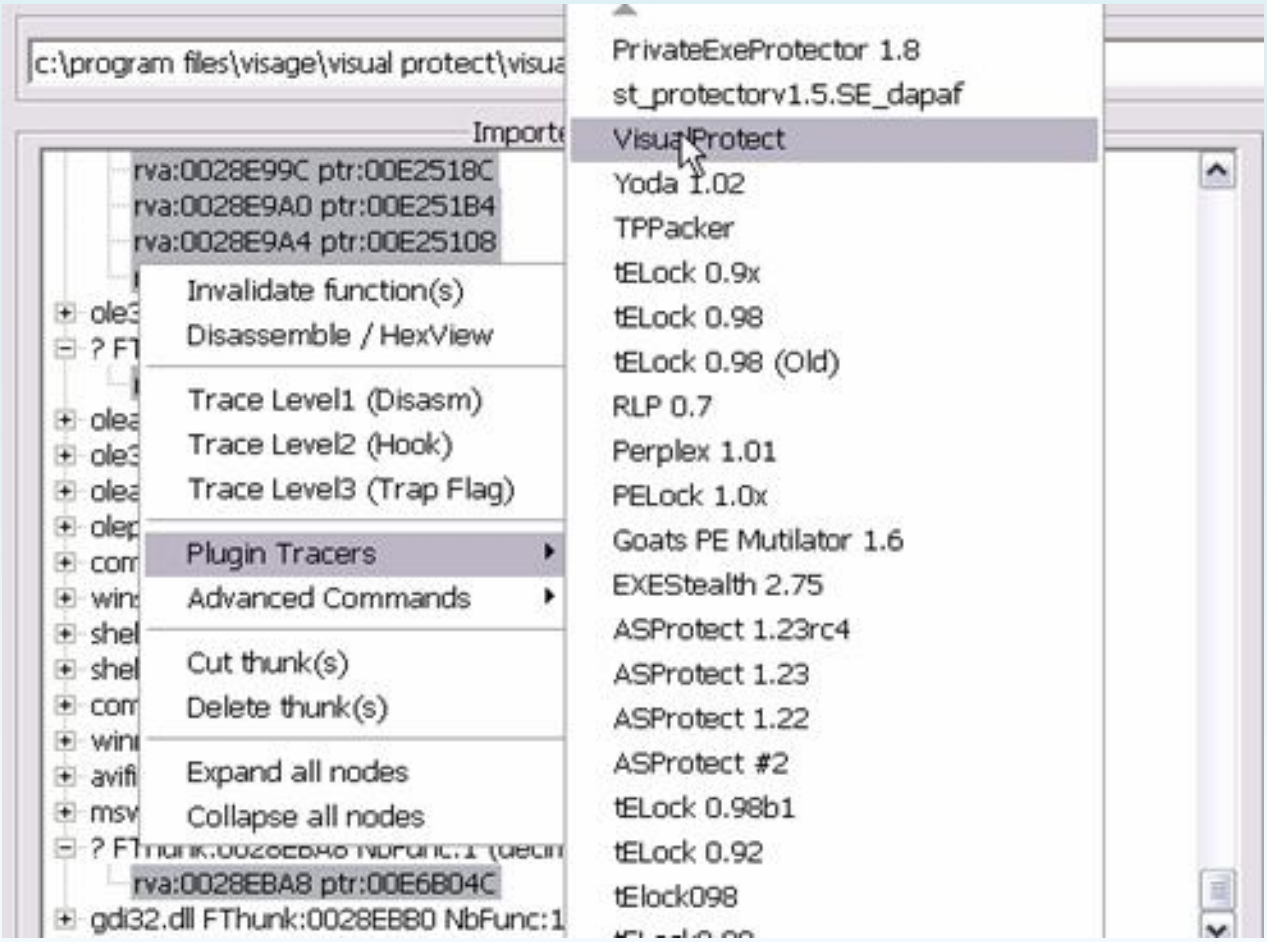
I-R E V I build mp ort:

_ Open **ImportREC** up. Select the list **VisualProtect.exe** process. **OEP =**

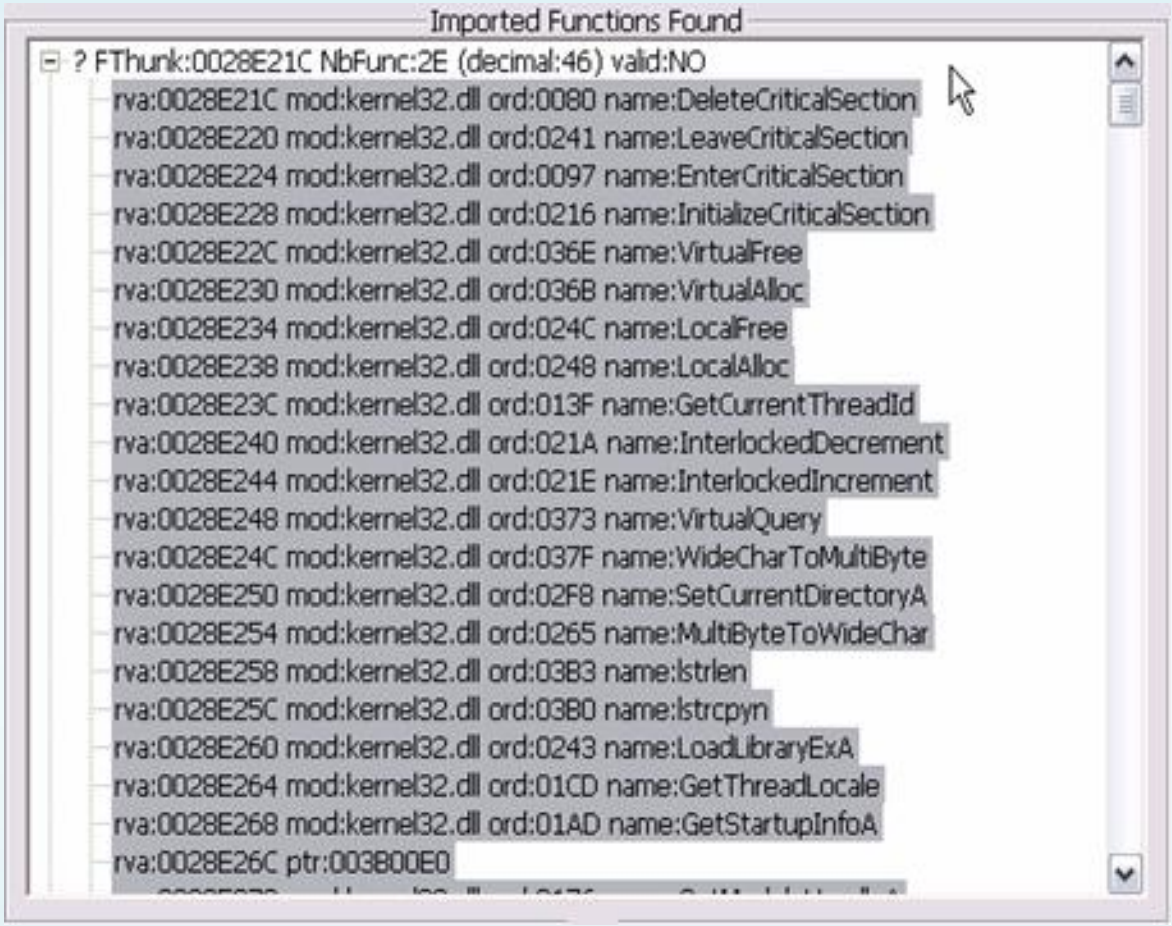
Enter **0066B508 - 00,400,000 *(Imagebase)* = 26B508, *IAT AutoSearch***
Click -> ***Get Imports*** -> ***Show Invalid***



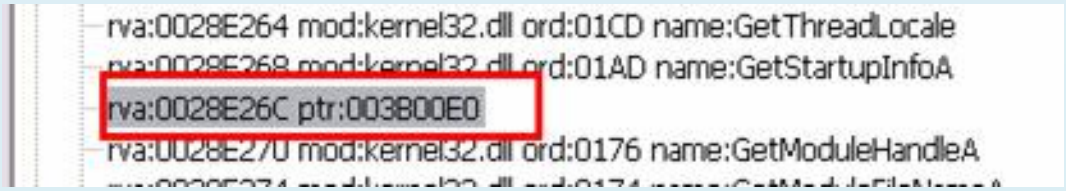
_Hichic .... A lot ... Fix ***Invalid*** function manually khùng always sure to use **Plugin** lẽ ... In the window select **ImportREC** nhusau:

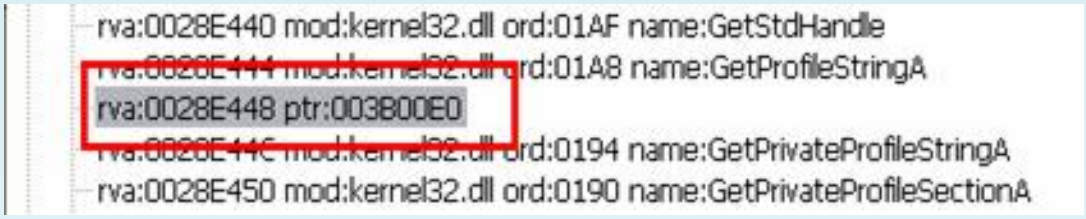


_ C c h t h ú í x u t a c ó

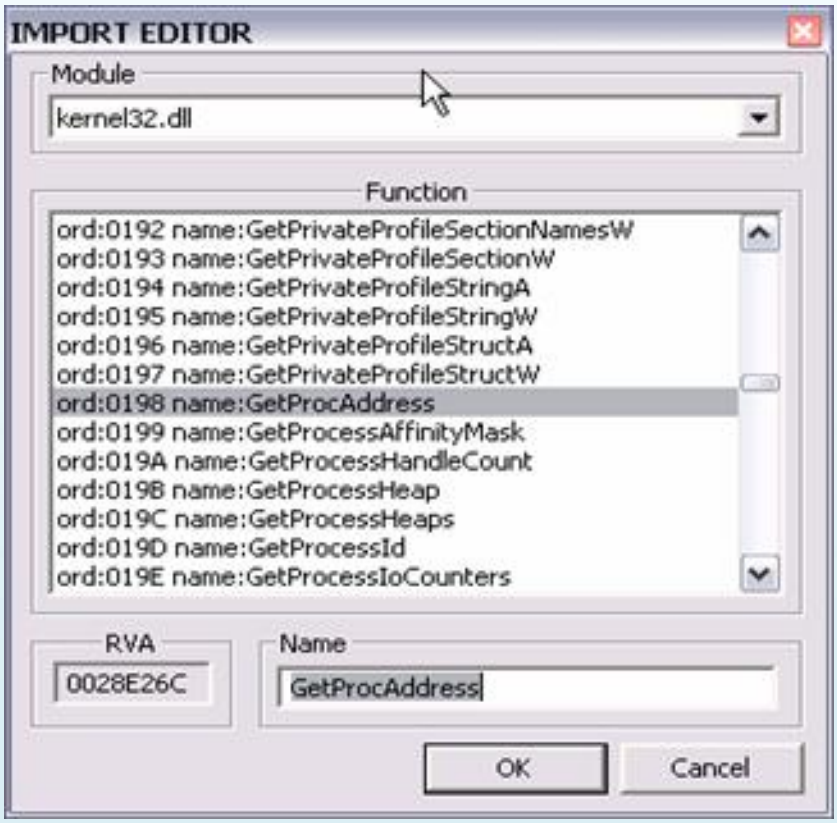


_ Click the ***Show Invalid*** 2 children Invalid



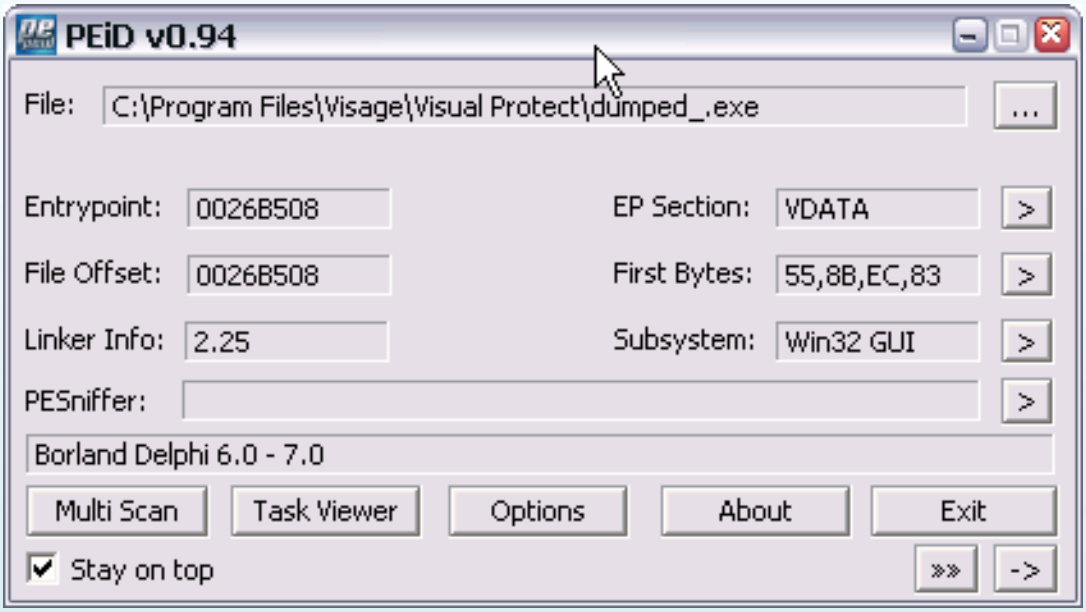


_ Fix manual thui ... Double-click on the first function **Invalid**



2 _ I also modified to **"GetProcAddress"** ***Show Invalid*** Click again and do not function any longer ***Invalid*** _ OK, Click **Fix dump** select File and Run **Dumped. exe** thuFile **Dumped_.exe**

_ H e h e h e .... U n p a c k o n e D!!



G r l Ee TsF italy Ou the *Co mpu t e r A _ of e l, e mbi Z o, M A B oo nb*

italy, H o acnh, Nina B e, k i e o w ar nman, Z o i, D e ux, M e r c, the

light o f nix, T r o ickyb italy, Takad a iamidi ot, of the e n t han e n d i,

o ... and italy u!

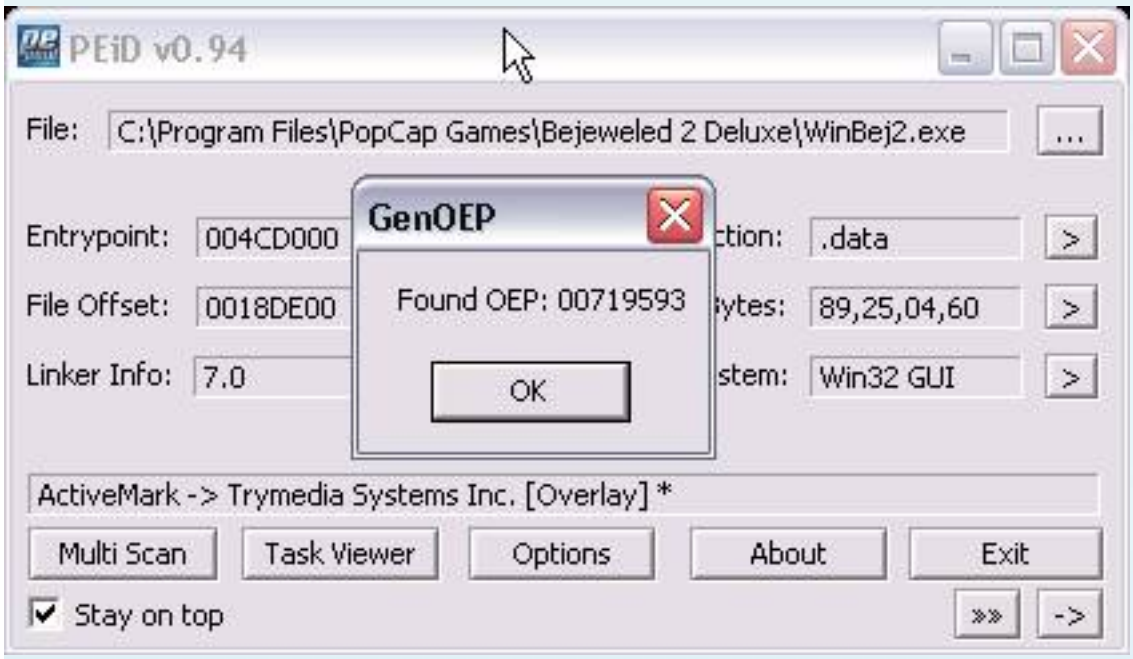
The N h a n a g, Day 2 9 t h a n g 8 years 200 6

W h o t italy N Bar

MANUAL unpack ACTIVEMARK 5:31

Target: Bejeweled 2 Deluxe (www.popcap.com)
Packer: ActiveMark 5:31
T ools: Ollydbg 1:10, Imprec 1.6, LordPe 1:41, PeiD 0.94, ActiveMark.Version

Bejeweled 2 Deluxe with the new version, the game's graphics and great game but 1 point lrm we do not get hri lnng lr we buy it! Ha ha, where mr purchase money, treat it only!
_Scan File target with PeiD 0.94 and dung Plugin Finder Generic OEP we have:



_De Know the exact version ActiveMark you can use Tool "ActiveMark.Version"

_Nhu So you can guess the OEP in Section. "Text" (005D4000). All You should note the nry quite important. Run "WinBej2.exe" will have 1 Nag reminder register. Ok, so that open Olly Attach it and and you will here.

```
7C901231 C3 RETN
```

```
7C901232 8BFF MOV EDI, EDI
7C901234 90 NOP
7C901235 90 NOP
```

_bay time we jump to the first Address Section. lr text 005D4000 we lr as follows:

```
7C901231 - E9 CA2DCD83 JMP WinBej2.005D4000
7C901236 90 NOP
7C901237 90 NOP
```

_Nhan F7 to you here:

```
005D4000 6E OUTS DX, BYTE PTR ES: [EDI], I / O command
005D4001 6E OUTS DX, BYTE PTR ES: [EDI], I / O command
005D4002 16 PUSH SS
005D4003 0082 6E160094 ADD BYTE PTR DS: [EDX +9400166 E], AL
```

_nhap mouse to search for and select \ All Calls Intermodular and Go "GetCommandLineA" and double click vro "GetCommandLineA" to you here:

```
00719614 E8 C05F0000 CALL WinBej2.0071F5D9
00719619 FF15 74D17300 CALL NEAR DWORD PTR DS: [73D174]; kernel32.
GetCommandLineA
0071961F A3 44967300 MOV DWORD PTR DS: [739644], EAX
00719624 E8 7E5E0000 CALL WinBej2.0071F4A7
```

_cuon mouse over the top and set the trenh 1 Hardware, on Execution in 00719593:

```
00719593 55 PUSH EBP
00719594 8BEC MOV EBP, ESP
00719596 6A FF PUSH -1
00719598 68 C8EB6300 PUSH WinBej2.0063EBC8
0071959D 68 70F97100 PUSH WinBej2.0071F970
```

_nhan Alt + F2, F3 select "WinBej2.exe, Atl + O card in Events marked" Break on new module (dll) "and press F9 until at 00,719,593 (OEP)

```
00719593 55 PUSH EBP <== OEP
00719594 8BEC MOV EBP, ESP
00719596 6A FF PUSH -1
00719598 68 C8EB6300 PUSH WinBej2.0063EBC8
0071959D 68 70F97100 PUSH WinBej2.0071F970
007195A2 64: A1 00000000 MOV EAX, DWORD PTR FS: [0]
```

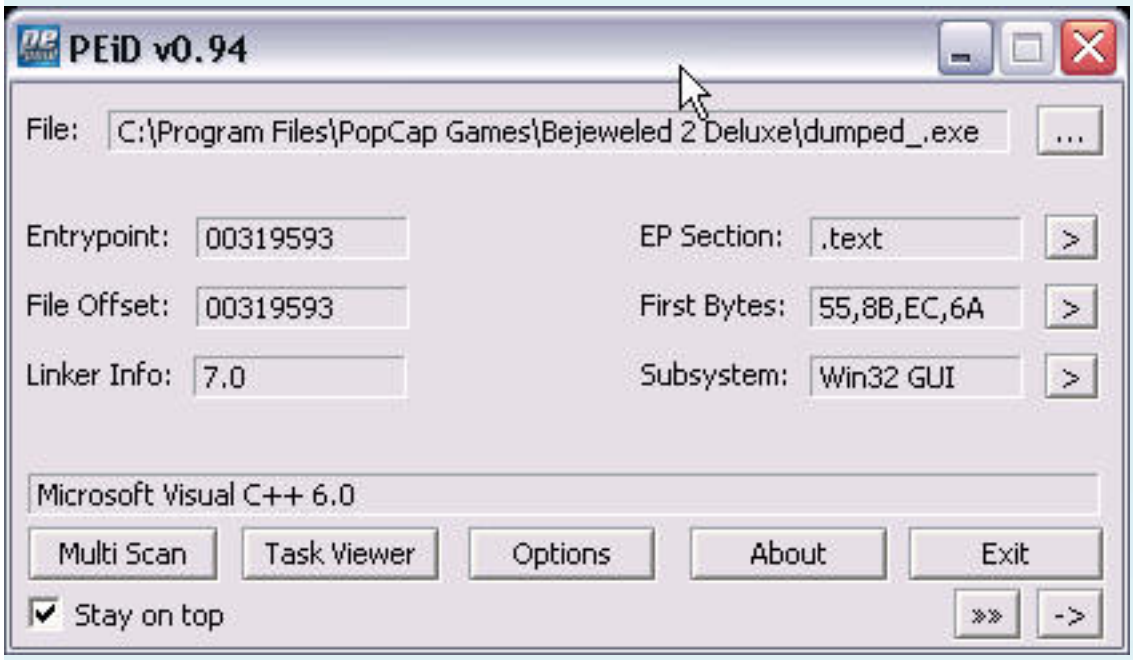
Dung Plugin OllyDump dump the memory to select the items rebuild Import, import ImportREC open OEP = 319593, Click "IAT AutoSearch", "Get Imports", "Show Invalid", "Cut Thunks" and "Fix dump." Try and Run File not run! haha! Now Load File "Dumped.exe" vro Olly, but you must select "Break on new module (dll)" in the Events tab. We are here.

```
00719593> / $ 55 PUSH EBP
00719594 |. 8BEC MOV EBP, ESP
00719596 |. 6A FF PUSH -1
00719598 |. 68 C8EB6300 PUSH dumped_.0063EBC8
0071959D |. 68 70F97100 PUSH dumped_.0071F970; SE handler installation
```

_nhap mouse to search for and select \ All Calls Intermodular and Go "GetModuleHandleA" and double click vro dnng "kernel32.GetModuleHandleA"
First, and we come.

```
006407FA. 837D D8 00 Cmp DWORD PTR SS: [EBP-28], 0
006407FE. 74 49 JE SHORT dumped_.00640849
00640800. 813D B0706300> Cmp DWORD PTR DS: [6370B0], 416E6454
0064080A. 75 2F JNZ SHORT dumped_.0064083B
0064080C. 6A 00 PUSH 0; / pModule = null
0064080E. FF15 E8D17300 CALL NEAR DWORD PTR DS: [<& kernel32.
GetModuleHandleA>] \ GetModuleHandleA
00640814. 8B0D BC706300 MOV ECX, DWORD PTR DS: [6370BC]
0064081A. 03C8 ADD ECX, EAX
0064081C. 890D E8485D00 MOV DWORD PTR DS: [5D48E8], ECX
```

_Dua Mouse pointer to 006407FE and JE Patch thrnh JNZ. Then click to select Copy to executable \ Section \ Save File (1 Name platform for other file). Run mortar try File Save, Oh, no cnn Nag reminder register more as we've always gni Crack! He he ... ..
_Dung PeiD scan shows the Code trenh be the "Microsoft Visual C + + 6.0"



_Unpack Done! Bye.

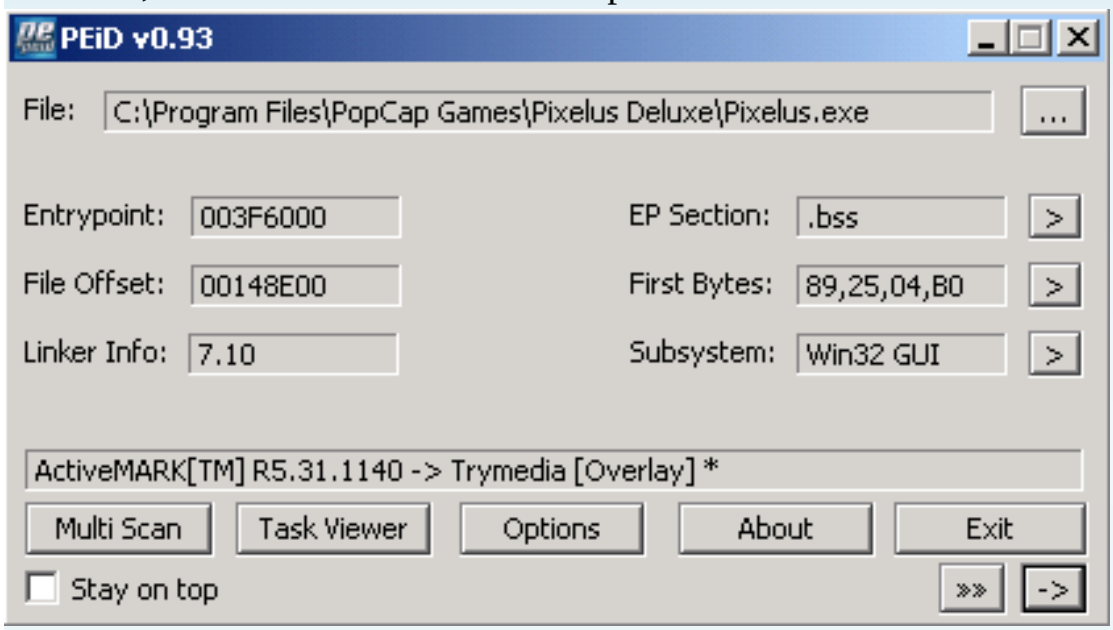
Written by WhyNotBar.

MANUAL unpack ACTIVEMARK 5.x

tlandn

Target: Pixelus Delux (www.popcap.com)
Packer: ActiveMark 5.x
Tools: Ollydbg, Imprec, LordPe

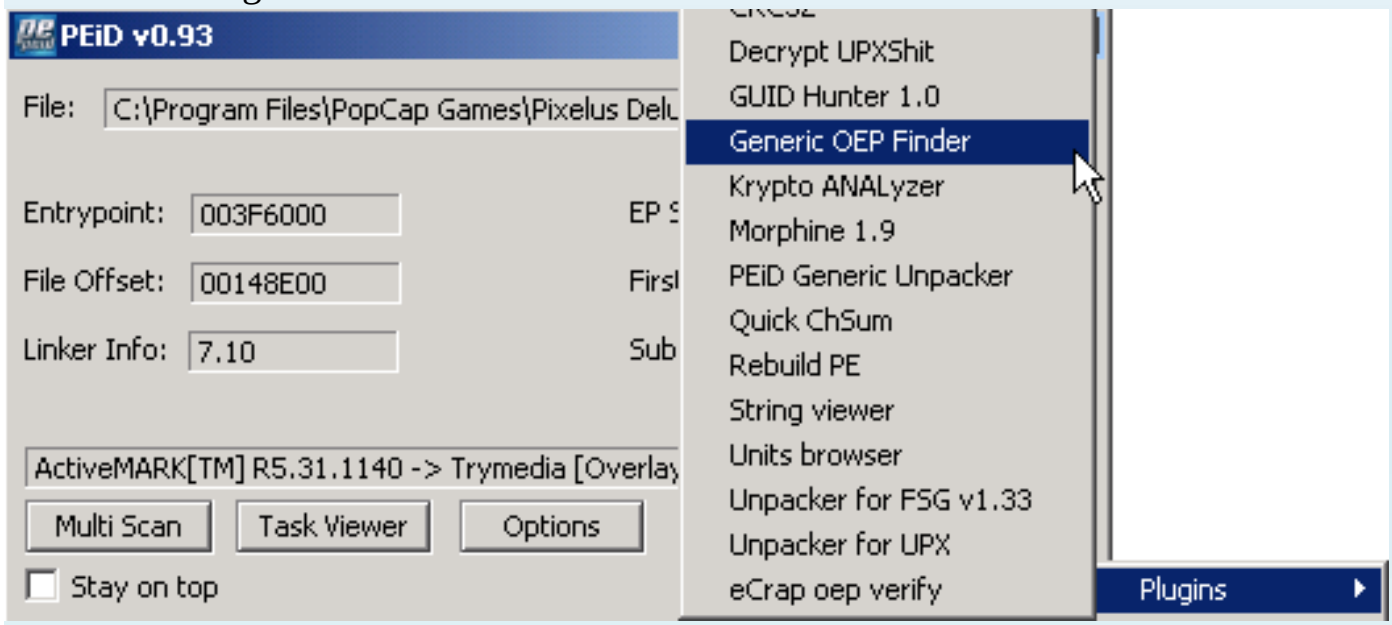
As usual, we will use PEID to see the pack in what is



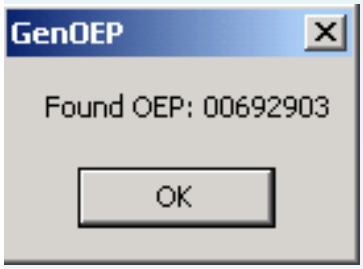
If your PEID not identify ActiveMark, you add the file in the directory userdb.txt PEID the following lines:

[ActiveMARK [TM] R5.31.1140 -> Trymedia]
signature = 79117fab9a4a83b5c96b1a48f927b425
ep_only = true

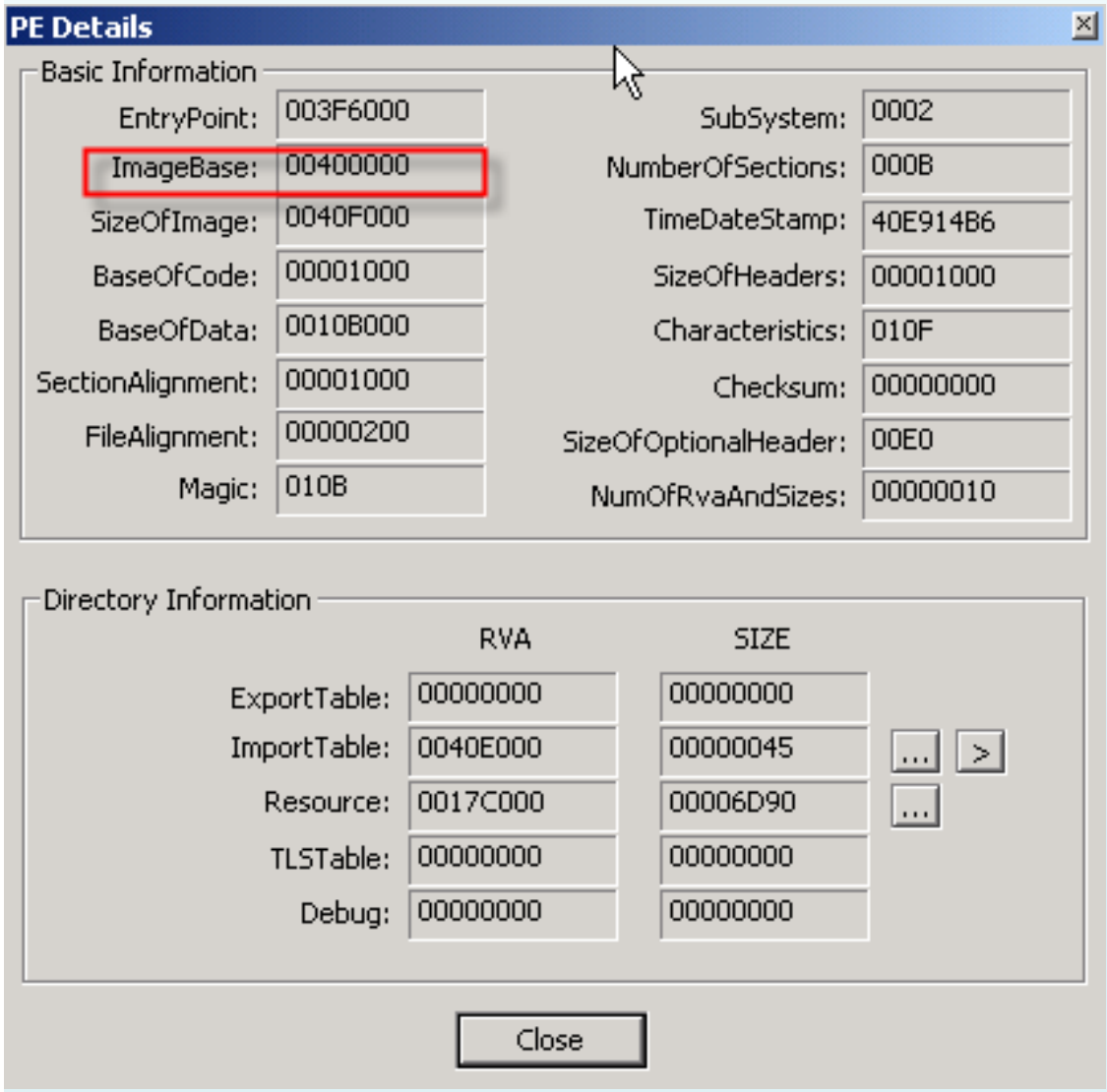
We use the Plugin Finder's Generic OEP PEID.



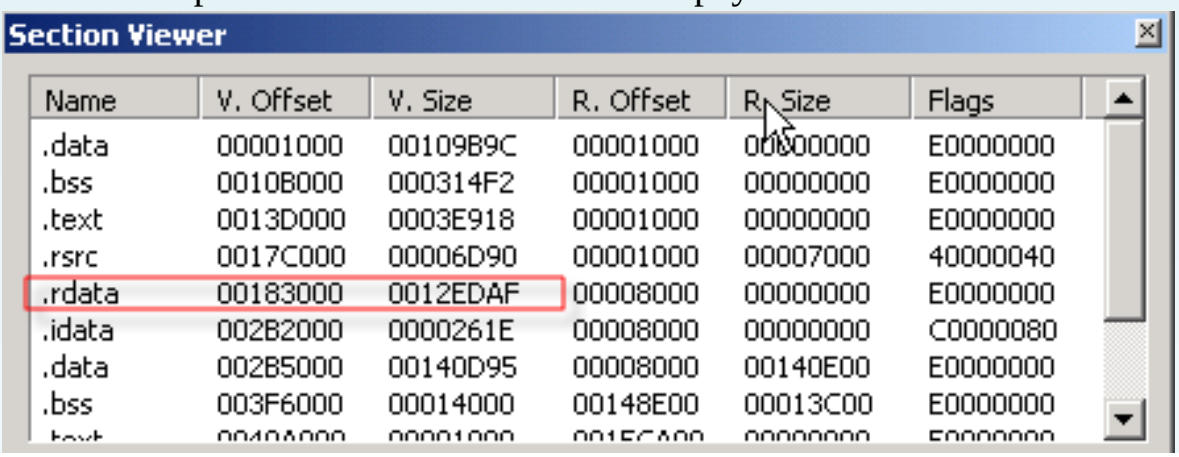
The result is 00692903:

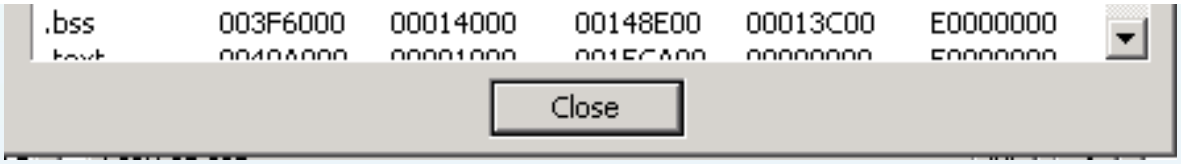


In PEID click button> in the Subsystem. We are:



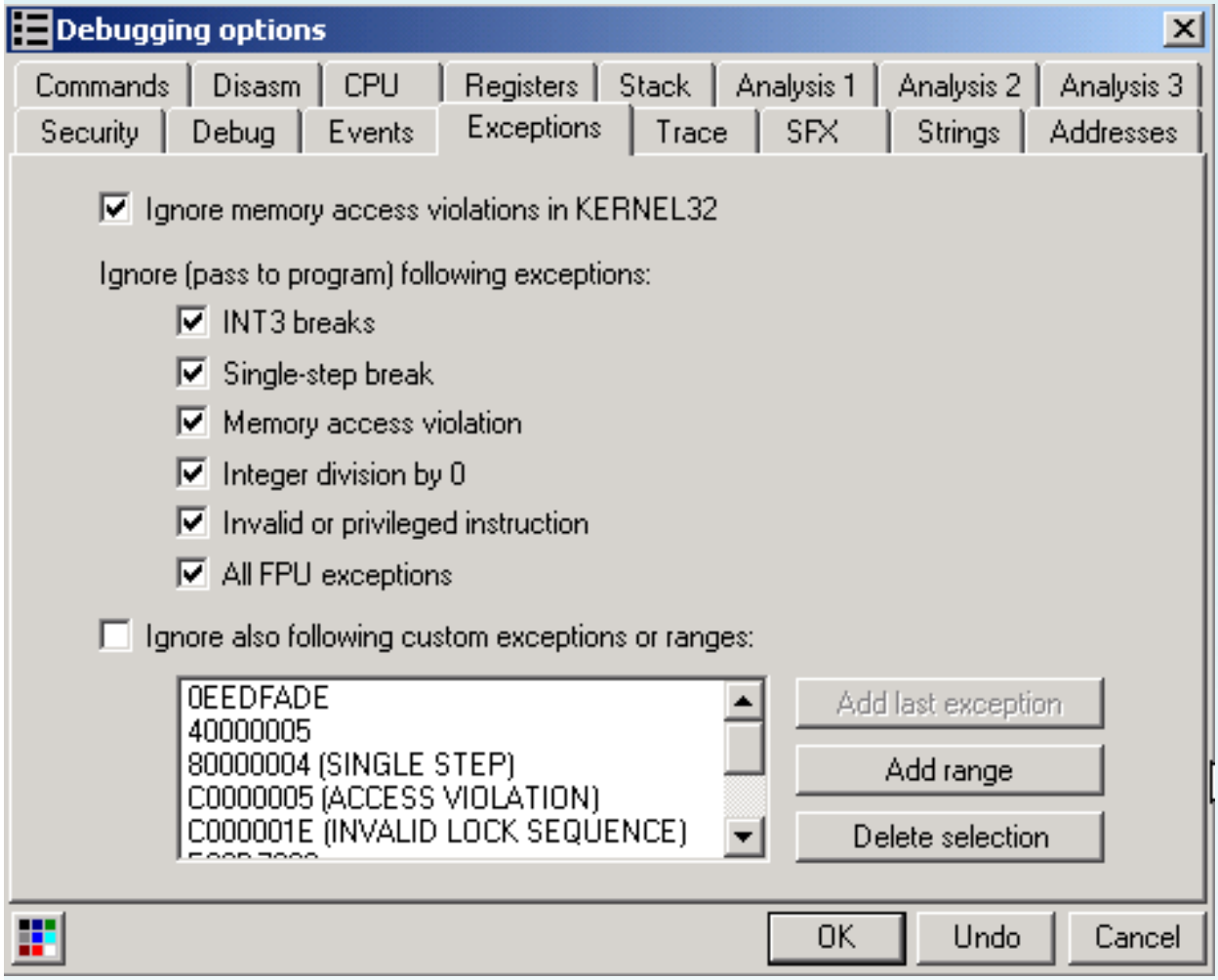
You note Imagebase is 00400000. Retrieved 00692903 - 00400000 = 00292903. We will consider the address 00292903 is located in any section. This is the section we need to dump there.
Also in PEID press> in the "Section EP. You pay attention to their section below:



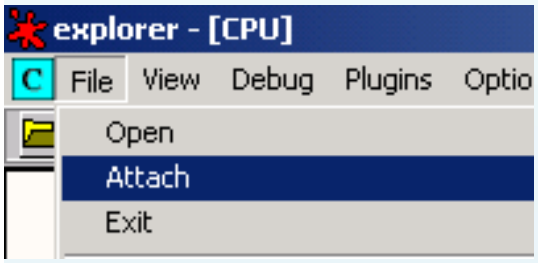


Why do we choose the section. Rdata this? Simply, you notice V. Offset by this section is 00183000, and V. Size is 0012EDAF. How a community of simple, this section:
Start: 00183000
Finish: 00183000 + 0012EDAF = 002B1DAF
We have: 00183000 <00292903 <002B1DAF this section should be selected.
Local first section was considered as completed.
Now we start the program Pixelus. To screen "Welcome to Pixelus it stopped.

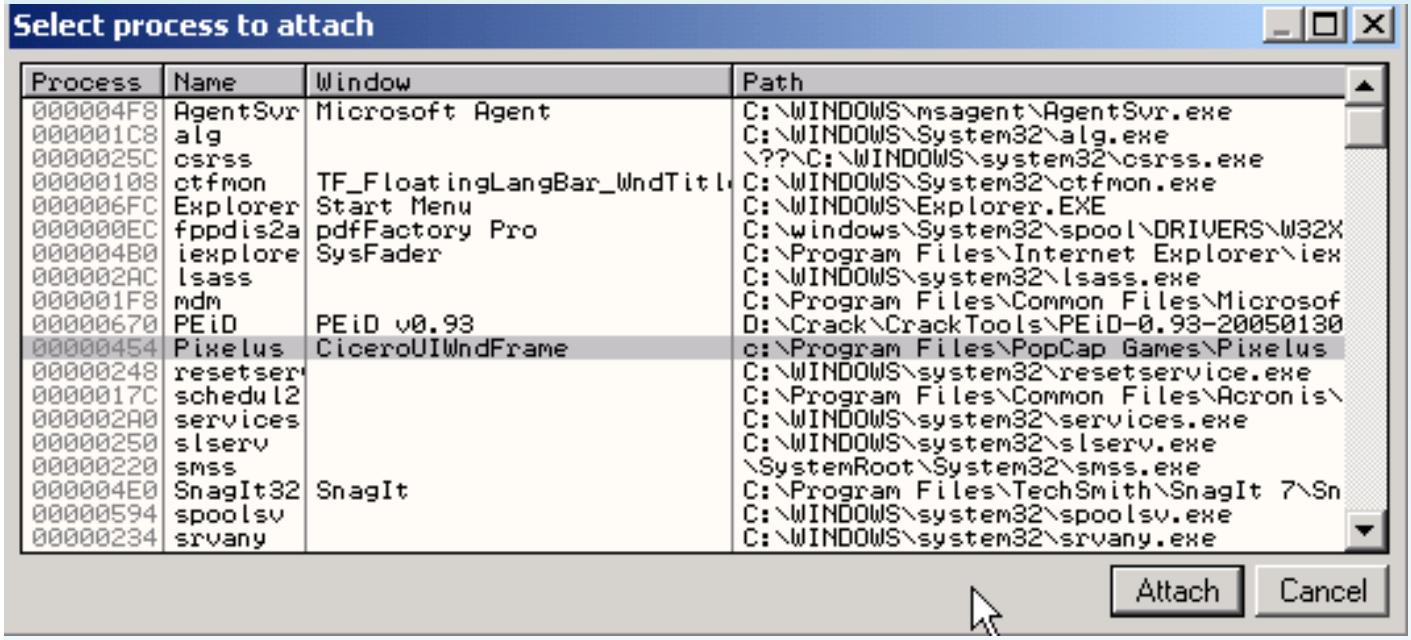
Now we will use OllyDbg Attach to this program.
Open OllyDbg. First the original Option Exceptions in the same image:



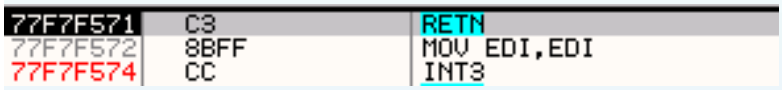
In File menu select Attach:



Select the program and click the button Pixelus Attach



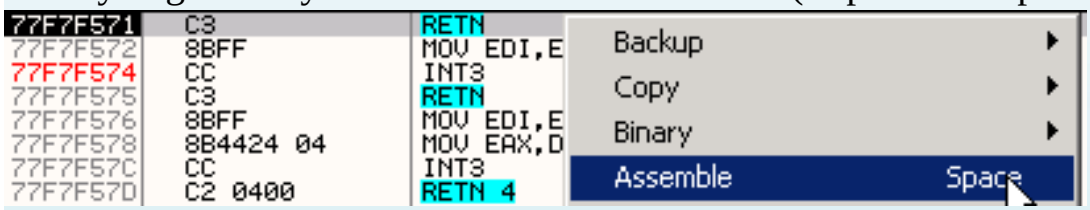
We stop here:



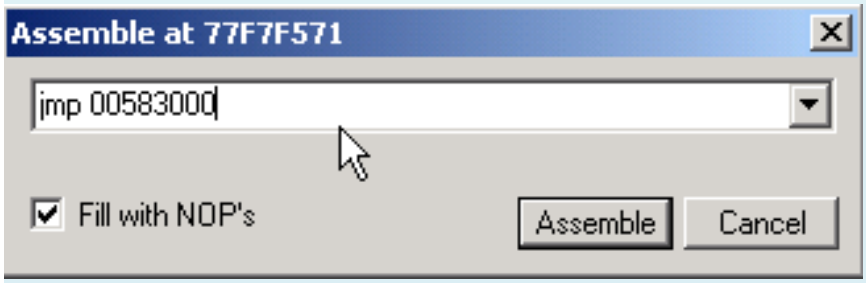
Now we will jump to the section. Rdata we chose above. Note section. Rdata have V. Offset is 00183000. We must add to Imagebase:

00183000 + 00400000 = 00583000.

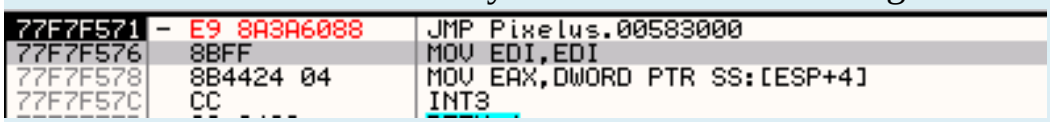
In OllyDbg. Click your mouse to select assemble (or press the Space also)



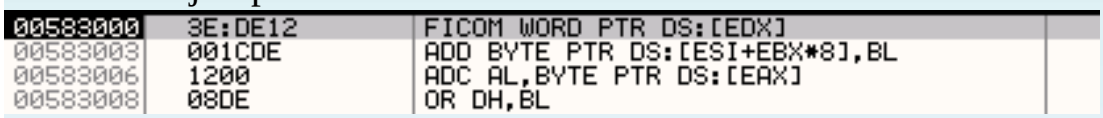
Enter JMP 00583000. Click assemble



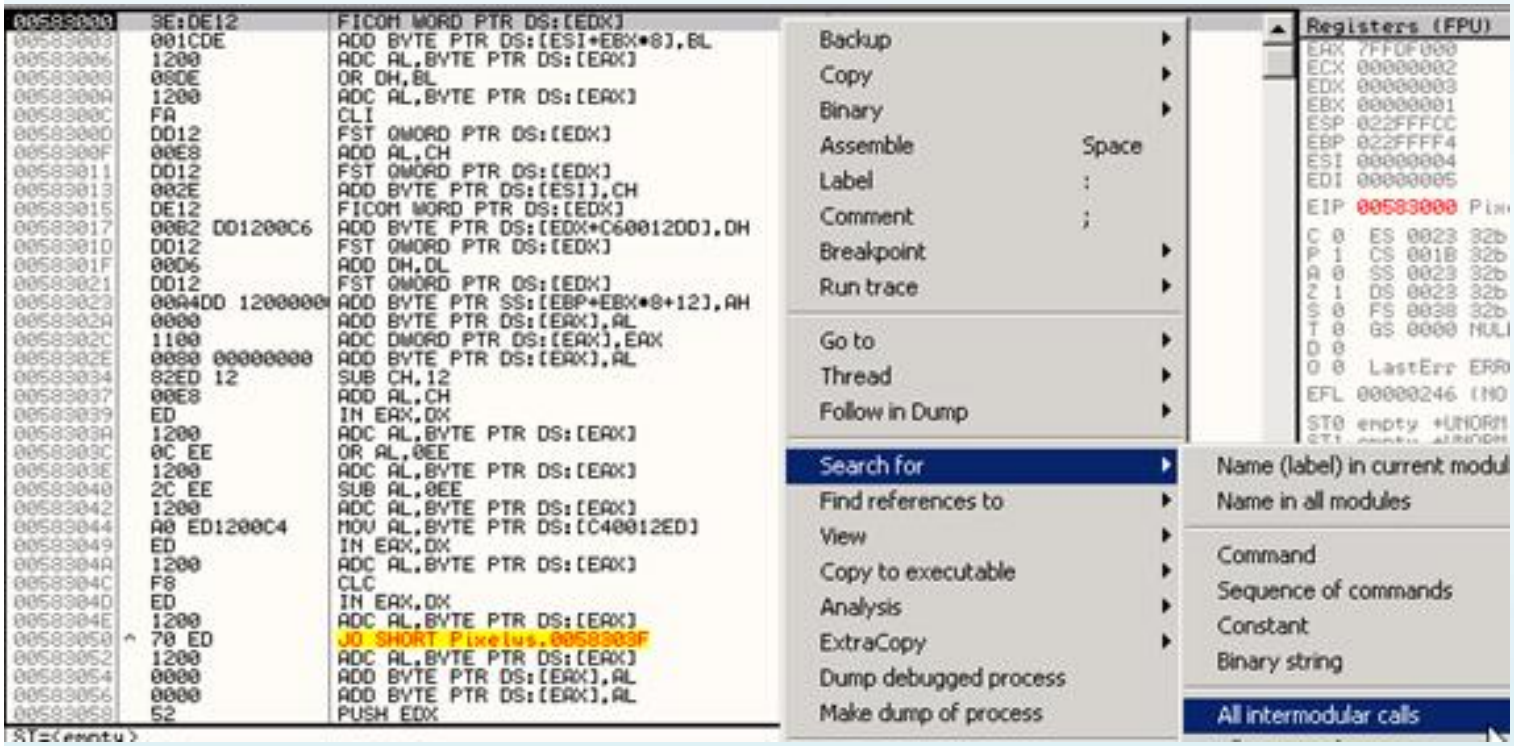
In the window of the Code Olly would like the following:



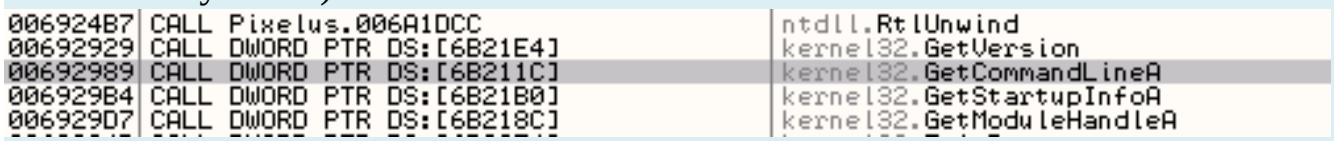
Press F7 to jump to 00583000.



Now click the mouse to select the image in



We will find the API GetCommandLineA (hint: you entered GetCommandLineA, Olly automatically for us).

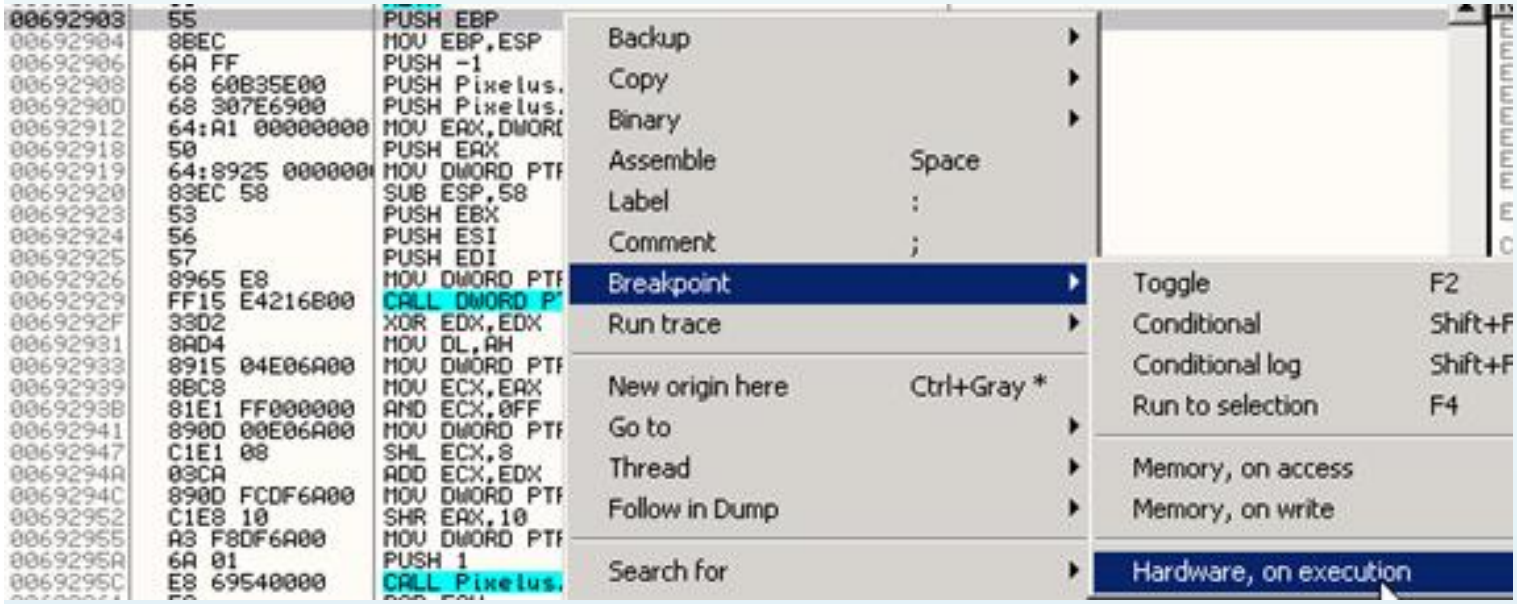


Double-click on that line. We will be here 00692989:

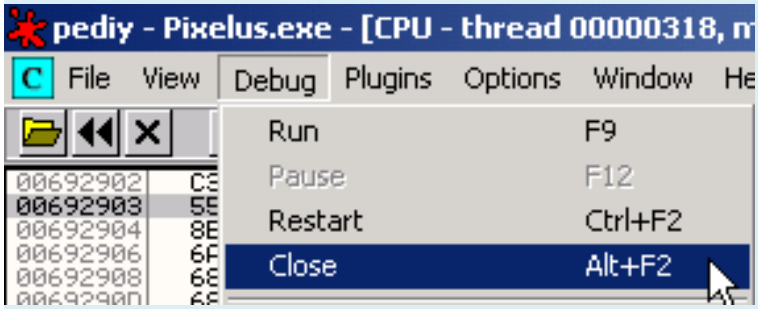
```
00692903   55              PUSH EBP
00692904   8BEC            MOV EBP,ESP
00692906   6A FF           PUSH -1
00692908   68 60B35E00     PUSH Pixelus.005EB360
0069290D   68 307E6900     PUSH Pixelus.00697E30
00692912   64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
00692918   50              PUSH EAX
00692919   64:8925 000000( MOV DWORD PTR FS:[0],ESP
00692920   83EC 58         SUB ESP,58
00692923   53              PUSH EBX
00692924   56              PUSH ESI
00692925   57              PUSH EDI
00692926   8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
00692929   FF15 E4216B00   CALL DWORD PTR DS:[6B21E4]      kernel32.GetVersion
0069292F   33D2            XOR EDX,EDX
00692931   8AD4            MOV DL,AH
00692933   8915 04E06A00   MOV DWORD PTR DS:[6AE004],EDX
00692939   8BC8            MOV ECX,EAX
0069293B   81E1 FF000000   AND ECX,0FF
00692941   890D 00E06A00   MOV DWORD PTR DS:[6AE000],ECX
00692947   C1E1 08         SHL ECX,8
0069294A   03CA            ADD ECX,EDX
0069294C   890D FCDF6A00   MOV DWORD PTR DS:[6ADFFC],ECX
00692952   C1E8 10         SHR EAX,10
00692955   A3 F8DF6A00     MOV DWORD PTR DS:[6ADFF8],EAX
0069295A   6A 01           PUSH 1
0069295C   E8 69540000     CALL Pixelus.00697DCA
00692961   59              POP ECX
00692962   85C0            TEST EAX,EAX
00692964 v 75 08           JNZ SHORT Pixelus.0069296E
00692966   6A 1C           PUSH 1C
00692968   E8 C3000000     CALL Pixelus.00692A30
0069296D   59              POP ECX
0069296E   E8 99490000     CALL Pixelus.0069730C
00692973   85C0            TEST EAX,EAX
00692975 v 75 08           JNZ SHORT Pixelus.0069297F
00692977   6A 10           PUSH 10
00692979   E8 B2000000     CALL Pixelus.00692A30
0069297E   59              POP ECX
0069297F   33F6            XOR ESI,ESI
00692981   8975 FC         MOV DWORD PTR SS:[EBP-4],ESI
00692984   E8 10510000     CALL Pixelus.00697A99
00692989   FF15 1C216B00   CALL DWORD PTR DS:[6B211C]      kernel32.GetCommandLineA
0069298F   A3 84F76A00     MOV DWORD PTR DS:[6AF784],EAX
```

Scroll window Olly up points to start the program. You note that in 00692903 PUSH EBP line is we need to find.

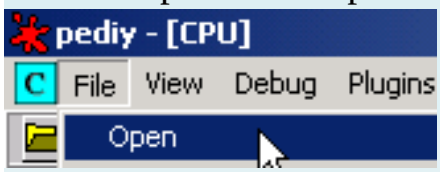
Click the cursor to the line 00692903. Click your mouse to select the image as:



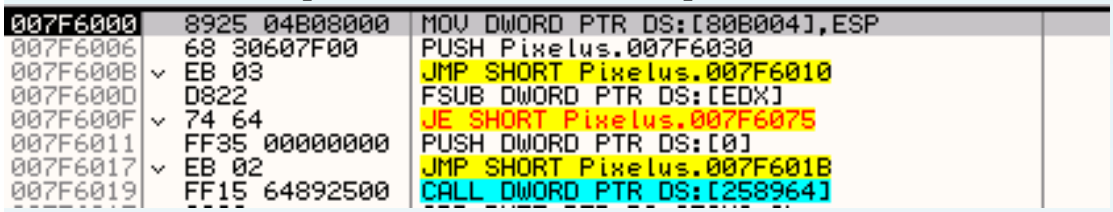
Now we will close the program. Debug menu select Close



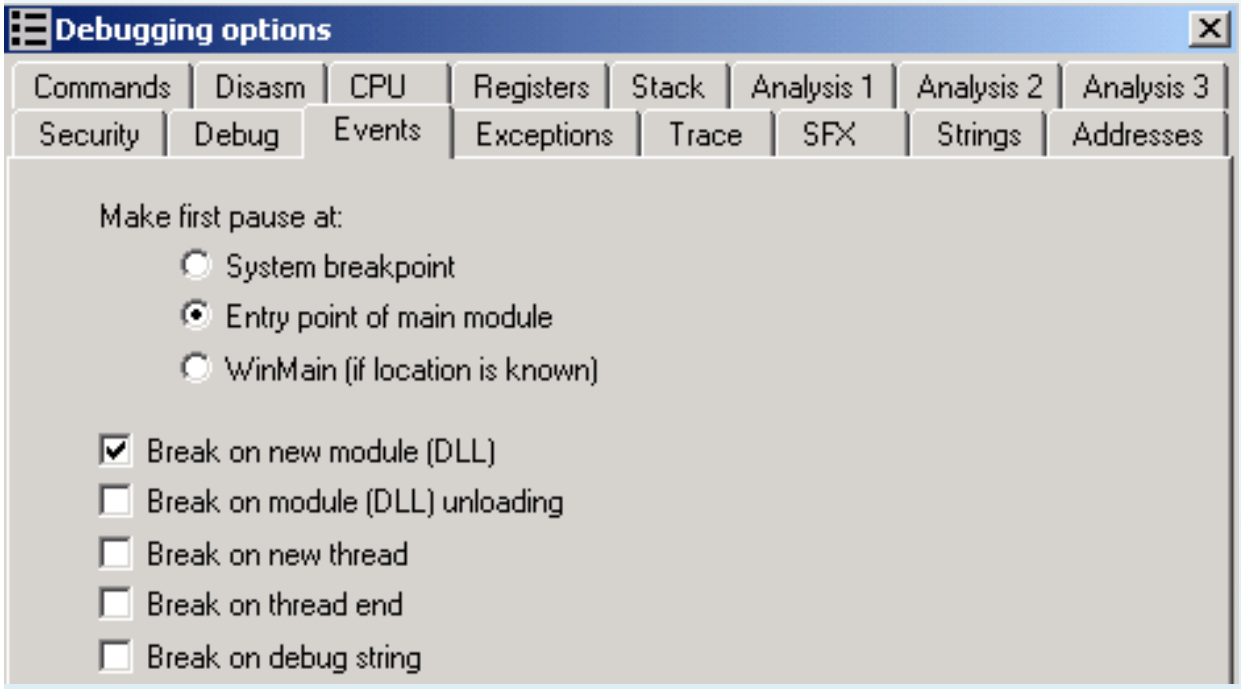
We will open the file pixelus.exe. In the menu choose Open File



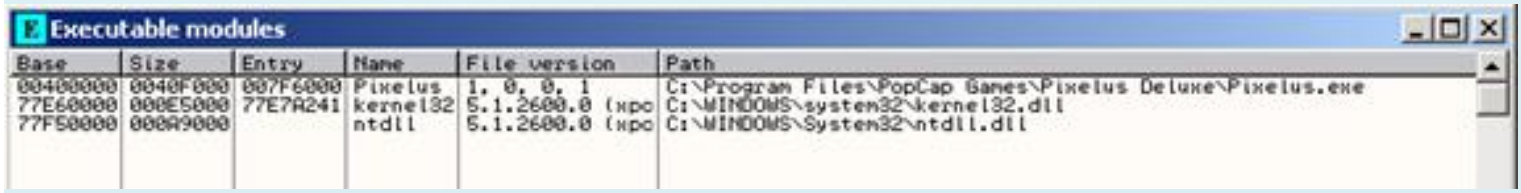
And select the file pixelus.exe. We will stop here:



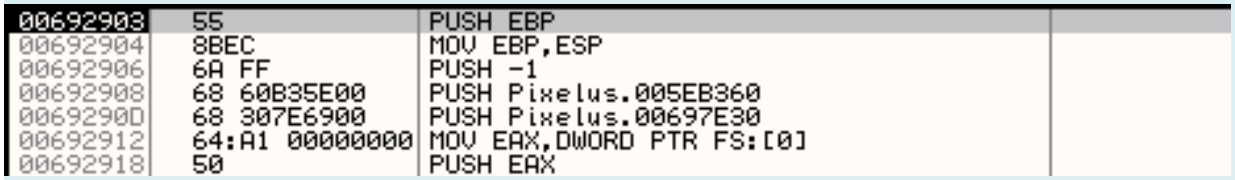
Before we run a little adjustment in the Option. Press Alt-O and the like in the picture:



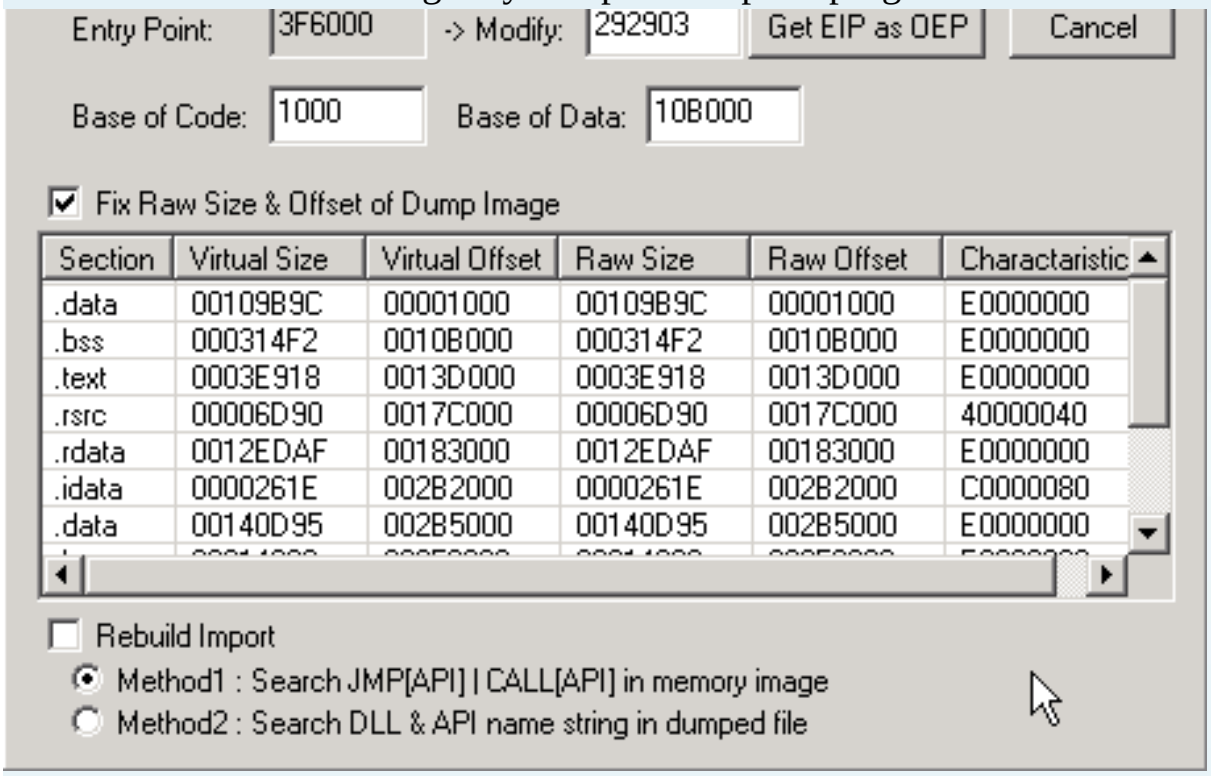
Click OK. Now press F9. We found out the window "executable Modules"



Continue pressing F9 until we break at 00,692,903.



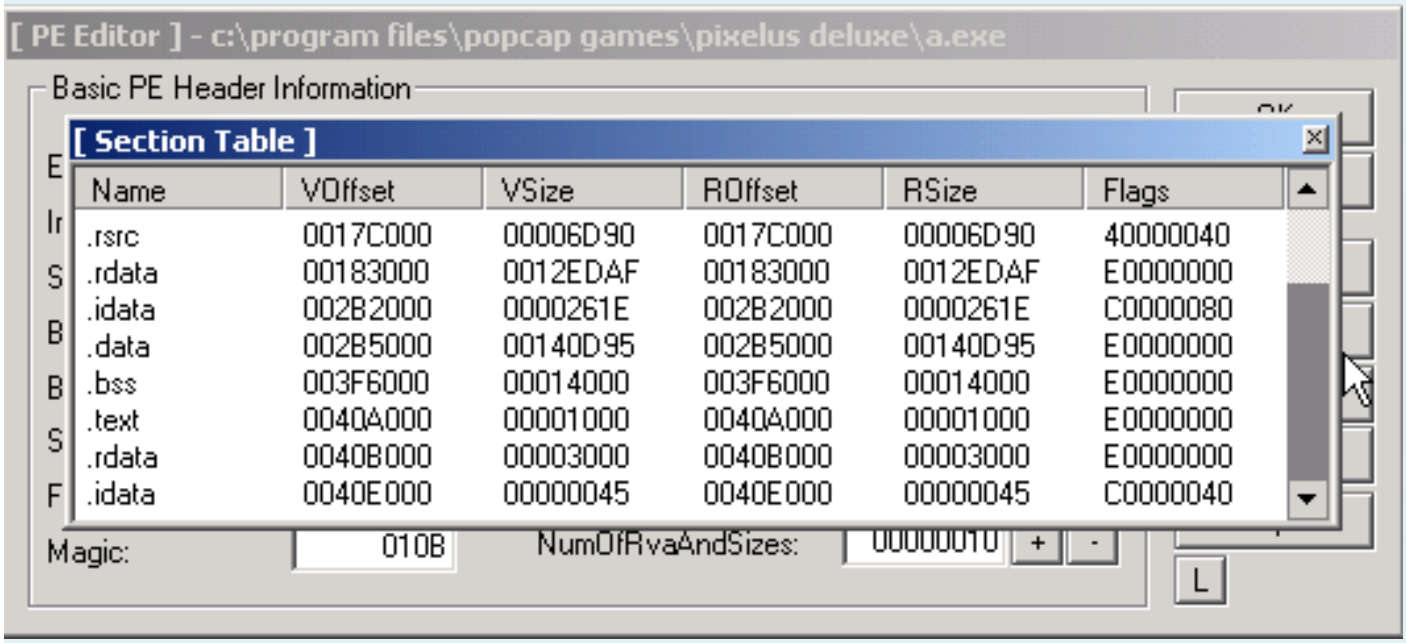
This will is our OEP. Using OllyDump to dump the program:



I named the file dump is a.exe.

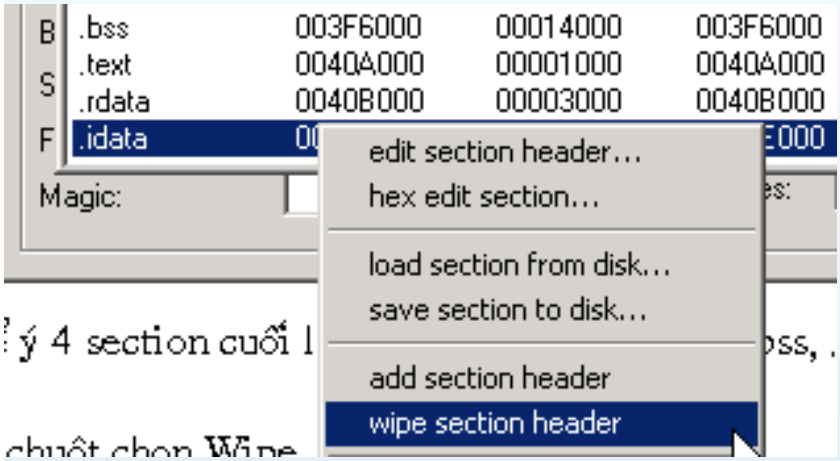
To make the file smaller in size than. We will remove the last section 4 a.exe file.

Using LordPE open file a.exe. Click to Sections in the Section Table

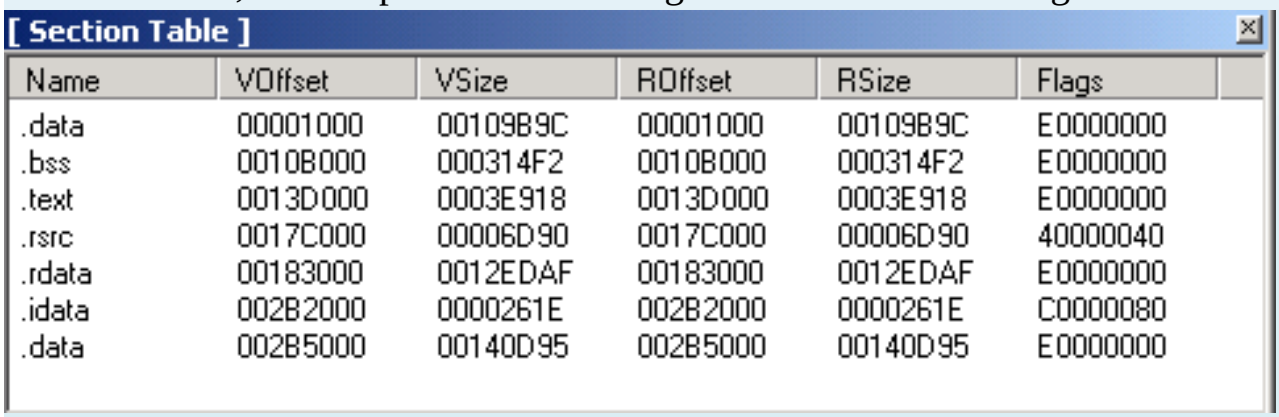


To the last section 4 that in turn (on down) is. Bss. Text. Rdata. Idata

Click your mouse to select "Wipe section header" on each section in 4 on the section.

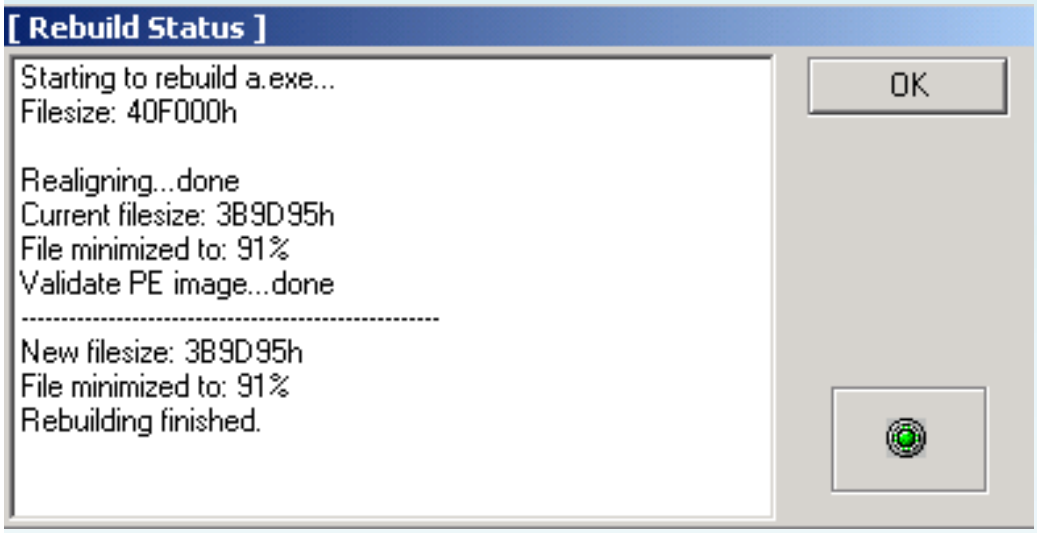


Once removed, we complete the remaining section of the following:

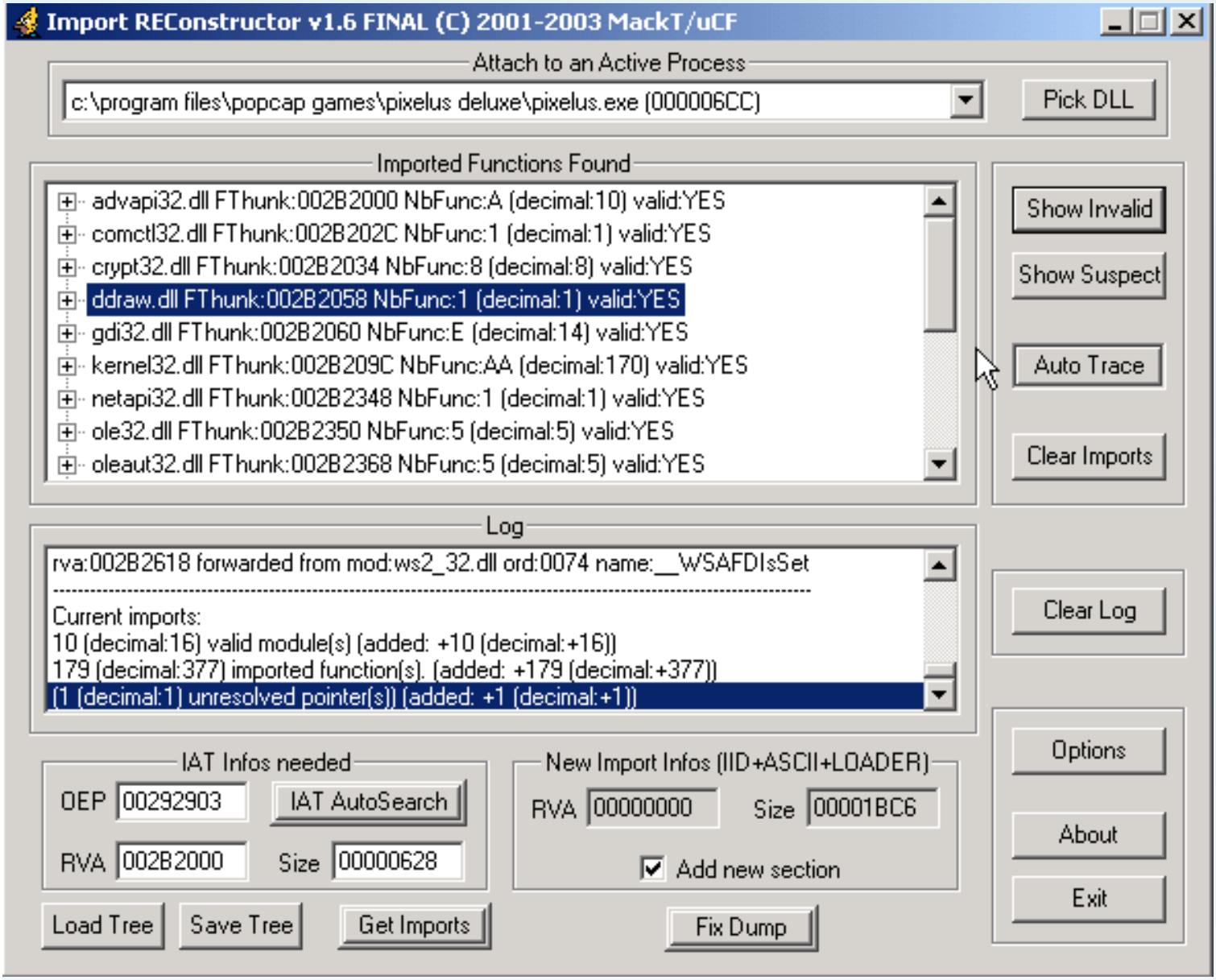


Name	VOffset	VSize	ROffset	RSize	Flags
.data	00001000	00109B9C	00001000	00109B9C	E0000000
.bss	0010B000	000314F2	0010B000	000314F2	E0000000
.text	0013D000	0003E918	0013D000	0003E918	E0000000
.rsrc	0017C000	00006D90	0017C000	00006D90	40000040
.rdata	00183000	0012EDAF	00183000	0012EDAF	E0000000
.idata	002B2000	0000261E	002B2000	0000261E	C0000080
.data	002B5000	00140D95	002B5000	00140D95	E0000000

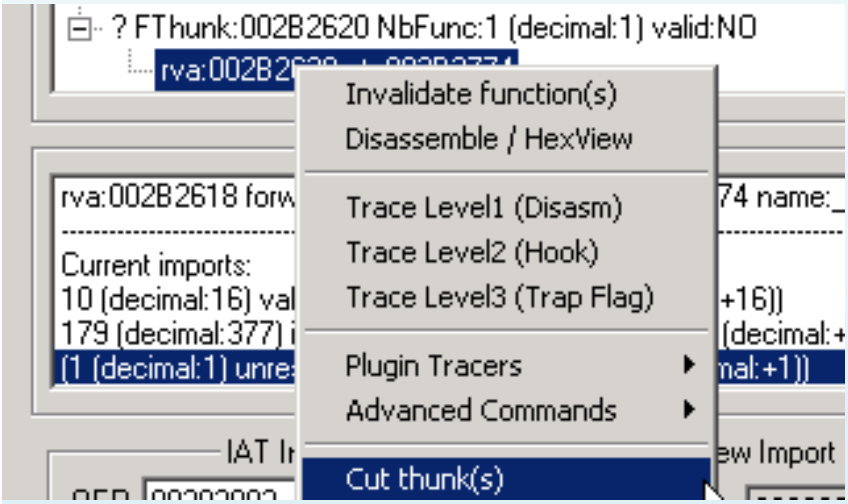
Close window Section Table. Click Save. Click OK. We will rebuild the file a.exe. Also use LordPE. Click rebuild PE. Select File a.exe.



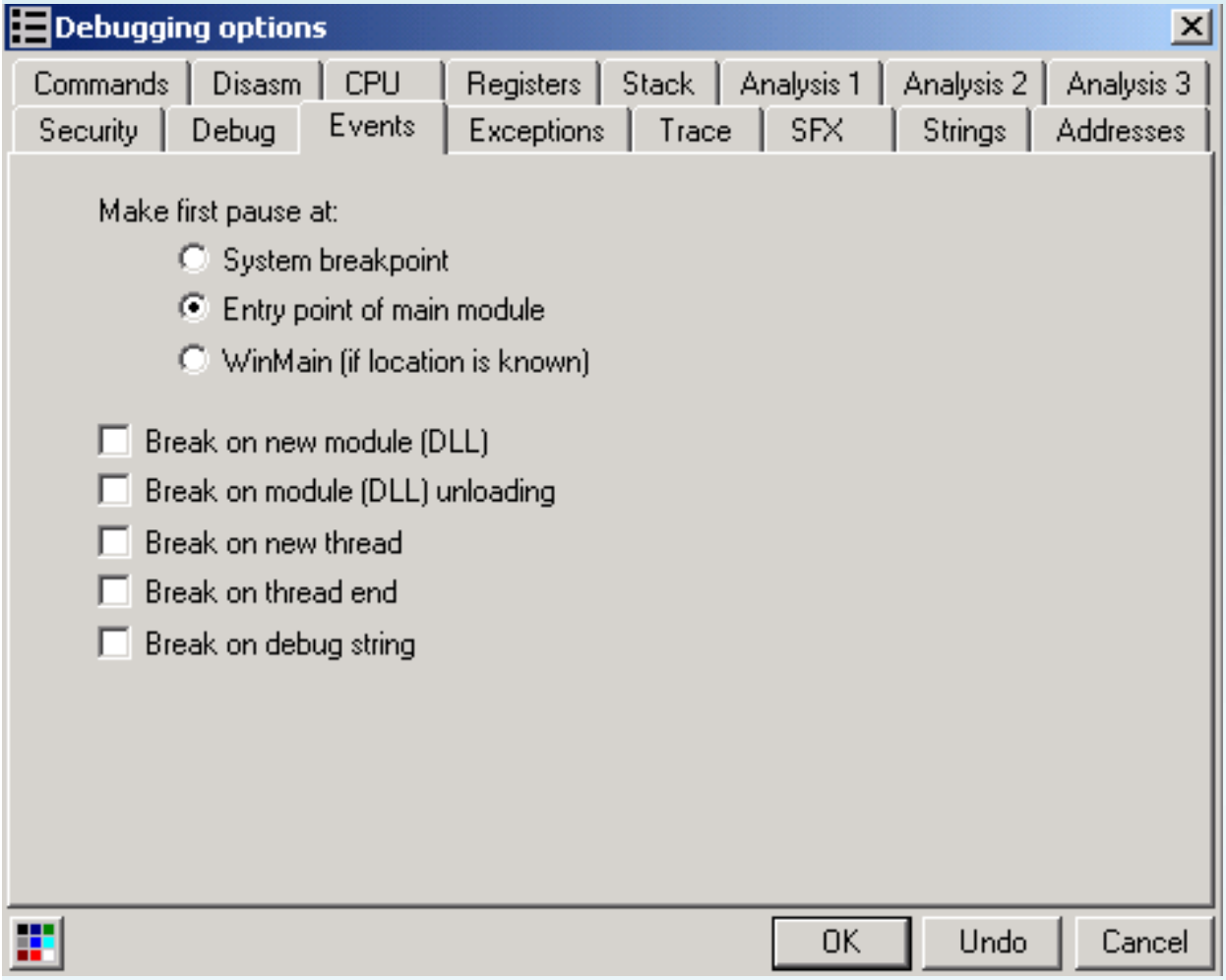
Next we will fix IAT. Open Imprec, OEP enter 00292903, IAT AutoSearch click, click OK, click Get Imports, we are:



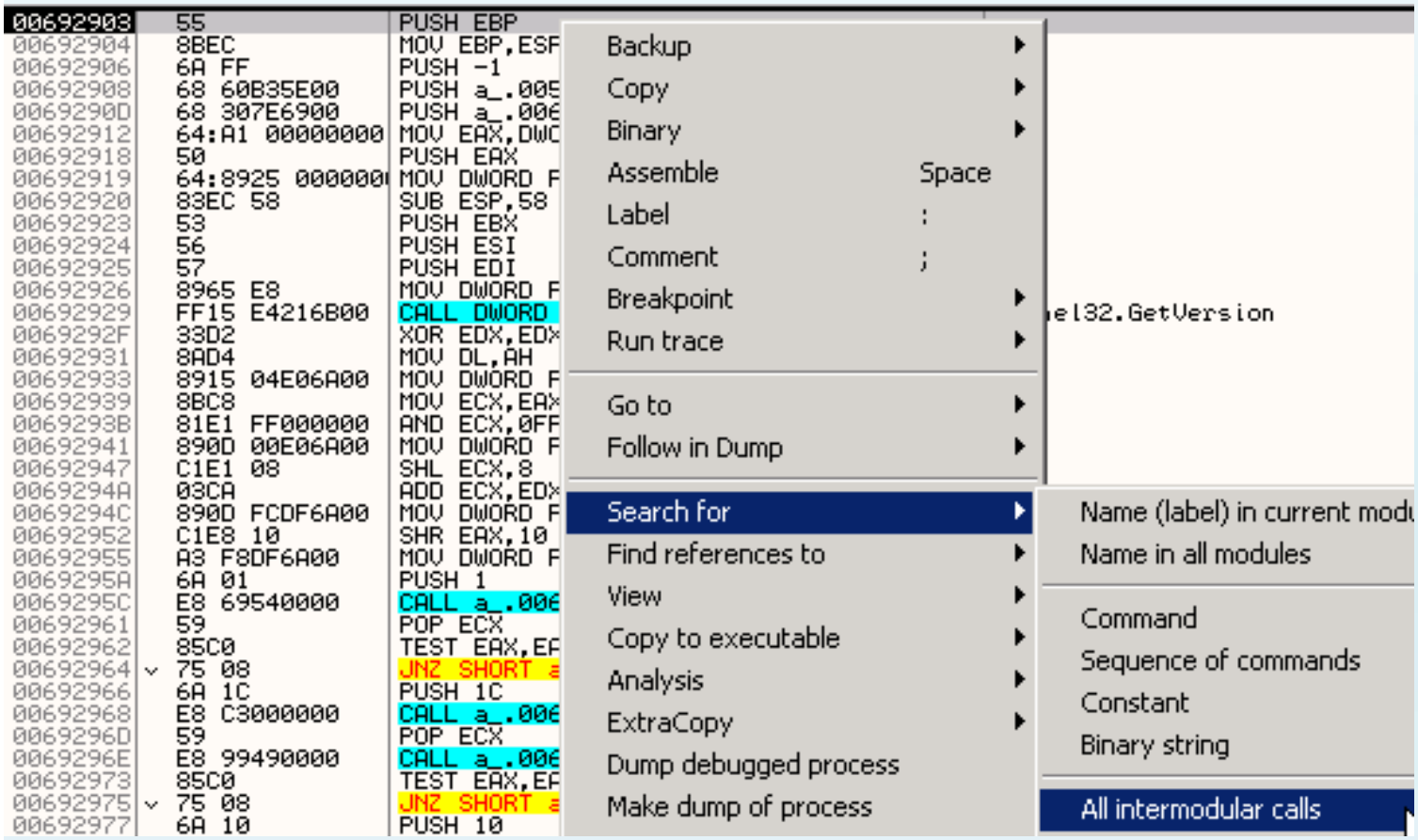
Click Show Invalid. Click your mouse to select "Cut Thunks"



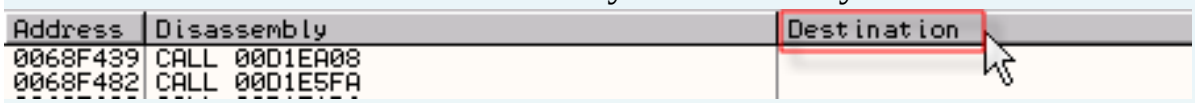
Now we have complete IAT. Click "Fix dump", select the file a.exe. We will file a_.exe
Test file a_.exe. We do not see any at all. Next we will fix a few seats to exe files can run.
Open Olly. Edit Option parameters as following:



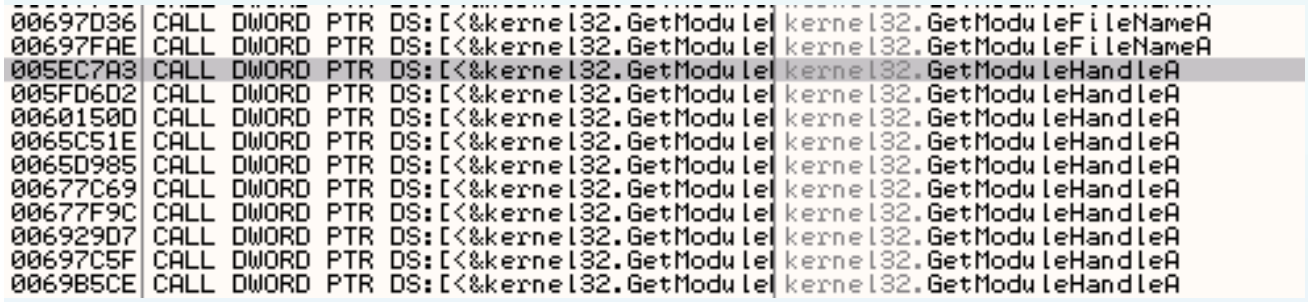
Click OK. Using OllyDbg open file a_.exe. Click your mouse to select the image in



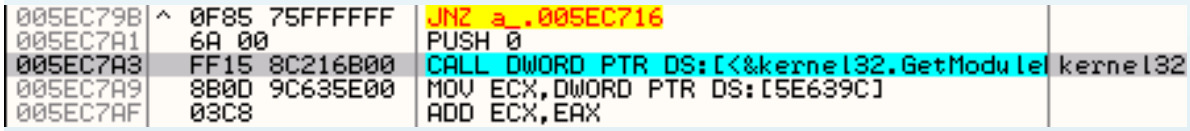
Click the Destination column to sort by name for easy search.



We will find the API GetModuleHandleA. Enter GetModuleHandleA, Olly will automatically go to the API for us.



We have a lot GetModuleHandleA results. The problem is we will select results. Generally, the results first and the second will be the first we need to find. Double-click the mouse on the first results 5EC7A3.

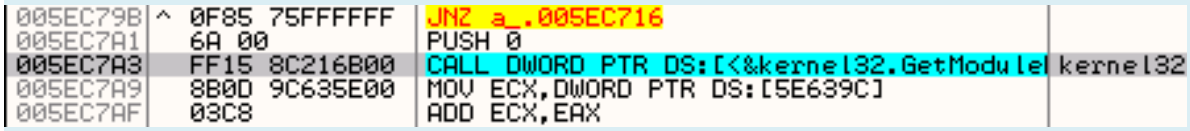


You note that in line 2:

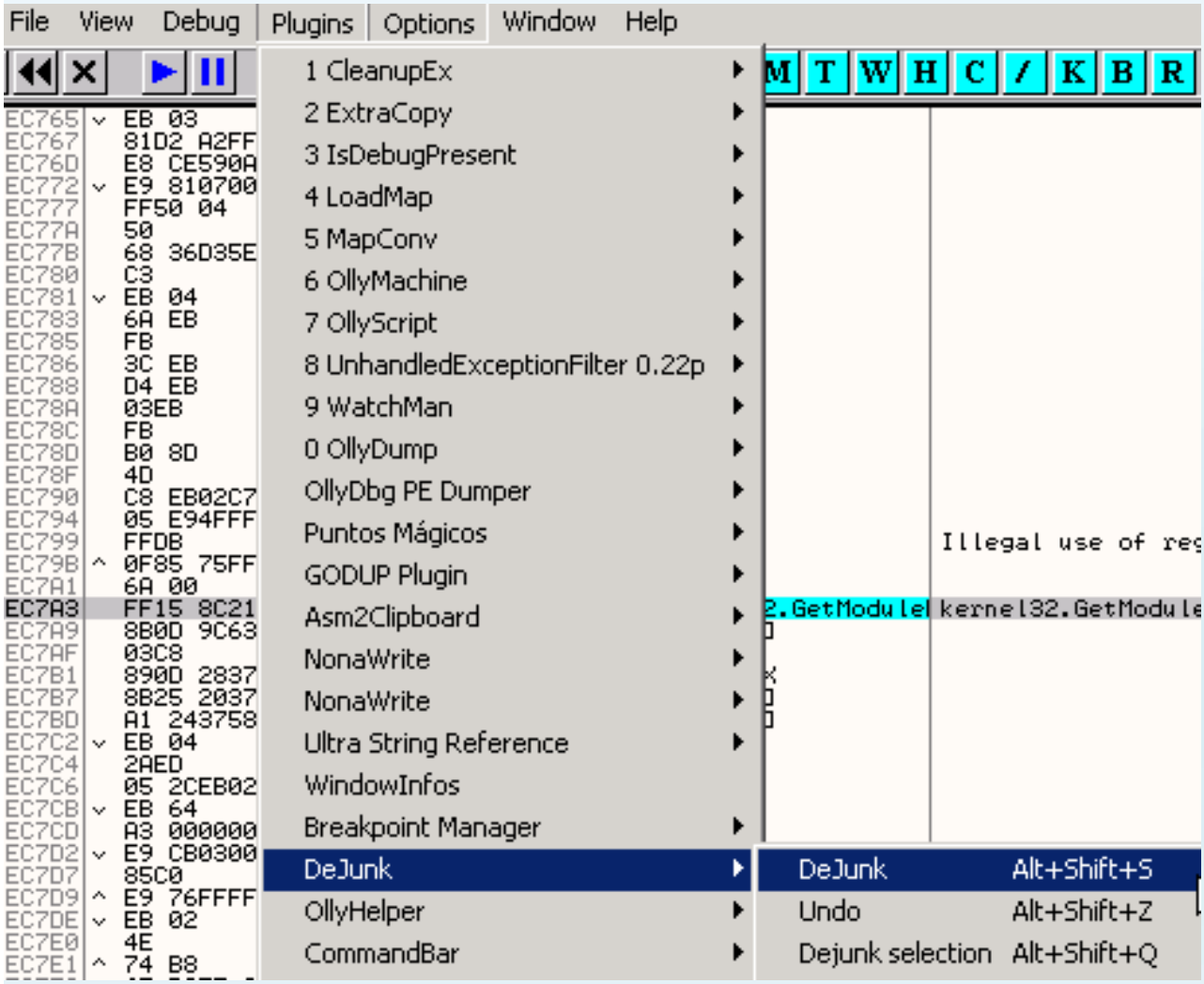
005EC7AF ADD ECX, EAX

If you see this line then you can conclude this is the result we need to find. If not you see the double-click on each result and find the ADD ECX, EAX.

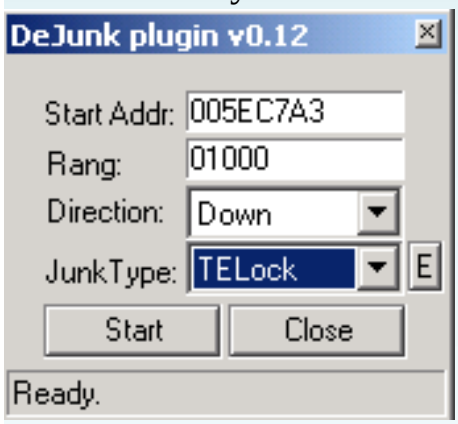
We are 5EC7A3. We know this is GetModuleHandleA functions that we need. Above the function GetModuleHandleA we will have 2 orders jumped JE and JNZ. Order JNZ we have seen in 005EC79B



We will find the commands on the command JE JNZ. First we will use DeJunk plugin. Select the pictures in

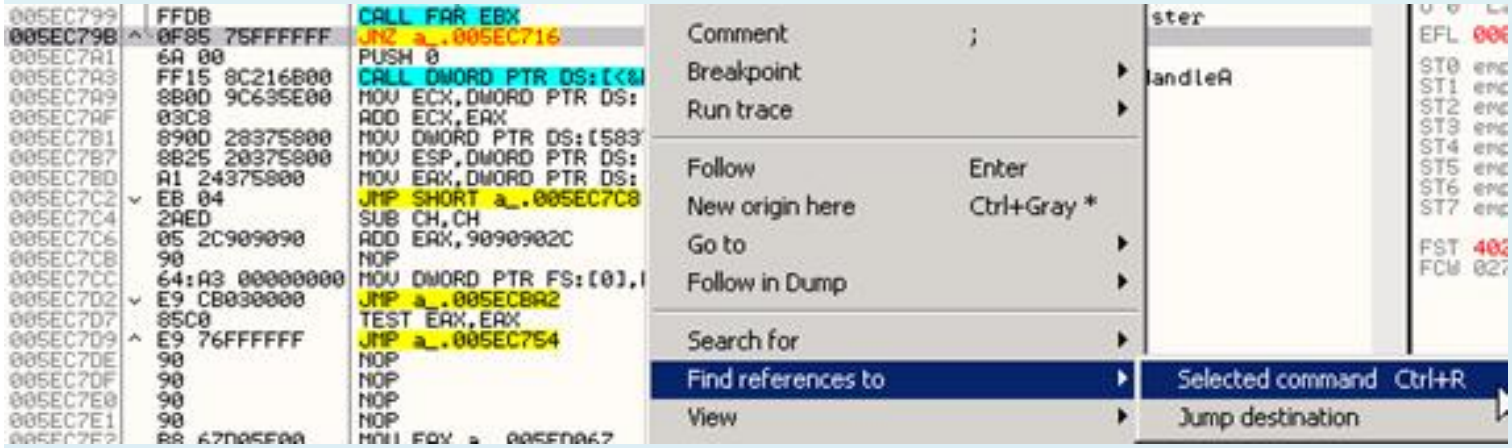


Start addr entry into 005EC7A3. Select the image as:



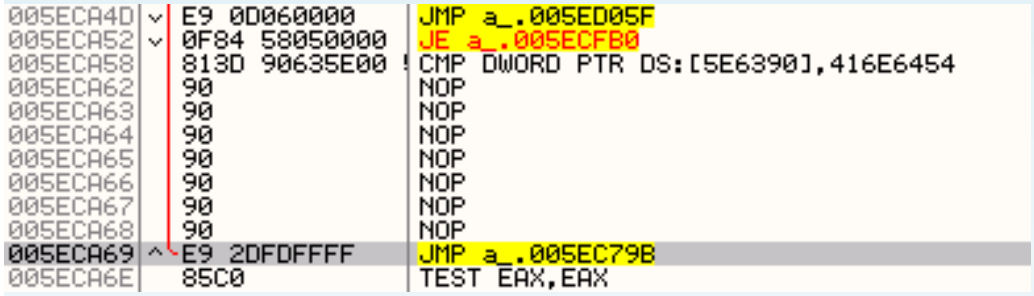
Click Start. Click OK.

Click the 005EC79B. Click your mouse to select the image in



Results

Double-click the mouse on the 005ECA69.

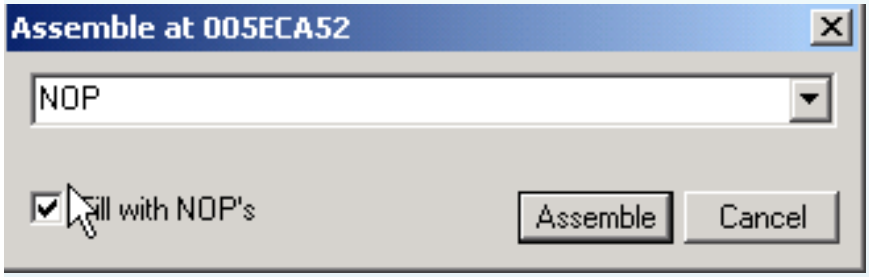


Look up a bit, we see

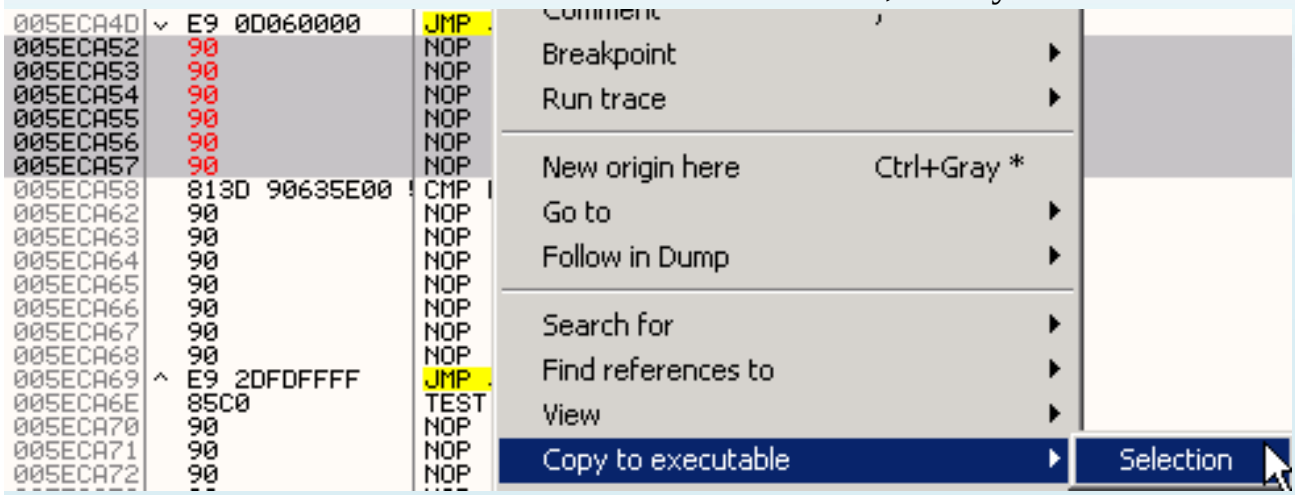
005ECA52 JE a_.005ECFB0

This is the command JE we need to find. We will NOP JE this command.

Click the 005ECA52. Press Space. Enter as in the picture



Click assemble. Choose from 005ECA52 to 005ECA57, click your mouse to select the image as:



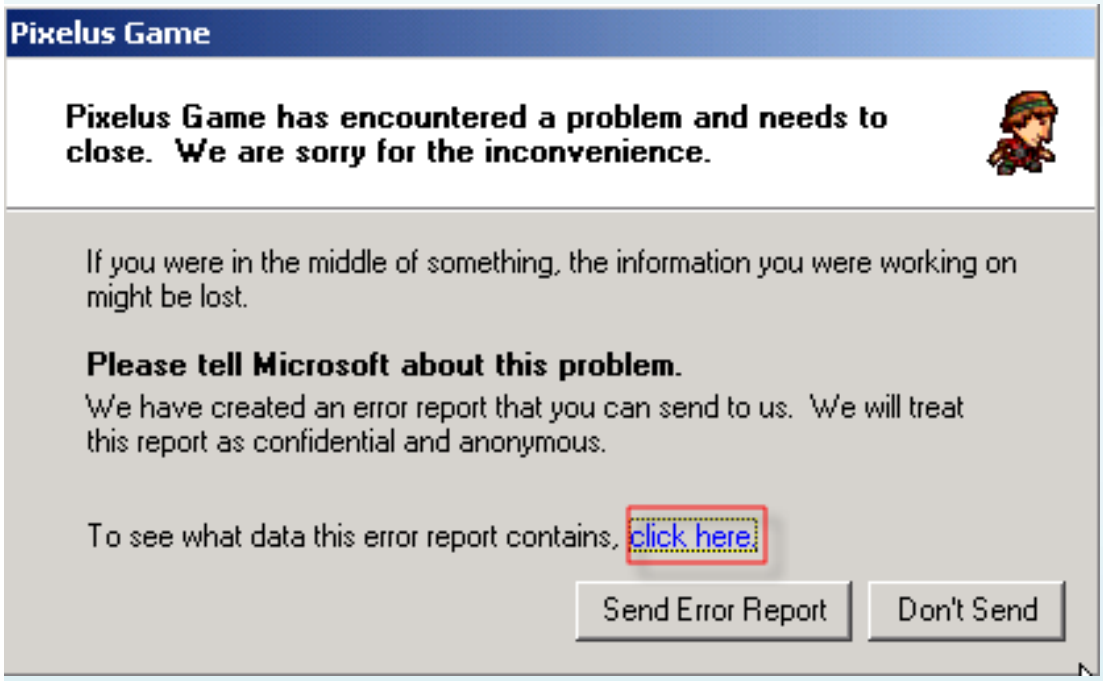
A window appear. Click your mouse to select the image

```
001B1C52    90              NOP
001B1C53    90              NOP
001B1C54    90              NOP
001B1C55    90              NOP
001B1C56    90              NOP
001B1C57    90              NOP
001B1C58    813D 90635E00 ! CMP DWORD PTR DS
001B1C62  v EB 02           JMP SHORT 001B1C
001B1C64  v EB 02           JMP SHORT 001B1C
001B1C66  v EB 01           JMP SHORT 001B1C
001B1C68  ^ EB E9           JMP SHORT 001B1C
001B1C6A    2D FDFFFF85     SUB EAX,85FFFFFD
001B1C6F    C0EB 02         SHR BL,2
001B1C72    49              DEC ECX
001B1C73  v 74 0F           JE SHORT 001B1C8
```

Backup
Copy
Binary
Assemble
Search for
Save file

Named a_1.exe. Test program:

We do not see a window up to us to purchase the program again. To this we can be pleased. However, there is a problem here. When we close the window. An error message appear:



We will fix this error.
Using Olly a_1.exe open the file. Press Shift-F9 to run the program. When the window is closing on the window again (press X button on the right corner). Olly will stop here:
Windows code:

```
014EC2D4   0023          ADD BYTE PTR DS:[EBX],AH
014EC2D6   04 00         ADD AL,0
014EC2D8   0B00          OR EAX,DWORD PTR DS:[EAX]
014EC2DA   0000          ADD BYTE PTR DS:[EAX],AL
014EC2DC   00E0          ADD AL,AH
```

Registers window:

```
Registers (FPU)
EAX 0050ABD1 a_1.0050ABD1
ECX 0057A059 a_1.0057A059
EDX 00DBB108
EBX 7FFD0000 ASCII "??????????????????????
ESP 0012FE6C UNICODE "z0"
EBP 0012FE94
ESI 00000001
EDI 00000000

EIP 014EC2D4
```

Stack window:

```
0012FE6C   004F007A  RETURN to a_1.004F007A
0012FE70   00000000
0012FE74   00000000
0012FE78   7FFD0000  ASCII "??????????????????????
0012FE7C   0012FE70
0012FE80   0012FA94
```

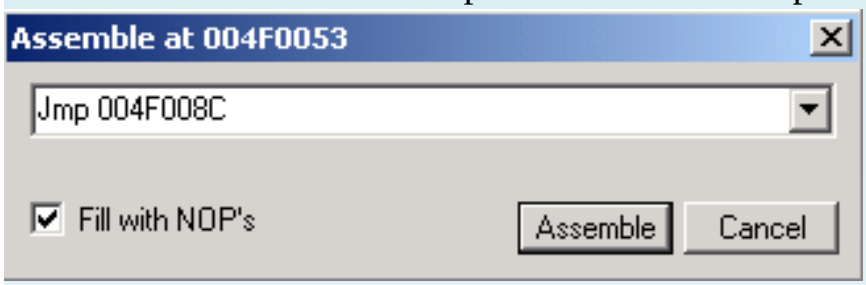
You note that we will return 004F007A (to red in the image above).
In the window code. G.Nhap Press Ctrl-to 004f007a.

Click OK.

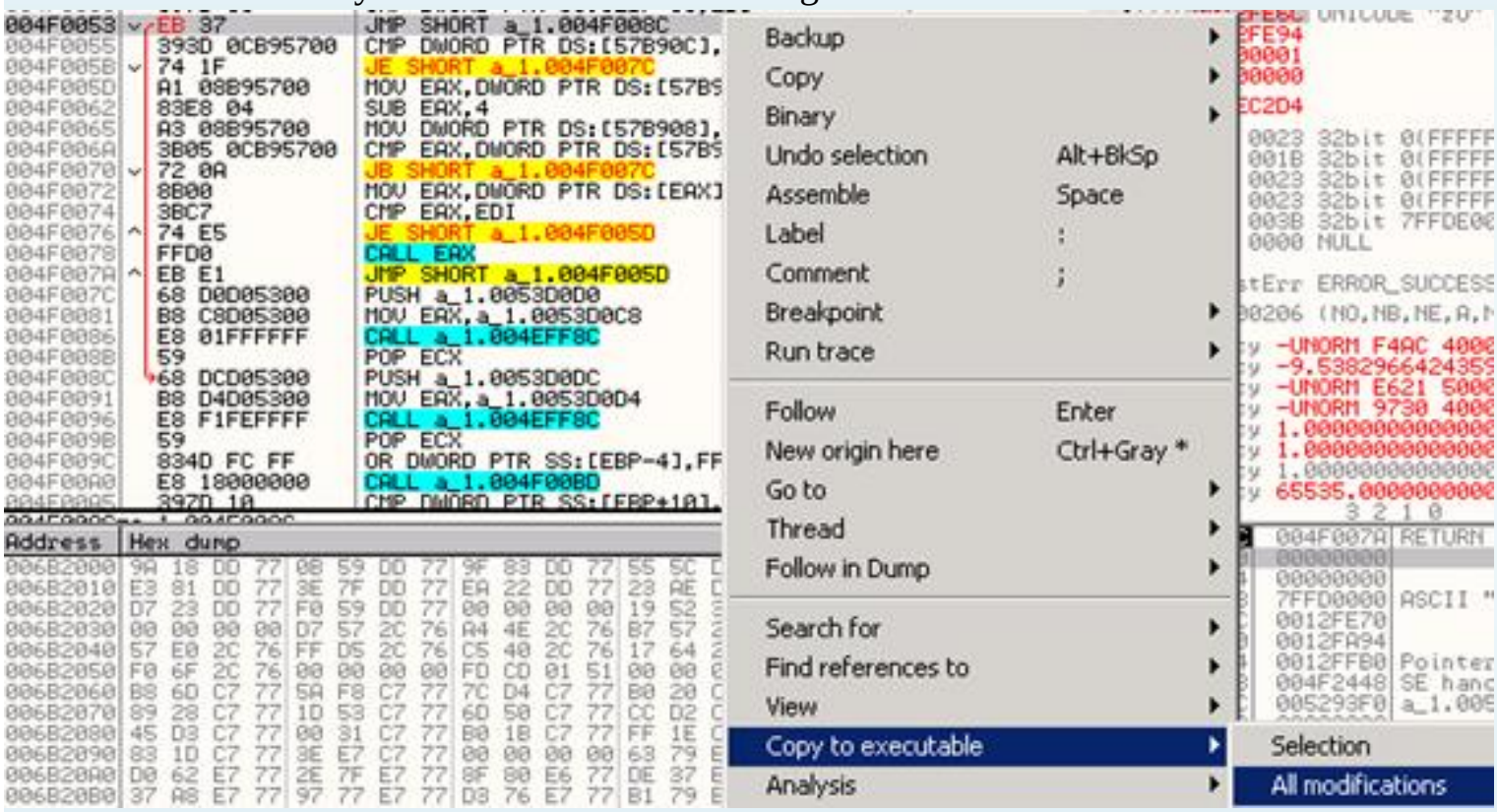
```
004F0042    8935 B8A05700   MOV DWORD PTR DS:[57A0B8],ESI
004F0048    8A45 10         MOV AL,BYTE PTR SS:[EBP+10]
004F004B    A2 B4A05700     MOV BYTE PTR DS:[57A0B4],AL
004F0050    397D 0C         CMP DWORD PTR SS:[EBP+C],EDI
004F0053  v 75 37           JNZ SHORT a_1.004F008C
004F0055    393D 0CB95700   CMP DWORD PTR DS:[57B90C],EDI
004F005B  v 74 1F           JE SHORT a_1.004F007C
004F005D    A1 08B95700     MOV EAX,DWORD PTR DS:[57B908]
004F0062    83E8 04         SUB EAX,4
004F0065    A3 08B95700     MOV DWORD PTR DS:[57B908],EAX
004F006A    3B05 0CB95700   CMP EAX,DWORD PTR DS:[57B90C]
004F0070  v 72 0A           JB SHORT a_1.004F007C
004F0072    8B00            MOV EAX,DWORD PTR DS:[EAX]
004F0074    3BC7            CMP EAX,EDI
004F0076  ^ 74 E5           JE SHORT a_1.004F005D
004F0078    FFD0            CALL EAX
004F007A  ^ EB E1           JMP SHORT a_1.004F005D
```

In line 004F0078 CALL EAX will cause problems. There are many ways to solve this problem. Here I choose at the 004F0053 JNZ SHORT a_1.004F008C we will revise the order to always jump JMP overcome command CALL EAX -> do not cause problems.

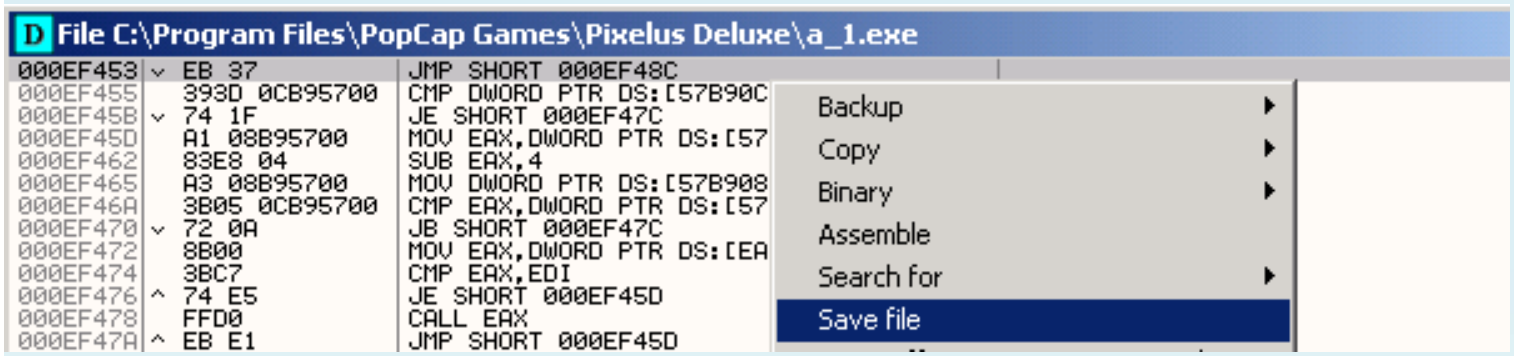
Click 004F0078 line. Press Space. Enter as in the picture:



Click assemble. Click your mouse to select the image as:



A dialog box up. Select Copy All. A window up. Click your mouse to select Save File:



Named a_2.exe.

Test file a_2.exe. When you exit the program, we will not encounter the error message again. Them. Happy happy.

Greetingz: All members VCT, Condzero, and you.

tlandn

Manual unpack Armadillo v4.62_all protections

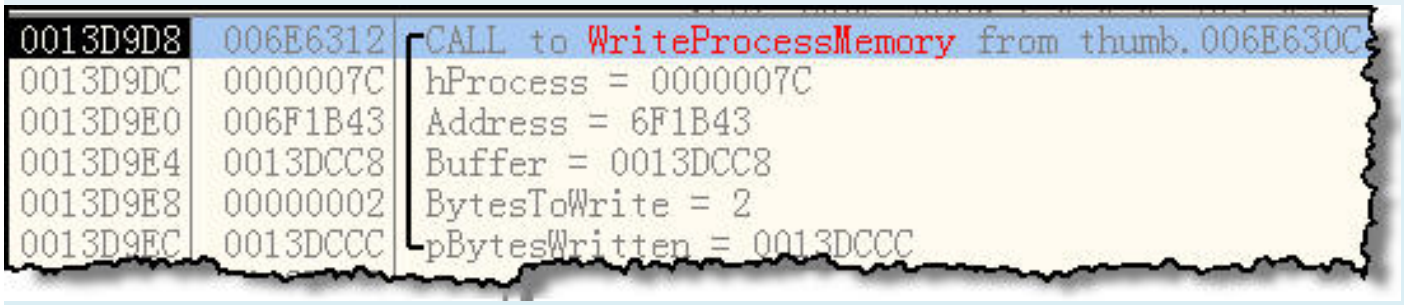
Author: kienmanowar

1. COPYMEM II Defeat

Olly configuration and load the target, set a BP WriteProcessMemory. Press F9 to run the program.

Observations in Olly:

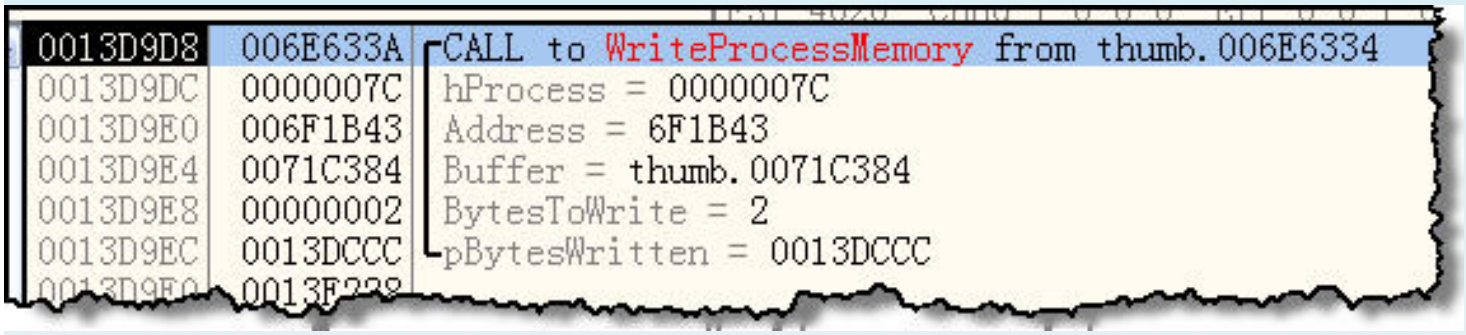
_Break First:

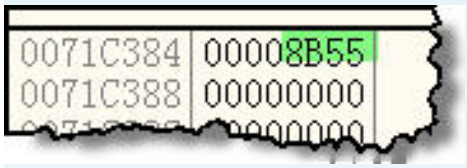


_Follow At Buffer above we see here bytes will be written to address 0x6F1B43, first place will

infinite loop on EP's son process.

_Nhan F9 to run, you break a second time. This time we have the results as follows:

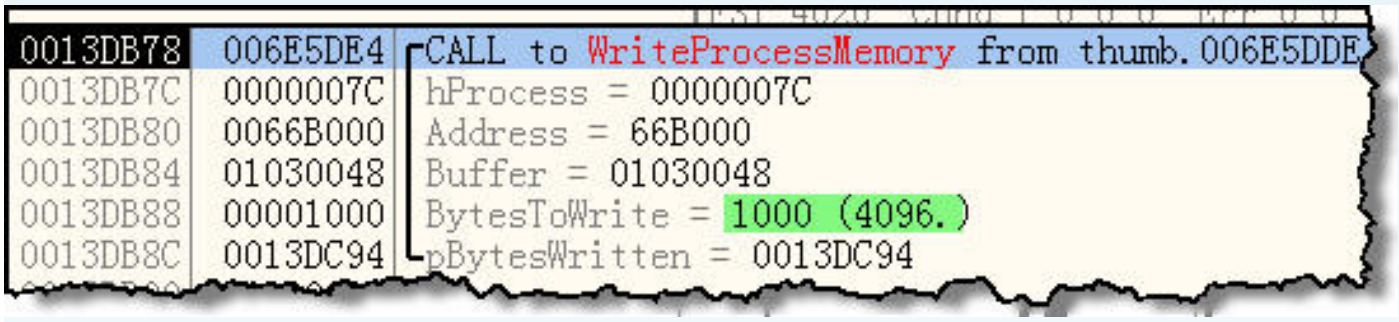




_Nhu Results illustrate the image, this also is 2 bytes from the buffer area will be recorded in this time

but have slightly different times is to replace the infinite loop by 0x558B.

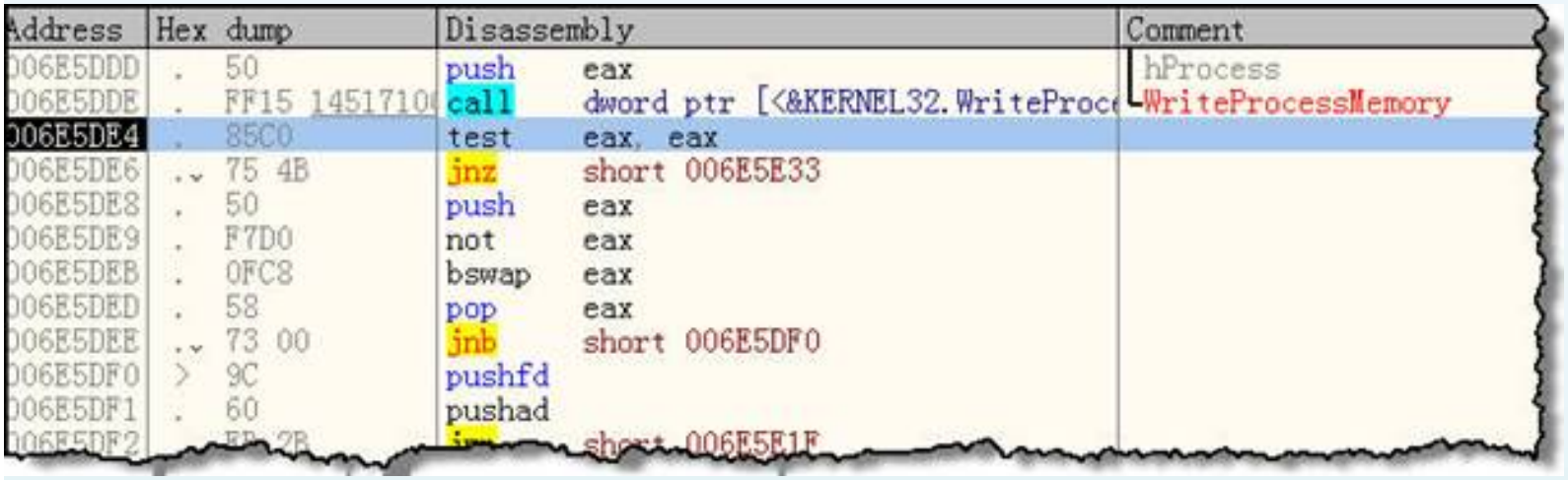
_Tiep To press F9 to run, we function at the break WriteProcessMemory:



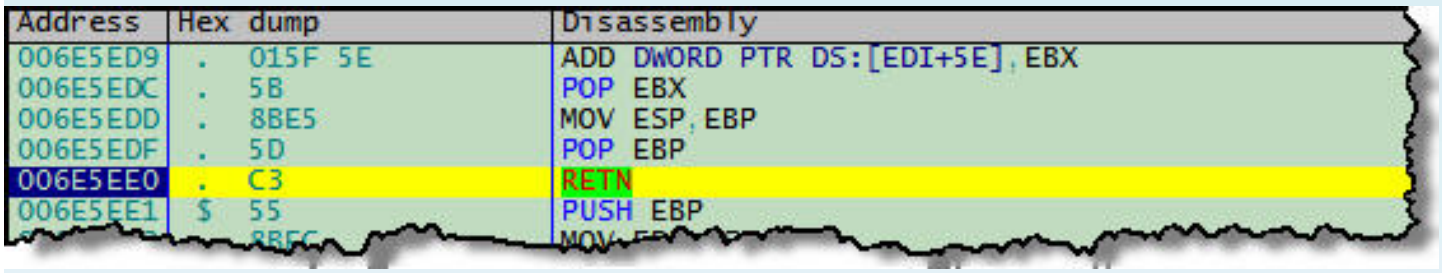
_Chung We are stopped at the seat his father will Process 1000 bytes to process from the start address

0x66B000.Bay time we must find Magic Call, press **Ctrl + F9** and press **F8** we'll stop here (with

Ollyice ko need to press F8):



_Tiep By pressing Ctrl + F9 to again, we will stop me in order RETN:



_Nhan Alt + K to open the Call Stack window:

Address	Stack	Procedure / arguments	Called from	Frame
0013DCA0	006E4A52	thumb.006E4D9A	thumb.006E4A4D	0013DCD0

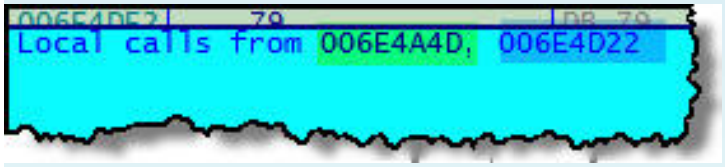
_Day Is Deencrypt Call can.Nhap we double-click Call this function to our code:

Address	Hex dump	Disassembly
006E4A48	. 51	PUSH ECX
006E4A49	. 8B55 08	MOV EDX,DWORD PTR SS:[EBP+8]
006E4A4C	. 52	PUSH EDX
006E4A4D	. E8 48030000	CALL thumb.006E4D9A
006E4A52	> 83C4 0C	ADD ESP,0C
006E4A55	. 25 FF000000	AND EAX,0FF
006E4A5A	. 85C0	TEST EAX,EAX
006E4A5C	. 75 07	JNZ SHORT thumb.006E4A65

_Nhan Enter to follow the Call this function, we will come here:

Address	Hex dump	Disassembly	Comment
006E4D9A	$ 55	PUSH EBP	
006E4D9B	. 8BEC	MOV EBP,ESP	
006E4D9D	. 81EC 00010000	SUB ESP,100	
006E4DA3	. 53	PUSH EBX	
006E4DA4	. 56	PUSH ESI	
006E4DA5	. 57	PUSH EDI	
006E4DA6	. 8B45 08	MOV EAX,DWORD PTR SS:[EBP+8]	
006E4DA9	. C1E0 0C	SHL EAX,0C	
006E4DAC	. 8B0D 20C57100	MOV ECX,DWORD PTR DS:[71C520]	thumb.00401000

_Tai Ago we observed the window Tip:



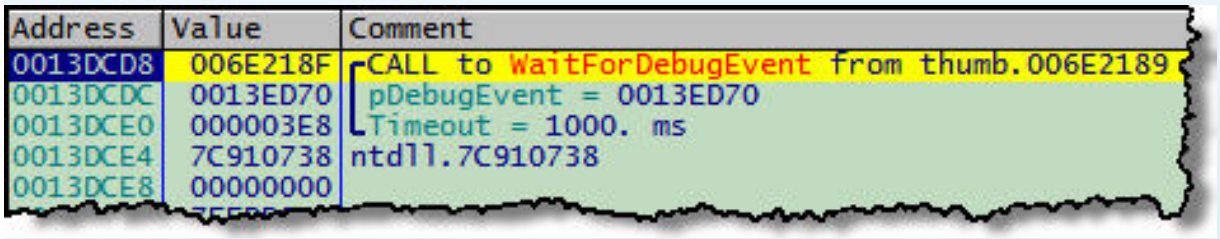
_Chung We have two function call in two different addresses, the first month is thằng and decrypt it

was known then as we observed that in some pictures illustrated above, only the second function is the

function that Encrypt we need to treat ly.Vay is we have an important information for the next step.

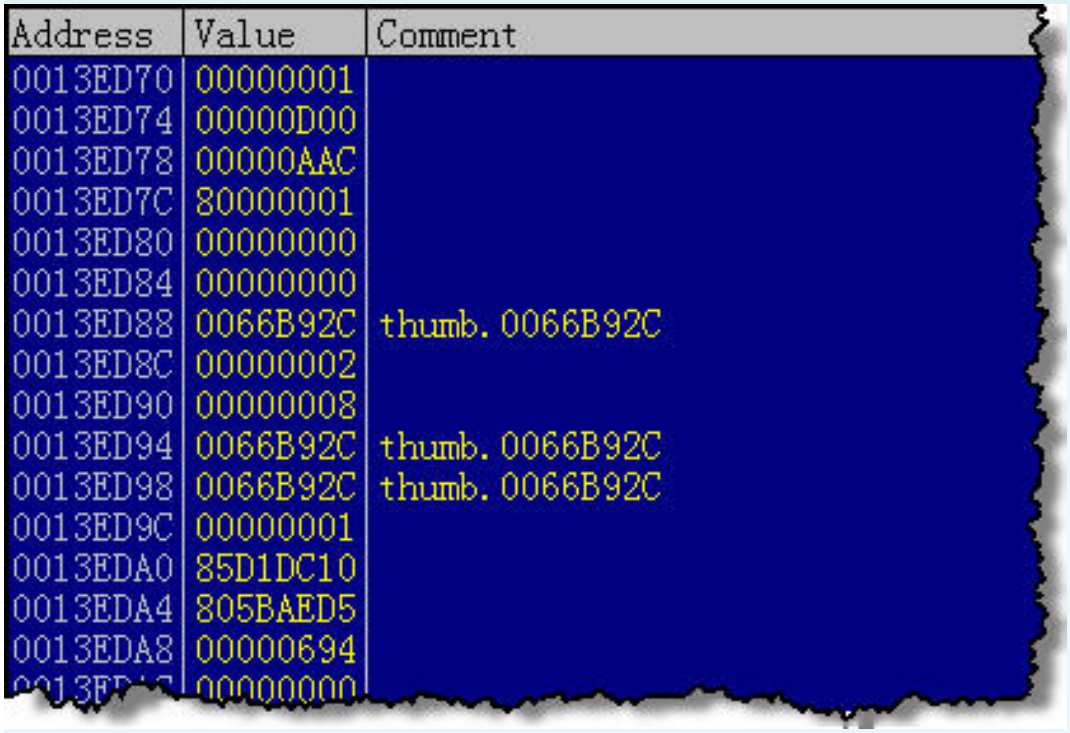
2nd Search OEP's Son process.

_Chung We have found Encrypt function in the previous section, next we need to find OEP's son process. Hold the Olly not need to function in restart.Xoa bp WriteProcessMemory go, we put a BP in WaitForDebugEvent function. Press F9 to run, we will stop here:

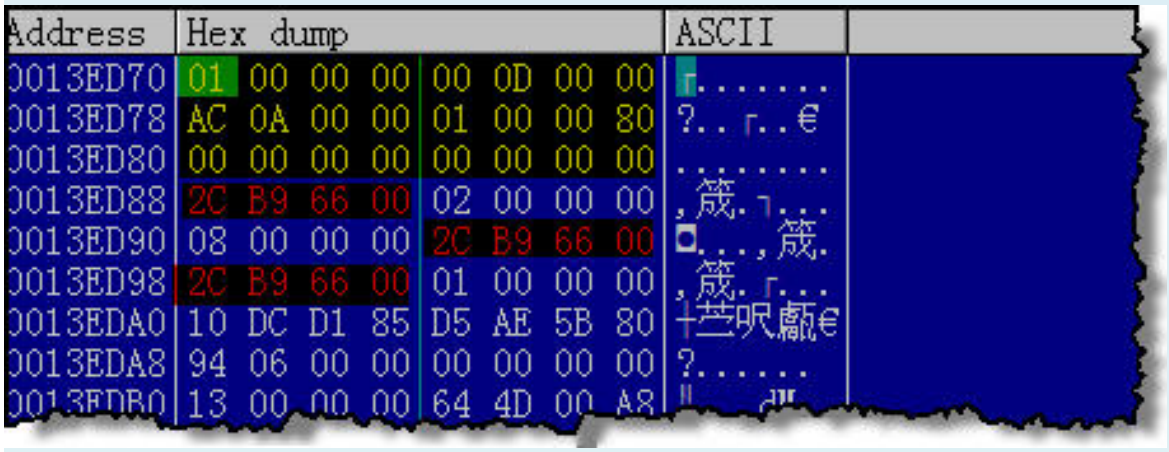


Address	Value	Comment
0013DCD8	006E218F	CALL to WaitForDebugEvent from thumb.006E2189
0013DCDC	0013ED70	pDebugEvent = 0013ED70
0013DCE0	000003E8	Timeout = 1000. ms
0013DCE4	7C910738	ntdll.7C910738
0013DCE8	00000000	

_Follow In dump at 0x0013ED70:



Address	Value	Comment
0013ED70	00000001	
0013ED74	00000D00	
0013ED78	00000AAC	
0013ED7C	80000001	
0013ED80	00000000	
0013ED84	00000000	
0013ED88	0066B92C	thumb.0066B92C
0013ED8C	00000002	
0013ED90	00000008	
0013ED94	0066B92C	thumb.0066B92C
0013ED98	0066B92C	thumb.0066B92C
0013ED9C	00000001	
0013EDA0	85D1DC10	
0013EDA4	805BAED5	
0013EDA8	00000694	



Address	Hex dump	ASCII
0013ED70	01 00 00 00 00 0D 00 00	┌.......
0013ED78	AC 0A 00 00 01 00 00 80	?..┌..€
0013ED80	00 00 00 00 00 00 00 00	....
0013ED88	2C B9 66 00 02 00 00 00	,筱.┐...
0013ED90	08 00 00 00 2C B9 66 00	◘...,筱.
0013ED98	2C B9 66 00 01 00 00 00	,筱.┌...
0013EDA0	10 DC D1 85 D5 AE 5B 80	►芒呎龘€
0013EDA8	94 06 00 00 00 00 00 00	?.....
0013EDB0	13 00 00 00 64 4D 00 A8	‼ dM

_O Ago we observed that the value 0x0066B92C OEP is that we need to find. As in previous pictures

we remember where that will be recorded in 1000 bytes starting at 0x0066B000, so this will always

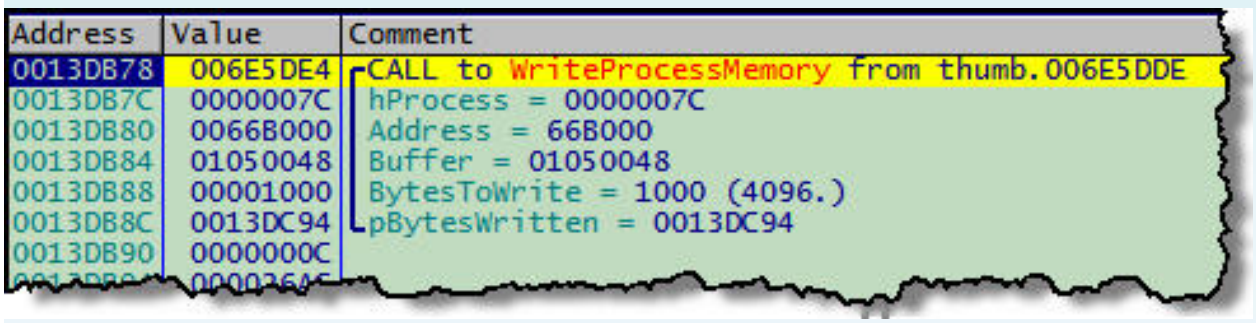
include all of our OEP in it.

_Ok Continue to work, we again collect some more important information is encrypt the call, OEP's

son process. The next section we need to do is detach the process from his father's no.De do this the

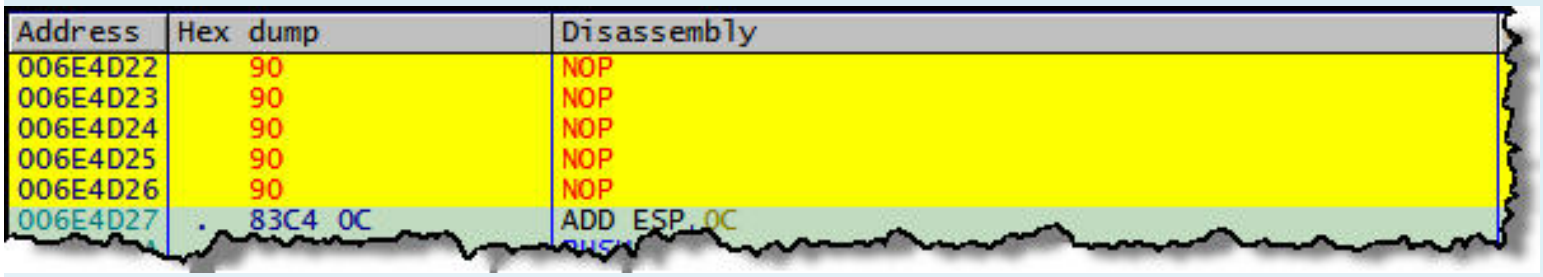
first we must set an infinite loop in OEP's son process. Ok, restart again Olly, BP set at

WriteProcessMemory, press F9 3 times we stopped in preparation for record 1000 bytes:



_Xoa Bp WriteProcessMemory go in, press Ctrl + G and enter the address of the function call is

Encrypt 0x006E4D22. Submit call this function J:



Address	Hex dump	Disassembly
006E4D22	90	NOP
006E4D23	90	NOP
006E4D24	90	NOP
006E4D25	90	NOP
006E4D26	90	NOP
006E4D27	. 83C4 0C	ADD ESP,0C

_Buoc Next infinite loop is placed in the month OEP con.Lam to how we do this, we have a formula

as follows:

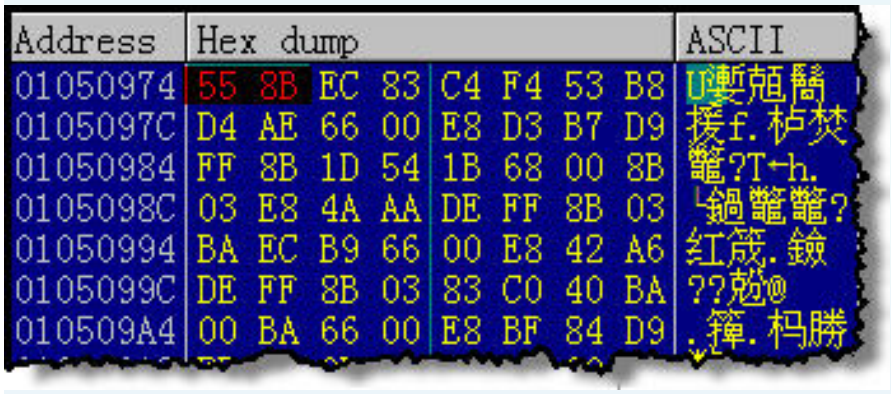
OEP - BASE ZONE = Displacement

66B92C - 66B000 = 92C

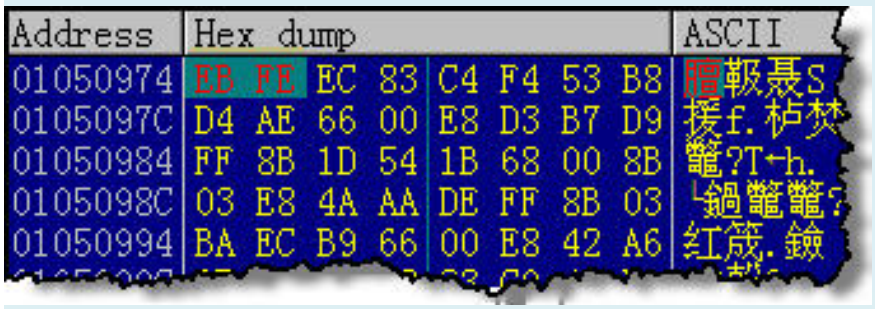
BUFFER ZONE = + displacement of bytes of OEP

1050048 + 92C = 1050974

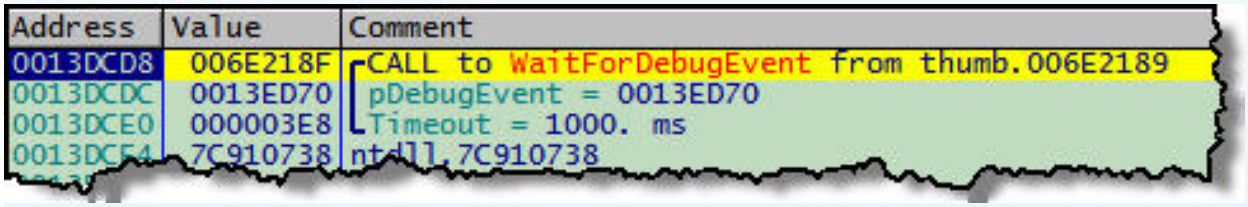
_Chuyen To dump window, press Ctrl + G and enter the address that we have calculated the above:



_Thay 2 bytes with 55 8B EB FE:



_Ok, Followed by BP at WaitForDebugEvent.Nhan set to run F9, Olly will break:



_Follow In dump at 0x13ED70:

_Tai Here we are OEP's son process and the region marked yellow is very important. We're stopping

at WaitForDebugEvent function, until now we submitted the encrypt function, located at EB FE OEP's

son process. Press Ctrl + F9, F8 and then we will come here:

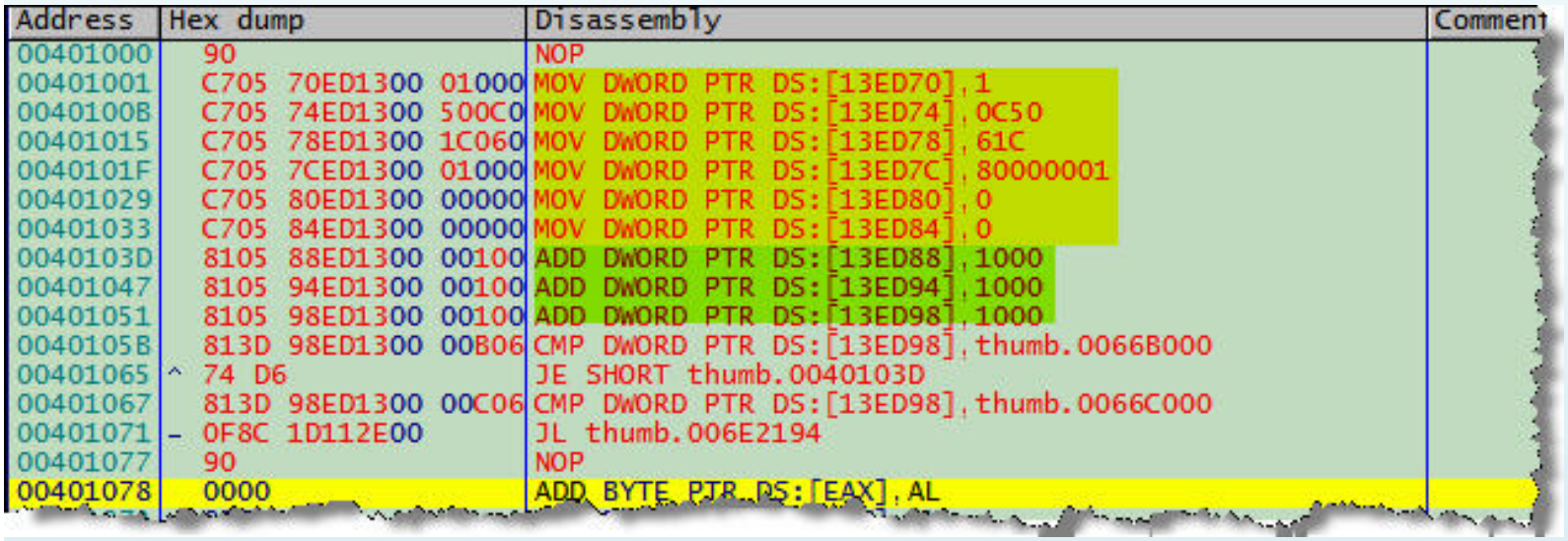
_Bay Time we change E8 03 with 01 00:

3. Create code to patch

_Chung We are stopping me in order TEST EAX, EAX. Space click here to assemble and replace me

in order JMP 00401000. Ok we have been as follows:

_Tiep As we press Ctrl + G and to address 0x401000. Here we will edit the following:

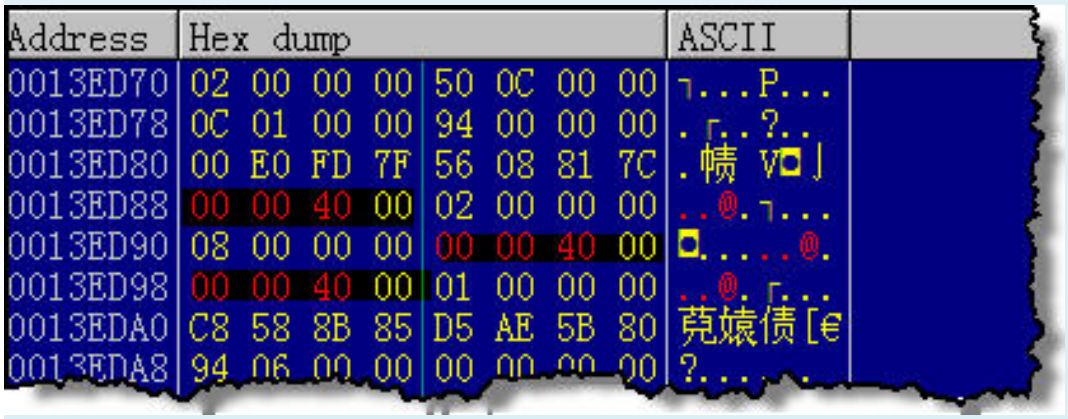


Address	Hex dump	Disassembly	Comment
00401000	90	NOP	
00401001	C705 70ED1300 01000	MOV DWORD PTR DS:[13ED70],1	
0040100B	C705 74ED1300 500C0	MOV DWORD PTR DS:[13ED74],0C50	
00401015	C705 78ED1300 1C060	MOV DWORD PTR DS:[13ED78],61C	
0040101F	C705 7CED1300 01000	MOV DWORD PTR DS:[13ED7C],80000001	
00401029	C705 80ED1300 00000	MOV DWORD PTR DS:[13ED80],0	
00401033	C705 84ED1300 00000	MOV DWORD PTR DS:[13ED84],0	
0040103D	8105 88ED1300 00100	ADD DWORD PTR DS:[13ED88],1000	
00401047	8105 94ED1300 00100	ADD DWORD PTR DS:[13ED94],1000	
00401051	8105 98ED1300 00100	ADD DWORD PTR DS:[13ED98],1000	
0040105B	813D 98ED1300 00B06	CMP DWORD PTR DS:[13ED98],thumb.0066B000	
00401065	^ 74 D6	JE SHORT thumb.0040103D	
00401067	813D 98ED1300 00C06	CMP DWORD PTR DS:[13ED98],thumb.0066C000	
00401071	- 0F8C 1D112E00	JL thumb.006E2194	
00401077	90	NOP	
00401078	0000	ADD BYTE PTR DS:[EAX],AL	

_Ok, Prepared to run the program L but before we run to set a bp at 0x401077 and put in Bp

WaitForDebugEvent go. At the same time we also need to correct the value in 3 OEP address. We

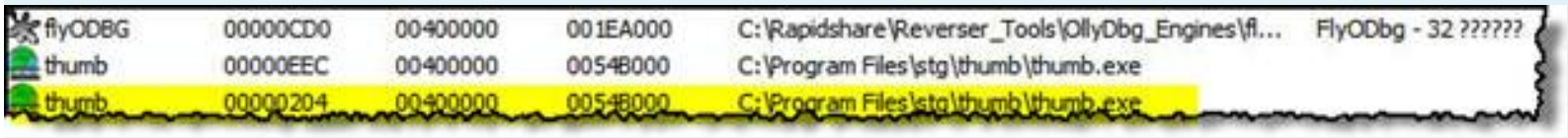
revised as follows:



_Bay Hours, the press F9 to run only passable, wait a few seconds we will break in the address that we

have set HE bp above:

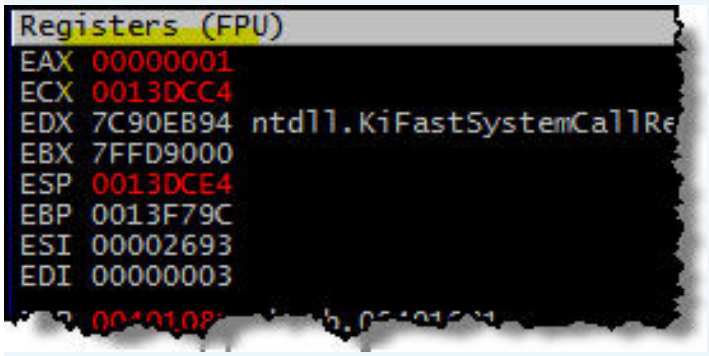
Task Explorer _Mo up will see two process, the process is under process J child.



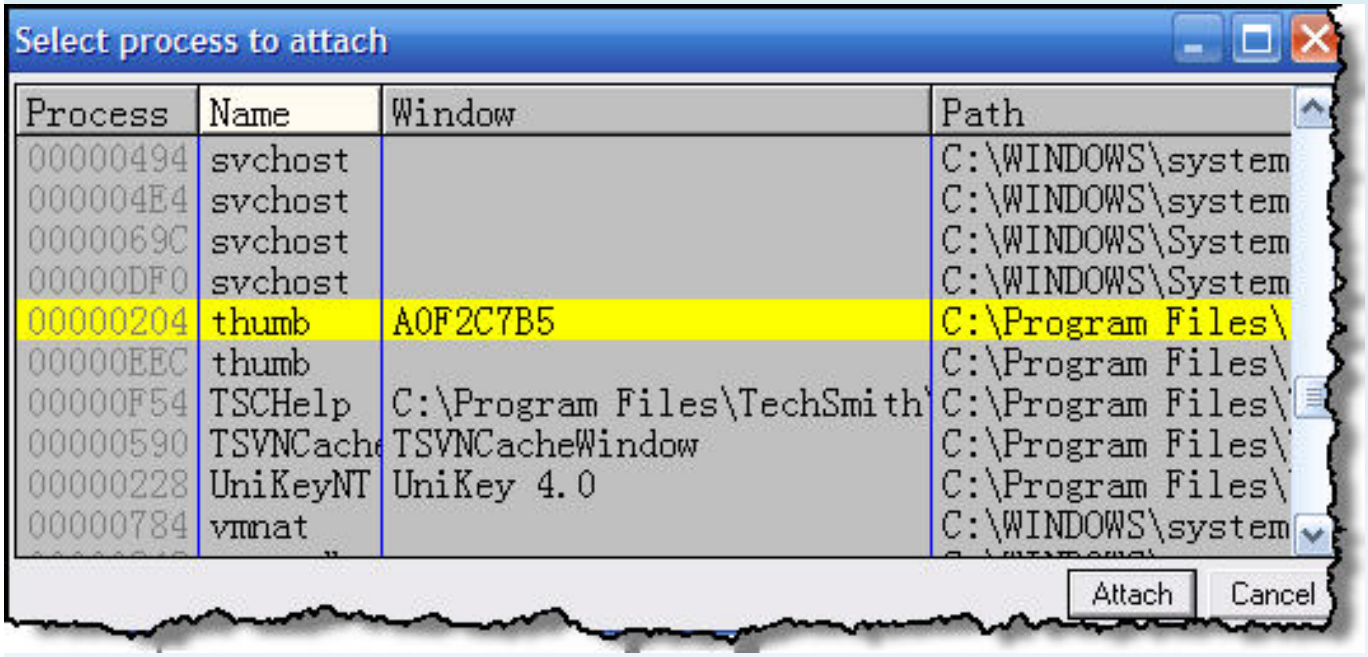
Olly _Quay again, removing HE bp and 2 more on order follows:

_Nhan F8 to trace the two commands, the last trace function API DebugActiveProcessStop we

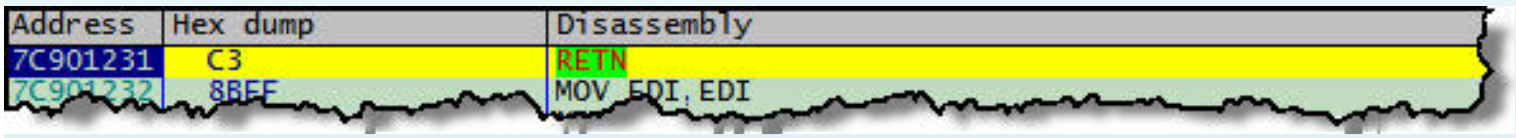
recorded the results of EAX is 1. This means that we have made successful J:



There _Dung Olly current we are working now to open a new and Olly Attach child process to:



_Chung We will stop here, in a different modules:



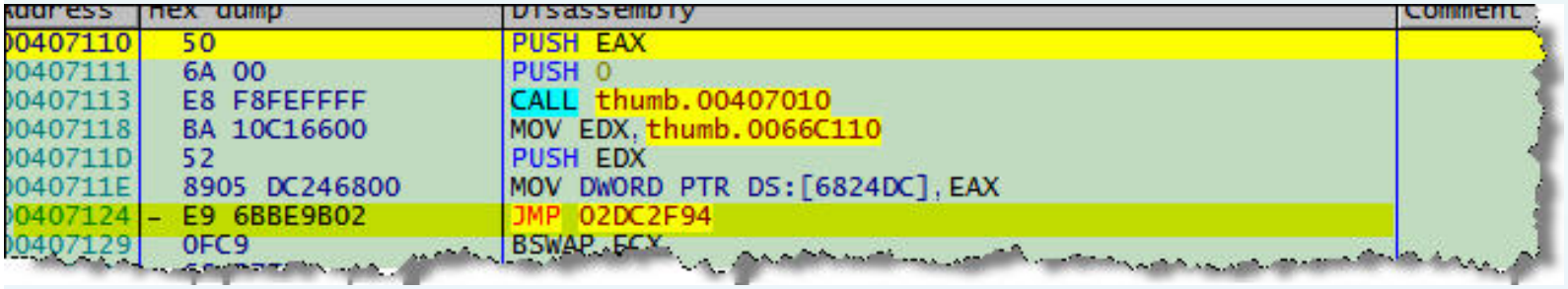
_Nhan F9 to run and hit the F12 to pause the program again. We will be here in Olly, tolerable in

infinite loop:

_Chung We stopped at the OEP, it's about values instead of the original EB FE as above:

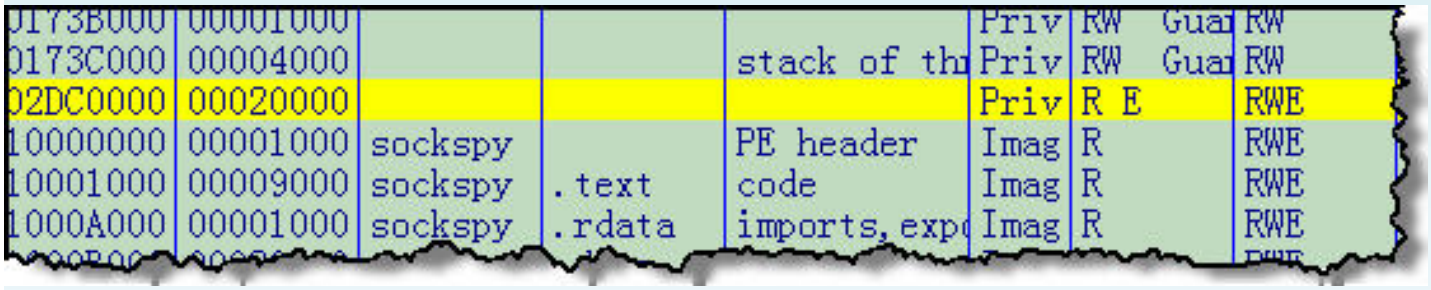
4th Search IAT

_Buoc Next we are going to find out IAT.De at the OEP we see a function call. Move the cursor to the function and press Enter to Follow the functions that we will go to here:



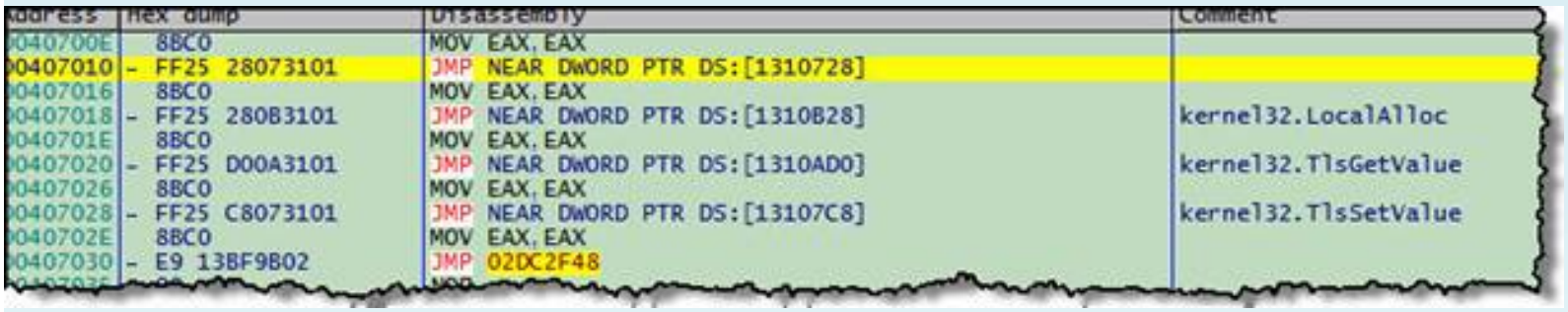
_Lenh Dance are the highlight of the region's SPLICES also called CODE SPLICING.Nhan Alt + M

to open the Memory Map window, it starts from 0x2DC0000 and length is 20,000:



_Tiep Continue to search IAT, we're in first Call function and the function we call this function to find

a different call. Follow the function call that we will see the following:



_Day Is part of the IAT through indirect jump beyond the external memory area of exe files, this is

IAT Scramble format. We will find places to start end of IAT table, the final results we have are as

follows:

IAT Start: 01310048 7C80E9EC kernel32.FileTimeToSystemTime

IAT End: 01310B64 01137C70

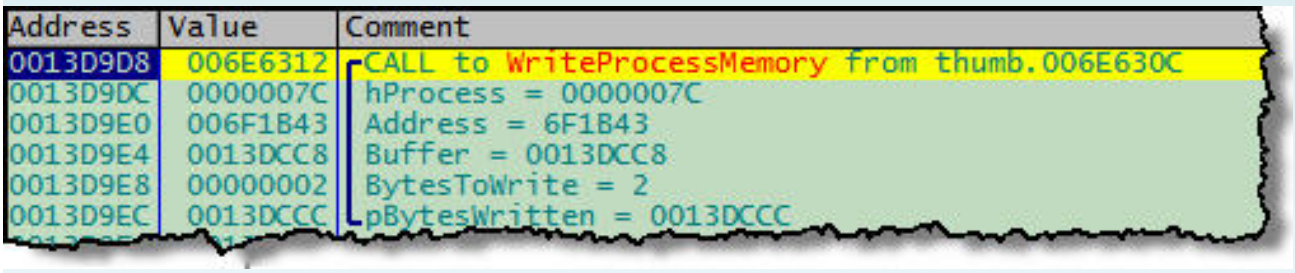
Length: B20

_De Repair the IAT we must perform in child process when it stopped at the EP. To do this we use a

script by fly is ***Armadillo V4.0-V4.4.Standard.Protection.osc.***

_De Do this, we re-open a further Olly and load the original exe files not Attach from the process are

currently co.Sau place at a BP WriteProcessMemory and press F9 to run:



_Follow At Buffer:

0013DCC8 **EB FE** 00 00 02 00 00 00 eþ .....

_Tiep To press F9 to run and follow the buffer address:

0071C384 **55 8B** 00 00 00 00 00 00 U <.....

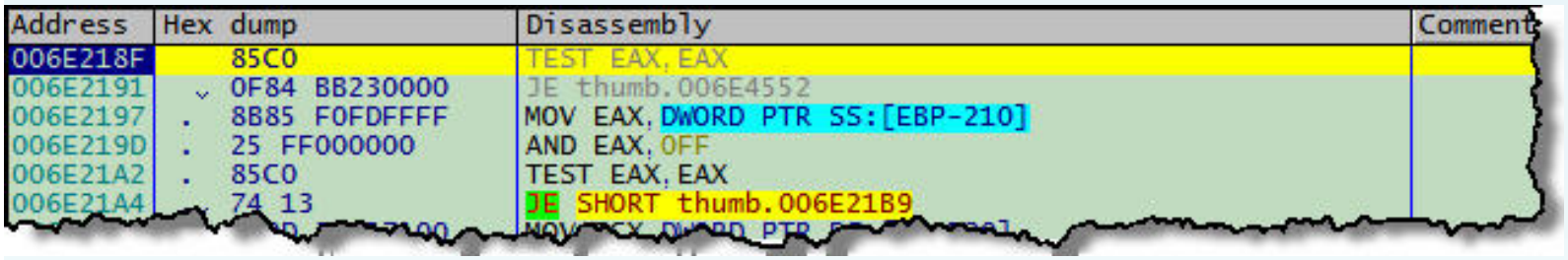
EB FE _Oh has been clear and instead of 2 bytes of the original dau.Vay we change back into EB FE:

0071C384 **EB FE** 00 00 00 00 00 00 eþ .....

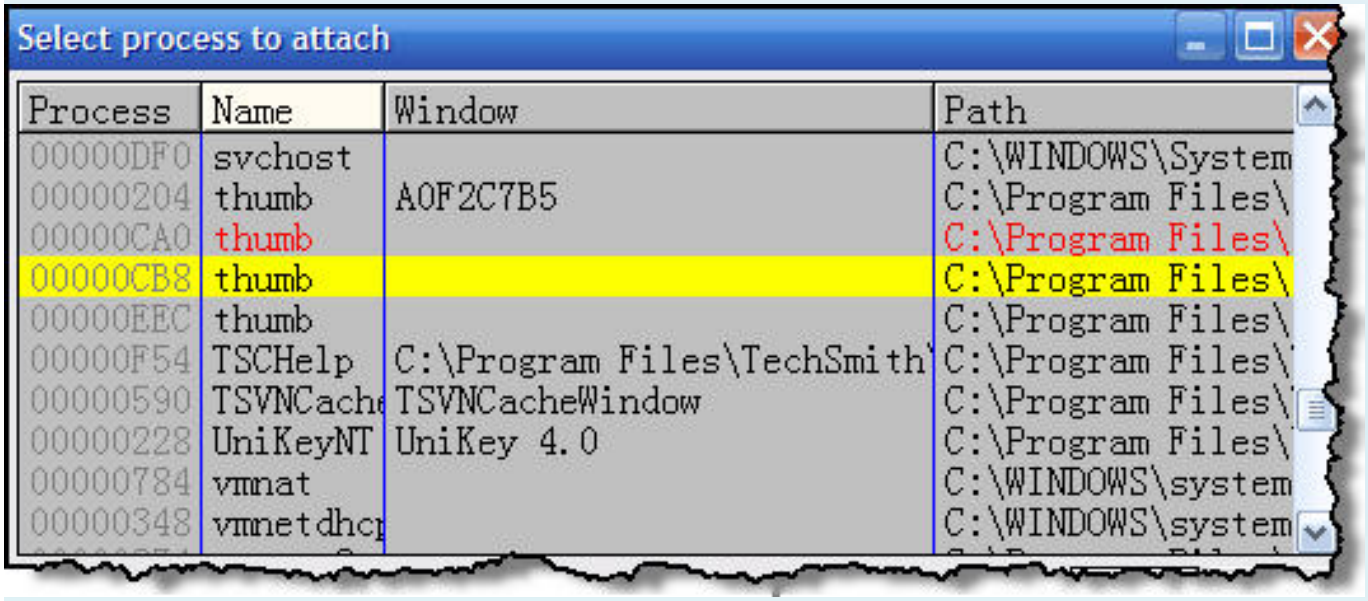
_Bay Hours we put in BP WriteProcessMemory go, then press F9 to run and open a window Memory

map, and set at a BP section. Text. First we will stop here:

_Tiep To press F9 to run again and set a BP is the same as above, we will stop here in Olly:



_Ta Find PID of child process, do not ask to be confusion:



_Ok We have 0CB8 PID is, in our Olly edit as follows:

_Nhan F8 to trace the two commands and remember to observe the results of EAX, if it returns the

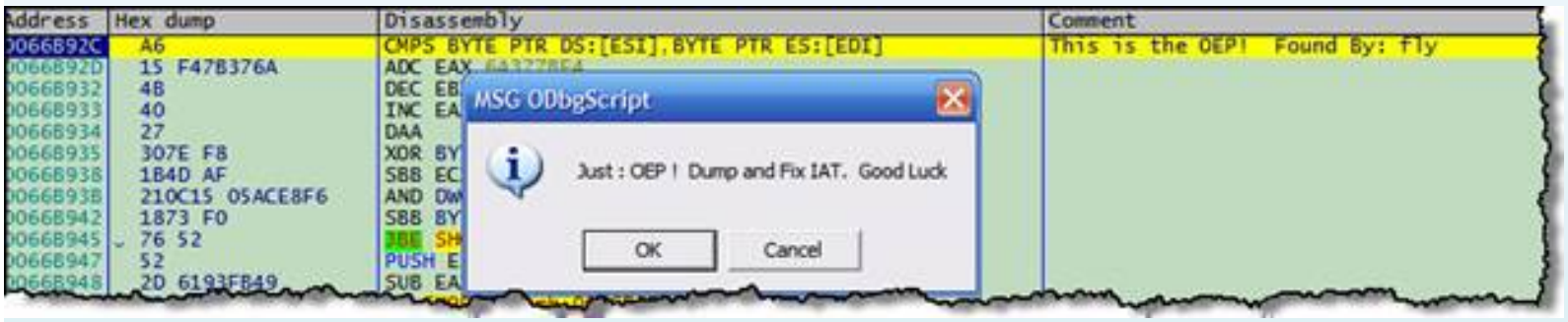
value 1 is ok, we have done right then, but it does not do it again ặc ặc L.

_Tiep To a more open and more Olly Attach this new child process vao.Nhan F9 to run and press F12

to pause the program. I will here in Olly:

_Thay The EB FE 8B to 55, then Plugins ODBScript used to run the script that I have said above.

Results last one is as follows:



_Chung We stopped at OEP's Child process, though the code has been encrypt but not important. tasks

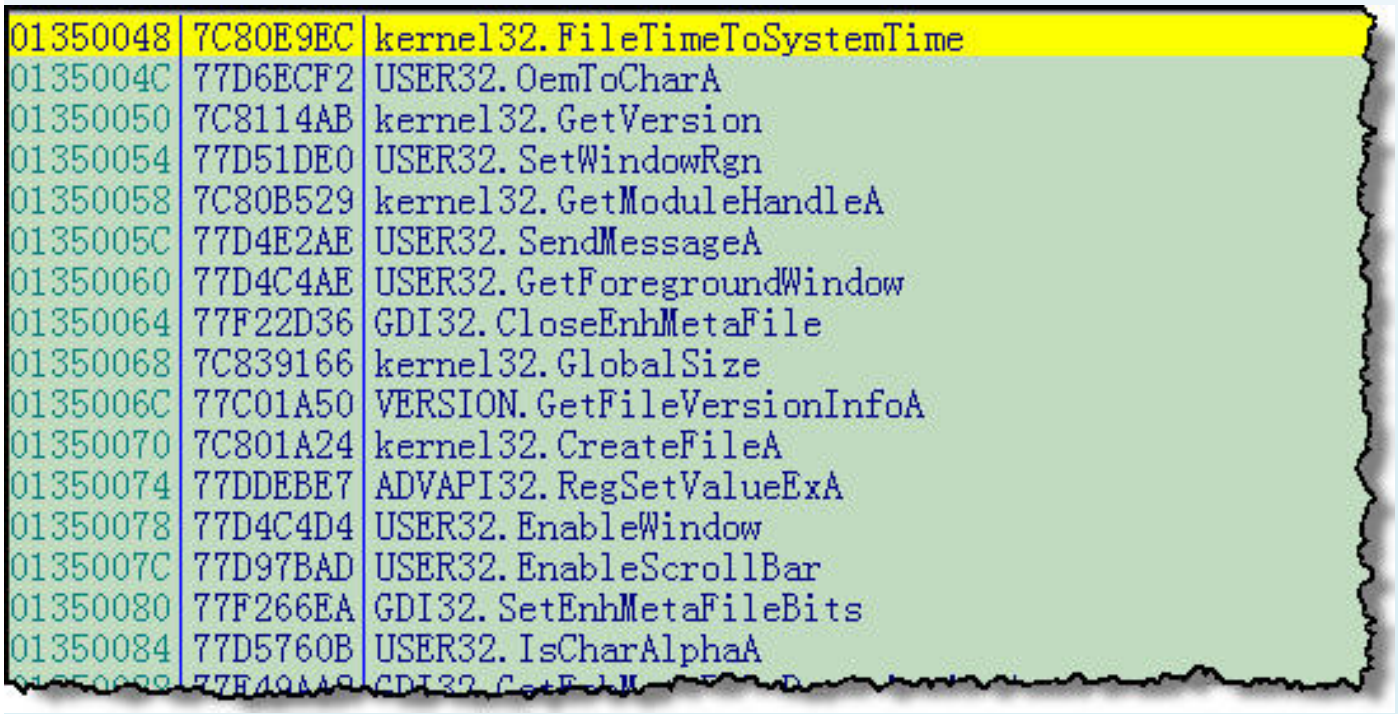
we are looking for IAT.

_De Find exactly IAT, we open the window Memory Map, and to the top. Then press Ctrl + B to

perform the search function 7C80E9EC kernel32.FileTimeToSystemTime because this is the start of

the function IAT. (Remember to find the address against the EC E9 80 7C. Results first is not correct,

press Next Ctrl + L to find and we are as follows:

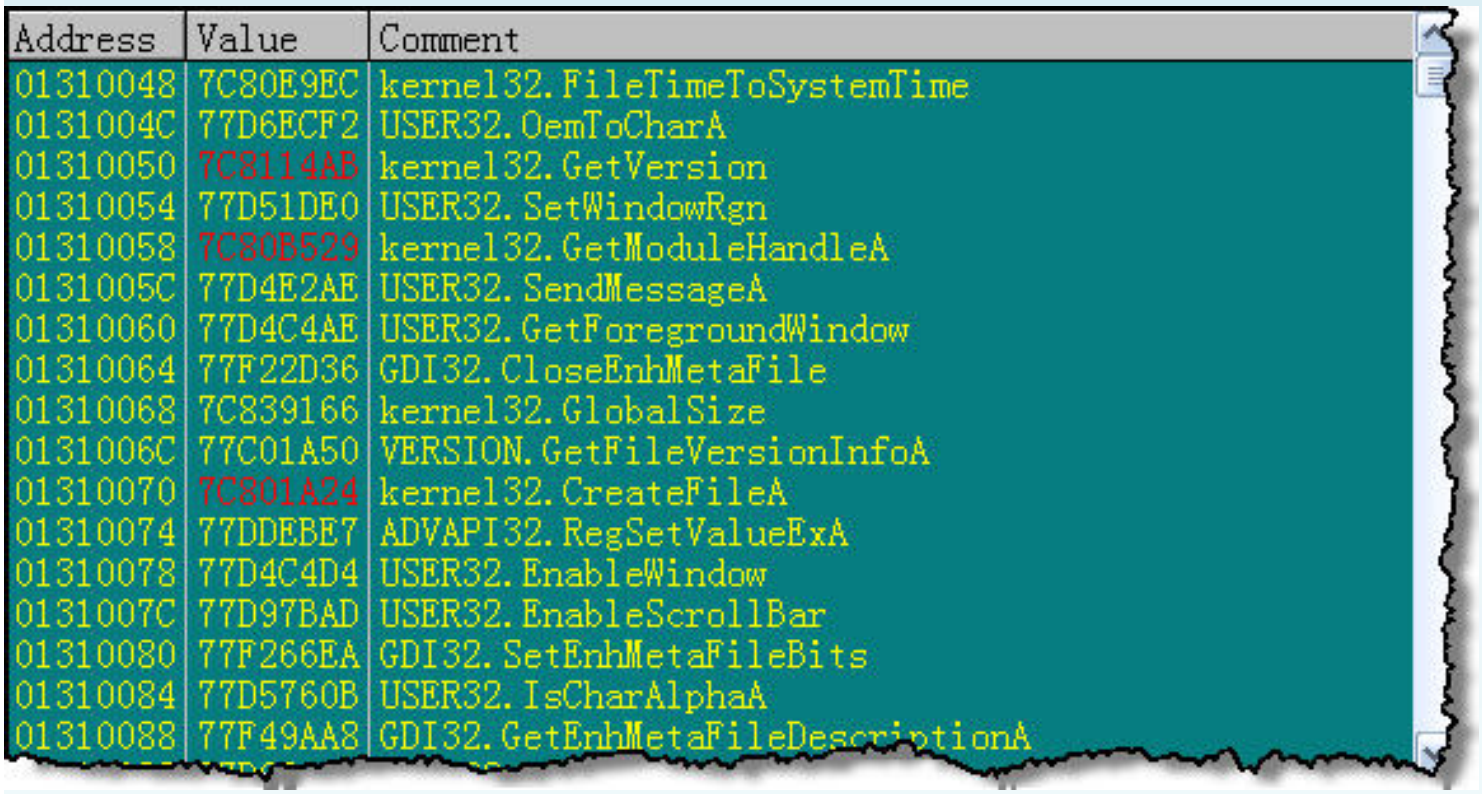


01350048	7C80E9EC	kernel32.FileTimeToSystemTime
0135004C	77D6ECF2	USER32.OemToCharA
01350050	7C8114AB	kernel32.GetVersion
01350054	77D51DE0	USER32.SetWindowRgn
01350058	7C80B529	kernel32.GetModuleHandleA
0135005C	77D4E2AE	USER32.SendMessageA
01350060	77D4C4AE	USER32.GetForegroundWindow
01350064	77F22D36	GDI32.CloseEnhMetaFile
01350068	7C839166	kernel32.GlobalSize
0135006C	77C01A50	VERSION.GetFileVersionInfoA
01350070	7C801A24	kernel32.CreateFileA
01350074	77DDEBE7	ADVAPI32.RegSetValueExA
01350078	77D4C4D4	USER32.EnableWindow
0135007C	77D97BAD	USER32.EnableScrollBar
01350080	77F266EA	GDI32.SetEnhMetaFileBits
01350084	77D5760B	USER32.IsCharAlphaA

_Dem Results compare with what we have been on, we concluded this is IAT Table for our ta.Thuc

Copy from the Binary table in the region to which we need to fix IAT table above, we have been as

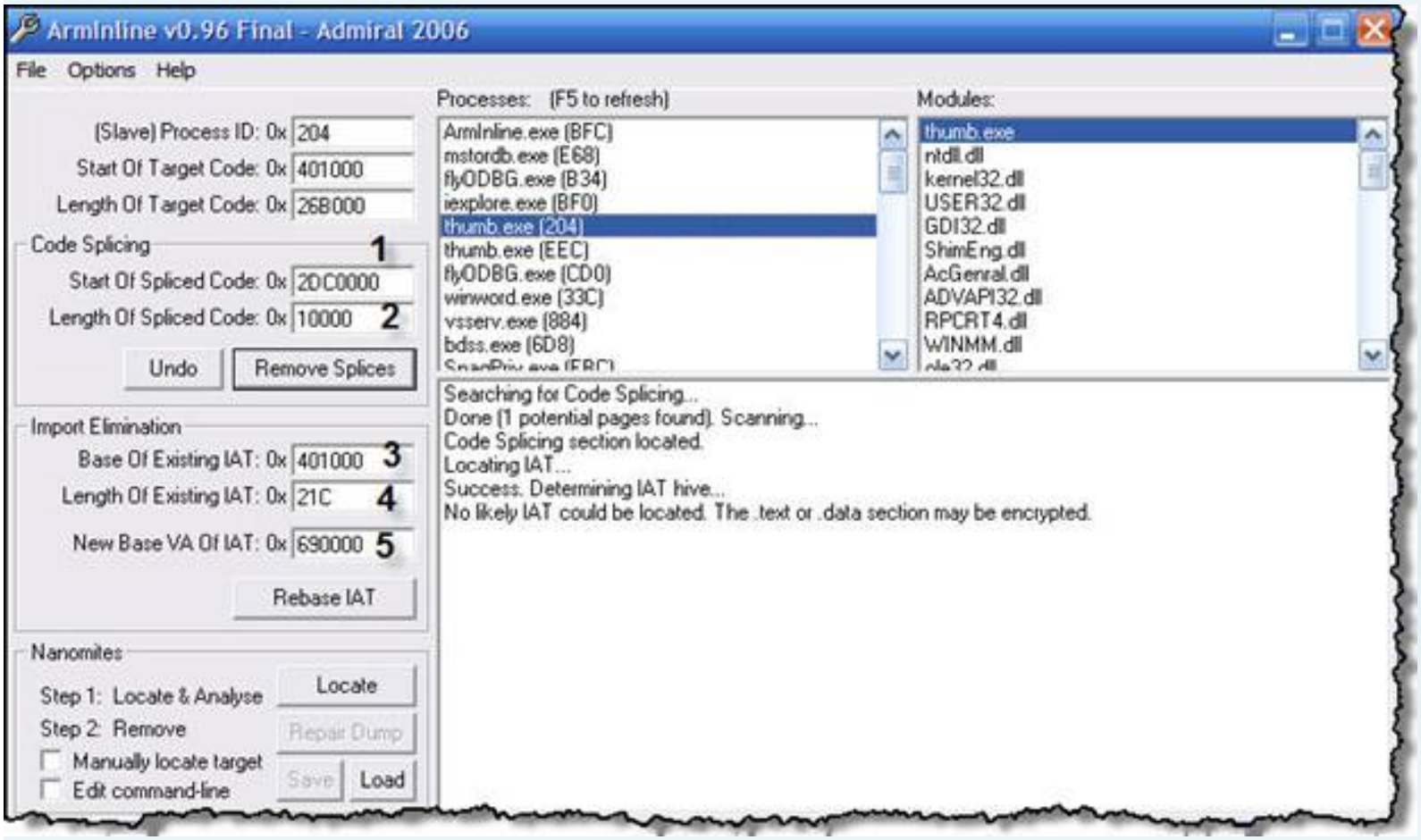
follows:



Address	Value	Comment
01310048	7C80E9EC	kernel32.FileTimeToSystemTime
0131004C	77D6ECF2	USER32.OemToCharA
01310050	7C8114AB	kernel32.GetVersion
01310054	77D51DE0	USER32.SetWindowRgn
01310058	7C80B529	kernel32.GetModuleHandleA
0131005C	77D4E2AE	USER32.SendMessageA
01310060	77D4C4AE	USER32.GetForegroundWindow
01310064	77F22D36	GDI32.CloseEnhMetaFile
01310068	7C839166	kernel32.GlobalSize
0131006C	77C01A50	VERSION.GetFileVersionInfoA
01310070	7C801A24	kernel32.CreateFileA
01310074	77DDEBE7	ADVAPI32.RegSetValueExA
01310078	77D4C4D4	USER32.EnableWindow
0131007C	77D97BAD	USER32.EnableScrollBar
01310080	77F266EA	GDI32.SetEnhMetaFileBits
01310084	77D5760B	USER32.IsCharAlphaA
01310088	77F49AA8	GDI32.GetEnhMetaFileDescriptionA

_Vay The IAT is completed, we can close the new open Olly was then (remember retain Olly 2 we make the first).

_Viec Need to do next is to remove Splicing Code, to the region IAT. To do this we use a tool that is famous ArmInline. Select the child process in the list of programs that process found



1. The address where the start of the region SPLICES.

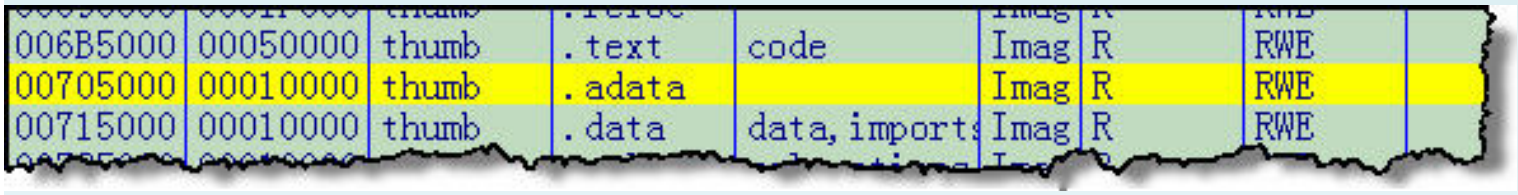
2. As the length of the regional Code Splicing.

3. As the starting area of child IAT process.

4. The length of the IAT.

5. Is where we decided to set the IAT.

_Chung We will find areas to set IAT Table, open the memory map and select the following section:



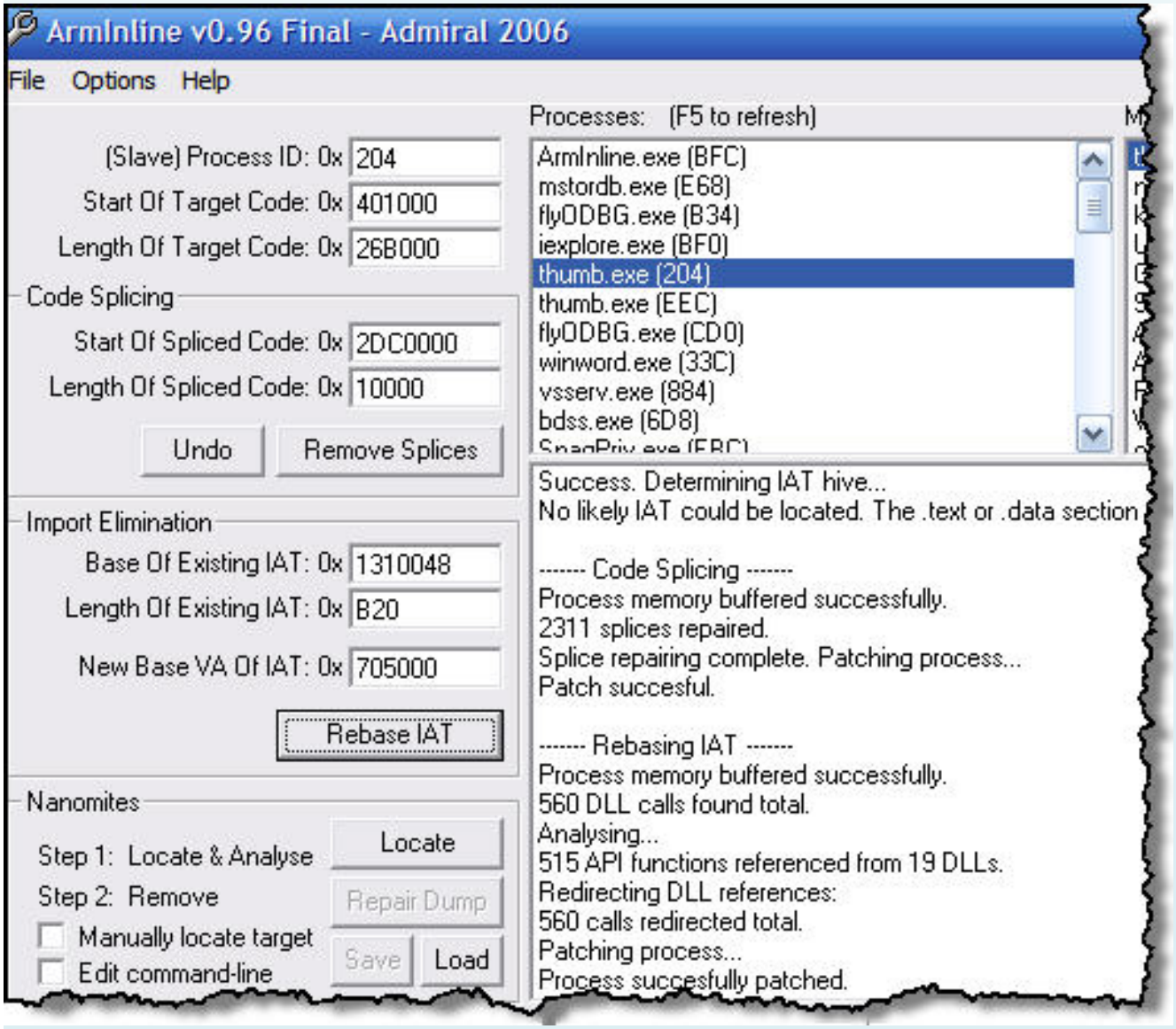
006B5000	00050000	thumb	.text	code	Imag	R	RWE	
00705000	00010000	thumb	.adata		Imag	R	RWE	
00715000	00010000	thumb	.data	data, imports	Imag	R	RWE	

_Day An empty section and the length of 10,000, is very suitable place for us to set IAT.

_Truoc We remove the code splicing:

```
------- Code Splicing -------
Process memory buffered successfully.
2311 splices repaired.
Splice repairing complete. Patching process...
Patch succesful.
```

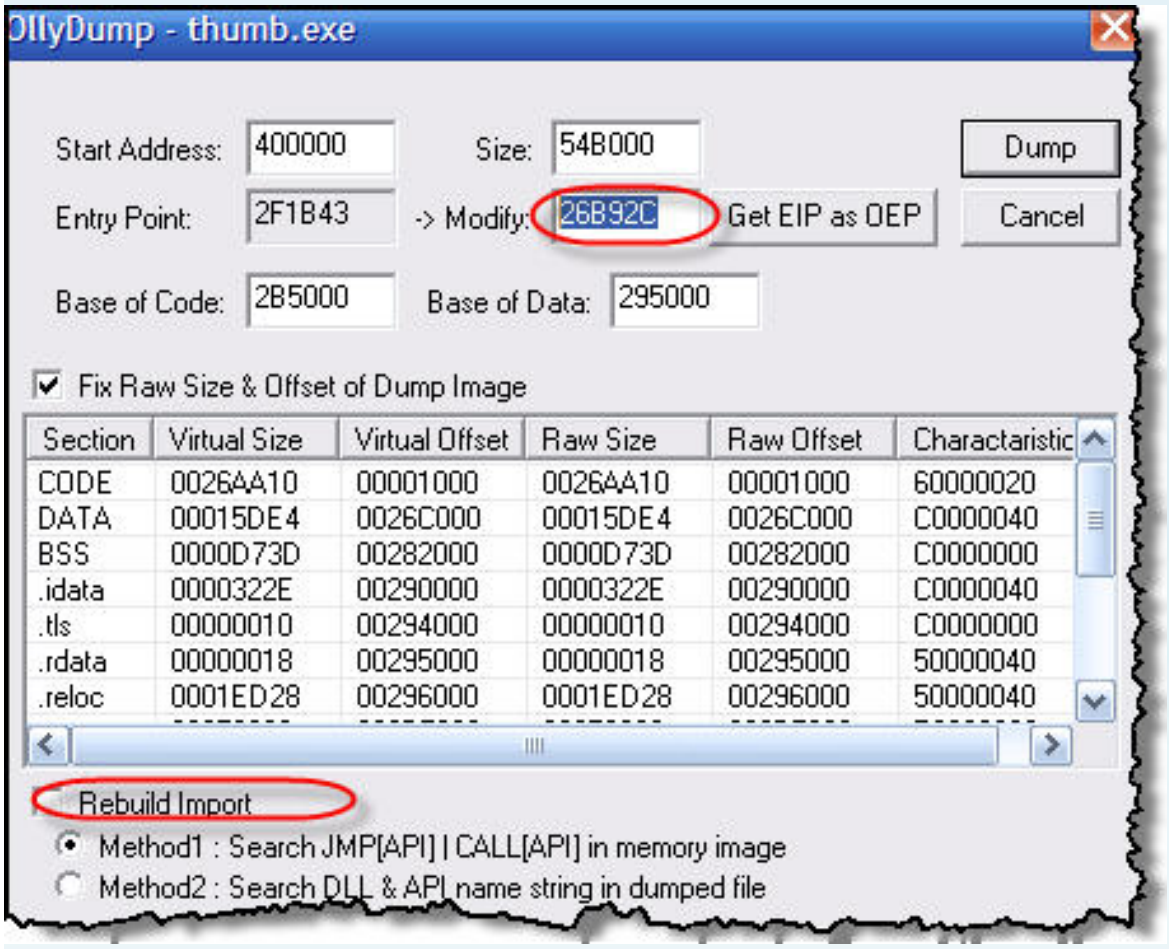
Rebase _Tiep by the IAT:



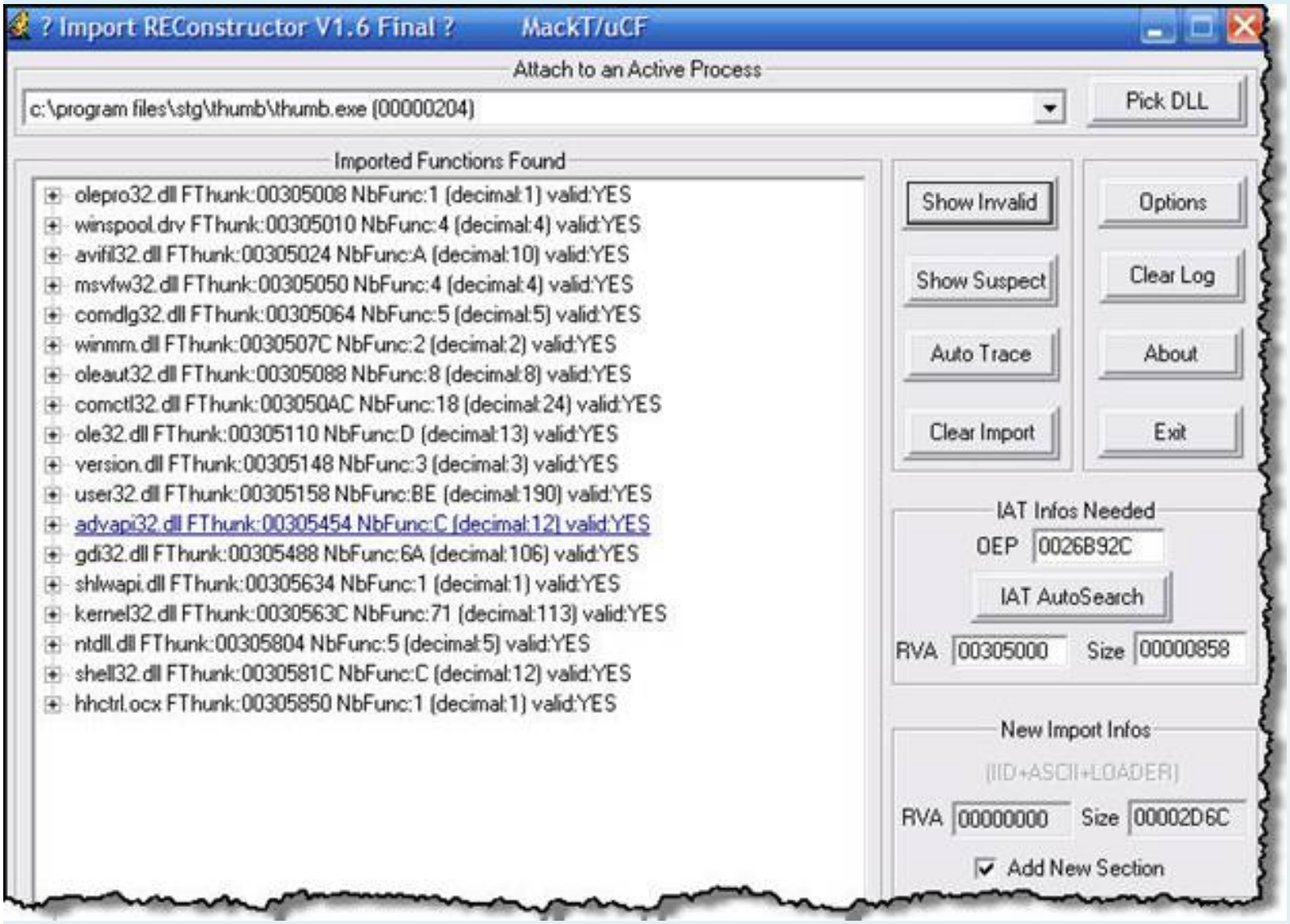
_Kiem To see the correct one was found as follows:

_Hoan All accurate! Next conduct dump file, but before you dump it will copy the PE Headers for

child process. Then use the dump to dump Olly target:

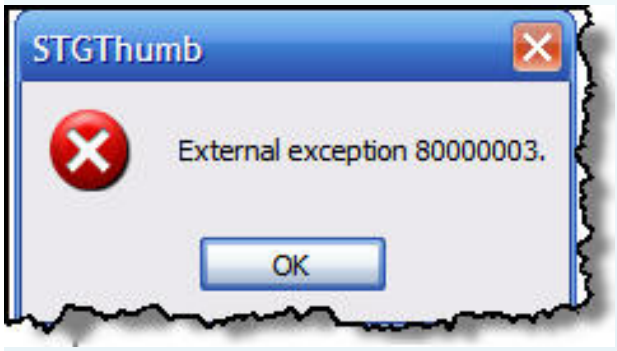


_Tien To rebuild the IAT, remember to select the right child in the process list processes:



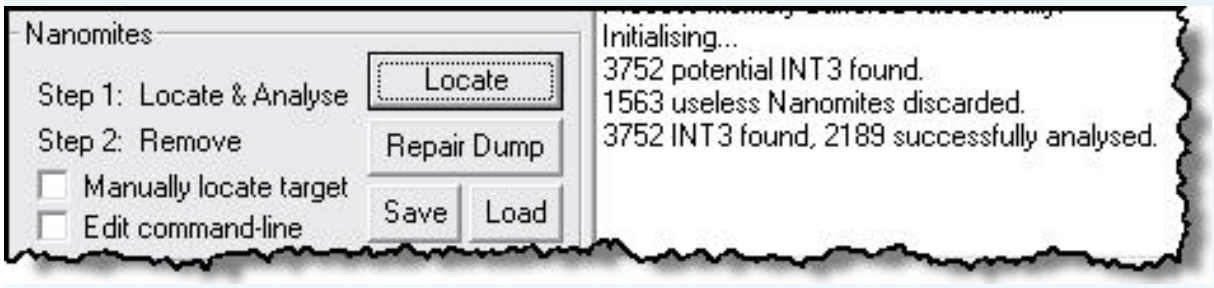
_Cut Thunks and fix the IAT has dump.Chay file file has to fix IAT test we received the following

error message:

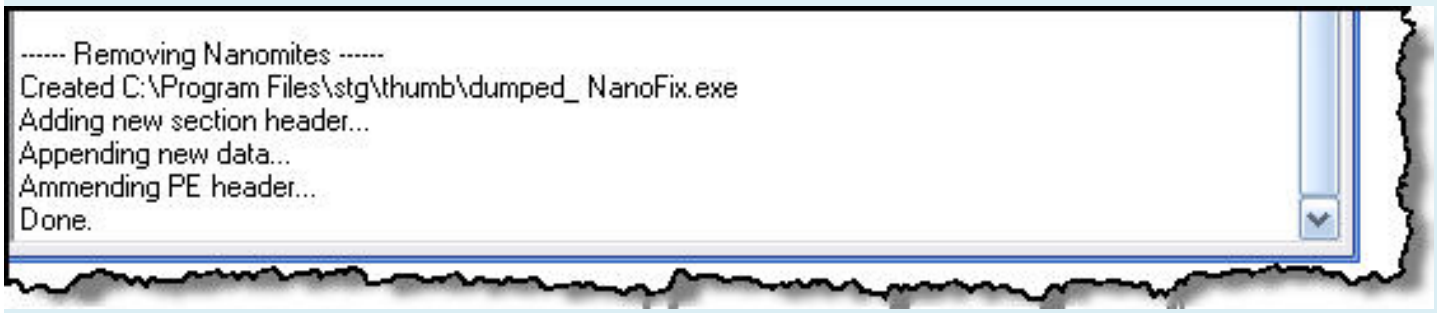


Day Are signs of Nanomites. Olly Open a new file dumped.exe load. Then in the process of

selecting ArmInline dumped_.exe. Click locate and select the original file.



Repair _Cuoi select the dump:



_Test Try to fix the file has Nanomites .... oh works fine!

_Phu Has finally done! J

hacnho's tutorials # 16

Guide to unpack ASProtect 1:23 RC 4
(Support ver ASProtect 1:23 RC4 - 1.3.08.24, RC4 Registered ASProtect 1:23)

I. Introduction:

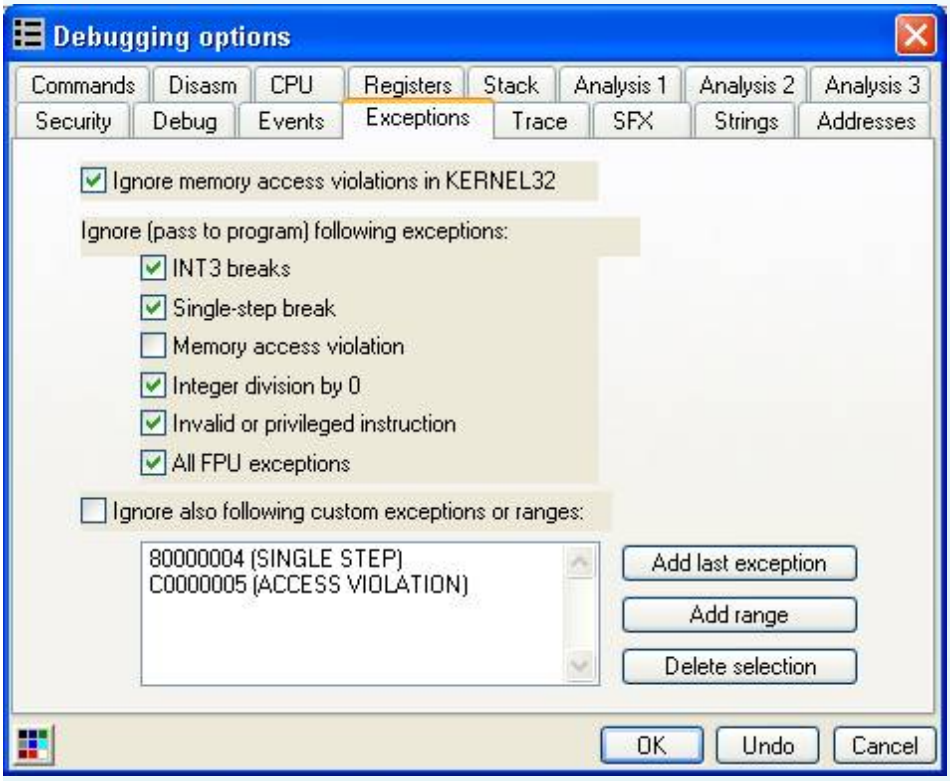
There are many on the NET tut and methods to unpack two ver this ASProtect. But reading to read the chả a tut do as I pleased both. Now write this as I tut is understandable (for bags) best.

II. Tools:

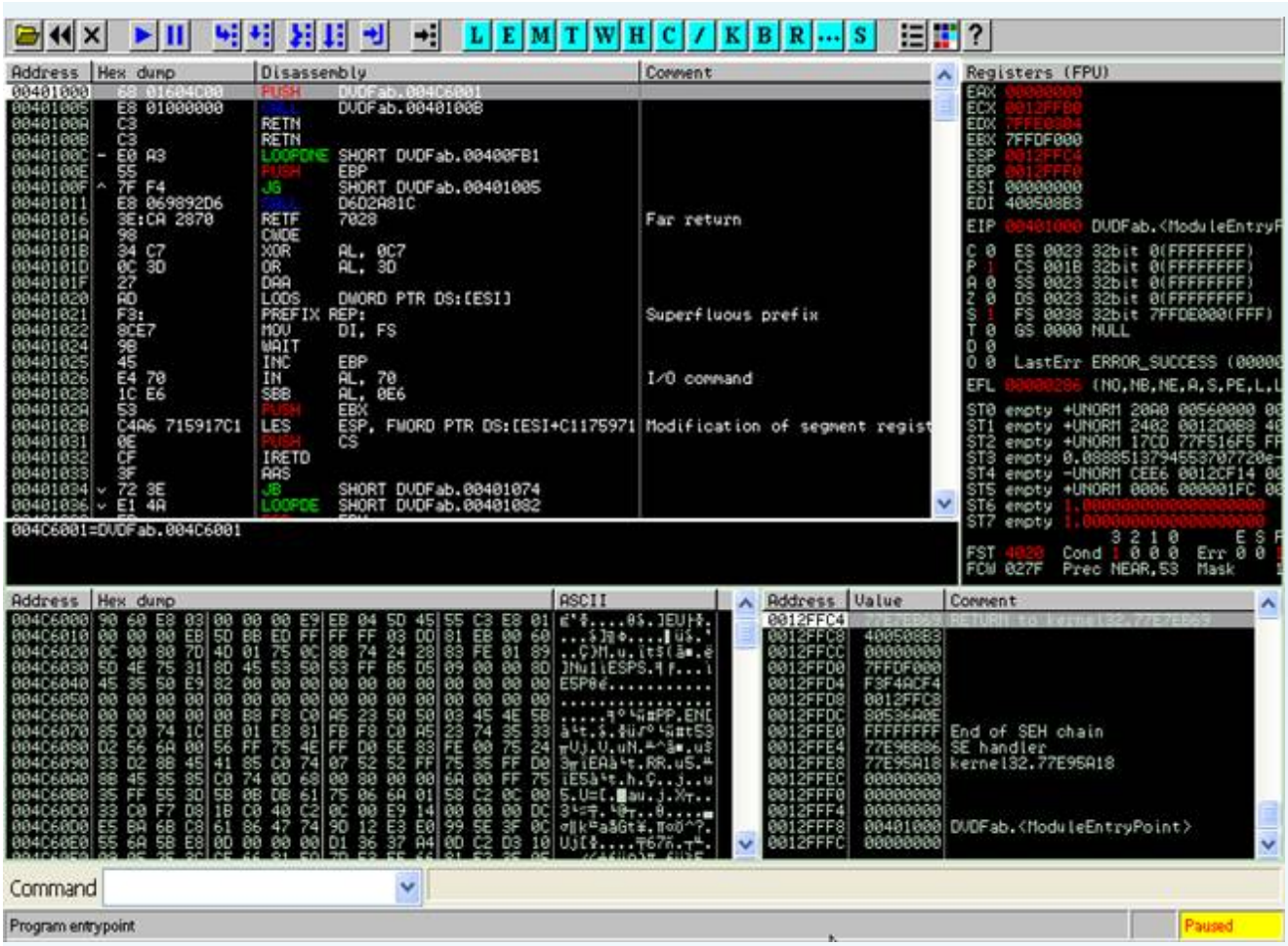
1:10 Final OllyDBG with OllyDump, Hide 1.2 debugger, Command bar 3.1, 0.92 PeiD, Import REConstructor 1.6 plugin with Final ASPR_1.23-ImpREC_Plugin.dll

III. Objective: DVDFab v2.0 (Case 45 bytes).

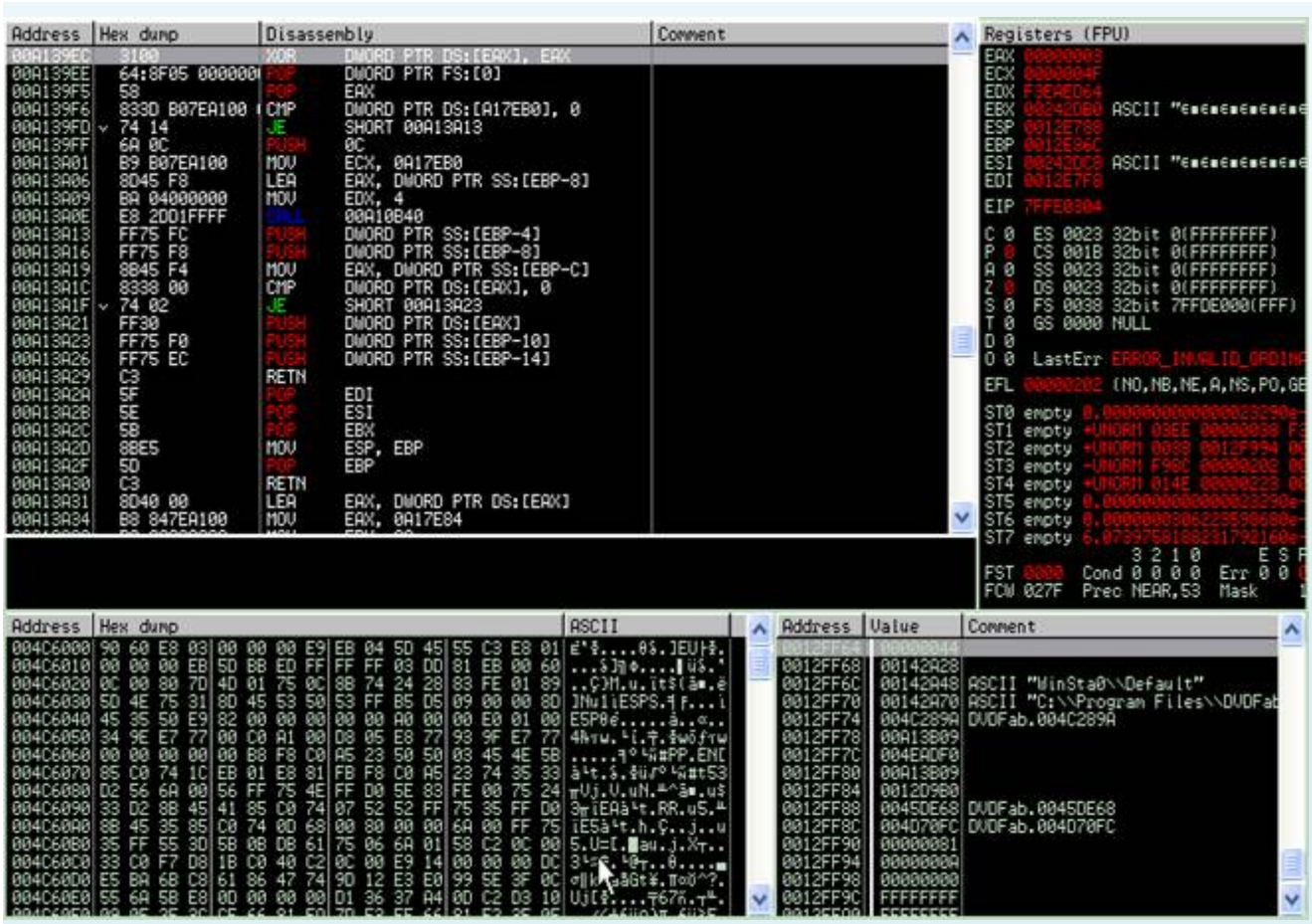
-Step 1: Edit Option Exception by Olly as follows:



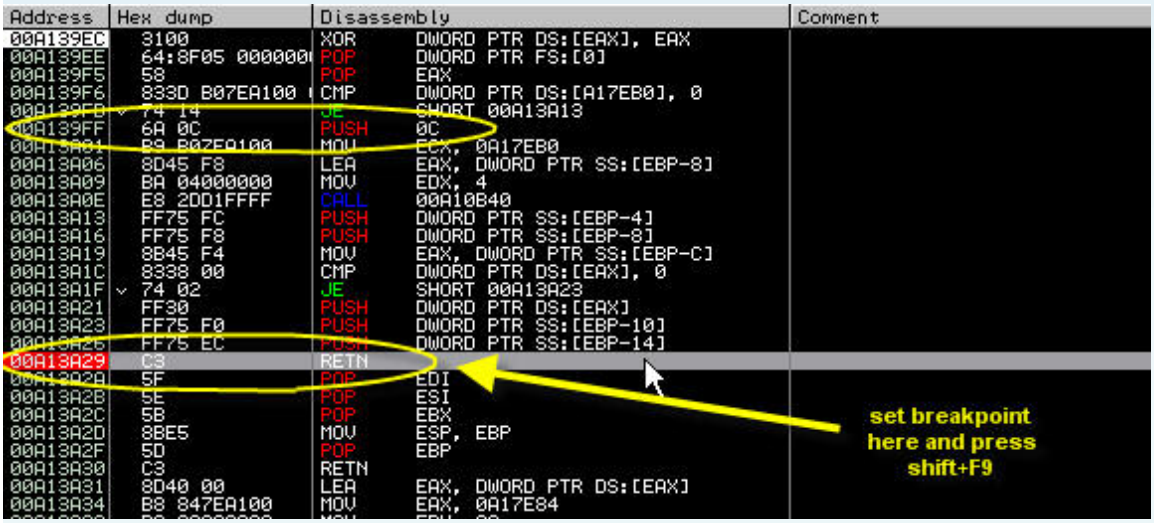
-Step 2: Load up DVDFab.exe Olly.



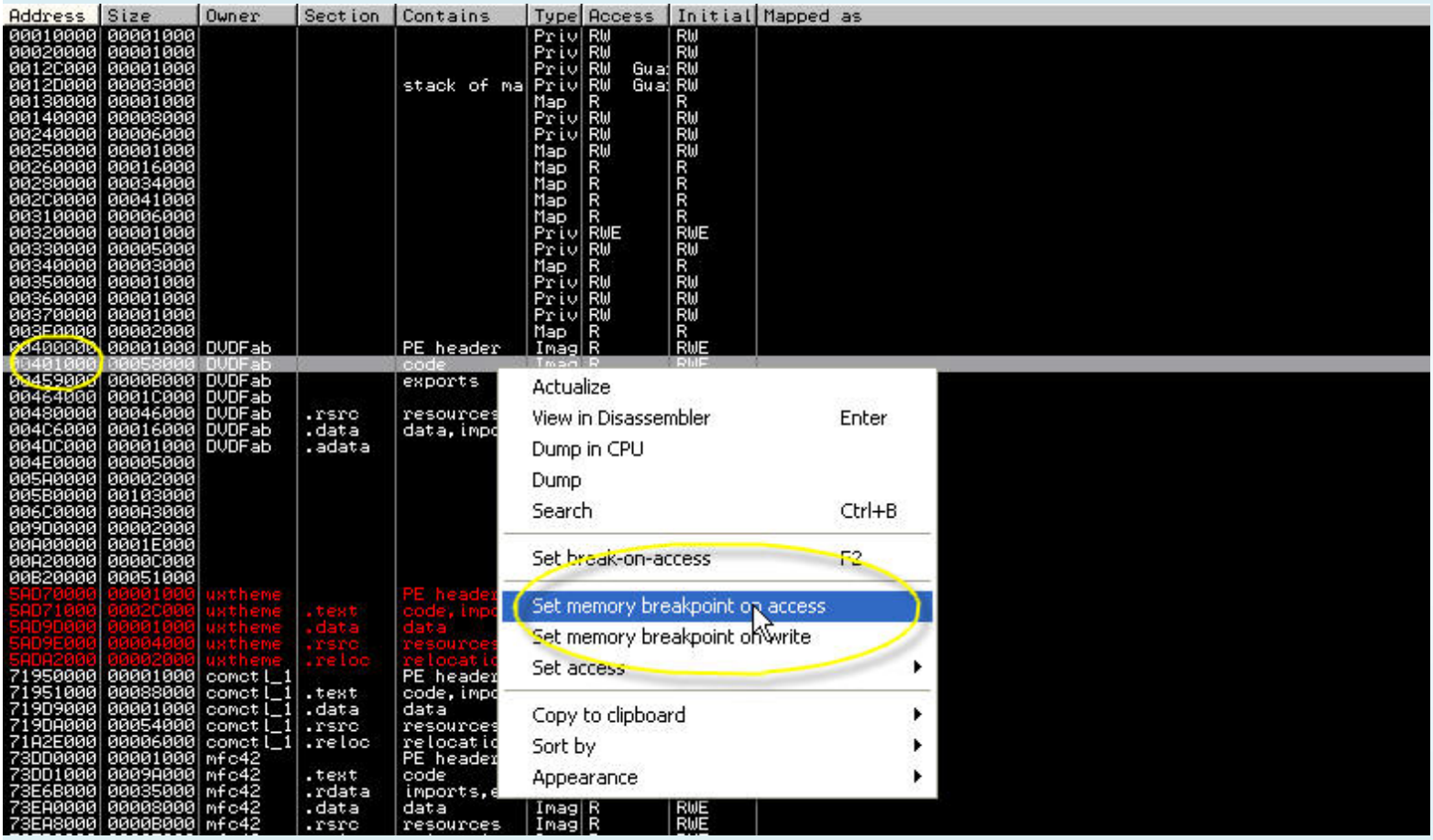
-Step 3: Press Shift + F9 (by pass exeception) 26 times, you will go to last exception. Click again to run the program completely.



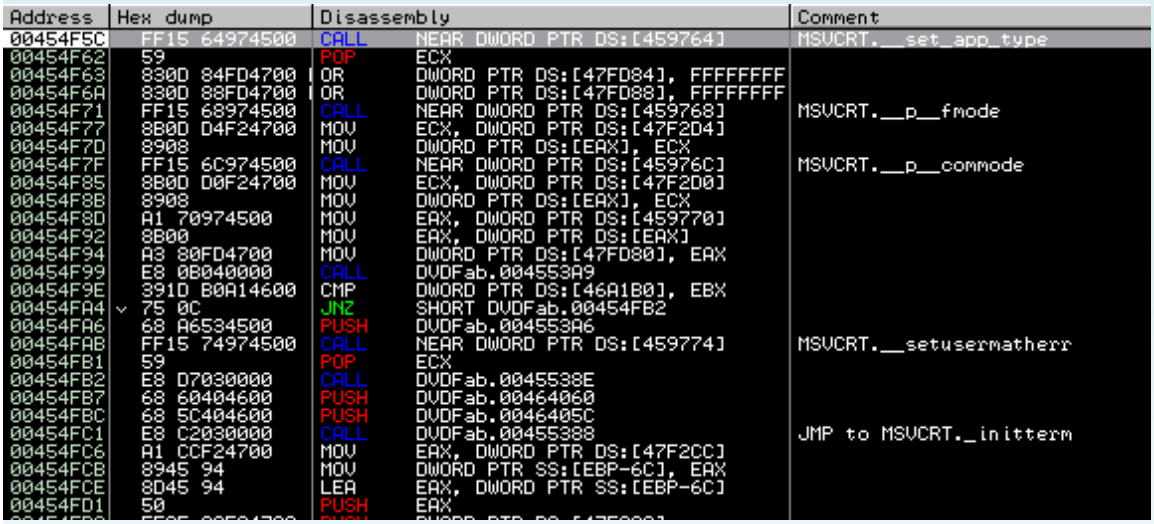
-Step 4: Set breakpoint in the RETN and press Shift + F9 as drawings:



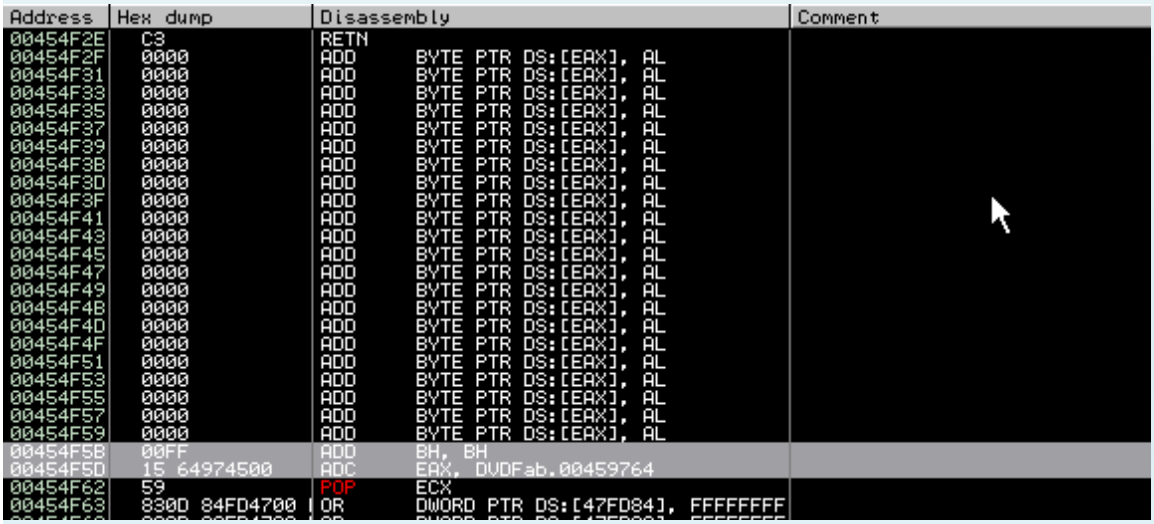
-Step 5: Then press Alt + M to the memory map, select the code section and set mem breakpoint like:



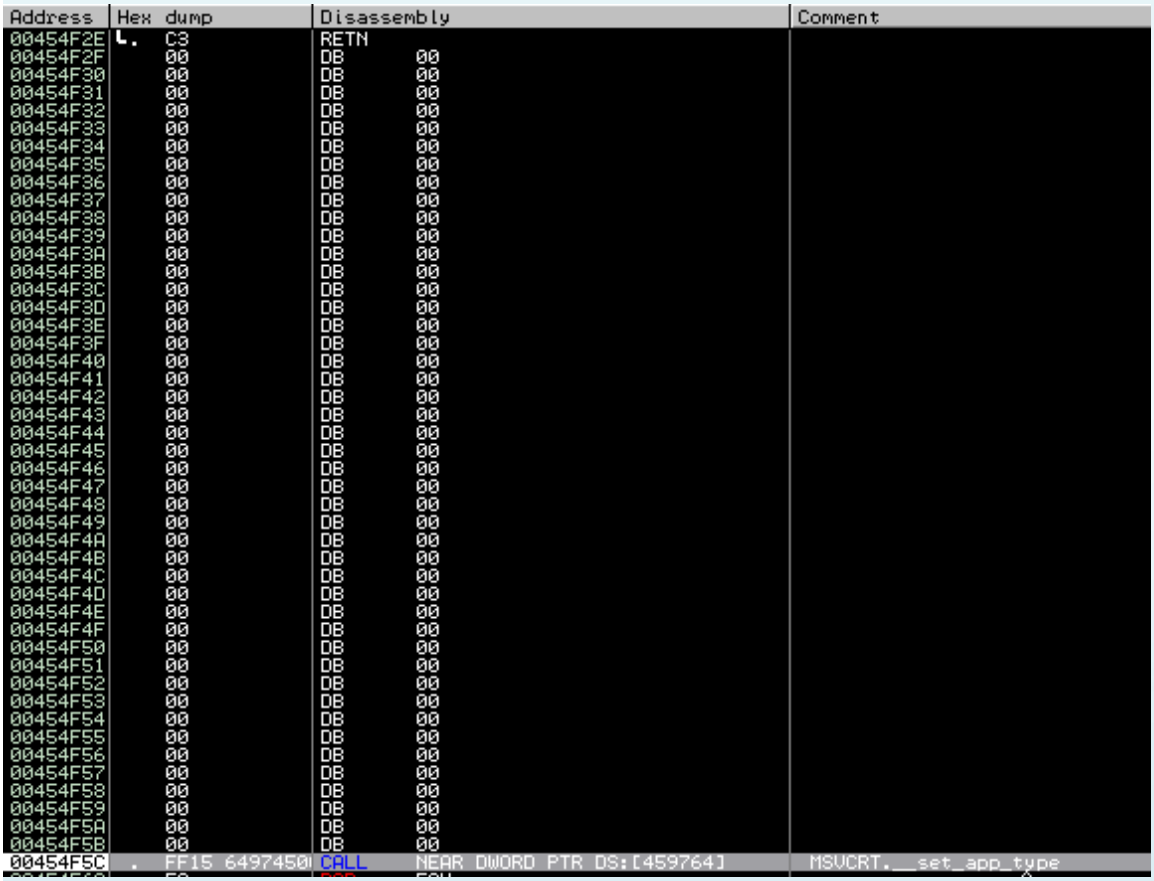
-Step 6: Press Ctrl + F11 to trace over. Wait Olly trace completed, you will come:



Step-7: scroll mouse over some line, you'll see the code form 00.



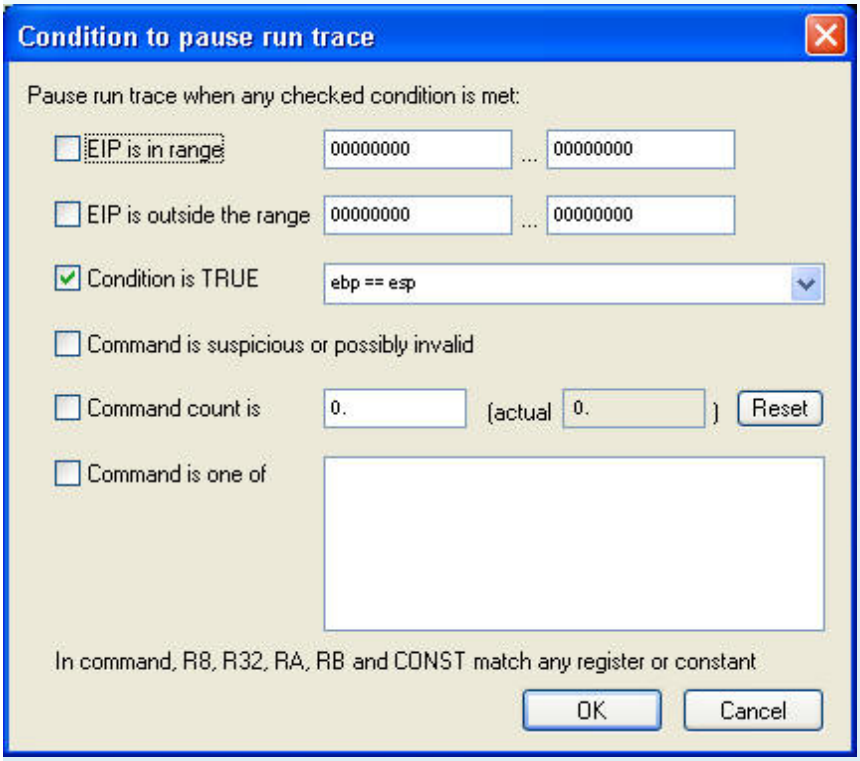
-Step 8: press Ctrl + A to re-analyze:



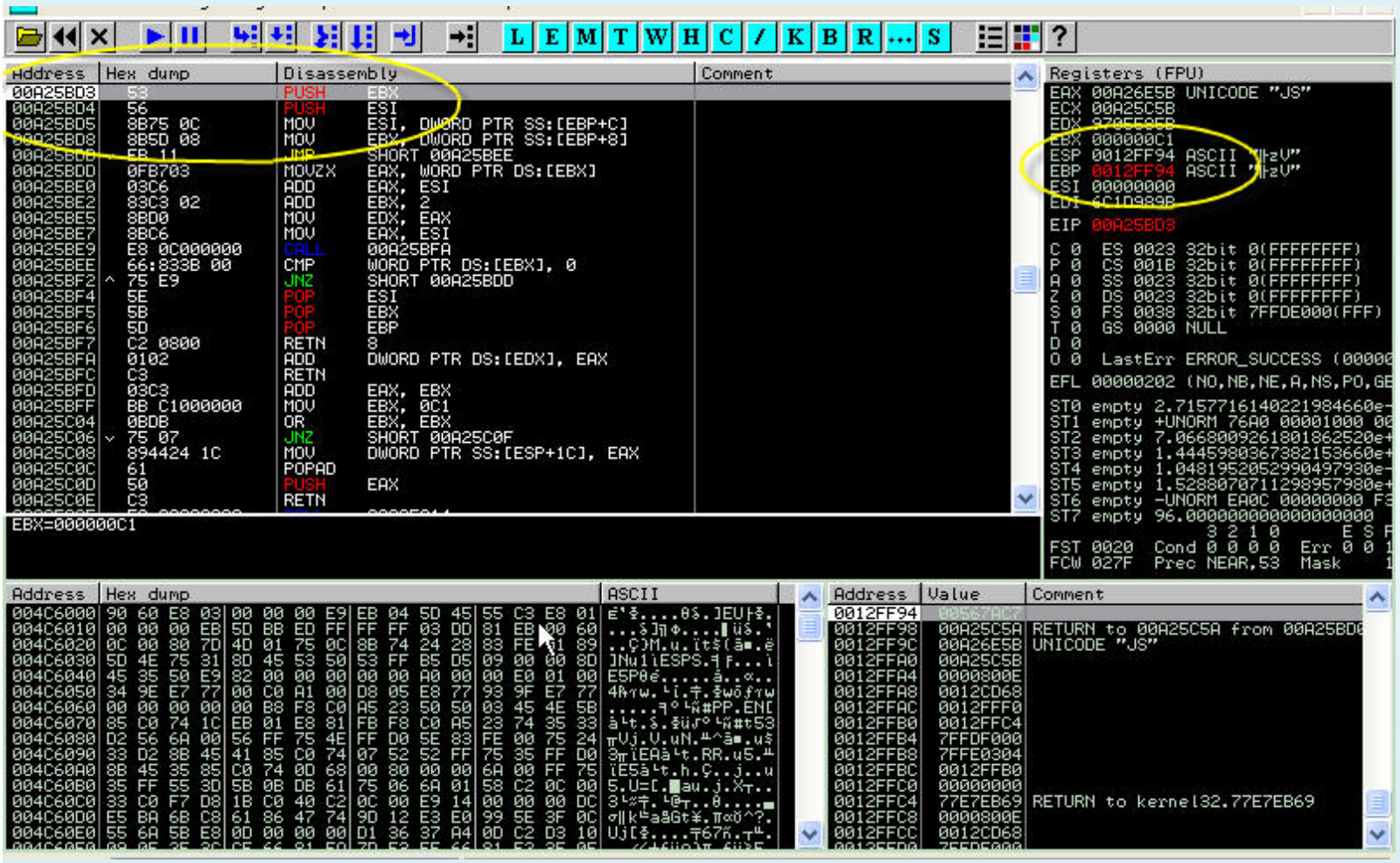
-Step 9: count is 45 bytes. So this case is 45 bytes. Now the task is, we fix the bytes.

Temporary OllyDBG to open again. We will open a window onto other Olly. Press Shift + F9 26 times, then set breakpoint at RETN, press Alt + M, located in memory breakpoint code section.

The most important step for both the push of this case is 45 bytes, we must set conditions balanced stack **ebp = esp.** OK, now press Alt + F1 and enter the **TC ebp == esp** or press Ctrl + T and set conditions as follows:



-Buoc10: Then press Ctrl + F11 to trace over. You will stop at places where EBP = ESP.



-Step 11: Scroll down the screen a few lines. You will see two values need to push to find. Waaaaa.

-Step 12: Return Olly open it. We will edit the 00 bytes. First you need to know the case 45 bytes. The more you read the tut will understand more about the case of the stolen bytes.

The form of Case 45 bytes:

```
PUSH EBP
MOV EBP, ESP
PUSH -1
PUSH XXXXXX
PUSH XXXXXX
MOV EAX, DWORD PTR FS: [0]
PUSH EAX
MOV DWORD PTR FS: [0], ESP
SUB ESP, 68
PUSH EBX
PUSH ESI
PUSH EDI
MOV DWORD PTR SS: [EBP-18], ESP
XOR EBX, EBX
MOV DWORD PTR SS: [EBP-4], EBX
PUSH 2
```

OK, we will change the value by XXXXXX

PUSH 45D9F0
PUSH 454F0A
Step-13: We of the entire 00 bytes this. Then press Ctrl + E and type the following:

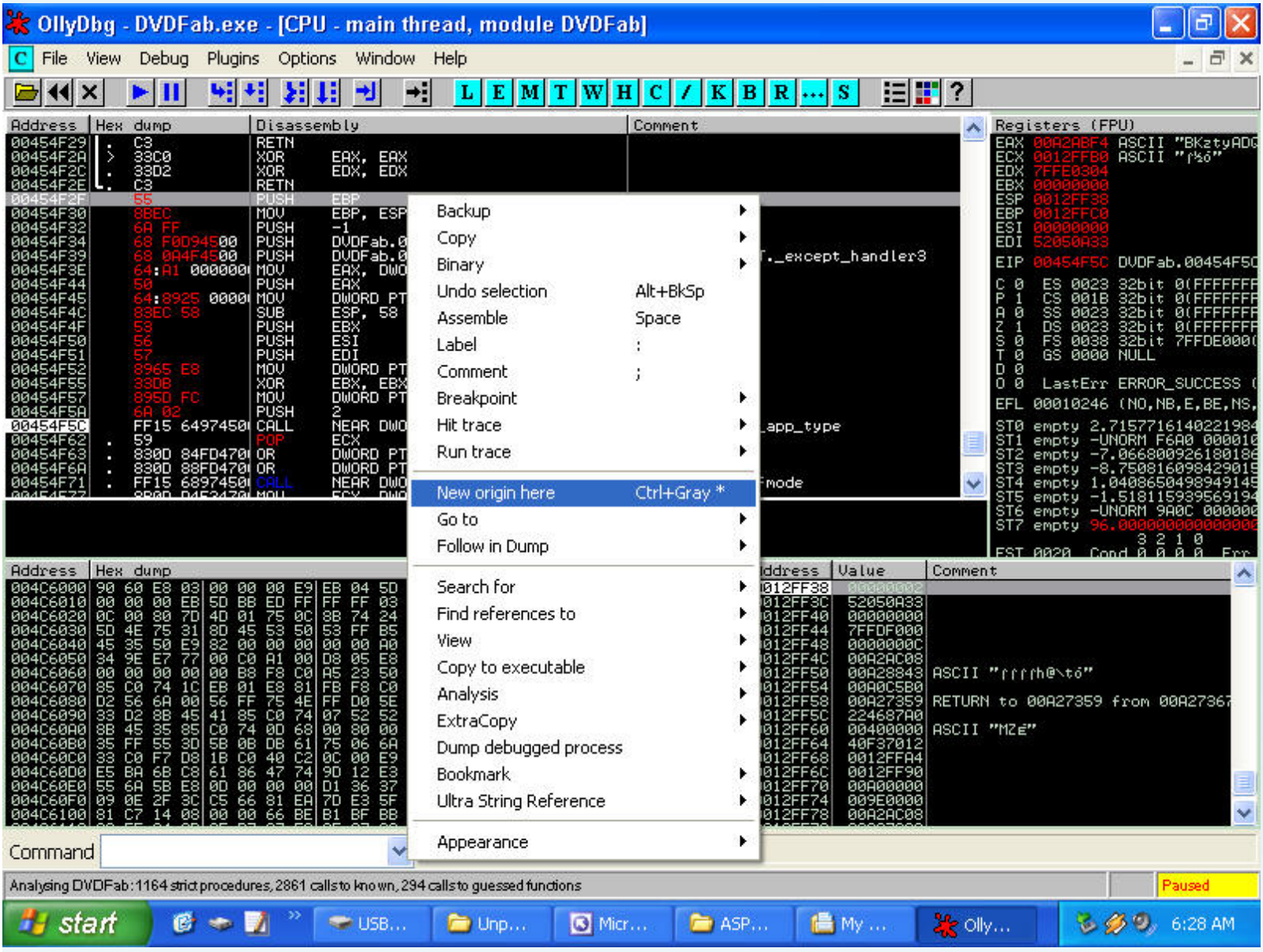
* before:

```
 <span onmouseover="_tipon(this)"
onmouseout="_tipoff()"><span
class="google-src-text" style="direction: ltr;
text-align: left"><span
style='font-size:10.0pt;'>00454F2F      00
DB      00  00454F30      00          DB      00
```

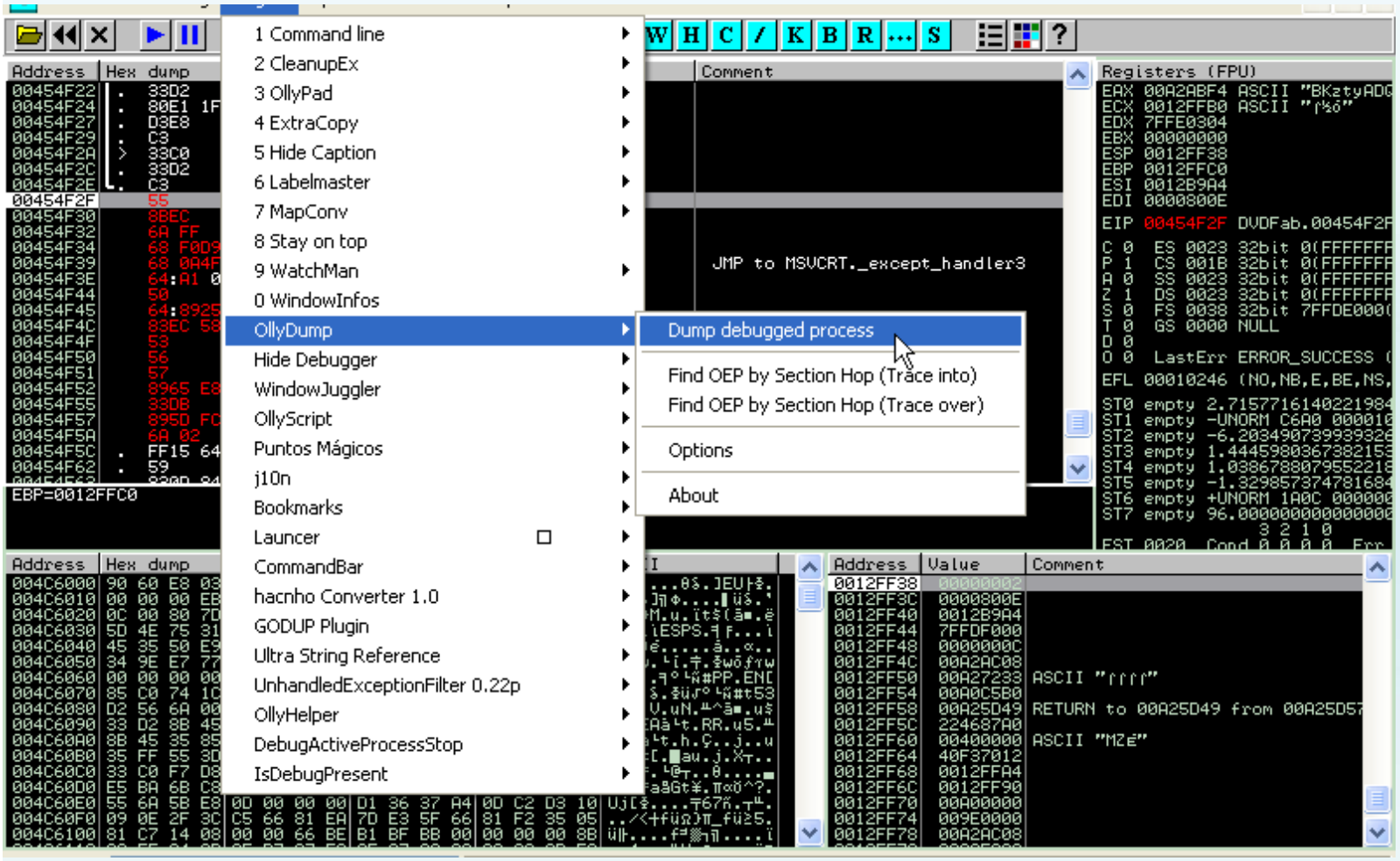
* follows:

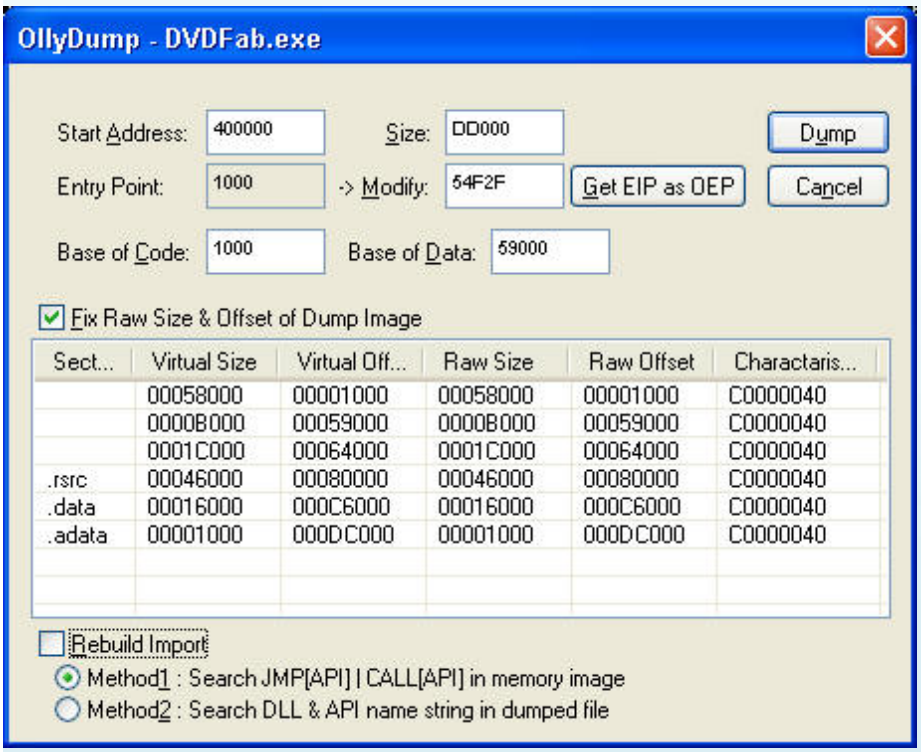
You found it absolutely khit with just 00 bytes. Good job!

Step-14: Right at the Push EBP image as you choose:

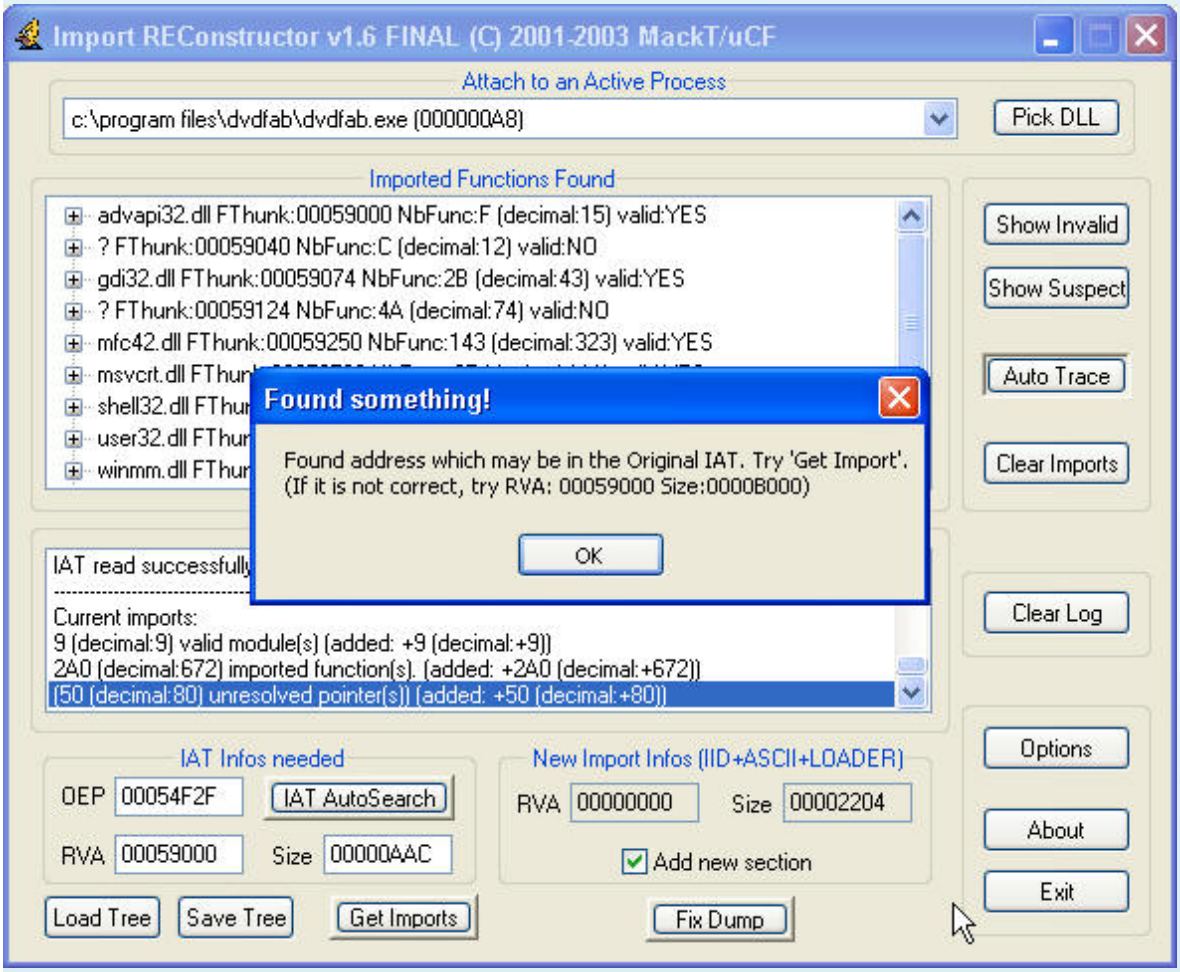


-Step 15: At OllyDUMP, select dump debugged process!

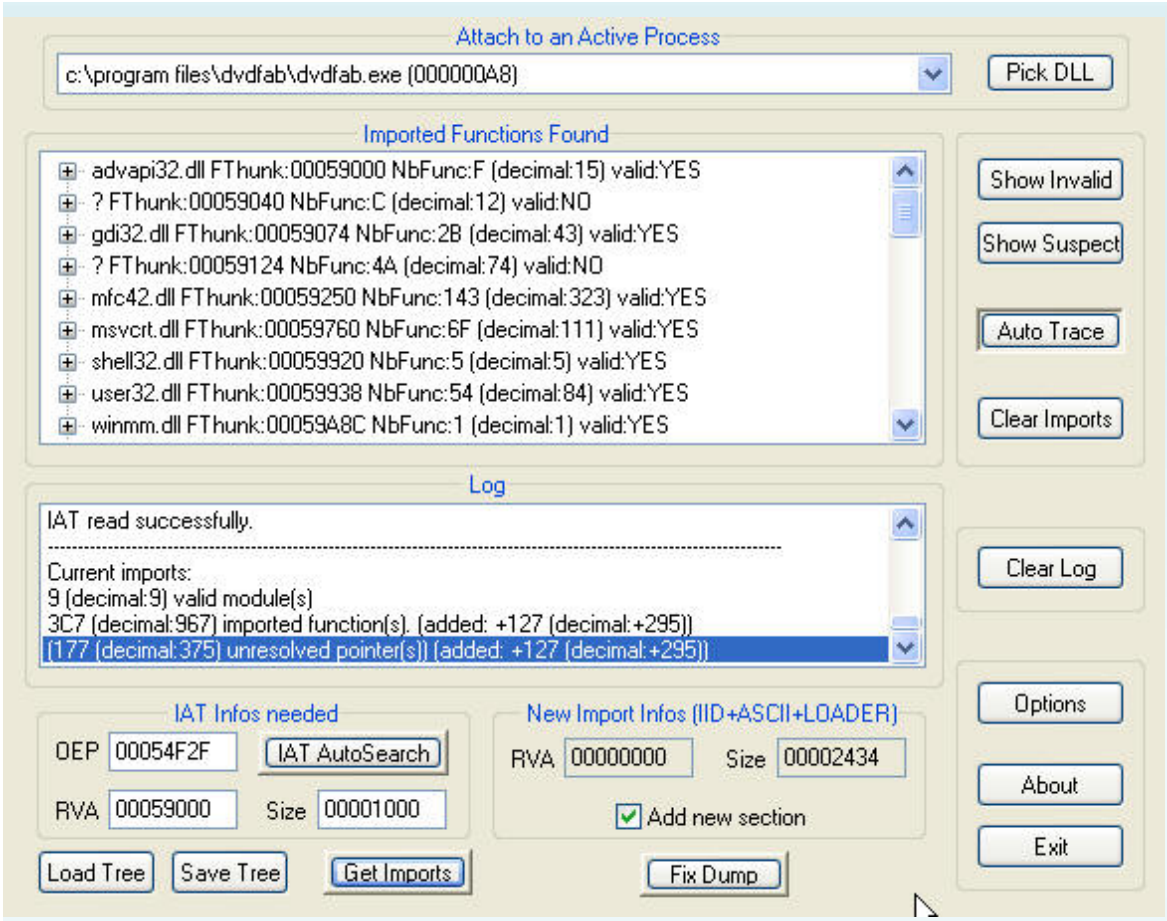




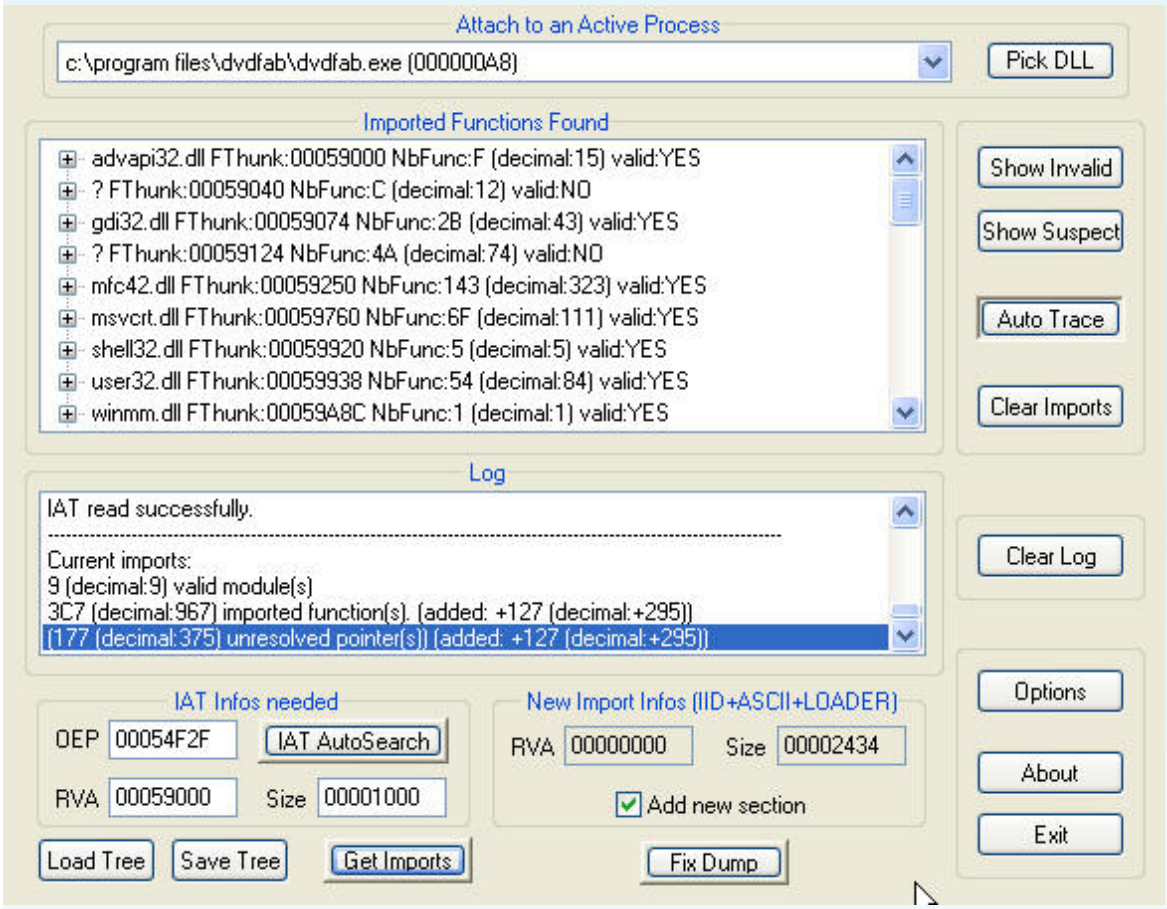
-Step 16: Once dumped, we fix IAT ban ImpREC 1.6

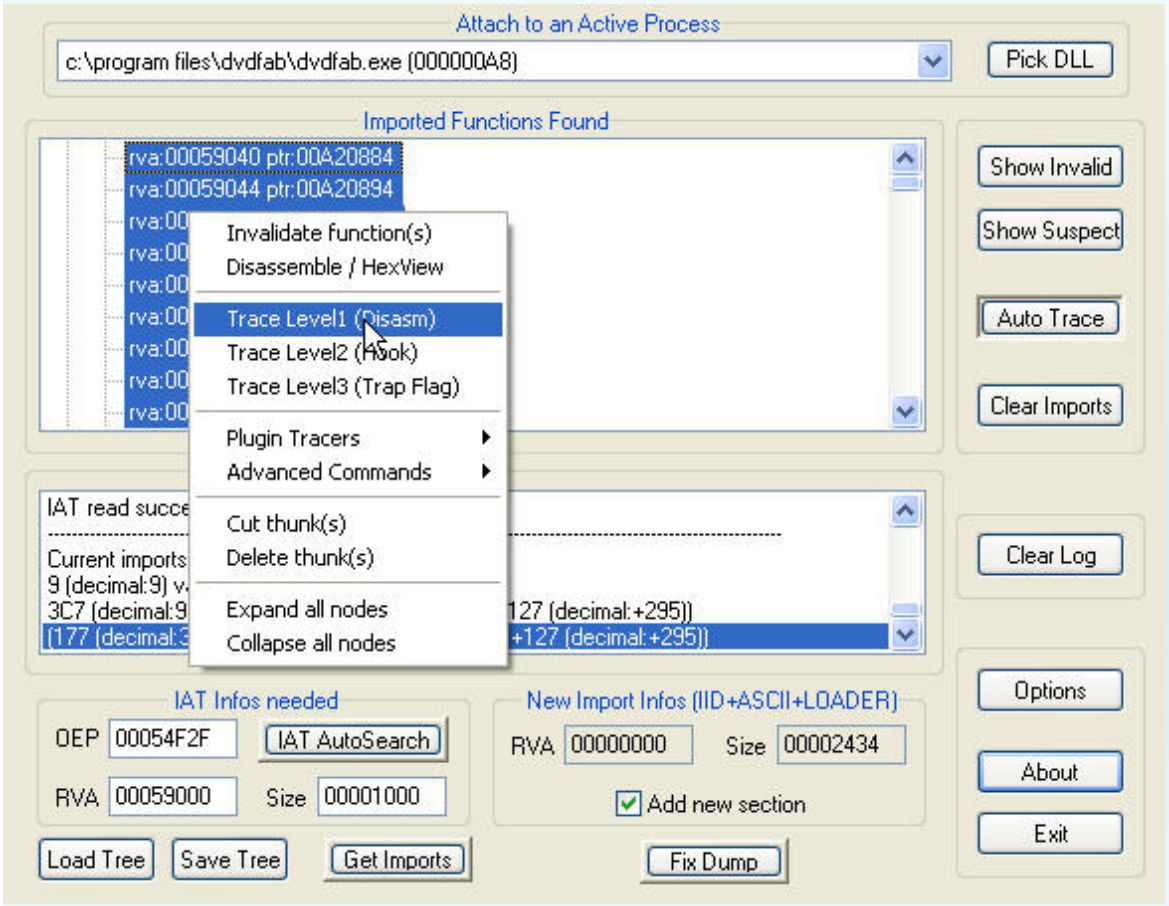


OEP to enter, click IAT AutoSearch. A message for us that if not properly collected by the new size ka B000. This is quite large, should we choose for streamlined in 1000.

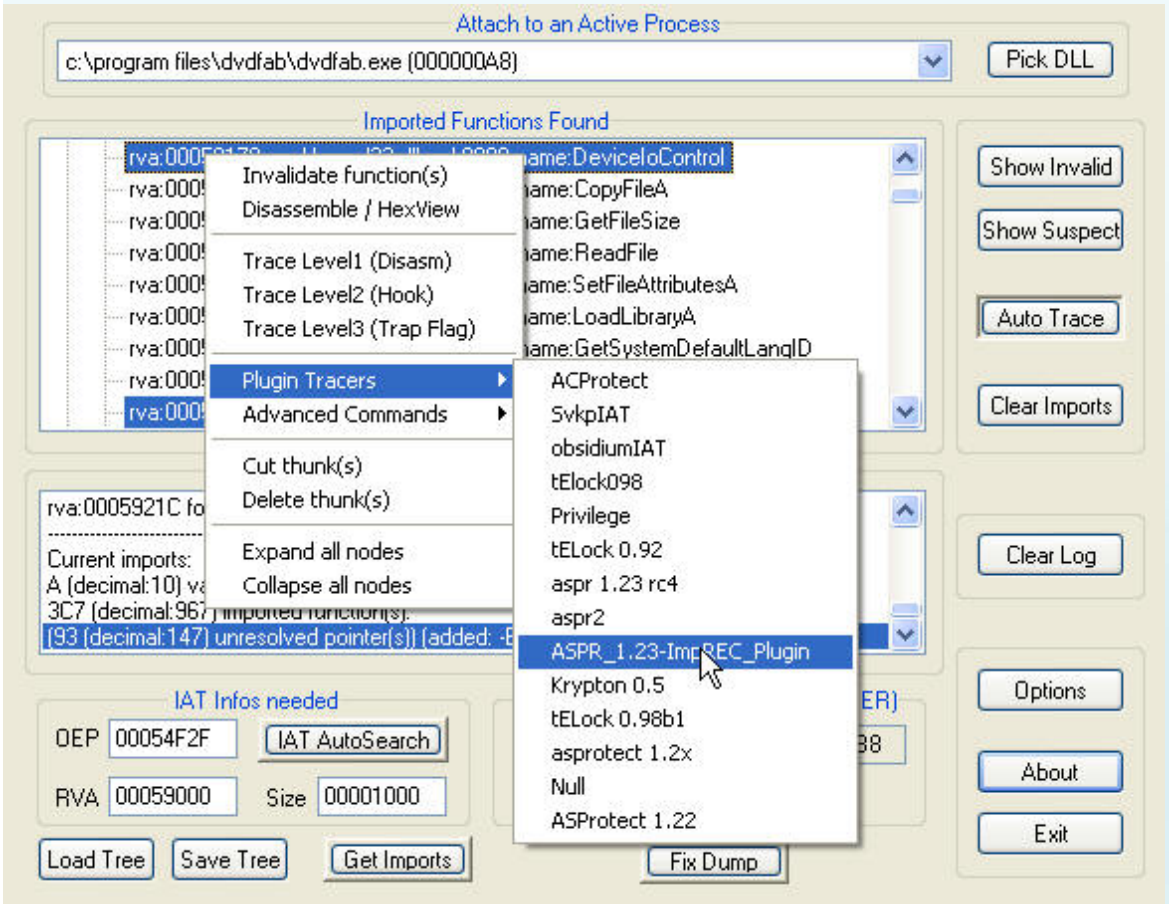


Then click Get Imports. Show Invalid click Next. Click to select trace level1:

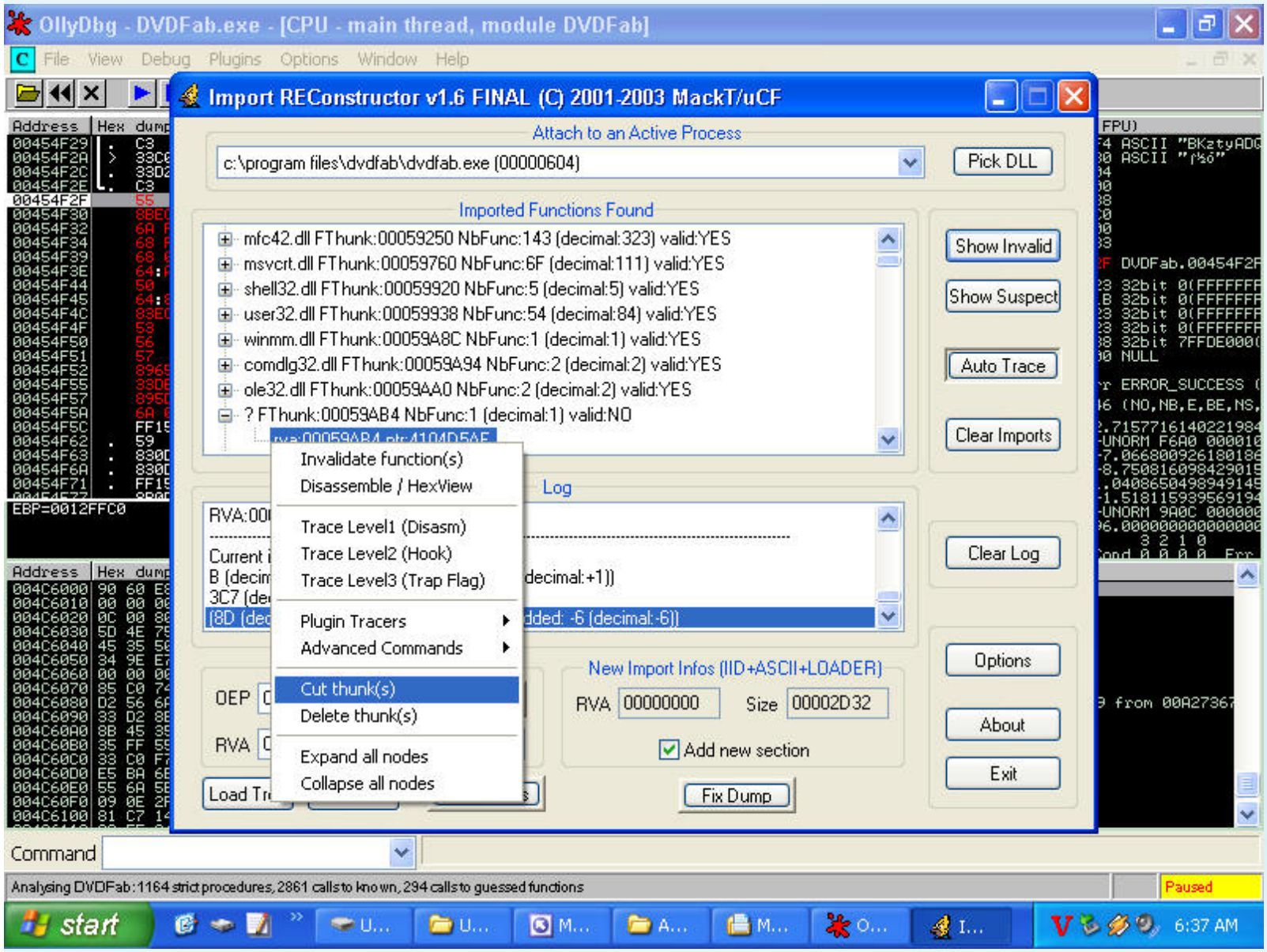


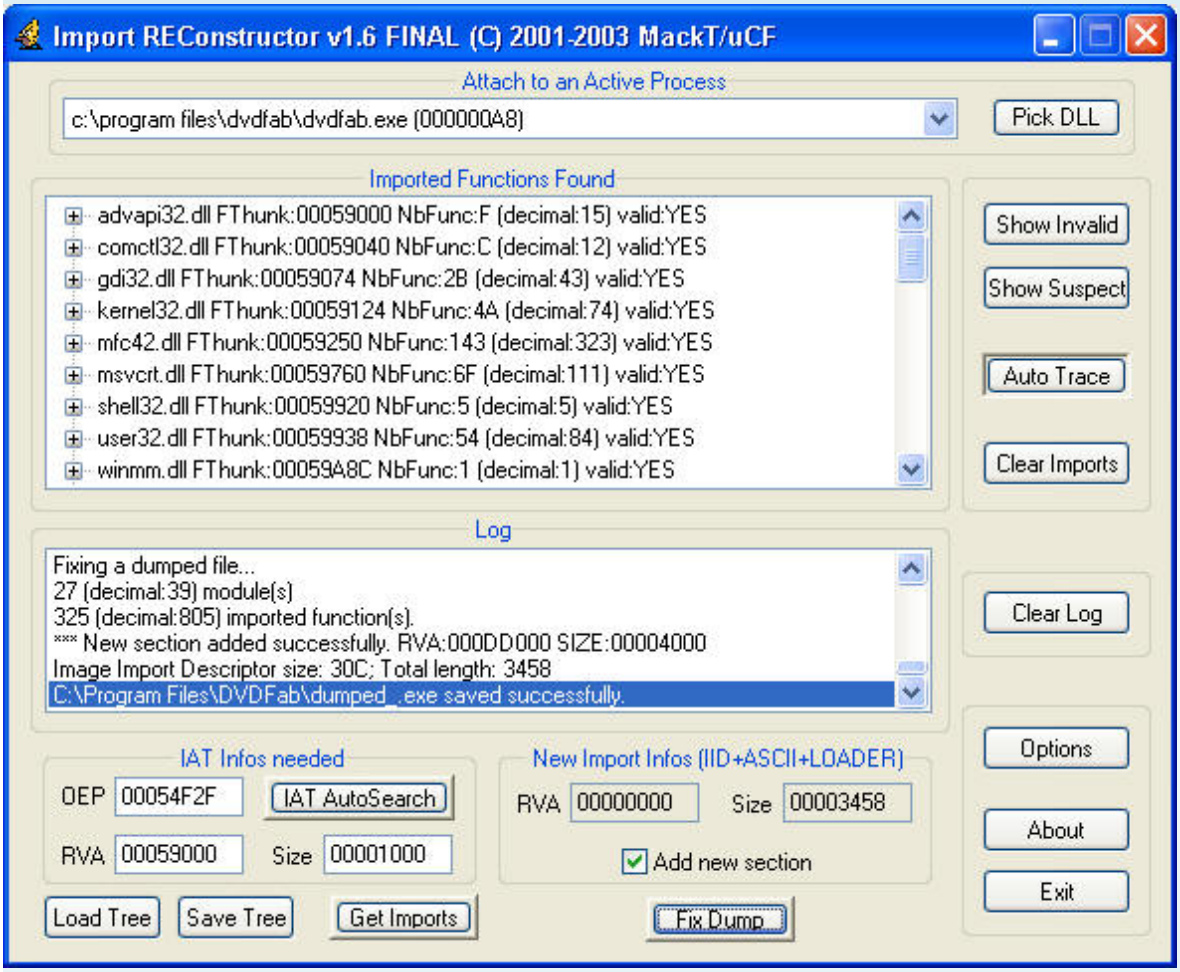


-Then click Show Invalid more, and click to select the image:

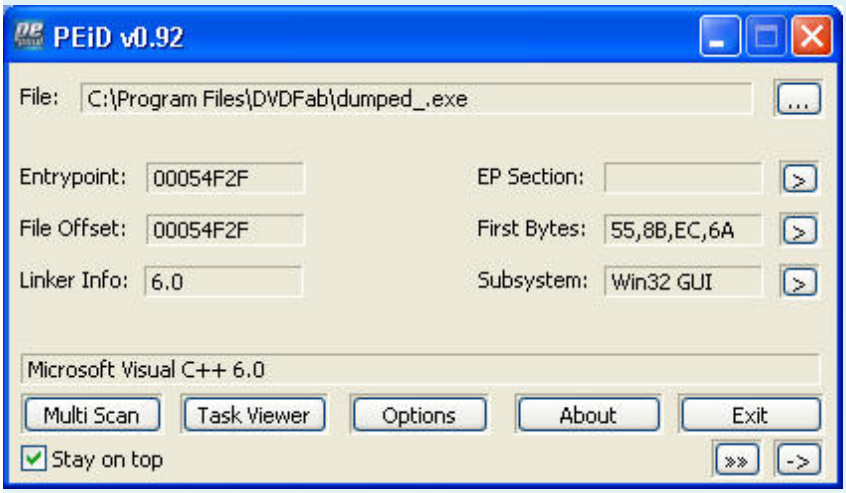


-Continue Show Invalid clicks again. And this time, only thunks Cut: d.


OllyDbg - DVDFab.exe - [CPU - main thread, module DVDFab]
File View Debug Plugins Options Window Help
Import REConstructor v1.6 FINAL (C) 2001-2003 MackT/uCF
Attach to an Active Process
c:\program files\dvdfab\dvdfab.exe (00000604)
Pick DLL
Imported Functions Found
mfc42.dll FThunk:00059250 NbFunc:143 (decimal:323) valid:YES
msvcrt.dll FThunk:00059760 NbFunc:6F (decimal:111) valid:YES
shell32.dll FThunk:00059920 NbFunc:5 (decimal:5) valid:YES
user32.dll FThunk:00059938 NbFunc:54 (decimal:84) valid:YES
winmm.dll FThunk:00059A8C NbFunc:1 (decimal:1) valid:YES
comdlg32.dll FThunk:00059A94 NbFunc:2 (decimal:2) valid:YES
ole32.dll FThunk:00059AA0 NbFunc:2 (decimal:2) valid:YES
? FThunk:00059AB4 NbFunc:1 (decimal:1) valid:NO
Show Invalid
Show Suspect
Auto Trace
Clear Imports
Invalidate function(s)
Disassemble / HexView
Trace Level1 (Disasm)
Trace Level2 (Hook)
Trace Level3 (Trap Flag)
Plugin Tracers
Advanced Commands
Cut thunk(s)
Delete thunk(s)
Expand all nodes
Collapse all nodes
Log
Clear Log
Options
About
Exit
New Import Infos (IID+ASCII+LOADER)
OEP
RVA
RVA 00000000
Size 00002D32
Add new section
Load Tr
Fix Dump
Command
Analysing DVDFab: 1164 strict procedures, 2861 calls to known, 294 calls to guessed functions
Paused
start
6:37 AM



Step-17: Test file dumped_.exe see stars? OK, very good run, not crash. Using the considered view PEiD ;-).



The goal is complete with a case 45 bytes. The other type of cases, you can apply similar Advanced Windows Password Recovery (Case 38 bytes), NetworkSearcher (Case 38 bytes) ...

Bonus: you raise your table the case that I have a script for the OEP 1.23RC4 version. Very good, there is no guarantee on the homepage Ollycripts.

```
//////////////////////////////////////////////
/ / Asprotect / /
/ / Date: 19/10/2004 / /
/ / / /
var cebp //////////////////////////////////////////////
var cesp
```

```
var addra
var addra2
var addrb
var addrclast
var count
var test
var addrc
var addrc2
var Valid
var valid2
var csize
var msize
var popc
eoe checklast
eob checklast
GMI 401000, CODESIZE
mov csize, $ RESULT
var sizet
mov sizet, csize
add sizet, 400,000
GMI 401000, MODULESIZE
mov msize, $ RESULT
add msize, 400,000


esto


checklast:
dbh
Cmp edx, 4
jne f
mov popc, eip
add popc, 4
mov popc, [popc]
Cmp popc, 0000068f
jne f
find eip, # 74? E8 #
mov popc, $ RESULT
sub popc, 5
mov popc, [popc]
mov [popc], 1
Cmp $ result, 0

je f:
bprm 401,000, csize
eob oep
eoe oep
esto
f:
find eip, 85c00f85 # #
Cmp $ result, 0
je cntlast
mov valid, $ RESULT
Valid sub, 3e
Cmp [valid], 00001fb8

jne cntlast
mov valid2, $ RESULT
sub valid2, eip
Cmp valid2, 0ff
```

```
ja cntlast
eob bypass
bp $ RESULT
esto

Bypass:
mov eax, 0
bc $ RESULT
esto
cntlast:
eoe checklast
eob checklast
mov addra, ebp
mov addrc, ebp
sub addra, 10
mov addra2, addra
mov addrc2, addra
mov cesp, esp
mov cebp, ebp
and cesp, 00ff0000
and cebp, 00ff0000
Cmp cesp, cebp
jne false

mov addra, [addra]

Cmp addra, 400,000

jne false1
add addra2, 4
mov addra2, [addra2]
Cmp addra2, msize
jb foundlast
false1:
sub addrc, 20
mov addrc2, addrc
mov cesp, esp
mov cebp, ebp
and cesp, 00ff0000
and cebp, 00ff0000
Cmp cesp, cebp

jne false

mov addrc, [addrc]


Cmp addrc, 400,000
jne false
add addrc2, 4
mov addrc2, [addrc2]
Cmp addrc2, msize


ja test1
Cmp addrc2, 401,000
ja foundlast
jmp false
test1:
mov addrc2, edi
and addrc2, 0000ffff
```

```
Cmp addrc2, 0

je foundlast
false:
esto
ret
foundlast:
MSGYN "this is the last exception, do you want to continue to the OEP?"
Cmp $ result, 0
je last
jmp oepn

oep:
Cmp eip, sizet
jb oepf
esto
oepn:
bprm 401,000, csize
cob
CoE
esto

oepf:
msg "this is the oep if it stolen, Thanks for using my scripts; BriteDream"
bpmc
ret



Last:
msg "This is the last exception, Thank you for using my scripts; BriteDream"
ret
```

---

8 bytes:

Code:

```
005B8F74 <Module> / $ 55 PUSH EBP
005B8F75 |. 8BEC MOV EBP, ESP
005B8F77 |. B9 06000000 MOV ECX, 6
```

11 bytes (Case I)

Code:

```
00495778 <Module> $ 55 PUSH EBP
00495779. 8BEC MOV EBP, ESP
0049577B. 83EC 0C SUB ESP, 0C
0049577E. B8 E8544900 MOV EAX, dumped_1.004954E8
```

11 bytes (Case II)

Code:

```
005008BC <Module> $ 55 PUSH EBP
005008BD. 8BEC MOV EBP, ESP
005008BF. B8 5C055000 MOV EAX, dumped_1.0050055C
005008C4. 83C4 F4 ADD ESP, 0C -
```

12 bytes:

Code:

```
004B38C0> $ 55 PUSH EBP
```

```
004B38C1. 8BEC MOV EBP, ESP
004B38C3. 83C4 F4 ADD ESP, 0C -
004B38C6. 53 PUSH EBX
004B38C7. B8 58334B00 MOV EAX, dumped_.004B3358
16 bytes:

Code:

004FF904 <Module> / $ 55 PUSH EBP
004FF905 |. 8BEC MOV EBP, ESP
004FF907 |. 83EC 14 SUB ESP, 14
004FF90A |. 33C0 XOR EAX, EAX
004FF90C |. 8945 EC MOV DWORD PTR SS: [EBP-14], EAX
004FF90F |. B8 54F34F00 MOV EAX, dumped_1.004FF354
20 bytes:

Code:

00553710 00 DB 00
00553711 00 DB 00
00553712 00 DB 00
00553713 00 DB 00
00553714 00 DB 00
00553715> / $ 55 PUSH EBP
00553716 |. 8BEC MOV EBP, ESP
00553718 |. 51 PUSH ECX
00553719 |. 52 PUSH EDX
0055371A |. 53 PUSH EBX
0055371B |. 50 PUSH EAX
0055371C |. 6A 00 PUSH 0
0055371E |. 53 PUSH EBX
0055371F |. B8 A0305500 MOV EAX, SOunpack.005530A0
22 bytes:

Code:

0057B0F8 <Module> $ 55 PUSH EBP
0057B0F9. 8BEC MOV EBP, ESP
0057B0FB. 83EC 18 SUB ESP, 18
0057B0FE. 53 PUSH EBX
0057B0FF. 56 PUSH ESI
0057B100. 57 PUSH EDI
0057B101. 33C0 XOR EAX, EAX
0057B103. 8945 E8 MOV DWORD PTR SS: [EBP-18], EAX
0057B106. 8945 EC MOV DWORD PTR SS: [EBP-14], EAX
0057B109. B8 78A95700 MOV EAX, a.0057A978
38 bytes:

Code:

0066B131 55 PUSH EBP
0066B132 8BEC MOV EBP, ESP
0066B134 6A FF PUSH -1
0066B136 68 C0716C00 PUSH opera.006C71C0
0066B13B 68 D8B96600 PUSH opera.0066B9D8
0066B140 64: A1 00000000 MOV EAX, DWORD PTR FS: [0]
0066B146 50 PUSH EAX
0066B147 64:8925 00000000 MOV DWORD PTR FS: [0], ESP
0066B14E 83EC 58 SUB ESP, 58
0066B151 53 PUSH EBX
0066B152 56 PUSH ESI
```

0066B153 57 PUSH EDI
0066B154 8965 E8 MOV DWORD PTR SS: [EBP-18], ESP
45 bytes:

Code:

00475278> 55 PUSH EBP
00475279 8BEC MOV EBP, ESP
0047527B 6A FF PUSH -1
0047527D 68 58BE4800 PUSH dumped_.0048BE58
00475282 68 46504700 PUSH <JMP.&msvcrt.#206>
00475287 64: A1 00000000 MOV EAX, DWORD PTR FS: [0]
0047528D 50 PUSH EAX
0047528E 64:8925 00000000 MOV DWORD PTR FS: [0], ESP
00475295 83EC 68 SUB ESP, 68
00475298 53 PUSH EBX
00475299 56 PUSH ESI
0047529A 57 PUSH EDI
0047529B 8965 E8 MOV DWORD PTR SS: [EBP-18], ESP
0047529E 33DB XOR EBX, EBX
004752A0 895D FC MOV DWORD PTR SS: [EBP-4], EBX
004752A3 6A 02 PUSH 2

Stolen Asprotect Bytes [By Computer_Angel)

Quote:
Case 38 bytes:

0066B131 55 PUSH EBP
0066B132 8BEC MOV EBP, ESP
0066B134 6A FF PUSH -1
0066B136 68 C0716C00 PUSH opera.006C71C0
0066B13B 68 D8B96600 PUSH opera.0066B9D8
0066B140 64: A1 00000000 MOV EAX, DWORD PTR FS: [0]
0066B146 50 PUSH EAX
0066B147 64:8925 00000000 MOV DWORD PTR FS: [0], ESP
0066B14E 83EC 58 SUB ESP, 58
0066B151 53 PUSH EBX
0066B152 56 PUSH ESI
0066B153 57 PUSH EDI
0066B154 8965 E8 MOV DWORD PTR SS: [EBP-18], ESP

Quote:
11 bytes:

005008BC <Module> $ 55 PUSH EBP
005008BD. 8BEC MOV EBP, ESP
005008BF. B8 5C055000 MOV EAX, dumped_1.0050055C
005008C4. 83C4 F4 ADD ESP, 0C -

Quote:
22 bytes:

0057B0F8 <Module> $ 55 PUSH EBP
0057B0F9. 8BEC MOV EBP, ESP

```
0057B0FB. 83EC 18 SUB ESP, 18
0057B0FE. 53 PUSH EBX
0057B0FF. 56 PUSH ESI
0057B100. 57 PUSH EDI
0057B101. 33C0 XOR EAX, EAX
0057B103. 8945 E8 MOV DWORD PTR SS: [EBP-18], EAX
0057B106. 8945 EC MOV DWORD PTR SS: [EBP-14], EAX
0057B109. B8 78A95700 MOV EAX, a.0057A978
```

Quote:
16 bytes:

```
004FF904 <Module> / $ 55 PUSH EBP
004FF905 |. 8BEC MOV EBP, ESP
004FF907 |. 83EC 14 SUB ESP, 14
004FF90A |. 33C0 XOR EAX, EAX
004FF90C |. 8945 EC MOV DWORD PTR SS: [EBP-14], EAX
004FF90F |. B8 54F34F00 MOV EAX, dumped_1.004FF354
```

11 bytes:

Quote:

```
00495778 <Module> $ 55 PUSH EBP
00495779th 8BEC MOV EBP, ESP
0049577B. 83EC 0C SUB ESP, 0C
0049577E. B8 E8544900 MOV EAX, dumped_1.004954E8
```

8 bytes:

Quote:

```
005B8F74 <Module> / $ 55 PUSH EBP
005B8F75 |. 8BEC MOV EBP, ESP
005B8F77 |. B9 06000000 MOV ECX, 6
```

12 bytes:

Quote:

```
004B38C0> $ 55 PUSH EBP
004B38C1. 8BEC MOV EBP, ESP
004B38C3. 83C4 F4 ADD ESP, 0C -
004B38C6. 53 PUSH EBX
004B38C7. B8 58334B00 MOV EAX, dumped_.004B3358
```

20 bytes:

Quote:

```
00553710 00 DB 00
00553711 00 DB 00
00553712 00 DB 00
00553713 00 DB 00
```

```
00553714 00 DB 00
00553715> / $ 55 PUSH EBP
00553716 |. 8BEC MOV EBP, ESP
00553718 |. 51 PUSH ECX
00553719 |. 52 PUSH EDX
0055371A |. 53 PUSH EBX
0055371B |. 50 PUSH EAX
0055371C |. 6A 00 PUSH 0
0055371E |. 53 PUSH EBX
0055371F |. B8 A0305500 MOV EAX, SOunpack.005530A0
---------

==== Microsoft Visual C + + 6.0 ====

55 PUSH EBP
8BEC MOV EBP, ESP
6AFF PUSH -1
6800000000 PUSH 00000000; à mettre à jour
6800000000 PUSH 00000000; à mettre à jour
64A100000000 MOV EAX, DWORD PTR FS: [0]
50 PUSH EAX
64892500000000 MOV DWORD PTR FS: [0], ESP
83EC58 SUB ESP, 58
53 PUSH EBX
56 PUSH ESI
57 PUSH EDI
8965E8 MOV DWORD PTR [EBP-18], ESP

558BEC6AFF6800000000680000000064A10000
00005064892500000000083EC585356578965E8

=> 38 stolen bytes

====================================


==== Microsoft Visual C + + 7.0 ====

6A60 PUSH 60
6800000000 PUSH 00000000; à mettre à jour

6A606800000000

=> 7 stolen bytes

====================================


==== ============== Borland Delphi

55 PUSH EBP
8BEC MOV EBP, ESP
83C4F4 ADD ESP, 0C -
B800000000 MOV EAX, 00000000; à mettre à jour

558BEC83C4F4B800000000

=> 11 stolen bytes

-----

55 PUSH EBP
```

```
8BEC MOV EBP, ESP
83EC10 SUB ESP, 10
B800000000 MOV EAX, 00000000; à mettre à jour

558BEC83EC10B800000000

=> 11 stolen bytes

-----

55 PUSH EBP
8BEC MOV EBP, ESP
83C4F4 ADD ESP, 0C -
53 PUSH EBX
B800000000 MOV EAX, 00000000; à mettre à jour

558BEC83C4F453B800000000

= 12 bytes stolen

-----

55 PUSH EBP
8BEC MOV EBP, ESP
83C4F0 ADD ESP, -10
53 PUSH EBX
B800000000 MOV EAX, 00000000; à mettre à jour

558BEC83C4F053B800000000

= 12 bytes stolen

-----

==================================

Autres cas possibles:


22 bytes:

55 PUSH EBP
8BEC MOV EBP, ESP
83EC18 SUB ESP, 18
53 PUSH EBX
56 PUSH ESI
57 PUSH EDI
33C0 XOR EAX, EAX
8945E8 MOV DWORD PTR SS: [EBP-18], EAX
8945EC MOV DWORD PTR SS: [EBP-14], EAX
B800000000 MOV EAX, 00000000; à mettre à jour

-----


16 bytes:

55 PUSH EBP
8BEC MOV EBP, ESP
83EC14 SUB ESP, 14
33C0 XOR EAX, EAX
8945EC MOV DWORD PTR SS: [EBP-14], EAX
```

B800000000 MOV EAX, 00000000; à mettre à jour

---

8 bytes:

55 PUSH EBP
8BEC MOV EBP, ESP
B900000000 MOV ECX, 00000000; à mettre à jour

---

00 DB 00
00 DB 00
00 DB 00
00 DB 00
00 DB 00
55 PUSH EBP
8BEC MOV EBP, ESP
51 PUSH ECX
52 PUSH EDX
53 PUSH EBX
50 PUSH EAX
6A00 PUSH 0
B800000000 MOV EAX, 00000000; à mettre à jour

(C'est un cas special).

---

25 bytes:

55 PUSH EBP
8BEC MOV EBP, ESP
83C4E4 ADD ESP,-1C
53 PUSH EBX
56 PUSH ESI
57 PUSH EDI
33C0 XOR EAX, EAX
8945E4 MOV DWORD PTR SS: [EBP-1C], EAX
8945E8 MOV DWORD PTR SS: [EBP-18], EAX
8945EC MOV DWORD PTR SS: [EBP-14], EAX
B800000000 MOV EAX, 00000000; à mettre à jour

---

45 bytes:

PUSH EBP
MOV EBP, ESP
ADD ESP,-12C
PUSH EBX
XOR EAX, EAX
MOV [EBP] [-120], EAX
MOV [EBP] [-124], EAX

```
MOV [EBP] [-118], EAX
MOV [EBP] [-11C], EAX
MOV [EBP] [-14], EAX
MOV EAX, 00333333
CALL ...


-----


32 bytes:

PUSH EBP
MOV EBP, ESP
ADD ESP,-1C
PUSH EBX
XOR EAX, EAX
MOV [EBP] [-1C], EAX
MOV [EBP] [-18], EAX
MOV [EBP] [-14], EAX
MOV EAX, [00407C14]
MOV B, [EAX], 001
MOV EAX, 0033333
CALL ...
----------


Possible Stolen bytes: ASProtect
********************************

1) M $ Visual C + +:

55 PUSH EBP
8BEC MOV EBP, ESP
6A FF PUSH -1

68 xxxxxx00 PUSH target_name.00xxxxxx | Look in stack window for "Pointer to next SEH record"
68 xxxxxx00 PUSH target_name.00xxxxxx | Besides the below will see Handler 2 Pushed addresses

64: A1 00000000 MOV EAX, DWORD PTR FS: [0]
50 PUSH EAX
64:8925 00000000 MOV DWORD PTR FS: [0], ESP
83EC 58 SUB ESP, 58
53 PUSH EBX
56 PUSH ESI
57 PUSH EDI
8965 E8 MOV DWORD PTR SS: [EBP-18], ESP




OR MFC application:

55 PUSH EBP
8BEC MOV EBP, ESP
6A FF PUSH -1

68 xxxxxx00 PUSH target_name.00xxxxxx | Look in stack window for "Pointer to next SEH record"
68 xxxxxx00 PUSH target_name.00xxxxxx | Besides the below will see Handler 2 Pushed addresses

64: A1 00000000 MOV EAX, DWORD PTR FS: [0]
50 PUSH EAX
```

64:8925 00000000 MOV DWORD PTR FS: [0], ESP
83EC 68 SUB ESP, 68
53 PUSH EBX
56 PUSH ESI
57 PUSH EDI
8965 E8 MOV DWORD PTR SS: [EBP-18], ESP
33DB XOR EBX, EBX
895D FC MOV DWORD PTR SS: [EBP-4], EBX
6A 02 PUSH 2

****

2) Borland Delphi:

Stolen 8 Bytes
****
55 PUSH EBP
8BEC MOV EBP, ESP
B9 0x000000 MOV ECX, x <--- Check ECX in value when the land at fake OEP

Stolen 11 Bytes
****
55 PUSH EBP
8BEC MOV EBP, ESP
83C4 F0 ADD ESP, -10
B8 xxxxxx00 MOV EAX, target_name.00xxxxxx <- execute or POP EAX MOV EAX, EBX with F7 when you land after tracing from last RETN value and then check in EAX and then continue on land and F7 Fake OEP

Stolen 12 Bytes
****
55 PUSH EBP
8BEC MOV EBP, ESP
83C4 F4 ADD ESP, 0C -
53 PUSH EBX
B8 xxxxxx00 MOV EAX, target_name.00xxxxxx <- execute or POP EAX MOV EAX, EBX with F7 when you land after tracing from last RETN value and then check in EAX and then continue on land and F7 Fake OEP

Stolen 14 Bytes
****
55 PUSH EBP
8BEC MOV EBP, ESP
83C4 F4 ADD ESP, 0C -
53 PUSH EBX
56 PUSH ESI
57 PUSH EDI
B8 xxxxxx00 MOV EAX, target_name.00xxxxxx <- execute or POP EAX MOV EAX, EBX with F7 when you land after tracing from last RETN value and then check in EAX and then continue on land and F7 Fake OEP

Stolen 19 Bytes
****
55 PUSH EBP
8BEC MOV EBP, ESP
33C9 XOR ECX, ECX
51 PUSH ECX
51 PUSH ECX

```
51 PUSH ECX
51 PUSH ECX
51 PUSH ECX
51 PUSH ECX
51 PUSH ECX
53 PUSH EBX
56 PUSH ESI
B8 xxxxxx00 MOV EAX, target_name.00xxxxxx <- Check EAX
```

****

See in other tut! I will have the opportunity to write a tut about ASProtect 1.3x and 2.x. Wait for me!

hacnho [VCT2k4]
http://tothesky.us
lenguyenkhang@gmail.com

GrEeTs Fly Out: Deux, infinite, luucorp, Aaron, Canterwood, hhphong, R @ dier, tlandn, Computer_Angel, Moonbaby, RCA, CTL, Zombie, Nilrem, Ferrari, hosiminh, Govindah, elooo, Seven, diablo2oo2's, anh_surprised ... And you ;-)!

Thanx to authors of OllyDBG, ImpREC, LordPE, OllyScript, ASProtect.
To be continued ...

Written by hacnho (tutorial date: Sai Gon 10/01/2004)

L i tt l e t t o u r i al A u t o b e x e s t e a l t h 2. 73 b italy italy No. W h t

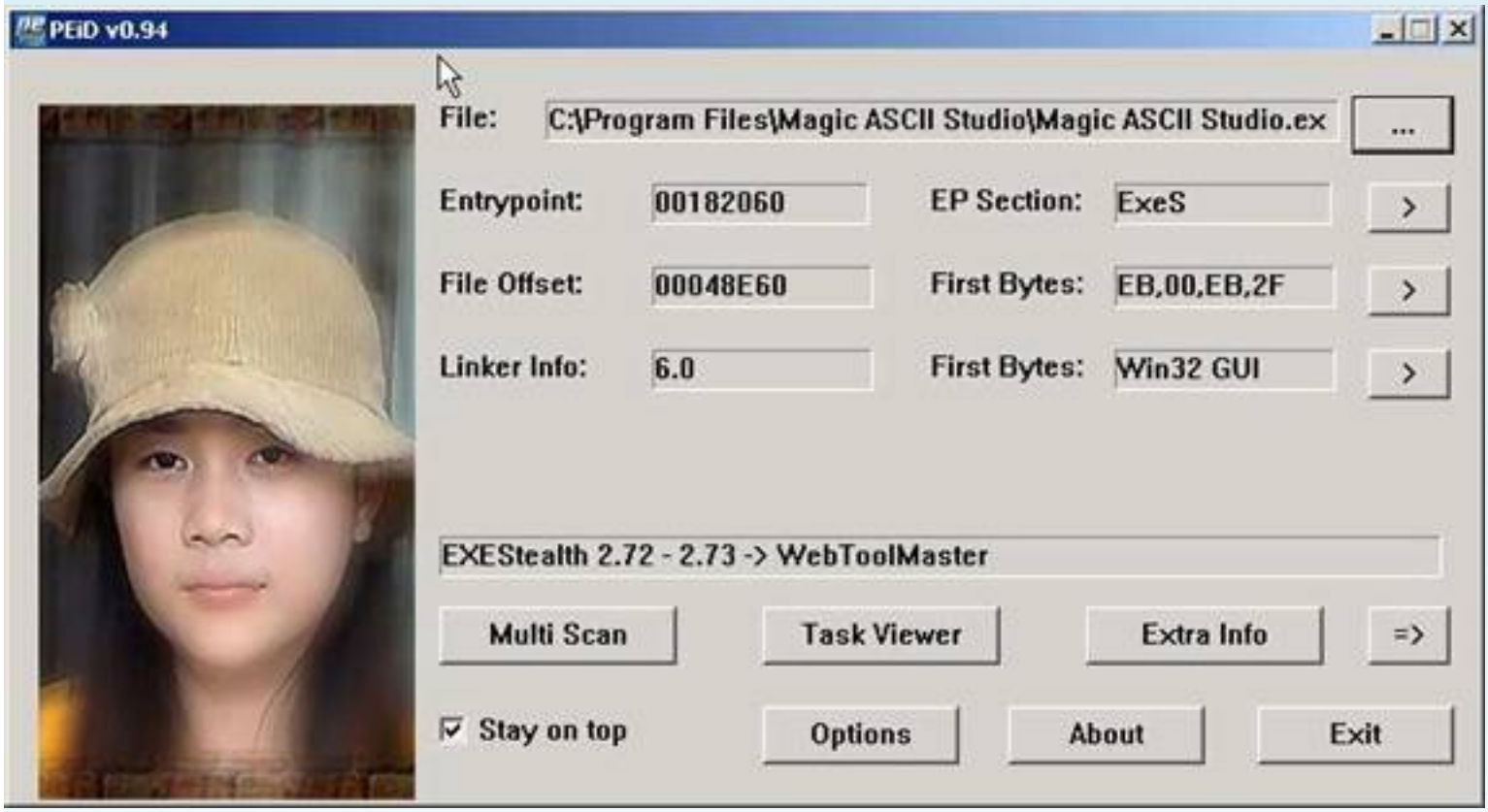
B ar

T a g e r t: a GIC M A S C I S T I udio 2 .2

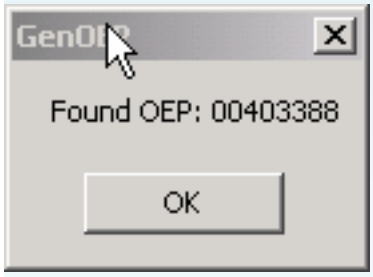
H o m e P a g e : H tt p: / / www. Italy x o o s o f t. C o m /

Unkpac Tool : Olliitaly BDG 1.10 and Italy llOMUDP puling

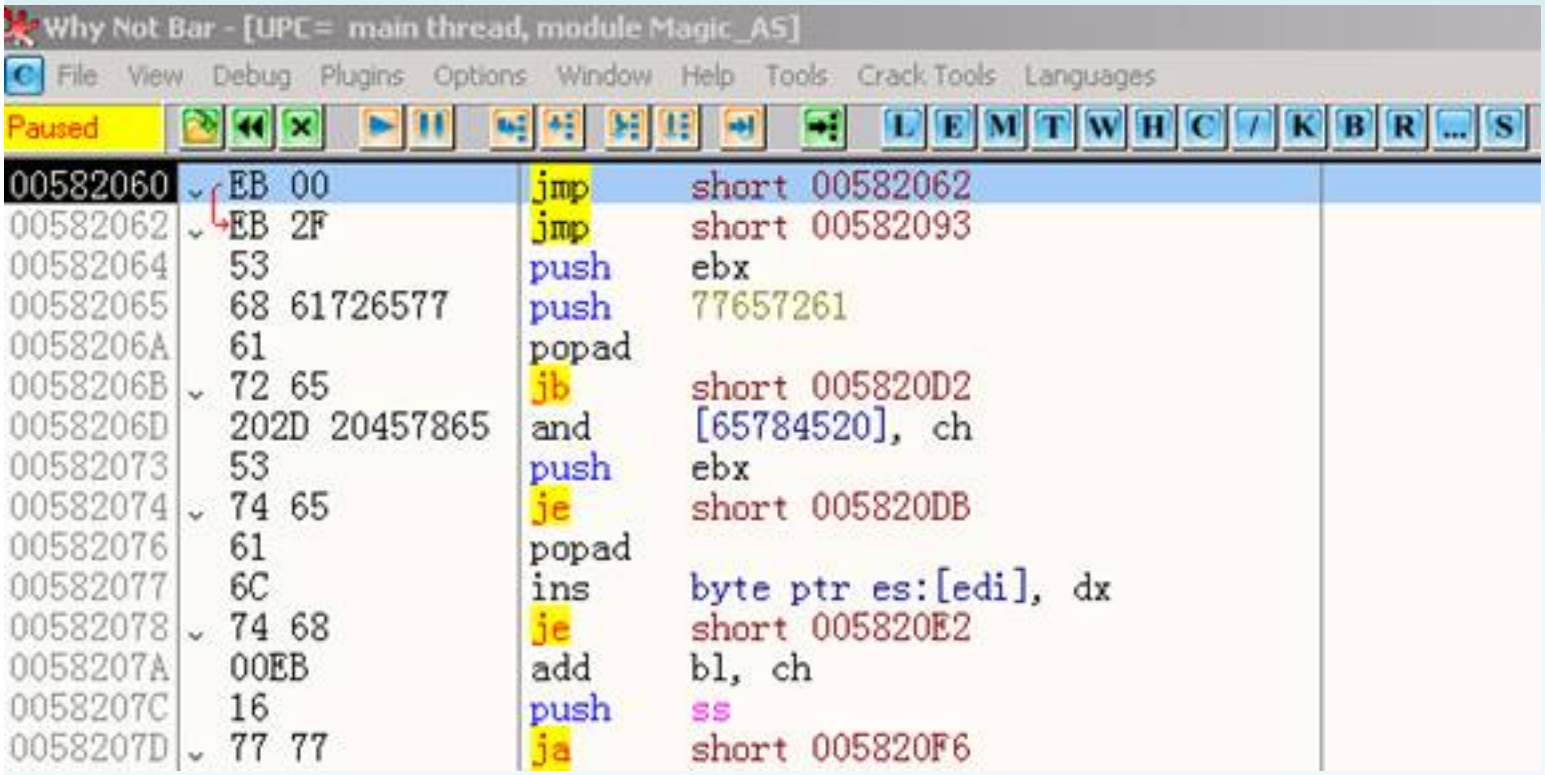
_ UsingPeiD 0.94 fordetectESTEXealth 2.72 - 2.73 -> WebToolMaster


PEiD v0.94
File:
C:\Program Files\Magic ASCII Studio\Magic ASCII Studio.ex
...
Entrypoint:
00182060
EP Section:
ExeS
>
File Offset:
00048E60
First Bytes:
EB,00,EB,2F
>
Linker Info:
6.0
First Bytes:
Win32 GUI
>
EXEStealth 2.72 - 2.73 -> WebToolMaster
Multi Scan
Task Viewer
Extra Info
=>
Stay on top
Options
About
Exit

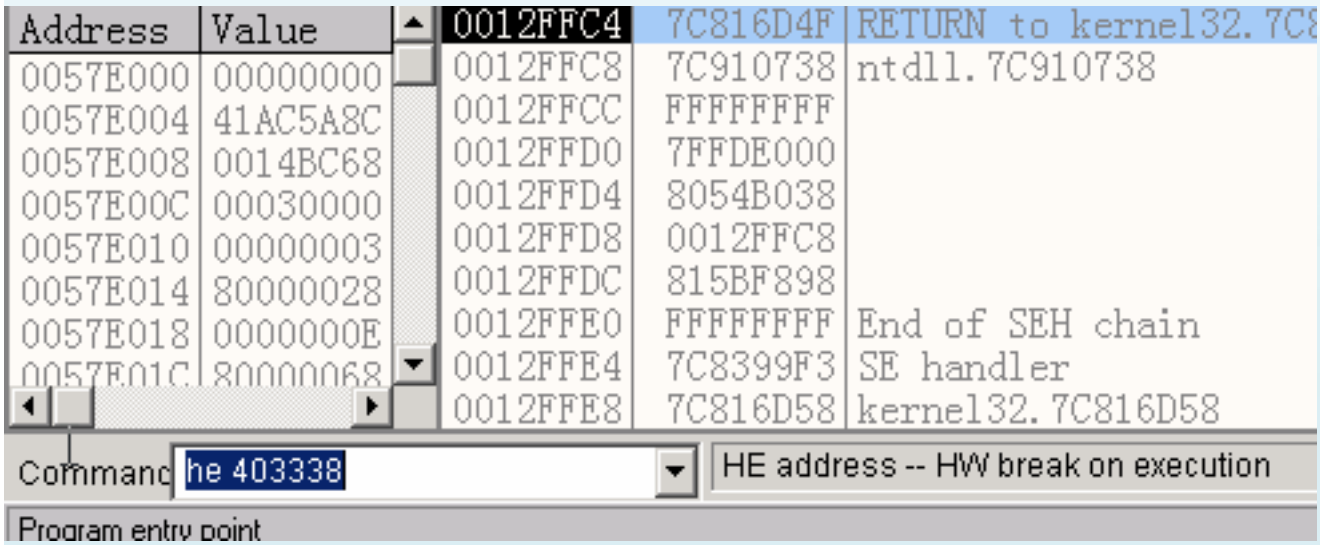
_ U s i n g p u l i n g "G e n e r i c e P O F i n d e r" F o r S e a r c h P OE



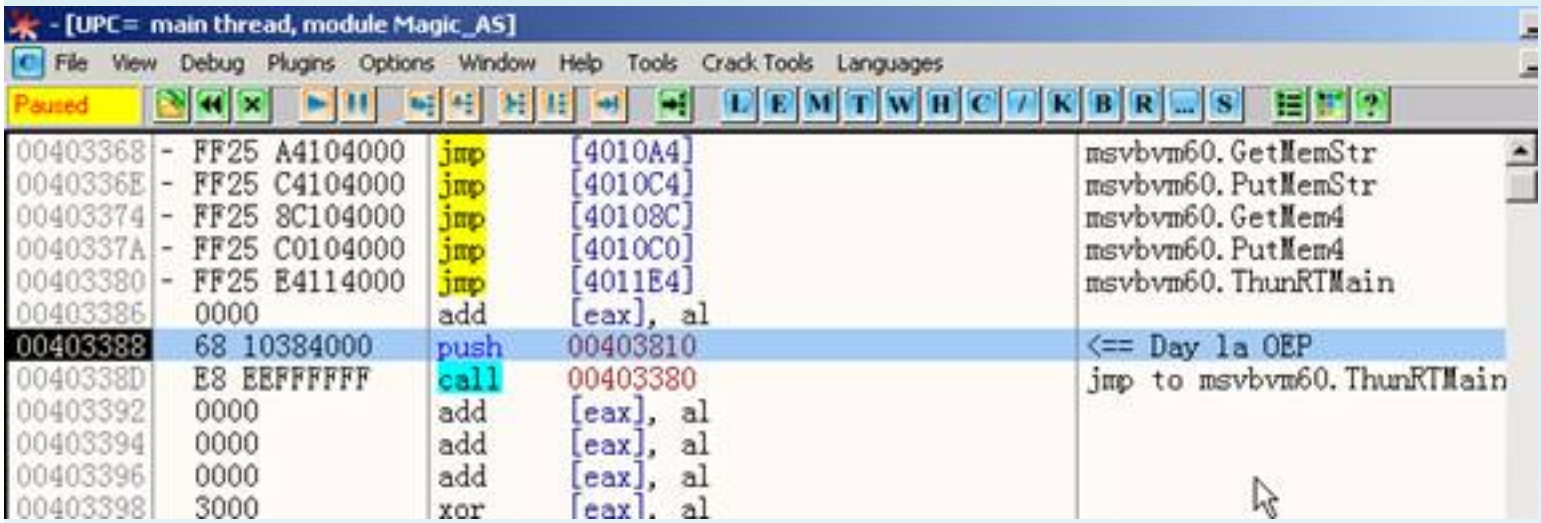
_ O K, L o a d t a g e r t i n t o O ll italy B D G italy a n d o u w ill pa u s e h e r e



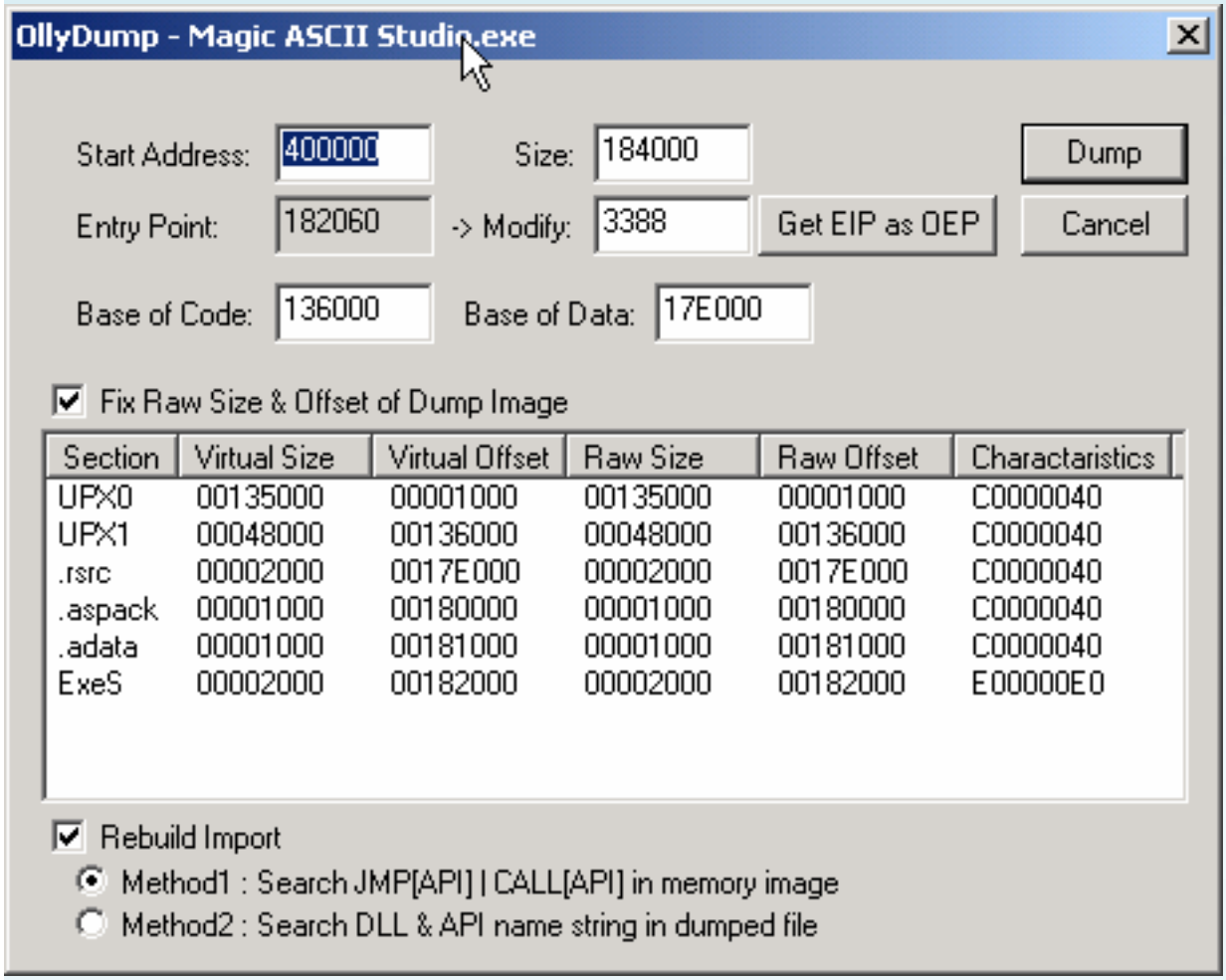
_ No w, e s s P l a t + F 1, "H e 403,338 a nd P r e s t e r sen



_PressF9,Youwilllanderheandthisis OEP

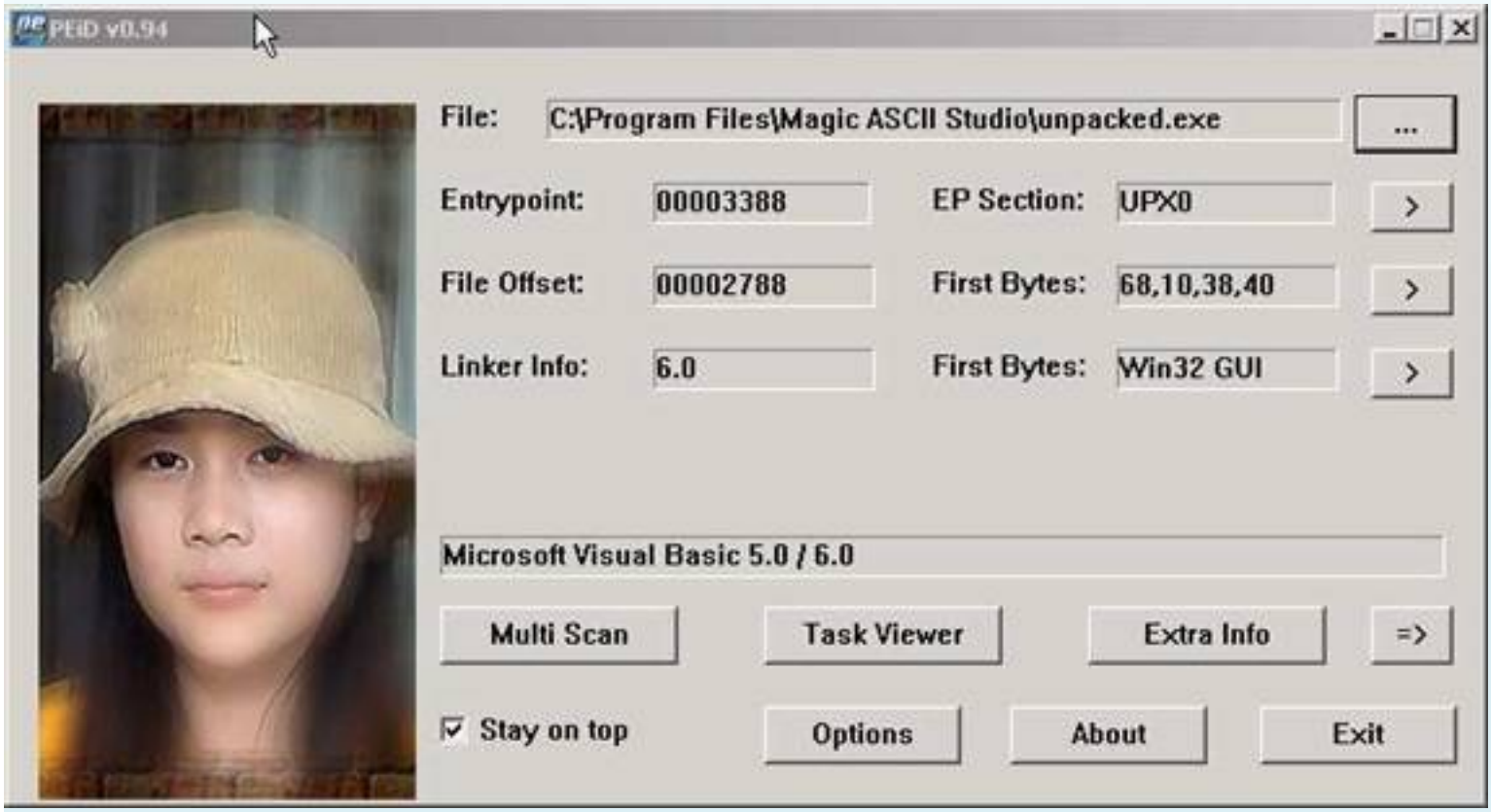

- [UPC= main thread, module Magic_AS]
File View Debug Plugins Options Window Help Tools Crack Tools Languages
Paused
00403368 - FF25 A4104000 jmp [4010A4] msvbvm60.GetMemStr
0040336E - FF25 C4104000 jmp [4010C4] msvbvm60.PutMemStr
00403374 - FF25 8C104000 jmp [40108C] msvbvm60.GetMem4
0040337A - FF25 C0104000 jmp [4010C0] msvbvm60.PutMem4
00403380 - FF25 E4114000 jmp [4011E4] msvbvm60.ThunRTMain
00403386 0000 add [eax], al
00403388 68 10384000 push 00403810 <== Day la OEP
0040338D E8 EEFFFFFF call 00403380 jmp to msvbvm60.ThunRTMain
00403392 0000 add [eax], al
00403394 0000 add [eax], al
00403396 0000 add [eax], al
00403398 3000 xor [eax], al

_ G o t o m e l p u if i g n, c h oo s e l l italy O D U M P a n d c h e c k "R e b u il d I m p o r t"


OllyDump - Magic ASCII Studio.exe
Start Address: 400000
Size: 184000
Dump
Entry Point: 182060
-> Modify: 3388
Get EIP as OEP
Cancel
Base of Code: 136000
Base of Data: 17E000
Fix Raw Size & Offset of Dump Image
Section Virtual Size Virtual Offset Raw Size Raw Offset Charactaristics
UPX0 00135000 00001000 00135000 00001000 C0000040
UPX1 00048000 00136000 00048000 00136000 C0000040
.rsrc 00002000 0017E000 00002000 0017E000 C0000040
.aspack 00001000 00180000 00001000 00180000 C0000040
.adata 00001000 00181000 00001000 00181000 C0000040
ExeS 00002000 00182000 00002000 00182000 E00000E0
Rebuild Import
Method1 : Search JMP[API] | CALL[API] in memory image
Method2 : Search DLL & API name string in dumped file

_ No w r un heu of the PA c k e e dfil. I t 'sOk a italy ... ingPEiD0.94f U s e d o t r e c t: M i c r o

s o f t V i s u a l i s a B 5. 0 / 6. 0



O k i e, e x e s t e a l t h i s o n w un pa c k e d e s u cc ss f u l! T h a t e s a italy! H uh.

Italy N W h t o a r B

G r e s e T F O L italy u t C o m p u t e r a n _ l e g, Z o m b i e, M oo n Bab italy, Ha of the o, B e a

nin , ki n e m a n a r o w, i o Z, D x u e, M e r c, l i g h p o HT e where x, T r i c o b up italy, T A

K Ada, a i m i i d t o, the HT p g e h o ni x, t of t h e n a n d e a n ... ndy o u!

Homepage: http://www.magictweak.com
Production: Efreesky Software
Software: MagicTweak v2.70
Copyright by: Copyright (C) 2000 - 2003 Efreesky Software.All Rights Reserved.
Type: N / S
Packed: PECompact 1.68 - 1.84 -> Jeremy Collake
Language: Microsoft Visual C + + 6.0
Crack Tool: 1:10 OllyDbg, PEiD 0.92, Import REConstructor v1.6F, LordPE v1.4
Unpack: Manual
Request: Correct Serial
Comments:

MagicTweak v2.70

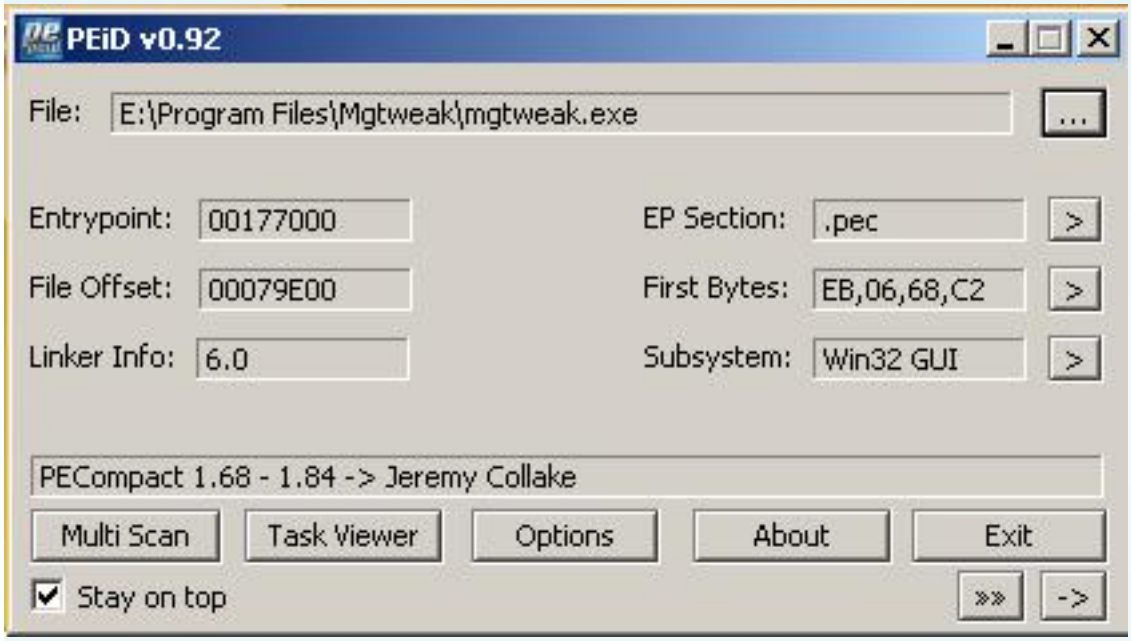
MagicTweak is a special program designed to optimize and personalize Microsoft Windows. It provides one-stop, instant access to a variety of Windows settings that can be altered for a friendlier Windows environment.This unique software makes it easy to tweak hundreds of hidden settings in Windows XP/2000/Me/98, so there is no longer any need to dig through the registry looking for that specific setting (from Start Menu, Desktop, IE skin, System Icon to System Security) that just does not seem to be there. With the ability to customize almost any aspect of Windows, you can become a Windows expert almost instantly!

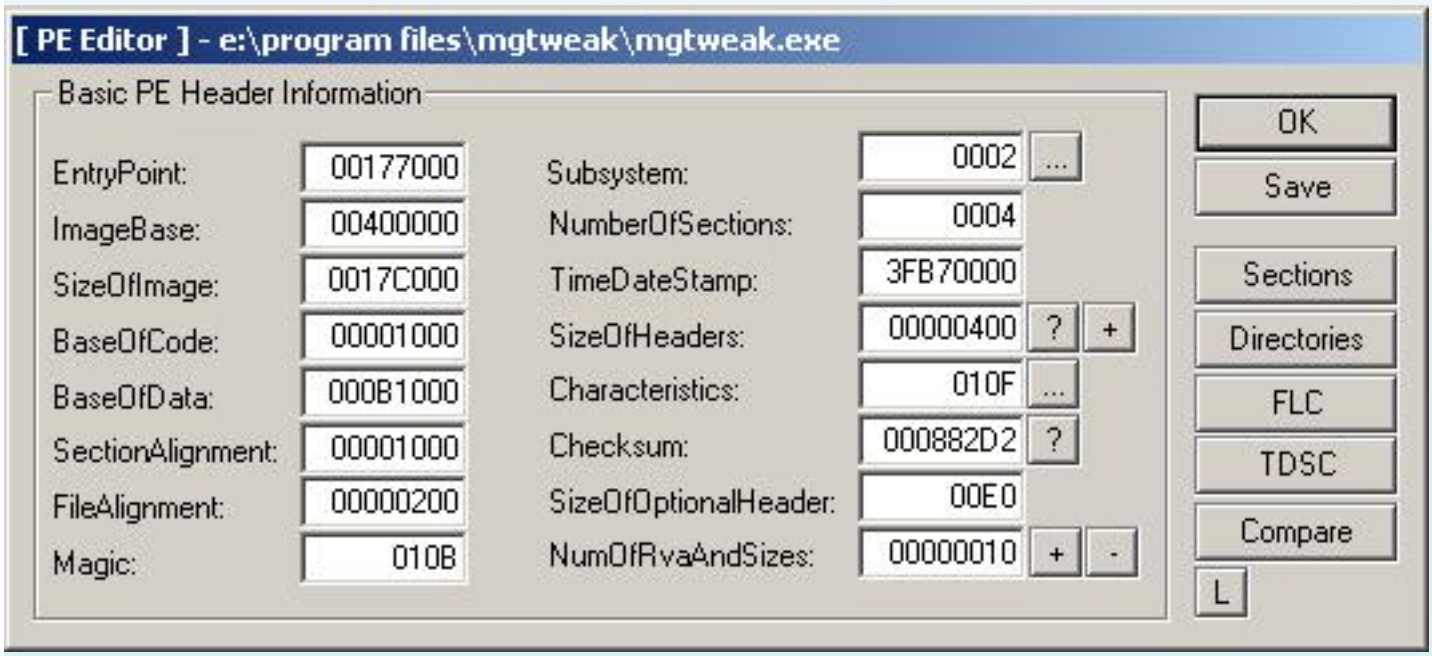
I - Information:

-**** **PeiD** Used to Detect **v0.92,** we know this program was the author with the Pack **PECompact 1.68 - 1.84 -> Jeremy Collake.** So it is with other Pack thằng **Magic Utilities,** but do not all problems have solutions. We will try to **unpack** this month to see why.
-**** Run test program to see what's special, immediately a Nag Screen shot out: **"Enter the registration here ... ."** Nag Screen in this we will see two textbox to enter **User Name** and **Registration Code.** So how is the protection of the program is N / S. If you enter the correct Oki. At this time we should not have been temporarily đành click on **Continue** Button **Evaluation** for more information.
-**** Once we click to the main screen of the program, the title bar, we see a line as follows: **Magic Tweak unregistered - Day 1 of 15.** That means if we are not legally registered we will only be used to try the features of the program within 15 days only. Too date is "he ơi stay hiiiiiiii them farewell." One more thing to want to say is this program of the User Interface to look very eyes ... ... looking good so it's been quite nice **$ 29.95.**

II - UnPacking:

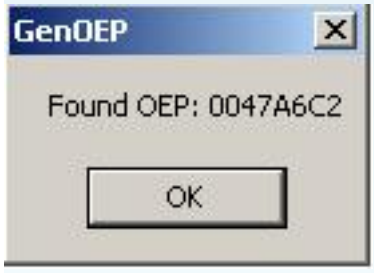
-**** **PeiD** Used to Detect and **LordPE,** we have some information as follows:





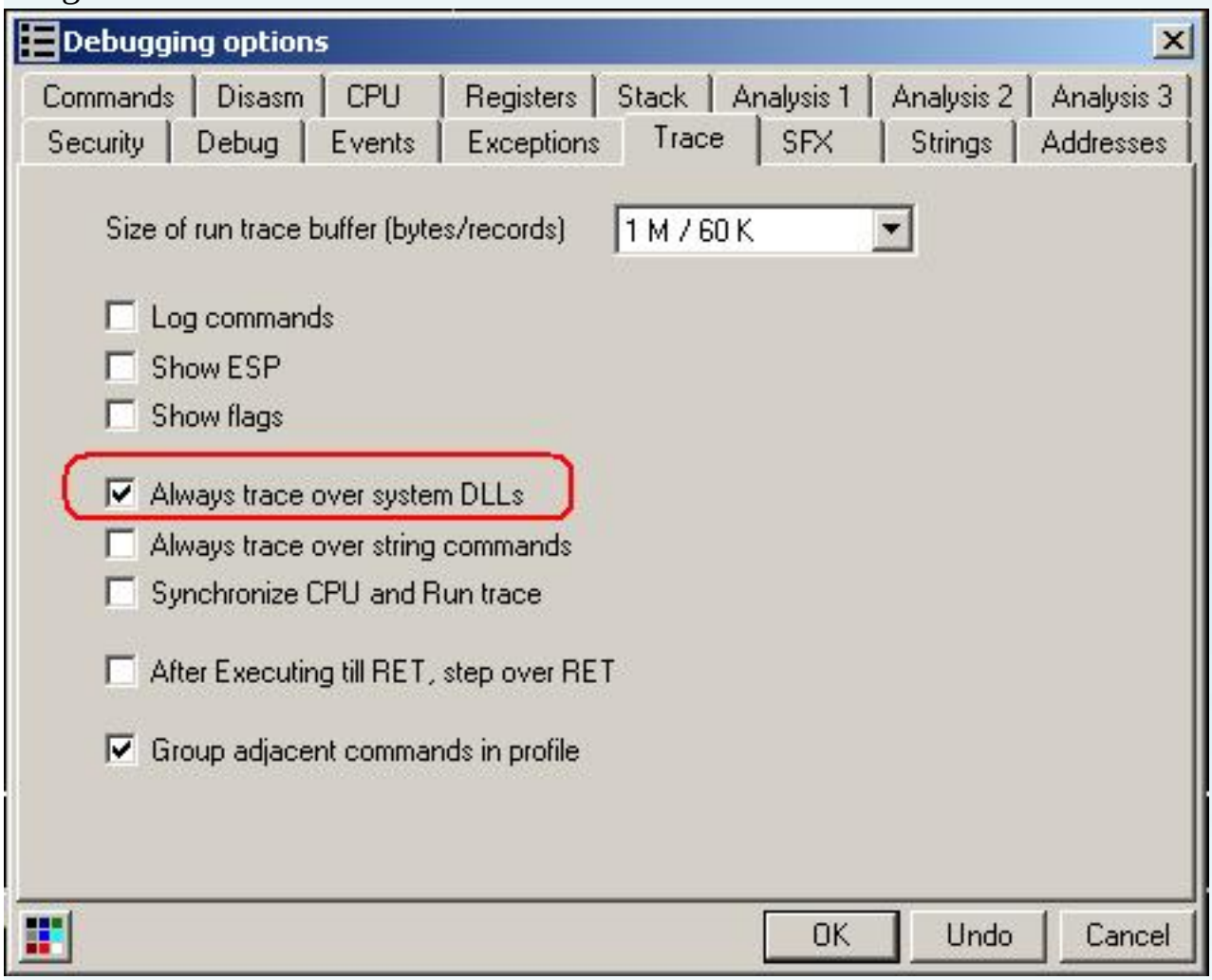
1. Search OEP:

-**** As we know in a PeiD Plugin **"Generic OEP Finder." For** the Pack is in **PECompact 1.68 - 1.84 -> Jeremy Collake** this is a good plugin to find the **OEP,** use This plugin we OEP will be as follows:



-**** Ke Ke Ke, OEP PeiD which is found **0047A6C2.** Oki, so the old formula we can find **real**

OEP as follows:
Real OEP = OEP find in PEiD-Image-47A6C2 Base = 400000 = **7A6C2.**
2.Dump file:
To -**** can dumping, we must configure the following Olly. At the main screen of Olly, click on the **Option** menu ---> **Options debugging (Alt + O).** Transfer to **Trace** tab. Revising like the image below:

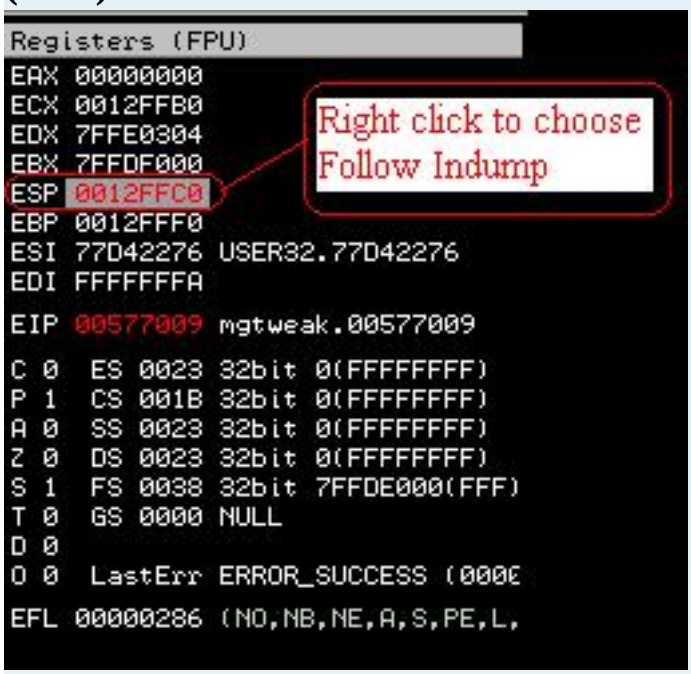


-**** Then Load files need to unpack Olly **(mgtweak.exe), select** it **(not Analysis).** We will come here:

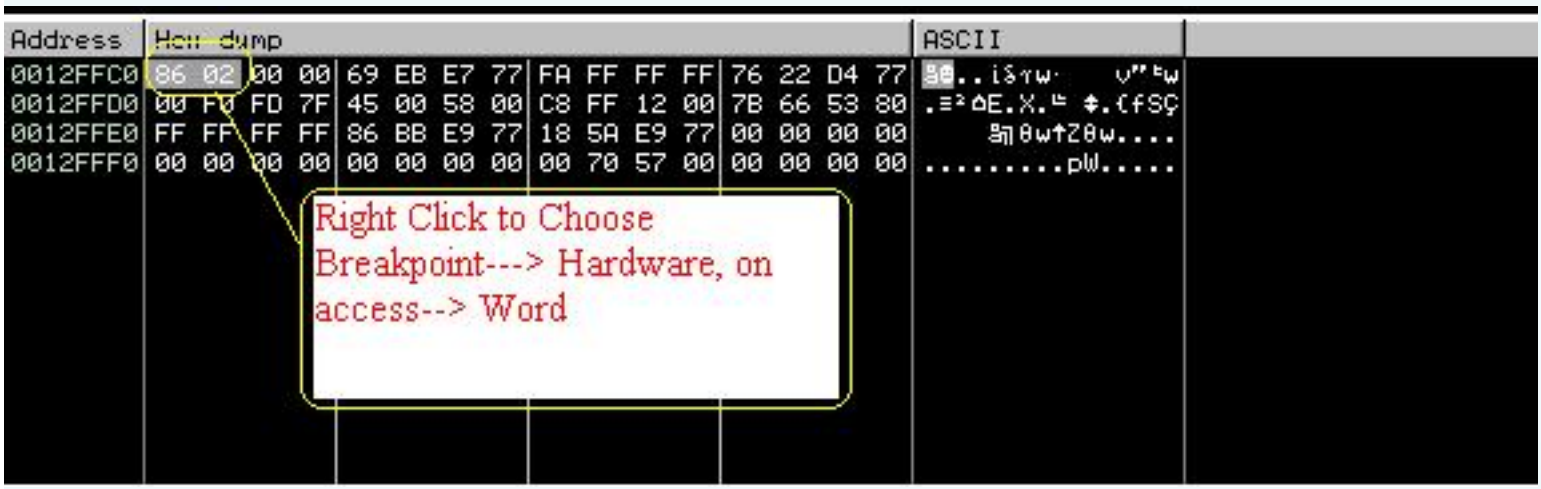
00577000> / EB 06 JMP SHORT mgtweak.00577008; <== We're here
00577002 | 68 C2A60700 PUSH 7A6C2
00577007 | C3 RETN
00577008 \ 9C PUSHFD
00577009 60 PUSHAD; <== **Push F8 to trace here**
0057700A E8 02000000 CALL mgtweak.00577011
0057700F 33C0 XOR EAX, EAX

-**** Press F8 to Trace to **PUSHAD** in order, after which to trace you to that window to **register**

(FPU). Click to write in to choose **ESP Follow in dump** as follows:



-**** **Hex dump** window will switch to new window, select the first **4 bytes** of this window and click to select **Break ==> Hardware, on acces ==> Word:**



-**** Then press **F9,** we will come here:

00578550 50 PUSH EAX; <=== We're here
00578551 68 C2A64700 PUSH mgtweak.0047A6C2
00578556 C2 0400 RETN 4

-**** Press F8 to **Trace** through **RETN4** order, we will come **OEP:**

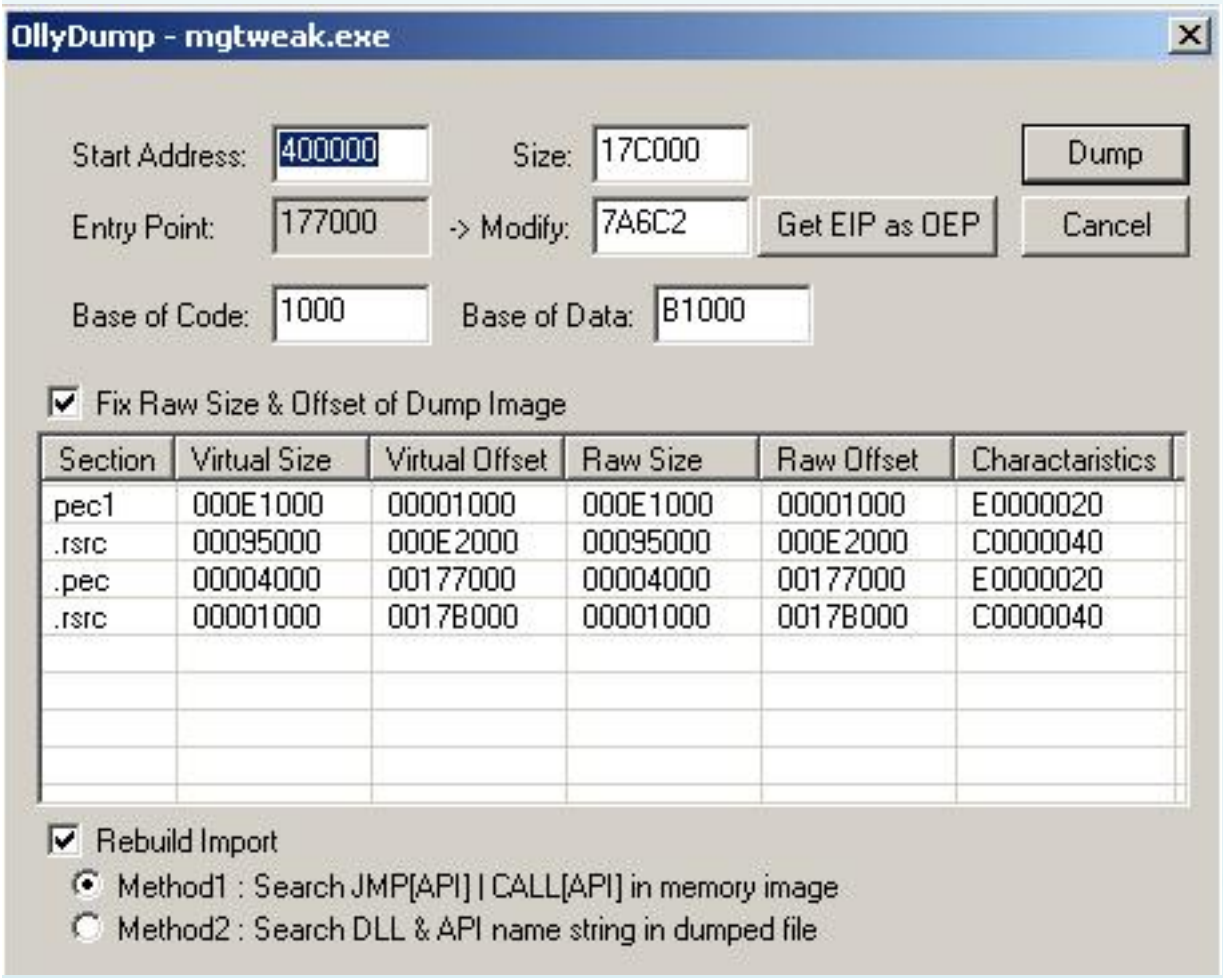
0047A6C2 55 PUSH EBP; <=== We're here: OEP
0047A6C3 8BEC MOV EBP, ESP

0047A6C5 6A FF PUSH -1

OEP What we found is **47A6C2.** Now we will calculate the real find OEP of the program by the following formula:
Real OEP = OEP find in Olly-Image-Base 47A6C2 = 400000 = **7A6C2. (OEP** finding coincides with the PEid)

2.Dump file:

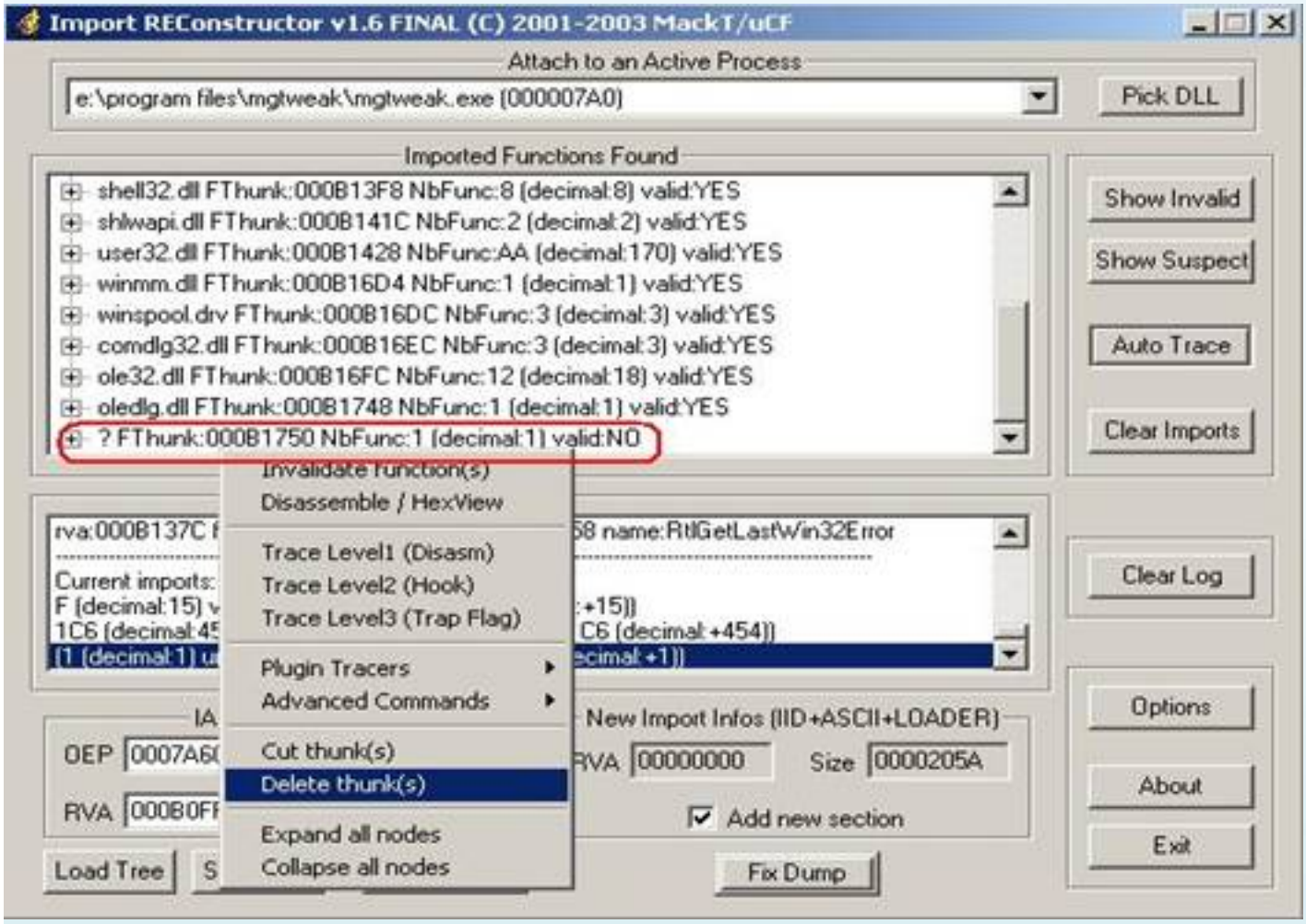
-**** At **0047A6C2** we **Plugin** to menu **-> OllyDump -> debugged process dump** or click to select **dump debugged process.** We will monitor to **OllyDump:**



Check **Import -**** **rebuild,** in the Modify the **real OEP** we have calculated according to the formula above. Click **dump,** Save us with a name any. Here you save is **dumped.exe.**

3. Find and Edit IAT (Import Adress Table):

-**** Retain the program, open the **Import REConstructor v1.6F** load file **mgtweak.exe.** Instead of using the OEP in the value we have found and calculated in the **(7A6C2)** then select **IAT AutoSearch** and then click **Get Imports.** We will be as follows:

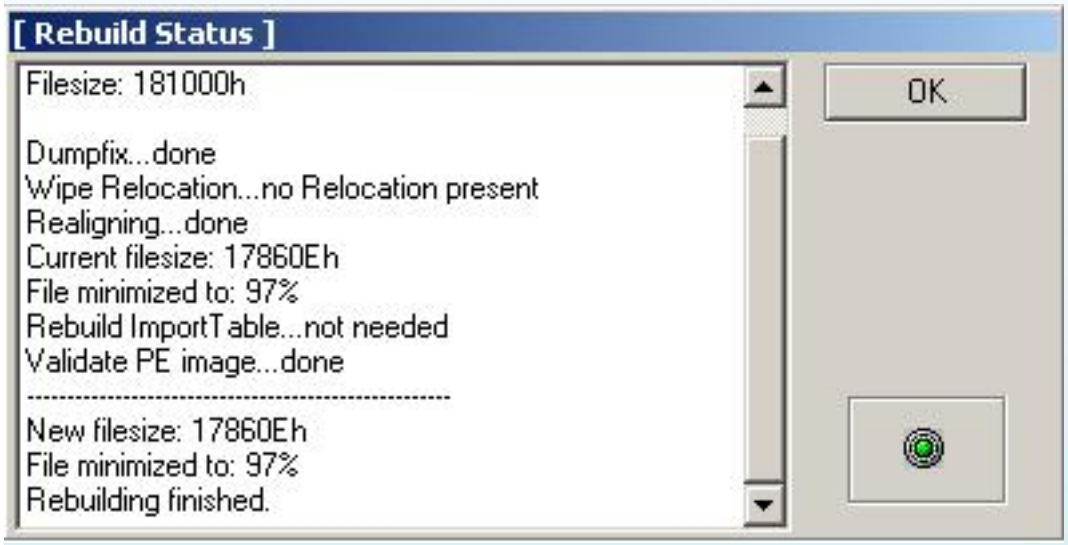


A -**** **Import Function Invalid,** right click in the **Function** and select **Delete Thunk (s).** Now we press **Fix Fix IAT** to **dump** file for **dumped.exe** that we save on.

4. Cleaning and reduce the size of the file after unpack:

To improve -**** than we conducted the process of cleaning and reduce the file size of the file after **Fix dump** (the purpose of making the file as small as possible). If you do not like you can step over.

Using -**** **LordPE v1.4.** Load up this program, select **Rebuit PE.** Then select the file that we **Fix dump** (the file **dumped_.exe).** The we have a complete new file which you then. Ặc ặc too tired ... ... but ultimately that's the next, we will become easier.



Using **-**** PeiD v0.92** detect again we know this program is the author code with **Microsoft Visual C + + 6.0.** See that the eyes of the right, no child left eye too hiiiiiiiiii

Homepage: http://www.magictweak.com
Production: Efreesky Software
Software: Magic Utilities 2004 v3.10
Copyright by: Copyright (C) 2000 - 2004 Efreesky Software.All Rights Reserved.
Type: N / S
Packed: PECompact 2.x -> Jeremy Collake
Language: Microsoft Visual C + + 6.0
Crack Tool: 1:10 OllyDbg, PEiD 0.92, Import REConstructor v1.6F, LordPE v1.4
Unpack: N / A
Request: Correct Serial / KeyGen
Comments:

Magic Utilities 2004 v3.10

Magic Utilities is a cute program designed to make your computer clean and more stable.These utilities include Uninstller Plus, Startup Organizer, Process Killer.Magic Utilities enables you to easily and safely uninstall programs, inspect and manage the programs that start automatically when you turn on or logon to your computer, list and control all currently running processes (system and hidden processes are also shown). With a cool and user-friendly interface makes it easy for anyone to use Magic Utilities.

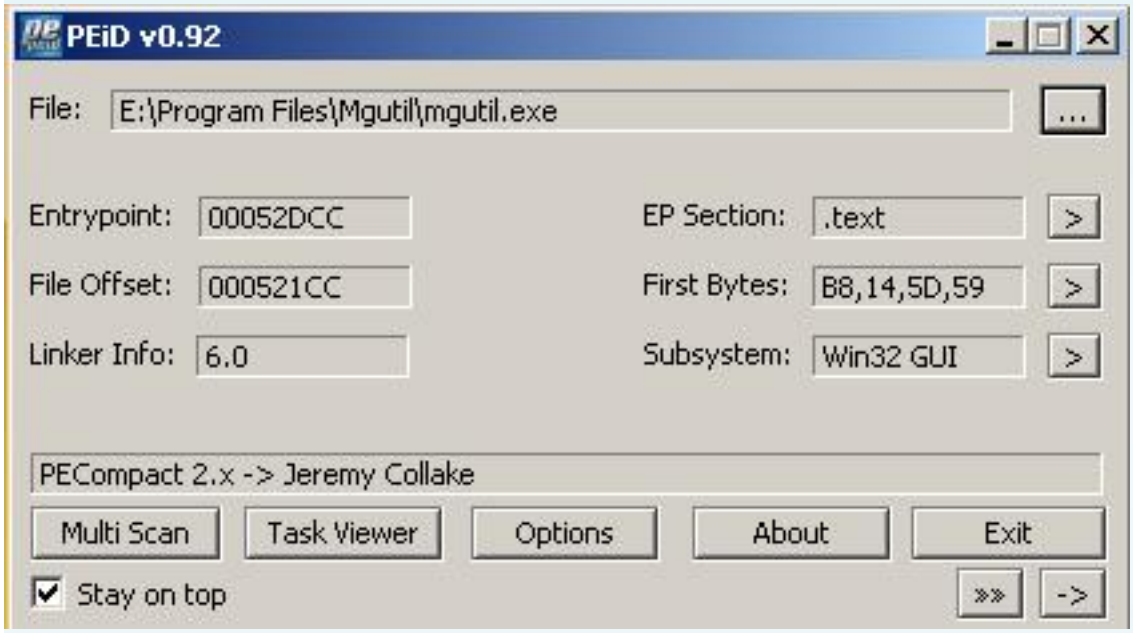
---------- ----------

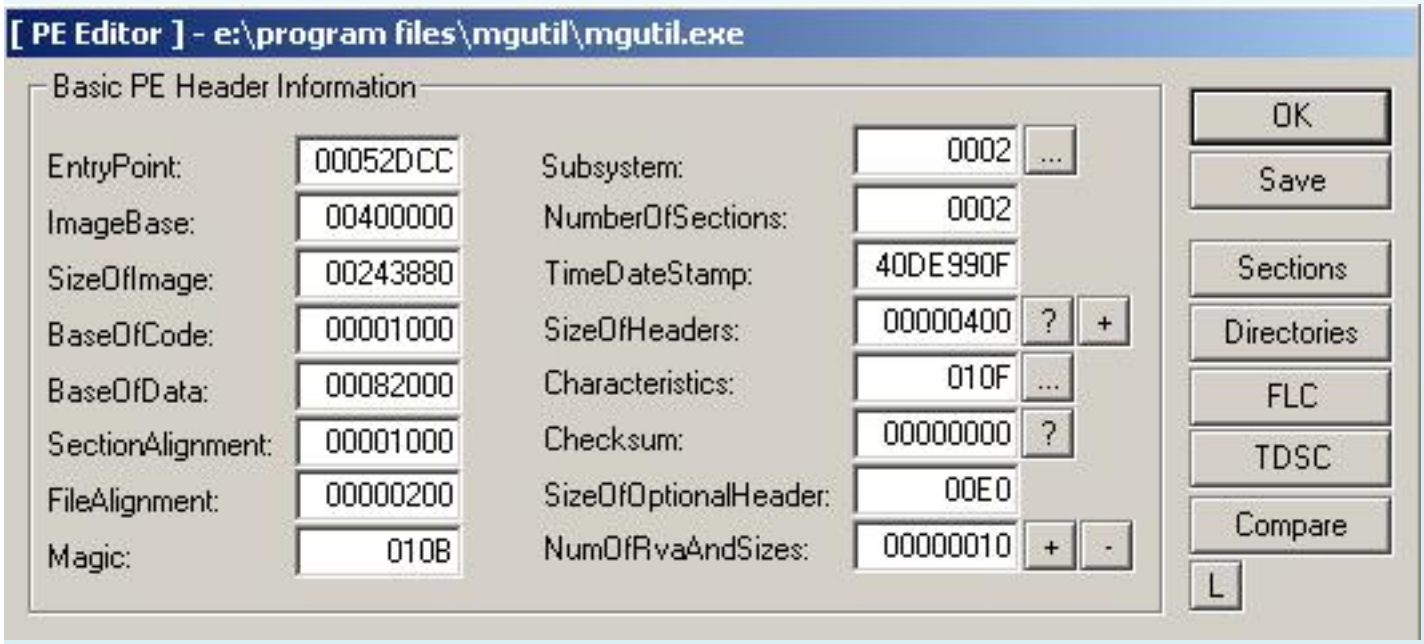
I - Information:

-**** **PeiD** Used to Detect **v0.92,** we know this program was the author with the Pack **PECompact 2.x -> Jeremy Collake.** What is difficult for us then, but do not have a hard new lo the wise. We will try to unpack this month to see why.
-**** Run test program to see what's special, immediately a Nag Screen shot out: **"Enter the registration here ... ."** Nag Screen in this we will see two textbox to enter **User Name** and **Registration Code.** So how is the protection of the program is N / S. If you enter the correct Oki. At this time we should not have been temporarily đành click on **Continue** Button **Evaluation** for more information.
-**** Once we click to the main screen of the program, the title bar, we see a line as follows: **unregistered Magic Utilities 2004 - Day 1 of 15.** That means if we do not register legally we will only be used to try the features of the program within 15 days only. Too date is "he ơi stay hiiiiiiii them farewell." One more thing to want to say is this program of the User Interface to look very eyes ... ... looking good so it's been quite nice **$ 29.95.**

II - UnPacking:

-**** **PeiD** Used to Detect and **LordPE,** we have some information as follows:





1. Search OEP:

-**** Load program in Olly, select it (not Analysis). We will come here:

00452DCC> b8 145D5900 MOV EAX, mgutil.00595D14; <== We're here
00452DD1 50 PUSH EAX
00452DD2 64: FF35 0000000> PUSH DWORD PTR FS: [0]
00452DD9 64:8925 0000000> MOV DWORD PTR FS: [0], ESP
00452DE0 33C0 XOR EAX, EAX
00452DE2 8908 MOV DWORD PTR DS: [EAX], ECX
00452DE4 50 PUSH EAX
45 INC EBP 00452DE5

-**** Press F9 twice, we'll come to the following order:

00452DE2 8908 MOV DWORD PTR DS: [EAX], ECX ;<=== We're here
00452DE4 50 PUSH EAX
45 INC EBP 00452DE5
00452DE6 43 INC EBX
00452DE7 6F OUTS DX, DWORD PTR ES: [EDI], I / O command

-**** Here we hit the combination **Alt + M** to open the window in Olly **Memory Map:**

Memory map
Address Size Owner Section Contains Type Access Initial Mapped as
00360000 00001000 Priv RW RW
003E0000 00004000 Priv RW RW
003F0000 00002000 Map R R
00400000 00001000 mgutil PE header IMAG R RWE
00401000 0016B000 mgutil. IMAG text code R RWE
0056C000 000D8000 mgutil. Rsrc imports, IMAG reso R RWE
00650000 00003000 Map RE RE
00710000 00002000 Map RE RE

At -**** red line above, we have to click and then select **Set breakpoint on memory access.**

-**** Then press **Shift + F9** we will code to the following:

00595D29 C602 E9 MOV BYTE PTR DS: [EDX], 0E9 ;<=== We're here
00595D2C 83C2 05 ADD EDX, 5
00595D2F 2BCA SUB ECX, EDX
00595D31 894A FC MOV DWORD PTR DS: [EDX-4], ECX
00595D34 33C0 XOR EAX, EAX
00595D36 C3 RETN

-**** Next they hit **Shift + F9** to 3 times more, we'll come to a different code as follows:

00595D37 b8 BD4CCDFF MOV EAX, FFCD4CBD; <=== We're here
00595D3C 64:8 F05 0000000> POP DWORD PTR FS: [0]
00595D43 83C4 04 ADD ESP, 4
00595D46 55 PUSH EBP
00595D47 53 PUSH EBX

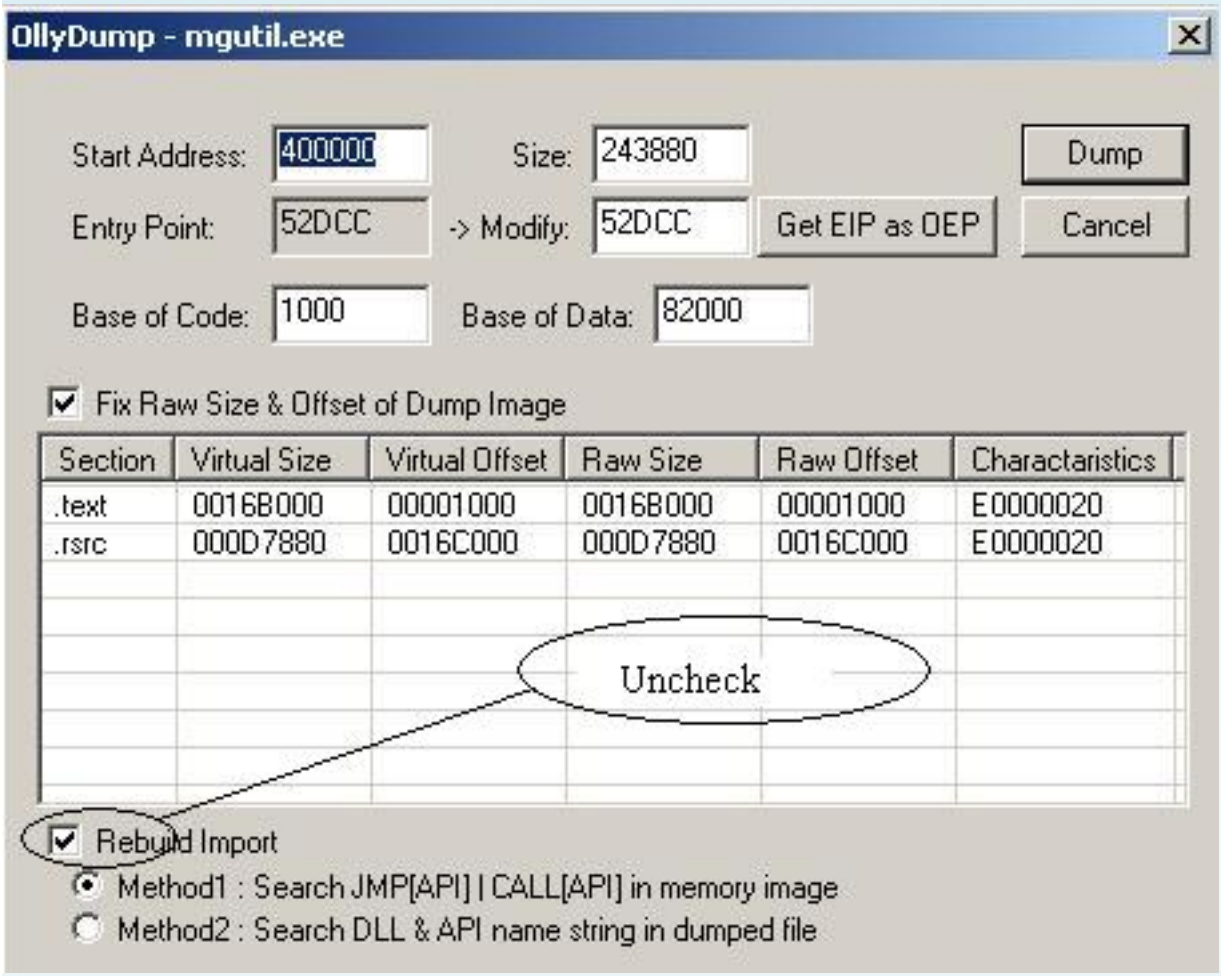
-**** Here we press **Ctrl + F12,** we'll see the following code:

00B50289 F3: A4 REP MOVS BYTE PTR ES: [EDI], BYTE PTR DS: [> ;<=== We're here, very close to OEP rùi you ơi.
00B5028B 8BF3 MOV ESI, EBX
00B5028D 8D8D D7128C00 LEA ECX, DWORD PTR SS: [EBP +8 C12D7]
00B50293 51 PUSH ECX
00B50294 E8 4D020000 CALL 00B504E6
00B50299 8B4E 2C MOV ECX, DWORD PTR DS: [ESI +2 C]
00B5029C 8B56 24 MOV EDX, DWORD PTR DS: [ESI +24]
00B5029F 0356 08 ADD EDX, DWORD PTR DS: [ESI +8]

-**** Finally we press **Ctrl + F12** again, OEP will appear right before our eyes:

00452DCC> 55 PUSH EBP <=== Our OEP is 00452DCC
00452DCD 8BEC MOV EBP, ESP
00452DCF 6A FF PUSH -1
00452DD1 68 908D4800 PUSH mgutil.00488D90
00452DD6 68 488D4500 PUSH mgutil.00458D48
00452DDB 64: A1 00000000 MOV EAX, DWORD PTR FS: [0]

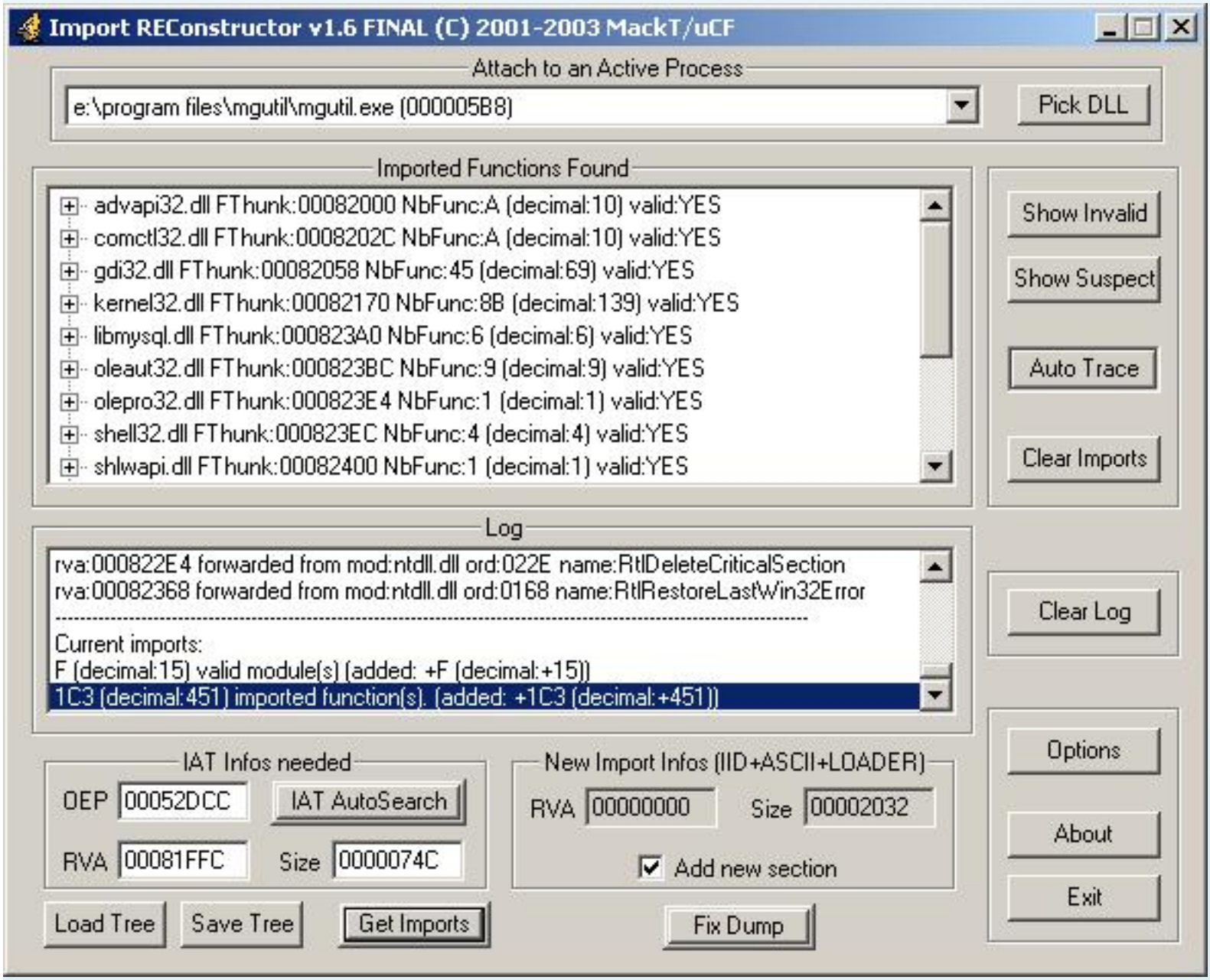
OEP What we found is **452DCC.** Now we will calculate the real find OEP of the program by the following formula:
Real OEP = OEP find in Olly-Image-Base 452DCC = 400000 = **52DCC.**
2.Dump file:
-**** At **00452DCC** we **Plugin** to menu -> **OllyDump** -> **debugged process dump** or click to select **dump debugged process.** We will monitor to **OllyDump:**



Uncheck **Import** -**** **rebuild,** in the Modify the real OEP we have calculated according to the formula above. Click dump, Save us with a name any. Here you save is **dumped.exe.**

3. Find and Edit IAT (Import Adress Table):

-**** Retain the program, open the **Import REConstructor v1.6F** load file **mgutil.exe.** Instead of using the OEP in the value we have found and calculated in the (52DCC) then select **IAT AutoSearch** and then click **Get Imports.** We will be as follows:

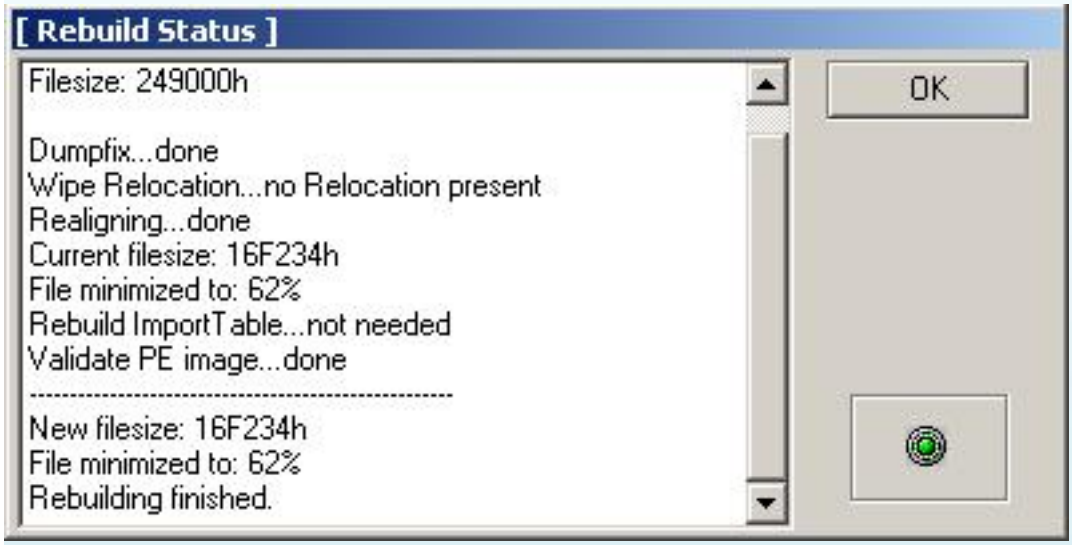


-**** All **Import Function Valid** all too has rùi. Now we press **Fix Fix IAT** to **dump** file for **dumped.exe** that we save on.

4. Cleaning and reduce the size of the file after unpack:

To improve -**** than we conducted the process of cleaning and reduce the file size of the file after **Fix dump** (the purpose of making the file as small as possible). If you do not like you can step over.

Using -**** **LordPE v1.4.** Load up this program, select **Rebuit PE.** Then select the file that we **Fix dump** (the file **dumped_.exe).** The we have a complete new file which you then. Ặc ặc too tired ... ...

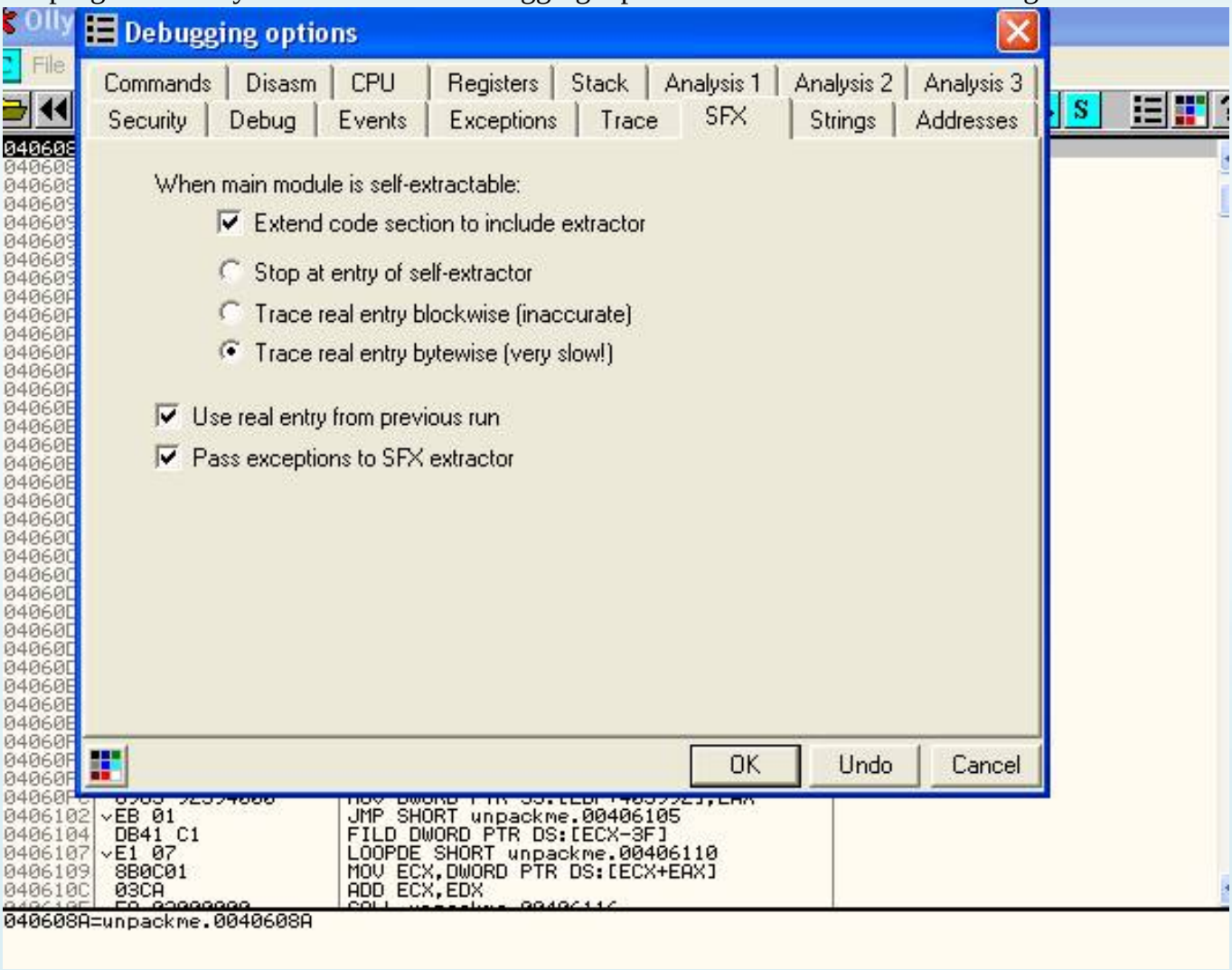


Using **-**** PeiD v0.92** detect again we know this program is the author code with **Microsoft Visual C + + 6.0.** See that the eyes of the right, no child left eye too hiiiiiiiiii

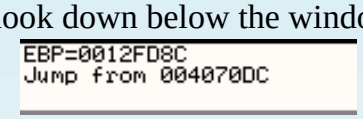
Manual unpack PESpin by 0.7 Kagra

Translate and Edit: tlandn

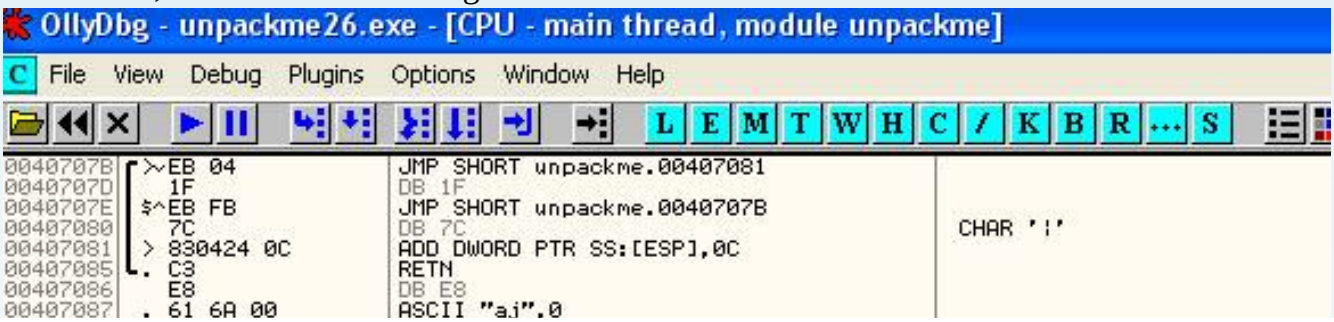
Tut this Kagra your bags. Tut Kagra's short and does not explain clearly quite difficult to understand. I add images, and notes for you to understand more.
Target: Unpackme? by hacnho (enclosed in the file)
First you have to go hide OllyDbg. Kagra use HideOlly Plugin but you can also use the plugin IsDebugPresent.
Load program to Olly. Press Alt-O to "debugging Options" and the same as following:



Now load the program by pressing Ctrl-F2. The error message just click on the OK.
Press Ctrl-F9. The program will stop at 00,401,029. Press Ctrl-A to "analyze ...". A notice on the select YES. Now look down below the window will see the following:



That is we have to jump 00401029 from 004070DC. Press Ctrl-G. Type in 004070DC. Click OK. Now roll up the window a bit, we'll see the following:



```
00407085  L. C3              RETN
00407086    E8              DB E8
00407087  . 61 6A 00         ASCII "aj",0
0040708A    EB              DB EB
0040708B  > 01E3            ADD EBX,ESP
0040708D  . 68 97704000     PUSH unpackme.00407097
00407092  .-E9 7DA0FFFF     JMP unpackme.00401114
00407097  . A3 00304000     MOV DWORD PTR DS:[403000],EAX
0040709C  .v EB 01          JMP SHORT unpackme.0040709F
0040709E  . F1              INT1
0040709F  > 6A 00           PUSH 0
004070A1  .v EB 01          JMP SHORT unpackme.004070A4
004070A3  . 45              INC EBP
004070A4  > 68 F5EED209     PUSH 9D2EEF5
004070A9  . 812C24 CCDE9209 SUB DWORD PTR SS:[ESP],992DECC
004070B0  . 6A 00           PUSH 0
004070B2  .v EB 01          JMP SHORT unpackme.004070B5
004070B4    1C              DB 1C
004070B5  > 6A 65           PUSH 65
004070B7  .v EB 01          JMP SHORT unpackme.004070BA
004070B9    81              DB 81
004070BA  > FF35 00304000   PUSH DWORD PTR DS:[403000]      unpackme.00400000
004070C0  .v EB 01          JMP SHORT unpackme.004070C3
004070C2    DC              DB DC
004070C3  > 68 CD704000     PUSH unpackme.004070CD
004070C8  .-E9 53A0FFFF     JMP unpackme.00401120
004070CD  . 6A 00           PUSH 0
004070CF  .v EB 01          JMP SHORT unpackme.004070D2
004070D1  . 27              DAA
004070D2  > 68 DC704000     PUSH unpackme.004070DC
004070D7  .-E9 32A0FFFF     JMP unpackme.0040110E
004070DC  .-E9 489FFFFF     JMP unpackme.00401029
004070E1    5C              DB 5C                           CHAR '\'
004070E2    47              DB 47                           CHAR 'G'
```

File we start with PUSH 0 (6A 00). We found a little under 00407085 in two 00407088 bytes (6A 00). This is our OEP. Press Ctrl-G. Enter 00407088. Click OK.

OllyDbg - dumped_.exe - [CPU - main thread, module dumped_]

File View Debug Plugins Options Window Help

L E M T W H C / K B R ... S

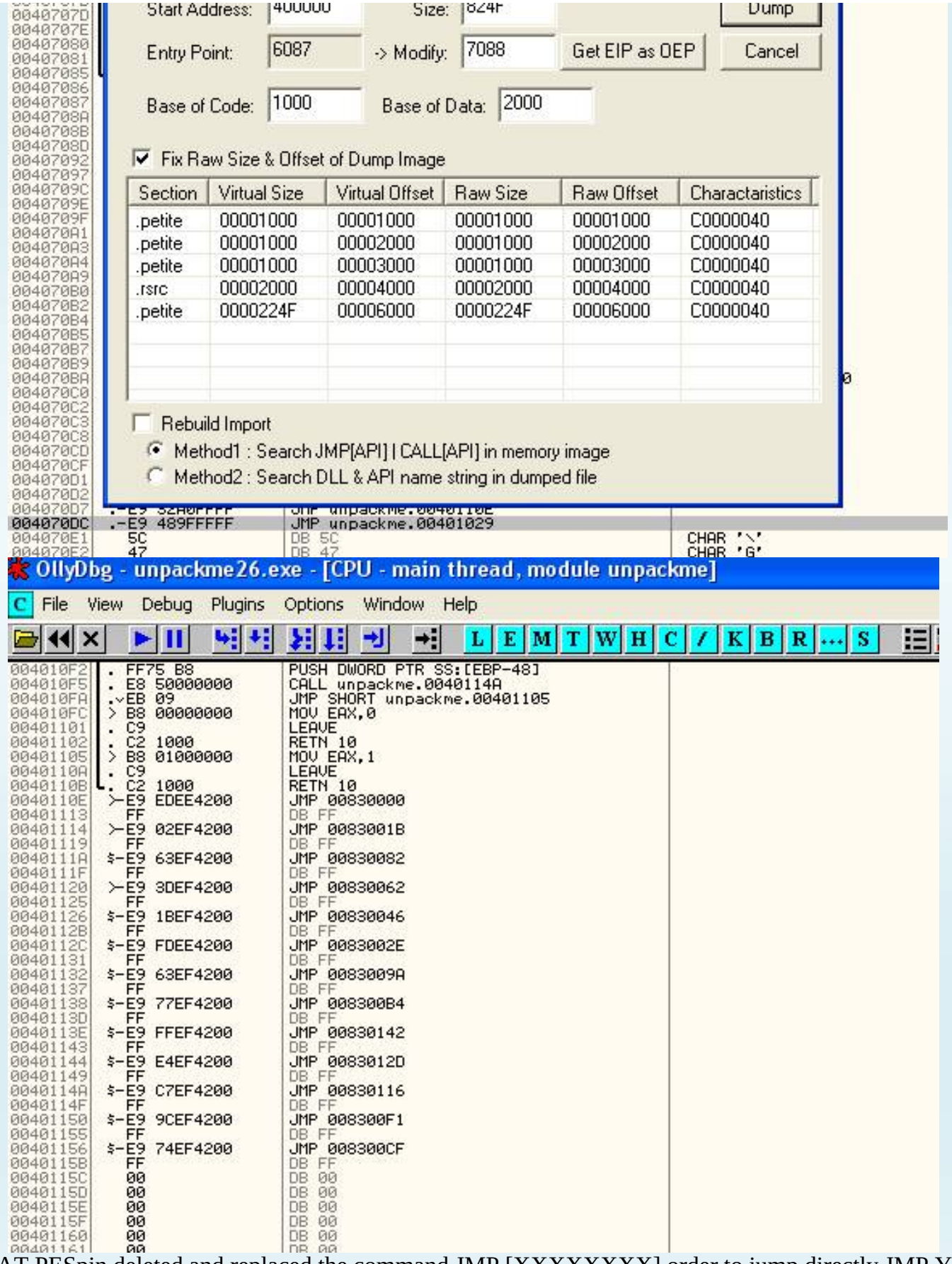
```
00407088  6A 00             PUSH 0
0040708A  EB 01             JMP SHORT dumped_.0040708D
0040708C  E3 68             JECXZ SHORT dumped_.004070F6
0040708E  97                XCHG EAX,EDI
0040708F  70 40             JO SHORT dumped_.004070D1
00407091  00E9              ADD CL,CH
00407093  7D A0             JGE SHORT dumped_.00407035
00407095  FFFF              ???                             Unknown command
00407097  A3 00304000       MOV DWORD PTR DS:[403000],EAX
0040709C  EB 01             JMP SHORT dumped_.0040709F
0040709E  F1                INT1
0040709F  6A 00             PUSH 0
004070A1  EB 01             JMP SHORT dumped_.004070A4
004070A3  45                INC EBP
004070A4  68 F5EED209       PUSH 9D2EEF5
004070A9  812C24 CCDE9209   SUB DWORD PTR SS:[ESP],992DECC
004070B0  6A 00             PUSH 0
004070B2  EB 01             JMP SHORT dumped_.004070B5
004070B4  1C 6A             SBB AL,6A
004070B6  65:EB 01          JMP SHORT dumped_.004070BA      Superfluous prefix
004070B9  81FF 35003040     CMP EDI,40300035
004070BF  00EB              ADD BL,CH
004070C1  01DC              ADD ESP,EBX
004070C3  68 CD704000       PUSH dumped_.004070CD
004070C8  -E9 53A0FFFF      JMP <JMP.&user32.DialogBoxParamA>
004070CD  6A 00             PUSH 0
004070CF  EB 01             JMP SHORT dumped_.004070D2
004070D1  27                DAA
004070D2  68 DC704000       PUSH dumped_.004070DC
004070D7  -E9 32A0FFFF      JMP <JMP.&kernel32.ExitProcess>
004070DC  -E9 489FFFFF      JMP dumped_.00401029
004070E1  5C                POP ESP
004070E2  47                INC EDI
004070E3  8C18              MOV WORD PTR DS:[EAX],DS
004070E5  8E2B              MOV GS,WORD PTR DS:[EBX]        Modification of segment register
004070E7  E8 F8732E27       CALL 276EE4E4
004070EC  44                INC ESP
004070ED  56                PUSH ESI
004070EE  EF                OUT DX,EAX                      I/O command
004070EF  D905 69B799BF     FLDD DWORD PTR DS:[BF99B769]
```

Now we will use the dump file is named OllyDump dump.exe. Just following:

OllyDbg - unpackme26.exe - [CPU - main thread, module unpackme]

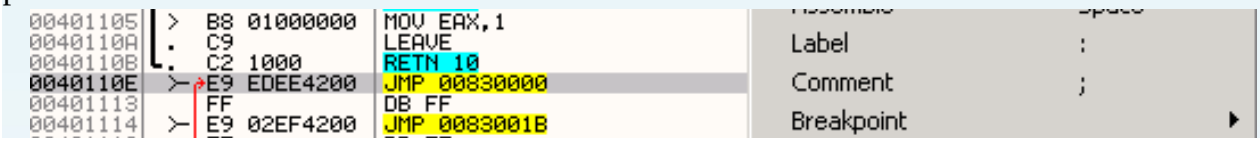
OllyDump - unpackme26.exe

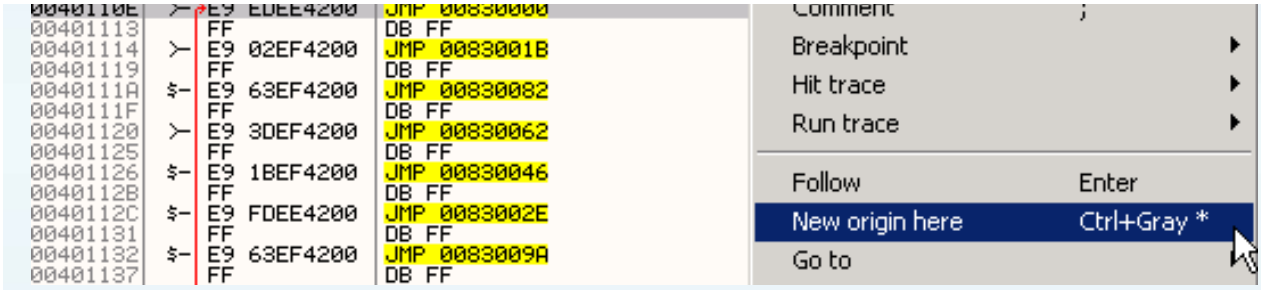
Start Address: 400000 Size: 824F Dump



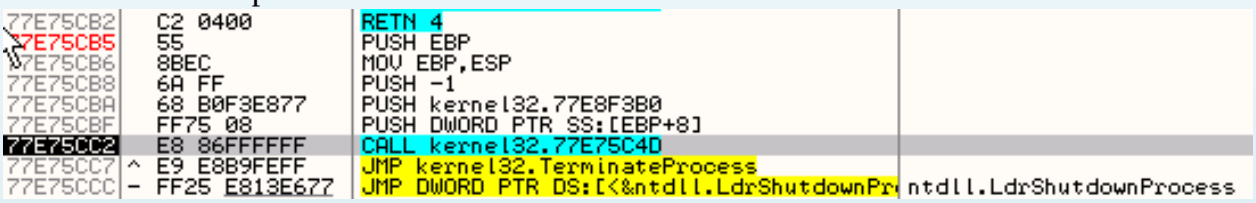
Now it's time we fix IAT. Press the button "*" we will at 00401029, scroll down the screen. At 0040110E we will see the function call APIs. (If you do not see, in 0040110E press Ctrl-A)

IAT PESpin deleted and replaced the command JMP [XXXXXXXX] order to jump directly JMP YYYYYYYY. So now how do I find the APIs. We will trace the API. At 0040110E must click your mouse and select as in the picture.

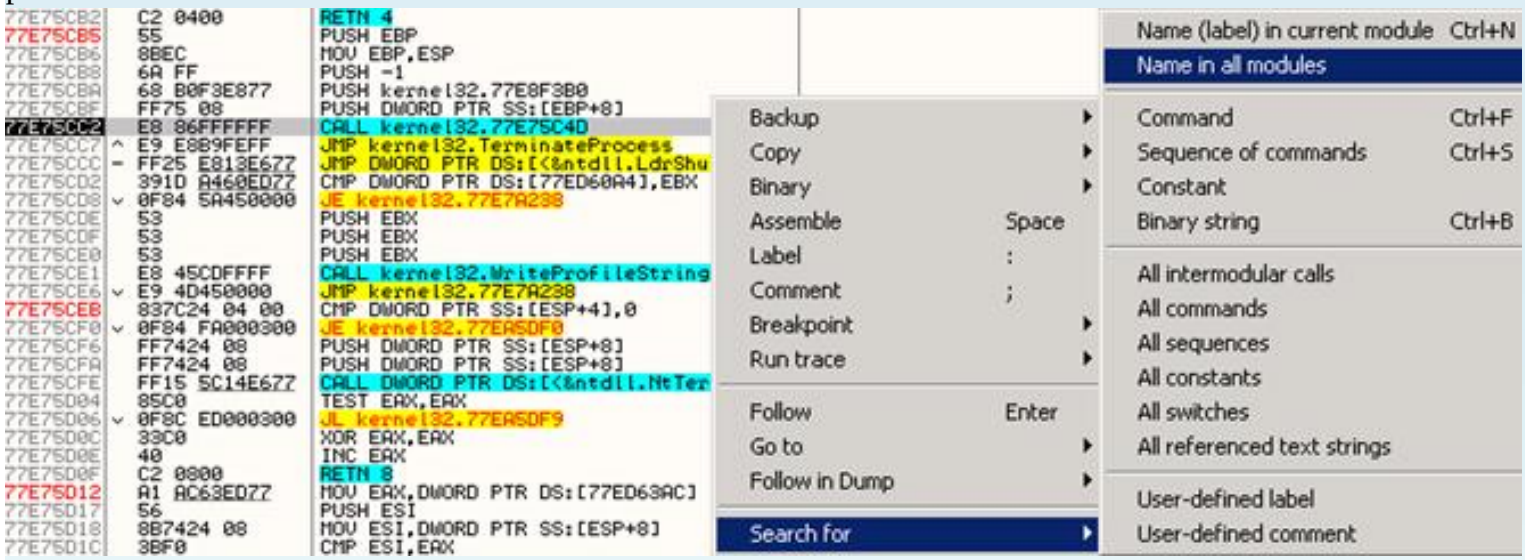




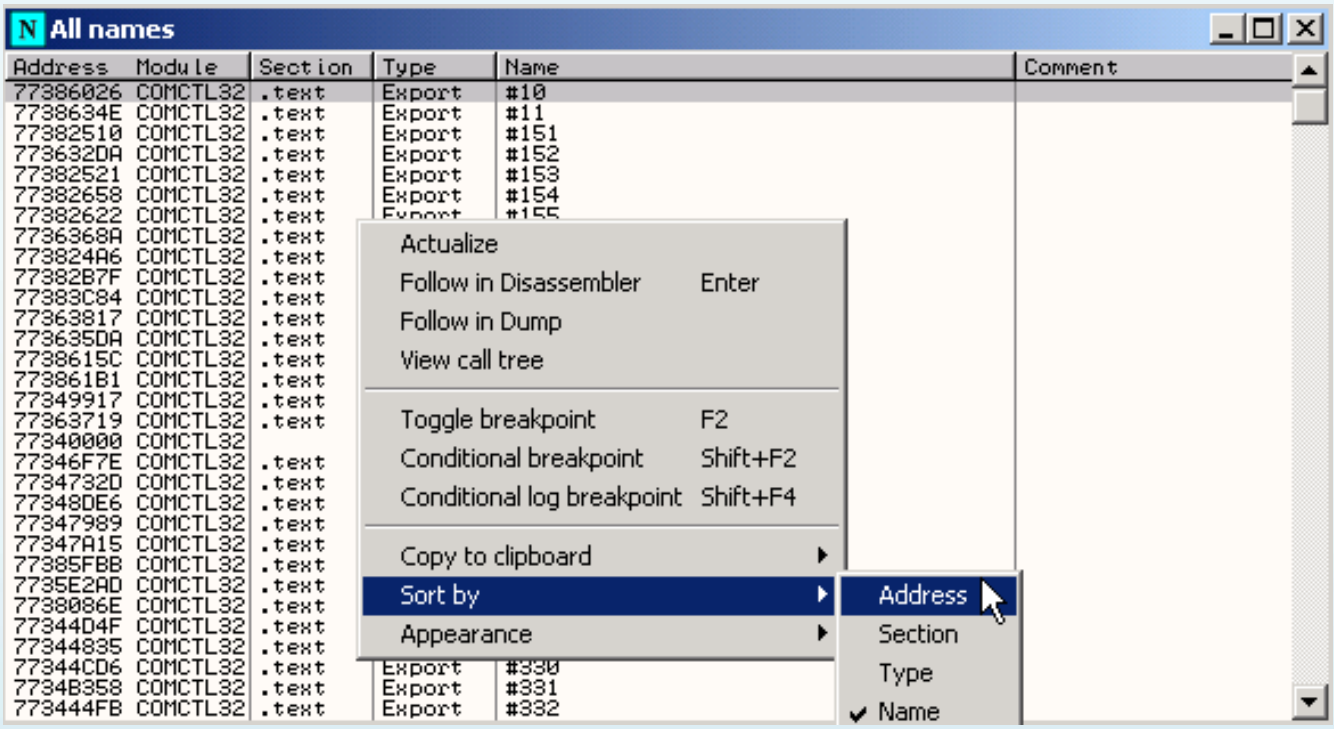
We will in 0040110E. Now trace the F7 until we address in the form 77XXXXXX. On bags, I will stop at 77E75CC2. Scroll up a screen hairbreadth. We found as follows:



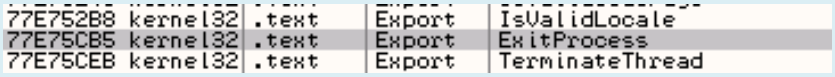
Note the starting point is the API 77E75CB5 (red in the picture above). Now click the mouse to select as in the picture.



In the window "All Names". Click your mouse to select the image in order to organize the API in order to address to search.



Now scroll down window below the search 77E75CB5 address.



Also, so we are aware of this API is ExitProcess in Kernel32.dll.

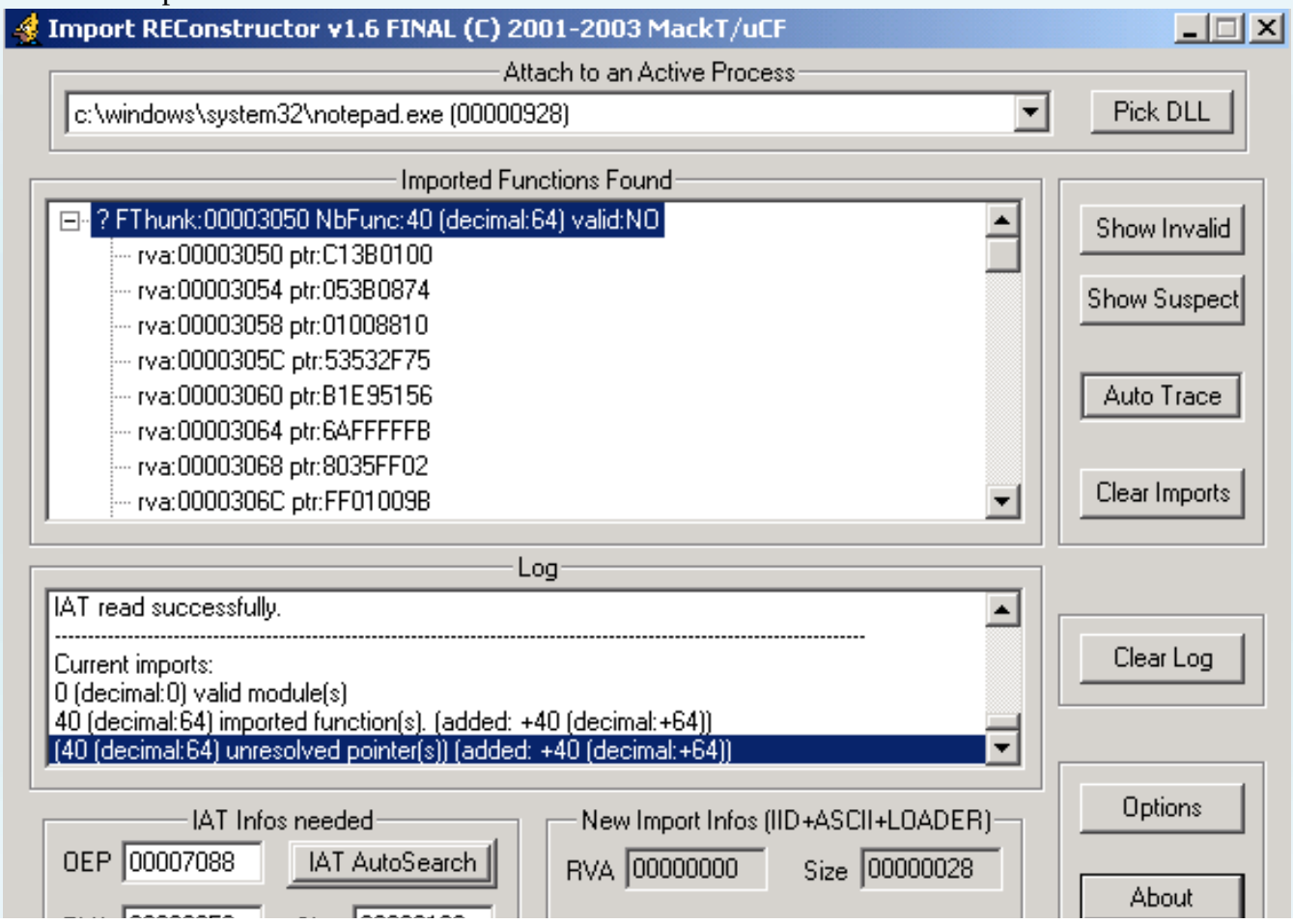
For other APIs, we also do the same (00401114, 0040111A, ..., 00401156). Also select "New Origin Here" to address remaining and trace with F7.

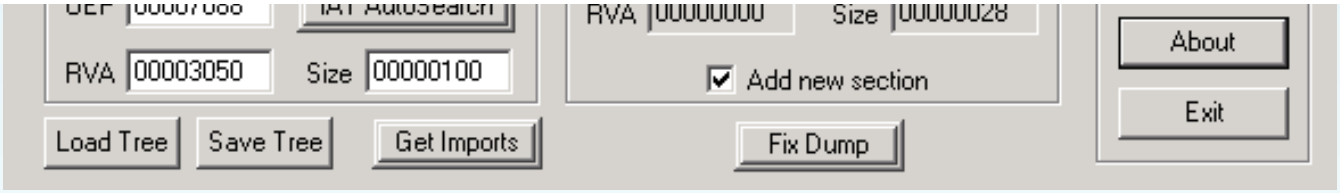
Finally we have a table summarizing the following:

0040110E	ExitProcess	Kernel32.dll
00401114	GetModuleHandleA	Kernel32.dll
0040111A	BeginPaint	User32.dll
00401120	DialogBoxParamA	User32.dll
00401126	EndDialog	User32.dll
0040112C	EndPaint	User32.dll
00401132	LoadBitmapA	User32.dll
00401138	SendMessageA	User32.dll
0040113E	BitBlt	Gdi32.dll
00401144	CreateCompatibleDC	Gdi32.dll
0040114A	DeleteDC	Gdi32.dll
00401150	DeleteObject	Gdi32.dll
00401156	SelectObject	Gdi32.dll

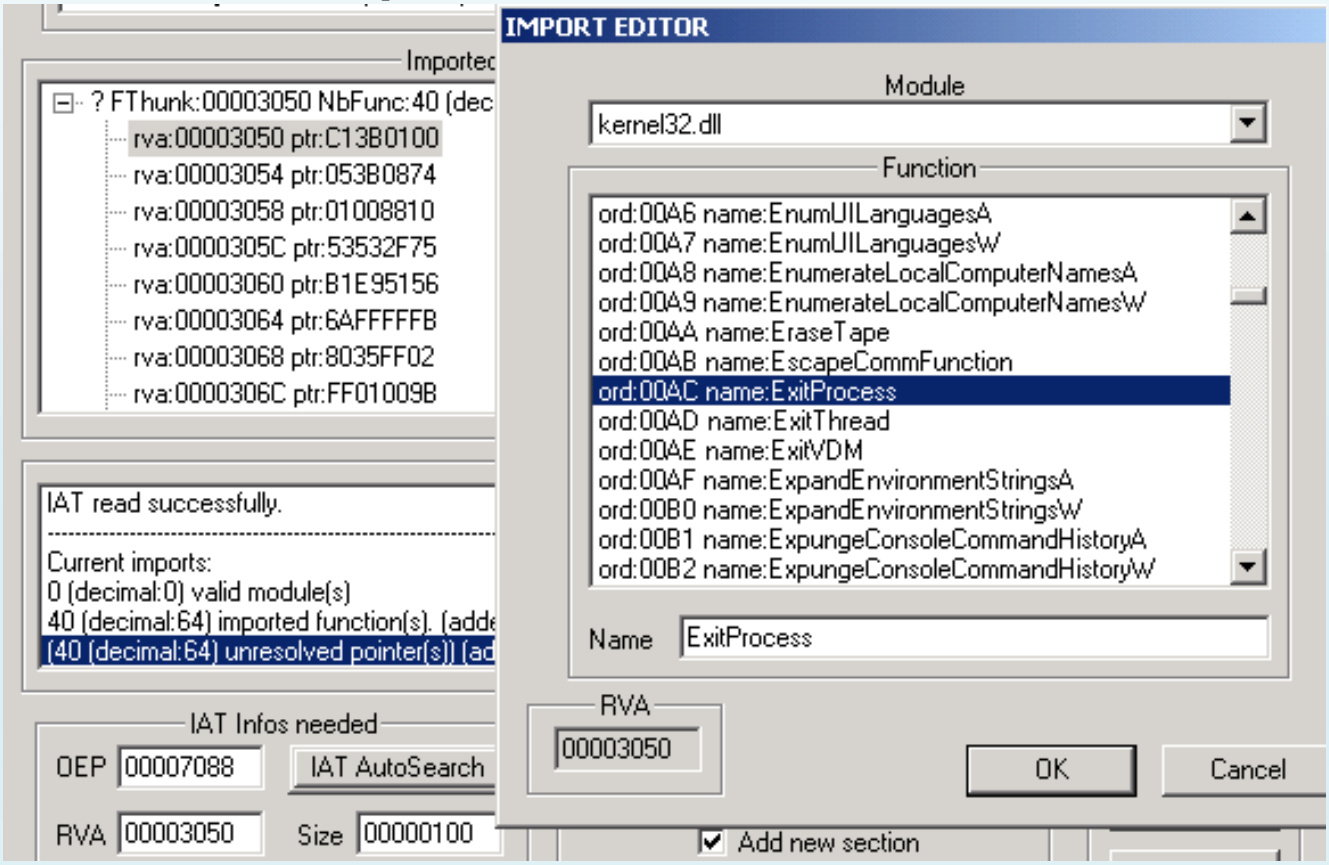
Now we will make a space in the file dump.exe to insert this in the API. Using any program Hex Edit any open files and search dump.exe space (multiple-byte 00). Here I found 00403050 many empty seats. We will insert it in the API.

Running Imprec. Select any of the process will be. Here I choose Notepad. Enter the same number in the picture. Click "Get Imports". We are:

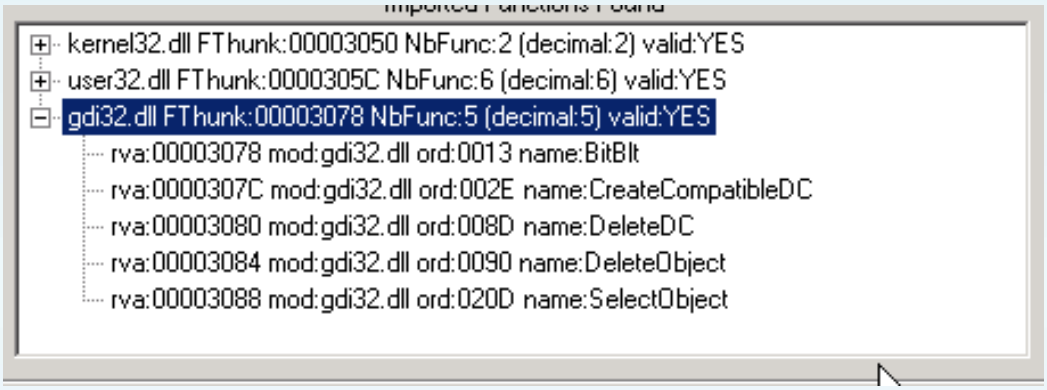




Now we will enter into the API. Double-click the mouse on the "rva: 00003050 ptr: C13B0100". And to complete the API ExitProcess as in the picture:



At a function rva 00003054 GetModuleHandleA. In rva 00003058 we will cut it out (by the end of the API in kernel32.dll by mouse click to select "Cut Thunk (s)")
Do the same for the rest of the API (at 00003074 removed). The rva remaining after complete all API also removed. We are as follows:



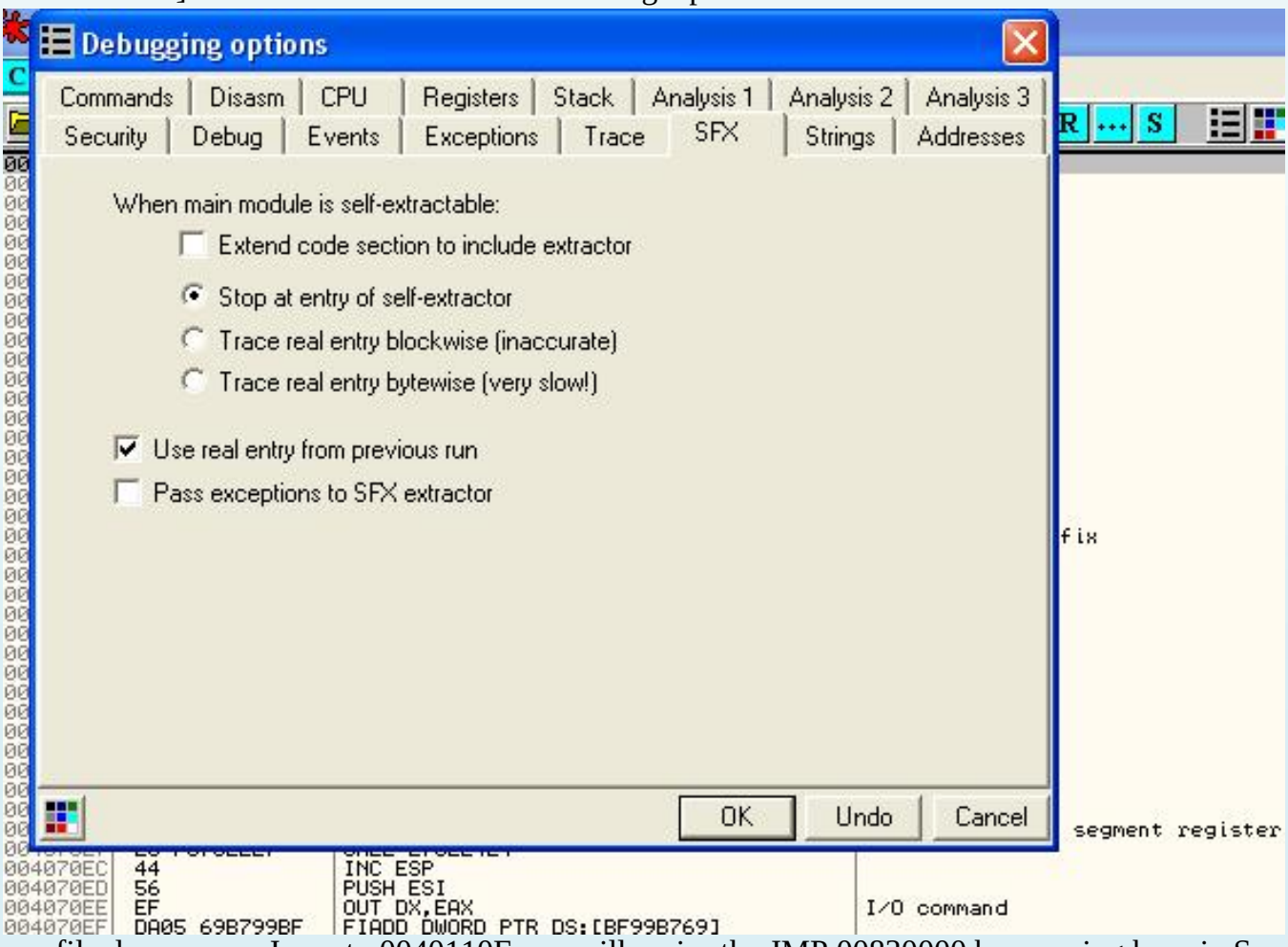
Click "Fix dump". Dump.exe Select File, we are dump_.exe file. IAT will be formatted as follows:
Target: C: \ WINDOWS \ system32 \ NOTEPAD.EXE
OEP: 00007088 IATRVA: 00003050 IATSize: 00000100

FThunk: 00003050 NbFunc: 00000002
1 00003050 kernel32.dll ExitProcess 00AC
1 00003054 kernel32.dll 0168 GetModuleHandleA

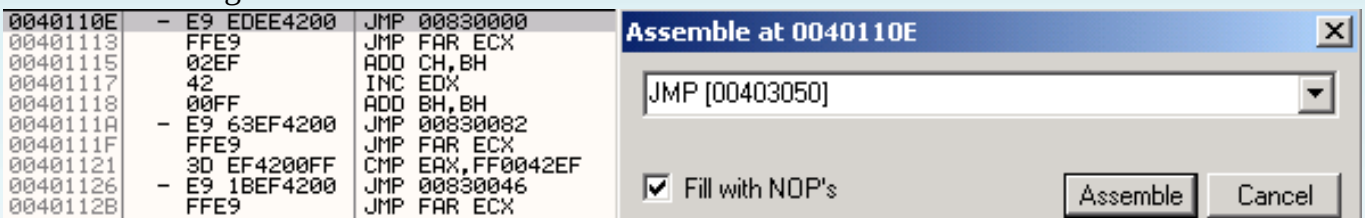
FThunk: 0000305C NbFunc: 00000006
1 0000305C user32.dll 000E BeginPaint
1 00003060 user32.dll 009F DialogBoxParamA
1 00003064 user32.dll 00C7 EndDialog
1 00003068 user32.dll 00C9 EndPaint
1 0000306C user32.dll 01B6 LoadBitmapA
1 00003070 user32.dll 023C SendMessageA

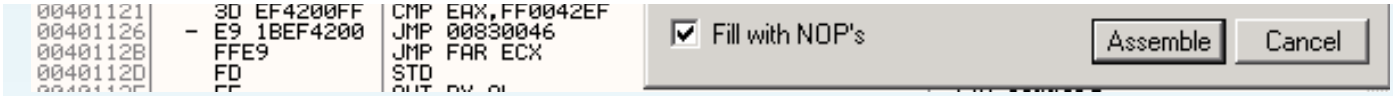
FThunk: 00003078 NbFunc: 00000005
1 00003078 gdi32.dll 0013 BitBlt
1 0000307C gdi32.dll 002E CreateCompatibleDC
1 00003080 gdi32.dll 008D DeleteDC
1 00003084 gdi32.dll 0090 DeleteObject
1 00003088 gdi32.dll 020D SelectObject

We need a more minor changes to IAT work. We will address the JMP YYYYYYYY and fix the JMP [XXXXXXXX]. But first we will revise the "Debug Options" as follows



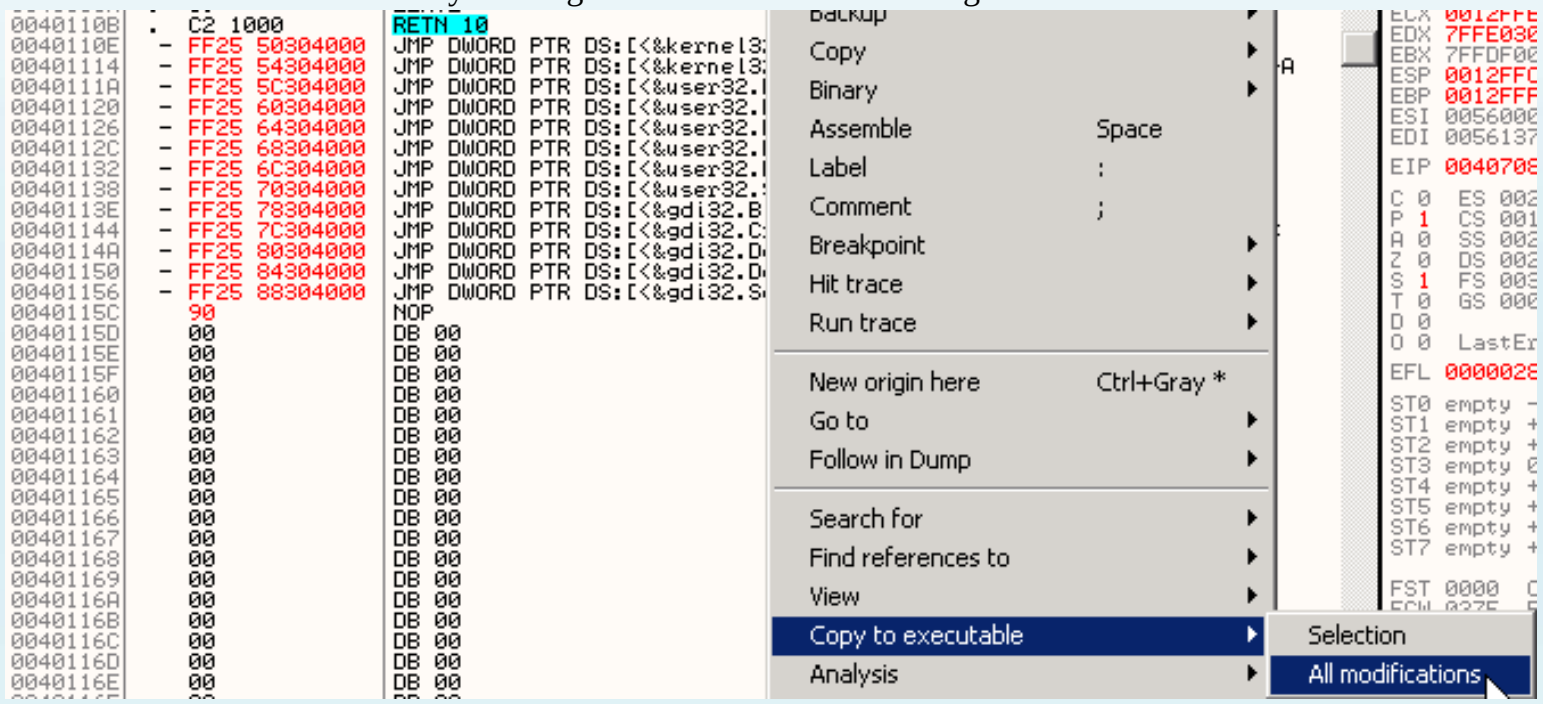
Open file dump_.exe. Jump to 0040110E, we will revise the JMP 00830000 by pressing keys in Space 0040110E. Enter the following:



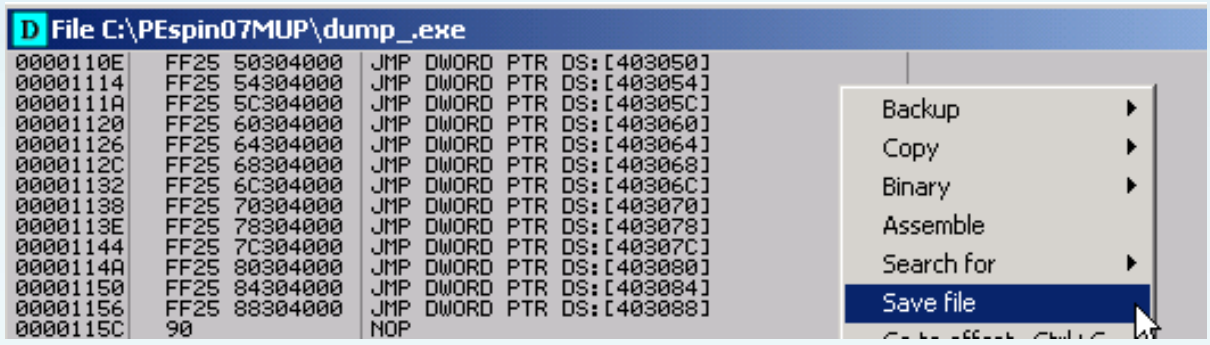


Click "assemble" (Note the above is 00403050 is the address of ExitProcess function in our IAT). The API also do the same. Finally we are:

Now we will save the file to edit by clicking the mouse to select the image in



A dialog box to select the "Copy All". Click your mouse to select "Save File" named unpacked.exe



Test file unpacked.exe. Well. Them. Although quite elaborately but finally we were successful in unpack the J unpackme this. You can use the PE Tools LordPE or to "rebuild PE will reduce the file size unpacked.exe from 40 to 17 Kb Kb J

Greetz: All members VCT, Crusader, and Ricardo Kagra ...

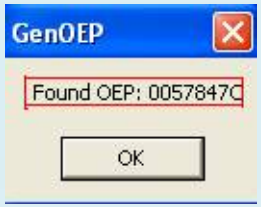
14-06-2005

tlandn

Manual unpack tElock

Welcome all brothers, this is the first tutorial on 3 of them unpack basis for Newbie.
Before writing this tut he thought many tut should write this or not, because the target is 1 soft Vietnamese, but the purpose of them is only a guide for how to unpack it.
First they apologize for the medical Bkis, and 2 are sorry medical NhatPhuongLe (hix, are warning 1 time because I unpack việt soft and that does not contain)!!!!
Target: BKAV2006.exe (included in tut)
Tools: Ollydbg, ImportREC, PeiD
Protect: tElock 0.90 -> in!
Level: Normal

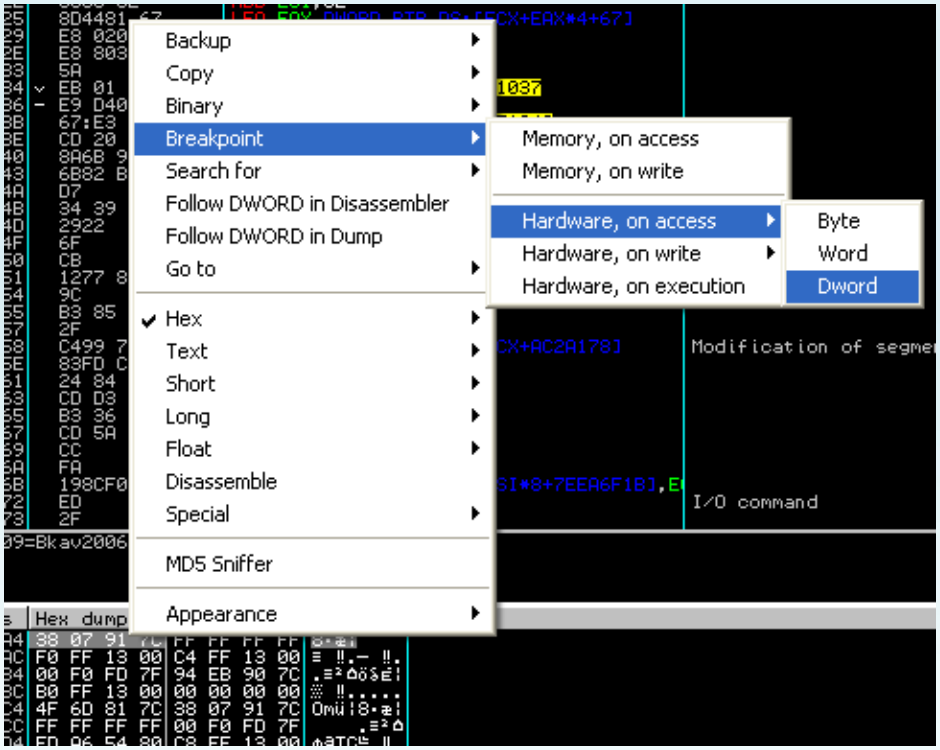
Scan target with Peid we pack it with tElock 0.90 -> in!, OEP see any of it:



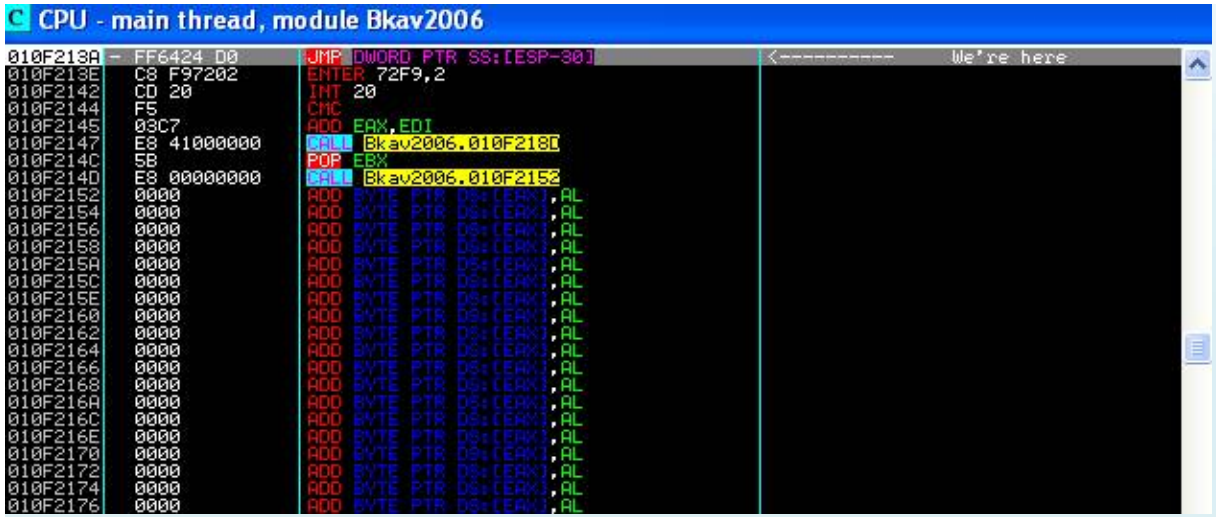
Made, so that we know is 1 some information then. Load Ollydbg to target: the table to inform you select it

```
010F1000   90              NOP
010F1001   60              PUSHAD
010F1002   E8 02000000    CALL Bkav2006.010F1009
010F1007   E8 00E80000    CALL 010FF80C
010F100C   0000            ADD BYTE PTR DS:[EAX],AL
010F100E   5E              POP ESI
010F100F   2BC9            SUB ECX,ECX
010F1011   58              POP EAX
010F1012 v 74 02           JE SHORT Bkav2006.010F1016
010F1014   CD 20           INT 20
010F1016   B9 FF100000     MOV ECX,10FF
010F101B   8BC1            MOV EAX,ECX
010F101D   F8              CLC
010F101E v 73 02           JNB SHORT Bkav2006.010F1022
010F1020   CD 20           INT 20
010F1022   83C6 32         ADD ESI,32
010F1025   8D4481 67       LEA EAX,DWORD PTR DS:[ECX+EAX*4+67]
010F1029   E8 02000000     CALL Bkav2006.010F1030
010F102E   E8 80300646     CALL 471540B3
010F1033   5A              POP EDX
010F1034 v EB 01           JMP SHORT Bkav2006.010F1037
010F1036 - E9 D409E2EA     JMP EBF11A0F
010F103B   67:E3 02        JCXZ SHORT Bkav2006.010F1040
010F103E   CD 20           INT 20
010F1040   8A6B 92         MOV CH,BYTE PTR DS:[EBX-6E]
```

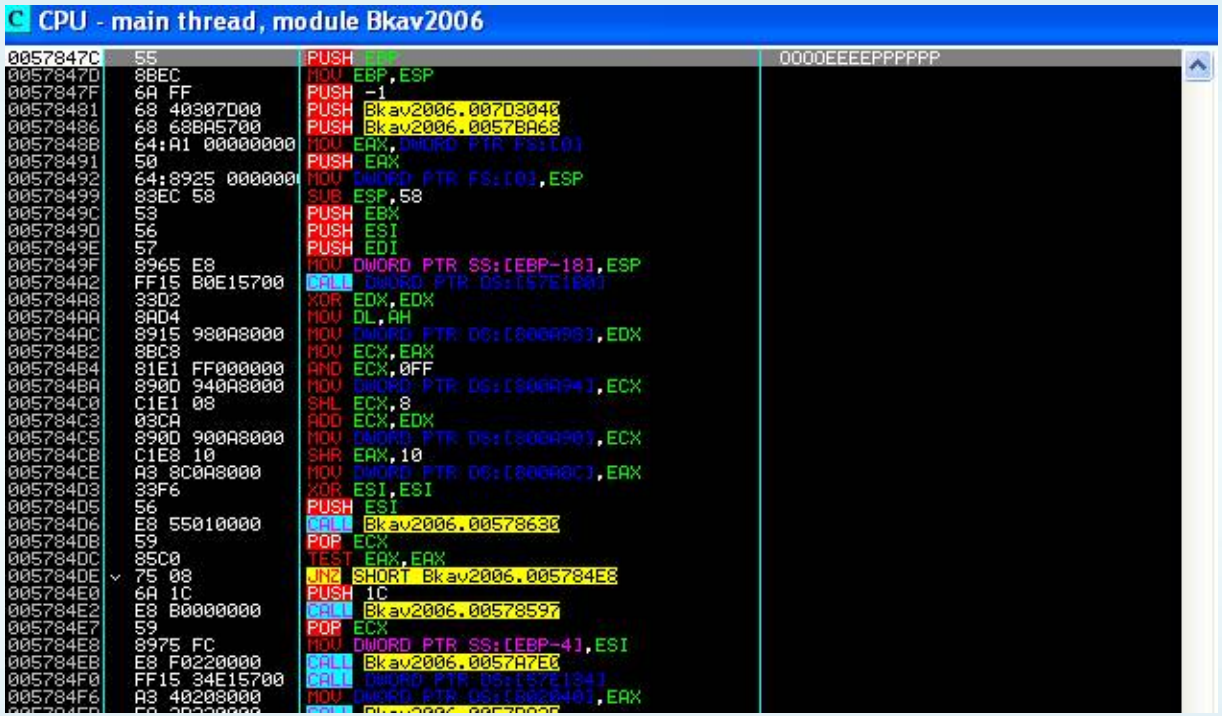
Press F8 2 times, to look at the screen FPU, ESP 0013FFA4, right click -> Follow in dump. Hight light first 4 bytes -> Breakpoint -> Hardware on access -> Dword:



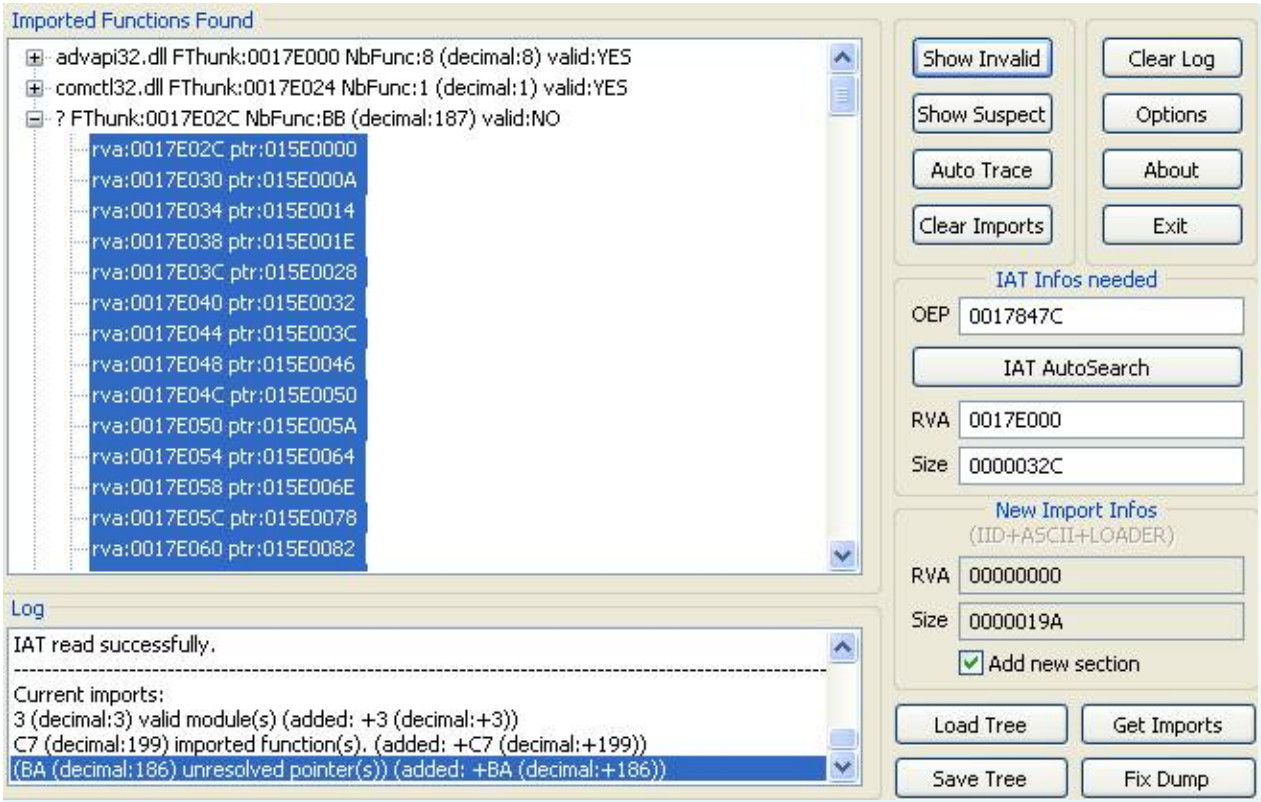
Now press the Shift + F9 8 times (in the child is 8 times), you stand in this place:



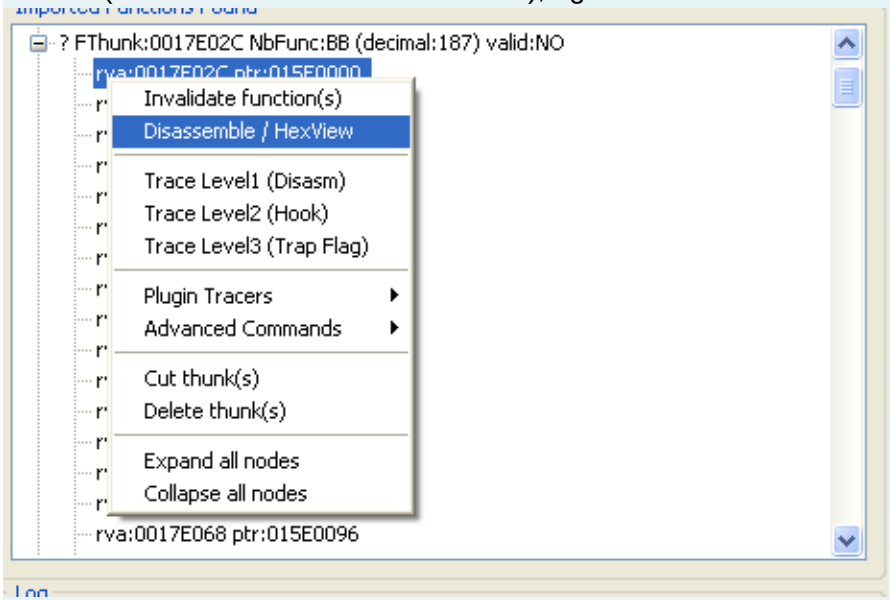
Just click the star to which the order JMP is OK then! , Which F8 1, Oh ho, we are to OEP and its kakakaka ...



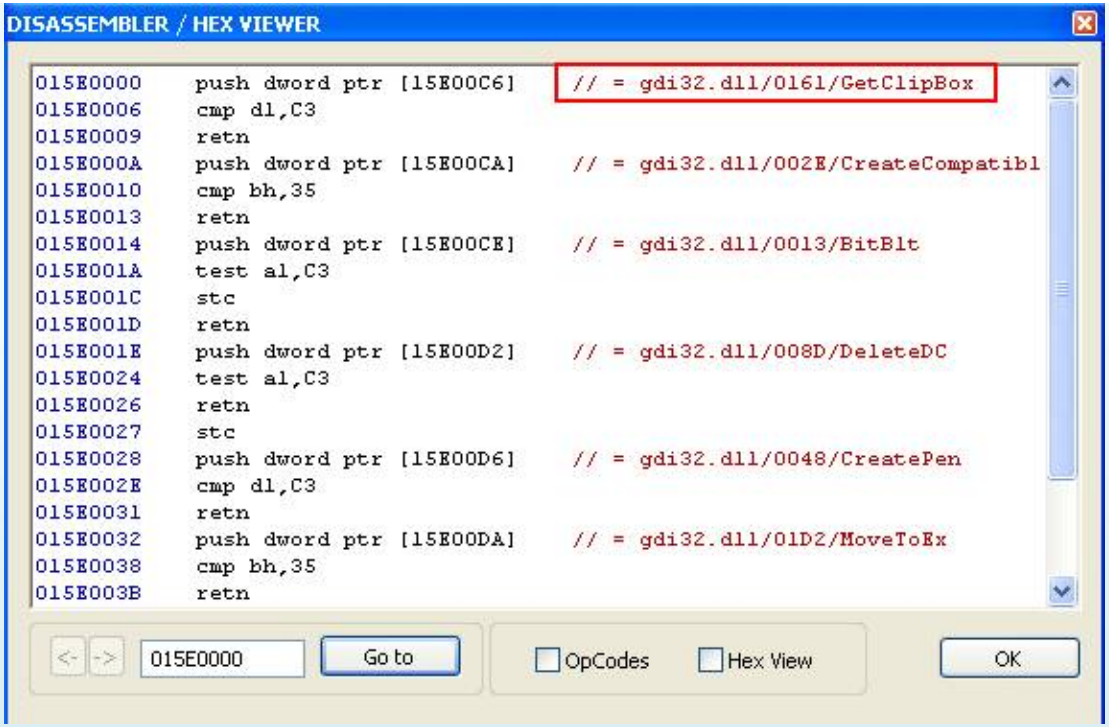
Dump file is, Plugins -> OllyDump -> dump Debugged process, this process they have specific instructions in 1 and tut tut 2 should then they will not do again. After the dump file, load up any ImportREC, then fill OEP IAT AutoSearch, Invalid Show:



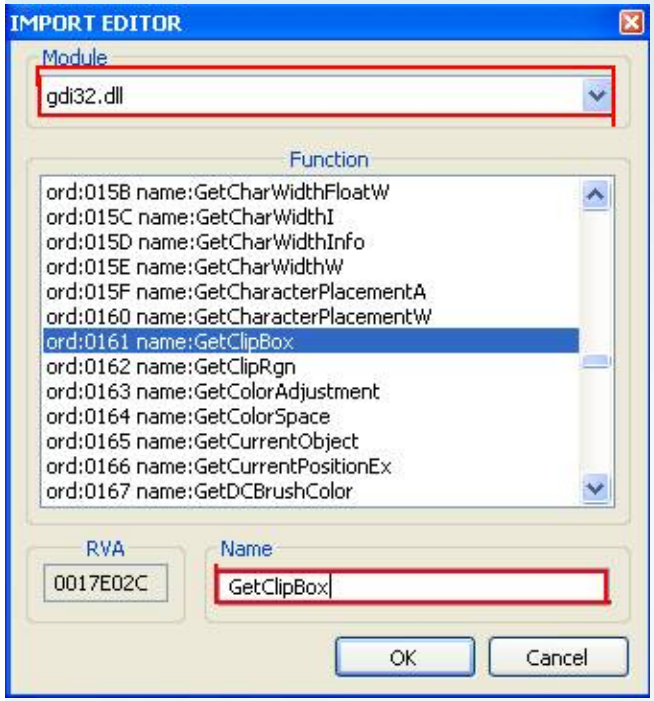
Fix IAT (not that there is not more correct), right-click the invalid first select Disassemble / HexView



Even the first line in the table you'll see: gdi32.dll / 0161 / GetClipBox



Ok remember this from 2 and gdi32.dll GetClipBox, off the table Disassemble / HexView go, double-click the line this rva: 0017E02C ptr: 015E0000 selected as follows:



and
imag
None
Skip
And
> Fix
End

Manual Unpacking & Cracking

ActiveMark 5.Xx

I -- Print d o t r u c t i o n:

ActiveMark 1 Protect is quite famous for the Games feel they own it both difficult and easy to fit. Difficult if we

do not know how to kill and of course extremely easy when we understand the methods of meat do it. The body

then they have done almost the entire game meat is the Protect **ActiveMark** by **bigfishgames** and **Yahoo!** For

Games so they also have little experience in this type of decision and write everything they know about

ActiveMark to share with all brothers ...

I I -- T oo ls T & g e r a t:

- **T oo L and P lug i n c a n d n g s:**
  - *O ll italy DB G 1. 1 0*
  - *Lor DP E 1st 4*
  - *I mp or the EC R 1. 6 F*
  - *U lt AE d r i t - 3 2*
  - *A c ti v e r M a k e r D ump*
  - *A c ti v e r M a k O v er ayW l i z a r d*
  - *A c ti v e r M a k a d e Lo r*
  - *P ro ti c e t o n i D v 5th 1 E*
- **One g e r t:** ***the UK B S u d u ok***

H o m e P a g e: h_tt_p: / / hg www.bigfi_s_a_m es. C_o_m /

II I - U n p a c k ing

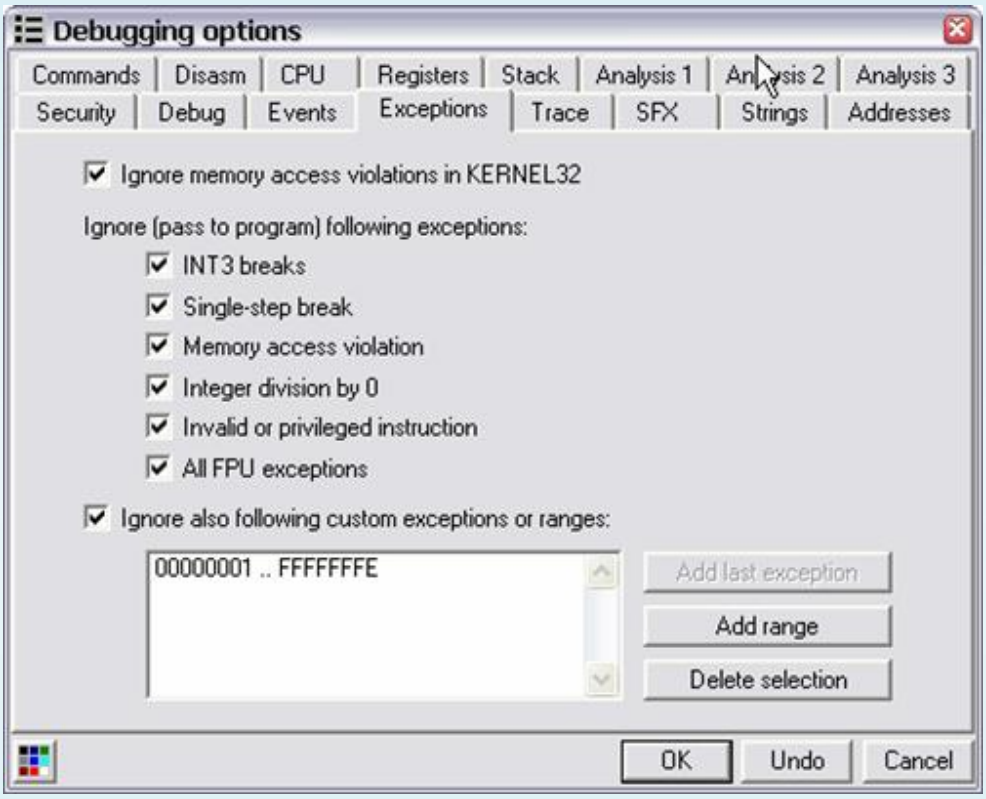
And unpack **ActiveMark** we have 2 ways:

- **Unpacking Tools for support** (this fast and efficient)
- **Manual Unpacking** (this is extremely standard and the professional higher)

1st M a n u a l U n p a cki ng:

_ Need to **detect** when the **Games** have been Protect Pack or form do they recommend the use Uncle **Protection** Scan **ID 5.1f** to work because it is quite accurate

_ OK, Open OllyDBG and press **Alt + O** and select the following:



_ Lo ad **in a g e r t** to **OllyDBG** and a stop here:

```
00748000   8925 04107600   MOV DWORD PTR DS:[761004], ESP
00748006   68 2B807400     PUSH BUKUSudo.0074802B
0074800B   EB 03           JMP SHORT BUKUSudo.00748010
0074800D   EB FB           JMP SHORT BUKUSudo.0074800A
0074800F   EB EB           JMP SHORT BUKUSudo.00747FFC
00748011   01EB            ADD EBX, EBP
00748013   64:FF35 000000(  PUSH DWORD PTR FS:[0]
0074801A   64:8925 000000(  MOV DWORD PTR FS:[0], ESP
00748021   EB 03           JMP SHORT BUKUSudo.00748026
00748023   9C              PUSHFD
00748024   EE              OUT DX, AL                    I/O command
00748025   15 E9CD0400      ADC EAX, 4CDE9
```

_ Press **Shif t + F9** G a m e s u n R'll

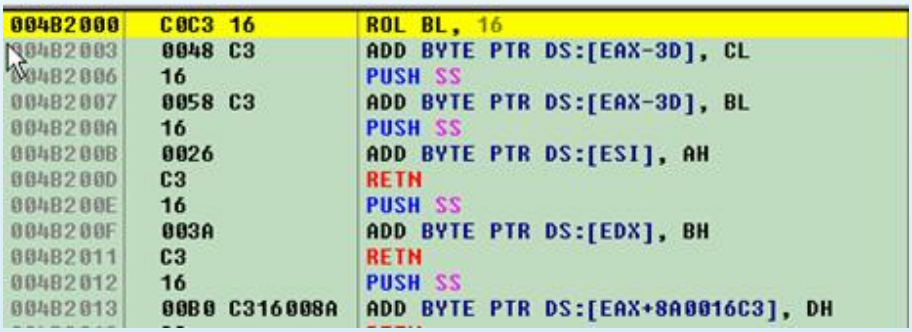
_ Now we need to determine the Section contains the **OEP.** In **OllyDBG** window press **Alt + M** and drag down and see

```
003E0000 00003000                          Map  R       R
003F0000 00004000                          Priv RW      RW
00400000 00001000 BUKUSudo                 Imag RW Copy RWE
00401000 00088000 BUKUSudo .bss    code    Imag RW Copy RWE
00489000 00014000 BUKUSudo .text           Imag RW Copy RWE
0049D000 00013000 BUKUSudo .rdata          Imag RW Copy RWE
004B0000 00002000 BUKUSudo .rsrc           Imag RW Copy RWE
004B2000 0016E000 BUKUSudo .data   data    Imag RW Copy RWE
00620000 00003000 BUKUSudo .idata          Imag RW Copy RWE
00623000 00003000 BUKUSudo .rsrc           Imag RW Copy RWE
00626000 0011F000 BUKUSudo .bss            Imag RW Copy RWE
00745000 00001000 BUKUSudo .idata          Imag RW Copy RWE
00746000 00002000 BUKUSudo .rsrc   resources Imag RW Copy RWE
00748000 00018000 BUKUSudo .text   SFX     Imag RW Copy RWE
00760000 00001000 BUKUSudo .rdata          Imag RW Copy RWE
00761000 0000A000 BUKUSudo .data           Imag RW Copy RWE
0076B000 00001000 BUKUSudo .idata  imports Imag RW Copy RWE
```

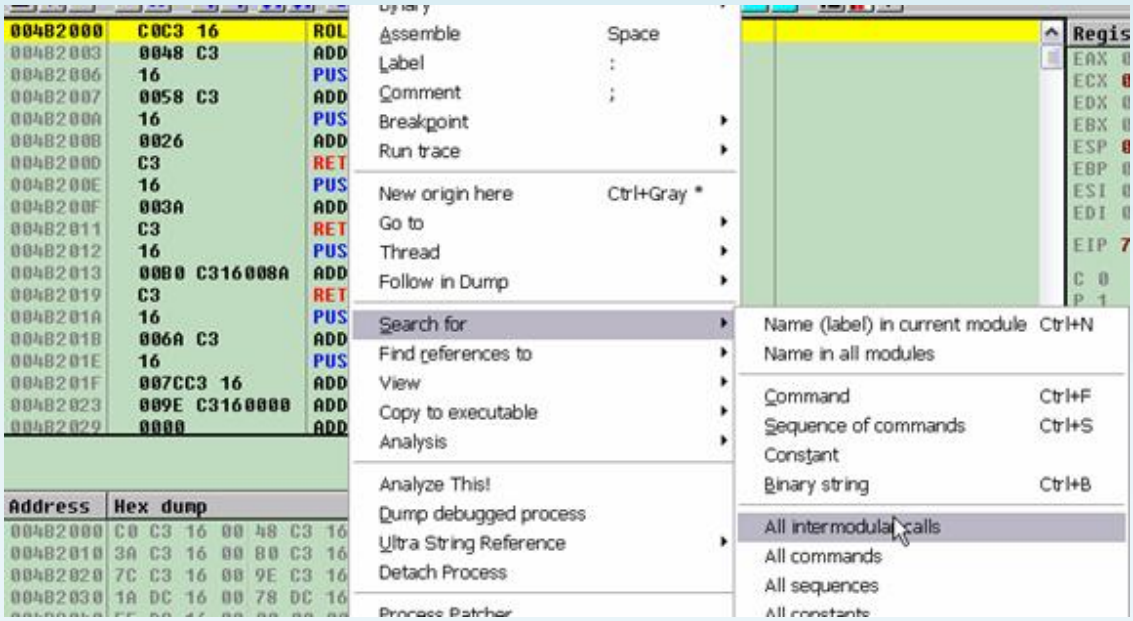
_ **Section. ADATA (004B2000)** contains **OEP (most** of the game is often **ActiveMark** protect **OEP** contained

in **Section below. Rsrc first,** from the **PE Header** of the game) ... Press **Alt + C** and press **Ctrl + G** to

enter **004B2000** and we come



_N Han **F10** and more as h in h



_ G **G** o **t e d C o** mman **in E A L**

```
005FC0CD  CALL NEAR DWORD PTR DS:[620288]          kernel32.InterlockedIncrement
005FC1A4  CALL NEAR DWORD PTR DS:[6202D0]          kernel32.MultiByteToWideChar
005FC200  CALL NEAR DWORD PTR DS:[6202D0]          kernel32.MultiByteToWideChar
005FC227  CALL NEAR DWORD PTR DS:[6202D0]          kernel32.MultiByteToWideChar
005FC423  CALL BUKUSudo.0060DF26                   ntdll.RtlUnwind
005FC6B7  CALL BUKUSudo.0060DF26                   ntdll.RtlUnwind
005FC7D9  CALL NEAR DWORD PTR DS:[620240]          kernel32.GetVersion
005FC839  CALL NEAR DWORD PTR DS:[620180]          kernel32.GetCommandLineA
005FC864  CALL NEAR DWORD PTR DS:[620210]          kernel32.GetStartupInfoA
005FC887  CALL NEAR DWORD PTR DS:[6201E8]          kernel32.GetModuleHandleA
005FC8FD  CALL NEAR DWORD PTR DS:[620144]          kernel32.ExitProcess
005FCCD3  CALL NEAR DWORD PTR DS:[6202F0]          kernel32.RaiseException
005FDF17  CALL NEAR DWORD PTR DS:[620264]          ntdll.RtlAllocateHeap
005FDF6E  CALL NEAR DWORD PTR DS:[620274]          ntdll.RtlReAllocateHeap
005FE07F  CALL NEAR DWORD PTR DS:[620264]          ntdll.RtlAllocateHeap
005FE0C0  CALL NEAR DWORD PTR DS:[620274]          ntdll.RtlReAllocateHeap
```

N _ steamed double training and am **G e** h **t o C in mmand L E A**

```
005FC825  75 08          JNZ SHORT BUKUSudo.005FC82F
005FC827  6A 10          PUSH 10
005FC829  E8 B2000000    CALL BUKUSudo.005FC8E0
005FC82E  59             POP ECX
005FC82F  33F6           XOR ESI, ESI
005FC831  8975 FC        MOV DWORD PTR SS:[EBP-4], ESI
005FC834  E8 C05F0000    CALL BUKUSudo.006027F9
005FC839  FF15 80016200  CALL NEAR DWORD PTR DS:[620180]   kernel32.GetCommandLineA
005FC83F  A3 84CB6100    MOV DWORD PTR DS:[61CB84], EAX
005FC844  E8 7E5E0000    CALL BUKUSudo.006026C7
005FC849  A3 E0B36100    MOV DWORD PTR DS:[61B3E0], EAX
005FC84E  E8 275C0000    CALL BUKUSudo.0060247A
005FC853  E8 695B0000    CALL BUKUSudo.006023C1
```

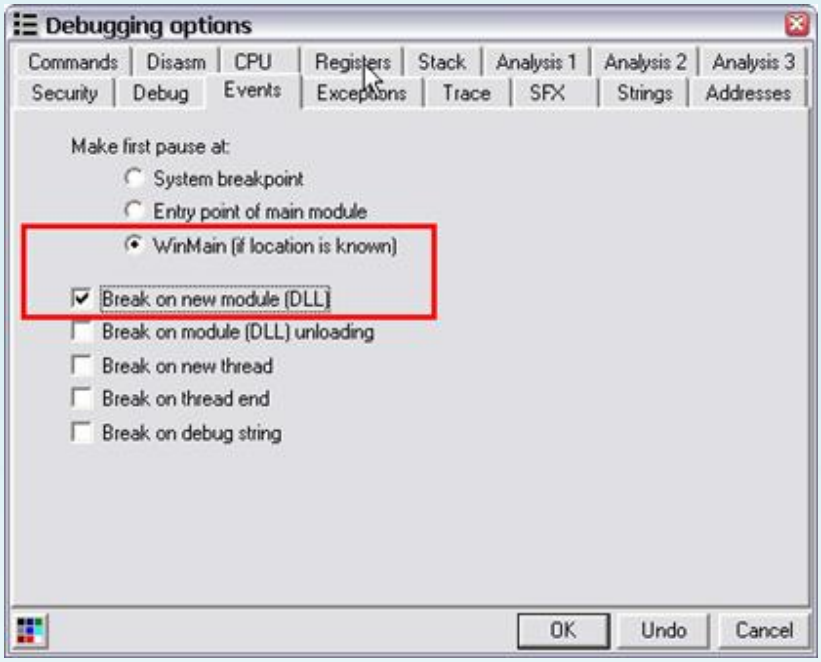
_ Scroll back to the top of this code and is **OEP**

```
201607AD  8D6C24 0C      LEA EBP, DWORD PTR SS:[ESP+C]
201607B1  50             PUSH EAX
201607B2  C3             RETN
201607B3  55             PUSH EBP                  <=== OEP
201607B4  8BEC           MOV EBP, ESP
201607B6  6A FF          PUSH -1
201607B8  68 08170820    PUSH PrimeSus.20081708
201607BD  68 906B1620    PUSH PrimeSus.20166B90
201607C2  64:A1 00000000 MOV EAX, DWORD PTR FS:[0]
201607C8  50             PUSH EAX
201607C9  64:8925 000000 MOV DWORD PTR FS:[0], ESP
201607D0  83EC 58        SUB ESP, 58
201607D3  53             PUSH EBX
201607D4  56             PUSH ESI
201607D5  57             PUSH EDI
201607D6  8965 E8        MOV DWORD PTR SS:[EBP-18], ESP
201607D9  FF15 28421820  CALL NEAR DWORD PTR DS:[20184228]   kernel32.GetVersion
201607DF  33D2           XOR EDX, EDX
201607E1  8AD4           MOV DL, AH
```

_ B at below g a t **S e t 1 WBP** in **H O P E**

```
005FC7AD   8D6C24 0C      LEA EBP, DWORD PTR SS:[ESP+C]
005FC7B1   50             PUSH EAX
005FC7B2   C3             RETN
005FC7B3   55             PUSH EBP                          <=== OEP
005FC7B4   8BEC           MOV EBP, ESP
005FC7B6   6A FF          PUSH -1
005FC7B8   68 08D75100    PUSH BUKUSudo.0051D708
005FC7BD   68 902B6000    PUSH BUKUSudo.00602B90
005FC7C2   64:A1 00000000 MOV EAX, DWORD PTR FS:[0]
005FC7C8   50             PUSH EAX
005FC7C9   64:8925 000000 MOV DWORD PTR FS:[0], ESP
005FC7D0   83EC 58        SUB ESP, 58
005FC7D3   53             PUSH EBX
005FC7D4   56             PUSH ESI
005FC7D5   57             PUSH EDI
005FC7D6   8965 E8        MOV DWORD PTR SS:[EBP-18], ESP
005FC7D9   FF15 40026200  CALL NEAR DWORD PTR DS:[620240]   kernel32.GetVersion
005FC7DF   33D2           XOR EDX, EDX
005FC7E1   8AD4           MOV DL, AH
```

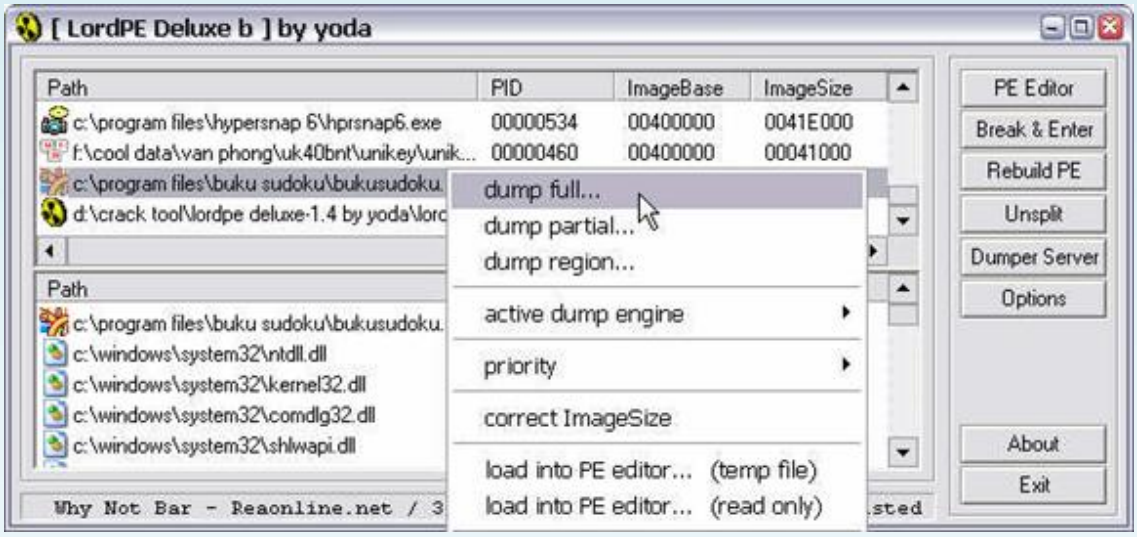
_ O k, n **a l t** han + **O** and the more the usau h



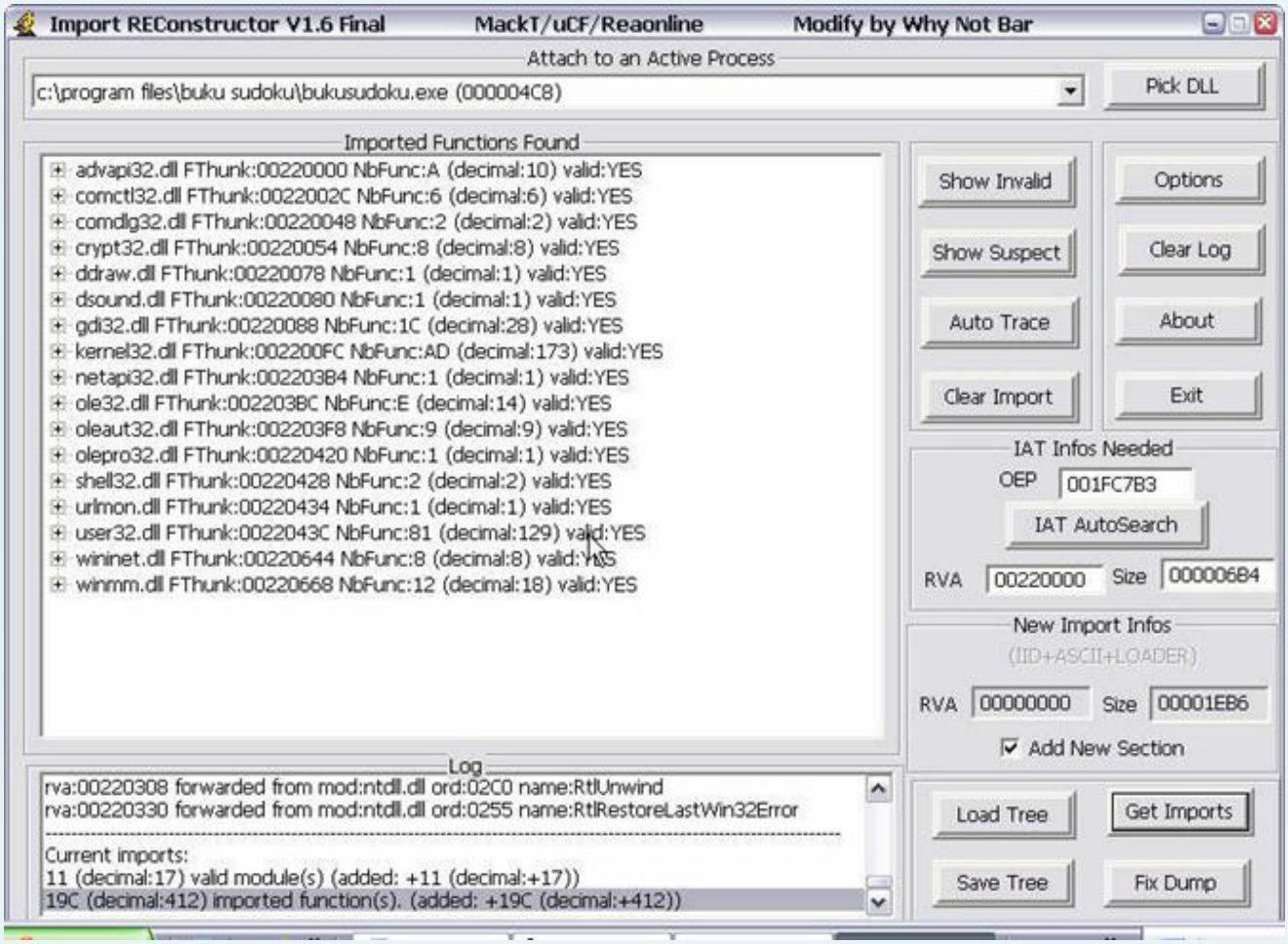
_ Press **Ctrl + F2,** press **F9** to stop the **OEP** (machine they hit 17 times) that we've **set HWBP**

```
005FC7B3   55             PUSH EBP                          <=== OEP
005FC7B4   8BEC           MOV EBP, ESP
005FC7B6   6A FF          PUSH -1
005FC7B8   68 08D75100    PUSH BUKUSudo.0051D708
005FC7BD   68 902B6000    PUSH BUKUSudo.00602B90
005FC7C2   64:A1 00000000 MOV EAX, DWORD PTR FS:[0]
005FC7C8   50             PUSH EAX
005FC7C9   64:8925 000000 MOV DWORD PTR FS:[0], ESP
005FC7D0   83EC 58        SUB ESP, 58
005FC7D3   53             PUSH EBX
005FC7D4   56             PUSH ESI
005FC7D5   57             PUSH EDI
005FC7D6   8965 E8        MOV DWORD PTR SS:[EBP-18], ESP
005FC7D9   FF15 40026200  CALL NEAR DWORD PTR DS:[620240]   kernel32.GetVersion
005FC7DF   33D2           XOR EDX, EDX
```

No _ A K h à, Enough **Lor** n g p um **dPE** D F u l l

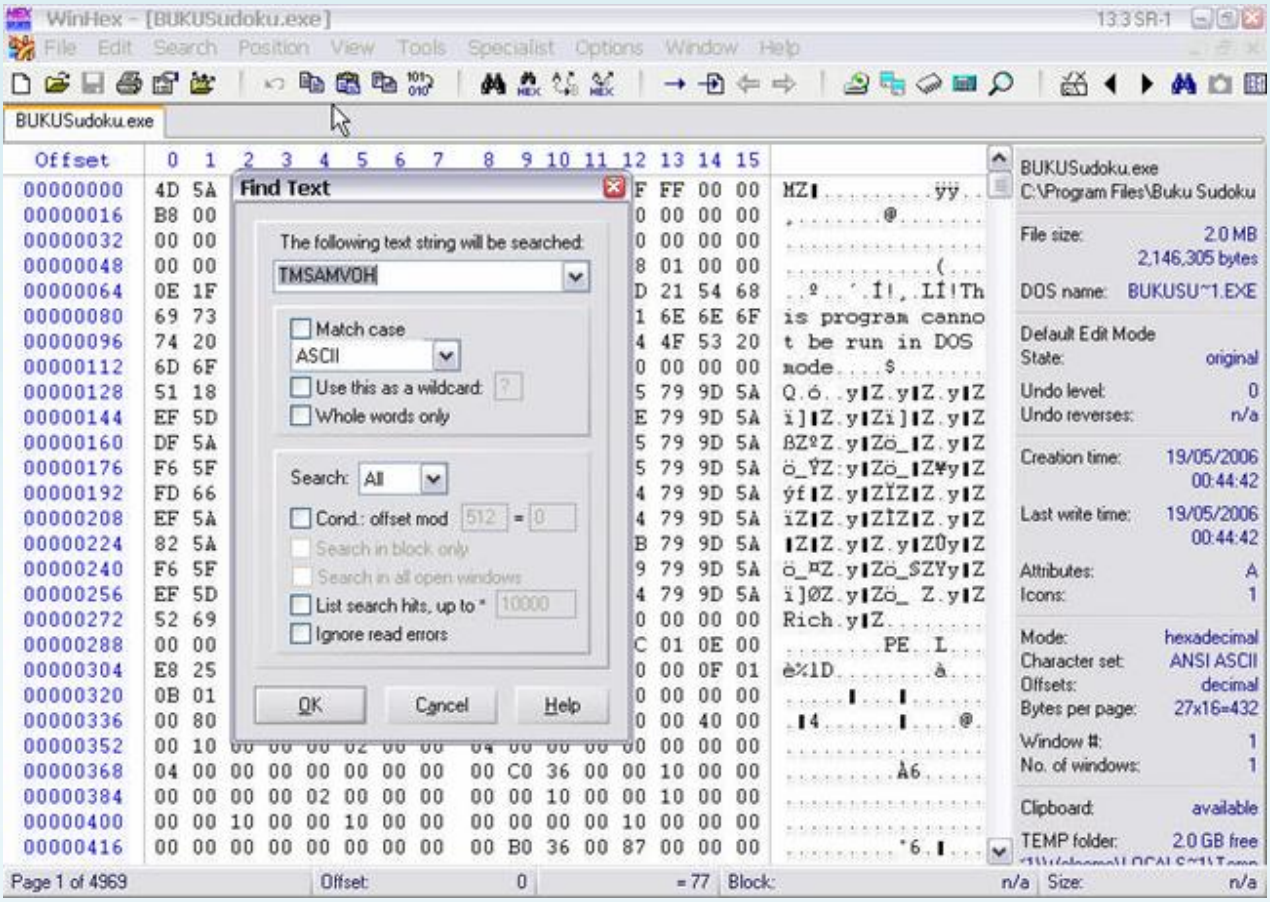


_ Open **ImportREC** up. Select the list **BUKUSudoku.exe** process. **OEP** = Enter **005FC7B3 - 0,040,000** ***(Imagebase)*** **= 001FC7B3,** ***IAT AutoSearch*** Click -> ***Get Imports*** -> ***Show Invalid***

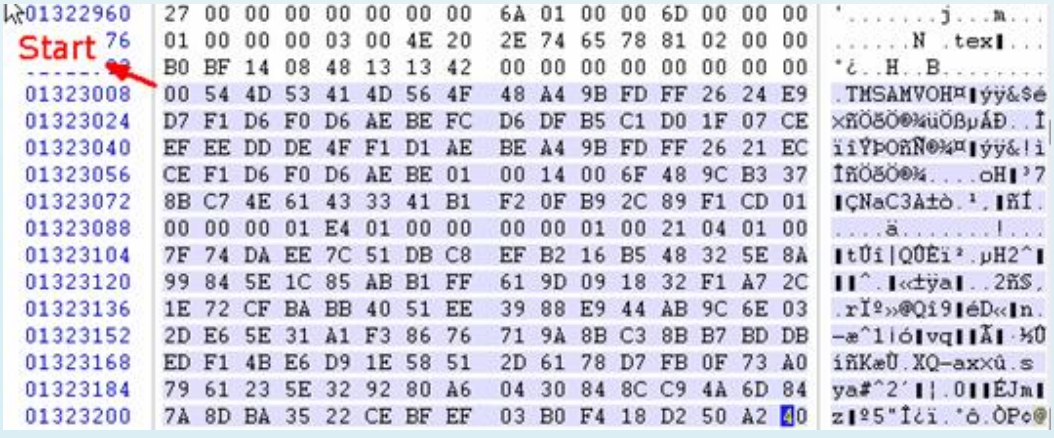


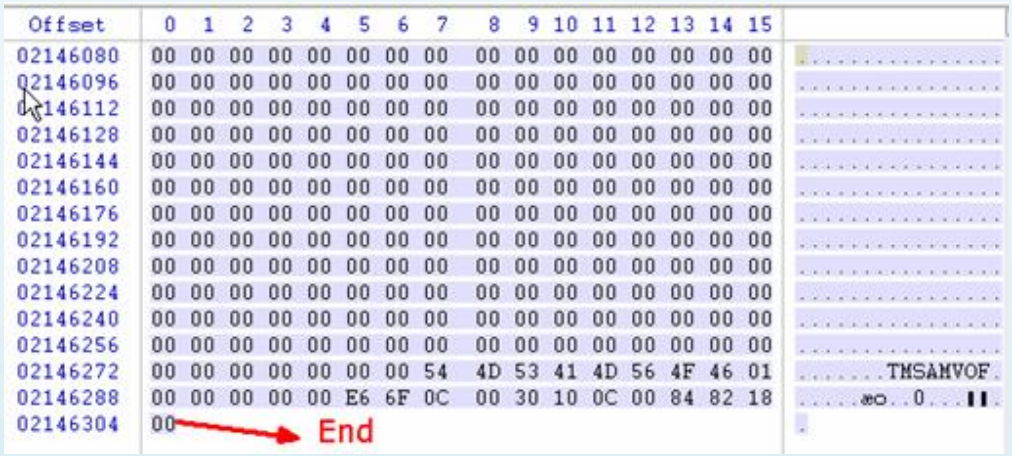
_ Hu hon, I do not have any of Invalid, **click Fix dump** select File **"Dumped.exe"** Run and try File **"Dumped_. exe" Run** chit they are in line ... The reasons are due **ActiveMark 5.xx** have to add 1 or function that is quite **Overlay Data,** this will encrypt the Data 1 and will be the resolution ActiveMark code for game use. But **ActiveMark** we have Kill **Encrypt Data** and the authors he is writing **ActiveMark** ong star lem or even dump Full card of the prices are still more loss of this data. In the original file still contains the **Encrypt Data** and tasks we need to identify and copy to be in the **Encrypt Data** from File **"BUKUSudoku.exe"** and **Paste** to File **"Dumped_.exe."** Signs identified as the **Encrypt Data** always start **with. TMSAMVOH** and last address to the final. Using a tool Hex Edit any to us, and the Copy **Data Encrypt** here they use **WinHex** *(If using **Hex Workshop***

4.2 *with game with space when copying large files sebi Crash best use* ***WinHex).*** Load File **"BUKUSudoku.exe"** to **WinHex,** press **Ctrl + F** and type in **TMSAMVOH**

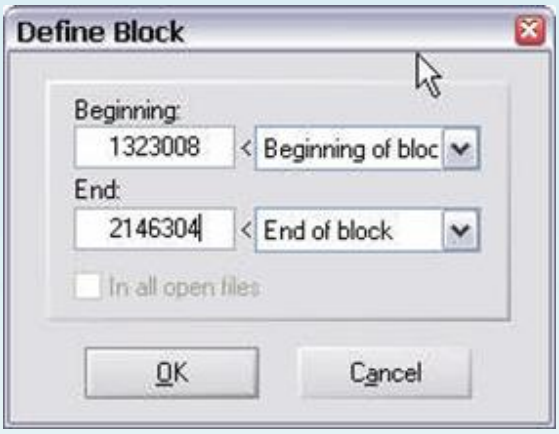


_ Select **01323008** to address final

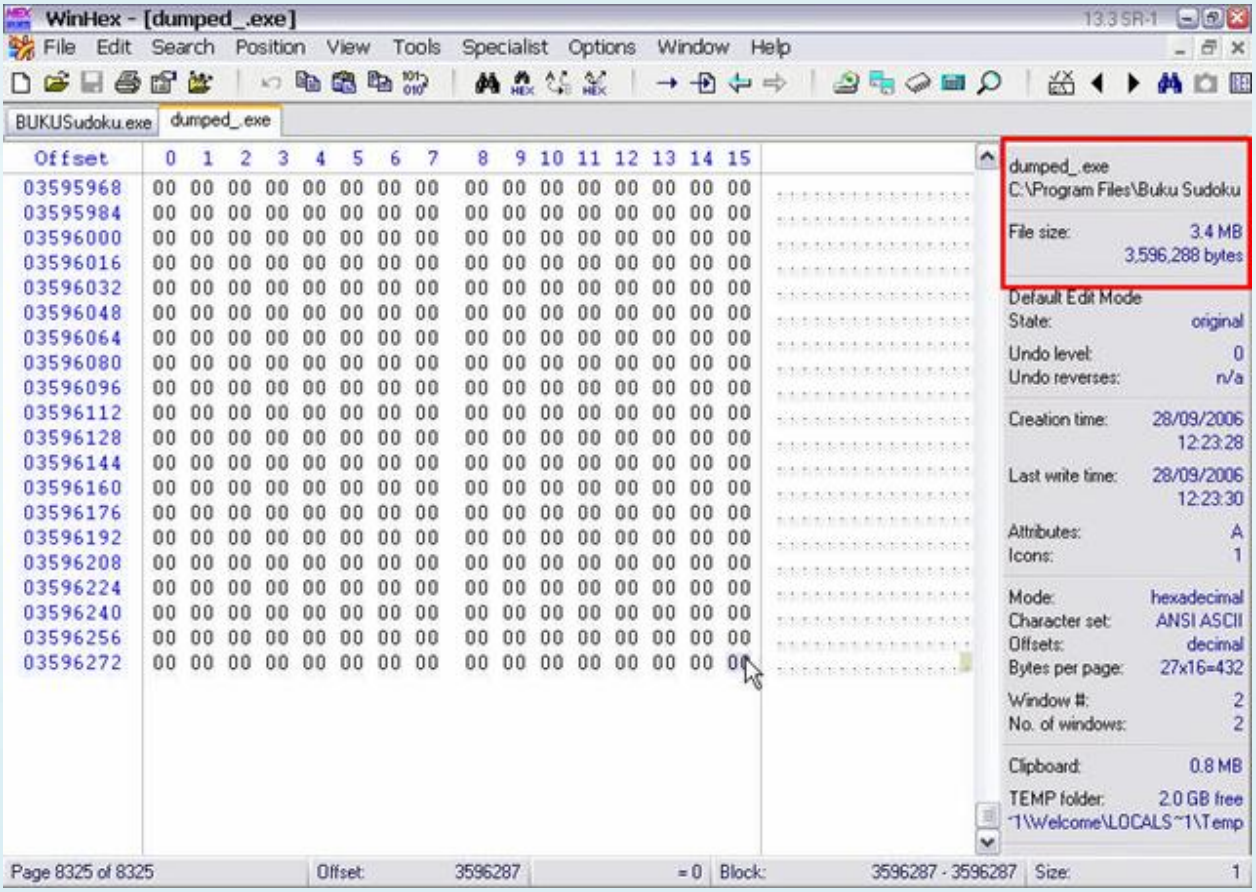




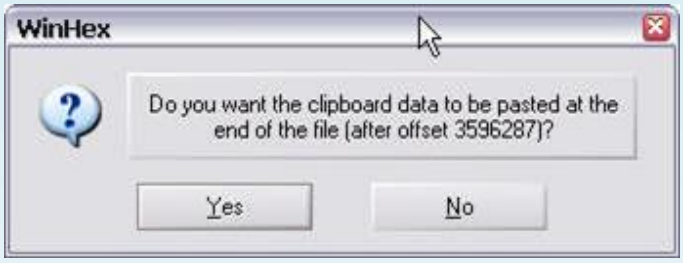
_ You should use the **Block Define WinHex** to block the fast



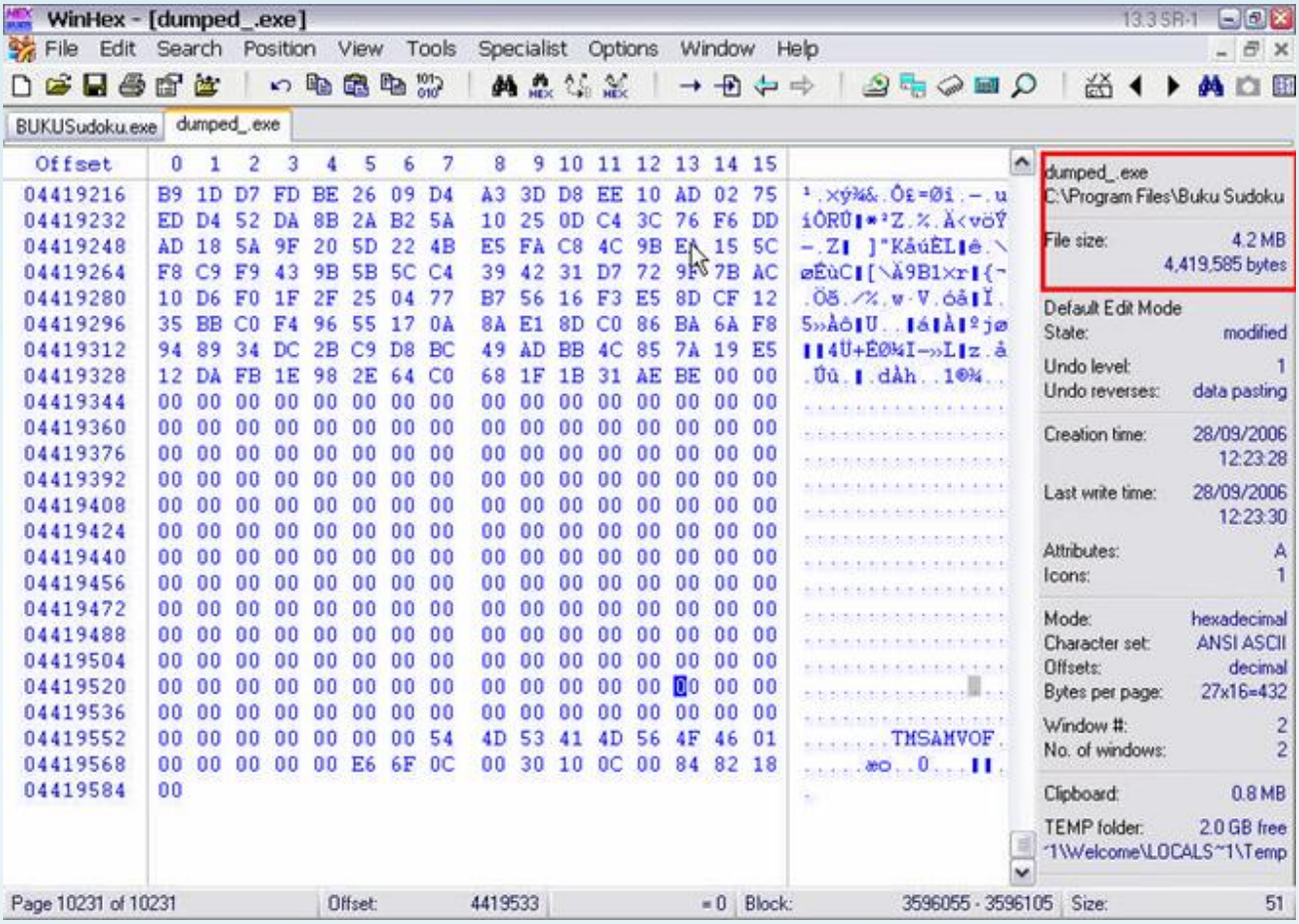
_ Press **Ctrl +** C to copy the **Data Encrypt** this, **press Ctrl** + O select File **"dumped_.exe"** and scroll down to the last address



_ Press **Ctrl + V** to paste and the **Encrypt Data** Copy both to address the end of File **"Dumped_.exe"**



_ Click **Yes** we are



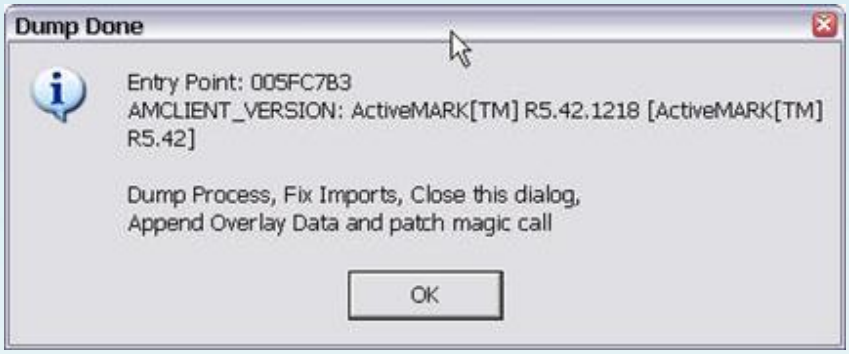
_ Passable ... **Save** the name of what is, they placed **"Unpacked.exe"** easy to remember ... **Run** ... khua try khua both numbness ... ... run lickerish unpack done!

2nd U n pa ck with T oo l s

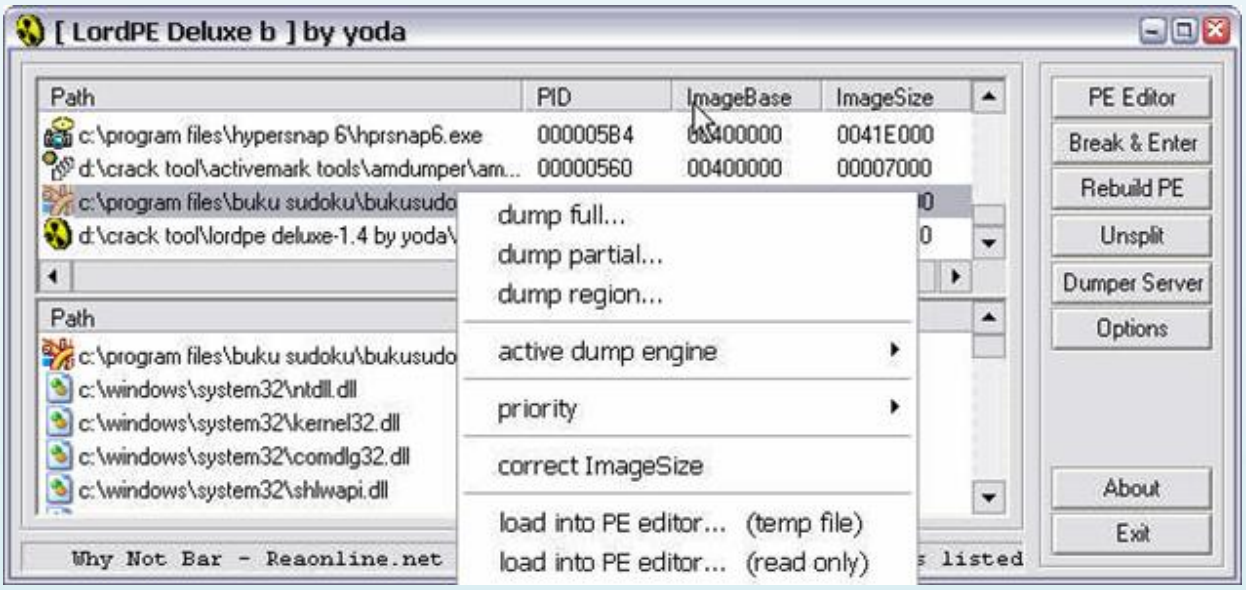
_ MUP the long line nhuvay tools are used but less than 2 minutes. Open **Amdumper** This tool helps you find

the OEP and you **dump Full Import** and **rebuild** with **ImportREC**

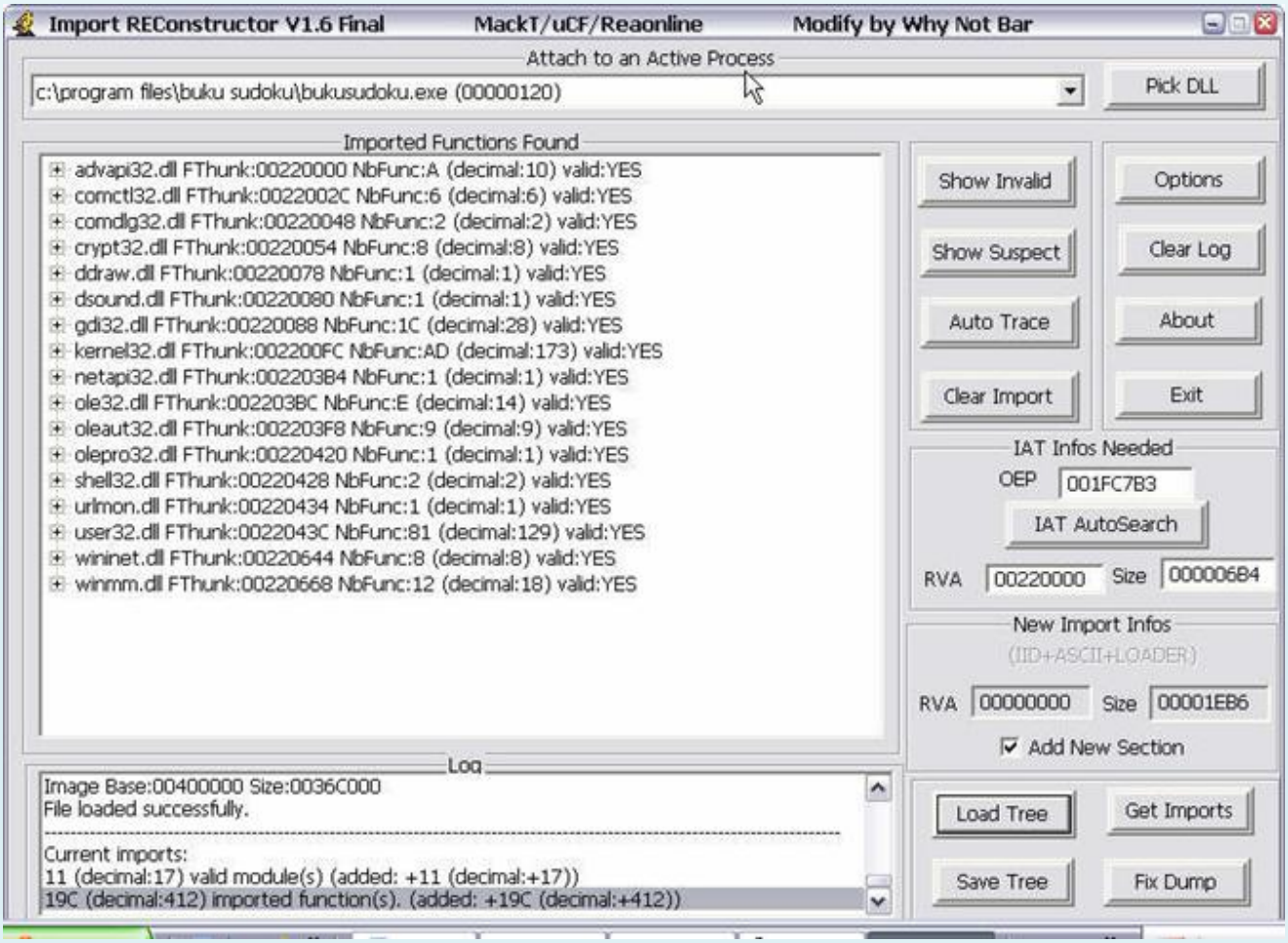
_Nhan **"Open ActiveMARK protected target"** choose file **"BUKUSudoku.exe"**



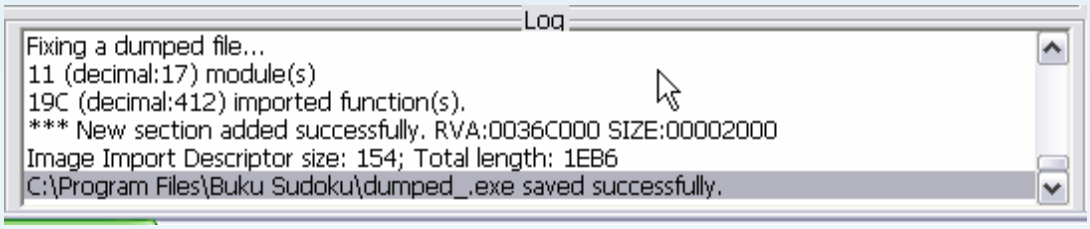
_ Open **LordPE** choose the correct **PID** and **dump Full**



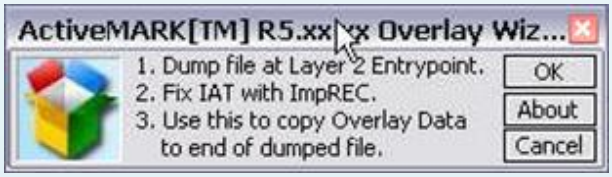
_ Open **ImportREC** up. Select the list process **"BUKUSudoku.exe."** Fill **005FC7B3 OEP = *(Entry Point)* - 0,040,000 *(Imagebase)* = 001FC7B3, *IAT AutoSearch*** Click -> ***Get Imports*** -> ***Show Invalid***



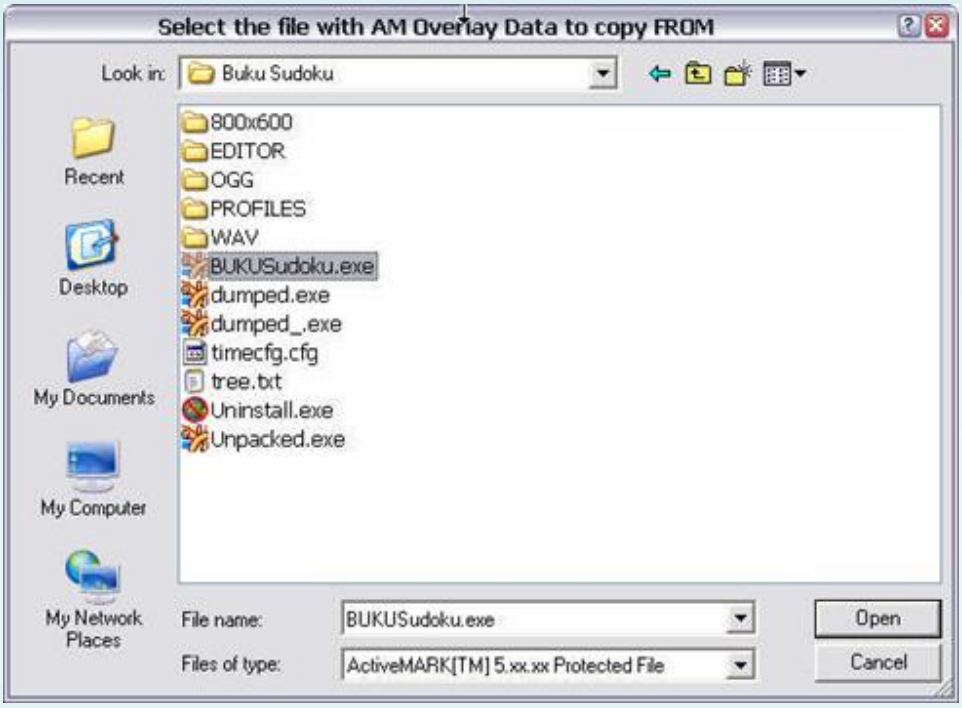
_ Click **Fix** selected **dump** file "**Dumped.exe**"



_ **Dark Overlay Wizard** tool will help you automatically **Encrypt Data** Copy files from the original file to "**dumped_.exe**" quickly but do need to use **WinHex**



_ Click OK to select the file "**BUKUSudoku.exe**"



_ Select "**dumped_.exe.**" Test Run ... khua khua also run lickerish

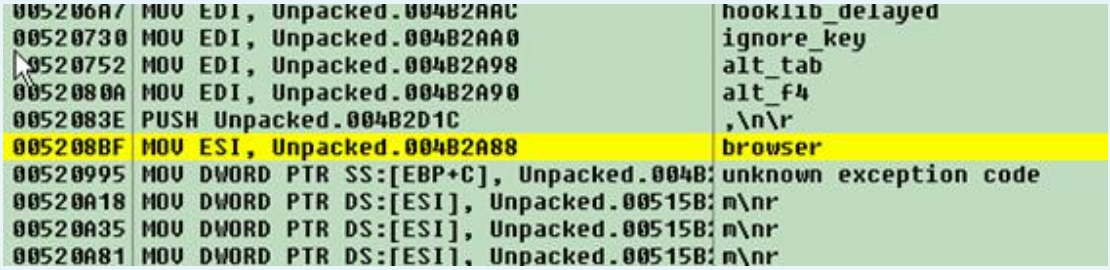
I V - C r acking

_ C hun g a t need italy B P s c a s Asia in a G to consider in the

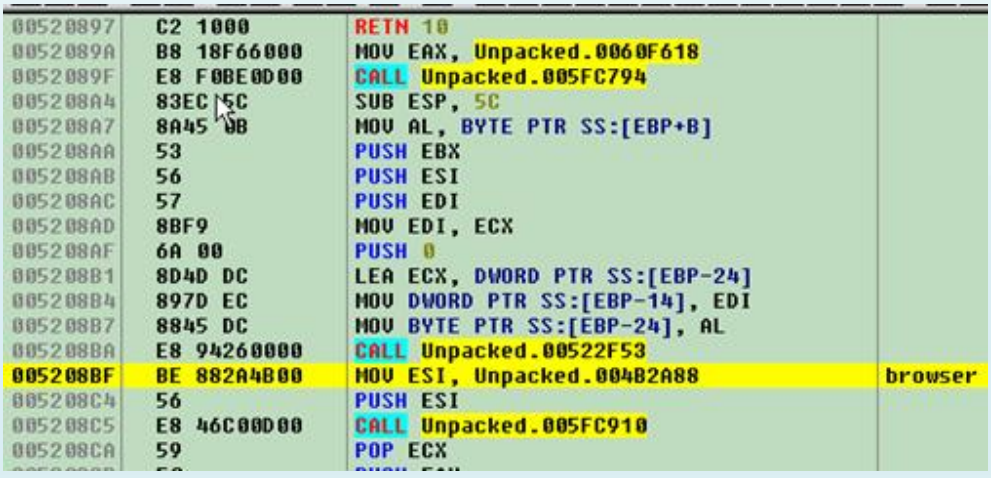
_Lo Ad fil e U np a ck e d e a car on O ll yD B G

_ D ùn g ug P l i n **"Ul of a S tr ing R e f e re nc e"**

_ L E N Scroll first that the ì n h, n han C t r l + F and G o and o **"was br o r e,** h a n n h p í MN four times

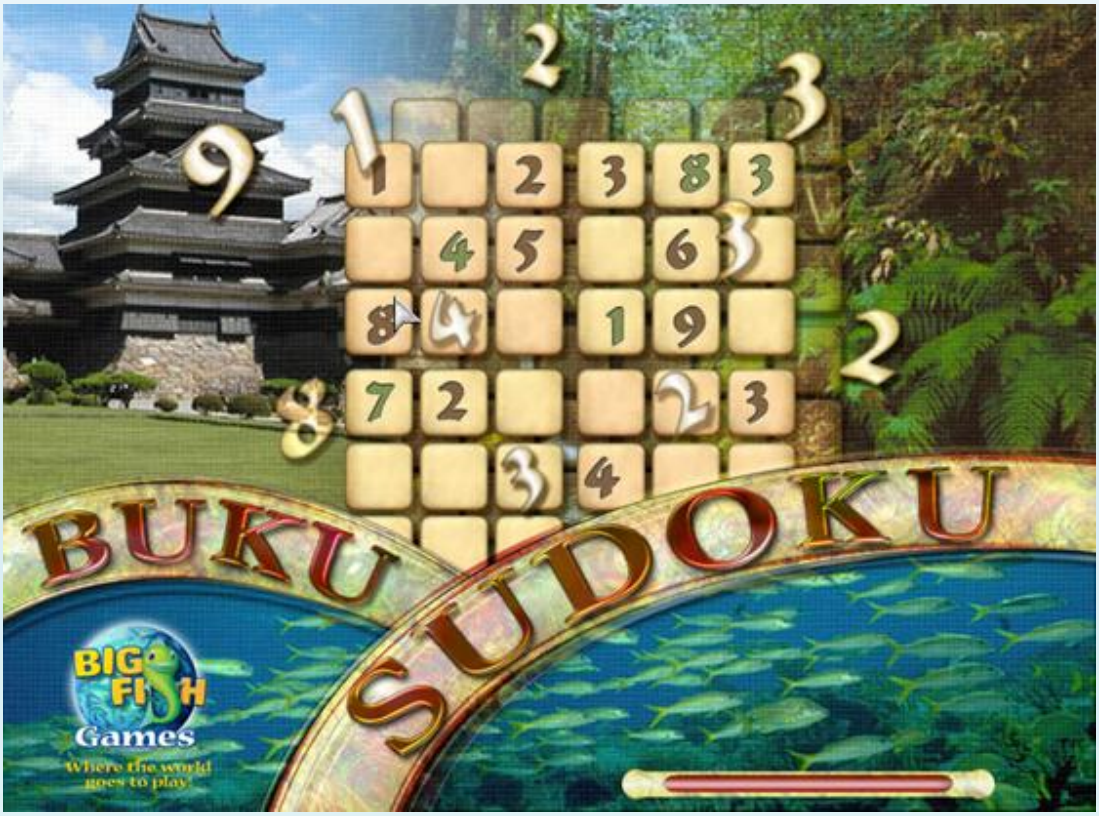


_ In the other game of the crack and you do not need to hit **the** Arab world campus **4** times that you find how the double click on the **"browser"** will jump to address code distant nhuben the same as



_ Scroll to the top of **the** code and **Patch**

_ Save and Run Run ... try considered straight game to do is remind NAG



_ To ensure that the food you find this more 4 String "**dialog**", "**timeout**", "**timer**", "**execute**" and Patch it

_ S e r of a "**dial o g**"

```
00520B86   C9              LEAVE
00520B87   C2 0400         RETN 4
00520B8A   B8 88F66000     MOV EAX, Unpacked.0060F688
00520B8F   E8 00BC0D00     CALL Unpacked.005FC794
00520B94   83EC 5C         SUB ESP, 5C
00520B97   8A45 13         MOV AL, BYTE PTR SS:[EBP+13]
00520B9A   53              PUSH EBX
00520B9B   56              PUSH ESI
00520B9C   57              PUSH EDI
00520B9D   8BF9            MOV EDI, ECX
00520B9F   6A 00           PUSH 0
00520BA1   8D4D DC         LEA ECX, DWORD PTR SS:[EBP-24]
00520BA4   897D EC         MOV DWORD PTR SS:[EBP-14], EDI
00520BA7   8845 DC         MOV BYTE PTR SS:[EBP-24], AL
00520BAA   E8 A4230000     CALL Unpacked.00522F53
00520BAF   BE 802A4B00     MOV ESI, Unpacked.004B2A80      dialog
00520BB4   56              PUSH ESI
00520BB5   E8 56BD0D00     CALL Unpacked.005FC910
```

Patch to:

```
00520B86   C9              LEAVE
00520B87   C2 0400         RETN 4
00520B8A   C3              RETN
00520B8B   90              NOP
00520B8C   90              NOP
00520B8D   90              NOP
00520B8E   90              NOP
00520B8F   E8 00BC0D00     CALL Unpacked.005FC794
00520B94   83EC 5C         SUB ESP, 5C
00520B97   8A45 13         MOV AL, BYTE PTR SS:[EBP+13]
00520B9A   53              PUSH EBX
```

```
00520B9A   53              PUSH EBX
00520B9B   56              PUSH ESI
00520B9C   57              PUSH EDI
00520B9D   8BF9            MOV EDI, ECX
00520B9F   6A 00           PUSH 0
00520BA1   8D4D DC         LEA ECX, DWORD PTR SS:[EBP-24]
00520BA4   897D EC         MOV DWORD PTR SS:[EBP-14], EDI
00520BA7   8845 DC         MOV BYTE PTR SS:[EBP-24], AL
00520BAA   E8 A4230000     CALL Unpacked.00522F53
00520BAF   BE 802A4B00     MOV ESI, Unpacked.004B2A80          dialog
00520BB4   56              PUSH ESI
00520BB5   E8 56BD0D00     CALL Unpacked.005FC910
00520BBA   59              POP ECX
```

_ S e r of a "**t im e t o u**"

```
00520C43   5B              POP EBX
00520C44   C9              LEAVE
00520C45   C2 0C00         RETN 0C
00520C48   B8 9CF66000     MOV EAX, Unpacked.0060F69C
00520C4D   E8 42BB0D00     CALL Unpacked.005FC794
00520C52   83EC 5C         SUB ESP, 5C
00520C55   8A45 0B         MOV AL, BYTE PTR SS:[EBP+B]
00520C58   53              PUSH EBX
00520C59   56              PUSH ESI
00520C5A   57              PUSH EDI
00520C5B   8BF9            MOV EDI, ECX
00520C5D   6A 00           PUSH 0
00520C5F   8D4D DC         LEA ECX, DWORD PTR SS:[EBP-24]
00520C62   897D EC         MOV DWORD PTR SS:[EBP-14], EDI
00520C65   8845 DC         MOV BYTE PTR SS:[EBP-24], AL
00520C68   E8 E6220000     CALL Unpacked.00522F53
00520C6D   BE 702A4B00     MOV ESI, Unpacked.004B2A70          timeout
00520C72   56              PUSH ESI
00520C73   E8 98BC0D00     CALL Unpacked.005FC910
00520C78   59              POP ECX
```

P a t a n of the h

```
00520C43   5B              POP EBX
00520C44   C9              LEAVE
00520C45   C2 0C00         RETN 0C
00520C48   C3              RETN
00520C49   90              NOP
00520C4A   90              NOP
00520C4B   90              NOP
00520C4C   90              NOP
00520C4D   E8 42BB0D00     CALL Unpacked.005FC794
00520C52   83EC 5C         SUB ESP, 5C
00520C55   8A45 0B         MOV AL, BYTE PTR SS:[EBP+B]
00520C58   53              PUSH EBX
00520C59   56              PUSH ESI
00520C5A   57              PUSH EDI
00520C5B   8BF9            MOV EDI, ECX
00520C5D   6A 00           PUSH 0
```

```
00520C5B   8BF9          MOV EDI, ECX
00520C5D   6A 00         PUSH 0
00520C5F   8D4D DC       LEA ECX, DWORD PTR SS:[EBP-24]
00520C62   897D EC       MOV DWORD PTR SS:[EBP-14], EDI
00520C65   8845 DC       MOV BYTE PTR SS:[EBP-24], AL
00520C68   E8 E6220000   CALL Unpacked.00522F53
00520C6D   BE 702A4B00   MOV ESI, Unpacked.004B2A70        timeout
00520C72   56            PUSH ESI
```

_ S e r of a "**T im e r**"

```
00520D2C   C9            LEAVE
00520D2D   C2 0400       RETN 4
00520D30   B8 B0F66000   MOV EAX, Unpacked.0060F6B0        ,È\ra
00520D35   E8 5ABA0D00   CALL Unpacked.005FC794
00520D3A   83EC 5C       SUB ESP, 5C
00520D3D   8A45 0B       MOV AL, BYTE PTR SS:[EBP+B]
00520D40   53            PUSH EBX
00520D41   56            PUSH ESI
00520D42   57            PUSH EDI
00520D43   8BF9          MOV EDI, ECX
00520D45   6A 00         PUSH 0
00520D47   8D4D DC       LEA ECX, DWORD PTR SS:[EBP-24]
00520D4A   897D EC       MOV DWORD PTR SS:[EBP-14], EDI
00520D4D   8845 DC       MOV BYTE PTR SS:[EBP-24], AL
00520D50   E8 FE210000   CALL Unpacked.00522F53
00520D55   BE 782A4B00   MOV ESI, Unpacked.004B2A78        timer
00520D5A   56            PUSH ESI
```

P a t a n of the h

```
00520D2C   C9            LEAVE
00520D2D   C2 0400       RETN 4
00520D30   C3            RETN                             ,È\ra
00520D31   90            NOP
00520D32   90            NOP
00520D33   90            NOP
00520D34   90            NOP
00520D35   E8 5ABA0D00   CALL Unpacked.005FC794
00520D3A   83EC 5C       SUB ESP, 5C
00520D3D   8A45 0B       MOV AL, BYTE PTR SS:[EBP+B]
00520D40   53            PUSH EBX
00520D41   56            PUSH ESI
00520D42   57            PUSH EDI
00520D43   8BF9          MOV EDI, ECX
00520D45   6A 00         PUSH 0
00520D47   8D4D DC       LEA ECX, DWORD PTR SS:[EBP-24]
00520D4A   897D EC       MOV DWORD PTR SS:[EBP-14], EDI
00520D4D   8845 DC       MOV BYTE PTR SS:[EBP-24], AL
00520D50   E8 FE210000   CALL Unpacked.00522F53
00520D55   BE 782A4B00   MOV ESI, Unpacked.004B2A78        timer
00520D5A   56            PUSH ESI
```

_ S e r of a "**E x E cu te**"

```
00520E40   C2 0400          RETN 4
00520E43   B8 C4F66000      MOV EAX, Unpacked.0060F6C4          ,ð\ra
00520E48   E8 47B90D00      CALL Unpacked.005FC794
00520E4D   83EC 5C          SUB ESP, 5C
00520E50   8A45 0B          MOV AL, BYTE PTR SS:[EBP+B]
00520E53   53               PUSH EBX
00520E54   56               PUSH ESI
00520E55   57               PUSH EDI
00520E56   8BF9             MOV EDI, ECX
00520E58   6A 00            PUSH 0
00520E5A   8D4D DC          LEA ECX, DWORD PTR SS:[EBP-24]
00520E5D   897D EC          MOV DWORD PTR SS:[EBP-14], EDI
00520E60   8845 DC          MOV BYTE PTR SS:[EBP-24], AL
00520E63   E8 EB200000      CALL Unpacked.00522F53
00520E68   BE 682A4B00      MOV ESI, Unpacked.004B2A68          execute
00520E6D   56               PUSH ESI
00520E6E   E8 9DBA0D00      CALL Unpacked.005FC910
```

P a t a n of the h

```
00520E40   C2 0400          RETN 4
00520E43   C3               RETN                                ,ð\ra
00520E44   90               NOP
00520E45   90               NOP
00520E46   90               NOP
00520E47   90               NOP
00520E48   E8 47B90D00      CALL Unpacked.005FC794
00520E4D   83EC 5C          SUB ESP, 5C
00520E50   8A45 0B          MOV AL, BYTE PTR SS:[EBP+B]
00520E53   53               PUSH EBX
00520E54   56               PUSH ESI
00520E55   57               PUSH EDI
00520E56   8BF9             MOV EDI, ECX
00520E58   6A 00            PUSH 0
00520E5A   8D4D DC          LEA ECX, DWORD PTR SS:[EBP-24]
00520E5D   897D EC          MOV DWORD PTR SS:[EBP-14], EDI
00520E60   8845 DC          MOV BYTE PTR SS:[EBP-24], AL
00520E63   E8 EB200000      CALL Unpacked.00522F53
00520E68   BE 682A4B00      MOV ESI, Unpacked.004B2A68          execute
00520E6D   56               PUSH ESI
00520E6E   E8 9DBA0D00      CALL Unpacked.005FC910
```

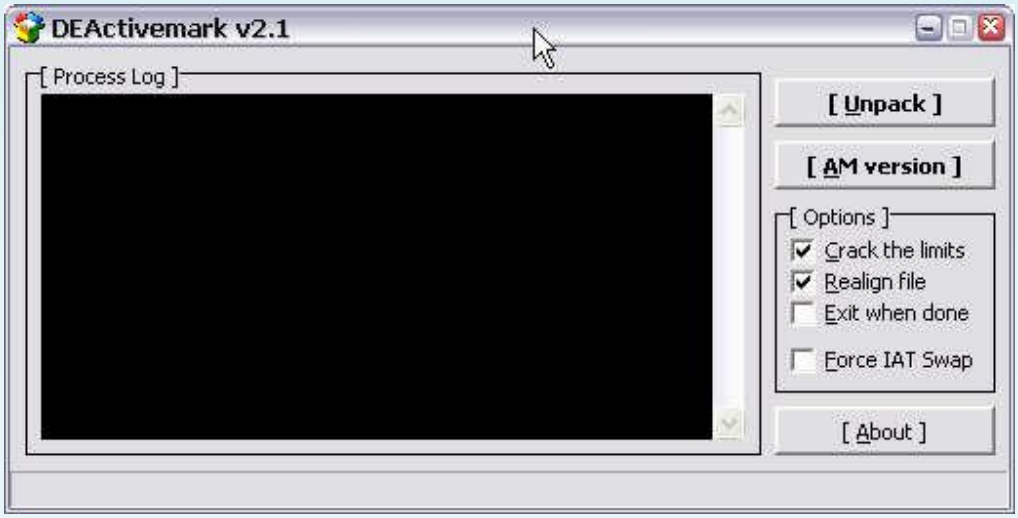
_ **Save all** ... i also ensure any limit 1 more time ... If this ko Crack use is No. 1 for the game you should consult tut **"Unpacking ActiveMark level 2 entry point"** to see how to find the string **"setkey** "and think that the **Magic Call.**

_ Tolerable if it is still lười ko unpack or Crack need for tools to use tired **ActiveMark 5.x Generic Loader**

_ N t han nu  Protect the selected file in **ActiveMark** ... Load into the game i

have always reminded **NAG** spent. But it only supports a game only.

_Moi Have more than **2.1 DeActivemark**



The _Lam also good but it is still only tools but should also do support all games ... some cases it is still the **MUP** solution

G r l Ee TsF italy Ou the ***Co mpu t e r A _ of e l, e mbi Z o, M A B oo nb italy, H o acnh, Nina B e, e ki nman o***

w ar, Z o i D e ux, M e r c, l o e ight to nix, T r o b icky italy, Takad a iamidi ot, of the handi e n e n t, C o r o

f ndZ ... and italy o u !

N ha that T, N g à 29 italy hang9 the click of 2 006

W h o t italy N Bar

[MUP & Cracking] MoleBox Pro 2.6 Trial - Volume 1 - <Unpacking>

Contents Table:

Tools: OllyDBG + plugins, LordPE, ImportREC 1.6
Target: MoleBox Pro 2.6 Trial
Link: www.molebox.com
Skill Request: Basic Using Olly and some tools.

I. Introduction

Welcome you, the doctors and the aged. Giang's walking this day song too many, the trick of letting go đành should make "gut" off. But due to the 1 gang high in the trace, trick forced to dance for self-protection. 1 hope to make this way can help resolve the trick giang a blood debt. Đành not subject to the death only.
Today we will practice 1 half-dozen dishes half district. It is em "MoleBox Pro 2.6.0.2375 Trial." Because of the inheritance from that of British đám 2.5x Mole should destroy them to do this will be suon yet. hope that through this article, we can say with MoleBox DONE. Let the promotion of take up, the battle will be quite long so long in one place is new. I, beginning ...

II.Bypass ASProtect Layer

Viewer, even the developers do Mole also confident with the Packer's aged. Layer we face is ASProtect 2.2 SKE:

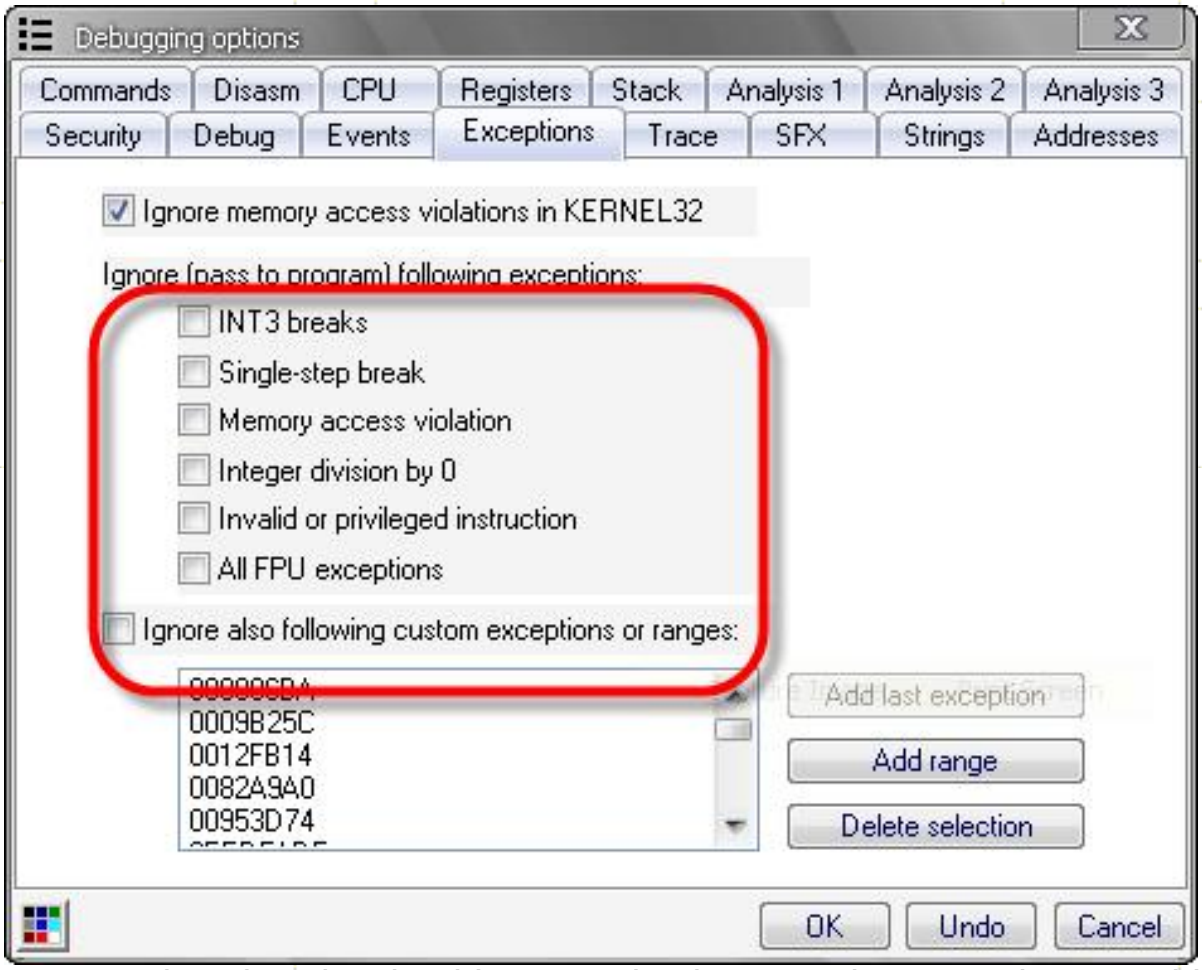
He way seats with carrying wild, calm hear presentations tí trick.

Việc pack nhiều layer có thể xem là hay ,đồng thời cũng bộc lộ nhiều cái dở .Hay ở chỗ làm run tay các bác yếu tim và hạn chế các Tool unpack chuyên dụng .
Còn dở thì lại nhiều hơn cả cái hay .Ta hãy xét lại các tính năng cơ bản của đa số các packer là:

- **Encrypt Code**
- **Hide/Eliminate IAT**
- **Destroy Relocation (DLL/OCX)**
- **Compress Resource**

Khi pack nhiều layer ,các công việc trên đều do layer đầu tiên kiêm nhiệm.Các layer sau chỉ đơn giản là encrypt "nhẹ" thêm 1 section code của loại packer đó (nếu có) nhằm hide EP của các layer trước. Và tận dụng các Anti-Debug của chính layer đó .

Meanwhile, SKE ASProtect most famous place in: Hide / eliminate IAT. If it is in layer 2 (or n! = 1) Nothing is worth the fear. Experiment shows Mole always pack by itself. Therefore ASProtect sure to do the first layer. So, we take it with meat.
Of the familiar with the Exception in Olly when ASProtect 2.x:



Many of you or questions is "why should any Uncheck Ignore the Exception? Machines to take over. "Yes, we are almost in many tut, if only method but not hề have to issue" why ". Even writers sometimes Cuc know it is what ear, can they explain lười or simply 1 to follow the script kiddy train at. So, we pause to 1 walking through a few definitions:

Exception là các lỗi phát sinh trong quá trình Runtime .Để ngăn ngừa chương trình bị crash khi gặp các lỗi này ,người lập trình cố gắng ghi lại để xử lý .Nếu xử lý thành công thì chương trình có thể tiếp tục chạy bình thường .Ngược lại thì sẽ gửi thông báo loại lỗi gì và gọi Exit Process để thoát chương trình .Cách làm những thao thác trên chính Handle Exception. (tạm dịch là điều khiển lỗi)

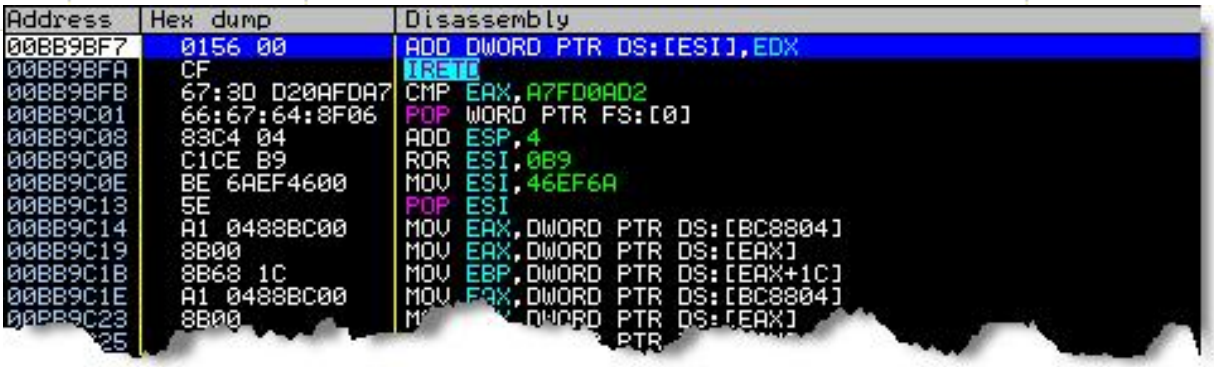
Có nhiều phương pháp để handle exception ,phổ biến là SEH (Structured exception handling) .SEH có thể dùng để xử lý cả 2 loại lỗi :exception cứng và mềm . Exception cứng thường phát sinh trong quá trình tính toán :như lỗi chia không ,tràn bộ đệm .. Exception mềm như lỗi truy xuất con trỏ null ,các tham số ko hợp lệ ...

SEH ban đầu chỉ để dùng trong các chương trình code bằng C ,nhưng về sau thì cho cả C++ , MFC mặc dù theo lời khuyên của các chuyên gia thì : C++ exception handling nên dùng cho C++ và MFC exception handling nên dùng cho MFC . (các bạn tự tìm hiểu thêm nhé)

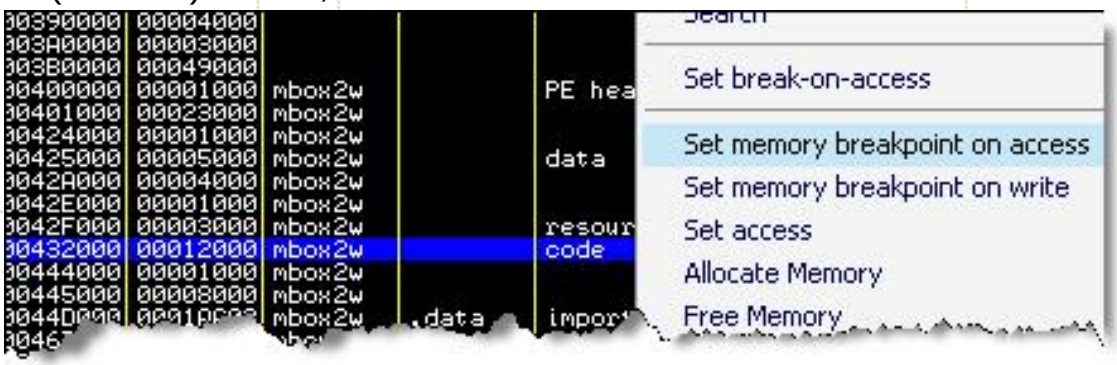
Với ASProtect , tác giả quá cẩn thận nên thêm nhiều SEH trong quá trình Unpack Code để kiểm soát mọi lỗi xảy ra ,nếu ta Uncheck Ignore Exception thì trình debug sẽ bị ngắt lại mỗi lần gặp 1 đoạn SEH ,và sau đoạn SEH cuối cùng cũng là lúc ASProtect đã unpack xong code ,chuẩn bị access tới code chính và chúng ta thường lợi

Now load the file you come in, we stopped at the EP's ASProtect 2.x:

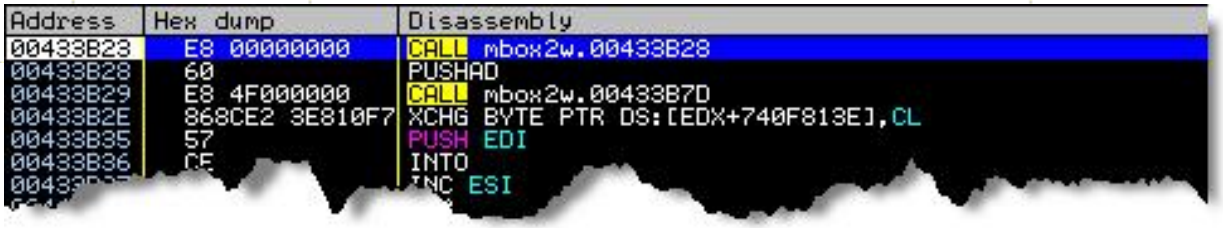
Shift-F9 of times to run the target completely. It's best to do is detect that you do is set any memory nhé for any BP will create ASProtect Thread to check the BP here, do it again each time, so check in BP window view is that they remove all the previous and then run. On the computer trick 31 times Shift-F9 is run target, the Ctrl-F2 and to restart the implementation of 30 times to come:



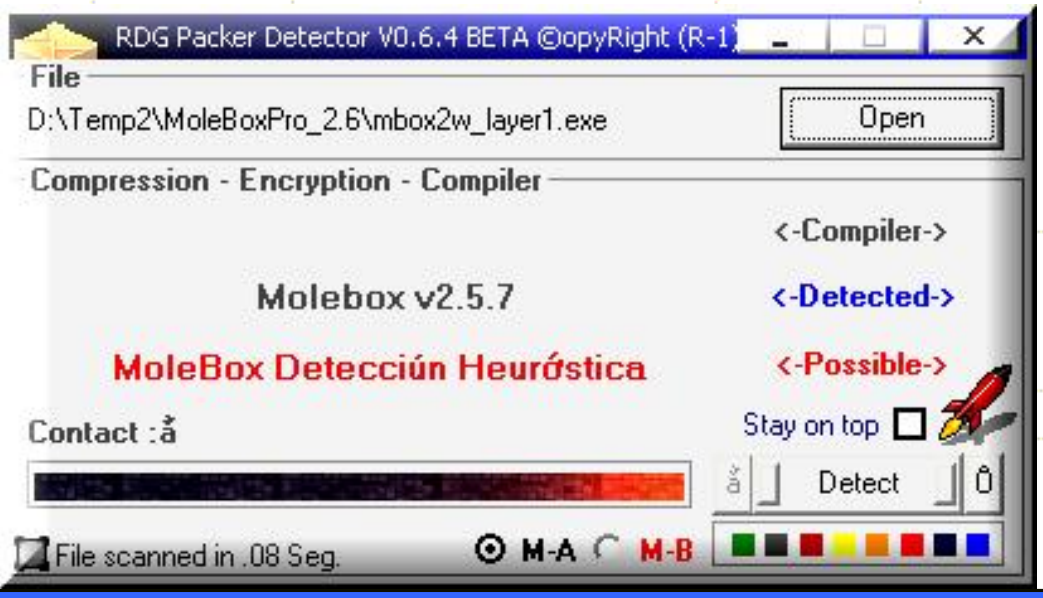
We are in the code generated by ASProtect, Alt-M open Memory Map, "set breakpoint on memory access (MBOA) to 432,000 in the code section:



Continue Shift-F9 final, and we at Break:



This ko is OEP's file before beginning nhé pack, it is the EP's next layer: MoleBox Pro. You like a dump file out the option (if the Grid, you can use to unpack Stripper will be out this layer)

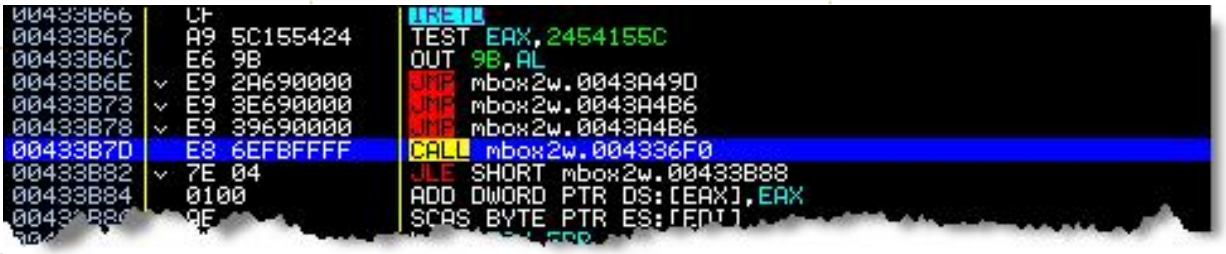


III.Unpacking MoleBox Pro Layer

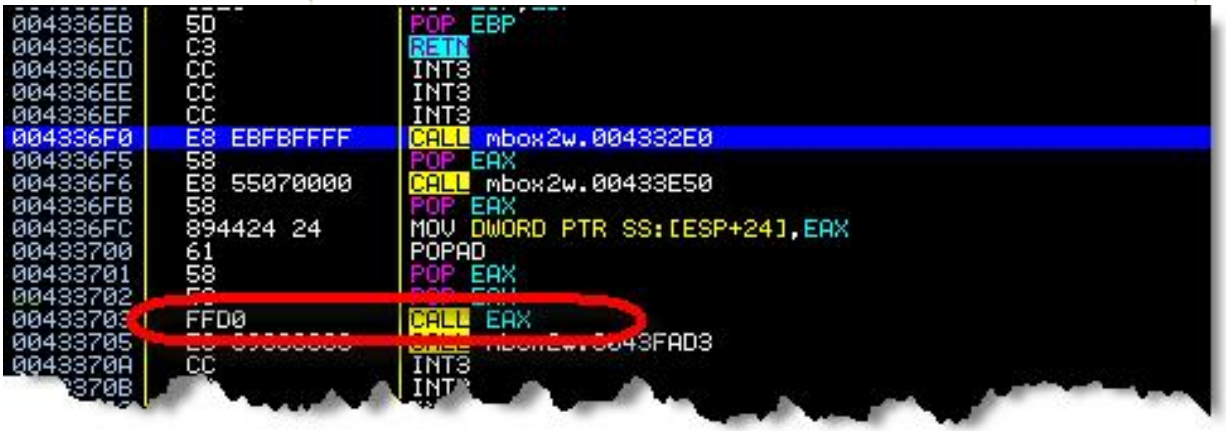
A - Find OEP, Fix IAT Hide & Extract 2 modules:

This trick will hustler from this point is, you remove the MBOA nhé. Now you can use methods in ASPack unpack UPX or to find the OEP. That Trace F7 through me orders PUSHAD à Follow in dump to record ESP à break on the access Byte ...
But Mole is quite easy to find the OEP 1 otherwise. I enter the command CALL 2:

Will come:

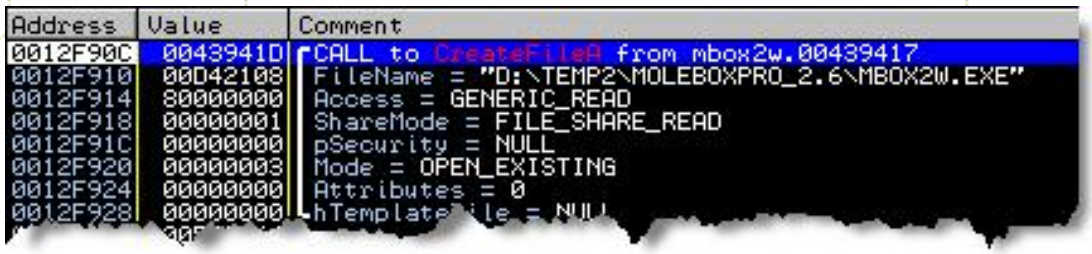


Continue to enter it, is to:



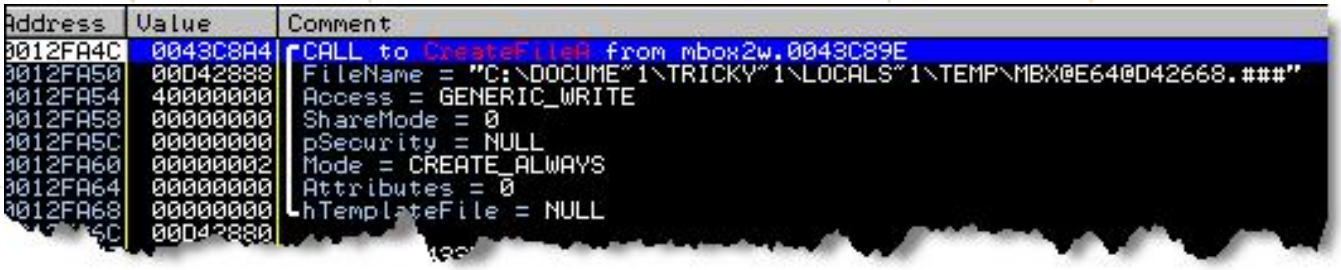
Seats fold in the region, we set a BP on it (F2). When Mole unpack code will complete the questions in order Break CALL EAX before calling it to OEP. And here is where to start Inline Patch if you like.
Through the MaDMAn_H3rCuL3s tut of the Mole ARTeam 2.5x will Extract from Module 2 in the unpack code. And also in the 2.6. We used to function CreateFileA summary of this module. BP set CreateFileA to do:

Shift-F9 first a break, corn down the window stack:



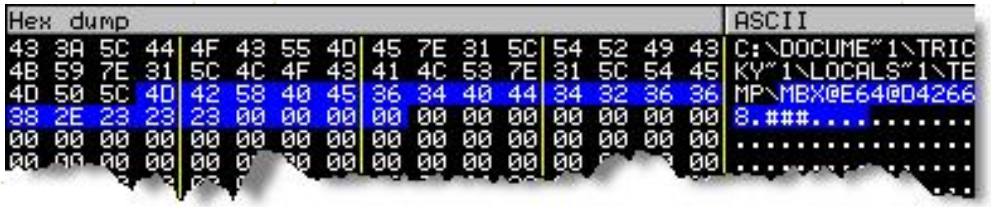
Still not at the Mole extract module, continue Shift-F9 a break:

The one is the right Shift-F9 a break. If not, add 1 time Shift-F9 a break again:

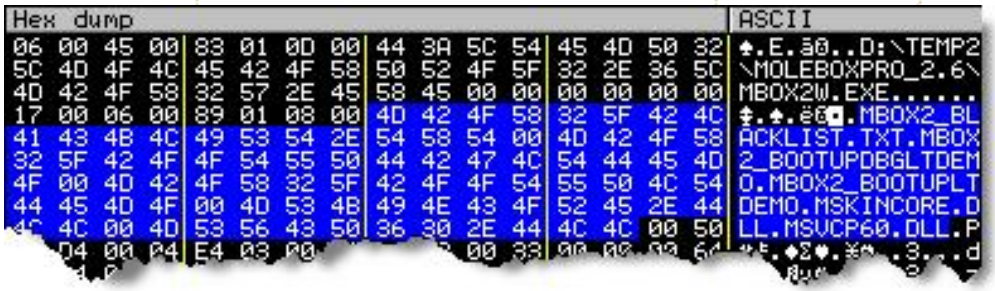


Ah ha, this is the Mole prepare extract the first module to TEMP directory here. Click on the right lines and FileName Follow dump in it:

Looking through the window of a dump Byte Name of file has been encrypted:

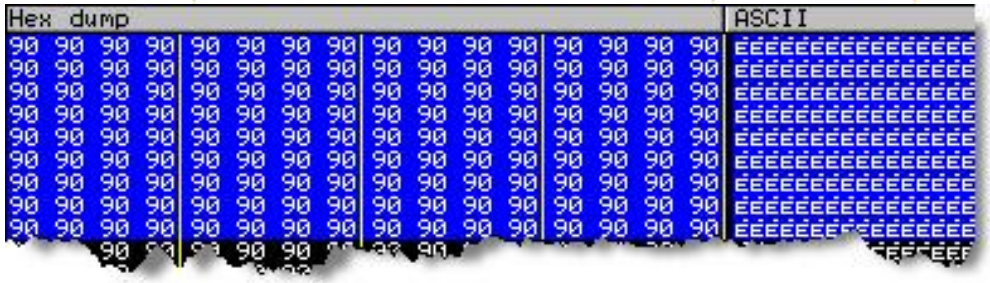


From here we pull up to see if:

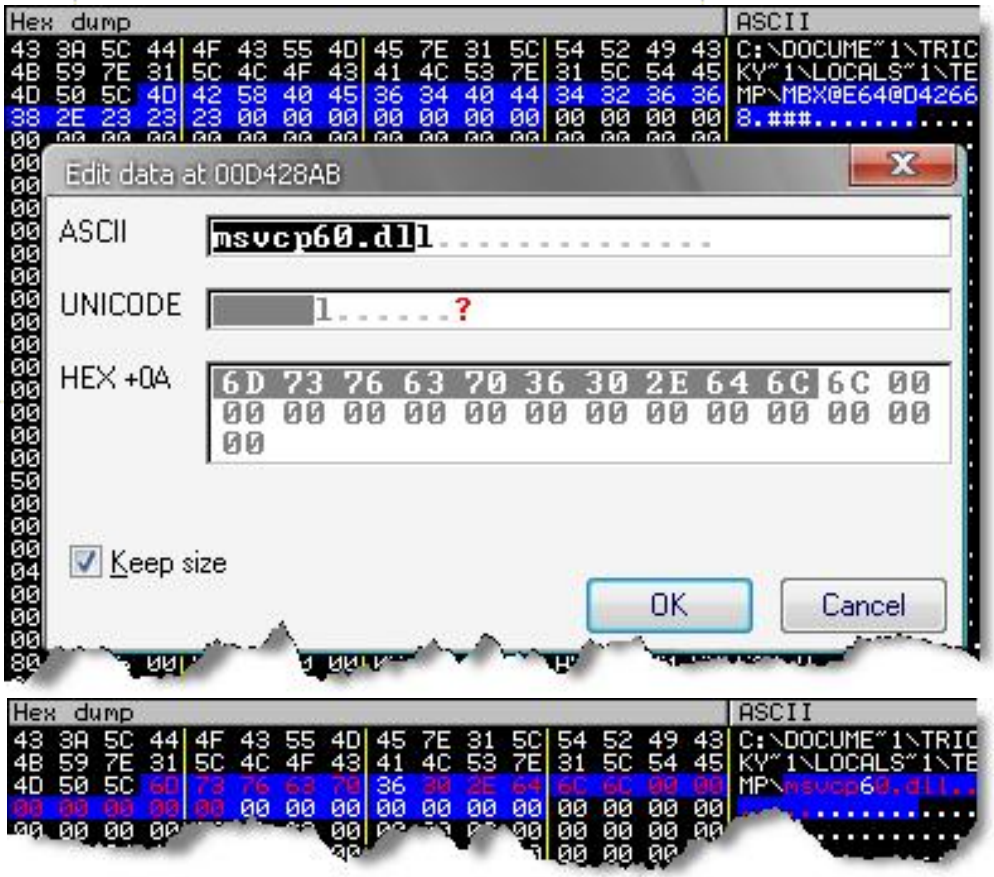


That list of files that may Mole Extract is:

In the first, when the extract from the first module, we easily find the file Name is msvcp60.dll, but here by Byte be overwritten so we do not see the name of the file before encoding:



No problem, in order that familiar or Mole, msvcp60.dll module is the first to extract. One back in line Follow the dump now, the source file name to: (Select Binary à Edit or press Space Bar, or Ctrl-E)



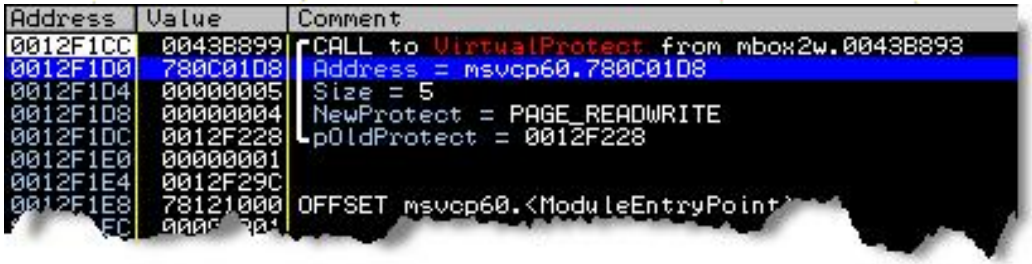
Now we darksome OEP modules of this code as soon as it is to load memory, set GetModuleHandleA bp:

Remember that BP is still in CreateFileA uphold previous nhé. Shift-F9 a new. Ah why every Shift-F9 to do that is F9? F9 or because they were suddenly stopped by several reasons. Shift-F9 to help debug suon will run better. After Shift-F9, we function in GetModuleHandleA Break:

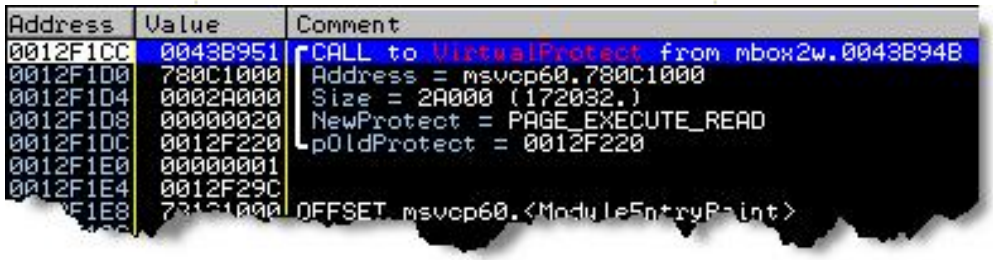
Un-Break Point here to go (for Bread F2). Open memory map will be notified 1 trick used by the plugin to ignore OllyAdvanced notice that it should do is consult more. I find the section of the module msvcp60. dll:

Set in MBOA section. Text as in the picture. Ấy, not with F9 or Shift-F9. Not understand at Olly on trick run too fast or by OEP is now beginning section. Text but when you press F9 now it ào ào This is the last module, including pieces Break any time. What you are doing is like this, usually when the code is unpack, or borrow more to function, in dỗ em VirtualProtect or used. Try it to delay the process the implementation, may be the break in the OEP's modules. BP VirtualProtect we go:

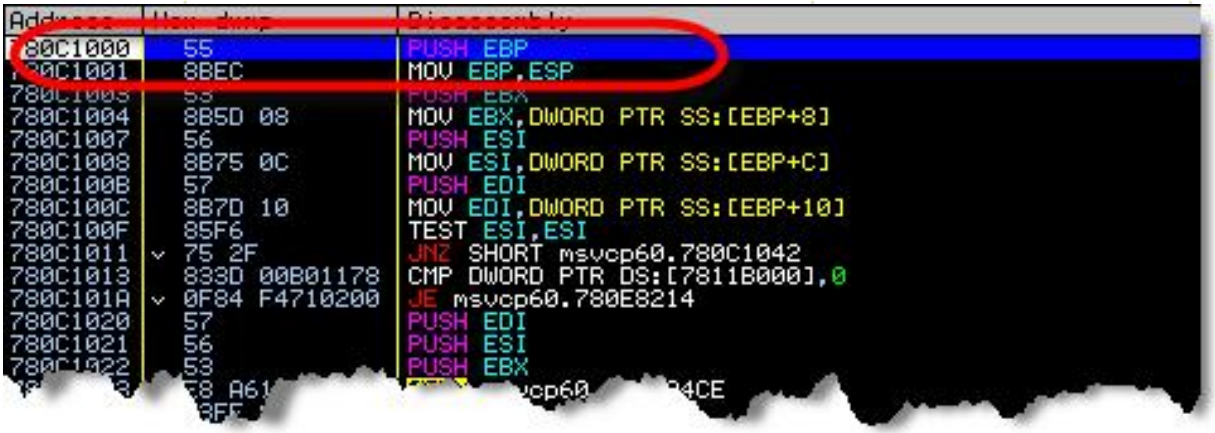
Now, the Shift-F9 to break from at this function, first, we dom down window stack:



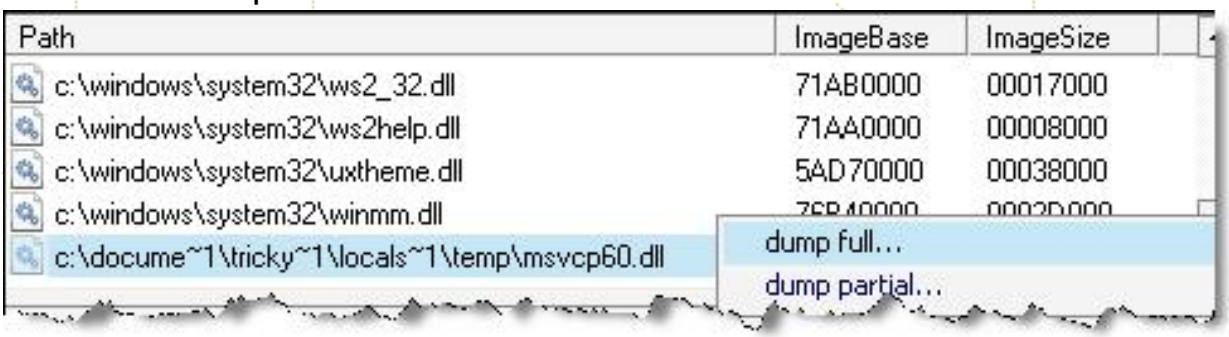
Ah, it is set up under the READWRITE PE Header section contains the modules, continue to Shift-F9:



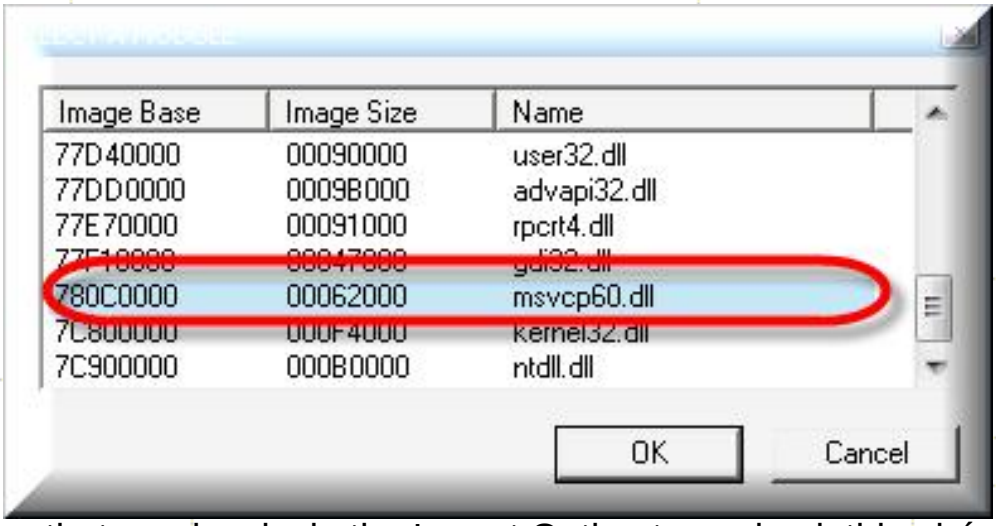
Set up under the EXECUTE_READ section. Text of the module. Keep Shift-F9 until it set up all of the attributes of the section will be at the OEP Break:



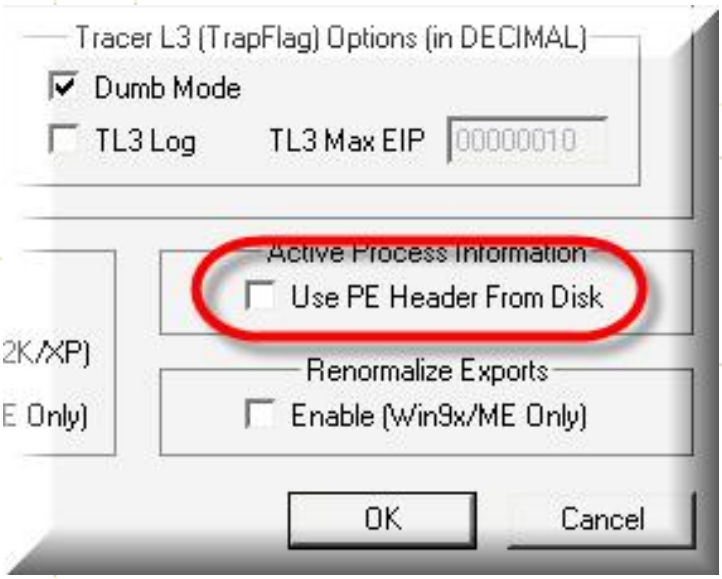
So OEP by this module is now top of the right section. RVA text = 780C1000, hen or what it crawled too fast now I leave this section MBOA in farewell. Then they dump out this module, LordPE trick used to dump:



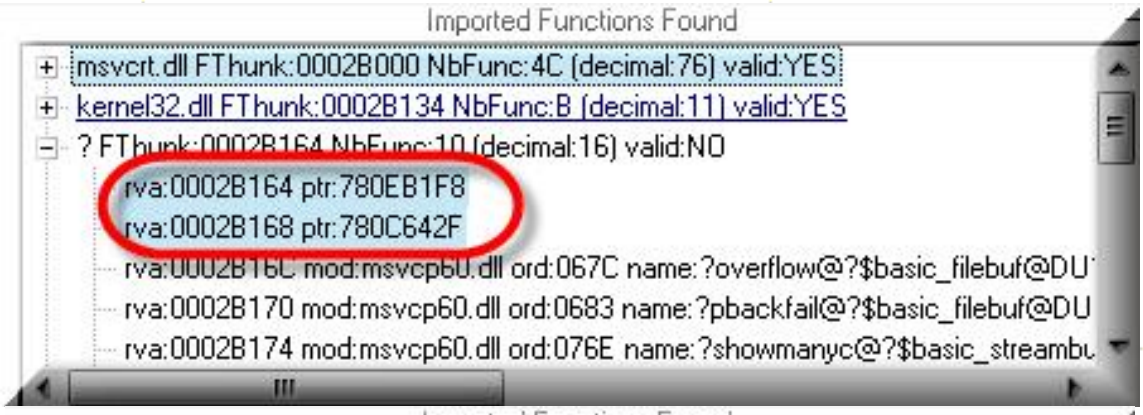
Save with the name: msvcp60_dump.dll han.Sau not fix it with ImportREC IAT. ImportREC Open, select the process needs to handle, dll Pick it:

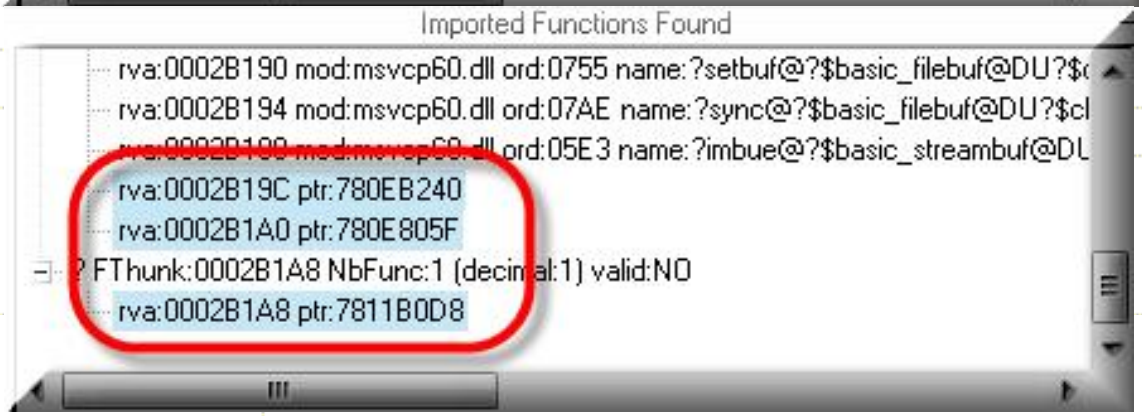


OK play, remember that previously, in the Import Option to uncheck this nhé:

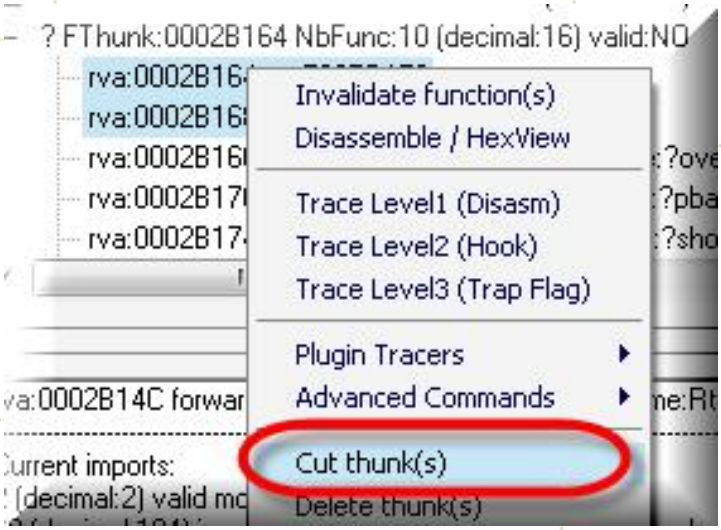


Why must the tut in the Armadillo_DLL_Unpacking_n_More was discussed. OEP = Enter 1000, click Search IAT à Get Auto Import. Continue pressing Invalid Show, here are some invalid value:





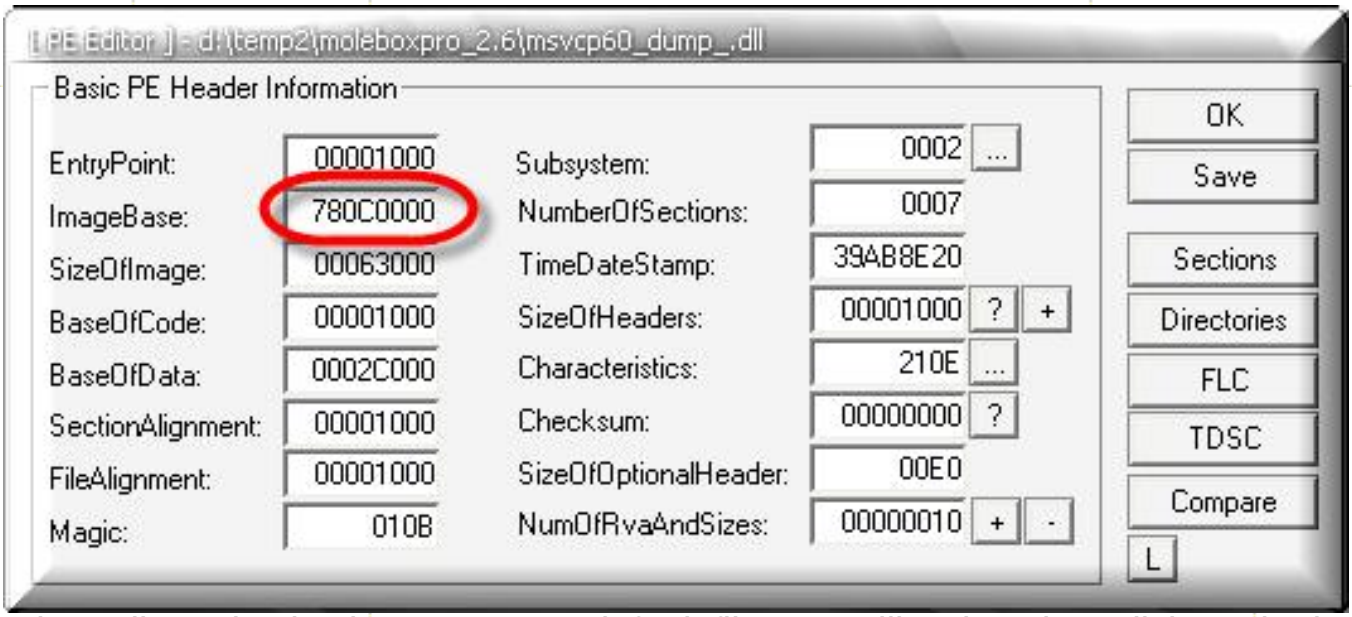
If the tut of the MaDMAn_H3rCuL3s we should choose Dissamble / Hex View in the value of Invalid module to find exactly the IAT is Hide. But do know we have aged lầm or ko, where almost Mole still do not interfere to Hide / eliminate the IAT. And to ensure that food, you can check by a search msvcp60.dll other (to do this module is designed for Mole, it is a module for the app code in C + +). Version 2.6 uses the Mole is 6.0.8972.0, but only in comparison with the version 6.0.8168.0 I also found that i have more time in the IAT position on. So that an Cut Thunk (s) all:



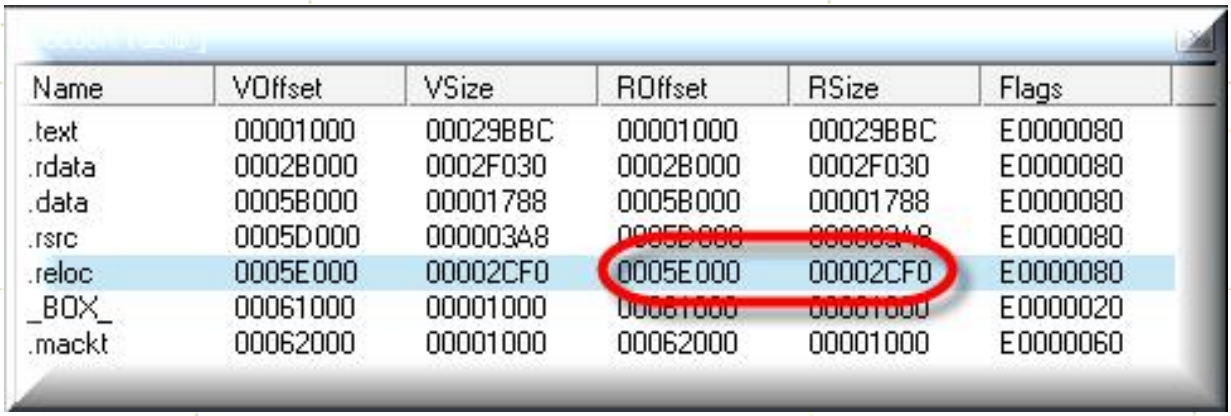
Then fix the dump is then:

The still have not finished with this first module, remember when unpack 1 dll outside the OEP, IAT, the third important is the Relocation and ImageBase. Why do you consider Armadillo_DLL_Unpacking_n_More tut, the trick also presented several concepts of 1 to unpack the dll file.
First is Imagebase, we see the dump file has at any ImageBase, back in the memory map Olly:

Add the first load of PE Header modules ImageBase is also the need to find, so IM = 780C0000. Use PE Editor's LordPE file to open the dump has fix this:

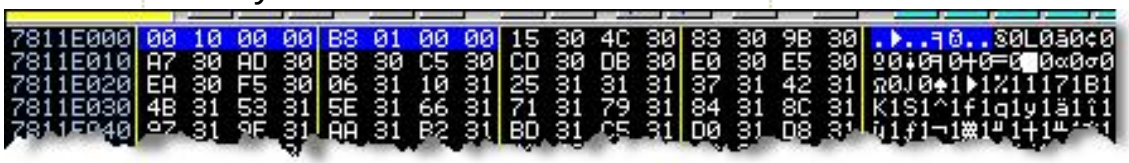


So i need to edit, IM is also in memory IM default file. But still Relocation, click on the button right now Sections:



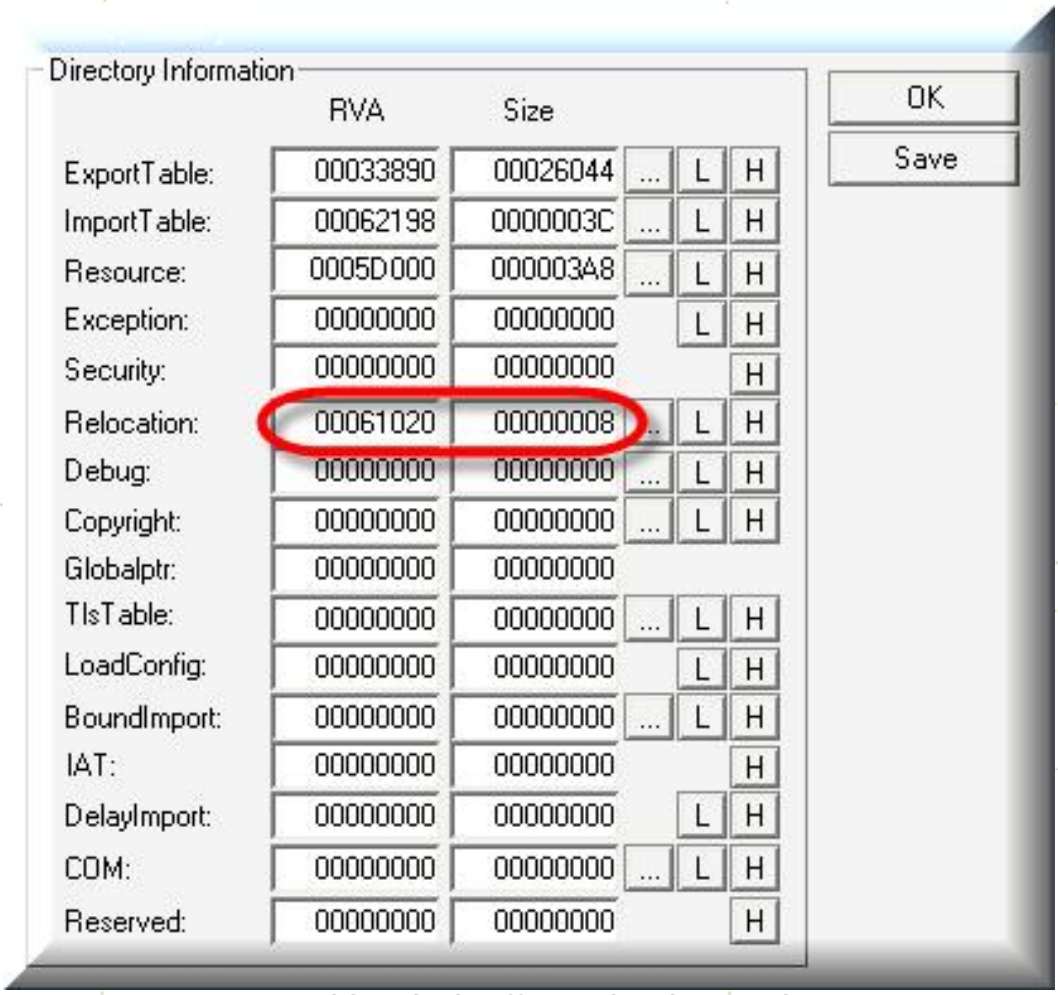
Name	VOffset	VSize	ROffset	RSize	Flags
.text	00001000	00029BBC	00001000	00029BBC	E0000080
.rdata	0002B000	0002F030	0002B000	0002F030	E0000080
.data	0005B000	00001788	0005B000	00001788	E0000080
.rsrc	0005D000	000003A8	0005D000	00000400	E0000080
.reloc	0005E000	00002CF0	0005E000	00002CF0	E0000080
BOX	00061000	00001000	00061000	00001000	E0000020
.mackt	00062000	00001000	00062000	00001000	E0000060

5E000 that start section contains Relocation, next to the actual size of it. Be careful then should we define the memory of food for sure. We see Relocation start here:



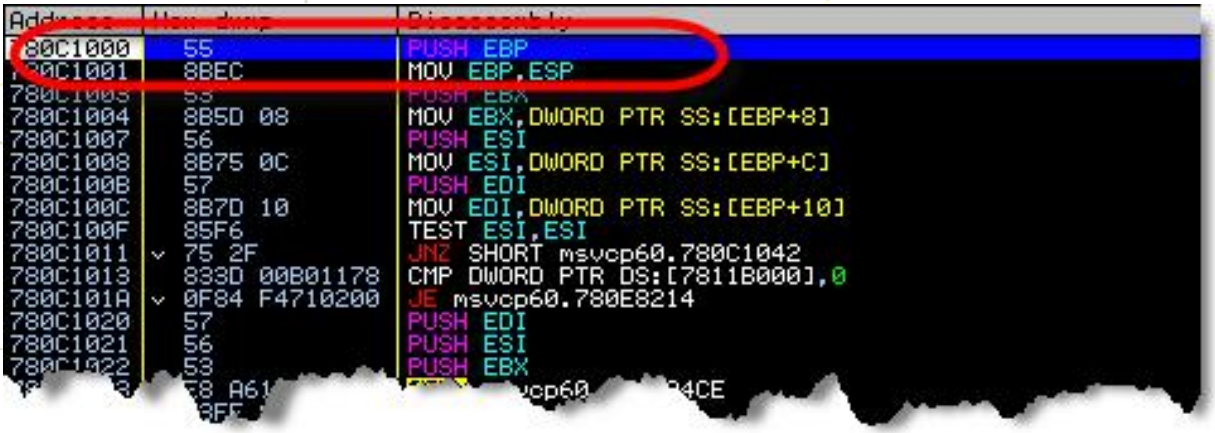
7811E000 - IM: 780C0000 = 5E000. And in the end:

78120CF0 - 7811E000 = 2CF0. Thus the starting address and Size of Relocation are correct. Back PE Editor, close the section, choose to Directories:

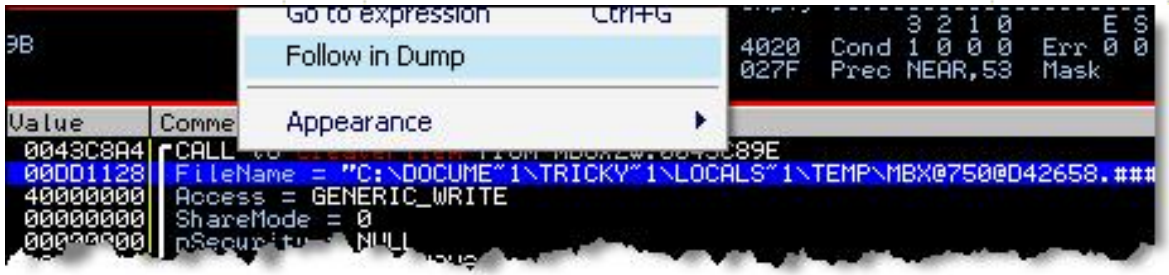


Where fold region must correct, and loaded Offset Size has to be on:

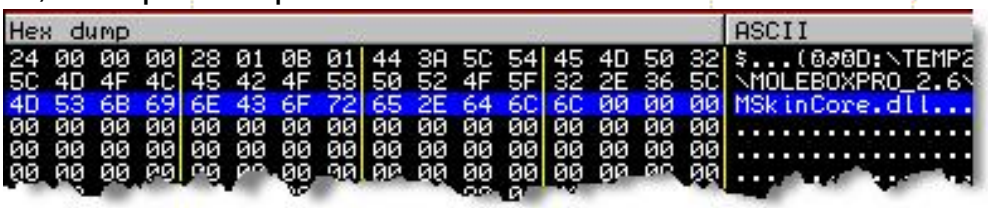
Save and Save again. Rename the file Fix dump into its original name: msvcp60.dll. The module is completed first and then đấy. You go back and Olly continued from previous stops:



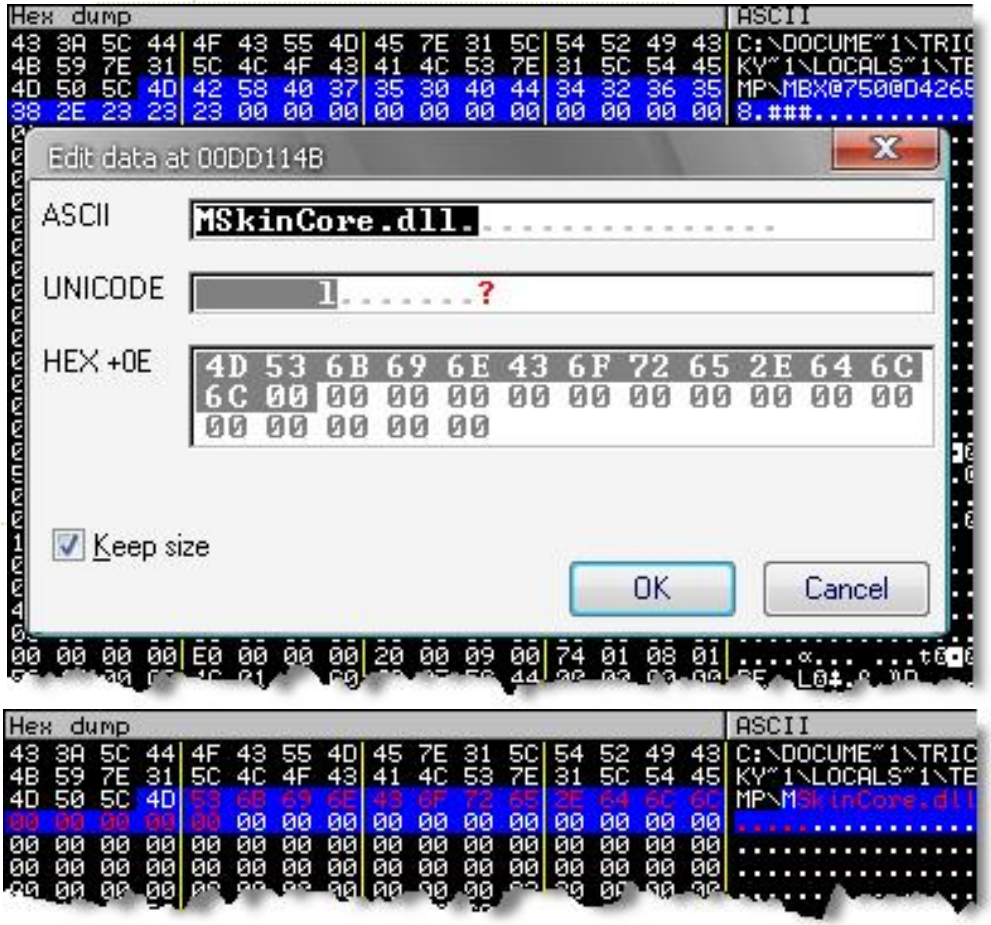
Remember that BP has set VirtualProtect before, time we put it in BC VirtualProtect. If BP initially set at CreateFileA still make you press Shift-F9, Olly will break down and dom Stack for summary module 2:



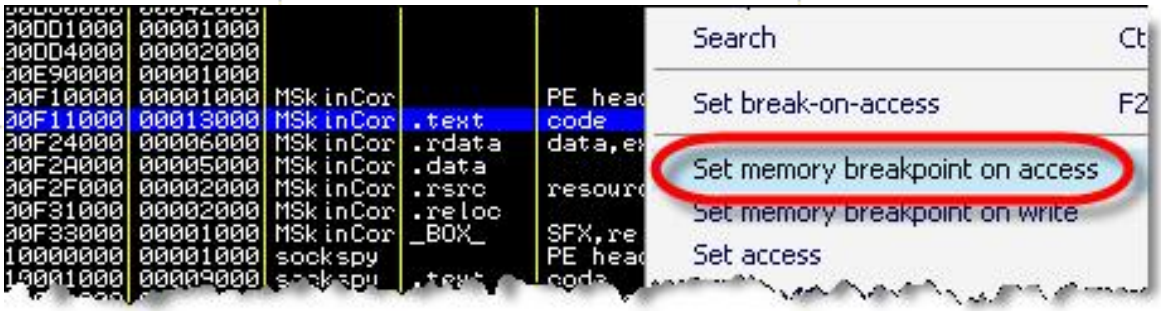
Follow also in line at the dump Filename (as in the picture). Dom wa window dump will see encrypted file name, then pulled up on the 1 billion:



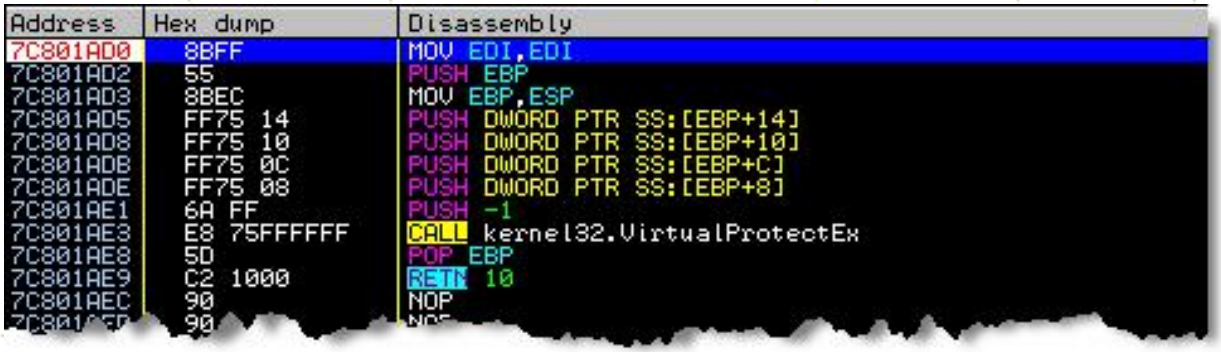
May too, Byte of the original file name has not been overwritten, so fix the encrypted file back to the previous name:



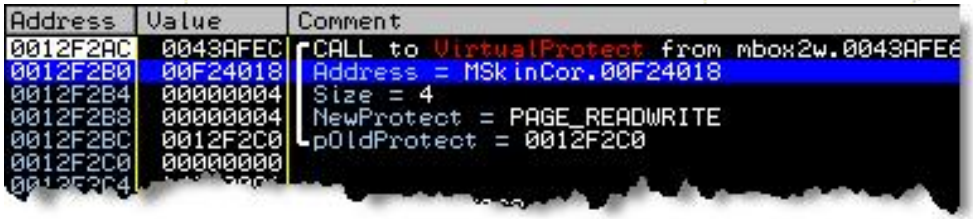
Leave CreateFileA in BP and BP GetModuleHandleA similar to break immediately after the file load into memory. Even then, put in BP GetModuleHandleA go to the memory map and set in MBOA section. Text of this module:



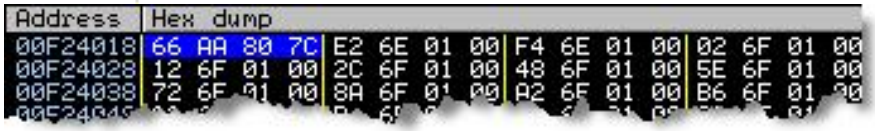
However, in this module, month Male ... flipped out, Mole will conduct Hide / eliminate IAT. Tut by Hec aged Cu Lec to do only one way to find the accuracy of the IAT Hide / eliminate this. The new security aged lãng nhach, the module will do is what they go mò the function of the bay add, still aged only the need to do only. Teu real!
There is a trick used by + NCR tip. Before Mole conducted Hide IAT, it will call VirtualProtect function, so we should set the BP VirtualProtect to find accommodation will destroy our IAT. Once set, the Shift-F9 to run at the top and Break functions:



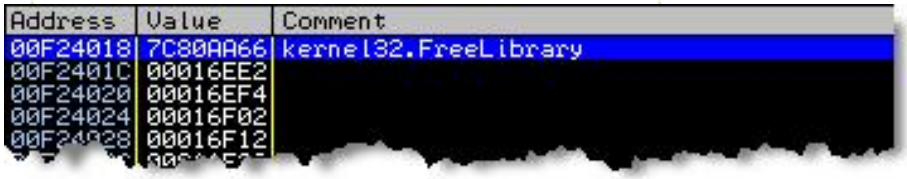
Dom down the stack, will see 1 address:



Follow in dump in this line, will see the value IAT first move was to memory:



Click right, select Address Long to see that more clearly:

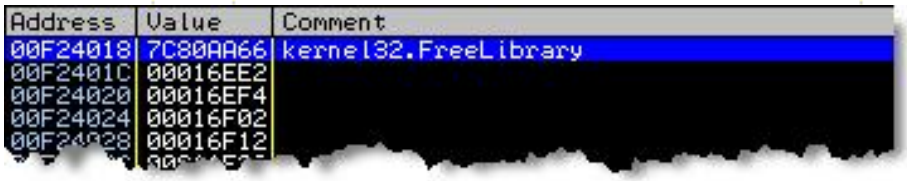


This is the value before IAT canceled, Click to time in this line, choose:

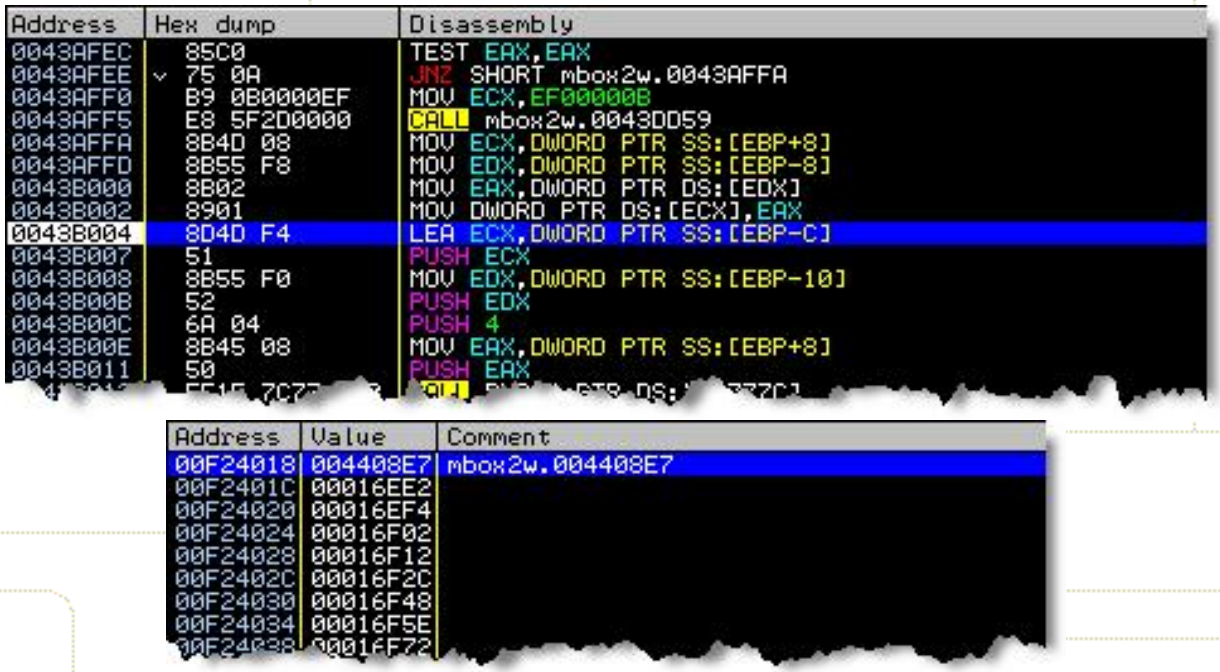
How to Backup the value of this. Now we trace to the function of RETN, to return to it, we come:

Now continue to trace me to this command:

Observations IAT value at this time, it is still raw:



But after Trace me through this command are:



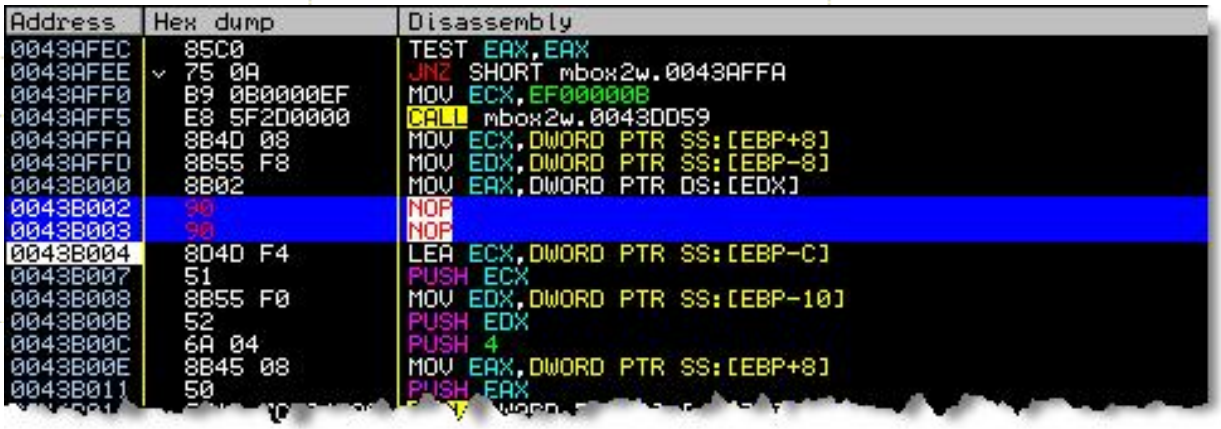
Address	Hex dump	Disassembly
0043AFEC	85C0	TEST EAX,EAX
0043AFEE	75 0A	JNZ SHORT mbox2w.0043AFFA
0043AFF0	B9 0B0000EF	MOV ECX,EF00000B
0043AFF5	E8 5F2D0000	CALL mbox2w.0043DD59
0043AFFA	8B4D 08	MOV ECX,DWORD PTR SS:[EBP+8]
0043AFFD	8B55 F8	MOV EDX,DWORD PTR SS:[EBP-8]
0043B000	8B02	MOV EAX,DWORD PTR DS:[EDX]
0043B002	8901	MOV DWORD PTR DS:[ECX],EAX
0043B004	8D4D F4	LEA ECX,DWORD PTR SS:[EBP-C]
0043B007	51	PUSH ECX
0043B008	8B55 F0	MOV EDX,DWORD PTR SS:[EBP-10]
0043B00B	52	PUSH EDX
0043B00C	6A 04	PUSH 4
0043B00E	8B45 08	MOV EAX,DWORD PTR SS:[EBP+8]
0043B011	50	PUSH EAX

Address	Value	Comment
00F24018	004408E7	mbox2w.004408E7
00F2401C	00016EE2	
00F24020	00016EF4	
00F24024	00016F02	
00F24028	00016F12	
00F2402C	00016F2C	
00F24030	00016F48	
00F24034	00016F5E	

Asia Ah, this old Male dare cancel IAT front of us there the other. Note concept "Cancel" here ko means completely destroyed. It covers always notice encrypted again. For example, in above, refers to the value CALL IAT original has been replaced by a CALL to address 1 (4408E7) in code decrypt by Mole.
Now Click right at the IAT canceled Paste the values that we have now to Backup:

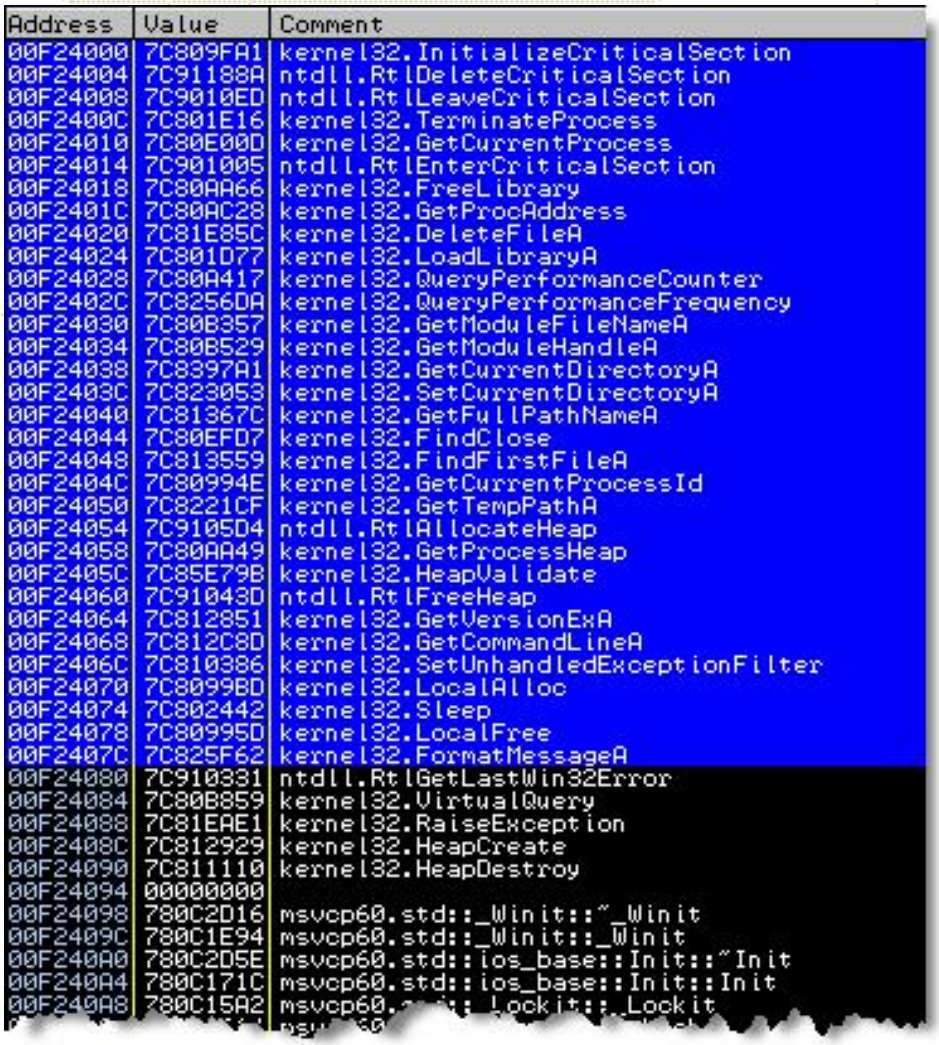
Address	Value	Comment
00F24018	7C80AA66	kernel32.FreeLibrary
00F2401C	00016EE2	
00F24020	00016EF4	
00F24024	00016F02	
00F24028	00016F12	
00F2402C	00016F2C	

How color mè nay hour only for you to see Mole IAT cancel any place, when? But if you continue to work with such a long thoong IAT loong the only country disappear. Observations by the orders we've Trace through, every time IAT canceled orders on the question is enforcement. But the value in ECX day will then be replaced by me orders: LEA ECX, ... for the other. So the wish to prevent the cancellation IAT simply NOP he was going on but do not fear the influence of the ECX:



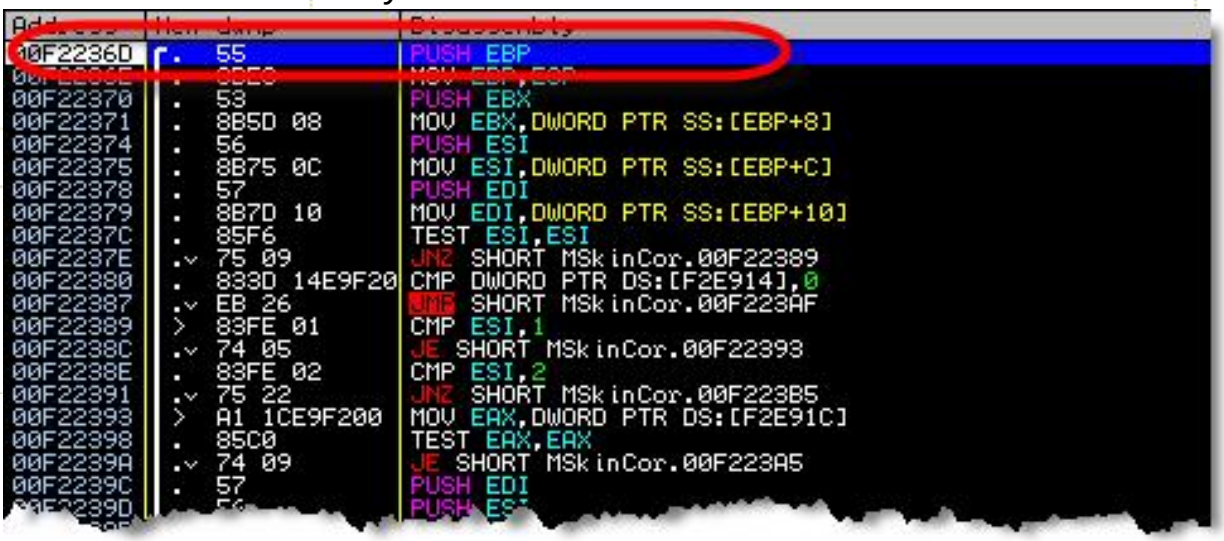
Address	Hex dump	Disassembly
0043AFEC	85C0	TEST EAX,EAX
0043AFEE	75 0A	JNZ SHORT mbox2w.0043AFFA
0043AFF0	B9 0B0000EF	MOV ECX,EF00000B
0043AFF5	E8 5F2D0000	CALL mbox2w.0043DD59
0043AFFA	8B4D 08	MOV ECX,DWORD PTR SS:[EBP+8]
0043AFFD	8B55 F8	MOV EDX,DWORD PTR SS:[EBP-8]
0043B000	8B02	MOV EAX,DWORD PTR DS:[EDX]
0043B002	90	NOP
0043B003	90	NOP
0043B004	8D4D F4	LEA ECX,DWORD PTR SS:[EBP-C]
0043B007	51	PUSH ECX
0043B008	8B55 F0	MOV EDX,DWORD PTR SS:[EBP-10]
0043B00B	52	PUSH EDX
0043B00C	6A 04	PUSH 4
0043B00E	8B45 08	MOV EAX,DWORD PTR SS:[EBP+8]
0043B011	50	PUSH EAX

This is what the script unpack MoleBox 2.x or do. Now it continues to Shift-F9 to Break in VirtualProtect, dom wa dump window will see the IAT in turn is to move that do hè cancel any function is:



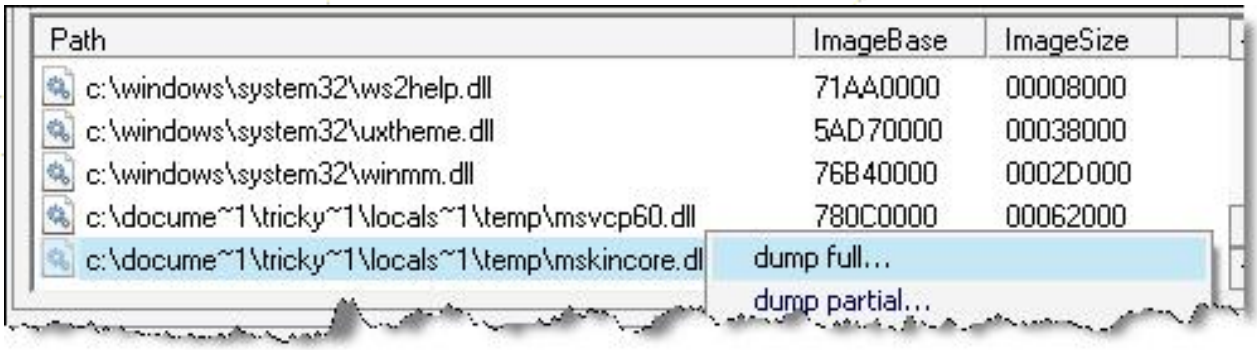
Address	Value	Comment
00F24000	7C809FA1	kernel32.InitializeCriticalSection
00F24004	7C91188A	ntdll.RtlDeleteCriticalSection
00F24008	7C9010ED	ntdll.RtlLeaveCriticalSection
00F2400C	7C801E16	kernel32.TerminateProcess
00F24010	7C80E00D	kernel32.GetCurrentProcess
00F24014	7C901005	ntdll.RtlEnterCriticalSection
00F24018	7C80AA66	kernel32.FreeLibrary
00F2401C	7C80AC28	kernel32.GetProcAddress
00F24020	7C81E85C	kernel32.DeleteFileA
00F24024	7C801D77	kernel32.LoadLibraryA
00F24028	7C80A417	kernel32.QueryPerformanceCounter
00F2402C	7C8256DA	kernel32.QueryPerformanceFrequency
00F24030	7C80B357	kernel32.GetModuleFileNameA
00F24034	7C80B529	kernel32.GetModuleHandleA
00F24038	7C8397A1	kernel32.GetCurrentDirectoryA
00F2403C	7C823053	kernel32.SetCurrentDirectoryA
00F24040	7C81367C	kernel32.GetFullPathNameA
00F24044	7C80EFD7	kernel32.FindClose
00F24048	7C813559	kernel32.FindFirstFileA
00F2404C	7C80994E	kernel32.GetCurrentProcessId
00F24050	7C8221CF	kernel32.GetTempPathA
00F24054	7C9105D4	ntdll.RtlAllocateHeap
00F24058	7C80AA49	kernel32.GetProcessHeap
00F2405C	7C85E79B	kernel32.HeapValidate
00F24060	7C91043D	ntdll.RtlFreeHeap
00F24064	7C812851	kernel32.GetVersionExA
00F24068	7C812C8D	kernel32.GetCommandLineA
00F2406C	7C810386	kernel32.SetUnhandledExceptionFilter
00F24070	7C8099BD	kernel32.LocalAlloc
00F24074	7C802442	kernel32.Sleep
00F24078	7C80995D	kernel32.LocalFree
00F2407C	7C825F62	kernel32.FormatMessageA
00F24080	7C910331	ntdll.RtlGetLastWin32Error
00F24084	7C80B859	kernel32.VirtualQuery
00F24088	7C81EAE1	kernel32.RaiseException
00F2408C	7C812929	kernel32.HeapCreate
00F24090	7C811110	kernel32.HeapDestroy
00F24094	00000000	
00F24098	780C2D16	msvcp60.std::_Winit::~_Winit
00F2409C	780C1E94	msvcp60.std::_Winit::_Winit
00F240A0	780C2D5E	msvcp60.std::ios_base::Init::~Init
00F240A4	780C171C	msvcp60.std::ios_base::Init::Init
00F240A8	780C15A2	msvcp60.[illegible]::_Lockit::_Lockit

And then a break in the module by OEP MBOA we set in section. Previous text:

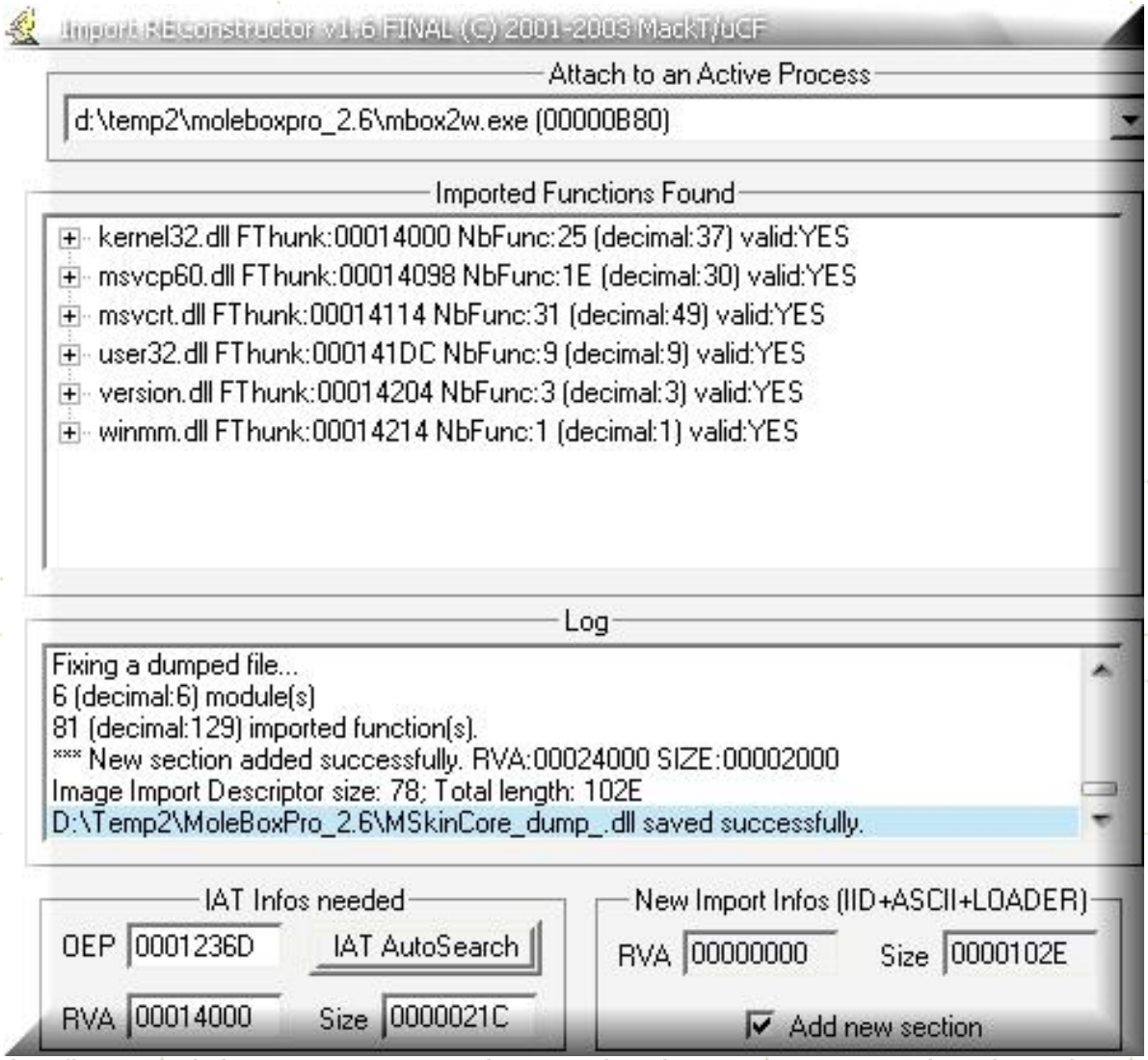


Address	Hex dump	Disassembly
00F2236D	55	PUSH EBP
[illegible]	[illegible]	[illegible]
00F22370	53	PUSH EBX
00F22371	8B5D 08	MOV EBX,DWORD PTR SS:[EBP+8]
00F22374	56	PUSH ESI
00F22375	8B75 0C	MOV ESI,DWORD PTR SS:[EBP+C]
00F22378	57	PUSH EDI
00F22379	8B7D 10	MOV EDI,DWORD PTR SS:[EBP+10]
00F2237C	85F6	TEST ESI,ESI
00F2237E	75 09	JNZ SHORT MSkinCor.00F22389
00F22380	833D 14E9F20	CMP DWORD PTR DS:[F2E914],0
00F22387	EB 26	JMP SHORT MSkinCor.00F223AF
00F22389	83FE 01	CMP ESI,1
00F2238C	74 05	JE SHORT MSkinCor.00F22393
00F2238E	83FE 02	CMP ESI,2
00F22391	75 22	JNZ SHORT MSkinCor.00F223B5
00F22393	A1 1CE9F200	MOV EAX,DWORD PTR DS:[F2E91C]
00F22398	85C0	TEST EAX,EAX
00F2239A	74 09	JE SHORT MSkinCor.00F223A5
00F2239C	57	PUSH EDI
[illegible]	[illegible]	PUSH ES

Delete BP VirtualProtect in farewell, the MBOA are in this section. Using LordPE to dump:

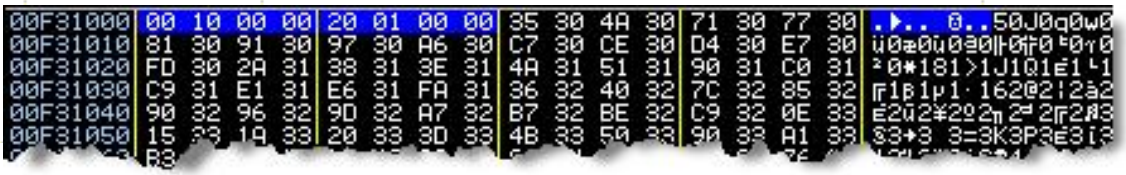


Next to the ImportREC due IAT has been canceled again do so of course the All Valid:



Similarly to the first module, we must conduct revised ImageBase and Relocation.

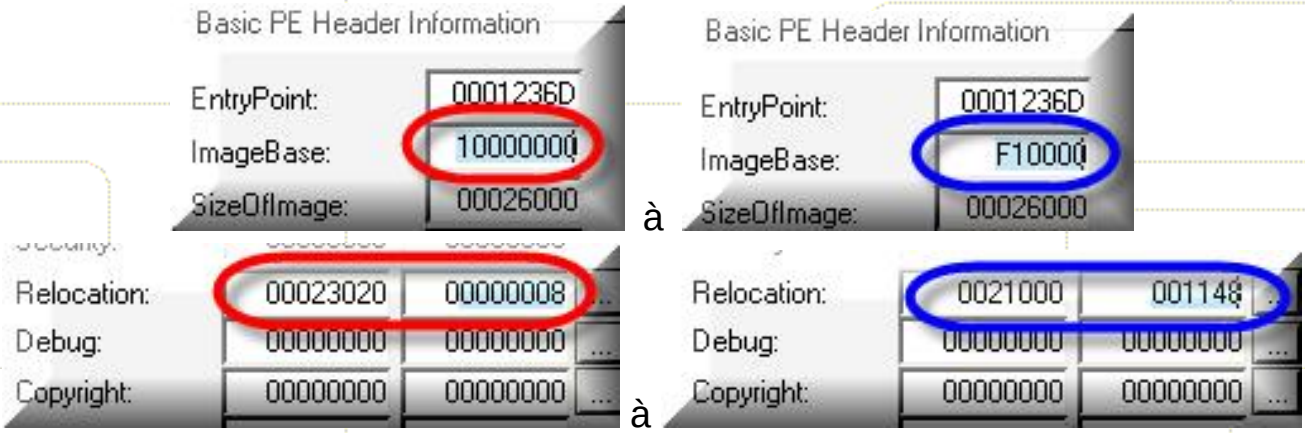
So Imagebase = F10000 (in the other you can nhé)



Relocation start here: F31000 - F10000 = 21000.

And at the end of the size F32148 = F32148 - F31000 = 1148. Do not ask why know exactly how nhé, here Relocation ko canceled after the OEP as ASPack or UPX packer and with the habits easily identify where Start and End only. We do not deepen the structure Relocation do.

LordPE again used to fix the information on:

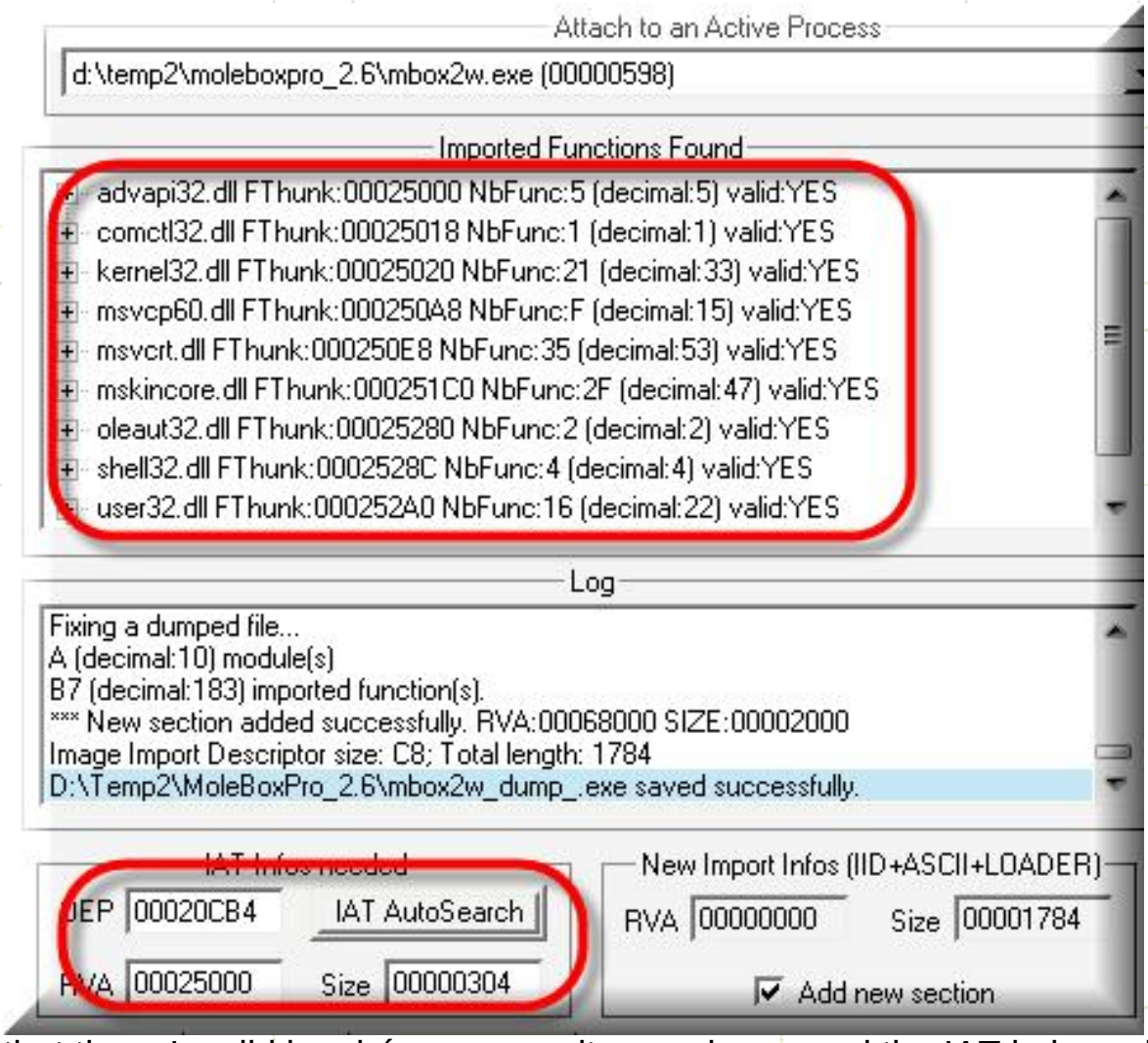


Change the file name: MSkinCore.dll. That is always complete modules 2. Now we must ensure that all leave has to BP, just keep me in every BP order is set at first, when the EP's MoleBox layer:

Shift-F9 a play, turn to the code of the file and unpack the break:

Leave to BP, and Trace F7 to go, stop at OEP:

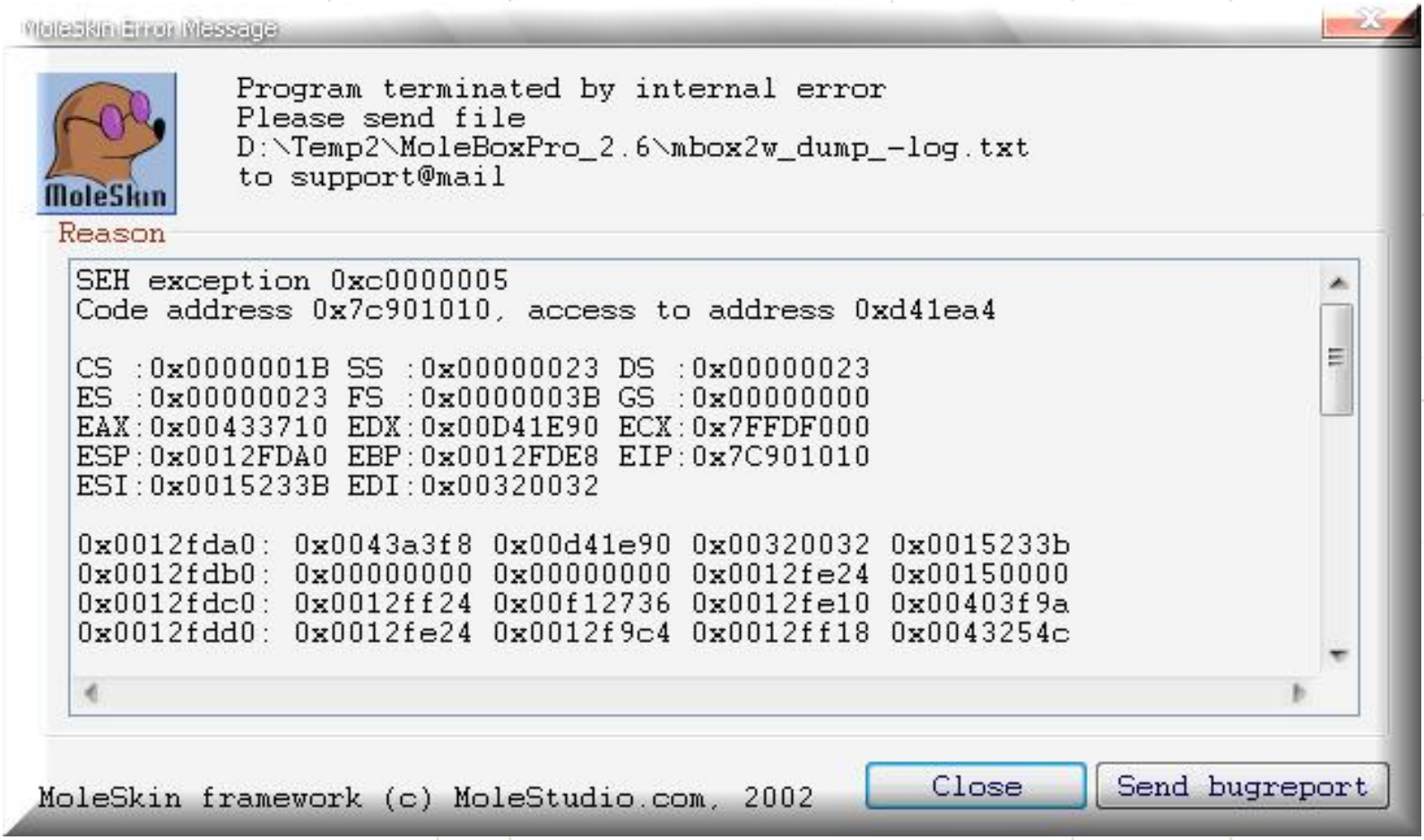
LordPE dump. Then Open ImportREC to fix IAT:



I do not see that there Invalid ko nhé concerns, it may also cancel the IAT in here, but also cancel the order with 1 as we fix the above. So obvious Valid All.

B - Fix dump file:

Now remains the same window when Olly OEP at last. Running fix dump file has the same folder with 2 module has extract out why:



This is everyone knows what type of error is correct, then do? Report on the 1 of the SEH in mole. If during unpack, we have done all the right steps when having this type of error, only minutes from Trace to find out where errors arise. Close notification and load the file to fix this dump 1 Olly other:

Also at this time we still Olly 1 before being stopped at the OEP's original file. Temporarily called Olly is Olly (1) and Olly open the dump file fix Olly (2) nhé. How to find a trace errors in Olly (2), the position of having failed, the one back through Olly (1) trace to the same position to see the value in it like? From the comparison and find out how to overcome.
How often does a trace Ctrl-F8 function to search for any CALL call to cause the error, press 1 to go yet, we will have to go to 1 loop:

```
00420D8B   803E 22          CMP BYTE PTR DS:[ESI],22
00420D8E   75 3A            JNZ SHORT mbox2w_d.00420DCA
00420D90   46               INC ESI
00420D91   8975 8C          MOV DWORD PTR SS:[EBP-74],ESI
00420D94   8A06             MOV AL,BYTE PTR DS:[ESI]
00420D96   3AC3             CMP AL,BL
00420D98   74 04            JE SHORT mbox2w_d.00420D9E
00420D9A   3C 22            CMP AL,22
00420D9C   75 F2            JNZ SHORT mbox2w_d.00420D90
00420D9E   803E 22          CMP BYTE PTR DS:[ESI],22
00420DA1   75 04            JNZ SHORT mbox2w_d.00420DA7
00420DA3   46               INC ESI
00420DA4   8975 8C          MOV DWORD PTR SS:[EBP-74],ESI
00420DA7   8A06             MOV AL,BYTE PTR DS:[ESI]
00420DA9   3AC3             CMP AL,BL
00420DAB   74 04            JE SHORT mbox2w_d.00420DB1
00420DAD   3C 20            CMP AL,20
00420DAF   76 F2            JBE SHORT mbox2w_d.00420DA3
00420DB1   895D D0          MOV DWORD PTR SS:[EBP-30],EBX
00420DB4   8D45 A4          LEA EAX,DWORD PTR SS:[EBP-5C]
00420DB7   50               PUSH EAX
00420DB8   FF15 98504200    CALL DWORD PTR DS:[<&kernel32.GetStartupInfoA>]
00420DBE   F645 D0 01       TEST BYTE PTR SS:[EBP-30],1
```

Immediately press F12 to Pause, find positions end loop, pulling down 1 billion, set in a BP:

```
00420DB7   50               PUSH EAX
00420DB8   FF15 98504200    CALL DWORD PTR DS:[<&kernel32.GetStartupInfoA>]
00420DBE   F645 D0 01       TEST BYTE PTR SS:[EBP-30],1
00420DC2   74 11            JE SHORT mbox2w_d.00420DD5
00420DC4   0FB745 D4        MOVZX EAX,WORD PTR SS:[EBP-2C]
00420DC8   EB 0E            JMP SHORT mbox2w_d.00420DD8
00420DCA   803E 20          CMP BYTE PTR DS:[ESI],20
00420DCD   76 D8            JBE SHORT mbox2w_d.00420DA7
00420DCF   46               INC ESI
00420DD0   8975 8C          MOV DWORD PTR SS:[EBP-74],ESI
00420DD3   EB F5            JMP SHORT mbox2w_d.00420DCA
00420DD5   6A 0A            PUSH 0A
00420DD7   58               POP EAX
00420DD8   50               PUSH EAX
00420DD9   56               PUSH ESI
00420DDA   53               PUSH EBX
00420DDB   53               PUSH EBX
00420DDC   FF15 80504200    CALL DWORD PTR DS:[<&kernel32.GetModuleHandleA>]
00420DE2   50               PUSH EAX
00420DE3   E8 48AEFFFF      CALL mbox2w_d.0041BC30
```

F9 to run and in the Break, BP put it. Continue Ctrl-F8 to find itself and Olly Break met by Exception:

```
Address    Hex dump          Disassembly
7C901010   837A 14 00        CMP DWORD PTR DS:[EDX+14],0
7C901014   75 4F            JNZ SHORT ntdll.7C901065
7C901016   F0:FF42 04       LOCK INC DWORD PTR DS:[EDX+4]
7C90101A   75 19            JNZ SHORT ntdll.7C901035
7C90101C   8B41 24          MOV EAX,DWORD PTR DS:[ECX+24]
7C90101F   8942 0C          MOV DWORD PTR DS:[EDX+C],EAX
7C901022   C742 08 010000   MOV DWORD PTR DS:[EDX+8],1
7C901029   33C0             XOR EAX,EAX
7C90102B   C2 0400          RETN 4
7C90102E   8DA424 0000000   LEA ESP,DWORD PTR SS:[ESP]
```

Click "-" to step back before looking for new CALL function just go to:

```
Address    Hex dump          Disassembly
00420DE3   E8 48AEFFFF      CALL mbox2w_d.0041BC30
00420DE8   8945 98          MOV DWORD PTR SS:[EBP-68],EAX
00420DEB   50               PUSH EAX
00420DEC   FF15 74514200    CALL DWORD PTR DS:[<&msvcrt.exit>]
00420DF2   8B45 EC          MOV EAX,DWORD PTR SS:[EBP-14]
00420DF5   8B08             MOV ECX,DWORD PTR DS:[EAX]
00420DF7   8B09             MOV ECX,DWORD PTR DS:[ECX]
```

So go on living here is an error, we enter into the first function, BP set 1. Ctrl-F2 restart again, F9 to Break BP has set in:

Delete BP go, do the same, find the function CALL cause errors, BP set it right, Ctrl-F2, F9 and Bread:

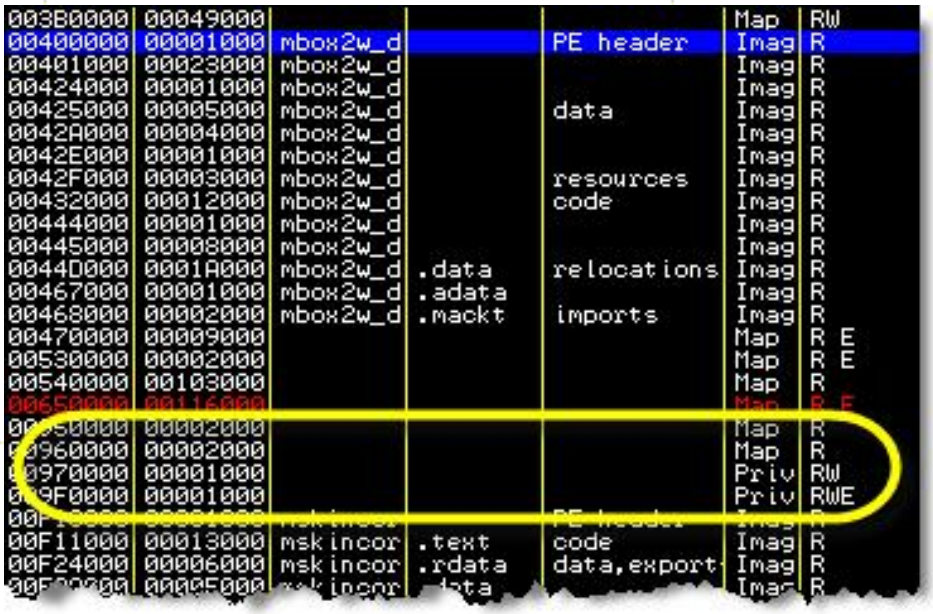
This refers to 1 CALL address is 433B6E, this address is located in the section:

This is the old section of the Mole, so is the dump file, we still rely on Mole, unpack News is not complete. Continue to do the same as above, and find out exactly where that error here:

BP set immediately ordered PUSH DWORD PTR DS: [EAX +4]. Ctrl-F2, F9 and Bread:

Dom down in value [EAX +4] at this time:

Khuc khúc, why go to the address D41E90 funds do exist in memory at this time:

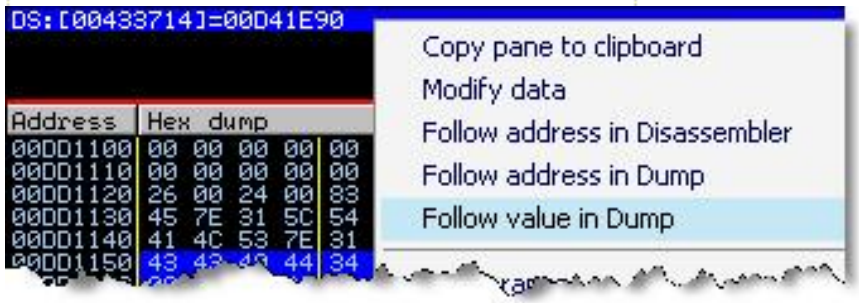


Clearly ko ko exist right? That is why there notified of this exception:

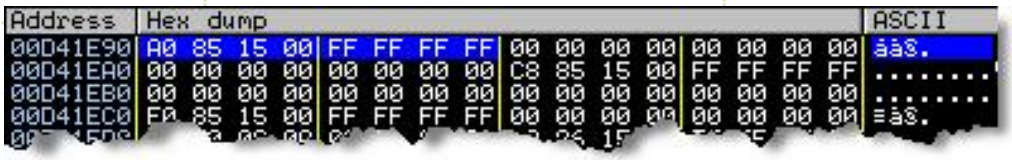
Keep the school, that they Olly (1) is open ko, turn it over. Goto to the same address in the command PUSH 43A3EF, BP set 1, and F9 Break:

Chang Y, others do anything (remember that address D41E90 this on your other nhé, it is the area section do have a fixed offset). But in Olly (1), the region address these shortcomings:

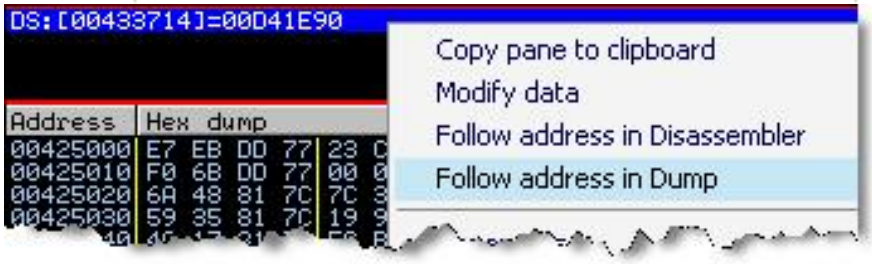
This is due Mole Packer created during unpack code. But in the dump file fix will of course do not have. Frequently this case, or we dump the whole section to find the Olly (1) and then add the file to fix dump. But after checking the trick i need to see how. Simply edit the value for the match is. Back of the book's code Olly (1), Follow dump value in value in D41E90 see value in that What:



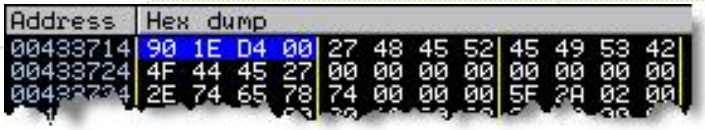
Ah há:



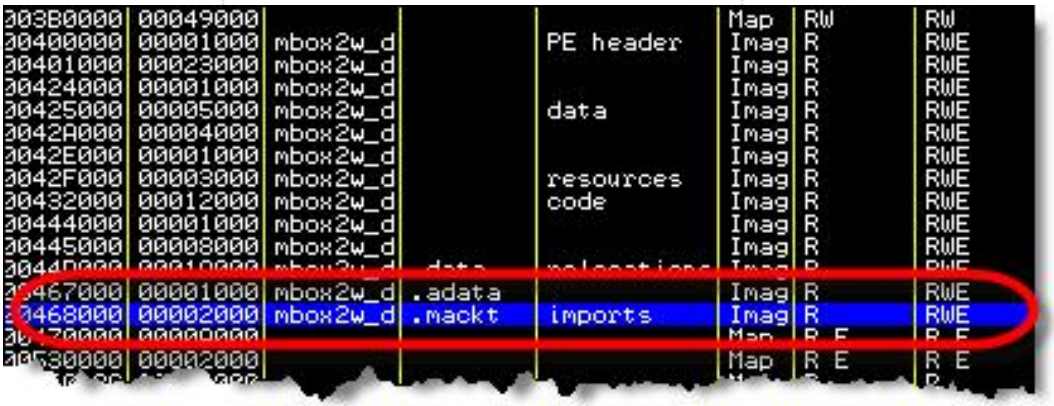
Remember to get DWORD 2 here: FF FF FF FF. Quay through Olly (2), Follow in dump address:



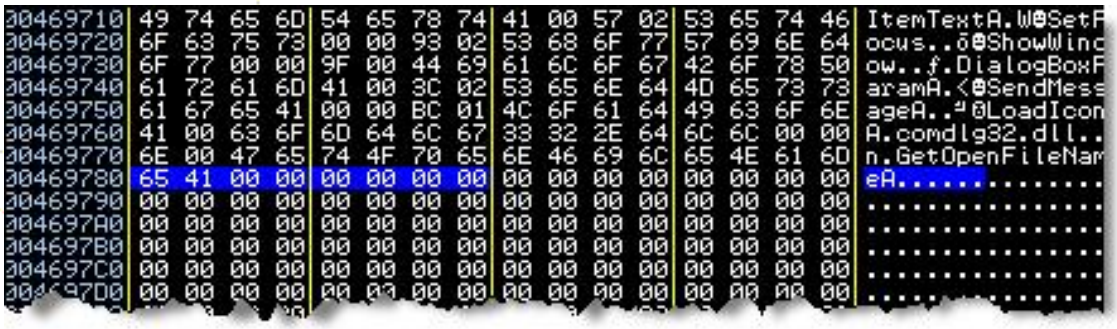
We found:



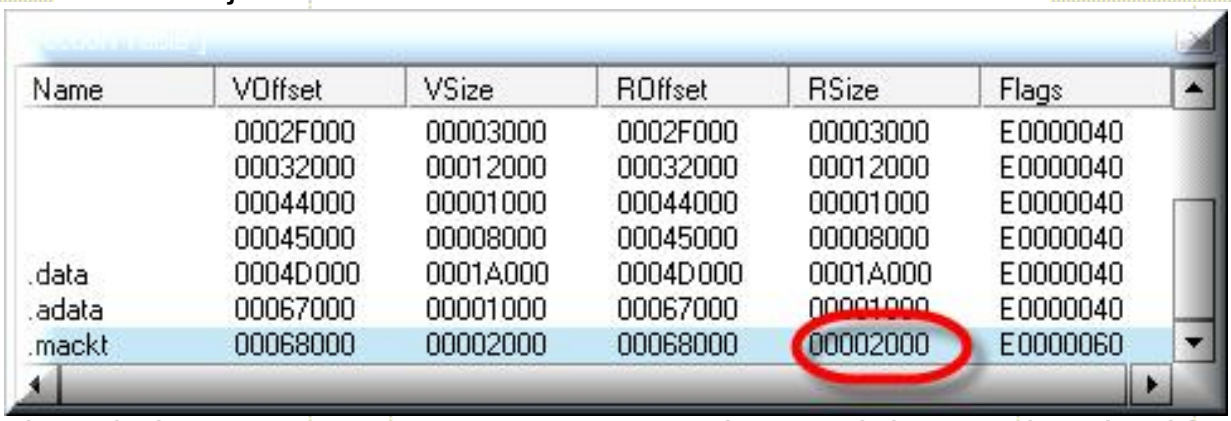
So DWORD 00D41E90 saved at 433,714. Ko To access must address do actually have this, we modified it to address in the file, then paste DWORD 2 found in Olly (1) to the Okie . Hour 1 place to find enough space contains DWORD 1, section often empty or are used in these cases was ImportREC add to fix the IAT:



Size of memory in this section is 2000, and it just use:



469788 - 468000 = 1788 bytes. The balance is still a lot Byte for us. But to consider the Byte is empty there is real or just a virtual:



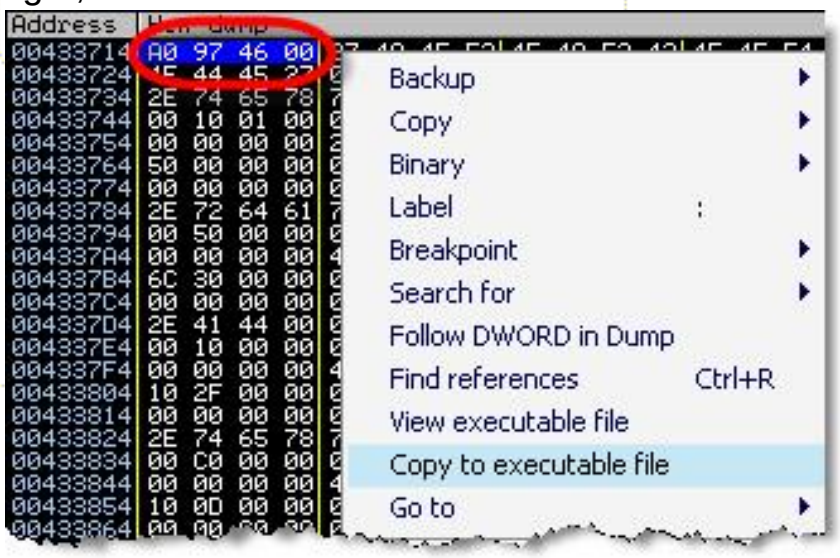
Name	VOffset	VSize	ROffset	RSize	Flags
	0002F000	00003000	0002F000	00003000	E0000040
	00032000	00012000	00032000	00012000	E0000040
	00044000	00001000	00044000	00001000	E0000040
	00045000	00008000	00045000	00008000	E0000040
.data	0004D000	0001A000	0004D000	0001A000	E0000040
.adata	00067000	00001000	00067000	00001000	E0000040
.mackt	00068000	00002000	00068000	00002000	E0000060

Recall that the Windows memory management areas by 1000h bytes. Size should sometimes in memory rounded up to the actual size than the baby. And if you Save the file with Olly in the memory do exist in the actual file will be error: "Unable locate memory" now. There really Size: Raw Offset is 2000 we should secure the Byte memory space in the other may use and be saved.

Back window memory dump from the map:

You can use any position is available, the trick is to select 4697A0. Back window Code Olly (2), fix the value D41E90:

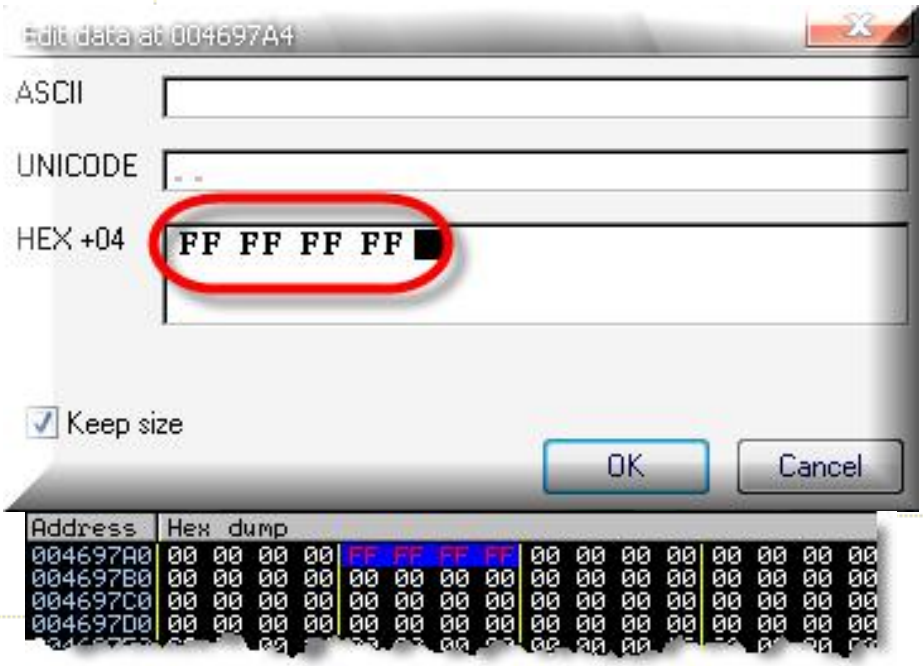
To DWORD area just right, or Select:



Save overwrite files with the same name fix dump. Remember task of editing we include 2 parts, to address regional D41E90 into 1 address in the file, and edit content at the address for this match DWORD we found in Olly (1) . But only Olly Save the amendment in section 1 so we have to turn 2.

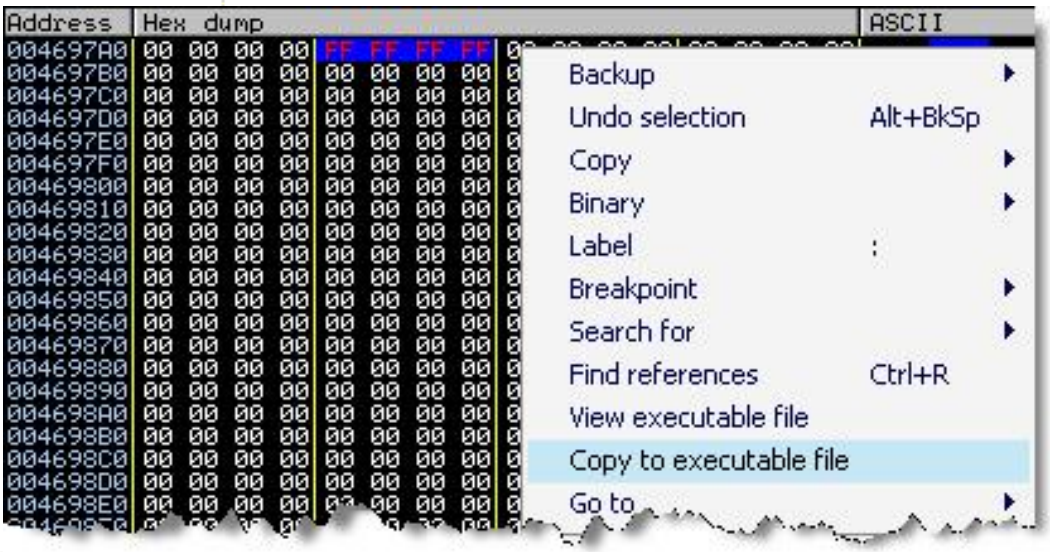
The use Olly (2) open the dump file fix has been saved for, the window dump, Goto to address both fixed 4697A0:

DWORD need to be fixed is the value found in Olly (1) but we must move up from 1 DWORD 4697A0, then the Edit:

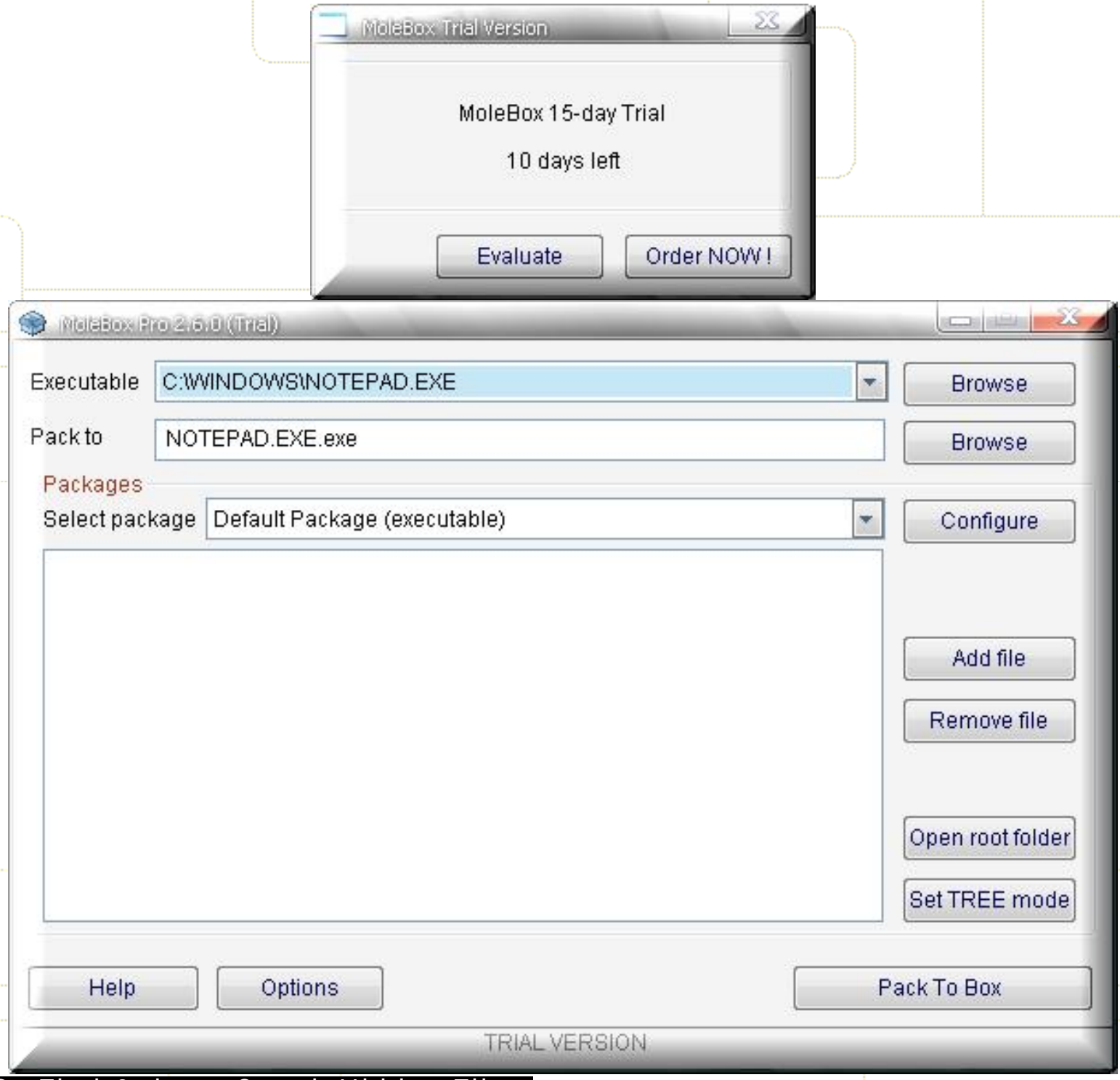


Why only get DWORD 2 found? If you're hard to trace this function:

It will only access to the value in D41E90 News + 4 + 4 is 4697A0 now. So save the file is then this:

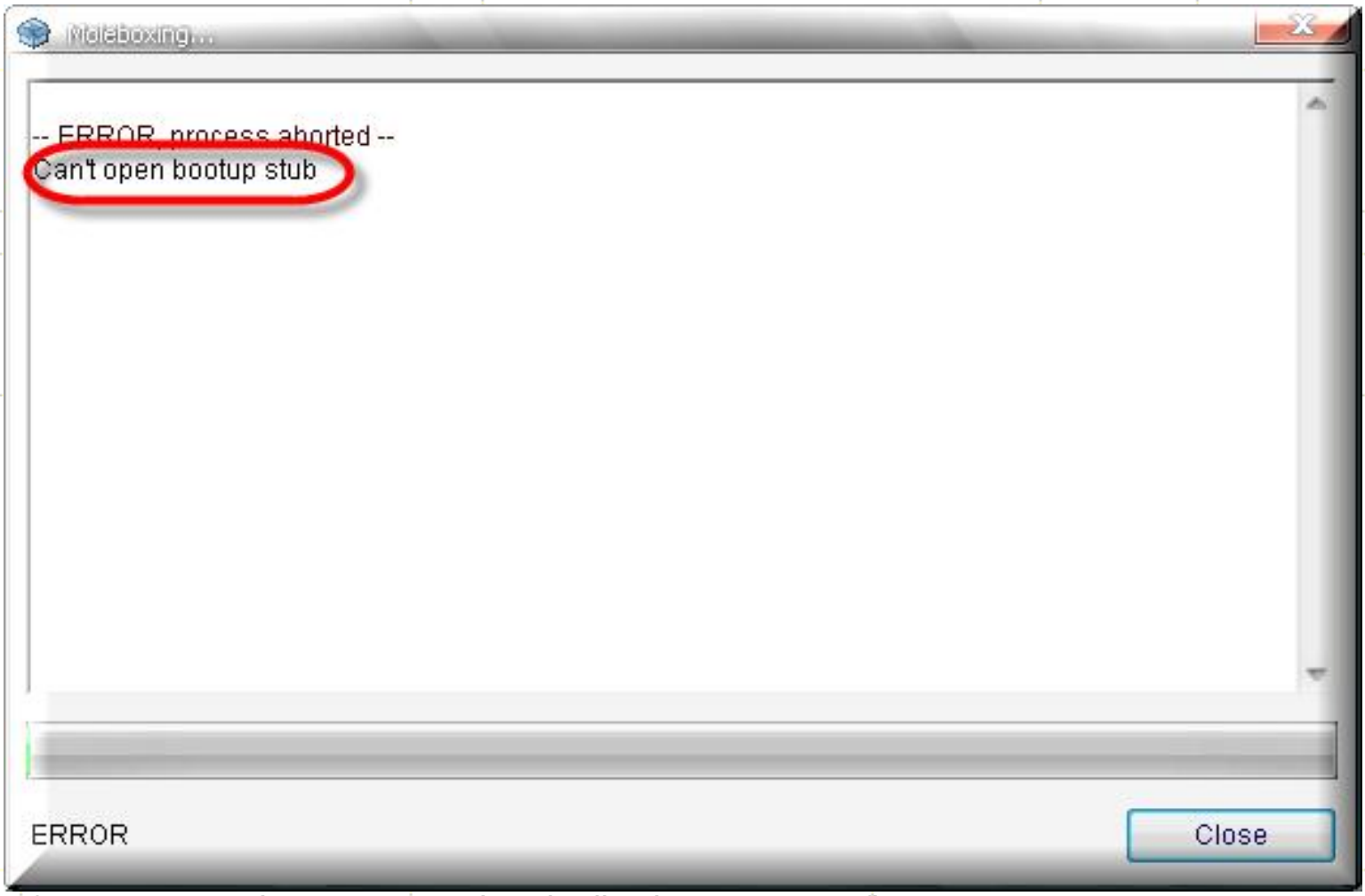


The best is saved for the file name always fix dump. Olly (1) has not Close nhé. Now run fix dump file to see how (the same folder other small module 2), rub rub:

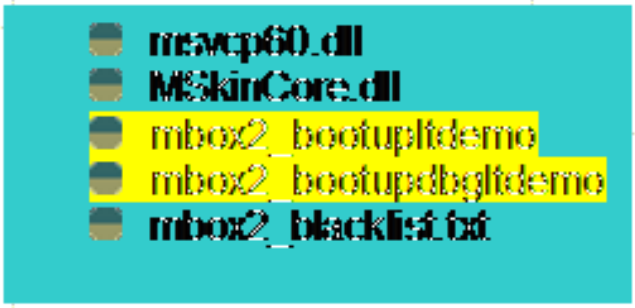


C - Find & dump 2 stub Hidden Files:

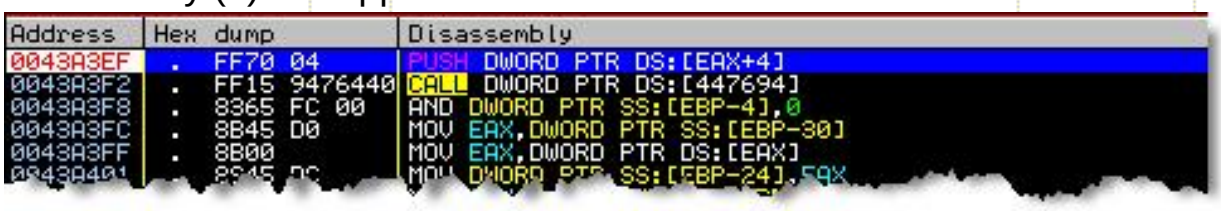
File "RUN NGON" do right? That way, let drilling from "NGON" from the early mồm, select 1 files PE get any, as in the picture is NOTEPAD.exe, then press the button "Pack To Box":



So from "NGON" always. Remember the list that we see at first:

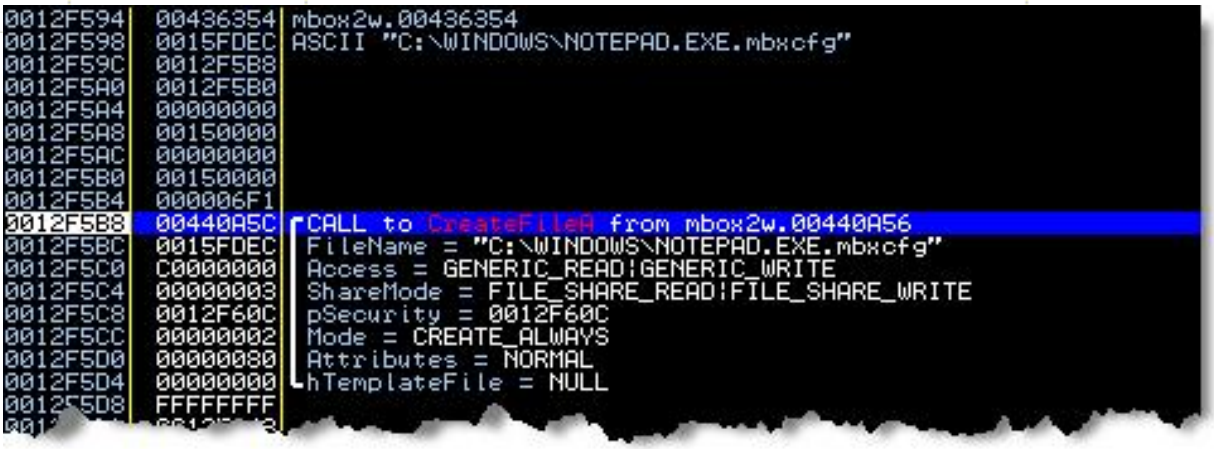


According to the list and the error message I guess it is now the 2 surviving children: mbox2_bootupltdemo and mbox2_bootupdbgltdemo. *Mbox2_blacklist.txt* the file but i do need to find. If you ever run the 1 Retail 2.5x will meet demands NAG 1 License . As the black list file can only list as Key to compare with the imported variety Key. Therefore, the file can do this in 1 of Trial ko hề requires the key. Now we find the other 2 files bootup nhé.
Cu Lao Hec Lec use 1 tip for that is quite trick or using BP CreateFileA associated with BP GetSystemTimeAsFileTime to the return of this function will immediately create files on bootup. Now back Olly (1) is stopped at PUSH commands me ...:

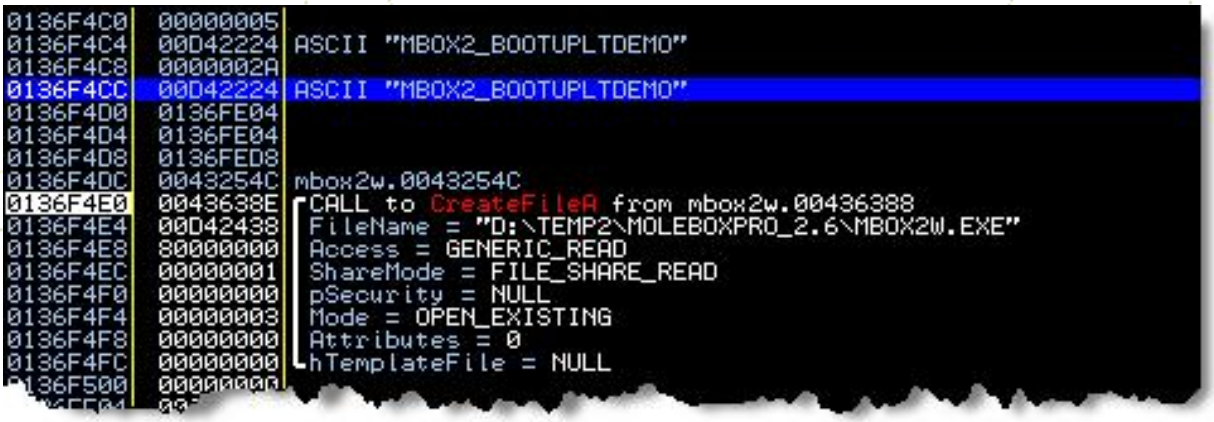


Un BP go right here. Click to run for the target to complete the program. Before the Pack File, back Olly (1), BP set CreatFileA:

Now click the new "Pack To Box" and Bread

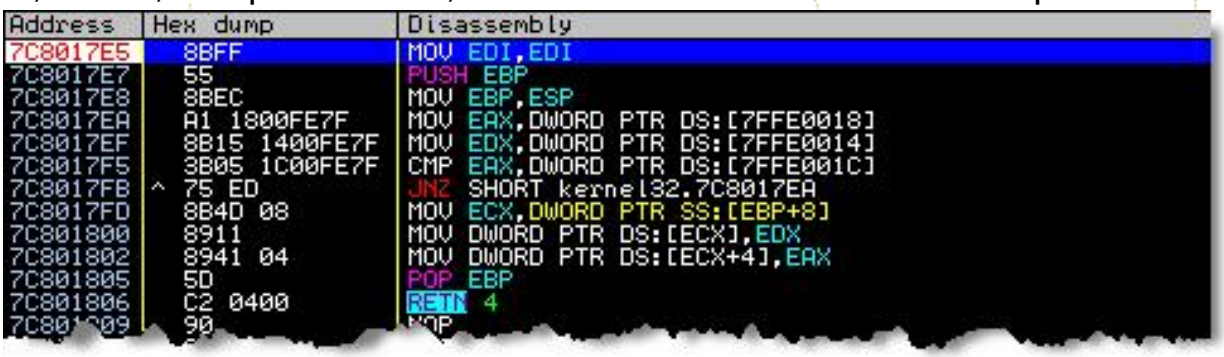


Not need to find the file, continue to press Shift-F9 until you see:



Fairness, it is her child. CreateFileA Put in to BP. GetSystemTimeAsFileTime bp Set:

Shift-F9 to 1, Bread, and press 1 and, more Bread also function at the top:



Do not take BP. Ctrl-F9 to trace RETN 4 and Return from this function, we come:

Follow dump in value here:

Remember that address D90090 on to another trick on you nhé.

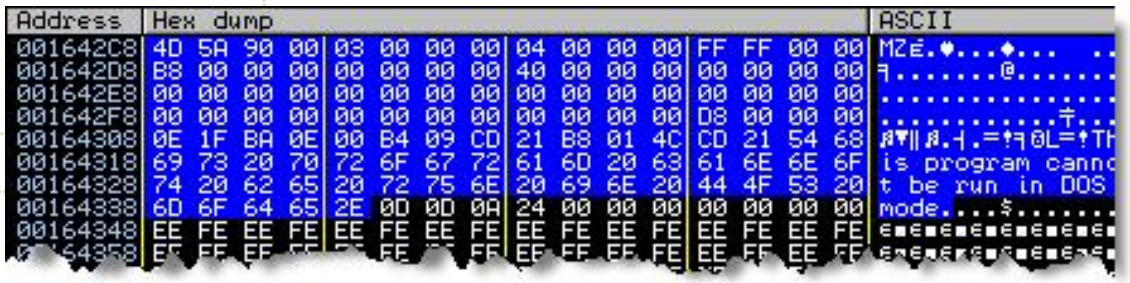
Hum hum, no matter how this same PE header so wá play. Vậy bootup file by this reasoning it has header header as of 1 PE file. But this is only 1 small section header only, not to save the memory area File mbox2_bootupltdemo. One replied that it will decrypt the Byte full file 1 through this region in mind other. Now we set 1 BP access to memory on Byte first

Press Shift-F9 to Break right to access it on Byte during bootup decrypt the file:

Implementing a Trace F7 in order on me, then dump in Follow address here:

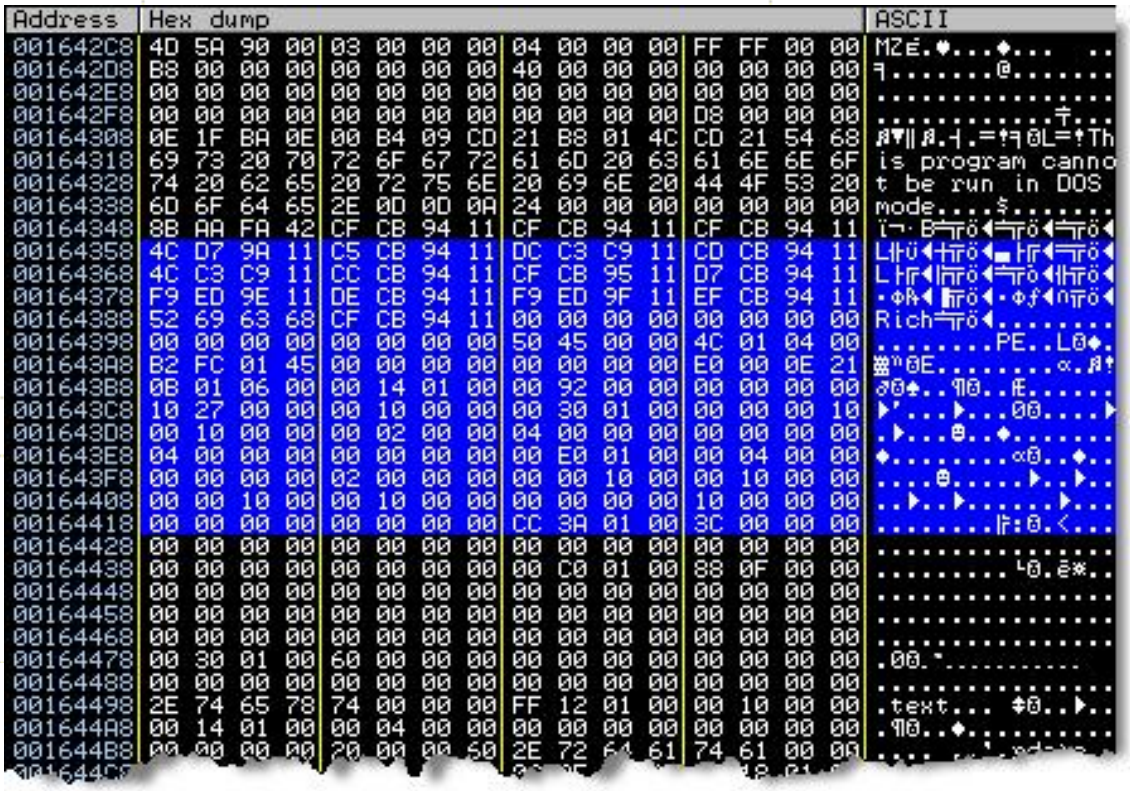
Not necessary but must also consider the address on your computer at the other it will nhé, but this is the Byte dump in memory:

The implementation of 1 Trace F7 to see it:

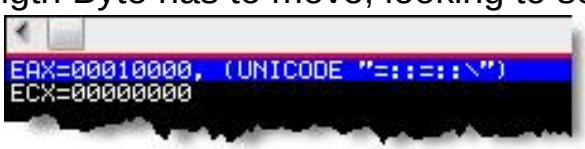


Yes it is the move from Byte D90090 to 1642C8, if any pressing F7 will see more clearly the process. But we do take the time useless, Trace F8 1 for slavery:

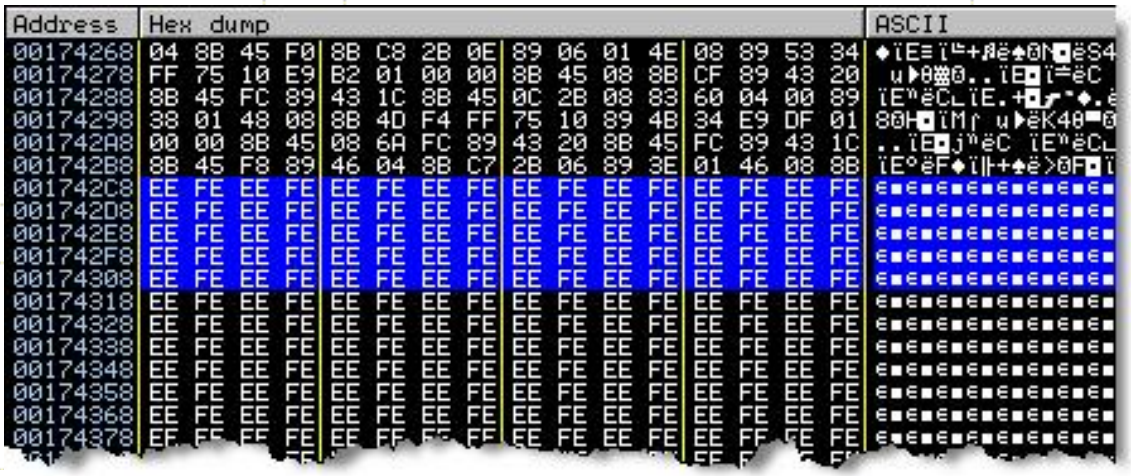
The Byte has to move a lot:



But how to know the exact length Byte has to move, looking to see is right here:



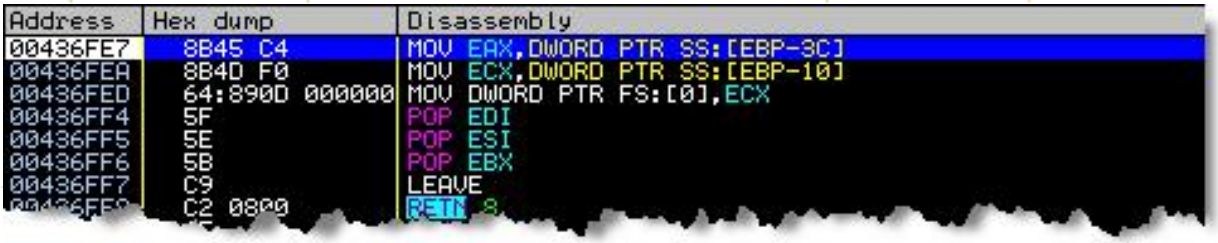
In the address ends of the move is 1642C8 + 10000 = 1742C8, I Go to it to the dump:



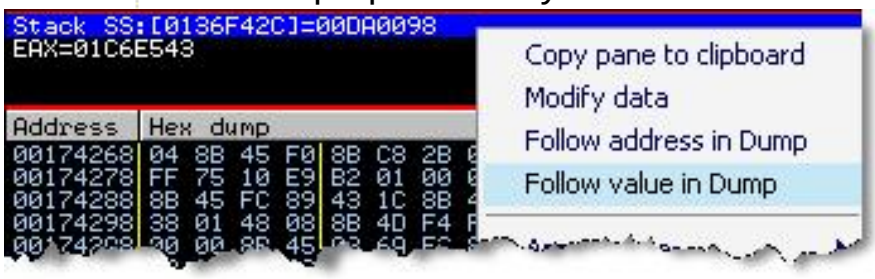
1 is still below the garbage. There appears to move this process is not complete. Continue Trace F8 to here:

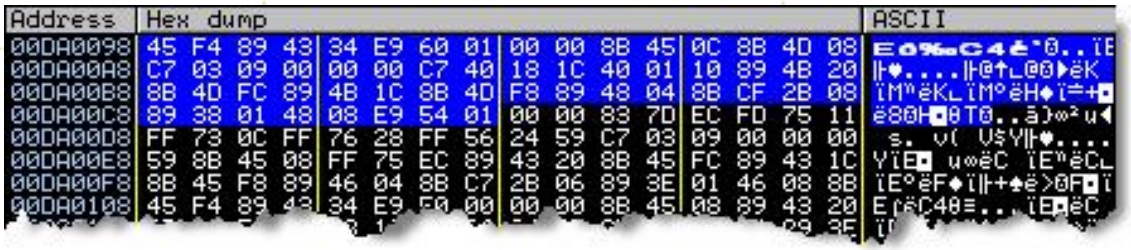
He he:

16000 is the new size of the actual file this bootup. In the 6000 Byte not handle it. Shift-F9 to 2 of 2 times to break in GetSystemTimeAsFileTime. Then trace wa RETN 4 to return to here:



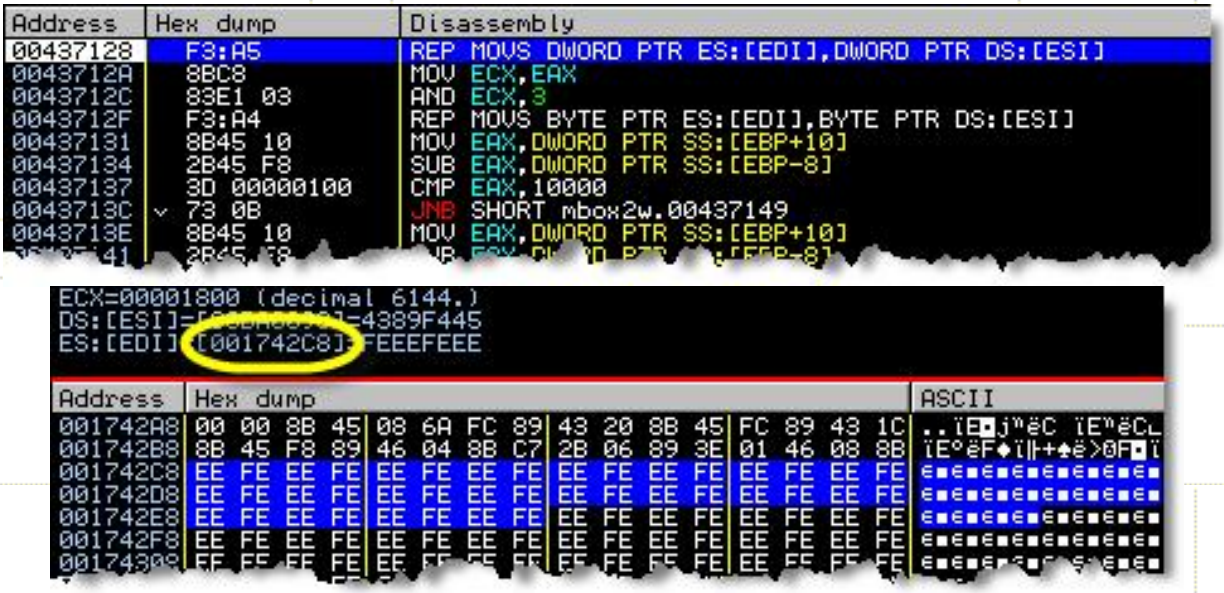
Same as above, we find the next move preparation Byte:



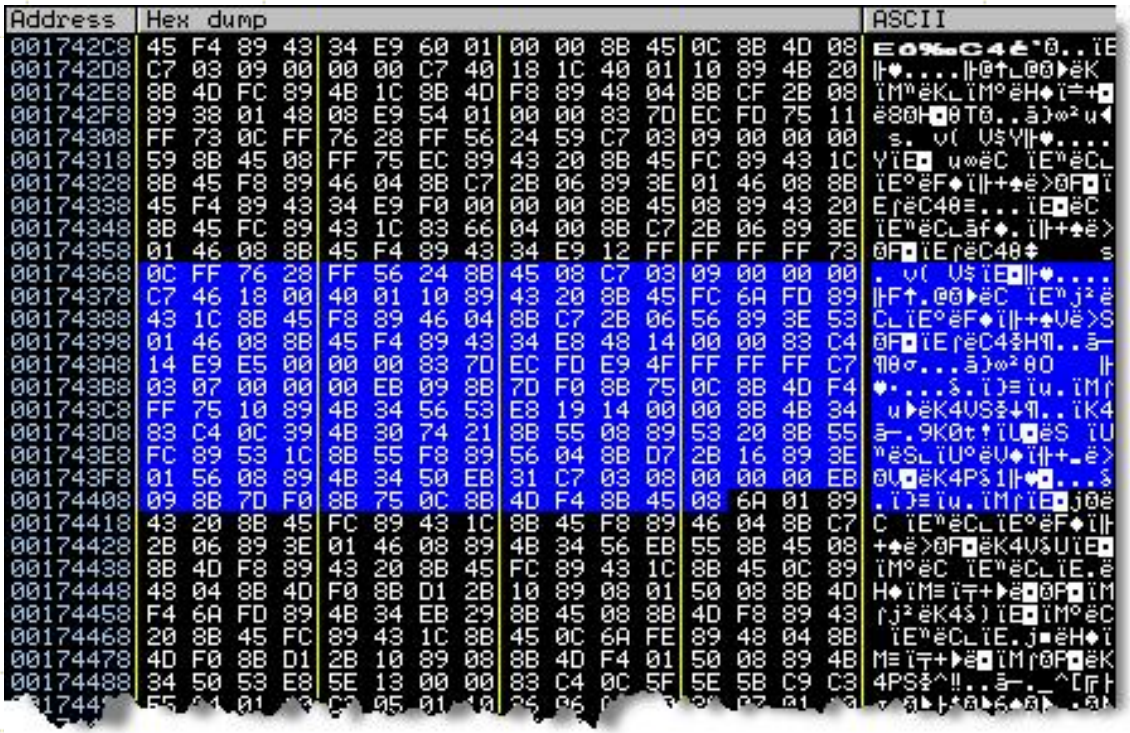


BP also set up access memory on Byte's region:

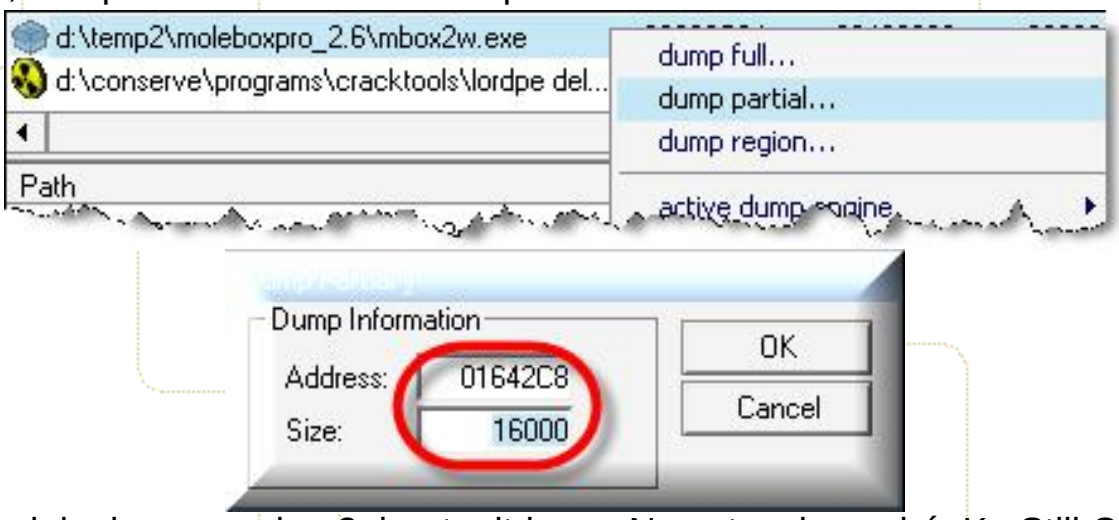
Shift-F9, break:



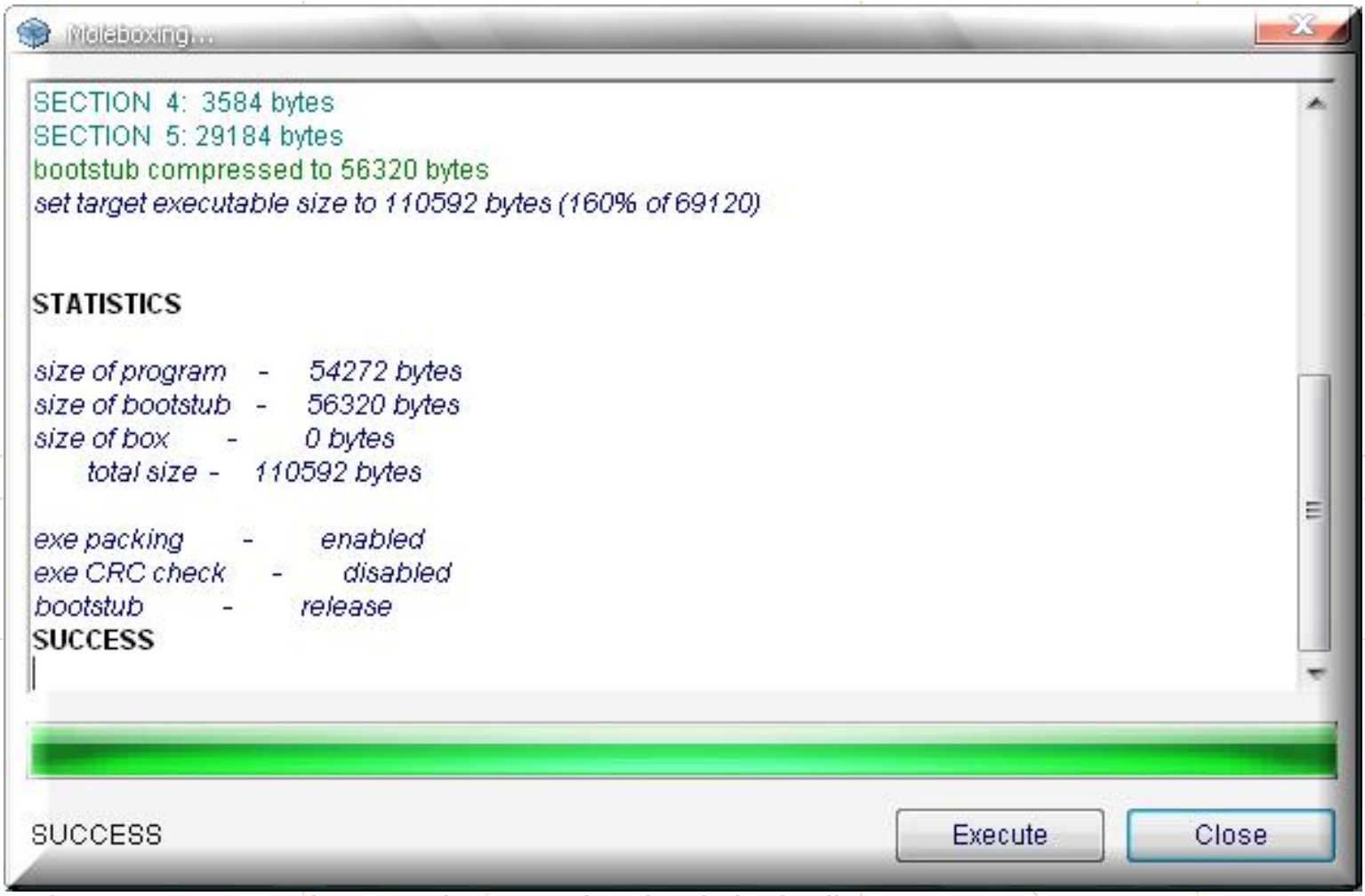
Yes it is to move to the end before. Thôi Trace F8 to move it through to the end.



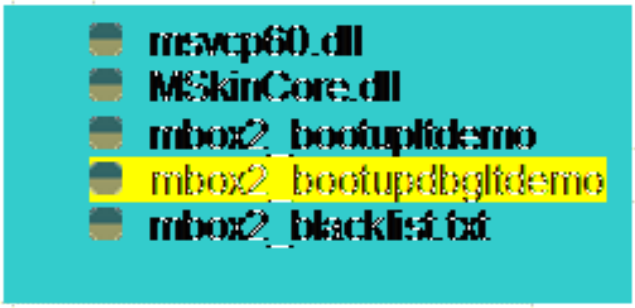
So determined is the address start saving the file is in the bootup Offset = 1642C8 with Size = 16000
Using LordPE, dump Partial remember this particular area:



Save with its original name: mbox2_bootupltdemo. No extensions nhé. Ko Still Close Olly (1). BP temporarily put in GetSystemTimeAsFileTime go. Shift-F9 to run completely, packing process is complete, close the window pack Mole this close, but not always Mole this nhé. Now back to fix dump file, run and pack NotePad to see why:

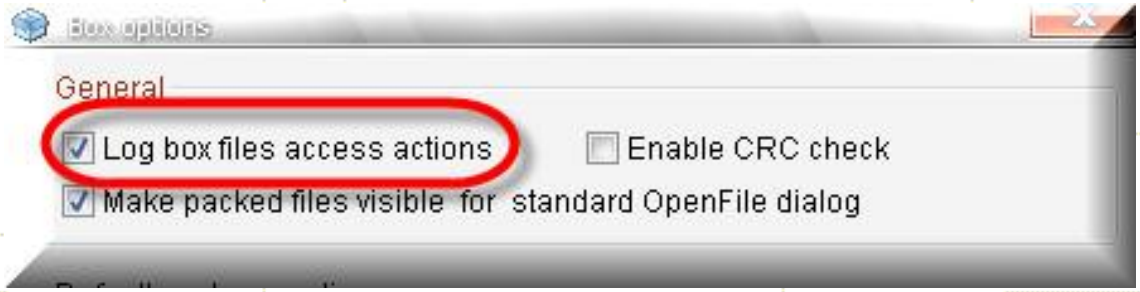


Ko also correct errors ko? But that 1 again, clearly in the list:

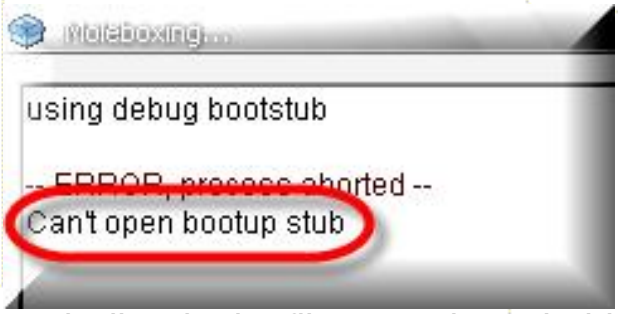


That is missing 1 files mbox2_bootupdbgltdemo. Will have to file or do this? Open Option Mole's fix dump file:

Check this box:

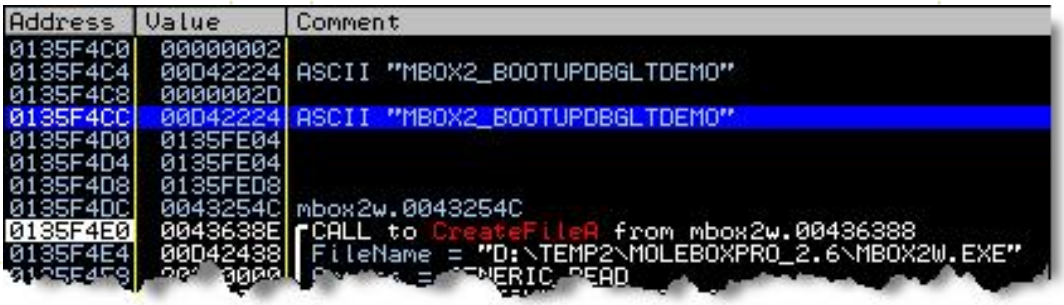


Then again NotePad the Pack:

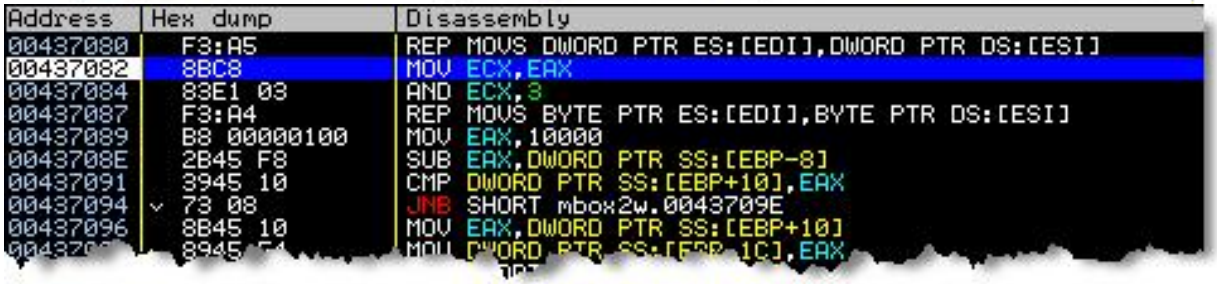


That is still need to file this. Word "dbg" in the file name is probably the Debug, help for the Log file when packing. Okie, Back through the Mole Olly (1), as well as on select Options, click the button before you pack and BP CreateFileA:

Click "Pack To Box," Bread. Continue Shift-F9 until you see:



Un-BP in CreateFileA go. BP set GetSystemTimeAsFileTime. And then do you know more then đấy. Similar steps in finding a number of Byte initial move to be in:



```
EAX=00010000, (UNICODE "=::=::\")
ECX=00000000
```

Original size is 10,000. But Size really is:

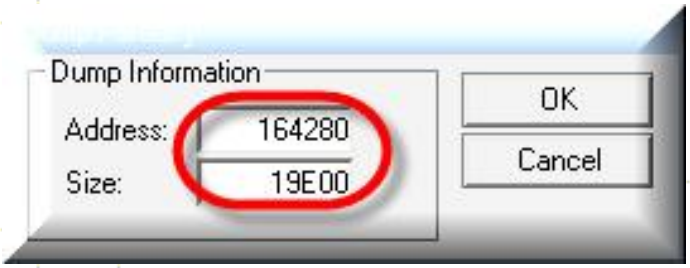
```
Address   Hex dump          Disassembly
00437080    F3:A5           REP MOVS DWORD PTR ES:[EDI],DWORD PTR DS:[ESI]
00437082    8BC8            MOV ECX,EAX
00437084    83E1 03         AND ECX,3
00437087    F3:A4           REP MOVS BYTE PTR ES:[EDI],BYTE PTR DS:[ESI]
00437089    B8 00000100     MOV EAX,10000
0043708E    2B45 F8         SUB EAX,DWORD PTR SS:[EBP-8]
00437091    3945 10         CMP DWORD PTR SS:[EBP+10],EAX
00437094    73 08           JNB SHORT mbox2w.0043709E
00437096    8B45 10         MOV EAX,DWORD PTR SS:[EBP+10]
```

```
EAX=00010000, (UNICODE "=::=::\")
Stack SS:[0135F4B4]=00019E00
```

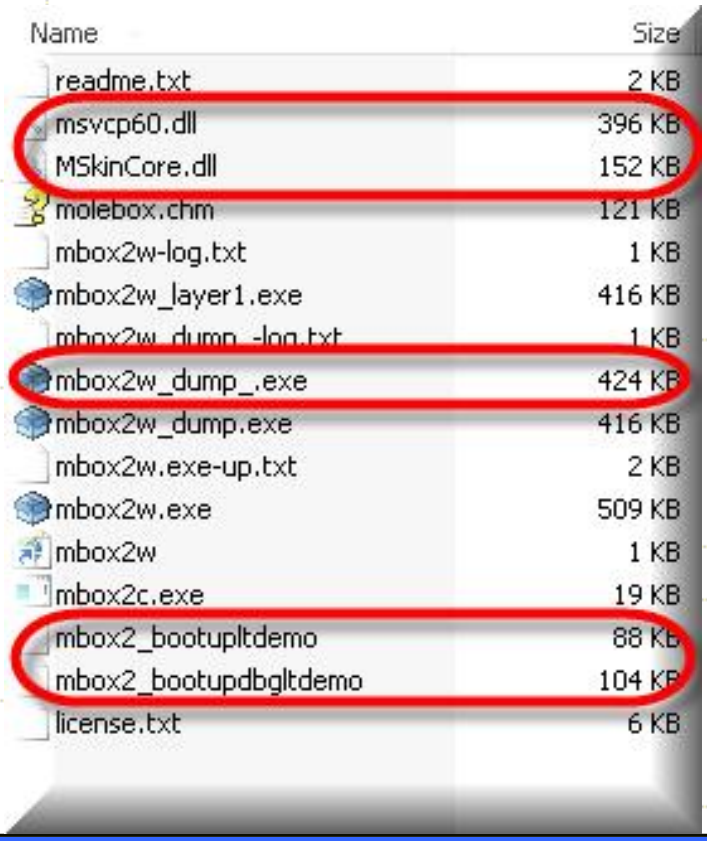
So it is 19E00 Size. But the move has not yet finished. How similar step 2 above, the bytes are to move from 174,280:

```
Address   Hex dump                                          ASCII
00174280  62 FF FF 85 C0 74 1E 6A 00 FF 75 10 FF 75 0C FF   b  à└t▲j. u▶ u.
00174290  75 08 6A 00 6A 00 6A 00 E8 B2 65 FF FF 83 C4 1C   u◘j.j.j.╕═e  â─└
001742A0  89 45 FC EB 12 FF 75 10 FF 75 0C FF 75 08 FF 15   ëE"$↕ u▶ u. u◘ $
001742B0  24 99 01 10 89 45 FC 8B 45 FC C9 C2 0C 00 55 8B   $ÖÐ▶ëE"ïE"╔┬..Uï
001742C0  EC 51 FF 75 10 FF 75 08 FF 75 14 68 74 90 01 10   ∞Q u▶ u◘ u¶htÉÐ▶
001742D0  E8 31 D3 FF FF 83 C4 10 6A 00 33 D2 8B 4D 14 E8   ╪1╙  â─▶j.3╥ïM¶╪
001742E0  79 62 FF FF 85 C0 74 1F 6A 01 FF 75 14 FF 75 10   yb  à└t▼j☺ u¶ u▶
001742F0  FF 75 0C 6A 00 6A 00 FF 75 08 E8 50 65 FF FF 83    u.j.j. u◘╪Pe  â
00174300  C4 1C 89 45 FC EB 15 FF 75 14 FF 75 10 FF 75 0C   ─└ëE"ï§ u¶ u▶ u.
00174310  FF 75 08 FF 15 40 40 01 10 89 45 FC 8B 45 FC C9    u◘ $@@☺▶ëE"ïE"╔
00174320  C2 10 00 55 8B EC 51 51 83 7D 08 00 75 0F 6A 7E   ┬►.Uï∞QQâ}◘.u*j~
00174330  FF 15 90 99 01 10 33 C0 E9 9F 00 00 00 83 7D 08    §É☺▶3└Ðƒ...âJ◘
00174340  00 74 08 8B 45 08 89 45 F8 EB 07 C7 45 F8 2C 91   .t◘ïE◘ëE°§·╠E°,æ
00174350  01 10 FF 75 0C FF 75 F8 68 08 91 01 10 E8 A4 D2   Ð▶ u. u°h◘æ0▶╪ñπ
00174360  FF FF 83 C4 0C 8B 4D 08 E8 C2 A4 FF FF 89 45 FC     â─.ïM◘╪┬ñ  ëE"
00174370  83 7D FC 00 75 50 FF 75 08 68 EC 90 01 10 E8 83   â}".uP u◘h∞É0▶╪â
00174380  D2 FF FF 59 59 8B 55 0C 8B 4D 08 E8 7A AC FF FF   π  YYïU.ïM◘╪z¼
00174390  89 45 FC 83 7D FC 00 75 2D FF 15 14 99 01 10 50   ëE"â}".u- §¶00▶P
001743A0  FF 75 08 68 C8 90 01 10 E8 59 D2 FF FF 83 C4 0C    u◘h╩É0▶╪Yπ  â─.
001743B0  FF 15 14 99 01 10 85 C0 75 08 6A 7E FF 15 90 99    §¶00▶à└u◘j~ §É0
001743C0  01 10 33 C0 EB 16 FF 75 FC FF 75 08 68 9C 90 01   0▶3└ß▬ u" u◘h£É0
001743D0  10 E8 30 D2 FF FF 83 C4 0C 8B 45 FC C9 C3 55 8B   ▶╪0π  â─.ïE"╔├Uï
001743E0  EC 6A 00 FF 75 08 E8 38 FF FF FF 59 59 5D C2 04   ∞j. u◘╪8   YY]┬♦
001743F0  00 55 8B EC FF 75 10 FF 75 08 68 34 91 01 10 E8   .Uï∞ u▶ u◘h4æ0▶╪
```

Using partial LordPE to dump. Offset = 164280, size = 19E00:

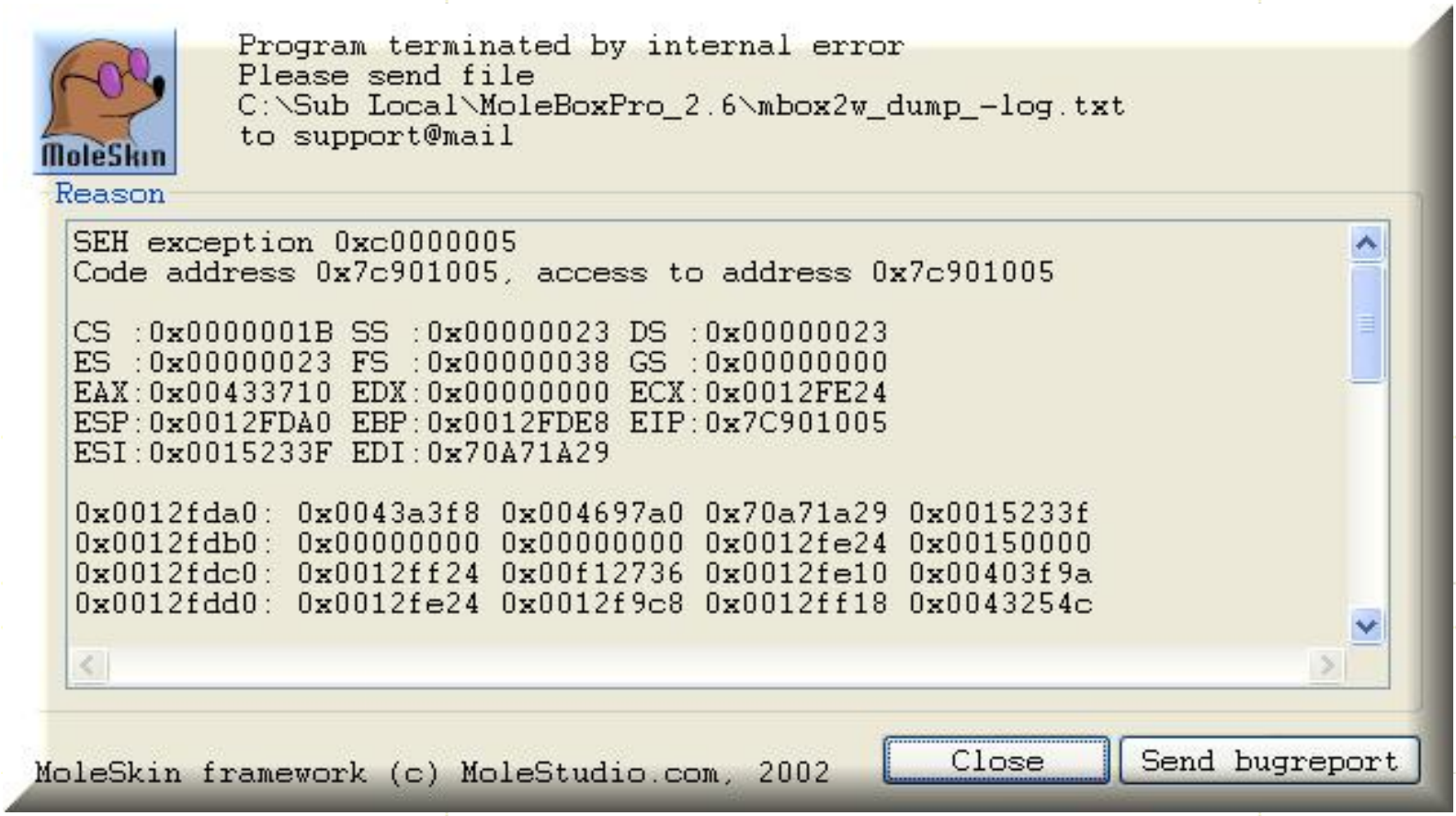


Save with the name found: mbox2_bootupdbgltdemo do not have extensions. So in the folder at this time are:



IV.Ending Volume 1

Of course the process of packing the Option which will take place will suon. May be called or not unpack DONE? Khoan you set many, the nay-hour unpack trick as the Win XP SP 2. Take the set of files that last 1 Win XP SP1 running dump file and fix:



It is informed by children and SEH mouse obnoxious. The DONE, do not say what the

monkey house. A file unpack / crack can only run "NGON" on you or on 1 few machines, or just run on several OS ko means you've completed the process Unpacking / Cracking start. Do not say "I test on 10 May in which always oi", must do all OS machines are the same. You should of course also have the machine will do file is run, even for the same OS as SP2. Here is more specific SP1 i can run. So do excavation to fix errors but hí hung with the result: "Only my work system", you just hug the files that do not carry gas for anyone with a bad hand. Ah, of course is 1 month deal is hot: unpack / crack 1 file on SP1, but then the file and do this work on SP2.

Therefore, to say done, all you have to fix that may work All OS, (can add Win 2000, Win 98 is also sometimes by another name, the API function is private). And this trick will presented in Volume 2 if you have time. Volume 1 to the end is here! Hi all.

Big thanks to:

All REA's members: Computer_Angel, Moonbaby, Zombie, hacnho, benina, kienmanowar, rongchaua, Deux, Merc, hoadongnoi, the_lighthouse, TQN, light.phoenix, hytkl, tlandn, hurt_heart, dzungltvn, Zoi, littleboy84, haule_nth, takada, Why not bar, iamidiot, Akira, dump, thienthandien, [kid], ...

Special thanks to:

fly, stephenteh, Gabri3l, MaDMAn_H3rCuL3s, CondZero, Ricardo Narvaja + NCR, lena151, haggar, ARTeam, snd, RES, CrackLatinos, all unpack.cn ... Authors who created tools and you.

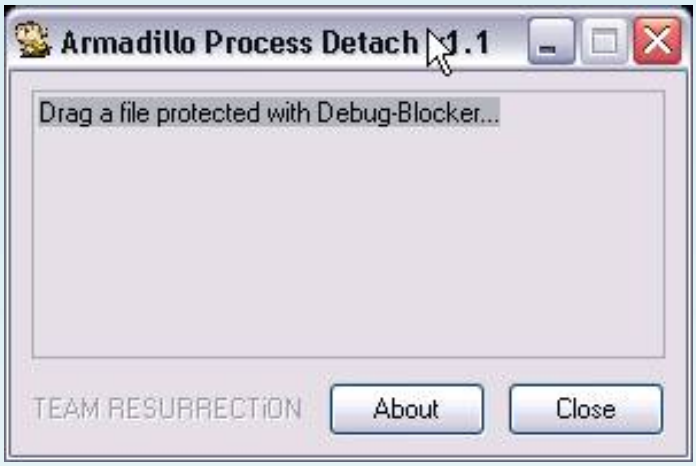
Written by Trickyboy - 2006

Import elimination Debugblocker + + Nanomites

SoftWare : **AoA DVD Ripper 3.81**
Homepage: *http://www.aoamedia.com/*
Packed : *Debugblocker + + Code Splicing Nanomites*
Crack Tool *1. OllyDBG by hacnho.*
2. LordPE Deluxe 1.4-by yoda
3. Import REConstructor 1.6 Final
4. ArmInline 0.71
5. ArmaDetach 1.1
6. CFF ExplorerII
Author : **Why Not Bar**

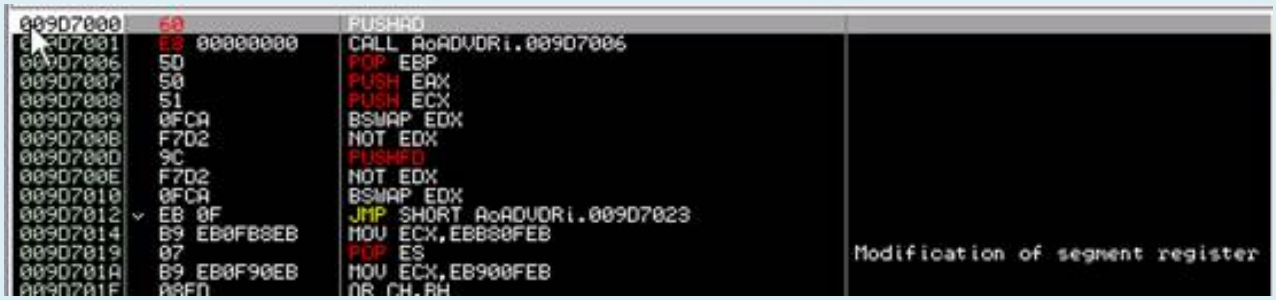
This target children meat orders! Hehe ... not speechify working days.

1. Running ArmaDetach 1.1



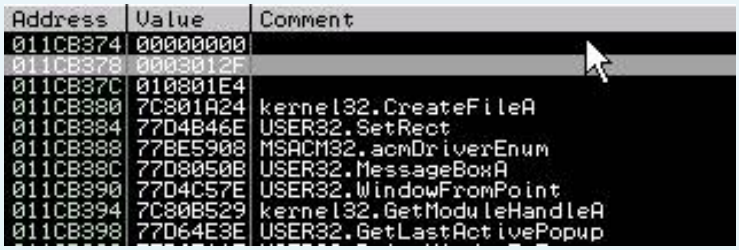
2. Drag the file "AoADVDRipper.exe" released into the window of ArmaDetach

3. Select Open Olly Child process ID and Attach. F9, F12 and Edit to 60E8



4. Running Scripts "Armadillo Standard unpack"

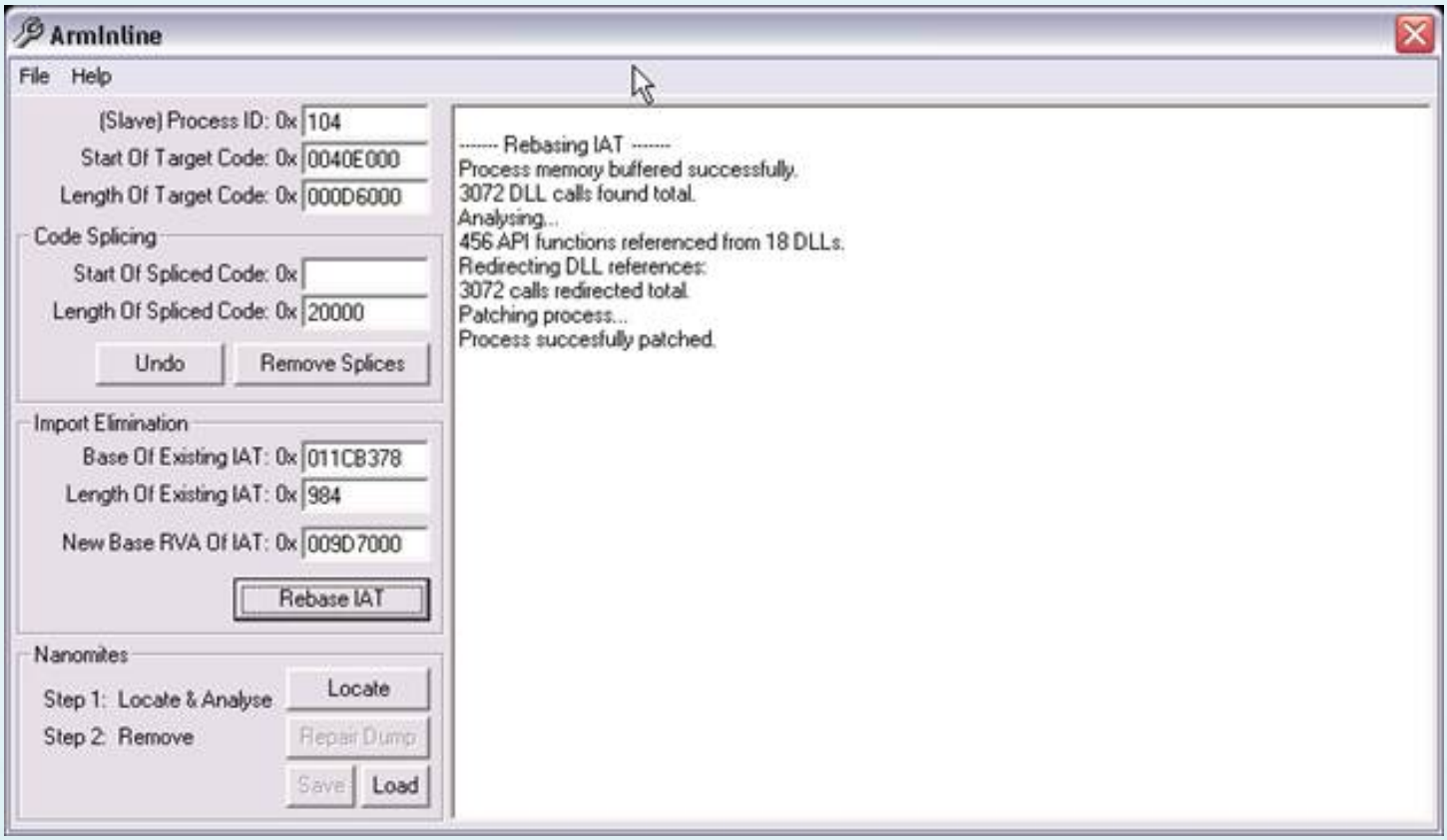
5. IAT and now find we are as follows:
IAT Start: 011CB378



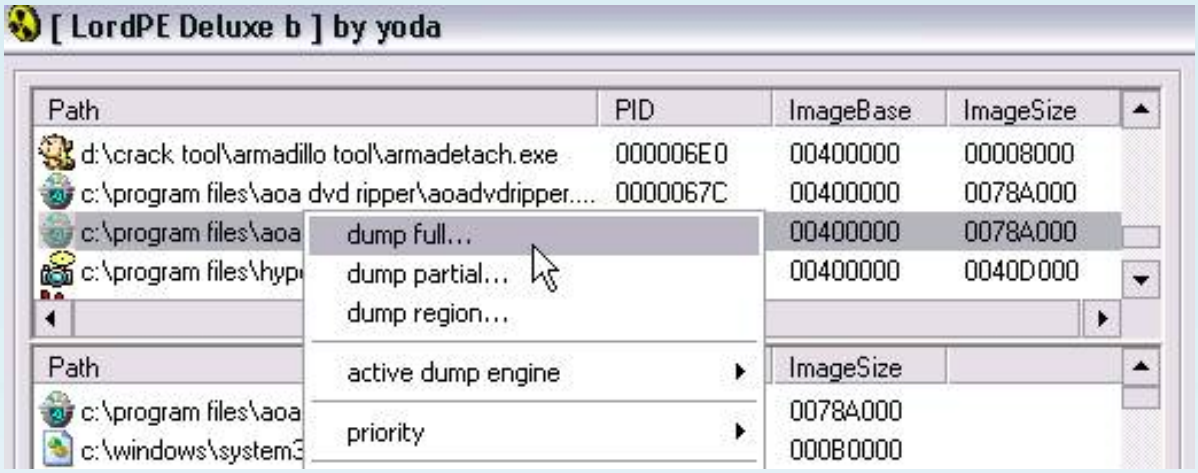
IAT End: 011CBCFC

IAT len: 984

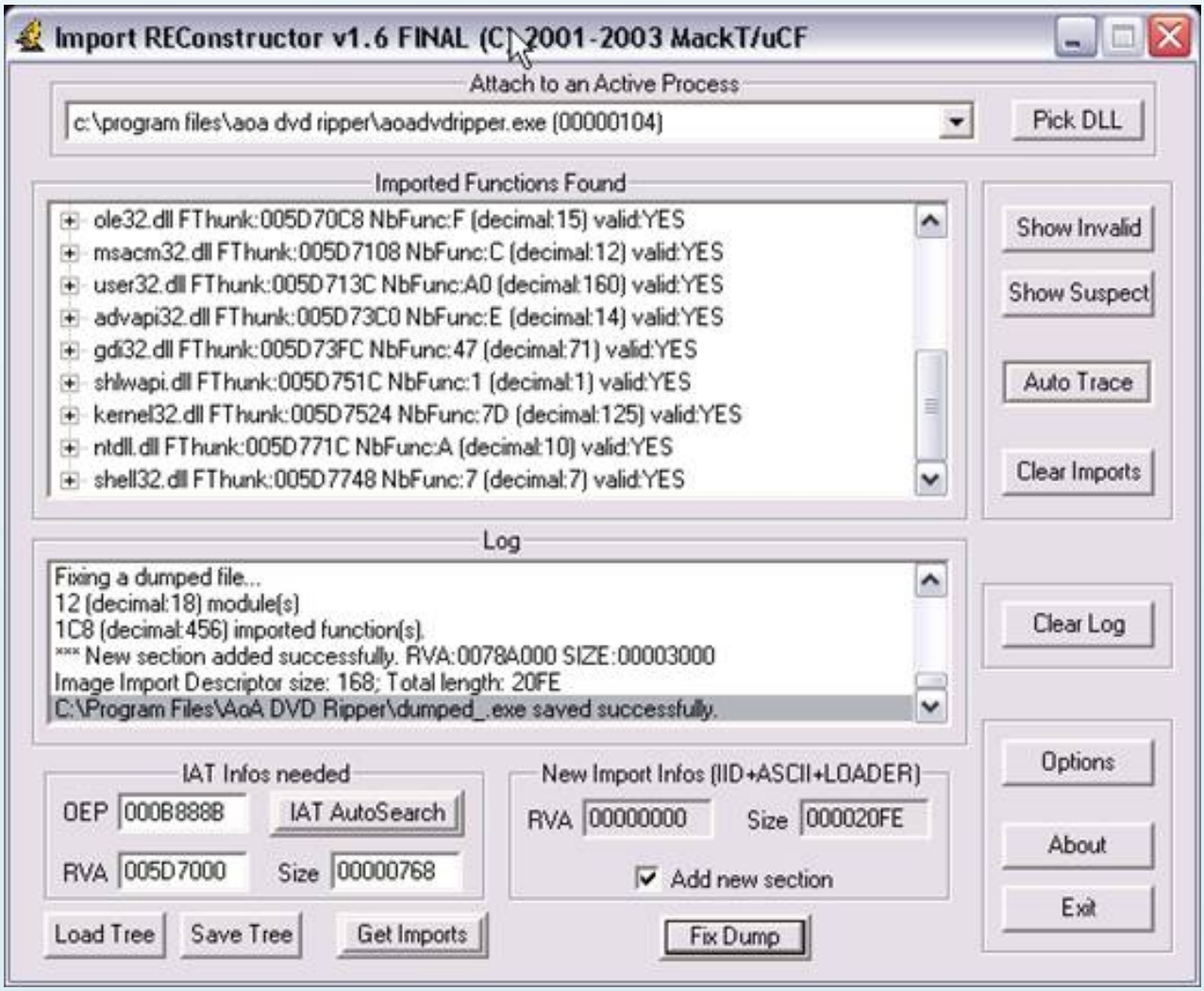
6. Now Fix Import elimination. ArmInline Open and complete information (



7. Using LordPE dump Full stop!

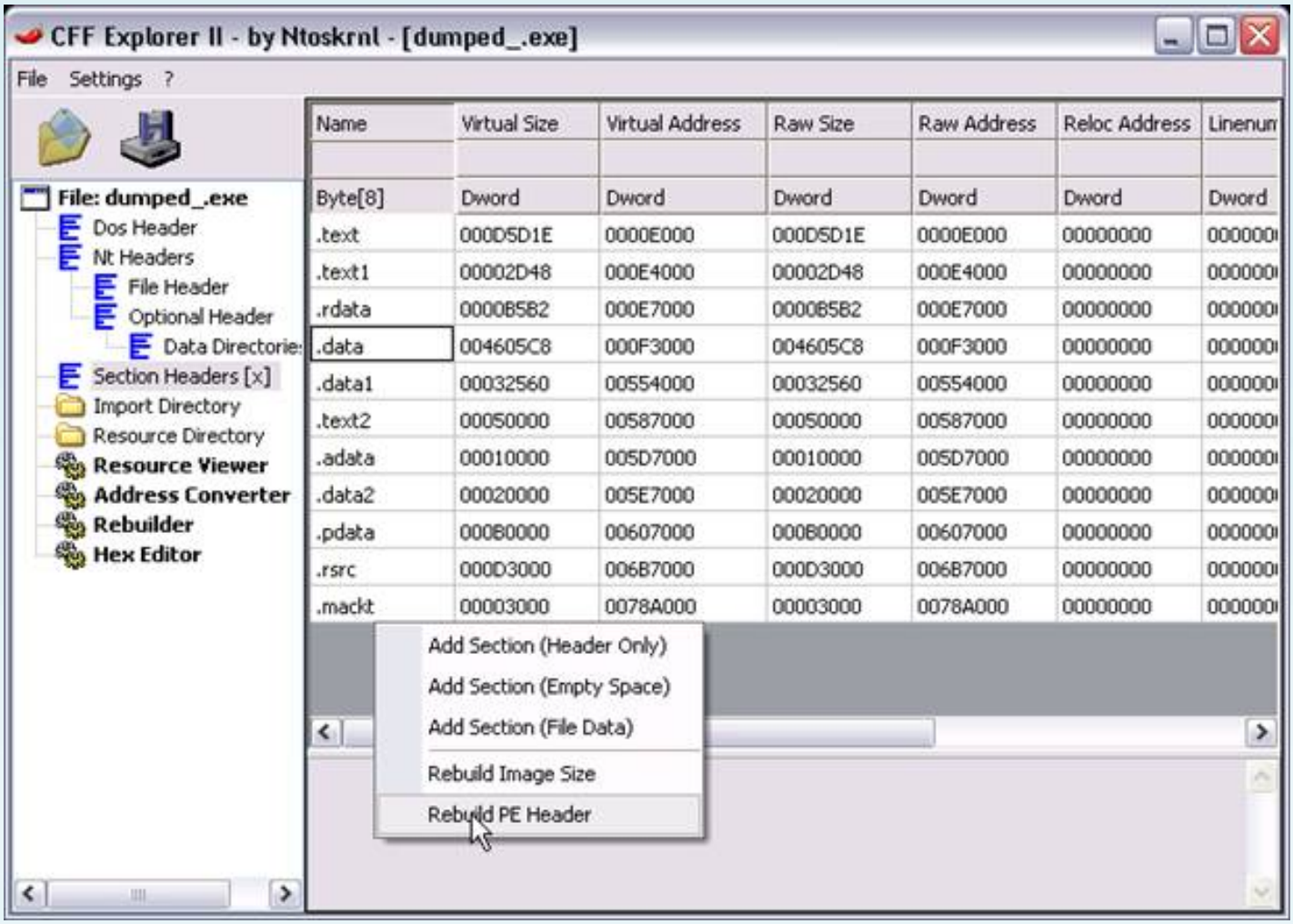


8. M ImportREC fill in the information and dump Fix



9. Test-File "dumped_.exe"

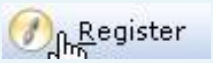
10. What more here! According sure they think it is PE Header gòi tua te! Fix it all. Here they use ExplorerII CFF. You choose like home



11. Save then run back and try to see why.

12. Hu gòi complete run! Now we make meat baby Nanomites. Click 

to the primary.

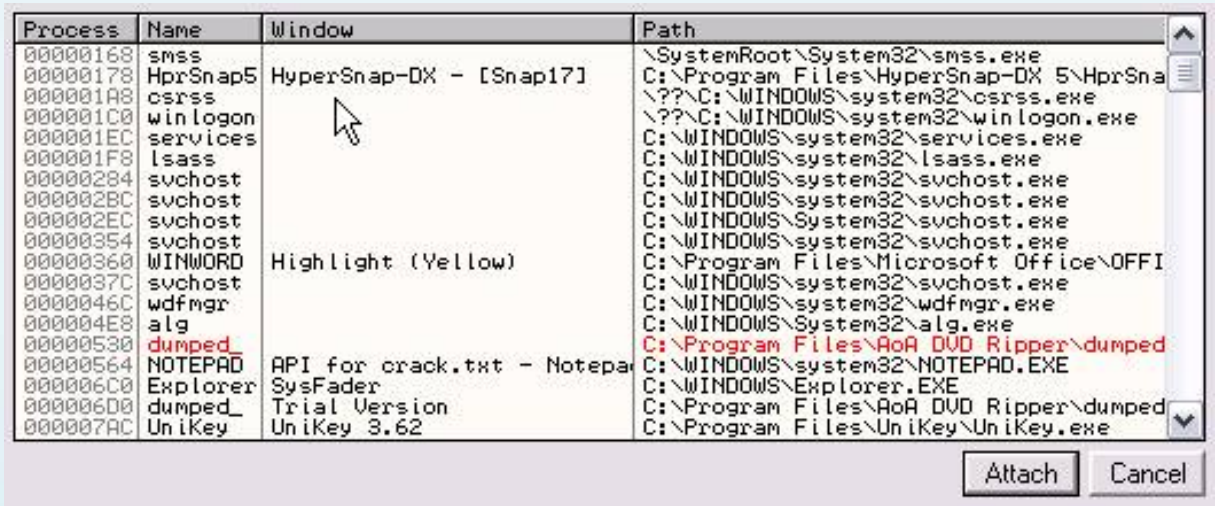
13. Nice ha! Next click the button 

, And type the following:

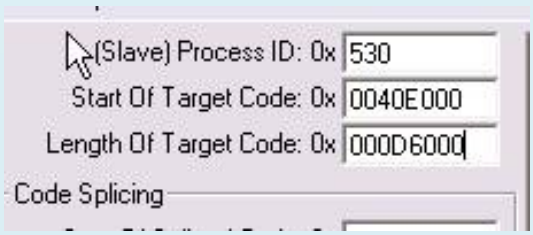
14. Click 

we found as follows:

15. Never mind! Ministry that the Nano! Cute ha! Load File "dumped_.exe" to olly and PID



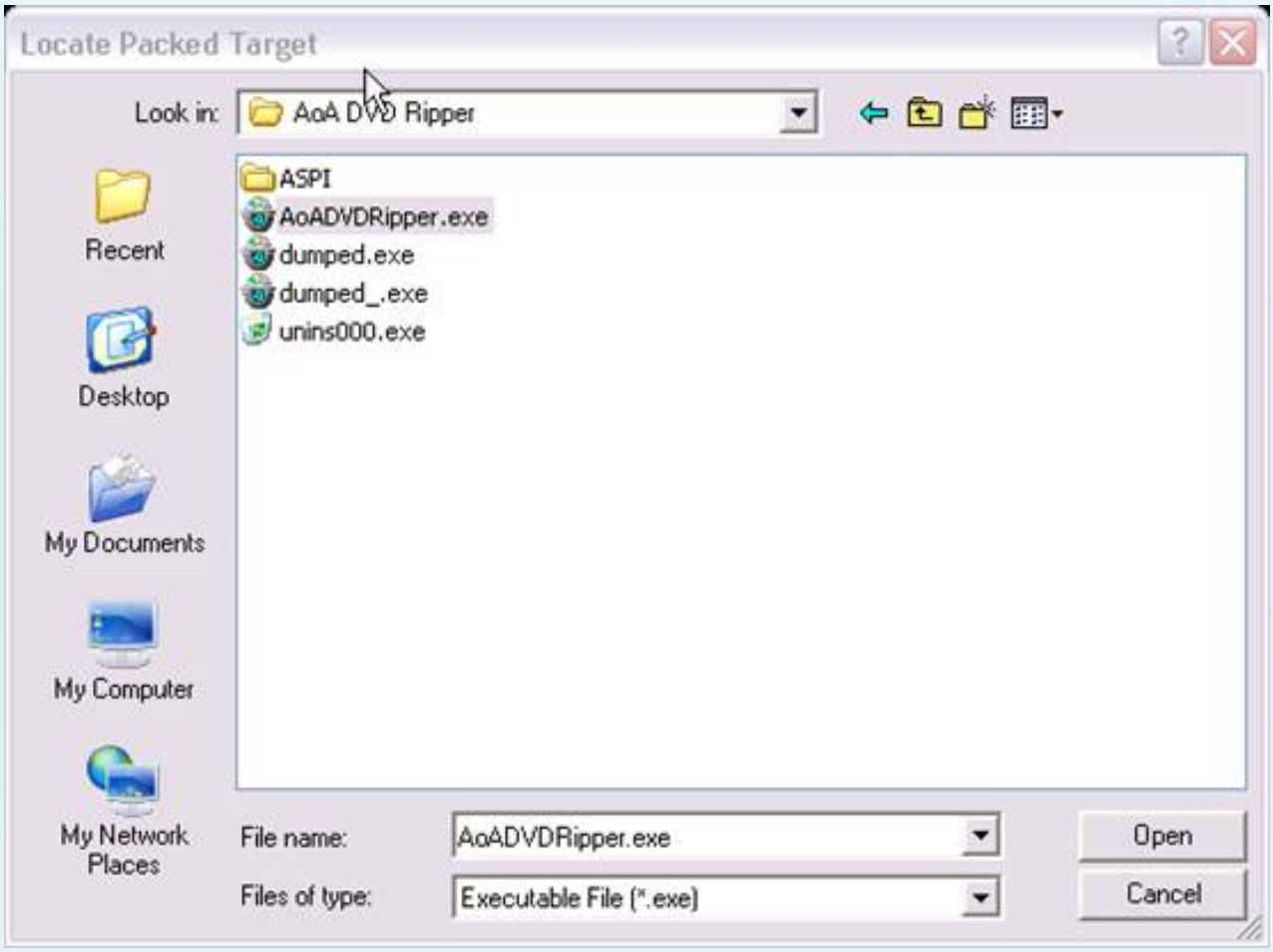
16. ArmInline open and filled as follows:



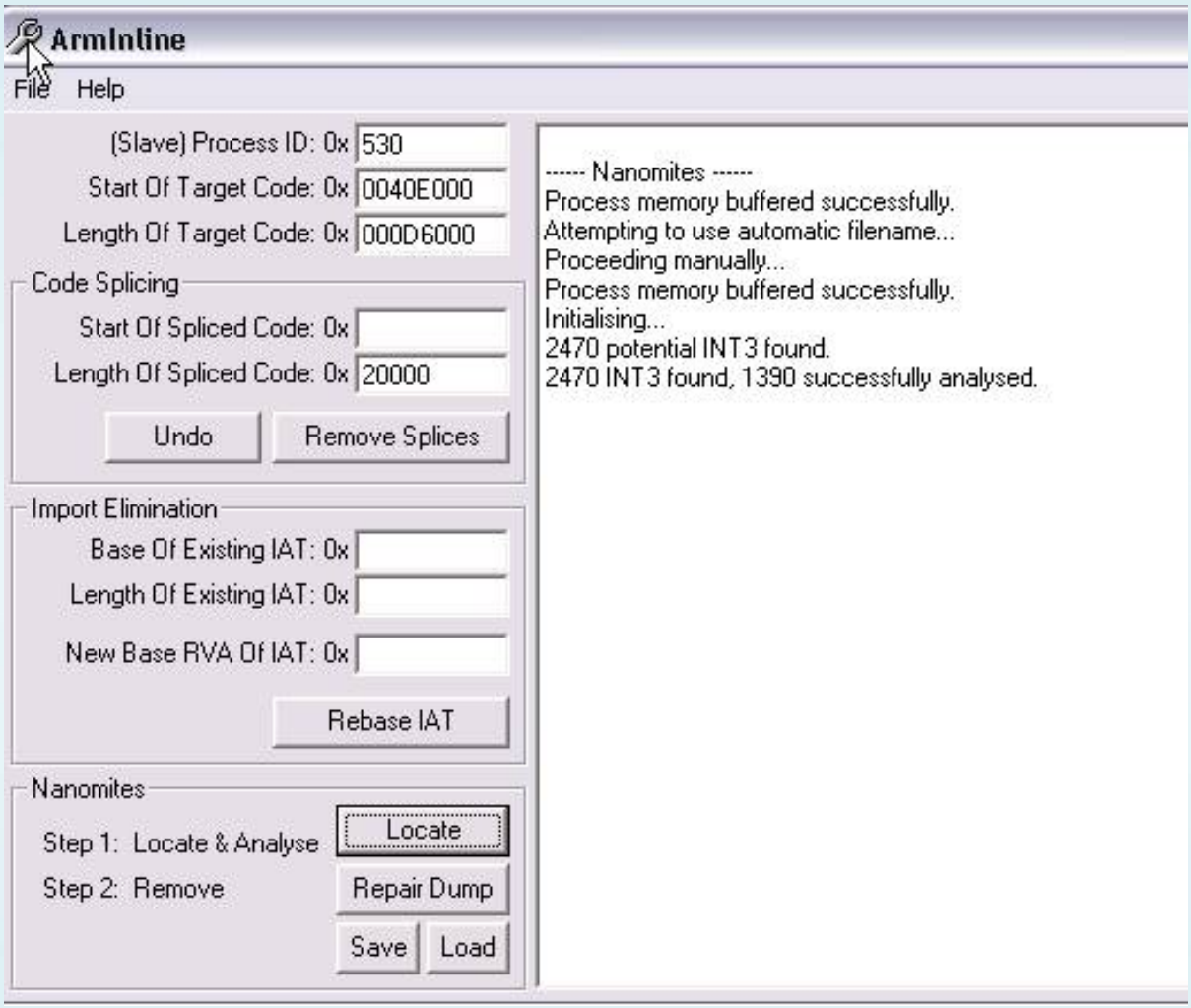
17. Click 

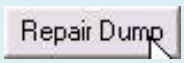
, Enter the following

18. Click OK to 1, next select the file "AoADVDRipper.exe"

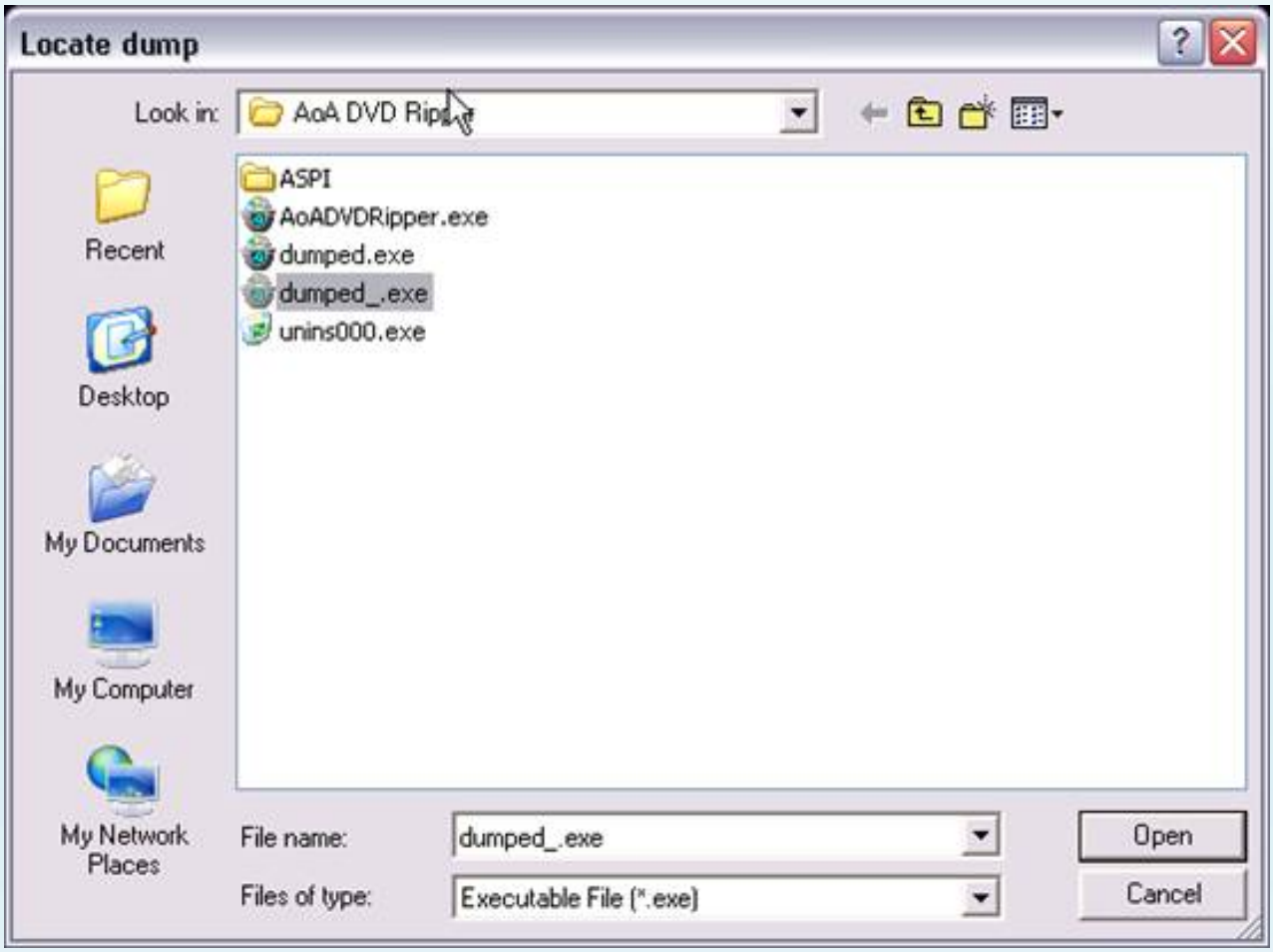


19. At Nag as the type and then click OK, back window ArmInline you see the following:

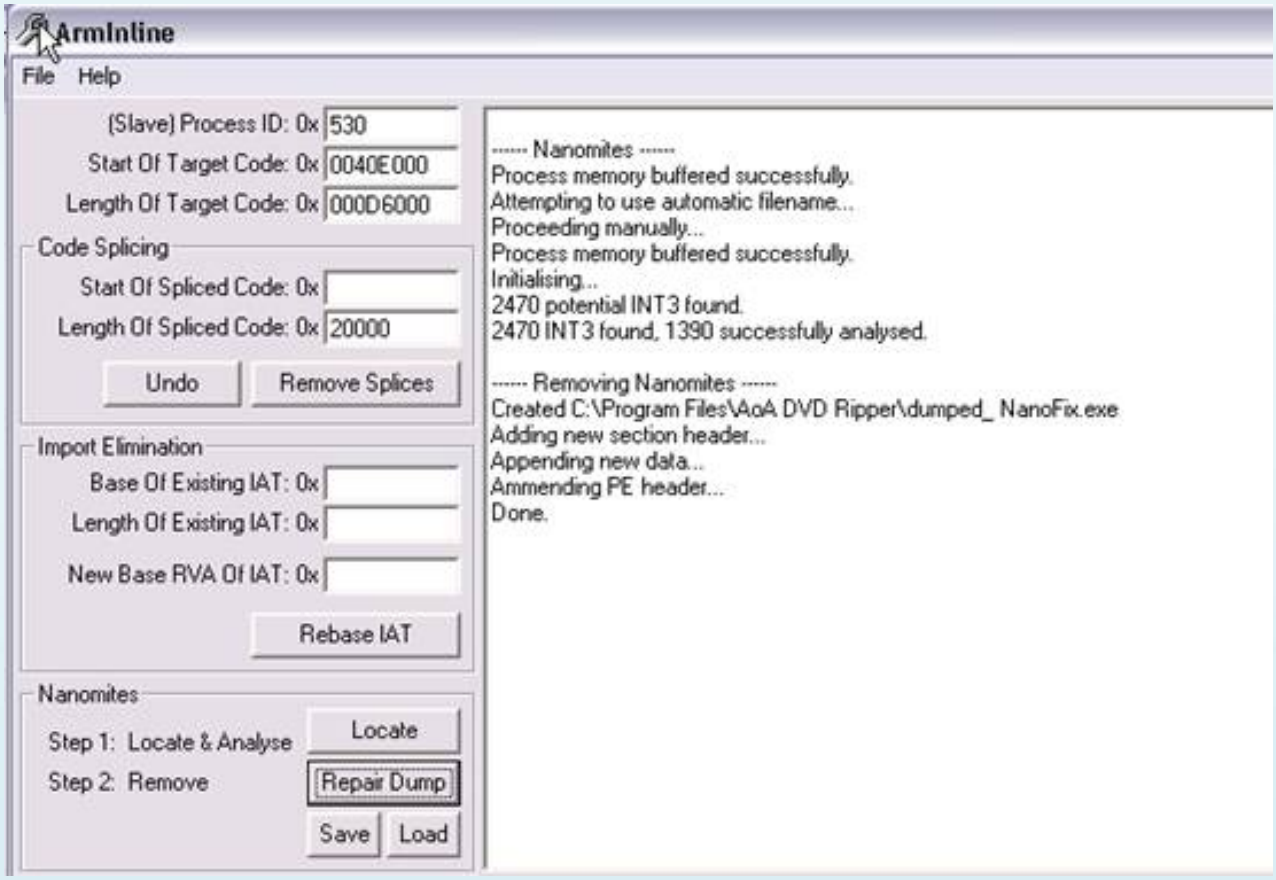


20. Click 

and select File "dumped_.exe"



21. Done gòi kìa you! See



22. Run test considered stars

23. Oh! Yeah. Unpack Done !!!!!!!!!!!!!!!!!!!!! The Crack ha!'s Not for a few songs! Was also easy to treat it.

Written by Why Not Bar

ASF Converterv2.68: Cracking unpackingArmadillo3.78StandardProtection Manual + + Reducefilesize.

[Target]: **ASF Converter v2.68**
[W ebsite]: **http://ww w. Boilsoft.com**

[Author]: **LightPhoenix**
[E m a il]: light (dot) Phoenix (at) g m ail (dot) com
[At Contact]: www.reaonline.net / forum

The settings should be

1.) Olly Debug v1.1

2.) LordPE

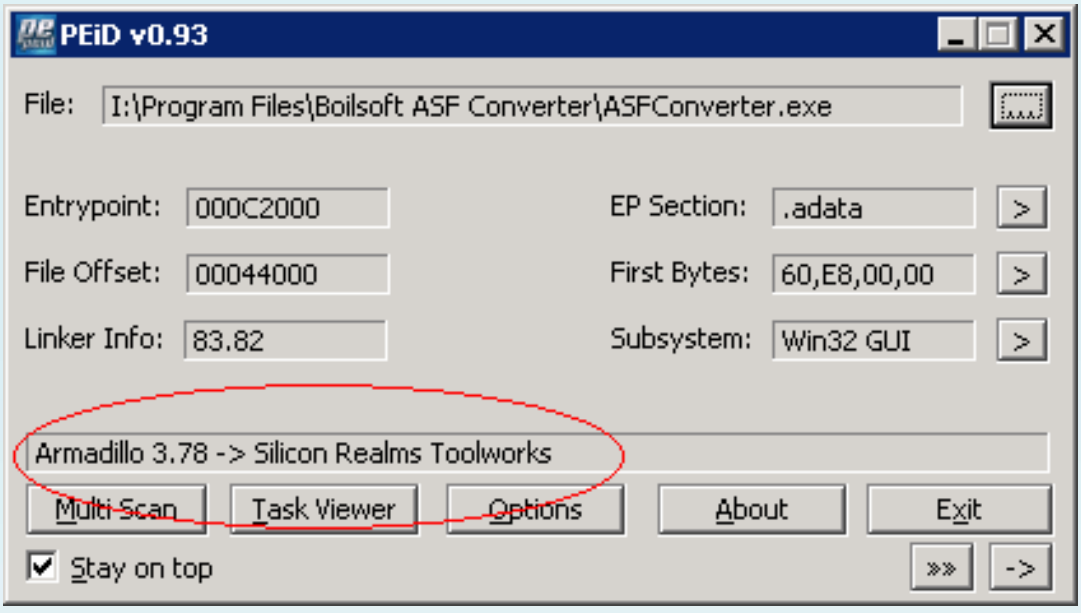
3.) I m port Reconstructor v1.6 Final

4) PEID 0.93

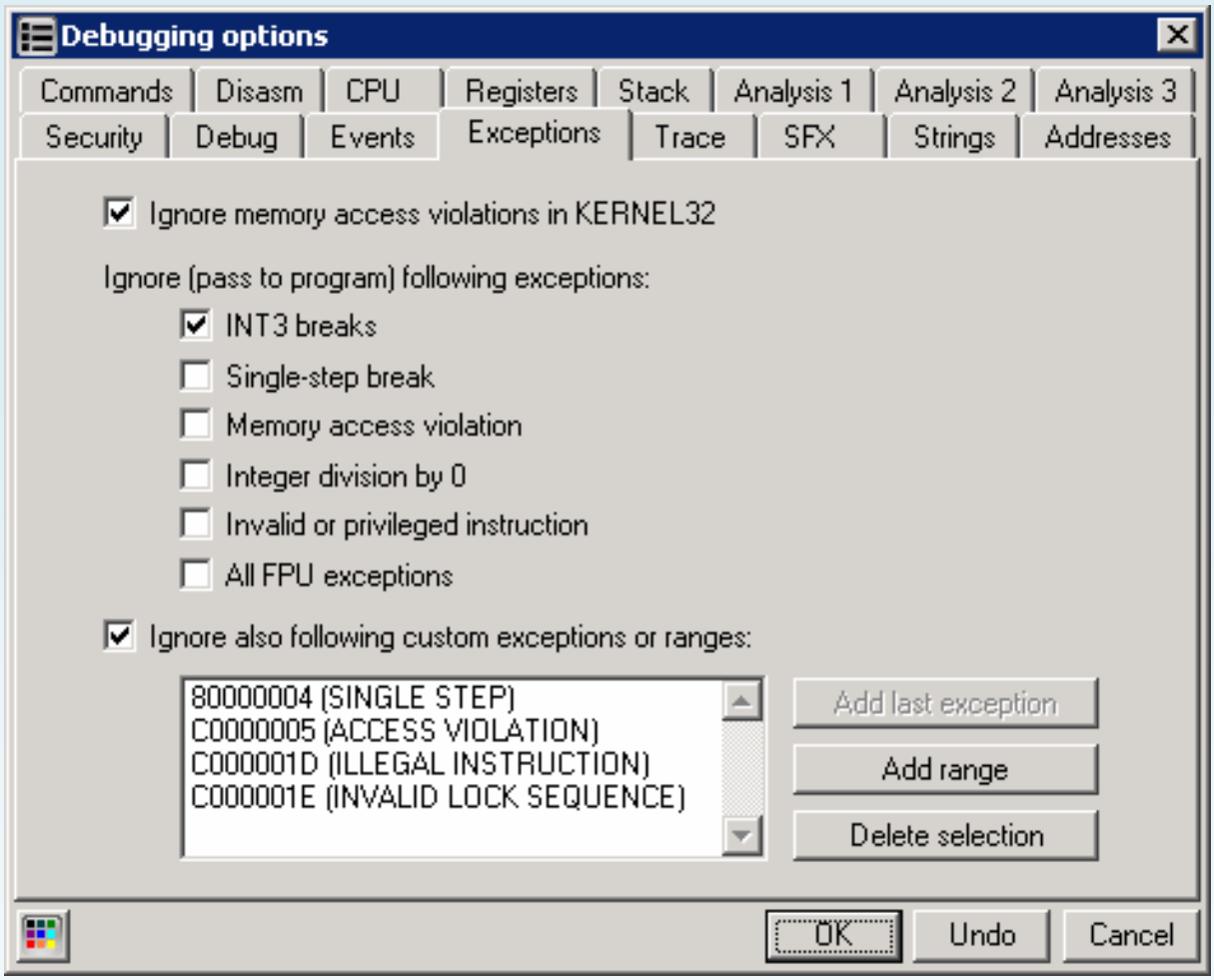
(You culay the medical tool in Hacnho gioithieu series tut about unpack a r m e adillo the tone Ok! J)

PART 1: MUP Armadillo

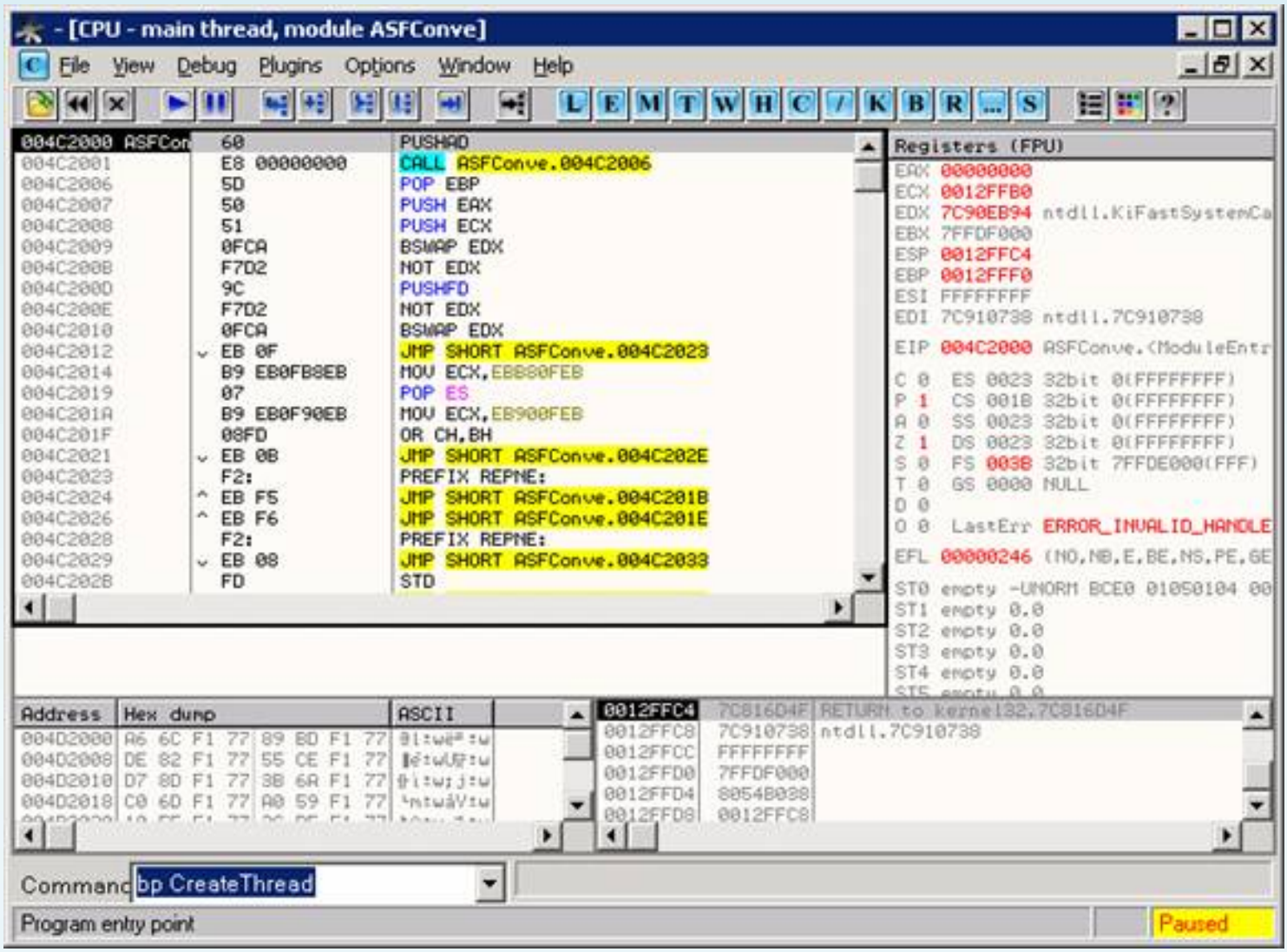
Except in the first, we survey this name. L click italy PEID test, the q u a:



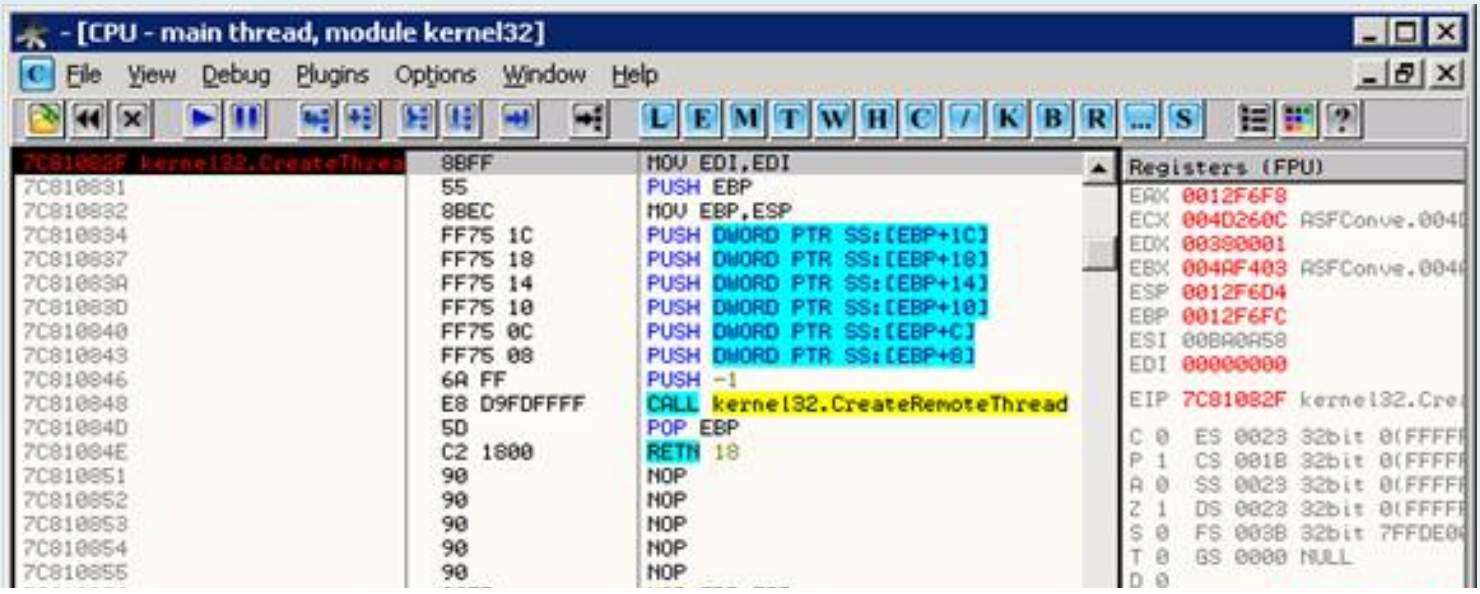
Chaythunophat, otask m m anagerlen, t h m otprocessASFConverter.exeduynhat way -> hehe, nokhongbiDebug-blocker, quaonroi, mupthoi.MoOllyDbgra (odayemdung OllyShadow), load targ e tlen, put options exception as follows:

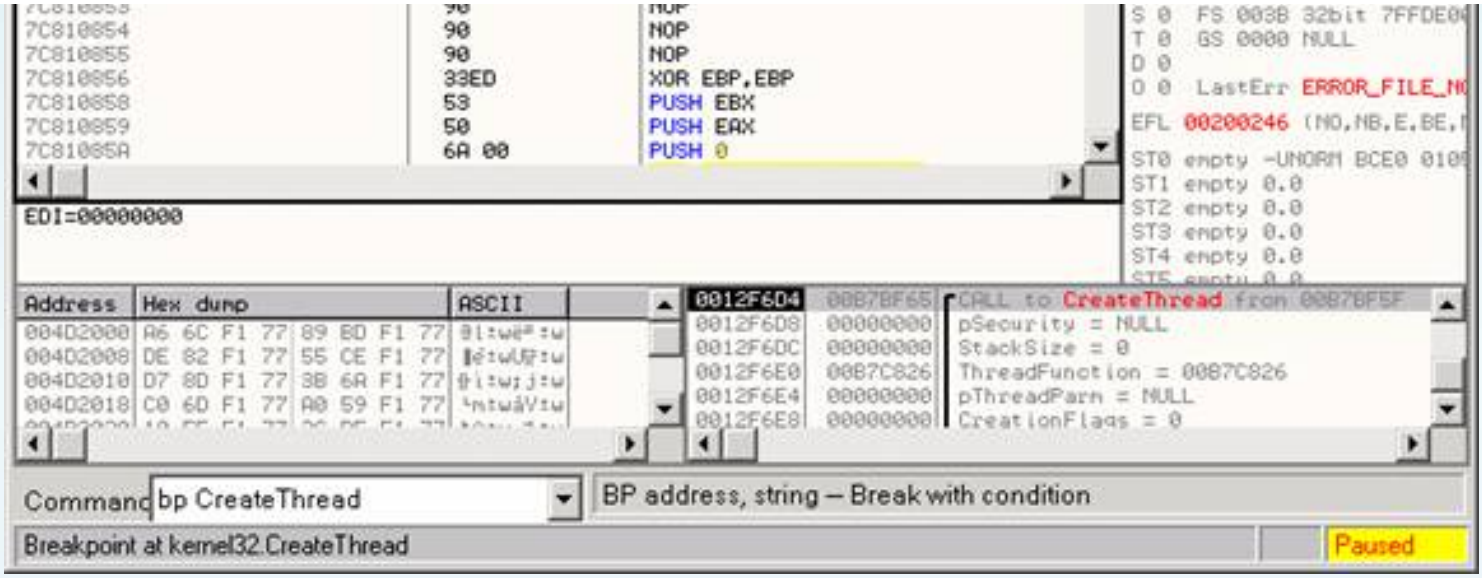


A place in the BP reateThread C:



Running time: F9: hienrathongbao it: "Don 't know how to ...", m devilish, you OK, just a italy the IEP, Shift + F 9. Again having "privileged instruction", Shift + F9 lannua. Ha, break it at CreateThread rùi:

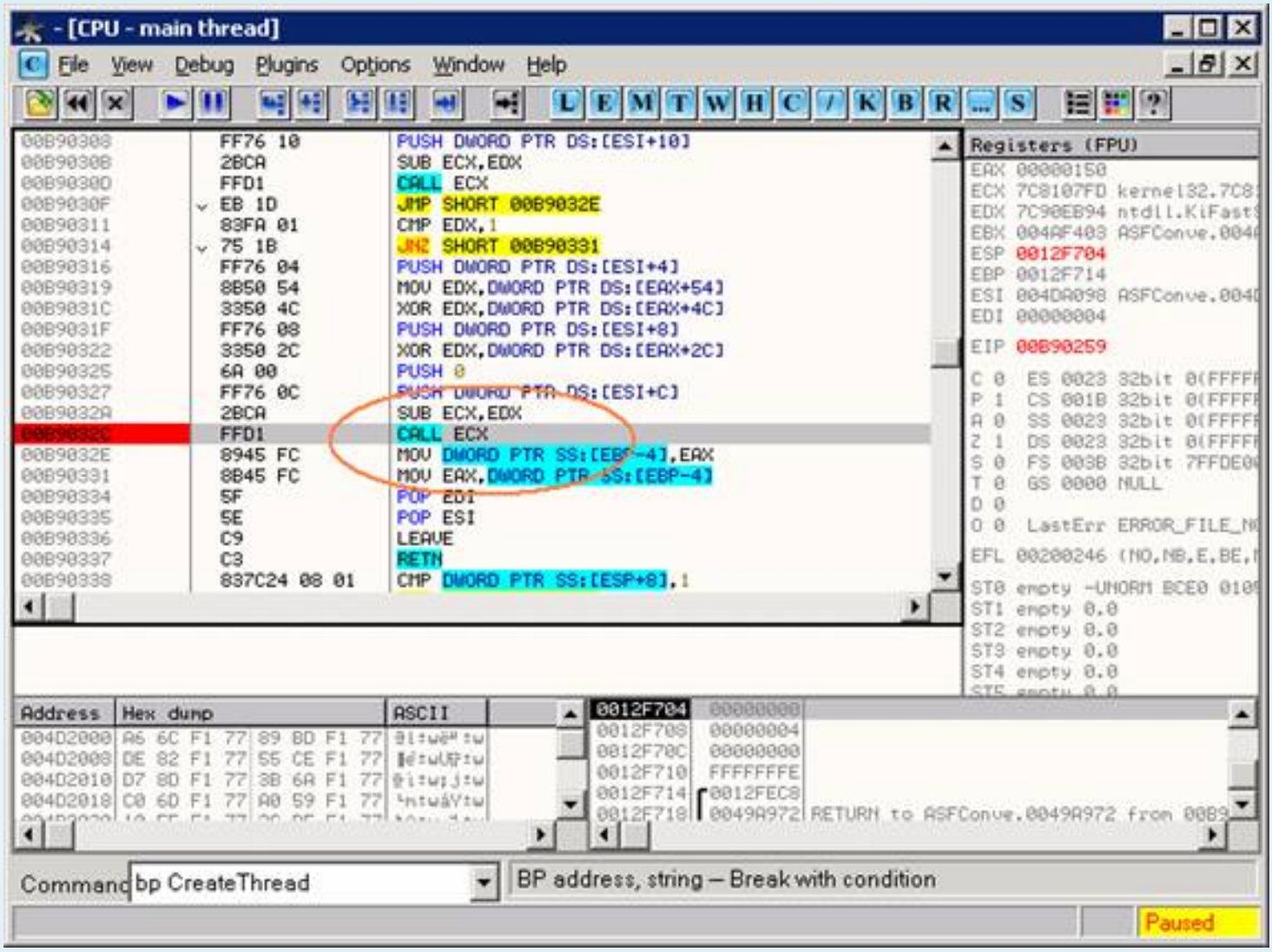




Ctrl + F9 to denhay ret, F7. L ai Ctrl + F9, F7 more. Now I'm here:

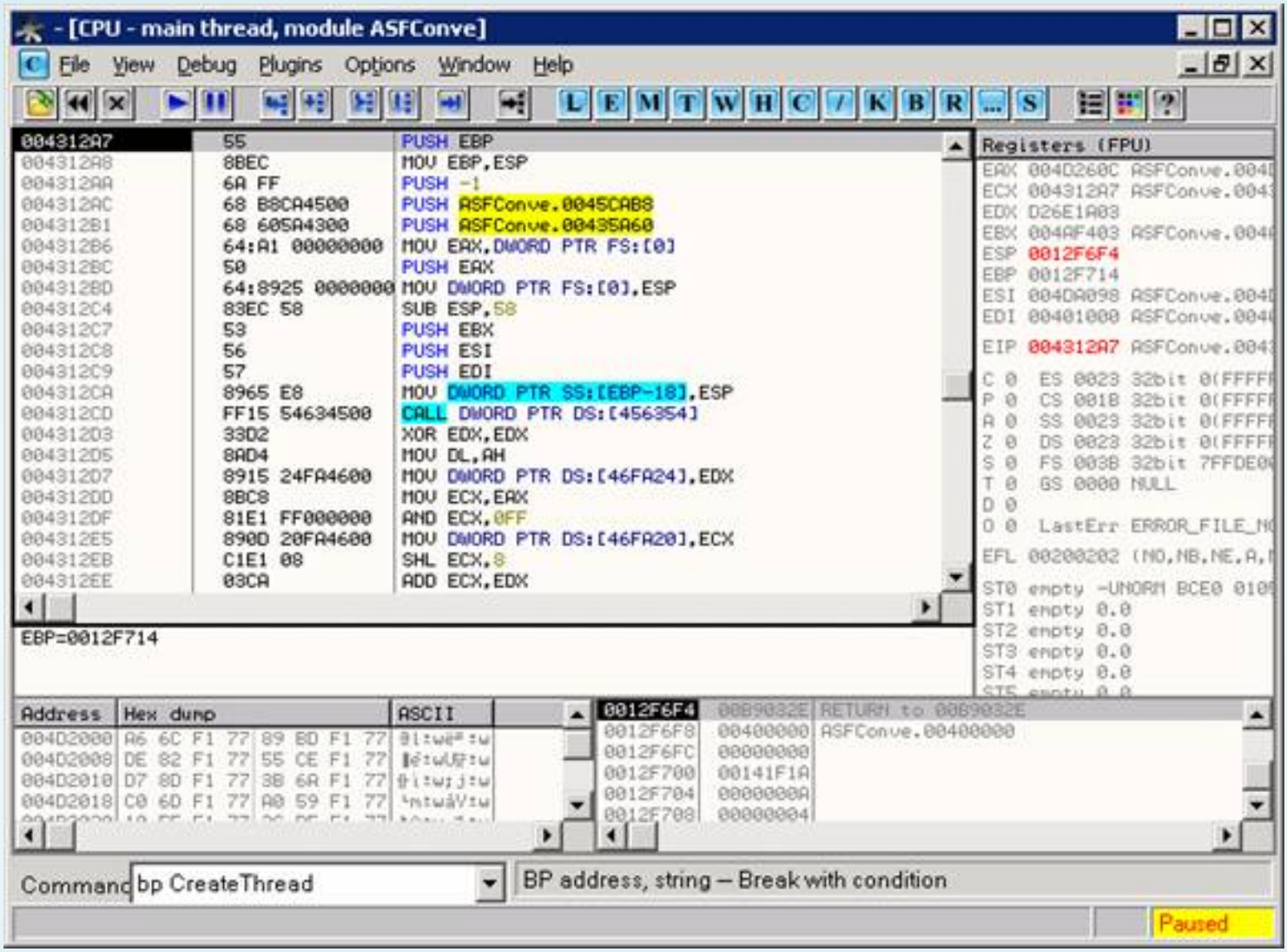
```
00B9026A    6A 01           PUSH 1
00B9026C    8BCF            MOV ECX,EDI
00B9026E    E8 E7D3FDFF     CALL 00B6D65A
00B90273    B9 C0FBB900     MOV ECX,0B9FBC0
00B90278    C705 30C2B900 C MOV DWORD PTR DS:[B9C230],0B9DEC0
00B90282    E8 62550000     CALL 00B957E9
00B90287    6A 00           PUSH 0
00B90289    E8 5B550000     CALL 00B957E9
```

Scroll down to balance're a tí, a 00B9032C of you, that we timt h:

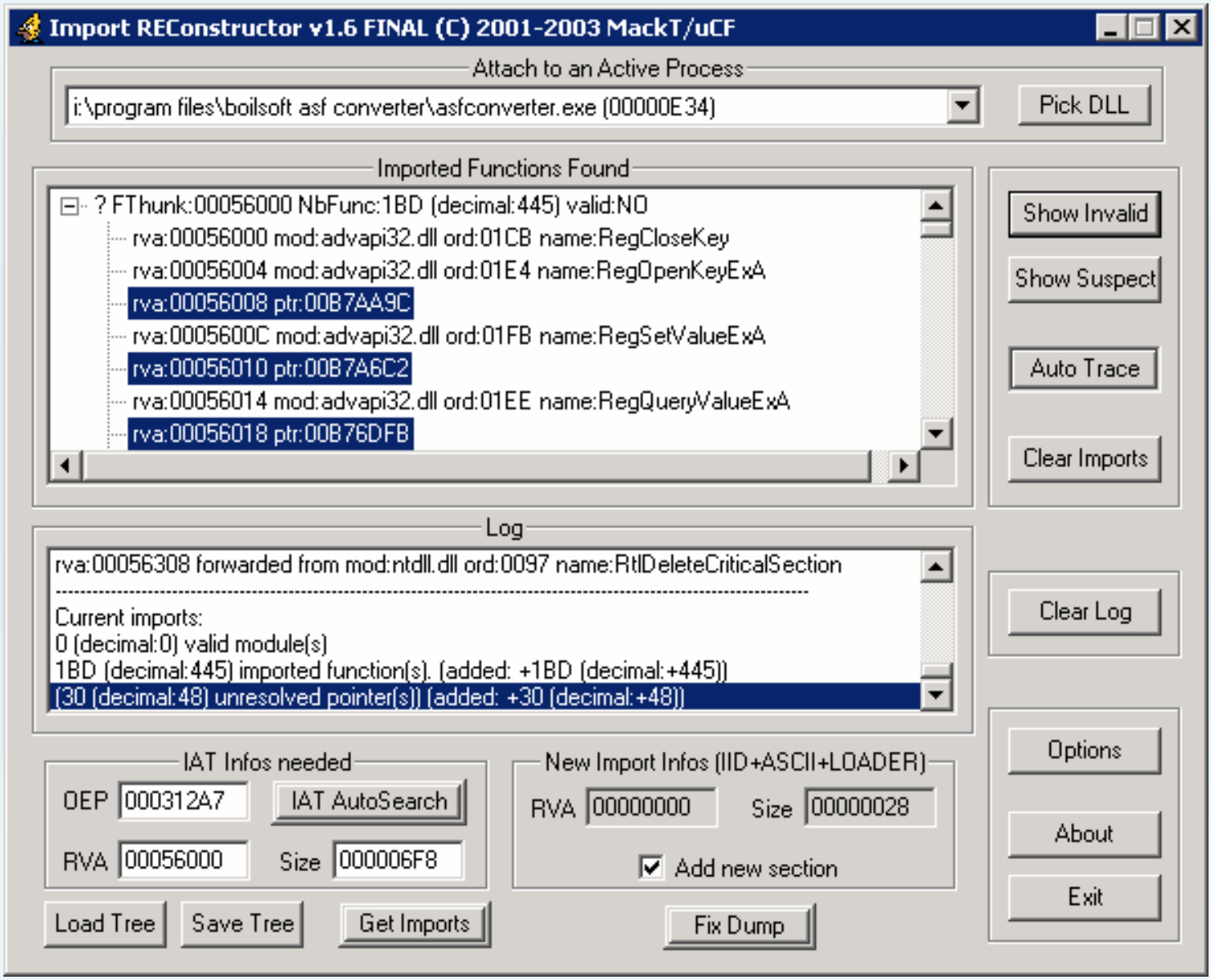


DaylalenhnhayveOEP (dungconhamvoicallecxt you i00B9030Dnha). Tadatbpo ago, F9, and F7. O, we

then select the OEP in:

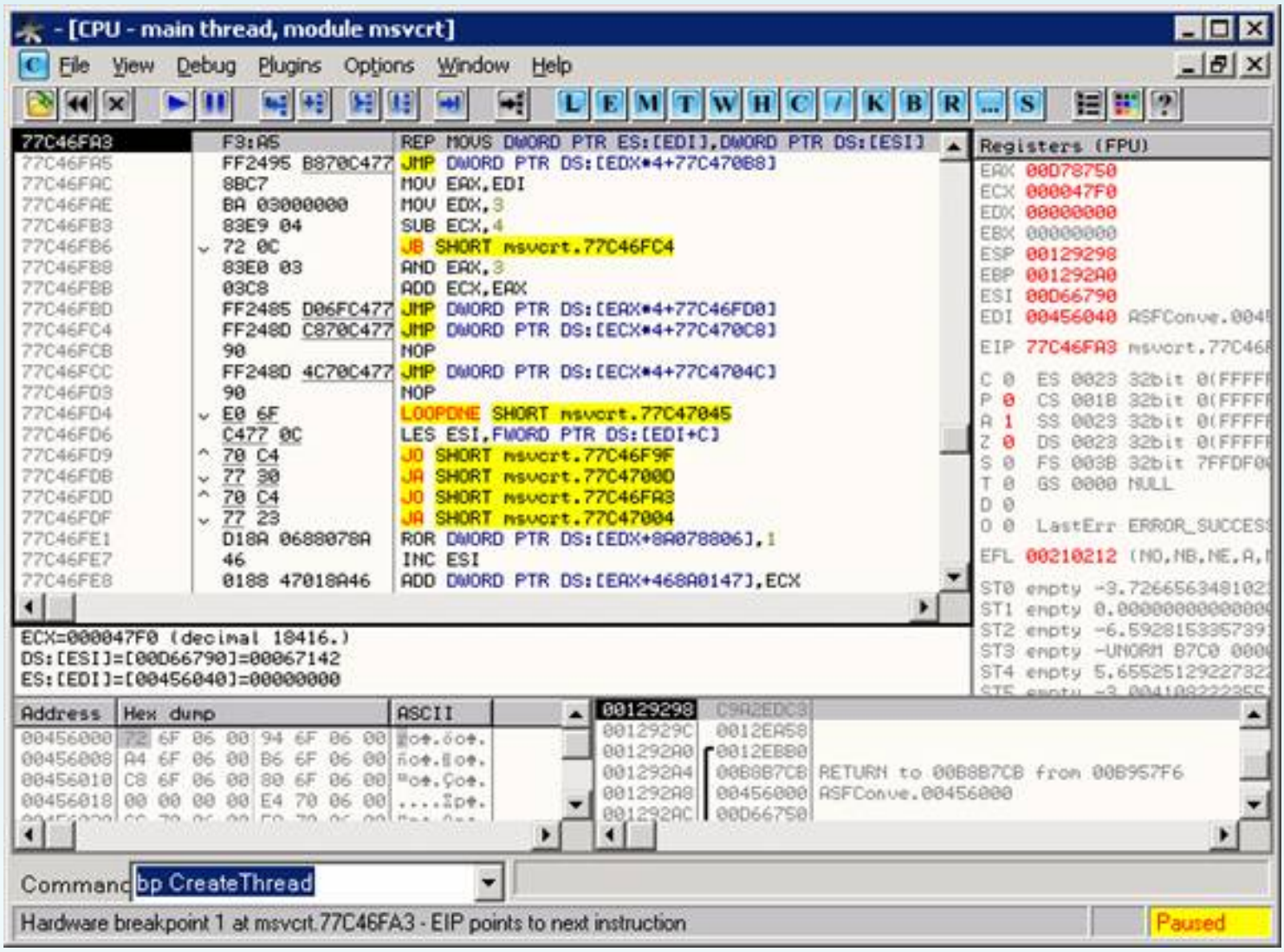


G io oLordPElen m, timprocessASFConverter, and prafiledu m m ped.exe.Tiepden, I get m portRECra, loadprocessASFConverter, goOEPla312A7 (0x4312A7-0x312A7 = 0x400000) and "IAT AutoSearch", "Get I m port. Click "Show Invalid":

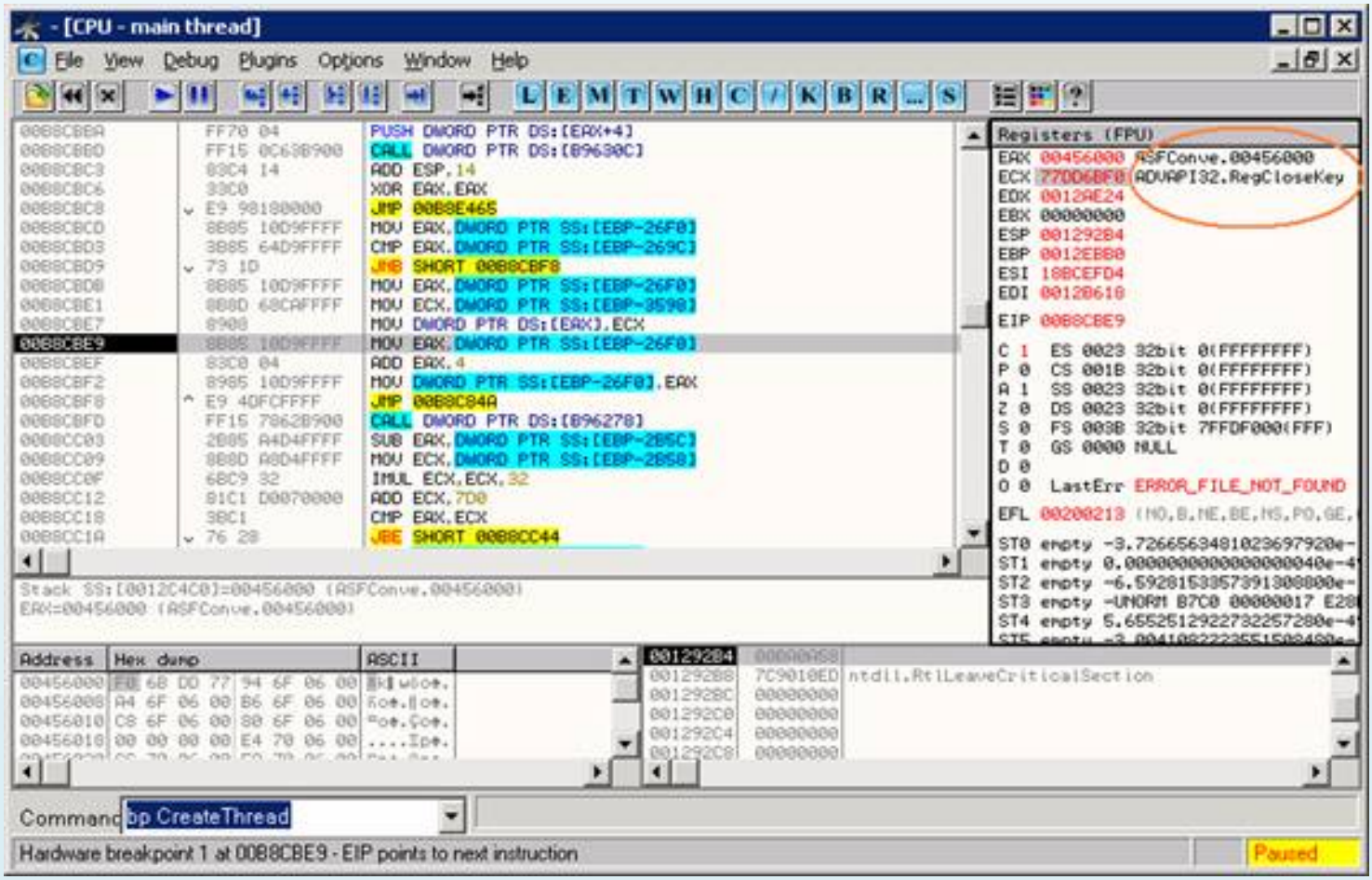


Hik, laitrog enough i r m portaddresscuaA mday.Bayg ophai I find that a m a m j prices pde patch

(MUP tut thanx mcuabac hacnho A r). Im Nhintren portREC, tat ayRVAcuaIATla0x56000 h -> V Acuanola: 0x400000 + 0x56000 = 0x456000. ObatdaucuaIAT A aylavungn h, is the AA ơi m m l r h oadcachamt be vienvaghid ị achivao.Tacandatbponwrite m e modaydechanlucnobatdauthuc does because I created the E AT. Resta tOlly & r o l a strange ad, clickvaovungdu m p, Ctrl + G, enter456000.Rightclick, than the breakpoint-> hardware, onwrite-> italy DWORD.F9decha: L ạ iOk, Shi t f + F9, Shi t f + F9. O, it was BP and then another, but the stars aio m m odule svcrt -> F9 to run.



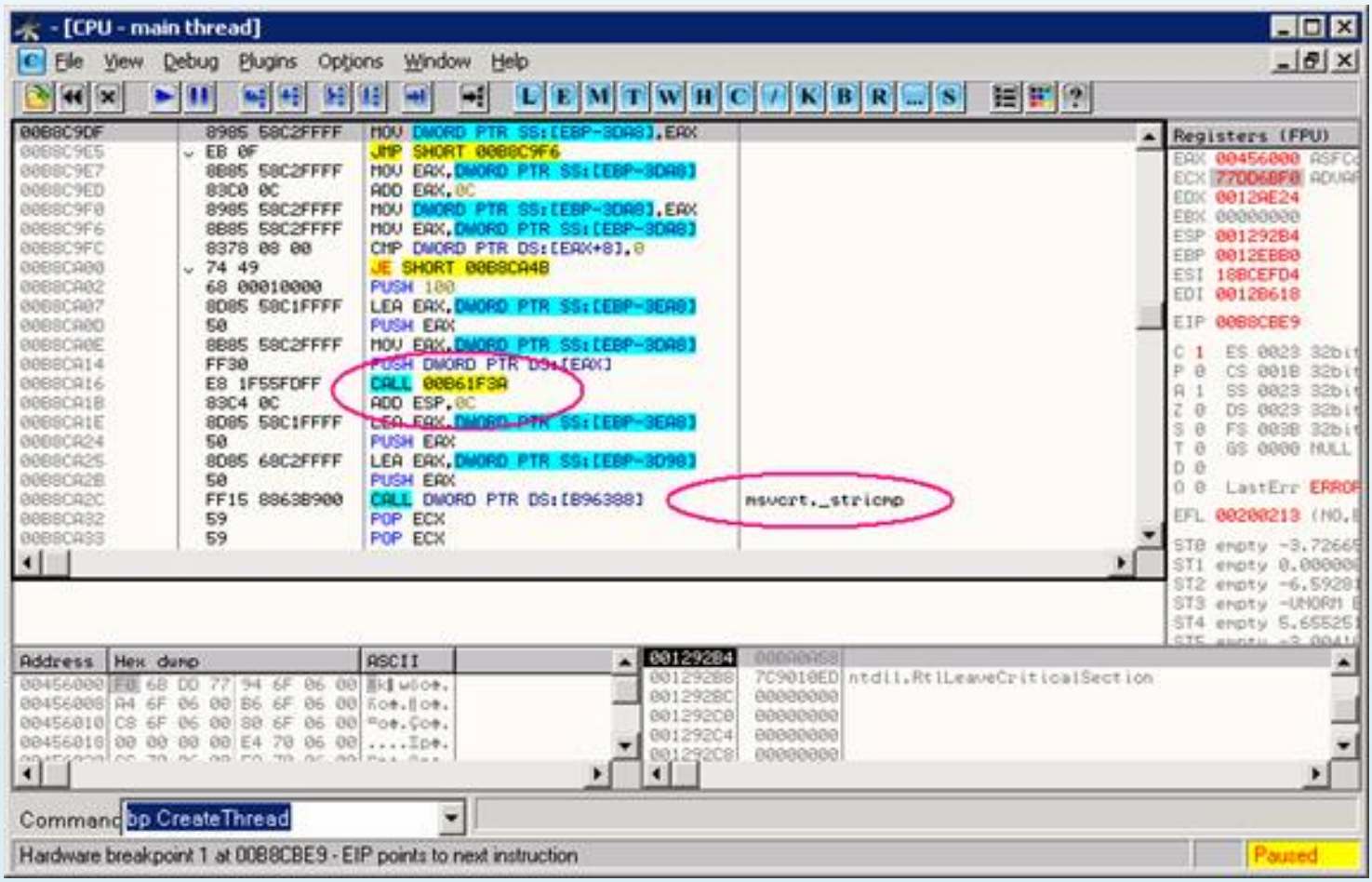
At BP h could lant two, we have a user noican the T-score:



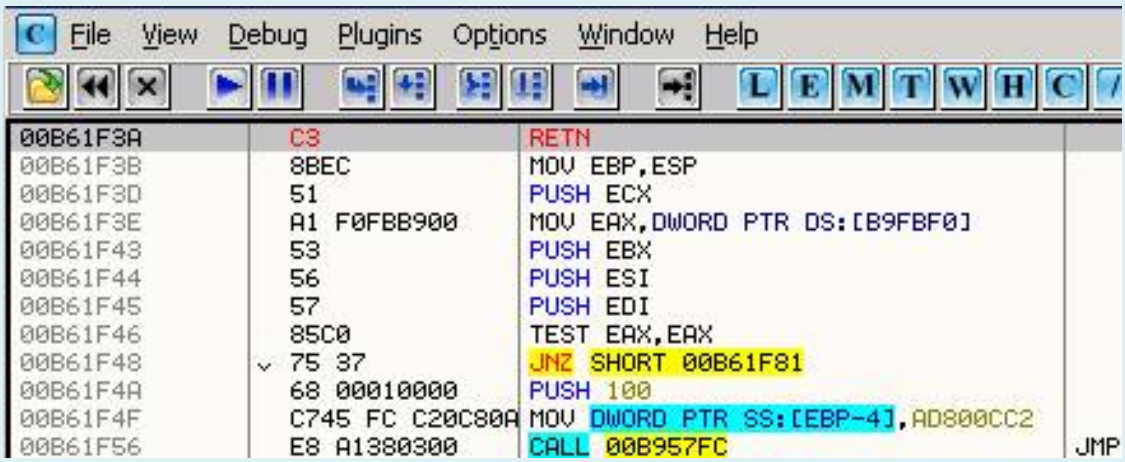
To this, there are two ways to build ung laibang IAT. How the h be the box, you scroll up on a line, will see the command:

```
00B8CBE78908MOV DWORD PTR DS: [EAX], ECX
```

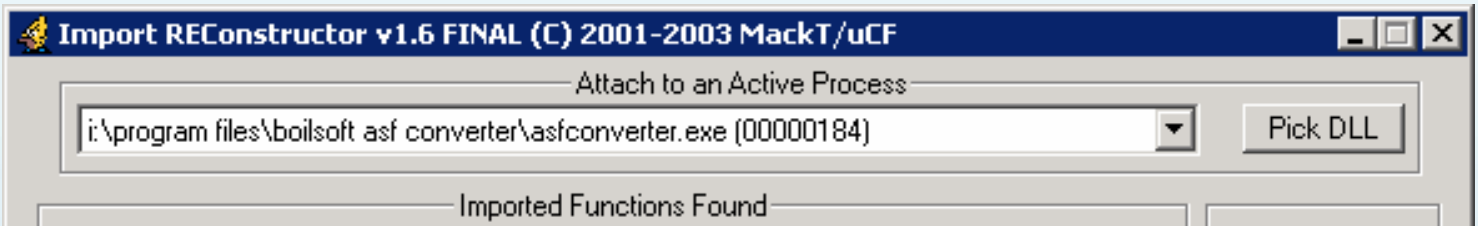
Nhomsangcuasoregister, tat h ayecxchuadiachihamRegCloseKey, eax = Tuclacu 456,000 b ptai enhnay l, i timnhungentrynaoconth eutrong b angIAT adienvao m (using the BP o ndition chodo to the F9 hieu J) . Cachthuhaihocdu debit ctrongtutcuabachacnho, PageUplen5 L-6 An timt h after aydauhieu :

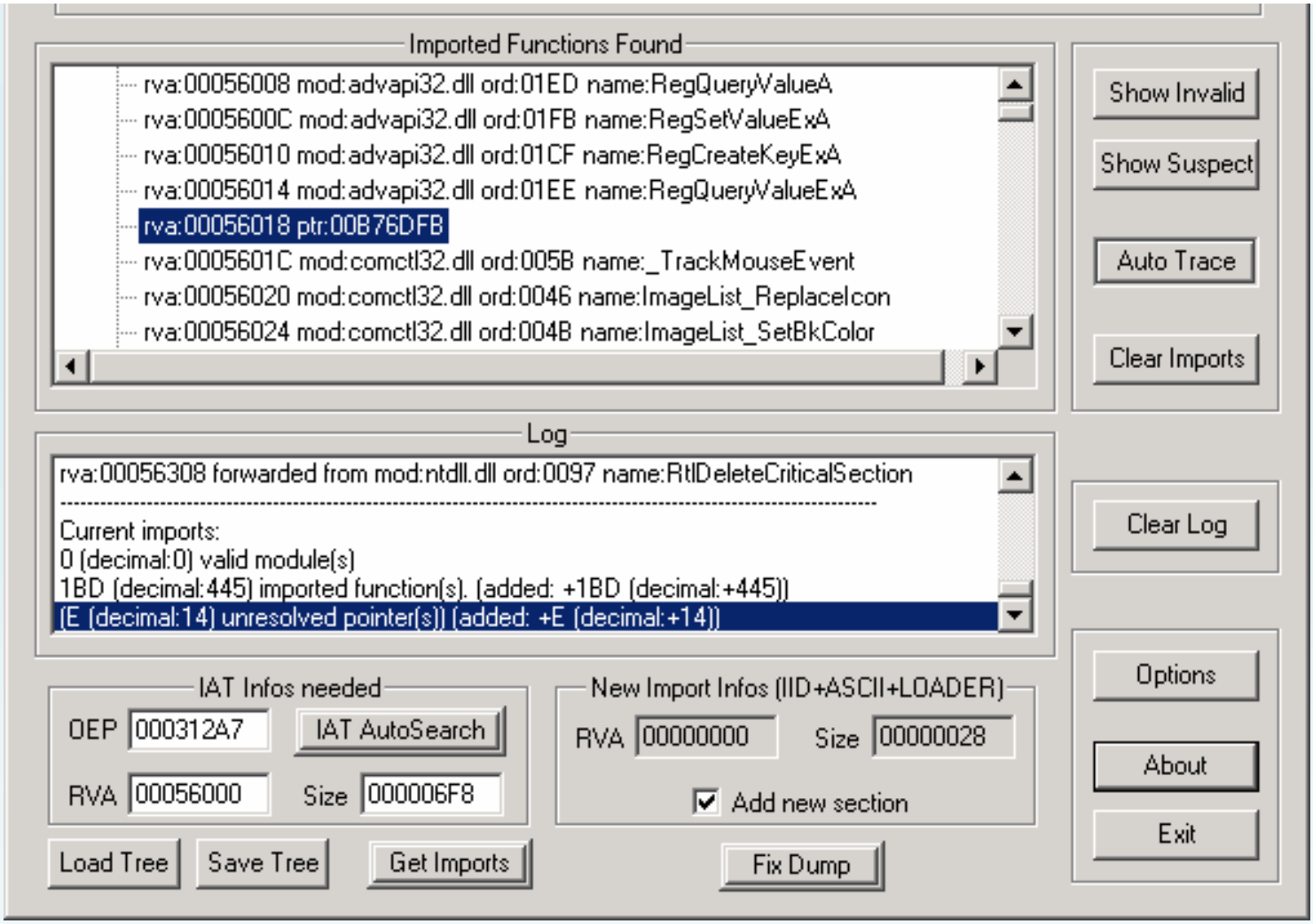


Tailenhcallkhoanh otren, tan h yd ol click ị ac h ai l ila0x0B8CA16.Restart all catuda are set hw on write at 0x456000, F9 ... At times HW break head First, we or to e. A only a 0x0B8CA16 vadat hw on excecution. F9 dechay of the Ep. Khidapause, taentervaohamcall, thaybytes55-> C3 (h o acanspace, type vaOk ret). Mucdichc ủ aviectrenlavohieuhoa g oihamnay, ngaykhi and rove the uacallxongnose always, not if a.

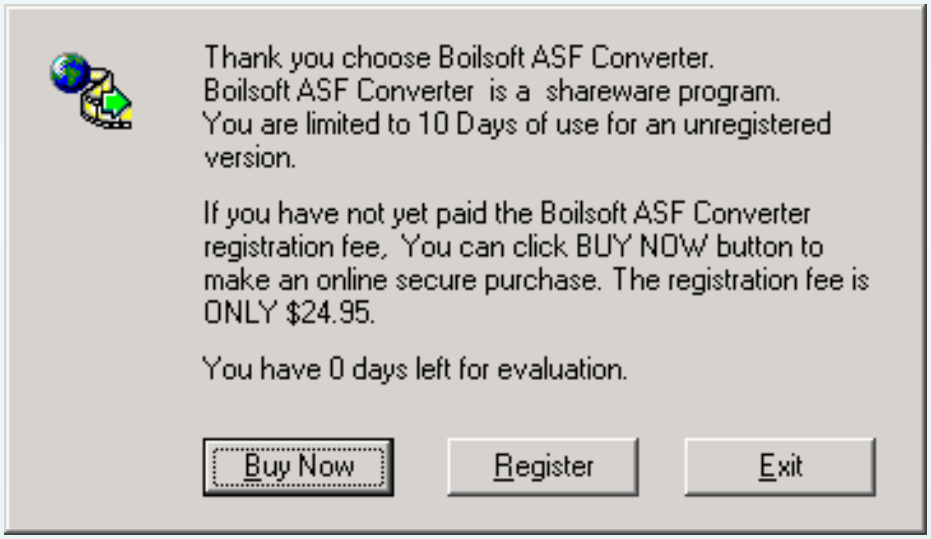


G at C & L earhetcachw bp.Nhaydend ị achi0x4312A7 (OEP), set H Wonexcecution taidodedunglaitaiOEP.F9de the haytiep.Okie, nodadungroi.G olayI i m portRECra, the current huc italy are all b o C above, we đư C:



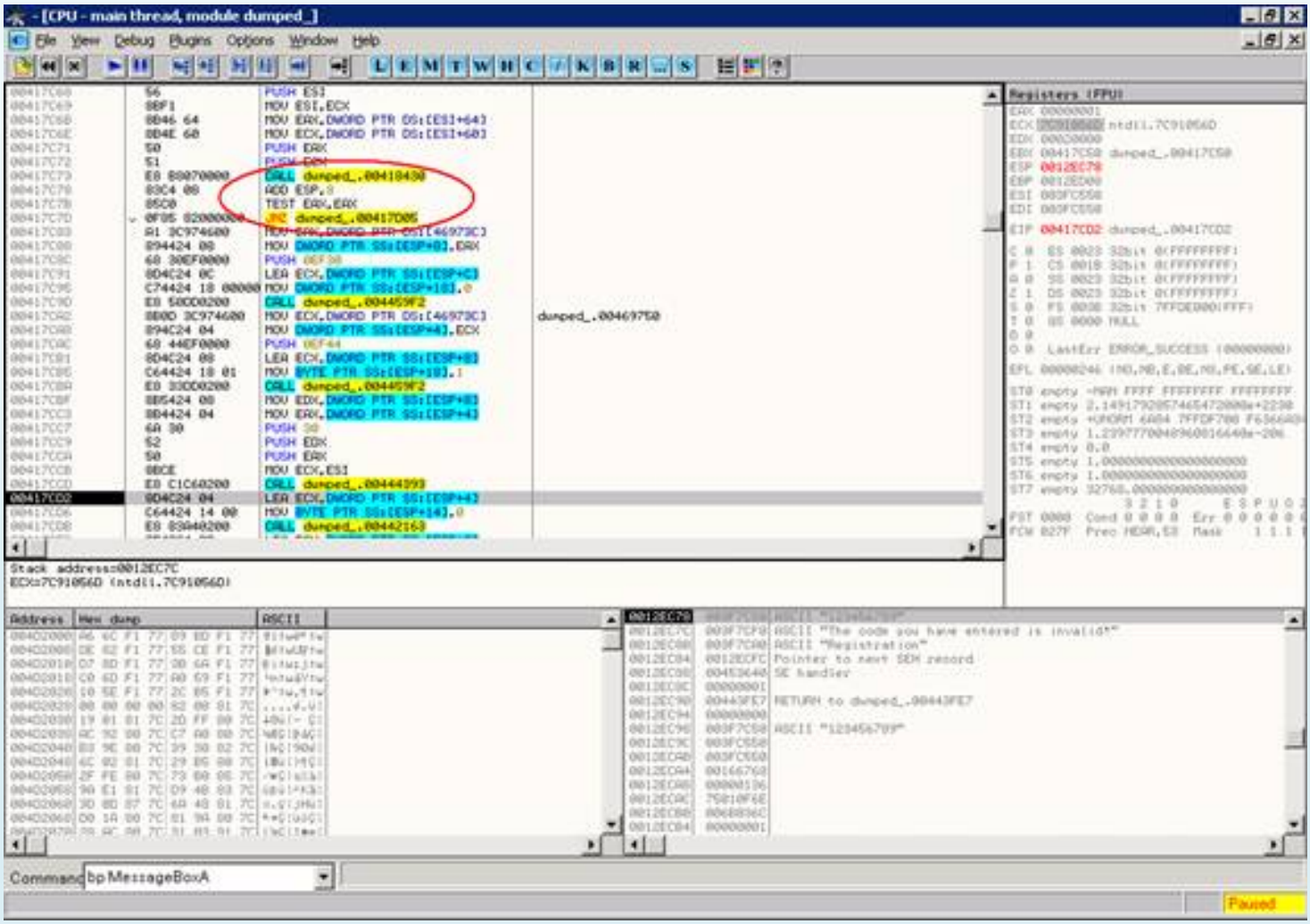

Imported Functions Found
rva:00056008 mod:advapi32.dll ord:01ED name:RegQueryValueA
rva:0005600C mod:advapi32.dll ord:01FB name:RegSetValueExA
rva:00056010 mod:advapi32.dll ord:01CF name:RegCreateKeyExA
rva:00056014 mod:advapi32.dll ord:01EE name:RegQueryValueExA
rva:00056018 ptr:00B76DFB
rva:0005601C mod:comctl32.dll ord:005B name:_TrackMouseEvent
rva:00056020 mod:comctl32.dll ord:0046 name:ImageList_ReplaceIcon
rva:00056024 mod:comctl32.dll ord:004B name:ImageList_SetBkColor
Show Invalid
Show Suspect
Auto Trace
Clear Imports
Log
rva:00056308 forwarded from mod:ntdll.dll ord:0097 name:RtlDeleteCriticalSection
Current imports:
0 (decimal:0) valid module(s)
1BD (decimal:445) imported function(s). (added: +1BD (decimal:+445))
(E (decimal:14) unresolved pointer(s)) (added: +E (decimal:+14))
Clear Log
IAT Infos needed
OEP 000312A7
IAT AutoSearch
RVA 00056000
Size 000006F8
New Import Infos (IID+ASCII+LOADER)
RVA 00000000
Size 00000028
Add new section
Options
About
Exit
Load Tree
Save Tree
Get Imports
Fix Dump

Well rùi, b i hours c u t If the NK then fix du m p. We đư C File du m ped_.exe. Run t h using it play. Ohlala, then success! N h like it up the nag this:



PART 2: Crack

Tieptheop antru h o C, P annaytat h h m uchiencrackfiled ped_.exe.LoadnovaoOlly, F9. At register, Enter: N a m e: REA; Code: 123456789. Back that in the l ai Olly, e place b p I run the MessageBoxA. Done back to reg, click O K. Again BP, veOlly. Ctrl + F9, to c h as Mr. Trinh click OK close m e s sagebox, veOlly edition F7. Trace live cra to 0x00417CD2



Chuyvungkhoanh, daylachocheckreg.Noreturneax = 1neuregok, conkhongfalse

vah i en m essageboxinvalid.Entervaoham0x00418430. A occodecuano, click tanhan t h i v italy dautiennoloadthu E nArmAccess.dll, timhamInstallK yva g e d oidecheckco eNeu khongtimt h aythu and iện, who khongtimduochamInstallKeyhaycheck s, n ot POSTPAY l ai r eax = 0 . However, if the patch hamnay (at 0x418492):

```
      00418490 33C0 XOR EAX, EAX
      00418492 5B POP EBX
00418493            C3              RETN
00418494            90              NOP
00418495            90              NOP
```

replace with:

```
00418490            33C0            XOR EAX,
                                    EAX
00418492            40              INC EAX
00418493            5B              POP EBX
```

```
00418494 C3 RETN
00418495 90 NOP
```

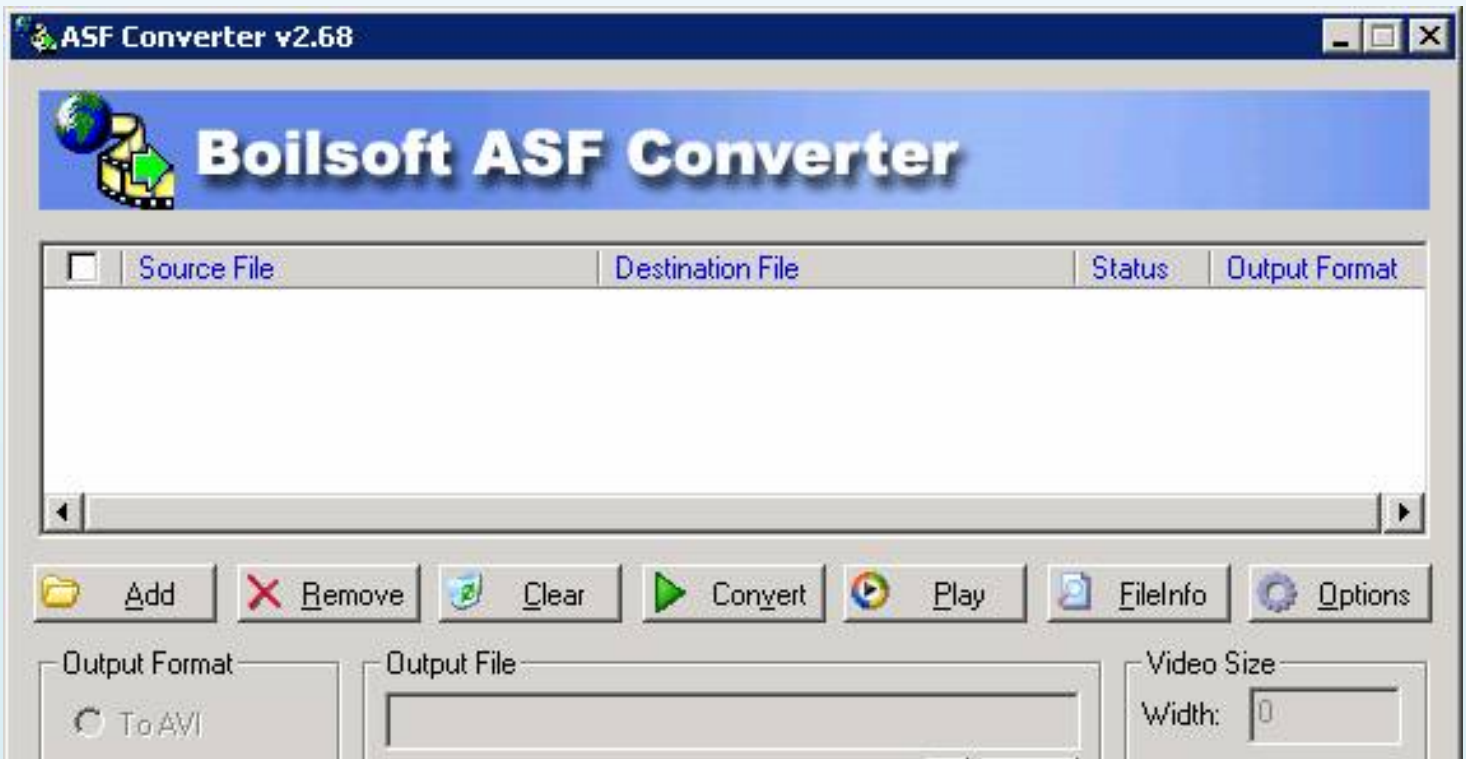
Ketquavankhongon, vichikhicheckkeyno m h oiok.Conkhirestartc're not ngtrinhvan chuareg. Uclakhik T h oidong, noconco m othamcheck the ua.Oday, the aiham00418430, tacuon a whimper en l m otchutse find t h ayngayhamki to mtranay, a run that i0x4183C0.Hamn italy cungloadArmAcesss, nhunggoihamVerifyK y.Tathuchienpatchhamnaytaigiat e r ị returns:

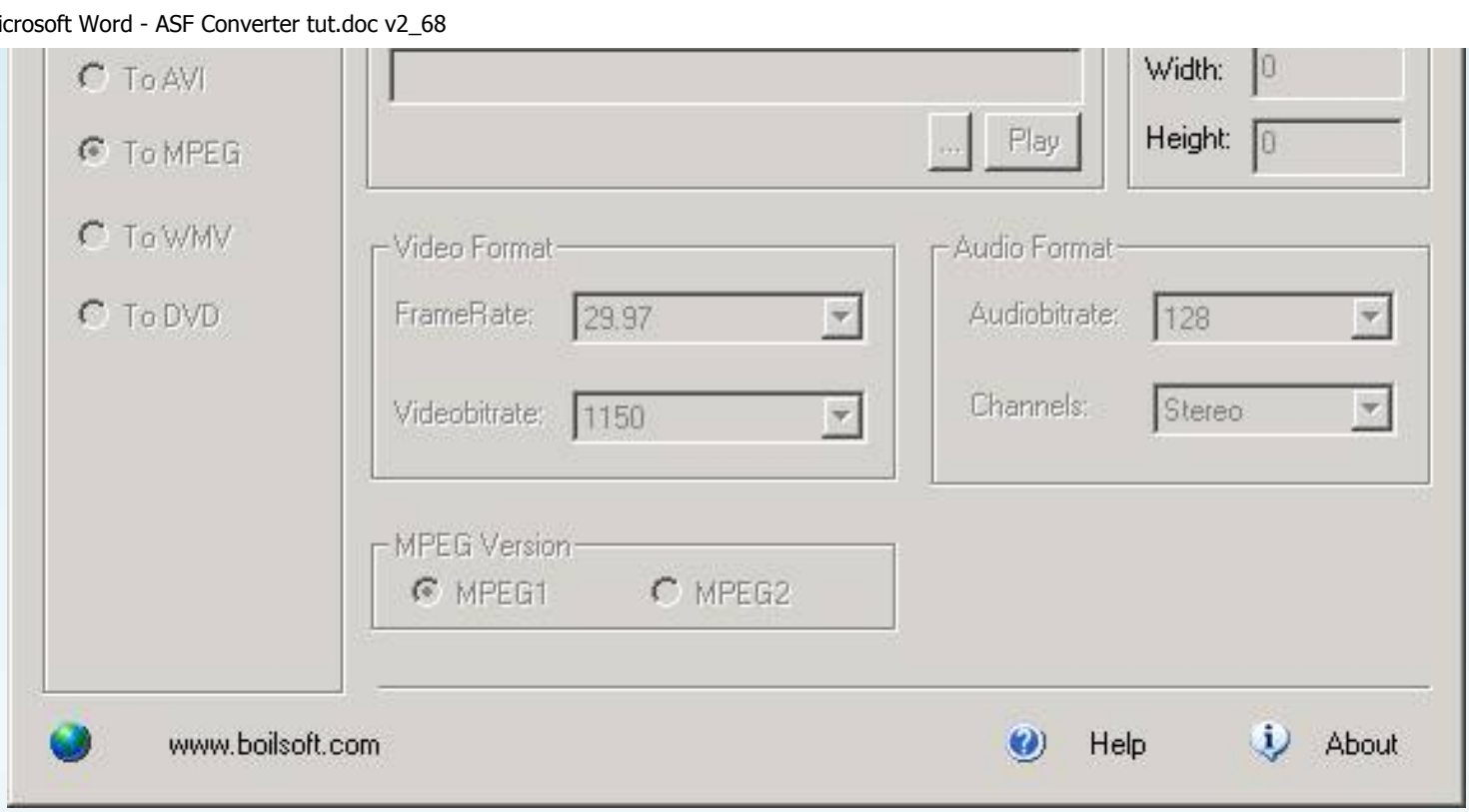
```
00418420            33C0              XOR EAX,
                                          EAX
00418422            5B                POP EBX
00418423 C3 RETN
00418424      90                      NOP
00418425      90                      NOP

Become:
00418420        33C0              XOR         EAX, EAX
00418422        40                INC         EAX
00418423        5B                POP         EBX
 00418424 C3 RETN
 00418425 90 NOP
```

Select area just patch (from 418,422 to 418,424), right click -> write to executa l b e-> selection. Dongwindowvua m m o.Ollyseh ie nlen SG h ơi, clickYes, save the file patch.exe.

OK, time to run the file patch.exe, we đư C:




To AVI
To MPEG
To WMV
To DVD
Width:
0
Height:
0
...
Play
Video Format
FrameRate:
29.97
Videobitrate:
1150
Audio Format
Audiobitrate:
128
Channels:
Stereo
MPEG Version
MPEG1
MPEG2
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He, daxong! G h i oneut interests, the cacbancudefilenaychaycu gdu debit c.Tuynhienneux the k m e h t h countries estimated that f ilenaytat h i s zec ủ anoco1500KB L . Dayladodu m praphandu the promise vatrongdococaphancodecuaarmkhongcandungtoi.Tacothebo fish cdoancodecua armdi to giamkich uo of the f ile:

PART 3: Reduce file size

Copy patch.exe to a more f ile, have called pact.exe m, m ofilenay table Editor of PE not LordPE, in the section, we have:

[Section Table]

Name	VOffset	VSize	ROffset	RSize	Flags
.rdata	00056000	0001135E	00056000	0001135E	C0000040
.data	00068000	00009C68	00068000	00009C68	C0000040
.text1	00072000	00050000	00072000	00050000	E0000020
.adata	000C2000	00010000	000C2000	00010000	E0000020
.data1	000D2000	00020000	000D2000	00020000	C0000040
.pdata	000F2000	00070000	000F2000	00070000	C0000040
.rsrc	00162000	00013000	00162000	00013000	40000040
.mackt	00175000	00002000	00175000	00002000	E0000060

Cacsection.text1. ADATA. Data1. PdatalacuaA r m, cothebodi.Tuynhien, xoakhong dungcachselamcrashfileexedantoikhongc h aydu debit c.Tase huchientungbu mind cnhu the following:

1) Record POSTPAY all the information section of the (default if they do not have to t h m in the f ile patch.exera to xemlai if necessary).

2) Comments italy 2 section . rsc (Resource CPC file) & . Ackt m (section add to I m your portRECdefixIAT). XemROffsetcua.rsc (laoffsettrenfileexe), C tadu 0x162000. By ROffset. Text is 0x72000.

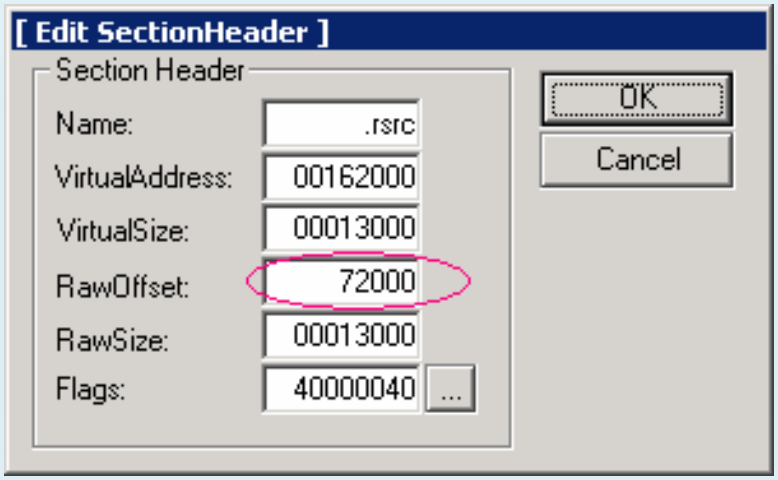
3) Open Hexworkshop the (hoachexeditornaytuythich), goto0x162000, f ile selectden end and cut more than

4) Tiepdengotodenoffset0x72000, selectdenc the ối f ile h ondelete and evil (whether aylax that a code share your ar m)

5) Now paste the datada cut in step 3 at the location 0x72000 and then save the file ái.

X e mlaiki the hthu mind cfileco pact.exe m: J nocon540KB. Tuynhieniconcua ilebi f m ráo at all, the

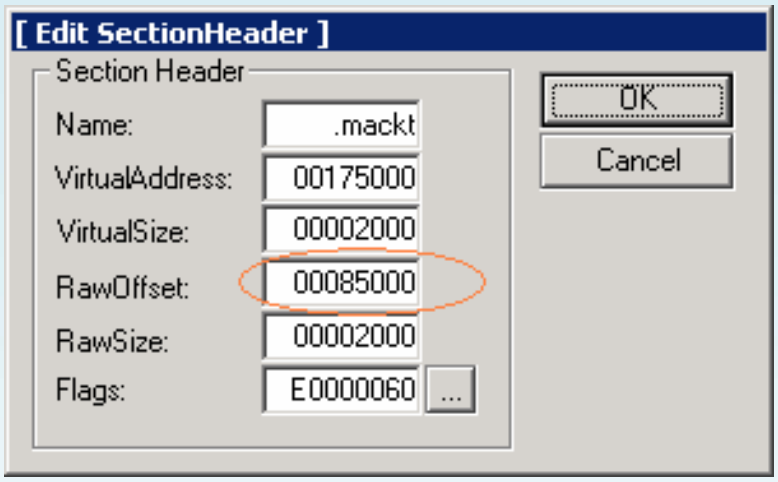
file also bicrash always. : Ddung worry, we will re-ua s PE Header t h ai l ì run it delicious. DungPEEditorc ủ aLordPE, m in the hansection, xoahetcacsectionheader. Text1. ADATA. Data1. Pdata go (rightclick, than the "wipesectionheader"). Audoeditsectionheadercua S. Rsc as follows:



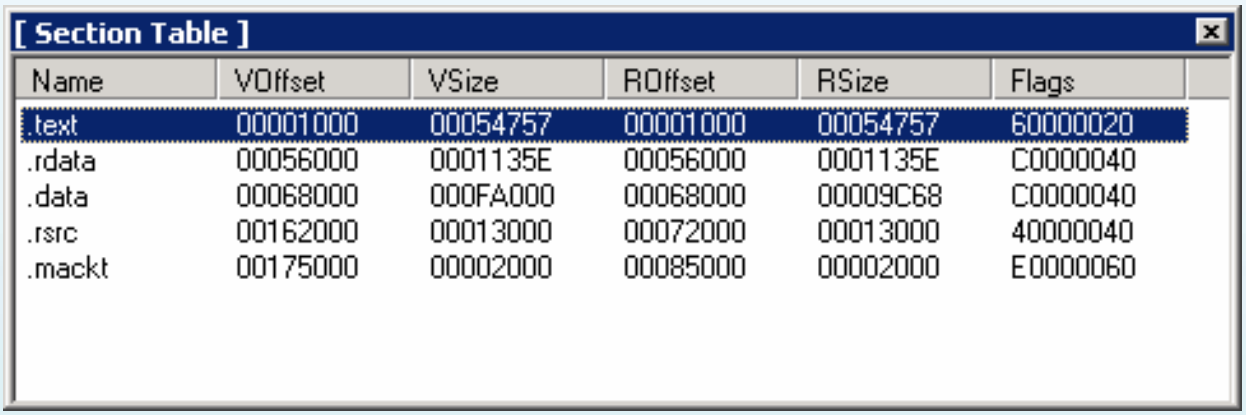
Vitadadoidu ieucua.rsrcve0x72000nentacanch the only part of hlaiRawOffsetcuano.Cac to other resources.

're More of you. Ackt m:

GiatriRawOffsetbandaucua. Cktla0x175000.Giat r m a I. Acktb m a ndaucua.rsrcla 0x162000. Dotadichuyencahaikhoi iennhau l, t r chonenvi ITU ơ n g gdoi iuachung not change. Khối. Rsrc 0x72000 in the en-> block. Ackt m will have a new RawOffset: 0x175000 - 0x162000 + 0x72000 = 0x85000



Tiepden, simply isolate nhlai now chthu of mind cvirtual uasection.data, dovungn than the ua.datava. rsrc not enough o C continuously. We have:. VOffset available data is 0x68000, VSize is 0x9C68-> đ A uoi the only area of memory. Data is 0x68000 + 0x9C68 = 0x71C68-> rounding is 0x72000 (because W i ndows Management the the page size mco m e 4K = 0x1000). Tacanch only to the hlaiVSizesaocho ị achicu number ủ a.datatrungvoidiac ic h idaucua. Rsrc is 0x162000, so the need to fix is: 0x162000 - 0x68000 = 0xFA000. N so damaged, the section of the same ối as follows:



Name	VOffset	VSize	ROffset	RSize	Flags
.text	00001000	00054757	00001000	00054757	60000020
.rdata	00056000	0001135E	00056000	0001135E	C0000040
.data	00068000	000FA000	00068000	00009C68	C0000040
.rsrc	00162000	00013000	00072000	00013000	40000040
.mackt	00175000	00002000	00085000	00002000	E0000060

Save the file you have i.Chay file pact.exe, Okie, it has a number of activities, the treatment with k t h o C as a 540K J If there is the press table aspack ai, h is the size C is the remaining 231K!. To the end is guided MUP and crack a SFConverter v2.68!

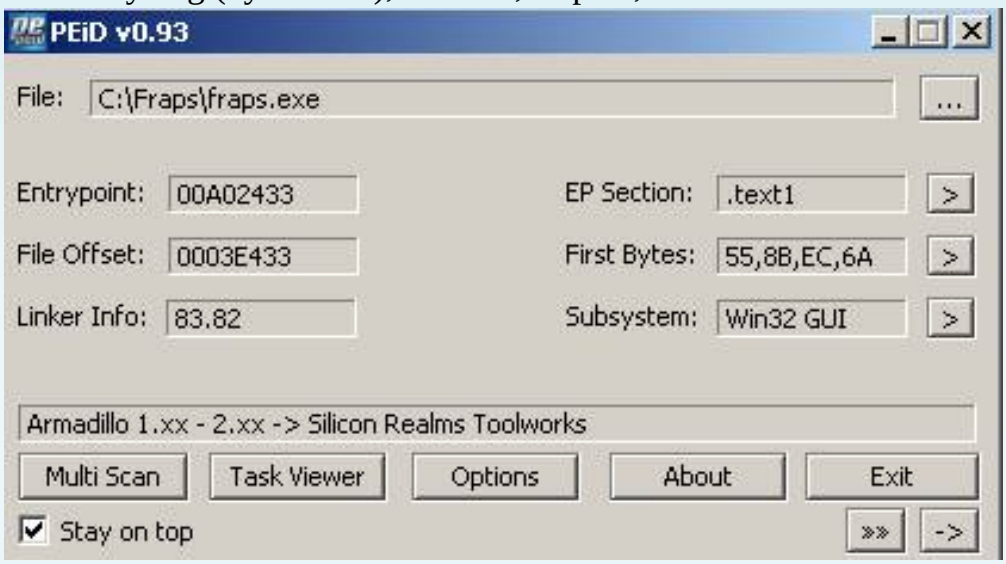
Thanx to:

Hacnho, Deux, has puter_Angel, Z o m bie, Moonbaby, RCA, kien m anowar, benina, TQN, the_lighthouse, Nini, hoadongnoi, ... and you!

W ritten by LightPhoenix (dat e: Sept., 5 th 2005)

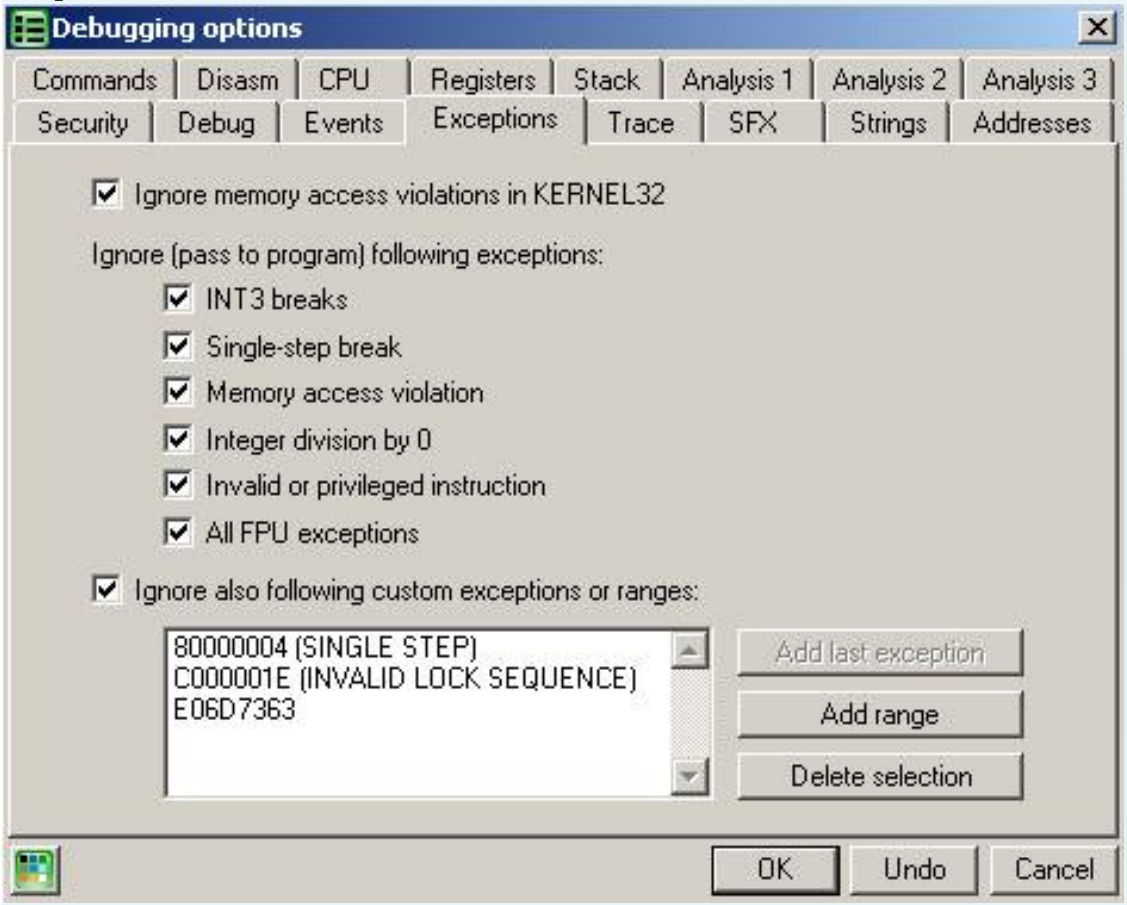
MUP_Armadillo_Fraps_Code_Splicing_ + _IAT_Elimination
tlandn

Target: Fraps (included in tut)
Packer: Armadillo
Tools: OllyDbg (by hacnho), LordPE, Imprec, ArmInline 0.4

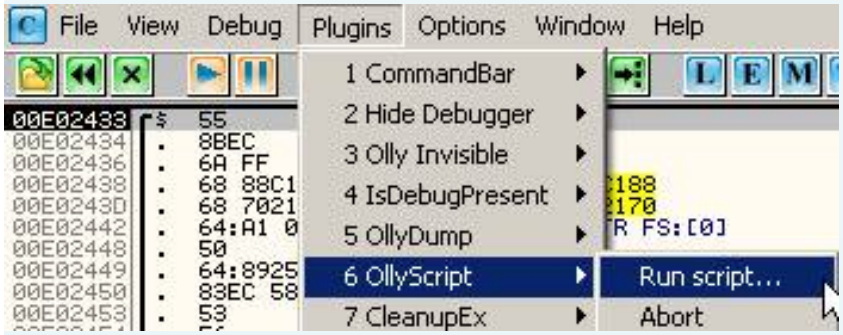


First we check the pack with what is. Using PEID:

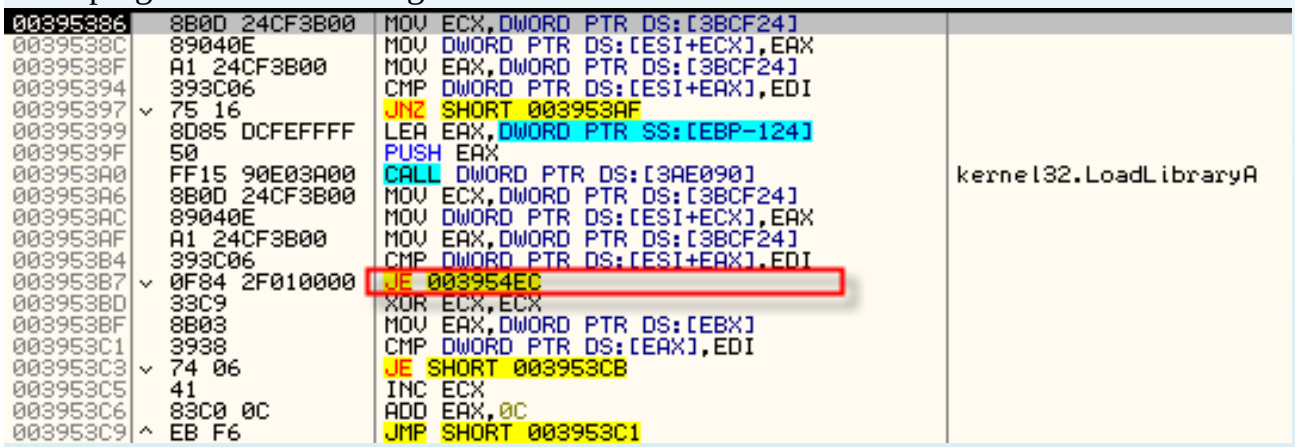
We see the pack in the Armadillo.
Using OllyDbg (hacnho by using a very good J) fraps.exe open the file. Press Alt-O. Edit the number as in the picture:



First we will jump to find magic patch. The goal is to make our IAT will complete.
For the fast, I will use the script by hacnho for magic jump (included in the tut). Using OllyScript plugin:

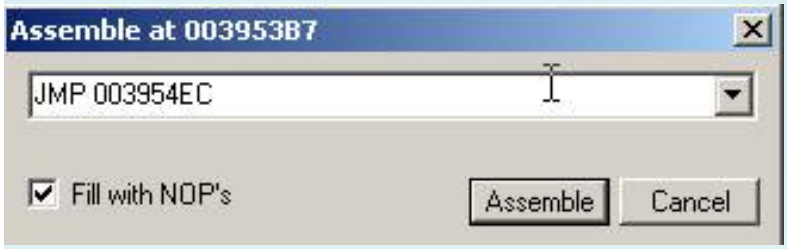


After plugin finished running. We will be here:

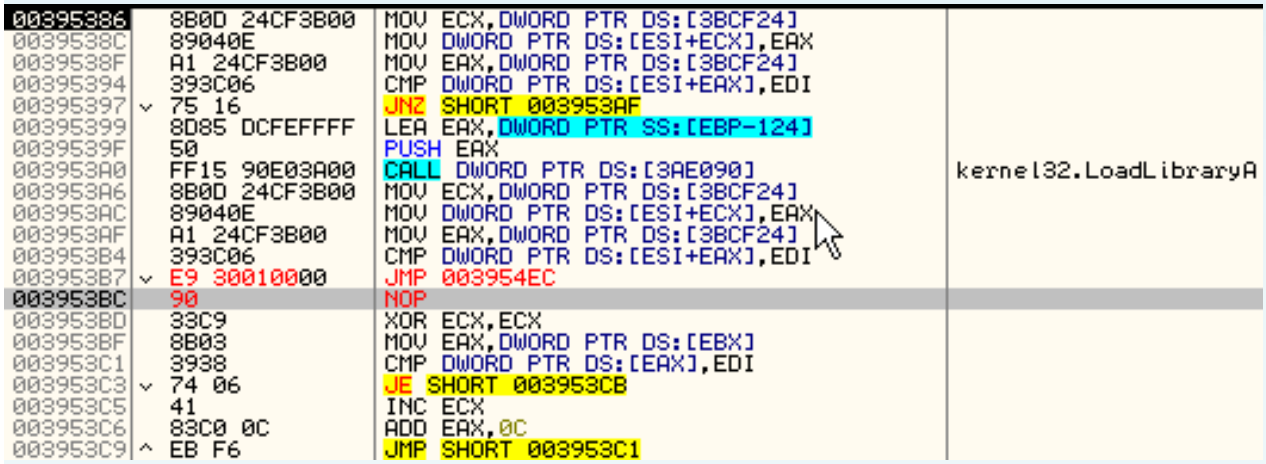


You note of Red's jump on the magic of us. We will revise the JMP 003954EC.

Click your cursor on the magic jump. Press Space. Enter JMP 003954EC:

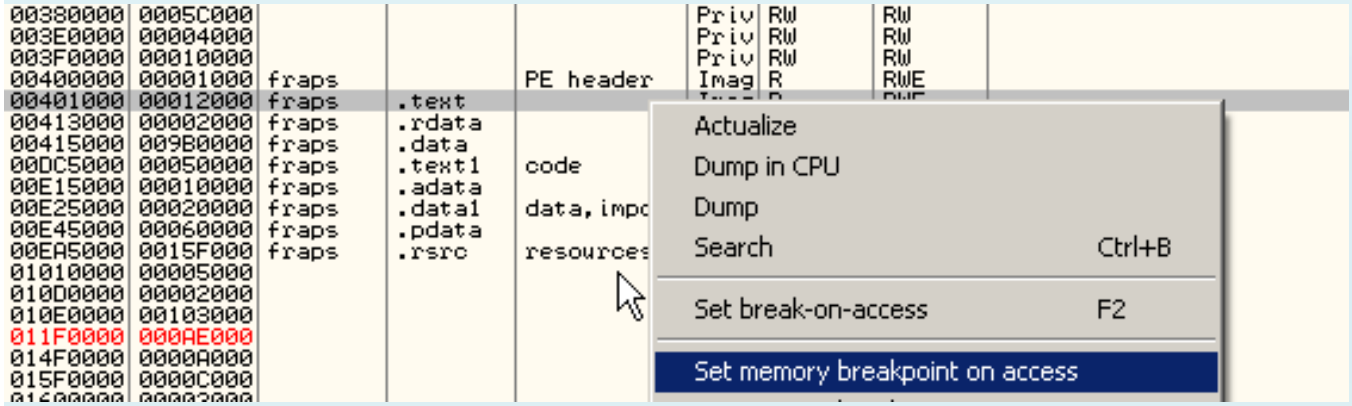


Click Asemble. We are:

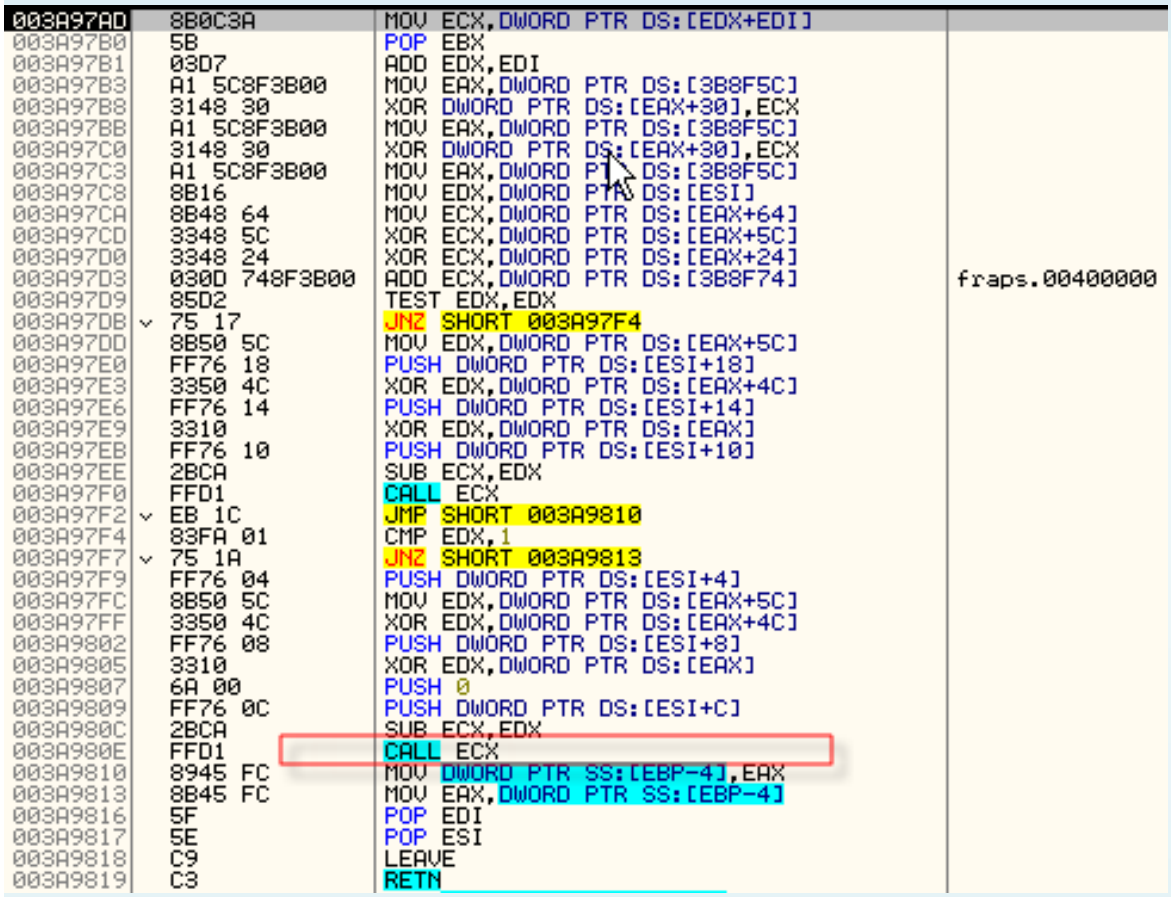


So once the Magic Jump.

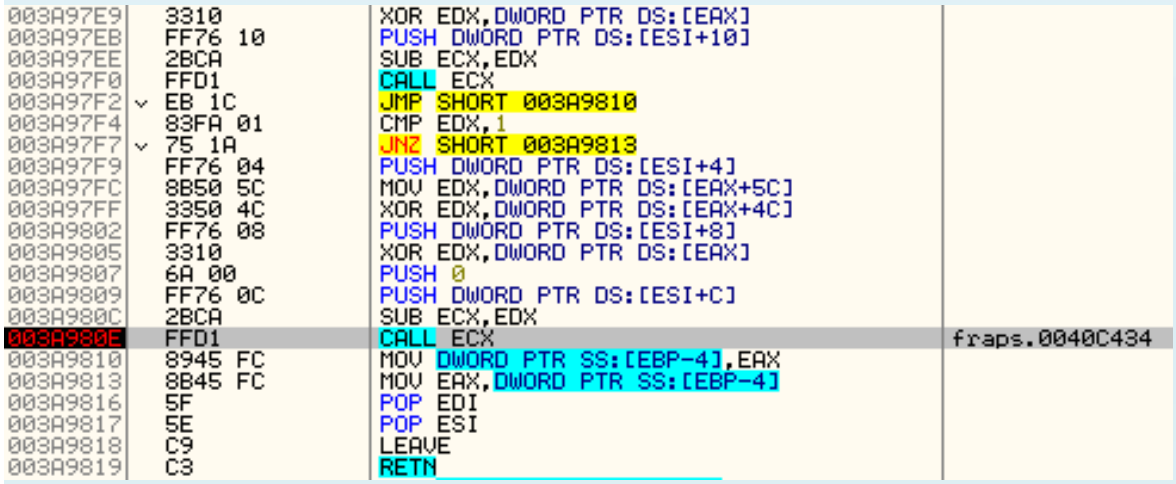
Press Alt-M to window "Memory Map". Set in Breakpoint section. Text:



Press Shift-F9. We here:



You note of red in the image above. Set a breakpoint in it (double-click the mouse on the line). Press F9. We in the line:



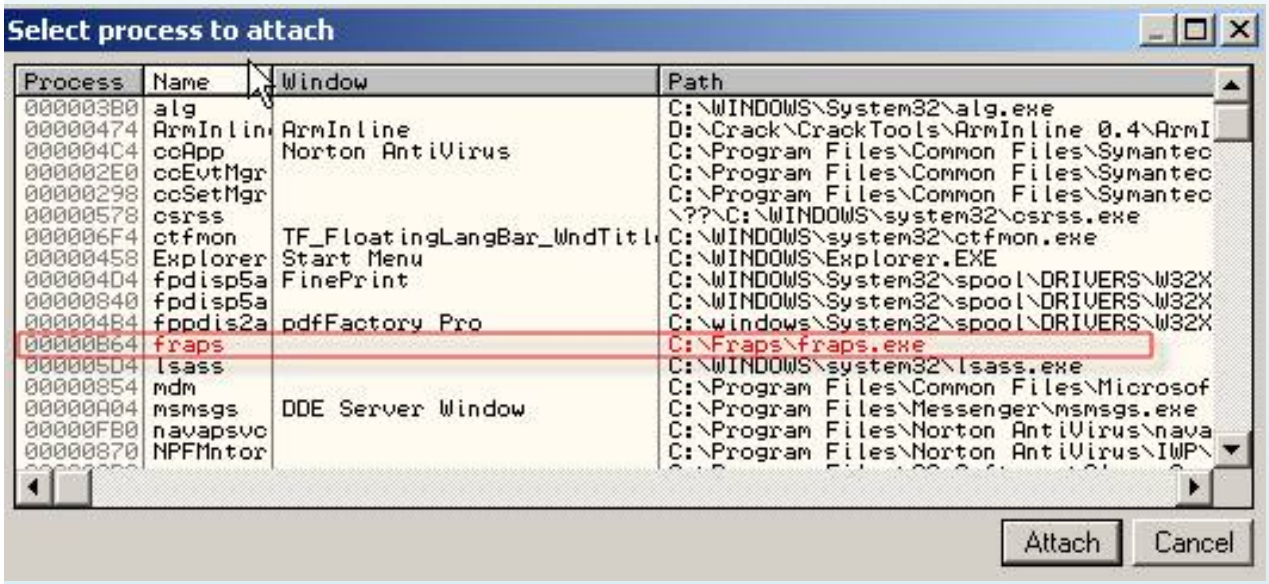
Press F7. We at J OEP

```
0040C434   55              PUSH EBP
0040C435   8BEC            MOV EBP,ESP
0040C437   6A FF           PUSH -1
0040C439   68 28334100     PUSH fraps.00413328
0040C43E   68 30E94000     PUSH fraps.0040E930
0040C443   64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
0040C449   50              PUSH EAX
0040C44A   64:8925 000000( MOV DWORD PTR FS:[0],ESP
0040C451   83EC 58         SUB ESP,58
0040C454   53              PUSH EBX
0040C455   56              PUSH ESI
0040C456   57              PUSH EDI
0040C457   8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
0040C45A   FF15 744B6F01   CALL DWORD PTR DS:[16F4B74]      kernel32.GetVersion
```

OEP: 0040C434

The next step we will fix Code Splicing and IAT elimination.

The first is the Code Splicing. Booting ArmInline 0.4. We need to find a process by PID Fraps we are running. In OllyDbg select File -> Attach. Make a red line:



Here I'm on B64 (your computer may be different). I B64 to enter the "Process ID" in ArmInline.

In OllyDbg click Cancel to close the window Attach. Press Alt-M. We will find the area of memory that are Splicing Code. Very easy. Section usually form 0xxx0000 and the last section under Fraps. Image to more easily understand:

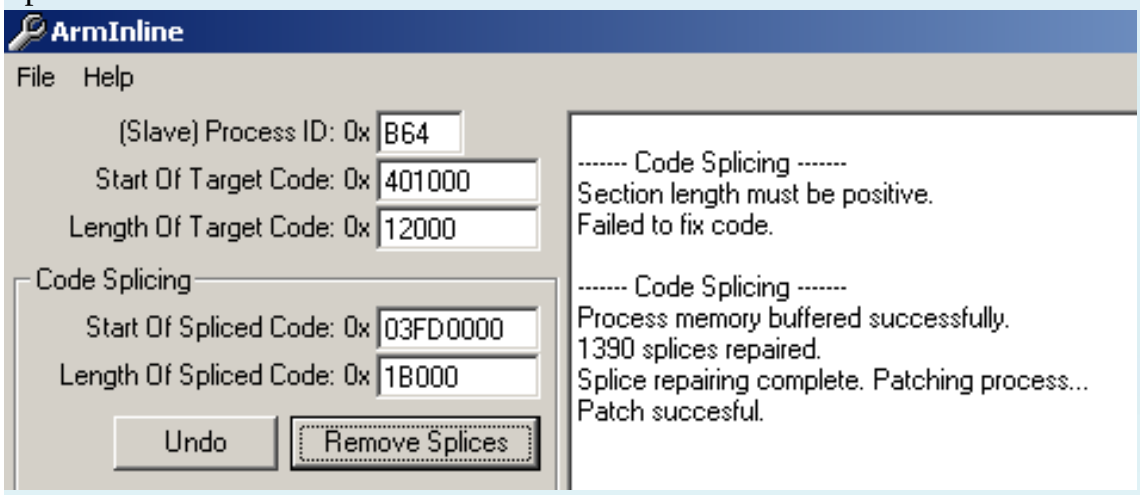
```
00400000 00001000 fraps                          Imag R     RWE
00401000 00012000 fraps  .text                   Imag R     RWE
00413000 00002000 fraps  .rdata                  Imag R     RWE
00415000 009B0000 fraps  .data                   Imag R     RWE
00DC5000 00050000 fraps  .text1  code            Imag R     RWE
00E15000 00010000 fraps  .adata                  Imag R     RWE
00E25000 00020000 fraps  .data1  data,import     Imag R     RWE
00E45000 00060000 fraps  .pdata                  Imag R     RWE
00EA5000 0015F000 fraps  .rsrc   resources       Imag R     RWE
01010000 00005000                                Map  R E   R E
010D0000 00002000                                Map  R E   R E
010E0000 00103000                                Map  R     R
011F0000 000B3000                                Map  R E   R E
014F0000 0000A000                                Priv RW    RW
015F0000 0000C000                                Priv RW    RW
01600000 00002000                                Map  R     R
01610000 0001D000                                Priv RW    RW
01630000 000AF000                                Priv RW    RW
016F3000 00002000                                Priv RW    RW
01710000 00006000                                Priv RW    RW
01720000 00001000                                Map  RW    RW
01730000 00001000                                Map  RW    RW
01740000 00039000                                Priv RW    RW
01940000 00001000                                Priv RW    RW
01950000 00004000                                Priv RW    RW
01960000 00010000                                Priv RW    RW
01D60000 00003000                                Priv RW    RW
01DF0000 00002000                                Map  R     R
01E00000 00001000                                Priv RW    RW
01F7E000 00002000                                Priv RW  Gua RW
03FD0000 0001B000                                Priv R E   RWE
5B0A0000 00001000 umdmxfrm       PE header       Imag R     RWE
```

Here I'm on the computer section and 03FD0000 length is 1B000. Enter the number on the item in the Code

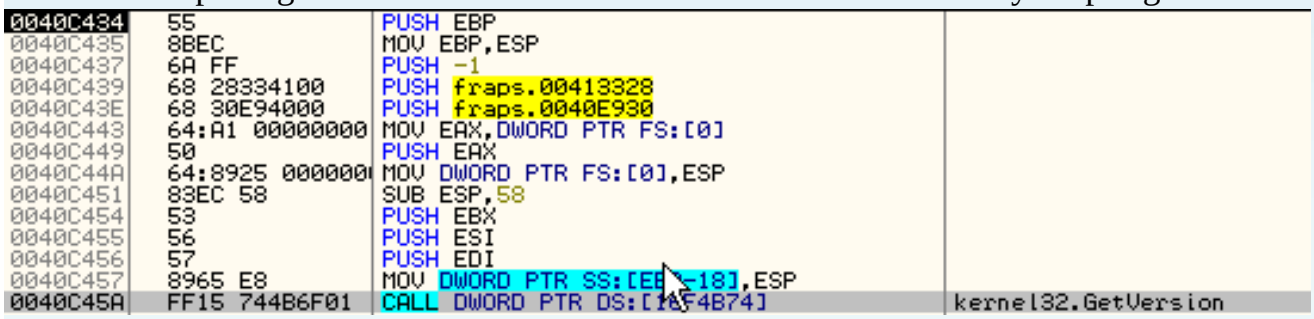
Splicing ArmInline. Also, we must find the section. Text and length of this section:

00400000	00001000	fraps			Imag	R	RWE	
00401000	00012000	fraps	.text		Imag	R	RWE	
00413000	00002000	fraps	.rdata		Imag	R	RWE	
00415000	009B0000	fraps	.data		Imag	R	RWE	
00DC5000	00050000	fraps	.text1	code	Imag	R	RWE	
00E15000	00010000	fraps	.adata		Imag	R	RWE	
00E25000	00020000	fraps	.data1	data,import	Imag	R	RWE	
00E45000	00060000	fraps	.pdata		Imag	R	RWE	
00EA5000	0015F000	fraps	.rsrc	resources	Imag	R	RWE	

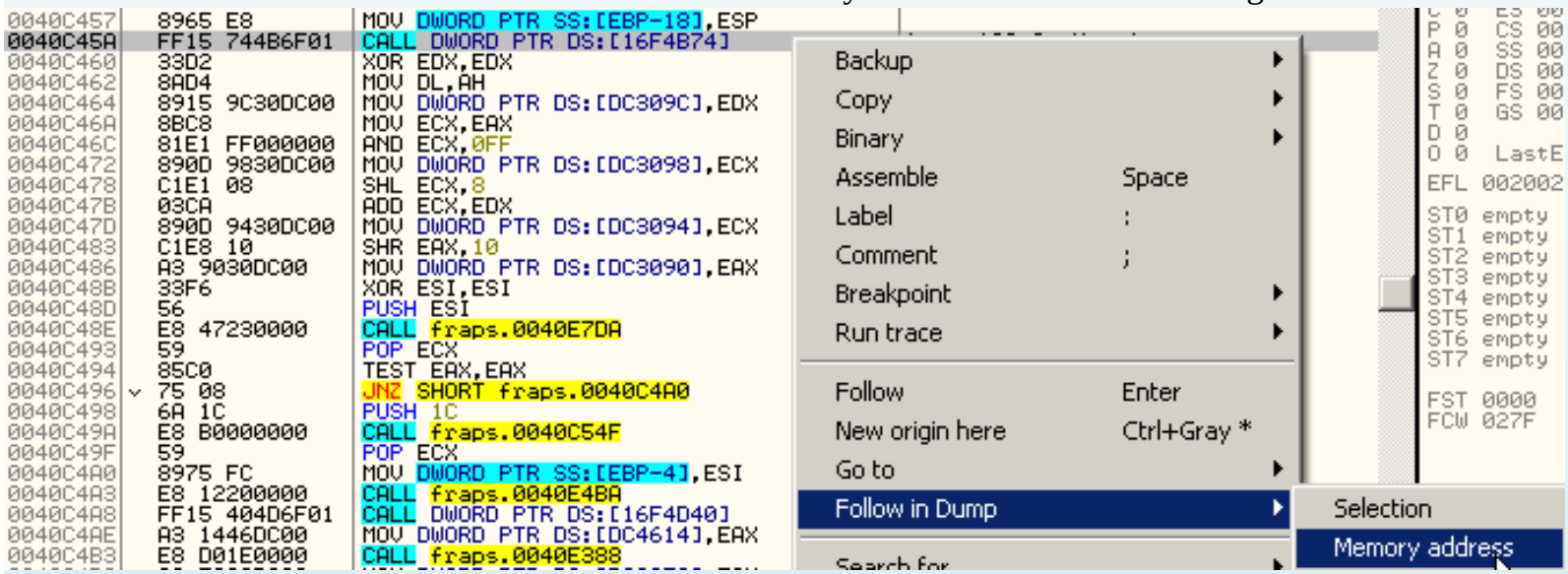
We have a section. Text: 401,000, length of 12,000. Enter the number on the ArmInline, click "Remove Splices":



Done Code Splicing. Now to IAT elimination. Close window "Memory Map" again. We are in OEP:



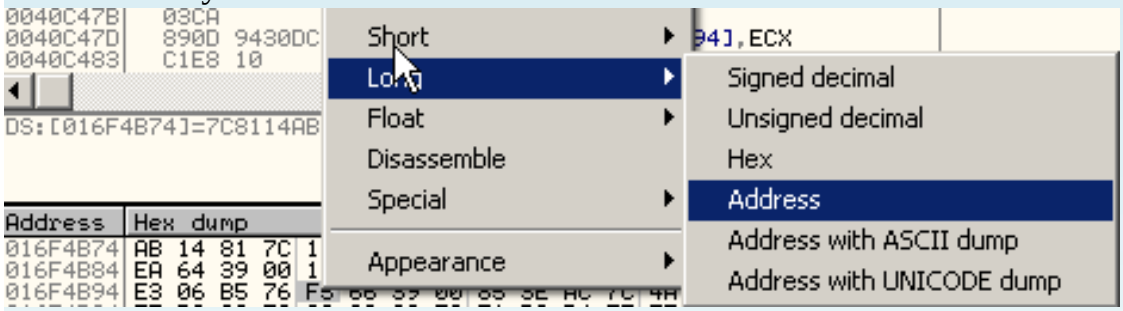
You note in 0040C45A we call GetVersion function. Click your mouse to select the image as:



In the window dump:

Address	Hex dump	ASCII
016F4B74	AB 14 81 7C 16 4F D9 77 7A 66 39 00 72 65 39 00	½¶ü¦_O┘wzf9.re9.
016F4B84	EA 64 39 00 19 99 80 7C C3 65 39 00 26 66 39 00	Ωd9.↓Öç¦├e9.&f9.
016F4B94	E3 06 B5 76 F5 66 39 00 85 3E AC 7C 4A BC D4 77	π♠╡vJf9.à>¼¦Jᵐ ᵗw
016F4BA4	57 B3 80 7C 80 38 82 7C 51 D0 D4 77 FE 65 39 00	W|Ç|Ç8é¦Qⁿᵗwⁿⁿe9.

To more easily visible. You must click the mouse to the window and select the dump in the picture:



We are:

Address	Value	Comment
016F4B74	7C8114AB	kernel32.GetVersion
016F4B78	77D94F16	USER32.TrackPopupMenu
016F4B7C	0039667A	
016F4B80	00396572	
016F4B84	003964EA	
016F4B88	7C809919	kernel32.GetCurrentThread
016F4B8C	003965C3	
016F4B90	00396626	
016F4B94	76B506E3	WINMM.mixerGetLineControlsA
016F4B98	003966F5	
016F4B9C	7CAC3E85	SHELL32.SHBrowseForFolderA
016F4BA0	77D4BC4A	USER32.MsgWaitForMultipleObjectsEx
016F4BA4	7C80B357	kernel32.GetModuleFileNameA

Here, that it must not over. In the window dump pulled up to the starting point IAT, we have:

016F4934	00000000	
016F4938	0003009D	
016F493C	01080192	
016F4940	003966F5	
016F4944	77D521AE	USER32.LoadIconA
016F4948	00396520	
016F494C	7C809943	kernel32.GetACP
016F4950	76B5C3FD	WINMM.waveInGetPosition
016F4954	77D4C5B8	USER32.ScreenToClient
016F4958	77D4CEFD	USER32.PeekMessageA
016F495C	7C811110	kernel32.HeapDestroy
016F4960	00396605	
016F4964	7C80EB3F	kernel32.CreateMutexA

The starting point is: 16F4944 (gray line, LoadIconA address on your computer may be different).

In the window dump drag down to the end points of the IAT, we have:

016F4DF8	77DD7883	ADVAPI32.RegQueryValueExA
016F4DFC	0039651E	
016F4E00	7C80ACB2	kernel32.IsProcessorFeaturePresent
016F4E04	003[illegible]5E6	
016F4E08	77D[illegible]55A	USER32.GetSubMenu
016F4E0C	00396624	
016F4E10	003965BA	
016F4E14	00396672	
016F4E18	0039666C	
016F4E1C	7C810DA6	kernel32.SetFilePointer
016F4E20	009D0004	fraps.009D0004

End points: 16F4E1C (gray line, SetFilePointer).

In summary:

IAT

The starting point: 16F4944

End points: 16F4E1C

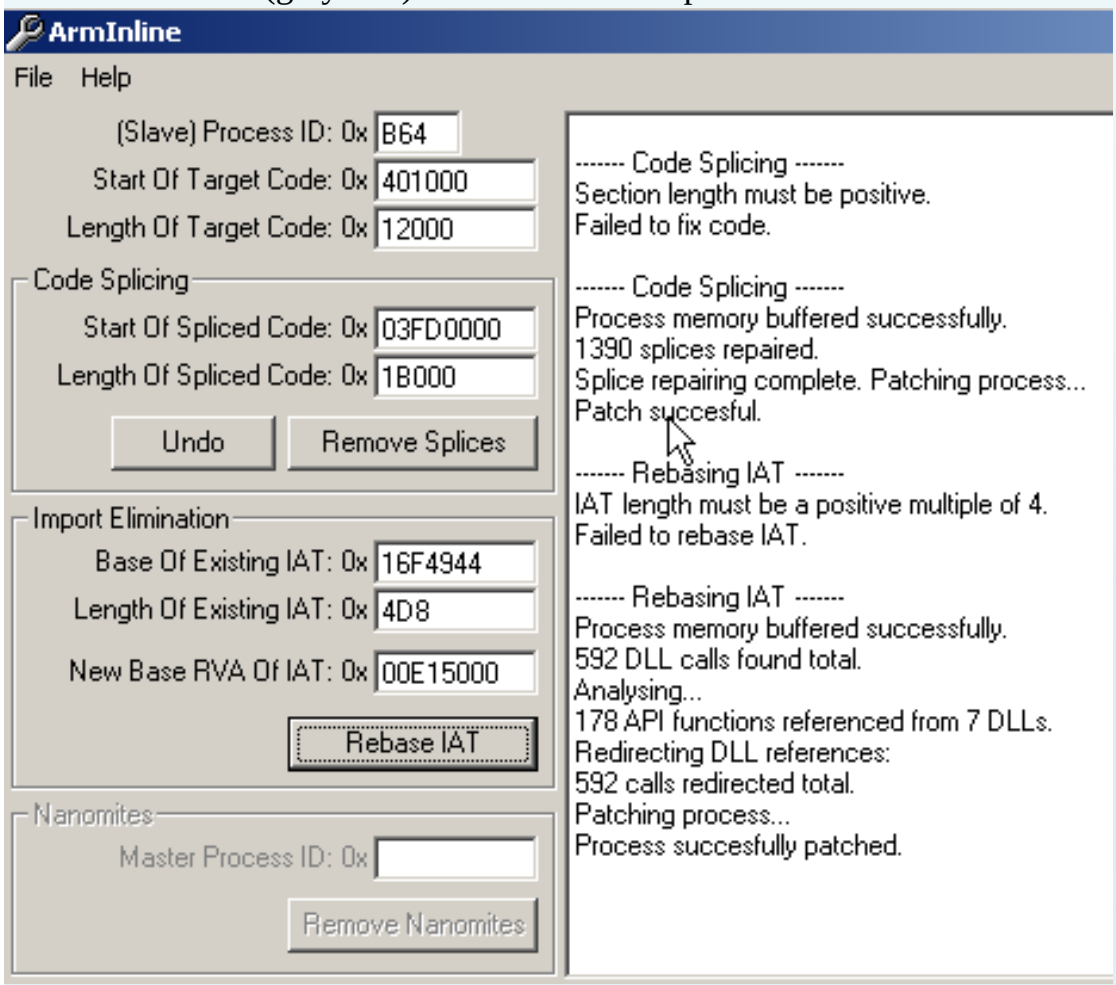
Length: 16F4E1C - 16F4944 = 4D8

Enter the number on the ArmInline (just starting point and length).

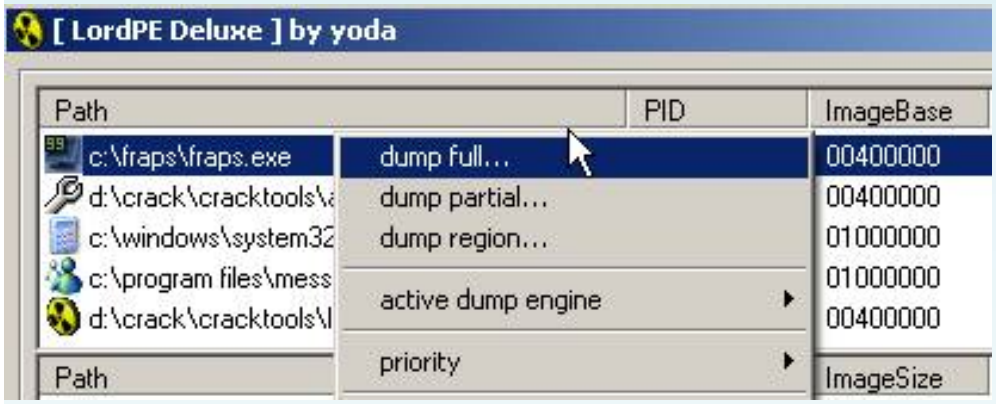
We also need a number where more ArmInline to move to the IAT, we will select that section. ADATA. In OllyDbg press Alt-M

00400000	00001000	fraps		
00401000	00012000	fraps	.text	
00413000	00002000	fraps	.rdata	
00415000	009B0000	fraps	.data	
00DC5000	00050000	fraps	.text1	code
00E15000	00010000	fraps	.adata	
00E25000	00020000	fraps	.data1	data,import
00E45000	00060000	fraps	.pdata	
00EA5000	0015F000	fraps	.rsrc	resources

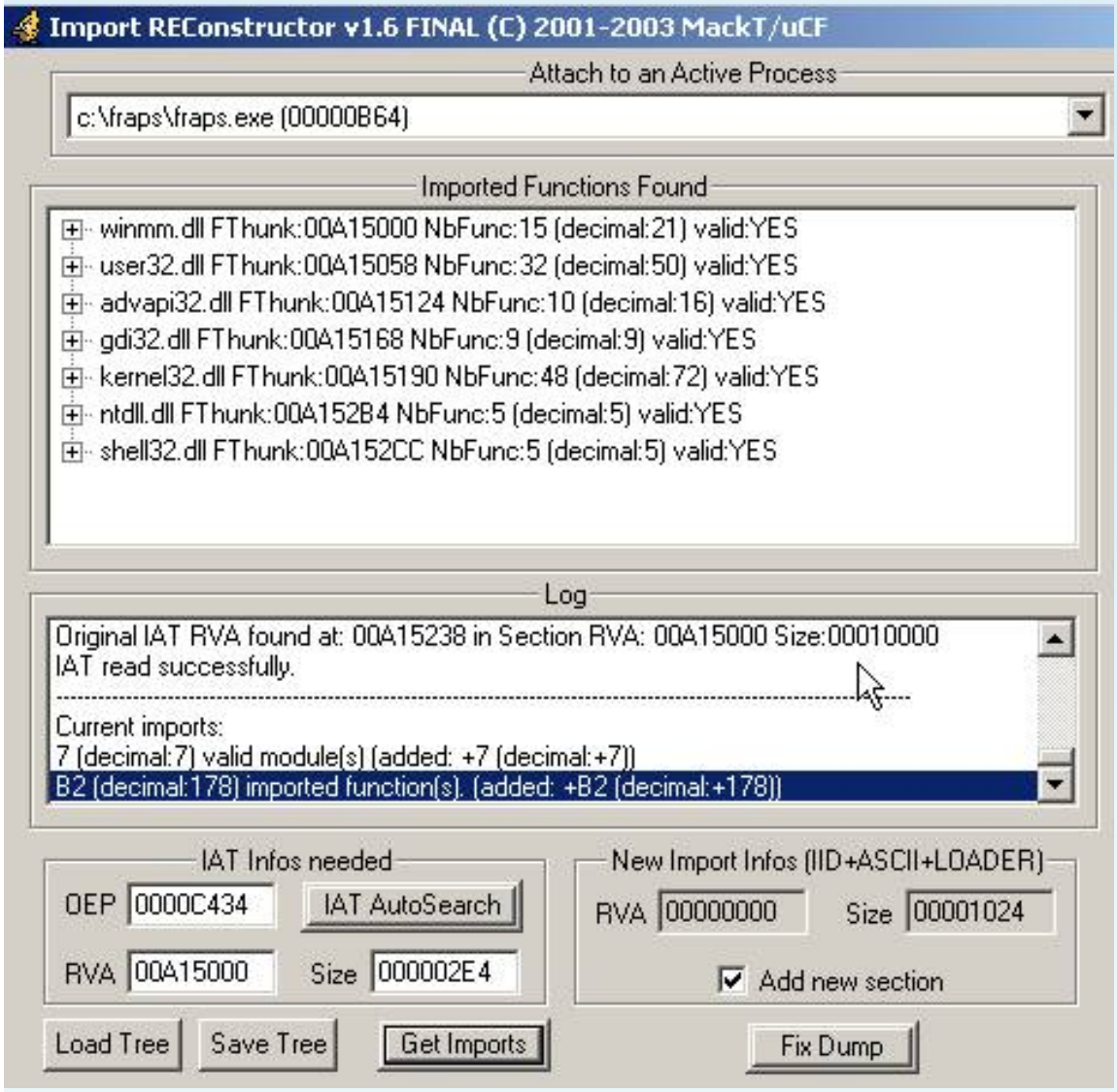
Section. ADATA (gray line): 00E15000. Enter parameters to ArmInline as following, click Rebase IAT:



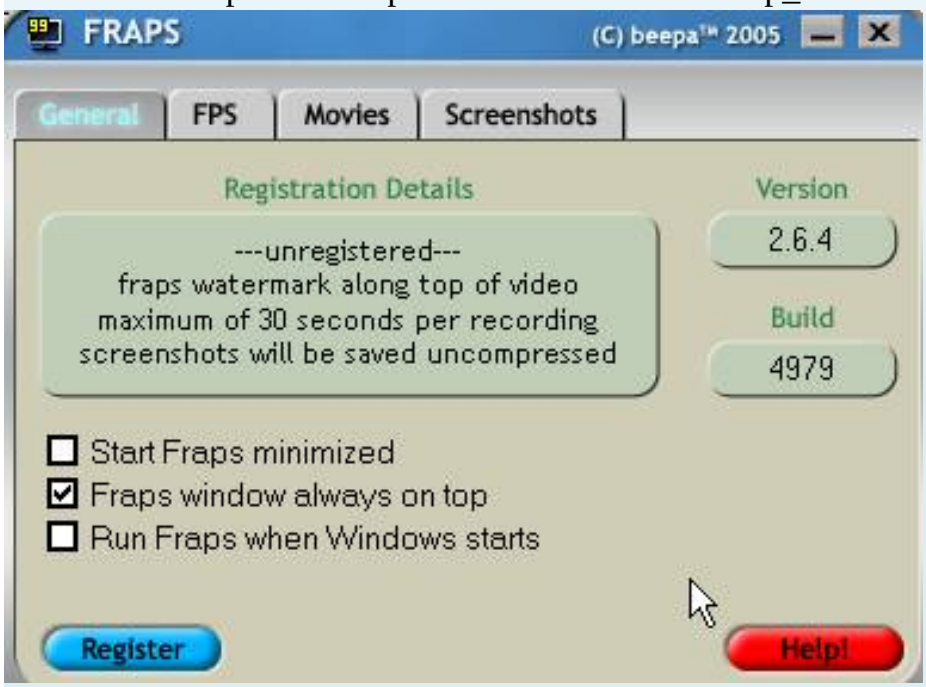
Now we will use to LordPE dump file. Open LordPE, dump:



Name the file is dump.exe. Open Imprec, fill OEP: C434. Click "IAT AutoSearch," OK, "Get Import":



Click "Fix dump" file dump.exe choose. We are dump_.exe file. Test J

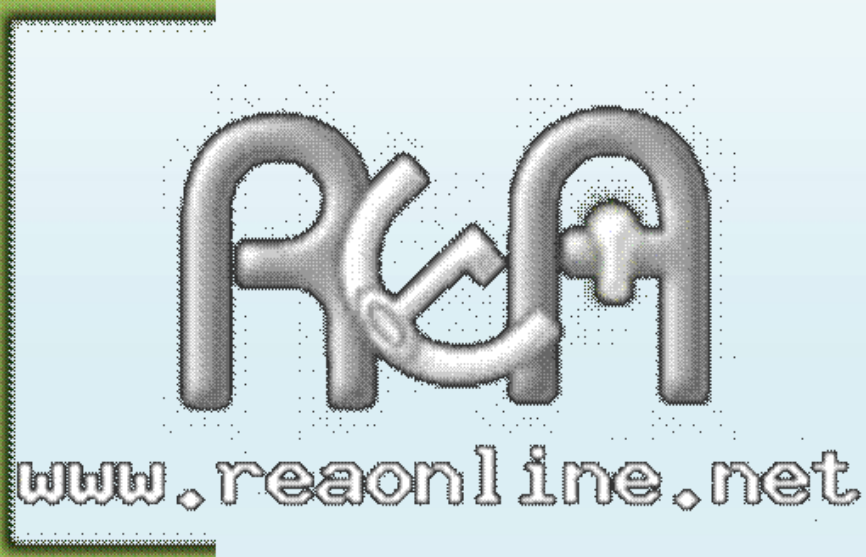


Have Fun!
tlandn

Greetz: All VCT memberz, and you ... J

2008

[MUP Armadillo v4.64 Small Case]



kienmanowar

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6/19/2008

Contents

I. Introduction

Welcome brother, is the second article in my post about how to unpack Armadillo. This is because the reeve tuts4you, they have found on Armadillo v4.64 which is the right target which I replied in the previous version 4.62 arm. Down to try to try and found it still used as the Protect first, but after mup complete the run is not as soft for too. After you ask the brothers to their new memory forgotten one .... Add to that the promise to be tricky should not be disappointed. This article is nothing but the subliminal hope it provides some useful information for the brothers! For the brother and the higher the firm is also pleased to read J

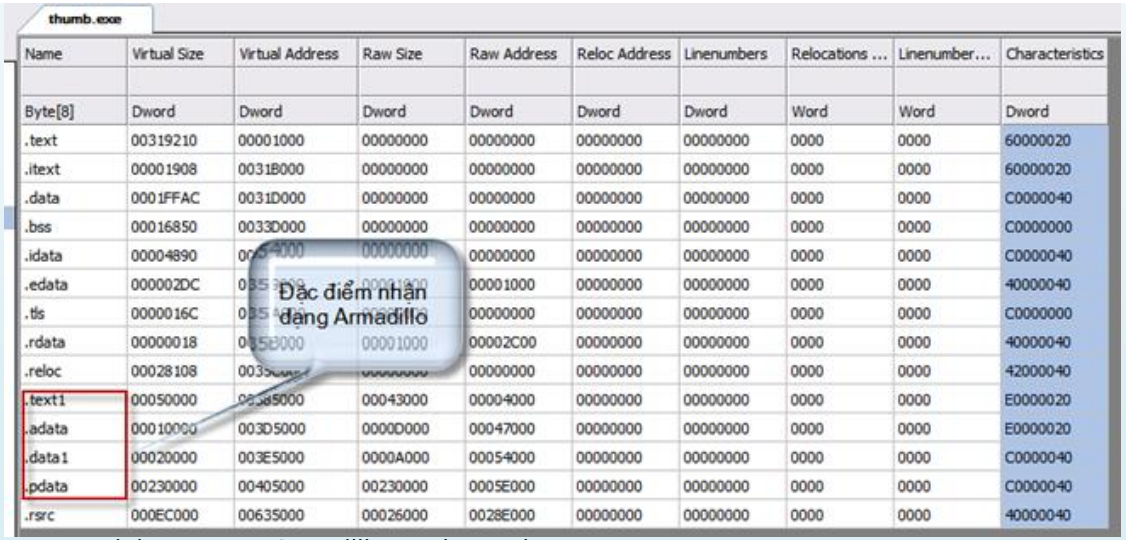
II. The use Tools

Posts using the following:

1. OllyIce (ver **2008.1.1): This was introduced in the REA, include it available to plug can help brothers bypass the mechanism of anti-debug Armadillo**
2. Armadillo Find Protected V1.8
3. ArmaDetach v1.31
4. ArmInline v0.96f (Eng)
5. Task LordPE or Explorer.
6. ImportRec v1.7c Final.
7. CFF Explorer.

III. Manual unpack Armadillo v4.64

1. Seeking information on Target.



Name	Virtual Size	Virtual Address	Raw Size	Raw Address	Reloc Address	Linenumbers	Relocations ...	Linenumber...	Characteristics
Byte[8]	Dword	Dword	Dword	Dword	Dword	Dword	Word	Word	Dword
.text	00319210	00001000	00000000	00000000	00000000	00000000	0000	0000	60000020
.itext	00001908	0031B000	00000000	00000000	00000000	00000000	0000	0000	60000020
.data	0001FFAC	0031D000	00000000	00000000	00000000	00000000	0000	0000	C0000040
.bss	00016850	0033D000	00000000	00000000	00000000	00000000	0000	0000	C0000000
.idata	00004890	00[illegible]	00000000	00000000	00000000	00000000	0000	0000	C0000040
.edata	000002DC	00[illegible]	[illegible]	00001000	00000000	00000000	0000	0000	40000040
.tls	0000016C	00[illegible]	[illegible]	00000000	00000000	00000000	0000	0000	C0000000
.rdata	00000018	00[illegible]	00001000	00002C00	00000000	00000000	0000	0000	40000040
.reloc	00028108	00[illegible]	[illegible]	00000000	00000000	00000000	0000	0000	42000040
.text1	00050000	00[illegible]5000	00043000	00004000	00000000	00000000	0000	0000	E0000020
.adata	00010000	003D5000	0000D000	00047000	00000000	00000000	0000	0000	E0000020
.data1	00020000	003E5000	0000A000	00054000	00000000	00000000	0000	0000	C0000040
.pdata	00230000	00405000	00230000	0005E000	00000000	00000000	0000	0000	C0000040
.rsrc	000EC000	00635000	00026000	0028E000	00000000	00000000	0000	0000	40000040

Next we need to check to see this program pack in as many Armadillo version and protect the mechanism is applied to it to the power of that deal. Open Armadillo Find Protect v1.8, then drag & drop target to be one of the following information:

17-06-2008 14:19:01 <------- ------->
C: \ Program Files \ stg \ thumb \ thumb.exe
- Protected Armadillo
Protection system (Professional)
- <Protection Options>
Debug-Blocker
CopyMem-II
Enable elimination Import Table
Enable Strategic Code Splicing
Enable Nanomites Processing
- Key <Backup Options>
Variable Backup Keys
- <Compression Options>
Best / Slowest Compression
- <Other Options>
- Version 4.64 22January2007
- Elapsed Time 00h 00m 02s 093ms

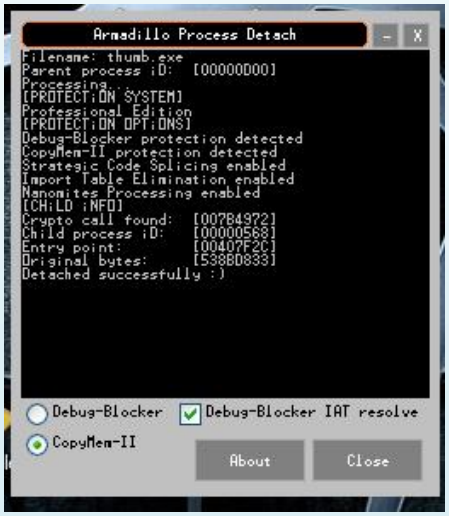
Ui chà enough of his face from Debug-blocker to the floor last Nanomites, so here are tired. Ok this is the collection of information is finished, we carried out any work.

2. Through face CopyMemII and DebugBlocker

If his children have read messages before the MUP Armadillo 5:42 will see if we play the manual is very tired and oải. So in this Tutor I applied the tools available to reduce the work load already have the order before.

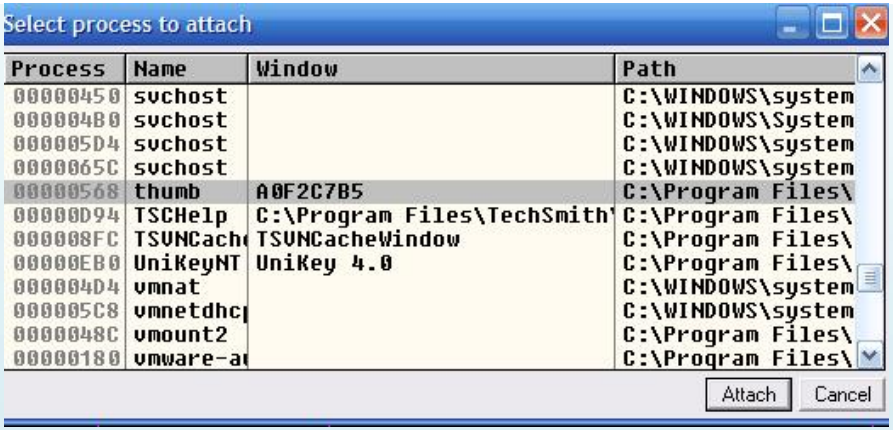
First load the program and select ArmaDetach v1.31 as follows:

Then drag & drop target by us to:

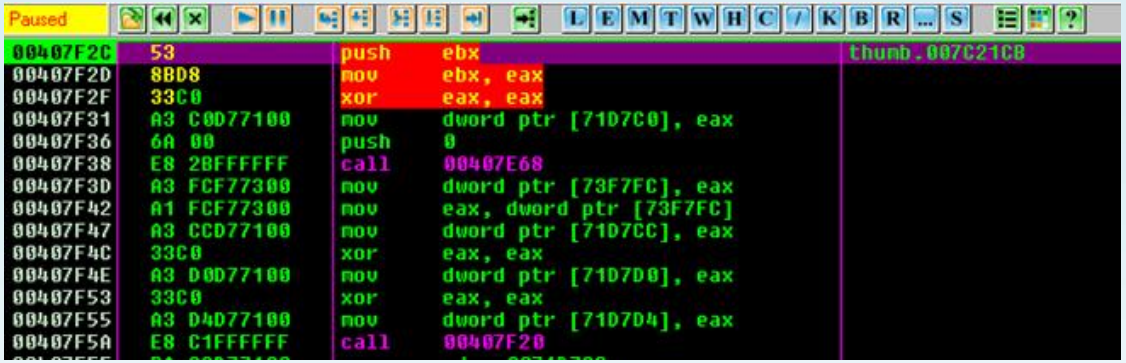



```
[CHILD Info]
Crypto call found: [007B4972]
Child process ID: [00000568]
Entry point: [00407F2C] t o EP
Original bytes: [538BD833]
```

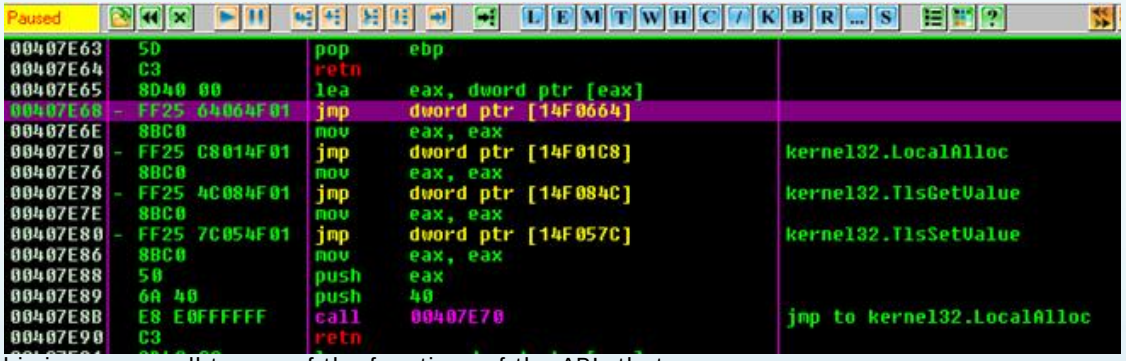
After implementation of the above is officially over we face **Debug-blocker** and then **CopyMem2.** Now the load and Olly Attach child process to:



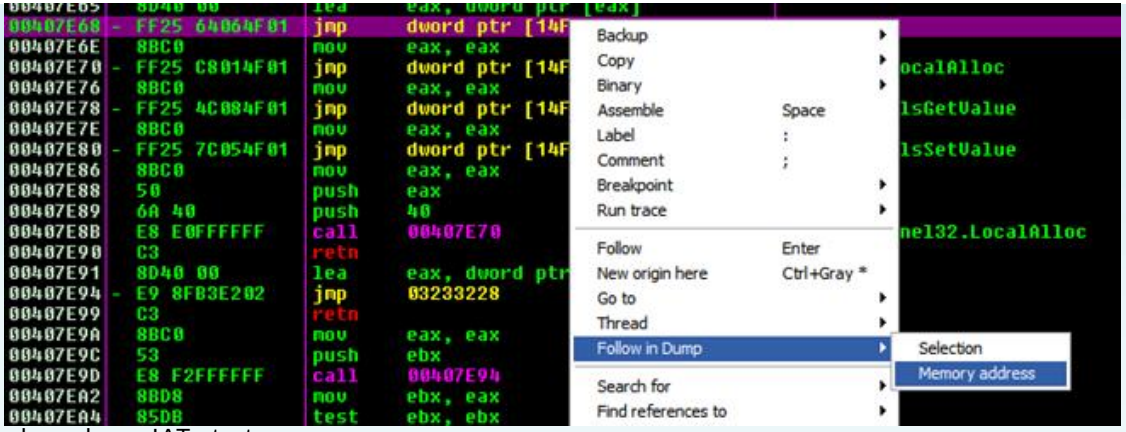
F9 and F12, and then edit the EP in bytes:



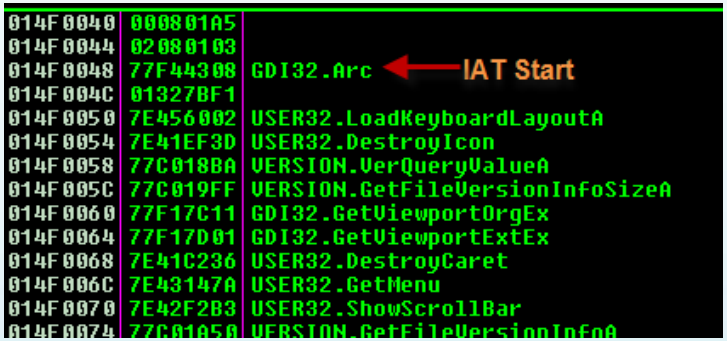
Khúc them and defeat CopyMem2 DebugBlocker very gently but do not have to waste any dew J . Khuc next restore the IAT to target, we must first locate the **IAT Start, End IAT** and the **IAT** has **Size.** You have to notice under orders Call EP not: `00407F38 E8 2BFFFFFF call 00407E68`. Select it and press Enter to follow, to me here:



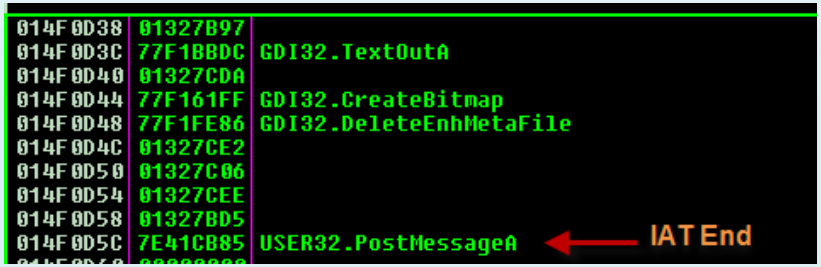
Ola something there, no doubt what this is more a call to one of the functions of the API, that function is what we will not know. One of the things have, and mouse to select the following:



At window dump scroll mouse over we have been IAT start:



Scroll down we have IAT End:

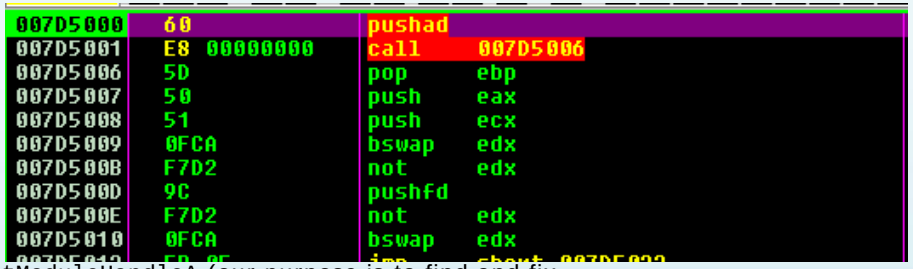


Summarized the end we have:

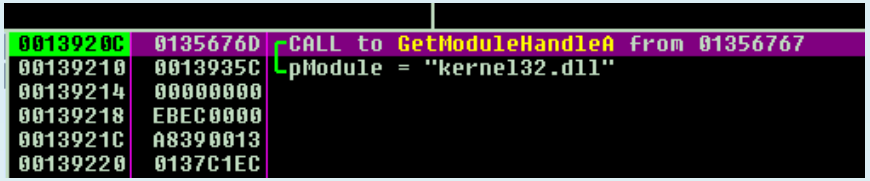
```
014F0048 77F44308 GDI32.Arc <== IAT Start
014F004C 01317BF1
014F0050 7E456002 USER32.LoadKeyboardLayoutA
014F0054 7E41EF3D USER32.DestroyIcon
... ... ... ... ...
... ... ... ... ...

014F0D5C 7E41CB85 USER32.PostMessageA
014F0D60 00000000
014F0D64 00000000 <== End IAT (2 back down position to ensure ArmInline find
the right)

IAT IAT Size = End - Start = IAT 0xD1C
```

With information such as the time when we are looking for **Full IAT.** Open the ArmaDetach v1.31

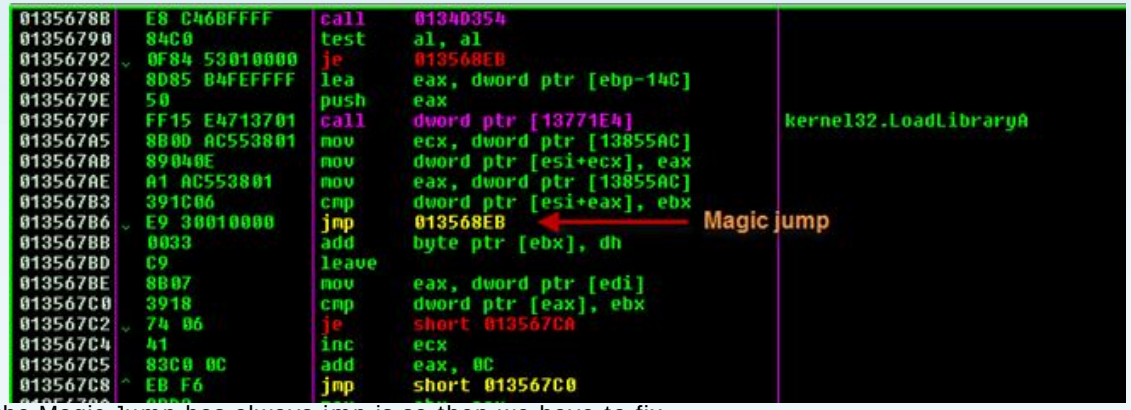
but this time only select Debug-blocker and Debug-Blocker IAT resolve it. Then drop into the target. Next use a new Olly to Attach child proc, fix the bytes.



After recover bytes in the EP, set in a hwbp `GetModuleHandleA` (our purpose is to find and fix Magic Jump-for versions arm use under 5 magic jump to cancel our IAT). Once in place hwbp `GetModuleHandleA`, press Shift + F9 to implement the program until you see signs in the window, the Stack stop:

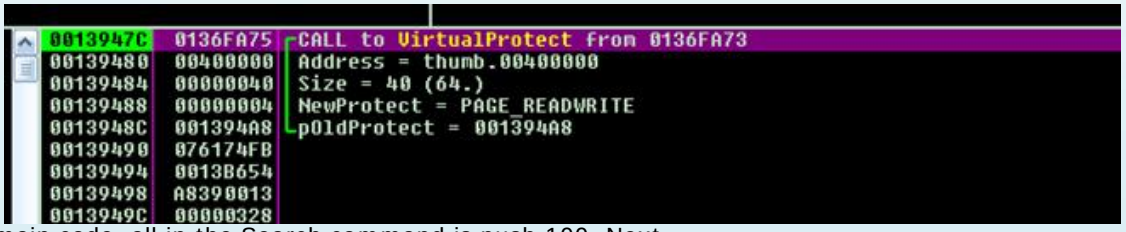


Then press Ctrl + F9 to us here:

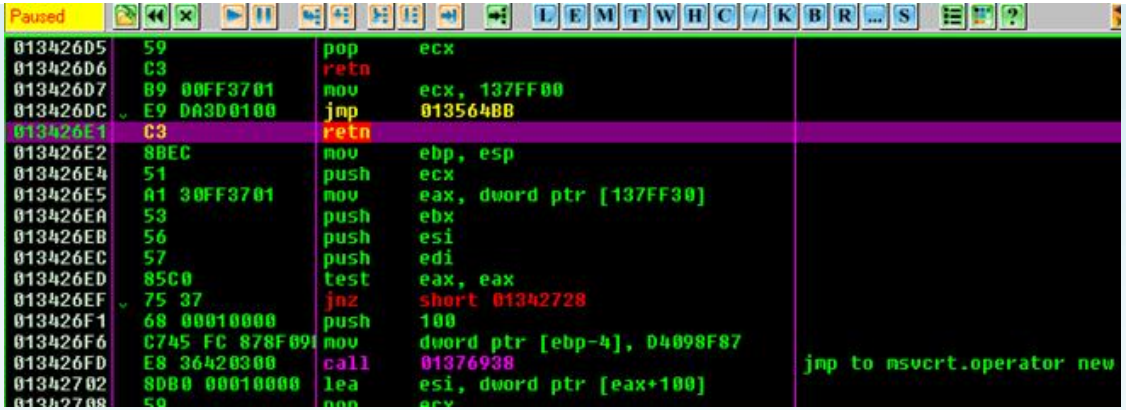


According to the pictures we see on the Magic Jump has always jmp is so then we have to fix, and from the ability of the IAT program have not been canceled J . Next is to find OEP by placing in a hwbp `CreateThread` (remember to remove hwbp in `GetModuleHandleA` farewell).

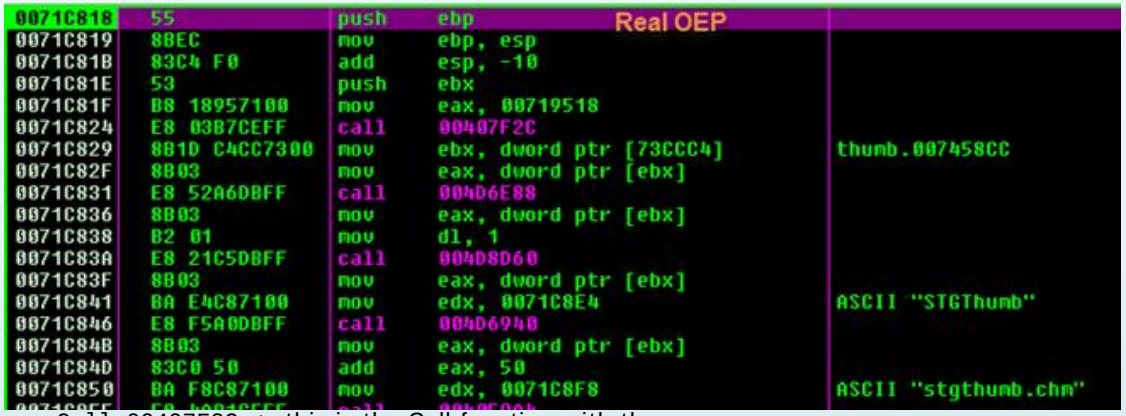
Note: If your still want to try any way to find and fix `100` Push is set in a hwbp `VirtualProtect`, then Shift + F9 to implement the program until found signs similar to the window at the stop Stack again:



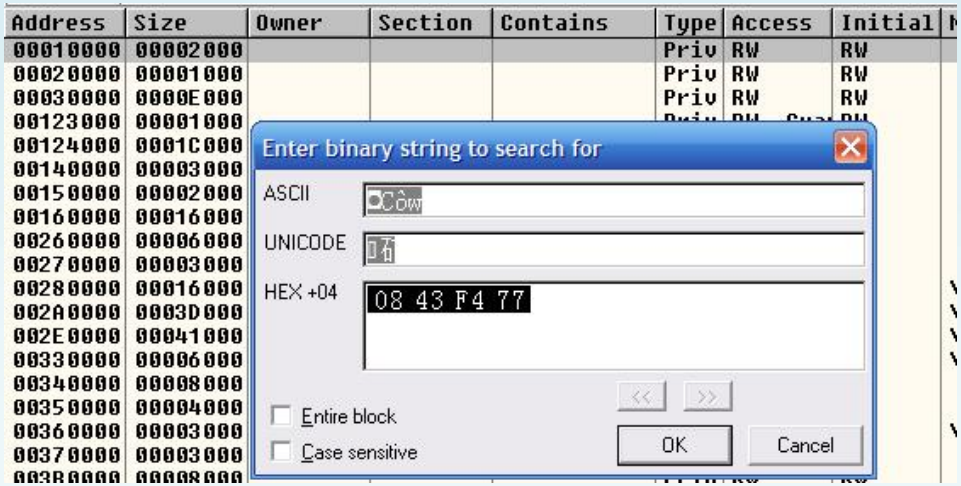
Then press Ctrl + F9 to turn back to main code, all in the Search command is push 100. Next select the first month, follow it and fix the following:



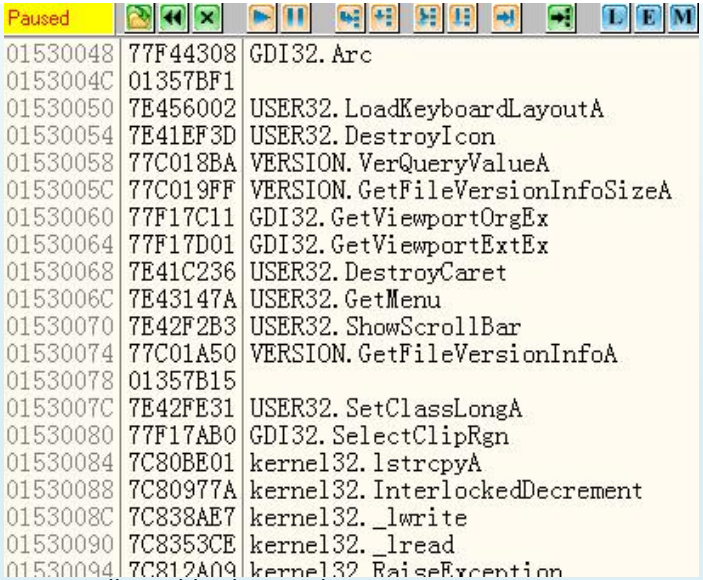
After the fix is on leave as hwbp `VirtualProtect` go in, put in a hwp `CreateThread` purpose we are going to find OEP original program.
Implementation of similar Tutor Armadillo v.5.42 to us here:



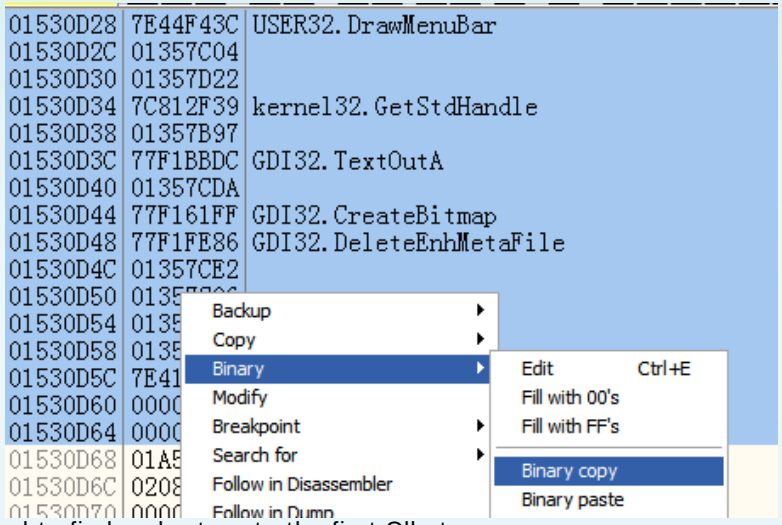
Hì hì dom down a bit and you do not see: `Call 00407F2C` <- this is the Call function with the address of the EP we find on the bypass and DebugBlocker CopyMem2. Now is the time for full IAT, press Alt + M and roll the mouse on the top, then press Ctrl + B to enter: `08 43 F4 77` (address `GDI32.Arc`).



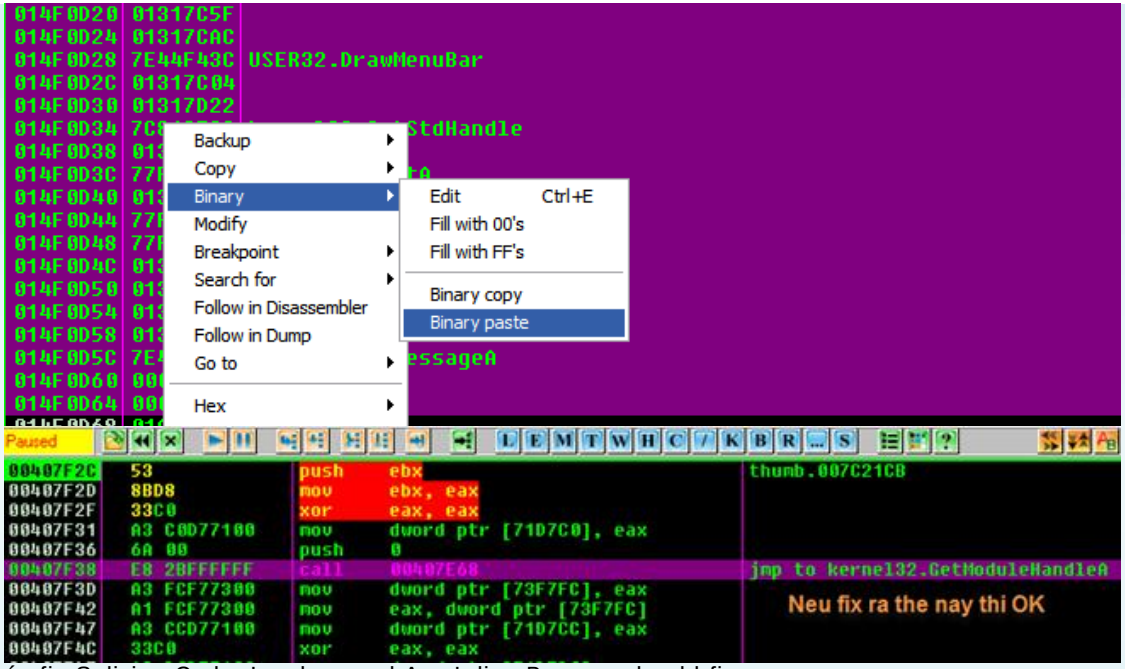
Click OK, we find the IAT Full here:



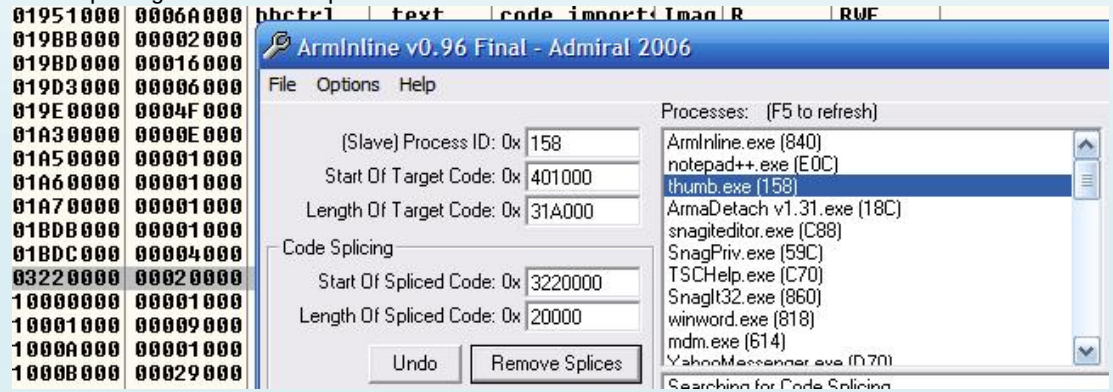
Check the information found on the same IAT match what we collected in the previous step.
Locate the entire block Full IAT this, right click and select:



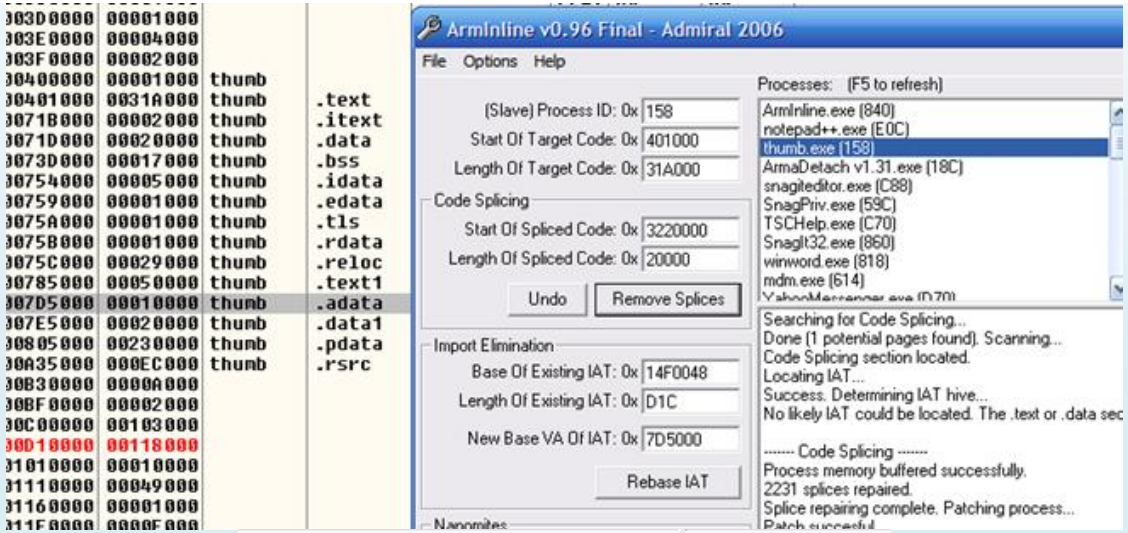
So as we have been Full IAT then, is the Olly IAT used to find and return to the first Olly to continue the process of positioning IAT.Ta fix IAT need to fix, then right click and select :

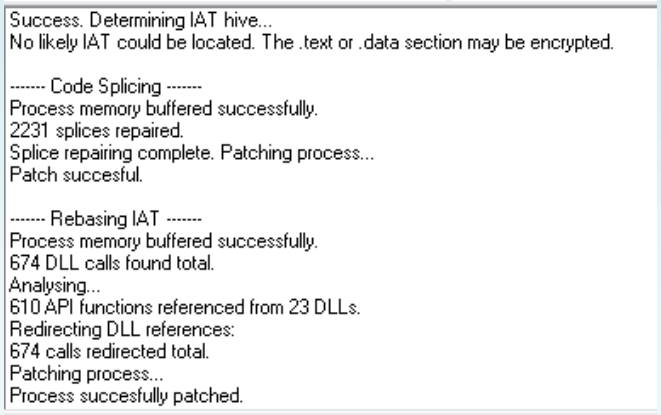


Khuc them rebuild the IAT. Next is khúc fix Splicing Code. Load up and ArmInline Process should fix:

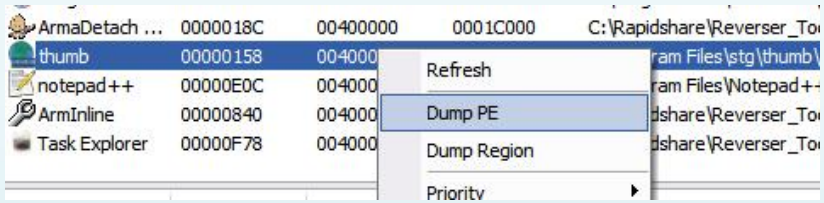


Remove Splices Rebase to complete the IAT are:

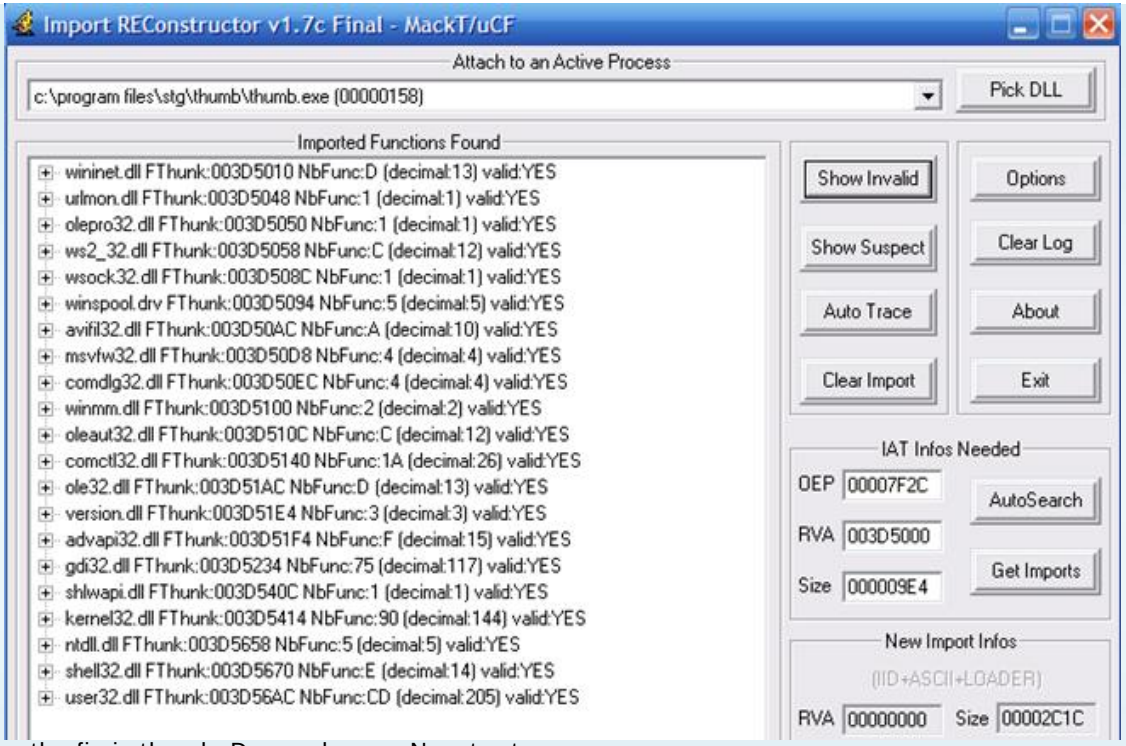




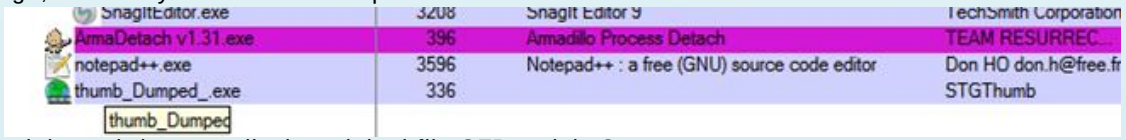
After such a fix is completed, open up Task Explorer to dump and save the file with a name thumb_Dumped.exe:



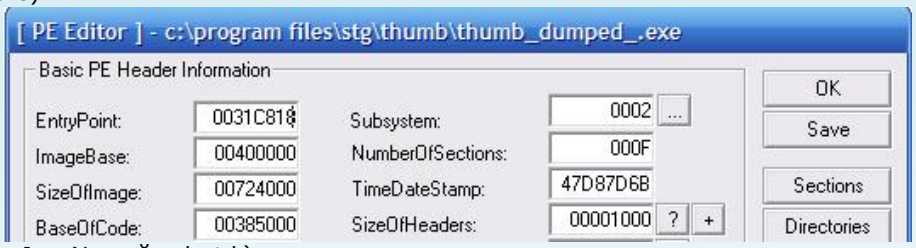
ImportRec continue to open up 1.7c to fix dumped file (cut remove invalid if any):



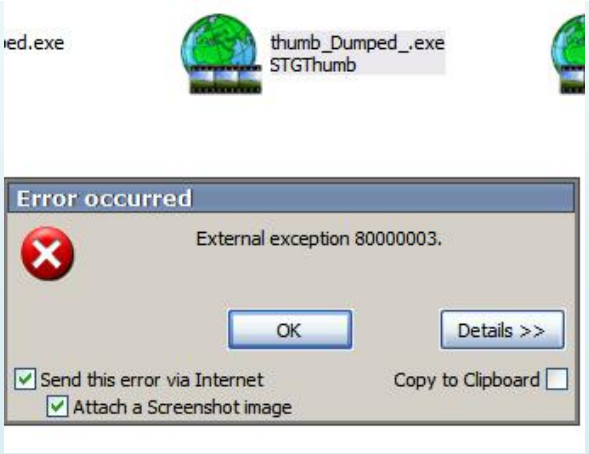
After we complete fix is a new file after the fix is thumb_Dumped_.exe. Now try to run ... see how default ặc do not see all too strange, have only seen each of its process:



It looks like I forgot what it must be a right and then to edit the original file OEP on lolz.Cac you remember the original OEP but that **0071C818.** Now open the file to load in LordPE and fix the following (remember to kill process of it here):



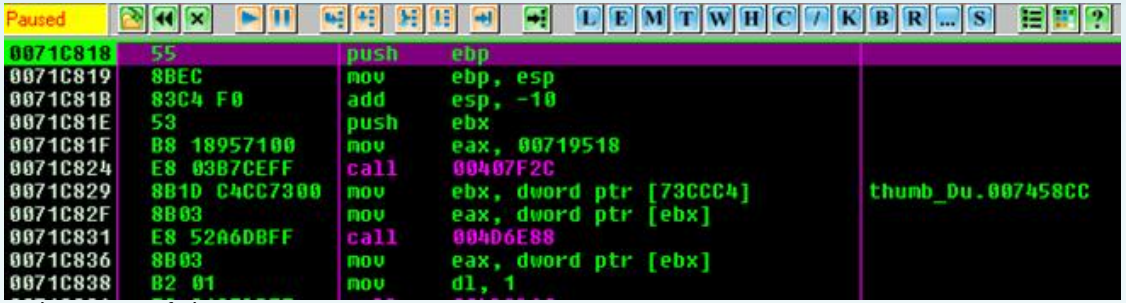
After the fix is completed a test to see how the J , Nag sặc shot kìa:



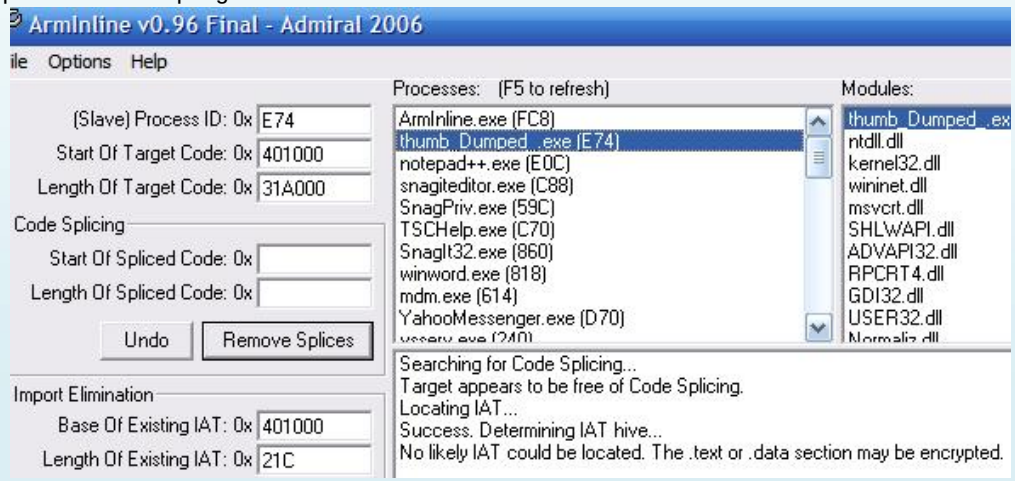
Nag see what this is all you should be happy here, I am also happy because this is more a sign of Nanomites. Now is the time for us to bypass the final floor it.

3. Fix Nanomites

As said before when we see the Nag on file, that is our dump was very good and fix things, only the last obstacle is the only Nanomites again. To bypass this mechanism is used ArmInline is the fastest. The fix what type? I will just for you right here, open up Olly and load the file has to fix the above:

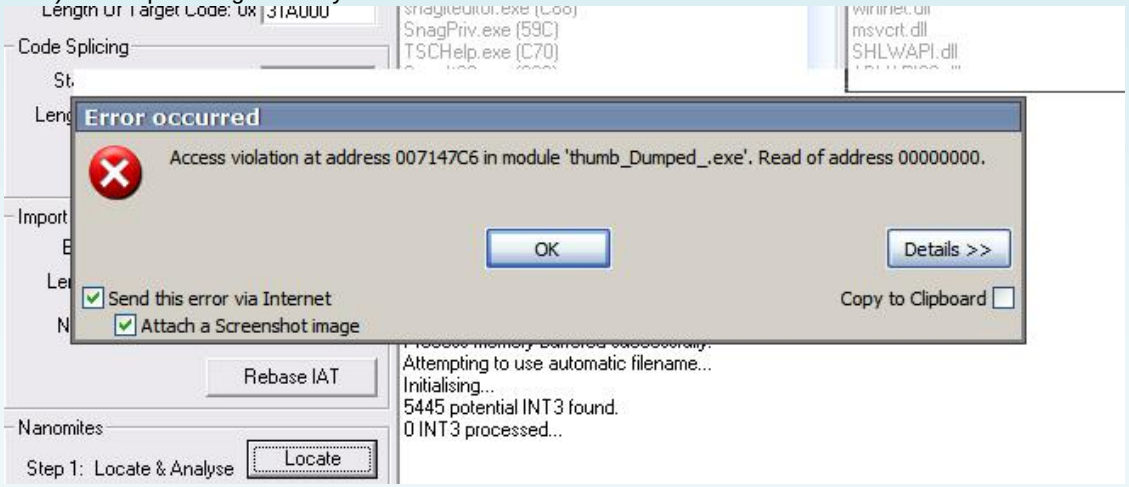


Hold the Olly like, open up ArmInline and process of the program:

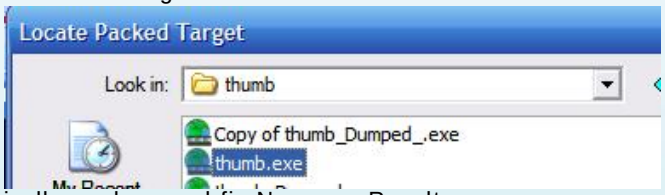


Now you down to that part of Nanomites ArmInline, where you choose to locate (Note: in some cases ArmInline not automatically be to locate the original file you should select the Target to

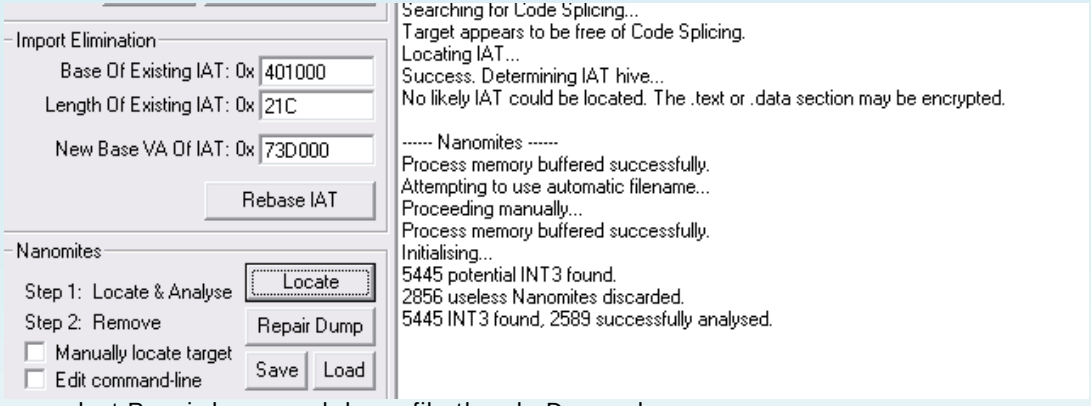
locate manually browse to the original file). After pressing locate you receive notification as follows:



Do not forget it all, uncheck the Send this error via the Internet and click OK. After you click OK the program will be implemented, you close the program will continue to receive notification similar tren.Nhan OK to ignore it, ArmInline will allow you to select target:



Select the original file and click Open, ArmInline automatically analyze and fix Nano us. Results finally obtained as follows:



So is the life tolerable Nanomites then, we select Repair hours and dump file thumb_Dumped_.exe to repair. If Repair Ok brother will receive the following information:

```
------ Nanomites ------
Process memory buffered successfully.
Attempting to use automatic filename...
Proceeding manually...
Process memory buffered successfully.
Initialising...
5445 potential INT3 found.
2856 useless Nanomites discarded.
5445 INT3 found, 2589 successfully analysed.

------ Removing Nanomites ------
Created C:\Program Files\stg\thumb\thumb_Dumped_ NanoFix.exe
Adding new section header...
Appending new data...
Ammending PE header...
Done.
Success. Determining IAT hive...
A possible IAT has been located.
```

Now brother just run the file and test results only J . However, when I write this article and Repairt the dump file is a sticky this (before the write is not the K) :

```
Locating IAT...
Success. Determining IAT hive...
No likely IAT could be located. The .text or .data section may be encrypted.

------ Nanomites ------
Process memory buffered successfully.
Attempting to use automatic filename...
Proceeding manually...
Process memory buffered successfully.
Initialising...
5445 potential INT3 found.
2856 useless Nanomites discarded.
5445 INT3 found, 2589 successfully analysed.

------ Removing Nanomites ------
Created C:\Program Files\stg\thumb\thumb_Dumped_ NanoFix.exe
Unable to add a section to the dump.
Try removing some of Armadillo's residual sections.
```

If you stick to this case you are not worried at all, just load the file in Explorer and CFF reduce the cut sections of the Armadillo:

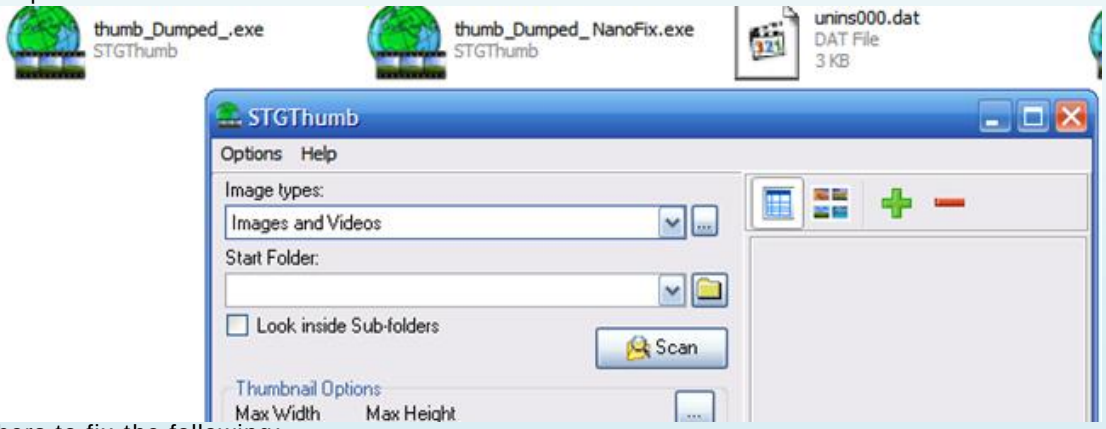
thumb_Dumped_.exe

Name	Virtual Size	Virtual Address	Raw Size	Raw Address	Reloc Address	Linenumbers	Relocations ...	Linenumber...	Characteristics
00000360	00000368	0000036C	00000370	00000374	00000378	0000037C	00000380	00000382	00000384
Byte[8]	Dword	Dword	Dword	Dword	Dword	Dword	Word	Word	Dword
.itext	00001908	0031B000	00001908	0031B000	00000000	00000000	0000	0000	60000020
.data	0001FFAC	0031D000	0001FFAC	0031D000	00000000	00000000	0000	0000	C0000040
.bss	00016850	0033D000	00016850	0033D000	00000000	00000000	0000	0000	C0000000
.idata	00004890	00354000	00004890	00354000	00000000	00000000	0000	0000	C0000040
.edata	000002DC	00359000	000002DC	00359000	00000000	00000000	0000	0000	40000040
.tls	0000016C	0035A000	0000016C	0035A000	00000000	00000000	0000	0000	C0000000
.rdata	00000018	0035B000	00000018	0035B000	00000000	00000000	0000	0000	40000040
.reloc	00028108	0035C000	00028108	0035C000	00000000	00000000	0000	0000	42000040
.text1	00050000	00385000	00050000	00385000	00000000	00000000	0000	0000	E0000020
.adata	00010000	003D5000	00010000	003D5000	00000000	00000000	0000	0000	E0000020
.data1	00020000	003E5000	00020000	003E5000	00000000	00000000	0000	0000	C0000040
.pdata	00230000	00405000	00230000	00405000	00000000	00000000	0000	0000	C0000040
.rsrc	000EC000	00635000	000EC000	00635000	00000000	00000000	0000	0000	40000040
.mackt	00003000	00721000	00003000	00721000	00000000	00000000	0000	0000	E0000060

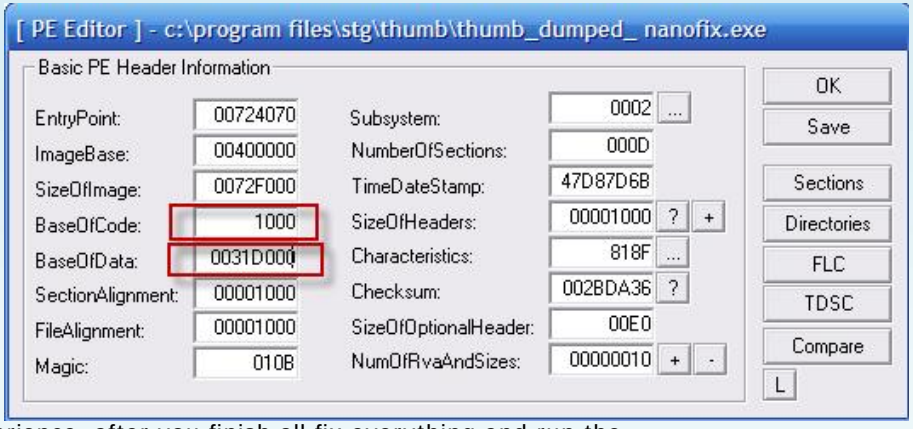
thumb_Dumped_.exe

Name	Virtual Size	Virtual Address	Raw Size	Raw Address	Reloc Address	Linenumbers	Relocations ...	Linenumber...	Characteristics
Byte[8]	Dword	Dword	Dword	Dword	Dword	Dword	Word	Word	Dword
.text	0031A000	00001000	00319210	00001000	00000000	00000000	0000	0000	60000020
.itext	00002000	0031B000	00001908	0031B000	00000000	00000000	0000	0000	60000020
.data	00020000	0031D000	0001FFAC	0031D000	00000000	00000000	0000	0000	C0000040
.bss	00017000	0033D000	00016850	0033D000	00000000	00000000	0000	0000	C0000000
.idata	00005000	00354000	00004890	00354000	00000000	00000000	0000	0000	C0000040
.edata	00001000	00359000	000002DC	00359000	00000000	00000000	0000	0000	40000040
.tls	00001000	0035A000	0000016C	0035A000	00000000	00000000	0000	0000	C0000000
.rdata	00001000	0035B000	00000018	0035B000	00000000	00000000	0000	0000	40000040
.reloc	00079000	0035C000	00028108	0035C000	00000000	00000000	0000	0000	42000040
.adata	00260000	003D5000	00010000	00385000	00000000	00000000	0000	0000	E0000020
.rsrc	000EC000	00635000	000EC000	00395000	00000000	00000000	0000	0000	40000040
.mackt	00003000	00721000	00003000	00481000	00000000	00000000	0000	0000	E0000060

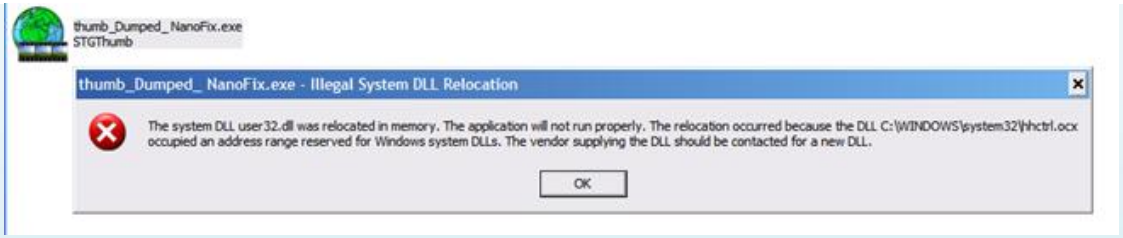
Then proceed to Fix Nanomites as the steps above is OK. Test Test file after fix:



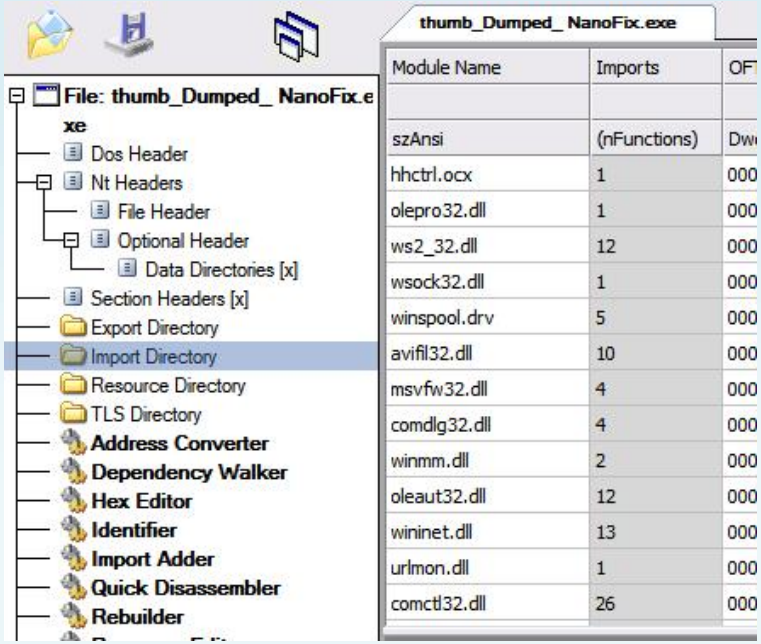
File to run OK, more like beautiful brothers to fix the following:



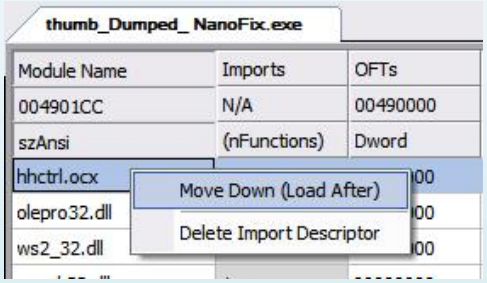
Note: In some cases the very useful new experience, after you finish all fix everything and run the file you receive the Nag as follows:



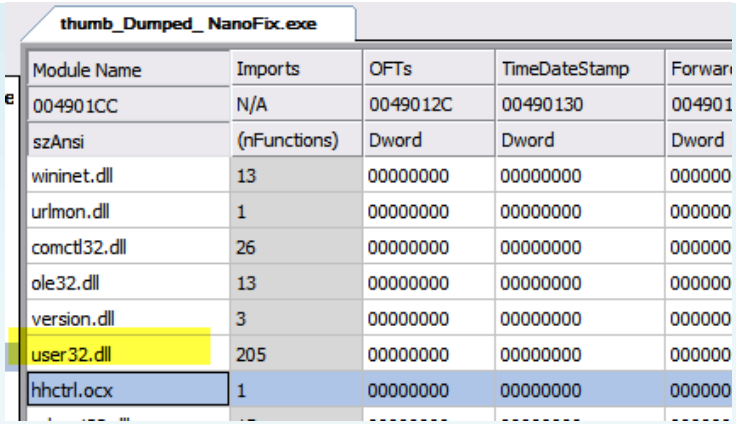
Read the notice on sure you also have to understand is notorious and the J . You do not worry too in this case, the files are still performing well but do not run it normally is because thằng hhctrl. ocx has occupied an area that would address the region must for System Dlls. So How do I run files without the sticky nag, very simple one is to load it follows that the system dll on Nag announced. Are there any tool does not support, there is J CFF Explorer. OK time to load exe files CFF:



Select the Import as the Directory, select hhctrl.ocx and click to select:



Move it down user32.dll is OK.


thumb_Dumped_ NanoFix.exe

Module Name	Imports	OFTs	TimeDateStamp	Forwar
004901CC	N/A	0049012C	00490130	004901
szAnsi	(nFunctions)	Dword	Dword	Dword
wininet.dll	13	00000000	00000000	000000
urlmon.dll	1	00000000	00000000	000000
comctl32.dll	26	00000000	00000000	000000
ole32.dll	13	00000000	00000000	000000
version.dll	3	00000000	00000000	000000
user32.dll	205	00000000	00000000	000000
hhctrl.ocx	1	00000000	00000000	000000

Finally Save the file and test our. File enforcement normal! Phu ... ...

IV. Conclusion

Finally, the complete message, this article I wrote for the purpose of storage and only the basic points to unpack Armadillo but I do not go more deeply into each section of these have too many resources no.Them's talk about the record more knowledge you are with me it is a pleasure, a feeling for their own Refresh your knowledge of minh.Rat thank him and you for taking the time valuable to you to read this document.

PS: This document is only a reference, the author is not responsible if the reader uses it to any goal.

Best Regards

_ [Kienmanowar] _

--+ +--= =[Greatz thanks to]= =--+ +--

My family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Merc, Hoadongnoi, Nini ... all REA's members, TQN, HacNho, RongChauA, Deux, tlandn, light.phoenix, dqtln, ARTEAM .... all my friend, and you.

Thanks to --+ +--= =[ ]= =--+ +--

iamidiot, WhyNotBar, trickyboy, dzungltvn, takada, hurt_heart, haule_nth, hytkl, Moth, XIANUA, nhc1987, v. 0xdie. v.. You have contributed greatly to the REA. Hope you will continue to promote J

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>>>> If you have any suggestions, comments or corrections email me: **kienmanowar [at] reaonline.net**

2008

[MUP Armadillo v5.42 Case Study]

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www.reaonline.net

6/14/2008

Contents

I. Introduction

Welcome brother, you see walking this increasingly too slow. Look brother RlPack exchange, EncryptPE, ExEcRyptor, PECompact, v. WinLic. V.. just as not, you still do not know is just outside ngo K . Take the one to be the lượm unpackme the pack with Armadillo v.5.42 chance to try to try, who are easy-to-use real currency. Try to try again just as often fail ^ ^. Finally, it must also seek to help his children be mup. Tutor of the full Armadill0 Ray on the network, even small aged (hacnho) has certainly show a series of it (no one should read). This article I wrote the main purpose is to document storage, then the old error reading for pleasure. I do not go deep more, want more for reference by tut-aged small and Tutor mang.Now on, let's g0 ... ...

II. The Tools use

Posts using the following:

1. OllyIce (ver **2008.1.1): This was introduced in the REA, include it available to plug can help brothers bypass the mechanism of anti-debug Armadillo**
2. Armadillo Find Protected V1.8
3. ArmaDetach v1.31
4. ArmInline v0.96f (Eng)
5. Task LordPE or Explorer.
6. ImportRec v1.7c Final.
7. CFF Explorer.
8. Suite 2005 PUPE-Universal Process Patcher
9. Arma 5.x Fix Magic Call.osc

III. Manual unpack Armadillo v5.42

1. Seeking information on Unpackme.

Before treatment unpackme we face test run nose how it was:

Dom try the section of it:

Armadillo_UnPack Me.exe

Name	Virtual Size	Virtual Address	Raw Size	Raw Address	Reloc Address	Linenumbers	Relocations ...	Linenumber...	Characteristics
Byte[8]	Dword	Dword	Dword	Dword	Dword	Dword	Word	Word	Dword
.text	00011B8E	00001000	00000000	00000000	00000000	00000000	0000	0000	60000020
.rdata	0000453E	00013000	00000000	00000000	00000000	00000000	0000	0000	40000040
.data	00006348				00000000	00000000	0000	0000	C0000040
.text1	00050008				00000000	00000000	0000	0000	E0000020
.adata	00010000	0006F000	0000D000	00043000	00000000	00000000	0000	0000	E0000020
.data1	00020000	0007F000	0000B000	00050000	00000000	00000000	0000	0000	C0000040
.pdata	00060000	0009F000	00057000	0005B000	00000000	00000000	0000	0000	C0000040
.rsrc	00003000	000FF000	00001000	000B2000	00000000	00000000	0000	0000	40000040

dấu hiệu của Armadillo

Next we need to check it has been used as pack with Armadillo ver 5:42 or not? And protect the mechanism is applied to it. Fortunately, doctors have vel "and" a tool to perform this job is Armadillo Find Protect. Armadillo Run Find Protect v1.8, then drag & drop to unpackme we obtained the following information:

15-06-2008 15:13:20 <------- ------->
C: \ Documents and Settings \ m4n0w4r \ Desktop \ Armadillo_UnPack Me.exe
- Protected Armadillo
Protection system (Professional)
- <Protection Options>
Debug-Blocker
CopyMem-II
Enable elimination Import Table
Enable Strategic Code Splicing
Enable Memory-Patching Protections
- Key <Backup Options>
Fixed Backup Keys
- <Compression Options>
Best / Slowest Compression
- <Other Options>
Allow Only One Copy
- Version 5.42 20-02-2008 t o **exact**
- Elapsed Time 00h 00m 01s 812ms

Rub it is almost all aspects of the mechanism by Protect Armadillo, just missing the end of each level is more Nanomites thoi.Ok so is the collection of information is finished, we carried out any work.

2. Through face CopyMemII and DebugBlocker

First, we target to load Olly was then calculated to:

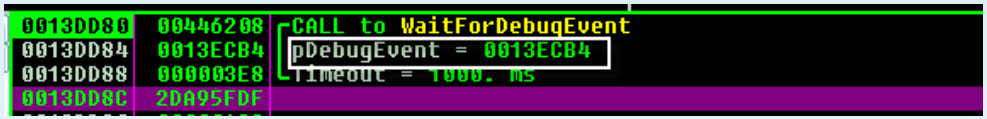
```
0046F000 Armadill.<ModuleEntryPoint>  60          pushad
0046F001                              E8 00000000 call    0046F006
0046F006                              5D          pop     ebp
0046F007                              50          push    eax
0046F008                              51          push    ecx
0046F009                              0FCA        bswap   edx
0046F00B                              F7D2        not     edx
0046F00D                              9C          pushfd
0046F00E                              F7D2        not     edx
0046F010                              0FCA        bswap   edx
0046F012                              EB 0F       jmp     short 0046F023
```

Set in a hwbp API is `WaitForDebugEvent`:

Command he WaitForDebugEvent | HE address -- HW break on execution
Start:47F000 End:47EFFF Value:77F1B221

Armadillo do it playing the **Memory Patching Protection,** so it will detect the BP we set at any

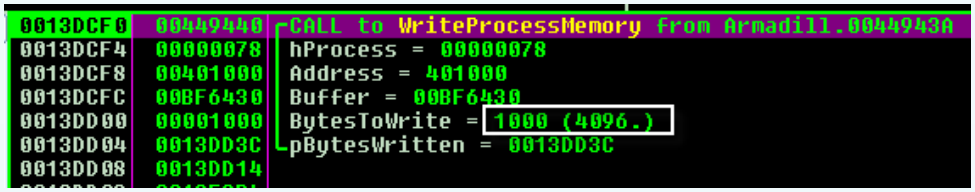
time API. So to bypass this mechanism we use hwbp.Ok, after BP put on as we press Shift + F9 to run unpackme, the program will break in our BP. Now dom through window Stack we obtained the following information:



You save this information to:

0013DD80 00446208 / Call to WaitForDebugEvent
0013DD84 0013ECB4 | pDebugEvent = 0013ECB4
0013DD88 000003E8 \ Timeout = 1000. ms

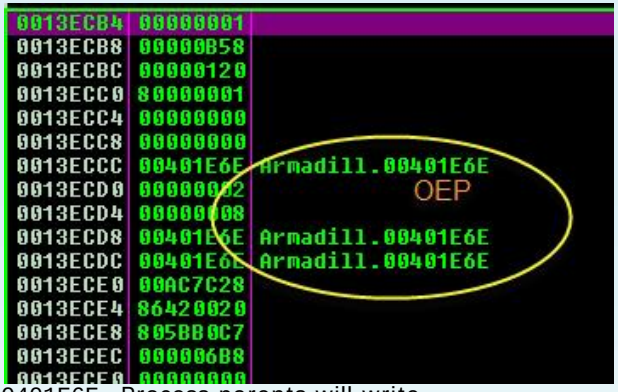
Now we press Ctrl + F2 to restart Olly, put in hwbp WaitForDebugEvent go. Set in a hwbp WriteProcessMemory, press Shift + F9 to see when it is preparing to write 1000 bytes is stopped (usually hit 3 times is found):



Record information on:

0013DCF0 00449440 / Call to WriteProcessMemory from Armadill.0044943A
0013DCF4 00000078 | 00000078 = hProcess
0013DCF8 00401000 | Address = 401000
0013DCFC 00BF6430 | Buffer = 00BF6430
0013DD00 00001000 | BytesToWrite = 1000 (4096).
0013DD04 0013DD3C \ = pBytesWritten 0013DD3C

Through the window we dump press Ctrl + G and enter the address of pDebugEvent that we find the above:



According to what we have above, we know our OEP is 0x00401E6E. Process parents will write the 1000 bytes to process from the start address is 0x401000. So we need to do next is to find and "destroy" function call to 1000 bytes. To find it we do the following, dom through window Stack at this time we're stopped the hwbp, mouse scroll down a bit until you see the first return:

```
0013DD30  00BF7430
0013DD34  00000020
0013DD38  00401000  Armadill.00401000
0013DD3C  00001000
0013DD40  00000020
0013DD44  00BF7430
0013DD48  0013DD78
0013DD4C  00448755  RETURN to Armadill.00448755 from Armadill.00448AA0
0013DD50  00000000
0013DD54  00BF5FC4
0013DD58  00000000
0013DD5C  00000007
```

Address 0x00448AA0 second is the address that we need to concern because it is based on, we will find a specific function or is MagicCall EncryptCall or that related to CopyMem function.
Ok, time flying through the window CPU and press Ctrl + G, type in the address 0x00448AA0 will come:

```
00448AA0  $  55          push    ebp
00448AA1  .  8BEC        mov     ebp, esp
00448AA3  .  83EC 40     sub     esp, 40
00448AA6  .  8B45 08     mov     eax, dword ptr [ebp+8]
00448AA9  .  C1E0 0C     shl     eax, 0C
00448AAC  .  0305 B8634  add     eax, dword ptr [4863B8]      Armadill.00401000
00448AB2  .  8945 F0     mov     dword ptr [ebp-10], eax
00448AB5  .  8B0D E0634  mov     ecx, dword ptr [4863E0]
00448ABB  .  894D FC     mov     dword ptr [ebp-4], ecx
```

Pull back down we have information:

```
0044941E  >  8D55 F4     lea     edx, dword ptr [ebp-C]
00449421  .  52          push    edx
00449422  .  68 00100000 push    1000
00449427  .  A1 E0634800 mov     eax, dword ptr [4863E0]
0044942C  .  50          push    eax
0044942D  .  8B4D F0     mov     ecx, dword ptr [ebp-10]
00449430  .  51          push    ecx
00449431  .  8B15 B4634  mov     edx, dword ptr [4863B4]
00449437  .  8B02        mov     eax, dword ptr [edx]
00449439  .  50          push    eax
0044943A  .  FF15 0CF147 call    dword ptr [<&KERNEL32.WriteProc
00449440  .  85C0        test    eax, eax

pBytesWritten
BytesToWrite = 1000 (4096.)
Buffer => 00BF6430
Address
hProcess
WriteProcessMemory
```

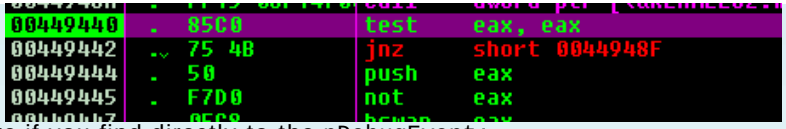
At which we press Ctrl + G, we choose ebp push and press Ctrl + R to find all references to function at this:

Address	Disassembly	Comment
00448750	call 00448AA0	
00448A1B	call 00448AA0	
00448AA0	push ebp	(Initial CPU selection)

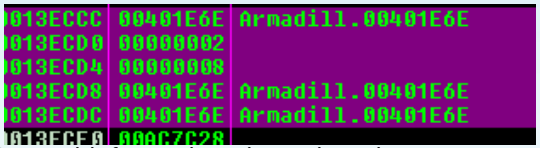
According to the context of my money has to go before any analysis of the function that the second Call meat, so double click function second call we will call this to function. NOP conducted it is finished!

```
00448A17  .  8B048A      mov     eax, dword ptr [edx+ecx*4]
00448A1A  .  50          push    eax
00448A1B     90          nop
00448A1C     90          nop
00448A1D     90          nop
00448A1E     90          nop
00448A1F     90          nop
00448A20  .  83C4 0C     add     esp, 0C
00448A23  .  50          push    eax
```

The work of the next one is sever relations hold both father and child process by creating a loop of tan.Sau that the next time we OEP month child process. I press Ctrl + F9 to out from the API is WriteProcessMemory:



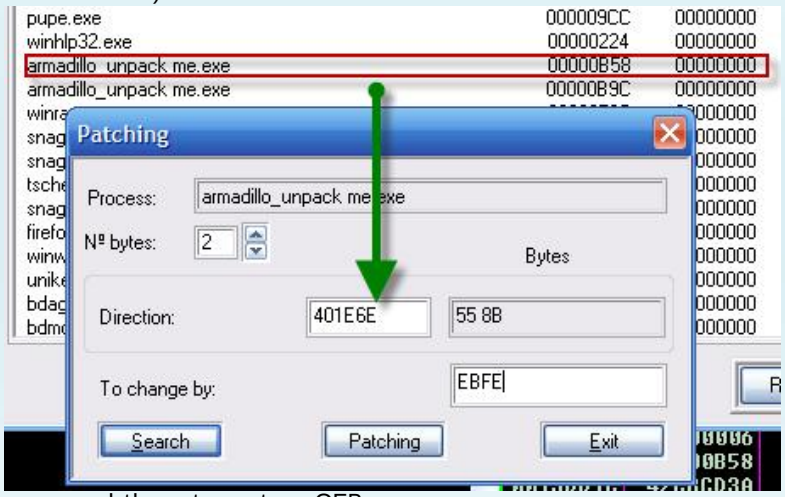
You also remember window dump in the air, not sure if you find directly to the pDebugEvent:



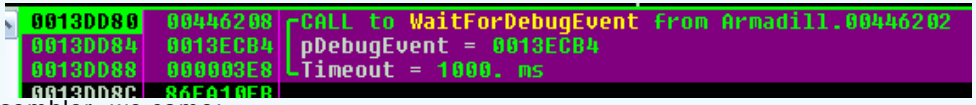
As above, we have been OEP's child is 0x00401E6E process. We need information about them later, so save it again:

```
0013ECB4 00000001
0013ECB8 00000A10 child t o process ID
0013ECBC 00000D2C
0013ECC0 80000001
0013ECC4 00000000
0013ECC8 00000000
0013ECCC 00401E6E Armadill.00401E6E
0013ECD0 00000002
0013ECD4 00000008
0013ECD8 00401E6E Armadill.00401E6E
0013ECDC 00401E6E Armadill.00401E6E
```

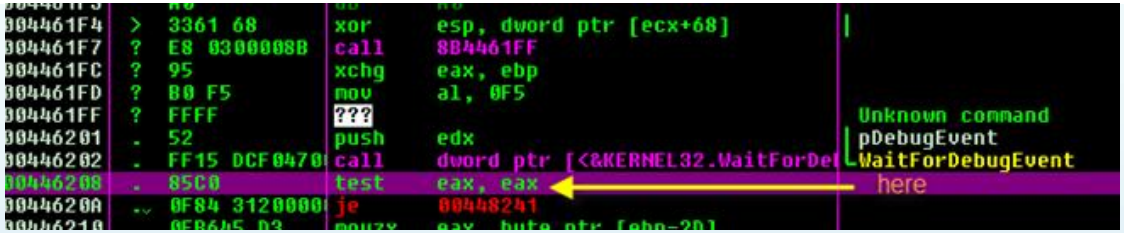
Now we'll patch child process at the OEP its infinite loop. PUPE Open up and fill in as follows (remember to find the right child process by PID small J) :



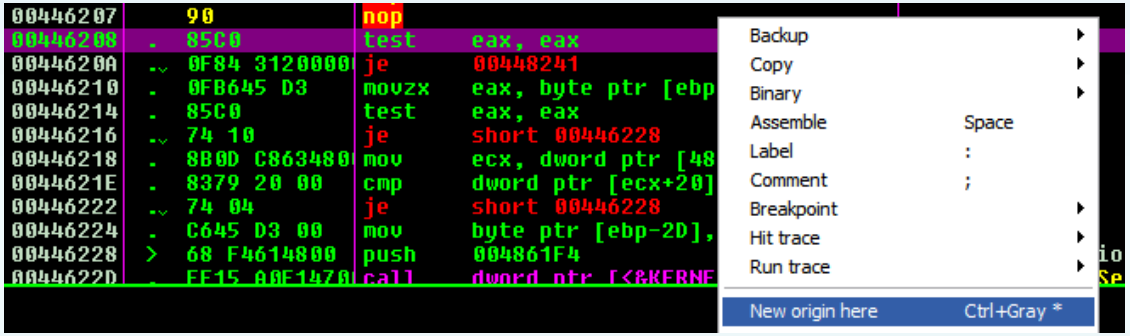
Remember the original two bytes are 55 8B because we need them to restore OEP simultaneously PUPE close again. After patch back Olly finished, remove hwbp in WriteProcessMemory and reset hwbp in WaitForDebugEvent. Press Shift + F9 to run the program, we will break in hwbp:



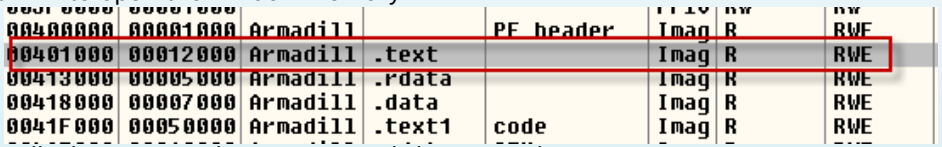
Click the first line and select Follow in Disassembler, we come:



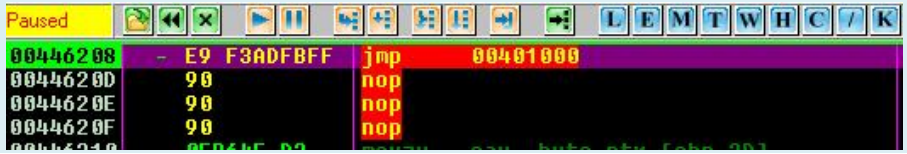
Submit your entire code related to WaitForDebugEvent, and set new origin in order `test eax, eax`:



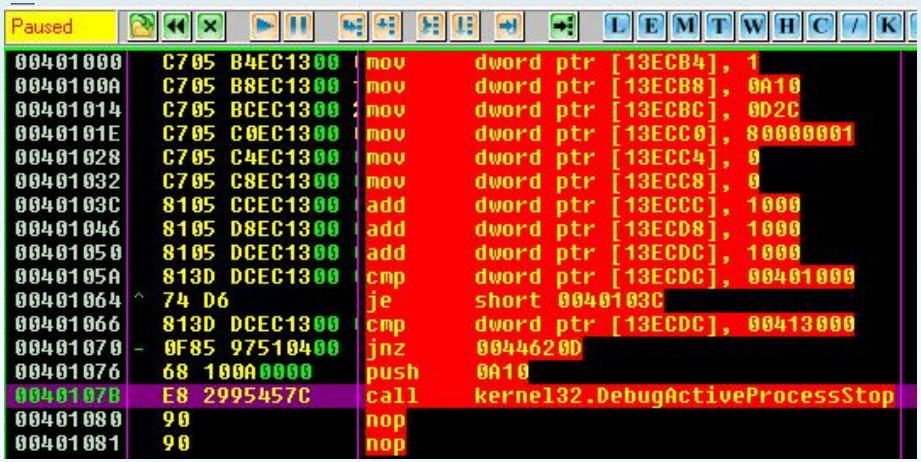
Now we need a code to decrypt 1000 bytes, where we choose section. Text as a starting place for this code. So section. Text is where, press Alt + M to open the window Memory:



OK, so section. Text begins at `0x00401000`. I edit the command test eax, eax it jumps to the region this section:

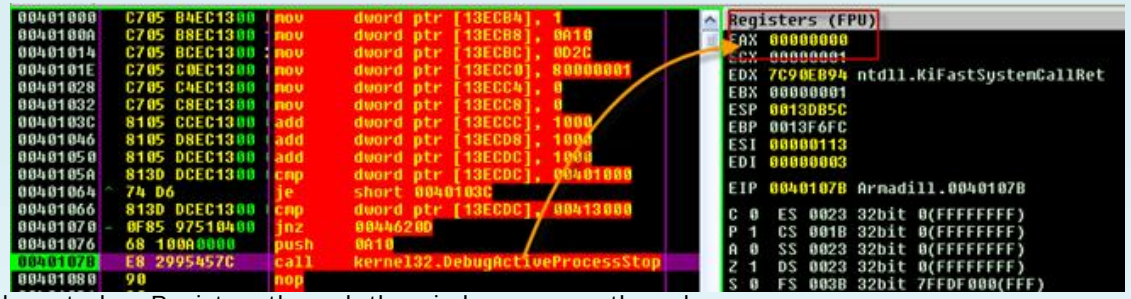


Now we press Enter `jmp 00401000` in order to follow the areas that we need to create code. One patch as follows:



Next we follow the pDebugEvent in the window and dump 3 patch addresses containing OEP:

OK, after such a path is set in a hwbp `0040107B E8 2995457C call kernel32.DebugActiveProcessStop` and press Shift + F9 to run the program:



Tolerable, we are stopped at King hwbp set, dom Registers through the window you see the value of EAX is 0. If we trace through DebugActiveProcessStop function that returns the value in EAX is not a non-zero, the as we go and dust from the beginning K .

DebugActiveProcessStop Function

Stops the debugger from debugging the specified process.

```
BOOL WINAPI DebugActiveProcessStop(
  __in  DWORD dwProcessId
);
```

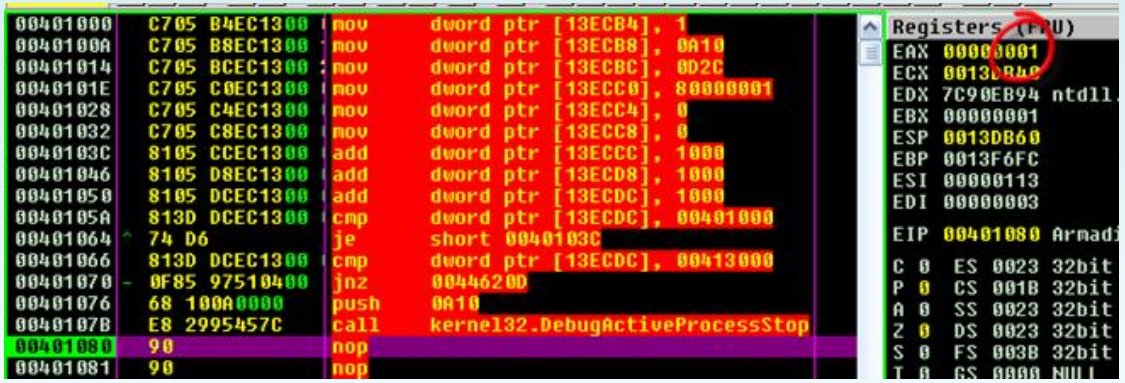
Parameters

dwProcessId
The identifier of the process to stop debugging.

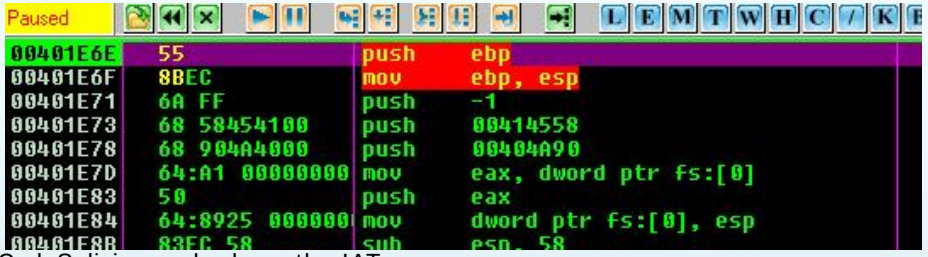
Return Value

If the function succeeds, the return value is nonzero.

Now we press F8 to trace through this function and that the value of EAX to write:



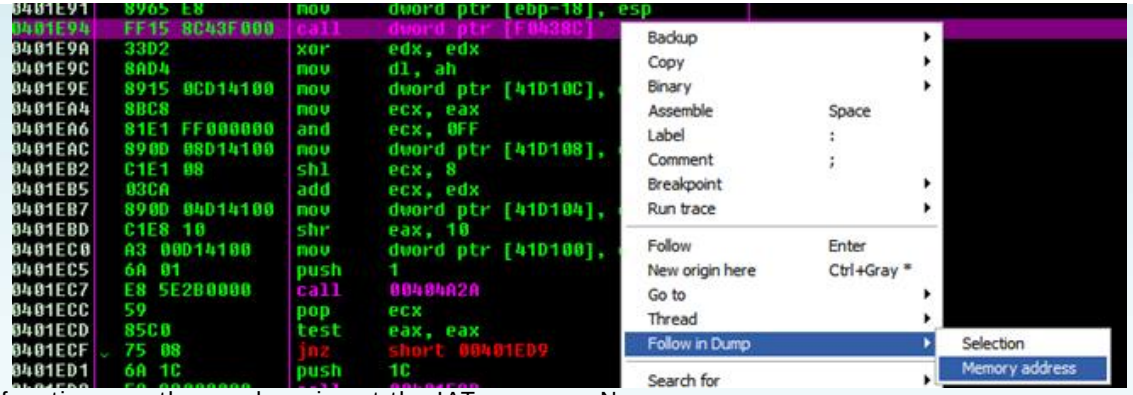
Ola, it is CopyMem2 and DebugBlocker have to dust not we go J dust. Now we open a more Olly and child Attach to process, run it and press F12 and recover the OEP in bytes (bytes of this we are at one with the patch PUPE):



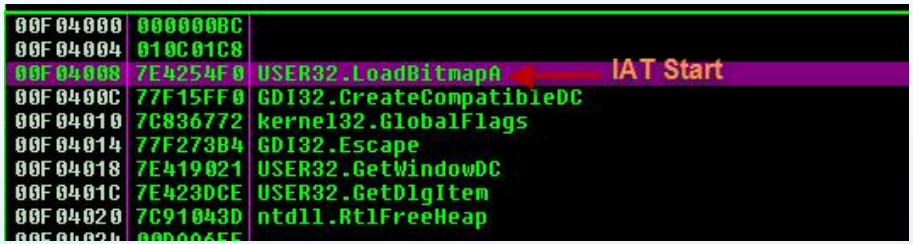
So is temporary finished! Next we fix IAT, fix CodeSplicing and rebase the IAT.

3. Fix IAT - bypass CodeSplicing - Rebase IAT:

At the screen when Olly Attach one child process, pulling down a bit to see Call command as follows: `00401E94 FF15 8C43F000 call dword ptr [F0438C]`. Mouse in order to Call and select as follows:



At window dump we'll see many API functions, so the one here is not the IAT program. Now you roll your mouse over the top for IAT start:

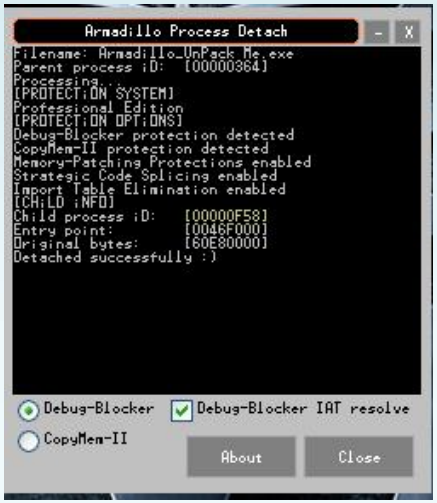


Continue to roll the mouse down for IAT End:

Summarized again:

```
IAT Start: 00F04008 7E4254F0 USER32.LoadBitmapA
IAT End: 00F045E0 00BC0044
IAT Size: 5D8
```

Now we go looking for Full IAT. Search by any now? Search by "read a" respectable to do so, time is running ArmaDetach v1.31, then drag our target to:



You open an Olly Attach another child and that the process has to detach. F9 and F12 to run

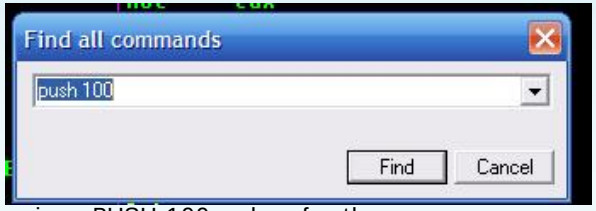
the program to pause, and then recover the bytes:

```
0046F000   60              pushad
0046F001   E8 00000000     call    0046F006
0046F006   5D              pop     ebp
0046F007   50              push    eax
0046F008   51              push    ecx
0046F009   0FCA            bswap   edx
0046F00B   F7D2            not     edx
0046F00D   9C              pushfd
0046F00E   F7D2            not     edx
0046F010   0FCA            bswap   edx
0046F012   EB 0F           jmp     short 0046F023
```

Next we set a hwbp he `VirtualProtect` (remember to remove the hwbp has before). Then press Shift + F9 to run the program until you see signs as follows (try this only for the many, they do not ask him J) :

```
00139360   00E5DED8  CALL to VirtualProtect from 00E5DED2
00139364   00400000  Address = Armadill.00400000
00139368   00000040  Size = 40 (64.)
0013936C   00000004  NewProtect = PAGE_READWRITE
00139370   0013943C  pOldProtect = 0013943C
00139374   00000000
00139378   00000000
```

After the break in place are such signs, press Ctrl + F9 to return to the main code. Then right click and select Search For> All commands:



Now you will see many orders PUSH 100, the experience is a giang PUSH 100 orders for the first meat. So scroll mouse thẳng to the top, select the first command and press Enter to us here:

```
00E1264F   CC              int3
00E12650   55              push    ebp
00E12651   8BEC            mov     ebp, esp
00E12653   83EC 2C         sub     esp, 2C
00E12656   833D 00B6E800   cmp     dword ptr [E8B600], 0
00E1265D   75 59           jnz     short 00E126B8
00E1265F   C745 EC 16944B  mov     dword ptr [ebp-14], 1C4B9416
00E12666   68 00010000     push    100
00E1266B   E8 86580500     call    00E67EF6
00E12670   83C4 04         add     esp, 4
```

Conduct patch command PUSH EBP into Ret.

```
00E1264F   CC              int3
00E12650   C3              retn
00E12651   8BEC            mov     ebp, esp
00E12653   83EC 2C         sub     esp, 2C
00E12656   833D 00B6E800   cmp     dword ptr [E8B600], 0
00E1265D   75 59           jnz     short 00E126B8
00E1265F   C745 EC 16944B  mov     dword ptr [ebp-14], 1C4B9416
00E12666   68 00010000     push    100
00E1266B   E8 86580500     call    00E67EF6
```

OK them the IAT, wind traditional way to OEP. We put in a hwbp `CreateThread` (delete hwbp set), then press Shift + F9 we stopped at hwbp:

```
0013F6A0  00E437E5  CALL to CreateThread from 00E437DF
0013F6A4  00000000  pSecurity = NULL
0013F6A8  00000000  StackSize = 0
0013F6AC  00E44750  ThreadFunction = 00E44750
0013F6B0  00000000  pThreadParm = NULL
0013F6B4  00000000  CreationFlags = 0
0013F6B8  0013F6C4  pThreadId = 0013F6C4
0013F6BC  00000002
```

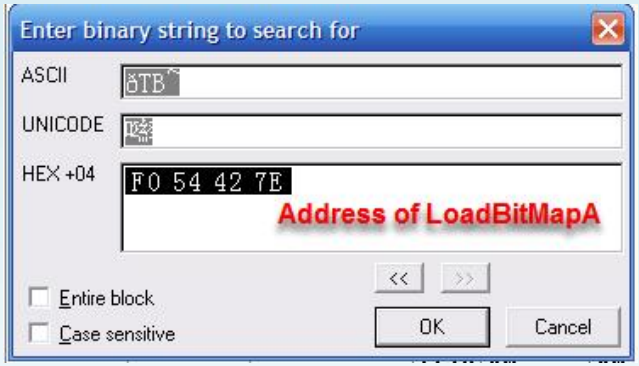
Press Ctr + F9 2 times we return to Armadillo code, dragging down the search `Call edx` second, press F2 to set it at BP:

```
00E5FA3D   8B55 F4        mov     edx, dword ptr [ebp-C]
00E5FA40   2B55 DC        sub     edx, dword ptr [ebp-24]
00E5FA43   FFD2           call    edx
00E5FA45   8945 FC        mov     dword ptr [ebp-4], eax
00E5FA48   8B45 FC        mov     eax, dword ptr [ebp-4]
00E5FA4B   5E             pop     esi
00E5FA4C   8BE5           mov     esp, ebp
00E5FA4E   5D             pop     ebp
00E5FA4F   C3             retn
```

Press F9 to run it stopped at `Call edx`, press F7 to trace into one of the OEP in the original program:

```
00401E6E   73 C6          jnb     short 00401E36
00401E70   AE             scas    byte ptr es:[edi]
00401E71   A3 D9251A8C    mov     dword ptr [8C1A25D9], eax
00401E76   67:4D          dec     ebp
00401E78   2A59 6C        sub     bl, byte ptr [ecx+6C]
00401E7B   0D 42AD874D    or      eax, 4D87AD42
00401E80   42             inc     edx
00401E81   C9             leave
00401E82   26:1D 2640034D sbb     eax, 4D034026
00401E88   42             inc     edx
```

Hehe time we go to find any clean IAT, to find how nhi? You fly through the window memory: Alt + M. You remember the address but IAT Start, which is the function `IAT Start: 00F04008 7E4254F0 USER32.LoadBitmapA`. You will find this function, in memory window to drag it on and press Ctrl + B:



Click OK to search until we have the following information:

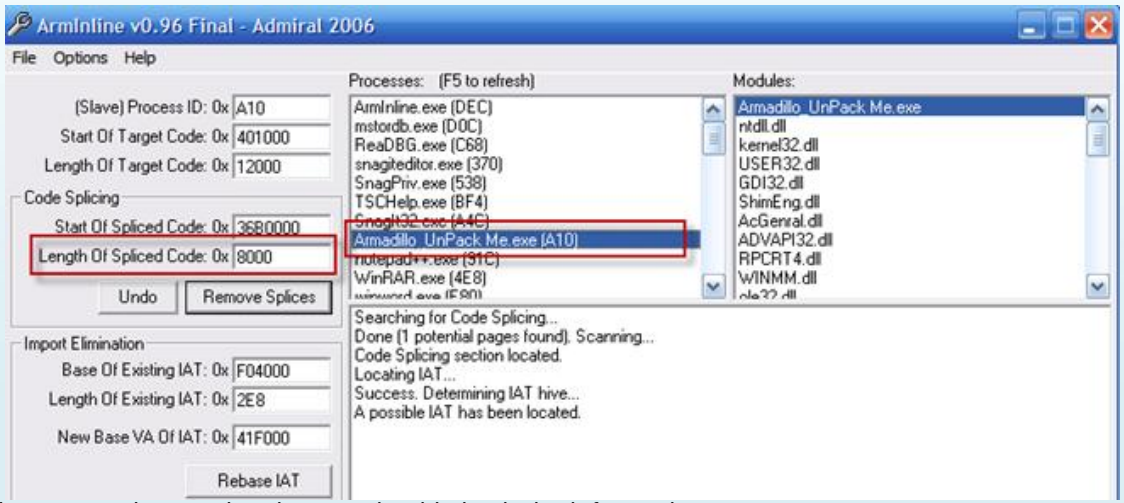
```
00F94000  000000BC
00F94004  010C01B2
00F94008  7E4254F0  USER32.LoadBitmapA
00F9400C  77F15FF0  GDI32.CreateCompatibleDC
00F94010  7C836772  kernel32.GlobalFlags
00F94014  77F273B4  GDI32.Escape
```

```
00F945C4  7E42FFC0  USER32.SetPropA
00F945C8  7C80B4CF  kernel32.GetModuleFileNameA
00F945CC  7E430002  USER32.GetPropA
00F945D0  00E3A6D9
00F945D4  00E3A61F
00F945D8  7E44EF68  USER32.GetMenuItemID
00F945DC  00000000
00F945E0  00BC0145
```

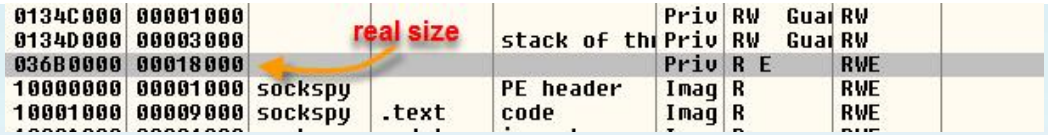
Very exactly matches the information that we learn about IAT.Ta locate all of the IAT IAT Start and End then click to select Binary> Binary Copy. Now we return to Olly thắng we defeat CopyMem2 and DebugBlocker, locate areas IAT IAT Start and end in the dump window, right click and select Binary> Binary Paste to paste the entire full to IAT (while you save the huddle Binary again because we need for the following):

```
00F04000  000000BC
00F04004  010C01C8
00F04008  7E4254F0  USER32.LoadBitmapA
00F0400C  77F15FF0  GDI32.CreateCompatibleDC
00F04010  7C836772  kernel32.GlobalFlags
00F04014  77F273B4  GDI32.Escape
00F04018  7E419021  USER32.GetWindowDC
00F0401C  7E423DCE  USER32.GetDlgItem
00F04020  7C91043D  ntdll.RtlFreeHeap
00F04024  00E3A6E5
00F04028  00E3A6F2
00F0402C  7E43212B  USER32.GetWindowTextA
00F04030  7E41B72F  USER32.GetParent
00F04034  77F161FF  GDI32.CreateBitmap
00F04038  7E43C6CA  USER32.DrawTextA
00F0403C  7E43EBC7  USER32.GetClassInfoA
00F04040  00E3A550
00F04044  7C80AC0F  kernel32.SetErrorMode
00F04048  7C81CDDA  kernel32.ExitProcess
00F0404C  00E3A63B
00F04050  7C80CC97  kernel32.SetHandleCount
00F04054  77F16E6F  GDI32.DeleteDC
```

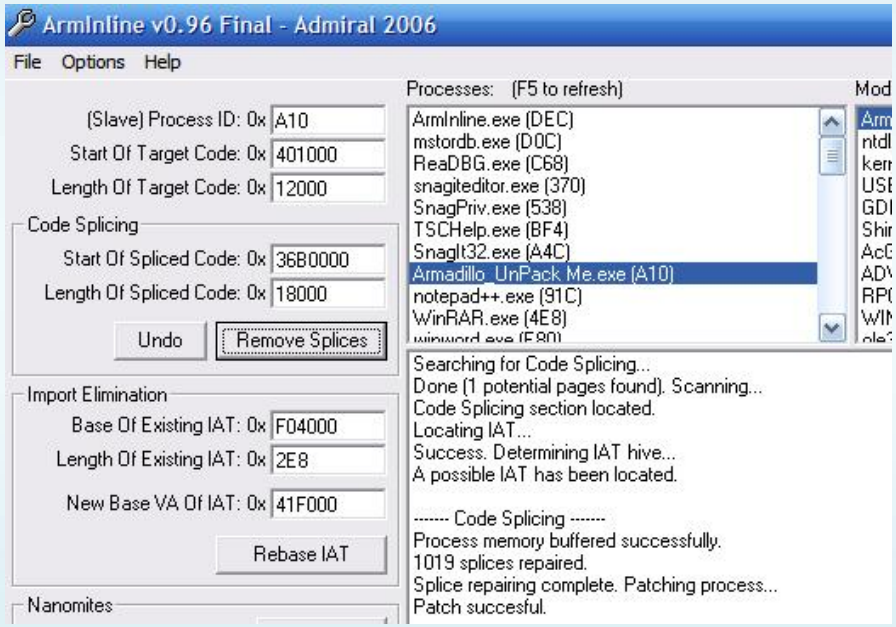
So once the IAT. Now we will fix Code splicing, time we do not need to use that Olly thắng for full IAT more so it is close to the eye and then J . Running the program ArmInline v0.96f (Eng), straighten this fix is the most fast.



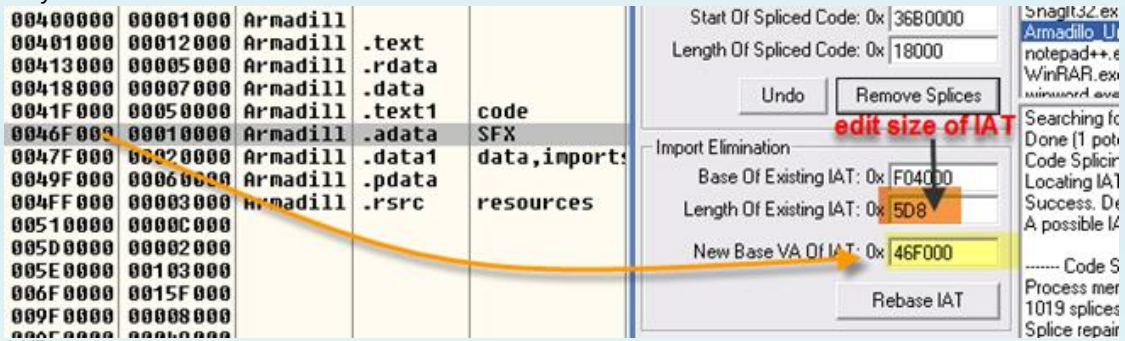
The program automatically detect splice area code contains, but we should check the information on length of splicing code for many when they detect non-standard. Press Alt + M and search:



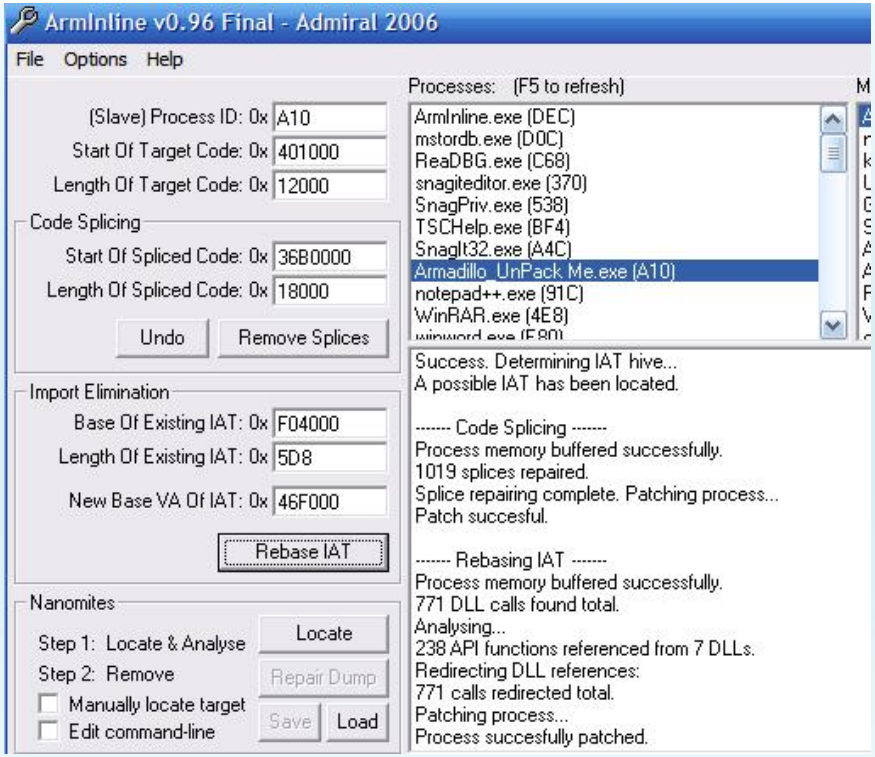
Edit the size and select Remove Splices:



Next we Rebase the IAT, edit the memory size of the IAT:

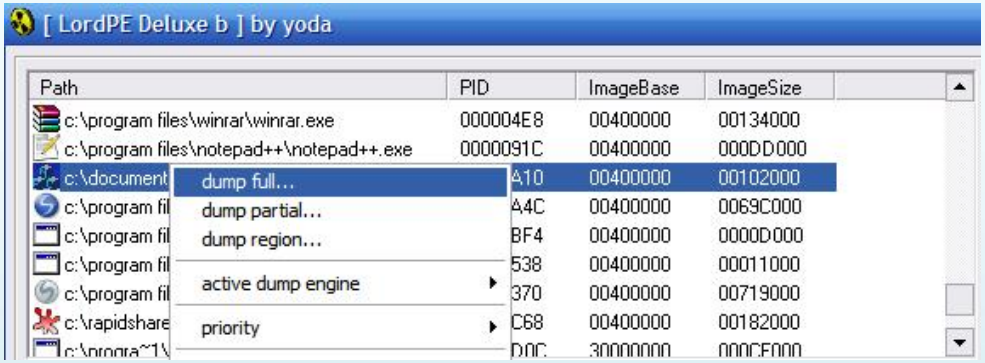


After editing is complete click Rebase IAT:

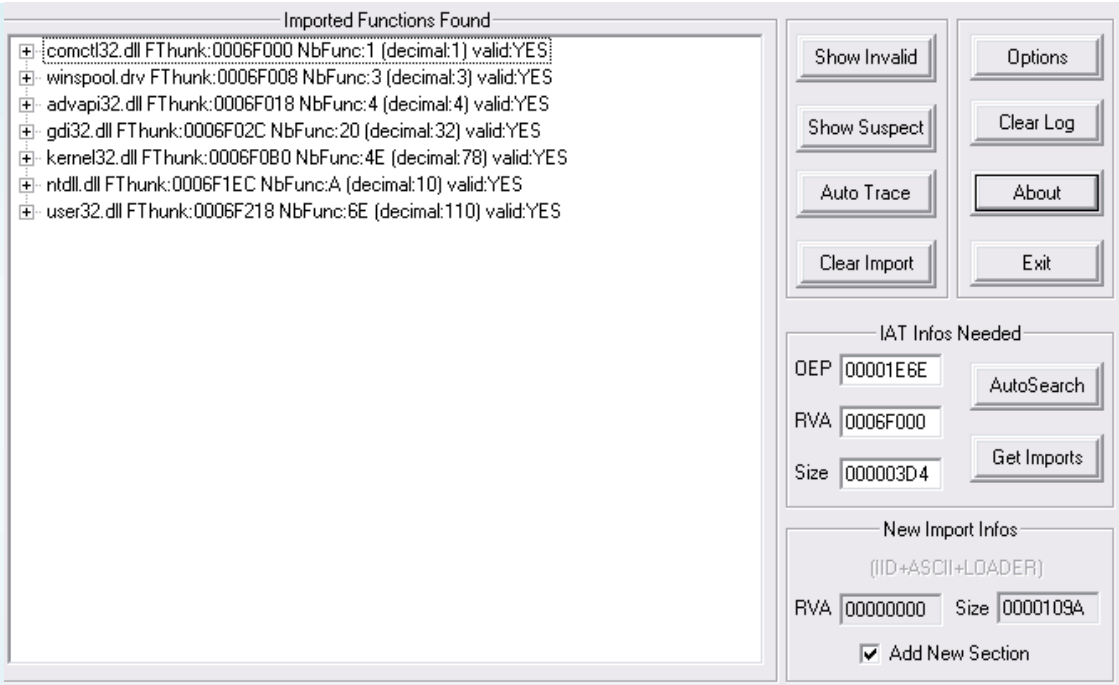


4. Fix DUMPED test file and the file after the fix IAT:

Once done the job on, time is the time we conducted Fix IAT dump file to file dumped. Open up and dump LordPE full:



1.7c ImpREC open up, select the edit process OEP and AutoSearch. Next click Get Imports:



Tolerable without any invalid, it is fortunate. Now it's time to fix dump, select Fix dump dumped and browse to the file. After we have completed fix dumped_.exe file. Run the file to try to see the results:

To file for lessening our use CFF Explorer VII del to reduce the section of Arma:

dumped_.exe

Name	Virtual Size	Virtual Address	Raw Size	Raw Address	Reloc Address	Linenumbers	Relocations ...	Linenumber...	Characteristics
Byte[8]	Dword	Dword	Dword	Dword	Dword	Dword	Word	Word	Dword
.text	00011B8E	00001000	00011B8E	00001000	00000000	00000000	0000	0000	60000020
.rdata	0000453E	00013000	0000453E	00013000	00000000	00000000	0000	0000	40000040
.data	00006348	00018000	00006348	00018000	00000000	00000000	0000	0000	C0000040
.text1	00050000	0001F000	00050000	0001F000	00000000	00000000	0000	0000	E0000020
.adata	00010000	0006F000	00010000	0006F000	00000000	00000000	0000	0000	E0000020
.data1	00020000	0007F000	00020000	0007F000	00000000	00000000	0000	0000	C0000040
.pdata	00060000	0009F000	00060000	0009F000	00000000	00000000	0000	0000	C0000040
.rsrc	00003000	000FF000	00003000	000FF000	00000000	00000000	0000	0000	40000040
.mackt	00002000	00102000	00002000	00102000	00000000	00000000	0000	0000	E0000060

So is the MUP is finished, if you follow the above is that you have very good then. But if you encounter any target that also play this style, the only sure water died. The next section we will use the tool available to bypass much faster.

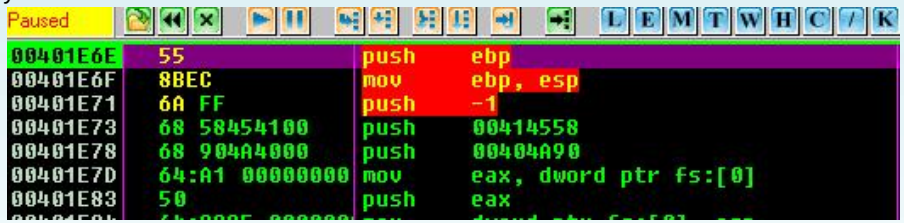
IV. Unpack using the tools available

This section will guide you unpack with Arma tool available with this tool will reduce the load for us to reduce the work must be performed manually very tired. First load the program and select ArmaDetach v1.31 as follows:

Then drag & drop target by us to:

You go to that section is found Crypto Call: `0x00448A1B`. Look not familiar, is the function that we found when implemented by the Manual. Remember child process ID and Original bytes program that provides for us. Now the load and Olly Attach child process to:

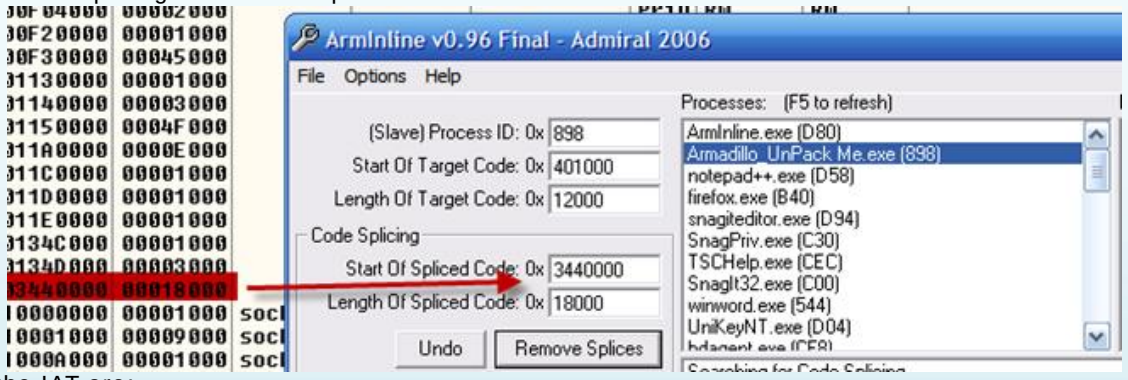
F9 and F12, and then edit the original OEP in bytes:



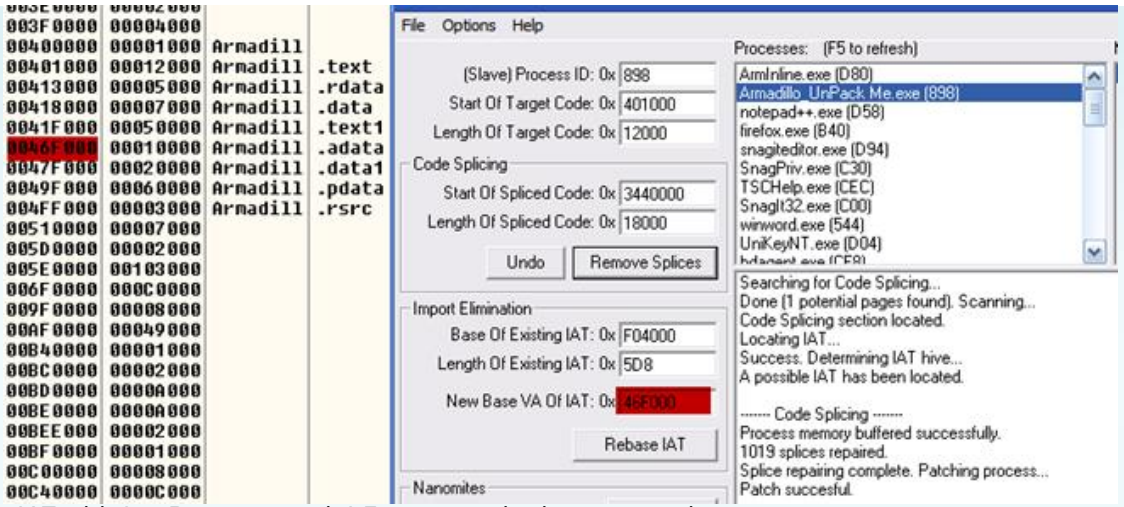
Khúc them and defeat CopyMem2 DebugBlocker very gently but do not have to waste any dew J . Khúc next restore the IAT to target, if you have the binary's IAT that I retain the first step in any time to bring that xài, but if you forget it again ArmaDetach used v1.31, but this time only Debug-blocker and Debug-Blocker IAT resolve it. Then drop into the target. Next use a new Olly to Attach child proc, fix the bytes. Next you run the script *Arma 5.x Magic F ix Call.osc* to fix it Call Magic lost the support of the search. Finally, do as the first to find out Full IAT.
I saved the IAT available full and that I always paste into J

```
00F04018 7E419021 USER32.GetWindowDC
00F0401C 7E423DCE USER32.GetDlgItem
00F04020 7C91043D ntdll.RtlFreeHeap
00F04024 00E3A6E5
00F04028 00E3A6F2
00F0402C 7E43212B USER32.GetWindowTextA
00F04030 7E41B72F USER32.GetParent
00F04034 77F161FF GDI32.CreateBitmap
00F04038 7E43C6CA USER32.DrawTextA
00F0403C 7E43EBC7 USER32.GetClassInfoA
00F04040 00E3A550
00F04044 7C80AC0F kernel32.SetErrorMode
00F04048 7C81CDDA kernel32.ExitProcess
00F0404C 00E3A63B
00F04050 7C80CC97 kernel32.SetHandleCount
00F04054 77F16E6F GDI32.DeleteDC
00F04058 00E3A66F
00F0405C 7E41B6D4 USER32.GetWindowRect
00F04060 00E3A5E9
00F04064 7E44F852 USER32.SetMenuItemBitmaps
00F04068 7E41D7F9 USER32.UpdateWindow
00F0406C 00E3A5A6
00F04070 77DD761B ADVAPI32.RegOpenKeyExA
00F04074 7E42E002 USER32.GetMessageA
00F04078 77F16C0A GDI32.DeleteObject
00F0407C 7C84467D kernel32.SetUnhandledExceptionFilter
00F04080 7C809B47 kernel32.CloseHandle
00F04084 00E3A6D9
00F04088 00E3A5B2
00F0408C 00E3A4D4
00F04090 7E41D8A4 USER32.ShowWindow
00F04094 7C812D9F kernel32.TlsAlloc
00F04098 00E3A5A0
00F0409C 7C81CF5B kernel32.GetEnvironmentStringsA
00F040A0 00E3A4A4
00F040A4 77F15B80 GDI32.SelectObject
00F040A8 7E41BDC8 USER32.ScreenToClient
```

Khuc them rebuild the IAT. Next is khúc fix Splicing Code. Load up and ArmInline Process should fix:



Remove Splices Rebase to complete the IAT are:



Finally a full dump with LordPE and fix IAT with ImpRec once again! Faster step in the many and J . Dumped_ To file size of the small del reduce the section of the Armadillo is complete, try the test file was found fix mượt run as a way to do Manual.

V. Conclusion

Finally, the complete message, takes 25 pages for a topic has been said a lot of hope you're not bored. This article I wrote for the purpose of storage and only the basic points to unpack Armadillo but I do not go more deeply into each section of these have too much material about the no.Them more recorded knowledge you are with me it is a pleasure, a feeling for their own Refresh your knowledge of minh.Rat thank him and you for taking your valuable time to read this document.

PS: This document is only a reference, the author is not responsible if the reader uses it to any goal.

Best Regards

_ [Kienmanowar] _

--+--==[Greatz to]==--+--

My family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Merc, Hoadongnoi, Nini ... all REA's members, TQN, HacNho, RongChauA, Deux, tlandn, light.phoenix, dqtln, ARTEAM .... all my friend, and you.

Thanks to --+--==[ ]==--+--

iamidiot, WhyNotBar, trickyboy, dzungltvn, takada, hurt_heart, haule_nth, hytkl, Moth, XIANUA, nhc1987, v. 0xdie. v.. You have contributed greatly to the REA. Hope you will continue to promote J

I want to thank **Teddy Roggers** for his great site, Reversing.be folks (especially **haggar),** Arteam folks **(Shub-Nigurrath, MaDMAn_H3rCuL3s)** and all folks on crackmes.de, thank to all members of **unpack.cn** (especially **fly** and **linhanshi**). Great thanks to **lena151** (I like your tutorials). And finally, thanks to **Ricardo NARVAJA** and all members on **CRACKSLATINOS.**

>>>> If you have any suggestions, comments or corrections email me: **kienmanowar [at] reaonline.net**

2008

[MUP Armadillo v6.00]

Why Not Bar

www.reaonline.net

7/14/2008

I. Introduction

ArmaDillo today, to the new Version 6.0 ... With the new tools have been put **Armageddon_v1.3.3** Blacklist and the course will do is unpack. After MUP Done should write to the tut is to store for later the party forgotten that draw readers. In this tut, beyond the present way unpack Armadillo V6.0, he also presented to the **"Retouch** "the dump file after unpack it look better ... Pro only do work

II. The Tools use

Posts using the following:

1. **READBG 1.1 (version OllyDBG MOD) or OllyIce (ver 2008.1.1)**
2. **Armadillo Find Protected V1.8**
3. **ArmaDetach v1.31**
4. **Fixed ArmInline v0.96f by Trickky Boy**
5. **Task LordPE or Explorer.**
6. **CHimpREC or 1.0 ImportRec v1.7c Final.**
7. **CFF Explorer.**
8. **0.94 PEiD and RDG Packer Detector v0.6.5**

III. Manual unpack Armadillo v4.64

1. Seeking information on Target.

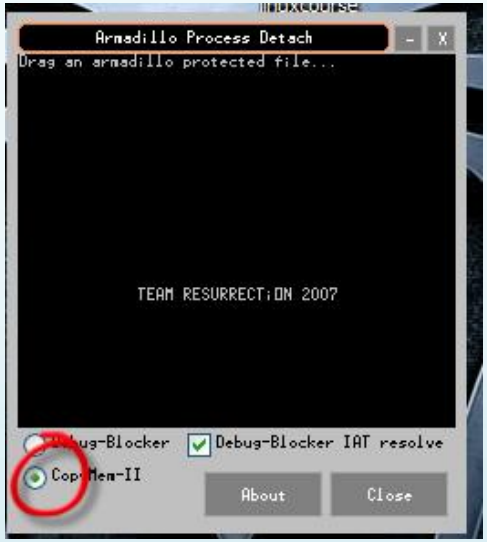
Armadillo Find Protect v1.8 check to see the pack in this version **Armadillo** how much and which protect the Option. Open Armadillo Find Protect v1.8, then **drag & drop** target to be one of the following information:

12-07-2008 00:36:35 <------- ------->
C: \ Documents and Settings \ REAteam \ Desktop \ Testlab \ UnPackMe_Armadillo_v6 \ UnPackMe.exe
- Protected Armadillo
Protection system (Professional)
- <Protection Options>
Debug-Blocker
CopyMem-II
Enable elimination Import Table
Enable Strategic Code Splicing
Enable Nanomites Processing
Enable Memory-Patching Protections
- Key <Backup Options>
Variable Backup Keys
- <Compression Options>
Best / Slowest Compression
- <Other Options>
Allow Only One Copy
- Version 6.00 08-07-2008
- Elapsed Time 00h 00m 07s 578ms
You should add Add **Signature.txt** by **Armadillo Find Protect v1.8** to identify properly Version

"4872AE00 Version 6.00 08-07-2008"
Fairness, full Protect the essence of the **Armadillo.** Heard in this Custom Build ...

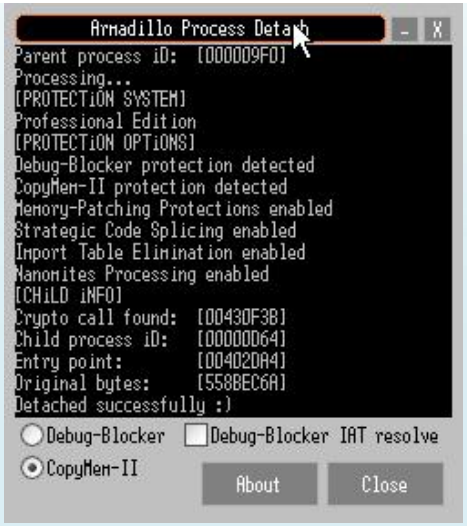
2. CopyMemII defeat, DebugBlocker

If he does want children **Manual Detach** or find out more you can see tut **MUP Armadillo v5.42 Case Study** by **Kien** or read the old tut on REA. So in this Tutor She used the tools available for fast results that same
First load the program and select **ArmaDetach v1.31** as follows:



Then **drag & drop** target by us to:

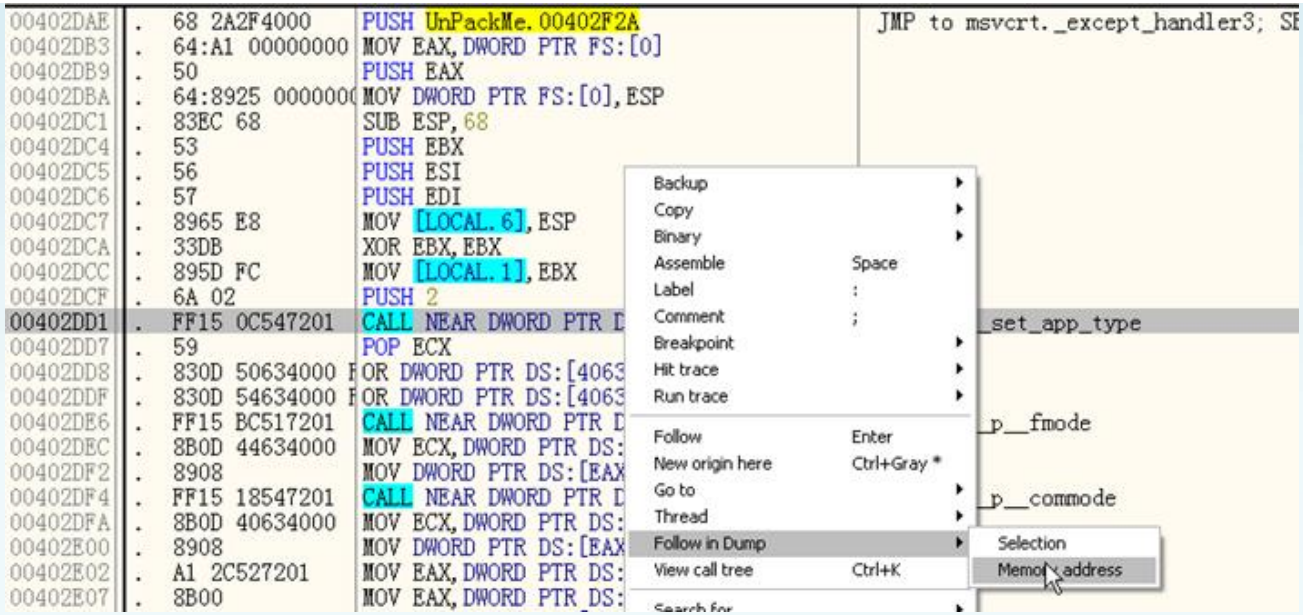
Click OK



Now the load and Olly Attach Select **Child Process ID** for accuracy, press **F9** and **F12,** then based on the Info **ArmaDetach** edit by the **EP** in bytes:

```
00402DA4  .  55              PUSH EBP
00402DA5  .  8BEC            MOV EBP,ESP
00402DA7  .  6A FF           PUSH -1
00402DA9  .  68 88484000     PUSH UnPackMe.00404888
00402DAE  .  68 2A2F4000     PUSH UnPackMe.00402F2A                  JMP to msvcrt._except_handler3; SE
00402DB3  .  64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
00402DB9  .  50              PUSH EAX
00402DBA  .  64:8925 0000000 MOV DWORD PTR FS:[0],ESP
00402DC1  .  83EC 68         SUB ESP,68
00402DC4  .  53              PUSH EBX
00402DC5  .  56              PUSH ESI
00402DC6  .  57              PUSH EDI
00402DC7  .  8965 E8         MOV [LOCAL.6],ESP
00402DCA  .  33DB            XOR EBX,EBX
00402DCC  .  895D FC         MOV [LOCAL.1],EBX
00402DCF  .  6A 02           PUSH 2
00402DD1  .  FF15 0C547201   CALL NEAR DWORD PTR DS:[172540C]        msvcrt.__set_app_type
00402DD7  .  59              POP ECX
00402DD8  .  830D 50634000 F OR DWORD PTR DS:[406350],FFFFFFFF
00402DDF  .  830D 54634000 F OR DWORD PTR DS:[406354],FFFFFFFF
00402DE6  .  FF15 BC517201   CALL NEAR DWORD PTR DS:[17251BC]        msvcrt.__p__fmode
00402DEC  .  8B0D 44634000   MOV ECX,DWORD PTR DS:[406344]
00402DF2  .  8908            MOV DWORD PTR DS:[EAX],ECX
00402DF4  .  FF15 18547201   CALL NEAR DWORD PTR DS:[1725418]       msvcrt.__p__commode
```

OK! defeat and was **CopyMemII DebugBlocker.** To wait is to find the peace of the **IAT** to **Full** Paste. We need to determine the **IAT Start, End** and **IAT IAT Size.** From the command Call **EP** below, select it, right click and select as follows:



At window dump scroll mouse over we have been **IAT start:**

Address	Value	Comment
01724F4C	00000000	
01724F50	002400A1	
01724F54	010C01A2	
01724F58	77F3AD80	GDI32.CreateFontA ===>IAT Start
01724F5C	015CC5D8	
01724F60	015CC665	
01724F64	73E6CBFA	MFC42.#3738
01724F68	73DD2415	MFC42.#567
01724F6C	73DE1CF0	MFC42.#1089
01724F70	015CC778	
01724F74	73DD6879	MFC42.#641

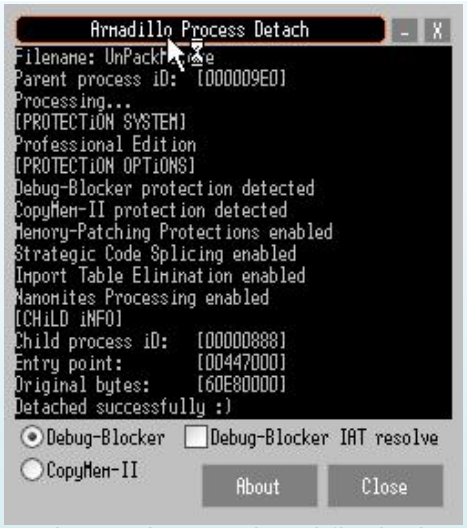
Scroll down we have **IAT End:**

Address	Value	Comment
01725434	015CC76E	
01725438	015CC6CF	
0172543C	015CC760	
01725440	73DD5EF1	MFC42.#2554
01725444	73DD3CFA	MFC42.#3874
01725448	73DE092D	MFC42.#5875
0172544C	77F1C83B	GDI32.Ellipse
01725450	77C018BA	VERSION.VerQuervValueA
01725454	00000000	===>IAT End
01725458	00A10004	Un
0172545C	010C01C3	

How summation lay gently we have **IAT Size**

IAT IAT Size = End - Start = IAT 0x4FC

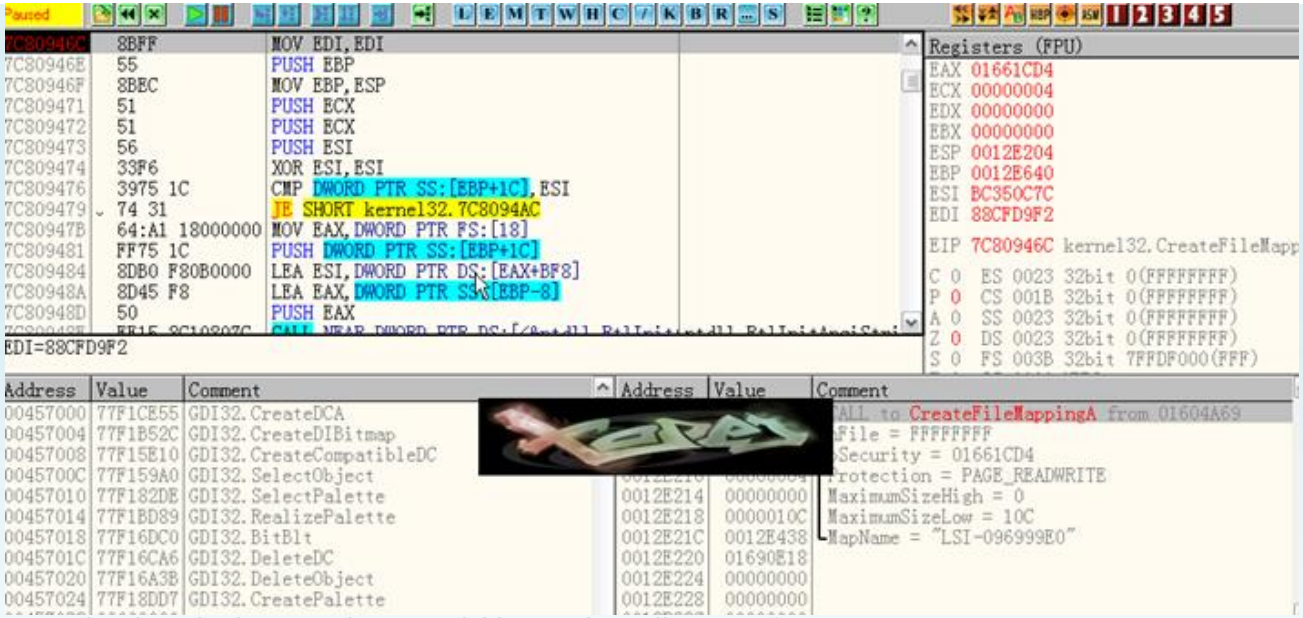
For Full **IAT,** open again **ArmaDetach v1.31** but this time only select **Debug-blocker.** Then drop the target.



Next use a new Olly Attach to **Process Child ID** (remember to choose the exact) and fix the bytes.

```
00447000   60              PUSHAD
00447001   E8 00000000     CALL UnPackMe.00447006
00447006   5D              POP EBP
00447007   50              PUSH EAX
00447008   51              PUSH ECX
00447009   0FCA            BSWAP EDX
0044700B   F7D2            NOT EDX
0044700D   9C              PUSHFD
0044700E   F7D2            NOT EDX
00447010   0FCA            BSWAP EDX
00447012   EB 0F           JMP SHORT UnPackMe.00447023
00447014   B9 EB0FB8EB     MOV ECX,EBB80FEB
00447019   07              POP ES                        Modification of segment register
0044701A   B9 EB0F90EB     MOV ECX,EB900FEB
```

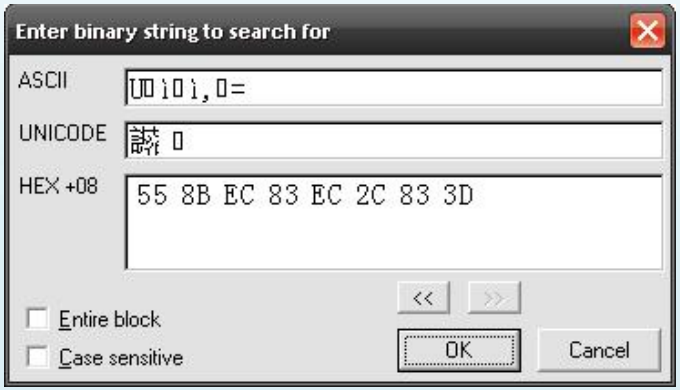
Continue pressing **Alt + F1, BP CreateFileMappingA, Shift + F9,** and will stop here

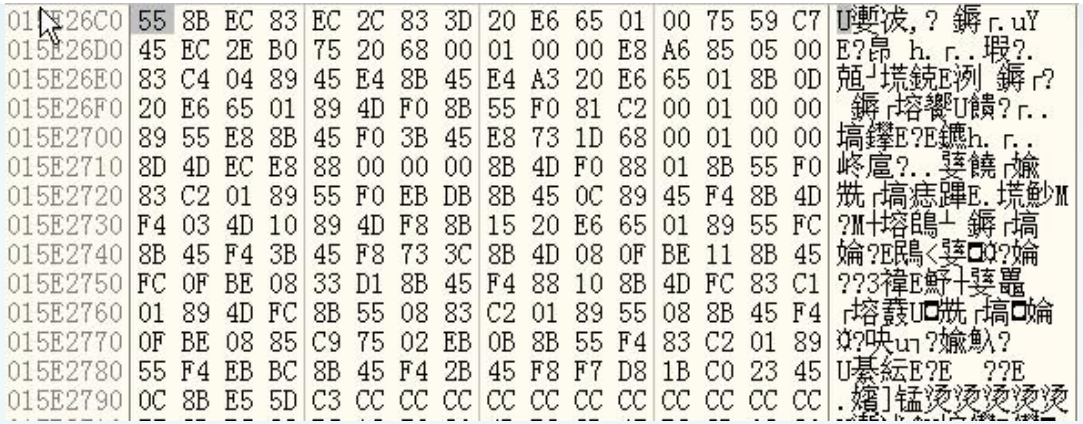


1 time unpack Armadillo v5.xx and 1 draw is the Opcode can quickly get the Full IAT performance with 98% account. Press **Alt + M, Ctrl + B** search the following **Opcode**

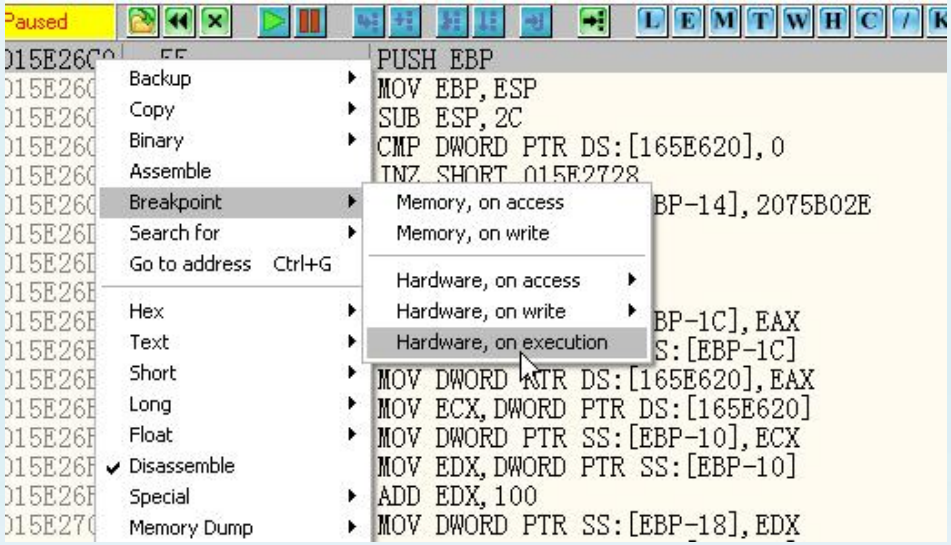
"55 8B EC 83 EC 2C 83 3D"

```
00DDCD10 55 push ebp
00DDCD11 8BEC mov ebp, esp
00DDCD13 83EC 2C sub esp, 2C
00DDCD16 833D 7CDCE000 0> Cmp dword ptr [E0DC7C], 0
00DDCD1D 75 59 jnz short 00DDCD78
```





And with only 1 address this, if someone do it for information on the test are soft Pack with Arma v5.xx **up. Disassemble** out for the **set** and **1 HWBP** there always



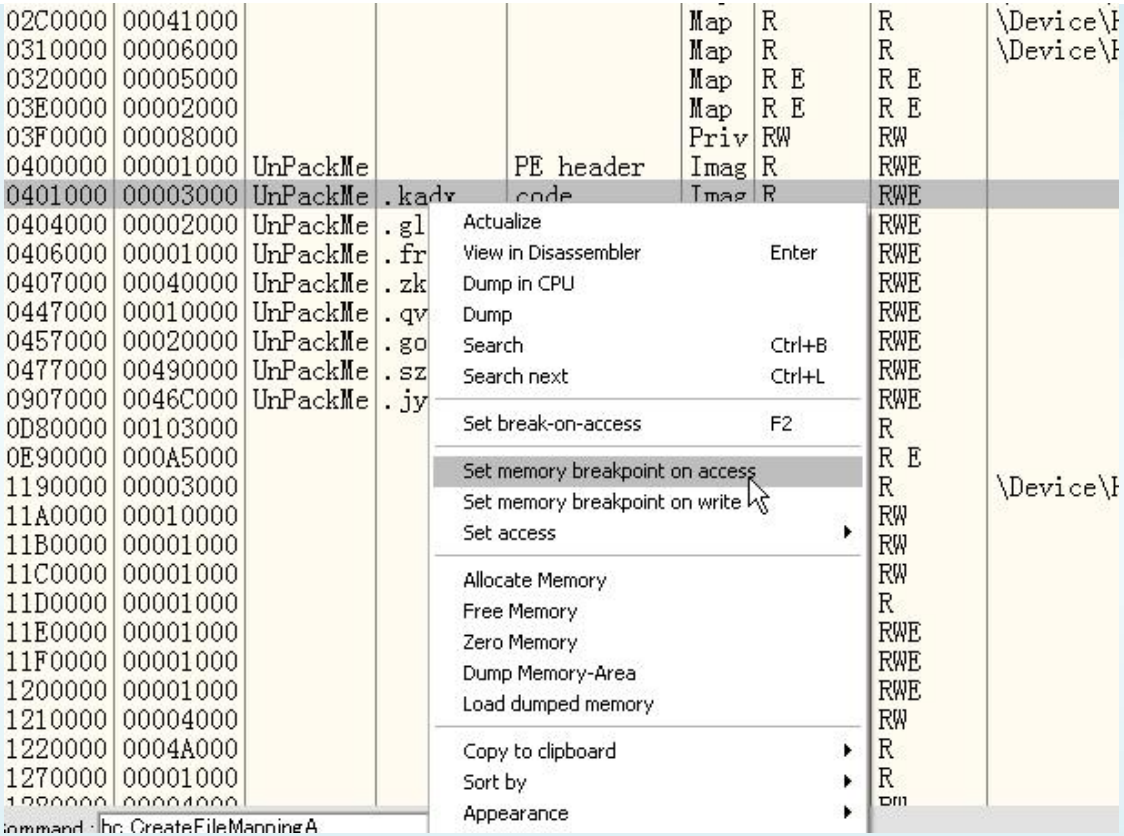
bc CreateFileMappingA, press **Shift + F9** until **NAG Reminder** up, click OK Play stopped at **HWBP Set**

```
015E26C0   55              PUSH EBP                                 ===>Pause Here
015E26C1   8BEC            MOV EBP,ESP
015E26C3   83EC 2C         SUB ESP,2C
015E26C6   833D 20E66501 ( CMP DWORD PTR DS:[165E620],0
015E26CD   75 59           JNZ SHORT 015E2728
015E26CF   C745 EC 2EB075( MOV DWORD PTR SS:[EBP-14],2075B02E
015E26D6   68 00010000     PUSH 100
015E26DB   E8 A6850500     CALL 0163AC86
015E26E0   83C4 04         ADD ESP,4
015E26E3   8945 E4         MOV DWORD PTR SS:[EBP-1C],EAX
015E26E6   8B45 E4         MOV EAX,DWORD PTR SS:[EBP-1C]
015E26E9   A3 20E66501     MOV DWORD PTR DS:[165E620],EAX
015E26EE   8B0D 20E66501   MOV ECX,DWORD PTR DS:[165E620]
015E26F4   894D F0         MOV DWORD PTR SS:[EBP-10],ECX
```

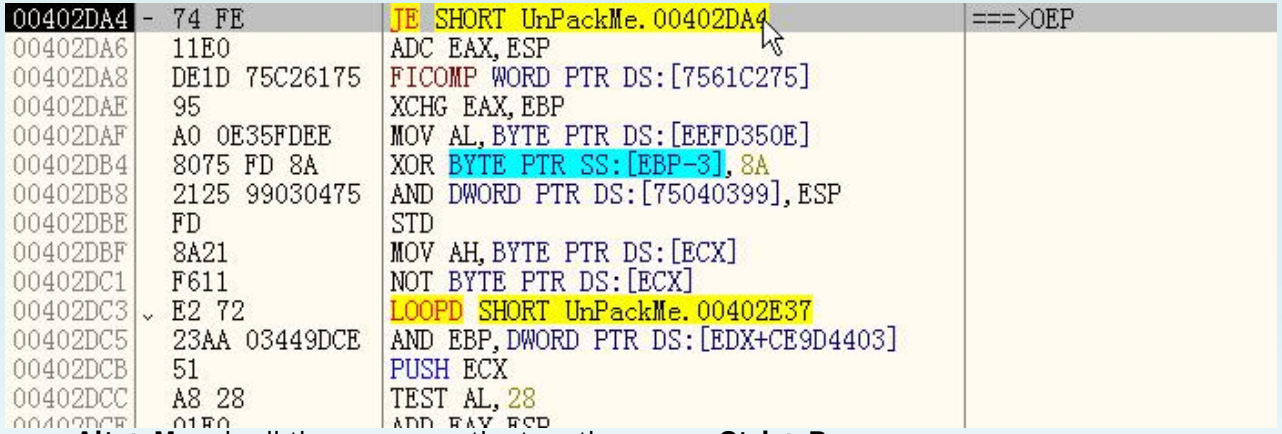
Ctrl + E to patch **C3**

```
015E26C0   C3              RETN                                     ===>Pause Here
015E26C1   8BEC            MOV EBP,ESP
015E26C3   83EC 2C         SUB ESP,2C
015E26C6   833D 20E66501 ( CMP DWORD PTR DS:[165E620],0
015E26CD   75 59           JNZ SHORT 015E2728
015E26CF   C745 EC 2EB075( MOV DWORD PTR SS:[EBP-14],2075B02E
015E26D6   68 00010000     PUSH 100
015E26DB   E8 A6850500     CALL 0163AC86
015E26E0   83C4 04         ADD ESP,4
015E26E3   8945 E4         MOV DWORD PTR SS:[EBP-1C],EAX
015E26E6   8B45 E4         MOV EAX,DWORD PTR SS:[EBP-1C]
015E26E9   A3 20E66501     MOV DWORD PTR DS:[165E620],EAX
015E26EE   8B0D 20E66501   MOV ECX,DWORD PTR DS:[165E620]
015E26F4   894D F0         MOV DWORD PTR SS:[EBP-10],ECX
```

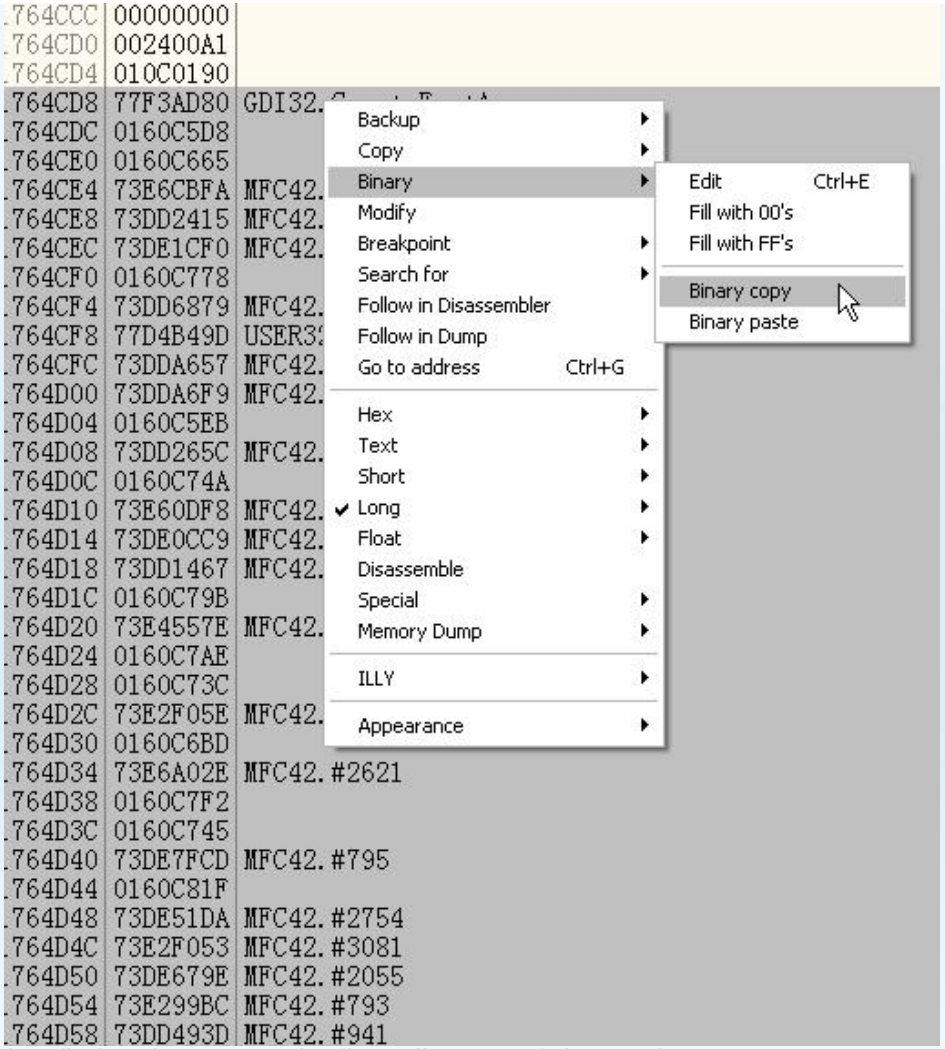
Remove HWBP, **Alt + M** and **Memory Set BP** under the same image



Press **Shift + F9** to **OEP** is the ball, but i do for purposes of our search is the only IAT Full Crash ...
If there is not anything to nho ...



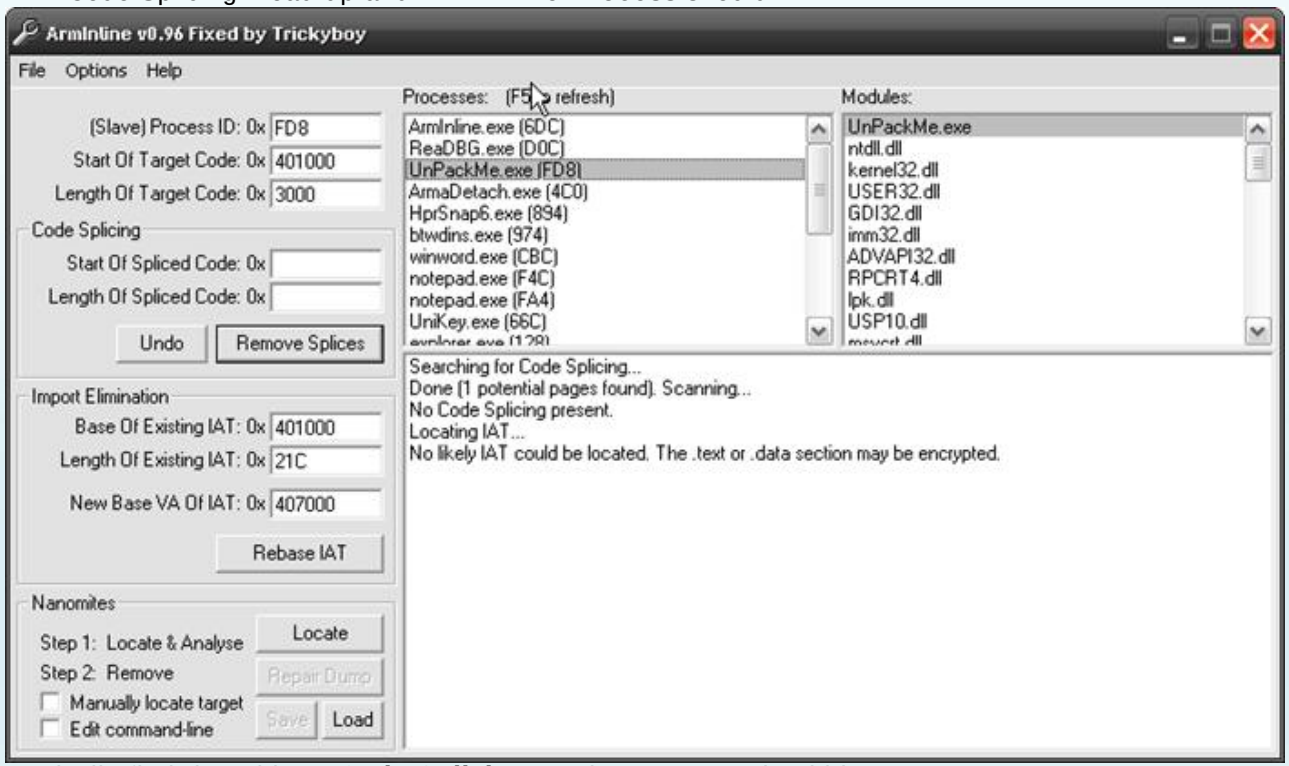
Now is the time for full IAT, press **Alt + M** and roll the mouse on the top, then press **Ctrl + B** to enter: **80 AD F3 77** Address by **GDI32.CreateFontA (IAT Start).** Click OK, after seeing Check IAT information that we find at the same match we COPY Full IAT block this, right click and select:



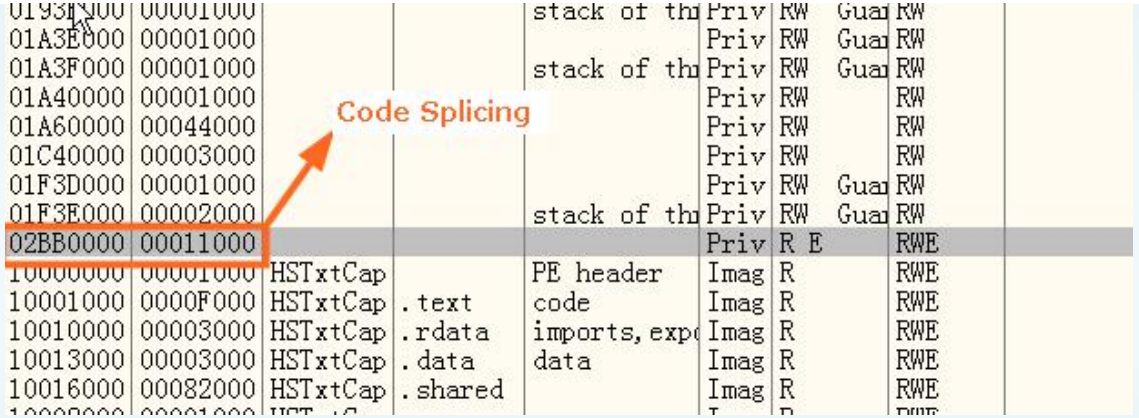
Included Full IAT then, is the Olly IAT used to find and return to the first Olly. One of the need to fix the IAT and **Binary Paste** to see us have more API functions but at first i have if we are successful in Fix IAT

Address	Value	Comment
01725370	0160C6CA	
01725374	0160C76C	
01725378	0160C7B3	
0172537C	7C80AA66	kernel32.FreeLibrary
01725380	0160C68C	
01725384	77D4E2AE	USER32.SendMessageA
01725388	0160C75D	
0172538C	77D48C06	USER32.SetTimer
01725390	77C39D67	msvcrt._initterm
01725394	73E2F314	MFC42.#5302
01725398	7C80B529	kernel32.GetModuleHandleA
0172539C	77C1EEEB	msvcrt.__getmainargs
017253A0	73DDCF2B	MFC42.#1576
017253A4	77C39E9A	msvcrt._exit
017253A8	0160C658	
017253AC	77C34E51	msvcrt.__dllonexit
017253B0	7C801EEE	kernel32.GetStartupInfoA
017253B4	73DD6BE1	MFC42.#2446
017253B8	73DD1265	MFC42.#4079
017253BC	73E2ED67	MFC42.#3095

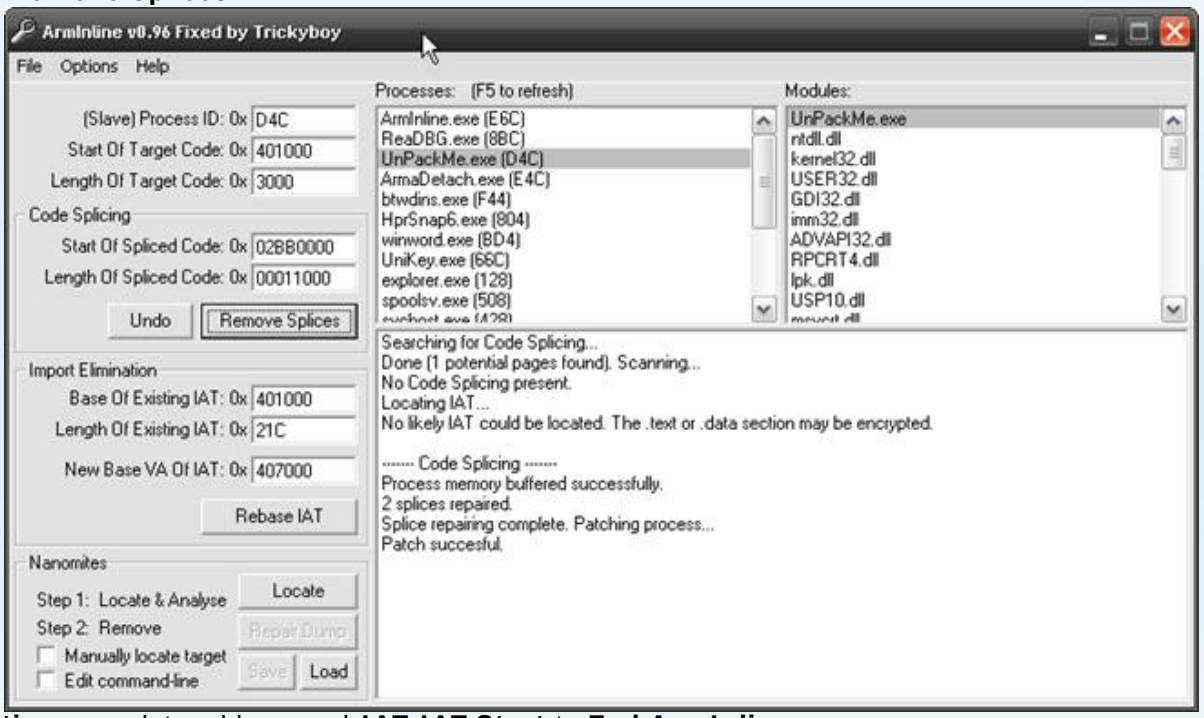
So complete rebuild IAT. Now fix Code Splicing. Load up and **ArmInline Process** should fix:



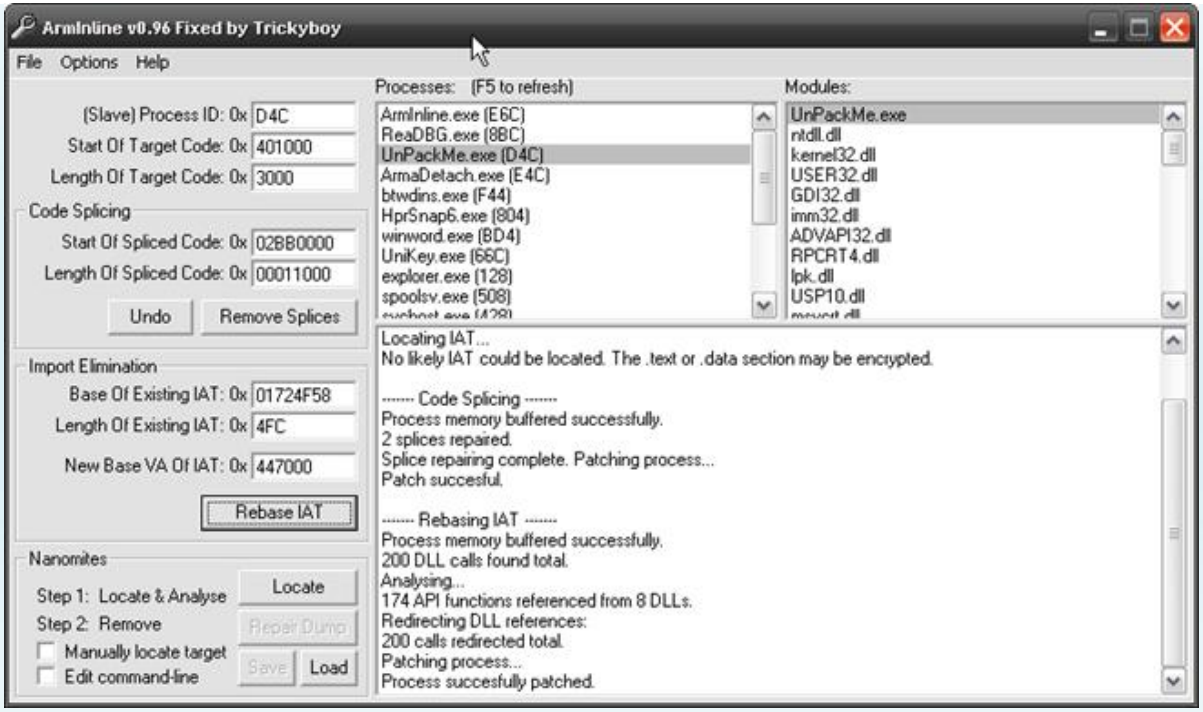
With this target ko Tool automatically find the address **Code Splicing** as always so we should have to go find ... **Alt + M** and scroll down to see the mouse signs **Splicing** of the **Code,** each and every time they do it will address Others should note that you do not block the Arab world crash that affected Asia ....



OK, back to fill **ArmInline** click **Remove Splices**



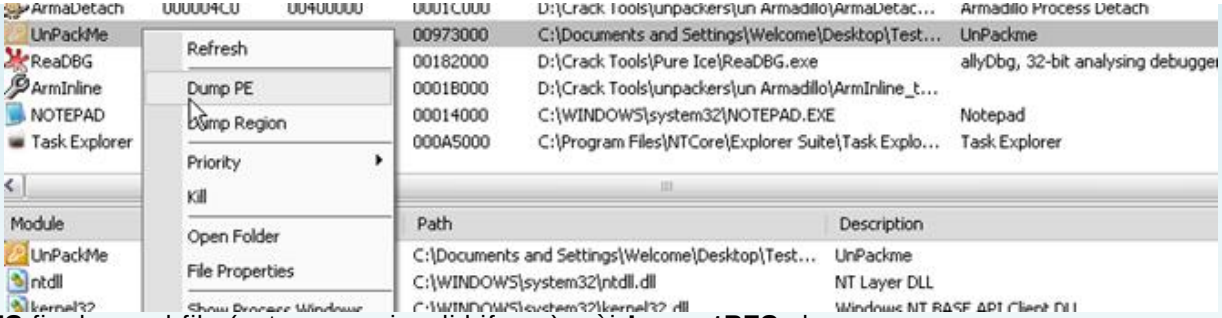
Time to **Import Table elimination,** complete address and **IAT IAT Start** to **End ArmInline,**
click **Rebase IAT**



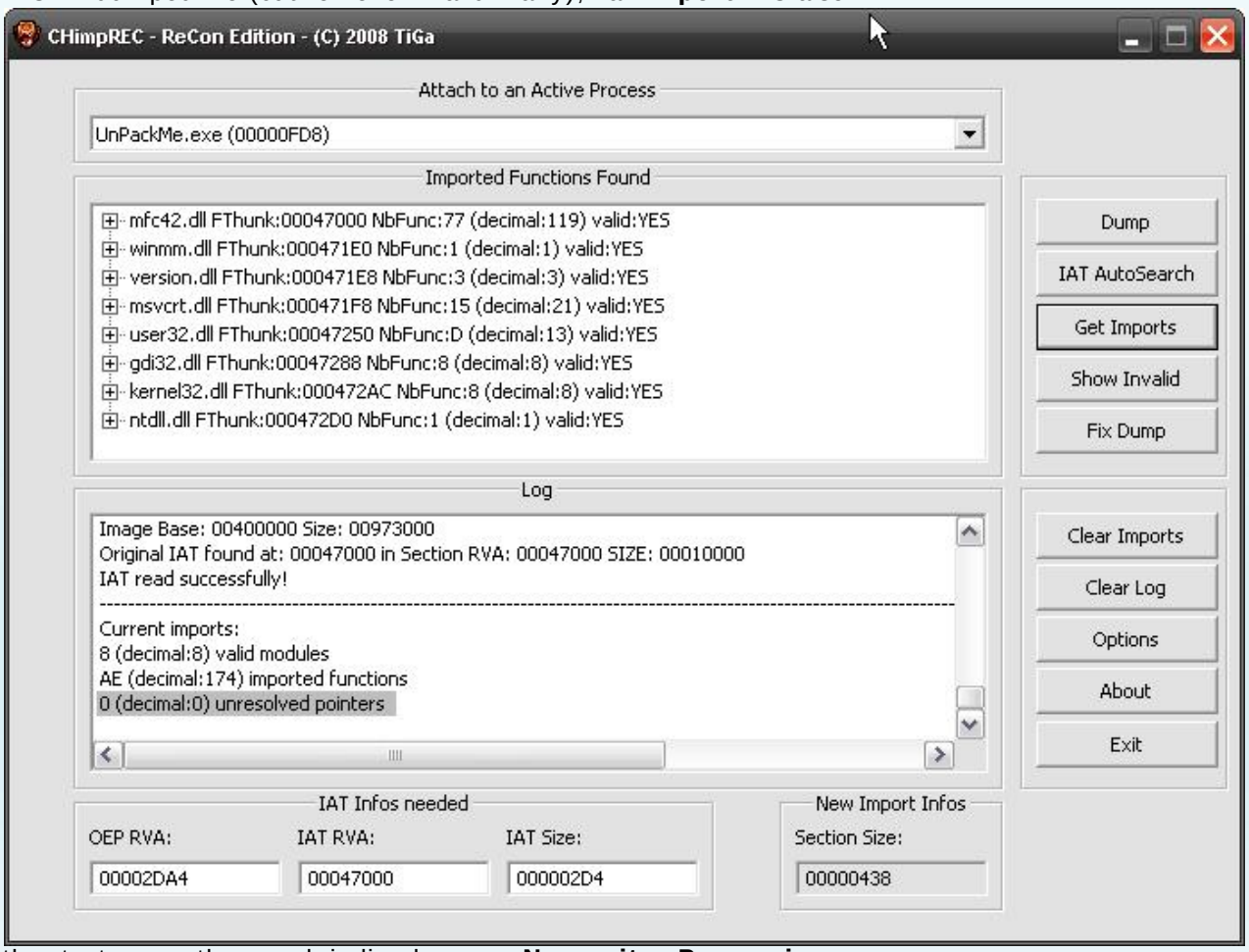
In Olly has a change

```
00402D9D  L.  C3              RETN
00402D9E  $-  FF25 40724400   JMP NEAR DWORD PTR DS:[447240]      msvcrt._ftol
00402DA4  r.  55              PUSH EBP
00402DA5  .   8BEC            MOV EBP,ESP
00402DA7  .   6A FF           PUSH -1
00402DA9  .   68 88484000     PUSH UnPackMe.00404888
00402DAE  .   68 2A2F4000     PUSH UnPackMe.00402F2A           JMP to msvcrt._except_handler3; SE
00402DB3  .   64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
00402DB9  .   50              PUSH EAX
00402DBA  .   64:8925 000000( MOV DWORD PTR FS:[0],ESP
00402DC1  .   83EC 68         SUB ESP,68
00402DC4  .   53              PUSH EBX
00402DC5  .   56              PUSH ESI
00402DC6  .   57              PUSH EDI
00402DC7  .   8965 E8         MOV [LOCAL.6],ESP
00402DCA  .   33DB            XOR EBX,EBX
00402DCC  .   895D FC         MOV [LOCAL.1],EBX
00402DCF  .   6A 02           PUSH 2
00402DD1  .   FF15 18724400   CALL NEAR DWORD PTR DS:[447218]   msvcrt.__set_app_type
00402DD7  .   59              POP ECX
00402DD8  .   830D 50634000 F OR DWORD PTR DS:[406350],FFFFFFFF
00402DDF  .   830D 54634000 F OR DWORD PTR DS:[406354],FFFFFFFF
00402DE6  .   FF15 00724400   CALL NEAR DWORD PTR DS:[447200]   msvcrt.__p__fmode
00402DEC  .   8B0D 44634000   MOV ECX,DWORD PTR DS:[406344]
00402DF2  .   8908            MOV DWORD PTR DS:[EAX],ECX
```

OK, open up **Task Explorer** to dump and save the file:



Continue to open up **CHimpREC** fix dumped file (cut remove invalid if any), xài **ImportREC** also:

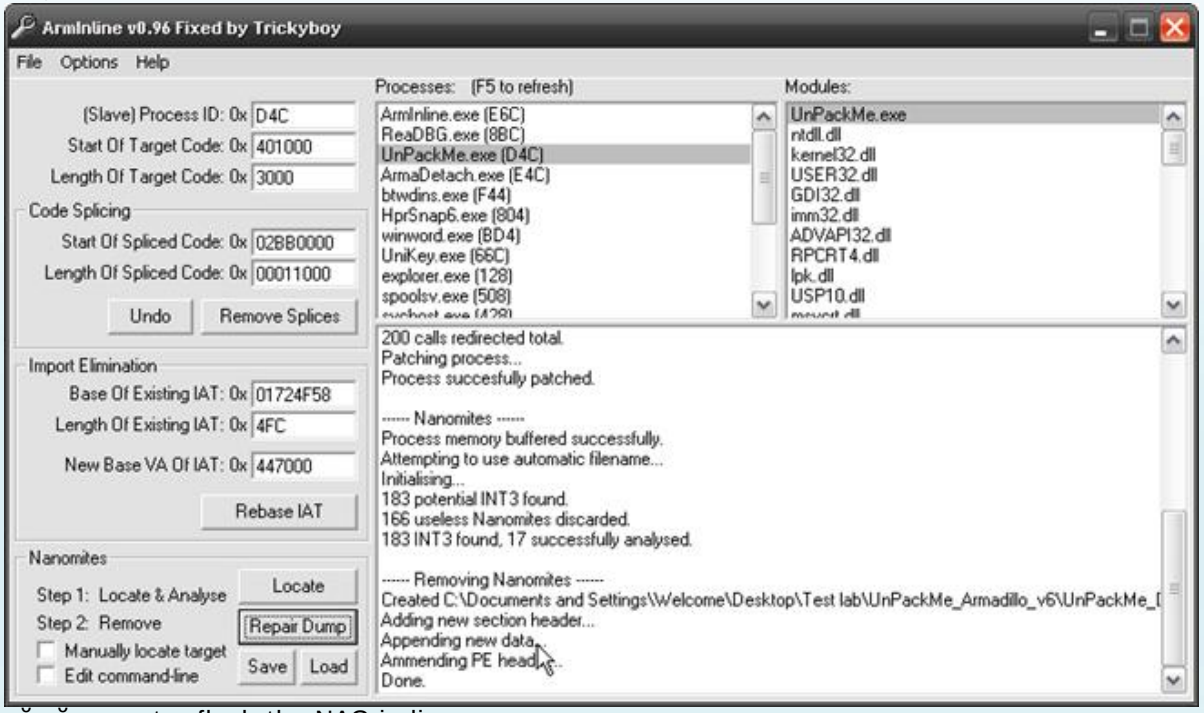


After the fix is done, run another test ... another crash in line because **Nanomites Processing** muh enough time ... do ... I invited him over the 3, then to lower resolution.

3. Fix Nanomites

To **Fix Nanomites** they use **ArmInline fixed by TrickyBoy** ... 1 tool has been fixed by the insurance Trick's songs. Tool can fix the original crash that nhen. Back **ArmInline** running, click **locate,** it does NAG Reminder, click OK and select **Repair dump** dump file to **repair.** If

Ok **Repair** will receive the following information:



It's time to try Run ... File dump ặc ặc country flush the NAG in line ...

This has 2 months ... Fix **Fixed** Load **File Nano** to **Olly,** press **F9** it loi the **NAG Reminder,** press **F12, Alt + K,** Stack method that is traditional

```
Address   Stack     Procedure / arguments                  Called from              Frame
0012E8B0  77D493F5  Includes ntdll.KiFastSystemCallRet      USER32.77D493F3          0012E8E4
0012E8B4  77D6EA24  USER32.WaitMessage                     USER32.77D6EA1F          0012E8E4
0012E8E8  77D5688A  USER32.77D6E895                        USER32.77D56885          0012E8E4
0012E910  77D6B7C5  USER32.77D567D4                        USER32.77D6B7C0          0012E90C
0012EBD0  77D6B12B  USER32.SoftModalMessageBox             USER32.77D6B126          0012EBCC
0012ED20  77D95FDF  USER32.77D6AFB6                       USER32.77D95FDA          0012ED1C
0012ED78  77D96084  USER32.MessageBoxTimeoutW             USER32.77D9607F          0012ED74
0012EDAC  77D80598  ? USER32.MessageBoxTimeoutA           USER32.77D80593          0012EDA8
0012EDCC  77D80550  ? USER32.MessageBoxExA                USER32.77D8054B          0012EDC8
0012EDD0  00000000    hOwner = NULL
0012EDD4  004060AC    Text = "Armadillo not detected!"
0012EDD8  004060C4    Title = "ERROR!"
0012EDDC  00000010    Style = MB_OK|MB_ICONHAND|MB_APPLMODAL
0012EDE0  00000000    LanguageID = 0 (LANG_NEUTRAL)
0012EDE8  0040152A  ? USER32.MessageBoxA                  UnPackMe.00401524        0012EDE4
0012EDEC  00000000    hOwner = NULL
0012EDF0  004060AC    Text = "Armadillo not detected!"
0012EDF4  004060C4    Title = "ERROR!"
0012EDF8  00000010    Style = MB_OK|MB_ICONHAND|MB_APPLMODAL
0012F204  0040169F  ? UnPackMe.004014C0                   UnPackMe.0040169A
```

Set 1 **BP 0040150C, Ctrl + F2, F9** stop at BP

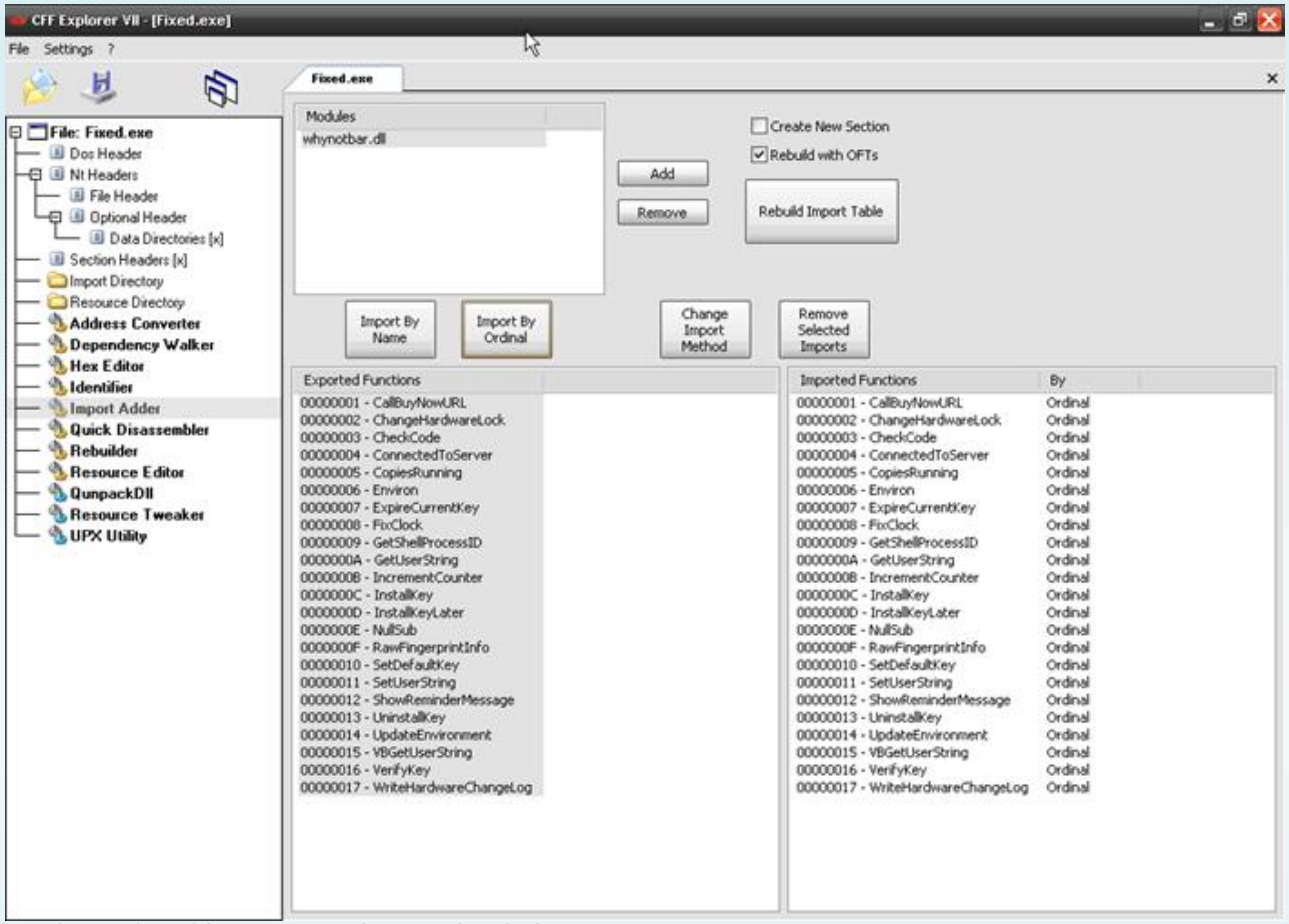
```
00401506   68 FF000000    PUSH 0FF
0040150B   50             PUSH EAX
0040150C   68 CC604000    PUSH UnPackMe.004060CC          ASCII "ALTUSERNAME"
00401511   FFD6           CALL NEAR ESI
00401513   85C0           TEST EAX,EAX
00401515   75 1E          JNZ SHORT UnPackMe.00401535
00401517   6A 10          PUSH 10
00401519   68 C4604000    PUSH UnPackMe.004060C4          ASCII "ERROR!"
0040151E   68 AC604000    PUSH UnPackMe.004060AC          ASCII "Armadillo not detected!"
00401523   50             PUSH EAX
00401524   FF15 80724400  CALL NEAR DWORD PTR DS:[<&user32.Messag USER32.MessageBoxA
0040152A   5F             POP EDI
0040152B   32C0           XOR AL,AL
0040152D   5E             POP ESI
0040152E   81C4 00040000  ADD ESP,400
00401534   C3             RETN
00401535   8D8C24 0801000 LEA ECX,DWORD PTR SS:[ESP+108]
0040153C   68 FF000000    PUSH 0FF
00401541   51             PUSH ECX
00401542   68 A4604000    PUSH UnPackMe.004060A4          ASCII "USERKEY"
```

Patch as the image

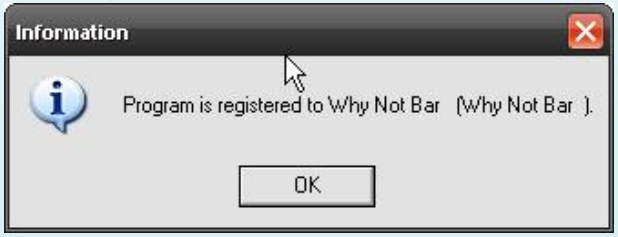
```
00401506   68 FF000000    PUSH OFF
0040150B   50             PUSH EAX
0040150C   68 CC604000    PUSH UnPackMe.004060CC                ASCII "ALTUSERNAME"
00401511   FFD6           CALL NEAR ESI
00401513   85C0           TEST EAX,EAX
00401515   75 1E          JNZ SHORT UnPackMe.00401535           ===>Patch to JMP
00401517   6A 10          PUSH 10
00401519   68 C4604000    PUSH UnPackMe.004060C4                ASCII "ERROR!"
0040151E   68 AC604000    PUSH UnPackMe.004060AC                ASCII "Armadillo not detected!"
00401523   50             PUSH EAX
00401524   FF15 80724400  CALL NEAR DWORD PTR DS:[<&user32.Messag USER32.MessageBoxA
0040152A   5F             POP EDI
0040152B   32C0           XOR AL,AL
0040152D   5E             POP ESI
0040152E   81C4 00040000  ADD ESP,400
00401534   C3             RETN
00401535   8D8C24 0801000 LEA ECX,DWORD PTR SS:[ESP+108]
0040153C   68 FF000000    PUSH OFF
00401541   51             PUSH ECX
00401542   68 A4604000    PUSH UnPackMe.004060A4                ASCII "USERKEY"
00401547   FFD6           CALL NEAR ESI
00401549   85C0           TEST EAX,EAX
0040154B   75 27          JNZ SHORT UnPackMe.00401574           ===>Patch to JMP
0040154D   BF 9C604000    MOV EDI,UnPackMe.0040609C             ASCII "No key!"
00401552   83C9 FF        OR ECX,FFFFFFFF
```

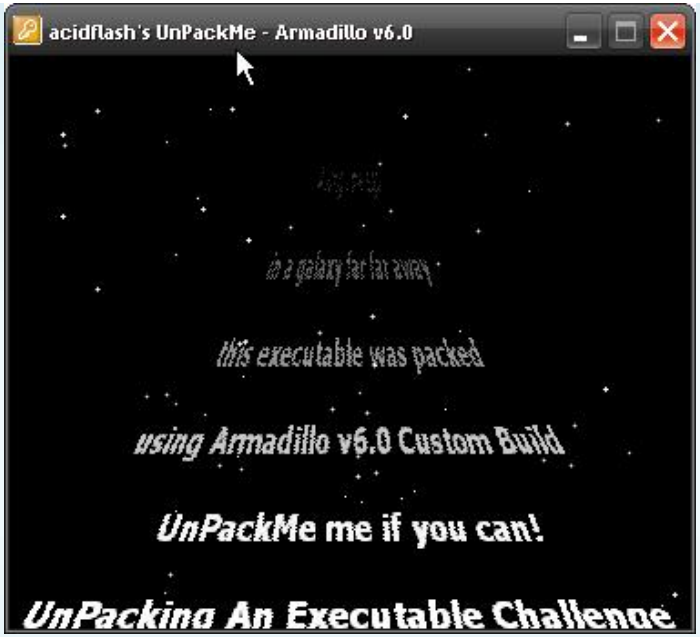
Save the Run ... ... tolerable.

Method 2, you can Add More **User Name, User Key** ... can patch directly in the dump file to bypass NAG, but here they play add 1 mod dll files from the File ... **ArmAccess.dll** from the infected patch fix the above . Most of the soft pack with ArmaDillo unpack after they finished 1 and add to the cracked always take from the hands of the foot. Tolerable ... File this name very private and very Pro **"whynotbar.dll"** ... ha ha ... with **CFF** Open File, select **Import Adapter,** select all the API function below, click **Import** and **Ordial By** pressing **rebuild Import Tabale**



Save and run the test considered .... Khua khua name who taught choi

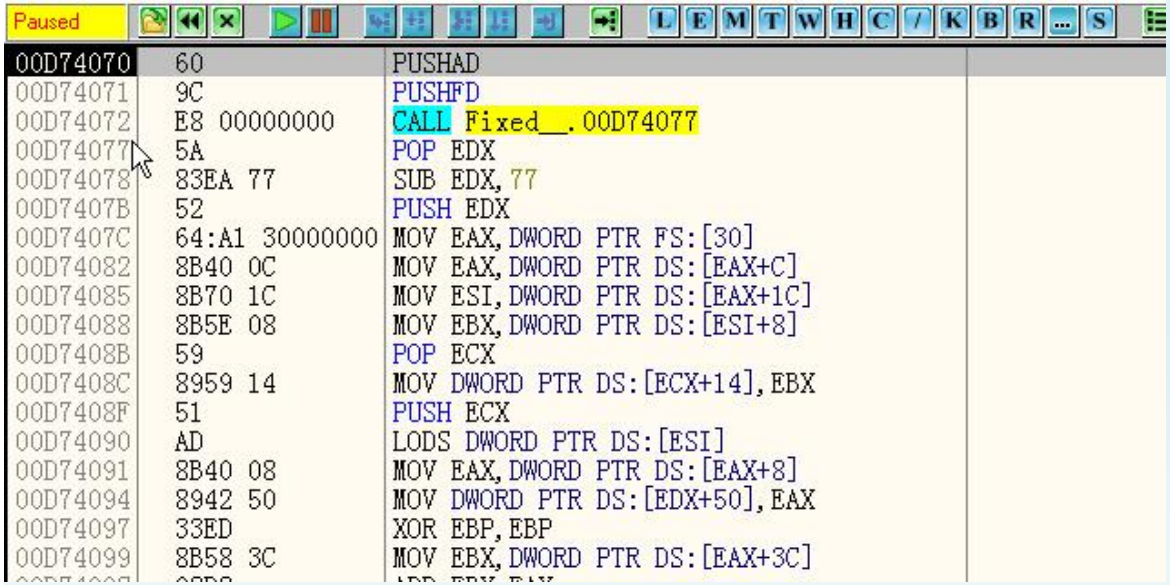




From the infected hen ... If patch file unpack he was OK to invite them through the **"Retouch"**

3. Retouch File dump

After Fix nano completed, it **ArmaInline** Add 1 code to EP Fix Nano should look very nice ko ...



The code is responsible for the use of Nano **INT3** it will AutoFix. So we just need it to run, check all Funtion (if any) and click Exit. How such a code to help one another out Fix a few bugs **INT3** created by Nano. Xót To do what they should always Exit soft for sure. Exit When finished typing **Ctrl + G** to **401,000** and to conduct **Binary Copy** from the beginning to end. Then load dump file that we have not **Fix Nano** with **Binary ArmInline** and **Paste** it. We will see in Olly **INT3** is a change in order to **Jump** respectively.

```
00401663   6A FF          PUSH -1
00401665   68 B0304000    PUSH UnPackMe.004030B0
0040166A   64:A1 00000000 MOV EAX,DWORD PTR FS:[0]
00401670   50             PUSH EAX
00401671   64:8925 000000( MOV DWORD PTR FS:[0],ESP
00401678   83EC 1C         SUB ESP,1C
0040167B   57             PUSH EDI
0040167C   8BF9           MOV EDI,ECX
0040167E   E8 0B150000    CALL <JMP.&mfc42.#4710>
00401683   EB 03          JMP SHORT UnPackMe.00401688
00401685   A5             MOVS DWORD PTR ES:[EDI],DWORD PTR DS:[ES
00401686   889C68 E061400( MOV BYTE PTR DS:[EAX+EBP*2+4061E0],BL
0040168D   68 D8614000    PUSH UnPackMe.004061D8                    ASCII "john"
00401692   E8 69FFFFFF    CALL UnPackMe.00401600
00401697   83C4 08         ADD ESP,8
0040169A   E8 21FEFFFF    CALL UnPackMe.004014C0
0040169F   84C0           TEST AL,AL
004016A1   75 08          JNZ SHORT UnPackMe.004016AB
004016A3   6A 00          PUSH 0
004016A5   FF15 28724400  CALL NEAR DWORD PTR DS:[<&msvcrt.exit>]   msvcrt.exit
004016AB   56             PUSH ESI
004016AC   90             NOP
004016AD   90             NOP
004016AE   90             NOP
```

OK ... Save File and Run ... try running File and delicious EP returned correctly and reduce the Section **1. "Nano"** which **ArmInline** Add to Fix Nano

```
00402DA4   55             PUSH EBP                                  ===>EP
00402DA5   8BEC           MOV EBP,ESP
00402DA7   6A FF          PUSH -1
00402DA9   68 88484000    PUSH UnPackMd.00404888
00402DAE   68 2A2F4000    PUSH <JMP.&msvcrt._except_handler3>
00402DB3   64:A1 00000000 MOV EAX,DWORD PTR FS:[0]
00402DB9   50             PUSH EAX
00402DBA   64:8925 000000( MOV DWORD PTR FS:[0],ESP
00402DC1   83EC 68        SUB ESP,68
00402DC4   53             PUSH EBX
00402DC5   56             PUSH ESI
00402DC6   57             PUSH EDI
00402DC7   8965 E8        MOV DWORD PTR SS:[EBP-18],ESP
00402DCA   33DB           XOR EBX,EBX
00402DCC   895D FC        MOV DWORD PTR SS:[EBP-4],EBX
00402DCF   6A 02          PUSH 2
00402DD1   FF15 18724400  CALL NEAR DWORD PTR DS:[<&msvcrt.__set_( msvcrt.__set_app_type
```

Conducted to remove the balance of the Section of ArmaDillo

UnPackMe_Del_section.exe

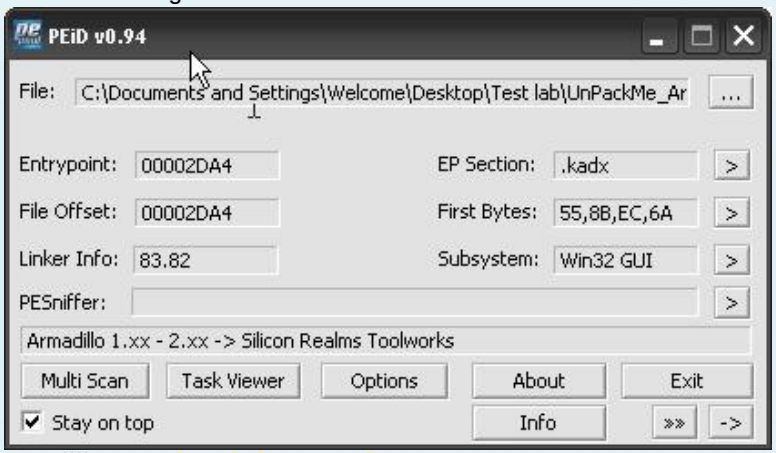
Name	Virtual Size	Virtual Address	Raw Size	Raw Address	Reloc Address
Byte[8]	Dword	Dword	Dword	Dword	Dword
.kadx	000022F2	00001000	000022F2	00001000	00000000
.glsu	000013C8	00004000	000013C8	00004000	00000000
.frnp	00000358	00006000	00000358	00006000	00000000
zkjfv	00040000	00007000		00007000	00000000
.qvmhe	00010000	00047000		00047000	00000000
.gofq	00020000	00057000		00057000	00000000
.szet	00490000	00077000	00490000	00077000	00000000
.jygm	0046C000	00507000	0046C000	00507000	00000000
.TiGa	00001000	00973000	00001000	00973000	00000000

Xóa các Section này

Rename the name of the **Section** for aesthetic slightly

Name	Virtual Size	Virtual Address	Raw Size	Raw Address	Reloc Address
00000210	00000218	0000021C	00000220	00000224	00000228
Byte[8]	Dword	Dword	Dword	Dword	Dword
.text	00003000	00001000	000022F2	00000400	00000000
.rdata	00002000	00004000	000013AF	00002800	00000000
.data	00041000	00006000	00000261	00003C00	00000000
.idata	0092C000	00047000	0000C005	00004000	00000000
.idata	00001000	00973000	0000073A	00010200	00000000
.rsrc	0046C000	00974000	0046B8C6	00010A00	00000000

After deleting the **Section,** File storage dump down half. Using **PeiD** File Scan considered stars



Cause PeiD that still recognize the value of the Armadillo's **MajorLinkerVersion** and **MenorLinkerVersion.** I know that this is also the seat choc ngoay Peid players who doubt it Scan 2 of this ... accidentally lượm know in time ....

Member	Offset	Size	Value	Meaning
Magic	00000110	Word	010B	PE32
MajorLinkerVersion	00000112	Byte	53	
MinorLinkerVersion	00000113	Byte	52	
SizeOfCode	00000114	Dword	00049000	
SizeOfInitializedData	00000118	Dword	0049A000	
SizeOfUninitializedData	0000011C	Dword	00000000	
AddressOfEntryPoint	00000120	Dword	00002DA4	.text
BaseOfCode	00000124	Dword	00007000	
BaseOfData	00000128	Dword	00057000	
ImageBase	0000012C	Dword	00400000	
SectionAlignment	00000130	Dword	00001000	
FileAlignment	00000134	Dword	00001000	
MajorOperatingSystemVersion	00000138	Word	0004	
MinorOperatingSystemVersion	0000013A	Word	0000	

According to experience your own children to look at the **EP** that it is **Microsoft Visual C + + 6.0,** if you do not have experience using the **RDG Packer Detector v0.6.5** considered to Detect File dump code with anything ... and compare with the **MajorLinkerVersion** and that they **MenorLinkerVersion** have listed below and use the **CFF** to Fix

Code MajorLinkerVersion MenorLinkerVersion

Microsoft Visual C + + 7.0 - v7.1 07 0A

Microsoft Visual C + + 7.0 dll Method 3 07 00

Microsoft Visual C + + 6.0 dll 06 00

Microsoft Visual C + + 6.0 [Debug] 06 00

Borland C + + 1999 05 00

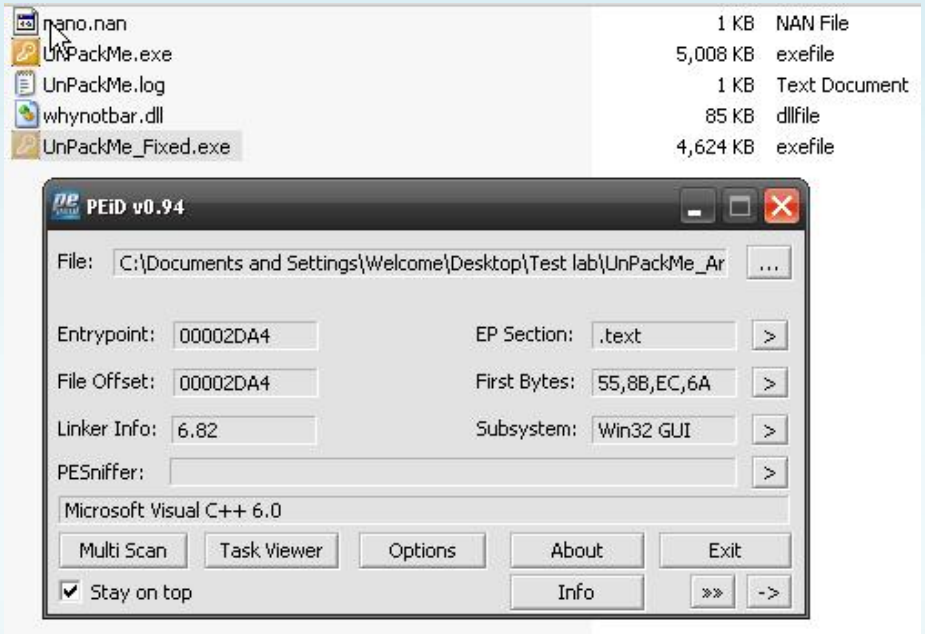
Borland Delphi v6.0 - v7.0 02 19

Microsoft Visual Basic 5.0 / 6.0 06 00

MASM32 / TASM32 05 0C

Member	Offset	Size	Value	Meaning
Magic	00000110	Word	010B	PE32
MajorLinkerVersion	00000112	Byte	06	
MinorLinkerVersion	00000113	Byte	00	
SizeOfCode	00000114	Dword	00049000	
SizeOfInitializedData	00000118	Dword	0049A000	
SizeOfUninitializedData	0000011C	Dword	00000000	
AddressOfEntryPoint	00000120	Dword	00002DA4	.kadx

Save and use the scan to see **Peid**



Ok ... too tired to unpack this ... 5 minutes without sitting writing copy that is a long long time ...
ơi hungry, they remember and add iu party ... brothers we pause here hen ...

IV. Conclusion

Finally, the complete message, this article I wrote for the purpose of storage and only the basic points to unpack Armadillo but I do not go more deeply into each section of these have too many resources no.Them's talk about the record more knowledge you are with me it is a pleasure, a feeling for their own Refresh your knowledge of minh.Rat thank him and you for taking the time valuable to you to read this document.

PS: This document is only a reference, the author is not responsible if the reader uses it to any goal.

Best Regards

_ [Why Not Bar] _

--+ +--= =[Greatz thanks to]= =--+ +--

My family, Computer_Angel, Moonbaby, Kienmanowar, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Merc, Hoadongnoi, Nini ... all REA's members, TQN, HacNho, RongChauA, Deux, tlandn, light.phoenix, dqtln, ARTEAM .... all my friend, and you.

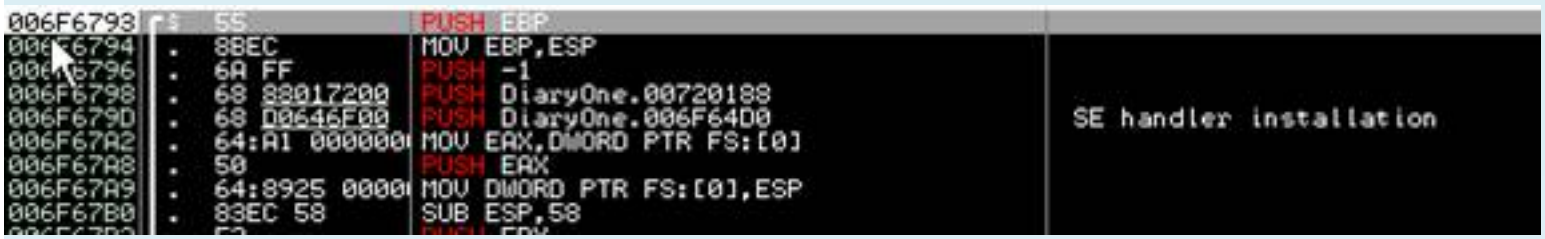
Thanks to --+ +--= =[ ]= =--+ +--
iamidiot, trickyboy, dzungltvn, takada, hurt_heart, haule_nth, hytkl, Moth, XIANUA, nhc1987, v. 0xdie. v.. You have contributed greatly to the REA. Hope you will continue to promote J
I want to thank **Teddy Roggers** for his great site, Reversing.be folks (especially **haggar),** Arteam folks **(Shub-Nigurrath, MaDMAn_H3rCuL3s)** and all folks on crackmes.de, thank to all members of **unpack.cn** (especially **fly** and **linhanshi**). Great thanks to **lena151** (I like your tutorials). And finally, thanks to **Ricardo NARVAJA** and all members on **CRACKSLATINOS.**

>>>> If you have any suggestions, comments or corrections email me: **WhyNotBar [at] reaonline.net**

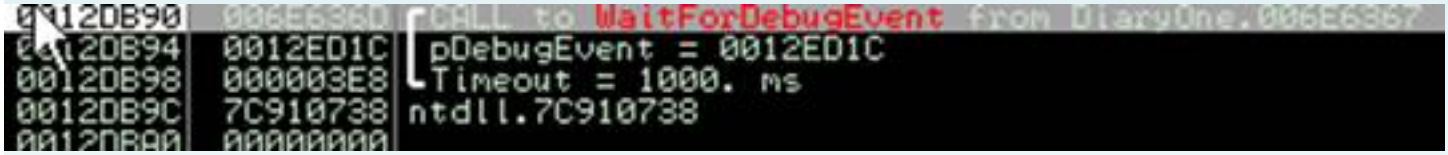
```
      + + CopyMemII
         Debugblocker
 IAT elimination
+ Code Splicing
          + Nanomites

Target        :       DiaryOne 5.6
Crack Tool    : 1.OllyDBG
2005
  2.          LordPE
  Deluxe 1.4-by
  yoda
  3.Import
  REConstructor
  1.6 Final
4. ArmInline
0.71
Author        : Why Not Bar
```

Before they start to say a pair! Please Dear Uncle Em with 1 lính new acceptance of children with written tut if the goal is how to how to unpack Done 1 Soft Pack with Arma is not going into the resolution of the copy. so should the quality of articles in English can not Hacnho, Benina member or the other ... hope for the Uncle! Uncle Funnynet suggestions for a message they do not have the quality they should also not dare to write more! hic hic! I do not Uncle Funnynet sad and I also hope that many people comment so they have to be progress. Meals before any gambling say they should wait tut they write. Again I just want this article is the view that Uncle not only dare to be first TUT. Thôi start time ...

_ Target Load:

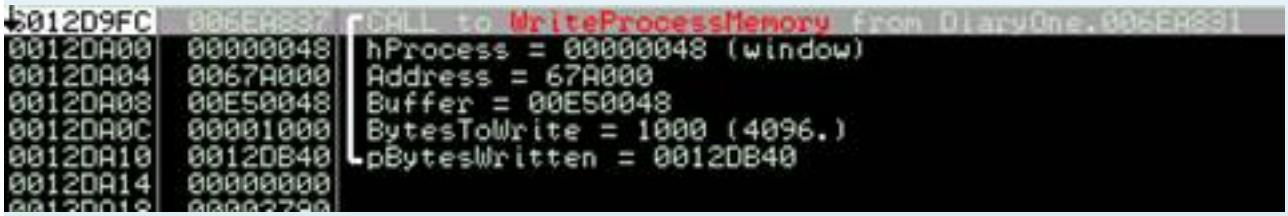


_ **Alt** + F1, BP **WaitForDebugEvent** and press **F9** Stack window we see as follows:

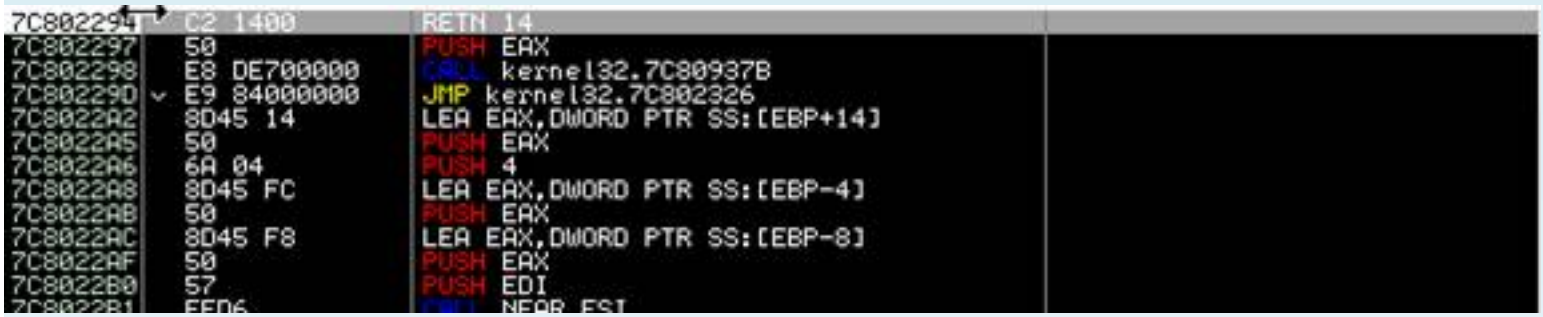


_Chon Like

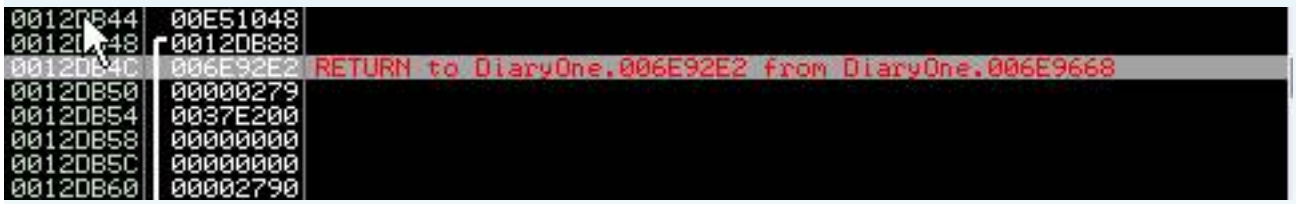
_ Next **WaitForDebugEvent** BC, BP WriteProcessMemory, press F9, 1 Nag appears click OK you'll see the following:



_ **Ctrl + F9** execute till return. You will be here:

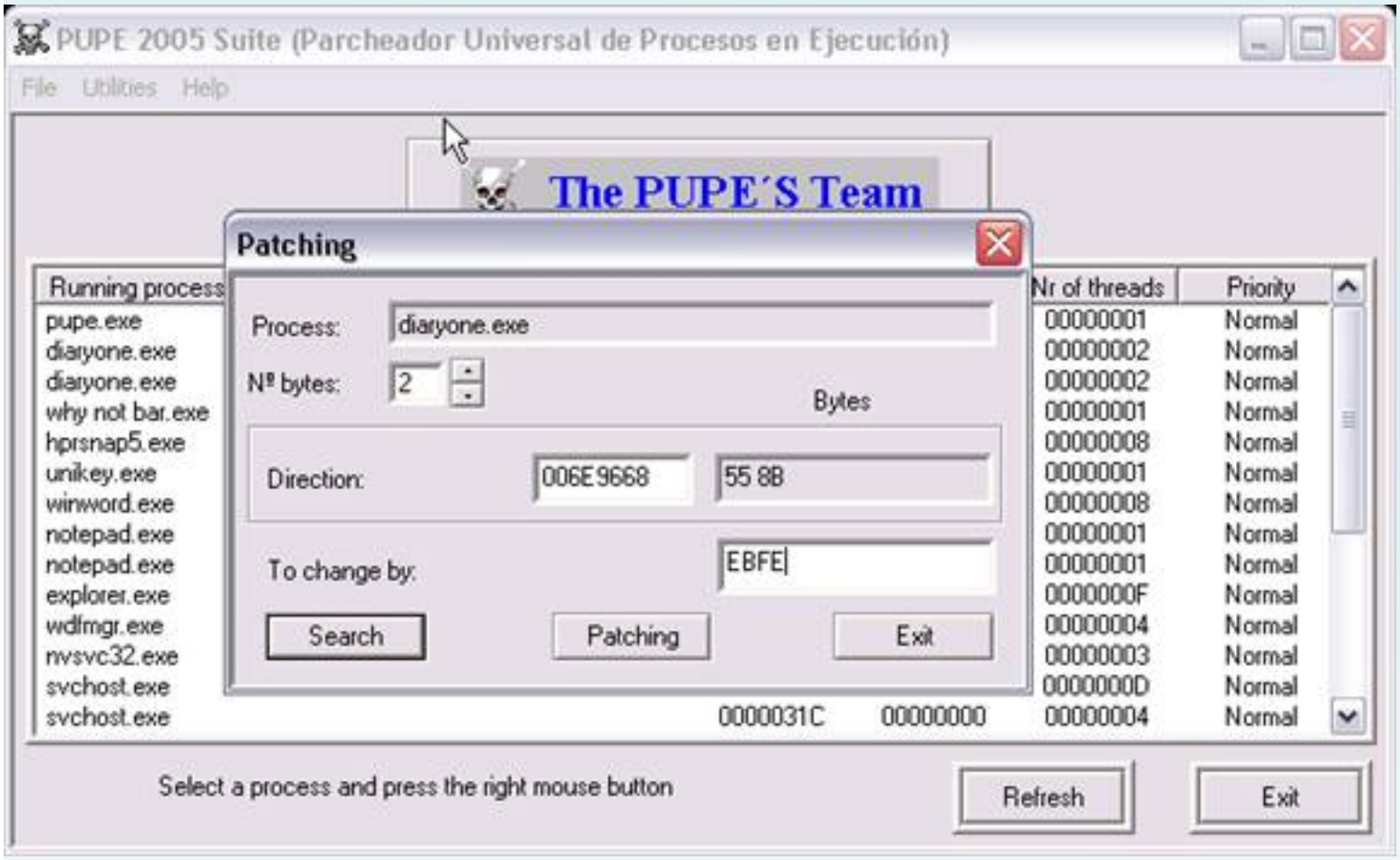


_ In areas Stack you roll the mouse to meet the second return from the return first and we are



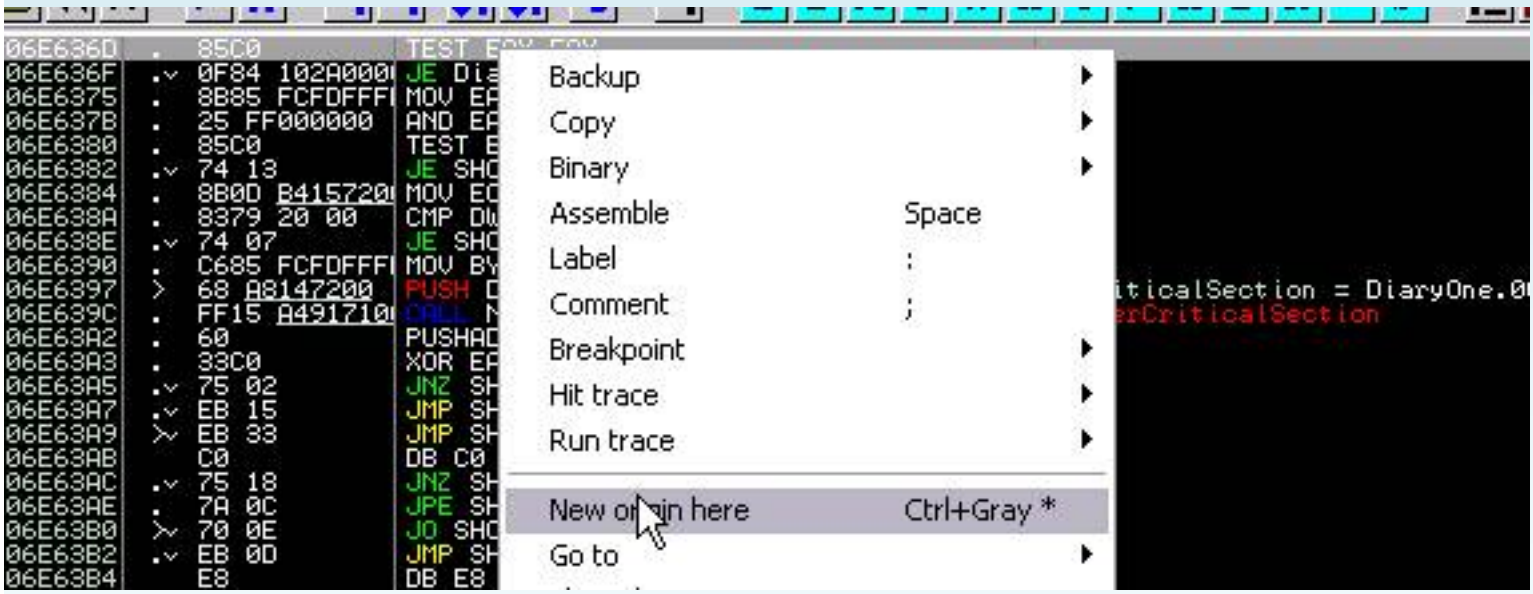
_ Back to the CPU, Ctrl + G: 006E9668, Ctrl + R, select the command Call 2 Double-click on it and submit lenh Call this as follows:

_Mo PuPe and enter as follows:

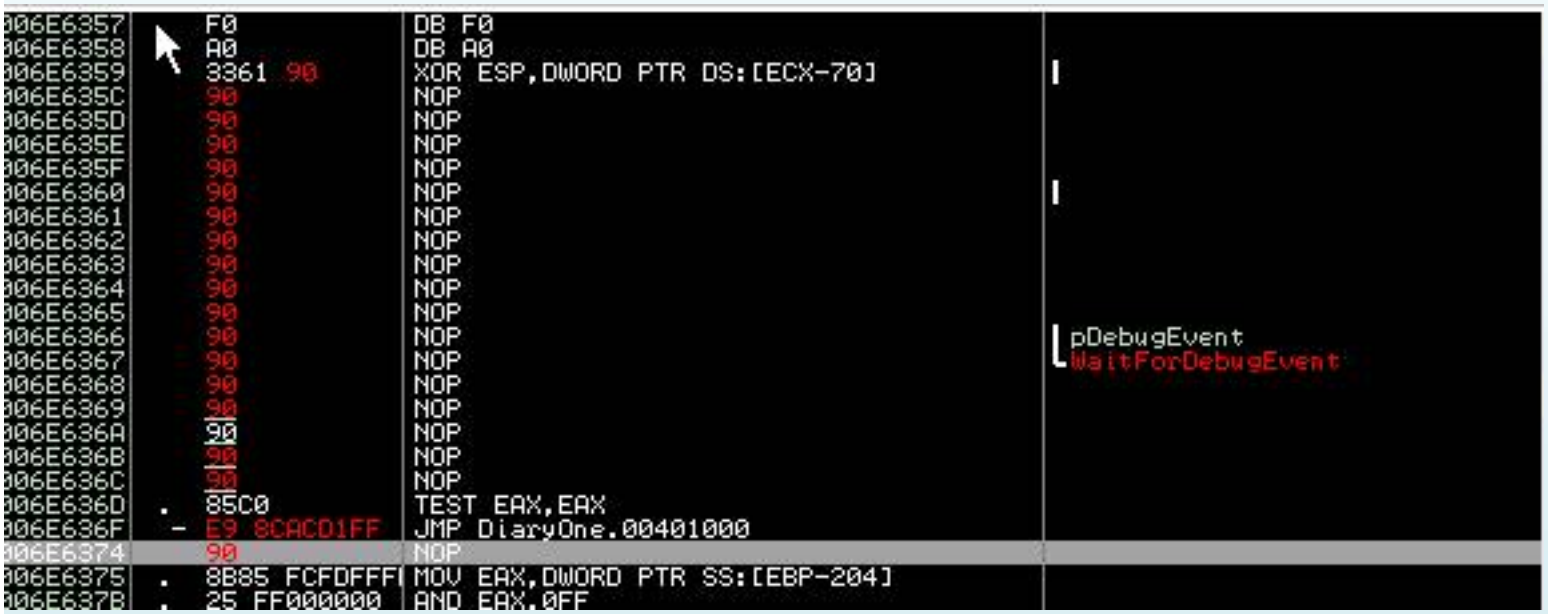


Patching _Nhan, you are a breakpoint in the kernel32 WriteProcessMemory. Bc it, then set a breakpoint bp WaitForDebugEvent, F9. At 0012DB90 [in Stack] -> right click> Follow in Disassembler.

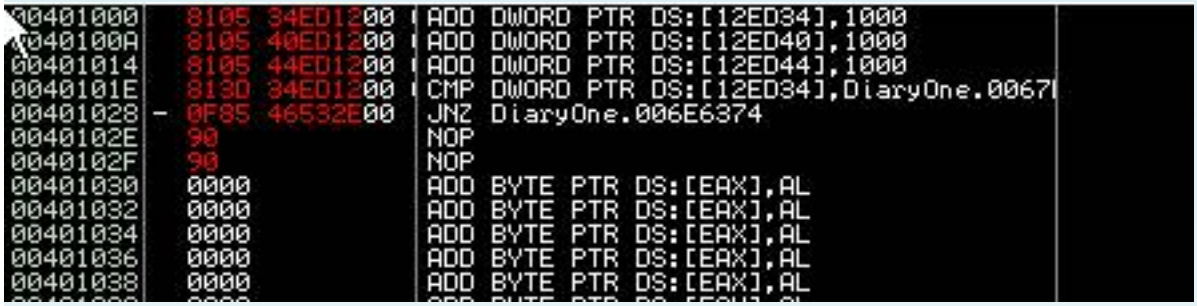
_ Need to set an origin here:



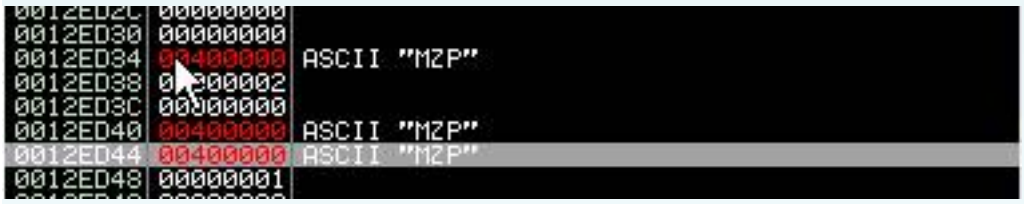
_ And patch as follows:



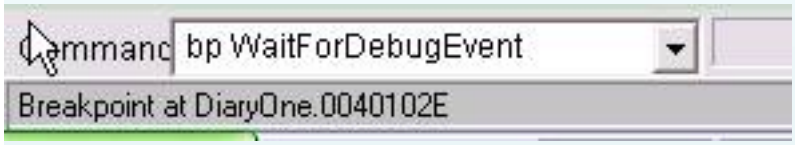
_ Jump to 401,000 and the patch:



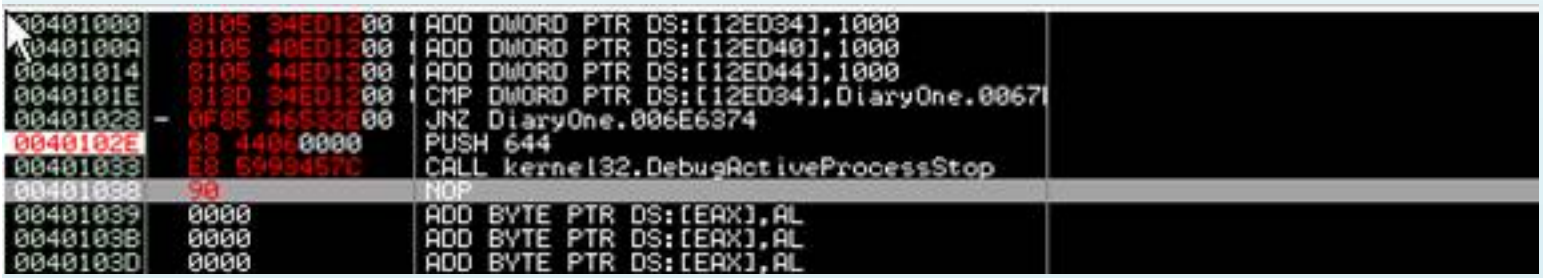
_ Continue in 3 patch addresses containing OEP:



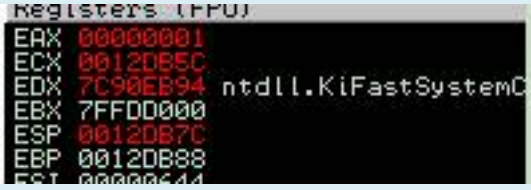
1 _Dat breakpoint in 0040102E Press F9 to run



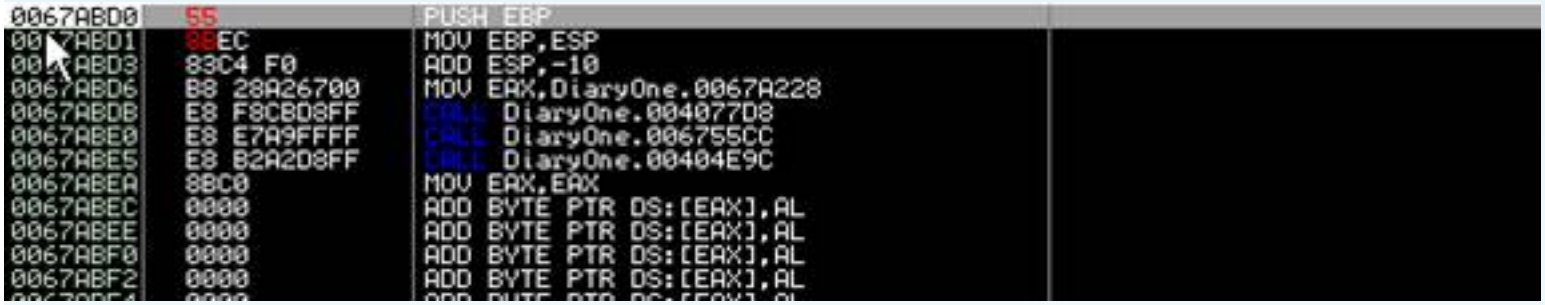
_Bay Time we pass by debug blocker



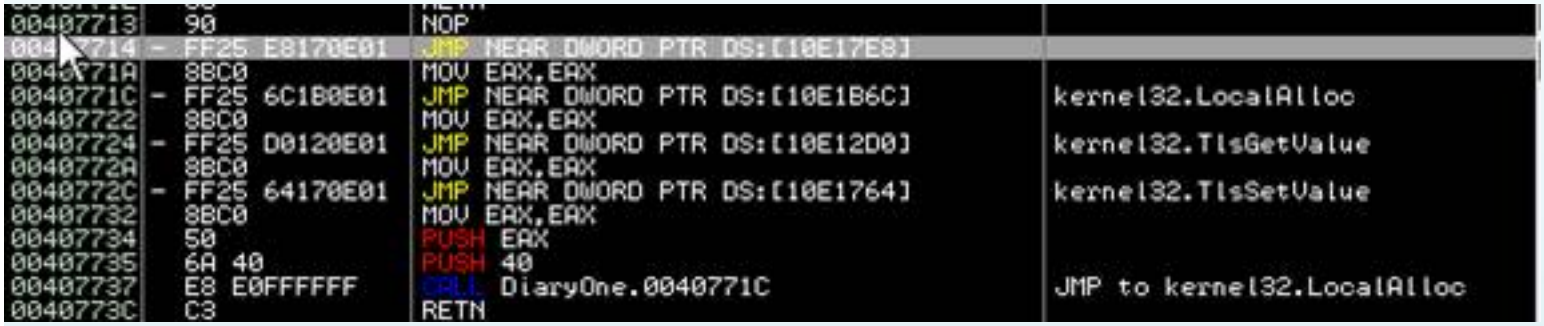
_ Press F8 when the last from the following functions nop Call DebugActiveProcessStop



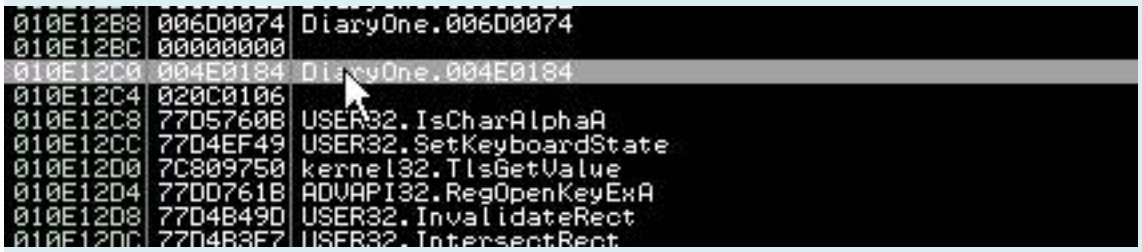
_ Open a **OllyDBG** other, Attach. F9, F12 and patch as follows:



_Bay Time we start identifying IAT and IAT End



_Voi Steps familiar operation and we have:
IAT start:



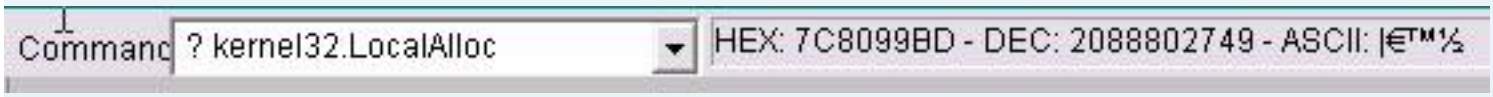
IAT end:

_buoc next IAT we find complete and paste into the IAT is only OK. **ArmaDetach 1.1** Open and Drag "DiaryOne.EXE" released into the window to see the program as follows

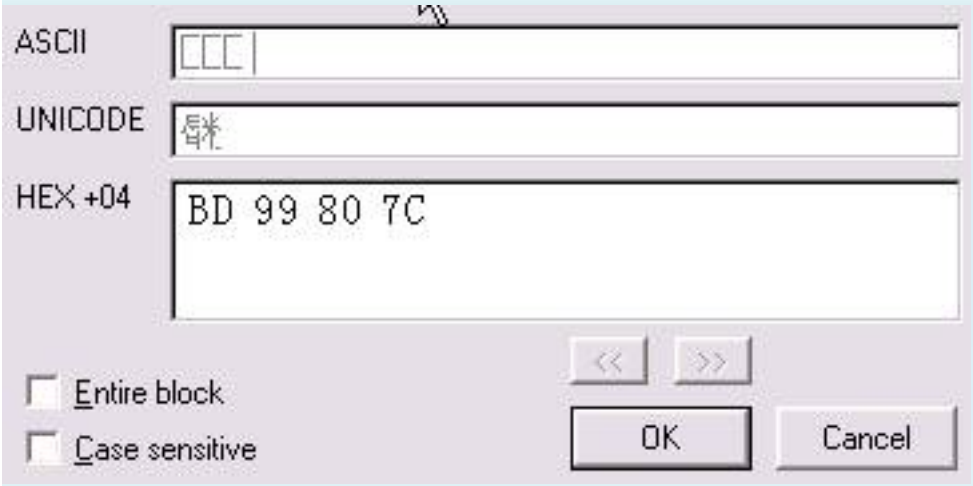
_ Open 1 Olly again and select the process ID and Child Attach. F9, F12, to patch 558B

_ Use OllyScript 0.92 Script run "Armadillo V4.0-V4.4.Standard.Protection.osc." Wait script you run to finish here

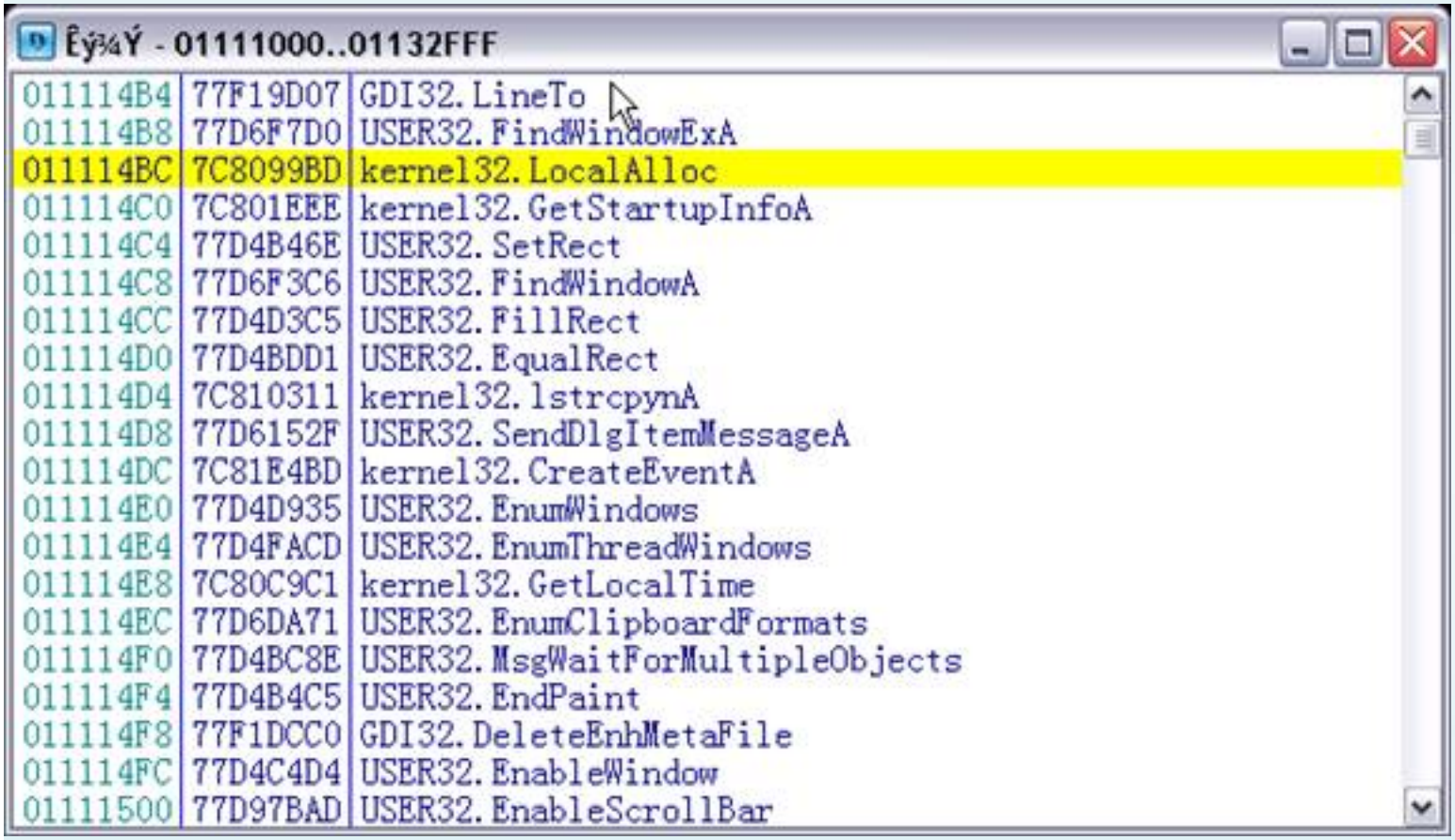
_Alt + F1 and enter the following:



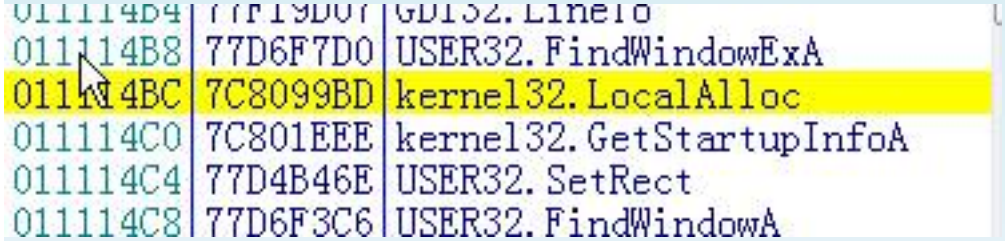
_ Alt + M, Ctrl + B, reverse the number again as follows:



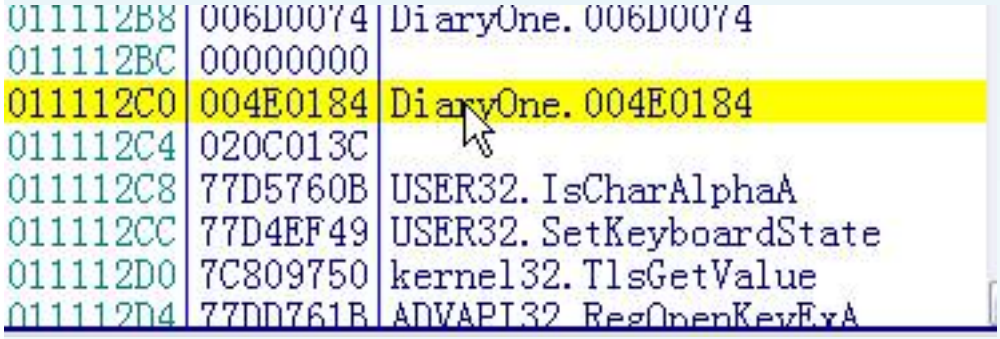
_ OK to you here:



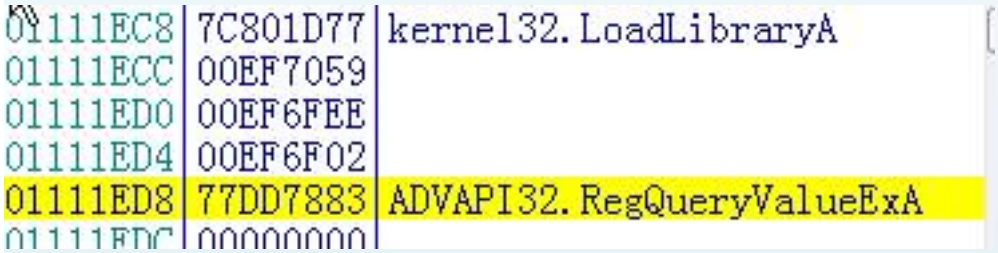
_ Alt + C, in the window dump press Ctrl + G and enter 11114BC



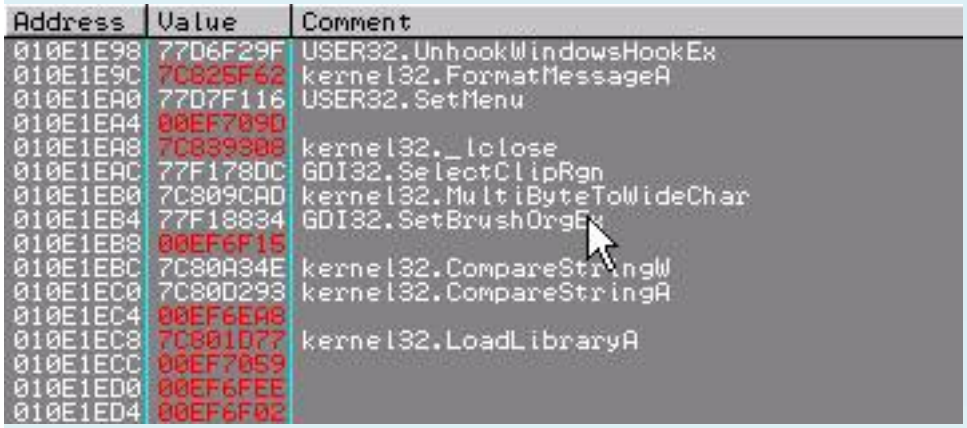
_ Roll back to determine the IAT start:



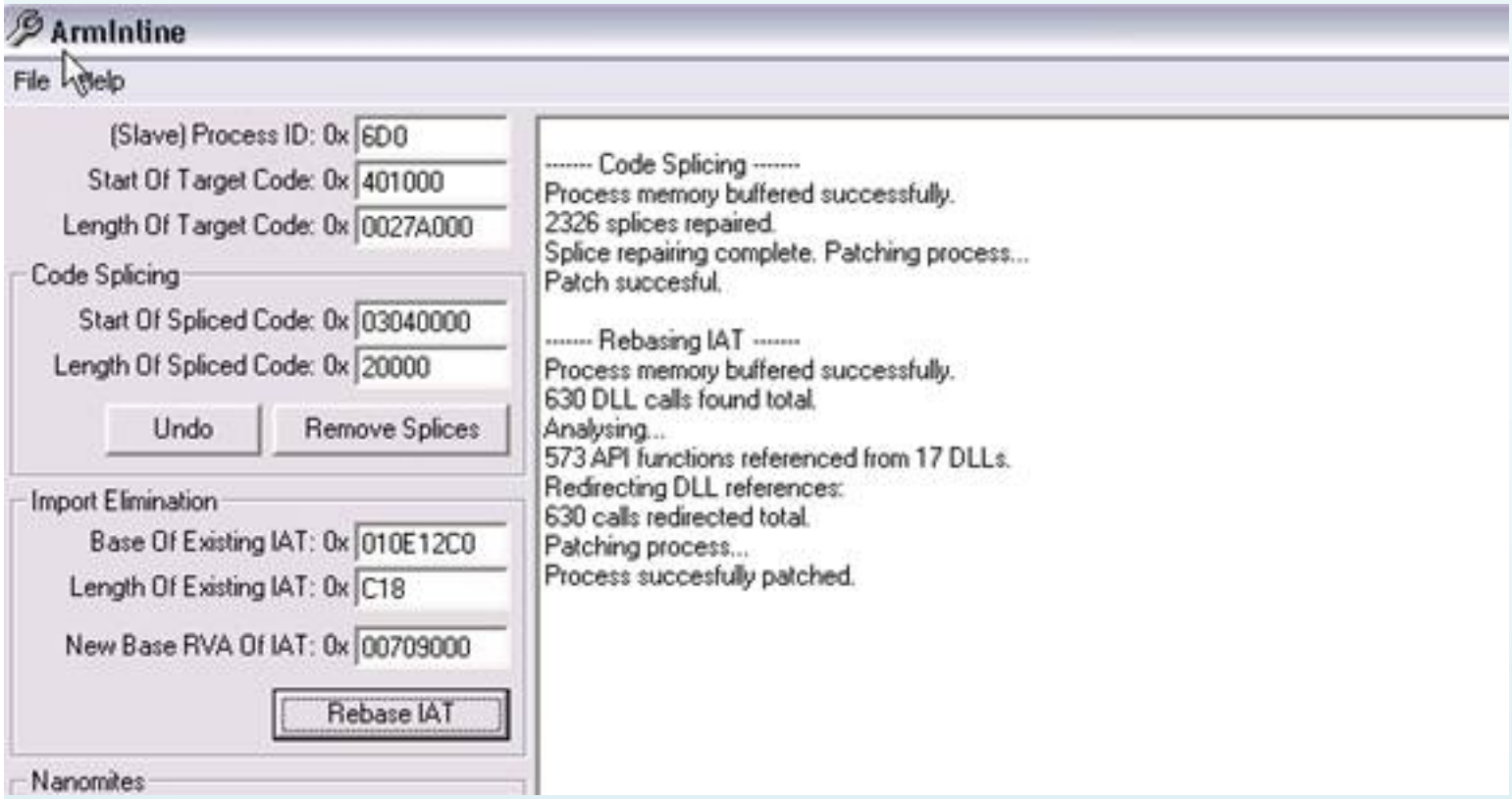
Scroll down _ identified IAT end:



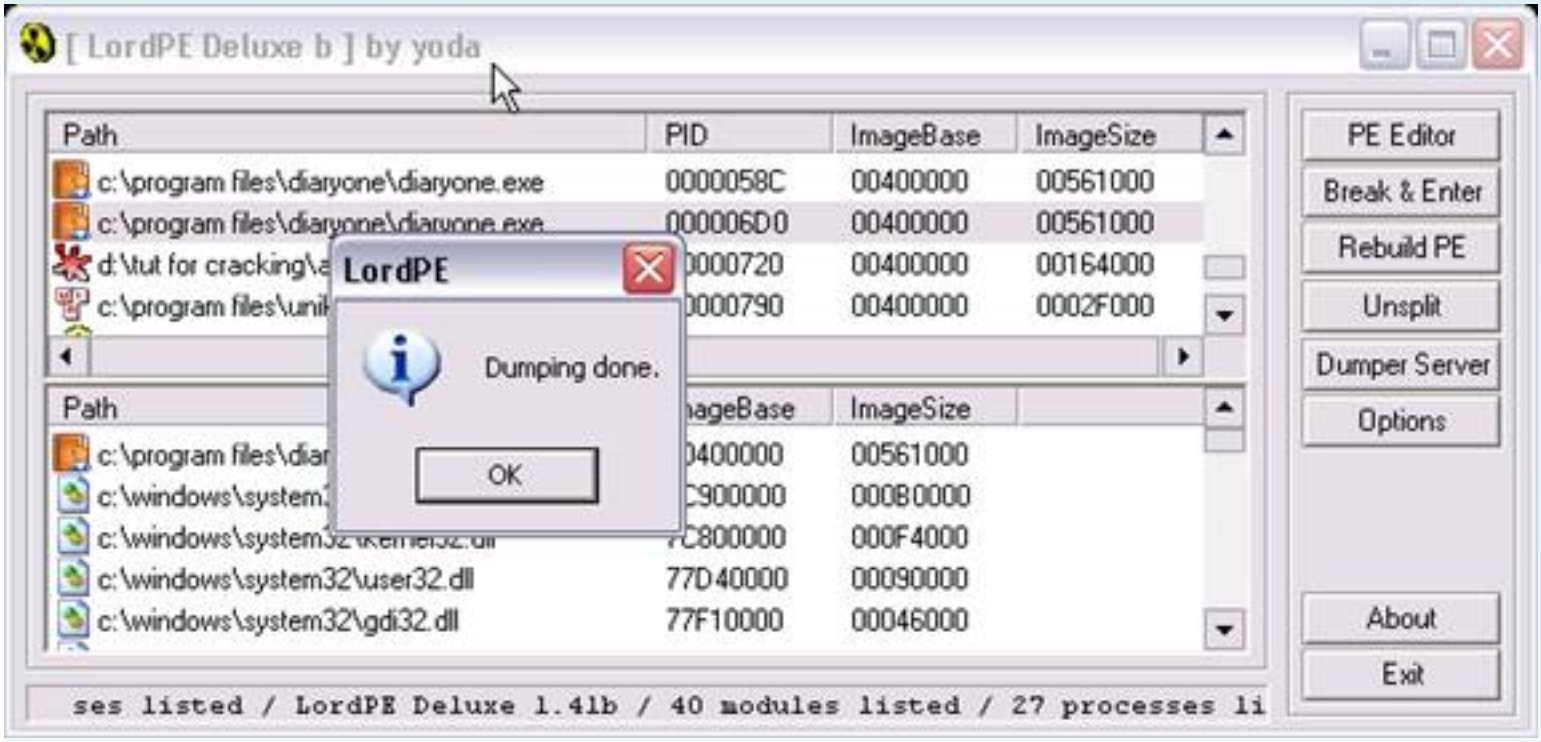
_ Now Binany \ Binany Copy and Paste on the IAT is not yet fully complete. After Paste you will find the No. 1 function:



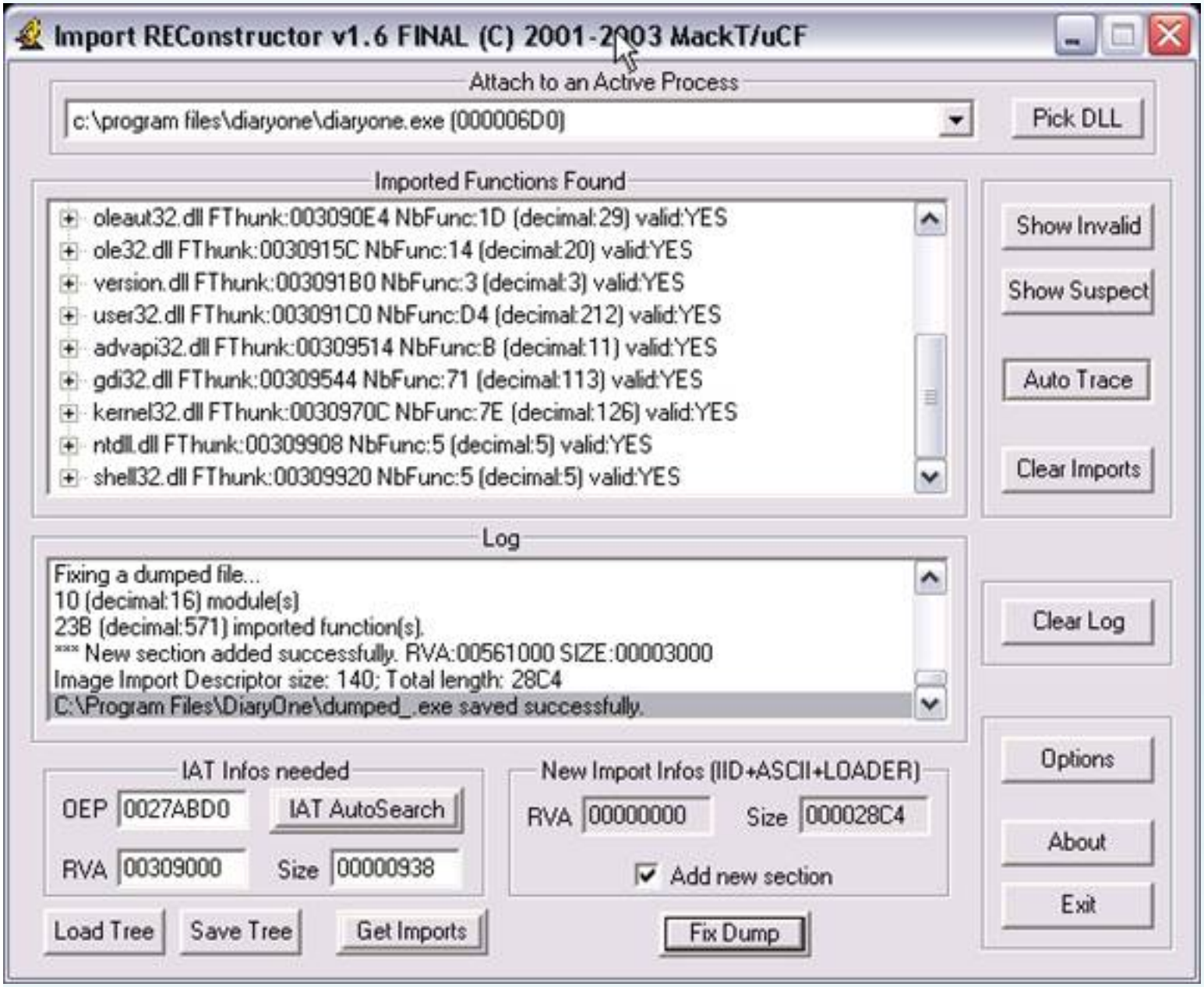
_ So is our Fix the IAT. ArmaDetach now closed and olly there again. Next we Fix IAT elimination, Code Splicing. ArmaInline M in to fill up as follows:



_ Good call, dump Full stop! Use LordPE

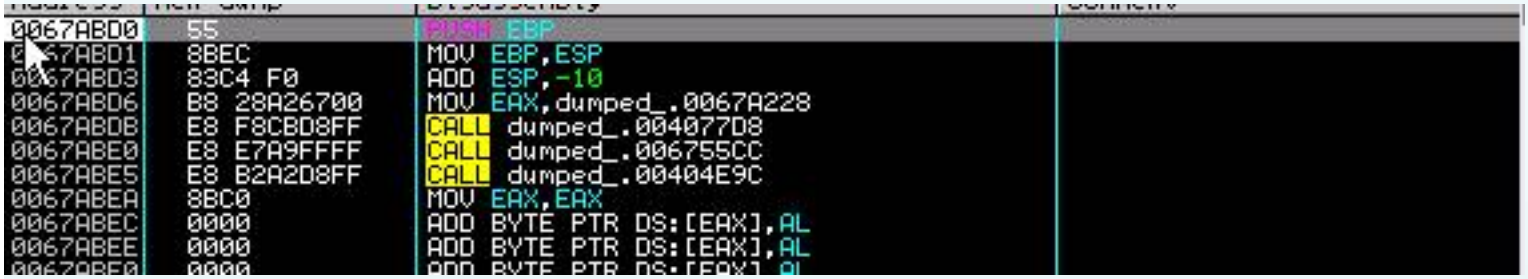


_ Open ImportREC fill and dump Fix



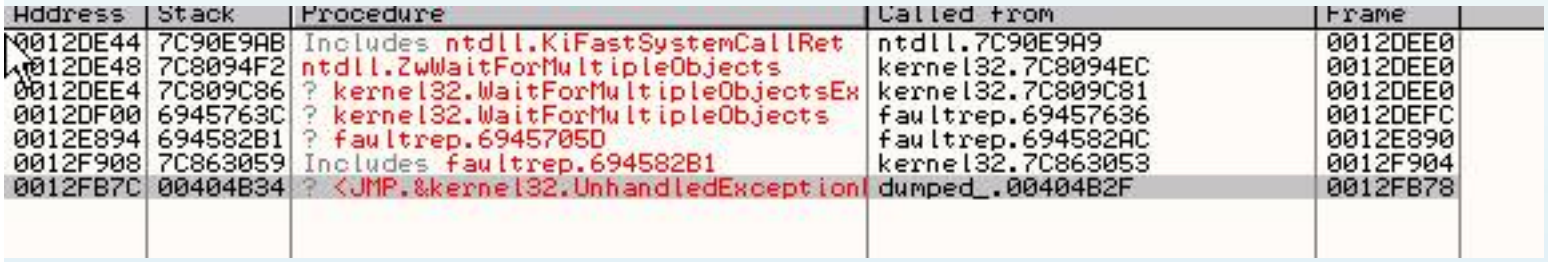
_ Run the file to try "dumped_.exe"

Em That the NAG as the Uncle confused. Here they also say more if gambling is done by way of Uncle Tomo to this month, the meat is not so! That the signs of NANO now! She also not know why more? But in this case he mày open and found 1 Fix it, see Uncle nè ... Load File "dumped.exe" Olly to be Crash

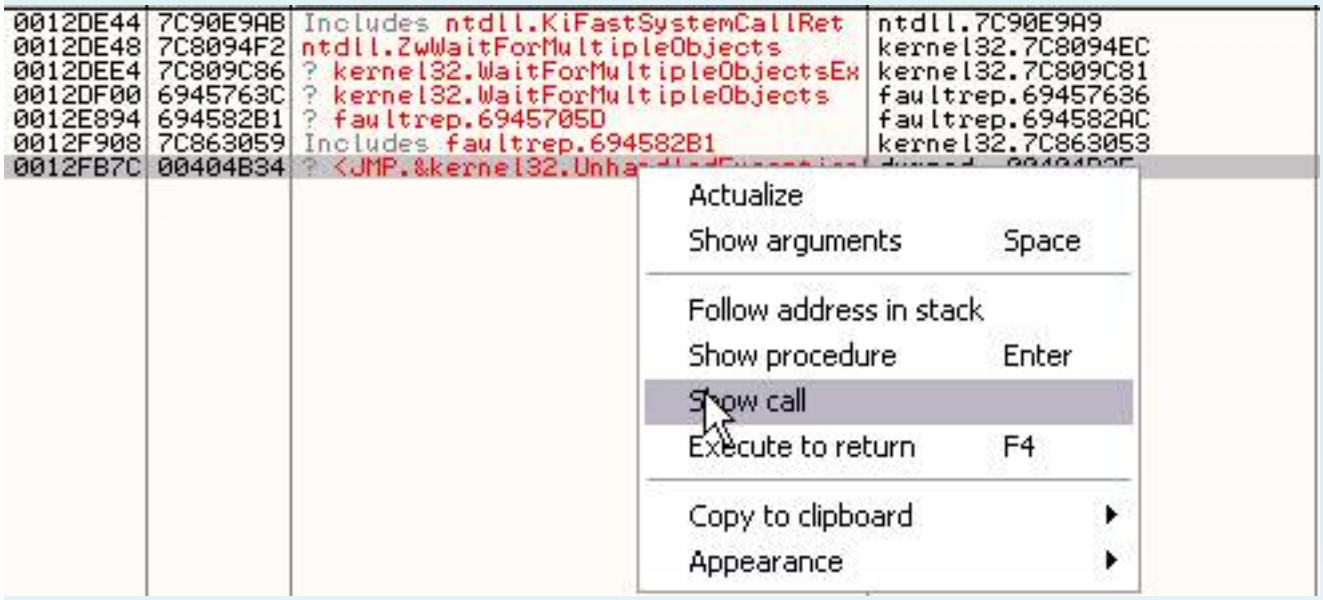


_ Press Shift + F9 to Run, and it does the error NAG

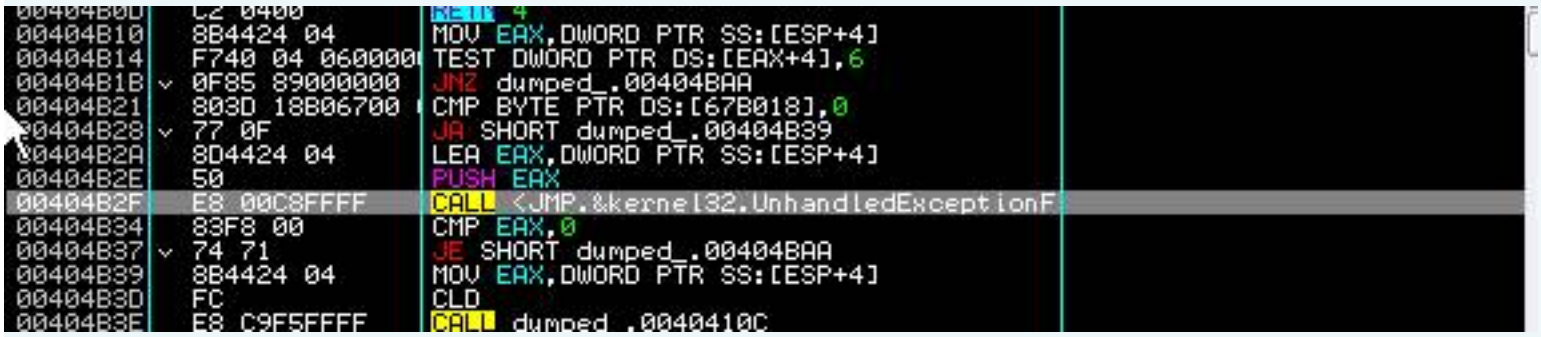
_Nhan F12, Alt + K



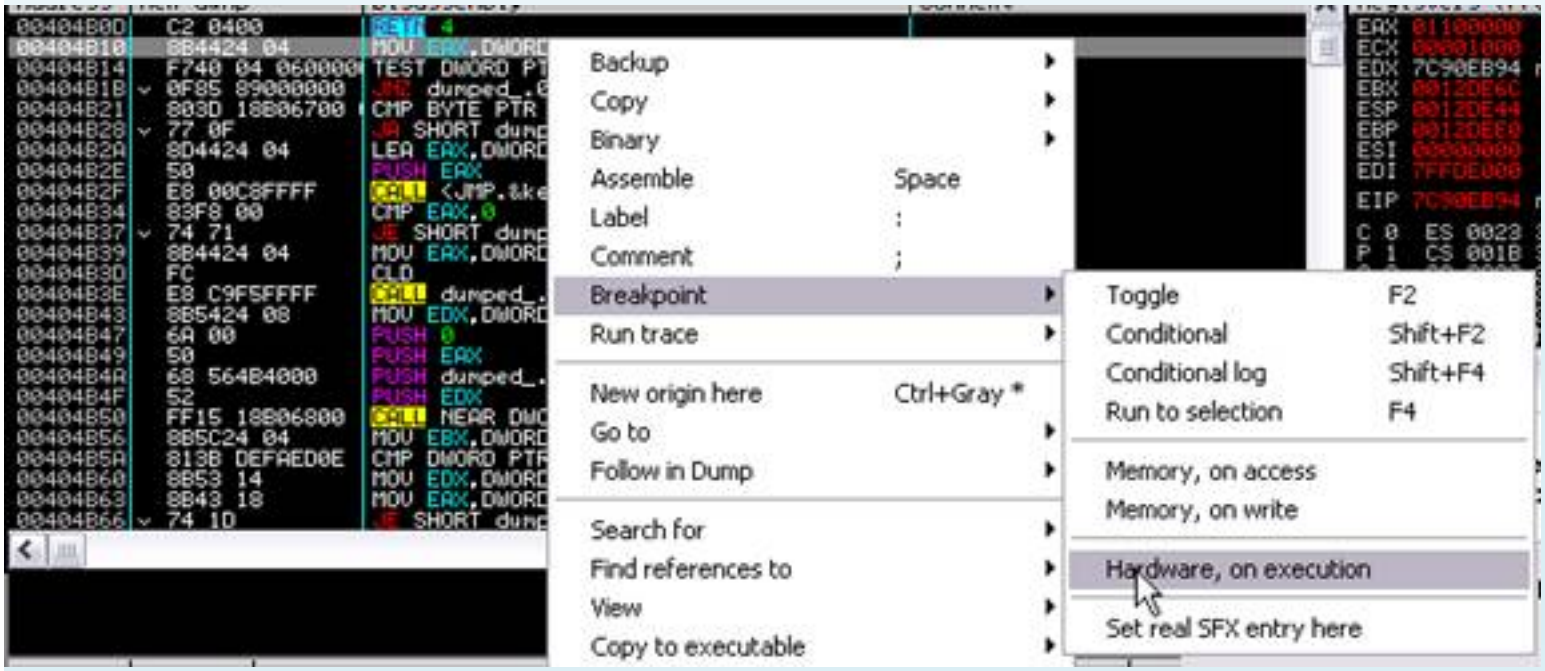
_va selected as type:



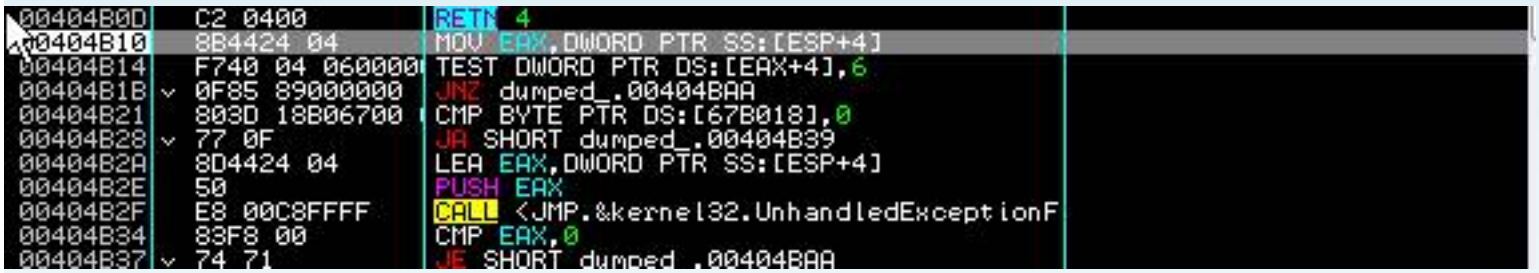
_ta to here:



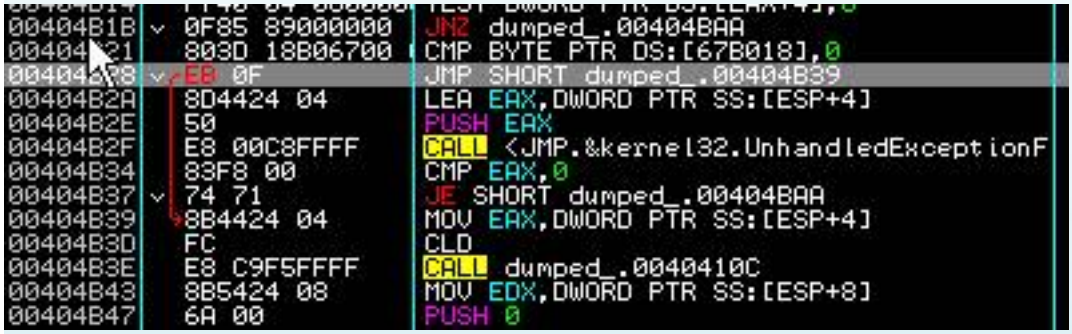
Funtion _cuon to top this and like



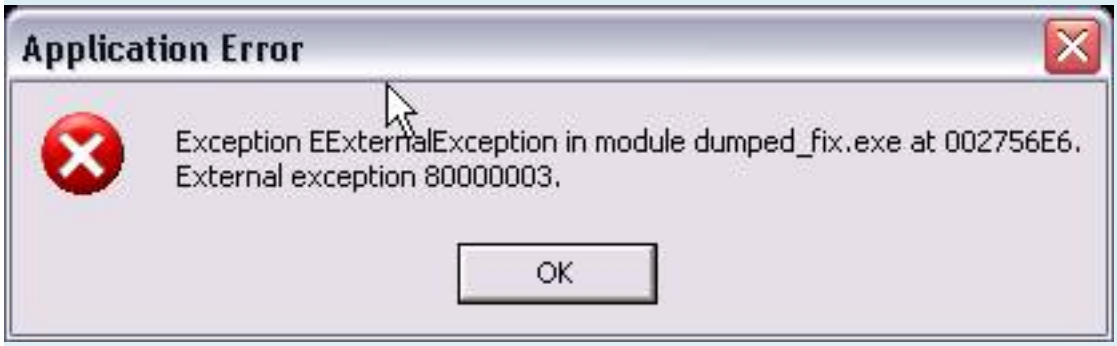
_Ctrl + F2, Shift + F9 we stopped at the BP Set nay



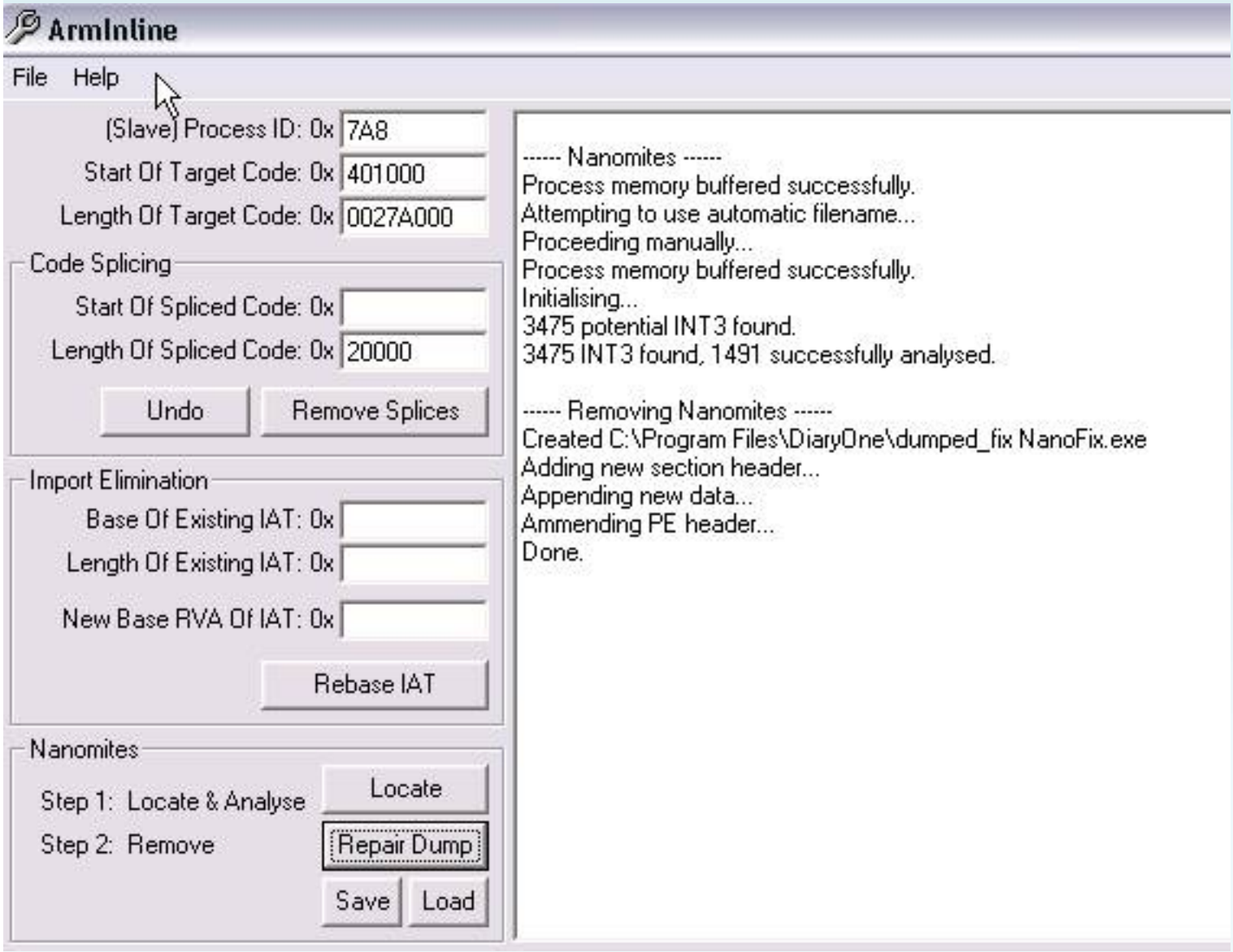
_ta need to patch at:
00404B28 / 77 0F JA SHORT dumped_.00404B39
And the patch as follows:



_ Then click to select Copy to executable \ Section \ Save File (1 should put the file name). Run just try File Save



_Ha Ha Nano appear. Load mortar save the file with signs Nano to Olly, open ArmInline enter parameters and to conduct Fix Nano as usual



_Run Test, run too!

_Em On this too! Miss hearing gòi But the place to do well. Again olly to load it. Here we pay attention to our 002757B9 plus 400,000 (Image Base). So in the CPU press Ctrl + G and enter 6757B9 and we come

```
006757B4    E8 F3F1D8FF     CALL dumped_f.004049AC
006757B9    E9 F6000000     JMP dumped_f.006758B4
006757BE    90              NOP
006757BF    90              NOP
006757C0    90              NOP
006757C1    90              NOP
006757C2    90              NOP
006757C3    8D45 CC         LEA EAX,DWORD PTR SS:[EBP-34]
006757C6    E8 45EAF6FF     CALL dumped_f.005E4210
006757CB    8D45 CC         LEA EAX,DWORD PTR SS:[EBP-34]
006757CE    50              PUSH EAX
006757CF    8D45 C8         LEA EAX,DWORD PTR SS:[EBP-38]
006757D2    50              PUSH EAX
006757D3    B1 01           MOV CL,1
006757D5    BA B0596700     MOV EDX,dumped_f.006759B0       ASCII "DiaryOne"
006757DA    B8 FC596700     MOV EAX,dumped_f.006759FC       ASCII "N+KsOjLEncQeedBzD4gYz
006757DF    E8 1459F7FF     CALL dumped_f.005EB0F8
```

_cuon mouse over 1 billion is to come:

```
00675775    E8 7212E0FF     CALL dumped_f.004769EC
0067577A    8B45 D4         MOV EAX,DWORD PTR SS:[EBP-2C]
0067577D    E8 CE94F8FF     CALL dumped_f.005FEC50
00675782    3D 20402C00     CMP EAX,2C4020
00675787    7D 07           JGE SHORT dumped_f.00675790
00675789    3D E0322900     CMP EAX,2932E0                  UNICODE "anama"
0067578E    7F 2E           JG SHORT dumped_f.006757BE
00675790    8D45 D0         LEA EAX,DWORD PTR SS:[EBP-30]
00675793    50              PUSH EAX
00675794    B1 01           MOV CL,1
00675796    BA B0596700     MOV EDX,dumped_f.006759B0       ASCII "DiaryOne"
0067579B    B8 C4596700     MOV EAX,dumped_f.006759C4       ASCII "qj0UK+yjsrtw2RcWUOrVqU4wWkTy
006757A0    E8 5359F7FF     CALL dumped_f.005EB0F8
006757A5    8B4D D0         MOV ECX,DWORD PTR SS:[EBP-30]
006757A8    B2 01           MOV DL,1
006757AA    A1 7C8E4000     MOV EAX,DWORD PTR DS:[408E7C]
006757AF    E8 9491D9FF     CALL dumped_f.0040E948
006757B4    E8 F3F1D8FF     CALL dumped_f.004049AC
006757B9    E9 F6000000     JMP dumped_f.006758B4
006757BE    90              NOP
```

_dia simply Patch
00675787 / 7D 07 JGE SHORT dumped_f.00675790
We NOP it

```
0067577A    8B45 D4         MOV EAX,DWORD PTR SS:[EBP-2C]
0067577D    E8 CE94F8FF     CALL dumped_f.005FEC50
00675782    3D 20402C00     CMP EAX,2C4020
00675787    90              NOP
00675788    90              NOP
00675789    3D E0322900     CMP EAX,2932E0                  UNICODE "anama"
0067578E    7F 2E           JG SHORT dumped_f.006757BE
00675790    8D45 D0         LEA EAX,DWORD PTR SS:[EBP-30]
00675793    50              PUSH EAX
00675794    B1 01           MOV CL,1
00675796    BA B0596700     MOV EDX,dumped_f.006759B0       ASCII "DiaryOne"
0067579B    B8 C4596700     MOV EAX,dumped_f.006759C4       ASCII "qj0UK+yjsrtw2RcWUOrVqU4wWkTykazlh9
006757A0    E8 5359F7FF     CALL dumped_f.005EB0F8
006757A5    8B4D D0         MOV ECX,DWORD PTR SS:[EBP-30]
006757A8    B2 01           MOV DL,1
006757AA    A1 7C8E4000     MOV EAX,DWORD PTR DS:[408E7C]
006757AF    E8 9491D9FF     CALL dumped_f.0040E948
006757B4    E8 F3F1D8FF     CALL dumped_f.004049AC
006757B9    E9 F6000000     JMP dumped_f.006758B4
006757BE    90              NOP
```

_Save Again, Run test stars. But before Olly Run closed again.

Done _Ha hectares packages. But here it's just a reminder only Nag but still unregistered

_Crack It simple, but they not only discussed! Because this area of more children called Uncle!

P / S: if the Uncle support of restraining the child would do some form of this Target again! Sour than it was this much! We believe some Uncle ...

Why Not Bar

Tutorials hacnho # 8

Manual unpacking **EXE Shield v0.5 -> SMOKE**

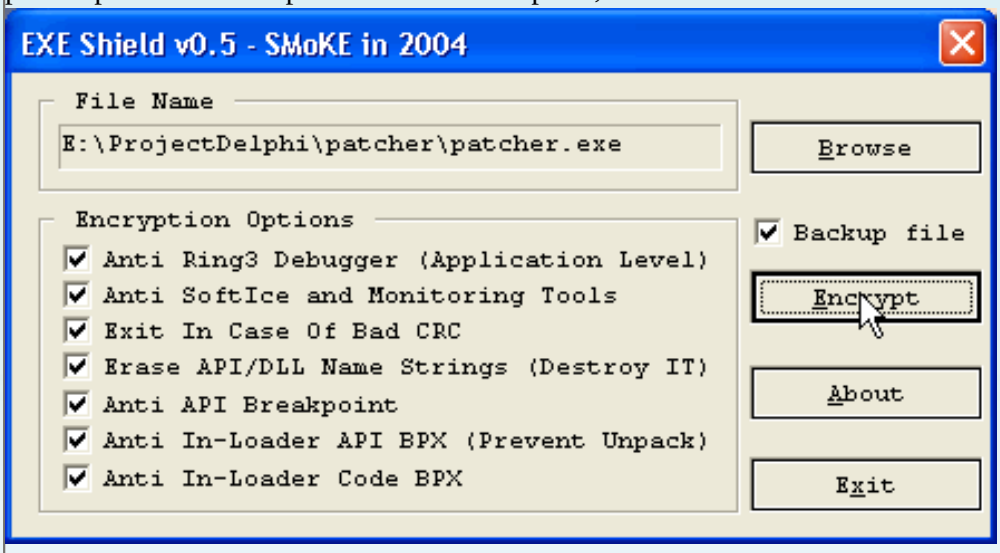
Information	Unpacking for Newbie's
Target	**patcher. rar**
Available	http://nhandan.info/hacnho/tuts/unpackme8_tuts.zip
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, Stud_PE 1.8, PEiD 0.92, 1.6 ImportREC Final.
Protection	EXE Shield v0.5 -> SMOKE
L Evel	Very Easy!
Category	Manual unpacking

1. Introduction

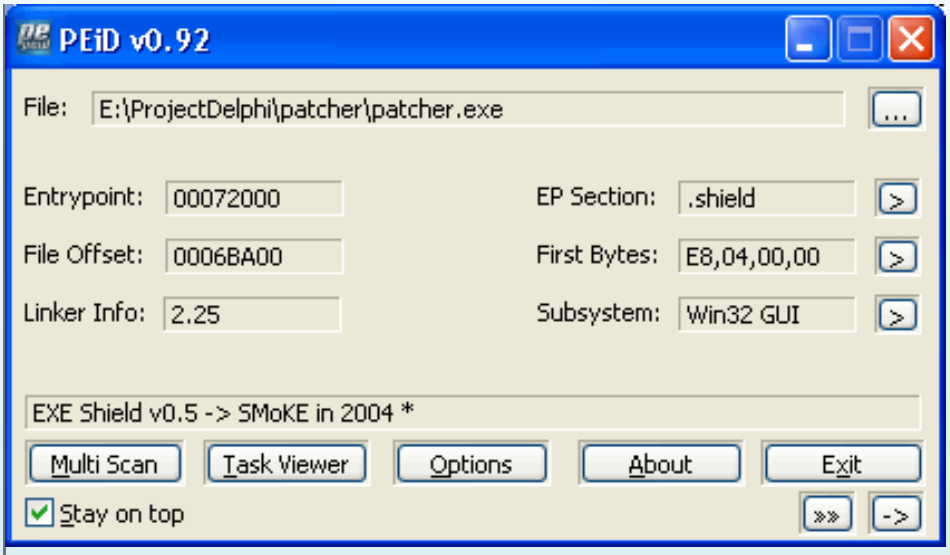
In a topic as Exetools Forum, when I wrote "EXE Shield v0.5 is very easy for unpack," A lot of memberz were not belive. And they were a request for tut prove my paroles ... He he, okay. I will explain to you the ways for this unpacker packer.

2. Getting Started

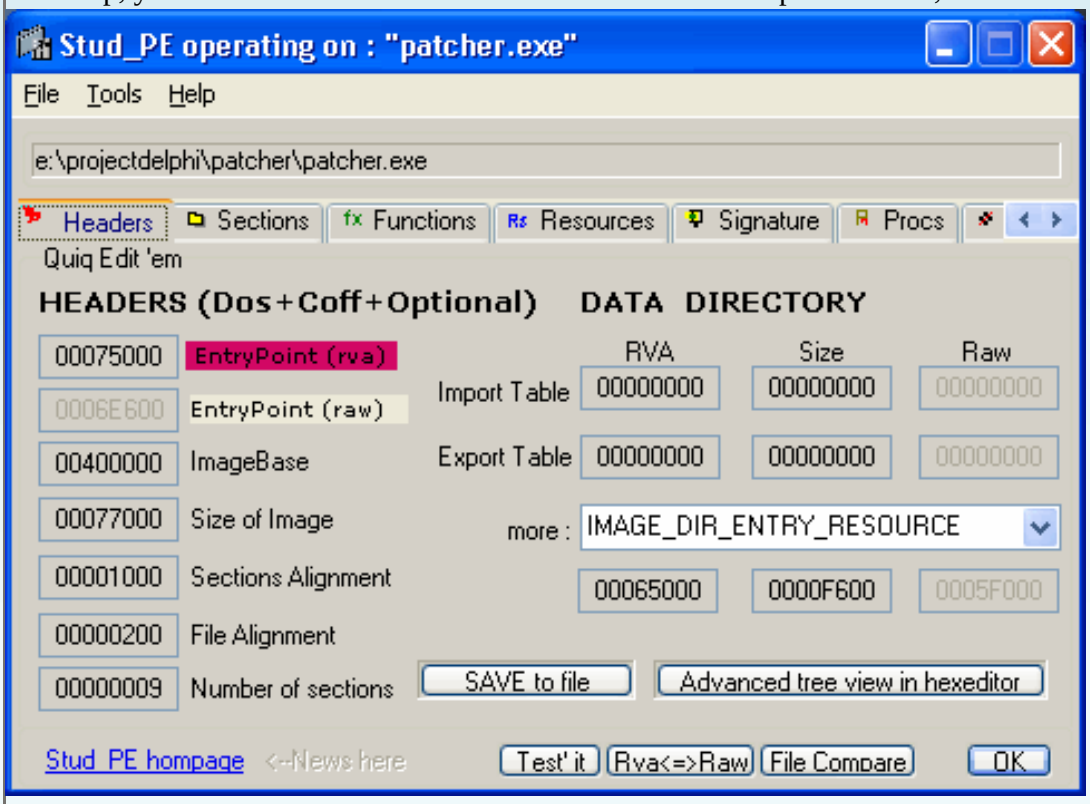
Before unpack this packer. I have to pack some application. I choose my pacher code in Delphi. I choose all options for this packer pack. Par example: Anti API Breakpoint, Anti Si ... See here:

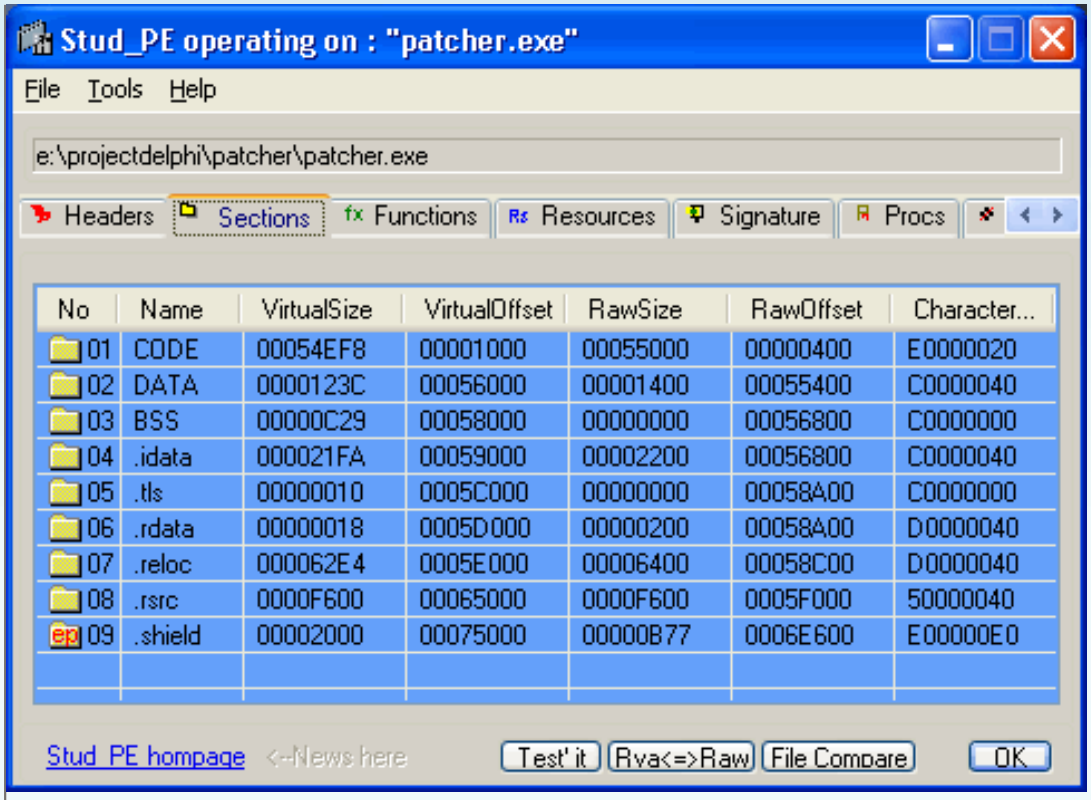


Now, try to detect with PEiD 0.92 :-).



First step, you have to find some info from this PE software. Open Lord PE, PE Editor choose. And we have:





EP: 75000, flags The value of this case is not needed, Image Base is always 400000, Import Table: 0000 and size is 00.

3. Finding the OEP

Load **unpackme.exe** into OllyDBG. And you still here:

```
00472000   E8 04000000     CALL patcher.00472009
00472005   8360 EB 0C      AND DWORD PTR DS:[EAX-15],0C
00472009   5D              POP EBP
0047200A   EB 05           JMP SHORT patcher.00472011
0047200C   45              INC EBP
0047200D   55              PUSH EBP
0047200E   EB 04           JMP SHORT patcher.00472014
```

Then, you press **F7** until you see as follows:

```
0047200A   EB 05           JMP SHORT patcher.00472011
```

And then, you press **Shift + F9 1 time.** Now you still here:

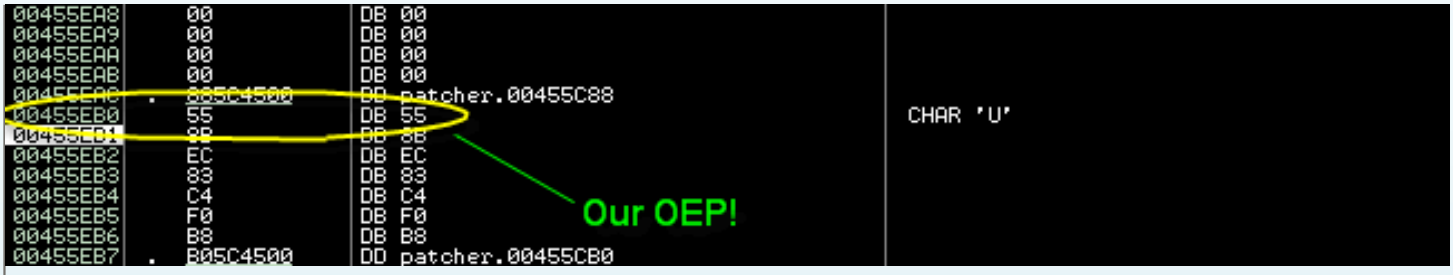
```
00472B52   8B00            MOV EAX,DWORD PTR DS:[EAX]
00472B54   EB 01           JMP SHORT patcher.00472B57
00472B56   845414 1E       TEST BYTE PTR SS:[ESP+EDX+1E],DL
00472B5A   0000            ADD BYTE PTR DS:[EAX],AL
00472B5C   C045 00 10      ROL BYTE PTR SS:[EBP],10
00472B60   C045 00 C0      ROL BYTE PTR SS:[EBP],0C0          Shift constant out of range 1..31
00472B64   60              PUSHAD
00472B65   45              INC EBP
```

Continued, press **F9.**

And then press **Shift + F9.** You still here

```
00455EB1   8BEC            MOV EBP,ESP
00455EB3   83C4 F0         ADD ESP,-10
00455EB6   B8 B05C4500     MOV EAX,patcher.00455CB0
00455EBB   E8 0403FBFF     CALL patcher.004061C4
00455EC0   A1 C8704500     MOV EAX,DWORD PTR DS:[4570C8]
00455EC5   8B00            MOV EAX,DWORD PTR DS:[EAX]
00455EC7   E8 24DDFFFF     CALL patcher.00453BF0
```

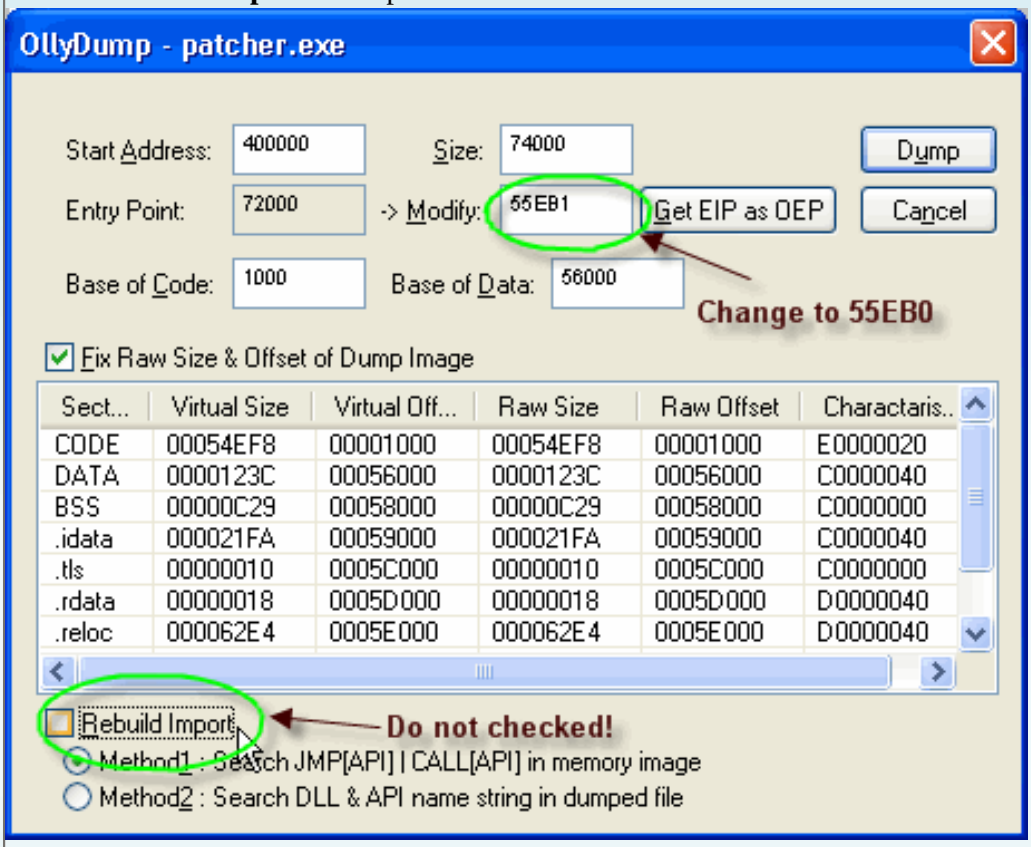
Next, press **CTRL + A** analyze the code for:



Congratulations! According OEP we found is **455EB0.** And now we Calculate the real OEP of this unpackme by the formula:
Real OEP = OEP find in Olly-Image Base = 400000 = **455EB0-55EB0.**

4th dumping

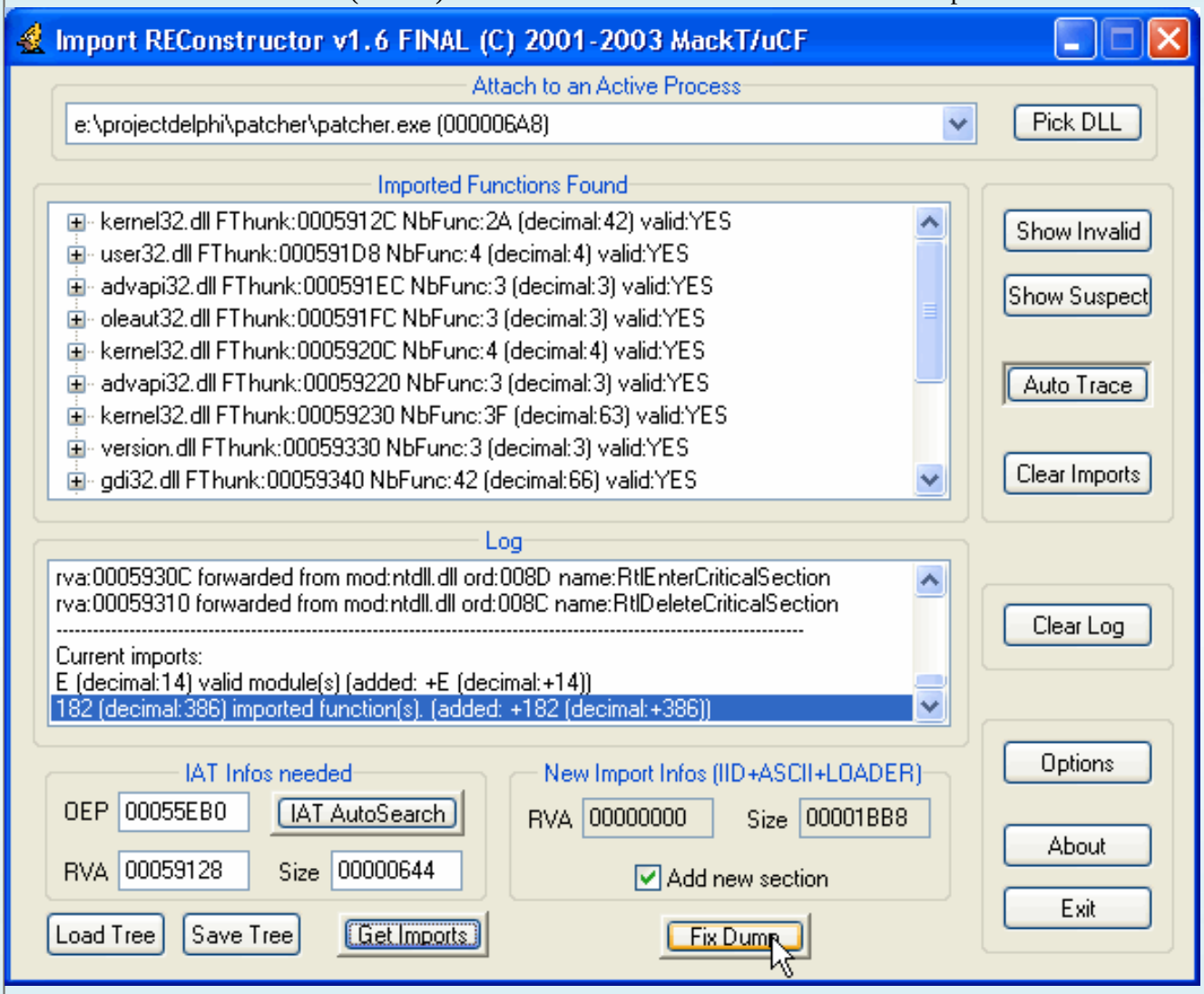
At **00455EB0 address,** we go to the menu Plugin -> OllyDump -> dump debugged process. And then, just press dump, save the file at **dumped.exe** unpacked.



Do not run **dumped.exe** now, will be a crash ... It must fix IAT.

5. Finding and Fixing the Adress Import Table

And select Open ImpREC attached to active process and choose unpackme.exe. Change the value in the OEP window to the one we wrote down earlier (55EB0) then select IATAutosearch then click Get Imports.



All Import Functions valid.
Now, click fix dump to fix the IAT **dumped.exe** file.
Use LordPE 1.4 by Y0da for rebuild our Dumped_.exe

6. Testing Our Unpacked file

Now run unpacked files. Wow, not crash.

7. Conclusion

Special thanx to **koncool** et **R @ dier** for this template.
My Greetz to: Deux, NVH (c), luucorp, Maipt0301, R @ dier, tlandn, Computer_Angel, Zombie, RCA, CTL, JAL, LeVuHoang, 777, LeonHart, Bin ... and you ;-)!

To be continued ...

Written by hacnho (tutorial date: Sai Gon 17/4/2004)

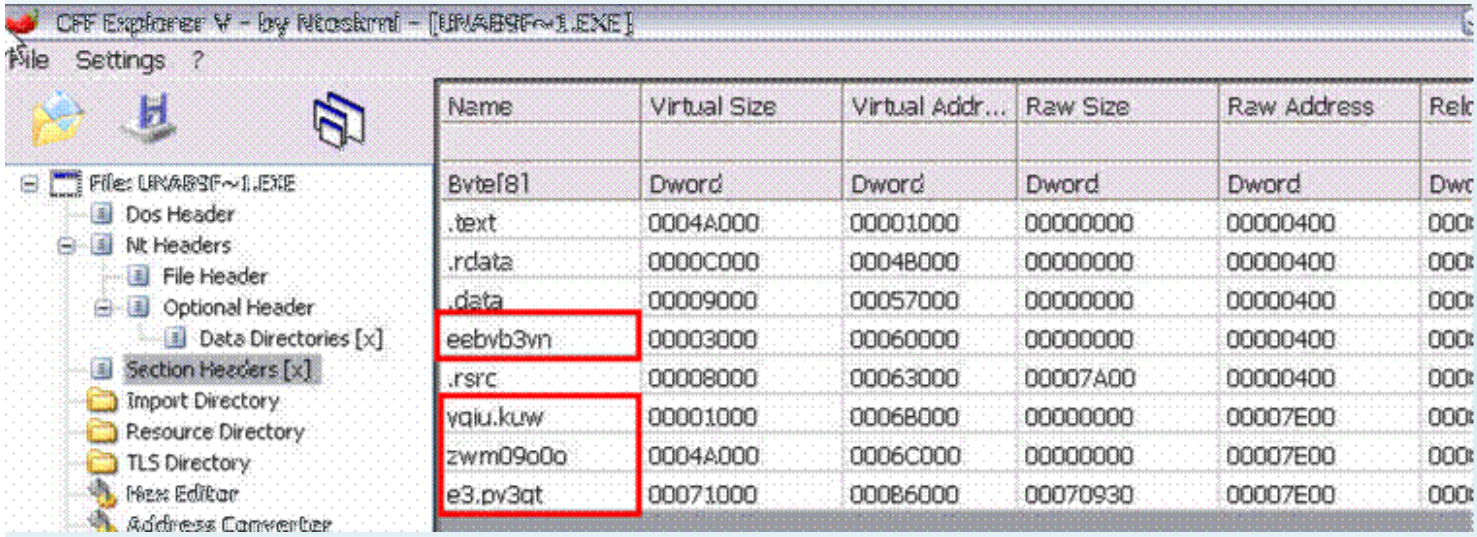
If a code of Unipac k and E C r e x p italy to R 2. 2. 5 0

W hy N ot B ar

T GE ar t : U nP ackM e_ E C r e x p italy to R 2. 2. 50. J. E x e
P a c k e r E C r e x p italy to R2. 2. 5 0 (A ll P r ot ec t i o ns a n b e l e d + 100% With ual r t i z a t-ion)
T oo ls: O ll italy B D X G_E Ecr italy to p r, O ll D italy u m 2. 2 1, O l l Ad italy v a n ce d 1st 2 6, P r o t ec t ionI D_ the 5th 1 E, F C F E x p lo re RV

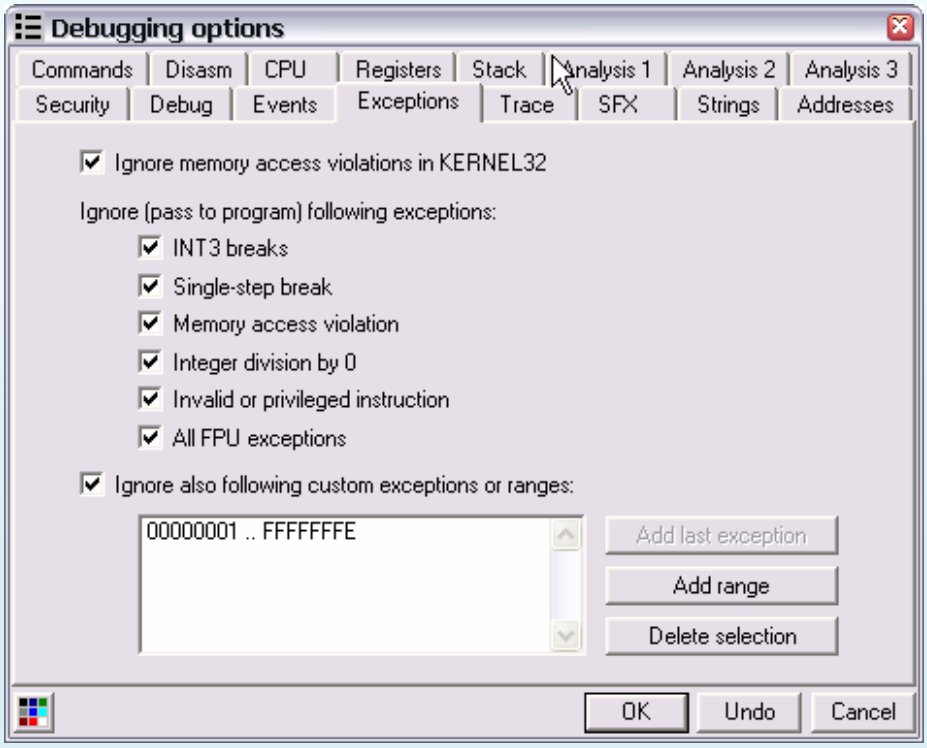
Sis has found the range for **MUP tut Newbie,** Download read about or see h ... ay Consider also find themselves **Newbie** but also want to contribute in some subjects to people with learning ...

_ Ung D **ot P r e c t i o n ID _ 5.1 e** Sc **v** a n F i l e

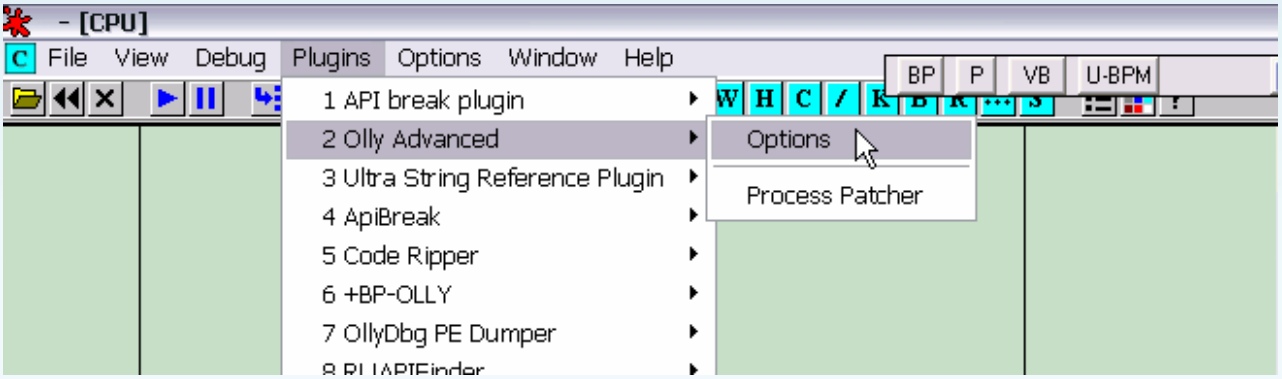


_ That is, addition **ExeCryptor** easily identify the observations of **Section** ... it's very similar ko lang ad nhucac other Packer

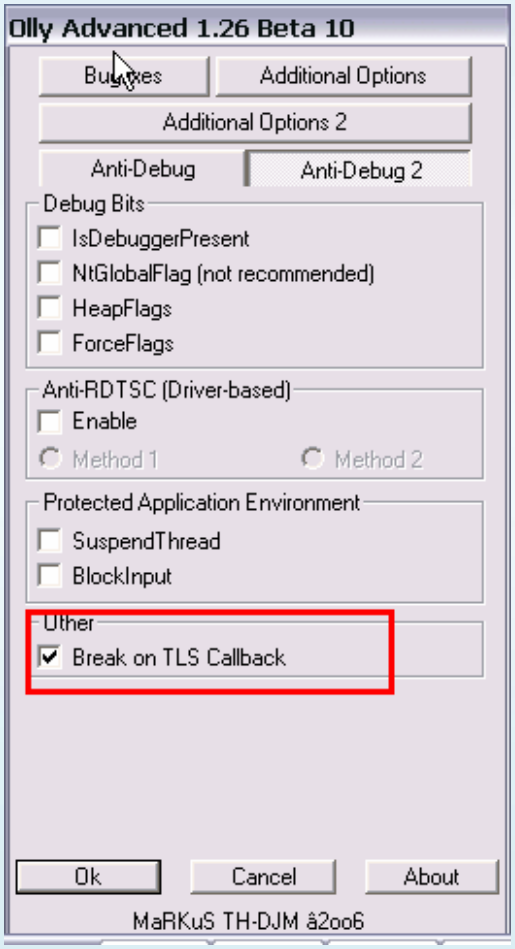
_ OK **OllyDBG_ExeCryptor** open, press **Alt + O** and the following



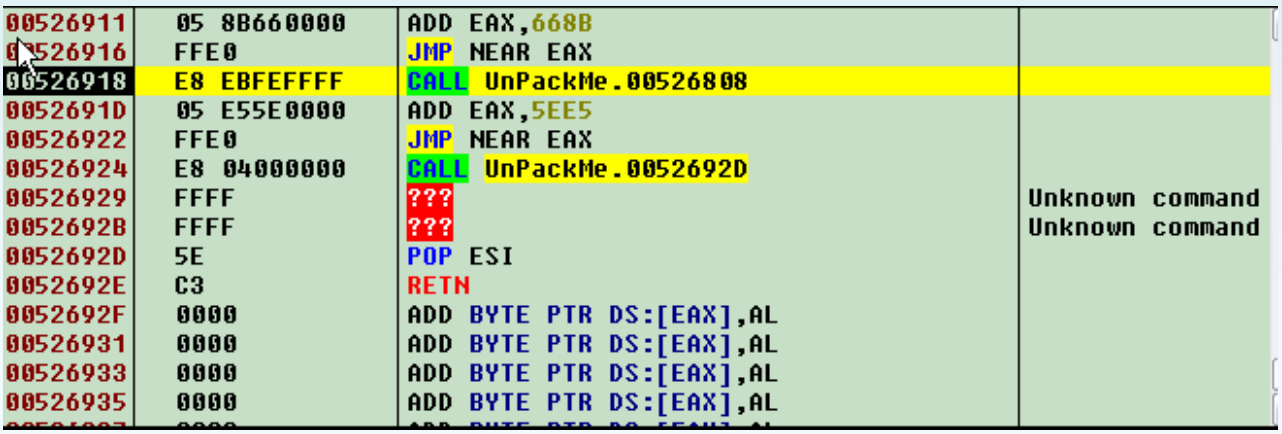
_ Select **Olly Advanced** plugin and like



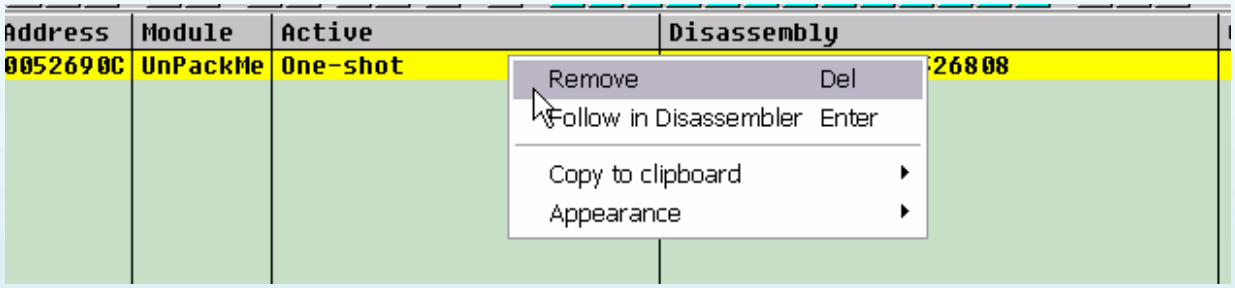
_ To select as follows:



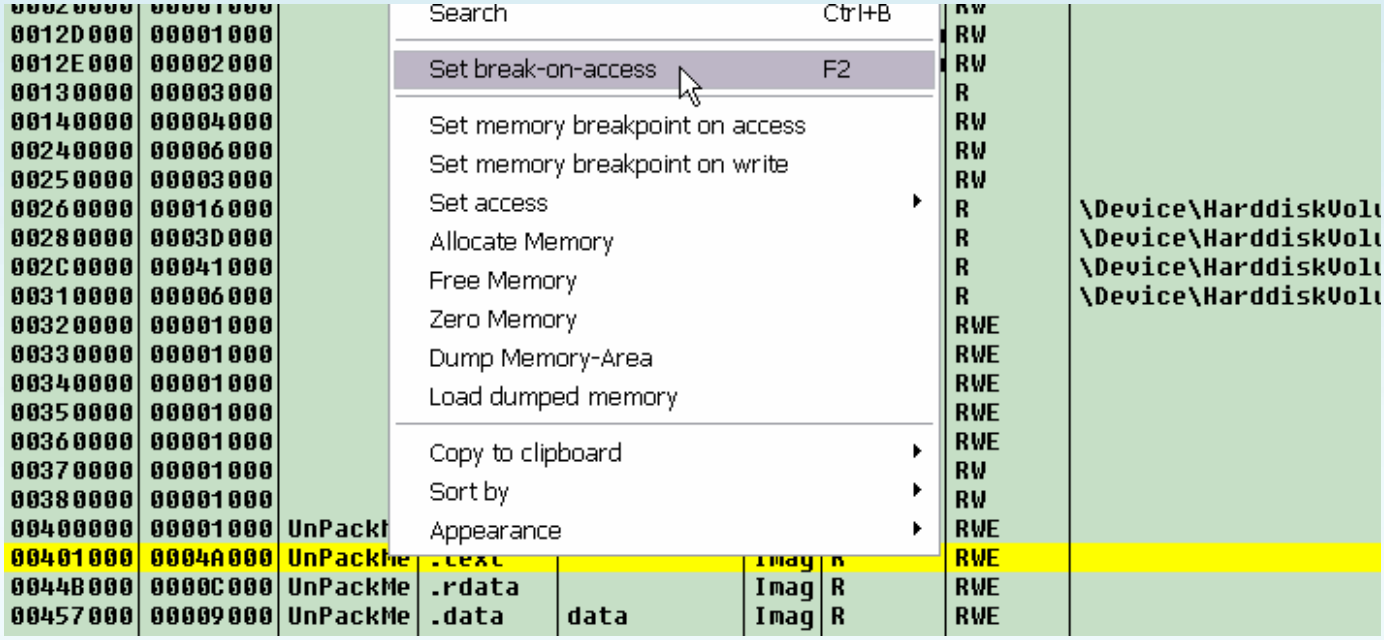
_ Now Load ***"UnPackMe_ExeCryptor2.2.50.j.exe"*** to **OllyDBG** and you will stop here



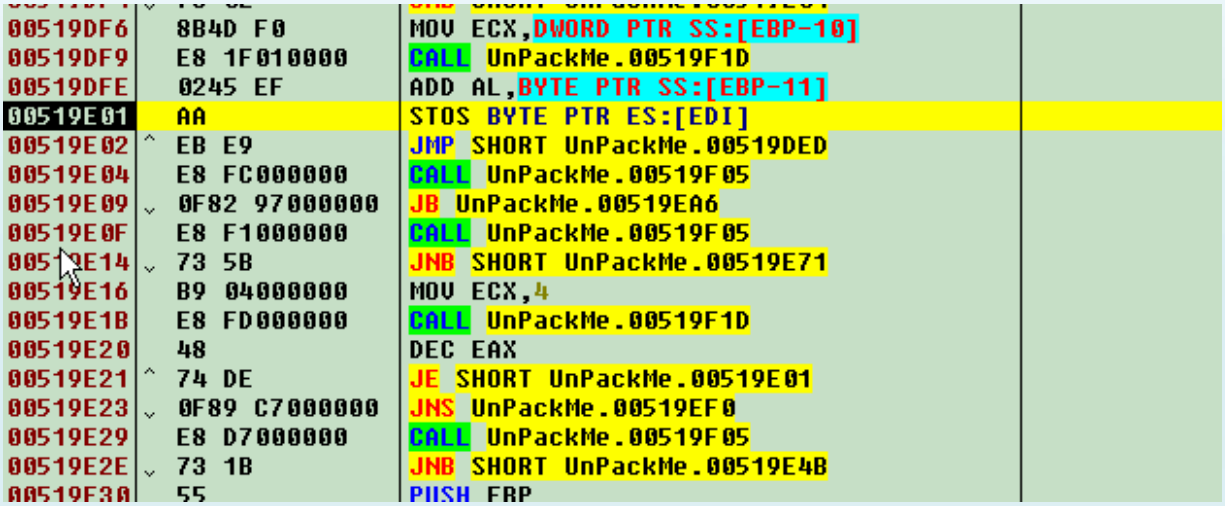
_ Press **Alt + B** 1 Breakpoint you and delete it



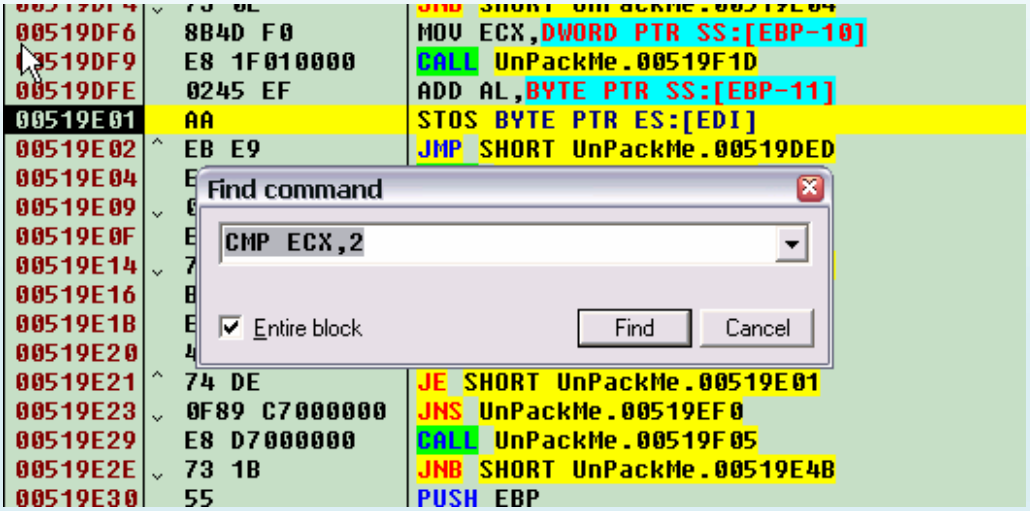
_ Press **Alt + M** and BP Set in **Section 1. Text**



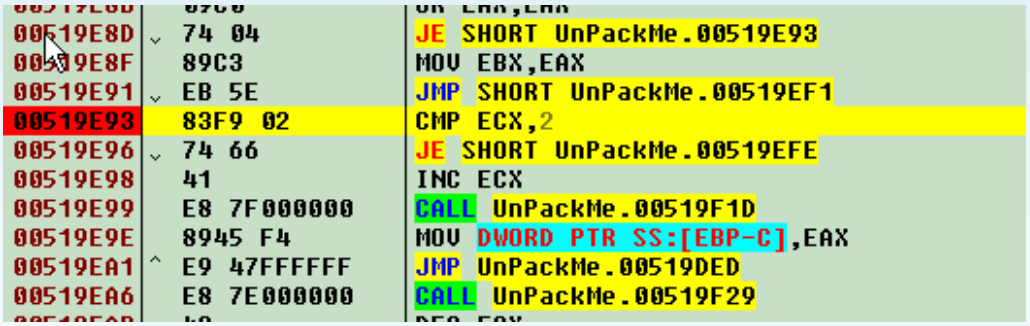
_ Press **Shift + F9** you stop here



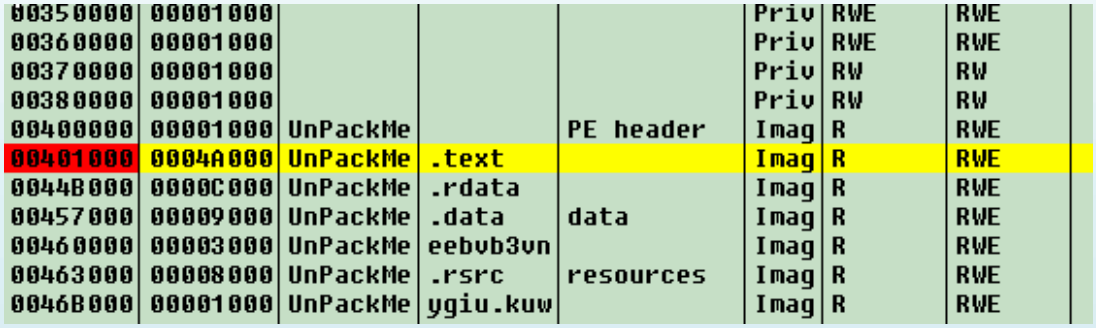
_ Press **Ctrl + F** to enter **Cmp ECX, 2**



_ Click **Find,** press **F2** to set it at BP



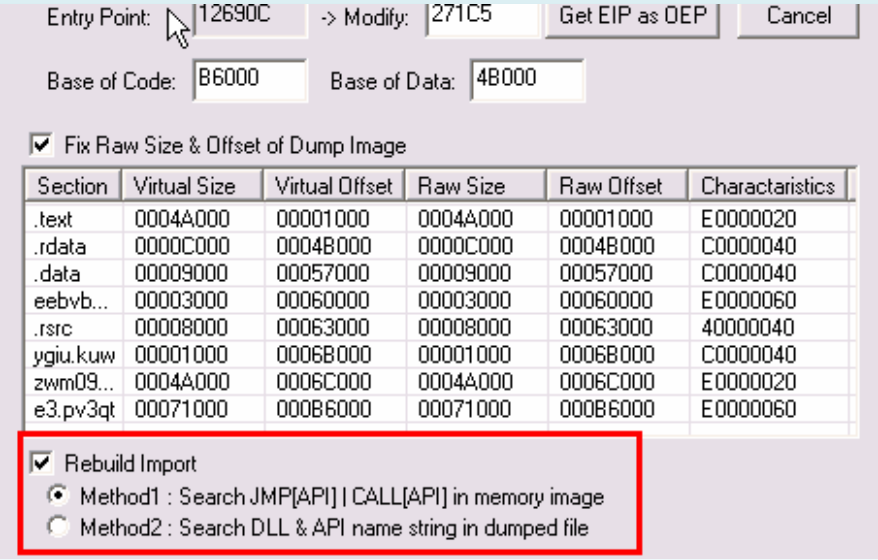
_ Press **Shift + F9 10 times** (If you hit 11 times will be Crash hichic ... ... if you do not believe can receive messages) Soft time code has been completely on the **F2** nho.Nhan BP to remove this and I find to **OEP, press Alt + M** to Set and BP in **Section 1. Text**



_ Press **Shift + F9** to you here

```
004271B0 - E9 6CD10500    JMP UnPackMe.00484321
004271B5   58             POP EAX
004271B6   C1C0 18        ROL EAX,18
004271B9 - E9 424E0400    JMP UnPackMe.0046C000
004271BE   70 12          JO SHORT UnPackMe.004271D2
004271C0   6C             INS BYTE PTR ES:[EDI],DX        I/O command
004271C1   90             NOP
004271C2   321F           XOR BL,BYTE PTR DS:[EDI]
004271C4   ED             IN EAX,DX                       I/O command
004271C5   50             PUSH EAX
004271C6   64:8925 000000 MOV DWORD PTR FS:[0],ESP
004271CD   83C4 A8        ADD ESP,-58
004271D0   53             PUSH EBX
```

Hic hic _ have **Stolen Code,** but in this case do not need very banana Fix What ráo ... Dumped 1 and is run as **Horses,** use and remember **OllyDump** plugin selected nhuhinh under house! If selected nhuday from the use **ImportREC**



_ Click **Save** and **enter** the name, such as **Unpacked_Full** such and wait in seconds. Run test run ... ... unpack lickerish

Done !!!!!!!!

W r i t e n t W hy by the B N o ar (2 6 - 0 8 - 20 0 6)

.:: [MUP EXECryptor v.2.2.6 with target: PowerArchiver 2007]::.

(_kienmanowar_)

I. Proem

Walking this brother BQT REA movement are looking for is soft to protect by EXEcryptor voc try. REA also have a lot of articles on this Protector, the election is that the message of **WhyN0tBar, tlandn, trickyboy** not matter in which the professional soft kill without written tut that's the J Com. People have presented different methods to MUP Execyptor, common goals are 3 methods as medical tlandn mentioned that manual manual for OEP use ***OEPfinder vX.YZ*** deroko by using scripts ***AntiDBG Bypass OEP . txt*** and add a more of the trick is to use 2 bytes is famous for **EB FE** MUP. However in the later version of the EXEcryptor OEPfinder was working more and deroko are also not aware of this tool to update, use the script ***AntiDBG OEP.txt Bypass*** at the time was not (in general is not stable), so only the remaining two months is completely manual to find the OEP, is used **EB FE.** In this article I do not have the super-high, my brother learned to write and what I do only. I will present both for target PowerArchiver. *A reminder of what I do not do the following purposes outside academic and research so I will not bear any responsibility if you do use it to the not a good idea!* 0k13! L3t's R0ck w1th m3 J

II. Target and Tools

Target:
Name: PowerArchiver 2007, Version 10.0
Home site: http://www.powerarchiver.com

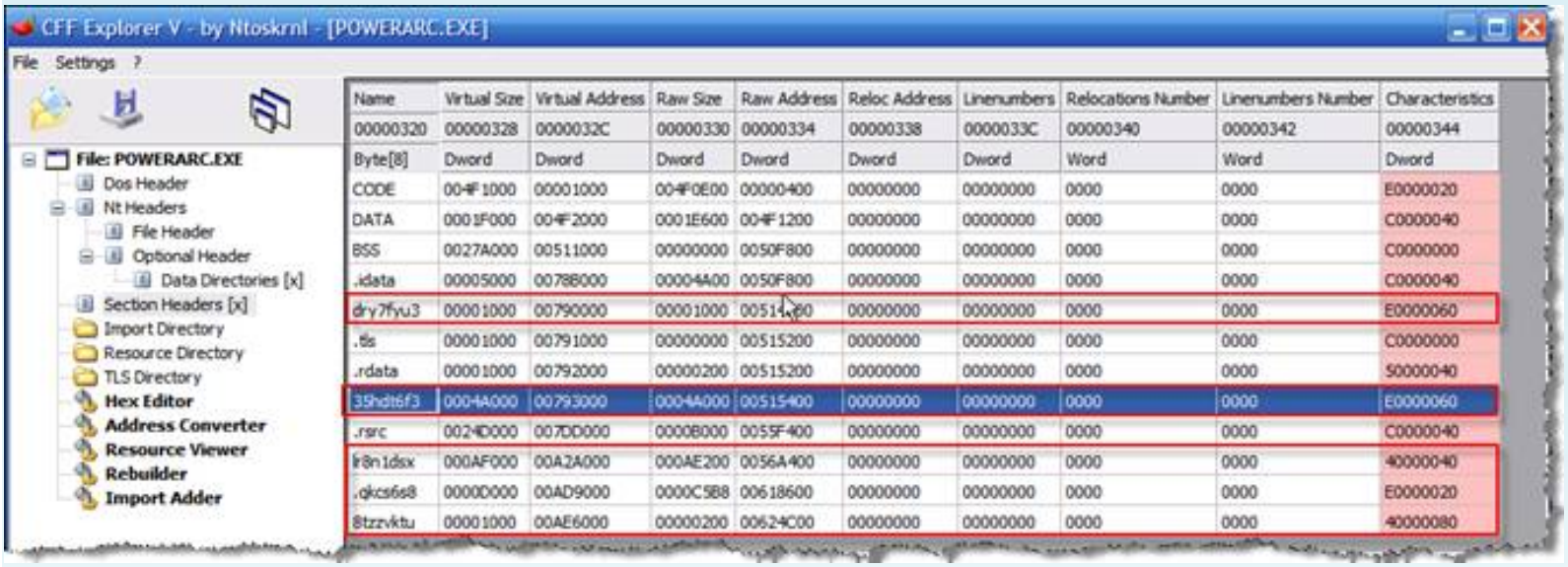
Tools:
Debugger: flyODBG
PE Tools: ProtectionID, RDG Packer Detector, CFF Explorer, LordPE, ImpRec

III. Manual Unpacking

1. MUP usual way:
_Dau First we used the program to detect find information about the target we are about to work:
_Thong Information has been passed ***Protection ID v5.2c:***

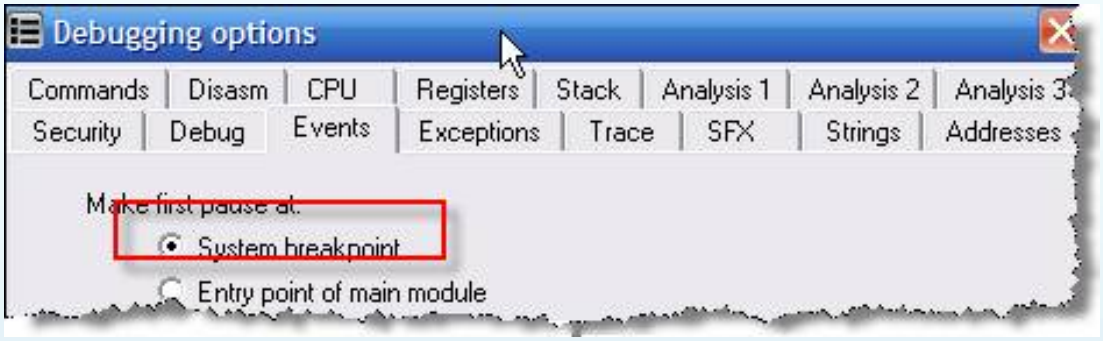
_Thong Through ***RDG Packer Detector:***

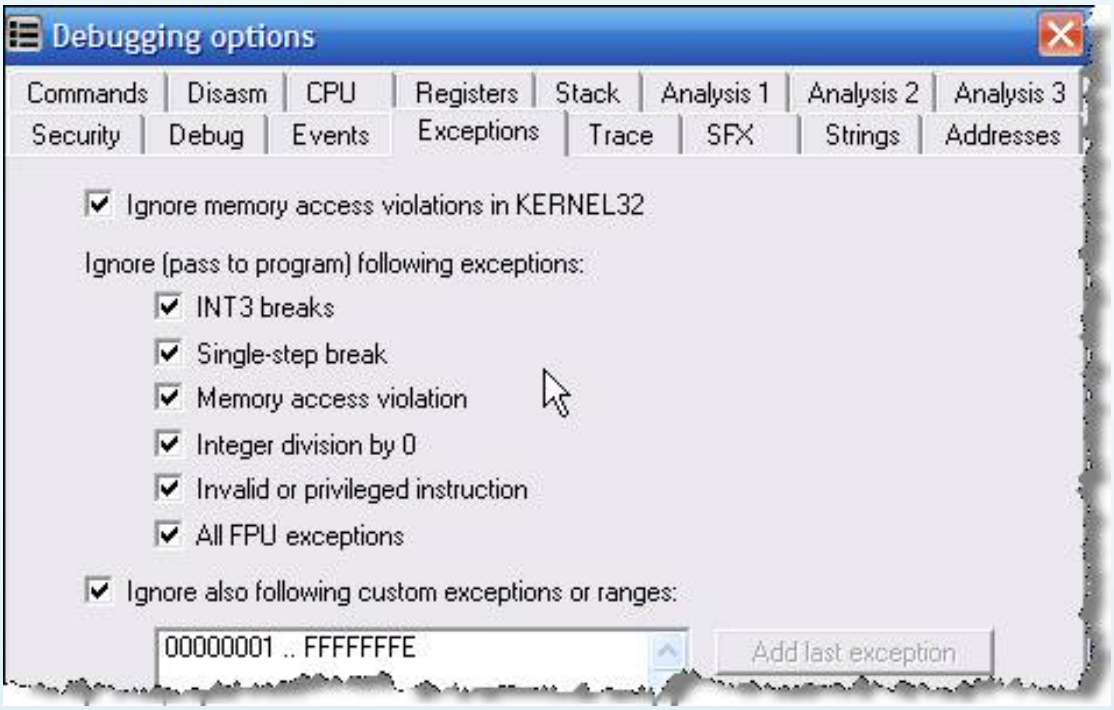
_Thong Of the section collected through ***CFF Explorer:***



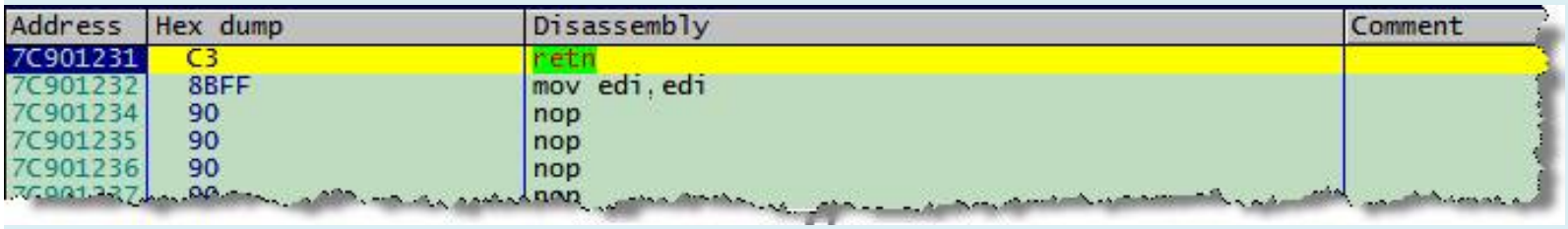
Through this we can conclude the PowerArchvier protected by EXEcryptor, and we also know this is the code with Borland Delphi (sometimes we do not trust 100% to the detector, but the target I have this crack and then 1 time I should make sure it is using Borland Delphi code, more most of the program code with Borland has section. Code).

_Ok Collect information such as full, time we Olly configured as follows:

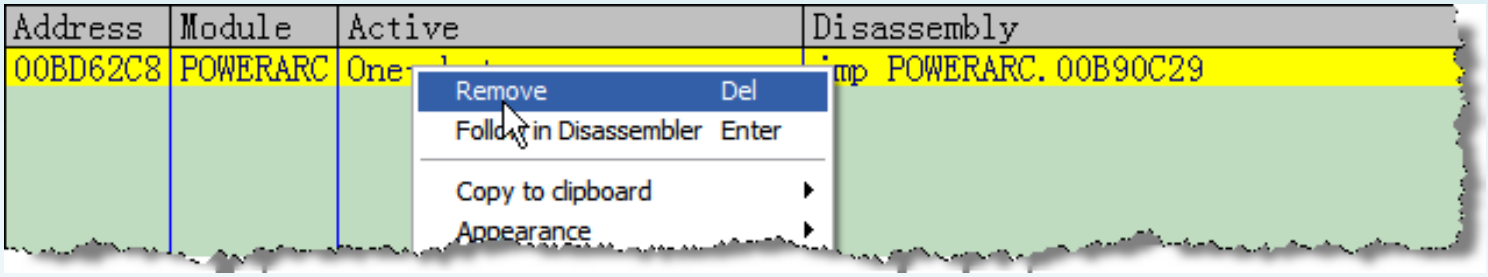




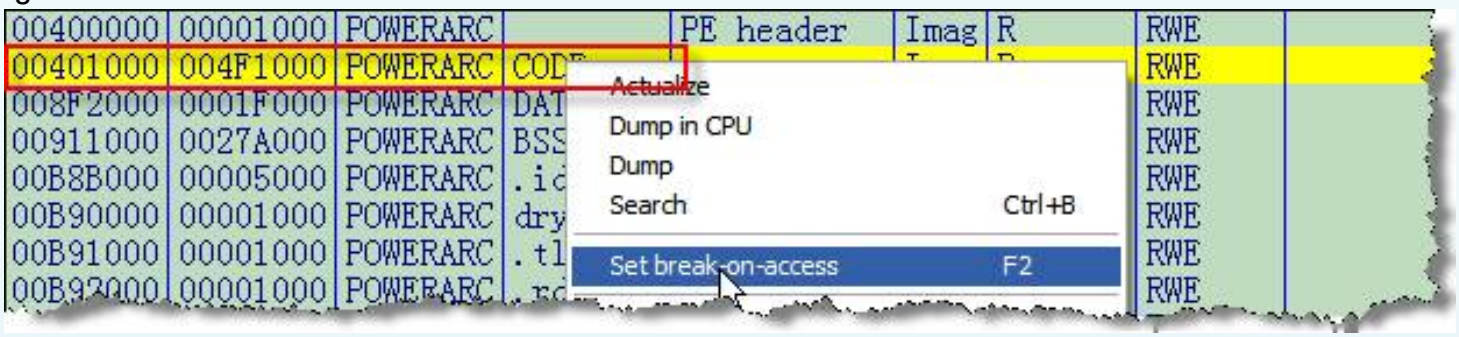
Olly's _Cau complete our target to Olly load after load programs into Olly we stop here:



_Nhan **Alt + B** to open the window BreakPoint, then remove the BP system.

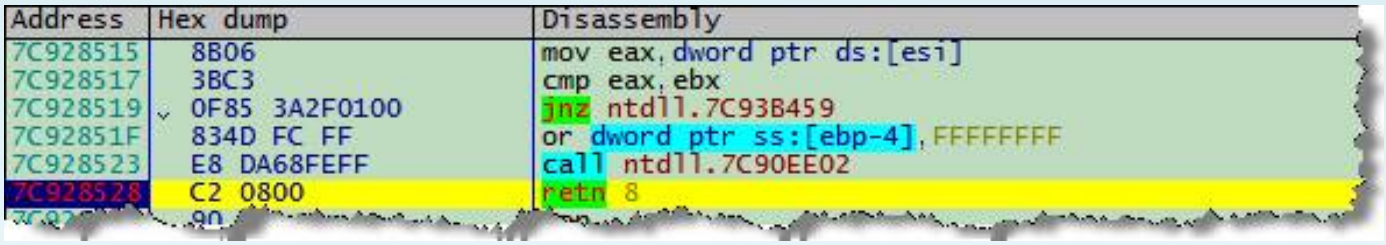


_Tiep By pressing **Alt + M** to open the Memory window, you select the **section.'s CODE** and set a target BP as follows:

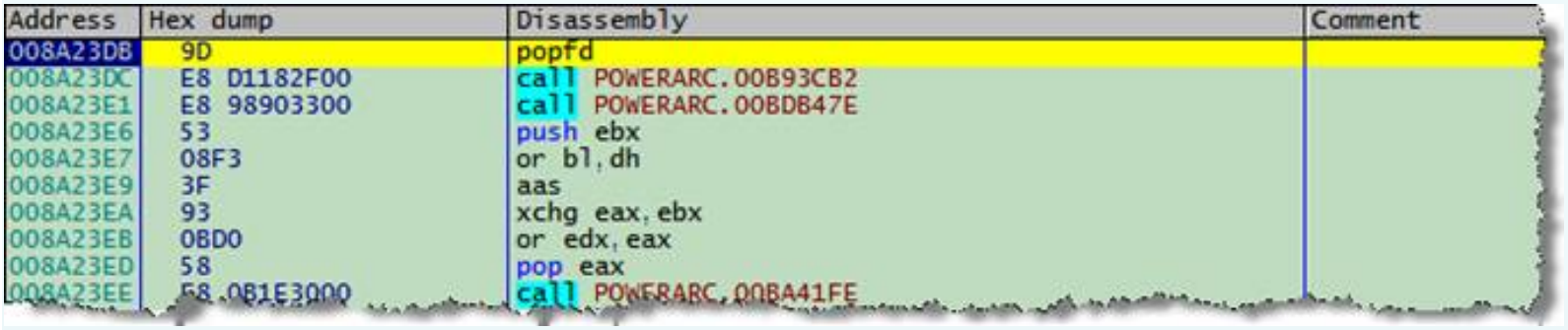


_Nhan **F9** to run, we will break here in Olly:

_Nhin Down slightly you will see a command **RETN 8,** vet am moving down this command and press **F2** to set BP 1. Next you press **Shift + F9,** we will break me in order RETN.



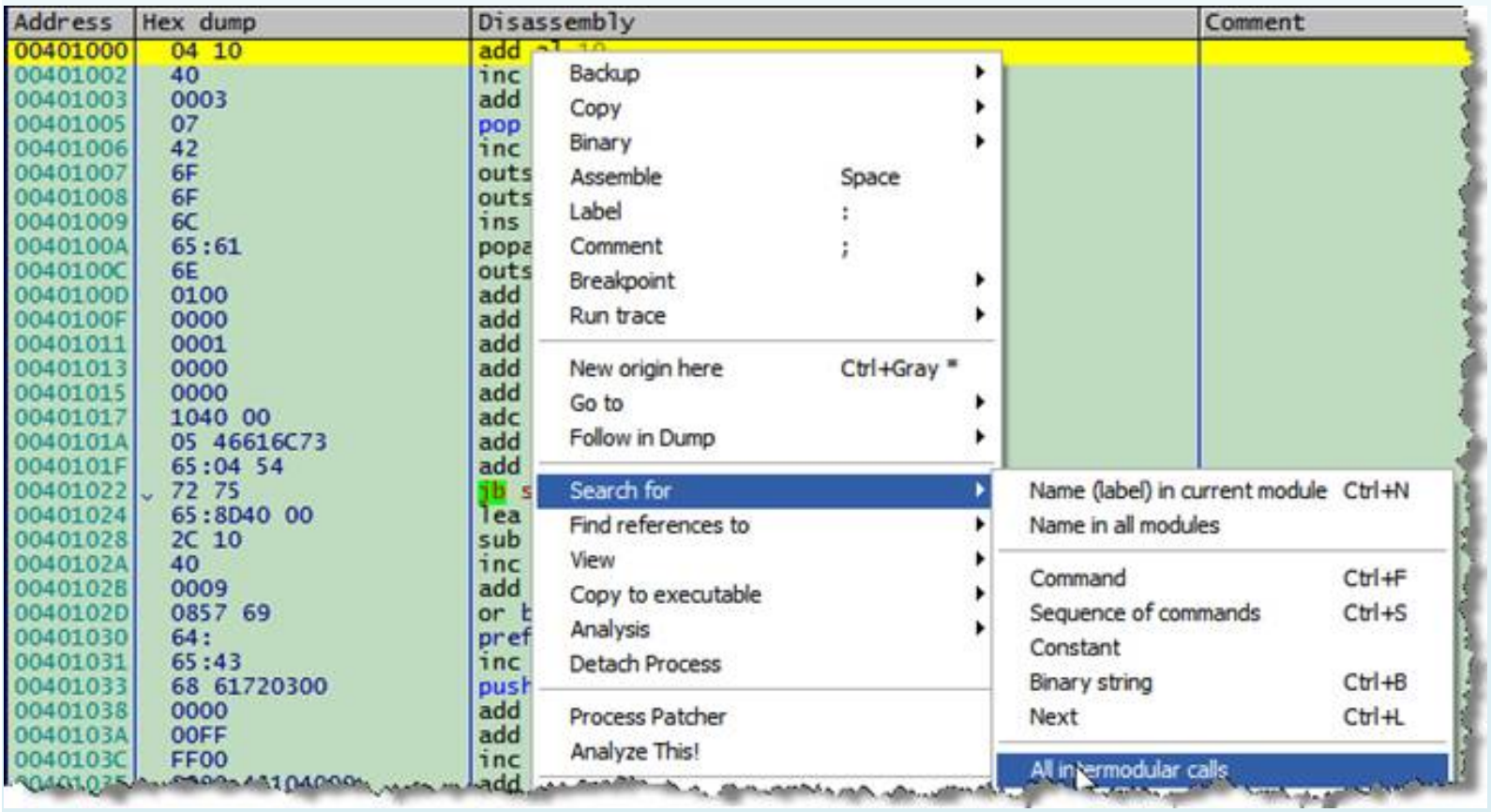
_Nhan **F2** BP to remove this, then continue to press **Alt + M** and set to a similar BP made in the above **section. Code.** Once you've set at the BP **section. Code,** press F9 to run the program, we will break here in Olly:



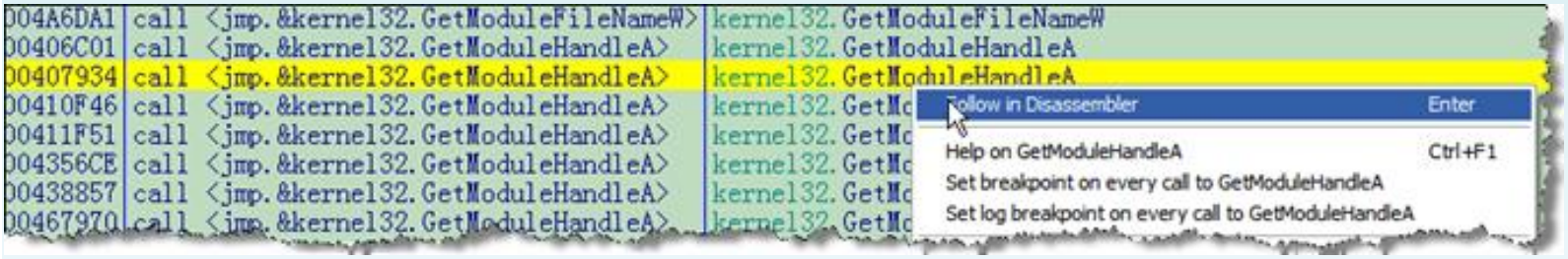
_Do The program code with **Borland Delphi 6.0 - 7.0 GetModuleHandleA** function is below. Based on this we will time to OEP of trinh.Trong Olly, in screen CPU you press **Ctrl +** G and enter:

_Nhan OK we will go to here:

_Tai Here you must click and select the image below:



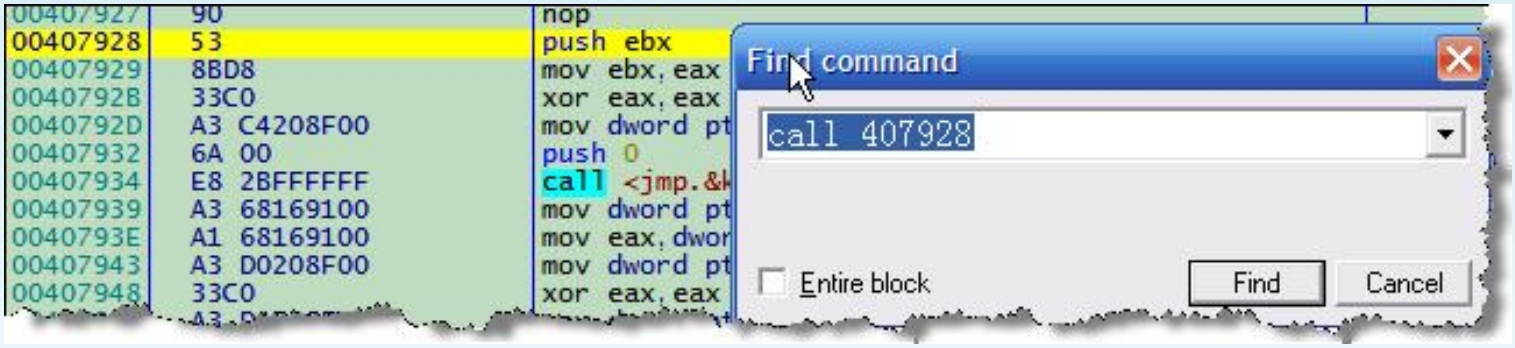
_Ta Function will select second, and mouse to select the image below:



_Chung Will be in here in Olly:

```
Address   Hex dump      Disassembly                                  Comment
00407919  ^ 74 DB       je short POWERARC.004078F6
0040791B    C3          retn
0040791C    B8 CC208F00 mov eax,POWERARC.008F20CC
00407921    E8 06F8FFFF call POWERARC.0040712C
00407926    C3          retn
00407927    90          nop
00407928    53          push ebx
00407929    8BD8        mov ebx,eax
0040792B    33C0        xor eax,eax
0040792D    A3 C4208F00 mov dword ptr ds:[8F20C4],eax
00407932    6A 00       push 0
00407934    E8 2BFFFFFF call <jmp.&kernel32.GetModuleHandleA>
00407939    A3 68169100 mov dword ptr ds:[911668],eax
0040793E    A1 68169100 mov eax,dword ptr ds:[911668]
```

_Gio We will find out which function to call this code, and to vet the morning address **0x00407928.** You press **Ctrl + F** and enter **Call 407,928,** similar to Figure below:



Find _Nhan, Olly will take you to come up and hairbreadth you will see OEP program but is in Stolen OEP:

```
Address   Hex dump      Disassembly                                  Comment
008F18F2    8F00        pop dword ptr ds:[eax]
008F18F4  - E9 CF492E00 jmp POWERARC.<ModuleEntryPoint>              <== this is OEP
008F18F9  ^ 75 E5       jnz short POWERARC.008F18E0
008F18FB    AB          stos dword ptr es:[edi]
008F18FC    6A 00       push 0
008F18FE    6A 00       push 0
008F1900    49          dec ecx
008F1901  ^ 75 F9       jnz short POWERARC.008F18FC
008F1903    51          push ecx
008F1904    B8 2C0C8F00 mov eax,POWERARC.008F0C2C
008F1909    E8 1A60B1FF call POWERARC.00407928
008F190E    33C0        xor eax,eax
```

_Ok Is so we know the OEP of the program where then, the fix Stolen bytes we will later. Now we need to see the interest of the IAT has canceled what was not. Very easy to find the position you start and end of the OEP. According to the trick in the hip, I do have the super-high, pulling down a pull-up and conclusion IAT has not been canceled tolerable. What is healthy and J .

Address	Value	Comment
00B8B268	00000000	
00B8B26C	7C91188A	ntdll.RtlDeleteCriticalSection ← IAT Start
00B8B270	7C9010ED	ntdll.RtlLeaveCriticalSection
00B8B274	7C901005	ntdll.RtlEnterCriticalSection
00B8B278	7C809FA1	kernel32.InitializeCriticalSection
00B8B27C	7C809B14	kernel32.VirtualFree
00B8B280	7C809A81	kernel32.VirtualAlloc
00B8B284	7C80995D	kernel32.LocalFree
00B8B288	7C8099BD	kernel32.LocalAlloc
00B8B28C	7C8092AC	kernel32.GetTickCount
00B8B290	7C80A417	kernel32.QueryPerformanceCounter
00B8B294	7C8114AB	kernel32.GetVersion
00B8B298	7C809737	kernel32.GetCurrentThreadId
00B8B29C	7C809794	kernel32.InterlockedDecrement

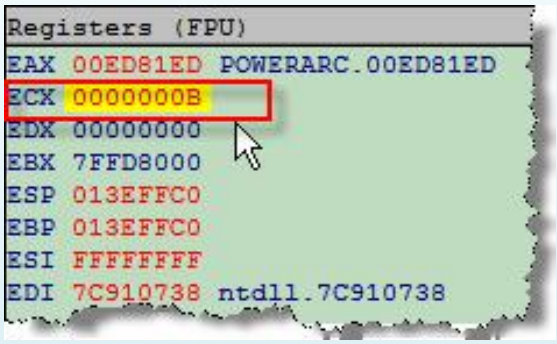
Address	Value	Comment
00B8BF38	77A9FC1F	crypt32.CertEnumCertificatesInStore
00B8BF3C	77AB8140	crypt32.CertDeleteCertificateFromStore
00B8BF40	77A9085A	crypt32.CertFreeCertificateContext
00B8BF44	77AB8A1A	crypt32.CertAddEncodedCertificateToStore
00B8BF48	77A8C19E	crypt32.CertCloseStore
00B8BF4C	77A94F78	crypt32.CertFindCertificateInStore
00B8BF50	77AB9E0A	crypt32.CertOpenSystemStoreA
00B8BF54	00000000	
00B8BF58	77DF1BD1	advapi32.CryptGetProvParam
00B8BF5C	77DEA879	advapi32.CryptImportKey
00B8BF60	77E11861	advapi32.CryptExportKey
00B8BF64	77DE8546	advapi32.CryptReleaseContext
00B8BF68	77DEA544	advapi32.CryptDestroyKey
00B8BF6C	77E11789	advapi32.CryptGetUserKey
00B8BF70	77DE7F96	advapi32.CryptAcquireContextA
00B8BF74	00000000	
00B8BF78	774F42A9	ole32.CoCreateGuid ← IAT End

_Van On IAT is finished, we do not bother rolling tan it again. Now we go back to fix Stolen bytes. Remember that you are still in the media have not OEP nhé. Now we set a similar BP's illustrated below:

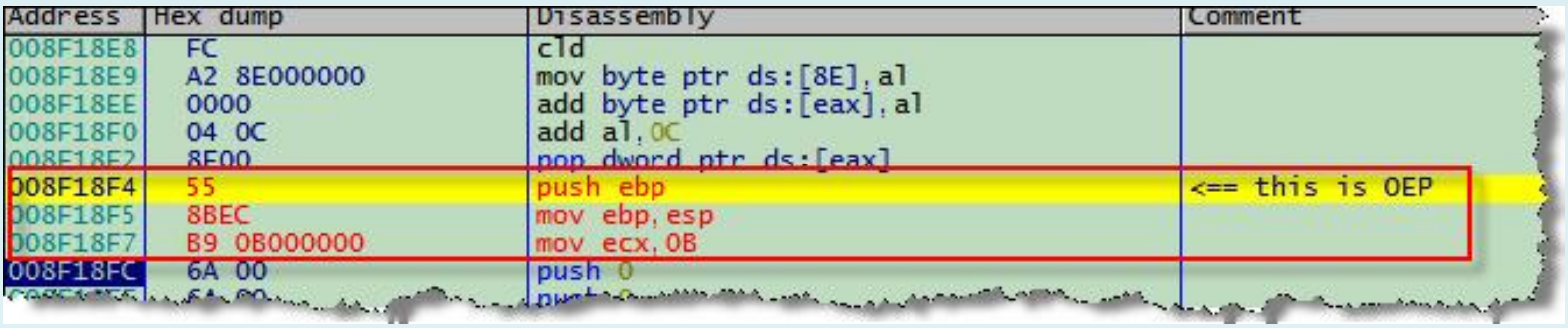
```
008F18F2   8F00          pop dword ptr ds:[eax]
008F18F4 - E9 CF492E00   jmp POWERARC.<ModuleEntryPoint>     <== this is OEP
008F18F9 ^ 75 E5         jnz short POWERARC.008F18E0
008F18FB   AB            stos dword ptr es:[edi]
008F18FC   6A 00         push 0
008F18FE   6A 00         push 0
008F1900   49            dec ecx
```

_Tiep As you press **F9** to run the program, we will break at the place that we've set this BP.Luc observing the Registers window, you will see an information important for the fix stolen bytes

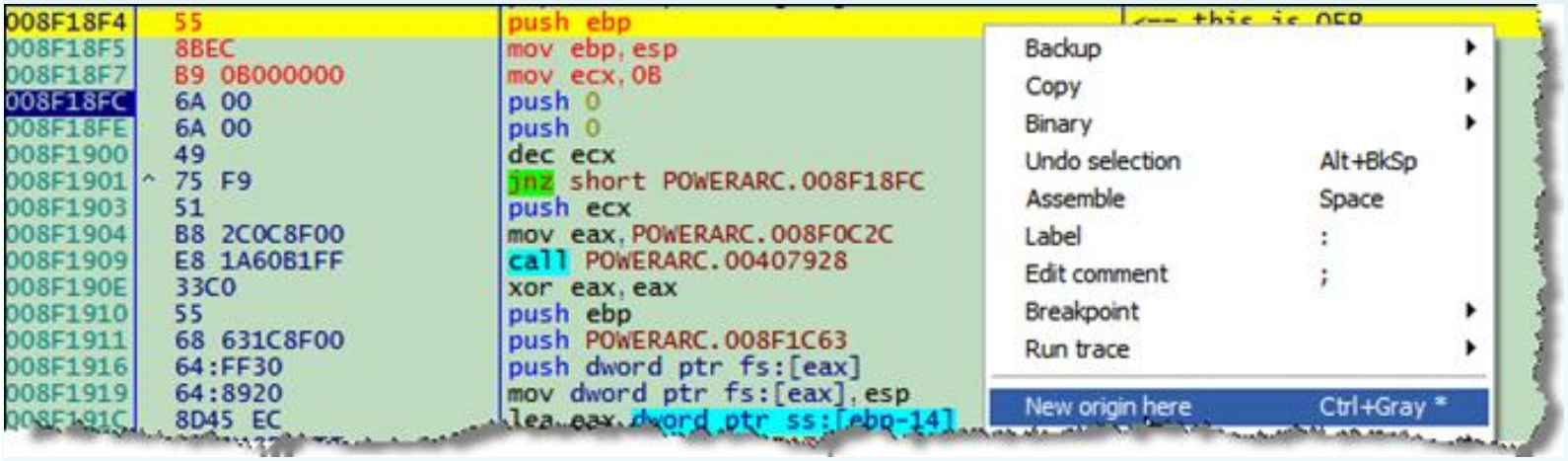
our (my way of learning lởm Why only).



F2 _Nhan to leave BP we've set, then proceed as revised picture below:



_Chuot Must address **0x008F18F4** and selected as follows:

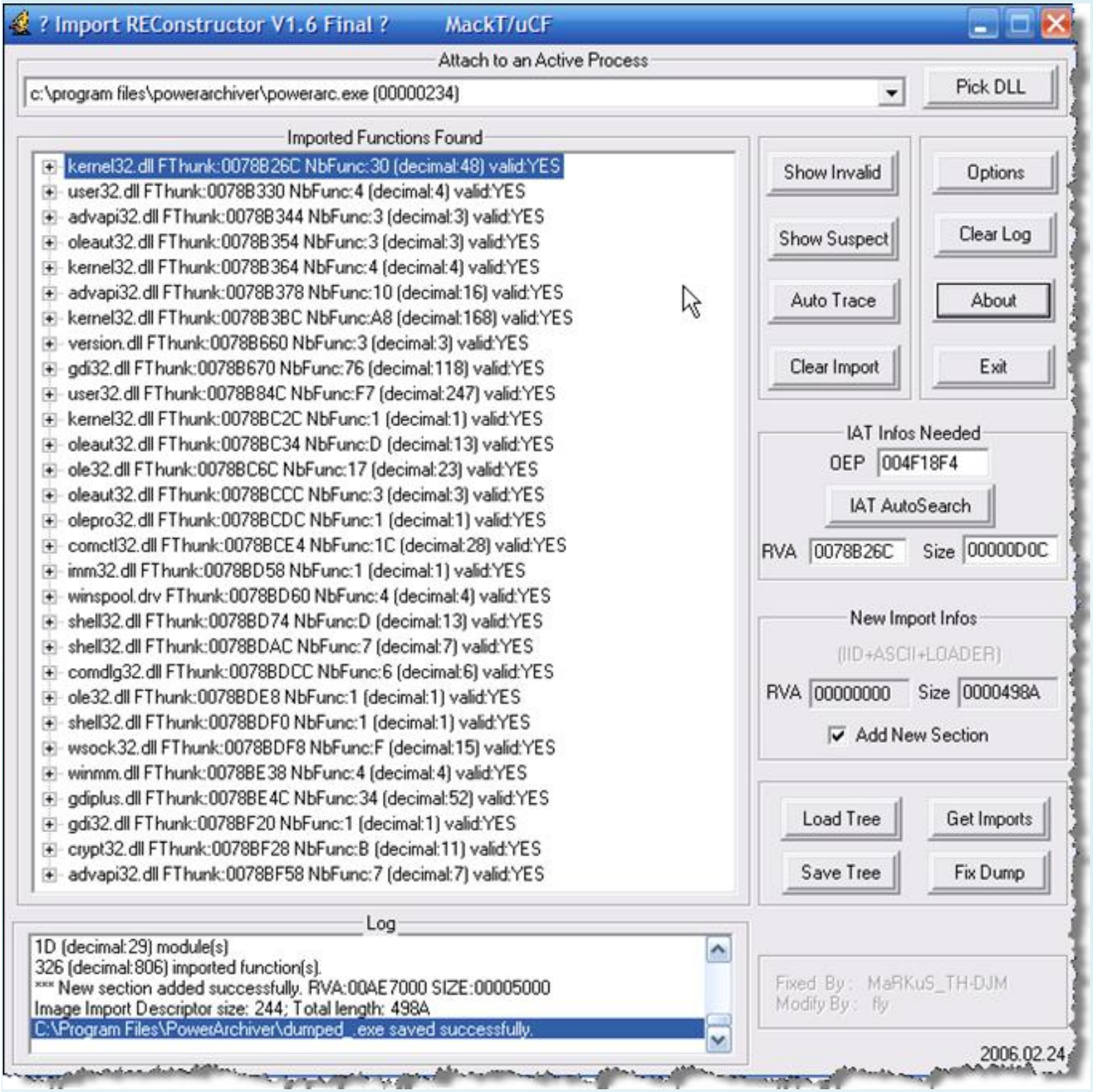


_Bay Hours conducting dump file and Fix IAT thoi.Toi xài always quick to Ollydump plugin. You remember select functions rebuild Import nhé, then conducted dump and save the file with a name as you like, I put a **dumped.exe.**

_Ok Dump file after it completed the last step is fix IAT. Before we open ImportRec calculation has little 1:

Real OEP = 0x008F18F4 - 0x00400000 = 0x004F18F4
RVA = IAT Start - 0x0078B26C = 0x00400000
Size = IAT End - IAT Start = 0x00000D0C

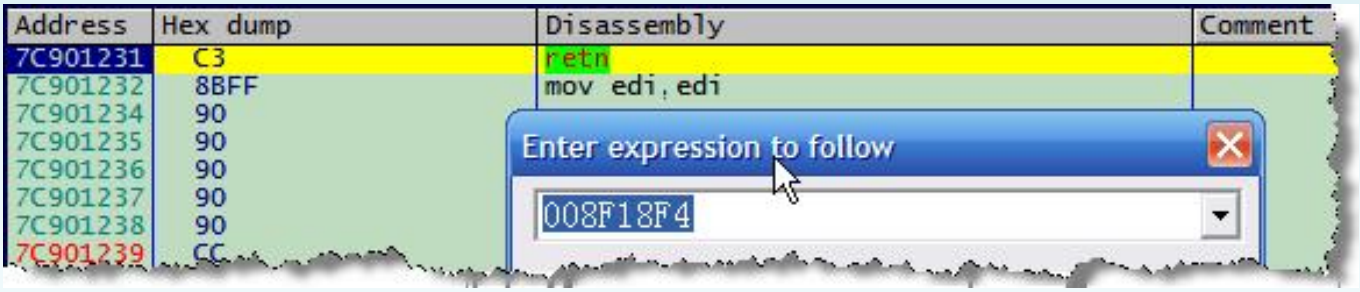
_Bay Open ImportRec out, select Process and complete the information on to. Then click Get Imports. Wow, so cool is not an invalid any func. Tolerable fix any dump J. Click Fix dump file and dumped.



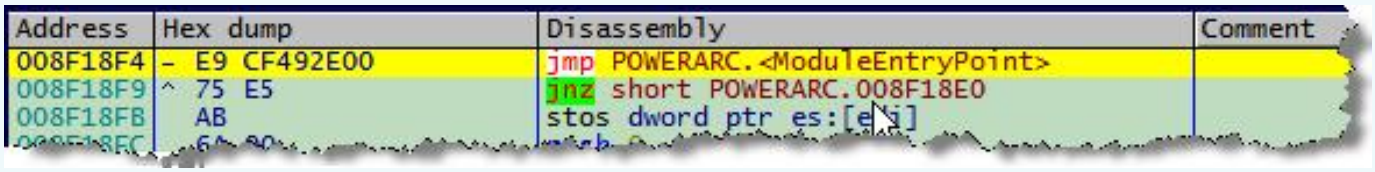
_Bay Time we try to test the file has to fix it has not run normally nhé. Oh well run, so that we have completed the MUP J

2. Properly EB FE:

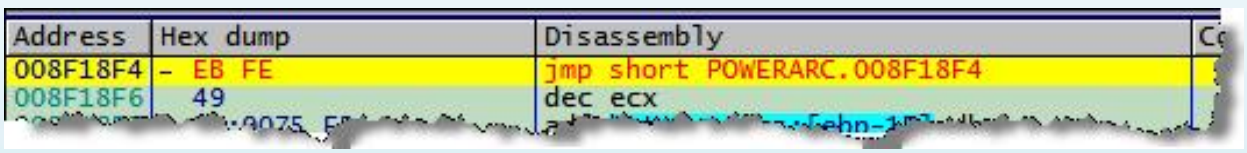
_Cach This trick is presented and that I will not go into the analysis that will always applied. The OEP find you can do or can follow the same instructions in the article by trick, but here are a particular need not fix Stolen bytes that the program is still running J. First, the load has to Olly, then remove the BP system, followed by pressing **Ctrl + G** and enter the address of OEP:



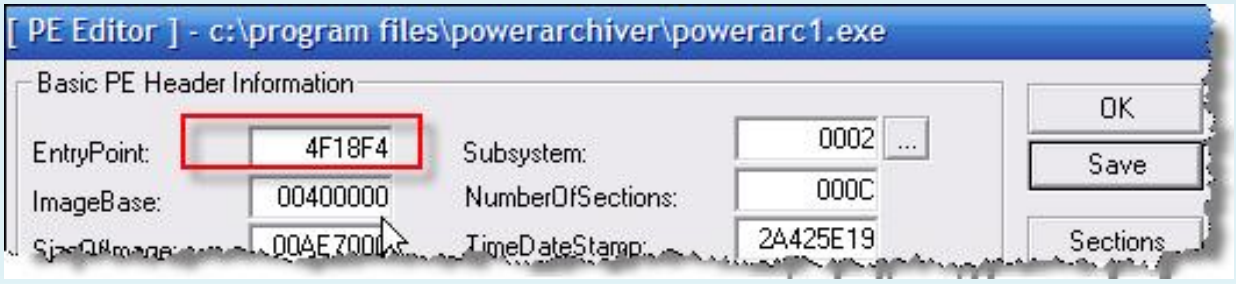
_Nhan OK, we will stay in the position of OEP:



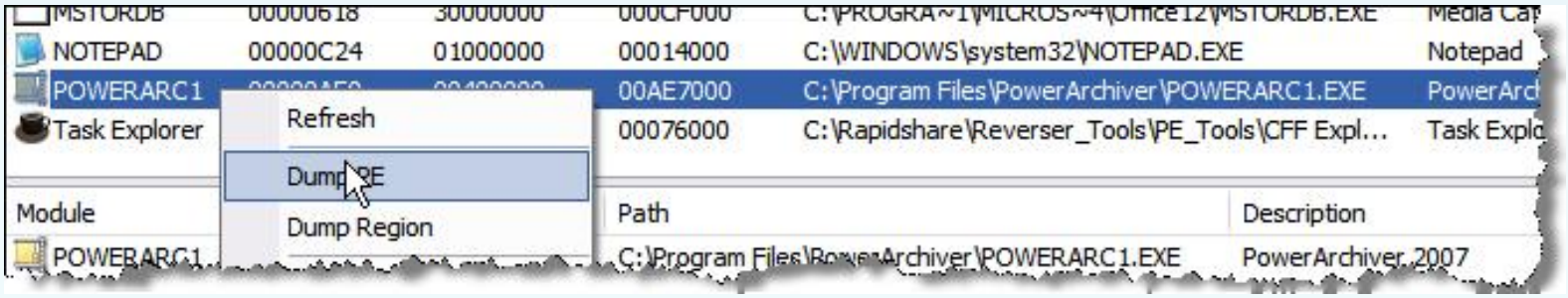
_Tai This press **Ctrl + E,** and to correct **EB FE** and remember two bytes have been replaced:



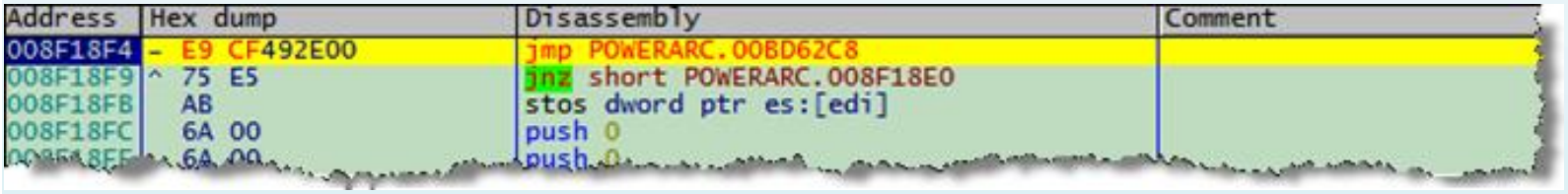
_Save Things have changed again, here's my Save **POWERARC1.EXE.** Then load this file on LordPE EP and revised to correct OEP we have again and Save:



_Bay Time double click the file to run **POWERARC1.EXE** file. Now the program is falling on the status repeats endlessly, we conducted the full dump. Here I use Task Explorer to Save the dump and into **POWERARC1_Dumped.EXE:**



_Sau Dump when finished using ImportRec to fix IAT. Simply select the Process, then IAT Auto Search, the next Get Imports and finally J Fix dump. Hì hì do not jump gold fix dump file to run with, hours POWERARC1 kill the process and load the dump file fix Olly to edit the bytes have been Edit.Cuoi together with Save the name is **POWERARC_fix.EXE.**



_Run Try to view the file **POWERARC_fix.EXE** nao.Kha kha has, it also run mượt J

_Phu Them, too tired, but not khiếp with the IAT cancel it: D. Over here I have presented to you 2 hours and as you see two ways this work is quite good. Now it is tired, appointment to the posts in the other. Thank you very much brother wrote the tuts to share experiences!

Best Regards
_ *[Kienmanowar]* _

--++--==[Greatz thanks to]==--++--
My family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Merc, Hoadongnoi, Nini ... all REA's members, TQN, HacNho, RongChauA, Deux, tlandn, light.phoenix, dqtln, ARTEAM .... all my friend, and you.

Thanks to --++--==[ ]==--++--
iamidiot, WhyNotBar, trickyboy, dzungltvn, takada, hurt_heart, haule_nth, v. hytkl. v.. You have contributed greatly to the REA. Hope you will continue to promote J

I want to thank **Teddy Roggers** for his great site, Reversing.be folks (especially **haggar),** Arteam folks **(Shub-Nigurrath, MaDMAn_H3rCuL3s)** and all folks on crackmes.de, thank to all members of **unpack.cn** (especially **fly** and **linhanshi**). Great thanks to **lena151** (I like your tutorials). And finally, thanks to **Ricardo NARVAJA** and all members on **CRACKSLATINOS.**

>>>> If you have any suggestions, comments or corrections email me: **kienmanowar [at] reaonline.net**

computer_angel unpacking series

Manual unpacking **EZIP 1.0 -> Jonathan Clark [Overlay]**

Information	Unpacking series for Newbie
Target	VBReformer
Available	None
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, PEiD 0.92.
Protection	EZIP 1.0 -> Jonathan Clark [Overlay]
L Evel	Easy
Category	Manual unpacking

1. Introduction

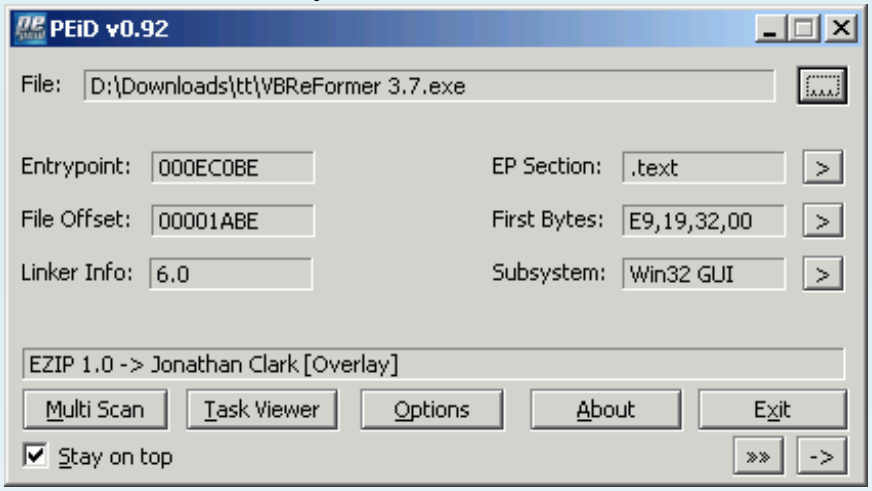
EZIP 1.0 is a free packer with some features:

- Compressed EXEs are typically **30-50%** their original size.
- Compressed EXEs run as normal. No special files or drivers need.
- Compressed programs are more difficult to reverse engineer
- Compressed programs load faster from network drives or CDROM
- Ezip is easy to install and uninstall.
- Ezip is completely free! Other similar programs cost from $ 50 to $ 200.

Today, I will show you the way to unpack for this packer. It is very easy! (The GUI of this packer is nice too.)

2. Getting Started

Use PEiD to detect the packer of VBREformer, now you see it said: EZIP 1.0 -> Jonathan Clark [Overlay]

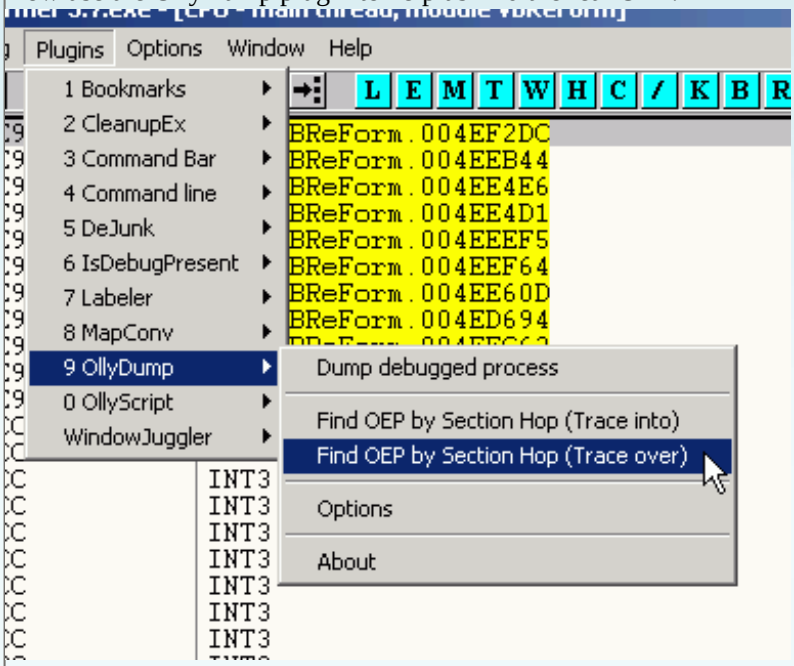


3. Finding the OEP

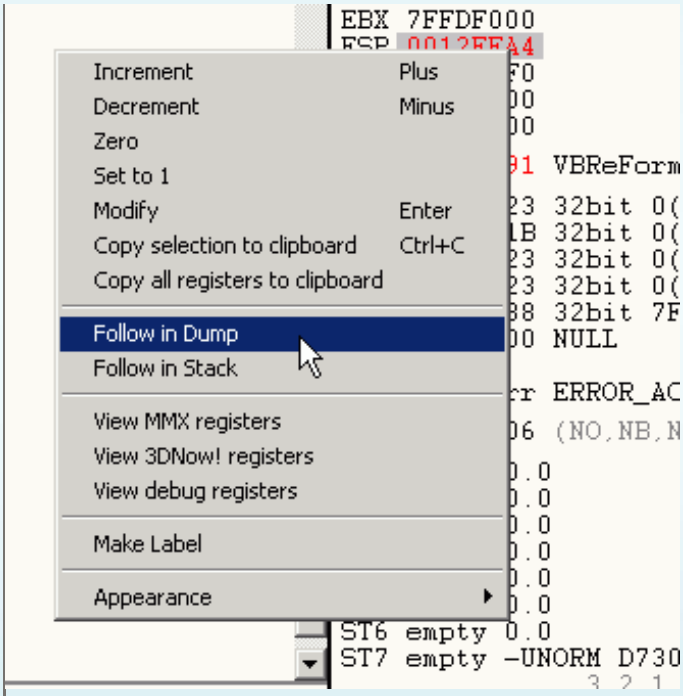
First load **VBReformer.exe** into OllyDBG. And you see a lot of instruction JUMP:

```
004EC0BE  $v E9 19320000  JMP VBReForm.004EF2DC
004EC0C3  .v E9 7C2A0000  JMP VBReForm.004EEB44
004EC0C8  $v E9 19240000  JMP VBReForm.004EE4E6
004EC0CD  $v E9 FF230000  JMP VBReForm.004EE4D1
004EC0D2  .v E9 1E2E0000  JMP VBReForm.004EEEF5
004EC0D7  $v E9 882E0000  JMP VBReForm.004EEF64
004EC0DC  $v E9 2C250000  JMP VBReForm.004EE60D
004EC0E1  $v E9 AE150000  JMP VBReForm.004ED694
004EC0E6  $v E9 772B0000  JMP VBReForm.004EEC62
004EC0EB  $v E9 87020000  JMP VBReForm.004EC377
004EC0F0  $v E9 702E0000  JMP VBReForm.004EEF65
004EC0F5     CC           INT3
004EC0F6     CC           INT3
004EC0F7     CC           INT3
004EC0F8     CC           INT3
004EC0F9     CC           INT3
004EC0FA     CC           INT3
```

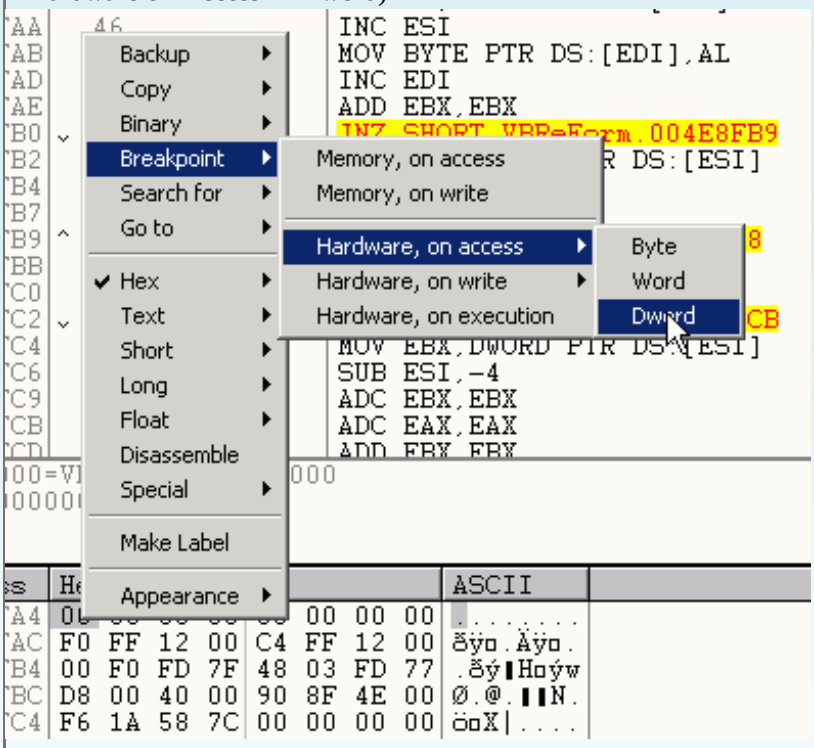
Now use the OllyDump plugin to help us find the real OEP:



This will take us to PUSHAD instruction nicely. Now we will have to use the trick of the PUSHAD. For that it does not know becomes one since I explain it: In the first place you must step in and press the F8 PUSHAD so that it is this executed. After you will see that ESP (in the window of registry) becomes color from red , compared with beams click the right button menu and select "Follow in dump"



After that you watch in the dump window (the one that is right under the code) and right click in the first byte, Breakpoint -> Hardware on Access -> Dword)

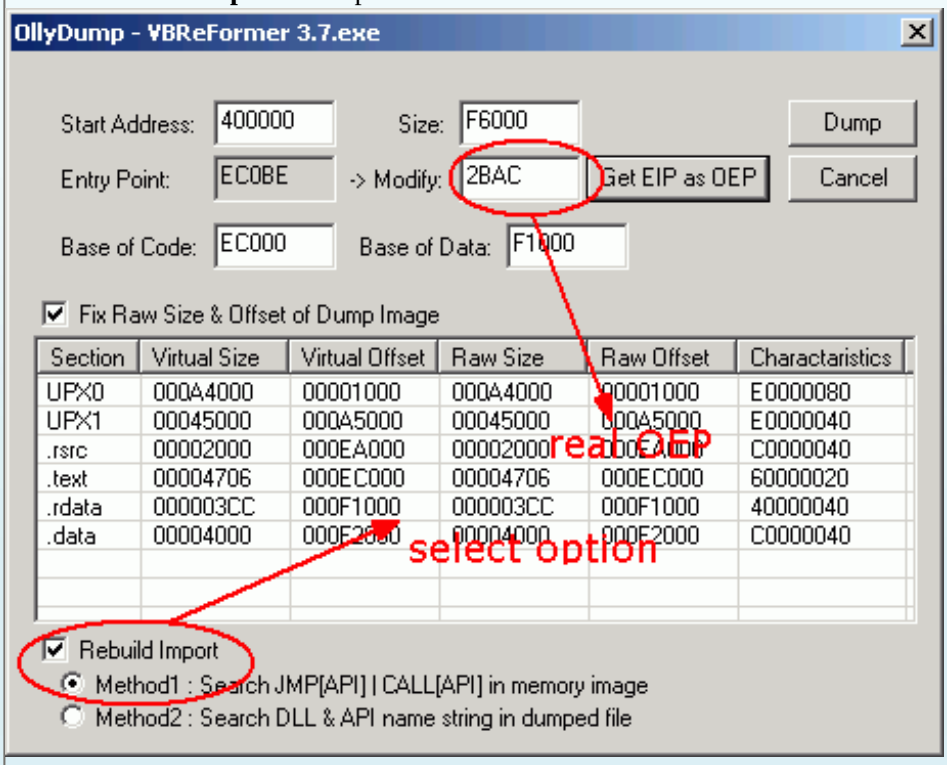


After this, you press F9 once and you appear in JMP. Here, press F8 and you will be in the real OEP. It is easy to identify that it is the OEP because the program being done in a right upon the VB OEP must be the reference to ThunRTMain and underneath a call to this one.

```
00402BAC   68 4C8D4000     PUSH VBReForm.00408D4C
00402BB1   E8 F0FFFFFF     CALL VBReForm.00402BA6                  JMP to MSVBVM60.ThunRTMai
00402BB6   0000            ADD BYTE PTR DS:[EAX],AL
00402BB8   48              DEC EAX
00402BB9   0000            ADD BYTE PTR DS:[EAX],AL
00402BBB   0030            ADD BYTE PTR DS:[EAX],DH
00402BBD   0000            ADD BYTE PTR DS:[EAX],AL
00402BBF   0040 00         ADD BYTE PTR DS:[EAX],AL
00402BC2   0000            ADD BYTE PTR DS:[EAX],AL
00402BC4   0000            ADD BYTE PTR DS:[EAX],AL
00402BC6   0000            ADD BYTE PTR DS:[EAX],AL
00402BC8   99              CDQ
00402BC9   1981 F0E1D4BC   SBB DWORD PTR DS:[ECX+BCD4E1F0],EAX
00402BCF   4A              DEC EDX
00402BD0   AD              LODS DWORD PTR DS:[ESI]
00402BD1   F9              STC
00402BD2   02D3            ADD DL,BL
```

4th dumping

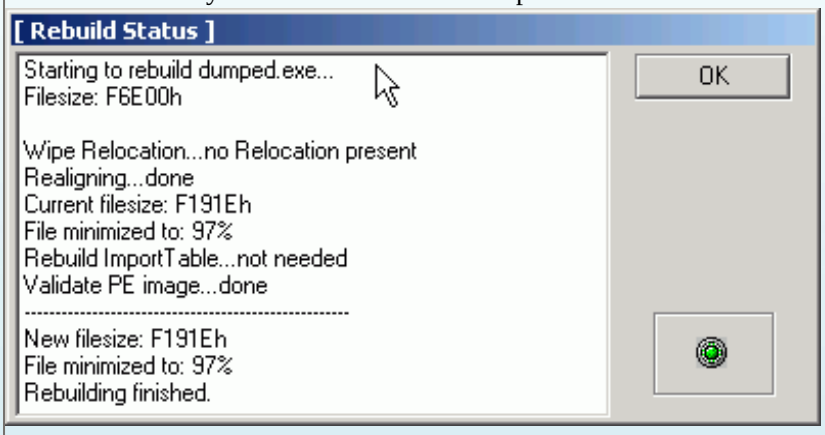
At address **00402BAC** we go to the menu Plugin -> OllyDump -> dump debugged process. And then, just press dump, save the file at **dumped.exe** unpacked.



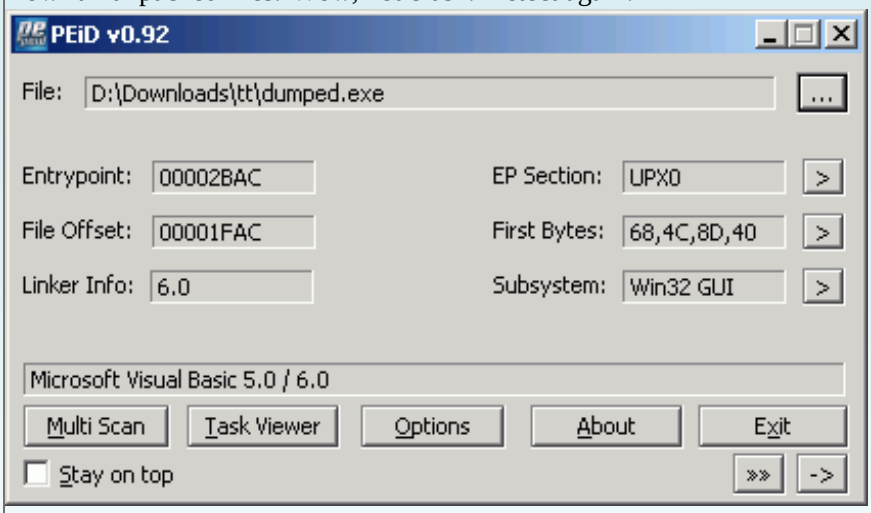
Because we fix IAT was automatically on OllyDump. So, not needed to use ImportREC!

5. Rebuild PE

Use LordPE 1.4 by Y0da for rebuild our dumped.exe



Now run unpacked files. Wow, not crash. Detect again:



6. Conclusion

Special thanx to **R @ dier** for this template.
My Greetz to: Deux, infinite, R @ dier, tlandn, Computer_Angel, Zombie, RCA, Moonbaby, ... and you ;-)!

I'll be back ...

Written by Computer_Angel (tutorial date: TPHCM 30/5/2004)

hacnho Tutorials # 1

Manual unpacking FSG 1.0
template by R @ dier.

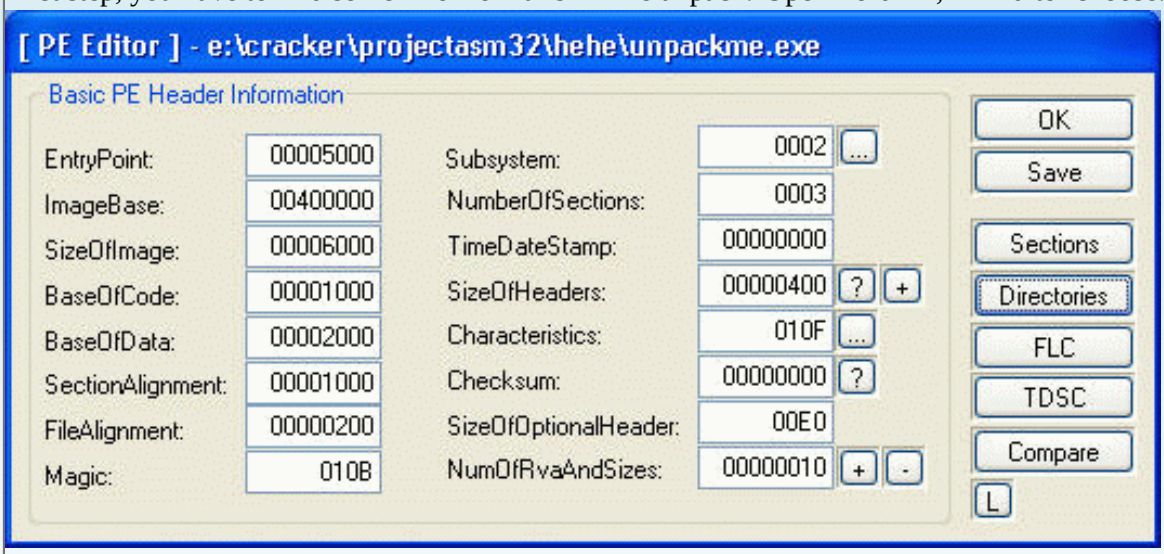
Information	Unpacking for Newbie's
Target	unpackme.exe
Available	http://nhandan.info/hacnho/tuts/unpackme1_tuts.zip
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, ImpRec 1.6 for XP, Lord PE 1.4.
Protection	FSG by 1.0 **dulek / XT**
L Evel	Easy
Category	Manual unpacking

1. Introduction

Salut tout le monde!
This is my first tut for manual Unpacking. In this tut, I will introduction to manual unpacking FSG 1.0. A packer for easy learning unpack Tech.

2. Getting Started

First step, you have to find some info from this PE me unpack. Open Lord PE, PE Editor choose. And we have:



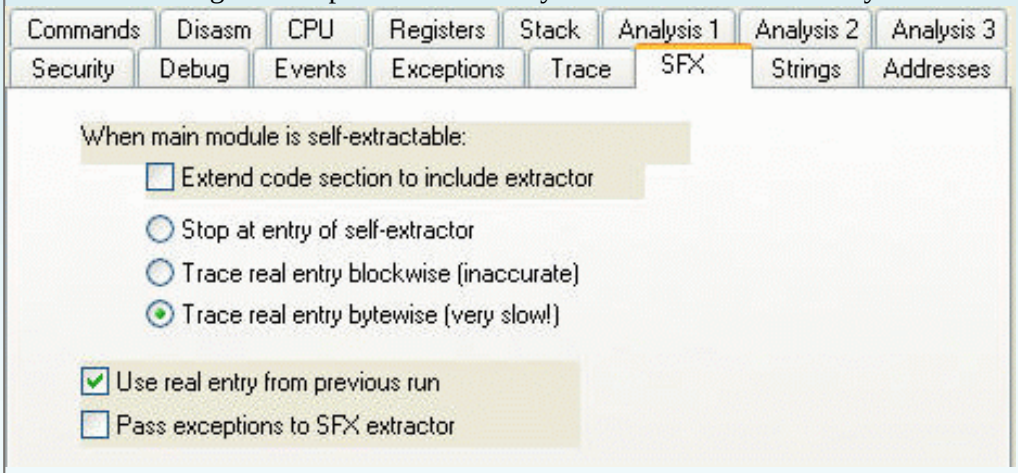
[Section Table]

Name	VOffset	VSize	ROffset	RSize	Flags
	00001000	00003000	00000000	00000000	C00000E0
	00004000	00001000	00000400	000000BA	C00000E0
	00005000	00001000	00000200	00000200	C00000E0

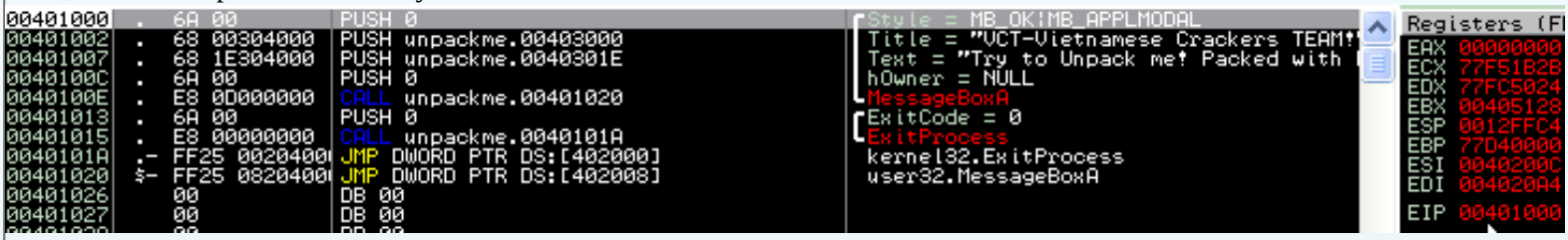
and we have:
OEP: 5000, All Flags is C00000E0, Image Base is always 400000, Import Table: 50F4 and size is 6B.

3. Finding the OEP

We have to configure the options in SFX Olly. Press Alt + O and modify:



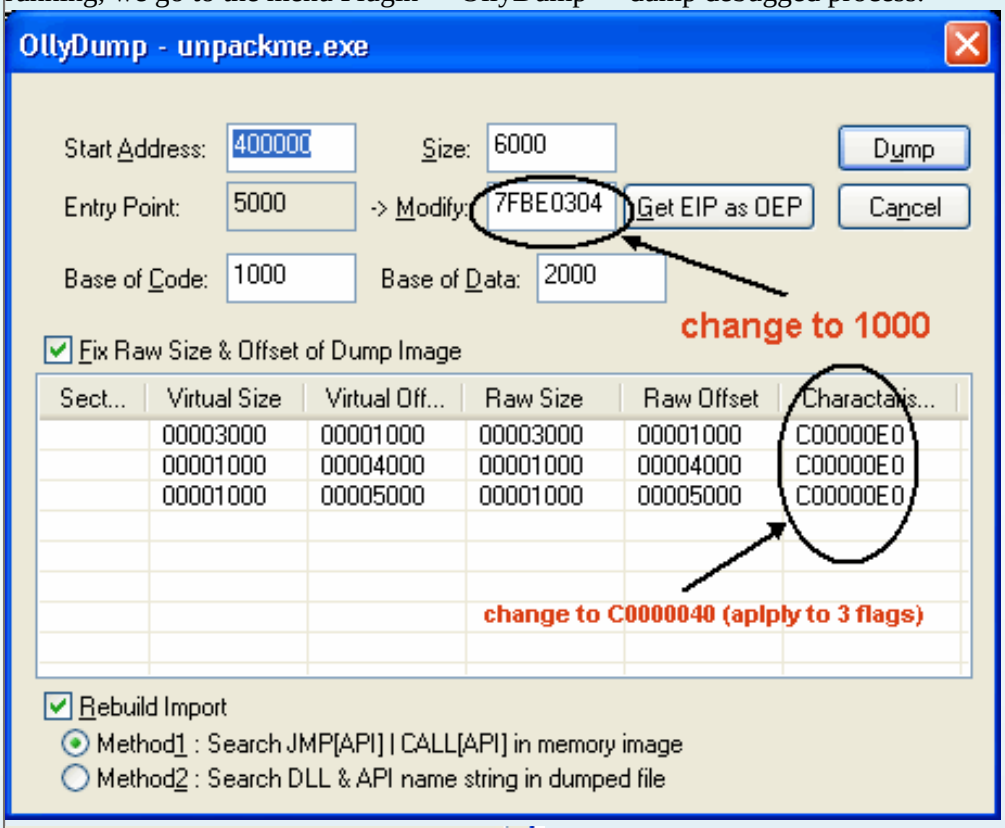
Now, this load unpackme in to Olly. And we still here:

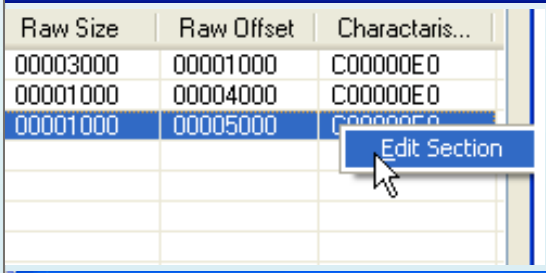


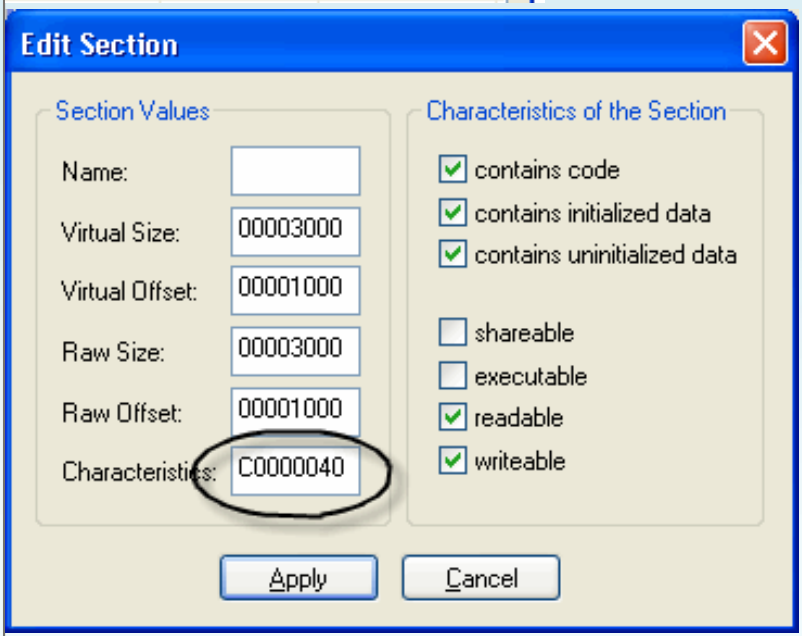
Wow, I see the OEP unpackme of this! This is:
Real OEP = OEP find in Olly-Image Base = 401000-400000 = **1000.**

4th dumping

Print Line 00401000. 6A 00 PUSH 0. Press F2 for set a breakpoint. Then, press F9 to run unpackme. When unpackme running, we go to the menu Plugin -> OllyDump -> dump debugged process.



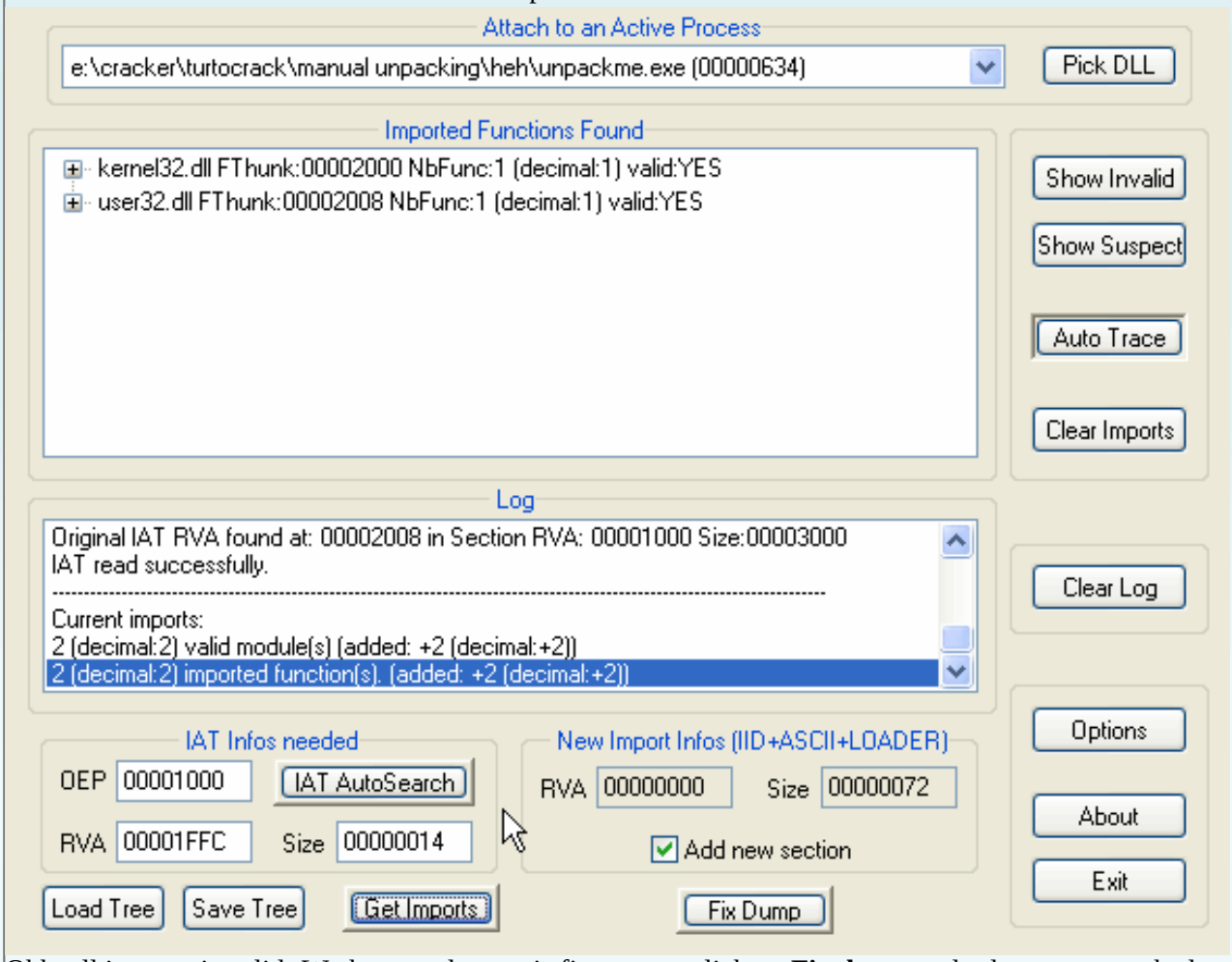




Change modify the Entry Point to **1000.** And change all flags (characteristics in Olly) to **C0000040.** And then, just press dump, save the unpacked files. Now, do not shut down OllyDbg just yet, we need to get the import table and fix our exe.

5. Finding and Fixing the Adress Import Table

ImpREC open, select Print ImpRec attached to active process and choose our target program.
Change the value in the OEP window to the one we wrote down earlier **(1000)**
then select IAT Autosearch then click Get Imports.



Ohh, all imports is valid. We have to do now is fix our exe click on **Fix dump** and select our unpacked.exe and we are done :-) our dump will be saved as unpacked_.exe and will now run.

6. Testing Our Unpacked file

Now run unpackme.exe. Wow, not crash. Using PEiD 0.92 detect: **MASM32 / TASM32.** Okie, FSG 1.0 is now unpacked successful!

7. Conclusion

Special thanx to R @ dier for this template.
My Greetz to: Deux, RCA, Moonbaby, Computer_Angel, tlandn, Zombie, Maipt0301, tykhung, softcracker_vn, CTL, LeVuHoang ...

To be continued ...

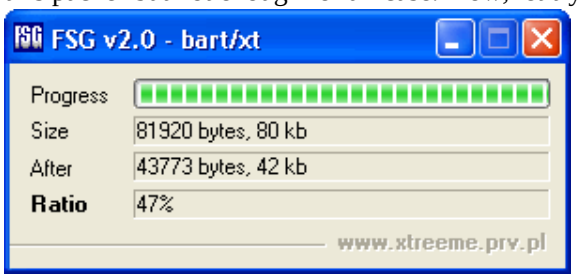
Written by hacnho (tutorial date: Sai Gon 15/2/2004)

hacnho Tutorials # 14
Manual unpacking FSG 2.0 -> bart / XT

Information	Unpacking for Newbie's
Target	**target1** and **target2**
Available	http://nhandan.info/hacnho/tuts/unpackme14_tuts.zip
Tools	1:10 OllyDbg plugin with Final OllyDump 2.21.108, OllyScript, Lord PE 1.4, 0.92 and PEiD EM Editor for 4:04 write scripts.
Protection	FSG 2.0 -> bart / XT
Level	Standard
Category	Manual unpacking

1.Introduction

Most Crackers, was used keygenner FSG 1.x, 2.x protect for the keygen or patcher. I was posted for a tut unpack this packer but not enough for all case. Now, let try another method for unpacking FSG 2.0



In this tutorials, I have two files: one: just fix IAT with OllyDump, two: Can not fix auto IAT, we must fix IAT by hand with ImpREC.

2. Target1

Step 1: Find OEP
Load-1 into **target** OllyDBG

```
Address   Hex dump          Disassembly                              Comment
00400154    8725 BCA24100   XCHG    DWORD PTR DS:[41A2BC], ESP
0040015A    61              POPAD
0040015B    94              XCHG    EAX, ESP
0040015C    55              PUSH    EBP
0040015D    A4              MOVS    BYTE PTR ES:[EDI], BYTE PTR DS:
0040015E    B6 80           MOV     DH, 80
00400160    FF13            CALL    NEAR DWORD PTR DS:[EBX]
00400162  ^ 73 F9           JNB     SHORT target1.0040015D
00400164    33C9            XOR     ECX, ECX
00400166    FF13            CALL    NEAR DWORD PTR DS:[EBX]
00400168  v 73 16           JNB     SHORT target1.00400180
0040016A    33C0            XOR     EAX, EAX
0040016C    FF13            CALL    NEAR DWORD PTR DS:[EBX]
0040016E  v 73 1F           JNB     SHORT target1.0040018F
00400170    B6 80           MOV     DH, 80
00400172    41              INC     ECX
00400173    B0 10           MOV     AL, 10
00400175  >FF13             CALL    NEAR DWORD PTR DS:[EBX]
00400177  | 12C0            ADC     AL, AL
00400179  ^\73 FA           JNB     SHORT target1.00400175
0040017B  v 75 3A           JNZ     SHORT target1.004001B7
0040017D    AA              STOS    BYTE PTR ES:[EDI]
0040017E  ^ EB E0           JMP     SHORT target1.00400160
00400180    FF53 08         CALL    NEAR DWORD PTR DS:[EBX+8]
00400183    02F6            ADD     DH, DH
00400185    83D9 01         SBB     ECX, 1
00400188  v 75 0E           JNZ     SHORT target1.00400198
```

Scroll down until you see:

```
004001C5    50              PUSH    EAX
004001C6    FF53 10         CALL    NEAR DWORD PTR DS:[EBX+10]
004001C9    95              XCHG    EAX, EBP
004001CA    8B07            MOV     EAX, DWORD PTR DS:[EDI]
004001CC    40              INC     EAX
004001CD  ^ 78 F3           JS      SHORT target1.004001C2
004001CF  v 75 03           JNZ     SHORT target1.004001D4
004001D1    FF63 0C         JMP     NEAR DWORD PTR DS:[EBX+C]
004001D4    50              PUSH    EAX
004001D5    55              PUSH    EBP
004001D6    FF53 14         CALL    NEAR DWORD PTR DS:[EBX+14]
004001D9    AB              STOS    DWORD PTR ES:[EDI]
004001DA  ^ EB EE           JMP     SHORT target1.004001CA
004001DC    33C9            XOR     ECX, ECX
```

three jump is the special signal of FSG

Toggle a breakpoint at **004001D1** (press F2). Press F9, Olly will be break at this **breakpoint!** Then, you can clear our breakpoint. Next step, press **F7** and you will still at OEP:

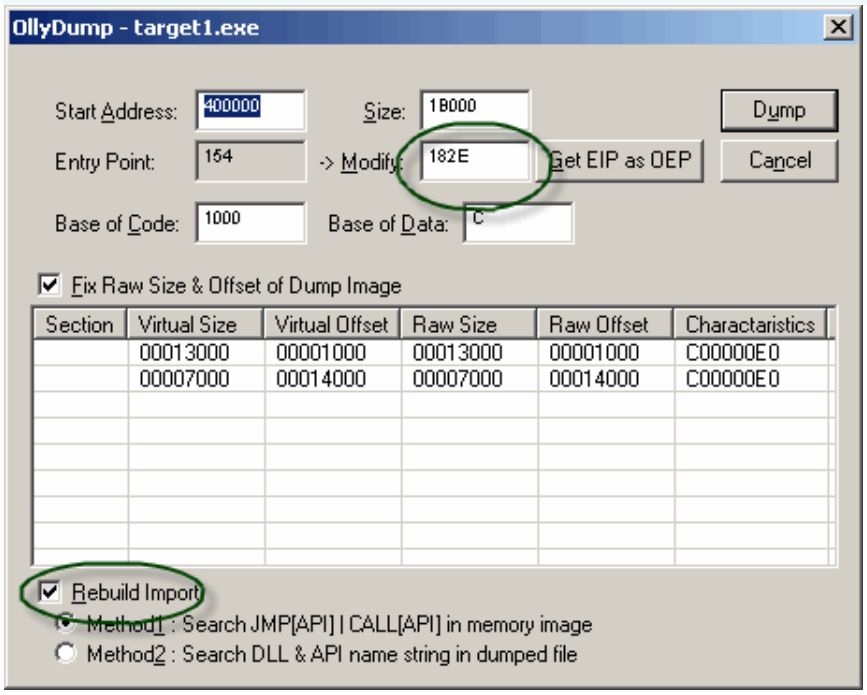
```
Address   Hex dump   Disassembly          Comment
0040182E    6A       DB      6A           CHAR 'j
0040182F    00       DB      00
00401830    E8       DB      E8
00401831    CD       DB      CD
00401832    01       DB      01
00401833    00       DB      00
00401834    00       DB      00
00401835    A3       DB      A3
00401836    40       DB      40           CHAR '@
```

Press Ctrl + A for analyze:

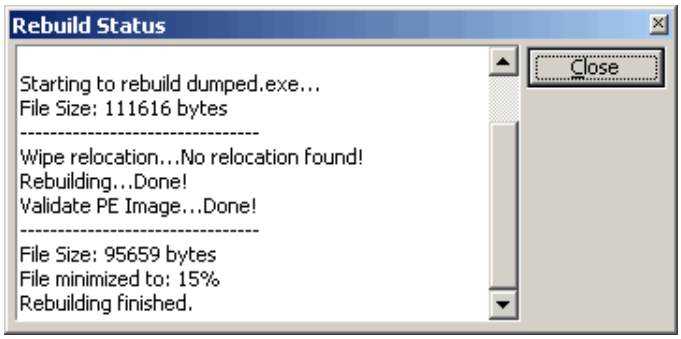
```
Address   Hex dump      Disassembly                              Comment
0040182E  .  6A 00      PUSH    0                                pModule = NULL
00401830  .  E8 CD010000 CALL    target1.00401A02                 GetModuleHandleA
00401835  .  A3 40314000 MOV     DWORD PTR DS:[403140], EAX
0040183A  .  6A 00      PUSH    0                                lParam = NULL
0040183C  .  68 55184000 PUSH    target1.00401855                 DlgProc = target1.00401855
00401841  .  6A 00      PUSH    0                                hOwner = NULL
00401843  .  68 C8000000 PUSH    0C8                              pTemplate = C8
00401848  .  50         PUSH    EAX                              hInst
00401849  .  E8 6C010000 CALL    target1.004019BA                 DialogBoxParamA
0040184E  .  6A 00      PUSH    0                                ExitCode = 0
00401850  .  E8 A7010000 CALL    target1.004019FC                 ExitProcess
00401855  .  55         PUSH    EBP
00401856  .  8BEC       MOV     EBP, ESP
```

Step 2: dump and auto fix IAT

- Go to the menu plugin, choose OllyDUMP:



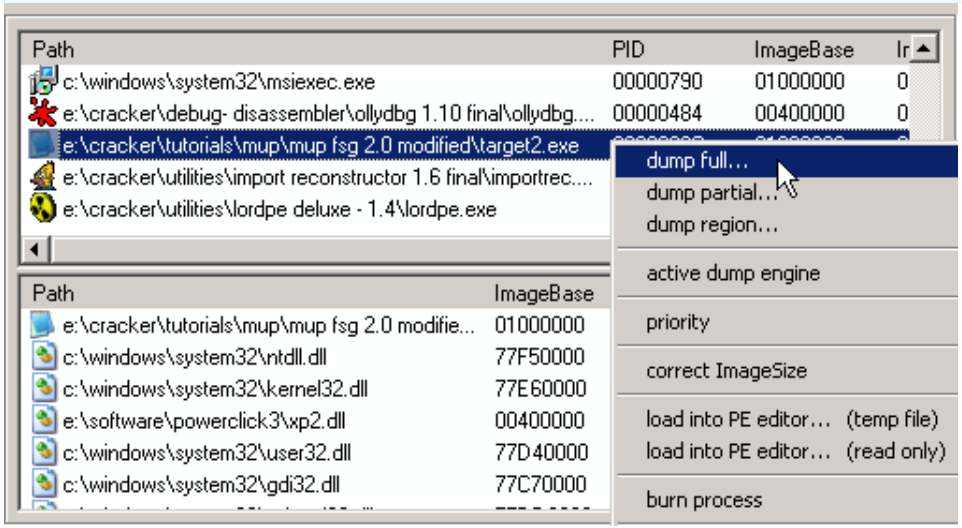
Step 3: rebuild PE
Use LordPE 1.4 by Y0da for rebuild our **dumped.exe**



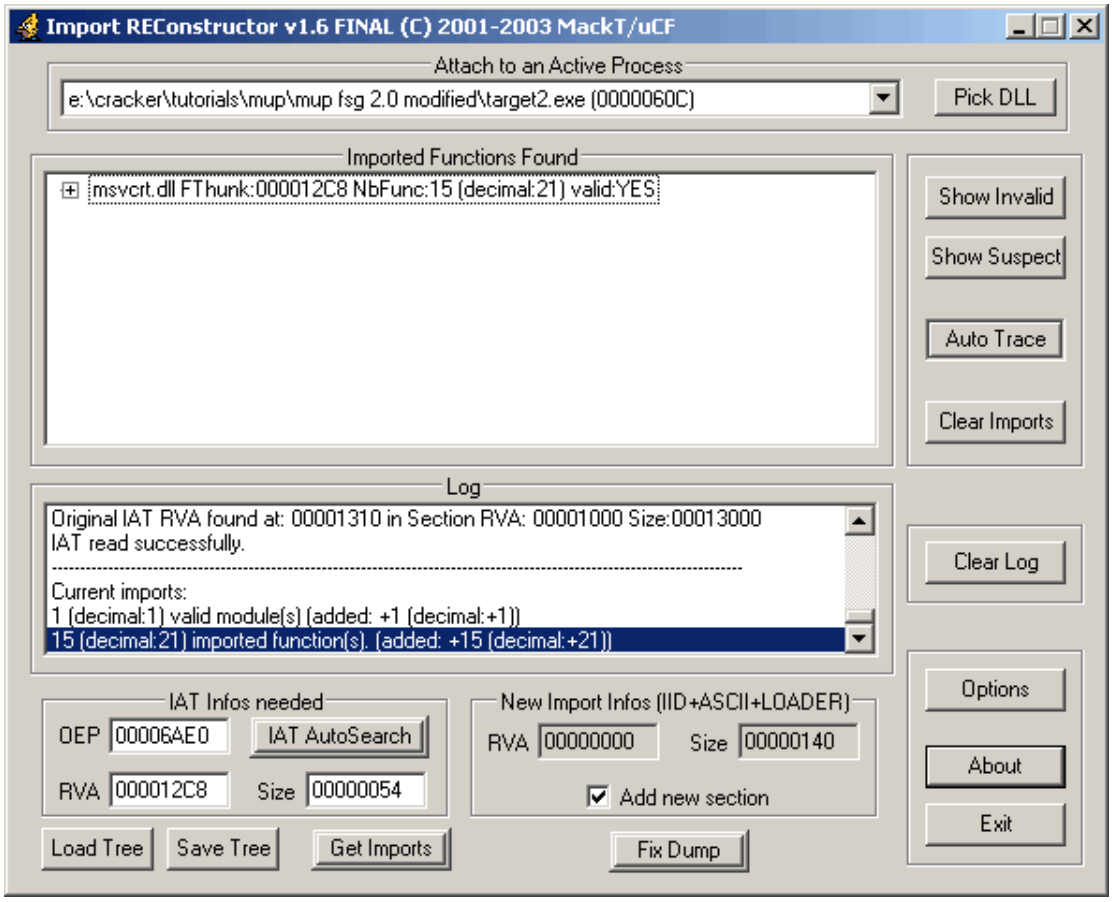
- Unpacked successful! Done ...

3.Target2

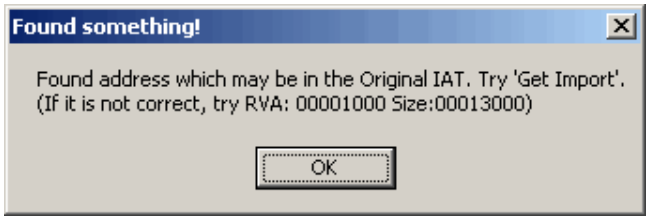
Step 1 is the same **target1:** Find the special signal, set breakpoint, jump to OEP, analyze ...
Step 2: dump and fix IAT by hand with ImpREC
-When you still at OEP, LordPE open, right click at targer2. Choose **Full dump** ...



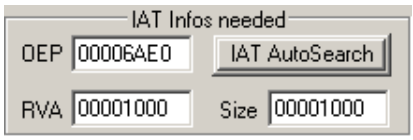
- Do not close Olly, now in select ImpRec attached to active process and choose the **target2.exe.** Change the value in the box OEP (OEP for the **target2.exe** is **6AE0),** then select IATAutosearch then click Get Imports.



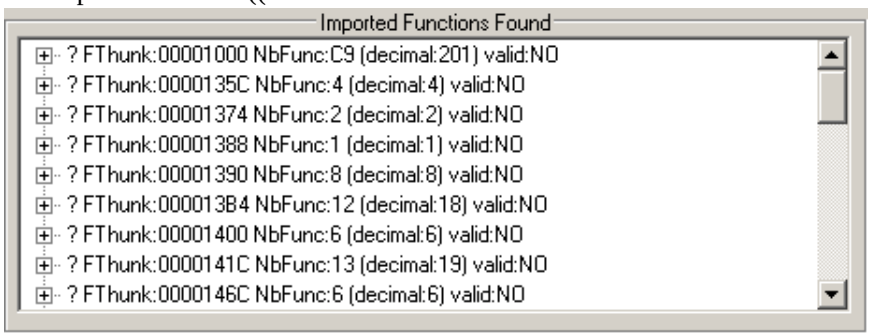
As we will, ImpREC was found only **msvcrt.dll.** So, we know, this target was Coded in VC + + and have to some lib, par exp: user32.dll, kernel.dll, ntdll.dll, gdi32.dll ... etc! Remembers, after we press IAT AutoSearch, a dialog was appeared.



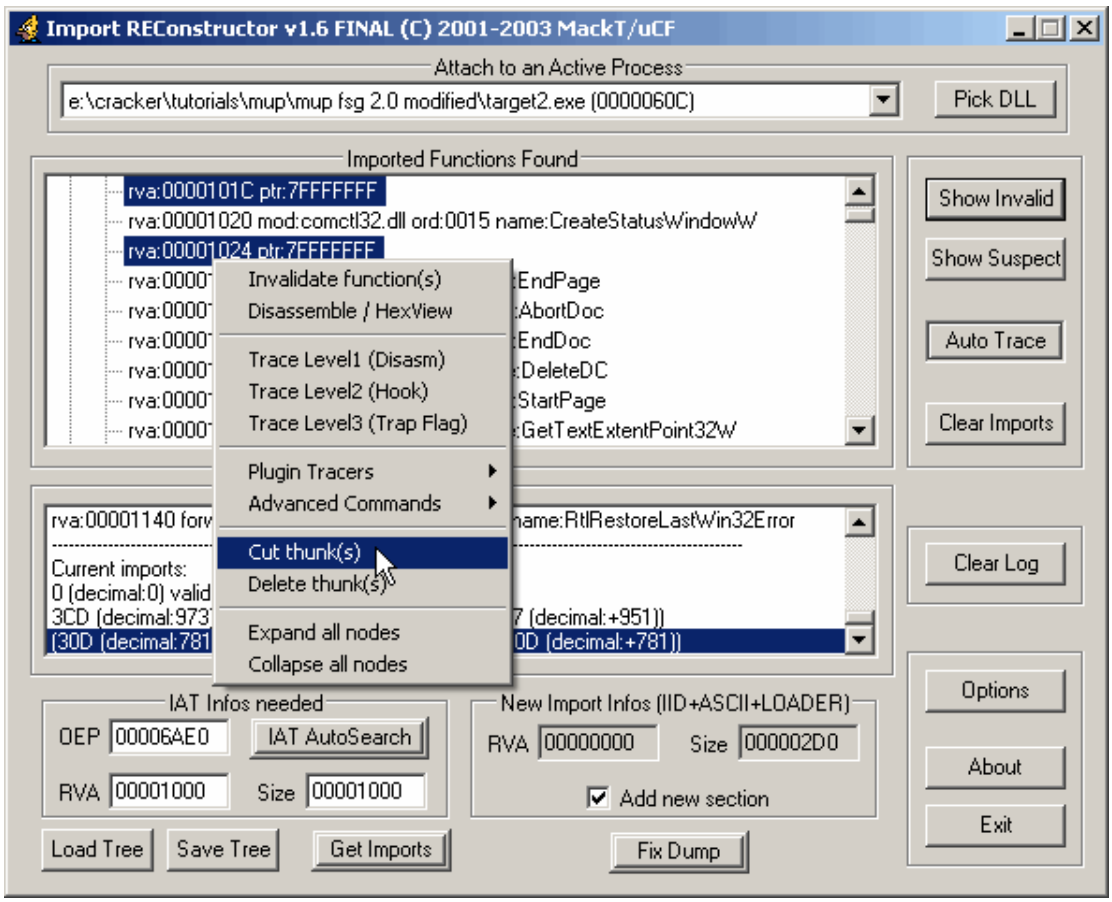
(If not correct, try RVA: 00001000 Size 00013000). 00013000 size is very large, I choose 1000 and RVA too, I choose the value in 1000. Now, re-enter in the box IAT value:



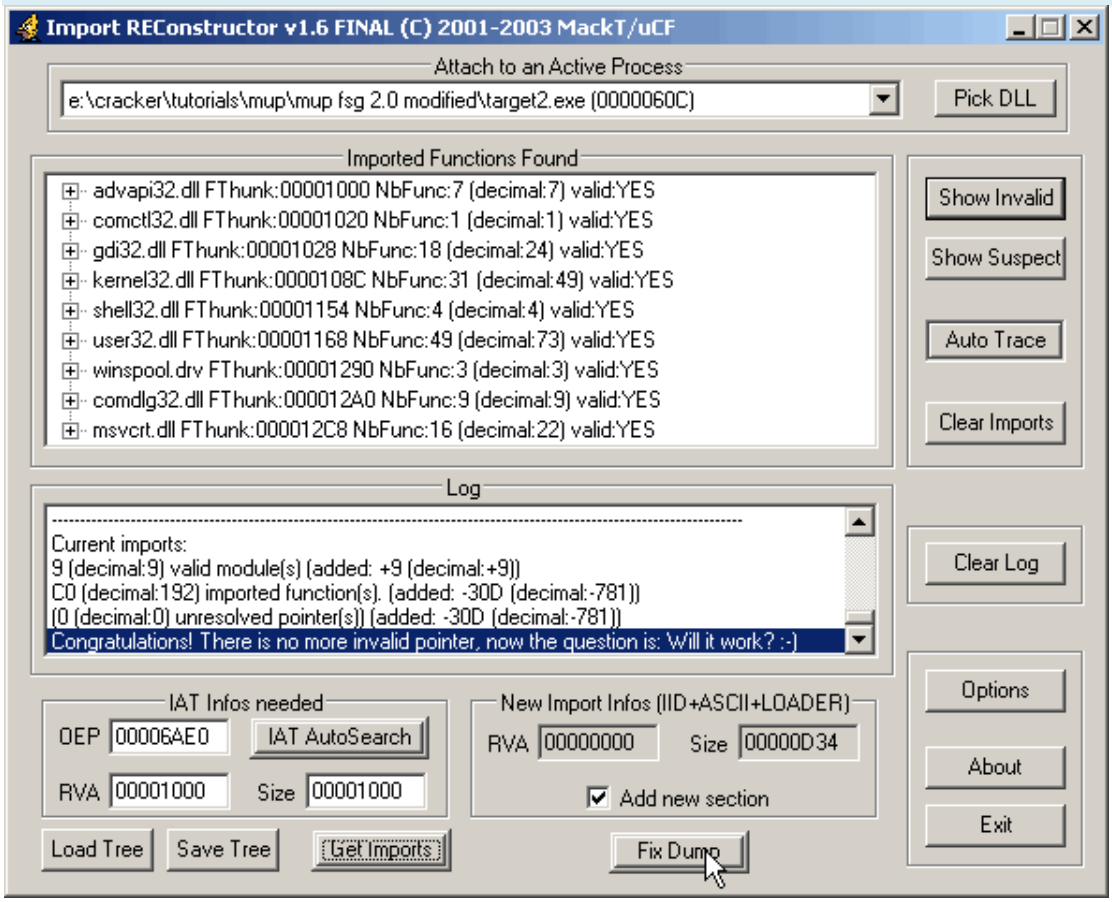
All import is invalid: ((.



Then, click the button **Show Invalid.** Right click at a function invalid, choose **Cut thunk (s)!**

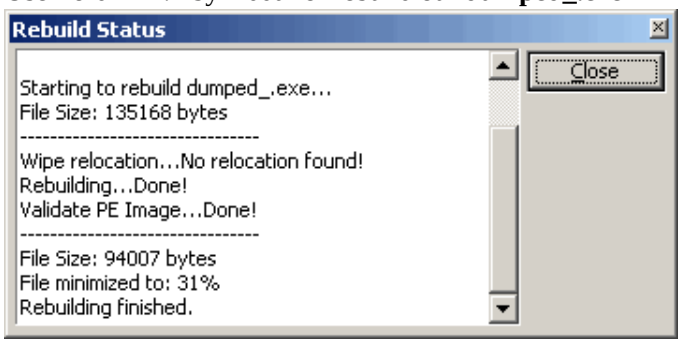


Waiting for few second ImpREC cut thunks. Wow, all is valid, good job: D.



Now, click Fix dump fix for our target!

Step 3: rebuild PE
Use LordPE 1.4 by Y0da for rebuild our **dumped_.exe**



- Unpacked successful! Done ...

4. Testing Our Unpacked file

Now run 2 unpacked files. It's Okay!
Using **PEiD 0.92** for detect: **MASM32 / TASM32** and **Micorsoft Visual C + + 7.0 Method2.** Okie, FSG 2.0is now unpacked successful!

5. Create OllyScript

After find OEP in Olly, we create a need for auto OllyScript find OEP next time! Remember! We have found three step for OEP:
1st First: Find the special signal of FSG for breakpoint set!
2.Second: Set breakpoint, press F9 to run, clear breakpoint!
3.Final: When was OllyDBG break, step into for jump to **OEP**
Okay!, Write in our step langue OllyScript

```
Cut here ---------------------------------- ---------- -----
/ *
////////////////////////////////////////////// ///////////
/ / FSG 2.0 OEP finder
/ / Author: hacnho/VCT2k4
/ / Email: hacnho@hotmail.com
/ / Website: http://nhandan.info/hacnho
/ / OS: WinXP Pro, OllyDbg 1:10 Final, OllyScript v0.85
////////////////////////////////////////////// //////////
* /

eob Break
findop eip, # FF63? # / / Find the special signal, this is the JUMP
bphws $ result, "x" / / Set a breakpoint on memory cute e x
run / / Run the program

Bread:
bphwc $ RESULT / / Clear memory breakpoint
STI / / Step into (F7)
Police eip / / Ctrl + A for Analyze
log eip / / Logs to source OllyDbg log window.
CMT eip, "This is the OEP! Found by hacnho/VCT2k4" / / Write a comment
Msg "Dumped and IAT fix now! Thanx for using my script ...!" / / Show a message

ret / / Exits script
Cut here ---------------------------------- ---------- -----
```

6. Conclusion

GrEeTs Fly Out: Deux, infinite, NVH (c), softcracker_vn, luucorp, Aaron, Canterwood, hhphong, R @ dier, tlandn, Computer_Angel, Zombie, RCA, CTL, Moonbaby, Nilrem, Teerayoot, Ferrari, Kruger, Devilz, anh_surprised ;-) ... and you!
Thanx to authors of OllyDBG, ImpREC, LordPE, OllyScript, FSG, for the Canterwood tagert1 and Bill Gates for the target2;).

To be continued ...
Written by **hacnho** (tutorial date: Saigon 30/07/2004)

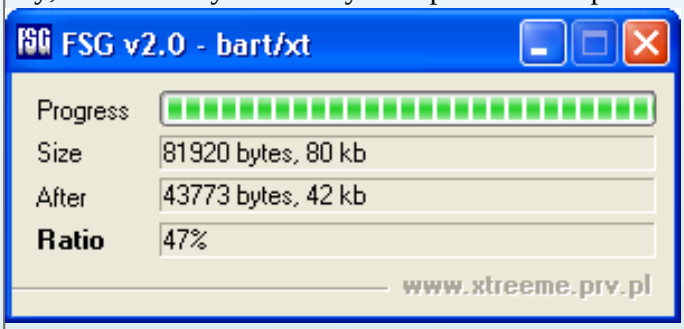
hacnho Tutorials # 12

Manual unpacking **FSG v2.0 -> bart / XT**

Information	Unpacking for Newbie's
Target	unpackme.exe
Available	http://nhandan.info/hacnho/tuts/unpackme12_tuts.zip
Tools	OllyDbg plugin 1.10c with OllyDump 2.21.108, LordPE 1.4, PEiD 0.92.
Protection	FSG v2.0 -> bart / XT
L Evel	Easy
Category	Manual unpacking

1. Introduction

FSG v2.0 -> bart / XT is a good pack packer for viruses: d. It was Anti Virus tools detect this virus is a packer. To day, I will show you the way to unpack for this packer. It is very easy! The GUI of this packer is nice.

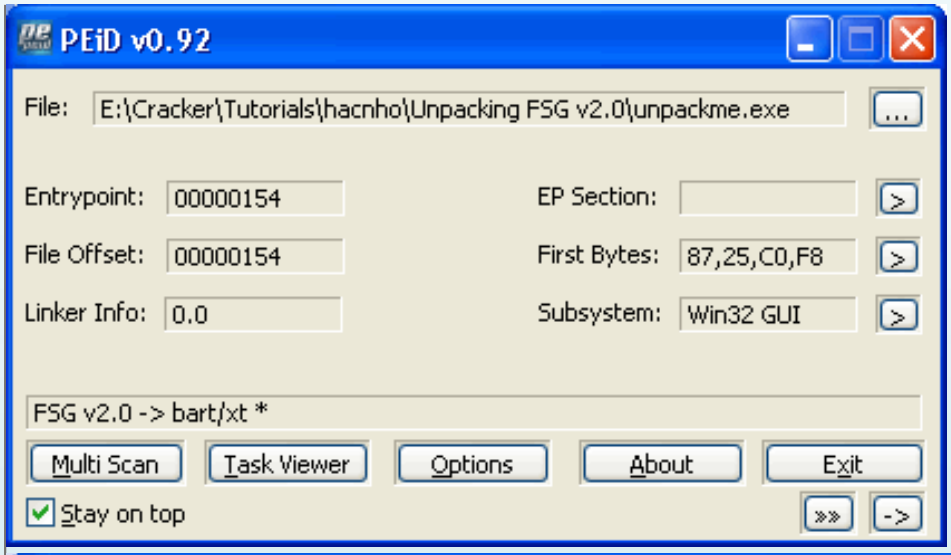


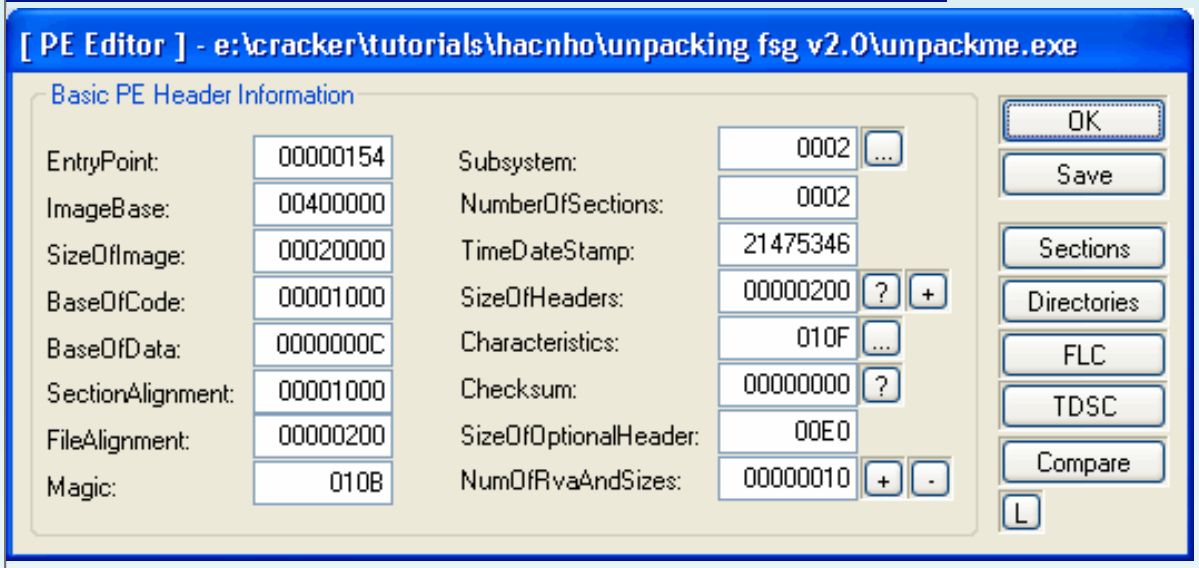
2. Getting Started

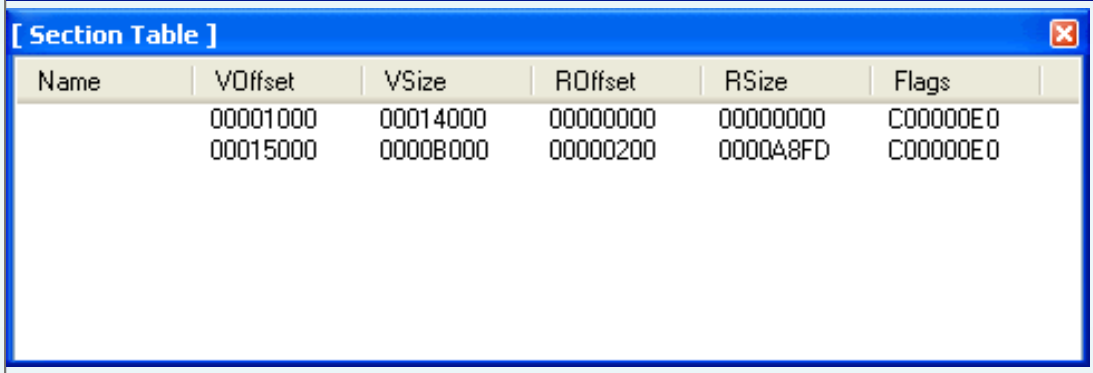
Use PEiD and get some LordPE for PE Info. If your PEiD can not detect my unpackme. You can add this to your sign **userdb.txt**

;-------------------------
[FSG v2.0 -> bart / XT]
signature = 87 25? ? ? 00 61 94 55 A4 B6 80 FF 13
ep_only = true
;-------------------------

or copy the files on your **userdb.txt** of PEiD folder and overwrite the old. (Included in zip file).



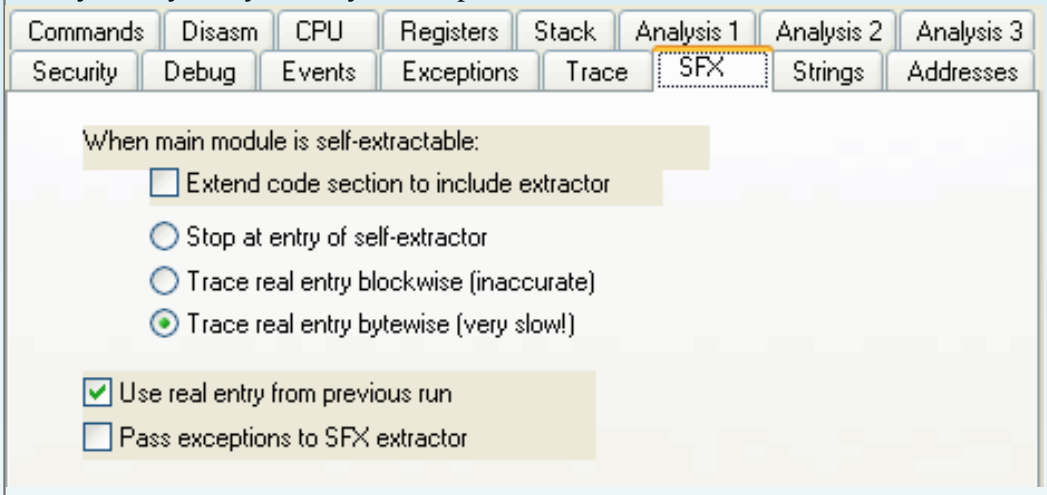




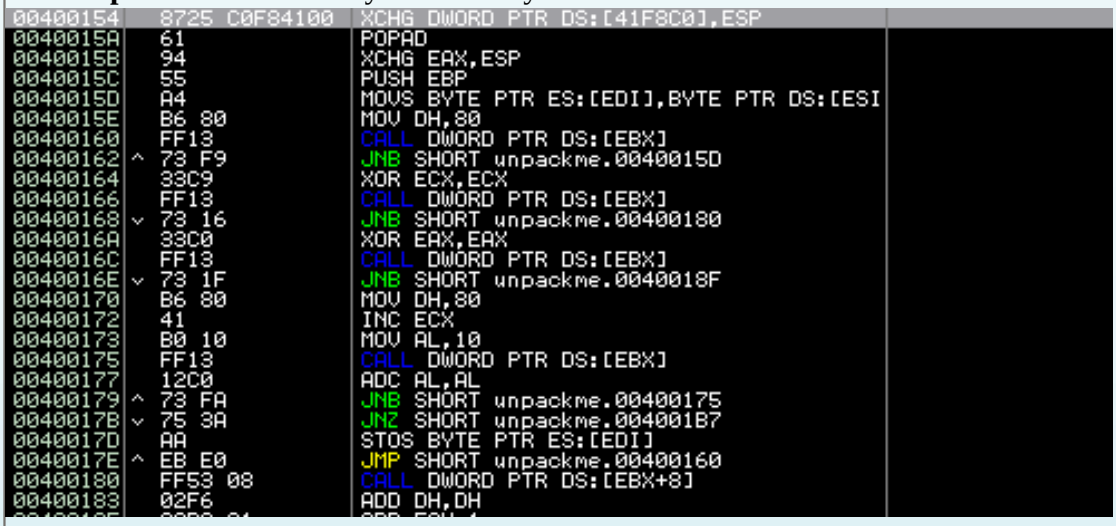
EP: 154, flags The value of this case is not needed, Image Base is always 400000, Import Table: 0000 and size is 00.

3. Finding the OEP

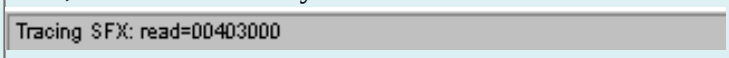
First, you may edit your OllyDBG Options:



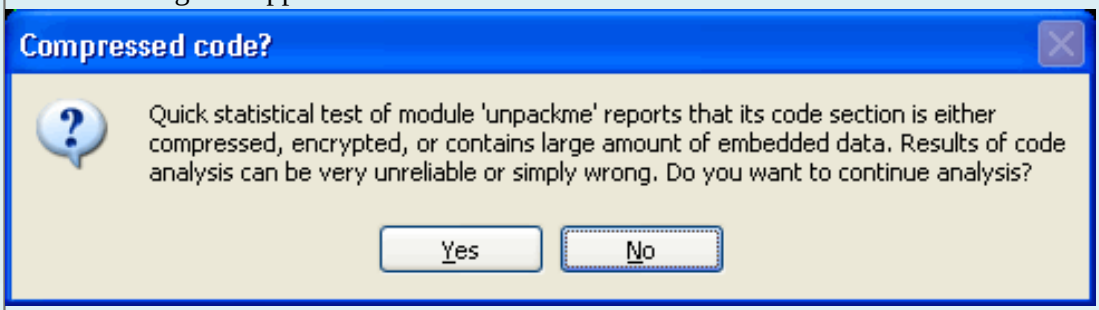
Load **unpackme.exe** into OllyDBG. And you still here:



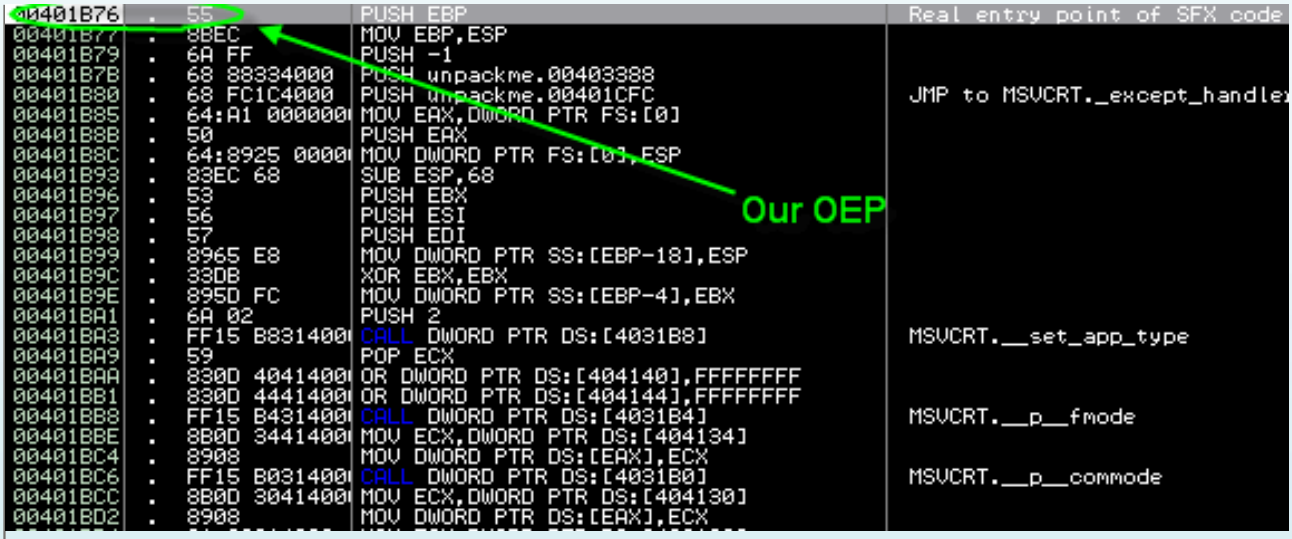
Now, attention! See Olly on status bar:



Wait Olly is tracing SFX. If your CPU speed is high, very fast Olly trace. (My CPU 2.8Ghz trace in 3S). When Olly finish trace. A dialog will appear!



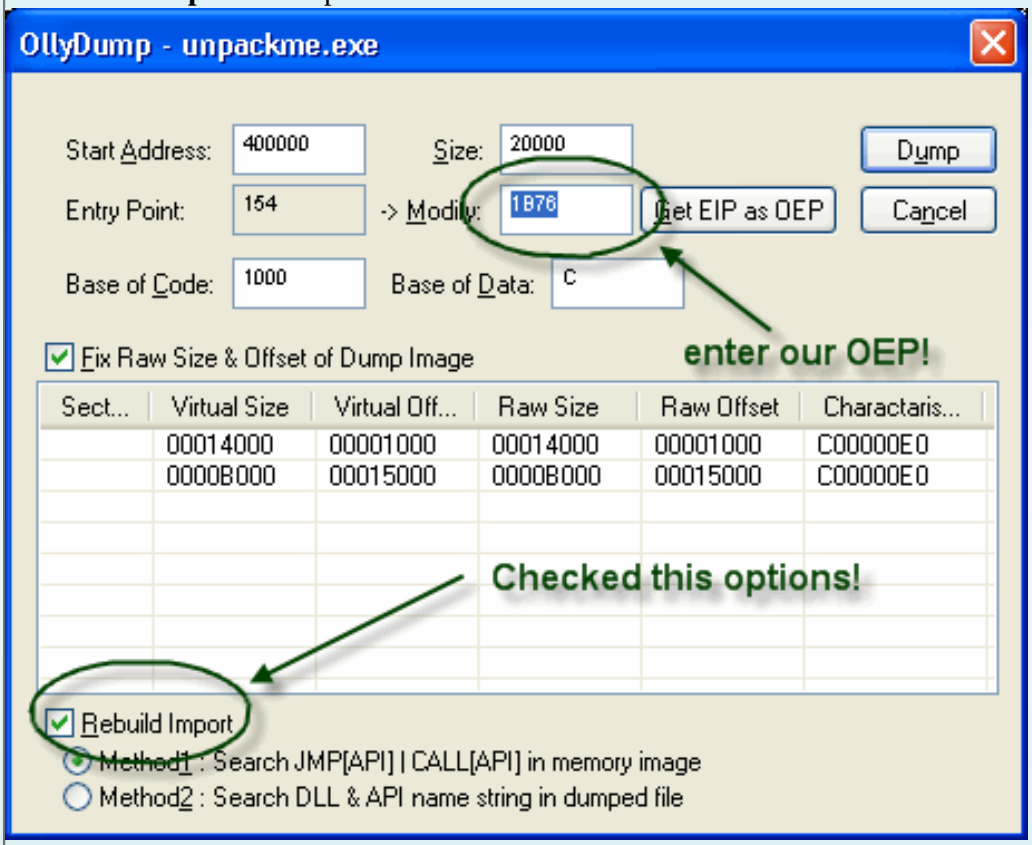
Click **Yes** and we will still here:



Congratulations! According OEP we found is **401B76** And now we Calculate the real OEP of this unpackme by the formula: Real OEP = OEP Olly find in Image-Base-401B76 = 400000 = **1B76.**

4th dumping

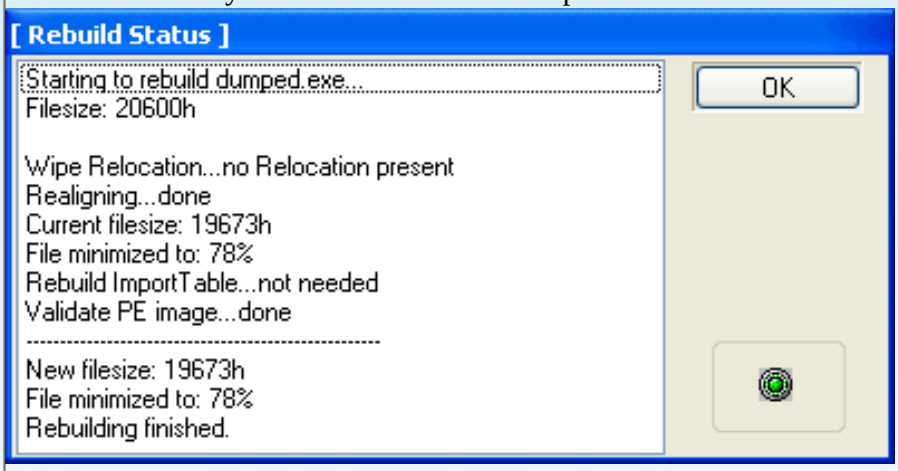
At address **00401B76** we go to the menu Plugin -> OllyDump -> dump debugged process. And then, just press dump, save the file at **dumped.exe** unpacked.



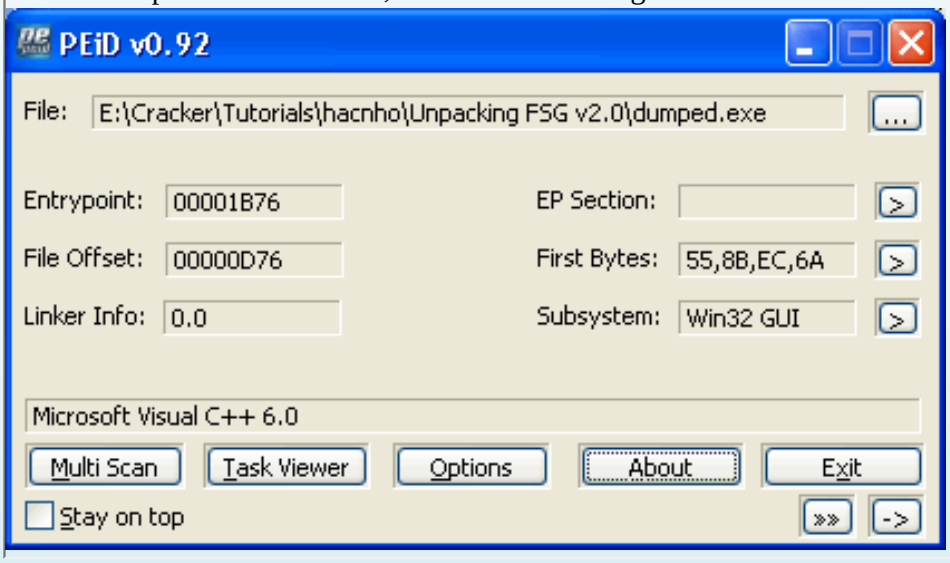
Because we fix IAT was on OllyDump. So, not needed to use ImportREC!

5. Rebuild PE

Use LordPE 1.4 by Y0da for rebuild our dumped.exe



Now run unpacked files. Wow, not crash. Detect again:



6. Conclusion

Special thanx to **R @ dier** for this template.
My Greetz to: Deux, infinite, NVH (c), softcracker_vn, luucorp, Aaron, hhphong, R @ dier, tlandn, Computer_Angel, Zombie, RCA, CTL, Moonbaby, Ferrari, Devilz, Neitsa, anh_surprise ... and you; -)!

To be continued ...

Written by hacnho (tutorial date: Sai Gon 25/5/2004)

M a n u a l U n p a o f t h e k i h i m m s i t a l y - P a c k e r 1 s t 0

I -- Print d o t r u c t i o n:

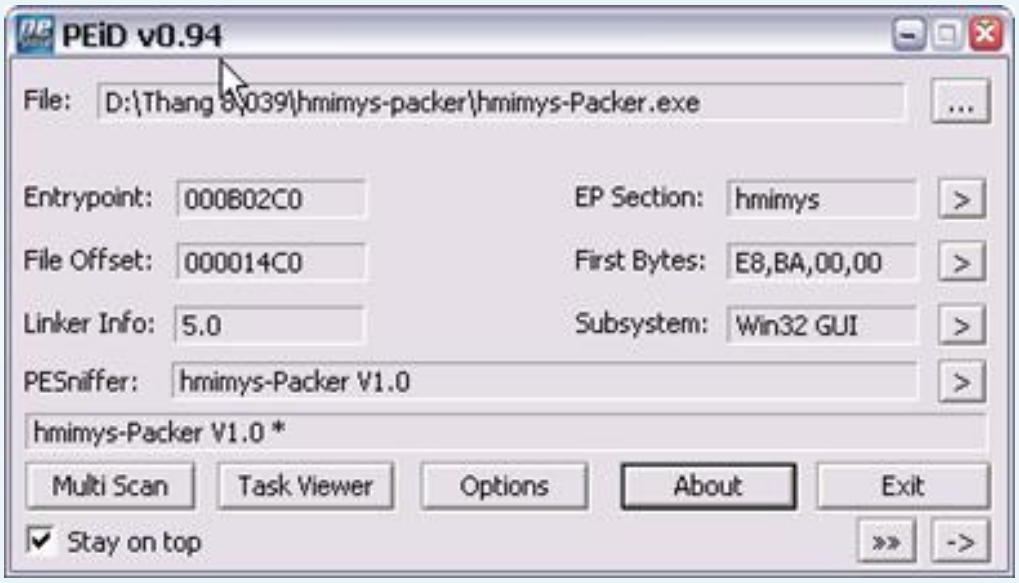
Seeing the www.unpack.cn have introduced Packer 1 "is the tree garden" is their **hmimys-Packer 1.0.** Products brothers together MUP we try to see it do?

I I -- Tools T&g e r a t:

- **T oo l P and the need to lug a d ứng:**
  - **O LLY DBG 1:10**
  - **OllyDump 2.2 p lu gin**
  - **I mp O R T R E C1.6f**
  - **PE ID 0.94**
- **One g e r t:** ***hmimy s - P e r 1.0 ACK***

I I I - F ind OEP & D u m p Fil e:

_ As usual for **PE** can **iD0.94** S t a g e r t



PEiD _ If you do identify the **hmimys-Packer 1.0** Add the **signature** to add ***"userdb.txt"***

[S hmimy - ACK P e r V 1.0]
ignas t u r e = 8 e BA00 00 00?00 0 0 00
p_ e= o nly will fal

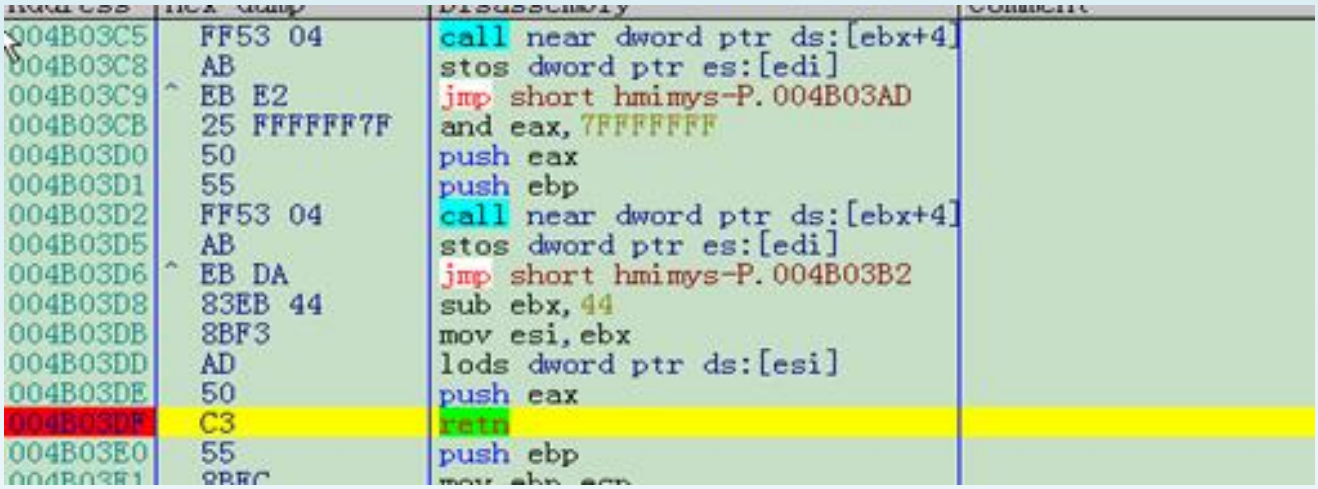
_O K, Lo ad T a g e r tvao **OllyDBG**

Address	Hex dump	Disassembly	Comment
004B02C0	E8 BA000000	call hmimys-P.004B037F	
004B02C5	0300	add eax,dword ptr ds:[eax]	
004B02C7	0000	add byte ptr ds:[eax],al	
004B02C9	00E0	add al,ah	
004B02CB	0A00	or al,byte ptr ds:[eax]	
004B02CD	0010	add byte ptr ds:[eax],dl	
004B02CF	40	inc eax	
004B02D0	0069 96	add byte ptr ds:[ecx-6A],ch	
004B02D3	0300	add eax,dword ptr ds:[eax]	
004B02D5	42	inc edx	
004B02D6	0C 4B	or al,4B	

_ N han **F 7**

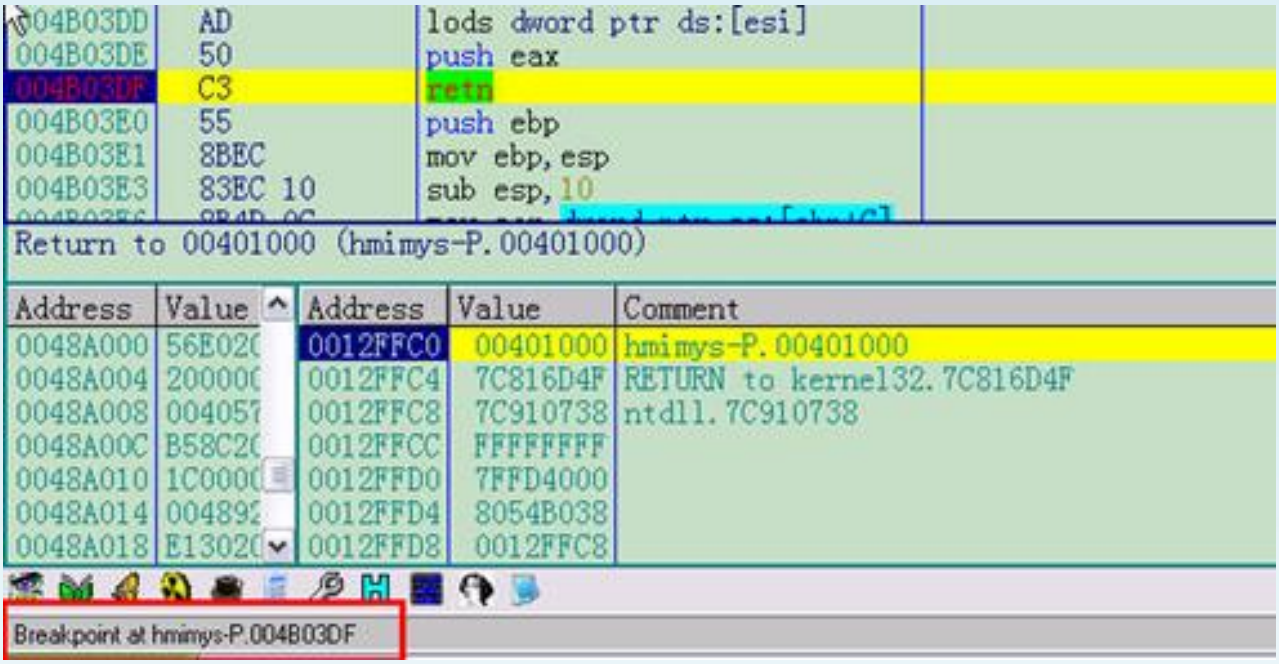
Address	Hex dump	Disassembly	Comment
004B037F	5E	pop esi	hmimys-P.004B02C5
004B0380	83C6 64	add esi,64	
004B0383	AD	lods dword ptr ds:[esi]	
004B0384	50	push eax	
004B0385	AD	lods dword ptr ds:[esi]	
004B0386	50	push eax	
004B0387	83EE 6C	sub esi,6C	
004B038A	AD	lods dword ptr ds:[esi]	
004B038B	50	push eax	
004B038C	AD	lods dword ptr ds:[esi]	
004B038D	50	push eax	

_ Mouse Scroll down to position the end of this Code and press F2 to Set 1 in which BP

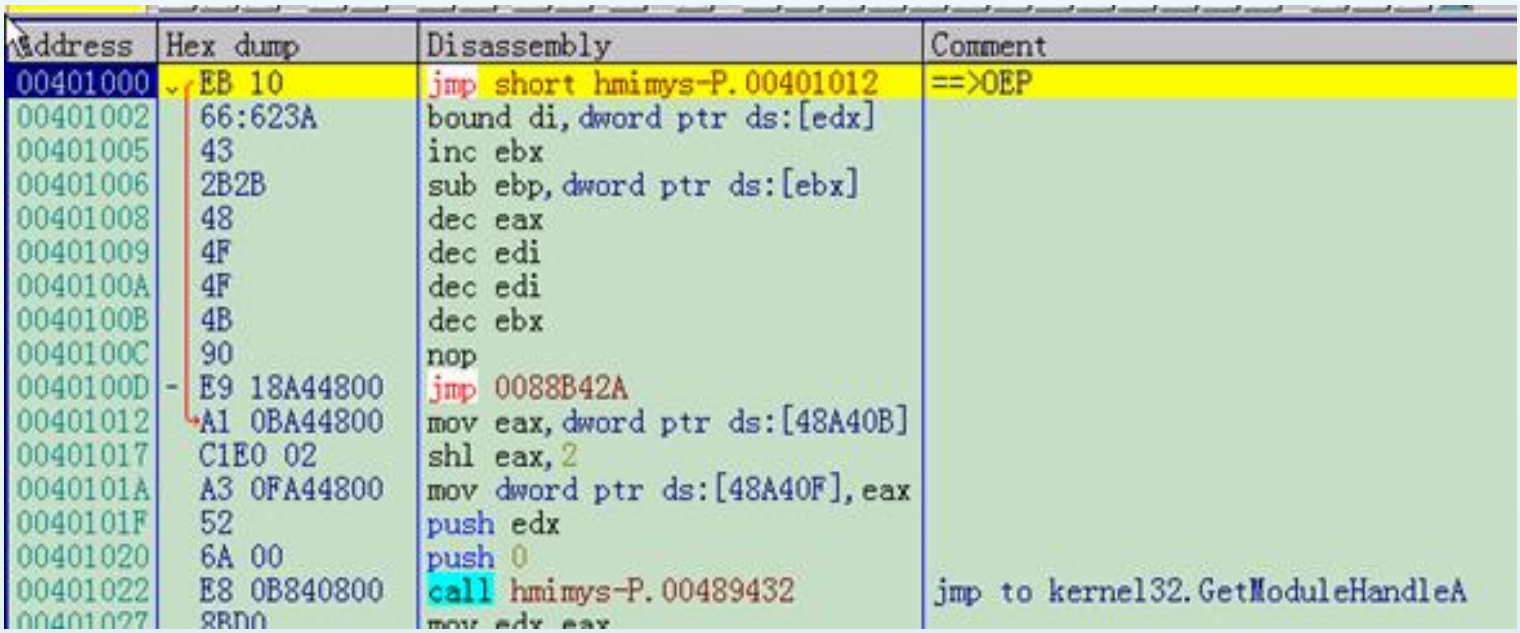


004B03C5	FF53 04	call near dword ptr ds:[ebx+4]	
004B03C8	AB	stos dword ptr es:[edi]	
004B03C9	EB E2	jmp short hmimys-P.004B03AD	
004B03CB	25 FFFFFF7F	and eax,7FFFFFFF	
004B03D0	50	push eax	
004B03D1	55	push ebp	
004B03D2	FF53 04	call near dword ptr ds:[ebx+4]	
004B03D5	AB	stos dword ptr es:[edi]	
004B03D6	EB DA	jmp short hmimys-P.004B03B2	
004B03D8	83EB 44	sub ebx,44	
004B03DB	8BF3	mov esi,ebx	
004B03DD	AD	lods dword ptr ds:[esi]	
004B03DE	50	push eax	
004B03DF	C3	retn	
004B03E0	55	push ebp	
004B03E1	8BEC	mov ebp,esp	

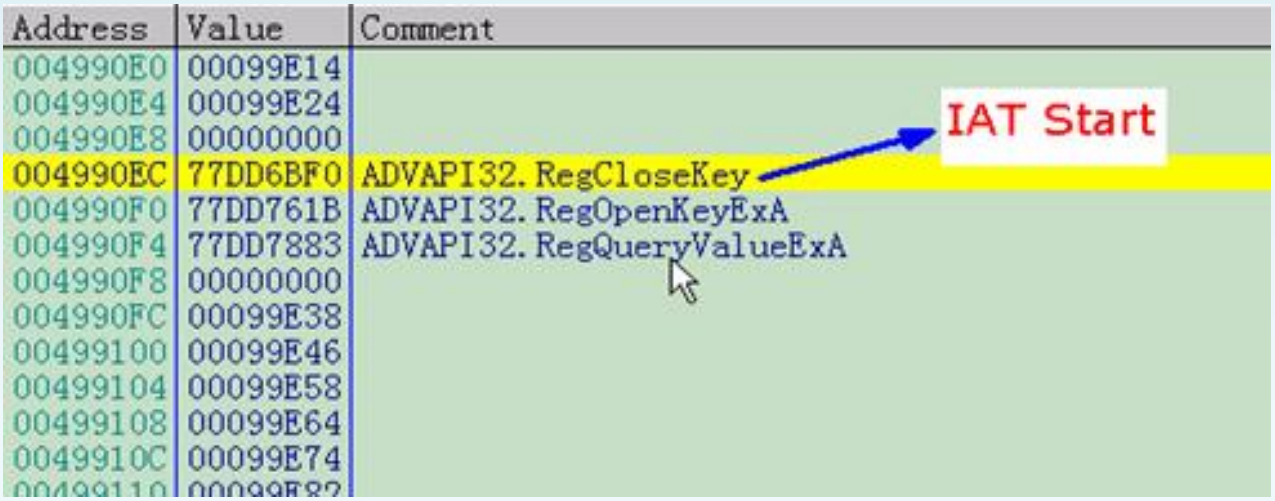
_ Press **F9** will stop at the point we've **set BP**



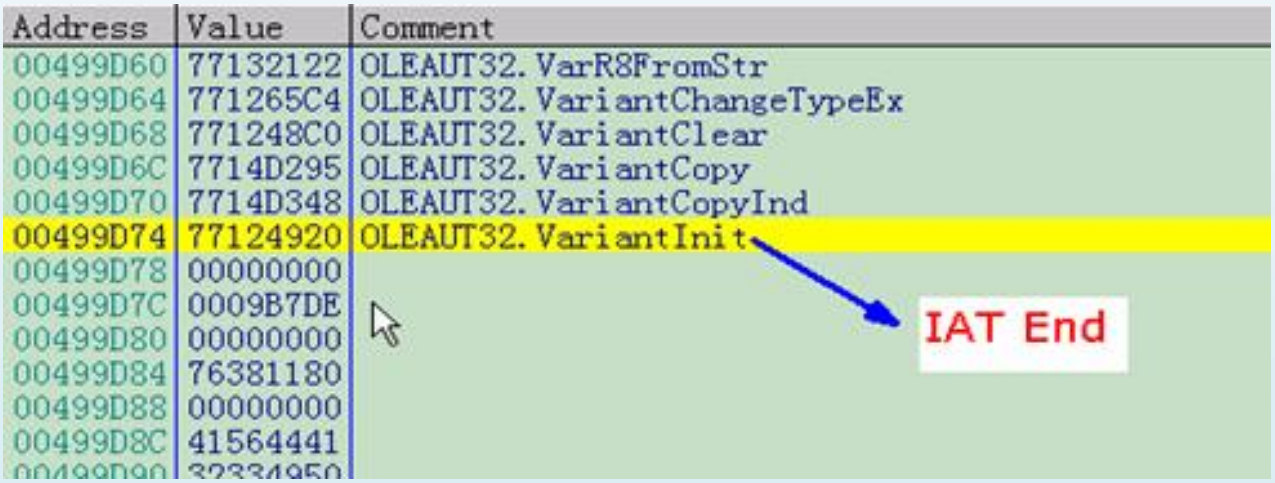
_ Press the **F8** will be **OEP**



_Bay Time we need to determine the position start and end of the **IAT.**



Scroll down to find _ **IAT End**



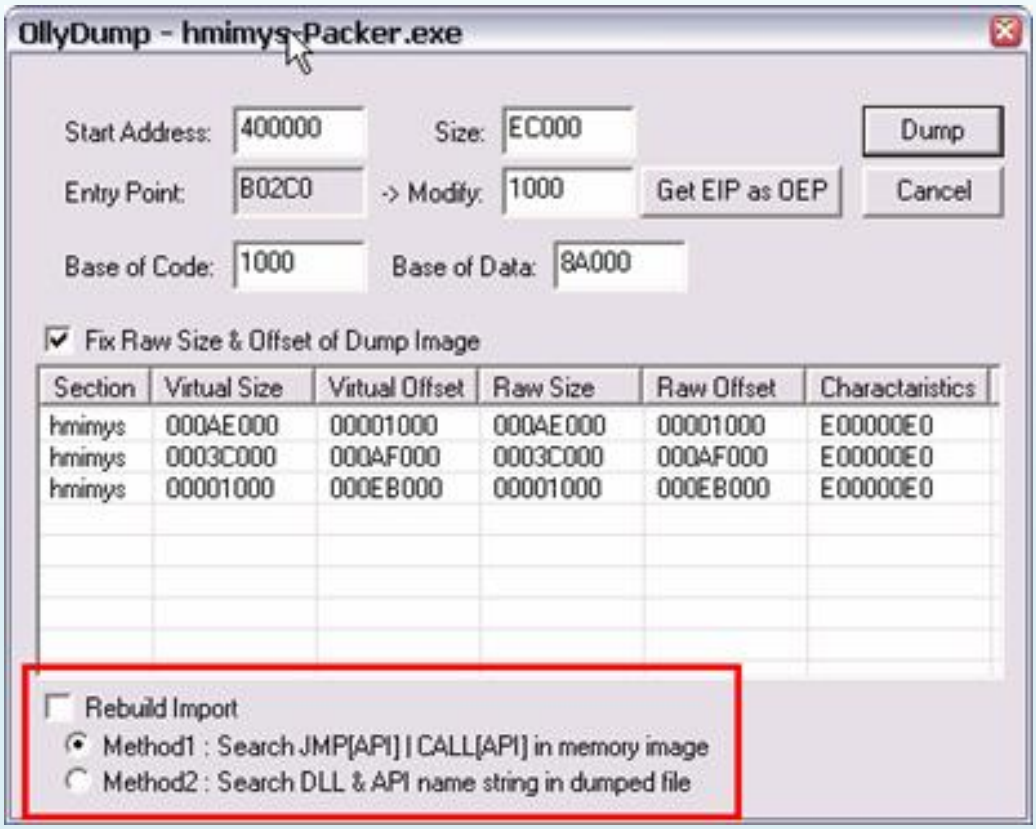
_T Ú m back of a C n h to the usa:

Dr. IAt r a t: 004990EC 77 DD 6 B 0 A D F I VAP 3 2. Re g C o l e s e K italy

IA T E nd: 0049 9D747 712 4920OLEAU-T32. And a nt r i n i t I

IA T and L e h t: 000 00C 8 8

Good q _ not called, D u m p i try ... with a S T E N any k y h n n g n as they choose iong n g h is h h ì n h a n below.



T h _ see a P r e c k to this for a q u a o n g h could write to the cells of the Asia S i r c i t p

```
/ /= ========== ===== == = = = == == = = ======== =======
// F i l e m e     : h mi m italy s - P r devilish 1st EP
   Na               0 O F i n d S c r ip t
// A uth o r       : Italy N W h t o B ar
// W e b S it      : h_tt_p: / /_re_o n a l in e. n e t
   e
/ /========== ======== = = = == == = = ======== =======
S T I / F 7
F DO IN P e ip, 50 # 3 # / / S e r of a "5 0 C 3"
go $ U R E S T L
s t o / F 8
s t o / F 8



c e t i m p, "O P E! F o u n d b italy yN W h o
```

t r a B!" MS G "P l e m p ASE du d e d i n our

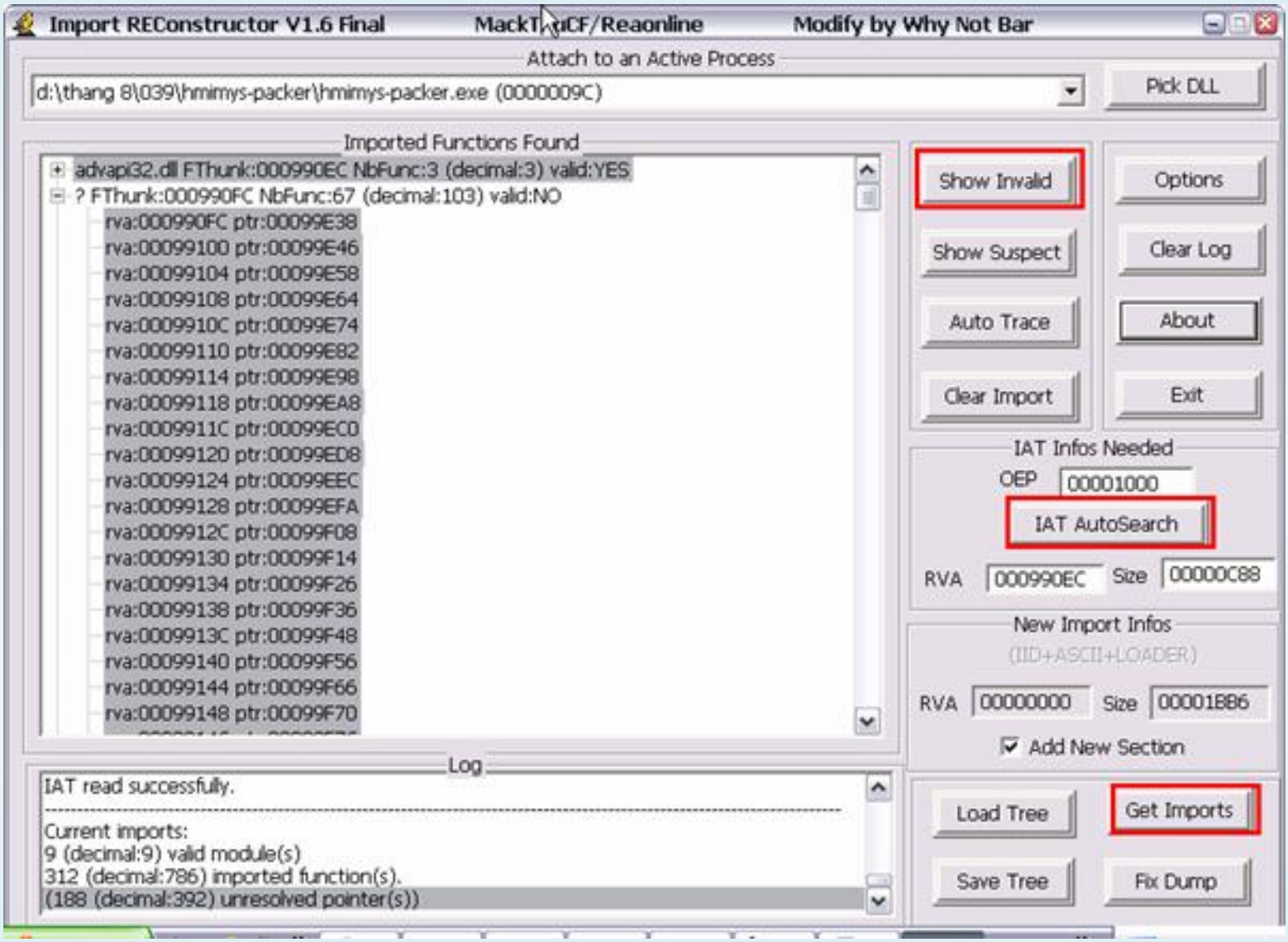
xi Fi A T"

Re t

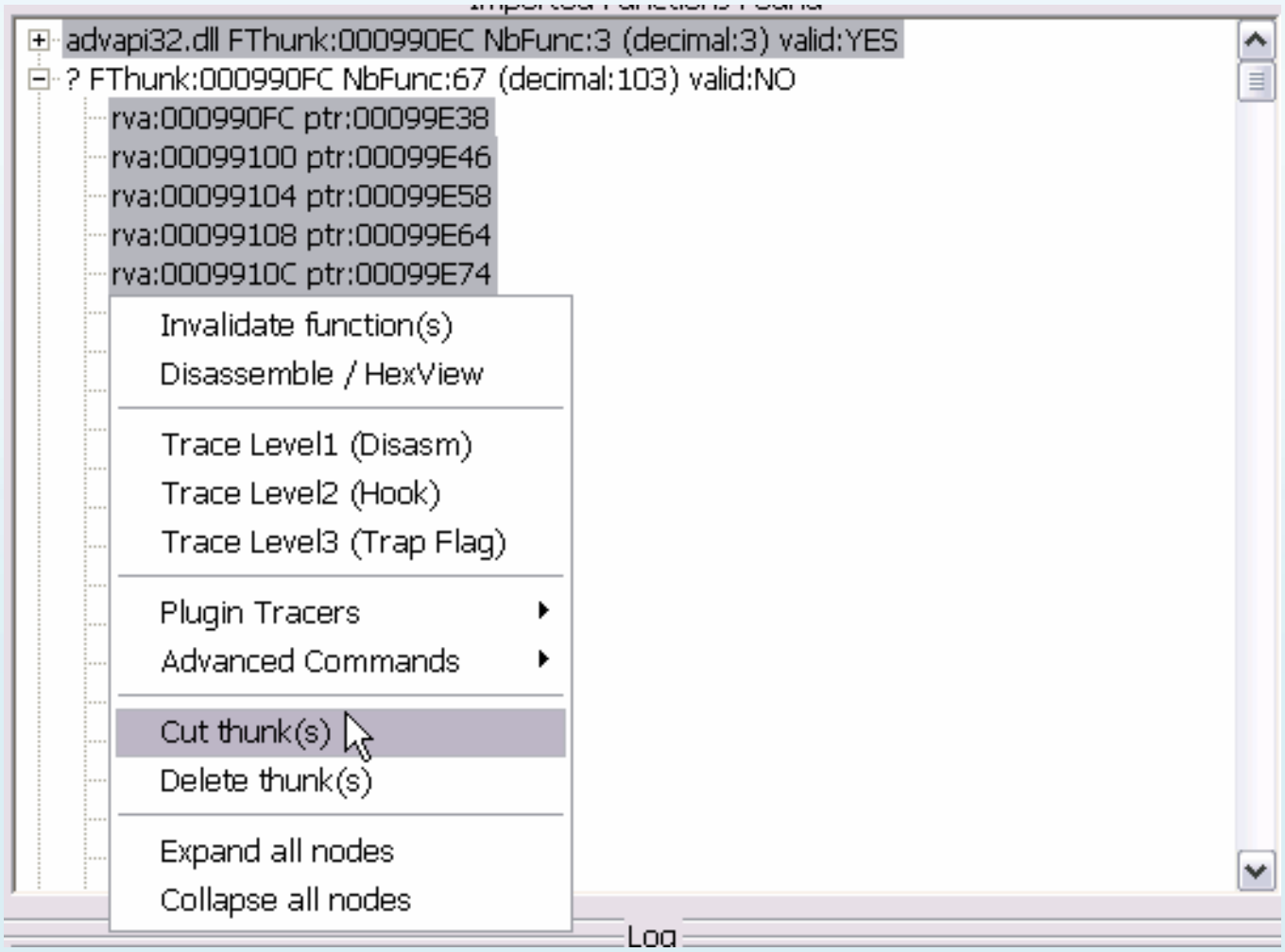
I-R E V I build mp ort:

_ Open **ImportREC** up. Select list **in-process hmimys Packer.exe.** Enter **O P E = 0 0 40 1 000-004000 0**0 ***(I mag e s a b e)* = 0 0 001000**
R V = A 0 0 4 9 9 0 E-C 0 0 400,000 *(I mag e s a b e)* = E 0 0 0990 C Si z e = 0000 0 CC 8 (IA T and L e t h)

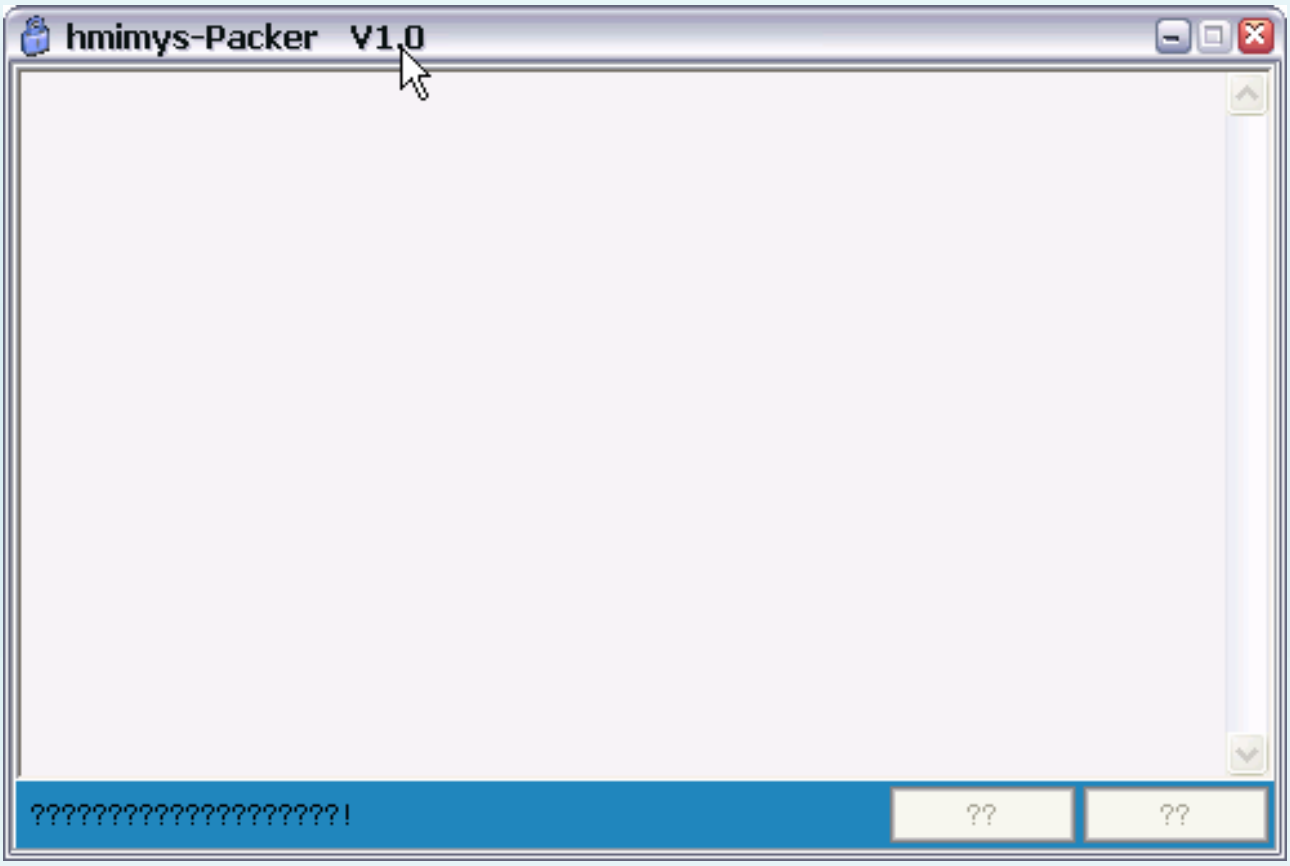
Click ***IA T to the A S E A R and -> G e t I m p t or s -> Sh o w I nv a lid***



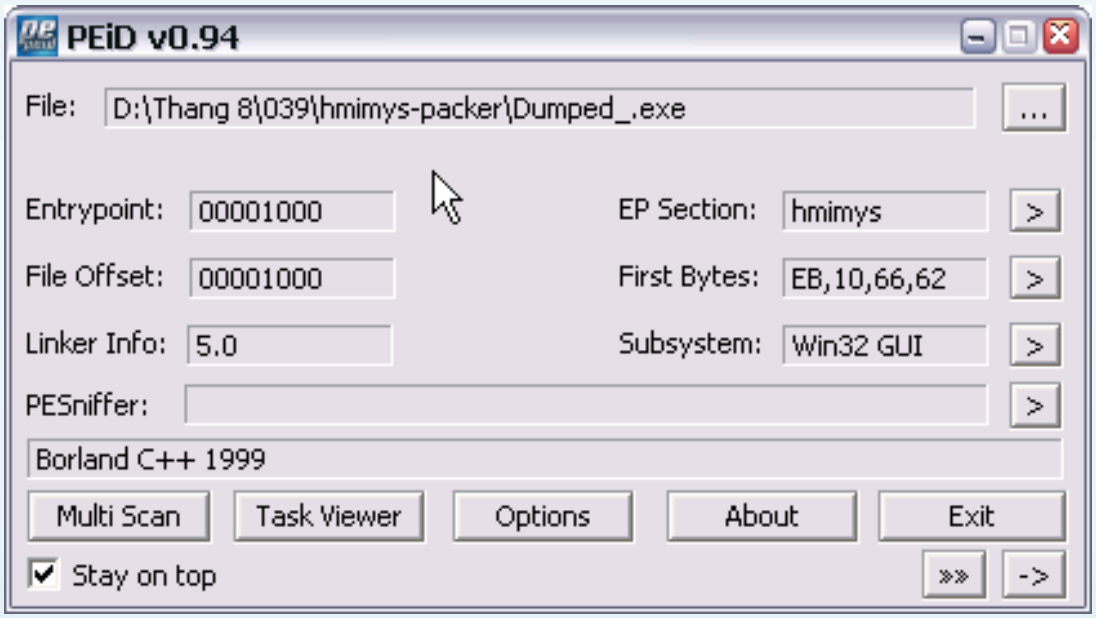
_Hichic .... A lot function ***Invalid*** **Thunks** ... **Cut** out the window and select **ImportREC** nhusau:



***Show Invalid*** Click again and do not function any longer ***Invalid,*** Click **Fix Dumped.exe dump** file and select Run Test File **Dumped.exe**



_ H e h e h e .... **Unp a ck D o n e!!**



G r l Ee TsF italy Ou the Co mpu t e r A _ of e l, e mbi Z o, M A B oo nb italy, H o acnh, Nina B e, k i nman o w e r a, Z o i, D e ux, M e r c, the light o f nix, T r o ickyb italy, Takad a iamidi ot, of the e n t e n handi ... and italy o u!

The N h a n a g, 3 1 th a n G8 year 200 6

Whot italyN Bar

.:: [MUP ID Application Protector 1.2]::.

(_kienmanowar_)

I. Foreword

Today, I downloaded UnpackMe (PE32bit): **ID Application Protector 1.2** from Teddy's site and try to manual unpacking it. 0k13! L3t's R0ck w1th m3 J

II. Target and Tools

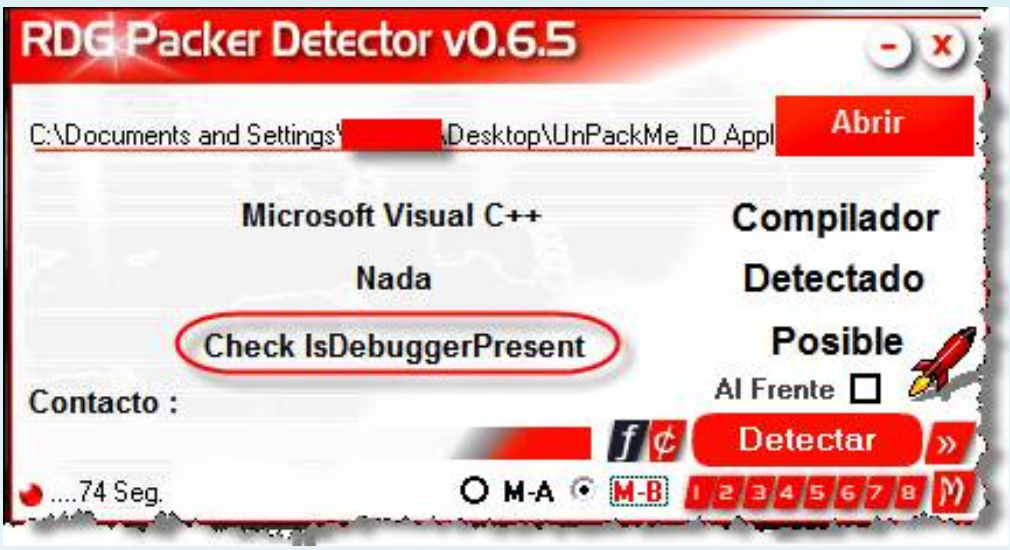
Target:
Name: UnPackMe_ID Application Protector 1.2.e.exe
Home site: http://www.tuts4you.com/

Tools:
Debugger: OllyIce (16/2/07)
PE Tools: RDG Packer Detector, PEiD, CFF Explorer, LordPE, ImpRec

III. Manual Unpacking

_First, Dectectors we use to find information about the target we'll work with:

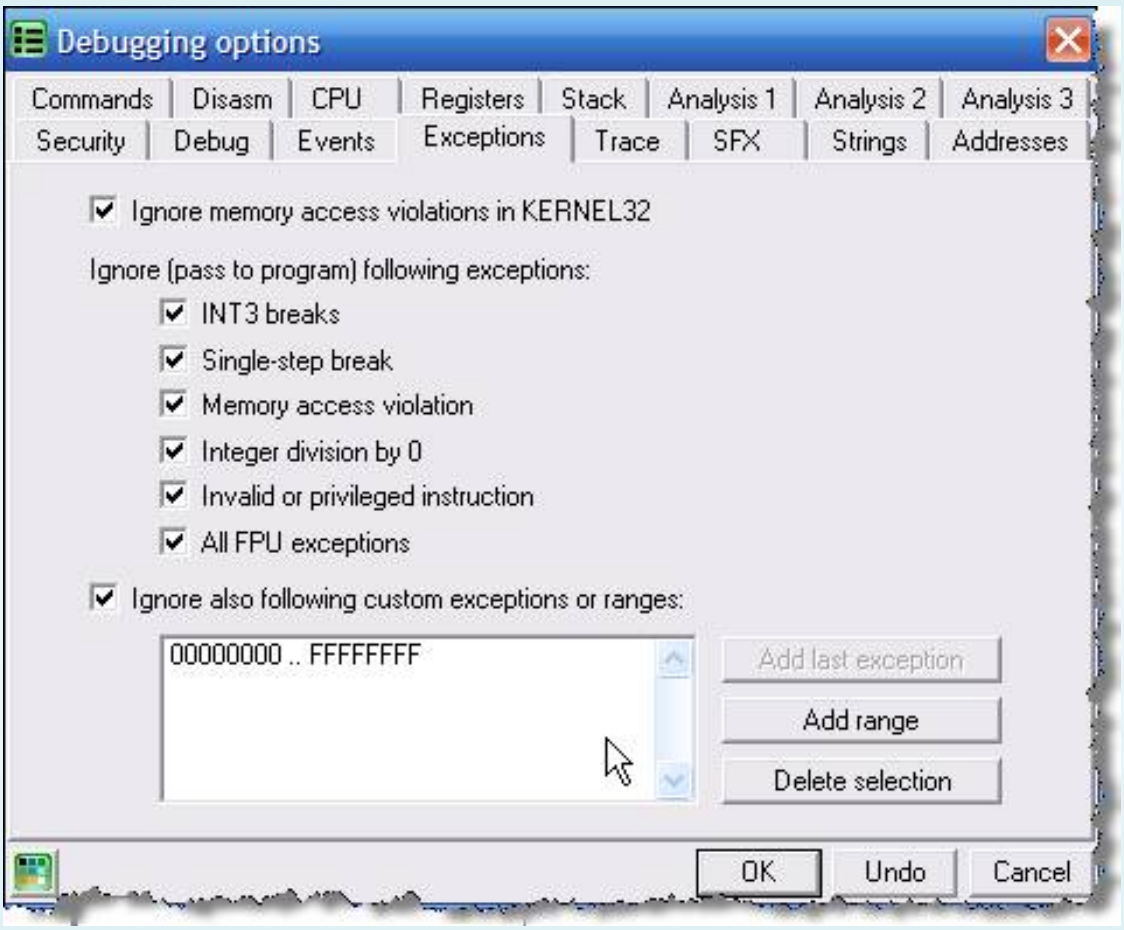
_ RDG Packer Detector:



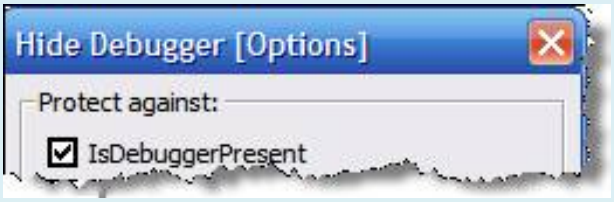
_ PeiD:

RDG packer can not dectect this but it gives me some useful information about target. My PeiD gives me exactly the result because it uses the signatures of J fly.

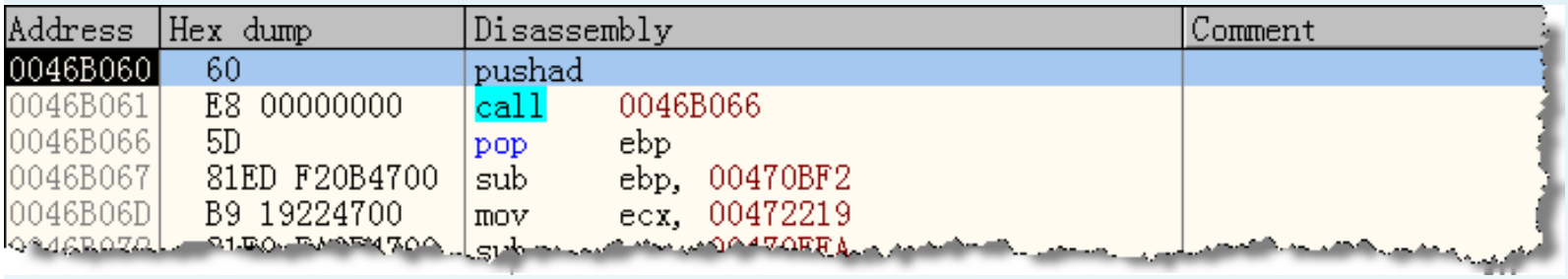
_Ok That's enough, now open Olly and configure it like that:



_This Uses *the* target *to IsDebuggerPresent function determines whether the calling process is running under the context of a debugger.* We can bypass this function manually or use the ***Hide Debugger*** plugin to defeat it.

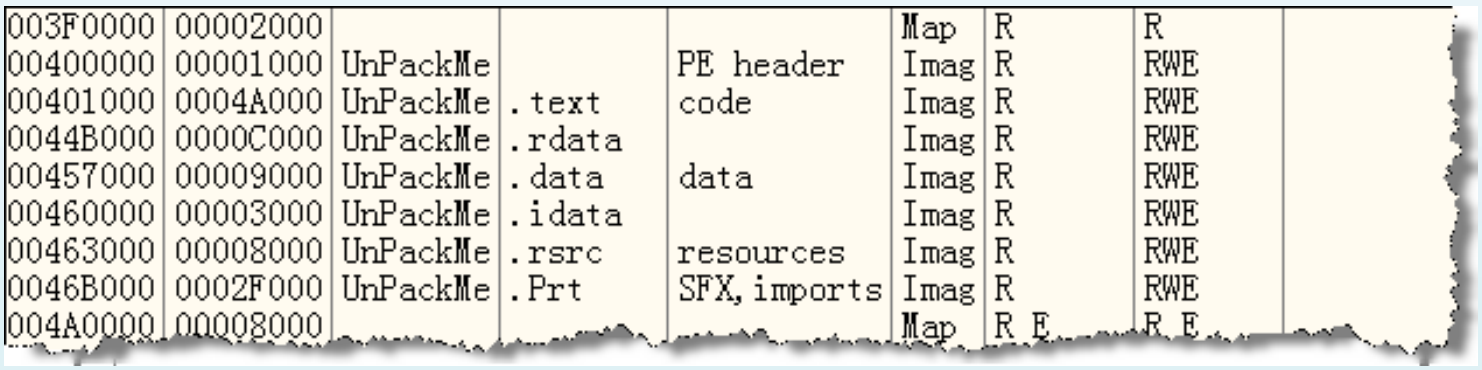


Olly _After configured like above picture, we will load into Olly target, after loading successful we stop here in Olly:



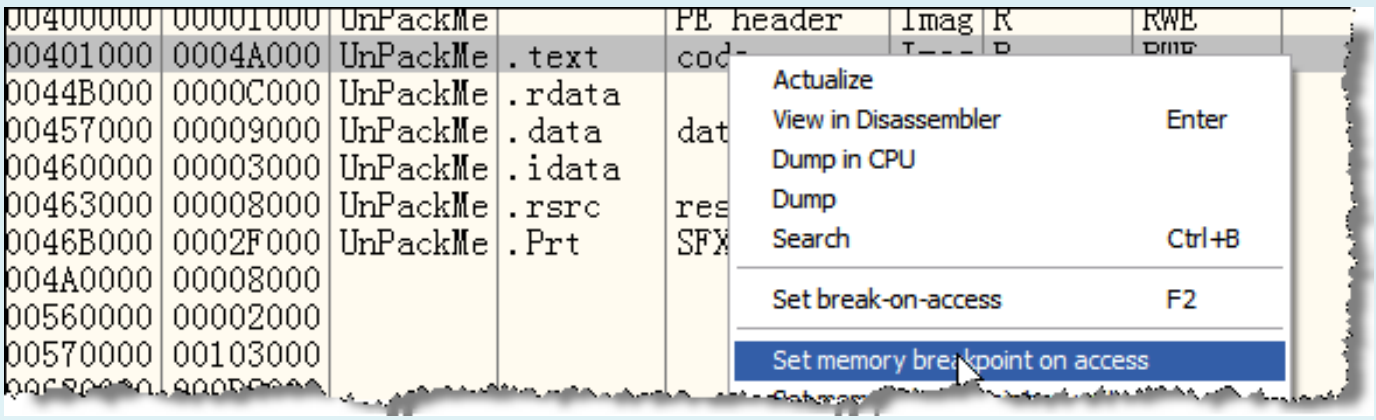
Address	Hex dump	Disassembly	Comment
0046B060	60	pushad	
0046B061	E8 00000000	call 0046B066	
0046B066	5D	pop ebp	
0046B067	81ED F20B4700	sub ebp, 00470BF2	
0046B06D	B9 19224700	mov ecx, 00472219	

_Aha, Pushad and Popad method. May be we do it like MUP MUP UPX method, it was first that I tried but I can not go to the OEP of this target. Ok, we try another method. Press **Alt + M** to open the Memory window:



003F0000	00002000				Map	R	R	
00400000	00001000	UnPackMe		PE header	Imag	R	RWE	
00401000	0004A000	UnPackMe	.text	code	Imag	R	RWE	
0044B000	0000C000	UnPackMe	.rdata		Imag	R	RWE	
00457000	00009000	UnPackMe	.data	data	Imag	R	RWE	
00460000	00003000	UnPackMe	.idata		Imag	R	RWE	
00463000	00008000	UnPackMe	.rsrc	resources	Imag	R	RWE	
0046B000	0002F000	UnPackMe	.Prt	SFX,imports	Imag	R	RWE	
004A0000	00008000				Map	R E	R E	

_Next, **Select. Text** section and set a BP like the following picture:



_Press **Shift + F9** to run, we'll break in here Olly:

Address	Hex dump	Disassembly	Comment
0046BF13	3E:AC	lods byte ptr [esi]	
0046BF15	26:AA	stos byte ptr es:[edi]	
0046BF17	^ E2 FA	loopd short 0046BF13	
0046BF19	5F	pop edi	
0046BF1A	5E	pop esi	
0046BF1B	58	pop eax	
0046BF1C	59	pop ecx	
0046BF1D	89EC	mov esp, ebp	
0046BF1F	5D	pop ebp	
0046BF20	C3	retn	

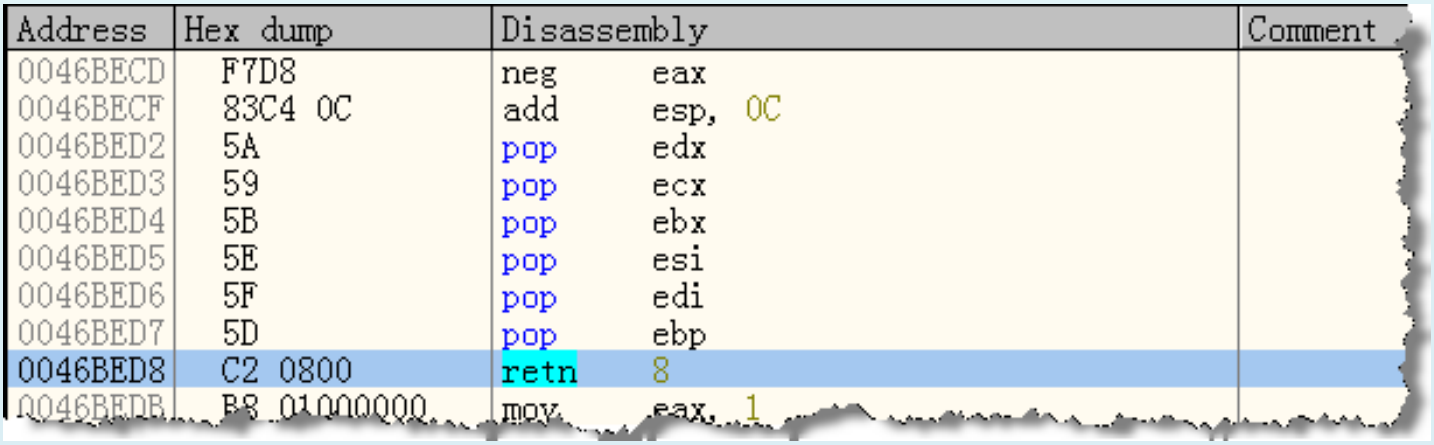
BP _Remove memory and see a little code below, you'll find at **RETN** 0x0046BF20, select this command and press **F2** to set a BP. Next, we'll break press **F9:**

0046BF1D	89EC	mov	esp, ebp
0046BF1F	5D	pop	ebp
0046BF20	C3	retn	
0046BF21	55	push	ebp

_Remove This BP, and then press **Alt + M,** set a BP as we did at **above. Text** section. After that, press **Shift + F9** to run our target. Olly'll break here:

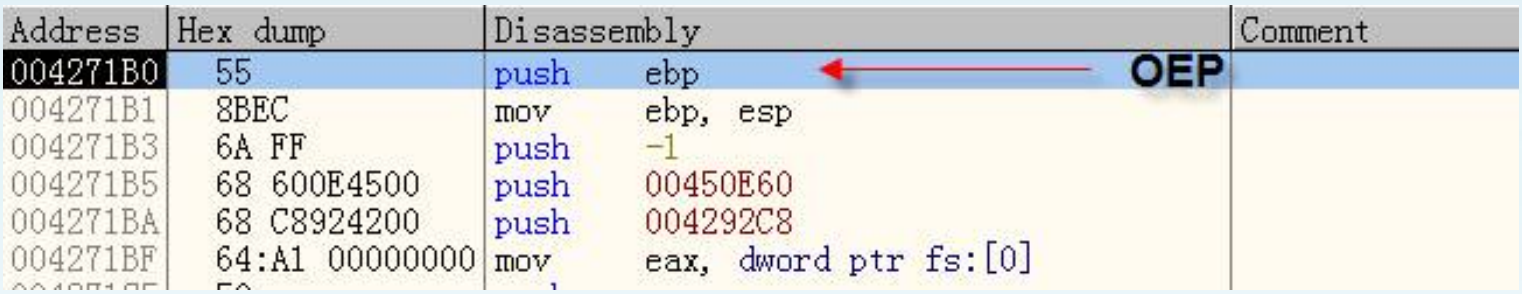
Address	Hex dump	Disassembly	Comment
0046BCBB	3E:8917	mov dword ptr [edi], edx	
0046BCBE	83C7 04	add edi, 4	
0046BCC1	49	dec ecx	
0046BCC2	^ 75 F1	jnz short 0046BCB5	
0046BCC4	29C6	sub esi, eax	
0046BCC6	29C7	sub edi, eax	
0046BCC8	3E:8A06	mov al, byte ptr [esi]	

_OK, Do the same, remove memory breakpoint and scroll down to find the **RETN** command. I found it as the following picture:

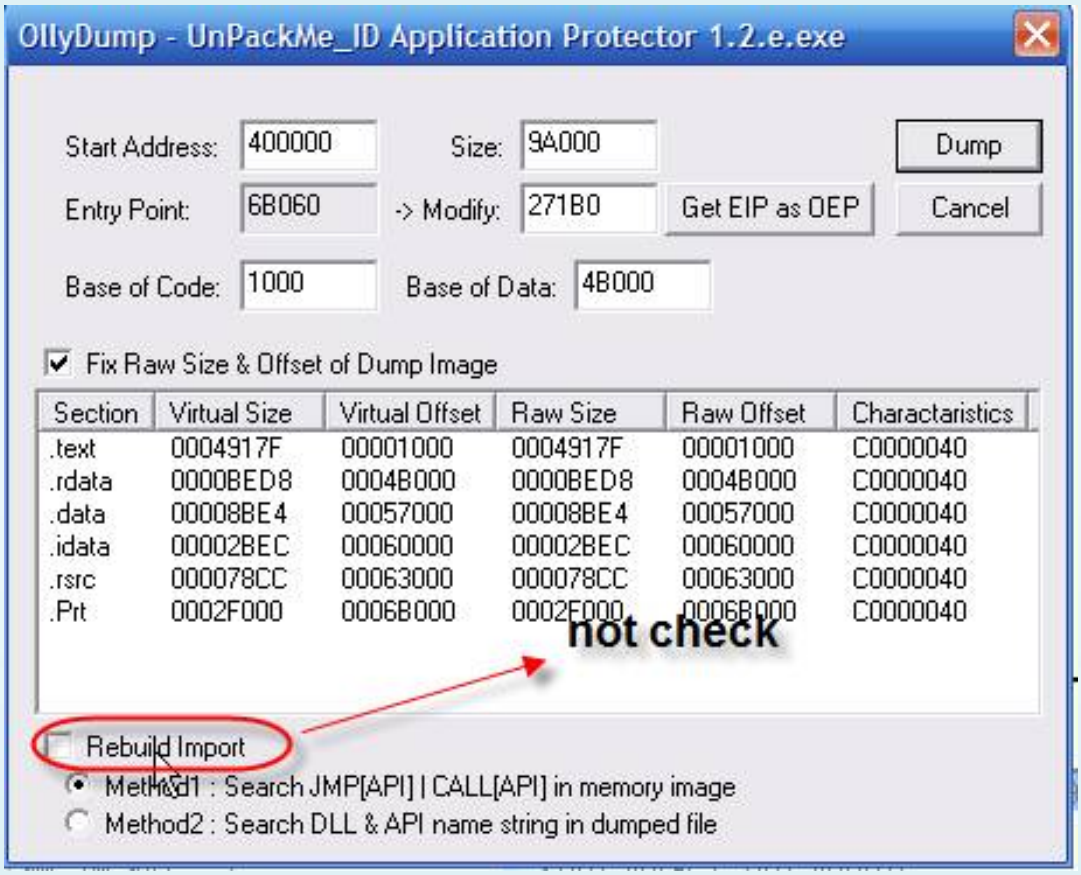


Address	Hex dump	Disassembly	Comment
0046BECD	F7D8	neg eax	
0046BECF	83C4 0C	add esp, 0C	
0046BED2	5A	pop edx	
0046BED3	59	pop ecx	
0046BED4	5B	pop ebx	
0046BED5	5E	pop esi	
0046BED6	5F	pop edi	
0046BED7	5D	pop ebp	
0046BED8	C2 0800	retn 8	
0046BEDB	B8 01000000	mov eax, 1	

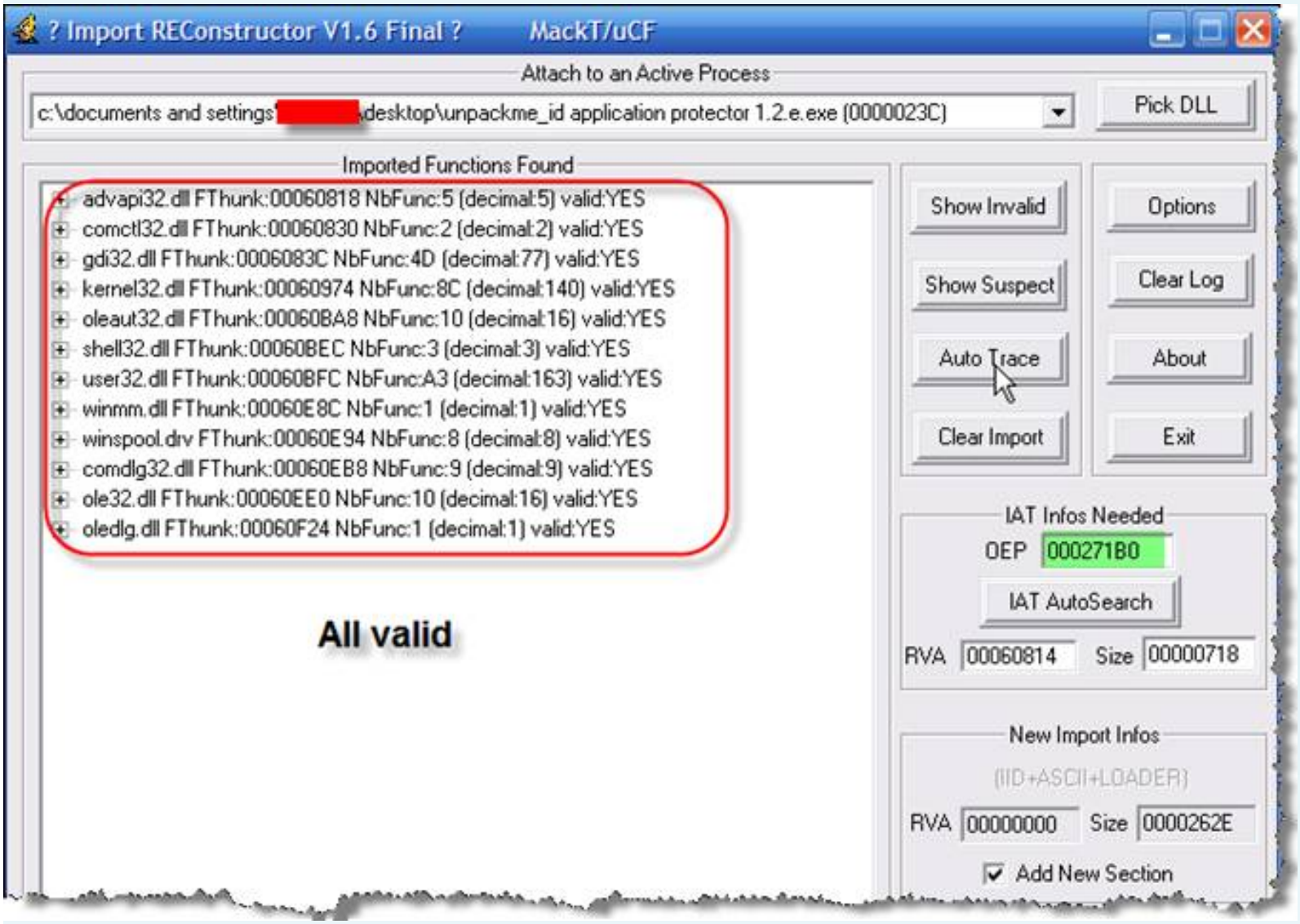
_Nothing Specially, press **F2** to place at a BP **RETN 8** command and then press **F9** to run. Olly'll break at the BP that we set. This clear and BP Press **Alt + M** to open the memory window to set the BP as we did above. After that, press **Shift + F9** to run, kaka Olly OEP at the break of the target J .



_Let's Dump and Fix IAT. Use **OllyDump** to dump the target and save the file dumped as any name you like:



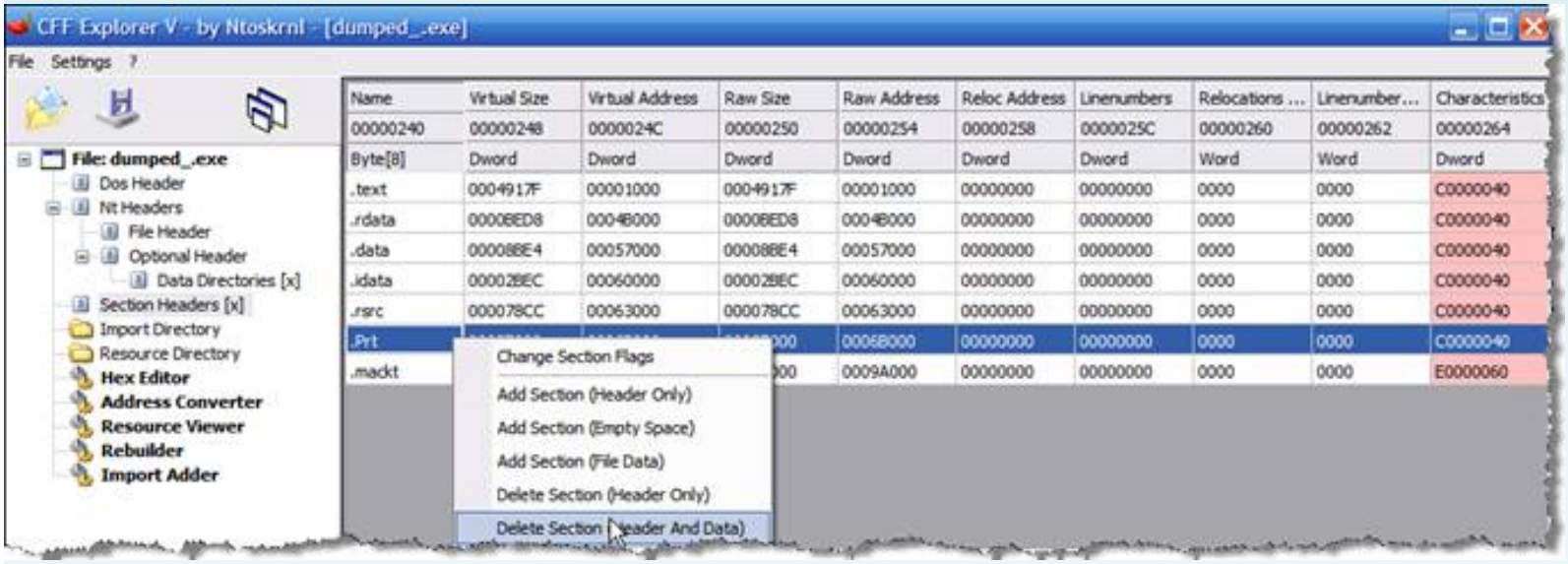
_Open ImpRec and chooses process, fill the right OEP. **IAT AutoSearch** Press and then press **Get Imports.**



_Finally Press **Fix dump** dumped and choose the file to fix IAT. Run our fixed file to test, it runs ok normally J

_Open CFF Explorer and load the file into fixed it. Delete the section of the packer and use the

LordPE fixed to rebuild the file.



_The End. I hope my poor English with all of you can understand what I write.See you in another tutorials.

Best Regards
_ *[Kienmanowar]* _

--++--==[Greatz thanks to]==--++--
My family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker,

the_Lighthouse, Merc, Hoadongnoi, Nini ... all REA's members, TQN, HacNho, RongChauA, Deux, tlandn, light.phoenix, dqtln, ARTEAM .... all my friend, and you.

Thanks to --++--==[ ]==--++--
iamidiot, WhyNotBar, trickyboy, dzungltvn, takada, hurt_heart, haule_nth, v. hytkl. v.. You have contributed greatly to the REA. Hope you will continue to promote J

I want to thank **Teddy Roggers** for his great site, Reversing.be folks (especially **haggar),** Arteam folks **(Shub-Nigurrath, MaDMAn_H3rCuL3s)** and all folks on crackmes.de, thank to all members of **unpack.cn** (especially **fly** and **linhanshi**). Great thanks to **lena151** (I like your tutorials). And finally, thanks to **Ricardo NARVAJA** and all members on **CRACKSLATINOS.**

>>>> If you have any suggestions, comments or corrections email me: **kienmanowar [at] reaonline.net**

hacnho Tutorials # 11

Manual unpacking **Mew 10 exe-coder 1.0 -> Northfox [HCC]**

Information	Unpacking for Newbie's
Target	unpackme.exe
Available	http://nhandan.info/hacnho/tuts/unpackme11_tuts.zip
Tools	OllyDbg plugin 1.10c with OllyDump 2.21.108, ImportREC Final 1.6, 1.4 LordPE, PEiD 0.92.
Protection	Exe mew 10-coder 1.0 -> Northfox [HCC]
L Evel	Standard
Category	Manual unpacking

1. Introduction

Mew 10 v1.0 is a powerful packer for compress your soft. Some case, it's good pack UPX or FSG. See bellow:

exe name	unpacked	FSG 1.33	UPX 1.22	Mew 9 beta 3	Mew 10 v1.0
test.exe	1024	can't pack	can't pack	717	542
server.exe	45056	18576	19456	can't pack	18518
opengl.exe	6144	2784	4096	2929	2711
mew5.exe	45056	18928	19968	19096	18880
main.exe	90624	38576	39424	38723	38477
keygen.exe	7680	4352	5632	4479	4272
imtoo.exe	2560	1088	can't pack	1234	1039
crack.exe	5120	2976	can't pack	3097	2894
bytekiller.exe	61440	22640	23040	22556	22321

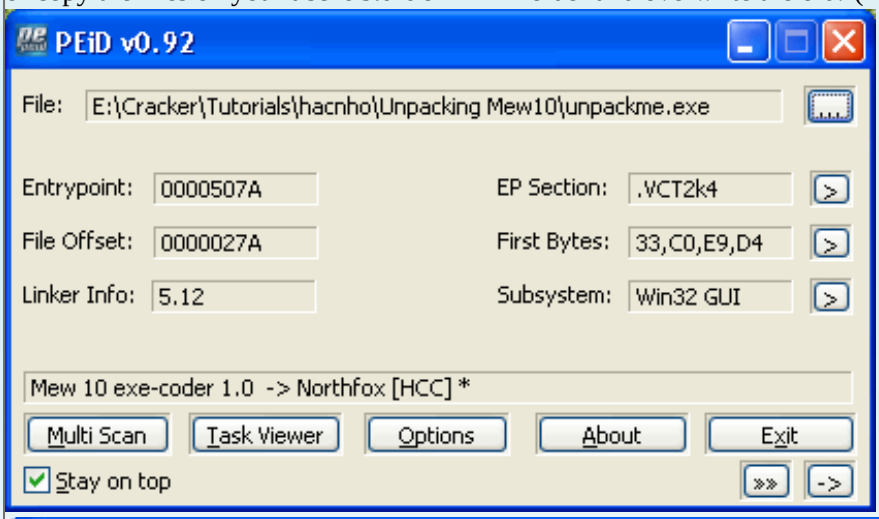
He he, this is good for packer optimize size for your software, but if you do not use it for anti-cracker. Why? Because, very easy for unpack this packer. This is the newest packer was found on k3nny's website (hxxp: / / k3nny.wz.cz). Okay, I will explain the ways for manual unpacking for you and anyone like unpacking tech; --).

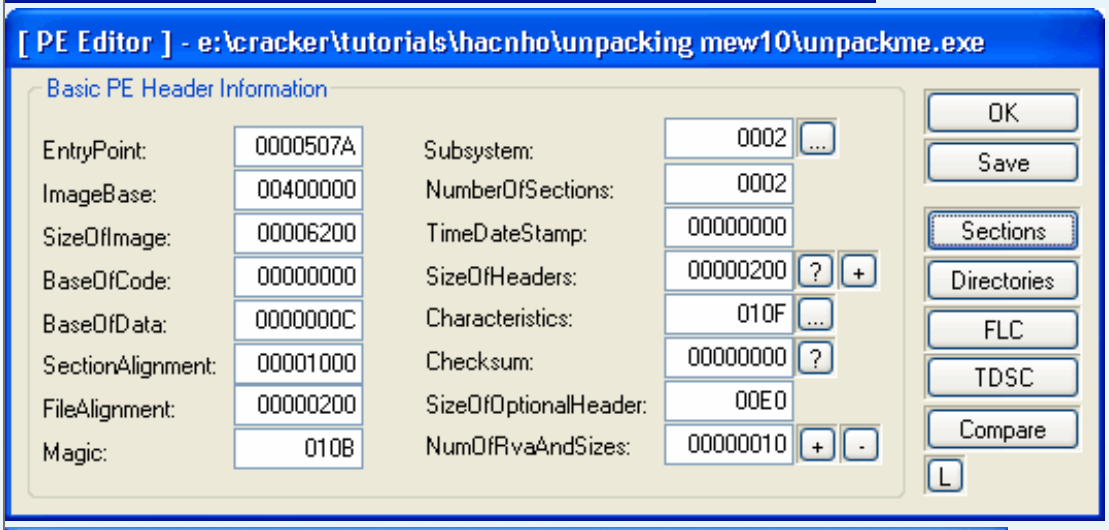
2. Getting Started

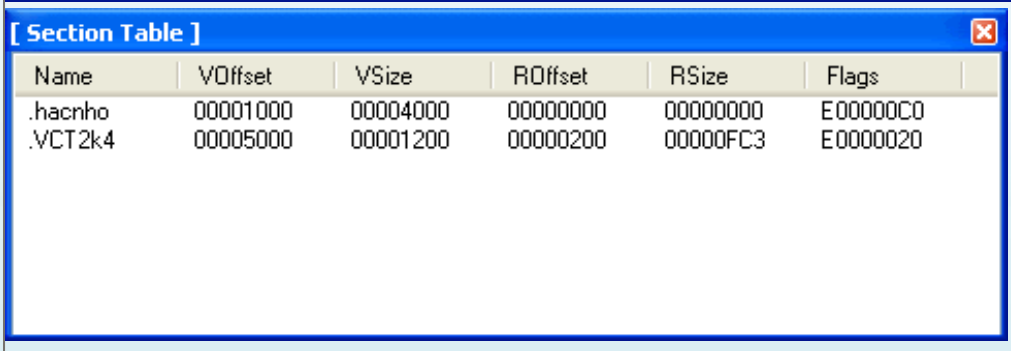
Use PEiD and get some LordPE for PE Info. If your PEiD can not detect my unpackme. You can add this to your sign **userdb.txt**

;-------------------------
[Mew 10 exe-coder 1.0 -> Northfox [HCC]]
signature = 33 C0 E9? ? FF FF 6A? ? ? ? ? 70
ep_only = true
;-------------------------

or copy the files on your **userdb.txt** of PEiD folder and overwrite the old. (Included in zip file).



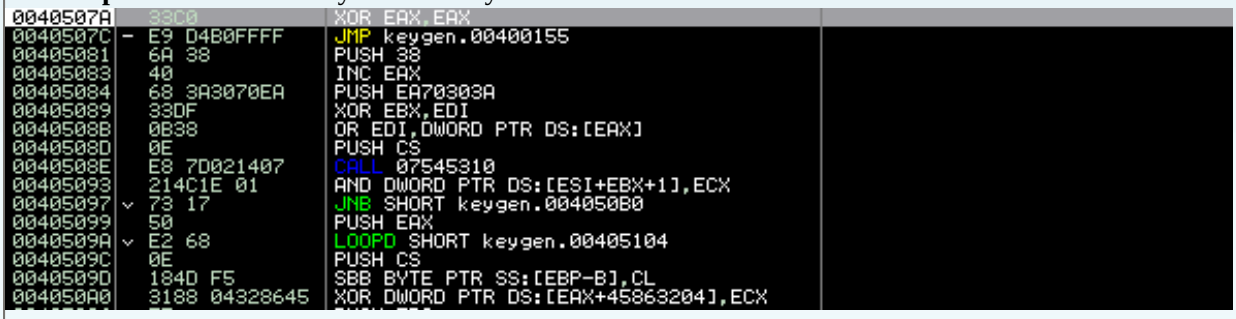




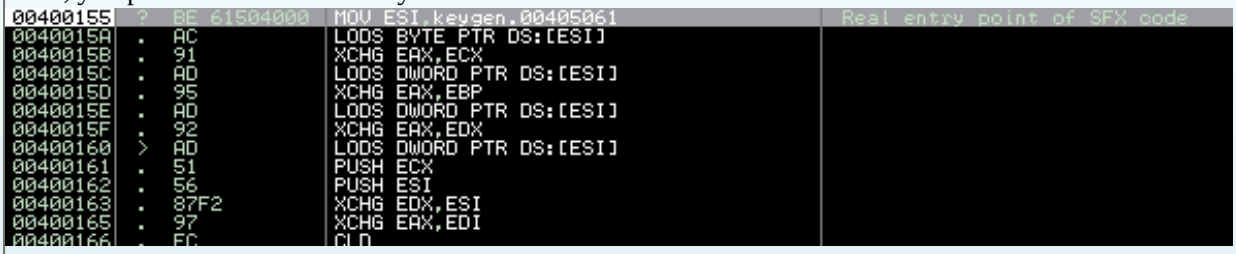
EP: 507A, flags The value of this case is not needed, Image Base is always 400000, Import Table: 0000 and size is 00.

3. Finding the OEP

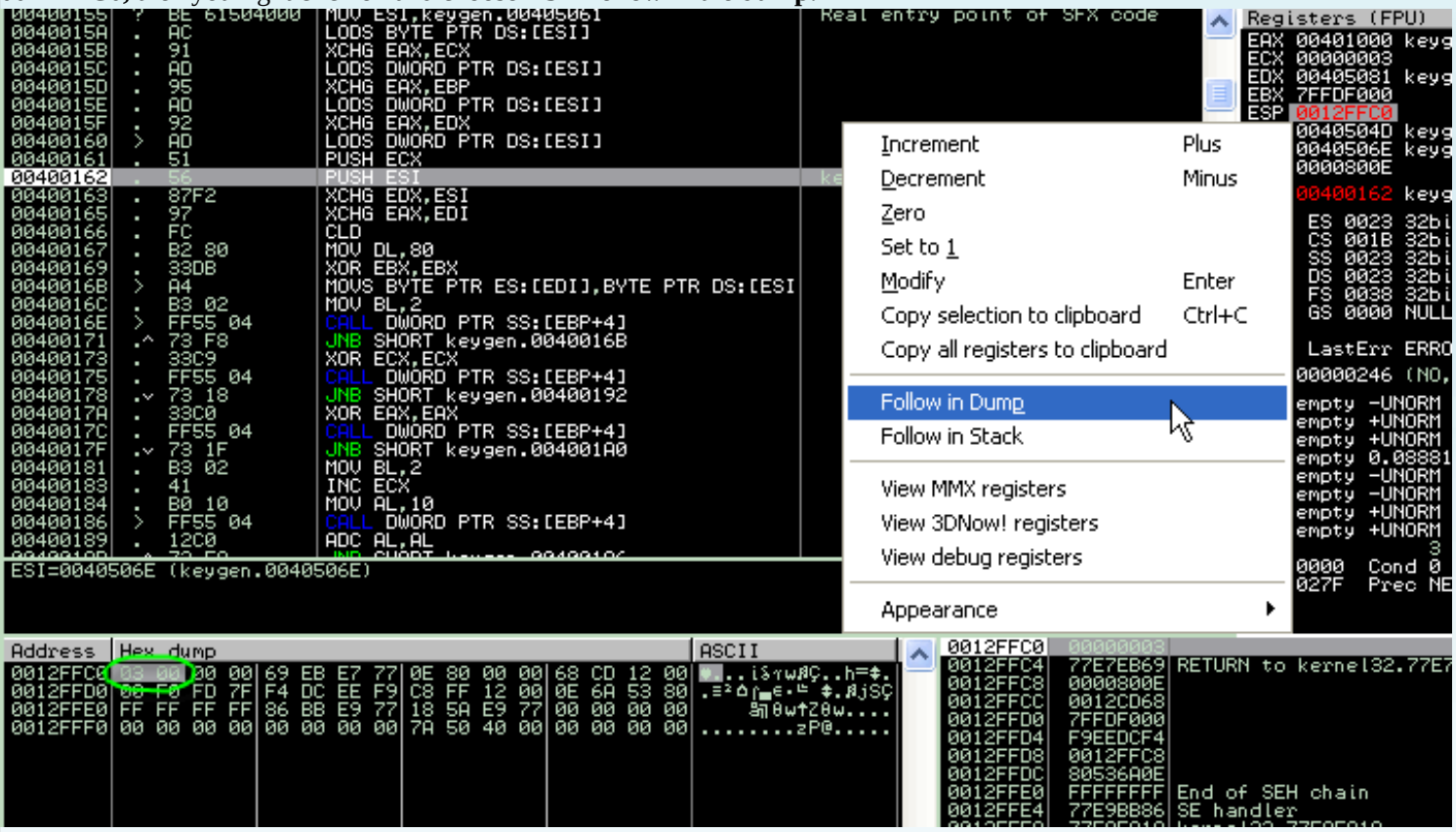
Load **unpackme.exe** into OllyDBG. And you still here:



Then, you press **F7** two times and you see as follows:

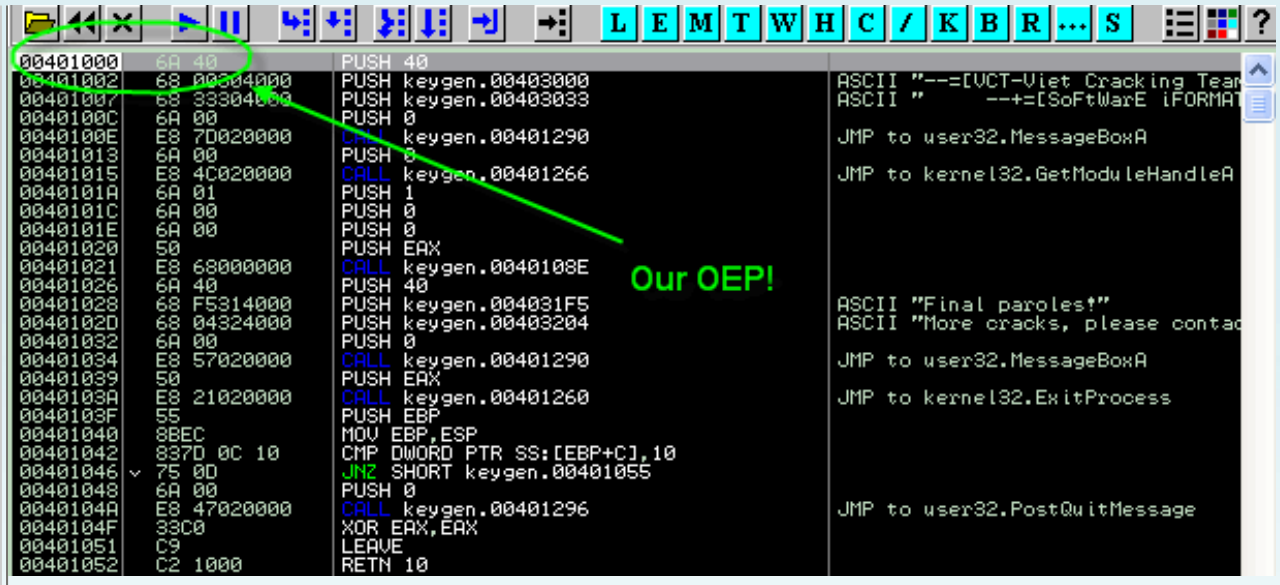


Now, press **F7** to trace to address **400,162.** At this line, you see in the **Registers (FPU)** table. The value of **ESP** is **0012FFC0,** then you right click on and choose **ESP Follow in** the **dump.**



Then you go to the Hex dump window. Then right click on the value **0012FFC0** and select Breakpoint -> Hardware, on Access -> Word. Our breakpoint is now set.

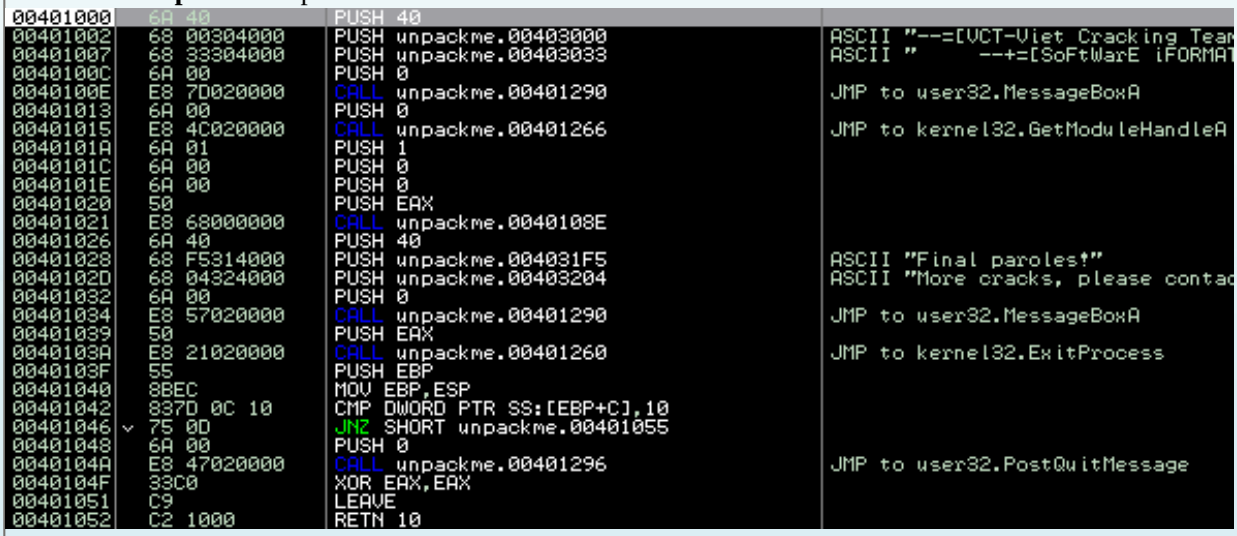
Now, when our breakpoint was set. We press **F9** 8 times. And we still here:



Congratulations! According OEP we found is **401000** And now we Calculate the real OEP of this unpackme by the formula: Real OEP = OEP find in Olly-Image Base = 401000-400000 = **1000.**

4th dumping

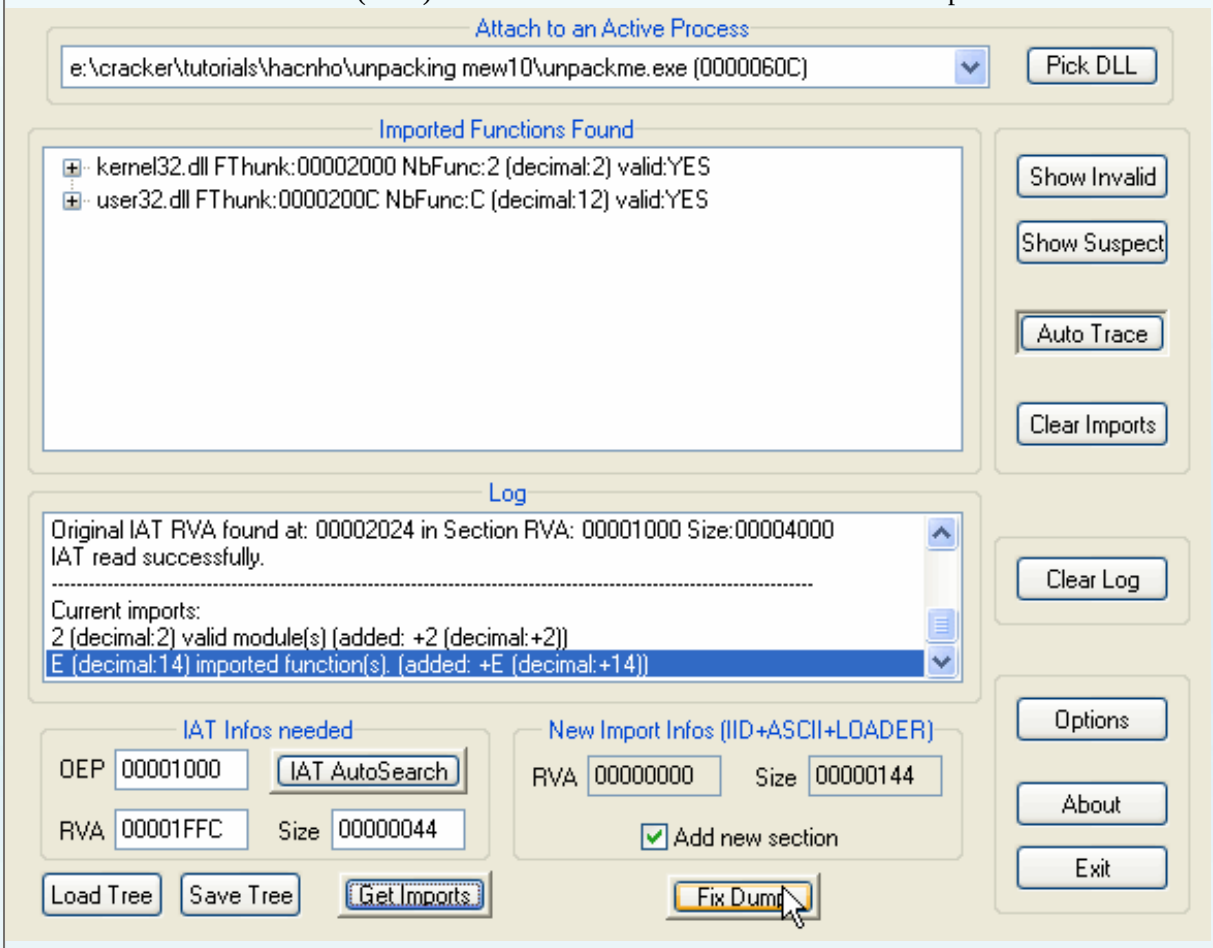
At address **0041000** we go to the menu Plugin -> OllyDump -> dump debugged process. And then, just press dump, save the file at **dumped.exe** unpacked.



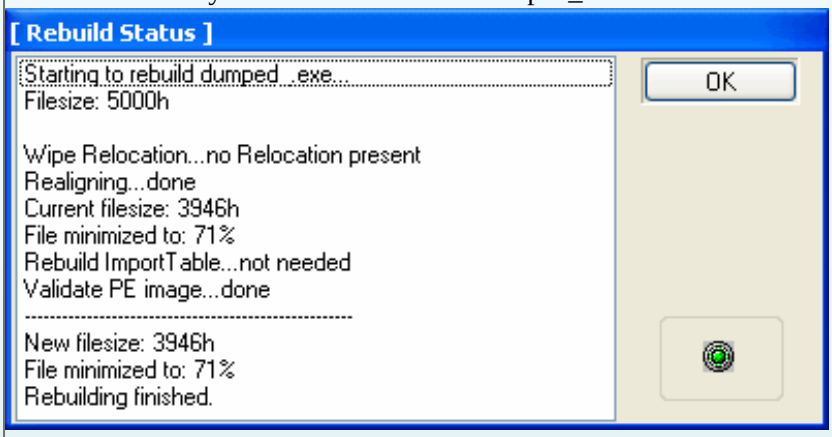
Do not run **dumped.exe** now, will be a crash ... It must fix IAT.

5. Finding and Fixing the Adress Import Table

And select Open ImpREC attached to active process and choose unpackme.exe. Change the value in the OEP window to the one we wrote down earlier (1000) then select IATAutosearch then click Get Imports.



All Import Functions valid.
Now, click fix dump to fix the IAT **dumped.exe** file.
Use LordPE 1.4 by Y0da for rebuild our Dumped_.exe



Now run unpacked files. Wow, not crash.

6. Conclusion

Special thanx to **R @ dier** for this template.
My Greetz to: Deux, infinite, NVH (c), softcracker_vn, luucorp, Aaron, hhphong, R @ dier, tlandn, Computer_Angel, Zombie, RCA, CTL, Moonbaby, Ferrari, Devilz, Neitsa, anh_surprise ... and you; -)!

To be continued ...

Written by hacnho (tutorial date: Sai Gon 20/5/2004)

hacnho Tutorials # 15

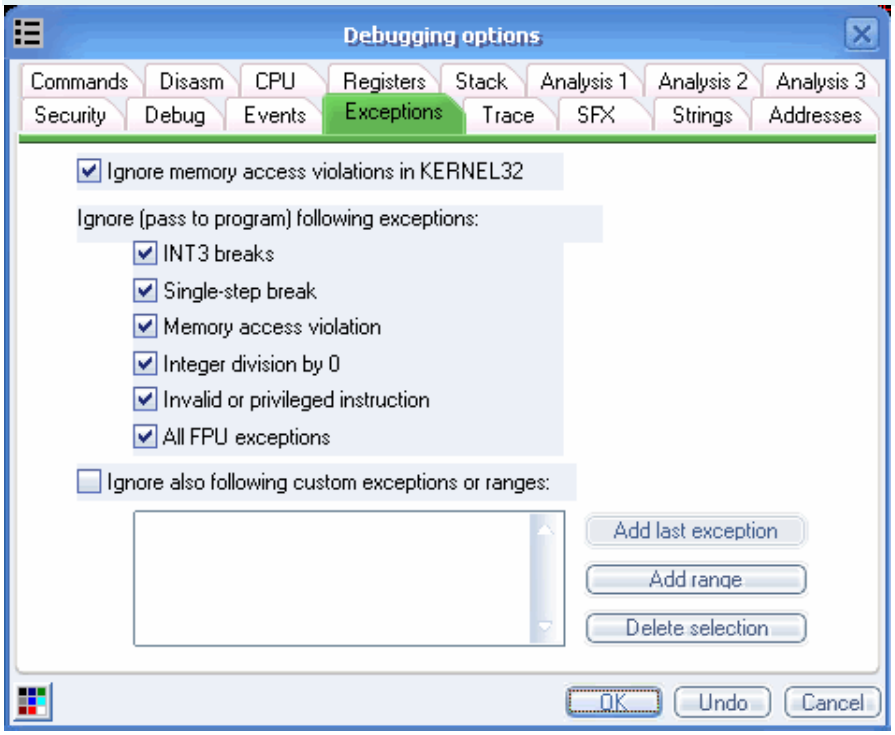
Manual unpacking **MEW 11 SE v1.1 - > Northfox [HCC]**

Information	Unpacking for Newbie's
Target	**target1**
Available	http://nhandan.info/hacnho/tuts/unpackme15_tuts.zip
Tools	1:10 OllyDbg plugin with Final OllyDump 2.21.108, OllyScript, Lord PE 1.4, 0.92 and PEiD EM Editor for 4:04 write scripts.
Protection	FSG 2.0 -> bart / XT
Level	Easy
Category	Manual unpacking

1.Introduction

Northfox [HCC] was released his packer. This is MEW 11 SE v1.1. I written this tut for help anyone want to learn a follow unpacking easy method.

Before unpacking, you can edit your options OllyDBG follow my method.



Since 25 June 2004, was not snaker PEiD0.92 update, so it can not detect this packer. I found was the sign of the packer. If you want, you can add those text string into the folders in the userdb.txt was installed PEiD.

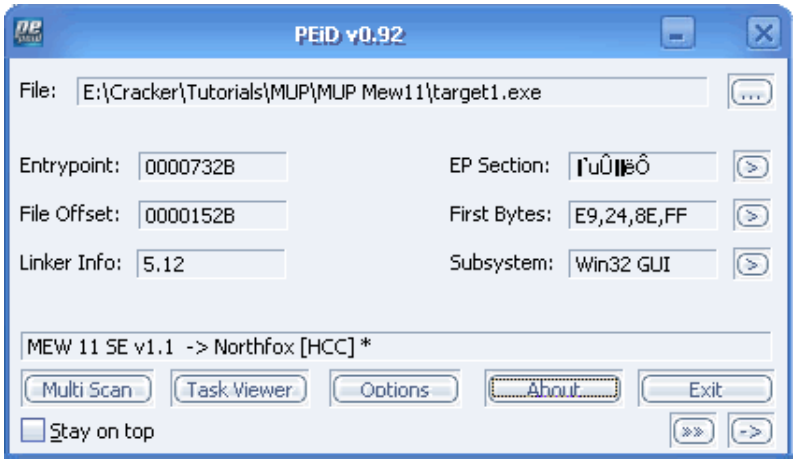
;----------

[MEW 11 SE v1.1 -> Northfox [HCC]]

signature = E9? ? ? FF 0C? 0

ep_only = true

;----------



2.Find OEP

Step 1: Find OEP
Load-1 into **target** OllyDBG

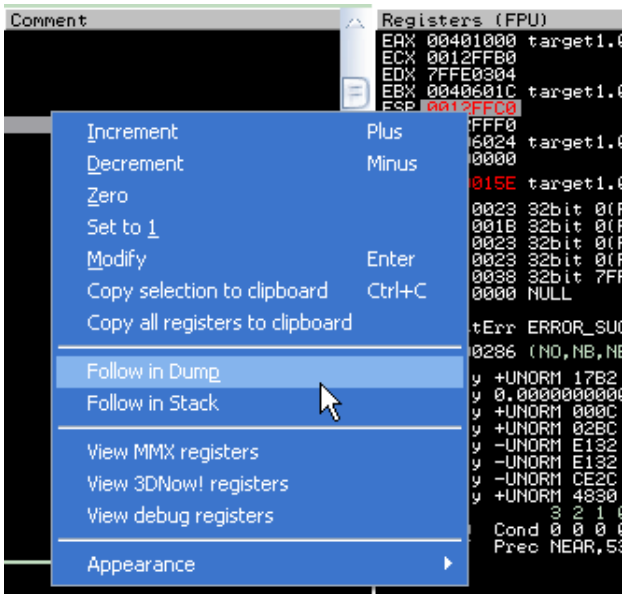
```
Address   Hex dump          Disassembly                          Comment
0040732B  - E9 248EFFFF     JMP     target1.00400154
00407330    0C 60           OR      AL, 60
00407332    0000            ADD     BYTE PTR DS:[EAX], AL
00407334    0000            ADD     BYTE PTR DS:[EAX], AL
00407336    0000            ADD     BYTE PTR DS:[EAX], AL
00407338    0000            ADD     BYTE PTR DS:[EAX], AL
0040733A    0000            ADD     BYTE PTR DS:[EAX], AL
0040733C    0273 00         ADD     DH, BYTE PTR DS:[EBX]
0040733F    000C60          ADD     BYTE PTR DS:[EAX], CL
00407342    0000            ADD     BYTE PTR DS:[EAX], AL
00407344    8978 40         MOV     DWORD PTR DS:[EAX+40], EDI
00407347    0000            ADD     BYTE PTR DS:[EAX], AL
00407349    0000            ADD     BYTE PTR DS:[EAX], AL
```

Press **F8** 6 times (you can see the ESP register in FPU is highlighting Windows):

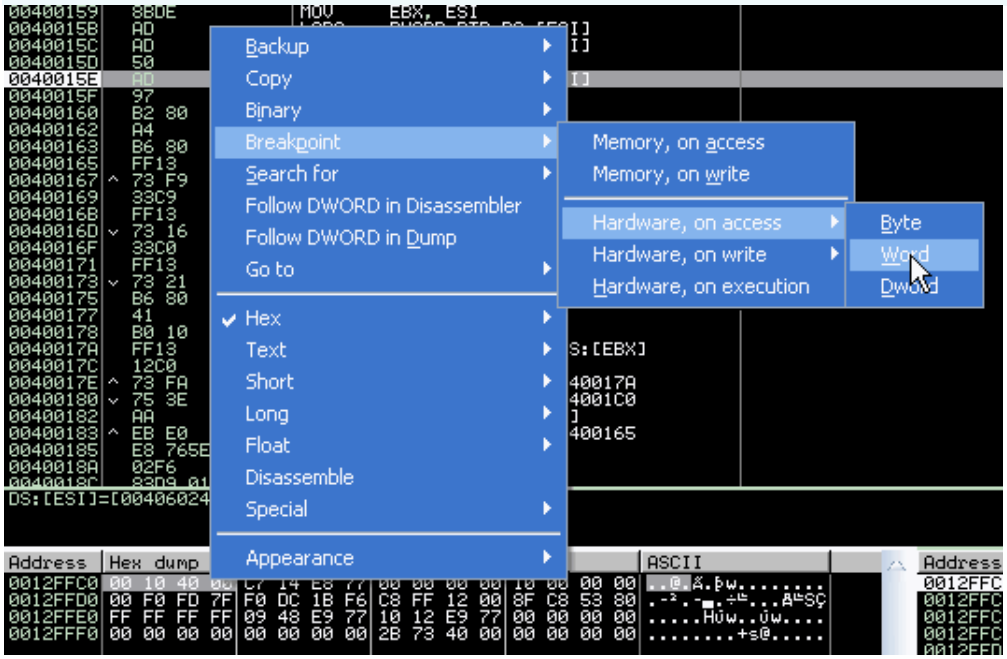
```
Address   Hex dump          Disassembly                          Comment
00400154    BE 1C604000     MOV     ESI, target1.0040601C
00400159    8BDE            MOV     EBX, ESI
0040015B    AD              LODS    DWORD PTR DS:[ESI]
0040015C    AD              LODS    DWORD PTR DS:[ESI]
0040015D    50              PUSH    EAX
0040015E    AD              LODS    DWORD PTR DS:[ESI]
0040015F    97              XCHG    EAX, EDI
00400160    B2 80           MOV     DL, 80
00400162    A4              MOVS    BYTE PTR ES:[EDI], BYTE PTR DS:
00400163    B6 80           MOV     DH, 80
00400165    FF13            CALL    NEAR DWORD PTR DS:[EBX]
00400167  ^ 73 F9           JNB     SHORT target1.00400162
00400169    33C9            XOR     ECX, ECX
0040016B    FF13            CALL    NEAR DWORD PTR DS:[EBX]
0040016D  v 73 16           JNB     SHORT target1.00400185
0040016F    33C0            XOR     EAX, EAX
00400171    FF13            CALL    NEAR DWORD PTR DS:[EBX]
```

```
Registers (FPU)
EAX 00401000 target1.00401000
ECX 0012FFB0
EDX 7FFE0304
EBX 0040601C target1.0040601C
ESP 0012FFC0
EBP 0012FFF0
ESI 00406024 target1.00406024
EDI 00000000

EIP 0040015E target1.0040015E

C 0  ES 0023 32bit 0(FFFFFFFF)
P 1  CS 001B 32bit 0(FFFFFFFF)
A 0  SS 0023 32bit 0(FFFFFFFF)
```

At this line, you see in the Registers (FPU) table. The value of ESP is **0012FFC0,** then you right click on and choose the **ESP** Follow in dump

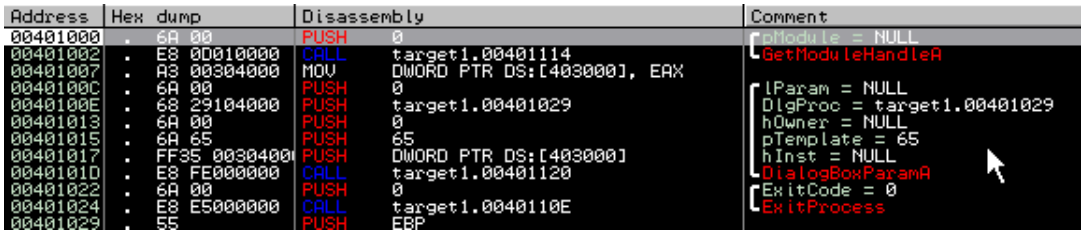


Then you go to the Hex dump window. Then right click on the value 0012FFC0 and select Breakpoint -> Hardware, on Access -> Word. Our breakpoint is now set.



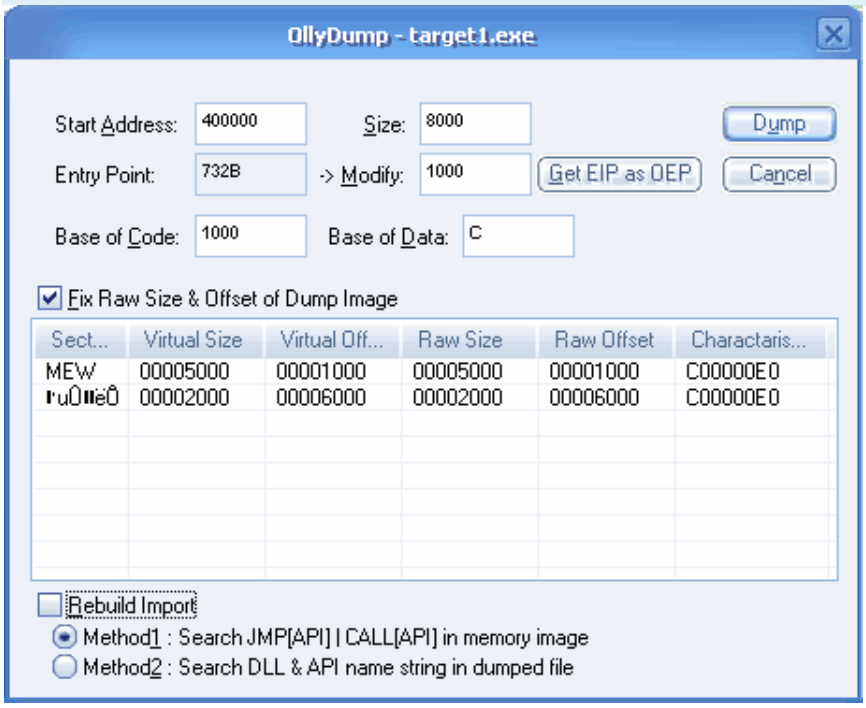
Press **F9** to run. You will still be on OEP

Press Ctrl + A for analyze.

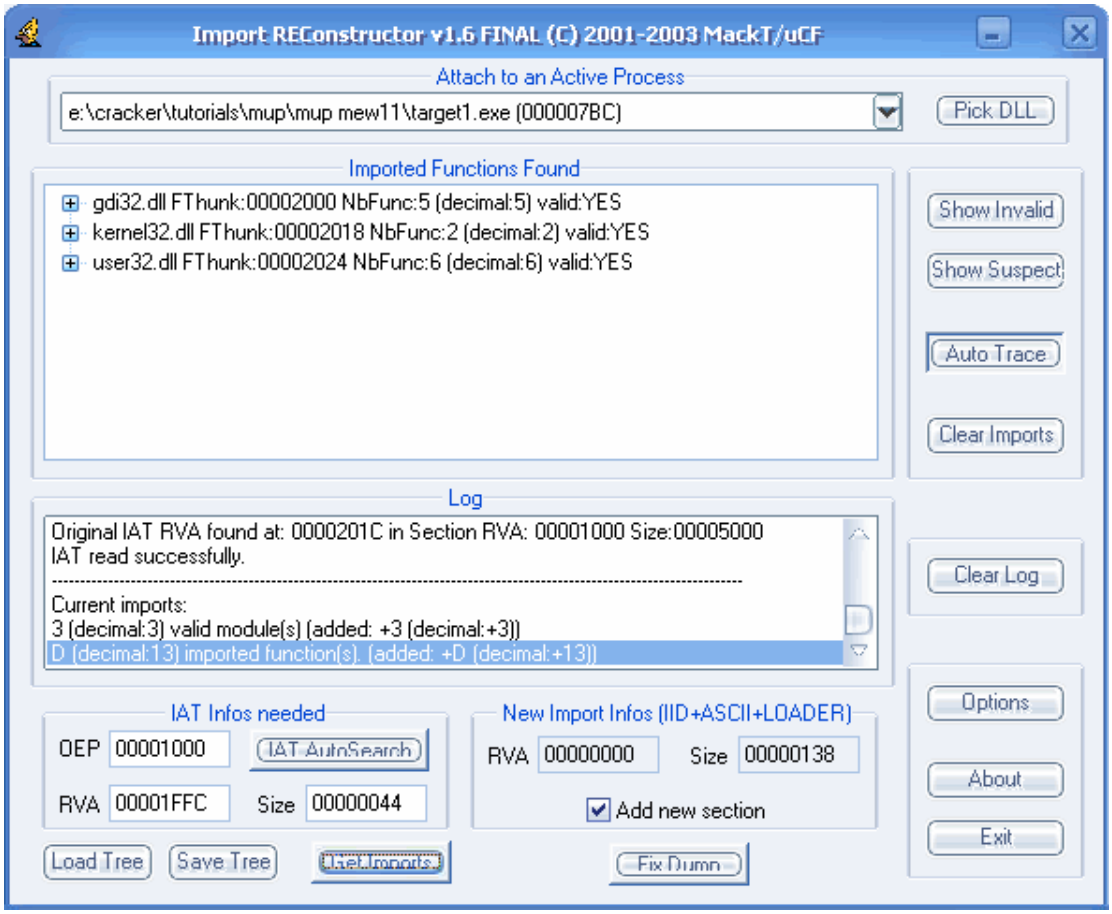


Step 2: dumping

- Go to the menu plugin, choose OllyDUMP:

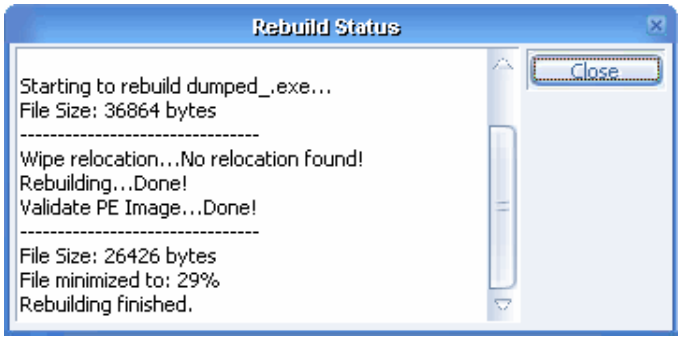


Step 3: Finding and Fixing the Adress Import Table
And select Open ImpREC attached to active process and choose unpackme.exe. Change the value in the OEP window to the one we wrote down earlier (1DFE) then select IATAutosearch then click Get Imports.



Now, click fix to fix IAT dump the file **dumped.exe**

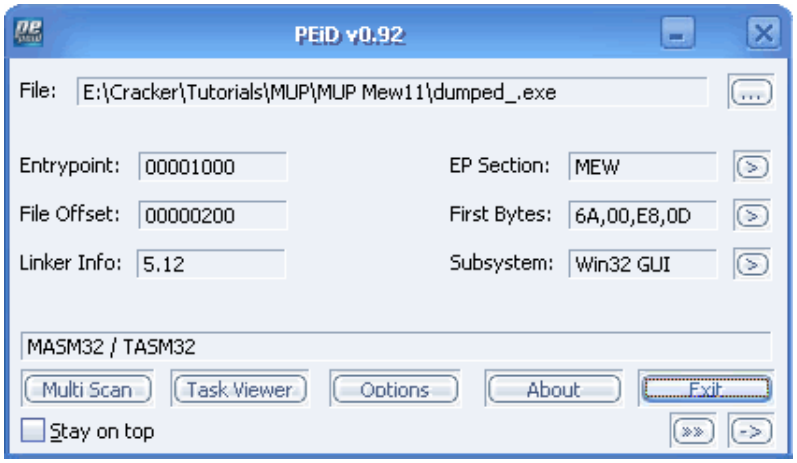
Step 3: rebuild PE
Use LordPE 1.4 by Y0da for rebuild our **dumped_.exe**



- Unpacked successful! Done ...

3. Testing Our Unpacked file

Now run the unpacked files. It's Okay! Using **PEiD 0.92** for detect: **MASM32 / TASM32.** Okie, MEW 11 SE v1.1is now unpacked successful!



4. Create OllyScript

After find OEP in Olly, we create a need for auto OllyScript find OEP next time! Remember! We have found three step for OEP:
1. First: Find the special signal of MEW breakpoint set for 11!
2.Second: Step over 6 times.
3.Final: Set breakpoint, press F9 to run for jump to **OEP**
Okay!, Write in our step langue OllyScript

```
Cut here ---------------------------------- ---------- -----
/ *
////////////////////////////////////////////////// ////////////
/ / MEW 11 SE v1.1 -> Northfox [HCC] OEP finder
/ / Author: hacnho/VCT2k4
/ / Email: hacnho@hotmail.com
/ / Website: http://nhandan.info/hacnho
/ / OS: WinXP Pro, OllyDbg 1:10 Final, OllyScript v0.85
////////////////////////////////////////////////// //////////
* /
STI / / Step into (F7)
```

```
Sto / / Step over (F8)
Sto
Sto
Sto
Sto
eob Break
findop eip, 50AD # # / / Find the special signal
bphws ESP, "r" / / Set a breakpoint on memory access
run / / Run the program

Bread:
Police eip / / Ctrl + A for Analyze
log eip / / Logs to source OllyDbg log window.
CMT eip, "This is the OEP! Found by hacnho/VCT2k4" / / Write a comment
Msg "Dumped and IAT fix now! Thanx for using my script ...!" / / Show a message

ret / / Exits script
Cut here ---------------------------------- ---------- -----
```

6. Conclusion

GrEeTs Fly Out: Deux, infinite, NVH (c), softcracker_vn, luucorp, Aaron, Canterwood, hhphong, R @ dier, tlandn, Computer_Angel, Zombie, RCA, CTL, Moonbaby, Nilrem, diablo2oo2, Ferrari, Devilz, anh_surprised .. . and you ;-)!
Thanx to authors of OllyDBG, ImpREC, LordPE, OllyScript, MEW 11,
To be continued ...
Written by **hacnho** (tutorial date: Saigon 23/08/2004)

FRIENDS SITE
[Exetools Forum] | [HVAOnline] | [Vncracking Group] | [REA Forum] | [hacnho's homepage] | [AR Team] | [Vicki's Fan] | [Devilz Crack] |

.:: [Manual Unpacking MoleBox v2.5.7 and Serial Fishing]::.

(_kienmanowar_)

I. Proem

Today some of the brothers in the REA's of Com and Trick working visit also made me itch career unbearable ... more he Com Trick and online every day to make a new status as the thèm Enhance tò open. Ặc where he ngặt but they play the first data is not that, my career and flood earth is not known. Luckily, today I love Com rồi Rai, two brothers seated man step by step. With the help of his Com today I will write a small how **"Manual Unpacking a program packed with MoleBox (specifically ver 2.5.7)"** also performed well methods **"Serial Fishing" .** *a reminder of what I do not do the following purposes outside academic and research so I will not bear any responsibility if you do use it on purpose is not good!* 0k13! L3t's R0ck w1th m3 J

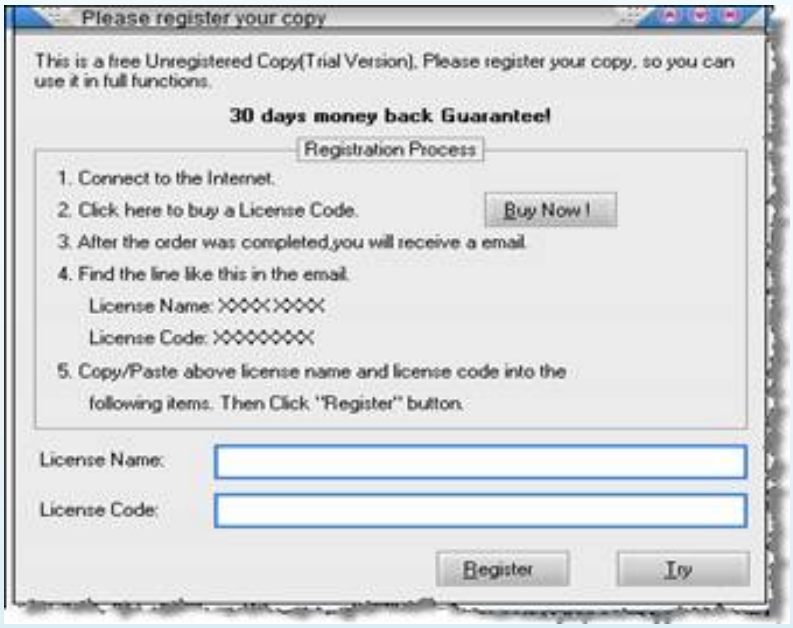
II. Target and Tools

Target:
Name: WMV to AVI MPEG DVD WMV Converter
Home site: http://www.alloksoft.com/wmv.htm
Description: WMV to AVI MPEG DVD WMV Converter is a powerful tool for Splendid and WMV to AVI, WMV to MPEG, WMV to DVD, WMV to VCD and WMV to SVCD video converter.

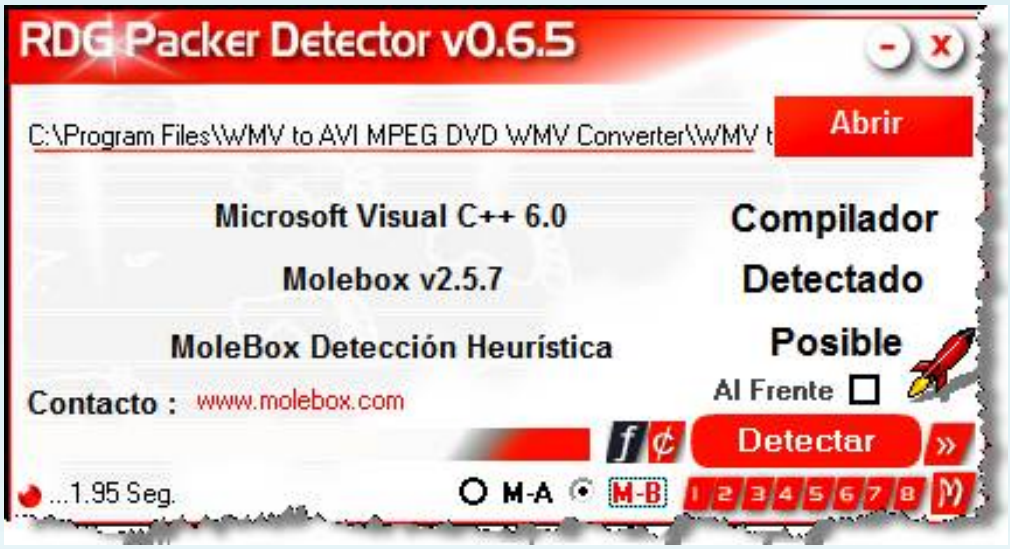
Tools:
Debugger: Ollydbg
PE Tools: PeiD, RDG Packer Detector, LordPE, ImpRec

III. Manual Unpacking

I assume you down load the program and install the machines. Test the program you will see the following:



Ok so we know that this program will only give us 30 days to try and stop the use will be limited features. Now as usual we will check the use Packer / Protector time. I used **PeiD** and **RDG Packer Detector** to find information:

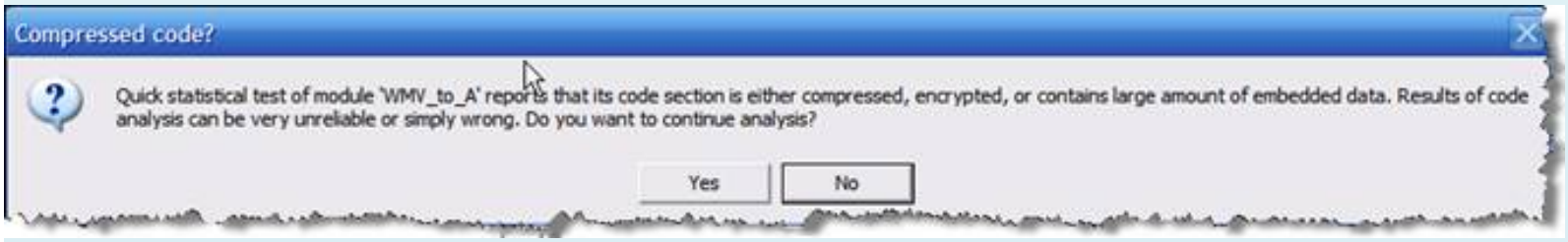


If we use the function in Deep Scan PeiD we also have the results that this program is using the code: **Microsoft Visual C + + 6.0.** Here I am not very much interested to CrypTo that this program to I just use that focuses on information that PeiD RDG and provide that: **MoleBox v2.5.7.** Information that I have been on the Packer this as follows:

MoleBox is a runtime exe packer for Windows applications. *It bundles the executable together with the dll files and data into a single EXE file, without losing the ability to run the application.*
MoleBox compresses and encrypts all the application files. With MoleBox you can protect your application's data and media files from viewing and modifications, and your DLLs and ActiveX components from usage by third party programs. (More at: [http://www.molebox.com/features.shtml).](http://www.molebox.com/features.shtml)

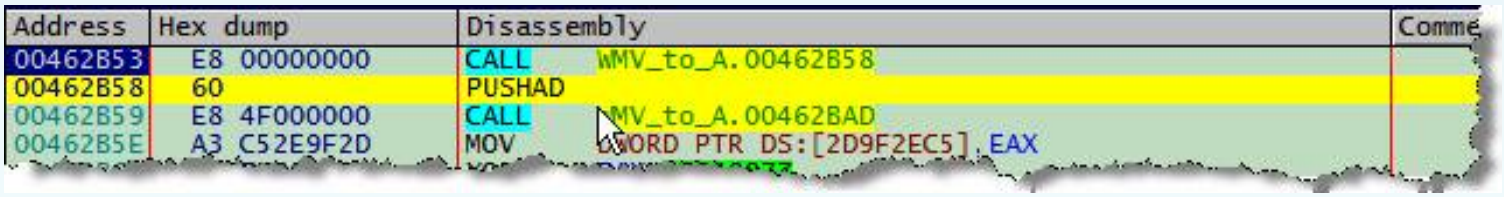
Before I do not have the opportunity to try this they Packer, just read a few Tuts in which items of J Trick. Yesterday he was Com ru happy to do the same (as he also Com MUP and the child is finished), the dose should also try and make the final ... ... kaka today sit writing tut J .

OK so the information is enough, now we load the program to proceed and Olly MUP.Khi to load Olly if you encounter a message similar to the degree the "No" to ignore it and continue work:

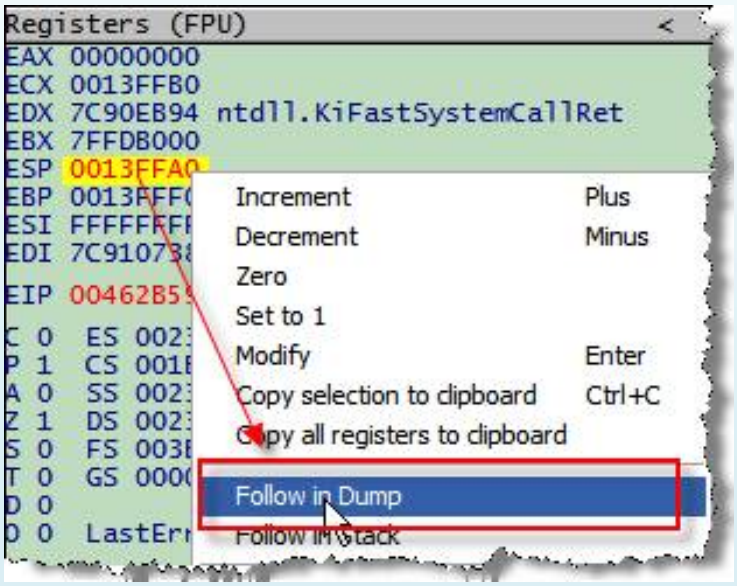


1st Search OEP and dump file:

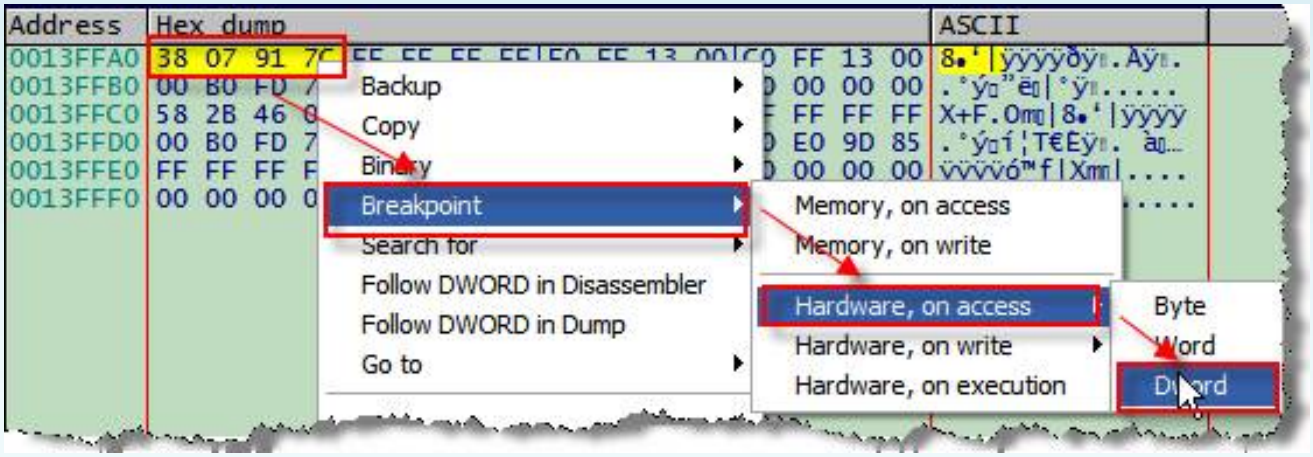
After you click "No" we stop here in Olly:



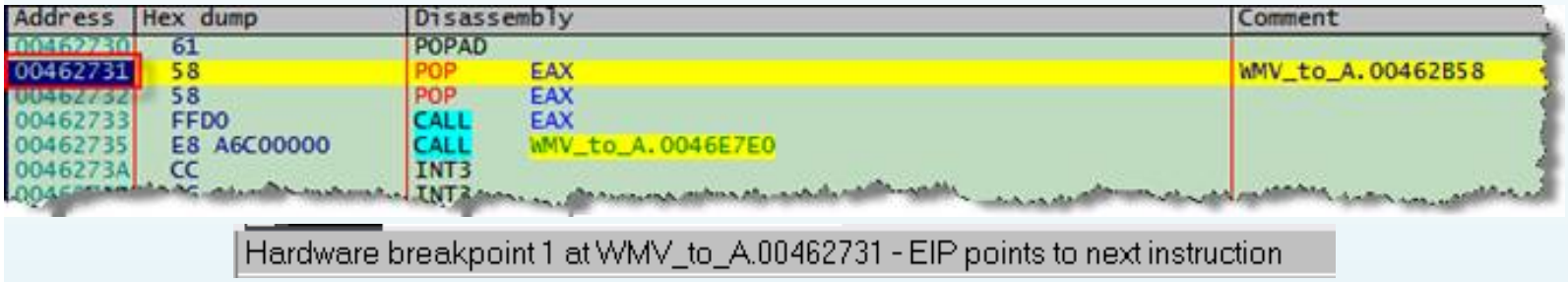
Observations hairbreadth you'll see a command **PUSHAD,** so there are signs this month borrowing by way UPX. We press **F8** to trace through PUSHAD command, observation window and select **Registers** record **ESP,** click to select **Follow in dump:**



At window dump we choose DWORD, and set a BP on HW access similar image illustrated below:

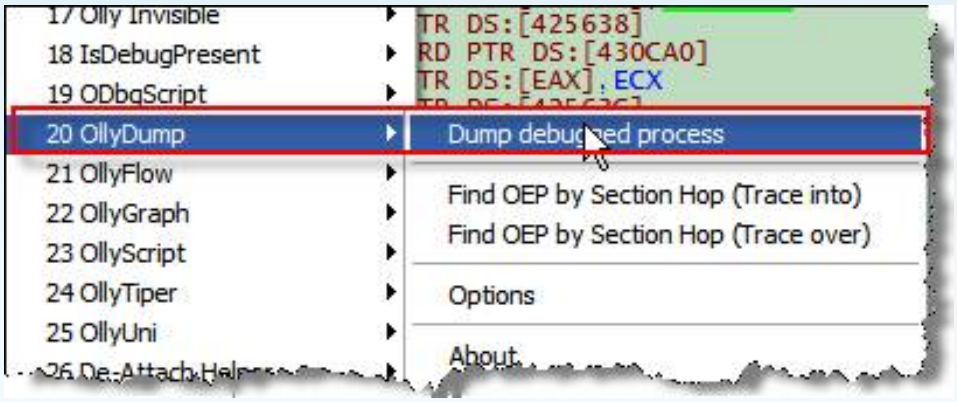


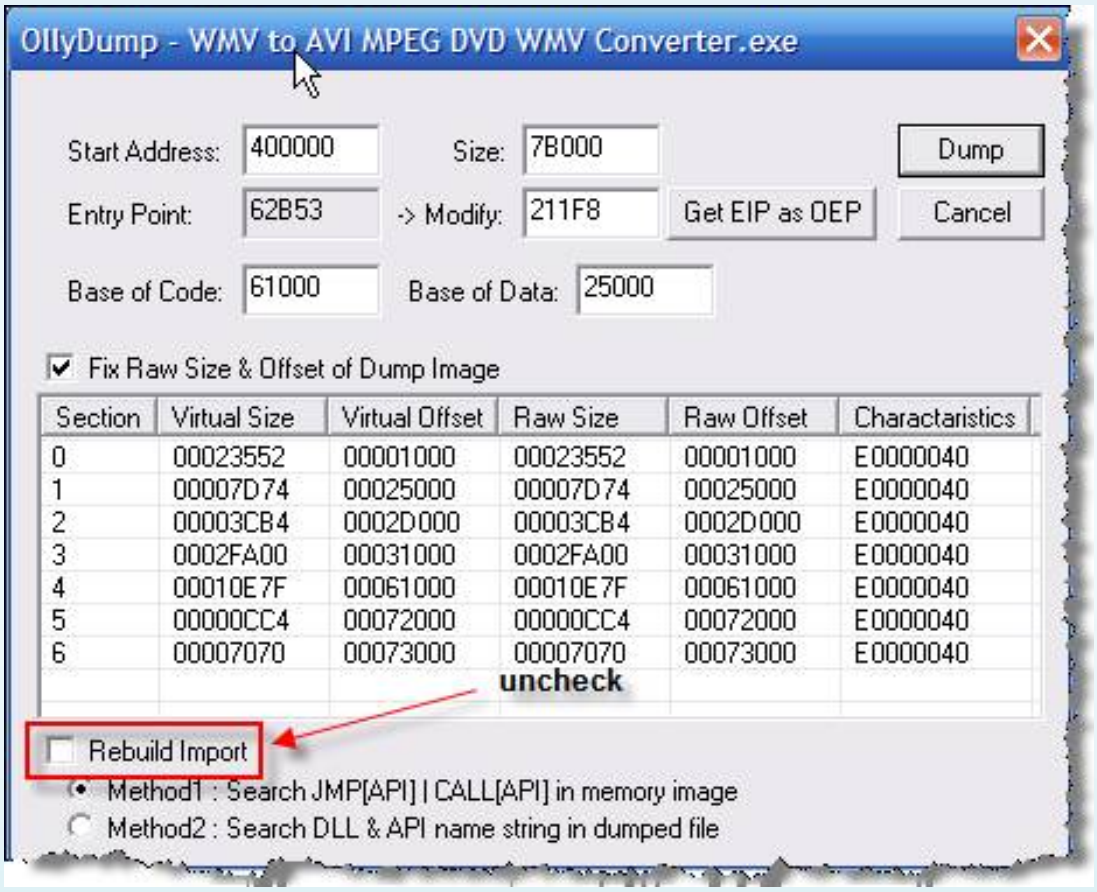
Press **F9** to run the program, we will Break here in Olly:



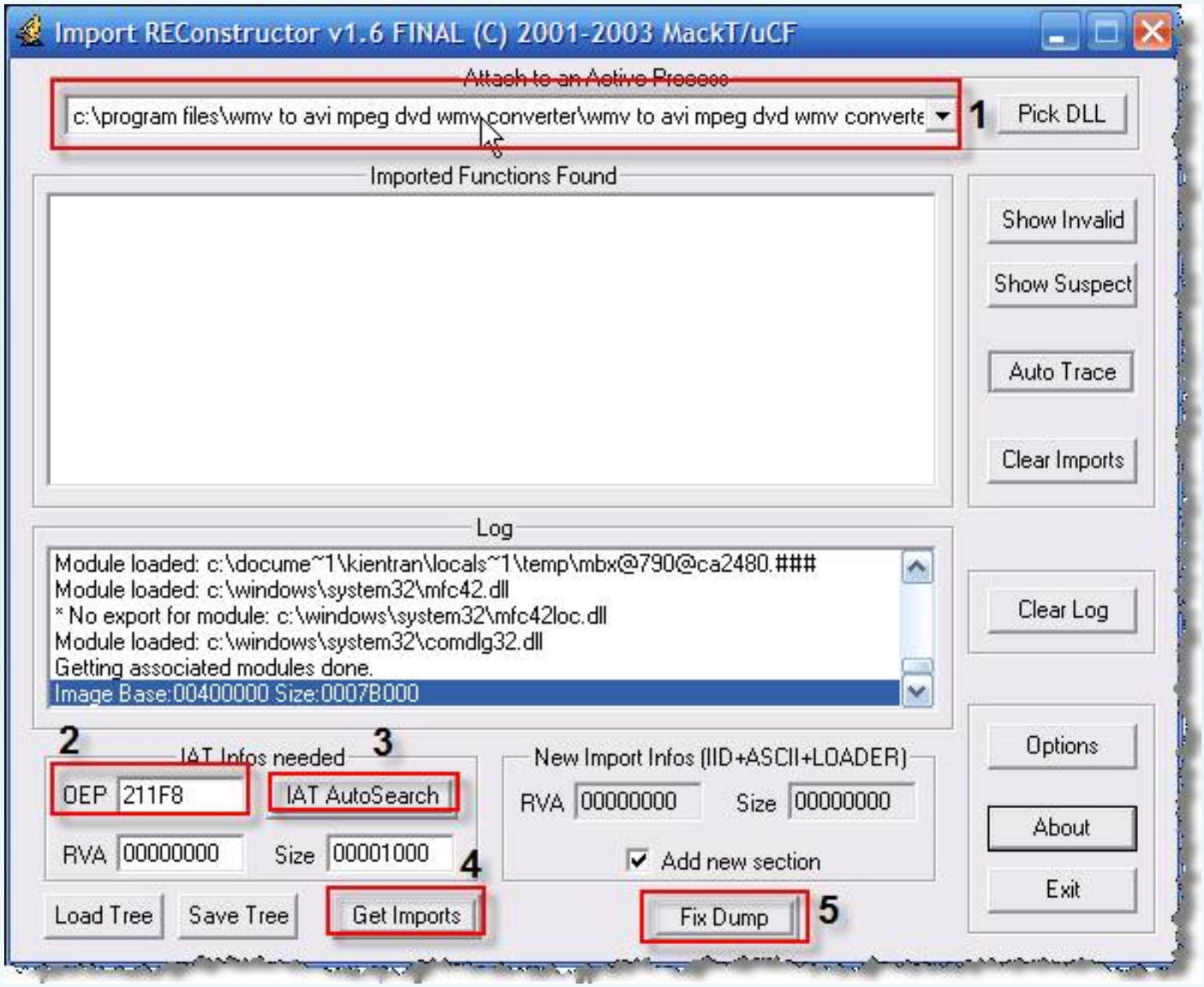
2 Press **F8** to trace through **POP EAX** 2, and press **F7** to Trace Call to order at **0x00462733,** we will go to the OEP of the program:

As usual when we work with the Packers, to the OEP and the dump and only J Fix IAT. Use Plugin OllyDump to dump and Save the file with the name of any options you put me here is dumped.exe.

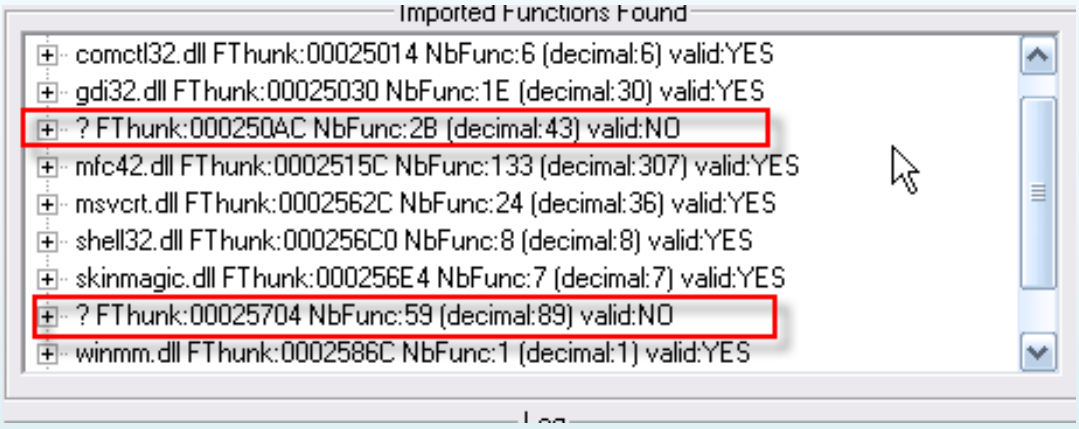




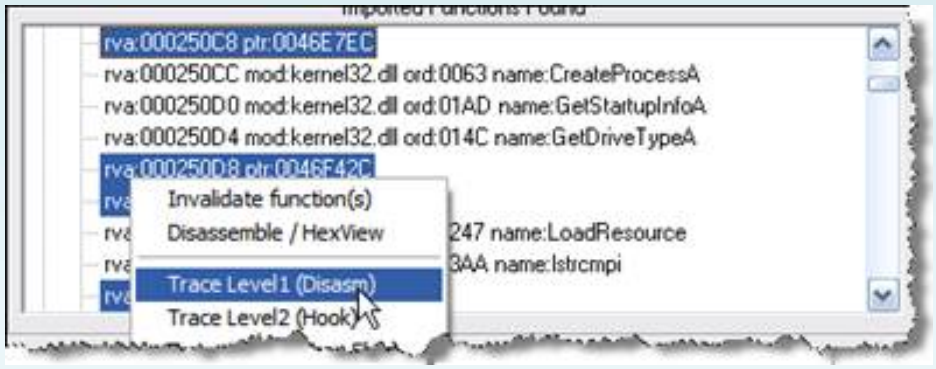
After the dump is complete, open and ImportRec conducted Fix IAT.



In the Get Imports may Invalid image as illustrated below:

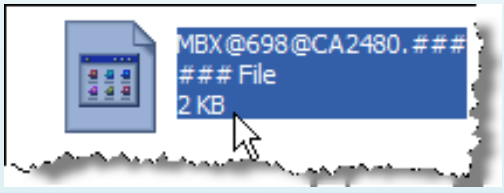


Now click on the button "Show Invalid", on a mouse to any function and as follows:

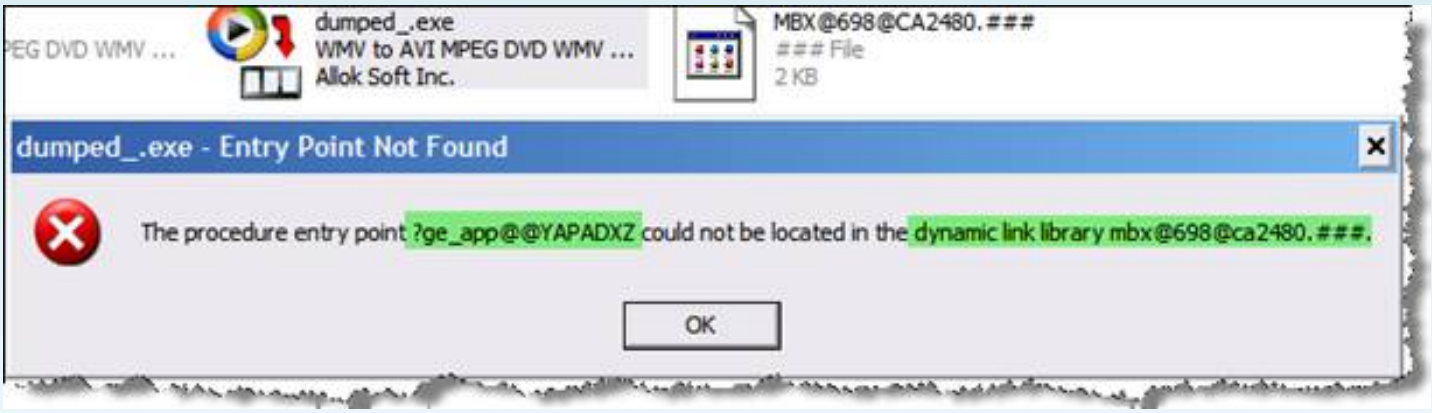


After implementation we see all have a valid function, click and select Fix dump file we have to dump at the Fix IAT. Tolerable J too simple, we try to run the file has fix dump see how:

Ặc Failed! With a reason it can not find the file qui quái What is **mbx @ 698 ...** a search we have found this file in the Temp directory:



We copy the file in the Temp directory to install the program and try Run the file dumped_.exe see how.

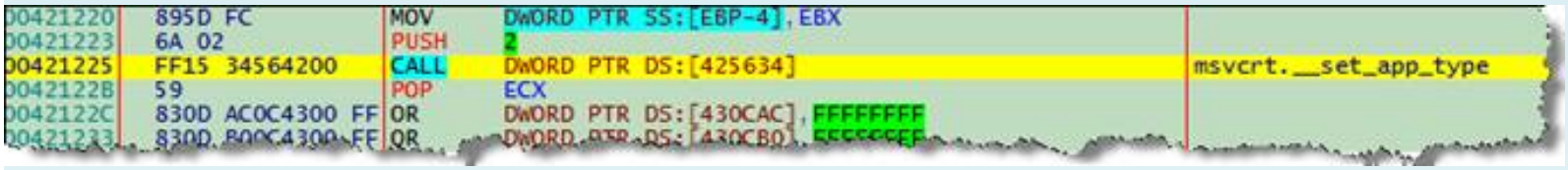


Through this we draw the conclusion thẳng MoleBox will be embedded in a dll file, but this dll file is encrypted to the name, when we run exe file it will extract the dll file and load it into the .'s programs we will use the functions in this dll file. So this dll file name is what and how to get it? The second task of our J

2. Find dll, and dump Fix IAT, reloc. Fix dump and IAT of exe files.

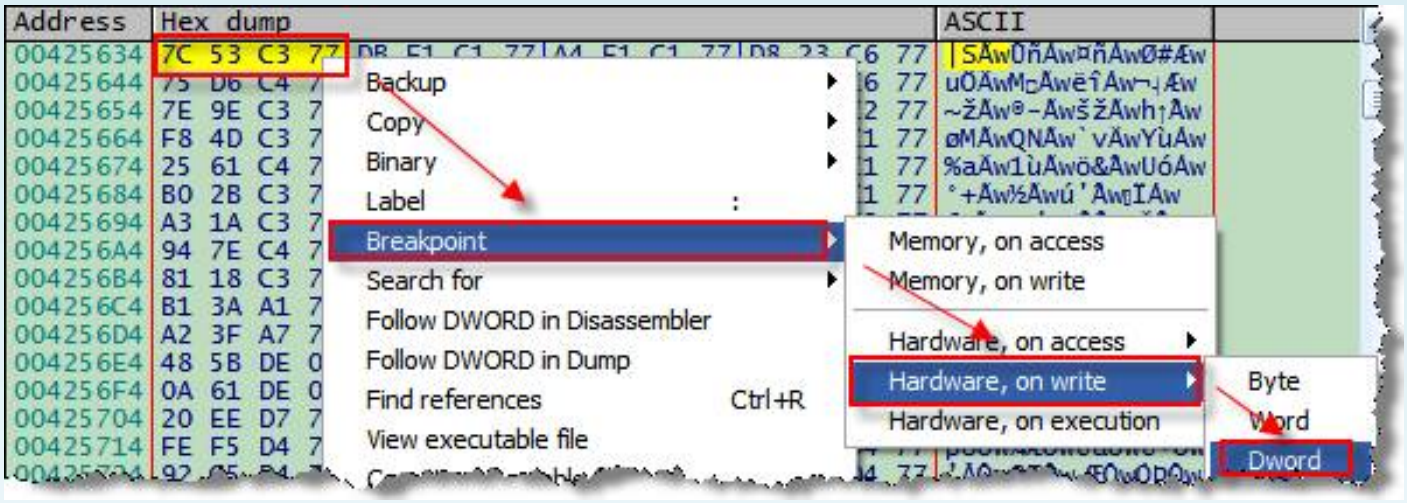
Okie, so that we have a better overview, now you delete all the files have dump fix IAT and we will take a leo beginning to end J . Load the file in Olly, as the above steps until we stop at **EAX Call** function as above.

We will set a BP in order for this Call is ordered Call us will go to the OEP program. We see this month it destroyed IAT, which we read Invoice's place will be called to cancel the IAT this function (similar Armadillo) so that we must find command will jump to jump over the cancellation IAT (or often called with the name "magic jump"). Ok press Enter **Call EAX** in order, we will go to OEP of trinh.Tai here look down below 1 paragraph you'll see a command as follows:



To vet this morning in order as illustrated in the image above and select Follow in dump> Memory Address. In the window dump we will see many functions Api.

At **0x00425643** we will set a BP on HW write> Dword to see thẳng will write the address IAT to remember this region.

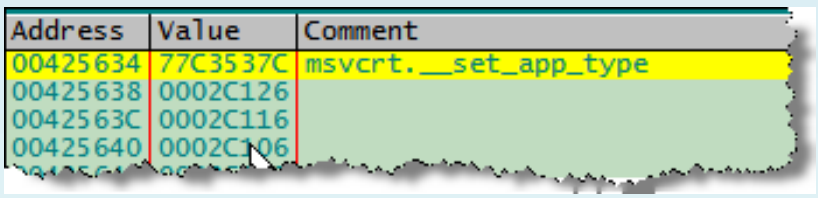


Then **Ctrl + F2** to Restart Olly again. Press **F9** first time we here at Break:

Dom down window dump found no significant (ie not appear correctly Api like Figure above). Press **F9** to continue, at the Break:

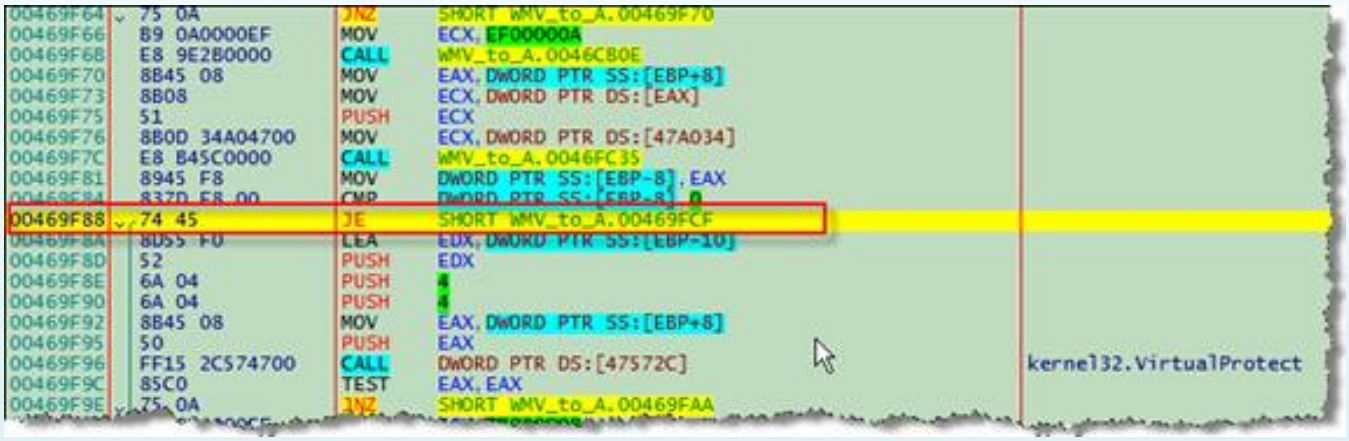
00467B92 5B POP EBX; 7FFDF000

Continue to press **F9** to see the API functions appear similar to the above and we stopped here in Olly:

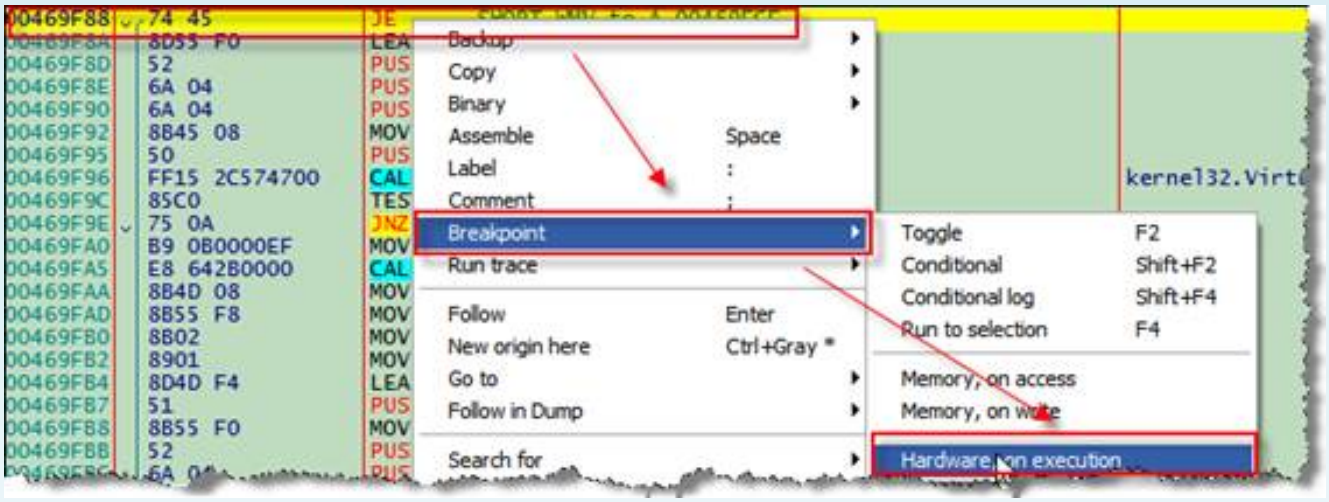


Ok so we are in the area and IAT. Looking down a bit, we'll see a command Call:

Giang in a store that people here that contain the magic jump, it will have to consider cancellation IAT API or khong.Nhan Enter to Call to order in this and look down a bit we will see a command JE-year jump between the two orders jumped JNZ, here is the death of huyet MoleBox the rumor's giang lake.

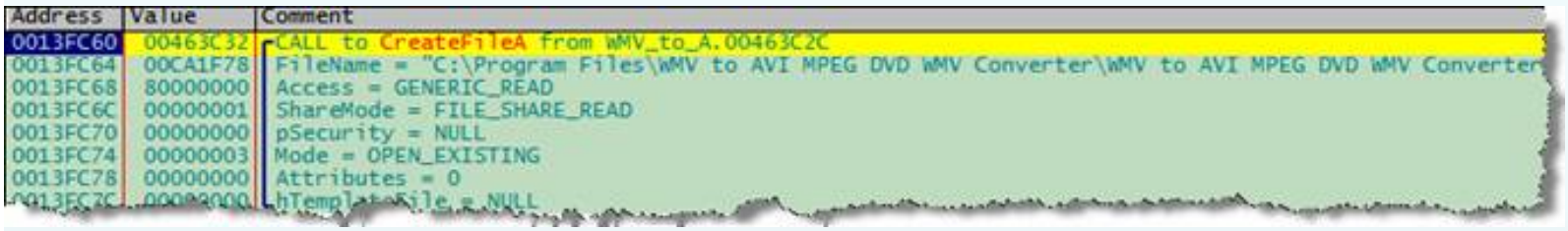


So here we will set a BP on HW execute commands in this dance JE.

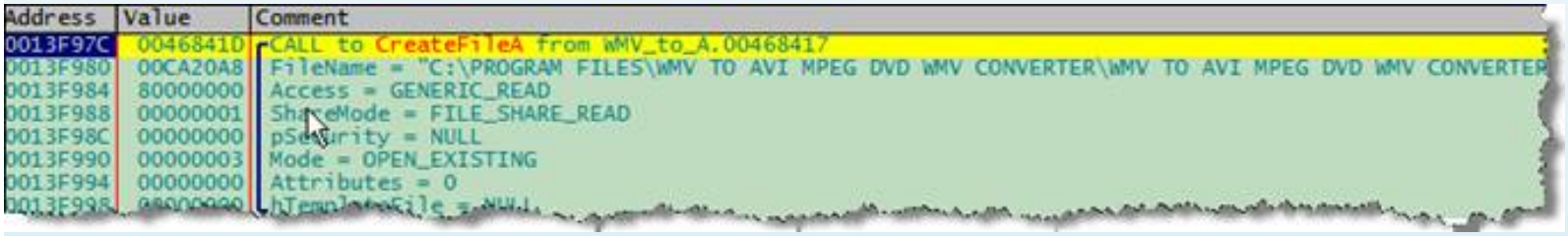


Summarized again at this time we know the OEP of the program and know the magic jump. Next we need to know and get the file that MoleBox created as above. Press **Ctrl + F2** to restart the Olly, an **CreateFileA BP.**

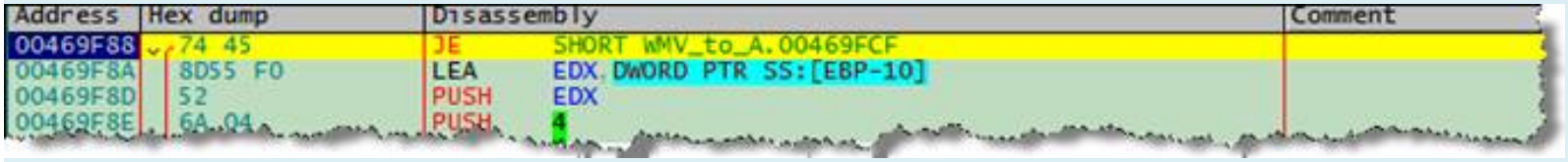
So we have 3 BP 1 BP in Call EAX, BP and 1 at CreateFileA execute on HW jump in orders. Now we press F9 to run the program, we will Break 1 times here:



F9, the Break times 2:

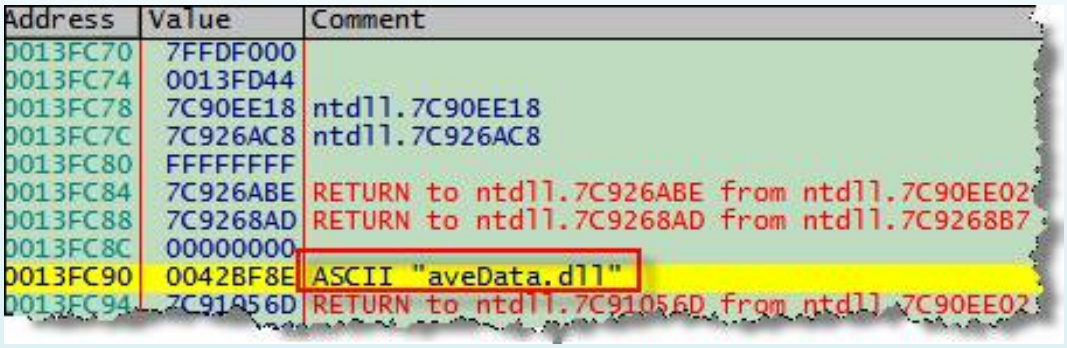


F9, the Break 3 times but this is the magic jump at Break:

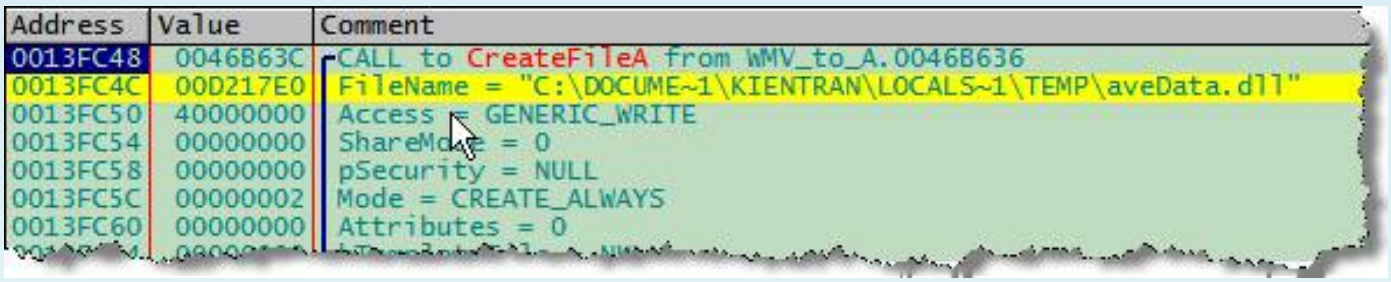


Press **Space Bar** and Jmp to change, and put BP on HW to execute here. Then click to **F9,** we pass through by the IAT canceled until we stop here:

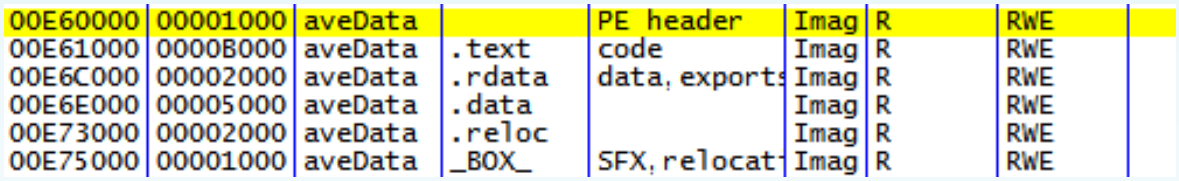
Wow, look, we see to the right place and that. How to know the name of the chain quái qui. Hihi very often simply because it will end up in the Stack of Stack window you look down hairbreadth is found its name:



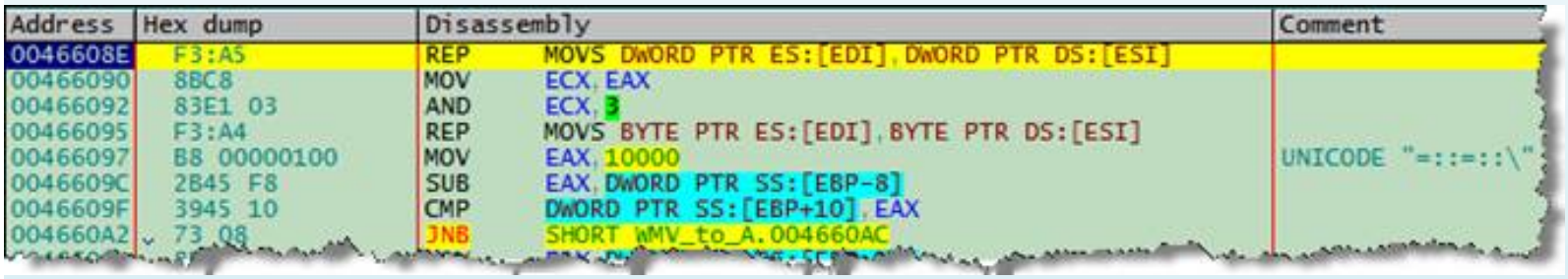
So we will correct the name correctly, Follow in Adrress dump in the image above ('s name contains a banana loang ngoang) and Edit again we will be as follows:



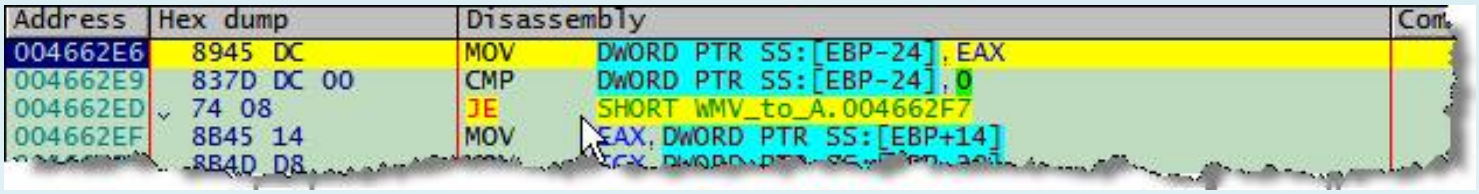
Now you leave BP CreateFileA on, press **Alt + O,** in the **Events** tab select **Break on New modules (dll).** Back to Olly we press F9, we will module.Lai Break in new press **Alt + O** and select **Break on new modules.** Then press Alt + M to open the window memory, where you pull down the search area by Avedata as in the picture below:



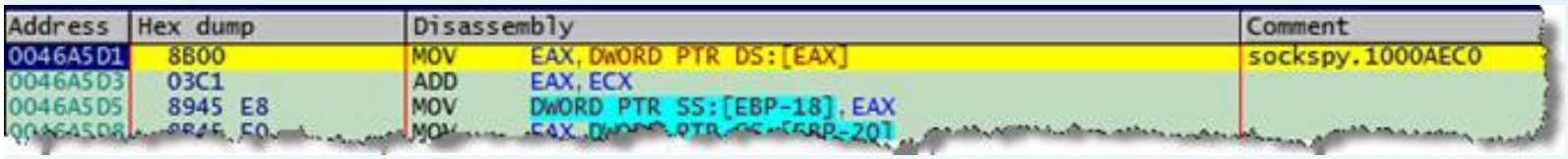
Select section. Text and set a BP on access by pressing **F2.** Next press **F9** to run the program, will Olly ice here:



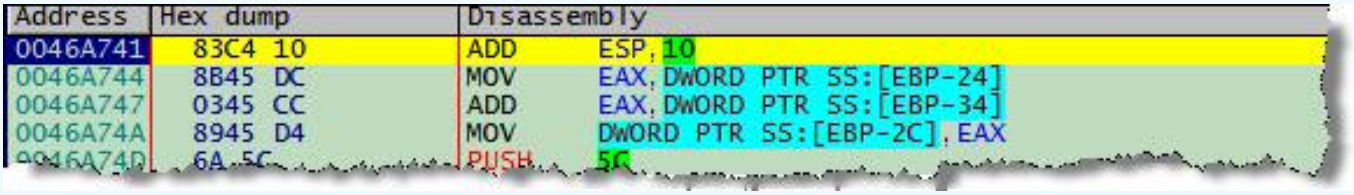
Pull down we found the command: 00466172 C2 0C00 RETN 0C
Set in BP and press **F9,** we will break there. Un BP and press F8 to trace out, we will come:



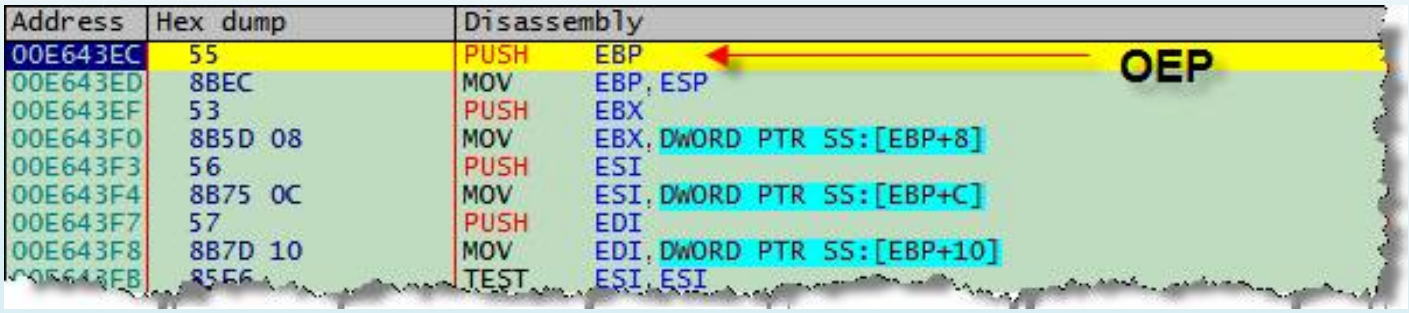
The press **Alt + M** and clay at the BP **section.** AveData of **text.** Press **F9** to run, to break in here:



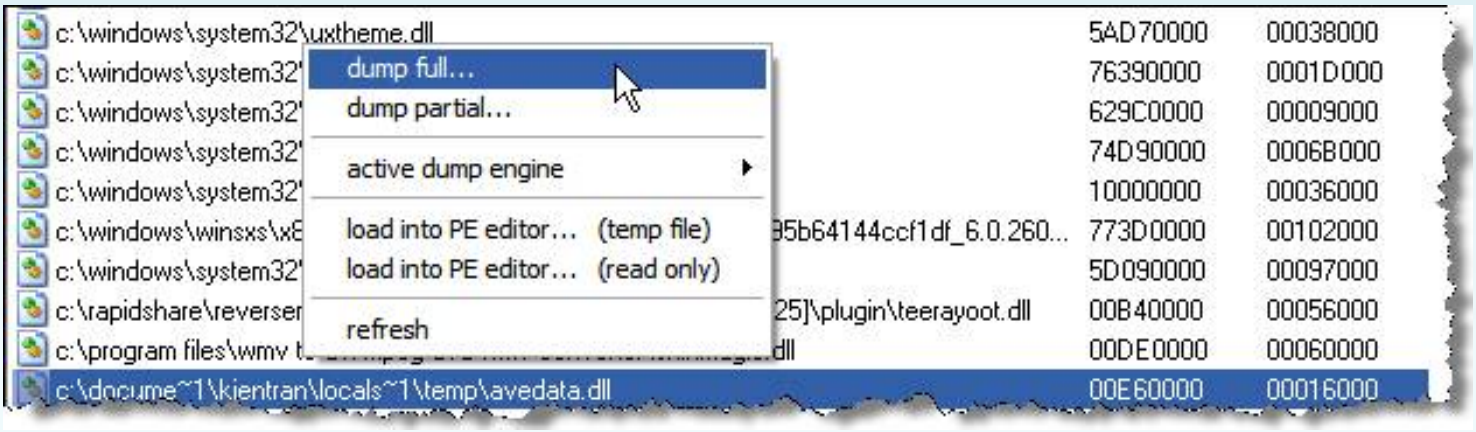
Looking to find command: 0046A5E8 C3 RETN. Set a BP here, press **F9** and Olly will break. Un-BP and press **F8** to trace out here we will:



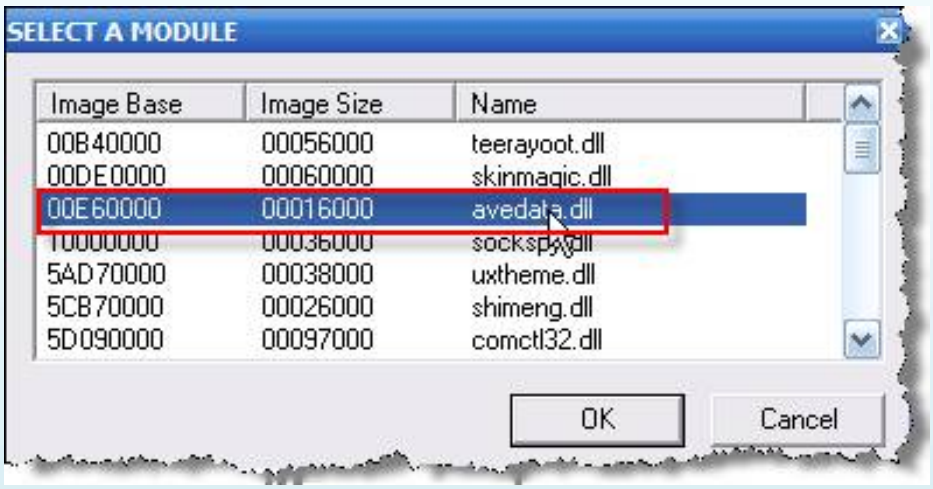
Once again set in the BP **section.** AveData **text** of press **F9,** and we will stop at the OEP aveData.dll.



Then to the attractions here and now we will dump this dll file. Here I used to dump LordPE file. Open LordPE the process and select the modules and find aveData.dll, click to select full dump. Then save your name with a **aveData_dumped.dll:**

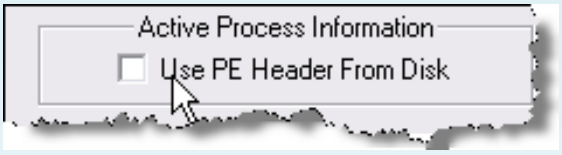


Now conducted Fix IAT for this dll file. ImportRec open up, select the Process then click Pick dll we are as follows:

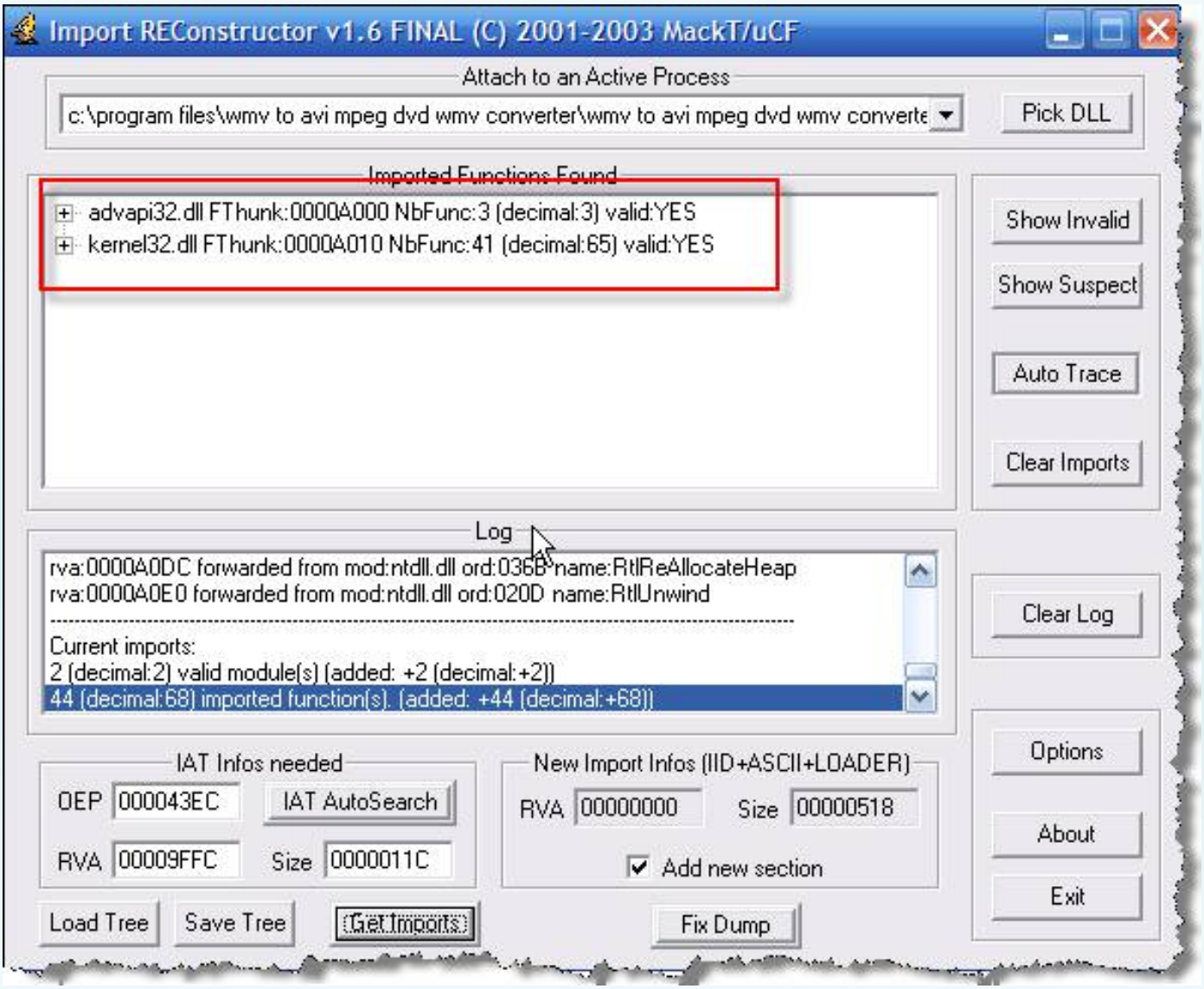


Click OK to select, we will see ImageBase and size is wrong:

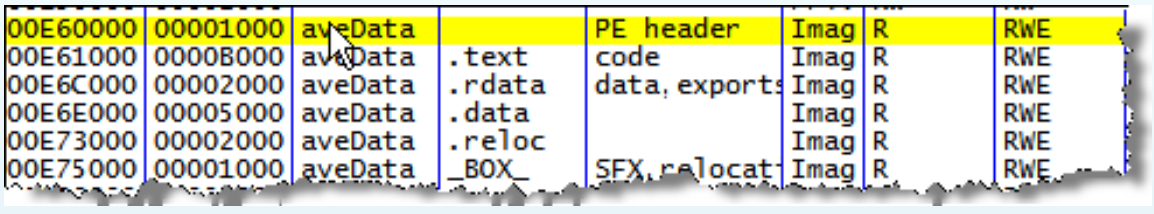
Click on Options in ImportRec and select:



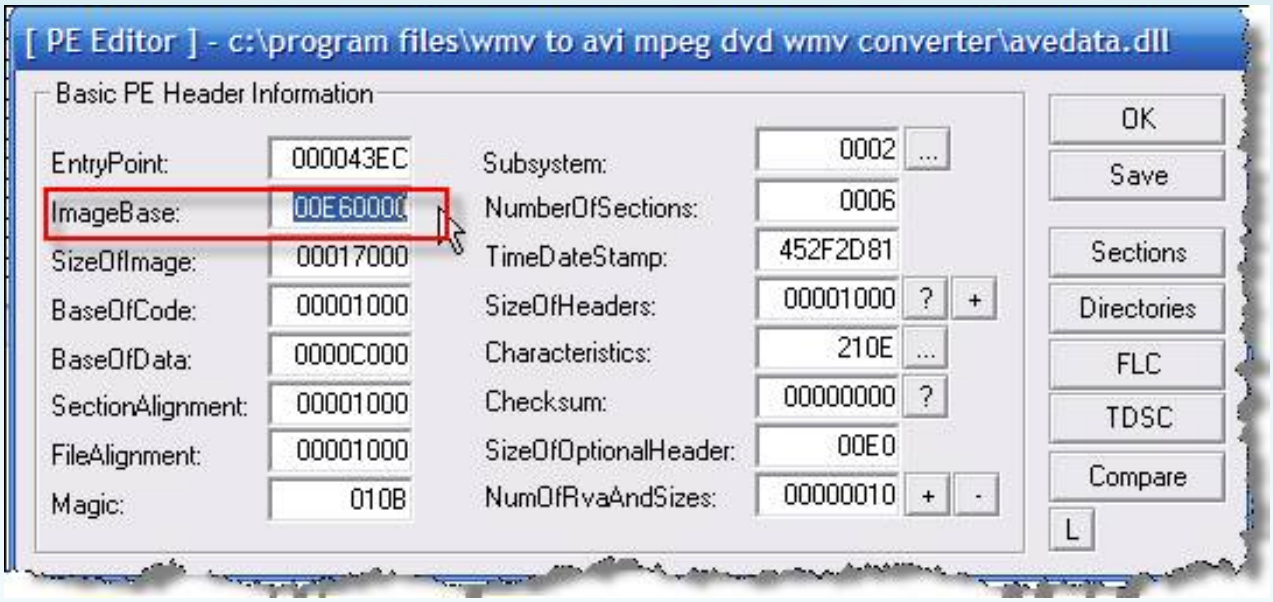
VBy OEP has filled hours we will fix ImageBase later. Hihi in previous pictures we see aveData start at 0x00E60000 (ImageBase), OEP that we find in the Olly 0x00E643EC so here OEP's file on the disk is = **0x00E643EC - 0x00E60000 = 0x43EC.** Fill in the OEP to ImportRec, click Search and IAT Get Auto Imports we have been as follows:



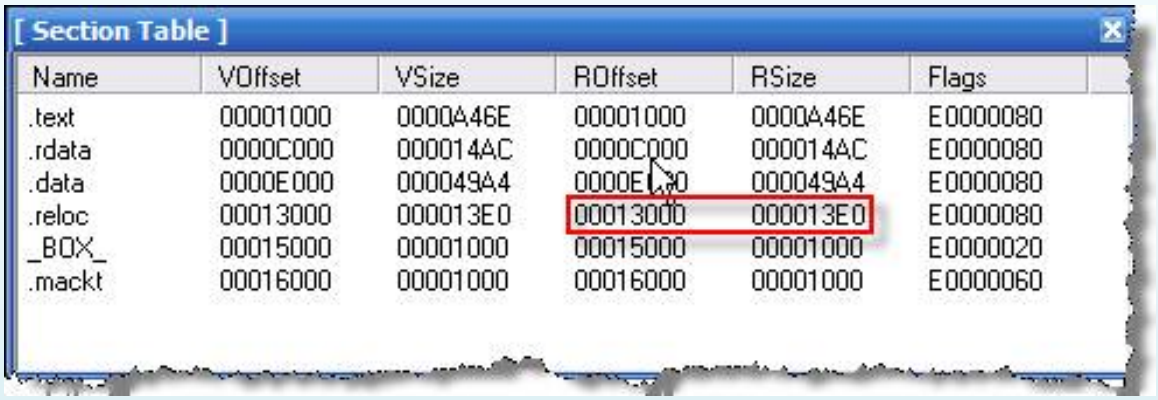
Conduct Fix dump dll files for which we have full dump with LordPE. ImportRec Close to rename the file aveData.dll. The next step we will conduct Fix ImageBase and Reloc of this dll file. Learn more **about. Reloc** section in PE lessons and tutorials written by Trickyboy. First is ImageBase, we will see one in the dump file ImageBase any, in Olly press Alt + M we have been as follows:



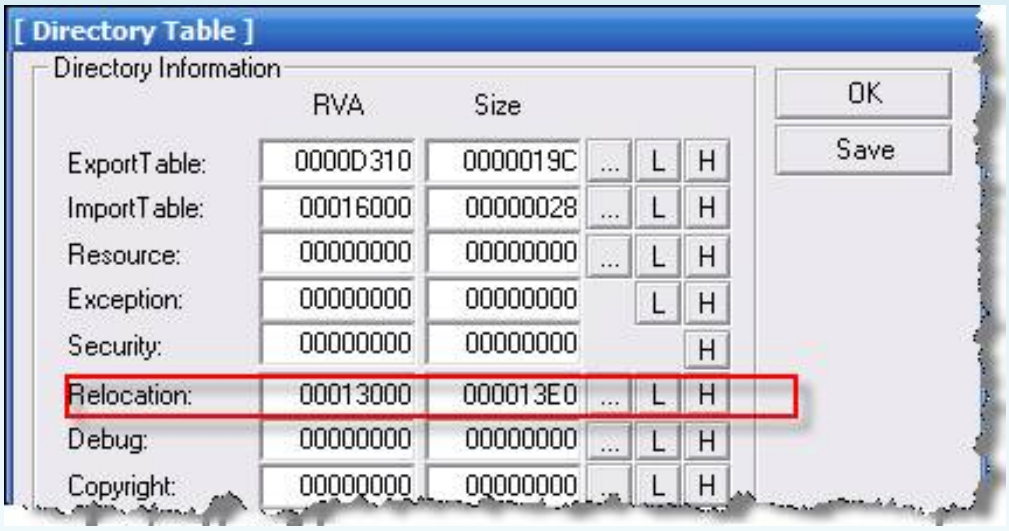
Address PE Header is ImageBase, so we have a ImageBase **0x00E60000.** Open selected LordPE PE Editor and select aveData.dll then revised ImageBase:



Click Save to save them ImageBase. Now **to. Reloc,** click Sections we have the following information:

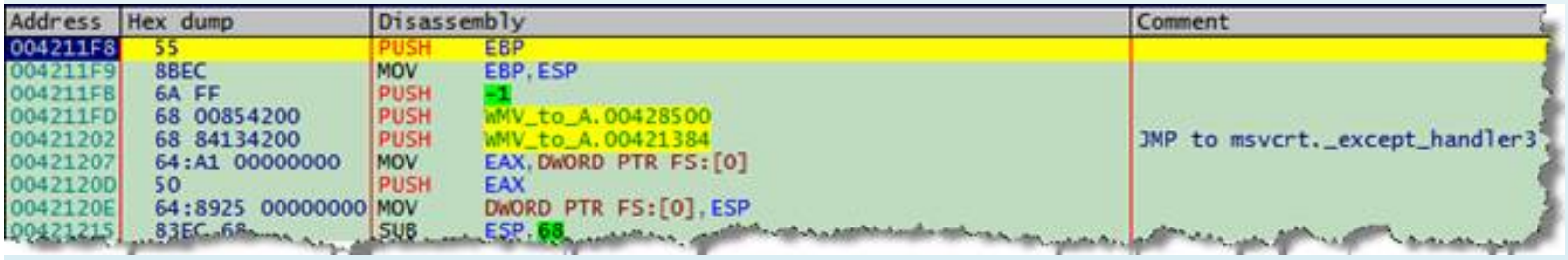


Back to Olly we see section. Reloc start at 0x00E73000. Get this value will be less ImageBase us Raw Offset: **0x00E73000 - 0x00E60000 = 0x00013000.** That is exactly Roffset not need to correct, is probably to fix the Rsize but here I plunge after it đấy. Back to LordPE click Directories Relocation and revised as below:

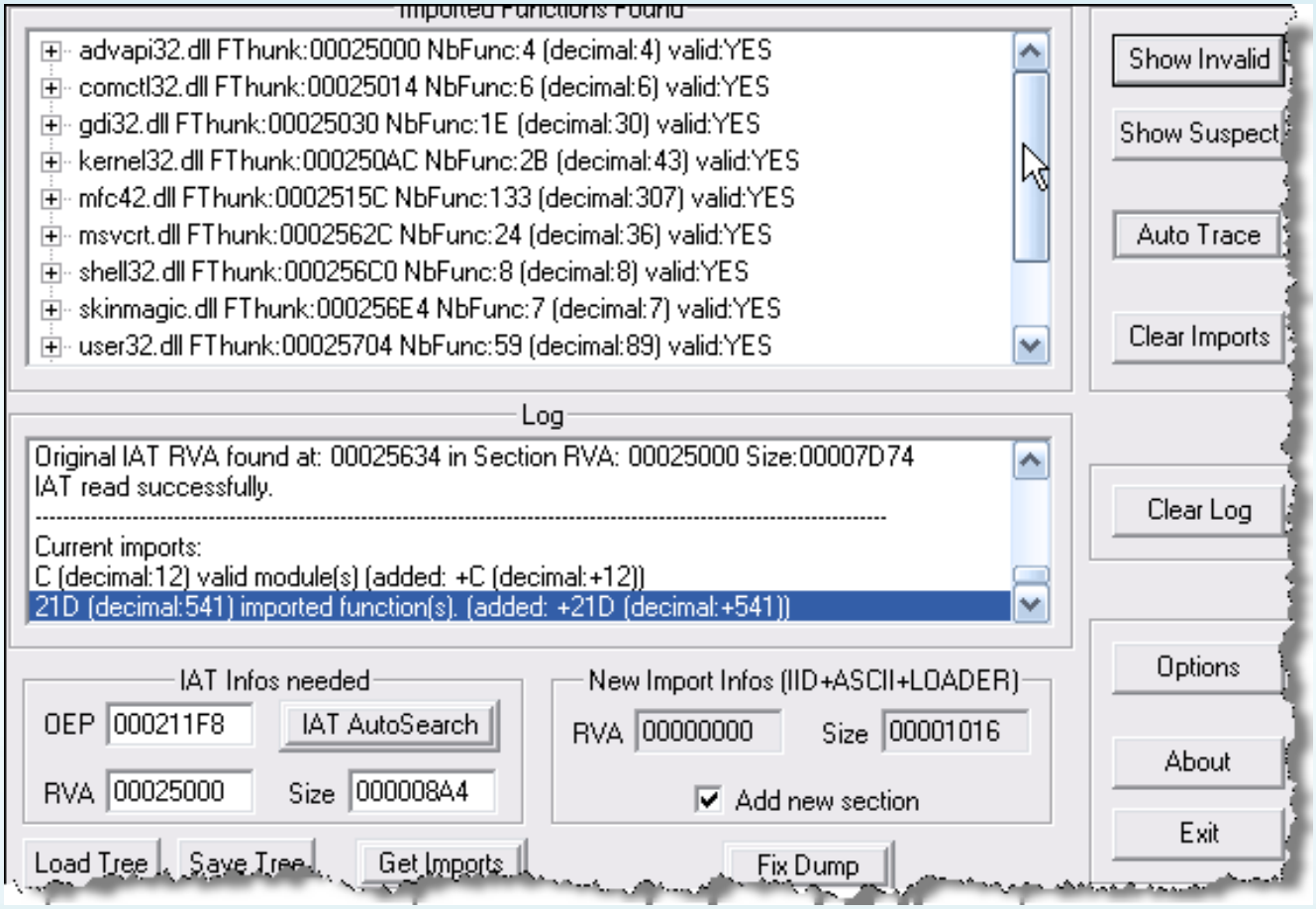


Click Save to save. Then it is finished and part or most interesting. Next is to dump the main file. Now on to review and remove all of the BP go only to the per-BP in order Call EAX only. Then press **Shift + F9** a play, we will stop me in this order:

Un-BP go, press **F7** to Trace Call in order we will stop OEP's main modules:



Conduct Fix IAT dump and only the owners do more chần ka ka J , a forgotten memory you choose to leave the Option has been selected in ImportRec time we fix dll file nhé. If done properly will be as follows:

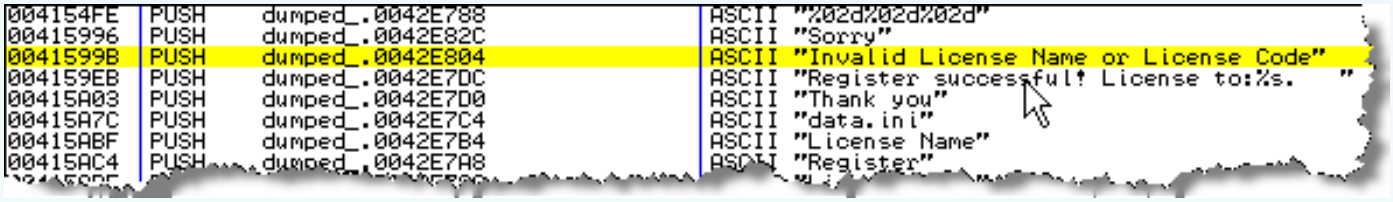


No one is invalid, Fix dump and run the test concerns not any more tolerable J . Wow file dumped_.exe we've run too mượt keke.Neu your run it is please do from the beginning nhé!

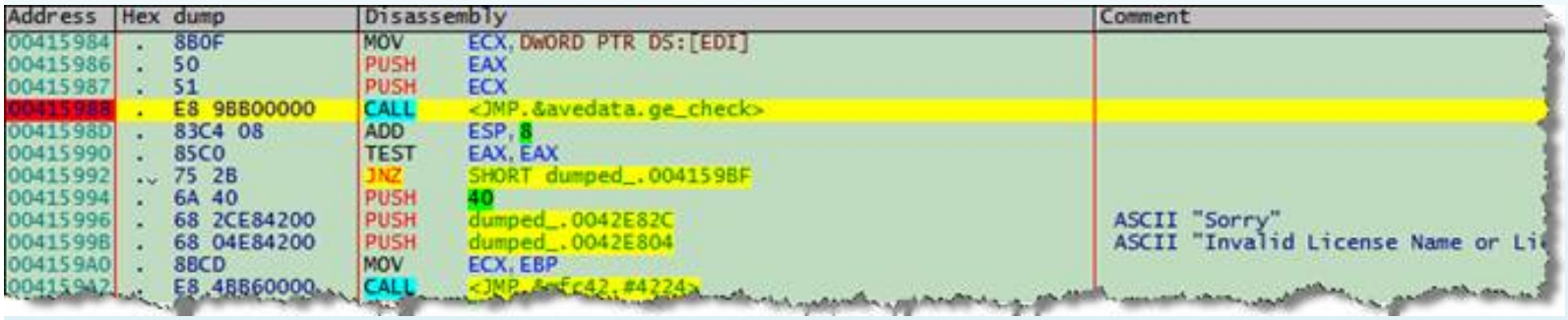
IV. Serial Fishing

Next we'll take care of the crack of this program. Okie dumped_.exe load the file in Olly, press F9 to run the program and enter the username and the serial, click Register immediately receive the following:

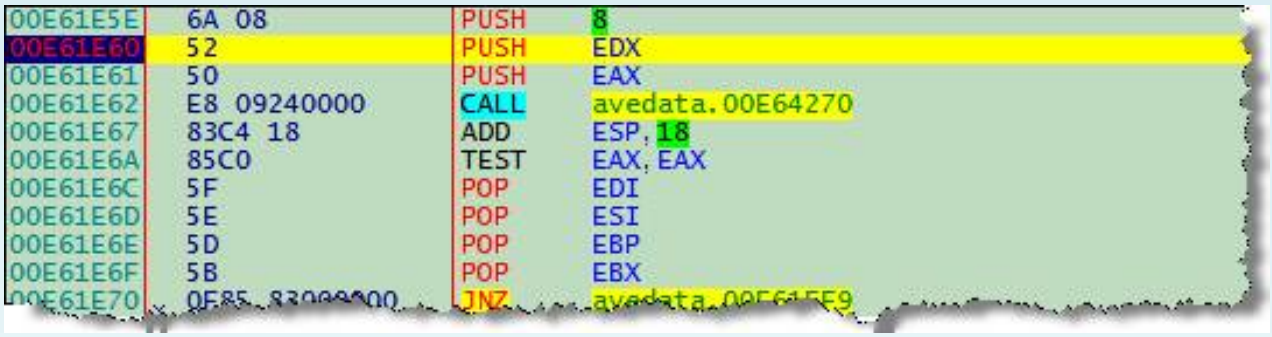
Search String in Olly we see on the series here:

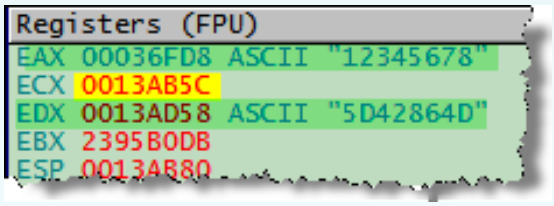


Follow this address we will be in here in Olly:

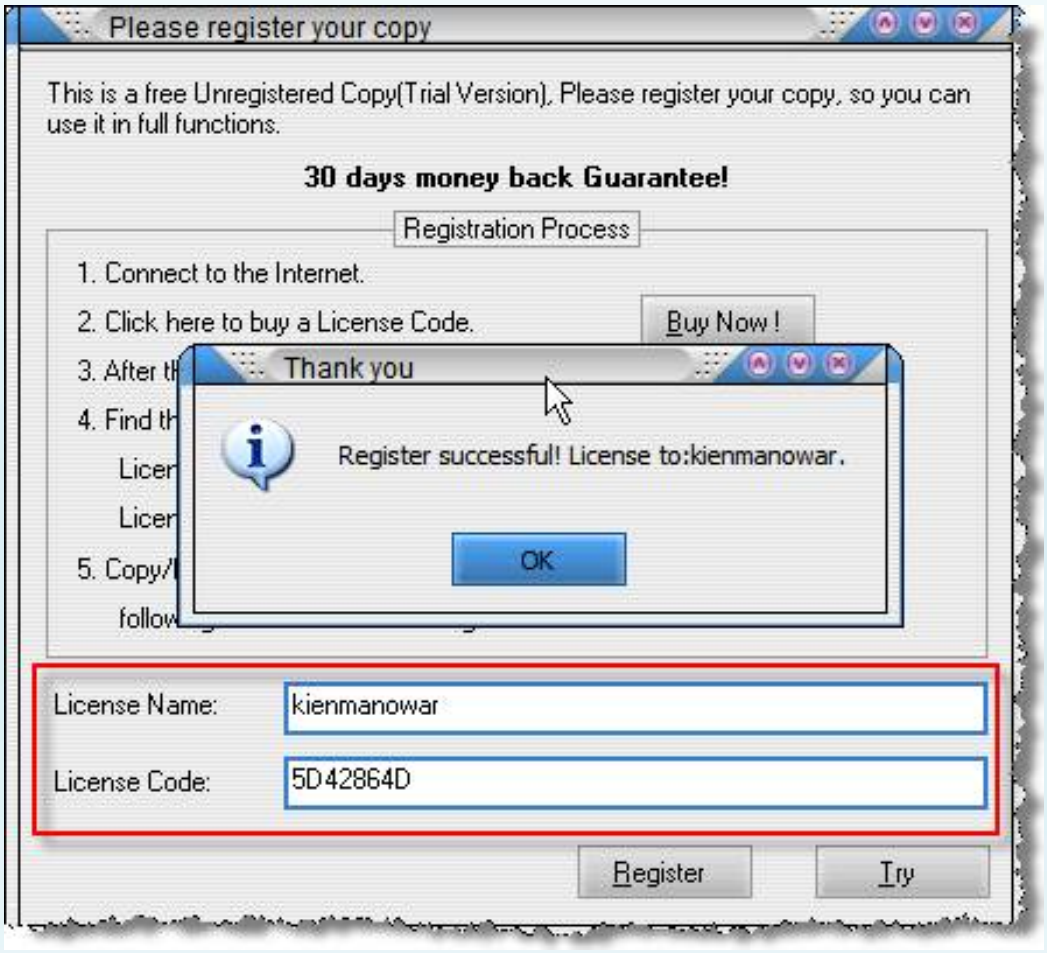


Dịch up some of you set a BP at **0x00415988** same as in Figure tren.Sau the press F9 to run, enter UserName Fake Fake Code and then click Register, we will break in the jaw in Olly. Press F7 to Trace in order to Call this, if you're interested in keygen then analyze kĩ the order in which my goal is just Fishing should not need my attention. After a trace I also need to be given to:





Wow with a user name: kienmanowar the right code is: **5D42864D.** Close Olly, run the program try to enter user name and corresponding code .... Bup tolerable Done! J



The program will immediately file a birth data.ini to save the information registered by the ta. Vay is finished, I ended permission message here!

Best Regards
_ [Kienmanowar] _

--++--==[Greatz thanks to]==--++--
My family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Merc, Hoadongnoi, Nini ... all REA's members, TQN, HacNho, RongChauA, Deux, tlandn, light.phoenix, dqtln, ARTEAM .... all my friend, and you.

Thanks to --++--==[ ]==--++--
iamidiot, WhyNotBar, trickyboy, dzungltvn, takada, hurt_heart, haule_nth, v. hytkl. v.. You have contributed greatly to the REA. Hope you will continue to promote J

I want to thank **Teddy Roggers** for his great site, Reversing.be folks (especially **haggar),** Arteam folks **(Shub-Nigurrath, MaDMAn_H3rCuL3s)** and all folks on crackmes.de, thank to all members of **unpack.cn** (especially **fly** and **linhanshi**). Great thanks to **lena151** (I like your tutorials). And finally, thanks to **Ricardo NARVAJA** and all members on **CRACKSLATINOS.**

>>>> If you have any suggestions, comments or corrections email me: **kienmanowar [at] reaonline.net**

KaGra Tutorials

Translated and written by: kienmanowar

Manual
unpacking
Morphine
1.4 - 2.7

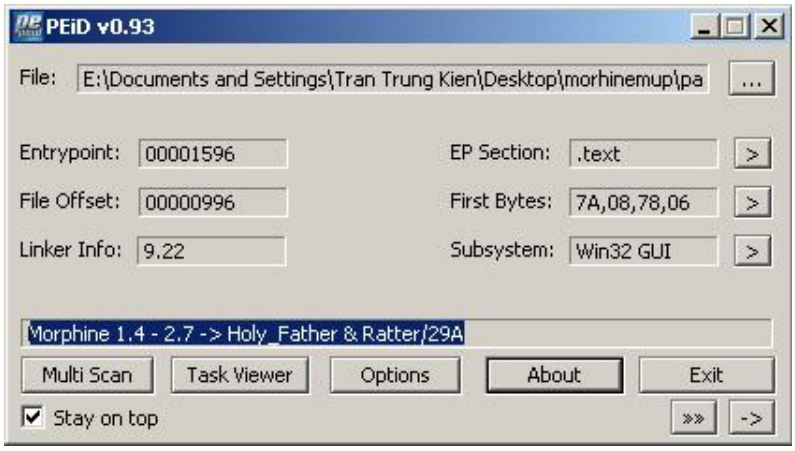
Information	Unpacking for Newbie's
Target	**Target.exe**
Available	http://www.reaonline.net
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, PEid 0.93, Lord PE 1.4, Plugin Command Line, ImpRec v1.6f.
Protection	**Morphine 1.4 - 2.7**
L Evel	Beginner
Category	Manual unpacking
Author	KaGra (February 06 2005)

1. Introduction

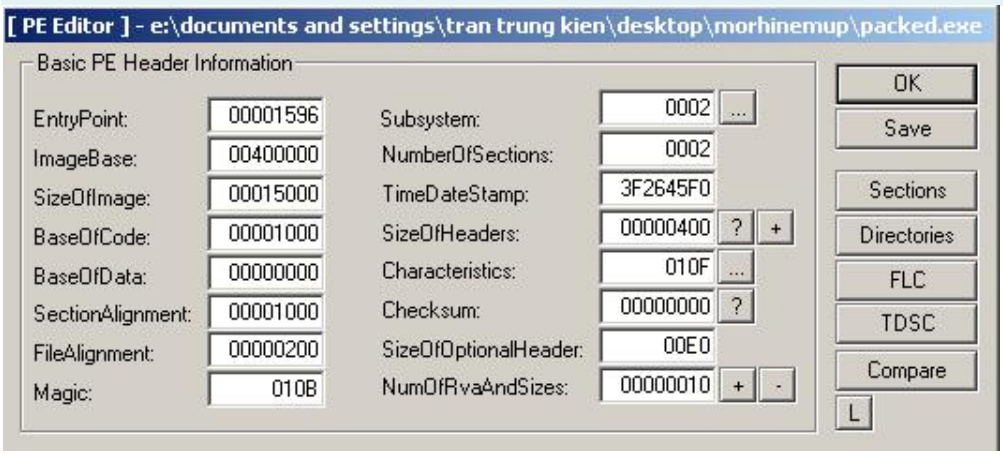
This article will guide you unpack **Morphine 1.4 - 2.7.**

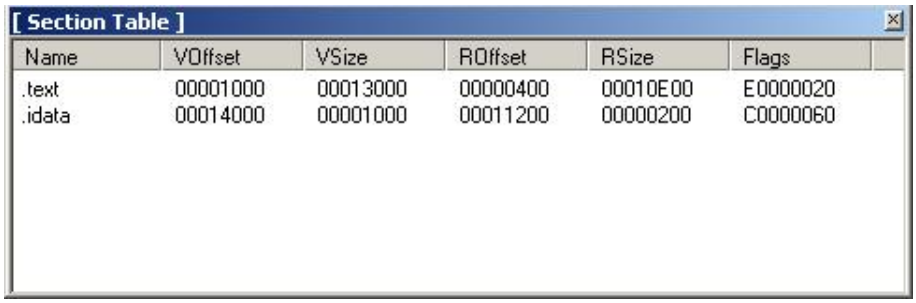
PE 2.Detect and get info

PEid use to detect, we know the following:



Use **Lord PE 1.4** to search for more information:

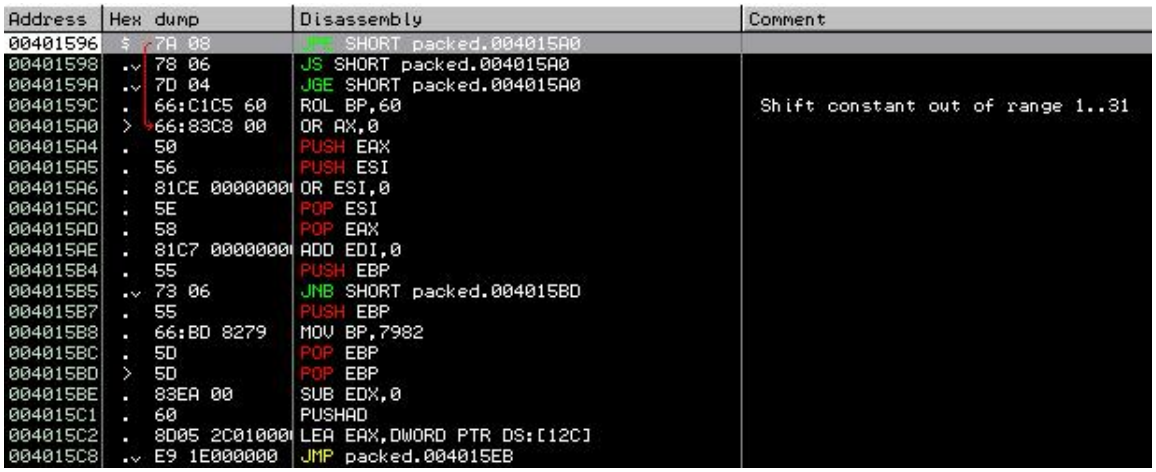




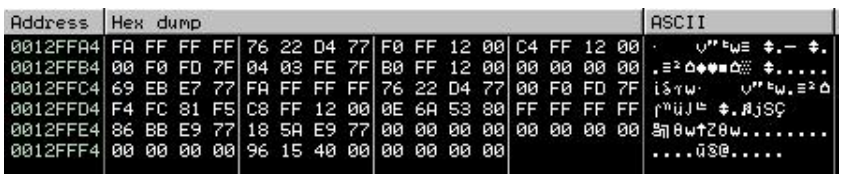
So we have been as follows: EntryPoint is: 1596, ImageBase always is: 400000.

3.Finding the Original Entry Point

After the above information, we open and Olly Load target in Olly.Chon **Yes to Ananlysis** and we will stop at **EntryPoint:**



Oki, after Load in Olly finished, the next set a BP at **004015C1** and press **F9.** Olly Ice will address **004015C1.** Delete points BP set this, press **F7** to enforce order **PUSHAD.** Transfer Register through window, right click on the bar and write **ESP Follow in dump.** We have been as follows:



Highlight 4 bytes at **0012FFA4,** then right click and select **BreakPoint-> Hardware-on**

access> DWORD, press **Ctrl + F9** (can you get a message like this: **"Bad or unknown format ... "forget** it and just click OK final press **F7** we will stop here:

Address	Hex dump	Disassembly	Comment
004010E9	5E	POP ESI	USER32.77D42276
004010EA	5D	POP EBP	
004010EB	83C4 04	ADD ESP,4	
004010EE	5B	POP EBX	
004010EF	5A	POP EDX	
004010F0	83C4 08	ADD ESP,8	
004010F3	894C24 04	MOV DWORD PTR SS:[ESP+4],ECX	
004010F7	FFE0	JMP EAX	

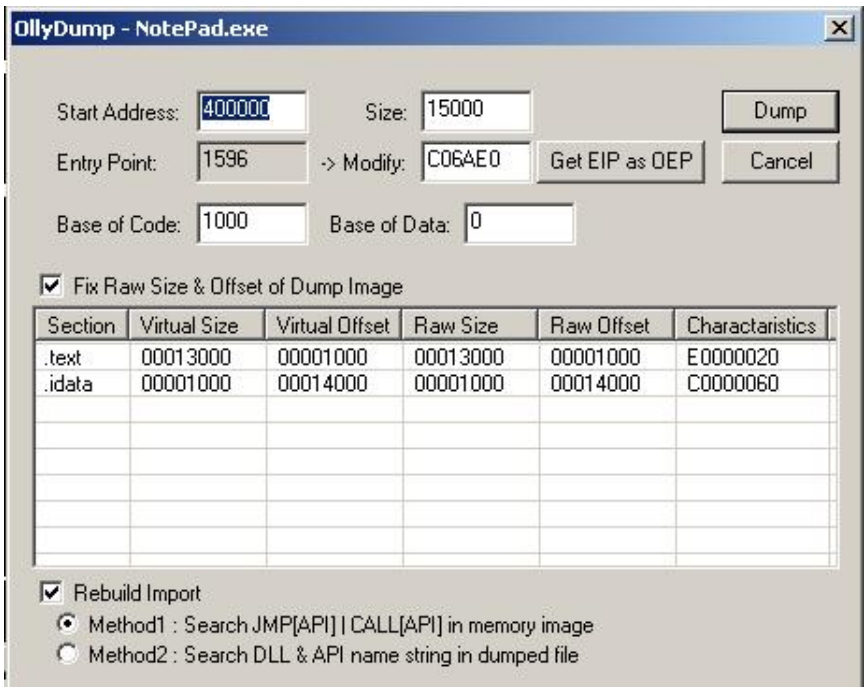
Oki, at a command **004010F7** jump to OEP. Now we delete Hardware breakpoint by the **Debug-> Breakpoints Hardware-> Delete** to delete. Then we perform lenh jump at **004010F7** and we will stay in **OEP:**

Address	Hex dump	Disassembly	Comment
01006AE0	6A 70	PUSH 70	
01006AE2	68 88180001	PUSH packed_1.01001888	
01006AE7	E8 BC010000	CALL packed_1.01006CA8	
01006AEC	33DB	XOR EBX,EBX	
01006AEE	53	PUSH EBX	
01006AEF	8B3D 4C110001	MOV EDI,DWORD PTR DS:[100114C]	kernel32.GetModuleHandleA
01006AF5	FFD7	CALL EDI	
01006AF7	66:8138 4D5A	CMP WORD PTR DS:[EAX],5A4D	

OEP so that we are **01006AE0.**

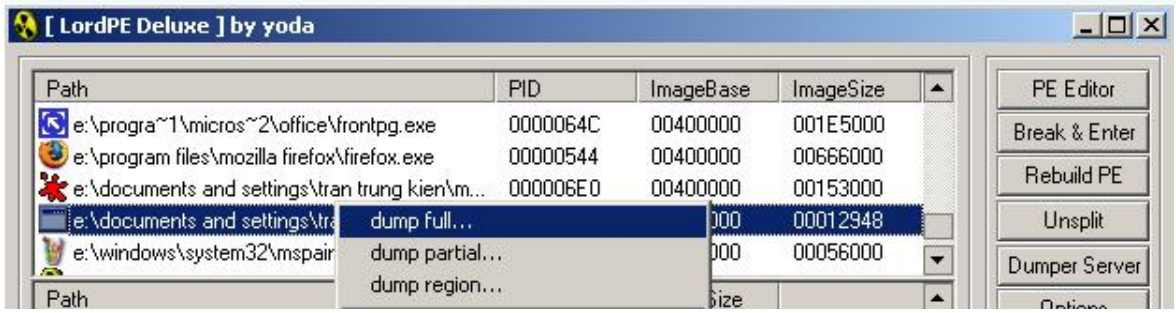
4. Unpacked dumping our files

At **01006AE0,** we try to dump in the Plugin with Olly. Click to select and **dump debugged process.** We will see the following:



Start address: 00400000 Size: 15000
Entry Point: 1596 Modify: C06AE0

Now we will change the value in the Modify the value of our OEP (01006AE0 = 01000000-6AE0) and value in the Start Address of 01,000,000. **Rebuilt** select **Import** and click Dump.Ac we can not dump the no.Vay we will try to dump it in LordPE see why. LordPE open up, select the program that we want to dump, **dump** your mouse to select **full:**



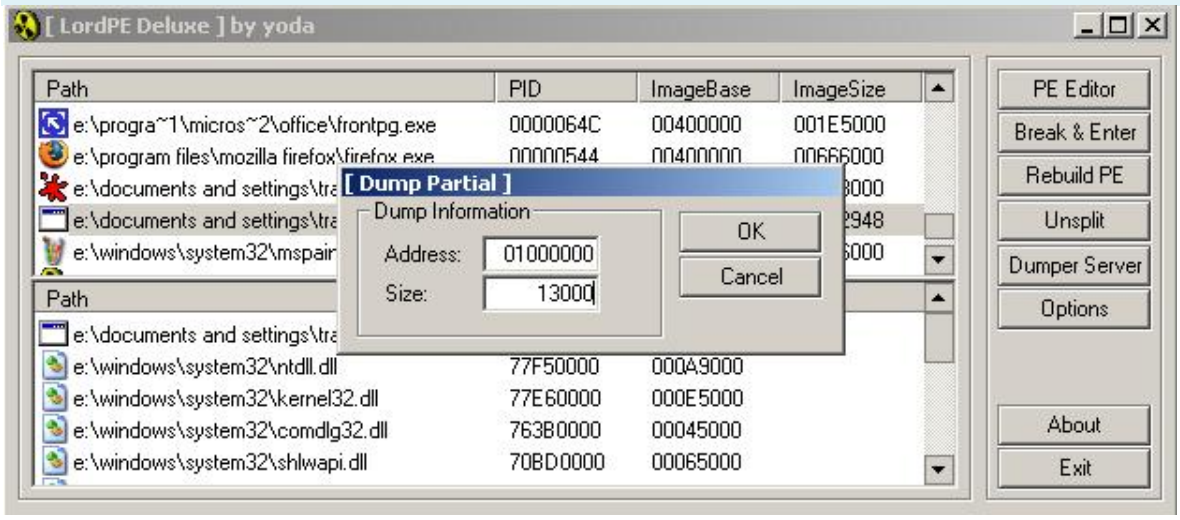
Oki, the dump file to complete dumped.exe we try to run it. The crash is now (it does not run and it is not because of the IAT (well, this packer does not do anything with IAT, like UPX)). Why is this happening again?
At Olly screen, we press **Alt + M** to open the window Memory map, we will see the following:

Address	Size	Owner	Section	Contains	Type	Access	Initial
00010000	00001000	00010000 (itself)			Priv 00021004	RW	RW
00020000	00001000	00020000 (itself)			Priv 00021004	RW	RW
0011F000	00001000	00030000			Priv 00021104	RW Guarded	RW
00120000	00010000	00030000		stack of ma	Priv 00021104	RW Guarded	RW
00130000	00001000	00130000 (itself)			Map 00041002	R	R
00140000	00010000	00140000 (itself)			Priv 00021004	RW	RW
00240000	00006000	00240000 (itself)			Priv 00021004	RW	RW
00250000	00001000	00250000 (itself)			Map 00041004	RW	RW
00260000	00016000	00260000 (itself)			Map 00041002	R	R
00280000	00034000	00280000 (itself)			Map 00041002	R	R
002C0000	00041000	002C0000 (itself)			Map 00041002	R	R
00310000	00006000	00310000 (itself)			Map 00041002	R	R
00320000	00004000	00320000 (itself)			Priv 00021004	RW	RW
00330000	00003000	00330000 (itself)			Map 00041002	R	R
00340000	00001000	00340000 (itself)			Priv 00021004	RW	RW
00350000	00001000	00350000 (itself)			Priv 00021004	RW	RW
00360000	00002000	00360000 (itself)			Map 00041002	R	R
00370000	00003000	00370000 (itself)			Priv 00021004	RW	RW
00380000	00002000	00380000 (itself)			Map 00041002	R	R
00400000	00015000	00400000 (itself)			Imag 01001002	R	RWE
00420000	00003000	00420000 (itself)			Map 00041020	R E	R E
004E0000	00002000	00420000			Map 00041020	R E	R E
004F0000	00103000	004F0000 (itself)			Map 00041002	R	R
00600000	00074000	00600000 (itself)			Map 00041020	R E	R E
01000000	00013000	NotePa_1 01000000 (itself)		PE header	Priv 00021040	RWE	RWE
70BD0000	00001000	SHLWAPI 70BD0000 (itself)		PE header	Imag 01001002	R	RWE
70BD1000	0005A000	SHLWAPI 70BD0000	.text	code,import	Imag 01001002	R	RWE
70C2B000	00002000	SHLWAPI 70BD0000	.data	data	Imag 01001002	R	RWE

Well, actually that Packer was a change the contents of memory and Olly now think that only a single Section of exe file is run, starting at Adress is 01000000 and the size is 13,000 . Hold the window Olly this, we will open a window and Olly Load up exe files (not run), press **Alt + M** to open a window similar Memory map:

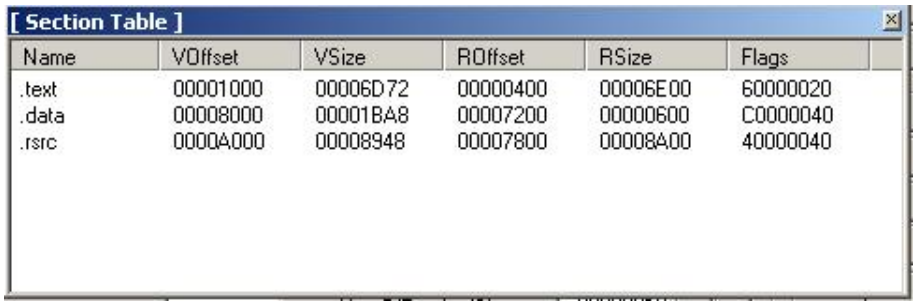
Address	Size	Owner	Section	Contains	Type	Access	Initial	Map
00010000	00001000	00010000 (itself)			Priv	RW	RW	
00020000	00001000	00020000 (itself)			Priv	RW	RW	
0011F000	00001000	00030000			Priv	RW Gua	RW	
00120000	00010000	00030000		stack of main thread	Priv	RW Gua	RW	
00130000	00001000	00130000 (itself)			Map	R	R	
00140000	00010000	00140000 (itself)			Priv	RW	RW	
00240000	00006000	00240000 (itself)			Priv	RW	RW	
00250000	00001000	00250000 (itself)			Map	RW	RW	
00260000	00016000	00260000 (itself)			Map	R	R	
00280000	00034000	00280000 (itself)			Map	R	R	
002C0000	00041000	002C0000 (itself)			Map	R	R	
00310000	00006000	00310000 (itself)			Map	R	R	
00400000	00001000	NotePad 00400000 (itself)		PE header	Imag	R	RWE	
00401000	00013000	NotePad 00400000	.text	code	Imag	R	RWE	
00414000	00001000	NotePad 00400000	.idata	imports	Imag	R	RWE	
77E60000	00001000	kernel32 77E60000 (itself)		PE header	Imag	R	RWE	
77E61000	00075000	kernel32 77E60000	.text	code,imports,exports	Imag	R	RWE	
77ED6000	00003000	kernel32 77E60000	.data	data	Imag	R	RWE	
77ED9000	00066000	kernel32 77E60000	.rsrc	resources	Imag	R	RWE	

Well, we'll see Header beginning with 00400000 Size is 1000, Code Section 13000 is the Size and Size imports section of the 1000 (total of 15,000). Oki, after observing all the above, the authors believe that the only section in the first memory image may include all of the Section (PE header, code and imports), although [it is the smaller size in 2000 (13,000 = 1000 for sure the PE header and 12,000 for two otherz)]. Therefore, we will dump file by using the function partial dump. LordPE Open up, get selected Process. Click right, select **partial dump ....** We change the value in 2 box is: Address: 01000000, Size: 13000. Similarly as follows:

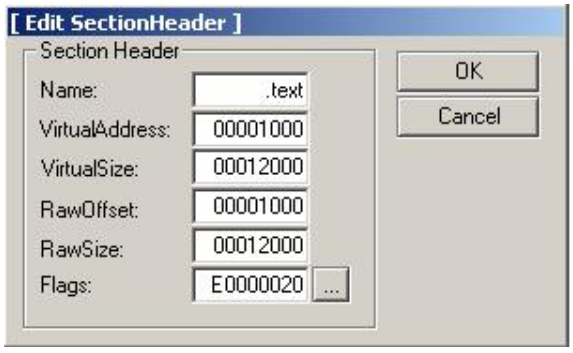


5. Editing Section in the file Dumped

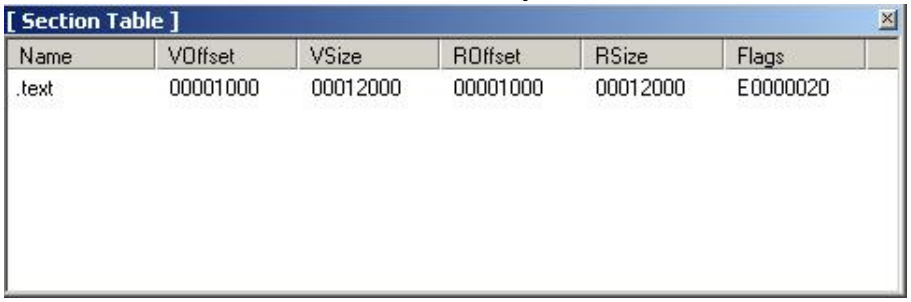
After we finished dump, remains the same window LordPE, use the open file **PE Editor dumped.exe.** Then select the Sections, we are as follows:



Change the value in Section text by right clicking on it and choose Edit section header image ... as illustrated below:



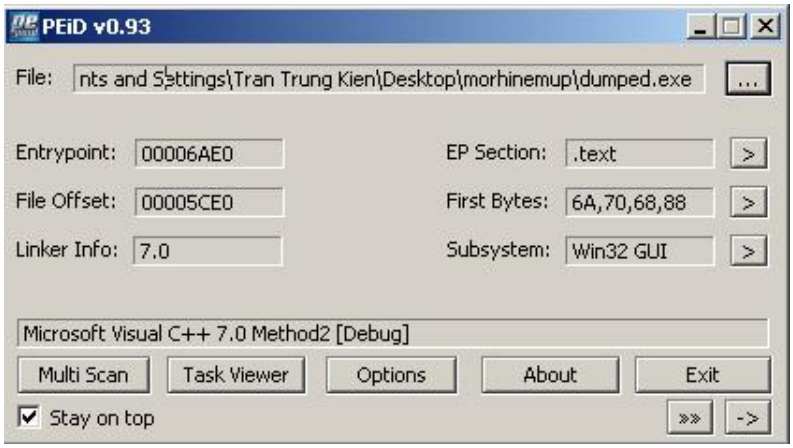
Click OK, then delete the rest of Section 2 only to retain the text section:



Finally, we used to LordPE Rebuilt the file **Dumped.exe**

6. Testing Our Unpacked file

Oki, a test file we Unpacked. Yup! It works.
Used to Detect PEid again we have been as follows:



So **Morphine 1.4 - 2.7 -> Holy_Father & Ratter/29A** was successful unpack. Have fun:)

7. Conclusion

My Greetz to: tlandn (supported me this tut) and KaGra (author of this tut)
To thank my family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Hoadongnoi, Nini ... all REA's members, HacNho, RongChauA, Deux .... all my friend, and YOU!

Written by **kienmanowar** (tutorial date: HaNoi 14/03/2005)

.:: [MUP NTkrnl_Protector_0.1]::.

(_kienmanowar_)

I. Foreword

What day of the week is it, huh? Hic! During this week, I have to work hard and very busy K . Today is Sunday and I am free, so I decided to download UnpackMe (PE32bit): **UnPackMe_NTkrnl_Protector_0.1** from Teddy's site and try to manual unpacking it.My tutorial base on the idea of **bpx** from reversing.be. 0k13! L3t's R0ck w1th m3 J

II. Target and Tools

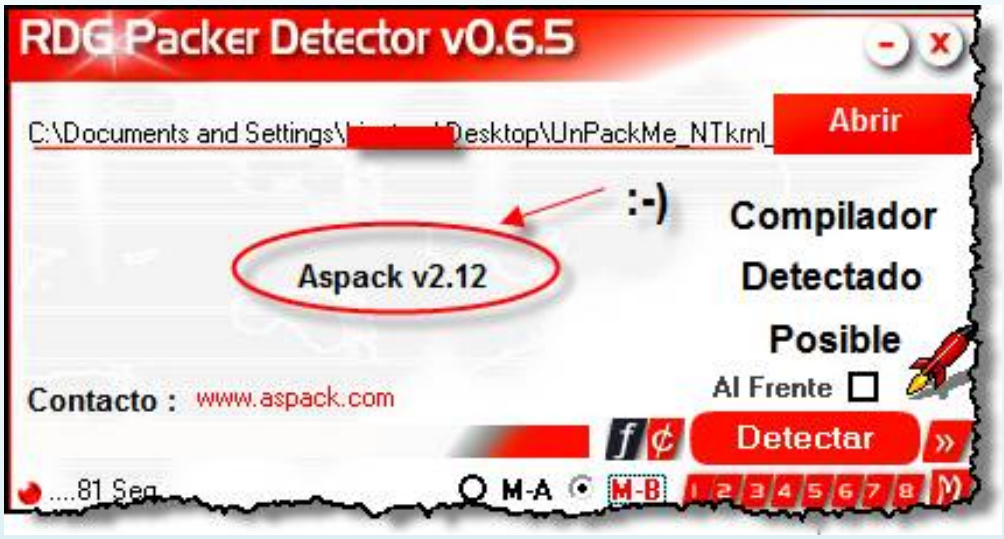
Target:
Name: UnPackMe_NTkrnl_Protector_0.1.m.exe
Home site: http://www.tuts4you.com/

Tools:
Debugger: OllyIce (16/2/07) with HideOD
PE Tools: RDG Packer Detector, PeiD, XPELister, LordPE, ImpRec (with ***nt_krnlprotect_0_1.dll*** plugin)

III. Manual Unpacking

_First, We try to use some famous dectector programs to find information about the target we'll work with:

_ ***RDG Packer Detector:***

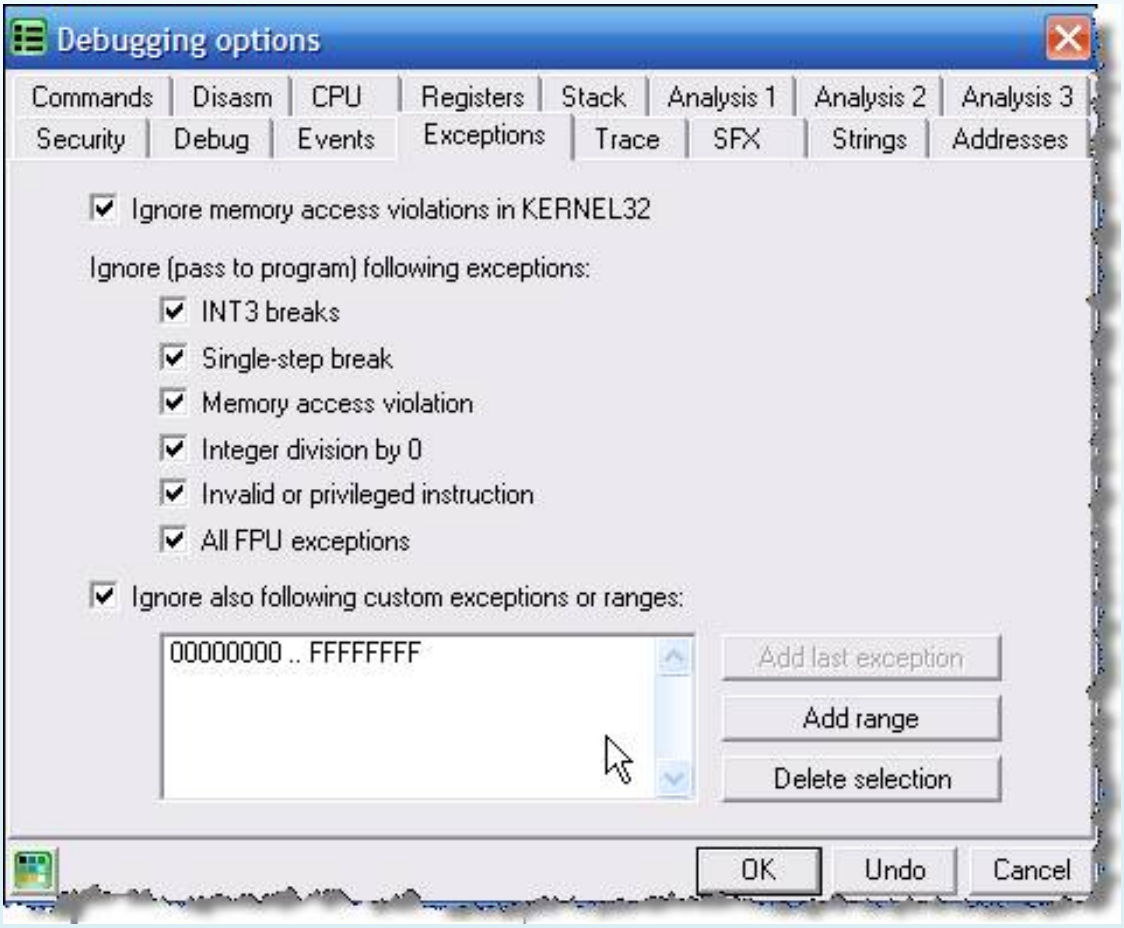


_ ***PeiD:***

RDG dectect this packer can not because of the signature database does not support it for this packer. My PeiD gives me exactly the result because it uses the signatures of J fly.

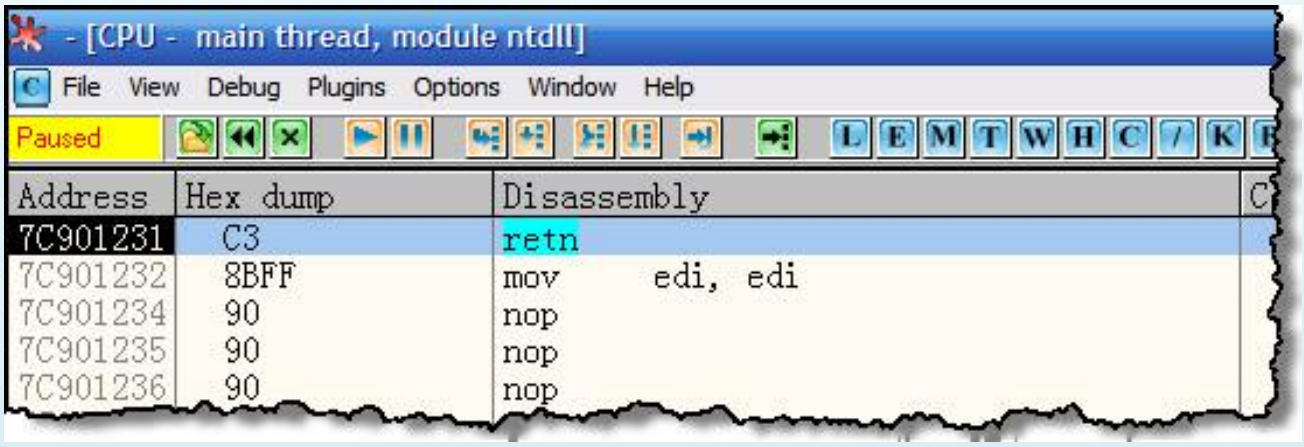
_Now We run me unpack this, it shows me the splash screen protector about this:

_Ok That's enough, now open Olly and configure it like that:

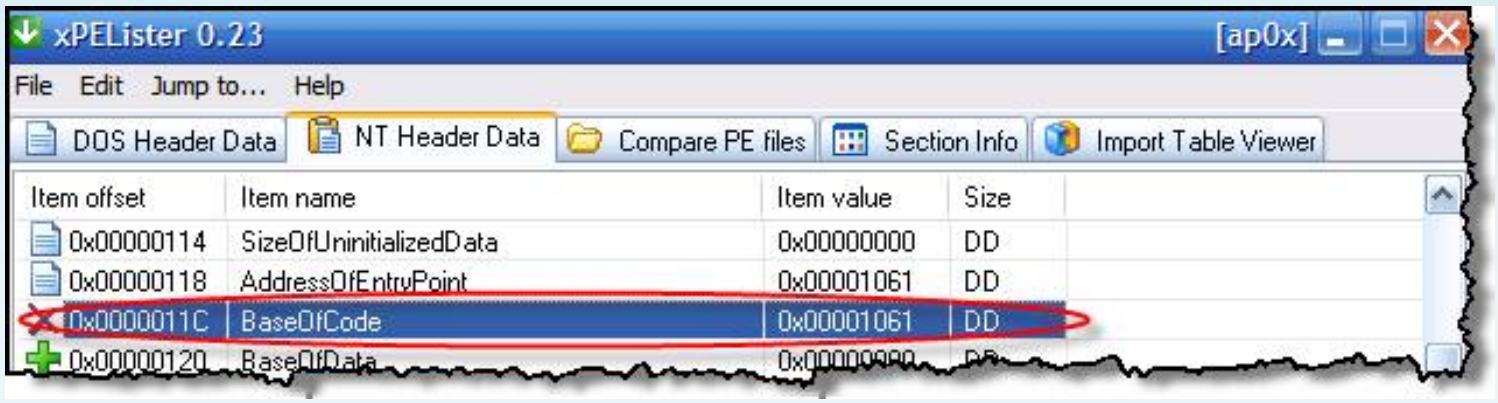


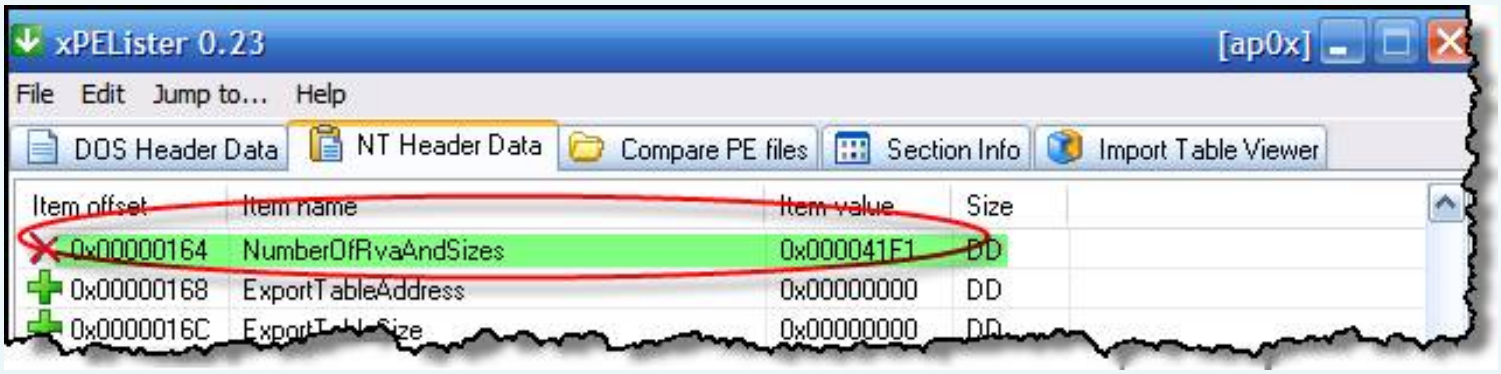
Olly _After configured like above picture, we will load into Olly target, when we get the loading errors L message like this:

_Press Ok, and we stop here in Olly. Huh, not in the main module of this target, we stopped at ntdll module:



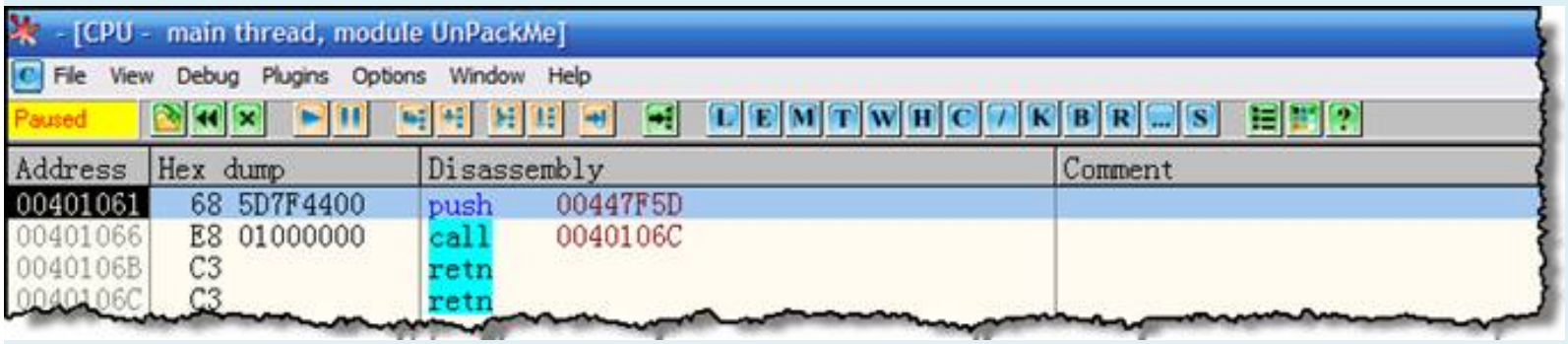
_Ok, Follow the above message, we can guess the target has some errors in PE format. Ok, let's open the **XPELister** tool to check:



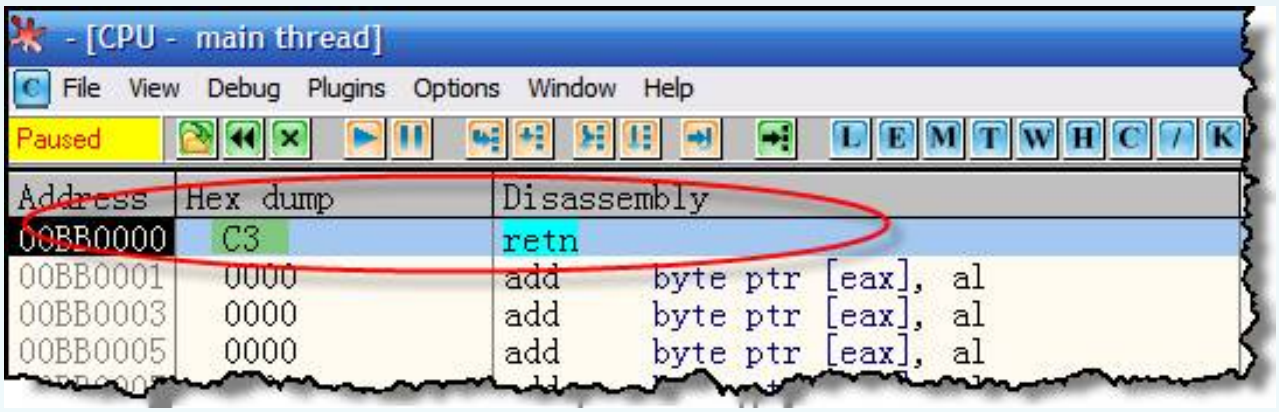


_Ok There are some wrong values, but we only care about values of two **BaseOfCode**

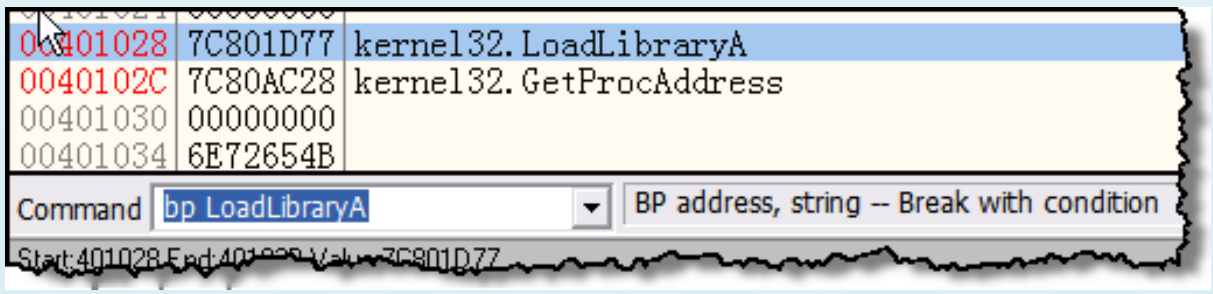
NumberOfRvaAndSizes and as you can see in the pictures above. To defeat the message when we load the target in Olly, we change the value of **BaseOfCode to: 0x1000** and **NumberOfRvaAndSizes to: 0x10.** Reload and save it in Olly, kaka we stop at the EP of this target:



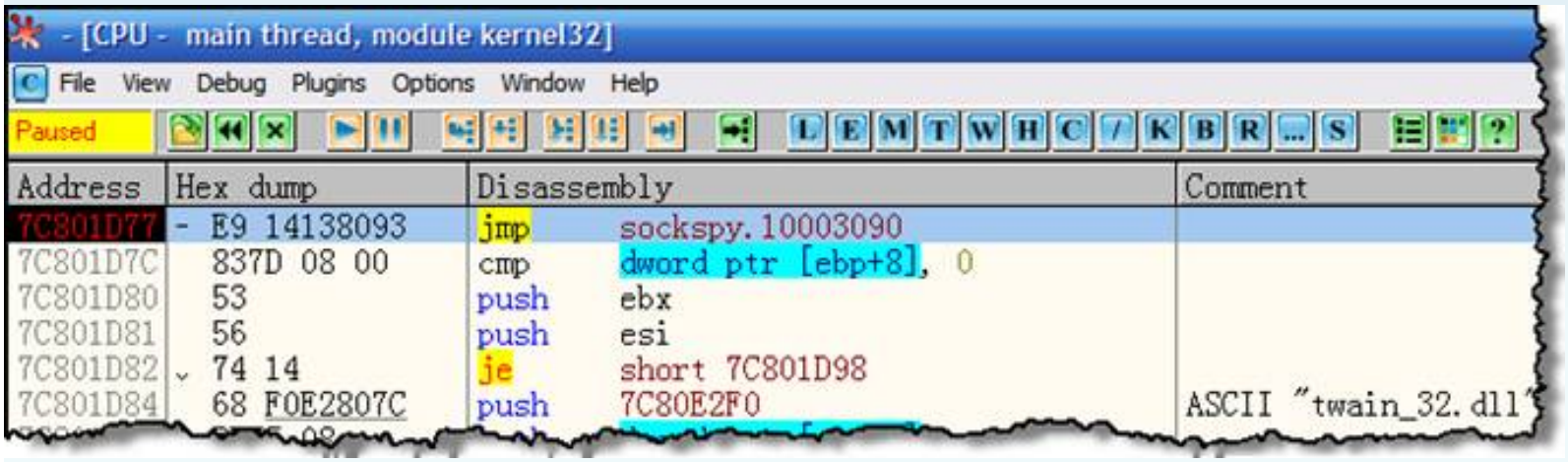
_Notice That the EP in here looks like ASPR entrypoint, compared RDG thinked me unpack this is protected by ASPR J . Use HideOD plugin to hide our Ollydbg and press **F9** to run in our target environment debugged. Hic this target has an anti-debug trick so we stop here:

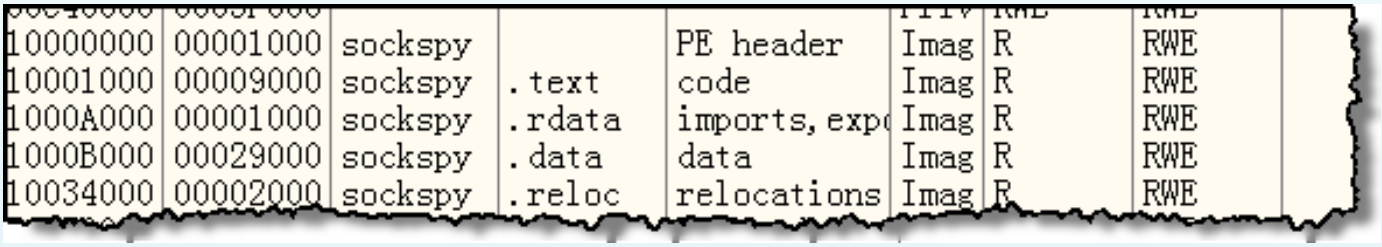


_To Bypass this anti-debug trick, we need to edit **from** the **C3.** Press **Ctrl + E** and edit, then set at BP **LoadLibraryA** API.

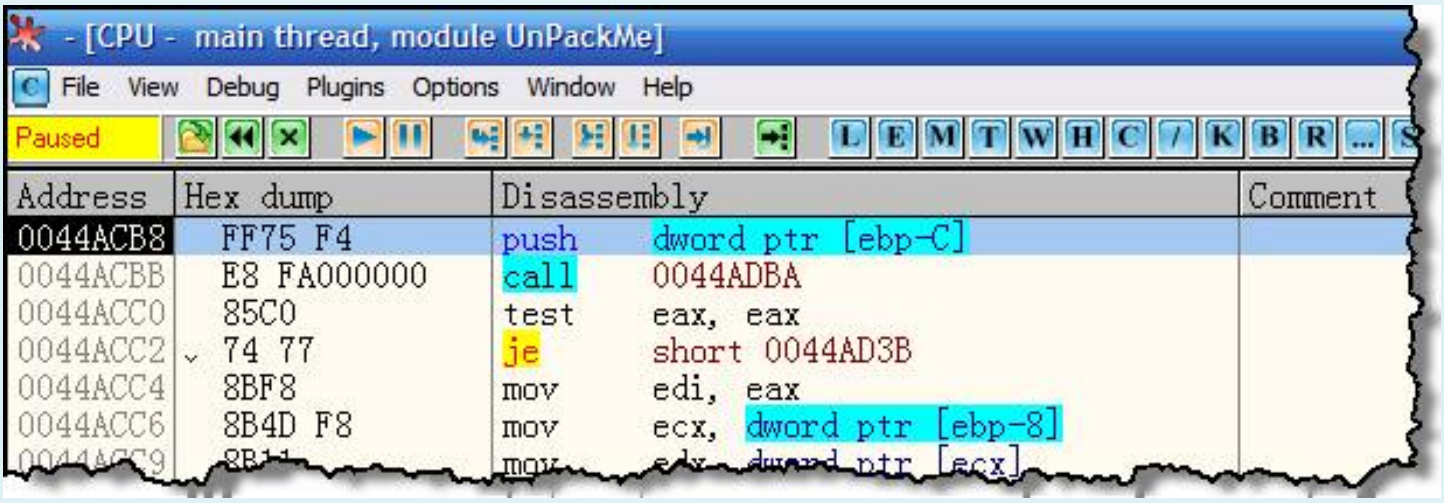


_After We set BP, press **F9** to run we'll stop at the BP that we we set.But in another module:

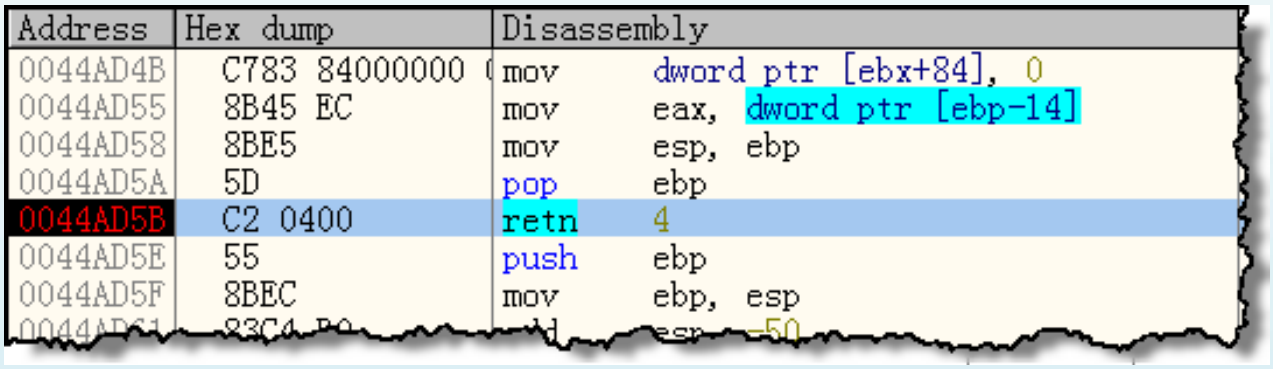




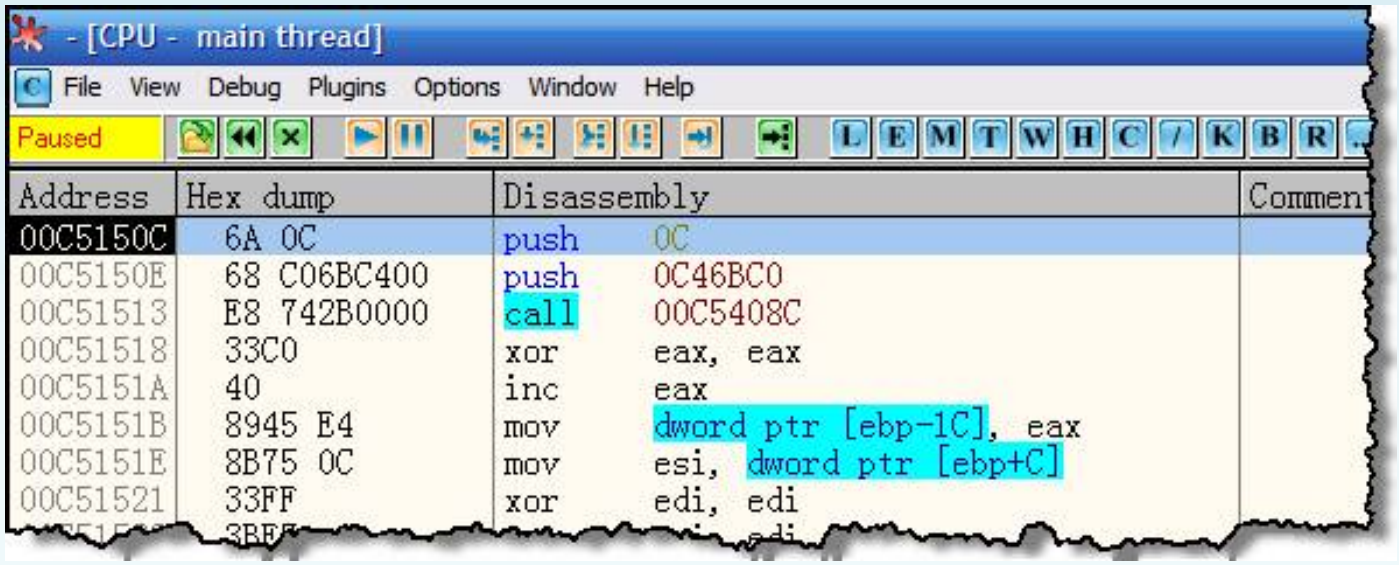
_That's Not a problem, remove and BP press **Alt + F9.** Olly will take me to here:



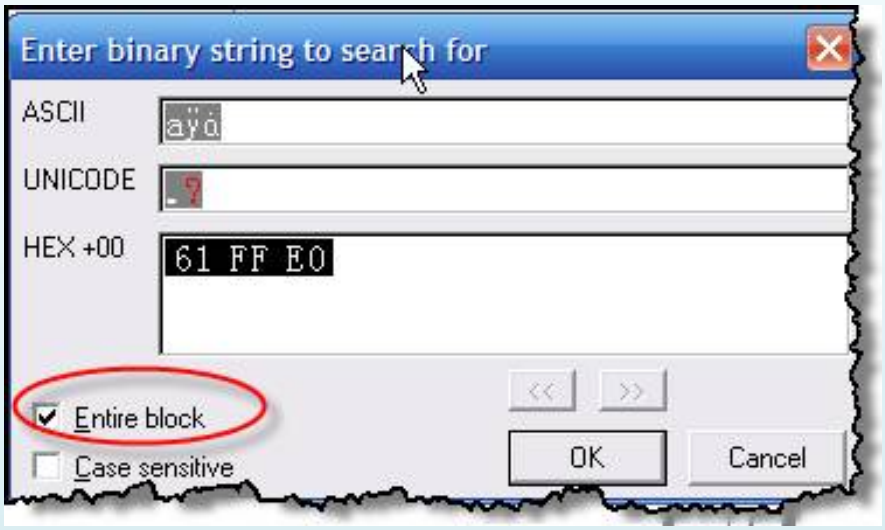
_We Are in the range that call to IAT (import Resolver), now we want to find the code that call to this code. Scroll down and find the **retn** 4th Set BP at this command and press **F9,** we stop here:



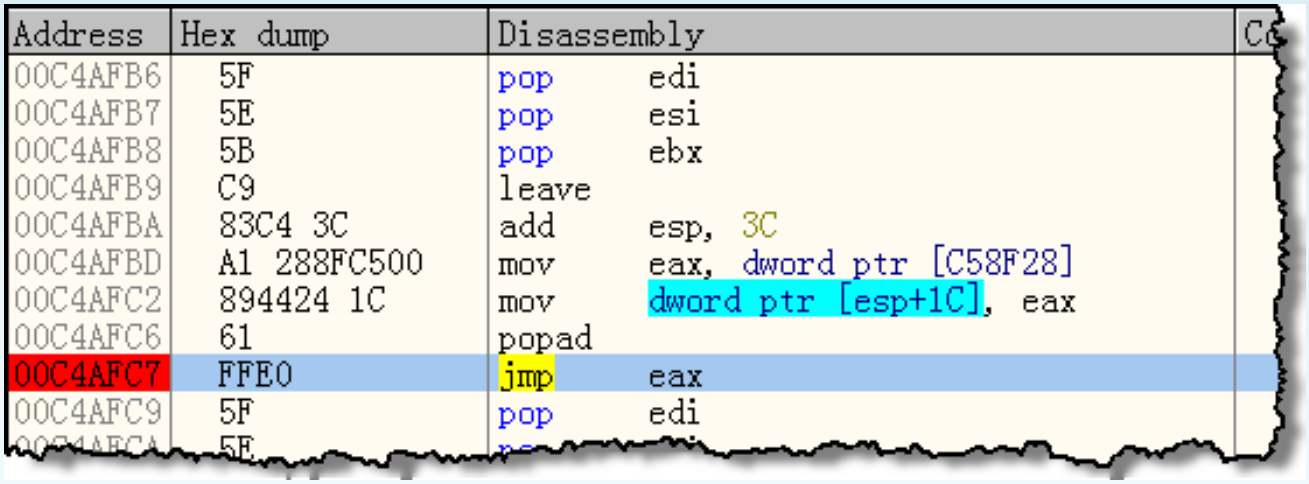
_Remove BP, and press **F8** to trace out the import Resolver. Olly will take our code to call that to the import Resolver. Next, scroll down and we'll see the **call eax** command. Ok, set the BP at this command, press **F9** to run we'll stop at Call eax. BP Remove and press **F7** to trace into this call. We are here:



_Now, Press **Ctrl + B** to find (61 FF E0: popad (61), FF E0 (jmp eax)).

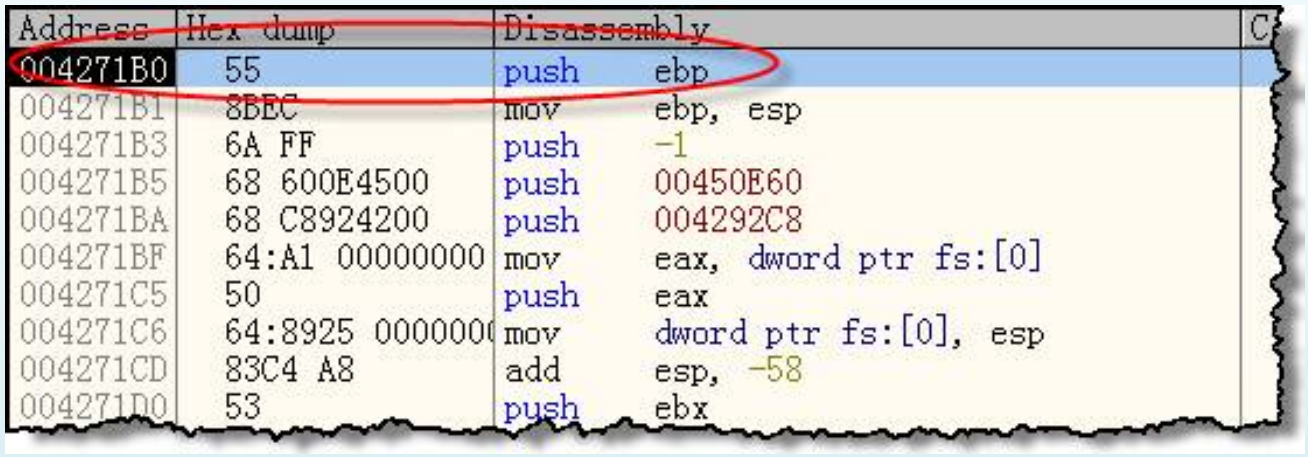


_Skip The first result, press **Ctrl + L** to Find Next and the second result is the final result that we need to find the OEP of this target. Set the BP at the **jmp eax** command.



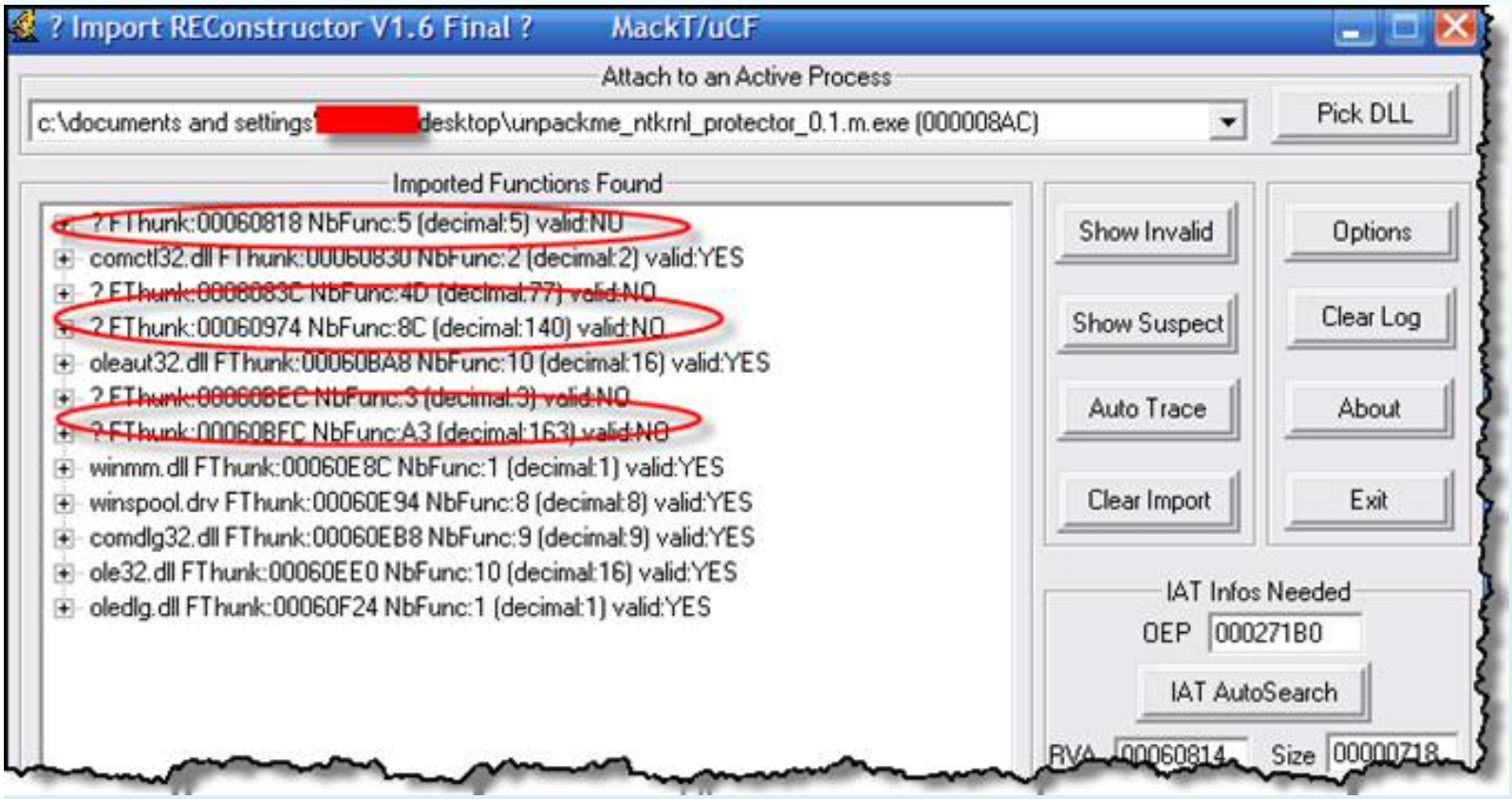
Address	Hex dump	Disassembly	C
00C4AFB6	5F	pop edi	
00C4AFB7	5E	pop esi	
00C4AFB8	5B	pop ebx	
00C4AFB9	C9	leave	
00C4AFBA	83C4 3C	add esp, 3C	
00C4AFBD	A1 288FC500	mov eax, dword ptr [C58F28]	
00C4AFC2	894424 1C	mov dword ptr [esp+1C], eax	
00C4AFC6	61	popad	
00C4AFC7	FFE0	jmp eax	
00C4AFC9	5F	pop edi	

_Press F9 to run the splash screen appears and we stop at the BP. Now remove the BP and press F8, wow kaka we go to the OEP !!!!!!!!!!

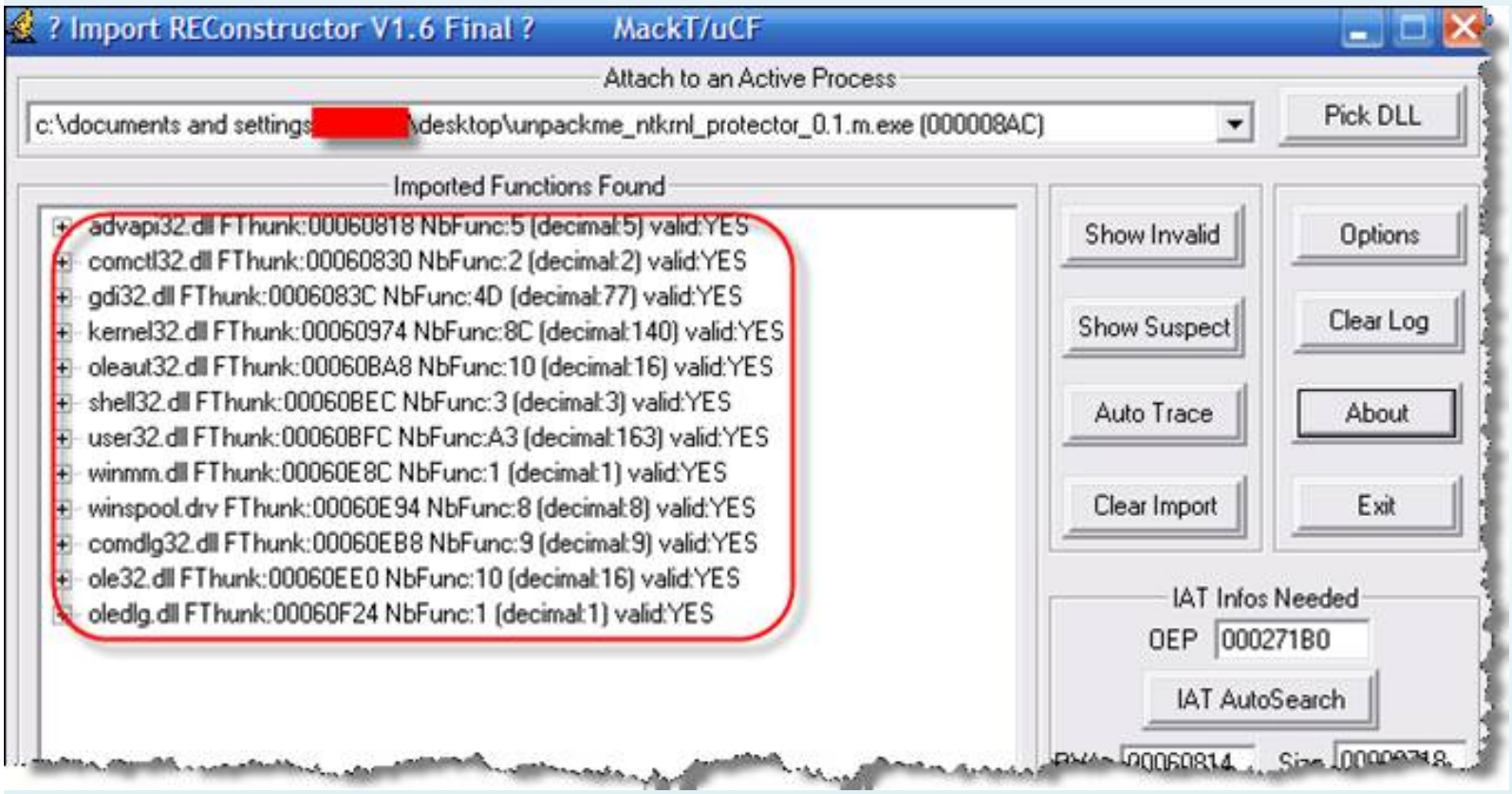


Address	Hex dump	Disassembly	C
004271B0	55	push ebp	
004271B1	8BEC	mov ebp, esp	
004271B3	6A FF	push -1	
004271B5	68 600E4500	push 00450E60	
004271BA	68 C8924200	push 004292C8	
004271BF	64:A1 00000000	mov eax, dword ptr fs:[0]	
004271C5	50	push eax	
004271C6	64:8925 0000000	mov dword ptr fs:[0], esp	
004271CD	83C4 A8	add esp, -58	
004271D0	53	push ebx	

_This Time to dump and fix IAT. Use Ollydump plugin to dump the target (uncheck **rebuild import** option) and save as any name you like (ex: dumped.exe). Now, open ImportRect to fix IAT, for the right process. Edit the OEP, then IAT Auto Search and Get Imports:



_huh, have some invalids. Not a problems, we will use the plug in: ***nt_krnlprotect_0_1.dll*** of **bpx** to resolve all invalids:



_Hehe, The plugin works very well! Let's fix dump now, and run our fixed file to test. J Kaka, it runs normally. The splash screen protector of the disappears!

_Repair Fixed the file by LordPE J
_The End. I hope my poor English with all of you can understand what I write.See you in another tutorials.

Best Regards
_ *[Kienmanowar]* _

--++--==[Greatz thanks to]==--++--
My family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Merc, Hoadongnoi, Nini ... all REA's members, TQN, HacNho, RongChauA, Deux, tlandn, light.phoenix, dqtln, dump .... all my friend, and you.

Thanks to --++--==[ ]==--++--
iamidiot, WhyNotBar, trickyboy, dzungltvn, takada, hurt_heart, haule_nth, v. hytkl. v.. You have contributed greatly to the REA. Hope you will continue to promote J

I want to thank **Teddy Roggers** for his great site, Reversing.be folks (especially **haggar),** Arteam folks **(Shub-Nigurrath, MaDMAn_H3rCuL3s)** and all folks on crackmes.de, thank to all members of **unpack.cn** (especially **fly** and **linhanshi**). Great thanks to **lena151** (I like your tutorials). And finally, thanks to **Ricardo NARVAJA** and all members on **CRACKSLATINOS.**

>>>> If you have any suggestions, comments or corrections email me: **kienmanowar [at] reaonline.net**

Tutorials hacnho # 4

Manual unpacking **PE Diminisher v0.1**
template by **koncool** and **R @ dier.**

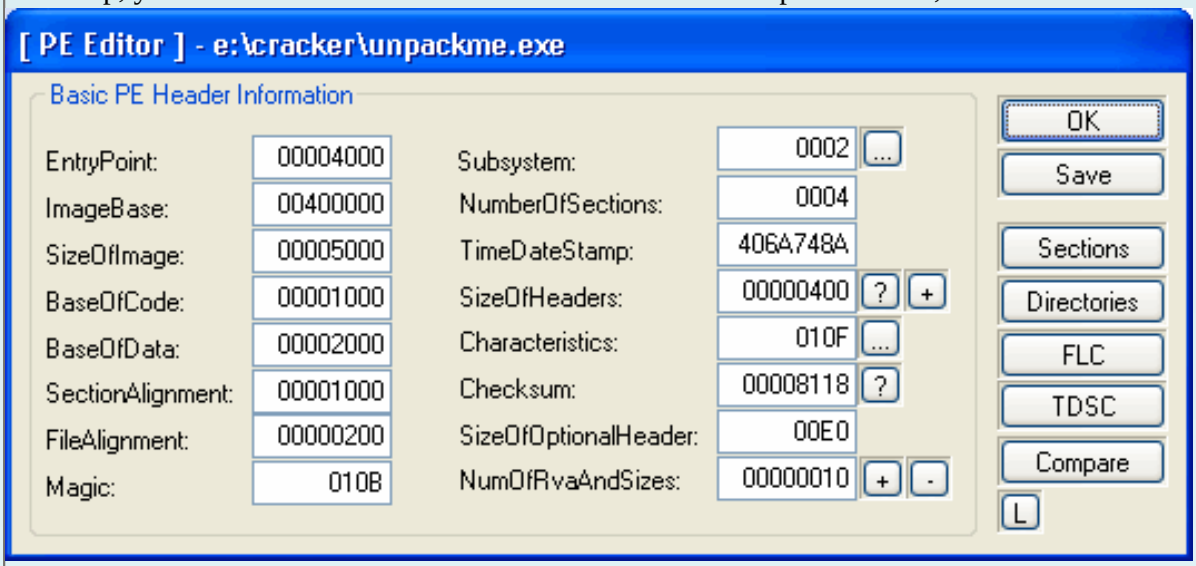
Information	Unpacking for Newbie's
Target	**Unpackme.exe**
Available	http://nhandan.info/hacnho/tuts/unpackme4_tuts.zip
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, Lord PE 1.4, PESniffer 3.2b.
Protection	PE Diminisher v0.1 - Crappy PE Packer by **Teraphy**
L Evel	Easy
Category	Manual unpacking

1. Introduction

Hi all, in this tut, I will unpack introduction to how easy packer of **Teraphy.** This is **Diminisher PE v0.1.** This is a very basic method for unpack a packer.

2. Getting Started

First step, you have to find some info from this PE software. Open Lord PE, PE Editor choose. And we have:



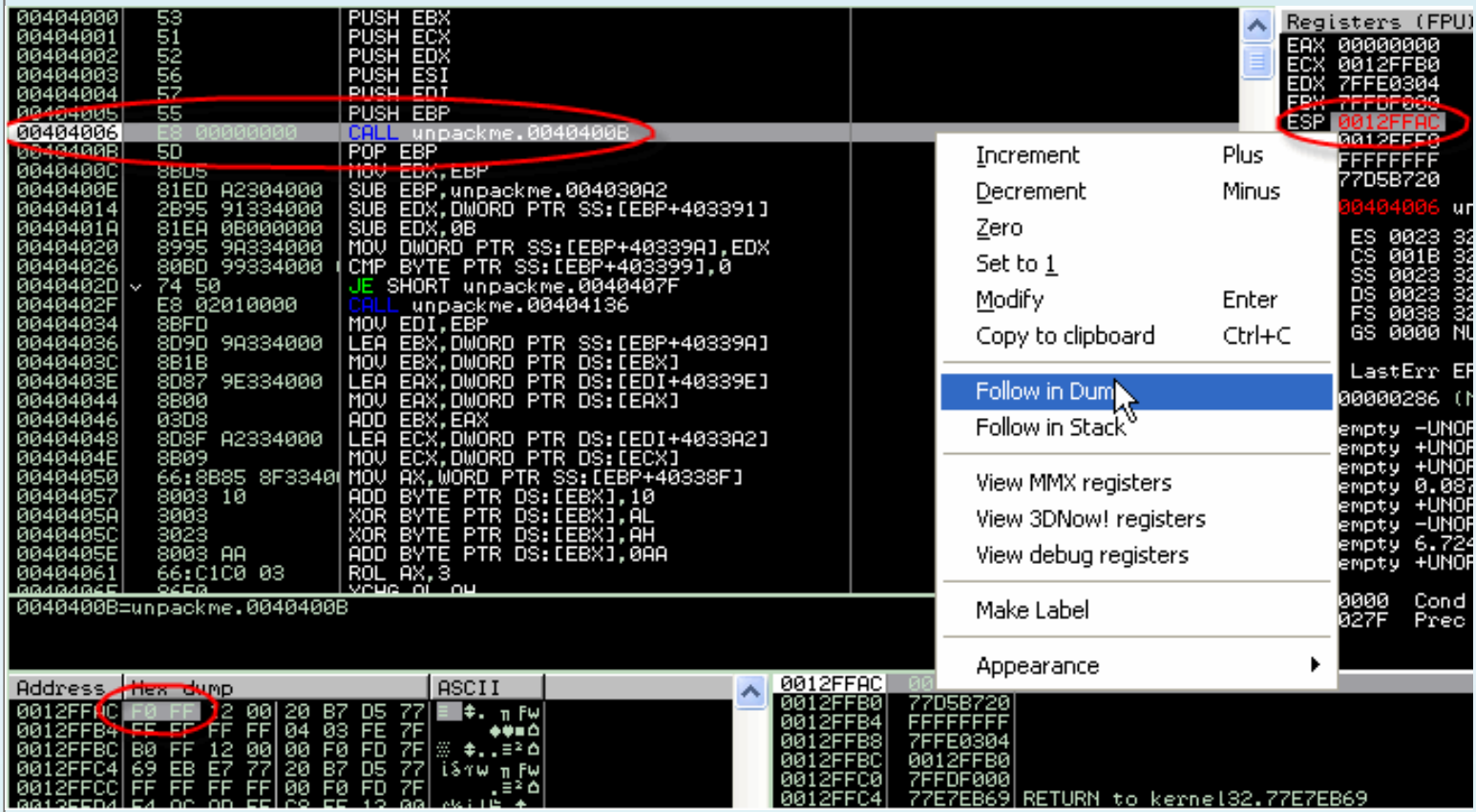
[Section Table]

Name	VOffset	VSize	ROffset	RSize	Flags
.text	00001000	00000026	00000400	00000020	E0000020
.rdata	00002000	00000092	00000600	00000051	C0000040
.data	00003000	000000A8	00000800	0000008B	C0000040
.teraphy	00004000	00001000	00000A00	0000041A	C0000040

EP: 4000, The value of flags this case is not needed, Image Base is always 400000, Import Table: 0000 and size is 00.

3. Finding the OEP

Load into unpackme.exe Olly. We still in line **00404000> 53 PUSH EBX.** Now, press F7 to trace to address **00404006.** At this line, you see in the **Registers (FPU)** table. The value of **ESP** is **0012FFAC,** then you right click on and choose **ESP Follow in** the **dump.**

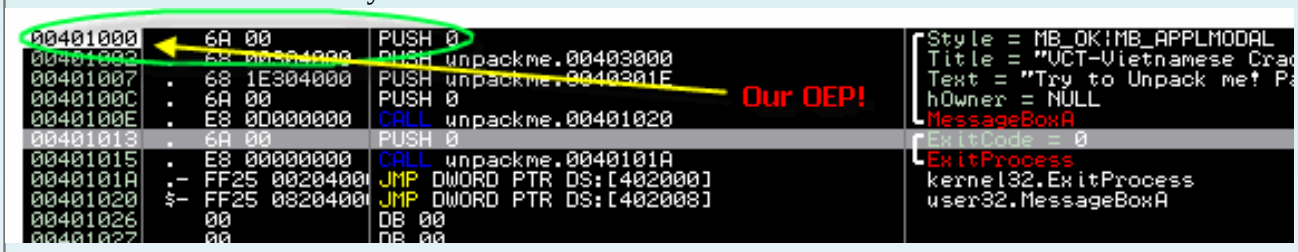


Then you go to the Hex dump window. Then right click on the value **0012FFC0** and select Breakpoint -> Hardware, on Access -> Word. Our breakpoint is now set.

Then Press **F9** to run unpackme, after that, continue press **F8 5 times** until you see as follows:

Et puis, press **F7,** you still here:

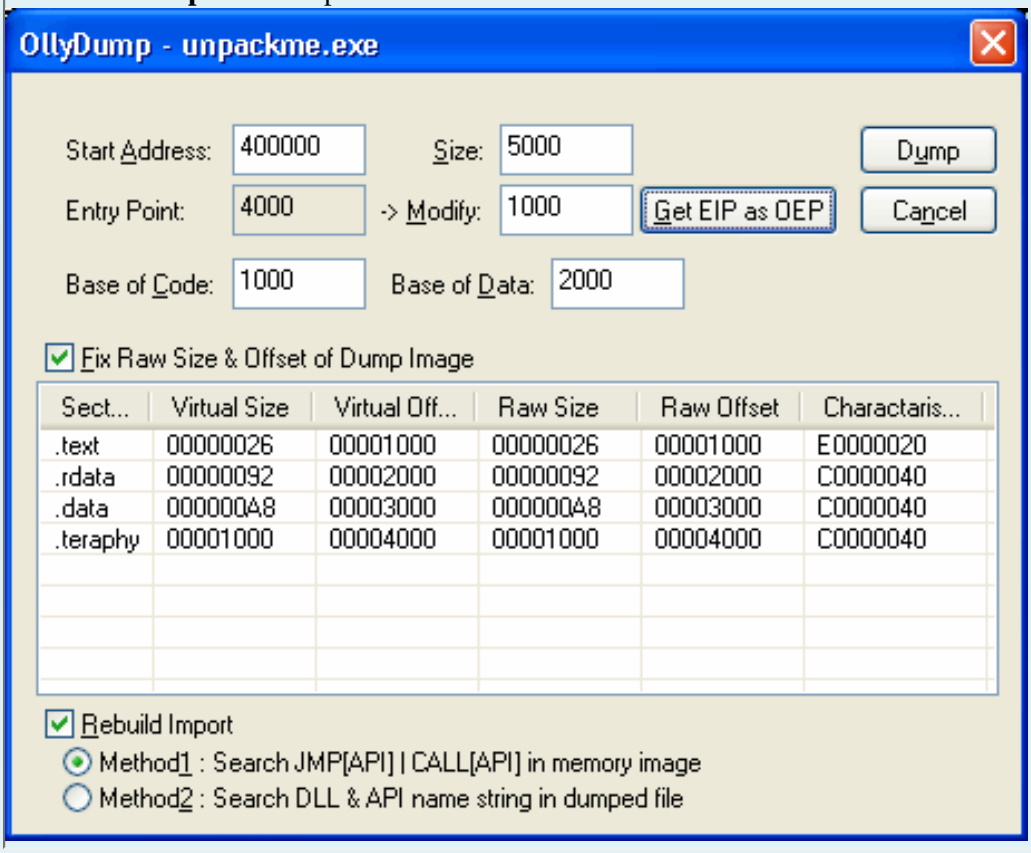
Now! Press **Ctrl + A** for analyze:



Congratulations! According OEP we found is **401,000.** And now we Calculate the real OEP of this unpackme by the formula:
Real OEP = OEP find in Olly-Image Base = 401000-400000 = **1000.**

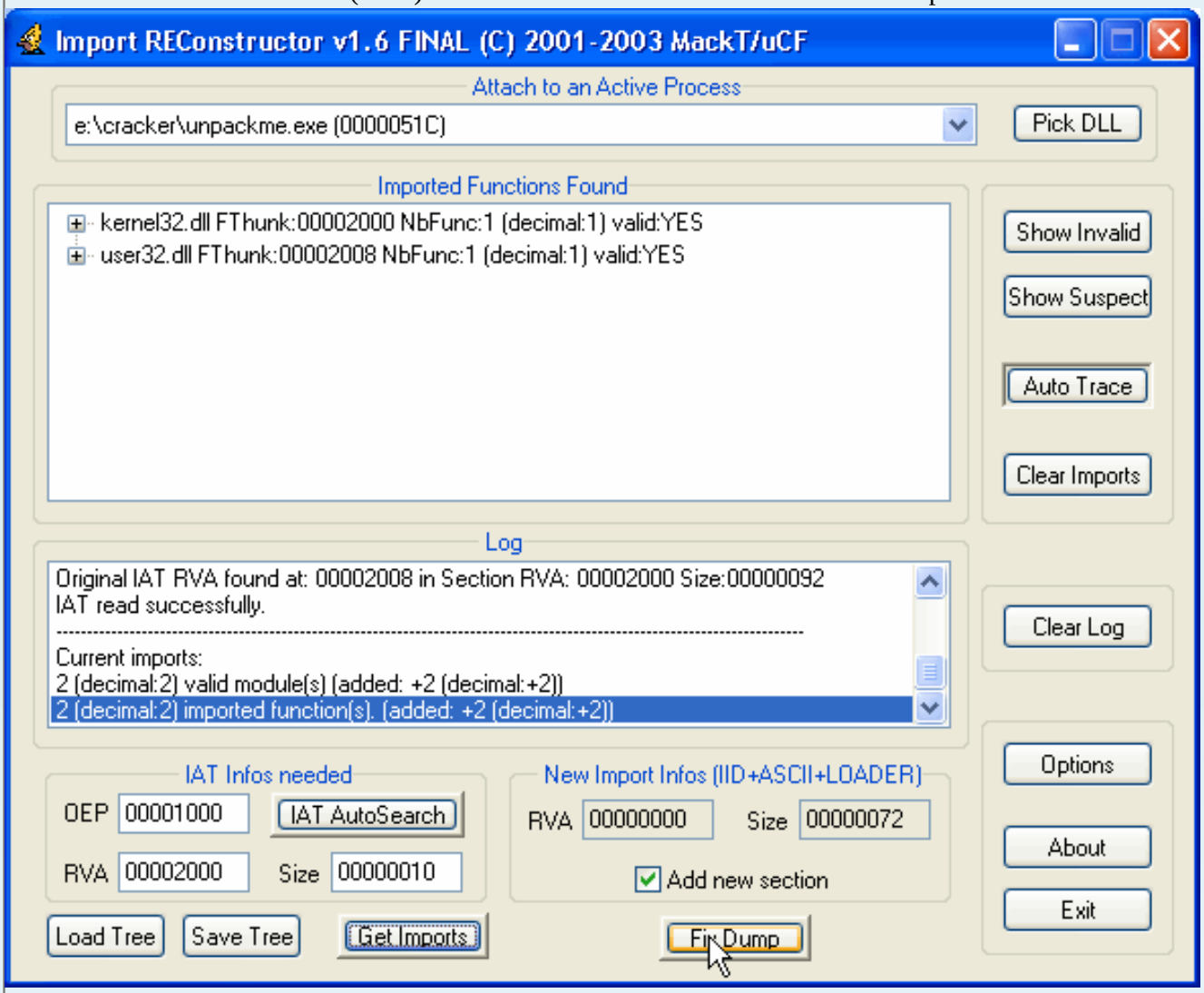
4th dumping

At address **00401000,** we go to the menu Plugin -> OllyDump -> dump debugged process. And then, just press dump, save the file at **dumped.exe** unpacked.

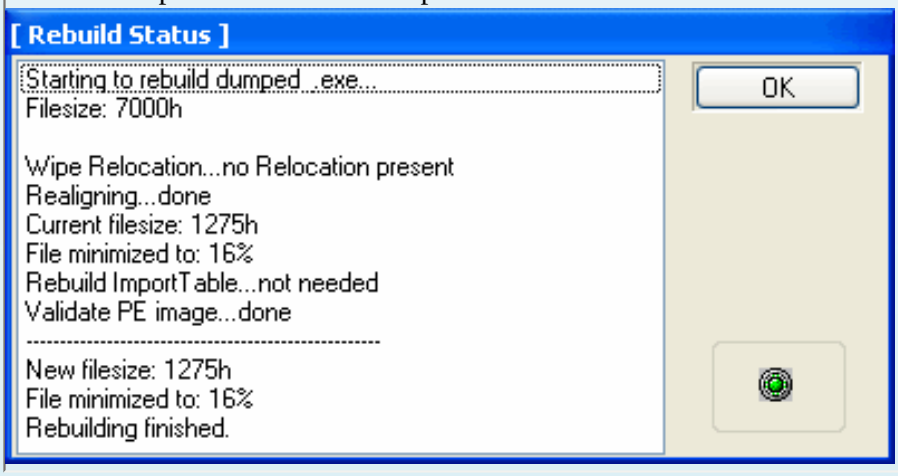


5. Finding and Fixing the Adress Import Table

And select Open ImpREC attached to active process and choose unpackme.exe. Change the value in the OEP window to the one we wrote down earlier (1000) then select IATAutosearch then click Get Imports.

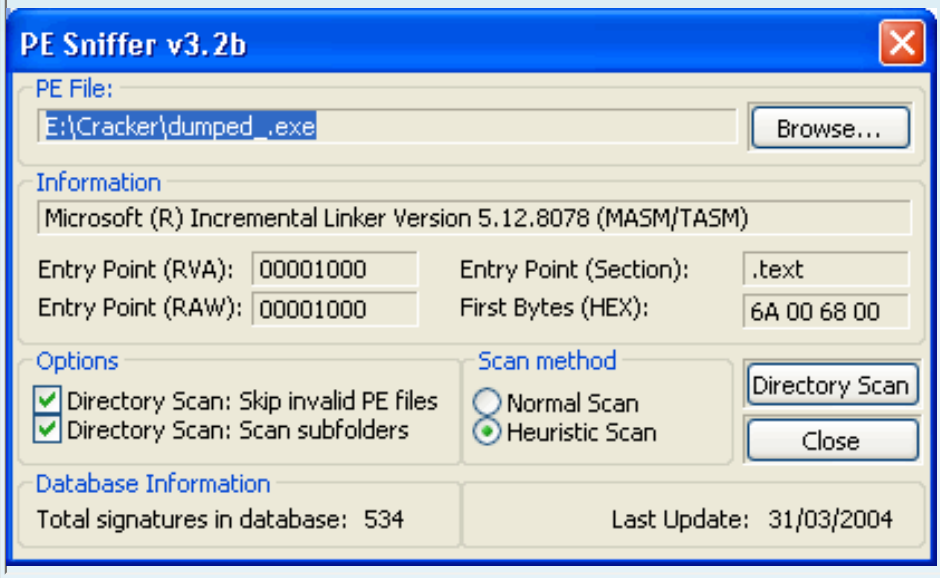


Import Functions all valid ... Now, click fix to fix IAT dump the file **dumped.exe.** And then LordPE open, choose rebuild PE optimize for size of unpackme ..



6. Testing Our Unpacked file

Now run unpacked files. Wow, not crash.
Using PESniffer 3.2b for detect: **MASM / TASM.** Okie, PE Diminisher v0.1 - Crappy PE Packer by **Teraphy** is now unpacked successful!



7. Conclusion

Special thanx to **koncool** et **R @ dier** for this template.
My Greetz to: Deux, RCA, Moonbaby, Computer_Angel, tlandn, R @ dier, Zombie, Maipt0301, tykhung, softcracker_vn, CTL, LeVuHoang ...

To be continued ...

Written by hacnho (tutorial date: Sai Gon 2/4/2004)

Tutorials hacnho # 6

Manual unpacking **PE Lock NT 2:04**
template by **koncool** and **R @ dier.**

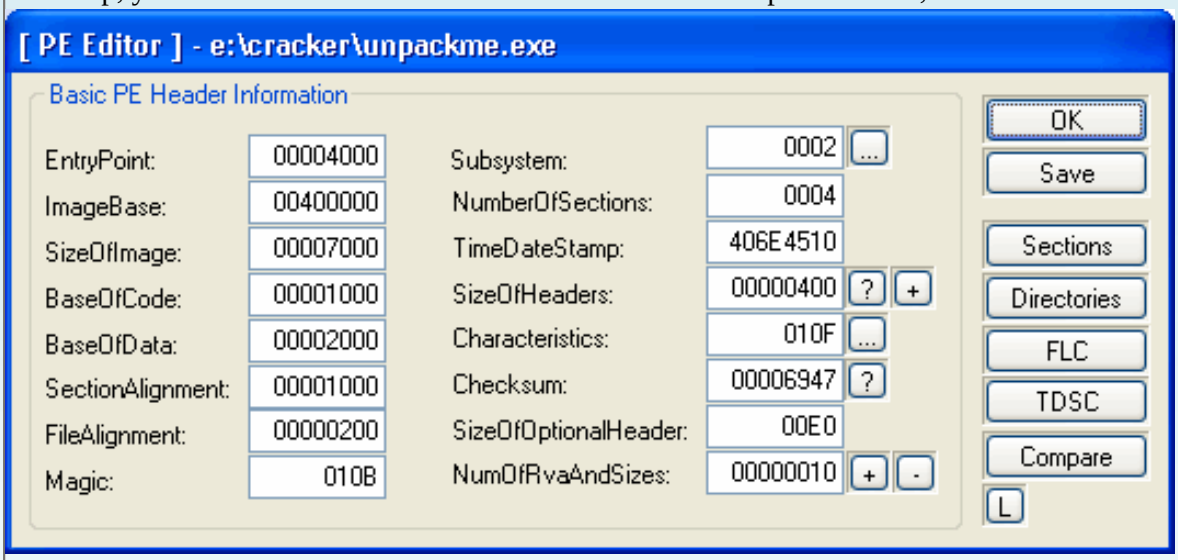
Information	Unpacking for Newbie's
Target	**Unpackme.exe**
Available	http://nhandan.info/hacnho/tuts/unpackme6_tuts.zip
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, Lord PE 1.4, PESniffer 3.2b.
Protection	PELOCKnt v2.04 Copyright **(C): Marquis: DE: soirée:**
L Evel	Standard
Category	Manual unpacking

1. Introduction

Bonjour Mesdames et Mesieur ;-). Today, I will be the introduction method "how to unpack PELOCKnt v2.04 Copyright **(C): Marquis: DE: soirée".** I hope you have some time happiness with this tut!
Tuts only for the beginner. If you are a bro. Please do not mock my tuts ... You can contact me for help and improve it.

2. Getting Started

First step, you have to find some info from this PE software. Open Lord PE, PE Editor choose. And we have:



[Section Table]

Name	VOffset	VSize	ROffset	RSize	Flags
PELOCKnt	00001000	00000026	00000400	00000200	E0000020
.rdata	00002000	00000092	00000600	00000200	C0000040
.data	00003000	000000A5	00000800	00000200	C0000040
PELOCKnt	00004000	00002A00	00000A00	00002A00	C0000060

EP: 4000, The value of flags this case is not needed, Image Base is always 400000, Import Table: 0000 and size is 00.

3. Finding the OEP

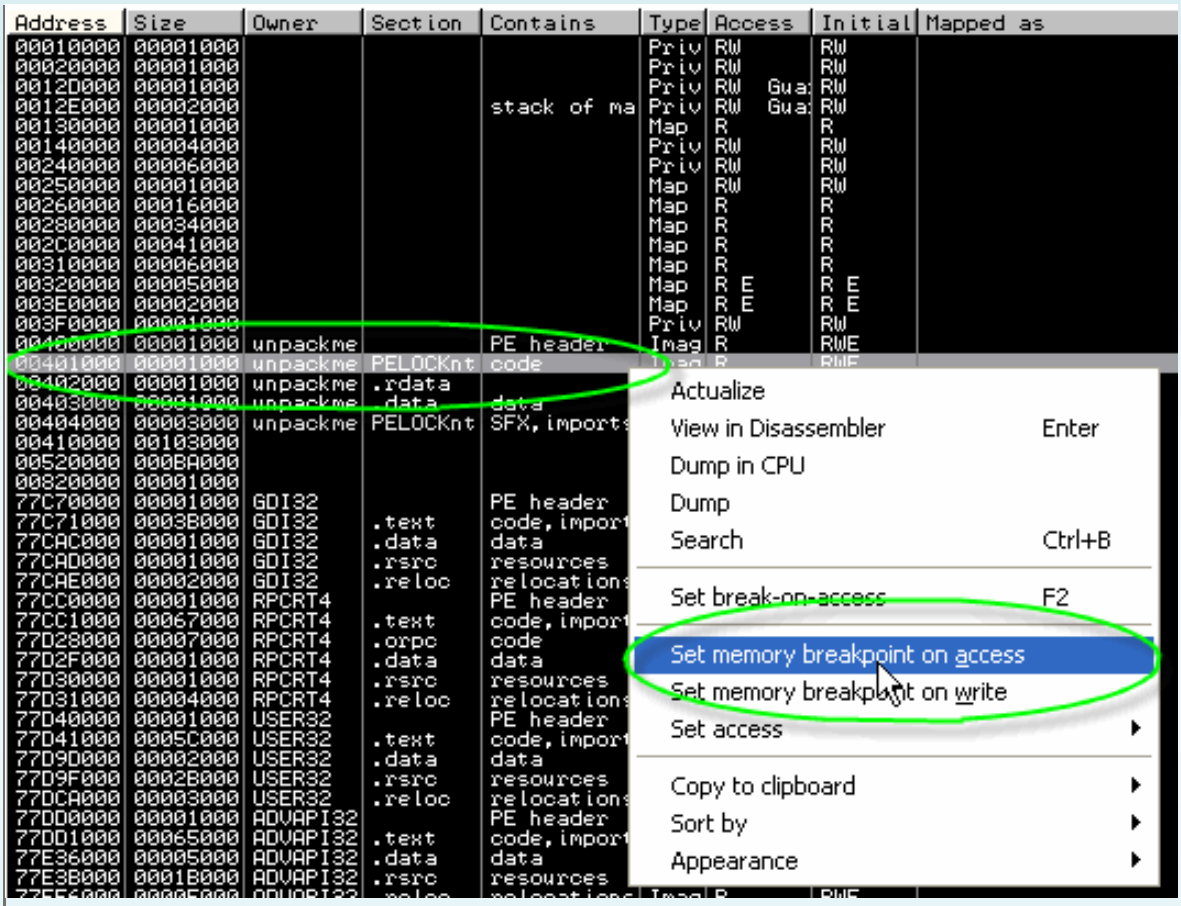
Load **unpackme.exe** into OllyDBG. And you still here:

```
00404000  EB 03          JMP SHORT unpackme.00404005
00404002  CD 20          INT 20
00404004  C7             ???                          Unknown command
00404005  1E             PUSH DS
00404006  EB 03          JMP SHORT unpackme.0040400B
00404008  CD 20          INT 20
0040400A  EA 9CEB02EB 01 JMP FAR EB01:EB02EB9C        Far jump
00404011  01EB           ADD EBX,EBP
00404013  60             PUSHAD
00404014  EB 03          JMP SHORT unpackme.00404019
00404016  CD 20          INT 20
00404018  EB EB          JMP SHORT unpackme.00404005
0040401A  01EB           ADD EBX,EBP
0040401C  E8 03000000    CALL unpackme.00404024
00404021  E9 EB045840    JMP 40984511
00404026  50             PUSH EAX
00404027  C3             RETN
```

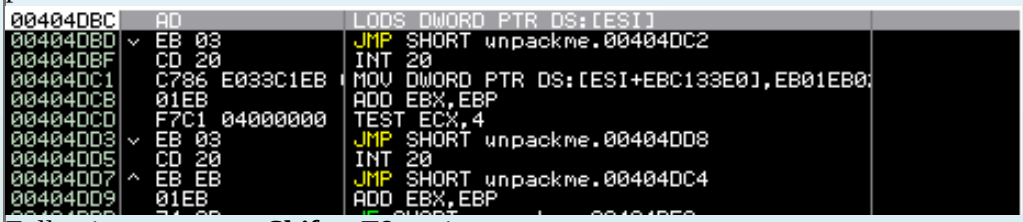
Then, you press **F7** until you see as follows:

```
00404013  60             PUSHAD
00404014  EB 03          JMP SHORT unpackme.00404019
00404016  CD 20          INT 20
00404018  EB EB          JMP SHORT unpackme.00404005
0040401A  01EB           ADD EBX,EBP
0040401C  E8 03000000    CALL unpackme.00404024
00404021  E9 EB045840    JMP 40984511
00404026  50             PUSH EAX
00404027  C3             RETN
00404028  EB 03          JMP SHORT unpackme.0040402D
0040402A  CD 20          INT 20
0040402C  EB EB          JMP SHORT unpackme.00404019
0040402E  03CD           ADD ECX,EBP
00404030  2003           AND BYTE PTR DS:[EBX],AL
00404032  FC             CLD
00404033  EB 03          JMP SHORT unpackme.00404038
```

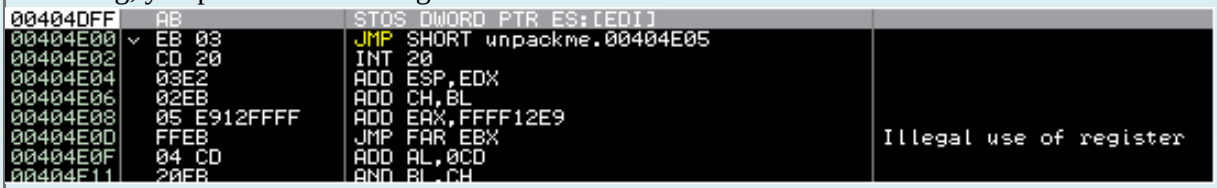
Continued, you have to press **ALT + M** to open the **Memory** of **MAP** OllyDBG.



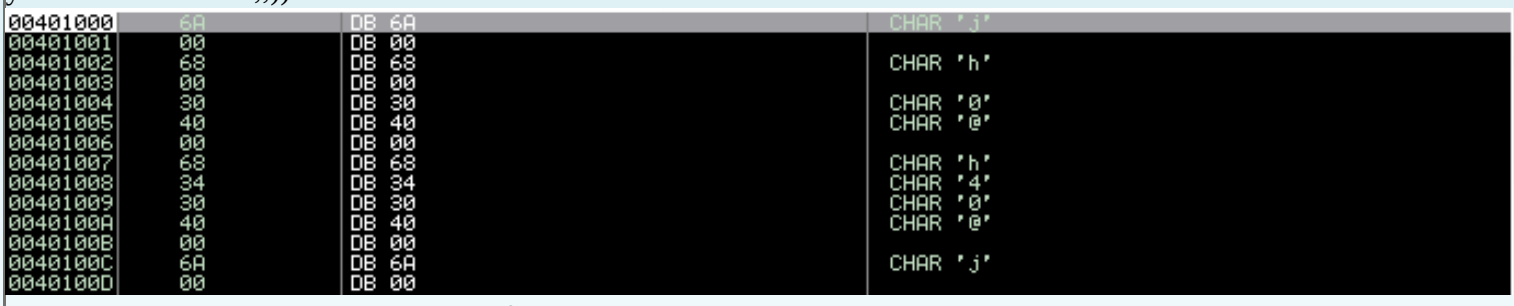
Et puis, you search the address line contain **401,000.** Right click on it and choose **Set breakpoint on memory access.** Now, press **Shift + F9:**



Following, you press **Shift + F9** again:



Waaaa, the job is very uninspired ... You have press **Shift + F9** until you see as follows (I count about **260 times** he he, what do you think about this ;;)):

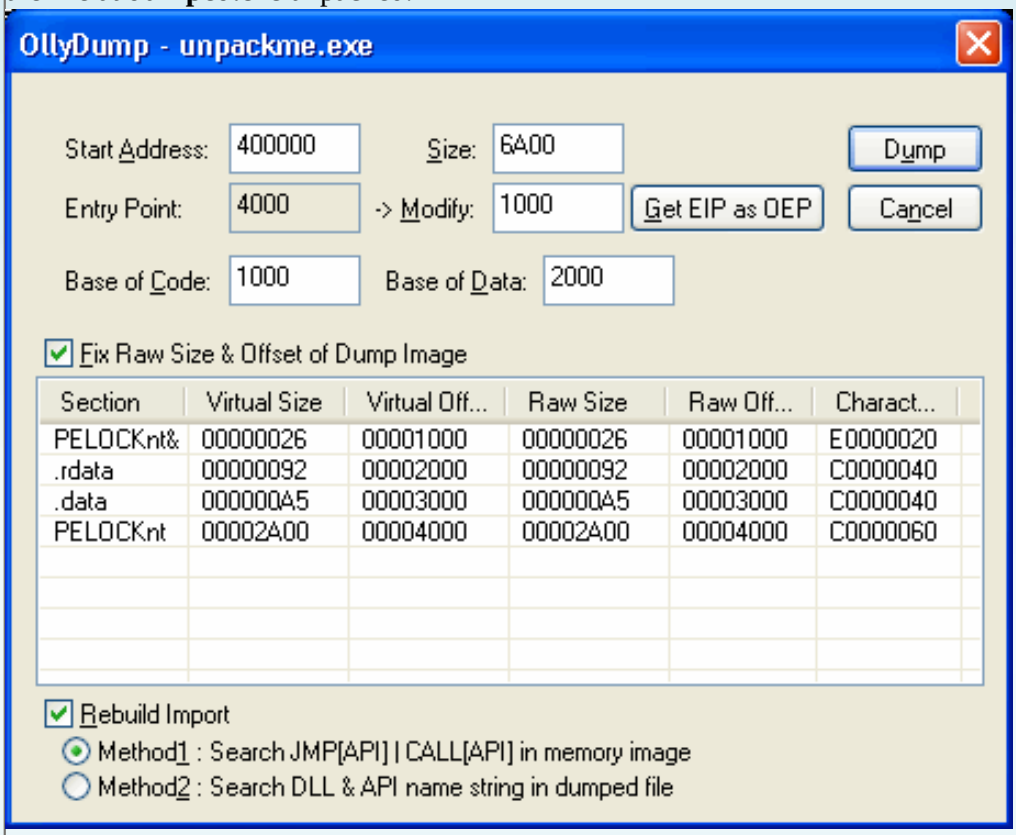


Next, press **CTRL + A** analyze the code for:

Congratulations! According OEP we found is **401,000.** And now we Calculate the real OEP of this unpackme by the formula: Real OEP = OEP find in Olly-Image Base = 401000-400000 = **1000.**

4th dumping

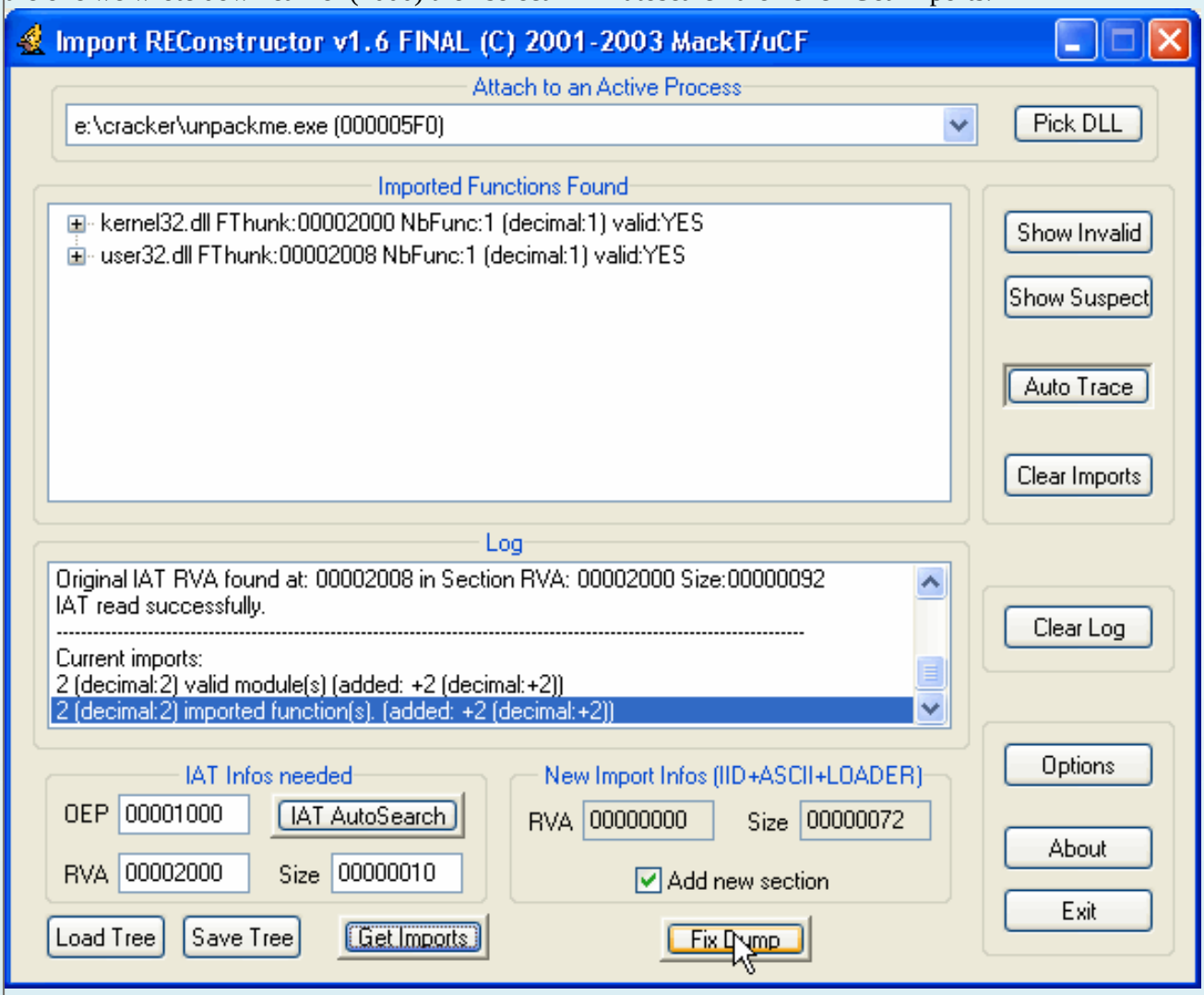
At address **00401000,** we go to the menu Plugin -> OllyDump -> dump debugged process. And then, just press dump, save the file at **dumped.exe** unpacked.



Do not run **dumped.exe** now, will be a crash ... It must fix IAT.

5. Finding and Fixing the Adress Import Table

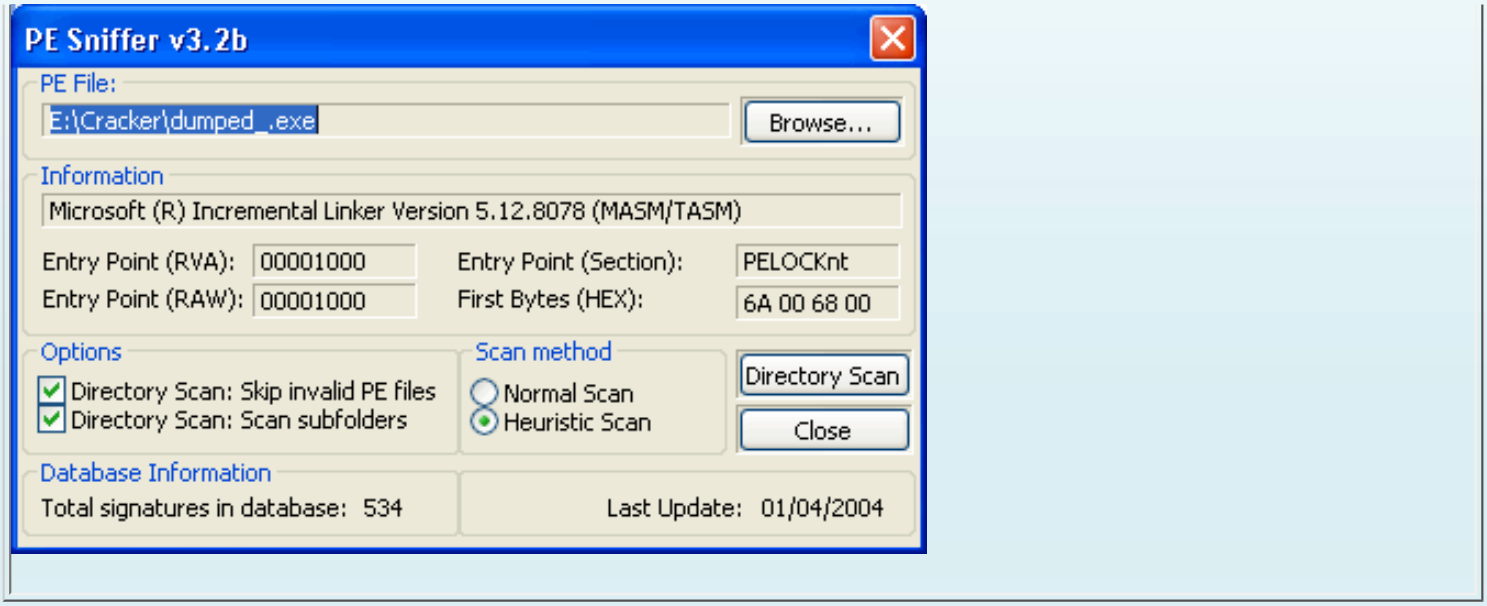
And select Open ImpREC attached to active process and choose unpackme.exe. Change the value in the OEP window to the one we wrote down earlier (1000) then select IATAutosearch then click Get Imports.



Import Functions all valid ... Now, click fix dump to fix the IAT **dumped.exe** file.

6. Testing Our Unpacked file

Now run unpacked files. Wow, not crash.
Using **PE 3.2b** for **Sniffer** detect: **MASM / TASM.** Okie, PELOCKnt v2.04 **by Marquis: DE: soirée is** now unpacked successful!



7. Conclusion

Special thanx to **koncool** et **R @ dier** for this template.
My Greetz to: Deux, NVH (c), luucorp, Maipt0301, R @ dier, tlandn, CTL, JAL, LeVuHoang, 777, LeonHart, Bin ... and you ;-)!

To be continued ...

Written by hacnho (tutorial date: Sai Gon 5/4/2004)

hacnho Tutorials # 2

Manual unpacking **PECompact 1.84**
template by **koncool** and **R @ dier.**

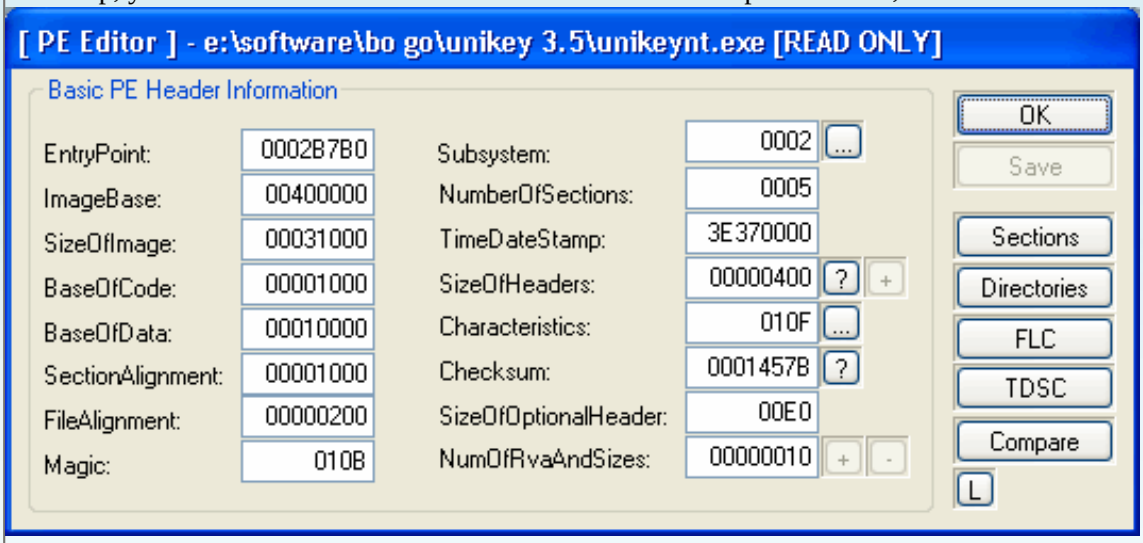
Information	Unpacking for Newbie's
Target	**Unikey 3:55 for XP** (http://unikey.sourceforge.net/)
Available	http://nhandan.info/hacnho/tuts/unpackme2_tuts.zip
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, ImpRec 1.6 for XP, Lord PE 1.4, PESniffer 3.2b.
Protection	PECompact 1.84 by **Jeremy Collake**
Level	Easy
Category	Manual unpacking

1. Introduction

Salut tout le monde!
This is my second tut for manual Unpacking. In this tut, I will introduction to manual unpacking PECompact 1.84. Because the tutorial **"Manual unpacking PeCompact 1.76"** of R @ dier can not apply for the newer version of PE Compact. So I found was a method for unpack the newer version of this packer and want to sharing with every body.

2. Getting Started

First step, you have to find some info from this PE software. Open Lord PE, PE Editor choose. And we have:



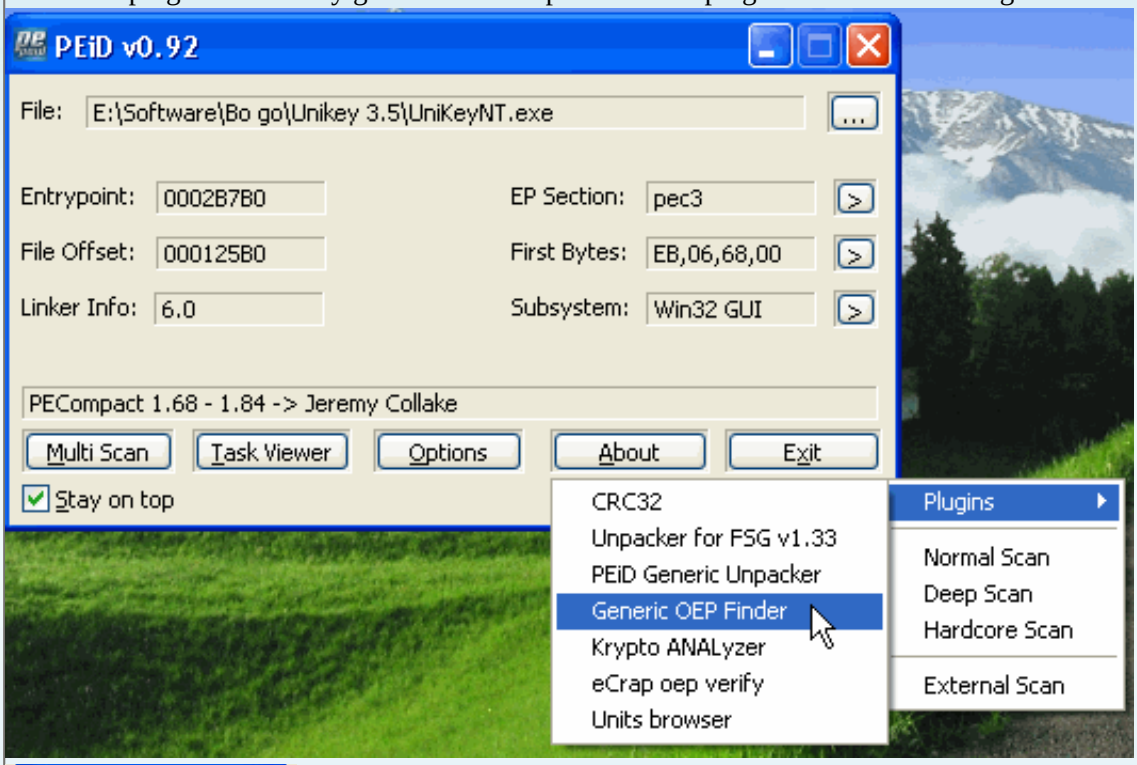
[Section Table]

Name	VOffset	VSize	ROffset	RSize	Flags
pec1	00001000	0001C000	00000400	0000B000	E0000020
.rsrc	0001D000	00006000	0000B400	00004200	C0000040
pec2	00023000	00008000	0000F600	00002800	C2000040
pec3	0002B000	00005000	00011E00	00000E00	C0000040
.rsrc	00030000	00001000	00012C00	00000400	C0000040

EP: 2B7B0, The Flags is (E0000020; C0000040, C2000040, C0000040, C0000040), Image Base is always 400000, Import Table: 30000 is the size and AF.

3rd Finding the OEP

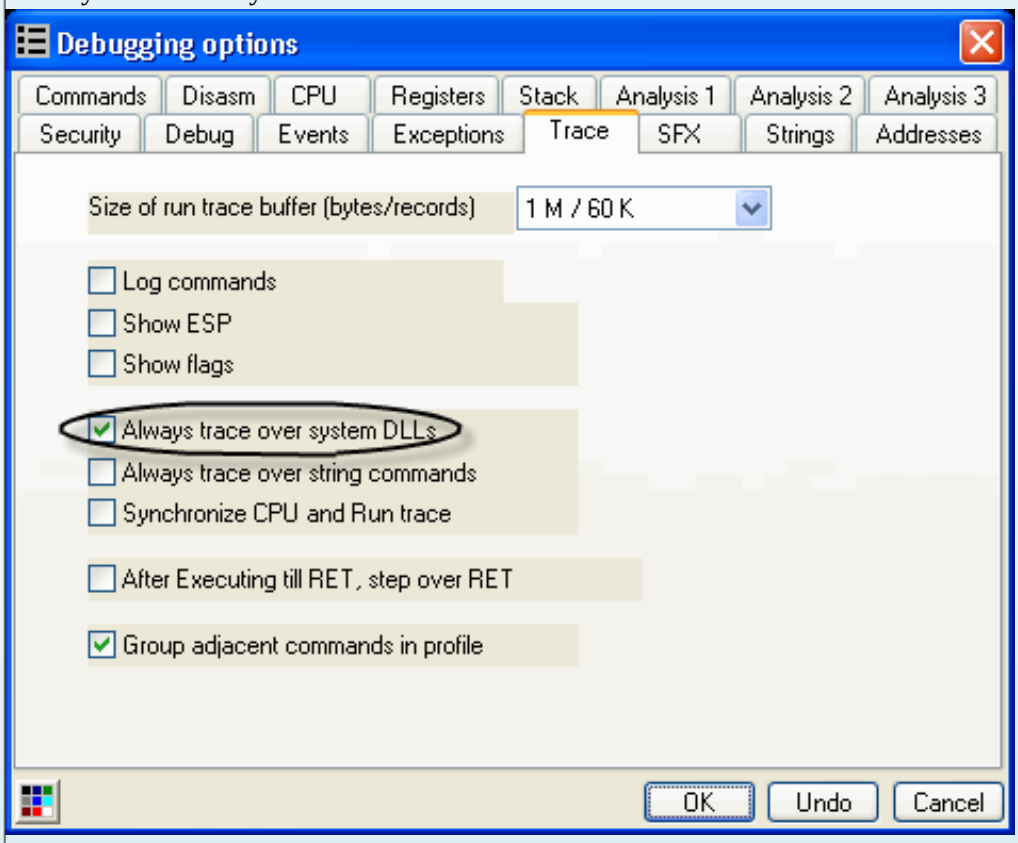
The PEiD plugin have a very good for tech unpack. This is plugin OEP. Now! Let's go to detect OEP of this soft.



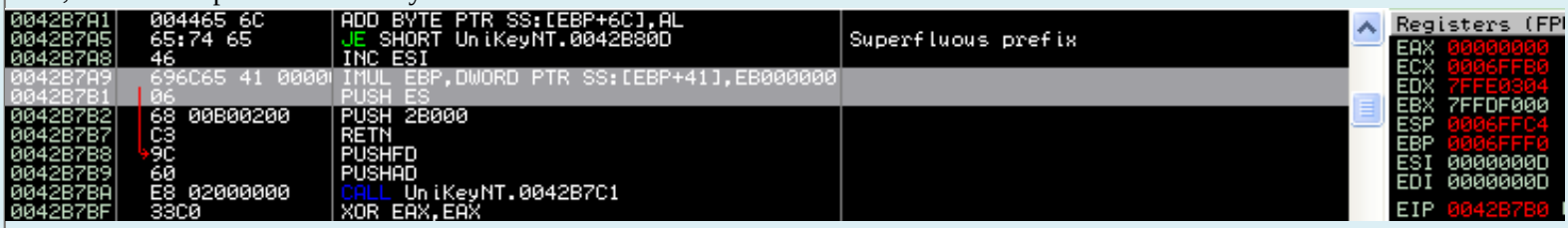
Waaa ... The OEP is 0040F1D0. Okie, now we have to Calculate the real OEP by the Formule:
Real OEP = OEP find in PEiD-Image Base = 400000 = **40F1D0-F1D0.**

4th dumping

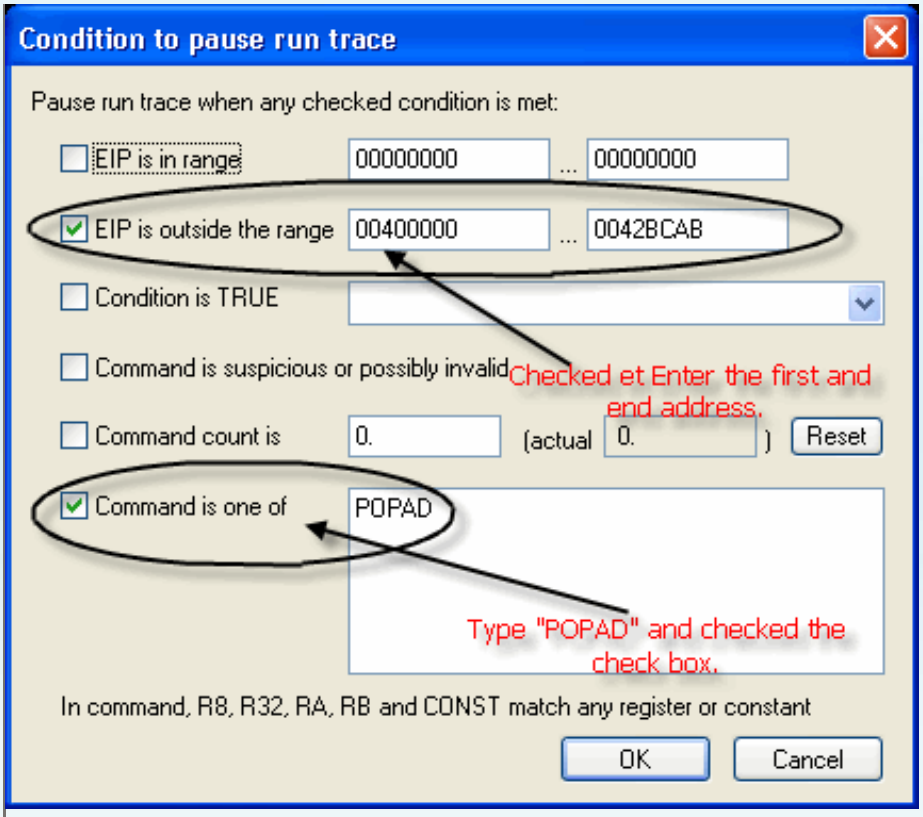
For dumping, we have to configure the options in Olly Trace. Press Alt + O and modify: Checked the CheckBox in the "Always trace over system DLLs"



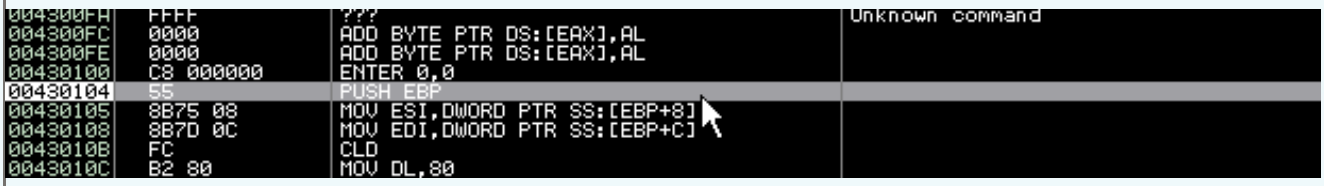
Now, this load unpackme in to Olly. And we still here:



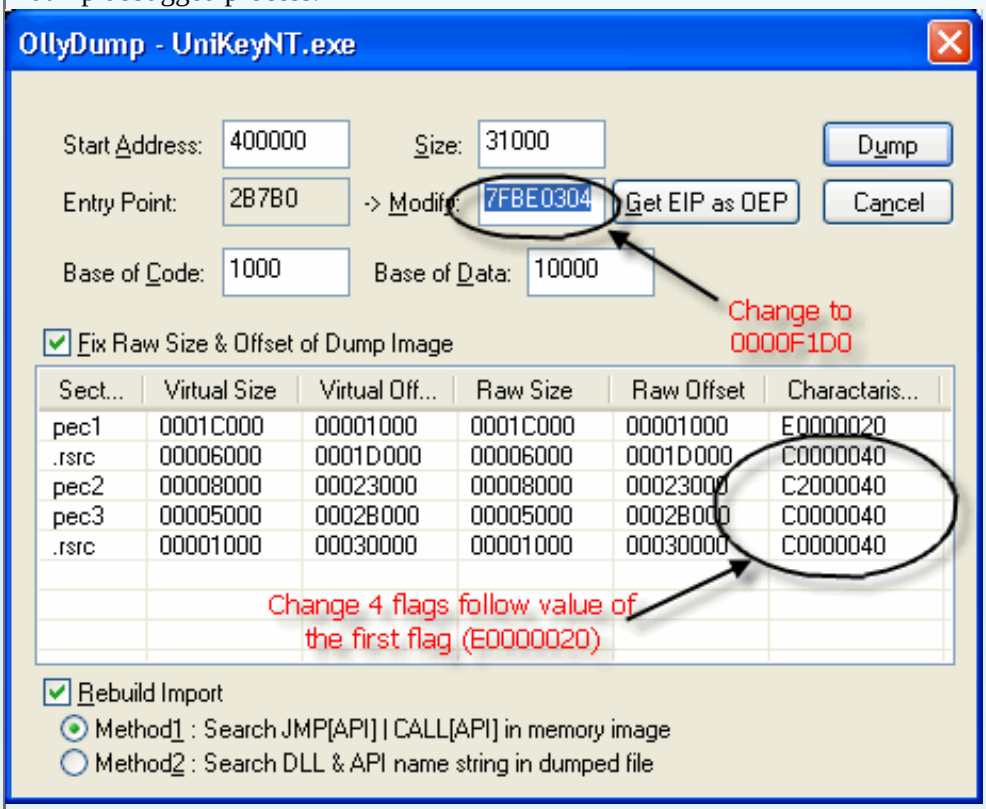
Next is a **CTRL + T** and bring up the trace window. All steps follow this pictures ...



After, you press **F11 + Ctrt** for Trace Into. Press Continue until you see the address 00430104:



Okie, address line at 430,104. You press F9 to run Unikey. Unikey When running, we go to the menu Plugin -> OllyDump -> dump debugged process.

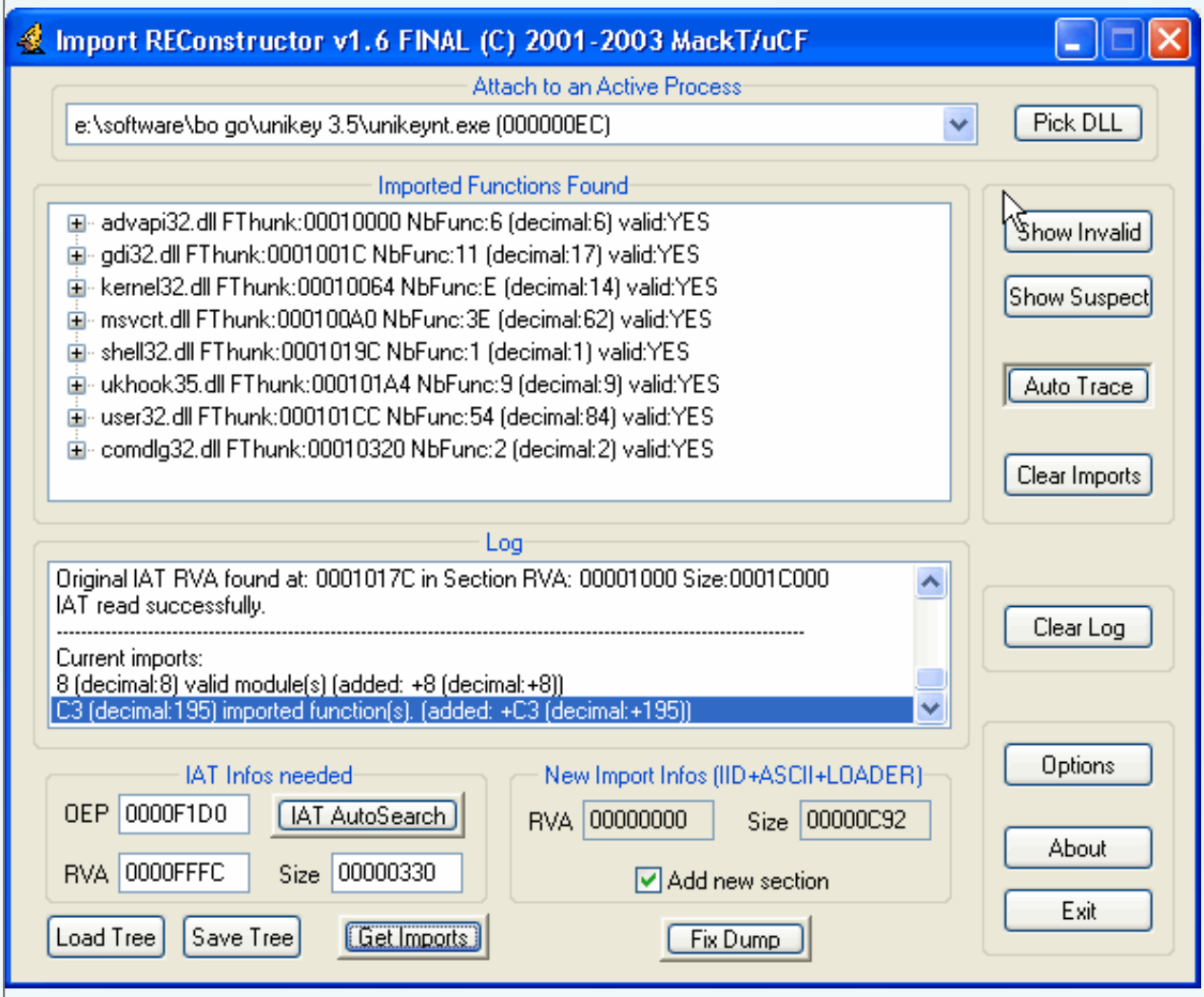


Change the Entry Point to modify **F1D0.** 4 flags and change (in Olly characteristics) follow the value of the first

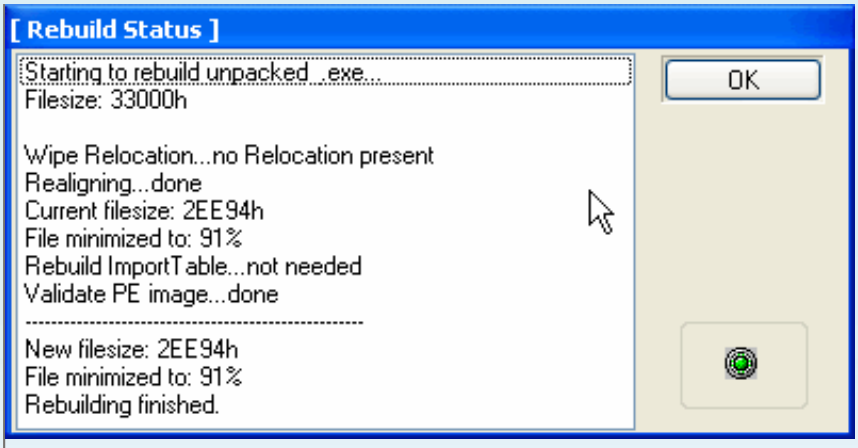
flag **(E0000020).** And then, just press dump, save the unpacked files. Now, do not shut down OllyDbg just yet, we need to get the import table and fix our exe.

5th Finding and Fixing the Adress Import Table

ImpREC open, select Print ImpRec attached to active process and choose our target program.
Change the value in the OEP window to the one we wrote down earlier **(F1D0)**
then select IAT Autosearch then click Get Imports.



Ohh, all imports is valid. We have to do now is fix our exe click on **Fix dump** and select our unpacked.exe and we are done :-) our dump will be saved as unpacked_.exe. And then, we have to rebuild this file unpacked. Open Lord PE. Choose rebuild PE. Browse to unpack the file, click OK.



6. Testing Our Unpacked file

Now run Unikey unpacked files. Wow, not crash.
Using PESniffer detect 3.2b for: **Microsoft Visual C + + 6.0.** Okie, PECompact 1.84 by **Jeremy Collake** is now unpacked successful!

7. Conclusion

Special thanx to **koncool** et **R @ dier** for this template.
My Greetz to: Deux, RCA, Moonbaby, Computer_Angel, tlandn, R @ dier, Zombie, Maipt0301, tykhung, softcracker_vn, CTL, LeVuHoang ...

To be continued ...

Written by hacnho (tutorial date: Sai Gon 17/3/2004)

hacnho Tutorials # 10

Manual unpacking **PECompact 2.0 Final -> Jeremy Collake**

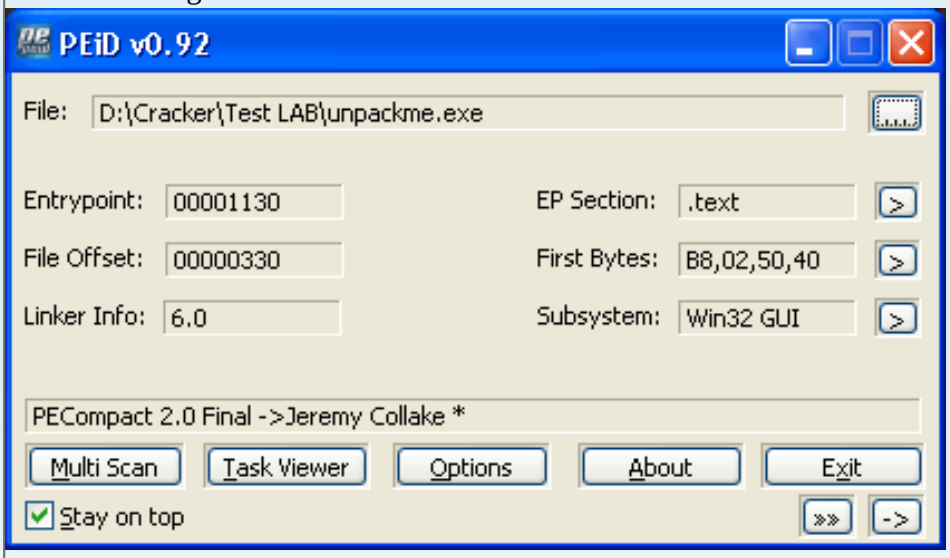
Information	Unpacking for Newbie's
Target	unpackme.exe
Available	http://nhandan.info/hacnho/tuts/unpackme10_tuts.zip
Tools	OllyDbg plugin 1.10c with OllyDump 2.21.108, ImportREC Final 1.6, 1.4 LordPE.
Protection	PECompact 2.0 Final -> Jeremy Collake
L Evel	Standard
Category	Manual unpacking

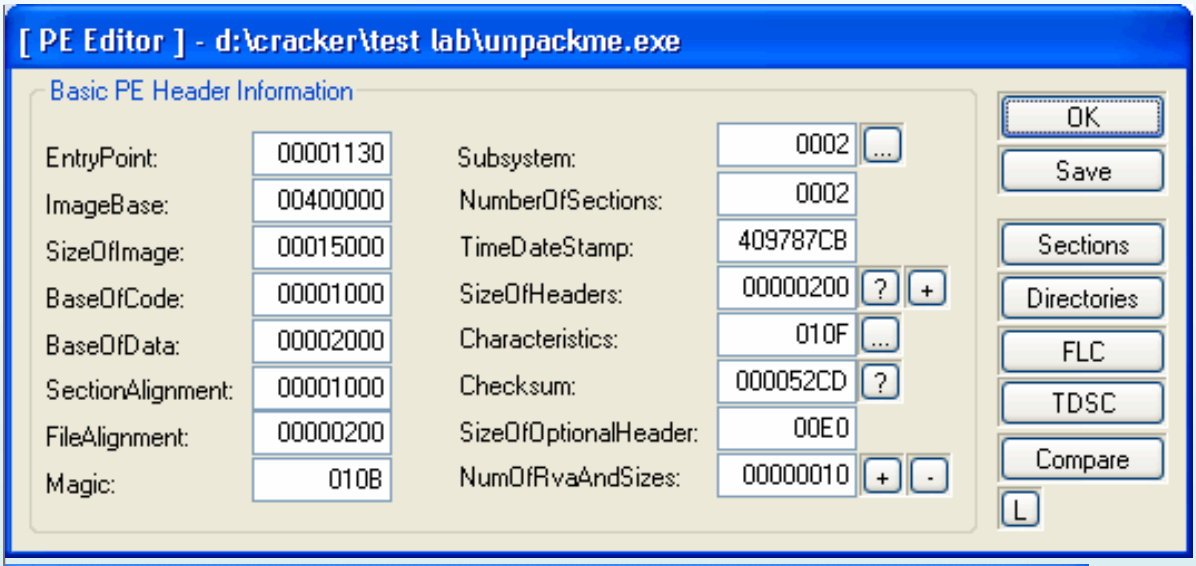
1. Introduction

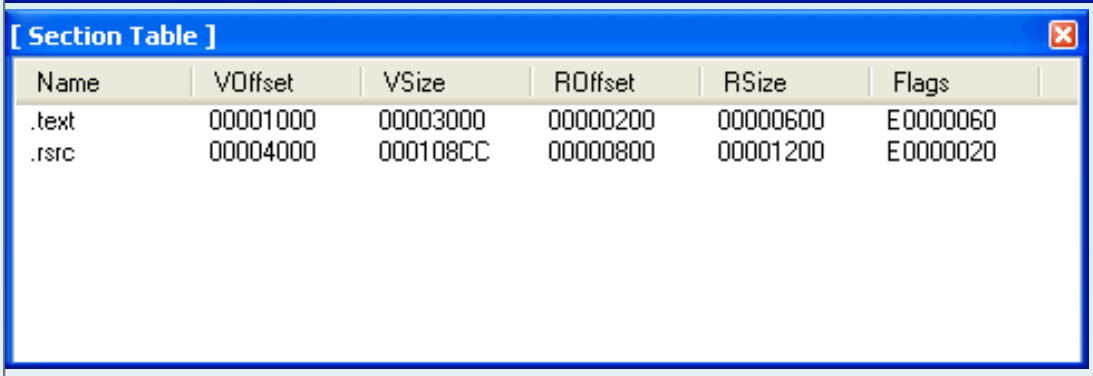
Nowadays, the newest packer is PECompact 2.0x. This is a commercial packer packer, so very easy for unpack it. I will explain the ways for unpack this packer. I use PECompact 2.0 Final, but this method can support version 2. x.

2. Getting Started

Use PEiD and get some LordPE for PE Info.







EP: 1130, The value of flags this case is not needed, Image Base is always 400000, Import Table: 0000 and size is 00.

3. Finding the OEP

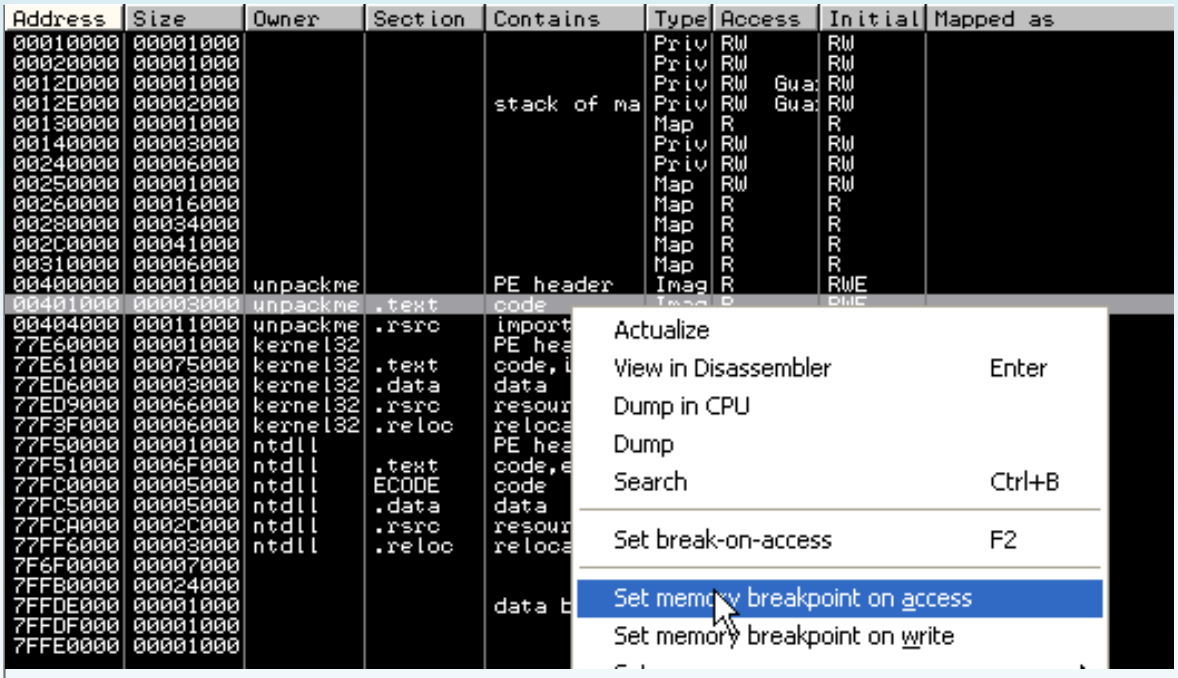
Load **unpackme.exe** into OllyDBG. And you still here:

```
00401130  $  B8 02504000    MOV EAX,unpackme.00405002
00401135  .  50             PUSH EAX
00401136  .  64:FF35 0000(  PUSH DWORD PTR FS:[0]
0040113D  .  64:8925 0000(  MOV DWORD PTR FS:[0],ESP
00401144  .  33C0           XOR EAX,EAX
00401146  .  8908           MOV DWORD PTR DS:[EAX],ECX
00401148  .  50             PUSH EAX
00401149  .  45             INC EBP
0040114A  .  43             INC EBX
0040114B  .  6F             OUTS DX,DWORD PTR ES:[EDI]      I/O command
0040114C  .  6D             INS DWORD PTR ES:[EDI],DX       I/O command
0040114D  .v 70 61          JO SHORT unpackme.004011B0
0040114F  .  637432 00      ARPL WORD PTR DS:[EDX+ESI],SI
00401153  .  6C             INS BYTE PTR ES:[EDI],DX        I/O command
00401154  .  C2 2801        RETN 128
```

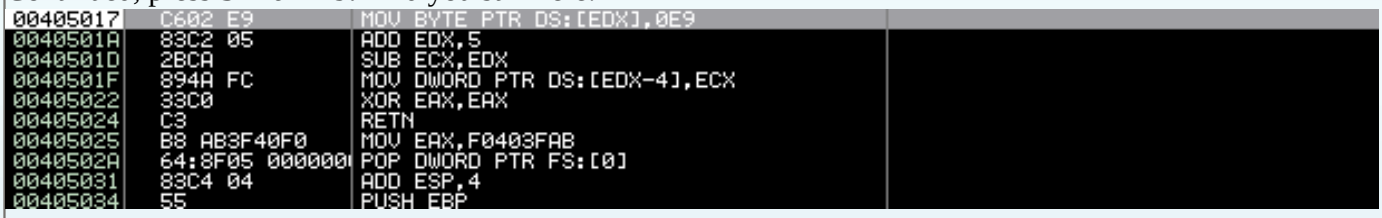
Then, you press **F9** two times and you see as follows:

```
00401130  $  B8 02504000    MOV EAX,unpackme.00405002
00401135  .  50             PUSH EAX
00401136  .  64:FF35 0000(  PUSH DWORD PTR FS:[0]
0040113D  .  64:8925 0000(  MOV DWORD PTR FS:[0],ESP
00401144  .  33C0           XOR EAX,EAX
00401146  .  8908           MOV DWORD PTR DS:[EAX],ECX
00401148  .  50             PUSH EAX
00401149  .  45             INC EBP
0040114A  .  43             INC EBX
0040114B  .  6F             OUTS DX,DWORD PTR ES:[EDI]      I/O command
0040114C  .  6D             INS DWORD PTR ES:[EDI],DX       I/O command
0040114D  .v 70 61          JO SHORT unpackme.004011B0
0040114F  .  637432 00      ARPL WORD PTR DS:[EDX+ESI],SI
00401153  .  6C             INS BYTE PTR ES:[EDI],DX        I/O command
00401154  .  C2 2801        RETN 128
```

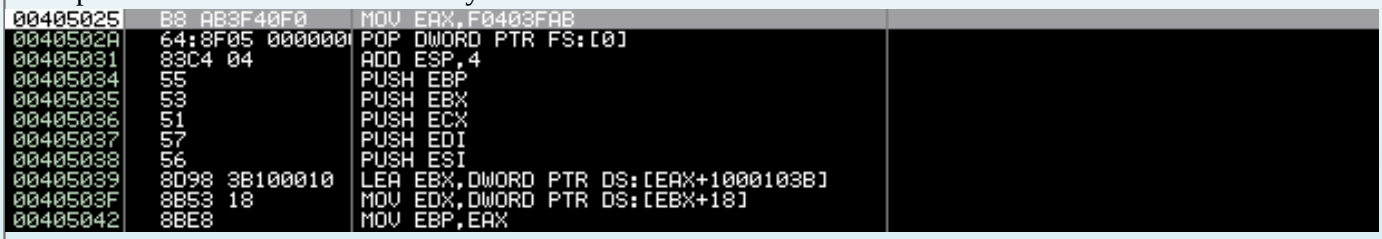
Continued, you have to press **ALT + M** to open the **Memory** of **MAP** OllyDBG.



Continued, press **Shift + F9.** And you still here:

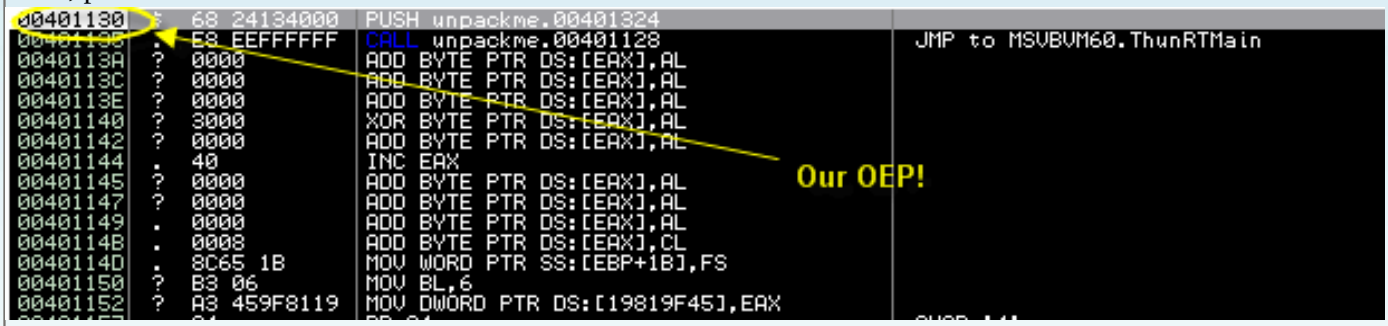


Then press **F9 SHITF + 3 times** and you still here:



Next, press **Ctrl + F12.** And we see as follows:

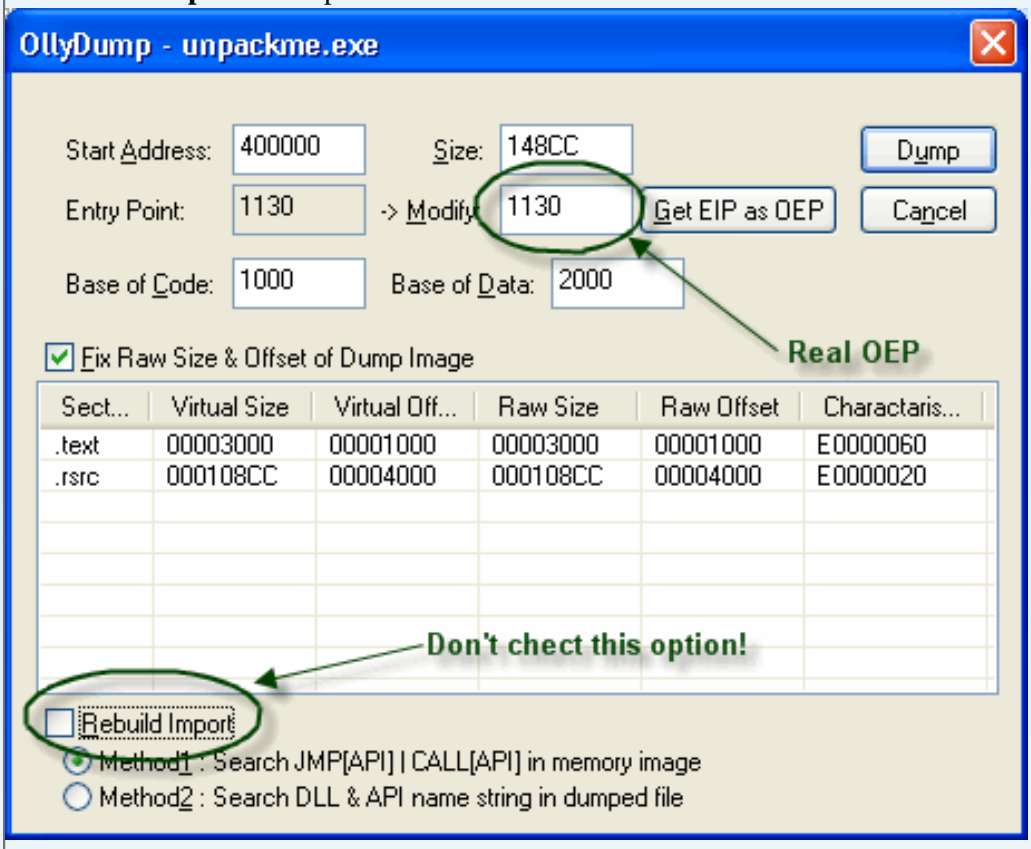
Final, press **Ctrl + F12** and we have:



Congratulations! According OEP we found is **401130** And now we Calculate the real OEP of this unpackme by the formula: Real OEP = OEP find in Olly-Image Base = 401130-400000 = **1130.**

4th dumping

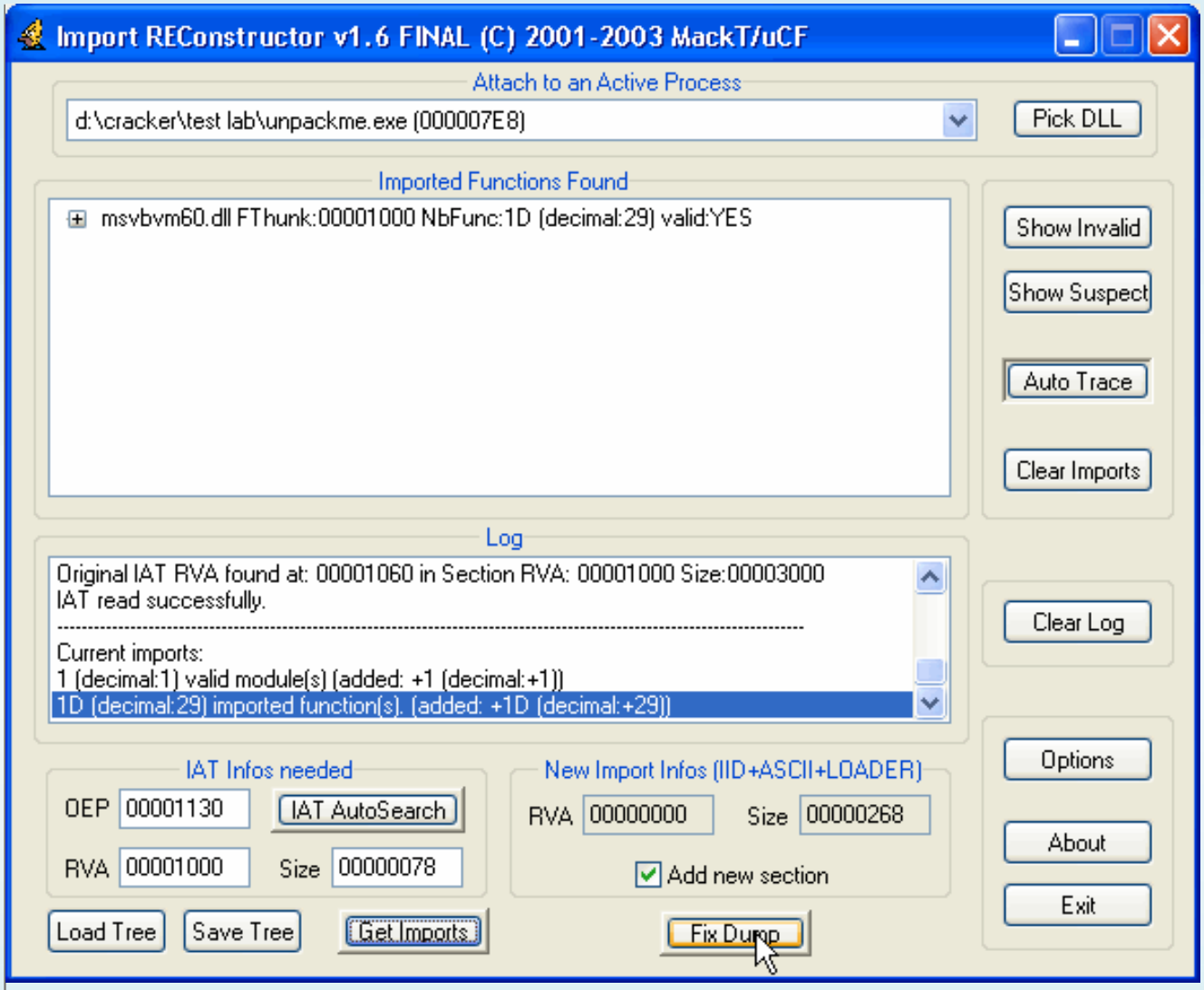
At address **0041130** we go to the menu Plugin -> OllyDump -> dump debugged process. And then, just press dump, save the file at **dumped.exe** unpacked.



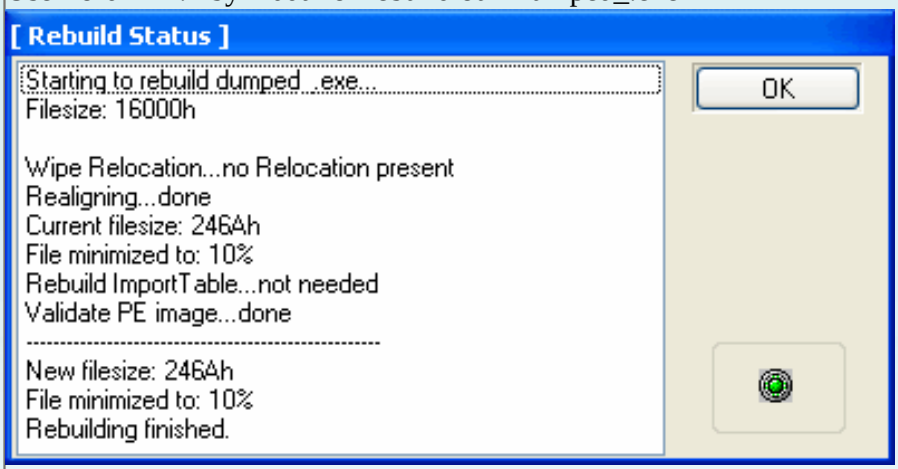
Do not run **dumped.exe** now, will be a crash ... It must fix IAT.

5. Finding and Fixing the Adress Import Table

And select Open ImpREC attached to active process and choose unpackme.exe. Change the value in the OEP window to the one we wrote down earlier (1130) then select IATAutosearch then click Get Imports.

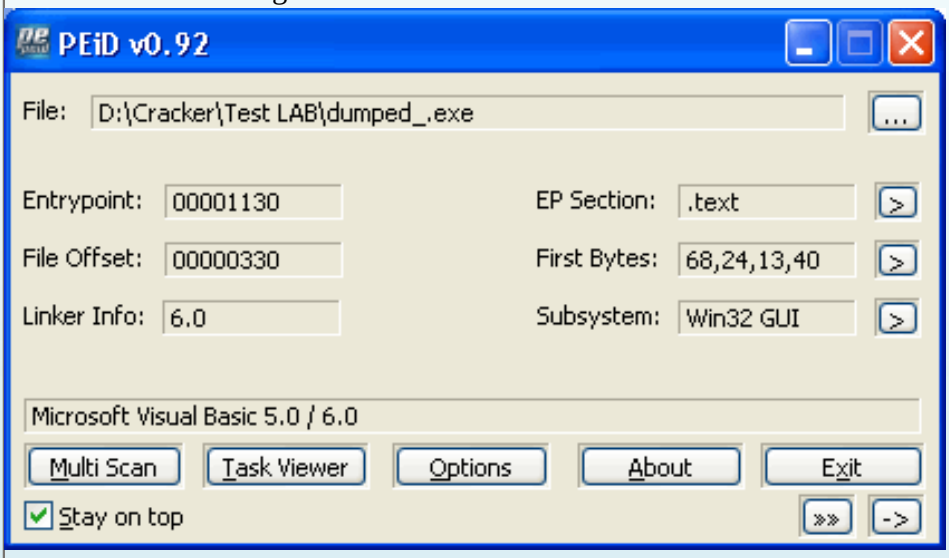


All Import Functions valid.
Now, click fix dump to fix the IAT **dumped.exe** file.
Use LordPE 1.4 by Y0da for rebuild our Dumped_.exe



6. Testing Our Unpacked file

Use PEiD for detect again:



Now run unpacked files. Wow, not crash.

7. Conclusion

Special thanx to **R @ dier** for this template.
My Greetz to: Deux, infinite, NVH (c), softcracker_vn, luucorp, Aaron, hhphong, R @ dier, tlandn, Computer_Angel, k3nny, Ferrari, Zombie, RCA, CTL, Moonbaby, Neitsa, JAL, LeVuHoang, 777, LeonHart , Bin ... and you ;-)!

To be continued ...

Written by hacnho (tutorial date: Sai Gon 4/5/2004)

Translated and written by: kienmanowar

Manual unpacking **PECompact v2.38**

Information	Unpacking for Newbie's
Target	**Target.exe**
Available	http://www.reaonline.net
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, PEid 0.93, Lord PE 1.4, Plugin Command Line, ImpRec v1.6f.
Protection	**PECompact v2.38**
L Evel	Beginner
Category	Manual unpacking

1. Introduction

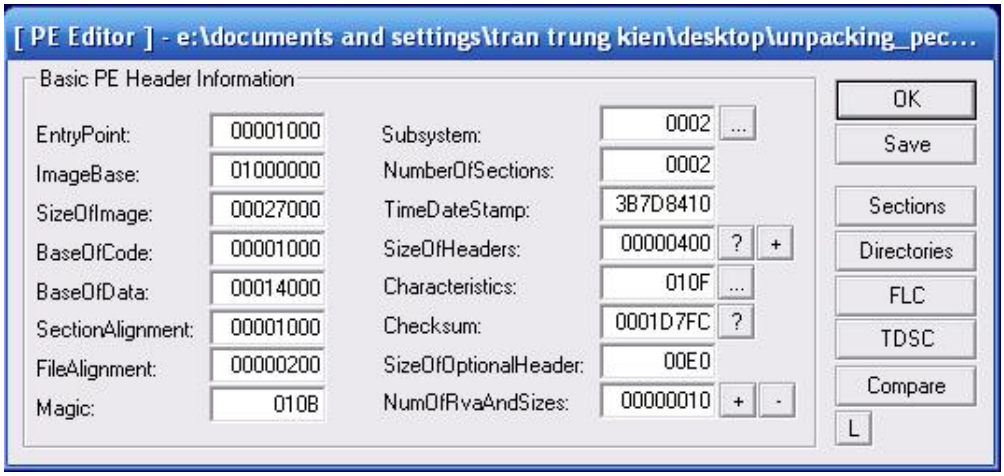
This article aims to discuss how to unpack **PECompact 2:38** success through some basic steps. File for the practice has been enclosed with this article. Destination of the tutorial is targeted for Newbie when you get familiar with the Unpacking (same to me **=)).** Unpacking is a job quite difficult and daunting easy when we face the difficult Packer, so to get familiar with this job is no way that we must start from the example application the most, the first step in the firm to the knowledge of our strength

will gradually up. And one can at any time, so as we will not be any doubt before a Packers **do:).** Oki, let's do it!

PE 2.Detect and get info

Use **PEid of 0.93** to detect, we know the following:

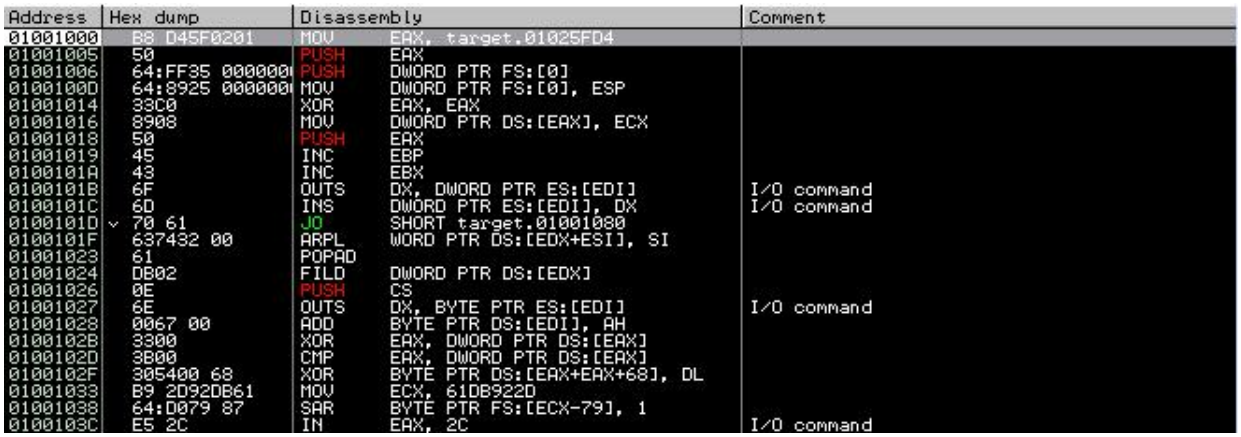
Use **Lord PE 1.4** to search for more information:



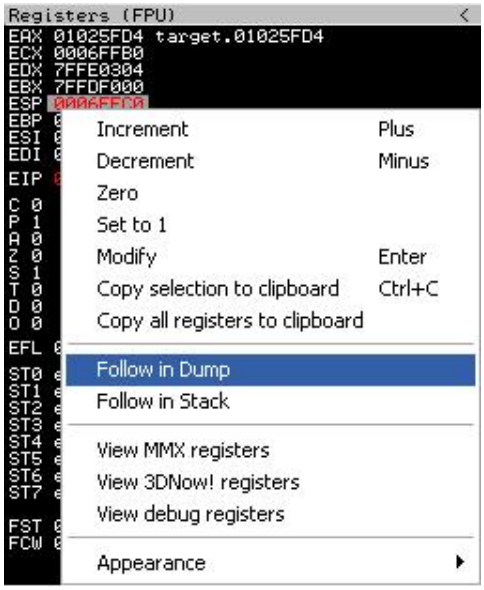
So we have been as follows: EntryPoint is: 1000, ImageBase is 1000000.

3.Finding the Original Entry Point

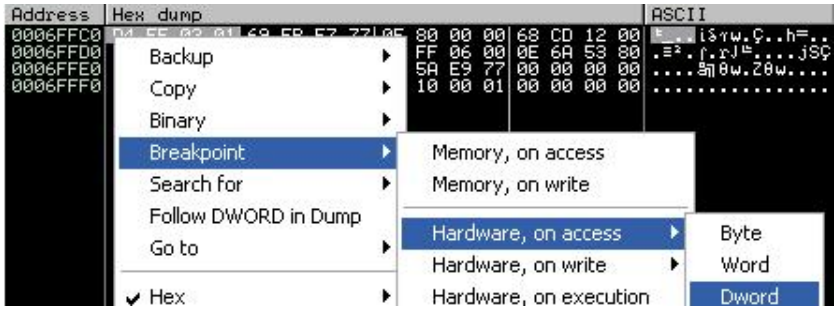
After the above information, we open and Olly Load target in Olly.Chon **No Ananlysis** and we will stop at **EntryPoint:**



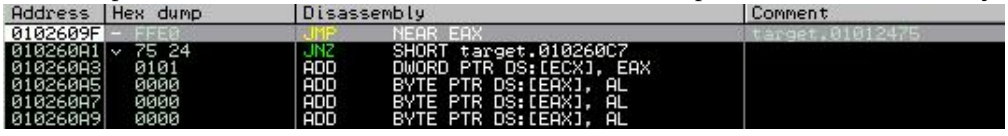
Oki, after Load in Olly finished, press F8 next 2 times. Transfer Register through window, right click on the bar and write **ESP Follow in dump.** We are as follows:



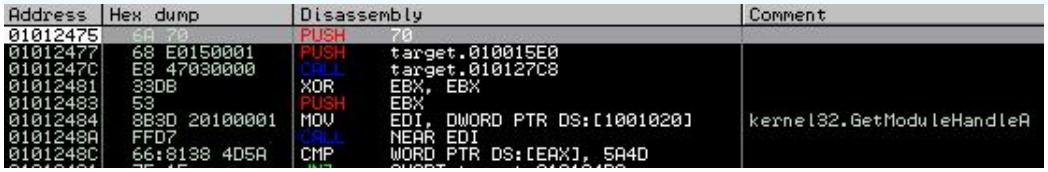
Highlight 4 bytes at **0006FFC0,** then right click and select **BreakPoint-> Hardware-on access> DWORD:**



Next, we press F9 1 times and Shift + F9 4 times. We will stop me in order **JMP EAX** jump:



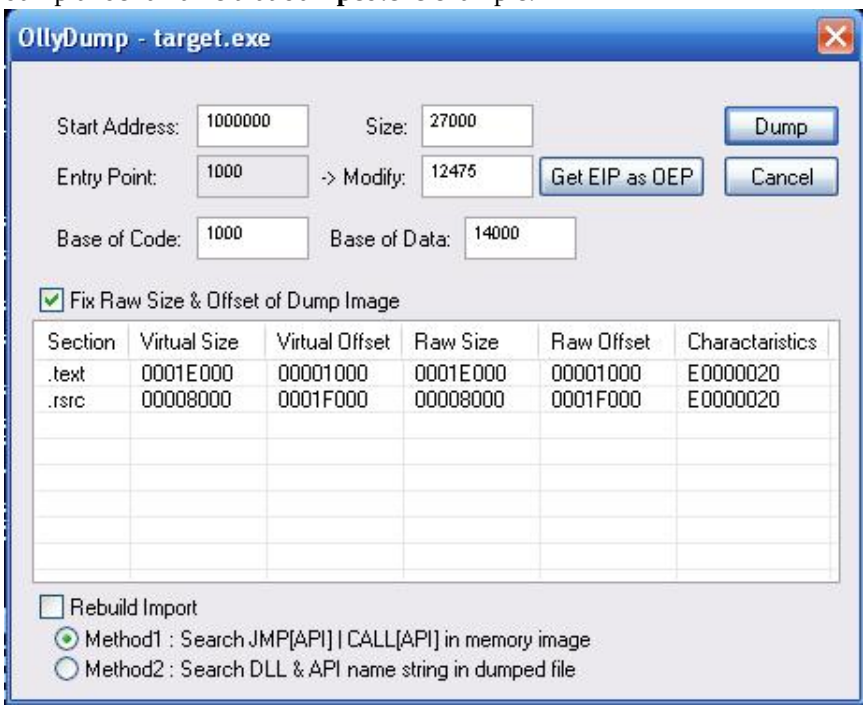
Oki, at a command **0102609F** jump to OEP. Now we delete Hardware breakpoint by the **Debug-> Breakpoints Hardware-> Delete** to delete. Then we perform lenh jump at **0102609F** and we will stay in **OEP.** OEP What we have is **01,012,475.**



OEP calculation of the formula:
Real OEP = OEP find in Olly-Image Base = 01012475 - 01000000 = **00012475.**
Next press Ctrl + A to Analysis Code. We have been as follows:

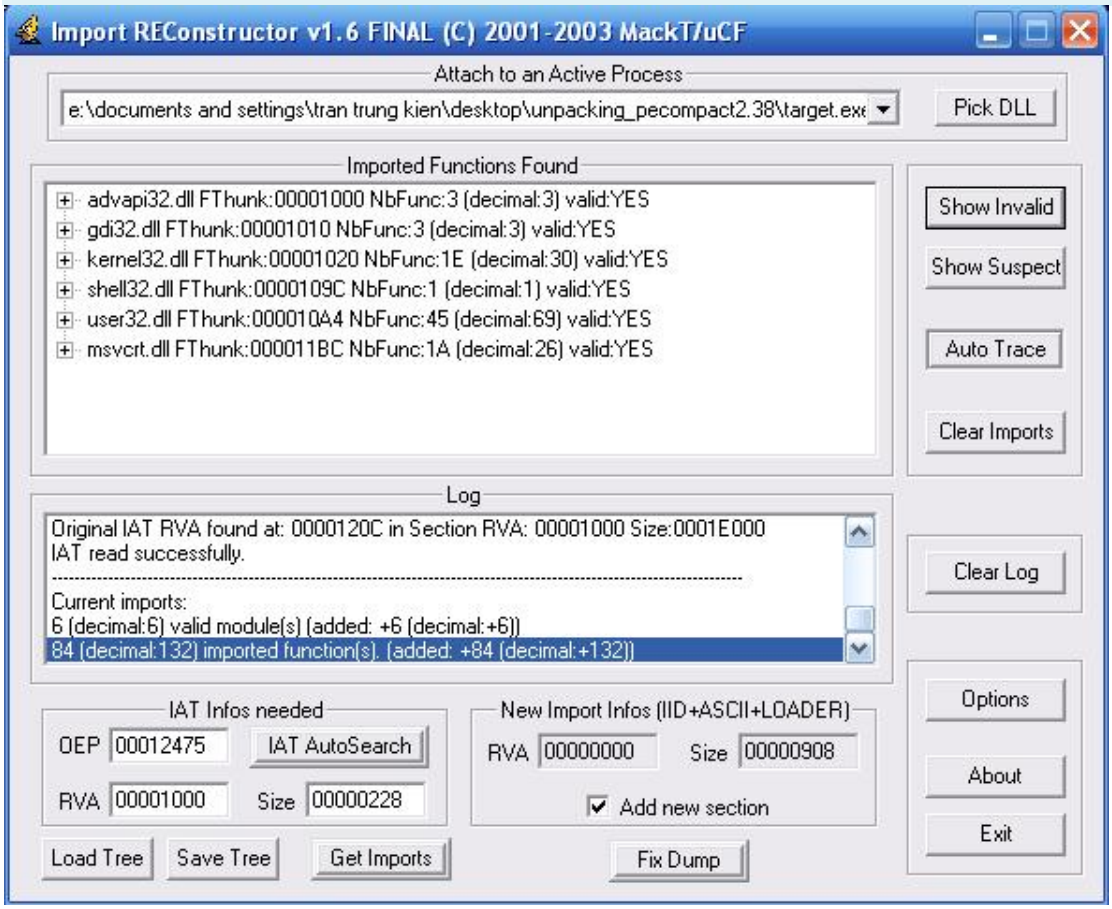
4. Unpacked dumping our files

At **01012475,** we click and choose to **dump debugged process.** Uncheck **Rebuilt Import,** click and save the dump under a name that **dumped.exe** example.

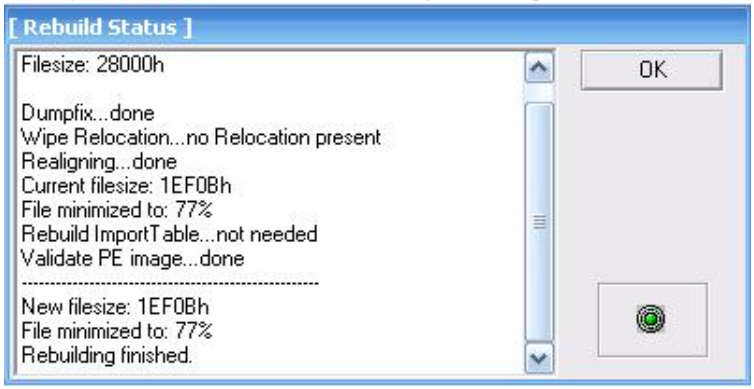


5. Finding and Fixing the Adress Import Table

Hold the window Olly, open **ImpRec** select list box in **target.exe Attach to an Active Process.** Enter OEP we have found the calculation of the above in, **and** click **Get Autoseach IAT Imports.** Then click **Show Invalid.** Keke too good not Invalid thunks at all. Finally click Fix dump file and select dumped.exe.



Finally, we used to LordPE Rebuilt again Dumped_.exe file.



6. Testing Our Unpacked file

Oki, a test file we Unpacked. Yup! It works.
Used to Detect PEid again we have been as follows:

So **PECompact v2.38** unpack was successful. Have fun:)

7. Conclusion

Greetz to: ARTEAM
To thank my family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Hoadongnoi, Nini, tlandn, dqtln ... all REA's members, HacNho, RongChauA, Deux .... all my friend, and YOU!

Written by **kienmanowar** (tutorial date: HaNoi 04/05/2005)

Manual Unpacking PEQuake v0.06

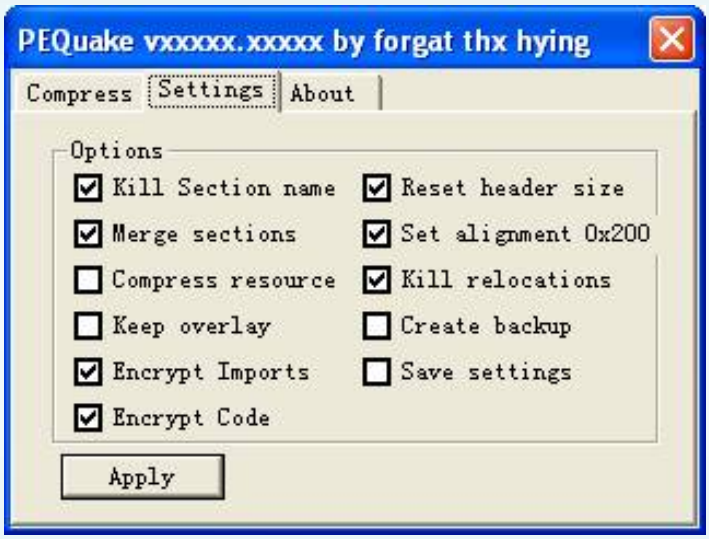
Target: PEQuake.exe (v0.06)

Tools: OllyDBG with OllyDump, CMDBar. (ImportREC, PETools if you want)

Writer: REA Trickyboy ()

I. Introduction

- Hi, sure some of you have heard the last name Packer PEQuake this, it was developed by forgat and quite small. The Option of the packer is also diverse, please review:



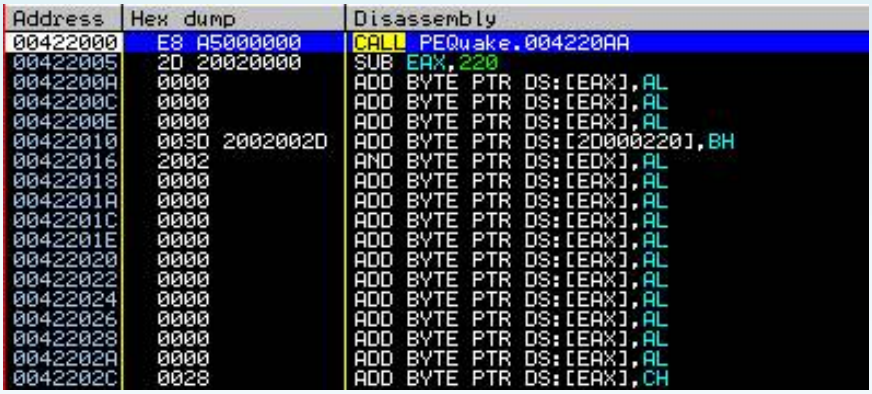
- The packer has Option ways of protecting it lies in the following 2 points:
+ Anti-Debugger
+ Encrypt IAT table.
- Tricky packer that through this touching thanks to a layer of very UnpackeMe Why Not Bar. Unpack hoài do that, but after walking on a net, also found the packer try this man. Also lượm a tut Chinese on the packer, but see tut and then too, tricky to do that should the Chinese tit blind. Finally have to unpack nghiền hours underground. Time would have to consult with you.
- We will always use the Packer PEQuake in this pack because it is by itself. J

II.Detecting

- It can be used to Detect PEiD:

- Or observe 1 billion:
+ Have LOADING gray when run:

+ Entry Point (EP) starts with a function CALL:

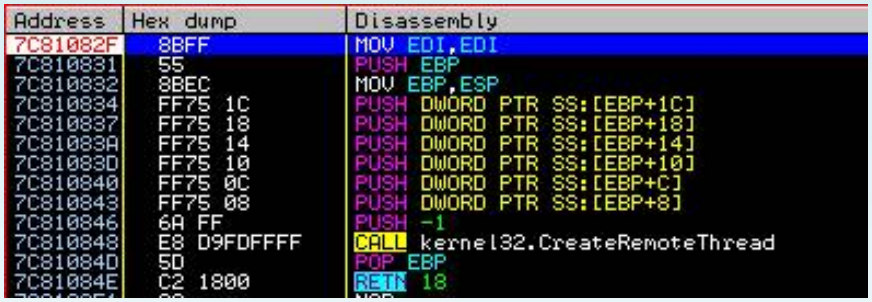


- Thus it is enough to conclude it is PEQuake then. Of course, the aged PRO will detect through signature of the packer, is less tricky to do so temporarily. J

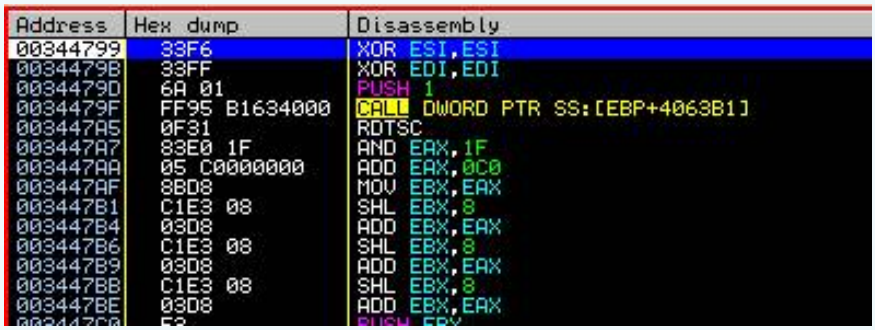
Anti-III.Bypass Debugger:

- Packer this anti-debugger by check to see programs Load from where, if explorer.exe from ko's Win is an independent in order to dance itself. Packer check Where When run, it will create an area code in memory and then check. I will remember to this region by set breakpoint (BP) in CreateThread function.
- So after Load to Olly, you enter the Command Bar "BP CreateThread," Enter.

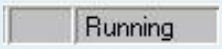
- Press F9 to run, may have LOADING up and preparing to load. Break!



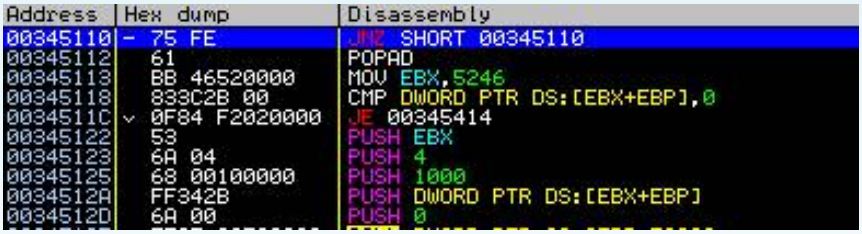
- Remove BP this place. Ctrl-F9 to order RETN 18. And F8 to return, to us here:



- So check stage will take place in the Code are in the start address is 340000 & Size A000. Here we will analyze a bit to find out the first set in BP. If at this Run for more, we do not see the program up, to have full LOADING, while still reporting Olly Running:



- From the failure to be either Olly Loop Where it is independent or 1 in order jumped by airplanes. 3 dance or order form is used JMP, JE, JNZ.
- JMP independent if the previous order to have a jump conditions to it. Hope is the ability to independently and in JE JNZ higher, so we easily than man. JE if independent, there is a 74 FE OPCODE. JNZ is 75 FE.
- You drag a window onto the top. Search for Byte: 74 FE. Item not found.
- Search more of Byte: 75 FE. Found 4 orders jumped as: (Ctrl-L to the next order)



- Of course it is set in all 4 BP commands. Then F9 Run Break it in what was the Okie. It is and try this:

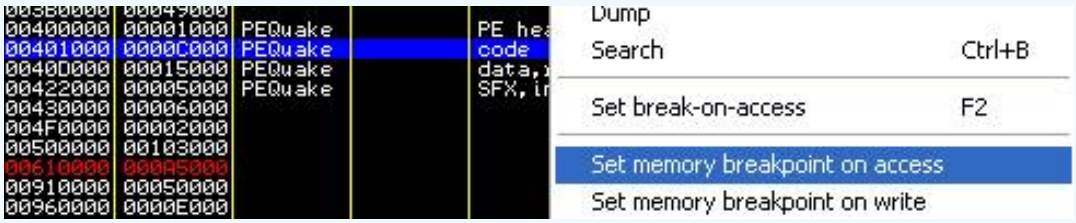
- Now that new orders for Cmp EAX, 4C505845 quite special:

- If the load from Explorer.exe, the obvious Byte here will match the order in Byte Cmp on. From that failure to find out how this command JNZ jump faster by any Search Command: Cmp EAX, 4C505845 is enough.
- So now it's too easy to bypass it. Here are Intergrity ko you should check that an NOP it. But it gently for Change flag Z = 1 to do it is to skip:

- The bypass is part of our Anti-Debugger of PEQuake then đấy. Now click Run will see the program run lickerish.
- But do not want to do from the beginning for you here, and one through the IV-Find OEP.

IV.Find OEP

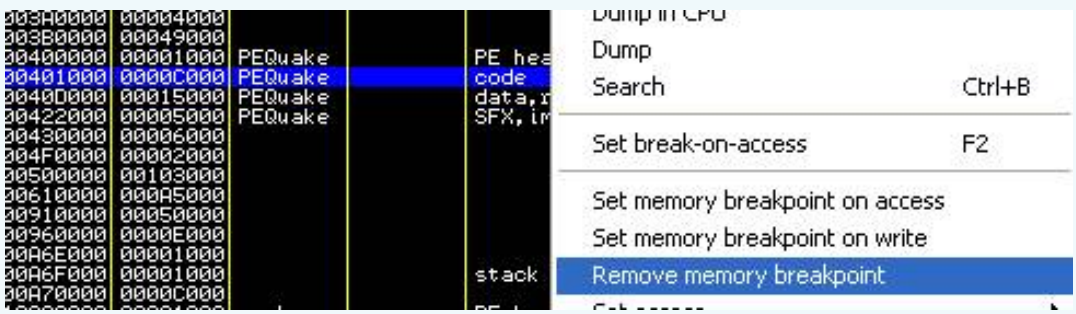
- Unpack the packer is, we always need a key 2 OEP ß IAT table and they are usually the packer encoding. Tricky course as you know 2 things on what is.
- How to Find OEP is temporary, and tricky mò mam should not be optimal.
- Here we still follow the traditional waiting Packer unpack completely Code of the program, access to the Code section and Bread for the OEP. So we open Memory Map, Alt-M, "Set breakpoint on memory access **(MBOA)** in the code section:



- F9 to run more, LOADING full bar, and Bread:

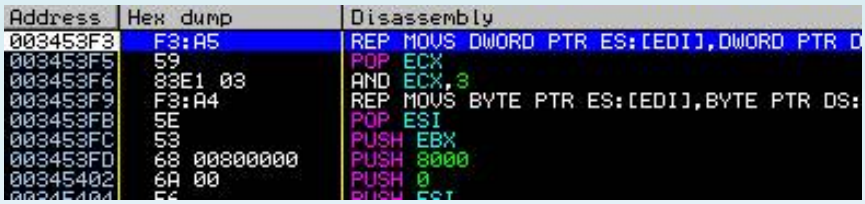
- At this time not to OEP, under an order JNB jumped up. If we continue F9 will trace each loop a long time. Need some trick to bypass tip. Hehe ... tricky but J
- Course for the last loop, BP set for just below it, then F9 is too soon (remember to remove the MBOA)
- But after several times mò mam, see also some tricky loop below, and get 1 BP placement help us go faster. Pull down a tí, over 2 orders RETN, and stopped in order RETN 3, BP set it up:

- Do not forget to delete MBOA other small, because now we're in the code section. If MBOA remain there, all the time RUN F9's like we were a Trace F8 order - are the region access to this Code.

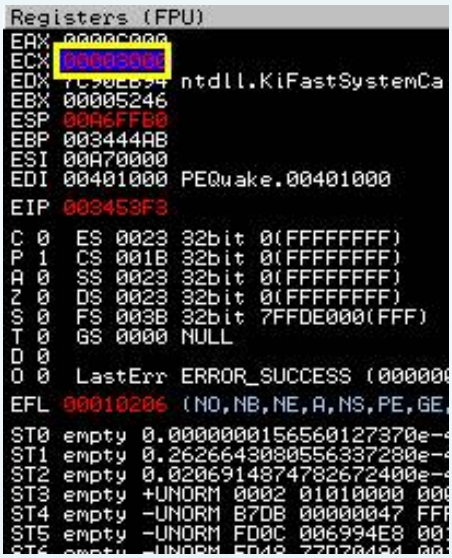


- Now, F9, Bread:

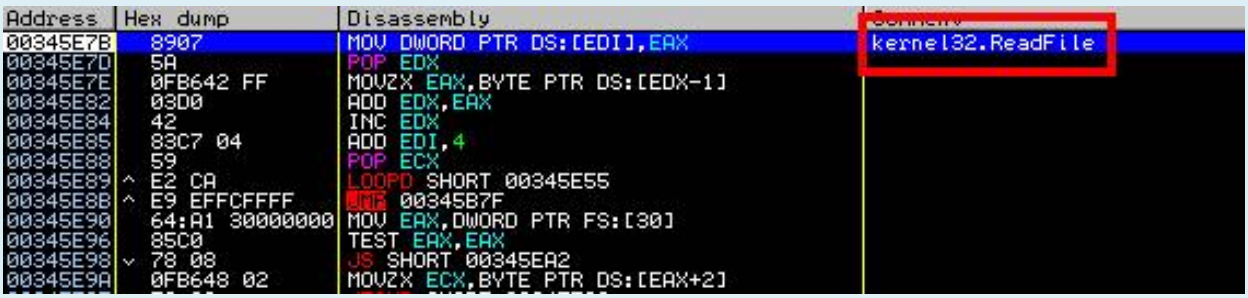
- Set the MBOA to the code section for finding OEP still unknown when the program go back to. Remember to remove RETN 8 BP in the other. F9 any Break:



- Look through the window Register:

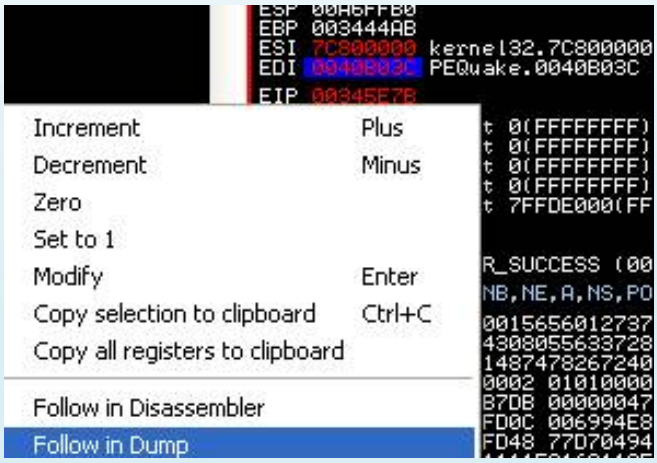


- ECX = 3000, if your patience will run F9 feedback in order to reduce the 3000 value gradually. He he .. Tricky offense F9 button of your use F8 trick tip is the last one ... ECX = 0 J
- Now back to F9, Bread:

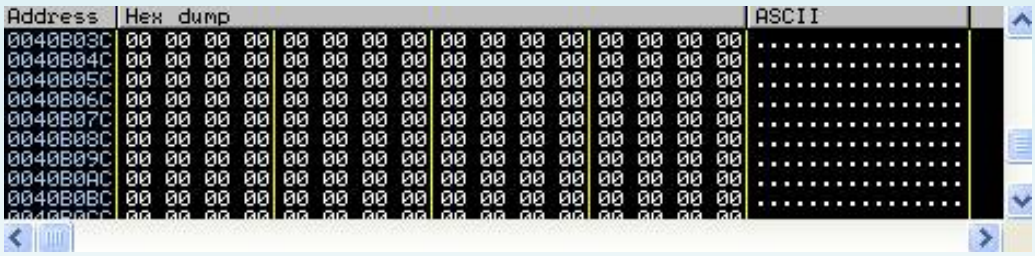


- There is something special was shown. Remember prior to the OEP, the value of the table must be IAT Write to Memory truoc.O here we see a value eyehole. Find the memory location is also very important to rebuild Import, so look through the Register:

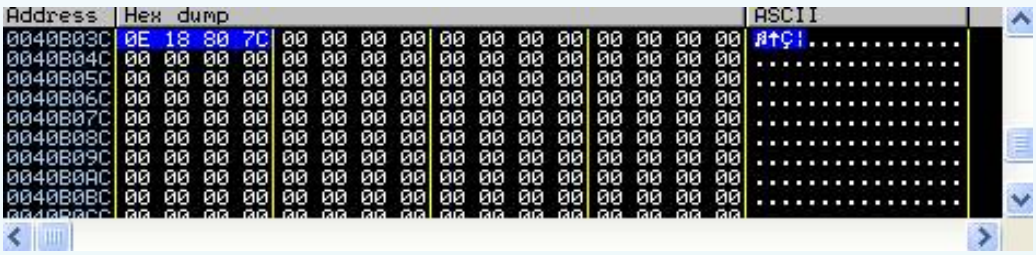
- There is a value only under section code of the program, EDI = 0040B03C (401,000 <40B03C <40D000). Hopefully that is the address on the value of the IAT is to write. Follow us in dump in EDI:



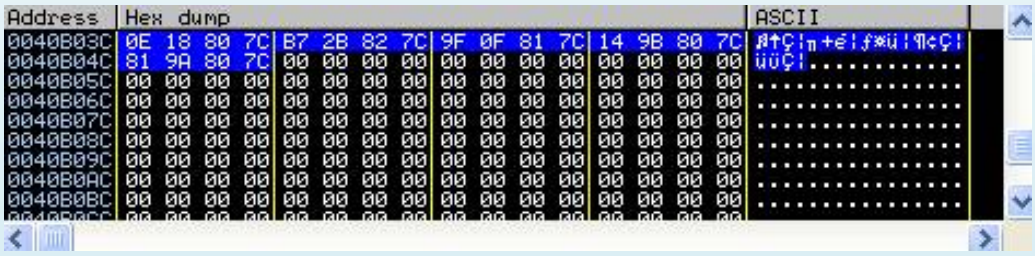
- Look through the window dump:



- Still have not found anything, but please press F9 to any one, we still Break command in the dump and found in Memory:



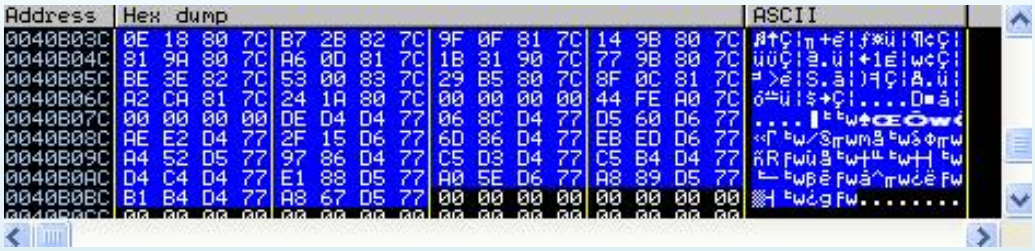
- Yes is stored value IAT, code calls ReadFile function was to Write. If some F9 again, we'll see Byte of the following functions are to write:



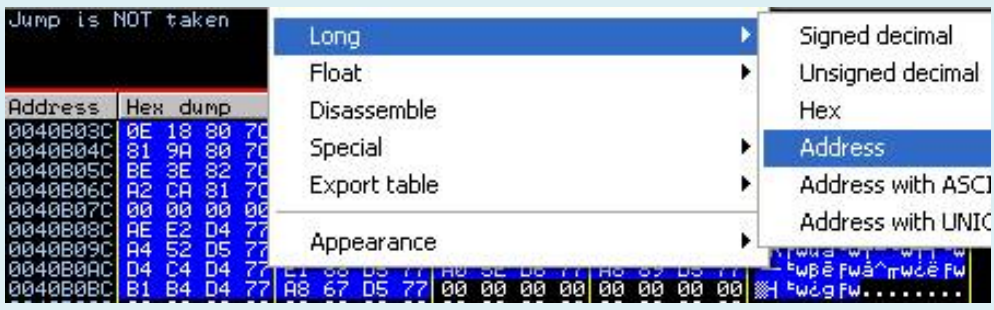
- But do not know how much value is to Write, we probably do F9 any feedback? Again trade their F9 button. Use trick tip you hen. Dom tí down from the seats on the Break, Bp set here:

- Remember to remove the MBOA go home. Now, F9, break:

- In memory dump:



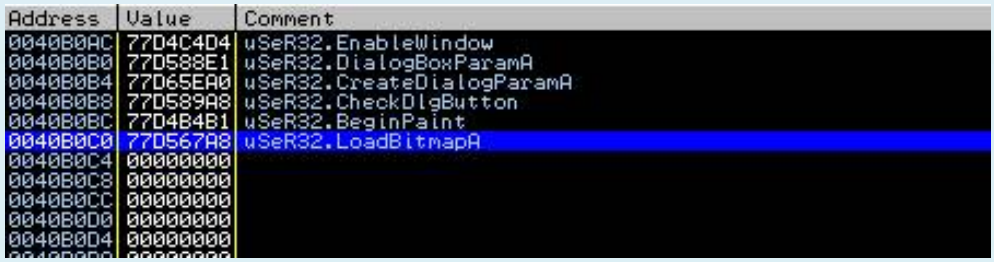
- The value IAT was sufficient to Write to View more, we have to Click, choose:



- As to look more correct ko?

- Pull up, IAT **40B000** Start at:

- Pull-down search IAT End:



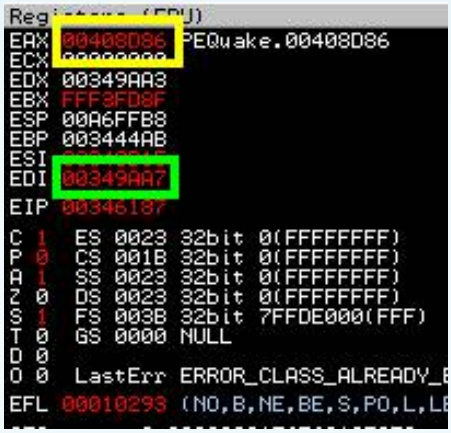
- What are IAT Length = **C0**
- Okie, and that information useful for the Import rebuild. So after IAT write to memory. Hope that it will access to OEP. We put the BP immediately jumped this command. Continue set MBOA in code section. F9 - Break:

- Hic, OEP has not yet, but it do not break in the offset in the code of the program. This Code is the area that packer created to check the present. Now make sure it duties decrypt something. At first come, tricky đành blindly press F9 "to" look forward to a time when it is to OEP. And it has to really (do not you do the housework, so raw here, Section V to continue the fast)

- What is the complete Find OEP. One to the next.

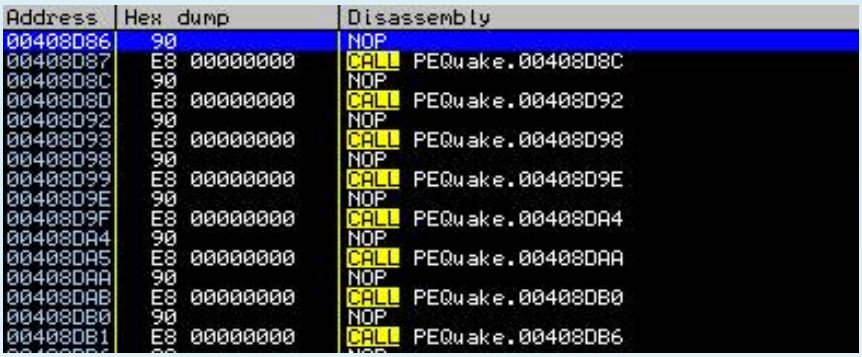
V. Analyze decrypt IAT Jump & Find OEP Faster

- At the one we have is that the number "n" - number ko bít before, we must have a general way. What do you press F9 on the tricky subject is difficult to make the last item IV nhé. But one principle is to observe the hours Register:



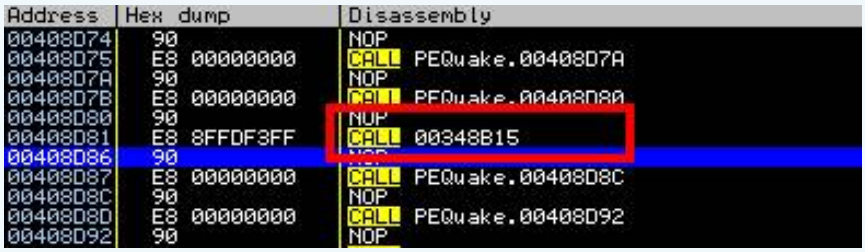
- Fortunately **EAX = 408D86** may be offset under the program code. We try to Goto it, Ctrl-G: 408D86:

- I'm here:

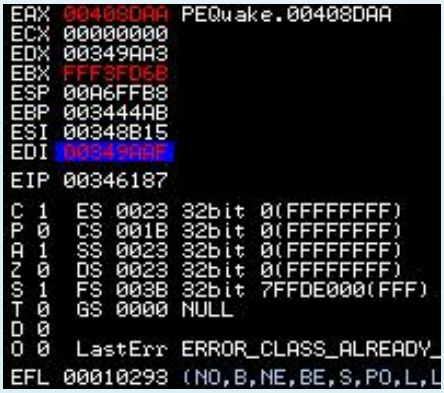


- Looking back kĩ the CALL command is called to each other in order from top down. It lãng nhach to do? So here is the function CALL has been encrypted. Now a new F9 again, EAX is the address of one of the functions on CALL.

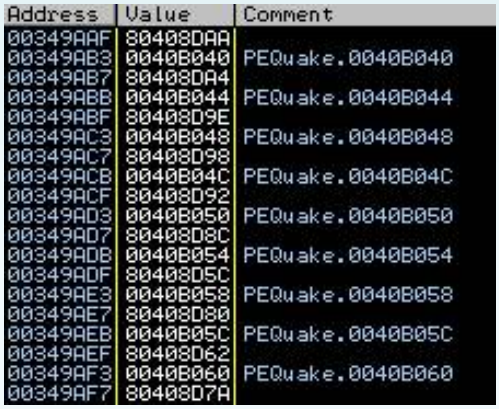
We again Goto 408D86 to address at this time:



- There are 1 small change, in order CALL called on to do 408D86 which is 348B15. That is after F9, has been the change in bytes, and a call CALL other appear. It is called to address 34xxxx area remember that packer created, this should certainly related to decrypt. It decrypt what? We again opted to mò mam. Looking through the Register:



- **ESI** are kept in the code offset by packer, **EDI** is still their, it demonstrated the new changes in the value and use, in our Follow dom and dump it into memory dump:



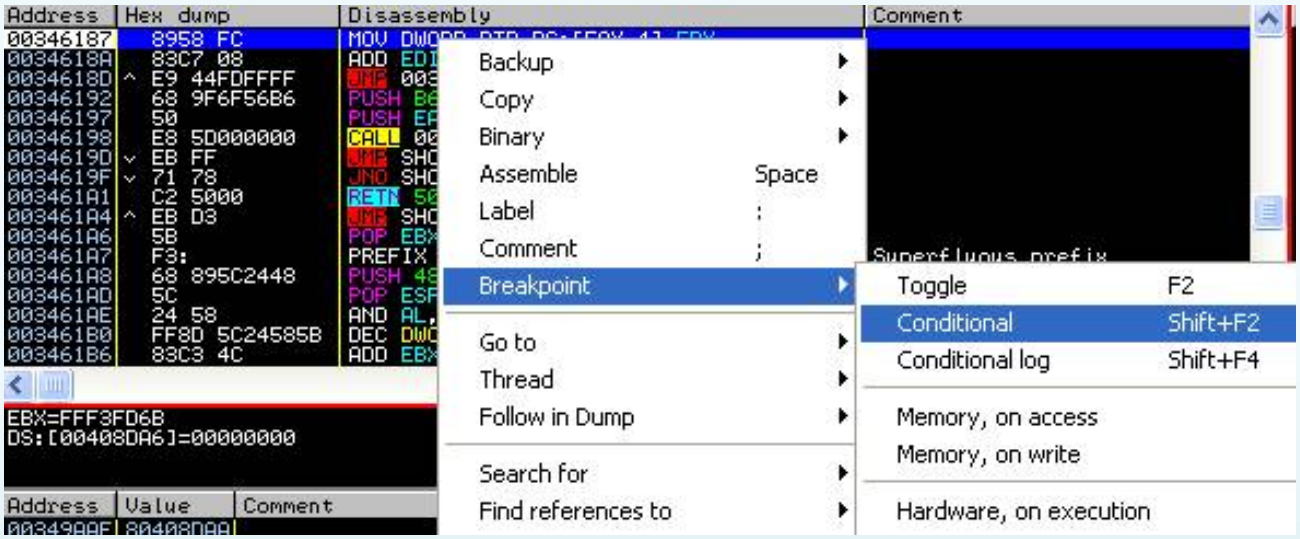
- Ah ... há you do not see any? Sure i remember ha, IAT we find now **is: 40B000 - 40B0C0.** So the value here is the part where Address save IAT. Byte and the other, as 80408DAA - **80000000** = 408DAA is the address of 1 in the function CALL lãng nhach there.
- So now the thinking here is that the code in a call to the IAT.
- Normally, a program with the command to IAT:

JMP DWORD PTR DS: [xxxxxxxx]

- This cost is 2 Byte 6 **FF 25-byte** opcode JMP by Byte and 4 - **xx xx xx xx** is a need to address the region to jump.
- Compare we see here packer has encryption JMP order that a command NOP 1 Byte and a command CALL 5 Byte. So our job is to counteract Patch 1 Byte NOP CALL + 5 bytes t h a t JMP 6 bytes. But it is in the

following categories, tricky time back to find OEP. The number "n" above, can be solved this place.
- Remember that every time F9 break in top position, a command CALL been changed to 348B15 CALL. Position the CALL command is in order from top down. Of each address found in the EAX, the CALL command will change the address **EAX-6.** In previous Byte 6. If you click "n-1" times, you will see the value of EAX held before OEP is to address the command CALL lãng nhach final **+ 6.**
- So very simply, we put the MBOA, are now in order Break:

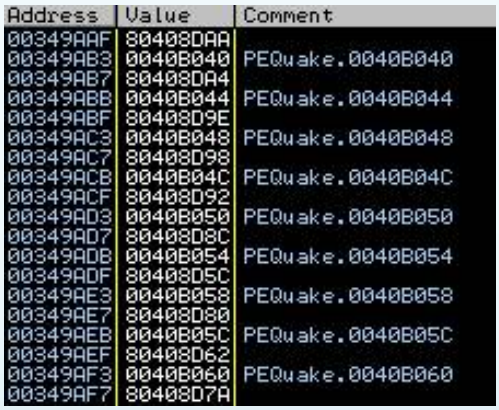
- BP has set the conditions are satisfied, click right here (or Shift-F2):



- For the EAX == Address CALL lãng nhach final **+6.?** How do I find this last CALL? Of course to do after "n" F9 times, like the lãng nhach evil. There is a general search.
- From the CALL function, pulling down the bottom to find CALL:

- The address is the need to find the address just below the CALL command. As said *"each of the address found in the EAX, the CALL command will change the address EAX-6."* You sure know ha. That address is the need to find **408E5E.**
- But how do find this optimization, because the table can Küç IAT scattered, including continuous together, such as encryption, and this will CALL years together, including continuous, CALL and final course i just have to pull down is found. UnpackMe is typical of why the CALL 2 years together.

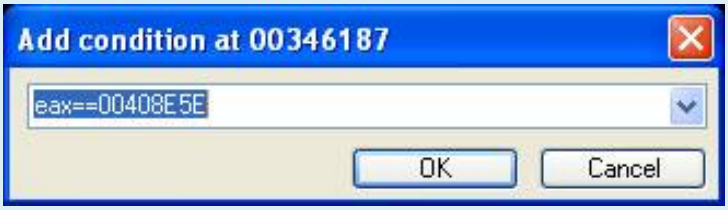
- There is a better way, back to the dump Memory:



- At 804xxxxx values, you have to find the greatest value here. This case we found:

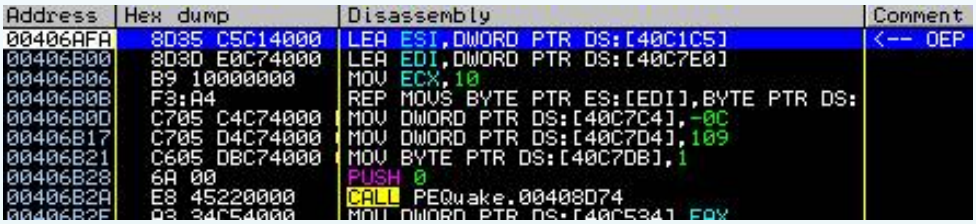
80408E5E - 80000000 = 408E5E

- Okie, hope you understand J. Back fill the box BP Conditional:



- OK, one of F9 (deleted MBOA) I still stop here:

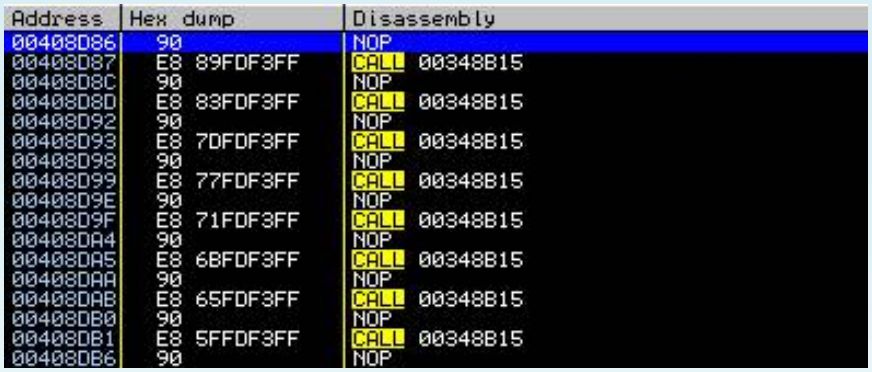
- But EAX = 00408E5E. What is past "n-1" times. Now delete this BP seats. MBOA set the code section, and F9 break at OEP darling:



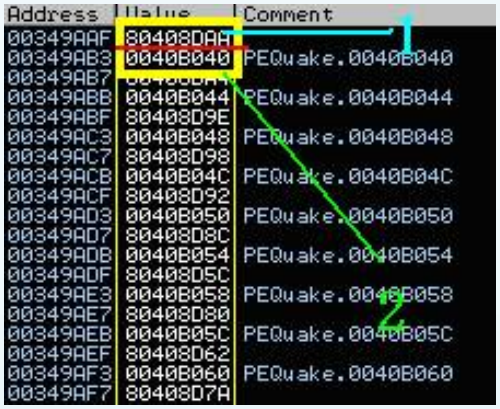
- This is how i find OEP optimal, but perhaps better F9 "n" times nhỉ you? Okie. How tired the rest hen. Then to the next.

VI. Jump to repair IAT

- When you unpack, if they have any memory area to keep Real IAT (IAT News ko encrypted), OEP, which means we can dump the Import and rebuild it. Đống But back CALL lãng nhach any, Goto **408D86** :

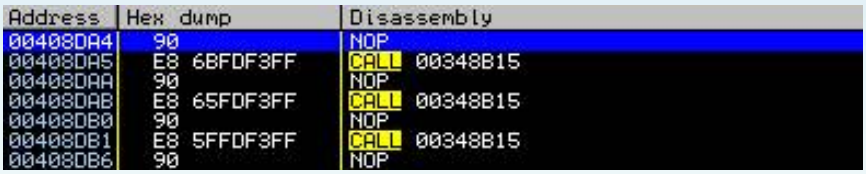


- Yes the entire order before CALL **CALL** are registered **00348B15,** packer to decrypt the IAT program to call.
- But as the analysis in part V. You only need to change the patch NOP Byte 1 + 5 bytes Call à JMP 6 bytes.
- Now we return to dump Memory:

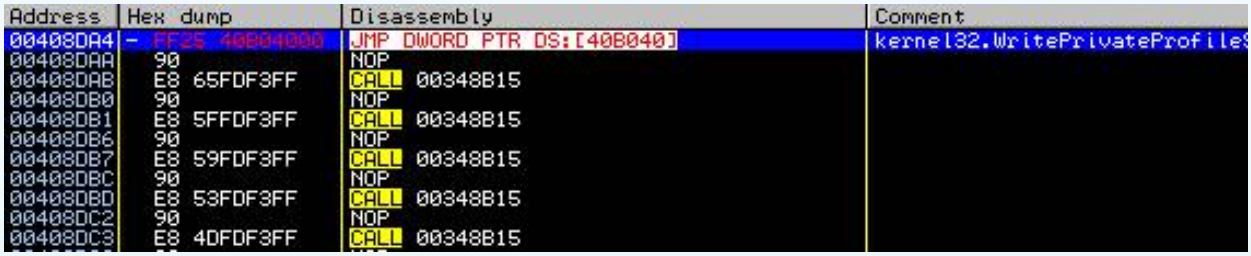


- I see with each address has 2 parts, one is the Byte address CALL lãng nhach + **80000000,** which is the address of a memory region containing IAT.
- Get the 1 case highlighted above, you may think, we Patch NOP + CALL in the **JMP 408DAA [40B040].** But please remember: *"address of each found in EAX, the CALL command will change the address EAX-6"*
- JMP also a mind that, with each command should JMP Patch, Patch will be at less than 6. If you do not believe, you just try to patch addresses do change, will be the surviving command NOP + CALL first and last legacy of CALL. So in the above example from 408DAA:

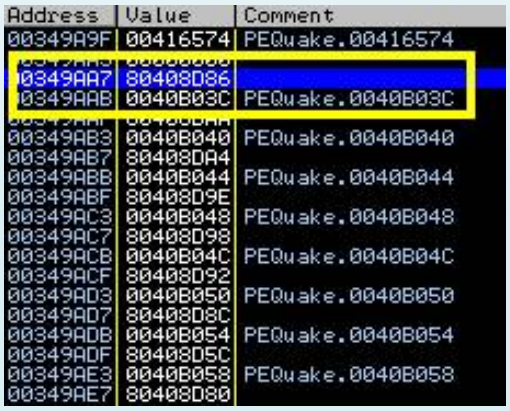
- Move up 6 bytes, even in the NOP command:



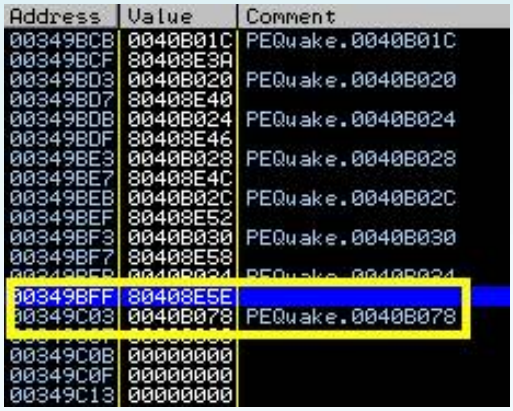
- Patch to JMP [40B040]:



- To complete the patch, you pull up to find where to start in the memory dump:



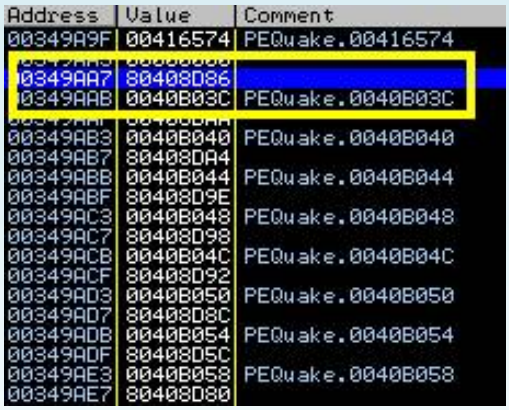
- Down the end:



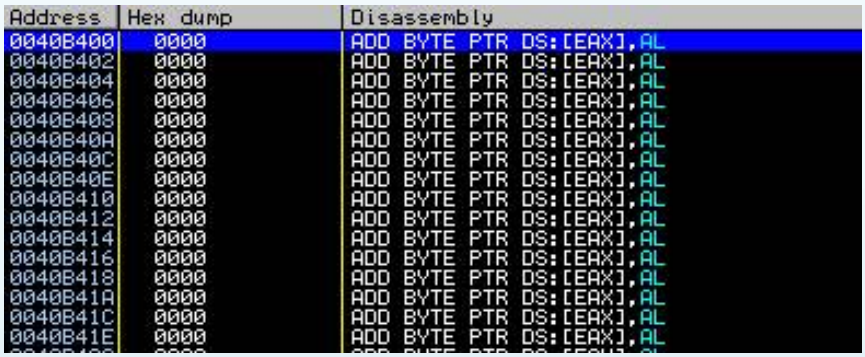
- So start from 349AA7 address, the address 408D86 - 6 = 408D80, you patch into JMP [40B30C]. You Patch formula by which to address 349BFF is completed.
Then dump-and rebuild IAT. (If OEP has to do is to use dump LordPE)

Jump to VII.Repair IAT quickly by Coding

- Hi hi, finished reading the above, you will have the village is now ... *"This patch may do all àh? Wá many."* Yes, the right hand each patch on the line as everyone oải. For example **PEQuake.exe** with this patch is only the number of small orders JMP. What's also UnpackMe to **84** lines. Hehe .. but first unpack it is very tricky patch hand.
Only when writing this tricky new thinking otherwise.
- Of course the readers aged PRO khúc has to think of how now more quickly. Tricky think that speed to be improved only.
- I resolve problems with the patch itself through Olly help you (are content because the CPU).
- The kĩ see you again, we found that only works with 3 main value, 1 address in the dump Memory, and 2 parts Byte memory of it.



- From this address, from increased, to take part in Byte 1 to determine the need to address patch, and get to the byte in the 2 to address identified areas should remember to JMP. Patch until at last they stopped.
- So when the OEP, we find a region CODE available (in fact do not need to be the same):

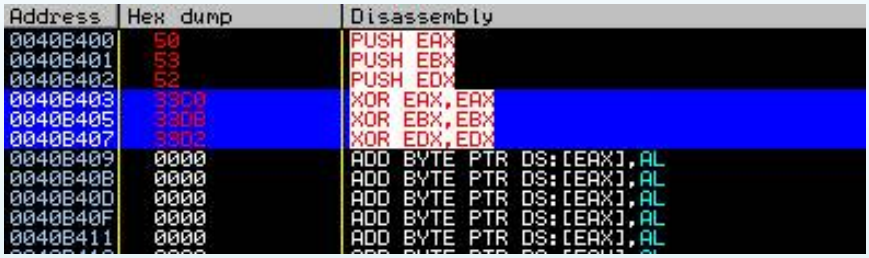


- At the time of the OEP, this place is empty, so tricky borrow temporary accommodation for creative nghen relatives. Address **40B400**
- As the above analysis, we only work with 3 main value, 1 value is only a memory region, 2 value is left in the area remember that, so we need to use to record to 2 and more 1 to write back. Here tricky use EAX, EBX, EDX.
- Use which must preserve the way, pushing it stack up now:

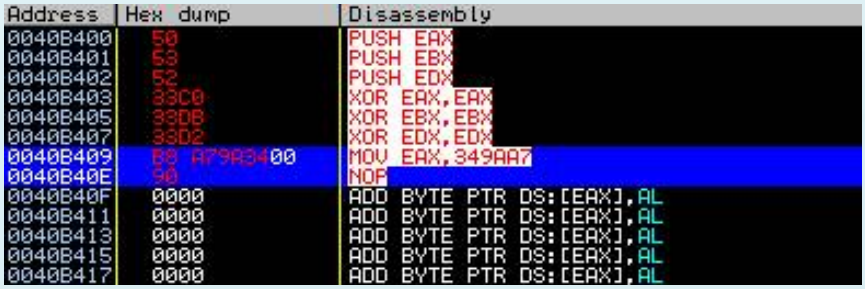
- More secure, we cleaned 3 write this: There are 3 ways to make a clean record 1:

MOV EAX, 0 ß cost of bytes 5
SUB EAX, EAX ß take 2 bytes
XOR EAX, EAX ß take 2 bytes.

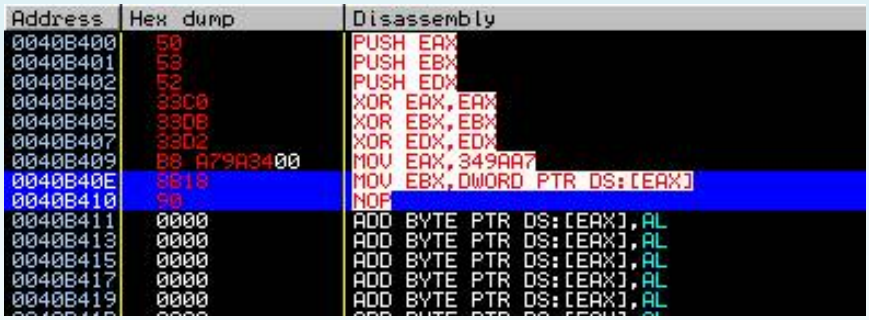
-Of course it should take only 2 bytes, select tricky XOR:



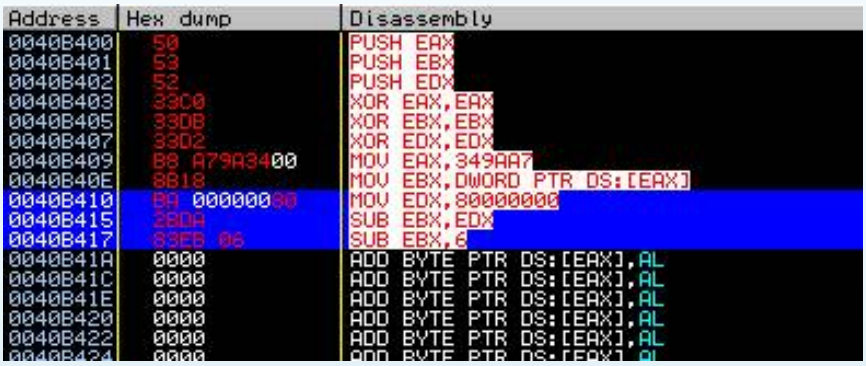
- We start at Start in the memory: 349AA7, it should MOV EAX:



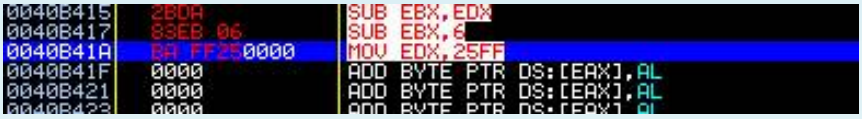
- We need the 1 byte in the address in EAX, so we MOV content in the memory address in EAX to EBX. (*)



- The byte to be less **80000000,** and then subtracting the **6** new address should correct patch. In ASM, we do make sure the area between value and 1 randomly. So to write temporary borrowing to keep EDX 80000000, then less:

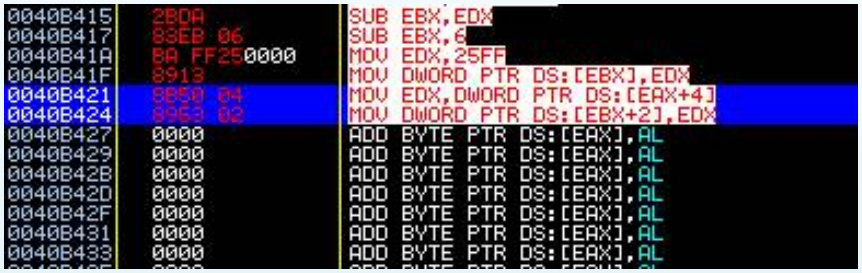


- Of course can get 80,000,000 - 6, to MOV EDX, and except for the neat, but I understand why they just write as the wall.
- So the command line **SUB EBX, 6** EBX has contained the correct address should patch. Now we start to patch the area with a memory address in EBX.
- Recall we need to patch NOP CALL + à JMP. Opcode is FF25, so if the dump from the area, the island is the byte is 25FF. EDX borrow temporarily keep this value:

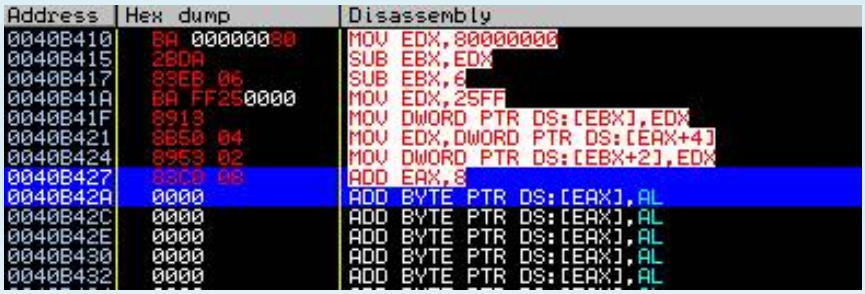


- Then they MOV region to address memory in EBX:

- Region in memory before MOV EBX is OPCODE by NOP + CALL command. MOV after the command above, we have to rewrite Byte 2 FF 25. Now we add to the record Byte address to complete the IAT. The Byte is located in the region 2 in memory address in EAX.
To get the Byte this, we need to increase EAX 4 is completed. Due to the byte address the 1-byte address of part 2 of 4 bytes. Then we mov position it to the next byte of FF 25 in the EBX. News EBX must increase Byte 2:

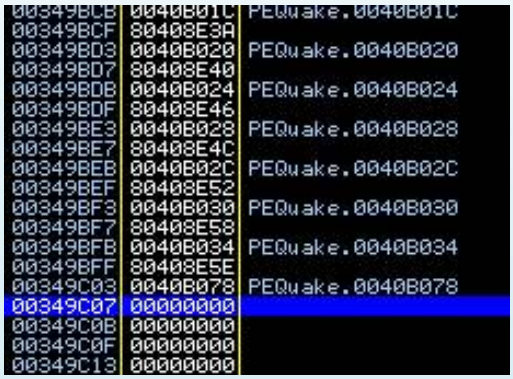


- Must use EDX as intermediaries for ASM ko work directly between the 2 regions in mind. So we have a complete command Patch jumped to 1 address.
- EAX does remain START address, you increase it to point to address the next address next month to 8 Byte **EAX +8.**

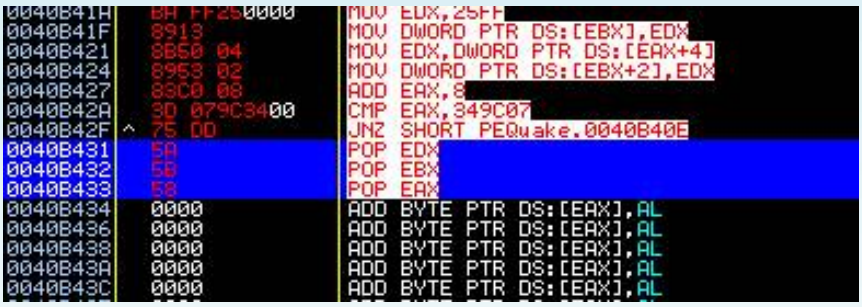


- After that period (*) are repeated. So it is a command to jump back up to create a loop. But loop should have standing. You see when EAX held last address, the patch is complete stop. But we increased the EAX +8 after Patch complete command jump 1. Therefore, for comparison when stopped, we must compare with last address + 8. If EAX is not with the values that make the process on. So we Patch to:

- Address End is here:

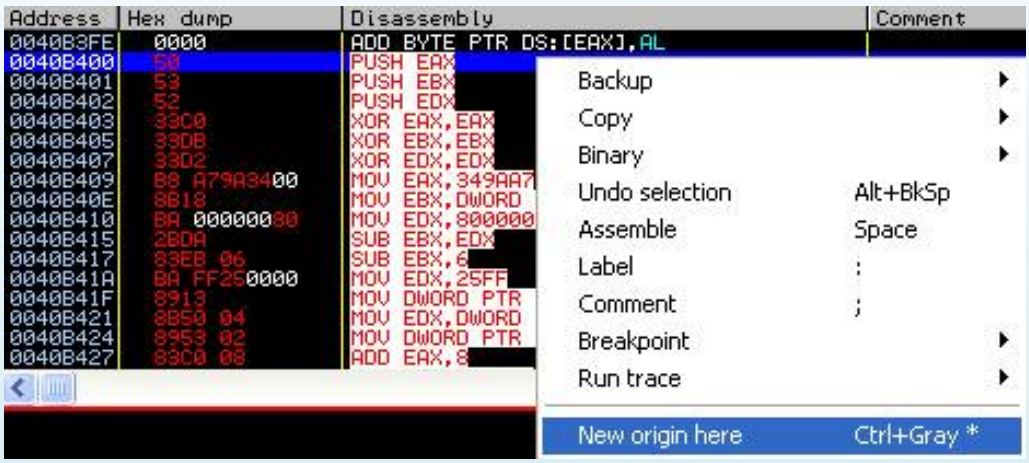


- Call, then returned value before creating this code for 3 record EAX, EBX, EDX order against evacuation from stack:



- To the beautiful, tricky creating a command to jump when the OEP completed this patch, OEP = **406AFA:**

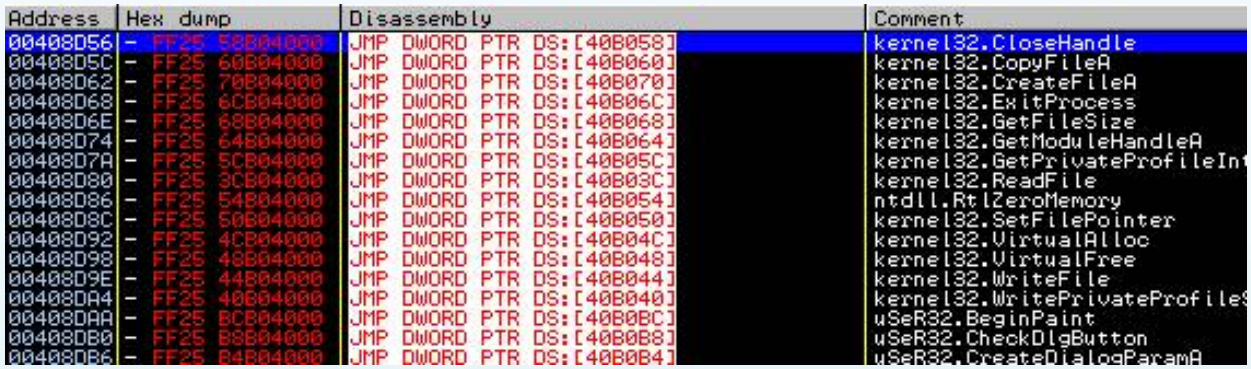
- The need to do after creating the Patch Set New Origin is at the top of the patch:



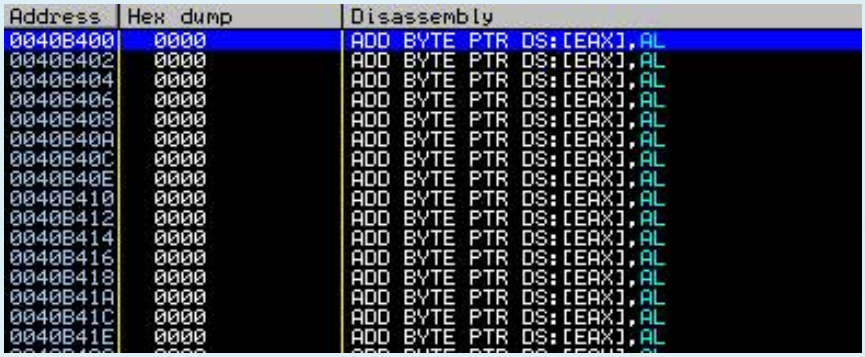
- Set at the end of BP, at about JMP OEP:

- Now make sure that only a single BP here, please clear out even BP, MBOA previously. Then press F9. After Patch, break it in BP:

- Now back to address CALL lãng nhach, see the results:

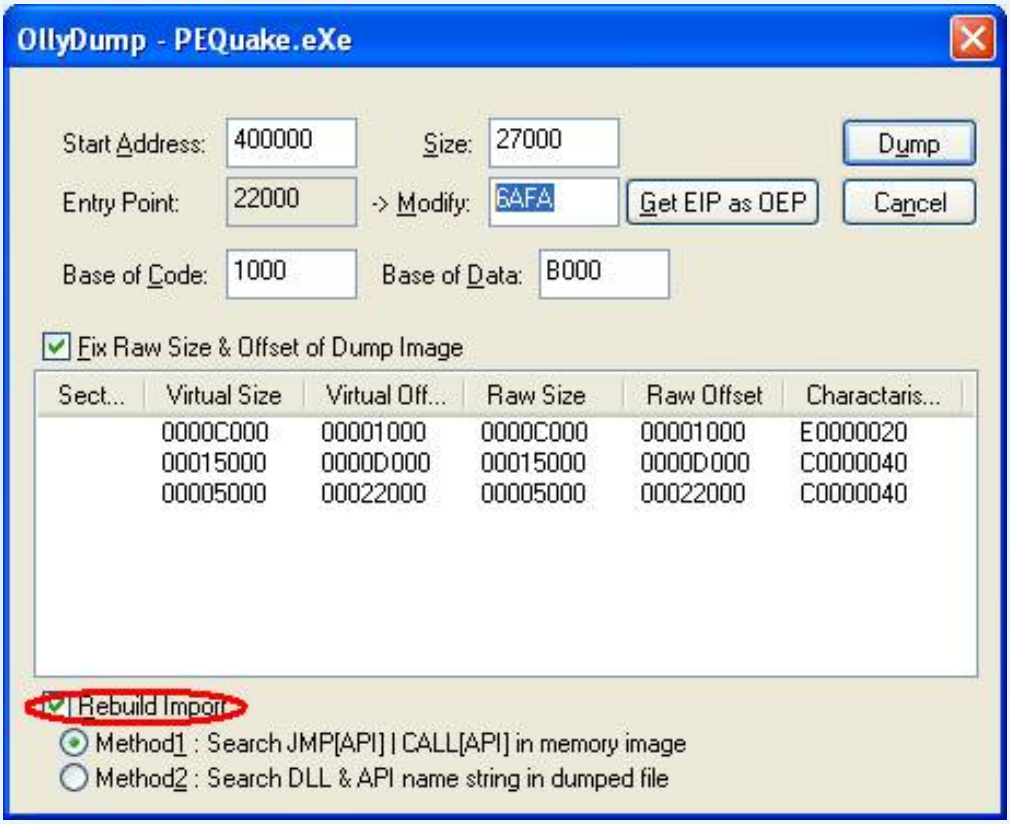


- The entire order was JMP Patch to correct its position, including survival, including excessive. So the code was effective and help us reduce mỏi hands Patch several times. Now i have to dump rubbish, you can Undo the Selection code patch is now on its original form (not to undo the table JMP àh IAT)



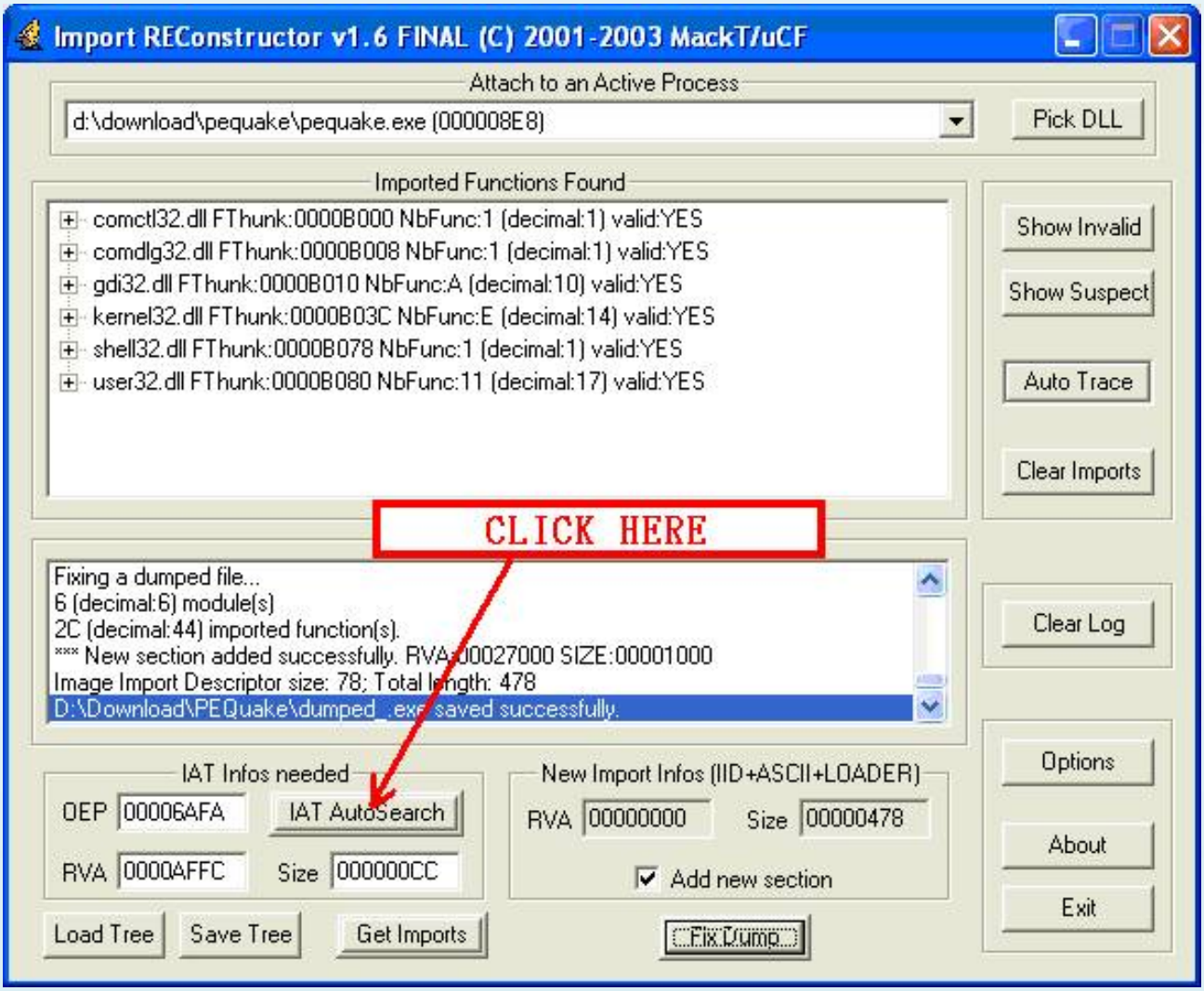
- Back OEP, New Origin here:

- Dump and rebuild quickly with OllyDump:



- Remember to Check Import rebuild if you do not need to use ImportREC. The function of OllyDump to rebuild IAT has a long length of time will take a long time.

- So, if Length IAT long, you dump in OllyDump (uncheck rebuild Import) or PETools (ko lordPE used here), then use ImportREC fix IAT:



- Okie, the code is basic, but you want to write script or Code Patch tool to optional Memory Process.
- There is a bit tricky because of long lines trying to explain the line where the Code of suffering Newbie. As tricky when read by tut-aged foreign hate the patch is finished and then put it xó, wear readers learn that noob as tricky first must always understand. Hic hic ...

VIII.Ending

- Phu ... do you read bít tired but not tricky to write dactylogram always ne, this chat should be walking hand pain wá ơi, in more rapid typing wá J . This is the first tricky self-analysis a small Packer and Repair Code JMP to IAT. As the level of reading and writing Code also poor, only know a few simple commands, if the seats do not expect the well-aged Pro only teach more. Now only rest tired .. Bye.

Thanks for all your help REA was tricky in the study.
Thanks to Oleh Yuschuk for your OllyDBG.
Thanks to forgat for your packer.
Thanks to Chinese cyclotron for your tut. L
And you for reading my document.

Tutorials hacnho # 5

Manual unpacking **PE-shield v0.25**
template by **koncool** and **R @ dier.**

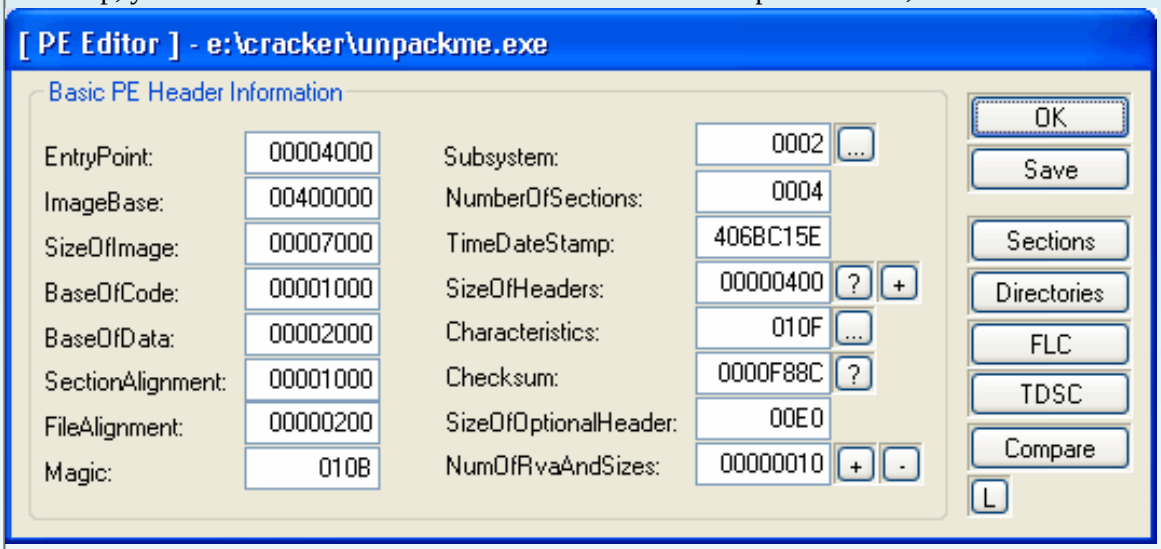
Information	Unpacking for Newbie's
Target	**Unpackme.exe**
Available	http://nhandan.info/hacnho/tuts/unpackme5_tuts.zip
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, Lord PE 1.4, PESniffer 3.2b.
Protection	PE-shield v0.25 by **ANAKiN [DaVinci]**
L Evel	Standard
Category	Manual unpacking

1. Introduction

Hi all, up to this time, I was written recv 4 tutorials and a lot of cheers from you. For this reason, I write the 5th continue tutorials. In this tut, I will be ways for the introduction unpacking PE-shield v0.25 by **ANAKiN [DaVinci].** Tuts only for the beginner. If you are a bro. Please do not mock my tuts ... You can contact me for help and improve my tuts.

2. Getting Started

First step, you have to find some info from this PE software. Open Lord PE, PE Editor choose. And we have:



[Section Table]

Name	VOffset	VSize	ROffset	RSize	Flags
PESHiELD	00001000	00001000	00000400	00000200	C0000040
PESHiELD	00002000	00001000	00000600	00000200	C0000040
PESHiELD	00003000	00001000	00000800	00000200	C0000040
ANAKIN2K	00004000	00003000	00000A00	00001600	C0000040

EP: 4000, The value of flags this case is not needed, Image Base is always 400000, Import Table: 0000 and size is 00.

3. Finding the OEP

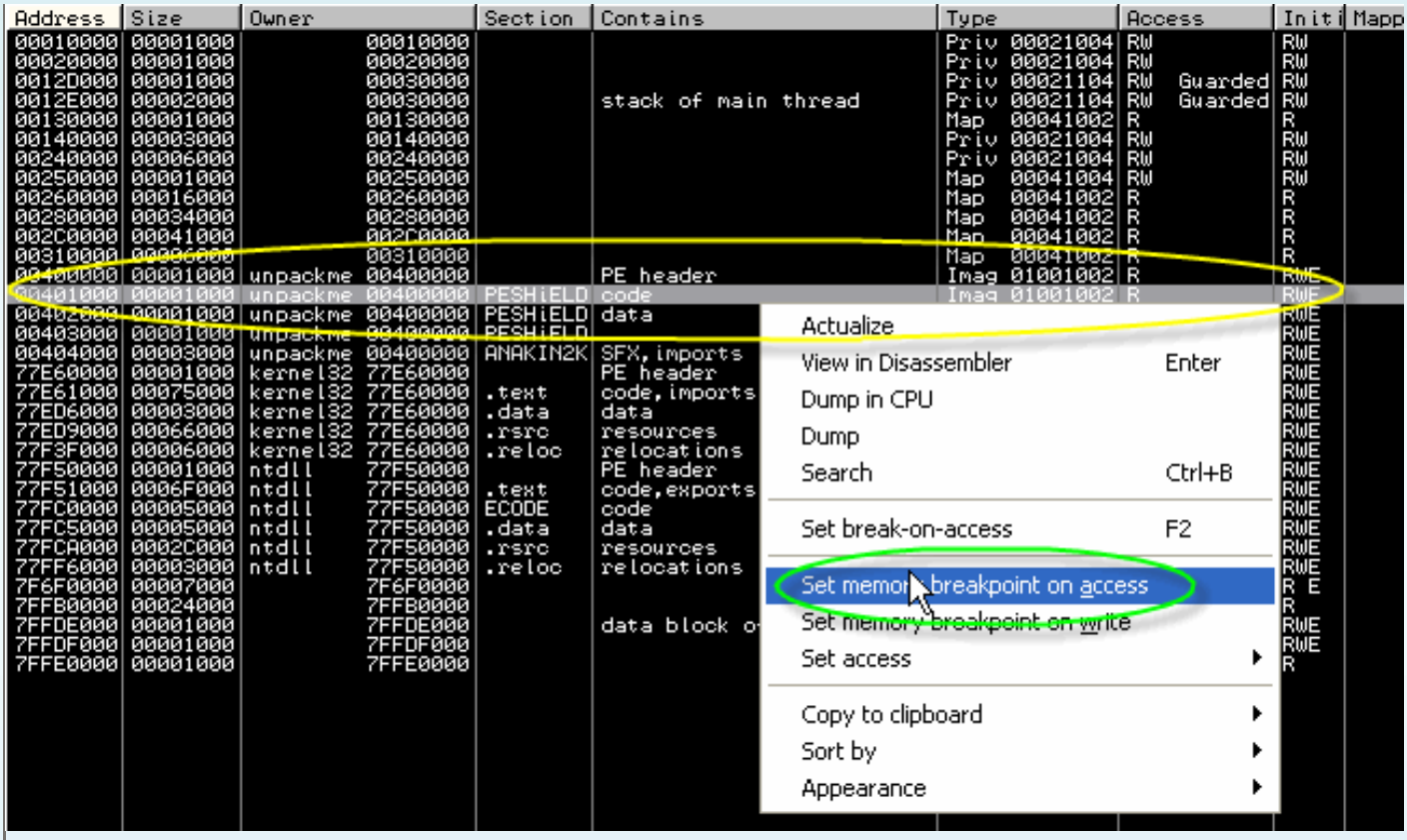
Load **unpackme.exe** into OllyDBG. And you still here:

```
00404000   60              PUSHAD
00404001   E8 2B000000     CALL unpackme.00404031
00404006   0D 0A0D0A0D     OR EAX,0D0A0D0A
0040400B   0A52 65         OR DL,BYTE PTR DS:[EDX+65]
0040400E   67:6973 74 657  IMUL ESI,DWORD PTR SS:[BP+DI+74],646572
00404016   20746F 3A       AND BYTE PTR DS:[EDI+EBP*2+3A],DH
0040401A   204E 4F         AND BYTE PTR DS:[ESI+4F],CL
0040401D   4E              DEC ESI
0040401E   2D 434F4D4D     SUB EAX,4D4D4F43
00404023   45              INC EBP
00404024   52              PUSH EDX
00404025   43              INC EBX
00404026   49              DEC ECX
00404027   41              INC ECX
00404028   4C              DEC ESP
00404029   2121           AND DWORD PTR DS:[ECX],ESP
0040402B   0D 0A0D0A0D     OR EAX,0D0A0D0A
00404030   0A5D 83         OR BL,BYTE PTR SS:[EBP-7D]
00404033   ED              IN EAX,DX                    I/O command
00404034   06              PUSH ES
00404035 v EB 02           JMP SHORT unpackme.00404039
00404037   EA 048DBD56 00L JMP FAR 0000:56BD8D04        Far jump
```

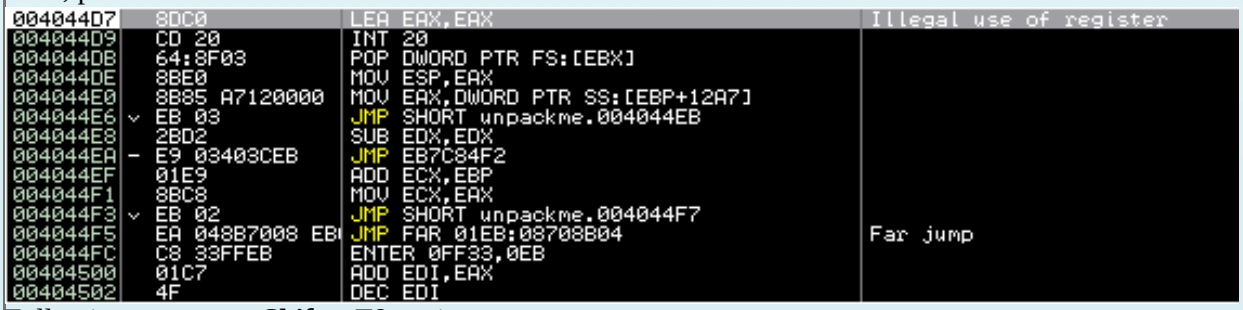
Then, you must press **Shift** + **F9.** And you see as follows:

```
00404232   8DC0            LEA EAX,EAX                  Illegal use of register
00404234   CD 20           INT 20
00404236   64:8F03         POP DWORD PTR FS:[EBX]
00404239   8BE0            MOV ESP,EAX
0040423B   8D85 5C100000   LEA EAX,DWORD PTR SS:[EBP+105C]
00404241 v EB 02           JMP SHORT unpackme.00404245
00404243   EA 0450EB01 EAL JMP FAR E8EA:01EB5004       Far jump
0040424A   BF 040000EB     MOV EDI,EB000004
0040424F   01C7            ADD EDI,EAX
00404251   0BC0            OR EAX,EAX
00404253 v EB 01           JMP SHORT unpackme.00404256
00404255   EA 0F842D05 00L JMP FAR 0000:052D840F       Far jump
0040425C v EB 03           JMP SHORT unpackme.00404261
0040425E   44              INC ESP
0040425F   50              PUSH EAX
00404260   CA 8985         RETF 8589                    Far return
00404263   2312            AND EDX,DWORD PTR DS:[EDX]
00404265   0000            ADD BYTE PTR DS:[EAX],AL
00404267   8B9D 97120000    MOV EBX,DWORD PTR SS:[EBP+1297]
0040426D v EB 03           JMP SHORT unpackme.00404272
0040426F   57              PUSH EDI
00404270   CD 20           INT 20
00404272   8DB5 580F0000    LEA ESI,DWORD PTR SS:[EBP+F58]
00404278 v EB 03           JMP SHORT unpackme.0040427D
0040427A   CD 20           INT 20
```

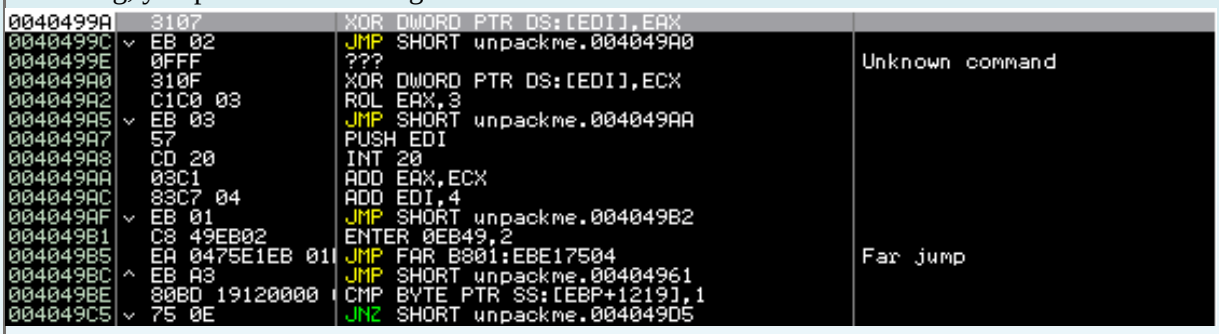
Continued, you have to press **ALT + M** to open the **Memory** of **MAP** OllyDBG.



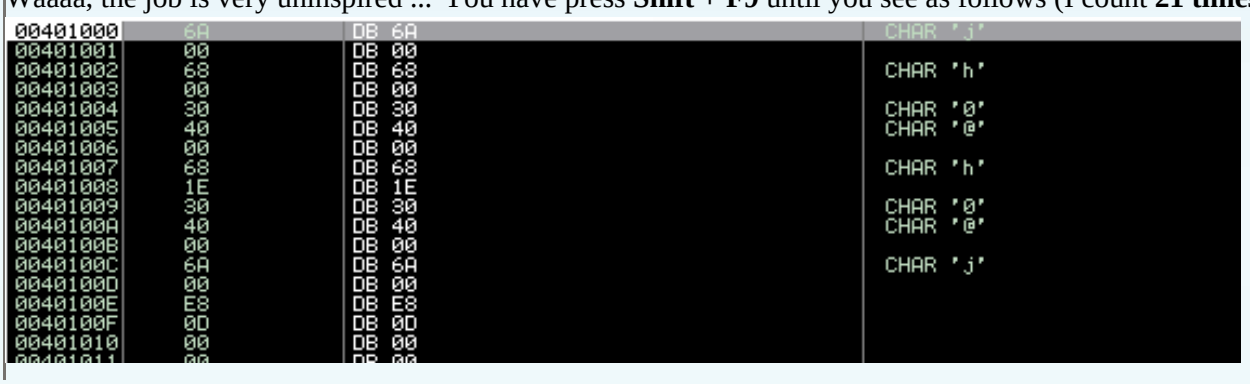
Et puis, you search the address line contain **401,000.** Right click on it and choose **Set breakpoint on memory access.** Now, press **Shift + F9:**



Following, you press **Shift + F9** again:



Waaaa, the job is very uninspired ... You have press **Shift + F9** until you see as follows (I count **21 times):**

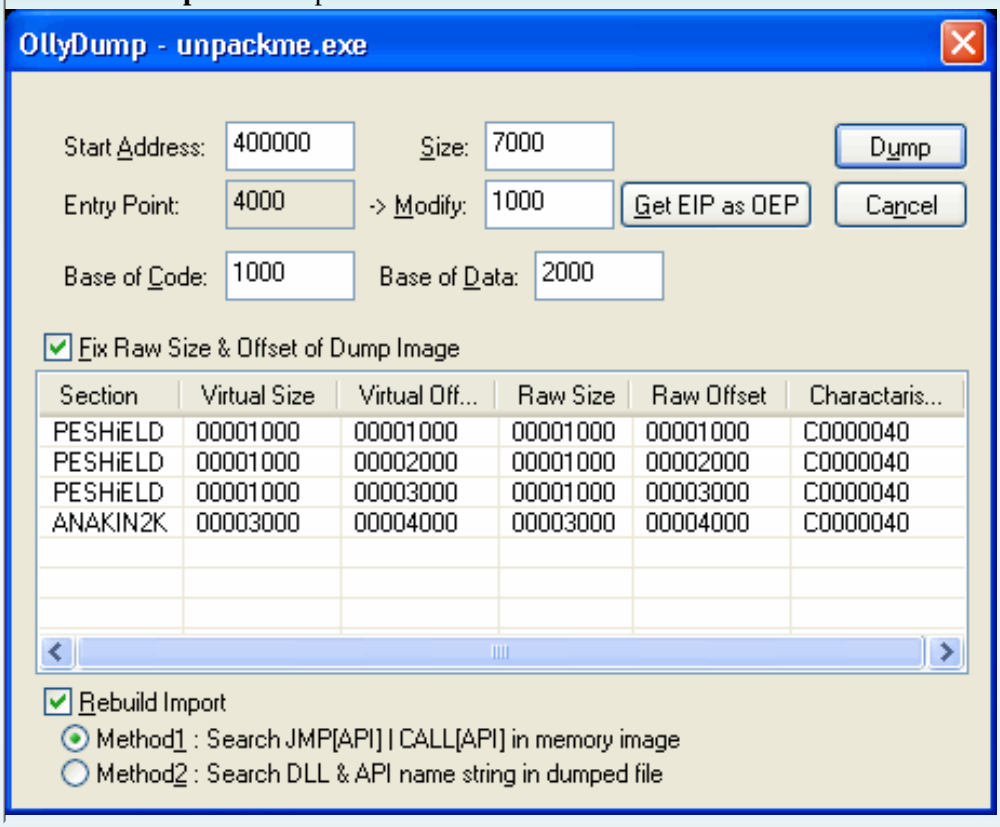


Next, press **CTRL + A** analyze the code for:

Congratulations! According OEP we found is **401,000.** And now we Calculate the real OEP of this unpackme by the formula: Real OEP = OEP find in Olly-Image Base = 401000-400000 = **1000.**

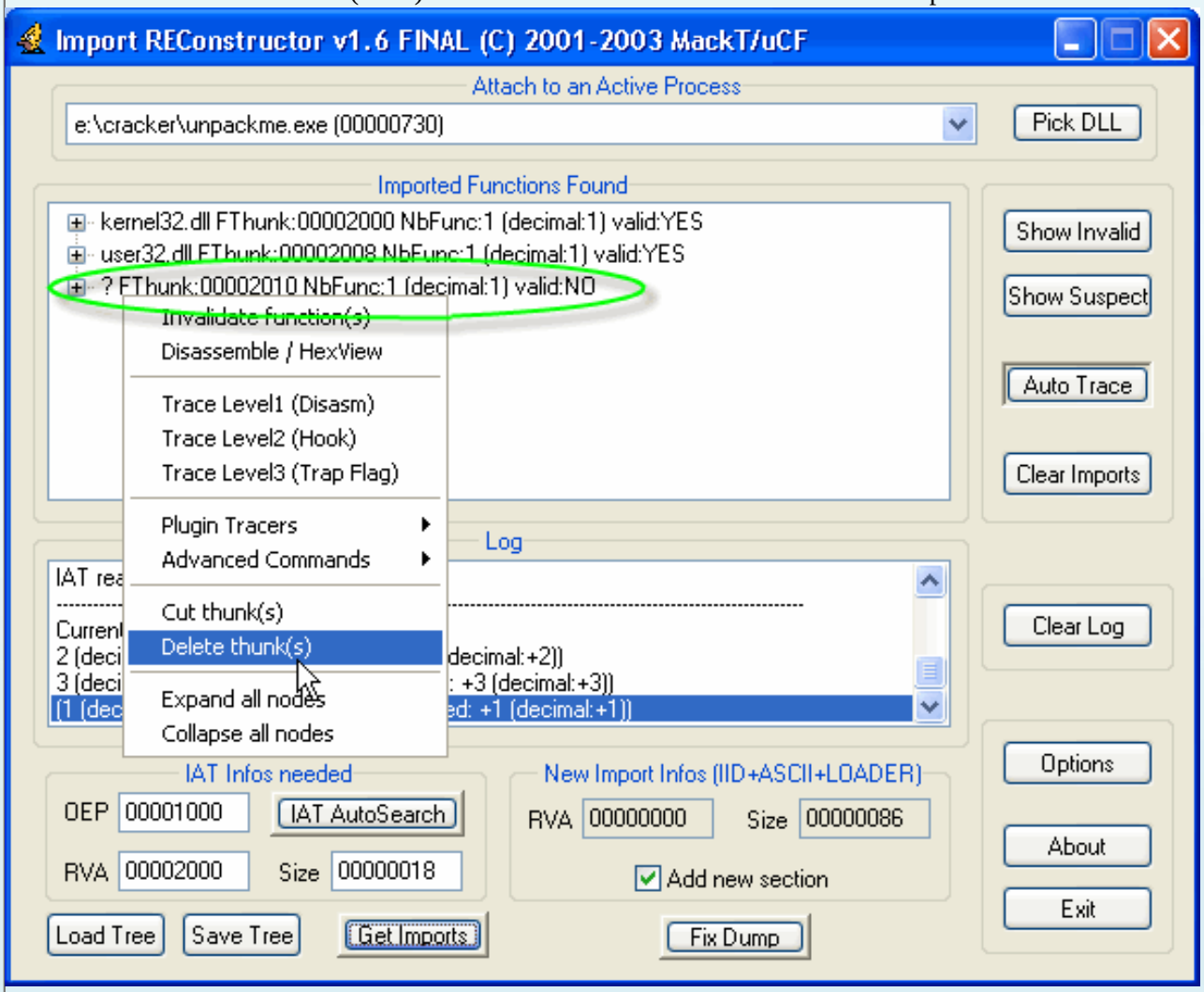
4th dumping

At address **00401000,** we go to the menu Plugin -> OllyDump -> dump debugged process. And then, just press dump, save the file at **dumped.exe** unpacked.



5. Finding and Fixing the Adress Import Table

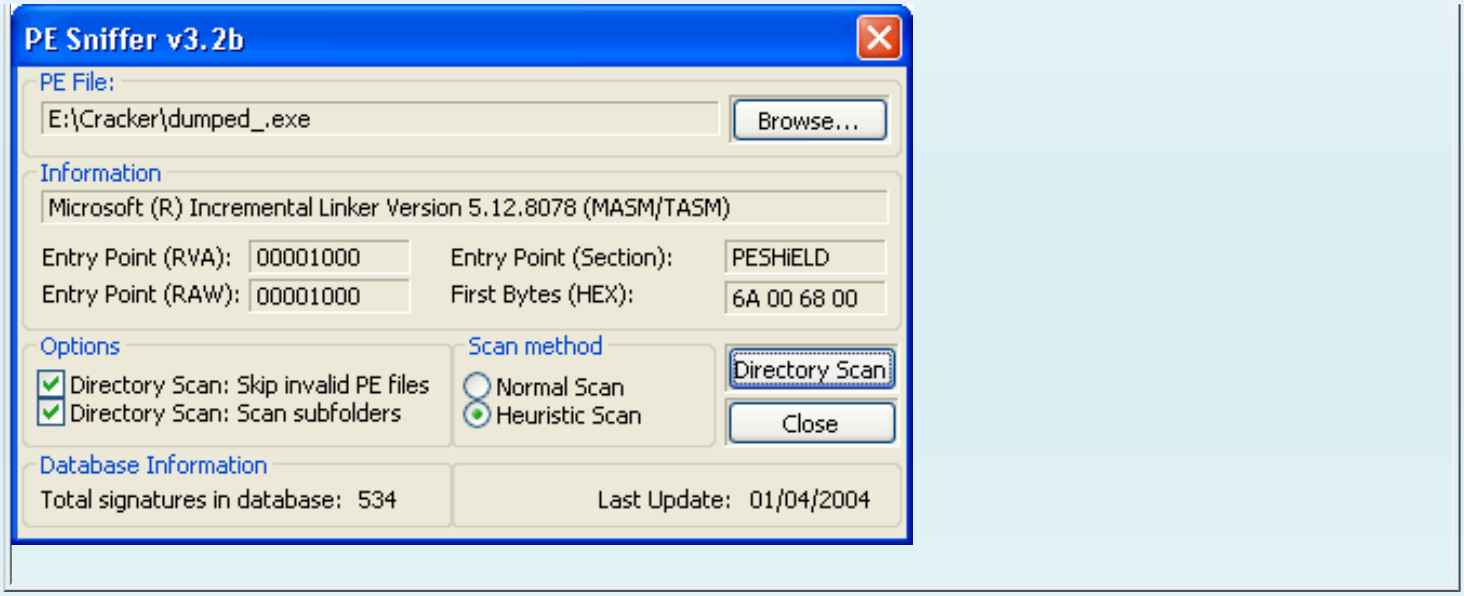
And select Open ImpREC attached to active process and choose unpackme.exe. Change the value in the OEP window to the one we wrote down earlier (1000) then select IATAutosearch then click Get Imports.



One Import Functions is invalid ... Before, right on this cilck import function and choose Delete thunks.Now, click fix to fix IAT dump the file **dumped.exe.** And then LordPE open, choose rebuild PE optimize for size of unpackme ..

6. Testing Our Unpacked file

Now run unpacked files. Wow, not crash.
Using **PE 3.2b** for **Sniffer** detect: **MASM / TASM.** Okie, PE-shield v0.25 by **ANAKiN [DaVinci]** is now unpacked successful!

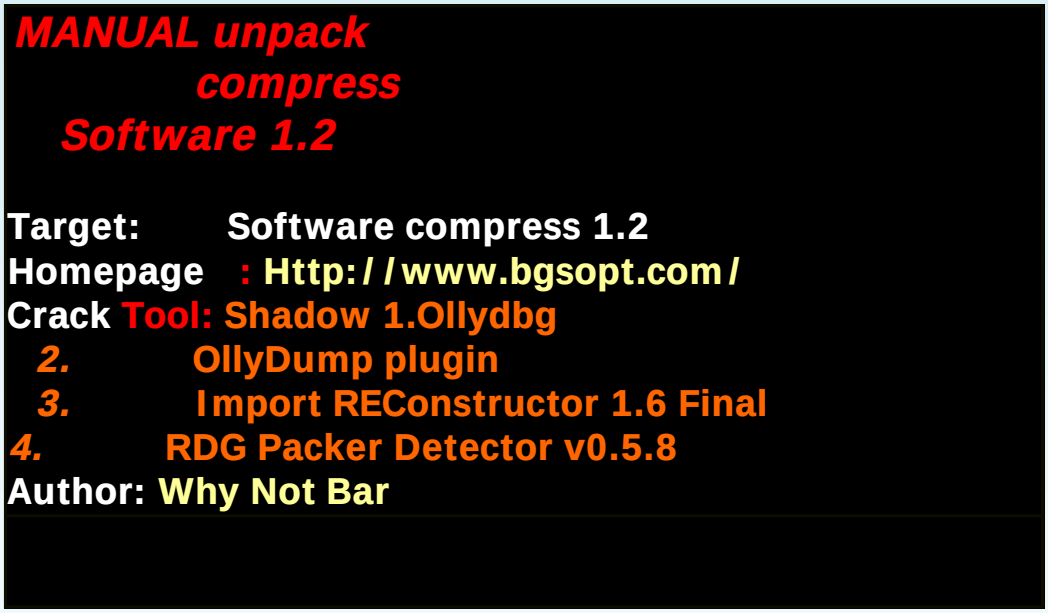


7. Conclusion

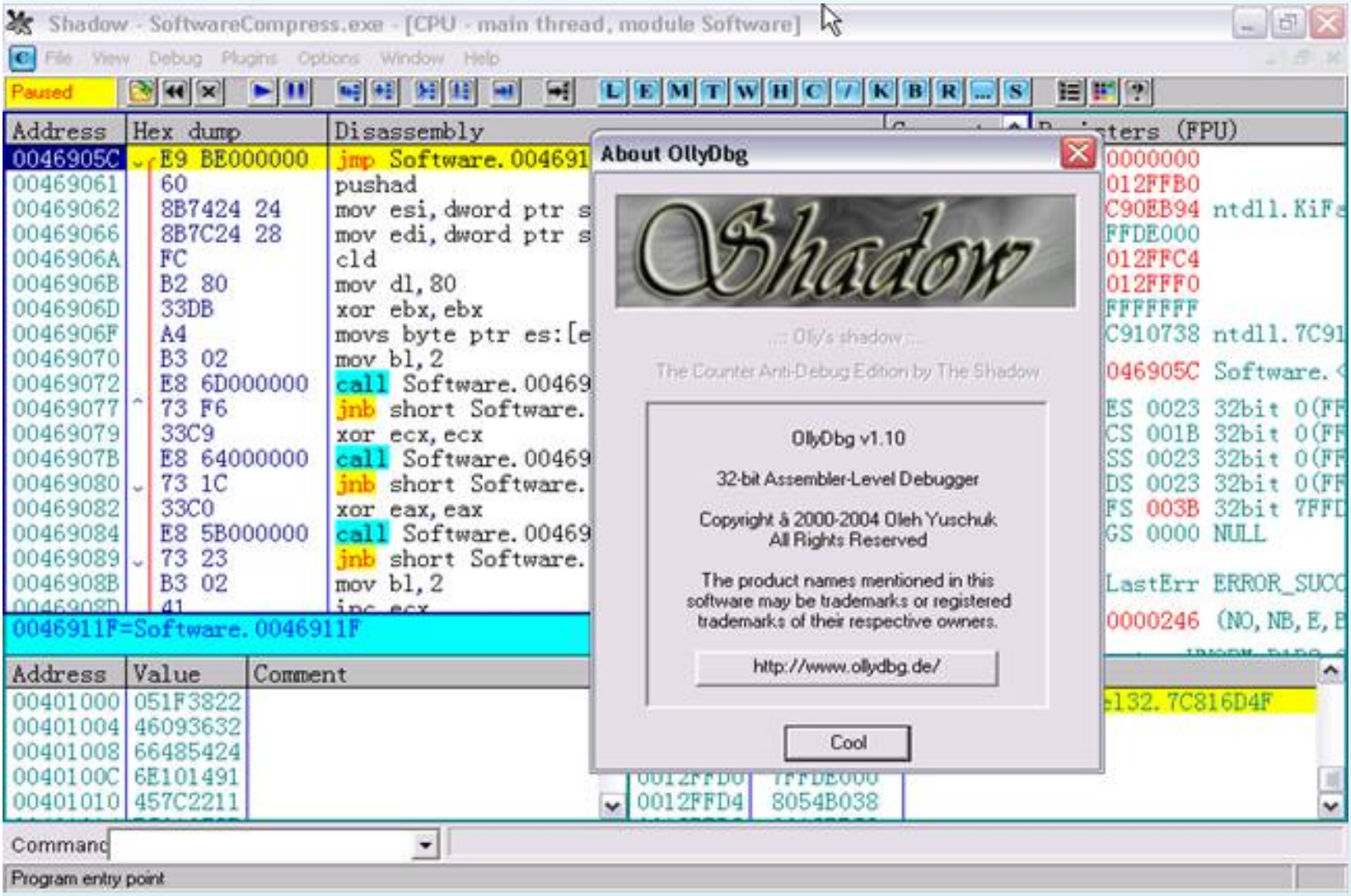
Special thanx to **koncool** et **R @ dier** for this template.
My Greetz to: Deux, NVH (c), luucorp, Maipt0301, R @ dier, tlandn, CTL, JAL, LeVuHoang, 777, LeonHart, Bin ... and you ;-)!

To be continued ...

Written by hacnho (tutorial date: Sai Gon 5/4/2004)

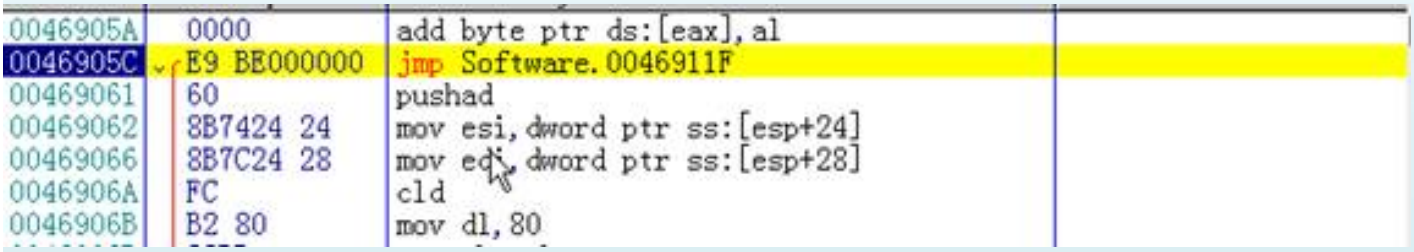


Software compress is a soft 1.2 appears, its name has said to us and to its call. Brother we try unpack it to see stars. They see him through the Shadow Tool Ollydbg children download yesterday. Đẹp to them!

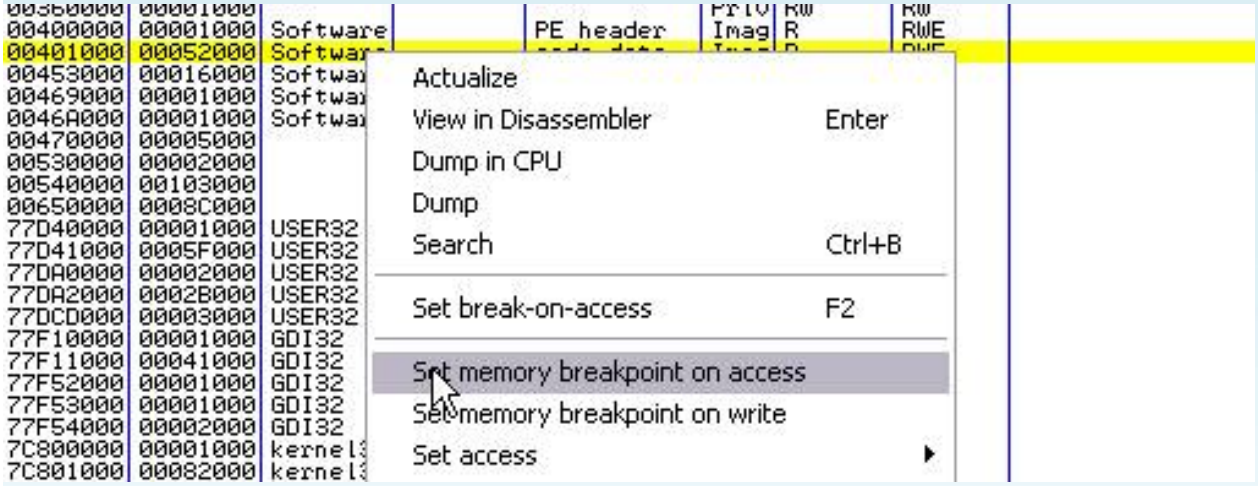


Ok, work only. First, the use of RDG Packer Detector v0.5.8 scan it and our information is as follows:

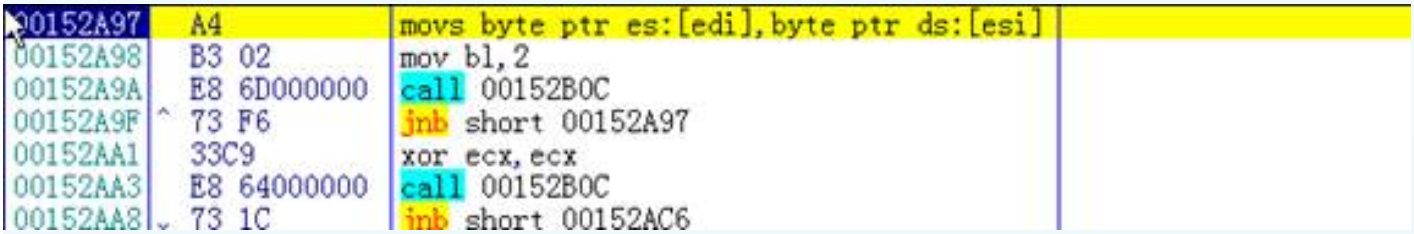
Load target to Ollydbg Shadow:



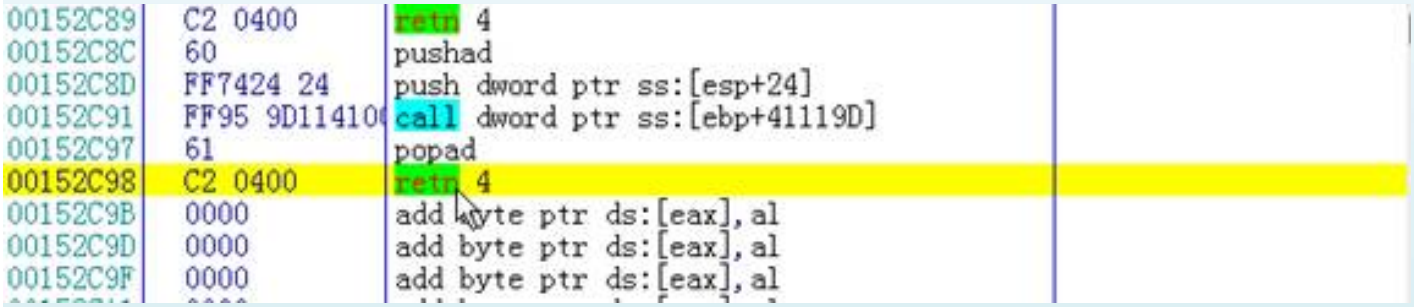
Alt + M and select the image:



Press F9 to 1 in one here:



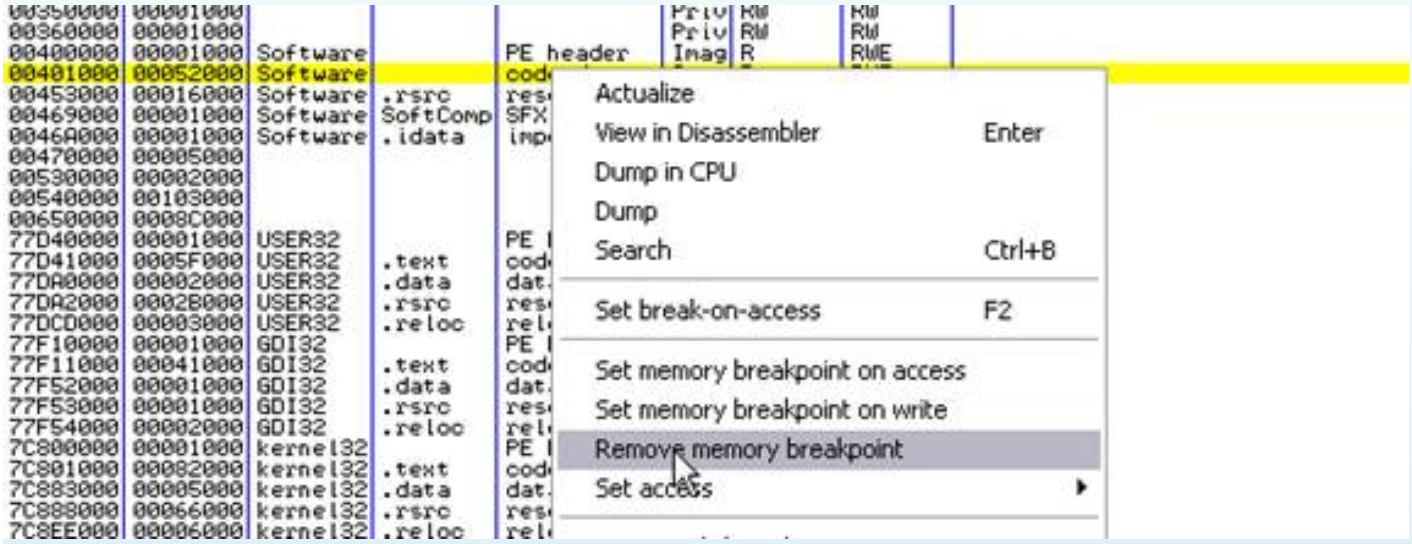
Scroll down the mouse until you see signs as follows:



Scroll to Set 1 billion and BP *(press F2)* in 00152C71

```
00152C69   8D8D 1D114100   lea ecx, dword ptr ss:[ebp+41111D]
00152C6F   51              push ecx
00152C70   57              push edi
00152C71   FFA5 9D114100   jmp dword ptr ss:[ebp+41119D]
00152C77   60              pushad
00152C78   FF7424 24       push dword ptr ss:[esp+24]
00152C7C   6A 40           push 40
00152C7E   FF95 95114100   call dword ptr ss:[ebp+411195]
00152C84   894424 1C       mov dword ptr ss:[esp+1C], eax
00152C88   61              popad
```

Next you press Alt + M and the image:



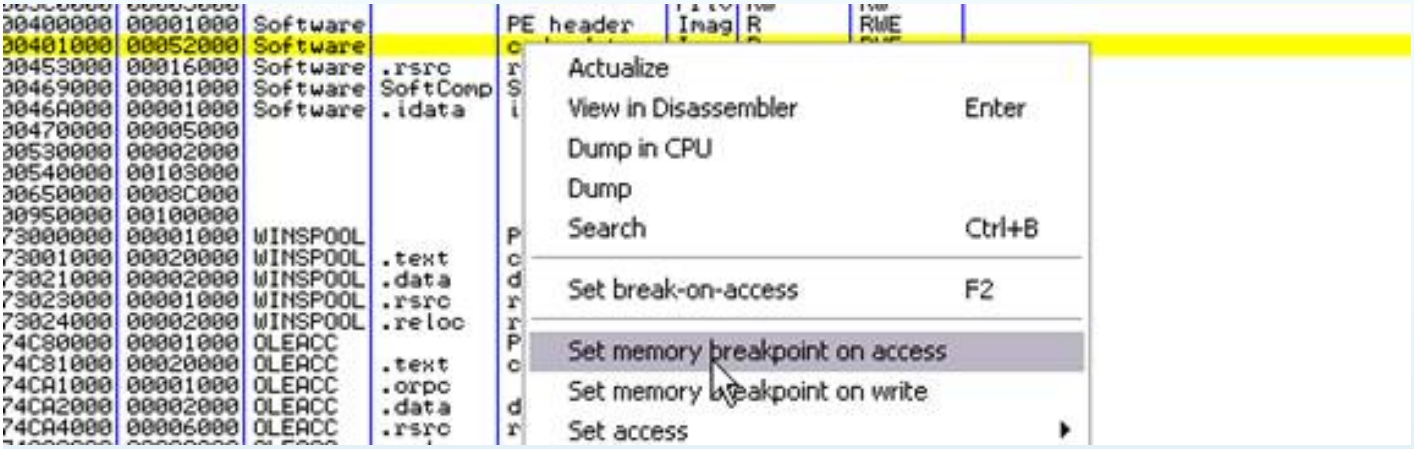
Press F9 to stop at the point when we've set BP (in this case is 3 times press F9) and you come:

```
00152C6F   51              push ecx
00152C70   57              push edi
00152C71 - FFA5 9D114100   jmp dword ptr ss:[ebp+41119D]   kernel32.GlobalFree
00152C77   60              pushad
00152C78   FF7424 24       push dword ptr ss:[esp+24]
00152C7C   6A 40           push 40
00152C7E   FF95 95114100   call dword ptr ss:[ebp+411195]
00152C84   894424 1C       mov dword ptr ss:[esp+1C], eax
```

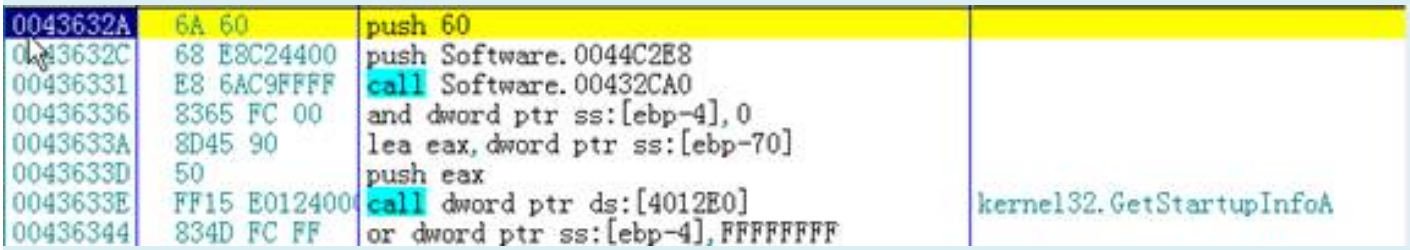
Press F7, F8 you will see in the window OEP Stack

```
0012FFA4   00000018
0012FFA8   0043632A   Software.0043632A
0012FFAC   001529E0
0012FFB0   001529E8
0012FFB4   001A69E4
```

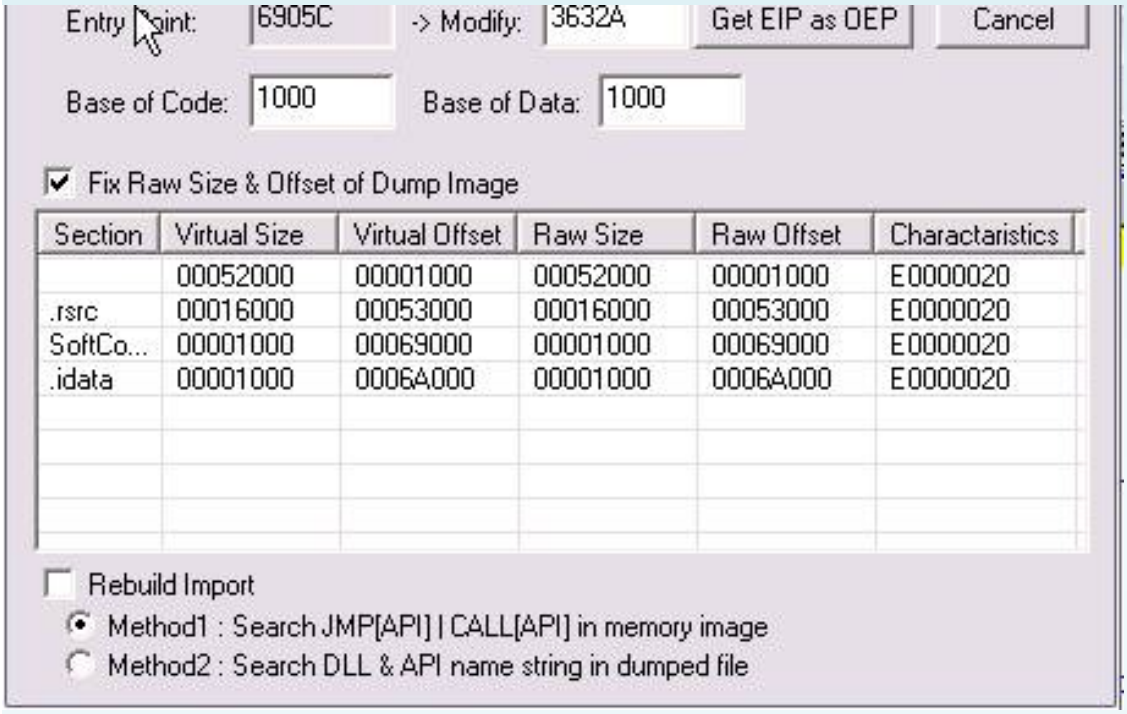
Ok, now you press Alt + M and select the image



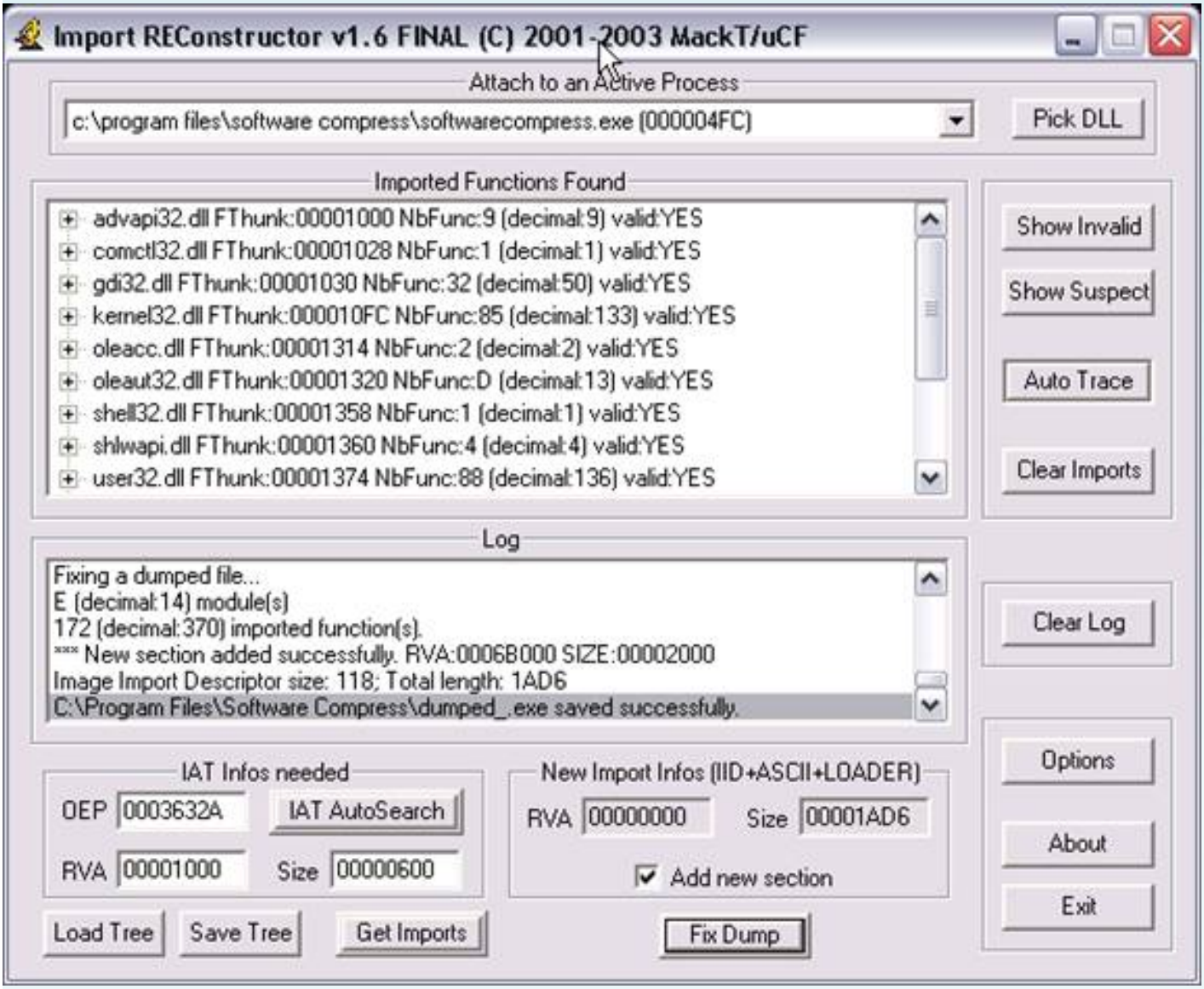
Press F9 one of you to be OEP



Ha ha, good too! Only dump, used here to dump OllyDump Plugin, select the image:



Open up to 1.6 ImportREC Fix dump



Test Run File "dumped_.exe." Ohh, File run run lickerish. Unpack Done!

Written by
Why Not Bar

KaGra Tutorials

Translated and written by: kienmanowar

Manual
unpacking
SPLayer
0:08

Information	Unpacking for Newbie's
Target	**PEiD v0.93**
Available	http:// www.reaoline.net
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, Lord PE 1.4, Plugin Command Line, ImpRec v1.6f.
Protection	SPLayer 0:08
L Evel	Beginner
Category	Manual unpacking
Author	KaGra (Thursday, 01 March 2005)

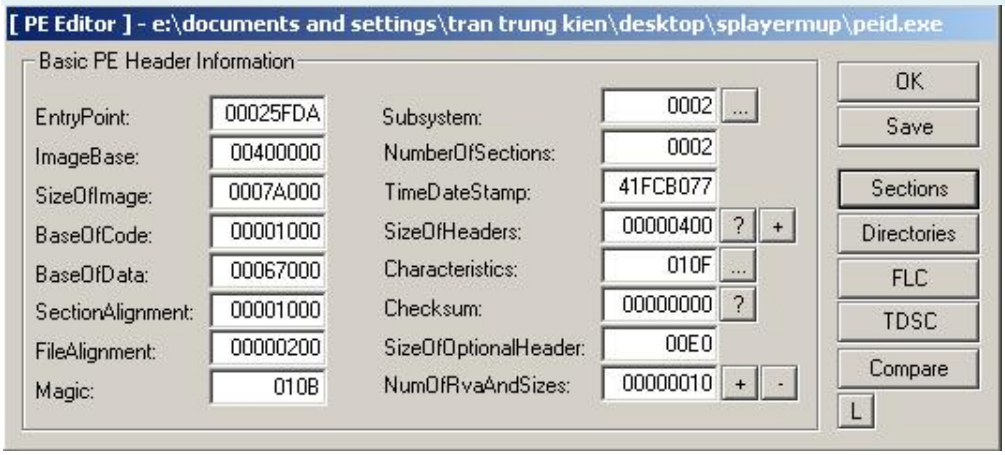
1. Introduction

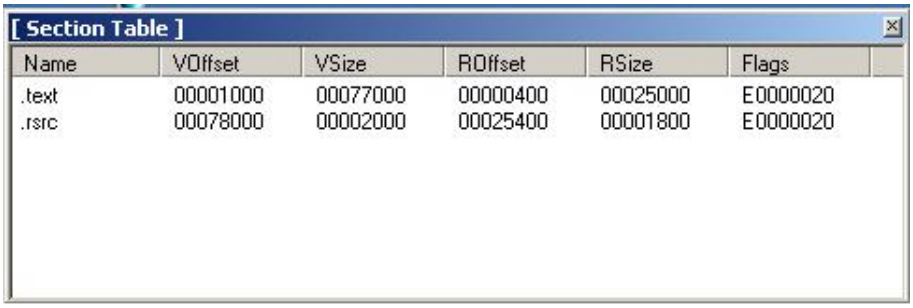
The author of this article after you download the program PEid v0.93 on, the goal is to find the authors want to know the API functions are used in the new version is not nay.Nhung Luckily, version v0. 93 are Proteced by a Protector.Sau using a version of PEid to detect the author learned that Packer is: **SPLayer 0:08 -> Jibz.**

PE 2.Detect and get info

Using a version of PEid to detect:

Use Lord PE 1.4 to search for more information:





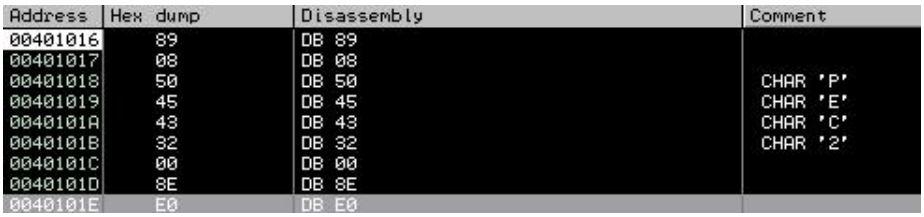
So we have been as follows: EntryPoint is 25FDA, ImageBase always is: 400000.

3.Finding the Original Entry Point

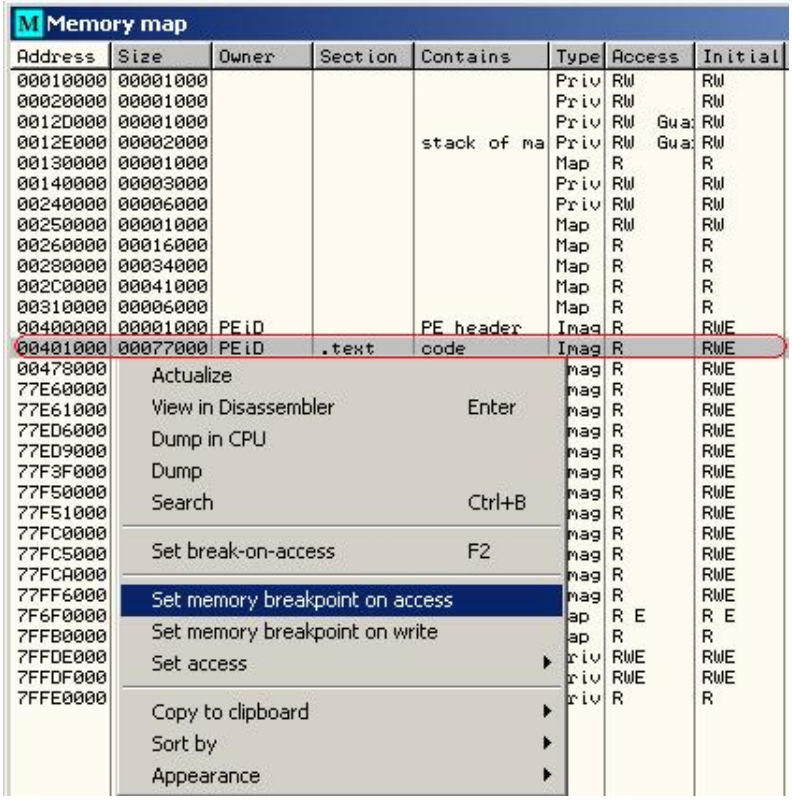
After the above information, we open Olly target and Load (PEid.exe) in Olly.Chon **Yes to Ananlysis** and we will stop at **EntryPoint:**

Oki, after Load in Olly finished, we in the **Options** Menu **\ debugging Options** to customize the options in Exceptions as follows:

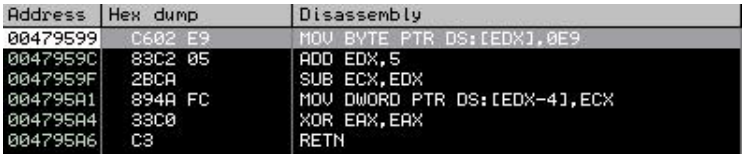
Press **Shift + F9** 1 times, Olly will stop here:



Now, in the window of Olly we click the **"M"** to open the window **Memory map.** We will set a **breakpoint on memory access** similar to Figure below:

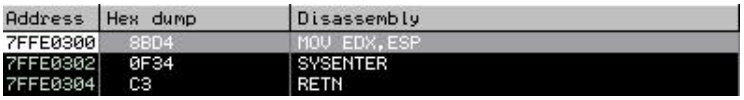


Next press **Shift + F9** once, Olly will stop here:



Get **F7** to Trace and implement orders **RETN,** Olly will give us a window to the API's memory:

Oki, if we continue to use F7 Trace **(36 times)** we will reach a code as follows:



At this code authors called (at Jamps kernel, Ring-3 debuggers can not proceed debugging). This means that if we press **F7** to continue the trace we can not continue to be Debug again. The program will run and ignore the position OEP that we need to find. So at **77F833A0,** we will open a window **Memory map** and set the same as BP, we have done in the tren.Sau press **Shift + F9,** we will stop here:

Here we press **Ctrl + A** (for Analysis), we have been as follows:

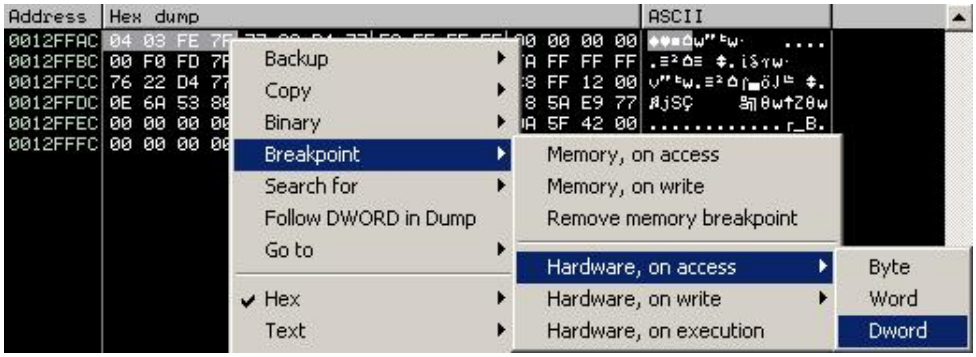
Press **F7** to Trace **JMP order,** here we will:

```
Address   Hex dump          Disassembly
004795A7    B8 6884BAFF     MOV EAX,FFBA8468
004795AC    64:8F05 000000( POP DWORD PTR FS:[0]
004795B3    83C4 04         ADD ESP,4
004795B6    55              PUSH EBP
004795B7    53              PUSH EBX
004795B8    51              PUSH ECX
004795B9    57              PUSH EDI
004795BA    56              PUSH ESI
004795BB    52              PUSH EDX
004795BC    8D98 F8108D00   LEA EBX,DWORD PTR DS:[EAX+8D10F8]
```

Continue to Trace address **004795BC. PUSH** The order we see that the record of the program stored in Packer Stack. Then code enforcement and this will finally get them out of the Stack and take us to **OEP.** Therefore, when we Trace to address **004795BC,** to write to the **ESP Registers** window. Mouse must write at this bar and select **Follow in dump.** In the window **dump window** we will see the following:

```
Address   Hex dump                                          ASCII
0012FFAC  04 03 FE 7F 77 22 D4 77 FA FF FF FF 00 00 00 00  ♦♥■Ωwⁿtwּ    ....
0012FFBC  00 F0 FD 7F F0 FF 12 00 69 EB E7 77 FA FF FF FF  .≡²Ω≡ ↕.iδτwּ
0012FFCC  76 22 D4 77 00 F0 FD 7F F4 DC 94 F5 C8 FF 12 00  vⁿtw.≡²Ω⌠▄öJ╚ ↕.
0012FFDC  0E 6A 53 80 FF FF FF FF 86 BB E9 77 18 5A E9 77  ♫jSÇ     å╗Θwↈ Z Θw
0012FFEC  00 00 00 00 00 00 00 00 00 00 00 00 DA 5F 42 00  ............r_B.
0012FFFC  00 00 00 00                                      ....
```

Oki, now we highlight 4 bytes at **0012FFAC (04 03 FE 7F),** and mouse to select **Breakpoint-> Hardware-on access> Dword.** This will make for Olly to stop the record with the same **ESP** value with the value in **(0012FFAC).** This happens when the basic bar record is removed from Stack and prior to the **OEP.** This procedure is used in most of the Packer simple, but it does not mean that all Packer.



Next we **Remove memory breakpoint,** press Shift + F9 1 times we'll stop here:

```
Address   Hex dump    Disassembly
0047964A    5E        POP ESI
0047964B    5F        POP EDI
0047964C    59        POP ECX
0047964D    5B        POP EBX
0047964E    5D        POP EBP
0047964F    FFE0      JMP EAX
```

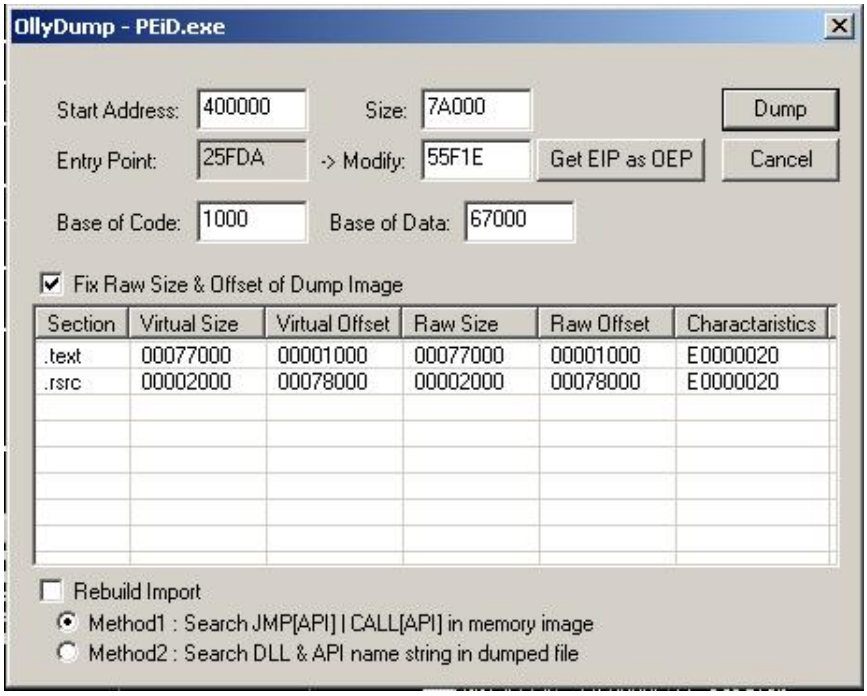
At **0047964A,** we trace through press **F7 JMP** commands us to address **00455F1E,** mouse right at this address and select Analysis> Analysis Code we will be as follows:

```
Address   Hex dump    Disassembly                          Comment
00455F1E  .  6A 60    PUSH 60
00455F20  .  68 08F54200 PUSH PEiD.0042F508
00455F25  .  E8 B2180000 CALL PEiD.004577DC
00455F2A  .  BF 94000000 MOV EDI,94
00455F2F  .  8BC7     MOV EAX,EDI
00455F31  .  E8 1AFAFFFF CALL PEiD.00455950
00455F36  .  8965 E8  MOV DWORD PTR SS:[EBP-18],ESP
00455F39  .  8BF4     MOV ESI,ESP
00455F3B  .  893E     MOV DWORD PTR DS:[ESI],EDI
00455F3D  .  56       PUSH ESI                             pVersionInformation
00455F3E  .  FF15 9011400( CALL DWORD PTR DS:[401190]      GetVersionExA
```

OEP so that we are **00455F1E.** OEP calculation of the formula:
Real OEP = OEP find in Olly-Image Base = 00455F1E - 00400000 = **00055F1E**

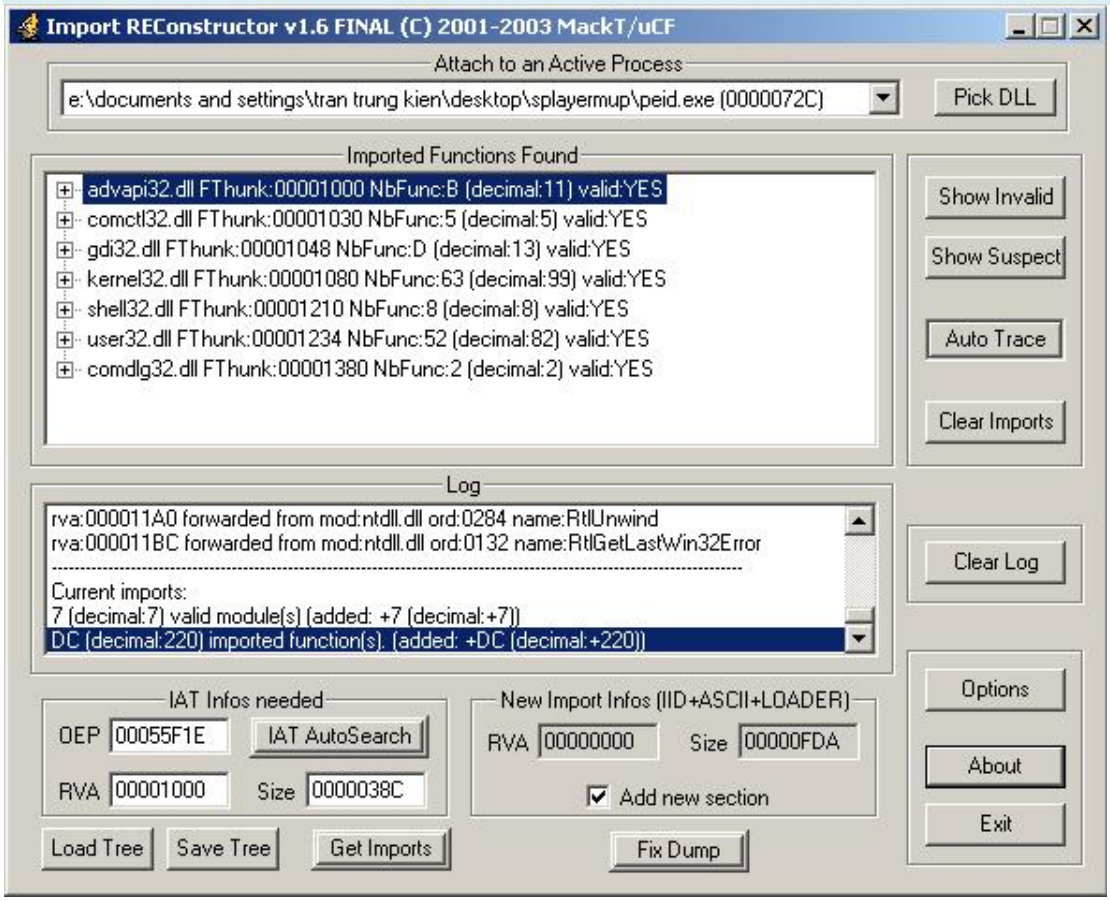
4. Unpacked dumping our files

At **00455F1E,** right click and select **dump debugged process.** Uncheck **Rebuilt Import,** click and save the **dump** under a name that **dumped.exe** example.

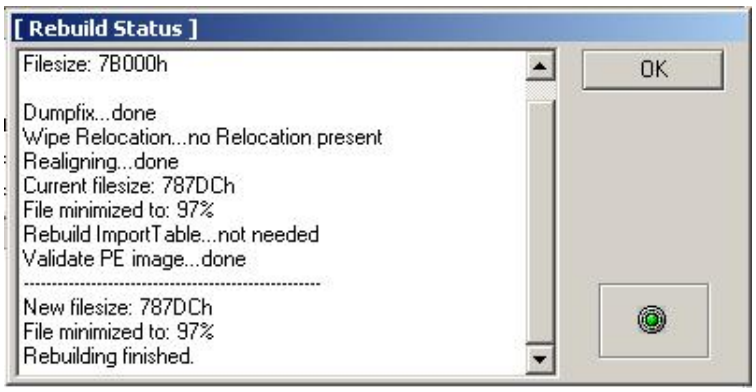


5. Finding and Fixing the Adress Import Table

Hold the window Olly, open **ImpRec** select list box in **Peid.exe Attach to an Active Process.** Enter OEP we have found the calculation of the above in, and click **Get Autoseach IAT Imports.** Then click **Show Invalid.** Keke too good not Invalid thunks at all. Finally click **Fix dump** file and select **dumped.exe.**

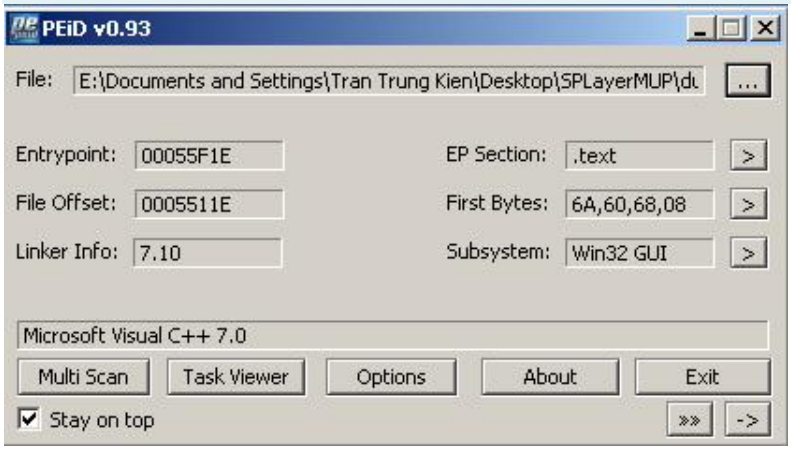


Finally, we used to LordPE Rebuilt again **Dumped_.exe file.**



6. Testing Our Unpacked file

Oki, a test file we Unpacked. Yup! It works.
Used to Detect PEid again we have been as follows:



So **SPlayer 0.88** unpack was successful. Have fun:)

7. Conclusion

My Greetz to: tlandn (supported me this tut) and KaGra (author of this tut)
To thank my family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Hoadongnoi, Nini ... all REA's members, HacNho, RongChauA, Deux .... all my friend, and YOU!

Written by **kienmanowar** (tutorial date: HaNoi 14/03/2005)

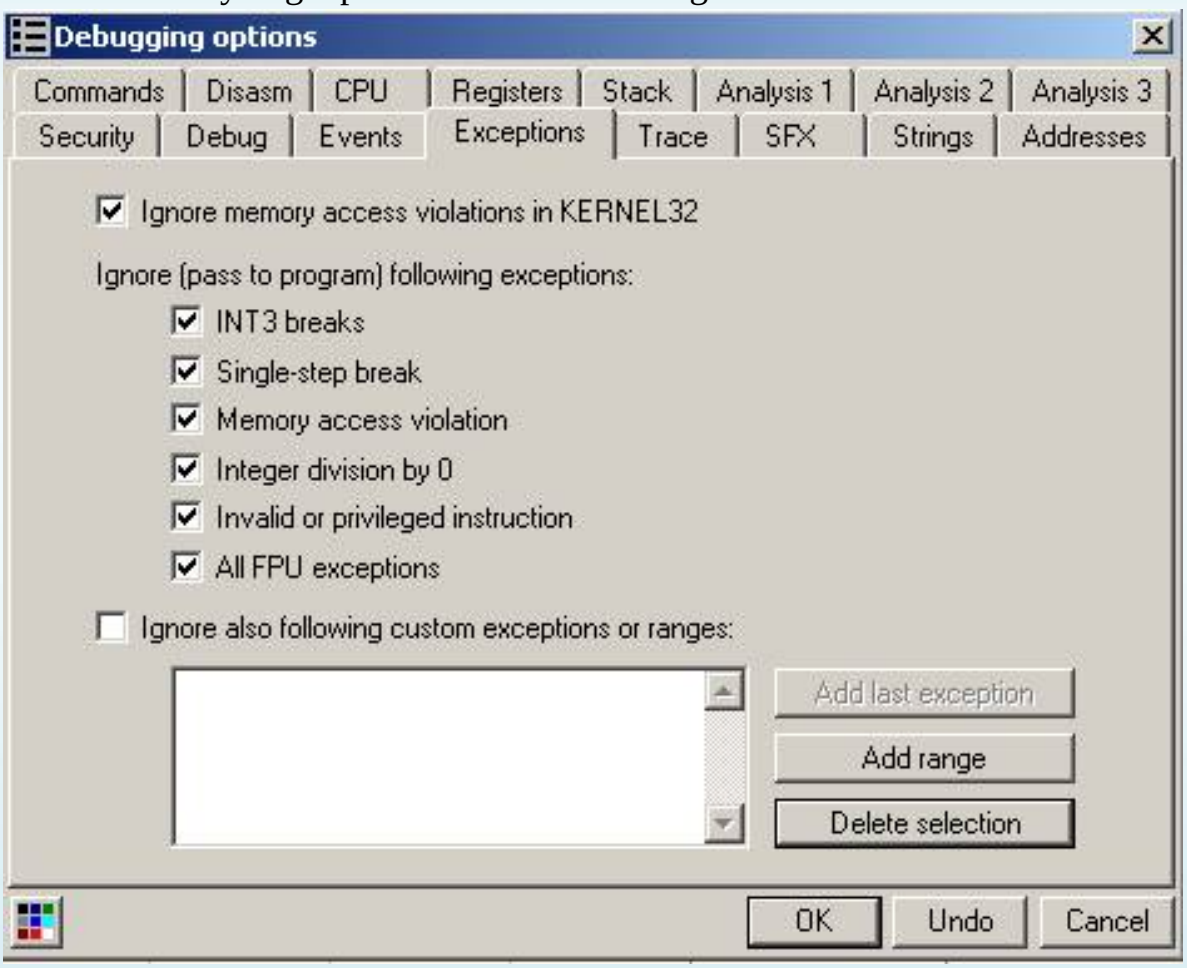
Tu hoc unpack SVKP 1:32 TUT 1 - ASM TARGET

Author: tlandn

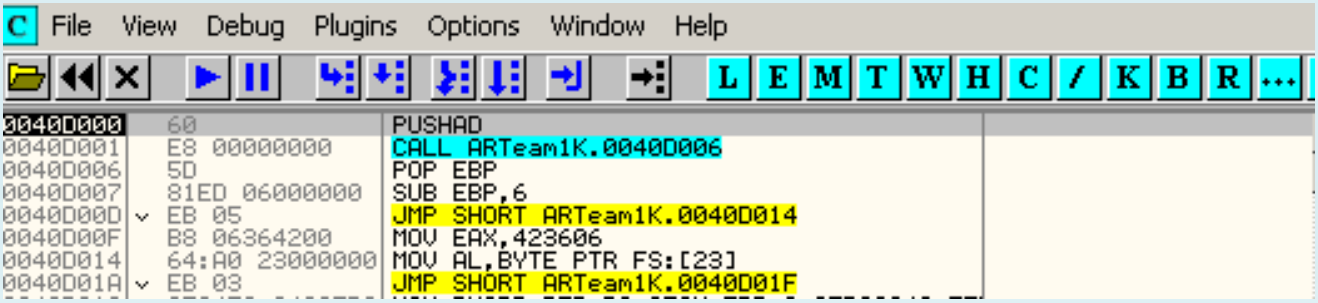
Welcome you. I have ideas, write a tut about SVKP hope is to share some of their knowledge.
Hopefully you support. If you have ideas, please write something to share tut. Thanks.
We will begin.

I. **OEP Search:**

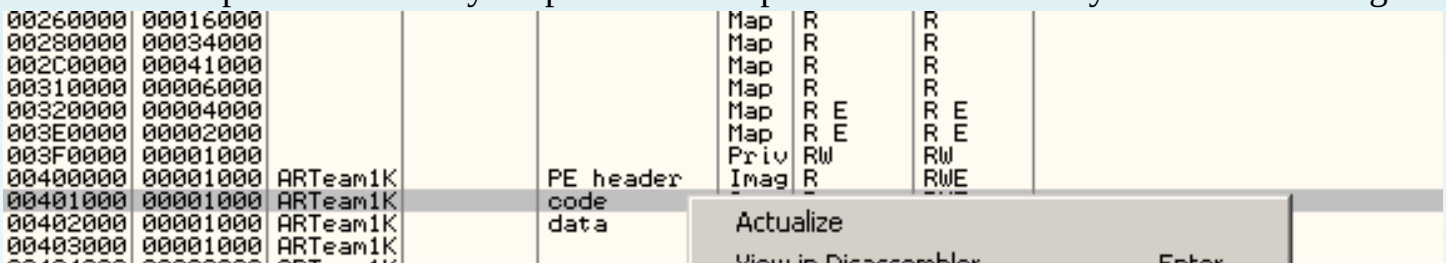
First edit the OllyDbg Options like the following:

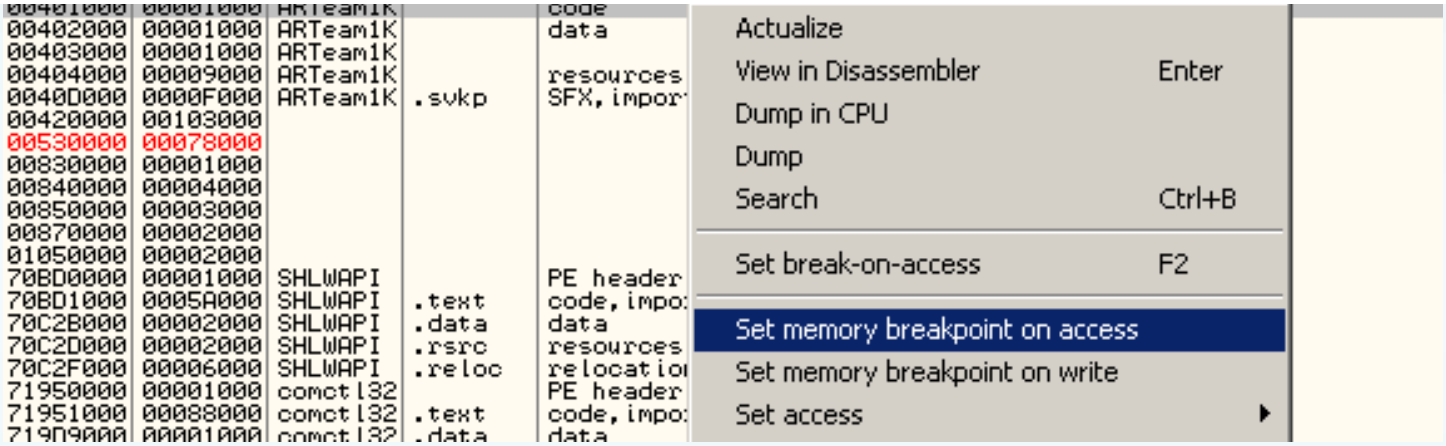


Load the file. What opportunities click OK. We will start here.

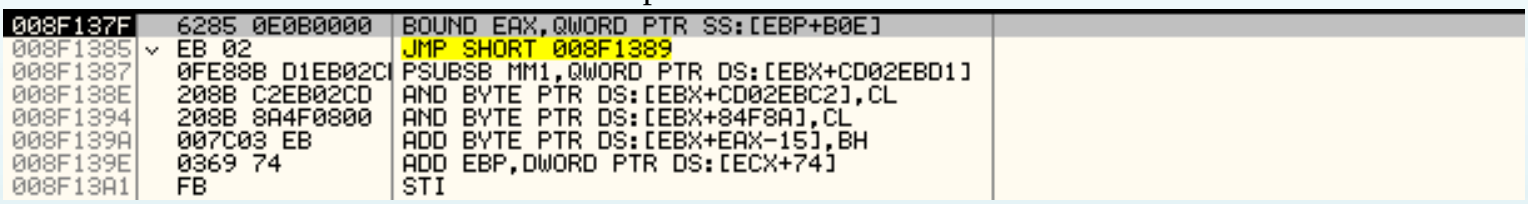


Press Alt-M to open the "Memory Map". Set "Breakpoint on acess memory" in the same image:

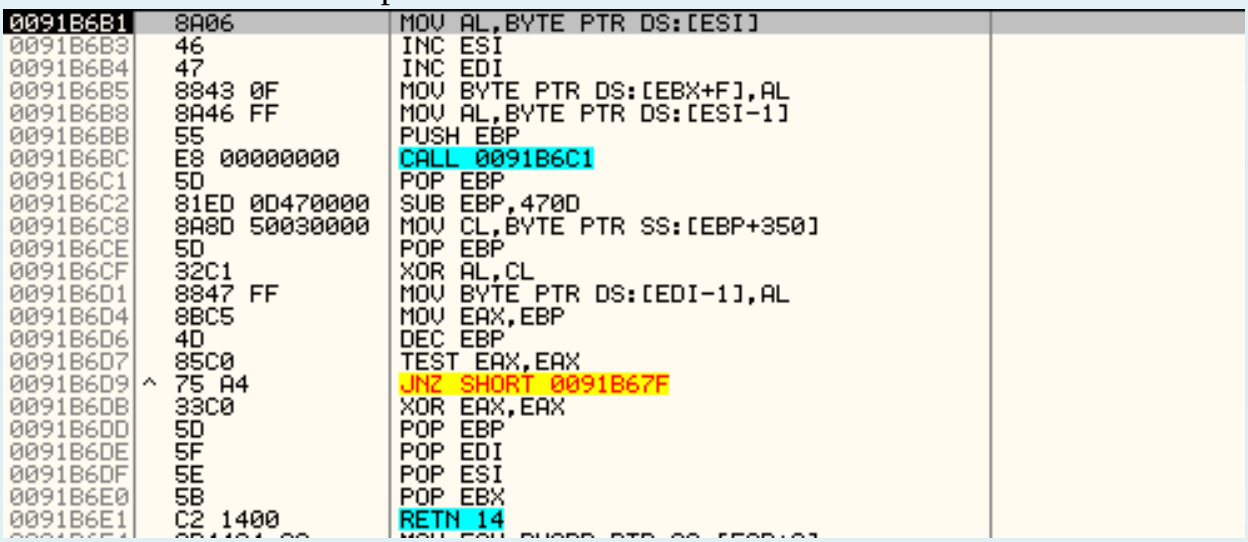




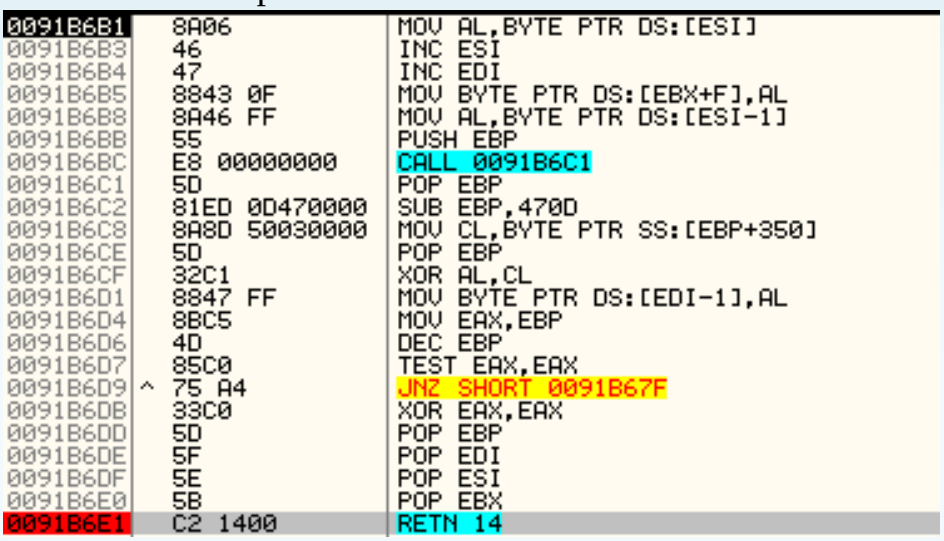
Back "CPU Window." Press F9. The one stop here:



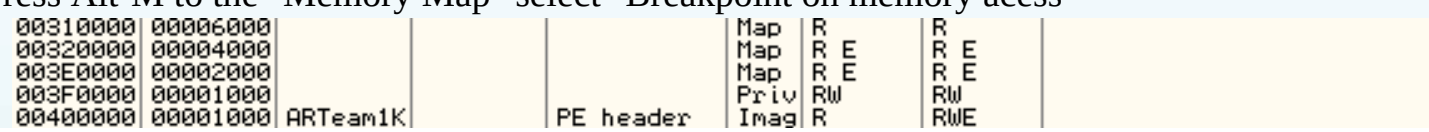
Press Shift-F9. The one stop here:

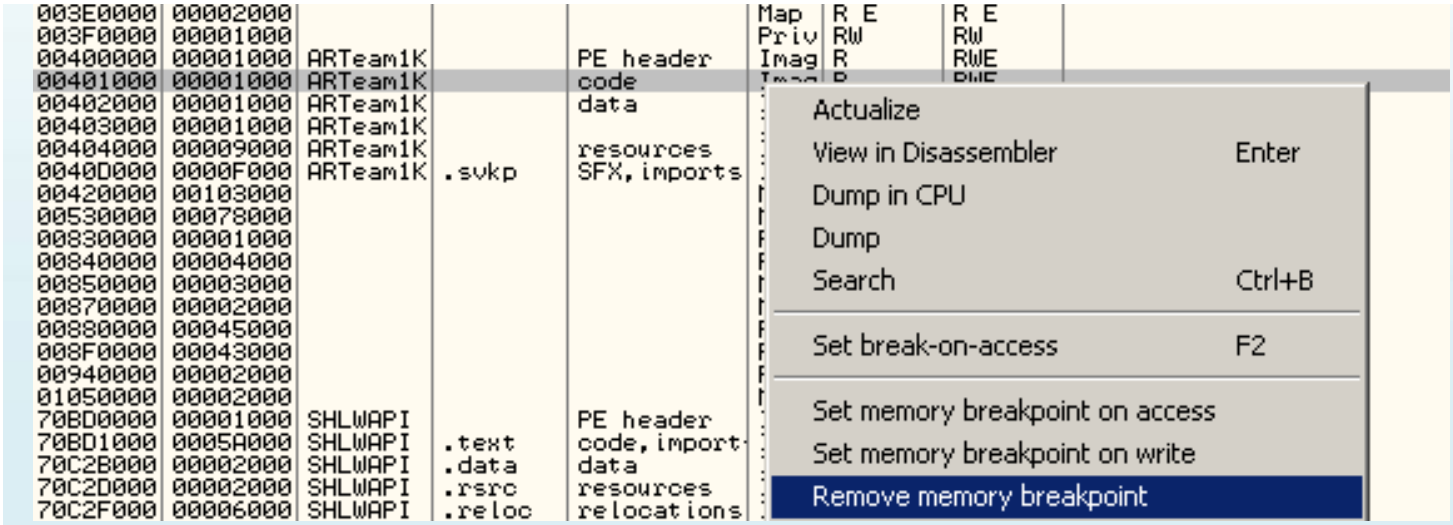


You note in 91B6E1 we have the "RETN 14" (blue line above). Set at the breakpoint by using the mouse click it and press F2.



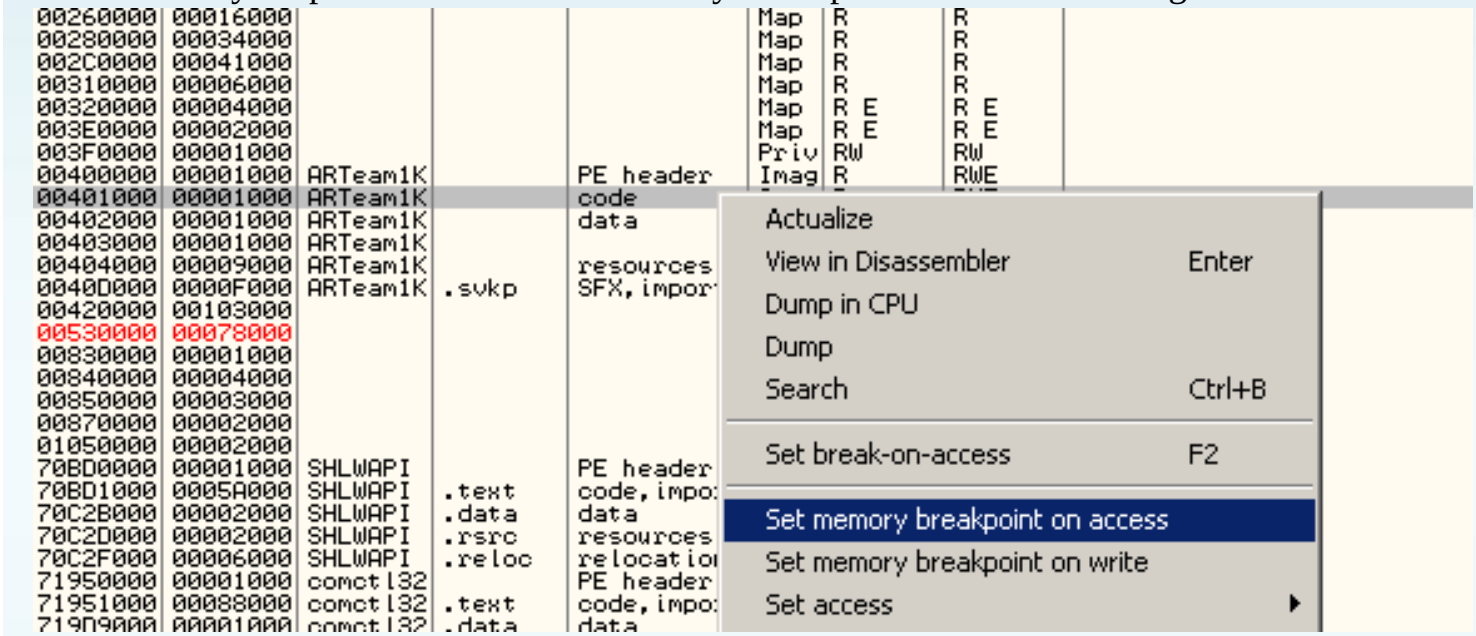
Press Alt-M to the "Memory Map" select "Breakpoint on memory acess"



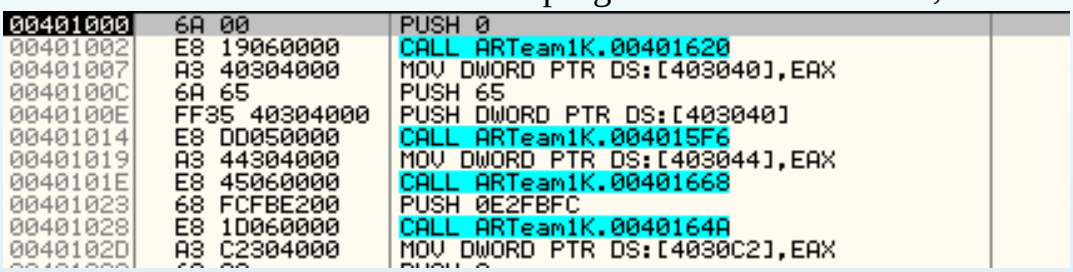


Back on "CPU Window." Press F9. We will break at 91B6E1 (points we've set the breakpoint above). Uncheck breakpoint by pressing F2.

At the "Memory Map". Reset "on acess memory Breakpoint" in the same image:



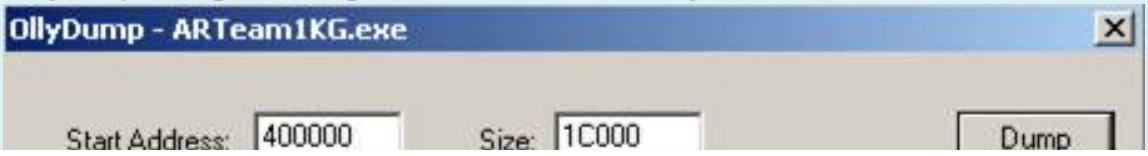
Go to "CPU Window." Press F9. The program will break at 401,000:

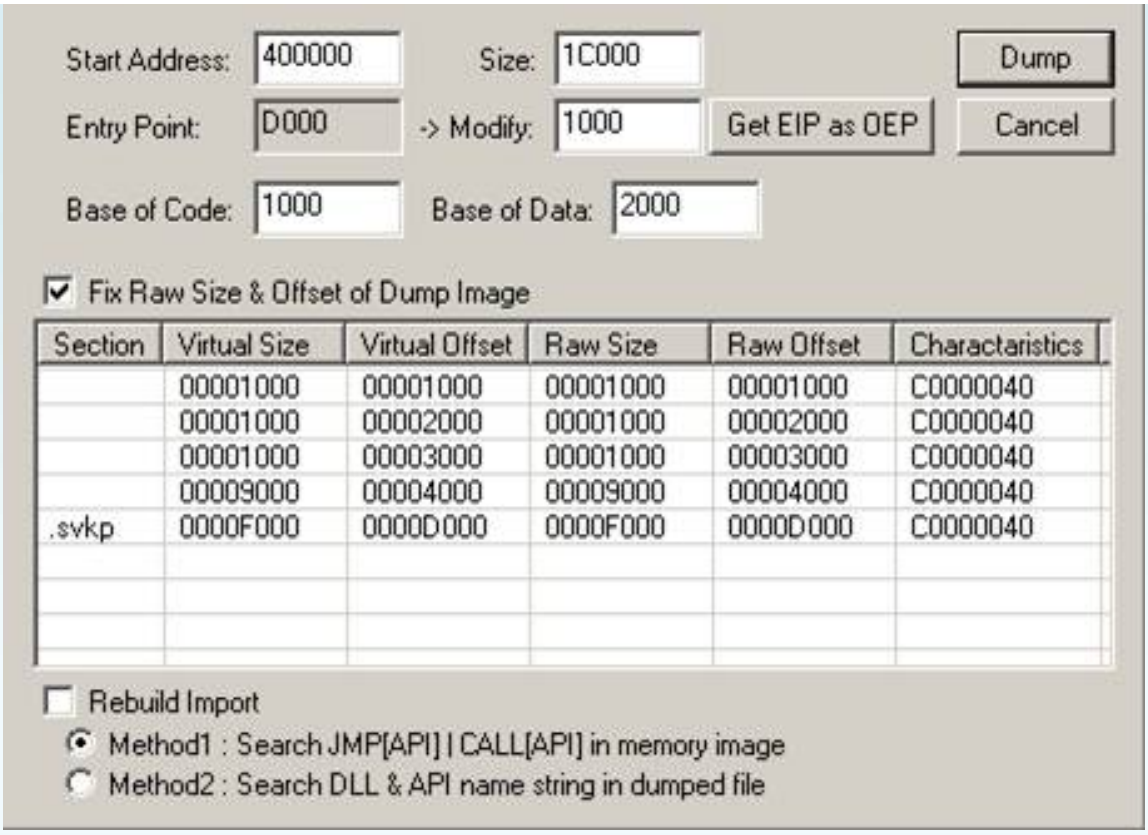


This is our OEP.

II. **Dump program:**

Using OllyDump to dump. Select the same image:

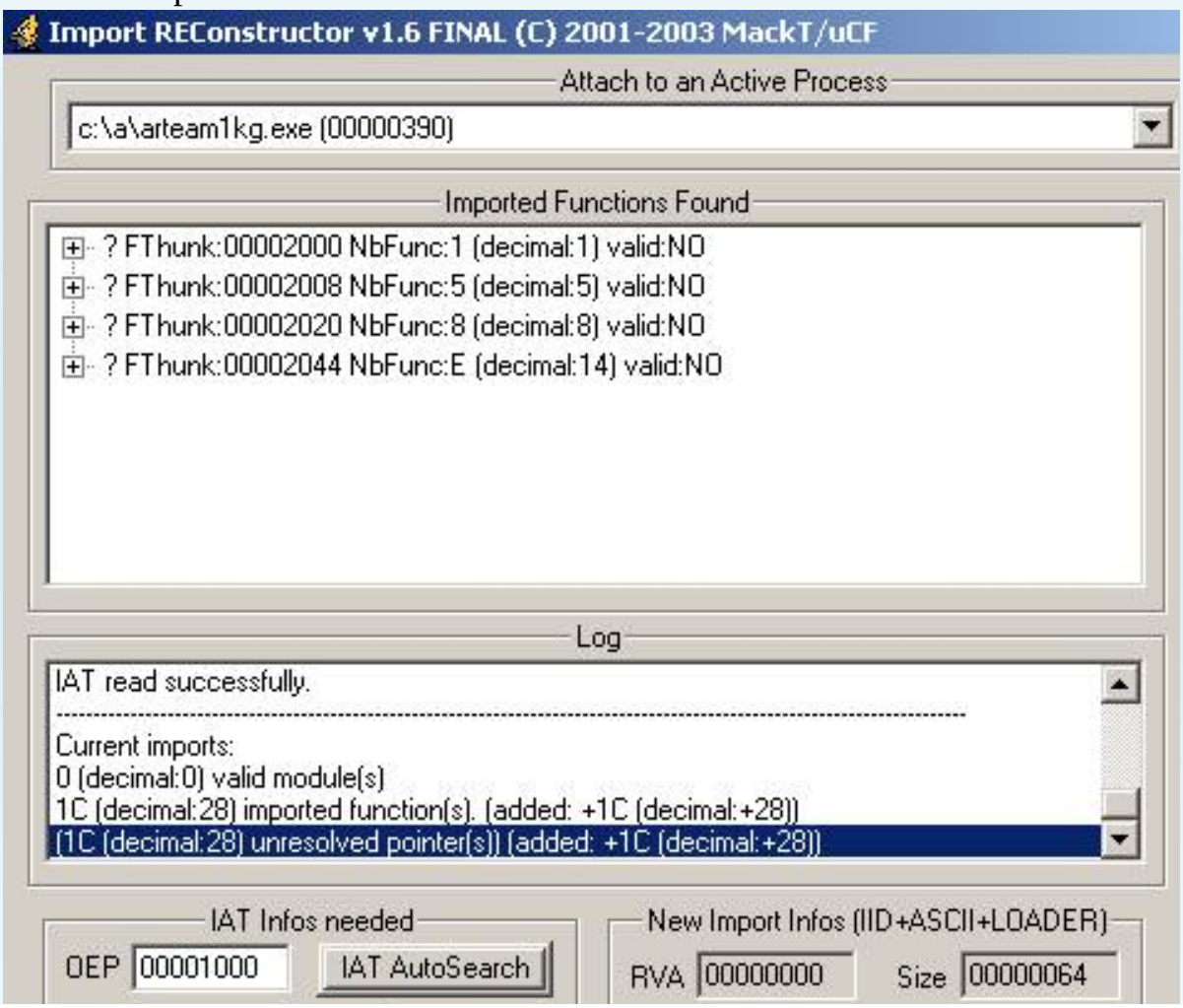




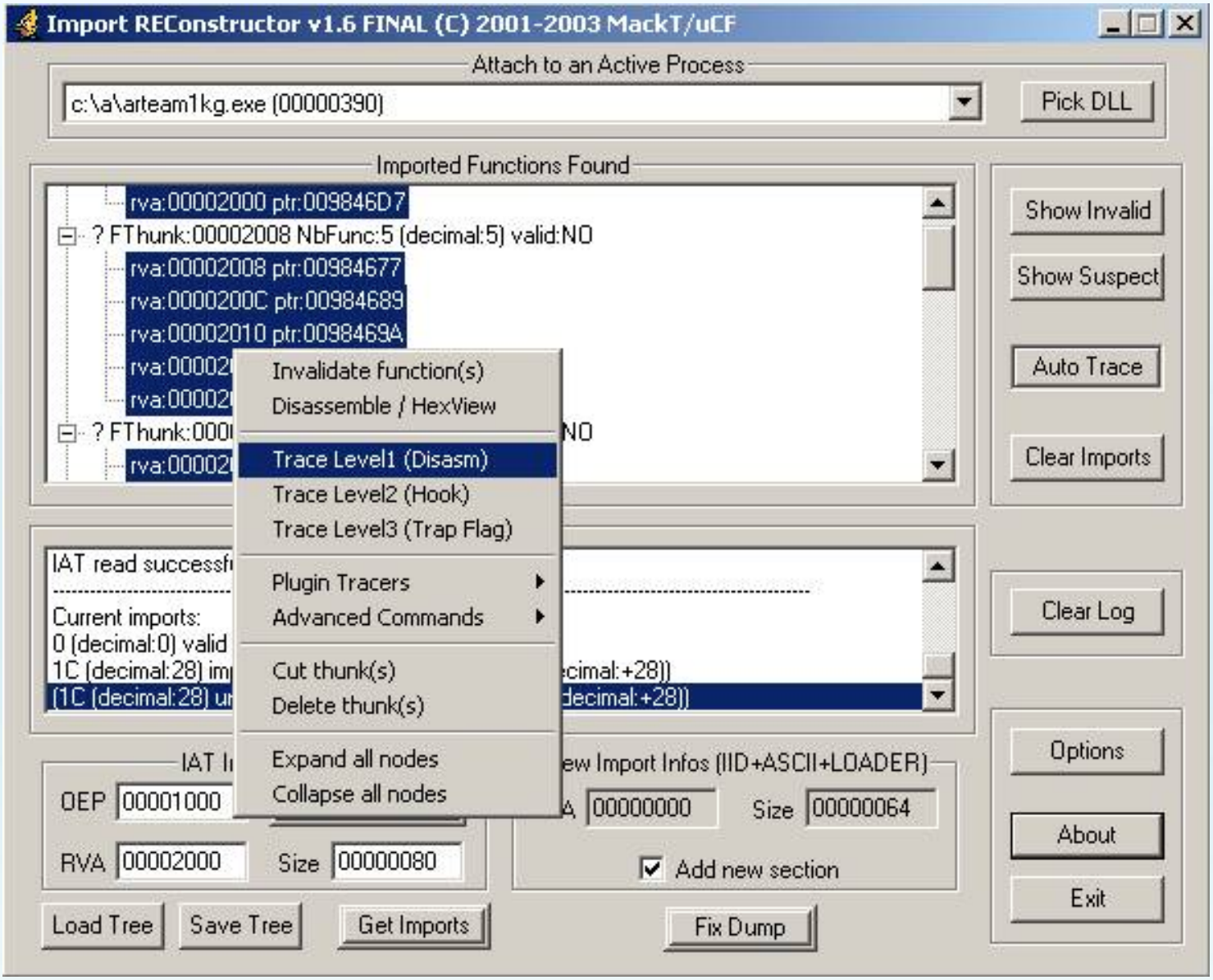
Name the file "a.exe" J

III. **Rebuild IAT:**

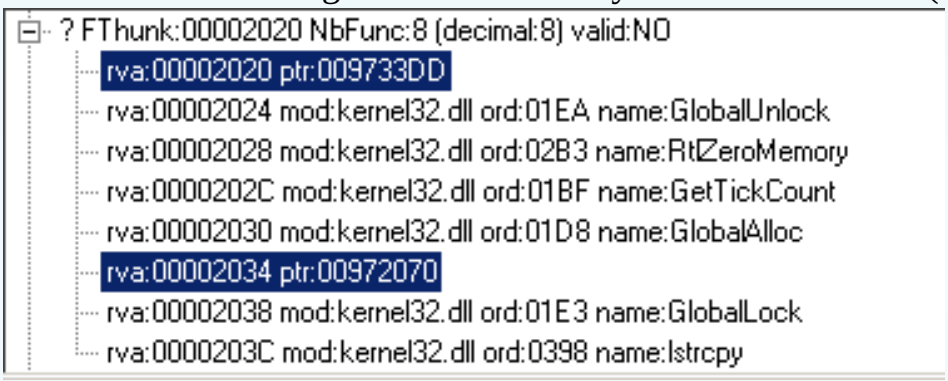
Using Imprec load programs. Enter the parameters of the same image, click "IAT AutoSearch" then click "Get Imports"



Click "Show Invalid". Click on the line to the mark and then select "Trace Level 1"

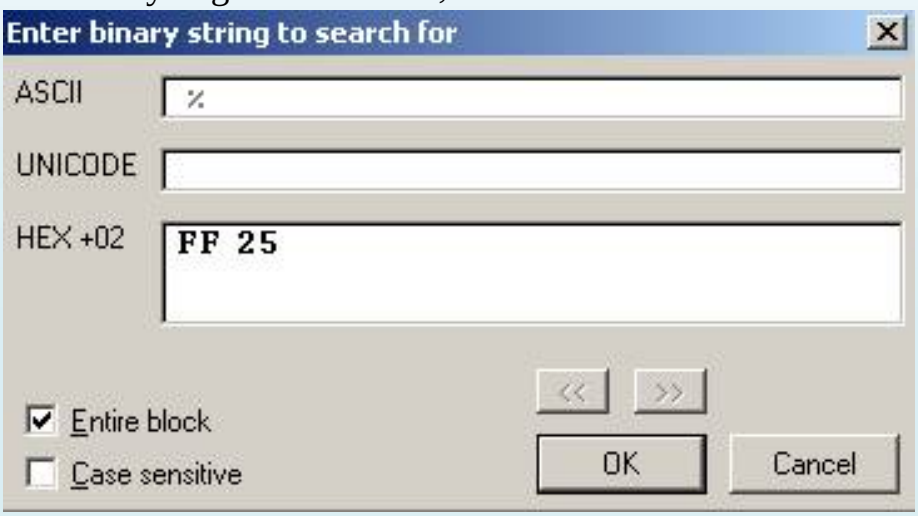


Click "Show Invalid" again. We found only 2 API is not found (2 reform green below):

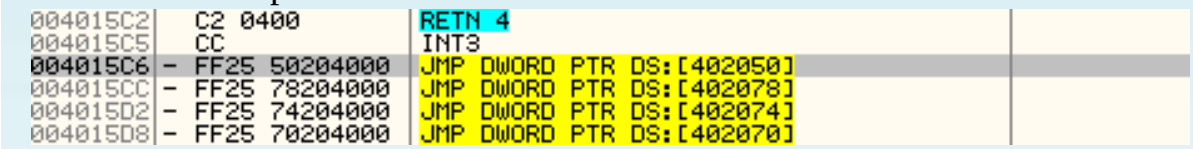


They are 402020 (400000 + 2020).
402034 (400000 + 2034).

Back to OllyDbg. We're at 401,000. Press Ctrl-B. Enter FF 25 under the same image:

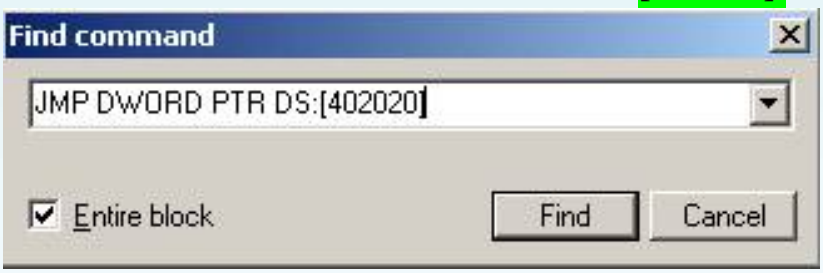


Click OK. We stop here:



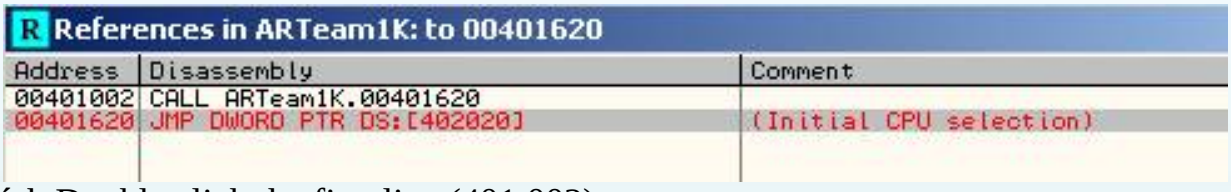
API is a form of JMP DWORD PTR DS: [XXXXXX].

Press Ctrl-F. Enter JMP DWORD PTR DS: [402020]. Click Find.



We stop here:

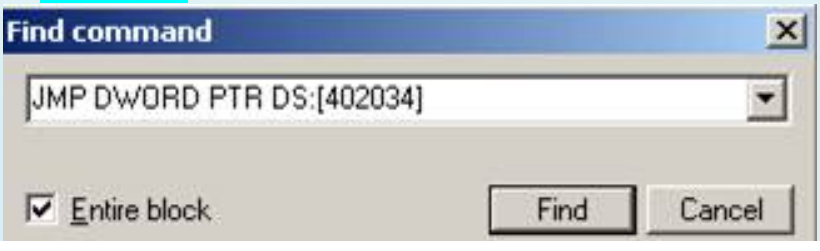
Press Ctrl-R to see what the code calls this function. We are:



Kích Double click the first line (401,002).

We're at 401,000. Press F8. We in line 401002. Note the value recorded by EAX = 401000. Press F8 once to perform functions. We look at the value of EAX = 400000 -> This is a function **GetModuleHandleA.**

For value API second (402,034) need to find we do the same. Press Ctrl-F. Enter JMP DWORD PTR DS: [402034]. Click Find.



We here:

```
0040160E - FF25 44204000  JMP DWORD PTR DS:[402044]
00401614 - FF25 54204000  JMP DWORD PTR DS:[402054]
0040161A - FF25 34204000  JMP DWORD PTR DS:[402034]
00401620 - FF25 20204000  JMP DWORD PTR DS:[402020]
00401626 - FF25 2C204000  JMP DWORD PTR DS:[40202C]
```

Just press Ctrl-R.

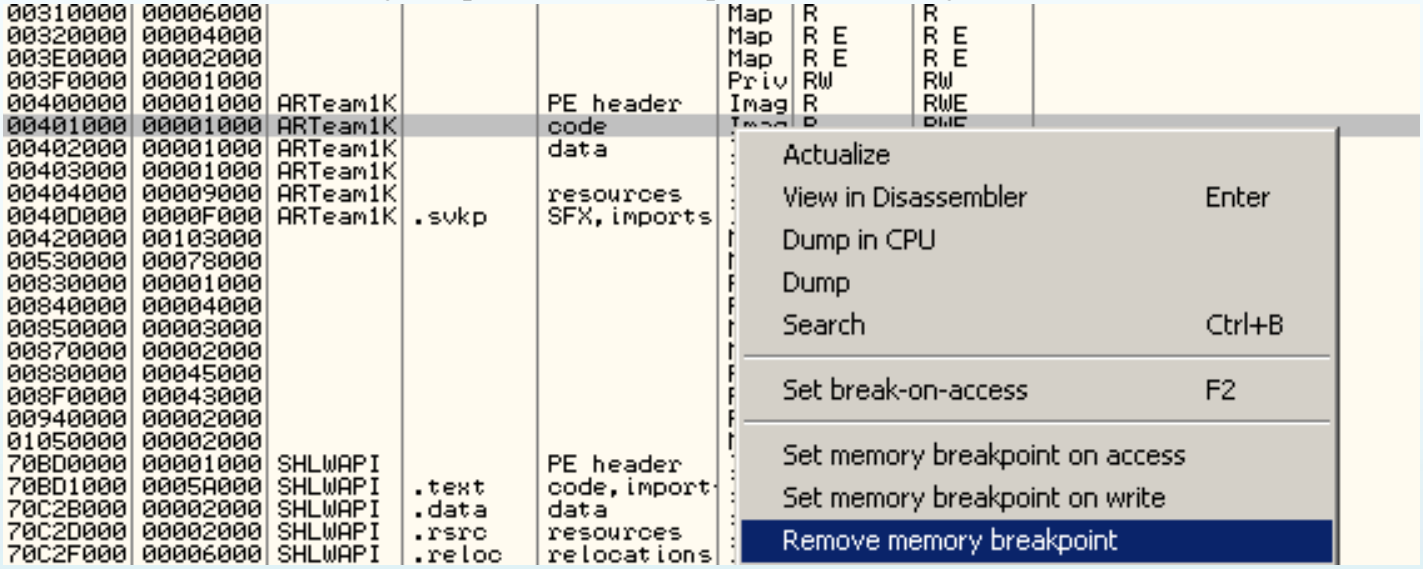
```
Address   Disassembly                      Comment
00401058  CALL ARTeam1K.0040161A
0040161A  JMP DWORD PTR DS:[402034]        (Initial CP
```

Kích Double click the first line (401,058).

Press F2 to set the breakpoint.

```
0040104B   FF35 C2304000   PUSH DWORD PTR DS:[4030C2]
00401051   E8 FA050000     CALL ARTeam1K.00401650
00401056   6A 00           PUSH 0
00401058   E8 BD050000     CALL ARTeam1K.0040161A
0040105D   55              PUSH EBP
0040105E   8BEC            MOV EBP,ESP
```

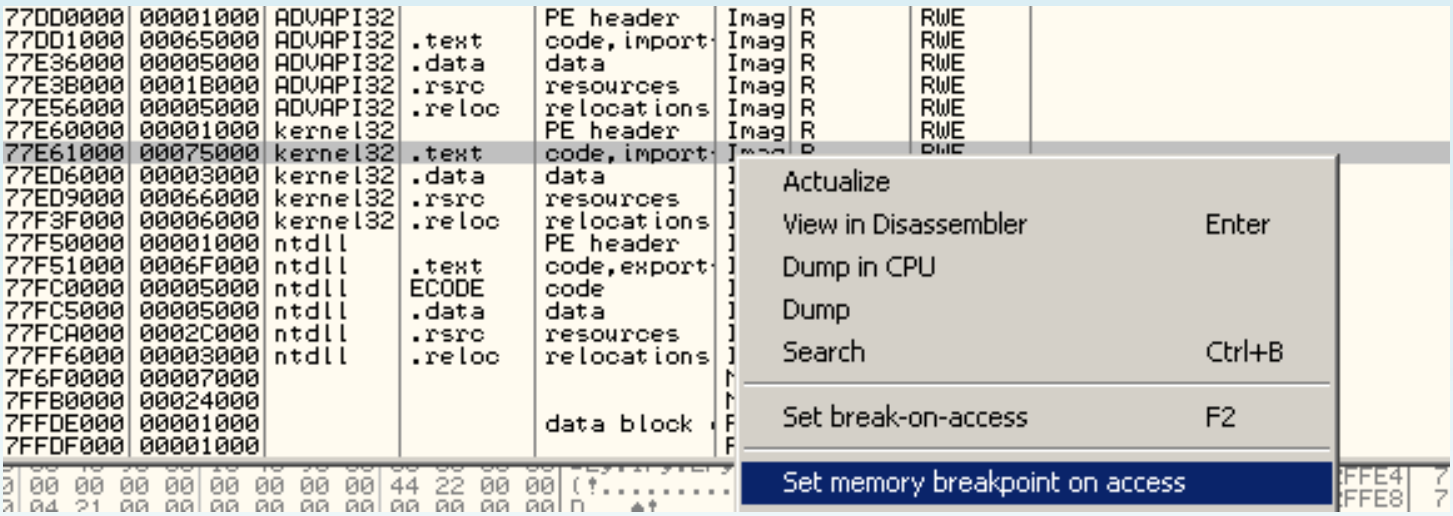
Press Alt-M to the "Memory Map" select "Breakpoint on memory acess"



Back "CPU Window." Press F9 to run the program. When you activate the "Exit" to close the break in the OllyDbg 401,058 (for one set breakpoint).

In Imprec we know kernel32.dll under 402,034.

And "Memory Window" set "Breakpoint on acess memory" on the section of text in the image as kernel32.dll:



Back "CPU Window." Press F9 3 (or 4) times. We will in kernel32.dll.

```
77E77963    64:A1 18000000  MOV EAX,DWORD PTR FS:[18]
77E77969    8B48 30         MOV ECX,DWORD PTR DS:[EAX+30]
77E7796C    8B4424 04       MOV EAX,DWORD PTR SS:[ESP+4]
77E77970    83F8 F4         CMP EAX,-0C
77E77973  ^ 0F84 4CB4FFFF   JE kernel32.77E72DC5
77E77979    83F8 F5         CMP EAX,-0B
77E7797C  ^ 0F84 38B4FFFF   JE kernel32.77E72DBA
77E77982    83F8 F6         CMP EAX,-0A
```

Note the address we're standing is 77E77963. Press Ctrl-N. Click Address column to rearrange the order to make the API. Search the 77E77963

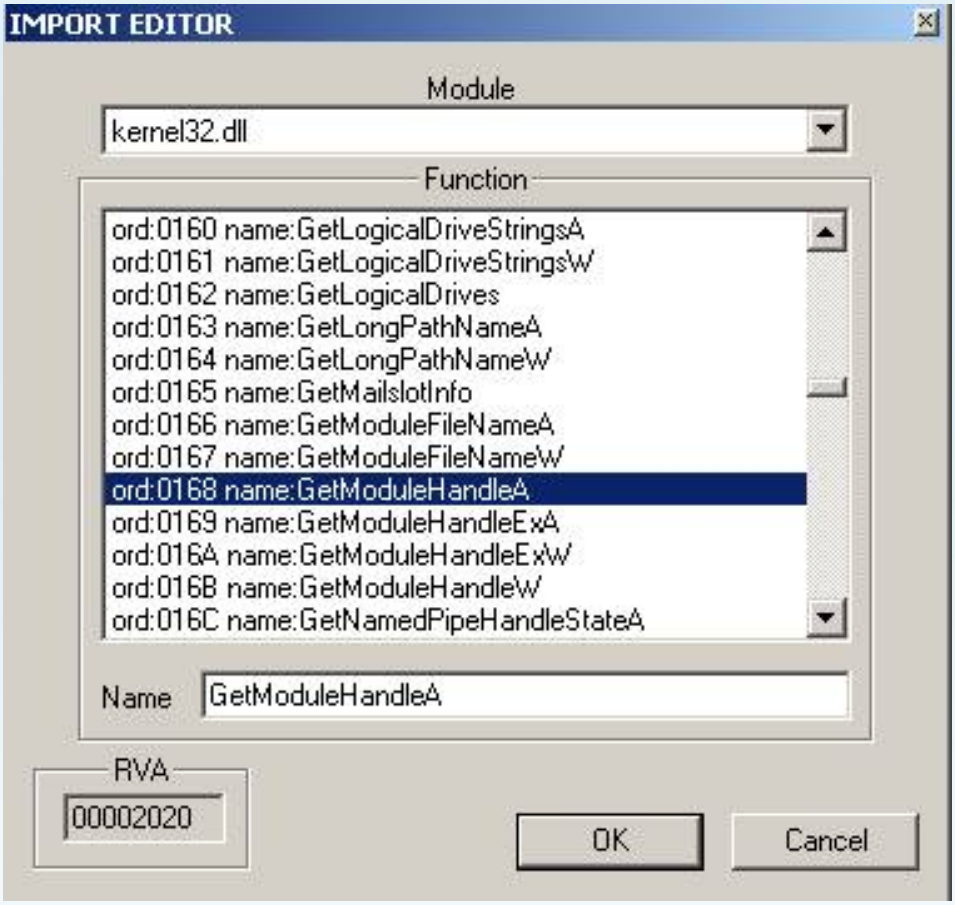
```
77E777EF  .text   Export  InterlockedIncrement
77E77800  .text   Export  WaitForSingleObjectEx
77E778C5  .text   Export  InterlockedDecrement
77E77963  .text   Export  CloseHandle
77E779B1  .text   Export  CreateFileW
```

That CloseHandle function.

So we have the results: **402,020 is GetModuleHandleA**

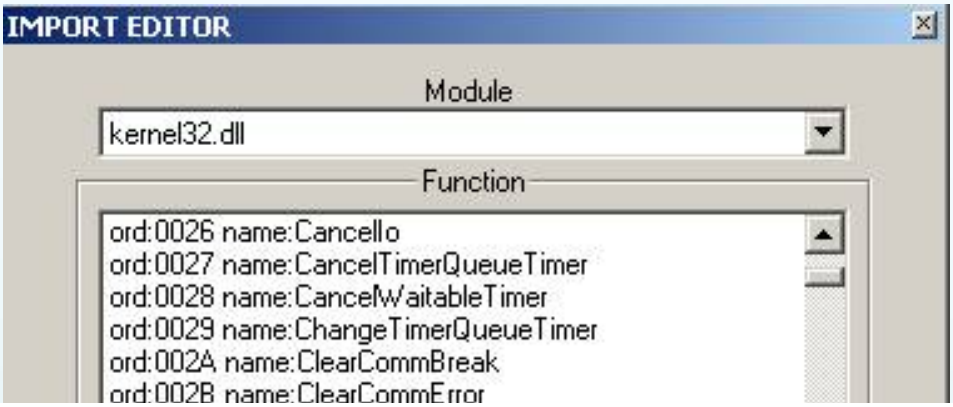
402,034 is CloseHandle

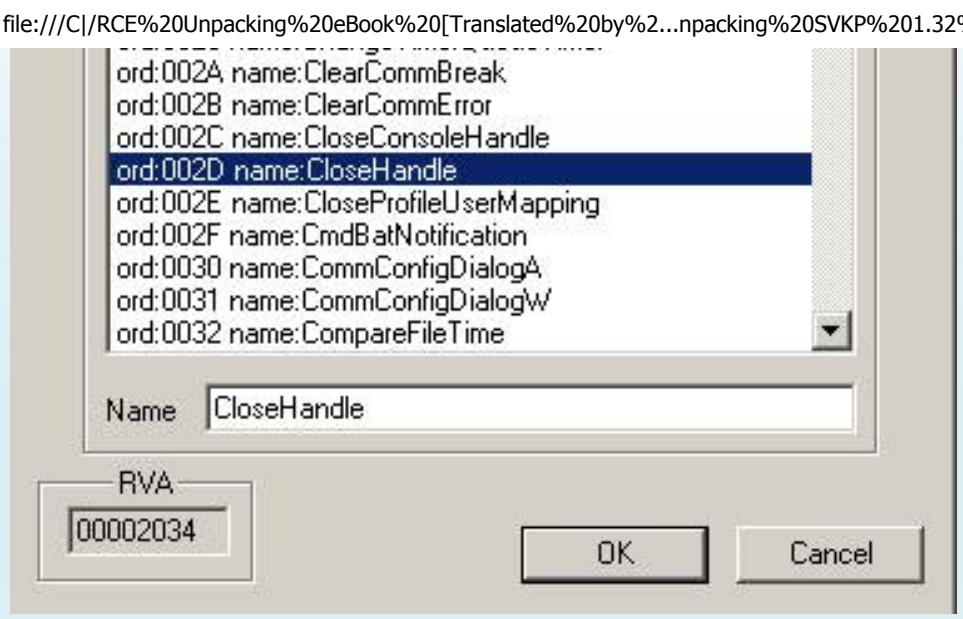
In Imprec revised 2 function properly:



402020:

402034:

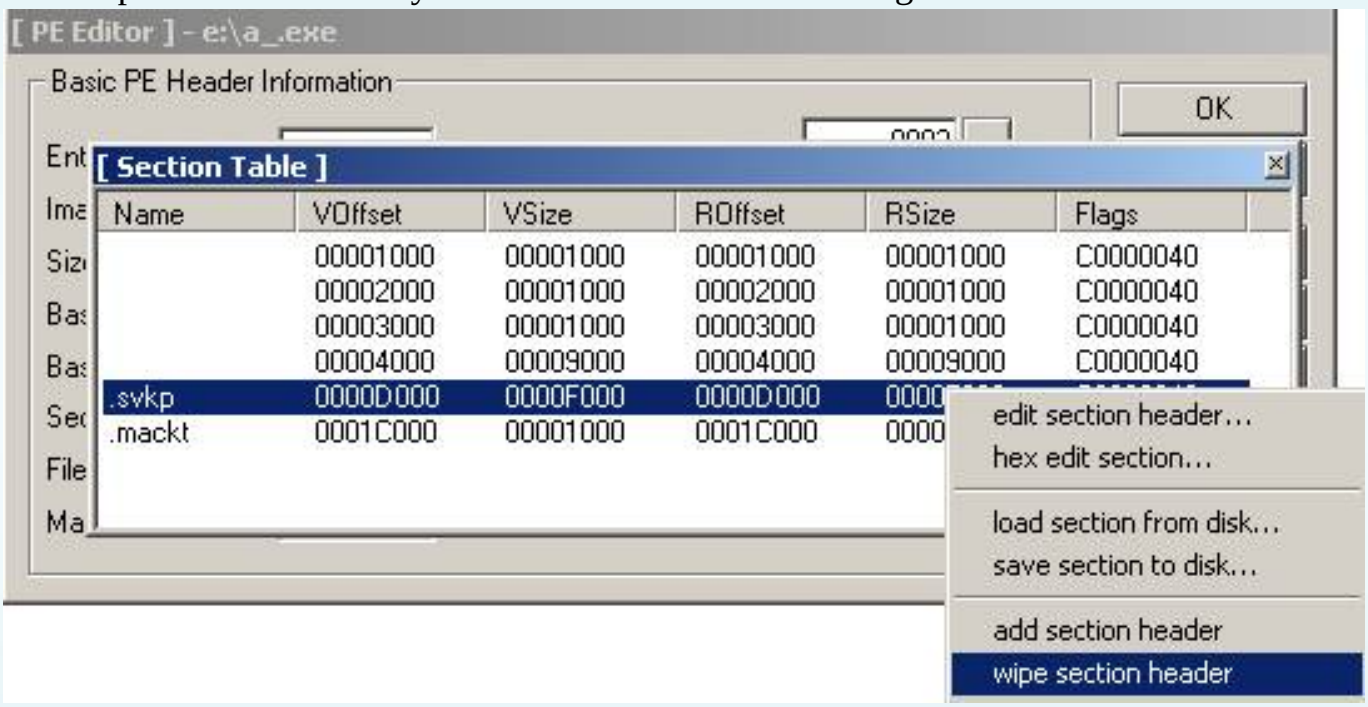




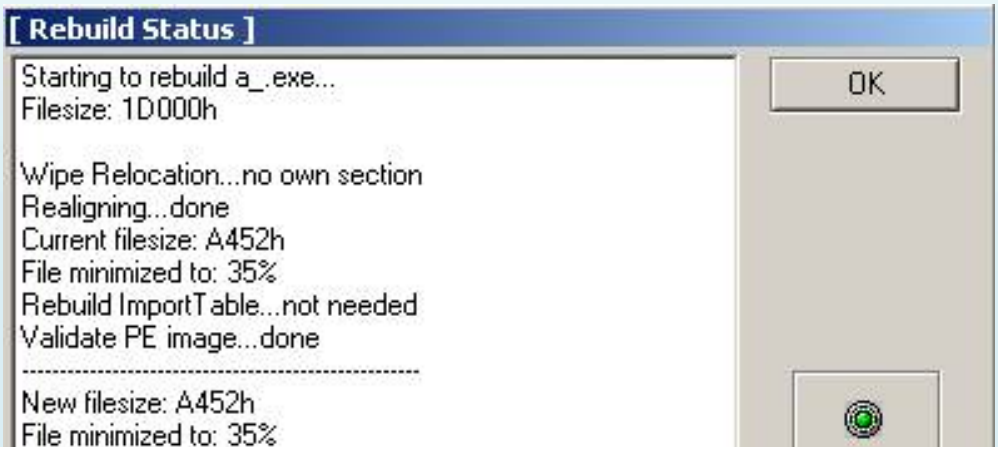
Click "Fix dump." Select the file "a.exe". We are file "a_.exe".
Test file "a_.exe". Running good.

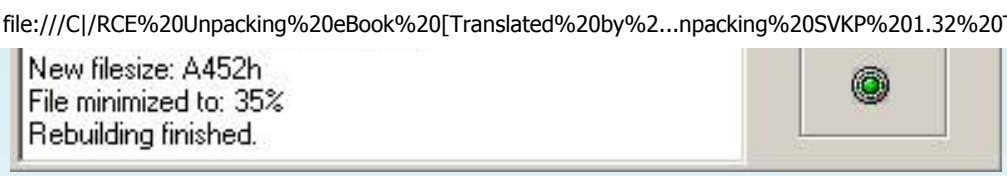
IV. **Rebuild EXE:**

File program "a_.exe" we are still too large
(116 KB). We will reduce it.
LordPE open the file correctly. At the Section. Select the image as:



Then use LordPE rebuild the exe file.





File we have approximately 41 KB.

Them. Wish you success and happy J

Tlandn

Thanks: reaonline all members (many), Crusader, Ricardo, you ...

Tutorials hacnho # 7

Manual unpacking **tElock 0.98b1 -> in!**

The very important plugin **"tELock1.dll"** is by **tlandn** support.

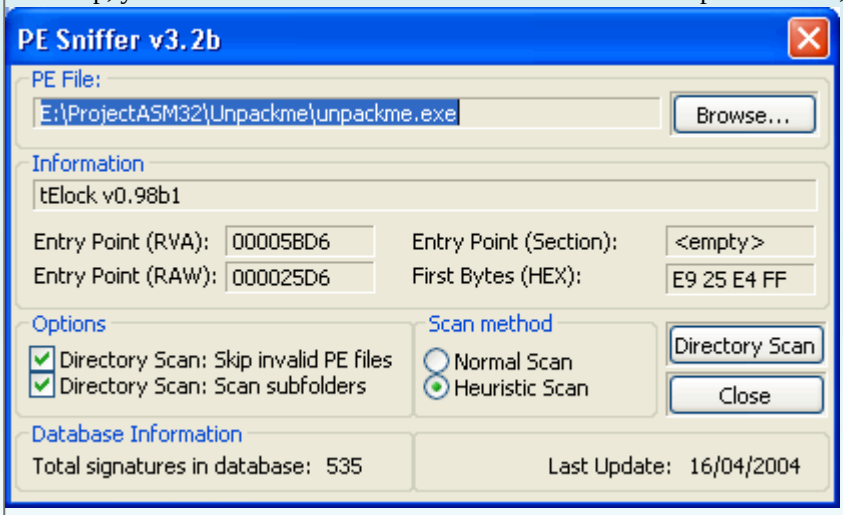
Information	Unpacking for Newbie's
Target	**unpackme.exe**
Available	http://nhandan.info/hacnho/tuts/unpackme7_tuts.zip
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, Lord PE 1.4, PESniffer 3.2b, 1.6 Final ImportREC and Plugin for **tELock1.dll** ImpREC.
Protection	tElock version 0.98b1 -> **in (to** support **v0.99)**
L Evel	Standard
Category	Manual unpacking

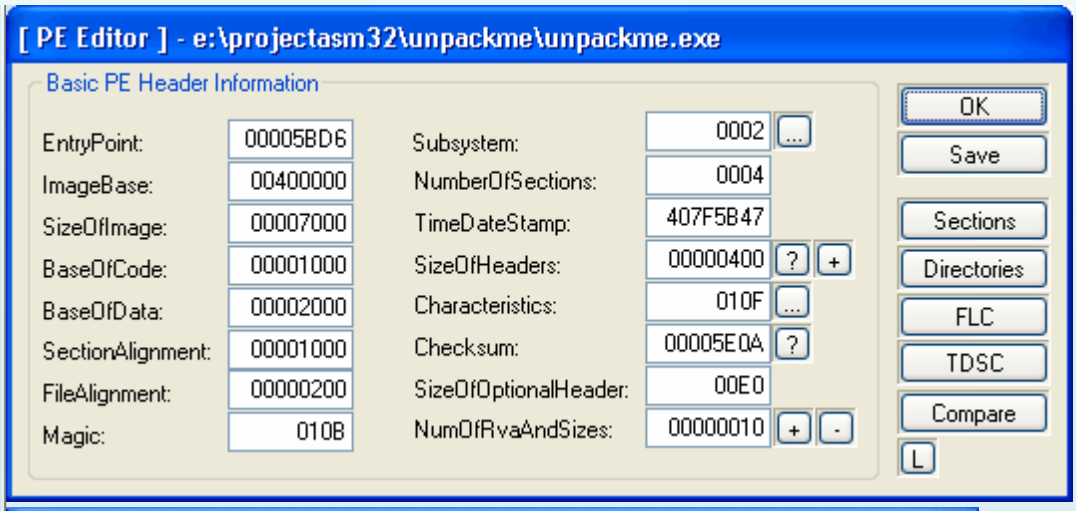
1. Introduction

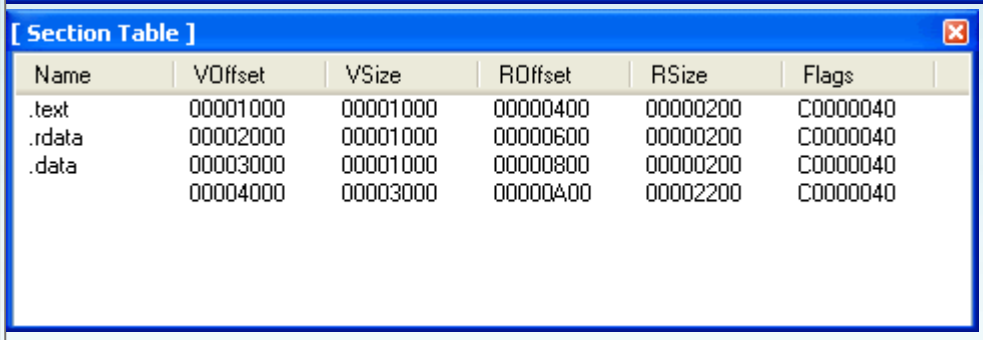
I try to unpack tELock 0.98b1, but not success because I was check the options in Olly **rebuild Import** Plugin dump. So, Olly can not dump. But now, my good friends **tlandn** was a tut for maked unpack this packer in English language.
For this reason, I edited and designed for a complete tutorials for you! Thanx again for **tlandn** help me.

2. Getting Started

First step, you have to find some info from this PE software. Open Lord PE, PE Editor choose. And we have:



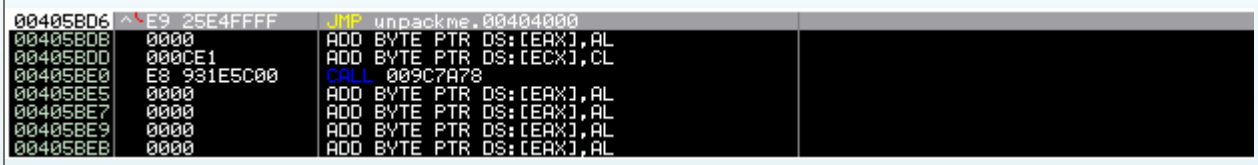




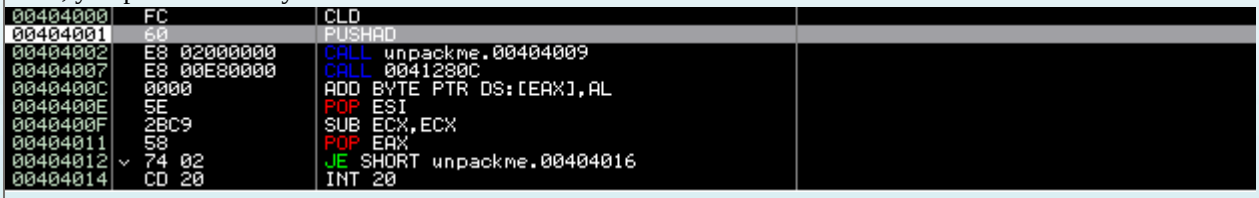
EP: 5BD6, flags The value of this case is not needed, Image Base is always 400000, Import Table: 5BE2 and size is 9C.

3. Finding the OEP

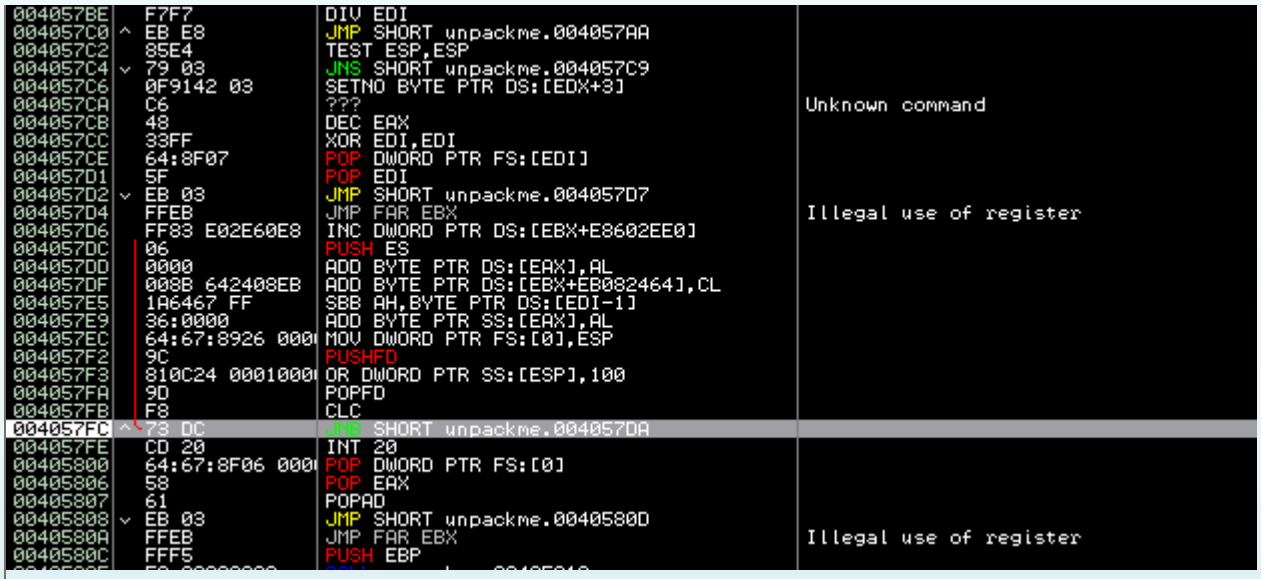
Load **unpackme.exe** into OllyDBG. And you still here:



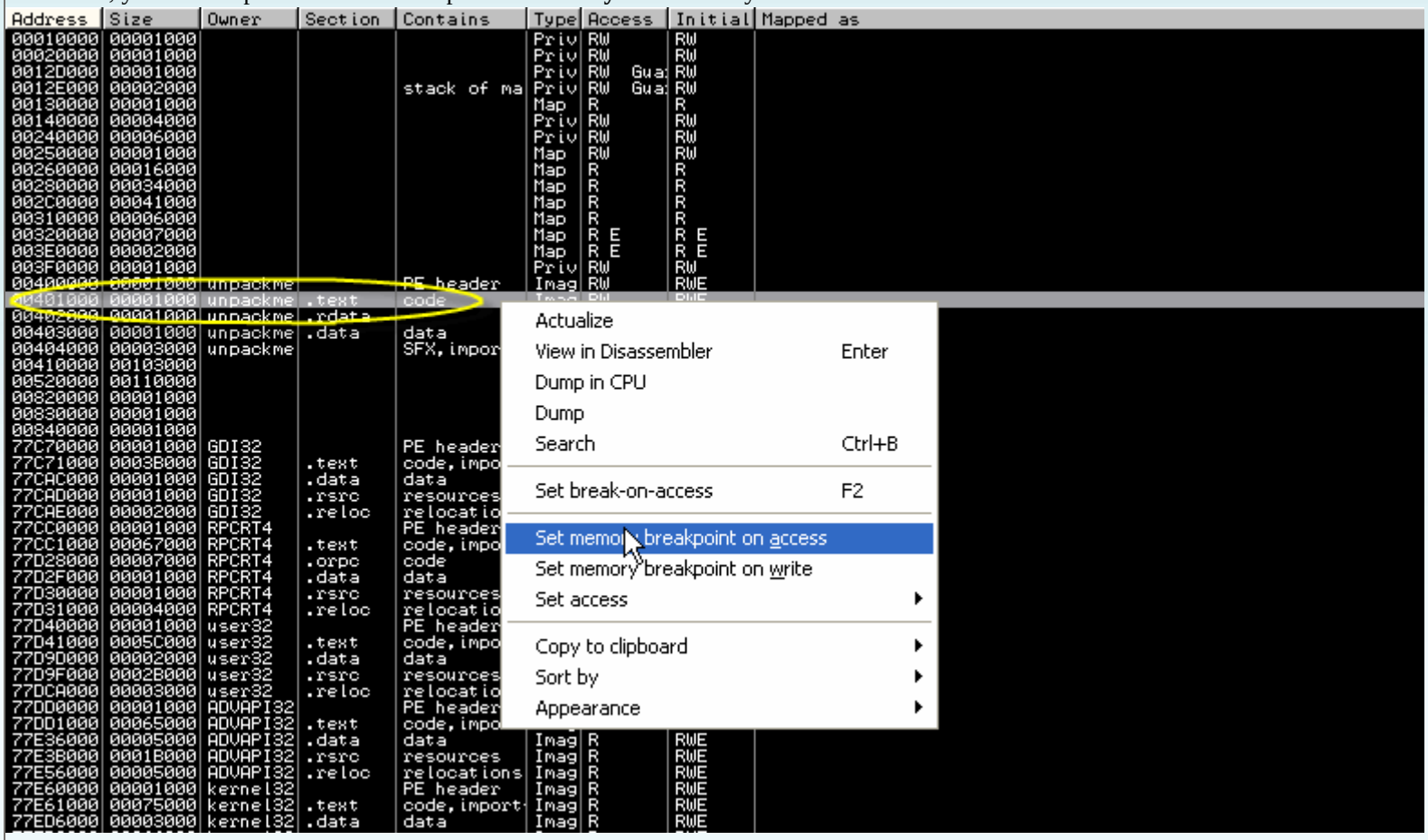
Then, you press **F7** until you see as follows:



And then, you press **Shift + F9 17 times** (after press Shift + F9 18 times, the unpackme run is now complete in memory).
Now you still here:



Continued, you have to press **ALT + M** to open the **Memory** of **MAP** OllyDBG.



Et puis, you search the address line contain **401,000.** Right click on it and choose **Set breakpoint on memory access.**

Now, press **Shift + F9:**

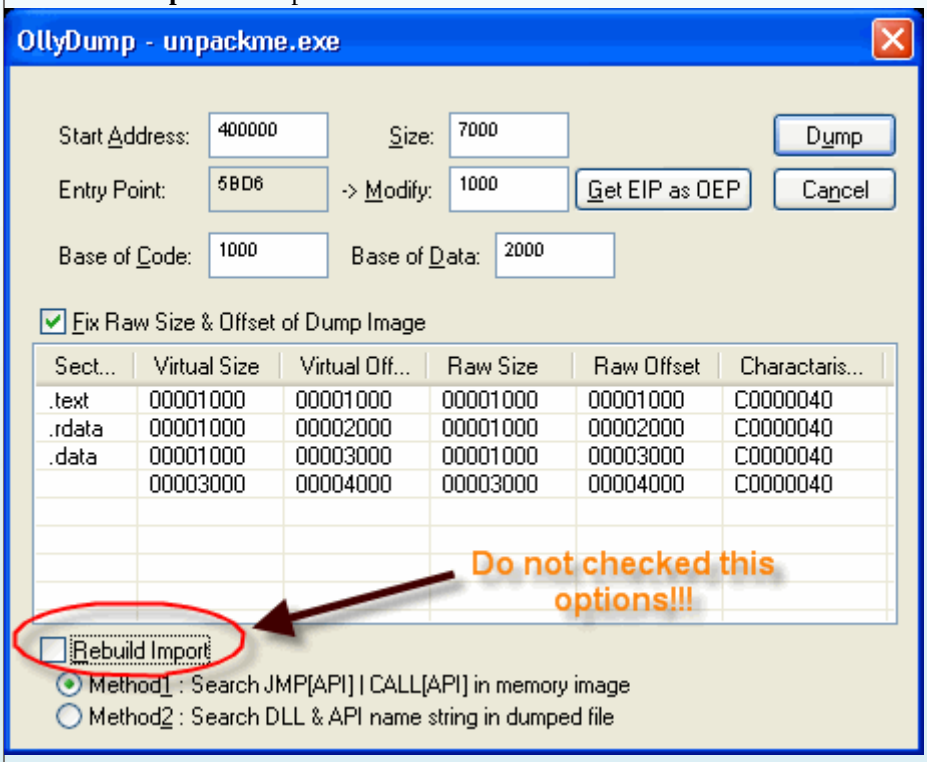
Next, press **CTRL + A** analyze the code for:

```
00401000   .   6A 00          PUSH 0
00401002   .   68 00304000    PUSH unpackme.00403000          ASCII "...:::--=<[VCT-Vietnamese Crackers TEAM!]>=
00401007   .   68 34304000    PUSH unpackme.00403034          ASCII "Try to Unpack me! Packed with tElock 0.98b1
0040100C   .   6A 00          PUSH 0
0040100E   .   E8 0D000000    CALL unpackme.00401020
00401013   .   6A 00          PUSH 0
00401015   .   E8 00000000    CALL unpackme.0040101A
0040101A   $-  FF25 00204000  JMP DWORD PTR DS:[402000]
00401020   $-  FF25 08204000  JMP DWORD PTR DS:[402008]
00401026       00             DB 00
```

Congratulations! According OEP we found is **401,000.** And now we Calculate the real OEP of this unpackme by the formula:
Real OEP = OEP find in Olly-Image Base = 401000-400000 = **1000.**

4th dumping

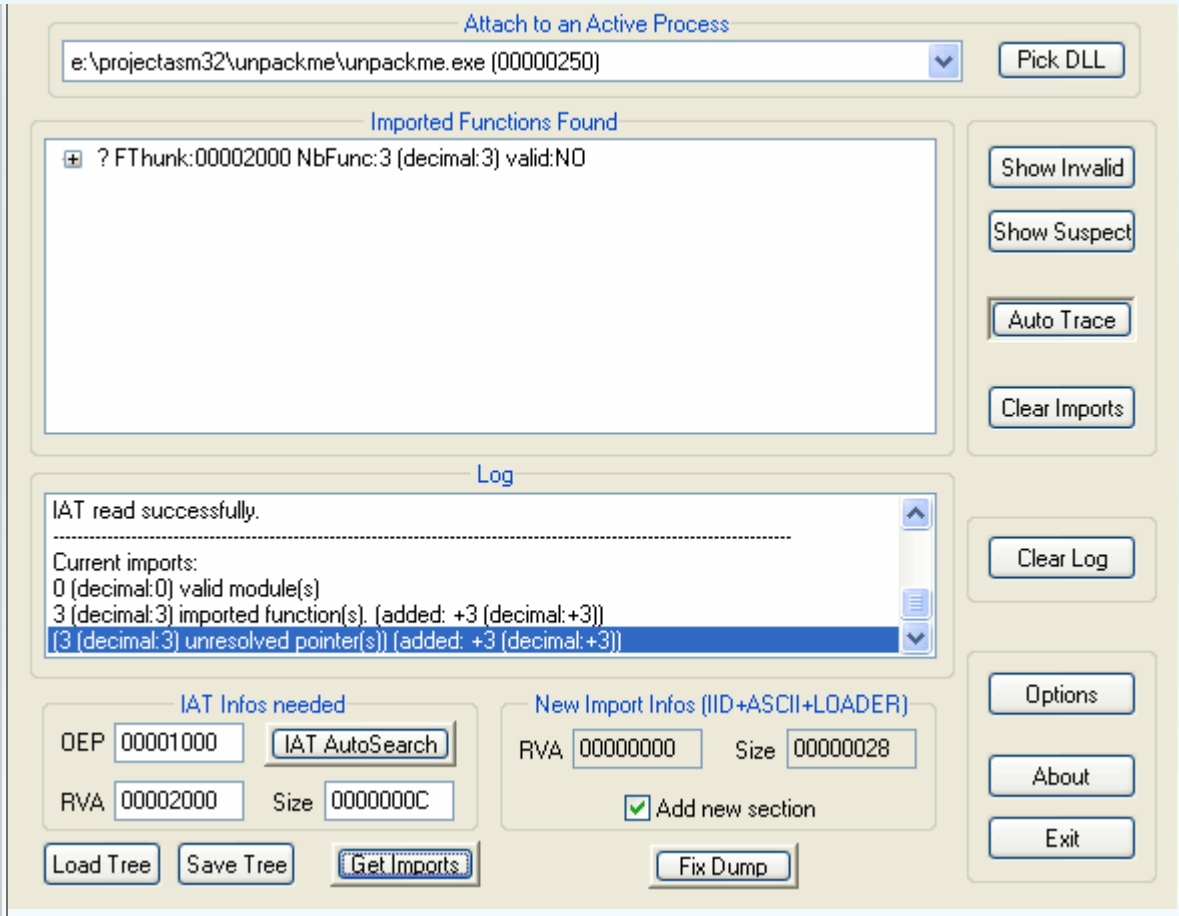
At address **00401000,** we go to the menu Plugin -> OllyDump -> dump debugged process. And then, just press dump, save the file at **dumped.exe** unpacked.



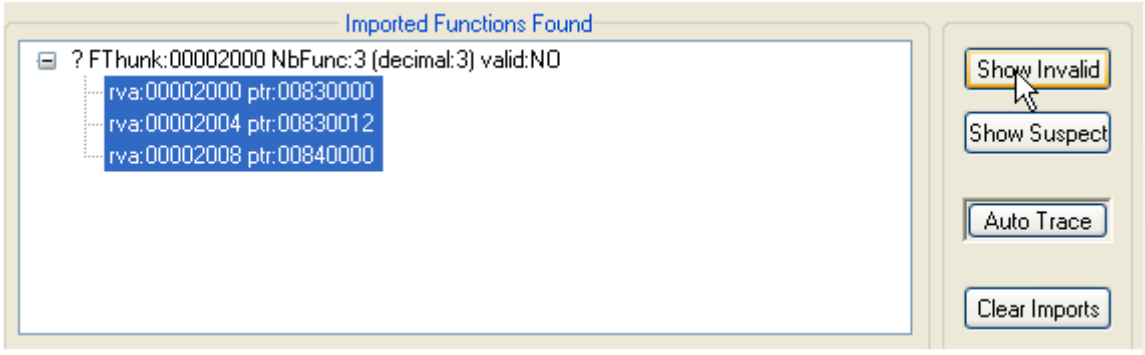
Do not run **dumped.exe** now, will be a crash ... It must fix IAT.

5. Finding and Fixing the Adress Import Table

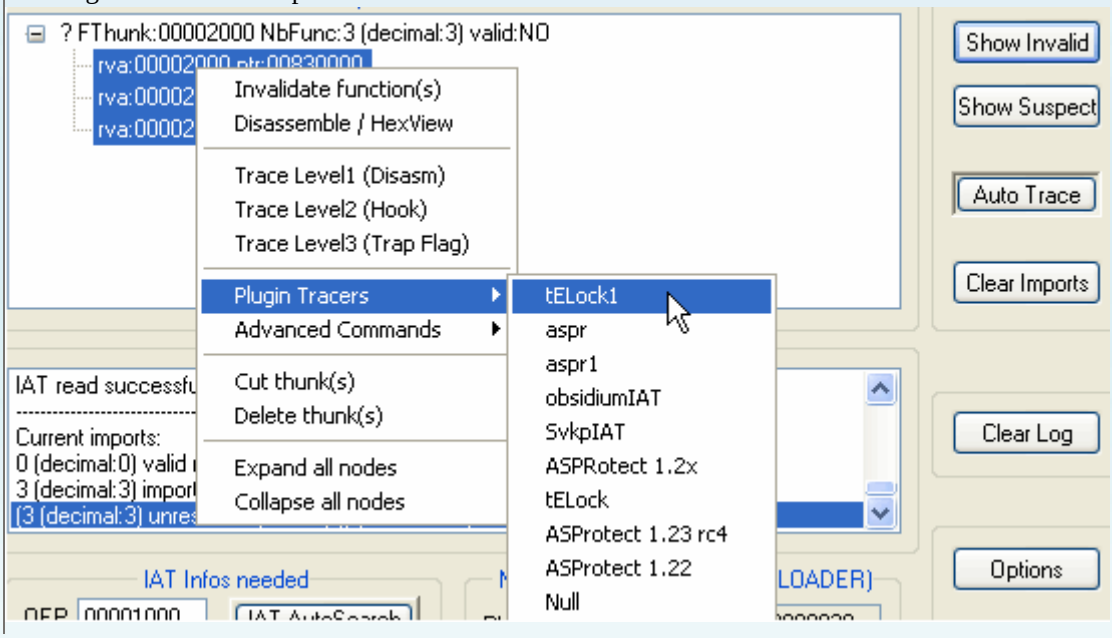
And select Open ImpREC attached to active process and choose unpackme.exe. Change the value in the OEP window to the one we wrote down earlier (1000) then select IATAutosearch then click Get Imports.



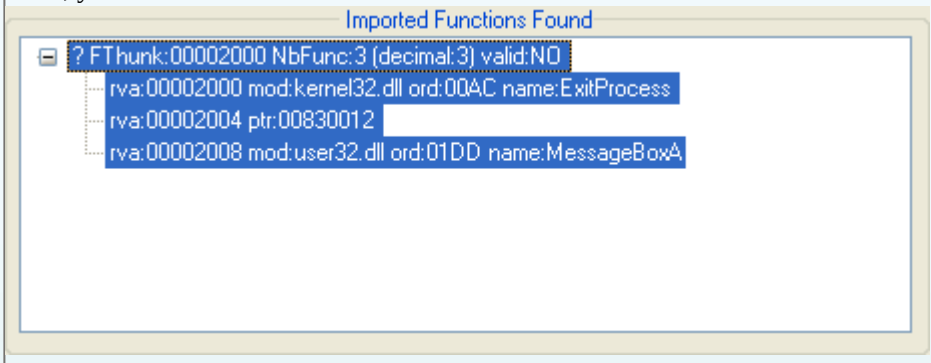
Humm, the unlucky import function is invalid. But no problem! Now, you must click on **Show Invalid** button.



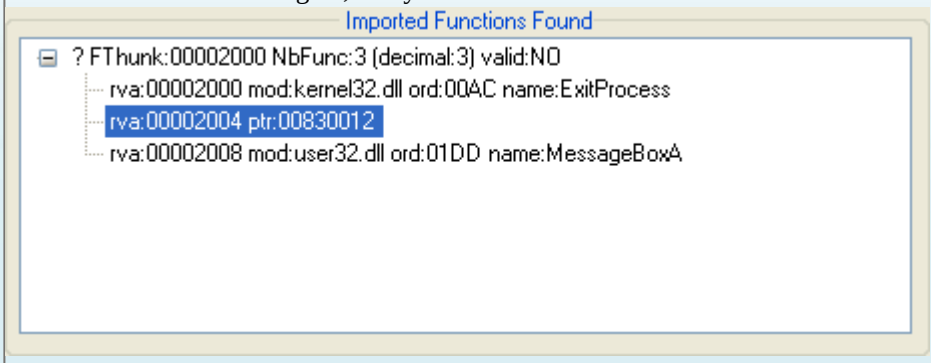
Then right click on the imports and choose:



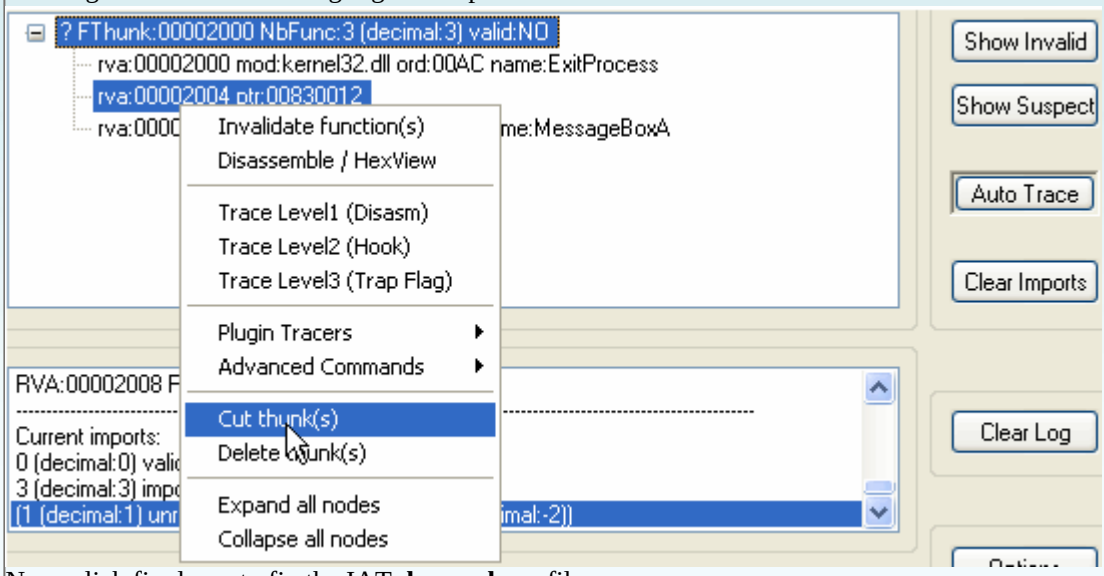
After, you see as follows:



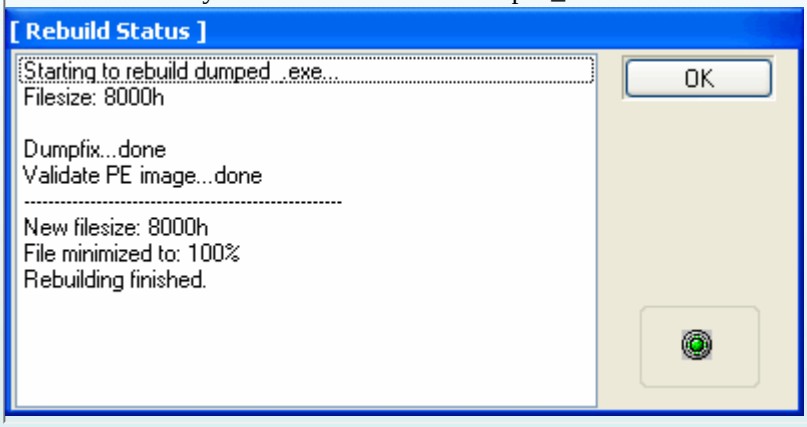
Then click Show Invalid again, and you have:



Then right-click one of the highlighted imports **Cut thunks** and choose:

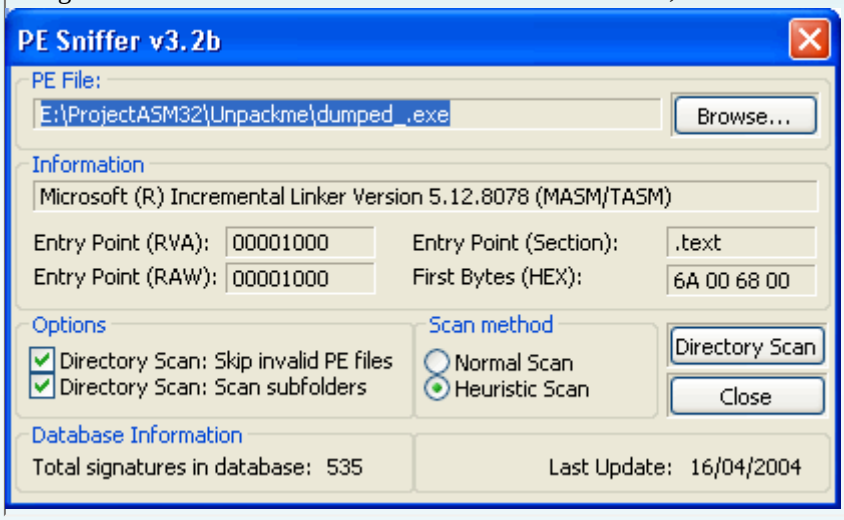


Now, click fix dump to fix the IAT **dumped.exe** file.
Use LordPE 1.4 by Y0da for rebuild our Dumped_.exe



6. Testing Our Unpacked file

Now run unpacked files. Wow, not crash.
Using **PE 3.2b** for **Sniffer** detect: **MASM / TASM.** Okie, tElock version 0.98b1 -> **in!** Is now unpacked successful!



7. Conclusion

Special thanx to **koncool** et **R @ dier** for this template.
My Greetz to: Deux, NVH (c), luucorp, Maipt0301, R @ dier, tlandn, Computer_Angel, Zombie, RCA, CTL, JAL, LeVuHoang, 777, LeonHart, Bin ... and you ;-)!

To be continued ...

Written by hacnho (tutorial date: Sai Gon 10/4/2004)

Manual Unpacking Total Uninstall 3

EXECryptor 2.xx

I-Introduction:

Total Uninstall 3 in the pack but **ExeCryptor** methods to unpack Execryptor children have the opportunity to introduce the i can apply for this Target. Even **PeiD** and **RGD Packer Detector** mistakenly identified the **UPX,** very easy mistake and brought the wild oriented approach unpack, also cause that some parties SNDforum Pa vociferous Target with this. I evaluate authors Soft quite high because this is very smart when Protect soft as this. It would say in **Version 3.6x** ko **CRC Check** with the **new version 3.7** will have.

II-Tools & Target:

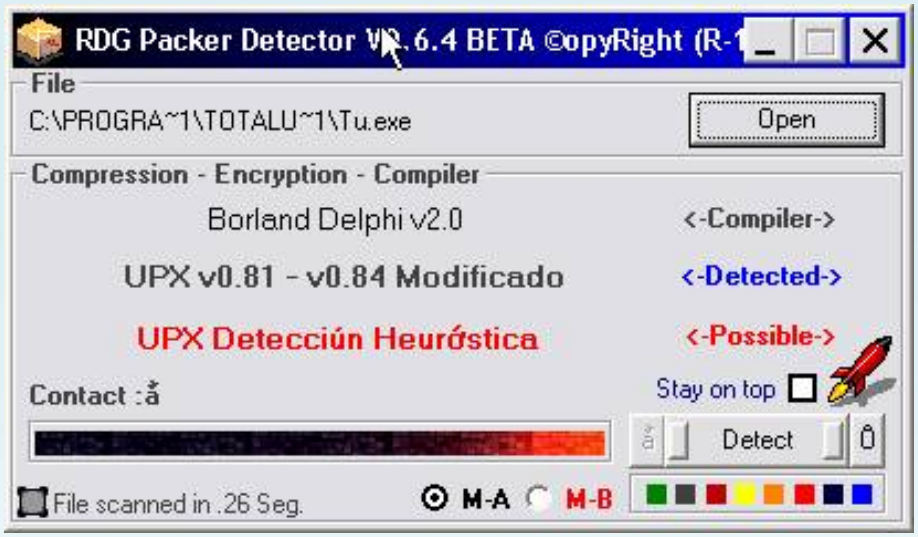
Tool and to use the Plugin:

- **OLLYDBG_Execryptor 1:10**
- **LordPE 1.4**
- **ImportREC 1.6f**
- **RDG Packer Detector v0.6.4**
- **ID Protection 5.1f**
- **CFF Explorer V**

Target: ***Total Uninstall 3***
http://www.martau.com/

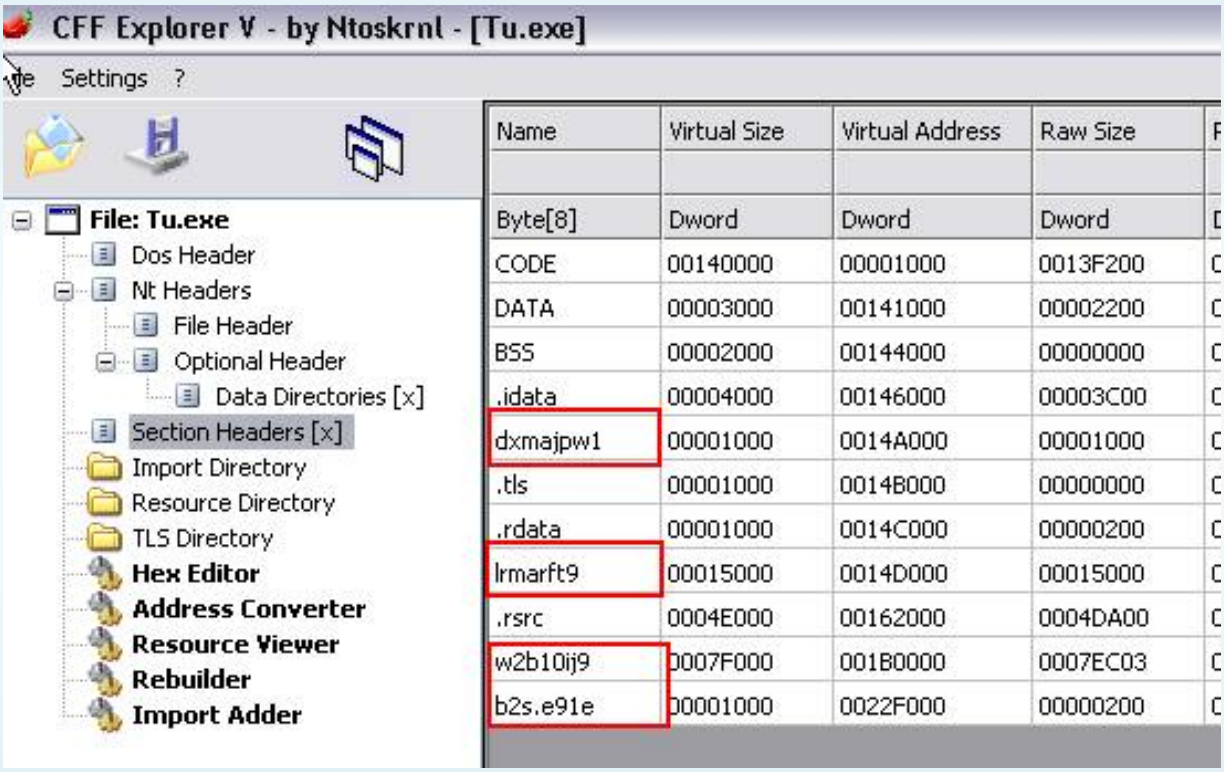
III-Bypass & AntiDebug Find OEP:

_Dung **RDG Packer Detector v0.6.4** scan target

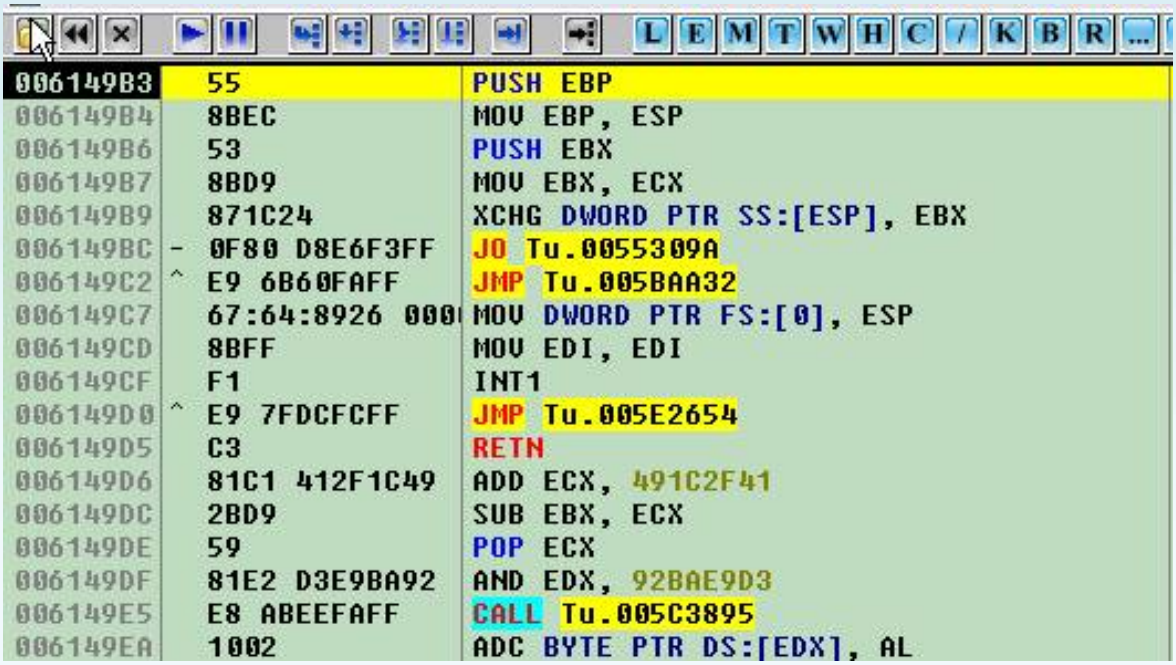


ID PROTECTION _Dung v5.1f target scan

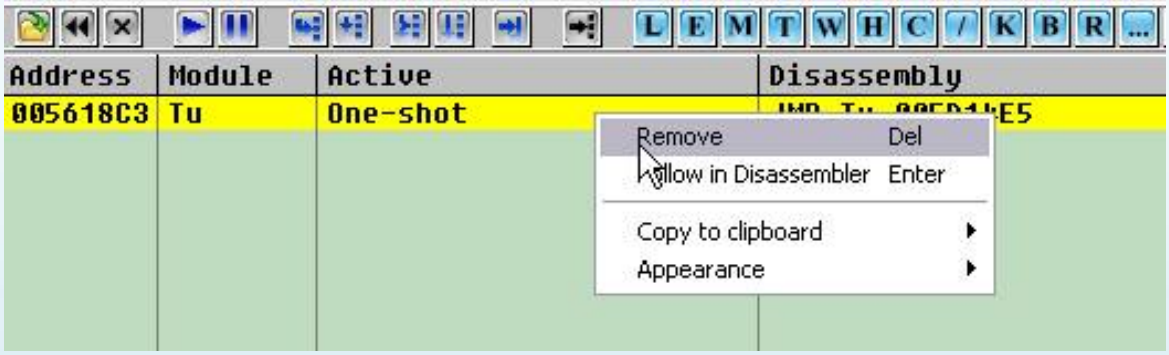
_Mo The **CFF,** the **Red Section** below may be signs of the pack with target **Execrypto** R.



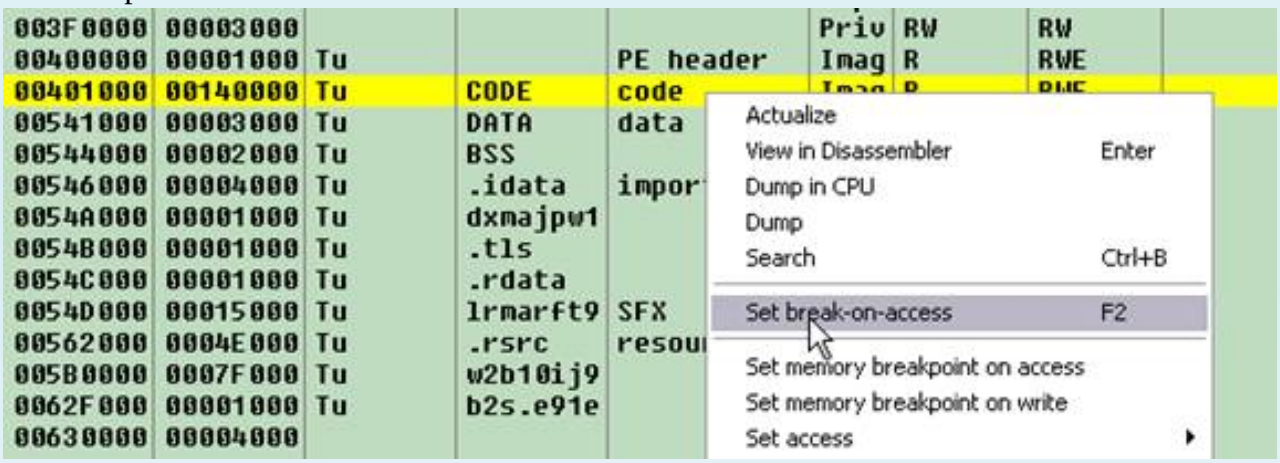
_ OK, Load OllyDBG_EXEcryptor on target and we stop here:



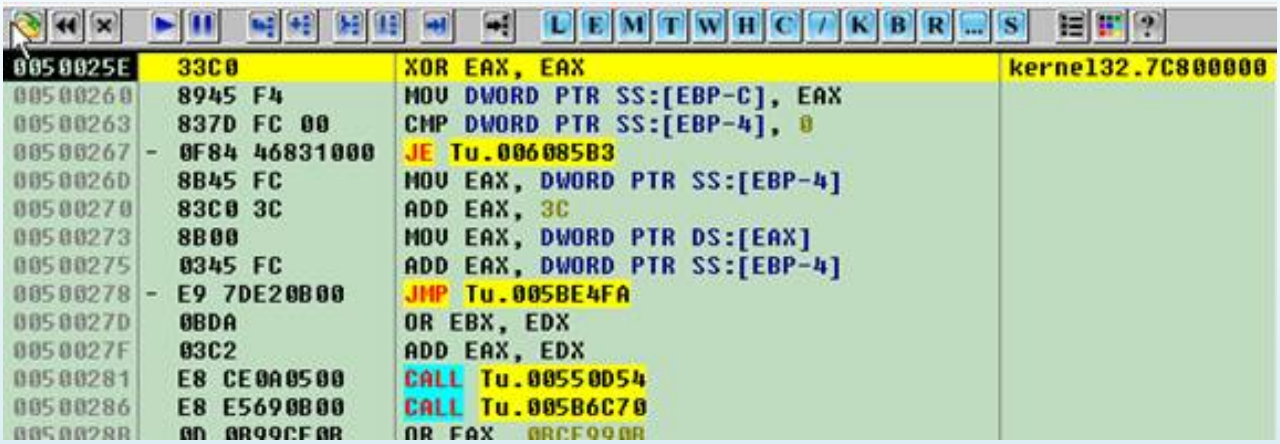
_ Press **Alt + B 1 Breakpoint** you see, please delete it



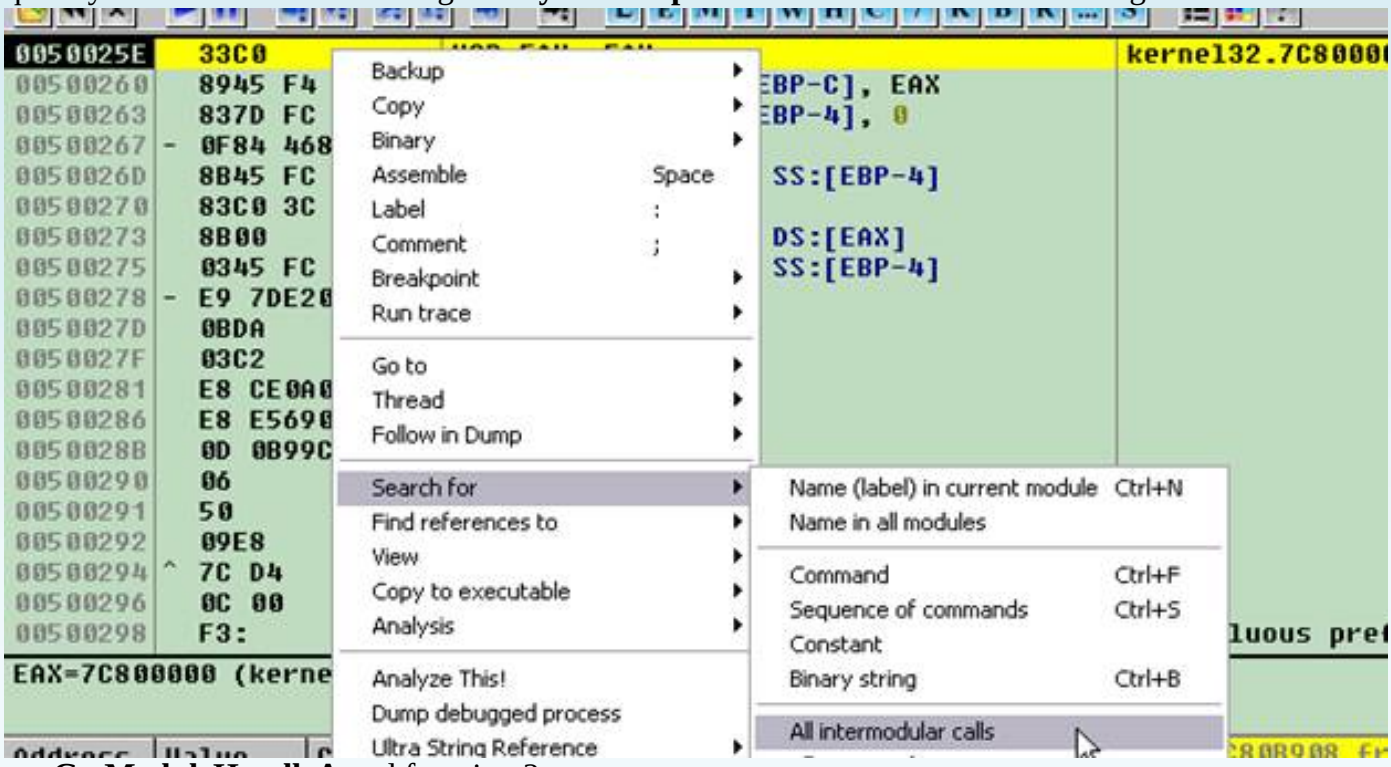
_ Press **Alt + M** and press **F2** to set BP in Section **1. Code**



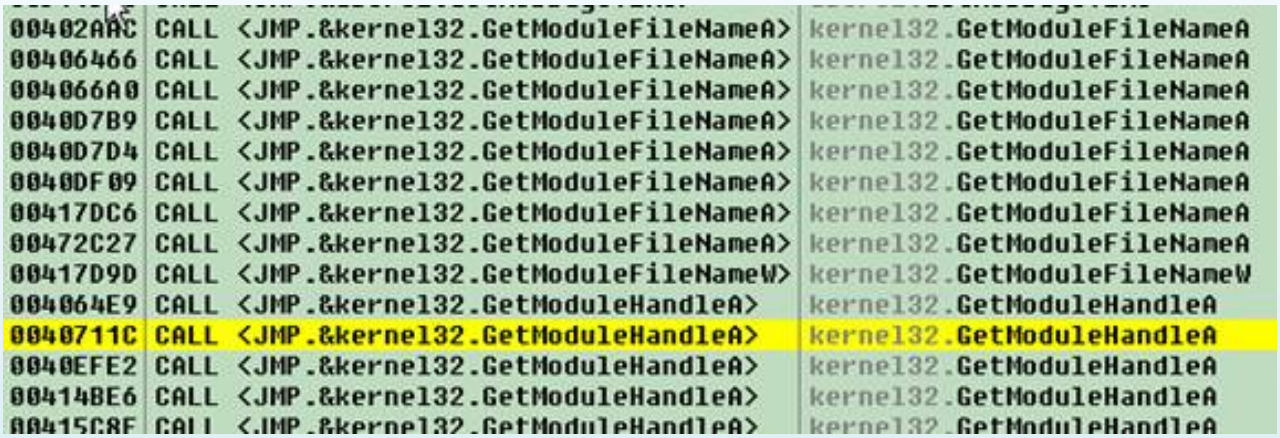
_ Press **Shift + F9** you stop here



_ As we know Soft code using **Borland Delphi 6.0 - 7.0** Ham have always had **GetModuleHandleA** below. Based on this we quickly find the **OEP** of this Target. **OllyDBG** In **press F10** and select the same image



_ Type **GetModuleHandleA** and function 2



_ **Click** here to **double** our

```
00407109   E8 D2F8FFFF   CALL Tu.004069E0
0040710E   C3            RETN
0040710F   90            NOP
00407110   53            PUSH EBX
00407111   8BD8          MOV EBX, EAX
00407113   33C0          XOR EAX, EAX
00407115   A3 10475400   MOV DWORD PTR DS:[544710], EAX
0040711A   6A 00         PUSH 0
0040711C   E8 2BFFFFFF   CALL <JMP.&kernel32.GetModuleHandleA>
00407121   A3 18475400   MOV DWORD PTR DS:[544718], EAX
00407126   A1 18475400   MOV EAX, DWORD PTR DS:[544718]
0040712B   A3 B0105400   MOV DWORD PTR DS:[5410B0], EAX
00407130   33C0          XOR EAX, EAX
00407132   A3 B4105400   MOV DWORD PTR DS:[5410B4], EAX
00407137   33C0          XOR EAX, EAX
00407139   A3 B8105400   MOV DWORD PTR DS:[5410B8], EAX
0040713E   E8 C1FFFFFF   CALL Tu.00407104
```

_ We need to find a command to call call this code, press **Ctrl + F** to enter **call 407110** and click the **Find** it here

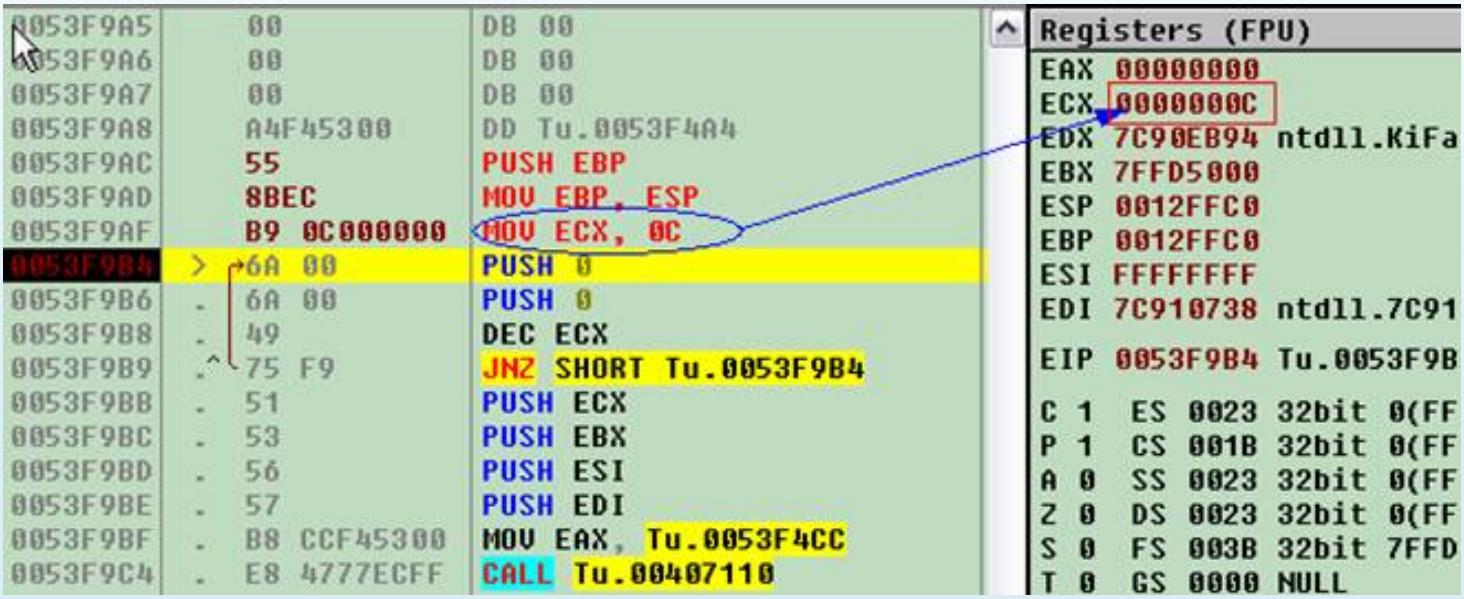
```
0053F9A7      00          DB 00
0053F9A8      A4F45300    DD Tu.0053F4A4
0053F9AC  .-  E9 121F0200 JMP Tu.<ModuleEntryPoint>
0053F9B1  .   0A0C73      OR CL, BYTE PTR DS:[EBX+ESI*2]
0053F9B4  >   6A 00       PUSH 0
0053F9B6  .   6A 00       PUSH 0
0053F9B8  .   49          DEC ECX
0053F9B9  .^  75 F9       JNZ SHORT Tu.0053F9B4
0053F9BB  .   51          PUSH ECX
0053F9BC  .   53          PUSH EBX
0053F9BD  .   56          PUSH ESI
0053F9BE  .   57          PUSH EDI
0053F9BF  .   B8 CCF45300 MOV EAX, Tu.0053F4CC
0053F9C4  .   E8 4777ECFF CALL Tu.00407110
0053F9C9  .   33C0        XOR EAX, EAX
0053F9CB  .   55          PUSH EBP
```

Look up slightly _ is **OEP** ... **Stolen Bytes** but we need to Fix it, roll the mouse to **0053F9B4,** Press F2 Set 1 in which BP and press F9 will stop at **0053F9B4**

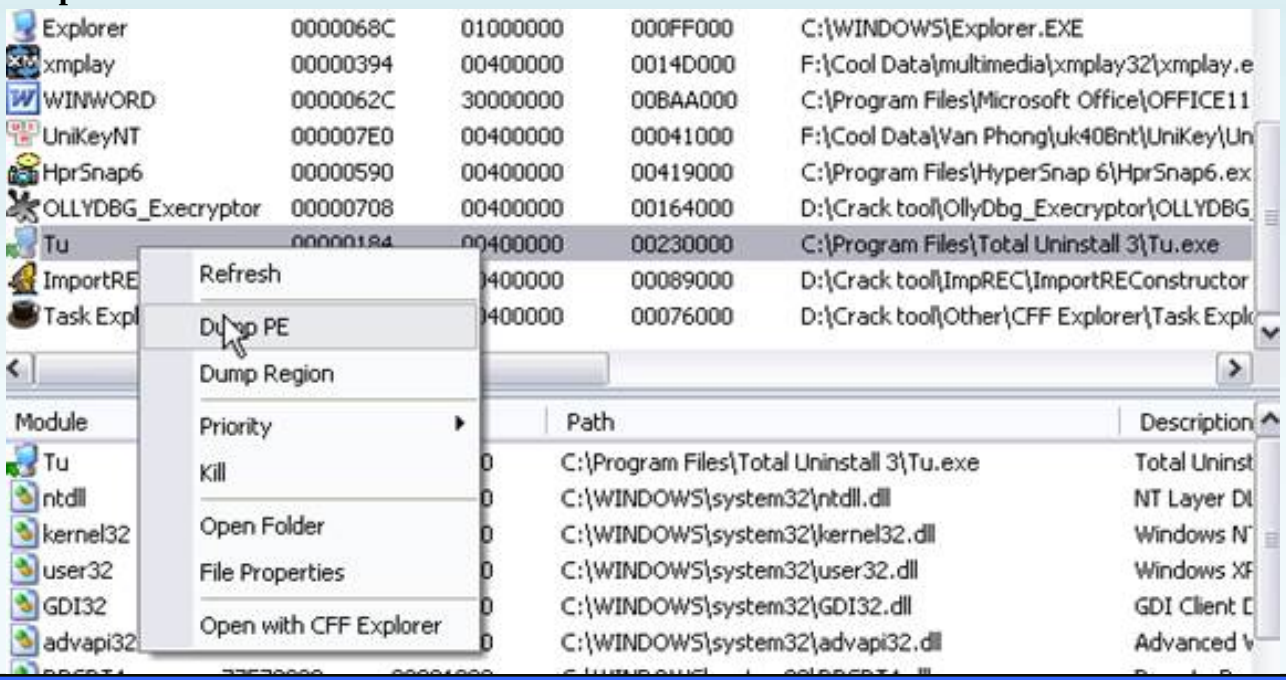
```
0053F9A5      00          DB 00
0053F9A6      00          DB 00
0053F9A7      00          DB 00
0053F9A8      A4F45300    DD Tu.0053F4A4
0053F9AC  -   E9 121F0200 JMP Tu.<ModuleEntryPoint>
0053F9B1      0A0C73      OR CL, BYTE PTR DS:[EBX+ESI*2]
0053F9B4  >   6A 00       PUSH 0
0053F9B6  .   6A 00       PUSH 0
0053F9B8  .   49          DEC ECX
0053F9B9  .^  75 F9       JNZ SHORT Tu.0053F9B4
0053F9BB  .   51          PUSH ECX
0053F9BC  .   53          PUSH EBX
0053F9BD  .   56          PUSH ESI
0053F9BE  .   57          PUSH EDI
0053F9BF  .   B8 CCF45300 MOV EAX, Tu.0053F4CC
```

```
Registers (FPU)
EAX 00000000
ECX 0000000C
EDX 7C90EB94 ntdll
EBX 7FFD5000
ESP 0012FFC0
EBP 0012FFC0
ESI FFFFFFFF
EDI 7C910738 ntdll
EIP 0053F9B4 Tu.00
C 1  ES 0023 32bit
P 1  CS 001B 32bit
A 0  SS 0023 32bit
Z 0  DS 0023 32bit
```

_Toi You look into the window and see **FPU** bar **ECX = 0x0C.** Note this is quite important for us to Fix **OEP.** We revised the language as follows:

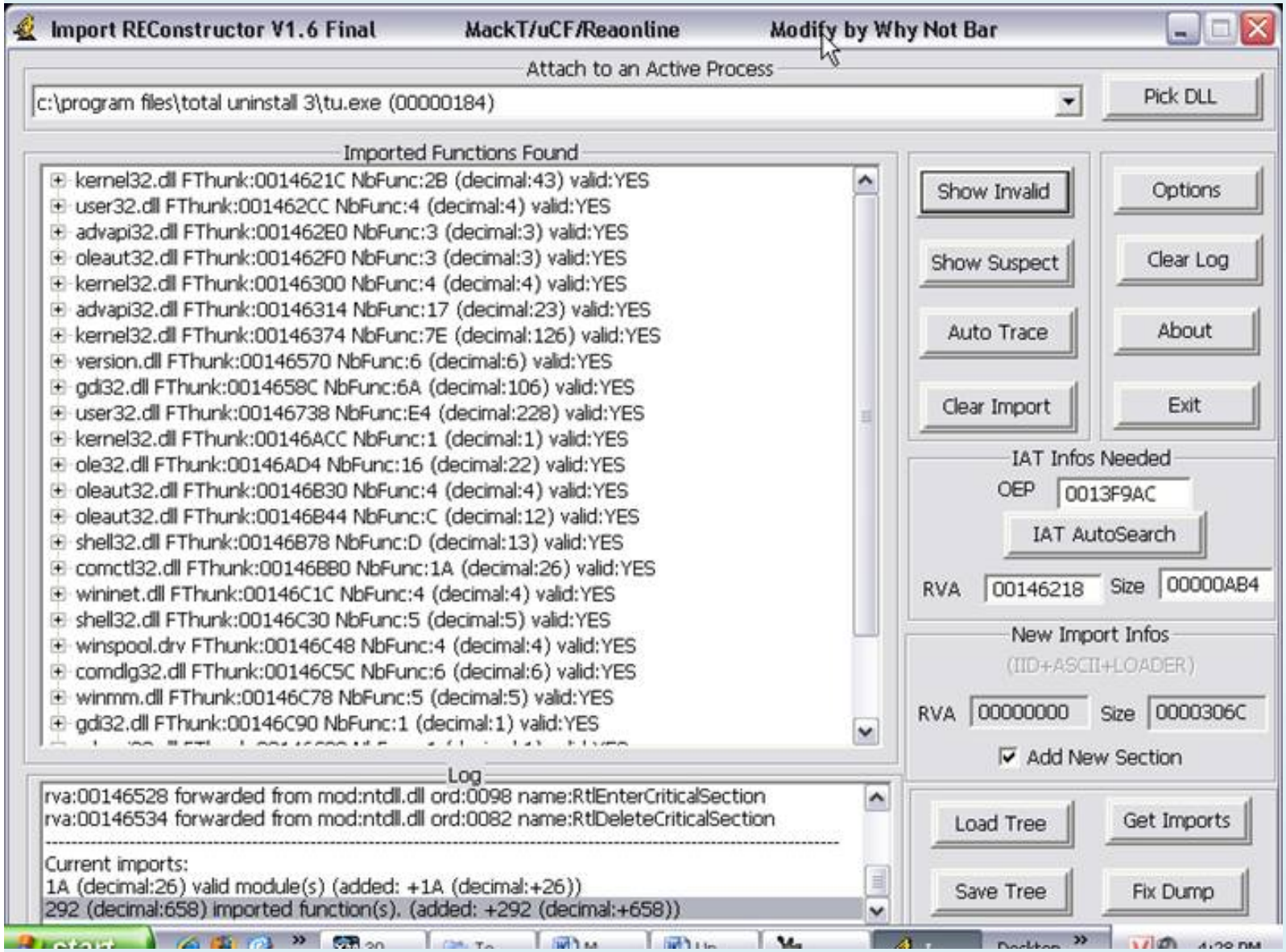


Thui _Gio **dump file** ...

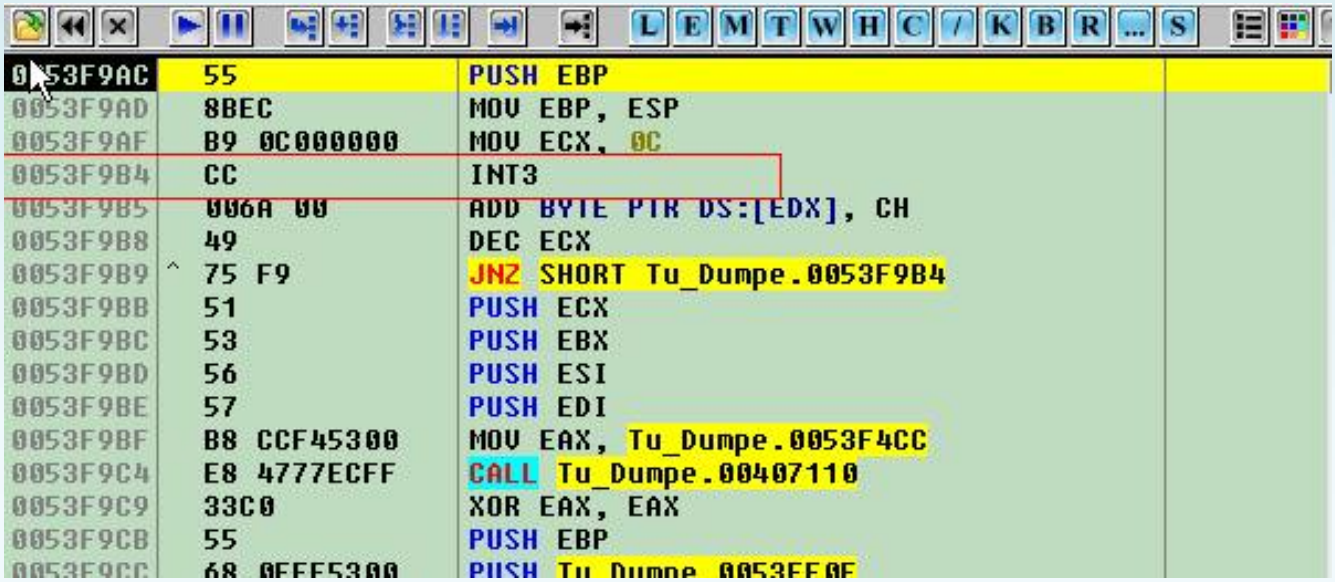


IV-rebuild Import & Fix CRC:

_ Open **ImportREC** up. Select **List** in **Process** ***TU.exe.*** **OEP** = Enter **0053F9AC - 00,400,000** ***(Imagebase)*** = **0013F9AC,** Click ***IAT AutoSearch à à Get Imports Show Invalid***

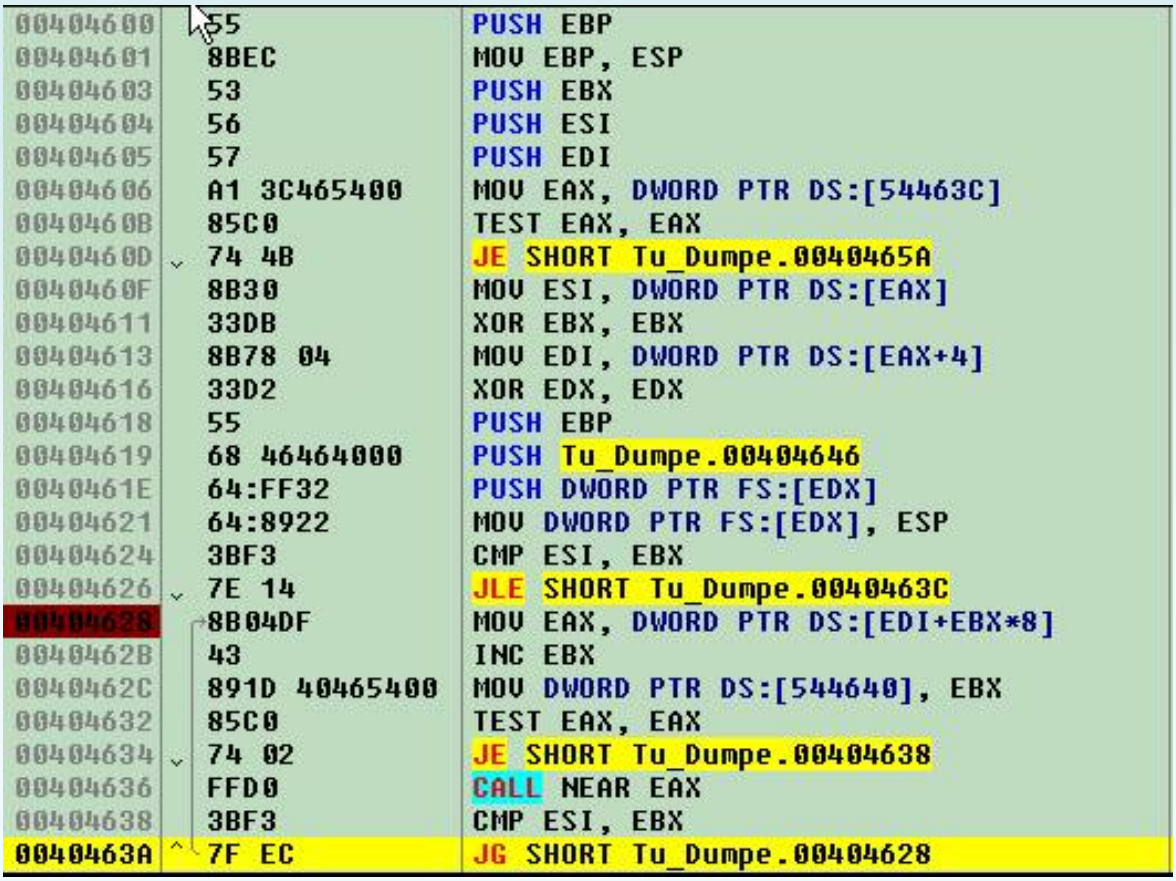


_ Hú complete .... I have any function ***Invalid*** ... OK, Click **Fix Dumped Tu_Dumped.exe** File and select Run ... try. Hic ... hic ... Dek run Load **Tu_Dumped.exe** to **OllyDBG_Execryptor,** press **Shift + F9** to **EP**



_Tai **0053F9B4** revised as follows:

_Ok, **Save** the **file** and try to run ... khua khua still running Dek Load File Again ... just to save **OllyDBG_Execryptor,** with this format is the best way is Trace between **F7** and **F8** since then to find from just Fix, but how This is quite long but absolutely accurate. Here they work quickly, press Ctrl + G to enter **00404628** and **press F2 Set** at **BP**



_Nhan For **Shift + F9** until Soft Crash ... ***(press Shift + F9 a lot of times),*** times hit **Shift + F9** before Crash soft signs are the following:

```
00404611   33DB            XOR EBX, EBX
00404613   8B78 04         MOV EDI, DWORD PTR DS:[EAX+4]
00404616   33D2            XOR EDX, EDX
00404618   55              PUSH EBP
00404619   68 46464000     PUSH Tu_Dumpe.00404646
0040461E   64:FF32         PUSH DWORD PTR FS:[EDX]
00404621   64:8922         MOV DWORD PTR FS:[EDX], ESP
00404624   3BF3            CMP ESI, EBX
00404626   7E 14            JLE SHORT Tu_Dumpe.0040463C
00404628   8B04DF          MOV EAX, DWORD PTR DS:[EDI+EBX*8]   Tu_Dumpe.004FF3
00404628   43              INC EBX
0040462C   891D 40465400   MOV DWORD PTR DS:[544640], EBX
00404632   85C0            TEST EAX, EAX
00404634   74 02            JE SHORT Tu_Dumpe.00404638
00404636   FFD0            CALL NEAR EAX
00404638   3BF3            CMP ESI, EBX
0040463A   7F EC            JG SHORT Tu_Dumpe.00404628
0040463C   33C0            XOR EAX, EAX
0040463E   5A              POP EDX
DS:[0053F87C]=004FF3F8 (Tu_Dumpe.004FF3F8)
```

Dia chi doan code Check CRC

_ **Ctrl + F2, Ctrl + G** to enter **004FF3F8**

```
004FF3F5   C3              RETN
004FF3F6   8BC0            MOV EAX, EAX
004FF3F8   832D 28535400   SUB DWORD PTR DS:[545328], 1
004FF3FF   73 1A           JNB SHORT Tu_Dumpe.004FF41B
004FF401   E9 54A00D00     JMP Tu_Dumpe.005D945A
004FF406   FA              CLI
004FF407   62AD 57B87BB7   BOUND EBP, QWORD PTR SS:[EBP+B77BB857]
004FF40D   0C 1B           OR AL, 1B
004FF40F   838E 38402C2D   OR DWORD PTR DS:[ESI+2D2C4038], 79
004FF416   71 A8           JNO SHORT Tu_Dumpe.004FF3C0
004FF418   38AE 29C368F4   CMP BYTE PTR DS:[ESI+F468C329], CH
```

Patch _Va as follows:

```
004FF3F5   C3              RETN
004FF3F6   8BC0            MOV EAX, EAX
004FF3F8   C3              RETN
004FF3F9   90              NOP
004FF3FA   90              NOP
004FF3FB   90              NOP
004FF3FC   90              NOP
004FF3FD   90              NOP
004FF3FE   0173 1A         ADD DWORD PTR DS:[EBX+1A], ESI
004FF401   E9 54A00D00     JMP Tu_Dumpe.005D945A
004FF406   FA              CLI
```

_Save Run the file and try khua khua ... .. this is a good run ... **unpack Done!**

GrEeTs Fly Out: ***Computer_Angel, Zombie, Moonbaby, Hacnho, Benina, kienmanowar, Zoi, Deux, Merc, light Phoenix, Trickyboy, Takada, iamidiot, thienthandien, ... and you!***

Nha Trang, the 1st 11, 2006

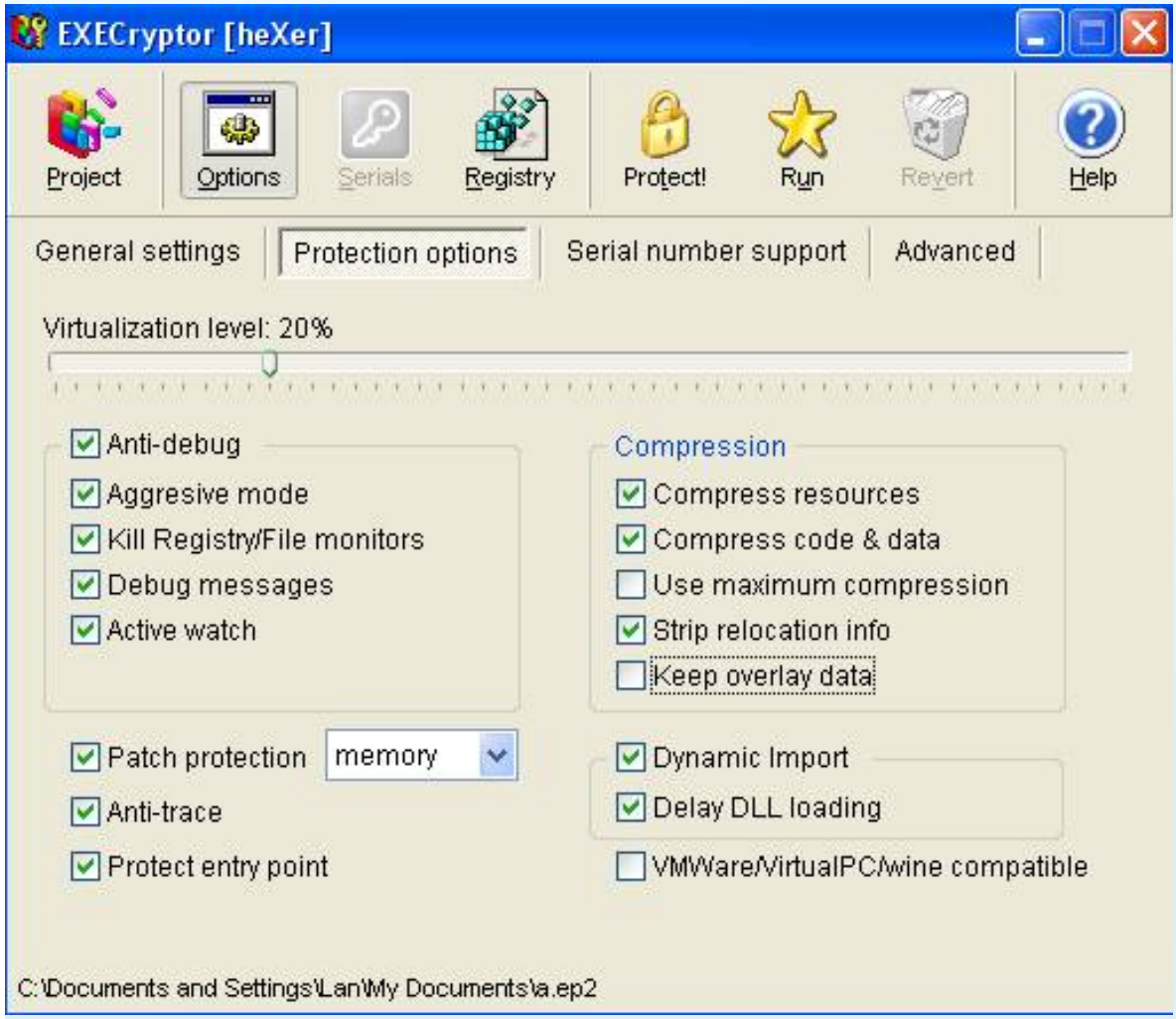
Why Not Bar

Manual unpack Execryptor 2.x

tlandn

Target: BitArray.exe (included)
Tools: Diablo OllyDbg or OllyDbg_Execryptor (download the tut about Execryptor by Why_Not_Bar)
Welcome you. Time is not correct to unpack. Both then read some tut Why_Not_Bar he's on Execryptor should see or learn more. In this tut I try to put all the methods (that I know) to unpack Execryptor.

We will make a program for the demo. I select the BitArray.exe. This is a program written in MFC. The aim is to give them tí (tut because now almost all of the programs written in VC + +). I used to pack Execryptor 2.2.6. I Options as follows:

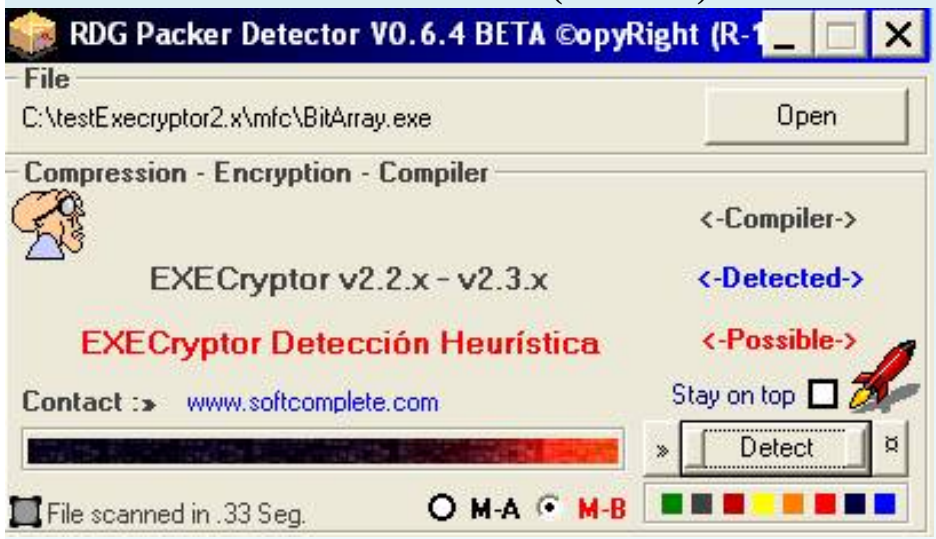


OK. We start.

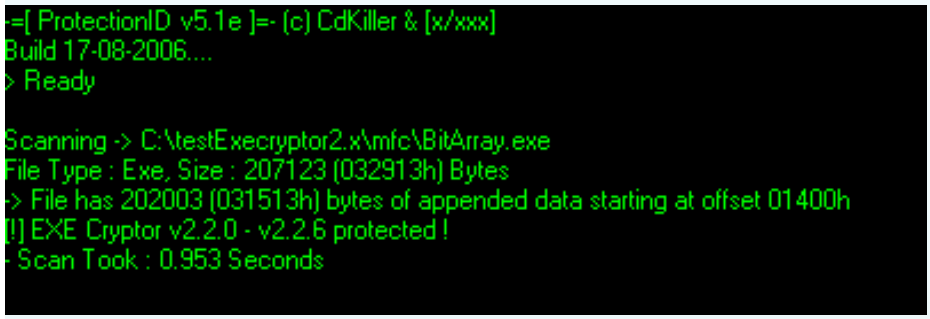
I) Determining Packer:

We can use PEID to check the program:

Or use RDP Packer Detector 0.6.4 beta (method B):



Or use the newer Protection 5.1e ID:



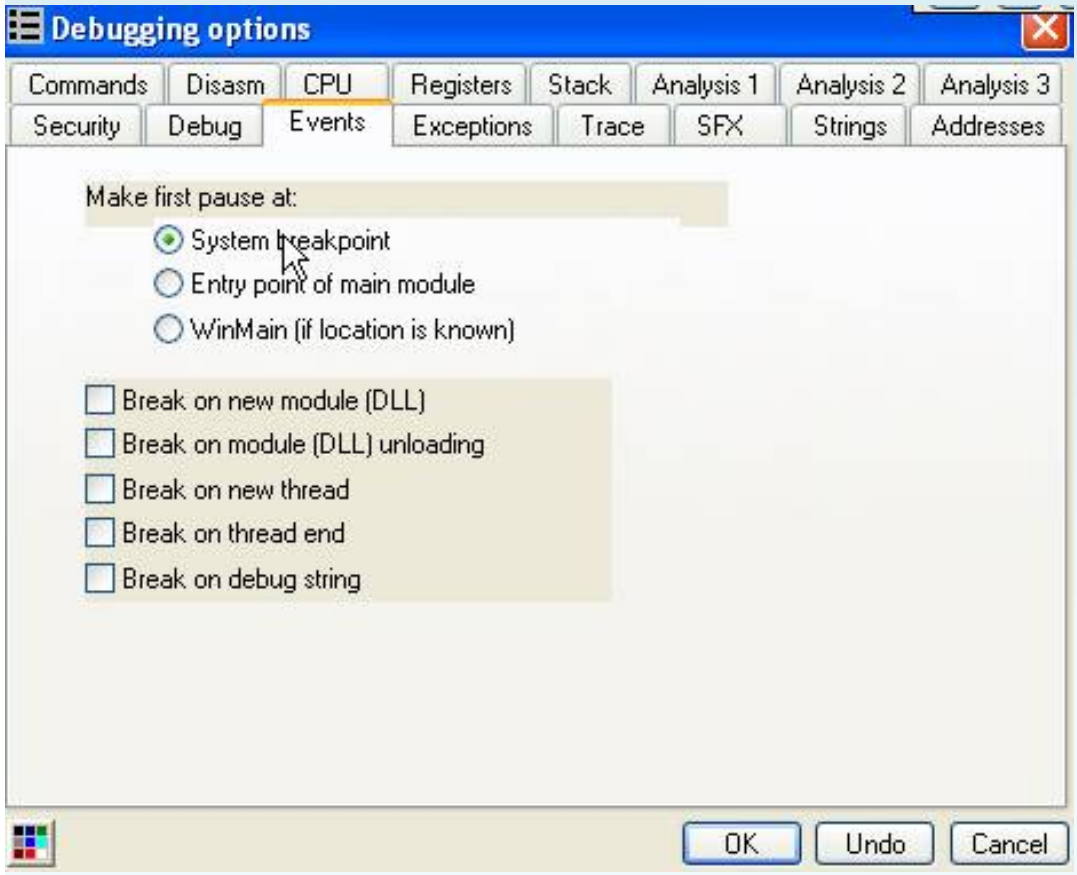
So just under 3 months if the program we are clearly using the pack Execryptor J 2.x

II) Find False OEP:

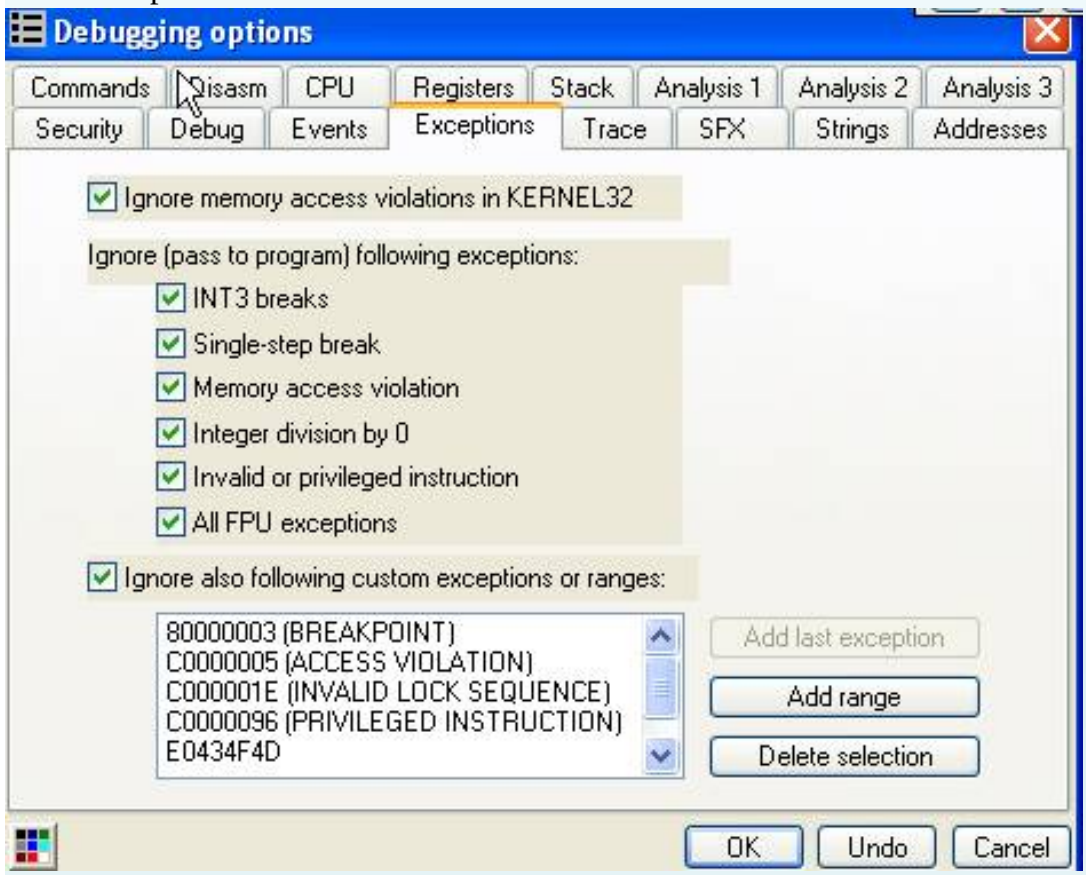
1) Method 1:

Running OllyDbg (I xài Diablo OllyDbg see this month because xài sướng and stability). Press Alt-O following the same tune:

The "Events":



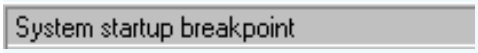
The "Exceptions":



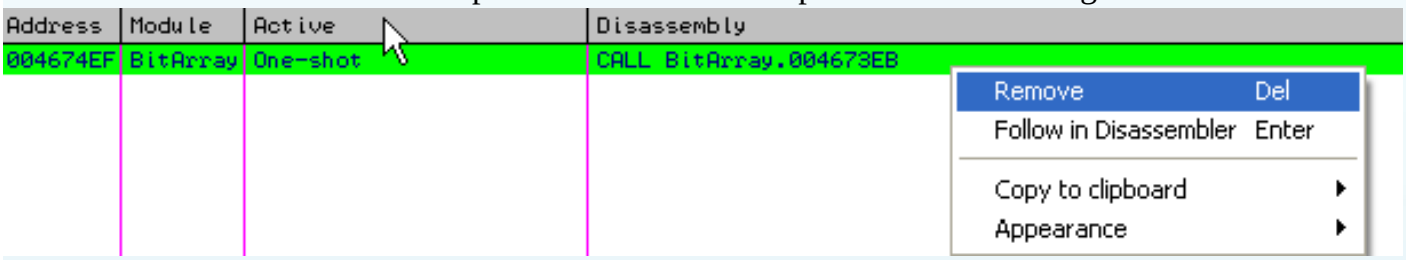
Done and then load the program to BitArray.exe. We stop here:

```
7C901231   C3     RETN
7C901232   8BFF   MOV EDI,EDI
7C901234   90     NOP
7C901235   90     NOP
```

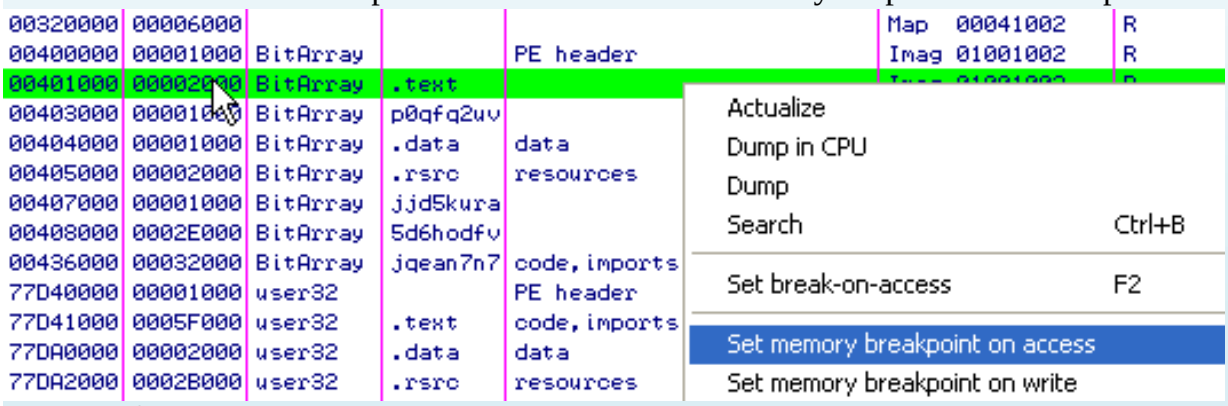
Looking down the Status bar:



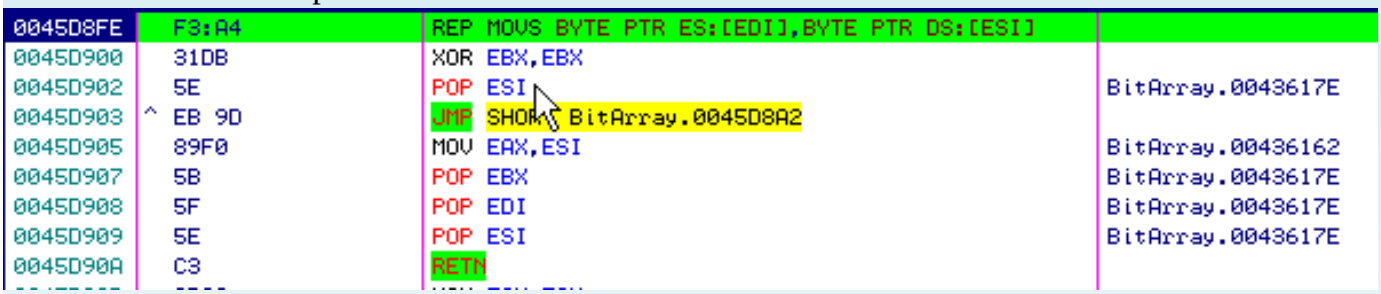
Press Alt-B to the window "Breakpoint." Delete the breakpoint. Select the image as:



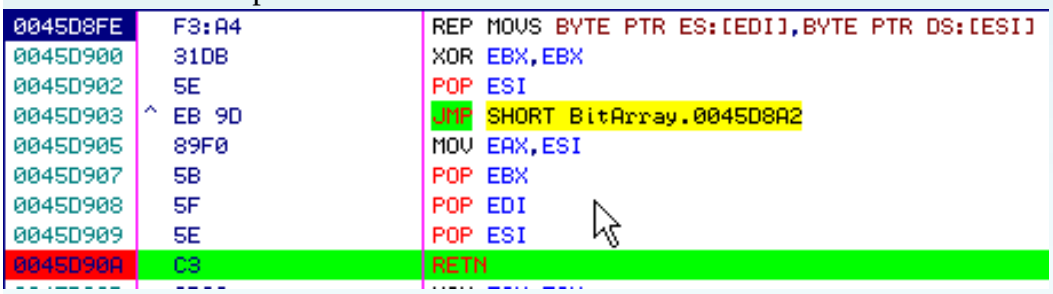
Remove and then finished press Alt-M to window "Memory Map". Set in Breakpoint section. Text. Image:



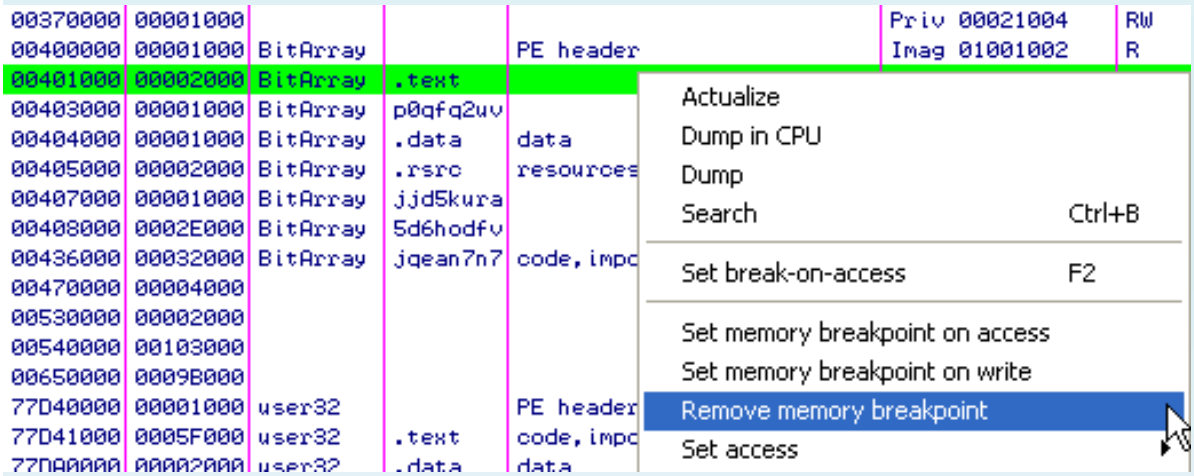
Press Shift-F9. We stop here:



Press F2 set breakpoint at 0045D90A.

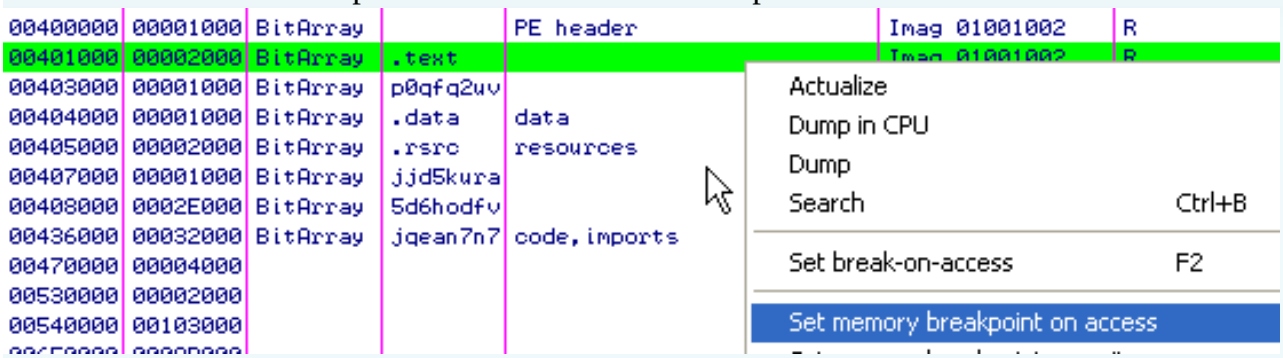


Press Alt-M. Delete breakpoint on the section. Text. This type:

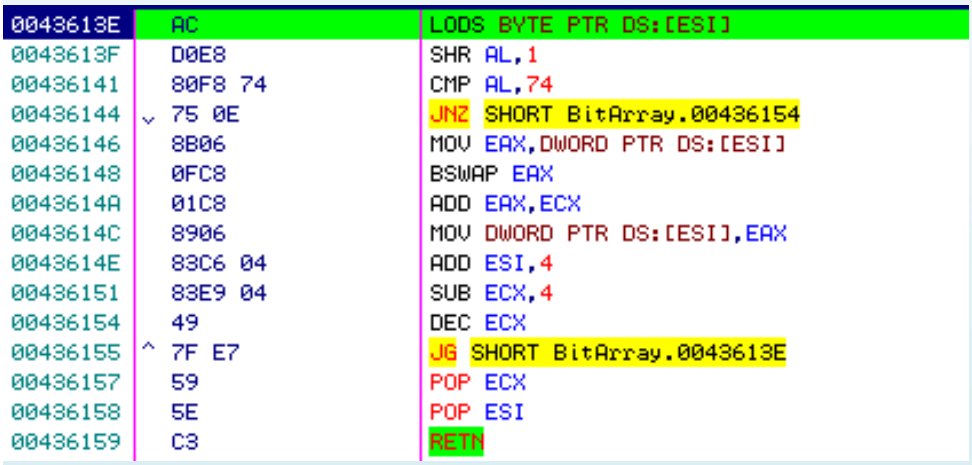


Press Shift-F9. We stopped at 0045D90A.

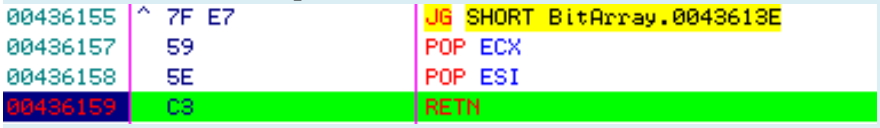
Press F2 to remove breakpoint. Press Alt-M. Set breakpoint in the section. Text.



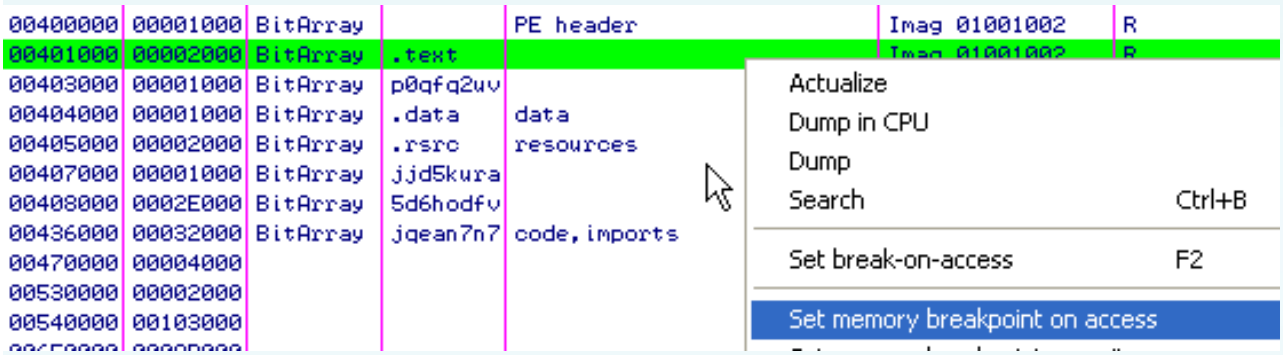
Press Shift-F9. We here:



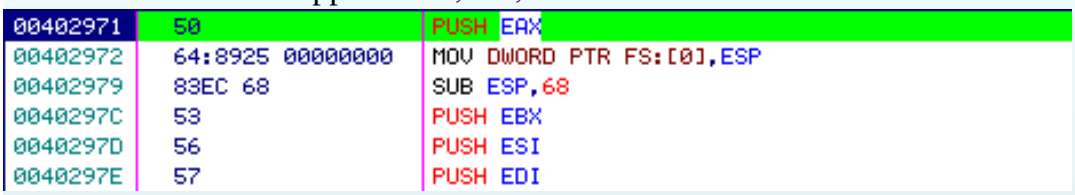
Continue set breakpoint (F2) at 00,436,159 (RETN). Press Alt-M remove breakpoint in section. Then press Shift-F9. We will stop at 00,436,159.



Press F2 remove breakpoint. Continue to press Alt-M breakpoint set in section. Text.



Press Shift-F9. We stopped at 00,402,971.

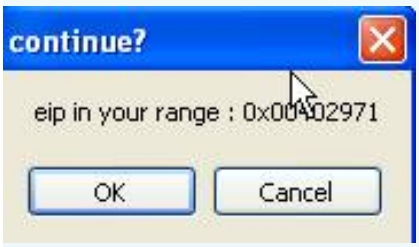


Here I would say 2 more hours to go to 00,402,971.

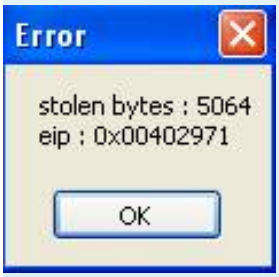
Method 2:

We use OEP Finder's deroko xyz. Choose the type:

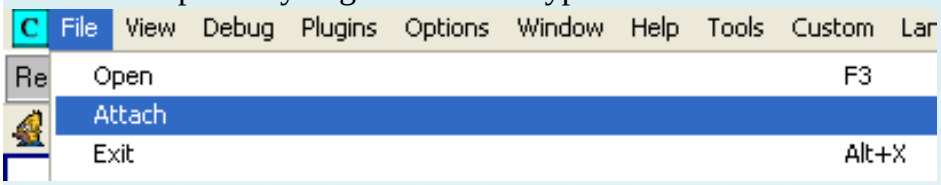
Click the "trace". We have notified:



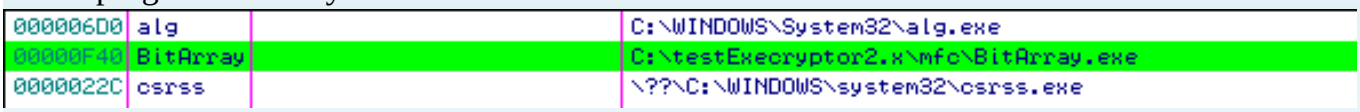
Click "Cancel".



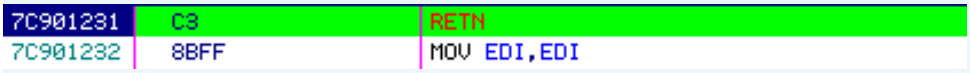
You remember the bytes "50 64" nhé.
Click OK. Open OllyDbg. Choose the type:



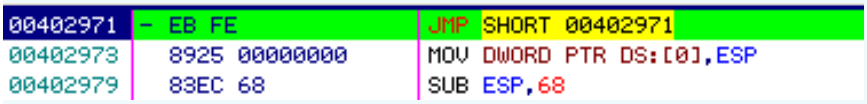
Select program BitArray. Click "Attach":



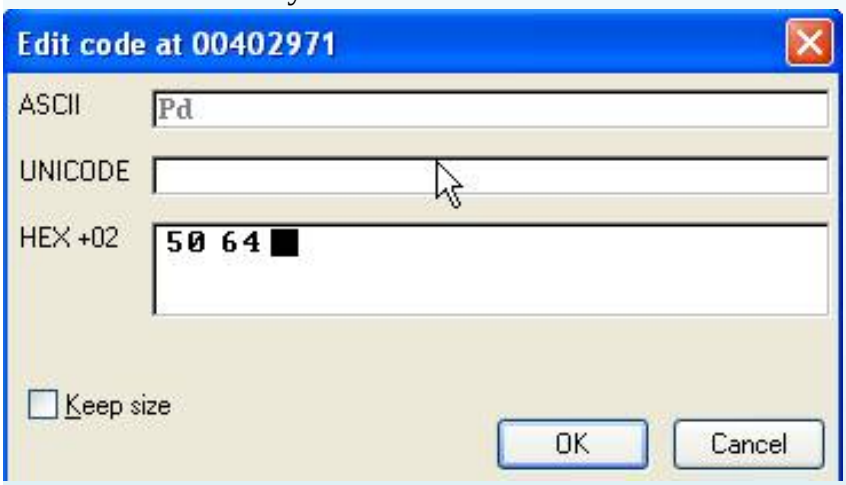
We here.



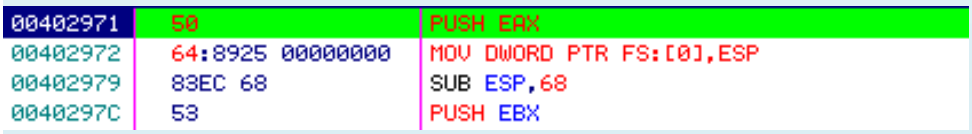
Press F9 and F12. We stop here:



Press Ctrl-E. Enter bytes are "50 64".



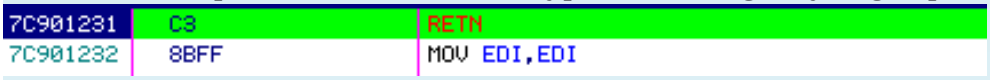
Click OK.



So how is finished 2nd. This fastest.

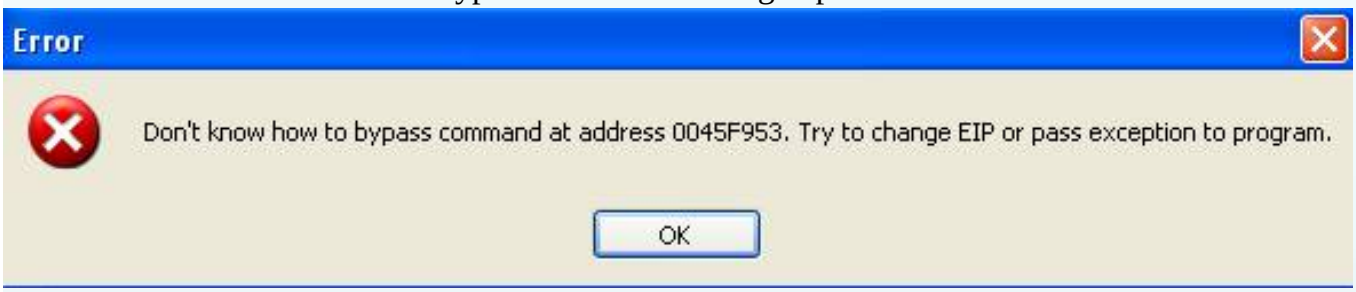
3 months:

We use the script "AntiDBG OEP.txt Bypass. Running OllyDbg. Open file BitArray. We stop here:

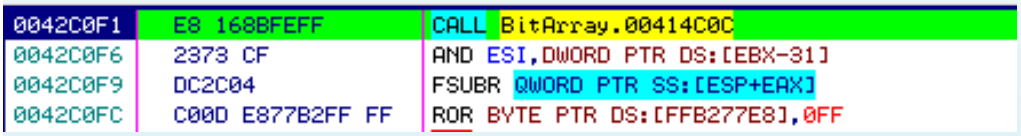


We run the script. Click your mouse to select the image:

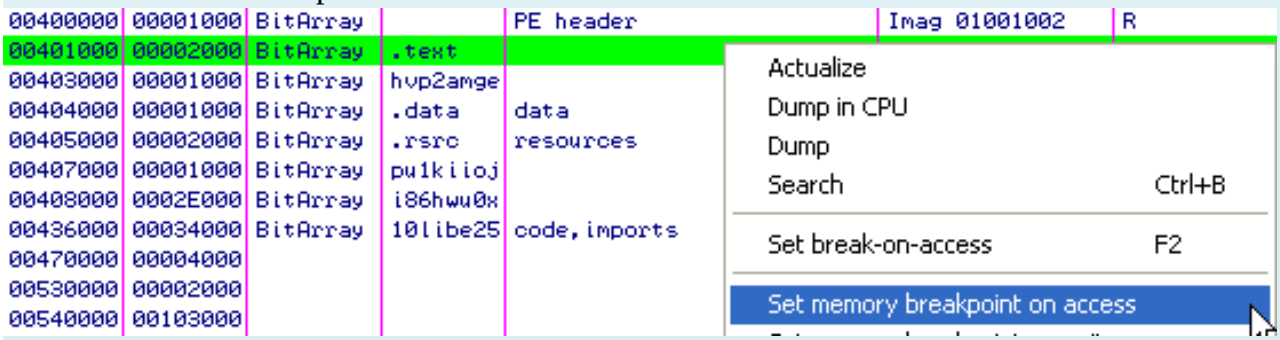
Select File "AntiDBG OEP.txt Bypass. An error message up:



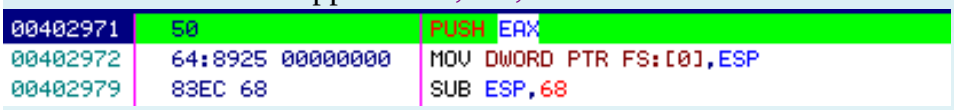
We wear it shelves. Click OK. Then Shift-F9. With any error messages show up at the OK and then Shift-F9 until "Script Finished". We stop here:



Press Alt-M. Set breakpoint in the section. Text.



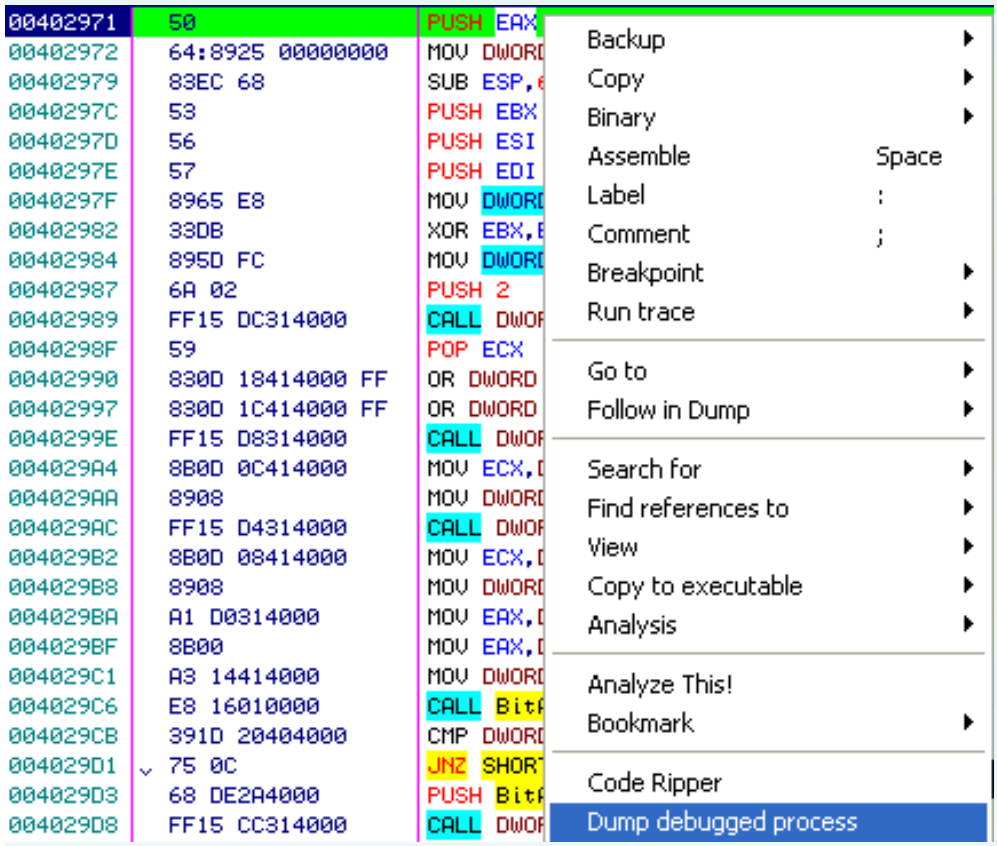
Press Shift-F9. We stopped at 00,402,971.



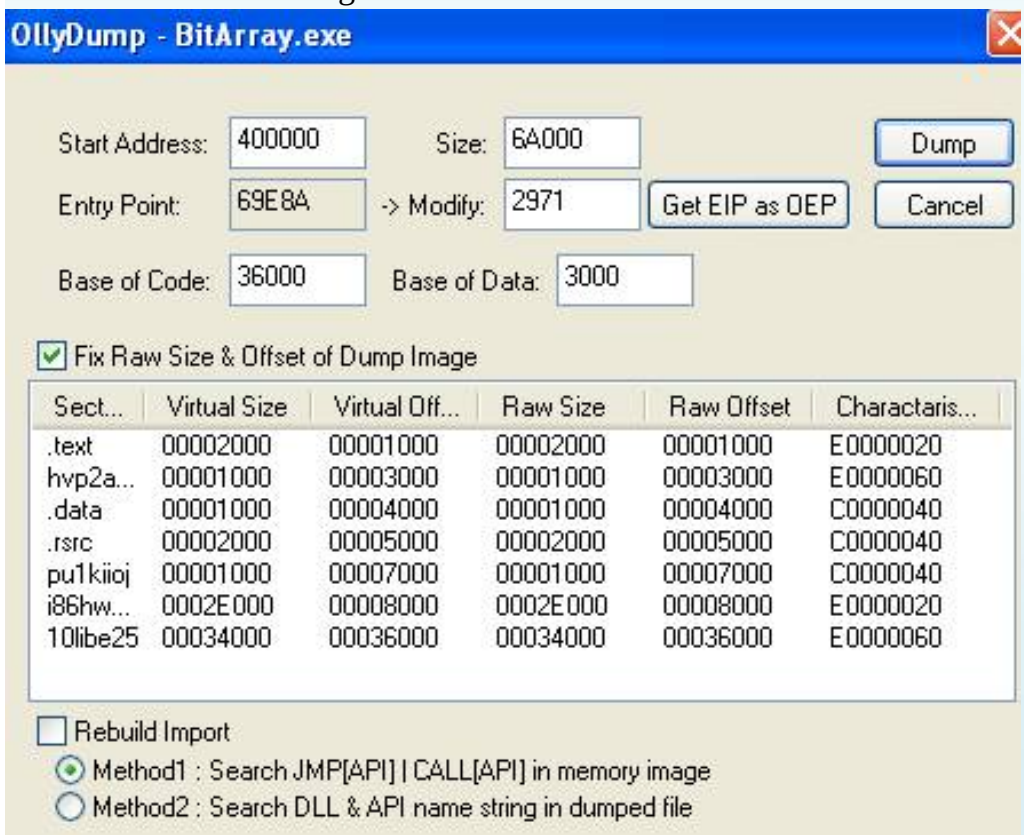
So, with 3 ways. We achieved the same results as the program stopped in False OEP 00402971.
For some programs you try Method 1 is not the test 2 hours, 3 minutes. In the program I have encountered it at least a 3 on the way to successful J OK, so you get false OEP then we should do next? We continue.

III) Find and fix Stolen OEP Bytes:

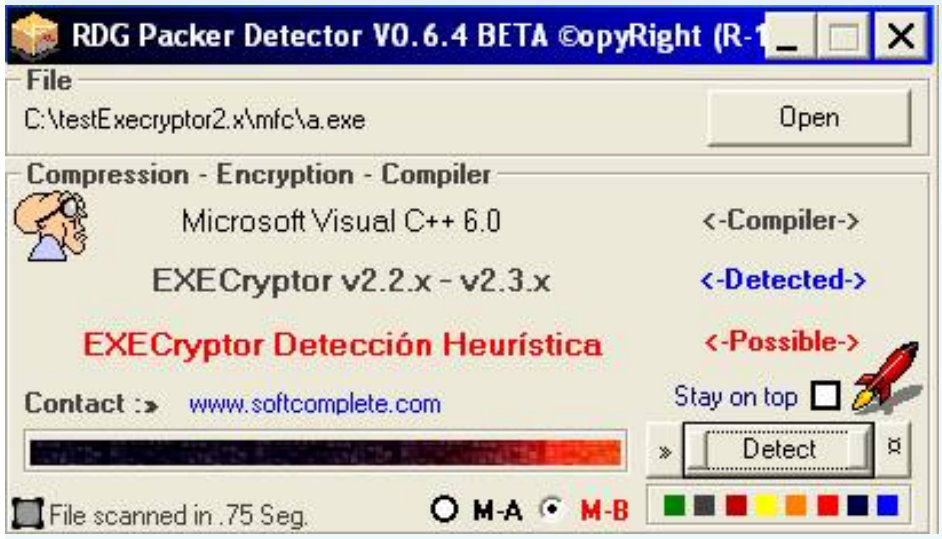
The first is we must identify the program is written in what language? We will use and dump RDG Packer Detector to determine.
We are stopped at a false OEP 00402971. We will dump. Click your mouse to select the image:



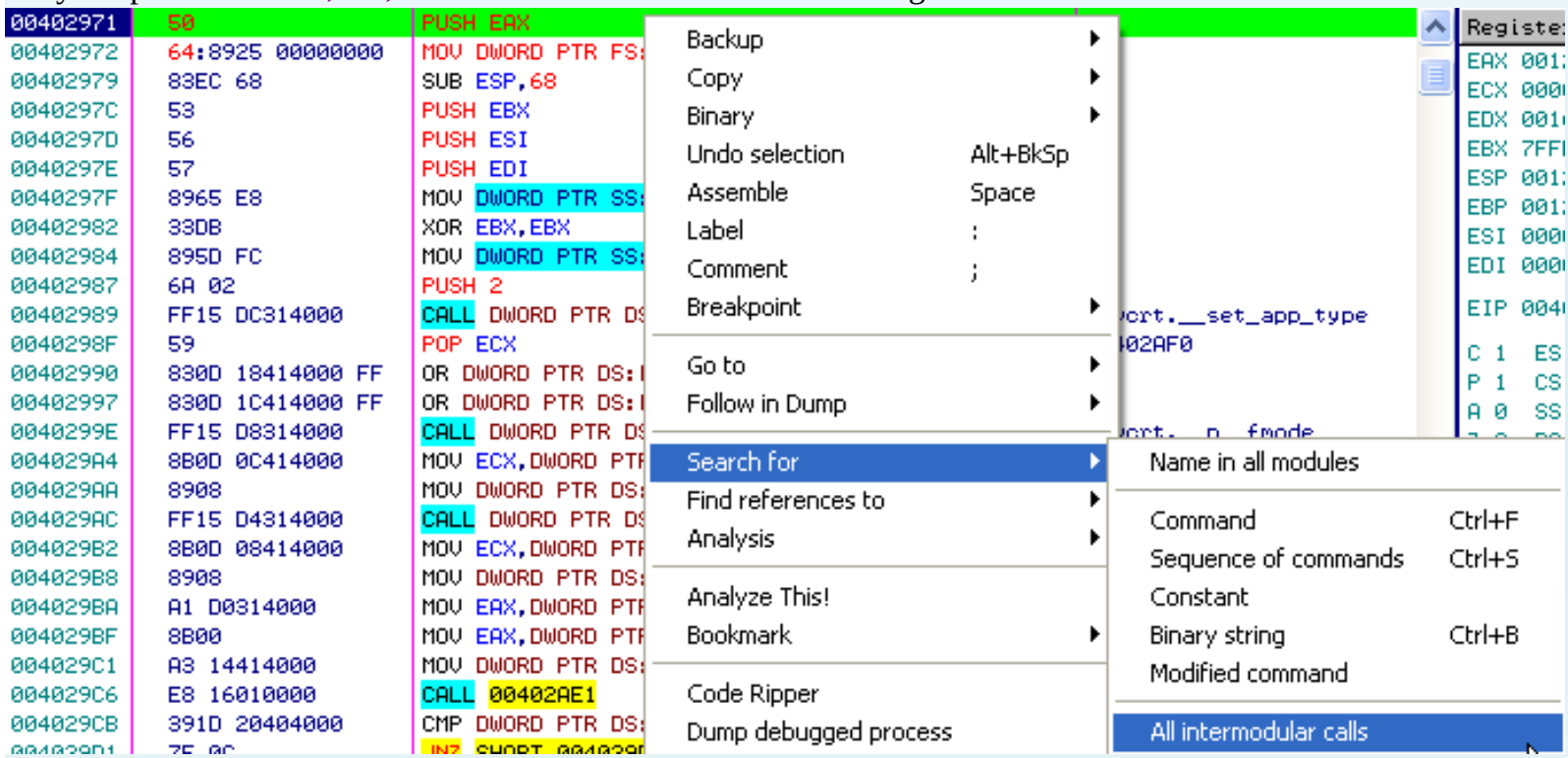
Then select the following:



Name the file a.exe. RDG then used to check the file a.exe

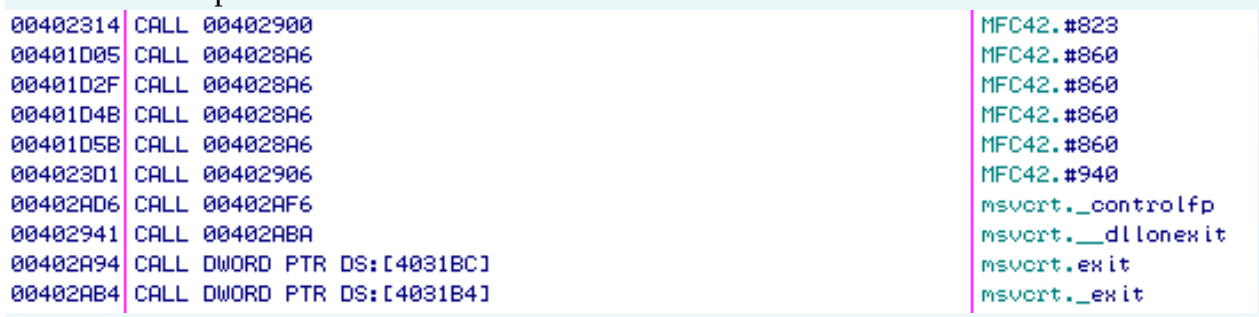


We see the program is written in VC + + 6. However, you should remember that the VC + + 6 with MFC MFC and do not have OEP completely different. We must determine the exact program we MFC or not?
Very simple. We are 00,402,971. Click the mouse to select the image:



Click the title "Destination" to reorder the API. As in the picture:

Done and then pulled down a tí. We found:



The program we have the function xài MFC42.XXXX
So clearly we are programs written in MFC.

The next is for a program written in MFC to consider signs in OEP how. I make the program "Keygenme # 1's 0x87k GAS". You can use any programs you do MFC found.
Open OllyDbg new (I call this a Olly2, OllyDbg beginning is our Olly1) loaded "Keygenme # 1's 0x87k GAS" to. Press F9. I have in OEP:

```
004088E4  $  55              PUSH EBP
004088E5  .  8BEC            MOV EBP,ESP
004088E7  .  6A FF           PUSH -1
004088E9  .  68 F8A64000     PUSH +gAs+.0040A6F8
004088EE  .  68 DE884000     PUSH <JMP.&MSVCRT._except_handler3>          SE handler installation
004088F3  .  64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
004088F9  .  50              PUSH EAX
004088FA  .  64:8925 00000000 MOV DWORD PTR FS:[0],ESP
00408901  .  83EC 68         SUB ESP,68
00408904  .  53              PUSH EBX
00408905  .  56              PUSH ESI
00408906  .  57              PUSH EDI                                     ntdll.7C910738
00408907  .  8965 E8         MOV [LOCAL.6],ESP
0040890A  .  33DB            XOR EBX,EBX
0040890C  .  895D FC         MOV [LOCAL.1],EBX
0040890F  .  6A 02           PUSH 2
00408911  .  FF15 38A24000   CALL DWORD PTR DS:[<&MSVCRT.__set_app_type>]  MSVCRT.__set_app_type
00408917  .  59              POP ECX                                      kernel32.7C816D4F
00408918  .  830D 58C54100 FF OR DWORD PTR DS:[41C558],FFFFFFFF
0040891F  .  830D 5CC54100 FF OR DWORD PTR DS:[41C55C],FFFFFFFF
```

We see the first function is called in the MFC is MSVCRT.__set_app_type ".
In Olly1. We make this function, we found here (in the window Intermodular Found Calls):

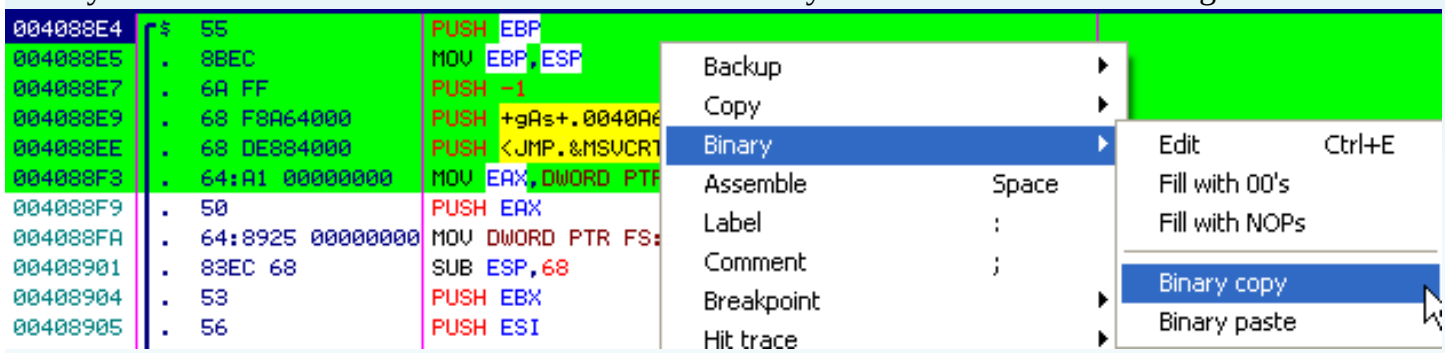
```
00436479 CALL DWORD PTR DS:[4031F0]   msvcrt.realloc
00402B30 CALL DWORD PTR DS:[4031F4]   msvcrt._setmbcp
004029D8 CALL DWORD PTR DS:[4031CC]   msvcrt.__setusermatherr
00402989 CALL DWORD PTR DS:[4031DC]   msvcrt.__set_app_type
0044151E CALL SHELL32.7CA01847        SHELL32.7CA01847
00402AA6 CALL 00402AC0                msvcrt._XcptFilter
```

Double-click the mouse on 00402989. We are here to:

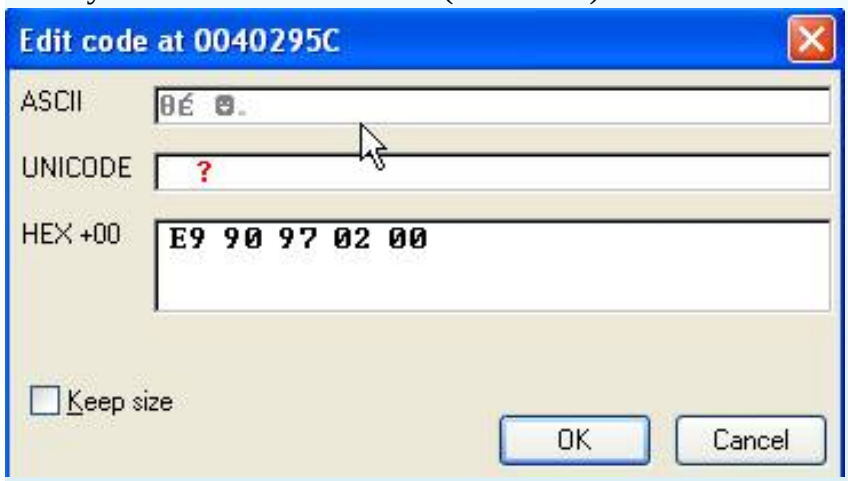
```
0040295B    C3              RETN
0040295C  v E9 90970200     JMP 0042C0F1
00402961    81E8 E241CEF0   SUB EAX,F0CE41E2
00402967  v E9 94560000     JMP 00408000
0040296C    0E              PUSH CS
0040296D    CB              RETF                                         Far return
0040296E    5C              POP ESP                                      00402AF0
0040296F    C3              RETN
00402970  v 74 50           JE SHORT 004029C2
00402972    64:8925 00000000 MOV DWORD PTR FS:[0],ESP
00402979    83EC 68         SUB ESP,68
0040297C    53              PUSH EBX
0040297D    56              PUSH ESI
0040297E    57              PUSH EDI
0040297F    8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
00402982    33DB            XOR EBX,EBX
00402984    895D FC         MOV DWORD PTR SS:[EBP-4],EBX
00402987    6A 02           PUSH 2
00402989    FF15 DC314000   CALL DWORD PTR DS:[4031DC]                   msvcrt.__set_app_type
0040298F    59              POP ECX                                      00402AF0
```

You also remember false OEP Ours is 00402971, that is in this function on a tí. We will find real OEP. How to find what?
In Olly2. Distance from OEP to function "MSVCRT.__set_app_type" are:
00408911 (set_app_type Ham) - 004088E4 (OEP) = 2D.
So in Olly1. Distance from OEP to function "MSVCRT.__set_app_type" must be 2D bytes. As against this, we are:

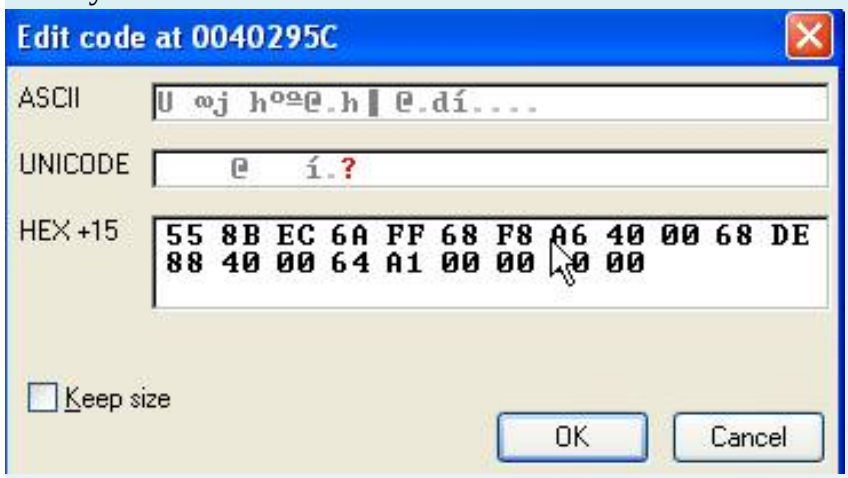
Real OEP = 00402989 (set_app_type Ham) - 2D = 0040295C
We have found real OEP. We need to fix Stolen bytes more. How fast is the copy of the bytes at OEP Olly2 to Olly1 then revised some value.
In Olly2 choose from OEP 004088E4 to 004088F3. Click your mouse to select the image:



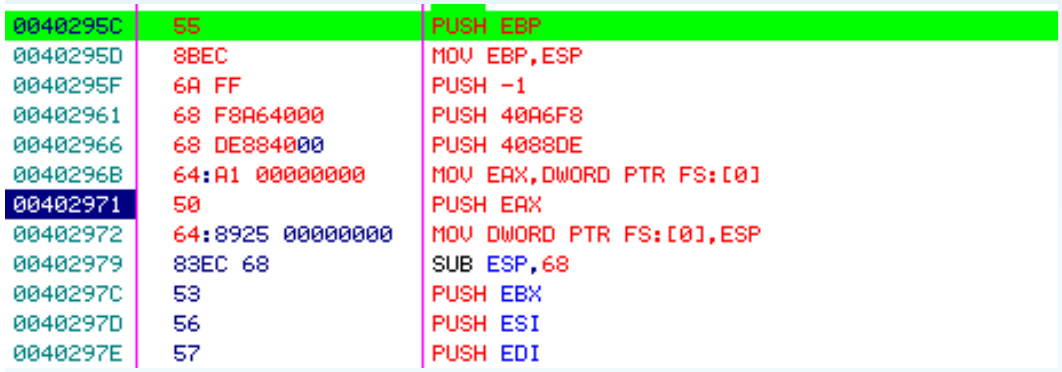
In Olly1. Select line 0040295C (Real OEP). Press Ctrl-E.



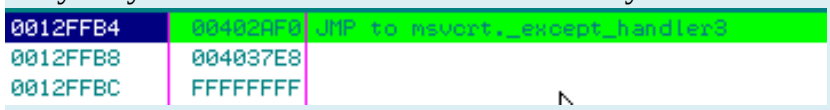
Click your mouse to select Paste.



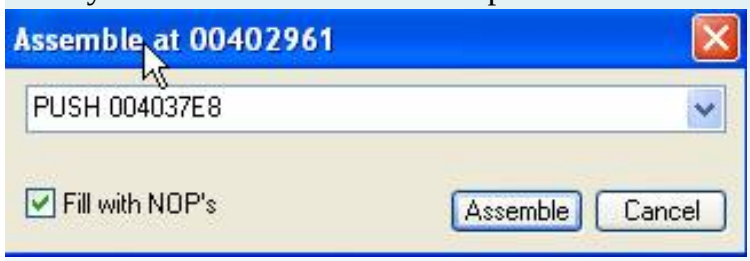
Click OK. We are as follows:



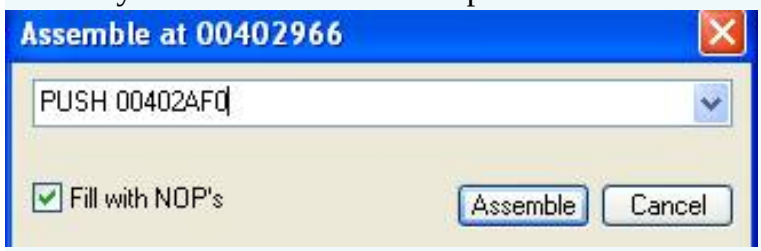
I think back down below:
PUSH EBP
MOV EBP, ESP
PUSH -1
PUSH 0040A6F8 (value should fix 1)
004088DE PUSH (value should fix 2)
MOV EAX, DWORD PTR FS: [0]
We need to fix 2 this value is more complete. In each of the MFC, 2 value is different. We must find the 2 values for this program by ourselves.
Very easy. You could look at the stack in Olly1.



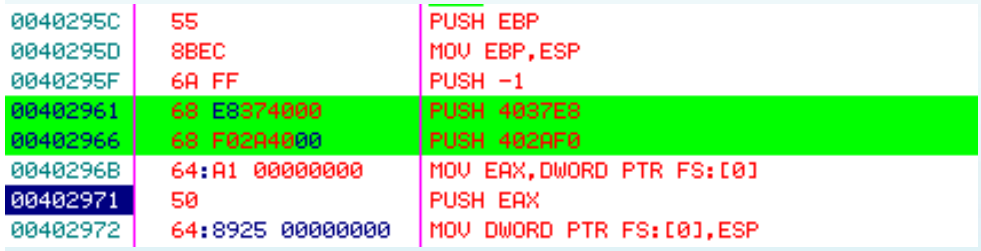
The less you see? We have 2 value is 00402AF0 and 004037E8. So we will correct as follows (reverse order by the stack):
PUSH 0040A6F8 (value should fix 1)
004088DE PUSH (value should fix 2)
Edit to:
PUSH 004037E8 (value should fix 1)
PUSH 00402AF0 (value should fix 2)
In Olly1. Click on the 00402961. Space bar to hit. Edit the following:



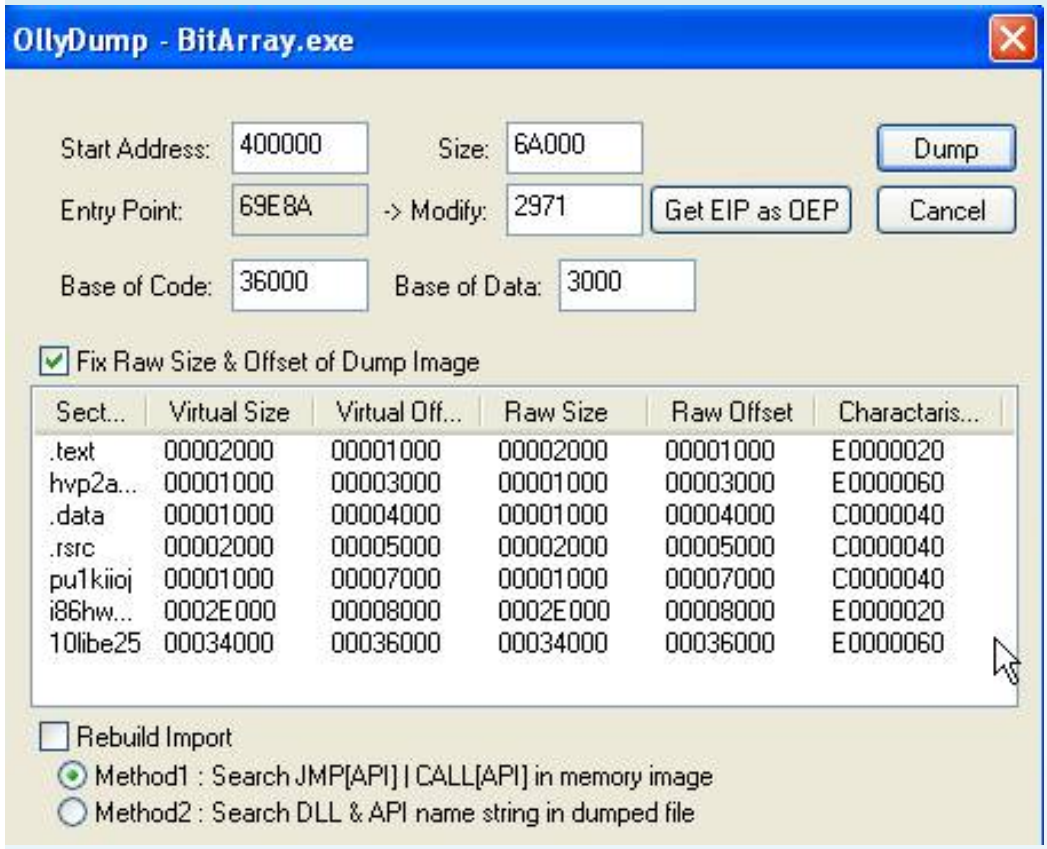
Similarly. Click line 00402966. Space bar to hit. Edit the following:



Final results we have:



Dump program. Using OllyDump.



Name the file is dump.exe. I am here you can Olly2 again.

IV) Fix IAT:

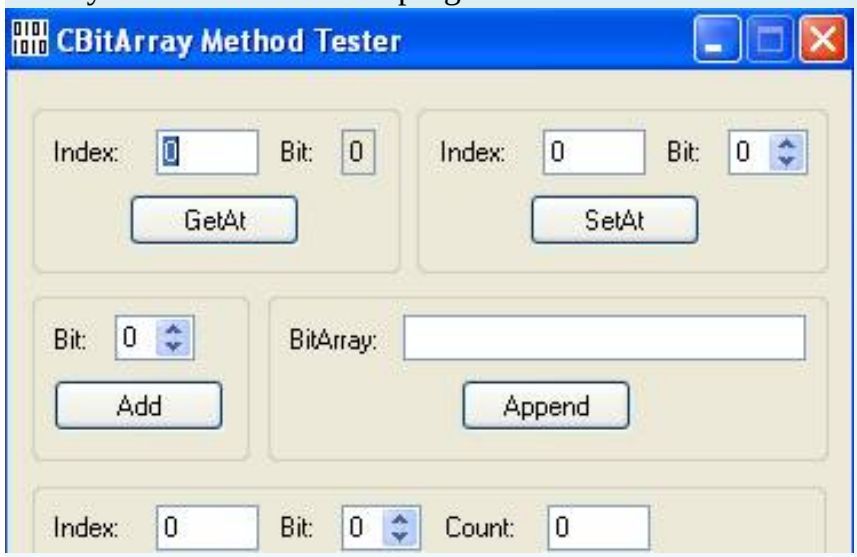
1) Method 1:

Using scripts "ExeCryptor 2.xx IAT Rebuilder v1.1.txt". The more you read the tut Why_Not_Bar to know how to use this script. You noted in a number of the script does not work (the program is run crash). If the crash when the fix was completed IAT not say anything but the crash between the IAT is the fix is lost hứng! In the script we are good xài J

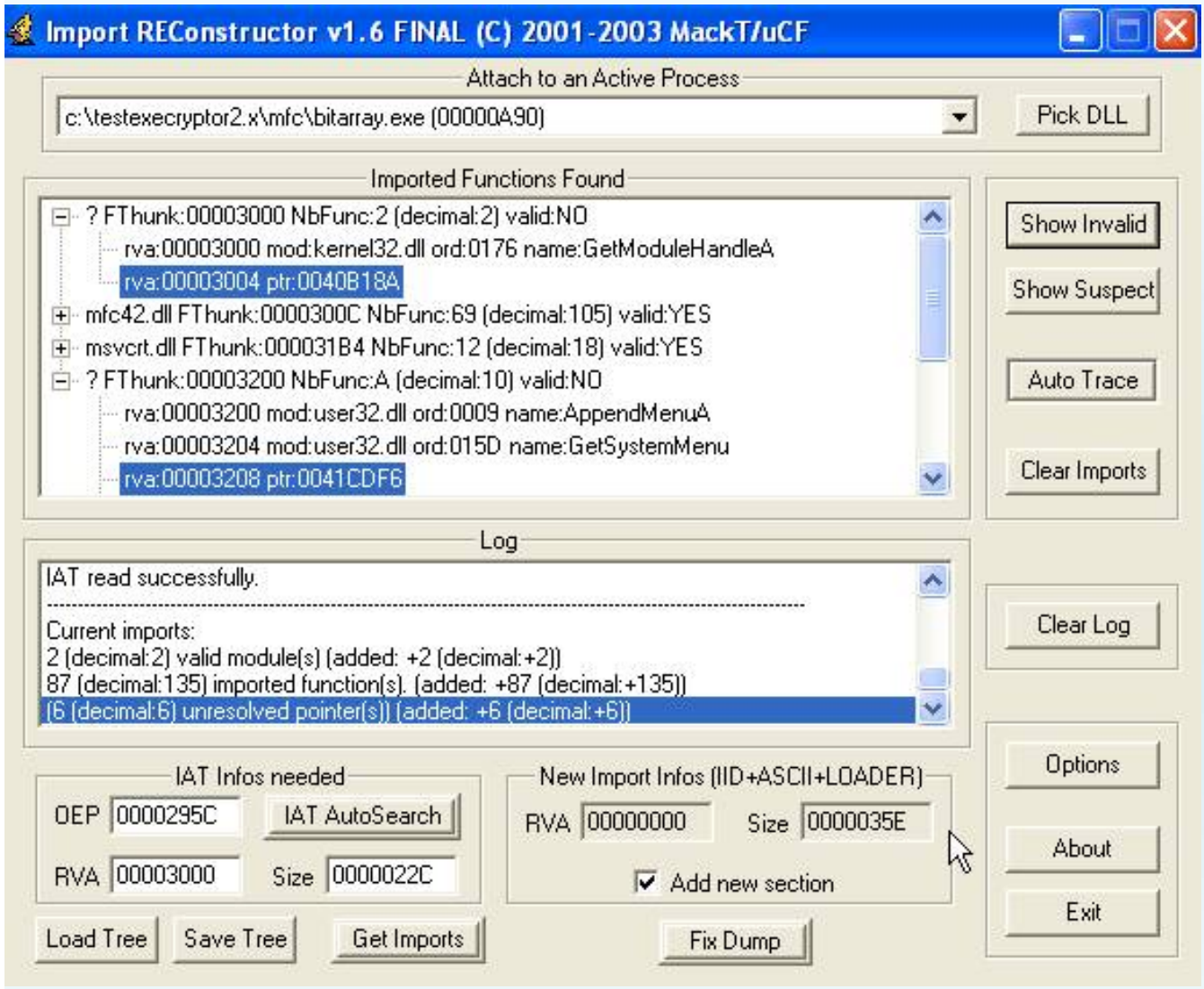
2) Method 2:

Execryptor have one or not we need to fix IAT full run new programs. IAT as long as we have a function GetModuleHandleA program stream. We will try to see.

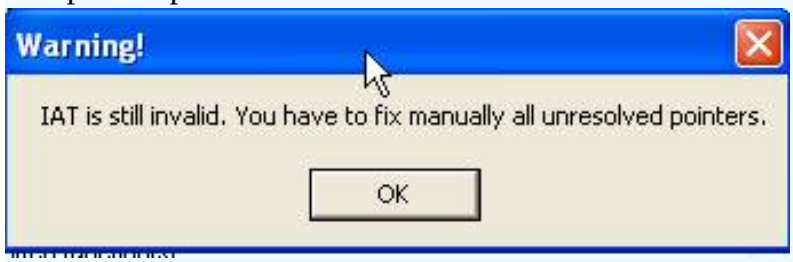
In Olly1 click Shift-F9. The program we run:



Now run Imprec. Select BitArray process. Enter the number in, click the button IAT AutoSearch , OK , Get Import:



We see our IAT not complete. But what is not. Exemption can be a function GetModuleHandleA then. Click Fix dump. Dump.exe Select File. A notice of the J

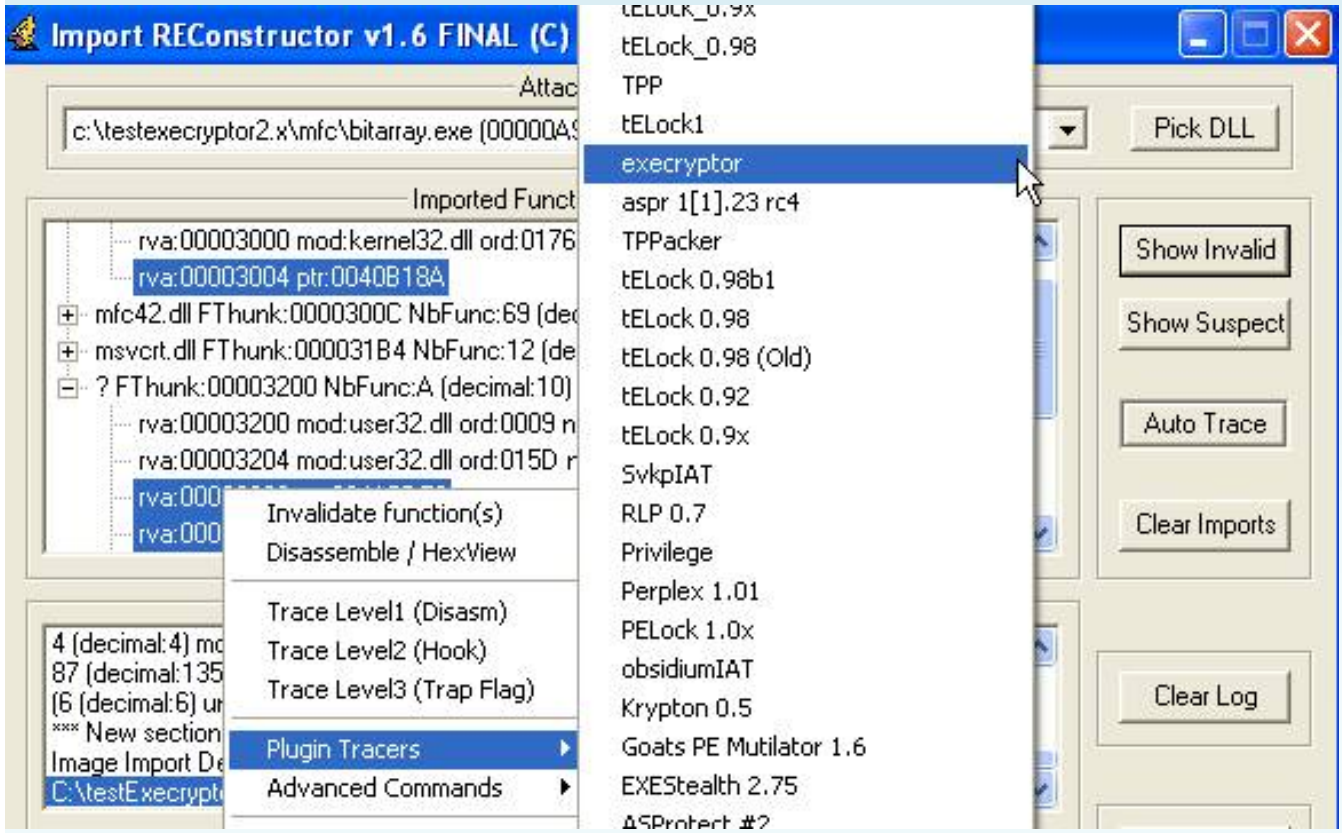


Do not. Click OK. We are dump_.exe file. Test this file. Good! Not surprised?

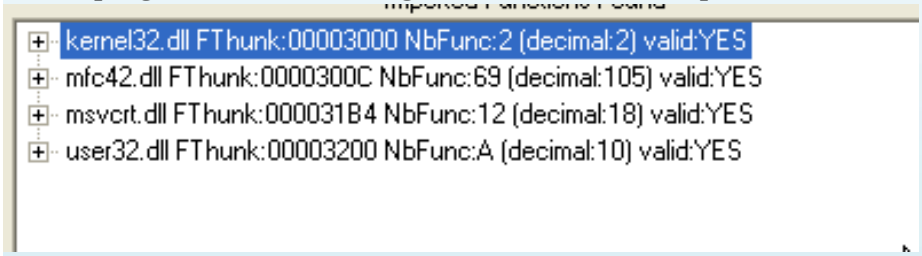
3) How 3:

There is no need to fix IAT full run new programs. However, say what they say we still want a more complete IAT. Therefore we will use the plugin execryptor Imprec.

Hopefully you have not closed Imprec. Click "Show Invalid". Click your mouse to select the plugin execryptor as in the picture:



Wait a bit. Speaking before you run this plugin is quite long. You also do not close Olly1 nhé. I also take a while for new ways xài that this plugin;) catastrophic U.S.!
When plugin finished running, we will have a complete IAT.



The file you fix dump.exe normal. Done a test!
Them. 2h morning then. Make sure the company tomorrow to sleep too. Wishing you happy. Hopefully you will learn something new through this tut.
Greetingz: All reaonline.net members, ... and you.
tlandn
30-Aug-2006

Tutorials hacnho # 9

Manual unpacking **UPX Protector 1.0x -> BlindAngel / TMG**

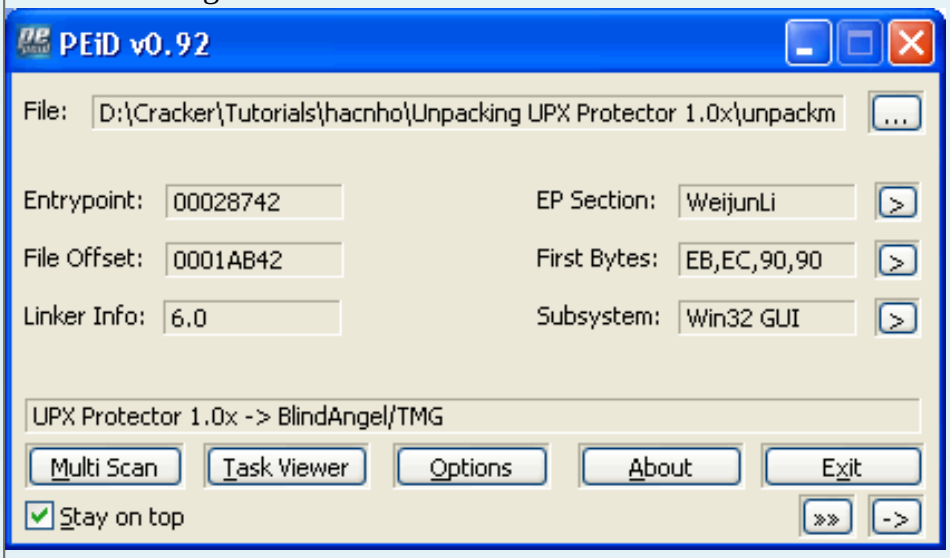
Information	Unpacking for Newbie's
Target	unpackme.exe
Available	http://nhandan.info/hacnho/tuts/unpackme9_tuts.zip
Tools	OllyDbg plugin 1.10c with OllyDump 2.21.108, ImportREC Final 1.6, 1.4 LordPE.
Protection	UPX Protector 1.0x -> BlindAngel / TMG
L Evel	Standard
Category	Manual unpacking

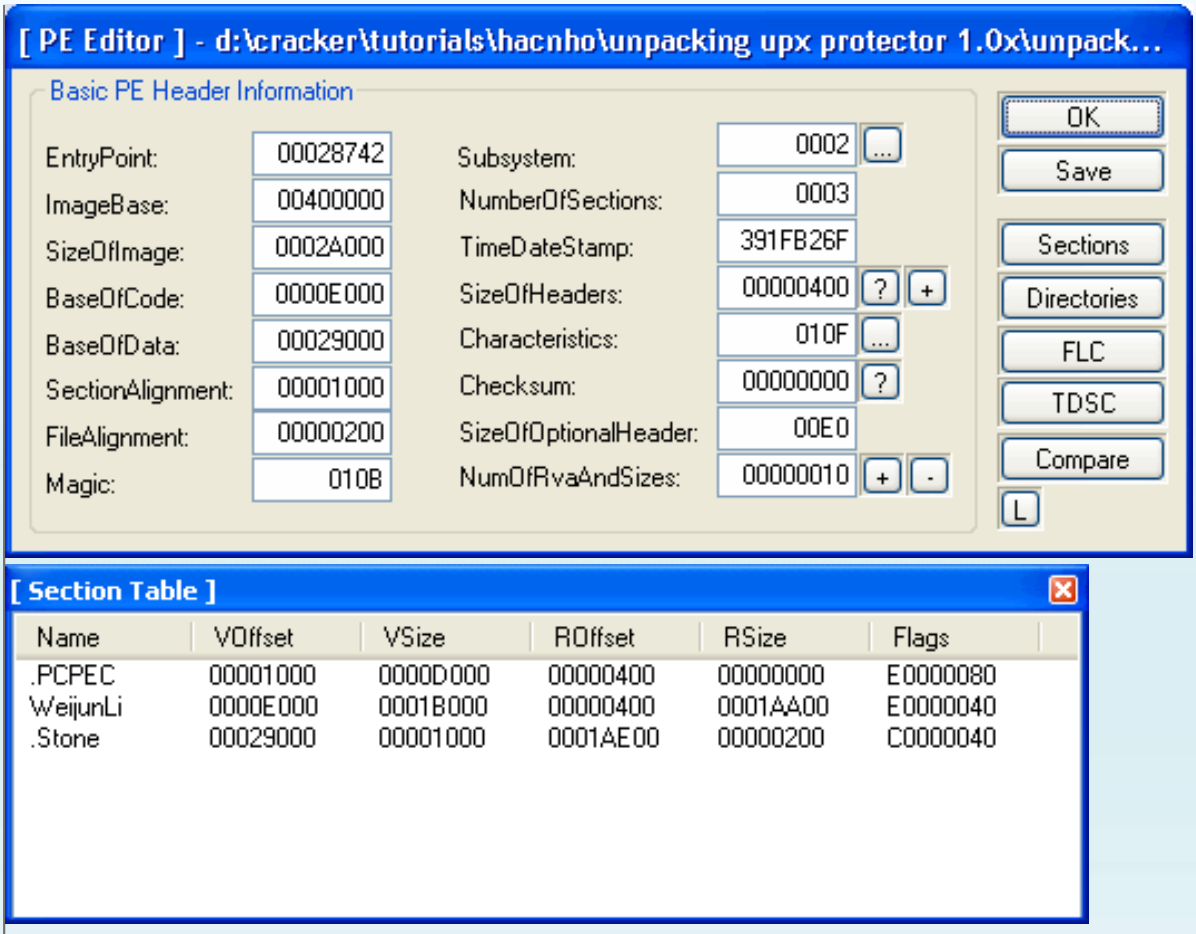
1. Introduction

Today, I will explain the ways for unpacking a packer of a member of TMG team. This is a packer enjoyable.

2. Getting Started

Use PEiD and get some LordPE for PE Info.





EP: 28742, flags The value of this case is not needed, Image Base is always 400000, Import Table: 0000 and size is 00.

3. Finding the OEP

Load **unpackme.exe** into OllyDBG. And you still here:

```
00428742  EB EC          JMP SHORT unpackme.00428730
00428744  90             NOP
00428745  90             NOP
00428746  90             NOP
00428747  90             NOP
00428748  8A06           MOV AL,BYTE PTR DS:[ESI]
0042874A  46             INC ESI
0042874B  8807           MOV BYTE PTR DS:[EDI],AL
0042874D  47             INC EDI
0042874E  01DB           ADD EBX,EBX
```

Then, you press **F7** one time and you see as follows:

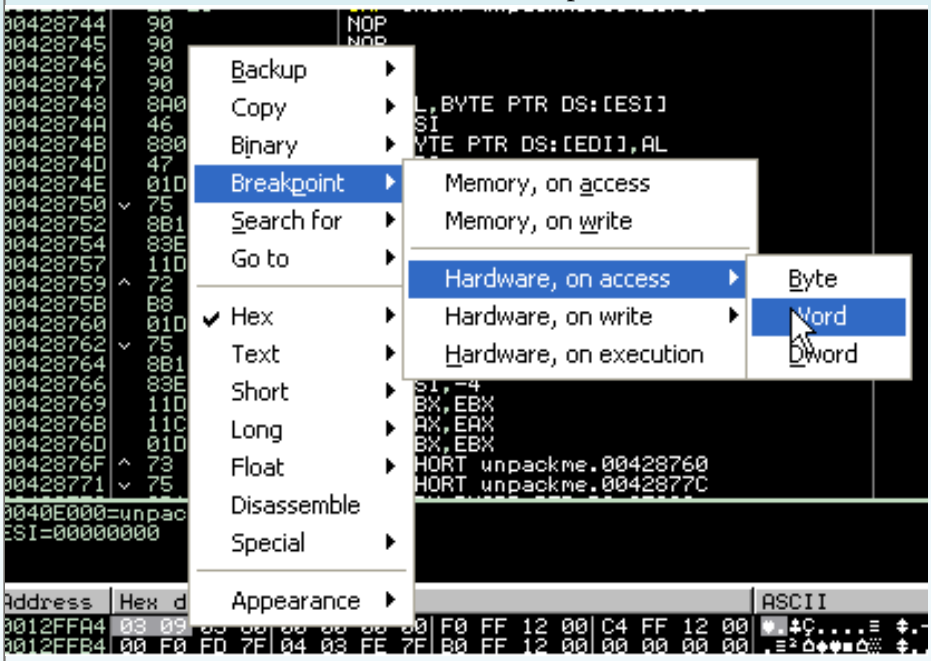
```
00428730  60             PUSHAD
00428731  BE 00E04000    MOV ESI,unpackme.0040E000
00428736  8DBE 0030FFFF  LEA EDI,DWORD PTR DS:[ESI+FFFF3000]
0042873C  57             PUSH EDI
0042873D  83CD FF        OR EBP,FFFFFFFF
00428740  EB 10          JMP SHORT unpackme.00428752
00428742  EB EC          JMP SHORT unpackme.00428730
```

Then, continue press **F7**

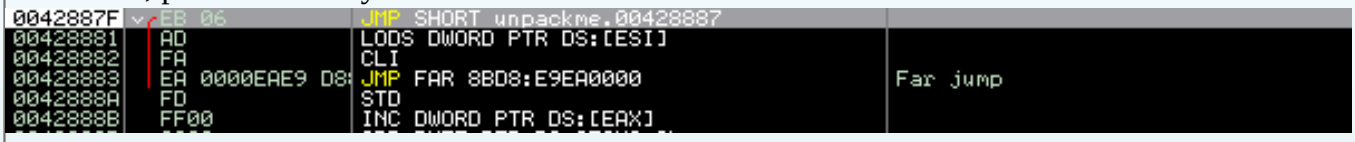
```
00428730  60             PUSHAD
00428731  BE 00E04000    MOV ESI,unpackme.0040E000
00428736  8DBE 0030FFFF  LEA EDI,DWORD PTR DS:[ESI+FFFF3000]
0042873C  57             PUSH EDI
0042873D  83CD FF        OR EBP,FFFFFFFF
00428740  EB 10          JMP SHORT unpackme.00428752
00428742  EB EC          JMP SHORT unpackme.00428730
```

At this line, you see in the **Registers (FPU)** table. The value of **ESP** is **0012FFA4,** then you right click on and choose **ESP Follow in** the **dump.**

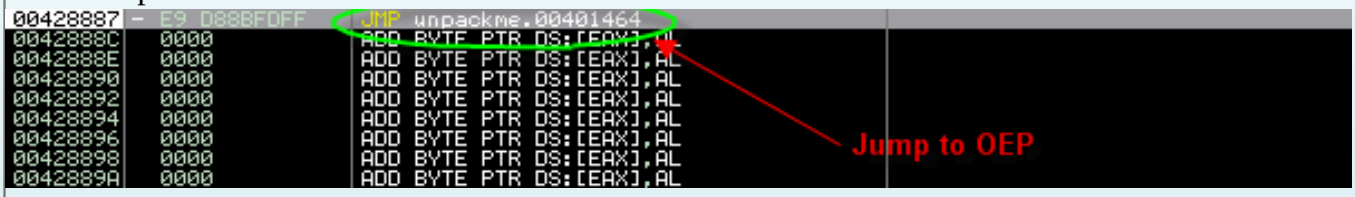
Then you go to the Hex dump window. Then right click on the value **0012FFA4** and select Breakpoint -> Hardware, on Access -> Word. Our breakpoint is now set.



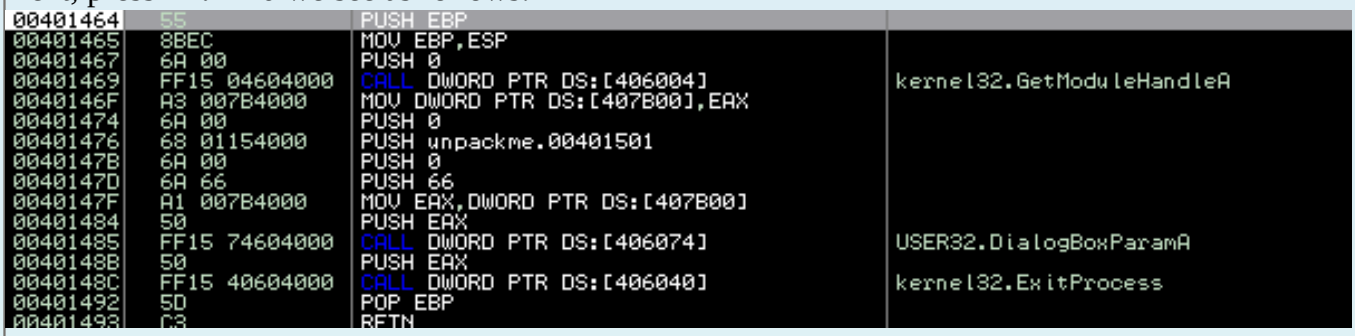
Continued, press **F9.** And you still here:



And then press **F8:**



Next, press **F7.** And we see as follows:

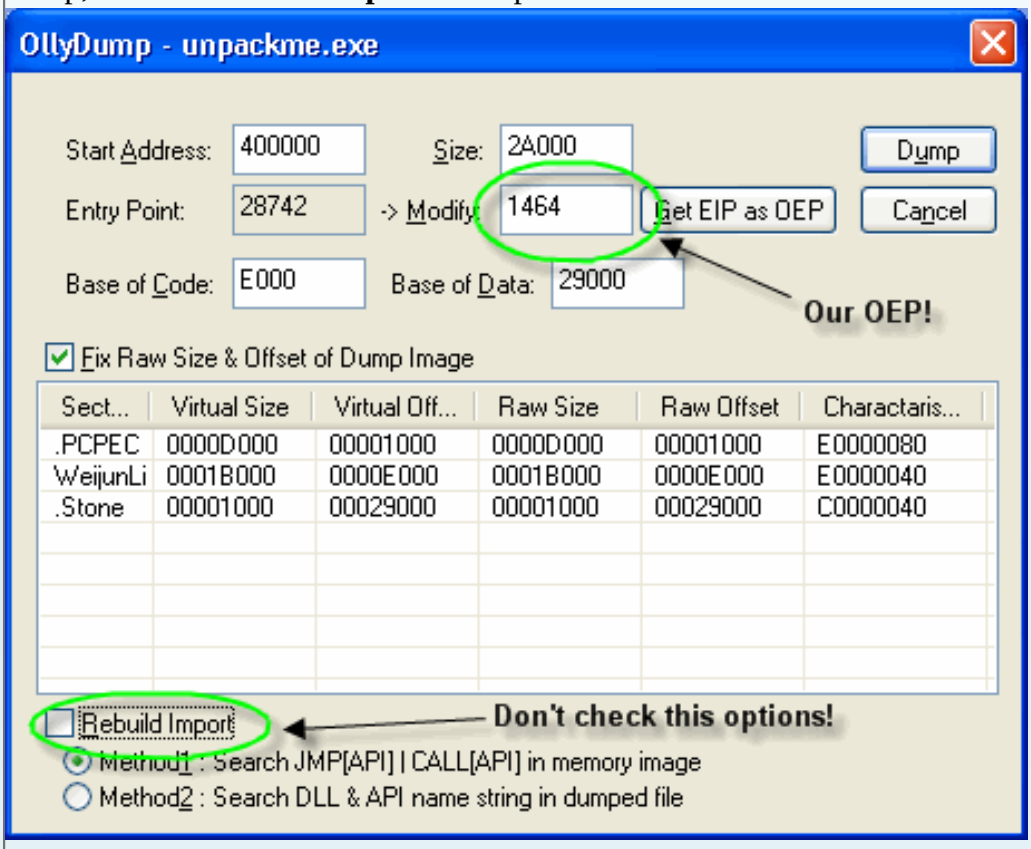


Congratulations! According to OEP we found is **401,464.** And now we Calculate the real OEP of this unpackme by the formula:

Real OEP = OEP find in Olly-Image Base = 401464-400000 = **1464.**

4th dumping

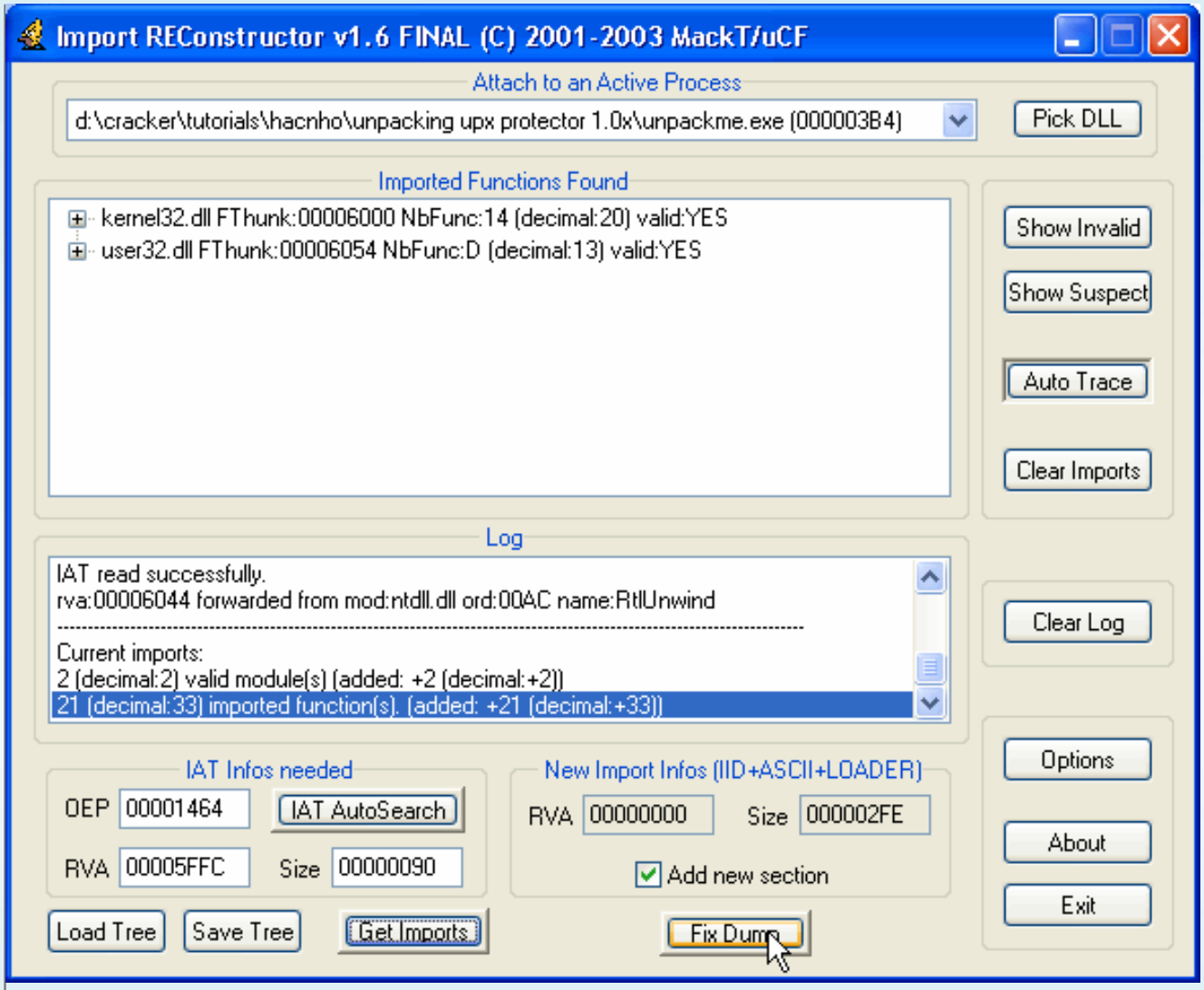
At address **0041464,** we go to the menu Plugin -> OllyDump -> dump debugged process. And then, just press dump, save the file at **dumped.exe** unpacked.



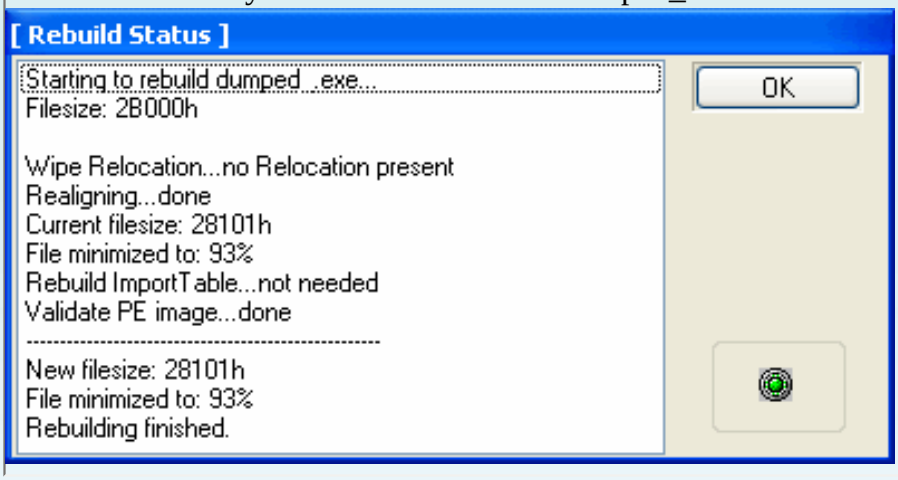
Do not run **dumped.exe** now, will be a crash ... It must fix IAT.

5. Finding and Fixing the Adress Import Table

And select Open ImpREC attached to active process and choose unpackme.exe. Change the value in the OEP window to the one we wrote down earlier (1464) then select IATAutosearch then click Get Imports.

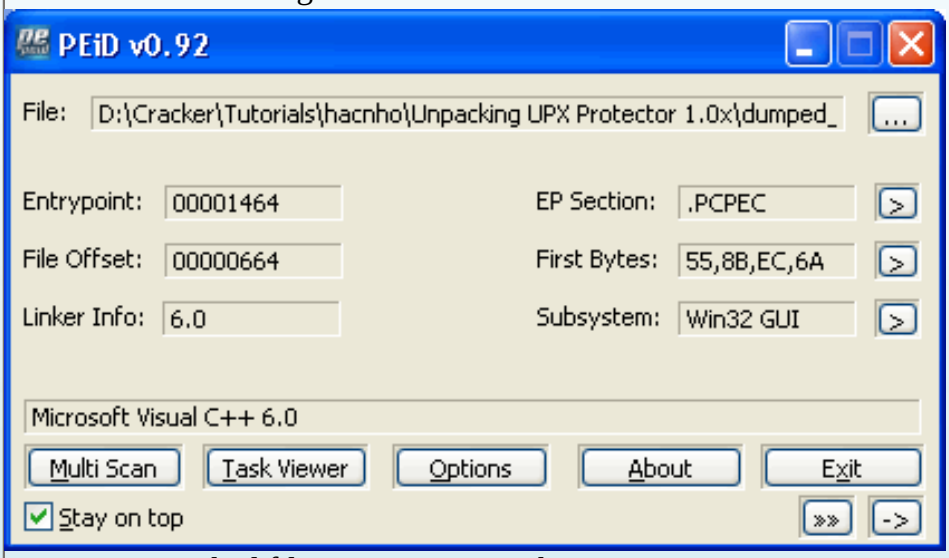


All Import Functions valid.
Now, click fix dump to fix the IAT **dumped.exe** file.
Use LordPE 1.4 by Y0da for rebuild our Dumped_.exe



6. Testing Our Unpacked file

Use PEiD for detect again:



Now run unpacked files. Wow, not crash.

7. Conclusion

Special thanx to **R @ dier** for this template.
My Greetz to: Deux, infinite, NVH (c), softcracker_vn, luucorp, Aaron, hhphong, R @ dier, tlandn, Computer_Angel, k3nny, Ferrari, Zombie, RCA, CTL, Moonbaby, Neitsa, JAL, LeVuHoang, 777, LeonHart , Bin ... and you ;-)!

To be continued ...

Written by hacnho (tutorial date: Sai Gon 3/5/2004)

hacnho Tutorials # 13

Manual
unpacking
Virogen crypt
v0.75

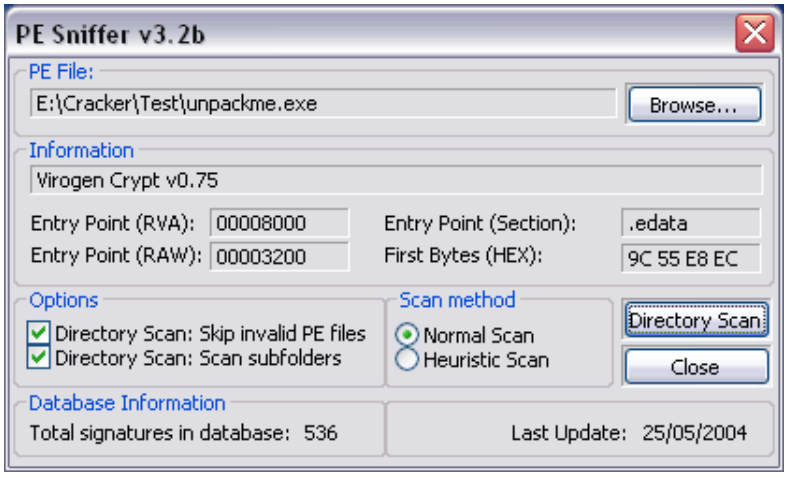
Information	Unpacking for Newbie's
Target	**Unpackme.exe**
Available	http://nhandan.info/hacnho/tuts/unpackme13_tuts.zip
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, Lord PE 1.4, PESniffer 3.2b.
Protection	Virogen crypt v0.75
Level	Easy
Category	Manual unpacking

1.Introduction

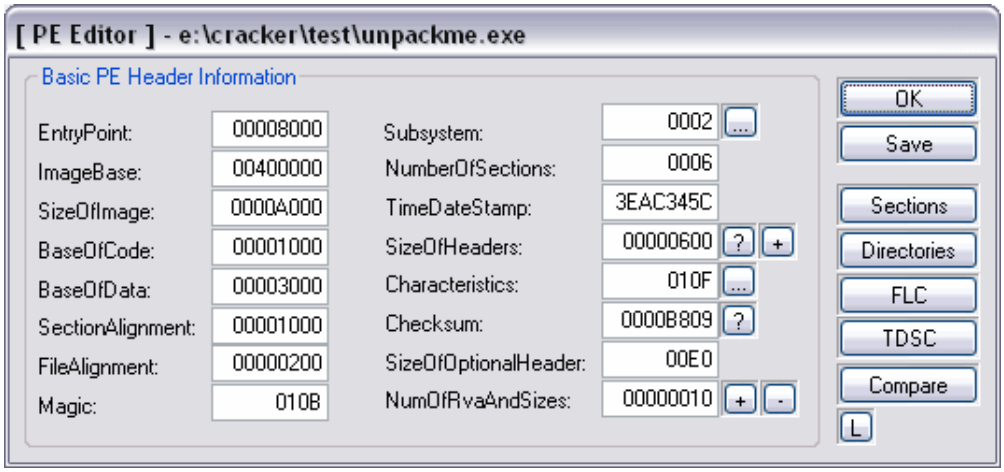
Team EAT crypter use this pack for their keygens. Today, we will try to unpack this crypter, so easy! I was replace the template's Radier by this template! What do you think about this!

PE 2.Detect and get info

First, use PE for Sniffer detect.



And get LordPE for PE Info.



[Section Table]

Name	VOffset	VSize	ROffset	RSize	Flags
.text	00001000	00002000	00000600	00000A00	C0000040
.rdata	00003000	00001000	00001000	00000600	C0000040
.data	00004000	00001000	00001600	00000200	C0000040
.rsrc	00005000	00001000	00001800	00000400	C0000040
.eatkey	00006000	00002000	00001C00	00001600	C0000040
.edata	00008000	00001158	00003200	00000200	E0000060

Then, we have the Entry Point is: 8000, Image Base is 40,000, is 00 and Importable Size is 00!

3.Finding the Original Entry Point

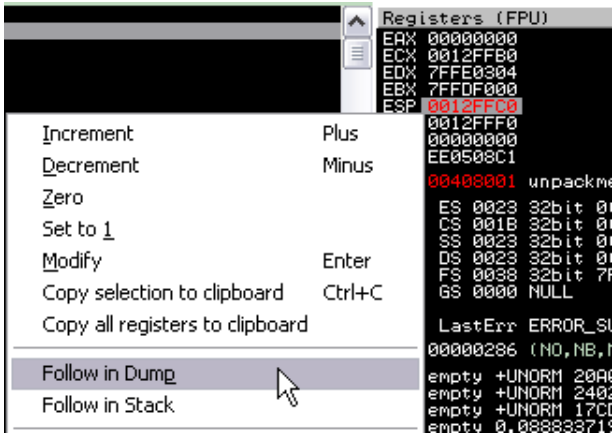
Now, after PE detect and get info, load this into unpackme Olly!

```
00408000   9C              PUSHFD
00408001   55              PUSH EBP
00408002   E8 EC000000    CALL unpackme.004080F3
00408007   87D5            XCHG EBP,EDX
00408009   5D              POP EBP
0040800A   60              PUSHAD
0040800B   87D5            XCHG EBP,EDX
0040800D   80BD 15274000 1 CMP BYTE PTR SS:[EBP+402715],1
00408014 v 74 39           JE SHORT unpackme.0040804F
00408016   C685 15274000 1 MOV BYTE PTR SS:[EBP+402715],1
0040801D v E9 E4000000     JMP unpackme.00408106
00408022 - E9 BEED4BC1     JMP C18C6DE5
00408027   9B              WAIT
```

Press **F7** to trace address 408,001.

```
00408000   9C              PUSHFD
00408001   55              PUSH EBP
00408002   E8 EC000000    CALL unpackme.004080F3
00408007   87D5            XCHG EBP,EDX
00408009   5D              POP EBP
0040800A   60              PUSHAD
0040800B   87D5            XCHG EBP,EDX
```

At this line, you see in the Registers (FPU) table. The value of ESP is **0012FFC0,** then you right click on and choose the **ESP** Follow in dump



Then you go to the Hex dump window. Then right click on the value **0012FFC0** and select Breakpoint -> Hardware, on Access -> Word. Our breakpoint is now set. Then Press **F9** to run unpackme, after that, continue press **F8** 5 times until you see as follows:

```
004063B0  75 08          JNZ SHORT unpackme.004063BA
004063B2  B8 01000000    MOV EAX,1
004063B7  C2 0C00        RETN 0C
004063BA  68 FE1D4000    PUSH unpackme.00401DFE
004063BF  C3             RETN
004063C0  8B85 26040000  MOV EAX,DWORD PTR SS:[EBP+426]
004063C6  8D8D 3B040000  LEA ECX,DWORD PTR SS:[EBP+43B]
004063CC  51             PUSH ECX
004063CD  50             PUSH EAX
```

Et puis, press **F7** 3 times, and you still here:

```
00401DFE    55          DB 55                    CHAR 'U'
00401DFF    8B          DB 8B
00401E00    EC          DB EC
00401E01    6A          DB 6A                    CHAR 'j'
00401E02    FF          DB FF
00401E03    68          DB 68                    CHAR 'h'
00401E04    78          DB 78                    CHAR 'x'
00401E05    34          DB 34                    CHAR '4'
00401E06    40          DB 40                    CHAR '@'
00401E07    00          DB 00
00401E08    68          DB 68                    CHAR 'h'
```

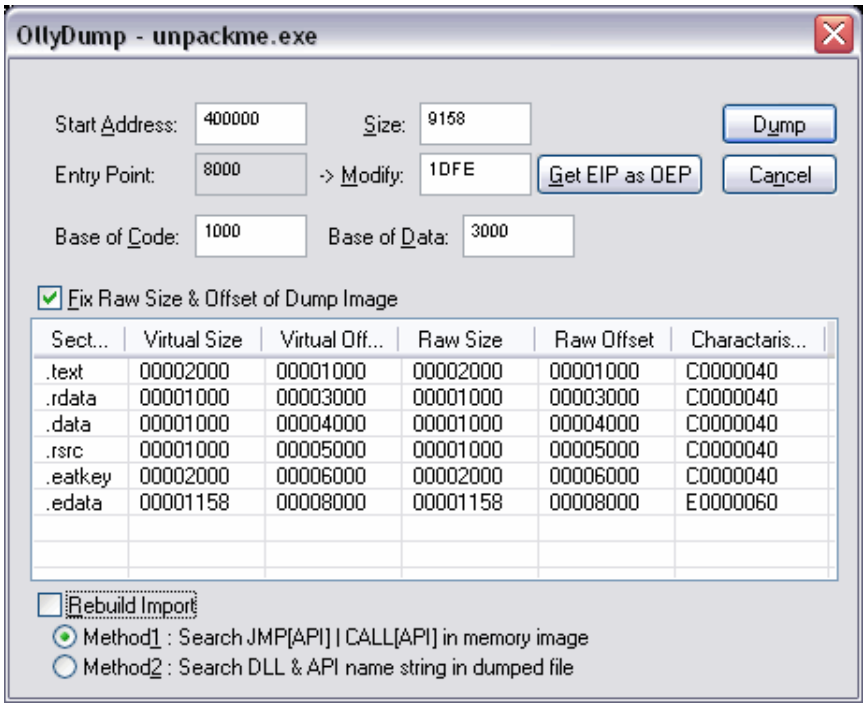
Now! Press **Ctrl + A** for analyze:

```
00401DFE  .  55          PUSH EBP
00401DFF  .  8BEC        MOV EBP,ESP
00401E01  .  6A FF       PUSH -1
00401E03  .  68 78344000 PUSH unpackme.00403478
00401E08  .  68 841F4000 PUSH unpackme.00401F84          JMP to MSVCRT._except_handler3
00401E0D  .  64:A1 000000 MOV EAX,DWORD PTR FS:[0]
00401E13  .  50          PUSH EAX
00401E14  .  64:8925 0000 MOV DWORD PTR FS:[0],ESP
00401E1B  .  83EC 68     SUB ESP,68
00401E1E  .  53          PUSH EBX
00401E1F  .  56          PUSH ESI
```

We are on OEP. The OEP is **401DFE.** Now we must Calculate the real OEP by the formula: Real OEP = OEP find in Olly-Image Base = 401DFE - 400,000 = **1DFE**

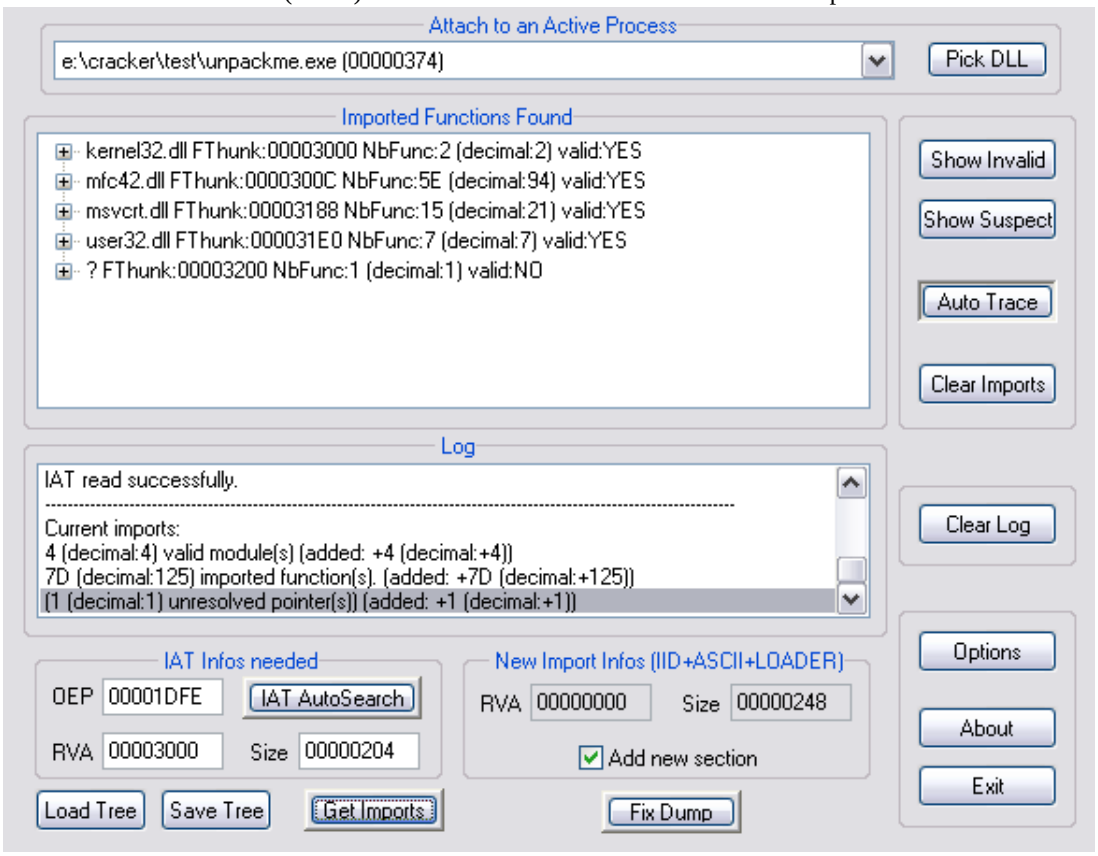
4th dumping our Unpacked file

At **401DFE address,** we go to the menu Plugin -> OllyDump -> dump debugged process. And then, just press dump, save the file unpacked at **dumped.exe**

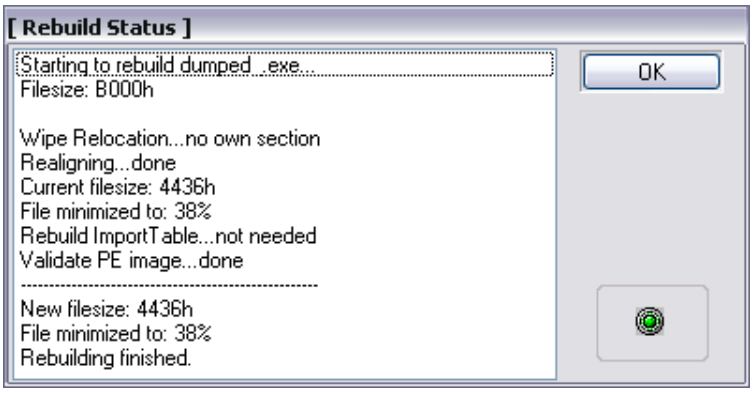


5th Finding and Fixing the Adress Import Table

And select Open ImpREC attached to active process and choose unpackme.exe. Change the value in the OEP window to the one we wrote down earlier (1DFE) then select IATAutosearch then click Get Imports.

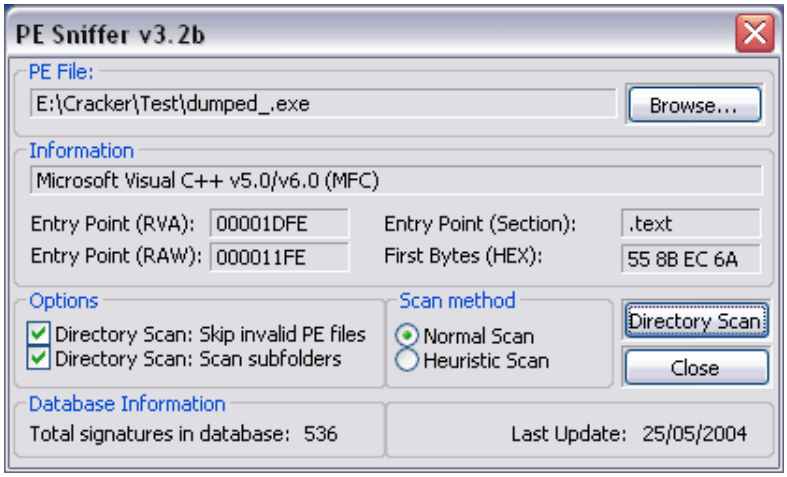


Humm, the unlucky import function is invalid. But no problem! Now, you must click on **Show Invalid** button. Then right click on the invalid imports and choose: Trace level1 (Disasm). Click Show Invalid again. Continue, right click invalid import, choose **Delete Thunk (s).** Now, click fix dump to fix the IAT **dumped.exe** file. Use LordPE 1.4 by Y0da for rebuild our Dumped_.exe



6. Testing Our Unpacked file

Now run unpacked files. It's Okay!
Using **PE Sniffer** detect **3.2b** for: **Microsoft Visual C + + v5.0/v6.0 (MFC).** Okie, Virogen crypt v0.75is now unpacked successful!



7. Conclusion

My Greetz to: Deux, infinite, NVH (c), softcracker_vn, luucorp, Aaron, hhphong, R @ dier, tlandn, Computer_Angel, Zombie, RCA, CTL, Moonbaby, Ferrari, Devilz, Neitsa, anh_surprised ... and you; -)!

To be continued ...
Written by **hacnho** (tutorial date: Saigon 30/05/2004)

[Exetools Forum] | [HVAOnline] | [Vncracking Group] | [REA Forum] | [hacnho's homepage] | [AR Team] | [Vicki's Fan] | [VCT2k4] |

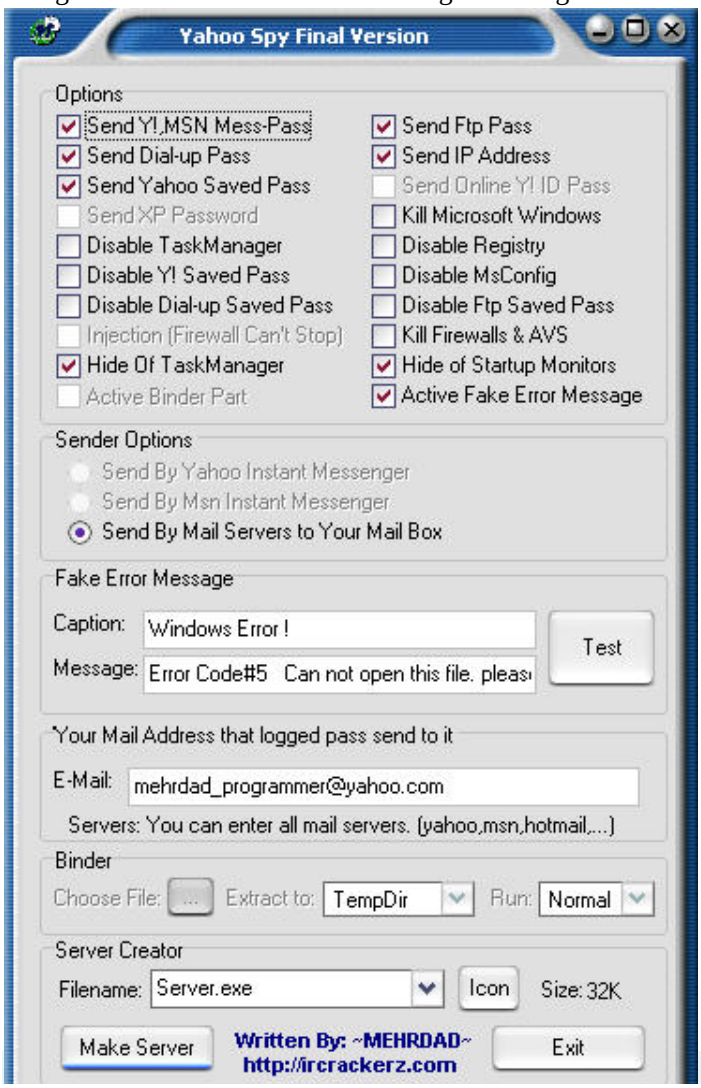
hacnho Tutorials # 16

Manual unpacking **WWPack32** **1.x**

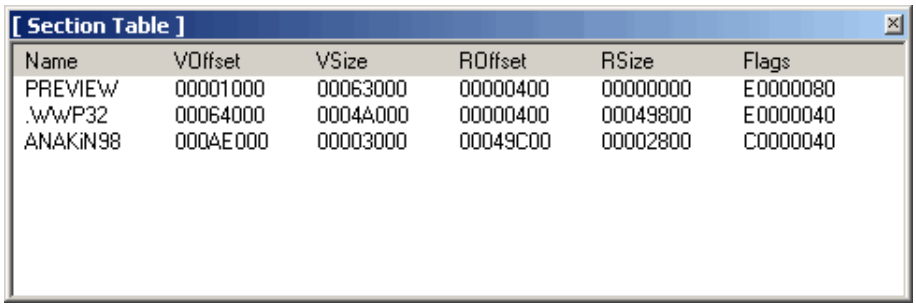
Information	Unpacking for Newbie's
Target	**target**
Available	http://nhandan.info/hacnho/tuts/unpackme16_tuts.zip
Tools	1:10 OllyDbg plugin with Final OllyDump 2.21.108, OllyScript, Lord PE 1.4, PEiD 0.92, EM Editor ProtectionID_v5.0_Final and write scripts for 4:04.
Protection	WWPack32 1.x
Level	Easy
Category	Manual unpacking

1.Introduction

The good tools for Yahoo Pass Hacking after Magic-PS 1.x is Yahoo Spy.



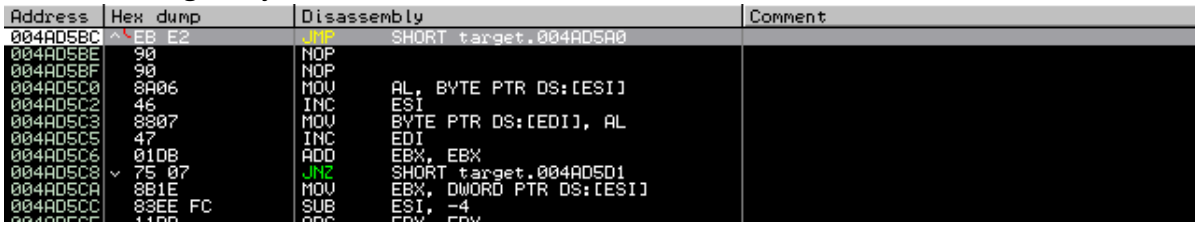
This is packed with tools WWPack32 1.x. PEiD and PESniffer PEScan or can not detect him. So, I am trying to detect with ProtectionID_v5.0_Final.



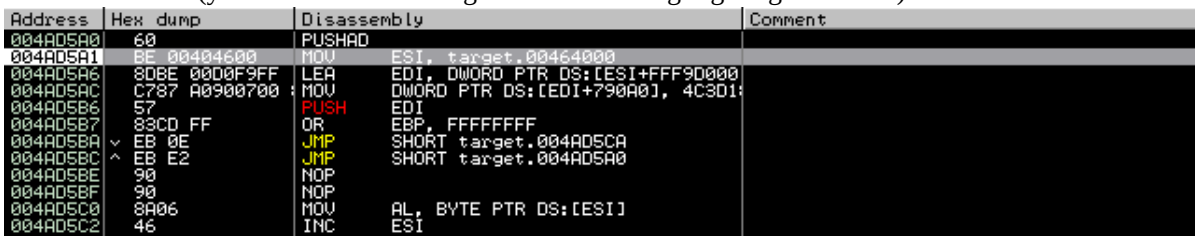
This packer is easy for unpack. Follow my tut ....

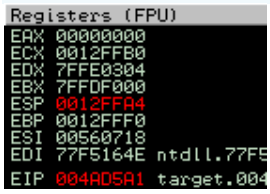
2.Find OEP

Step 1: Find OEP
Load-1 into **target** OllyDBG

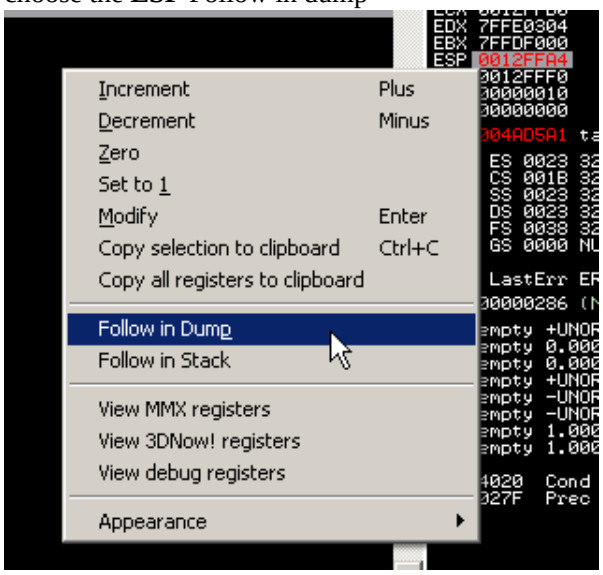


Press **F8** 2 times (you can see the ESP register in FPU is highlighting Windows):

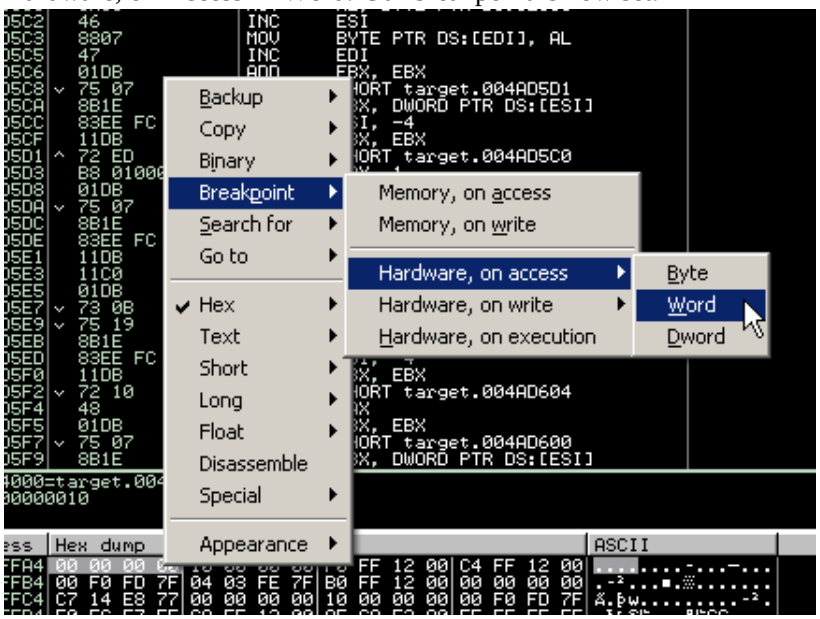




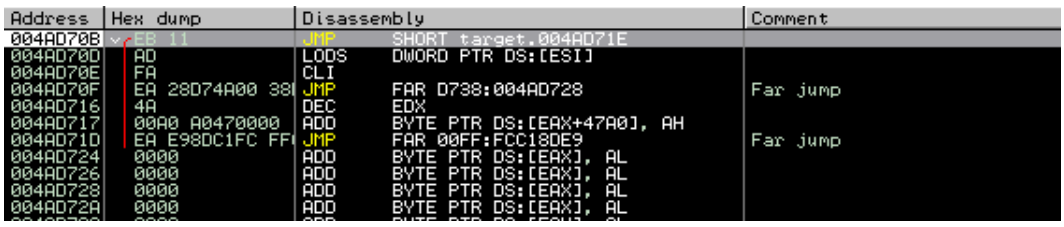
At this line, you see in the Registers (FPU) table. The value of ESP is **0012FFA4,** then you right click on and choose the **ESP** Follow in dump



Then you go to the Hex dump window. Then right click on the value 0012FFA4 and select Breakpoint -> Hardware, on Access -> Word. Our breakpoint is now set.



Press **F9** to run. You will still be here:

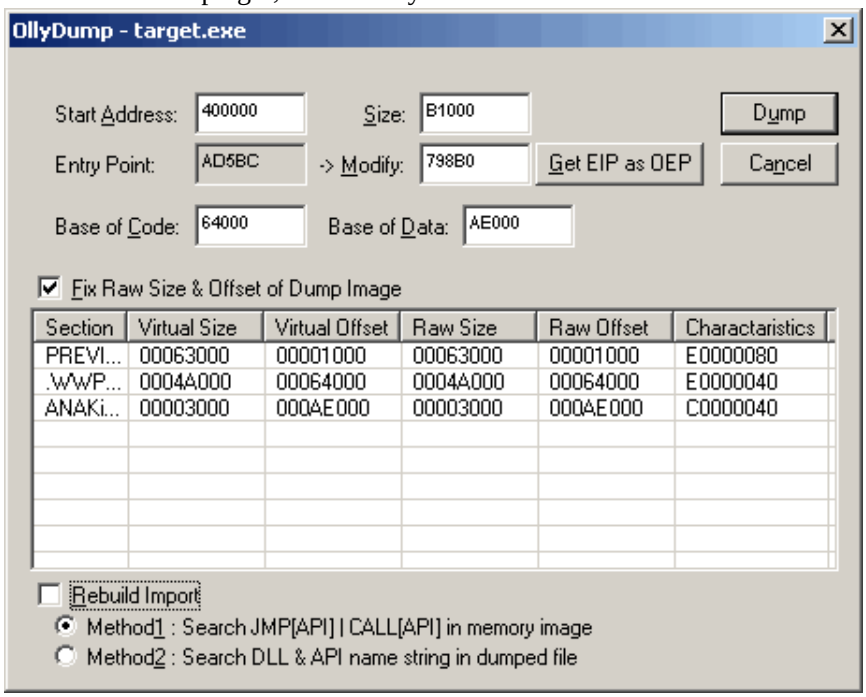


Press **F8** 2 times. This is OEP.

```
Address   Hex dump          Disassembly                              Comment
004798B0  55                PUSH    EBP
004798B1  8BEC              MOV     EBP, ESP
004798B3  83C4 F0           ADD     ESP, -10
004798B6  B8 38964700       MOV     EAX, target.00479638
004798BB  E8 44C5F8FF       CALL    target.00405E04
004798C0  A1 D0B34700       MOV     EAX, DWORD PTR DS:[47B3D0]
004798C5  8B00              MOV     EAX, DWORD PTR DS:[EAX]
004798C7  E8 2405FEFF       CALL    target.00459DF0
004798CC  8B0D BCB14700     MOV     ECX, DWORD PTR DS:[47B1BC]       target.0047CC88
004798D2  A1 D0B34700       MOV     EAX, DWORD PTR DS:[47B3D0]
004798D7  8B00              MOV     EAX, DWORD PTR DS:[EAX]
004798D9  8B15 B0804700     MOV     EDX, DWORD PTR DS:[4780B0]       target.004780FC
004798DF  E8 2405FEFF       CALL    target.00459E08
004798E4  A1 D0B34700       MOV     EAX, DWORD PTR DS:[47B3D0]
004798E9  8B00              MOV     EAX, DWORD PTR DS:[EAX]
004798EB  E8 9805FEFF       CALL    target.00459E88
004798F0  E8 EBA5F8FF       CALL    target.00403EE0
004798F5  8D40 00           LEA     EAX, DWORD PTR DS:[EAX]
```

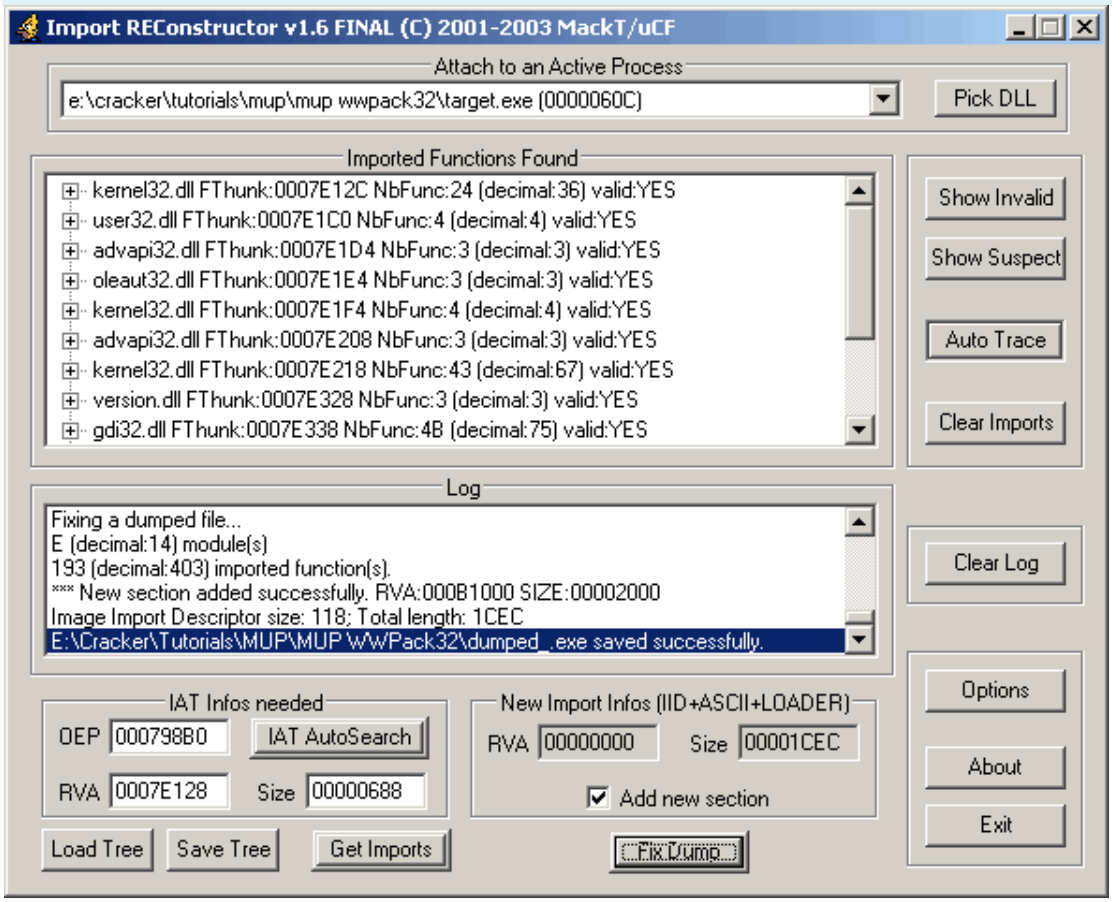
Step 2: dumping

- Go to the menu plugin, choose OllyDUMP:



Step 3: Finding and Fixing the Adress Import Table

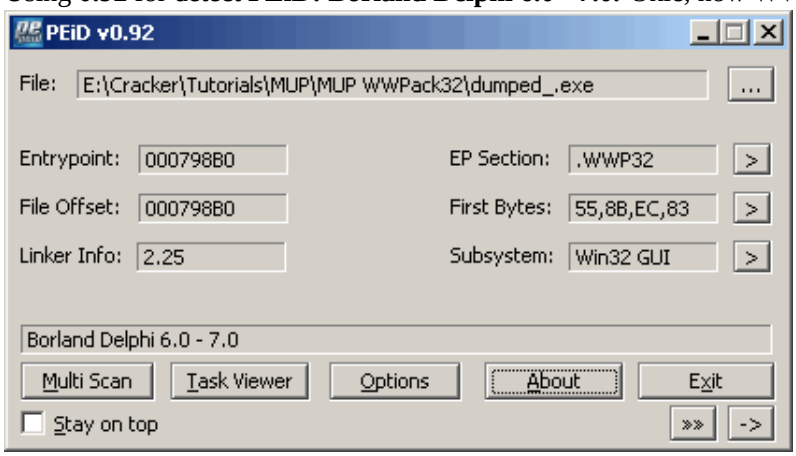
And select Open ImpREC attached to active process and choose unpackme.exe. Change the value in the OEP window to the one we wrote down earlier (798B0) then select IATAutosearch then click Get Imports.



Now, click fix to fix IAT dump the file **dumped.exe**
- Unpacked successful! Done ...

3. Testing Our Unpacked file

Now run the unpacked files. It's Okay!
Using **0.92** for detect **PEiD: Borland Delphi 6.0 - 7.0.** Okie, now WWPack32 v1.xis unpacked successful!



4. Create OllyScript

After find OEP in Olly, we create a need for auto OllyScript find OEP next time! Remember! We have found three step for OEP:
1st First: Find the special signal of WWPack32 for breakpoint set!
2.Second: Step over 2 times.
3.Final: Set breakpoint, press F9 to run, press F8 2 times for jump to **OEP**
Okay!, Write in our step langue OllyScript

```
Cut here ---------------------------------- ---------- -----
/ *
////////////////////////////////////////////////// ////////////
/ / WWPack32 v1.x OEP finder
/ / Author: hacnho/VCT2k4
/ / Email: hacnho@hotmail.com
/ / Website: http://nhandan.info/hacnho
/ / OS: WinXP Pro, OllyDbg 1:10 Final, OllyScript v0.85
////////////////////////////////////////////////// //////////
* /
STI / / Step into (F7)
Sto / / Step over (F8)
eob Break
findop eip, 60BE # # / / Find the special signal
bphws ESP, "r" / / Set a breakpoint on memory access
run / / Run the program

Bread:
Sto
Sto
Police eip / / Ctrl + A for Analyze
log eip / / Logs to source OllyDbg log window.
CMT eip, "This is the OEP! Found by hacnho/VCT2k4" / / Write a comment
Msg "Dumped and IAT fix now! Thanx for using my script ...!" / / Show a message

ret / / Exits script
Cut here ---------------------------------- ---------- -----
```

6. Conclusion

GrEeTs Fly Out: Deux, infinite, NVH (c), softcracker_vn, luucorp, Aaron, Canterwood, hhphong, R @ dier, tlandn, Computer_Angel, Zombie, RCA, CTL, Moonbaby, Nilrem, diablo2oo2, Ferrari, Devilz, anh_surprised .. . and you ;-)!
Thanx to authors of OllyDBG, ImpREC, LordPE, OllyScript, PEiD, ID Protection, WWPack32,
To be continued ...
Written by **hacnho** (tutorial date: Sai Gon 24/08/2004)

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hacnho Tutorials # 3

Manual unpacking **y0da's Crypter v1.2**
template by **koncool** and **R @ dier.**

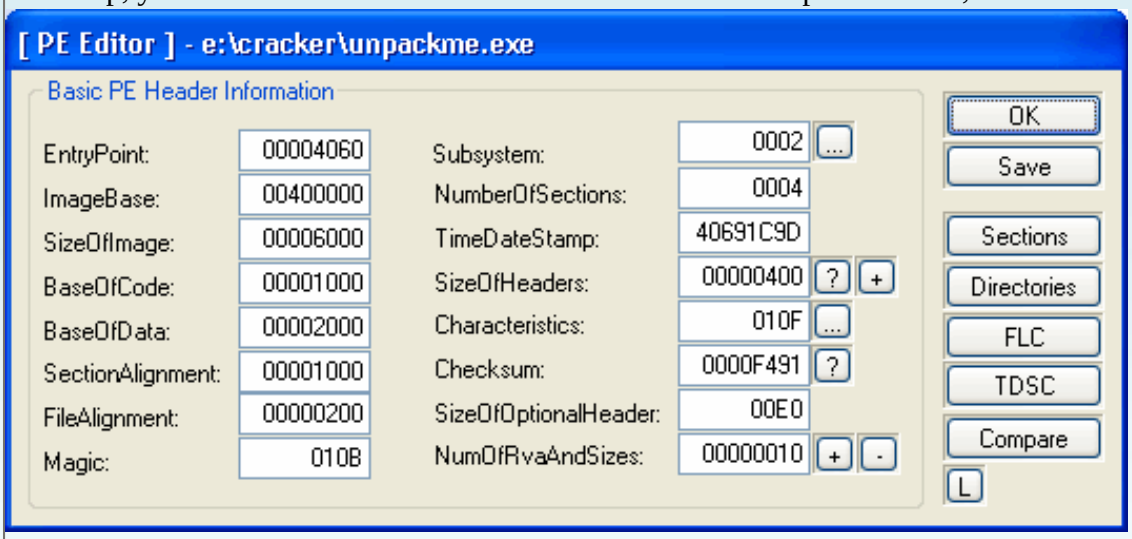
Information	Unpacking for Newbie's
Target	**Unpackme.exe**
Available	http://nhandan.info/hacnho/tuts/unpackme3_tuts.zip
Tools	OllyDbg plugin with 1:10 OllyDump 2.21.108, Lord PE 1.4, PESniffer 3.2b.
Protection	y0da's Crypter v1.2 by **y0da**
Level	Standard
Category	Manual unpacking

1. Introduction

Hi all,
In my 3rd tutorial. I will explain the manual method for unpacking a famous crypter. This is a crypter of y0da bro: **y0da's Crypter v1.2.** OK tested on Windows XP.

2. Getting Started

First step, you have to find some info from this PE software. Open Lord PE, PE Editor choose. And we have:



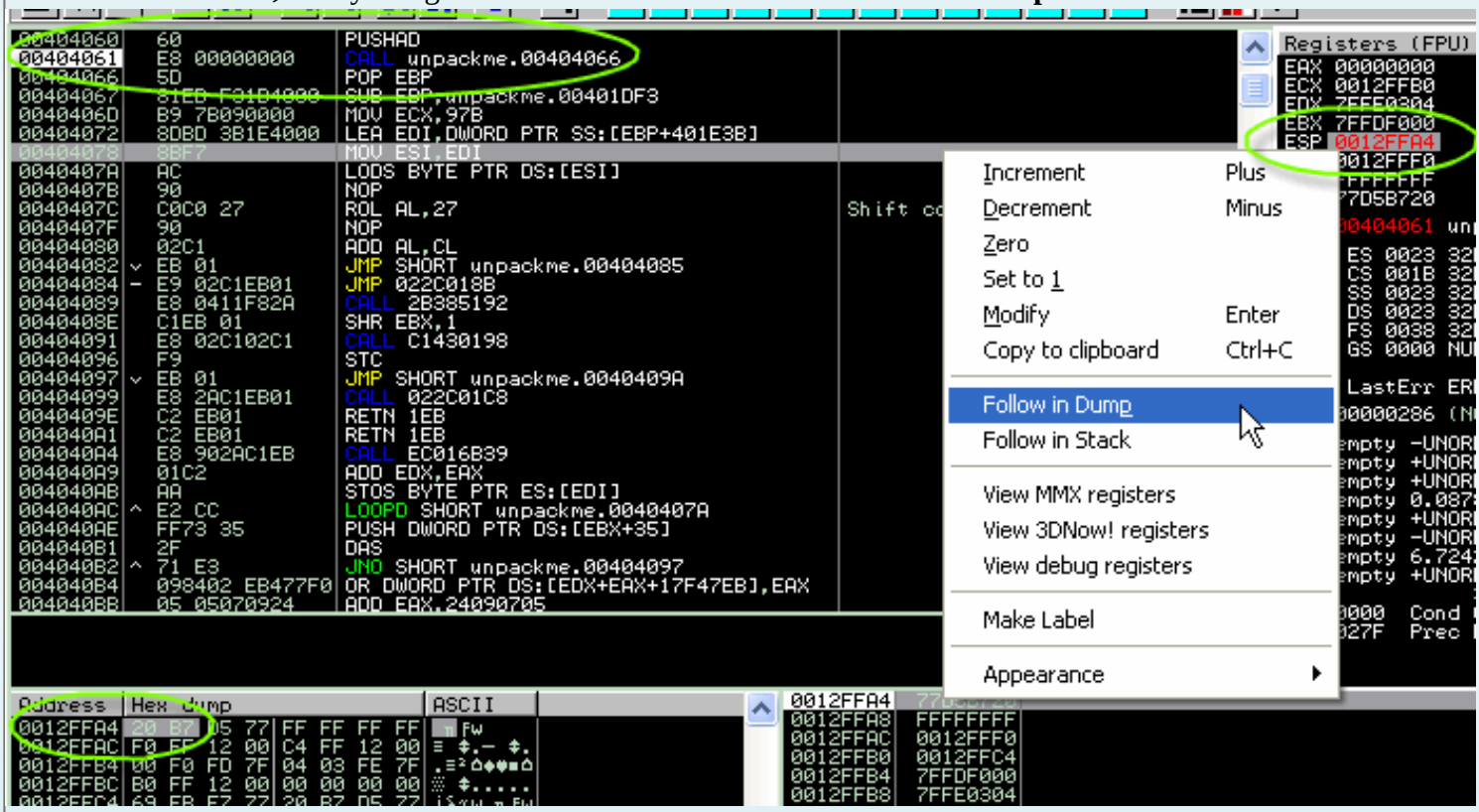
[Section Table]

Name	VOffset	VSize	ROffset	RSize	Flags
.text	00001000	00000026	00000400	00000200	E0000020
.rdata	00002000	00000092	00000600	00000200	C0000040
.data	00003000	00000096	00000800	00000200	C0000040
yC	00004000	00002000	00000A00	00000A46	E00000E0

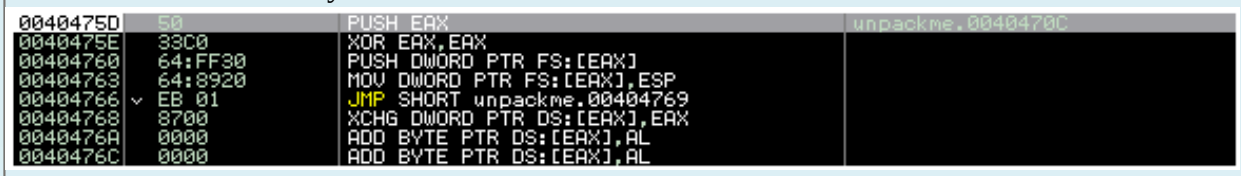
EP: 4060, The Flags is (E0000020; C0000040; C0000040; E00000E0), Image Base is always 400000, Import Table: 4000 and is the size 3C.

3. Finding the OEP

I often use for PEiD detect OEP. But in this case, PEiD can not search the OEP. So, I have to search OEP "by hand". Okie, now use Olly for OEP detect. Load into unpackme.exe Olly. We still in line **00404060> 60 PUSHAD.** Now, press F7 to trace to address 404,061. At this line, you see in the **Registers (FPU)** table. The value of **ESP** is **0012FFA4,** then you right click on and choose **ESP Follow in** the **dump.**



Then you go to the Hex dump window. Then right click on the value **0012FFA4** and select Breakpoint -> Hardware, on Access -> Word. Our breakpoint is now set.
Then Press F9 to run. Olly was break here:



Now, this is a very important step for finding the OEP. You must follow my step for Practice correct. OK, if

you understand, we continue ...
At Push EAX 40475D line, you press F7 to trace downward. And still line at **00404766 / EB 01 JMP SHORT unpackme.00404769.** Here, **you press F9 two times** and then **press Shift + F9 one time.** And we have:

```
00401002     68          DB 68                    CHAR 'h'
00401003     00          DB 00
00401004     30          DB 30                    CHAR '0'
00401005     40          DB 40                    CHAR '@'
00401006     00          DB 00
00401007     68          DB 68                    CHAR 'h'
00401008     1E          DB 1E
```

Et puis, you must press **Ctrl + A** for analyze. And you see:

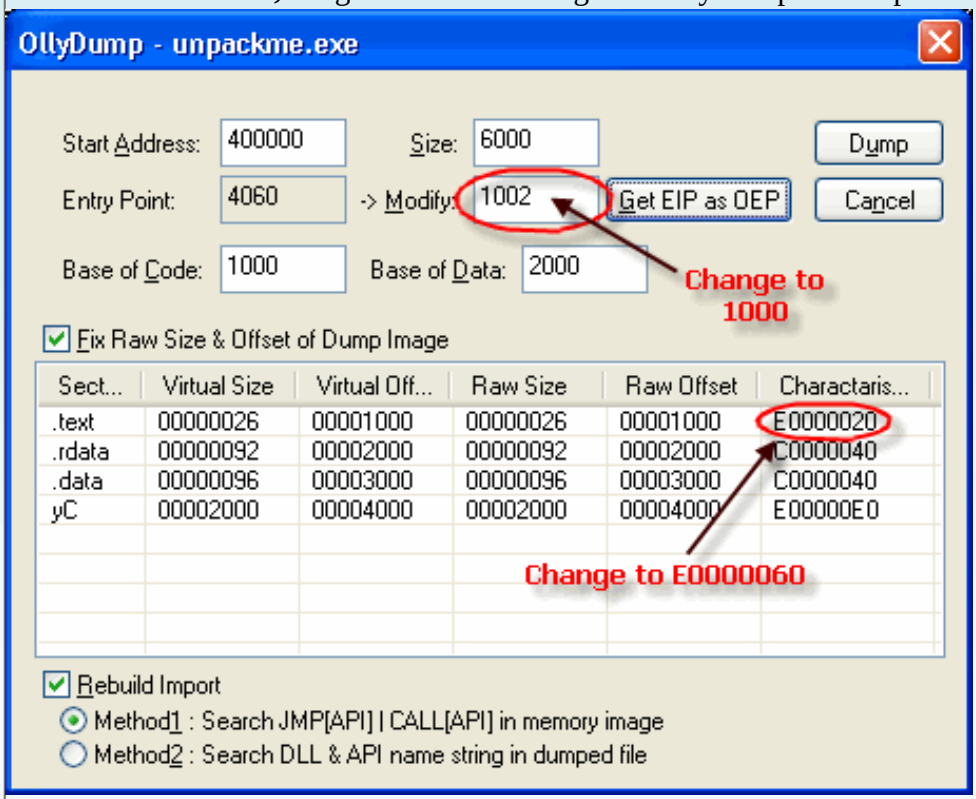
```
00401000  .  6A 00          PUSH 0
00401002  .  68 00304000    PUSH unpackme.00403000      ASCII "VCT-Vietnamese Crackers TEAM!"
00401007  .  68 1E304000    PUSH unpackme.0040301E      ASCII "Try to Unpack me! Packed with y0da's Crypter v1.2
0040100C  .  6A 00          PUSH 0
0040100E  .  E8 0D000000    CALL unpackme.00401020
00401013  .  6A 00          PUSH 0
00401015  .  E8 00000000    CALL unpackme.0040101A
0040101A  .- FF25 00204000  JMP DWORD PTR DS:[402000]
00401020  $- FF25 08204000  JMP DWORD PTR DS:[402008]
00401026     00             DB 00
00401027     00             DB 00
```

OEP we found: 401000

Congratulations! According to OEP we found is 401,000. And now we Calculate the real OEP of this unpackme the Formule:
Real OEP = OEP find in Olly-Image Base = 401000-400000 = **1000.**

4. Dumping

At address **00401002,** we go to the menu Plugin -> OllyDump -> dump debugged process.



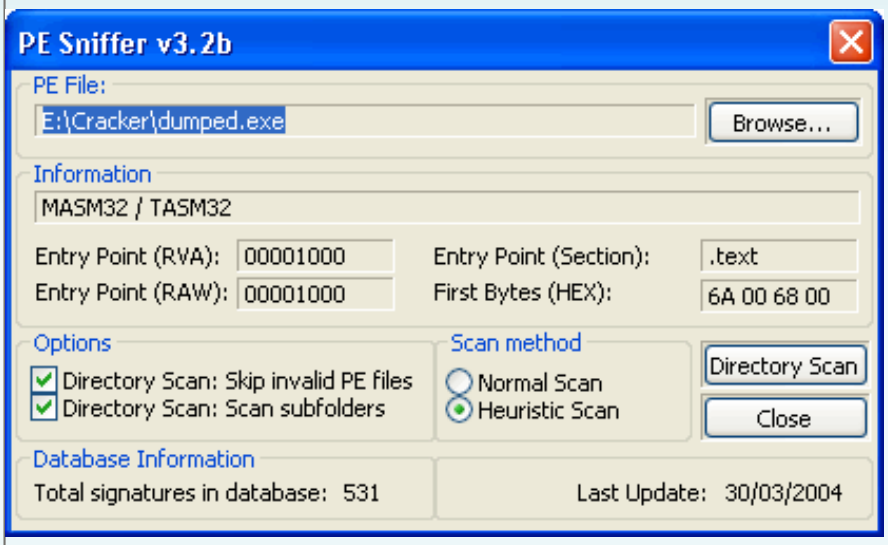
Change modify the Entry Point to **1000.** And change the first flag (characteristics in Olly) to **E0000020.** And then, just press dump, save the file at **dumped.exe** unpacked.

5. Finding and Fixing the Adress Import Table

Please remember: Do not fix IAT and rebuild it. Unpackme will be crash.

6. Testing Our Unpacked file

Now run unpacked files. Wow, not crash.
Using PESniffer 3.2b for detect: **MASM32 / TASM32.** Okie, y0da's Crypter v1.2 by **y0da** is now unpacked successful!



7. Conclusion

Special thanx to **koncool** et **R @ dier** for this template.
My Greetz to: Deux, RCA, Moonbaby, Computer_Angel, tlandn, R @ dier, Zombie, Maipt0301, tykhung, softcracker_vn, CTL, LeVuHoang ...

To be continued ...

Written by hacnho (tutorial date: Sai Gon 30/3/2004)

UAManalUnpi ck theZReippiraTo ol2.3

I -- Print d o t r u c t i o n:

Zip Repair Tool version before they have meat but with this new version level Protect its advanced than many. Version With this, the doctors can use a **script bypass Antidebug** can Fix IAT is able to run before nhucac tut they presented. But in this tut they want to present methods for MUP to OEP of Target.

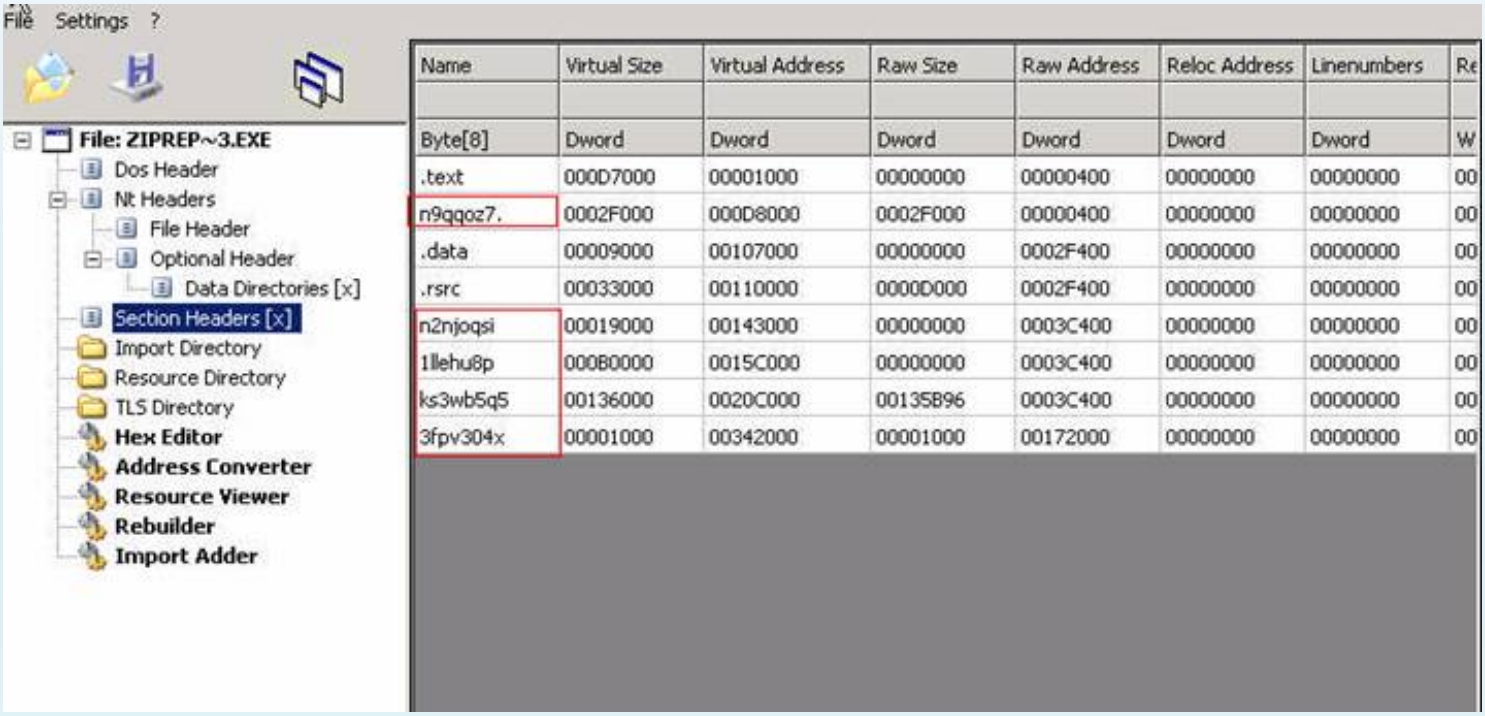
I I -- T oo ls T & g e r a t:

- **T oo L and P lug i n c a n d ứng:**
  - **O LLY DB G _ E x c e r YP to r1.10**
  - **I k e s e r xpl or**
  - **I mp O R T R E C1.6f**
  - **RDG P ACK D e r e c t e r to v0.6. 5**
  - **C FF E xpl or e r V**
- **One g e r t: Zip R e p l a irT oo 3.2**

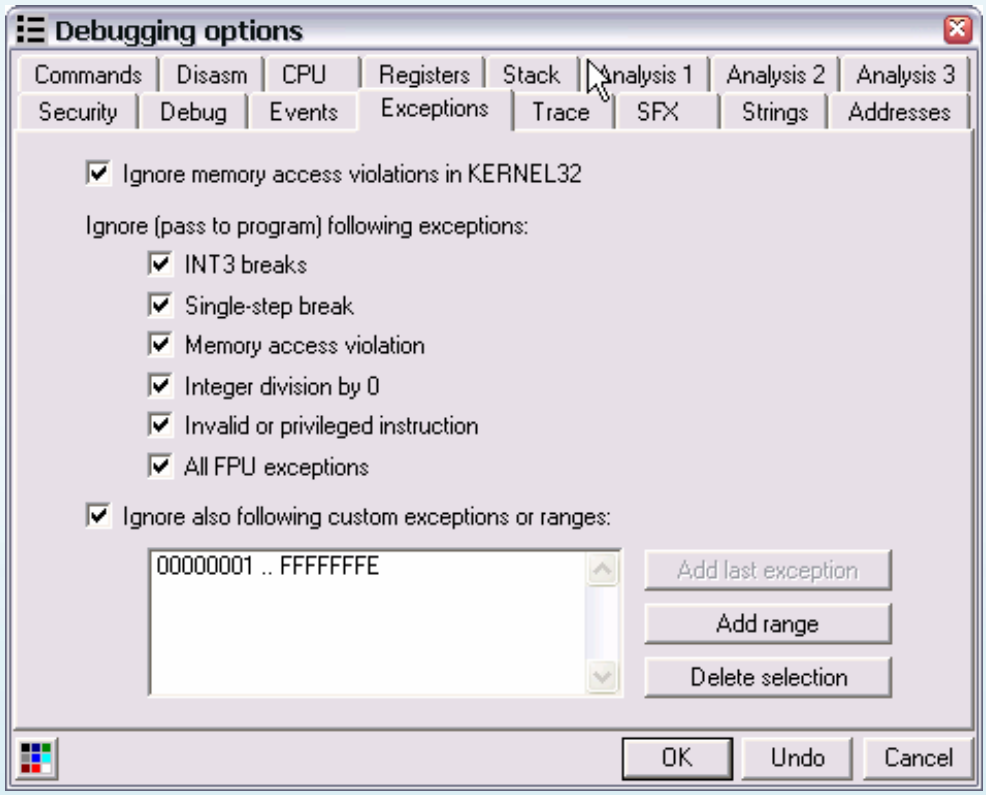
II I - B italy ss P a n a t i Deb ug & F ind O P E:

_ D ùn **RDG P ACK** g **e r D e t e r c v0.6.5 to** scan a g e r a t

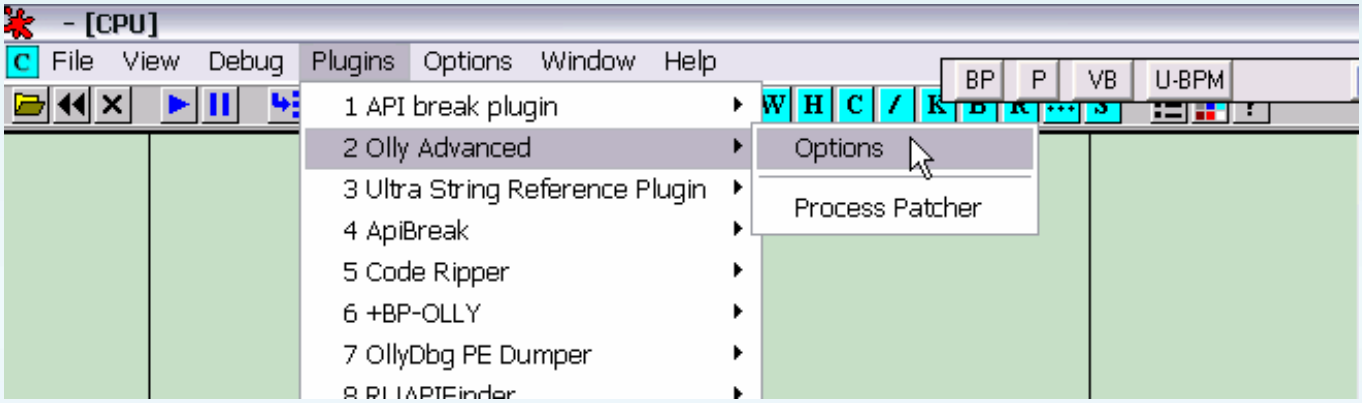
_ Open with **CFF,** The **Red Section** below may be a sign of the pack with target **Execrypto** R.



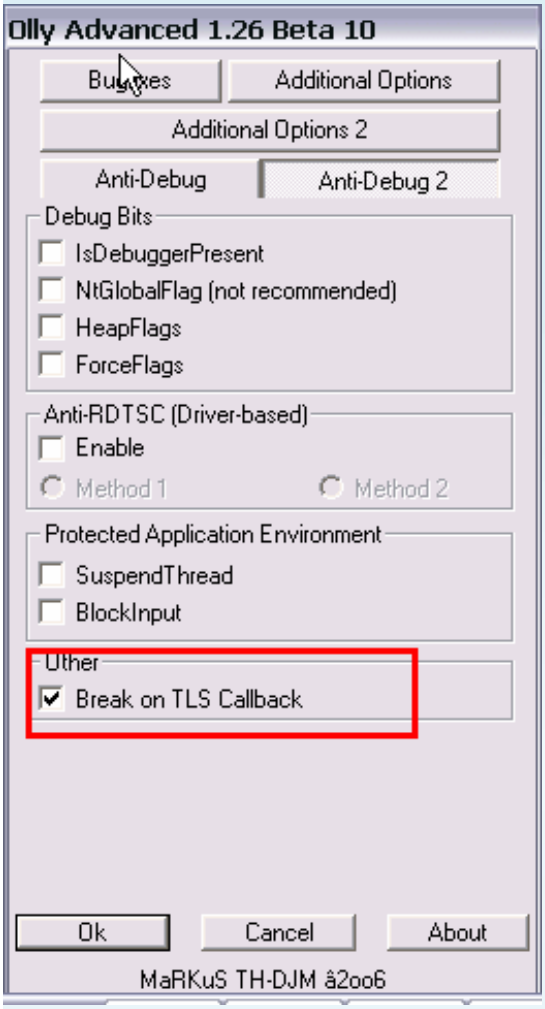
_OK OllyDBG_ExeCryptor open, press Alt + O and the following



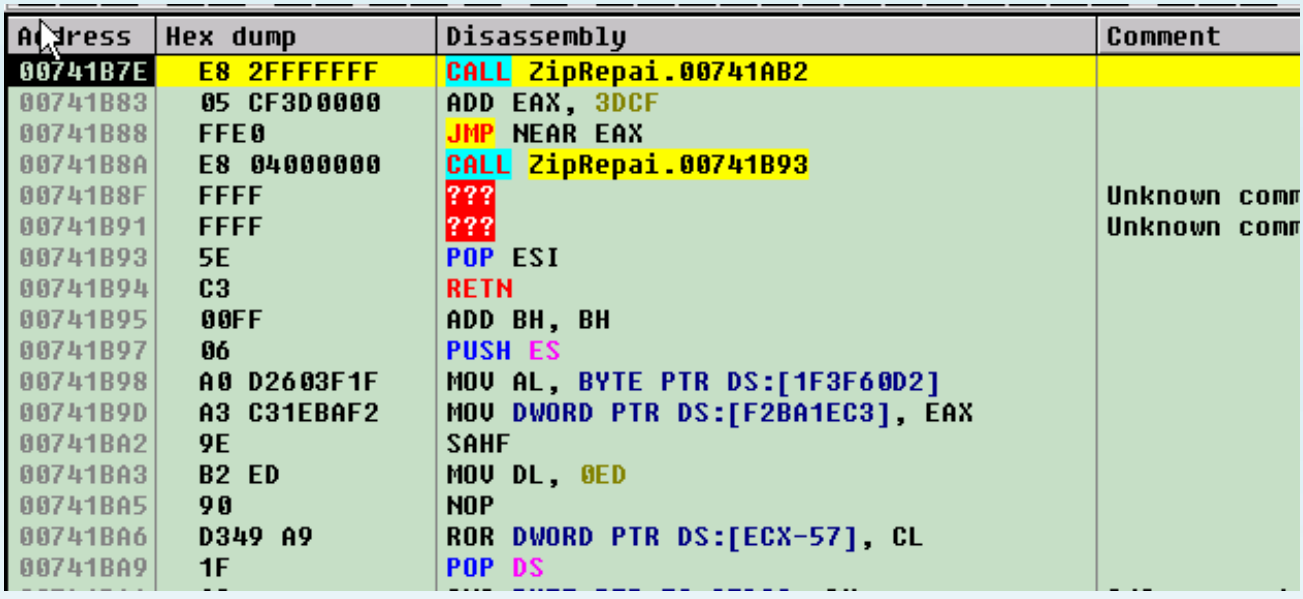
_ Select Olly Advanced plugin and like



_ Nhusau to choose:

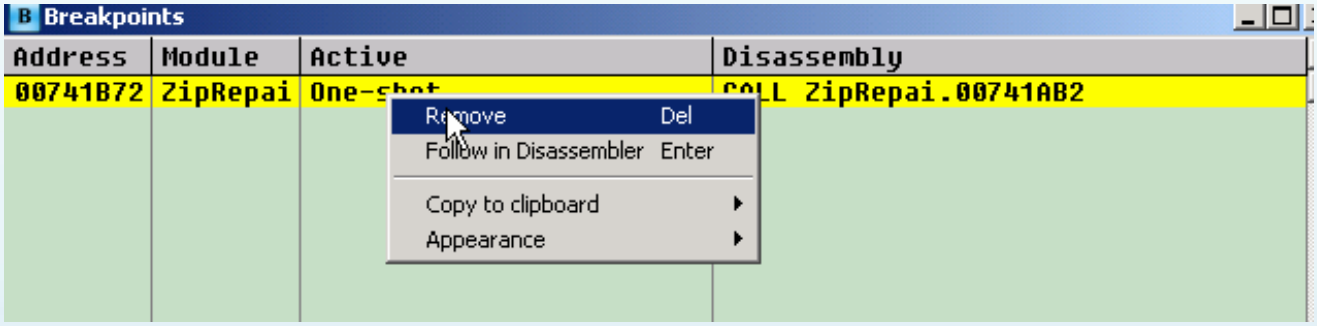


_ OK, Load OllyDBG_EXEcryptor on target and we stop here:

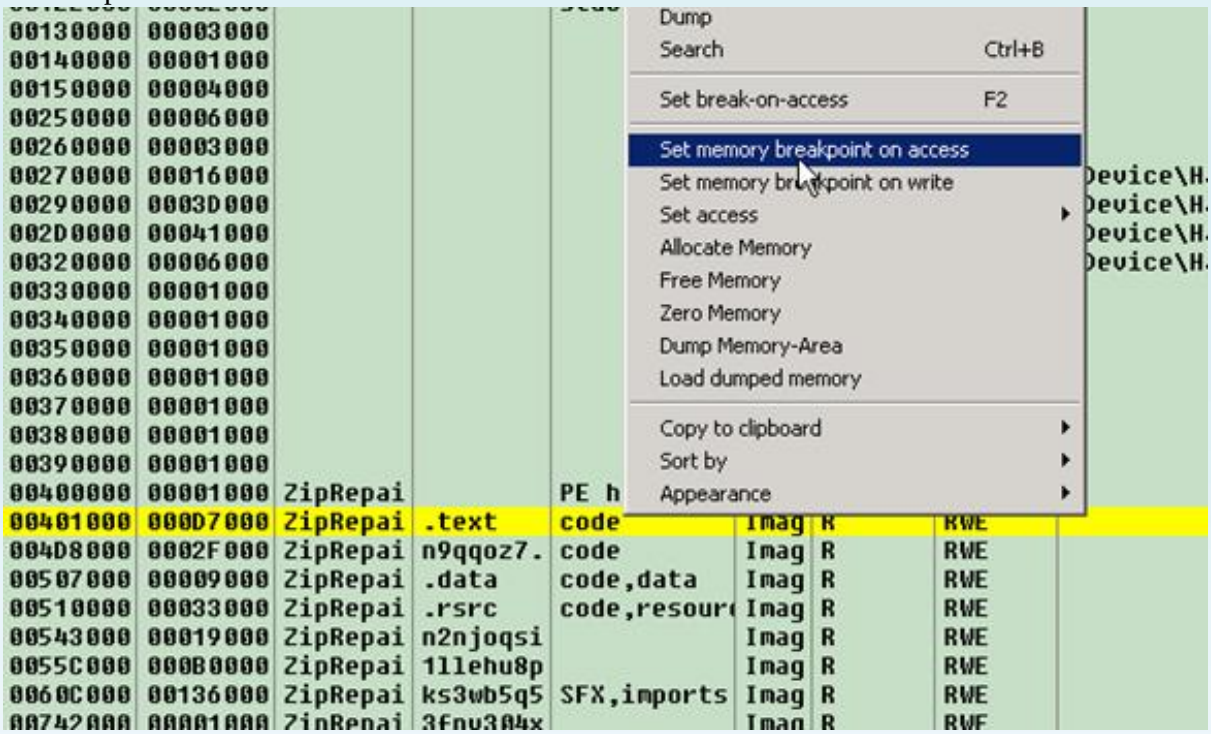


Address	Hex dump	Disassembly	Comment
00741B7E	E8 2FFFFFFF	CALL ZipRepai.00741AB2	
00741B83	05 CF3D0000	ADD EAX, 3DCF	
00741B88	FFE0	JMP NEAR EAX	
00741B8A	E8 04000000	CALL ZipRepai.00741B93	
00741B8F	FFFF	???	Unknown comm
00741B91	FFFF	???	Unknown comm
00741B93	5E	POP ESI	
00741B94	C3	RETN	
00741B95	00FF	ADD BH, BH	
00741B97	06	PUSH ES	
00741B98	A0 D2603F1F	MOV AL, BYTE PTR DS:[1F3F60D2]	
00741B9D	A3 C31EBAF2	MOV DWORD PTR DS:[F2BA1EC3], EAX	
00741BA2	9E	SAHF	
00741BA3	B2 ED	MOV DL, 0ED	
00741BA5	90	NOP	
00741BA6	D349 A9	ROR DWORD PTR DS:[ECX-57], CL	
00741BA9	1F	POP DS	

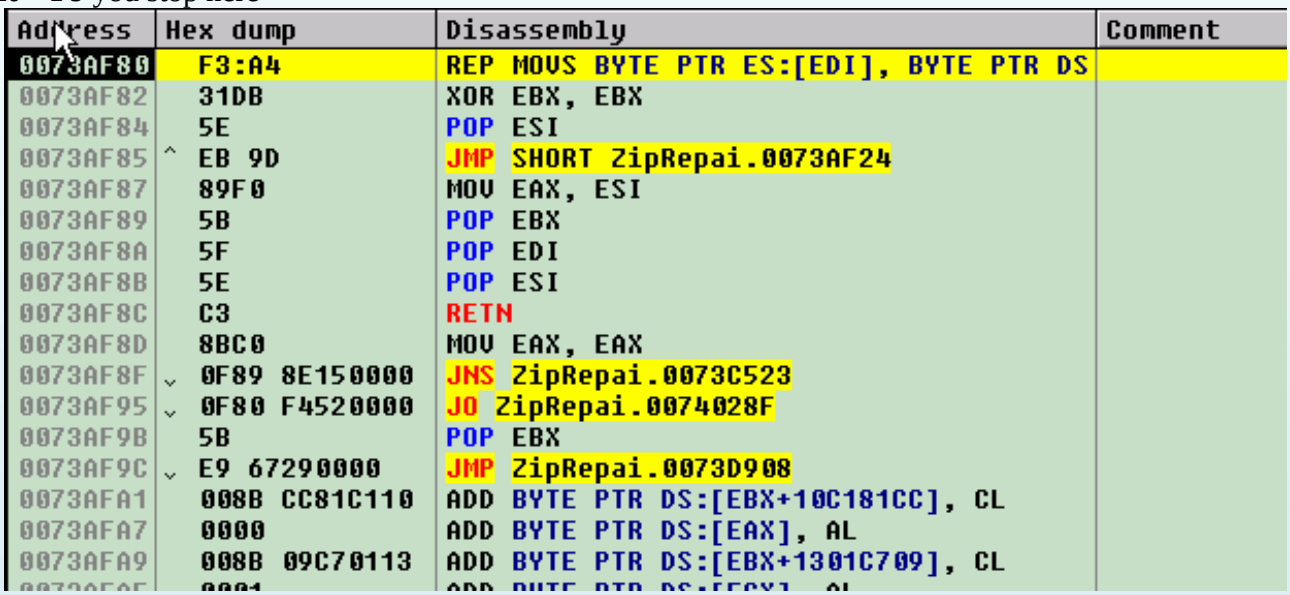
1st press **Alt + B 1 Breakpoint** you see, please delete it



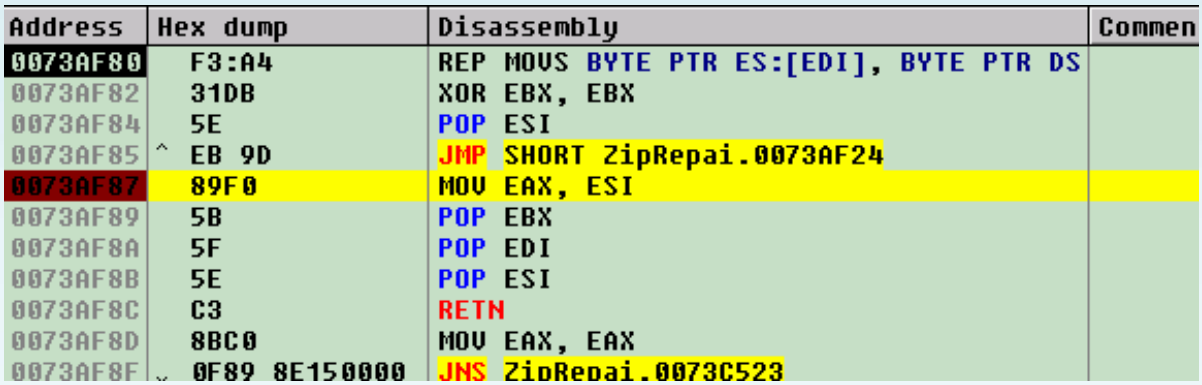
2nd press **Alt + M** and press **F2** to Set 1 BP on access in **Section. Code**



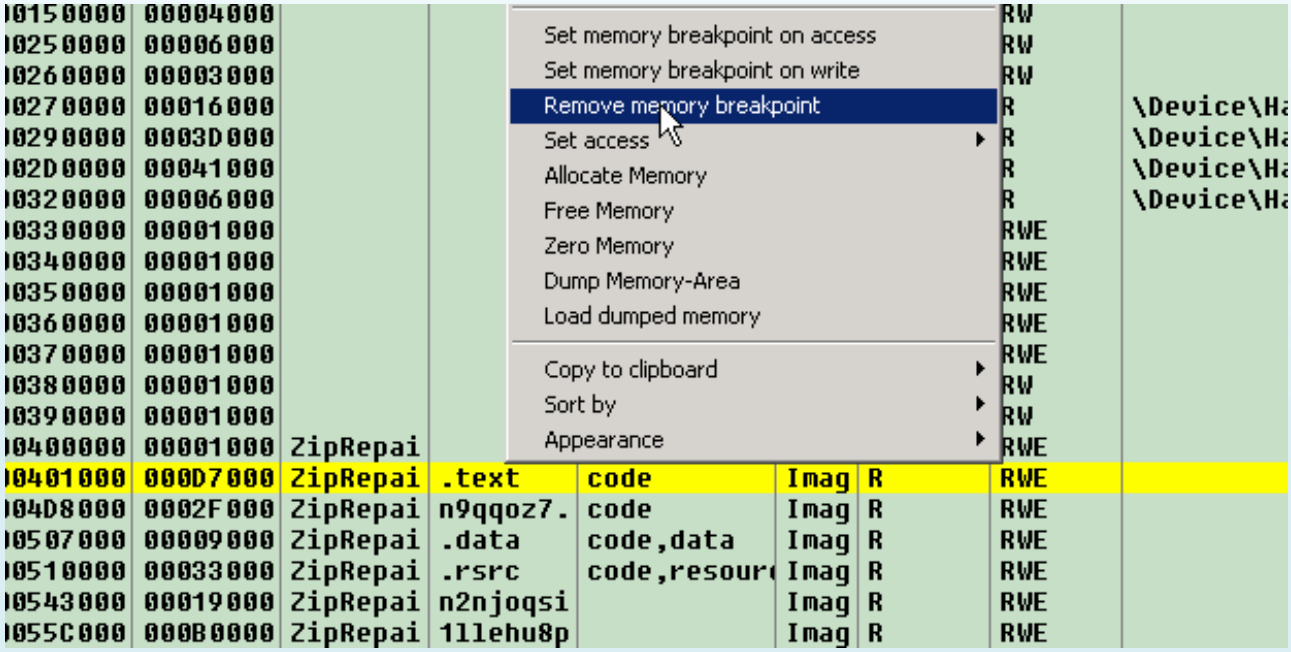
3. Press **Shift + F9** you stop here



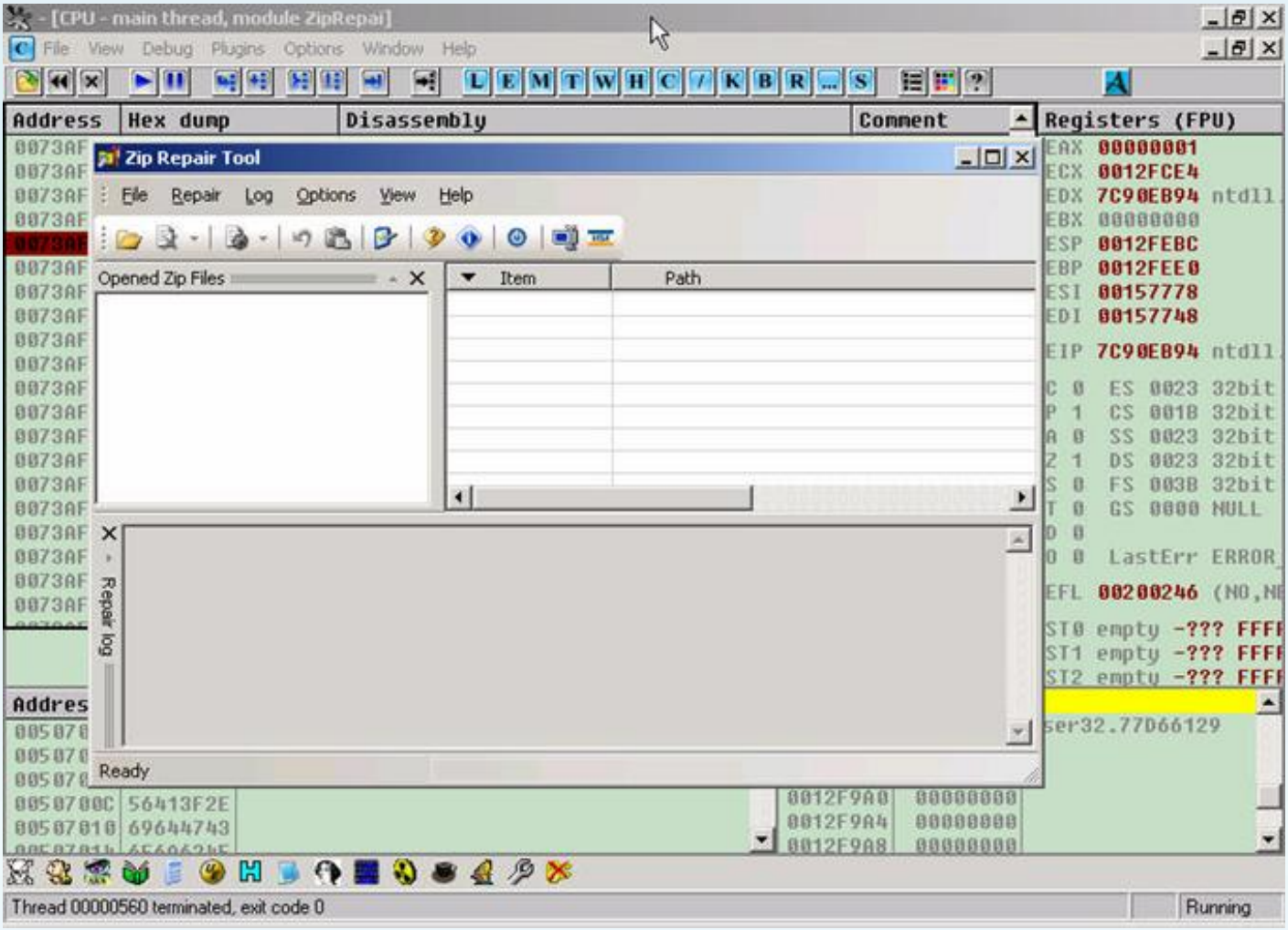
4th Set 1 BP at "**0073AF87 89F0 MOV EAX, ESI**"



5. Press **Alt + M** to remove access on BP in **Section. Code**



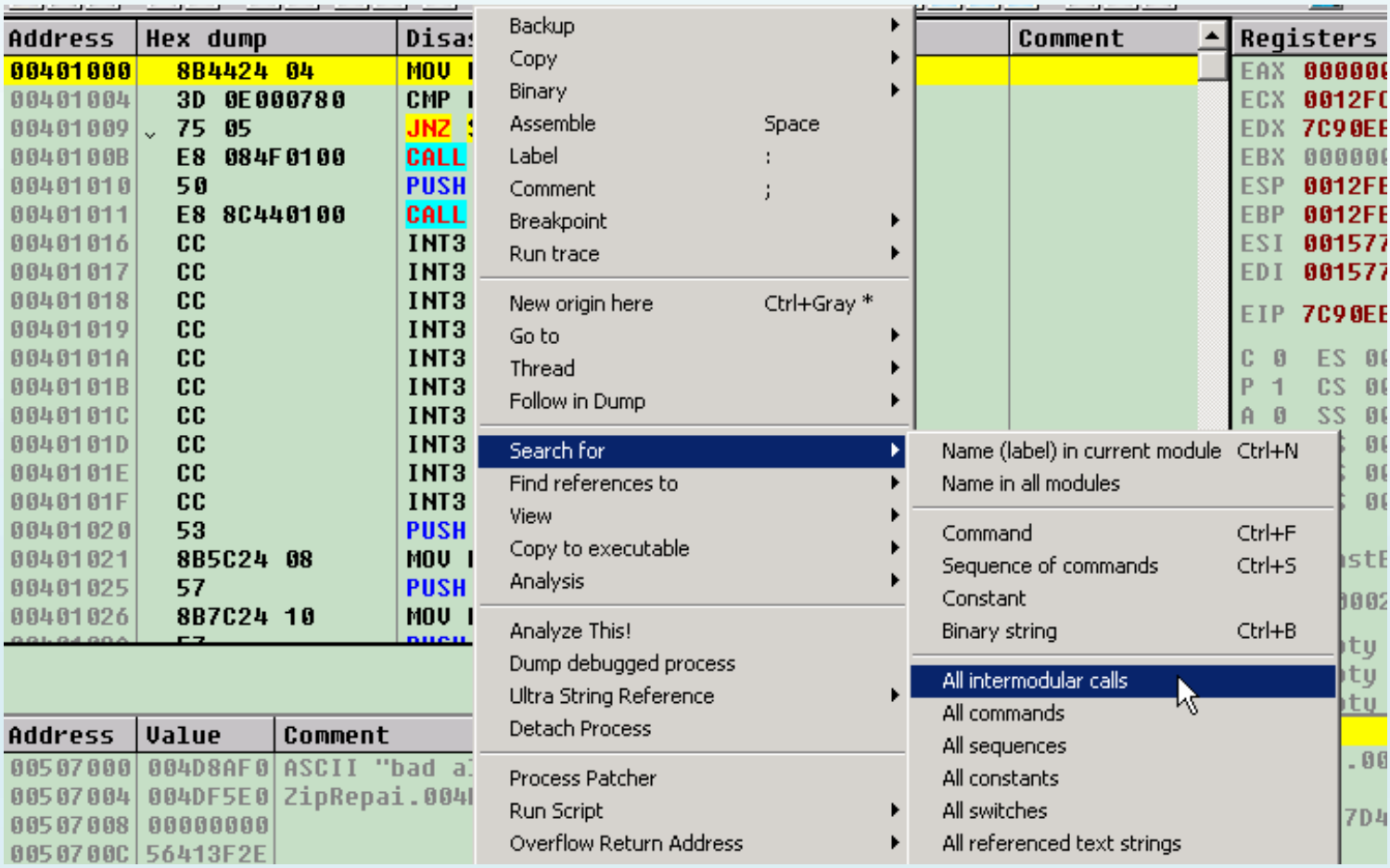
_ Click hold **Shift + F9** until Soft run completely nhuday is our successful **bypass AntiDebug** gòi



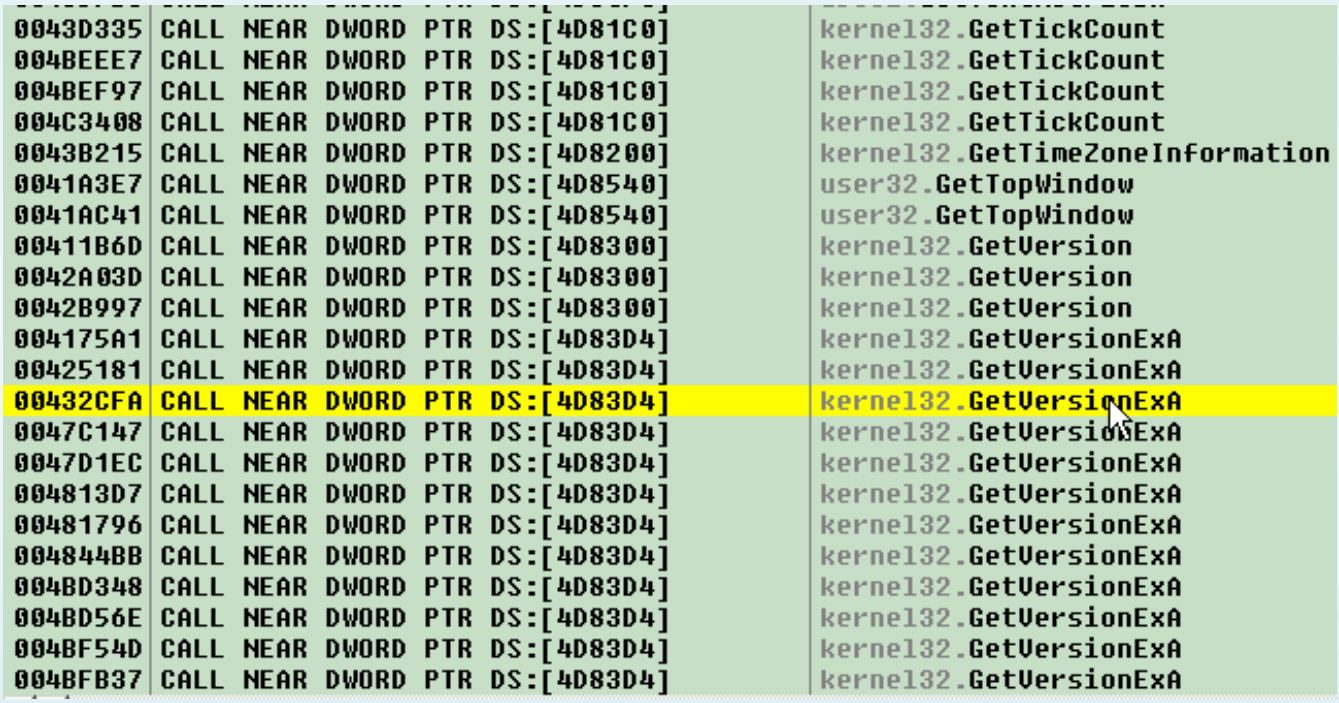
_ Press **Ctrl + G** and type in **401000** and we come

Address	Hex dump	Disassembly	Comment
00401000	8B4424 04	MOV EAX, DWORD PTR SS:[ESP+4]	
00401004	3D 0E000780	CMP EAX, 8007000E	
00401009	75 05	JNZ SHORT ZipRepai.00401010	
0040100B	E8 084F0100	CALL ZipRepai.00415F18	
00401010	50	PUSH EAX	
00401011	E8 8C440100	CALL ZipRepai.004154A2	
00401016	CC	INT3	
00401017	CC	INT3	
00401018	CC	INT3	
00401019	CC	INT3	
0040101A	CC	INT3	
0040101B	CC	INT3	
0040101C	CC	INT3	
0040101D	CC	INT3	
0040101E	CC	INT3	
0040101F	CC	INT3	

_ Click the image below Search



_Go **GetVersionExA** and line 3 (She also dek subliminal bít What exactly when this API functions such bít soft through the code with **Visual C** + + to use the trial and exclude new exactly this function)



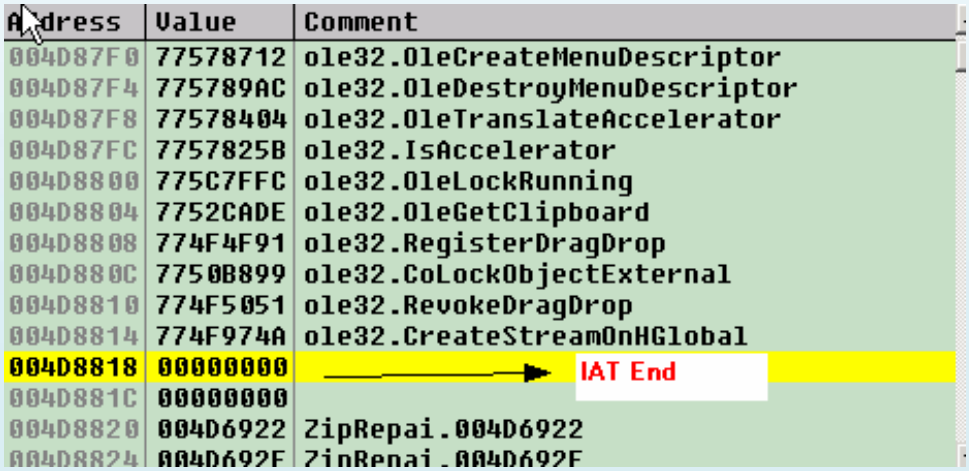
_ Double Click on, roll on top of this function and that the **OEP of** Target

Address	Hex dump	Disassembly	Comment
00432CAB	C3	RETN	
00432CAC	6A 60	PUSH 60	<=== This is OEP
00432CAE	68 B8A44F00	PUSH ZipRepai.004FA4B8	
00432CB3	E8 F4040000	CALL ZipRepai.004331AC	
00432CB8	8365 FC 00	AND DWORD PTR SS:[EBP-4], 0	
00432CBC	8D45 90	LEA EAX, DWORD PTR SS:[EBP-70]	
00432CBF	50	PUSH EAX	
00432CC0	FF15 44824D00	CALL NEAR DWORD PTR DS:[4D8244]	ZipRepai.00606C1E
00432CC6	C745 FC FEFFFFI	MOV DWORD PTR SS:[EBP-4], -2	
00432CCD	BF 94000000	MOV EDI, 94	
00432CD2	57	PUSH EDI	
00432CD3	6A 00	PUSH 0	
00432CD5	8B1D 48824D00	MOV EBX, DWORD PTR DS:[4D8248]	kernel32.GetProcessHeap
00432CDB	FFD3	CALL NEAR EBX	
00432CDD	50	PUSH EAX	
00432CDE	FF15 60824D00	CALL NEAR DWORD PTR DS:[4D8260]	ntdll.RtlAllocateHeap
00432CE4	8BF0	MOV ESI, EAX	
00432CE6	85F6	TEST ESI, ESI	
00432CE8	75 0D	JNZ SHORT ZipRepai.00432CF7	
00432CEA	6A 12	PUSH 12	
00432CEC	E8 56FFFFFF	CALL ZipRepai.00432C47	
00432CF1	59	POP ECX	
00432CF2	E9 8A010000	JMP ZipRepai.00432E81	
00432CF7	893E	MOV DWORD PTR DS:[ESI], EDI	
00432CF9	56	PUSH ESI	
00432CFA	FF15 D4834D00	CALL NEAR DWORD PTR DS:[4D83D4]	kernel32.GetVersionExA
00432D00	56	PUSH ESI	

_ We easily determine the position start and end of the table IAT. We need to define the parameters of this script to be used for quick Fix IAT

Address	Value	Comment
004D8000	00596EB6	ZipRepai.00596EB6
004D8004	005BE050	ZipRepai.005BE050
004D8008	00564D9D	ZipRepai.00564D9D
004D800C	00549F21	ZipRepai.00549F21
004D8010	005797D9	ZipRepai.005797D9
004D8014	00567DDA	ZipRepai.00567DDA
004D8018	00577461	ZipRepai.00577461
004D801C	005629E5	ZipRepai.005629E5
004D8020	005771AF	ZipRepai.005771AF
004D8024	0058A693	ZipRepai.0058A693
004D8028	005B6FED	ZipRepai.005B6FED
004D802C	005ADF3D	ZipRepai.005ADF3D
004D8030	005E78E9	ZipRepai.005E78E9
004D8034	0059329A	ZipRepai.0059329A

IAT Start



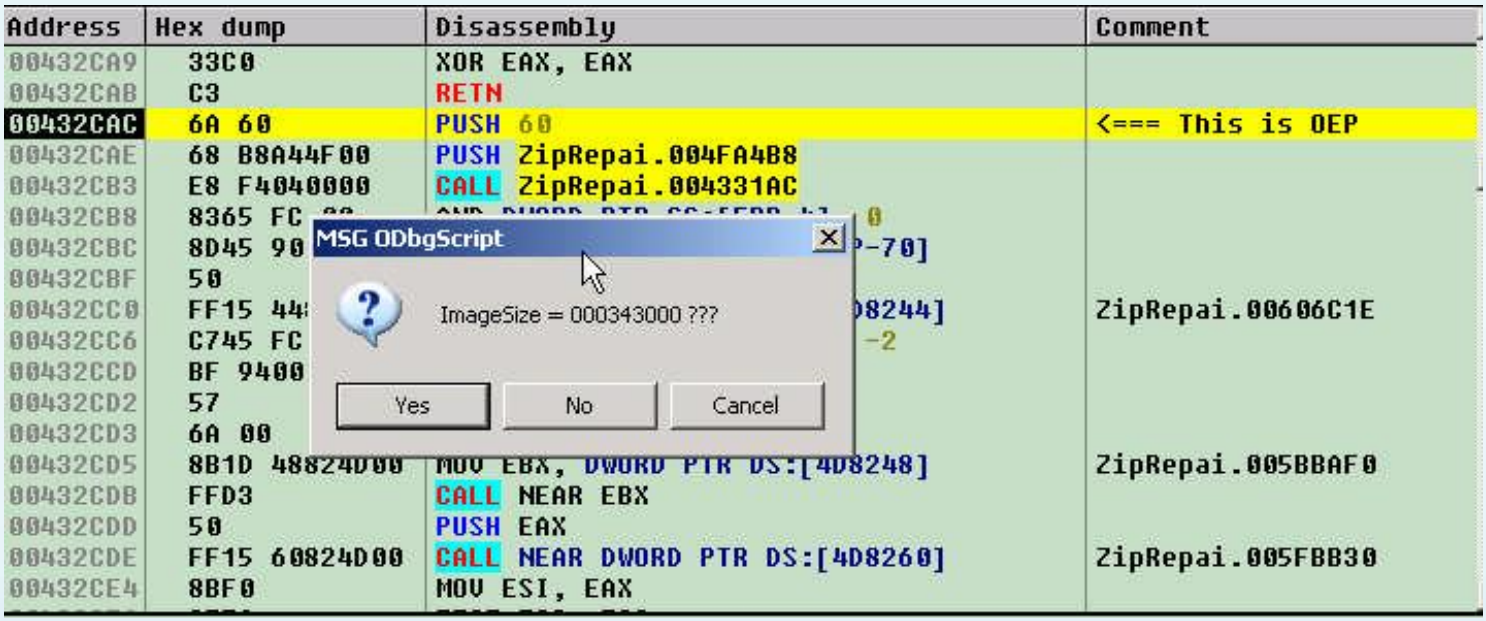
Address	Value	Comment
004D87F0	77578712	ole32.OleCreateMenuDescriptor
004D87F4	775789AC	ole32.OleDestroyMenuDescriptor
004D87F8	77578404	ole32.OleTranslateAccelerator
004D87FC	7757825B	ole32.IsAccelerator
004D8800	775C7FFC	ole32.OleLockRunning
004D8804	7752CADE	ole32.OleGetClipboard
004D8808	774F4F91	ole32.RegisterDragDrop
004D880C	7750B899	ole32.CoLockObjectExternal
004D8810	774F5051	ole32.RevokeDragDrop
004D8814	774F974A	ole32.CreateStreamOnHGlobal
004D8818	00000000	IAT End
004D881C	00000000	
004D8820	004D6922	ZipRepai.004D6922
004D8824	004D692F	ZipRepai.004D692F

V I D E-Fix IA & T E R I build an MP or

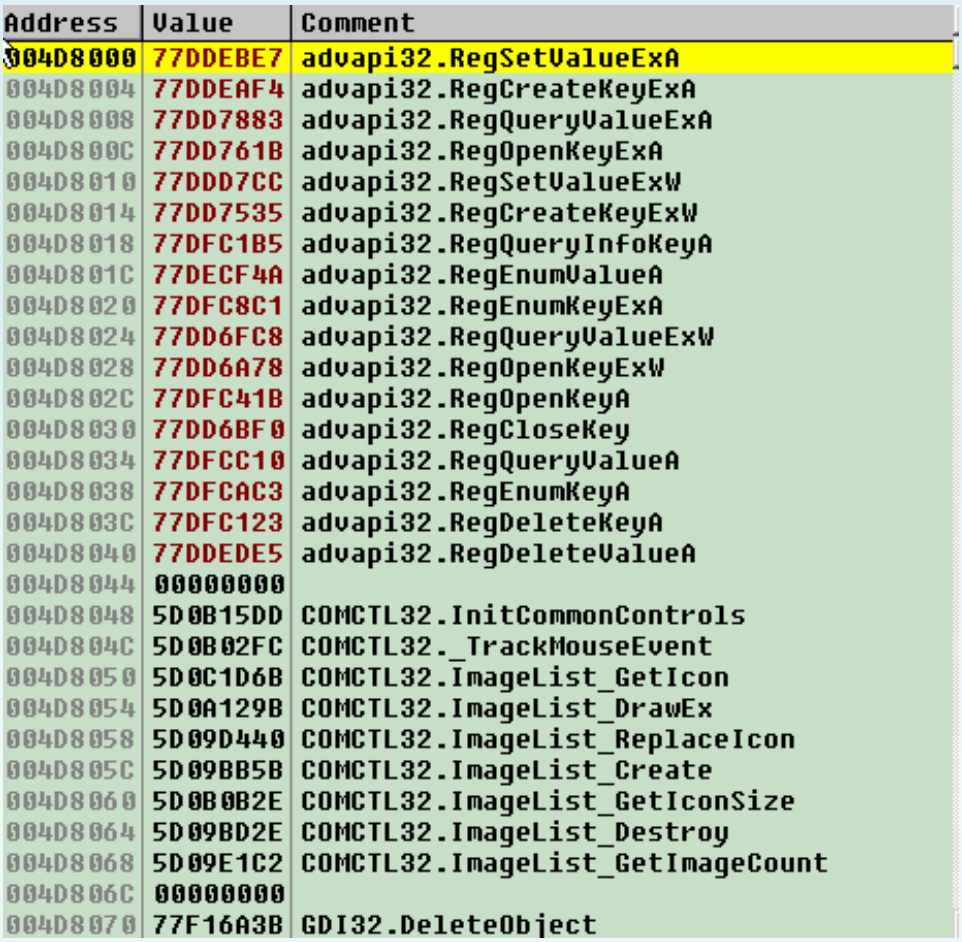
_ Once you've collected enough information to press **Ctrl + F2** and make italy chang nhucac steps **1 -> 5.** Then press **Shift + F9** 2 times and press **Ctrl + G** complete address **OEP = 432CAC** and we come

Address	Hex dump	Disassembly	Comment
00432CA9	33C0	XOR EAX, EAX	
00432CAB	C3	RETN	
00432CAC	6A 60	PUSH 60	<=== This is OEP
00432CAE	68 B8A44F00	PUSH ZipRepai.004FA4B8	
00432CB3	E8 F4040000	CALL ZipRepai.004331AC	
00432CB8	8365 FC 00	AND DWORD PTR SS:[EBP-4], 0	
00432CBC	8D45 90	LEA EAX, DWORD PTR SS:[EBP-70]	
00432CBF	50	PUSH EAX	
00432CC0	FF15 44824D00	CALL NEAR DWORD PTR DS:[4D8244]	ZipRepai.00606C1E
00432CC6	C745 FC FEFFFFI	MOV DWORD PTR SS:[EBP-4], -2	
00432CCD	BF 94000000	MOV EDI, 94	
00432CD2	57	PUSH EDI	
00432CD3	6A 00	PUSH 0	
00432CD5	8B1D 48824D00	MOV EBX, DWORD PTR DS:[4D8248]	ZipRepai.005BBAF0
00432CDB	FFD3	CALL NEAR EBX	
00432CDD	50	PUSH EAX	
00432CDE	FF15 60824D00	CALL NEAR DWORD PTR DS:[4D8260]	ZipRepai.005FBB30
00432CE4	8BF0	MOV ESI, EAX	

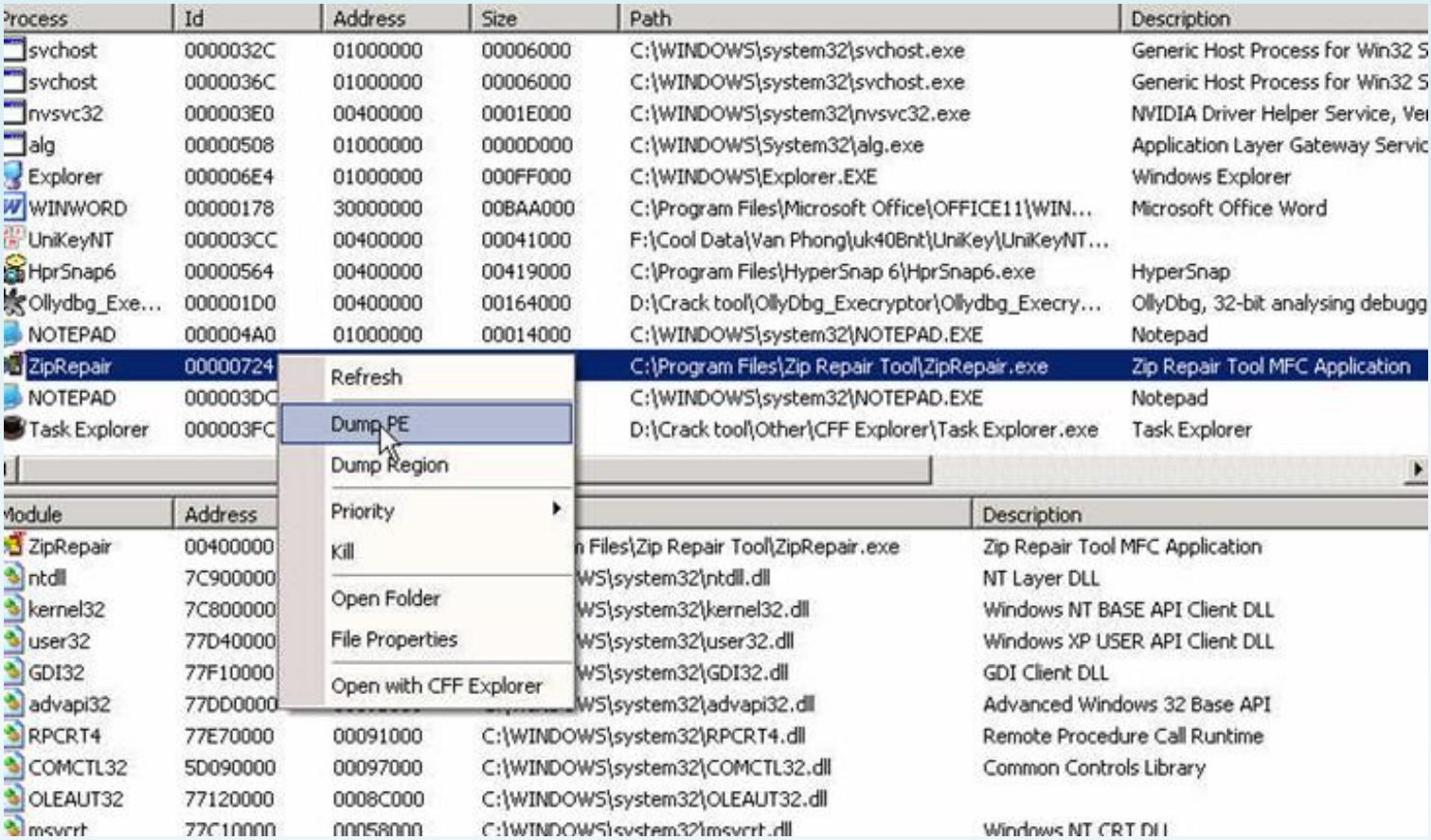
_ Set 1 BP in OEP and press Shift + F9 and again as we stop at the OEP. Remove the existing BP and started to run script automatically Fix IAT *(IAT sure to start and edit the script for End punctuality)*



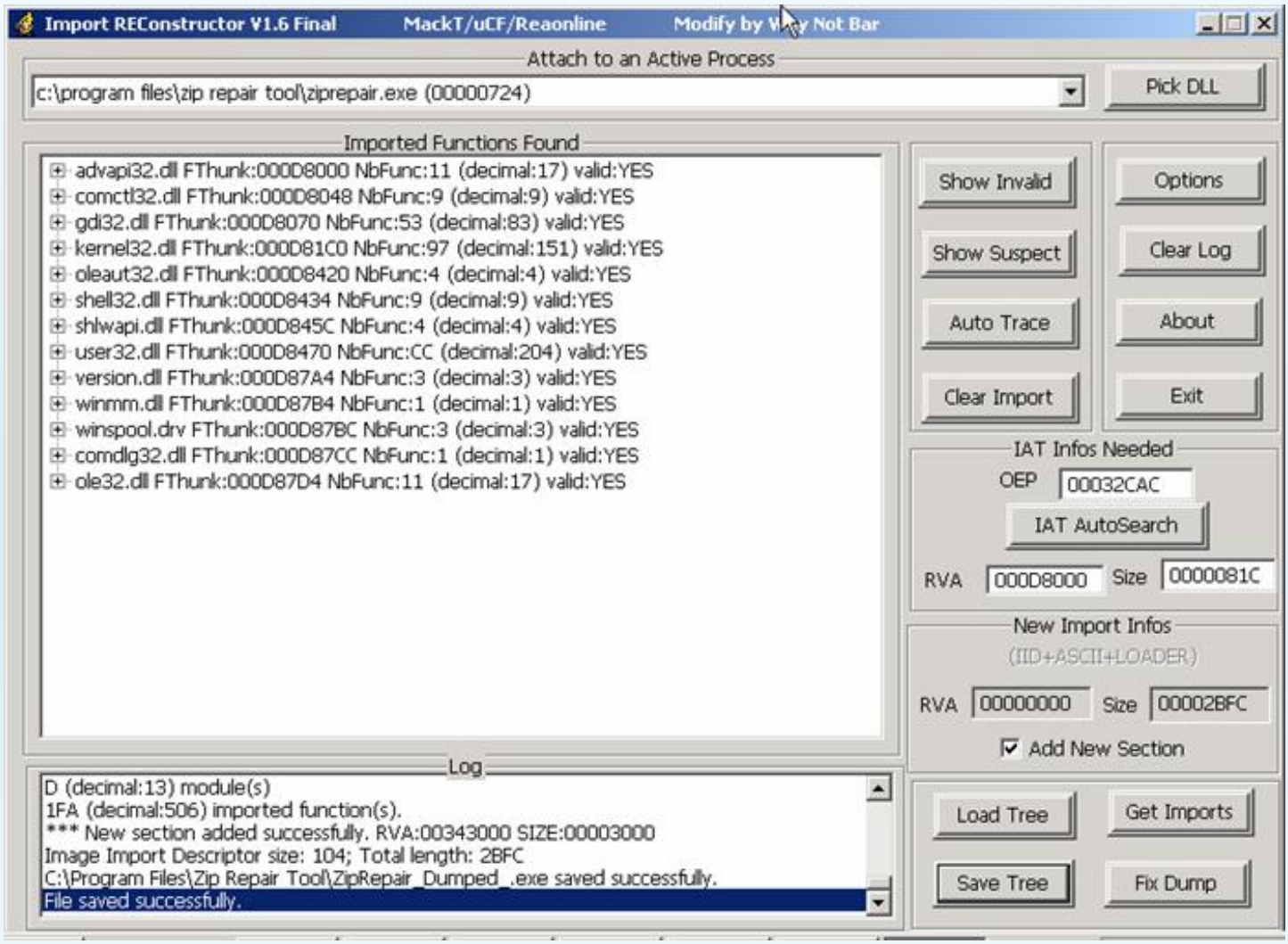
_ After waiting Script finished running you can complete the IAT



Full dump _ u i t h

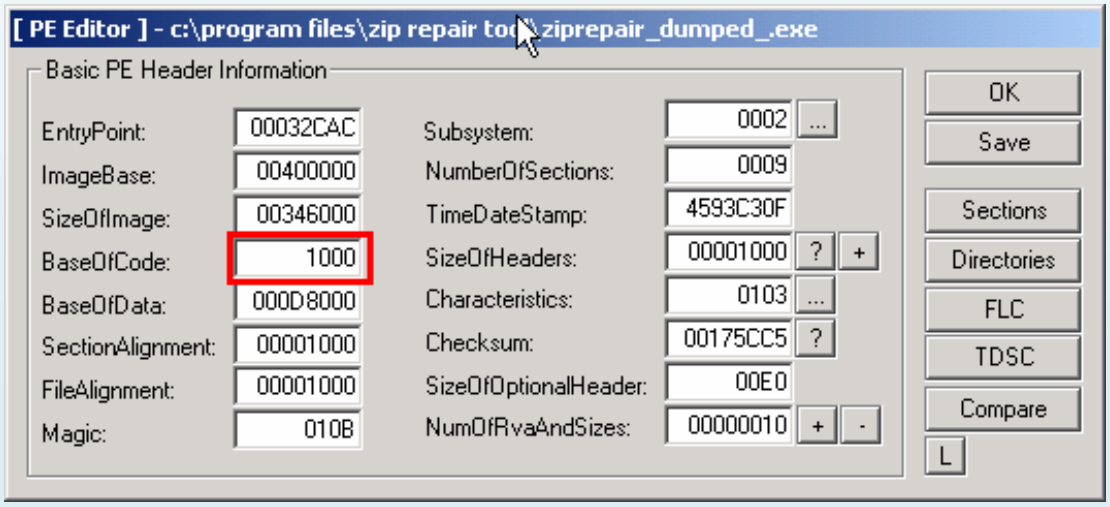


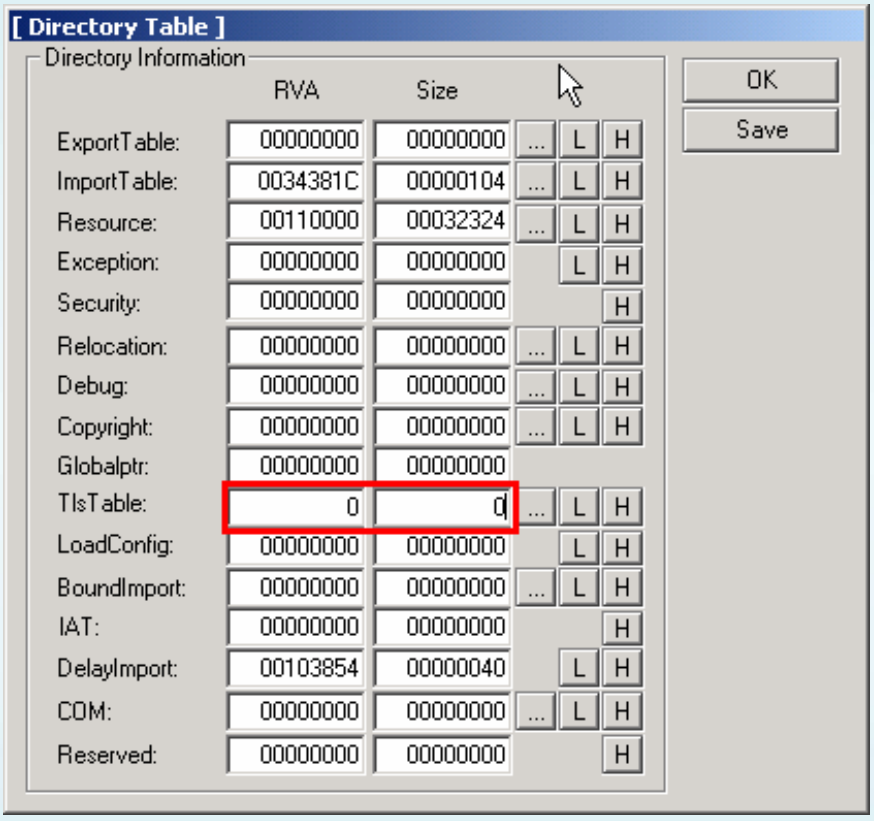
_ Open **ImportREC** up. Select **List** in **Process *ZipRepair.exe.* OEP** = Enter **00432CAC - 00,400,000 *(Imagebase)* = 00032CAC, *IAT AutoSearch*** Click -> ***Get Imports*** -> ***Show Invalid***



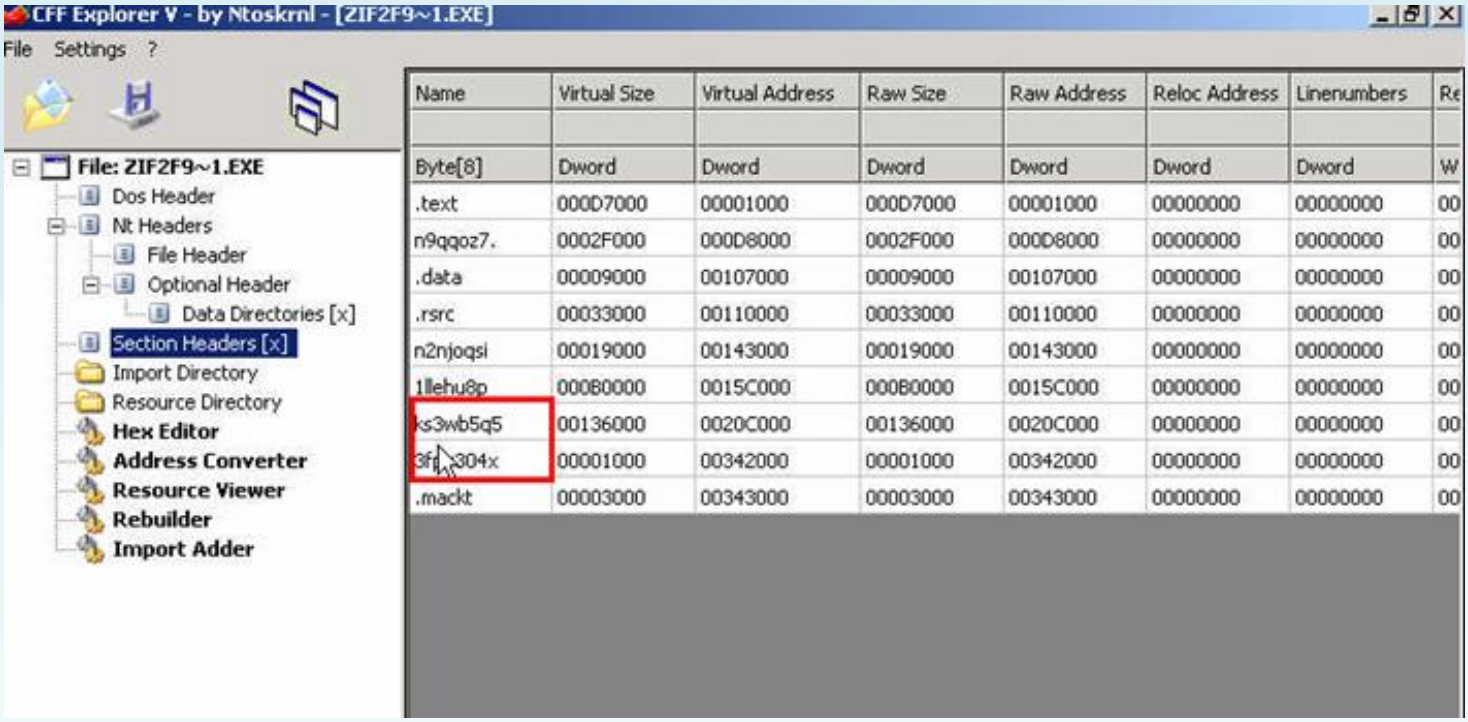
_ Hú complete .... I have any function ***Invalid*** ... OK, Click **Fix Dumped ZipRepair_Dumped_.exe** File and select Run ... khua khua try .. **Unpack** ... **Done!** Respectable finish ... This is also what i know the contact of **Trickyboy,** also want to patch or Keygen's meeting of the **dump.** Newbie She is just what i should start .... Hahaha.

_ Also forgot to load File **ZipRepair_Dumped_.exe LordPE** and Fix the nhusau





_ Save the run and try running nhuthuong, continue to load new File Save to **CFF**



Section 2 _Xoa with red circle and Save again.

G r l Ee TsF italy Ou the *Co mpu t e r A _ of e l, e mbi Z o, M A B oo nb italy, H o acnh, Nina B e, e ki nman o*

w ar, Z o i D e ux, M e r c, li ght to nix o e, i T r o c kyb italy, Takad a iamidi ot, of the e n t e n handi ... and italy

o u!

The N h a n a g, Day 2 7 th a n g2 20 0 7

W h o t italy N Bar

+ + CopyMemII Debugblocker Nanomites

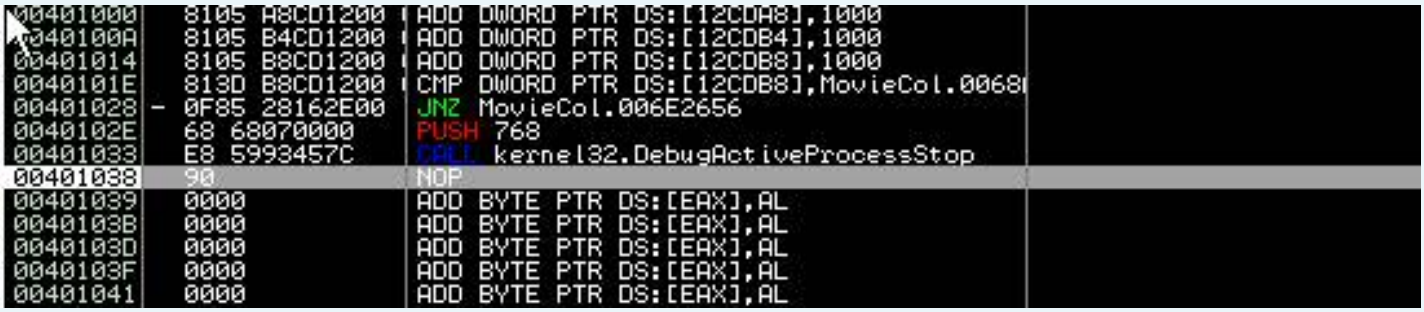
SoftWare : **Movie Collector 4.4**
Packed : ***Armadillo 4.xx - CopyMemII + + Debugblocker Nanomites***
Crack Tool *1.* ***OllyDBG by hacnho.***
2. LordPE Deluxe 1.4-by yoda
3.Import REConstructor 1.6 Final
4. ArmInline 0.71
Author : **Why Not Bar**

Target With this he has Benina tut but then use Tool ArmTools03f.exe. In fact is the video or very intuitive to Newbie as they can quickly be practice (Thanks to Benina). But using gas Tool trouble when they use it for meat mạn allowed this month in Tool ArmInline 0.71. Please say just before they set out a method to unpack with soft ***Nanomites*** not be repaired tut about his Benina because it is too then edit! OK. Only start time?

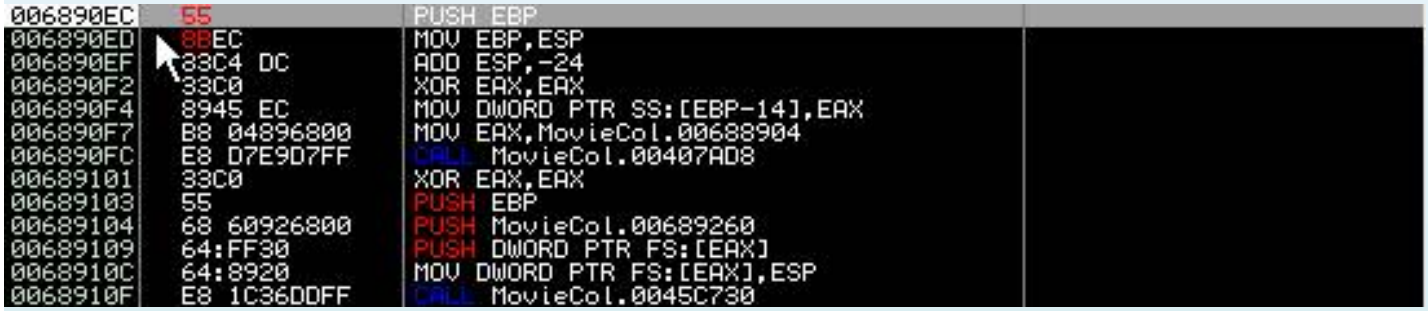
On the treatment *CopyMemII + Debugblocker* According to the default Benina to know you do. If you do not know Uncle can find tut by Hacnho or your are to see more. Here they work fast because the mainly *Nanomites Fix.*

Target _Load to Olly

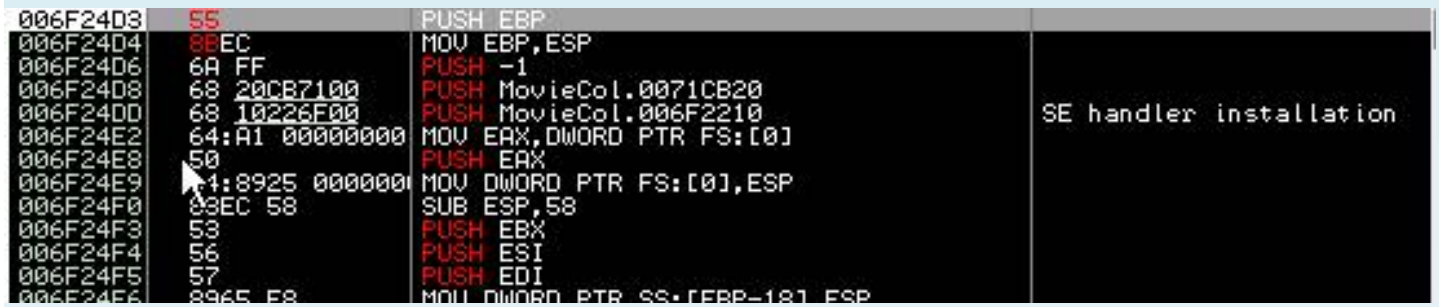
_Chay Scripts (with the tut) by Benina he wrote it or. Running Script finished one here



_Mo Add more windows Attach PID, F9, F12, and the following patch



_Mo LordPE, Full dump, Next we Fix IAT. Close the window is working with the Child and Father Restart. Running Scripts "Armadillo Detach from Client." Running Script Done Attach one PID, F9, F12 to us here.

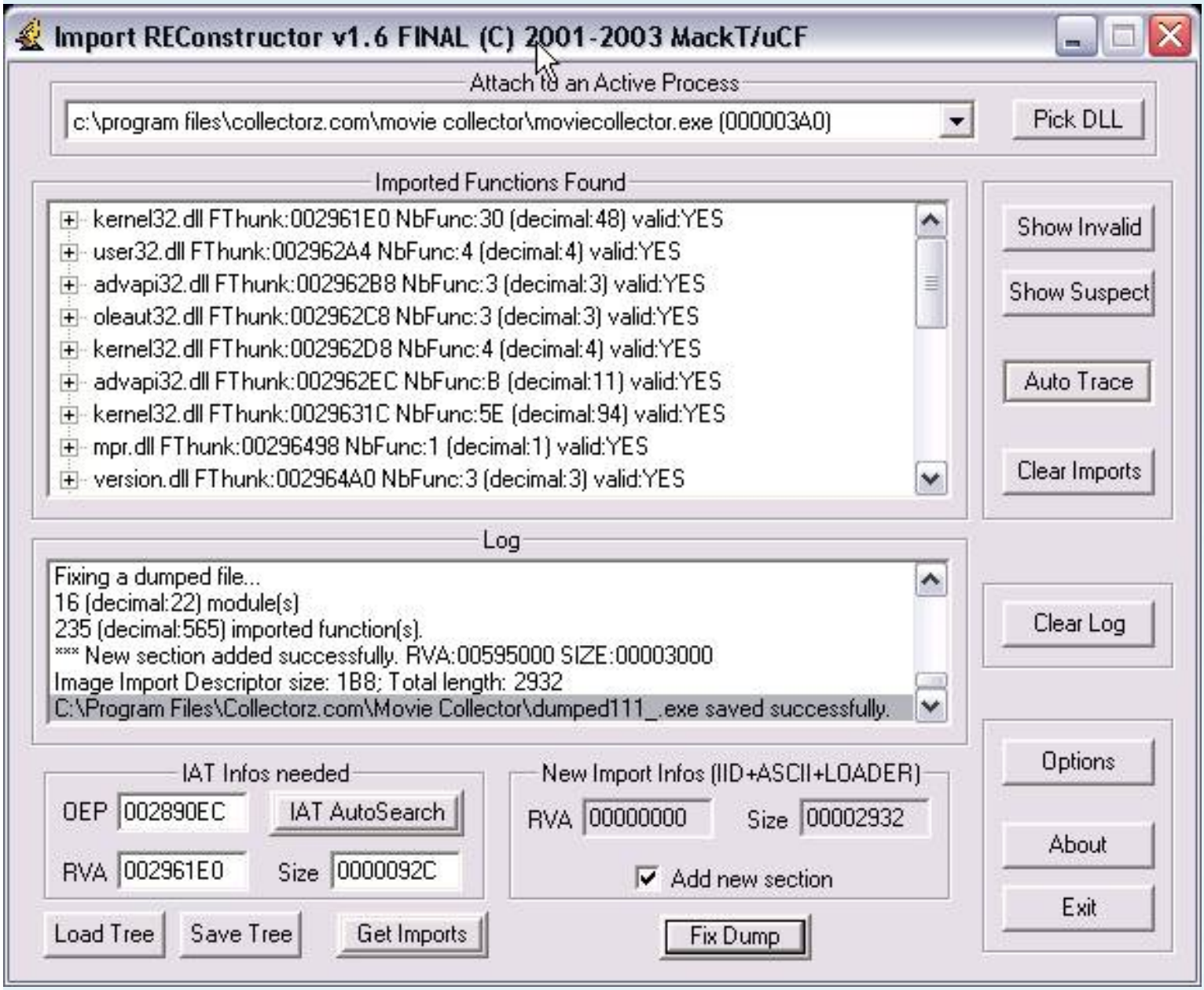


_Chay Scripts "Armadillo Standard unpack" (with the tut)

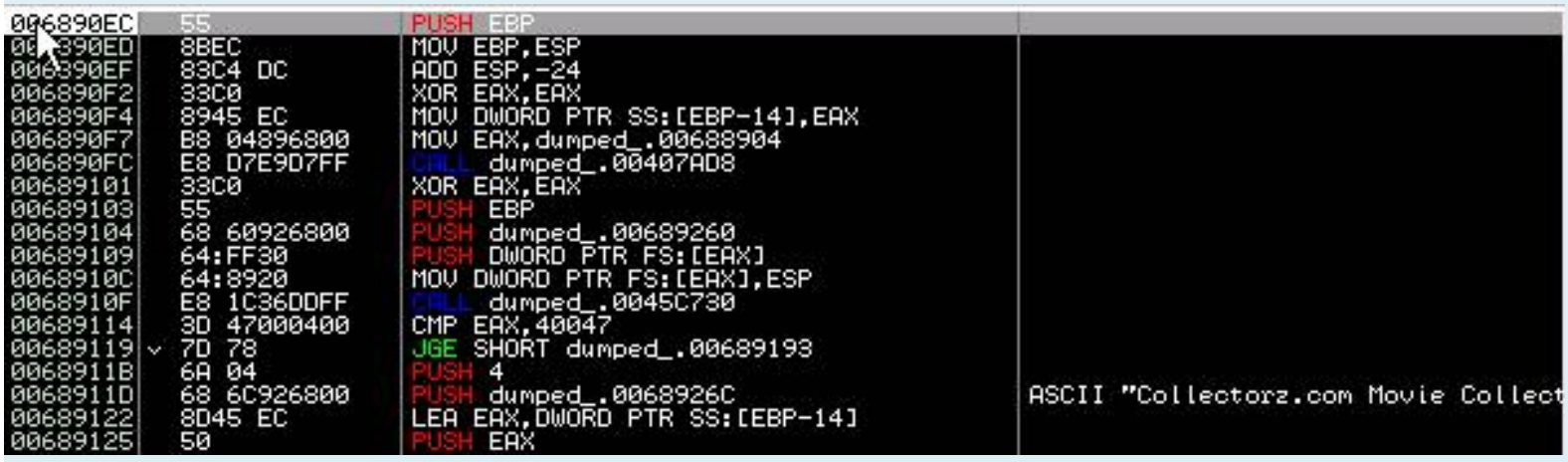
_Ta Have IAT Start:
006961E0 ntdll.RtlDeleteCriticalSection 7C91188A

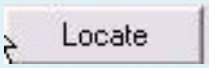
IAT and end: 00696B0C 7C8097F4 kernel32.MulDiv

Len: 92C
_ Open ImportREC and enter parameters

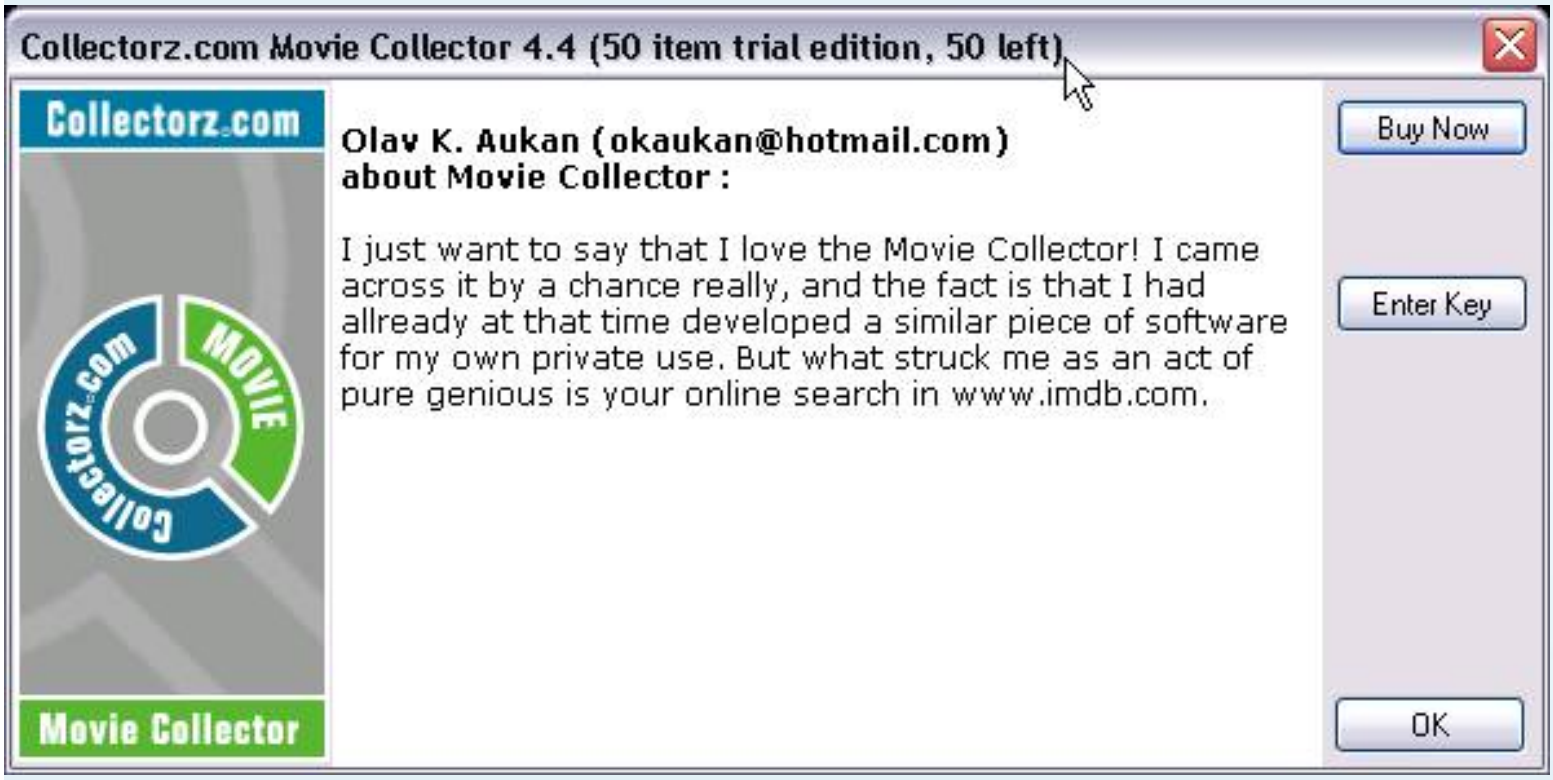


run try running lickerish. Done CopymemII and now to the main ***Fix*** ***Nanomites.*** Close all windows Olly. dumped.exe Load File to Olly.

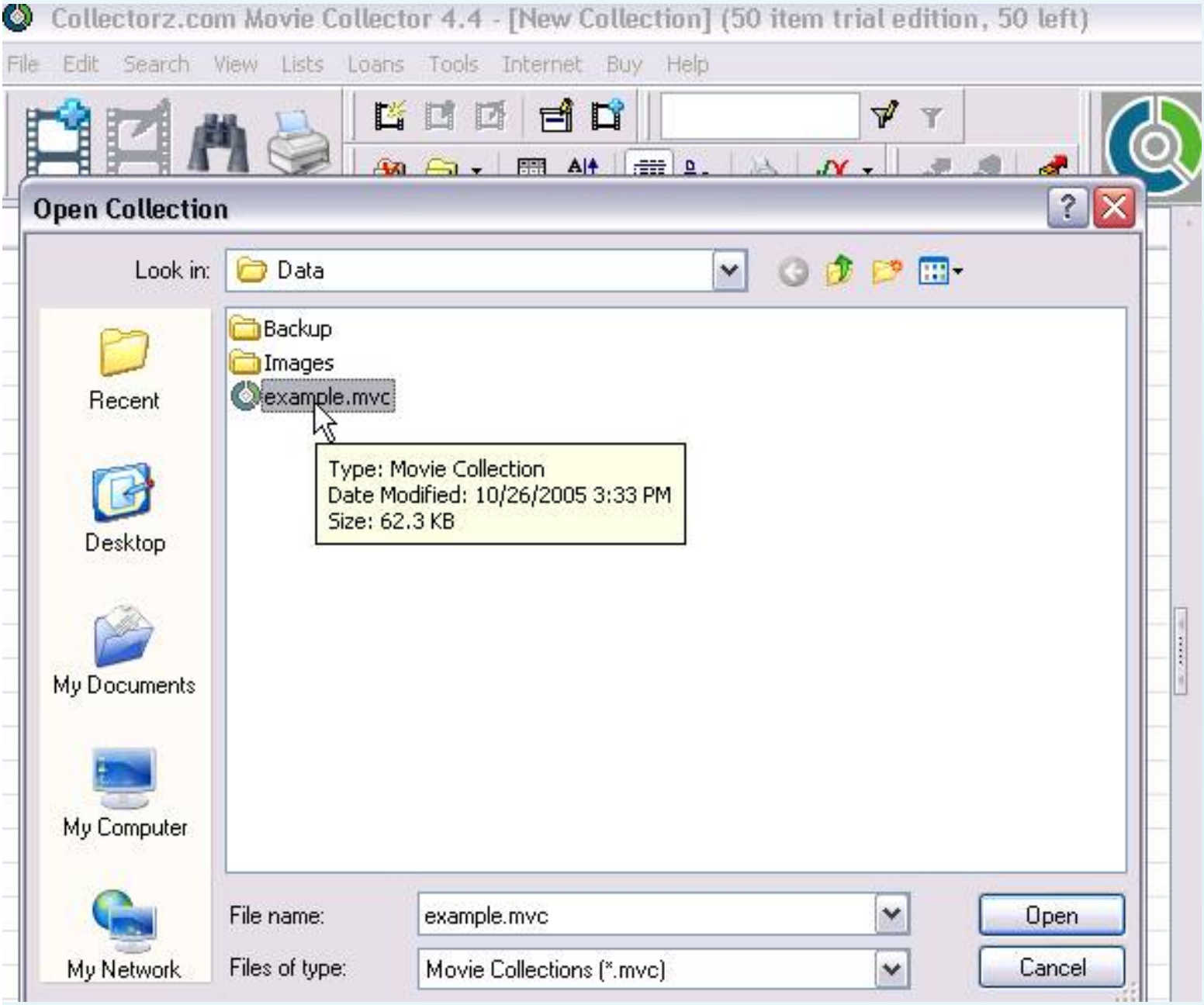


_Mo ArmInline 0.71 and enter the number and click the button 

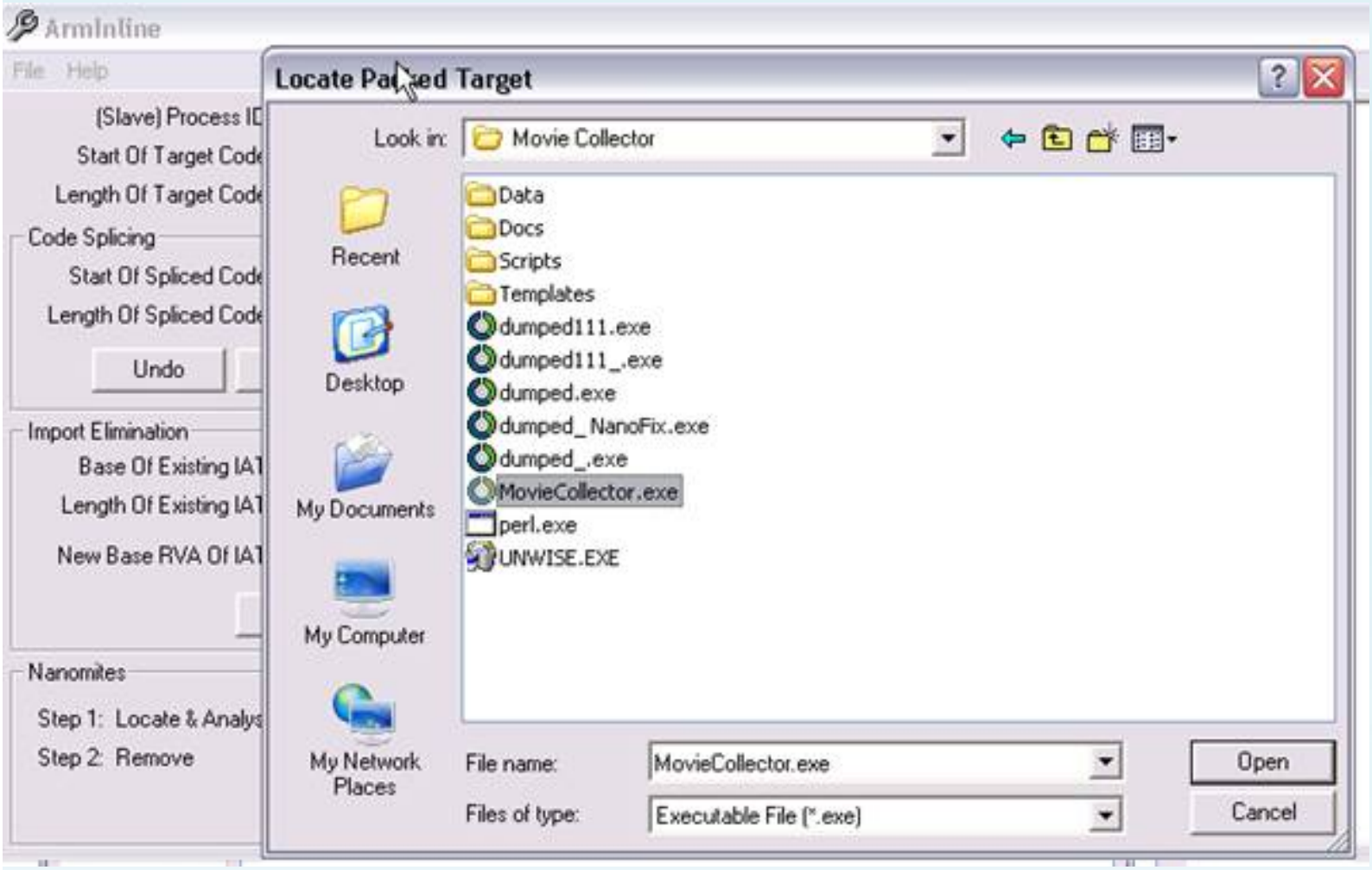
the NAG



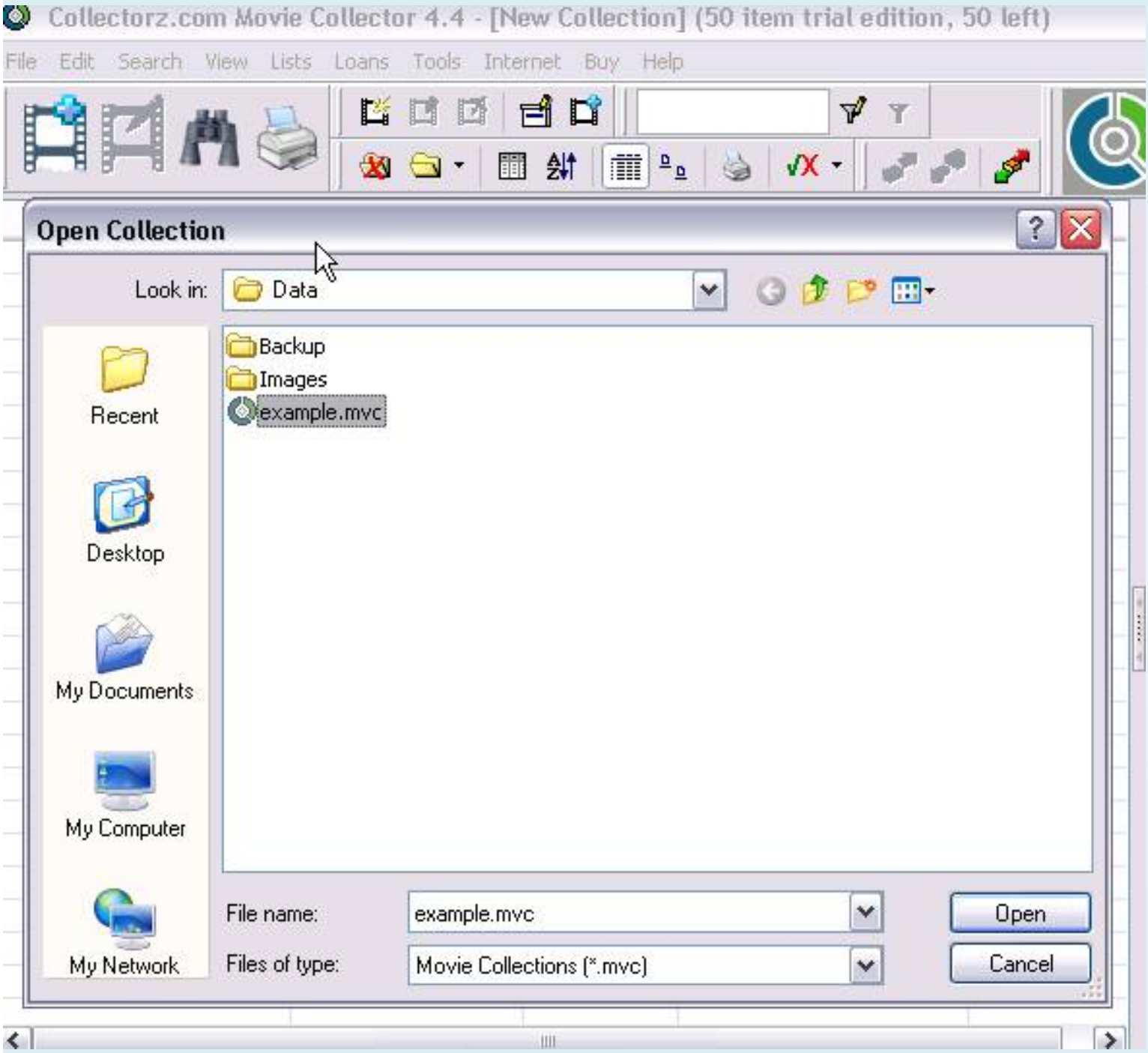
_Nhap OK, File -> Open and select the following:



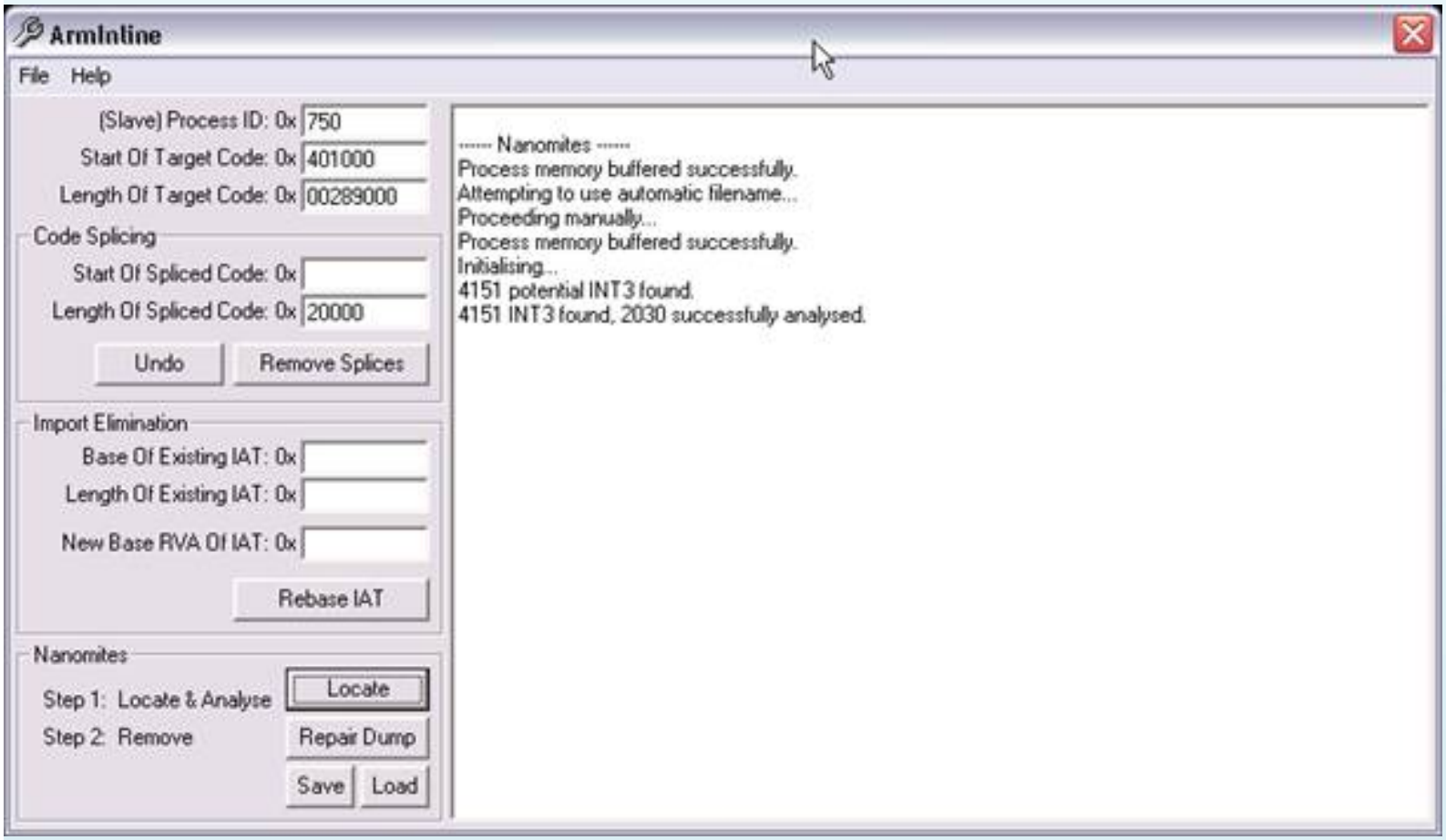
_Sau It, select MovieCollector.exe



1 _Lai does the Nag again, and OK Select File -> Open and select the following

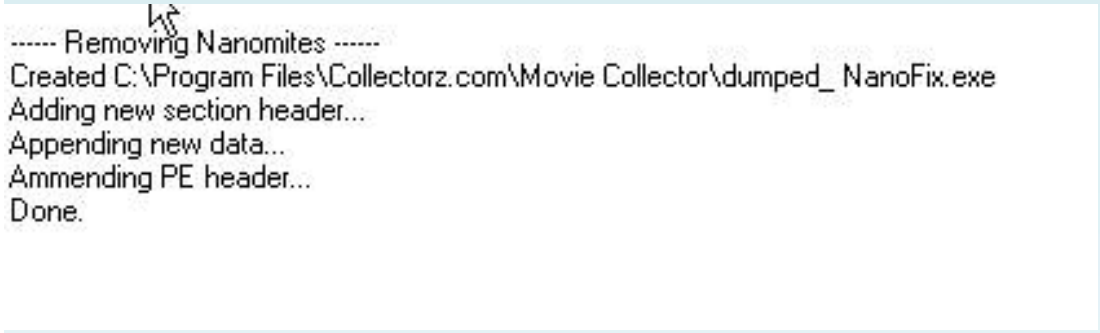


_Doi Finished running you will see the following:



_Tiep By pressing buttons 

and dumped_.exe



_Hehe That's it! Gently than when ArmTools03f.exe. As they use the tool is also provided unpack Done is OK then, but you do it. Test, run good ==> unpack Done! !!!!!
CFF Explorer _Dung remove excess Section have new file storage 3.76Mb

Written by Why Not Bar

Armadillo 4.xx - Standard Protection

SoftWare : **My Screen Recorder Pro 2:22**

Copyright by: Copyright © 2005 DeskShare Incorporated. All rights reserved.

Download : **www.deskshare.com / download / msrp / msrp.exe**

Packed : ***Armadillo* 4.xx - *Standard Protection***

Language : Microsoft Visual C + + 7.0

Crack Too l: *1.OllyDBG by hacnho.*

2. LordPE Deluxe 1.4-by yoda

3.Import REConstructor 1.6 Final

4th D *iablo2oo2's Universal Patcher 2:10*

Author : **Why Not Bar**

Features

Record your desktop screen activity to AVI, Windows Media Format (WMV) or Flash.

Generate and distribute self-contained and self-playable executables.

Create very small Flash and WMV recordings.

Make WMV recordings that are designed to be played from a streaming server.

Record the entire desktop, a desktop region or a specified window.

Create time lapse screen recordings.

Organize your screen recordings in easily accessible folder shortcuts.

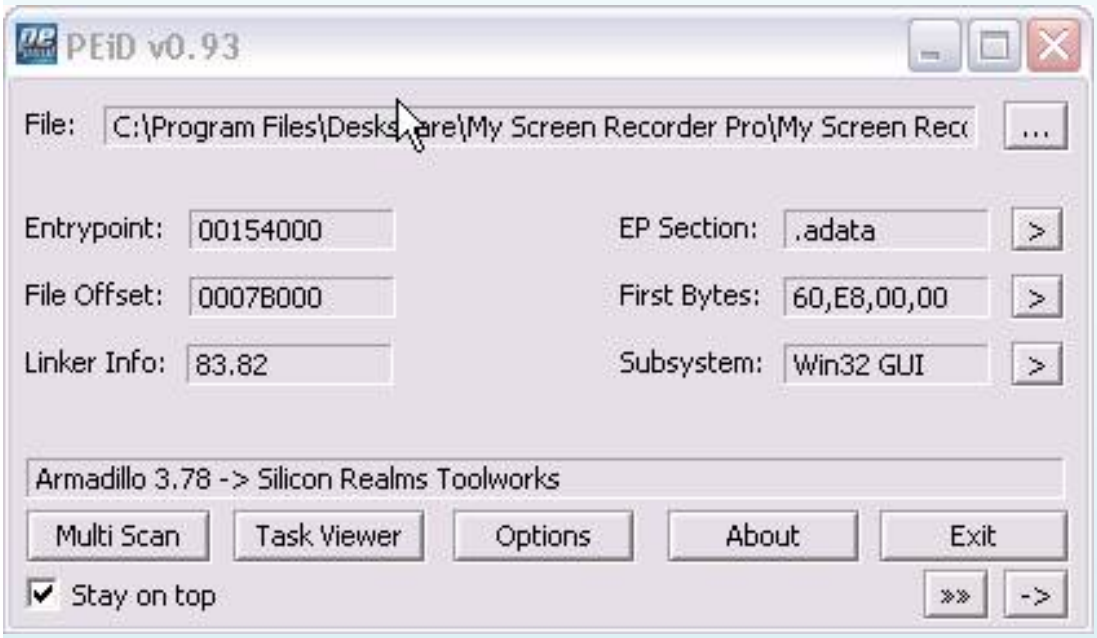
Fine-tune frame rate, audio quality, compressors and more.

Although the Hacnho is 1 of the series of professional thằng tut Arma from basic to advanced very detailed. But truly say that to read that the meaning of deep deep inside the series of tut Hacnho force you to have the 1 something to understand. If Newbie accept new chung must have the time, from the idea that children write a tut for Newbie. I say so because they also belong to the group Newbie perennial stop! As is Newbie should tut and writing tasks also extremely Newbie. I look forward to

the university in this area to bypass them.

I. Information:

_Dau First, we see Scan Soft What form this pack:



_Thay Pack with the *Armadillo.* At first, not read a series of positive or tut Hacnho, he met with Soft Pack *Armadillo* which is now run concern. Sợ ghê yet but now it seems much more confident and active search for it meat.

Soft _Run to find out some information to know which way to Crack and we are as follows:

At Nag reminder

There are the words unregistered

Click the Record 1 Nag reminder xài is only 30 days

The mission we are removing 2 Nag reminder, the words disappear unregistered

II - Cracking:

Soft In this we have 2 approaches to treat it as follows:

1. Do not unpack, we need to create 1 loader to patch it in Memory always. This is quite effective when we are not unpack.
2. Unpack and crack normal

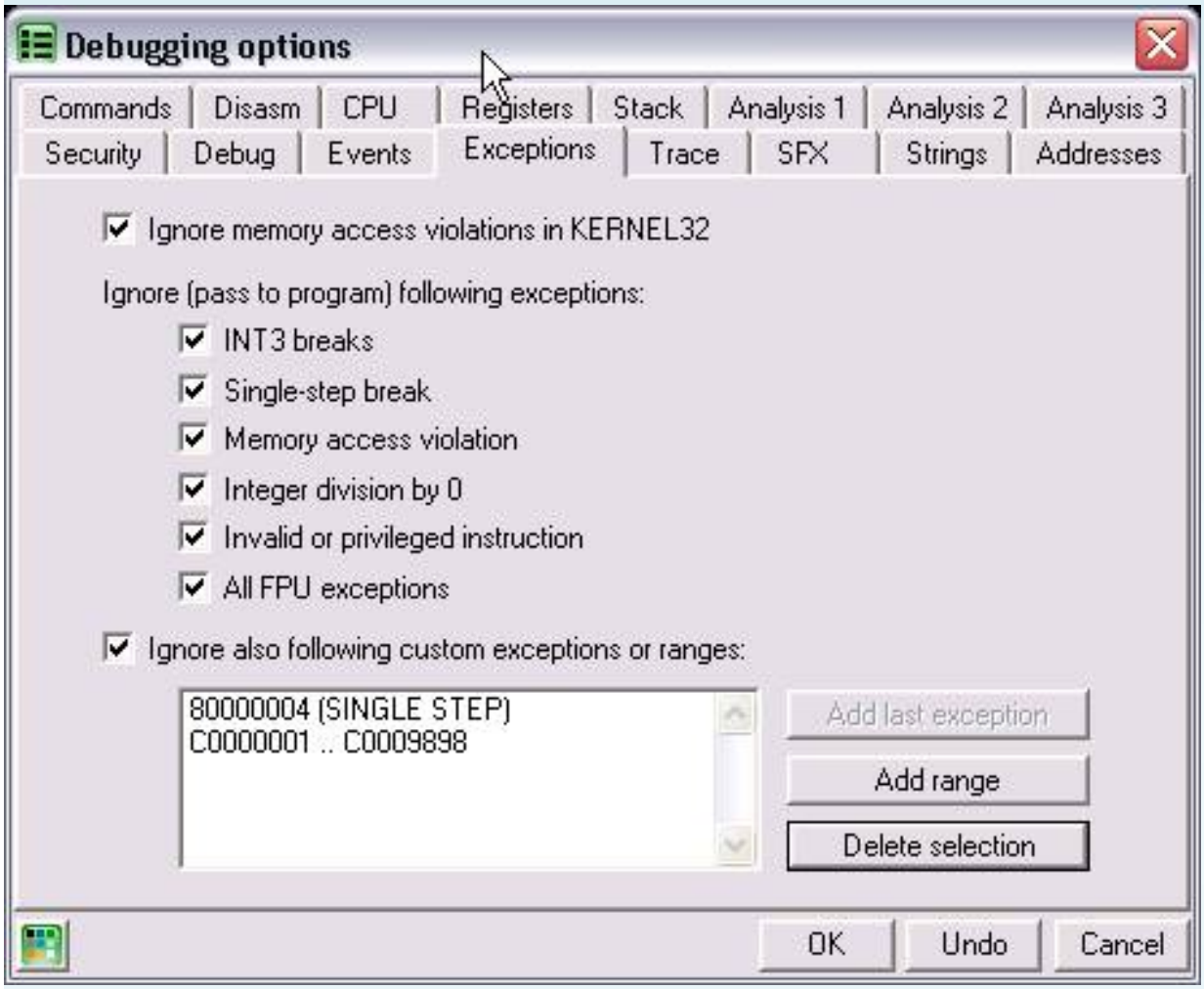
And they would look salt presented in 2 ways to Uncle new start looking more comprehensive.

1. Create Loader with DUP:

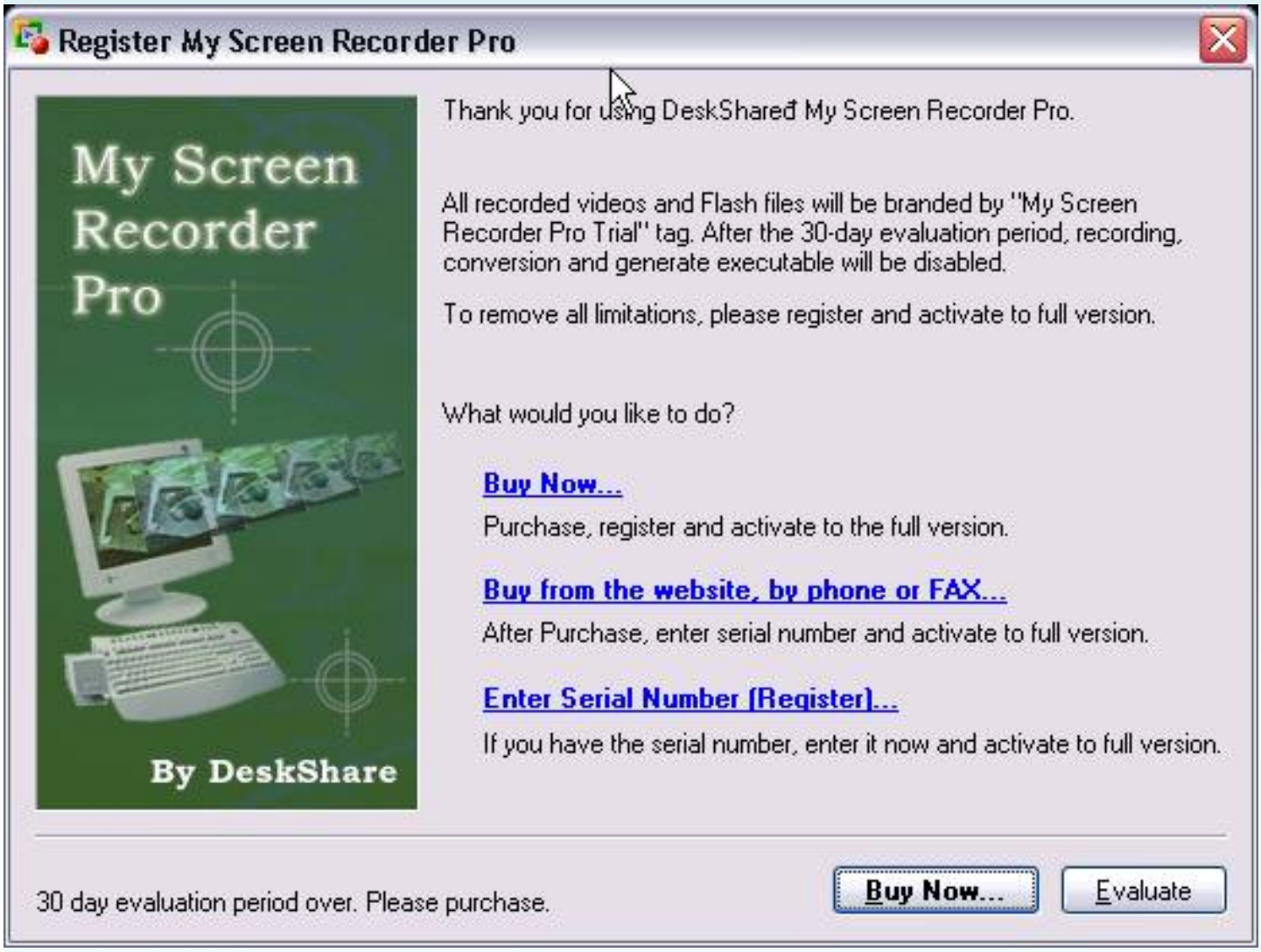
_ OK! gioLoad target is to olly

```
Address   Hex dump          Disassembly                          Comment
00554000    60              PUSHAD
00554001    E8 00000000     CALL My_Scree.00554006
00554006    5D              POP EBP
00554007    50              PUSH EAX
00554008    51              PUSH ECX
00554009    0FCA            BSWAP EDX
0055400B    F7D2            NOT EDX
0055400D    9C              PUSHFD
0055400E    F7D2            NOT EDX
00554010    0FCA            BSWAP EDX
00554012  v EB 0F           JMP SHORT My_Scree.00554023
00554014    B9 EB0FB8EB     MOV ECX,EBB80FEB
00554019    07              POP ES                               Modification of segment register
0055401A    B9 EB0F90EB     MOV ECX,EB900FEB
0055401F    08FD            OR CH,BH
00554021  v EB 0B           JMP SHORT My_Scree.0055402E
00554023    F2:             PREFIX REPNE:                        Superfluous prefix
00554024  ^ EB F5           JMP SHORT My_Scree.0055401B
00554026  ^ EB F6           JMP SHORT My_Scree.0055401E
00554028    F2:             PREFIX REPNE:                        Superfluous prefix
00554029  v EB 08           JMP SHORT My_Scree.00554033
0055402B    FD              STD
0055402C  ^ EB E9           JMP SHORT My_Scree.00554017
0055402E    F3:             PREFIX REP:                          Superfluous prefix
0055402F  ^ EB E4           JMP SHORT My_Scree.00554015
```

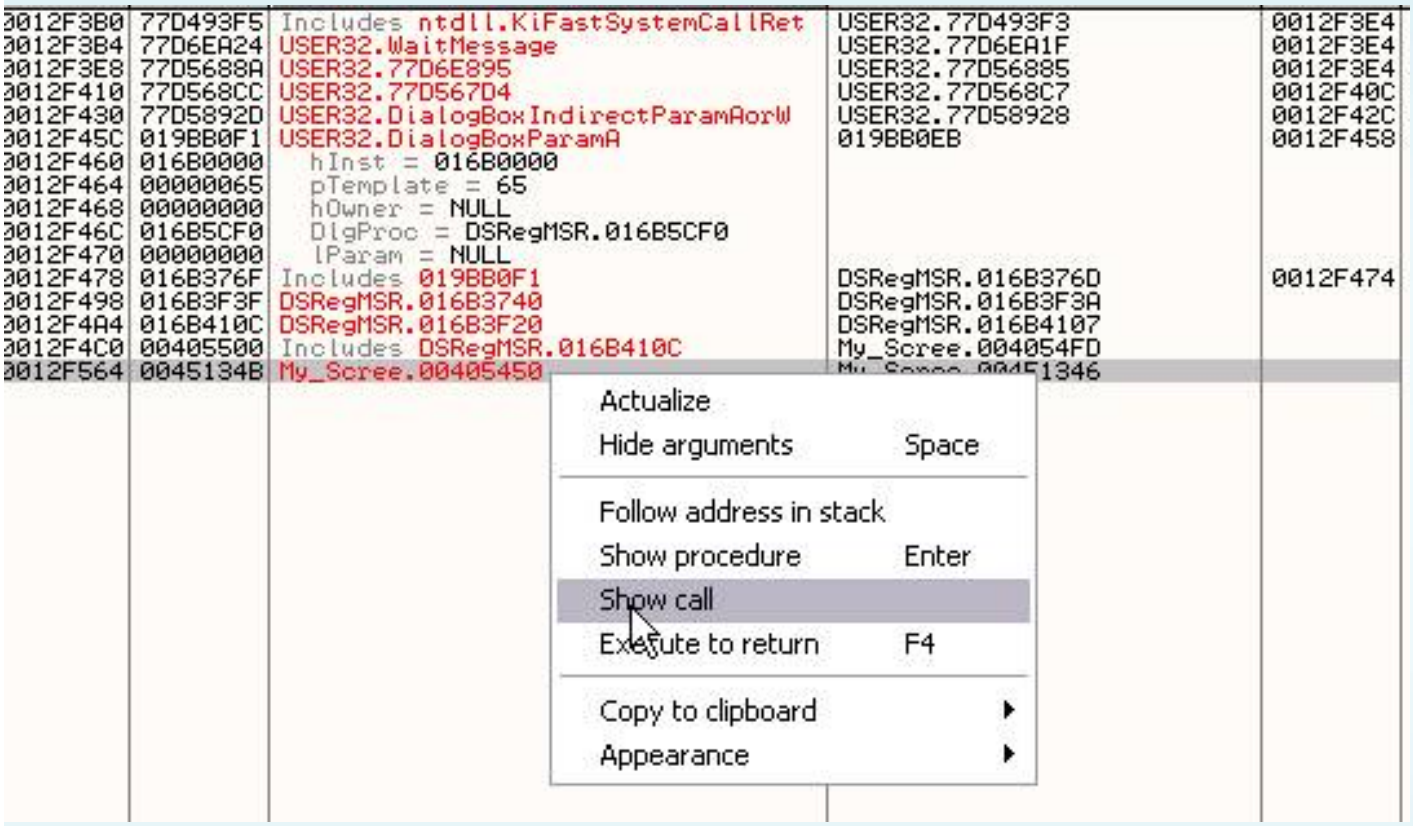
_ You should be configured as follows:



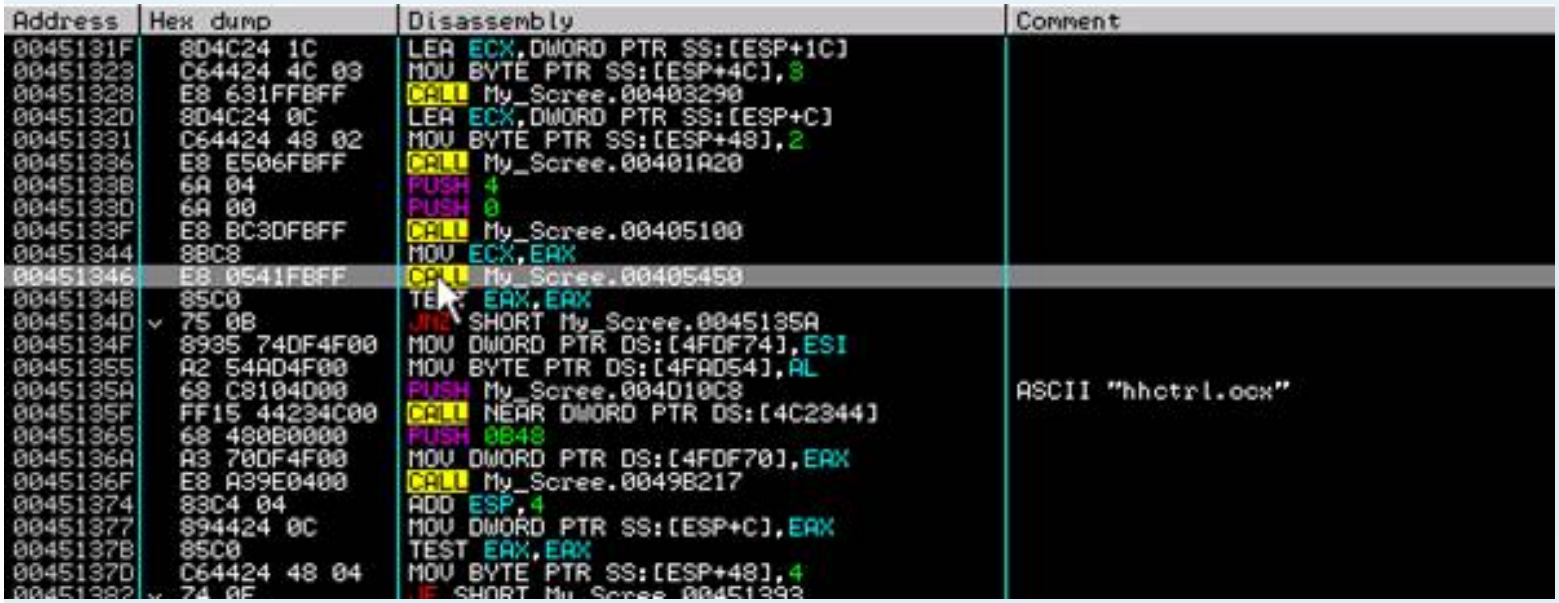
_ Press Shift + F9, appear Nag reminder, you click Evaluate drilling jump.



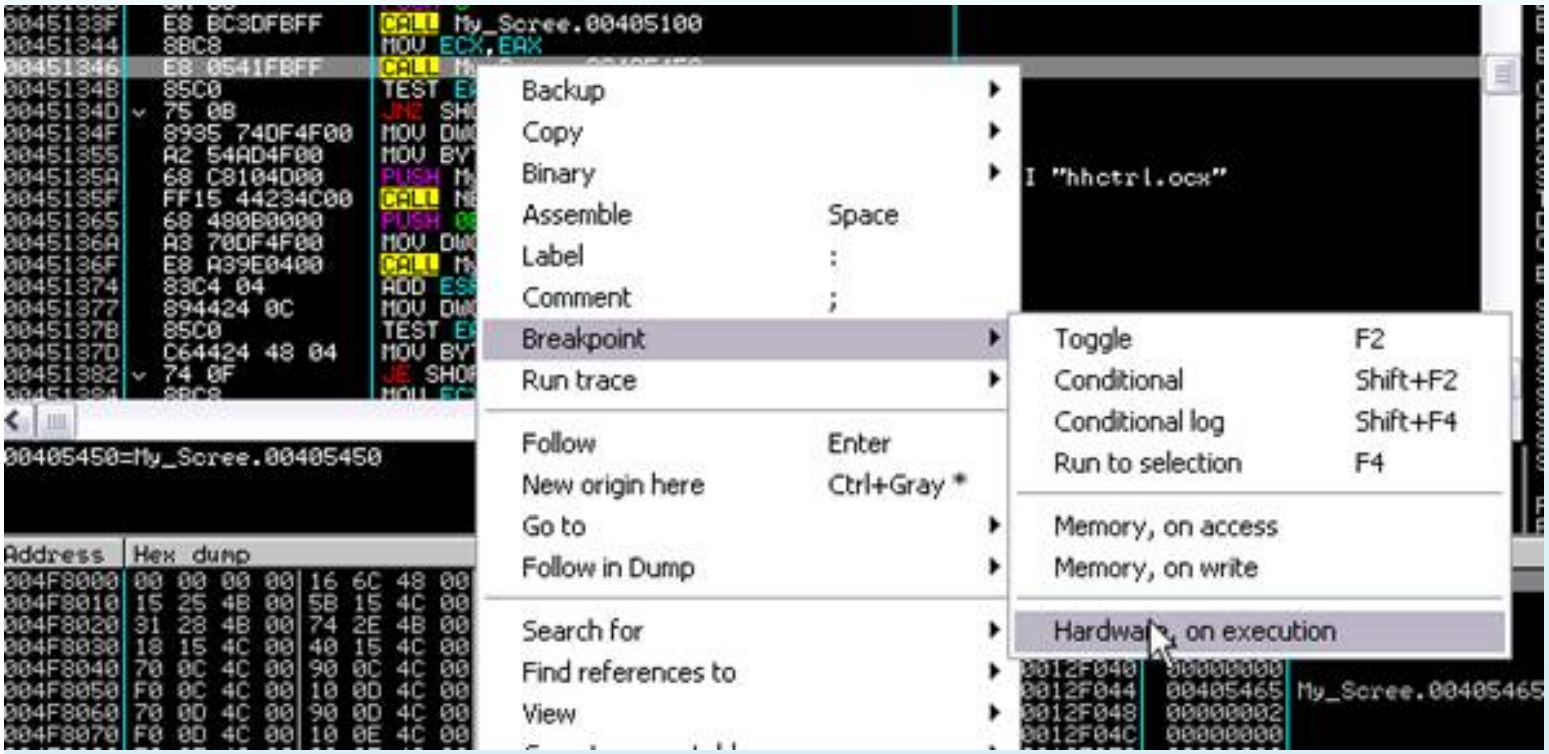
_ Back to Olly press F12, Alt + M, select the address and click to select Show Call.



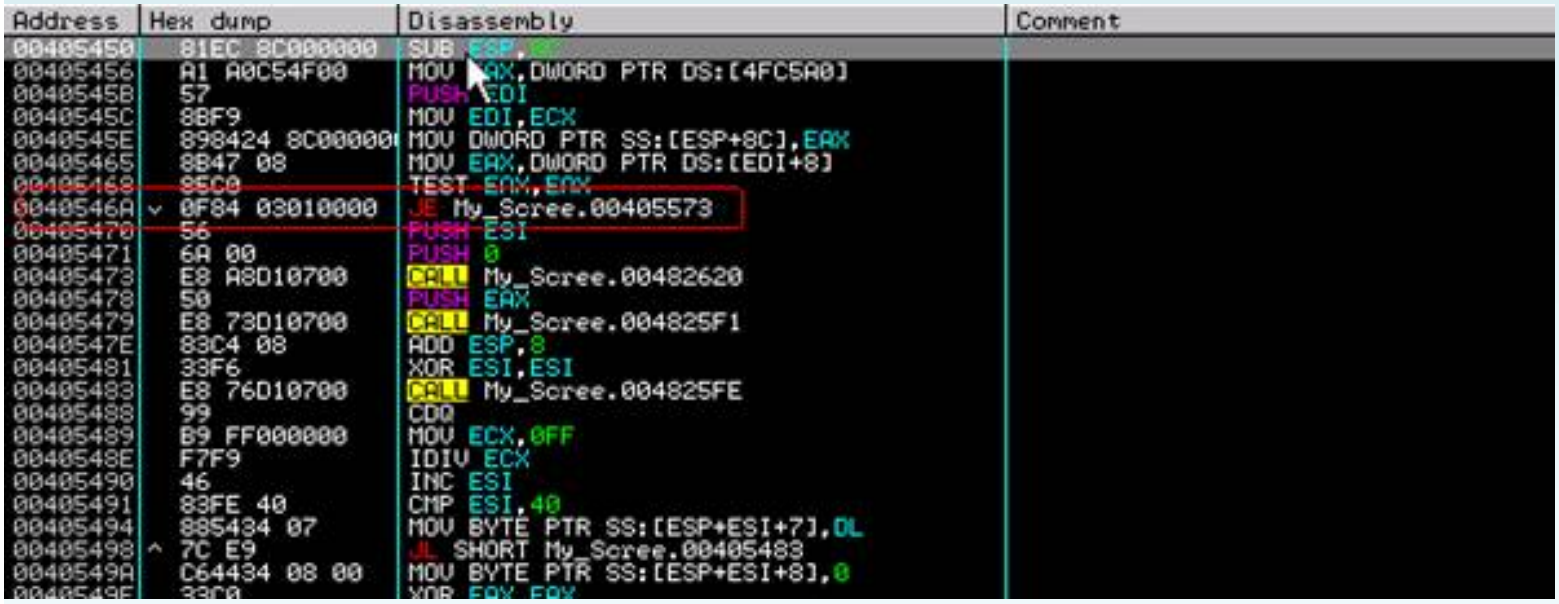
_ I come:



_ You Set Hardware Breakpoint 1 at 00451346



_Ctrl + F2, Shifl + F9, to the address we've set Breakpoint, press F7 to the function of this Call. The goal is to jump to address the Nag and patch it.



_Nhin The code Make sure you know you have to do it ha! Meaning the code as follows

00405468 85C0 TEST EAX, EAX <== Check have not registered

0040546A 0F84 03010000 JE My_Scree.00405573 <== down code inspection and springiness Nag if not registered.

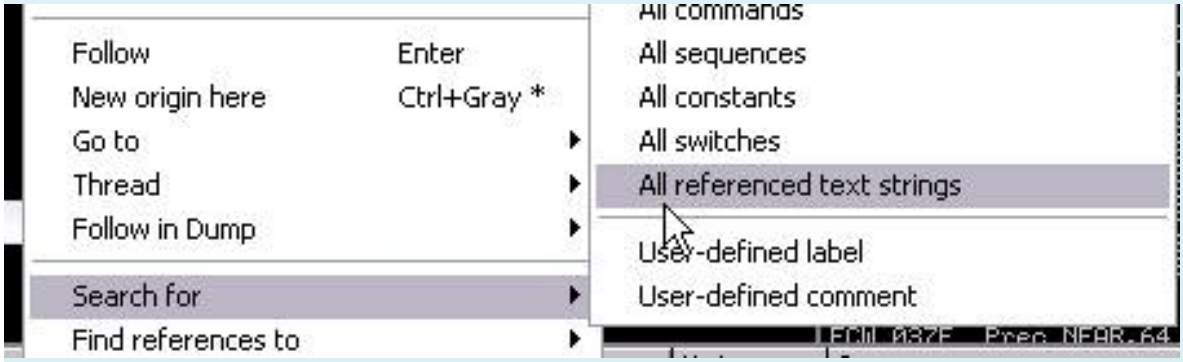
To jump from the Nag prompt and very simple one press Ctrl + E to:

0F84 to 0F85

Once the patch is as follows:

0040546A / 0F85 03010000 JNZ My_Scree.00405573

_Click Mouse to select the image below



_go chains are looking for *"unregistered"* and you find the series as follows:

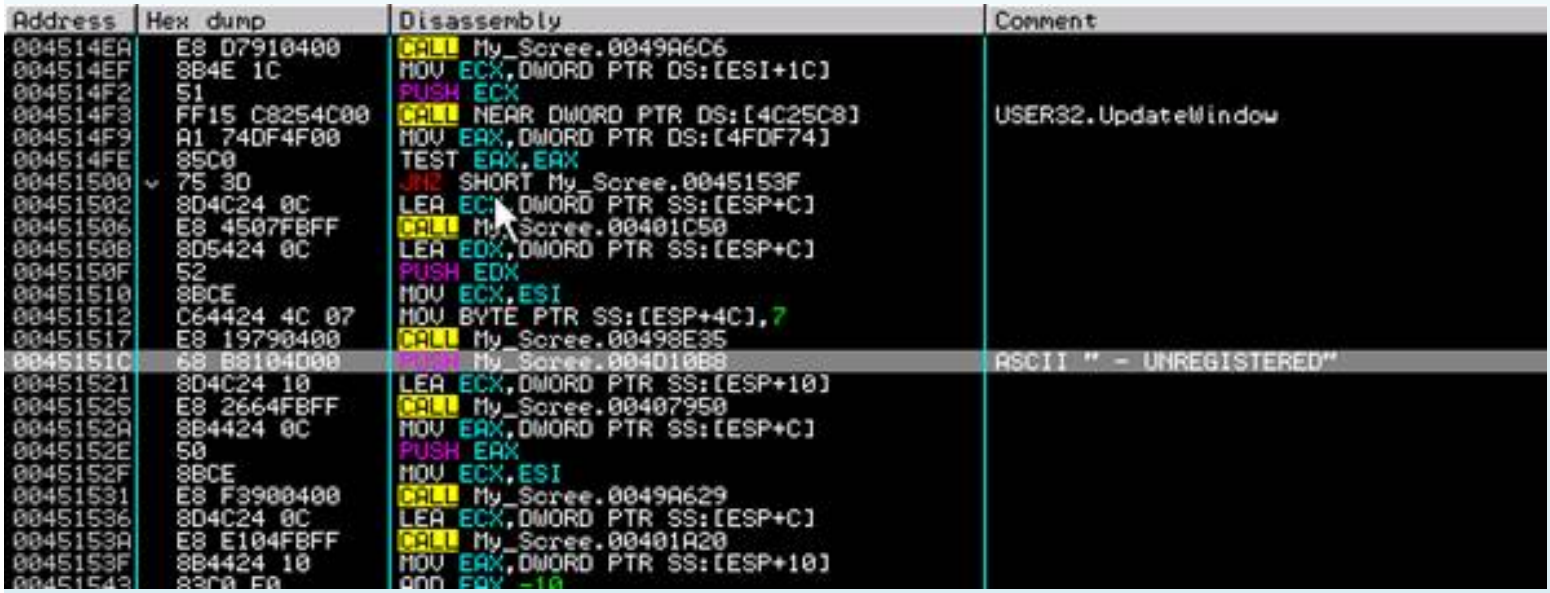
004127E8 68 E06F4C00 PUSH My_Scree.004C6FE0; ASCII "My Screen Recorder Pro - unregistered"

00418E95 68 E06F4C00 PUSH My_Scree.004C6FE0; ASCII "My Screen Recorder Pro - unregistered"

00422F88 68 A4974C00 PUSH My_Scree.004C97A4; ASCII "unregistered - Trial Version"

0045151C 68 B8104D00 PUSH My_Scree.004D10B8; ASCII "- unregistered"

_Dia Only red line is the first we need. Make sure you ask more? Why do you know exactly the same. Nothing subliminal all, Try a few other Dek is only ***0045151C*** **is OK. Double Click on one** ***0045151C*** **here**



_Các Do not you see? On the orders it has 1 kìa dance! Code on the understanding you can simply

considered TEST you have not registered, if not to insert the text "- unregistered." You jump over it for not implementing code insert Text is OK.

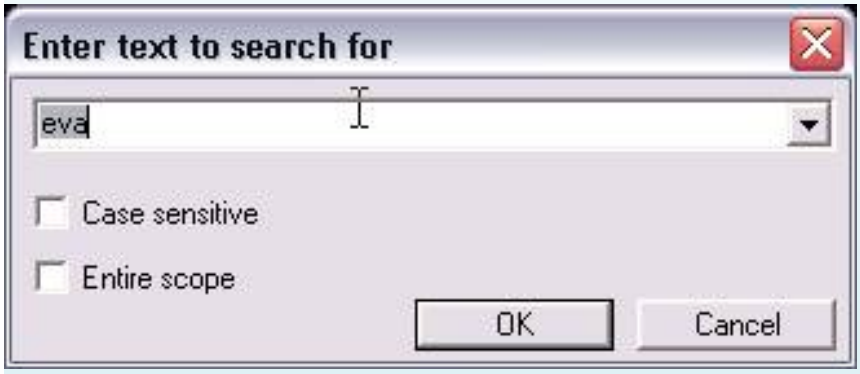
00451500 / 75 3D JNZ SHORT My_Scree.0045153F

Patch's

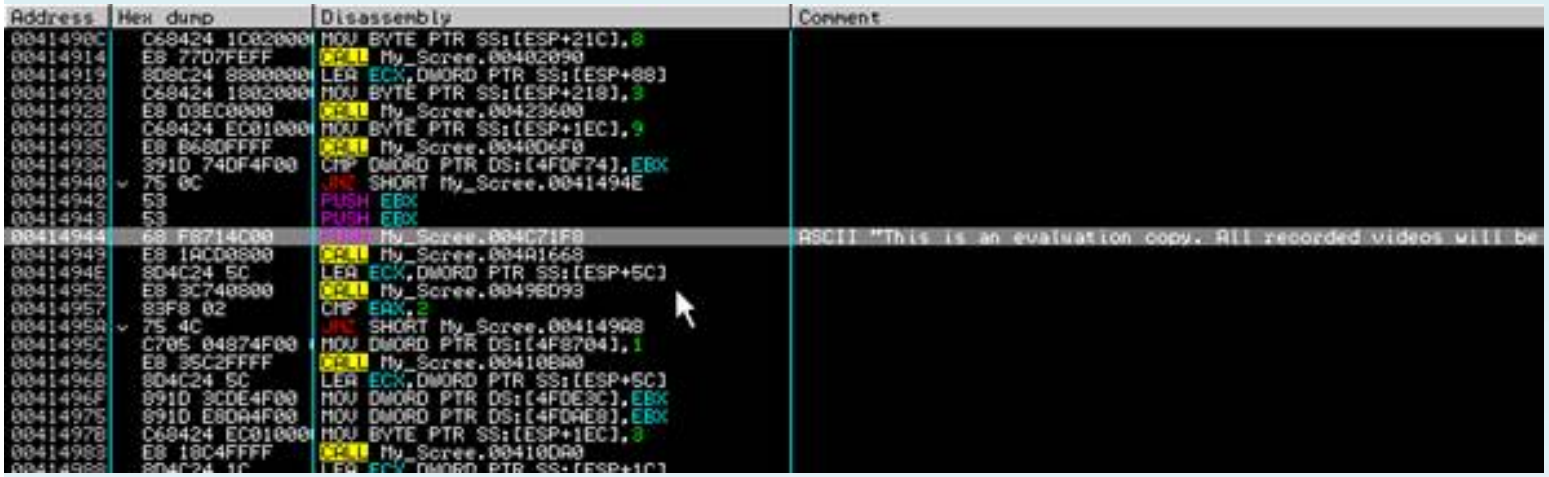
00451500 / 74 3D JE SHORT My_Scree.0045153F

_Nhung Analysis at the beginning we have a 1 Nag reminder when more pressing Record

_Alt + R to back window and type Text Search



_Nhan OK to me here



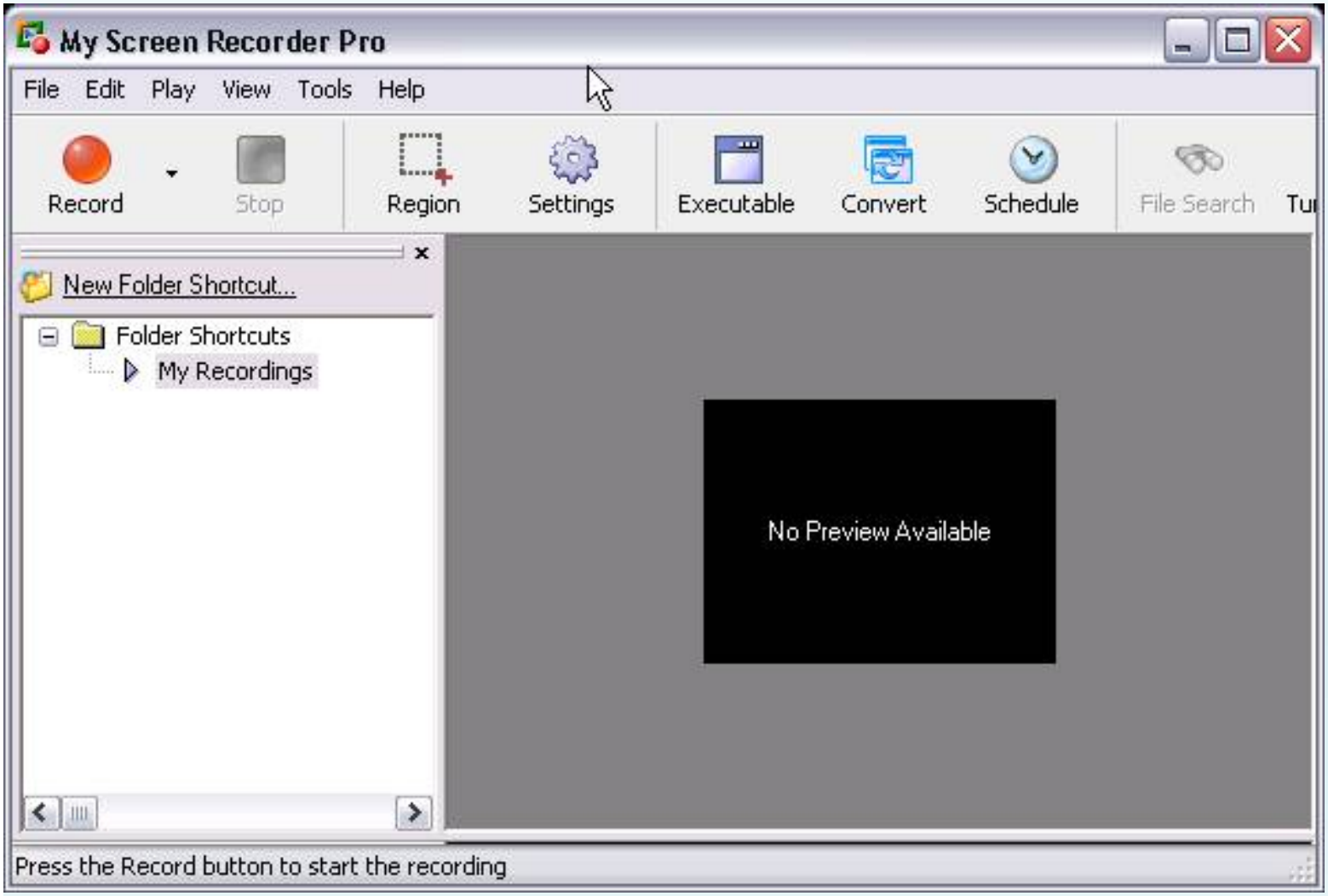
_He He! Above it has orders jumped reference! This code does the comparison you are not registered, if not jump NAG reminder. We need to do is to understand it as we have subscribed to from springiness NAG reminder. Say the long lines, but the implementation is as follows:

00414940 / 75 0C JNZ SHORT My_Scree.0041494E

Patch's

00414940 / 74 0C JE SHORT My_Scree.0041494E

_Toi You press F9 a new view. Everything has been resolved



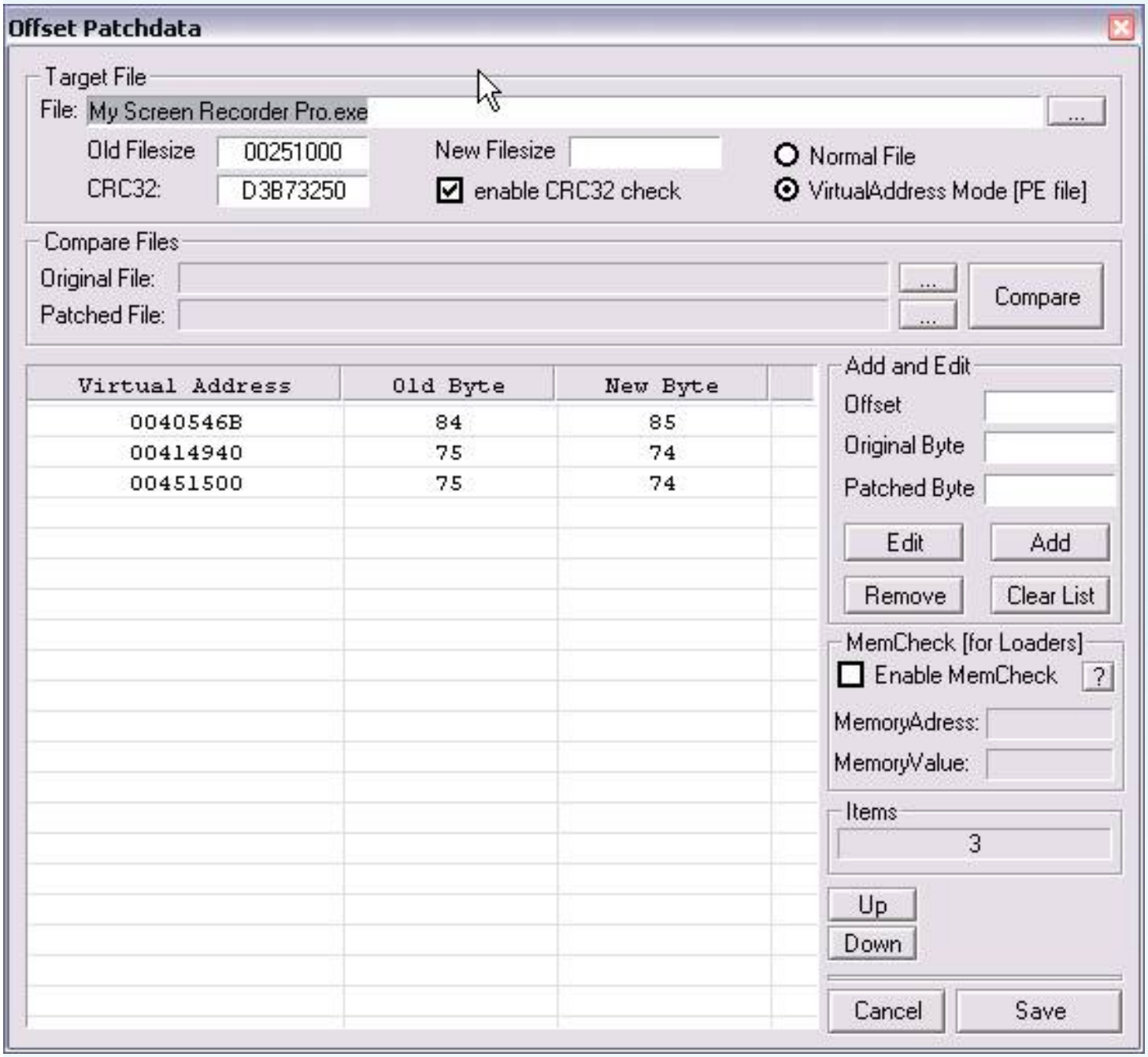
_Bay Time we need to gather to address when we emerged to fill Patch DUP to create Loader as follows:

0040546A / 0F85 03010000 JNZ My_Scree.00405573

00451500 / 74 3D JE SHORT My_Scree.0045153F

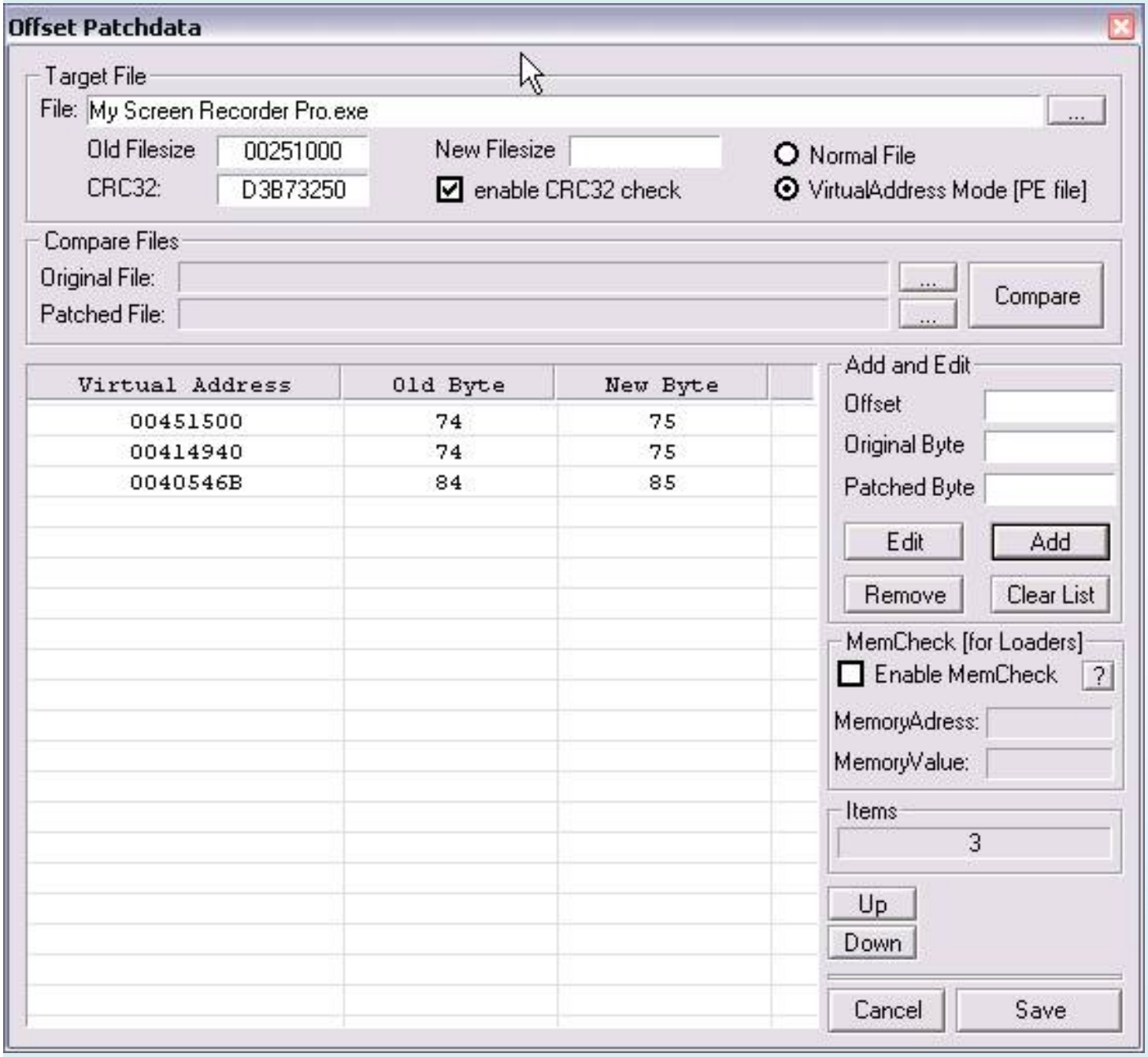
00414940 / 74 0C JE SHORT My_Scree.0041494E

DUP _Chay 2.1 (with the tut) and press 



ADD _Nhan and Offset Patch

_ Double click Offset Patch and fill in the information that we found



_Nhap Button and click Save button  name and optional

_Chay Try Loader

_Gi Up any one! Calm review considered!. We note the report and reviewed the code does Nag first time we Patch

00405468 85C0 TEST EAX, EAX <== Check have not registered

0040546A 0F84 03010000 JE My_Scree.00405573 <== down code inspection and springiness Nag if not registered.

To jump from the Nag prompt and very simple one press Ctrl + E to:

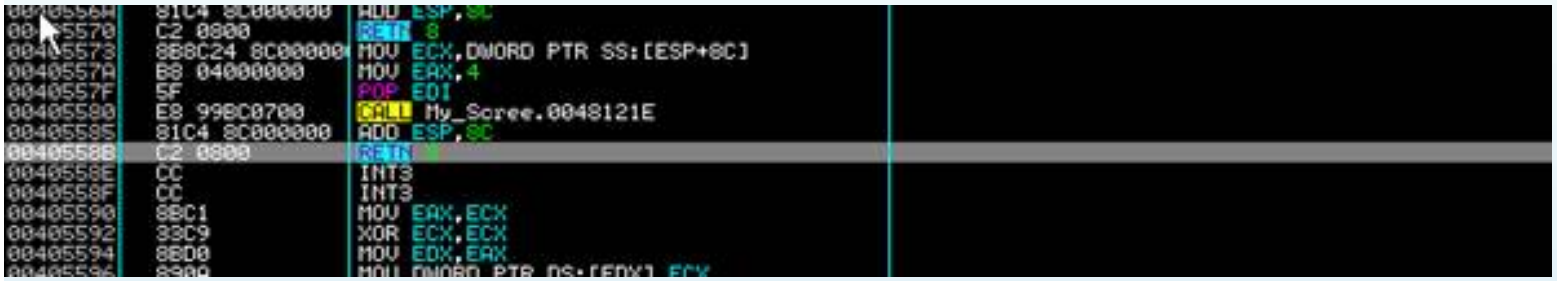
0F84 to 0F85

Once the patch is as follows:

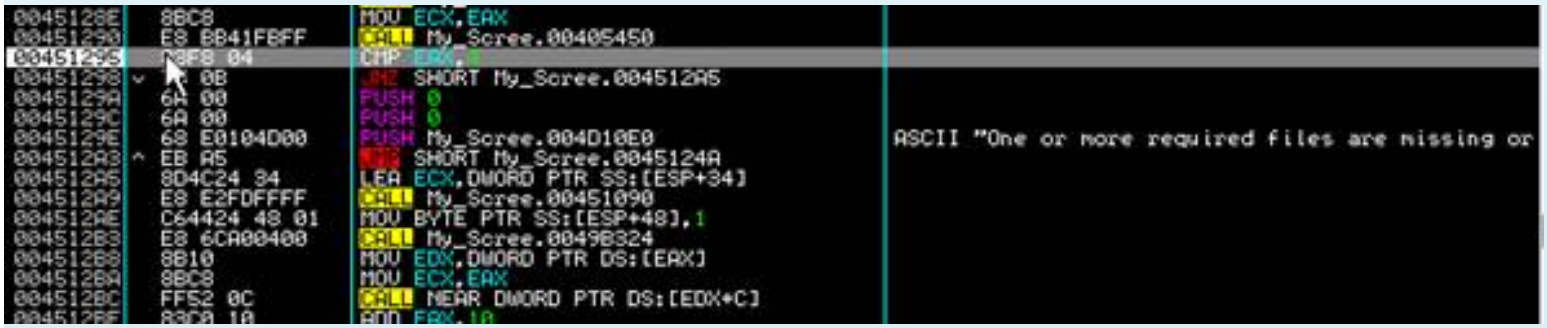
0040546A / 0F85 03010000 JNZ My_Scree.00405573

So that is when we Patch 0F84 to 0F85 it does not jump down to check the code and NAG but jumped to 1 NAG error message. So we just treat thằng NAG this error message is more complete.

_ Load Soft and Olly to Shifl + F9, one to address Set Breakpoint, press F7 to the function of this Call. 0F84 to 0F85 Patch, F8 Using Trace and it jumps to



F8 _Dung trace over it to RETN 8



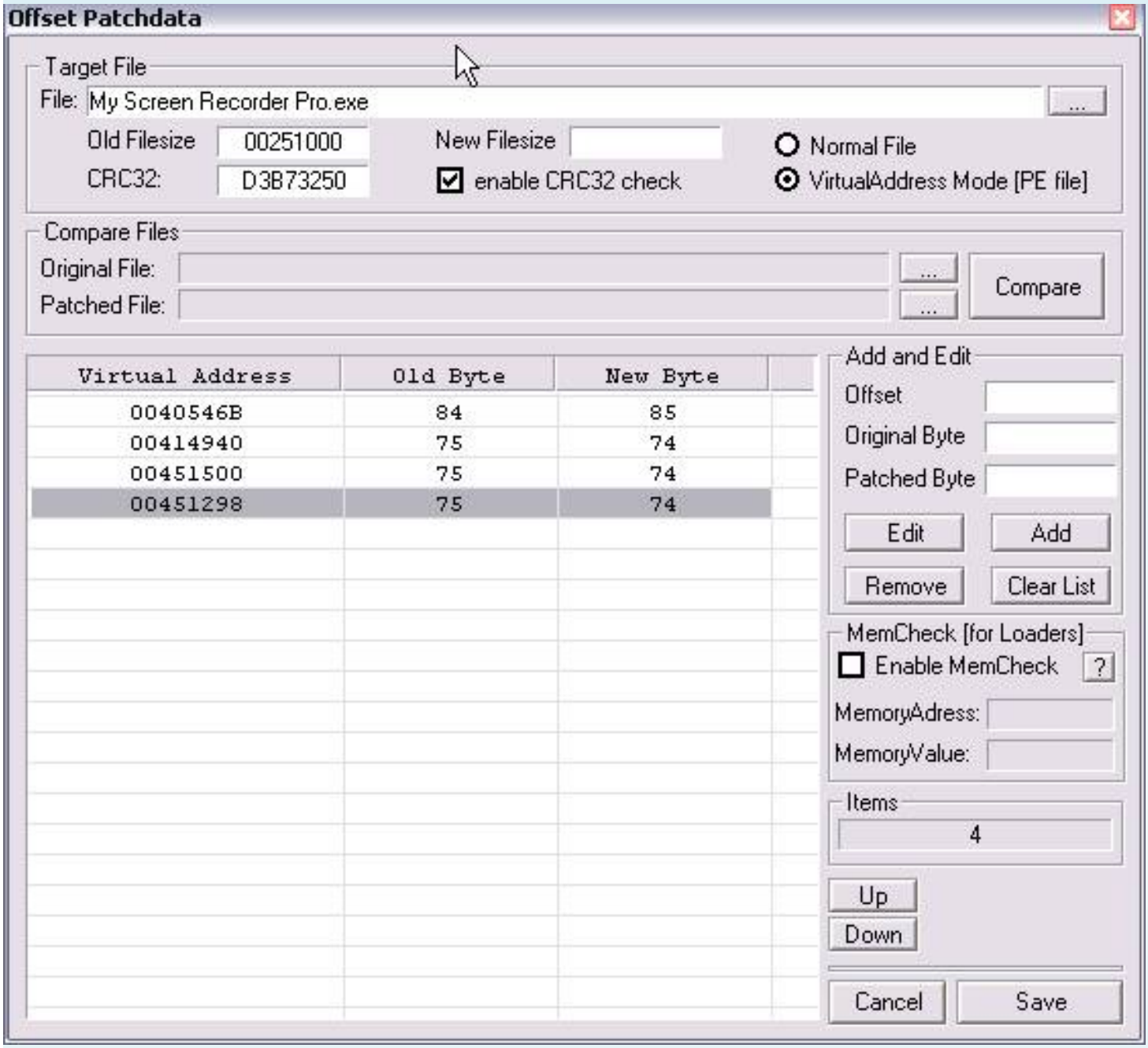
_ Is the Text that nay notice when we receive. Authors software quite wise when it set the NAG here. Make sure he understands this, he is also our patch 0F84 to 0F85 should set this to the NAG doa we damaged that it! But not in the stars Male He has asked her "quit fruits have thick nails nhộn." You treat it only

00451298 / 75 0B JNZ SHORT dumped_.004512A5

Patch's

00451298 / 74 0B JE SHORT dumped_.004512A5

_ So we need to fill more 00451298 DUP as follows



_ Click the Save button and click 

, Run Loader create, hehe everything as you like. Gòi Done ha!

3. Unpack and Crack:

With protected format, the ***Standard*** unpack it very simple. You use the Script "Armadillo Standard unpack" (with the tut) or ArmaDumper 1.0 unpack are successful, but here they present operation manual. The doctors should refer tut 1 Hacnho extremely detailed

_ OK! gioLoad target is to olly

```
Address   Hex dump          Disassembly                              Comment
00554000    60              PUSHAD
00554001    E8 00000000     CALL My_Scree.00554006
00554006    5D              POP EBP
00554007    50              PUSH EAX
00554008    51              PUSH ECX
00554009    0FCA            BSWAP EDX
0055400B    F7D2            NOT EDX
0055400D    9C              PUSHFD
0055400E    F7D2            NOT EDX
00554010    0FCA            BSWAP EDX
00554012  v EB 0F           JMP SHORT My_Scree.00554023
00554014    B9 EB0FB8EB     MOV ECX,EBB80FEB
00554019    07              POP ES                                   Modification of segment register
0055401A    B9 EB0F90EB     MOV ECX,EB900FEB
0055401F    08FD            OR CH,BH
00554021  v EB 0B           JMP SHORT My_Scree.0055402E
00554023    F2:             PREFIX REPNE:                            Superfluous prefix
00554024  ^ EB F5           JMP SHORT My_Scree.0055401B
00554026  ^ EB F6           JMP SHORT My_Scree.0055401E
00554028    F2:             PREFIX REPNE:                            Superfluous prefix
00554029  v EB 08           JMP SHORT My_Scree.00554033
0055402B    FD              STD
0055402C  ^ EB E9           JMP SHORT My_Scree.00554017
0055402E    F3:             PREFIX REP:                              Superfluous prefix
0055402F  ^ EB E4           JMP SHORT My_Scree.00554015
```

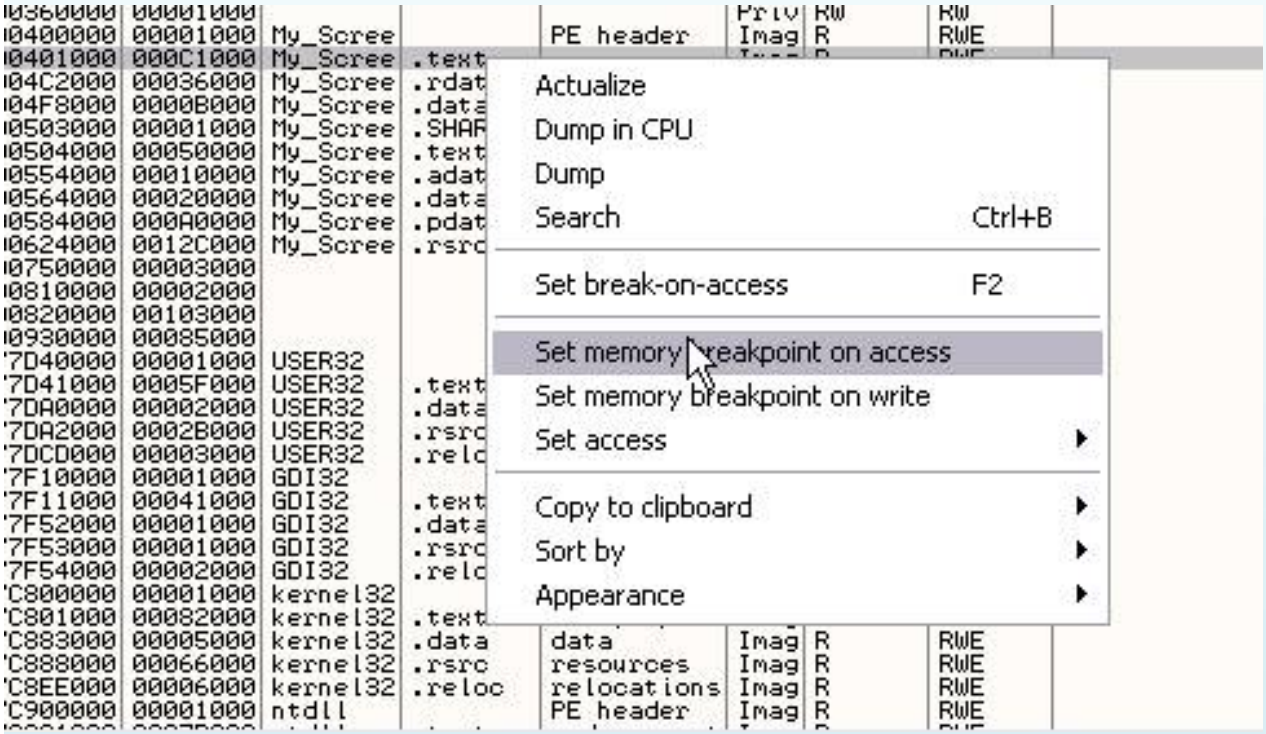
_Alt + F1, GetModuleHandleA He, Shifl 3 + F9, Alt + F9 to you here.

```
Address   Hex dump          Disassembly                              Comment
003A5B47    8B0D 6C503D00   MOV ECX,DWORD PTR DS:[3D506C]
003A5B4D    89040E          MOV DWORD PTR DS:[ESI+ECX],EAX
003A5B50    A1 6C503D00     MOV EAX,DWORD PTR DS:[3D506C]
003A5B55    391C06          CMP DWORD PTR DS:[ESI+EAX],EBX
003A5B58  v 75 16           JNZ SHORT 003A5B70
003A5B5A    8D85 B4FEFFFF   LEA EAX,DWORD PTR SS:[EBP-14C]
003A5B60    50              PUSH EAX
003A5B61    FF15 B8623C00   CALL NEAR DWORD PTR DS:[3C62B8]          kernel32.LoadLibraryA
003A5B67    8B0D 6C503D00   MOV ECX,DWORD PTR DS:[3D506C]
003A5B6D    89040E          MOV DWORD PTR DS:[ESI+ECX],EAX
003A5B70    A1 6C503D00     MOV EAX,DWORD PTR DS:[3D506C]
003A5B75    391C06          CMP DWORD PTR DS:[ESI+EAX],EBX
003A5B78  v 0F84 2F010000   JE 003A5CAD
003A5B7E    33C9            XOR ECX,ECX
003A5B80    8B07            MOV EAX,DWORD PTR DS:[EDI]
003A5B82    3918            CMP DWORD PTR DS:[EAX],EBX
003A5B84  v 74 06           JE SHORT 003A5B8C
003A5B86    41              INC ECX
003A5B87    83C0 0C         ADD EAX,0C
003A5B8A  ^ EB F6           JMP SHORT 003A5B82
003A5B8C    8BD9            MOV EBX,ECX
003A5B8E    C1E3 02         SHL EBX,2
```

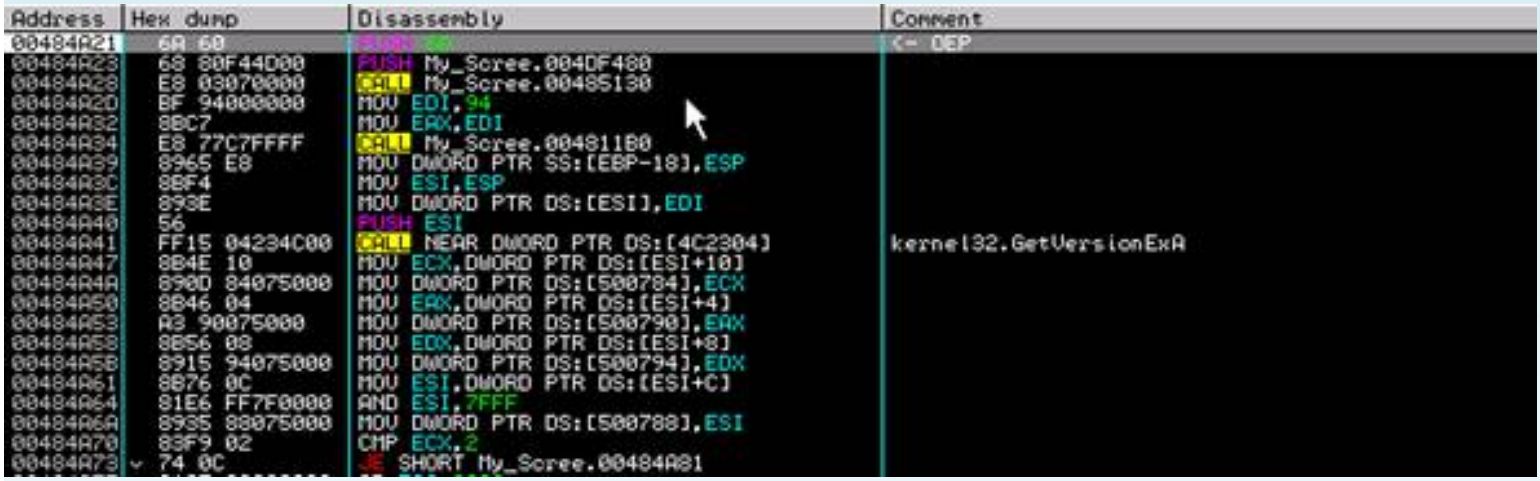
_Patch Magic Jump

```
Address   Hex dump          Disassembly                              Comment
003A5B47    8B0D 6C503D00   MOV ECX,DWORD PTR DS:[3D506C]
003A5B4D    89040E          MOV DWORD PTR DS:[ESI+ECX],EAX
003A5B50    A1 6C503D00     MOV EAX,DWORD PTR DS:[3D506C]
003A5B55    391C06          CMP DWORD PTR DS:[ESI+EAX],EBX
003A5B58  v 75 16           JNZ SHORT 003A5B70
003A5B5A    8D85 B4FEFFFF   LEA EAX,DWORD PTR SS:[EBP-14C]
003A5B60    50              PUSH EAX
003A5B61    FF15 B8623C00   CALL NEAR DWORD PTR DS:[3C62B8]          kernel32.LoadLibraryA
003A5B67    8B0D 6C503D00   MOV ECX,DWORD PTR DS:[3D506C]
003A5B6D    89040E          MOV DWORD PTR DS:[ESI+ECX],EAX
003A5B70    A1 6C503D00     MOV EAX,DWORD PTR DS:[3D506C]
003A5B75    391C06          CMP DWORD PTR DS:[ESI+EAX],EBX
003A5B78  v E9 30010000     JMP 003A5CAD
003A5B7D    90              NOP
003A5B7E    33C9            XOR ECX,ECX
003A5B80    8B07            MOV EAX,DWORD PTR DS:[EDI]
003A5B82    3918            CMP DWORD PTR DS:[EAX],EBX
003A5B84  v 74 06           JE SHORT 003A5B8C
003A5B86    41              INC ECX
003A5B87    83C0 0C         ADD EAX,0C
003A5B8A  ^ EB F6           JMP SHORT 003A5B82
003A5B8C    8BD9            MOV EBX,ECX
```

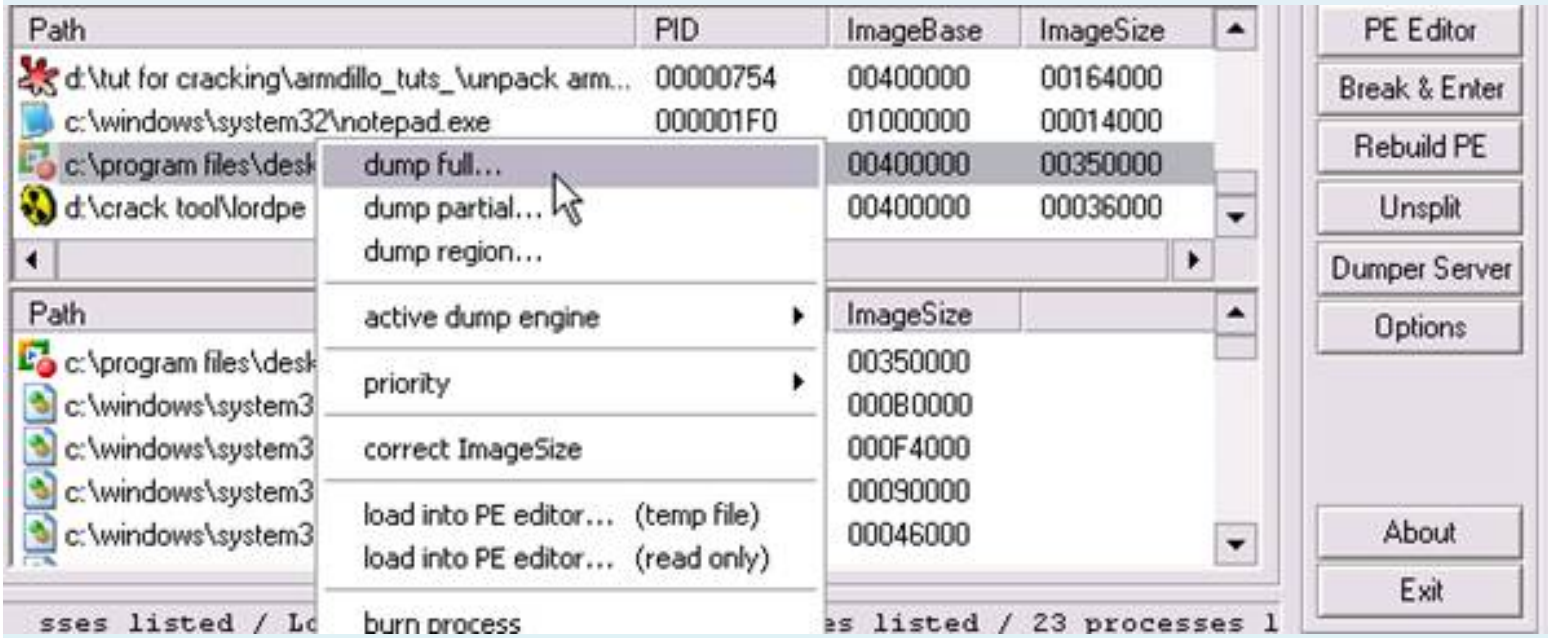
_Vi Copy must Patch Magic jump, just as we do so to IAT has been completed to the dump run Fix lickerish not crash. Delete Breakpoint GetModuleHandleA (HeGetModuleHandleA) and press Alt + M or click the "M" on the interface and Memory Set Breakpoint on access in Section. Text (like below).

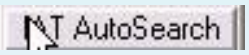


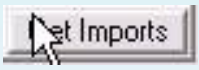
_ Press Shift + F9 to OEP:

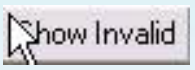


_Mo LordPE select Target Full dump:

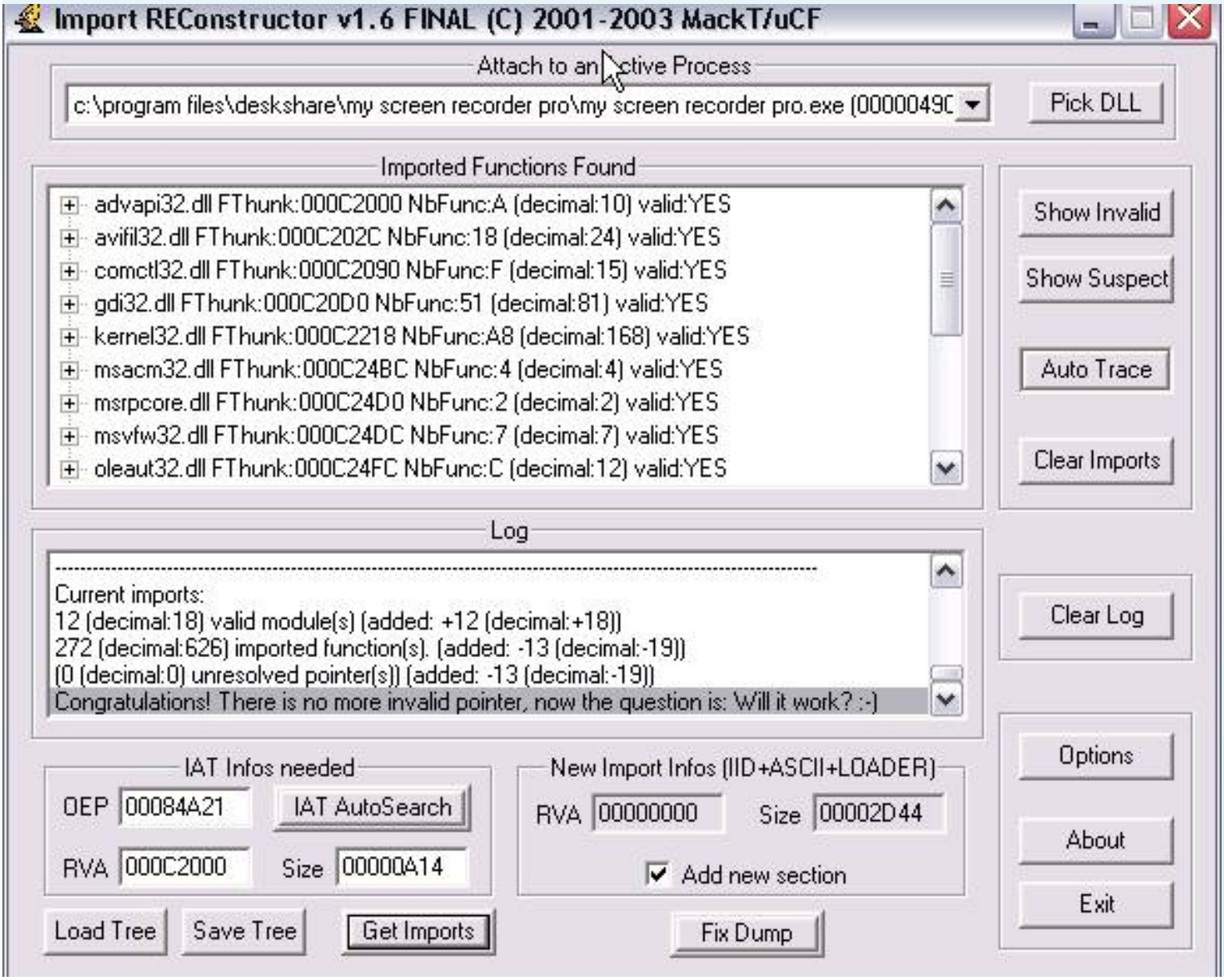


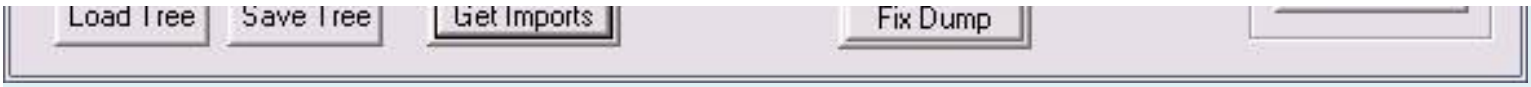
_Mo ImportREC fill OEP: 84A21, click 

, Click 

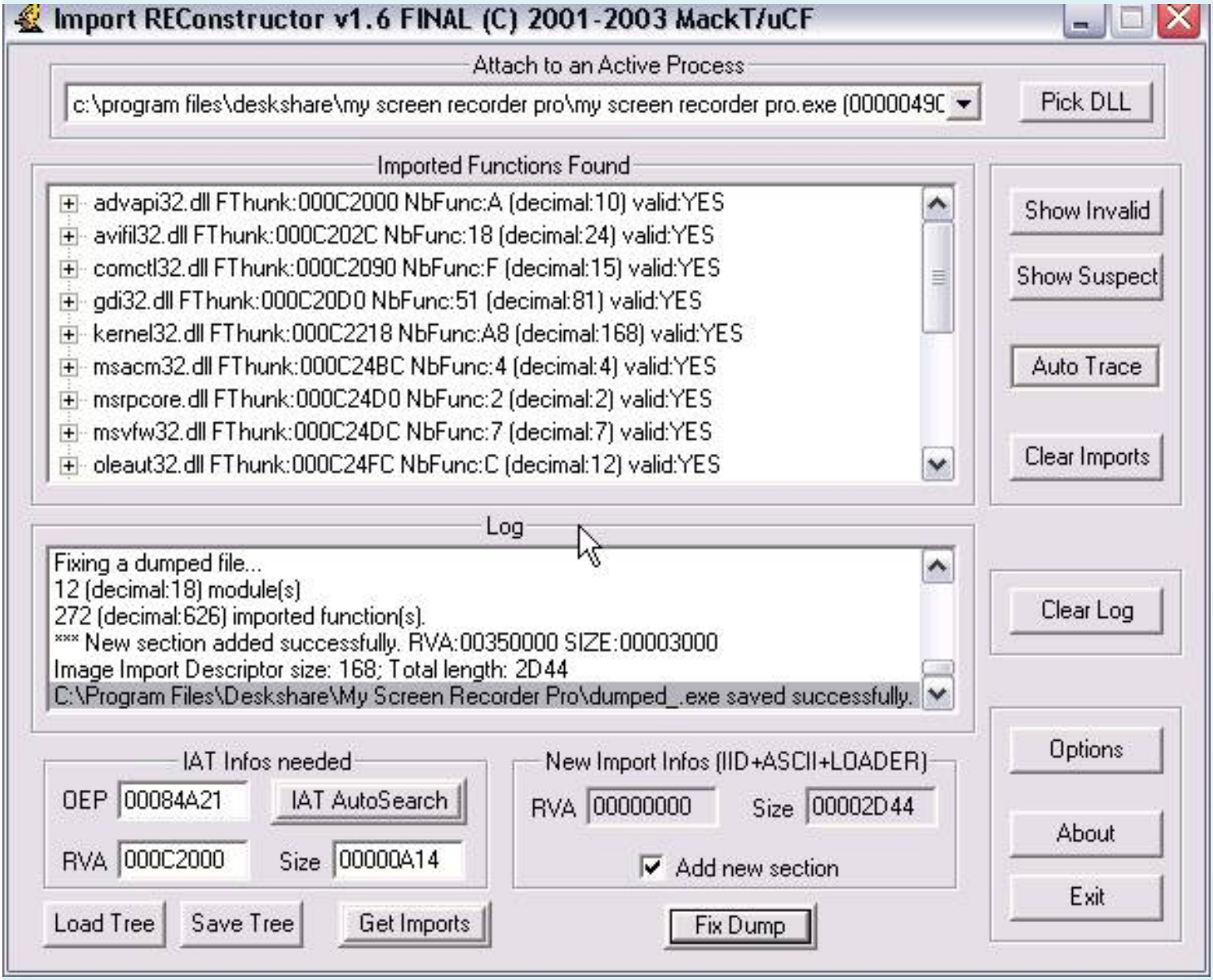
, Click 

Cut and Thunk



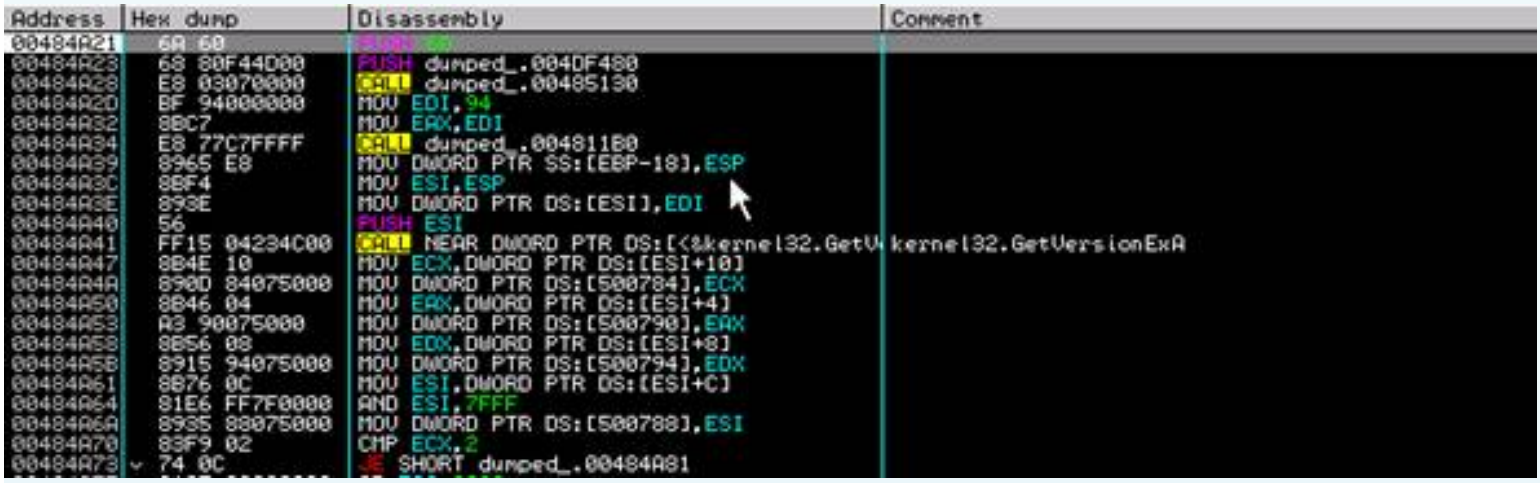


Fix dump _nhan



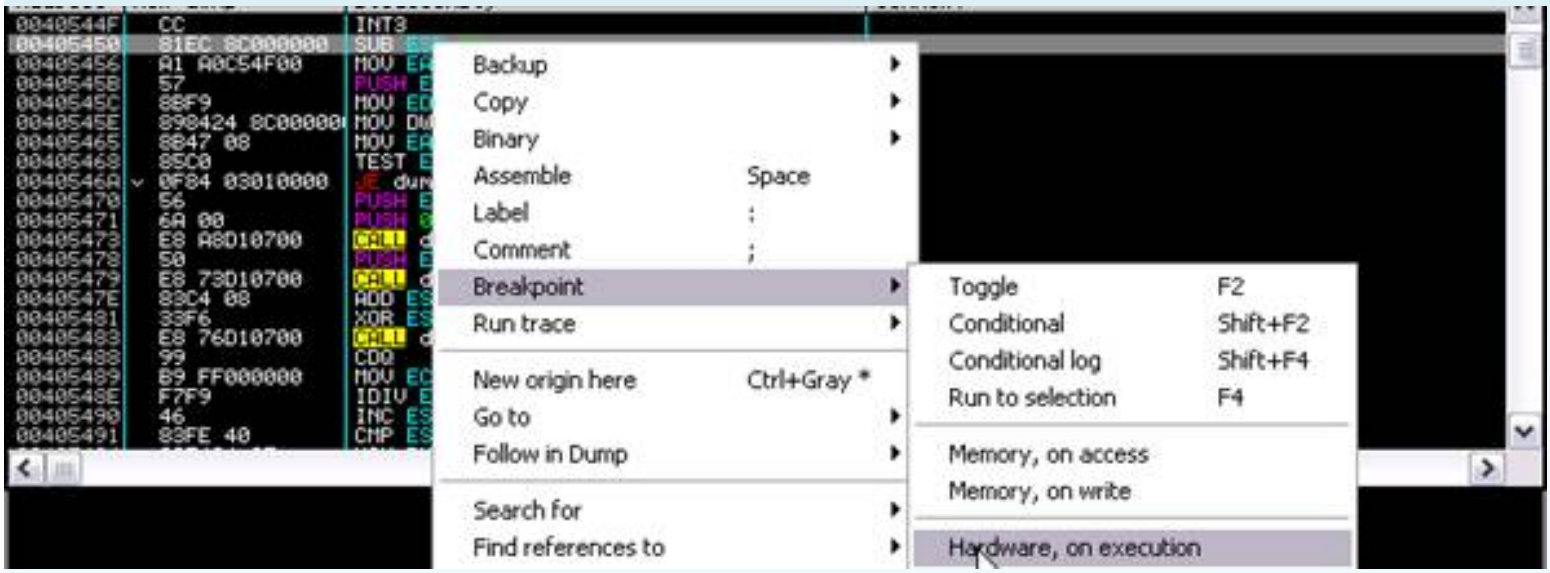
Try dumped_.exe _Run file, do not run OK Crash ==> unpack Done

Crack _Viec the operation also nearly as we create as loader at first. Filedumped_.exe Load to Olly

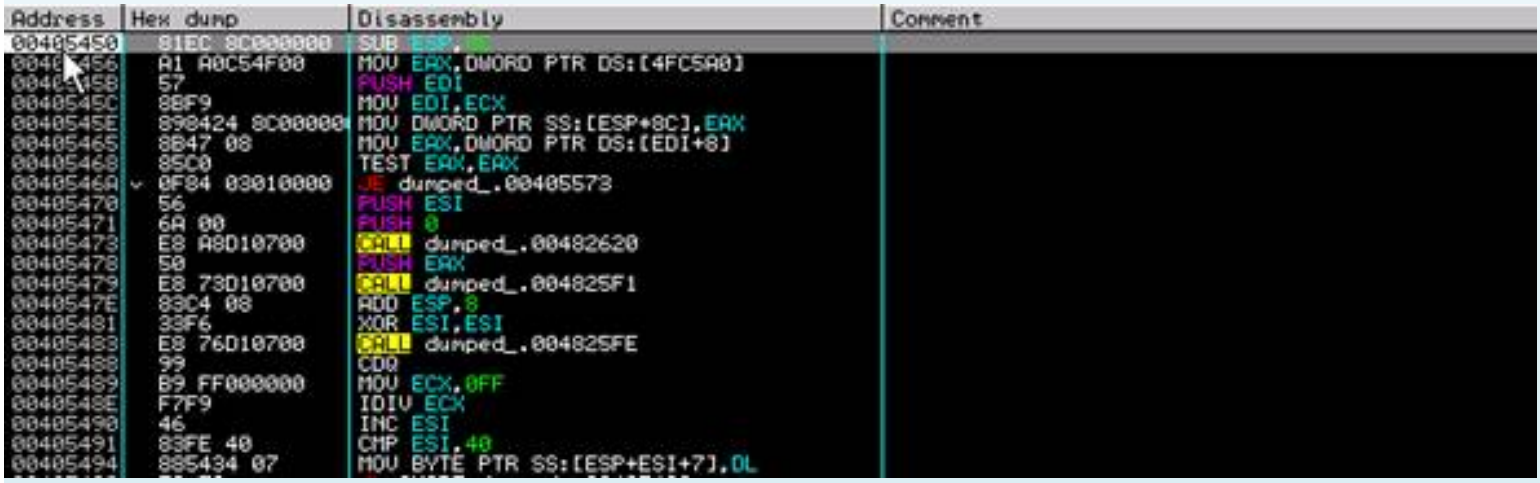


_ Press Shift + F9, appear Nag reminder, you click Evaluate drilling jump. Back to Olly press F12, Alt + M,

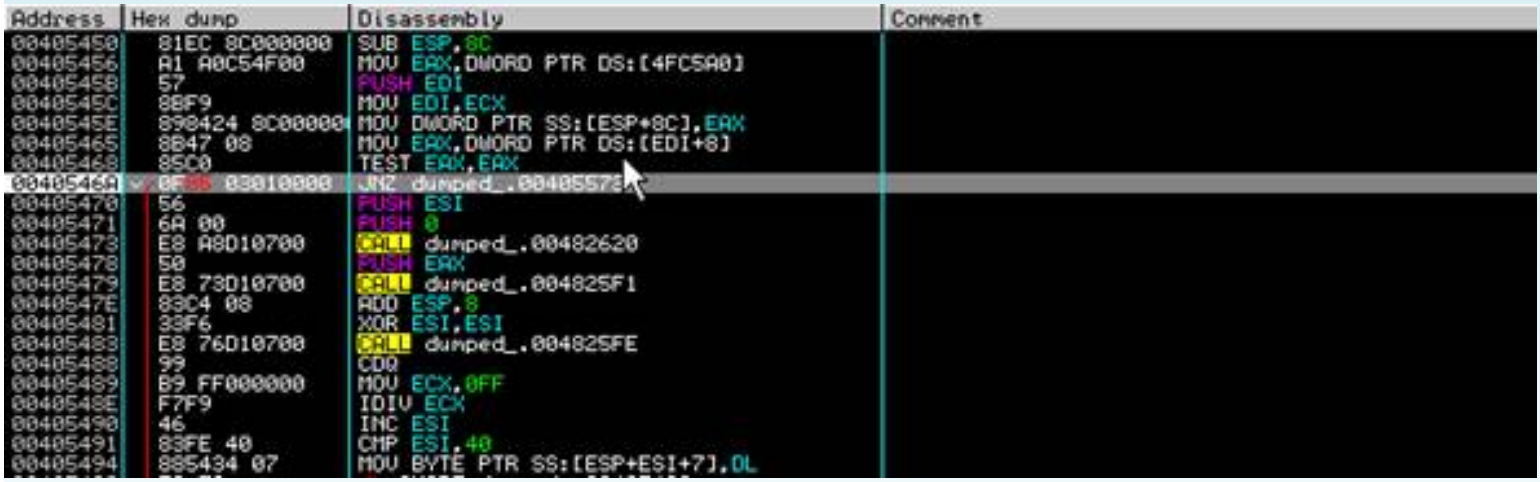
_ Selected address and click the mouse and double set Breakpoint like



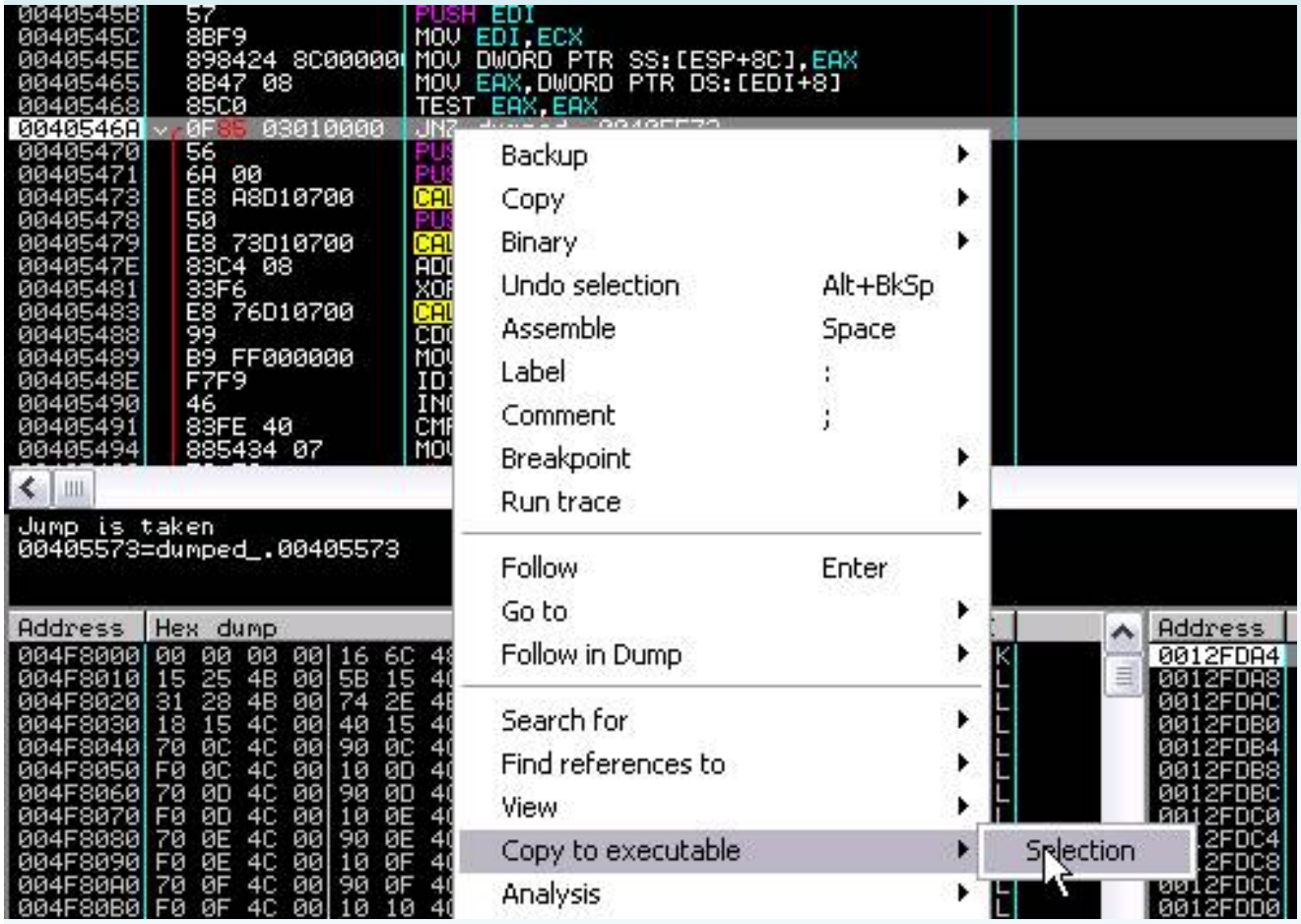
_ Ctrl + F2, Shifl + F9, to the address we've set Breakpoint



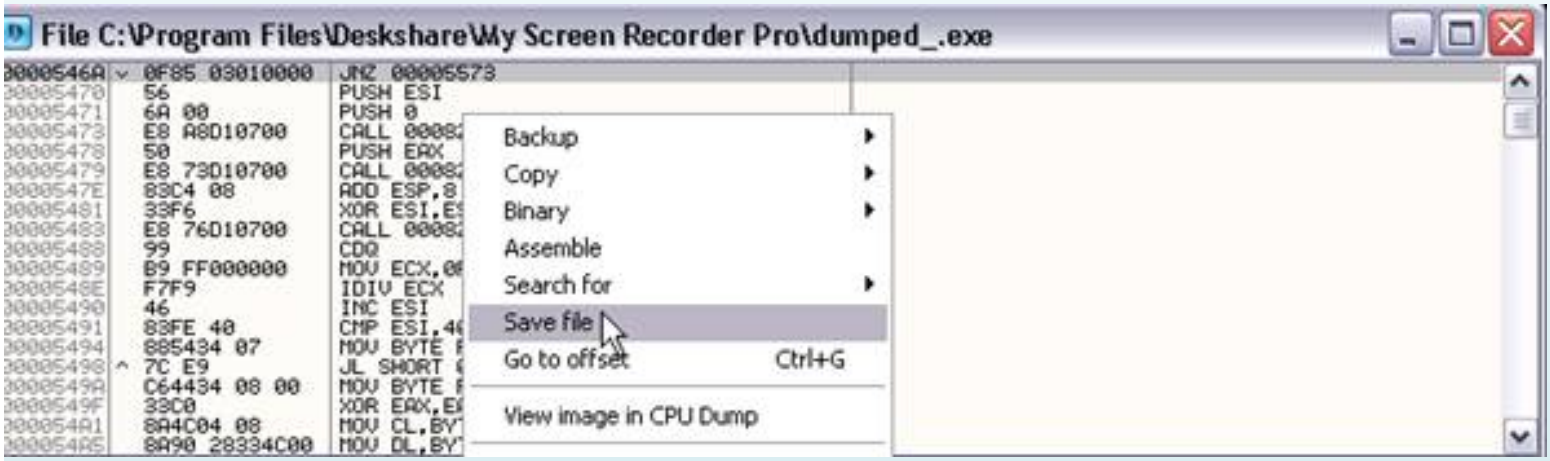
F8 to trace _Dung 0040546 and patch 0F84 to 0F85



_nhap and mouse to do image



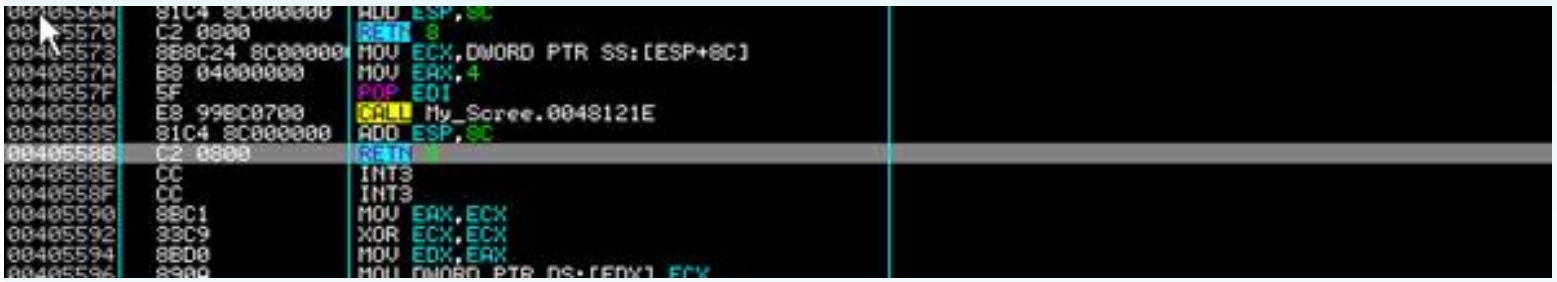
1 _Hien the window and click right and Save File



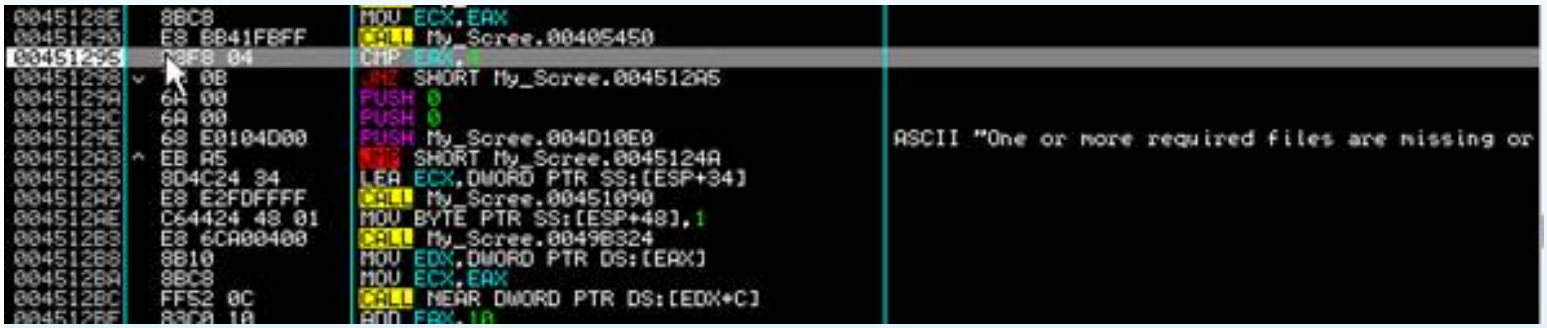
File Save _Chay new notice to appear

_Moi The same place as we analyze the Loader do so just Load File Save to Olly, Shifl + F9, we set

up to address Patch and Breakpoint 0F84 to 0F85, F8 Using Trace and it jumps to



F8 _Dung trace over it to RETN 8



_Thit It to you

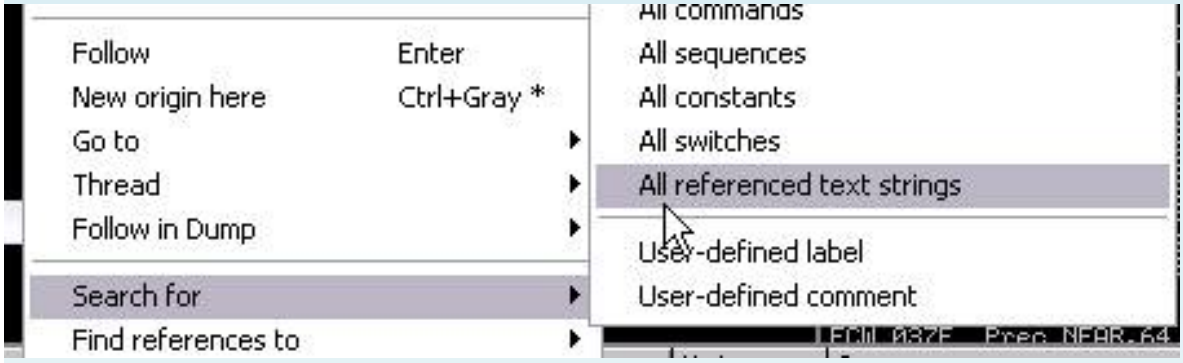
00451298 / 75 0B JNZ SHORT dumped_.004512A5

Patch's

00451298 / 74 0B JE SHORT dumped_.004512A5

_ Save the file and run the test, take the OK error message gòi

_ Now we treat more words on the "unregistered" Click to select the image below



_go chains are looking for *"unregistered"* and you find the series as follows:

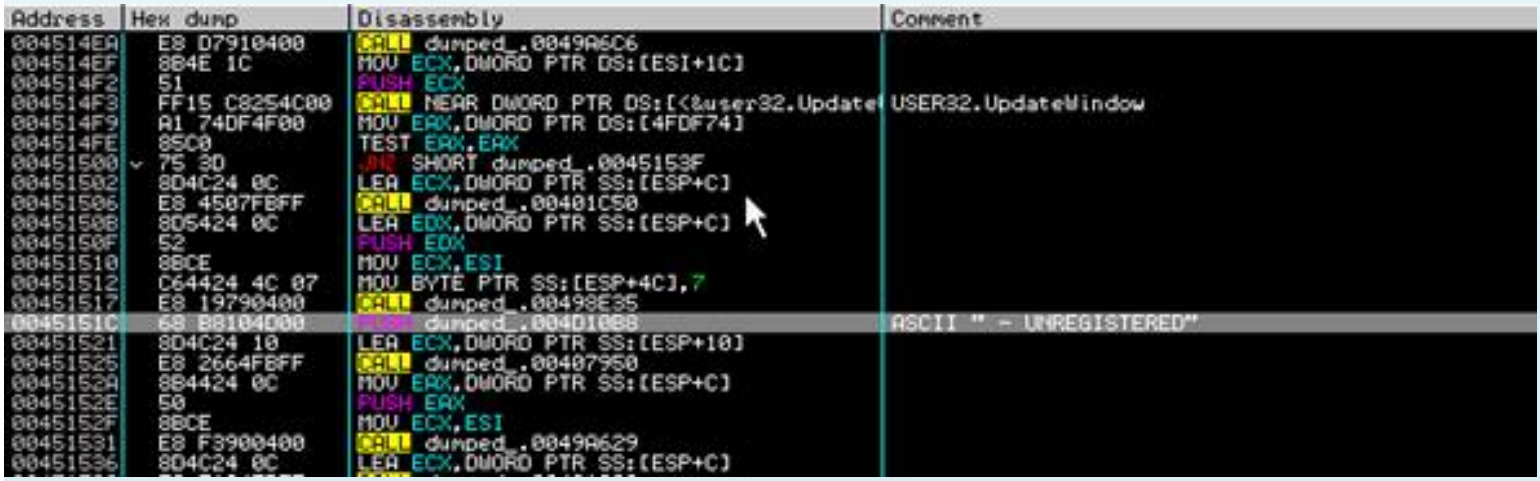
004127E8 68 E06F4C00 PUSH My_Scree.004C6FE0; ASCII "My Screen Recorder Pro - unregistered"

00418E95 68 E06F4C00 PUSH My_Scree.004C6FE0; ASCII "My Screen Recorder Pro - unregistered"

00422F88 68 A4974C00 PUSH My_Scree.004C97A4; ASCII "unregistered - Trial Version"

0045151C 68 B8104D00 PUSH My_Scree.004D10B8; ASCII "- unregistered"

_ Double Click on 0045151C

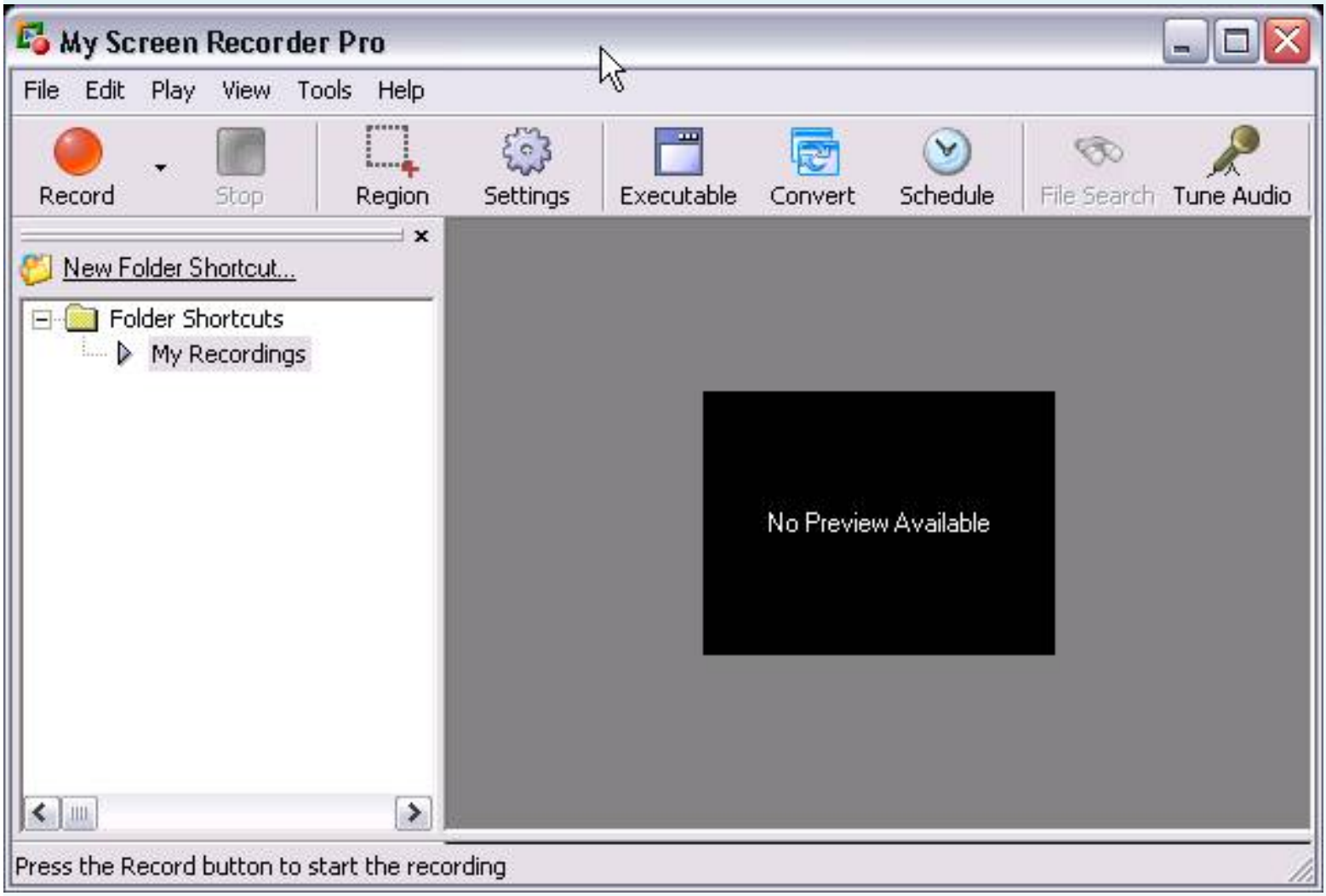


00451500 / 75 3D JNZ SHORT My_Scree.0045153F

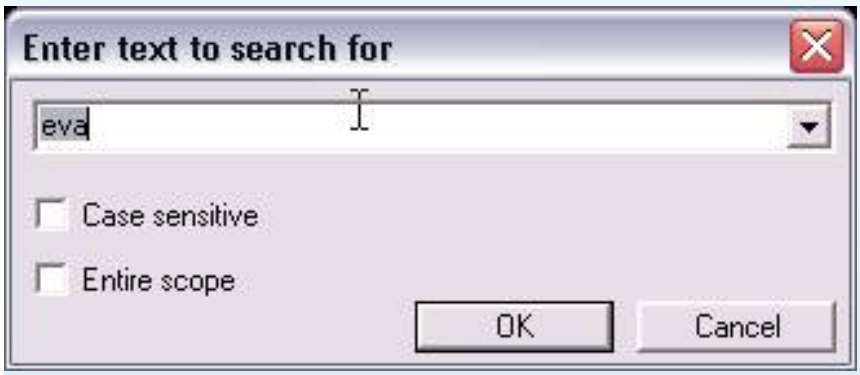
Patch's

00451500 / 74 3D JE SHORT My_Scree.0045153F

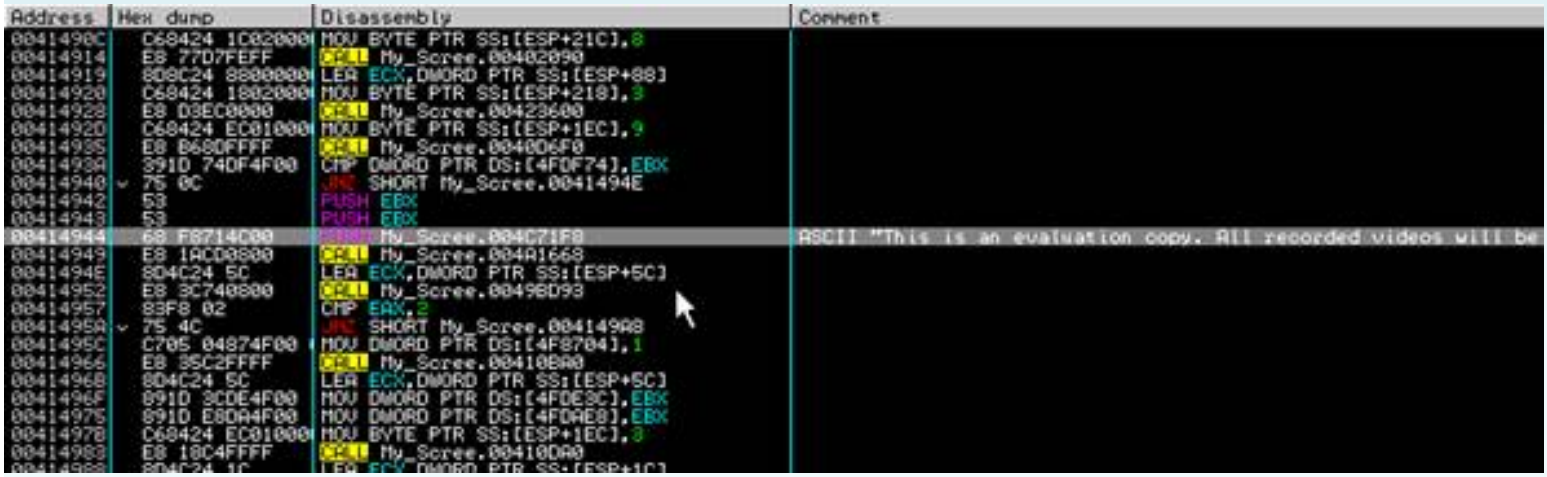
_Save File and test to see how he he lost the word unregistered packages.



NAG 1 _Con the more pressing when the Record button on the window and type Text Search



_Nhan OK to me here

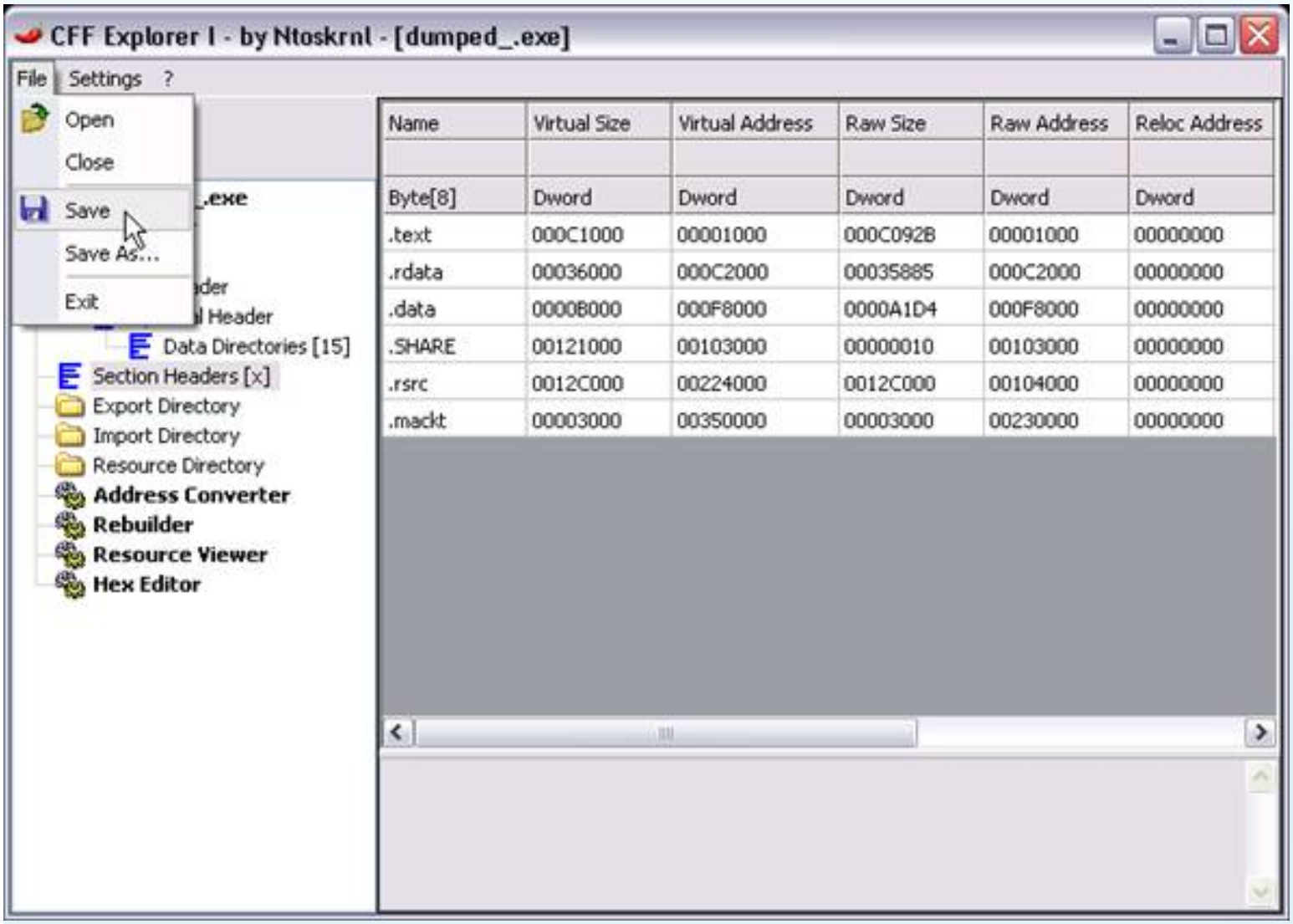


00414940 / 75 0C JNZ SHORT My_Scree.0041494E

Patch's

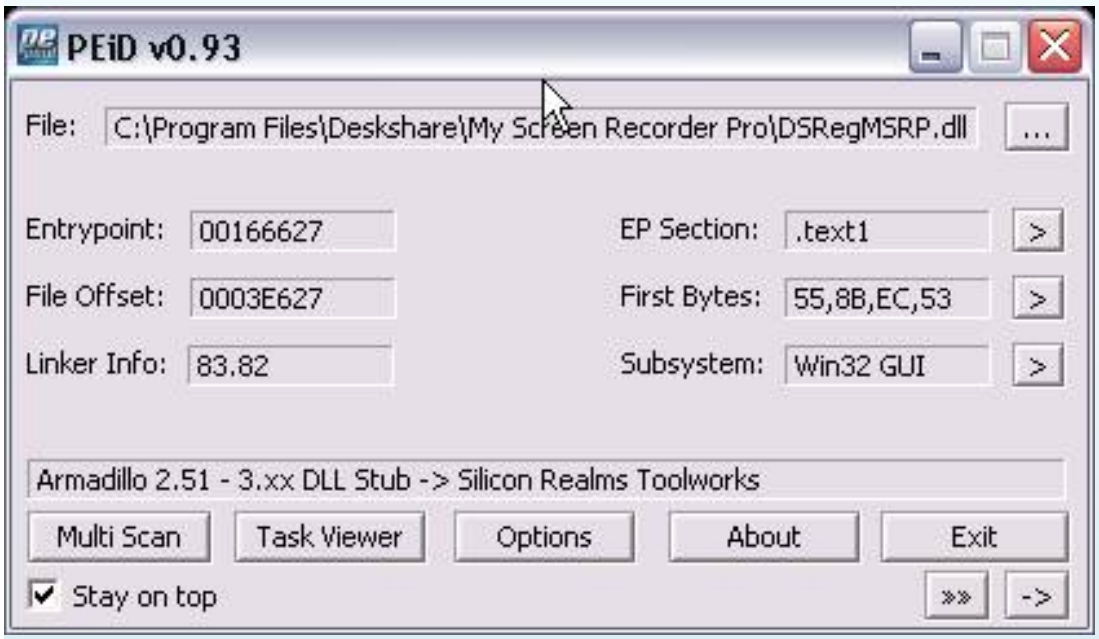
00414940 / 74 0C JE SHORT My_Scree.0041494E

_Save File and Test, Oh everything has Done. Here you run to embrace but also to the smaller amount you use CFF Explorer to delete Section reduce the excess. Text1. ADATA. Data1. Pdata . This is the Section tàn of Arma.



Now as then finished it you. But in fact when you click About

_ These are located in the File DSRegMSRP.dll and it is in Arma Pack



_Muon Unpack it and see Uncle tut 9 of Hacnho. I do not presented here. As it can do for this tut Available on it but I have attached file unpack it in tut for your reference. The suggestions for when you unpack this dll files you should change its Image Base 20000000 is to run it. Subject 10000000

error feedback it only. If you are successful, the same as follows

_ Wish you success

Written by Why Not Bar (20-10-2005)

Obsidium 1.2.5.0 - unpacking

(I combined the practice of my own material with the author of this article to become more specific. So they can only be wrong, but the code is similar).

1. Intro:

The tools we need:
Windows XP, OllyDbg; ImpREC; LordPE; hex editor; PEID.
Target is attached.

Obsidium some of the technical anti-debug:
- CheckRemoteDebuggerPresent: this API detected debugger on XP machines.
- UnhandledExceptionFilter: do crash load is applied by the debugger.
- FindWindowA: it finds olly window class "OLLYDBG"
- IsDebuggerPresent: detect debugger.
- Threads: obsidium have one or two thead Ma Su used the technique on. (Because the procedure only checked once, and the procedure was performed 2 times).
- OEP stolen code: it will be some legs in OEP bytes.
- Cool import protection.

We only need to use plugin Hide Debugger is overcome. Here the authors present a brief bit about the technique:

Obsidium many "code nhảm" (junk code) with the command jmp short jump as uncomfortable as we explore it. I really hate junk code. Obsidium not GetProcAddress for the imports, which it uses a procedure to search for imports. It also checks the breakpoints (BP) in the code of the API, however we are still breakpoits place at the end of the API.

The procedure anti-debugger: CheckRemoteDebuggerPresent, FindWindowA, IsDebuggerPresent, can be overcome, by placing on BP and API changes EAX to 0.

But this function is used UnhandledExceptionFilter control exceptions that protect the community. The problem is if we use the debugger (Olly), the application will be that the debugger has taken control instead of the debugger system (Mr.Watson). We can make the system think that the application does not work in other debbuger.

Look to UnhandledExceptionFilter and may be different for you:

```
PUSH 248 <------------------------ UnhandledExceptionFilter function starts
here.

PUSH kernel32.7C8635E0
```

```
CALL kernel32.7C8024CB
MOV EAX, DWORD PTR DS: [7C8836CC]
MOV DWORD PTR SS: [EBP-1C], EAX
MOV EBX, DWORD PTR SS: [EBP +8]
MOV DWORD PTR SS: [EBP-178], EBX
MOV DWORD PTR SS: [EBP-148], 4
XOR EDI, EDI
MOV DWORD PTR SS: [EBP-13C], EDI
MOV DWORD PTR SS: [EBP-16C], EDI
MOV EAX, DWORD PTR DS: [EBX]
TEST BYTE PTR DS: [EAX +4], 10
JE SHORT kernel32.7C862BD4
PUSH DWORD PTR DS: [EAX]
PUSH -1
CALL DWORD PTR DS: [<& ntdll.NtTerminatePr>; ntdll.ZwTerminateProcess
MOV EAX, DWORD PTR DS: [EBX]
MOV ESI, C0000005
Cmp DWORD PTR DS: [EAX], ESI
JNZ SHORT kernel32.7C862BF9
Cmp DWORD PTR DS: [EAX +14], 1
JNZ SHORT kernel32.7C862BF9
PUSH DWORD PTR DS: [EAX +18]
CALL kernel32.7C862874
Cmp EAX, -1
JNZ SHORT kernel32.7C862BF9
OR EAX, EAX
JMP kernel32.7C863458
```

```
MOV DWORD PTR SS: [EBP-124], EDI

PUSH EDI

PUSH 4

LEA EAX, DWORD PTR SS: [EBP-124]

PUSH EAX

PUSH 7

CALL kernel32.GetCurrentProcess <------------ Here is the trick! This API
returns FFFFFFFF. Change EAX to 0.

PUSH EAX

CALL DWORD PTR DS: [<& ntdll.NtQueryInform>; ntdll.ZwQueryInformationProcess

TEST EAX, EAX

...

...
```

With others, you also find the same points, is this:

PUSH7

CALL kernel32.GetCurrentProcess

Then edit the FFFFFFFFh EAX = EAX = 0.

2. OEP and stolen Code:

There is no general way to find the correct OEP (if there is a general way you can find OEP writing scripts.)

Instead I have the traces and even the test multiple times codes, exceptions, breakpoints. I found out where the command imports jumped be located, when the unpack crackme by the protection, I put BP on the most Import volume (not a problem because this small crackme).

Um, you should check all options in Olly exception, and then run crackme:

Then, look at the log window:

Log data

Message

Access indoctrination when reading [00000000]

Access indoctrination when reading [FFFFFFFF]

Module C: \ WINDOWS \ system32 \ advapi32.dll

Access indoctrination when reading [FFFFFFFF]

Breakpoint at kernel32.7C85994E

INT3 command at ntdll.DbgBreakPoint

Access indoctrination when executing [00000000]

Breakpoint at kernel32.7C862C10

Illegal instruction

Integer division by zero

Breakpoint at USER32.77D6F3DC

Access indoctrination when executing [00000000]

Breakpoint at kernel32.7C862C10

Integer division by zero

Access indoctrination when reading [00000000]

Access indoctrination when reading [8003F41E]

Integer division by zero

Access indoctrination when reading [00000000]

Access indoctrination when reading [FFFFFFFF]

Access indoctrination when reading [FFFFFFFF]

Access indoctrination when reading [8003F418]

Illegal instruction

Integer division by zero

Breakpoint at kernel32.7C812E10

INT3 command at 00396555

Integer division by zero

Integer division by zero

Integer division by zero

Integer division by zero

Integer division by zero

Integer division by zero

Illegal instruction

Integer division by zero <---------- this one.

New thread with ID 00000304 created

Breakpoint at kernel32.7C85994E

Exception finally "integer division by zero." Olly restart again, uncheck option "integer division by zero," So when Olly run, we will end it on Exception. After some time we will here:

```
F7F0 DIV EAX <------------------------ Exception.
55 PUSH EBP
8BEC MOV EBP, ESP
8B45 08 MOV EAX, DWORD PTR SS: [EBP +8]
6A 00 PUSH 0
68 CC971025 PUSH 251097CC
6A 00 PUSH 0
FF50 18 CALL DWORD PTR DS: [EAX +18]
5D POP EBP
C2 0800 RETN 8
55 PUSH EBP
8BEC MOV EBP, ESP
8B45 08          MOV EAX,DWORD PTR SS:[EBP+8]
8B00 MOV EAX, DWORD PTR DS: [EAX]
3D 1D0000C0 Cmp EAX, C000001D
74 0E JE SHORT UnPackMe.00415FD0
3D 940000C0 Cmp EAX, C0000094
75 41 JNZ SHORT UnPackMe.0041600A
B9 AB92AD01 MOV ECX, 1AD92AB
EB 05 JMP SHORT UnPackMe.00415FD5
B9 4E90AD01 MOV ECX, 1AD904E
E8 00000000 CALL UnPackMe.00415FDA
```

```
5A POP EDX
8B45 10 MOV EAX, DWORD PTR SS: [EBP +10]
81EA 893CBA00 SUB EDX, 0BA3C89
8D940A EFAB0CFF LEA EDX, DWORD PTR DS: [EDX + ECX FF0CABEF +]
8990 B8000000 MOV DWORD PTR DS: [EAX + b8], EDX
33C9 XOR ECX, ECX
8948 04 MOV DWORD PTR DS: [EAX +4], ECX
8948 08 MOV DWORD PTR DS: [EAX +8], ECX
8948 0C MOV DWORD PTR DS: [EAX + C], ECX
8948 10 MOV DWORD PTR DS: [EAX +10], ECX
C740 18 55003333 MOV DWORD PTR DS: [EAX +18], 33330055
33C0 XOR EAX, EAX
5D POP EBP
C3 RETN
33C0 XOR EAX, EAX
40 INC EAX
5D POP EBP
C3 RETN
33C0 XOR EAX, EAX
8D44C0 03 LEA EAX, DWORD PTR DS: [EAX + EAX * 8 +3]
010424 ADD DWORD PTR SS: [ESP], EAX
C3 RETN
```

At this code section is completely unpack. I put a memory breakpoints on the code section and we will run to be "FALSE OEP.

Consider a bit.

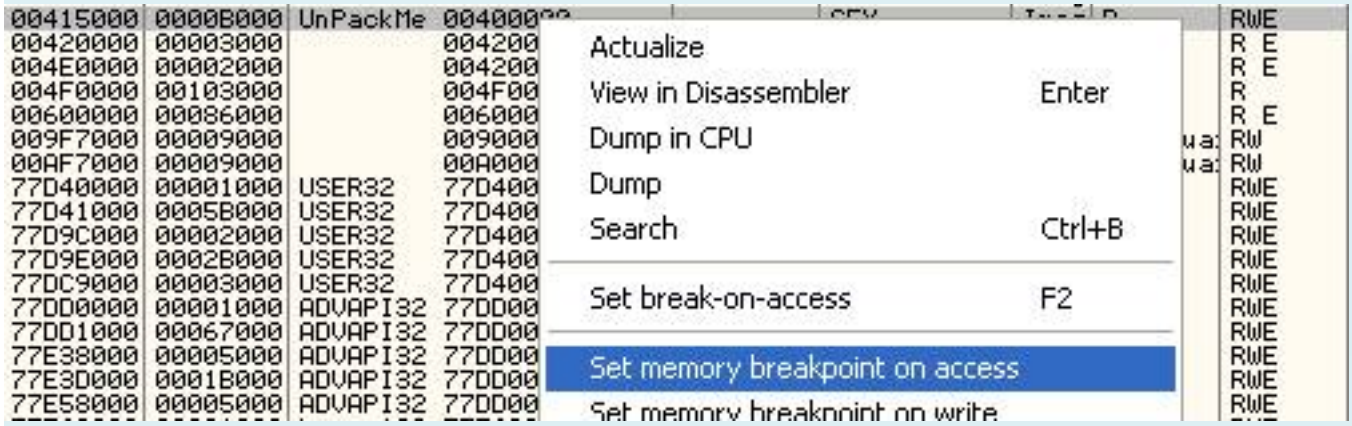
First, this section crackme code is 00404000, the second is always Obsidium jump to 'FALSE OEP "although it is not" legs "bytes, it will jump to the binary code in the distance.

We check to prevent placement, we will see SEH handler that will control the exceptions:

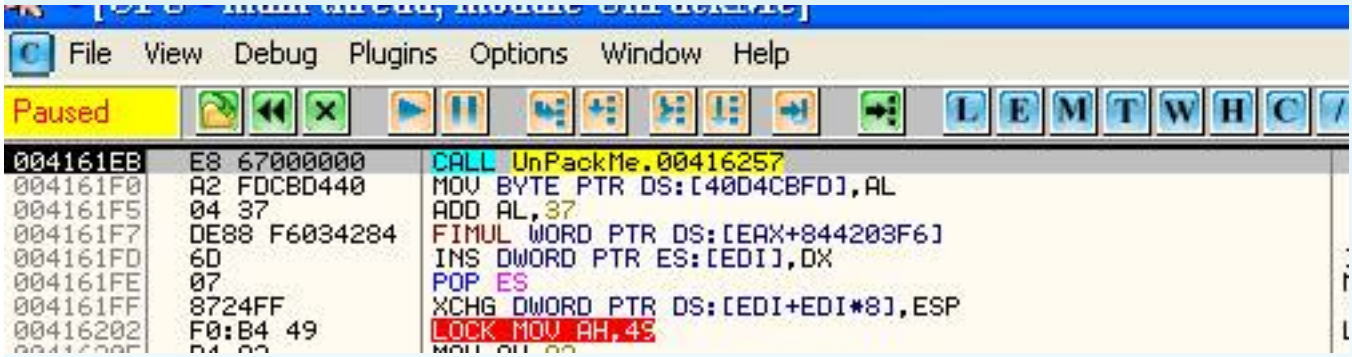
```
0012FF94 0012FFE0 Pointer to next SEH record

0012FF98 00415FB3 SE handler
```

You set breakpoints in 0x00415FB3, Shift + F9, then F8 to RETN we ntdll.dll to:

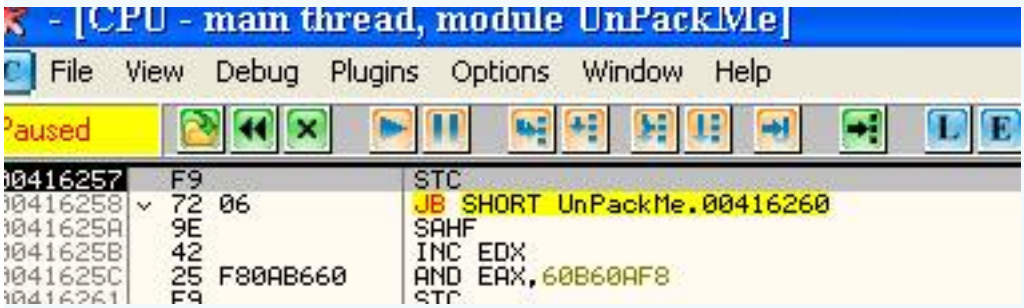
Then, we set breakpoints on the memory section of Obsidium:



In section 0041500. Then Shift + F9, we come:

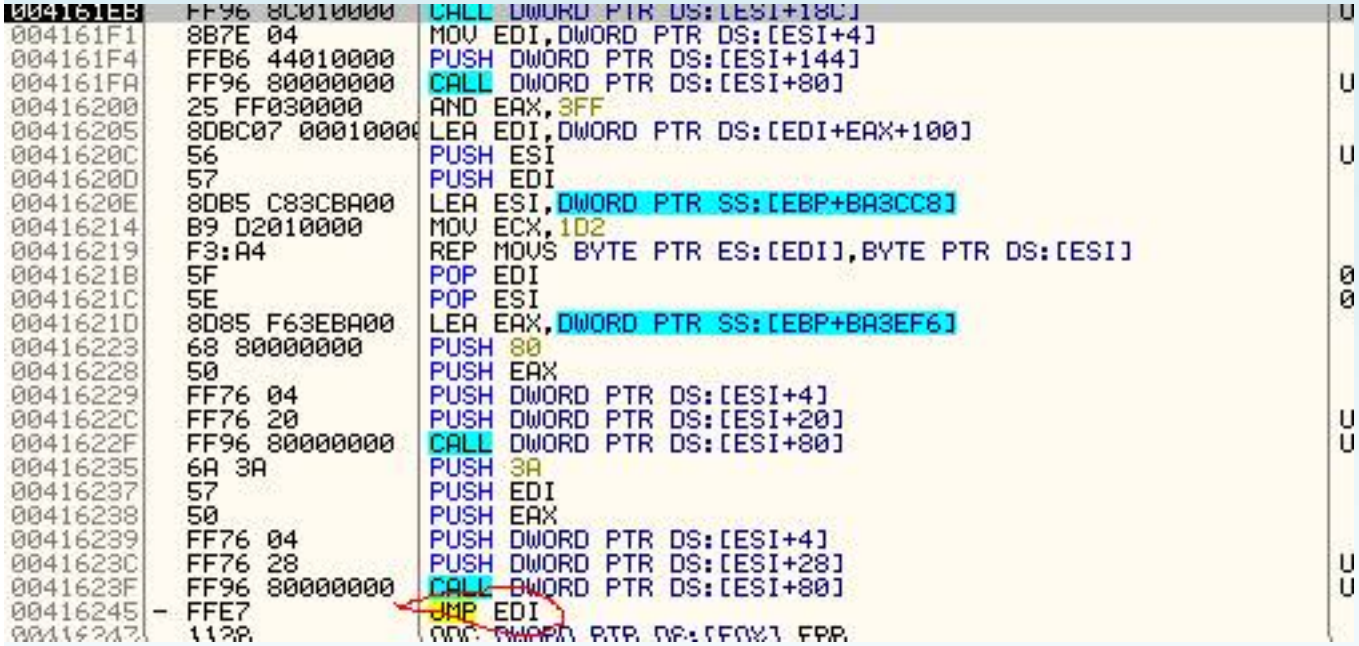


F7 to address 004161EB:



Trrace F8 repeatedly, you will see a loop in code:

Trace out of the loop by F2 at 004162CD RETN, then Shift + F9 to RETN, F7, we arrive this:

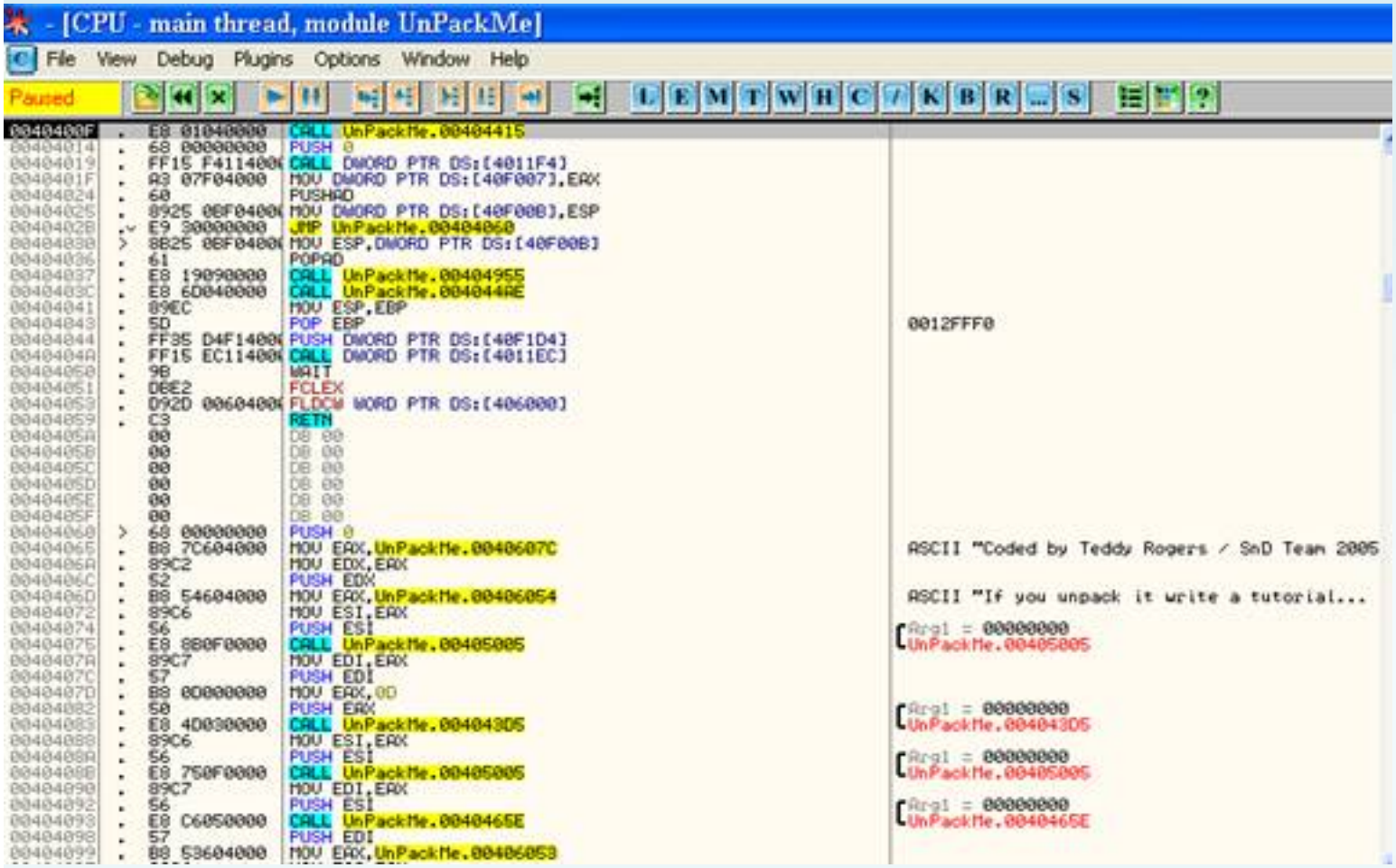


Then you look down a bit, we'll see JMP EDI 00416245, 00416245 Please, you should àh Hardware breakpoints set executation (F2 not be set at above), and remember to remove the trace breakpoints when completed, we to code the following:

The doctors should F8 respectively are the new shape as above. We stopped in 00378353:

JMP 0040400F ---------- à orders jumped to FALSE OEP

F7 um, we come:

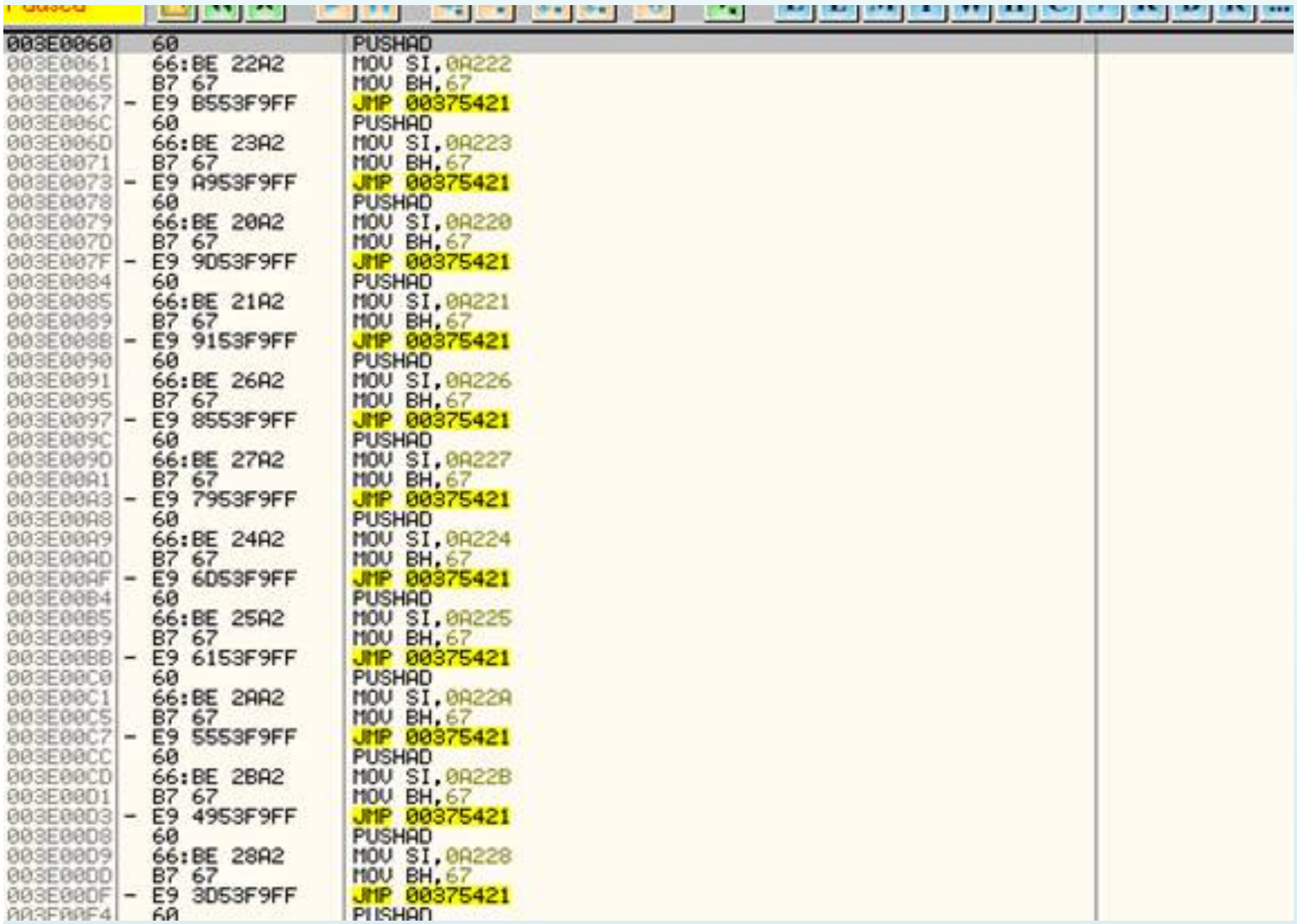


If someone does not correct it so please use the plugin Analyze this! By OLLY.

OEP is at 00404000, the script is the junk code, they will complicate our blind. Now we conduct dump. (This is in crackme crackme still work fine).

3. Imports

You find the following binary string: FF 25, and then choose a command's dance, Enter, you will see the following:



```
003E0060    60              PUSHAD
003E0061    66:BE 22A2      MOV SI,0A222
003E0065    B7 67           MOV BH,67
003E0067  - E9 B553F9FF     JMP 00375421
003E006C    60              PUSHAD
003E006D    66:BE 23A2      MOV SI,0A223
003E0071    B7 67           MOV BH,67
003E0073  - E9 A953F9FF     JMP 00375421
003E0078    60              PUSHAD
003E0079    66:BE 20A2      MOV SI,0A220
003E007D    B7 67           MOV BH,67
003E007F  - E9 9D53F9FF     JMP 00375421
003E0084    60              PUSHAD
003E0085    66:BE 21A2      MOV SI,0A221
003E0089    B7 67           MOV BH,67
003E008B  - E9 9153F9FF     JMP 00375421
003E0090    60              PUSHAD
003E0091    66:BE 26A2      MOV SI,0A226
003E0095    B7 67           MOV BH,67
003E0097  - E9 8553F9FF     JMP 00375421
003E009C    60              PUSHAD
003E009D    66:BE 27A2      MOV SI,0A227
003E00A1    B7 67           MOV BH,67
003E00A3  - E9 7953F9FF     JMP 00375421
003E00A8    60              PUSHAD
003E00A9    66:BE 24A2      MOV SI,0A224
003E00AD    B7 67           MOV BH,67
003E00AF  - E9 6D53F9FF     JMP 00375421
003E00B4    60              PUSHAD
003E00B5    66:BE 25A2      MOV SI,0A225
003E00B9    B7 67           MOV BH,67
003E00BB  - E9 6153F9FF     JMP 00375421
003E00C0    60              PUSHAD
003E00C1    66:BE 2AA2      MOV SI,0A22A
003E00C5    B7 67           MOV BH,67
003E00C7  - E9 5553F9FF     JMP 00375421
003E00CC    60              PUSHAD
003E00CD    66:BE 2BA2      MOV SI,0A22B
003E00D1    B7 67           MOV BH,67
003E00D3  - E9 4953F9FF     JMP 00375421
003E00D8    60              PUSHAD
003E00D9    66:BE 28A2      MOV SI,0A228
003E00DD    B7 67           MOV BH,67
003E00DF  - E9 3D53F9FF     JMP 00375421
003E00E4    60              PUSHAD
```

The order will jump to skip the process of Obsidium.O that does not function Obsidium GetProcAddress that instead, the imports are stored as:

- Dll image base (handle),

- Some flag (FFFFFFFF is the good one),

- Import code (which is 2,4,1,80 or 40),

- First character of import,

- CRC32 hash.

Obsidium will get information that programs need to use dll, then it will use some technical check inside (this is necessary import or not, ...), then it will search in the export dll symbols The first will be matched with something in the table "obsidium import info", then it will search for the import is based on the CRC32 hash with a value in this table.

Now is an example of us:

We see the following analysis:

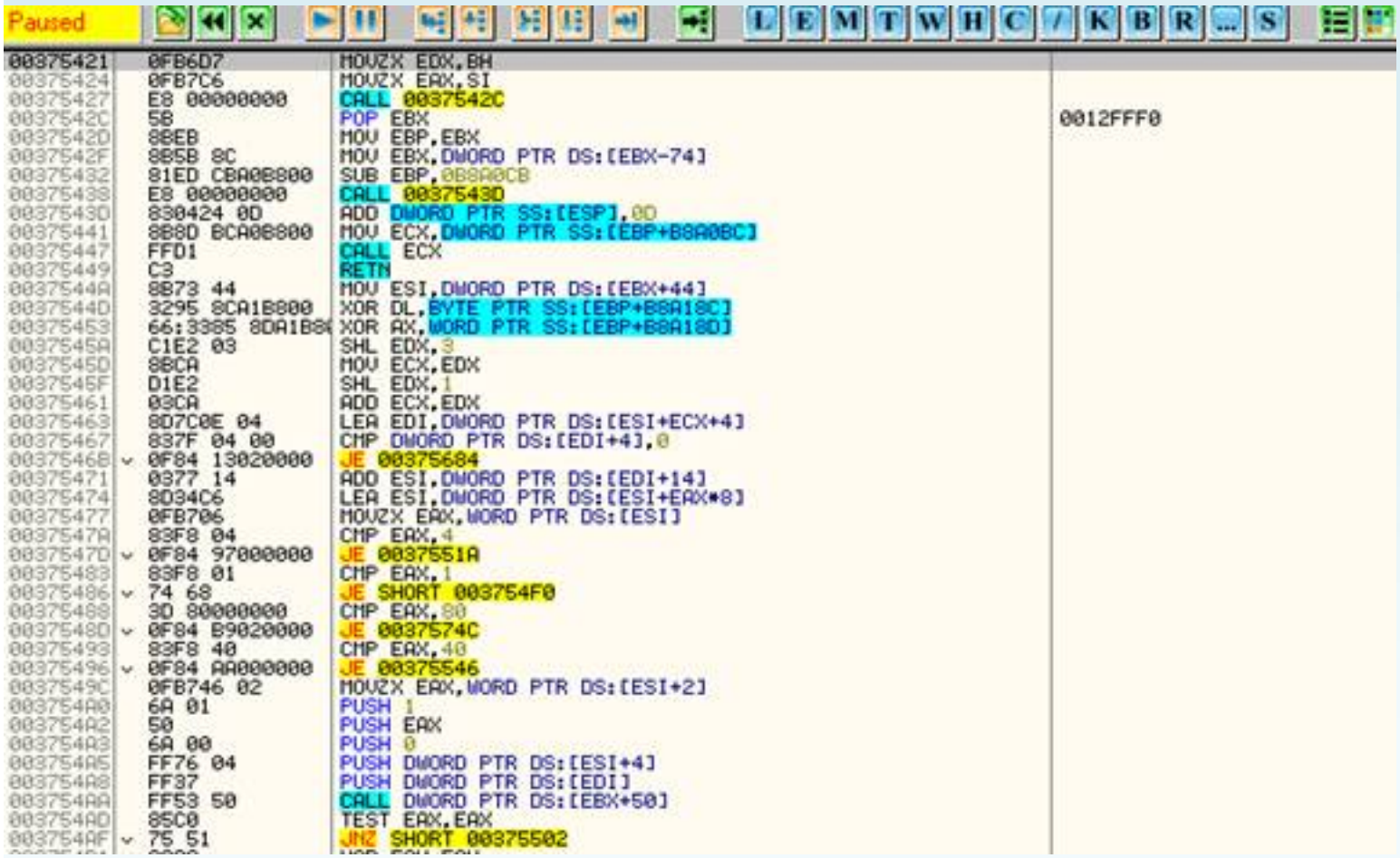
003E00B4 60 PUSHAD

003E00B5 66: BE 25A2 MOV SI, 0A225 <------ This is 2gia of which contains information

003E00B9 B7 67 MOV BH, 67 of <--------/ dll

003E00BB-E9 695389FF JMP 00395429

Then, you enter the address 003E00BB:



View:

00375467 Cmp DS DWORD PTR [EAX + EDI +4] check that, if the load is dll, the value is FFFFFFFF. I call this [1]

00375477 MOVZX EAX, WORD PTR DS: [ESI] <--------- It will take from the table "import code" (2,4,1,80,40) [2]

003754AA CALL DWORD PTR DS: [EBX +50] <--------- If "import code" is 2, it

searches import it here.

```
TEST EAX, EAX <---------------------- [3] EAX is API value. [3]
```

Most import is in "code 2" category.

I used to edit the script imports. First, we review panel Imports in the original file:

```
0040119C  003E0000
004011A0  003E000C
004011A4  003E0018
004011A8  003E0024
004011AC  003E0030
004011B0  003E003C
004011B4  003E0048
004011B8  003E0054
004011BC  00000000
004011C0  00000000
004011C4  00000000
004011C8  00000000
```

Now it is conducted manually fix Imports Heng.

Put "New Origin here" in the first 003E0000, then F7 to

003E0007 Jmp 00375421

Then F7 to 00375421, and then set break points in 3 position [1], [2], [3]:

```
00375421   0FB6D7          MOVZX EDX,BH
00375424   0FB7C6          MOVZX EAX,SI
00375427   E8 00000000     CALL 0037542C
0037542C   5B              POP EBX                                  0012FFF0
0037542D   8BEB            MOV EBP,EBX
0037542F   8B5B 8C         MOV EBX,DWORD PTR DS:[EBX-74]
00375432   81ED CBA0B800   SUB EBP,0B8A0CB
00375438   E8 00000000     CALL 0037543D
0037543D   830424 0D       ADD DWORD PTR SS:[ESP],0D
00375441   8B8D BCA0B800   MOV ECX,DWORD PTR SS:[EBP+B8A0BC]
00375447   FFD1            CALL ECX
00375449   C3              RETN
0037544A   8B73 44         MOV ESI,DWORD PTR DS:[EBX+44]
0037544D   3295 8CA1B800   XOR DL,BYTE PTR SS:[EBP+B8A18C]
00375453   66:3385 8DA1B80 XOR AX,WORD PTR SS:[EBP+B8A18D]
0037545A   C1E2 03         SHL EDX,3
0037545D   8BCA            MOV ECX,EDX
0037545F   D1E2            SHL EDX,1
00375461   03CA            ADD ECX,EDX
00375463   8D7C0E 04       LEA EDI,DWORD PTR DS:[ESI+ECX+4]
00375467   837F 04 00      CMP DWORD PTR DS:[EDI+4],0
0037546B   0F84 13020000   JE 00375684
00375471   0377 14         ADD ESI,DWORD PTR DS:[EDI+14]
00375474   8D34C6          LEA ESI,DWORD PTR DS:[ESI+EAX*8]
00375477   0FB706          MOVZX EAX,WORD PTR DS:[ESI]
0037547A   83F8 04         CMP EAX,4
0037547D   0F84 97000000   JE 0037551A
00375483   83F8 01         CMP EAX,1
00375486   74 68           JE SHORT 003754F0
00375488   3D 80000000     CMP EAX,80
0037548D   0F84 B9020000   JE 0037574C
00375493   83F8 40         CMP EAX,40
00375496   0F84 AA000000   JE 00375546
0037549C   0FB746 02       MOVZX EAX,WORD PTR DS:[ESI+2]
003754A0   6A 01           PUSH 1
003754A2   50              PUSH EAX
003754A3   6A 00           PUSH 0
003754A5   FF76 04         PUSH DWORD PTR DS:[ESI+4]
003754A8   FF37            PUSH DWORD PTR DS:[EDI]
003754AA   FF53 50         CALL DWORD PTR DS:[EBX+50]
003754AD   85C0            TEST EAX,EAX
003754AF   75 51           JNZ SHORT 00375502
003754B1   33C9            XOR ECX,ECX
```

One Shift + F9, stop at 003754AD TEST EAX, EAX to see the API, then fill to the IAT, in turn as follows:

```
0040119C 6E ED D4 77 BB D7 D4 77 7C B5 D4 77 0B 05 D8 n. 77. W. .. w | ..
w. .. w

004011AC B2 02 D7 77 54 05 D5 77 9F F2 D6 77 54 00 B0 00 … w. .. .. wT wT ...

004011BC 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

004011CC 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

004011DC 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

004011EC 60 00 B0 00 37 97 80 7C 29 B5 80 7C 2D FF 80 7C `..|)..|-..| ... 7

004011FC 2F FE 80 7C D4 05 91 7C AE 30 82 7C 29 29 81 7C /..|...|® 0 .|)).|

0040120C 10 11 81 7C 3D 04 91 7C B9 8F 83 7C E4 00 B0 00 ...|=..|...|....

0040404A CALL DWORD PTR DS: [4011EC] DS: [004011EC] = 00B00060

00404EF2 CALL DWORD PTR DS: [40119C] USER32.CallNextHookEx

00404F89 CALL DWORD PTR DS: [4011F0] kernel32.GetCurrentThreadId

00404C66 CALL DWORD PTR DS: [4011A0] USER32.GetDesktopWindow

00404019 CALL DWORD PTR DS: [4011F4] kernel32.GetModuleHandleA

00404C7F CALL DWORD PTR DS: [4011A4] USER32.GetWindowRect

004057CE CALL DWORD PTR DS: [4011F8] kernel32.GlobalAlloc

00405614 CALL DWORD PTR DS: [4011FC] kernel32.GlobalFree

00404622 CALL DWORD PTR DS: [401204] kernel32.HeapCompact

00404453 CALL DWORD PTR DS: [401208] kernel32.HeapCreate

00404584 CALL DWORD PTR DS: [40120C] kernel32.HeapDestroy

00404326 CALL DWORD PTR DS: [401214] kernel32.lstrcatA

00404FC9 CALL DWORD PTR DS: [4011A8] USER32.MessageBoxA

004045EF CALL DWORD PTR DS: [401200] ntdll.RtlAllocateHeap

0040463E CALL DWORD PTR DS: [401200] ntdll.RtlAllocateHeap

004046DD CALL DWORD PTR DS: [401210] ntdll.RtlFreeHeap

00404FA4 CALL DWORD PTR DS: [4011AC] USER32.SetWindowsHookExA
```

```
00404C17 CALL DWORD PTR DS: [4011B0] USER32.SystemParametersInfoA

00404FDB CALL DWORD PTR DS: [4011B4] USER32.UnhookWindowsHookEx
```

Only a single type of a "code 40", I trace a call that other than the above and is ExitProcess. (you should do with my hands like).

Finish.

Wish you luck.

Thanks.

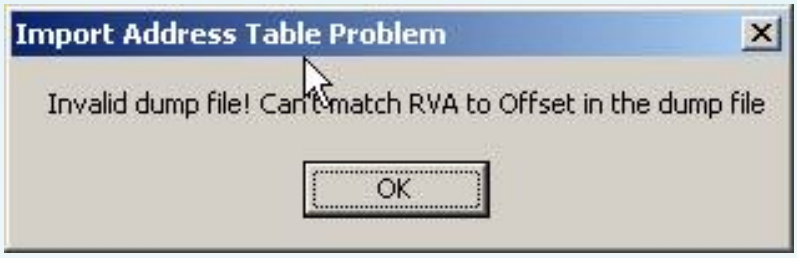
Toolcracking

Armadillo collect sand-stone

Picture Ripper 3: Armadillo 4.xx-Import + Nanomites Complete elimination tut!

I. Intro:

Tout le monde _Salut, now in the Net, I found some software was packed with options and Import Code Splicing elimination. And we can not unpack because the import was make in memory, I call this IAT is: Virtual IAT. Armadillo make Memory in the IAT and software to redirect. So, we can not use this because when IAT fix dump our dumped file, imprec show a dialog:



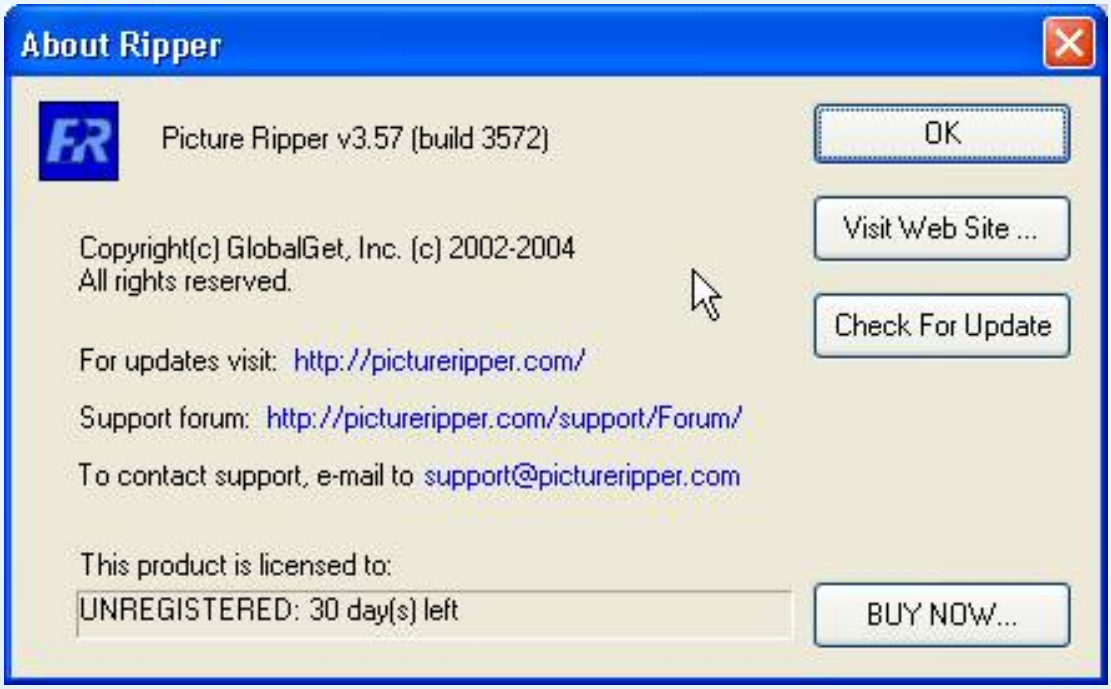
_It's A blessing when Admirallo make a very very good tools is: ArmaInline (the newest version is 0.6). ArmaInline appear before, I was found just one method redirect the virtual IAT by **Ricardo Narvaja** in the tuts *(203-ARMADILLO CON DESTRUCCION DE TABLA parte 1 A CHILD 208-ARMADILLO DESTRUCCION DE TABLA Y FINAL PARTE 6)* with the target HyperSnap-DX.v5.60! But think in this method only for pro and not for beginner!
_In Exetools Forum, I was published an article called: Code Splicing + IAT elimination. Sorry my blunder! And now, I complete a written tut for this options. I'll do my best to make this tut become very easy for every body! Ok, the end of Intro. Go go go!

II. Tools

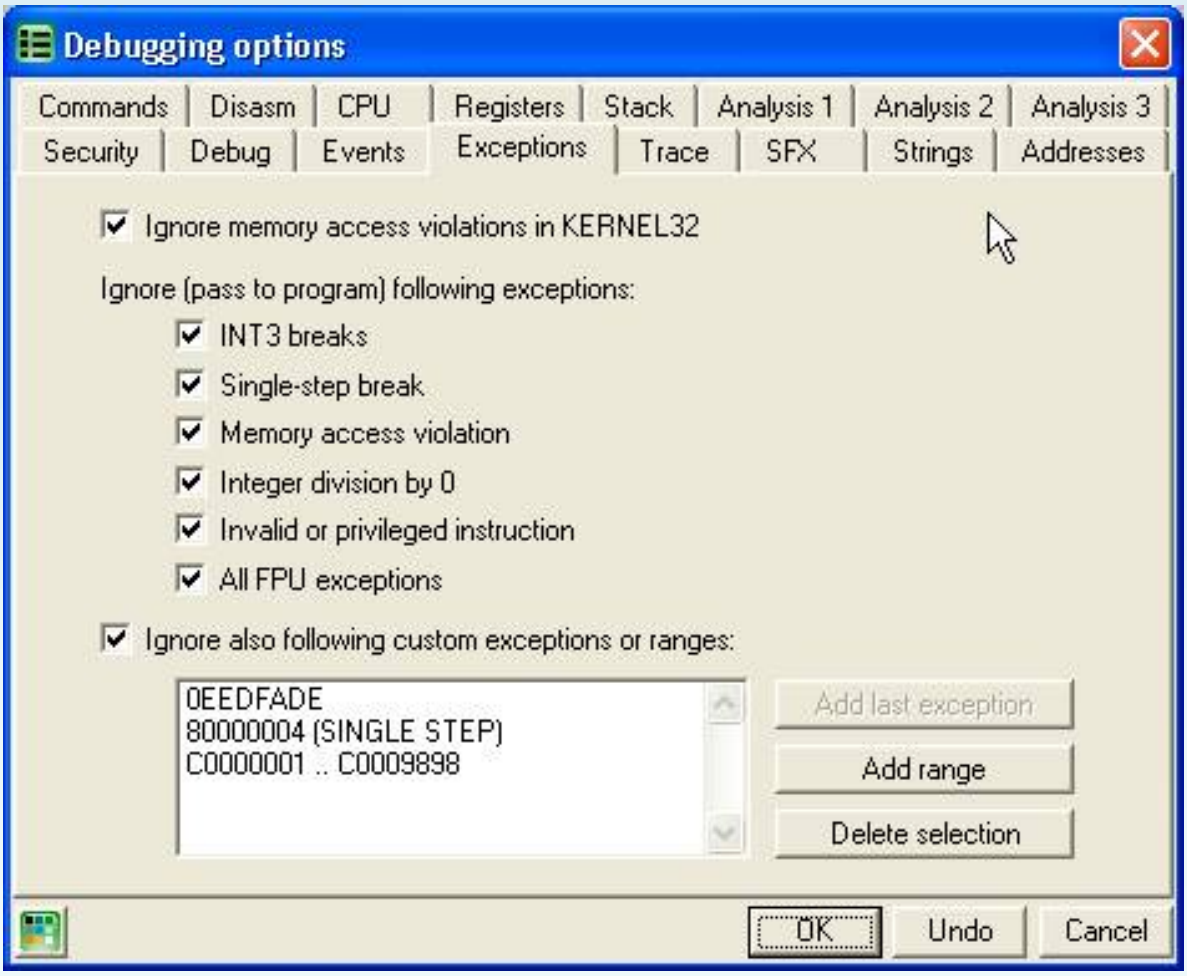
1.OllyDBG - The best config debugger for ArmMUP by hacnho.
2.LordPE 1.4 Deluxe
3.Import REConstructor 1.6 Final
4.ArmInline 0.71

III. Unpacking

Target: Picture Ripper 3:57 build 3572
ARM Debug 4.xx-Blocker IAT elimination + + + Anti Breakpoint Nanomites



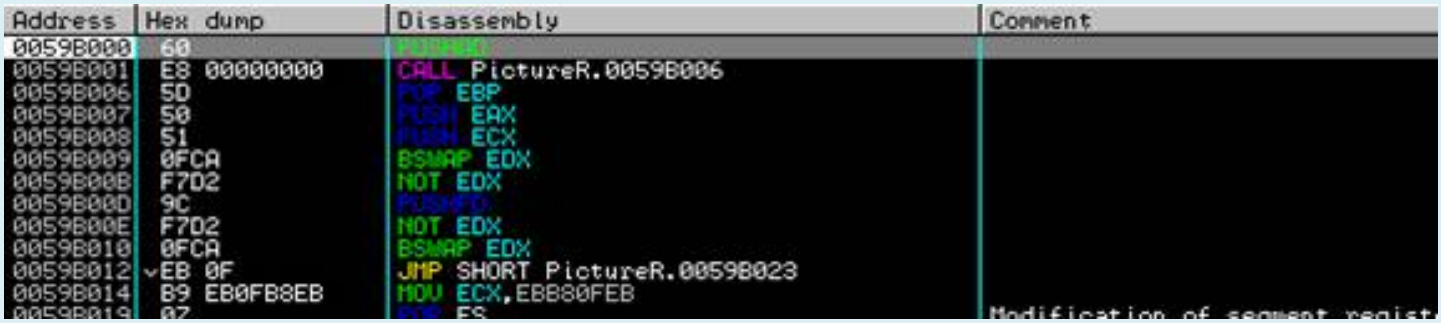
_Setting OllyDBG:



_Detect Target:

_

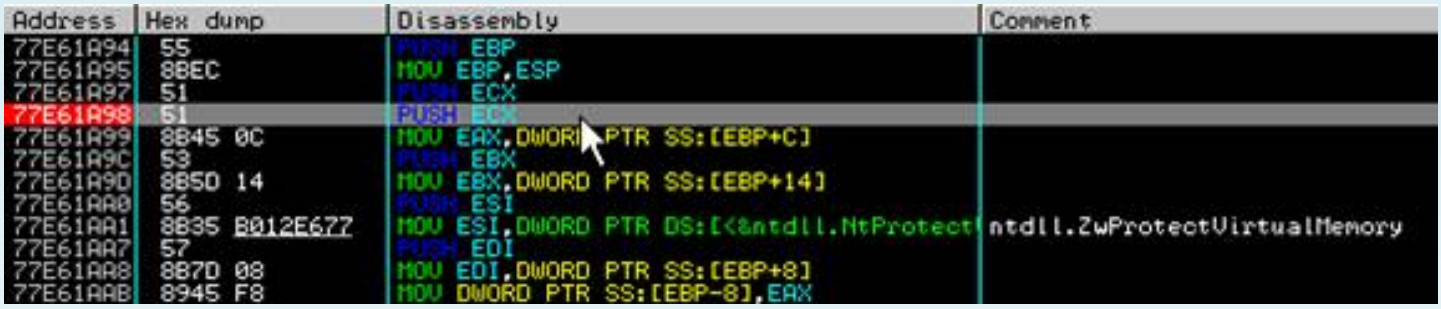
_Ok, Load into OllyDBG target:



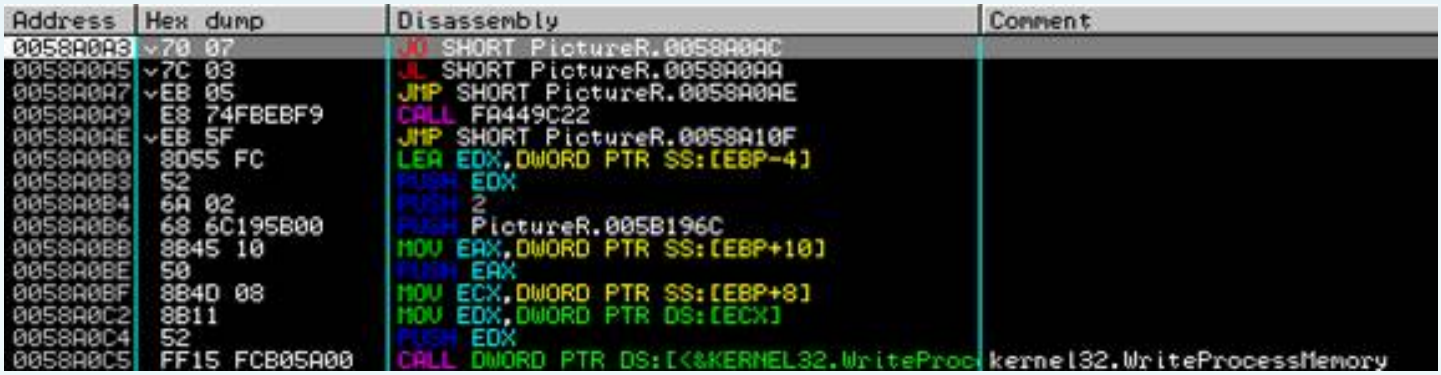
_bp WriteProcessMemory, Shift + F9:

_It's Crash. Oh, I think this target anti-bp! Ok. We must pass by the debug option by hand blocker. Ctrl + F2 restart target. Ctrl + G: WriteProcessMemory:

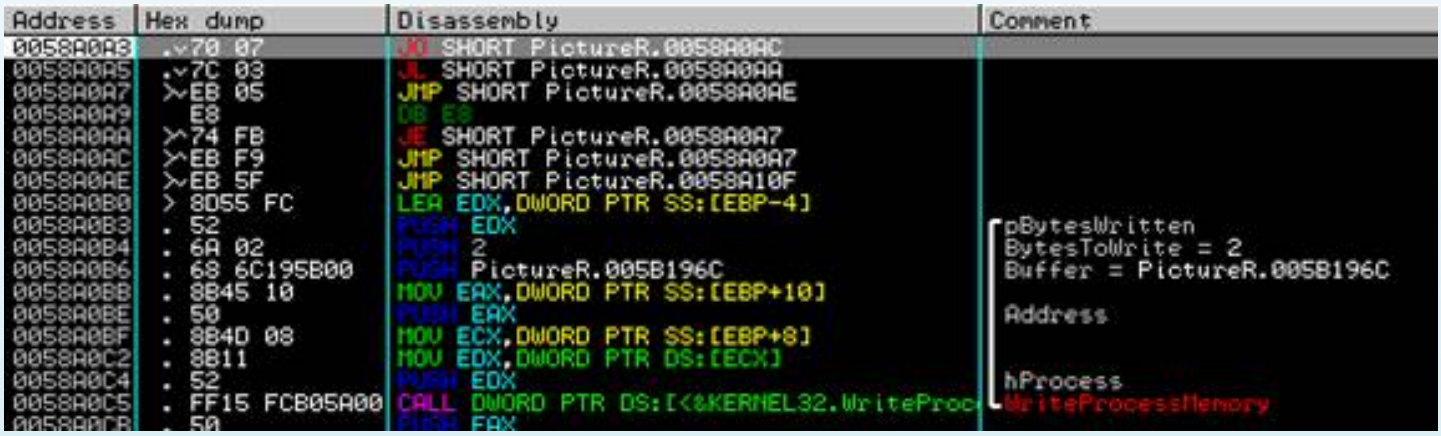
F2 _Press set a breakpoint at:



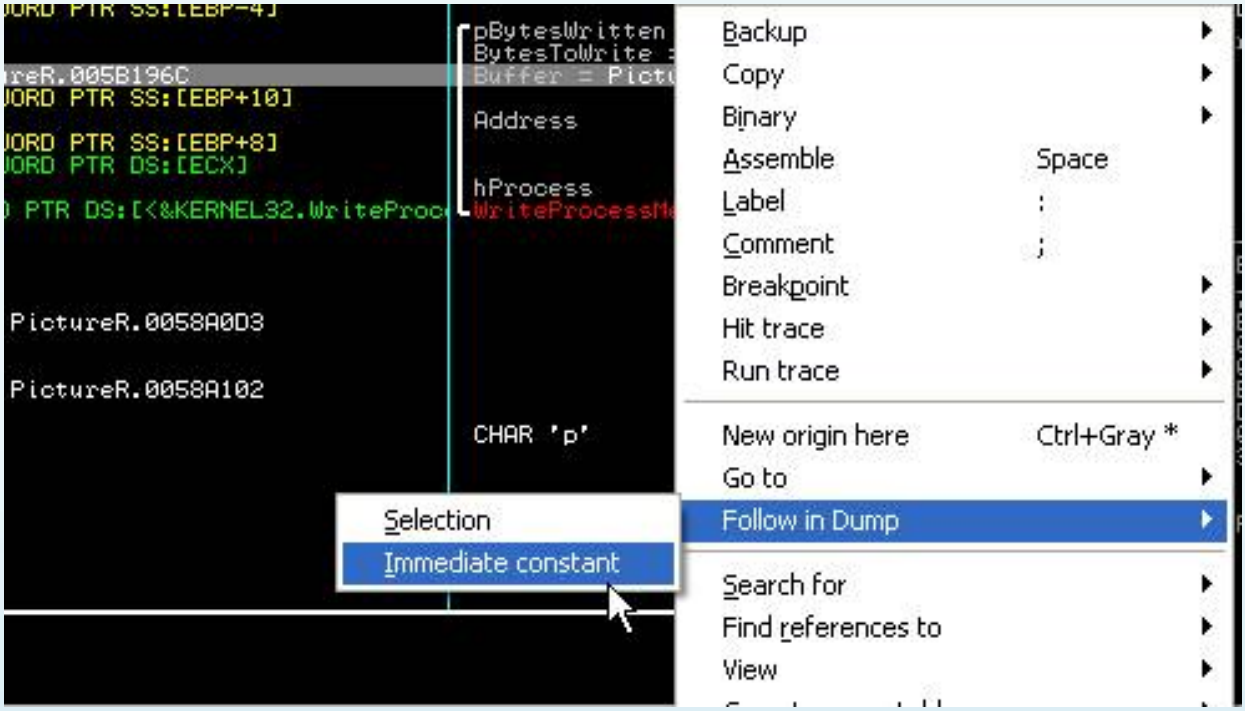
_Shift + F9, yeap. J OllyDBG break. Now, press Alt + F9:



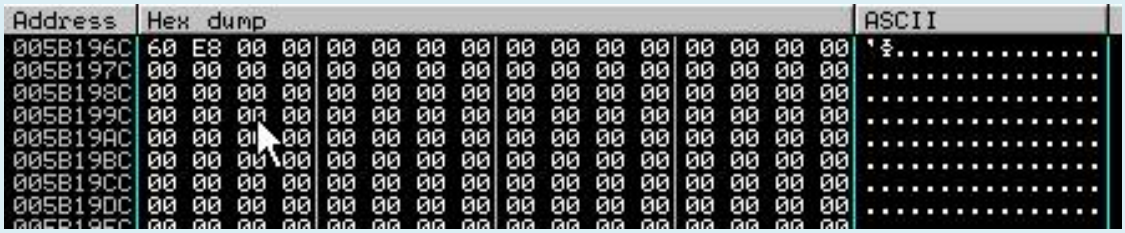
_Nothing Interest. Ok, Ctrl + A:



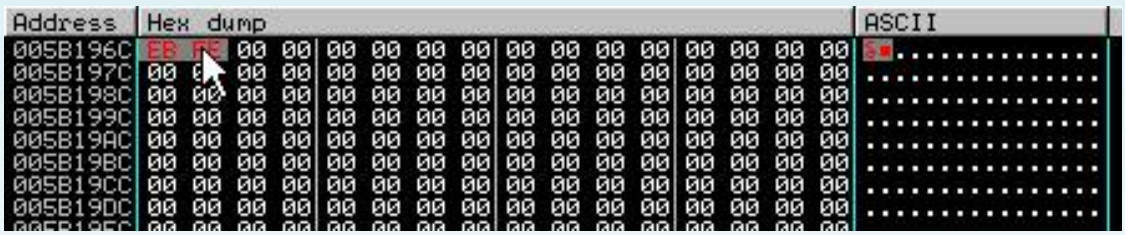
_Yeah! Ok, then right click at the buffer and follow in dump> Inmmediate Constant:



_Look Dump in Windows:

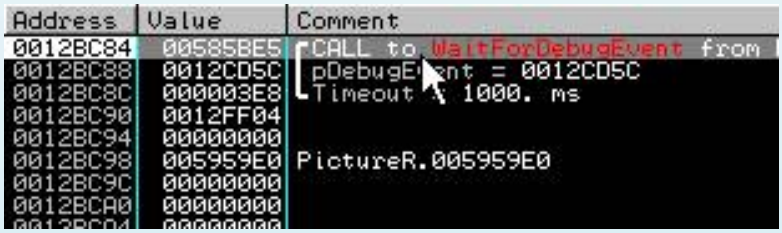


_Next, Ctrt + E: 60E8 to change EBFE:

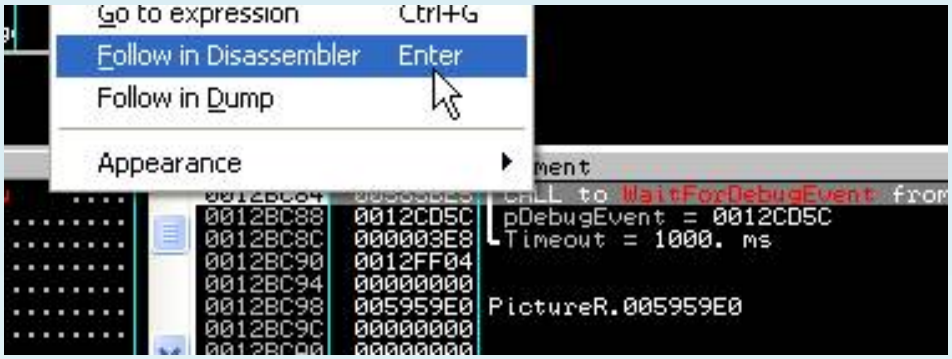


_Following, You set a breakpoint at API WaitForDebugEvent! Alt + F1: BP WaitForDebugEvent (Remember delete the breakpoint at Push ECX)! Attention, set breakpoint before WaitForDebugEvent, you must press F9 one time! If no, the child will be suppend:

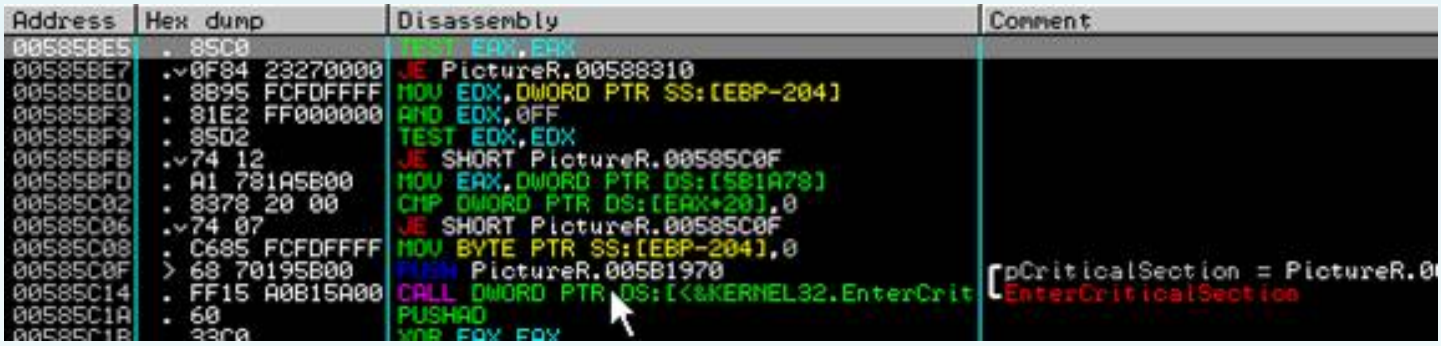
_Shift + F9, look in the Stack Window:



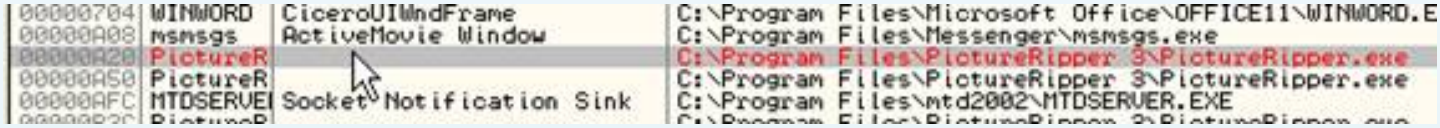
Disassembler _Follow in simple or press Ctrl + F9, F8



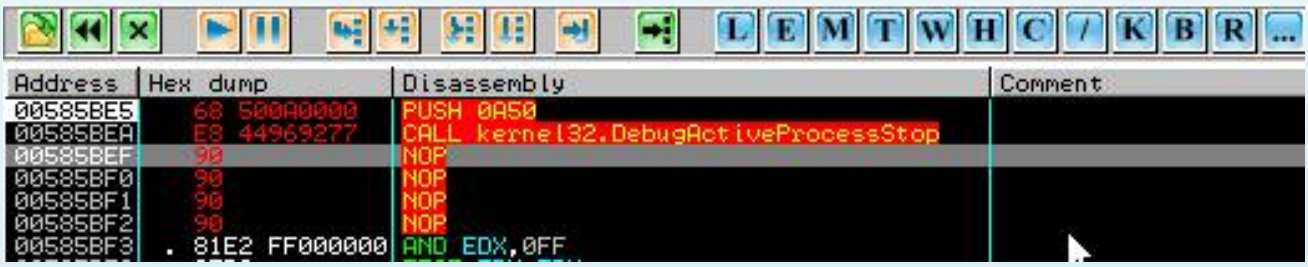
_You Still here:



_Look Attach the Window:

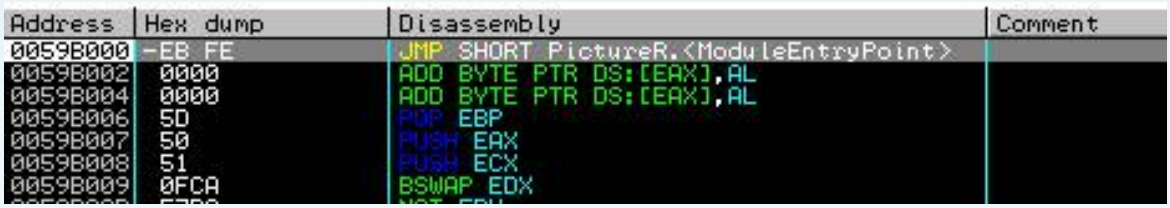


_Close Attach the Window, to patch:



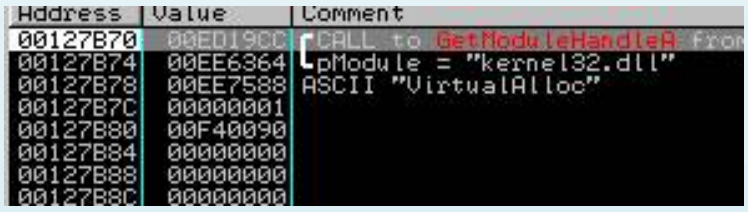
_Press F8, trace down:

_Done! By Debug pass blocker successful! Continued, Fire Up a OllyDBG, Attach the child, F9, F12:



_Change EBFE to 60E8:

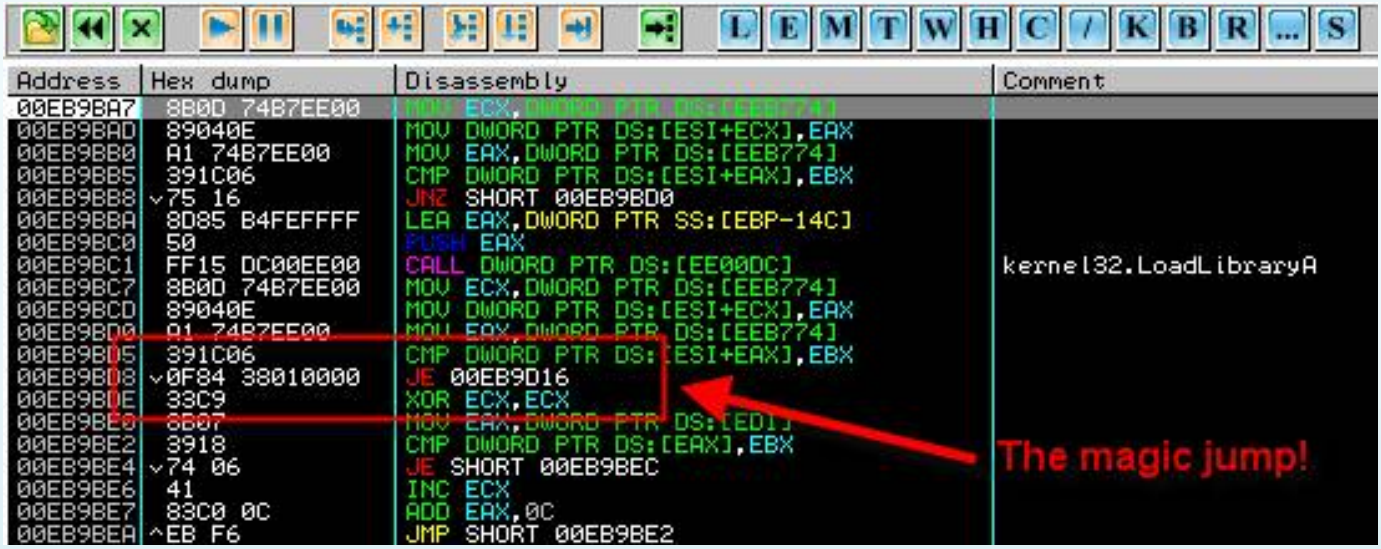
_The Next step is magic patch jump and find OEP. Ok, now, press Alt + F1: He GetModuleHandleA, Shift + F9 first time:



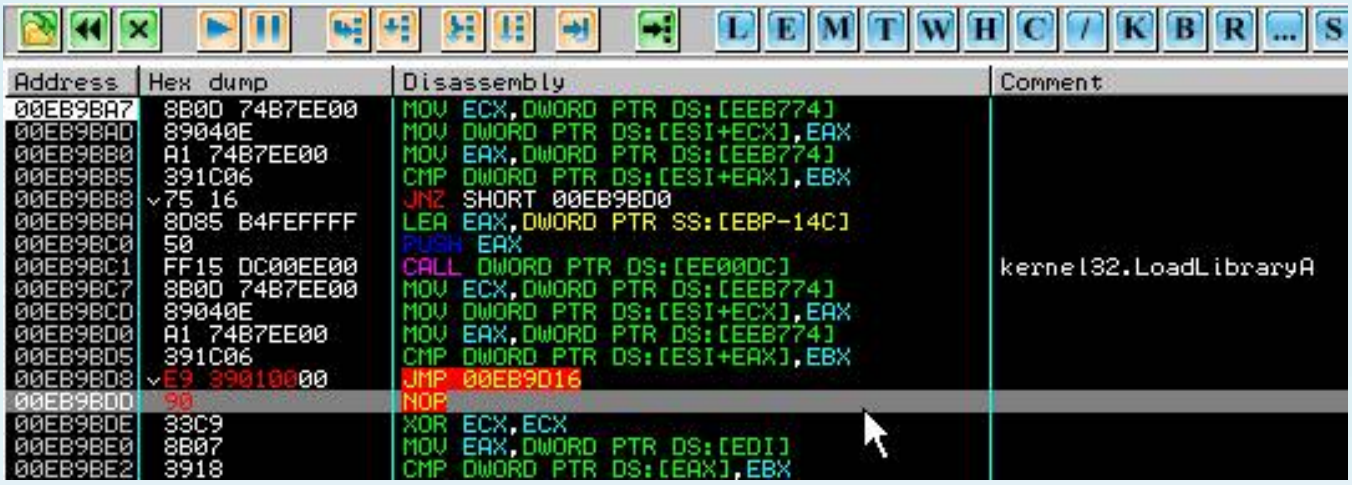
_ 2 nd:

_3 Rd:

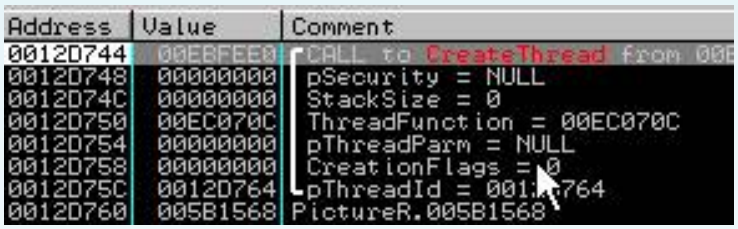
_Trace Down F8 with the Return and you here at:



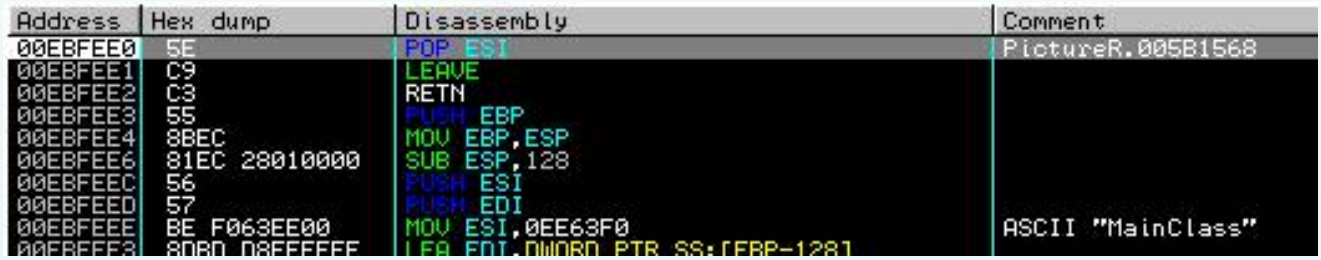
_Change It to EB:



_Now We find J OEP. Hd GetModuleHandleA, BP CreateThread, Shift + F9:

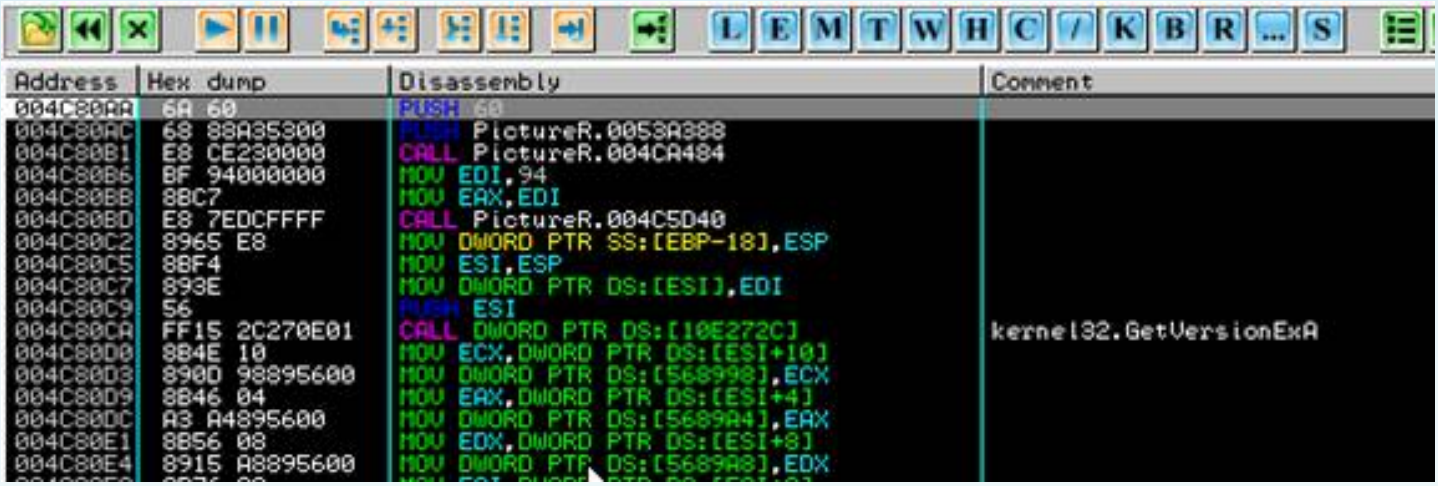


_Ctrl + F9, F8:



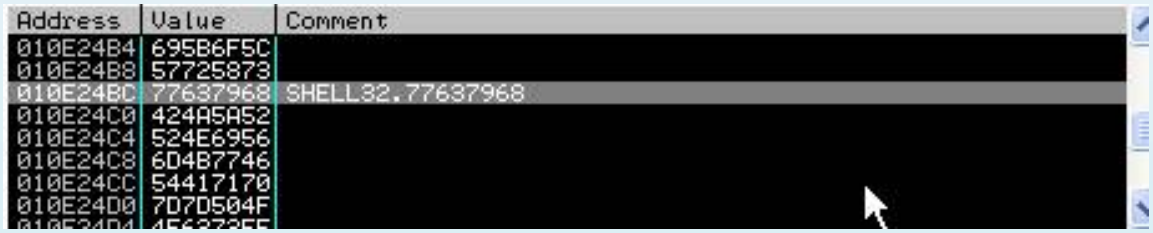
_Again, Ctrl + F9, F8, Scroll down the signal of OEP:

_Press Call EDI at F2, F9, F7: OEP J !

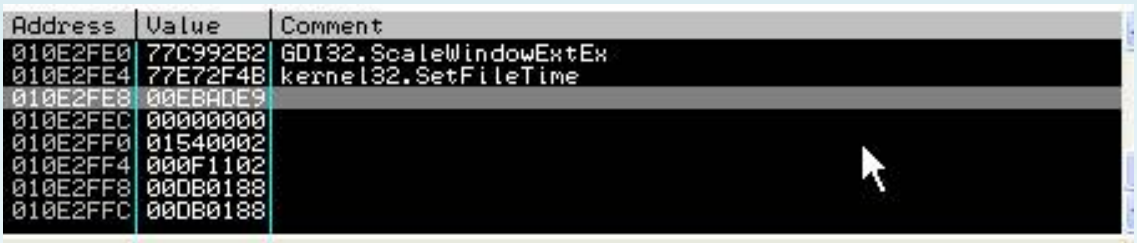


_This Is the signal of Import elimination. We must redirect it to a real cave memory! But the first step is to find the IAT. At the API GetVetsionA, Follow in dump> Memory Address, and we have the IAT:

_IAT Start:



_IAT End:



_Total We have:

IAT Start: 010E24BC 77637968 SHELL32.77637968

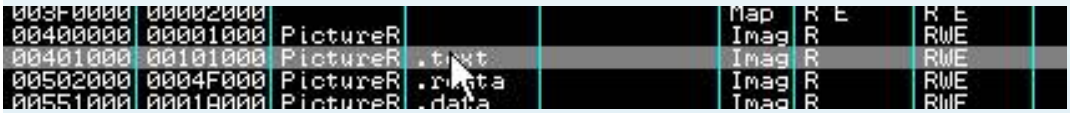
IAT End: 010E2FE4 77E72F4B kernel32.SetFileTime

IAT Len: 010E2FE4-010E24BC = B28

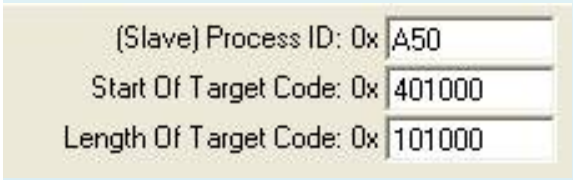
OEP: C80AA
PID: 07F8

_Is Now, we must redirect the IAT to a Virtual Real IAT. ArmInline fire up and fill in:

PID: 0A50
Start Of Target Code: 401000: this is the address sections of text:

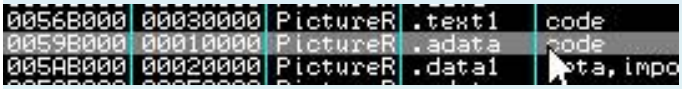


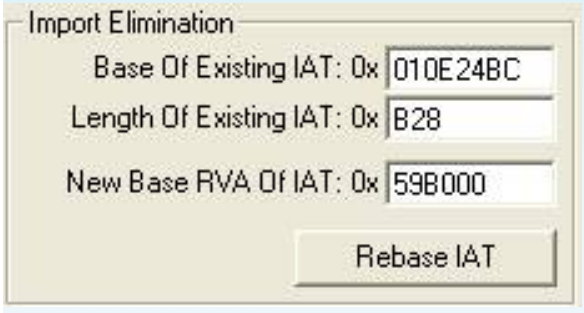
Length Of Target Code: 101000: Size of text sections:



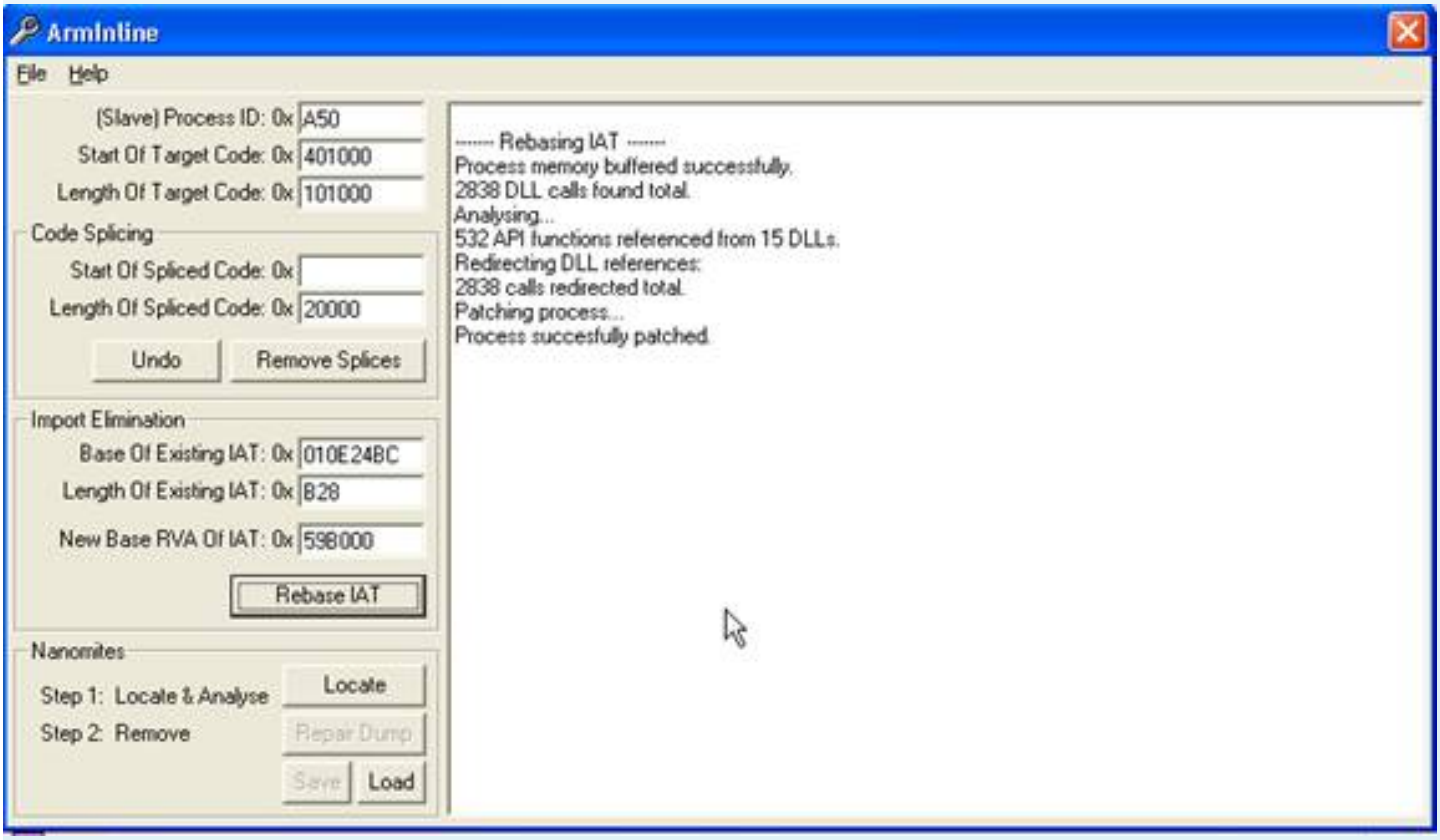
_In The table IAT elimination fill in:

Base Of Existing IAT: IAT Start: 010E24BC 77637968 SHELL32.77637968
Length Of Existing IAT: IAT Len: 010E2FE4-010E24BC = B28
New Base RVA of IAT: We choose the section. ADATA to redirect the IAT: 59B000

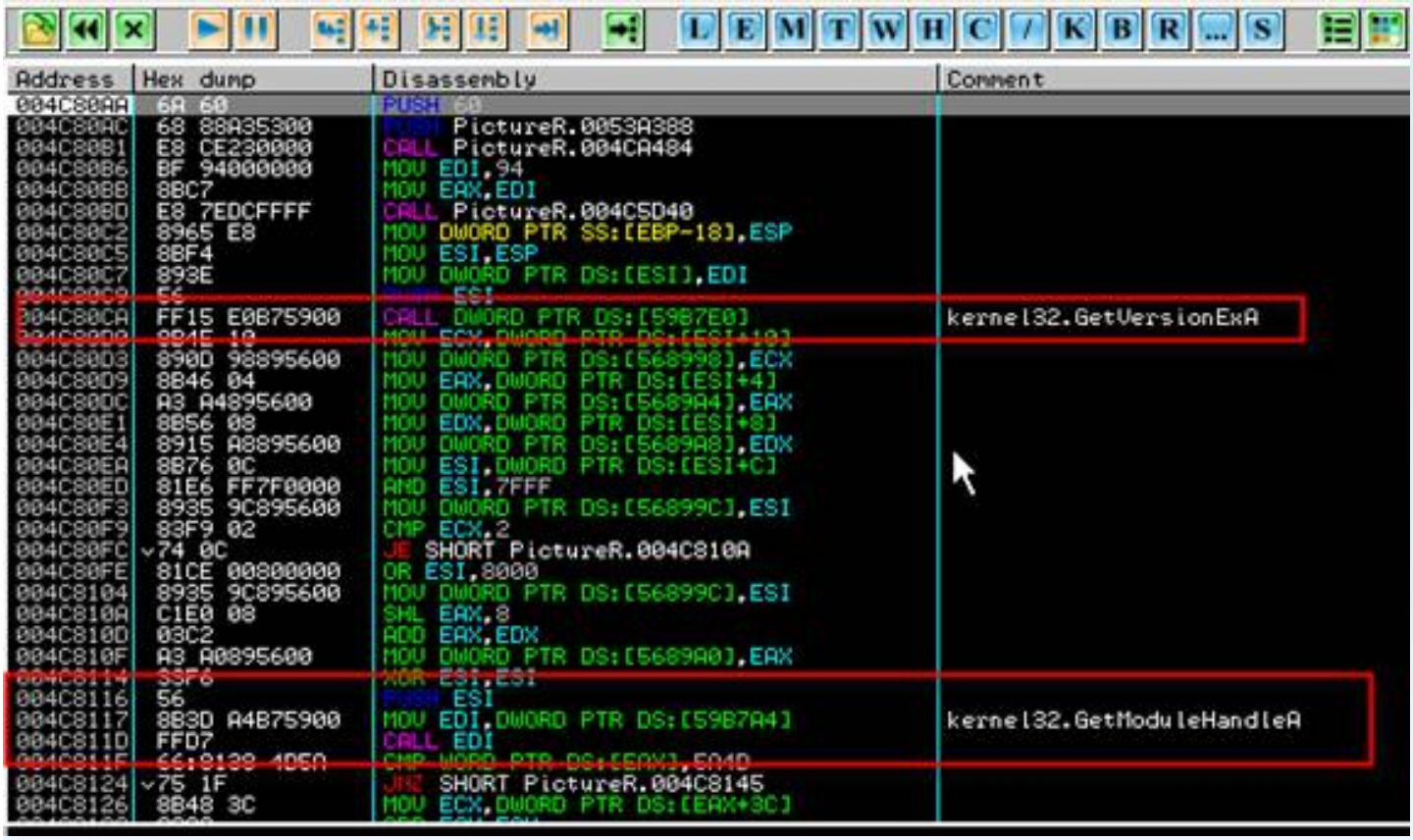




_Ok, Done, click Rebase IAT, and here we are:

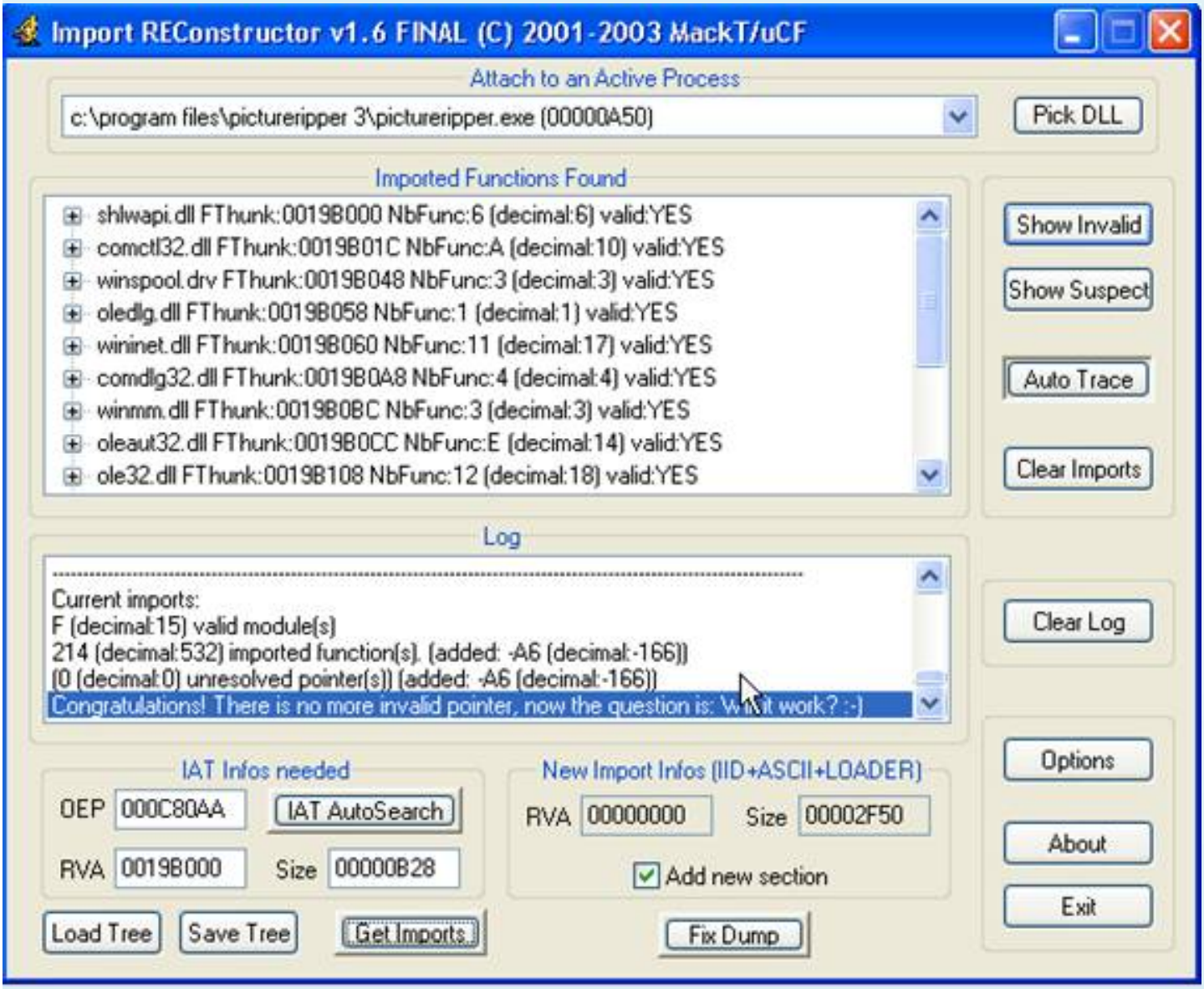


_Go Back to the CPU, and we see the IAT is successful redirect:

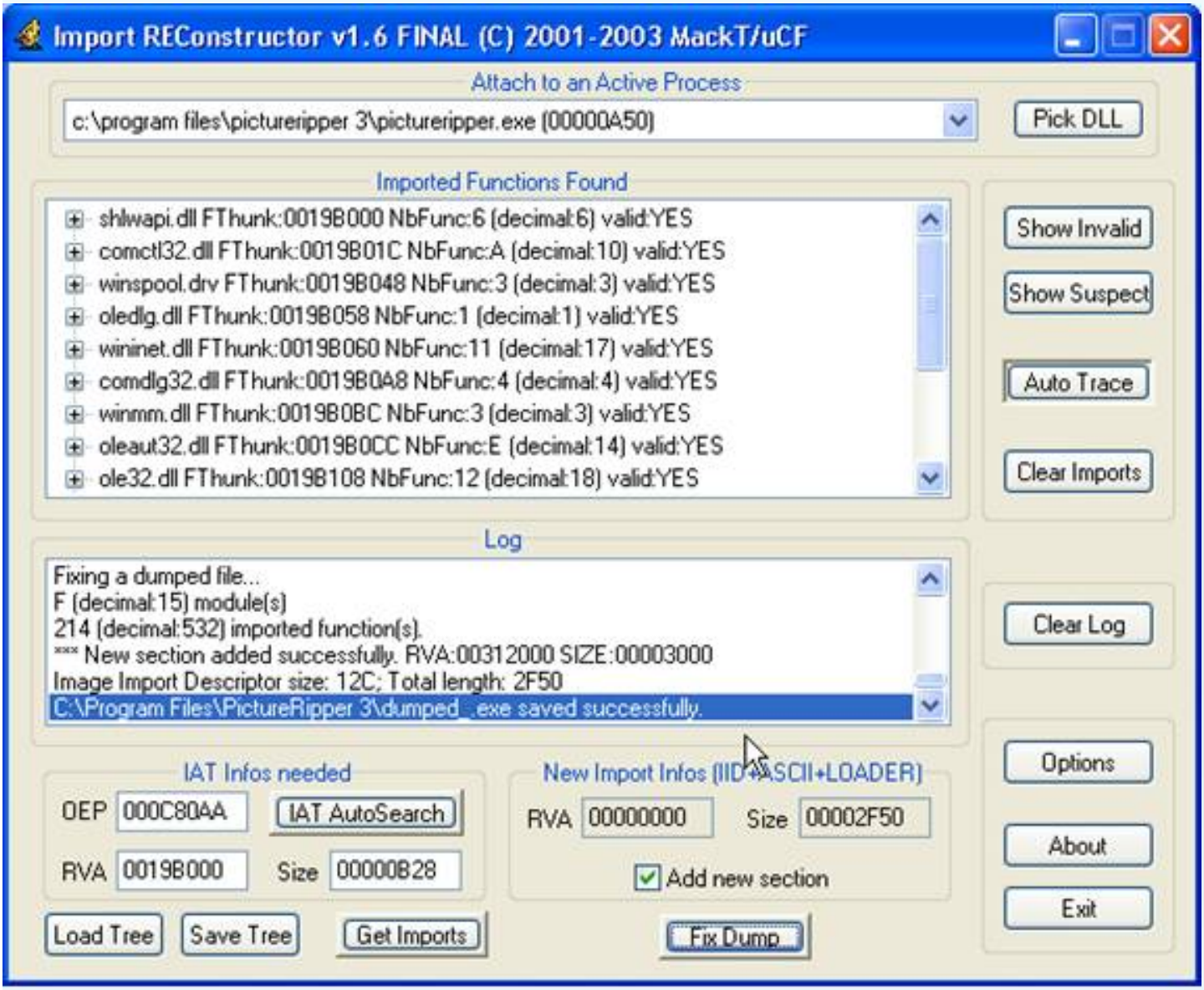


_Use LordPE and Full dump:

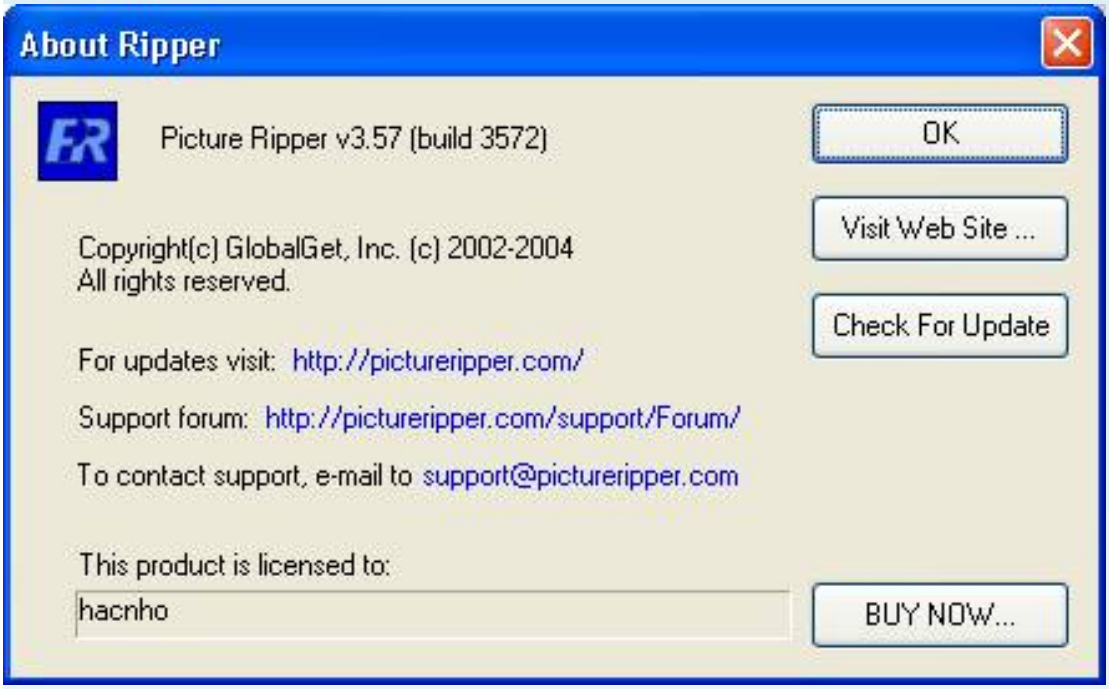
_Fire Up Imprec, fill OEP, IAT Auto Search, GetImport, Show Invalid, Thunks Cuts:


Import REConstructor v1.6 FINAL (C) 2001-2003 MackT/uCF
Attach to an Active Process
c:\program files\pictureripper 3\pictureripper.exe (00000A50)
Pick DLL
Imported Functions Found
shlwapi.dll FThunk:0019B000 NbFunc:6 (decimal:6) valid:YES
comctl32.dll FThunk:0019B01C NbFunc:A (decimal:10) valid:YES
winspool.drv FThunk:0019B048 NbFunc:3 (decimal:3) valid:YES
oledlg.dll FThunk:0019B058 NbFunc:1 (decimal:1) valid:YES
wininet.dll FThunk:0019B060 NbFunc:11 (decimal:17) valid:YES
comdlg32.dll FThunk:0019B0A8 NbFunc:4 (decimal:4) valid:YES
winmm.dll FThunk:0019B0BC NbFunc:3 (decimal:3) valid:YES
oleaut32.dll FThunk:0019B0CC NbFunc:E (decimal:14) valid:YES
ole32.dll FThunk:0019B108 NbFunc:12 (decimal:18) valid:YES
Show Invalid
Show Suspect
Auto Trace
Clear Imports
Log
Current imports:
F (decimal:15) valid module(s)
214 (decimal:532) imported function(s). (added: -A6 (decimal:-166))
(0 (decimal:0) unresolved pointer(s)) (added: -A6 (decimal:-166))
Congratulations! There is no more invalid pointer, now the question is: W
Clear Log
IAT Infos needed
OEP 000C80AA
IAT AutoSearch
RVA 0019B000
Size 00000B28
New Import Infos (IID+ASCII+LOADER)
RVA 00000000
Size 00002F50
Add new section
Options
About
Exit
Load Tree
Save Tree
Get Imports
Fix Dump

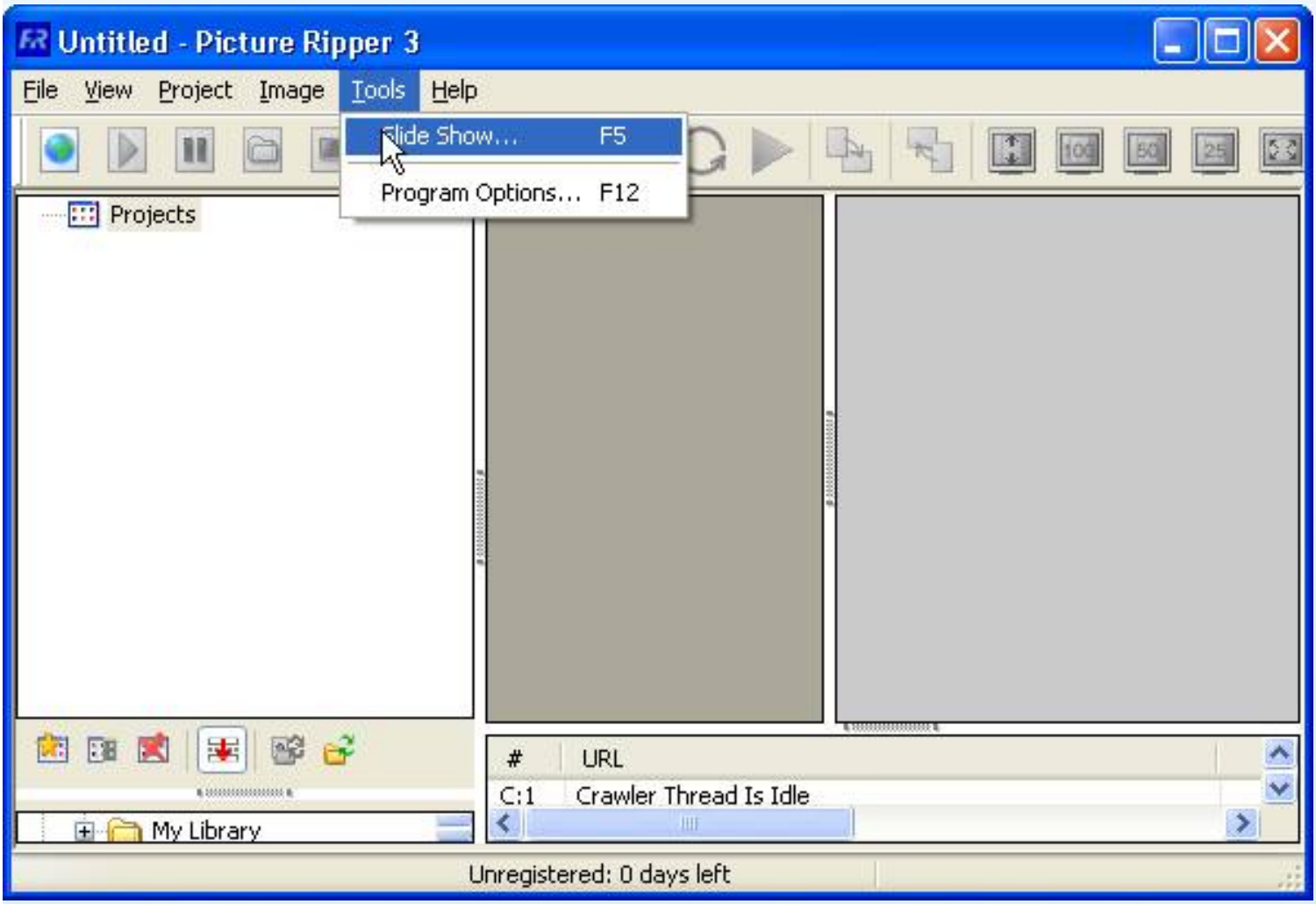
_Fix Dump:



Run Dumped.exe:

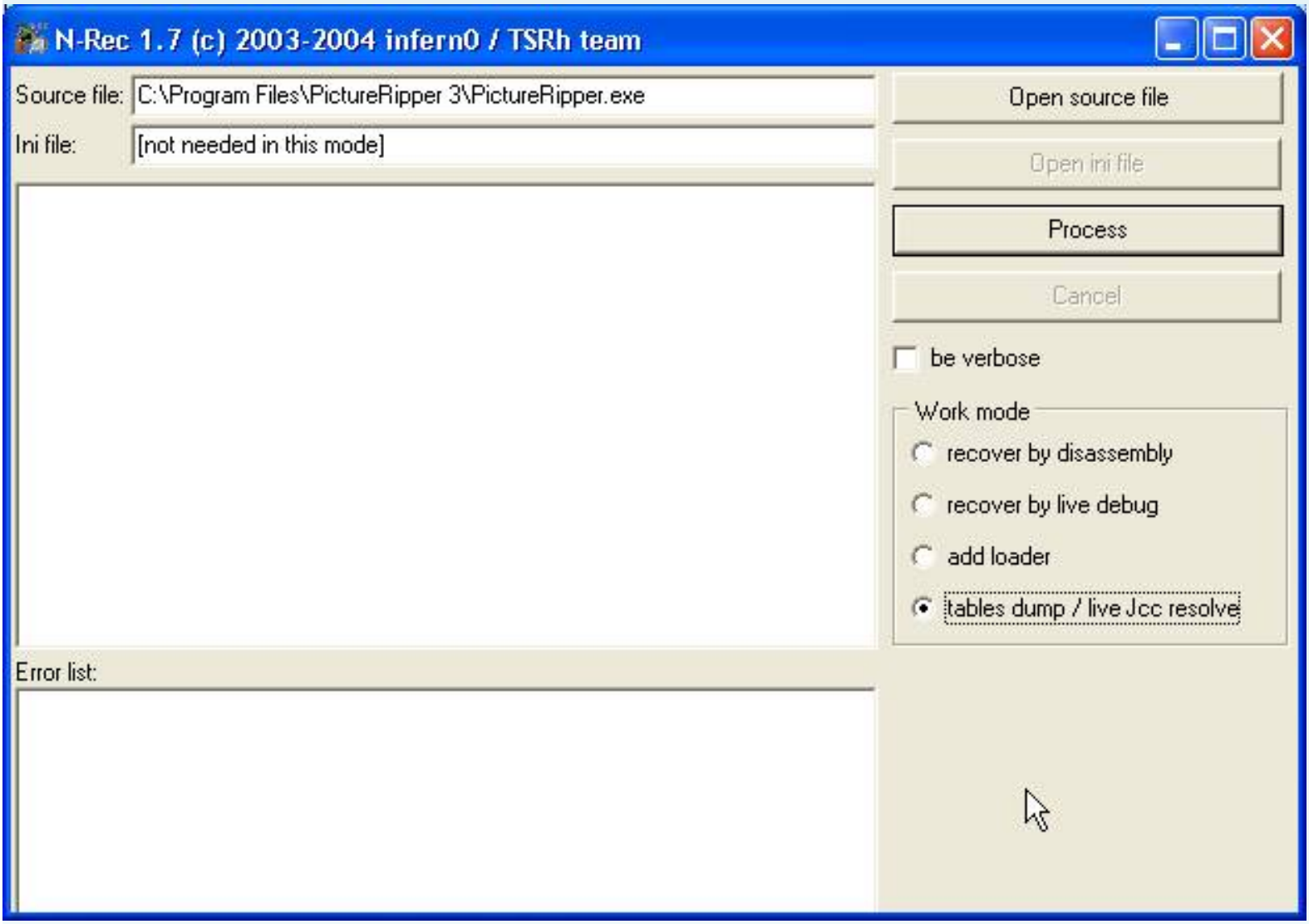


_So When we try to open the Options menu:

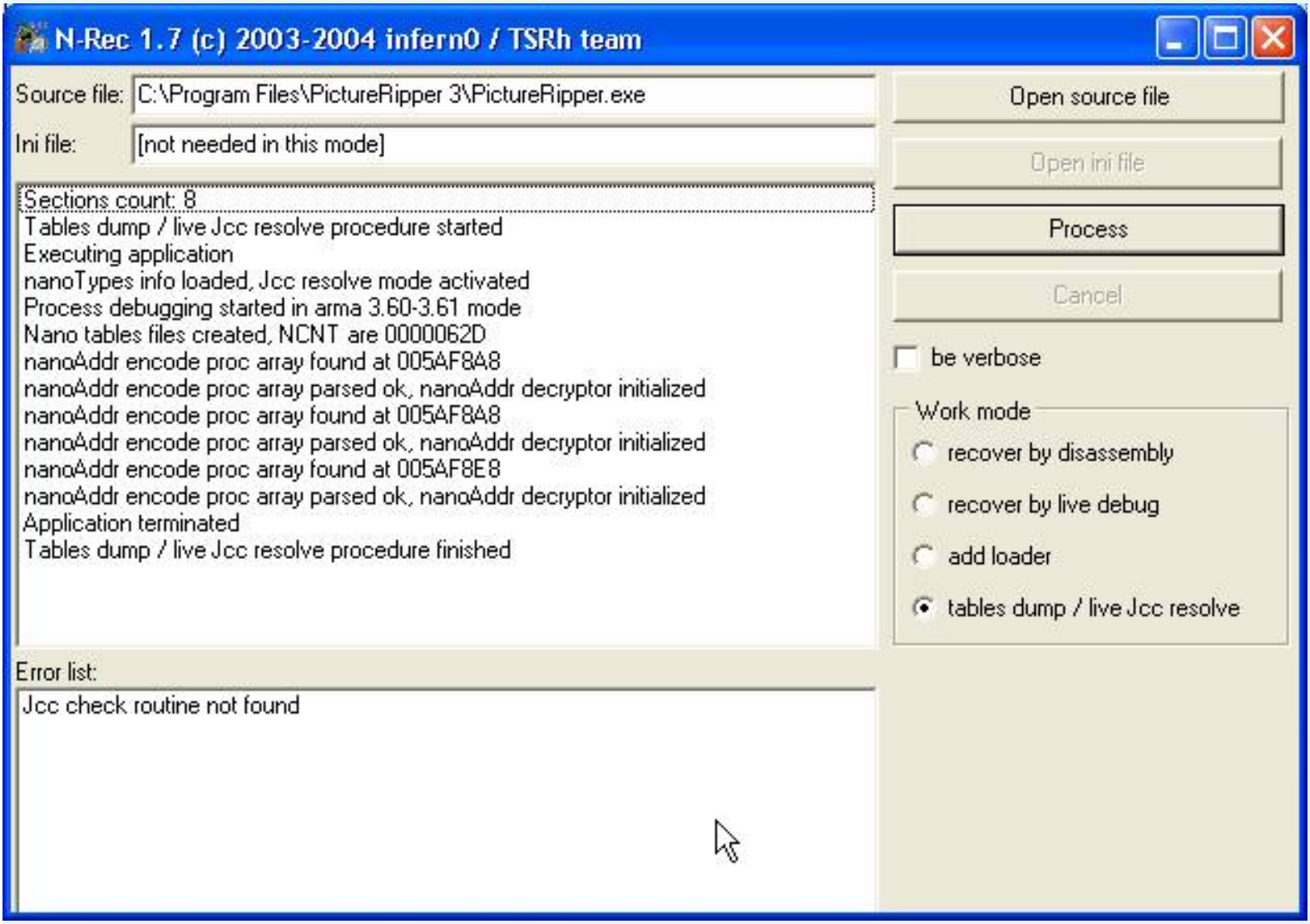


_We Crash:

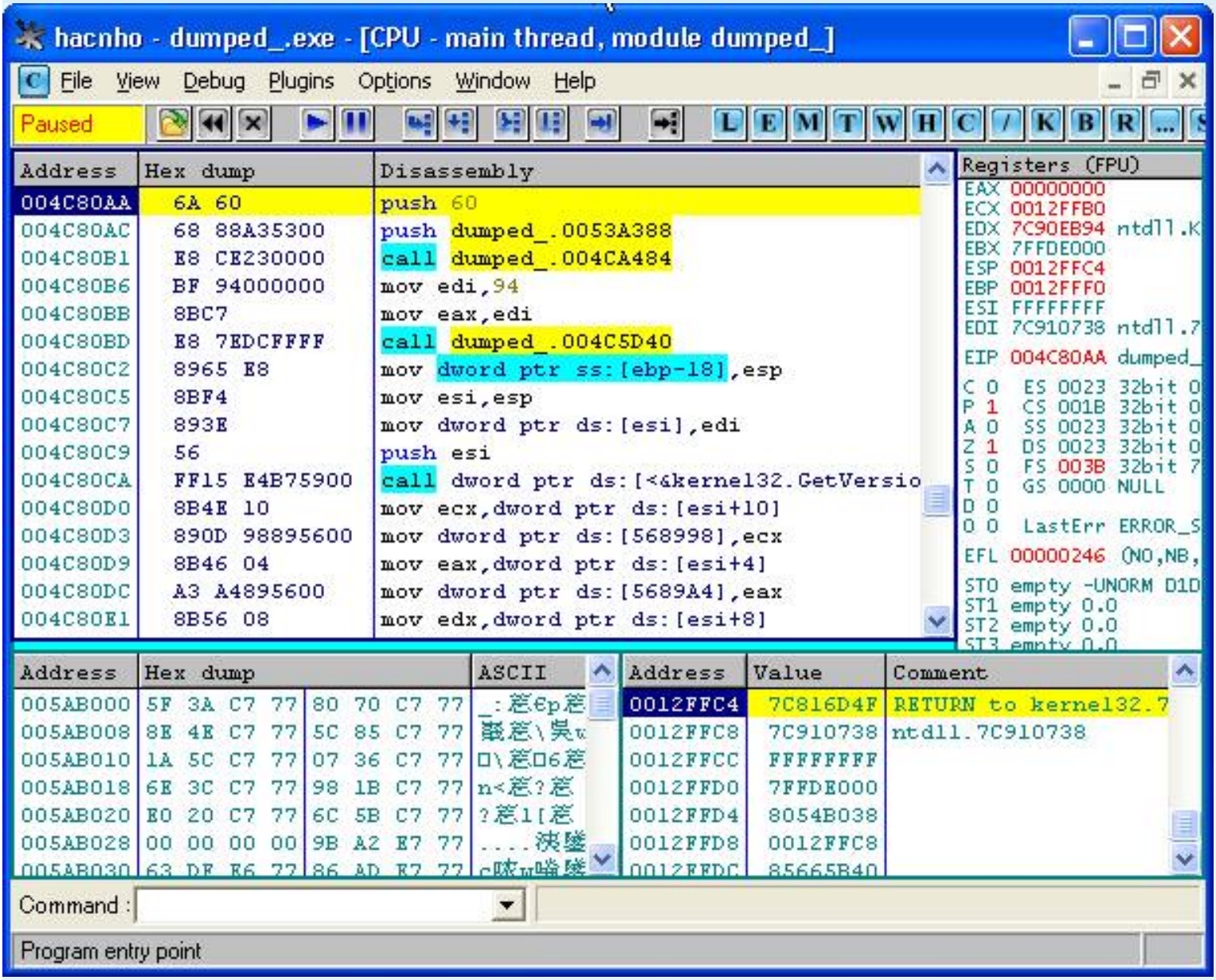
_Ok, Le analyze this crash. Load N-REC to:



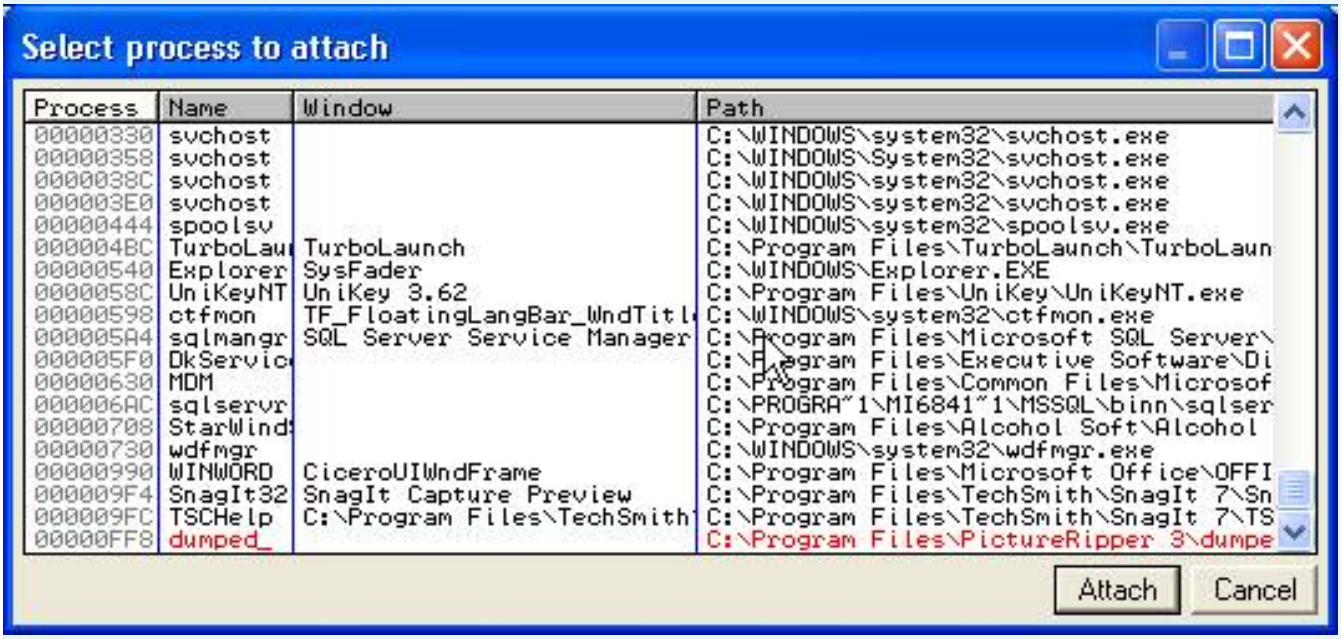
_And We found the CC:



We Use ArmInline 0.71 to fix Nanomites, ok, to load dumped.exe OllyDBG:

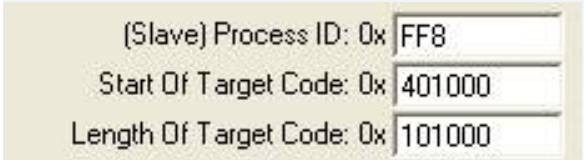


_View PID and text sections:

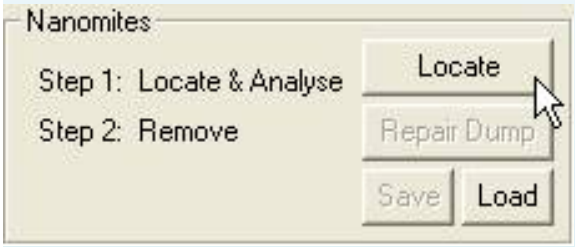


Address	Size	Owner	Section	Contains	Type	Access	Initial	Mapped as
00150000	0002D000				Priv	RW	RW	
00250000	00006000				Priv	RW	RW	
00260000	00003000				Map	RW	RW	
00270000	00016000				Map	R	R	\Device\HarddiskVolume5\WIND
00290000	0003D000				Map	R	R	\Device\HarddiskVolume5\WIND
002D0000	00041000				Map	R	R	\Device\HarddiskVolume5\WIND
00320000	00006000				Map	R	R	\Device\HarddiskVolume5\WIND
00330000	00041000				Map	R	R	
00380000	00001000				Priv	RWE	RWE	
00390000	00001000				Priv	RWE	RWE	
003A0000	00004000				Priv	RW	RW	
003B0000	00003000				Map	R	R	\Device\HarddiskVolume5\WIND
003C0000	00008000				Priv	RW	RW	
003D0000	00001000				Priv	RW	RW	
003E0000	00001000				Priv	RW	RW	
003F0000	00003000				Priv	RW	RW	
00400000	00001000	dumped_		PE header	Imag	R	RWE	
00401000	00101000	dumped_	.text		Imag	R	RWE	
00502000	0004F000	dumped_	.rdata		Imag	R	RWE	
00551000	0001A000	dumped_	.data		Imag	R	RWE	
0056B000	00030000	dumped_	.text1	code	Imag	R	RWE	
0059B000	00010000	dumped_	.adata	code	Imag	R	RWE	
005AB000	00020000	dumped_	.data1	data	Imag	R	RWE	
005CB000	000F0000	dumped_	.pdata		Imag	R	RWE	
006BB000	00057000	dumped_	.rsrc	resources	Imag	R	RWE	
00712000	00003000	dumped_	.mackt	imports	Imag	R	RWE	
00720000	00005000				Map	R E	R E	
007E0000	00002000				Map	R E	R E	
007F0000	00103000				Map	R	R	
00900000	000A4000				Map	R E	R E	
00C00000	00002000				Map	R	R	
00C10000	00002000				Map	R	R	
00C20000	00001000				Priv	RW	RW	
00CC0000	00002000				Map	R	R	
629C0000	00001000	LPK		PE header	Imag	R	RWE	
629C1000	00005000	LPK	.text	code,import	Imag	R	RWE	
629C6000	00001000	LPK	.data	data	Imag	R	RWE	
629C7000	00001000	LPK	.rsrc	resources	Imag	R	RWE	
629C8000	00001000	LPK	.reloc	relocations	Imag	R	RWE	

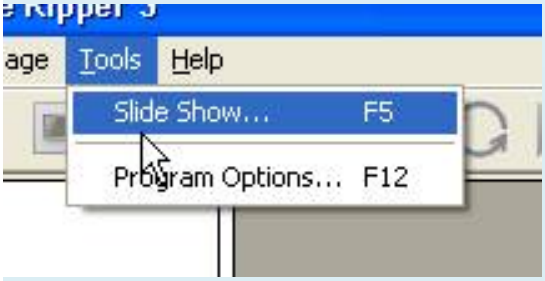
_Fill In ArmInline 0.71:



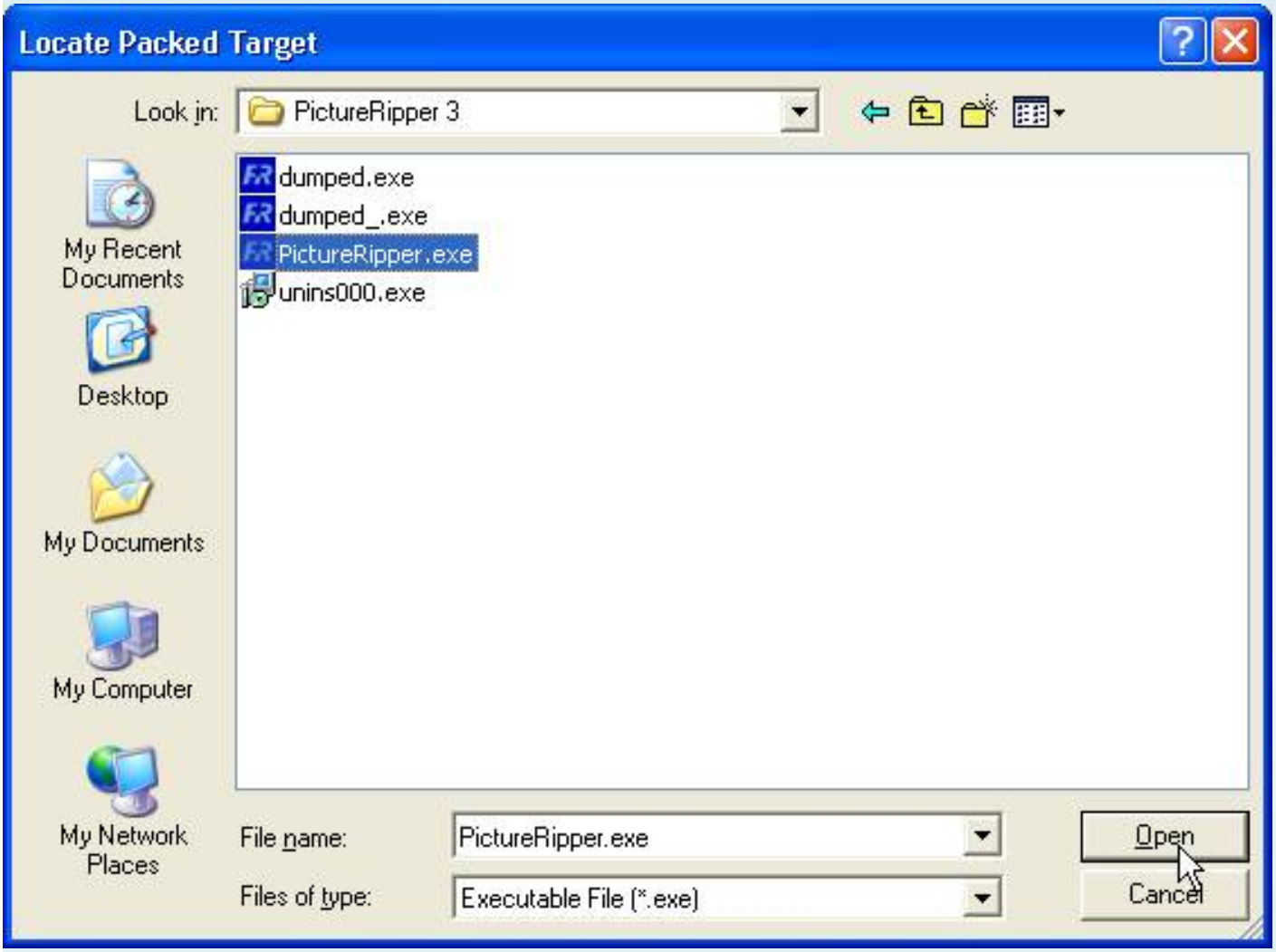
_Click Locate:



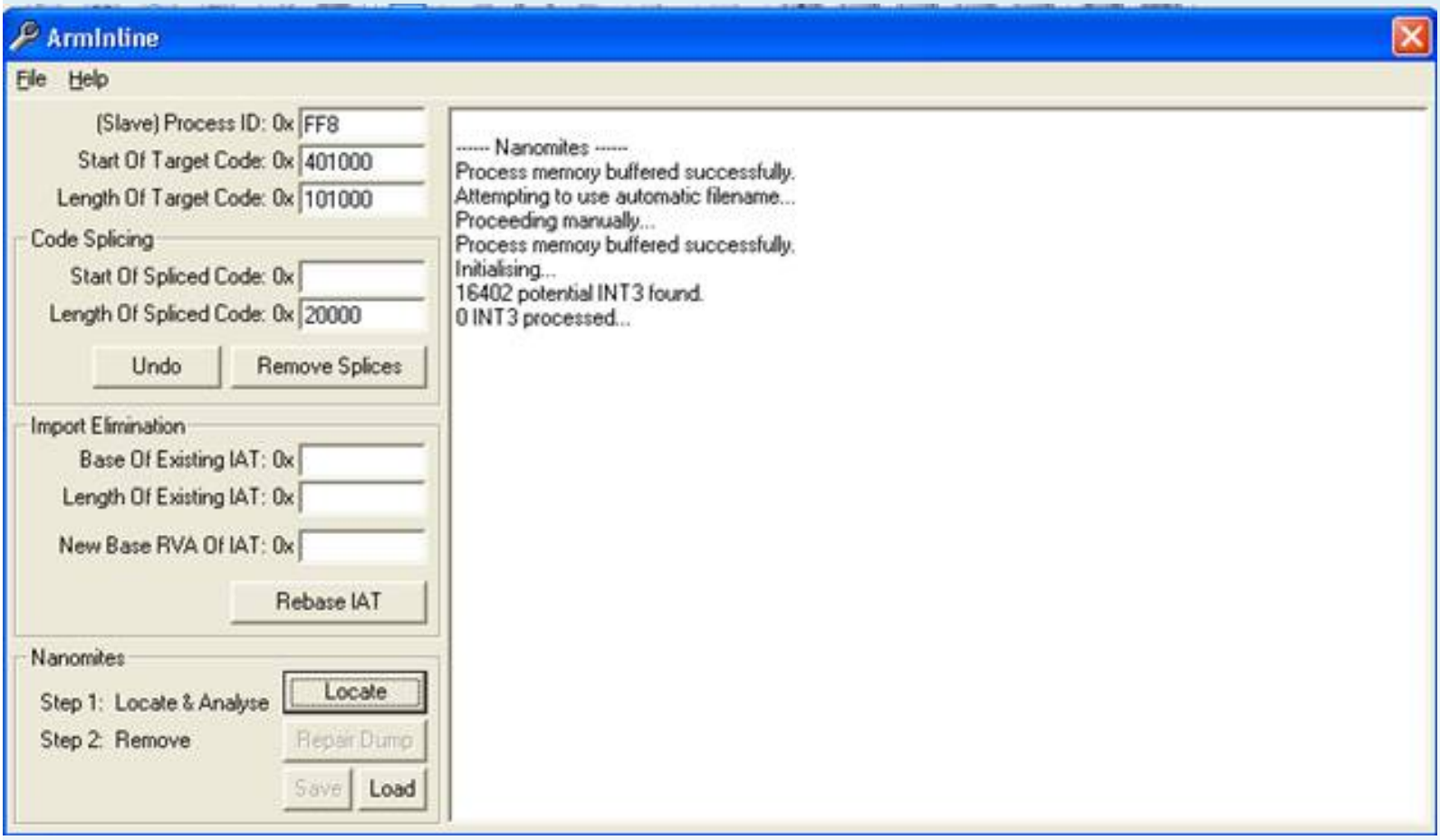
_Then Back to PictureRipper3:



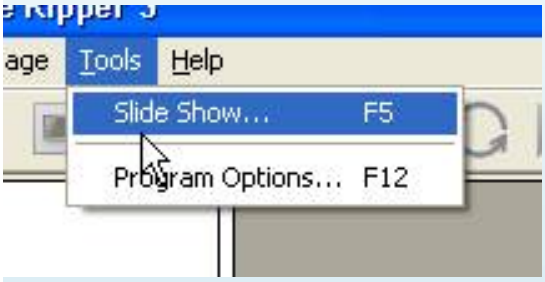
_Now In ArmInline: Load packet target:



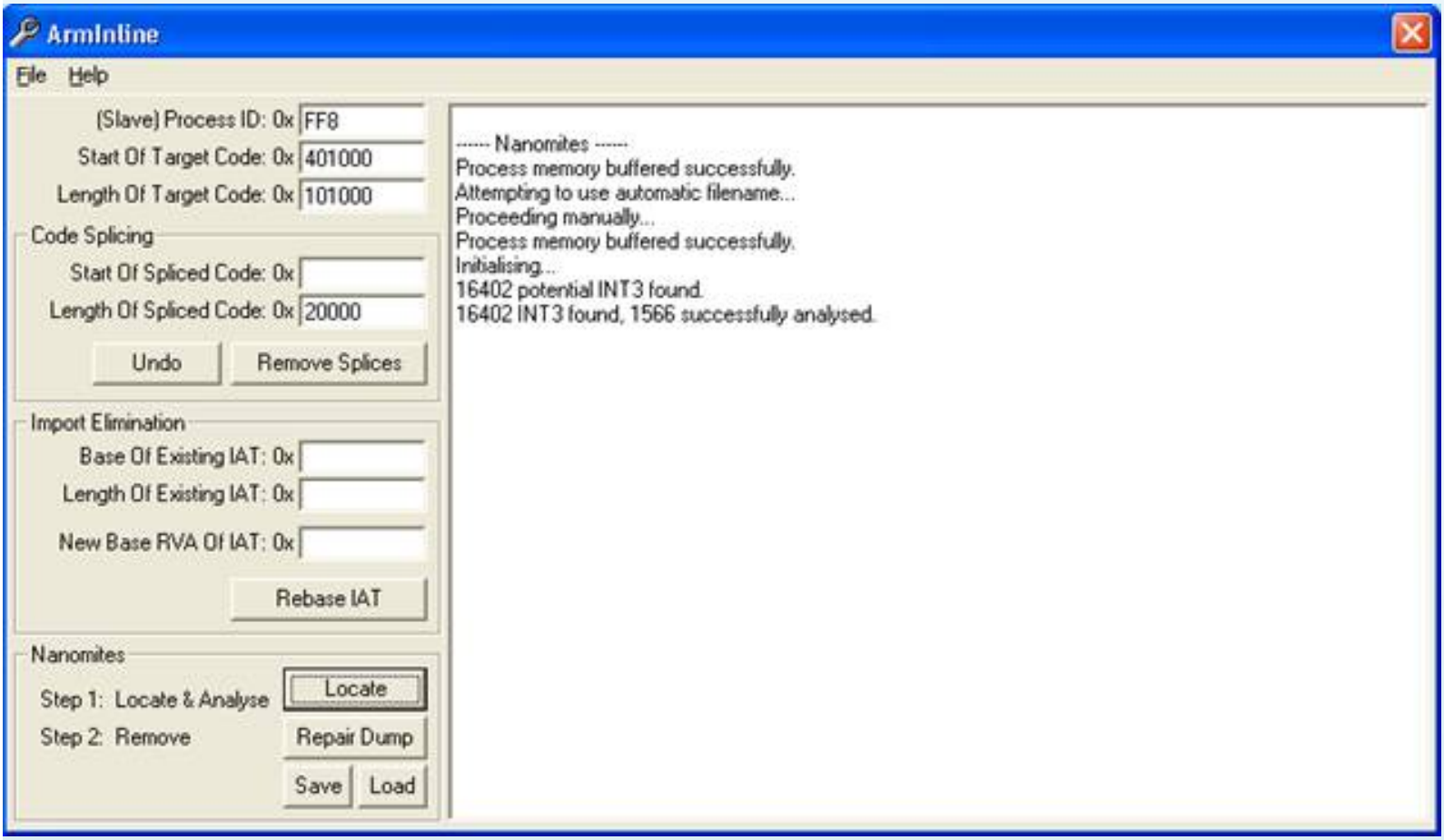
_We Choose the file PictureRipper.exe then:



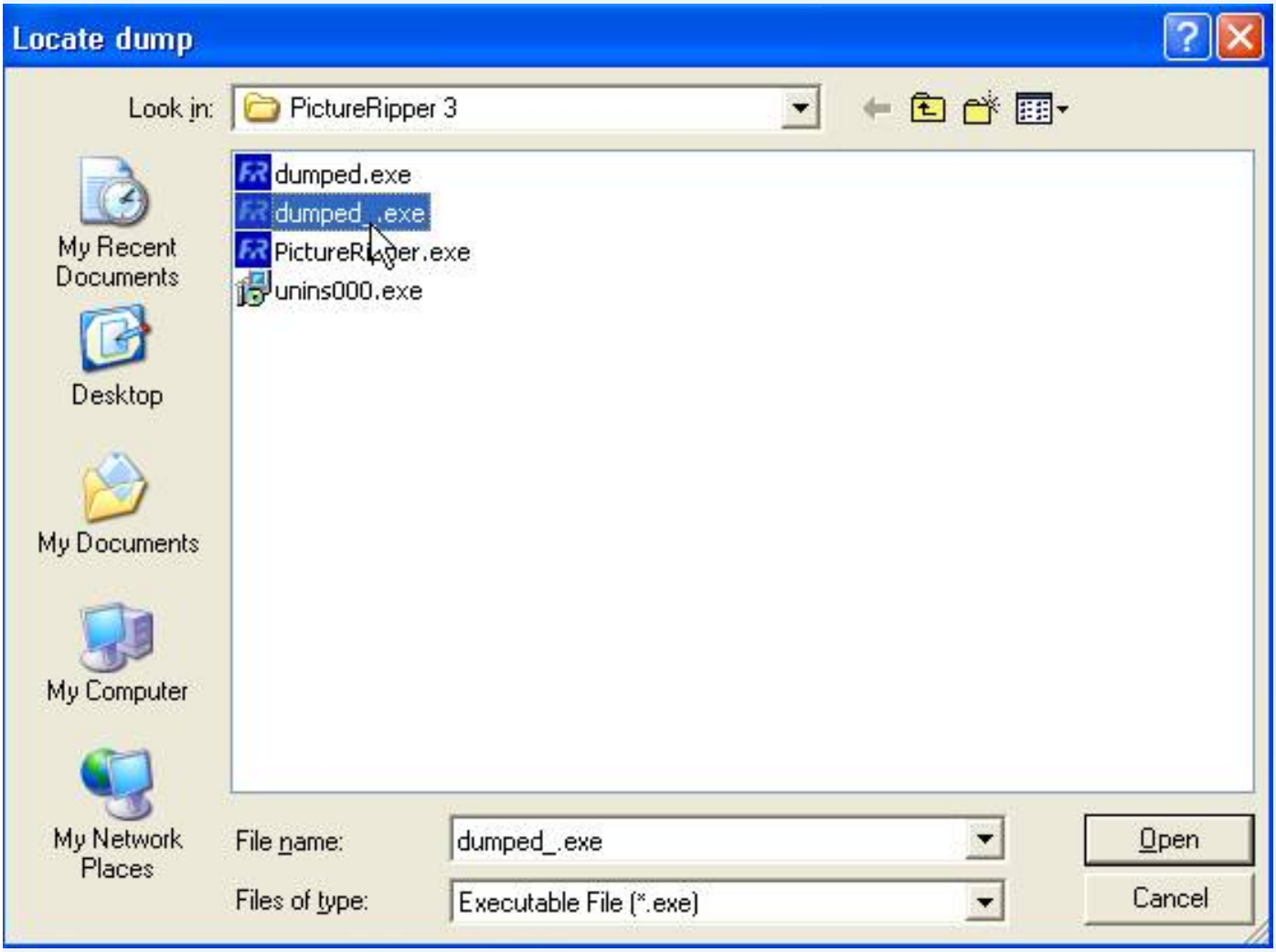
_Back To PictureRipper:



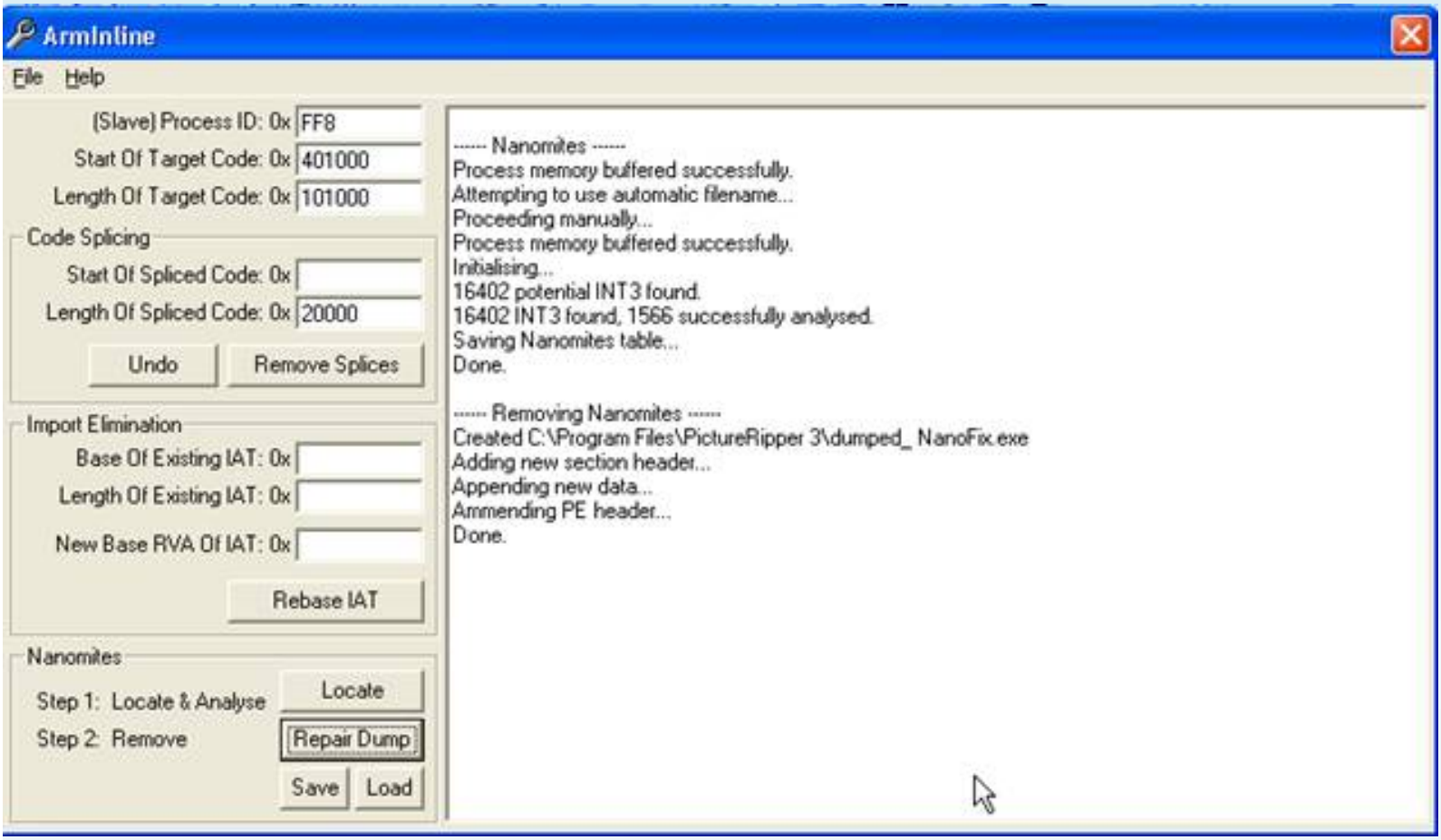
_Now:



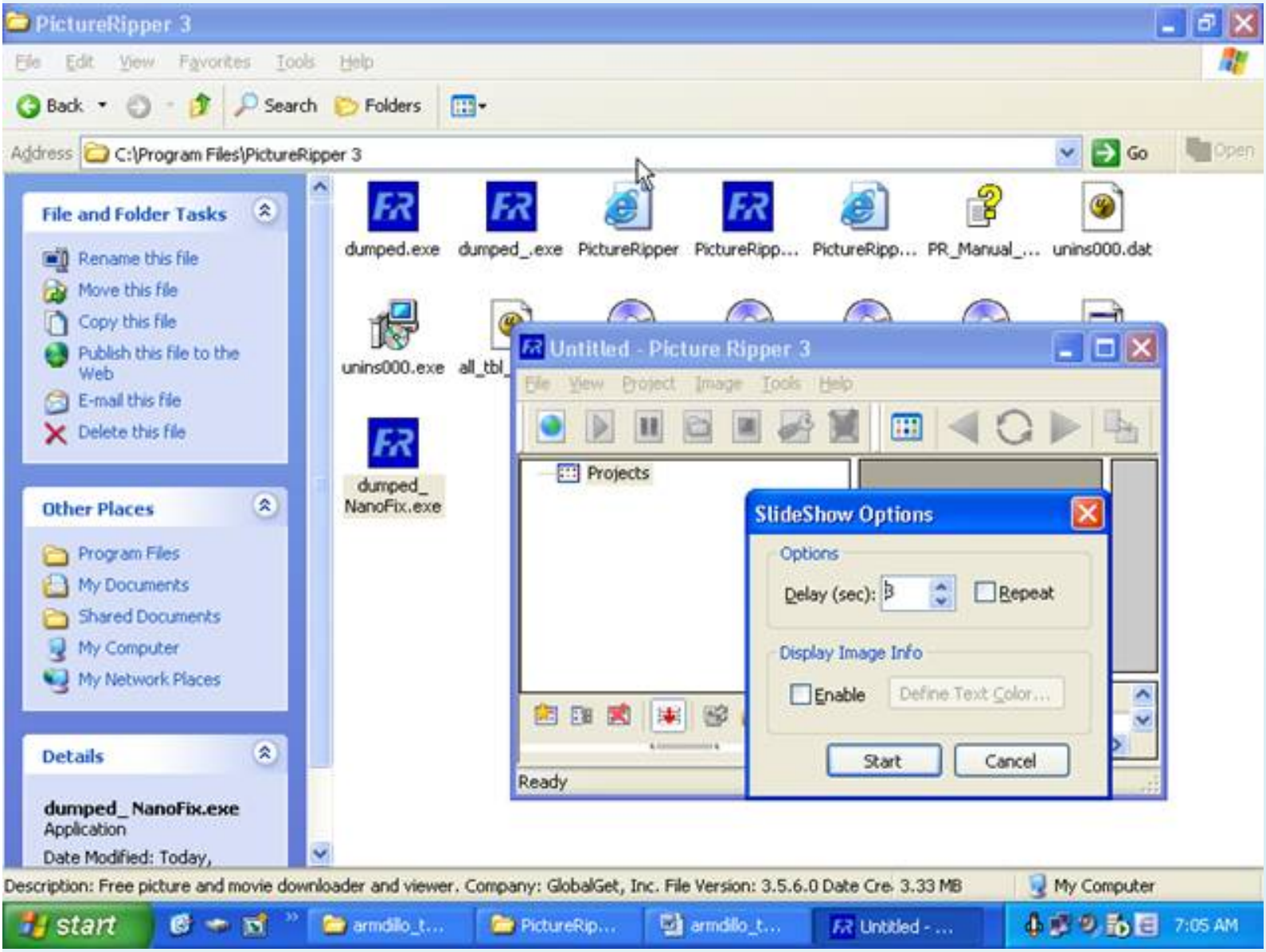
_Now You can save the NanoTable. Next. Click Repair dump:


Locate dump
Look in:
PictureRipper 3
dumped.exe
dumped_.exe
PictureRipper.exe
unins000.exe
My Recent Documents
Desktop
My Documents
My Computer
My Network Places
File name:
dumped_.exe
Files of type:
Executable File (*.exe)
Open
Cancel

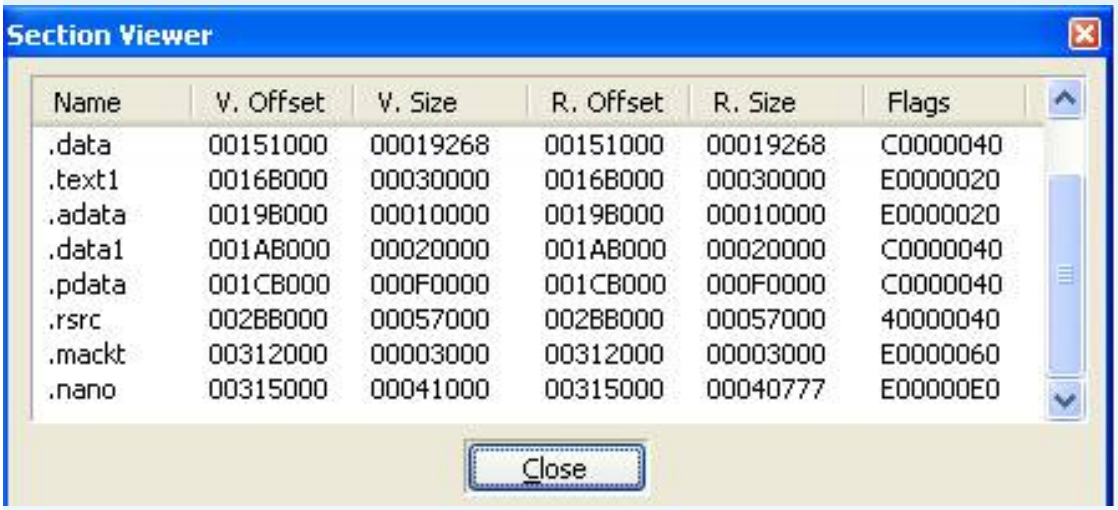
_Ok:

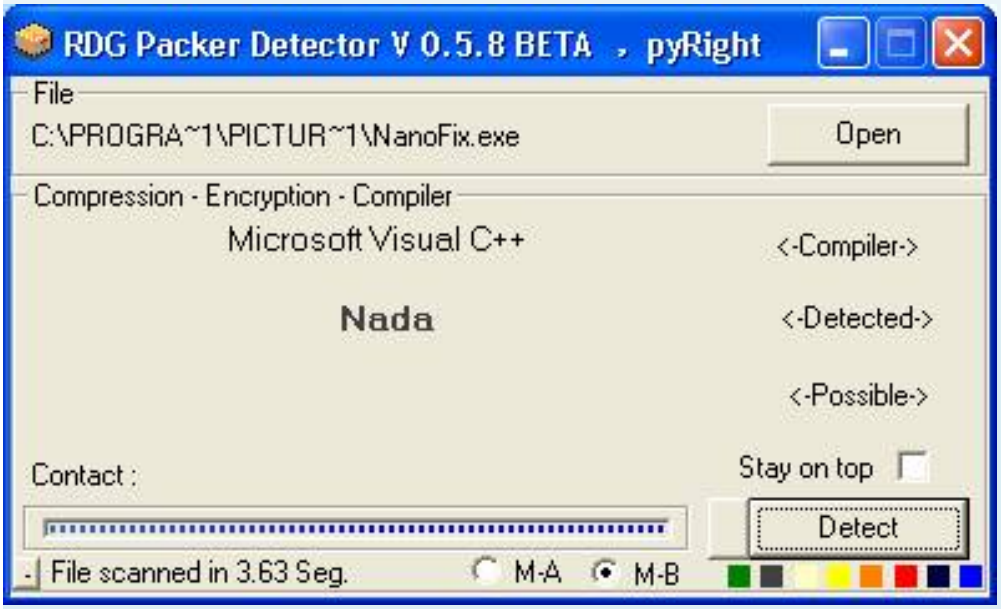


Run Dumped NanoFix.exe file, go to Options menu:



_Unpacked Successful!





IV. Conclusion

_For More tuts, please visit http://tinicat.de/hacnho or http://hacnho.exetools.com

_Bye!

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, MaDMAn_H3rCul3s, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light, iamidiot, WhyNotBar, trickyboy, Merc ... and you!

Special Thanx Cracks Latinos.

Thanx OllyDBG of the authors.

To be continued ...

Written by **hacnho** (tutorial date: VietNam 25/10/2005)

Sa they are a nui

One lost a child

Miraculous united Lu

Integration hunger Giang Ho

slayer	**Ikivo Animator**	**Snd**
takada	Tools you need:	**REA**
	ABEL (for loader), OllyDebugger	

Difficult: easy

Instruction

In this tut we will learn how to create applications for the loader packed with ProtectionPlus 4.x:).

This is 1 surrounded the other like Softwrap and 1 is interesting .... easily defeat (ko trouble as Softwrap). I always choose the easiest things to do hehe: P

Here, we will discuss how to create a loader, loader's task is to create a NOP 1 in memory function Call (Yes, namely 1 HAM CALL IS instance: P)

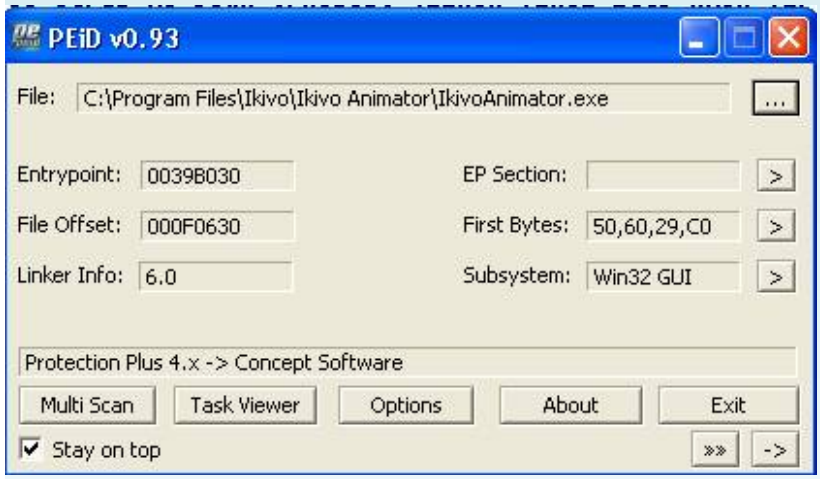
Read Ahead!

How to crack

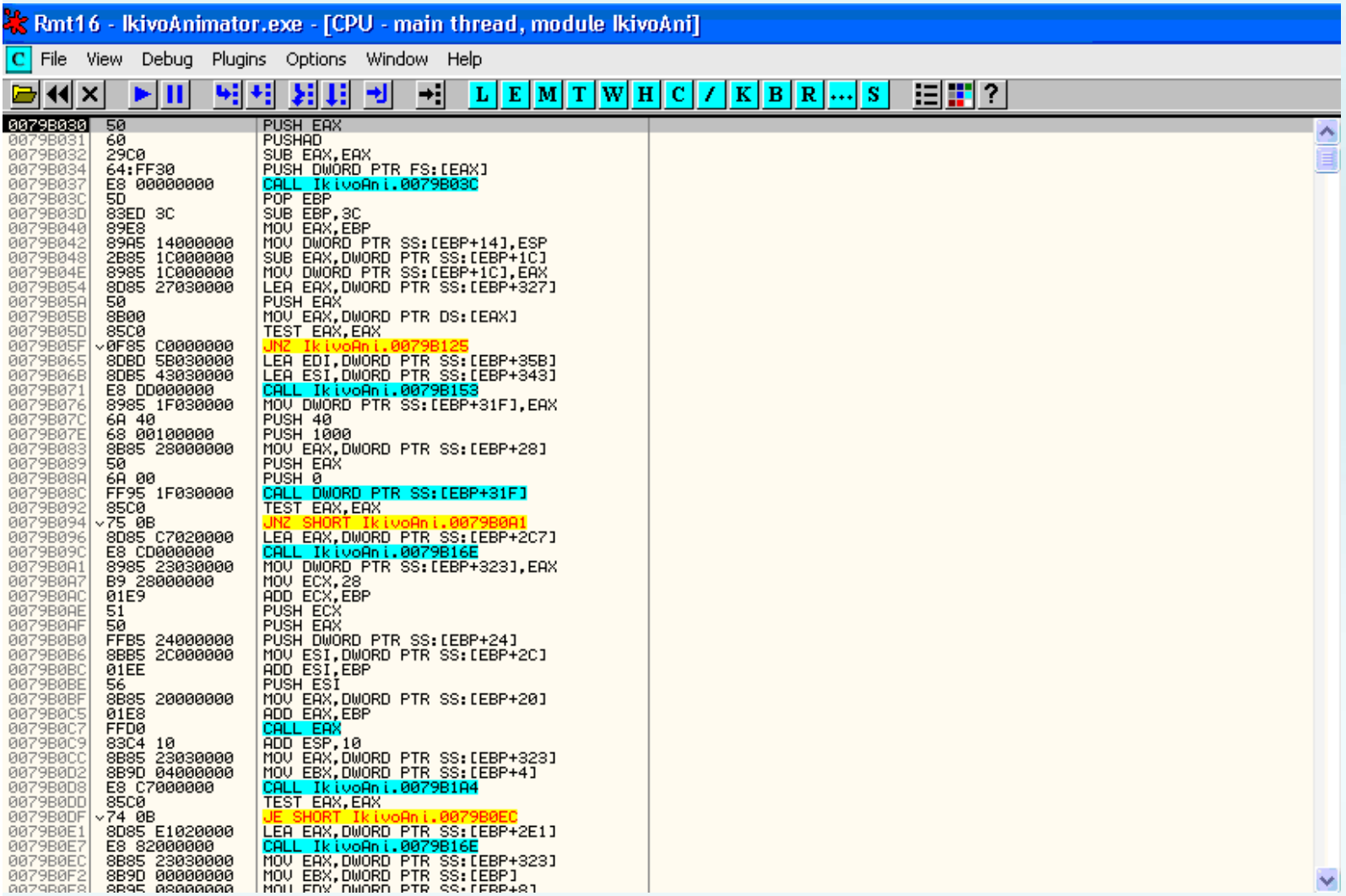
Target taking as Ex today is Ikivo Animator 1.1
You can download the following link
http://www.ikivo.com:80/animator/downloads/IkivoAnimatorSetup.exe

Ok here we go:)

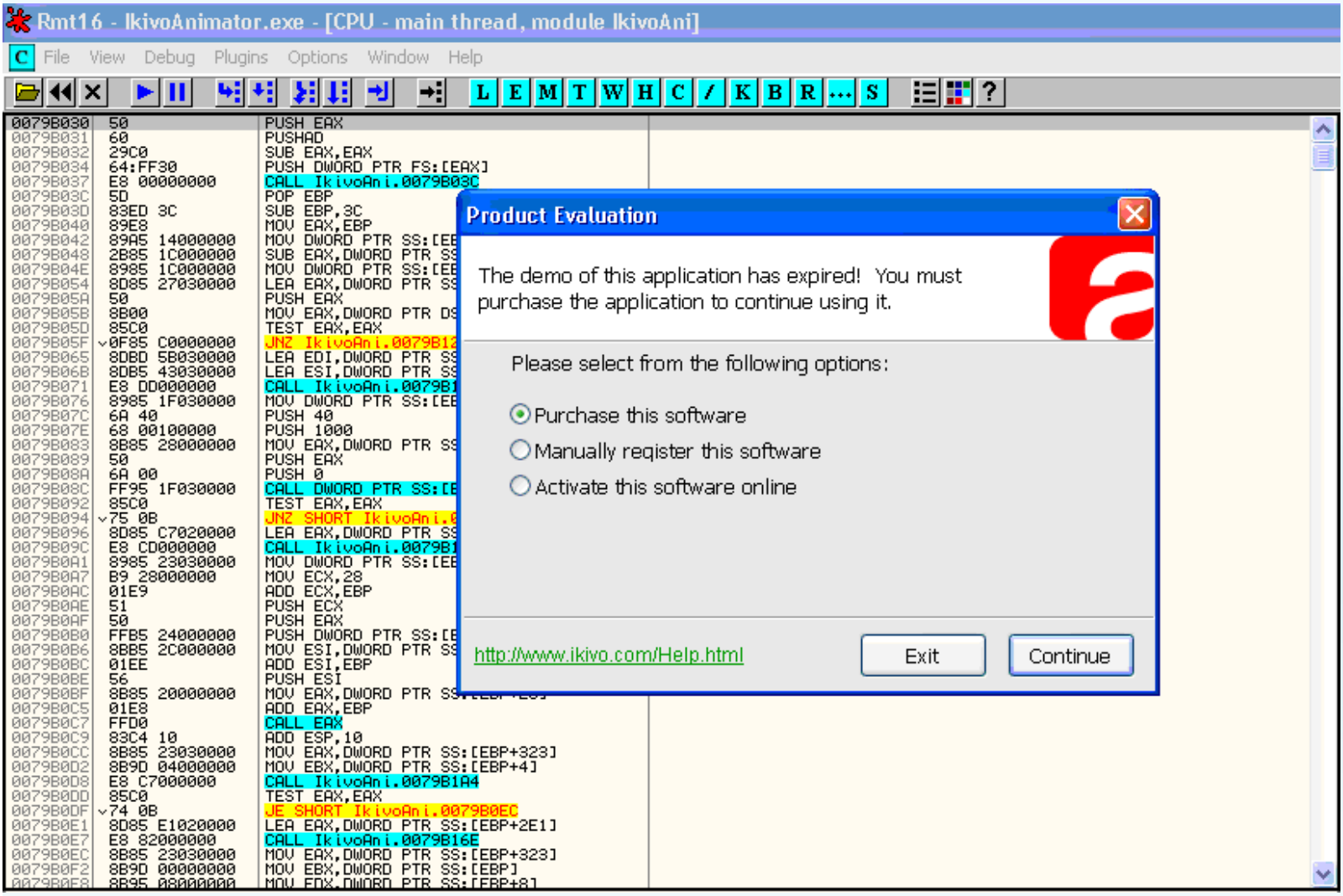
First, scan the file is still Peid =



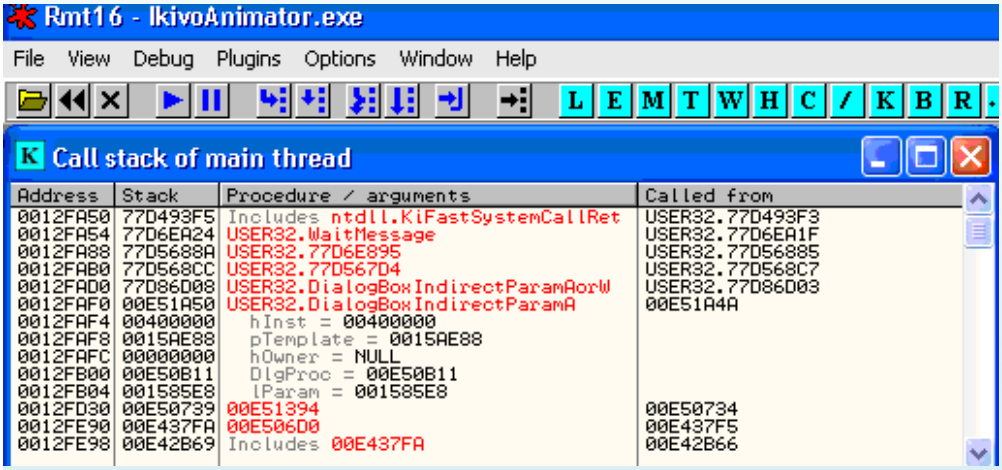
OK to load app Olly, and we will stop at EP



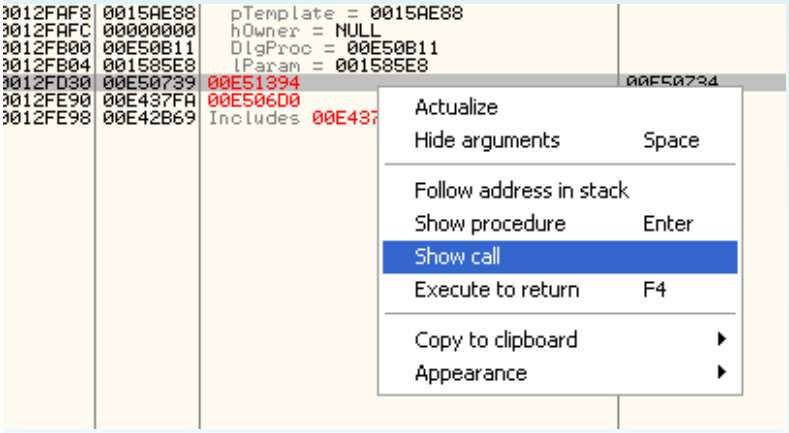
Now HIT F9 to run app and you'll see a nag follows:
(Do not Mail has expired, therefore I get installed THIS NAG)



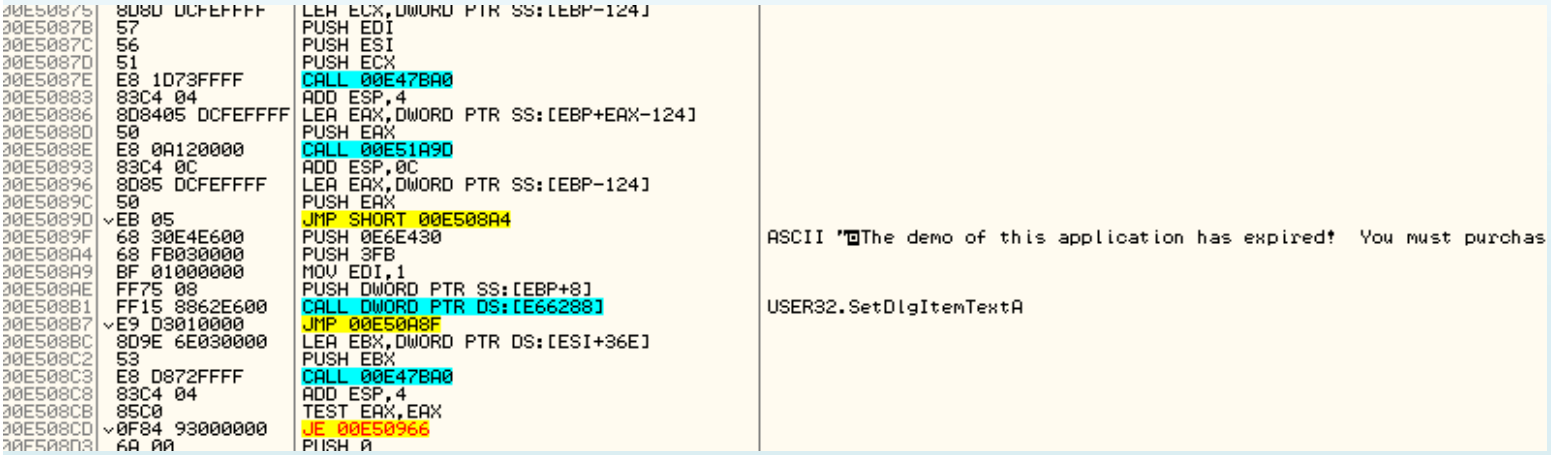
Now press F12 to pause olly and then press ALT + K
we will see the following:)

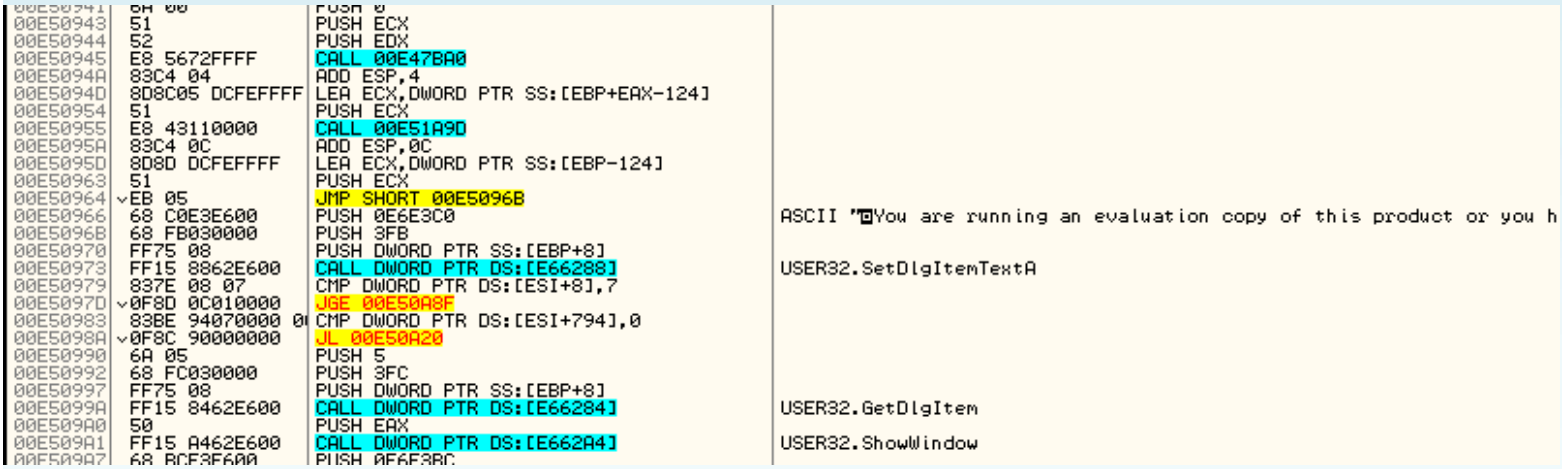


Right click in E51394 then select 'Show Call "

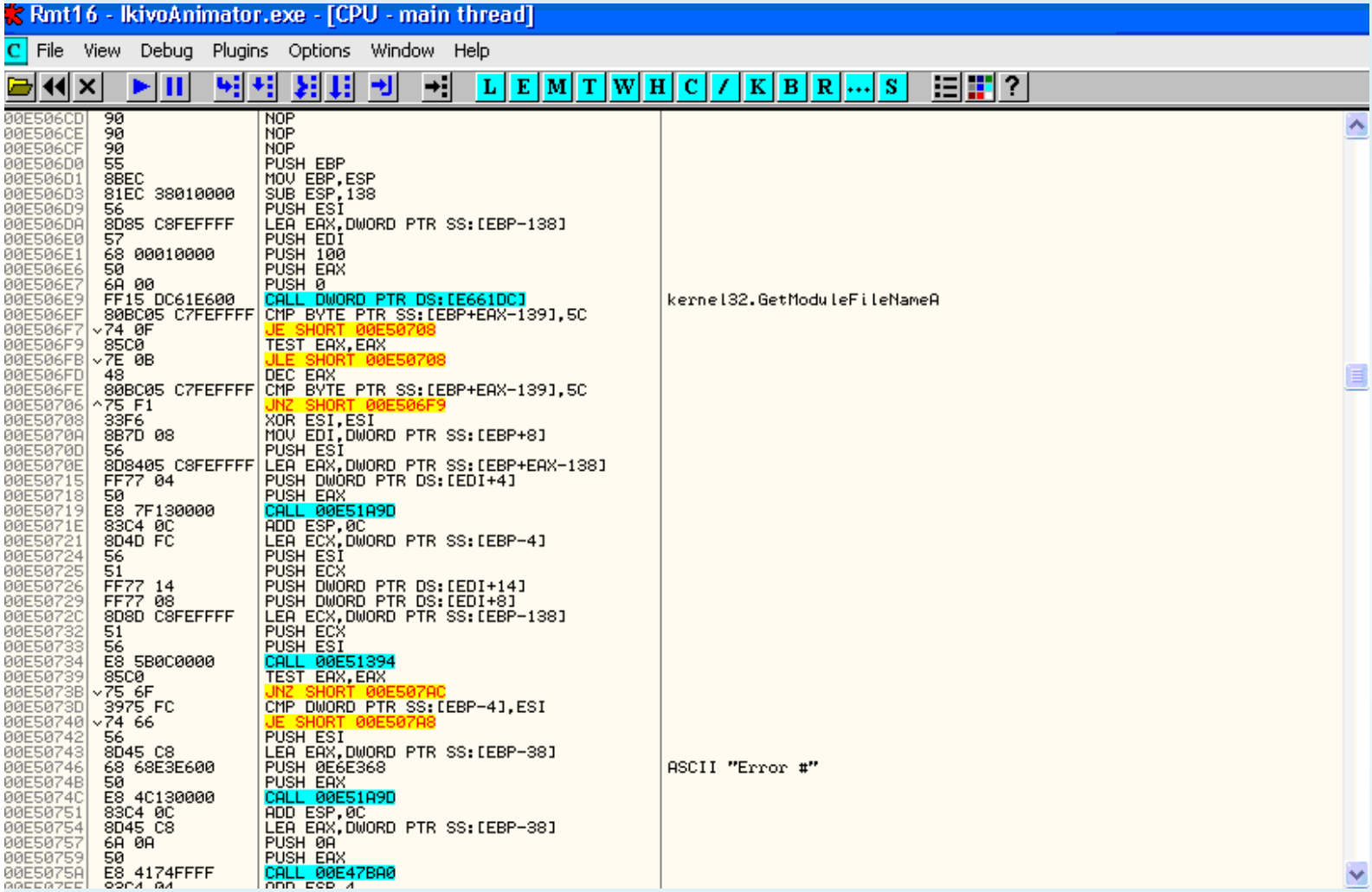


Now scroll down a few lines 1, we will see like this: D
2 See screenshots below: P



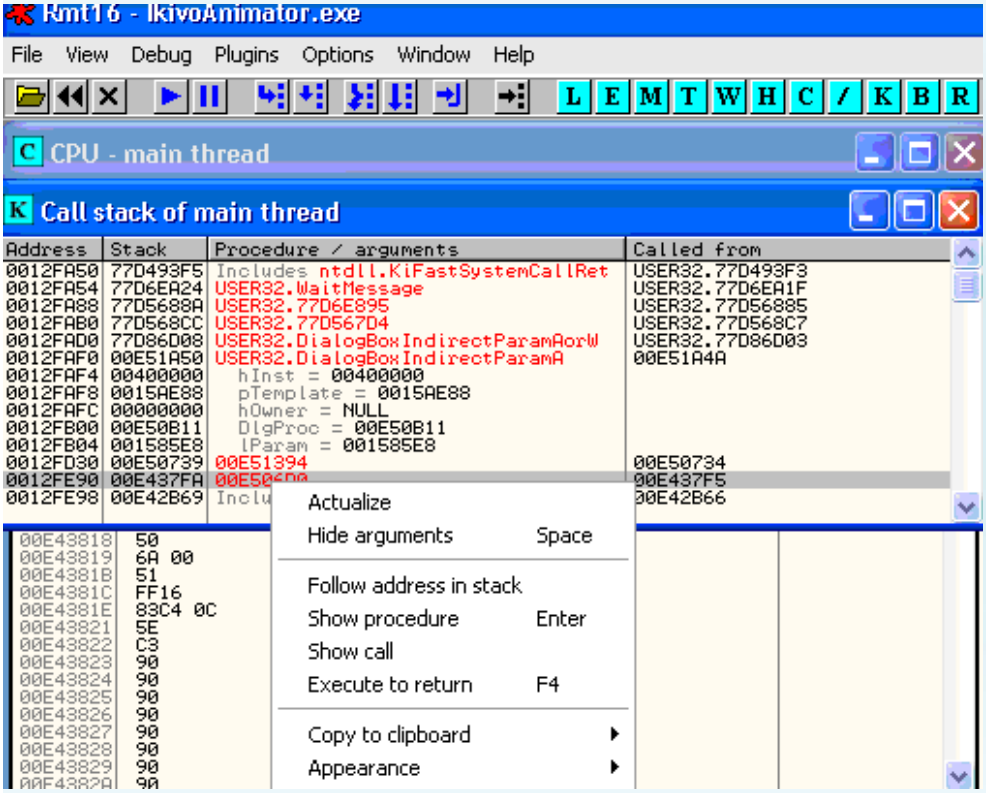


hehe, just the words appear on the nag me:)
Now they roll up a few lines, for the start of this produce.

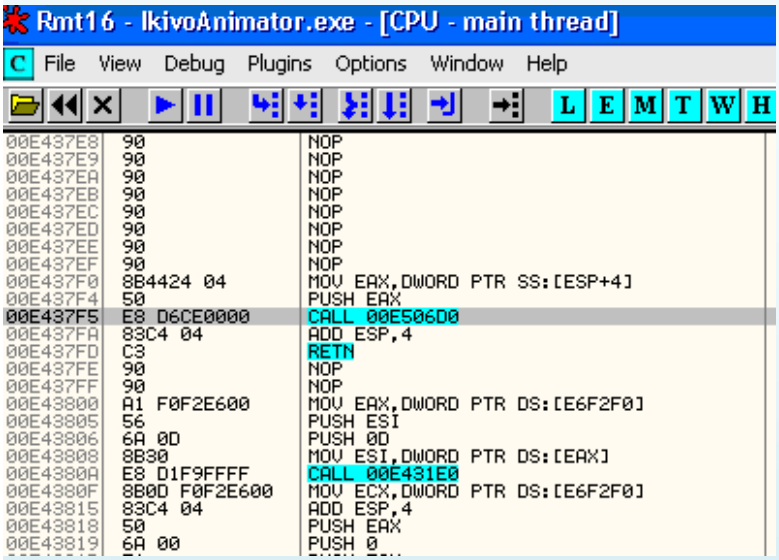


00E506D0 55 PUSH EBP

This is the start produce:)
Now, we will find any known function Call this produce
We back window stack, and then follow function Call 2, you will find interesting .....



We stop here

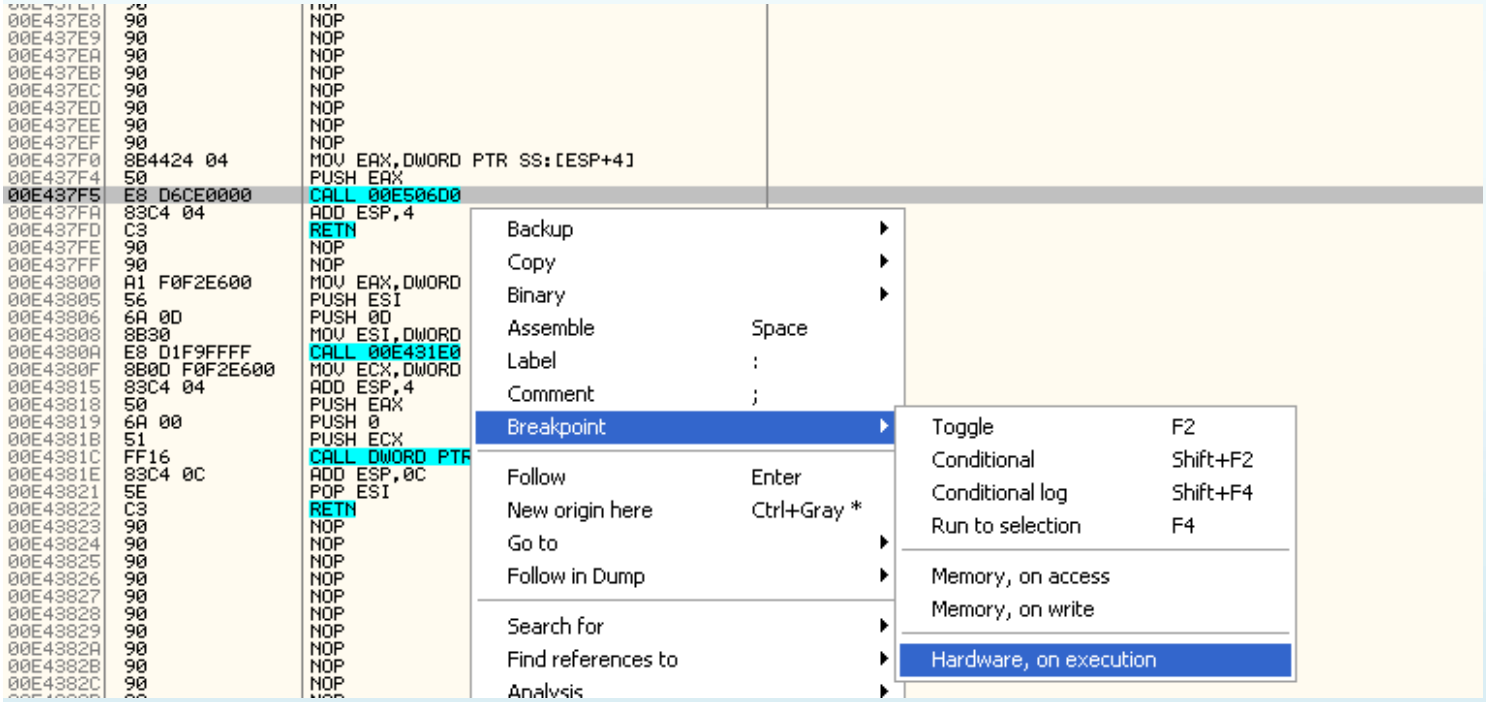


This is Ham Call we need, we produce it called see above:)
If desired, you can check by pressing Enter, and we will stop here

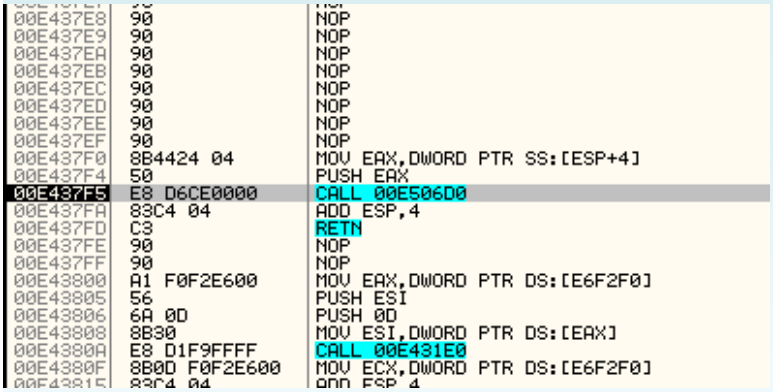
00E506D0 55 PUSH EBP

hehe:) OK, after finding a function Call are looking for, we only need to submit Call this function in memory we have completed the task:)

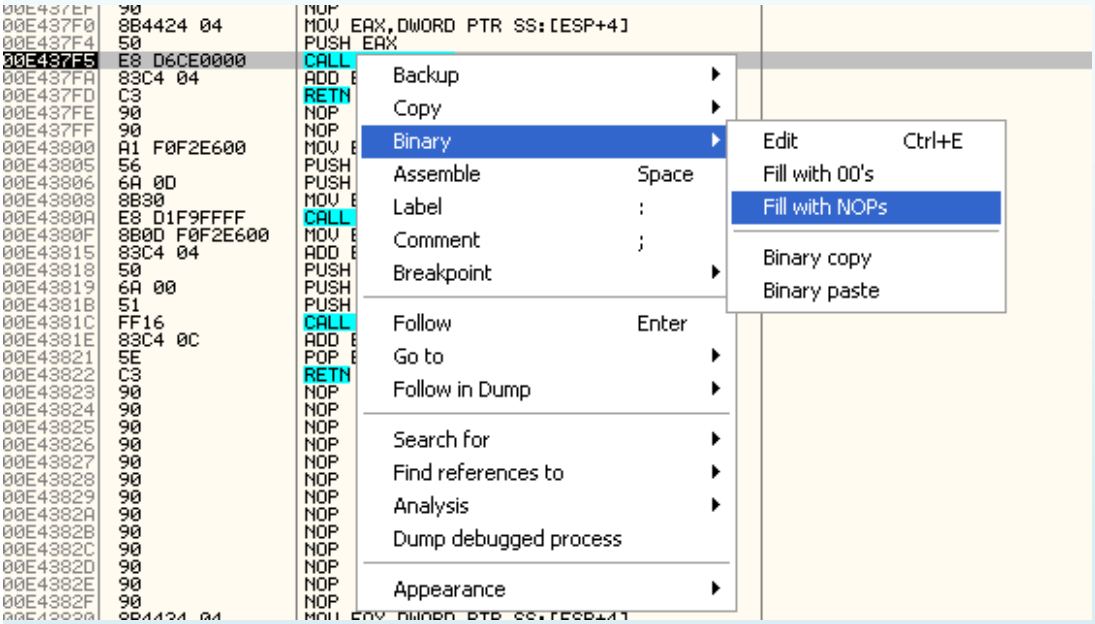
If you do not believe, you can check what I say
First Set 1 bp "Hardware On Execution" Call me at functions just find



Olly restart and run app (press F9), we will break at BP, we set

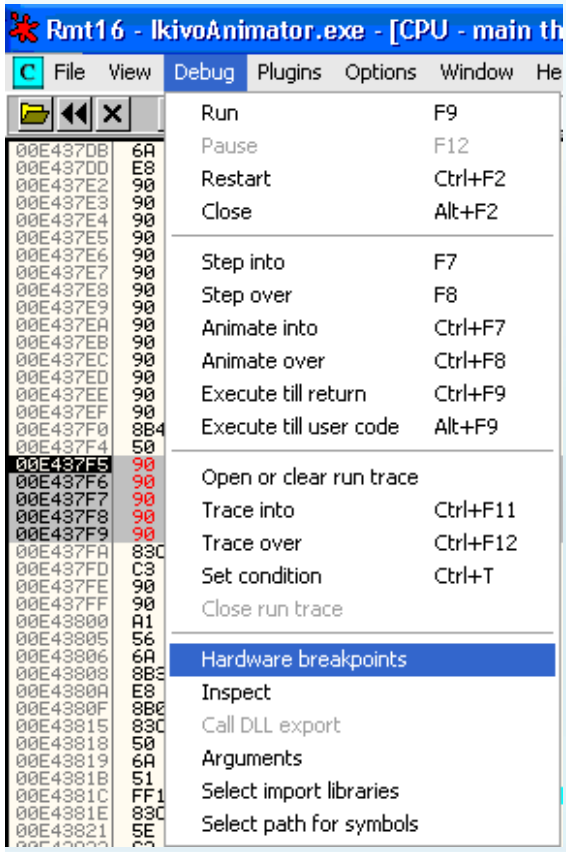


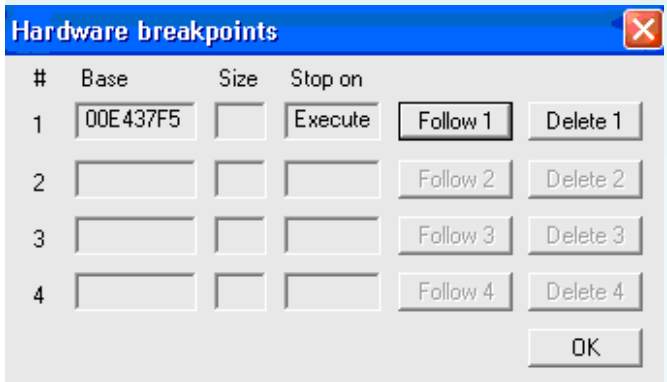
Olly in Rright click and then select Binary ---> Fill with nops



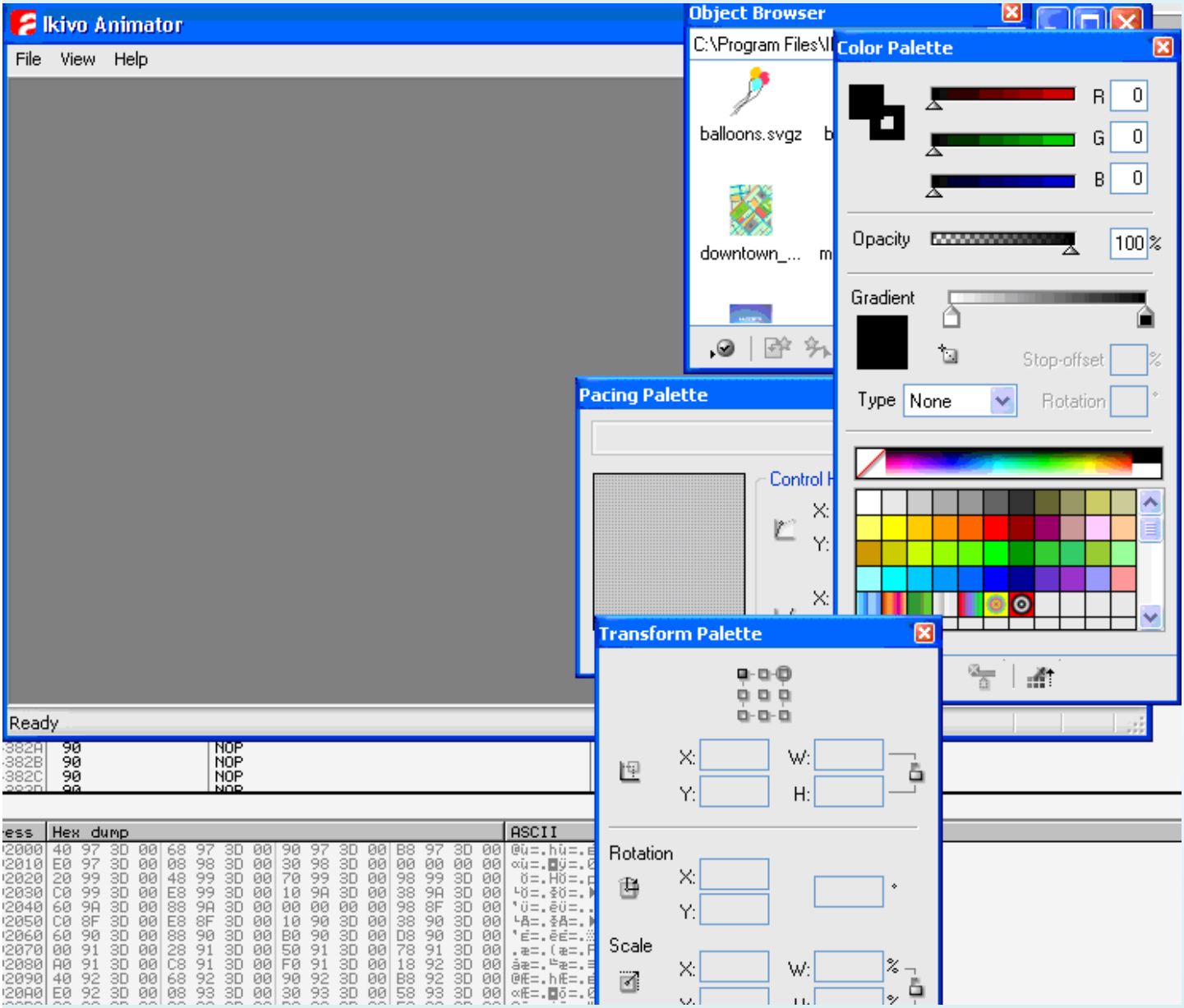
```
00E437EE  90              NOP
00E437EF  90              NOP
00E437F0  8B4424 04       MOV EAX,DWORD PTR SS:[ESP+4]
00E437F4  50              PUSH EAX
00E437F5  90              NOP
00E437F6  90              NOP
00E437F7  90              NOP
00E437F8  90              NOP
00E437F9  90              NOP
00E437FA  83C4 04         ADD ESP,4
00E437FD  C3              RETN
00E437FE  90              NOP
00E437FF  90              NOP
00E43800  A1 F0F2E600     MOV EAX,DWORD PTR DS:[E6F2F0]
00E43805  56              PUSH ESI
00E43806  6A 0D           PUSH 0D
00E43808  8B30            MOV ESI,DWORD PTR DS:[EAX]
00E4380A  E8 D1F9FFFF     CALL 00E431E0
```

Now go delete bp (the Debug menu -----> Hardware Breakpoints and then click Delete)



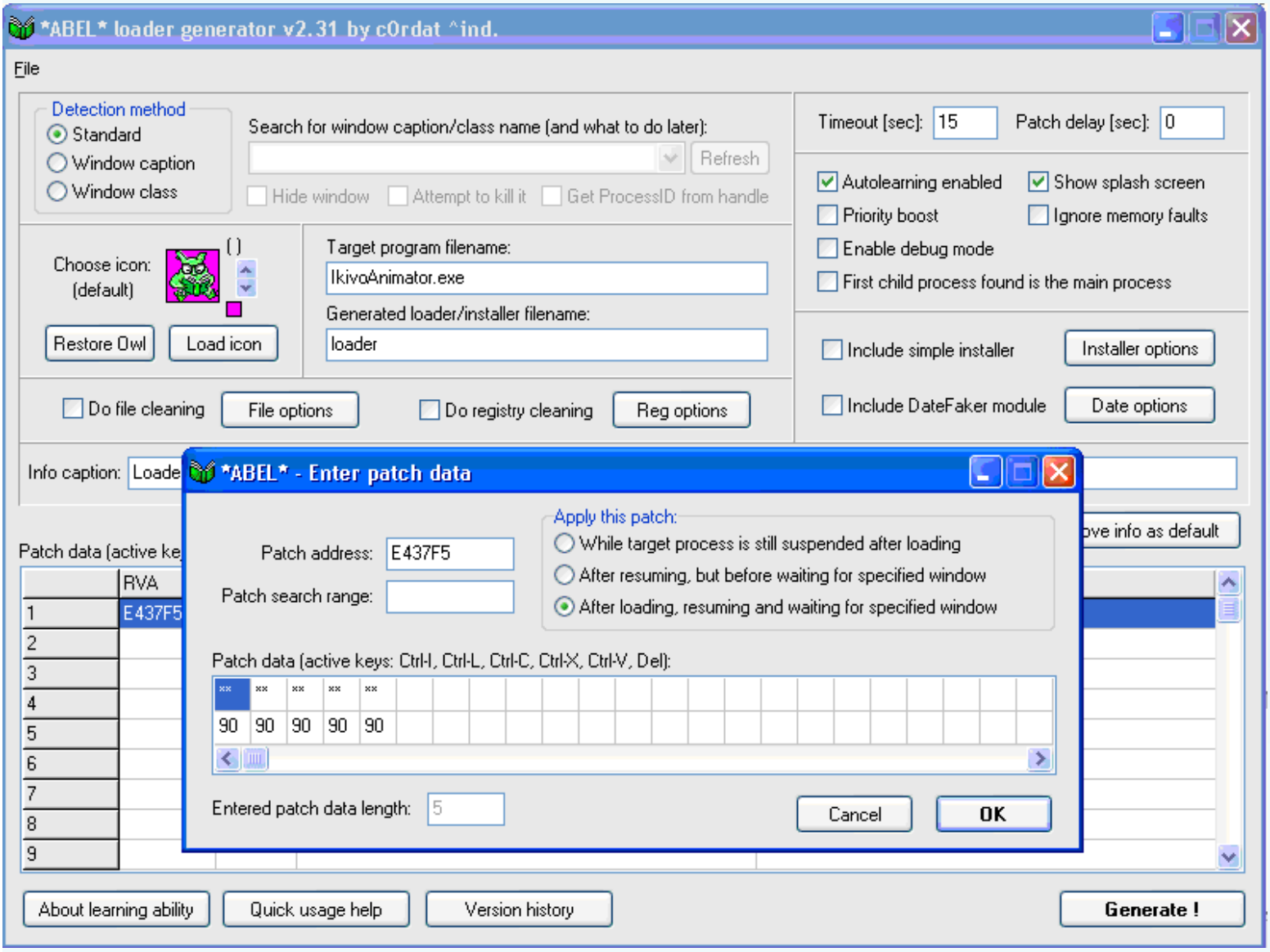


Important or do in this step is .... If you press Shift-F9 run target that normal stars do, but if they do not run ..... under difficult work from the beginning: D



Khuc khúc, on too:) target run very well and smooth:)
That means ..... We DEFEATE 4.xxx PROTECTION PLUS:): D

Now only the last step is to create loader (use ABEL), see pictures below for reference



Department surely, to my ** ** ** ** ** is because doing so may loader ignores the value of this address, it still NOP in the case have some minor changes:)

Done through!
Hopefully you already know how to defeat Protection Plus 4.x:))

If you want to try this with other target, then they can use this

Video Vault 3.0
http://www.dvdxsoftware.com/

Follow similar tut, and ..... you crack it:)

Done!

Closing words

Hope you enjoyed this guyz tut as much as I enjoyed doing it: P
Greetz to Madman_Hercules for his excellent tuts on unpacking and inline patching Protection Plus 4.x:))
Greetz to all snd, Mp2k, ICU, TSRh, ARteam members

and to you too: P

Then Laterz
slayer / snd

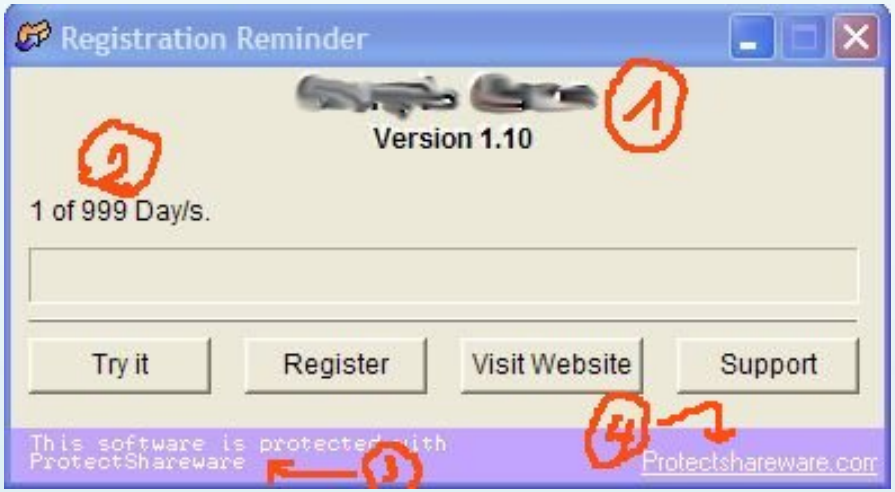
This article from Children's Lena the new post box English tut, or see the man well. Course is free for children with her, since many do not exactly

link via tut English:

http://www.reaonline.net/forum/showthread.php?p=19818#post19818

ProtectShareware

I accidentally found that this childish game (hehe, the only daughter I) see the type of protection it nè: NAG a notice accompanying information protect it (the form ni I did not know).



1. -> I deleted the name of the game to the appropriate law forum small.

2. 999 trial days? Hi, it is 1 of the demo course, the author must protect its rùi Code.

3. Name protector is "ProtectShareware" ... the name that I have not heard hề. Who or what is known about it? I've search the REA and other forums, but still do not see any information about it all.
This tò mò should I need to visit the site of this protector only.

4. As seen on the site of the protector is very little information about it, is the most ads.

No helpfile, but generally found it can protect protect anything.
Is worthwhile!. I need it immediately to ro thui.;)

Protect Shareware features include:
Advanced Systems Trial (which uses a binary system)
Restrict application launch by Date.
Hardware Finger Print for licensing the software.
Debugger Detection System.
State of the art encryption
Web based registration
Ability to register the software offline.
Select the number of trial runs.
Up to three levels of key generation can be used.
Easy to use.

Quick and extremely effective.
Create trial version softwares and ebooks.
Create trialware for all other exe files.
Option to create trial version based on time, count and date.
Reset trials on new versions
Option to allow only 1 copy
Create exe backup and detect file modification.
Enable hardware fingerprint.
Option to maintain stolen code database.
Highly secured encryption
Supports Windows 98 and higher versions

5. This site is not for download again, as I refuse to do. ;)

6. Ok. We will try Pack 1 a few programs in ProtectShareware to feel about it. Hum, through the ad and then: first, I try to pack 1 Delphi exe file -> crash it! 5 or 6 languages form, 2 form the assembler, or even do, but ... all crash. The Protector that this image is only used as a form of protection simply is stolen code (???) or not. I have tried all the 2, but i can understand the function quái do this anymore. And after many files to try to conclude that it is the uong useless. That parents must read authors explain that he's on the site.
But the game I found a good running back! Okay, we go back to the game and see how it is.

7. Olly to load and run -> click the "Try it" and the game starts. But to see any Olly, game still runs. Also ha!

8. Attach the game running away ... but the name of it and then another! Only the top seed and more. "Locked"

9. -> Dom to the game. Rub with a special file here: (I've renamed "Sample Game.exe to photograph *(aged It fear that the law))*

```
Sample Game.
exe
Sample Game.
exe.locked
```

and several portus.lic File -> sure license file?
Ok. Sample affordable Game.exe a loader for Game.exe.locked Sample?

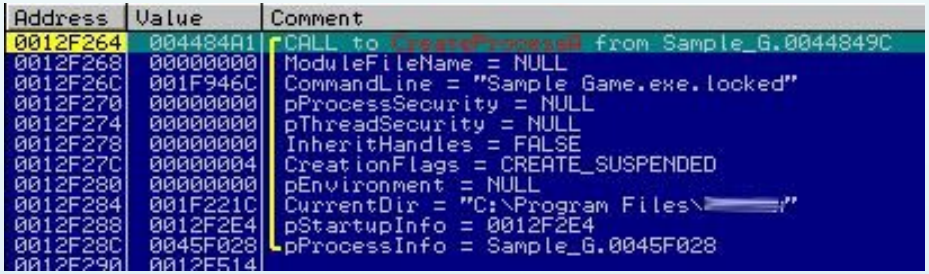
10. Uncheck the "locked" in the name of the file and DoubleClick -> It's run! Running game also delicious!
I recognized that far, I have a bit disappointed. However it is to have all?
I started playing, when you enter to try something and the game .... it crash! Hehe, looks like the above is not all.
Ok. Back Olly, load Sample Game.exe original (renamed before deleting the file locked by the other). Please say it is more written in VB.

11. If Sample Game.exe a loader, we try to set up a BP function API "loader" using commandbar plugin.

```
CreateProcessA
WriteProcessMemory
Resumethread
```

12. F9 and click "Try it".
---> I think i must do more to guess: a small window called "loader" sprung (hehe)

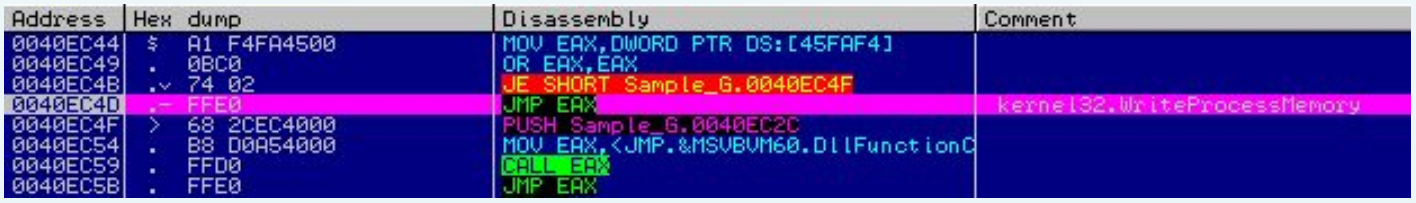
And after that break in CreateProcessA.




```
The CreateProcess function creates a new process and its primary thread. The new
process executes the specified executable file.

BOOL CreateProcess (

LPCTSTR lpApplicationName, / / Pointer to name of executable module
LPTSTR lpCommandLine, / / Pointer to command line string
LPSECURITY_ATTRIBUTES lpProcessAttributes, / / pointer to process security Attributes
LPSECURITY_ATTRIBUTES lpThreadAttributes, / / Pointer to thread security Attributes
BOOL bInheritHandles, / / handle inheritance flag
DWORD dwCreationFlags, / / creation flags
LPVOID lpEnvironment, / / Pointer to new environment block
LPCTSTR lpCurrentDirectory, / / pointer to current directory name
LPSTARTUPINFO lpStartupInfo, / / Pointer to STARTUPINFO
LPPROCESS_INFORMATION lpProcessInformation / / pointer to PROCESS_INFORMATION
);
```

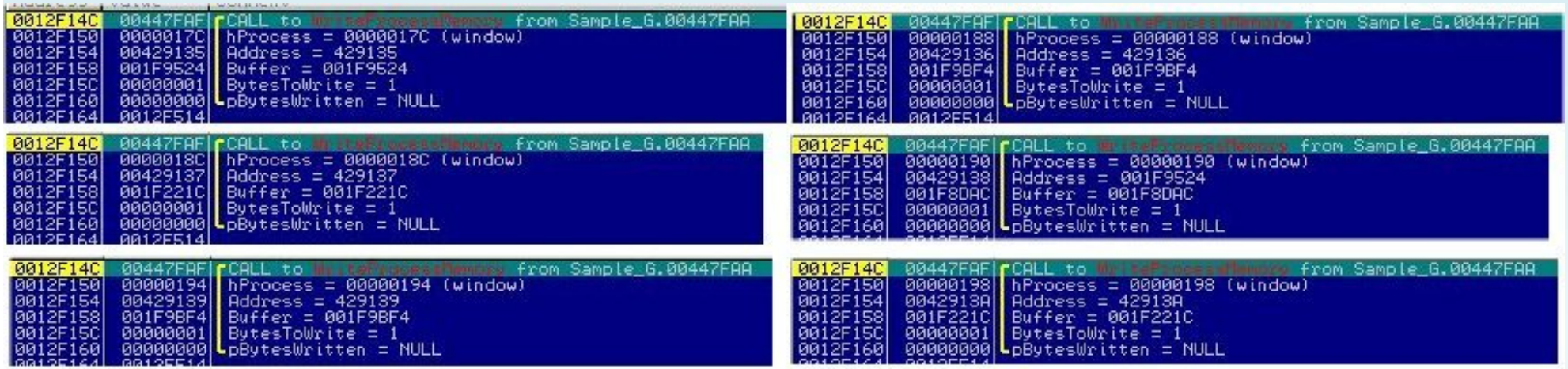
I think i need to explain anything more nhé.

13. Click "run" again and again, all at the break WriteProcessMemory. Backtracing *(sure trace wa RETN so many times about the code)*, we see orders jumped 1:



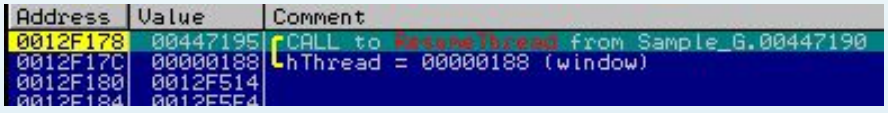
```
The WriteProcessMemory memory function writes a specified process. The entire area to
be written to must be accessible, or the operation fails.

BOOL WriteProcessMemory (

HANDLE hProcess, / / handle to process whose memory is written to
LPVOID lpBaseAddress, / / address to start writing to
LPVOID lpBuffer, / / Pointer to buffer to write data to
DWORD nSize, / / number of bytes to write
LPDWORD lpNumberOfBytesWritten / / actual number of bytes written
);
```

1 More few more pictures:



What is looking better then: WriteProcessMemory to write only 1 byte in each, at the beginning 429,136
Buffer area in turn contains 3 addresses, in each byte will be overwritten from this process through the other process. You can dom to dump window to see the bytes are, if you want to write.

14. Delete BP in WriteProcessMemory go (I also have a few more BP, for example OpenProcess break but there do have more information What should I remove all oi).
Press F9 and break in ResumeThread




```
The ResumeThread function decrements a thread's suspend count. When the suspend count
```

```
is decremented to zero, the execution of the thread is resumed.

DWORD ResumeThread (

HANDLE hThread / / identifies thread to restart
);
```

Certainly do need to explain more -> press F9 and running game.

15. Think tí time. This can be understood as: loader "Sample Game.exe" will run "Sample Game.exe.locked" and suspend thread. Start patch at 429,136 until the completion of the game and resume thread run lickerish

16. Who can be more research, but the time we try in Olly. Load Sample Game.exe.locked and select -> Go To -> 429,136
Chaaa! all first byte 0, from 429,136 to 429,534. Be read, too many bytes to lose! Without some bytes here, game will crash. -> In the protection, protector has "cut" of bytes from the original file, then rename it to "locked", then create 1 loader to manage the registration and re-inject it into the byte file protection allows.

17. Now running game (outside Olly) Attach it to Olly Game.exe.locked Sample files. Goto to 429,136 -> all bytes have been loaded into the code and look better then đấy.

18. To all black byte from 429,136 to 429,535 -> select binary copy. Then off to the end.

19. Rename. "Locked" to the original file name. Exe and then load it into Olly -> Go to to 429,136 -> Binary paste the bytes have to copy. Save the file there.

20. Delete the file loader. Running game. All good beginning. *Another one Bites the dust;)*

Additional comments:

After writing this article, I try to protect some files again, and good then, I have to protect *winasm studio executable* -> success! I also try to protect your bags *RadAsm.exe* -> lickerish! So I do not have luck with the other files?
lol However, I still have not understood the stolen bytes option to do more. Select or do choose are the same àh.

If you want to try this is the protector please note that it will override the original file when creating a backup option if loader do is check.
Reviews's first site for this protector.

<<END OF TRANSLATION>>

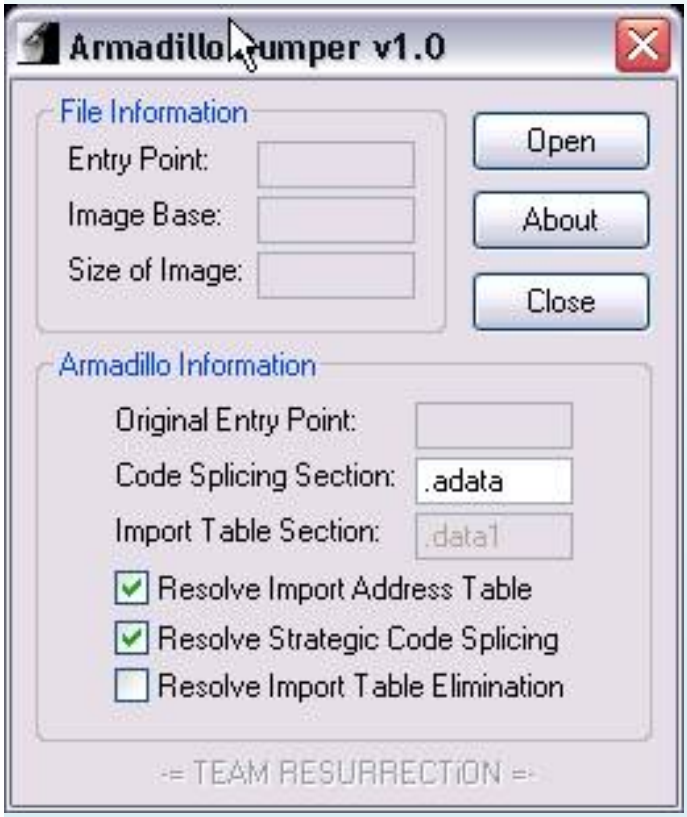
trickyboy

Big thanks to Lena151.
Best regard.

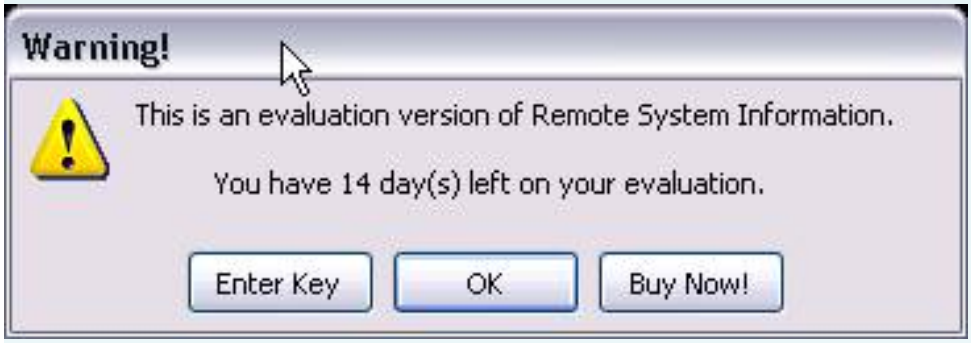
Debugblocker + + Code Splicing Nanomites

SoftWare : **Remote System Information 3.2**
Homepage : ***http://www.digitallabs.net***
Packed : ***Debugblocker + + Code Splicing Nanomites***
Crack Tool 1. ***ArmaDumper 1.0***
2. ArmInline 0.71
3. Import REConstructor 1.6
4. extended Task Manager
Author : **Why Not Bar**

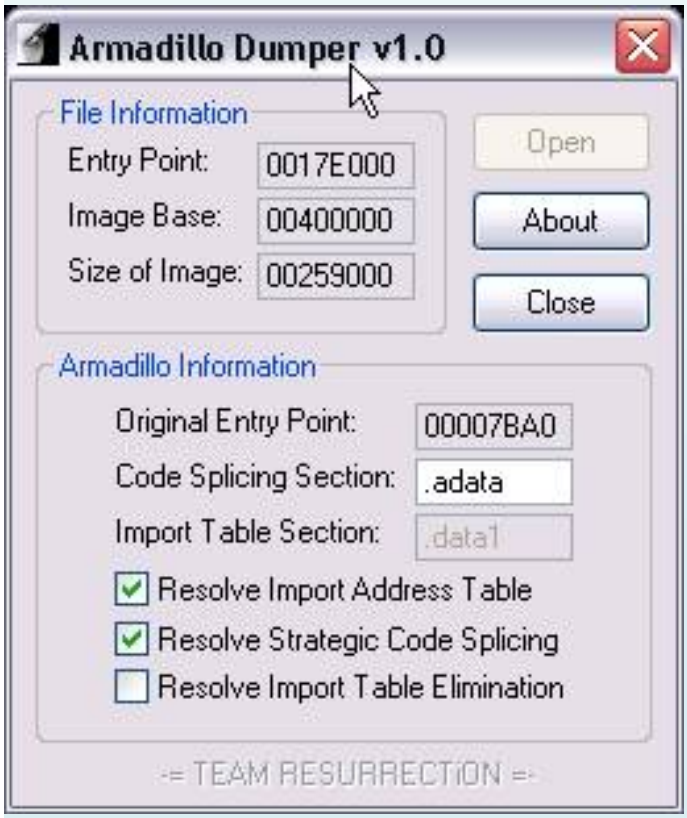
_Khi Unpack Pack 1 are soft in Arma we often target the Load Olly conducted since then in many ways to unpack it. But today, we try to unpack without touching Olly try to watch stars. Here they use Tool *ArmaDumper 1.0.* and select the following



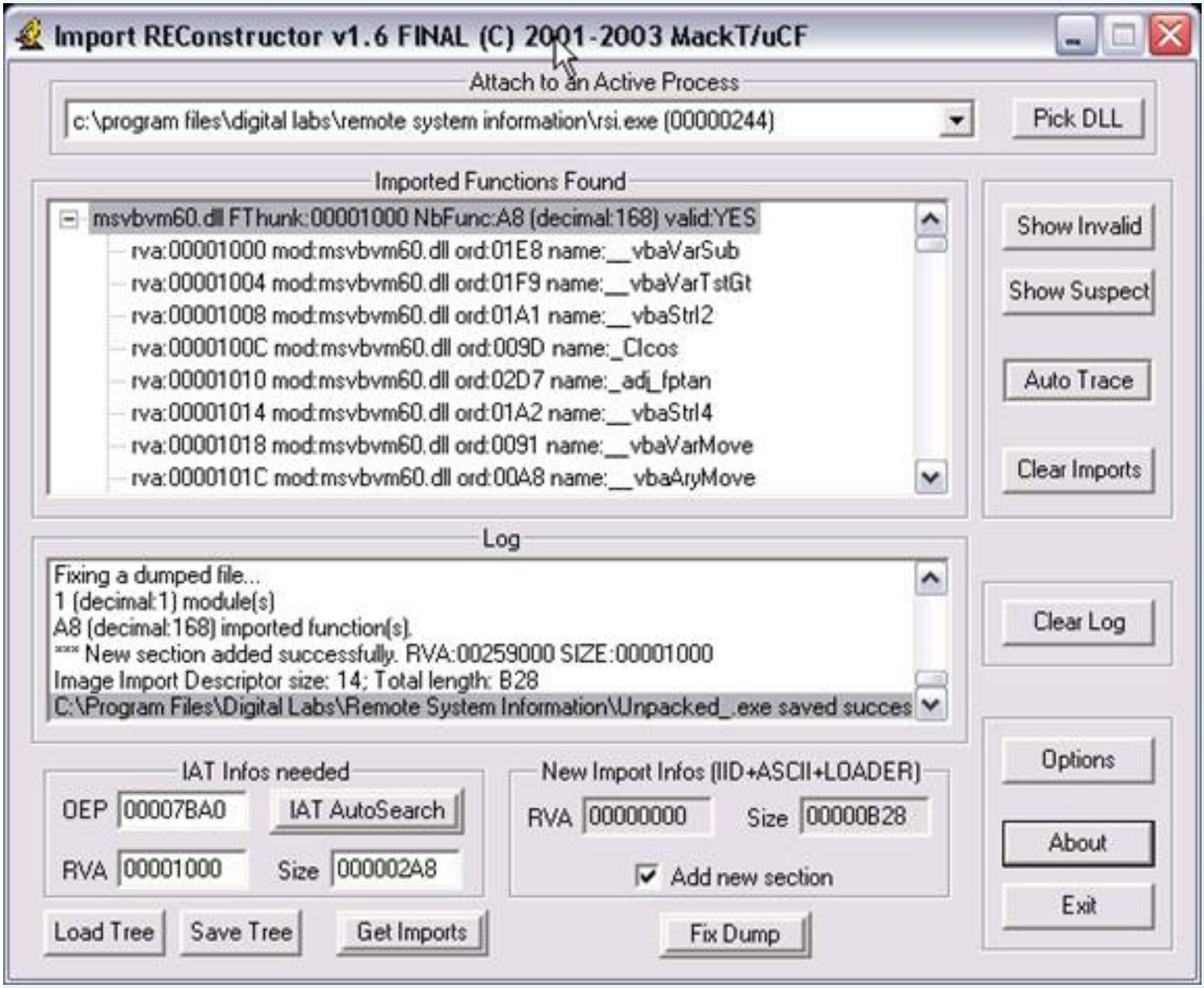
_Open Select File "rsi.exe" appear Nag



_Nhan OK, we have been as follows:



_ M in ImportREC to conduct Fix dump

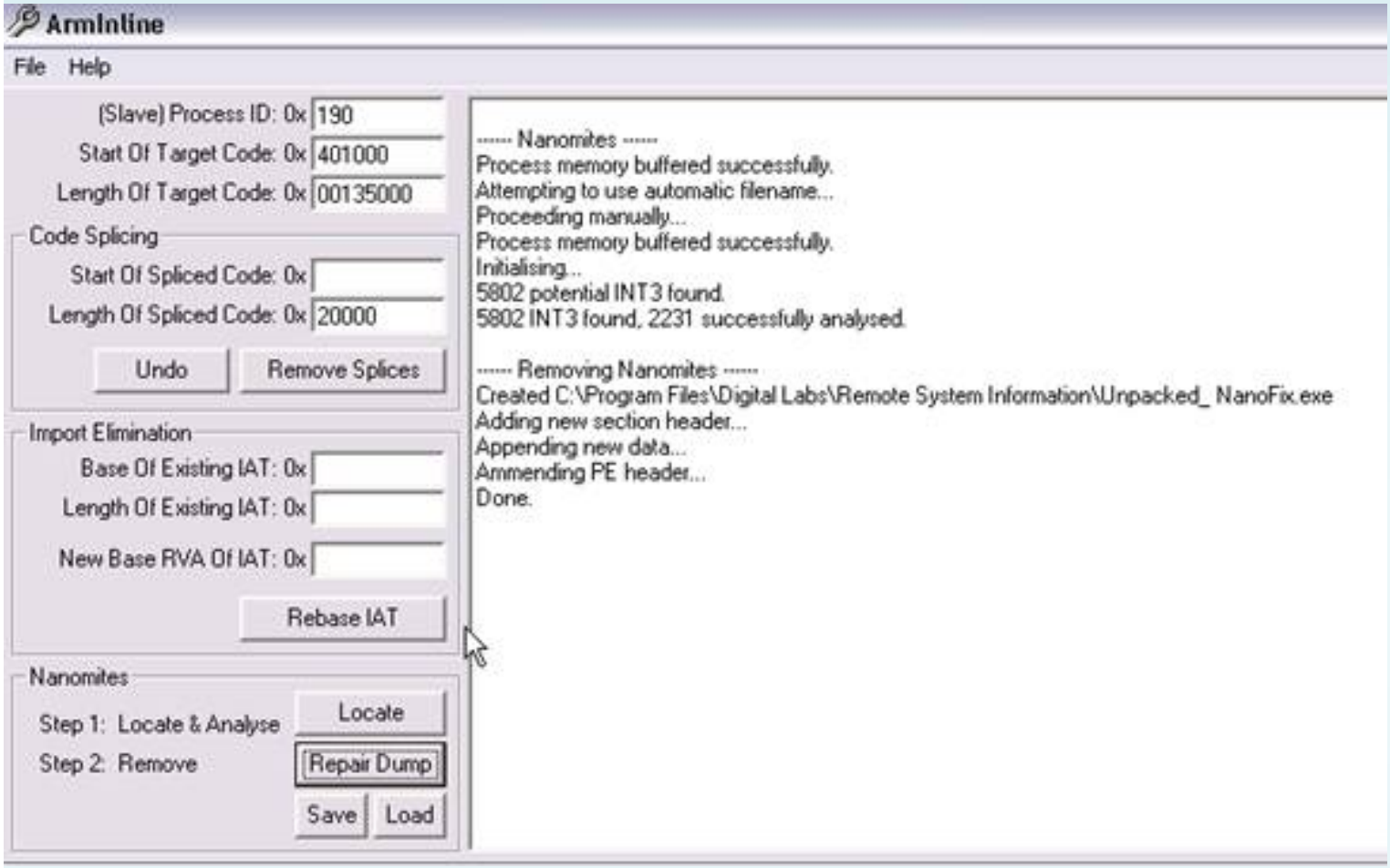


Run Try File "Unpacked.exe. Há a running call. But when you use the Open with crash

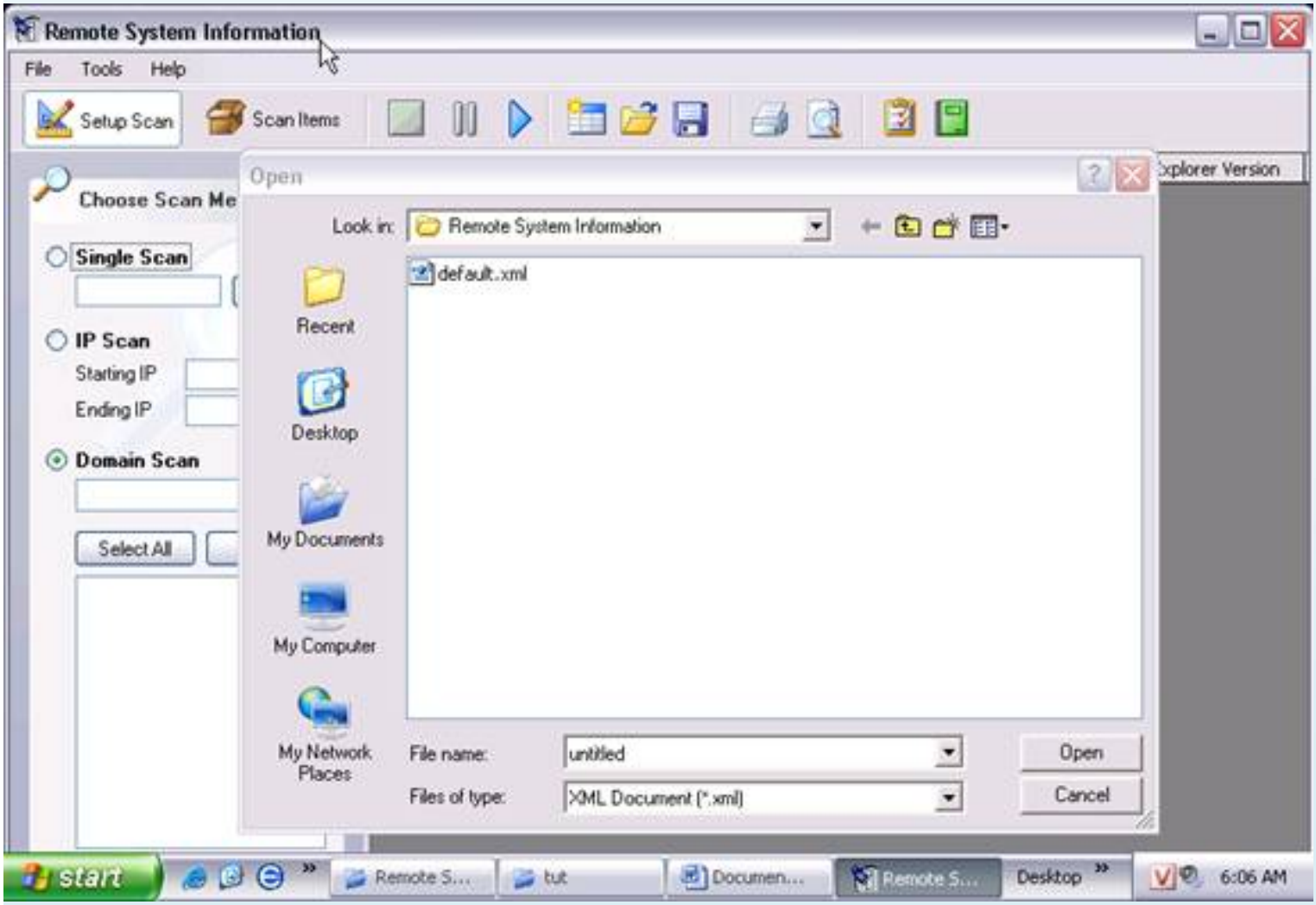
Do The phenomenon of Nano, we conducted Fix it is only OK. Run the file "Unpacked.exe" again. For it is, extended run Task Manager to see its PID

Image Name	PID	Description	User Name	CPU	Mem Usage	Handles
svchost.exe	844	Generic Host Process for Win32...	NT AUTHORITY\LOCAL SERVICE	0	272 K	198
System	4		NT AUTHORITY\SYSTEM	0	48 K	183
System Idle Pro...	0			96	16 K	0
UniKey.exe	1048		COMPUTER\Welcome	0	1,176 K	18
Unpacked_.exe	400		COMPUTER\Welcome	1	13,200 K	160
wdfmgr.exe	1136	Windows User Mode Driver Man...	NT AUTHORITY\LOCAL SERVICE	0	84 K	65
winlogon.exe	448	Windows NT Logon Application	NT AUTHORITY\SYSTEM	0	1,024 K	582
WINWORD.EXE	176	Microsoft Office Word	COMPUTER\Welcome	0	16,436 K	288
XTM.exe	1276	Warecase eXtended Task Mana...	COMPUTER\Welcome	2	2,980 K	58

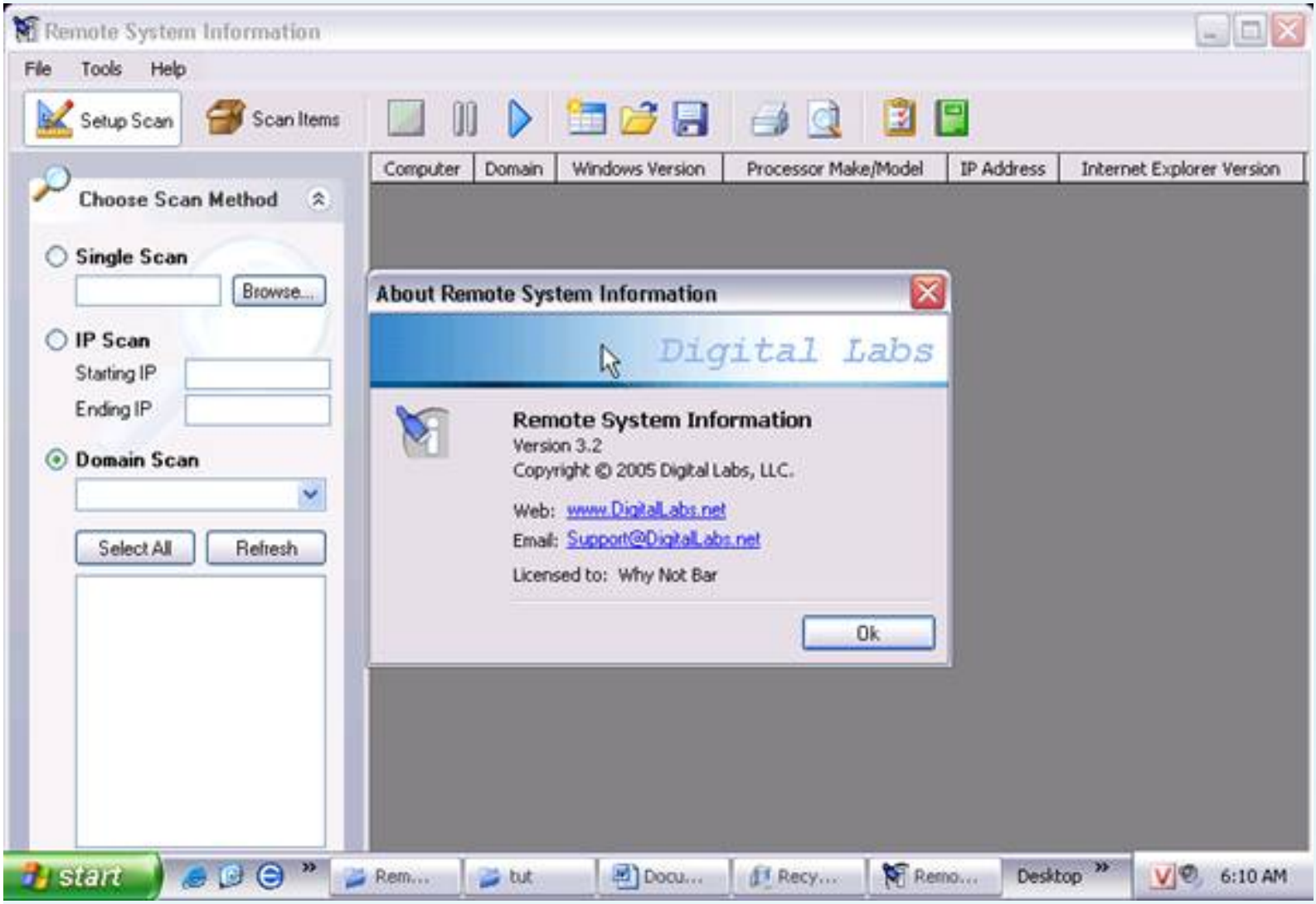
_O Machine is 400 HEX through it with the 190th Open ArmInline and to fill FIX Nano conducted as normal. If you do it right will result as follows:



Chay Try File "Unpacked NanoFix.exe" and use Open



_OK, Gòi Done! Ha ha .... Try to see the About information, it is always self Exit. So why? Do not worry carp File "ArmAccess.dll" folder on the installation is OK!



_Oh Yeah, unpack Done !!!!!!!!!!!! Crack from the infected. Ha ha!

Written by Why Not Bar

1:19 RLPack Research

Target: notepad_type_1.exe
Pack options:
Protect from generic unpacker
Import protection Redirection
Enforce memory protection
Olly notepad_type_1.exe to load, you see:

```
010238B9> 60 PUSHAD
010238BA E8 00000000 CALL notepad_.010238BF
010238BF 83C4 04 ADD ESP, 4
```

Khúc walking seems quite early this same UPX, one method to try to OEP by UPX.
And we have the results:

```
0100739D. 6A 70 PUSH 70
0100739F. 68 98180001 PUSH notepad_.01001898
010073A4. E8 BF010000 CALL notepad_.01007568
010073A9. 33DB XOR EBX, EBX
010073AB. 53 PUSH EBX
010073AC. 8B3D CC100001 MOV EDI, DWORD PTR DS: [10010CC]
010073B2. FFD7 CALL EDI
010073B4. 66:8138 4D5A Cmp WORD PTR DS: [EAX], 5A4D
010073B9. 75 1F JNZ SHORT notepad_.010073DA
010073BB. 8B48 3C MOV ECX, DWORD PTR DS: [EAX +3 C]
010073BE. 03C8 ADD ECX, EAX
010073C0. 8139 50450000 Cmp DWORD PTR DS: [ECX], 4550
```

This is the OEP, such OEP to find quite easily. Check to see intermodular calls APIs are not intact, we have the results:

```
01006D69 CALL DWORD PTR DS: [100102C] GDI32.AbortDoc
01007522 CALL DWORD PTR DS: [1001300] msvcrt._cexit
010030DA CALL DWORD PTR DS: [10012D0] comdlg32.ChooseFontW
01002003 CALL DWORD PTR DS: [10012E0] comdlg32.763B2BBF
010028D0 CALL DWORD PTR DS: [10012E0] comdlg32.763B2BBF
01002E09 CALL DWORD PTR DS: [10012E0] comdlg32.763B2BBF
010075E7 CALL notepad_.010075FC msvcrt._controlfp
010064A4 CALL DWORD PTR DS: [1001040] GDI32.CreateDCW
01006588 CALL DWORD PTR DS: [1001040] GDI32.CreateDCW
010030F7 CALL DWORD PTR DS: [1001064] GDI32.CreateFontIndirectW
```

Some API still raw state. But have 1 number of the API call being changed.

```
01001984 CALL DWORD PTR DS: [10010D8] DS: [010010D8] = 0094018F
010019EF CALL DWORD PTR DS: [1001224] DS: [01001224] = 009407E0
```

```
01001A19 CALL DWORD PTR DS: [1001220] DS: [01001220] = 009407CB
01001A64 CALL DWORD PTR DS: [100123C] DS: [0100123C] = 0094085E
01001B0F CALL DWORD PTR DS: [1001238] DS: [01001238] = 00940849
01001B1C CALL DWORD PTR DS: [1001234] DS: [01001234] = 00940834
01001B2B CALL DWORD PTR DS: [1001230] DS: [01001230] = 0094081F
01001B34 CALL DWORD PTR DS: [100122C] DS: [0100122C] = 0094080A
01001B5E CALL DWORD PTR DS: [100122C] DS: [0100122C] = 0094080A
01001B86 CALL DWORD PTR DS: [1001228] DS: [01001228] = 009407F5
01001C17 CALL DWORD PTR DS: [1001244] DS: [01001244] = 00940888
01001D52 CALL DWORD PTR DS: [1001244] DS: [01001244] = 00940888
01001D88 CALL DWORD PTR DS: [1001264] DS: [01001264] = 00940930
01001DA3 CALL DWORD PTR DS: [1001240] DS: [01001240] = 00940873
```

10010D8 area to remember and observe in the dump, you will have:

```
IAT begin = 01001000 77DD6FC8 EoYw ADVAPI32.RegQueryValueExW
IAT end = 01001344
```

Note to the value of the API changes were first
First IAT Redirect 0100108C = 00940000 .. ".

So we will set hardware breakpoint on memory write 0100108C in to see the RLPack create and write new value to how.
Set on write in hwbp 0100108C. Ctrl-F2 to restart and F9 to run. I will break in:

```
01023C36 F3: A4 REP MOVS BYTE PTR ES: [EDI], BYTE PTR DS: [>
01023C38 5e POP ESI
01023C39 ^ 8E EB JMP SHORT notepad_.01023BC9
```

This is not where RLPack write new value that is just delete the bytes of 0. Okie, F7, F8 Then F9 to continue, we will stop at:

```
010269A4 8907 MOV DWORD PTR DS: [EDI], EAX <--
010269A6 C3 RETN
010269A7 60 PUSHAD
```

This is where RLPack write the address of the API. Trace the flow, we are to:

```
01023A85 / 0F84 DE1A0000 JE notepad_.01025569
01023A8B | E8 D42F0000 CALL notepad_.01026A64
01023A90 | E8 8F2E0000 CALL notepad_.01026924
01023A95 | 83C7 04 ADD EDI, 4 <- here we
01023A98 | 8385 E14B0000 0> ADD DWORD PTR SS: [EBP +4 BE1], 4
```

Here, we try BP No. 1 in order to call on the current location and run the program. 1 the number of experiments, we commented:

```
01023A6F 8B85 E14B0000 MOV EAX, DWORD PTR SS: [EBP +4 BE1]
01023A75 8B00 MOV EAX, DWORD PTR DS: [EAX]
01023A77 50 PUSH EAX
```

```
01023A78 FFB5 DD4B0000 PUSH DWORD PTR SS: [EBP +4 BDD]
01023A7E E8 D1370000 CALL notepad_.01027254 <- get the API address root
01023A83 85C0 TEST EAX, EAX
01023A85 0F84 DE1A0000 JE notepad_.01025569
01023A8B E8 D42F0000 CALL notepad_.01026A64 <- create a new address
API (when met some conditions)
01023A90 E8 8F2E0000 CALL notepad_.01026924 <- API address assigned to
the IAT
```

So the rest of the simple, one in 01023A8B NOP, delete all breakpoint and F9 to run. Then see table intermodular calls will result:

```
01002003 CALL DWORD PTR DS: [10012E0] comdlg32.763B2BBF
010028D0 CALL DWORD PTR DS: [10012E0] comdlg32.763B2BBF
01002E09 CALL DWORD PTR DS: [10012E0] comdlg32.763B2BBF
01002146 CALL DWORD PTR DS: [10010EC] kernel32.CompareStringW
01005896 CALL DWORD PTR DS: [10010EC] kernel32.CompareStringW
01005921 CALL DWORD PTR DS: [10010EC] kernel32.CompareStringW
010075E7 CALL notepad_.010075FC msvcrt._controlfp
010064A4 CALL DWORD PTR DS: [1001040] GDI32.CreateDCW
01006588 CALL DWORD PTR DS: [1001040] GDI32.CreateDCW
01006AD6 CALL DWORD PTR DS: [1001214] user32.CreateDialogParamW
0100522E CALL DWORD PTR DS: [10010B4] kernel32.CreateFileMappingW
01002653 CALL DWORD PTR DS: [1001104] kernel32.CreateFileW
01002DAA CALL DWORD PTR DS: [1001104] kernel32.CreateFileW
010033AA CALL DWORD PTR DS: [1001104] kernel32.CreateFileW
010043D0 CALL DWORD PTR DS: [1001104] kernel32.CreateFileW
01004A07 CALL DWORD PTR DS: [1001104] kernel32.CreateFileW
...
```

-> Full IAT. The rest of the dump and fix.

1:19 RlPack Anti Anti dump dump & Advance

Options:
Anticracking Protection
+ Anti dump protection
+ Anti Advance dump protection instructions 512

For simplicity, we only protect the options on the target, the goal is research on how to dump the Anti RLPack. If we dump, and run IAT fixed target, we found:

```
010074E4. 50 PUSH EAX; / pStartupinfo
010074E5. FF15 D0100001 CALL DWORD PTR DS: [<& kernel32.GetStartup> \
GetStartupInfoA
010074EB. F645 AC 01 TEST BYTE PTR SS: [EBP-54], 1
```

```
010074EF. 74 11 JE SHORT notepad_.01007502
010074F1. 0FB745 B0 MOVZX EAX, WORD PTR SS: [EBP-50]
010074F5. EB 0E JMP SHORT notepad_.01007505
010074F7> 803E 20 Cmp BYTE PTR DS: [ESI], 20
010074FA. ^ 76 D8 JBE SHORT notepad_.010074D4
010074FC. 46 INC ESI
010074FD. 8975 E0 MOV DWORD PTR SS: [EBP-20], ESI
01007500. ^ EB F5 JMP SHORT notepad_.010074F7
01007502> 6A 0A PUSH 0A
01007504. 58 POP EAX
01007505> 50 PUSH EAX
01007506. 56 PUSH ESI
01007507. 53 PUSH EBX
01007508. 53 PUSH EBX
01007509. FFD7 CALL EDI
0100750B. 50 PUSH EAX
0100750C. E8 25B4FFFF CALL notepad_.01002936 <- here
```

When running 0100750C to call and implement this program will be crash. Back to the target and not unpack 0100750C break in to see how RLPack work, we have to trace:

```
01002936 $ 8BFF MOV EDI, EDI
01002938. 55 PUSH EBP
01002939. 8BEC MOV EBP, ESP
0100293B. 83EC 20 SUB ESP, 20
0100293E. 56 PUSH ESI
0100293F. 57 PUSH EDI
01,002,940 .- E9 B0E890FF JMP 009111F5 <- 1st jmp
```

The first is quite similar to the function of file notepad not unpack. I remember calling area is the area from 910,000 remember AntiDump Code. We trace test JMP will take you where to go:

```
009111F5 83EC 04 SUB ESP, 4
009111F8 C70424 14110001 MOV DWORD PTR SS: [ESP], 1001114
009111FF 50 PUSH EAX
00911200 8B4424 04 MOV EAX, DWORD PTR SS: [ESP +4]
00911204 8B00 MOV EAX, DWORD PTR DS: [EAX]
00911206 894424 04 MOV DWORD PTR SS: [ESP +4], EAX
0091120A 58 POP EAX
0091120B 83C4 04 ADD ESP, 4
FC 0091120E FF5424 CALL DWORD PTR SS: [ESP-4]
```

```
00911212 - E9 2F176F00 JMP notepad_.01002946 <- return next code
```

We try to analyze the views of the code at 009111F5 to do:

```
009111F5 83EC 04 SUB ESP, 4
009111F8 C70424 14110001 MOV DWORD PTR SS: [ESP], 1001114 <- 01001114
IAT addr of GetCommandLineW
009111FF 50 PUSH EAX
00911200 8B4424 04 MOV EAX, DWORD PTR SS: [ESP +4] <- EAX = 01001114
00911204 8B00 MOV EAX, DWORD PTR DS: [EAX] <- EAX = [01001114] = addr
of GetCommandLineW
00911206 894424 04 MOV DWORD PTR SS: [ESP +4], EAX <- [ESP +4] = addr
of GetCommandLineW
0091120A 58 POP EAX
0091120B 83C4 04 ADD ESP, 4
FC 0091120E FF5424 CALL DWORD PTR SS: [ESP-4] <- Call GetCommandLineW
00911212 - E9 2F176F00 JMP notepad_.01002946 <- return next code
```

So, guess 1 JMP section from the area code to area code AntiDump equivalent to 1 instruction. And compared with the original code, we can be sure the code is equivalent to:

```
CALL DWORD PTR [1001114]
```

Similarly, we have 1 JMP other as follows:

```
00910022 68 791A0000 PUSH 1A79 <--
00910027 A1 0C009000 MOV EAX, DWORD PTR DS: [90000C] <- 00001991 =
0091002C 310424 XOR DWORD PTR SS: [ESP], EAX <- xor 00001991 = 1A79
0091002F 58 POP EAX
00910030 - E9 61196F00 JMP notepad_.01001996
```

So the command is equivalent to:

```
MOV EAX, 3E8
```

And specifically, we have:

```
00910035 50 PUSH EAX
00910036 8F05 D0A40001 POP DWORD PTR DS: [100A4D0]
0091003C - E9 5A196F00 JMP notepad_.0100199B
```

Equivalent to:

```
MOV DWORD PTR DS: [100A4D0], EAX
```

1 again:

```
009100B6 83EC 04 SUB ESP, 4
009100B9 50 PUSH EAX
009100BA A1 38980001 MOV EAX, DWORD PTR DS: [1009838]
009100BF 894424 04 MOV DWORD PTR SS: [ESP +4], EAX
009100C3 58 POP EAX
009100C4 - E9 26196F00 JMP notepad_.010019EF
```

Equivalent to:
```
PUSH DWORD PTR [1009838]
```
....

So, with 1 target we simply can completely fix = hands. However, the number of instructions indicated as much to fix the hand = requires your patience. Still have 1 option for you is writing the script 1, listed all types and fix automatically. This would cede to you and wish you success, lolz.

Stolen bytes case:

Options:
Anticracking Protection
+ Convert to OEP Virtual Machine
In this case, we only look at the "Convert OEP to Virtual Machine" the protection of other options do we check to focus more.
Implementation unpack UPX similar, we stop at:
```
0102468A 61 POPAD
0102468B 8980 A3440000 MOV DWORD PTR DS: [EAX +44 A3], EAX <- Stolen
OEP VM
01024691 8998 A7440000 MOV DWORD PTR DS: [EAX +44 A7], EBX
01024697 8988 AB440000 MOV DWORD PTR DS: [EAX +44 AB], ECX
0102469D 8990 AF440000 MOV DWORD PTR DS: [EAX +44 AF], EDX
010246A3 89B0 B3440000 MOV DWORD PTR DS: [EAX +44 B3], ESI
010246A9 89B8 B7440000 MOV DWORD PTR DS: [EAX +44 B7], EDI
010246AF 89A0 BF440000 MOV DWORD PTR DS: [EAX +44 BF], ESP
010246B5 89A0 C3440000 MOV DWORD PTR DS: [EAX +44 C3], ESP
010246BB 89A8 BB440000 MOV DWORD PTR DS: [EAX +44 BB], EBP
010246C1 8BE8 MOV EBP, EAX
010246C3 8BBD 9F440000 MOV EDI, DWORD PTR SS: [EBP +449 F]
010246C9 8BB5 9B440000 MOV ESI, DWORD PTR SS: [EBP +449 B]
010246CF E9 5A040000 JMP notepad_.01024B2E
```
And here, if trace xíu 1, we will like to OEP old, and then we will see in OEP 0100739D is 1 of the order as NOP Moth above. So, is 0102468B predict the location of the VM Stolen OEP. Here, there are 2 ways to process, as you choose

OEP 1.Dump in VM, and to insert more VMSection.
From this position, we dump file, and fix IAT, is selected EP 0102468B = VM OEP. After the dump file and fix the dumped_1.exe. If Debug dumped_1.exe this file, we will find the cost mga record the EAX first is wrong, it will cause the Access bugs Error. Therefore, we fix the following:
```
01024686> b8 D9380201 MOV EAX, notepad_.010238D9
```

```
0102468B 8980 A3440000 MOV DWORD PTR DS: [EAX +44 A3], EAX
01024691 8998 A7440000 MOV DWORD PTR DS: [EAX +44 A7], EBX
```

Edit the file's new EP dumped_1.exe is 01024686.
And also continue to trace, we will see dumped_1.exe access to 1 duo.c other memory areas specified in the ESI and EDI = 960000 = 940000

```
010246C3 8BBD 9F440000 MOV EDI, DWORD PTR SS: [EBP +449 F]
010246C9 8BB5 9B440000 MOV ESI, DWORD PTR SS: [EBP +449 B]
```

Therefore, we must dump 2 in this area remember the original file, and import it into dumped_1.exe (remember to edit VAddress accurate).
After you add more -> file to run well.

2.Recover stolen bytes (for someone like "beauty").

The process of handling stolen bytes of RLPack beginning:

```
01024B2E 833E 00 Cmp DWORD PTR DS: [ESI], 0
01024B31 ^ 0F85 9DFBFFFF JNZ notepad_.010246D4
01024B37 8BB5 9F440000 MOV ESI, DWORD PTR SS: [EBP +449 F]
01024B3D EB 05 JMP SHORT notepad_.01024B44
01024B3F FF36 PUSH DWORD PTR DS: [ESI]
```

[ESI] will contain VM-Instruction
[EDI] stack memory
The value may be recorded in

```
0102468B 8980 A3440000 MOV DWORD PTR DS: [EAX +44 A3], EAX
01024691 8998 A7440000 MOV DWORD PTR DS: [EAX +44 A7], EBX
01024697 8988 AB440000 MOV DWORD PTR DS: [EAX +44 AB], ECX
0102469D 8990 AF440000 MOV DWORD PTR DS: [EAX +44 AF], EDX
010246A3 89B0 B3440000 MOV DWORD PTR DS: [EAX +44 B3], ESI
010246A9 89B8 B7440000 MOV DWORD PTR DS: [EAX +44 B7], EDI
010246AF 89A0 BF440000 MOV DWORD PTR DS: [EAX +44 BF], ESP
010246B5 89A0 C3440000 MOV DWORD PTR DS: [EAX +44 C3], ESP
010246BB 89A8 BB440000 MOV DWORD PTR DS: [EAX +44 BB], EBP
```

And it will be assigned again before returning to real OEP.

```
01024B75 8B85 A3440000 MOV EAX, DWORD PTR SS: [EBP +44 A3]
01024B7B 8B9D A7440000 MOV EBX, DWORD PTR SS: [EBP +44 A7]
01024B81 8B8D AB440000 MOV ECX, DWORD PTR SS: [EBP +44 AB]
01024B87 8B95 AF440000 MOV EDX, DWORD PTR SS: [EBP +44 AF]
01024B8D 8BB5 B3440000 MOV ESI, DWORD PTR SS: [EBP +44 B3]
01024B93 8BBD B7440000 MOV EDI, DWORD PTR SS: [EBP +44 B7]
01024B99 8BA5 BF440000 MOV ESP, SS DWORD PTR [EBP +44 BF]
01024B9F 8BAD BB440000 MOV EBP, DWORD PTR SS: [EBP +44 BB]
01024BA5 ^ E9 A3EFFFFF JMP notepad_.01023B4D
```

Corresponding to every instruction from the VM-1 Instruction will own the process called handler.
In this target, we have a review around 23 handler in turn is handler_00, handler_01 ..., handler_23
Example No. 1 handler:
Handler_00:

```
01024B2E 833E 00 Cmp DWORD PTR DS: [ESI], 0
01024B31 ^ 0F85 9DFBFFFF JNZ notepad_.010246D4
01024B37 8BB5 9F440000 MOV ESI, DWORD PTR SS: [EBP +449 F]
01024B3D EB 05 JMP SHORT notepad_.01024B44
```

Handler_01:

```
010246D4 833E 01 Cmp DWORD PTR DS: [ESI], 1
010246D7 75 1E JNZ SHORT notepad_.010246F7
010246D9 60 PUSHAD
010246DA 33C9 XOR ECX, ECX
010246DC 6A 08 PUSH 8
010246DE E8 620C0000 CALL notepad_.01025345
010246E3 50 PUSH EAX
010246E4 6A 07 PUSH 7
010246E6 E8 220A0000 CALL notepad_.0102510D
010246EB 897C24 1C MOV DWORD PTR SS: [ESP +1 C], EDI
010246EF 61 POPAD
010246F0 8BF8 MOV EDI, EAX
010246F2 E9 34040000 JMP notepad_.01024B2B
```

Handler_02:

```
010246F7 833E 02 Cmp DWORD PTR DS: [ESI], 2
010246FA 75 17 JNZ SHORT notepad_.01024713
010246FC 60 PUSHAD
010246FD 33C9 XOR ECX, ECX
010246FF FF76 04 PUSH DWORD PTR DS: [ESI +4]
01024702 E8 220E0000 CALL notepad_.01025529
01024707 897C24 1C MOV DWORD PTR SS: [ESP +1 C], EDI
0102470B 61 POPAD
0102470C 8BF8 MOV EDI, EAX
0102470E E9 18040000 JMP notepad_.01024B2B
```

Thus, to restore, then we must find hard to bear out this Handler 23 respectively as I do, and then perform the recovery process.
Here I will for example in the first instruction

```
0100739D> $ 6A 70 PUSH 70 <---
0100739F. 68 98180001 PUSH notepad_.01001898
```

010073A4. E8 BF010000 CALL notepad_.01007568

Set in 01024B2E BP is beginning process of all the handler, and F9, we will stop:
When the value of [ESI] is
DS: [00960000] = 00000002
So, is VM_Instruction 02 -> Handler_02, break in Handler_02 = 010246F7, we will:

010246F7 833E 02 Cmp DWORD PTR DS: [ESI], 2 <- PUSH OPCODE

010246FA 75 17 JNZ SHORT notepad_.01024713

010246FC 60 PUSHAD

010246FD 33C9 XOR ECX, ECX

010246FF FF76 04 PUSH DWORD PTR DS: [ESI +4] <- = 00000070 <- PUSH VALUE

01024702 E8 220E0000 CALL notepad_.01025529 <- Save the record bar

01024707 897C24 1C MOV DWORD PTR SS: [ESP +1 C], EDI <- stack

0102470B 61 POPAD

0102470C 8BF8 MOV EDI, EAX <- stack current

0102470E E9 18040000 JMP notepad_.01024B2B <- continue through next VM-Instruction

So I guess the VM-02 Instruction is PUSH ....

Unpacking SafeDisc 2.x - Trans by hacnho

Goal: The pure research, uses the discussion .... For a long time before .=.=' note

Goal: -> SD.EXE

(1) uses the tool, the examination, the discovery is

SsfeDisc 2.x

(2) S-ICE starts, supposes break point BPX GetVersion

After (3) returns to the master routine, found the entrance OEP

482302-PUSH EBP <------ OEP
482303-MOV EBP, ESP
482305 PUSH-FF
482307 PUSH-00466257
...
...
482302A-CALL [006F4320] ---> GetVersion

(4) DPLAYERX.DLL MAP32, SAFEDISC ==> decodes API

12BF4CB-61 75 0F -> Changes JMP Patch
12BF4F1 EB-917 -> Changes JMP Patch

(5) 0 = code corresponds 7D, 1 = 23 (examines MEMORY); U 120A270 (beginning)

(6) looks for the gap, reads in patch, but also? Shy; Import table
The attention, the code 0, wants the code 1 RUN 1 respectively,'s OK

Patch:
Loop: PUSH 9413FFBE
PUSH EBX
PUSH DWORD PTR 0; Code = 0
CALL [0013AF86]; decodes the API call
ADD ECX, EDX, ECX = search value
MOV EAX, [EBP +10]; True position API site
MOV EDX, 6F4000; IAT START
N0: Cmp DWORD PTR [EDX], ECX
JZ N1

```
INC EDX
Cmp EDX, 6F6000; IAT END
JZ N2
JMP N0
N1: MOV DWORD PTR [EDX], EAX
N2: INC EBX
Cmp EBX, 7D; Corresponding code ==> 7D
JNZ Loop
END: JMP END
```

(7) RUN LordPE => FULL dump ==> SD.EXE puts on file SD1.EXE

(8) RUN ImportREC inputs to revise OEP IAT, puts on file SD1.EXE

(9) TEST RUN SD1.EXE ... OK ~!!!! stopping work for the day

SafeDisc - Easy or Hard

Vol 1 - Bypass AntiDebug Find and OEP

I-Intro:

Rain and then sunshine again, human disease and the provinces, as well as protector of the meat and then upgrade again ... and again ... and then to the meat ...

Kì mạn this trick allowed them to introduce some pa Kon 1 small way to unpack Safedisc. Ah, say the right of Safedisc 1 story so long ago they would diffusion few lines.

From time immemorial, at which the game requires any disc into the CD was born file NoCD crack. And the time that the crack they guess the only tool we need the next W32DASM is enough meat but not to bother in the SoftIce. The parties should make the game to respond with new technologies protect high style. The tool pack the executable file of the game again, then write the content to unpack the file to secure the sector on the CD. So you want to play games we must have the original CD player is new, because the secure sector can not copy the style is generally.

Fortunately in the modern belgium hours, with some tool such as Alcohol 120%,

Deamon Tool, we can create and run the ISO file identical as the original CD (of course who created the ISO must have the CD 1 original). But do not be time to create the ISO also successful, so files crack NoCD will continue to be popular.

And most of them are aged Cracker Russia, including that balance has what you just bought this aged Lia lia disc would sit on the unpack, patch noCD, then share extensive network for pa Kon xài pagoda. Can say almost any game grid then will have "to" ...

Now, i sure that only the world in our group also nhen Cracker lot, but the party fold our hands just sitting ngo but also difficult to research that forms Protect CD, the reason is quite simple "hem with money would buy a disc" should be ... this is no reason 1 items instructions clearly to this protector of meat (Ah, if there is any particular research or writing underground underground wear the shelves of tools, the tools for embracing the private Đống down discoloration nhé:)) ...)

However it is up to date, the last trick they also contemplate some tut 1 super wan, perhaps in the knowledge tut kĩ were too old compared to the first of several Russian-aged, but are still more than a warm formula to death. And now she would write again in what has been ngộ in days: methods to unpack Safedisc - a protector of the easiest type protector (if compared with Securom or Starforce)

Version Safedisc kì to belong in this range 3.x - 4.x
Target: 2 games following is recommended: (1 of 2)
Raiden 3 +
+ Need For Speed Underground 2 (NFSU 2)

With NSFU 2, if the download is you can easily earn in the warez sites, not in the you can buy goods on the 2 CD set that practice.

The CD is the original resolution, how? You can on http://gamecopyworld.com/ for Fixed Image files of this game. To mount with Deamon Tool to create 1 CD of the original (problem solving decrypt secure sector on CD)

With raiden 3 1 rare cases, to protect this Option All of Safedisc but do need to run the CD Original trick so choose to target it as illustrated in.

Unpack Safedisc will be divided into several items for each type protect, this will go to the first, the Bypass Anti Debugger by Safedisc and OEP.

Anti-II Bypass Debugger & Find OEP:

We only need 1 copy Olly super "cui" (the original is) to bypass AntiDebug. Now load the file "Raiden3.exe" to:

OEP by Safedisc is nothing difficult, since the EP you drag down 1 billion until found 1 LONG JUMP:

So OEP = 51AD70. Hehe, you just set up here BP (encourage use HWBP) is 1 time later, when the code was the unpack, JUMP command will take us to fly directly to OEP.
The issue now is to bypass the Anti Debugger. Safedisc first detect through **IsDebuggerPresent,**

Leave to BP, for about RETN:

If the RETN, EAX = 1 then that is our debugger has been detect, we just fix it is 0 we okie.
Gio CTRL-F9 to return to:

```
Address   Hex dump          Disassembly
667047B4    56              PUSH ESI
667047B5    E8 367F0000     CALL 6670C6F0
667047BA    83C4 04         ADD ESP,4
667047BD    66:85C0         TEST AX,AX
667047C0  v 0F85 02010000   JNZ 667048C8
667047C6    F6C3 04         TEST BL,4
667047C9  v 76 12           JBE SHORT 667047DD
667047CB    56              PUSH ESI
667047CC    E8 1F7E0000     CALL 6670C5F0
667047D1    83C4 04         ADD ESP,4
667047D4    66:85C0         TEST AX,AX
667047D7  v 0F85 EB000000   JNZ 667048C8
667047DD    F6C3 08         TEST BL,8
667047E0  v 76 12           JBE SHORT 667047F4
667047E2    56              PUSH ESI
667047E3    E8 387D0000     CALL 6670C520
667047E8    83C4 04         ADD ESP,4
667047EB    66:85C0         TEST AX,AX
667047EE  v 0F85 D4000000   JNZ 667048C8
667047F4    F7C3 00080000   TEST EBX,800
667047FA  v 76 12           JBE SHORT 6670480E
667047FC    56              PUSH ESI
667047FD    E8 3E7C0000     CALL 6670C440
66704802    83C4 04         ADD ESP,4
66704805    66:85C0         TEST AX,AX
```

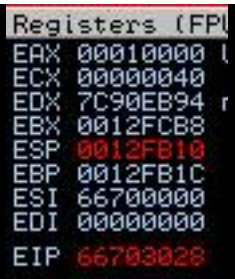
Rub, **IsDebuggerPresent** the outside, 1 Dong, there is another check to detect our debugger. If you view the items by haggar, you will know the name of some functions that used to detect Safedisc. Here i need a long line of fact dollop chả check this very important what we continue to Ctrl-F9 here:

```
Address   Hex dump          Disassembly
667013F9    83C4 08         ADD ESP,8
667013FC    66:8945 0C      MOV WORD PTR SS:[EBP+C],AX
66701400    58              POP EAX
66701401    66:8B45 0C      MOV AX,WORD PTR SS:[EBP+C]
66701405    66:F7D8         NEG AX
66701408    1BC0            SBB EAX,EAX
6670140A    66:25 0040      AND AX,4000
6670140E    03C6            ADD EAX,ESI
66701410    5E              POP ESI
66701411    C9              LEAVE
66701412    C3              RETN
```

After Đông check there, AX will be calculated at least 1. Continue Ctrl-F9:

```
Address   Hex dump          Disassembly
66703028    59              POP ECX
66703029    3D 00200000     CMP EAX,2000
6670302E    59              POP ECX
6670302F  v 74 23           JE SHORT 66703054
66703031    3D 00400000     CMP EAX,4000
66703036  ^ 74 D9           JE SHORT 66703011
66703038    33C9            XOR ECX,ECX
6670303A    3D 00000100     CMP EAX,10000
6670303F    0F94C1          SETE CL
66703042    49              DEC ECX
66703043    80E1 6A         AND CL,6A
66703046    81C1 FA000000   ADD ECX,0FA
6670304C    890D 94CC7E66   MOV DWORD PTR DS:[667ECC94],ECX
66703052    C9              LEAVE
66703053    C3              RETN
66703054    C705 94CC7E66 FB000000  MOV DWORD PTR DS:[667ECC94],0FB
6670305E    C9              LEAVE
6670305F    C3              RETN
```

Now if your EAX other 10,000 that is the debugger has been detected. This may be the last of the anonymous messages, but with Olly kĩ to hide the trick, also found itself in the EAX is 10,000:



So if your EAX = 2000 or 4000 then revised in the 10,000. Note that not only edit or Z flag patch for orders not skip jump nhé, if not with EAX 10,000 jump that was so, the error will occur.

The bypass is to be able to speak is too succinct, afedisc ung check how many but gom streamlined result of the check to EAX so we just need to fix such a presence through it.

Expand for you, Safedisc have 1 brother who is Safecast - used to protect soft (not games), and if it is safecast after bypass such as we have been completely out of the anti Safecast. However, with Safedisc is not necessarily, if you press Shift - F9 will now see that in BP LONG JUMP OEP not to break? Not have any notice of any detect, Olly not crash, as in the process evolve?

1 Make sure that something is not necessarily anti debugger, Okie, we restart everything again, bypass the anti as above, but this time not to run again but vẹo vẹo CTRL-F9 to return here:

The process may evolve as 1 endless loop, so the only way we trace from CALL to find out what makes the stiff suspension. Find CALL this form as well as find the call CALL trial NAG, in turn Ctrl - F8 ... and we are outstretched here:

```
Address   Hex dump          Disassembly
667036F1  >  F645 F0 02     TEST BYTE PTR SS:[EBP-10],2
667036F5  .v 75 09          JNZ SHORT ~df394b.66703700
667036F7  .  FF75 F8        PUSH DWORD PTR SS:[EBP-8]
667036FA  .  E8 981B0700    CALL ~df394b.66775297
667036FF  .  59             POP ECX
6703703   .  E8 F8480C00    CALL ~df394b.667C8000
6703708      8B43 14        MOV EAX,DWORD PTR DS:[EBX+14]
670370B   .  59             POP ECX
670370C   .  8B40 35        MOV EAX,DWORD PTR DS:[EAX+35]
670370F   .  A3 D40E8066    MOV DWORD PTR DS:[66800ED4],EAX
66703714  .  E8 E2CA0400    CALL ~df394b.667501FB
66703719  .  FF73 10        PUSH DWORD PTR DS:[EBX+10]
6670371C  .  57             PUSH EDI
6670371D  .  6A 01          PUSH 1
6670371F  .  68 18CE7E66    PUSH ~df394b.667ECE18
66703724  .  FF15 60B07C66  CALL DWORD PTR DS:[<&KERNEL32.CreateEventA>]
```

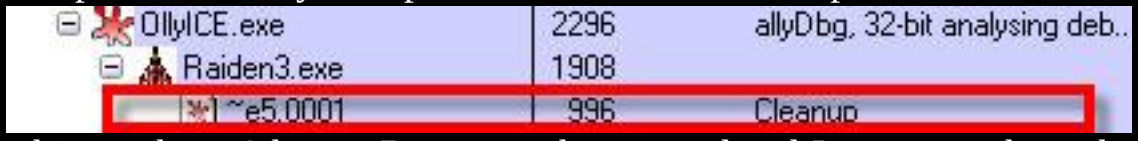
Set HWBP here, then Restart, the Anti bypass, run and break in on CALL. F7 to trace to here:

```
Address   Hex dump          Disassembly
667C8000  r$ 55             PUSH EBP
667C8001  .  8BEC           MOV EBP,ESP
667C8003  .  81EC 10020000  SUB ESP,210
667C8009  .  53             PUSH EBX
667C800A  .  E8 B994F3FF    CALL ~df394b.667014C8
667C800F  .  85C0           TEST EAX,EAX
667C8011  .v 0F84 EF000000  JE ~df394b.667C8106
667C8017  .  E8 C895F3FF    CALL ~df394b.667015E4
667C801C  .  66:3D 0100     CMP AX,1
667C8020  .v 0F84 E0000000  JE ~df394b.667C8106
667C8026  .  FF15 58B07C66  CALL DWORD PTR DS:[<&KERNEL32.GetCurrentProcessId>]
667C802C  .  8D8D F4FEFFFF  LEA ECX,DWORD PTR SS:[EBP-10C]
667C8032  .  68 04010000    PUSH 104
667C8037  .  51             PUSH ECX
```

Remember to take this command Jump, continued from the trace:

```
Address   Hex dump          Disassembly
667C80BE  .  FFD3           CALL EBX
667C80C0  .  FF75 FC        PUSH DWORD PTR SS:[EBP-4]
667C80C3  .  FFD6           CALL ESI
667C80C5  .  E8 8684F4FF    CALL ~df394b.66710550
667C80CA  >  FF75 FC        PUSH DWORD PTR SS:[EBP-4]
667C80CD  .  FF15 64B07C66  CALL DWORD PTR DS:[<&KERNEL32.SetEvent>]
667C80D3  .  85C0           TEST EAX,EAX
667C80D5  .v 75 0C          JNZ SHORT ~df394b.667C80E3
667C80D7  .  FFD3           CALL EBX
667C80D9  .  FF75 FC        PUSH DWORD PTR SS:[EBP-4]
667C80DC  .  FFD6           CALL ESI
667C80DE  .  E8 6D84F4FF    CALL ~df394b.66710550
667C80E3  >  6A FF          PUSH -1
667C80E5  .  57             PUSH EDI
667C80E6  .  FF15 90B07C66  CALL DWORD PTR DS:[<&KERNEL32.WaitForSingleObject>]
667C80EC  .  FF75 FC        PUSH DWORD PTR SS:[EBP-4]
667C80EF  .  8945 F8        MOV DWORD PTR SS:[EBP-8],EAX
667C80F2  .  FFD6           CALL ESI
```

Dom's on the see, with the number **-1** (or FFFFFFFF), is to PUSH, **WaitForSingleObject** function will make the current process hangs if debug is by Olly. For details on the wait time, **-1** is equivalent to Infinite Time. Process currently process for 1 second 2 (tentatively called the safedisc debugger) send it back to 1 signal to the contact between 2 process, here we are again Olly bulkhead to make the wait should not have to A, with the waiting period is Infinite should lead to repeats endlessly. But process 2 Where? Review process will see the list now:



So to bypass this, we have 2 hours. But remember we ordered Jump trace through the above,

if khúc jump in on, we will wait past the Infinite Time. With 2 minutes, we fix parameters PUSH PUSH -1 is 0 to shorten the waiting time down to 0 milisecond. Then trace and jump out through this:

```
Address   Hex dump          Disassembly
667C80E6  .  FF15 90B07C66  CALL DWORD PTR DS:[<&KERNEL32.WaitForSingleObject>
667C80EC  .  FF75 FC        PUSH DWORD PTR SS:[EBP-4]
667C80EF  .  8945 F8        MOV DWORD PTR SS:[EBP-8],EAX
667C80F2  .  FFD6           CALL ESI
667C80F4  .  57             PUSH EDI
667C80F5  .  FFD6           CALL ESI
667C80F7  .  837D F8 00     CMP DWORD PTR SS:[EBP-8],0
667C80FB  .  5F             POP EDI
667C80FC  .  5E             POP ESI
667C80FD  .v 74 07          JE SHORT ~df394b.667C8106
667C80FF  .  FFD3           CALL EBX
667C8101  .  E8 4A84F4FF    CALL ~df394b.66710550
667C8106  >  5B             POP EBX
667C8107  .  C9             LEAVE
667C8108  L. C3             RETN
```

Jump not here, they will fail. After the jump, we can secure Shift-F9 to OEP Jong JUMP:

```
007E6152    C3              RETN
007E6153  v 72 16           JB SHORT Raiden3.007E616B
007E6155    61              POPAD
007E6156    1360 0D         ADC ESP,DWORD PTR DS:[EAX+D]
007E6159  - E9 124CD3FF     JMP Raiden3.0051AD70
007E615E    CC              INT3
007E615F    CC              INT3
007E6160    81EC E8020000   SUB ESP,2E8
007E6166    53              PUSH EBX
007E6167    55              PUSH EBP
007E6168    56              PUSH ESI
007E6169    57              PUSH EDI
007E616A    8D4424 60       LEA EAX,DWORD PTR SS:[ESP+60]
```

F7 to develop and occupies the threshold OEP:

```
Address   Hex dump          Disassembly
0051AD70  .  6A 60          PUSH 60                          <-- OEP
0051AD72  .  68 00D05400    PUSH Raiden3.0054D000
0051AD77  .  E8 CC4B0000    CALL Raiden3.0051F948
0051AD7C  .  BF 94000000    MOV EDI,94
0051AD81  .  8BC7           MOV EAX,EDI
0051AD83  .  E8 F8F1FFFF    CALL Raiden3.00519F80
0051AD88  .  8965 E8        MOV DWORD PTR SS:[EBP-18],ESP
0051AD8B  .  8BF4           MOV ESI,ESP
0051AD8D  .  893E           MOV DWORD PTR DS:[ESI],EDI
0051AD8F  .  56             PUSH ESI
0051AD90  .  FF15 D4C05200  CALL DWORD PTR DS:[52C0D4]
0051AD96  .  8B4E 10        MOV ECX,DWORD PTR DS:[ESI+10]
0051AD99  .  890D F4027E00  MOV DWORD PTR DS:[7E02F4],ECX
0051AD9F  .  8B46 04        MOV EAX,DWORD PTR DS:[ESI+4]
0051ADA2  .  A3 00037E00    MOV DWORD PTR DS:[7E0300],EAX
```

How is the complete purpose of this article, we temporarily boot thui. After this step, you have a lot to do with as Safedisc Restore IAT, Emulated Code fix, fix Wrong CALL IAT, fix LONG JUMP .... And especially khiếp Nanomite fix.

See you in the following items.

Big thanks to:

All REA's members: Computer_Angel, Moonbaby, Zombie, hacnho, benina, kienmanowar, rongchaua, Deux, Merc, hoadongnoi, the_lighthouse, TQN, light.phoenix, hytkl, tlandn, hurt_heart, dzungltvn, Zoi, littleboy84, haule_nth, takada, Why not bar, iamidiot, Akira, dump, thienthandien, [kid], ...

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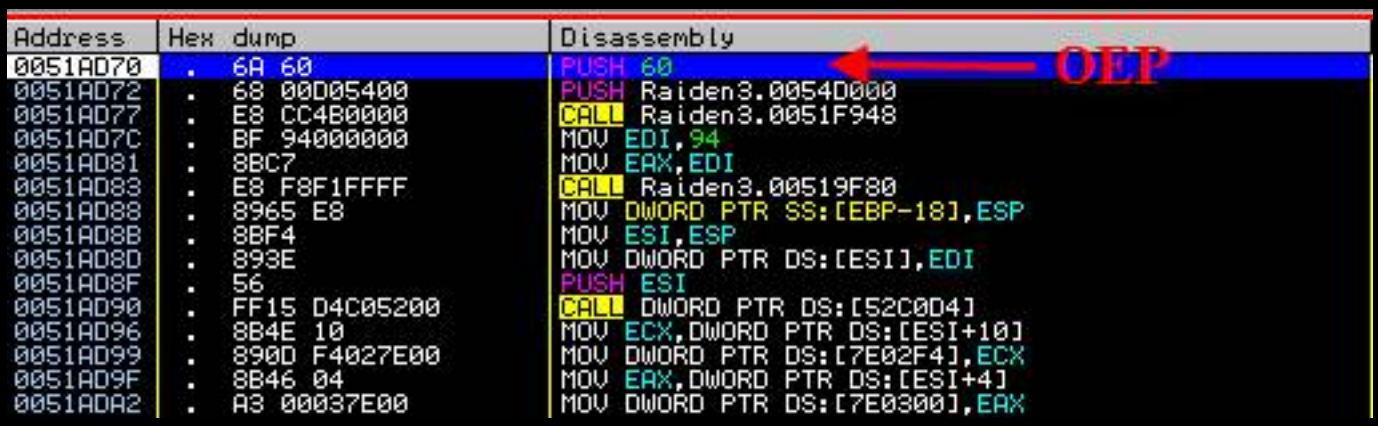
Trick Xi News - 2oo7

SafeDisc - Easy or Hard

Vol 2 - Restore Full IAT

I-Analyze:

Welcome brother, we met again. Ki before, we stop at OEP:



Even as we see now 1 IAT CALL: **CALL [52C0D4]. Follow dump in t h a t** it does **Memory Address:**

Rui drag on the top of the table, dom are more import was "playing" oi:

Find References we value first

New Origin, always go into this with CALL F7, we decode to the IAT:

PUSH, POP chả mean anything, call the other is the content, go to:

```
Address   Hex dump          Disassembly
667C43BA  .  55             PUSH EBP
667C43BB  .  8BEC           MOV EBP,ESP
667C43BD  .  83EC 34        SUB ESP,34
667C43C0  .  53             PUSH EBX
667C43C1  .  56             PUSH ESI
667C43C2  .  57             PUSH EDI
667C43C3  .  F0:FF05 DC007F66  LOCK INC DWORD PTR DS:[667F00DC]
667C43CA  .v 74 0E          JE SHORT ~df394b.667C43DA
667C43CC  .  6A FF          PUSH -1
667C43CE  .  FF35 E04B8466  PUSH DWORD PTR DS:[66844BE0]
667C43D4  .  FF15 90B07C66  CALL DWORD PTR DS:[<&KERNEL32.WaitForSingleObject>]
667C43DA  >v EB 0A          JMP SHORT ~df394b.667C43E6
667C43DC     EB             DB EB
667C43DD  >  50             PUSH EAX
667C43DE  .  8BC5           MOV EAX,EBP
```

F8 collude to here:

```
Address   Hex dump          Disassembly
667C44F1  .v 74 39          JE SHORT ~df394b.667C452C
667C44F3  .  8B45 0C        MOV EAX,DWORD PTR SS:[EBP+C]
667C44F6  .  83C0 24        ADD EAX,24
667C44F9  .  8945 D0        MOV DWORD PTR SS:[EBP-30],EAX
667C44FC  .  8B45 D0        MOV EAX,DWORD PTR SS:[EBP-30]
667C44FF  .  8B4D F4        MOV ECX,DWORD PTR SS:[EBP-C]
667C4502  .  8908           MOV DWORD PTR DS:[EAX],ECX
667C4504  .  8B45 D0        MOV EAX,DWORD PTR SS:[EBP-30]
667C4507  .  83C0 04        ADD EAX,4
667C450A  .  50             PUSH EAX
667C450B  .  E8 CDB3FAFF    CALL ~df394b.6676F8DD
667C4510  .  59             POP ECX
667C4511  .  F0:FF0D DC007F66  LOCK DEC DWORD PTR DS:[667F00DC]
667C4518  .v 78 0C          JS SHORT ~df394b.667C4526
667C451A  .  FF35 E04B8466  PUSH DWORD PTR DS:[66844BE0]
667C4520  .  FF15 64B07C66  CALL DWORD PTR DS:[<&KERNEL32.SetEvent>]
667C4526  >  8B65 0C        MOV ESP,DWORD PTR SS:[EBP+C]
667C4529  .  61             POPAD
667C452A  .  9D             POPFD
667C452B  .  C3             RETN
667C452C  >  8B45 EC        MOV EAX,DWORD PTR SS:[EBP-14]
667C452F  .  8945 E0        MOV DWORD PTR SS:[EBP-20],EAX
667C4532  .  8D45 D8        LEA EAX,DWORD PTR SS:[EBP-28]
```

English to children that it is about to jump that small. Also remember always code just below it, we jumped for it and trace back to here:

```
667C4689  .  8B45 CC        MOV EAX,DWORD PTR SS:[EBP-34]
667C468C  .  83C0 04        ADD EAX,4
667C468F  .  50             PUSH EAX
667C4690  .  E8 48B2FAFF    CALL ~df394b.6676F8DD
667C4695  .  59             POP ECX
667C4696  .  F0:FF0D DC007F66  LOCK DEC DWORD PTR DS:[667F00DC]
667C469D  .v 78 0C          JS SHORT ~df394b.667C46AB
667C469F  .  FF35 E04B8466  PUSH DWORD PTR DS:[66844BE0]
667C46A5  .  FF15 64B07C66  CALL DWORD PTR DS:[<&KERNEL32.SetEvent>]
667C46AB  >  8B65 0C        MOV ESP,DWORD PTR SS:[EBP+C]
667C46AE  .  61             POPAD
667C46AF  .  9D             POPFD
667C46B0  .  C3             RETN
```

Look wen wen with khúc not, na Ná same code that. When **RETN** stop now, what do we see?

Real value of import was located in the stack, you should return it to the equivalent command CALL 1 IAT me. From then also see the opening import sometimes greasy nhỉ serial? other other. Talking is always more in command Jump that when we stop now, it can not jump, going to return below it, but the value of its return to do the right value of real import. So only 2 code (the jump occurred at the) return of new value precisely. (if you do go back many times as a new draw this)

The value is also decode the same paragraph 1 above. So to restore the import table, I think will be 1 billion immediately.

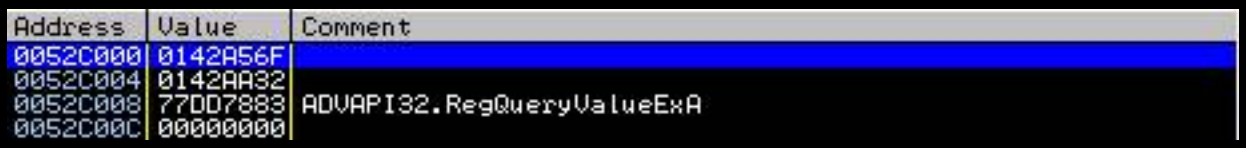
II-Coding:

To start code, the core is the following:

+ In the trace decode until **RETN,** the value of EAX, EBX and ECX not change (3 can get this to work)

+ Central region decode **1420000** to **1450000**

+ Start = IAT **52C000**



IAT + End = **52C238**

+ Where is the original value of **RETN:** (remember the code occurs when small jump)

Okie, we have the following code to restore IAT (with the file. Asm in available).
+ Compile this code, then load the file has to compile Olly
+ Copy Binary Code
+ Search for (creating) a blank area in mind the target safedisc
+ Paste Binary Code through.
*(code borrowed from 1 part **anonymous,** have to edit the match in progress)*

Title imports

```
.386
. model small, stdcall
Option casemap: none
. code

_IB Equ 00400000h; ImageBase
_IATStart Equ 0012C000h; Start Offset of IAT
_IATSize Equ 00000238h; Size of IAT

_lowerrange equ 01420000h; Start Offset `-vis the decode
_higherrange equ 01450000h; End Offset `-vis the decode

start:
pushad
pushfd
mov eax, (_IB + _IATStart); IAT Start the EAX

_iloop:
mov ecx, dword ptr [eax]; chuyen value / (encode value) on ECX
Cmp ecx, _lowerrange; than offset sa'nh vo'i start `-vis the decode
jl _next; ne'u be 'it `jump _next (i ca n` decode)
Cmp ecx, _higherrange; than offset sa'nh vo'i end of `vu decode
ja _next; ne'u lo'n it `jump _next (i ca n` decode)

_iresolve:
call ecx; Call decode at the value hie.n ta.i
; Go'c value is stored in EDX (POP EDX)
mov dword ptr [eax], edx; chuyen value go'c and `o in state import

_next:
add eax, 4; to import Ke 'tie'p
Cmp eax, (_IB + + _IATStart _IATSize); compared sa'nh elephant IAT End
je _iend, `If you test the` STOP restore IAT
jmp _iloop; do not contest the three `continue` restore IAT

_iend:
popfd
popad
nop; BP set here to Break
nop
```

end start

After Paste wa area empty, we do drill with the above. Back to this position:

```
667C469F   FF35 E04B8466   PUSH DWORD PTR DS:[66844BE0]
667C46A5   FF15 64B07C66   CALL DWORD PTR DS:[<&KERNEL32.SetEvent>]
667C46AB   8B65 0C         MOV ESP,DWORD PTR SS:[EBP+C]
667C46AE   61              POPAD
667C46AF   9D              POPFD
667C46B0   C3              RETN
667C46B1   F0:FF0D DC007F66 LOCK DEC DWORD PTR DS:[667F00DC]
```

Edit to:

```
667C46AB   8B65 0C         MOV ESP,DWORD PTR SS:[EBP+C]
667C46AE   61              POPAD
667C46AF   9D              POPFD
667C46B0   5A              POP EDX
667C46B1   C3              RETN
667C46B2   FF0D DC007F66   DEC DWORD PTR DS:[667F00DC]
```

Set the Write (or Full Access) for the section. Rdata (restore the IAT), the code enforcement is often the write memory in the other.

Set the BP location in the Source.

```
Address    Hex dump      Disassembly
00F70000   60            PUSHAD
00F70001   9C            PUSHFD
00F70002   B8 00C05200   MOV EAX,52C000
00F70007   8B08          MOV ECX,DWORD PTR DS:[EAX]
00F70009   81F9 00004201 CMP ECX,1420000
00F7000F   7C 0C         JL SHORT 00F7001D
00F70011   81F9 00004501 CMP ECX,1450000
00F70017   77 04         JA SHORT 00F7001D
00F70019   FFD1          CALL ECX
00F7001B   8910          MOV DWORD PTR DS:[EAX],EDX
00F7001D   83C0 04       ADD EAX,4
00F70020   3D 38C25200   CMP EAX,52C238
00F70025   74 02         JE SHORT 00F70029
00F70027   EB DE         JMP SHORT 00F70007
00F70029   9D            POPFD
00F7002A   61            POPAD
00F7002B   90            NOP
00F7002C   90            NOP
```

New Set Origin, F9 break and run, complete, IAT was full:

Address	Value	Comment
0052C000	77DFC41B	ADVAPI32.RegOpenKeyA
0052C004	77DD6BF0	ADVAPI32.RegCloseKey
0052C008	77DD7883	ADVAPI32.RegQueryValueExA
0052C00C	00000000	
0052C010	7228B126	DINPUT.DirectInputCreateA
0052C014	00000000	
0052C018	73F14C43	DSOUND.DirectSoundCreate
0052C01C	00000000	
0052C020	77F16E6F	GDI32.DeleteDC
0052C024	77F16C0A	GDI32.DeleteObject
0052C028	77F1E2E3	GDI32.CreateFontIndirectA
0052C02C	77F15EEB	GDI32.SetBkMode
0052C030	77F15B80	GDI32.SelectObject
0052C034	77F15D87	GDI32.SetTextColor
0052C038	77F15E39	GDI32.SetBkColor
0052C03C	77F19219	GDI32.CreateDIBSection
0052C040	77F15FF0	GDI32.CreateCompatibleDC
0052C044	00000000	
0052C048	7C801A24	kernel32.CreateFileA
0052C04C	7C80180E	kernel32.ReadFile
0052C050	7C810DA7	kernel32.WriteFile
0052C054	7C859F78	kernel32.OutputDebugStringA
0052C058	7C810BAE	kernel32.SetFilePointer
0052C05C	7C831E35	kernel32.DeleteFileA
0052C060	7C80FEA2	kernel32.GlobalUnlock
0052C064	7C80FC4F	kernel32.GlobalFree
0052C068	7C80FD4D	kernel32.GlobalAlloc
0052C06C	7C80FF39	kernel32.GlobalLock
0052C070	7C80E95F	kernel32.CreateMutexA
0052C074	7C910331	ntdll.RtlGetLastWin32Error
0052C078	7C833400	kernel32.SetEnvironmentVariableA

Later want to use the code for another target, we simply find the number needed to change the source is now expendable.

However Import full board is still on .... scoundrelly. The reason? See the following items.

Big thanks to:

All REA's members: Computer_Angel, Moonbaby, Zombie, hacnho, benina, kienmanowar, rongchaua, Deux, Merc, hoadongnoi, the_lighthouse, TQN, light.phoenix, hytkl, tlandn, hurt_heart, dzungltvn, Zoi, littleboy84, haule_nth, takada, Why not bar, iamidiot, Akira, dump, thienthandien, [kid], ...

Special thanks to:

fly, stephenteh, Gabri3l, MaDMAn_H3rCuL3s, CondZero, Ricardo Narvaja + NCR, lena151, haggar, ARTeam, snd, RES, CrackLatinos, all unpack.cn ... Authors who created tools and you.

Trick Xi News - 2oo7

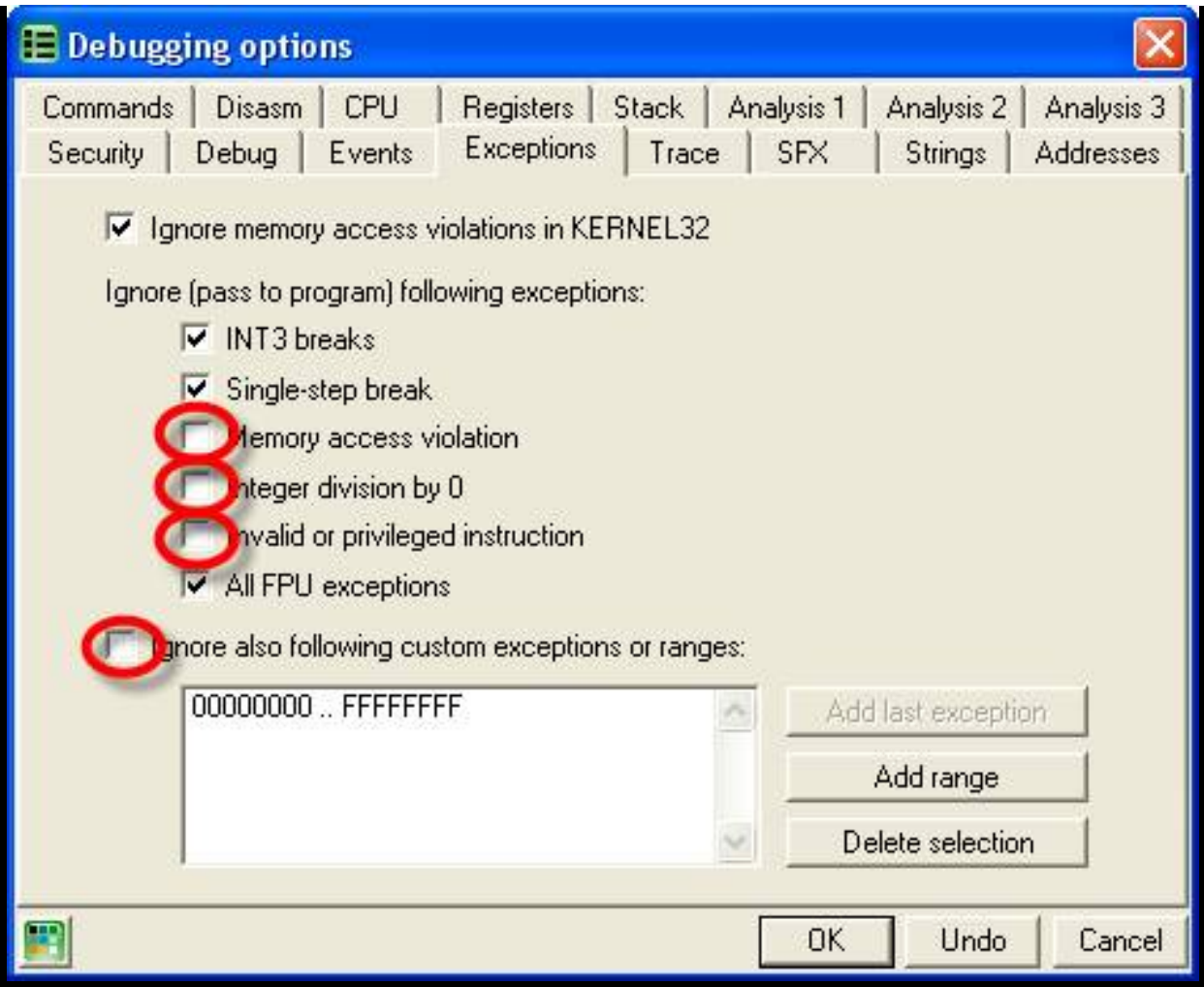
SafeDisc - Easy or Hard

Vol 3 - Fix commands Stolen

I-Analyze:

Phu, now have quite the mood to write more items on SafeDisc J . 2 In the first mentioned to Bypass Anti Debug, find and fix IAT OEP. File fix after the crash.

Now load file dump Olly to find out the cause. 1 way to find errors very quickly is to utilize Option Exception by Olly this many brothers on "professional" reverse crack to do that. Now we uncheck several categories:



Often the bug occurred after the dump file is the program to access a memory region 1 ko valid (indoctrination access memory) in the case of 1 part of the code packer rớt have been falling again, or is divided error 0 (integer division by 0) or by the enforcement order ko valid (or invalid privileged instruction) in the code was stolen, not decrypt ...

But why uncheck custom Exception? As the favorite trick is that since **00000000 FFFFFFFF** so t h a t it covers the bypass is the exception, to have to uncheck the box to the exception of the other means. When we touched ncheck, if 1 in this exception, Olly will break back immediately, stop in the position near the error occurred ko NAG error of the windows.

Hour 1 and F9, windows command line thui black, now find errors: (dom status bar down by Olly)

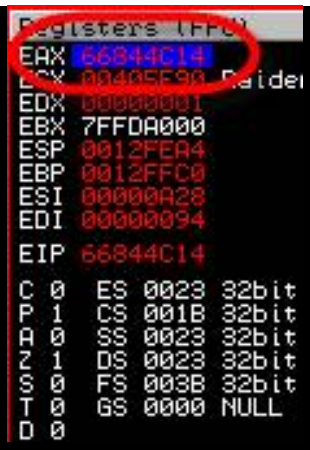
So is the program is access to the region in mind ko valid [66844C14], we immediately follow stack to return to the most recent returns:

Here:

Therefore CALL above the call to the arising problems. With restart, enter into this CALL:

According to the week itself, we again enter into CALL almost immediately below first function best:

Look command **JMP EAX** 1. Q suspect, dom through the register at the time of birth defects:



Morning as the date coincides with the value EAX region memory access ko valid. So we have been surviving this memory area file the pack.

Load the file pack, anti bypass, find OEP, i need to fix Full IAT, is now under OEP dom, CALL see that we follow back from the stack at this time:

Now from OEP, we trace every CALL to this, remember to get the address is **51ADB3,** then go to trace:

Continue to trace CALL go right now as under:

```
Address   Hex dump          Disassembly
004050F3    B8 AB200000     MOV EAX,20AB
004050F8    59              POP ECX
004050F9    8D0408          LEA EAX,DWORD PTR DS:[EAX+ECX]
004050FC    8B00            MOV EAX,DWORD PTR DS:[EAX]
004050FE  - FFE0            JMP EAX
00405100    55              PUSH EBP
00405101    8BEC            MOV EBP,ESP
```

JMP EAX to trace where the dump file fails, then the F7:

```
Address   Hex dump          Disassembly
66844C14    58              POP EAX
66844C15    59              POP ECX
66844C16    68 00004000     PUSH 400000
66844C1B    54              PUSH ESP
66844C1C    9C              PUSHFD
66844C1D    60              PUSHAD
66844C1E    54              PUSH ESP
66844C1F    68 044C8466     PUSH ~df394b.66844C04
66844C24    E8 77BEF2FF     CALL ~df394b.66770AA0
66844C29    58              POP EAX
66844C2A    58              POP EAX
66844C2B    61              POPAD
66844C2C    9D              POPFD
66844C2D    5C              POP ESP
66844C2E    C3              RETN
66844C2F    0000            ADD BYTE PTR DS:[EAX],AL
```

Is the correct file to pack the area with this memory. It na Ná decrypt the IAT was presented in Vol 2. I CALL trace to the next day:

```
Address   Hex dump          Disassembly
66770AA0    55              PUSH EBP
66770AA1    8BEC            MOV EBP,ESP
66770AA3    8B45 0C         MOV EAX,DWORD PTR SS:[EBP+C]
66770AA6    50              PUSH EAX
66770AA7    8B4D 08         MOV ECX,DWORD PTR SS:[EBP+8]
66770AAA    E8 51FFFFFF     CALL ~df394b.66770A00
66770AAF    5D              POP EBP
66770AB0    C3              RETN
66770AB1    CC              INT3
```

CALL is also the trace:

```
Address   Hex dump          Disassembly
66770A00    83EC 30         SUB ESP,30
66770A03    56              PUSH ESI
66770A04    8BF1            MOV ESI,ECX
66770A06    66:837E 7C 00   CMP WORD PTR DS:[ESI+7C],0
66770A0B  v 74 0A           JE SHORT ~df394b.66770A17
66770A0D    8D46 60         LEA EAX,DWORD PTR DS:[ESI+60]
66770A10    50              PUSH EAX
66770A11    FF15 7CB07C66   CALL DWORD PTR DS:[<&KERNEL32.EnterCritical
66770A17    8D4C24 04       LEA ECX,DWORD PTR SS:[ESP+4]
66770A1B    E8 00FDFFFF     CALL ~df394b.66770720
66770A20    8B4C24 38       MOV ECX,DWORD PTR SS:[ESP+38]
66770A24    51              PUSH ECX
66770A25    8D4C24 08       LEA ECX,DWORD PTR SS:[ESP+8]
66770A29    E8 82FEFFFF     CALL ~df394b.667708B0
66770A2E    66:8B16         MOV DX,WORD PTR DS:[ESI]
66770A31    8D4C24 04       LEA ECX,DWORD PTR SS:[ESP+4]
66770A35    52              PUSH EDX
```

Now the comfort F8 quite a long, F7 need to do some other things more CALL, CALL to this:

```
Address   Hex dump          Disassembly
66770A4C    8D4C24 04       LEA ECX,DWORD PTR SS:[ESP+4]
66770A50    E8 2BFDFFFF     CALL ~df394b.66770780
66770A55    66:837E 7C 00   CMP WORD PTR DS:[ESI+7C],0
66770A5A  v 74 0A           JE SHORT ~df394b.66770A66
66770A5C    83C6 60         ADD ESI,60
66770A5F    56              PUSH ESI
66770A60    FF15 78B07C66   CALL DWORD PTR DS:[<&KERNEL32.LeaveCritical
66770A66    8D4C24 04       LEA ECX,DWORD PTR SS:[ESP+4]
66770A6A    E8 11000000     CALL ~df394b.66770A80
66770A6F    66:B8 0100      MOV AX,1
66770A73    5E              POP ESI
66770A74    83C4 30         ADD ESP,30
66770A77    C2 0400         RETN 4
66770A7A    90              NOP
```

F7, to see it go right near the code:

```
66770A66    8D4C24 04       LEA ECX,DWORD PTR SS:[ESP+4]
66770A6A    E8 11000000     CALL ~df394b.66770A80
66770A6F    66:B8 0100      MOV AX,1
66770A73    5E              POP ESI
66770A74    83C4 30         ADD ESP,30
66770A77    C2 0400         RETN 4
66770A7A    90              NOP
66770A7B    90              NOP
66770A7C    90              NOP
66770A7D    90              NOP
66770A7E    90              NOP
66770A7F    90              NOP
66770A80    55              PUSH EBP
66770A81    8BEC            MOV EBP,ESP
66770A83    83EC 08         SUB ESP,8
66770A86    53              PUSH EBX
66770A87    56              PUSH ESI
66770A88    57              PUSH EDI
66770A89    894D F8         MOV DWORD PTR SS:[EBP-8],ECX
66770A8C    8B45 F8         MOV EAX,DWORD PTR SS:[EBP-8]
66770A8F    83C0 20         ADD EAX,20
66770A92    8945 FC         MOV DWORD PTR SS:[EBP-4],EAX
66770A95  - FF65 FC         JMP DWORD PTR SS:[EBP-4]
66770A98    5F              POP EDI
66770A99    5E              POP ESI
66770A9A    5B              POP EBX
66770A9B    8BE5            MOV ESP,EBP
66770A9D    5D              POP EBP
66770A9E    C3              RETN
```

Trace to JMP below, and F7 it fly:

```
Address   Hex dump          Disassembly
0012FE58    BC 80FE1200     MOV ESP,12FE80
0012FE5D    61              POPAD
0012FE5E    9D              POPFD
0012FE5F    5C              POP ESP
0012FE60    C3              RETN
0012FE61    9C              PUSHFD
```

Why it's the same flight on the stack;)). Replace the shelves, there is **RETN** mừng then, any return to:

```
0051ADA7   8B56 08          MOV EDX,DWORD PTR DS:[ESI+8]
0051ADAA   8915 04037E00    MOV DWORD PTR DS:[7E0304],EDX
0051ADB0   8B76 0C          MOV ESI,DWORD PTR DS:[ESI+C]
0051ADB3   81E6 FF7F0000    AND ESI,7FFF
0051ADB9   8935 F8027E00    MOV DWORD PTR DS:[7E02F8],ESI
0051ADBF   83F9 02          CMP ECX,2
0051ADC2   74 0C            JE SHORT Raiden3.0051ADD0
0051ADC4   81CE 00800000    OR ESI,8000
0051ADCA   8935 F8027E00    MOV DWORD PTR DS:[7E02F8],ESI
0051ADD0   C1E0 08          SHL EAX,8
0051ADD3   03C2             ADD EAX,EDX
0051ADD5   A3 FC027E00      MOV DWORD PTR DS:[7E02FC],EAX
0051ADDA   33F6             XOR ESI,ESI
```

You see it return to where do: **51ADB9?** Initially it to CALL in **51ADB3** position, but now questions CALL command was replaced by 1 several other commands. That is already the decrypt the original code to replace the stolen commands.

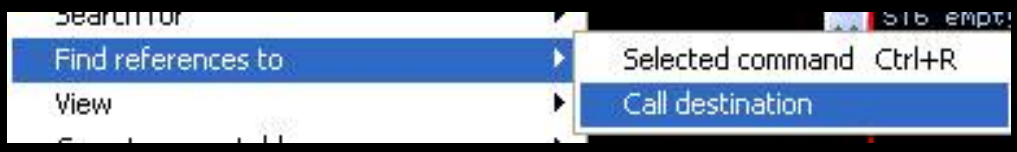
What more nhỉ? According to the logic of any copy paste the code to decrypt the files through the dump is ok. But have never stolen only 1 packer 1 position or do? If that is the OEP can, but only 1 code normally. So there are 2 deducing the following:

1. packer stolen many of the program, but can decrypt the code to implement in the original time of 1 day and then encrypt again (eg molebox, pespin, obsidium ß trick in mind if i do:-P). In case this often CALL decrypt the call to the code have offset each other. (molebox is the individual fixed)
2. packer stolen many of the program but after i decrypt code will encrypt back. In case this is often the decrypt fixed at 1.

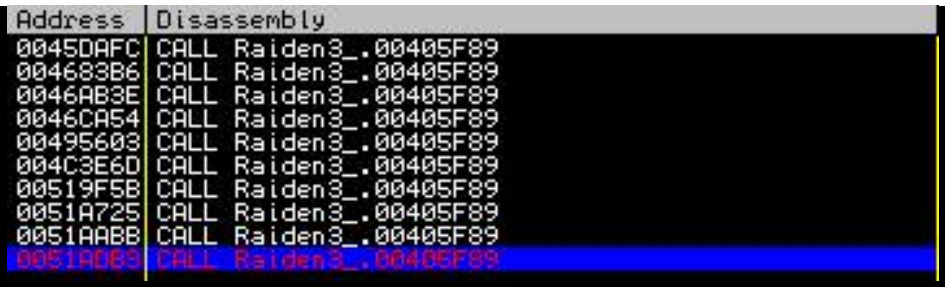
In Vol 2, we see the IAT's SafeDisc decrypt implemented in the same paragraph 1 should also conjecture that the stolen above will have 1 to the call CALL 1 position decrypt code.

But do remember CALL ko? **CALL 405F89**

We should analyze Ctrl-A to the dump file for the search command. Then search all questions on the command CALL:



The tolerable:



Address	Disassembly
0045DAFC	CALL Raiden3_.00405F89
004683B6	CALL Raiden3_.00405F89
0046AB3E	CALL Raiden3_.00405F89
0046CA54	CALL Raiden3_.00405F89
00495603	CALL Raiden3_.00405F89
004C3E6D	CALL Raiden3_.00405F89
00519F5B	CALL Raiden3_.00405F89
0051A725	CALL Raiden3_.00405F89
0051AABB	CALL Raiden3_.00405F89
0051ADB3	CALL Raiden3_.00405F89

So many of the stolen. Now fix how? If you understand how to fix the part IAT you will easily understand how to fix this case stolen. As the number of CALL is quite small so we can implement in each hand CALL 1 to decrypt all the above, but must also do the general, if the amount of up to 100.1000 ... is the best we must write code or scripts. Here the trick select code, we step through the next item.

II-Coding:

Here, we see if CALL is implemented on the original code will be restored. So we must search code to all the questions on the CALL command and then to turn enforcement. With the script to do this script by simulating the operation with Olly, but today we will code I can call all over CALL J , 1 zi interesting art!

First, remember that the call to CALL in 1 place, so CALL Opcode of this are the same. : **E8 D1 B1 EE FF**
2, and to that kĩ CALL Opcode of this view have been match of 1 Opcode several commands to the other or do? If the same can we call this in CALL 1 blether à arising exception.
3, E8 is the command opcode CALL, 4 bytes behind ko describes it called offset to that is the offset between the number to call and order offset by CALL (in bytes **E8).** It would be useful to know where to call (based on opcode) we may be calculated as follows:
+ Get offset by CALL: **51ADB3**
+ 4 bytes added on (the reverse, that is number 1 int offset 2): **FFEEB1D1**
Result + = **405F84**
+ Community then **5 and** the results have been (plus 5 for the length of the command CALL opcode is 5 bytes)
Result + = **405F89** (exactly what to see in Olly)

4, 1 CALL when called on, in the initial stack contains return value, but this value is wrong because the return after decrypt, the return could be offset other 1 **(51ADB8 # 51ADB9).** If the code to call a series of CALL such, we must know exactly where the pressure to return it immediately. Because each CALL return on each different place, while we want to return it to the inline code fixed by us.

Above, while the trace, we have found 1 **LONG JUMP** quite special:

LONG JUMP When to this is the original code has been completely restored and the stack contains the return was accurate (if you need the test again nhé, break here and on **51ADB3** Goto preview). Therefore we will force it to return to the inline code at this Jump.

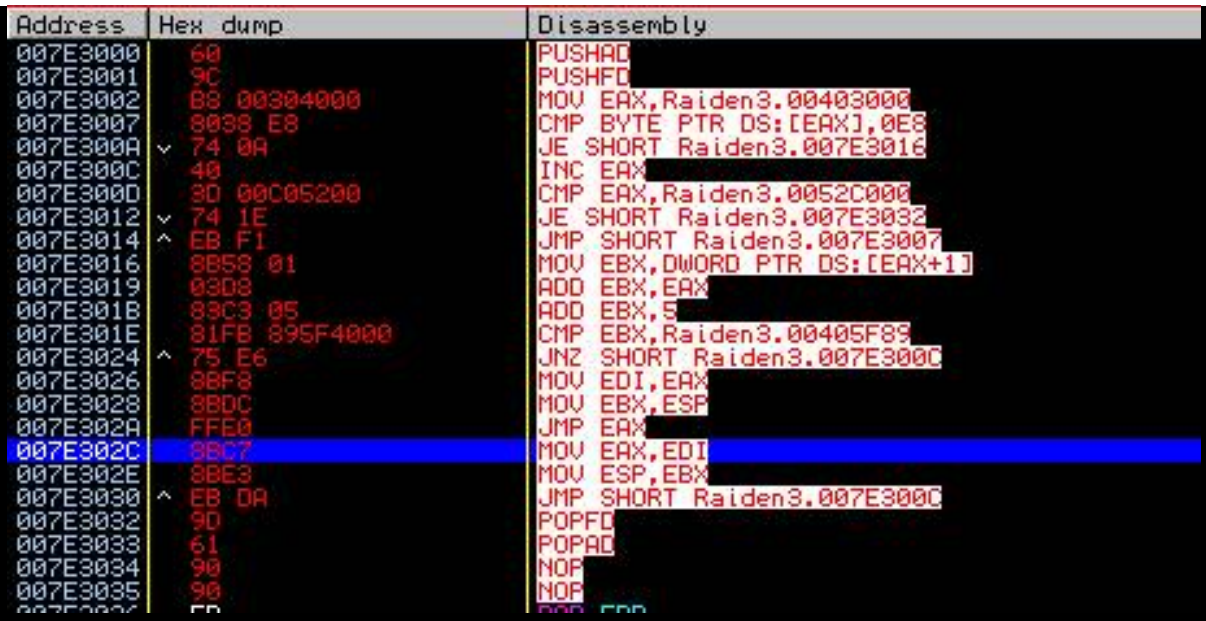
5, so the pressure is on the return of their inline code should probably be Stack overflow. To avoid this, need to save the stack pointer again. If observed kĩ during CALL to decrypt the value of EDI and **EBX** do change so we'll take it as a place to backup pointer. In case ko may also record any safety may be used to partition 1 clipboard (use the temporary memory area corresponding to each target to correct the value must be set and write access to the cove)

Finally CALL are located in this section. Text so you must scan from the beginning to the end of this section to implement all CALL can. OK, time is the Code: (code used by **anonymous,** and are optimized for editing more reasonable)

```
Title stolen_commands
.386
. model small, stdcall
Option casemap: none
. code

_IB Equ 00400000h; ImageBase
_text equ 00003000h; Section. ta.i text start 403000h
_textSize equ 00129000h; Size of section. text
_ICROffset Equ 00405F89h; offset by doan decrypt code CALL call to

start:

pushad
pushfd
_ICR:
mov eax, (+ _IB _text); Bat in a scan from a skin `section. text

_ICRLoop:
Cmp byte ptr [eax], 0E8h; check opcode of 1 lenh CALL
```

```
je _ICRCheck; if lenh 1 CALL `test jump _ICRCheck

_ICROk:
inc eax; neu ko phai opcode lenh CALL tang test eax wool 1
Cmp eax, (_IB + + _text _textSize); check have to position cuoi
; Crab section. Text or not?
je _ICREnd; if Location cuoi, jump _ICREnd
; Through the end of the `scan
jmp _ICRLoop; three `If not continue the contest is` m la.i

_ICRCheck:
mov ebx, dword ptr [eax + 01]; la'y and in 4-byte `ke 'pass opcode lenh CALL
add ebx, eax; there. he't by the ^ `n` o and EBX
add ebx, 5; EBX tang le ^ 5 bytes
; ~ Will offset the duo.c said go.i to'i
Cmp ebx, _ICROffset; Check offset stored in EBX
; `Have three of the offset doa.n or decrypt ko?
jne _ICROk; three Ne'u ko `` transfer the test? n toi 'Location next
; Three Ne'u `` the contest:
mov edi, eax; luu la.i Location in EAX and EDI `o
mov ebx, esp; luu la.i stack pointer de tra'nh stack overflow

jmp eax; home? italy toi 'offset chu'a CALL 00405F89
; De ba't skin a go.i no '

_ICRJumpHere:; Doa.n code italy na `I'll let other LONG JUMP
                                                    ; Jump `ve said na` y.
mov eax, edi; khoi phu.c la.i truo'c value of the EAX
mov esp, ebx; khoi phu.c la.i stack pointer
jmp _ICROk; return doa.n `ti` m ca'c CALL

_ICREnd:
popfd
popad
nop; dat bp ta.i here to Break!
nop

end start
```

OK, build the file with MASM. After the OEP, fix IAT ... just load the file code build complete, copy and paste code to 1 region in the file pack:



Address	Hex dump	Disassembly
007E3000	60	PUSHAD
007E3001	9C	PUSHFD
007E3002	B8 00304000	MOV EAX,Raiden3.00403000
007E3007	8038 E8	CMP BYTE PTR DS:[EAX],0E8
007E300A	v 74 0A	JE SHORT Raiden3.007E3016
007E300C	40	INC EAX
007E300D	3D 00C05200	CMP EAX,Raiden3.0052C000
007E3012	v 74 1E	JE SHORT Raiden3.007E3032
007E3014	^ EB F1	JMP SHORT Raiden3.007E3007
007E3016	8B58 01	MOV EBX,DWORD PTR DS:[EAX+1]
007E3019	03D8	ADD EBX,EAX
007E301B	83C3 05	ADD EBX,5
007E301E	81FB 895F4000	CMP EBX,Raiden3.00405F89
007E3024	^ 75 E6	JNZ SHORT Raiden3.007E300C
007E3026	8BF8	MOV EDI,EAX
007E3028	8BDC	MOV EBX,ESP
007E302A	FFE0	JMP EAX
007E302C	8BC7	MOV EAX,EDI
007E302E	8BE3	MOV ESP,EBX
007E3030	^ EB DA	JMP SHORT Raiden3.007E300C
007E3032	9D	POPFD
007E3033	61	POPAD
007E3034	90	NOP
007E3035	90	NOP

The _ICRJumpHere above will offset 7E302C match. So we go back seats LONG JUMP:

66770A8F	83C0 20	ADD EAX,20
66770A92	8945 FC	MOV DWORD PTR SS:[EBP-4],EAX
66770A95	FF65 FC	JMP DWORD PTR SS:[EBP-4]
66770A98	5F	POP EDI
66770A99	5E	POP ESI
66770A9A	5B	POP EBX

Edit to:

66770A8F	83C0 20	ADD EAX,20
66770A92	8945 FC	MOV DWORD PTR SS:[EBP-4],EAX
66770A95	- E9 9225079A	JMP Raiden3.007E302C
66770A9A	5B	POP EBX
66770A9B	8BE5	MOV ESP,EBP

Now New Origin Code at the top of the area just over the paste. BP set me in order to break the NOP.

Address	Hex dump	Disassembly
007E3000	60	PUSHAD
007E3001	9C	PUSHFD
007E3002	B8 00304000	MOV EAX,Raiden3.00403000
007E3007	8038 E8	CMP BYTE PTR DS:[EAX],0E8
007E300A	v 74 0A	JE SHORT Raiden3.007E3016
007E300C	40	INC EAX
007E300D	3D 00C05200	CMP EAX,Raiden3.0052C000
007E3012	v 74 1E	JE SHORT Raiden3.007E3032
007E3014	^ EB F1	JMP SHORT Raiden3.007E3007
007E3016	8B58 01	MOV EBX,DWORD PTR DS:[EAX+1]
007E3019	03D8	ADD EBX,EAX
007E301B	83C3 05	ADD EBX,5
007E301E	81FB 895F4000	CMP EBX,Raiden3.00405F89
007E3024	^ 75 E6	JNZ SHORT Raiden3.007E300C
007E3026	8BF8	MOV EDI,EAX
007E3028	8BDC	MOV EBX,ESP
007E302A	FFE0	JMP EAX
007E302C	8BC7	MOV EAX,EDI
007E302E	8BE3	MOV ESP,EBX
007E3030	^ EB DA	JMP SHORT Raiden3.007E300C
007E3032	9D	POPFD
007E3033	61	POPAD
007E3034	90	NOP
007E3035	90	NOP

F9 to run ... and bup, break. Done! To properly test the entire CALL 405F89 decrypt the code, we Goto to 403,000 - the start of the section. Text. Then find all the commands 405F89 CALL:

All have been decrypt:

Necessary than before decrypt the code, can save some of offset CALL this. After decrypt, back to check the code has been restored or not.
So is the complete fix the stolen command. Code by **anonymous** 1 fact quite the banana trick but was optimal, the aged in our firm to do that kĩ;)). Finish this section, we have prepared are 1 step before going to fix the IAT CALL, to Full IAT in Vol 2 ko meaningless;). I look back at the following:-P

Big thanks to:

All REA's members: Computer_Angel, Moonbaby, Zombie, hacnho, benina, kienmanowar, rongchaua, Deux, Merc, hoadongnoi, the_lighthouse, TQN, light.phoenix, hytkl, tlandn, hurt_heart, dzungltvn, Zoi, littleboy84, haule_nth, takada, Why not bar, iamidiot, Akira, dump, thienthandien, [kid], ...

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fly, stephenteh, Gabri3l, MaDMAn_H3rCuL3s, CondZero, Ricardo Narvaja + NCR, lena151, haggar, ARTeam, snd, RES, CrackLatinos, all unpack.cn ... Authors who created tools and you.

Trick Xi News - 2oo7

SoftWrap Loader 6.1.1

Written by: Gabri3l / ARTeam
http://cracking.accessroot.com

Loader to create a patch dll Softwrap

Target need to bup:
Professor Franklins' Instant Photo Effects 2 *(looks like version has not changed)*
http://www.swsoftware.com/photo_software_effects.aspx

The Tool to use:
PEID, Ollydbg 1:10, 1:14 dUP

Protection type:
Softwrap 6.1.1

Some other information:
The weighing more than 80 MB so I think some of you may not be it down ..
If you still want to follow, you should download XPSmoker 4.4: http://www.xp-smoker.com/xpsmoker.html *(the version on the homepage XPSmoker changed, the need to wait for a tricky up 4.5 up)*
It also used the version Softwrap to pack again. Dll is only to offset the load but the code is like italy chang.
I was trying to write this tut very easy to understand for those who do not download the target. Kì this lesson is to overcome the legal protection as well as how a Loader that may apply to other programs by the pack Softwrap this version.

Best view with Firefox at 1280x1024 resolution

Intro:

All tool to use can be found at: *(or some other place:)))*
http://navig8.to/diablo2oo2
http://home.t-online.de/home/Ollydbg/
http://Peid.has.it

First, we need to run a target

time. There are a BOX Softwrap notice is to be started before it can run programs. Click Next. When soft run completely close it again. Now the Softwrap was booted and we conducted "bup" it. Open target in PEiD, you pack it with Softwrap. Version not show clearly, but please click BUY in the NAG, we will see it is version 6.1.1.

Body:

How "bup" Softwrap:

1. Ok, Photon.exe to load Ollydbg *(Remember the first run was a time to boot the nag)*

2. There are the exception that this protection used to detect the debugger. So please check the following:

Ignore Memory Access Violations in Kernel32
INT 3
Single Step Breaks

Divison integer by Zero
And in addition to **custom exceptions:**
C000001D (ILLEGAL instruction)
3. Remember to check small exception? Click RUN go. Wait a bit, you see the NAG Softwrap. *(If time is a first run, a nag boot, I do not say things to nag them here.)*
4. Ok, back Olly and press Pause. Select View-> Call Stack. You will see:

Call stack of main thread
Address Stack Procedure / arguments Called from Frame
0012F3F0 77D493F5 Includes ntdll.KiFastSystemCallRet
USER32.77D493F3 0012F424
0012F3F4 77D6EA24 USER32.WaitMessage
USER32.77D6EA1F
0012F424
0012F428 77D5688A USER32.77D6E895
USER32.77D56885 0012F424
0012F450 77D568CC USER32.77D567D4
USER32.77D568C7
0012F44C
0012F470 77D5892D USER32.DialogBoxIndirectParamAorW
USER32.77D58928 0012F46C
0012F49C 00EA355F softwrap.00F35899
softwrap.00EA3559 0012F498
0012F4B4 00EA3876 softwrap.00EA353A

softwrap.00EA3871 * where *
BUNG NAG
0012F4D4
0012F4D8 00EA40C9
softwrap.00EA37EC
softwrap.00EA40C4
0012F4D4
0012FE24 00E919B8
softwrap.00EA3A69
softwrap.00E919B3 0012FE20
0012FE58 00508B3B Includes
softwrap.00E919B8
Photon.00508B39 0012FE54
0012FF9C 00506F25?
Photon.00508A87
Photon.00506F20

5. Remember that this is what should Stack on TOP will be called out first. Now we find any place called this nag.

6. You can Double-Click for each line. But I always do and then help you.
0012F4B4 00EA3876
softwrap.00EA353A <- This place is called a nag. Dom right through, we feel it is called 000EA3871 address.

7. Clich mouse to select the Go-To-> Expression and enter the 000EA3871. Click OK

8. You come:

00EA3871 E8 C4FCFFFF
CALL softwrap.00EA353A

9. Right-click and select Analyze code. Pull up a bit and you'll see that a call is selected from a Select Case. I have more comments to better

understand the task Case. Ah, how I know that it tui nhỉ do? I used a bit of old but always exactly is allowed to try and false. I have tried each a month. Then restart and try the next case. You can also do so if you like. I just thought I should do is help you quickly.

00EA3843 48 DEC EAX; The start switch (cases 1 .. 4)
00EA3844 74 35 JE SHORT softwrap.00EA387B; Jump to nag boot 00EA3846 48 DEC EAX
00EA3847 74 28 JE SHORT softwrap.00EA3871; Jump to Nag Softwrap
00EA3849 48 DEC EAX
00EA384A 74 1B JE SHORT softwrap.00EA3867; Jump to box in the server error Softwrap
00EA384C 48 DEC EAX
00EA384D 0F85 A4010000 JNZ softwrap.00EA39F7; Terminate program.
00EA3853 C705 48A6ED00 01> MOV DWORD PTR DS: [EDA648], 1; Case 4's switch
00EA3843 * This is where we need TO PROGRAM FOR THAT will run no longer NAG Trial *
00EA385D E8 35A1FFFF CALL softwrap.00E9D997
00EA3862 E9 90010000 JMP softwrap.00EA39F7
00EA3867 E8 46FFFFFF

CALL softwrap.00EA37B2;
Case 3 of switch
00EA386C E9 86010000 JMP
softwrap.00EA39F7
00EA3871 E8 C4FCFFFF
CALL softwrap.00EA353A;
Case 2 of switch
00EA3876 E9 7C010000 JMP
softwrap.00EA39F7
00EA387B 56 PUSH ESI;
Case's first switch 00EA3843
00EA387C 6A 08 PUSH 8

10. You always want to call the case 4. Code at this time can not be modified because it was running when unpack. So, let us restart the program and set a breakpoint immediately start the Switch.

11. A small trouble is we can not set a breakpoint normal. The reason: with integrity checks *(called a temporary check sovereignty).* When you set a debugger breakpoint the fact it was written prior to the directives that INT3 opcode *(see Help in Olly).* You should know that can stop the implementation of the command with a break INT3. But the override on any part of the code will cause the program to detect a debugger. So we will use memory breakpoint. However, as it implemented the program for longer but will not override the code section any time.

12. Ok, restart Photon.exe in

Olly. Now we want to set a breakpoint in 00EA3843 memory. Right-click, choose Go-To-> Expression and type 00EA3843. Humm, an error message because you do not find the address. Cause of Softwrap dll is not to load.
13. Open debugging and select Options tab (the tab) events. Check **On** to **Break New Module.**
14. Click the Run window, and the module is implemented will unwind. You can find the dll Softwrap are highlighted in red. Double Click it. You will go into this dll.
15. Right-click to select Go-To-> Expression and type 00EA3843. Click OK, you will come:

00EA3843 11DB ADC EBX, EBX

16. However dll is not unpack. We are still here want to Break. Right-click and select Breakpoint-> Memory, On Access. This option will help Olly break all the time at which the access to memory areas set breakpoint.
17. Now and then run it. But back to Options and debugging UNcheck **Break New Module on** the skin. Then click Run.
18. You will stop here:

00F3499B 2B6E 14 SUB EBP,

DWORD PTR DS: [ESI +14]
19. Click Run again. Will break as many times in the dll to unpack, because memory regions are retrieved many times.
20. Continue to click Run until you break in 00EA3843, then ordered me to have EAX DEC.
21. Ok, we're in the Select Case. If you dom through EAX will see it is 2. Dom Select the case, code we saw in Case 2 is to jump by Nag Trial Softwrap. So the Case 2 command jumped from JE to JE softwrap.00EA3871 SHORT SHORT softwrap.00EA3853 it to jump to case 4: MOV DWORD PTR DS: [EDA648], 1.
22. To change, select JE SHORT softwrap.00EA3871 and press SPACEBAR, edit the JE SHORT softwrap.00EA3853. Done not do? Very good. Click RUN .... chà Ai! It runs without the nag again. (This is effective whether the time limit has expired trial)

Create Loader:

1. Now we know "bup" was replaced by JE to JE softwrap.00EA3871 SHORT SHORT softwrap.00EA3853 in dll's Softwrap.
2. However, we can not do this when the soft running integrity checks to detect any edit the

time. Therefore we need to make a loader wait until the inspection is completed and then the new patch code. dUP will help us (Diablo2oo2's Universal Patcher)
3. Open up and dUP Offset Patch card. [...] Click on the box to the original file. Select Photon.exe
4. Check on Virtual Address Mode (for packed PE files) because the file you want to patch the pack again. You can not patch it until it is fully load into memory.
5. Time to change the softwrap.00EA3871 JE JE SHORT SHORT softwrap.00EA3853. I was offset by 00EA3847. Change the code this as follows:

00EA3847 74 28 JE SHORT softwrap.00EA3871
** BECOME **
00EA3847 74 **0A** JE SHORT softwrap.00EA3853
6. 00EA3847 the same address and 74 bytes does not change. Only in 00EA3848 bytes from 28 to **0A.** *(Next byte is located at the next 00EA3847 should increase 00EA3848)*
7. So in the box Add Bytes 00EA3848 to type in the box and type in the Offset box Original Byte is 28. Patched the box Byte is 0A. ** Note that the Offset on you may be

different **
8. Now click ADD.
9. If you look at the bottom then we will see an option "Wait for MemoryValue Before patch (for loaders). You can click the small question mark next to that party. They tell us that find a place in memory DWORD value that is written to AFTER integrity checks completed. So we need loader's waiting for DWORD value that is written on and then the new patch dll.
10. We need to find the place DWORD so.
11. Before continuing, we need a few minutes to analyze the problem. You know where the dll check if the program has been registered *(Select Case)*, integrity checks will have to occur elsewhere before then. There is a small time after the completion of integrity checks to the check register. We should certainly find a place DWORD code has been brought into memory before the check register arises.
12. How to find a place that before the check register is implemented? Also, we did then đấy! When you run the program and the first stop in NAG Trial, open the Call Stack window. Accommodation is a list of

commands call occurred before the NAG was created. So we look back to Call Stack:

Call stack of main thread
Address Stack Procedure / arguments Called from Frame
0012F3F0 77D493F5 Includes ntdll.KiFastSystemCallRet
USER32.77D493F3 0012F424
0012F3F4 77D6EA24 USER32.WaitMessage
USER32.77D6EA1F
0012F424
0012F428 77D5688A USER32.77D6E895
USER32.77D56885 0012F424
0012F450 77D568CC USER32.77D567D4
USER32.77D568C7
0012F44C
0012F470 77D5892D USER32.DialogBoxIndirectParamAorW
USER32.77D58928 0012F46C
0012F49C 00EA355F softwrap.00F35899 but softwrap.00EA3559 ** THIS IS AFTER NAG HAVE BEEN CHECK We NEED NOT FIND DWORD HERE **
0012F498
0012F4B4 00EA3876 softwrap.00EA353A softwrap.00EA3871 ** This is where BUNG NAG **
0012F4D4
So ** One of the lower jaw is seats Price EFFECTION DWORD CHEP TO BE **

0012F4D8 00EA40C9
softwrap.00EA37EC
softwrap.00EA40C4
0012F4D4
0012FE24 00E919B8
softwrap.00EA3A69
softwrap.00E919B3 0012FE20
0012FE58 00508B3B Includes
softwrap.00E919B8
Photon.00508B39 0012FE54
0012FF9C 00506F25?
Photon.00508A87
Photon.00506F20

13. Make sure you're thinking. "We will find what you're talking about a DWORD value is copied into memory?" Let I explained:
In assembly you have a command to copy the program memory (I will say more about this in the next tut: a patch program pack with UPX)
That command MOV. MOV command will do what is the name of it; It TRANSFER value in the right address on the left side. **For example:**
MOV EAX, ECX <-This is the value of EAX to ECX.

14. When burned into memory, we use MOV attached type of data that we need to move on. **For example:** MOV BYTE PTR DS: [401000], FF <FF-TRANSFER BYTE on memory at 401,000. From DS before 401,000 Segment Data means. Each program in the

memory to run Windows Data Segment have its own. Usually it is accompanied by the first address to machines that need to write information to 401,000 addresses in Data Segment of this program.

15. Ok, time, we know the program can write to a memory DWORD how. Therefore type questions need to find a command MOV DWORD PTR DS: [xxxxxxx], XXX

16. Any Load Photon.exe to Olly. Remember to check the previous exception (without **Break on New Module)**

17. Click Run until the NAG unwind.

18. When does the NAG, Olly back and hit pause button, then select View-> Call Stack

19. You can find command MOV DWORD PTR DS in a call this. But if you do go to work and trace all the code that you see almost the whole mov in the value 0. And when the soft run to the 0, dUP will find the right location and patch them in line. *(Because the patch is found only when the selected DWORD)*

And then the program detects the patch and the loader failed. *(By Patch integrity checks before completion)*

So-I to help you find small -

20. Double-click on this line in

the Call Stack:
0012FE58 00508B3B Includes softwrap.00E919B8
Photon.00508B39
*** There is need to correct for this? In fact no one forced you all, in case you find the DWORD value to use is too great. Many work for reversing allowed to try and false. And this is the first choice but I like that in many other authorized test .***
21. After the Double Click on the line, you will go to right here *(of gold)*

```
00E9192D> / $ 55
PUSH EBP
00E9192E |. 8BEC MOV
EBP, ESP
00E91930 |. 83EC 10
SUB ESP, 10
00E91933 |. 8B45 10
MOV EAX, DWORD PTR
SS: [EBP +10]
00E91936 |. FF05
887DED00 INC DWORD
PTR DS: [ED7D88]
00E9193C |. 833D
887DED00> Cmp DWORD
PTR DS: [ED7D88], 2
00E91943 |. 53 PUSH
EBX
00E91944 |. 56 PUSH
ESI
00E91945 |. 57 PUSH
EDI
00E91946 |. A3
```

```
20A7ED00 MOV DWORD
PTR DS: [EDA720],
EAX
00E9194B |. 7C 56 JL
SHORT
softwrap.00E919A3
00E9194D |. E8
CF670200 CALL
softwrap.00EB8121
00E91952 |. 8BF0 MOV
ESI, EAX
00E91954 |. C1E6 10
SHL ESI, 10
00E91957 |. E8
C5670200 CALL
softwrap.00EB8121
00E9195C |. 6A 10
PUSH 10
00E9195E |. 03F0 ADD
ESI, EAX
00E91960 |. 33DB XOR
EBX, EBX
00E91962 |. 8D45 F0
LEA EAX, DWORD PTR
SS: [EBP-10]
00E91965 |. 53 PUSH
EBX
00E91966 |. 50 PUSH
EAX
00E91967 |. 33FF XOR
EDI, EDI
00E91969 |. E8
025C0200 CALL
softwrap.00EB7570
00E9196E |. 8D45 F0
LEA EAX, DWORD PTR
SS: [EBP-10]
00E91971 |. 50 PUSH
```

```
EAX
00E91972 |. FF75 08
PUSH DWORD PTR SS:
[EBP +8]
00E91975 |. 56 PUSH
ESI
00E91976 |. E8
62FDFFFF CALL
softwrap.00E916DD
00E9197B |. 83C4 18
ADD ESP, 18
00E9197E |. 83F8 FF
Cmp EAX, -1
00E91981 |. 74 1C JE
SHORT
softwrap.00E9199F
00E91983 |. 6A 01
PUSH 1
00E91985 |. 8D45 F0
LEA EAX, DWORD PTR
SS: [EBP-10]
00E91988 |. 50 PUSH
EAX
00E91989 |. FF75 0C
PUSH DWORD PTR SS:
[EBP + C]
00E9198C |. E8
0DFFFFFF CALL
softwrap.00E9189E
00E91991 |. 83C4 0C
ADD ESP, 0C
00E91994 |. 83F8 FF
Cmp EAX, -1
00E91997 |. 75 04
JNZ SHORT
softwrap.00E9199D
00E91999 |. 0BF8 OR
EDI, EAX
```

```
00E9199B |. EB 02
JMP SHORT
softwrap.00E9199F
00E9199D |> 8BFE MOV
EDI, ESI
00E9199F |> 8BC7 MOV
EAX, EDI
00E919A1 |. EB 67
JMP SHORT
softwrap.00E91A0A
00E919A3 |> 6A 01
PUSH 1
00E919A5 |. 68
4944EC00 PUSH
softwrap.00EC4449
00E919AA |. 33DB XOR
EBX, EBX
00E919AC |. 53 PUSH
EBX
00E919AD |. FF35
8C7DED00 PUSH DWORD
PTR DS: [ED7D8C];
softwrap.00E90000
00E919B3 |. E8
B1200100 CALL
softwrap.00EA3A69
************
00E919B8 |. E8
64670200 CALL
softwrap.00EB8121
****** ****** YOU
HERE
************
00E919BD |. 8BF0 MOV
ESI, EAX
00E919BF |. C1E6 10
SHL ESI, 10
00E919C2 |. E8
```

```
5A670200 CALL
softwrap.00EB8121
00E919C7 |. 6A 10
PUSH 10
00E919C9 |. 03F0 ADD
ESI, EAX
00E919CB |. E8
055C0200 CALL
softwrap.00EB75D5
00E919D0 |. 6A 10
PUSH 10
00E919D2 |. 8BF8 MOV
EDI, EAX
00E919D4 |. 53 PUSH
EBX
00E919D5 |. 57 PUSH
EDI
00E919D6 |. E8
955B0200 CALL
softwrap.00EB7570
00E919DB |. 57 PUSH
EDI
00E919DC |. FF75 08
PUSH DWORD PTR SS:
[EBP +8]
00E919DF |. 56 PUSH
ESI
00E919E0 |. E8
F8FCFFFF CALL
softwrap.00E916DD
00E919E5 |. 83C4 1C
ADD ESP, 1C
00E919E8 |. 83F8 FF
Cmp EAX, -1
00E919EB |. 74 14 JE
SHORT
softwrap.00E91A01
```

```
00E919ED |. 57 PUSH
EDI
00E919EE |. FF75 0C
PUSH DWORD PTR SS:
[EBP + C]
00E919F1 |. E8
16FEFFFF CALL
softwrap.00E9180C
00E919F6 |. 83CB FF
OR EBX, FFFFFFFF
00E919F9 |. 3BC3 Cmp
EAX, EBX
00E919FB |. 59 POP
ECX
00E919FC |. 59 POP
ECX
00E919FD |. 74 02 JE
SHORT
softwrap.00E91A01
00E919FF |. 8BDE MOV
EBX, ESI
00E91A01 |> 57 PUSH
EDI
00E91A02 |. E8
C95B0200 CALL
softwrap.00EB75D0
00E91A07 |. 59 POP
ECX
00E91A08 |. 8BC3 MOV
EAX, EBX
00E91A0A |> 5F POP
EDI
00E91A0B |. 5e POP
ESI
00E91A0C |. 5B POP
EBX
00E91A0D |. C9 LEAVE
```

```
00E91A0E \. C3 RETN
```

22. Right-Click and select the Olly Analysis-> Analyze Code. Then pull up to see the same code as above.
21. "So what do here?" you will wonder. "command only MOV DWORD PTR DS that I see here is copied to EAX." This is true, but we should not use this month. Instead we will find it on the command in a tí.
22. Look at this line 00E91936:

00E91936 |. FF05 887DED00 INC DWORD PTR DS: [ED7D88]
00E9193C |. 833D 887DED00> Cmp DWORD PTR DS: [ED7D88], 2
23. Orders Increase INC. a value is to 1 times. Should INC DWORD PTR DS: [ED7D88] will plus 1 DWORD value to store in the area code ED7D88. Then compare the value there with 2. You may think the value in ED7D88 beginning 00000000. Then to me by the command 00000001 inc. *(The click here see the current value of 1 should be a previously 0)*
24. Now back dUP, MemoryAddress in the box and type in 00ED7D88 MemoryValue for the 00000001
*** Copy many of 0? Because it*

*is a DWORD. I will say more in this tutorial # 5. Every pair of'00 'that you see as a BYTE, BYTE two to create a WORD and 4 BYTE create a DWORD. So should all now No. 8 ***

25. All is not any? Good. Click "Create Loader." File name for Loader and click OK.

26. Now double-click on your new loader to do ... (hope that everything will suon) Oh .. it was delicious and healthy đấy! No more NAG.

27. Change a computer and try to run the loader. Still healthy appetite! Great, you've made a loader to overcome the protection of Softwrap. Because the loader is made based on the platform is the function and memory dll softwrap so this can be applied to other programs are protected by this version dll.

Conclusion:

I use this program is the only way to present Patch Softwrap. But if you like it then xài please help buy bags.

Thanks to the whole ARTeam:

[Nilrem] [JDog45] [Shub - Nigurrath] [MaDMAn_H3rCuL3s] [Ferrari] [Kruger] [Teerayoot] [R @ dier] [ThunderPwr] [Eggi]

[EJ12N] [Stickman 373] [Bone Enterprise] [KaGra]

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Thanks also to the Codebreakers Journal, and the Anticrack forum.
If you have questions, comments edit what the mail bags for:
Gabri3l2003 [at] yahoo.com

Translated to English by Trickyboy (REA Team).
Special thanks to Gabri3l
and all people who read this tut

Stupid Execryptor - Fixing dump

I. Introdution:

Hi everyone, today mạn trick for permission to discuss issues of 1 quite intense in unpack Execryptor that dump file to fix it can run on any computer. It is interesting when playing with this packer, trick dot many things, not xài scripts available, or plugin Hide Olly is dump the whole, are generally not have strong faith to unpack always successful. This article only expect people to introduce a further aspect of that execryptor only. Any, to the small ...

II.Config Olly:

Perhaps no configuring is absolute, but even less effective for the target that we work this kì (MultiTrans), the trick will take a few ways for people to MUP successful.

First, invite pa k0n down here or the Shadow Olly Olly on Ice: (Shadow Olly has Gui English)

http://www.tuts4you.com/blogs/download.php?list.4

Then again here, down Olly Advanced plugin 1:25:

http://www.tuts4you.com/blogs/download.php?view.75

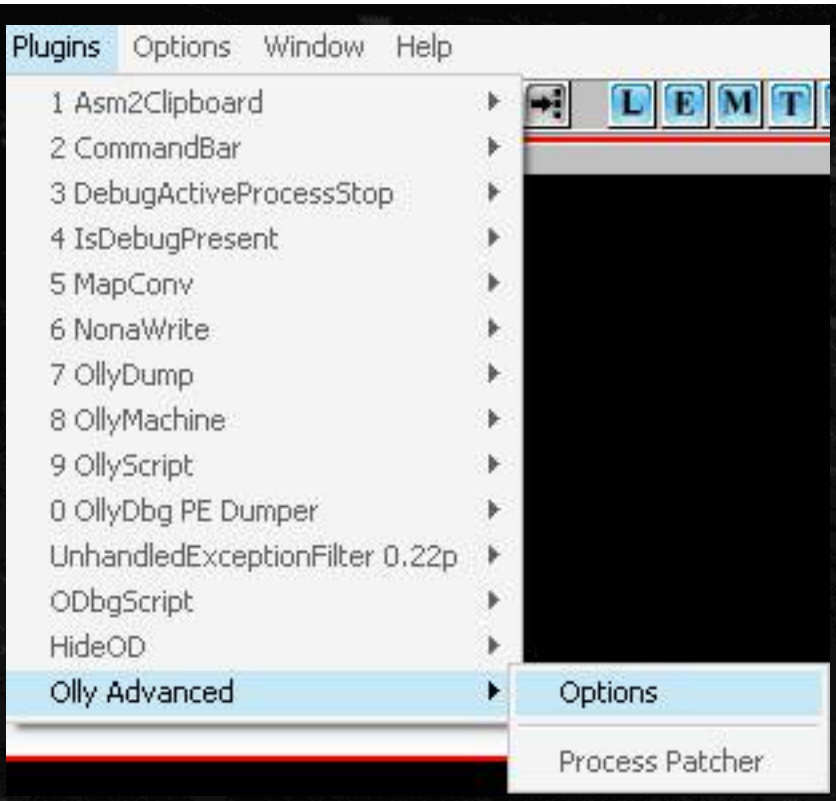
Back here down HideOD plugin:

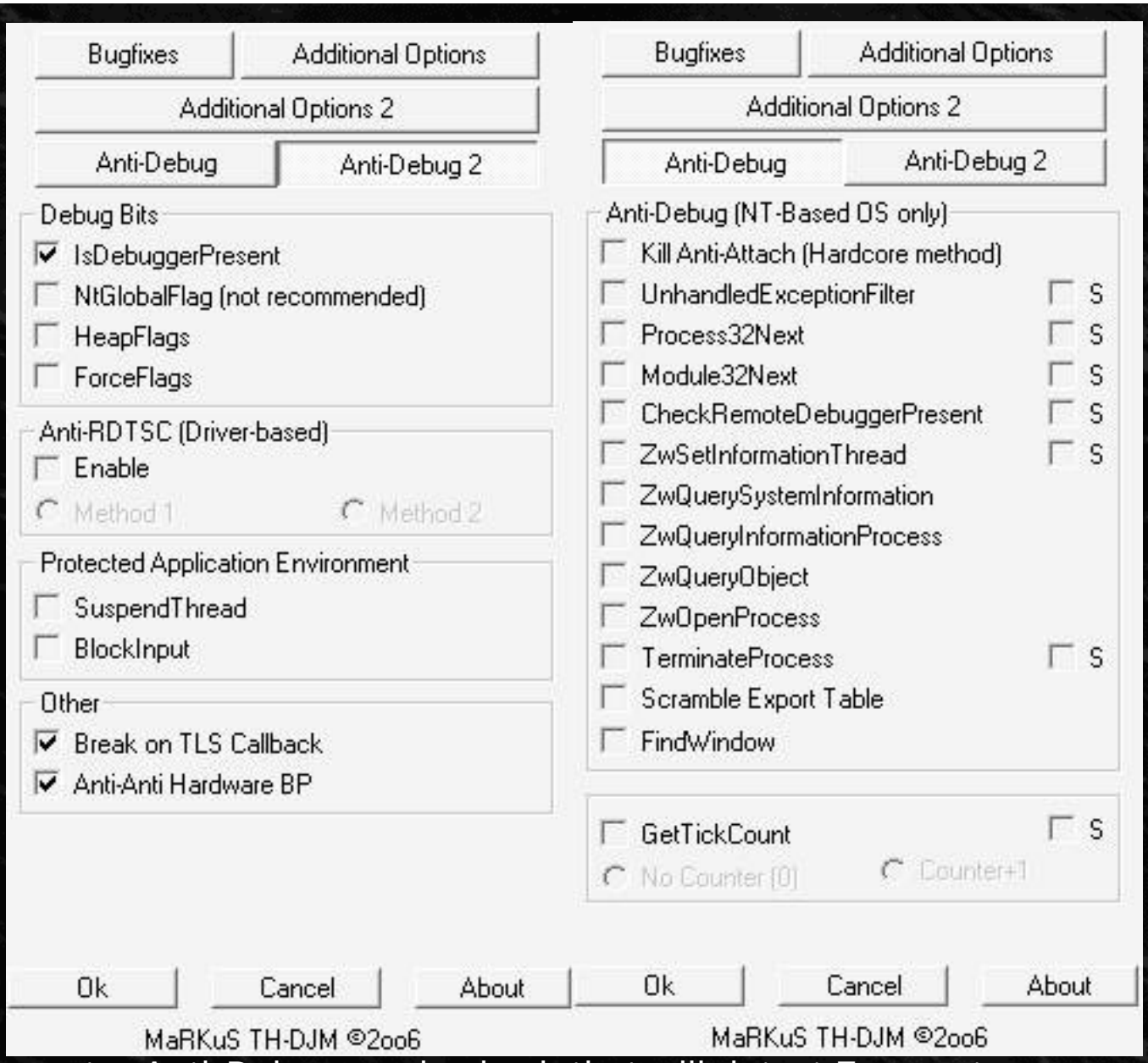
http://www.tuts4you.com/blogs/download.php?view.58

Continue down here zo ODbgScript (english and to his com)

http://www.reaonline.net/forum/showpost.php?p=25199&postcount=27

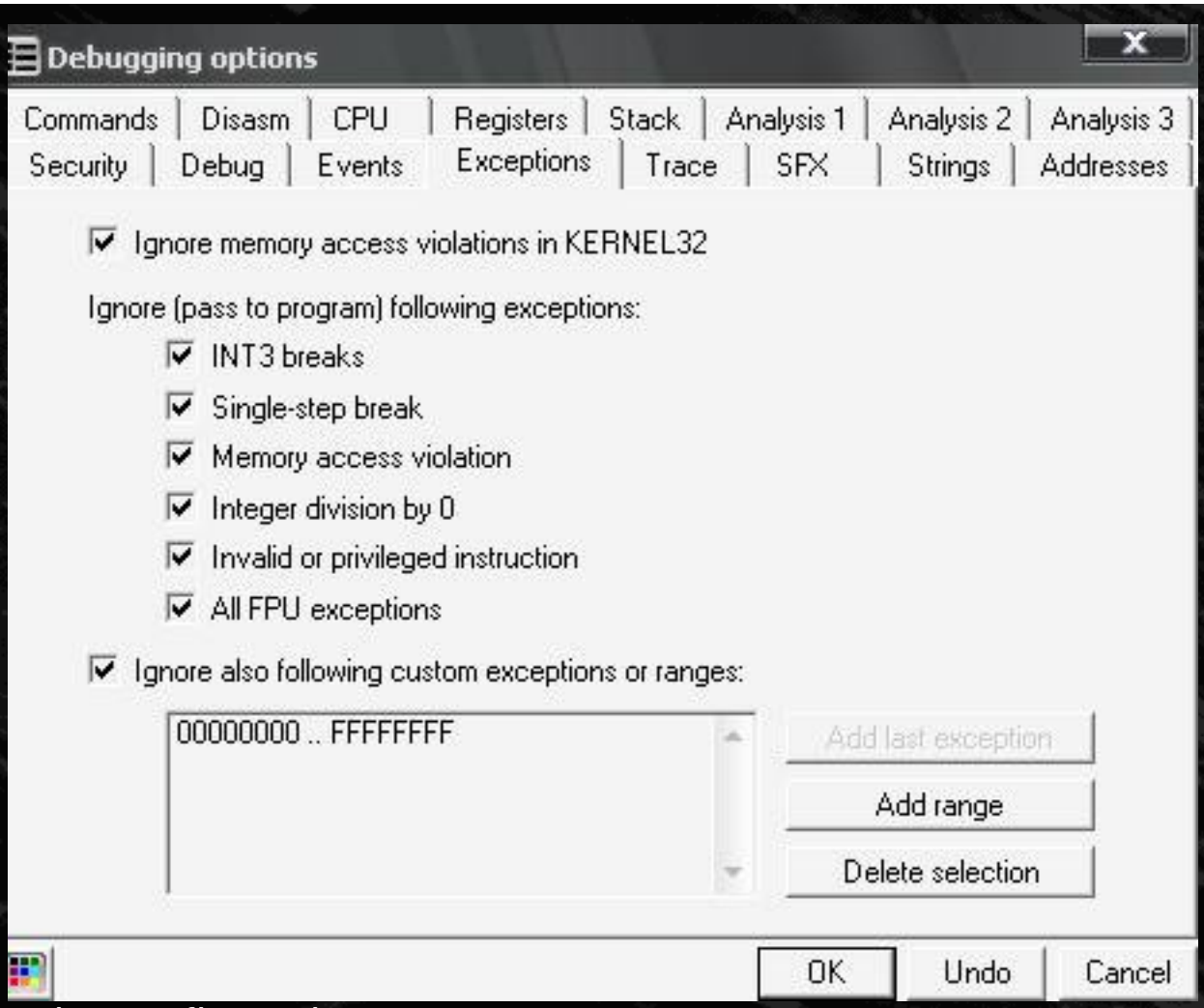
That is enough goods. Now we unpacked Olly the Shadow. Then unpacking to the other plugin, copy the folder PLUGIN Olly's Shadow. Call Olly Shadow run time. GUI's trick is that black Revising thui, if the white pa k0n do is copy. Olly Advanced plugin open up front, as image:


Plugins
Options
Window
Help
1 Asm2Clipboard
2 CommandBar
3 DebugActiveProcessStop
4 IsDebugPresent
5 MapConv
6 NonaWrite
7 OllyDump
8 OllyMachine
9 OllyScript
0 OllyDbg PE Dumper
UnhandledExceptionFilter 0.22p
ODbgScript
HideOD
Olly Advanced
Options
Process Patcher
L
E
M
T



Reason entry Anti-Debug we do check that will detect Execryptor as a method Hide Olly that used to Hook.
Continue to check the plugin HideOD so easy to remember:

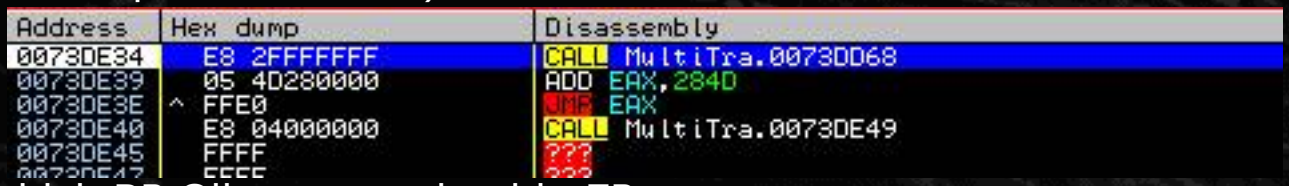
Some items do not need to check, but to remember ko pa k0n flipped the trick as check on the hen.
But this is in Olly Option:



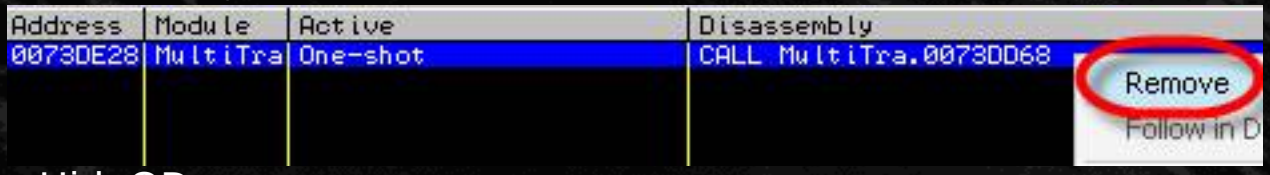
Complete the configuration.

III.Unpack:

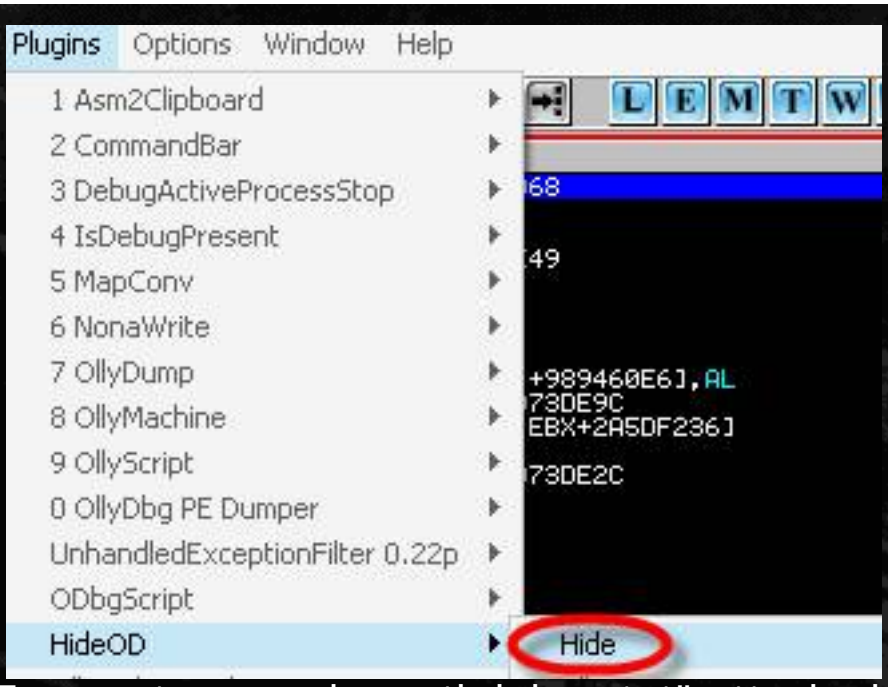
Now load MultiTrans zo (from scan anything because this topic has to say what it is packer). Olly Advanced will help you break in TLS (code be implemented prior to the EP):



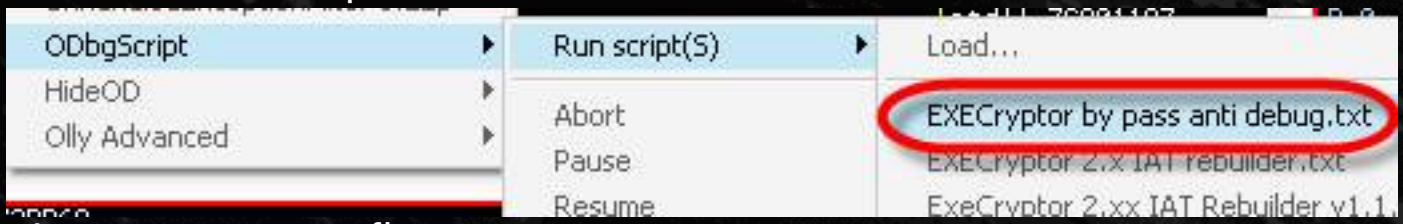
Alt-B, which BP Olly remove land in EP:



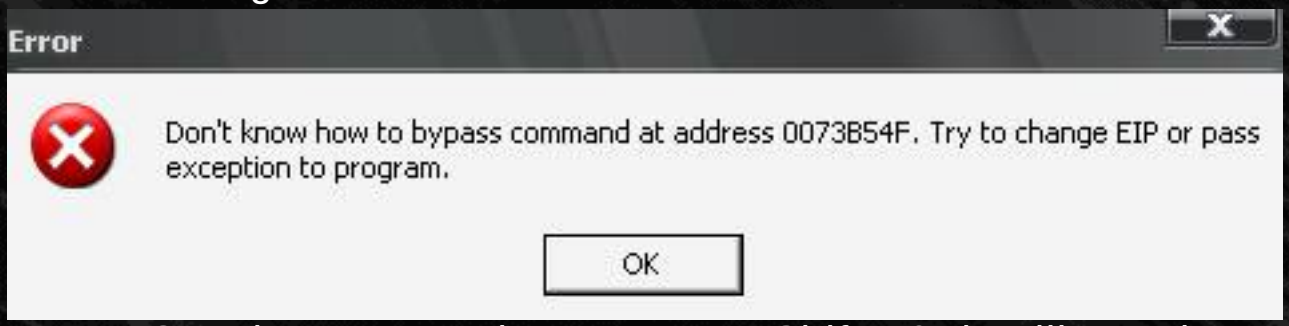
Start the HideOD:



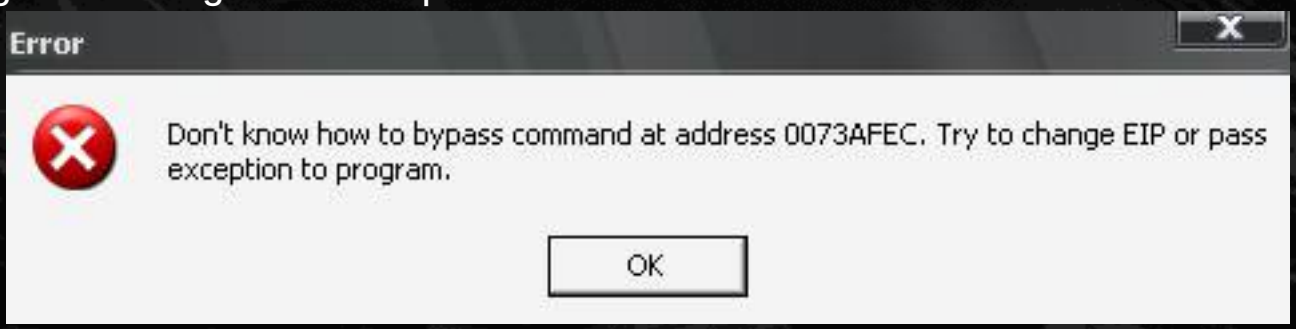
Then run script "Execryptor pass by anti debug.txt" attached this article (a similar script that uses Why in Zip Repair Tool 3.2), is running in memory plugin ODbgScript but must do OllyScript 0.92 nhé yore, because OllyScript do not run in this script:



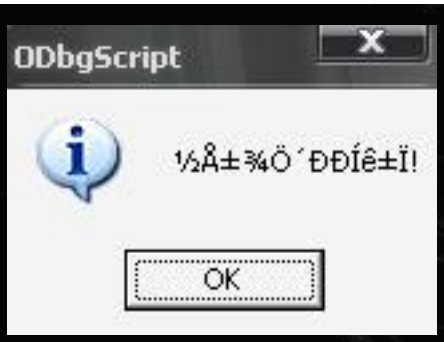
Meet 1 error message first:



Do not worry, OK, then we continue to press Shift-F9, it will run through training at 1 Dong and exception:



OK again and Shift-F9 scripts continue to work and inform Finished (in Chinese, the Com trans end nà ko):



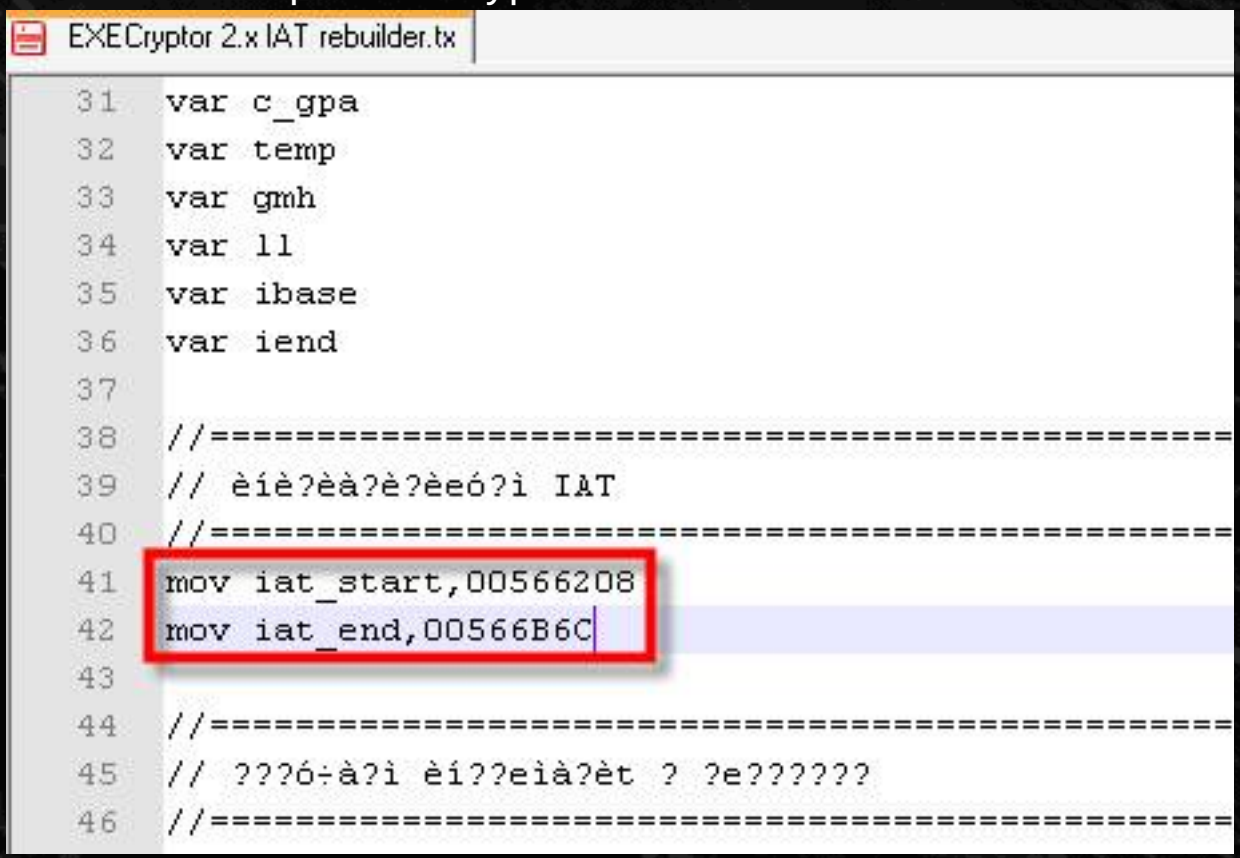
One break in Encrypt OEP:

Note: Script on the most effective on WinXP SP2, if you are running Terminate then Pause before ODbgScript Restart again.

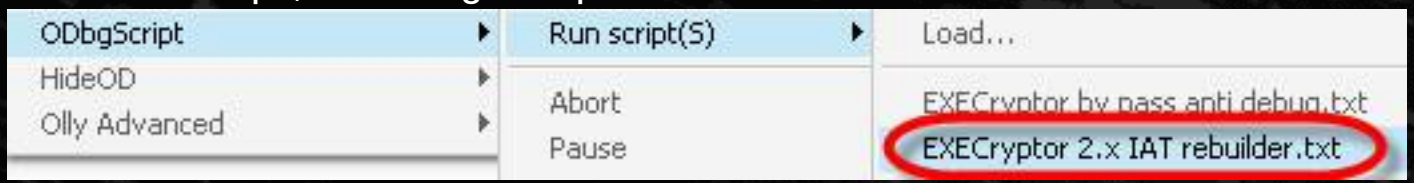
Goto to 401,000 for IAT (how to find the familiar nhé oi), and:

- IAT Start - 566208
- IAT End - 566B6C

Load 2 parameters to script "EXECryptor 2.x IAT rebuilder.txt" attached in:



Save File Script, Running Script sit and wait:

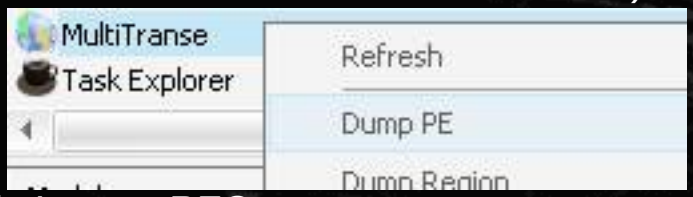


This script will redirect IAT accurate enough if you sit patiently waiting for it.

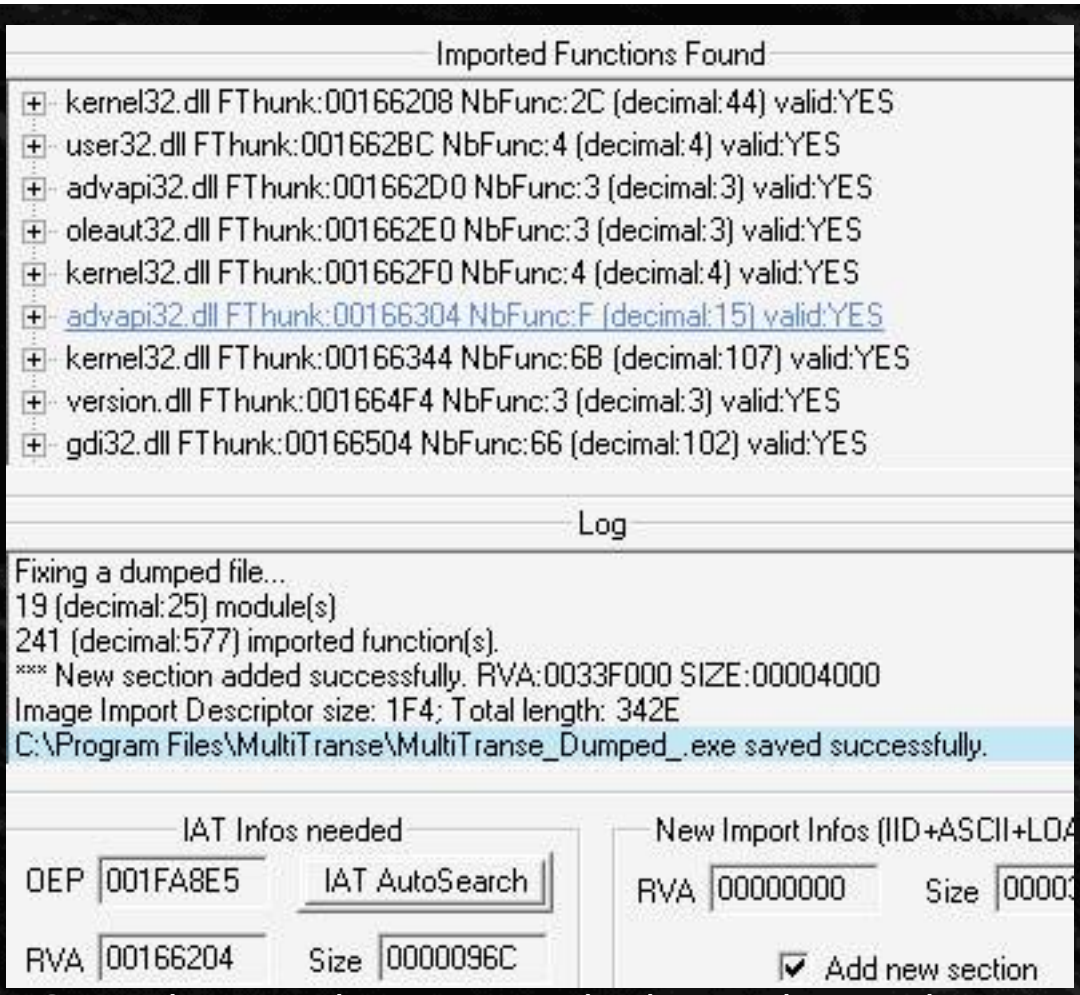
Results:

```
00566208 7C91188A ntdll.RtlDeleteCriticalSection
0056620C 7C9010ED ntdll.RtlLeaveCriticalSection
00566210 7C901005 ntdll.RtlEnterCriticalSection
00566214 7C809EF1 kernel32.InitializeCriticalSection
00566218 7C809AE4 kernel32.VirtualFree
0056621C 7C809A51 kernel32.VirtualAlloc
00566220 7C80992F kernel32.LocalFree
00566224 7C80998D kernel32.LocalAlloc
00566228 7C809728 kernel32.GetCurrentThreadId
0056622C 7C80977A kernel32.InterlockedDecrement
00566230 7C809766 kernel32.InterlockedIncrement
00566234 7C80B9D1 kernel32.VirtualQuery
00566238 7C80A0D4 kernel32.WideCharToMultiByte
0056623C 7C809BF8 kernel32.MultiByteToWideChar
00566240 7C80BDB6 kernel32.lstrlenA
00566244 7C810111 kernel32.lstrcpynA
00566248 7C801D4F kernel32.LoadLibraryExA
0056624C 7C80A415 kernel32.GetThreadLocale
00566250 7C801EEE kernel32.GetStartupInfoA
00566254 7C80ADA0 kernel32.GetProcAddress
00566258 7C80B6A1 kernel32.GetModuleHandleA
0056625C 7C80B4CF kernel32.GetModuleFileNameA
00566260 7C80D262 kernel32.GetLocaleInfoA
00566264 7C910331 ntdll.RtlGetLastWin32Error
00566268 7C812F1D kernel32.GetCommandLineA
0056626C 7C80ABDE kernel32.FreeLibrary
00566270 7C8137D9 kernel32.FindFirstFileA
00566274 7C80EDD7 kernel32.FindClose
00566278 7C81CDDA kernel32.ExitProcess
0056627C 7C80C058 kernel32.ExitThread
00566280 7C810637 kernel32.CreateThread
00566284 7C810D87 kernel32.WriteFile
00566288 7C862E62 kernel32.UnhandledExceptionFilter
```

Dump only (do not use because the LordPE detect):



Save the file. Fix IAT with ImportREC:

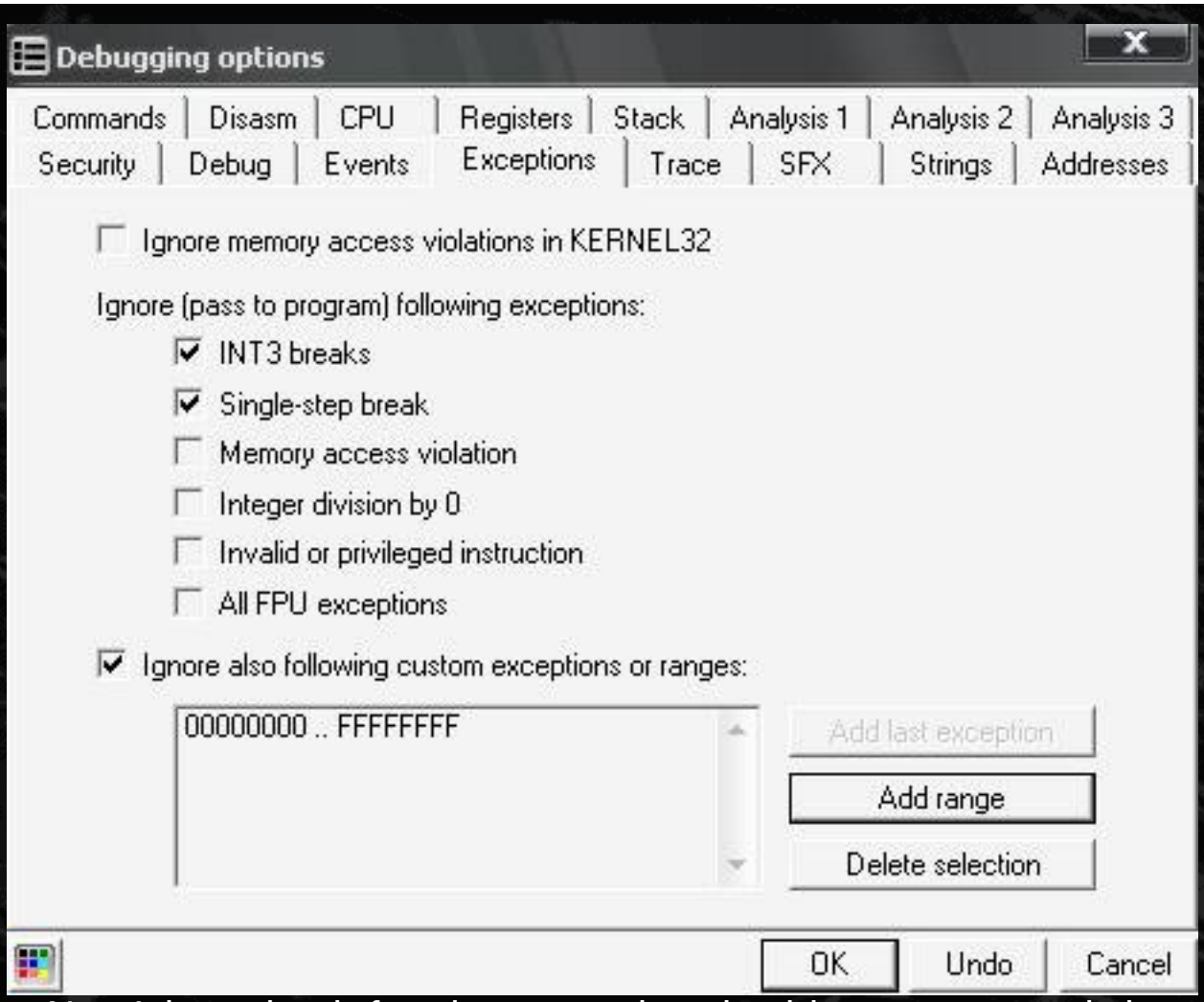


Remember to Save the Tree because we had to wait very long run scripts that. After this will xài to file đấy tree. Run the file dump, of course lickerish run. Finished as the dump. (This step unpack brief for why he and other children made a lot of items and Execryptor).

IV.Fix dump:

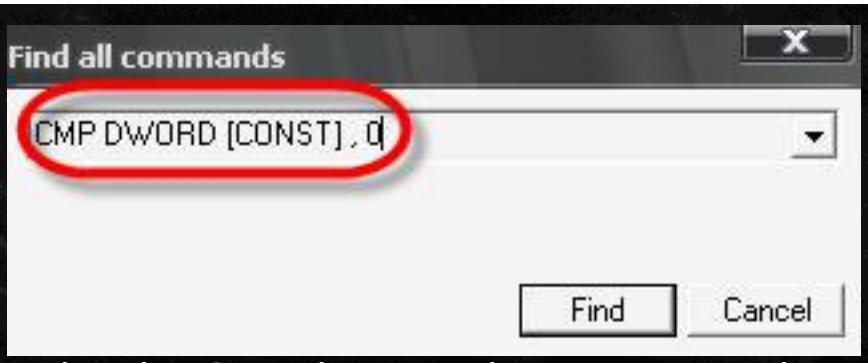
1.Analyze:

Now try to take over the dump file 1 machine. Trick to bring in Vmware Win SP1 and will be run when the crash. You load the file to fix dump Olly (should add 1 copy Olly Shadow) right on to consider why the crash. When you find errors in this form, you should edit this Option in Olly:



Exception No. 1 is a check for the exception do this error caused the crash and we need to check can be run in debug. Then you will break when touched exception "Memory Access Violation". By No. 1 procedure mò against Stack, Trace Log and the break thanks to Condition 1 ... quite long time you will find the cause of the error. Trick do not deepen the technical how, just get the results that research to say for more understandable, avoid confused messages.

So, why the error? Easy to explain more, we see these steps (When load at OEP Encrypt or to go to 1 in the section 5C9000, you must click and select the following on 2 May):



Asked on the order that is "Search me orders compare the value in 1 cove fixed with 0. And the results on 2 May:

Address	Disassembly	Comment
005D69ED	CMP DWORD PTR DS:[5D9F4C],0	DS:[005D9F4C]=7C800000 (kernel32.7C800000)
005DEB04	CMP DWORD PTR DS:[57ED78],0	DS:[0057ED78]=7C801D77 (kernel32.LoadLibraryA)
005E09AB	CMP DWORD PTR DS:[5ECE4C],0	DS:[005ECE4C]=00000000
005E735E	CMP DWORD PTR DS:[5C91BC],0	DS:[005C91BC]=77D40000 (user32.77D40000)
005E7F1B	CMP DWORD PTR DS:[5D9F44],0	DS:[005D9F44]=7C80B6A1 (kernel32.GetModuleHandleA)
005E8EC4	CMP DWORD PTR DS:[605D30],0	DS:[00605D30]=00153A70
005F8CA6	CMP DWORD PTR DS:[619434],0	DS:[00619434]=00000000
005FA8E6	MOV DWORD PTR SS:[ESP],EBX	(Initial CPU selection)
005FDFB6	CMP DWORD PTR DS:[605D30],0	DS:[00605D30]=00153A70
00606698	CMP DWORD PTR DS:[5C91BC],0	DS:[005C91BC]=77D40000 (user32.77D40000)
006069B6	CMP DWORD PTR DS:[5D9F44],0	DS:[005D9F44]=7C80B6A1 (kernel32.GetModuleHandleA)
0060796A	CMP DWORD PTR DS:[5DF438],0	DS:[005DF438]=00152CB0
00612554	CMP DWORD PTR DS:[5ECE4C],0	DS:[005ECE4C]=00000000
00615680	CMP DWORD PTR DS:[619434],0	DS:[00619434]=00000000
00617AEB	CMP DWORD PTR DS:[5CF498],0	DS:[005CF498]=77DD0000 (advapi32.77DD0000)
00617CB9	CMP DWORD PTR DS:[5C91BC],0	DS:[005C91BC]=77D40000 (user32.77D40000)
0061B961	CMP DWORD PTR DS:[5CF498],0	DS:[005CF498]=77DD0000 (advapi32.77DD0000)

Máy A - WinXP SP2

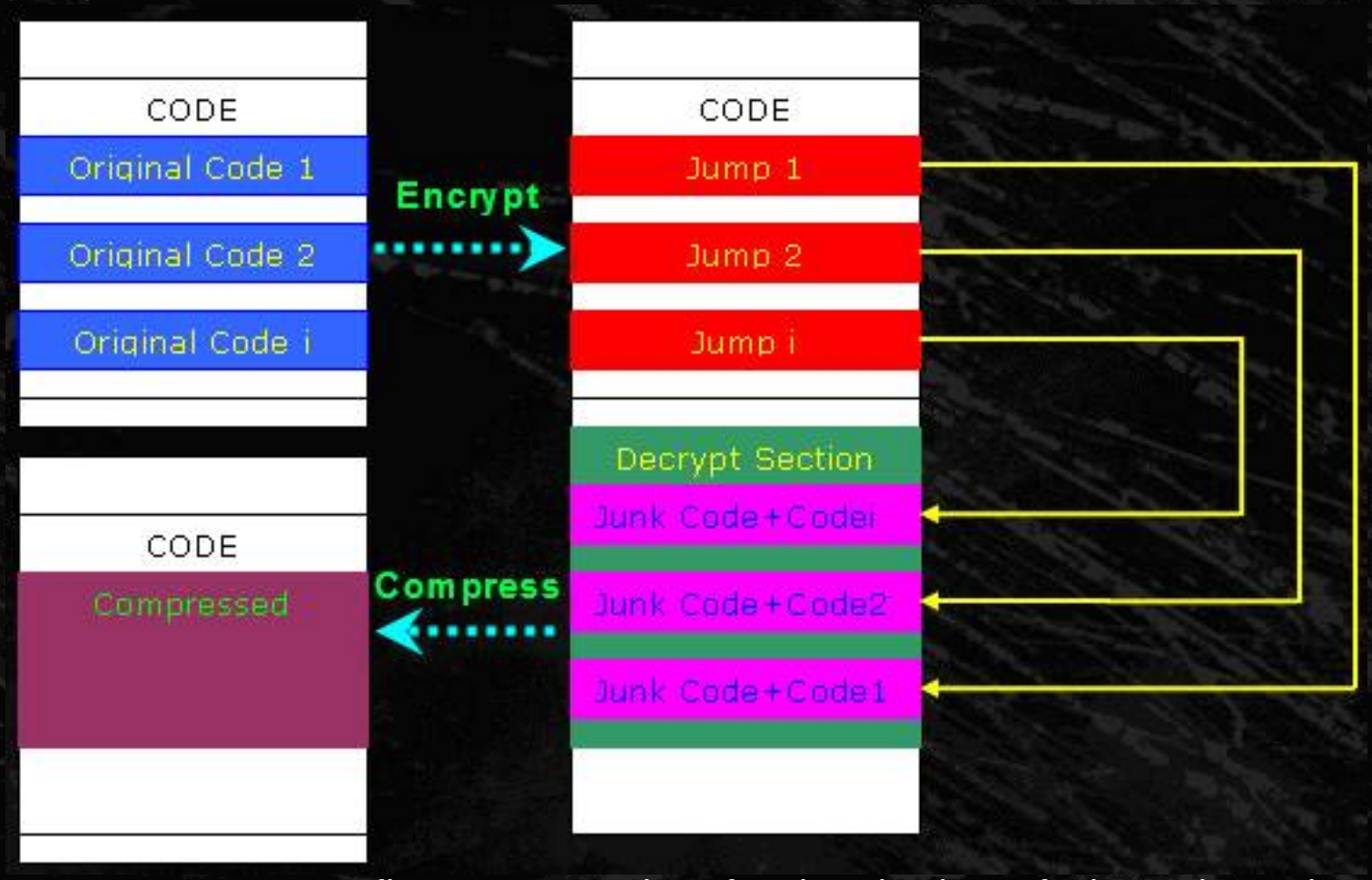
Address	Disassembly	Comment
005D69ED	CMP DWORD PTR DS:[5D9F4C],0	DS:[005D9F4C]=7C800000
005DEB04	CMP DWORD PTR DS:[57ED78],0	DS:[0057ED78]=7C801D77
005E09AB	CMP DWORD PTR DS:[5ECE4C],0	DS:[005ECE4C]=00000000
005E735E	CMP DWORD PTR DS:[5C91BC],0	DS:[005C91BC]=77D40000 (user32.77D40000)
005E7F1B	CMP DWORD PTR DS:[5D9F44],0	DS:[005D9F44]=7C80B6A1
005E8EC4	CMP DWORD PTR DS:[605D30],0	DS:[00605D30]=00153A70
005F8CA6	CMP DWORD PTR DS:[619434],0	DS:[00619434]=00000000
005FA8E5	PUSH ESI	(Initial CPU selection)
005FDFB6	CMP DWORD PTR DS:[605D30],0	DS:[00605D30]=00153A70
00606698	CMP DWORD PTR DS:[5C91BC],0	DS:[005C91BC]=77D40000 (user32.77D40000)
006069B6	CMP DWORD PTR DS:[5D9F44],0	DS:[005D9F44]=7C80B6A1
0060796A	CMP DWORD PTR DS:[5DF438],0	DS:[005DF438]=00152CB0
00612554	CMP DWORD PTR DS:[5ECE4C],0	DS:[005ECE4C]=00000000
00615680	CMP DWORD PTR DS:[619434],0	DS:[00619434]=00000000
00617AEB	CMP DWORD PTR DS:[5CF498],0	DS:[005CF498]=77DD0000 (ADVAPI32.77DD0000)
00617CB9	CMP DWORD PTR DS:[5C91BC],0	DS:[005C91BC]=77D40000 (user32.77D40000)
0061B961	CMP DWORD PTR DS:[5CF498],0	DS:[005CF498]=77DD0000 (ADVAPI32.77DD0000)

Máy B - WinXP SP1

So here are 2 points to note, first we found that by ImageBase module kernel32.dll **(7C800000)** on WinXP SP2 did not match ImageBase kernel32. dll on SP1 (Olly on SP1 should not be recognized). So the drag is just ***LoadLibraryA*** also always wrong. Article 2 is why the section 5C9000:

00400000	00001000	MultiTra		PE header
00401000	00156000	MultiTra	CODE	code
00557000	0000C000	MultiTra	DATA	data
00563000	00003000	MultiTra	BSS	
00566000	00004000	MultiTra	vbu.qmvb	
0056A000	00001000	MultiTra	ok3ytyit	
0056B000	00001000	MultiTra	.tls	
0056C000	00001000	MultiTra	.rdata	
0056D000	00016000	MultiTra	b0v9k07g	
00583000	00046000	MultiTra	.rsrc	resources
005C9000	00054000	MultiTra	9iw2t.87	SFX
0061D000	00121000	MultiTra	qsp5wxqs	
0073E000	00001000	MultiTra	k158u.cv	
0073F000	00004000	MultiTra	.mackt	imports

In this section, the file is 1 pack will remember empty area (00 bytes), but when you unpack that, to contain everything inside. So combining the above, plus the results that are the trick debug can draw the following: (see Figure)



- Execryptor first encrypt a lot of orders in the soft, in each section will be replaced by encrypt command Jump 1 (with conditions or have ko)
- The jump will jump to 1 section for the implementation of the orders have been asked in the encrypt (temporarily called decrypt section), of course in more junk code
- Conduct encoding IAT
- Then new Execryptor conducted compress source code in the section (here is the code) and decrypt section (here is 5C9000) ...

When the dump file in Encrypt OEP, we just dump file is attached decrypt section but not yet completed the process unpack. To be completed decrypt this entire section, redirect the command bytes are replaced by the original order Jump in section code. Also in the unpack code in memory, has execryptor 1 in very interesting. As you see above, ImageBase kernel32.dll right in this, but wrong in another machine. Execryptor has stealthy ImageBase record of modules to the memory in decrypt section. So, I do it with this value?

When we use scripts to redirect the IAT, we have restored full value in the IAT, but CALL IAT to ensure the first restored all do right? Meanwhile, execryptor to encrypt a lot in the section code, and of course many of these will always stick CALL / JMP IAT. Imagebase Execryptor saved to decrypt the address of the API functions and implement the order CALL IAT this (assume the CALL [LoadLibraryA]) and for each module ImageBase the computer or a different address to the API functions to other and the dump file on the computer can not run on other machines.

The comparing it like to do? (You follow me to order Cmp 1 above):

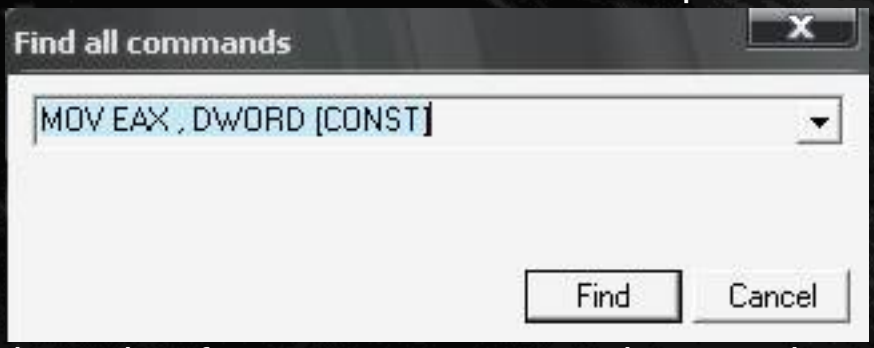
In addition to record ImageBase here, Execryptor always carefully before you get used to it. It will compare with 0 see here have NULL or do?

- If NULL prove it has not saved ImageBase Cmp order and will set up flags Z 1
- Order JNZ meet just below the flag Z = 1 will not run and jump down to go to the CALL command, the implementation process recover ImageBase (IM is by kernel32.dll) on the running
- If you have values stored in the flag Z = 0, JNZ jump, perform a decrypt the address 1 CALL IAT function is implemented and this function.

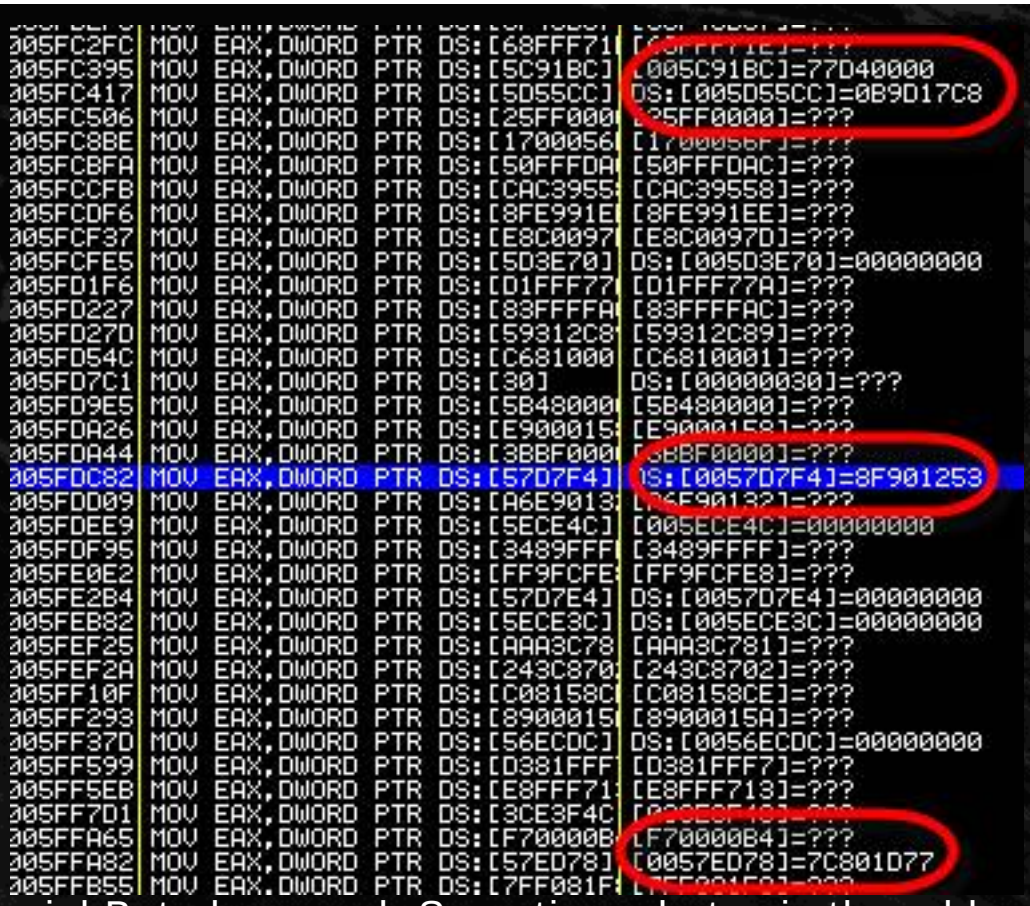
With the analysis, we see why the crash and then correct? When the address to which decrypt the wrong address compared to the API functions necessary to the course error. Kĩ But in comments to 2 pictures that we compare, we

do see only ImageBase modules that address both functions are saved again (LoadLibraryA). That is No. 1 CALL IAT function will be called directly based on the addresses stored, NULL if there are changes Z, Execryptor conducted to find where to save the value of the IM module, if the value of IM module also saved NULL the implementation of the IM to retrieve the module ... Then you know to fix the dump file is then đấy. Execryptor will recover ImageBase of the modules if they see value in the region are NULL. One advantage of this and to fill all 00 positions will be cheated execryptor. But that is all? No! Things will only match when you eat the last items considered by haggar. But some things have not haggar to say in the next version of Execryptor (aged sure you) execryptor It is not only saved ImageBase but also save a lot Byte encryption. Byte code and can be born from ImageBase of modules, or by 1 method but it does ensure that the byte is not on the same machine. The byte also compare NULL or not? If NULL, the conduct of the byte code and, if not the NULL byte is used to decrypt the code should be conducted. (May be CALL IAT). And so will crash if the byte dump on this decrypt on another machine.

One section 5C9000 back for 1 case as an example:



Search for all orders by value from 1 to EAX cove. (EAX and EDX is 2 to record execryptor be used mainly when decrypt the encrypted bytes are stored):



We see many special Byte be saved. Sometimes bytes is the address of the API function. Follow the line 1:

We see in the ImageBase execryptor bring compared with 0 and Z flag enabled using Cmp. But here? Execryptor also compare đấy Yes, but it does enable OR flags. And this order is also:

- Transfer value here to EAX
- Check ko NULL or set to flag Z
- ... Following a similar analysis of the modules ImageBase

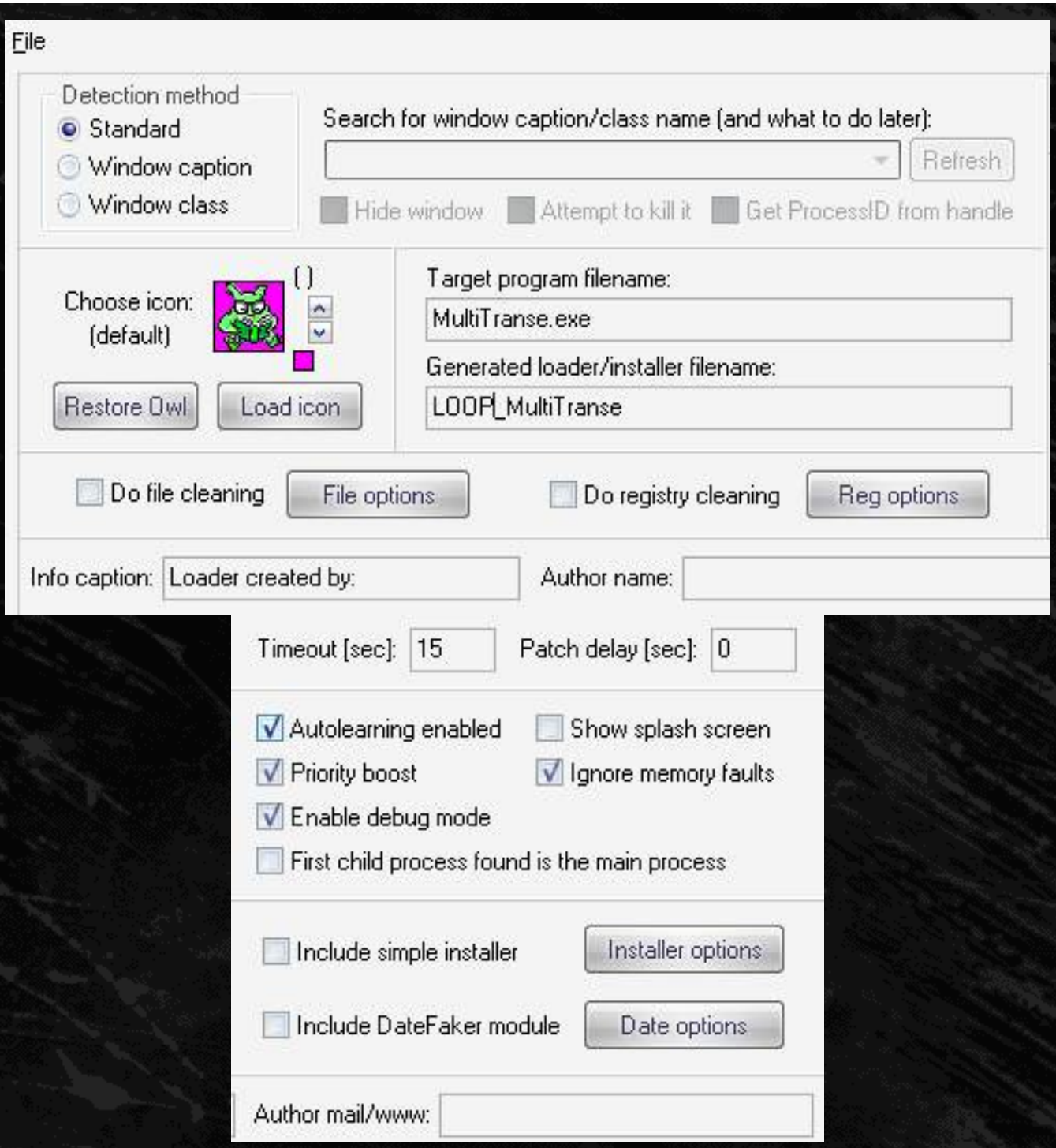
Many explanations, many questions order form, a variety of junk code, but the idea of the author's execryptor still unclear. And it clicks at a execryptor fix that. Shallot NULL seats should we fill it to 00. On another machine dump file will run well.

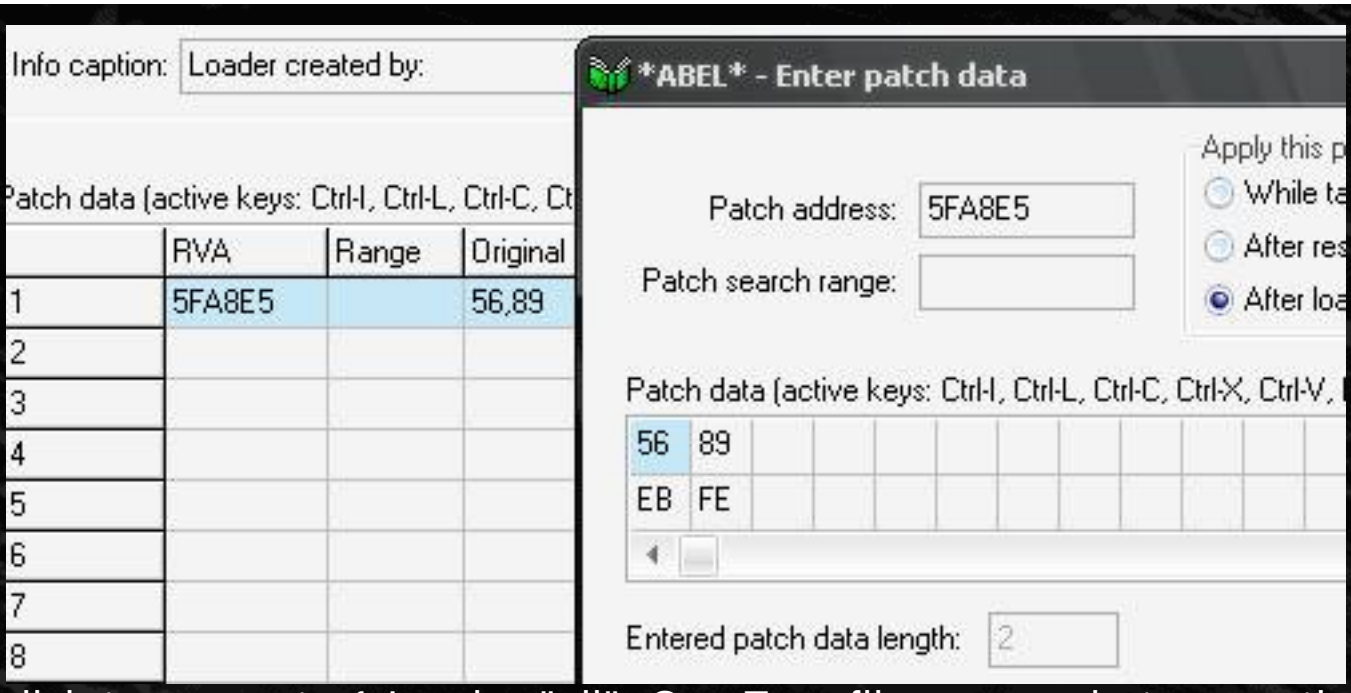
The problem is: How do I know exactly remember all areas need to fill 00? Of course the first way is to debug the site, having any seats ko valid on another machine, then fill it to 00. And if players like debug hand you will lose not less than 1 day for the first time. (dom trick too should take 2 days) time is not long for the time we can break right where it should fill 00. As above, to identify any exception error is always happening, and any error is due to be encrypted Byte wrong. Since then mò opposed Stack, Trace Log in using Condition Breakpoint .. will find all the seats.
May the stars before doing this, the trick was thinking 1 method interesting for people to fix file dump 1 gently over how to debug. (but still quite long nhé) This method only requires patience but without knowledge subliminal at all. Invite people to stay 1 more time then to later.

2.Second dump:

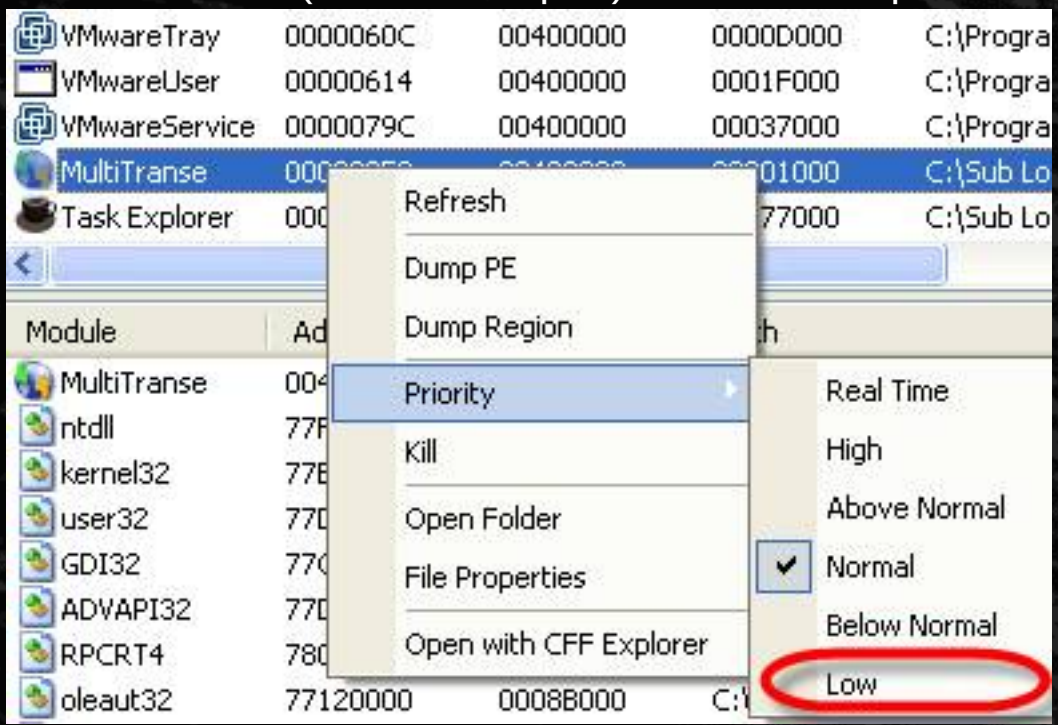
Currently dump file on crash with SP2 on SP1, it is difficult to bear dump 1 files on SP1 see how it nhé (remember to install the soft on this but do not copy the original xi install wa small party). But the script "Bypass Antidebug" not very effective on SP1's trick, so why do we dump here? Rub rub, that is, after unpack in the memory we seize them Encrypt OEP:

So have Address = **5FA8E5,** 2 more memory Byte first **56 89.** Then we invite's out of this ABEL loader generator, turn to enter the parameters like below:


File
Detection method
Standard
Window caption
Window class
Search for window caption/class name (and what to do later):
Refresh
Hide window
Attempt to kill it
Get ProcessID from handle
Choose icon:
(default)
( )
Restore Owl
Load icon
Target program filename:
MultiTranse.exe
Generated loader/installer filename:
LOOP_MultiTranse
Do file cleaning
File options
Do registry cleaning
Reg options
Info caption:
Loader created by:
Author name:
Timeout [sec]:
15
Patch delay [sec]:
0
Autolearning enabled
Show splash screen
Priority boost
Ignore memory faults
Enable debug mode
First child process found is the main process
Include simple installer
Installer options
Include DateFaker module
Date options
Author mail/www:

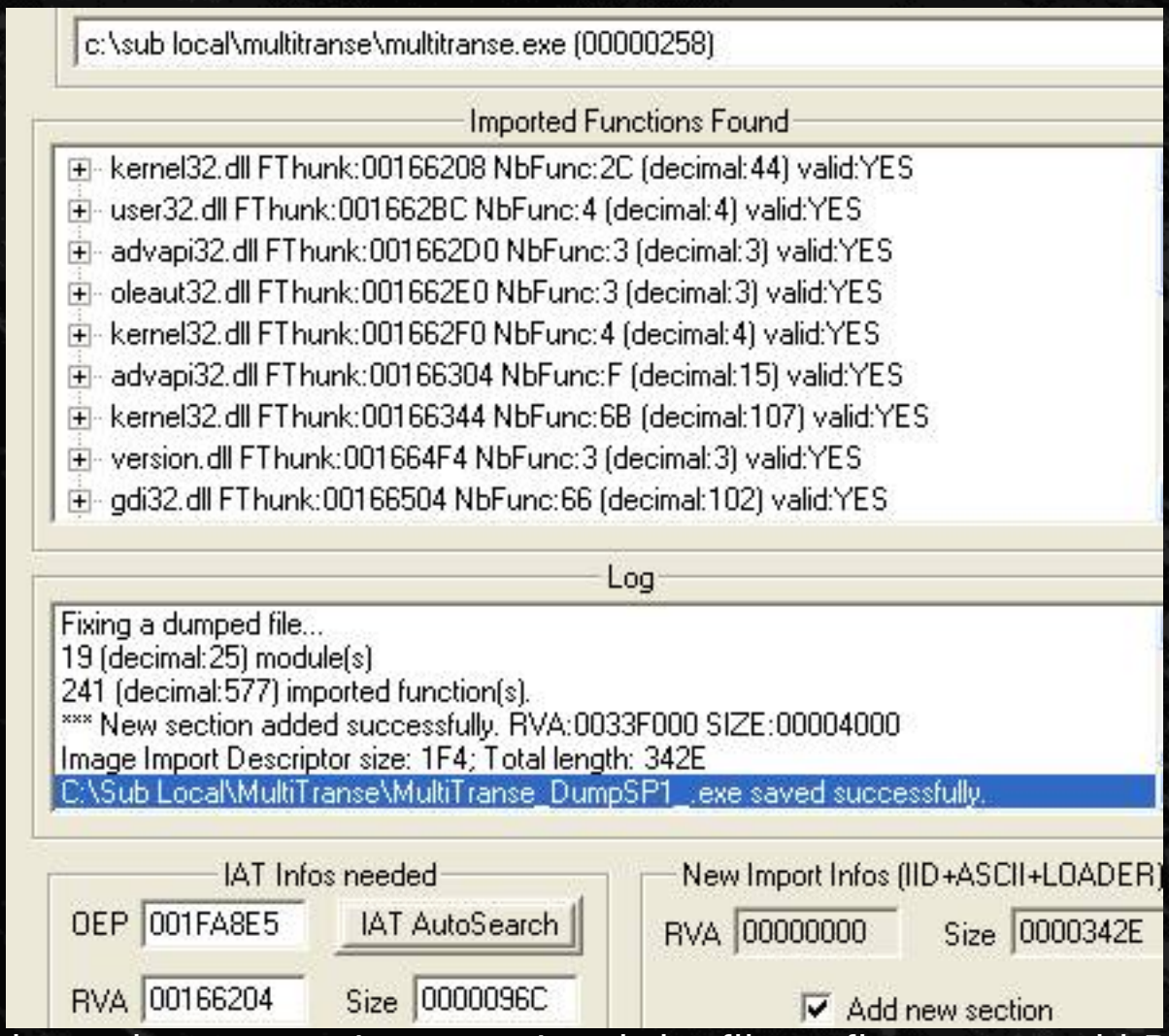


Then click to generate 1 Loader "all". One Tree file was made to save time by ImportREC fix IAT and loader through other SP1 machines.
First run loader, it will load into memory MultiTrans.exe and enforcement, the file is just unpack that, it immediately to 5FA8E5 Goto and patch Byte 2 to **56 89 EB FE.** When soft to run the loop will be endless, we must quickly open 1 to process the view (or the dump is) will find the process running:

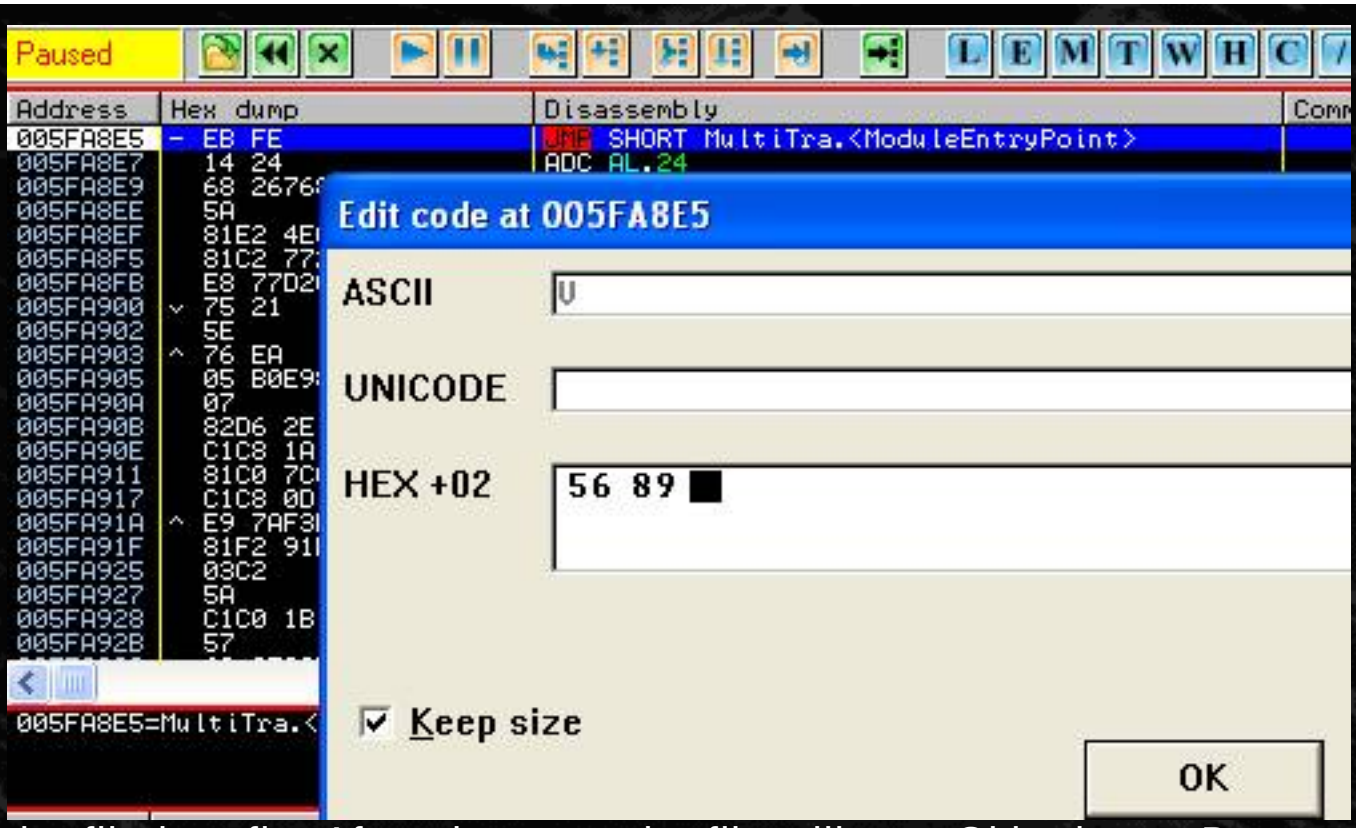


In small items trick, trick forget to do a task we must set a priority of this process of **Low** (or **Idle)** to avoid it consumes CPU is used too much, leading to the crash. Perhaps in this process does not need to do, but do be aware of the process, the other stars? If you have any study of Operating Systems will be more to the right priorities and the time slot between the process of how the trick ... not too deep learning.

Now we are then dump. Then again ImportREC use, but remember that just load the file to save Tree has:



Shutting down the process Loop go. Load the file to fix, restore old Byte 2:

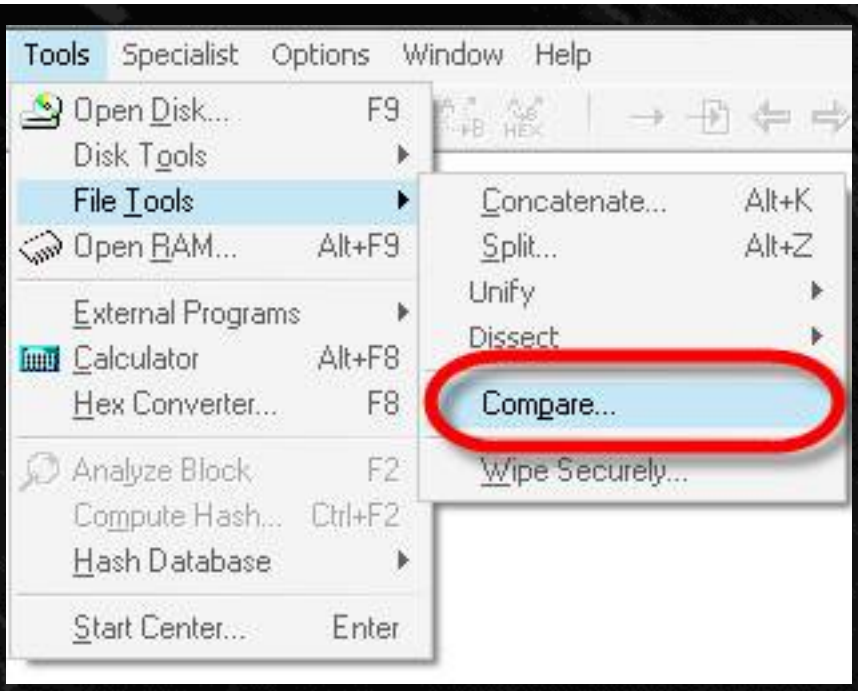


Save the file just fix. After that run, the file will run. Okie, hours But now we are doing what the quái? Dump file on the SP2 does not fix the dump 1 on SP1 children, life in the back more trouble then. Hehe, Calm down, we're close to the most interesting of this article đấy. Invite over to the following: D

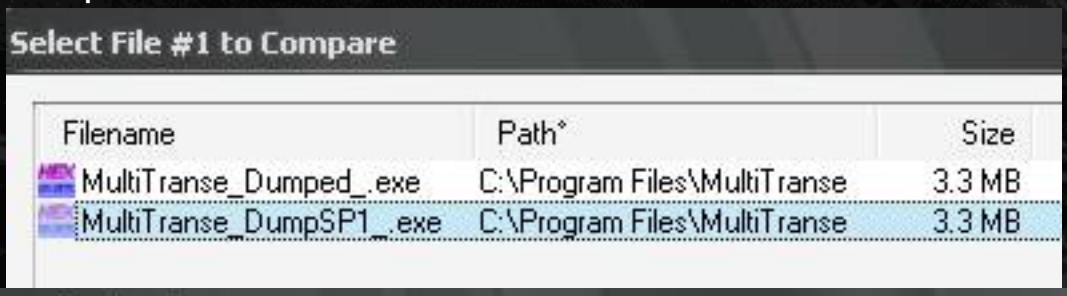
3.Compare and Fix:

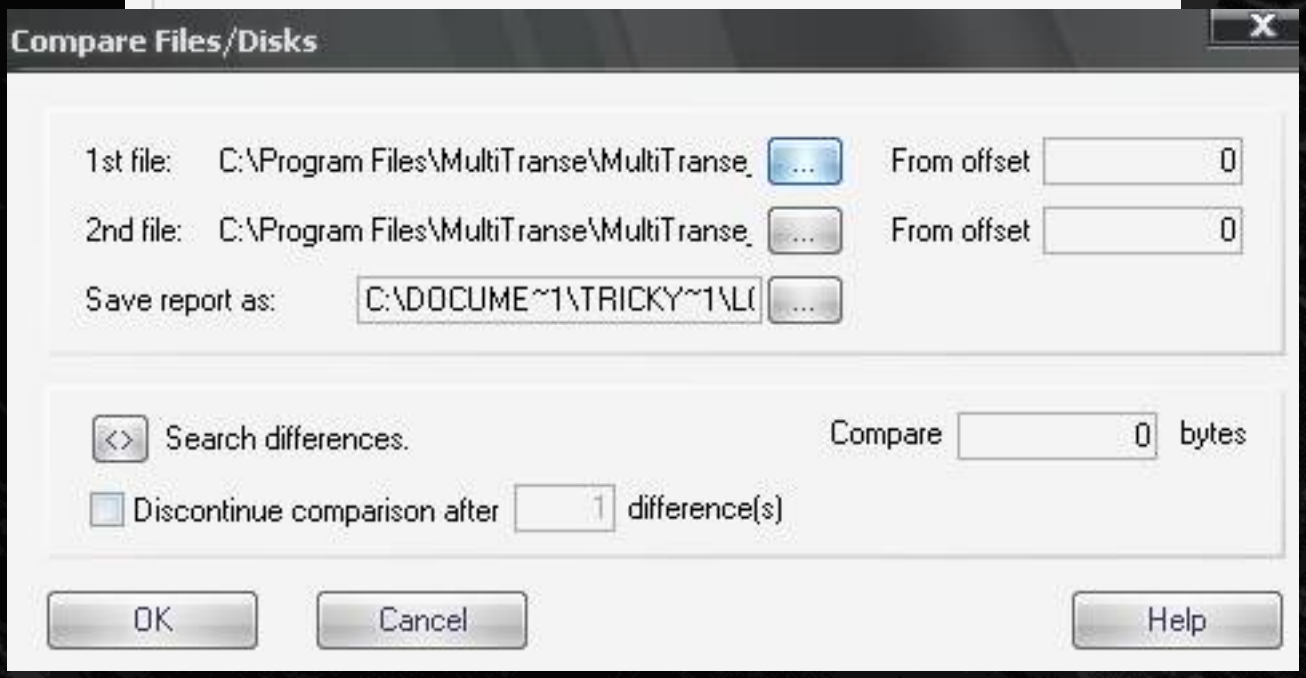
Now think again. File dump on the other SP2 ko run on SP1, the SP1 ko running on SP2. But it tui all that different, the same size from the dump, the same PE Header, resource, and IAT ... ... á á, the Byte encryption and ImageBase on each machine is certainly different. And as the analysis, we only need to Fill in the Byte of which 00 are considered as the finish. So, where should debug patch to each place, we do not compare the position and have taken different bytes that the patch, hak hak hak. This trick is a trick ... U.S. not say much, we bring dump file on 1 May to 1 May remaining. Compare conduct is just. This trick made dump file from SP1 wa SP2 machine when compare, will revise the value in the dump file SP2, then bring wa SP1 test, if work is Okie.

Compare also the art of Compare, not the message will be meaningless loss. WinHex trick used to compare because this is a very strong Hex Editor, handling files with high storage without fear Crash. Open Winhex to do, then:

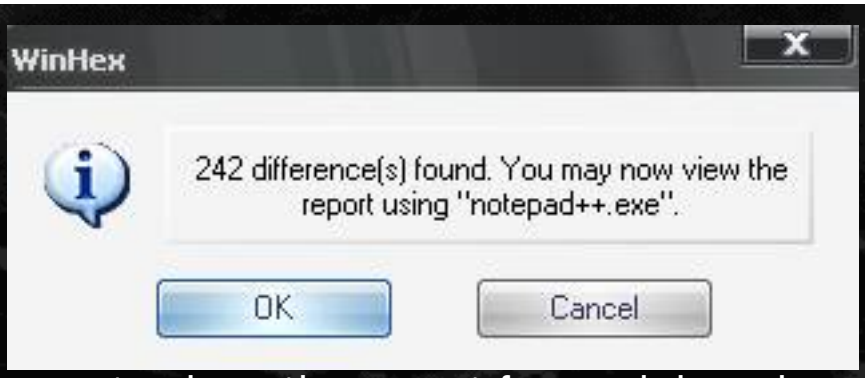


2 files need Compare:





OK to compare:



Trick use notepad + + to show the report from winhex, because notepad by Win will be in the banana case report on the 300,000 Byte different. So here are 242 different Byte:

Report.txt

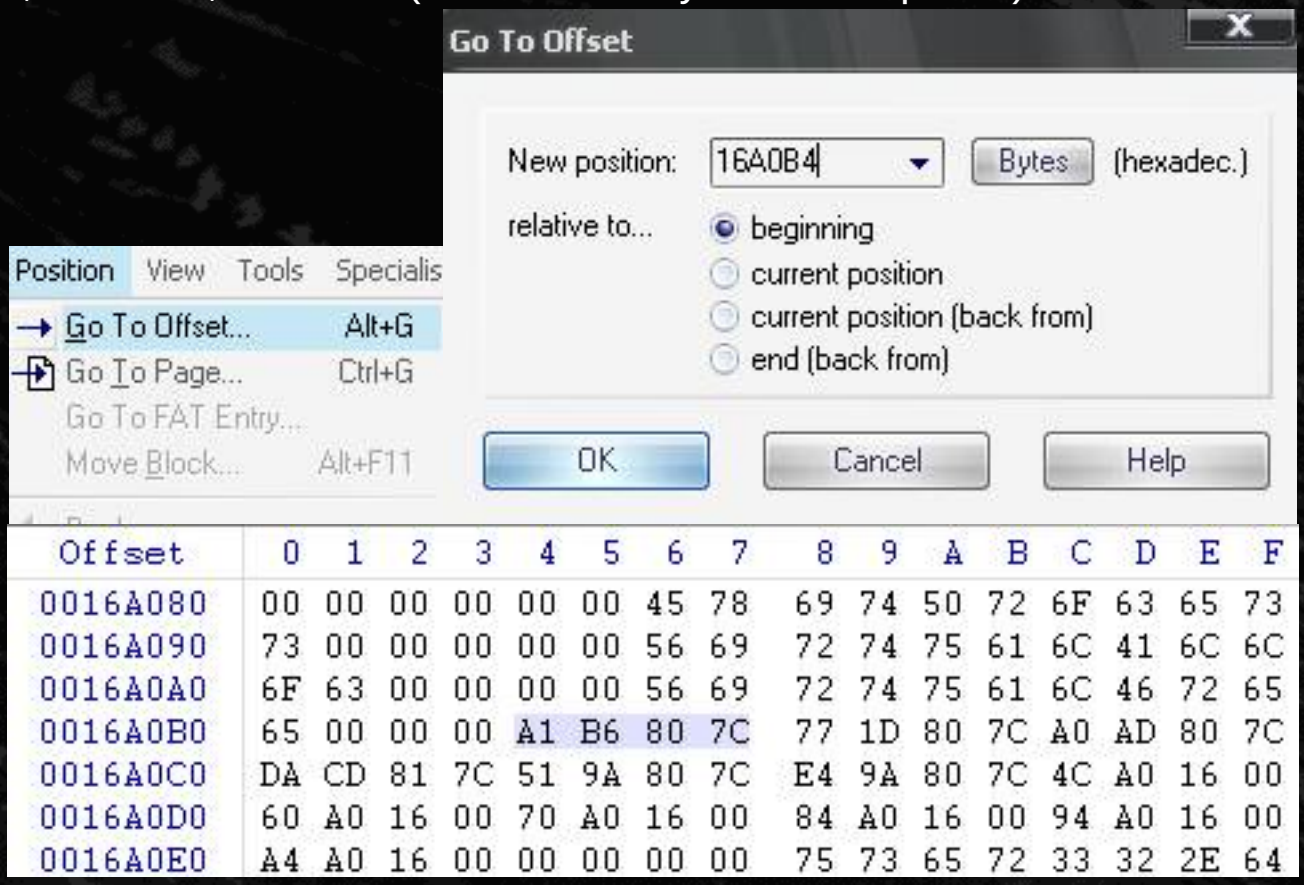
```
Search for differences

1. C:\Program Files\MultiTranse\MultiTranse_Dumped_.exe:
2. C:\Program Files\MultiTranse\MultiTranse_DumpSP1_.exe:
Offsets: hexadec.

16A0B4: A1  86
16A0B5: B6  AD
16A0B6: 80  E7
16A0B7: 7C  77
16A0B8: 77  61
16A0B9: 1D  D9
16A0BA: 80  E7
16A0BB: 7C  77
16A0BC: A0  32
16A0BD: AD  B3
16A0BE: 80  E7
16A0BF: 7C  77
16A0C0: DA  FD
16A0C1: CD  98
```

But does not mean that we will patch 242 positions. We must patch by the following case:

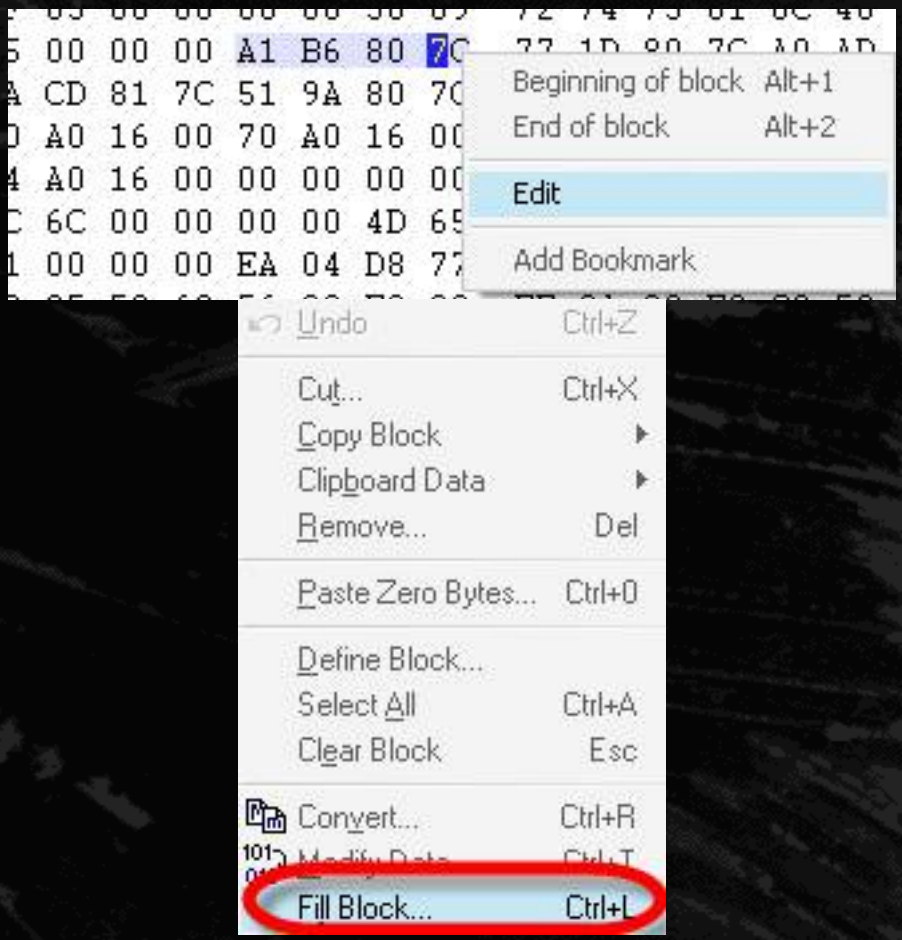
Case 1: 0 A 3
Case 2: 4 a 7
Case 3: A B 8
Case 4: C à F

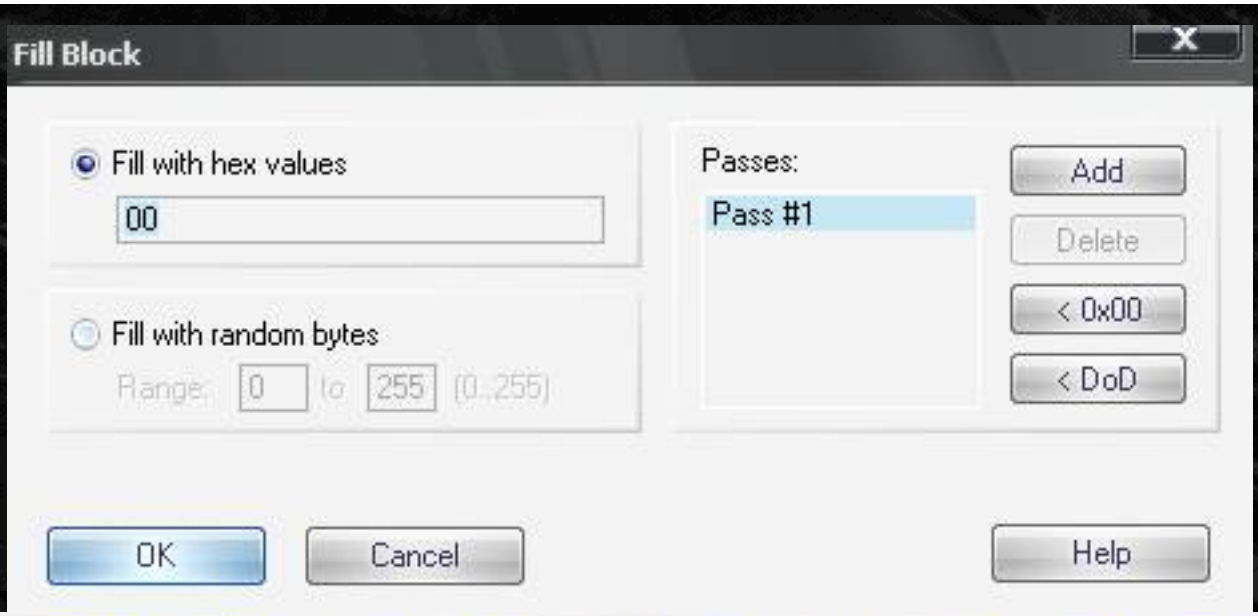
That is we must always fill full 1 DWORD (4 bytes) by the address above.
Retrieved from 1 Examples:
We see 16A0B4 is no difference of bytes, the number of rows in the address

of 4 case that is under 2, we will Fill 00 at 4 bytes in position 16A0B4, 16A0B5, 16A0B6, 16A0B7 (used to always Winhex patch):



Patch:





Offset	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0016A080	00	00	00	00	00	00	45	78	69	74	50	72	6F	63	65	73
0016A090	73	00	00	00	00	00	56	69	72	74	75	61	6C	41	6C	6C
0016A0A0	6F	63	00	00	00	00	56	69	72	74	75	61	6C	46	72	65
0016A0B0	65	00	00	00	00	00	00	00	77	1D	80	7C	A0	AD	80	7C
0016A0C0	DA	CD	81	7C	51	9A	80	7C	E4	9A	80	7C	4C	A0	16	00
0016A0D0	60	A0	16	00	70	A0	16	00	84	A0	16	00	94	A0	16	00
0016A0E0	A4	A0	16	00	00	00	00	00	75	73	65	72	33	32	2E	64

With the remaining position, you feel the Offset Goto, to black, Ctrl-L and OK is completed.

Trick will be to some more examples:

At 16A0B8 (case 3), fill 00 in 16A0B8, 16A0B9, 16A0BA, 16A0BB:

Offset	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
0016A080	00	00	00	00	00	00	45	78	69	74	50	72	6F	63	65	73
0016A090	73	00	00	00	00	00	56	69	72	74	75	61	6C	41	6C	6C
0016A0A0	6F	63	00	00	00	00	56	69	72	74	75	61	6C	46	72	65
0016A0B0	65	00	00	00	00	00	00	00	00	00	00	00	A0	AD	80	7C
0016A0C0	DA	CD	81	7C	51	9A	80	7C	E4	9A	80	7C	4C	A0	16	00
0016A0D0	60	A0	16	00	70	A0	16	00	84	A0	16	00	94	A0	16	00

... ...

... ...

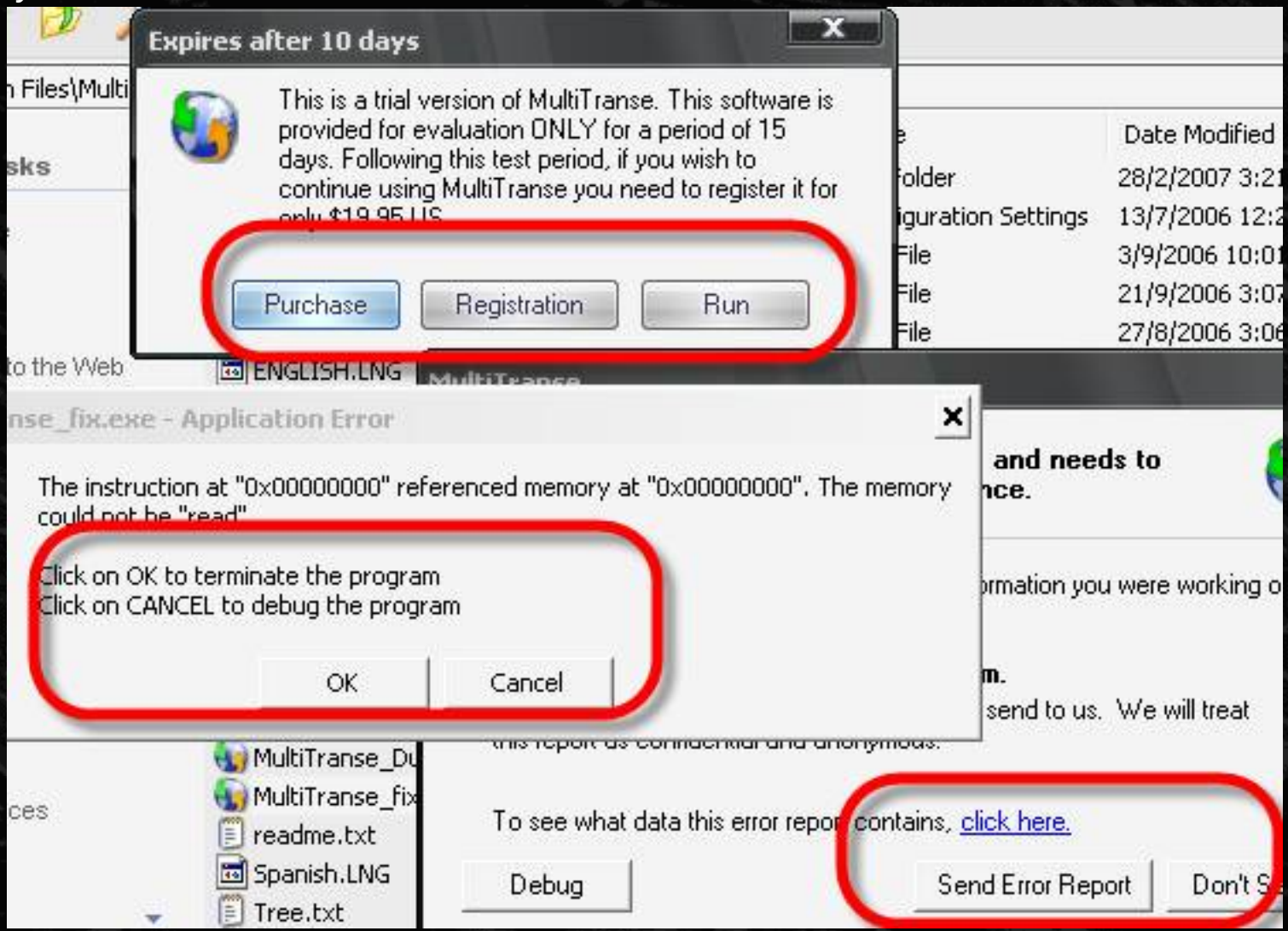
At 21941E (case 4) fill 00 at 21941C, 21941D, 21941E, 21941F:

Offset	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
00219400	01	E9	5B	B6	FD	FF	E9	28	AE	F5	FF	E9	9A	8F	FB	FF
00219410	37	74	64	1B	63	2E	46	D8	B1	00	B4	ED	00	00	00	00
00219420	E8	3F	13	FF	FF	4D	A2	29	09	F6	05	10	56	E9	A3	86
00219430	FE	FF	22	46	00	00	00	00	E9	BA	77	FC	FF	E9	33	1C
00219440	FC	FF	8B	CC	81	C1	10	00	00	00	8B	09	C7	01	13	00

... ...

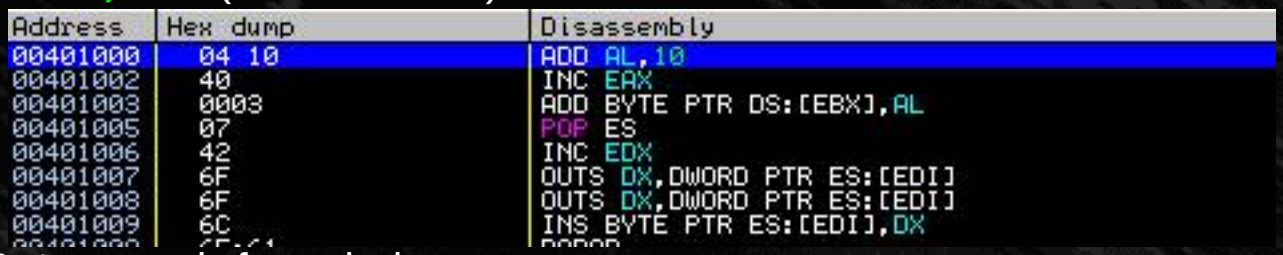
Every fill out is finished. Remember to fill the 4 on the case, to avoid cases

of mistaken Fill 00 on the E, F, 0.1 or 2,3,4,5. And always Fill each of 4 bytes, if the same address each other's case (as 16A0B4, 16A0B5) fill the first 1 is enough. You will wonder why the fill the 4 case so beautiful? Also it is in execryptor save bytes that the only beautiful too. According to the test of trick Zip Repair Tool 3.2 and how to fill the MultiTrans this good work. Subliminal than you can really code 1 tool and compare itself to fill 00 (based on 4 case made trick). Remember that if the Winhex used in this article, you must Goto and Fill out 76 times. Trick has saved text file 1, the address filter trick was to sit back and count the full 76 correct line.
Fix finished Save nhé remember, do not have hì huc over 76 times that immediately close the contract. Now we take with the file via WinSP1 that any run on SP2 to see how this:



Soft Trial NAG still does demonstrate a good run but it comes with 2 errors ... hix hix, probably not fix this principle do wrong? Because the trick was done successfully on the Zip Repair Tool. Sure sure ... that considered, Zip Repair Tool no CRC check, but this month to know where it is, because when you fix Byte Such changes content when compared with their dump file, but this sure CRC byte is stored back in time to dump it will not show

NAG error if you run only dump file does not fix that.
Okie, items such as small trick has written, we Load file to fix this new Olly,
Goto to **401,000** (section code):



Ctrl-B Byte search form below:

To place and is unique:

Patch of 1:

Save the file. File and run very mượt but not hú error.

Last night to try other machines (typically other SP1). File will make you happy: D
So the fix is a complete file to run on any computer. Too oải always pa k0n hen. However, though ...;)), the main issue is completed, trick adds about sub nè. We share the same over the next ...

V. Find Place Of Real OEP:

We return to Encrypt OEP, who have questions why the special trick name like or do?

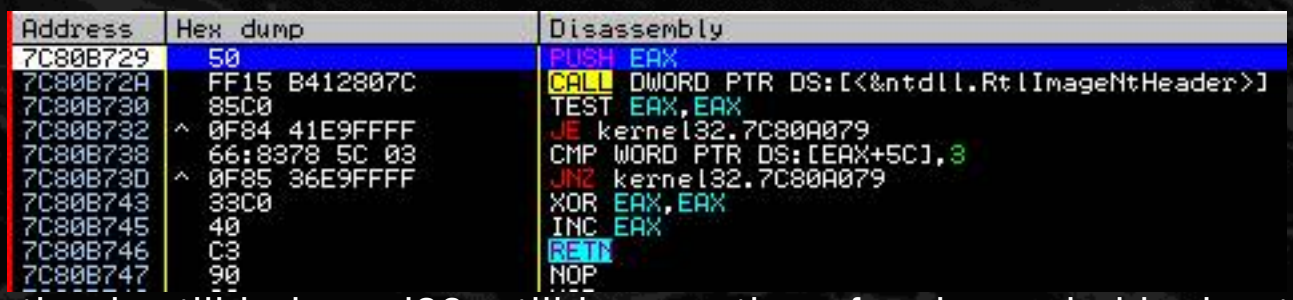
1 OEP always true meaning to the section in the code (in this section is code). But the EP we found in the section decrypt - the results returned from the script bypass antidebug. Therefore it can not be OEP or we call in the other tut. This thinking has to encrypt it in real OEP. Now we will find its position to see why.
Soft with this code Delphi :

So GetModuleHandleA jaw jaw is always the first call. We set "BP GetModuleHandleA":

Shift-F9 and break:

Address	Hex dump	Disassembly
7C80B6A1	8BFF	MOV EDI,EDI
7C80B6A3	55	PUSH EBP
7C80B6A4	8BEC	MOV EBP,ESP
7C80B6A6	837D 08 00	CMP DWORD PTR SS:[EBP+8],0
7C80B6AA	74 18	JE SHORT kernel32.7C80B6C4
7C80B6AC	FF75 08	PUSH DWORD PTR SS:[EBP+8]
7C80B6AF	E8 C0290000	CALL kernel32.7C80E074
7C80B6B4	85C0	TEST EAX,EAX
7C80B6B6	74 08	JE SHORT kernel32.7C80B6C0
7C80B6B8	FF70 04	PUSH DWORD PTR DS:[EAX+4]
7C80B6BB	E8 7D2D0000	CALL kernel32.GetModuleHandleW
7C80B6C0	5D	POP EBP
7C80B6C1	C2 0400	RETN 4

For Return of



Address	Hex dump	Disassembly
7C80B729	50	PUSH EAX
7C80B72A	FF15 B412807C	CALL DWORD PTR DS:[<&ntdll.RtlImageNtHeader>]
7C80B730	85C0	TEST EAX,EAX
7C80B732	0F84 41E9FFFF	JE kernel32.7C80A079
7C80B738	66:8378 5C 03	CMP WORD PTR DS:[EAX+5C],3
7C80B73D	0F85 36E9FFFF	JNZ kernel32.7C80A079
7C80B743	33C0	XOR EAX,EAX
7C80B745	40	INC EAX
7C80B746	C3	RETN
7C80B747	90	NOP

This section is still in kernel32, still less section of code, probably due to encrypt the above, we continue to Shift-F9 to break, and return:

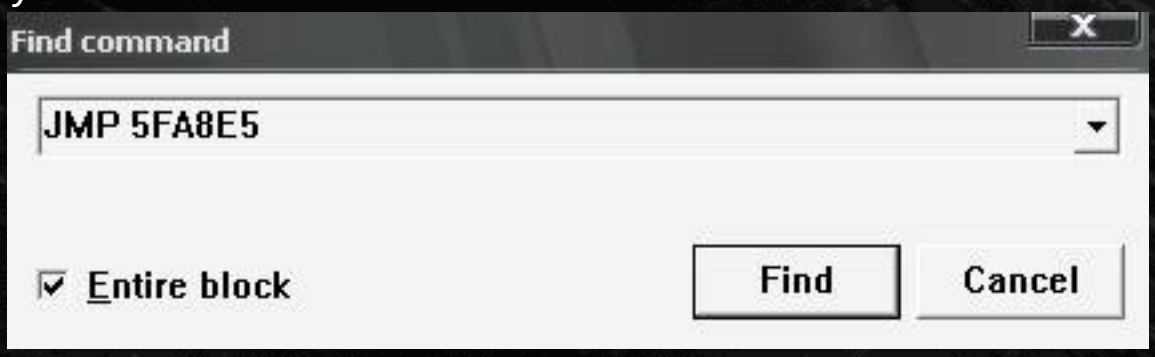
```
00406D83    90              NOP
00406D84  .  53             PUSH EBX
00406D85  .  8BD8           MOV EBX,EAX
00406D87  .  33C0           XOR EAX,EAX
00406D89  .  A3 10375600    MOV DWORD PTR DS:[563710],EAX
00406D8E  .  6A 00          PUSH 0
00406D90  .  E8 2BFFFFFF    CALL <JMP.&kernel32.GetModuleHandleA>
00406D95  .  A3 18375600    MOV DWORD PTR DS:[563718],EAX
00406D9A  .  A1 18375600    MOV EAX,DWORD PTR DS:[563718]
00406D9F  .  A3 94705500    MOV DWORD PTR DS:[557094],EAX
00406DA4  .  33C0           XOR EAX,EAX
00406DA6  .  A3 98705500    MOV DWORD PTR DS:[557098],EAX
00406DAB  .  33C0           XOR EAX,EAX
00406DAD  .  A3 9C705500    MOV DWORD PTR DS:[55709C],EAX
00406DB2  .  E8 C1FFFFFF    CALL MultiTra.00406D78
00406DB7  .  BA 90705500    MOV EDX,MultiTra.00557090
00406DBC  .  8BC3           MOV EAX,EBX
00406DBE  .  E8 31D5FFFF    CALL MultiTra.004042F4
00406DC3  .  5B             POP EBX
00406DC4  .  C3             RETN
00406DC5     8D40 00        LEA EAX,DWORD PTR DS:[EAX]
```

Correct form is the familiar functions of Delphi . But when Ctrl-A to Analyze, we see that the first function is not to find a call to:

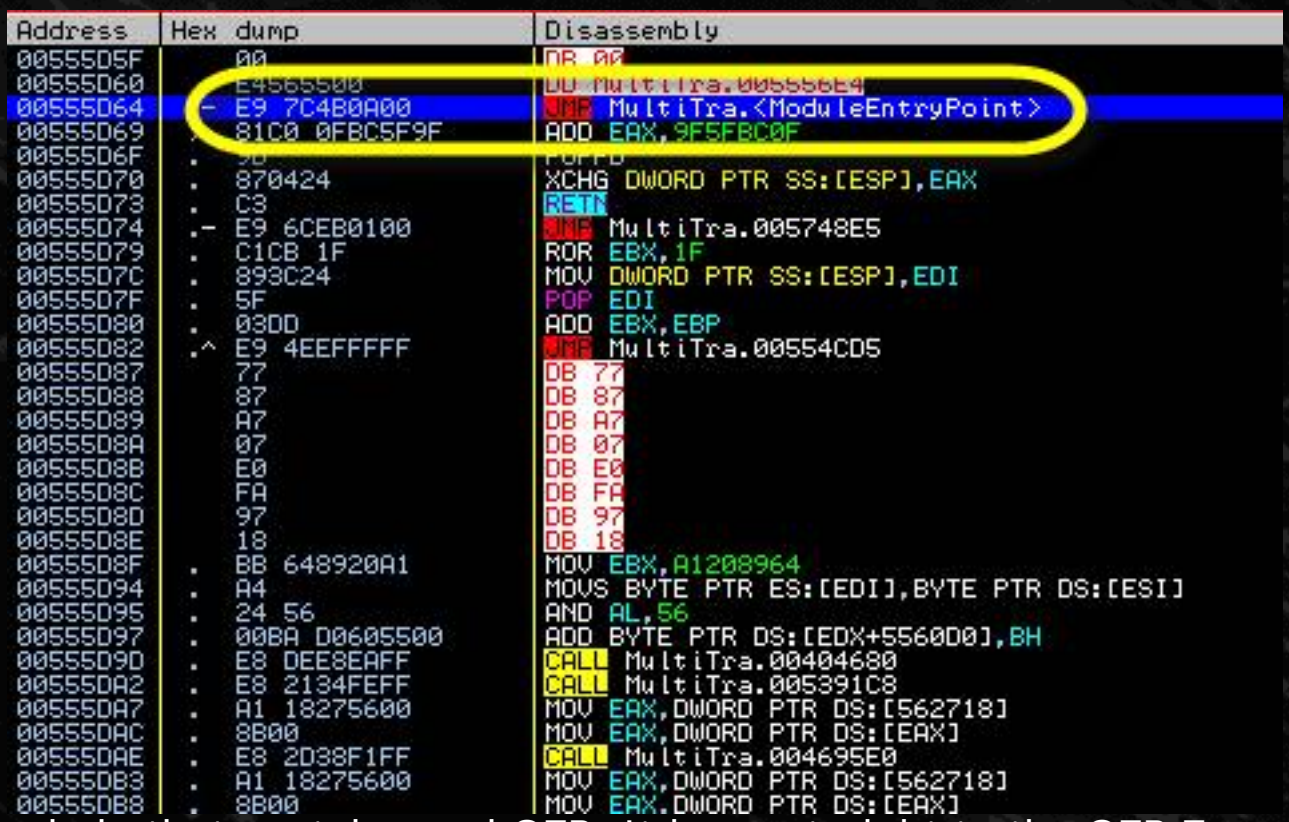
```
00406D84  .  53             PUSH EBX
00406D87  .  33C0           XOR EAX,EAX
00406D89  .  A3 10375600    MOV DWORD PTR DS:[563710],EAX
00406D8E  .  6A 00          PUSH 0
00406D90  .  E8 2BFFFFFF    CALL <JMP.&kernel32.GetModuleHandleA>
00406D95  .  A3 18375600    MOV DWORD PTR DS:[563718],EAX
00406D9A  .  A1 18375600    MOV EAX,DWORD PTR DS:[563718]
00406D9F  .  A3 94705500    MOV DWORD PTR DS:[557094],EAX
00406DA4  .  33C0           XOR EAX,EAX
00406DA6  .  A3 98705500    MOV DWORD PTR DS:[557098],EAX
00406DAB  .  33C0           XOR EAX,EAX
00406DAD  .  A3 9C705500    MOV DWORD PTR DS:[55709C],EAX
00406DB2  .  E8 C1FFFFFF    CALL MultiTra.00406D78
00406DB7  .  BA 90705500    MOV EDX,MultiTra.00557090
00406DBC  .  8BC3           MOV EAX,EBX
00406DBE  .  E8 31D5FFFF    CALL MultiTra.004042F4
00406DC3  .  5B             POP EBX
00406DC4  .  C3             RETN
00406DC5     8D40 00        LEA EAX,DWORD PTR DS:[EAX]
00406DC8  .  55             PUSH EBP
00406DC9  .  8BEC           MOV EBP,ESP
00406DCB  .  33C0           XOR EAX,EAX
```

Nothing

Ham called to this always is very close to OEP. And do not see here prove it has been canceled. From this base also showed that the OEP is not only encrypt the stolen bytes more. May 1 star fast way to find placements for this case, that's Offset Encrypt OEP is **5FA8E5.** I pull up the section code, at 401,000, by search command:



And then:



```
Address   Hex dump          Disassembly
00555D5F      00            DB 00
00555D60      E4565500      DD MultiTra.005556E4
00555D64  - E9 7C4B0A00     JMP MultiTra.<ModuleEntryPoint>
00555D69  . 81C0 0FBC5F9F   ADD EAX,9F5FBC0F
00555D6F  .  9D             POPFD
00555D70  .  870424         XCHG DWORD PTR SS:[ESP],EAX
00555D73  .  C3             RETN
00555D74  .- E9 6CEB0100    JMP MultiTra.005748E5
00555D79  .  C1CB 1F        ROR EBX,1F
00555D7C  .  893C24         MOV DWORD PTR SS:[ESP],EDI
00555D7F  .  5F             POP EDI
00555D80  .  03DD           ADD EBX,EBP
00555D82  .^ E9 4EEFFFFF    JMP MultiTra.00554CD5
00555D87      77            DB 77
00555D88      87            DB 87
00555D89      A7            DB A7
00555D8A      07            DB 07
00555D8B      E0            DB E0
00555D8C      FA            DB FA
00555D8D      97            DB 97
00555D8E      18            DB 18
00555D8F  .   BB 648920A1   MOV EBX,A1208964
00555D94  .   A4            MOVS BYTE PTR ES:[EDI],BYTE PTR DS:[ESI]
00555D95  .   24 56         AND AL,56
00555D97  .   00BA D0605500 ADD BYTE PTR DS:[EDX+5560D0],BH
00555D9D  .   E8 DEE8EAFF   CALL MultiTra.00404680
00555DA2  .   E8 2134FEFF   CALL MultiTra.005391C8
00555DA7  .   A1 18275600   MOV EAX,DWORD PTR DS:[562718]
00555DAC  .   8B00          MOV EAX,DWORD PTR DS:[EAX]
00555DAE  .   E8 2D38F1FF   CALL MultiTra.004695E0
00555DB3  .   A1 18275600   MOV EAX,DWORD PTR DS:[562718]
00555DB8  .   8B00          MOV EAX,DWORD PTR DS:[EAX]
```

Position circle that contains real OEP. It jump straight to the OEP Encrypt 1 Dong cancel stolen heavy below. So the franchise that would restore the original byte back to you nhé. Trick you only want to distinguish between Encrypt and Stolen Byte. Encrypt the code is still to ensure implementation of the only things you will not understand it do (to analyze the many new products are). But the Stolen Byte code will actually be done in 1 elsewhere, can not run in the code was stolen. Therefore Encrypt having difficulty reading the code, having Stolen the dump file will do is run peacetime J .

VI.Why?

During the message, the trick has many questions that you may also be questions and try to respond. This 2 more questions and answers to supplement the full on.

1.Tai stars execryptor code to encrypt and compress new source?

- If only compress the code can be uncompress, and then very vulnerable dissambler / debug through tools such as IDA, WDASM, Olly ... So to encrypt the code again, so files can be even unpack the also difficult to xài the tool through the crack in the soft.

2.Tai stars execryptor to save Byte encoding based ImageBase modules, during each run, execryptor unpack all the code, data is the excess or ko?

- It is not excessive if the thẳng as we just sit unpack / dump out the soft. The code of the summary is to make the dump file can not run on other

machines.

VII.Ending:

The battle took place is quite long you nhỉ? May have replied to finish. trick please remind me again ", the understanding is limited but knowledge is unlimited," in this article can not be sure from many mistakes, wrong on the technical, or thinking about how to use words, you expect please comment directly yourself. In the patch with WinHex, before the patent is 1 patcher do here, you should also patch first hand, the patch will train you for the patience. Also thanks to patience and passion, can trick should write this article đấy.

Also sorry you always have to read through the article Stupid Execryptor - Small trick, trick the items written in 1 mood any settlement should be used in a lot from khiếm house D. Who can complain to the disregard for, hope is fixing dump has not done one more frustration. Welcome all!

Big thanks to:

All REA's members: Computer_Angel, Moonbaby, Zombie, hacnho, benina, kienmanowar, rongchaua, Deux, Merc, hoadongnoi, the_lighthouse, TQN, light.phoenix, hytkl, tlandn, hurt_heart, dzungltvn, Zoi, littleboy84, haule_nth, takada, Why not bar, iamidiot, Akira, dump, thienthandien, [kid], ...

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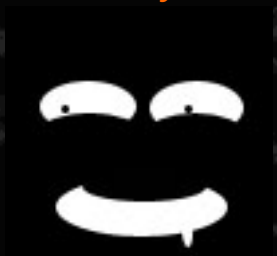
fly, stephenteh, Gabri3l, MaDMAn_H3rCuL3s, CondZero, Ricardo Narvaja + NCR, lena151, haggar, ARTeam, snd, RES, CrackLatinos, all unpack. cn ... Authors who created tools and you.



Trick Xi News - 2oo7

Stupid Execryptor - Small trick

(laughs stories - funny story)

I-Introduction:

Season to Valentine, the way people see dom we go deo Bong different players that play them, hix hix. The old well is not attractive to many emotions in the insurgent movement very ạ brother. The trick is they just opened down the mountain temple, she wrote a letter to his situation, but men det ơi, the message written on a new hard work will, huhu, hours before hem with his situation zới of whether children who also belong to a " the country flavor heaven. " But after the application of capital lieng literature 5 points of the children, they also finished a man for her show, part of which he / she would like background music accompanied by the web. Mò also to open a 1 out of MIDI or rather, from the legs of nghenhac. info background music, blogs that it affected only play MP3 new pain, the children find the loay hoay-sop we convert from MIDI the MP3. Asked by children from radish MIDI the other file formats lem, the sop dom, tit sop, not a time trial and limit function. Damn damn.
Then she is the guy "Direct MIDI to MP3 Converter. This guy or excellent, playing from MIDI convert the format mí lun. (Ho Ho, he stopped nghiu we are brothers and experience, this child walking xí xon xì information lem lem, hem them know they should do more or GAY hi hi)
But he ơi heaven, what does it feel NAG Trial hoài Ah, we make them mud. May stars func hem it can limit, they convert complete connection,

play blog lickerish ơi. Now dom sop to the hands itch itch again. The mouse is the mò opened the "goods" of children. Hix hix. The game is the start:

II-Identify:

3 results this enough to bring children 1 overall look:

So, enough conclusion it is stated in Execryptor oi (PeiD as sources of UPX, the hash name section, and at least 1 results in true RDG 0.6.5)

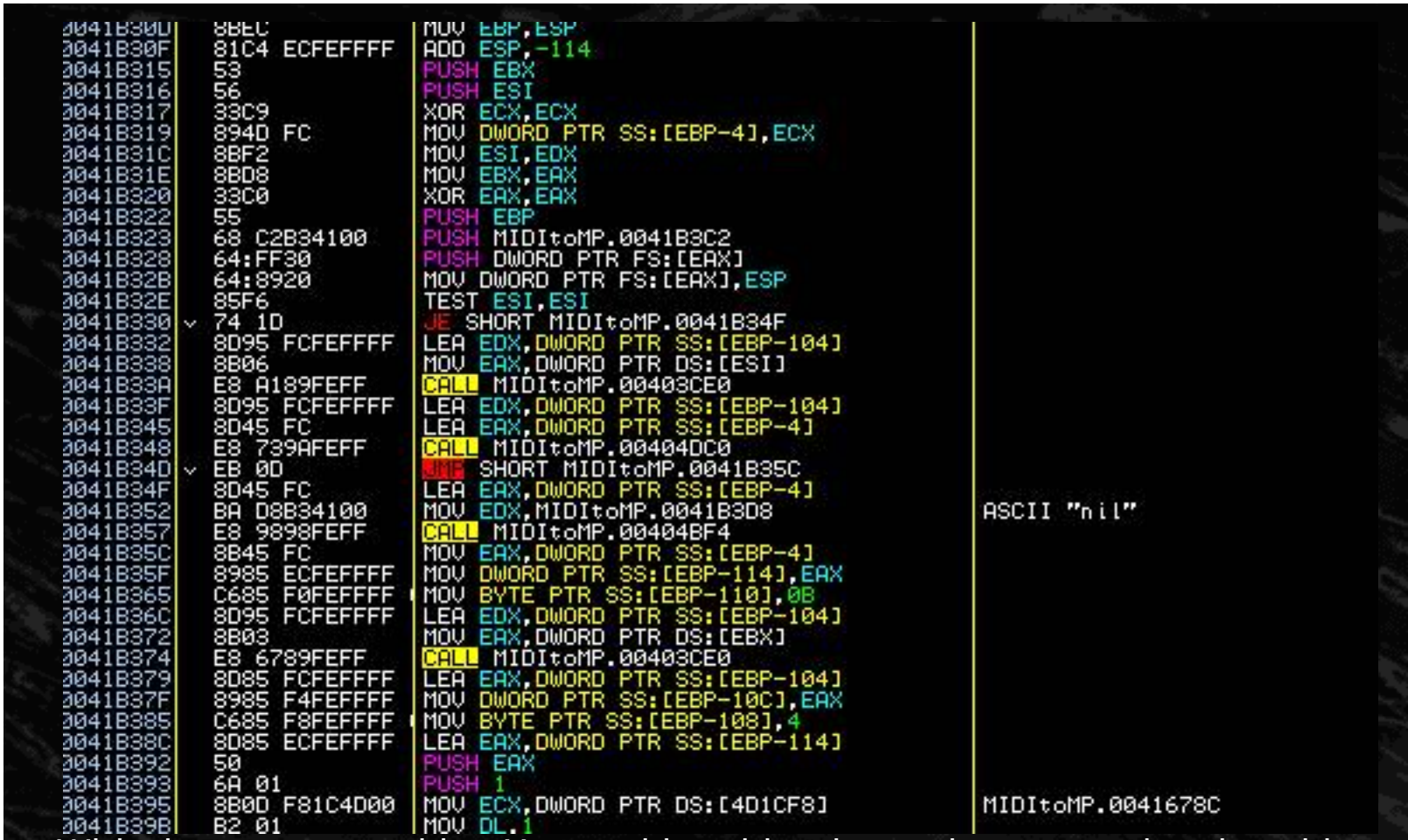
III-man meat:

Call, the life it khốn the suffering, he hands itch to play right on the wild he will lose them under consideration. In the first hour that they have skin in the execryptor they chit now. Yes "to" throw them all he's Why. Why that time of the foreign children receive meals tum lum wife should hate firing home, wandering forever photos should not know where to find images tissue. May only know how incorporates time images back to life for children should also think that this little tí.
Yet, they load into Olly, it contracted pa it. Ah, I remember why he has the sound check System breakpoint. I just break it and will shrink to climb if they continue RUN RUN RUN. Recognizing that he execryptor right of the U.S. Olly.
But little of it is luck, brother-dom to the this:

Recognizing that information should not Detector 100% but who have thec mec is how it is that Borland Delphi hem. Hi hi, so every load of children with Olly Breakpoint System, of course break here:

Address	Hex dump	Disassembly
7C901231	C3	RETN
7C901232	8BFF	MOV EDI,EDI
7C901234	90	NOP
7C901235	90	NOP
7C901236	90	NOP
7C901237	90	NOP
7C901238	90	NOP
7C901239	CC	INT3
7C90123A	C3	RETN

Now they fly and he nhé, to 401,000 vẹo section of code. Then she pulled down within walking 1:



With the eyes wen phin xXx considered by them, they recognize that this month it has Cuc pack as the section CODE sop to protect all types execryptor. That is when you run, it's not unpack code in memory. So, also it only wants to Execryptor 2 things:

+ Based quite the Anti-Debug Execryptor's very strong for Olly
+ Borrowing the junk code kì very difficult to analyze by execryptor 1 to encrypt the original code.

To the temporary enough, they believe is right to recognize the RDG is sop using Borland Delphi. According Why, photos Khoai GetModuleHandleA the very function, from which the image to open up OEP. She is quite thick, they risk execryptor thought it right to cancel immediately threaten the IAT will? I find OEP Borland's way of goof. She tuốt populations ... I flipped, she tuốt luot thanh truoc down bottom section code:

Address	Hex dump	Disassembly
004CFFC2	0000	ADD BYTE PTR DS:[EAX],AL
004CFFC4	0000	ADD BYTE PTR DS:[EAX],AL
004CFFC6	0000	ADD BYTE PTR DS:[EAX],AL
004CFFC8	0000	ADD BYTE PTR DS:[EAX],AL
004CFFCA	0000	ADD BYTE PTR DS:[EAX],AL
004CFFCC	0000	ADD BYTE PTR DS:[EAX],AL
004CFFCE	0000	ADD BYTE PTR DS:[EAX],AL
004CFFD0	0000	ADD BYTE PTR DS:[EAX],AL
004CFFD2	0000	ADD BYTE PTR DS:[EAX],AL
004CFFD4	0000	ADD BYTE PTR DS:[EAX],AL
004CFFD6	0000	ADD BYTE PTR DS:[EAX],AL
004CFFD8	0000	ADD BYTE PTR DS:[EAX],AL
004CFFDA	0000	ADD BYTE PTR DS:[EAX],AL
004CFFDC	0000	ADD BYTE PTR DS:[EAX],AL
004CFFDE	0000	ADD BYTE PTR DS:[EAX],AL
004CFFE0	0000	ADD BYTE PTR DS:[EAX],AL
004CFFE2	0000	ADD BYTE PTR DS:[EAX],AL
004CFFE4	0000	ADD BYTE PTR DS:[EAX],AL
004CFFE6	0000	ADD BYTE PTR DS:[EAX],AL
004CFFE8	0000	ADD BYTE PTR DS:[EAX],AL
004CFFEA	0000	ADD BYTE PTR DS:[EAX],AL
004CFFEC	0000	ADD BYTE PTR DS:[EAX],AL
004CFFEE	0000	ADD BYTE PTR DS:[EAX],AL
004CFFF0	0000	ADD BYTE PTR DS:[EAX],AL
004CFFF2	0000	ADD BYTE PTR DS:[EAX],AL
004CFFF4	0000	ADD BYTE PTR DS:[EAX],AL
004CFFF6	0000	ADD BYTE PTR DS:[EAX],AL
004CFFF8	0000	ADD BYTE PTR DS:[EAX],AL
004CFFFA	0000	ADD BYTE PTR DS:[EAX],AL
004CFFFC	0000	ADD BYTE PTR DS:[EAX],AL
004CFFFE	0000	ADD BYTE PTR DS:[EAX],AL

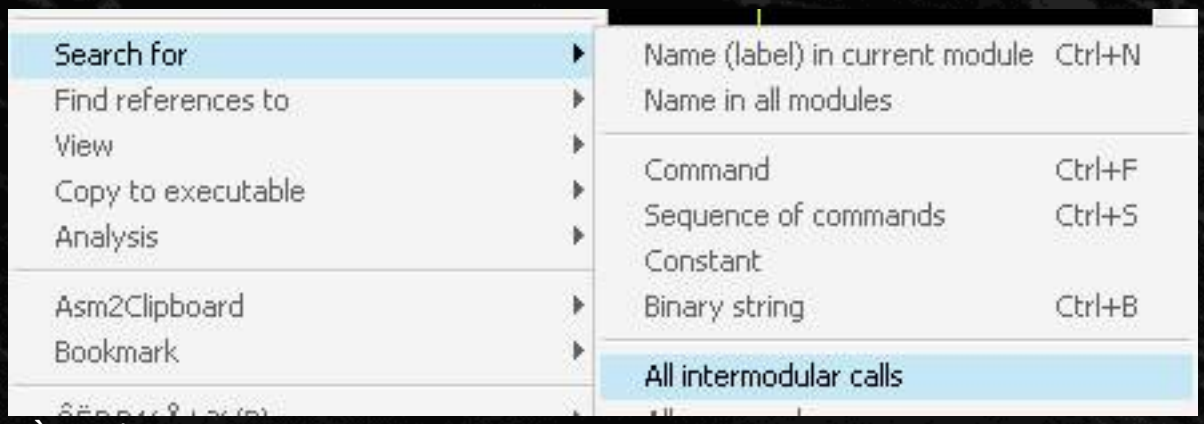
Then they try to pull from to see the code:

Address	Hex dump	Disassembly
004CFA6F	0014F7	ADD BYTE PTR DS:[EDI+ESI*8],DL
004CFA72	4C	DEC ESP
004CFA73	0055 8B	ADD BYTE PTR SS:[EBP-75],DL
004CFA76	EC	IN AL,DX
004CFA77	83C4 F0	ADD ESP,-10
004CFA7A	53	PUSH EBX
004CFA7B	B8 3CF74C00	MOV EAX,MIDItoMP.004CF73C
004CFA80	E8 A373F3FF	CALL MIDItoMP.00406E28
004CFA85	8B1D 581E4D00	MOV EBX,DWORD PTR DS:[4D1E58]
004CFA8B	8B03	MOV EAX,DWORD PTR DS:[EBX]
004CFA8D	E8 3E6DFBFF	CALL MIDItoMP.004867D0
004CFA92	8B03	MOV EAX,DWORD PTR DS:[EBX]
004CFA94	BA 6CFB4C00	MOV EDX,MIDItoMP.004CFB6C
004CFA99	E8 1A69FBFF	CALL MIDItoMP.004863B8
004CFA9E	8B0D A01B4D00	MOV ECX,DWORD PTR DS:[4D1BA0]
004CFAA4	8B03	MOV EAX,DWORD PTR DS:[EBX]
004CFAA6	8B15 A0AB4C00	MOV EDX,DWORD PTR DS:[4CABA0]
004CFAAC	E8 376DFBFF	CALL MIDItoMP.004867E8
004CFAB1	8B0D D41B4D00	MOV ECX,DWORD PTR DS:[4D1BD4]
004CFAB7	8B03	MOV EAX,DWORD PTR DS:[EBX]
004CFAB9	8B15 D8F04B00	MOV EDX,DWORD PTR DS:[4BF0D8]
004CFABF	E8 246DFBFF	CALL MIDItoMP.004867E8
004CFAC4	8B0D 74204D00	MOV ECX,DWORD PTR DS:[4D2074]
004CFACA	8B03	MOV EAX,DWORD PTR DS:[EBX]
004CFACC	8B15 E40F4C00	MOV EDX,DWORD PTR DS:[4C0FE4]
004CFAD2	E8 116DFBFF	CALL MIDItoMP.004867E8
004CFAD7	8B0D D01F4D00	MOV ECX,DWORD PTR DS:[4D1FD0]
004CFADD	8B03	MOV EAX,DWORD PTR DS:[EBX]

UI skin, so they see this right here is Delphi , As part of the EP sop in Borland Delphi or is in the last section CODE lem. Dom's hem brothers know what it thinks Stolen Byte hông hen? Cok a monkey at all, because you have not Analyze for Olly thui. What he hit Ctrl-A to help children hen:

Address	Hex dump	Disassembly
004CFA6D	00	DB 00
004CFA6E	00	DB 00
004CFA6F	00	DB 00
004CFA70	14F74C00	DD MIDItoMP.004CF714
004CFA74 .	55	PUSH EBP
004CFA75 .	8BEC	MOV EBP,ESP
004CFA77 .	83C4 F0	ADD ESP,-10
004CFA7A .	53	PUSH EBX
004CFA7B .	B8 3CF74C00	MOV EAX,MIDItoMP.004CF73C
004CFA80 .	E8 A373F3FF	CALL MIDItoMP.00406E28
004CFA85 .	8B1D 581E4D00	MOV EBX,DWORD PTR DS:[4D1E58]
004CFA8B .	8B03	MOV EAX,DWORD PTR DS:[EBX]
004CFA8D .	E8 3E6DFBFF	CALL MIDItoMP.004867D0
004CFA92 .	8B03	MOV EAX,DWORD PTR DS:[EBX]
004CFA94 .	BA 6CFB4C00	MOV EDX,MIDItoMP.004CFB6C
004CFA99 .	E8 1A69FBFF	CALL MIDItoMP.004863B8
004CFA9E .	8B0D A01B4D00	MOV ECX,DWORD PTR DS:[4D1BA0]
004CFAA4 .	8B03	MOV EAX,DWORD PTR DS:[EBX]
004CFAA6 .	8B15 A0AB4C00	MOV EDX,DWORD PTR DS:[4CABA0]
004CFAAC .	E8 376DFBFF	CALL MIDItoMP.004867E8
004CFAB1 .	8B0D D41B4D00	MOV ECX,DWORD PTR DS:[4D1BD4]
004CFAB7 .	8B03	MOV EAX,DWORD PTR DS:[EBX]
004CFAB9 .	8B15 D8F04B00	MOV EDX,DWORD PTR DS:[4BF0D8]
004CFABF .	E8 246DFBFF	CALL MIDItoMP.004867E8
004CFAC4 .	8B0D 74204D00	MOV ECX,DWORD PTR DS:[4D2074]

Life begins with little light camera hen, OEP am now vet Asia. Now you mò IAT nhe. Mí foggy What type is, they are mò function probably due to them in section mu CODE:



1 Dong nè out:

Address	Disassembly	Destination
004CC8A4	CALL <JMP.&bass.BASS_Stop>	bass.BASS_Stop
004CC8B8	CALL <JMP.&bass.BASS_StreamFree>	bass.BASS_StreamFree
004CC8BD	CALL <JMP.&bass.BASS_Free>	bass.BASS_Free
004CCA4C	CALL <JMP.&shell32.DragQueryFileA>	shell32.DragQueryFileA
004CCA69	CALL <JMP.&shell32.DragQueryFileA>	shell32.DragQueryFileA
004CCA95	CALL <JMP.&shell32.DragFinish>	shell32.DragFinish
004CCC26	CALL <JMP.&shell32.ShellExecuteA>	shell32.ShellExecuteA
004CCC4E	CALL <JMP.&shell32.ShellExecuteA>	shell32.ShellExecuteA
004CCCF6	CALL <JMP.&shell32.ShellExecuteA>	shell32.ShellExecuteA
004CD3CA	CALL <JMP.&bass.BASS_Init>	bass.BASS_Init
004CD3F1	CALL <JMP.&bass.BASS_Start>	bass.BASS_Start
004CD3FD	CALL <JMP.&bass.BASS_PluginLoad>	bass.BASS_PluginLoad
004CD409	CALL <JMP.&bass.BASS_PluginLoad>	bass.BASS_PluginLoad
004CDC91	CALL MIDItoMP.00567AEA	MIDItoMP.00567AEA
004CDD66	CALL <JMP.&bass.BASS_StreamFree>	bass.BASS_StreamFree
004CDD6E	CALL <JMP.&bass.BASS_StreamFree>	bass.BASS_StreamFree
004CDD88	CALL <JMP.&bassmidi.BASS_MIDI_StreamCre	bassmidi.BASS_MIDI_StreamCreateFile
004CDD9D	CALL <JMP.&bass_fx.BASS_FX_TempoCreate>	bass_fx.BASS_FX_TempoCreate
004CDE01	CALL <JMP.&bass.BASS_ChannelSetFX>	bass.BASS_ChannelSetFX
004CDE2F	CALL <JMP.&bass_fx.BASS_FX_TempoSet>	bass_fx.BASS_FX_TempoSet
004CDE39	CALL <JMP.&bass.BASS_ChannelPlay>	bass.BASS_ChannelPlay
004CDE44	CALL <JMP.&bass.BASS_ChannelGetLength>	bass.BASS_ChannelGetLength
004CDE51	CALL <JMP.&bass.BASS_ChannelBytes2Secon	bass.BASS_ChannelBytes2Seconds

She also ranked second hem itself as what quái, double-click function of 1 is:

```
004CCC37   .  6A 00              PUSH 0
004CCC39   .  A1 9C194D00        MOV EAX,DWORD PTR DS:[4D199C]
004CCC3E   .  E8 D983F3FF        CALL MIDItoMP.0040501C
004CCC43   .  50                 PUSH EAX
004CCC44   .  6A 00              PUSH 0
004CCC46   .  8BC3               MOV EAX,EBX
004CCC48   .  E8 53FBF9FF        CALL MIDItoMP.0046C7A0
004CCC4D   .  50                 PUSH EAX
004CCC4E   .  E8 6D57F6FF        CALL <JMP.&shell32.ShellExecuteA>
004CCC53   .  5B                 POP EBX
004CCC54   .  C3                 RETN
004CCC55      8D40 00            LEA EAX,DWORD PTR DS:[EAX]
```

The men they call this CALL:

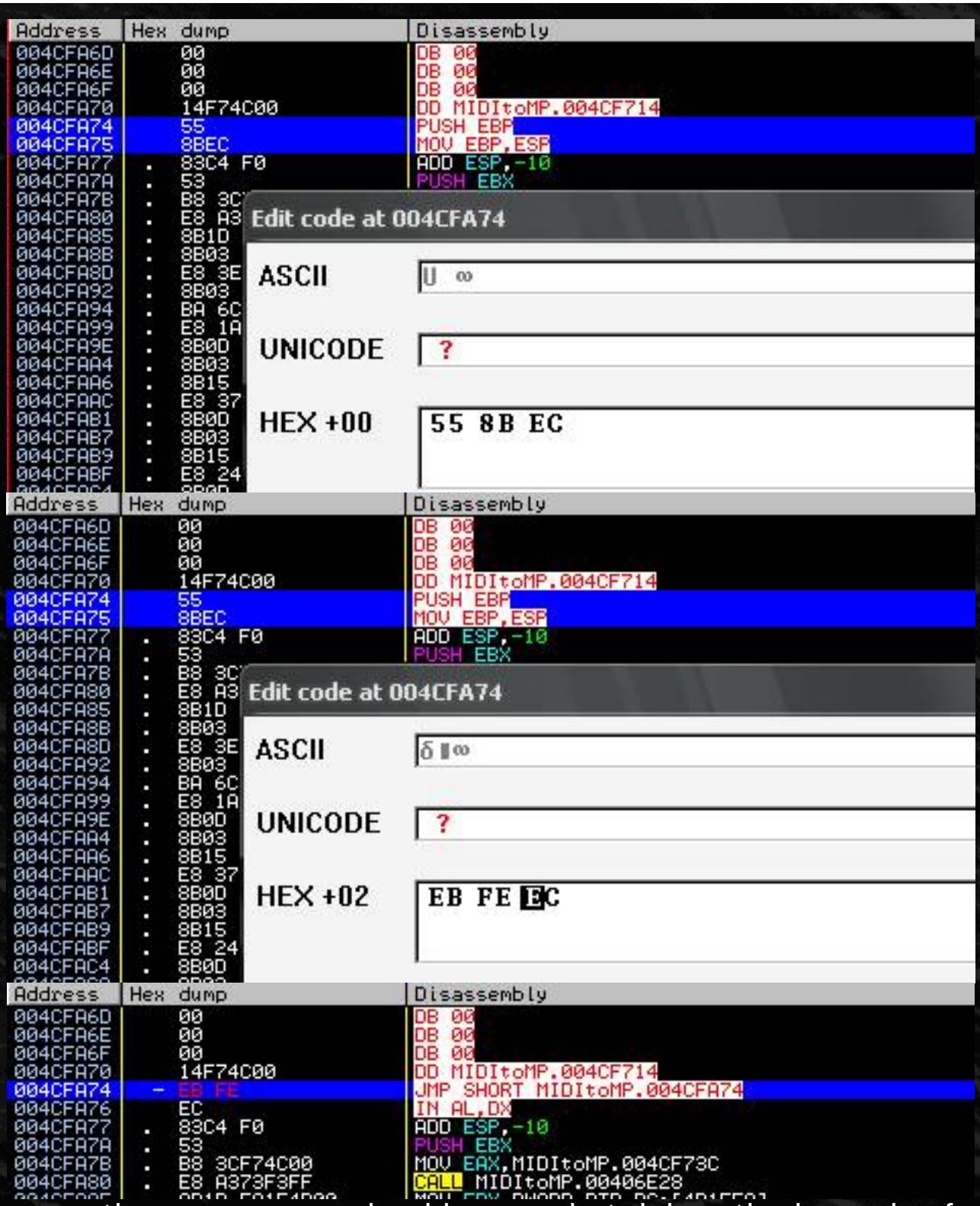
```
004323A0   .  832D 543A4D00 01   SUB DWORD PTR DS:[4D3A54],1
004323A7   .  C3                 RETN
004323A8   $- FF25 4C694D00      JMP DWORD PTR DS:[<&shell32.DragAcceptFiles>]
004323AE      8BC0               MOV EAX,EAX
004323B0   $- FF25 48694D00      JMP DWORD PTR DS:[<&shell32.DragFinish>]
004323B6      8BC0               MOV EAX,EAX
004323B8   $- FF25 44694D00      JMP DWORD PTR DS:[<&shell32.DragQueryFileA>]
004323BE      8BC0               MOV EAX,EAX
004323C0   $- FF25 40694D00      JMP DWORD PTR DS:[<&shell32.ShellExecuteA>]
004323C6      8BC0               MOV EAX,EAX
004323C8   .  55                 PUSH EBP
004323C9   .  8BEC               MOV EBP,ESP
```

Follow call them dump it in, 1 manipulate the very often, yes. I do all bromide hem ah, hix hix.:

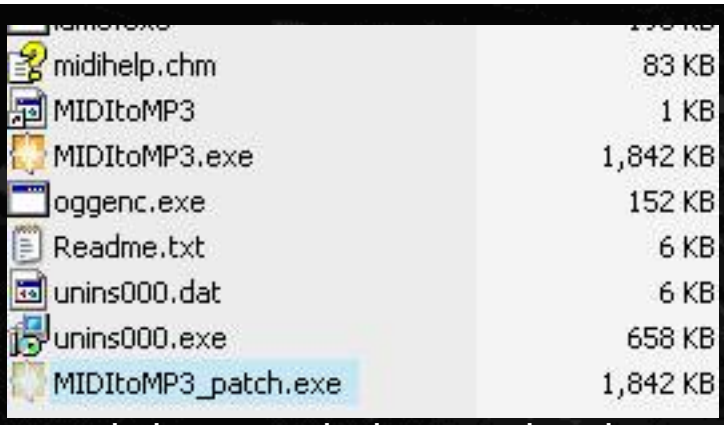
Address	Value	Comment
004D6260	7C801D4F	kernel32.LoadLibraryExA
004D6264	7C80A415	kernel32.GetThreadLocale
004D6268	7C801EEE	kernel32.GetStartupInfoA
004D626C	7C80ADA0	kernel32.GetProcAddress
004D6270	7C80B6A1	kernel32.GetModuleHandleA
004D6274	7C80B4CF	kernel32.GetModuleFileNameA
004D6278	7C80D262	kernel32.GetLocaleInfoA
004D627C	7C910331	ntdll.RtlGetLastWin32Error
004D6280	7C812F1D	kernel32.GetCommandLineA
004D6284	7C80ABDE	kernel32.FreeLibrary
004D6288	7C8137D9	kernel32.FindFirstFileA
004D628C	7C80EDD7	kernel32.FindClose
004D6290	7C81CDDA	kernel32.ExitProcess
004D6294	7C810D87	kernel32.WriteFile
004D6298	7C862E62	kernel32.UnhandledExceptionFilter
004D629C	7C810B8E	kernel32.SetFilePointer
004D62A0	7C832044	kernel32.SetEndOfFile
004D62A4	7C937A40	ntdll.RtlUnwind
004D62A8	7C80180E	kernel32.ReadFile
004D62AC	7C812A09	kernel32.RaiseException
004D62B0	7C812F39	kernel32.GetStdHandle
004D62B4	7C810A77	kernel32.GetFileSize
004D62B8	7C810E51	kernel32.GetFileType
004D62BC	7C801A24	kernel32.CreateFileA
004D62C0	7C809B47	kernel32.CloseHandle
004D62C4	00000000	
004D62C8	77D611B3	user32.GetKeyboardType
004D62CC	77D50FE8	user32.LoadStringA
004D62D0	77D804EA	user32.MessageBoxA
004D62D4	77D50F90	user32.CharNextA
004D62D8	00000000	
004D62DC	77DD7883	advapi32.RegQueryValueExA
004D62E0	77DD761B	advapi32.RegOpenKeyExA

I pull up, pull down, balls out of it enough way, to find hem START - END do anything that monkey Asia, they want it koai dom beautiful hem phone. Furcate they add it to a conclusion: COC has canceled IAT (IAT or hide, or what the sugarcane for the camera to the coin, other other) The children also do chả dump read, edit them into EP OEP they found, save the file in the Editor is PE. They run the packages, it automatically close now, they debug it reported spills Stack camera ạ. Tran hem I say

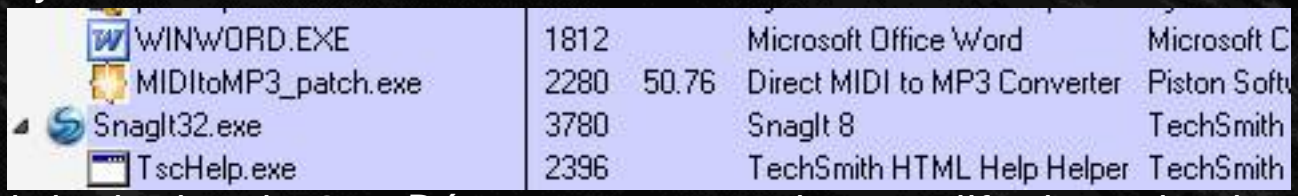
stack the pieces to xài again. My goodness, they love to hem execryptor is Đóa, that it can pack hem of the CODE section.
So they must think the other, they remember when you unpack what it should immediately Break OEP new dump, fix the IAT. Make sure they have done, and done wrong books too new to lose the pain. Error arising difficult to control. Ui that ơi choi, children have to debug the OEP nỗi, he said then, as he said execryptor by Olly that, subject to how it is to lose Olly. What he can not believe the PA tut unpack with Execryptor still there, some Western, he has not written all the cases protect the execryptor do tut dropped by more Đóa is to target some of the camera phone.
The children go to Vmware, have children in child nọc pork SoftIce in this, it is healthy or not they know hem but they heard SoftIce he is the father of the same with the other, he believes the Execryptor. Execryptor that he is the only so Olly and the SoftIce sure the statistics in this. I know the OEP so they just break in to SoftIce OEP is completed. But ... the complete break. Moa ơi, hem that they dump in SoftIce, xài IceExt as $ hit, it saved the file in 1000 Byte is also 1DA000 Size Image of this file it under hem. They only lose, sometimes NAG trial that does it in a garbage dump full of memory. So is she really tit ơi. I think their clothing is true because what the hem bik, also dump the hem bik they also stand for something.
Uiiiiiii ... yes you, now they hum uiiiiiiii bit more. At first they loe it out EP FE. 2 Byte khốn what should each of the Armadillo blankets ducks. Bik children than it is anything more but I see now that it debug it just jump right it. Do not know any statistics khùng out the orders of fiddling, but now they bik hem it is they have lost. What he has in mind is we opened immediately in OEP Olly without debug spent, but break at OEP in Olly the right is wá the imagination. However, we can he run the patch. The children return to OEP, they patch it:



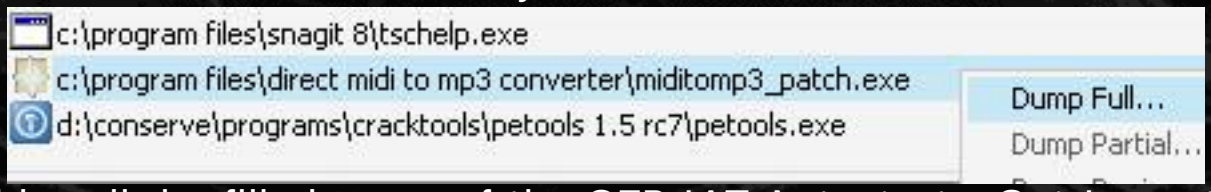
Call to save the camera, we should save what debug the hem also fear what where. Cameras bik they have just done what the hem Đóa What? Ah they just think that when it sop run hem Olly have it running mượt, who hem detect all, both the dump. Other other, so she repeats it at the OEP run, this means it is the break in when you debug OEP. So Đóa ơi camera, you do not wan the form is based in New Olly kill some of it he crack? byte patch Winhex this is also the right man said. That phone, they demonstrate what he saw for home, children run time just patch file:



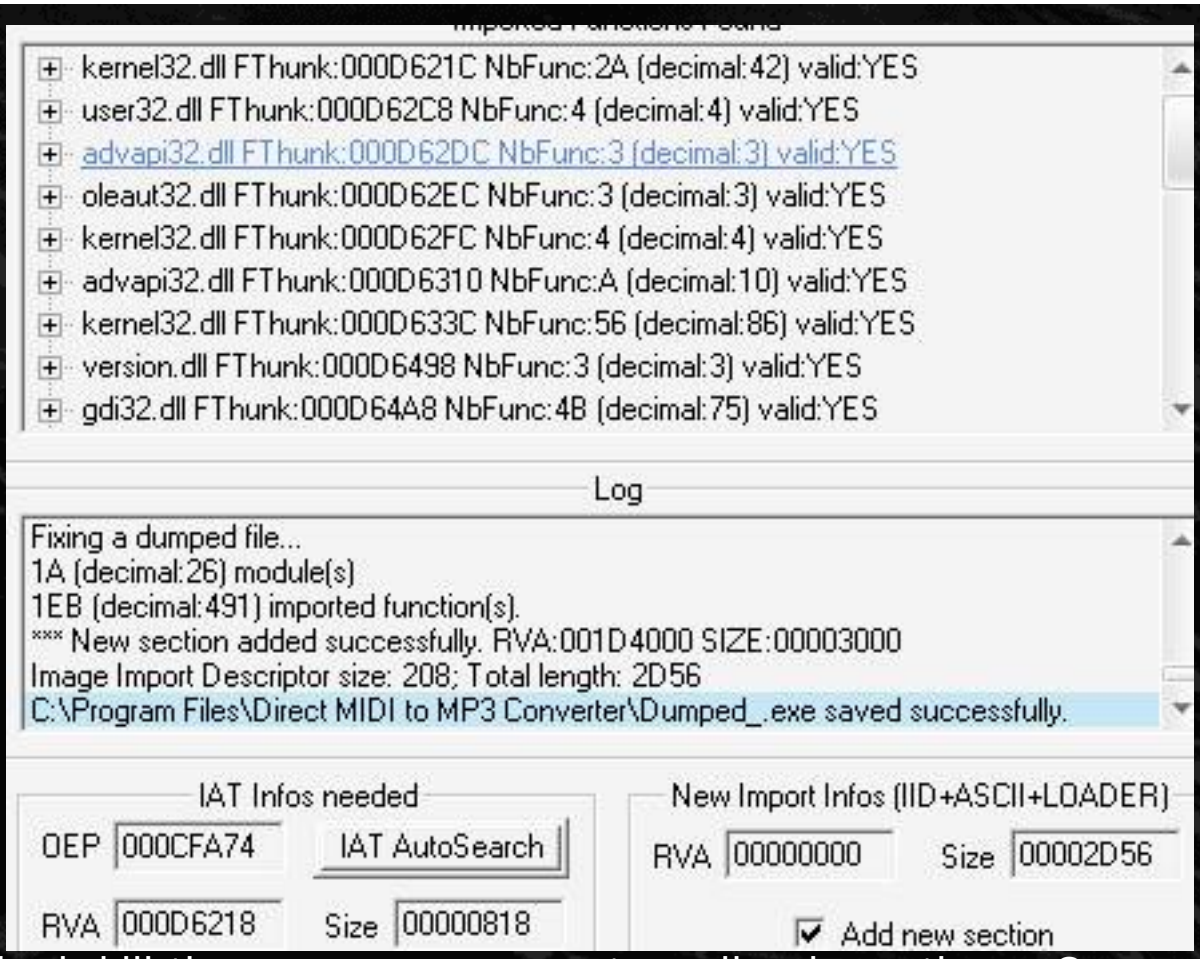
What he found more, and then run hok see what happens with all, but in memory still have it:



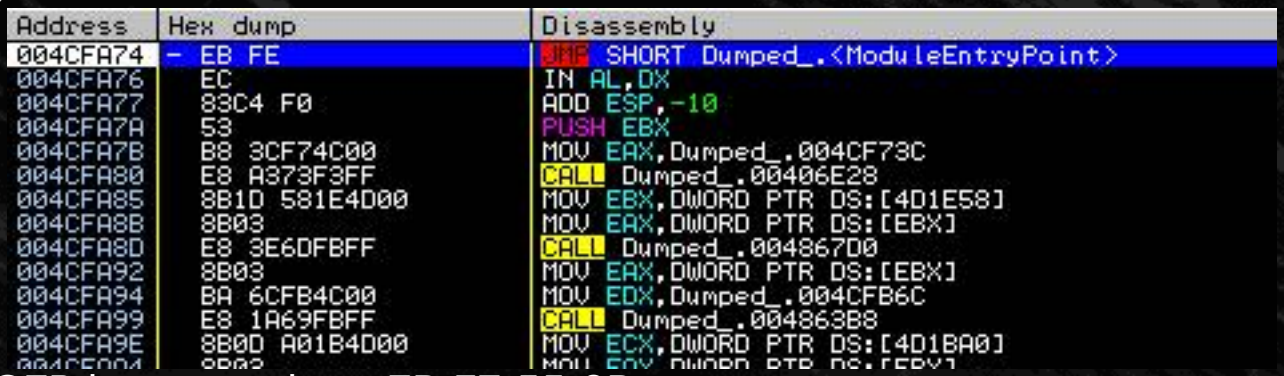
Hi hi, it is the last in OEP Đóa camera. Now they qualify dump books right then, what he means to use the dump for any use, not because xài LordPE detect it. But at the OEP Execryptor while it created some thread to detect tum lum should carefully home Camera:



IAT fix his call, he filled some of the OEP IAT Autostart - Get Import lickerish:



Fix finished, kill the process are repeats endlessly go there. Cameras drilling fix dump file to run for this month OEP also repeats, we load it on to Olly:



Mình OEP is correct is to EB FE 55 8B:

Save again. Call our brothers run nhen:

Ah not unpack expired where home is, in the child before it expired thui. Hi hi.May he used every Trial Reset is lickerish work. Services NAG the U. S. they lose. But suppose we close NAG, or even to run in, we also Exit is what happens:

Experience hem many children, but they again fossick in memory of corn cui children, why he has referred to CRC Check. I think this phone is it. I load the file to fix indefinite Olly. She pulled up the top truoc section code:

They call search form Byte later, this form automatically draws them all, his super-wan debug Why We, the children hok time:

How fortunate result is unique, if not only for the brothers when the search function in this form is Okie:

```
004A43C1   C3              RETN
004A43C2   8BC0            MOV EAX,EAX
004A43C4   832D 943C4D00 01  SUB DWORD PTR DS:[4D3C94],1
004A43CB   73 1A           JNB SHORT Dumped_f.004A43E7
004A43CD   E9 147B0E00     JMP Dumped_f.0058BEE6
004A43D2   68 C76D22A3     PUSH A3226DC7
004A43D7   5A              POP EDX
004A43D8   E9 D8D10100     JMP Dumped_f.004C15B5
004A43DD   04 2D           ADD AL,2D
004A43DF   02BD 27488D91   ADD BH,BYTE PTR SS:[EBP+918D4827]
004A43E5   863F            XCHG BYTE PTR DS:[EDI],BH
004A43E7   C3              RETN
```

It CRC check this place. They not only play raw bạo RETN as he Why, they change only 1 Byte:

```
004A43C1   C3              RETN
004A43C2   8BC0            MOV EAX,EAX
004A43C4   832D 943C4D00 01  SUB DWORD PTR DS:[4D3C94],1
004A43CB   EB 1A           JMP SHORT Dumped_f.004A43E7
004A43CD   E9 147B0E00     JMP Dumped_f.0058BEE6
004A43D2   68 C76D22A3     PUSH A3226DC7
004A43D7   5A              POP EDX
004A43D8   E9 D8D10100     JMP Dumped_f.004C15B5
004A43DD   04 2D           ADD AL,2D
004A43DF   02BD 27488D91   ADD BH,BYTE PTR SS:[EBP+918D4827]
004A43E5   863F            XCHG BYTE PTR DS:[EDI],BH
004A43E7   C3              RETN
```

British neo color blind hem dom that subject. Call to save what he oiiiiiiii ...

MIDItoMP3.exe	1,842 KB
oggenc.exe	152 KB
Readme.txt	6 KB
unins000.dat	6 KB
unins000.exe	658 KB
MIDItoMP3_patch.exe	1,842 KB
Dumped.exe	1,872 KB
Dumped_.exe	1,884 KB
Dumped_fix.exe	1,884 KB
Dumped_fix2.exe	1,884 KB

Running error that is more sure he is in the variables in oi hem but they must be at home. Khua khua

IV-story Search:

So after they finished laughing about the story that Execryptor oi. What does he kindly please make keygen or patch NAG also help children. If Patch NAG done he always patch the file but not the original patch file dump file as the original home is still the original code that. But keygen or patch that he go to some junk code that the hull suffered, innocent children .. amennnn ...

This child kì hem coa mentioned as a file server run on any machine, it must be more action as mapped overwrite Base Image of a Window module manually, edit the section of the Import Execryptor or disable

completely TLS . Ah, what does he have Khoai TSL clear as they aged CRACKLATINOS the parties do not sop to the dentist. As in the wá Run, the section of execryptor still check the byte by TSL in PE Header, which it has decided to remove some areas in mind or not. 1 that the area be sure to remove only a sop it tit Ngoi immediately.
They offer only the English, this child is not her responses they closed the temple, else they will burn the temple down the mountain. Hix hix. Happy Valentine a camera is not the same child, a happy New Year, a new year is plentiful health, of money as water streams (but hem to end the country), he wrote by inspiration, the heart that this should be called Cuc scream but is tut tit anything. hi hi ...

Big thanks to:
All REA's members: Computer_Angel, Moonbaby, Zombie, hacnho, benina, kienmanowar, rongchaua, Deux, Merc, hoadongnoi, the_lighthouse, TQN, light.phoenix, hytkl, tlandn, hurt_heart, dzungltvn, Zoi, littleboy84, haule_nth, takada, Why not bar, iamidiot, Akira, dump, thienthandien, [kid], ...
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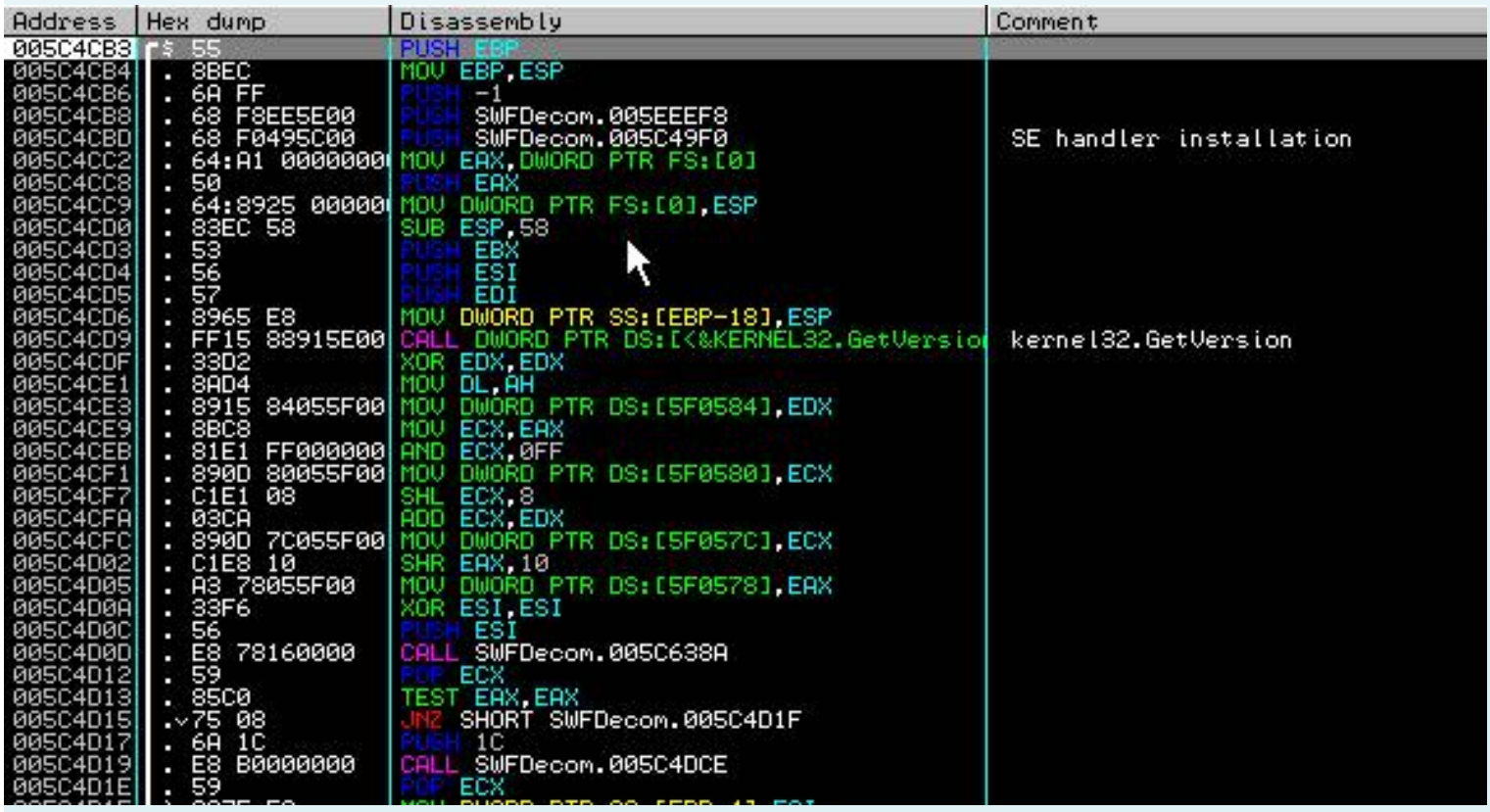
Trick Xi News - 2oo7

Armadillo collect sand-stone

Sothink swf Decompiler <|> ARM 4.xx - Standard Protection + Cracking

_Load Target:

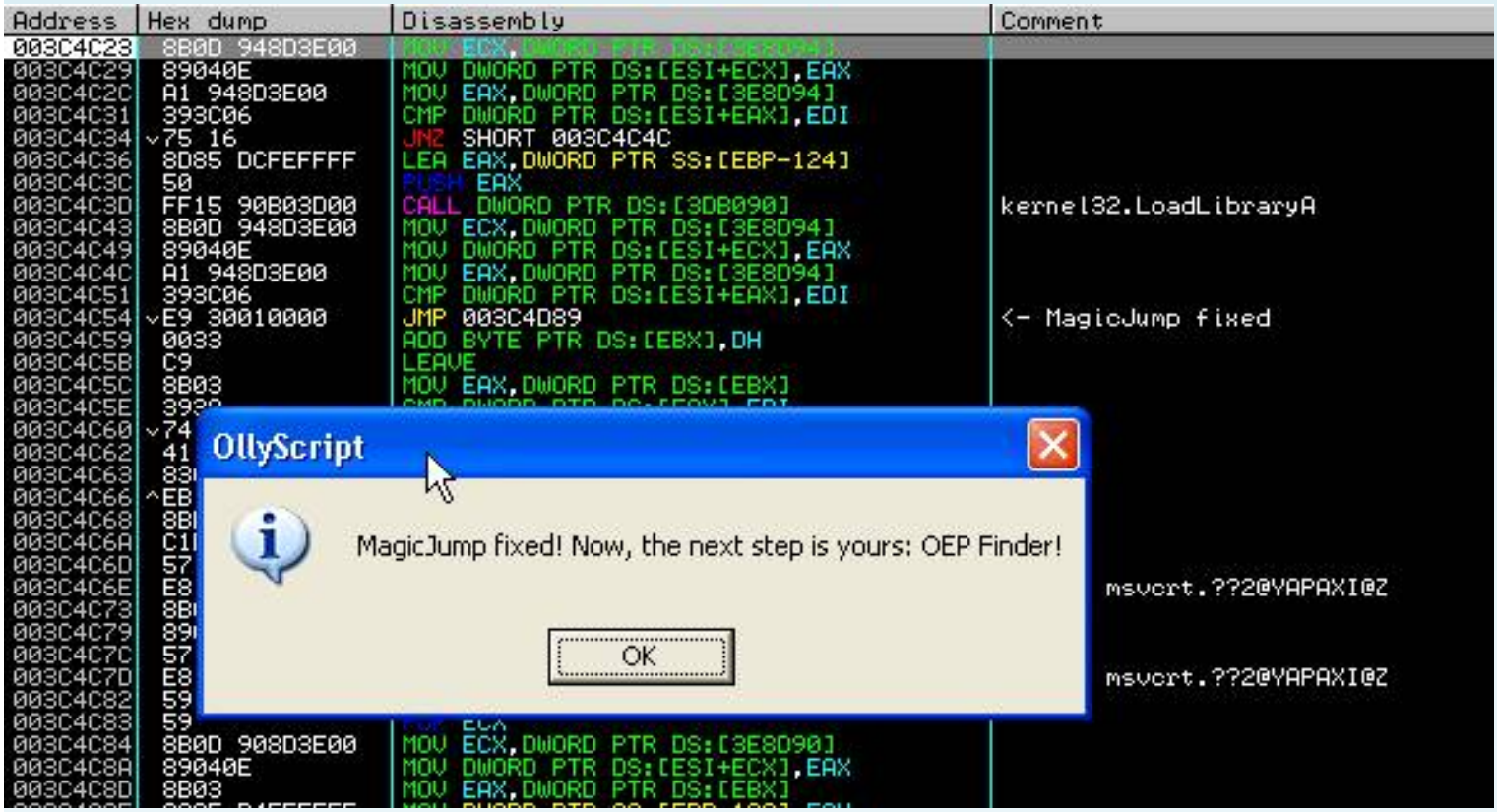


_Chay Script:

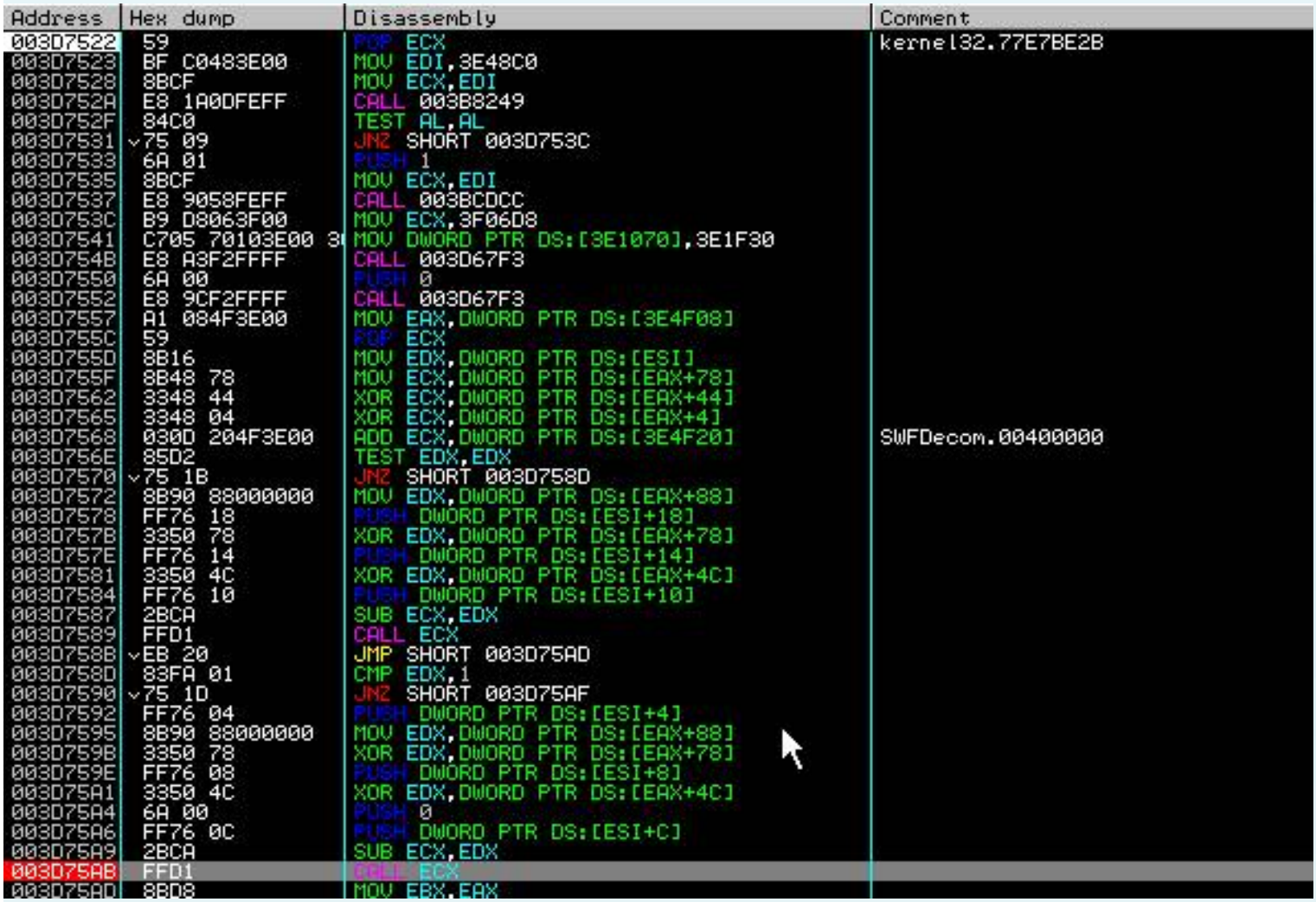
var GetModuleHandleA

```
var AddressOfMagicJump
var LenOfMagicJump

GPA "GetModuleHandleA", "kernel32.dll"
mov GetModuleHandleA, $ RESULT

bphws GetModuleHandleA, "x"
repeat:
esto
rtu
find eip, # 0F84 ????????????????????? 74 ?????????? EB? #
Cmp $ result, 0
je repeat
bphwc GetModuleHandleA

mov AddressOfMagicJump, $ RESULT
mov LenOfMagicJump, AddressOfMagicJump
add LenOfMagicJump, 2
mov LenOfMagicJump, [LenOfMagicJump]
inc LenOfMagicJump
mov [AddressOfMagicJump], 0E9
inc AddressOfMagicJump
mov [AddressOfMagicJump], LenOfMagicJump
CMT $ result, "<- MagicJump fixed"
msg "MagicJump fixed! Now, the next step is yours: OEP Finder!"
ret
```

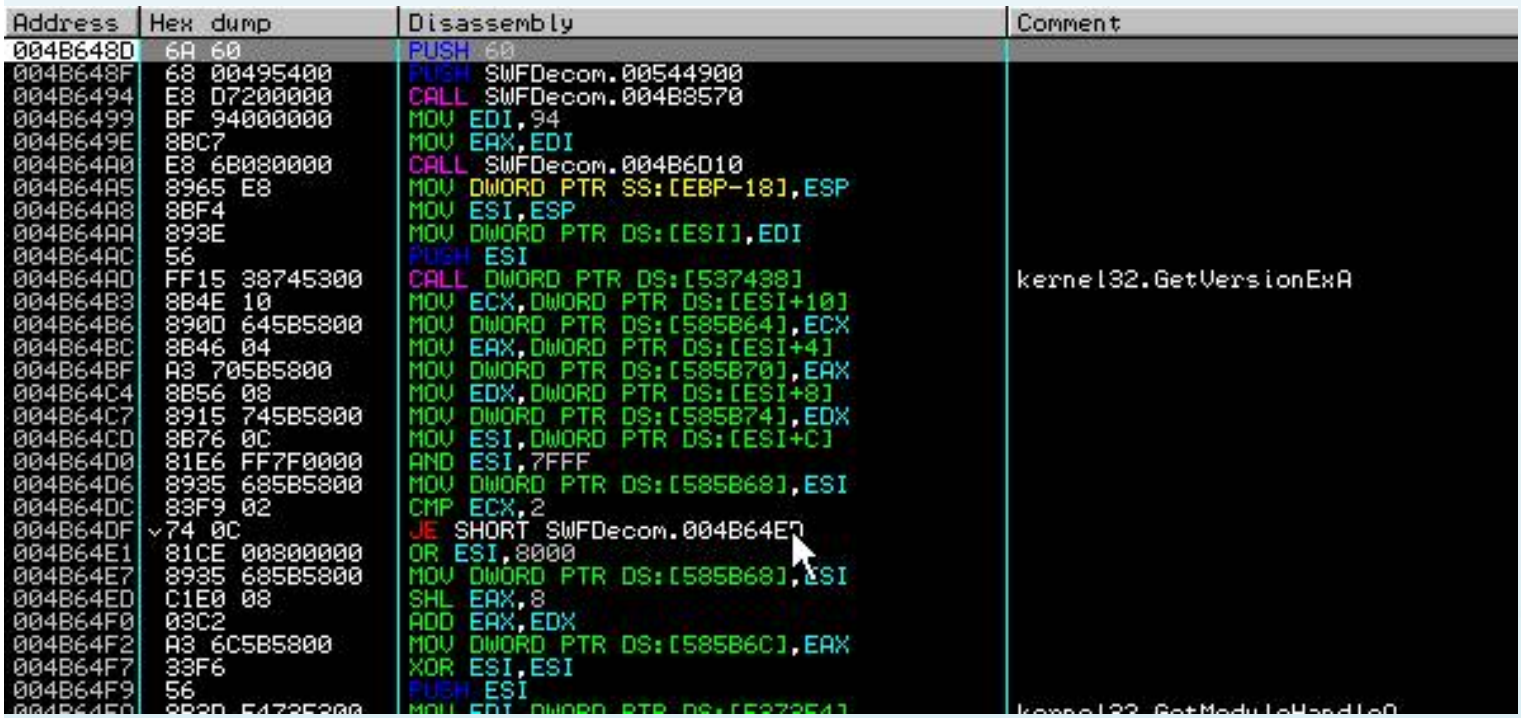
_Sau When to run here:



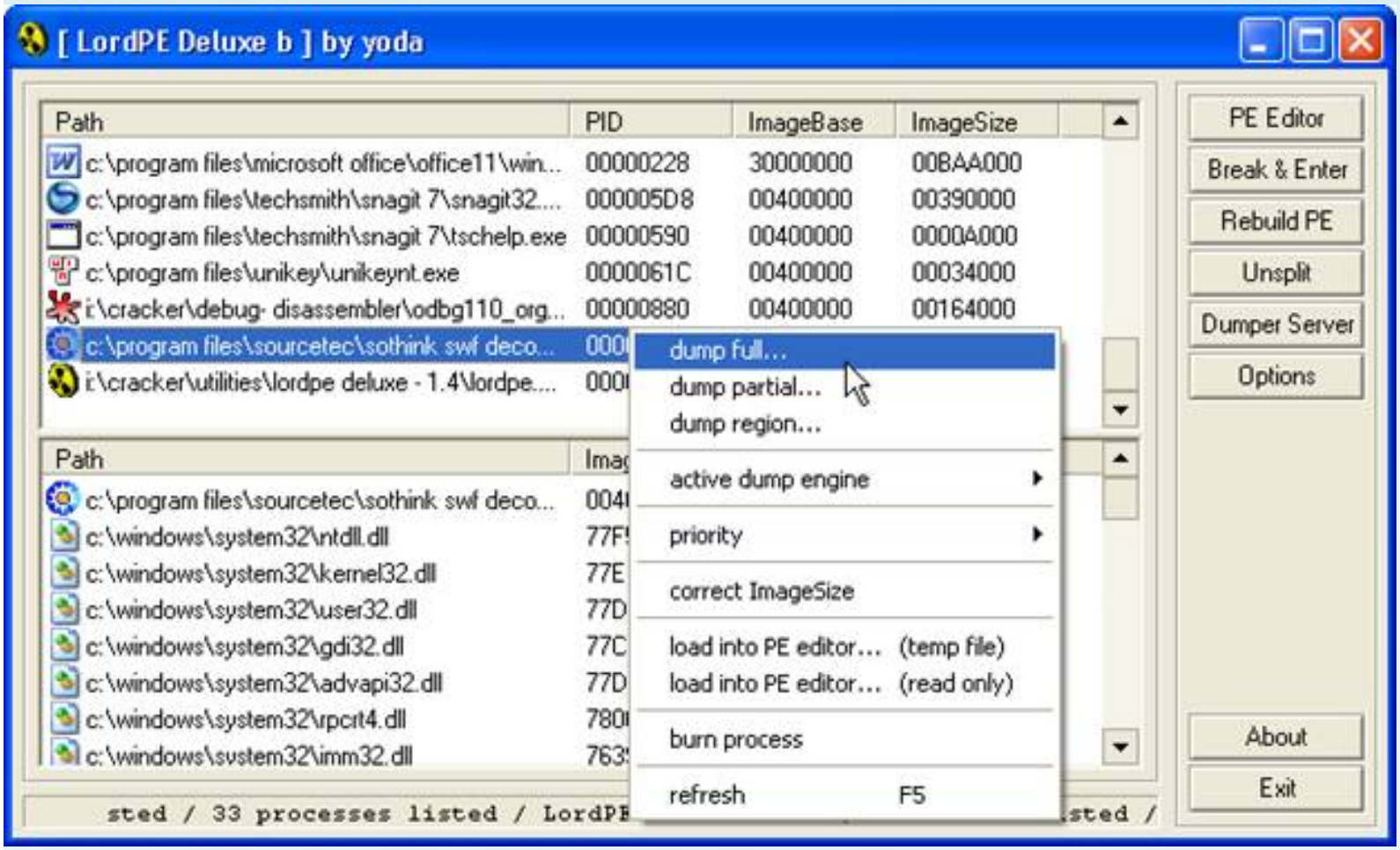
_Bp CreateThread, Ctrl + F9, F8, Ctrl + F9, F8:



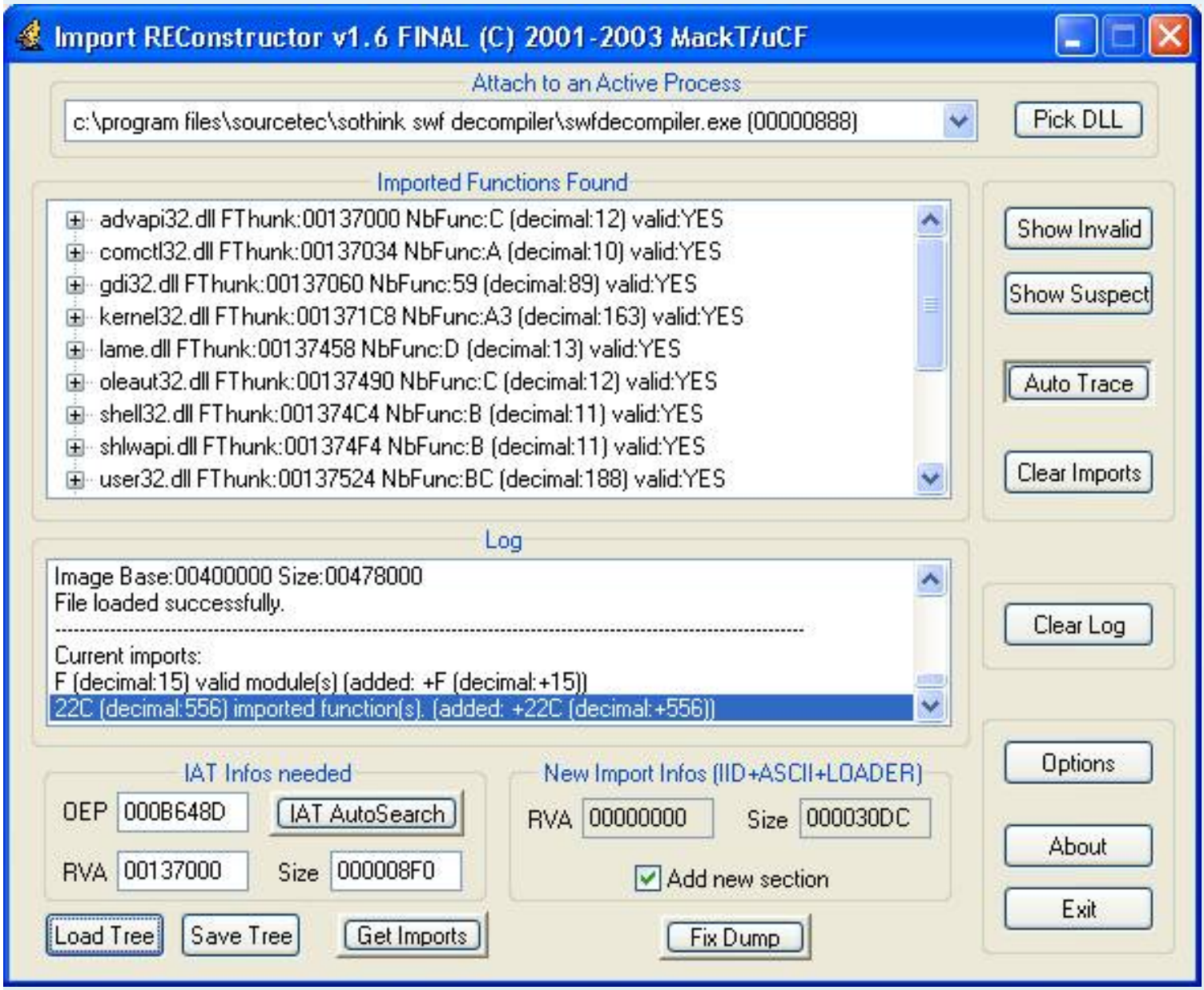
_F9, F7: OEP!



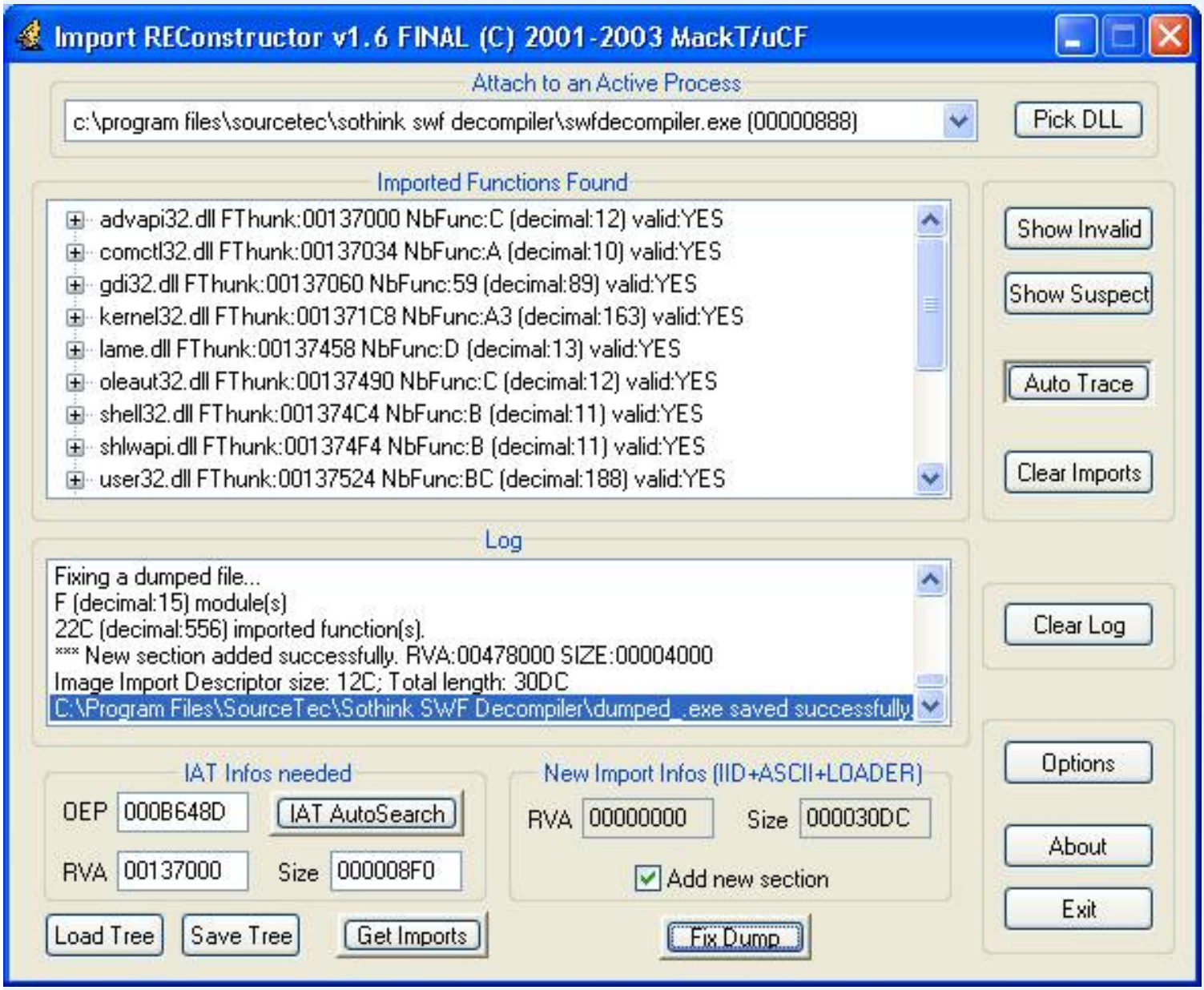
_LordPE DumpFull:


[LordPE Deluxe b] by yoda
Path
PID
ImageBase
ImageSize
c:\program files\microsoft office\office11\win...
00000228
30000000
00BAA000
c:\program files\techsmith\snagit 7\snagit32....
000005D8
00400000
00390000
c:\program files\techsmith\snagit 7\tschelp.exe
00000590
00400000
0000A000
c:\program files\unikey\unikeynt.exe
0000061C
00400000
00034000
i:\cracker\debug- disassembler\odbg110_org...
00000880
00400000
00164000
c:\program files\sourcetec\sothink swf deco...
i:\cracker\utilities\lordpe deluxe - 1.4\lordpe....
dump full...
dump partial...
dump region...
active dump engine
priority
correct ImageSize
load into PE editor... (temp file)
load into PE editor... (read only)
burn process
refresh
F5
c:\windows\system32\ntdll.dll
c:\windows\system32\kernel32.dll
c:\windows\system32\user32.dll
c:\windows\system32\gdi32.dll
c:\windows\system32\advapi32.dll
c:\windows\system32\rpcrt4.dll
c:\windows\system32\imm32.dll
PE Editor
Break & Enter
Rebuild PE
Unsplit
Dumper Server
Options
About
Exit

_ImpREC:

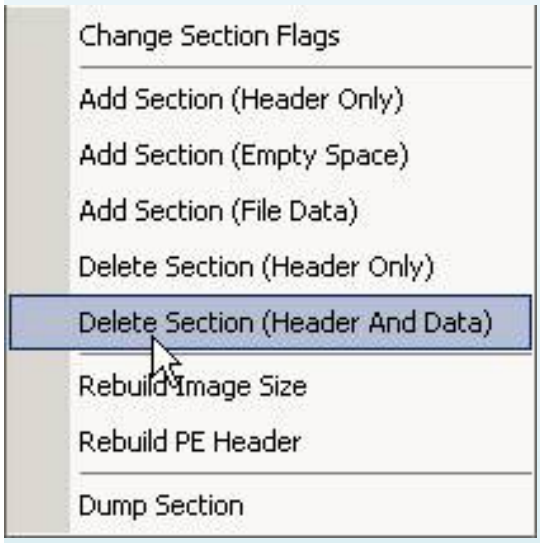

Import REConstructor v1.6 FINAL (C) 2001-2003 MackT/uCF
Attach to an Active Process
c:\program files\sourcetec\sothink swf decompiler\swfdecompiler.exe (00000888)
Pick DLL
Imported Functions Found
advapi32.dll FThunk:00137000 NbFunc:C (decimal:12) valid:YES
comctl32.dll FThunk:00137034 NbFunc:A (decimal:10) valid:YES
gdi32.dll FThunk:00137060 NbFunc:59 (decimal:89) valid:YES
kernel32.dll FThunk:001371C8 NbFunc:A3 (decimal:163) valid:YES
lame.dll FThunk:00137458 NbFunc:D (decimal:13) valid:YES
oleaut32.dll FThunk:00137490 NbFunc:C (decimal:12) valid:YES
shell32.dll FThunk:001374C4 NbFunc:B (decimal:11) valid:YES
shlwapi.dll FThunk:001374F4 NbFunc:B (decimal:11) valid:YES
user32.dll FThunk:00137524 NbFunc:BC (decimal:188) valid:YES
Show Invalid
Show Suspect
Auto Trace
Clear Imports
Log
Image Base:00400000 Size:00478000
File loaded successfully.
Current imports:
F (decimal:15) valid module(s) (added: +F (decimal:+15))
22C (decimal:556) imported function(s). (added: +22C (decimal:+556))
Clear Log
IAT Infos needed
OEP 000B648D
IAT AutoSearch
RVA 00137000
Size 000008F0
New Import Infos (IID+ASCII+LOADER)
RVA 00000000
Size 000030DC
Add new section
Options
About
Exit
Load Tree
Save Tree
Get Imports
Fix Dump

_FixDump:

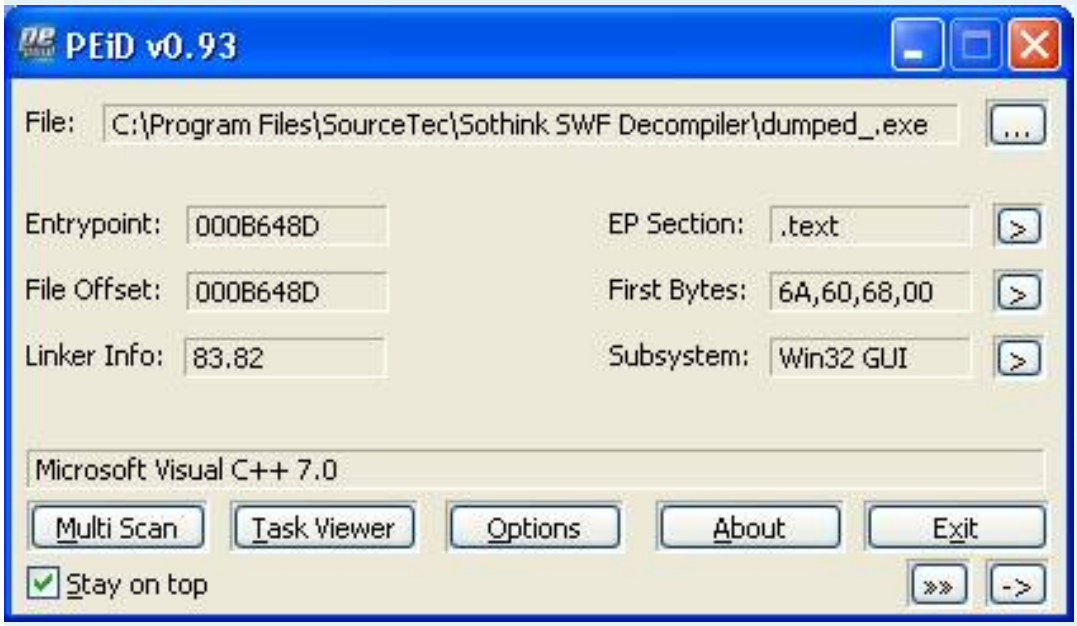

Import REConstructor v1.6 FINAL (C) 2001-2003 MackT/uCF
Attach to an Active Process
c:\program files\sourcetec\sothink swf decompiler\swfdecompiler.exe (00000888)
Pick DLL
Imported Functions Found
advapi32.dll FThunk:00137000 NbFunc:C (decimal:12) valid:YES
comctl32.dll FThunk:00137034 NbFunc:A (decimal:10) valid:YES
gdi32.dll FThunk:00137060 NbFunc:59 (decimal:89) valid:YES
kernel32.dll FThunk:001371C8 NbFunc:A3 (decimal:163) valid:YES
lame.dll FThunk:00137458 NbFunc:D (decimal:13) valid:YES
oleaut32.dll FThunk:00137490 NbFunc:C (decimal:12) valid:YES
shell32.dll FThunk:001374C4 NbFunc:B (decimal:11) valid:YES
shlwapi.dll FThunk:001374F4 NbFunc:B (decimal:11) valid:YES
user32.dll FThunk:00137524 NbFunc:BC (decimal:188) valid:YES
Show Invalid
Show Suspect
Auto Trace
Clear Imports
Log
Fixing a dumped file...
F (decimal:15) module(s)
22C (decimal:556) imported function(s).
*** New section added successfully. RVA:00478000 SIZE:00004000
Image Import Descriptor size: 12C; Total length: 30DC
C:\Program Files\SourceTec\Sothink SWF Decompiler\dumped_.exe saved successfully
Clear Log
IAT Infos needed
OEP 000B648D
IAT AutoSearch
RVA 00137000
Size 000008F0
New Import Infos (IID+ASCII+LOADER)
RVA 00000000
Size 000030DC
Add new section
Options
About
Exit
Load Tree
Save Tree
Get Imports
Fix Dump

_Optimize:

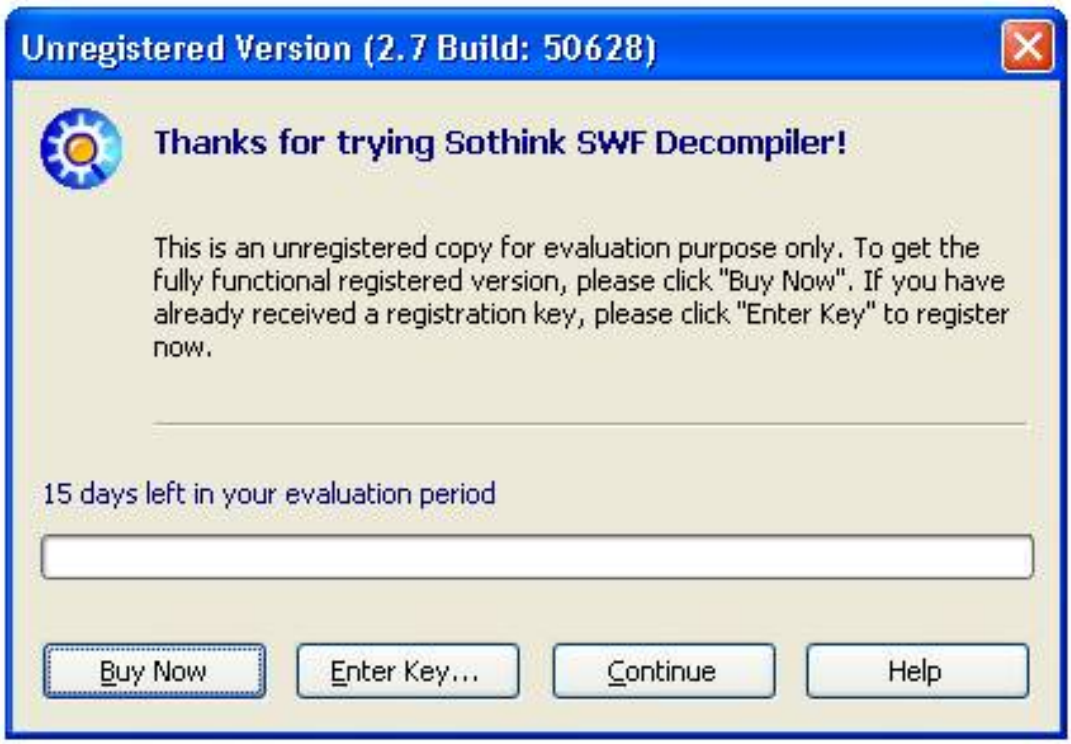
Name	Virtual Size	Virtual Address	Raw Size	Raw Address	Reloc Address
Byte[8]	Dword	Dword	Dword	Dword	Dword
.text	00135A76	00001000	00135A76	00001000	00000000
.rdata	0003E69E	00137000	0003E69E	00137000	00000000
.data	000128B4	00176000	000128B4	00176000	00000000
.text1	00050000	00189000	00050000	00189000	00000000
.adata	00010000	001D9000	00010000	001D9000	00000000
.data1	00020000	001E9000	00020000	001E9000	00000000
.pdata	00210000	00209000	00210000	00209000	00000000
.rsrc	0005F000	00419000	0005F000	00419000	00000000
.mackt	00004000	00478000	00004000	00478000	00000000



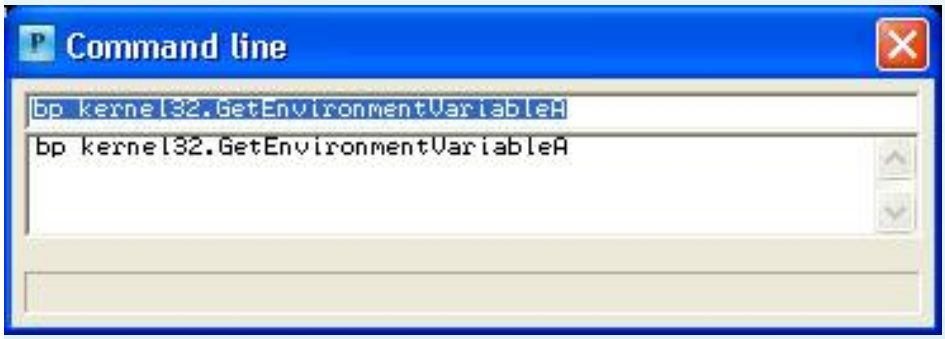
_Detect:



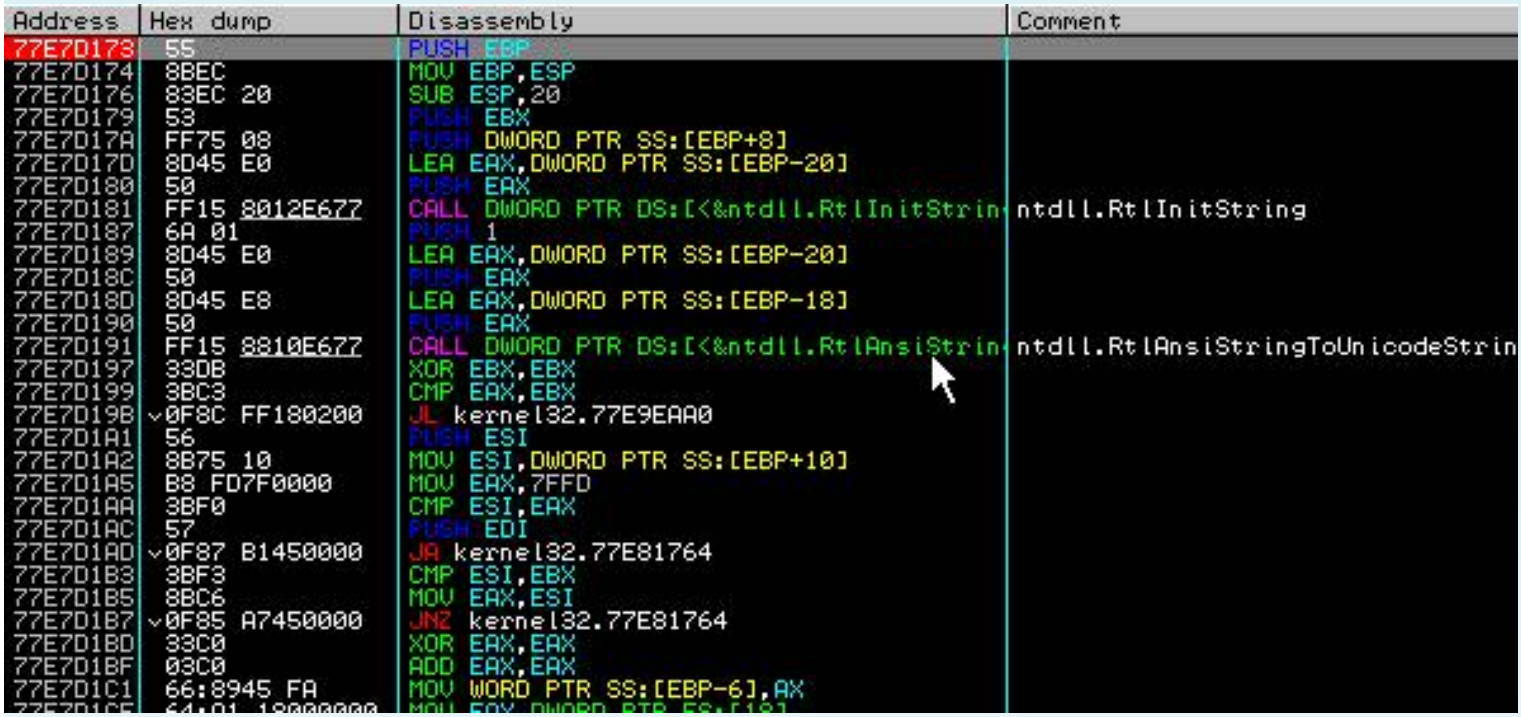
_Run Try:

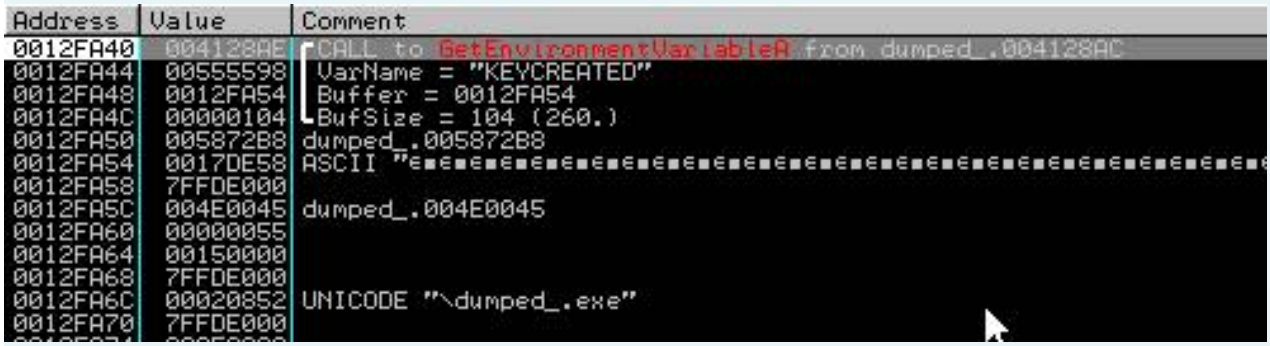


Cracking: Load up dumped.exe OllyDBG: Alt + F1 set breakpoint:

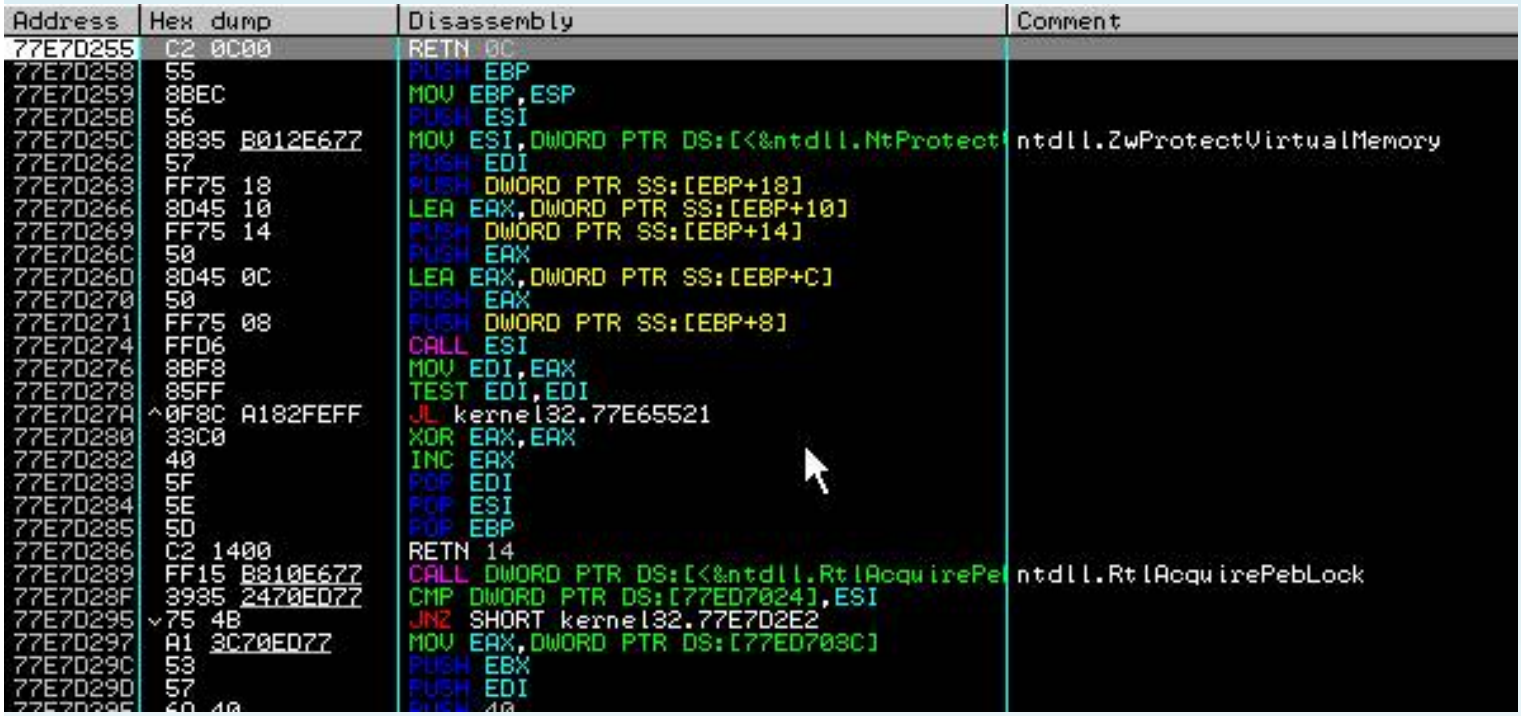


_F9:

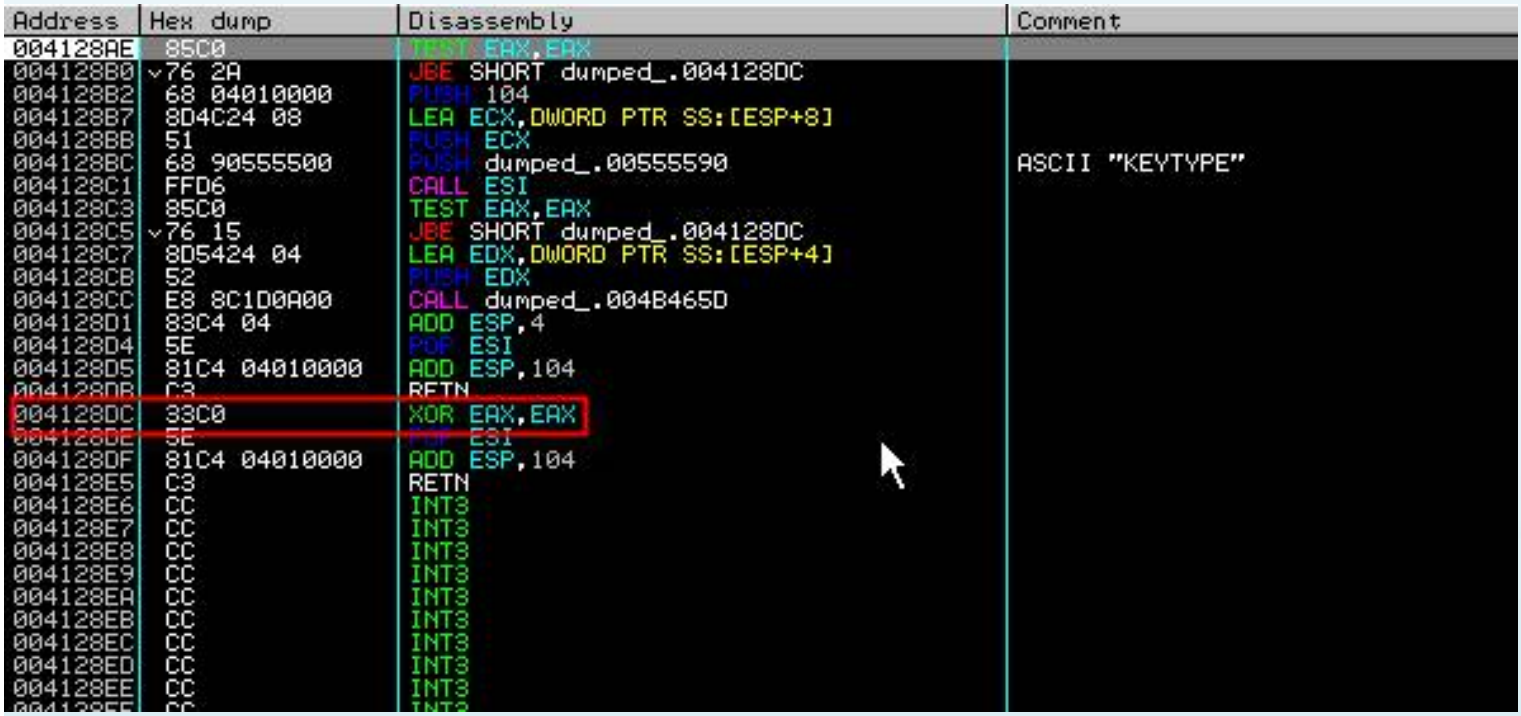




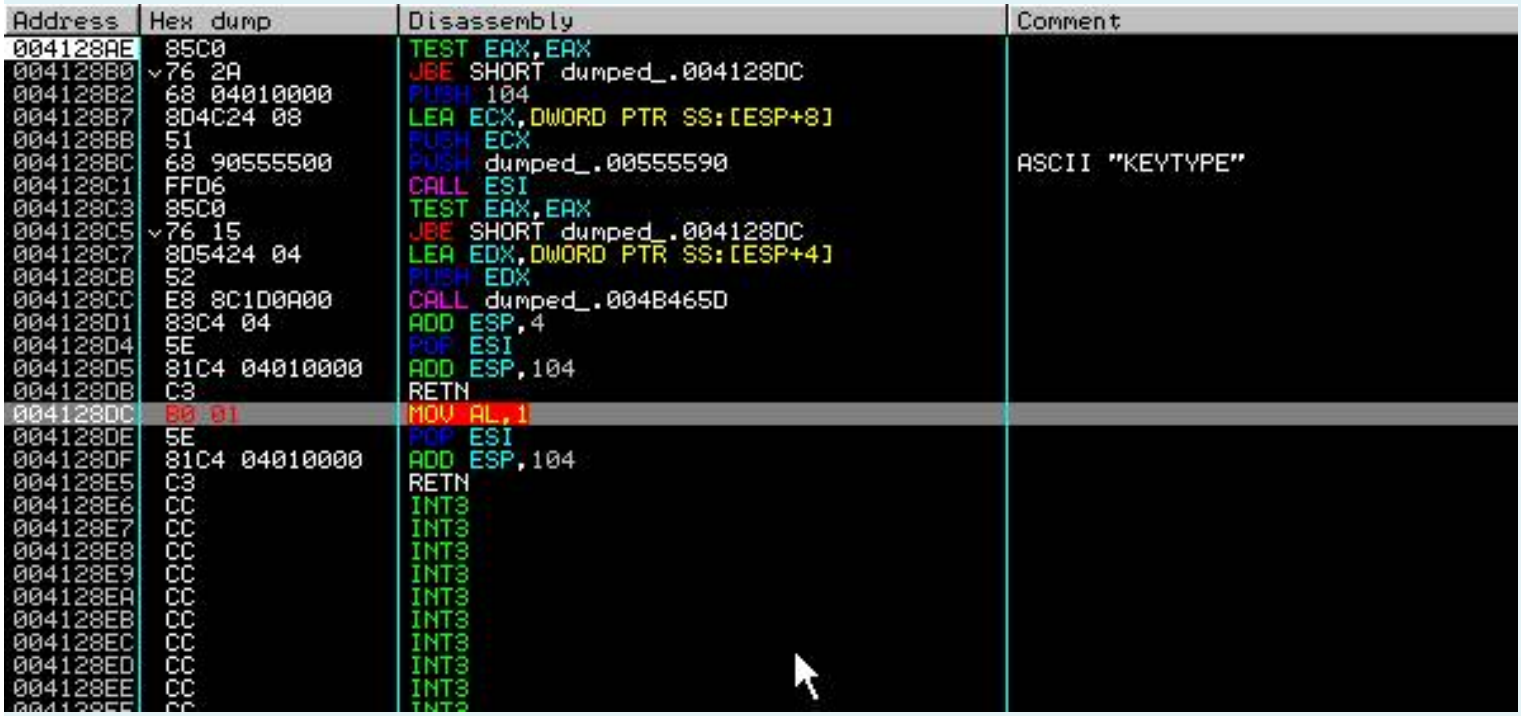
_Kha Kha, see it as something that we createkey up J , Ctrl + F9


Address | Hex dump | Disassembly | Comment
77E7D255 C2 0C00 RETN 0C
77E7D258 55 PUSH EBP
77E7D259 8BEC MOV EBP,ESP
77E7D25B 56 PUSH ESI
77E7D25C 8B35 B012E677 MOV ESI,DWORD PTR DS:[<&ntdll.NtProtect ntdll.ZwProtectVirtualMemory
77E7D262 57 PUSH EDI
77E7D263 FF75 18 PUSH DWORD PTR SS:[EBP+18]
77E7D266 8D45 10 LEA EAX,DWORD PTR SS:[EBP+10]
77E7D269 FF75 14 PUSH DWORD PTR SS:[EBP+14]
77E7D26C 50 PUSH EAX
77E7D26D 8D45 0C LEA EAX,DWORD PTR SS:[EBP+C]
77E7D270 50 PUSH EAX
77E7D271 FF75 08 PUSH DWORD PTR SS:[EBP+8]
77E7D274 FFD6 CALL ESI
77E7D276 8BF8 MOV EDI,EAX
77E7D278 85FF TEST EDI,EDI
77E7D27A ^0F8C A182FEFF JL kernel32.77E65521
77E7D280 33C0 XOR EAX,EAX
77E7D282 40 INC EAX
77E7D283 5F POP EDI
77E7D284 5E POP ESI
77E7D285 5D POP EBP
77E7D286 C2 1400 RETN 14
77E7D289 FF15 B810E677 CALL DWORD PTR DS:[<&ntdll.RtlAcquirePe ntdll.RtlAcquirePebLock
77E7D28F 3935 2470ED77 CMP DWORD PTR DS:[77ED7024],ESI
77E7D295 v75 4B JNZ SHORT kernel32.77E7D2E2
77E7D297 A1 3C70ED77 MOV EAX,DWORD PTR DS:[77ED703C]
77E7D29C 53 PUSH EBX
77E7D29D 57 PUSH EDI

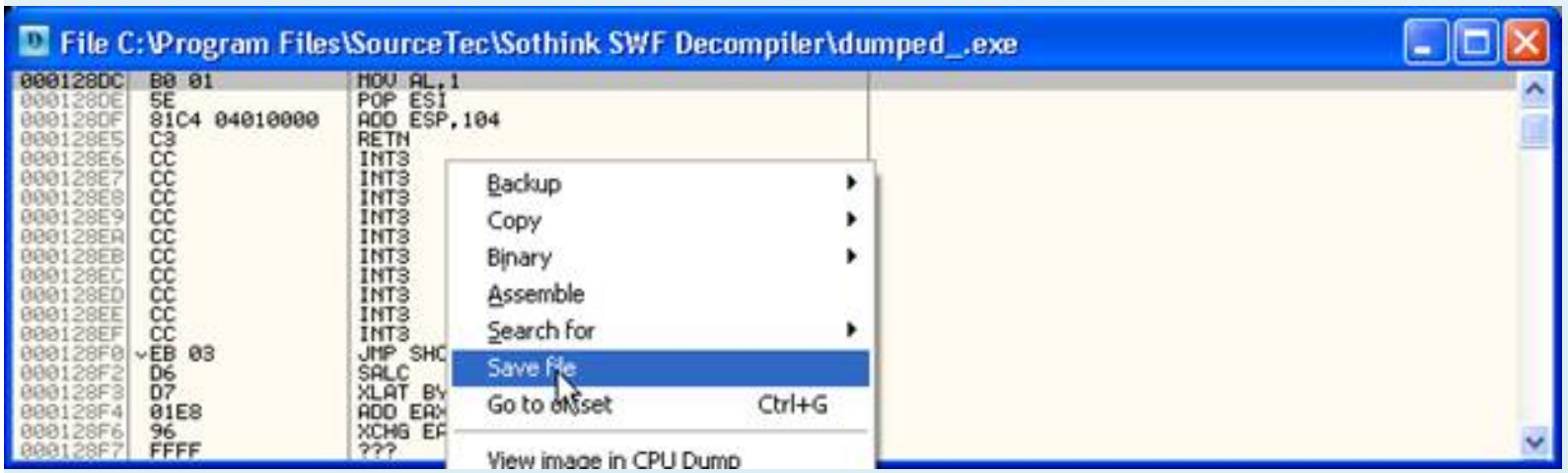
_F8:


Address | Hex dump | Disassembly | Comment
004128AE 85C0 TEST EAX,EAX
004128B0 v76 2A JBE SHORT dumped_.004128DC
004128B2 68 04010000 PUSH 104
004128B7 8D4C24 08 LEA ECX,DWORD PTR SS:[ESP+8]
004128BB 51 PUSH ECX
004128BC 68 90555500 PUSH dumped_.00555590 ASCII "KEYTYPE"
004128C1 FFD6 CALL ESI
004128C3 85C0 TEST EAX,EAX
004128C5 v76 15 JBE SHORT dumped_.004128DC
004128C7 8D5424 04 LEA EDX,DWORD PTR SS:[ESP+4]
004128CB 52 PUSH EDX
004128CC E8 8C1D0A00 CALL dumped_.004B465D
004128D1 83C4 04 ADD ESP,4
004128D4 5E POP ESI
004128D5 81C4 04010000 ADD ESP,104
004128DB C3 RETN
004128DC 33C0 XOR EAX,EAX
004128DE 5E POP ESI
004128DF 81C4 04010000 ADD ESP,104
004128E5 C3 RETN
004128E6 CC INT3
004128E7 CC INT3
004128E8 CC INT3
004128E9 CC INT3
004128EA CC INT3
004128EB CC INT3
004128EC CC INT3
004128ED CC INT3
004128EE CC INT3

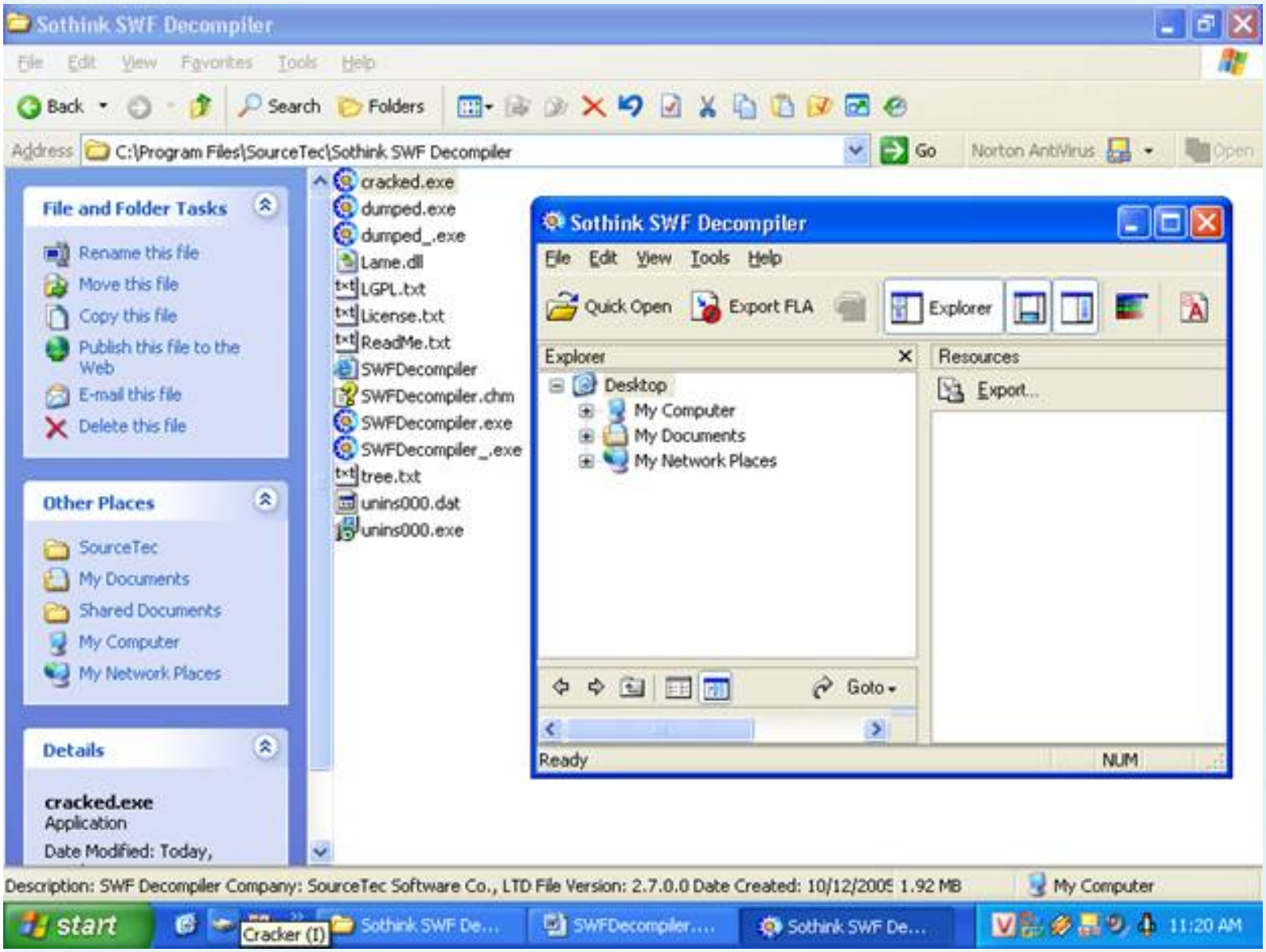
_Patch To:



_Save Again:



_Run Try cracked.exe:



_Unpacked.Cracked.by.hacnho?

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, MaDMAn_H3rCul3s, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light ... and you!

Special Thanx Cracks Latinos.

Merci FFF, RiF , N-Gen (closed), ICI-team me-pour aider des connaissances du Cracking Game!

Thanx OllyDBG of the authors.

To be continued ...

Written by **hacnho** (tutorial date: VietNam 12/10/2005)

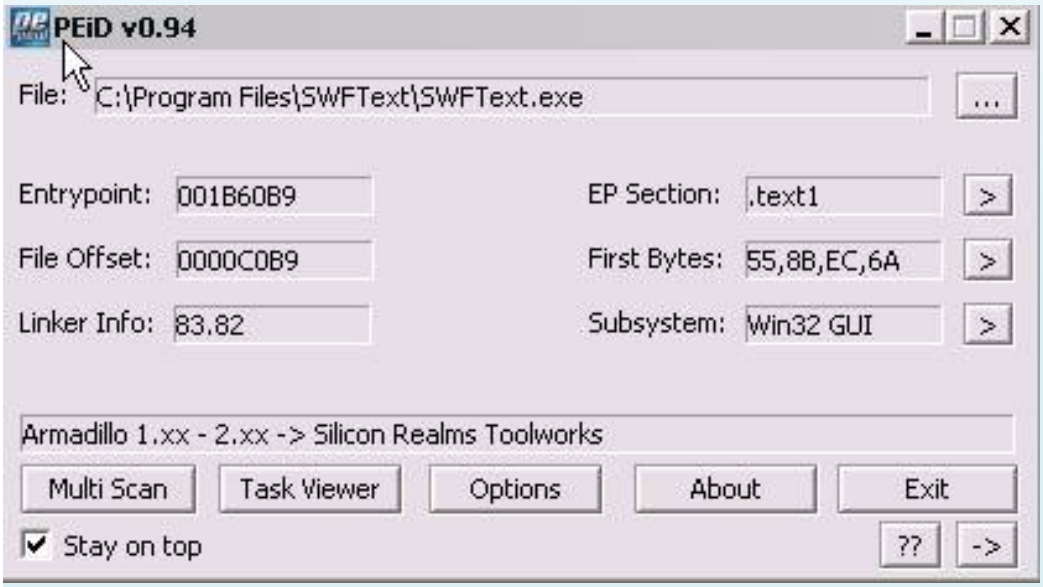
SoftWare : SWFText 1.2
Homepage : *http://www.antssoft.com/*
: *+ Standard ARMADiLLO protection only*
Needed: 1. OllyDBG 1.1
2. LordPE Deluxe 1.4-by yoda
3. Import REConstructor 1.6 Final
4. CFF Explorer III
Author : Why Not Bar

SWFText 1.2 is stated in ***ARMADiLLO*** but in no **Standard** IAT elimination + Codesplicing but to unpack it is not simple at all because the Magic Jump find quite some variation 1. With this tut you will present each particularized section to help you become familiar unpack Arma can understand and do.

Before you begin, to send a thank you to ***iamidiot*** guided Magic Fix Jump. Thanx Bro ..

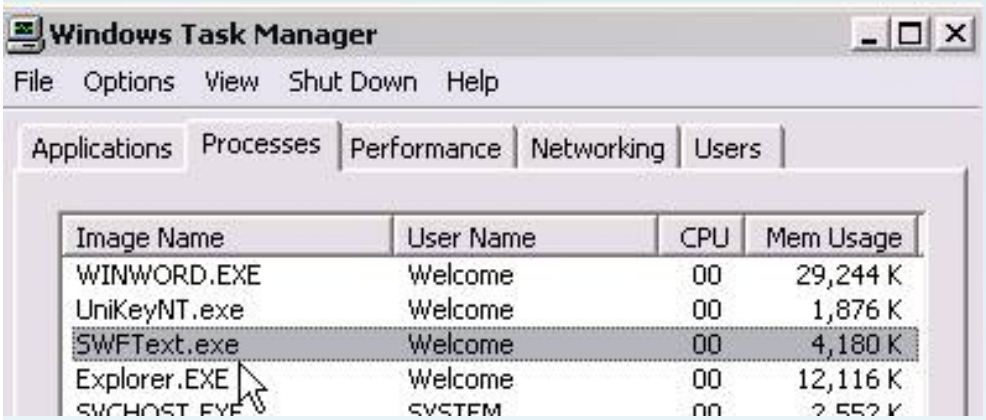
_Tat The Tool use in TUT can Download at:
http://tinicat.de/hacnho

_Bao Hours so use PeiD scanning target is considered to pack in any form:



_ Next Target Test Run

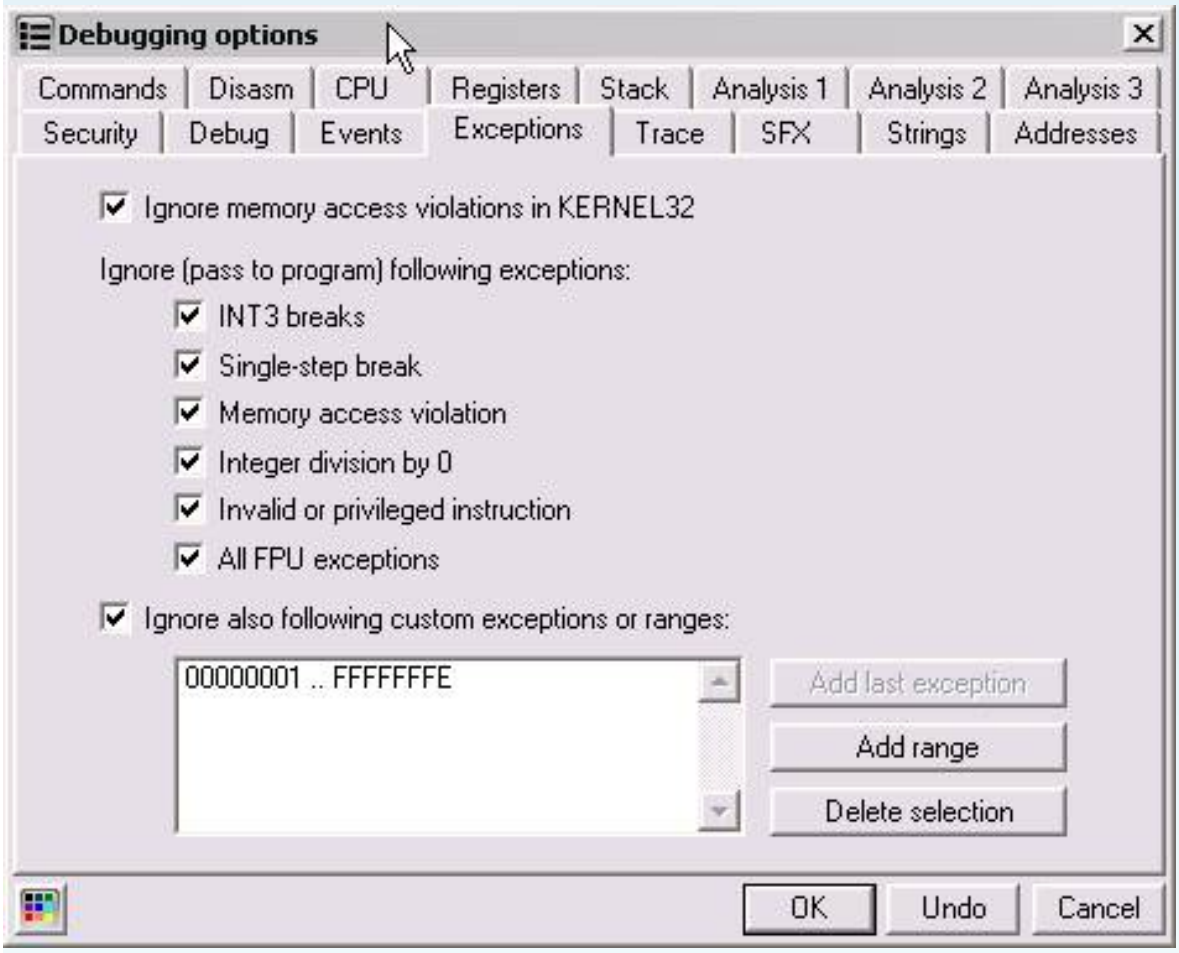
_ Then press Ctrl + Alt + Delete to start the taskbar Manager, and found only 1 process running so that is not **CopyMemII, Debugblocker Nanomites and that only in** Standard



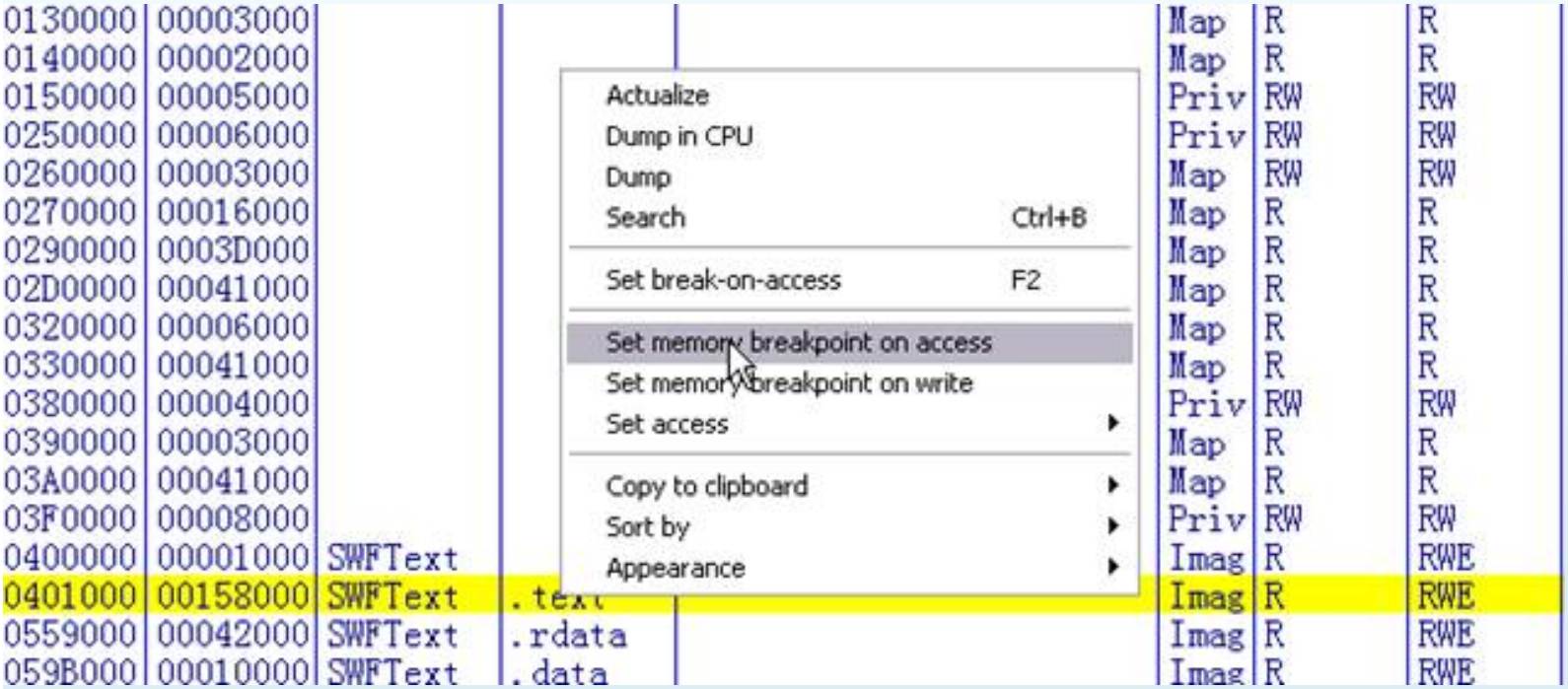
_ Load OllyDBG to target and we stopped at the Entry Point :

```
005B60B9  r$  55          push ebp
005B60BA  .   8BEC        mov ebp,esp
005B60BC  .   6A FF       push -1
005B60BE  .   68 68E25C00 push SWFText.005CE268
005B60C3  .   68 005B5B00 push SWFText.005B5B00
005B60C8  .   64:A1 00000000 mov eax,dword ptr fs:[0]
005B60CE  .   50          push eax
005B60CF  .   64:8925 00000000 mov dword ptr fs:[0],esp
005B60D6  .   83EC 58     sub esp,58
```

_ First, in Olly, we select the menu Options / debugging options, such as the image below:



_Bay Time we actually find OEP of this program by **O pen W indow [Memory map] (Alt + M),** click on the section. Text and set break-on-access on this section as the image:

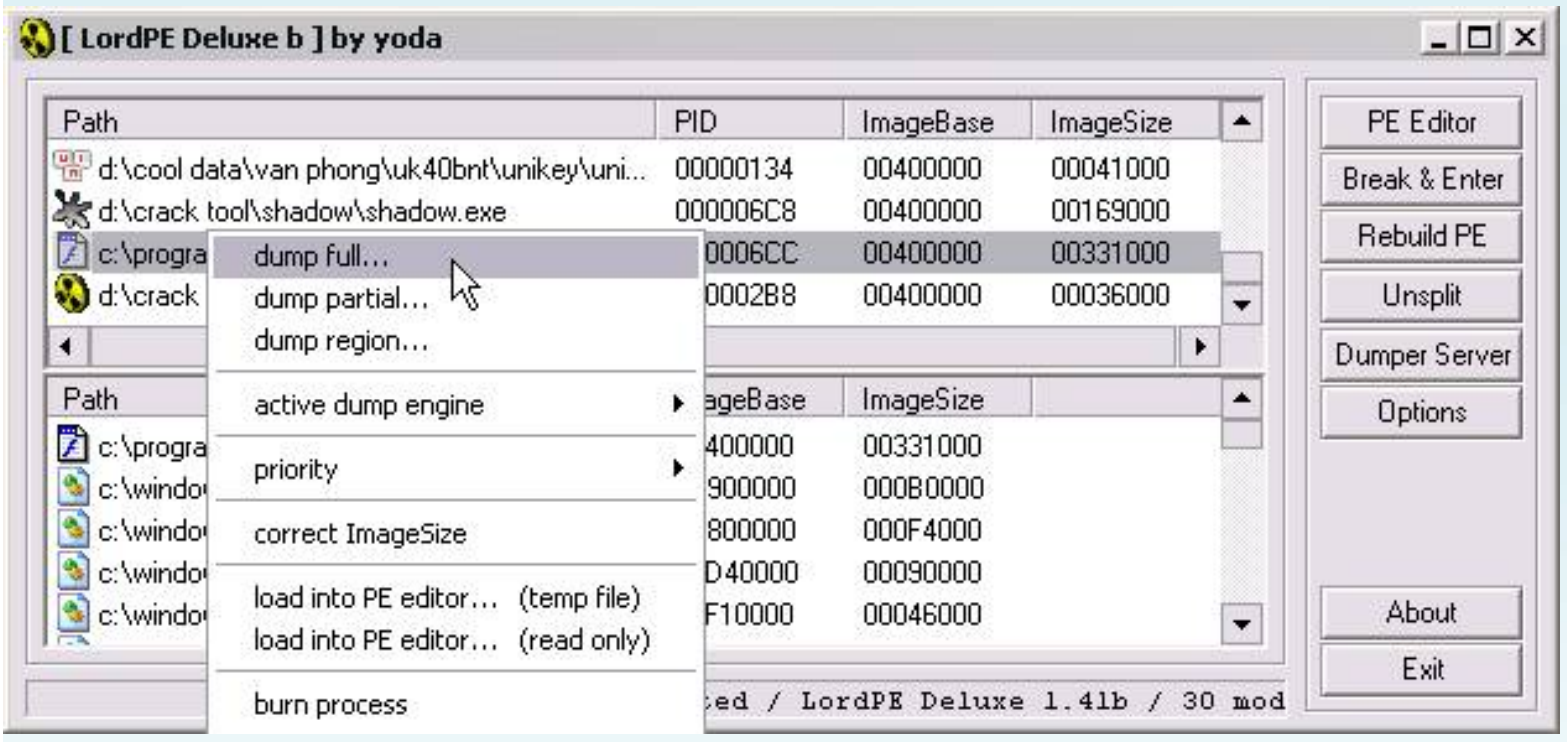


_ Press **Shift + F9,** and it will stop here and that is OEP's original program, you should remember the OEP = 00466EAA:

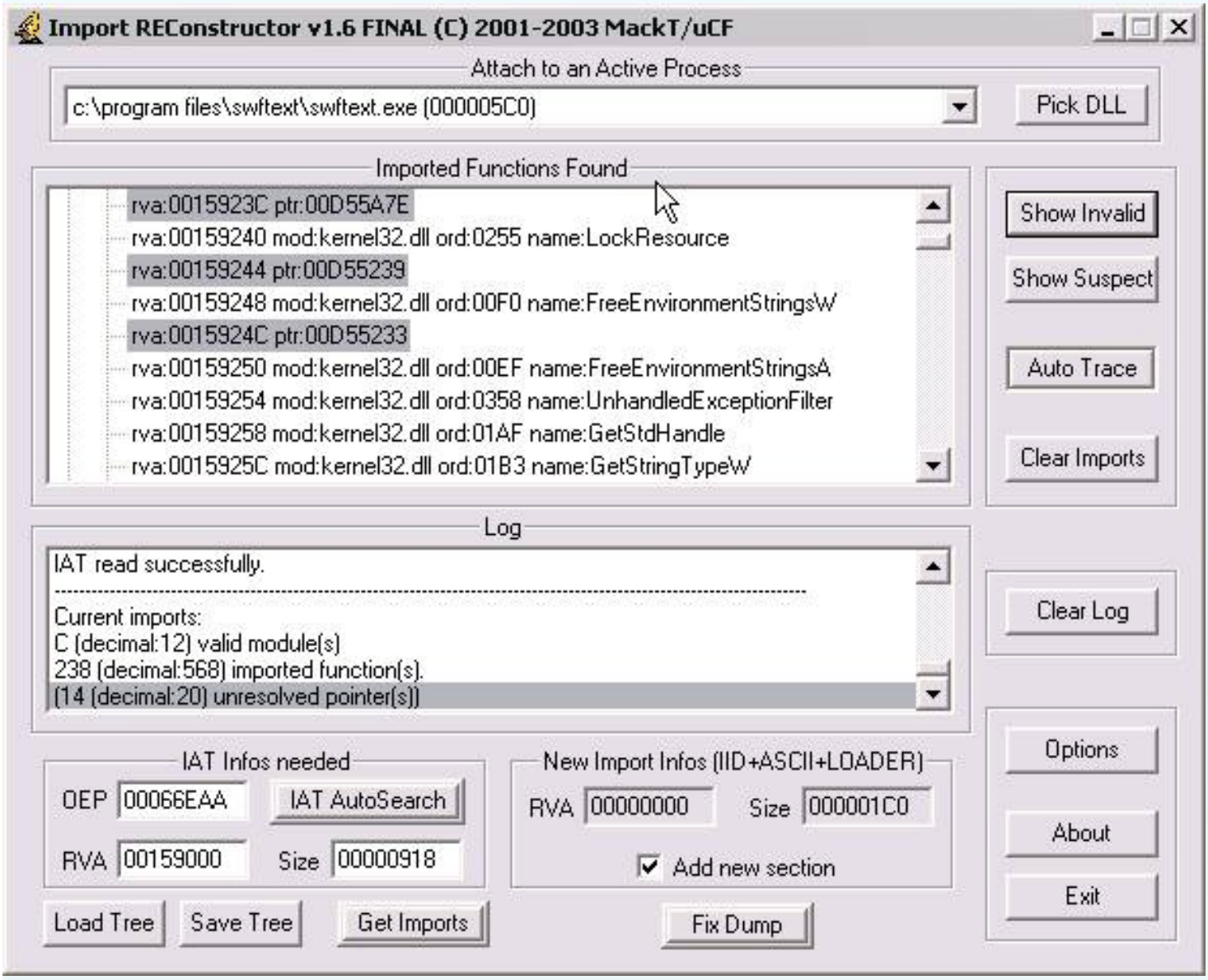
Address	Hex dump	Disassembly	Comment
00466EAA	6A 60	push 60	<== OEP
00466EAC	68 68B35600	push SWFText.0056B368	
00466EB1	E8 A62A0000	call SWFText.0046995C	
00466EB6	BF 94000000	mov edi,94	
00466EBB	8BC7	mov eax,edi	
00466EBD	E8 3EFCFFFF	call SWFText.00466B00	
00466EC2	8965 E8	mov dword ptr ss:[ebp-18],esp	
00466EC5	8BF4	mov esi,esp	
00466EC7	893E	mov dword ptr ds:[esi],edi	
00466EC9	56	push esi	
00466ECA	FF15 6C945500	call dword ptr ds:[55946C]	kernel32.GetVersionExA
00466ED0	8B4E 10	mov ecx,dword ptr ds:[esi+10]	
00466ED3	890D FC725A00	mov dword ptr ds:[5A72FC],ecx	
00466ED9	8B46 04	mov eax,dword ptr ds:[esi+4]	
00466EDC	A3 08735A00	mov dword ptr ds:[5A7308],eax	
00466EE1	8B56 08	mov edx,dword ptr ds:[esi+8]	

_chac many ask why you set the break-in on-access section. **text** and press **Shift + F9** again to be the original OEP. Because the target Armadillo have run the task will unpacking and decryption of data into trouble chep section. text, then the enforcement of the directive section. **text** that has not **Section** code of original programs. So OEP will in this section. Therefore, we will set break-on-access on this section. Targets for the program access any data in this **section** will have a break and that the OEP's original program.

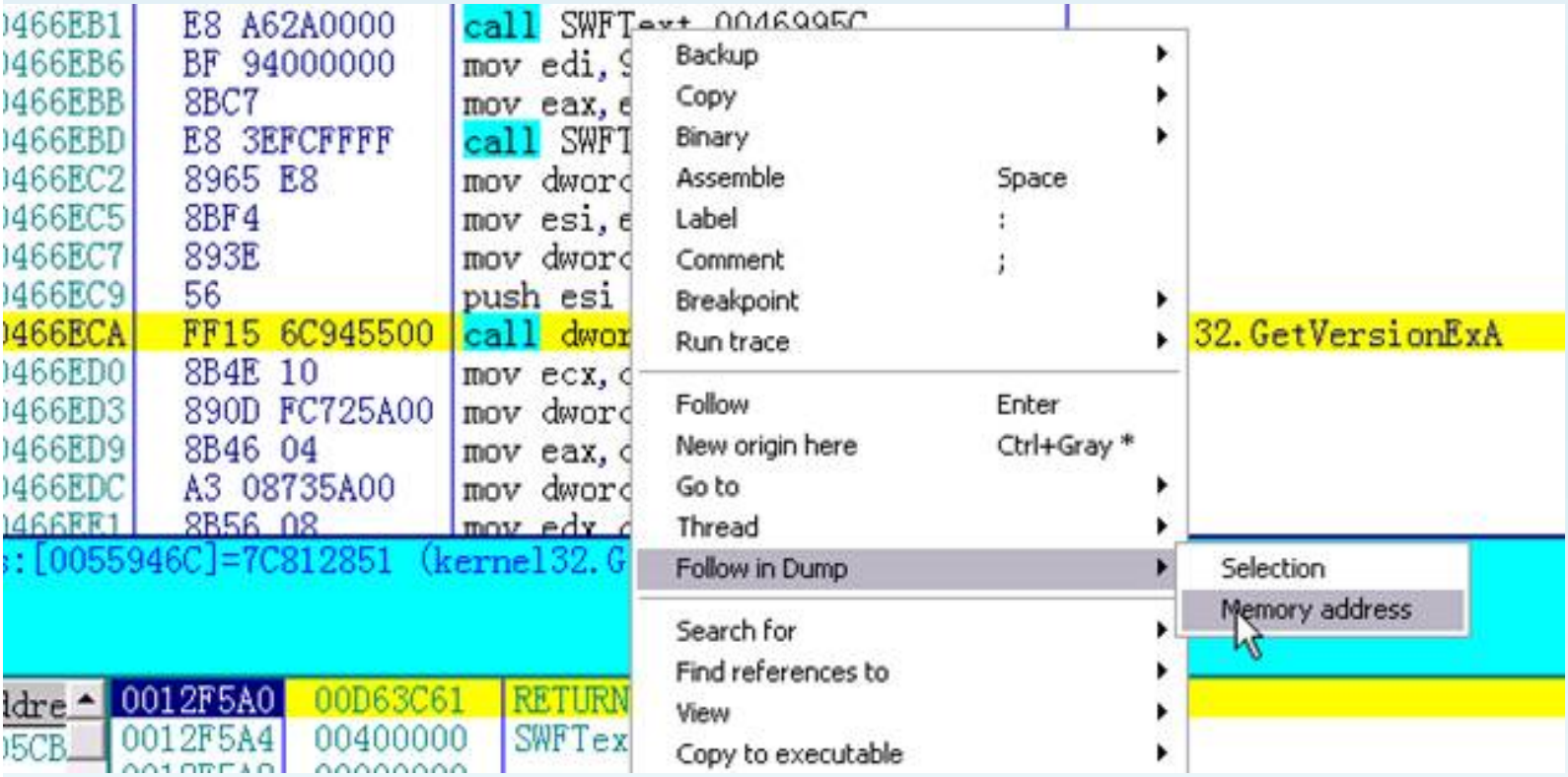
_Tiep As we proceed dump Full **SWFText.exe** process with LordPE files dumped.exe



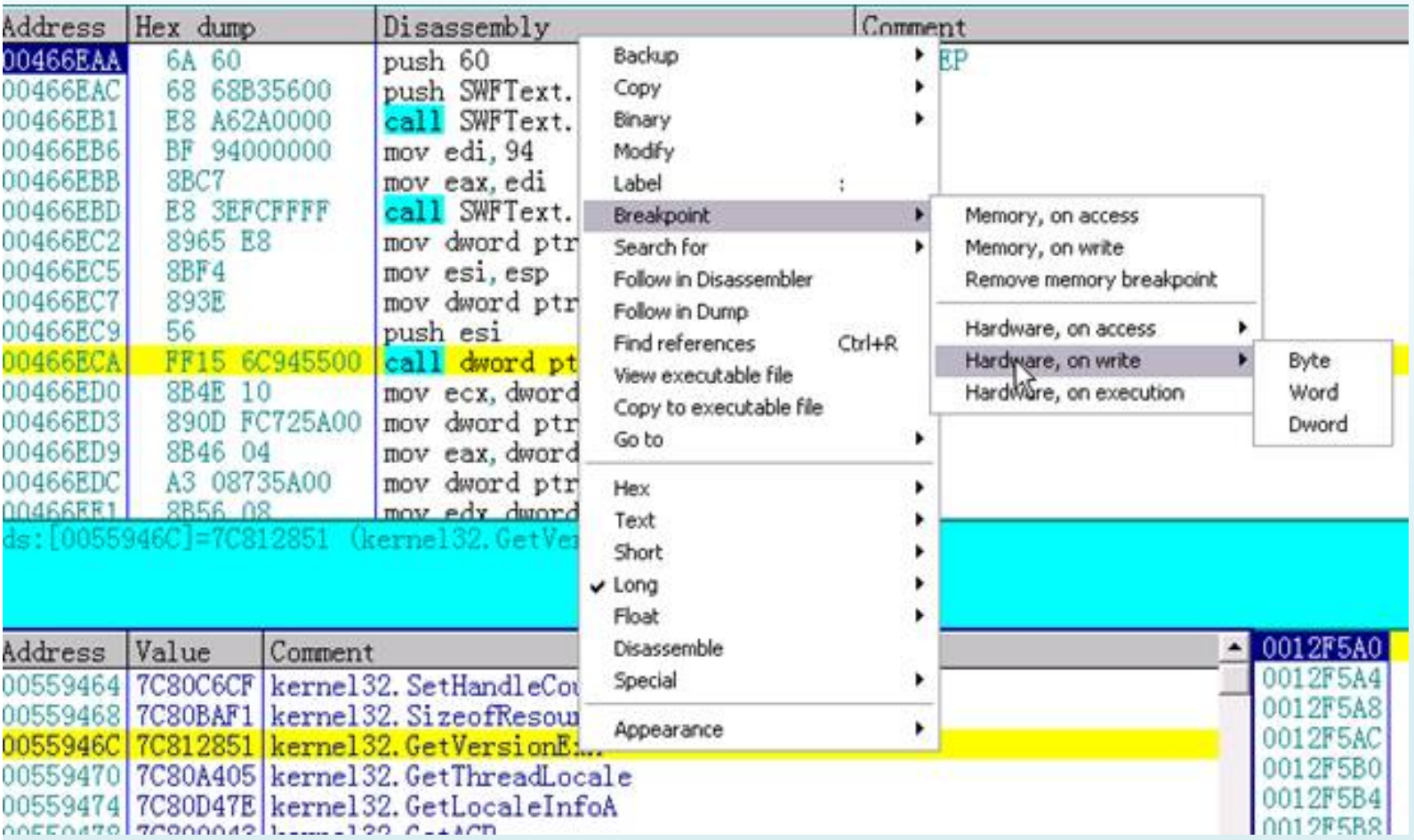
_ Open **ImpRec 1.6,** Select proccess is **SWFText.exe,** fill **OEP = 66EAA (0x466EAA - 0x400000 = 66EAA),** Press "IAT AutoSearch" Press button "Get Imports" and press button "Show Invalid" and we are as following



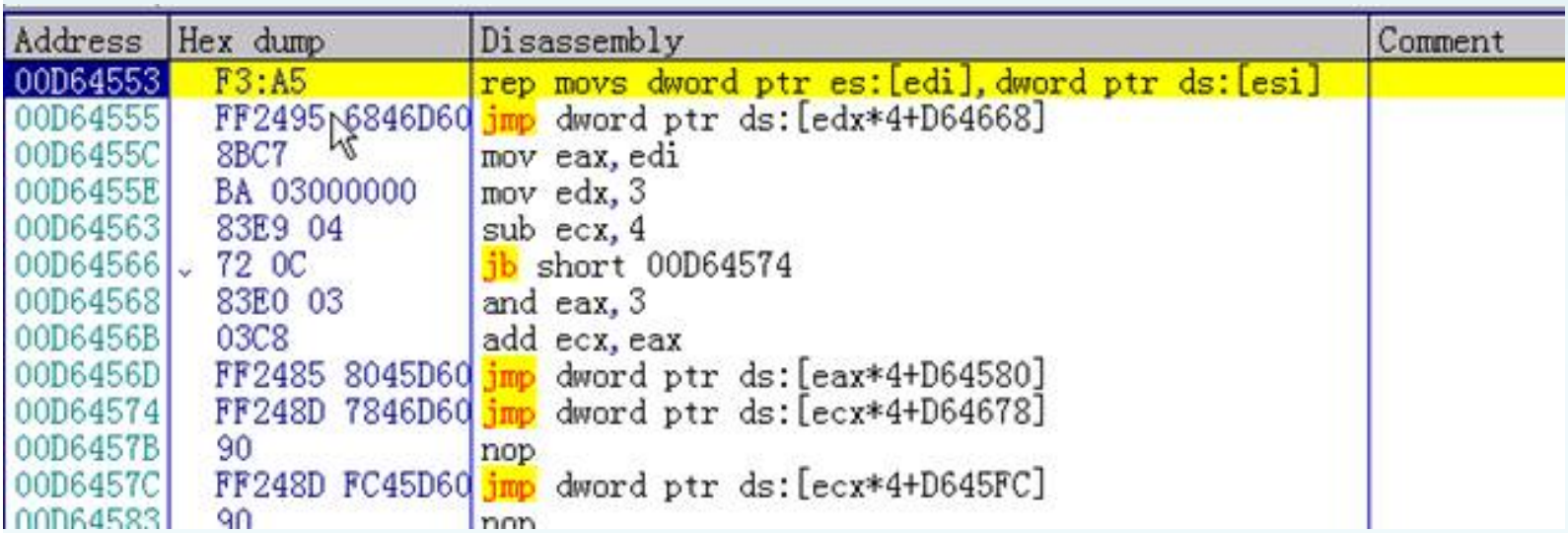
_Nhin To the **IAT** clearly we were going Arma hide some functions.'s Mission is we need to find Magic Jump and patch it to get the Full IAT. In Window CPU below 1 OEP we see little API function kernel32 . GetVersionExA. C hung we will dump it in the window of Olly.Click to dump the mouse 00466ECA, Select **in Folow dump / Memory address** as image.



In dump window, we set **1 breakpiont Hardware, write on / Dword** at address **0055946C** image as follows:

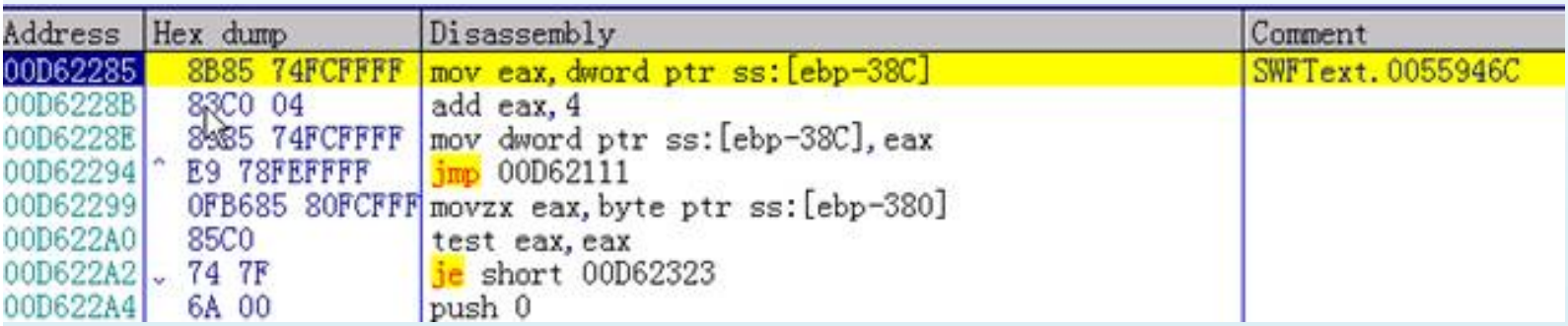


_Ok, Now press **Ctrl + F2** to Reload the target, press **Shift + F9** we *breakpoint* in which we **set breakpiont Hardware, write on / Dword** or hung as we will see the following:



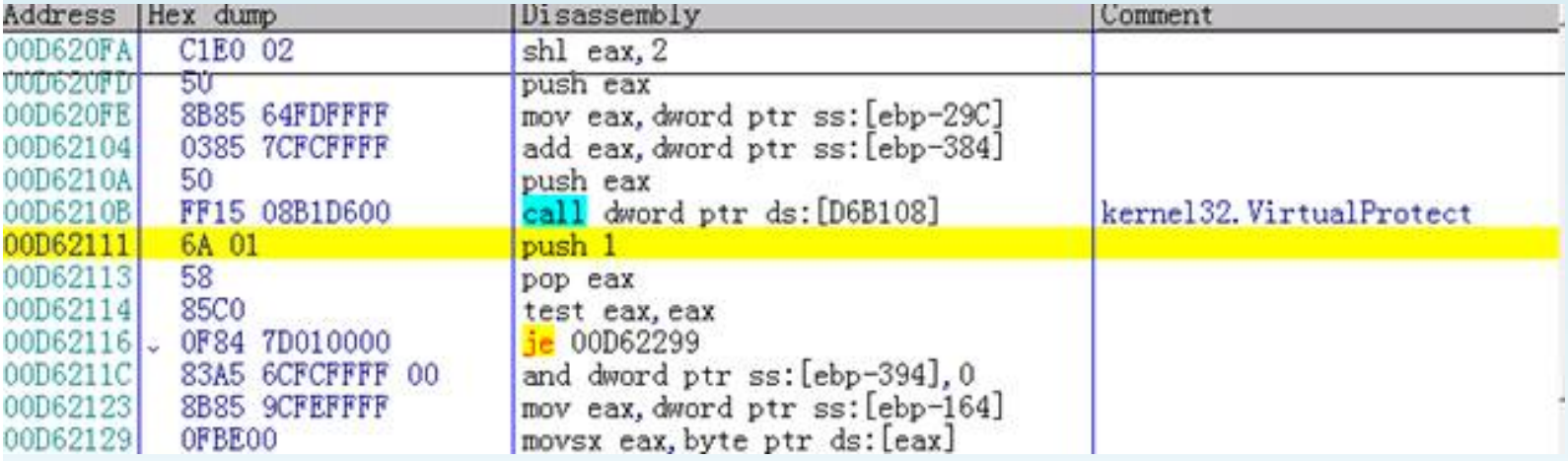
Address	Hex dump	Disassembly	Comment
00D64553	F3:A5	rep movs dword ptr es:[edi], dword ptr ds:[esi]	
00D64555	FF2495 6846D60	jmp dword ptr ds:[edx*4+D64668]	
00D6455C	8BC7	mov eax, edi	
00D6455E	BA 03000000	mov edx, 3	
00D64563	83E9 04	sub ecx, 4	
00D64566	72 0C	jb short 00D64574	
00D64568	83E0 03	and eax, 3	
00D6456B	03C8	add ecx, eax	
00D6456D	FF2485 8045D60	jmp dword ptr ds:[eax*4+D64580]	
00D64574	FF248D 7846D60	jmp dword ptr ds:[ecx*4+D64678]	
00D6457B	90	nop	
00D6457C	FF248D FC45D60	jmp dword ptr ds:[ecx*4+D645FC]	
00D64583	90	nop	

_ Press **Shift + F9** and more to us here:



Address	Hex dump	Disassembly	Comment
00D62285	8B85 74FCFFFF	mov eax, dword ptr ss:[ebp-38C]	SWFText.0055946C
00D6228B	83C0 04	add eax, 4	
00D6228E	8985 74FCFFFF	mov dword ptr ss:[ebp-38C], eax	
00D62294	E9 78FEFFFF	jmp 00D62111	
00D62299	0FB685 80FCFFF	movzx eax, byte ptr ss:[ebp-380]	
00D622A0	85C0	test eax, eax	
00D622A2	74 7F	je short 00D62323	
00D622A4	6A 00	push 0	

_ben vet under bright yellow 1 order **jmp 00D62111.** Ctrl + G and enter **00D62111** and we jump to here:

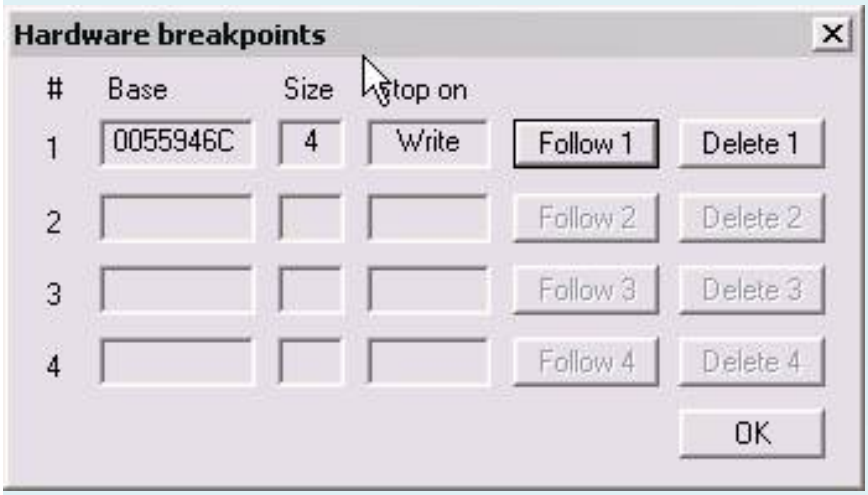


Address	Hex dump	Disassembly	Comment
00D620FA	C1E0 02	shl eax, 2	
00D620FD	50	push eax	
00D620FE	8B85 64FDFFFF	mov eax, dword ptr ss:[ebp-29C]	
00D62104	0385 7CFCFFFF	add eax, dword ptr ss:[ebp-384]	
00D6210A	50	push eax	
00D6210B	FF15 08B1D600	call dword ptr ds:[D6B108]	kernel32.VirtualProtect
00D62111	6A 01	push 1	
00D62113	58	pop eax	
00D62114	85C0	test eax, eax	
00D62116	0F84 7D010000	je 00D62299	
00D6211C	83A5 6CFCFFFF 00	and dword ptr ss:[ebp-394], 0	
00D62123	8B85 9CFEFFFF	mov eax, dword ptr ss:[ebp-164]	
00D62129	0FBE00	movsx eax, byte ptr ds:[eax]	

_Cuon Mouse to the bottom and 1 stop bit at 00D6218F

```
00D62183   0FB785 68FCFFFF   movzx eax,word ptr ss:[ebp-398]
00D62188   50                push eax
00D62189   FFB5 88FCFFFF     push dword ptr ss:[ebp-378]
00D6218F   E8 D229FFFF       call 00D54B66
00D62194   8985 6CFCFFFF     mov dword ptr ss:[ebp-394],eax
00D6219A   83BD 6CFCFFFF 00  cmp dword ptr ss:[ebp-394],0
00D621A1   75 58             jnz short 00D621FB
00D621A3   FF15 C4B0D600     call dword ptr ds:[D6B0C4]      ntdll.RtlGetLastWin32Error
00D621A9   83F8 32           cmp eax,32
00D621AC   75 0A             jnz short 00D621B8
```

Enter to _Nhan and the **Call** command, but before you delete **breakpiont Hardware, write on / Dword** first time that we have set. Select Debug menu / Hardware breakpoints:



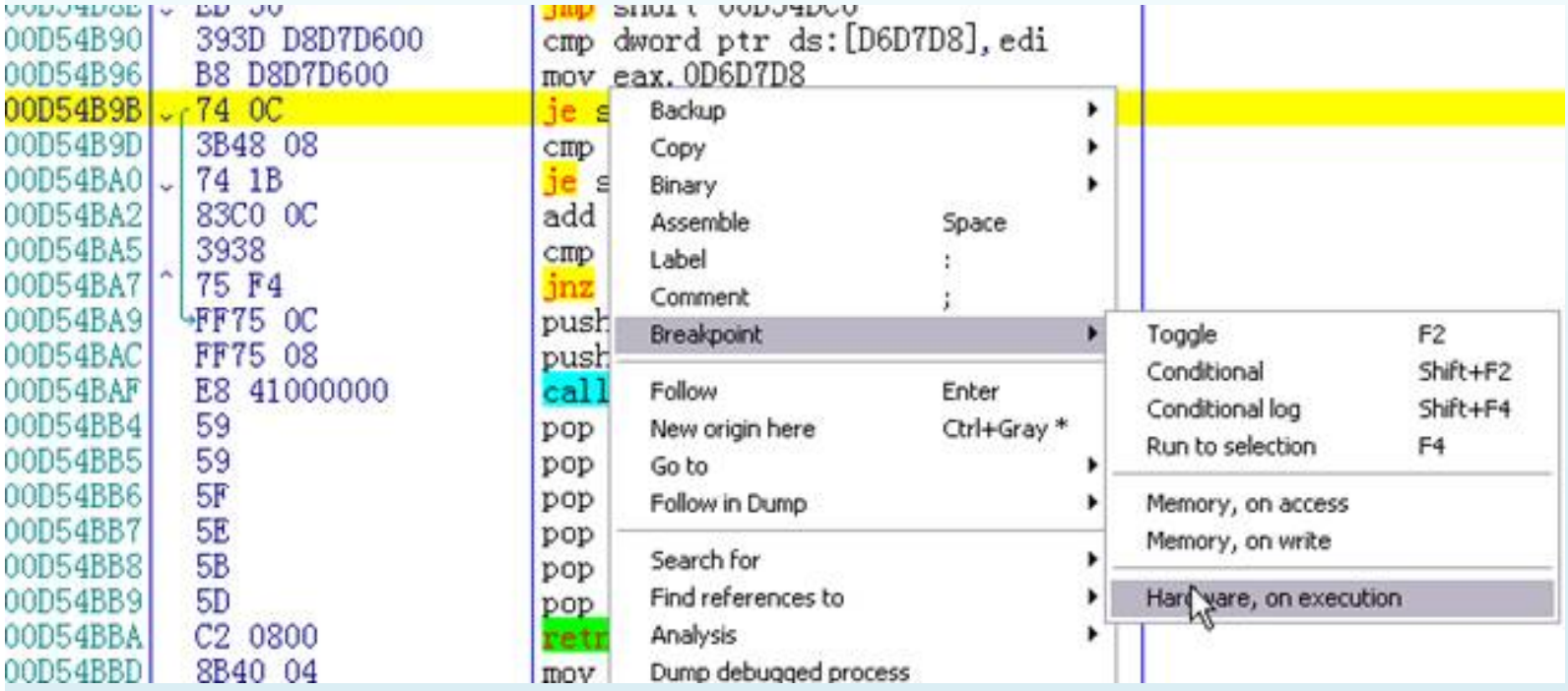
_ The button "Delete 1" to remove BP has set, and click OK. After one to enter into this:

```
Address   Hex dump          Disassembly                          Comment
00D54B66  55                push ebp
00D54B67  8BEC              mov ebp,esp
00D54B69  53                push ebx
00D54B6A  56                push esi
00D54B6B  57                push edi
00D54B6C  33FF              xor edi,edi
00D54B6E  33DB              xor ebx,ebx
00D54B70  66:F745 0E FFFF   test word ptr ss:[ebp+E],0FFFF
00D54B76  75 03             jnz short 00D54B7B
00D54B78  8B5D 0C           mov ebx,dword ptr ss:[ebp+C]
00D54B7B  57                push edi
00D54B7C  FF15 A4B0D600     call dword ptr ds:[D6B0A4]           kernel32.GetModuleHandleA
00D54B82  8B4D 08           mov ecx,dword ptr ss:[ebp+8]
00D54B85  3BC8              cmp ecx,eax
00D54B87  75 07             jnz short 00D54B90
```

1 _cuon mouse down slightly yellow line is the Magic Jump

```
00D54B82   8B4D 08          mov ecx, dword ptr ss:[ebp+8]
00D54B85   3BC8             cmp ecx, eax
00D54B87   75 07            jnz short 00D54B90
00D54B89   B8 18D3D600      mov eax, 0D6D318
00D54B8E   EB 30            jmp short 00D54BC0
00D54B90   393D D8D7D600    cmp dword ptr ds:[D6D7D8], edi
00D54B96   B8 D8D7D600      mov eax, 0D6D7D8
00D54B9B   74 0C            je short 00D54BA9
00D54B9D   3B48 08          cmp ecx, dword ptr ds:[eax+8]
00D54BA0   74 1B            je short 00D54BBD
00D54BA2   83C0 0C          add eax, 0C
00D54BA5   3938             cmp dword ptr ds:[eax], edi
00D54BA7   75 F4            jnz short 00D54B9D
00D54BA9   FF75 0C          push dword ptr ss:[ebp+C]
00D54BAC   FF75 08          push dword ptr ss:[ebp+8]
00D54BAF   E8 41000000      call 00D54BF5
00D54BB4   59               pop ecx
00D54BB5   59               pop ecx
00D54BB6   5F               pop edi
00D54BB7   5E               pop esi
00D54BB8   5B               pop ebx
00D54BB9   5D               pop ebp
00D54BBA   C2 0800          retn 8
```

Set one hour _Bay **1 breakpiont Hardware, on Execution**



_Bay Time to press Ctrl + F2, Shift + F9 and we just stopped at Breakpoint Set. I used to come to Srcipt Fix IAT, the script has Code as follows:

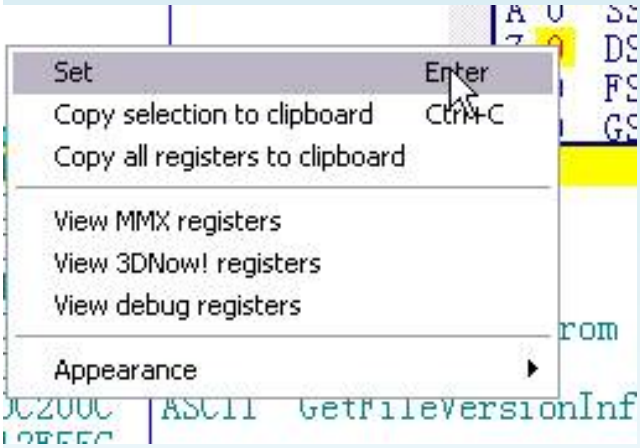
IATscript.osc
dbh
eoe LABEL
eob Babel
run

LABEL:
esto
jmp LABEL

Babel :
Cmp eip, 00 D54B9B
jne fin
mov! zF, 1
run
jmp Babel

Fin:
ret

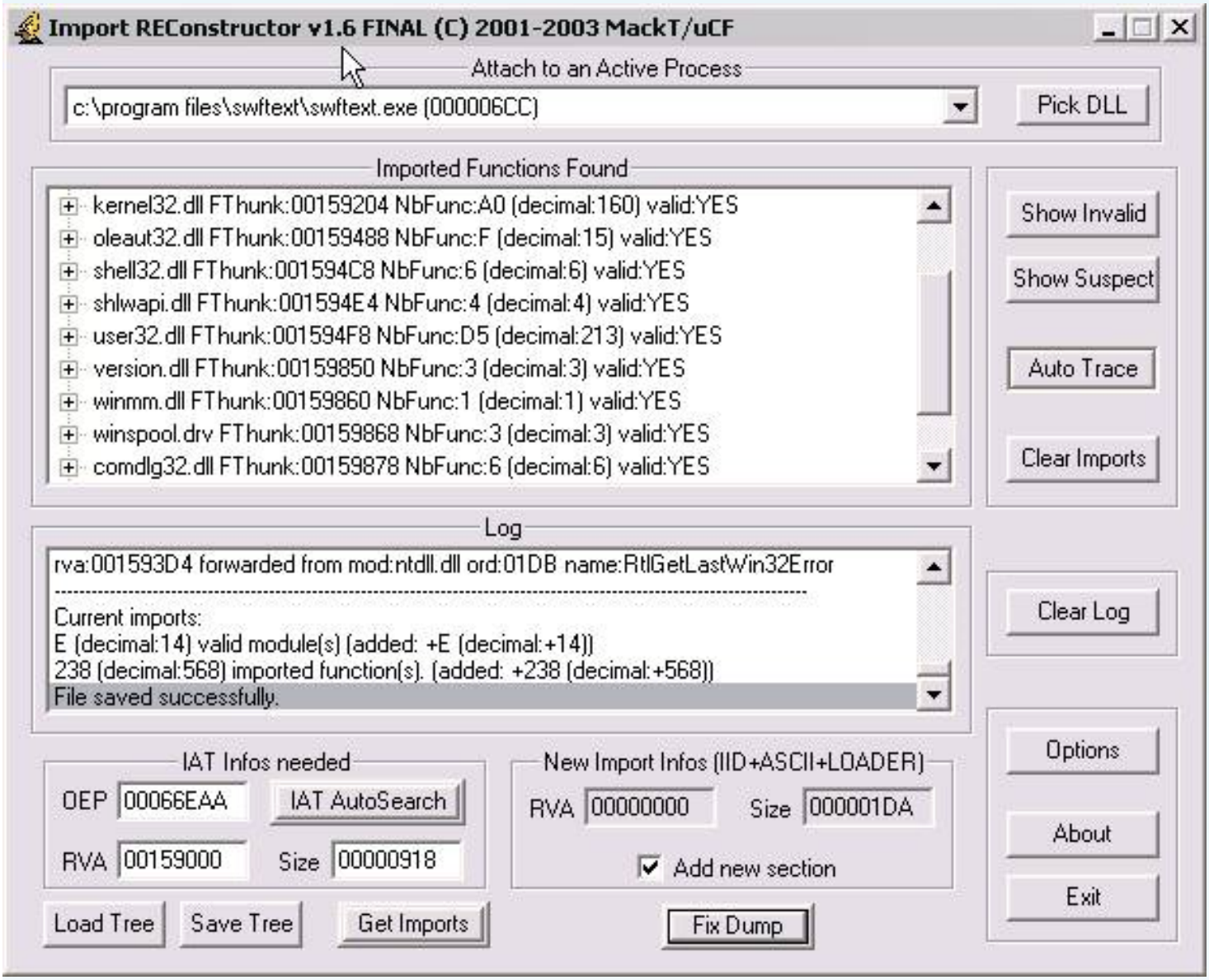
_Dia Only *00 D54B9B* *Scripts in the address Magic Jump we just stopped in Olly. Address this change by each of you should pay attention focus when running scripts. Some of the action before the Run Scripts you must set the flag Z = 1 if it is not with you must make it out to lose function when run Scripts*



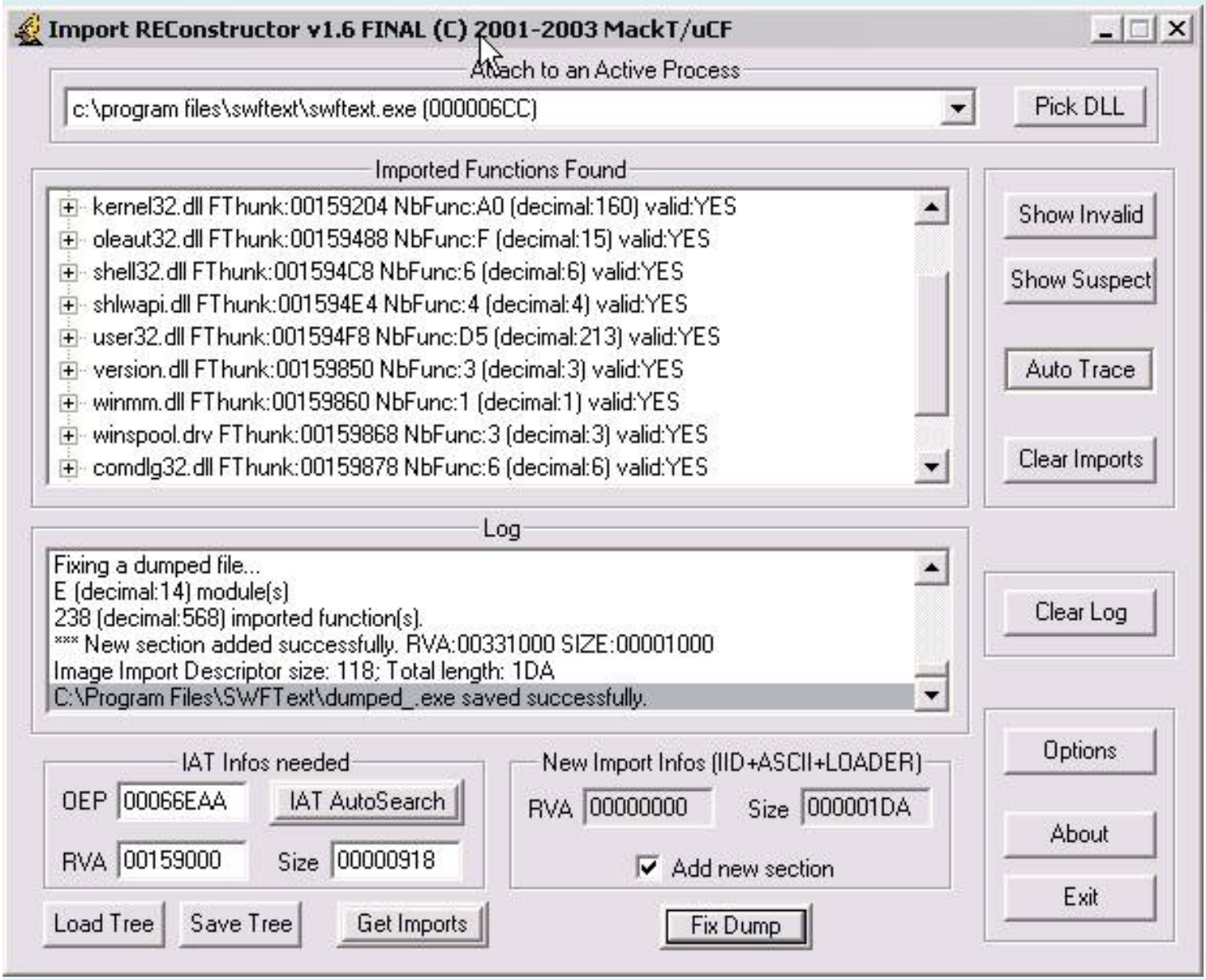
_Tiep We jump to the OEP 00466EAA = (Ctrl + G to enter 00466EAA) and set **1 breakpiont Hardware, OEP on Execution in** *doing so to complete the IAT Fix Script automatically jump to OEP always.*

_ Once done 2 requirements on our Run Scripts "IATscript.osc", the script is finished running

_tiep by **1.6 ImpRec** Open, Select proccess is **SWFText.exe, fill OEP 66EAA = ((0x466EAA - 0x400000 = 66EAA),** Press "IAT AutoSearch" Press button "Get Imports" and press button "Show Invalid" and it was like follows:



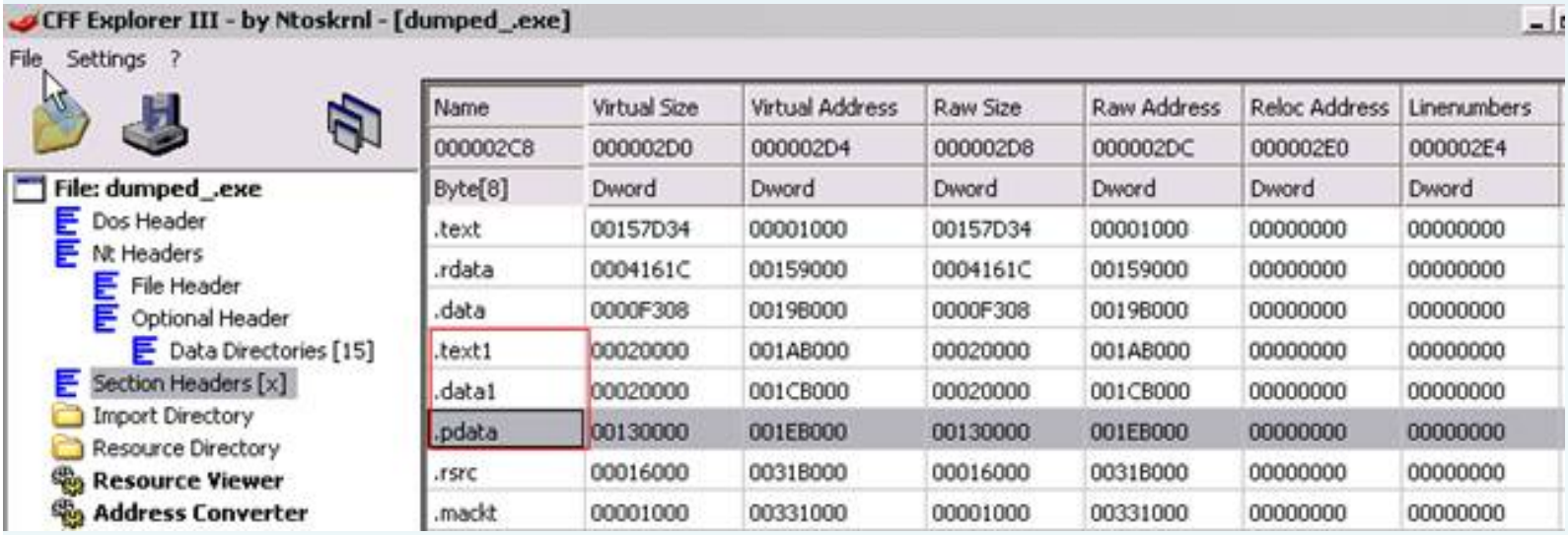
_he he, without any health **Invalid** re, Press button "Fix dump" file to fix IAT dumped.exe



Buoc Final Test Run **file dumped.exe. Oh yeah, File run well, always take the NAG limited time as we accidentally Crack It has always gòi Suong ... ha !!!!!!!!!!**

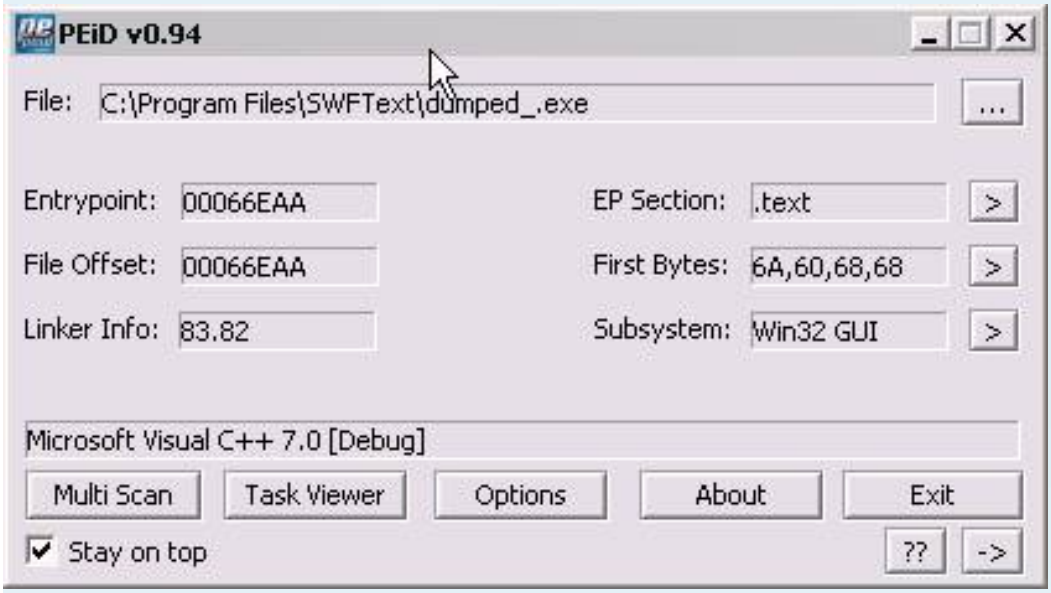
===> Unpack Done !!!!!

_ Far as the process is completed unpack. But if you want to reduce the small space to unpack the files we conducted delete Section tàn Arma balance is also xót. Pdata. Data1. Text1. Of course the delete This section does not affect the program. Here we should use CFF Explorer for quick



_Sau Then Save the file capacity is 1.75 Mb

Dung PeiD scanning the File Dumped.exe considered stars



Tut hope this helps you more. You find yourself writing so long but when you understand about how to insure your target, you just 2 minutes is OK ... wish you success.

Why Not Bar
24/1/2006

Tag & Rename 3.2 RC 3 - Inline Patching ASProtect 2.2 SKE -> Alexey Solodovnikov

Original Tutorial by Chinese fly - Convert to Vietnamese by hacnho

See the best in Web Layout mode 800 * 600

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软件介绍： 使用 MP3/VQF 的 Tag Info 批量为文件改名。

【作者声明】：只是感兴趣，没有其他目的。失误之处敬请诸位大侠赐教

【调试环境】：WinXP、OllyDBD、PEiD、LordPE、IDA

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The use: Uses the MP3/VQF Tag Info batch to change name as the document.

[Author Thanh Minh]: How tut feel for inspiration, not for purpose. Please ignore and hope for your forgiveness for my mistake!

[Tools]: WinXP, OllyDBD, PEiD, LordPE, IDA!

【脱壳过程】：

AsPrtect V2.X脱壳越来越麻烦，某些时候Inline Patch会省点事。国外不少人用此方法来对付AsPrtect，JohnWho写过教程，近来看到temerata也做了不少Inline Patch破解AsPrtect加壳程序。关于为何Patch可以参看以前的《Patch注册ASProtect V1.X壳保护程序的方法》。下面的记录算是再学习一次Inline Patch，没有新的成果。代码也较多，不适合新手练习。

感谢前人的研究成果。感谢shoooo的帮忙分析自校验。
下面以Tag&Rename.V3.2.RC3[3.2.56.119]为例来演示。

[Progress unpack]:

Asprotect 2.x packer is a very difficult game, unpack it very troubles, so the patch inline object of our life. Many people have written tut inline patch of form ASProtect this! Recently, JohnWho describe the curriculum (wrote a tut) to form inline patch by patch directly to ASProtect 1.x. Call na conduct as "Patch to register ASProtect V1.X Procedure Shell Protection Method" Today we will learn how to inline patch on the new form of ASProtect is 2.x. The process can inject code more complex, so not for you to know.

Thank in person the money of research results this (long lines this month, including J) . Shoooo thank you helped me a lot in the process of analyzing this software!

一、获取壳代码重定位基址

前面部分的几个解压代码留在Patch部分分析，下面先简单跟踪一下流程。
设置Ollydbg忽略所有的异常选项，用IsDebug插件去掉Ollydbg的调试器标志。

CODE: [Copy to clipboard]

```
00401000     68 01A08700        push 87A001
//进入Ollydbg后暂停在这
00401005     E8 01000000        call 0040100B
0040100A     C3                 retn
```

I: Load up OllyDBG target, remember to select the option HIDE Plugin IsDebuggerPresent.

00401000> 68 01A08700 PUSH TagRenam.0087A001 / / First Olly temporarily stop here
00401005 E8 01000000 CALL TagRenam.0040100B
0040100A C3 RETN

HE VirtualAlloc Shift+F9，中断2次后取消断点，Alt+F9返回

CODE: [Copy to clipboard]

```
0087A517     FF95 F0030000      call dword ptr ss:[ebp+3F0] ; kernel32.VirtualAlloc
0087A51D     8985 31040000      mov dword ptr ss:[ebp+431],eax
//[ebp+431]=[0087A869]=01280000 壳代码重定位基址  ★
0087A523     8985 D0010000      mov dword ptr ss:[ebp+1D0],eax
//[ebp+1D0]=[0087A608]=01280000
```

HE VirtualAlloc, Shift + F9 2 times, HD VirtualAlloc, then Alt + F9, to here:

0087A517 FF95 F0030000 call dword ptr ss: [ebp +3 F0]; kernel32.VirtualAlloc

```
0087A51D 8985 31040000 mov dword ptr ss: [ebp +431], eax
/ / [ebp +431] = [0087A869] = 01280000
0087A523 8985 D0010000 ss mov dword ptr [ebp +1 D0], eax
/ / [ebp +1 D0] = [0087A608] = 01280000
```

二、壳代码完全解压

HE GetModuleHandleA　Shift+F9，中断2次后取消断点，Alt+F9返回

CODE: [Copy to clipboard]

```
012B14A6     FF95 EC314400      call dword ptr ss:[ebp+4431EC]
012B14AC     85C0               test eax,eax
012B14AE     75 07              jnz short 012B14B7
```

II: Now ASProtect was completely unwind on memory:

HE GetModuleHandleA Shift + F9 2 times, delete breakpoint, Alt + F9:

```
012B14A6 FF95 EC314400 call dword ptr ss: [ebp +4431 EC]
012B14AC 85C0 test eax, eax
012B14AE 75 07 jnz short 012B14B7
```

Ctrl+F向下找popad，看到AsPrtect解压壳代码的那个循环

CODE: [Copy to clipboard]

```
012B15C1     61                 popad
//记住这里  ★
012B15C2     75 08              jnz short 012B15CC
012B15C4     B8 01000000        mov eax,1
012B15C9     C2 0C00            retn 0C
012B15CC     68 DC892A01        push 12A89DC
012B15D1     C3                 retn
```

Ctrl + F: POPAD, to here:

```
012815C1   61              popad                  //Remembers here  *
012815C2   75 08           jnz short 012815CC
012815C4   B8 01000000     mov eax,1
012815C9   C2 0C00         retn 0C
012815CC   68 00000000     push 0
012815D1   C3              retn
```

三、自校验：CreateFileMapping

自从AsPrtect V1.X被直接Patch后作者在V2.X里面增强了自校验。
要想办法找到可以搞定自校验的时机，AsPrtect开始准备自校验的同时也给我们提供了解决它的机会。
Ctrl+G:CreateFileMappingA　在函数尾下断，中断后取消断点，Alt+F9返回

CODE: [Copy to clipboard]

```
01298630     6A 00              push 0
01298632     6A 00              push 0
01298634     6A 00              push 0
01298636     6A 02              push 2
//需要修改push 8  ★
01298638     6A 00              push 0
0129863A     53                 push ebx
0129863B     A1 E4972A01        mov eax,dword ptr ds:[12A97E4]
01298640     8B40 1C            mov eax,dword ptr ds:[eax+1C]
01298643     FFD0               call eax ; kernel32.CreateFileMappingA
01298645     A3 14B42A01        mov dword ptr ds:[12AB414],eax
0129864A     53                 push ebx
0129864B     A1 E4972A01        mov eax,dword ptr ds:[12A97E4]
01298650     8B40 18            mov eax,dword ptr ds:[eax+18]
01298653     FFD0               call eax
01298655     833D 14B42A01 00   cmp dword ptr ds:[12AB414],0
0129865C     0F84 66040000      je 01298AC8
01298662     6A 00              push 0
01298664     6A 00              push 0
01298666     6A 00              push 0
01298668     6A 04              push 4
//需要修改push 1  ★
0129866A     A1 14B42A01        mov eax,dword ptr ds:[12AB414]
0129866F     50                 push eax
01298670     A1 E4972A01        mov eax,dword ptr ds:[12A97E4]
01298675     8B40 08            mov eax,dword ptr ds:[eax+8]
01298678     FFD0               call eax ; kernel32.MapViewOfFileEx
0129867A     8BD8               mov ebx,eax
//EAX值是映像文件的开始地址  ★
0129867C     50                 push eax
0129867D     E8 4A010000        call 012987CC
```

III: Ctrl + G: CreateFileMappingA, F2, Shift + F9 2 times, delete breakpoint, Alt + F9:

```
01298630 6A 00 push 0
01298632 6A 00 push 0
01298634 6A 00 push 0
01298636 6A 02 push 2
/ / Should be revised to push 8 ★
01298638 6A 00 push 0
0129863A 53 push ebx
0129863B A1 E4972A01 mov eax, dword ptr ds: [12A97E4]
01298640 8B40 1C mov eax, dword ptr ds: [eax +1 C]
01298643 FFD0 call eax; kernel32.CreateFileMappingA
01298645 A3 14B42A01 mov dword ptr ds: [12AB414], eax
0129864A 53 push ebx
0129864B A1 E4972A01 mov eax, dword ptr ds: [12A97E4]
01298650 8B40 18 mov eax, dword ptr ds: [eax +18]
01298653 FFD0 call eax
01298655 833D 14B42A01 00 Cmp dword ptr ds: [12AB414], 0
0129865C 0F84 66040000 je 01298AC8
01298662 6A 00 push 0
01298664 6A 00 push 0
01298666 6A 00 push 0
01298668 6A 04 push 4
/ / Should be revised to push ★ 1
```

```
0129866A A1 14B42A01 mov eax, dword ptr ds: [12AB414]
0129866F 50 push eax
01298670 A1 E4972A01 mov eax, dword ptr ds: [12A97E4]
01298675 8B40 08 mov eax, dword ptr ds: [eax +8]
01298678 FFD0 call eax; kernel32.MapViewOfFileEx
0129867A 8BD8 mov ebx, eax
/ / Value of EAX is mapped by EP 401000 ★
0129867C 50 push eax
0129867D E8 4A010000 call 012987CC
```

为何不仅仅修改MapViewOfFileEx的参数？看看MSDN

CODE: [Copy to clipboard]

```
HANDLE CreateFileMapping(
  HANDLE hFile,                       // handle to file
  LPSECURITY_ATTRIBUTES lpAttributes, // security
  DWORD flProtect,                    // protection
  DWORD dwMaximumSizeHigh,            // high-order DWORD of size
  DWORD dwMaximumSizeLow,             // low-order DWORD of size
  LPCTSTR lpName                      // object name
);

flProtect :
2=PAGE_READONLY
4=PAGE_READWRITE
8=PAGE_WRITECOPY   //需要修改成这个参数
```

Win9X平台上若不修改CreateFileMapping，则MapViewOfFileEx的FILE_MAP_COPY会失败

CODE: [Copy to clipboard]

```
LPVOID MapViewOfFileEx(
  HANDLE hFileMappingObject,   // handle to file-mapping object
  DWORD dwDesiredAccess,       // access mode
  DWORD dwFileOffsetHigh,      // high-order DWORD of offset
  DWORD dwFileOffsetLow,       // low-order DWORD of offset
  SIZE_T dwNumberOfBytesToMap, // number of bytes to map
  LPVOID lpBaseAddress         // starting address
);

dwDesiredAccess :
1=FILE_MAP_COPY
4=FILE_MAP_READ
```

Ham CreateFileMapping in MSDN:

```
HANDLE CreateFileMapping (
HANDLE hFile, / / handle to file to map
LPSECURITY_ATTRIBUTES lpAttributes, / / optional security Attributes
DWORD flProtect, / / protection for mapping object
DWORD dwMaximumSizeHigh, / / high-order 32 bits of object size
DWORD dwMaximumSizeLow, / / low-order 32 bits of object size
LPCTSTR lpName / / name of the file-mapping object
);

flProtect

Specifies the desired protection for the file view, when the file is
mapped. This parameter can be one of the following values:

ValueDescription
PAGE_READONLY Gives read-only access to the committed region of pages.
An attempt to write to or execute the committed region results in an
access indoctrination. The file specified by the hFile parameter must
have been created with GENERIC_READ access.
PAGE_READWRITE Gives read-write access to the committed region of pages.
The file specified by hFile must have been created with GENERIC_READ and
GENERIC_WRITE access.
Gives PAGE_WRITECOPY copy on write access to the committed region of
pages. The files specified by the hFile parameter must have been created
with GENERIC_READ and GENERIC_WRITE access.
```

Ham MapViewOfFileEx in MSDN:

```
LPVOID MapViewOfFileEx (

HANDLE hFileMappingObject, / / file-mapping object to map into address
space
DWORD dwDesiredAccess, / / access mode
DWORD dwFileOffsetHigh, / / high-order 32 bits of file offset
DWORD dwFileOffsetLow, / / low-order 32 bits of file offset
DWORD dwNumberOfBytesToMap, / / number of bytes to map
LPVOID lpBaseAddress / / suggested starting address for mapped view
);


Parameters

hFileMappingObject

Identifies an open handle to a file-mapping object. The CreateFileMapping
OpenFileMapping functions and return this handle.

dwDesiredAccess

Specifies the type of access to the file-mapping object and, therefore,
the page protection of the pages mapped by the file. This parameter can be
one of the following values:

ValueMeaning
FILE_MAP_WRITE Read-and-write access. The hFileMappingObject parameter must
have been created with PAGE_READWRITE protection. A read-write view of the
file is mapped.
FILE_MAP_READ read-only access. The hFileMappingObject parameter must have
been created with PAGE_READWRITE or PAGE_READONLY protection. A read-only
```

view of the file is mapped.
Same as FILE_MAP_ALL_ACCESS FILE_MAP_WRITE.
FILE_MAP_COPY Copy on write access. If you create the map with PAGE_WRITECOPY the view with FILE_MAP_COPY, you will receive a view to the file. If you write to it, the pages are automatically swappable and the modifications you make will not go to the original data file.Windows 95: You must pass PAGE_WRITECOPY to CreateFileMapping; otherwise, an error will be returned.If you share the mapping between multiple DuplicateHandle processes using one or OpenFileMapping process and writes to a view, the modification is propagated to the other process. The original file does not change.Windows NT: There is no restriction as to how the parameter hFileMappingObject must be created. Copy on write is valid for any type of view. If you share the mapping between multiple processes using DuplicateHandle or OpenFileMapping and one process writes to a view, the modification is not propagated to the other process. The original file does not change.

Copy on write access. If you create the map with PAGE_WRITECOPY the view with FILE_MAP_COPY, you will receive a view to the file. If you write to it, the pages are swappable automatically and make modifications will you go to the not original data file.
Windows 95/98/ME: You must pass PAGE_WRITECOPY to CreateFileMapping; otherwise, an error will be returned.

四、获得ASProtect注册名Pre-Dip处理的地址

现在设置Ollydbg忽略除了"内存访问异常、同时忽略以下制定异常"之外的所有其它异常选项。
Shift+F9 运行N次，直至堆栈中第2次看见硬盘指纹:

CODE: [Copy to clipboard]

```
0013FF1C   0013FF28  指针到下一个 SEH 记录
0013FF20   0129C356  SE 句柄
0013FF24   00000000
0013FF28   0013FF80  指针到下一个 SEH 记录
0013FF2C   0129D173  SE 句柄
0013FF30   0013FF78
0013FF34   01280000
0013FF38   01240000
0013FF3C   0129B470
0013FF40   00000000
0013FF44   012D5468  ASCII "wWDDDAAgLTg="
0013FF48   012D5434  ASCII "AFBC4FD7-E635"
```

IV: Search Hardware Finger Print of ASProtect by pressing Shift + F9 a few times until you reach here:

0013FF1C 0013FF28 point to next SEH Record
0013FF20 0129C356 SE 句柄 (SE cú Comments: P t h a t if I do not do is Sentense Handle J)
0013FF24 00000000
0013FF28 0013FF80 SEH Record point to the next
SE 0013FF2C 0129D173 句柄
0013FF30 0013FF78
0013FF34 01280000
0013FF38 01240000
0013FF3C 0129B470
0013FF40 00000000
0013FF44 012D5468 ASCII "wWDDDAAgLTg"

```
0013FF48 012D5434 ASCII "AFBC4FD7-E635"
```

Alt+M打开内存查看窗口，在00401000段"设置内存访问断点"，Shift+F9，断下

CODE: [Copy to clipboard]

```
004B7B44     55                 push ebp
//中断在这里
004B7B45     8BEC               mov ebp,esp
004B7B47     A1 B0037100        mov eax,dword ptr ds:[7103B0]
004B7B4C     A3 AC037100        mov dword ptr ds:[7103AC],eax
004B7B51     8B45 08            mov eax,dword ptr ss:[ebp+8]
004B7B54     A3 B0037100        mov dword ptr ds:[7103B0],eax
004B7B59     5D                 pop ebp
004B7B5A     C2 0400            retn 4
```

```
Press Alt + M, located on Access Memory Breakpoint, F9 + Shitf, stop here:

004B7B44 55 push ebp
/ / break here
004B7B45 8BEC mov ebp, esp
004B7B47 A1 B0037100 mov eax, dword ptr ds: [7103B0]
004B7B4C A3 AC037100 ds mov dword ptr [7103AC], eax
004B7B51 8B45 08 mov eax, dword ptr ss: [ebp +8]
004B7B54 A3 B0037100 mov dword ptr ds: [7103B0], eax
004B7B59 5D pop ebp
004B7B5A C2 0400 retn 4
```

取消内存断点，向上看：

CODE: [Copy to clipboard]

```
004B7B18     55                 push ebp
//下断，Shift+F9直至中断在这里，取消断点
004B7B19     8BEC               mov ebp,esp
004B7B1B     8B45 08            mov eax,dword ptr ss:[ebp+8]
//[ebp+8]=[0012FF24]=01283A29   注册名保存地址
004B7B1E     85C0               test eax,eax
004B7B20     74 0C              je short 004B7B2E
004B7B22     8038 00            cmp byte ptr ds:[eax],0
004B7B25     74 07              je short 004B7B2E
004B7B27     C605 B4037100 01   mov byte ptr ds:[7103B4],1
//注意：[7103B4]应该置1        ★
004B7B2E     8B15 A8037100      mov edx,dword ptr ds:[7103A8]
004B7B34     8915 A4037100      mov dword ptr ds:[7103A4],edx
004B7B3A     A3 A8037100        mov dword ptr ds:[7103A8],eax
//注册名保存地址放入[7103A8]   ★
004B7B3F     5D                 pop ebp
004B7B40     C2 0400            retn 4
//返回0129CABF
```

CODE: [Copy to clipboard]

```
0129CAB9     50                push eax
//注册名保存地址              ★
0129CABA     8B47 04           mov eax,dword ptr ds:[edi+4]
0129CABD     FFD0              call eax ; 004B7B18
```

Clear Memory breakpoint, roll up a few lines:

004B7B18 55 push ebp
/ / Set a breakpoint on acces here, Shift + F9, ice, remove breakpoint
004B7B19 8BEC mov ebp, esp
004B7B1B 8B45 08 mov eax, dword ptr ss: [ebp +8]
/ / [ebp +8] = [0012FF24] = 01283A29 stored registration information
004B7B1E 85C0 test eax, eax
004B7B20 74 0C je short 004B7B2E
Cmp 004B7B22 8038 00 byte ptr ds: [eax], 0
004B7B25 74 07 je short 004B7B2E
004B7B27 C605 B4037100 01 mov byte ptr ds: [7103B4], 1
/ / Note: [7103B4] equal to 1 (see the stack) ★
004B7B2E 8B15 A8037100 mov edx, dword ptr ds: [7103A8]
004B7B34 8915 A4037100 mov dword ptr ds: [7103A4], edx
004B7B3A A3 A8037100 mov dword ptr ds: [7103A8], eax
/ / Value of the registration information is recorded in the last variable EAX: [7103A8] ★
004B7B3F 5D pop ebp
004B7B40 C2 0400 retn 4
/ / Return 0129CABF

0129CAB9 50 push eax
/ / Save registration information ★
0129CABA 8B47 04 mov eax, dword ptr ds: [edi +4]
0129CABD FFD0 call eax; 004B7B18

五、程序中需要修改的地方

但是这里我们直接修改此Pre-Dip后程序还是显示未注册，呵呵
Tag&Rename和AlfaClock、Bee Icons等不同，还需要修改程序

1、判断是否是注册版

CODE: [Copy to clipboard]

```
0070CFC5     E8 FE4FDBFF        call 004C1FC8
//进入修改
0070CFCA     84C0               test al,al
0070CFCC     0F85 0E010000      jnz 0070D0E0
0070CFD2     33C9               xor ecx,ecx
0070CFD4     B2 01              mov dl,1
0070CFD6     A1 C45E6A00        mov eax,dword ptr ds:[6A5EC4]
0070CFDB     E8 B485D8FF        call 00495594
0070CFE0     8B15 D88F7100      mov edx,dword ptr ds:[718FD8]
0070CFE6     8902               mov dword ptr ds:[edx],eax
0070CFE8     33C0               xor eax,eax
0070CFEA     55                 push ebp
0070CFEB     68 B9D07000        push 70D0B9
0070CFF0     64:FF30            push dword ptr fs:[eax]
0070CFF3     64:8920            mov dword ptr fs:[eax],esp
0070CFF6     A1 D88F7100        mov eax,dword ptr ds:[718FD8]
0070CFFB     8B00               mov eax,dword ptr ds:[eax]
0070CFFD     E8 9ED8D8FF        call 0049A8A0
0070D002     A1 D88F7100        mov eax,dword ptr ds:[718FD8]
0070D007     8B00               mov eax,dword ptr ds:[eax]
0070D009     8B10               mov edx,dword ptr ds:[eax]
0070D00B     FF92 88000000      call dword ptr ds:[edx+88]
0070D011     8B0D B0867100      mov ecx,dword ptr ds:[7186B0]
0070D017     A1 B48B7100        mov eax,dword ptr ds:[718BB4]
0070D01C     8B00               mov eax,dword ptr ds:[eax]
0070D01E     8B15 6C876E00      mov edx,dword ptr ds:[6E876C]
0070D024     E8 CF1AD9FF        call 0049EAF8
0070D029     A1 D88F7100        mov eax,dword ptr ds:[718FD8]
0070D02E     8B00               mov eax,dword ptr ds:[eax]
0070D030     8B10               mov edx,dword ptr ds:[eax]
0070D032     FF92 88000000      call dword ptr ds:[edx+88]
0070D038     68 DC050000        push 5DC
0070D03D     E8 3A4DD0FF        call 00411D7C
0070D042     A1 B0867100        mov eax,dword ptr ds:[7186B0]
0070D047     8B00               mov eax,dword ptr ds:[eax]
0070D049     BA 70D27000        mov edx,70D270 ; ASCII "Tag&Rename 3.2 rc 3 UNREGISTERED"
0070D04E     E8 418AD6FF        call 00475A94
```

CODE: [Copy to clipboard]

```
004C20B1     C645 FB 00         mov byte ptr ss:[ebp-5],0
//Patch 点:  C645 FB 01         mov byte ptr ss:[ebp-5],1  ★
004C20B5     EB 2E              jmp short 004C20E5
```

V: The order restored improving local destination: P, conduct Argentina is starting to inline patch to the program was where to find the correct patch. We have found the Unreg such as the patch and then, but a soft pack with the way 2.x ASProtect patch will vary, for example billion compared with Tag Rename BeeIcon or AlfaClock!

1. We judgments code is related to the check Registered or unregistered!

```
0070CFC5 E8 FE4FDBFF call 004C1FC8
/ / Call this function to
0070CFCA 84C0 test al, al
0070CFCC 0F85 0E010000 jnz 0070D0E0
0070CFD2 33C9 xor ecx, ecx
0070CFD4 B2 01 mov dl, 1
0070CFD6 A1 C45E6A00 mov eax, dword ptr ds: [6A5EC4]
0070CFDB E8 B485D8FF call 00495594
0070CFE0 8B15 D88F7100 mov edx, dword ptr ds: [718FD8]
0070CFE6 8902 mov dword ptr ds: [edx], eax
0070CFE8 33C0 xor eax, eax
0070CFEA 55 push ebp
0070CFEB 68 B9D07000 push 70D0B9
0070CFF0 64: FF30 push dword ptr fs: [eax]
0070CFF3 64:8920 mov dword ptr fs: [eax], esp
0070CFF6 A1 D88F7100 mov eax, dword ptr ds: [718FD8]
0070CFFB 8B00 mov eax, dword ptr ds: [eax]
0070CFFD E8 9ED8D8FF call 0049A8A0
0070D002 A1 D88F7100 mov eax, dword ptr ds: [718FD8]
0070D007 8B00 mov eax, dword ptr ds: [eax]
0070D009 8B10 mov edx, dword ptr ds: [eax]
0070D00B FF92 88000000 call dword ptr ds: [edx +88]
0070D011 8B0D B0867100 mov ecx, dword ptr ds: [7186B0]
0070D017 A1 B48B7100 mov eax, dword ptr ds: [718BB4]
0070D01C 8B00 mov eax, dword ptr ds: [eax]
0070D01E 8B15 6C876E00 mov edx, dword ptr ds: [6E876C]
0070D024 E8 CF1AD9FF call 0049EAF8
0070D029 A1 D88F7100 mov eax, dword ptr ds: [718FD8]
0070D02E 8B00 mov eax, dword ptr ds: [eax]
0070D030 8B10 mov edx, dword ptr ds: [eax]
0070D032 FF92 88000000 call dword ptr ds: [edx +88]
0070D038 68 DC050000 push 5DC
0070D03D E8 3A4DD0FF call 00411D7C
0070D042 A1 B0867100 mov eax, dword ptr ds: [7186B0]
0070D047 8B00 mov eax, dword ptr ds: [eax]
THREE 0070D049 mov edx 70D27000, 70D270; ASCII "Tag & Rename 3.2 rc 3 unregistered"
0070D04E E8 418AD6FF call 00475A94
```

Jump to this, change the flag patch check:

```
004C20B1 C645 FB 00 mov byte ptr ss: [ebp-5], 0
/ / Patch's: C645 FB 01 mov byte ptr ss: [ebp-5], 1 ★
004C20B5 EB 2e jmp short 004C20E5
```

2、显示注册名

CODE: [Copy to clipboard]

```
00684611     E8 8230D8FF        call 00407698
00684616     8D45 E4            lea eax,dword ptr ss:[ebp-1C]
00684619     8B55 F8            mov edx,dword ptr ss:[ebp-8]
//[ebp-8]指向注册名，最后一起修改
0068461C     E8 770DD8FF        call 00405398
```

不要问我是如何找的，大家都会调试，只不过某些人在这方面用的时间多点而已。

2. Display the list (here means Registration Name):

00684611 E8 8230D8FF call 00407698
00684616 8D45 E4 Lea eax, dword ptr ss: [ebp-1C]
00684619 8B55 F8 mov edx, dword ptr ss: [ebp-8]
/ / [ebp-8] is a pointer to the value name Registration
0068461C E8 770DD8FF call 00405398

Do not ask me why the stars of the J back in, you can debug, only that I've made too many soft and should nhòm one that is right, it is a habit, you must create your own habits that (damn, and Medical nhe relatives, this month it per confess, confess on maize, dek bít where that open)!

六、RegOpenKeyExA

Ctrl+F在"整个段块"搜索命令：push 20019

CODE: [Copy to clipboard]

```
0128A289     68 19000200        push 20019
//找到这里
0128A28E     6A 00              push 0
0128A290     8BC7               mov eax,edi
0128A292     E8 8D97FFFF        call 01283A24
0128A297     50                 push eax
0128A298     56                 push esi
0128A299     E8 36B4FFFF        call 012856D4 ; jmp to advapi32.RegOpenKeyExA
//Call RegOpenKeyExA
0128A29E     85C0               test eax,eax
0128A2A0     0F85 84000000      jnz 0128A32A
```

点右键，搜索全部命令：call 012856D4

地址　　反汇编　　注释

CODE: [Copy to clipboard]

```
0128A299   call 012856D4      jmp to advapi32.RegOpenKeyExA
0128A376   call 012856D4      jmp to advapi32.RegOpenKeyExA
0128A3E2   call 012856D4      jmp to advapi32.RegOpenKeyExA
0128A495   call 012856D4      jmp to advapi32.RegOpenKeyExA
0128A57D   call 012856D4      jmp to advapi32.RegOpenKeyExA
0129E1C3   call 012856D4      jmp to advapi32.RegOpenKeyExA
0129E260   call 012856D4      jmp to advapi32.RegOpenKeyExA
```

```
0129E1C3   call 012856D4      jmp to advapi32.RegOpenKeyExA
0129E260   call 012856D4      jmp to advapi32.RegOpenKeyExA
```

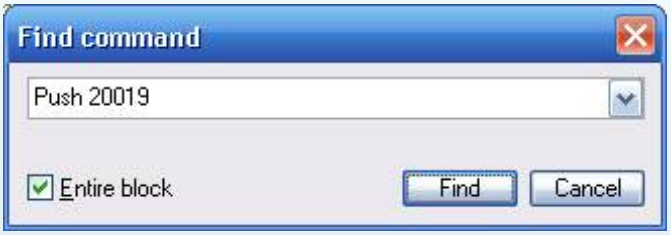
一般修改后面3个CALL后的跳转就行了，记住这几个地方
其实在本例中不需要修改这里，但是为了解说也Patch了

CODE: [Copy to clipboard]

```
0128A57D     E8 52B1FFFF        call 012856D4 ; jmp to advapi32.RegOpenKeyExA
0128A582     85C0               test eax,eax
0128A584     75 30              jnz short 0128A5B6
0129E1C3     E8 0C75FEFF        call 012856D4 ; jmp to advapi32.RegOpenKeyExA
0129E1C8     85C0               test eax,eax
0129E1CA     75 42              jnz short 0129E20E
0129E260     E8 6F74FEFF        call 012856D4 ; jmp to advapi32.RegOpenKeyExA
0129E265     85C0               test eax,eax
0129E267     0F85 88000000      jnz 0129E2F5
```

VI: RegOpenKeyA

Ctrl + F:



To here:

```
0128A289 68 19000200 push 20019
/ / You will be here!
0128A28E 6A 00 push 0
0128A290 8BC7 mov eax, edi
0128A292 E8 8D97FFFF call 01283A24
0128A297 50 push eax
0128A298 56 push esi
0128A299 E8 36B4FFFF call 012856D4; jmp to advapi32.RegOpenKeyExA
/ / Call RegOpenKeyExA
0128A29E 85C0 test eax, eax
0128A2A0 0F85 84000000 jnz 0128A32A
```

Call 012856D4 in line, you enter here to jump to:

```
0128A299 call 012856D4 jmp to advapi32.RegOpenKeyExA
0128A376 call 012856D4 jmp to advapi32.RegOpenKeyExA
0128A3E2 call 012856D4 jmp to advapi32.RegOpenKeyExA
0128A495 call 012856D4 jmp to advapi32.RegOpenKeyExA
0128A57D call 012856D4 jmp to advapi32.RegOpenKeyExA
0129E1C3 call 012856D4 jmp to advapi32.RegOpenKeyExA
0129E260 call 012856D4 jmp to advapi32.RegOpenKeyExA
```

Remember the position of this line. Ctrl + R to see what the call of this function:

```
0128A57D E8 52B1FFFF call 012856D4; jmp to advapi32.RegOpenKeyExA
```

```
0128A582 85C0 test eax, eax
0128A584 75 30 jnz short 0128A5B6
0129E1C3 E8 0C75FEFF call 012856D4; jmp to advapi32.RegOpenKeyExA
0129E1C8 85C0 test eax, eax
0129E1CA 75 42 jnz short 0129E20E
0129E260 E8 6F74FEFF call 012856D4; jmp to advapi32.RegOpenKeyExA
0129E265 85C0 test eax, eax
0129E267 0F85 88000000 jnz 0129E2F5
```

七、一起 Patch 吧

大体流程清楚了，下面开始Patch吧。复制TagRename.exe改名为Patch.eXe

看看Patch.eXe的PE信息，SizeOfImage=004A2000，区段信息如下：

CODE: [Copy to clipboard]

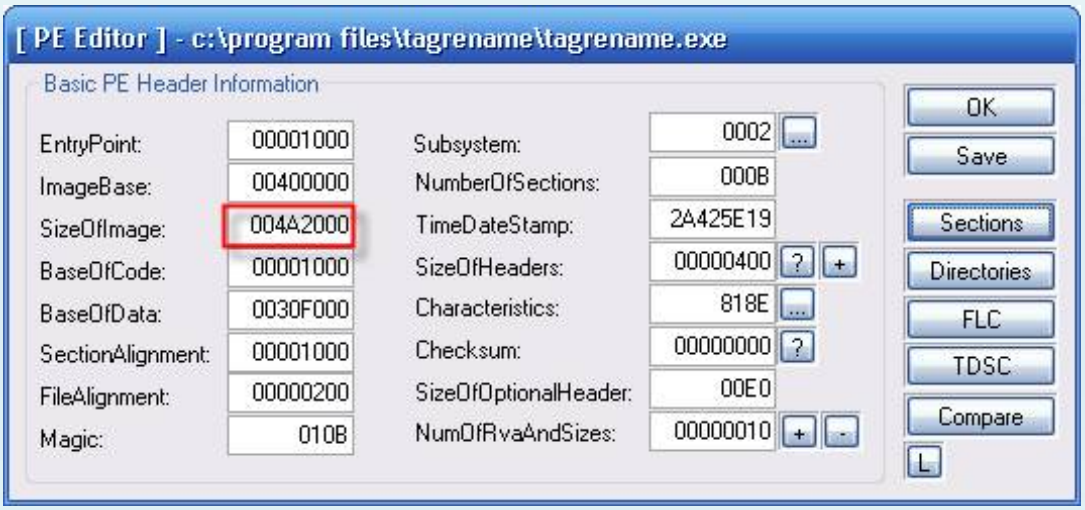
No	Name	VSize	VOffset	RSize	ROffset	Charact
01		0030E000	00001000	000F4A00	00000400	E0000040
02		0000B000	0030F000	00004000	000F4E00	E0000040
03		00002000	0031A000	00000000	000F8E00	E0000040
04		00004000	0031C000	00003800	000F8E00	E0000040
05		00001000	00320000	00000200	000FC600	E0000040
06		00001000	00321000	00000000	000FC800	E0000040
07		00001000	00322000	00000200	000FC800	E0000040
08		00029000	00323000	00000000	000FCA00	E0000040
09	.rsrc	0012E000	0034C000	0009BA00	000FCA00	E0000040
0A	.0000	00027000	0047A000	00026400	00198400	E0000040
0B	.adata	00001000	004A1000	00000000	001BE800	E0000040

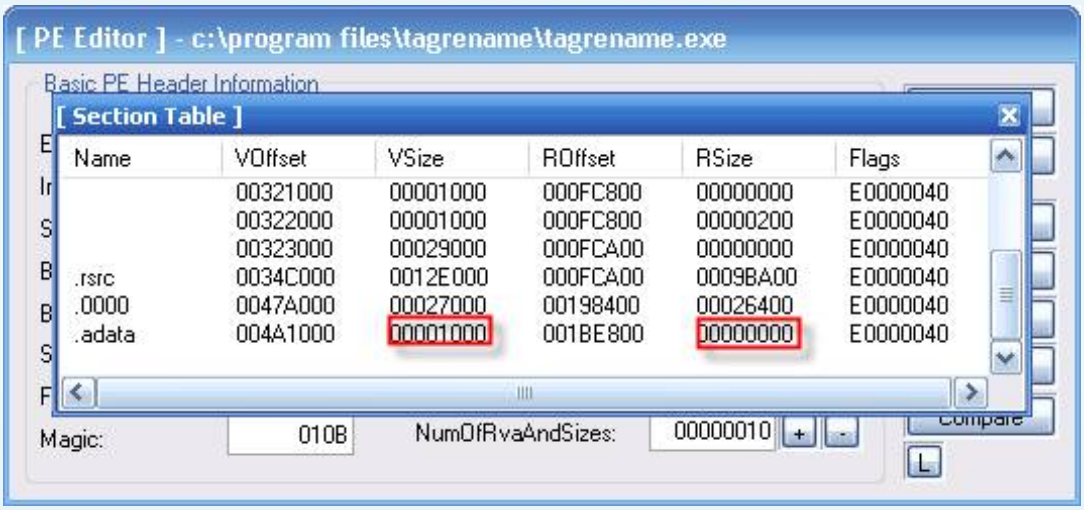
用LordPE把最后一个区段VSize和RSize都改为1500，保存后LordPE自动把SizeOfImage改为004A2500
用WinHex在Patch.eXe末尾添加1500H长度的00数据。当然，如果代码不多的话可以在程序中找空地。这样添加1500H长度后我们就获得了后面500H空白可以用，而不必管是否会被其他覆盖了。008A2000（偏移0X1BF800）处我们就可以写代码了。

新开OllyDBG载入Patch.eXe，我们要先Patch几个循环解码，再Patch上面六步分析的地方。

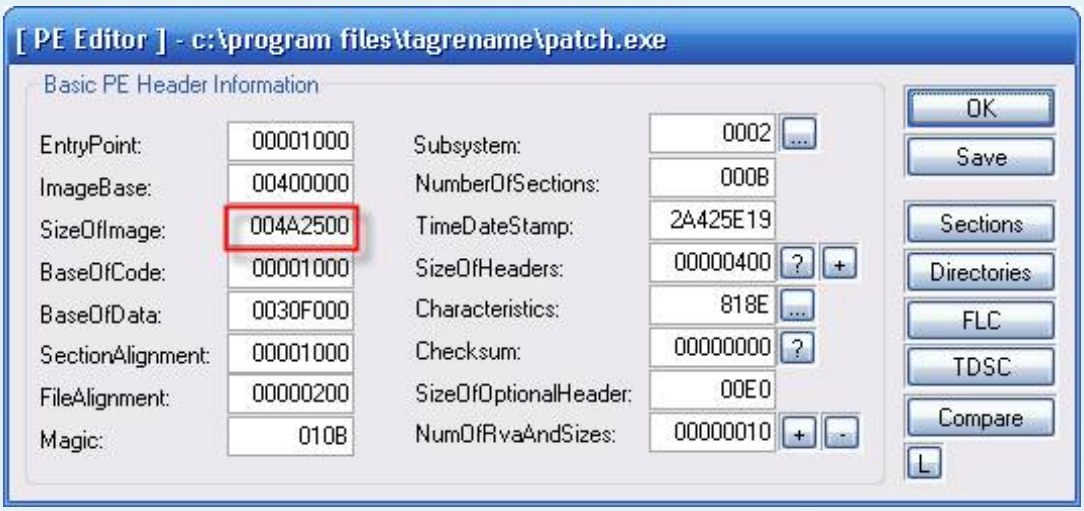
VII: Start patch:

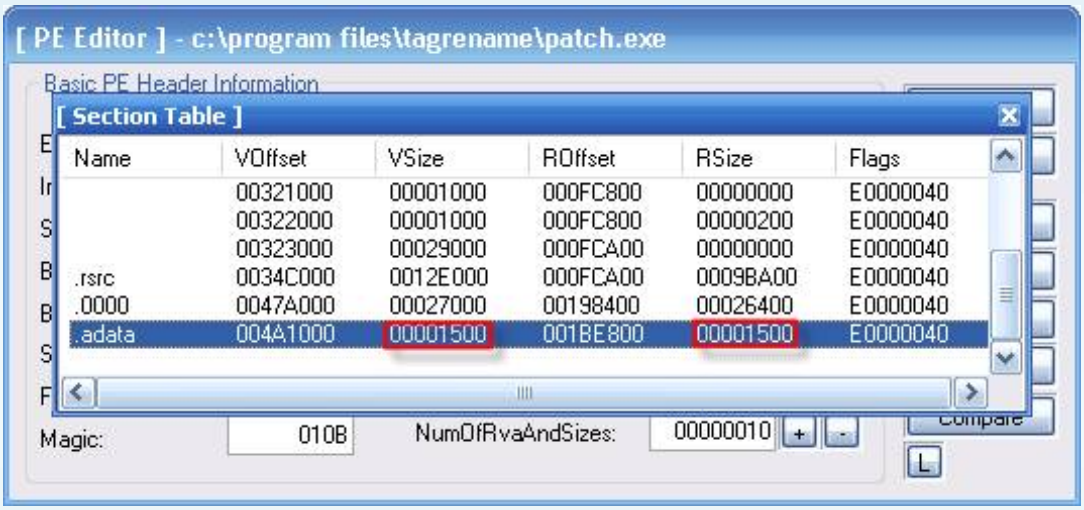
Copy the file TagRename.exe and renamed Patch.exe.'s Info View PE file Patch.exe





Using LordPE change into:





The expansion of the sections and imagebase help us to have a cave to inject code. Ok, now open a new OllyDBG, Patch.exe to load, we need to patch some loop check code of ASProtect then inject it into the following steps:

1、第1个点

CODE: [Copy to clipboard]

```
00401000     68 01A08700        push 87A001
//进入Ollydbg后暂停在这
00401005     E8 01000000        call 0040100B
0040100A     C3                 retn
```

F7单步走，看ASProtect解压壳代码

CODE: [Copy to clipboard]

```
0087A0FD     BE A93C493D        mov esi,3D493CA9
0087A102     81F6 543D493D      xor esi,3D493D54
0087A108     B8 EB8B342E        mov eax,2E348BEB
0087A10D     8B0A               mov ecx,dword ptr ds:[edx]
0087A10F     0F8B 08000000      jpo 0087A11D
0087A115     68 924FB86F        push 6FB84F92
0087A11A     8BFB               mov edi,ebx
0087A11C     5F                 pop edi
0087A11D     81C1 21A29555      add ecx,5595A221
0087A123     80DB 8D            sbb bl,8D
0087A126     81C1 4646A24E      add ecx,4EA24646
0087A12C     51                 push ecx
0087A12D     68 AF332832        push 322833AF
0087A132     B0 5B              mov al,5B
0087A134     5F                 pop edi
0087A135     58                 pop eax
0087A136     81C1 0770A50C      add ecx,0CA57007
0087A13C     0F81 00000000      jno 0087A142
0087A142     890A               mov dword ptr ds:[edx],ecx
0087A144     81EA 31F64154      sub edx,5441F631
0087A14A     BB A208717E        mov ebx,7E7108A2
0087A14F     81C2 2DF64154      add edx,5441F62D
0087A155     8BC7               mov eax,edi
0087A157     83EE 01            sub esi,1
0087A15A     0F85 ADFFFFFF      jnz 0087A10D
//解码循环    第1个点   接口    ★
//Patch ①、  E9 E17E0200       jmp 008A2040
```

Patch代码：

CODE: [Copy to clipboard]

```
008A2040     0F85 C780FDFF      jnz 0087A10D
//0087A15A代码挪这里执行
008A2046     C705 5AA18700 0F85>mov dword ptr ds:[87A15A],FFAD850F
008A2050     66:C705 5EA18700 F>mov word ptr ds:[87A15E],0FFFF
//还原0087A15A处修改的代码
008A2059     C705 D8A18700 8C7E>mov dword ptr ds:[87A1D8],27E8C
//Patch第2个点
008A2063     E9 F880FDFF        jmp 0087A160
//继续流程
```

1. Step 1:

```
00401000 68 01A08700 push 87A001
/ / You are here after load up OllyDBG
00401005 E8 01000000 call 0040100B
0040100A C3 retn
```

Press F7 is some way to surf the ASProtect unpacking code completely in memory:

```
0087A0FD BE A93C493D mov esi, 3D493CA9
0087A102 81F6 543D493D xor esi, 3D493D54
0087A108 b8 EB8B342E mov eax, 2E348BEB
0087A10D 8B0A mov ecx, dword ptr ds: [edx]
0087A10F 0F8B 08000000 jpo 0087A11D
0087A115 68 924FB86F push 6FB84F92
0087A11A 8BFB mov edi, ebx
0087A11C 5F pop edi
0087A11D 81C1 21A29555 add ecx, 5595A221
0087A123 80DB sbb BL 8D, 8D
0087A126 81C1 4646A24E add ecx, 4EA24646
0087A12C 51 push ecx
0087A12D 68 AF332832 push 322833AF
0087A132 mov al B0 5B, 5B
0087A134 5F pop edi
0087A135 58 pop eax
0087A136 81C1 0770A50C add ecx, 0CA57007
0087A13C 0F81 00000000 jno 0087A142
0087A142 890A mov dword ptr ds: [edx], ecx
0087A144 81EA 31F64154 sub edx, 5441F631
0087A14A BB A208717E mov ebx, 7E7108A2
0087A14F 81C2 2DF64154 add edx, 5441F62D
0087A155 8BC7 mov eax, edi
0087A157 83EE 01 sub esi, 1
0087A15A 0F85 ADFFFFFF jnz 0087A10D
/ / Loop decompress code, we need to patch this command jump:
0087A15A E9 E17E0200 jmp 008A2040
```

008A2040 at one patch as follows:

```
Cave 1:
008A2040 0F85 C780FDFF jnz 0087A10D
/ / I think the jump from the command loop at 0087A15A
008A2046 C705 5AA18700 0F85> mov dword ptr ds: [87A15A], FFAD850F
008A2050 66: C705 5EA18700 F> mov word ptr ds: [87A15E], 0FFFF
008A2059 C705 D8A18700 8C7E> mov dword ptr ds: [87A1D8], 27E8C
/ / Patch through step 2
008A2063 E9 F880FDFF jmp 0087A160
/ / Next to the store (ie after inject code this, do we jump to a command 0087A160,
this command after jumping at 008715A!)
```

2、第2个点

CODE: [Copy to clipboard]

```
0087A192     FF30               push dword ptr ds:[eax]
0087A194     B9 3390F94E        mov ecx,4EF99033
0087A199     5F                 pop edi
0087A19A     0FB7CB             movzx ecx,bx
0087A19D     81F7 1D90B243      xor edi,43B2901D
0087A1A3     8BD7               mov edx,edi
0087A1A5     81EF 92625E0E      sub edi,0E5E6292
0087A1AB     81D1 52F1012A      adc ecx,2A01F152
0087A1B1     81C7 63A4242F      add edi,2F24A463
0087A1B7     8AEF               mov ch,bh
0087A1B9     8938               mov dword ptr ds:[eax],edi
0087A1BB     B3 B8              mov bl,0B8
0087A1BD     83E8 04            sub eax,4
0087A1C0     68 4D3C7652        push 52763C4D
0087A1C5     51                 push ecx
0087A1C6     80CA 05            or dl,5
0087A1C9     59                 pop ecx
0087A1CA     5A                 pop edx
0087A1CB     4E                 dec esi
0087A1CC     0F85 18000000      jnz 0087A1EA
0087A1D2     66:81F1 80F3       xor cx,0F380
0087A1D7     E9 3A000000        jmp 0087A216
//解码循环   第2个点
//Patch ②、  E9 8C7E0200        jmp 008A2068
```

Patch代码：

CODE: [Copy to clipboard]

```
008A2068     C705 D8A18700 3A00>mov dword ptr ds:[87A1D8],3A
//还原0087A1D8处修改的代码
008A2072     C705 CFA28700 E9B6>mov dword ptr ds:[87A2CF],27DB6E9
//Patch第3个点
008A207C     66:C705 D3A28700 0>mov word ptr ds:[87A2D3],0FF00
008A2085     E9 4D81FDFF        jmp 0087A1D7
```

2. Step 2:

```
0087A192 FF30 push dword ptr ds: [eax]
0087A194 B9 3390F94E mov ecx, 4EF99033
0087A199 5F pop edi
0087A19A 0FB7CB movzx ecx, BX
0087A19D 81F7 1D90B243 xor edi, 43B2901D
0087A1A3 8BD7 mov edx, edi
0087A1A5 81EF 92625E0E sub edi, 0E5E6292
0087A1AB 81D1 52F1012A ADC ecx, 2A01F152
0087A1B1 81C7 63A4242F add edi, 2F24A463
0087A1B7 8AEF the mov, BH
0087A1B9 8938 mov dword ptr ds: [eax], edi
0087A1BB B3 b8 mov BL, 0B8
0087A1BD 83E8 04 sub eax, 4
0087A1C0 68 4D3C7652 push 52763C4D
```

```
0087A1C5 51 push ecx
0087A1C6 80CA 05 or dl, 5
0087A1C9 59 pop ecx
0087A1CA 5A pop edx
0087A1CB 4E dec esi
0087A1CC 0F85 18000000 jnz 0087A1EA
0087A1D2 66:81 F1 80F3 xor cx, 0F380
0087A1D7 E9 3A000000 jmp 0087A216
/ / Need to patch Jmp the position that we need to inject code, here is the cave 2:
0087A1D7 E9 8C7E0200 jmp 008A2068
```

Jump to 008A2068 (cbu like the same):

```
Cave 2:
008A2068 C705 D8A18700 3A00> mov dword ptr ds: [87A1D8], 3A
008A2072 C705 CFA28700 E9B6> mov dword ptr ds: [87A2CF], 27DB6E9
008A207C 66: C705 D3A28700 0> mov word ptr ds: [87A2D3], 0FF00
008A2085 E9 4D81FDFF jmp 0087A1D7
```

3、第3个点

CODE: [Copy to clipboard]

```
0087A2C4     83EA 04            sub edx,4
0087A2C7     BB E633514B        mov ebx,4B5133E6
0087A2CC     83EE 01            sub esi,1
0087A2CF     0F85 87FFFFFF      jnz 0087A25C
//解码循环   第3个点
//Patch ③、  E9 B67D0200        jmp 008A208A
```

Patch代码：

CODE: [Copy to clipboard]

```
008A208A     0F85 CC81FDFF      jnz 0087A25C
008A2090     C705 CFA28700 0F85>mov dword ptr ds:[87A2CF],FF87850F
008A209A     66:C705 D3A28700 F>mov word ptr ds:[87A2D3],0FFFF
//还原0087A2CF处修改的代码
008A20A3     C705 7FA38700 E937>mov dword ptr ds:[87A37F],27D37E9
008A20AD     66:C705 83A38700 0>mov word ptr ds:[87A383],0FF00
//Patch第4个点
008A20B6     E9 1A82FDFF        jmp 0087A2D5
```

3. Step 3:

```
0087A2C4 83EA 04 sub edx, 4
0087A2C7 BB E633514B mov ebx, 4B5133E6
0087A2CC 83EE 01 sub esi, 1
0087A2CF 0F85 87FFFFFF jnz 0087A25C
/ / Patch's
/ / 0087A2CF E9 B67D0200 jmp 008A208A

Cave 3:
008A208A 0F85 CC81FDFF jnz 0087A25C
008A2090 C705 CFA28700 0F85> mov dword ptr ds: [87A2CF], FF87850F
```

```
008A209A 66: C705 D3A28700 F> mov word ptr ds: [87A2D3], 0FFFF
008A20A3 C705 7FA38700 E937> mov dword ptr ds: [87A37F], 27D37E9
008A20AD 66: C705 83A38700 0> mov word ptr ds: [87A383], 0FF00
008A20B6 E9 1A82FDFF jmp 0087A2D5
```

4、第4个点

CODE: [Copy to clipboard]

```
0087A34D     81EF F17FF02D      sub edi,2DF07FF1
0087A353     81F3 B6D34803      xor ebx,348D3B6
0087A359     66:BF 62DB         mov di,0DB62
0087A35D     81C3 B7C8470B      add ebx,0B47C8B7
0087A363     8918               mov dword ptr ds:[eax],ebx
0087A365     81D7 61475018      adc edi,18504761
0087A36B     81E8 47B71B45      sub eax,451BB747
0087A371     B1 80              mov cl,80
0087A373     81C0 43B71B45      add eax,451BB743
0087A379     BA 0C25D675        mov edx,75D6250C
0087A37E     4E                 dec esi
0087A37F     0F85 B4FFFFFF      jnz 0087A339
//解码循环   第4个点
//Patch ④、  E9 377D0200       jmp 008A20BB
```

Patch代码：

CODE: [Copy to clipboard]

```
008A20BB     0F85 7882FDFF      jnz 0087A339
//0087A37F代码挪这里执行
008A20C1     C705 7FA38700 0F85>mov dword ptr ds:[87A37F],FFB4850F
008A20CB     66:C705 83A38700 F>mov word ptr ds:[87A383],0FFFF
//还原0087A37F处修改的代码
008A20D4     C705 27A48700 E9C0>mov dword ptr ds:[87A427],27CC0E9
008A20DE     66:C705 2BA48700 0>mov word ptr ds:[87A42B],0FF00
//Patch第5个点
008A20E7     E9 9982FDFF        jmp 0087A385
```

4. Step 4:

```
0087A34D 81EF F17FF02D sub edi, 2DF07FF1
0087A353 81F3 B6D34803 xor ebx, 348D3B6
0087A359 66: BF 62DB mov di, 0DB62
0087A35D 81C3 B7C8470B add ebx, 0B47C8B7
0087A363 8918 mov dword ptr ds: [eax], ebx
0087A365 81D7 ADC edi 61475018, 18504761
0087A36B 81E8 47B71B45 sub eax, 451BB747
0087A371 B1 80 mov cl, 80
0087A373 81C0 43B71B45 add eax, 451BB743
0087A379 THREE 0C25D675 mov edx, 75D6250C
0087A37E 4E dec esi
0087A37F 0F85 B4FFFFFF jnz 0087A339
/ / Skip to Cave 4
0087A37F E9 377D0200 jmp 008A20BB

Cave 4:
```

```
008A20BB 0F85 7882FDFF jnz 0087A339
008A20C1 C705 7FA38700 0F85> mov dword ptr ds: [87A37F], FFB4850F
008A20CB 66: C705 83A38700 F> mov word ptr ds: [87A383], 0FFFF
008A20D4 C705 27A48700 E9C0> mov dword ptr ds: [87A427], 27CC0E9
008A20DE 66: C705 2BA48700 0> mov word ptr ds: [87A42B], 0FF00
008A20E7 E9 9982FDFF jmp 0087A385
```

5、第5个点

CODE: [Copy to clipboard]

```
0087A3F4     59                 pop ecx
0087A3F5     5A                 pop edx
0087A3F6     81E8 9A2CB57B      sub eax,7BB52C9A
0087A3FC     50                 push eax
0087A3FD     8F041F             pop dword ptr ds:[edi+ebx]
0087A400     66:BE D174         mov si,74D1
0087A404     66:BE 09ED         mov si,0ED09
0087A408     81EB 2FB9E712      sub ebx,12E7B92F
0087A40E     B9 7DD3FF76        mov ecx,76FFD37D
0087A413     81C3 2BB9E712      add ebx,12E7B92B
0087A419     0F8B 02000000      jpo 0087A421
0087A41F     B2 72              mov dl,72
0087A421     81FB D8FAFFFF      cmp ebx,-528
0087A427     0F85 91FFFFFF      jnz 0087A3BE
//解码循环   第5个点
//Patch ⑤、  E9 C07C0200       jmp 008A20EC
```

Patch代码：

CODE: [Copy to clipboard]

```
008A20EC     0F85 CC82FDFF      jnz 0087A3BE
//0087A427代码挪这里执行
008A20F2     C705 27A48700 0F85>mov dword ptr ds:[87A427],FF91850F
008A20FC     66:C705 2BA48700 F>mov word ptr ds:[87A42B],0FFFF
//还原0087A427处修改的代码
008A2105     C705 97A58700 E981>mov dword ptr ds:[87A597],27B81E9
008A210F     66:C705 9BA58700 0>mov word ptr ds:[87A59B],0
//Patch第6个点
008A2118     E9 1083FDFF        jmp 0087A42D
```

5. Step 5:

```
0087A3F4 59 pop ecx
0087A3F5 5A pop edx
0087A3F6 81E8 9A2CB57B sub eax, 7BB52C9A
0087A3FC 50 push eax
0087A3FD 8F041F pop dword ptr ds: [edi + ebx]
0087A400 66: BE D174 mov si, 74D1
0087A404 66: BE 09ED mov si, 0ED09
0087A408 81EB 2FB9E712 sub ebx, 12E7B92F
0087A40E B9 7DD3FF76 mov ecx, 76FFD37D
0087A413 81C3 2BB9E712 add ebx, 12E7B92B
0087A419 0F8B 02000000 jpo 0087A421
0087A41F B2 72 mov dl, 72
0087A421 81FB D8FAFFFF Cmp ebx, -528
```

```
0087A427 0F85 91FFFFFF jnz 0087A3BE
/ / Skip to Cave 5
0087A427 E9 C07C0200 jmp 008A20EC


Cave 5:

008A20EC 0F85 CC82FDFF jnz 0087A3BE
008A20F2 C705 27A48700 0F85> mov dword ptr ds: [87A427], FF91850F
008A20FC 66: C705 2BA48700 F> mov word ptr ds: [87A42B], 0FFFF
008A2105 C705 97A58700 E981> mov dword ptr ds: [87A597], 27B81E9
008A210F 66: C705 9BA58700 0> mov word ptr ds: [87A59B], 0
008A2118 E9 1083FDFF jmp 0087A42D
```

6、第6个点　获取壳代码重定位基址

CODE: [Copy to clipboard]

```
0087A517     FF95 F0030000      call dword ptr ss:[ebp+3F0] ; kernel32.VirtualAlloc
0087A51D     8985 31040000      mov dword ptr ss:[ebp+431],eax
//[ebp+431]=[0087A869]=01280000 壳代码基址
0087A523     8985 D0010000      mov dword ptr ss:[ebp+1D0],eax
//[ebp+1D0]=[0087A608]=01280000
0087A529     64:67:A1 0000      mov eax,dword ptr fs:[0]
0087A52E     8985 2D040000      mov dword ptr ss:[ebp+42D],eax
0087A534     8B55 5B            mov edx,dword ptr ss:[ebp+5B]
0087A537     8B85 D0010000      mov eax,dword ptr ss:[ebp+1D0]
0087A53D     8902               mov dword ptr ds:[edx],eax
0087A53F     8B85 08040000      mov eax,dword ptr ss:[ebp+408]
0087A545     8942 04            mov dword ptr ds:[edx+4],eax
0087A548     8D85 9F030000      lea eax,dword ptr ss:[ebp+39F]
0087A54E     8B40 55            mov eax,dword ptr ds:[eax+55]
0087A551     8942 08            mov dword ptr ds:[edx+8],eax
0087A554     8B85 EC030000      mov eax,dword ptr ss:[ebp+3EC]
0087A55A     8942 10            mov dword ptr ds:[edx+10],eax
0087A55D     8B85 E8030000      mov eax,dword ptr ss:[ebp+3E8]
0087A563     8942 14            mov dword ptr ds:[edx+14],eax
0087A566     8B95 CC010000      mov edx,dword ptr ss:[ebp+1CC]
0087A56C     BB F8010000        mov ebx,1F8
0087A571     8B7C1A 0C          mov edi,dword ptr ds:[edx+ebx+C]
0087A575     0BFF               or edi,edi
0087A577     74 1E              je short 0087A597
0087A579     8B4C1A 10          mov ecx,dword ptr ds:[edx+ebx+10]
0087A57D     0BC9               or ecx,ecx
0087A57F     74 11              je short 0087A592
```

```
0087A581     03BD D0010000      add edi,dword ptr ss:[ebp+1D0]
0087A587     8B741A 14          mov esi,dword ptr ds:[edx+ebx+14]
0087A58B     03F2               add esi,edx
0087A58D     C1F9 02            sar ecx,2
0087A590     F3:A5              rep movs dword ptr es:[edi],dword ptr ds:[esi]
0087A592     83C3 28            add ebx,28
0087A595     EB DA              jmp short 0087A571
0087A597     8B85 CC010000      mov eax,dword ptr ss:[ebp+1CC]
//解码循环   第6个点
//Patch ⑥、  E9 817B0200        jmp 008A211D
```

Patch代码：

CODE: [Copy to clipboard]

```
008A211D     C705 97A58700 8B85>mov dword ptr ds:[87A597],1CC858B
008A2127     C605 9BA58700 00   mov byte ptr ds:[87A59B],0
//还原0087A597处修改的代码
008A212E     8B85 31040000      mov eax,dword ptr ss:[ebp+431]
//取得壳代码基址
008A2134     C780 ED100300 684C>mov dword ptr ds:[eax+310ED],8A214C68
008A213E     66:C780 F1100300 0>mov word ptr ds:[eax+310F1],0C300
//Patch第7个点 012B10ED
008A2147     E9 4B84FDFF        jmp 0087A597
```

6. Step 6: You remember the code contains functions VirtualAlloc not, we'll patch this code:

```
0087A517 FF95 F0030000 call dword ptr ss: [ebp +3 F0]; kernel32.VirtualAlloc
0087A51D 8985 31040000 mov dword ptr ss: [ebp +431], eax
/ / [ebp +431] = [0087A869] = 01280000
0087A523 8985 D0010000 ss mov dword ptr [ebp +1 D0], eax
/ / [ebp +1 D0] = [0087A608] = 01280000
0087A529 64:67: A1 0000 mov eax, dword ptr fs: [0]
0087A52E 8985 2D040000 mov dword ptr ss: [ebp +42 D], eax
0087A534 8B55 5B mov edx, dword ptr ss: [ebp +5 B]
0087A537 8B85 D0010000 mov eax, dword ptr ss: [ebp +1 D0]
0087A53D 8902 mov dword ptr ds: [edx], eax
0087A53F 8B85 08040000 mov eax, dword ptr ss: [ebp +408]
0087A545 8942 04 mov dword ptr ds: [edx +4], eax
0087A548 8D85 9F030000 Lea eax, dword ptr ss: [ebp +39 F]
0087A54E 8B40 55 mov eax, dword ptr ds: [eax +55]
0087A551 8942 08 mov dword ptr ds: [edx +8], eax
0087A554 8B85 EC030000 mov eax, dword ptr ss: [ebp +3 EC]
0087A55A 8942 10 mov dword ptr ds: [edx +10], eax
0087A55D 8B85 E8030000 mov eax, dword ptr ss: [ebp +3 E8]
0087A563 8942 14 mov dword ptr ds: [edx +14], eax
0087A566 8B95 CC010000 mov edx, dword ptr ss: [ebp +1 CC]
0087A56C BB F8010000 mov ebx, 1F8
0087A571 8B7C1A 0C mov edi, dword ptr ds: [ebx + edx + C]
0087A575 0BFF or edi, edi
0087A577 74 1E je short 0087A597
0087A579 8B4C1A 10 mov ecx, dword ptr ds: [ebx + edx +10]
0087A57D 0BC9 or ecx, ecx
0087A57F 74 11 je short 0087A592
0087A581 03BD D0010000 add edi, dword ptr ss: [ebp +1 D0]
0087A587 8B741A 14 mov esi, dword ptr ds: [ebx + edx +14]
0087A58B 03F2 add esi, edx
```

```
0087A58D C1F9 02 SAR ecx, 2
0087A590 F3: A5 rep movs dword ptr es: [edi], dword ptr ds: [esi]
0087A592 83C3 28 add ebx, 28
EB DA 0087A595 jmp short 0087A571
0087A597 8B85 CC010000 mov eax, dword ptr ss: [ebp +1 CC]
/ / Skip to Cave 6:
0087A597 E9 817B0200 jmp 008A211D


Cave 6:
008A211D C705 97A58700 8B85> mov dword ptr ds: [87A597], 1CC858B
008A2127 C605 9BA58700 00 mov byte ptr ds: [87A59B], 0
008A212E 8B85 31040000 mov eax, dword ptr ss: [ebp +431]
008A2134 C780 ED100300 684C> mov dword ptr ds: [eax +310 ED], 8A214C68
008A213E 66: C780 F1100300 0> mov word ptr ds: [eax +310 F1], 0C300
008A2147 E9 4B84FDFF jmp 0087A597
```

7、第7个点

CODE: [Copy to clipboard]

```
012B10C4     FF95 79294400      call dword ptr ss:[ebp+442979]
012B10CA     8985 75294400      mov dword ptr ss:[ebp+442975],eax
012B10D0     8D9D 452A4400      lea ebx,dword ptr ss:[ebp+442A45]
012B10D6     50                 push eax
012B10D7     53                 push ebx
012B10D8     E8 74050000        call 012B1651
012B10DD     8BC8               mov ecx,eax
012B10DF     8DBD 452A4400      lea edi,dword ptr ss:[ebp+442A45]
012B10E5     8BB5 75294400      mov esi,dword ptr ss:[ebp+442975]
012B10EB     F3:A4              rep movs byte ptr es:[edi],byte ptr ds:[esi]
012B10ED     8B85 75294400      mov eax,dword ptr ss:[ebp+442975]
//第7个点
//Patch ⑦、
012B10ED     68 4C218A00        push 8A214C
012B10F2     C3                 retn
```

Patch代码：

CODE: [Copy to clipboard]

```
008A214C     A1 69A88700        mov eax,dword ptr ds:[87A869]
//取得壳代码基址
008A2151     C780 ED100300 8B85>mov dword ptr ds:[eax+310ED],2975858B
008A215B     66:C780 F1100300 4>mov word ptr ds:[eax+310F1],44
//还原012B10ED处修改的代码
008A2164     C780 C2150300 687E>mov dword ptr ds:[eax+315C2],8A217E68
008A216E     66:C780 C6150300 0>mov word ptr ds:[eax+315C6],0C300
//Patch第8个点 012B15C2
008A2177     05 ED100300        add eax,310ED
008A217C     FFE0               jmp eax
//返回012B10ED处继续执行
```

7. Step 7:

```
012B10C4 FF95 79294400 call dword ptr ss: [ebp +442979]
```

```
012B10CA 8985 75294400 mov dword ptr ss: [ebp +442975], eax
012B10D0 8D9D 452A4400 Lea ebx, dword ptr ss: [ebp +442 A45]
012B10D6 50 push eax
012B10D7 53 push ebx
012B10D8 E8 74050000 call 012B1651
012B10DD 8BC8 mov ecx, eax
012B10DF 8DBD 452A4400 Lea edi, dword ptr ss: [ebp +442 A45]
012B10E5 8BB5 75294400 mov esi, dword ptr ss: [ebp +442975]
012B10EB F3: A4 rep movs byte ptr es: [edi], byte ptr ds: [esi]
012B10ED 8B85 75294400 mov eax, dword ptr ss: [ebp +442975]
/ / Patch's
012B10ED 68 4C218A00 push 8A214C
012B10F2 C3 retn
```

```
Cave 7:
008A214C A1 69A88700 mov eax, dword ptr ds: [87A869]
/ / Get the value of the code base address ASProtect
008A2151 C780 ED100300 8B85> mov dword ptr ds: [eax +310 ED], 2975858B
008A215B 66: C780 F1100300 4> mov word ptr ds: [eax +310 F1], 44
008A2164 C780 C2150300 687E> mov dword ptr ds: [eax +315 C2], 8A217E68
008A216E 66: C780 C6150300 0> mov word ptr ds: [eax +315 C6], 0C300
008A2177 05 ED100300 add eax, 310ED
008A217C FFE0 jmp eax
```

8、第8个点 CreateFileMappingA处理

CODE: [Copy to clipboard]

```
012B15C1     61                 popad
012B15C2     75 08              jnz short 012B15CC
//第8个点
//Patch ⑧、
012B15C2     68 7E218A00        push 8A217E
012B15C7     C3                 retn
```

Patch代码：

CODE: [Copy to clipboard]

```
008A217E     A1 69A88700        mov eax,dword ptr ds:[87A869]
//取得壳代码基址
008A2183     C780 C2150300 7508>mov dword ptr ds:[eax+315C2],1B80875
008A218D     66:C780 C6150300 0>mov word ptr ds:[eax+315C6],0
//还原012B15C2处修改的代码
008A2196     C680 37860100 08   mov byte ptr ds:[eax+18637],8
//修改01298636处的push 2为push 8  ★  CreateFileMappingA 参数
008A219D     C680 69860100 01   mov byte ptr ds:[eax+18669],1
//修改01298668处的push 4为push 1  ★  MapViewOfFileEx 参数
008A21A4     C780 7A860100 68BE>mov dword ptr ds:[eax+1867A],8A21BE68
008A21AE     66:C780 7E860100 0>mov word ptr ds:[eax+1867E],0C300
//Patch第9个点 0129867A
008A21B7     05 C2150300        add eax,315C2
008A21BC     FFE0               jmp eax
//返回012B15C2继续执行
```

8. Step 8:

```
You also remember our search for order in the POPAD not, belgium hours we will patch it
in code:

012B15C1 61 popad
012B15C2 75 08 jnz short 012B15CC
/ / Patch's
012B15C2 68 7E218A00 push 8A217E
012B15C7 C3 retn


Cave 8:
008A217E A1 69A88700 mov eax, dword ptr ds: [87A869]
/ / Get the value of the code base address ASProtect
008A2183 C780 C2150300 7508> mov dword ptr ds: [eax +315 C2], 1B80875
008A218D 66: C780 C6150300 0> mov word ptr ds: [eax +315 C6], 0
008A2196 C680 37860100 08 mov byte ptr ds: [eax +18637], 8
/ / Patch Push Push 2 to 8
008A219D C680 69860100 01 mov byte ptr ds: [eax +18669], 1
/ / Patch Push Push 4 to 1
008A21A4 C780 7A860100 68BE> mov dword ptr ds: [eax +1867 A], 8A21BE68
008A21AE 66: C780 7E860100 0> mov word ptr ds: [eax +1867 e], 0C300
008A21B7 05 C2150300 add eax, 315C2
008A21BC FFE0 jmp eax
```

9、第9个点　自校验处理

CODE: [Copy to clipboard]

```
01298630     6A 00              push 0
01298632     6A 00              push 0
01298634     6A 00              push 0
01298636     6A 02              push 2
01298638     6A 00              push 0
0129863A     53                 push ebx
0129863B     A1 E4972A01        mov eax,dword ptr ds:[12A97E4]
01298640     8B40 1C            mov eax,dword ptr ds:[eax+1C]
01298643     FFD0               call eax ; kernel32.CreateFileMappingA
01298645     A3 14B42A01        mov dword ptr ds:[12AB414],eax
0129864A     53                 push ebx
0129864B     A1 E4972A01        mov eax,dword ptr ds:[12A97E4]
01298650     8B40 18            mov eax,dword ptr ds:[eax+18]
01298653     FFD0               call eax
01298655     833D 14B42A01 00   cmp dword ptr ds:[12AB414],0
0129865C     0F84 66040000      je 01298AC8
01298662     6A 00              push 0
01298664     6A 00              push 0
01298666     6A 00              push 0
01298668     6A 04              push 4
0129866A     A1 14B42A01        mov eax,dword ptr ds:[12AB414]
0129866F     50                 push eax
01298670     A1 E4972A01        mov eax,dword ptr ds:[12A97E4]
01298675     8B40 08            mov eax,dword ptr ds:[eax+8]
01298678     FFD0               call eax ; kernel32.MapViewOfFileEx
0129867A     8BD8               mov ebx,eax
//第9个点
//Patch ⑨、
0129867A     68 BE218A00        push 8A21BE
0129867F     C3                 retn
```

Patch代码：

CODE: [Copy to clipboard]

```
008A21BE     8B1D 69A88700      mov ebx,dword ptr ds:[87A869]
//取得壳代码基址
008A21C4     C683 37860100 02   mov byte ptr ds:[ebx+18637],2
//还原01298636处修改的代码
008A21CB     C683 69860100 04   mov byte ptr ds:[ebx+18669],4
//还原01298668处修改的代码
008A21D2     C783 7A860100 8BD8>mov dword ptr ds:[ebx+1867A],E850D88B
008A21DC     66:C783 7E860100 4>mov word ptr ds:[ebx+1867E],14A
//还原0129867A处修改的代码
008A21E5     C780 50010000 0020>mov dword ptr ds:[eax+150],4A2000
//EAX值是映像文件的开始地址，还原映像文件的SizeOfImage
008A21EF     66:C780 90030000 0>mov word ptr ds:[eax+390],1000
//还原映像文件最后一个区段的VSize为1000
008A21F8     66:C780 98030000 0>mov word ptr ds:[eax+398],0
//还原映像文件最后一个区段的RSize为0000
008A2201     C780 5A851900 0F85>mov dword ptr ds:[eax+19855A],FFAD850F
008A220B     66:C780 5E851900 F>mov word ptr ds:[eax+19855E],0FFFF
//还原映像文件中第一个接口修改的代码
008A2214     C783 B9CA0100 682F>mov dword ptr ds:[ebx+1CAB9],8A222F68
008A221E     66:C783 BDCA0100 0>mov word ptr ds:[ebx+1CABD],0C300
//Patch第10个点 0129CAB9
008A2227     81C3 7A860100      add ebx,1867A
008A222D     FFE3               jmp ebx
//返回0129867A继续执行
```

9. Step 9:

Now we patch the two functions in the function CreateFileMappingA MapViewOfFileEx:

```
01298630 6A 00 push 0
01298632 6A 00 push 0
01298634 6A 00 push 0
01298636 6A 02 push 2
01298638 6A 00 push 0
0129863A 53 push ebx
0129863B A1 E4972A01 mov eax, dword ptr ds: [12A97E4]
01298640 8B40 1C mov eax, dword ptr ds: [eax +1 C]
01298643 FFD0 call eax; kernel32.CreateFileMappingA
01298645 A3 14B42A01 mov dword ptr DS: [12AB414], eax
0129864A 53 push ebx
0129864B A1 E4972A01 mov eax, dword ptr ds: [12A97E4]
01298650 8B40 18 mov eax, dword ptr ds: [eax +18]
01298653 FFD0 call eax
01298655 833D 14B42A01 00 Cmp dword ptr ds: [12AB414], 0
0129865C 0F84 66040000 je 01298AC8
01298662 6A 00 push 0
01298664 6A 00 push 0
01298666 6A 00 push 0
01298668 6A 04 push 4
0129866A A1 14B42A01 mov eax, dword ptr ds: [12AB414]
0129866F 50 push eax
01298670 A1 E4972A01 mov eax, dword ptr ds: [12A97E4]
01298675 8B40 08 mov eax, dword ptr ds: [eax +8]
01298678 FFD0 call eax; kernel32.MapViewOfFileEx
0129867A 8BD8 mov ebx, eax
```

```
/ / Patch's
0129867A 68 BE218A00 push 8A21BE
0129867F C3 retn

Cave 9:
008A21BE 8B1D 69A88700 mov ebx, dword ptr ds: [87A869]
008A21C4 C683 37860100 02 mov byte ptr ds: [ebx +18637], 2
008A21CB C683 69860100 04 mov byte ptr ds: [ebx +18669], 4
008A21D2 C783 7A860100 8BD8> mov dword ptr ds: [ebx +1867 A], E850D88B
008A21DC 66: C783 7E860100 4> mov word ptr ds: [ebx +1867 e], 14A
008A21E5 C780 50010000 0020> mov dword ptr ds: [eax +150], 4A2000
/ / Return value EAX original SizeOfImage (deceive ASProtect)
008A21EF 66: C780 90,030,000 0> mov word ptr ds: [eax +390], 1000
/ / Return Vsize = 1000
008A21F8 66: C780 98,030,000 0> mov word ptr ds: [eax +398], 0
/ / Return Rsize = 1000
008A2201 C780 5A851900 0F85> mov dword ptr ds: [eax +19855 A], FFAD850F
008A220B 66: C780 5E851900 F> mov word ptr ds: [eax +19855 E], 0FFFF
008A2214 C783 B9CA0100 682F> mov dword ptr ds: [ebx +1 CAB9], 8A222F68
008A221E 66: C783 BDCA0100 0> mov word ptr ds: [ebx CABD +1], 0C300
008A2227 81C3 7A860100 add ebx, 1867A
008A222D FFE3 jmp ebx
```

10、第10个点　注册名Pre-Dip处理

CODE: [Copy to clipboard]

```
0129CAB9     50                push eax
//第10个点
0129CABA     8B47 04           mov eax,dword ptr ds:[edi+4]
0129CABD     FFD0              call eax
//注册名Pre-Dip处理

//Patch 10、
0129CAB9     68 2F228A00       push 8A222F
0129CABE     C3                retn
```

Patch代码：

CODE: [Copy to clipboard]

```
008A222F     A1 69A88700        mov eax,dword ptr ds:[87A869]
008A2234     C780 B9CA0100 508B>mov dword ptr ds:[eax+1CAB9],4478B50
008A223E     66:C780 BDCA0100 F>mov word ptr ds:[eax+1CABD],0D0FF
//还原0129CAB9处修改的代码
008A2247     C680 84A50000 EB   mov byte ptr ds:[eax+A584],0EB
008A224E     C680 CAE10100 EB   mov byte ptr ds:[eax+1E1CA],0EB
008A2255     C780 67E20100 E989>mov dword ptr ds:[eax+1E267],89E9
008A225F     C605 B4204C00 01   mov byte ptr ds:[4C20B4],1
//修改程序中判断是否注册的标志位
008A2266     C705 1D466800 60DC>mov dword ptr ds:[68461D],21DC60
//Patch第11个点  0068461C
008A2270     68 04208A00        push 8A2004  ; ASCII "fly [2005.12.01]"
//Push 注册名地址，预先在8A2004处写下注册名
008A2275     A1 69A88700        mov eax,dword ptr ds:[87A869]
008A227A     05 BACA0100        add eax,1CABA
008A227F     FFE0               jmp eax
//返回0129CABA继续执行
```

10. Step 10:

This step is a step we put UserName to cave in to the table about, deceive with ASProtect that is valid UserName J !

0129CAB9 50 push eax
0129CABA 8B47 04 mov eax, dword ptr ds: [edi +4]
0129CABD FFD0 call eax
/ / Pre-Registration processing Dip

/ / Patch's
0129CAB9 68 2F228A00 push 8A222F
0129CABE C3 retn

Cave 10:
008A222F A1 69A88700 mov eax, dword ptr ds: [87A869]
008A2234 C780 B9CA0100 508B> mov dword ptr ds: [eax +1 CAB9], 4478B50
008A223E 66: C780 BDCA0100 F> mov word ptr ds: [eax +1 CABD], 0D0FF
008A2247 C680 EB 84A50000 mov byte ptr ds: [eax + A584], 0EB
008A224E C680 EB CAE10100 mov byte ptr ds: [eax +1 E1CA], 0EB
008A2255 C780 67E20100 E989> mov dword ptr ds: [eax +1 E267], 89E9
008A225F C605 B4204C00 01 mov byte ptr ds: [4C20B4], 1
008A2266 C705 1D466800 60DC> mov dword ptr ds: [68461D], 21DC60
008A2270 68 04208A00 push 8A2004; ASCII "fly [2005.12.01]"
/ / Push the string UserName
008A2275 A1 69A88700 mov eax, dword ptr ds: [87A869]
008A227A 05 BACA0100 add eax, 1CABA
008A227F FFE0 jmp eax

11、第11个点 注册名显示

CODE: [Copy to clipboard]

```
00684616     8D45 E4           lea eax,dword ptr ss:[ebp-1C]
00684619     8B55 F8           mov edx,dword ptr ss:[ebp-8]
0068461C     E8 770DD8FF       call 00405398
//第11个点
//Patch 11、
0068461C     E8 60DC2100       call 008A2281
```

Patch代码：

CODE: [Copy to clipboard]

```
008A2281     BA 04208A00       mov edx,8A2004
//Patch 注册名地址，注意8A2004-4处应该是字符串长度
008A2286     E9 0D31B6FF       jmp 00405398
//继续流程
```

11. Step 11:

```
00684616 8D45 E4 Lea eax, dword ptr ss: [ebp-1C]
00684619 8B55 F8 mov edx, dword ptr ss: [ebp-8]
0068461C E8 770DD8FF call 00405398
/ / Patch's
0068461C E8 60DC2100 call 008A2281

Cave 11:
008A2281 THREE 04208A00 mov edx, 8A2004
/ / Push to record EDX value contains UserName
008A2286 E9 0D31B6FF jmp 00405398
```

VIII: The end!

In summary the entire code that we need to Inject Patch.exe file is:

```
008A2040 0F85 C780FDFF jnz 0087A10D
008A2046 C705 5AA18700 0F85ADFF mov dword ptr ds: [87A15A], FFAD850F
008A2050 66: C705 5EA18700 FFFF mov word ptr ds: [87A15E], 0FFFF
008A2059 C705 D8A18700 8C7E0200 mov dword ptr ds: [87A1D8], 27E8C
008A2063 E9 F880FDFF jmp 0087A160
008A2068 C705 D8A18700 3A000000 mov dword ptr ds: [87A1D8], 3A
008A2072 C705 CFA28700 E9B67D02 mov dword ptr ds: [87A2CF], 27DB6E9
008A207C 66: C705 D3A28700 00FF mov word ptr ds: [87A2D3], 0FF00
008A2085 E9 4D81FDFF jmp 0087A1D7
008A208A 0F85 CC81FDFF jnz 0087A25C
008A2090 C705 CFA28700 0F8587FF mov dword ptr ds: [87A2CF], FF87850F
008A209A 66: C705 D3A28700 FFFF mov word ptr ds: [87A2D3], 0FFFF
008A20A3 C705 7FA38700 E9377D02 mov dword ptr ds: [87A37F], 27D37E9
008A20AD 66: C705 83A38700 00FF mov word ptr ds: [87A383], 0FF00
008A20B6 E9 1A82FDFF jmp 0087A2D5
008A20BB 0F85 7882FDFF jnz 0087A339
008A20C1 C705 7FA38700 0F85B4FF mov dword ptr ds: [87A37F], FFB4850F
```

```
008A20CB 66: FFFF C705 83A38700 mov word ptr ds: [87A383], 0FFFF
008A20D4 C705 27A48700 E9C07C02 mov dword ptr ds: [87A427], 27CC0E9
008A20DE 66: C705 2BA48700 00FF mov word ptr ds: [87A42B], 0FF00
008A20E7 E9 9982FDFF jmp 0087A385
008A20EC 0F85 CC82FDFF jnz 0087A3BE
008A20F2 C705 27A48700 0F8591FF mov dword ptr ds: [87A427], FF91850F
008A20FC 66: C705 2BA48700 FFFF mov word ptr ds: [87A42B], 0FFFF
008A2105 C705 97A58700 E9817B02 mov dword ptr ds: [87A597], 27B81E9
008A210F 66: C705 9BA58700 0000 mov word ptr ds: [87A59B], 0
008A2118 E9 1083FDFF jmp 0087A42D
008A211D C705 97A58700 8B85CC01 mov dword ptr ds: [87A597], 1CC858B
008A2127 C605 9BA58700 00 mov byte ptr ds: [87A59B], 0
008A212E     8B85 31040000               mov eax,dword ptr ss:[ebp+431]
008A2134     C780 ED100300 684C218A      mov dword ptr ds:[eax+310ED],8A214C6>
008A213E     66:C780 F1100300 00C3       mov word ptr ds:[eax+310F1],0C300
008A2147     E9 4B84FDFF                 jmp 0087A597
008A214C     A1 69A88700                 mov eax,dword ptr ds:[87A869]
008A2151     C780 ED100300 8B857529      mov dword ptr ds:[eax+310ED],2975858>
008A215B     66:C780 F1100300 4400       mov word ptr ds:[eax+310F1],44
008A2164     C780 C2150300 687E218A      mov dword ptr ds:[eax+315C2],8A217E6>
008A216E     66:C780 C6150300 00C3       mov word ptr ds:[eax+315C6],0C300
008A2177     05 ED100300                 add eax,310ED
008A217C     FFE0                        jmp eax
008A217E     A1 69A88700                 mov eax,dword ptr ds:[87A869]
008A2183     C780 C2150300 7508B801      mov dword ptr ds:[eax+315C2],1B80875
008A218D     66:C780 C6150300 0000       mov word ptr ds:[eax+315C6],0
008A2196     C680 37860100 08            mov byte ptr ds:[eax+18637],8
008A219D     C680 69860100 01            mov byte ptr ds:[eax+18669],1
008A21A4     C780 7A860100 68BE218A      mov dword ptr ds:[eax+1867A],8A21BE6>
008A21AE     66:C780 7E860100 00C3       mov word ptr ds:[eax+1867E],0C300
008A21B7     05 C2150300                 add eax,315C2
008A21BC     FFE0                        jmp eax
008A21BE     8B1D 69A88700               mov ebx,dword ptr ds:[87A869]
008A21C4     C683 37860100 02            mov byte ptr ds:[ebx+18637],2
008A21CB     C683 69860100 04            mov byte ptr ds:[ebx+18669],4
008A21D2     C783 7A860100 8BD850E8      mov dword ptr ds:[ebx+1867A],E850D88>
008A21DC     66:C783 7E860100 4A01       mov word ptr ds:[ebx+1867E],14A
008A21E5     C780 50010000 00204A00      mov dword ptr ds:[eax+150],4A2000
008A21EF     66:C780 90030000 0010       mov word ptr ds:[eax+390],1000
008A21F8     66:C780 98030000 0000       mov word ptr ds:[eax+398],0
008A2201     C780 5A851900 0F85ADFF      mov dword ptr ds:[eax+19855A],FFAD85>
008A220B     66:C780 5E851900 FFFF       mov word ptr ds:[eax+19855E],0FFFF
008A2214     C783 B9CA0100 682F228A      mov dword ptr ds:[ebx+1CAB9],8A222F6>
008A221E     66:C783 BDCA0100 00C3       mov word ptr ds:[ebx+1CABD],0C300
008A2227     81C3 7A860100               add ebx,1867A
008A222D     FFE3                        jmp ebx
008A222F     A1 69A88700                 mov eax,dword ptr ds:[87A869]
008A2234     C780 B9CA0100 508B4704      mov dword ptr ds:[eax+1CAB9],4478B50
008A223E     66:C780 BDCA0100 FFD0       mov word ptr ds:[eax+1CABD],0D0FF
008A2247     C680 84A50000 EB            mov byte ptr ds:[eax+A584],0EB
008A224E     C680 CAE10100 EB            mov byte ptr ds:[eax+1E1CA],0EB
008A2255     C780 67E20100 E9890000      mov dword ptr ds:[eax+1E267],89E9
008A225F     C605 B4204C00 01            mov byte ptr ds:[4C20B4],1
008A2266     C705 1D466800 60DC2100      mov dword ptr ds:[68461D],21DC60
008A2270     68 04208A00                 push 8A2004
008A2275     A1 69A88700                 mov eax,dword ptr ds:[87A869]
008A227A     05 BACA0100                 add eax,1CABA
008A227F     FFE0                        jmp eax
008A2281     BA 04208A00                 mov edx,8A2004
008A2286     E9 0D31B6FF                 jmp 00405398
```

CODE: [Copy to clipboard]

```
10 00 00 00 66 6C 79 20 5B 32 30 30 35 2E 31 32 2E 30 31 5D 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
0F 85 C7 80 FD FF C7 05 5A A1 87 00 0F 85 AD FF 66 C7 05 5E A1 87 00 FF FF C7 05 D8 A1 87 00 8C
7E 02 00 E9 F8 80 FD FF C7 05 D8 A1 87 00 3A 00 00 00 C7 05 CF A2 87 00 E9 B6 7D 02 66 C7 05 D3
A2 87 00 00 FF E9 4D 81 FD FF 0F 85 CC 81 FD FF C7 05 CF A2 87 00 0F 85 87 FF 66 C7 05 D3 A2 87
00 FF FF C7 05 7F A3 87 00 E9 37 7D 02 66 C7 05 83 A3 87 00 00 FF E9 1A 82 FD FF 0F 85 78 82 FD
FF C7 05 7F A3 87 00 0F 85 B4 FF 66 C7 05 83 A3 87 00 FF FF C7 05 27 A4 87 00 E9 C0 7C 02 66 C7
05 2B A4 87 00 00 FF E9 99 82 FD FF 0F 85 CC 82 FD FF C7 05 27 A4 87 00 0F 85 91 FF 66 C7 05 2B
A4 87 00 FF FF C7 05 97 A5 87 00 E9 81 7B 02 66 C7 05 9B A5 87 00 00 00 E9 10 83 FD FF C7 05 97
A5 87 00 8B 85 CC 01 C6 05 9B A5 87 00 00 8B 85 31 04 00 00 C7 80 ED 10 03 00 68 4C 21 8A 66 C7
80 F1 10 03 00 00 C3 E9 4B 84 FD FF A1 69 A8 87 00 C7 80 ED 10 03 00 8B 85 75 29 66 C7 80 F1 10
03 00 44 00 C7 80 C2 15 03 00 68 7E 21 8A 66 C7 80 C6 15 03 00 00 C3 05 ED 10 03 00 FF E0 A1 69
A8 87 00 C7 80 C2 15 03 00 75 08 B8 01 66 C7 80 C6 15 03 00 00 00 C6 80 37 86 01 00 08 C6 80 69
86 01 00 01 C7 80 7A 86 01 00 68 BE 21 8A 66 C7 80 7E 86 01 00 00 C3 05 C2 15 03 00 FF E0 8B 1D
69 A8 87 00 C6 83 37 86 01 00 02 C6 83 69 86 01 00 04 C7 83 7A 86 01 00 8B D8 50 E8 66 C7 83 7E
86 01 00 4A 01 C7 80 50 01 00 00 00 20 4A 00 66 C7 80 90 03 00 00 00 10 66 C7 80 98 03 00 00 00
00 C7 80 5A 85 19 00 0F 85 AD FF 66 C7 80 5E 85 19 00 FF FF C7 83 B9 CA 01 00 68 2F 22 8A 66 C7
83 BD CA 01 00 00 C3 81 C3 7A 86 01 00 FF E3 A1 69 A8 87 00 C7 80 B9 CA 01 00 50 8B 47 04 66 C7
80 BD CA 01 00 FF D0 C6 80 84 A5 00 00 EB C6 80 CA E1 01 00 EB C7 80 67 E2 01 00 E9 89 00 00 C6
05 B4 20 4C 00 01 C7 05 1D 46 68 00 60 DC 21 00 68 04 20 8A 00 A1 69 A8 87 00 05 BA CA 01 00 FF
E0 BA 04 20 8A 00 E9 0D 31 B6 FF 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
```

Run thử Patch.exe:

_So easy, huh!

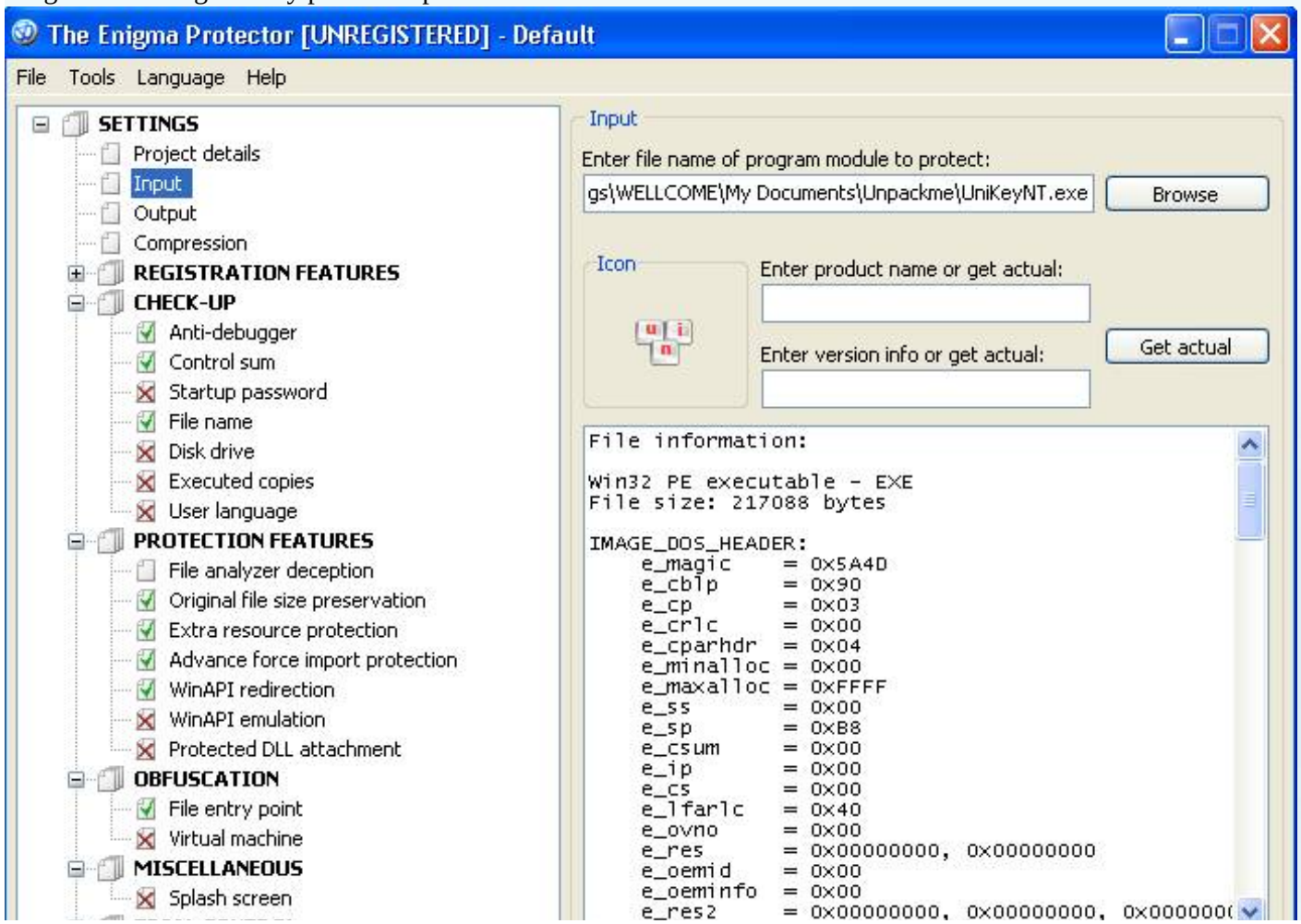
Welcome brothers gambling, then they have no long has tuts. But today because chán the sad life and the end of the week, so they try to take some time. Write a mini-tut 1 for reading the game. In fact this is not necessarily called tut, I just write as you understand them all, they should not go into the analysis. She analyzes some options of Enigma Protector lost 1 evening, so time is very urgent, they should also not have time to check kĩ. To understand this for good, require you to have:

1) Have knowledge of unpack
2) Once the packer unpack relatively such as armadillo
3) More and more ... .. : D

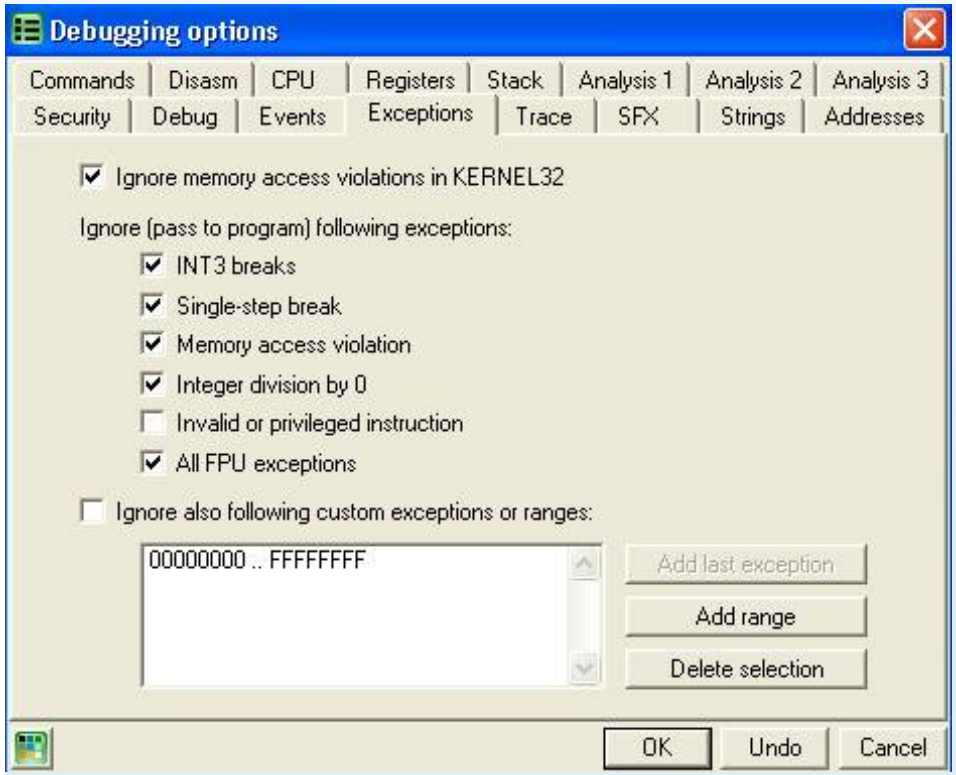
The Protector Egnima 1:33 - Mini-tut

Tools: Olly, LordPE, ImportREC ... as well as new mod: D

Target the message is they pack the option as follows:



Olly on target load (you have to go hide Olly small: D). Press Shift-F9 to nag springiness, then to config options as follows:



Config like Olly will break when having exception Illegal instruction. Do not understand the children's Olly kĩ not hide or mechanism by antidebug Enigma Protector, but when they target springiness nag try set memory BP is the crash. Configuring such a stop after the exception, we can freely set the memory bp without fear crash were: D.

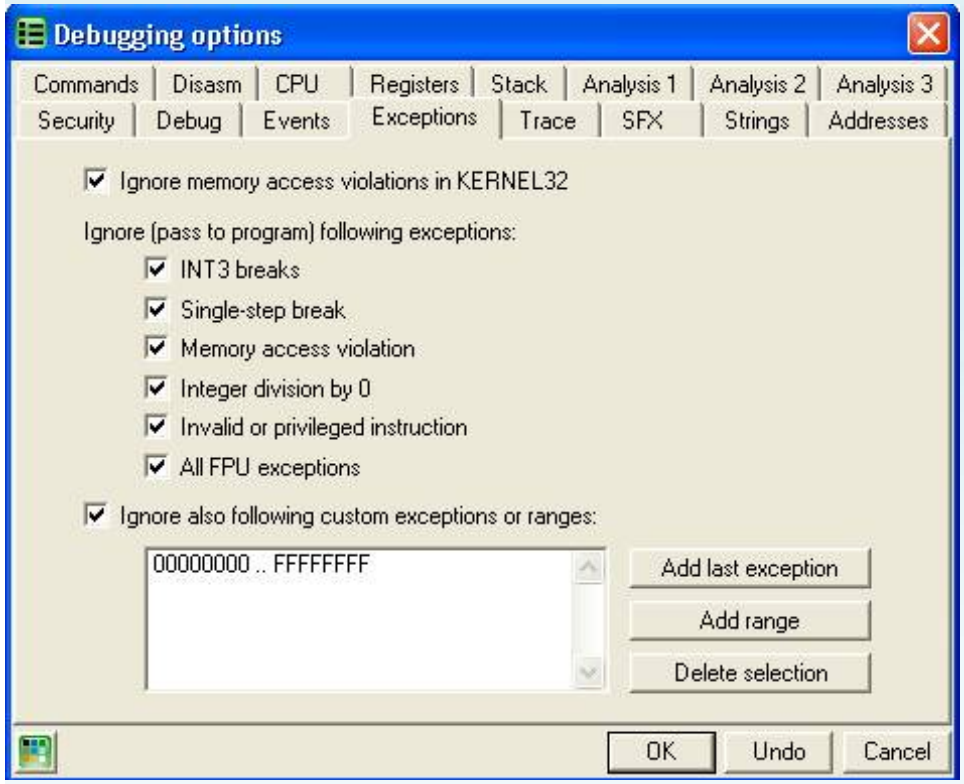
After clicking nag config Olly to stop at the exception, we will here

```
   00A3D77A 0F0B ud2
00A3D77C E8 8B4AFFFF call 00A3220C
00A3D781 33C0 xor eax, eax
00A3D783 5A pop edx
00A3D784 59 pop ecx
00A3D785 59 pop ecx
```

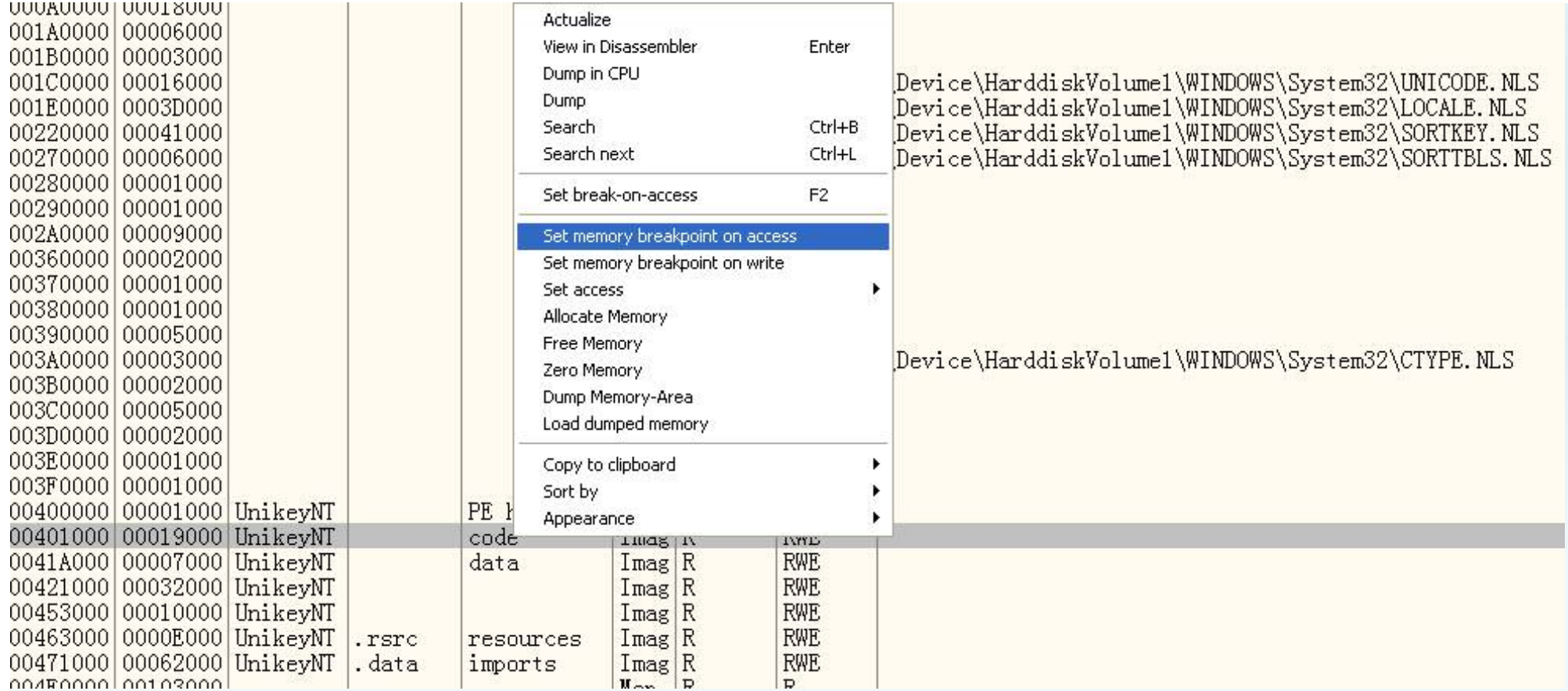
```
00A3D786 64:8910 mov dword ptr fs: [eax], edx
00A3D789 EB 0A jmp short 00A3D795
00A3D78B ^ E9 E85FFEFF jmp 00A23778
00A3D790 E8 4B63FEFF call 00A23AE0
```

Press Shift-F9 and count the number of clicks before the target run, do not understand each restart, every time different. There are time-shift F9 12 times, have at 13, 18, 19 .... Here they will press Shift-F9 10 times: D. After shift-F9 10 times the

Olly the config as follows:



Now we will set the memory bp section text (note that if some doctors have open Unikey then go off the house)



Done Shift-F9, we stop here (your computer may be different: D)

```
   00A228DB F3: A5 rep movs dword ptr es: [edi], dword p>
00A228DD 89C1 mov ecx, eax
00A228DF 83E1 03 and ecx, 3
00A228E2 F3: A4 rep movs byte ptr es: [edi], byte ptr>
00A228E4 5F pop edi
00A228E5 5e pop esi
00A228E6 C3 retn
FC Lea 00A228E7 8D7431 esi, dword ptr [ecx + esi-4]
FC Lea 00A228EB 8D7C39 edi, dword ptr [ecx + edi-4]
00A228EF C1F9 02 SAR ecx, 2
00A228F2 78 11 js short 00A22905
FD 00A228F4 std
00A228F5 F3: A5 rep movs dword ptr es: [edi], dword p>
00A228F7 89C1 mov ecx, eax
00A228F9 83E1 03 and ecx, 3
```

```
00A228FC 83C6 03 add esi, 3
00A228FF 83C7 03 add edi, 3
00A22902 F3: A4 rep movs byte ptr es: [edi], byte ptr>
00A22904 FC cld
00A22905 5F pop edi
00A22906 5e pop esi
00A22907 C3 retn
```

Remove memory BP, BP set at **00A22907 C3 retn** and Shift-F9
Trace to here:

```
00AAAB92 A1 7014AD00 mov eax, dword ptr [AD1470]
00AAAB97 E8 507BF7FF call 00A226EC
00AAAB9C C643 0D 01 mov byte ptr [ebx + D], 1
00AAABA0 A1 5C60AB00 mov eax, dword ptr [AB605C]
00AAABA5 50 push eax
00AAABA6 A1 C862AB00 mov eax, dword ptr [AB62C8]
00AAABAB 50 push eax
00AAABAC E8 3FB5F7FF call 00A260F0
00AAABB1 8B0D E060AB00 mov ecx, dword ptr [AB60E0]
00AAABB7 8B15 5C60AB00 mov edx, dword ptr [AB605C]
00AAABBD 8B12 mov edx, dword ptr [edx]
00AAABBF A1 C862AB00 mov eax, dword ptr [AB62C8]
00AAABC4 E8 0B89F8FF call 00A334D4
... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
00AAB0CD E8 DE5BF9FF call 00A40CB0
00AAB0D2 A1 EC62AB00 mov eax, dword ptr [AB62EC]
00AAB0D7 80B8 B0260000 0> Cmp byte ptr [eax +26 B0], 0
00AAB0DE 74 07 je short 00AAB0E7
00AAB0E0 E8 0F59F9FF call 00A409F4
00AAB0E5 EB 05 jmp short 00AAB0EC
00AAB0E7 E8 CC59F9FF call 00A40AB8
00AAB0EC C643 24 01 mov byte ptr [ebx +24], 1
00AAB0F0 E8 17A1F9FF call 00A4520C
00AAB0F5 C643 25 01 mov byte ptr [ebx +25], 1
00AAB0F9 E8 3246F9FF call 00A3F730
00AAB0FE C643 26 01 mov byte ptr [ebx +26], 1
00AAB102 E8 4990F9FF call 00A44150
00AAB107 C643 27 01 mov byte ptr [ebx +27], 1
00AAB10B E8 E86FF8FF call 00A320F8
00AAB110 C643 28 01 mov byte ptr [ebx +28], 1
00AAB114 E8 5B6FF8FF call 00A32074
```

```
00AAB119 C643 29 01 mov byte ptr [ebx +29], 1
00AAB11D E8 8AA0F9FF call 00A451AC
00AAB122 C643 2A 01 mov byte ptr [ebx +2 A], 1
00AAB126 E8 19A4F9FF call 00A45544
00AAB12B E8 846FF9FF call 00A420B4
00AAB130 33C0 xor eax, eax
... ... ... ... ... ... ... ... ... ... ... ... ... ...
```

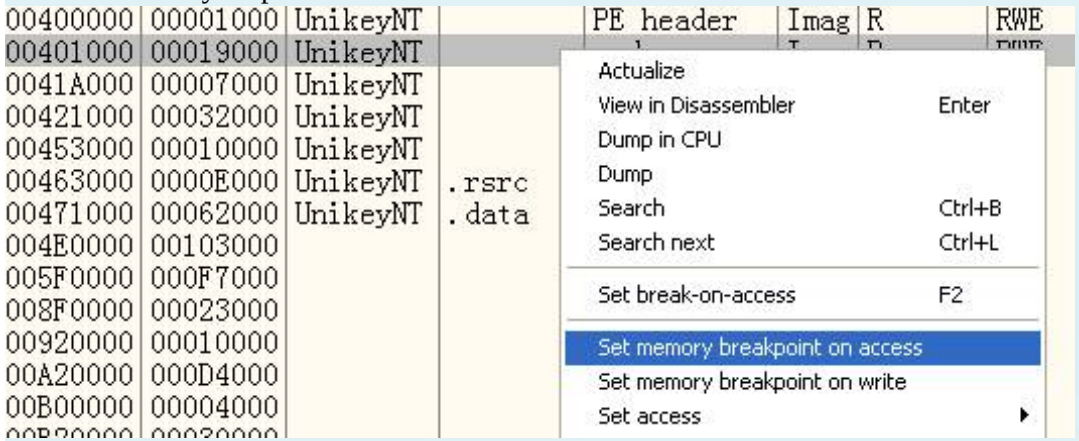
Scroll down to see signs of this:

```
00AAB146   004B B1          add     byte ptr [ebx-4F], cl
00AAB149   AA               stos    byte ptr es:[edi]
00AAB14A   0089 C38D95E4    add     byte ptr [ecx+E4958DC3], cl
00AAB150   FE               ???                                  Unknown command
00AAB151   FFFF             ???                                  Unknown command
00AAB153   8B03             mov     eax, dword ptr [ebx]
00AAB155   E8 CE80F7FF      call    00A23228
00AAB15A   8D95 E4FEFFFF    lea     edx, dword ptr [ebp-11C]
00AAB160   8D45 E4          lea     eax, dword ptr [ebp-1C]
00AAB163   E8 AC91F7FF      call    00A24314
00AAB168   FF75 E4          push    dword ptr [ebp-1C]
00AAB16B   68 98B3AA00      push    0AAB398
00AAB170   FF73 04          push    dword ptr [ebx+4]
00AAB173   8D45 E8          lea     eax, dword ptr [ebp-18]
00AAB176   BA 03000000      mov     edx, 3
00AAB17B   E8 B092F7FF      call    00A24430
00AAB180   8B45 E8          mov     eax, dword ptr [ebp-18]
00AAB183   E8 348FF9FF      call    00A440BC
00AAB188   E8 5389F7FF      call    00A23AE0
00AAB18D   E8 3E25F9FF      call    00A3D6D0
00AAB192   E8 4D2DF9FF      call    00A3DEE4
00AAB197   50               push    eax
00AAB198   89C1             mov     ecx, eax
00AAB19A   B8 D8B1AA00      mov     eax, 0AAB1D8
00AAB19F   E8 142DF9FF      call    00A3DEB8
00AAB1A4   010424           add     dword ptr [esp], eax
00AAB1A7   C3               retn
00AAB1A8   C8 548F16        enter   8F54, 16
00AAB1AC   F5               cmc
00AAB1AD   C8 B57254        enter   72B5, 54
00AAB1B1   1A3A             sbb     bh, byte ptr [edx]
```

Now we put in hardware bp **00AAB1A7 C3 retn**
Then Shift-F9, dom through stack, we see this, and remember it

```
0006FE50  00AAB1D8
0006FE54  0006FFE0  Pointer to next SEH record
0006FE58  00AAB34F  SE handler
0006FE5C  0006FF88
0006FE60  00AD2154
```

Now the memory map



Press Shift-F9 to 1, we stop here

```
004114E0 68 34154100 push 00411534
004114E5 64: A1 00000000 mov eax, dword ptr fs: [0]
004114EB 50 push eax
004114EC 8B4424 10 mov eax, dword ptr [esp +10]
004114F0 896C24 10 mov dword ptr [esp +10], ebp
004114F4 8D6C24 10 Lea ebp, dword ptr [esp +10]
004114F8 2BE0 sub esp, eax
004114FA 53 push ebx
004114FB 56 push esi
004114FC 57 push edi
004114FD 8B45 F8 mov eax, dword ptr [ebp-8]
00411500 8965 E8 mov dword ptr [ebp-18], esp
00411503 50 push eax
8B45 FC 00411504 mov eax, dword ptr [ebp-4]
C745 FC 00411507 FFFFFFF> mov dword ptr [ebp-4], -1
0041150E 8945 F8 mov dword ptr [ebp-8], eax
00411511 8D45 F0 Lea eax, dword ptr [ebp-10]
00411514 64: A3 00000000 mov dword ptr fs: [0], eax
0041151A C3 retn
```

Perhaps you also know, this is not the OEP, OEP because of VC GetVersion often function at the top. BP then remove memory trace to return from the code above, we come:

```
00B4C004 6A 60 push 60
00B4C006 68 60DA4100 push 41DA60
00B4C00B E8 D0548CFF call UnikeyNT.004114E0
00B4C010 BF 94000000 mov edi, 94
00B4C015 8BC7 mov eax, edi
00B4C017 E8 741E8CFF call UnikeyNT.0040DE90
00B4C01C 89A5 E8FFFFFF mov dword ptr [ebp-18], esp
00B4C022 8BF4 mov esi, esp
00B4C024 893E mov dword ptr [esi], edi
00B4C026 56 push esi
00B4C027 FF15 D0A3B300 call dword ptr [B3A3D0]
00B4C02D 8B4E 10 mov ecx, dword ptr [esi +10]
00B4C030 890D 3C0A4500 mov dword ptr [450A3C], ecx
00B4C036 8B46 04 mov eax, dword ptr [esi +4]
00B4C039 8905 480A4500 mov dword ptr [450A48], eax
00B4C03F 8B56 08 mov edx, dword ptr [esi +8]
00B4C042 8915 4C0A4500 mov dword ptr [450A4C], edx
00B4C048 8B76 0C mov esi, dword ptr [esi + C]
00B4C04B 81E6 FF7F0000 and esi, 7FFF
00B4C051 8935 400A4500 mov dword ptr [450A40], esi
Cmp 00B4C057 81F9 02000000 ecx, 2
00B4C05D 0F84 0C000000 je 00B4C06F
... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
```

We realize that OEP code in this area belong to small Egnima Protector created, and **00B4C027 FF15 D0A3B300 call dword ptr [B3A3D0]** is a function GetVersion .. This is the OEP stolen. OK, find out how a previous. Now Ctrl-F2 to restart target.

I. WinAPI redirection

Do the same for this
Remove memory BP, BP set at **00A22907 C3 retn** then Shift-F9
Trace to here:

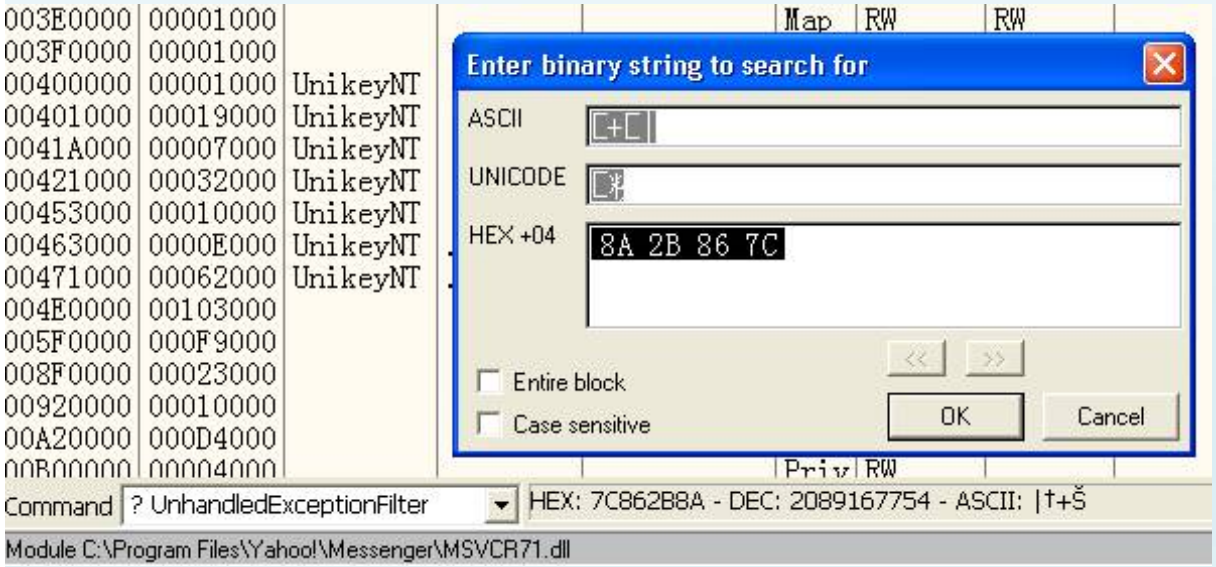
```
00AAAB92 A1 7014AD00 mov eax, dword ptr [AD1470]
00AAAB97 E8 507BF7FF call 00A226EC
00AAAB9C C643 0D 01 mov byte ptr [ebx + D], 1
00AAABA0 A1 5C60AB00 mov eax, dword ptr [AB605C]
00AAABA5 50 push eax
```

```
00AAABA6 A1 C862AB00 mov eax, dword ptr [AB62C8]
00AAABAB 50 push eax
00AAABAC E8 3FB5F7FF call 00A260F0
00AAABB1 8B0D E060AB00 mov ecx, dword ptr [AB60E0]
00AAABB7 8B15 5C60AB00 mov edx, dword ptr [AB605C]
00AAABBD 8B12 mov edx, dword ptr [edx]
00AAABBF A1 C862AB00 mov eax, dword ptr [AB62C8]
00AAABC4 E8 0B89F8FF call 00A334D4
```

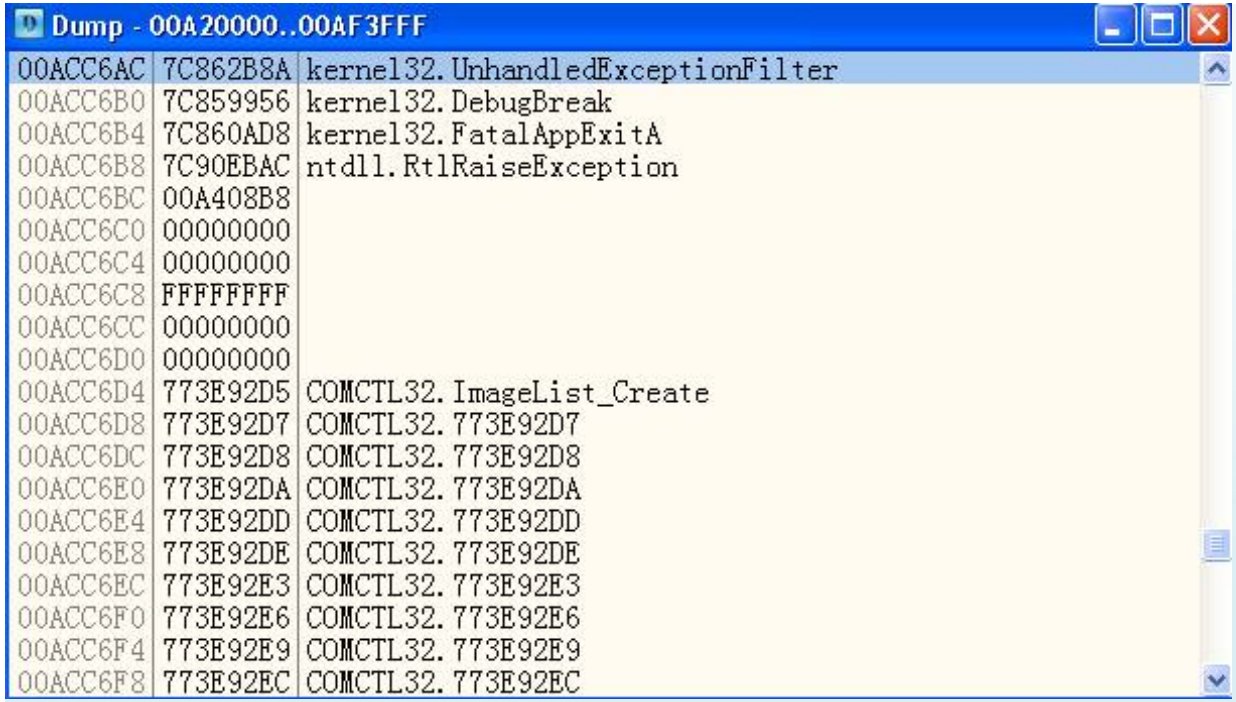
In the analysis Enigma Protector, they found 4 API not hide. They are:

kernel32.UnhandledExceptionFilter
kernel32.DebugBreak
kernel32.FatalAppExitA
ntdll.RtlRaiseException

OK, we will map to memory for this function



Select a view of Long => address to see clearly for



Press Ctrl-R and then select the first line in 00A20000 References 00AF3FFF to 00ACC6AC .. .. 00ACC6AC, 0 item
Address = 00A40432
Disassembly = Cmp eax, dword ptr [ACC6AC]
Comments = kernel32.UnhandledExceptionFilter

We came here

```
00A40430 33D2 xor edx, edx
00A40432 3B05 ACC6AC00 Cmp eax, dword ptr [ACC6AC]; kernel32.UnhandledExceptionFilter
00A40438 74 18 je short 00A40452
00A4043A 3B05 B0C6AC00 Cmp eax, dword ptr [ACC6B0]; kernel32.DebugBreak
00A40440 74 10 je short 00A40452
00A40442 3B05 B8C6AC00 Cmp eax, dword ptr [ACC6B8]; ntdll.RtlRaiseException
00A40448 74 08 je short 00A40452
00A4044A 3B05 B4C6AC00 Cmp eax, dword ptr [ACC6B4]; kernel32.FatalAppExitA
00A40450 75 02 jnz short 00A40454
00A40452 B2 01 mov dl, 1
00A40454 8BC2 mov eax, edx
00A40456 C3 retn
```

Here, it is easily found if eax = 1, the API will not hide. So we just patch 1 billion that it is finished. **00A40450**
Patch / **75 02 jnz short 00A40454**

to nop

Done press Shift-F9, remember we are still in hardware bp **00AAB1A7 C3 retn**

Dom through the window stack considered

0006FE50	4FC69842	
0006FE54	0006FFE0	Pointer to next SEH record
0006FE58	00AAB34F	SE handler
0006FE5C	0006FF88	
0006FE60	00AD2154	

Nè so what? I do have to address as the return nhỉ;;). No problem, the doctors have in mind when they first said that some doctors note that this does not address, in a machine they 00AAB1D8. Now we will modify to help Olly return to the right place: D

0006FE50	00AAB1D8	
0006FE54	0006FFE0	Pointer to next SEH record
0006FE58	00AAB34F	SE handler
0006FE5C	0006FF88	
0006FE60	00AD2154	

Done set memory bp section on text -> Shift-F9, we will stop at the old place: D

```
004114E0 68 34154100 push 00411534
004114E5 64: A1 00000000 mov eax, dword ptr fs: [0]
004114EB 50 push eax
004114EC 8B4424 10 mov eax, dword ptr [esp +10]
004114F0 896C24 10 mov dword ptr [esp +10], ebp
004114F4 8D6C24 10 Lea ebp, dword ptr [esp +10]
... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ... ...
```

I. Stolen OEP

Remove memory BP -> trace through the code that we stop here

```
00B5B314 6A 60 push 60
00B5B316 68 60DA4100 push 41DA60
00B5B31B E8 C0618BFF call UnikeyNT.004114E0
00B5B320 BF 94000000 mov edi, 94
00B5B325 8BC7 mov eax, edi
00B5B327 E8 642B8BFF call UnikeyNT.0040DE90
00B5B32C 89A5 E8FFFFFF mov dword ptr [ebp-18], esp
00B5B332 8BF4 mov esi, esp
00B5B334 893E mov dword ptr [esi], edi
```

```
00B5B336 56 push esi
00B5B337 FF15 0032B300 call dword ptr [B33200]; kernel32.GetVersionExA
00B5B33D 8B4E 10 mov ecx, dword ptr [esi +10]
00B5B340 890D 3C0A4500 mov dword ptr [450A3C], ecx
```

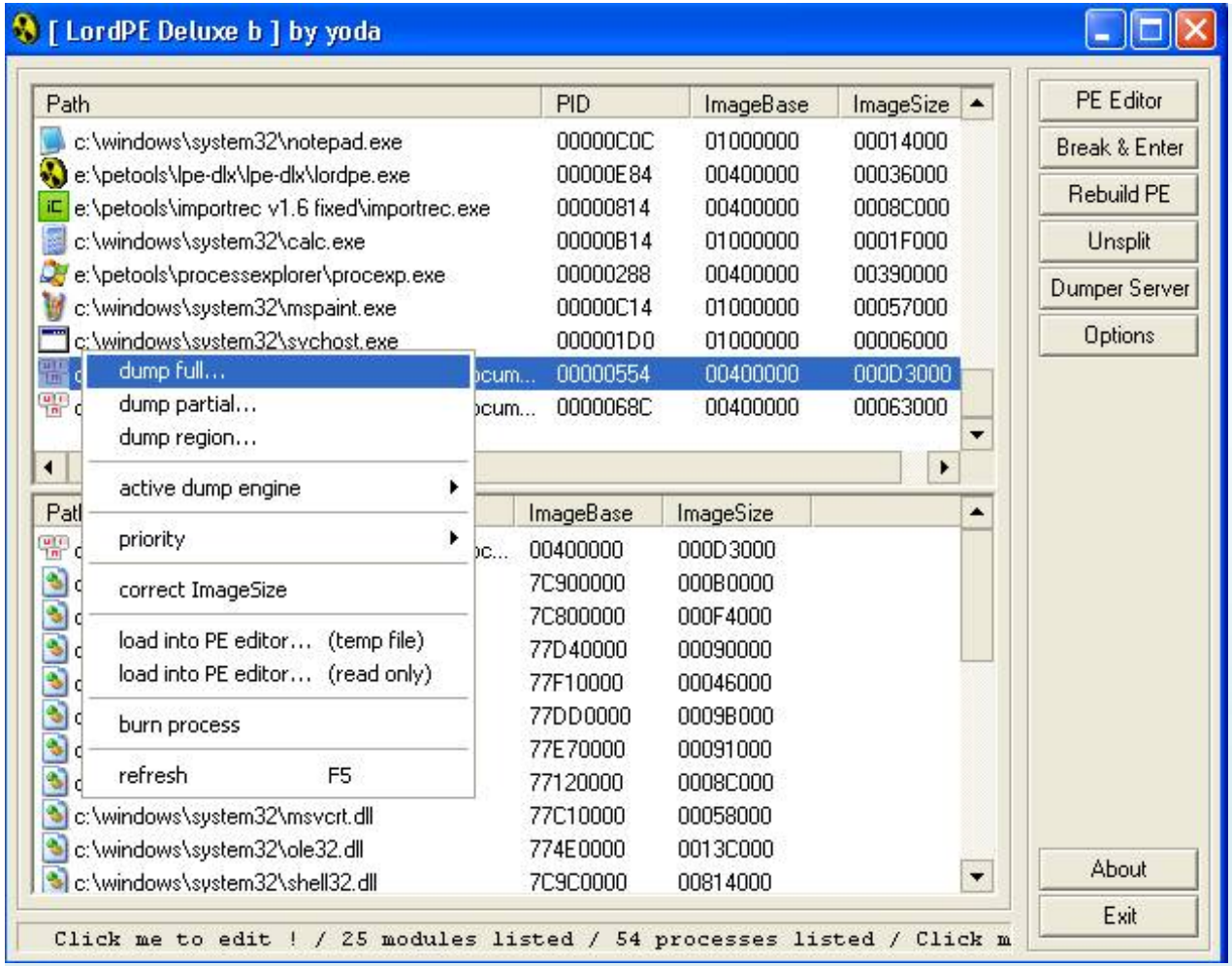
… … … … … … … … … … … … …

Now we see that then GetVersion function. We also do not need to address concerns that contains the original OEP, Goto text section (401,000), scroll down to find the code cave. OK, I will start from address **0041971F 0000 add byte ptr [eax], al**

Copy the entire code at the OEP to 0041971F. Note few medical doctors that if they use the Copy Binary Call will function very wrong address, this is what doctors can fix your hands.
Copy the selected finished **0041971F 6A 60 push 60** and then "New origin here"

II.Fix dump

Now conducted only full dump, where they used LordPE



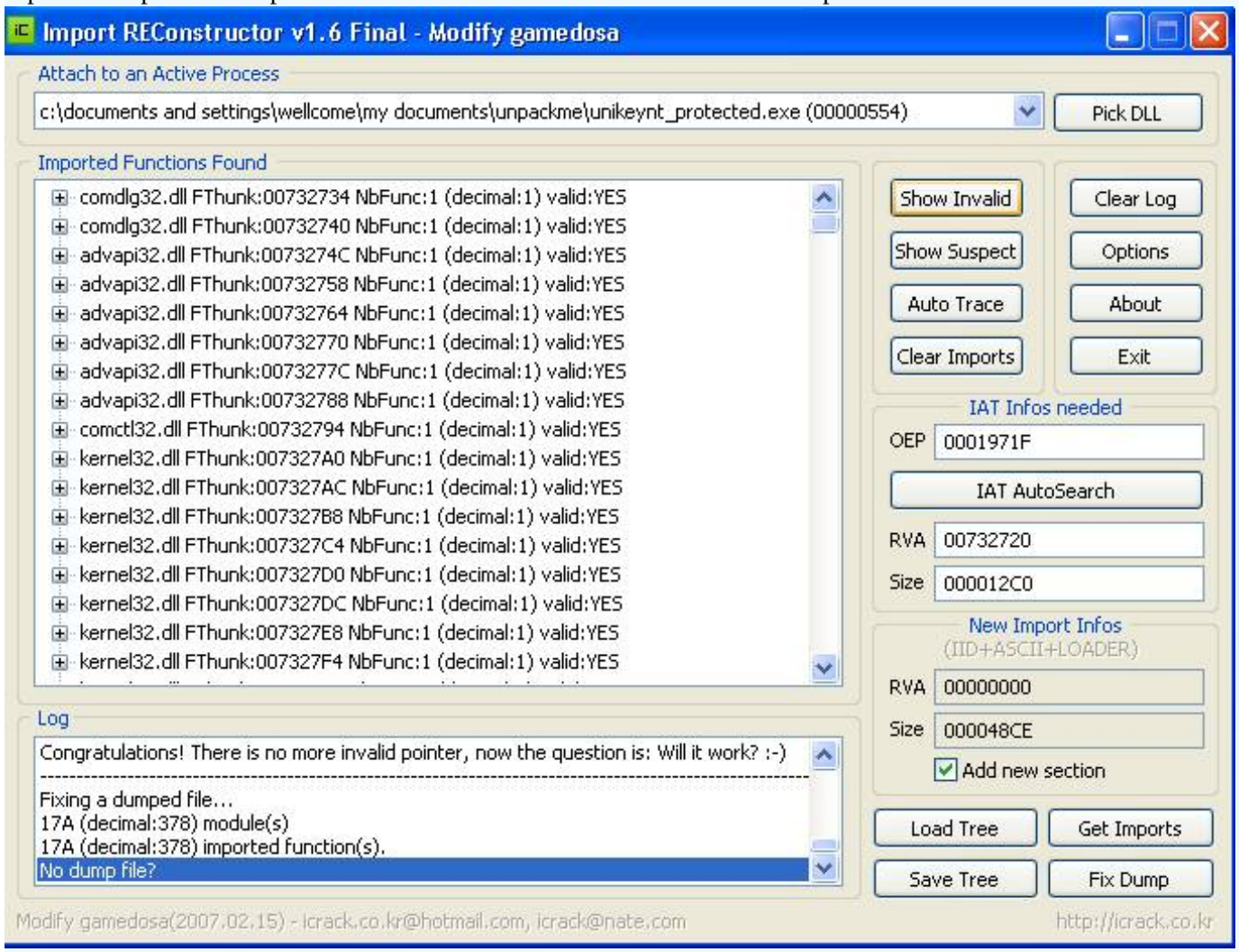
Then Fix IAT. If we use the IAT AutoSearch will notice the following:

It is probably of course, because the IAT is in our memory by Enigma Protector created. You have to go find IAT IAT Start and end only

00B32720 = 00000000> IAT Start

00B339E0 00000000 => IAT End

What's more waiting, they bring that information to Imporect only: D
Input is complete GetImports => Show Invaild => Cut Thunks => Fix dump



Hehe, so then it is finished ... … ... .
Of course by the time urgency, they should not have been explained kĩ. And the Enigma Protector also add option WinAPI emulation + Virtual Machine ..
If using WinAPI emulation combined with WinAPI redirection is or will be. They can appoint the following as examples: when the WinAPI emulation function ExitProccess will have 1 code in the memory by Enigma Protector created, and 1 in the code kernel32.dll. But it Virtual Machine request map file something, they do not understand this should not zu research: D. If you have time, then maybe they will write a 1 to 2 items on this child, with more detailed explanations than + features a higher level of Enigma Protector: D

Takada (14/10/2007)

T h a d-EMI will then go through
EMI d t h a 1. 9. 3 .0 - Unpac k mele and el6
A uto T ri l # 6 @ 200 7 italy b hectares of the O (hectares of the hot_o_@_i_m_a_l. C_o_m)
(Write the gift of friendship REA - all copy must be agreed by the author)

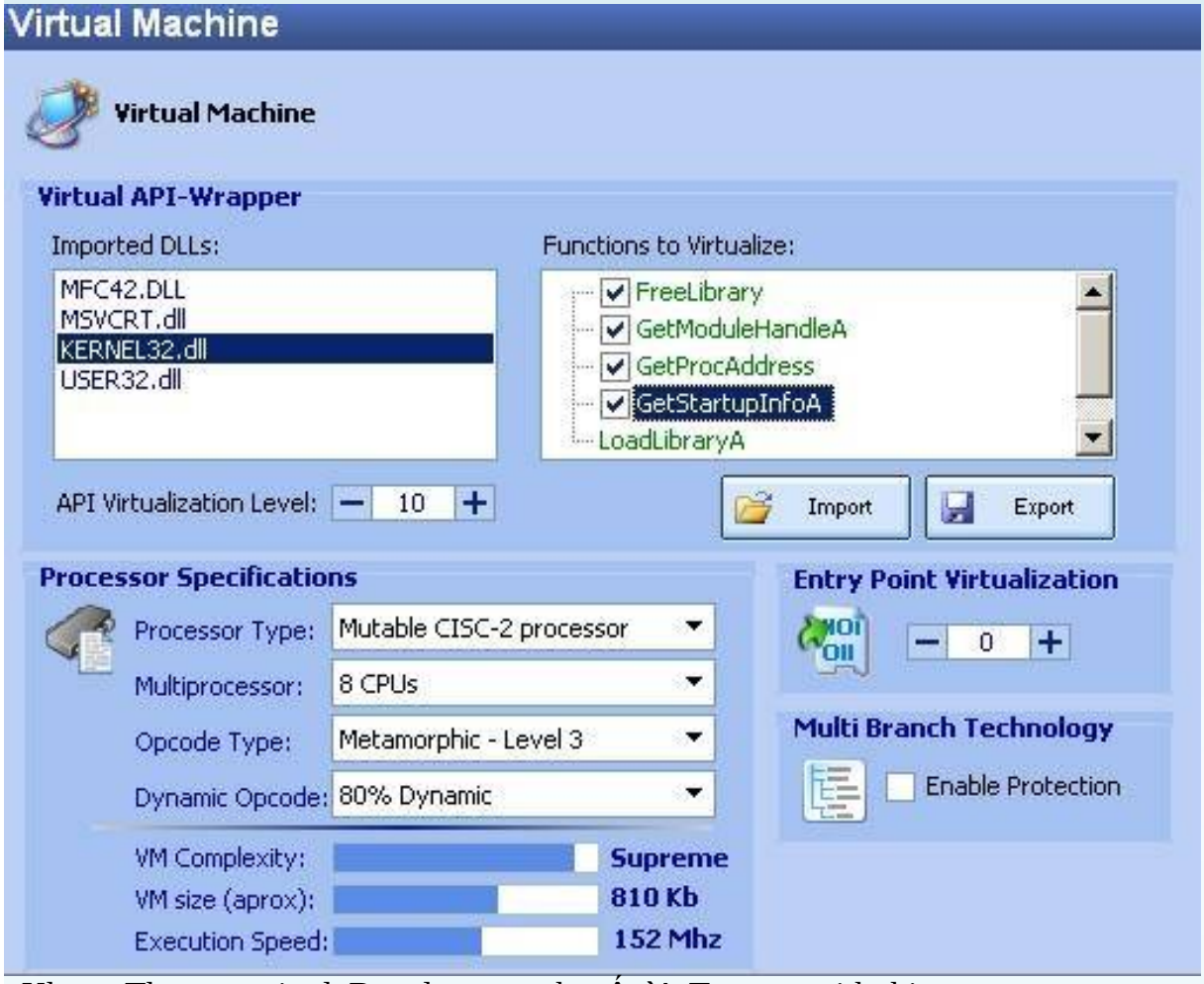
[Art cletitl e i]: T h e m i d a 1. 9. 3 .0-U np ackmele and el6
[A u t hor]: **hacnh o**
[A u t r ho ho me a GE p]: http://hvaonline.net
[Tar g e t]: 4V N Mod zA ud i ti o NL o a d er-A ugu st 2 0 0 7
[S i ze]: 1. 2 9 M B (1, 35 9.8 7 2b italy TES)
[D o w n l o p a GE ad]: 4V N. o rg
[Pa c k e r]: T he mi W i d a i n c e n Li will V 1. 9. 3. 0C.B-> Or e a n sTec hno l og ies
[C o m p o ilati a GE nla sources]: M icr o s o ftVis of ALC + + 8 .0
[T oo l s]: The0DBG + hideToolz **fly** by, LordPE, ImportREC, peid0.94
[O S]: W i n X P _SP 2
[G r ee TZ]: R E A, E x et oo ls, P e d i italy, U np ac k CN, S project dARTe Me a m m b erz

_Chao You, we met in this tut Friday. Perhaps you have gradually familiar with Themida and no longer is and the fear of it anymore: D! After training 5 success over the past 5 tuts, maybe we'll make down the mountain thằng any meat to give it a focused xom. He he, he does make time in the flag? Perhaps only the Vietnamese

people use Vietnamese goods, for S-ROBOT_Ultra_1008 or 4VN-2007.10.24.0 AuWindow many ;-). Islamic truocc pm when tickets hì huc at this present to the boil: P, the time to open it re im after a new need to understand it or Audition sro client and an Internet connection to run a new, really crazy T_T , the bags have dial up, how is heaven, only six đành target see what they have, AutoTT Themida + or VB 6 + Themida, ôi Dao few things to it since, is that VC + +, á à must and today has a pa 4VNLoader sent the bags for something, a month to 8 and also to run, thanks to help see, try to check, the VC + +8.0, browse browse, take the meat small children ...

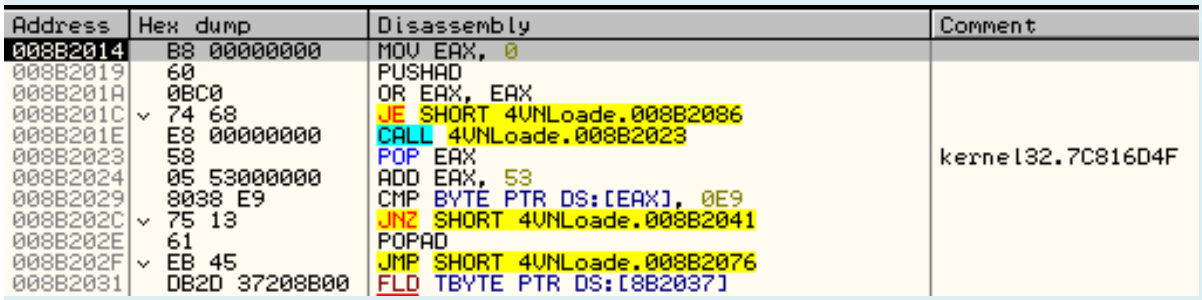
_Truoc The start guide unpack this, I particularly note: I could not guide you crack any software in Vietnam, the purpose of me unpack the software originated from Vietnam is to learn only. And when run on the PC is stopped immediately, and not contrary to learn how to encode of this software. For software 4VNLoader by 4VN team, I should not play Audition does not know it is a version pub or private, are free or charge. So my target temporarily compressed with Winrar with password. When he or Com Zombie REA to confirm, as if it is private or charge it to force me to remove it and only as a tut learning vegetarian only. The feeling you!

_Trong Tut this we will use the Virtual Machine: VMS Virtual APT-wrapper (I think the aged 4VN to the level 7, 8 and up, but if this is to ensure some of his father this tightrope on 10 for it beautiful;)), may not function EP Virtualization.



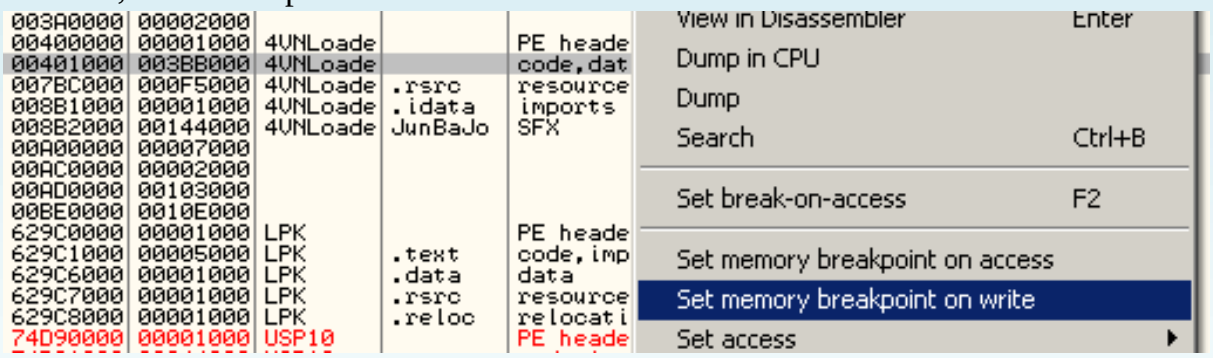
_Khong The more tired. But also unpack tuốt à!. To cope with this type protect, unpack the previous model has been bankrupt, just as redirect code-injection. And as you well know, thằng any intervention in most bạo raw files, Dear servers khua Tau! Drink this month, I borrowed đành Buddha glass flowers, bring Tau deal 4VN only: P! So this is interesting? You will see clearly. Speaking in advance if you never know what is Inject Code tired the day: D! OK to do the children:

_ L o rg adta et l v aoOl italy:



Address	Hex dump	Disassembly	Comment
008B2014	B8 00000000	MOV EAX, 0	
008B2019	60	PUSHAD	
008B201A	0BC0	OR EAX, EAX	
008B201C	74 68	JE SHORT 4VNLoade.008B2086	
008B201E	E8 00000000	CALL 4VNLoade.008B2023	
008B2023	58	POP EAX	kernel32.7C816D4F
008B2024	05 53000000	ADD EAX, 53	
008B2029	8038 E9	CMP BYTE PTR DS:[EAX], 0E9	
008B202C	75 13	JNZ SHORT 4VNLoade.008B2041	
008B202E	61	POPAD	
008B202F	EB 45	JMP SHORT 4VNLoade.008B2076	
008B2031	DB2D 37208B00	FLD TBYTE PTR DS:[8B2037]	

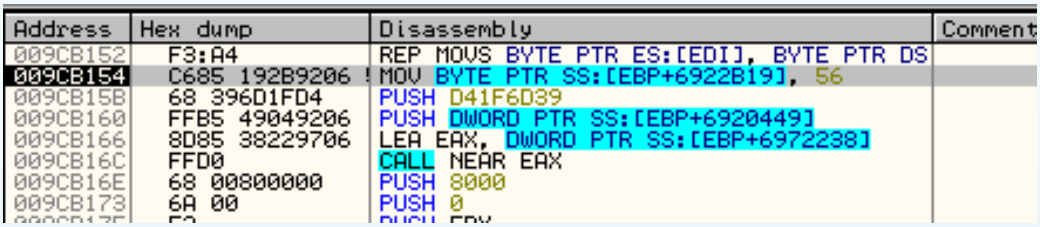
Alt + M, set a breakpoint on write:



_Sh T i f + F 93times:

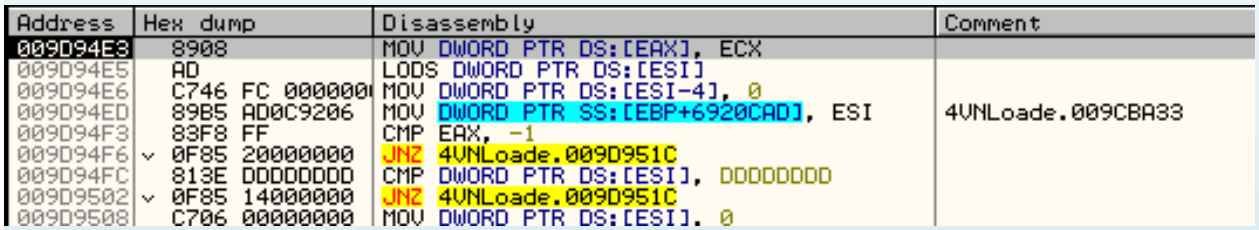
Address	Hex dump	Disassembly	Comme
009CB152	F3:A4	REP MOVS BYTE PTR ES:[EDI], BYTE PTR DS	
009CB154	C685 192B9206 !	MOV BYTE PTR SS:[EBP+6922B19], 56	
009CB15B	68 396D1FD4	PUSH D41F6D39	
009CB160	FFB5 49049206	PUSH DWORD PTR SS:[EBP+69204449]	
009CB166	8D85 38229706	LEA EAX, DWORD PTR SS:[EBP+6972238]	
009CB16C	FFD0	CALL NEAR EAX	
009CB16E	68 00800000	PUSH 8000	
009CB173	6A 00	PUSH 0	

_F7, F8:



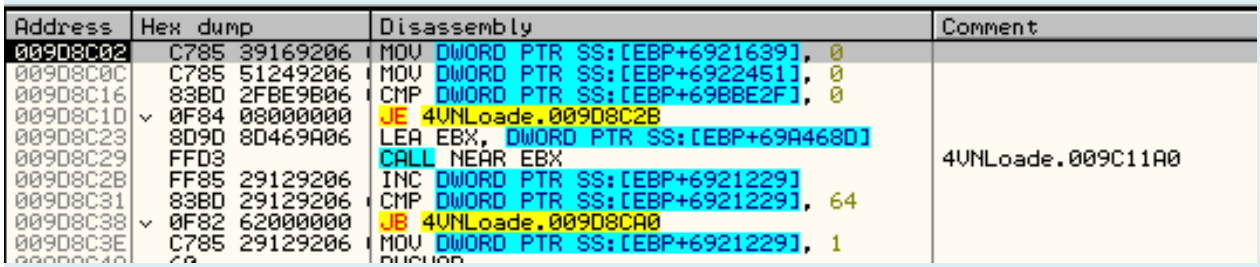
Address	Hex dump	Disassembly	Comment
009CB152	F3:A4	REP MOVS BYTE PTR ES:[EDI], BYTE PTR DS	
009CB154	C685 192B9206 !	MOV BYTE PTR SS:[EBP+6922B19], 56	
009CB15B	68 396D1FD4	PUSH D41F6D39	
009CB160	FFB5 49049206	PUSH DWORD PTR SS:[EBP+69204449]	
009CB166	8D85 38229706	LEA EAX, DWORD PTR SS:[EBP+6972238]	
009CB16C	FFD0	CALL NEAR EAX	
009CB16E	68 00800000	PUSH 8000	
009CB173	6A 00	PUSH 0	

_Sh T i f + F9:



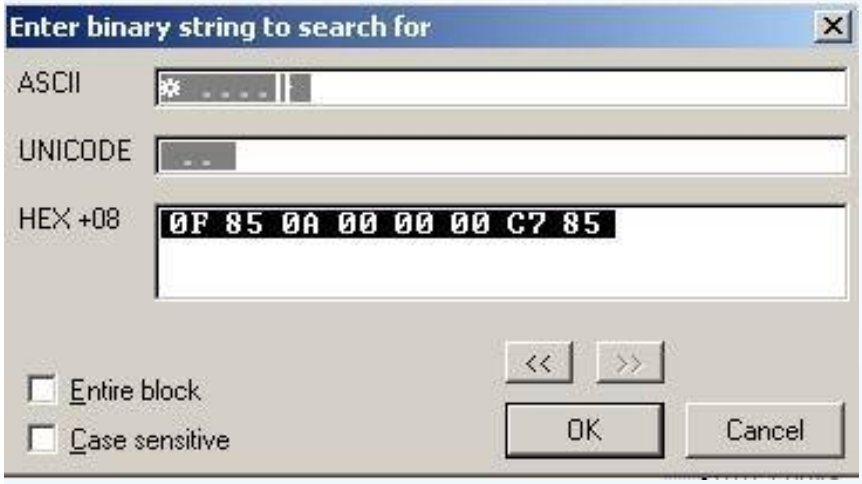
Address	Hex dump	Disassembly	Comment
009D94E3	8908	MOV DWORD PTR DS:[EAX], ECX	
009D94E5	AD	LODS DWORD PTR DS:[ESI]	
009D94E6	C746 FC 000000(	MOV DWORD PTR DS:[ESI-4], 0	
009D94ED	89B5 AD0C9206	MOV DWORD PTR SS:[EBP+6920CAD], ESI	4VNLoade.009CBA33
009D94F3	83F8 FF	CMP EAX, -1	
009D94F6	0F85 20000000	JNZ 4VNLoade.009D951C	
009D94FC	813E DDDDDDDD	CMP DWORD PTR DS:[ESI], DDDDDDDD	
009D9502	0F85 14000000	JNZ 4VNLoade.009D951C	
009D9508	C706 00000000	MOV DWORD PTR DS:[ESI], 0	

_Gio Press F8 trace down.

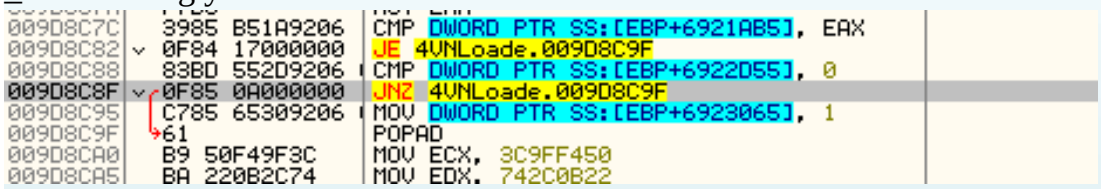


Address	Hex dump	Disassembly	Comment
009D8C02	C785 39169206 (	MOV DWORD PTR SS:[EBP+6921639], 0	
009D8C0C	C785 51249206 (	MOV DWORD PTR SS:[EBP+6922451], 0	
009D8C16	83BD 2FBE9B06 (	CMP DWORD PTR SS:[EBP+69BBE2F], 0	
009D8C1D	0F84 08000000	JE 4VNLoade.009D8C2B	
009D8C23	8D9D 8D469A06	LEA EBX, DWORD PTR SS:[EBP+69A468D]	
009D8C29	FFD3	CALL NEAR EBX	4VNLoade.009C11A0
009D8C2B	FF85 29129206	INC DWORD PTR SS:[EBP+6921229]	
009D8C31	83BD 29129206 (	CMP DWORD PTR SS:[EBP+6921229], 64	
009D8C38	0F82 62000000	JB 4VNLoade.009D8CA0	
009D8C3E	C785 29129206 (	MOV DWORD PTR SS:[EBP+6921229], 1	

_Go Ctrl + B: 0F850A000000C785

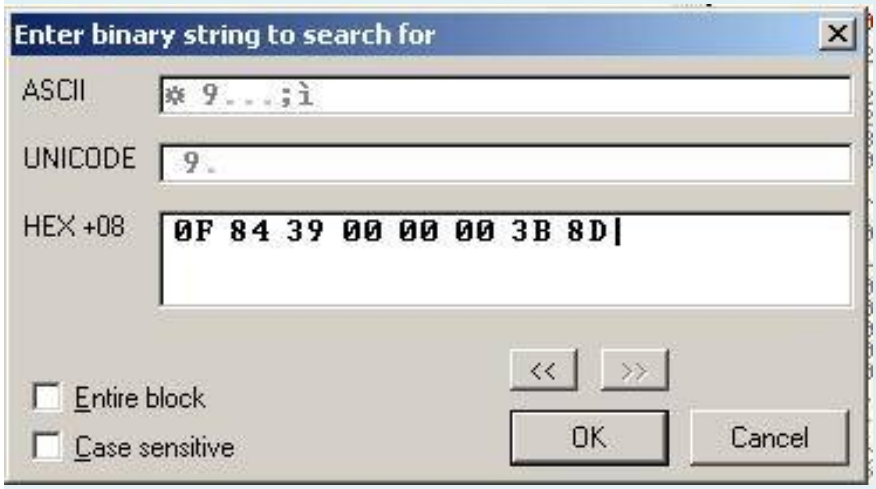


_No To bring you here:

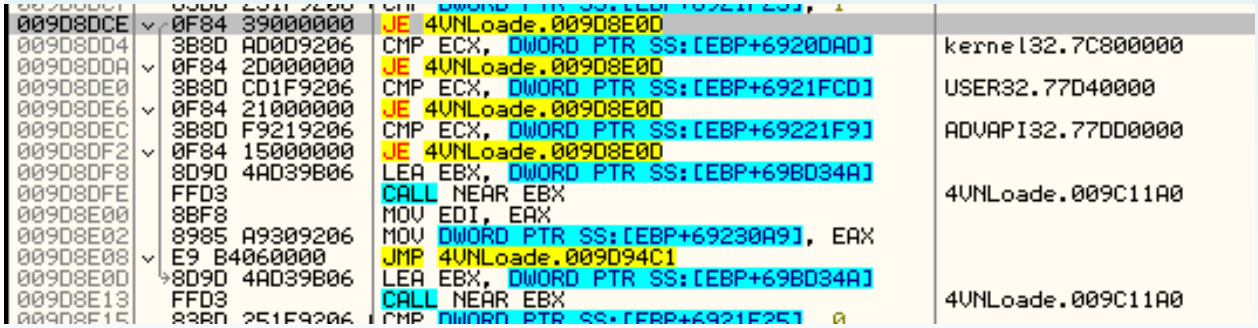


_Nho Address 009 D 8 C 8 F / 0F8 5 0 A0 000 00 Jn Z 4V NL oad 009 E. D 9 C 8 F

_ GO Ct r l + B: 0F843 9 000 0 003 B 8 D



_Toi Here:

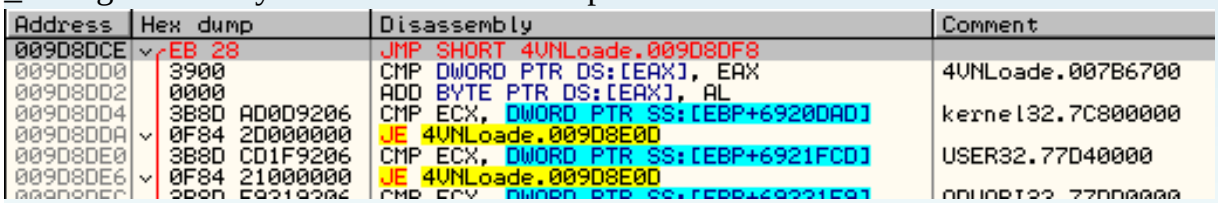


_Nho Address OO9 D 8 DCE 1 in F8 4 3 9 OO OO O O J E 4 V N L o a d e. OO9 D 8 EOD

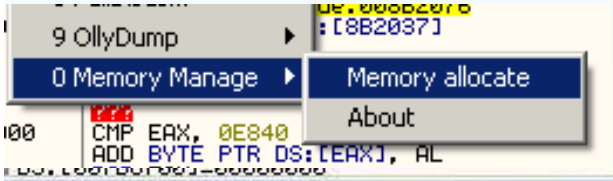
_Nho Finish what more hi, labor Dear, if you have read the series I wrote about tut Armadillo will know next to you is do Ctrl + F2. Why, because when you press F8 target trace through the API it will be canceled hash, no nothing. When you restart again erasing the memory OllyDB UDD home, not the breakpoint in the function library is a very tired. Now repeat the above steps to place F7, F8 and Shift + F9 2 times, finished press Alt + M remove the breakpoint. Now press Ctrl + G: OO9D8C8F:

_Tai That the patch:

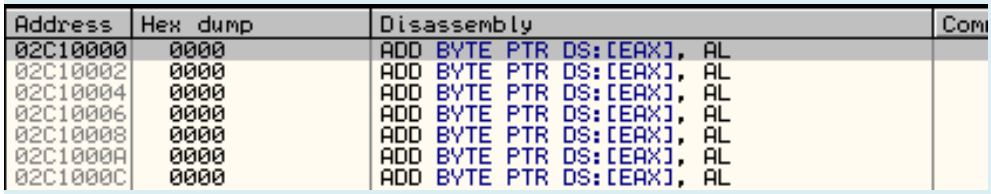
_Tuong Autonomy in OO9 D C D E 8 to patch



_Ok Complete patch continue, we need to create a code cave to write code in order to do this you should use plugin MemoryManage.dll. Create and simply click OK all, look to see time we have a space to inject into the code.



_ Ctrl + G to fly 2C10000 see stars



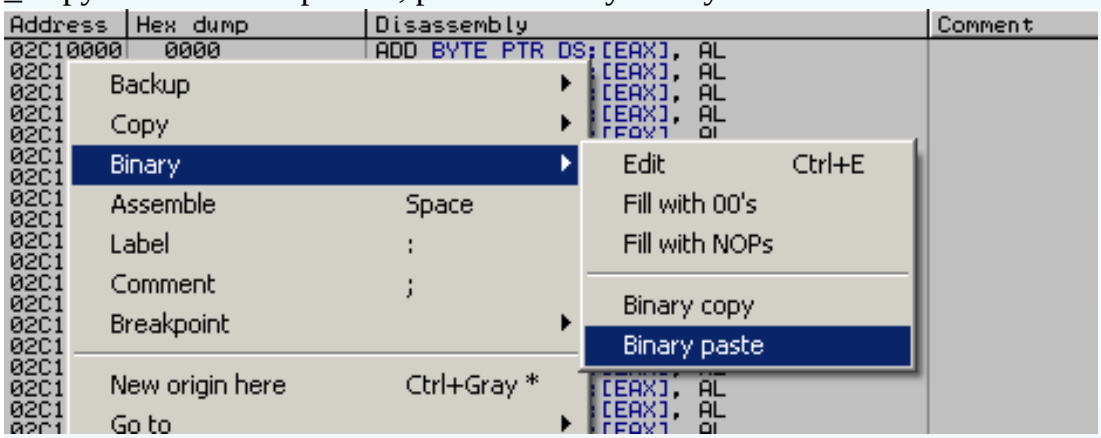
_Trong Slippery, the hours we paste this binary code is invisible.

A 3000 0 0 0 008 9 08 A DC 746FC000 0 00 00E 9000 0 0 0 0050 A1 0 0 000 0 00 89 078 0 7FF FE 8750 86

6 C 747F E FF15 EB 0666 C 74 7FE FF2558 E 900 0 00 00 050 A 1 0 0 0 000 0 08 94 701 8 07F F F E 8750 8

66 C 747 FF FF15 EB 0666 C 74 7F FFF2 5 58 0 F85 0 00 00 000 E 9 0 0 0 000 0 083 C 704 E 9 0 0 0 000 00

_Copy This to the clipboard, paste into Olly binary format.



_Sau The paste:

Address	Hex dump	Disassembly	Comment
02C10000	A3 00000000	MOV DWORD PTR DS:[0], EAX	4UNLoade.007B6700
02C10005	8908	MOV DWORD PTR DS:[EAX], ECX	
02C10007	AD	LODS DWORD PTR DS:[ESI]	
02C10008	C746 FC 000000(	MOV DWORD PTR DS:[ESI-4], 0	
02C1000F	E9 00000000	JMP 02C10014	
02C10014	50	PUSH EAX	4UNLoade.007B6700
02C10015	A1 00000000	MOV EAX, DWORD PTR DS:[0]	
02C1001A	8907	MOV DWORD PTR DS:[EDI], EAX	4UNLoade.007B6700
02C1001C	807F FF E8	CMP BYTE PTR DS:[EDI-1], 0E8	
02C10020	75 08	JNZ SHORT 02C1002A	
02C10022	66:C747 FE FF1	MOV WORD PTR DS:[EDI-2], 15FF	
02C10028	EB 06	JMP SHORT 02C10030	
02C1002A	66:C747 FE FF2	MOV WORD PTR DS:[EDI-2], 25FF	
02C10030	58	POP EAX	4UNLoade.007B6700
02C10031	E9 00000000	JMP 02C10036	
02C10036	50	PUSH EAX	4UNLoade.007B6700
02C10037	A1 00000000	MOV EAX, DWORD PTR DS:[0]	
02C1003C	8947 01	MOV DWORD PTR DS:[EDI+1], EAX	4UNLoade.007B6700
02C1003F	807F FF E8	CMP BYTE PTR DS:[EDI-1], 0E8	
02C10043	75 08	JNZ SHORT 02C1004D	
02C10045	66:C747 FF FF1	MOV WORD PTR DS:[EDI-1], 15FF	
02C1004B	EB 06	JMP SHORT 02C10053	
02C1004D	66:C747 FF FF2	MOV WORD PTR DS:[EDI-1], 25FF	
02C10053	58	POP EAX	4UNLoade.007B6700
02C10054	0F85 00000000	JNZ 02C1005A	
02C1005A	E9 00000000	JMP 02C1005F	
02C1005F	83C7 04	ADD EDI, 4	
02C10062	E9 00000000	JMP 02C10067	
02C10067	0000	ADD BYTE PTR DS:[EAX], AL	

_Doan Code is original, we will edit as follows:

```
Address   Hex dump          Disassembly                              Comment
02C10000    A3 0001C102     MOV DWORD PTR DS:[2C10100], EAX           4VNLoade.007B6700
02C10005    8908            MOV DWORD PTR DS:[EAX], ECX
02C10007    AD              LODS DWORD PTR DS:[ESI]
02C10008    C746 FC 000000( MOV DWORD PTR DS:[ESI-4], 0
02C1000F -  E9 D994DCFD     JMP 4VNLoade.009D94ED
02C10014    50              PUSH EAX                                  4VNLoade.007B6700
02C10015    A1 0001C102     MOV EAX, DWORD PTR DS:[2C10100]
02C1001A    8907            MOV DWORD PTR DS:[EDI], EAX               4VNLoade.007B6700
02C1001C    807F FF E8      CMP BYTE PTR DS:[EDI-1], 0E8
02C10020 v  75 08           JNZ SHORT 02C1002A
02C10022    66:C747 FE FF1( MOV WORD PTR DS:[EDI-2], 15FF
02C10028 v  EB 06           JMP SHORT 02C10030
02C1002A    66:C747 FE FF2( MOV WORD PTR DS:[EDI-2], 25FF
02C10030    58              POP EAX                                   4VNLoade.007B6700
02C10031 -  E9 8D95DCFD     JMP 4VNLoade.009D95C3
02C10036    50              PUSH EAX                                  4VNLoade.007B6700
02C10037    A1 0001C102     MOV EAX, DWORD PTR DS:[2C10100]
02C1003C    8947 01         MOV DWORD PTR DS:[EDI+1], EAX             4VNLoade.007B6700
02C1003F    807F FF E8      CMP BYTE PTR DS:[EDI-1], 0E8
02C10043 v  75 08           JNZ SHORT 02C1004D
02C10045    66:C747 FF FF1( MOV WORD PTR DS:[EDI-1], 15FF
02C1004B v  EB 06           JMP SHORT 02C10053
02C1004D    66:C747 FF FF2( MOV WORD PTR DS:[EDI-1], 25FF
02C10053    58              POP EAX                                   4VNLoade.007B6700
02C10054 -  0F85 6995DCFD   JNZ 4VNLoade.009D95C3
02C1005A -  E9 4C95DCFD     JMP 4VNLoade.009D95AB
02C1005F    83C7 04         ADD EDI, 4
02C10062 -  E9 8694DCFD     JMP 4VNLoade.009D94ED
02C10067    0000            ADD BYTE PTR DS:[EAX], AL
02C10069    0000            ADD BYTE PTR DS:[EAX], AL
```

A3OOOlClO289O8ADC746FCOOOOOOOO E 9D994DCFD5OAlOOOlClO289O78O7FFF E 875O8 6 6C747FEFF l 5 E BO6 66C747FEFF2558 E 98D95DCFD5OAl O OOlClO289 4 7Ol8O7FFF E 875O866C747FFFFl5 E BO666C747FFFF2558OF 856995DCFD E 94C95DC F D83C7O4 E 9 8 694DCFD

_Bay Time to jump OO9 D 94 E 3 patch:

```
Address   Hex dump          Disassembly
009D94E3 -  E9 186B2302     JMP 02C10000
009D94E8    FC              CLD
009D94E9    0000            ADD BYTE PTR DS:[EAX], AL
009D94EB    0000            ADD BYTE PTR DS:[EAX], AL
009D94ED    89B5 AD0C9206   MOV DWORD PTR SS:[EBP+6920CAD], ESI
009D94F3    83F8 FF         CMP EAX, -1
009D94F6 v  0F85 20000000   JNZ 4VNLoade.009D951C
009D94FC    813E DDDDDDDD   CMP DWORD PTR DS:[ESI], DDDDDDDD
```

_Toi Here:

```
009D9597    AA              STOS BYTE PTR ES:[EDI]
009D9598    58              POP EAX                                   4VNLoade.007B6700
009D9599    AA              STOS BYTE PTR ES:[EDI]
009D959A v  E9 24000000     JMP 4VNLoade.009D95C3
009D959F    58              POP EAX                                   4VNLoade.007B6700
009D95A0    AA              STOS BYTE PTR ES:[EDI]
009D95A1    807F FF E9      CMP BYTE PTR DS:[EDI-1], 0E9
009D95A5 v  0F85 18000000   JNZ 4VNLoade.009D95C3
009D95AB    83BD 2FBE9B06   CMP DWORD PTR SS:[EBP+69BBE2F], 0
009D95B2 v  0F84 08000000   JE 4VNLoade.009D95C0
```

And the patch:

```
009D9598    58              POP EAX
009D9599    AA              STOS BYTE PTR ES:[EDI]
009D959A -  E9 657A8EFF     JMP 002C1004
009D959F    58              POP EAX
009D95A0    AA              STOS BYTE PTR ES:[EDI]
009D95A1    807F FF E9      CMP BYTE PTR DS:[EDI-1], 0E9
009D95A5 v  0F85 18000000   JNZ 4VNLoade.009D95C3
```

_Tiep Proceed to:

```
009D95A1    807F FF E9      CMP BYTE PTR DS:[EDI-1], 0E9
009D95A5 v  0F85 18000000   JNZ 4VNLoade.009D95C3
009D95AB    83BD 2FBE9B06   CMP DWORD PTR SS:[EBP+69BBE2F], 0
009D95B2 v  0F84 08000000   JE 4VNLoade.009D95C0
```

Patch:

```
009D95A0    AA              STOS BYTE PTR ES:[EDI]
009D95A1    807F FF E9      CMP BYTE PTR DS:[EDI-1], 0E9
009D95A5 -  E9 8C6A2302     JMP 02C10036
009D95AA    0083 BD2FBE9B   ADD BYTE PTR DS:[EBX+9BBE2FBD], AL
009D95B0    06              PUSH ES
```

_Toi:

```
009D95BE    FFD3            CALL NEAR EBX
009D95C0    8847 04         MOV BYTE PTR DS:[EDI+4], AL
009D95C3    8B85 A9309206   MOV EAX, DWORD PTR SS:[EBP+69230
```

Submit it:

```
009D95BE   FFD3              CALL NEAR EBX
009D95C0   90                NOP
009D95C1   90                NOP
009D95C2   90                NOP
009D95C3   8B85 A9309206     MOV EAX, DWORD PTR SS:[EBP+69230A
009D95C9   2BC7              SUB EAX, EDI
```

_Toi:

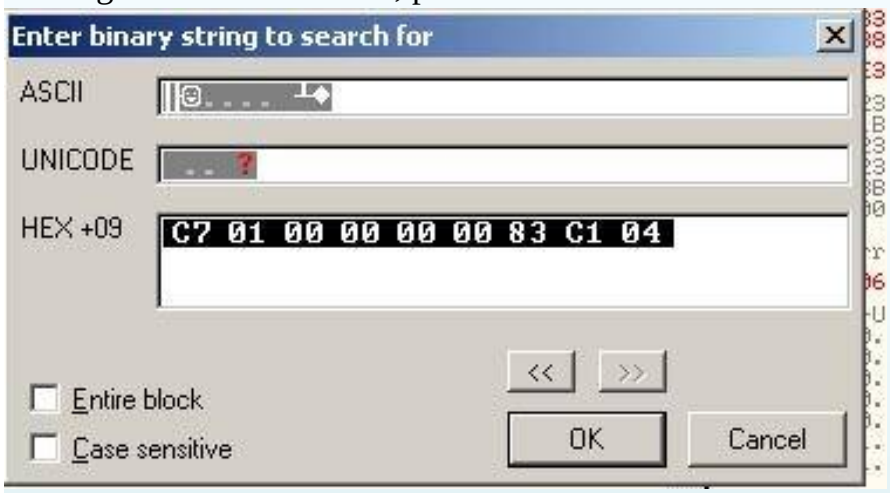
```
009D95CE   AB                STOS DWORD PTR ES:[EDI]
009D95CF   AD                LODS DWORD PTR DS:[ESI]
009D95D0   C746 FC 000000(   MOV DWORD PTR DS:[ESI-4], 0
```

Submit to:

```
009D95C9   2BC7              SUB EAX, EDI
009D95CB   83E8 04           SUB EAX, 4
009D95CE   90                NOP
009D95CF   AD                LODS DWORD PTR DS:[ESI]
009D95D0   C746 FC 000000(   MOV DWORD PTR DS:[ESI-4], 0
009D95D7 ^ E9 11FFFFFF       JMP 4VNLoade.009D94ED
009D95DC   89B5 AD0C9206     MOV DWORD PTR SS:[EBP+6920CAD]
```

_Nhuc Than the first, normally only one patch so to avoid the scattered and cancel IAT. CopymemII and elimination of Armadillo IAT, please see the old tut.

Writing the code is finished, press Ctrl + hour B C7010000000083C104



_Toi Here:

```
009D95FD   C701 00000000     MOV DWORD PTR DS:[ECX], 0
009D9603   83C1 04           ADD ECX, 4
009D9606   898D C9219206     MOV DWORD PTR SS:[EBP+69221C9], ECX
009D960C ^ E9 10F5FFFF       JMP 4VNLoade.009D8B21
009D9611 v E9 A4060000       JMP 4VNLoade.009D9CBA
009D9616   60                PUSHAD
009D9617   8B8D C9219206     MOV ECX, DWORD PTR SS:[EBP+69221C9]
009D961D   8B09              MOV ECX, DWORD PTR DS:[ECX]
```

_Dat A breakpoint:

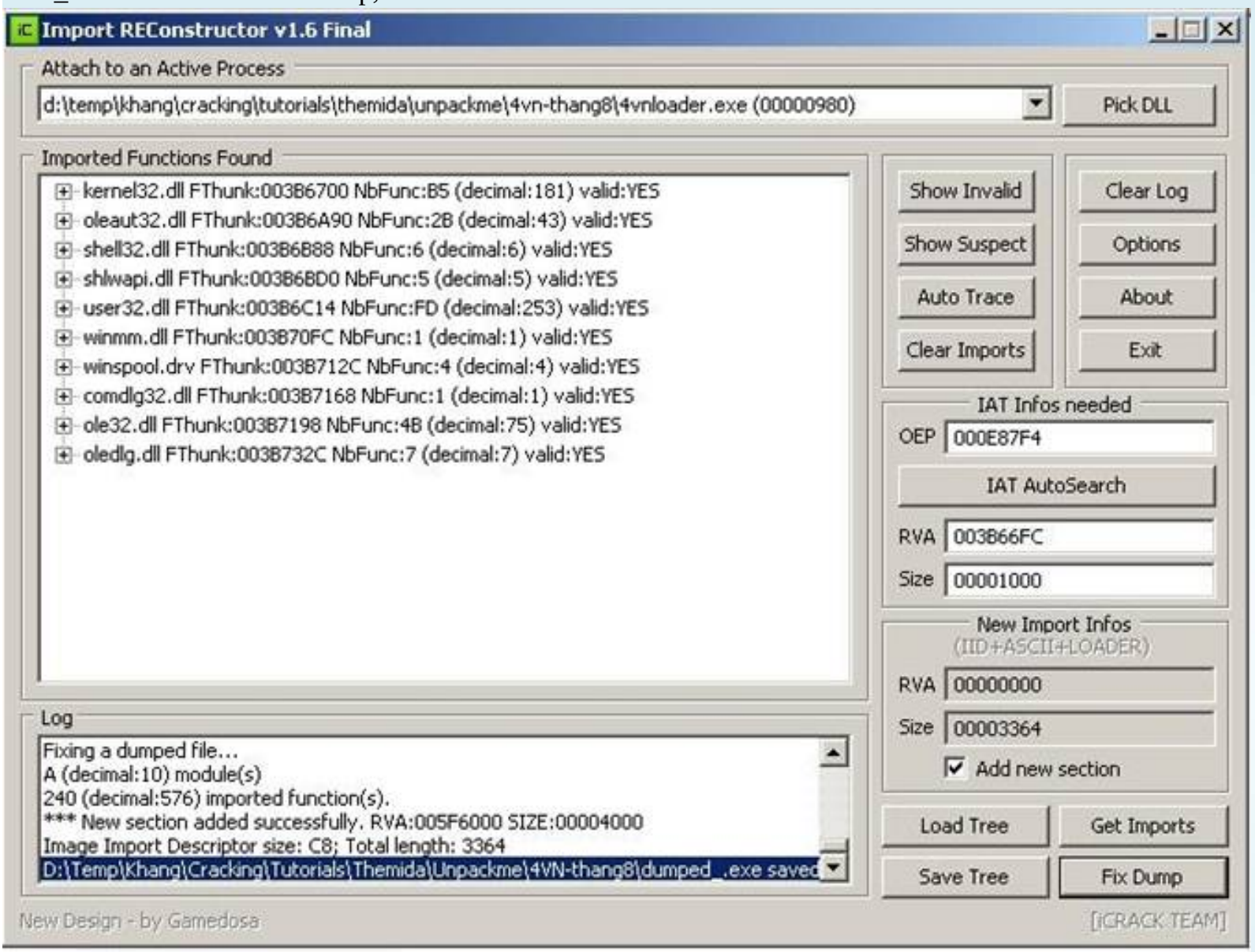
_Shift + F9:

```
Address    Hex dump          Disassembly                Comment
009D9611 v E9 A4060000       JMP 4VNLoade.009D9CBA
009D9616   60                PUSHAD
009D9617   8B8D C9219206     MOV ECX, DWORD PTR SS:[EBP+69221C9]
009D961D   8B09              MOV ECX, DWORD PTR DS:[ECX]
009D961F   898D 2BBE9B06     MOV DWORD PTR SS:[EBP+69BBE2B], ECX
009D9625   8138 4E54444C     CMP DWORD PTR DS:[EAX], 4C44544E
009D962B v 0F85 1C000000     JNZ 4VNLoade.009D964D
009D9631   66:8178 04 4C2(   CMP WORD PTR DS:[EAX+4], 2E4C
```

_Sau Remove the breakpoint with HD 009D9611. Press Alt + M, press F2 at the code section. F9.

Address	Hex dump	Disassembly	Comment
004E87F4	E9 E73A1500	JMP 4VNLoade.0063C2E0	OEP
004E87F9	E9 52B40C00	JMP 4VNLoade.005B3C50	
004E87FE	E9 3D9F0700	JMP 4VNLoade.00562740	
004E8803	E9 88C51B00	JMP 4VNLoade.006A4D90	
004E8808	E9 23C61400	JMP 4VNLoade.00634E30	
004E880D	E9 BE530D00	JMP 4VNLoade.005BDBD0	
004E8812	E9 C9E60600	JMP 4VNLoade.00556EE0	
004E8817	E9 A4B50500	JMP 4VNLoade.00543DC0	
004E881C	E9 EFC60400	JMP 4VNLoade.00534F10	
004E8821	E9 3ABA1C00	JMP 4VNLoade.006B4260	
004E8826	E9 05EF0E00	JMP 4VNLoade.005D7730	
004E882B	E9 60F40900	JMP 4VNLoade.00587C90	
004E8830	E9 8BFC0500	JMP 4VNLoade.005484C0	
004E8835	E9 76BA0500	JMP 4VNLoade.005442B0	
004E883A	E9 39B71B00	JMP 4VNLoade.006A3F78	JMP to ole32.CoRegisterClassObject
004E883F	E9 7C331700	JMP 4VNLoade.0065BBC0	
004E8844	E9 77DD0F00	JMP 4VNLoade.005E65C0	
004E8849	E9 42120800	JMP 4VNLoade.00569A90	
004E884E	E9 9DA40300	JMP 4VNLoade.00522CF0	
004E8853	E9 48BA1C00	JMP 4VNLoade.006B42A0	
004E8858	E9 D3C01900	JMP 4VNLoade.00684930	
004E885D	E9 DEB40E00	JMP 4VNLoade.005D3D40	
004E8862	E9 496C0800	JMP 4VNLoade.0056F4B0	
004E8867	E9 54D60900	JMP 4VNLoade.00585EC0	
004E886C	E9 FDAB1B00	JMP 4VNLoade.006A346E	JMP to USER32.MessageBoxW
004E8871	E9 3A821900	JMP 4VNLoade.00680AB0	
004E8876	E9 A5540400	JMP 4VNLoade.0052DD20	
004E887B	E9 D0090700	JMP 4VNLoade.00559250	
004E8880	E9 87B01B00	JMP 4VNLoade.006A390C	JMP to USER32.IsRectEmpty
004E8885	E9 46C10E00	JMP 4VNLoade.005D49D0	

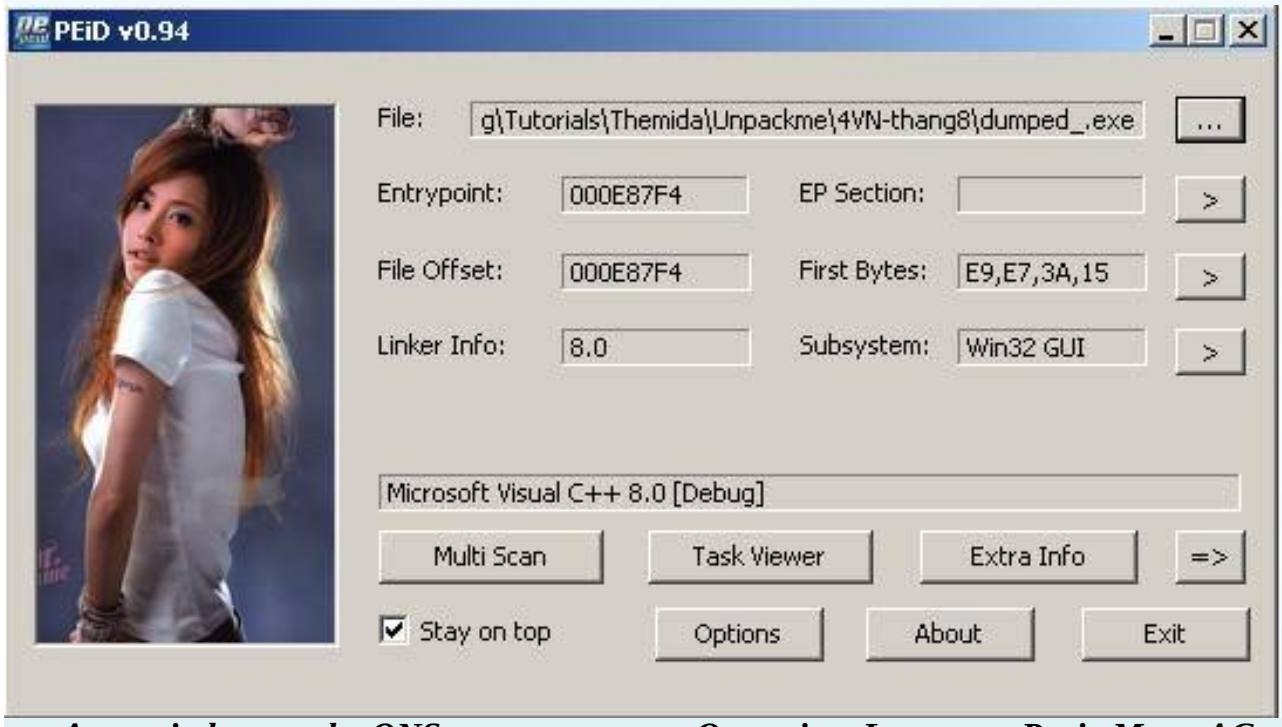
Full _IAT. Now conducted dump, and fix TAT:



_Run Try:


4VNLoader 1,328 KB Application 8/18/2007 6:42 PM
tree 27 KB Text Document 10/25/2007 11:46 PM
dumped 6,104 KB Application 10/26/2007 4:00 AM
dumped_ 6,120 KB 10/26/2007 4:01 AM
4vn.org
AIModz
About
Exit
Server Hanoi
Server HCM

_PeiD:



A n s e italy sugg the ONS, comme n ts o rc Orr ecti on Lea s p e s P v ia Mme: AC grapes h @ h o m o tmail.c

26 - 1 0 - 2 0 07

Themida - then will go through

Themida 1.9.1.0 - Unpackme level 1

Tutorial # 1 @ 2007 by hacnho (hacnho@hotmail.com)

(Write the gift of friendship REA - all copy must be agreed by the author)

[Article title]: Themida 1.9.1.0 - Unpackme level 1
[Author]: **hacnho**
[Author home page]: http://hvaonline.net
[Target]: A Tool HVA
[Size]: 252 KBS
[Download Page]: hvaonline.net
[Packer]: Themida | WinLicense V 1.9.1.0 -> Oreans Technologies
[Compilation language]: Microsoft Visual C + + 7.0
[Tools]: The0DBG + hideToolz **fly** by, LordPE, ImportREC, peid0.94
[OS]: WinXP_SP2
[Greetz]: REA, Exetools, Pediy, UnpackCN, snd and ARTeam Memberz

_Chao Relatives, this time I return is to add to your passion MUP a packer, perhaps

it is not new, but unpack the bags, it was popular then, but in Vietnam, many

people unpack successful but do not share technical unpack this, if you ask them to

get the answer is complex lem, Khe very much, need a high level, lol. Mk, dek

attracted to this aged, he he. Ok, I see him in the long REA ko work is fun fun, I

wrote a few doses network tuts small children as a gift brothers and some of his

property as Benia, he com, England Moon, aged kienmanowar, aged Lit tè, aged

WNB, 3 months old Merc, trickyboy, Thug and bract ;;)!.

_Ok, So I wrote this tut series based on any principles. Simply stop, know where to write to it. To simplify, I only based on version 1.9.1.0 to leak out as a premise to their own pack and unpack all his options by Themida. Can not properly with other software, but basically it is a method similar. Gradually, if this is finished, maybe we will discuss to the meat soft as 4VN or TLG such ;-). If the brothers can see

their contribution and then write a post on here, thanks to the British themselves

before, I was a noob in this issue.

_Công Particular need is what hi. Like normal. We will unpack the debugger

OllyDBG, LordPE, Imprec tools and some other support, but more important is the

end of the first and a computer would ram for the 512. Prior to unpack the bags

want to say is the father of Oreans-themida:), with some pa sure who should be

very warm ong as the region is located in the forum and the anti debug method is

discovered, referred to this new I remember he has failed to com, to which I have

aged by rapid ACC Zom share, when I upload the file to the folder Rapid, I see a

file OllyICe_mod_by_CA, down about chả I know I do it, dispose ago, a today he

said a VIP party exetools send bags to unpack execryptor asked hem know, I

always ừ, Ho Ho, of which I know about this packer dead line, which is about to

load Olly Crash, really mad, the pre OllyICE Com his mod to that, I try to see how

load,;), it runs the vo vo the new business, aged com him him :-). Then load the

finish I do, bít dead line, he he is the bags to dispose exetools that it always unpack

itself, but the evil is the mod Olly that pass by the new themida 1.8.xx pain, so it is

aged VIP Horses also herald the moss Straighten it oreans fix that bug. Chắc his

anger Com lem bags, bags of U.S. hem know. Then I sold up a little out for the first

time that it themida hot start. He he, through this thread I apologize for him Com:

((I hem bit bít sources that children do they put it! Back issues of the type of anti-

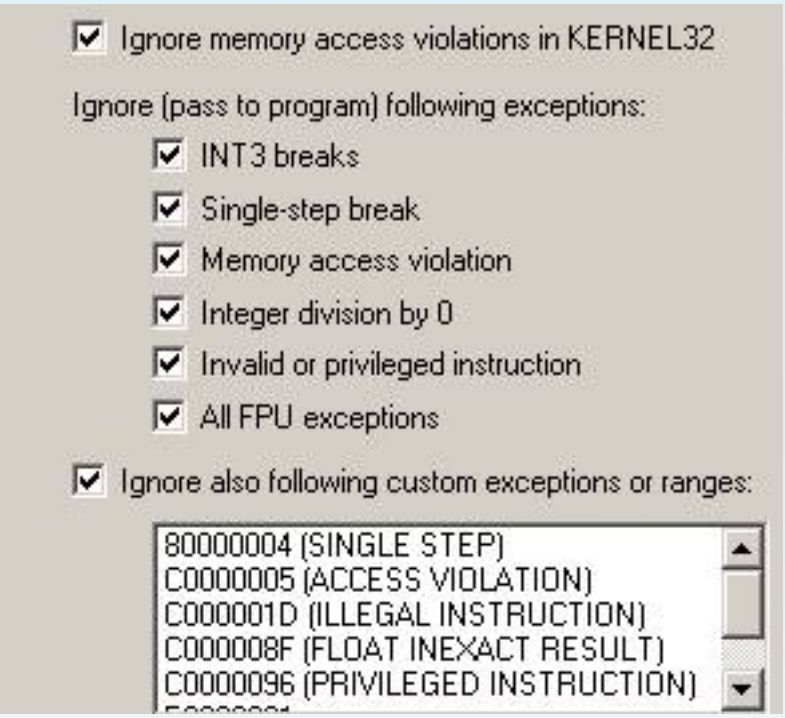
debug themida very diverse, they may we have the tools plugin + addon to pass by.

I suggest you straighten HideOD 1.7 (1.81 I do not use it to hide thằng OllyIce

process as futile to hook driver oreans) + + OllyICe HideToolz 2.1, or if it does

HanOlly do not use HideToolz. unpackme tested on 1.9.5.0 and 1.9.4.0 run well.

Edit Exception as follows:



_Trong Tuts we will start with the easiest, tentatively called Unpackme-1 level. In the following tuts we will do with the type more difficult to protect.

_Bay Hours Themida 1.9.1.0 open up, creating a new project and protect the

following:

Protection Options for Unpackme.exe

Information Macros

Macros VM: 0
CodeReplace Macros: 0
ENCRYPT Macros: 0
CLEAR Macros: 0

XBundler files

No files to bundle

Protection Options

Anti-Debugger: enabled
Anti-Dumpers: Disabled
API-wrapping Level: 0
Virtual Machine: enabled
Entry Point Ofuscation: Disabled
Memory Guard: Disabled
Anti-Monitor File: Disabled
Anti-Monitor Registry: Disabled
Resource Encryption: Disabled
VMWare compatible: Disabled
Delphi / BCB form protection: disabled

Advanced Protection Options

Encrypt Application: Disabled
. NET assemblies: Disabled
Dll plugin: Disabled
Active Context: Disabled
Section Last Name: hacnho

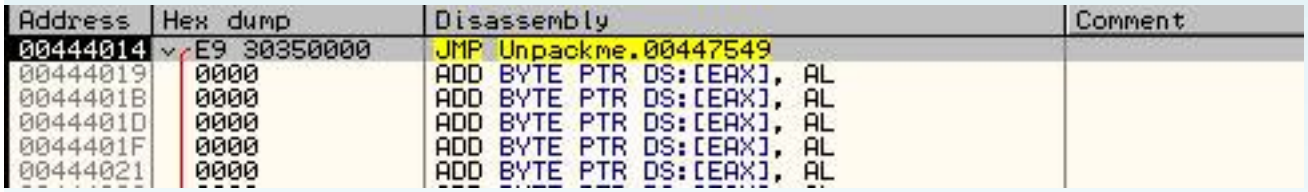
Compression

Application compression: Disabled
Resources compression: Disabled
SecureEngine compression: Disabled

Virtual Machine Settings

Number of Virtual wrapped APIs: 0
Entry Point Virtualization: 0 instructions
Virtual Machine Processor: Mutable CISC processor
Number of CPUs: 1
Opcode Type: Static opcodes
Dynamic Opcode: Disabled

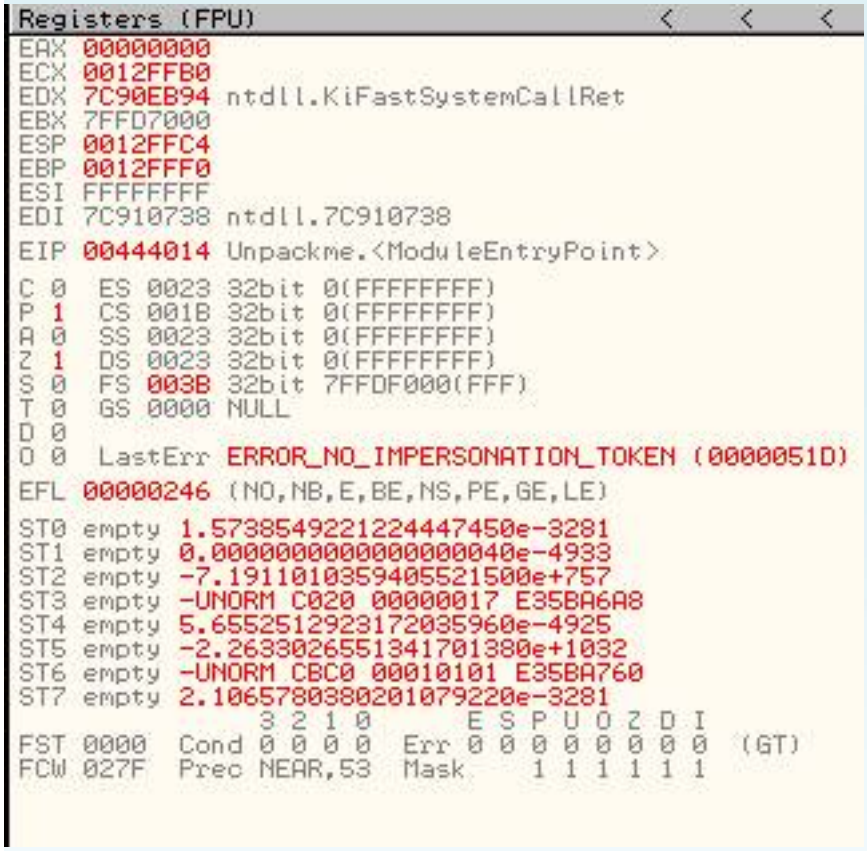
_Bay Hours to load target OllyDBG:



_Nhan Ctrl + G: ZwFreeVirtualMemory

_Toi And press F2 to RETN command:

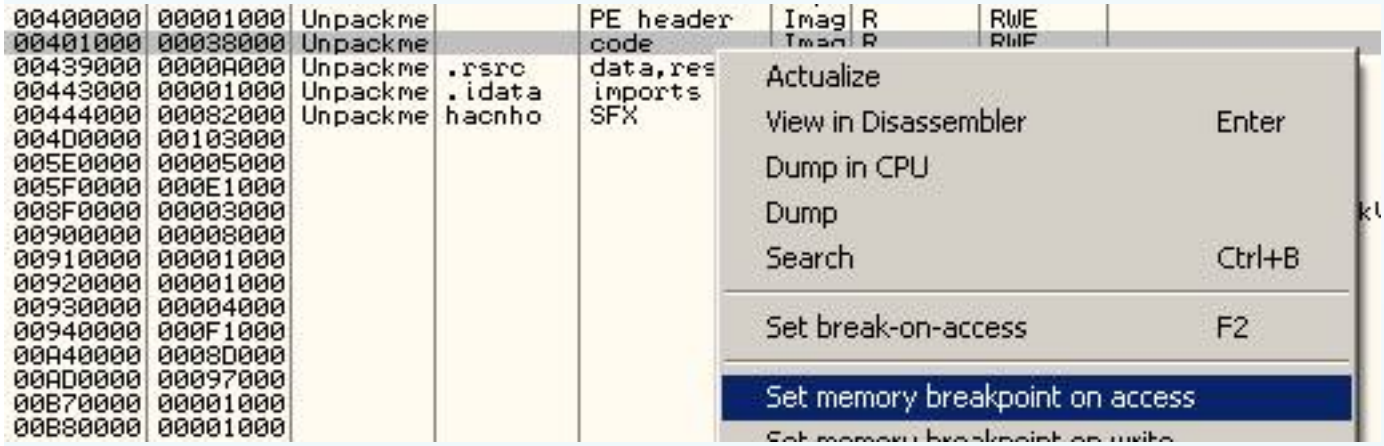
Nhan _Bay hours Shift + F9 and see the window of the Register:



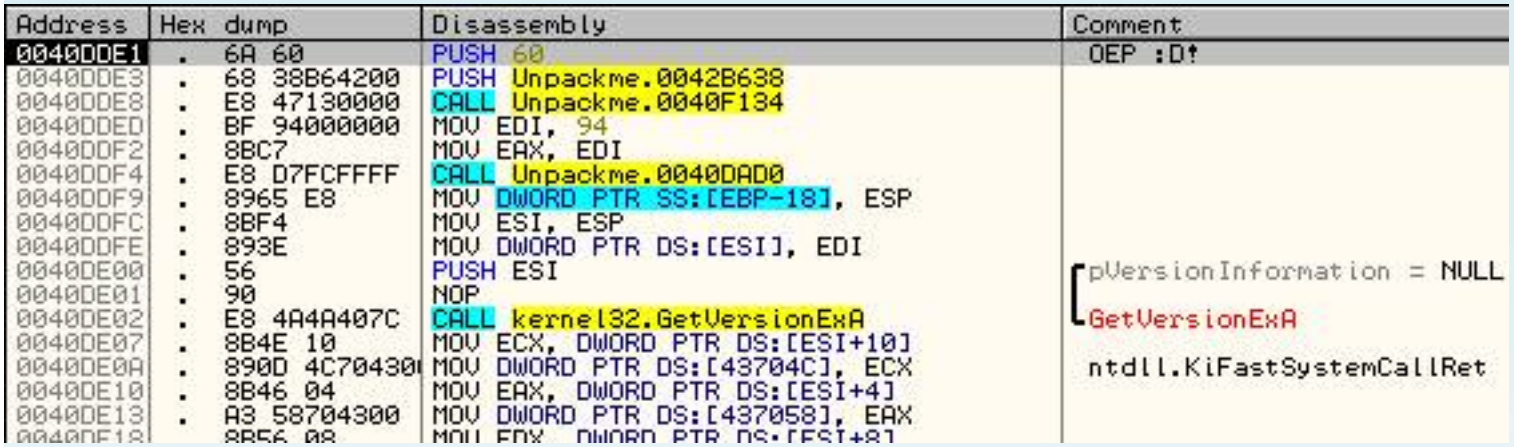
_Nhan Shift + F9 to when it is half red: P! (I count 16 times)

_Gio Press F2 to remove breakpoint, press Alt + M to Memory window, set a

Breakpoint in the section on Access code:

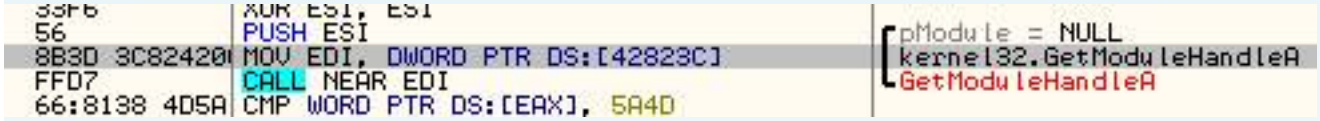


_Nhan The F9, to OEP:

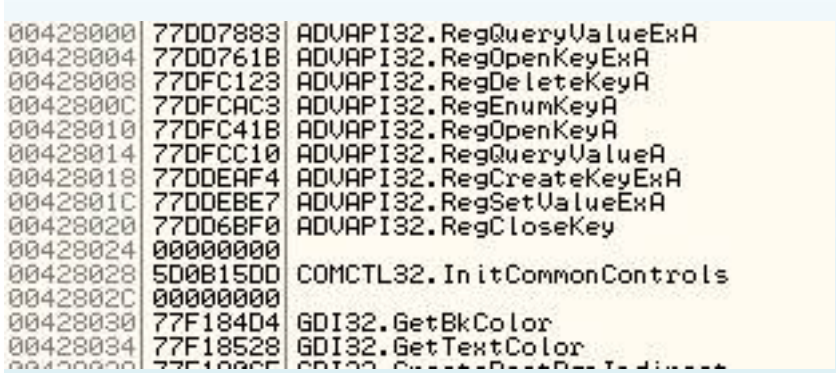


_Tien The dump with LordPE:

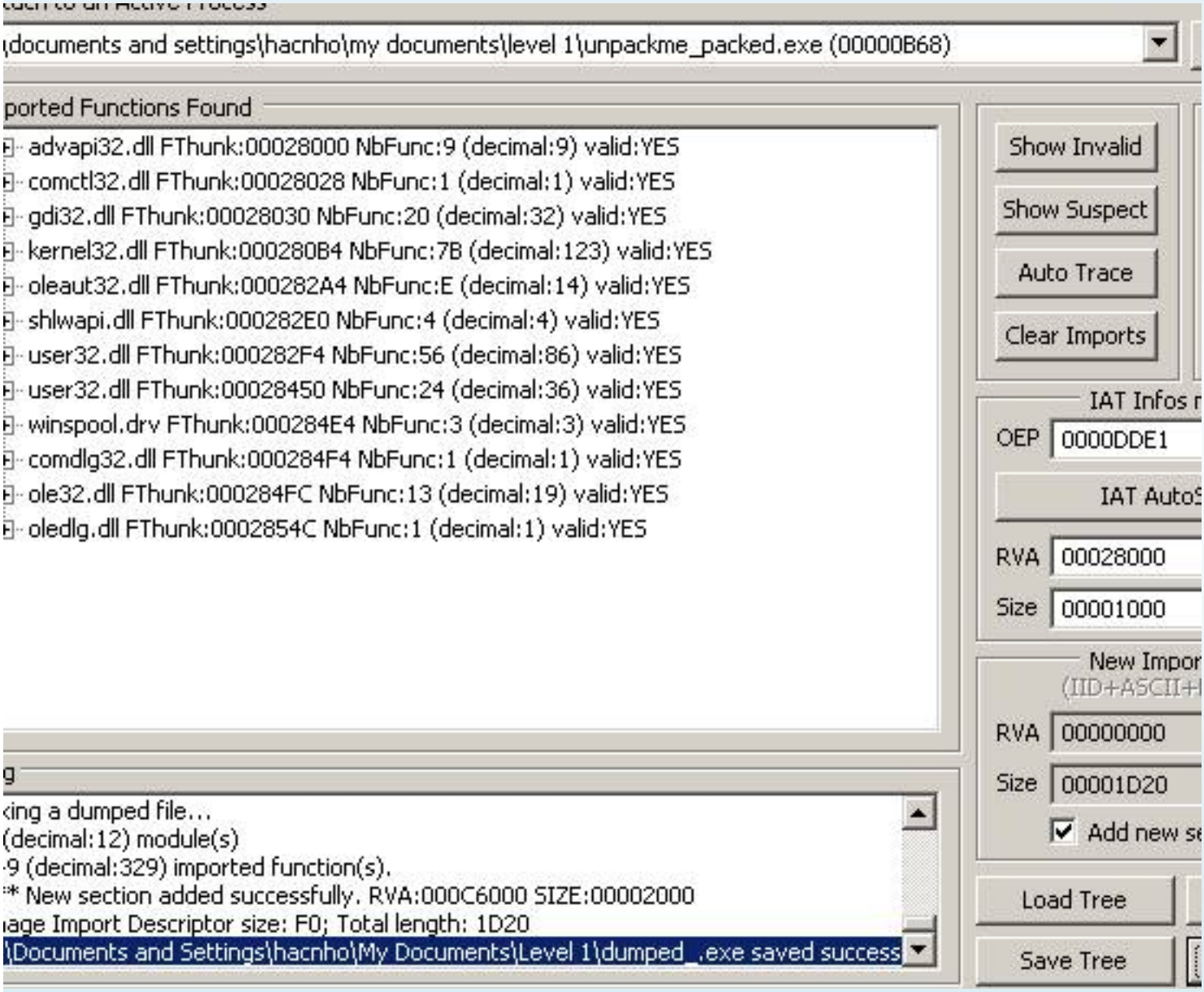
_Tim IAT table, in the CPU, IAT see this is not the mix, have easily IAT Full:



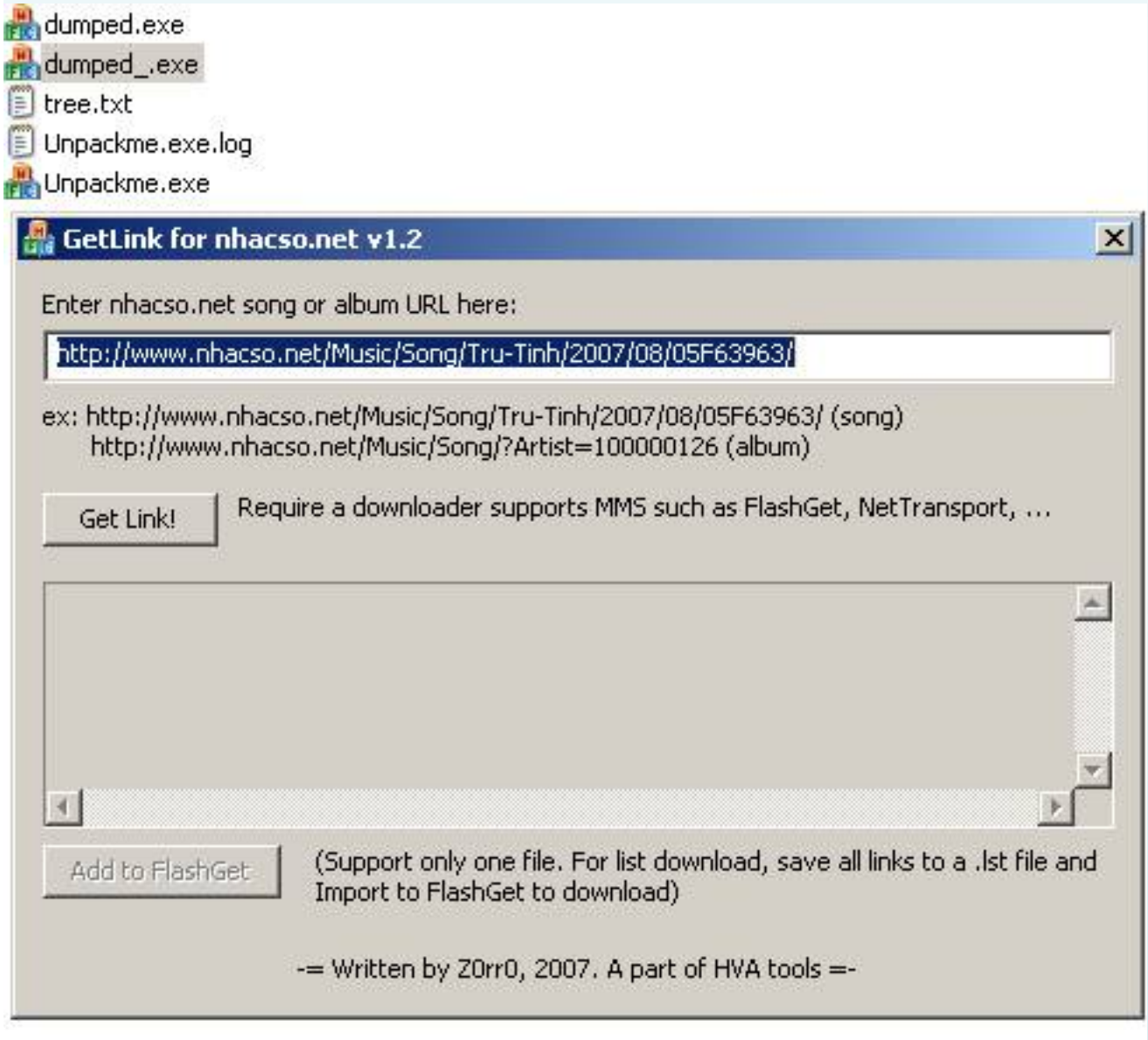
Print _Follow dump> Memory Address:



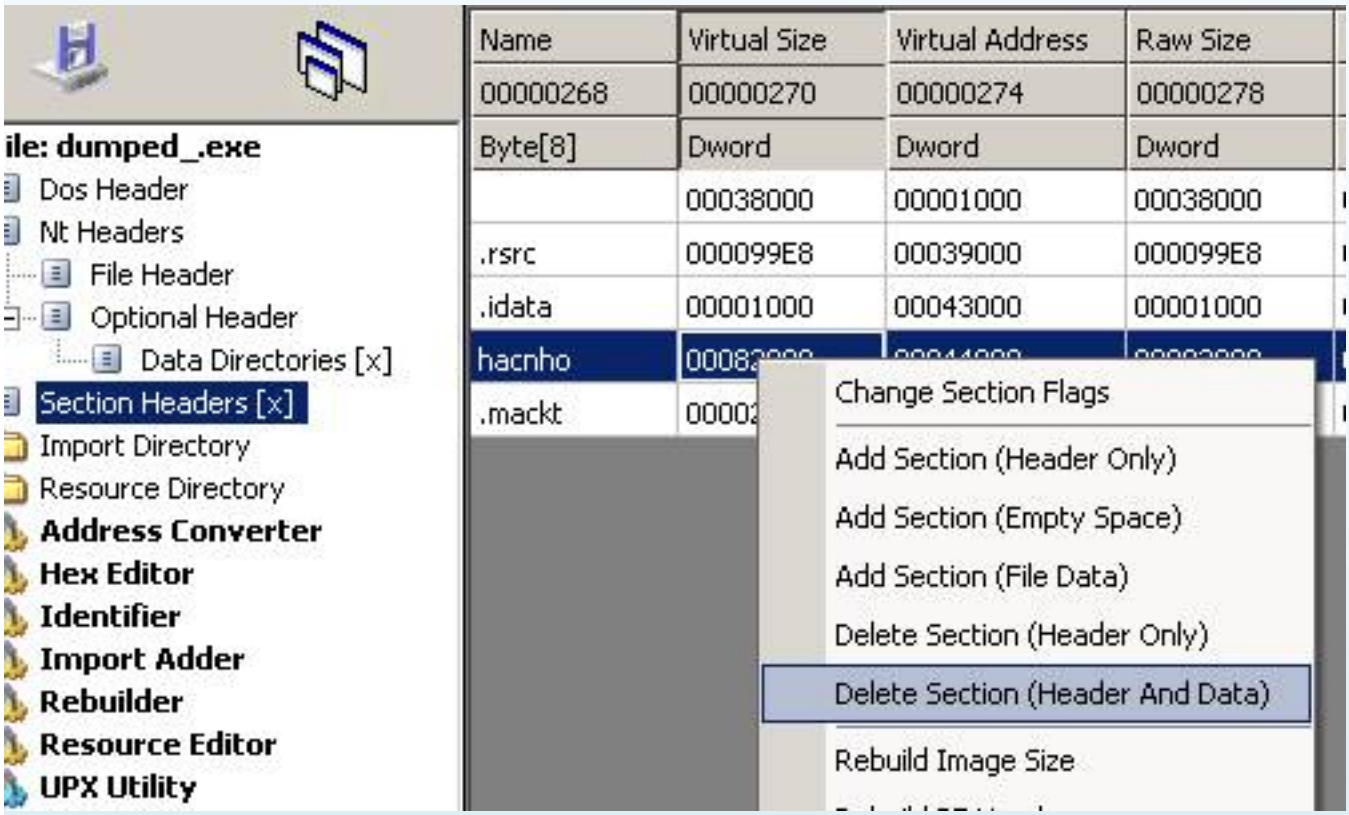
_Mo Imprec up:



_Gio Oral test:



_De File lightweight, can delete the section themida created:



_Unpack Done!

Any suggestions, comments or corrections please PM me via:

hacnho@hotmail.com

22-10-2007

Themida - then will go through

Themida 1.9.1.0 - Unpackme level 2

Tutorial # 2 @ 2007 by hacnho (hacnho@hotmail.com)

[Article title]: Themida 1.9.1.0 - Unpackme level 2
[Author]: **hacnho**
[Author home page]: http://hvaonline.net
[Target]: A Tool HVA
[Size]: 252 KBS
[Download Page]: hvaonline.net
[Packer]: Themida | WinLicense V 1.9.1.0 -> Oreans Technologies
[Compilation language]: Microsoft Visual C + + 7.0
[Tools]: The0DBG + hideToolz **fly** by, LordPE, ImportREC, peid0.94
[OS]: WinXP_SP2
[Greetz]: REA, Exetools, Pediy, UnpackCN, snd and ARTeam Memberz

_Chao Of the property, we met each other again at 2 tut, tut also easy et, only

protect the increase of Themida 1.9.1.0 up. Ok let's go ... Also, remember that you

edit option plugin Phantom of the following home:

__Mo Themida 1.9.1.0 to create a new project and protect the following:

Protection Options for unpackme.exe

Information Macros

Macros VM: 0
CodeReplace Macros: 0
ENCRYPT Macros: 0
CLEAR Macros: 0

XBundler files

No files to bundle

Protection Options

Anti-Debugger: enabled
Anti-Dumpers: Disabled
API-wrapping Level: 0
Virtual Machine: enabled
Entry Point Ofuscation: Disabled
Memory Guard: Disabled
Anti-Monitor File: enabled
Anti-Monitor Registry: enabled
Resource Encryption: Disabled
VMWare compatible: Disabled
Delphi / BCB form protection: disabled

Advanced Protection Options

Encrypt Application: Disabled
. NET assemblies: Disabled
Dll plugin: Disabled
Active Context: Disabled
Section Last Name: hacnho

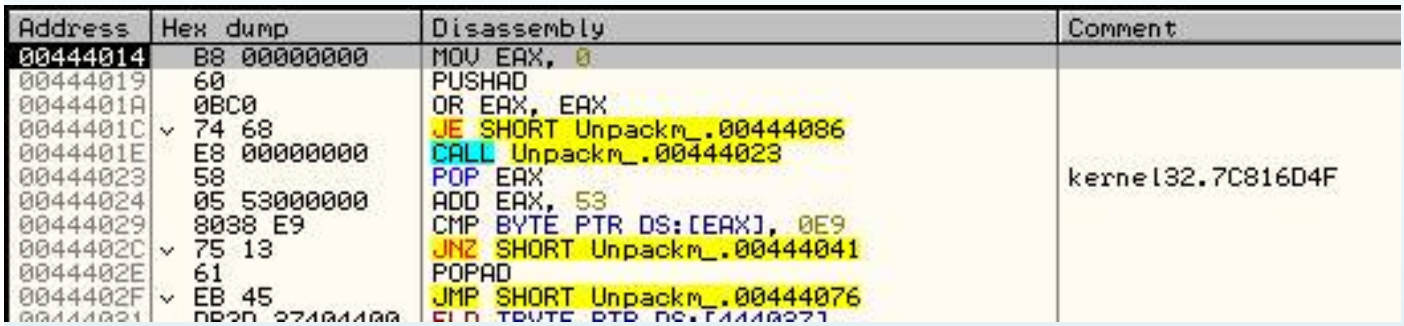
Compression

Application compression: enabled
Resources compression: enabled
SecureEngine compression: enabled

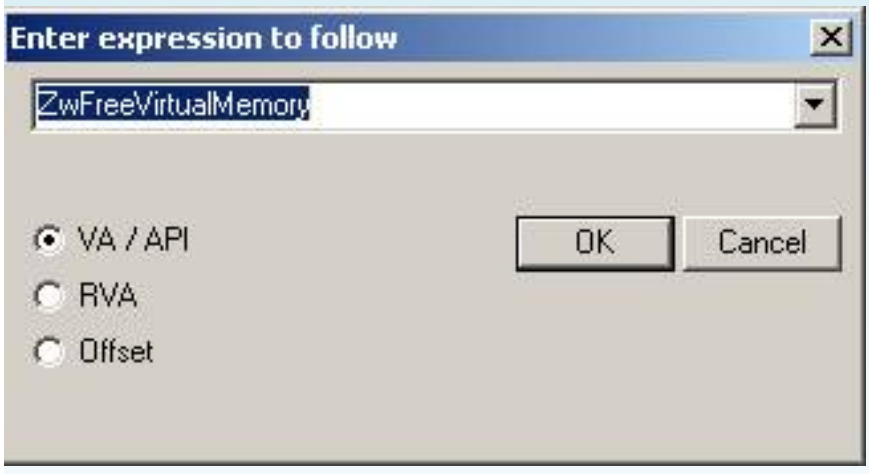
Virtual Machine Settings

Number of Virtual wrapped APIs: 0
Entry Point Virtualization: 0 instructions
Virtual Machine Processor: Mutable CISC processor
Number of CPUs: 1
Opcode Type: Static opcodes
Dynamic Opcode: Disabled

_Bay Hours to load target OllyDBG:

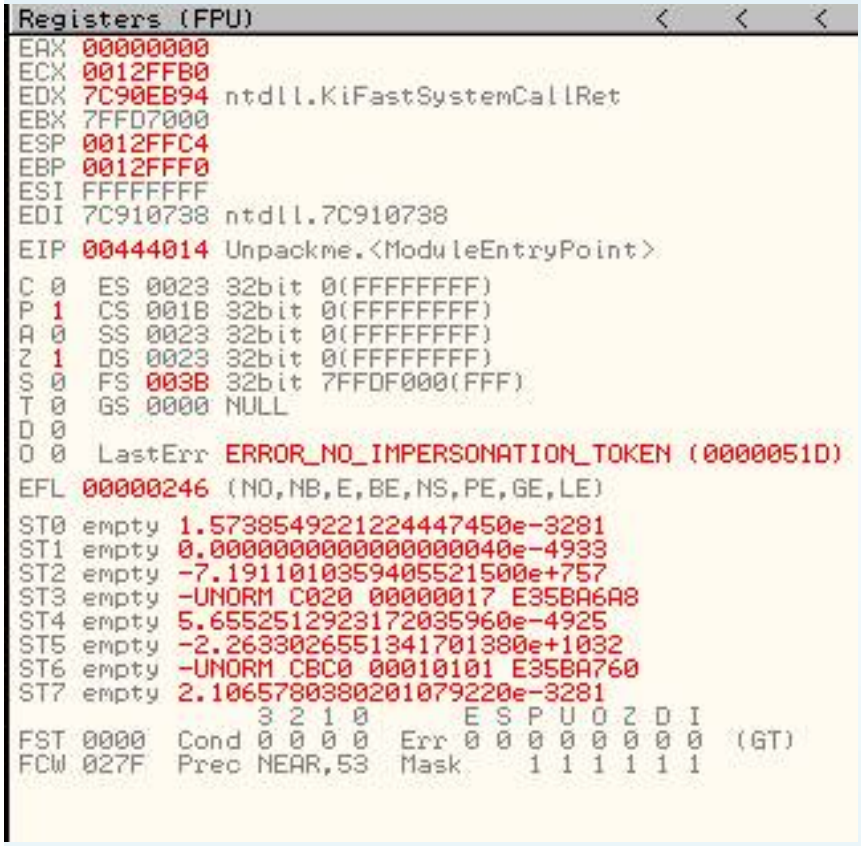


_Nhan Ctrl + G: ZwFreeVirtualMemory



_Toi And press F2 to RETN command:

Nhan _Bay hours Shift + F9 and see the window of the Register:

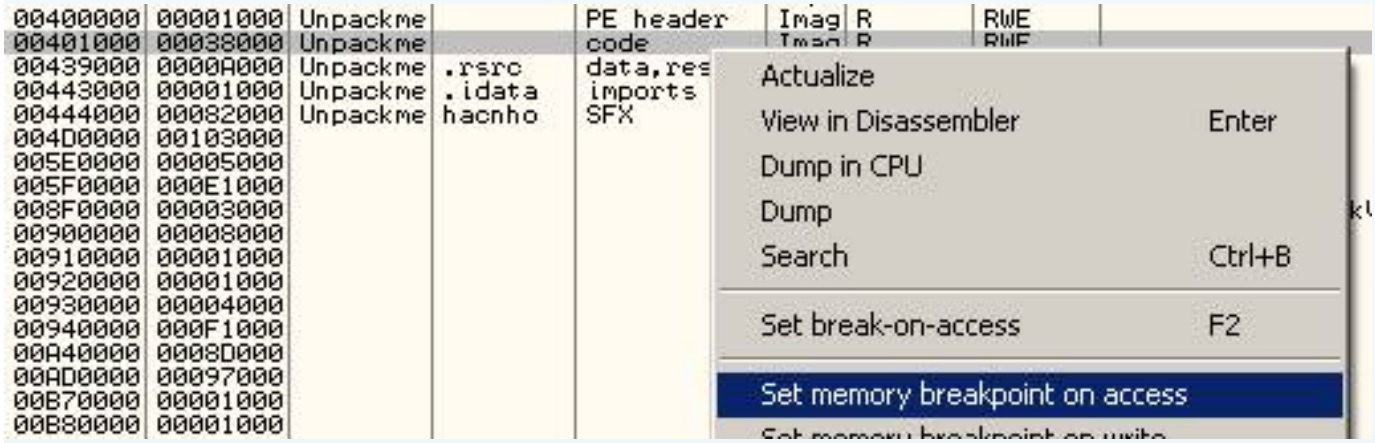


_Vua Press F9 just look down the window stack, the more it this payment MS: P!

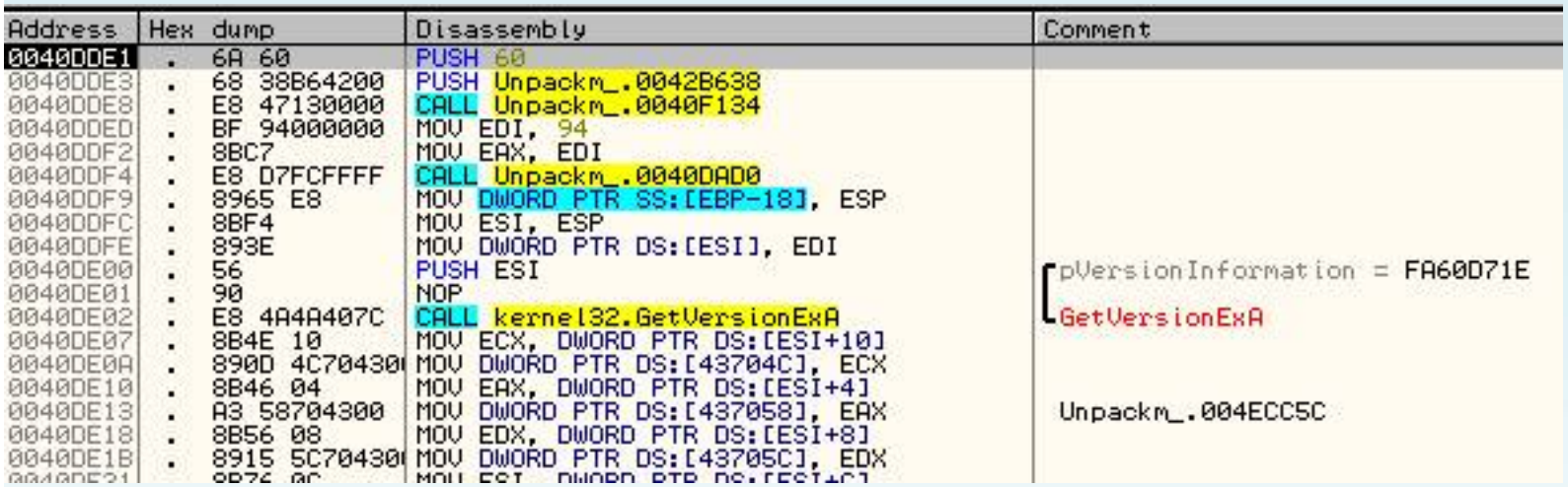
_Nhan Shift + F9 to when it is red again: P! (I count 20 times)

_Gio Press F2 to remove breakpoint, press Alt + M to Memory window, set a

Breakpoint in the section on Access code:

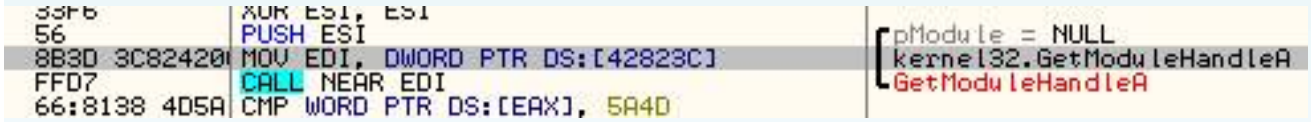


_Nhan The F9, to OEP:

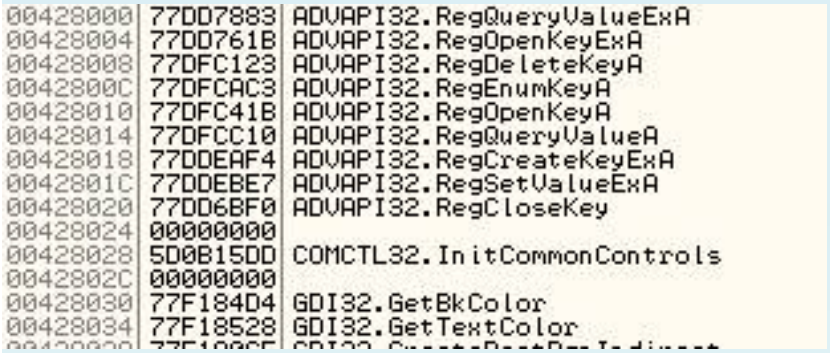


_Tien The dump with LordPE:

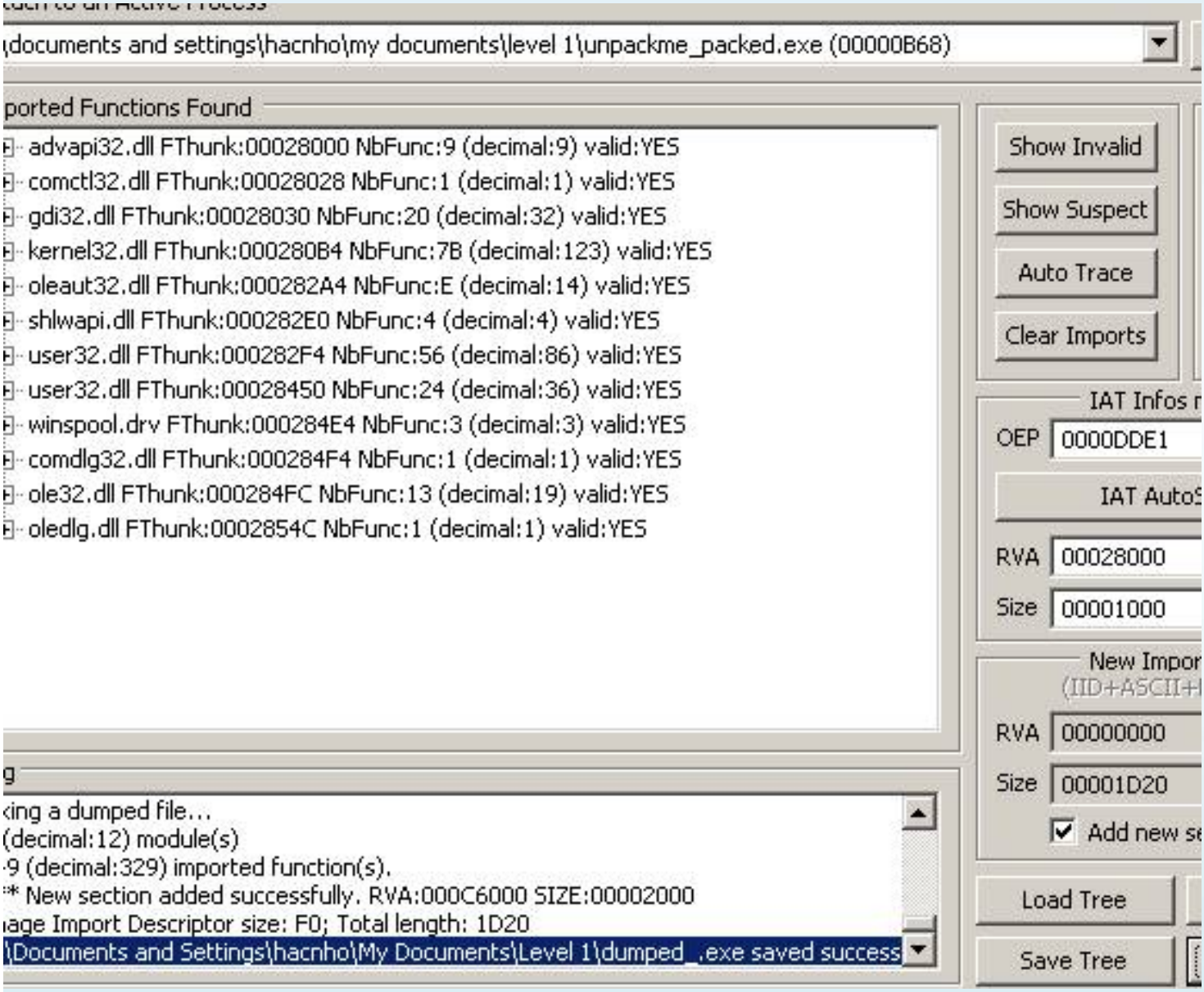
_Tim IAT table, in the CPU, IAT see this is not the mix, have easily IAT Full:



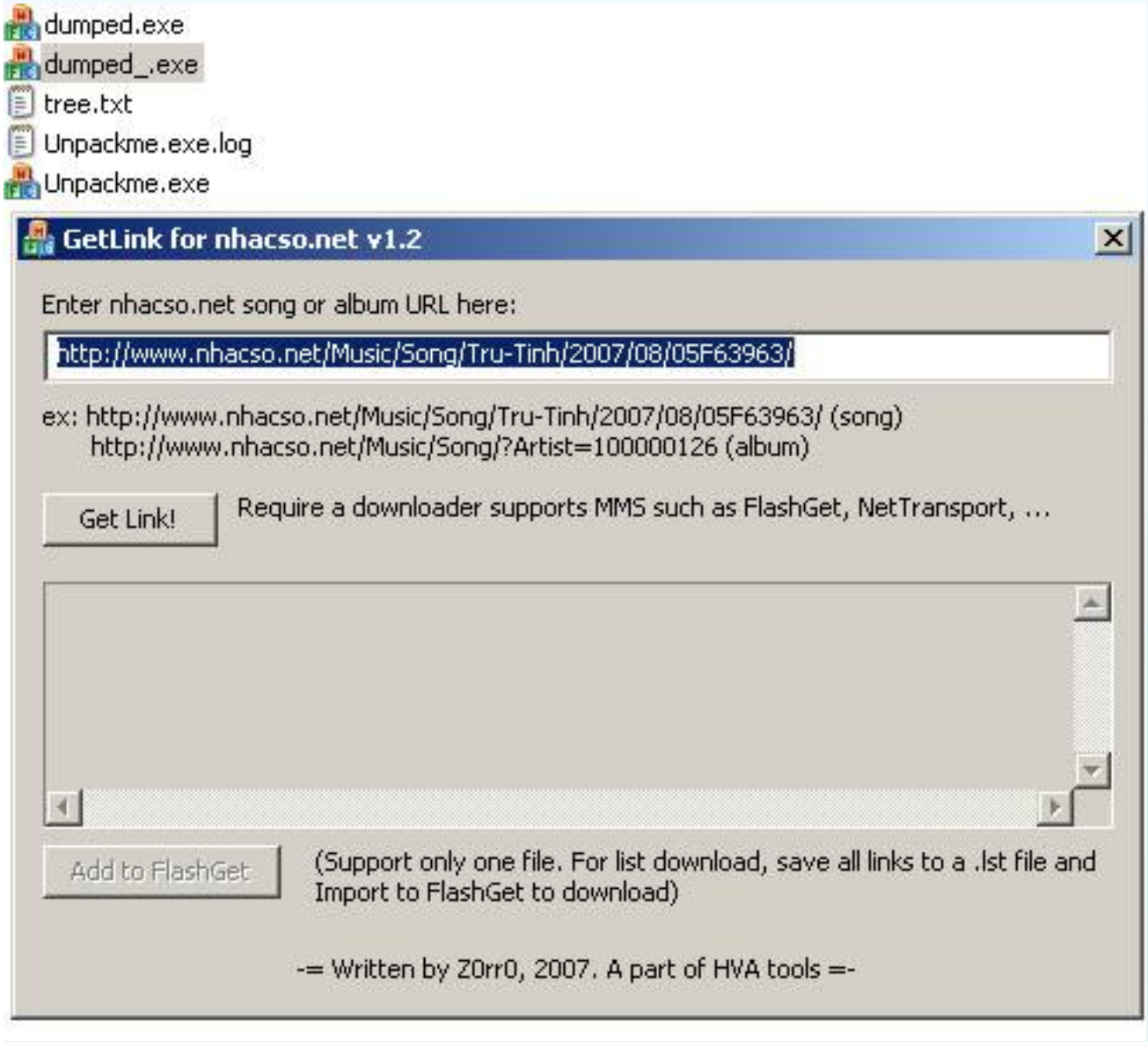
Print _Follow dump> Memory Address:


00428000 77DD7883 ADVAPI32.RegQueryValueExA
00428004 77DD761B ADVAPI32.RegOpenKeyExA
00428008 77DFC123 ADVAPI32.RegDeleteKeyA
0042800C 77DFCAC3 ADVAPI32.RegEnumKeyA
00428010 77DFC41B ADVAPI32.RegOpenKeyA
00428014 77DFCC10 ADVAPI32.RegQueryValueA
00428018 77DDEAF4 ADVAPI32.RegCreateKeyExA
0042801C 77DDEBE7 ADVAPI32.RegSetValueExA
00428020 77DD6BF0 ADVAPI32.RegCloseKey
00428024 00000000
00428028 5D0B15DD COMCTL32.InitCommonControls
0042802C 00000000
00428030 77F184D4 GDI32.GetBkColor
00428034 77F18528 GDI32.GetTextColor

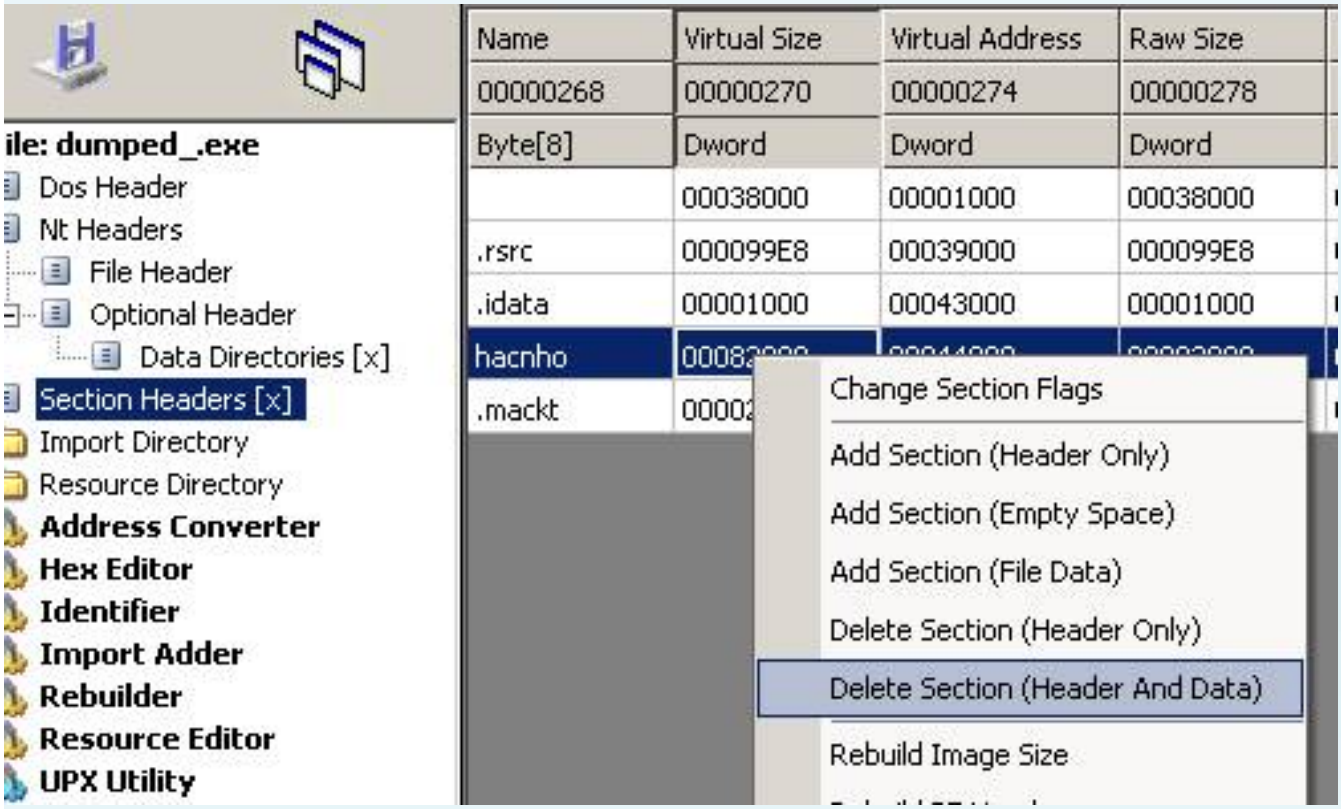
_Mo Imprec up:



_Gio Oral test:



_De File lightweight, can delete the section themida created:



_Unpack Done!

Any suggestions, comments or corrections please PM me via:

hacnho@hotmail.com

22-10-2007

Themida - then will go through

Themida 1.9.1.0 - Unpackme level 3

Tutorial # 3 @ 2007 by hacnho (hacnho@hotmail.com)

[Article title]: Themida 1.9.1.0 - Unpackme level 3
[Author]: **hacnho**
[Author home page]: http://hvaonline.net
[Target]: A Tool HVA
[Size]: 252 KBS
[Download Page]: hvaonline.net
[Packer]: Themida | WinLicense V 1.9.1.0 -> Oreans Technologies
[Compilation language]: Microsoft Visual C + + 7.0
[Tools]: The0DBG + hideToolz **fly** by, LordPE, ImportREC, peid0.94
[OS]: WinXP_SP2
[Greetz]: REA, Exetools, Pediy, UnpackCN, snd and ARTeam Memberz

3 _Trong tut this we will add an increased level are selected Anti dump, and how to

solve it ...

__Mo Themida 1.9.1.0 to create a new project and protect the following:

Protection Options for unpackme.exe

Information Macros

Macros VM: 0
CodeReplace Macros: 0
ENCRYPT Macros: 0
CLEAR Macros: 0

XBundler files

No files to bundle

Protection Options

Anti-Debugger: enabled
Anti-Dumpers: enabled
API-wrapping Level: 0
Virtual Machine: enabled
Entry Point Ofuscation: Disabled
Memory Guard: Disabled
Anti-Monitor File: enabled
Anti-Monitor Registry: enabled
Resource Encryption: Disabled

VMWare compatible: Disabled
Delphi / BCB form protection: disabled

Advanced Protection Options

Encrypt Application: Disabled
. NET assemblies: Disabled
Dll plugin: Disabled
Active Context: Disabled
Section Last Name: hacnho

Compression

Application compression: enabled
Resources compression: enabled
SecureEngine compression: enabled

Virtual Machine Settings

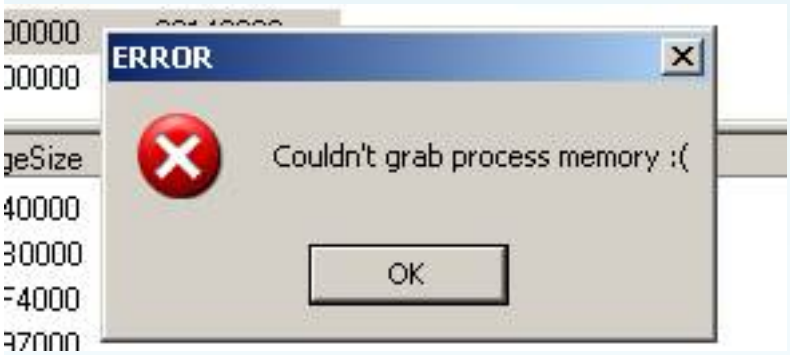
Number of Virtual wrapped APIs: 0
Entry Point Virtualization: 0 instructions
Virtual Machine Processor: Mutable CISC processor
Number of CPUs: 1
Opcode Type: Static opcodes
Dynamic Opcode: Disabled

_Bay Hours to load target OllyDBG, conducting the search tut2 such as OEP. After

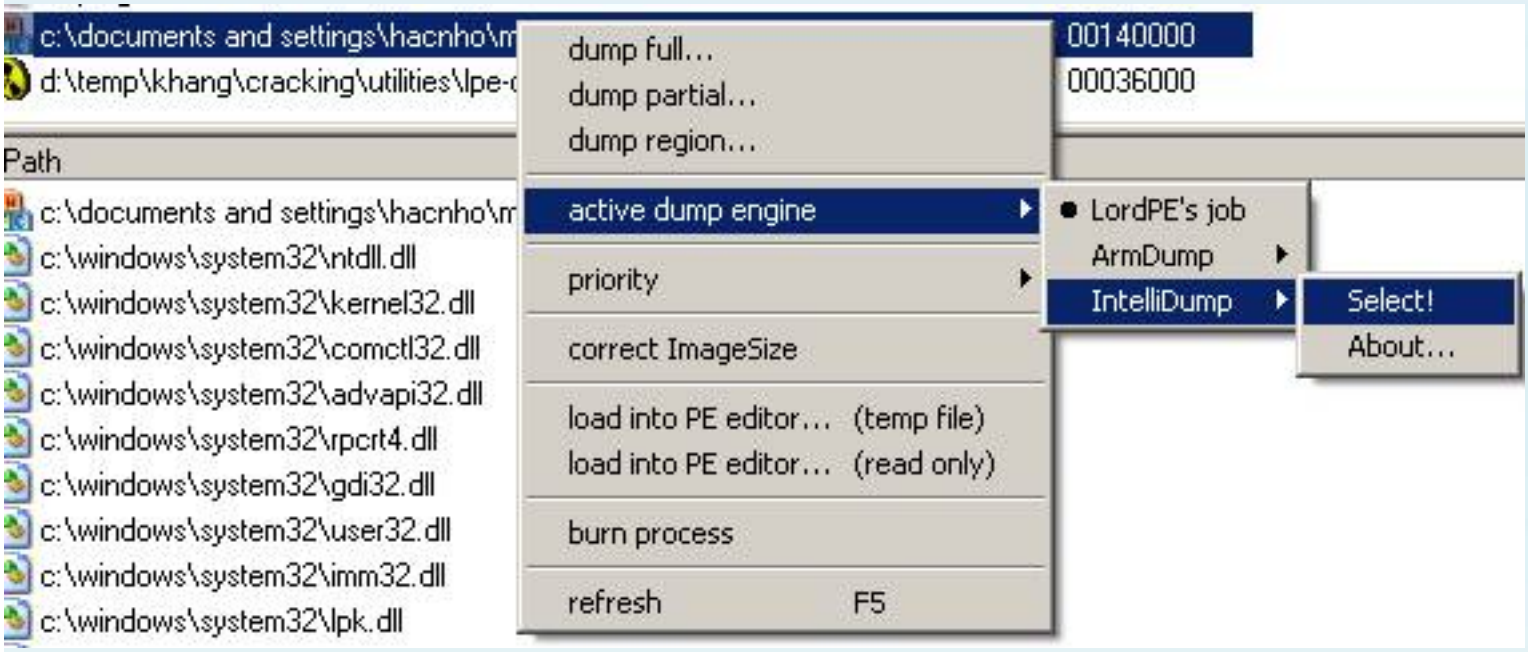
the OEP.

_Tien The dump with LordPE:

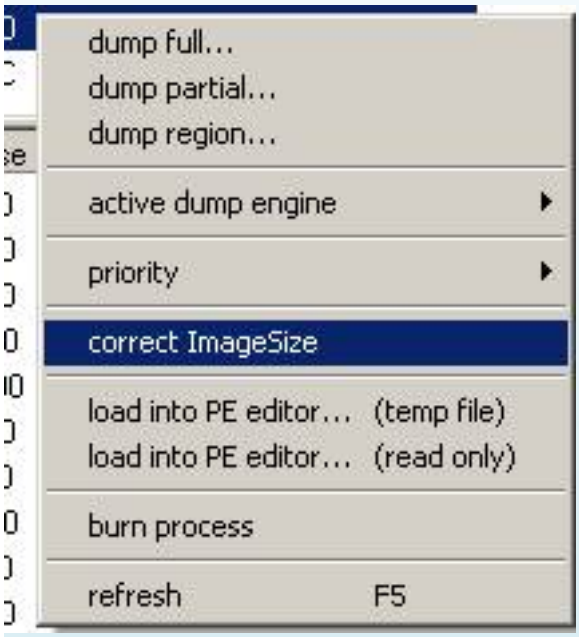
_Va Receive:



_Ok Now, click in the process need to dump:



_Sau Then right click to choose:



_Tien The dump and fix IAT normal.

Any suggestions, comments or corrections please PM me via:

hacnho@hotmail.com

22-10-2007

Themida - then will go through

Themida 1.9.1.0 - Unpackme level 4

Tutorial # 4 @ 2007 by hacnho (hacnho@hotmail.com)

[Article title]: Themida 1.9.1.0 - Unpackme level 4
[Author]: **hacnho**
[Author home page]: http://hvaonline.net
[Target]: A Tool HVA
[Size]: 252 KBS
[Download Page]: hvaonline.net
[Packer]: Themida | WinLicense V 1.9.1.0 -> Oreans Technologies
[Compilation language]: Microsoft Visual C + + 7.0
[Tools]: The0DBG + hideToolz **fly** by, LordPE, ImportREC, peid0.94
[OS]: WinXP_SP2
[Greetz]: REA, Exetools, Pediy, UnpackCN, snd and ARTeam Memberz

_Trong Tut 4nay we will process which Oreans called API-wrapping. I will at the API level 1-

wrapping.

__Mo Themida 1.9.1.0 to create a new project and protect the following:

Protection Options for unpackme.exe

Information Macros

Macros VM: 0
CodeReplace Macros: 0
ENCRYPT Macros: 0
CLEAR Macros: 0

XBundler files

No files to bundle

Protection Options

Anti-Debugger: enabled

Anti-Dumpers: enabled
API-wrapping Level: 1
Virtual Machine: enabled
Entry Point Ofuscation: Disabled
Memory Guard: enabled
Anti-Monitor File: enabled
Anti-Monitor Registry: enabled
Resource Encryption: enabled
VMWare compatible: Disabled
Delphi / BCB form protection: disabled

Advanced Protection Options

Encrypt Application: Disabled
. NET assemblies: Disabled
Dll plugin: Disabled
Active Context: Disabled
Section Last Name: hacnho

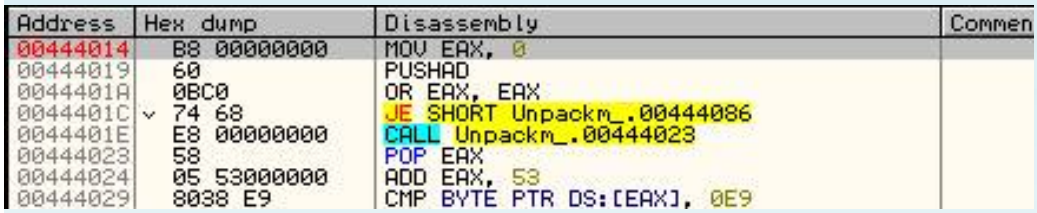
Compression

Application compression: enabled
Resources compression: enabled
SecureEngine compression: enabled

Virtual Machine Settings

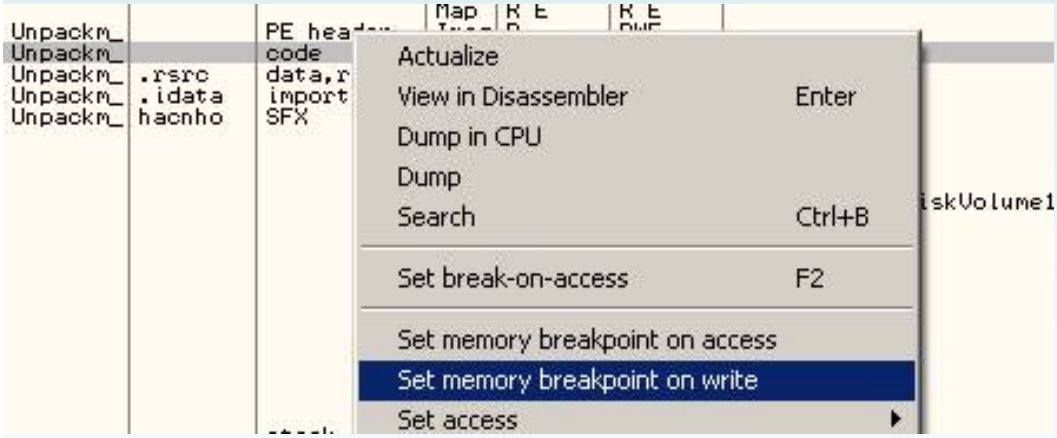
Number of Virtual wrapped APIs: 0
Entry Point Virtualization: 0 instructions
Virtual Machine Processor: Mutable CISC processor
Number of CPUs: 1
Opcode Type: Static opcodes
Dynamic Opcode: Disabled

_Bay Hours to load target OllyDBG:



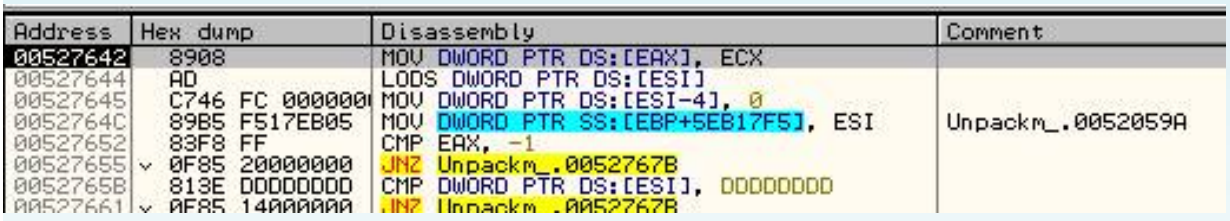
_Khong Tuts like 3 times before this API-wrapping, to fix Magic Jump is the first step we

press Alt + M to put on a Memory Write Breakpoint in code section:

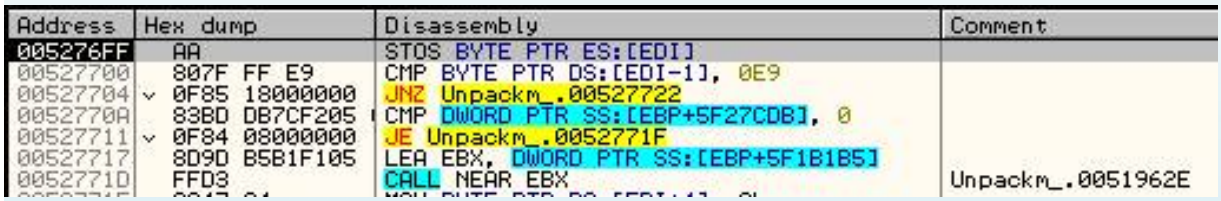


_Nhan Shift + F9:

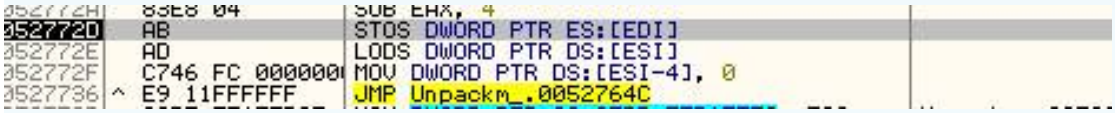
_Nhan F7, F8 and then press Shift + F9:



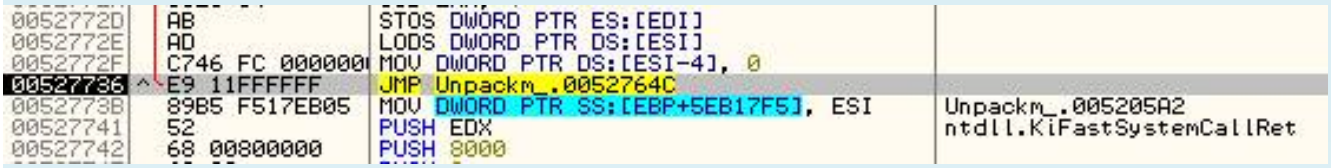
_Tiep To Shift + F9:



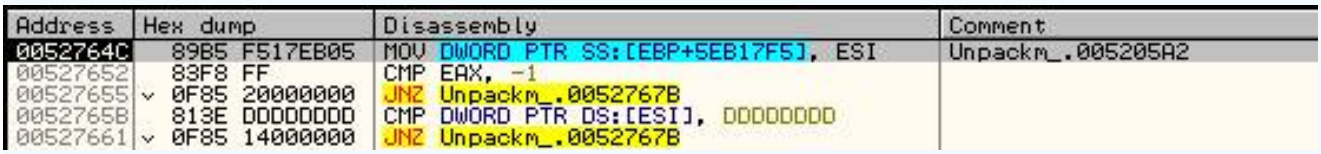
_Tiep To Shift + F9:



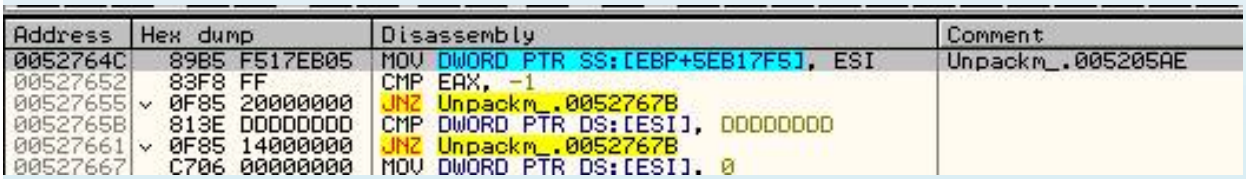
_Sau Then pressing F8 trace down:



_Toi Here:



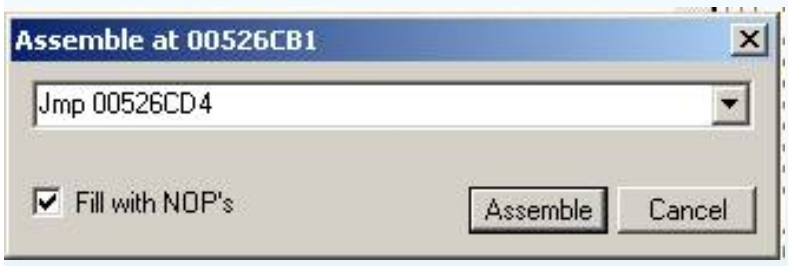
_Nhan F8 for more to come:



_Chức You happy to Magic Jump;;). Mệt quá: P!

```
Address   Hex dump          Disassembly                                  Comment
00526C27    C785 7931EB05   MOV DWORD PTR SS:[EBP+5EB3179], 0
00526C31    C785 9D05EB05   MOV DWORD PTR SS:[EBP+5EB059D], 0
00526C3B    83BD DB7CF205   CMP DWORD PTR SS:[EBP+5F27CDB], 0
00526C42  v 0F84 08000000   JE Unpackm_.00526C50
00526C48    8D9D B4A7F105   LEA EBX, DWORD PTR SS:[EBP+5F1A7B4]
00526C4E    FFD3            CALL NEAR EBX                                Unpackm_.0051962E
00526C50    FF85 1D07EB05   INC DWORD PTR SS:[EBP+5EB071D]
00526C56    83BD 1D07EB05   CMP DWORD PTR SS:[EBP+5EB071D], 64
00526C5D  v 0F82 72000000   JB Unpackm_.00526CD5
00526C63    C785 1D07EB05   MOV DWORD PTR SS:[EBP+5EB071D], 1
00526C6D    60              PUSHAD
00526C6E    8D85 6965F205   LEA EAX, DWORD PTR SS:[EBP+5F26569]
00526C74    FFD0            CALL NEAR EAX
00526C76    8DB5 AB7DF205   LEA ESI, DWORD PTR SS:[EBP+5F27DAB]
00526C7C    8DBD 589BF205   LEA EDI, DWORD PTR SS:[EBP+5F29B58]
00526C82    2BFE            SUB EDI, ESI                                 Unpackm_.005205AE
00526C84    8BD7            MOV EDX, EDI                                 Unpackm_.004117C4
00526C86    8BBD 5932EB05   MOV EDI, DWORD PTR SS:[EBP+5EB3259]
00526C8C    B9 FFFFFFFF     MOV ECX, -1
00526C91    33C0            XOR EAX, EAX
00526C93    8A06            MOV AL, BYTE PTR DS:[ESI]
00526C95    32C1            XOR AL, CL
00526C97    46              INC ESI                                      Unpackm_.005205AE
00526C98    8B0487          MOV EAX, DWORD PTR DS:[EDI+EAX*4]
00526C9B    C1E9 08         SHR ECX, 8
00526C9E    33C8            XOR ECX, EAX
00526CA0    4A              DEC EDX                                      ntdll.KiFastSystemCallRet
00526CA1  ^ 0F85 EAFFFFFF   JNZ Unpackm_.00526C91
00526CA7    8BC1            MOV EAX, ECX
00526CA9    F7D0            NOT EAX
00526CAB    3985 D91AEB05   CMP DWORD PTR SS:[EBP+5EB1AD9], EAX
00526CB1  v 0F84 1D000000   JE Unpackm_.00526CD4                         Magic Jump
00526CB7    B8 00000000     MOV EAX, 0
00526CBC    0BC0            OR EAX, EAX
```

_Patch To:



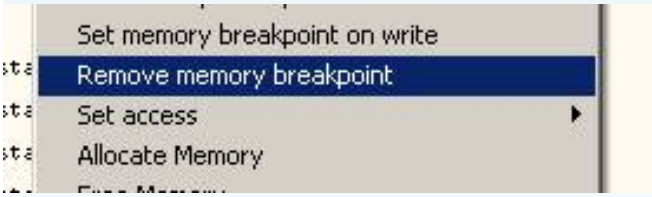
```
00526CB1  EB 21          JMP SHORT Unpackm_.00526CD4      Magic Jump
00526CB3  90             NOP
00526CB4  90             NOP
00526CB5  90             NOP
00526CB6  90             NOP
00526CB7  B8 00000000    MOV EAX, 0
00526CBC  0BC0           OR EAX, EAX
```

_Cuon Down some orders jumped 4 meeting. Submit it always nhé: D!

```
00526DE3   03C1            ADD EAX, ECX
00526DE5   5E              POP ESI                          Unpackm_.005205AE
00526DE6   83BD 1D02EB05   CMP DWORD PTR SS:[EBP+5EB021D], 1
00526DED   0F84 39000000   JE Unpackm_.00526E2C
00526DF3   3B8D 790EEB05   CMP ECX, DWORD PTR SS:[EBP+5EB0E79]   kernel32.7C800000
00526DF9   0F84 2D000000   JE Unpackm_.00526E2C
00526DFF   3B8D 6911EB05   CMP ECX, DWORD PTR SS:[EBP+5EB1169]   USER32.77D40000
00526E05   0F84 21000000   JE Unpackm_.00526E2C
00526E0B   3B8D C52FEB05   CMP ECX, DWORD PTR SS:[EBP+5EB2FC5]   ADVAPI32.77DD0000
00526E11   0F84 15000000   JE Unpackm_.00526E2C
00526E17   8D9D 2C93F205   LEA EBX, DWORD PTR SS:[EBP+5F2932C]
00526E1D   FFD3            CALL NEAR EBX                    Unpackm_.0051962E
00526E1F   8BF8            MOV EDI, EAX
00526E21   8985 091AEB05  MOV DWORD PTR SS:[EBP+5EB1A09], EAX
```

```
00526DE6   83BD 1D02EB05   CMP DWORD PTR SS:[EBP+5EB021D], 1
00526DED   90              NOP
00526DEE   90              NOP
00526DEF   90              NOP
00526DF0   90              NOP
00526DF1   90              NOP
00526DF2   90              NOP
00526DF3   3B8D 790EEB05   CMP ECX, DWORD PTR SS:[EBP+5EB0E79]   kernel32.7C800000
00526DF9   90              NOP
00526DFA   90              NOP
00526DFB   90              NOP
00526DFC   90              NOP
00526DFD   90              NOP
00526DFE   90              NOP
00526DFF   3B8D 6911EB05   CMP ECX, DWORD PTR SS:[EBP+5EB1169]   USER32.77D40000
00526E05   90              NOP
00526E06   90              NOP
00526E07   90              NOP
00526E08   90              NOP
00526E09   90              NOP
00526E0A   90              NOP
00526E0B   3B8D C52FEB05   CMP ECX, DWORD PTR SS:[EBP+5EB2FC5]   ADVAPI32.77DD0000
00526E11   90              NOP
00526E12   90              NOP
00526E13   90              NOP
00526E14   90              NOP
00526E15   90              NOP
00526E16   90              NOP
00526E17   8D9D 2C93F205   LEA EBX, DWORD PTR SS:[EBP+5F2932C]
00526E1D   FFD3            CALL NEAR EBX                    Unpackm_.0051962E
00526E1F   8BF8            MOV EDI, EAX
00526E21   8985 091AEB05  MOV DWORD PTR SS:[EBP+5EB1A09], EAX
```

_Nhan Alt + M, remove breakpoint:

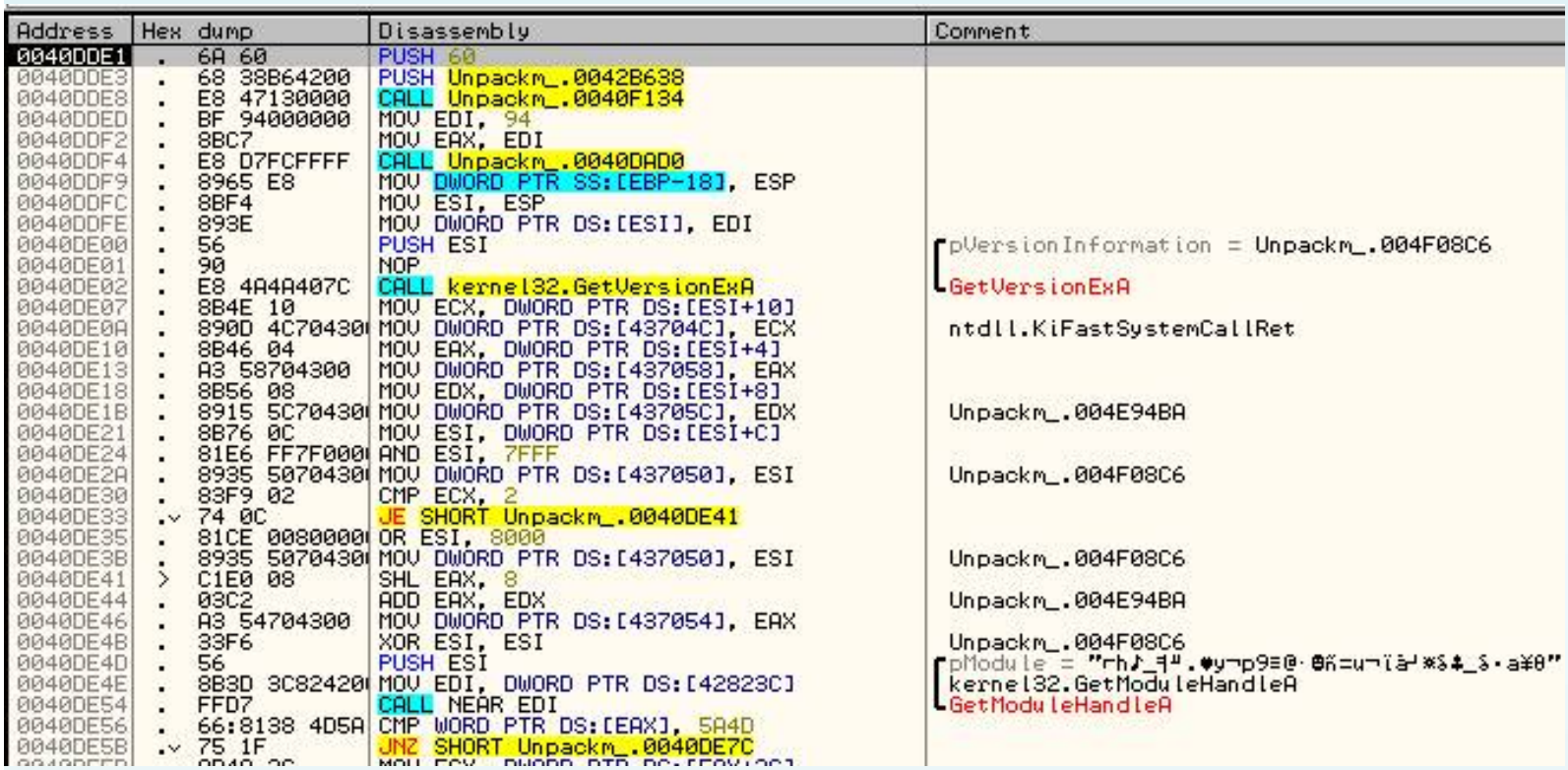


__Nhan Ctrl + G: ZwFreeVirtualMemory

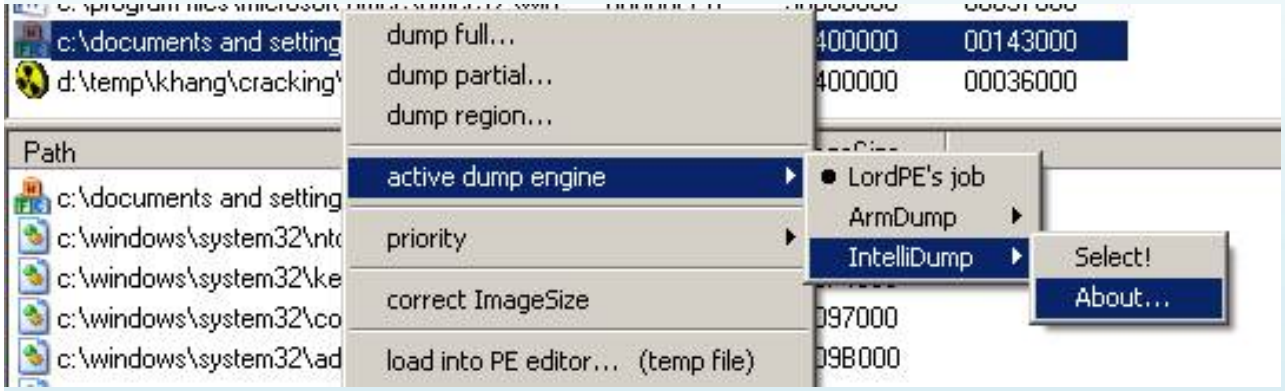
_Toi And press F2 to RETN command:

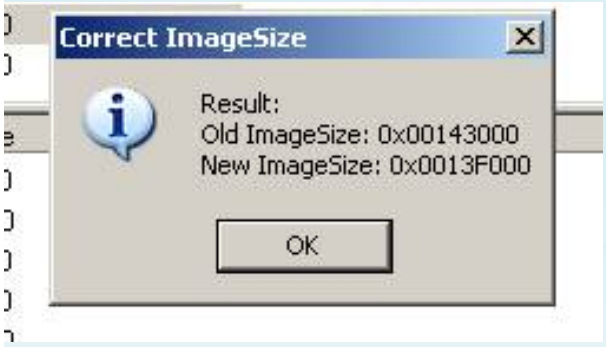
_Nhan F9 14 times, then put breakpoint, press Alt + M, press F2 at the code section. Press F9.

See what's nhé: D!

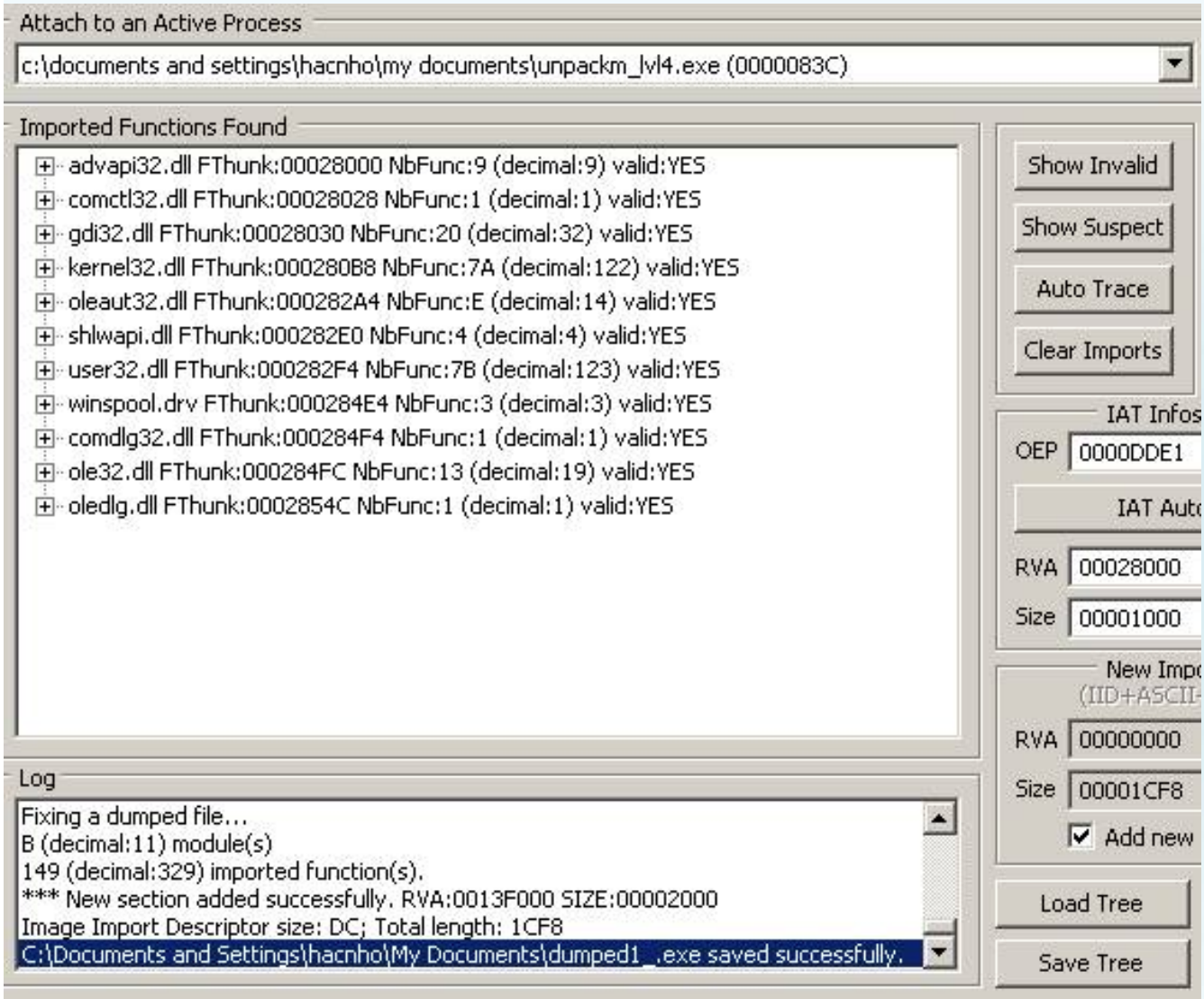


_Mo LordPE:





_Imprec:



_Test Test, work fine!

Any suggestions, comments or corrections please PM me via:

hacnho@hotmail.com

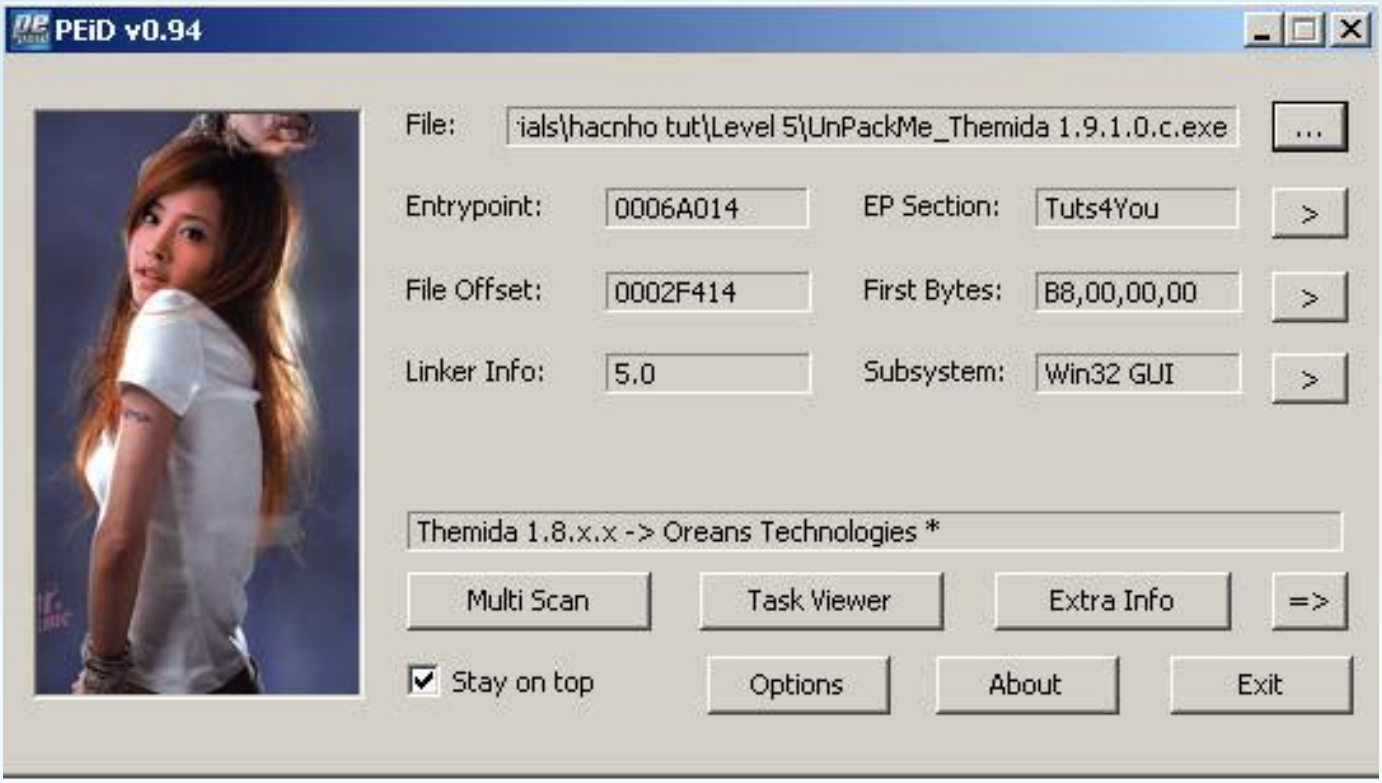
22-10-2007

Themida - then will go through

Themida 1.9.1.0 - Unpackme level 5

Tutorial # 5 @ 2007 by hacnho (hacnho@hotmail.com)

[Article title]: Themida 1.9.1.0 - Unpackme level 5
[Author]: **hacnho**
[Author home page]: http://hvaonline.net
[Target]: Tuts4You Unpackme: UnPackMe_Themida 1.9.1.0.c, d
[Size]: 1:53 MB (1,613,312 bytes)
[Download Page]: Tuts4You.Com
[Packer]: Themida | WinLicense V 1.9.1.0 -> Oreans Technologies
[Compilation language]: Microsoft Visual C + + 6.0
[Tools]: The0DBG + hideToolz **fly** by, LordPE, ImportREC, peid0.94
[OS]: WinXP_SP2
[Greetz]: REA, Exetools, Pediy, UnpackCN, snd and ARTeam Memberz



_Moi Wedding go on, slightly against, say that the wife actually look delicious thằng

you too ;-), hix dom tui to see his body too! He said he xỉn xỉn nhảm her little children

do not chùi. Now we will study what it is, does the tree leaves garden for 4 tuts and also

just enough to drop. Now we will use this data to the first: D! As you know Tuts4you

are very or unpack me, and it is the place to try unpacker of his. So the usually we will

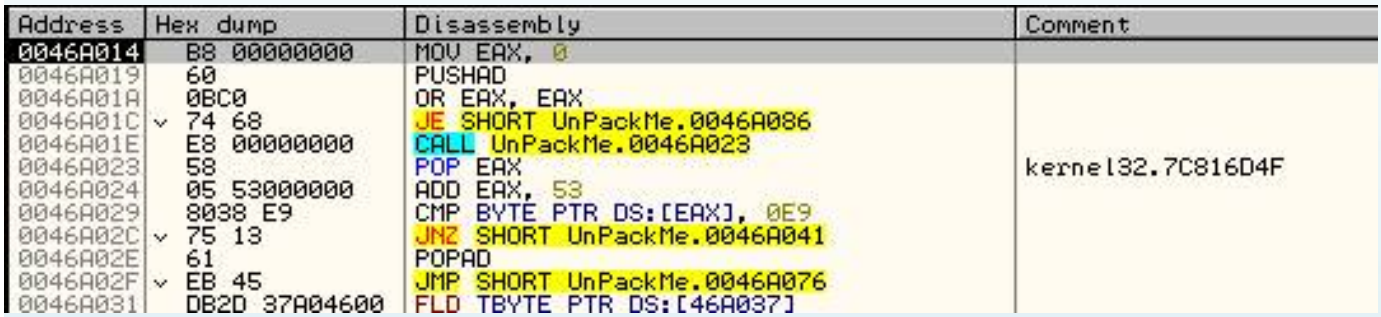
download 2 unpackme in unpackme Themida 1.9.1.0 of it. To illustrate this tut for

portfolio UnPackMe_Themida 1.9.1.0.c, D. For information about the file's log protect

themida you can contact Ted at snd forum.

I. UnPackMe_Themida 1.9.1.0.c

_Cau Say any hủ: Load OllyDBG to target.

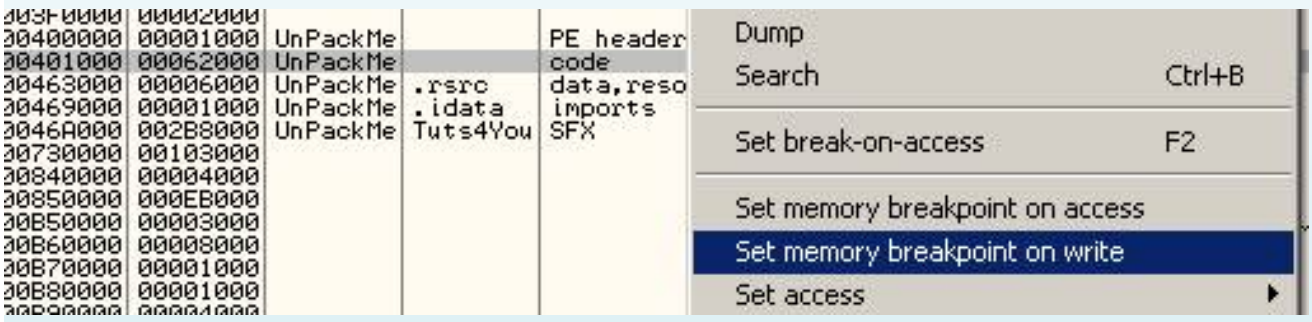


Address	Hex dump	Disassembly	Comment
0046A014	B8 00000000	MOV EAX, 0	
0046A019	60	PUSHAD	
0046A01A	0BC0	OR EAX, EAX	
0046A01C	74 68	JE SHORT UnPackMe.0046A086	
0046A01E	E8 00000000	CALL UnPackMe.0046A023	
0046A023	58	POP EAX	kernel32.7C816D4F
0046A024	05 53000000	ADD EAX, 53	
0046A029	8038 E9	CMP BYTE PTR DS:[EAX], 0E9	
0046A02C	75 13	JNZ SHORT UnPackMe.0046A041	
0046A02E	61	POPAD	
0046A02F	EB 45	JMP SHORT UnPackMe.0046A076	
0046A031	DB2D 37A04600	FLD TBYTE PTR DS:[46A037]	

_De OEP to you as similar tut 4. To record from the tuts 4, mạn allowed me to do the

steps to Fake OEP. Now you press Alt + M, set a break point in the section on write

code:

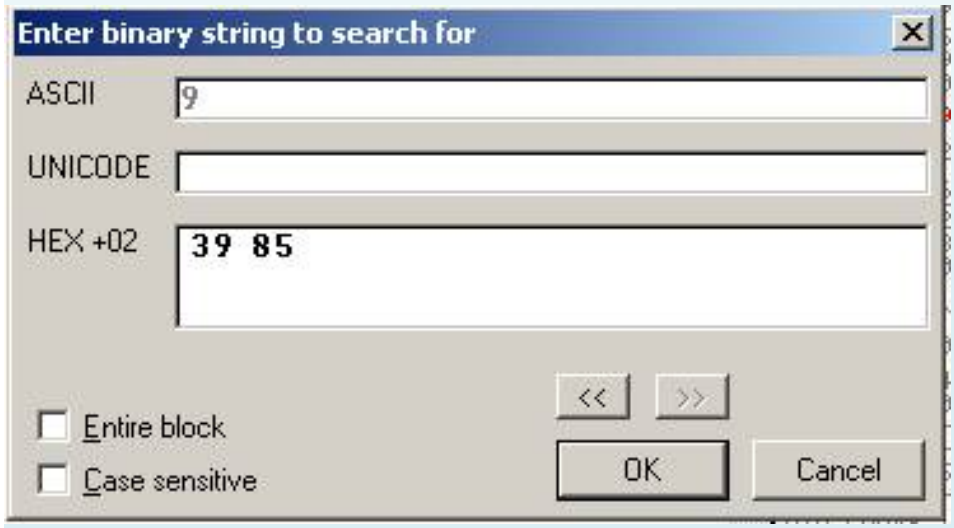


Shit _Nhan + F9:

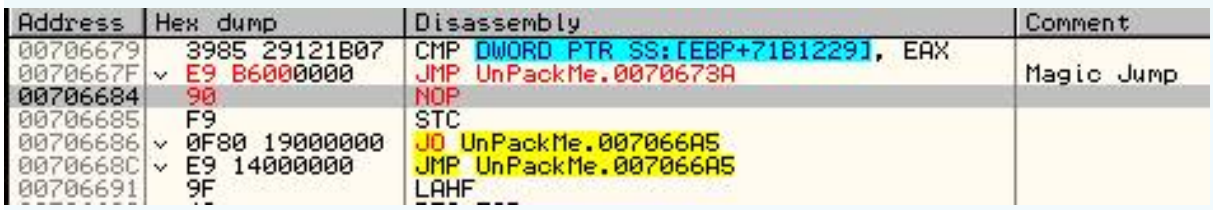
_Nhan F8, and then press Shift + F9 4 times:

_Sau The press F8 to here:

_Nhan Ctrl + B type in 3985

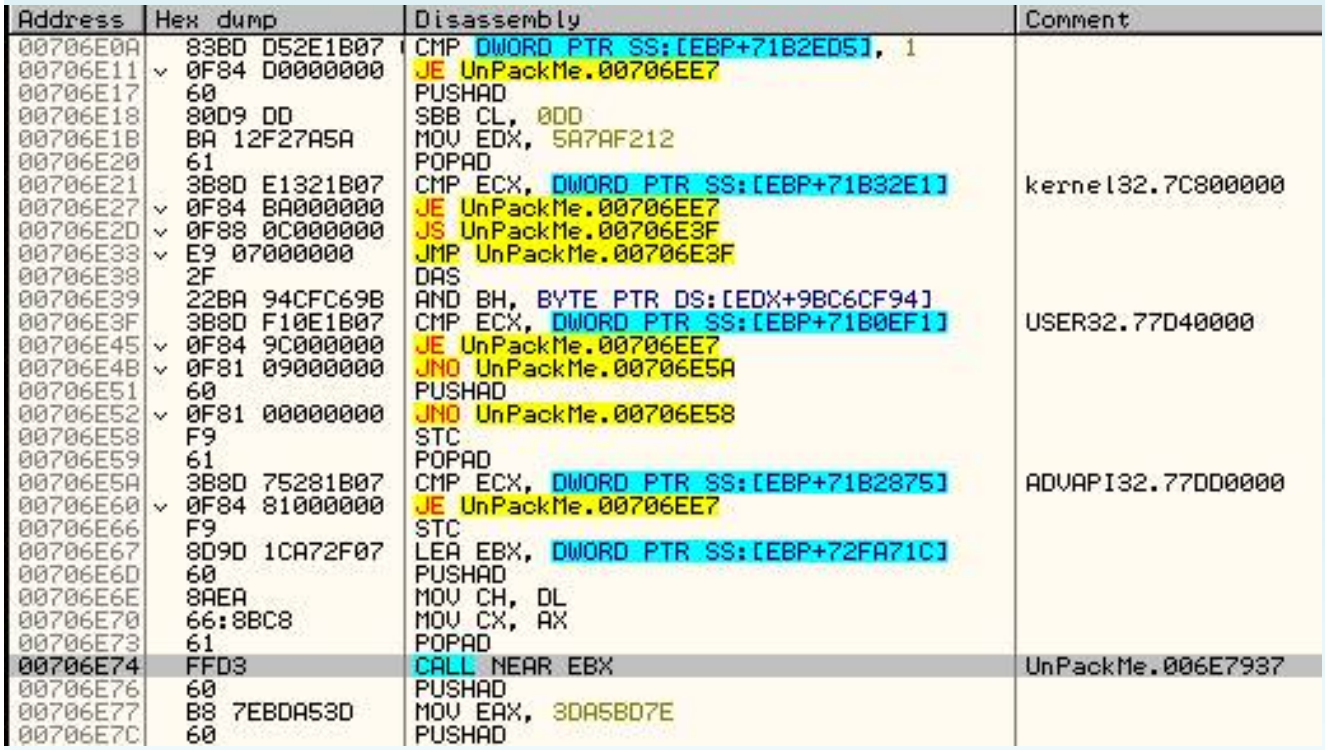


Magic _Toi JUMP, conducted patch it:



_Ctrl + B: FF D3

_Toi Here:



```
Address   Hex dump          Disassembly                              Comment
00706E0A    83BD D52E1B07   CMP DWORD PTR SS:[EBP+71B2ED5], 1
00706E11  v 0F84 D0000000   JE UnPackMe.00706EE7
00706E17    60              PUSHAD
00706E18    80D9 DD         SBB CL, 0DD
00706E1B    BA 12F27A5A     MOV EDX, 5A7AF212
00706E20    61              POPAD
00706E21    3B8D E1321B07   CMP ECX, DWORD PTR SS:[EBP+71B32E1]        kernel32.7C800000
00706E27  v 0F84 BA000000   JE UnPackMe.00706EE7
00706E2D  v 0F88 0C000000   JS UnPackMe.00706E3F
00706E33  v E9 07000000     JMP UnPackMe.00706E3F
00706E38    2F              DAS
00706E39    22BA 94CFC69B   AND BH, BYTE PTR DS:[EDX+9BC6CF94]
00706E3F    3B8D F10E1B07   CMP ECX, DWORD PTR SS:[EBP+71B0EF1]        USER32.77D40000
00706E45  v 0F84 9C000000   JE UnPackMe.00706EE7
00706E4B  v 0F81 09000000   JNO UnPackMe.00706E5A
00706E51    60              PUSHAD
00706E52  v 0F81 00000000   JNO UnPackMe.00706E58
00706E58    F9              STC
00706E59    61              POPAD
00706E5A    3B8D 75281B07   CMP ECX, DWORD PTR SS:[EBP+71B2875]        ADVAPI32.77DD0000
00706E60  v 0F84 81000000   JE UnPackMe.00706EE7
00706E66    F9              STC
00706E67    8D9D 1CA72F07   LEA EBX, DWORD PTR SS:[EBP+72FA71C]
00706E6D    60              PUSHAD
00706E6E    8AEA            MOV CH, DL
00706E70    66:8BC8         MOV CX, AX
00706E73    61              POPAD
00706E74    FFD3            CALL NEAR EBX                            UnPackMe.006E7937
00706E76    60              PUSHAD
00706E77    B8 7EBDA53D     MOV EAX, 3DA5BD7E
00706E7C    60              PUSHAD
```

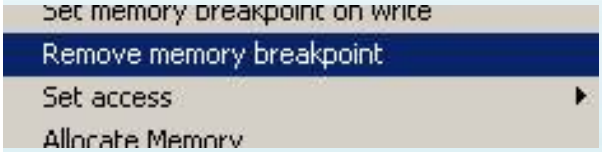
4 _Nop orders jumped JE, if you see only 3 orders jumped immediately enter the

command jump:

```
Address   Hex dump          Disassembly                              Comment
00706DFD    5C              POP ESP
00706DFE  v E9 07000000     JMP UnPackMe.00706E0A
00706E03    D1F5            SAL EBP, 1
00706E05    87CD            XCHG EBP, ECX                            winmm.PlaySoundA
00706E07  v 7E 0D           JLE SHORT UnPackMe.00706E16
00706E09    25 83BDD52E     AND EAX, 2ED5BD83
00706E0E    1B07            SBB EAX, DWORD PTR DS:[EDI]
00706E10    010F            ADD DWORD PTR DS:[EDI], ECX              winmm.PlaySoundA
00706E12    84D0            TEST AL, DL
```

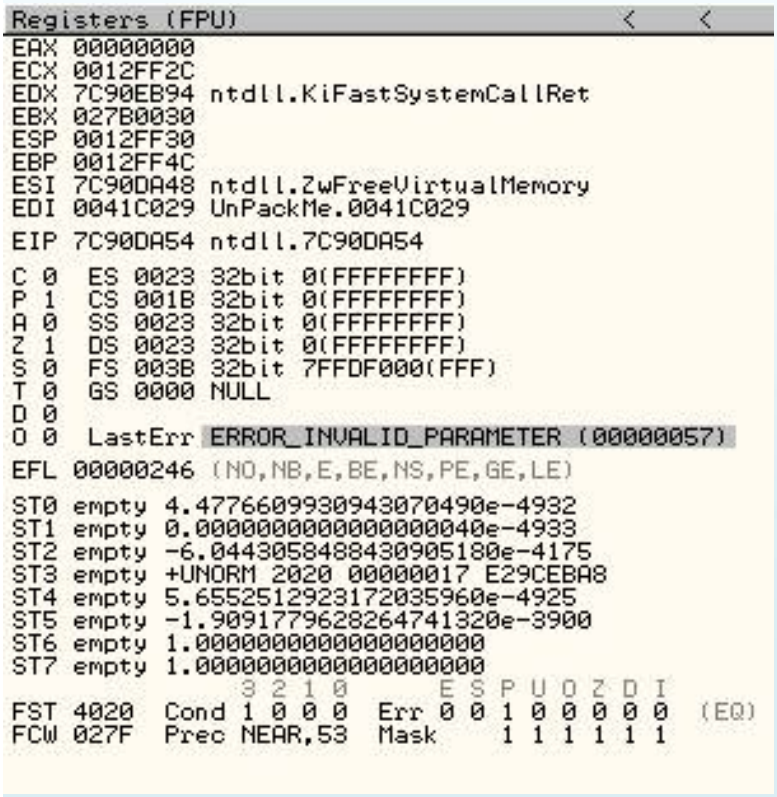
Nop _Sau when completed to avoid the destroyed IAT, conducted to find OEP. Now

press Alt + M, remove memory breakpoint:



_Ctrl + G: ZwFreeVirtualMemory, press F2 in order retn, press F9 to the register

window is red again;)!

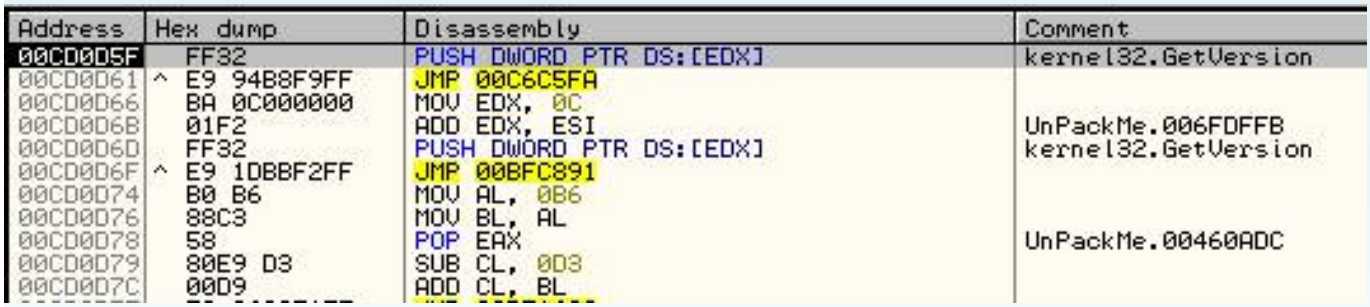


_Bay Hours if Unpackme has no copy of the VMS, but how to OEP, khua khua, but

said the gamer VLTK is "to eat by foreign (VinaGau) do". Thằng also Themida, not

information systems, ok , the time you press Alt + M to set a breakpoint on access to or

F2 section code and press F9 to see:



Address	Hex dump	Disassembly	Comment
00CD0D5F	FF32	PUSH DWORD PTR DS:[EDX]	kernel32.GetVersion
00CD0D61	^ E9 94B8F9FF	JMP 00C6C5FA	
00CD0D66	BA 0C000000	MOV EDX, 0C	
00CD0D6B	01F2	ADD EDX, ESI	UnPackMe.006FDFFB
00CD0D6D	FF32	PUSH DWORD PTR DS:[EDX]	kernel32.GetVersion
00CD0D6F	^ E9 1DBBF2FF	JMP 00BFC891	
00CD0D74	B0 B6	MOV AL, 0B6	
00CD0D76	88C3	MOV BL, AL	
00CD0D78	58	POP EAX	UnPackMe.00460ADC
00CD0D79	80E9 D3	SUB CL, 0D3	
00CD0D7C	00D9	ADD CL, BL	

What is the _Cai, signs of GetVersion functions, OEP to nearly ơi. Now continue to

press F9 again:

```
Address   Hex dump          Disassembly                          Comment
004271DC    33D2            XOR EDX, EDX
004271DE    8AD4            MOV DL, AH
004271E0    8915 34E64500   MOV DWORD PTR DS:[45E634], EDX
004271E6    8BC8            MOV ECX, EAX
004271E8    81E1 FF000000   AND ECX, 0FF
004271EE    890D 30E64500   MOV DWORD PTR DS:[45E630], ECX
004271F4    C1E1 08         SHL ECX, 8
004271F7    03CA            ADD ECX, EDX
004271F9    890D 2CE64500   MOV DWORD PTR DS:[45E62C], ECX
004271FF    C1E8 10         SHR EAX, 10
00427202    A3 28E64500     MOV DWORD PTR DS:[45E628], EAX
```

_Cuon Up OEP will see:

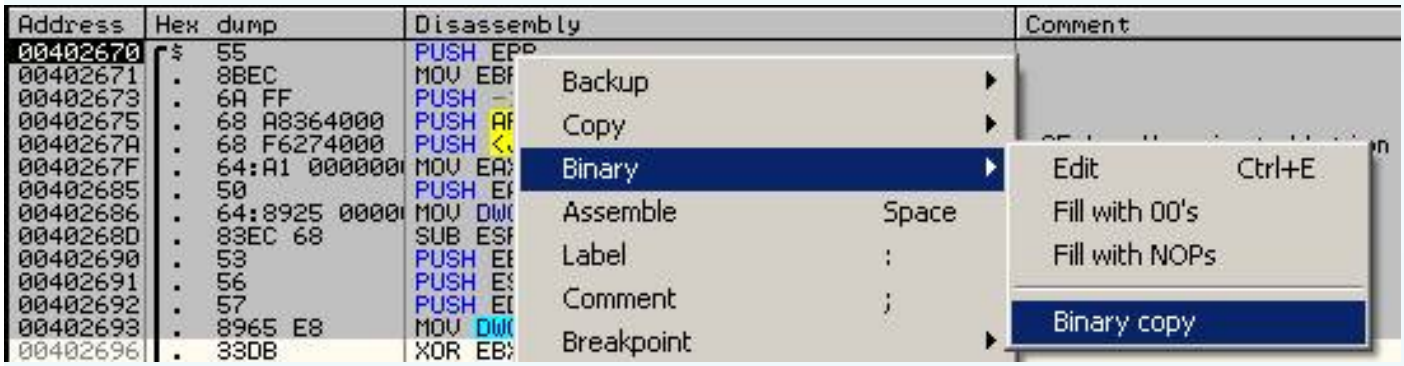
```
004271A7    80CC 10         OR AH, 10
004271AA    C3              RETN
004271AB    90              NOP
004271AC    90              NOP
004271AD    90              NOP
004271AE    90              NOP
004271AF    90              NOP
004271B0    115A C6         ADC DWORD PTR DS:[EDX-3A], EBX       OEP
004271B3    B8 615FF9BF     MOV EAX, BFF95F61
004271B8    6BD0 D7         IMUL EDX, EAX, -29
004271BB  ^ E1 CE           LOOPDE SHORT UnPackMe.0042718B
004271BD    3A7A 65         CMP BH, BYTE PTR DS:[EDX+65]
004271C0    AB              STOS DWORD PTR ES:[EDI]
004271C1    0FA1            POP FS                               Modification of segment register
004271C3    6D              INS DWORD PTR ES:[EDI], DX           I/O command
004271C4    43              INC EBX
004271C5    1F              POP DS                               Modification of segment register
004271C6  ^ 73 A7           JNB SHORT UnPackMe.0042716F
004271C8    BF 4933B0D3     MOV EDI, D3B03349
```

_Nhung Do it through: P! It has been destroyed, time to restore it, restore the stars, but

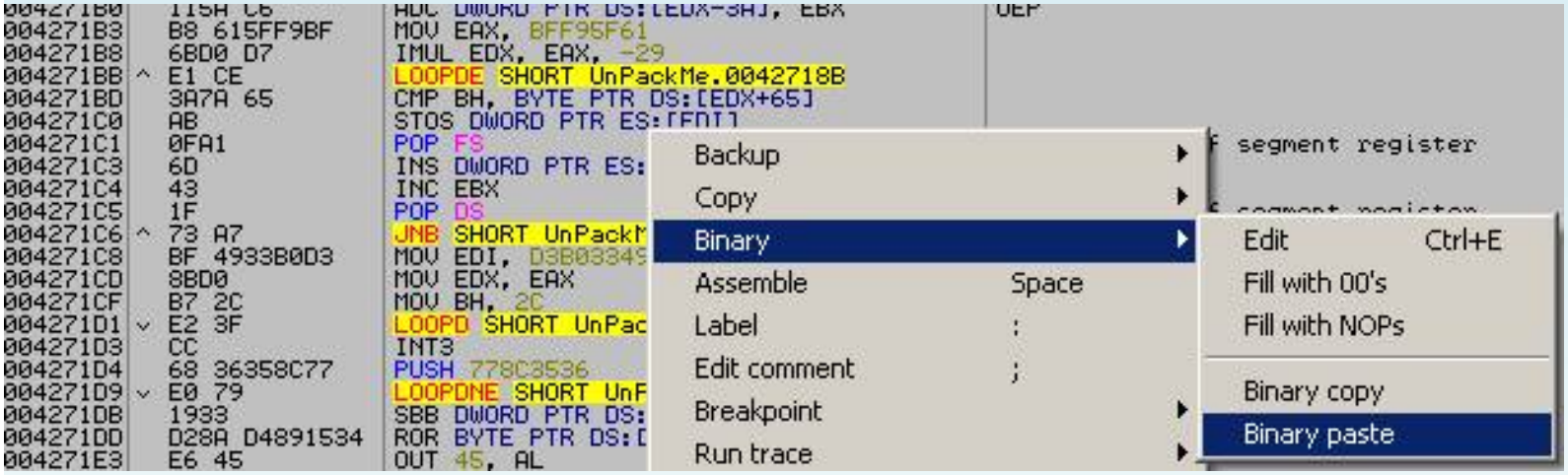
remember how to hem Armadillo, only doing so, make any thằng code with VC6 + +, I

recommend using the APIAddress:

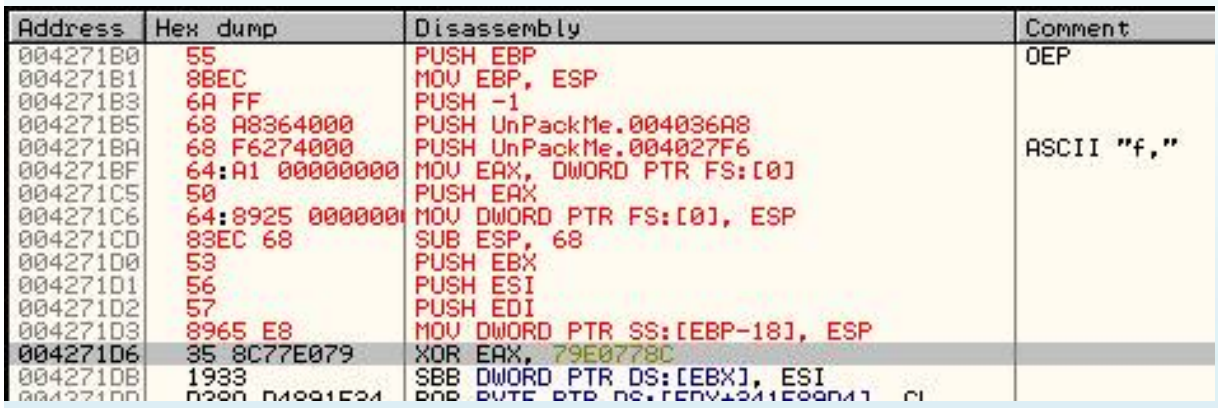
_Copy From 402,670 to 402,694:



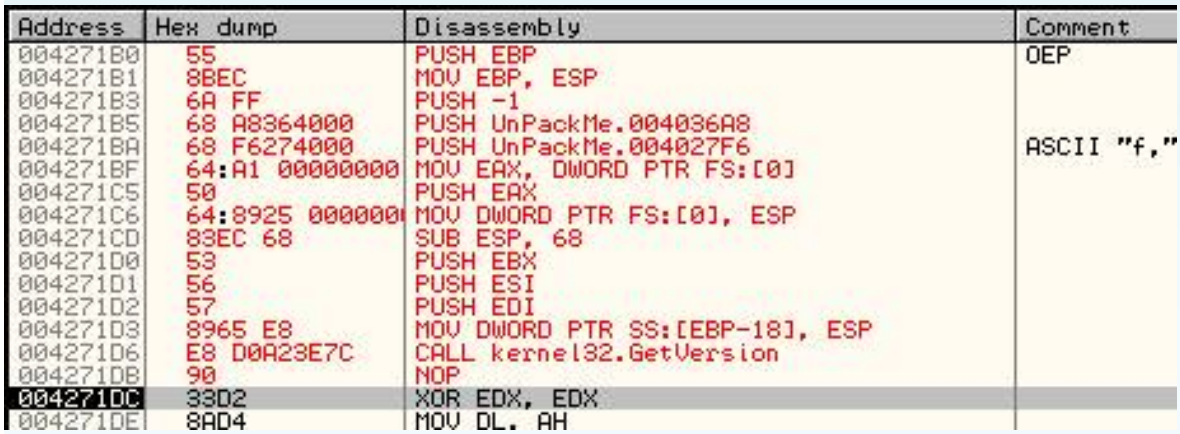
_Paste Invisible:



_Ra This here:



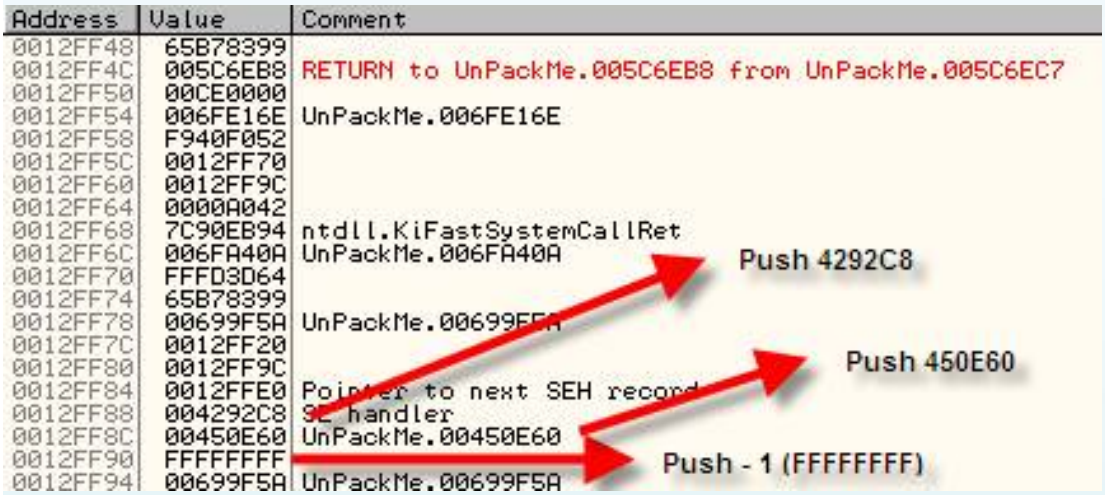
_Con Memory function GetVersion to this? Now the patch 4271D6 GetVersion to Call:



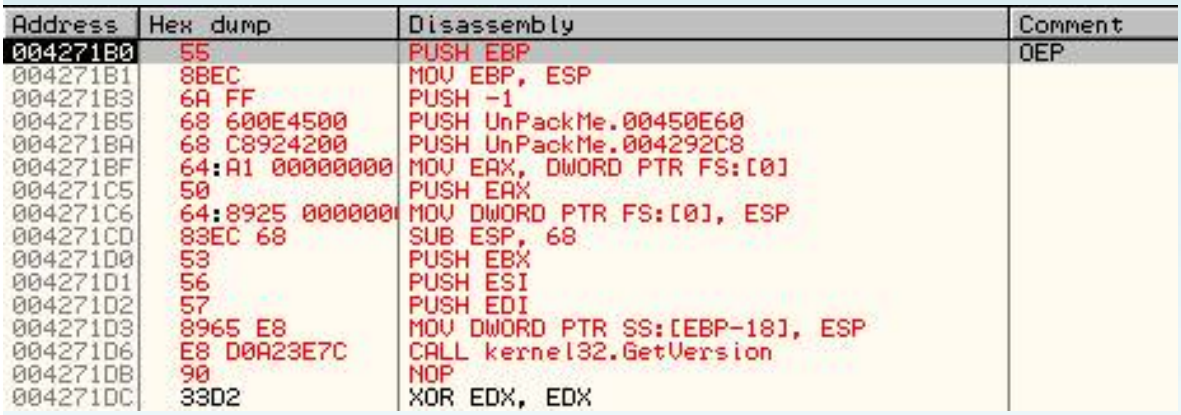
Address	Hex dump	Disassembly	Comment
004271B0	55	PUSH EBP	OEP
004271B1	8BEC	MOV EBP, ESP	
004271B3	6A FF	PUSH -1	
004271B5	68 A8364000	PUSH UnPackMe.004036A8	
004271BA	68 F6274000	PUSH UnPackMe.004027F6	ASCII "f,"
004271BF	64:A1 00000000	MOV EAX, DWORD PTR FS:[0]	
004271C5	50	PUSH EAX	
004271C6	64:8925 000000	MOV DWORD PTR FS:[0], ESP	
004271CD	83EC 68	SUB ESP, 68	
004271D0	53	PUSH EBX	
004271D1	56	PUSH ESI	
004271D2	57	PUSH EDI	
004271D3	8965 E8	MOV DWORD PTR SS:[EBP-18], ESP	
004271D6	E8 D0A23E7C	CALL kernel32.GetVersion	
004271DB	90	NOP	
004271DC	33D2	XOR EDX, EDX	
004271DE	8AD4	MOV DL, AH	

_Dump And FixIAT not be, not where we need to edit 2 push function. Now you look

down the stack of books:

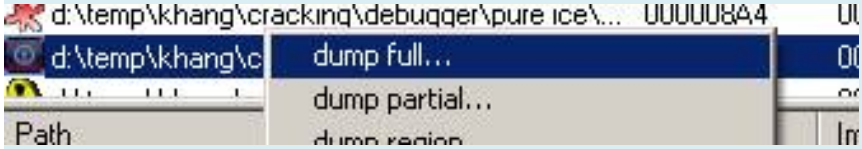


_Dien Window to stop the CPU:

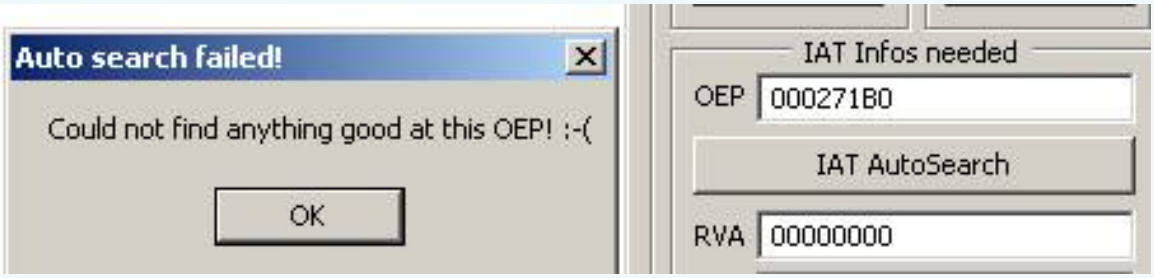


_Qua Standard time Ctrl + * to set new origin at the OEP. Open LordPE full dump, it is

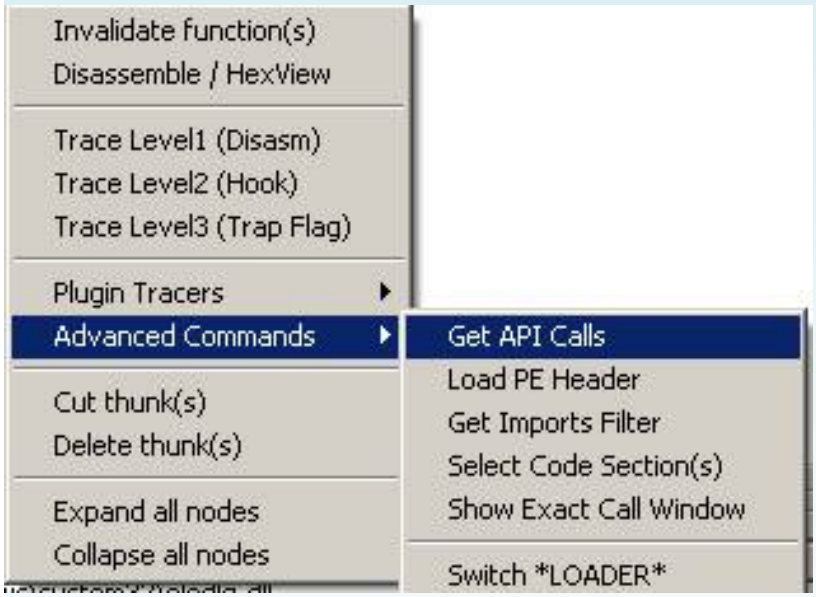
this anti dumper should do tuts nhe 2: D!

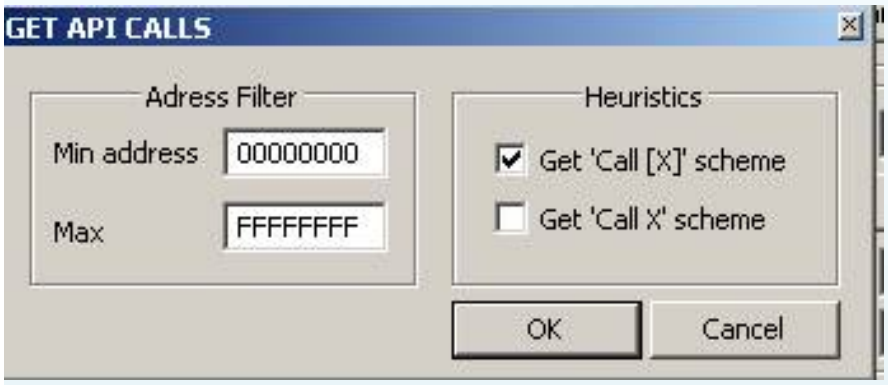


_Mo Imprec, fill OEP and receive: D!

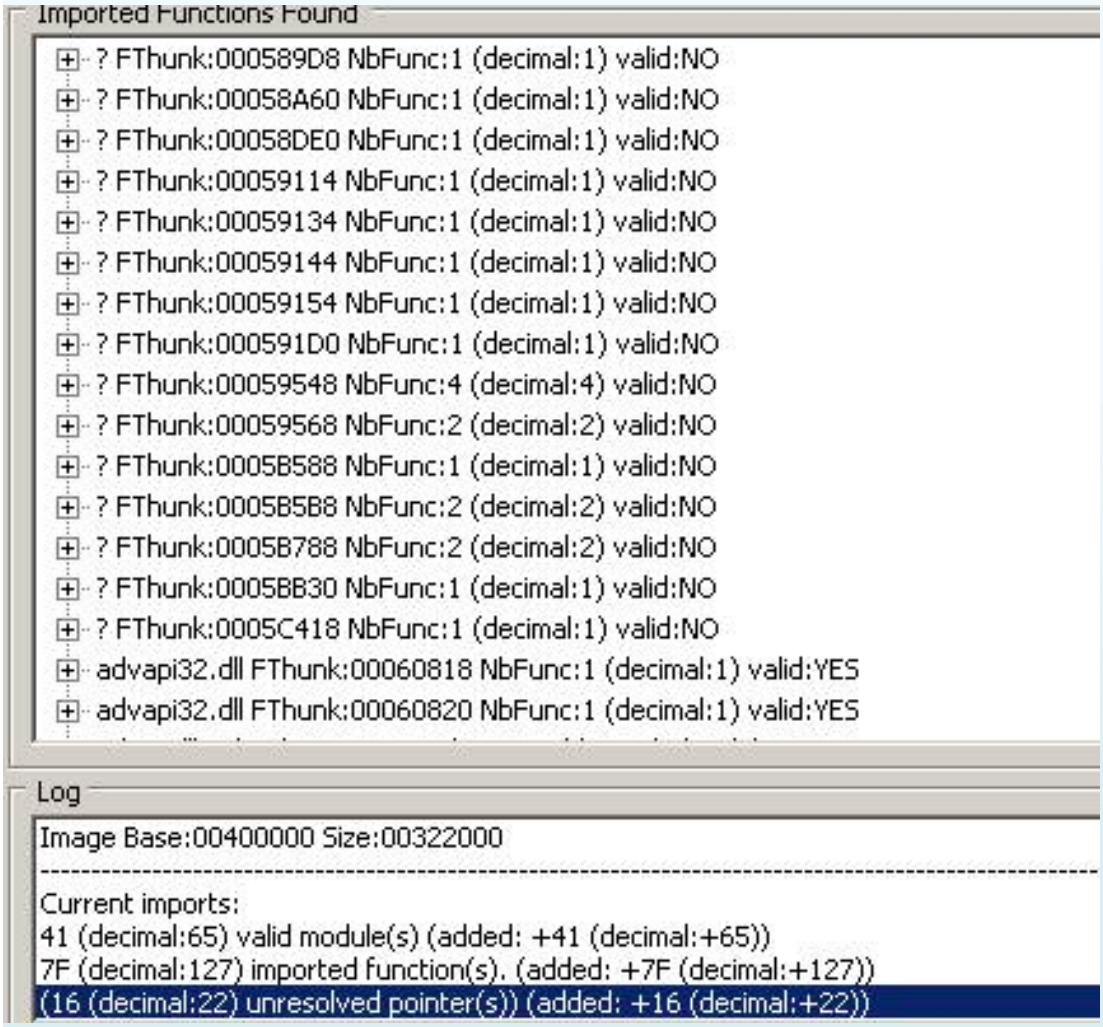


_Khong Stars, must click in the Function of Imported Imprec selected:

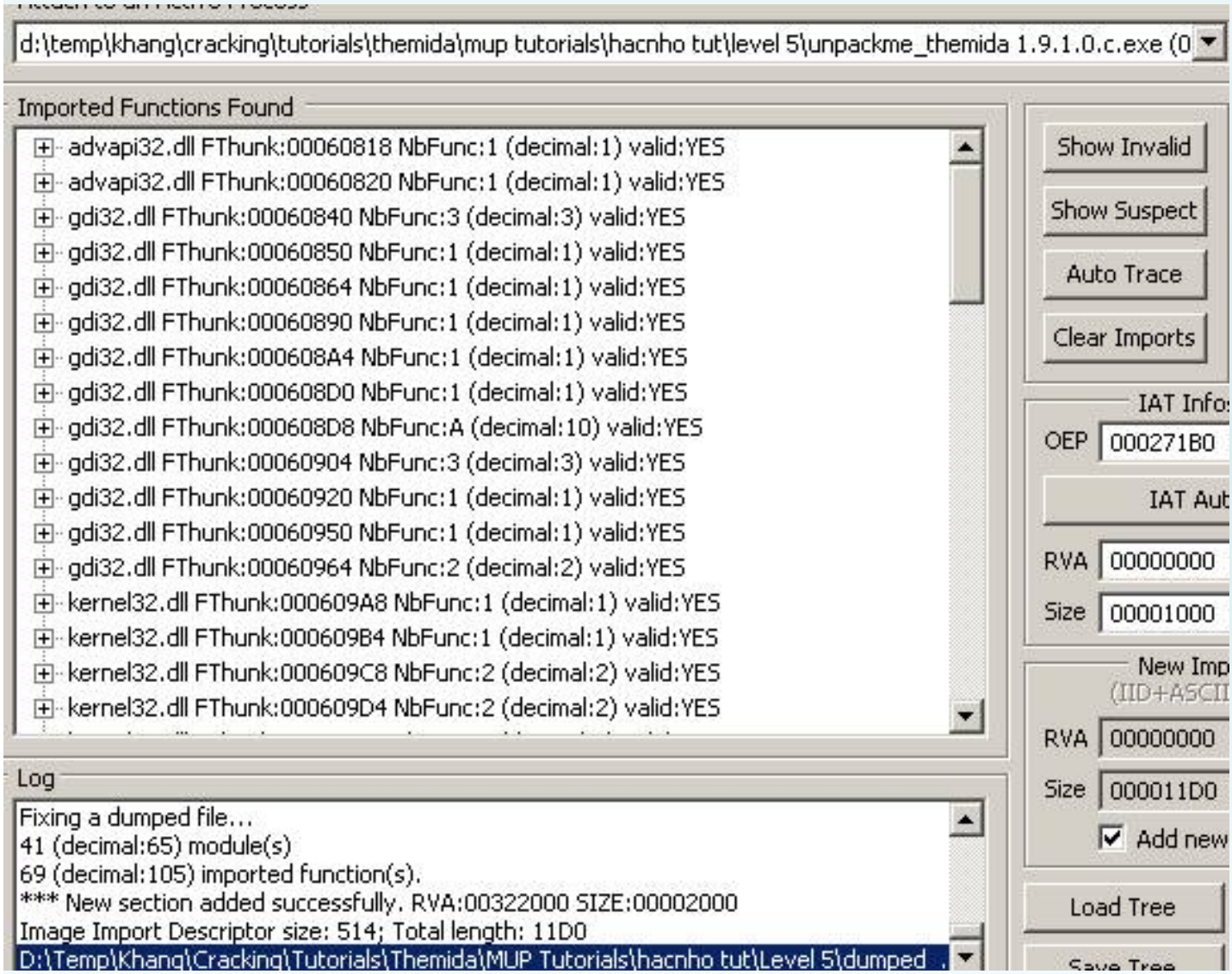




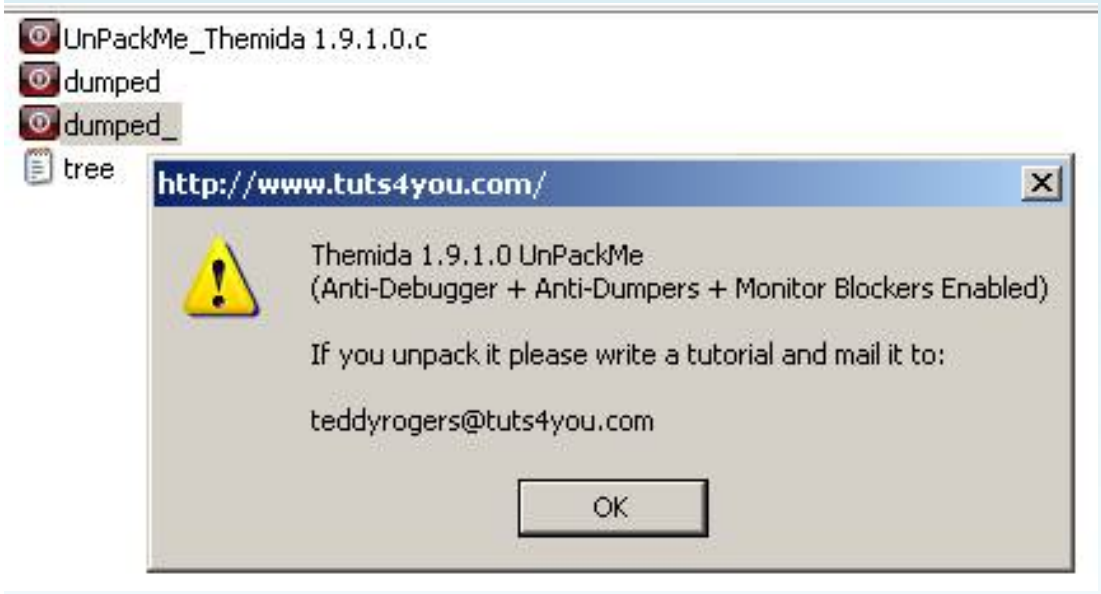
_Nhan OK and as follows:



_Show Invalid, Cut thunk:



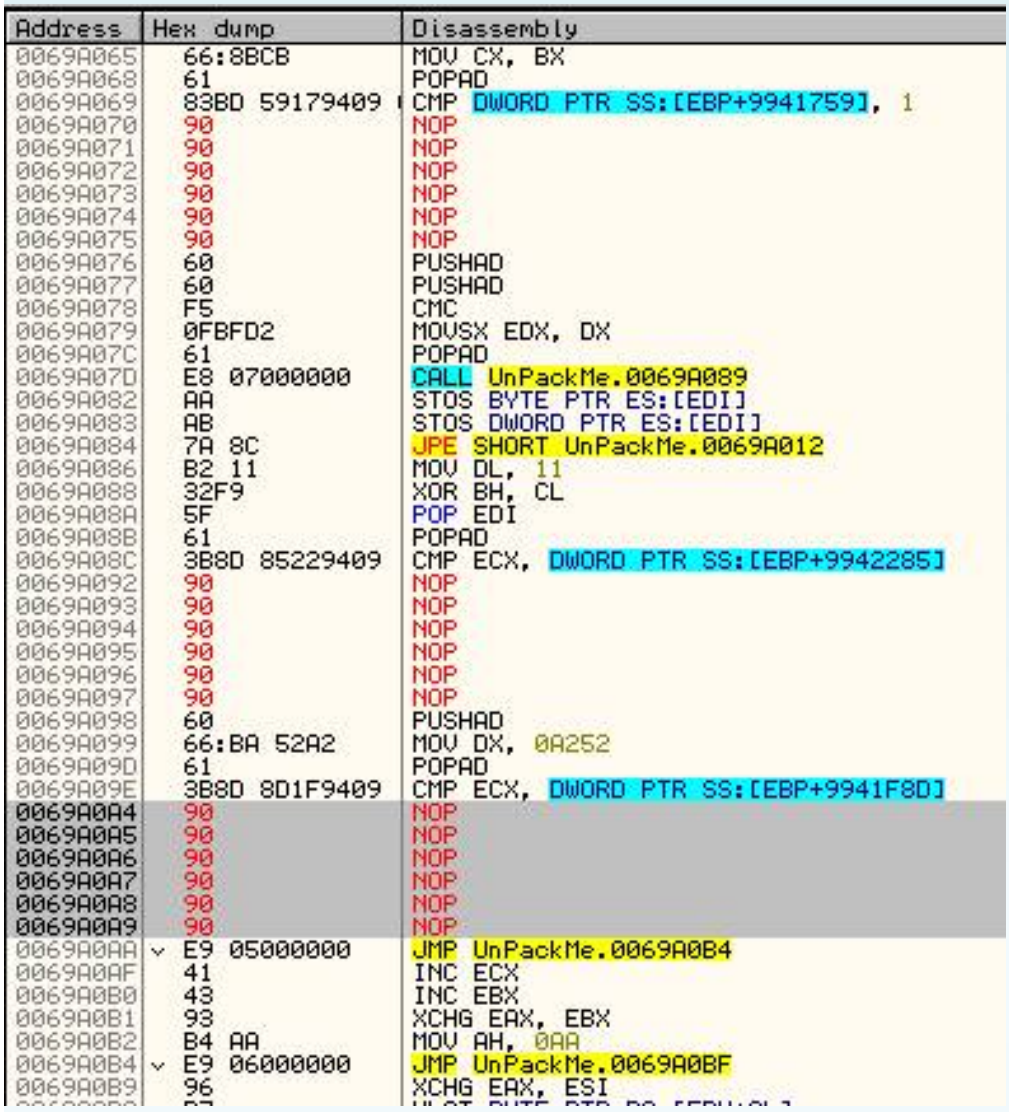
_Tien Fix the dump, and a test:



II.UnPackMe_Themida 1.9.1.0.d

In fact this month as italy chang **UnPackMe_Themida 1.9.1.0.c** but instead nop 4 JE

command, you only need to submit 3 commands:



Address	Hex dump	Disassembly
0069A065	66:8BCB	MOV CX, BX
0069A068	61	POPAD
0069A069	83BD 59179409	CMP DWORD PTR SS:[EBP+99417591, 1
0069A070	90	NOP
0069A071	90	NOP
0069A072	90	NOP
0069A073	90	NOP
0069A074	90	NOP
0069A075	90	NOP
0069A076	60	PUSHAD
0069A077	60	PUSHAD
0069A078	F5	CMC
0069A079	0FBFD2	MOVSX EDX, DX
0069A07C	61	POPAD
0069A07D	E8 07000000	CALL UnPackMe.0069A089
0069A082	AA	STOS BYTE PTR ES:[EDI]
0069A083	AB	STOS DWORD PTR ES:[EDI]
0069A084	7A 8C	JPE SHORT UnPackMe.0069A012
0069A086	B2 11	MOV DL, 11
0069A088	32F9	XOR BH, CL
0069A08A	5F	POP EDI
0069A08B	61	POPAD
0069A08C	3B8D 85229409	CMP ECX, DWORD PTR SS:[EBP+9942285]
0069A092	90	NOP
0069A093	90	NOP
0069A094	90	NOP
0069A095	90	NOP
0069A096	90	NOP
0069A097	90	NOP
0069A098	60	PUSHAD
0069A099	66:BA 52A2	MOV DX, 0A252
0069A09D	61	POPAD
0069A09E	3B8D 8D1F9409	CMP ECX, DWORD PTR SS:[EBP+9941F8D]
0069A0A4	90	NOP
0069A0A5	90	NOP
0069A0A6	90	NOP
0069A0A7	90	NOP
0069A0A8	90	NOP
0069A0A9	90	NOP
0069A0AA	E9 05000000	JMP UnPackMe.0069A0B4
0069A0AF	41	INC ECX
0069A0B0	43	INC EBX
0069A0B1	93	XCHG EAX, EBX
0069A0B2	B4 AA	MOV AH, 0AA
0069A0B4	E9 06000000	JMP UnPackMe.0069A0BF
0069A0B9	96	XCHG EAX, ESI

A child _Xong again: P! See the tut 6.

PS: cover tut tut from the video of what. Thank you!

-- Perhaps all that they do in the body in the gift bags to name hem aged and

aged Zom, watch aged sad sad del nick bags. Dear Please themida bags, with a

Newbie, also aged dragon with his South Com tề list tomb Dung - North Kieu

Phong, a specialist of aged. Themida NET, a specialized therapy aged 32 bit

Themida. I have not cry is the father was then on, I do dare to write a gift. And to

learn much more aged RCA. Hix hix. But aged Zom, some meals I guide you to

the meat thằng 4VNMod Audition, not sure I have the whole network with them

aged not more, but say what writing gift. lol!

Any suggestions, comments or corrections please PM me via: hacnho@hotmail.com

25-10-2007

Themida - then will go through

Winlicense 1.9.xx - Unpackme level 6 Expansion 1

Tutorial # 6 exp 1 @ 2007 by hacnho (hacnho@hotmail.com)

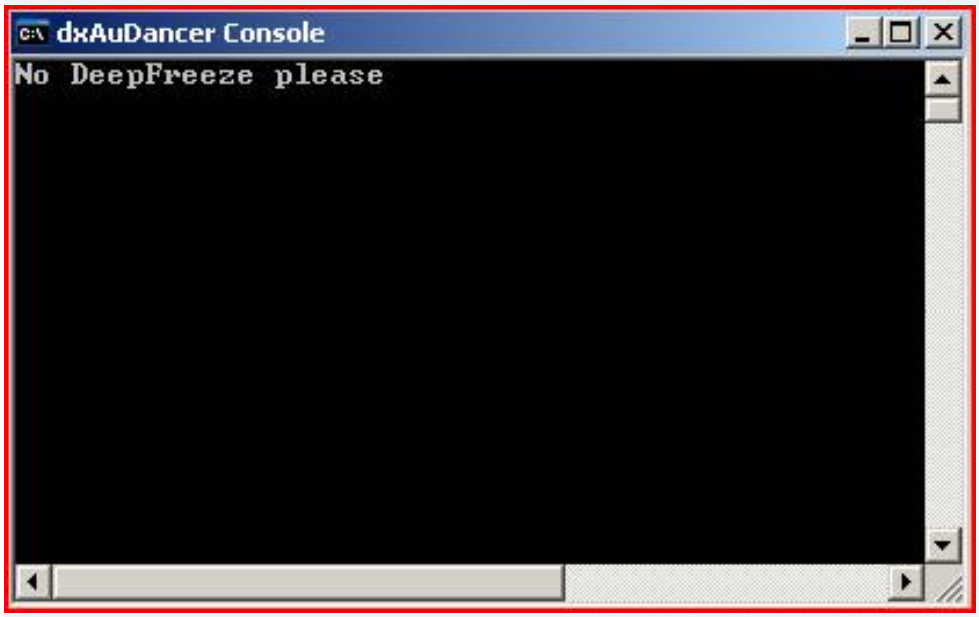
(Write the gift of friendship REA - all copy must be agreed by the author)

[Article title]: Winlicense 1.9.xx - Unpackme level 6 exp 1
[Author]: **hacnho**
[Author home page]: http://hvaonline.net
[Target]: Unknow target: P!
[Size]: 1.88 MB (1,978,368 bytes)
[Download Page]: Google
[Packer]: Themida | V WinLicense 1.9.xx CB-> Oreans Technologies
[Compilation language]: Borland Delphi 7
[Tools]: The0DBG + hideToolz **fly** by, LordPE, ImportREC, peid0.94
[OS]: WinXP_SP2
[Greetz]: REA, Exetools, Pediy, UnpackCN, snd and ARTeam Memberz

_Hi Her children, we continue the expansion of the tutorial # 6. In this section we will resolve the Delphi + Winlicense. Thank you trojanvietnam target was send this to me. Actually, when I received this target also chå very excited, because a busy story, with it have not written for the console and as such have the icon, slightly doubt be put to, he he. Today it's cold will be appropriate to sit meat it: P. Ok, here we go unpack.

_Dau First check with PeiD:

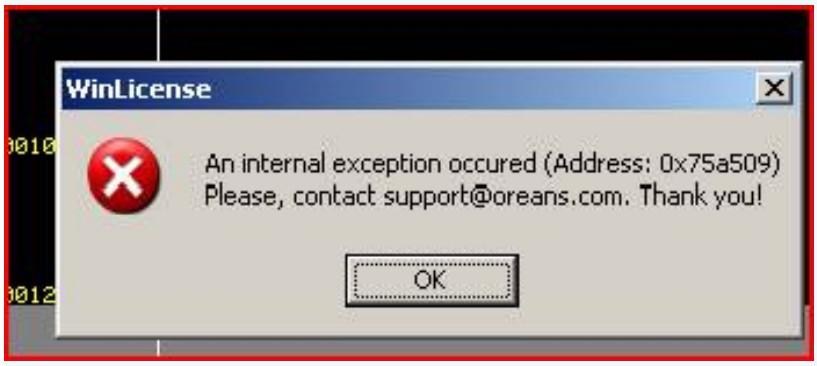
_Chay Try:



_Hoi Difficult to understand, we have set new DeepFreeze not do it for me, sure the players do all the things, that only the army, just to unpack, tí charge, running in Vmware for sure eat. Now OllyDBG sure that you have to pass by Themida / Winlicense 1.9.xx We load in and Olly in here:

```
Address   Hex dump          Disassembly                              Comment
00416014  B8 00000000       MOV EAX, 0
00416019  60                PUSHAD
0041601A  0BC0              OR EAX, EAX
0041601C  74 68             JE SHORT unpackme.00416086
0041601E  E8 00000000       CALL unpackme.00416023
00416023  58                POP EAX                                  kernel32.7C816D4F
00416024  05 53000000       ADD EAX, 53
00416029  8038 E9           CMP BYTE PTR DS:[EAX], 0E9
0041602C  75 13             JNZ SHORT unpackme.00416041
```

_Lam How to determine what do with this pack, simply stop, view:



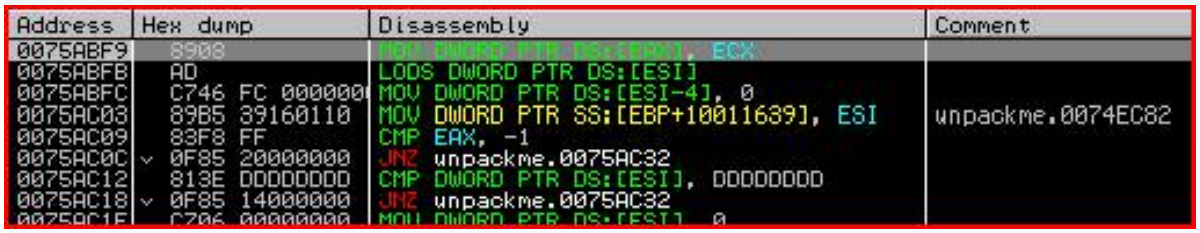
_Bay Time you press Alt + M, set a breakpoint on Hardware write, the press Shift + F9 will come:

```
Address   Hex dump          Disassembly                              Comment
00735179  8918              MOV DWORD PTR DS:[EAX], EBX
0073517B  8BC9              MOV ECX, ECX
0073517D  EB 0C             JMP SHORT unpackme.0073518B
0073517F  0000              ADD BYTE PTR DS:[EAX], AL
00735181  0000              ADD BYTE PTR DS:[EAX], AL
00735183  0100              ADD DWORD PTR DS:[EAX], EAX              unpackme.0040C6F8
00735185  0000              ADD BYTE PTR DS:[EAX], AL
```

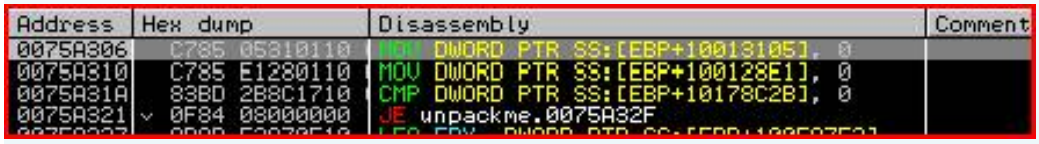
_Kha Is not? No problem, continue Shift + F9:

```
Address   Hex dump          Disassembly                              Comment
0074ABAF  8903              MOV DWORD PTR DS:[EBX], EAX
0074ABB1  51                PUSH ECX
0074ABB2  52                PUSH EDX                                 unpackme.00401000
0074ABB3  8D85 74420110     LEA EAX, DWORD PTR SS:[EBP+10014274]
0074ABB9  FFD0              CALL NEAR EAX
0074ABBB  8BFA              MOV EDI, EDX                             unpackme.00401000
0074ABBD  8BF1              MOV ESI, ECX
0074ABBF  8BD1              MOV EDX, ECX
```

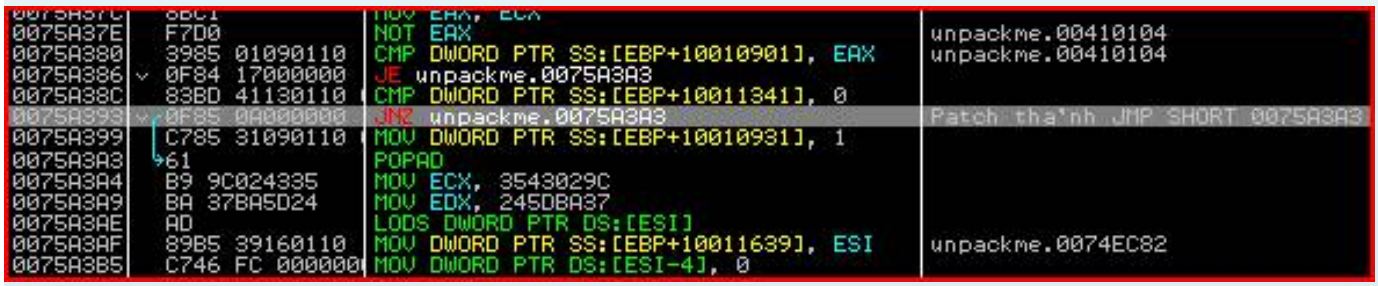
_Bay Hour press F7, F8, and then press Shift + F9 2 times:



_Tiep To press F8 to trace here:



_Gio If you have to work more hours. Take the way of tut then also, or use one's home SubZero. You look down slightly:

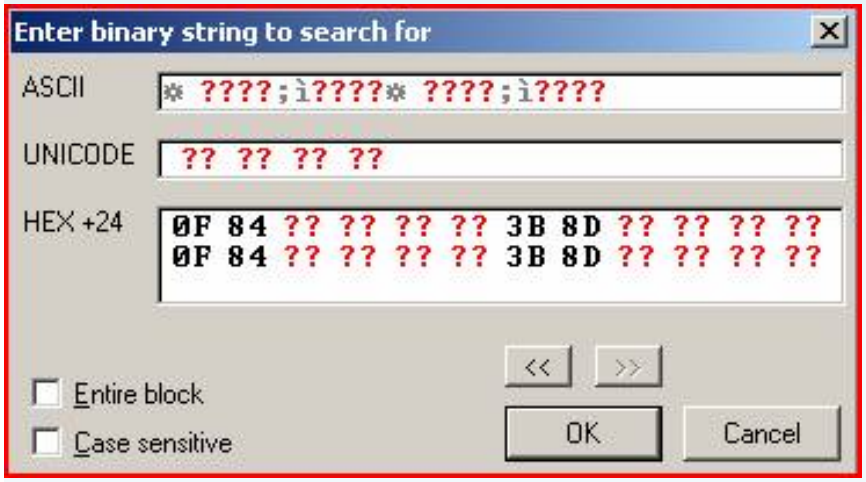


_Chung Will become pach 0075A393 JMP 0075A3A3 (opcode: EB0E0A).

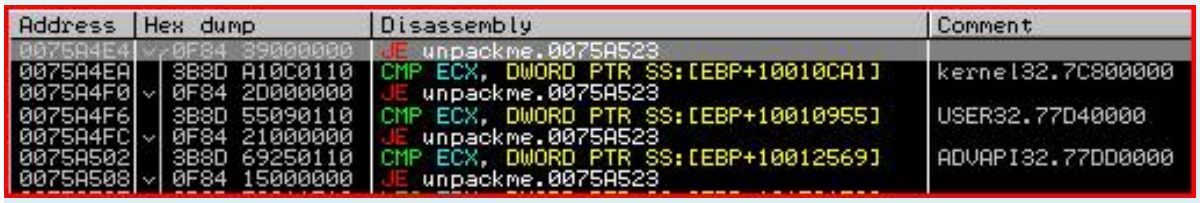
Now press Ctrl + B: type in:

0F 84? ? ? ? 3B 8D? ? ? ? 0F 84? ? ? ? 3B 8D? ? ? ? 0F 84? ? ? 3B 8D? ? ? ?

Or FF D3:

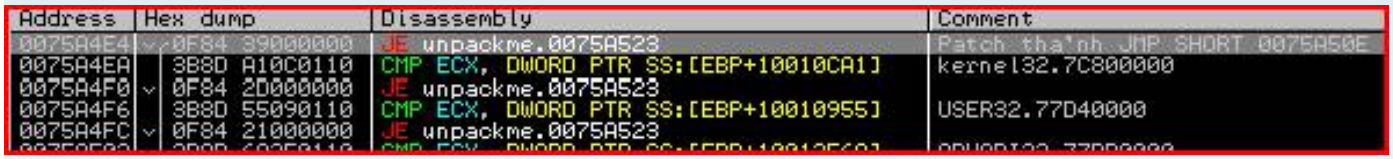


_Muc Purpose for us to make order 4 JE check Image API Base. Will come:

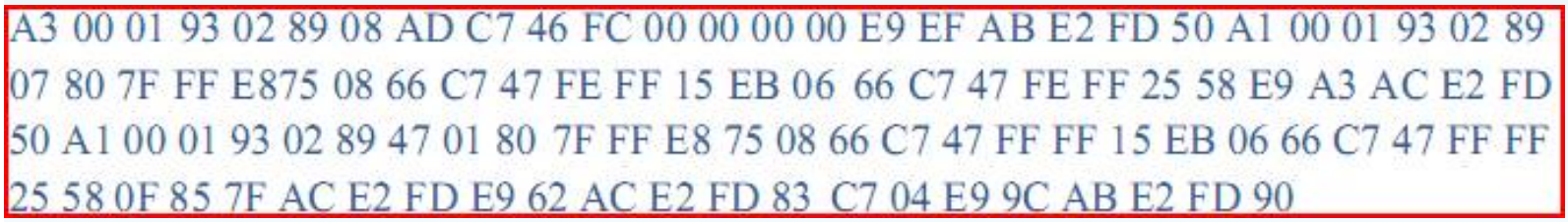


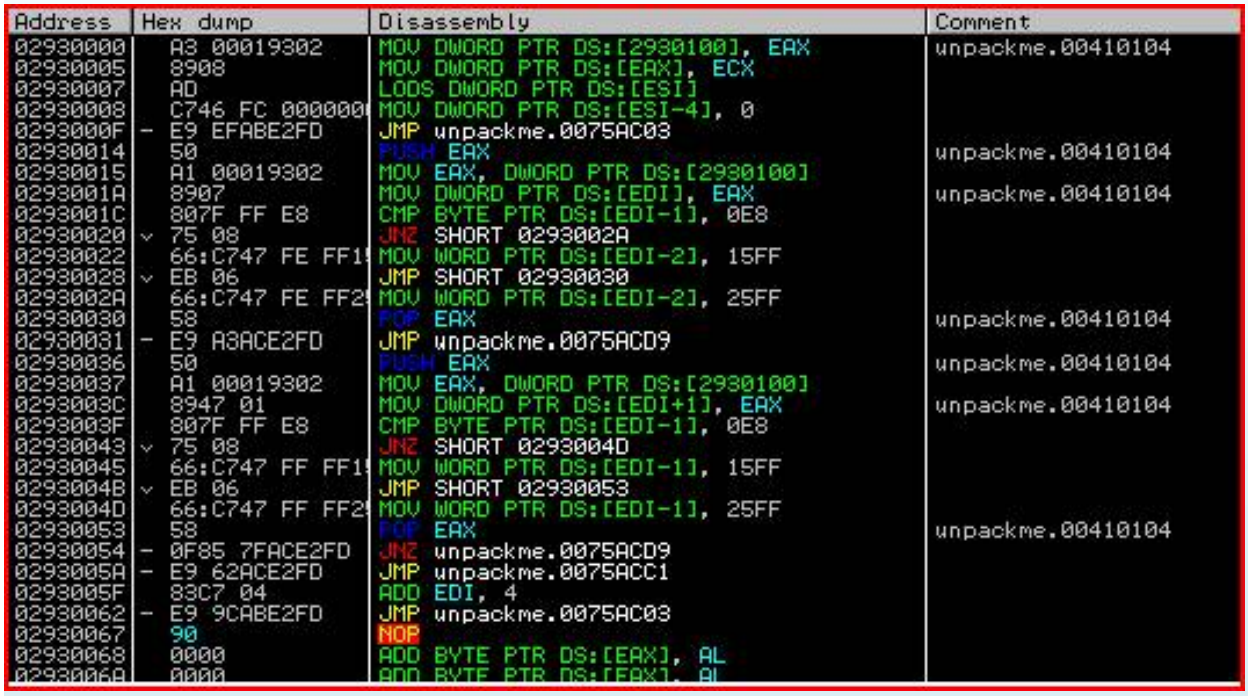
_Nhin Down:

_Chung Will patch to address 00754E4 JMP SHORT 0075A50E:



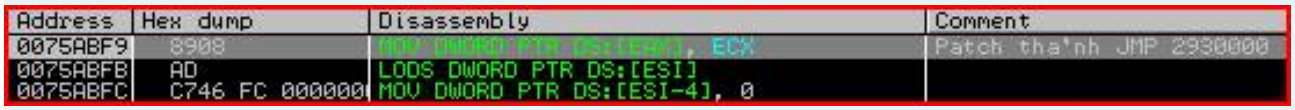
_Den Ago we also made similar tut 6, Alloc a cave code to write code to:





_Neu Like you can do the type of SubZero also. I will train and then the familiar, time adjusting to the jump command:

a.



b.

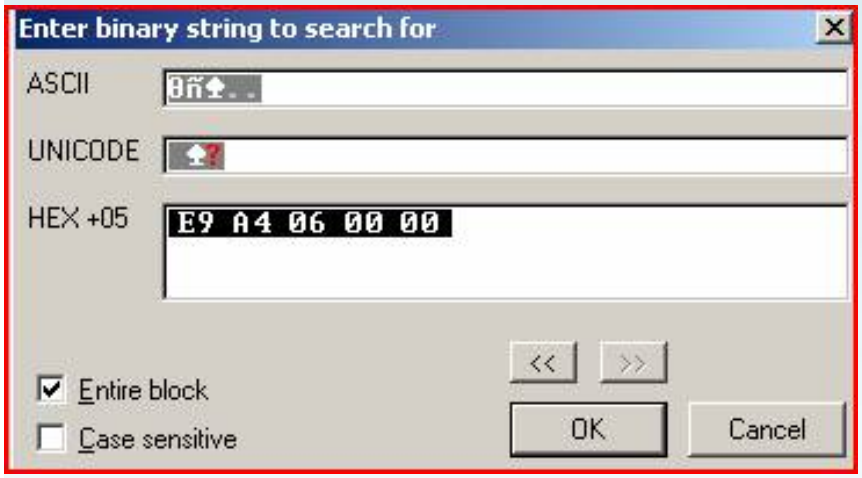
c.

d.

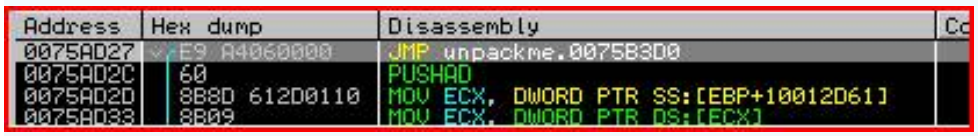
e.

f.

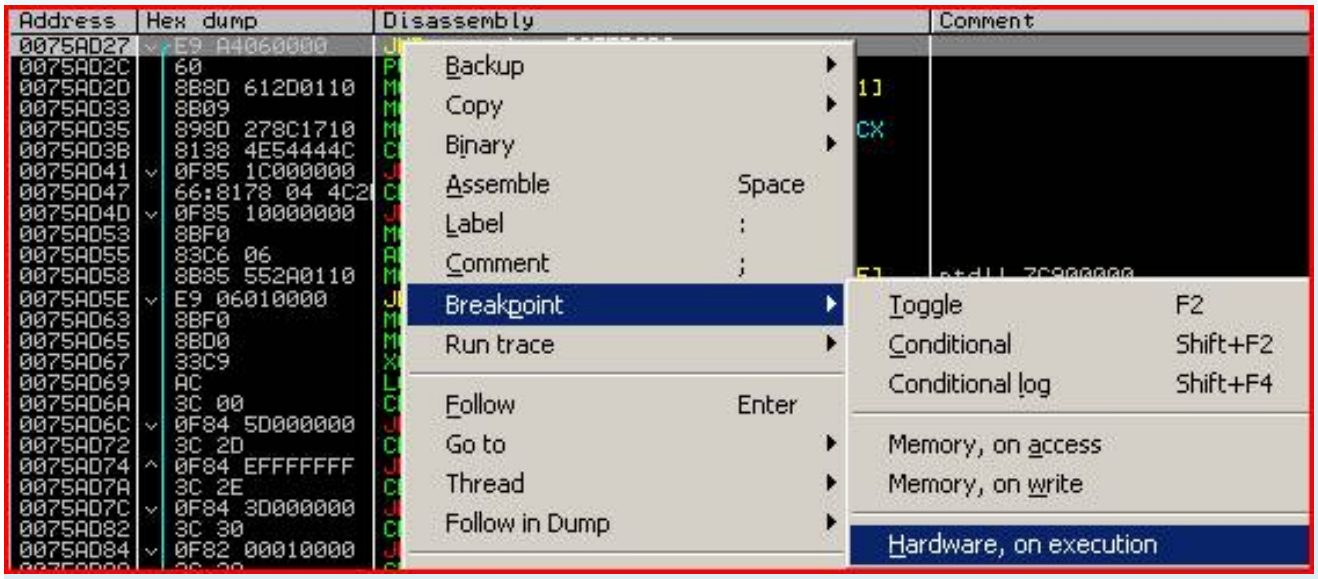
_Tim OEP: Ctrl + B type E9 A4 06 00 00



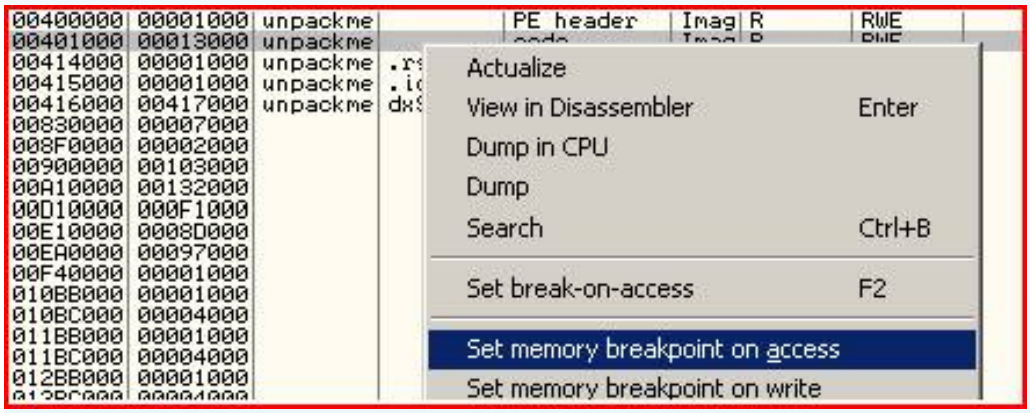
_Toi Here:



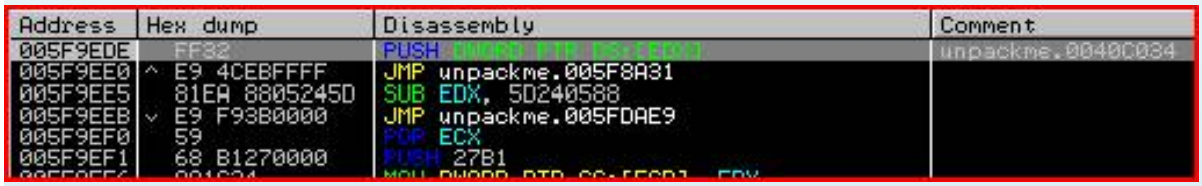
Hardware _Dat a breakpoint on Excution:



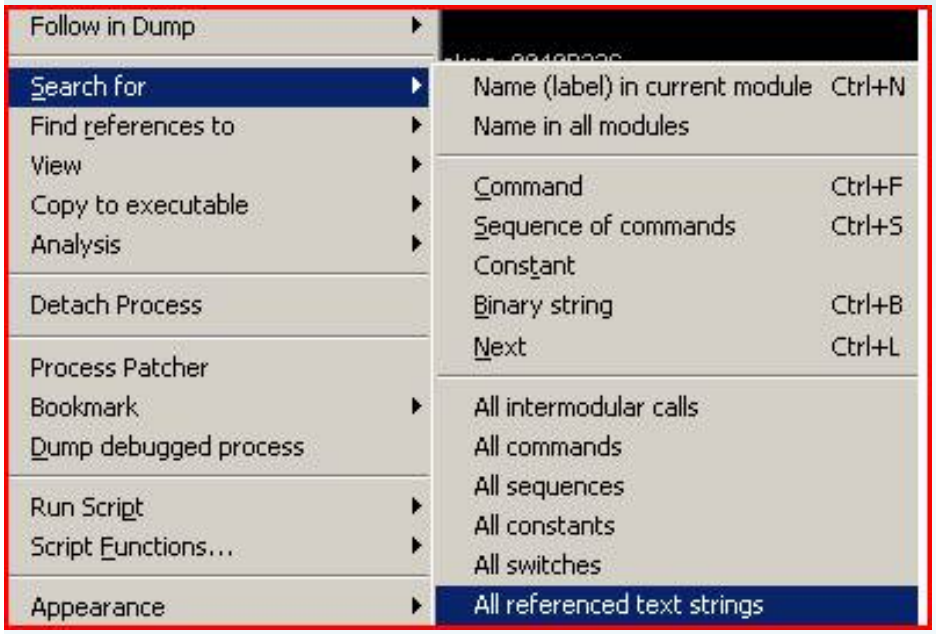
_Nhan F9, remove breakpoint, Alt + M and set the breakpoint code section:



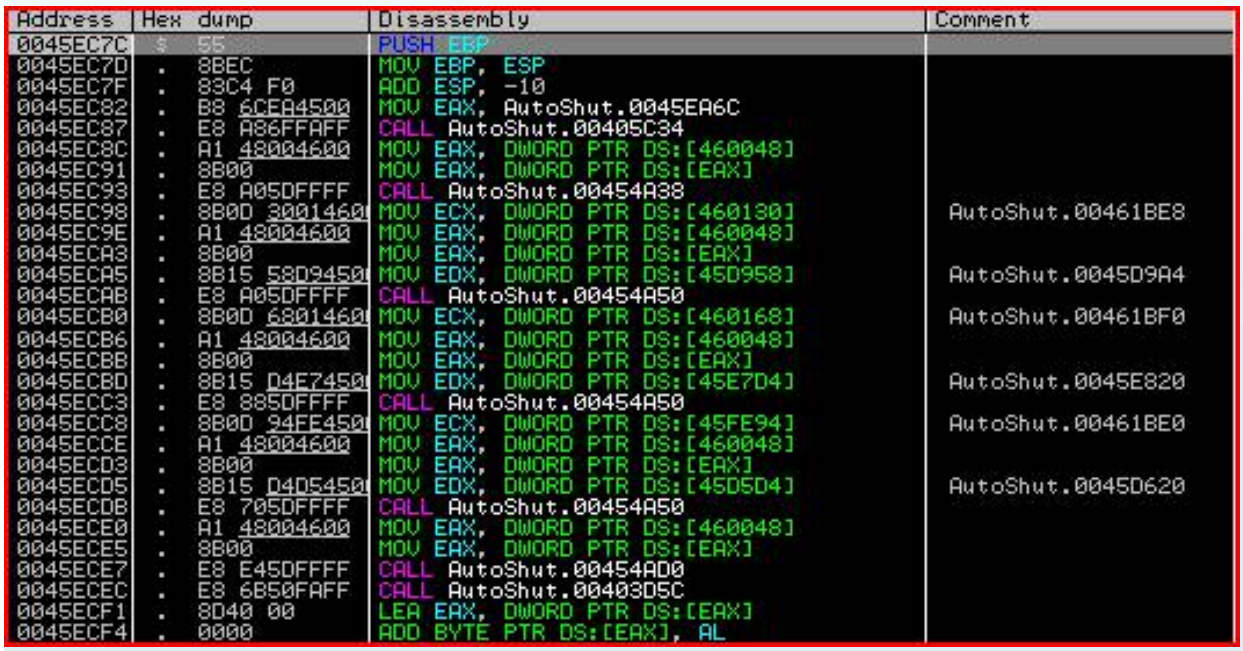
_Nhan F9:



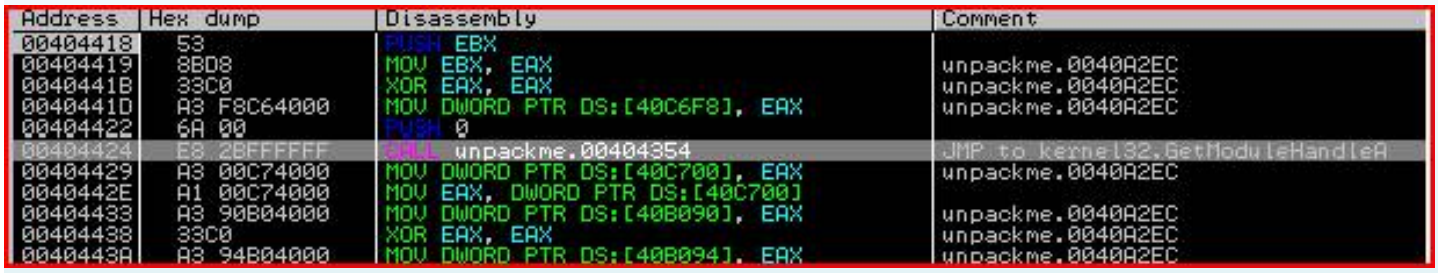
OEP _Chua know or not, we find String Reference see why:



_Code With Delphi, but signs of Dephi are:

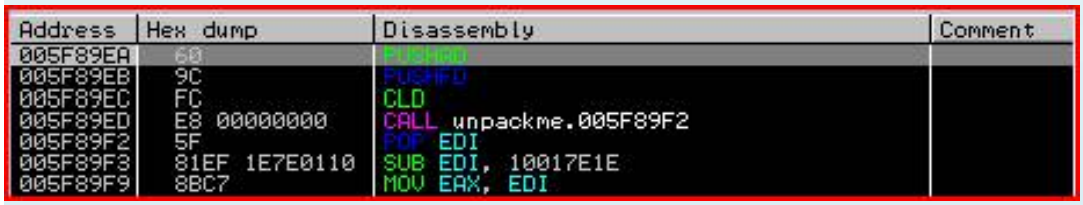


_Do So we press F9 2 times more:



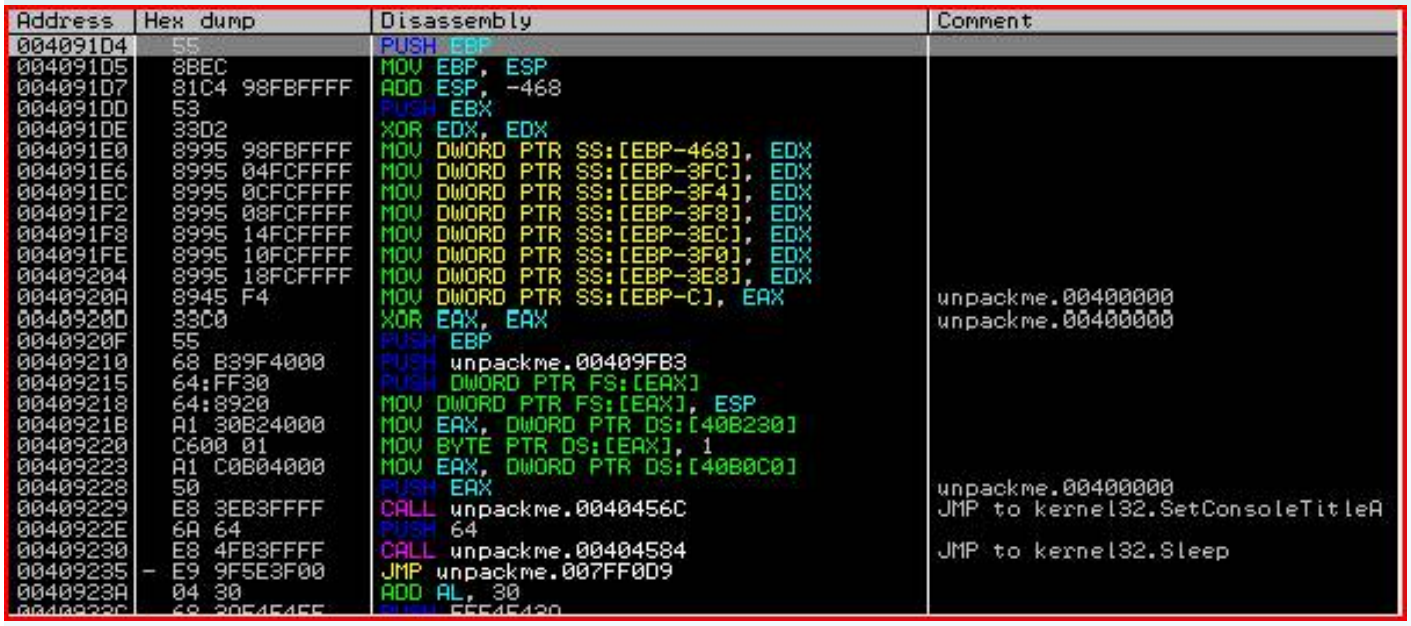
Address	Hex dump	Disassembly	Comment
00404418	53	PUSH EBX	
00404419	8BD8	MOV EBX, EAX	unpackme.0040A2EC
0040441B	33C0	XOR EAX, EAX	unpackme.0040A2EC
0040441D	A3 F8C64000	MOV DWORD PTR DS:[40C6F8], EAX	unpackme.0040A2EC
00404422	6A 00	PUSH 0	
00404424	E8 2BFFFFFF	CALL unpackme.00404354	JMP to kernel32.GetModuleHandleA
00404429	A3 00C74000	MOV DWORD PTR DS:[40C700], EAX	unpackme.0040A2EC
0040442E	A1 00C74000	MOV EAX, DWORD PTR DS:[40C700]	
00404433	A3 90B04000	MOV DWORD PTR DS:[40B090], EAX	unpackme.0040A2EC
00404438	33C0	XOR EAX, EAX	unpackme.0040A2EC
0040443A	A3 94B04000	MOV DWORD PTR DS:[40B094], EAX	unpackme.0040A2EC

_He He refers GetModuleHandleA, upcoming OEP then, press F8 trace hours from:



Address	Hex dump	Disassembly	Comment
005F89EA	60	PUSHAD	
005F89EB	9C	PUSHFD	
005F89EC	FC	CLD	
005F89ED	E8 00000000	CALL unpackme.005F89F2	
005F89F2	5F	POP EDI	
005F89F3	81EF 1E7E0110	SUB EDI, 10017E1E	
005F89F9	8BC7	MOV EAX, EDI	

_Nho For this to you, a dump VMS we will go through it here: P! Now press F9 2 times nhé:

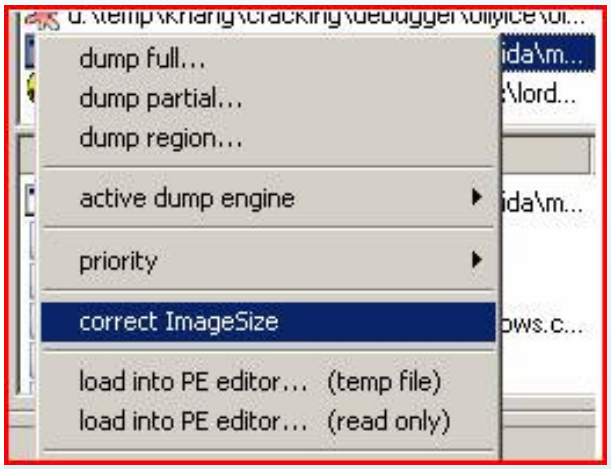


Address	Hex dump	Disassembly	Comment
004091D4	55	PUSH EBP	
004091D5	8BEC	MOV EBP, ESP	
004091D7	81C4 98FBFFFF	ADD ESP, -468	
004091DD	53	PUSH EBX	
004091DE	33D2	XOR EDX, EDX	
004091E0	8995 98FBFFFF	MOV DWORD PTR SS:[EBP-468], EDX	
004091E6	8995 04FCFFFF	MOV DWORD PTR SS:[EBP-3FC], EDX	
004091EC	8995 0CFCFFFF	MOV DWORD PTR SS:[EBP-3F4], EDX	
004091F2	8995 08FCFFFF	MOV DWORD PTR SS:[EBP-3F8], EDX	
004091F8	8995 14FCFFFF	MOV DWORD PTR SS:[EBP-3EC], EDX	
004091FE	8995 10FCFFFF	MOV DWORD PTR SS:[EBP-3F0], EDX	
00409204	8995 18FCFFFF	MOV DWORD PTR SS:[EBP-3E8], EDX	
0040920A	8945 F4	MOV DWORD PTR SS:[EBP-C], EAX	unpackme.00400000
0040920D	33C0	XOR EAX, EAX	unpackme.00400000
0040920F	55	PUSH EBP	
00409210	68 B39F4000	PUSH unpackme.00409FB3	
00409215	64:FF30	PUSH DWORD PTR FS:[EAX]	
00409218	64:8920	MOV DWORD PTR FS:[EAX], ESP	
0040921B	A1 30B24000	MOV EAX, DWORD PTR DS:[40B230]	
00409220	C600 01	MOV BYTE PTR DS:[EAX], 1	
00409223	A1 C0B04000	MOV EAX, DWORD PTR DS:[40B0C0]	
00409228	50	PUSH EAX	unpackme.00400000
00409229	E8 3EB3FFFF	CALL unpackme.0040456C	JMP to kernel32.SetConsoleTitleA
0040922E	6A 64	PUSH 64	
00409230	E8 4FB3FFFF	CALL unpackme.00404584	JMP to kernel32.Sleep
00409235	E9 9F5E3F00	JMP unpackme.007FF0D9	
0040923A	04 30	ADD AL, 30	

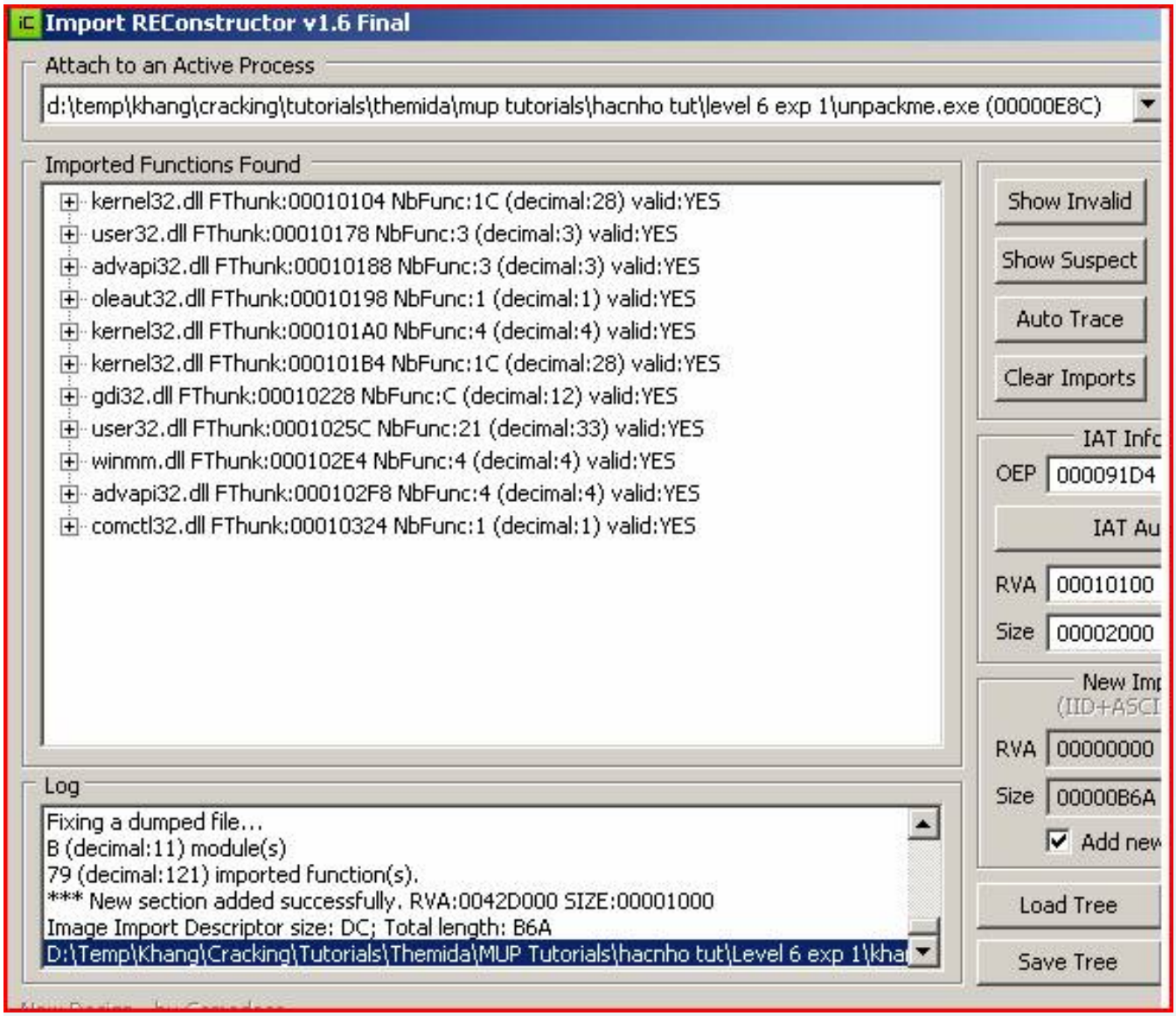
_Ctrl + A:

```
Address   Hex dump          Disassembly                              Comment
004091D4  .  55             PUSH EBP                                 OEP :D!
004091D5  .  8BEC           MOV EBP, ESP
004091D7  .  81C4 98FBFFF   ADD ESP, -468
004091DD  .  53             PUSH EBX
004091DE  .  33D2           XOR EDX, EDX
004091E0  .  8995 98FBFFF   MOV DWORD PTR SS:[EBP-468], EDX
004091E6  .  8995 04FCFFF   MOV DWORD PTR SS:[EBP-3FC], EDX
004091EC  .  8995 0CFCFFF   MOV DWORD PTR SS:[EBP-3F4], EDX
004091F2  .  8995 08FCFFF   MOV DWORD PTR SS:[EBP-3F8], EDX
004091F8  .  8995 14FCFFF   MOV DWORD PTR SS:[EBP-3EC], EDX
004091FE  .  8995 10FCFFF   MOV DWORD PTR SS:[EBP-3F0], EDX
00409204  .  8995 18FCFFF   MOV DWORD PTR SS:[EBP-3E8], EDX
0040920A  .  8945 F4        MOV DWORD PTR SS:[EBP-C], EAX            unpackme.00400000
0040920D  .  33C0           XOR EAX, EAX                             unpackme.00400000
0040920F  .  55             PUSH EBP
00409210  .  68 B39F4000    PUSH unpackme.00409FB3
00409215  .  64:FF30        PUSH DWORD PTR FS:[EAX]
00409218  .  64:8920        MOV DWORD PTR FS:[EAX], ESP
0040921B  .  A1 30B24000    MOV EAX, DWORD PTR DS:[40B230]
00409220  .  C600 01        MOV BYTE PTR DS:[EAX], 1
00409223  .  A1 C0B04000    MOV EAX, DWORD PTR DS:[40B0C0]
00409228  .  50             PUSH EAX                                 Title = "MZP"
00409229  .  E8 3EB3FFFF    CALL unpackme.0040456C                   SetConsoleTitleA
0040922E  .  6A 64          PUSH 64                                  Timeout = 100. ms
00409230  .  E8 4FB3FFFF    CALL unpackme.00404584                   Sleep
00409235  .- E9 9F5E3F00    JMP unpackme.007FF0D9
0040923A  .  04             DB 04
0040923B  .  30 68 3A 54    ASCII "0h:T"
0040923F     54             DB 54                                    CHAR 'T'
00409240     5E             DB 5E                                    CHAR '^'
```

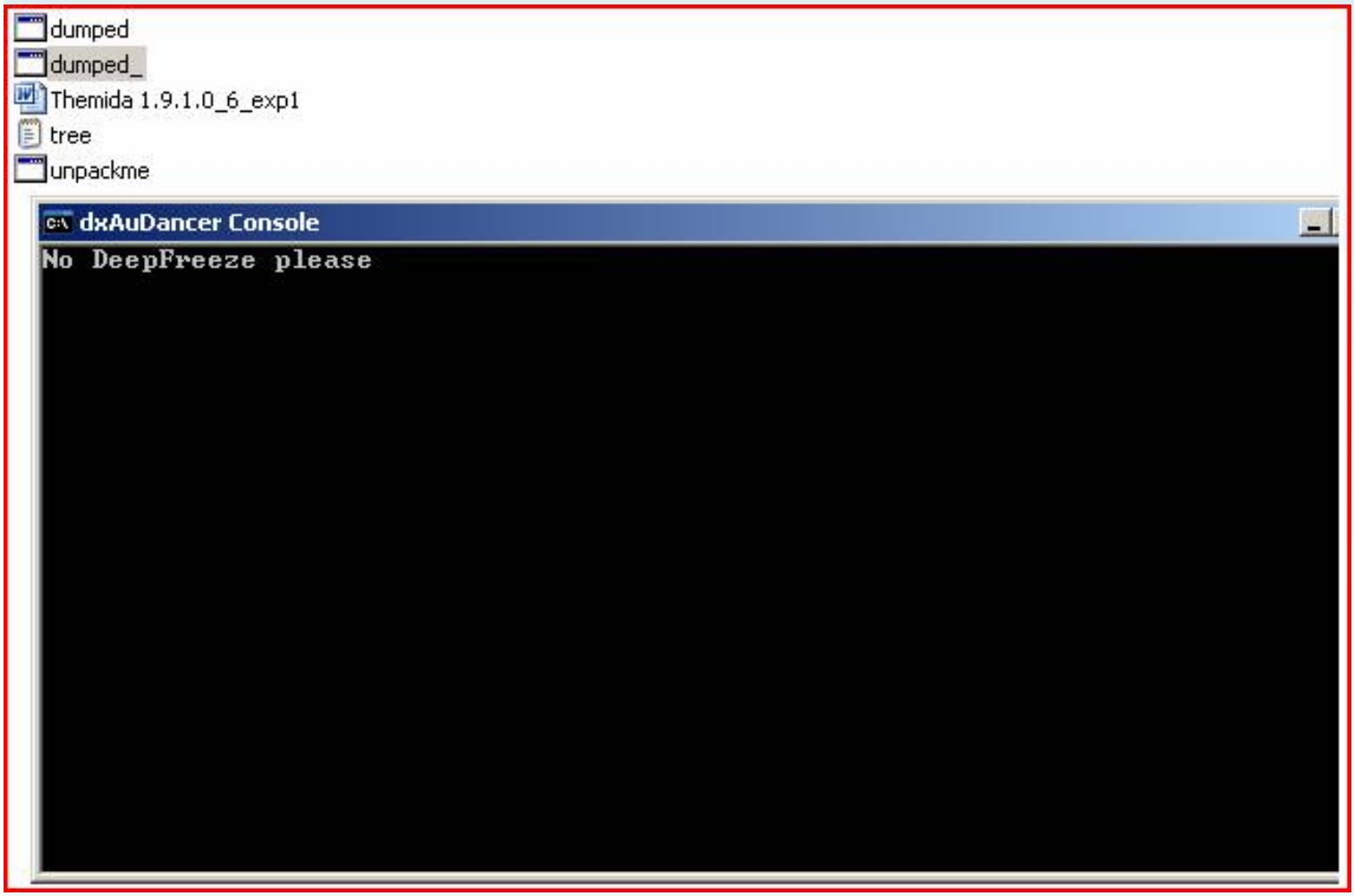
_Dump With LordPE, remember correct ImageSize home:



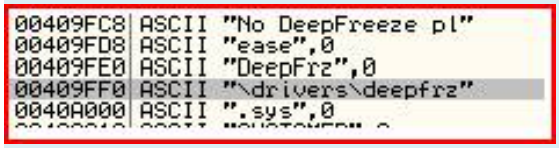
_Mo ImpREC and enter parameters, and fix dump:


Import REConstructor v1.6 Final
Attach to an Active Process
d:\temp\khang\cracking\tutorials\themida\mup tutorials\hacnho tut\level 6 exp 1\unpackme.exe (00000E8C)
Imported Functions Found
kernel32.dll FThunk:00010104 NbFunc:1C (decimal:28) valid:YES
user32.dll FThunk:00010178 NbFunc:3 (decimal:3) valid:YES
advapi32.dll FThunk:00010188 NbFunc:3 (decimal:3) valid:YES
oleaut32.dll FThunk:00010198 NbFunc:1 (decimal:1) valid:YES
kernel32.dll FThunk:000101A0 NbFunc:4 (decimal:4) valid:YES
kernel32.dll FThunk:000101B4 NbFunc:1C (decimal:28) valid:YES
gdi32.dll FThunk:00010228 NbFunc:C (decimal:12) valid:YES
user32.dll FThunk:0001025C NbFunc:21 (decimal:33) valid:YES
winmm.dll FThunk:000102E4 NbFunc:4 (decimal:4) valid:YES
advapi32.dll FThunk:000102F8 NbFunc:4 (decimal:4) valid:YES
comctl32.dll FThunk:00010324 NbFunc:1 (decimal:1) valid:YES
Show Invalid
Show Suspect
Auto Trace
Clear Imports
IAT Infc
OEP 000091D4
IAT Au
RVA 00010100
Size 00002000
New Imp
(IID+ASCI
RVA 00000000
Size 00000B6A
Add new
Load Tree
Save Tree
Log
Fixing a dumped file...
B (decimal:11) module(s)
79 (decimal:121) imported function(s).
*** New section added successfully. RVA:0042D000 SIZE:00001000
Image Import Descriptor size: DC; Total length: B6A
D:\Temp\Khang\Cracking\Tutorials\Themida\MUP Tutorials\hacnho tut\Level 6 exp 1\kha

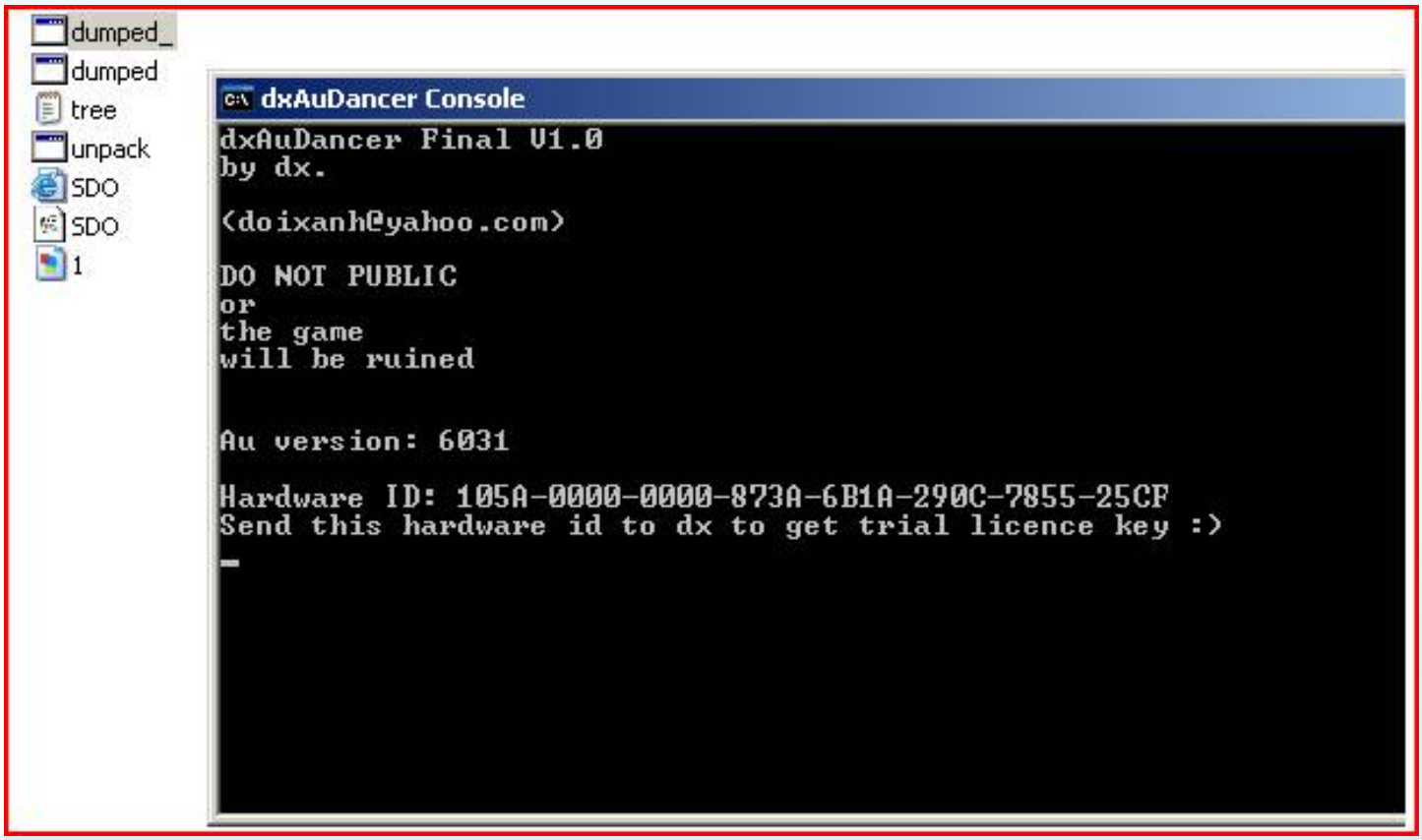
_Run Try:



_Unpacked Done. Now load dumped into Olly and little: D



_Oai, Do check the driver. Sys DeepFreeze by her, sure to cancel the license: P! Disable DF Now, try running it see why:



_Oh What is this term, difficult hiu too =))!

_Tra's A question you do not dump work on another machine, which is due to dump anti VM, in a different tuts will guide me. I'm the dump when the VM code, stack and contexts for ver 1.9.x to the environment debugger it re im running out it crash, then find out it changes the EBP implementation VM. Hix hix. Currently, only fix is only deroko, ổng pm, he Privacy: Tao blade, with the VMS is try to create the first J ! Hopefully AoRE fix the J!

_Con Some ask, why del section Themida causing the crash, only simple, soft because of this code do not make that key block for the License Manager Winlic's work, it should del crash is probably obvious: P!

_Tutorial Without target. Only for research only J!

_Công Tool for anyone not already have:

http://rapidshare.com/files/65258179/HanOlly1.1.rar

http://rapidshare.com/files/65255791/OllyICE.rar

http://rapidshare.com/files/65252636/PeID.rar **(pretty pretty =)))**
http://rapidshare.com/files/65253703/ImportREC_v1.6_New.rar

http://rapidshare.com/files/65697523/wark_v1.3.zip

Themida - then will go through

Themida 1.9.xx - 6 Unpackme level 2 Expansion

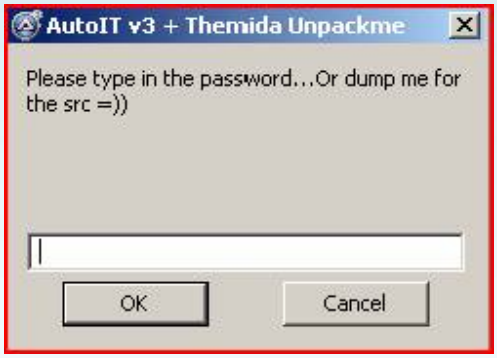
Tutorial # 6 exp 2 @ 2007 by hacnho (hacnho@hotmail.com)

[Article title]: Themida 1.9.xx - Unpackme level 6 exp 2
[Author]: **hacnho**
[Author home page]: http://hvaonline.net
[Target]: AutoIT
[Size]: 591 KB (605.216 bytes)
[Download Page]: Google
[Packer]: Themida | V WinLicense 1.9.xx CB-> Oreans Technologies
[Compilation language]: AutoIT
[Tools]: The0DBG + hideToolz **fly** by, LordPE, ImportREC, peid0.94
[OS]: WinXP_SP2
[Greetz]: REA, Exetools, Pediy, UnpackCN, snd and ARTeam Memberz

_Chung We meet again, and exposed to the target-related Themida. This time we will do unpackme and unpack it for sure, he he, dangerous pelt: K! In the extended # 2 this we will discuss 3 issues: Dealing with the target code AutoIT v3.2.1.0 and protect with a version number which Themida / Winlic. Created loader themida defeat. Writing scripts to avoid repeating the work nham chán.

I. AUTOIT + THEMIDA: NOT feasible?

_Hom It reads on his blog Computer_Angel see him say Themida + AutoIT easy xôi, tò mò you also know hẻm xoi is easy to do because there is not time to Themida is that any child is different again. This week a series of free writing tut Themida, check to themida a target that one can know what is this: P (đắc any theory, any theory đắc =))). It is quite simple, but if it is ver 3.2.8.1 nhé dream, if not to check Allow Decompile the scope tired. In tut I do not discuss this further to AutoIT decompile, only to be a dump when it's src protect it with Themida and compile with ver 3.2.1.0. In CHM version of this series tut, will update more dump src for the next version. Temporarily stop here. Accompanied tut I have attached a Unpackme based 3.2.8.1 compile and pack with themida, if you have handled the AutoIT v3.2.8.1 can apply here: D!
_De Do tut, you need to write a code as a small crackme / unpackme:



_Sau The pack with Themida Custom Build. Pack with the option as follows:

Protection Options for Unpackme_3210.exe

Information Macros

Macros VM: 0

CodeReplace Macros: 0

ENCRYPT Macros: 0

CLEAR Macros: 0
XBundler files

No files to bundle
Protection Options

Anti-Debugger: enabled

Anti-Dumpers: enabled

API-wrapping: enabled

Virtual Machine: enabled

Entry Point Ofuscation: enabled

Memory Guard: enabled

Anti-Monitor File: enabled

Anti-Monitor Registry: enabled

Resource Encryption: enabled

VMWare compatible: enabled

Delphi / BCB form protection: enabled
Advanced Protection Options

Encrypt Application: enabled

. NET assemblies: Disabled

Dll plugin: Disabled

Active Context: enabled

Section Last Name: Themida
Compression

Application compression: enabled

Resources compression: enabled

SecureEngine compression: enabled
Virtual Machine Settings

Number of Virtual wrapped APIs: 0

Entry Point Virtualization: 0 instructions

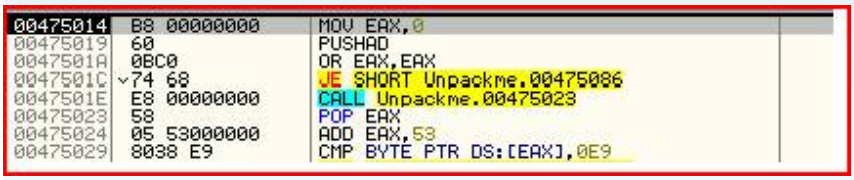
Virtual Machine Processor: Mutable CISC processor

Number of CPUs: 1

Opcode Type: Static opcodes

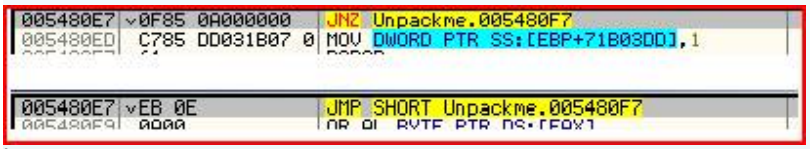
Dynamic Opcode: Disabled

_Truoc Unpack when I say over previous theory, with autoit original, pack it with UPX, simply find the string> AUTOIT SCRIPT <3.2.1.0 or in>>> AUTOIT SCRIPT <<<in 3.8.2.1, an Call now breakpoint commands, and trace down memory dump ECX. But with Themida the subject, you have a way to OEP first, but whether to have the full OEP IAT where the search string: P. So with themida we determine the following steps: By pass the type of Themida protect, prevent VMS, restore the OEP if so, get Full IAT, to stop it, from the need to dump and IAT fix for tired, that is src get it.
Now here we go:

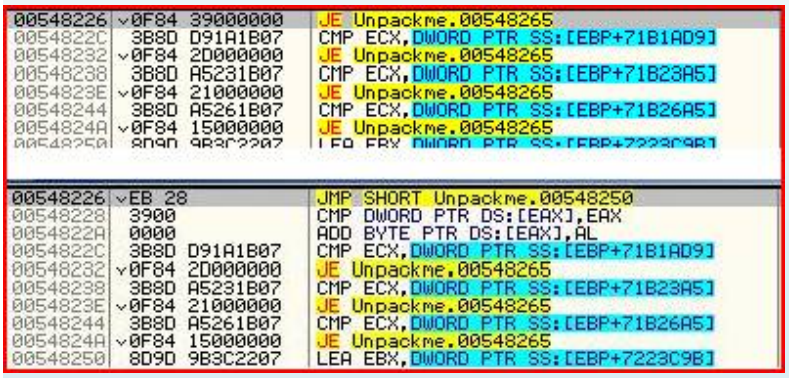


_De Avoid rewriting steps unpack, please review tut 6 exp 1. I only make place is important to patch:

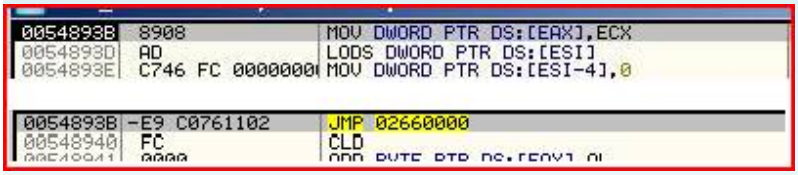
a.



b.



c.

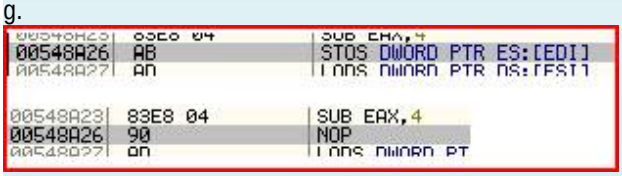


d.

e.

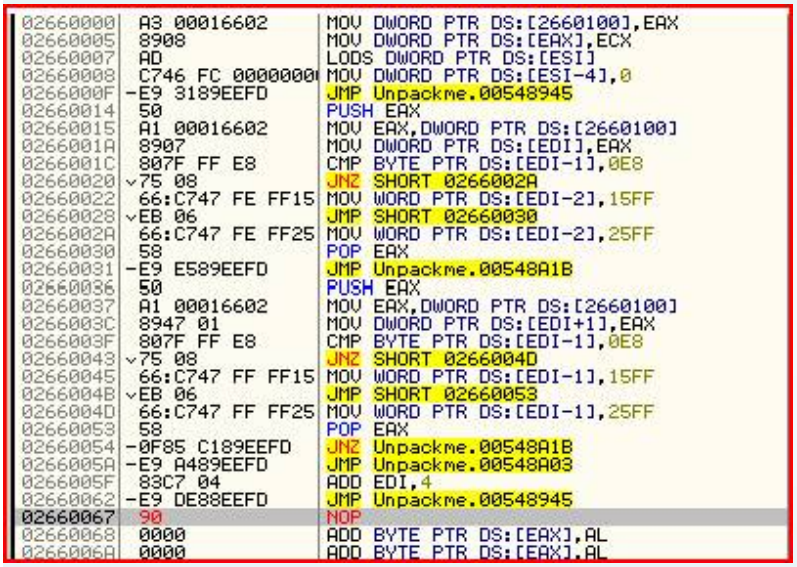
f.

g.



h.

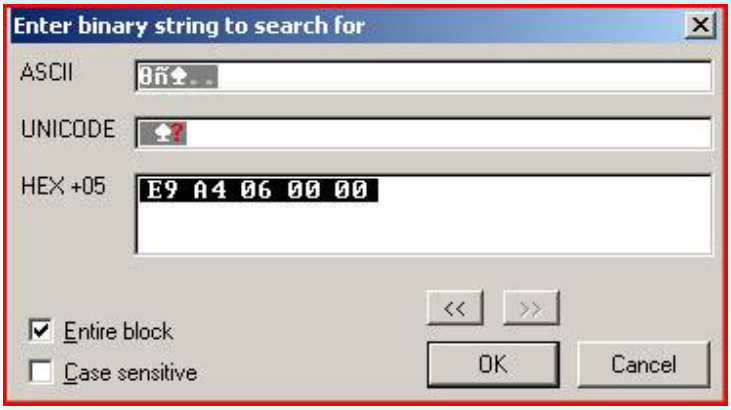
And this is inject code:



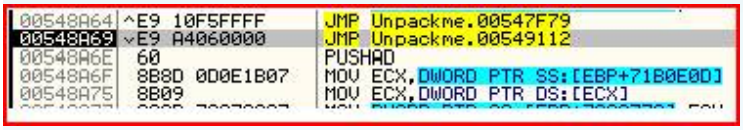
A3 00 01 66 02 89 08 AD C7 46 FC 00 00 00 00 E9 31 89 EE FD 50 A1 00 01 66 02 89 07 80 FF 7F E8 75 08 66 C7 47 FE FF 15 EB 06 66 C7 47 FE FF 25 58 E9 E5 89 EE FD 50 A1 00 01 66 02 89 47 01 80 7F FF E8 75 08 66 C7 47 FF FF 15 EB 06 66 C7 47 FF FF 25 58 0F 85 C1 89 EE FD E9 A4 89

EE FD 83 C7 04 E9 DE 88 EE FD 90

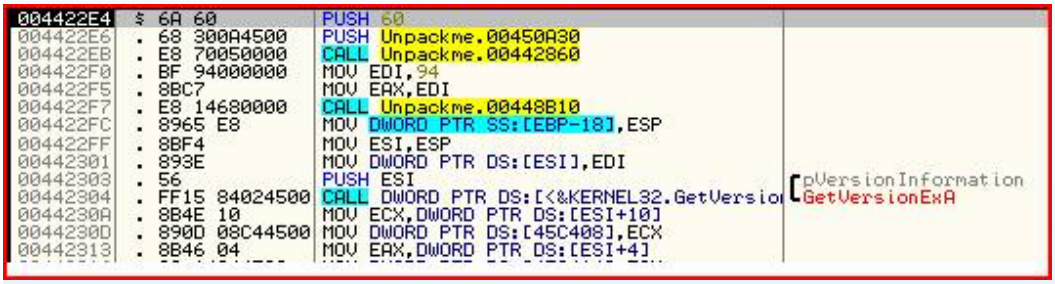
_Ctrl + B:



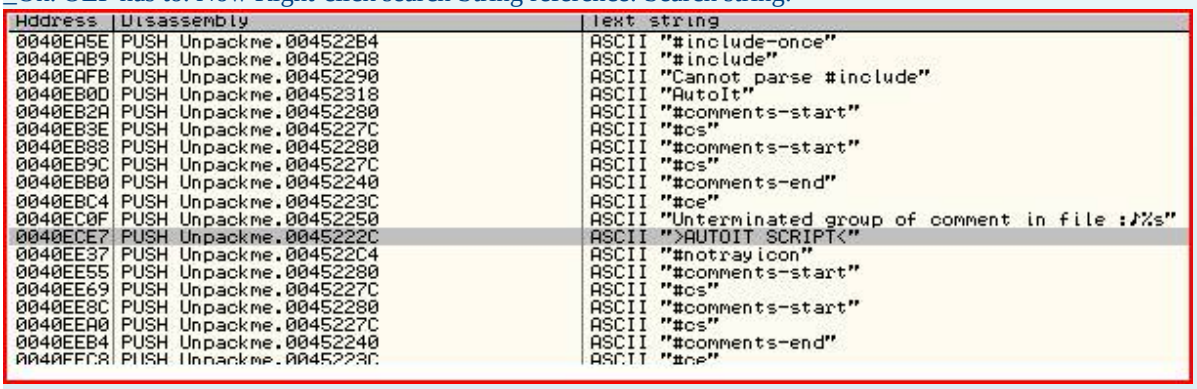
_Toi Here:



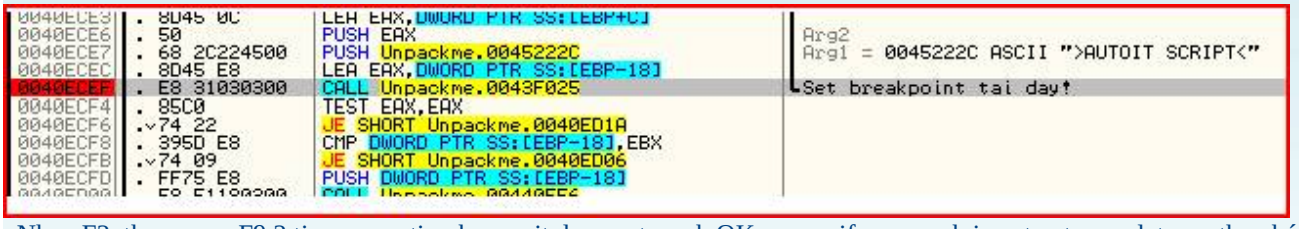
_Dat Execution on a breakpoint, press F9, remove breakpoint, Alt + M placed on access breakpoint, press F9:



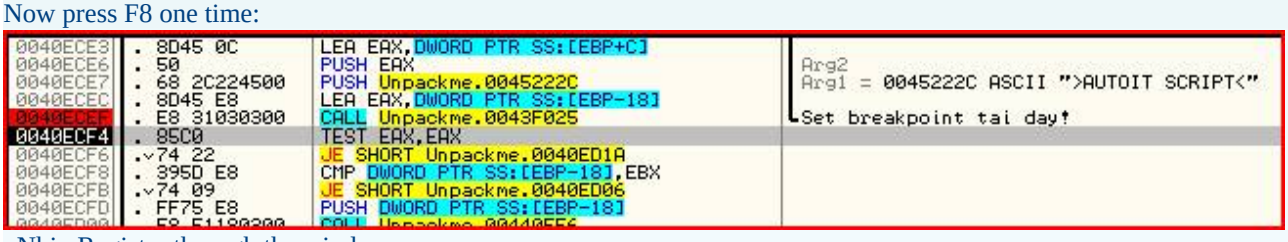
_Ok. OEP has to. Now Right-click search String reference: Search string:



_Nhan You enter here will be to:



_Nhan F2, then press F9 2 times, meeting house, it does not crash OK, so on, if you crash is not yet complete, as the nhé.
Now press F8 one time:



_Nhin Register through the window:

```
Registers (FPU)                          <    <    <
EAX 00000000
ECX 003DAE98 ASCII "; <AUT2EXE VERSION: 3.2.0.1>♪◘♪◘; -
EDX 00000000
EBX 00000000
ESP 0012E7AC
EBP 0012F7D0
ESI 00466FC0 Unpackme.00466FC0
EDI 0012F7B8

EIP 0040ECF4 Unpackme.0040ECF4
```

Follow _Gio dump in and look down dump small window:

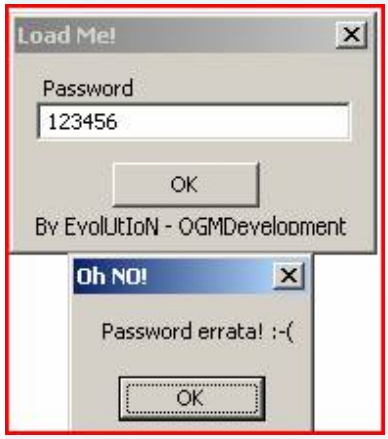
```
003DAD98 ..............................................................
003DADD8 ..............................................................
003DAE18 ..............................................................
003DAE58 ..............................................................
003DAE98 ; <AUT2EXE VERSION: 3.2.0.1>...; ----------------------------
003DAED8 ----------------------------------------..; <AUT2EXE INCLU
003DAF18 DE-START: C:\Documents and Settings\hacnho\My Documents\Unpackme
003DAF58 .au3>..; ----------------------------------------------------
003DAF98 --------------------....#Region ;**** Directives created by Aut
003DAFD8 oIt3Wrapper_GUI ****..#AutoIt3Wrapper_Version=Beta..#AutoIt3Wrap
003DB018 per_Use0px=n..#EndRegion ;**** Directives created by AutoIt3Wrap
003DB058 per_GUI ****..; <AUT2EXE VERSION: v3.2.8.1>...; ---------------
003DB098 ------------------------------------------------------------..;
003DB0D8  <AUT2EXE INCLUDE-START: C:\Documents and Settings\hacnho\My Doc
003DB118 uments\Unpackme\unpackme.au3>..; ------------------------------
003DB158 ----------------------------------....;..; AutoIt Ver
003DB198 sion: 3.2.8.1..; Language:       English..; Platform:       Win9
003DB1D8 x/NT/XP..; Author:         hacnho (hacnho@hotmail.com)..;..; Scr
003DB218 ipt Function: Demo an input box...;......; Loop around until the
003DB258  user gives a valid "autoit" answer..$bLoop = 1..While $bLoop =
003DB298 1..    $text = InputBox("AutoIT v3 + Themida Unpackme", "Please
003DB2D8 type in the password...Or dump me for the src =))")..    If @err
003DB318 or = 1 Then..        MsgBox(4096, "Goodbye", "A counsel for you
003DB358 : Foget Themida :D!")..    Exit..    Else..        ; They clicke
003DB398 d OK, but did they type the right thing?..        If $text <> "h
003DB3D8 acnho is so good :P!" Then..            Else..            $bLoop
003DB418  = 0    ; Exit the loop - ExitLoop would have been an alternativ
003DB458 e too :)..        EndIf..    EndIf..WEnd....; Print the success
003DB498 message..MsgBox(4096,"Done", "Good job, boy!")....; Finished!..
003DB4D8 ..; ----------------------------------------------------------
003DB518 ----------------..; <AUT2EXE INCLUDE-END: C:\Documents and Setti
003DB558 ngs\hacnho\My Documents\Unpackme\unpackme.au3>..; --------------
003DB598 ------------------------------------------------------------..
003DB5D8 ....; --------------------------------------------------------
003DB618 ------------------..; <AUT2EXE INCLUDE-END: C:\Documents and Set
003DB658 tings\hacnho\My Documents\Unpackme.au3>..; --------------------
003DB698 ------------------------------------------------
```

_Don But the hi: P!

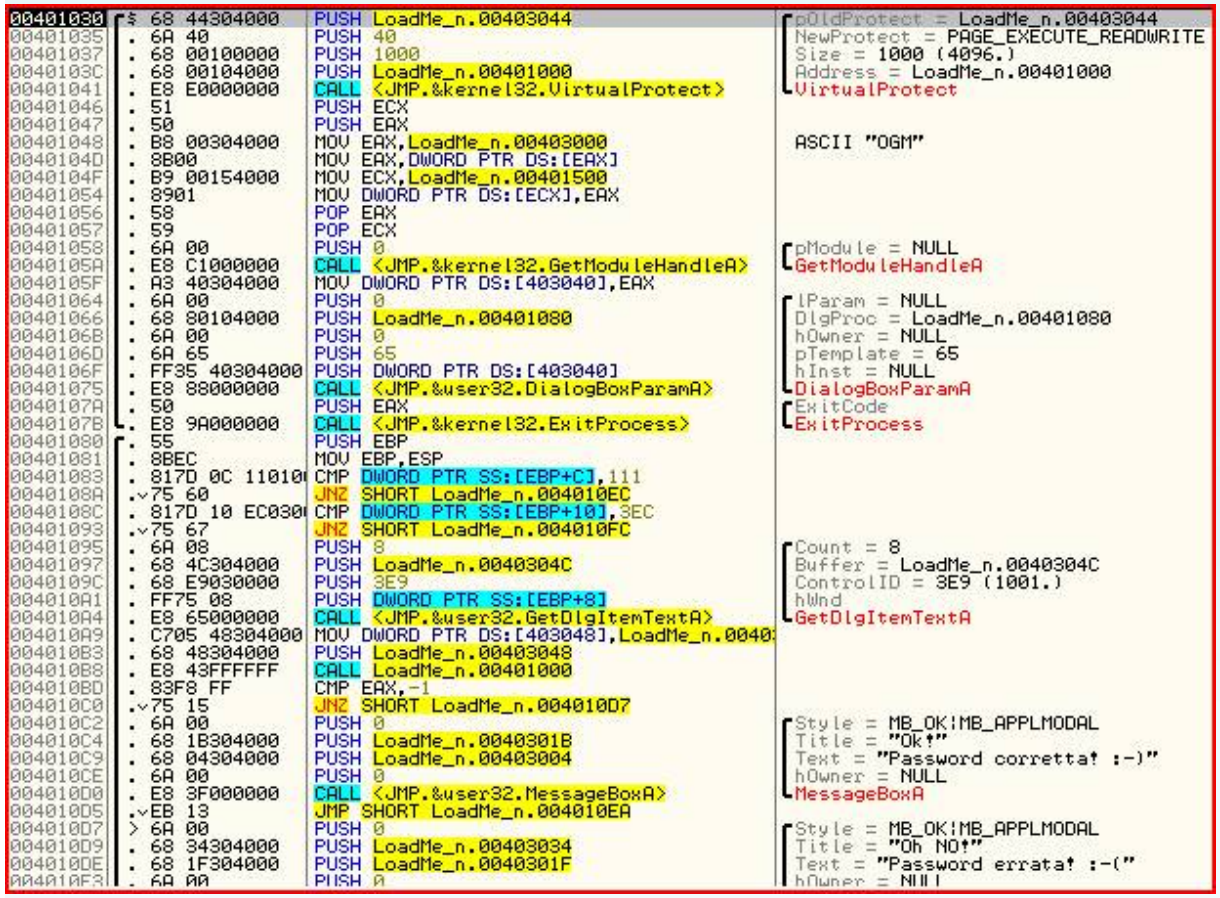
II. CREATE LOADER THEMIDA TREATMENT

_Khi You no way to unpack themida it is fully running, there are 3 ways to target treatment, the first is to create a standard loader to patch the memory, then the program has the springiness compressed memory, the second is inline patch, and this requires more elaborately, we must first pass by the inspection function as CRC checksum, MD5 εξαμπλε, then write a code in a position that is vacant and in a section that; ;), is the task that lies in the area, the program has run a variety nhào bup line. And 3 is to forget it, find something to do with J ! In this part 2 we will write a loader to handle the target packed with 1.8.xx themida mission is set to be one to OEP, trace need to find meat (which is another way to stack his pp Moon), written loader, use the function to read the writing process bác Bill to handle it. We will turn over 2 target, in an ASM (thx Evolution, my camarade) and one written in VB (thx DucCu: P).
_Neu You have made through the loader not to discuss what, if not read the invitation of the tut Translated by Arteam bract: **Cracking with Loader v1.1.**

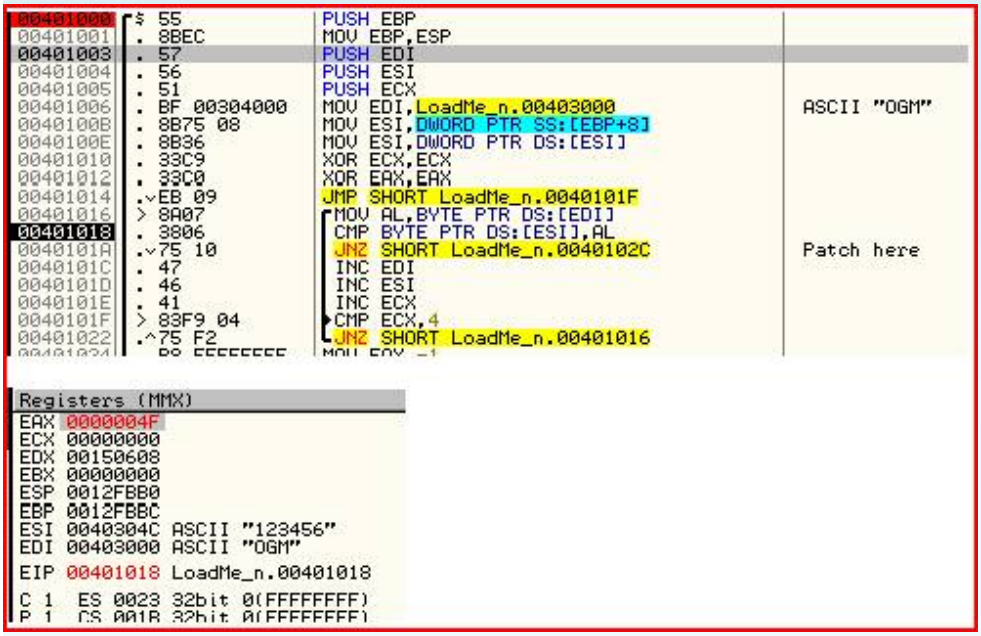
1.Target 1:



_Khong Discuss how to find OEP again, now is the work of you. Suppose now you are in the original OEP:



_Nhin To see us string OGM is correct, but we assume hem bit (because the actual process of creating a number of key soft very complicated. And we need to patch this site:



_Dia Just a patch to patch 40101A and submitted. Now we are written in ASM nhé:

```
486

. model flat, stdcall

casemap option: none
```

include \ masm32 \ include \ windows.inc

include \ masm32 \ include \ user32.inc

include \ masm32 \ include \ kernel32.inc

include \ masm32 \ include \ advapi32.inc

includelib \ masm32 \ lib \ user32.lib

includelib \ masm32 \ lib \ kernel32.lib

includelib \ masm32 \ lib \ advapi32.lib

. data

db program "LoadMe.exe", 0

wordset db 90h, 90h

wordtopatch db 75H, 10h

addresstopatch DWORD 40101Ah

. data?

cProcStart

cProcInfos

STARTUPINFO <>

PROCESS_INFORMATION <>

wordread db 10h dup (?)

byteswritten DWORD?

```
. code

start:

invoke CreateProcess, NULL, addr program, NULL, NULL, NULL, CREATE_SUSPENDED, NULL, NULL, addr cProcStart, addr

cProcInfos

;-------------------------------------------
```

xor eax, eax

. EAX while! = 1

invoke ResumeThread, cProcInfos.hThread

invoke Sleep, 5

```
invoke SuspendThread, cProcInfos.hThread

invoke ReadProcessMemory, cProcInfos.hProcess, addresstopatch, addr wordread, 2h, addr byteswritten

xor ecx, ecx

xor edx, edx

xor eax, eax

mov ecx, OFFSET wordread
```

mov cl, byte ptr [ECX]

mov edx, OFFSET wordtopatch

mov dl, byte ptr [EDX]

. if cl! = dl

xor eax, eax

```
jmp OFFSET resume

. endif

mov ecx, OFFSET wordread

inc ecx

mov cl, byte ptr [ECX]

mov edx, OFFSET wordtopatch

inc edx
```

```
mov dl, byte ptr [EDX]

. if cl! = dl

xor eax, eax

jmp OFFSET resume

. endif

mov eax, 1
```

Resume:

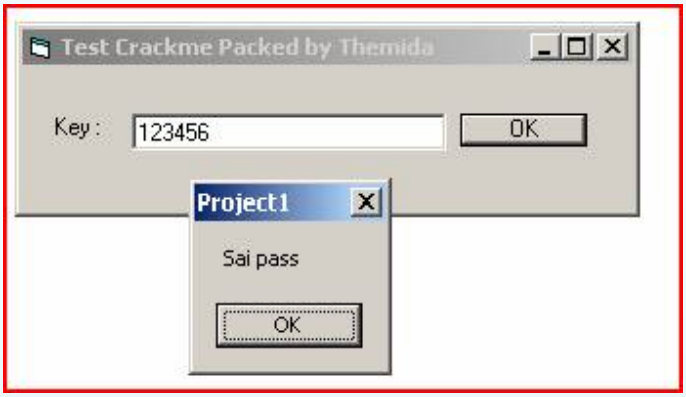
. endw

invoke WriteProcessMemory, cProcInfos.hProcess, addresstopatch, addr wordset, 2h, addr byteswritten

invoke ResumeThread, cProcInfos.hThread

```
RET

END start
```

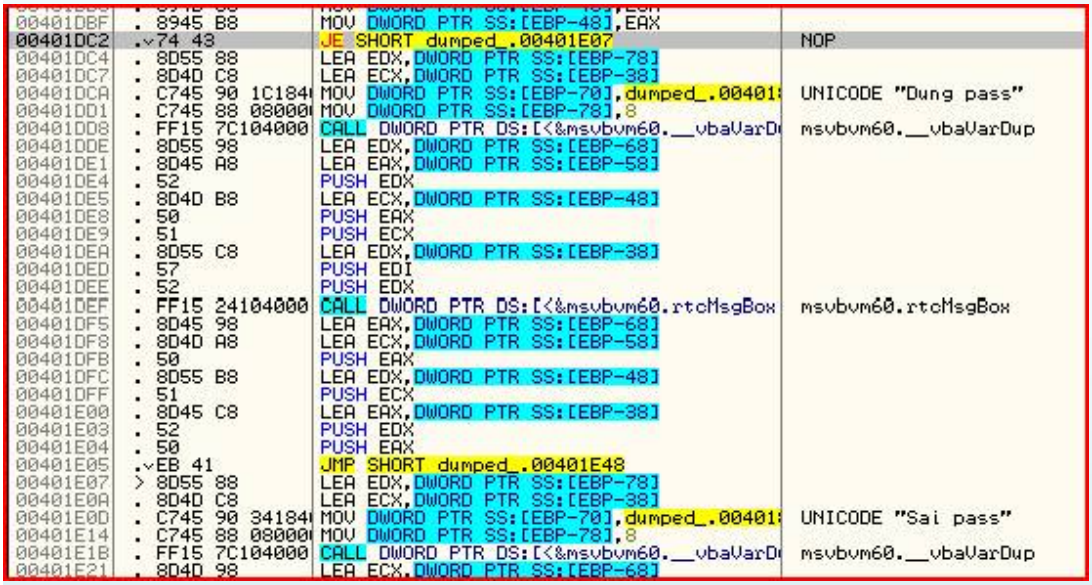
2. Target 2



_OEP's Target:

```
0040117C  .-FF25 4C104000 JMP DWORD PTR DS:[<&msvbvm60.EVENT_SINK  msvbvm60.EVENT_SINK_QueryInterface
00401182  .-FF25 38104000 JMP DWORD PTR DS:[<&msvbvm60.EVENT_SINK  msvbvm60.EVENT_SINK_AddRef
00401188  .-FF25 44104000 JMP DWORD PTR DS:[<&msvbvm60.EVENT_SINK  msvbvm60.EVENT_SINK_Release
0040118E  $-FF25 78104000 JMP DWORD PTR DS:[<&msvbvm60.ThunRTMain  msvbvm60.ThunRTMain
00401194  $ 68 54134000   PUSH dumped_.00401354
00401199  . E8 F0FFFFFF   CALL <JMP.&msvbvm60.ThunRTMain>
0040119E  . 0000          ADD BYTE PTR DS:[EAX],AL
004011A0  . 0000          ADD BYTE PTR DS:[EAX],AL
004011A2  . 0000          ADD BYTE PTR DS:[EAX],AL
004011A4  . 3000          XOR BYTE PTR DS:[EAX],AL
004011A6  . 0000          ADD BYTE PTR DS:[EAX],AL
004011A8  . 40            INC EAX
004011A9  . 0000          ADD BYTE PTR DS:[EAX],AL
004011AB  . 0000          ADD BYTE PTR DS:[EAX],AL
004011AD  . 0000          ADD BYTE PTR DS:[EAX],AL
004011AF  . 0017          ADD BYTE PTR DS:[EDI],DL
004011B1  . AA            STOS BYTE PTR ES:[EDI]
004011B2  . 312F          XOR DWORD PTR DS:[EDI],EBP
```

_Gio Search any site considered necessary patch:



_Cai For your practice. If it does not bít dUP it neat: P!

III. VIẾT SCRIPT

_Neu You unpack a dozen near themida target protected by the work place really nham feet, and we should have thought of writing a script to change it as we all work like magic fix jump, OEP not find? Now we will write a simple script only, include:

1. There are tasks set breakpoint, press the key combination such as Shift + F9, F7, F8 …

2. Instead of typing Ctrl + B to enter the code insensitivity, we use function findmem or find eip. Use asm mov to patch or replace the command Ctrl + E.

3. Alloc use alternative for creating a region memory space.

4. Use dump command to dump the process from using LordPE …

_De Illustrator for writing a script I used unpackme is AutoIT unpackme above. Note in the analysis I will use the format code Author (pseudocode) for analysis, the conclusion we will write to a complete nhé.

_Buoc 1: We open the Notepad or any editor, I use the Debug Olly Script Editor 1.2. Then use OllyDBG open on target, we will here:

_Nhu Of time before we press Alt + M to set a breakpoint on write. The command which is equivalent in

the language OllyScript:

/ *

BPWM addr, size: Set breakpoint on memory write. Size is the size of memory in bytes.

Example: bpwm 401,000, FF

* /

_Chung We set a breakpoint in the code section with addr, size is 401,000, 6F000. So we will have the

first order: 401,000.6 bpwm F000. In a written script so if we will use the variables, this variable to assign

the target to change the script will take. To get two of this, we use GMI:

/ *

Gets information about a module to which the specified address belongs.

"info" can be:

MODULEBASE, MODULESIZE, CODEBASE, ESIZE COD, MEMBASE, MEMSIZE, ENTRY, NSECT, database,

RELOCTABLE, RELOCSIZE RESBASE, RESSIZE, IDATABASE, DATATABLE, EDATATABLE, and strings EDATASIZE

NAME, PATH, VERSION

(If you want other info in the future versions plz tell me).

Sets the reserved $ RESULT variable (0 if data not found).

Example:

GMI eip, CODEBASE / / After this $ Result is the address to the codebase of the modules to which belongs eip

* /

_Chu That three letters this: CODEBASE, MODULEBASE, CODESIZE, is three variables we need to

get information. Retrieved finished we will assign to a temporary variable $ RESULT (Return value for

some functions like FIND etc.). OK if you follow this to J ， we will have the following script:

/ *

Var codebase / / declare variables to use, this value is a section of code addr

Var codesize / / Size of the code section

Var modulebase / / PE Header

gmi eip, MODULEBASE / / Get information PE Header

mov modulebase, $ RESULT / / Takes PE Header to change (at this time is 40,000)

gmi eip, CODEBASE / / Get information addr Section code

mov codebase, $ RESULT / / Insert (this time is 40,100)

gmi eip, CODESIZE / / Get the information section of the code size

mov codesize, $ RESULT / / Insert (this time is 6F000)

bpwm codebase, codesize / / Set a breakpoint in the section on write code

* /

_Viet Long lines like, but if we do it in Olly only 1 second is complete, OK, if at OllyDBG after you

set breakpoint is hit Shift + F9. In here you can order ESTO (Executes Shift-F9 in OllyDbg) . Now we

add the command:

/ *

ESTO

* /

_Khi Press Shift + F9 we will come:

_De Amenities track we put a label (Label) is a REP:

/ *

REP:

* /

Olly _Trong come if we press Shift + F9 2 times more in the script will add 2 ESTO:

/ *

ESTO

ESTO

* /

_Toi Here we will press F7 and F8, but if it does not stop in the form

/ *

REP MOVS BYTE PTR ES: [EDI], BYTE PTR DS: [ESI]

* /

_Khi That we will be entangled the endless loop, so we need to create a loop to avoid entangled loop.

Listen to the headaches. What started, simply stop, we will use OllyScript to create a loop to check the

cursor by Olly is in line with REP when we press Shift + F9 3 times not, if that is not repeated to the

point that the time. To create a loop in the language we use OllyScript structure monitoring a function

Cmp (compare, type True / False). The resolution as follows:

/ *

find eip, # F3A4 ????# / / check if there are standing in line REP (opcode F3A4)

Cmp $ result, 0 / / If you do not see this opcode the implementation of orders

REP je / / Jump to label REP to perform the command ESTO

* /

_Neu That we will continue to implement the command press F7, F8

/ *

STI / / step into

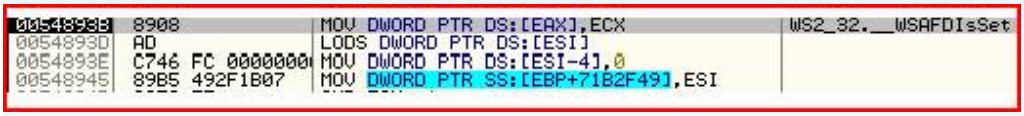
STO / / Step over

* /

_Tiep By, we will press Shift + F9 should add one more command ESTO nhé:

/ ESTO * * /

_Neu In OllyDBG hours this code by hand to you here:



_Khuc This is quite important to pass by IAT elimination so we will put to a loop to make sure that

we're standing here (opcode 8908AD). Write as follows:

/ *

Move:

find eip, # 8908AD? # / / check is in line with opcode 8908AD

Cmp $ result, 0 / / If you do not see this opcode the implementation of orders

je move / / Jump to label move to implement the order if the search result opcode = 0, if not

jmp MAINTASK / / Jump to label MAINTASK to work: P!

* /

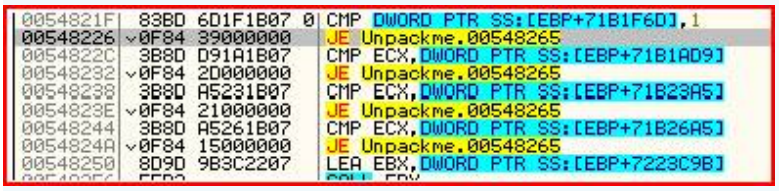
_Luu That is the label we need from the report, but the variable is declared. Now, if done by hand, we

will find the command have jumped opcode: 0F850A000000C785 and patch it into JMP. The script is

written as follows:

```
/ *
MAINTASK:
mov add, eip / / get the current position of the cursor on the window CPU
findmem 0F850A000000C785 # # / / Search opcode
mov addr1, $ RESULT / / Take the address to a temporary variable
mov [addr1], 0A0EEB / / Patch 3 bytes in temporary changes in value 0A0EEB
* /
```

_Tuong Self we find in the command chain JE 4 JE order to cancel IAT: P:



/ *

findmem 0F84390000003B8D # #

mov addr2, $ RESULT

mov [addr2], 3928EB

* /

_Chung We need to get the address of the command to addr1 chien: D, so get the address of it:

/ *

mov tmpbp, addr1

* /

_Gio If used to Manage Memory alloc a cave, the code we use:

/ *

alloc 1000 / / Allocate new memory page, you can read / write and execute.

* /

_Gio Read address area code, to a variable, so the set is soft, we use the command:

/ *

mov mem, $ RESULT / / read the address area code (example: 2660000)

log mem / / write the log

* /

_Gio We will write a code of how to train, and edit it, using
add two more variables are tmp and memtmp.

/ *

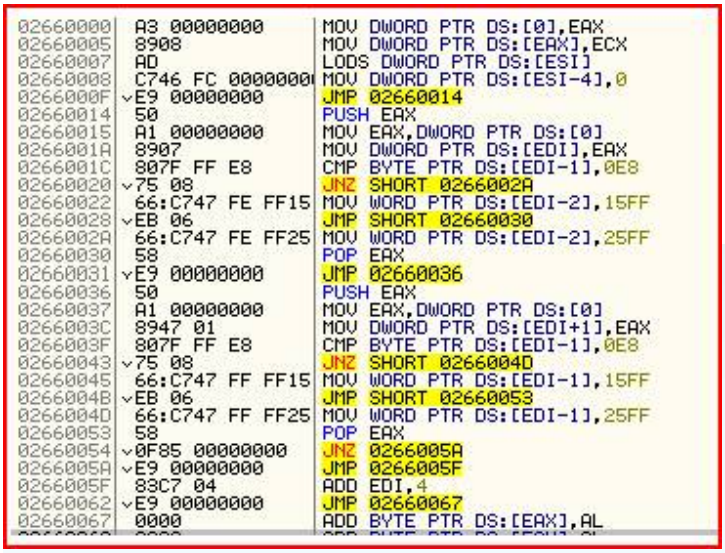
mov tmp, mem / / transfer the address area code changes just to alloc tmp

mov [tmp],
A3000000008908ADC746FC00000000E90000000050A1000000008907807FFFE8750866C747FEFF15EB0666
C747FEFF2558E90000000050A1000000008947018O7FFFE8750866C747FFFF15EB0666C747FFFF25580F8500
000000E90000000083C704E900000000 # / / Write the code in case of Chinatown area code to create =)).

mov memtmp, tmp / / Take value area code just to write variables memtmp

* /

_Luc In this window OllyDBG at 2660000 will like this:



_Gio We need to patch the value of the variable memtmp from 2660000 to 2660100 (note the value to address other nhé):

/ *

add memtmp, 100 / / added value memtmp 100

add tmp, 1 / / patch in the first byte News at 2660001

* /

_Khi It will OllyDBG out this:

_Tiep Community we continue to value at +15 tmp is 100 (ie address 2660000 +15 = 2660015):

/ *

mov [tmp], memtmp / / Bringing value to the variable tmp 2660100

add tmp, 15 / / patch to address 2660000 +15 value

* /

_Tuong Self we continue to do:

/ *

mov [tmp], memtmp

add tmp, 22

* /

_Sau That we get the address to mem tmp

/ *

mov tmp, mem / / Bring to address tmp 2660000

* /

_Ban Also remember remember tmpbp variables in the air, then its value is 548E07 not change (because nay xài first time that has changed). OK time to get it:

/ *

Find tmpbp, 8908AD # #

mov tmpbp, $ RESULT / / Insert value of $ RESULT (54893B is now) to turn tmpbp

* /

_Toi The patch orders jmp ago, the first patch to order 54893B jmp 2660000:

/ *

EVAL

Evaluates a string expression that contains variables.

The variables that are declared in the current script can be enclosed in curly braces () to be Inserted.

Sets the reserved $ RESULT variable

Example:

var x

mov x, 1000

eval "The value of x is (x)" / / After this $ Result is the value of x is 1000 "

* /

/ *

mov addr1, tmpbp / / Bring to address 54893B variable addr1

add addr1, 0A / / eval command a blank area to enter into the expression, we should leave 10, enough to command jmp

eval "jmp (tmp)" / / Get string jmp (2660000)

asm tmpbp, $ RESULT / / same as you type the space bar, and so the field of

* /

_Tuong Our own patch in turn:

/ *

Find tmpbp, E92400000058 # #

mov tmpbp, $ RESULT

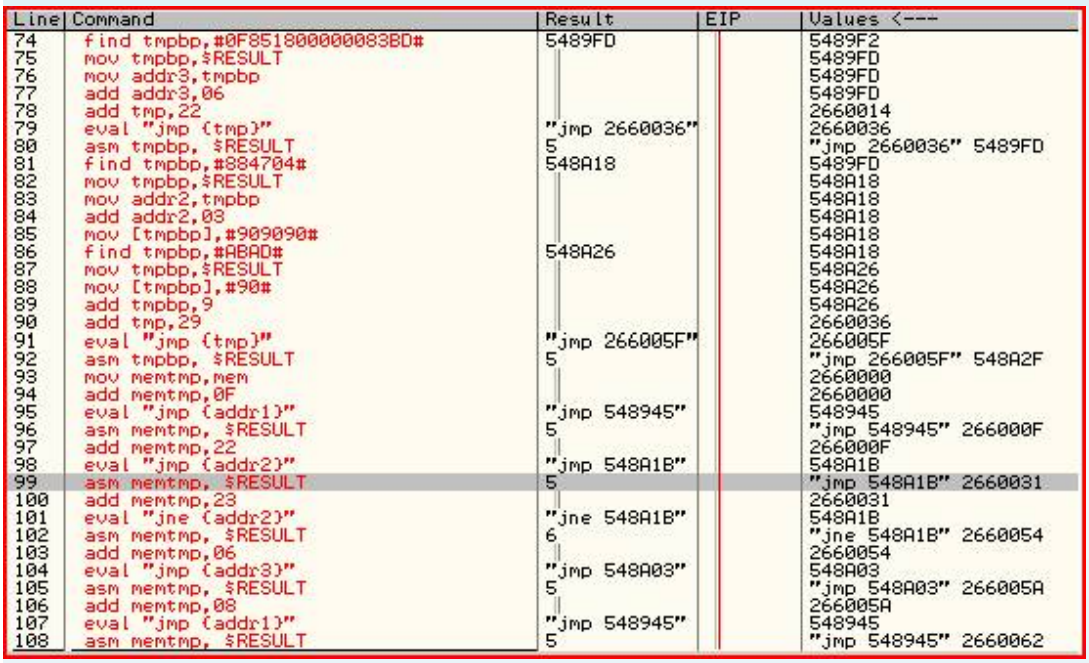
add tmp, 14

eval "jmp (tmp)"

asm tmpbp, $ RESULT

* /

_Khuc The same, you see the small, just get the value, and then patch it. Chang Y as on, if I have from the analysis, sure some dozen pages long. L !



Line	Command	Result	EIP	Values <---
74	find tmpbp,#0F851800000083BD#	5489FD		5489F2
75	mov tmpbp,$RESULT			5489FD
76	mov addr3,tmpbp			5489FD
77	add addr3,06			5489FD
78	add tmp,22			2660014
79	eval "jmp {tmp}"	"jmp 2660036"		2660036
80	asm tmpbp, $RESULT	5		"jmp 2660036" 5489FD
81	find tmpbp,#884704#	548A18		5489FD
82	mov tmpbp,$RESULT			548A18
83	mov addr2,tmpbp			548A18
84	add addr2,03			548A18
85	mov [tmpbp],#909090#			548A18
86	find tmpbp,#ABAD#	548A26		548A18
87	mov tmpbp,$RESULT			548A26
88	mov [tmpbp],#90#			548A26
89	add tmpbp,9			548A26
90	add tmp,29			2660036
91	eval "jmp {tmp}"	"jmp 266005F"		266005F
92	asm tmpbp, $RESULT	5		"jmp 266005F" 548A2F
93	mov memtmp,mem			2660000
94	add memtmp,0F			2660000
95	eval "jmp {addr1}"	"jmp 548945"		548945
96	asm memtmp, $RESULT	5		"jmp 548945" 266000F
97	add memtmp,22			266000F
98	eval "jmp {addr2}"	"jmp 548A1B"		548A1B
99	asm memtmp, $RESULT	5		"jmp 548A1B" 2660031
100	add memtmp,23			2660031
101	eval "jne {addr2}"	"jne 548A1B"		548A1B
102	asm memtmp, $RESULT	6		"jne 548A1B" 2660054
103	add memtmp,06			2660054
104	eval "jmp {addr3}"	"jmp 548A03"		548A03
105	asm memtmp, $RESULT	5		"jmp 548A03" 266005A
106	add memtmp,08			266005A
107	eval "jmp {addr1}"	"jmp 548945"		548945
108	asm memtmp, $RESULT	5		"jmp 548945" 2660062

_Khi Patch has finished and all, as usual, we typed in OllyDBG Ctrl + G: E9A4060000, here we use findeip:

/ *

find eip, E9A4060000 # # / / Find the address contains opcode

mov tmpbp, $ RESULT / / switch to temporary variables

bphws tmpbp, "x" / / Set a breakpoint on execution

esto / / Shift + F9

* /

_Sau That we need to set a breakpoint in the section on access code and press Shift + F9:

/ *

bphwc tmpbp / / Remove Hardware Breakoint

mov tmp, codebase / / add read the section of code

add tmp, codesize / / transfer size section of code to change tmp

OEP:

bprm codebase, codesize / / Set breakpoint

esto / / Shift + F9

bpmc / / remove breakpoint

Cmp eip, tmp

ja OEP

eval "dumped.exe" / / Filename dump

dpe $ result, eip / / dump file

msg "script finished, check the oep ~ place by yourself. If OEP OK, fire up and fix IAT ImpREC"

ret

* /

_Va Script is complete:

```
/ * Edit this script from the script of odoko for 1.9.xx ver * /

var modulebase

var codebase
```

var codesize

var tmpbp

var apibase

var mem

var tmp

BPHWCALL

gmi eip, MODULEBASE

mov modulebase, $ RESULT

gmi eip, CODEBASE

mov codebase, $ RESULT

gmi eip, CODESIZE

mov codesize, $ RESULT

bpwm codebase, codesize

ESTO

REP:

ESTO

ESTO

find eip, # F3A4 ????#

Cmp $ result, 0

je REP

STI

STO	
ESTO	
Move:	

find eip, # 8908AD? #

Cmp $ result, 0

je move

```
jmp MAINTASK

MAINTASK:

bpmc
```

mov add, eip

findmem 0F850A000000C785 # #

mov add1, $ RESULT

mov [add1], 0A0EEB

findmem 0F84390000003B8D # #

mov add2, $ RESULT

mov [add2], 3928EB

mov tmpbp, add1

alloc 1000

mov mem, $ RESULT

log mem

mov tmp, mem

mov

[tmp], # A3000000008908ADC746FC00000000E90000000050A10000000008907807FFFE8750866C74

7FEFF15EB0666C747FEFF2558E90000000050A10000000008947018 07FFFE8750866C747FFFF15E

B0666C747FFFF25580F8500000000E90000000083C704E900000000 #

mov memtmp, tmp

add memtmp, 100

add tmp, 1

mov [tmp], memtmp

add tmp, 15

mov [tmp], memtmp

add tmp, 22

mov [tmp], memtmp

mov tmp, mem

Find tmpbp, 8908AD # #

mov tmpbp, $ RESULT

mov addr1, tmpbp

add addr1, 0A

eval "jmp (tmp)"

asm tmpbp, $ RESULT

Find tmpbp, E92400000058 # #

mov tmpbp, $ RESULT

add tmp, 14

```
eval "jmp (tmp)"

asm tmpbp, $ RESULT

Find tmpbp, 0F851800000083BD # #
```

mov tmpbp, $ RESULT

mov addr3, tmpbp

add addr3, 06

```
add tmp, 22

eval "jmp (tmp)"

asm tmpbp, $ RESULT
```

Find tmpbp, # 884704 #

mov tmpbp, $ RESULT

mov addr2, tmpbp

add addr2, 03

mov [tmpbp], # 909090 #

Find tmpbp, ABAD # #

mov tmpbp, $ RESULT

mov [tmpbp], # 90 #

add tmpbp, 9

```
add tmp, 29

eval "jmp (tmp)"

asm tmpbp, $ RESULT
```

mov memtmp, mem

add memtmp, 0F

eval "jmp (addr1)"

```
asm memtmp, $ RESULT

add memtmp, 22

eval "jmp (addr2)"
```

asm memtmp, $ RESULT

add memtmp, 23

eval "jne) (addr2"

```
asm memtmp, $ RESULT

add memtmp, 06

eval "jmp addr3 ()"
```

```
asm memtmp, $ RESULT

add memtmp, 08

eval "jmp (addr1)"
```

asm memtmp, $ RESULT

find eip, E9A4060000 # #

mov tmpbp, $ RESULT

add tmpbp, 14

bphws tmpbp, "x"

esto

bphwc tmpbp

mov tmp, codebase

add tmp, codesize

oep:

bprm codebase, codesize

esto

bpmc

Cmp eip, tmp

ja oep

```
eval "dumped.exe"

dpe $ result, eip

msg "script finished, check the oep ~ place by yourself. If OEP OK, fire up and fix IAT ImpREC"
```

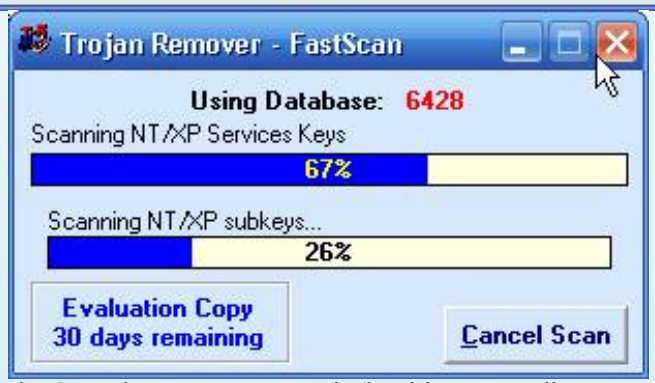
```
ret
```

_Co Can say the script is extremely simple and basic for anyone new to familiarize with Themida, as going into Themida, you need to do more work than as self-created script fix stolen bytes, dump VMS, …. Ôi referred to but tired. Stop that from going: P.

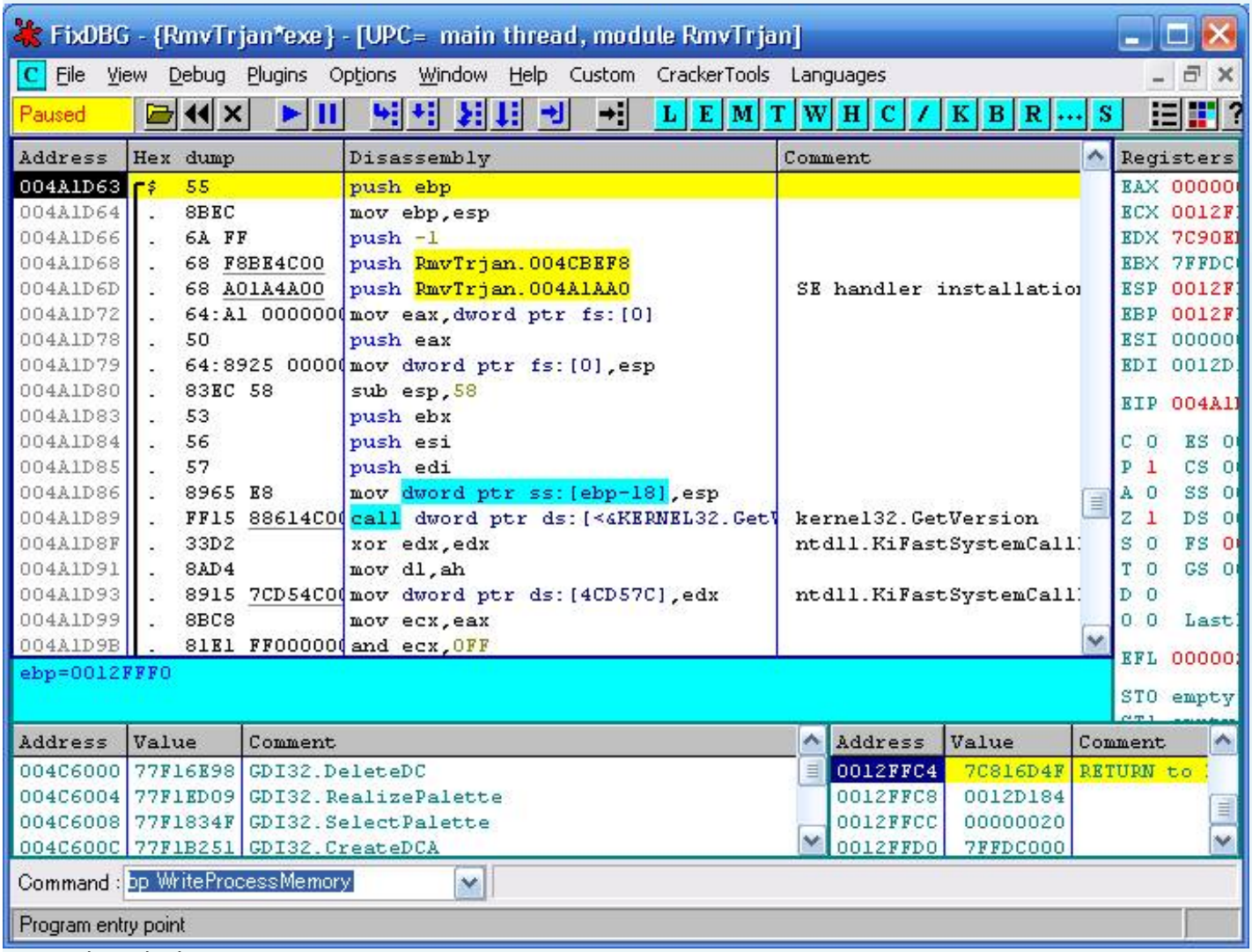
【作者声明】：只是感兴趣，没有其他目的。失误之处敬请诸位大侠赐教

Trojan-remover DebugBlocker + Nanomites

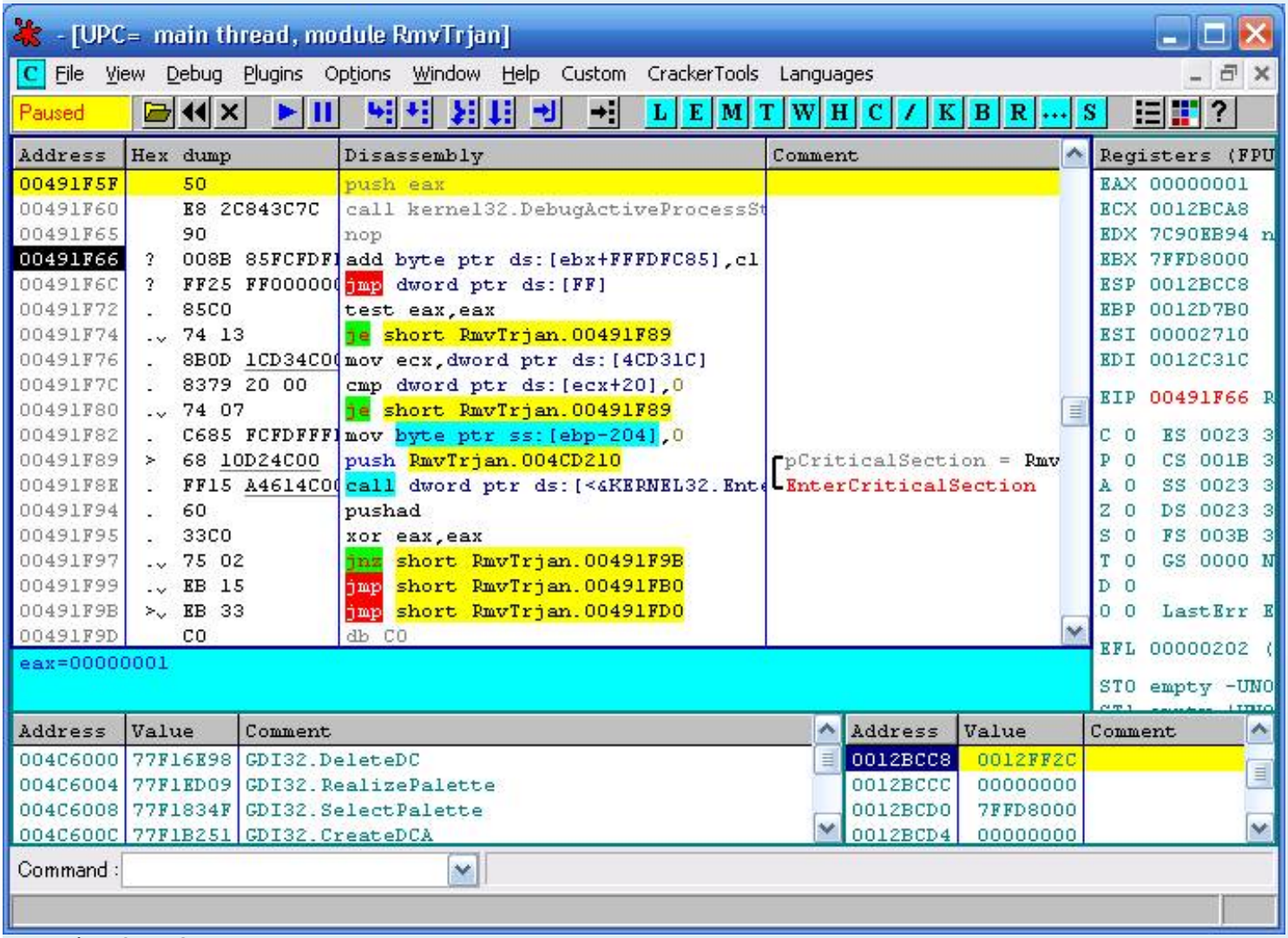
Distribution: unregistered evaluation copy
Version: 6.4.4 - 30th October 2005



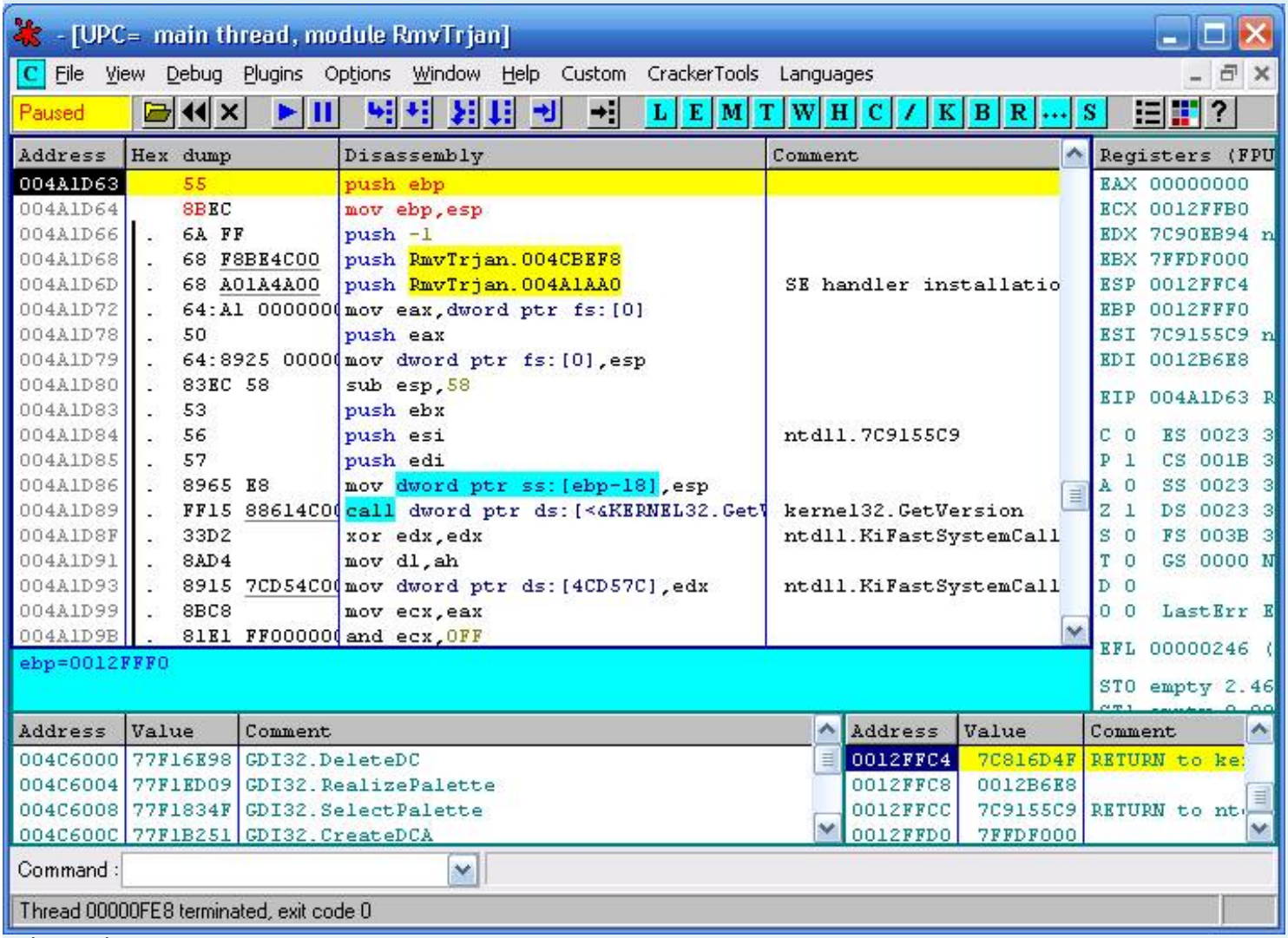
_Xin Greeting, we met again in this tut to discuss a target by Protect Armadillo 4.x can rename the file when run, more unpack when running the process will create a process to prevent other with a notice as suspend making machines we can not fix Nanomites! Ok, let's goooooo!



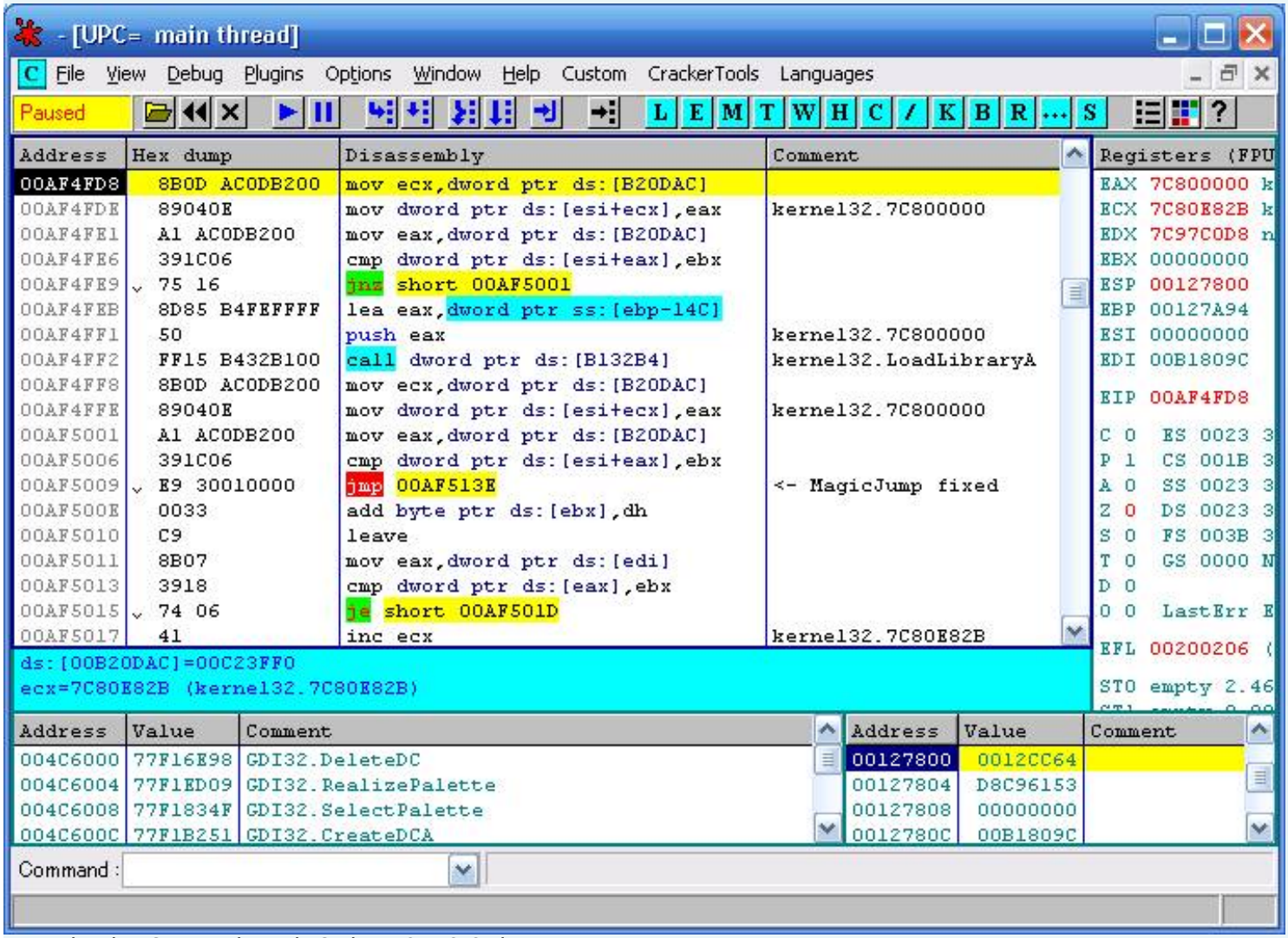
_By DebugBlocker pass:



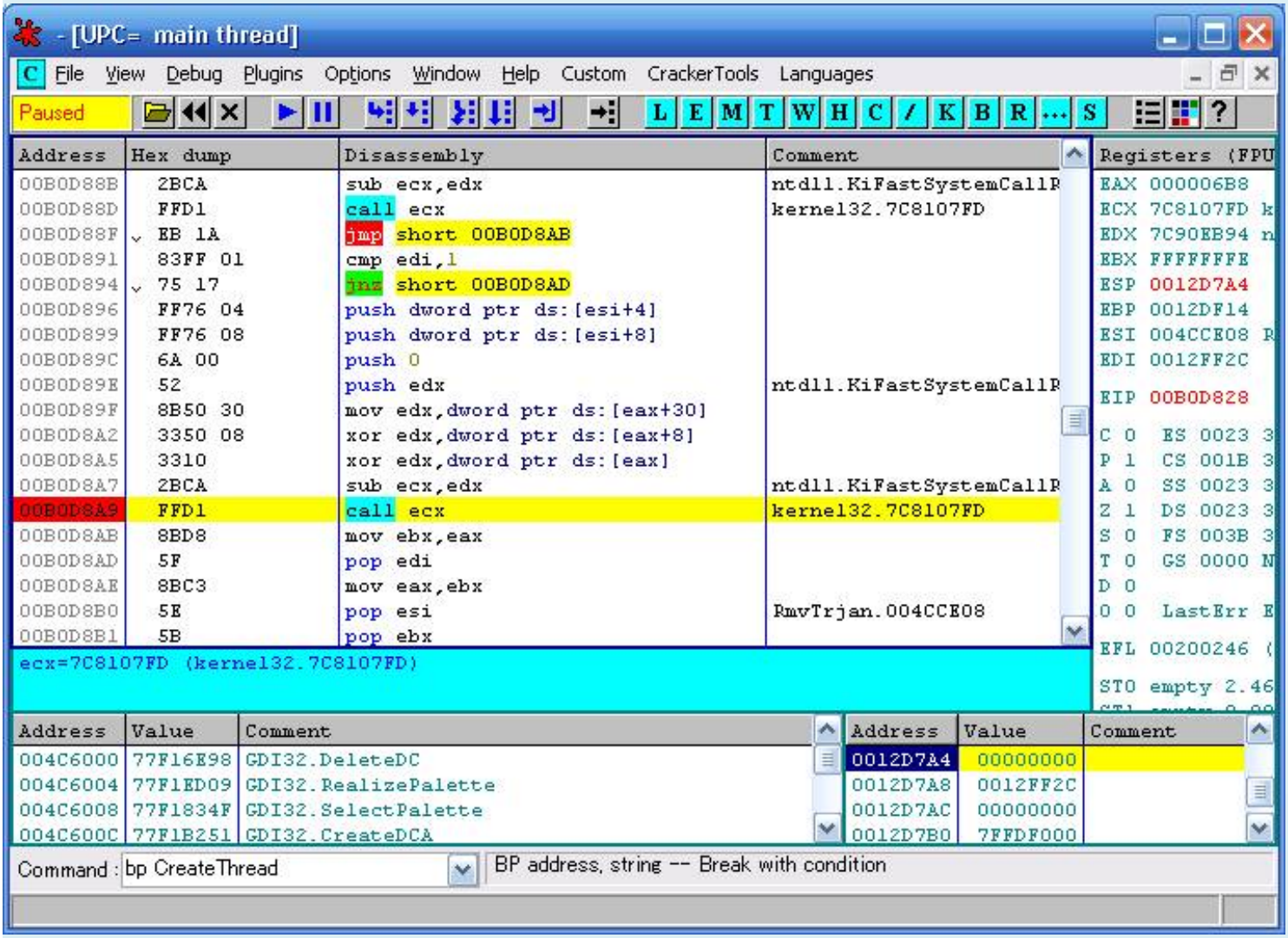
_Attach, F9, F12:



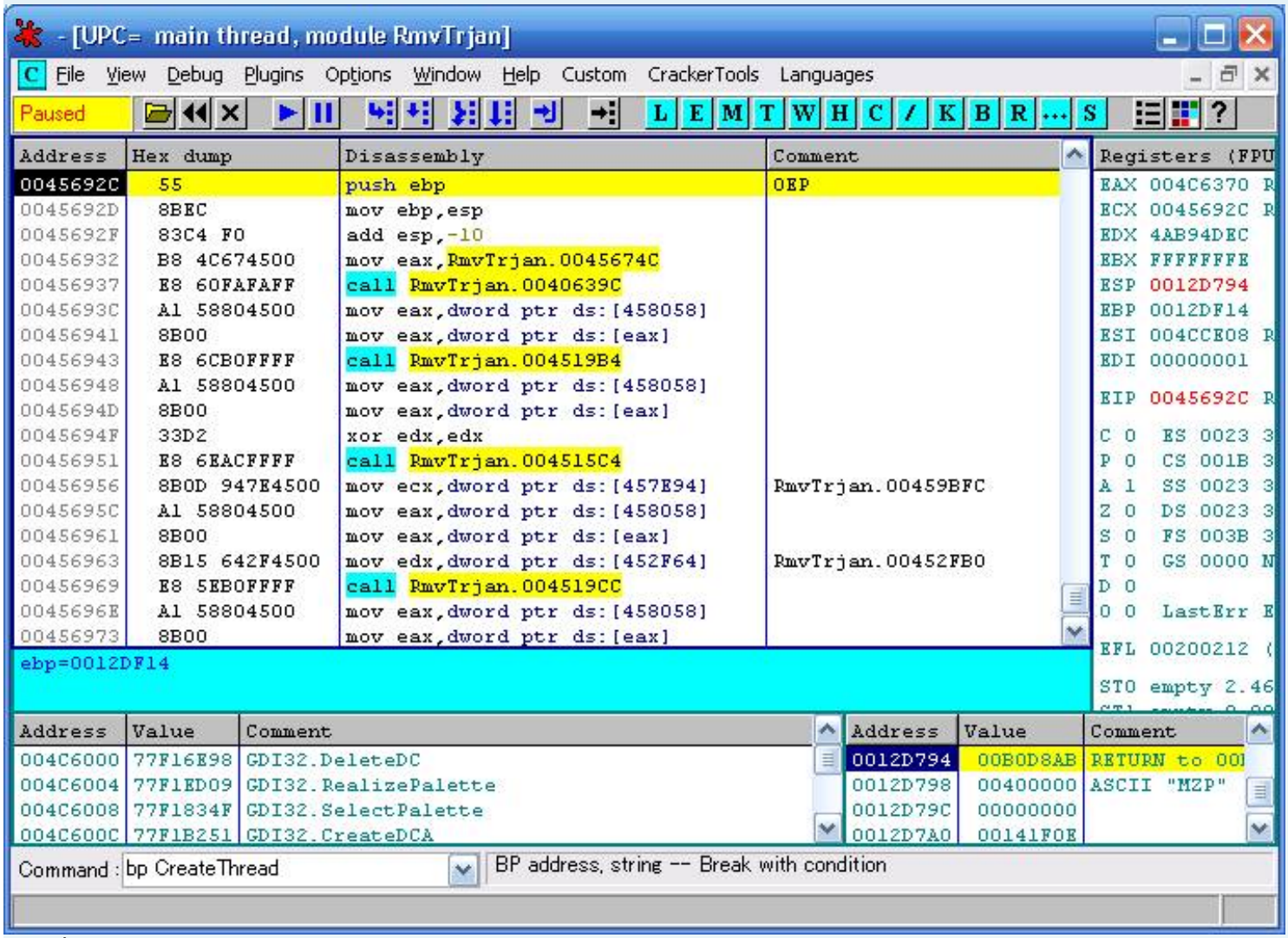
_Fix MagicJump:



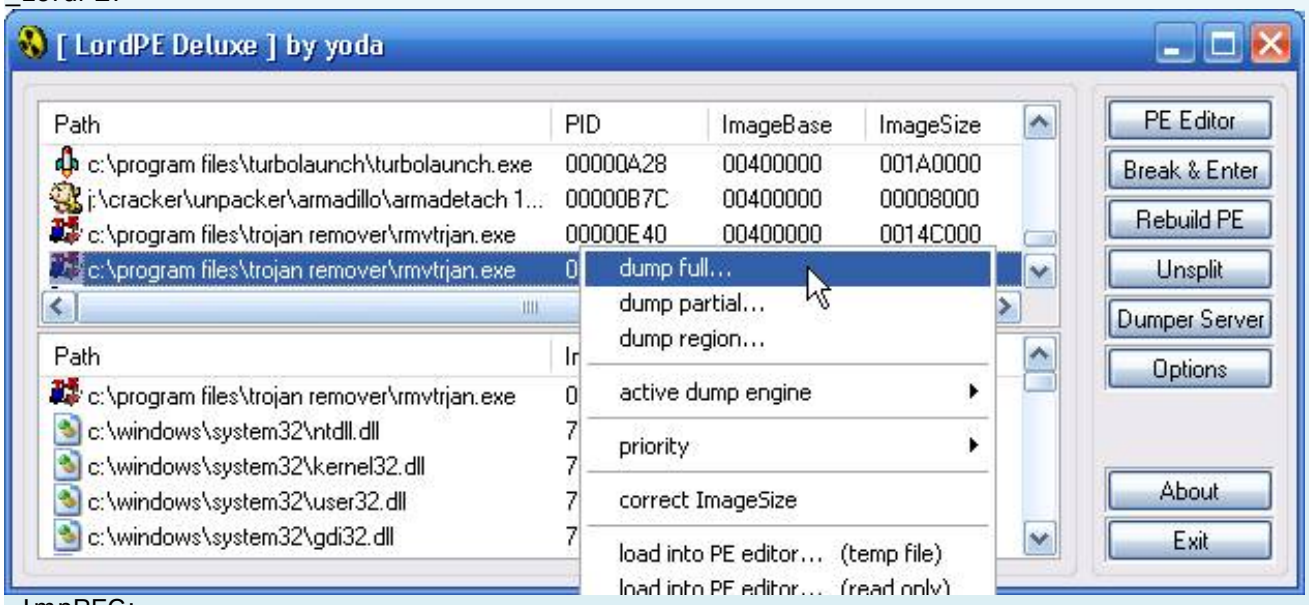
_Breakpoint CreateThread, Ctrl + F9, F8 2 times:


- [UPC= main thread]
File View Debug Plugins Options Window Help Custom CrackerTools Languages
Paused
Address Hex dump Disassembly Comment
00B0D88B 2BCA sub ecx,edx ntdll.KiFastSystemCallR
00B0D88D FFD1 call ecx kernel32.7C8107FD
00B0D88F EB 1A jmp short 00B0D8AB
00B0D891 83FF 01 cmp edi,1
00B0D894 75 17 jnz short 00B0D8AD
00B0D896 FF76 04 push dword ptr ds:[esi+4]
00B0D899 FF76 08 push dword ptr ds:[esi+8]
00B0D89C 6A 00 push 0
00B0D89E 52 push edx ntdll.KiFastSystemCallR
00B0D89F 8B50 30 mov edx,dword ptr ds:[eax+30]
00B0D8A2 3350 08 xor edx,dword ptr ds:[eax+8]
00B0D8A5 3310 xor edx,dword ptr ds:[eax]
00B0D8A7 2BCA sub ecx,edx ntdll.KiFastSystemCallR
00B0D8A9 FFD1 call ecx kernel32.7C8107FD
00B0D8AB 8BD8 mov ebx,eax
00B0D8AD 5F pop edi
00B0D8AE 8BC3 mov eax,ebx
00B0D8B0 5E pop esi RmvTrjan.004CCE08
00B0D8B1 5B pop ebx
ecx=7C8107FD (kernel32.7C8107FD)
Registers (FPU
EAX 000006B8
ECX 7C8107FD k
EDX 7C90EB94 n
EBX FFFFFFFE
ESP 0012D7A4
EBP 0012DF14
ESI 004CCE08 R
EDI 0012FF2C
EIP 00B0D828
C 0 ES 0023 3
P 1 CS 001B 3
A 0 SS 0023 3
Z 1 DS 0023 3
S 0 FS 003B 3
T 0 GS 0000 N
D 0
O 0 LastErr E
EFL 00200246 (
STO empty 2.46
Address Value Comment
004C6000 77F16E98 GDI32.DeleteDC
004C6004 77F1ED09 GDI32.RealizePalette
004C6008 77F1834F GDI32.SelectPalette
004C600C 77F1B251 GDI32.CreateDCA
Address Value Comment
0012D7A4 00000000
0012D7A8 0012FF2C
0012D7AC 00000000
0012D7B0 7FFDF000
Command : bp CreateThread
BP address, string -- Break with condition

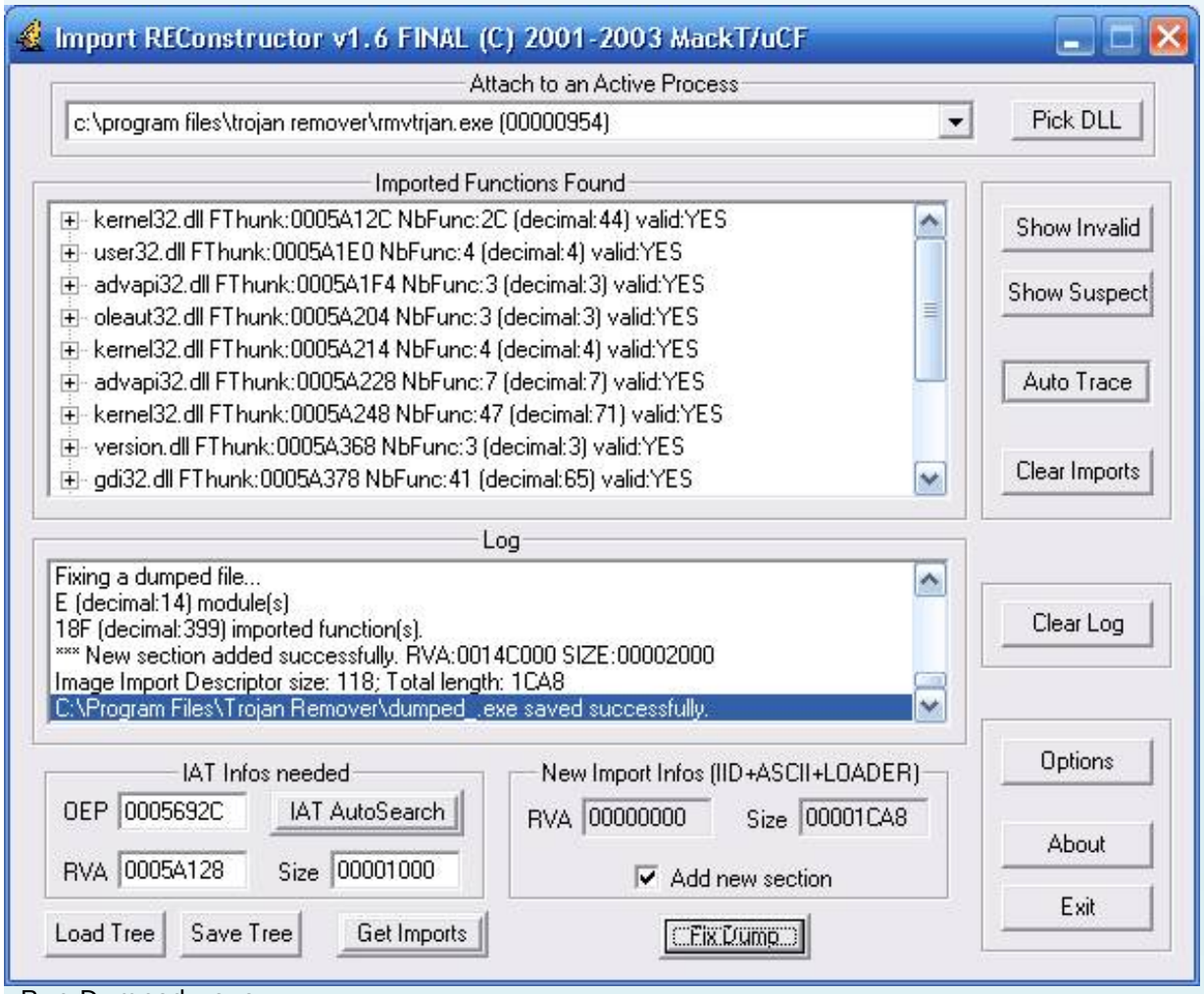
_F2, F9: J OEP



_LordPE:

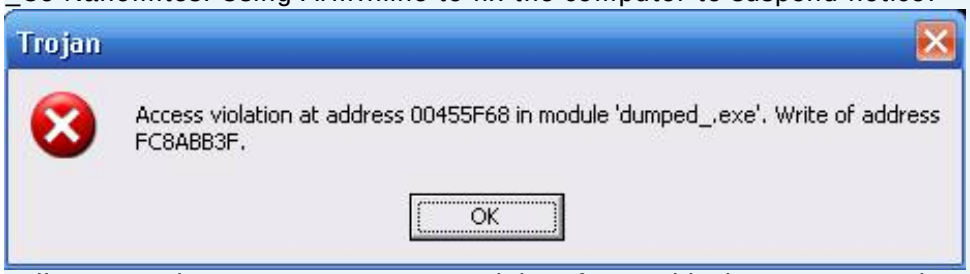


_ImpREC:

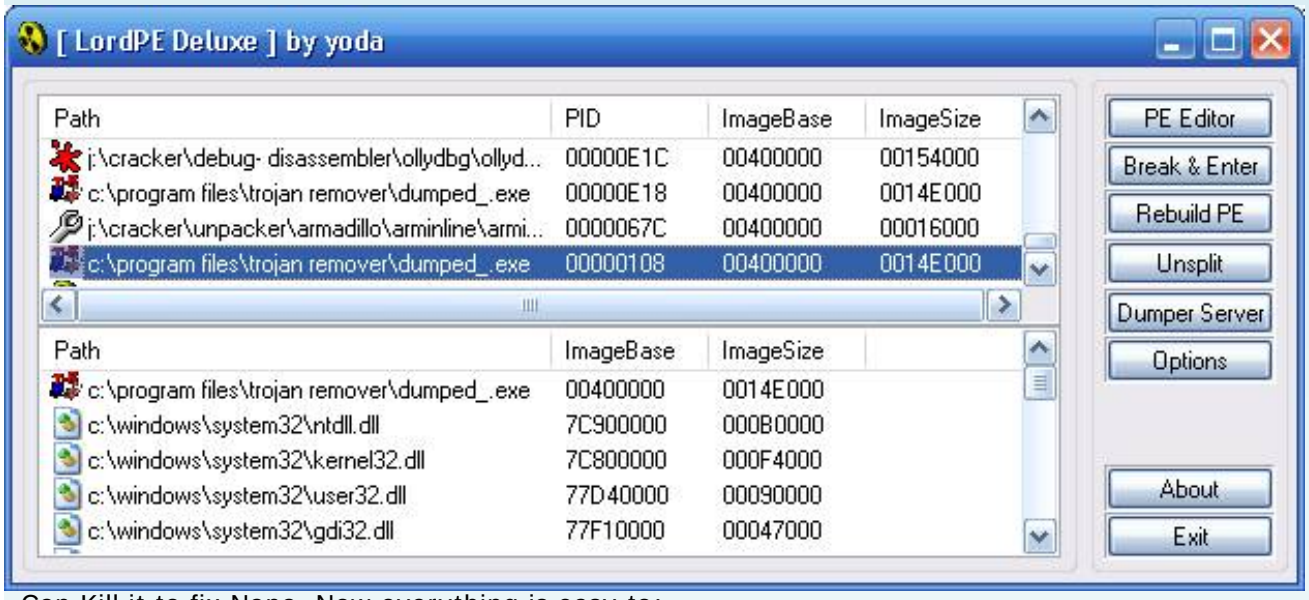


Run Dumped.exe:

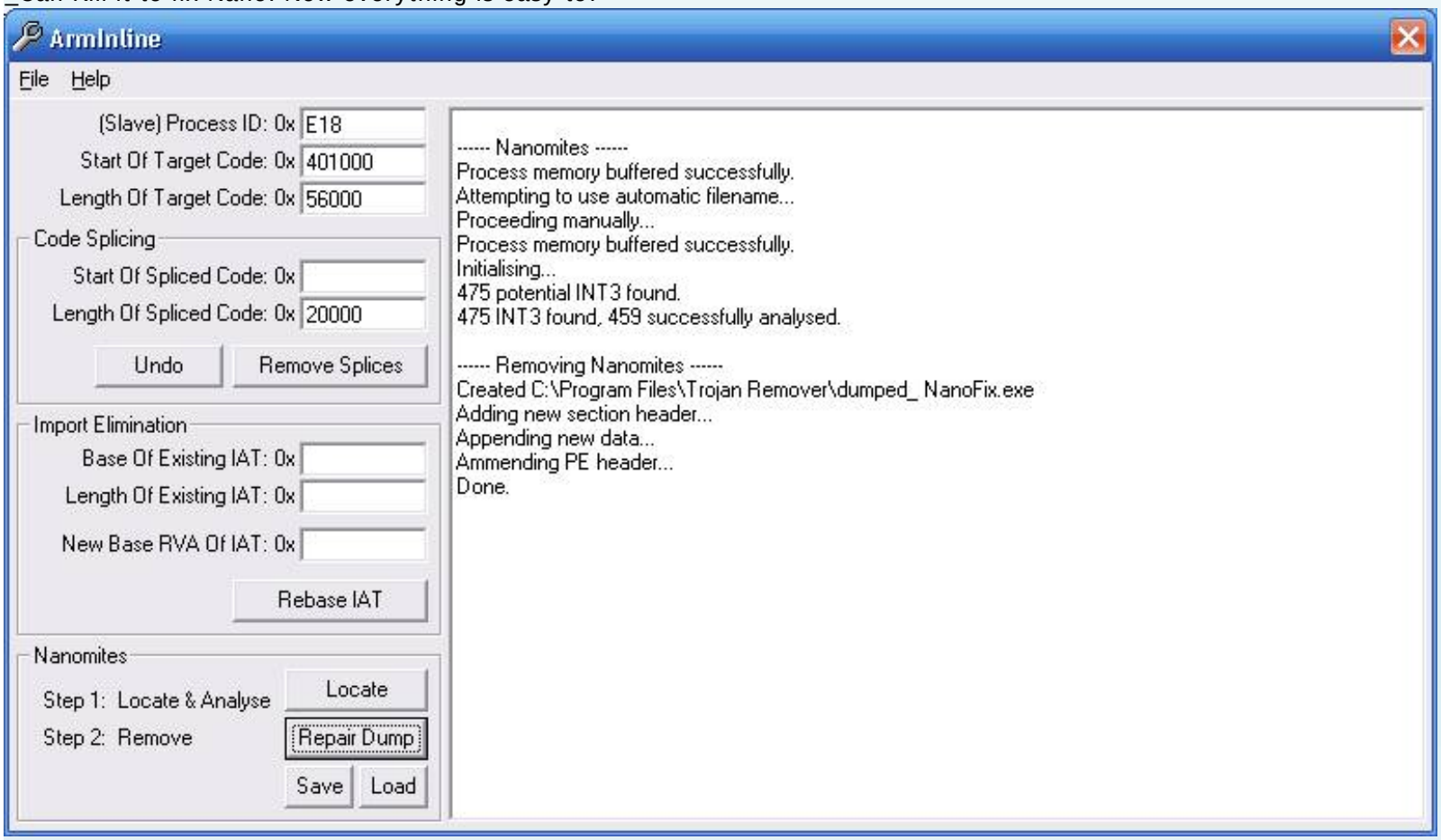
_Co Nanomites. Using ArmInline to fix the computer to suspend notice:



File Dumped.exe create a process debug format blocker to prevent it:



_Can Kill it to fix Nano. Now everything is easy to:



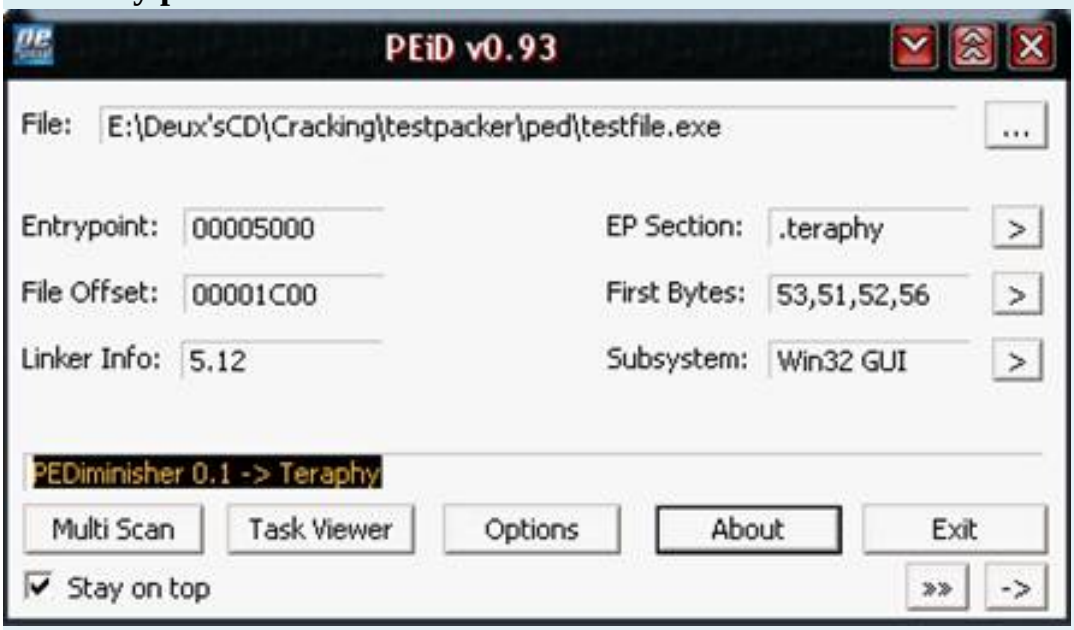
_Run:

_Bye!
Hacnho (http://hacnho.exetools.com)

Unpack manual PEDiminisher 0.1 -> Teraphy

Tool: - 0.93 PEID: detect packer.
- OllyDebugger (OllyDump plugin): Look for OEP, dump.
- ImpRec: FixIAT

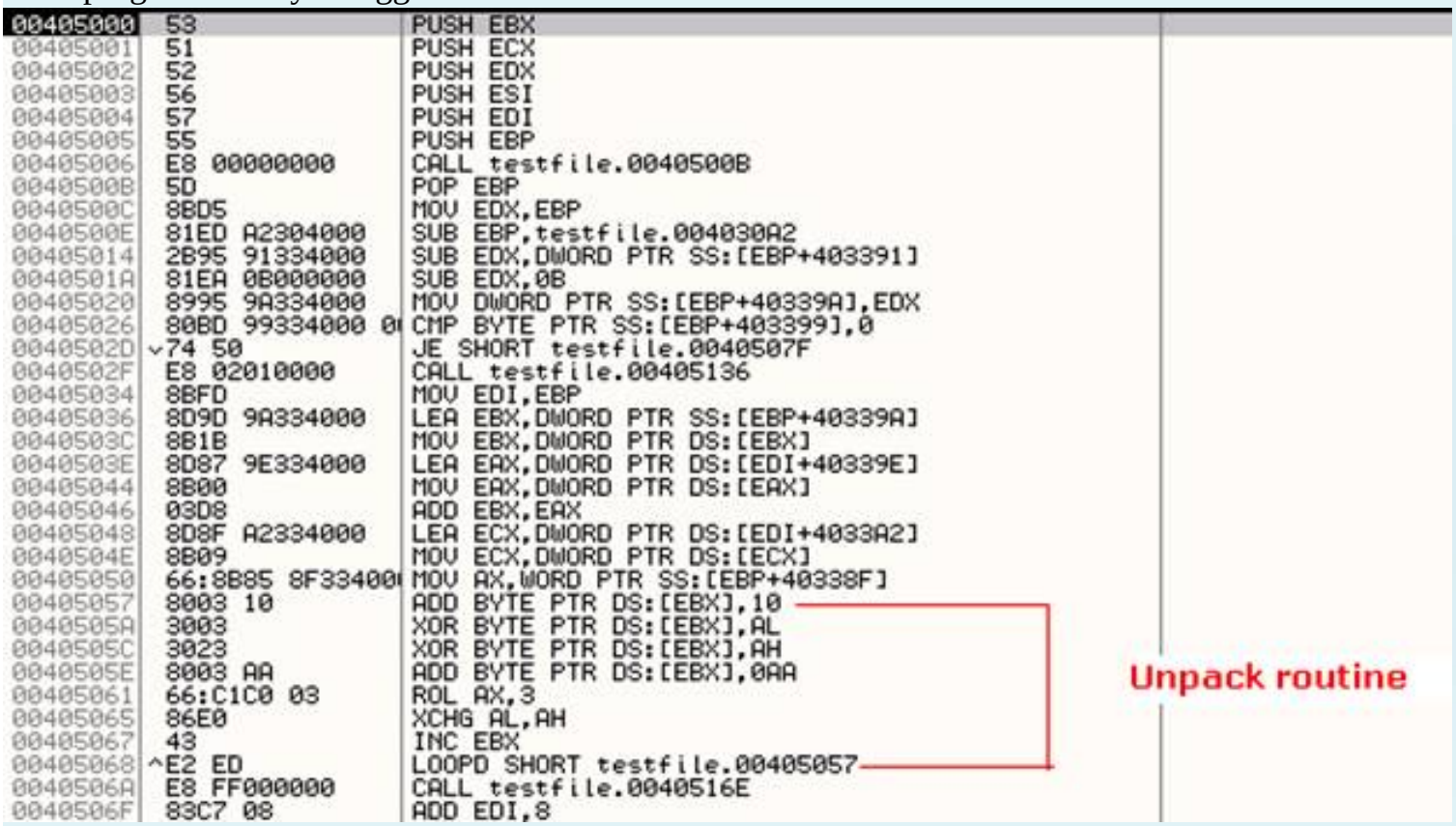
I-Identify packer:



II-unpack:

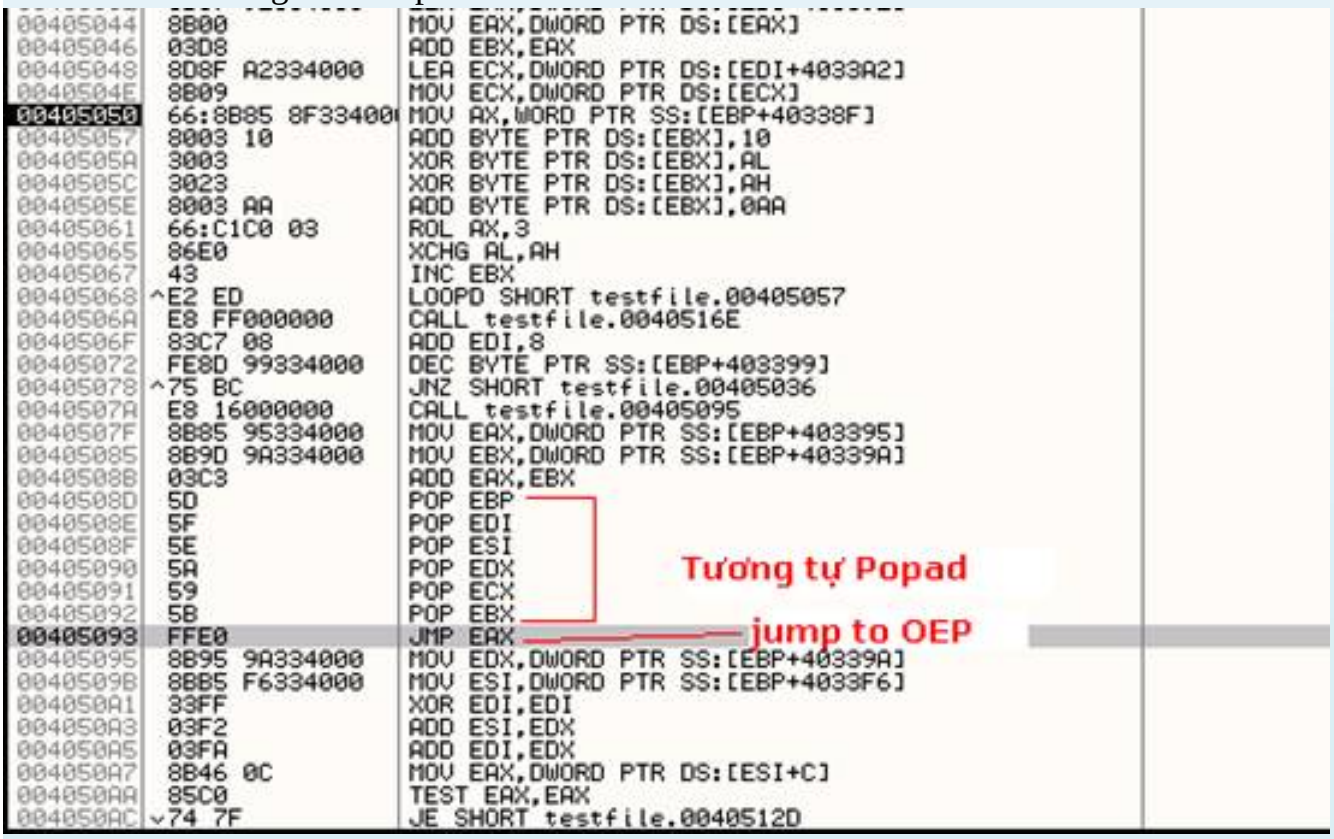
1) Find OEP

Load program to Ollydebugger.



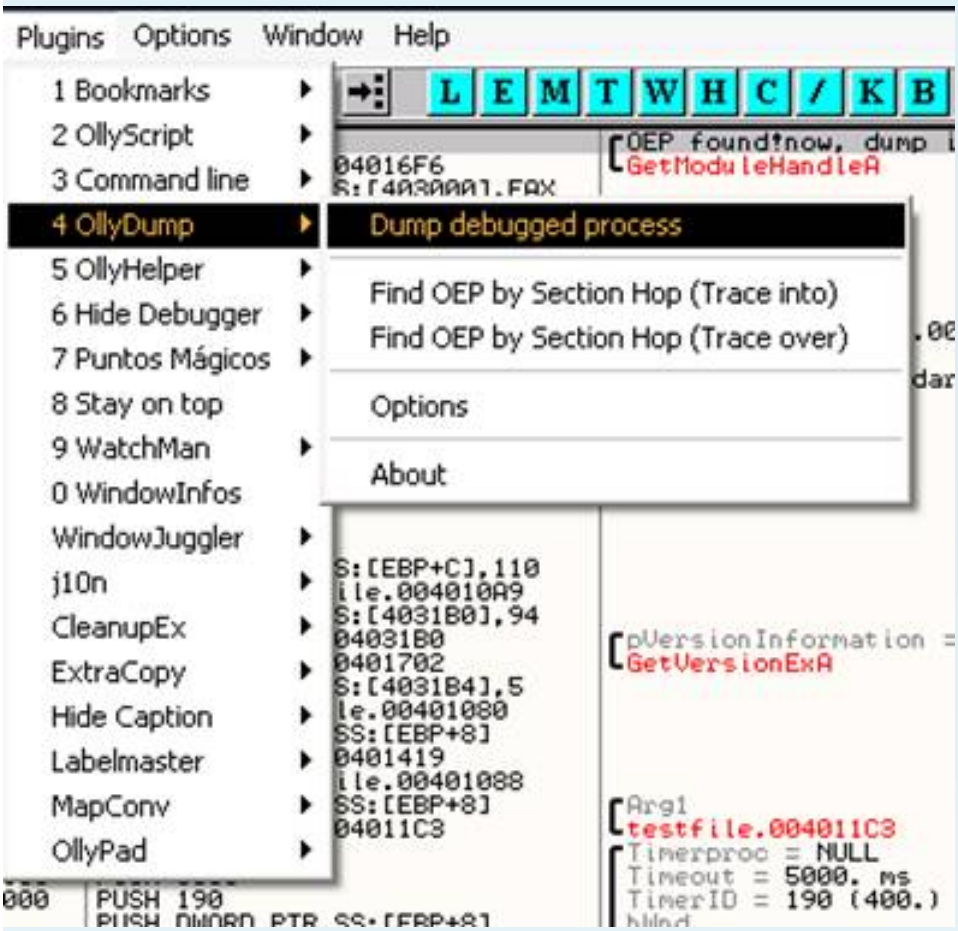
As seen above, will have 1 loop as the work is unpacking code into memory, after unpacking will complete

implementation.
So let's trace through the loop and see this view:

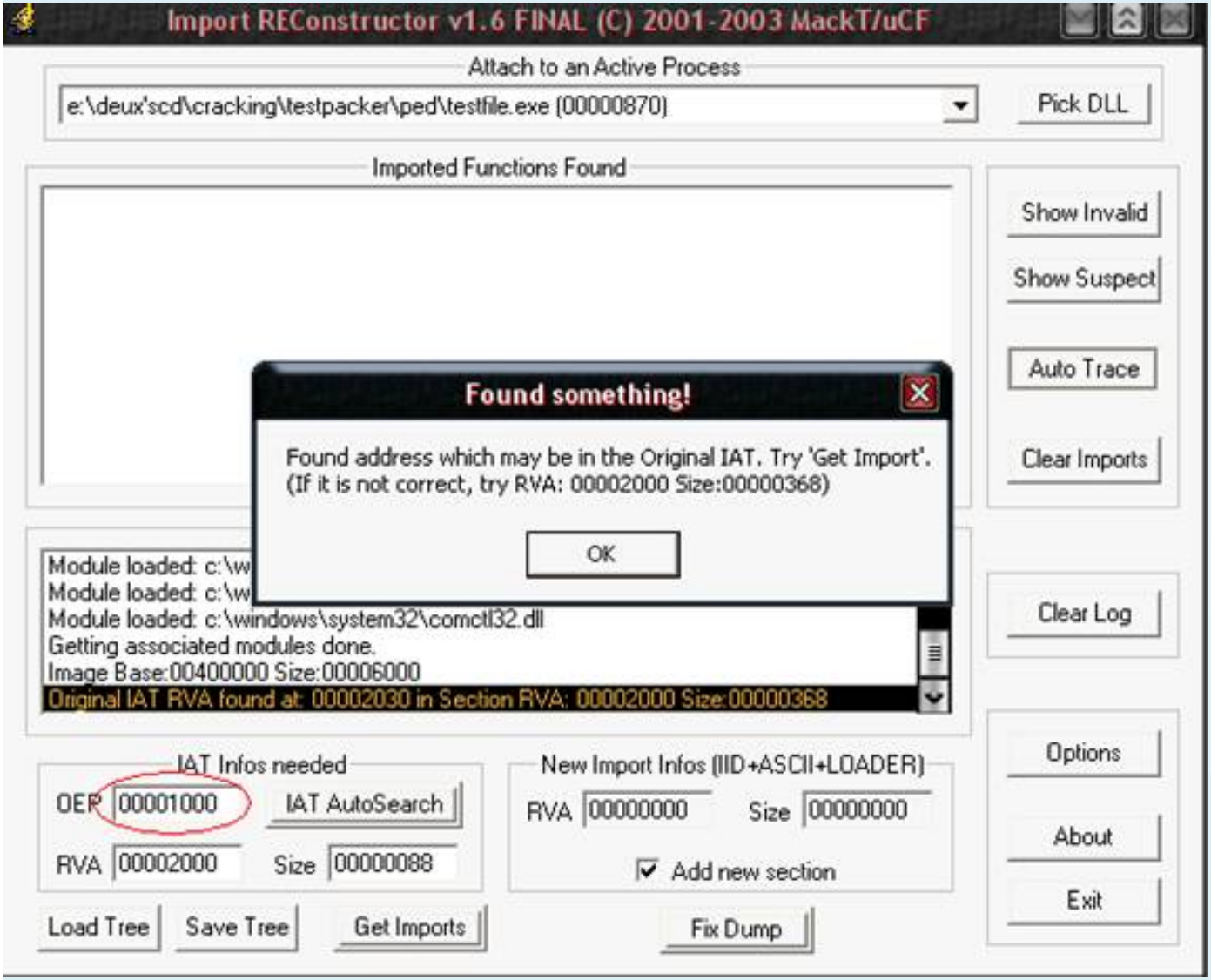


In 00405093, F8 to trace to the OEP.

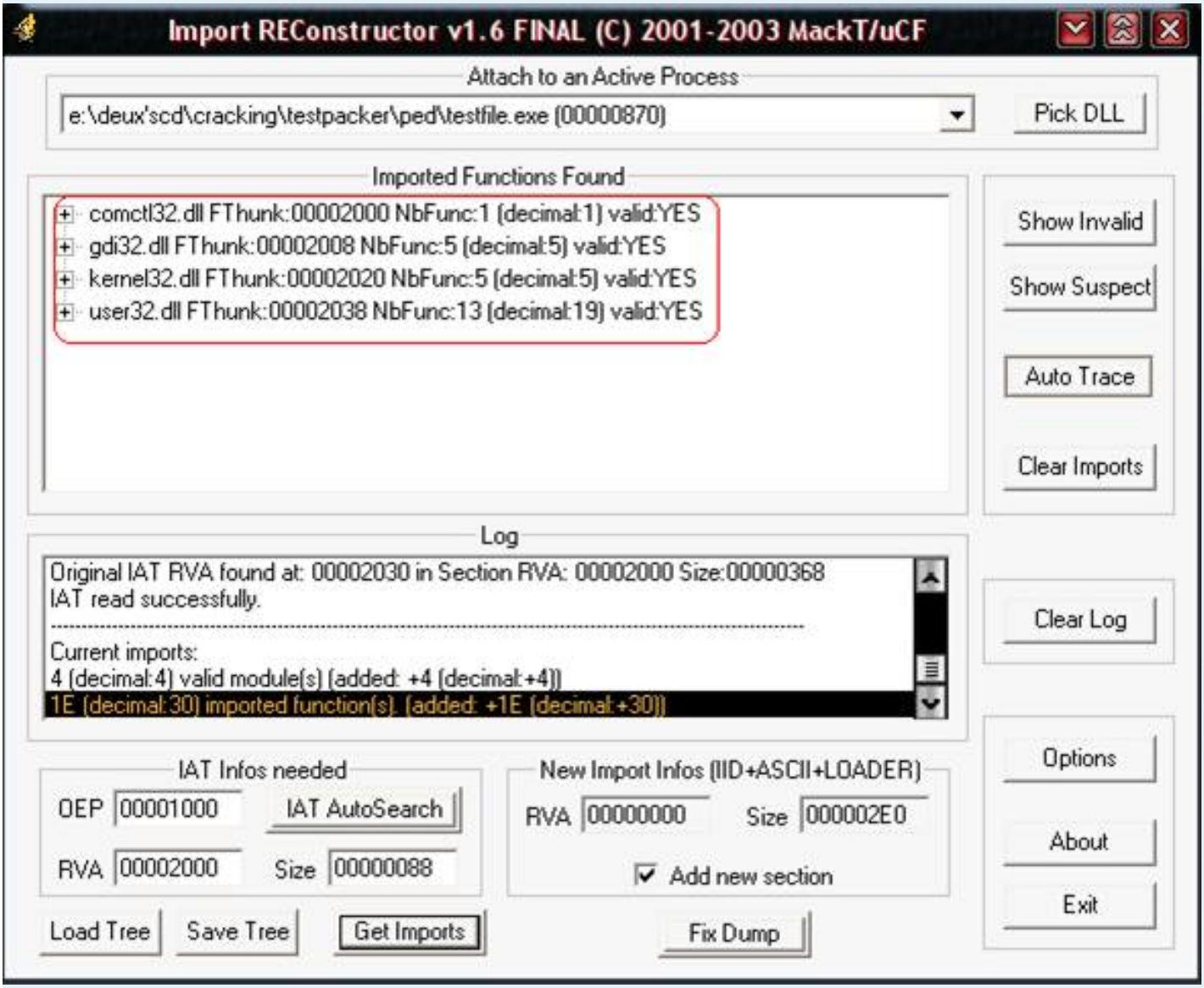
2) dump and IAT Fix:



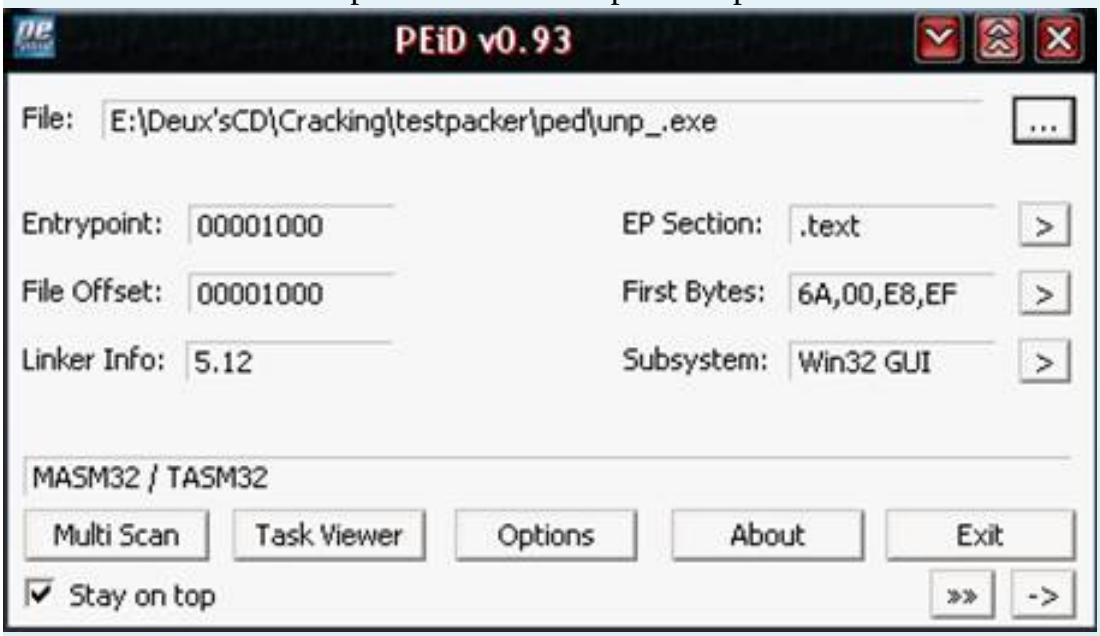
After the dump and save the file, open ImpRec up, select the exe file is run:



Enter OEP found t h a t IAT à Auto Search Get Imports:



Now fix to fix IAT dump file for vua dump is completed.



Conclusion:

Authors of the packer used Push Pop chant and write instead of using PushPad and Popad, but in general is simple. Can see similar Aspack.Sau unpack the code to use memory eax jump to jump to OEP

Tutorial by Deux.
Contact me: deux@surfy.net
Reverse Engineering Ascossiation: www.reaonline.net
EOF ---------- ---------- ----------

-Ni hao ma (What is washed), today Tàn per referral to a Communication tut that Mo đắc quite interested. Chà là be heard to chiêu *CopyMEM II + Debugblocker* our unpack the Armadillo, but as first loss failed to have a chance to do. Tự stop gã Takada sent a soft ***XP Tools*** is it, should be six per tut 4 of the tools that hacnho training. Preparation has also not make more of the series wa benina film about **GetRight 5.** Finally also completed. But the time ni *CopyMEM II + Debugblocker* may perimeter of the wá that gòi per ko should focus on but it simply is thằng Crack XP Tools. This is also a soft per xuc relatively perfect from the first hour (missing code keygen only).

Try-wa of tools, including 23 soft Tool by it, like love to see Mo, which is the most appropriate function Delete information extant of a soft is not uninstalled completely. Wa tut this is mainly to review the vulnerabilities of the security program, then you try to text code for soft solidified home. Which, together make up .... wo keng leng leng keng ...

Unpack and Crack Full XP Tools version 4:58

http://www.xptools.net/

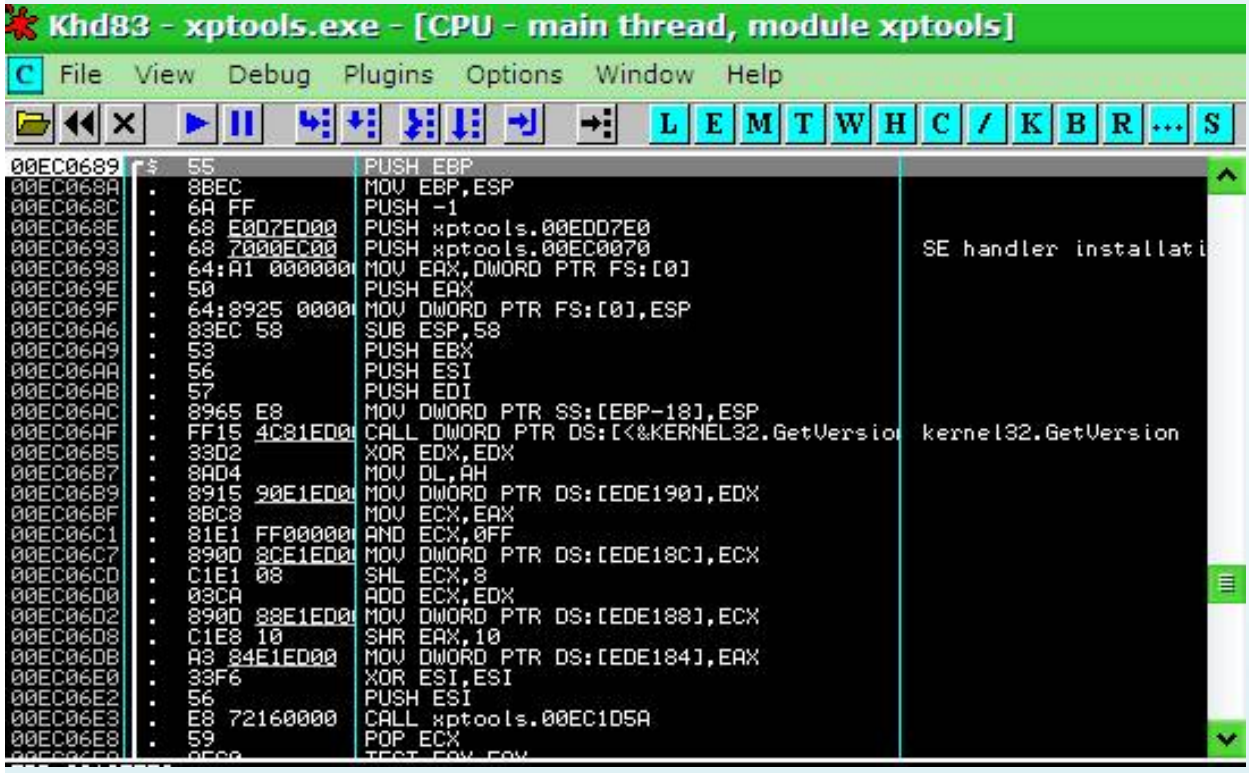
Protection: Armadillo with CopyMEM II + Debugblocker

Tools: OllyDBG Lord PE ImportREC CFF Explorer PUPE 2002 and OllyScript with Magic Jump Finder (for Armadillo Detach from Client

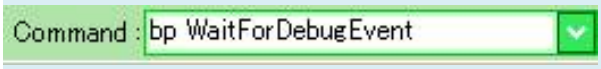
I / unpack:

1/Defeat CopyMEM II

The Options need for Olly tut just like then. Load soft to do:



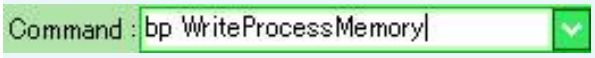
-Type:



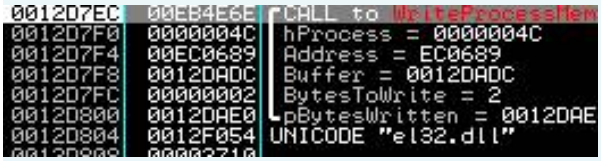
-F9, break:

-NGO down, remember that ni:

-Ctrl-F2 (Restart), to type:

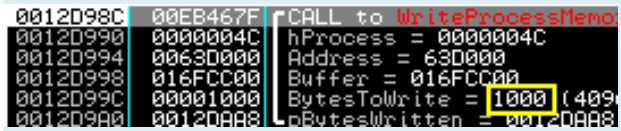


F9-1 play:



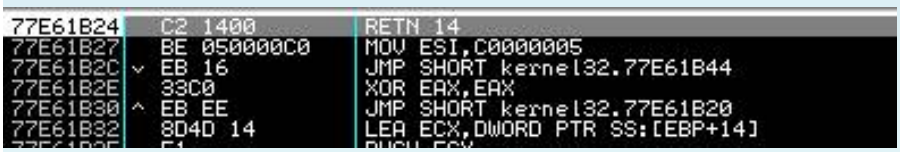
The F9-2:

The F9-3:

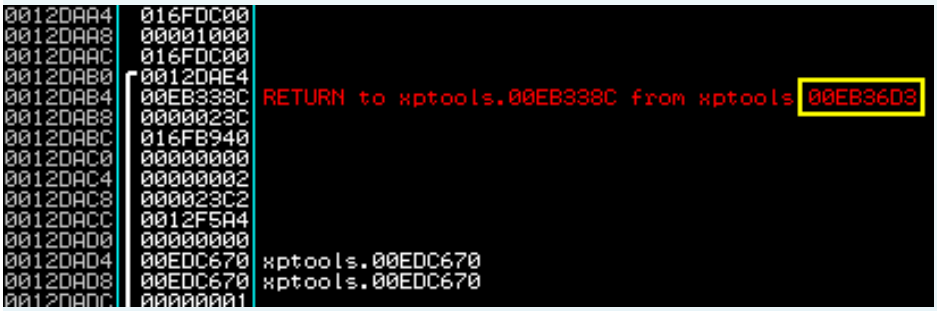


Signs 1000-Bytes target market is CopyMEM II. What the remaining seats Address and Buffer memory per home help.

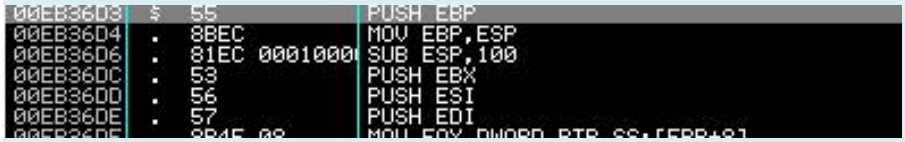
-Ctrl-F9 to order the RETN.



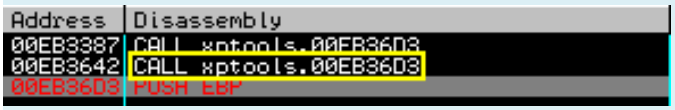
Look under Xeo, drag it down a little time, to this:



-Be sure the address is returned from the back window wa CPU, Ctrl-G to address it:



Ctrl-R-here:



Enter to-Call function 2:

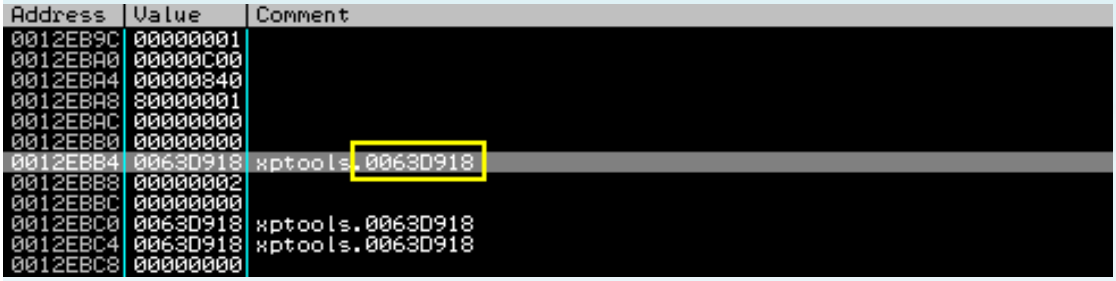
Click-it must submit:

To-2 months ago Patch create unlimited loop. (Patch to EBFE)

+ The first is a patch at EP Buffer month with Father Process:

[EP Buffer = (OEP child process - Address3) Buffer3 +] (formula and called temporary)

** With *OEP child process:* the small pDebugEvent the top ko, dump in the window, Ctrl-G will see to it OEP:



** Address3 and Buffer3 have been stopped at the BP *WriteProcessMemory 3 times.*

So EP-Buffer here = (63D918 - 63D000) 16FCC00 + = 16FD518 (the number of each machine Buffer3 each other, even each installation is each other, only child OEP process of installation time is similar)

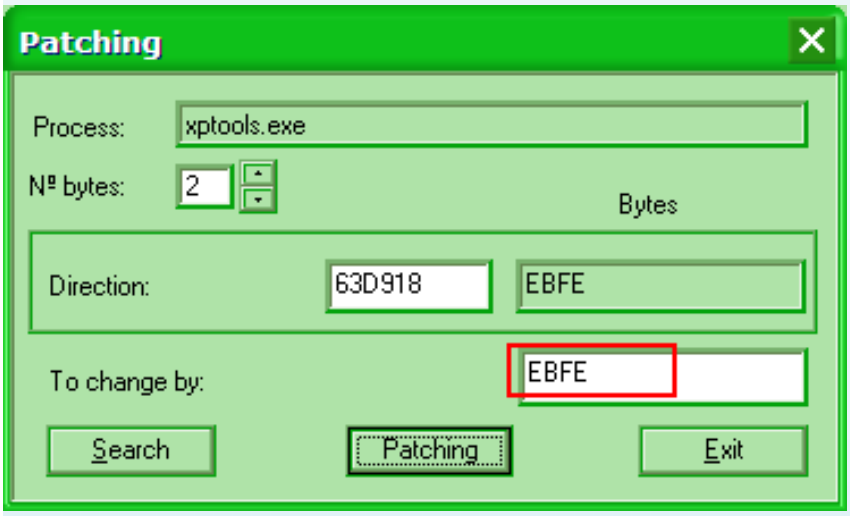
-Ctrl-G to that (in the window dump) and the 558B Patch EBFE. Or PUPE also.

+ How 2: we are always in every patch of OEP child process, such as how to find the OEP (OEP = 63D918), but need more of it PID, choose Attach:

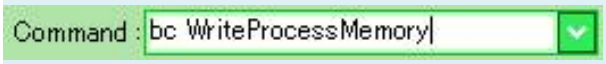
Open-choose 2, because as with the 1 after Defeat DebugBlocker, word will get a NAG error, although still to be done but do not like Mo NAG it.

-Collect enough information, open up PUPE 2002 (2 hours, the force is used only ni, ko is Ctrl-G):

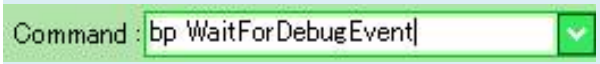
Often-child process PID is located on the PUPE. Select Patch it:



Close-call PUPE, Olly any way back, remove bp:

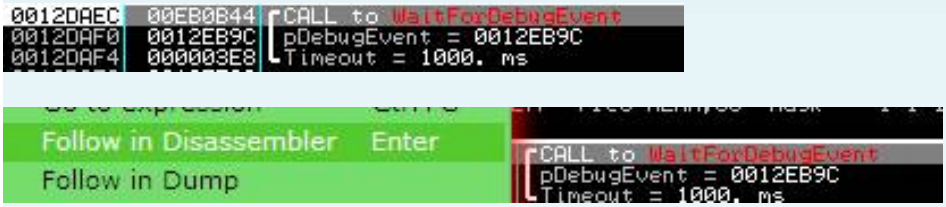


-Next:



F9-play:

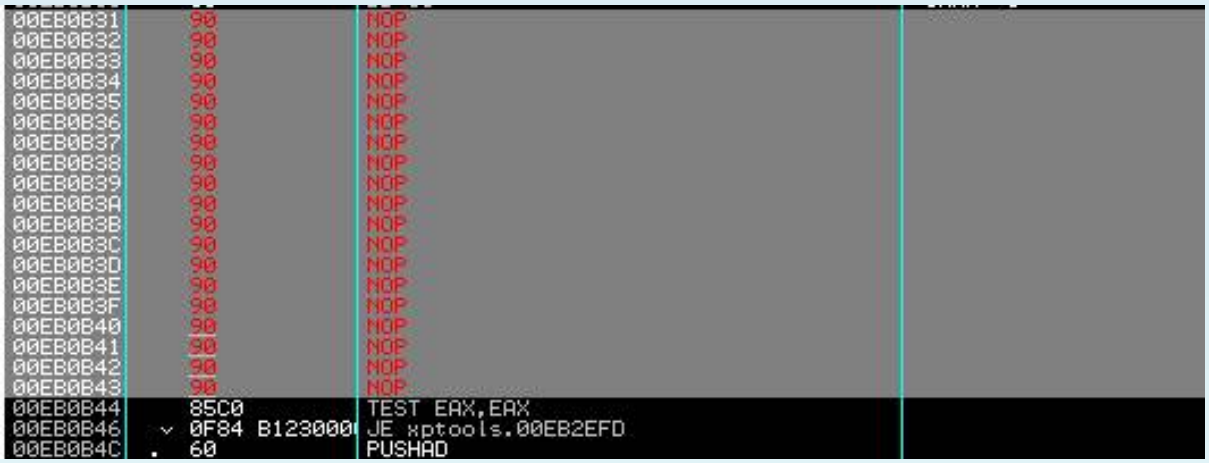
Down-NGO, and Click to *Follow Dissambler:*



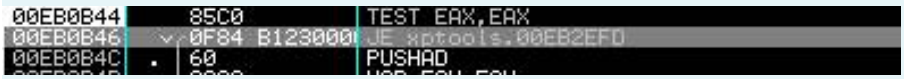
One-to:

Fill out tui-ni to submit it:

-Yes:

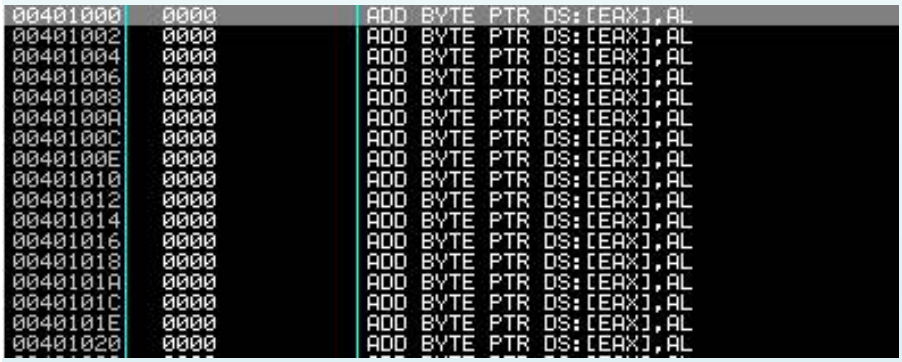


- New orders origin immediately TEXT EAX, EAX:

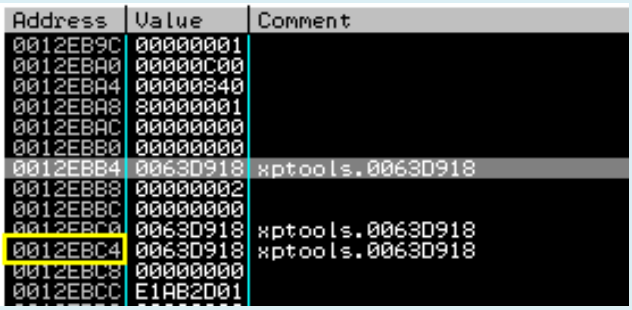


Patch-time Mr. JE below:

At the command-JMP has Patch, Enter to go to 401,000:

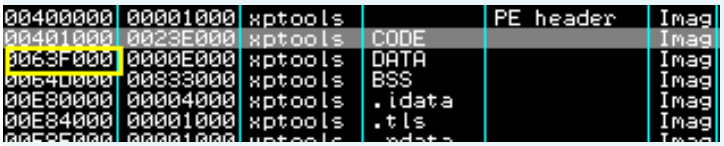


Ngo-time window to dump:



Patch-class order with the corresponding Address:

-Alt-M, more information:

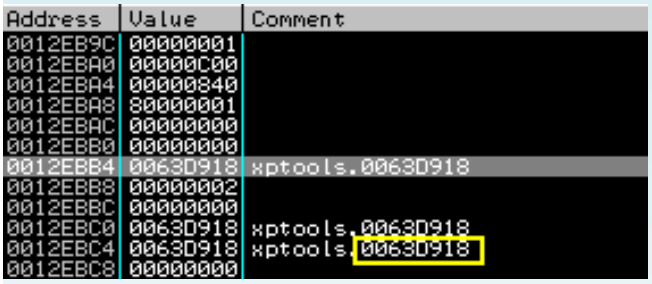


Back-patch, the text can be for any area with Cmp in 3 areas are small, because they are starting from a value of 400,000 (the value that we will modify below), then they are public 1000 from the same:

Back-seat TEST EAX, EAX:

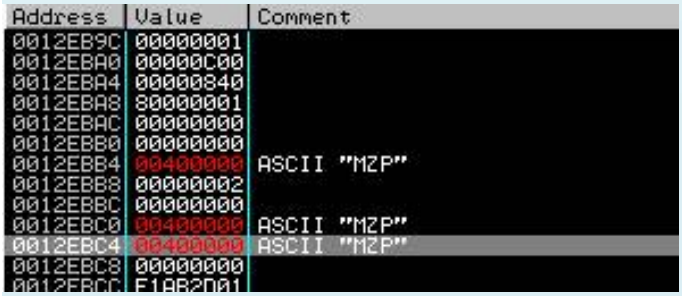
Remember Address in-command filed, back to 401,000, Patch (NOP remember a few more things for the good):

Time-to do the end, the window is still a dump ni must do:

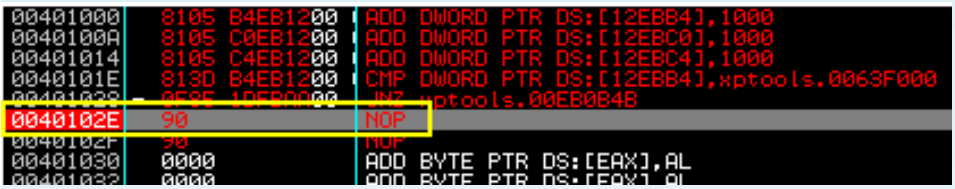


Click-to Modify each month and 400,000 of them (MZP):

-Done:



Now a set-BP immediately NOP commands:

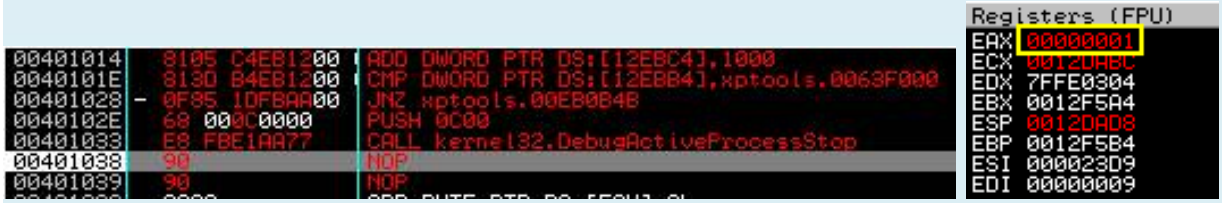


-If you want to check the Trace, the lower BP may place orders immediately JNZ to see the value is added to the questions in order to increase the like, then find speed for me to order this subject NOP to a large degree that we bring to compare me in order Cmp.

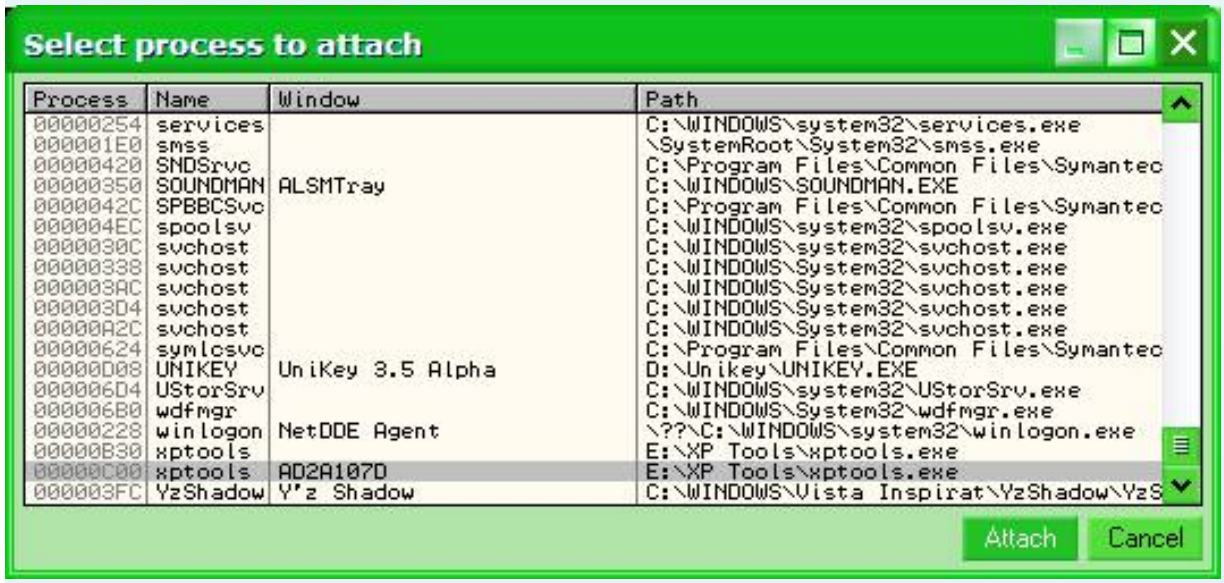
-Now press F9, a long, break it in order NOP:

The hour-always thoroughly DebugBlocker ship, remember PID process but the child, any patch:

Patch-Trace to complete the order wa any CALL:

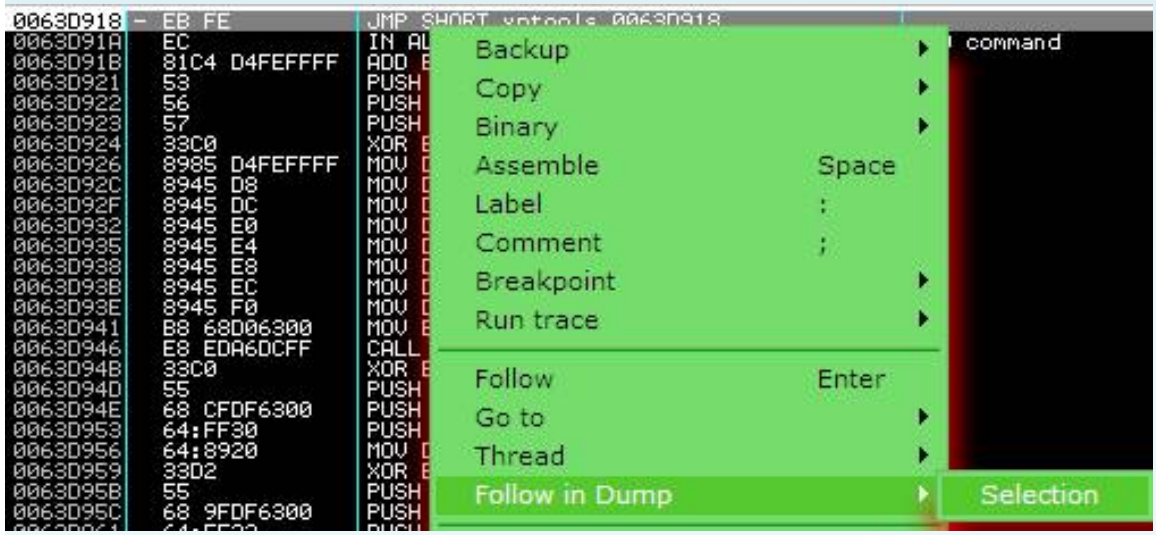


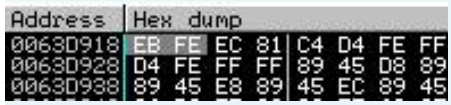
Open-more Olly other Attach child process to do:



-F9, F12 and Alt-C to return to the CPU:

Click-to dump --- Follow it:





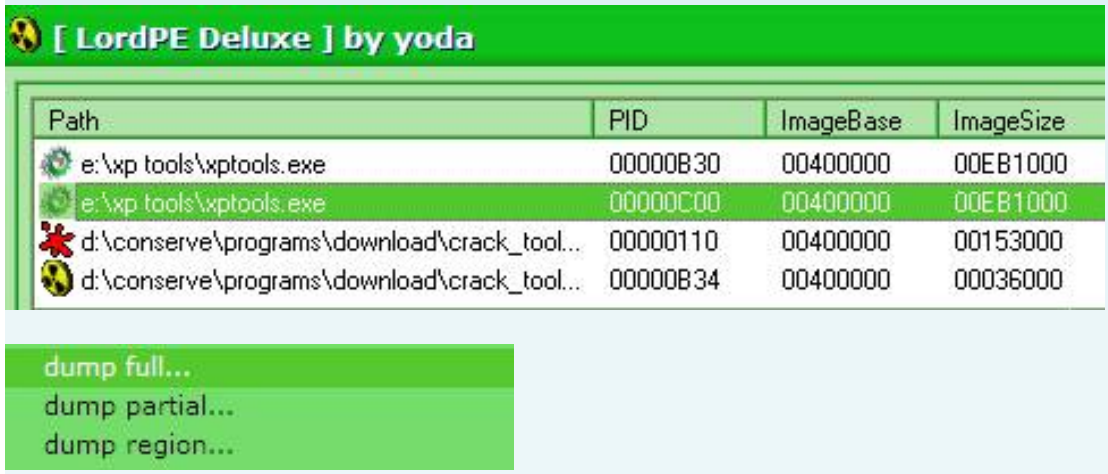
Patch-old EBFE as -> 558B:

```
Address  Hex dump
0063D918 55 8B EC 81 C4 D4 FE FF
0063D928 D4 FE FF FF 89 45 D8 89
0063D938 89 45 E8 89 45 EC 89 45
```

In-CPU:

```
0063D918   55              PUSH EBP
0063D919   8BEC            MOV EBP,ESP
0063D91B   81C4 D4FEFFFF   ADD ESP,-12C
0063D921   53              PUSH EBX
0063D922   56              PUSH ESI
0063D923   57              PUSH EDI
0063D924   33C0            XOR EAX,EAX
0063D926   8985 D4FEFFFF   MOV DWORD PTR SS:[EBP-12C],EAX
```

And-dump is the Lord of PE chiêu dump Full Ta kiếp:



Full-dump it. These Close Olly time. In Olly's child process, from OEP, dom down to see the command CALL:

```
0063D918   55              PUSH EBP
0063D919   8BEC            MOV EBP,ESP
0063D91B   81C4 D4FEFFFF   ADD ESP,-12C
0063D921   53              PUSH EBX
0063D922   56              PUSH ESI
0063D923   57              PUSH EDI
0063D924   33C0            XOR EAX,EAX
0063D926   8985 D4FEFFFF   MOV DWORD PTR SS:[EBP-12C],EAX
0063D92C   8945 D8         MOV DWORD PTR SS:[EBP-28],EAX
0063D92F   8945 DC         MOV DWORD PTR SS:[EBP-24],EAX
0063D932   8945 E0         MOV DWORD PTR SS:[EBP-20],EAX
0063D935   8945 E4         MOV DWORD PTR SS:[EBP-1C],EAX
0063D938   8945 E8         MOV DWORD PTR SS:[EBP-18],EAX
0063D93B   8945 EC         MOV DWORD PTR SS:[EBP-14],EAX
0063D93E   8945 F0         MOV DWORD PTR SS:[EBP-10],EAX
0063D941   B8 68D06300     MOV EAX,xptools.0063D068
0063D946   E8 EDA6DCFF     CALL xptools.00408038
```

-No Trace to it, you just press Enter to:

```
00408038   50              PUSH EAX
00408039   6A 00           PUSH 0
0040803B   E8 F8FEFFFF     CALL xptools.00407F38
00408040   BA 08F16300     MOV EDX,xptools.0063F108
00408045   52              PUSH EDX
```

Lai-a CALL command below:

```
00408038   50              PUSH EAX
00408039   6A 00           PUSH 0
0040803B   E8 F8FEFFFF     CALL xptools.00407F38
00408040   BA 08F16300     MOV EDX,xptools.0063F108
00408045   52              PUSH EDX
```

-Enter into it:

```
00407F38 - FF25 4403E800  JMP DWORD PTR DS:[E80344]
00407F3E   8BC0           MOV EAX,EAX
00407F40 - FF25 4003E800  JMP DWORD PTR DS:[E80340]   kernel32.LocalAlloc
00407F46   8BC0           MOV EAX,EAX
00407F48 - FF25 3C03E800  JMP DWORD PTR DS:[E8033C]   kernel32.TlsGetValue
00407F4E   8BC0           MOV EAX,EAX
00407F50 - FF25 3803E800  JMP DWORD PTR DS:[E80338]   kernel32.TlsSetValue
00407F56   8BC0           MOV EAX,EAX
```

-Here we go to find small IAT, Click right, Follow dump:

Being-in window dump:

```
Address  Value     Comment
00E80344 018191DF
00E80348 77E7ADA9  kernel32.GetModuleFileNameA
00E8034C 01816363
00E80350 77DE63B1  ADVAPI32.RegSetValueExA
00E80354 77DD2410  ADVAPI32.RegQueryValueExA
00E80358 77DE6CF4  ADVAPI32.RegQueryInfoKeyA
00E8035C 77DD229A  ADVAPI32.RegOpenKeyExA
00E80360 77DE696D  ADVAPI32.RegFlushKey
00E80364 77DE6A68  ADVAPI32.RegEnumValueA
00E80368 77DE6F8B  ADVAPI32.RegEnumKeyExA
00E8036C 77DE65D4  ADVAPI32.RegDeleteValueA
00E80370 77DE68E2  ADVAPI32.RegDeleteKeyA
00E80374 018196C8
00E80378 01819308
00E8037C 77DD2FCD  ADVAPI32.OpenProcessToken
00E80380 77DF582F  ADVAPI32.LookupPrivilegeValueA
00E80384 77DD4E99  ADVAPI32.GetUserNameA
00E80388 77DD31FD  ADVAPI32.AdjustTokenPrivileges
```

Search Start-IAT, pulled up:

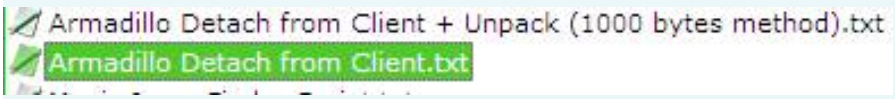
```
00E80208 77E7A7DF  kernel32.GetCurrentThreadId
00E8020C 77F525CA  ntdll.RtlDeleteCriticalSection
00E80210 77F75690  ntdll.RtlLeaveCriticalSection
00E80214 77F755DE  ntdll.RtlEnterCriticalSection
00E80218 77E7A745  kernel32.InitializeCriticalSection
```

-In fact this IAT, we get the name of a memory function is then, can then use ***APIAddress*** for it, but here only the per always remember the IAT Start Address is: 0E80208

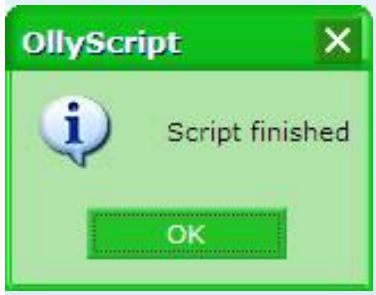
-Why do not open up to fix ImportREC IAT always, because the files are done Fix the Crash dump her Kon oi.Do the value of this table IAT damaged many seats (text can be checked by clicking to select HEX to 16, so some value is then compared with the table that we IAT *Defeat DebugBlocker* a normal)

Magic Jump 2/Find and Fix IAT:

Close all-time, open a different light in Olly, soft load again. Then run ***Scripts Armadillo Detach from Client (DebugBlocker*** to kill it that):

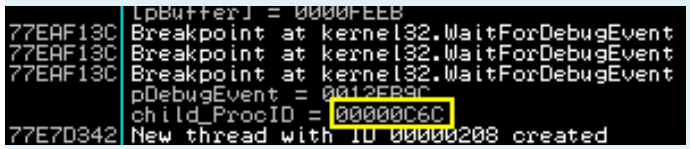


Wait-it makes complete:

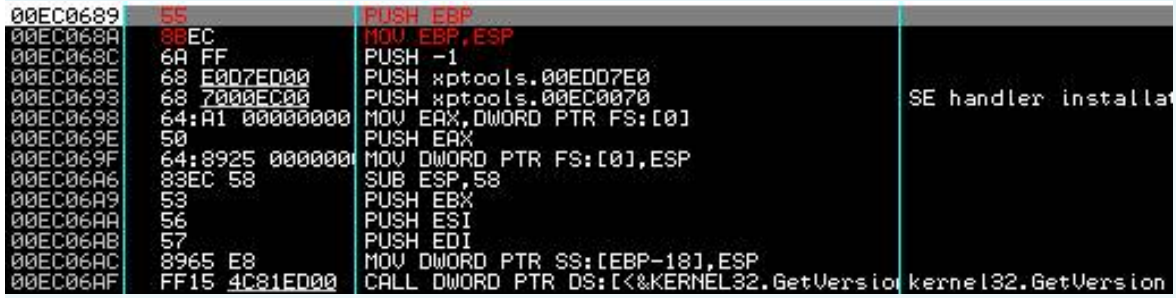


-The script for this I was working out better than ***Armadillo DETECH Plugin*** for Olly. With the script only after having failed form *Anti-Breakpoint,* which is the form you need to move BP down a bit when set bp *WriteProcessMemory.* So we should not rely on script that make it understand how to use that in time to save time.

So-ready Attach the child process and then, a quick process PID's child with Alt-L:

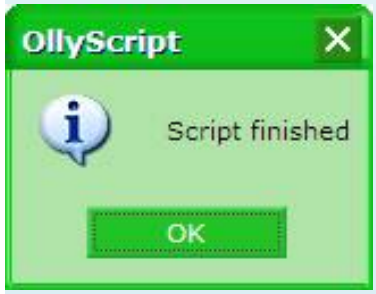


Open-more Olly another child Attach process, Follow dump and change into EBFE 558B, such as call ha:



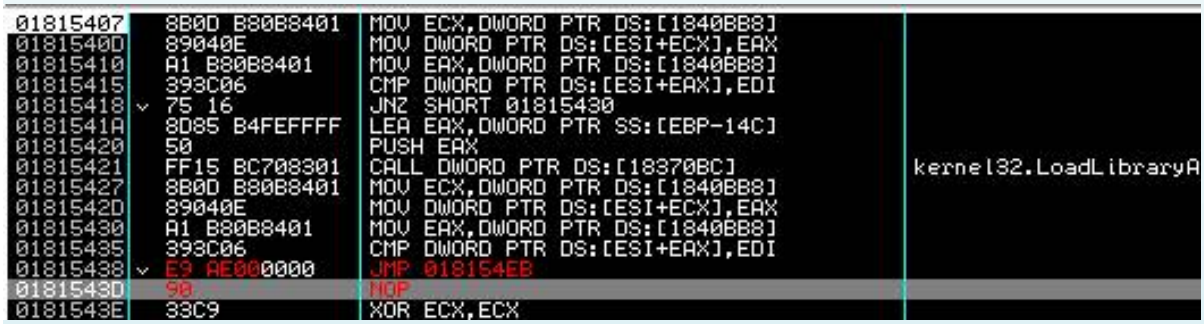
-Now you will find Magic Jump and Fix it. Maybe *"he GetModuleHandleA",* then press F9 xiu tired to sign "kernel32.dll", Magic Fix and Jump. Fortunately Scripts is now once again demonstrated the effectiveness of them. Using ***Magic Jump Finder Scripts:***

-Patiently waiting for some:

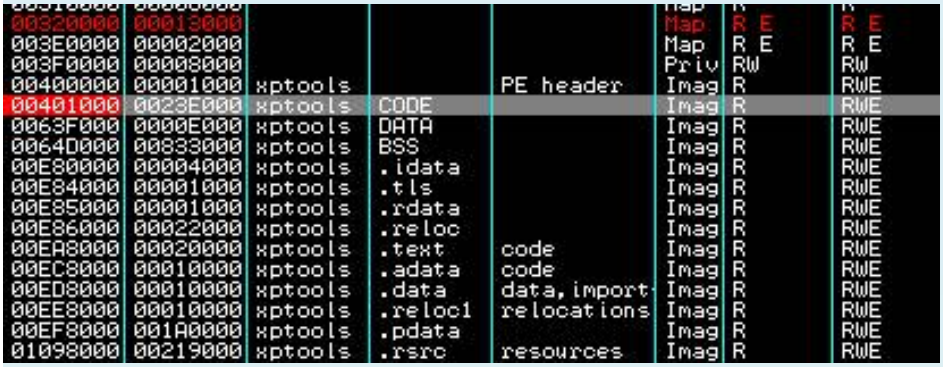


Stop-packages:

Fix to-do:



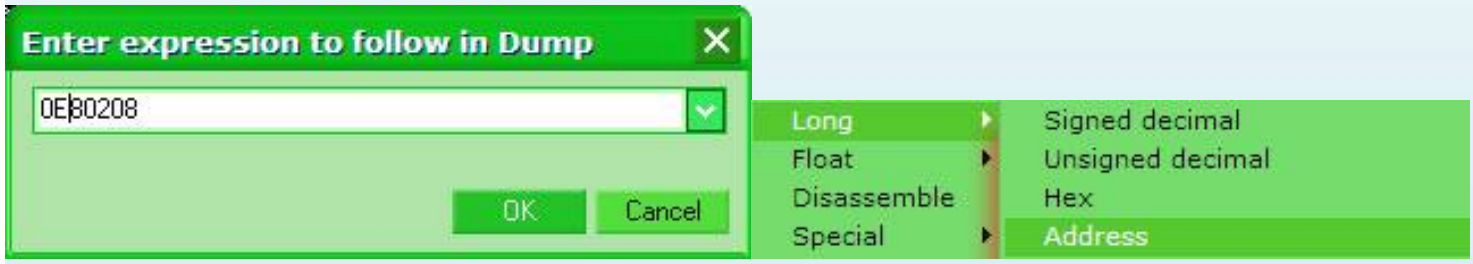
Remember to-Hardware BreakPoint BP is also considered the home to remove, then press Alt-M, set up a BP:



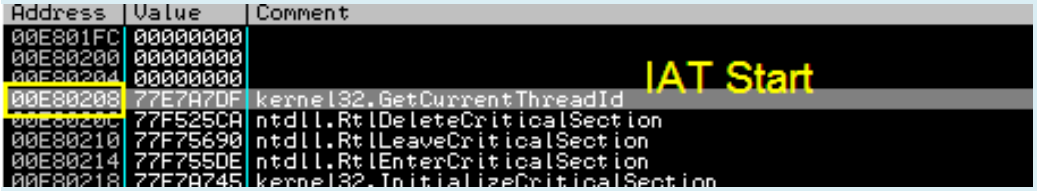
-Shift-F9 vuuuuuuu:

The OEP-gòi but this time the code here has been encrypted, which is why we dump the Lord with Full PE when to OEP ko encrypted before (this time thằng still *CopyMEM* II). But IAT is set by this month ko damaged, because if the corrupt soft ko can be perimeter Run a).

-Remember the address of IAT Start we find the time, dump in the window, Ctrl-G to it:



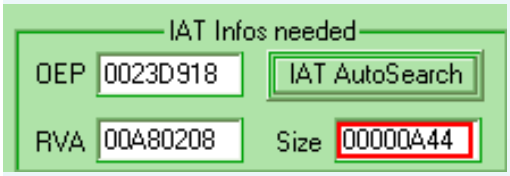
-Choose the viewpoint:



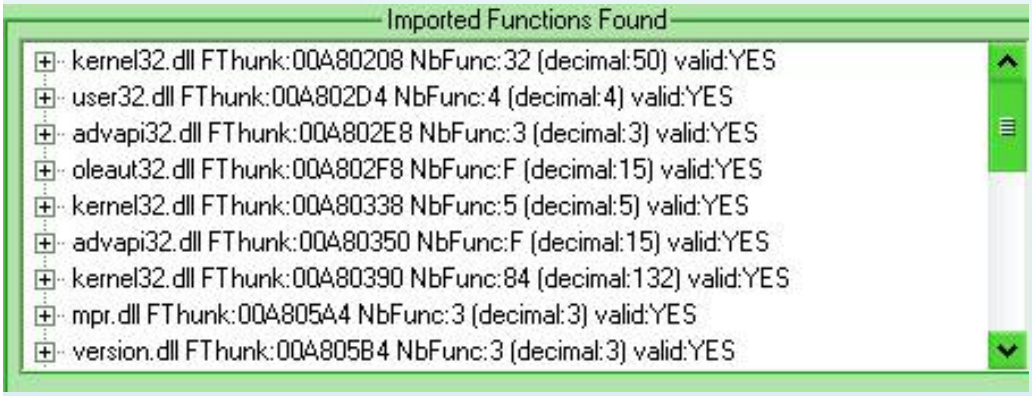
-Now go find a new IAT End, pulling down:

Okie-many number WA, not me nệ profile information, select a little down and die Cuc month that time.

But wait-what more do it without resistance, to put in ImportREC, select child process, and in line 3-D:



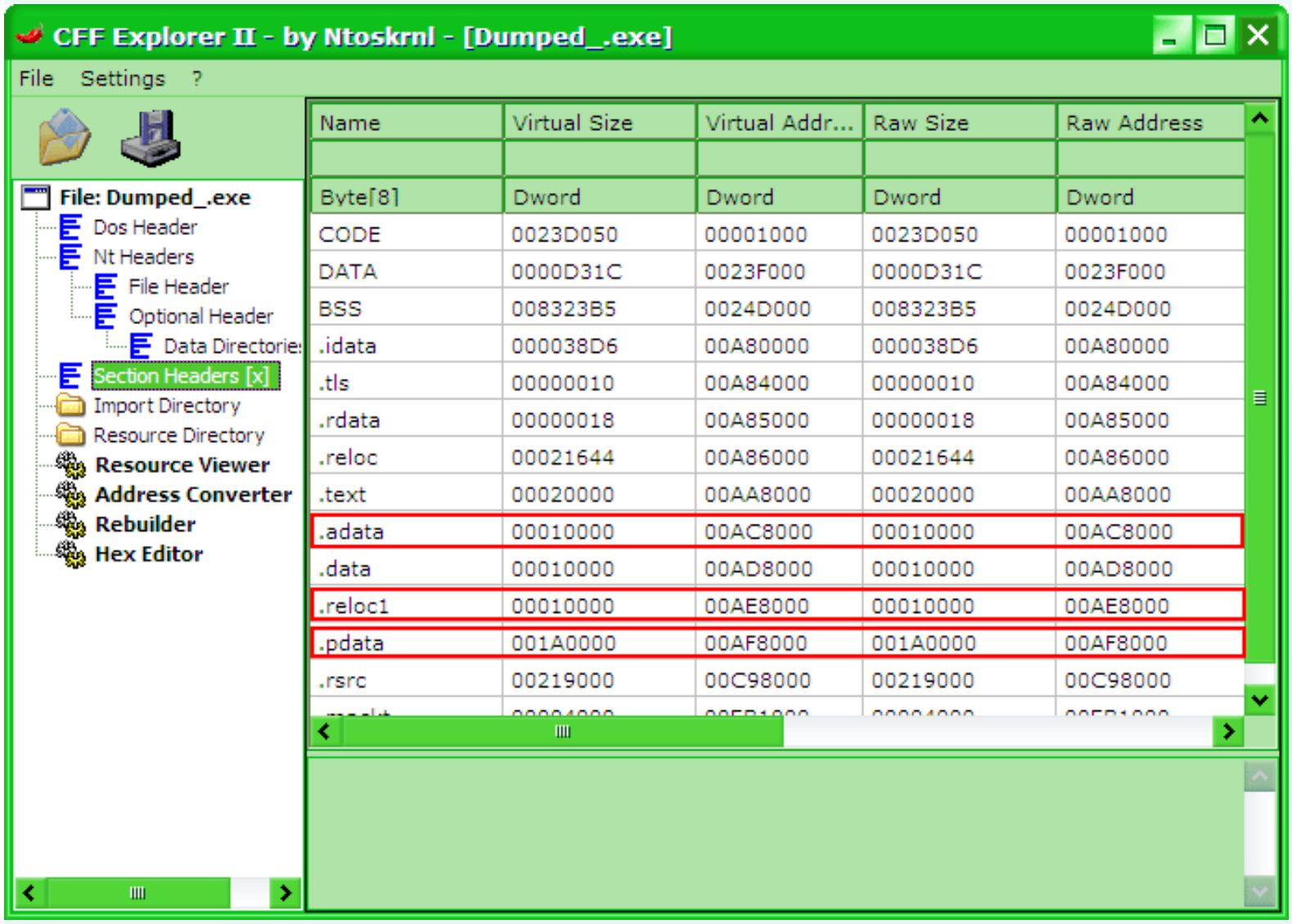
Get-Import, Show Invalid, which has thằng Cut Thunks that month, default default default, the people fell down many turtles, asked: "who want to have under ko?" Gật first dollop:



According to well-kill, dump Fix:

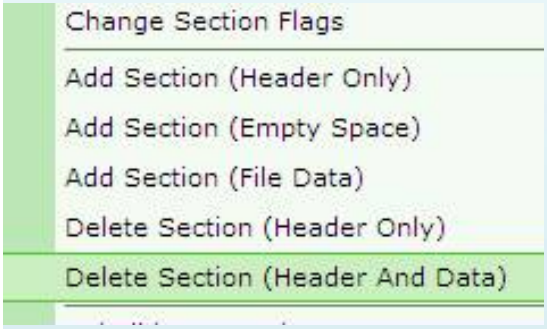
3/Rebuild:

Often Fix-it should dump complete rebuild the file to go a little light. Open CFF Explorer II, to do that:



Name	Virtual Size	Virtual Addr...	Raw Size	Raw Address
Byte[8]	Dword	Dword	Dword	Dword
CODE	0023D050	00001000	0023D050	00001000
DATA	0000D31C	0023F000	0000D31C	0023F000
BSS	008323B5	0024D000	008323B5	0024D000
.idata	000038D6	00A80000	000038D6	00A80000
.tls	00000010	00A84000	00000010	00A84000
.rdata	00000018	00A85000	00000018	00A85000
.reloc	00021644	00A86000	00021644	00A86000
.text	00020000	00AA8000	00020000	00AA8000
.adata	00010000	00AC8000	00010000	00AC8000
.data	00010000	00AD8000	00010000	00AD8000
.reloc1	00010000	00AE8000	00010000	00AE8000
.pdata	001A0000	00AF8000	001A0000	00AF8000
.rsrc	00219000	00C98000	00219000	00C98000

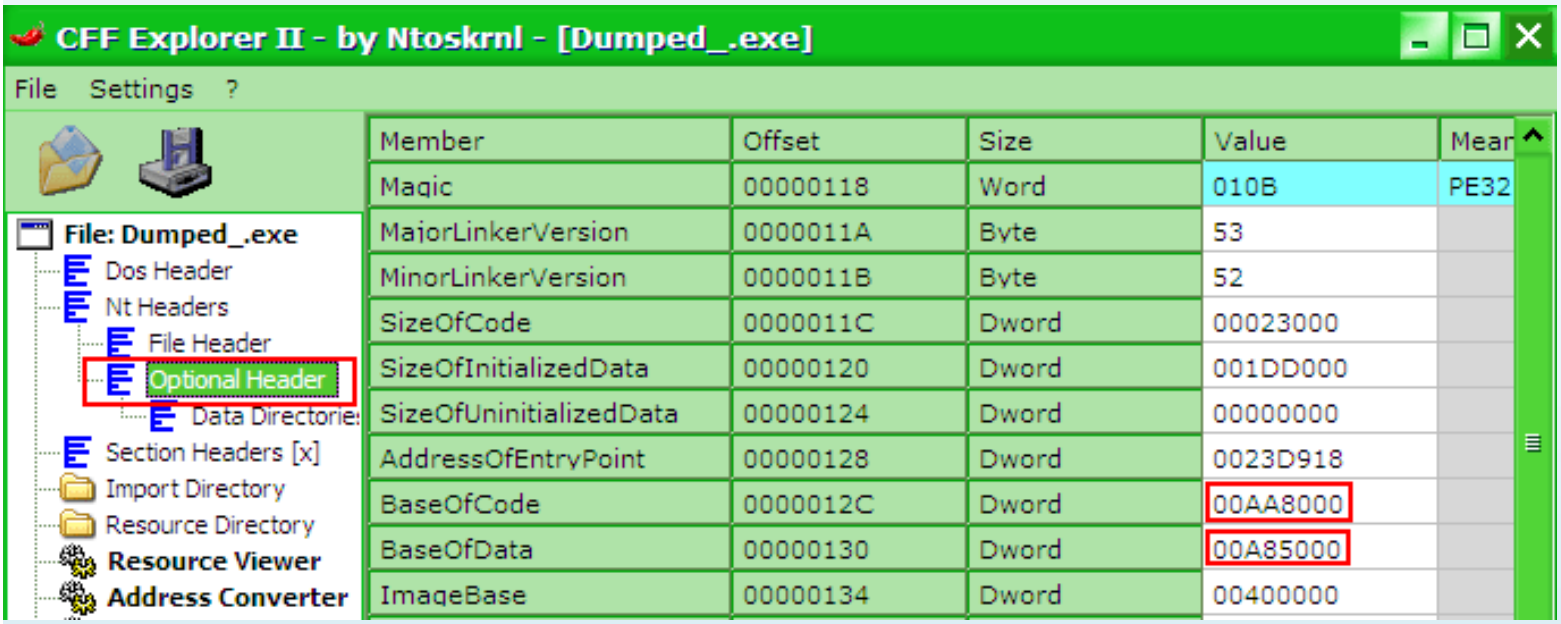
-Delete Section dùm to do:



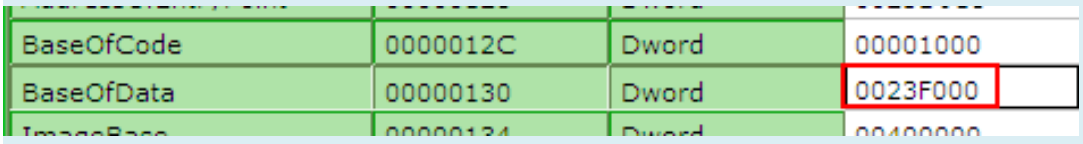
-Yes, but remember to add a few ni:

CODE	0023E000	00001000	0023D050	00001000
DATA	0000E000	0023F000	0000D31C	0023F000
BSS	00833000	0024D000	008323B5	0024D000
.idata	00004000	00A80000	000038D6	00A80000
.tls	00001000	00A84000	00000010	00A84000
.rdata	00001000	00A85000	00000018	00A85000
.reloc	00022000	00A86000	00021644	00A86000
.text	00030000	00AA8000	00020000	00AA8000
.data	001C0000	00AD8000	00010000	00AC8000
.rsrc	00219000	00C98000	00219000	00AD8000
.mackt	00004000	00EB1000	00004000	00CF1000

-Base is still adjusting of Code, the Data to Analyze little later is correct:

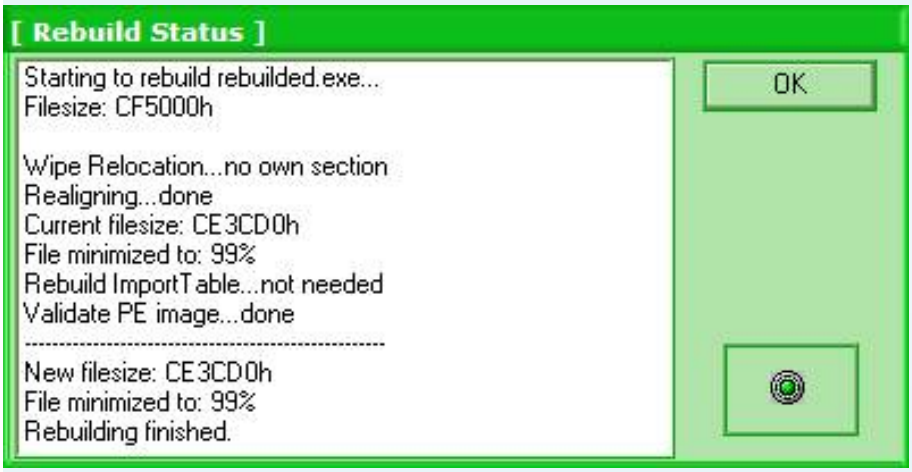


Edit-on position with flash flash that the number per marked:



The per-Save with the name:

PE-Lord tuốt the shell, but according to rebuild PE, select the file **rebuilded.exe:**



Tuong-stars, and rebuild from 14MB to 12 MB only. Damn it!

Run-hand or do the time, run the **rebuilded.exe** koi, he he:

Play-...., also from 3 days to 2 days, so we have to struggle throughout a day and a night not. The unpack for that

still has the limit on the stars, the stars ..? ? Ko stars, watch the 3 hour:

-Phu, so we unpack DONE! gòi home. Hope that people understand more about *CopyMEM II*, especially Takada, so that the parents let go, do them a promotion to the higher level, parents see the filing ngộ also very high, including the code to take oach oach. ..

-To ensure that many here feel the warm summer formula for self-stop stop lãng per xet. Ko where, what Tàn per the text that you get know, a we will go to the Crack 2 is more soft this. Open go buy meet interview. What you sit to relax a little time.

Now this late-WA, also bít ko ko Interviews again, but .. chaaaaa from offish seen in torrential lốc, gas business focused around the newsstand, including to air in her home that sap from rolling Interviews 're radiate, mừng chairs. Hold book stories, but not yet open but saw dao gas, gas for flood ngào end, shrine of, hix hix, kì this sure-to book stories always rách WA, put out to open the can do, Ummmmm ... ... Mo hair blowing purpose is to, first brain chao island, chairs ... Rammmm per seat automatically stop pop-up after a dao by Lam Vu pin to Ve Thập Nuong pin that as per the per ... aaa .... again at the Cuu wifeless About ....

II / Cracking Full:

Difficulties-frosted new from Cuu About wifeless with you. Hì hi.

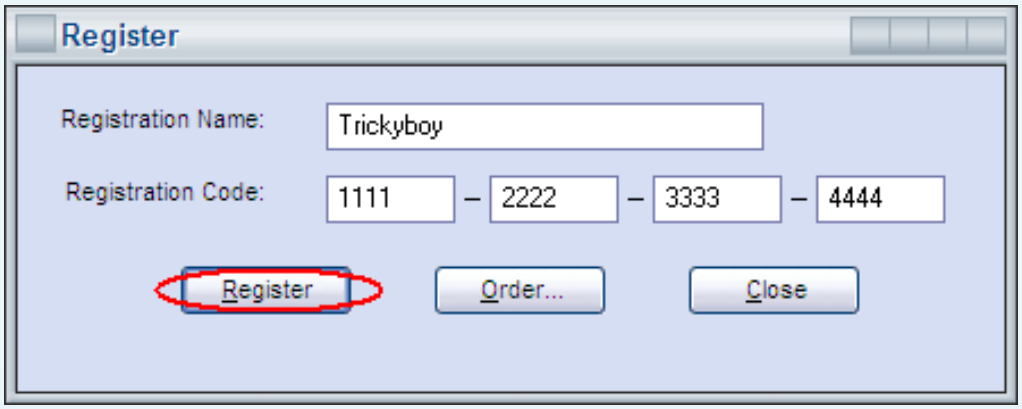
Um-speaking part on the next bit, after unpack, we do not doubt still be soft Crack. It is still counting the time as usual. Thus, from very unpack Ta Ro with the media that the grapes for Tàn reopened falling within the times of a noop. wai Do what now? Ko unpack probably finish it and then sit ngo count all that time?

In fact-here are 2 months, or a patch for it thought we register call, or find a real number Serial (2 hours by easily

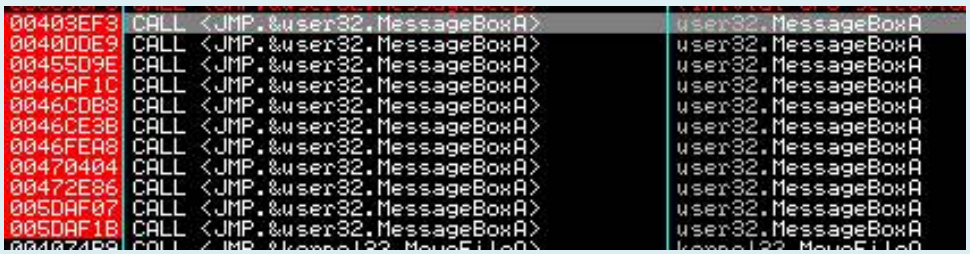
call home for the elderly to buy soft Serial number). But by going tuu so many long wá per bank of the call, only đành Patch:

Soft 1/Patch to use without register:

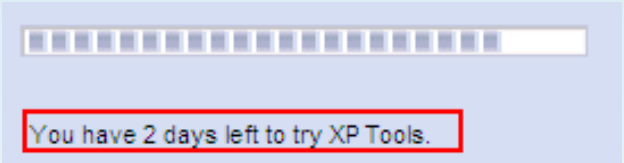
-Whether or Patch what should go away from them as signs of the table registered by Soft. Soft Run, Run during which it stops at POP, the degree to Shift-F9 to Run (perimeter have to press the long-long) and select the name and register with Fake Serial:



Register-Star press that do see it spray the Irak nhỉ, it is now WA, but each death, a new deep cold. So do not use methods against time with Stack of the Moon is then. And with the type ko NAG thèm the way it is set up 2 bp GetDlgItemText children and GetWindowText. But unfortunately the press Register also Cuc thèm break. then we try to set up BP all functions MessageBoxA see:



Multiple-WA, if the number of functions that are more easy ways ni also very congested. Okie, and hope you can start at the Bread for the MessageBoxA function. Tàn per But although that tàn Van Cuong, open i do like the open just like what the soft available:

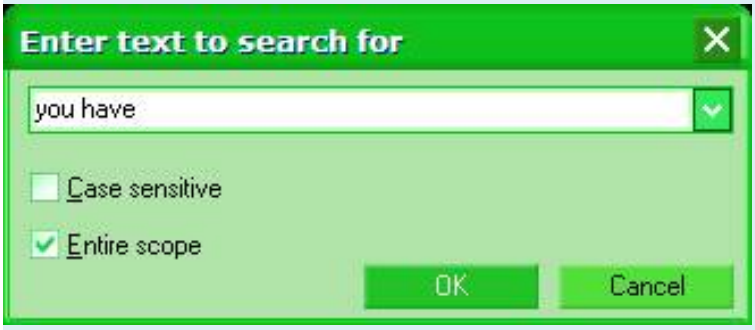


Oooooo-remember ... a few words in the chain only to the memory you have. "Load File **rebuilded.exe** to go:

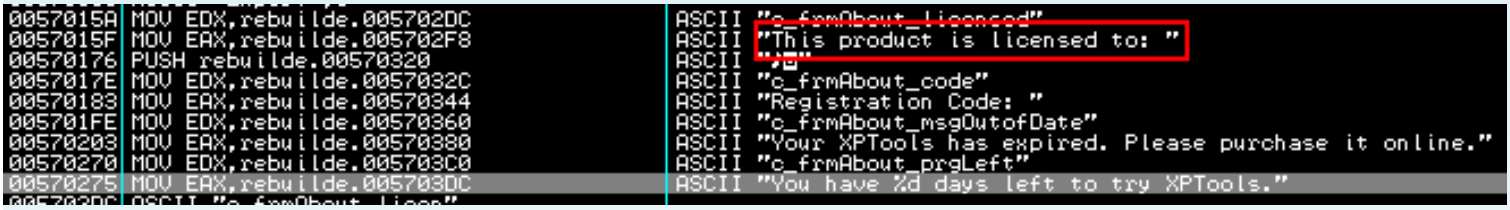
At per-rebuild has emphasized that to fix Base of the Code and Data gòi to do, like Olly hours Text Search String

exactly remember the previous rebuild under Search nha.Con who always want to unpack the files are still raw Xi is but remember to use ***the Ultra String Plugin*** by Olly to Search. Thôi, Search's take:

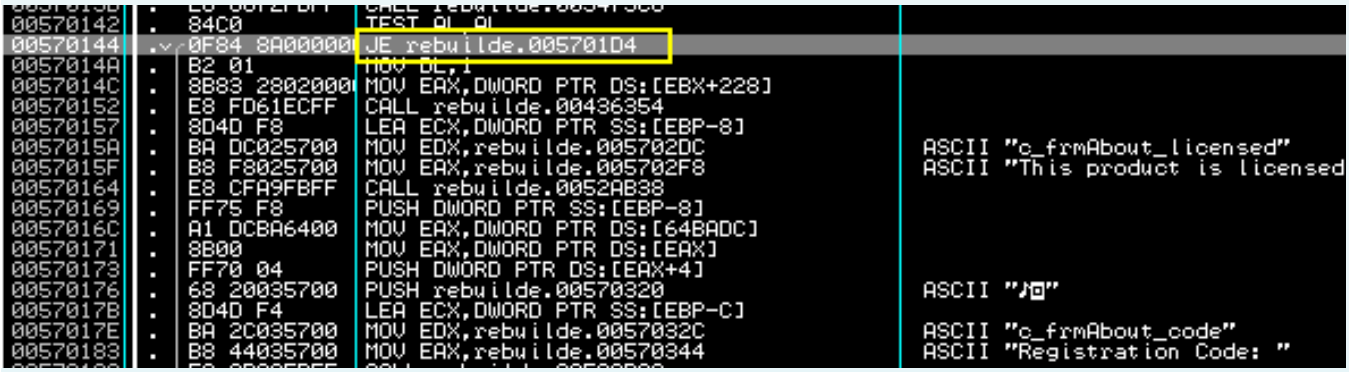
Cuc lóc-Type:



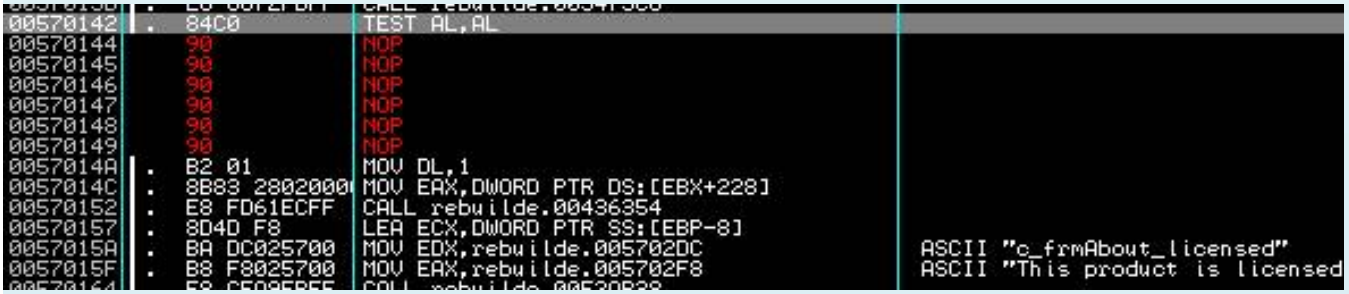
-Phu. They have to chain it. Kĩ looking back to see, what's on. Ái ai, ni a new right is the truth, they support:



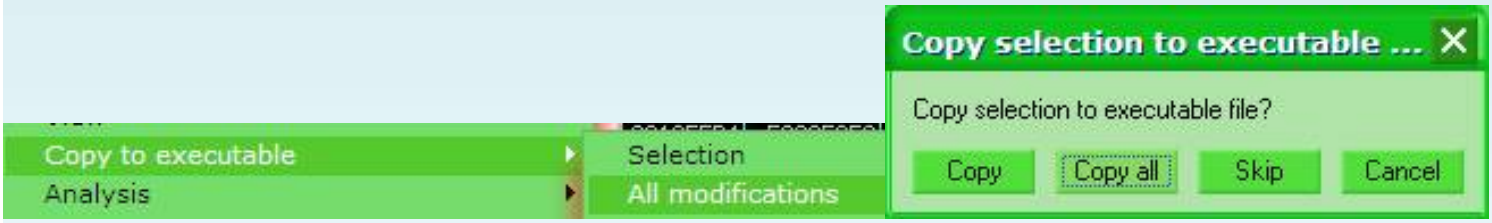
-Enter to have the "licensed", look to see what is on:



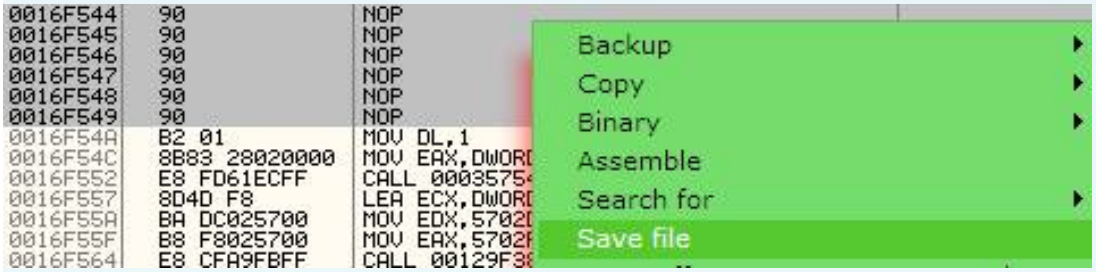
Há-A, where it can check whether we have registered or not, if it has not jump down to the number of days left, if it is to command wa JE and the "licensed to" the name of we Registration Code and more. So, here we do not want to skip it, submit it to:



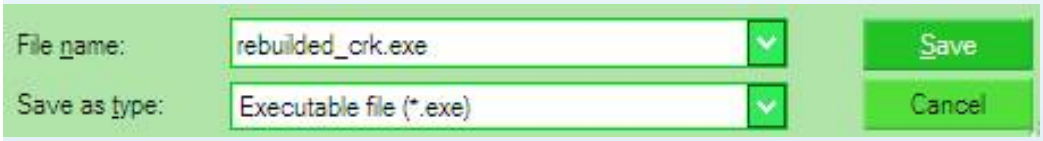
NOP-sent it back to Save a few, Click to:



Lai-Click to continue:



Here per-add a new name, means the hard drive increased 12 MB, actually Damn, per hard drive is only a few hundred megabytes àh.



-Running the new file to do:

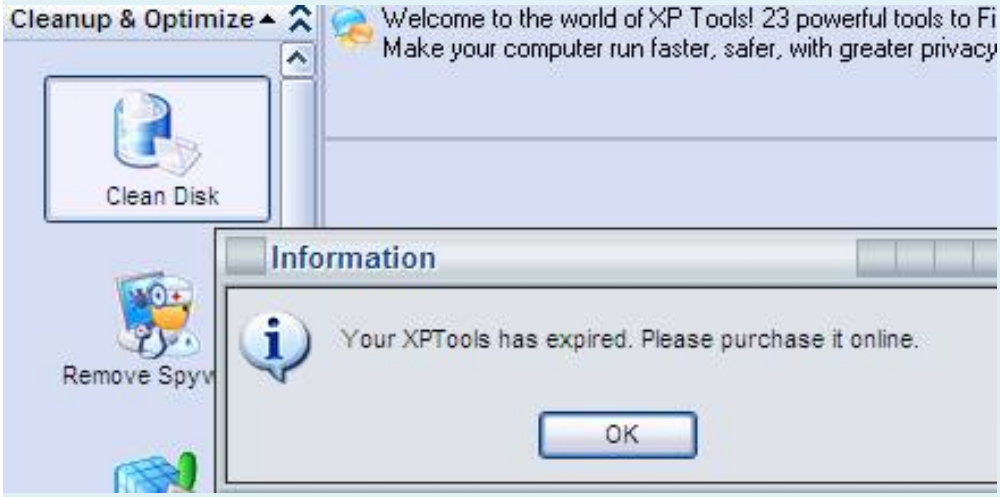
Hì-hi, but no one's name and Registration Code but even stars still comfortable than anything String count back obnoxious. However, when considered to do the count back, it meant that we have not yet registered nhé, time use one of the Cuu wifeless About to go to the future to any of this is most Khac (This Dịch Great Mind and Body Hổng bít first)

Set-up 365 white children:

-Run the file from soft **rebuilded_crk.exe.** Then select:

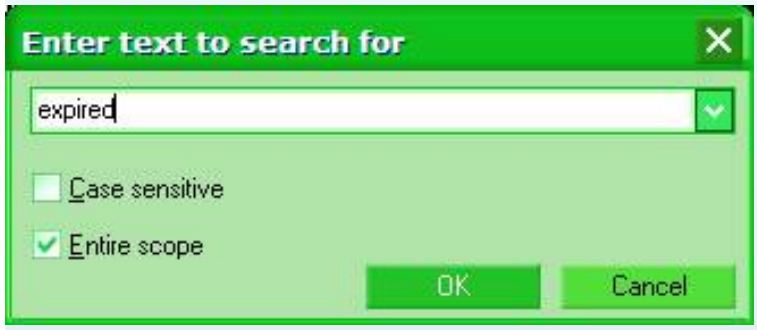
-Dungggggggg .... A break of the first:

Mo-ko be, try to choose a soft view of Tool, Dungggggggg:



- *"It has not, the idea mày mày delicious hả Wiuewi well too in the day"*. Chac sure, do not say Open. Thien ngoai natural property. Are within the same province, again Olly tuốt shell (with **rebuilded_crk file. exe).**

-Okie, NAG and has the task easier as, to some aged Search:



-Tới đây :

```
0056FDEE  MOV EDX,rebuilde.0056FF68   ASCII "c_frmAbout_msgOutofDate"
0056FE03  MOV EAX,rebuilde.0056FF88   ASCII "Your XPTools has expired. Please purchase it online."
0056FEC4  MOV EDX,rebuilde.0056FFCC   ASCII "c_PswError"
0056FEC9  MOV EAX,rebuilde.0056FFE0   ASCII "Incorrect Password."
```

-Nhưng Ctrl-L đi tiếp mấy bước coi có nhiêu thằng :

```
0057015F  MOV EAX,rebuilde.005702F8   ASCII "This product is licensed to: "
00570176  PUSH rebuilde.00570320      ASCII "♫◘"
0057017E  MOV EDX,rebuilde.0057032C   ASCII "c_frmAbout_code"
00570183  MOV EAX,rebuilde.00570344   ASCII "Registration Code: "
005701FF  MOV EDX,rebuilde.00570360   ASCII "c_frmAbout_msgOutofDate"
00570203  MOV EAX,rebuilde.00570380   ASCII "Your XPTools has expired. Please purchase it online."
00570270  MOV EDX,rebuilde.005703C0   ASCII "c_frmAbout_prgLeft"
00570275  MOV EAX,rebuilde.005703DC   ASCII "You have %d days left to try XPTools."
```

-Tiếp:

```
00573983  ASCII "TModuleManager"
00573CBE  MOV EDX,rebuilde.00573FA0   ASCII "c_frmAbout_msgOutofDate"
00573CC3  MOV EAX,rebuilde.00573FC0   ASCII "Your XPTools has expired. Please purchase it online."
00573CF0  PUSH rebuilde.00573FFC      ASCII "http://www.xptools.net/purchase.htm"
00573CF5  PUSH rebuilde.00574020      ASCII "OPEN"
00573D8F  MOV ECX,rebuilde.00574030   ASCII "ModuleManager: ModuleParent not assigned."
00573EC1  MOV EDX,rebuilde.00574064   ASCII "hint_"
```

-DONE !!! , có 3 mạng , nhớ lấy Address của mỗi thằng ,goto tới thằng đầu tiên nào :

```
0056FDEE  > 84DB          TEST BL,BL
0056FDF0  .v 75 30        JNZ SHORT rebuilde.0056FE22
0056FDF2  . 66:A1 5CFF56  MOV AX,WORD PTR DS:[56FF5C]
0056FDF8  . 50            PUSH EAX
0056FDF9  . 6A 00         PUSH 0
0056FDFB  . 8D4D FC       LEA ECX,DWORD PTR SS:[EBP-4]
0056FDFE  . BA 68FF5600   MOV EDX,rebuilde.0056FF68   ASCII "c_frmAbout_msgOutofDate"
0056FE03  . B8 88FF5600   MOV EAX,rebuilde.0056FF88   ASCII "Your XPTools has expired
```

-Ở trên nó kiểm tra quái gì ko bít nhưng bít rằng nếu thỏa thì hiện NAG hết hạn ,ko thỏa thì ko hiện ,vì thế ta cần nó luôn nhảy ở đây ,patch JNZ thành JMP :

```
0056FDEE  > 84DB          TEST BL,BL
0056FDF0  . EB 30         JMP SHORT rebuilde.0056FE22
0056FDF2  . 66:A1 5CFF56  MOV AX,WORD PTR DS:[56FF5C]
0056FDF8  . 50            PUSH EAX
0056FDF9  . 6A 00         PUSH 0
0056FDFB  . 8D4D FC       LEA ECX,DWORD PTR SS:[EBP-4]
0056FDFE  . BA 68FF5600   MOV EDX,rebuilde.0056FF68   ASCII "c_frmAbout_msgOutofDate"
0056FE03  . B8 88FF5600   MOV EAX,rebuilde.0056FF88   ASCII "Your XPTools has expired
0056FE08  . E8 2BADFBFF   CALL rebuilde.0052AB38
0056FE0D  . 8B55 FC       MOV EDX,DWORD PTR SS:[EBP-4]
```

-Goto tới em thứ 2 với address 0570203 :

```
005701DB   .  8378 14 00     CMP DWORD PTR DS:[EAX+14],0
005701DF   .v 7F 3F          JG SHORT rebuilde.00570220
005701E1   .  33D2           XOR EDX,EDX
005701E3   .  8B83 4002000   MOV EAX,DWORD PTR DS:[EBX+240]
005701E9   .  E8 6661ECFF    CALL rebuilde.00436354
005701EE   .  33D2           XOR EDX,EDX
005701F0   .  8B83 3C02000   MOV EAX,DWORD PTR DS:[EBX+23C]
005701F6   .  E8 5961ECFF    CALL rebuilde.00436354
005701FB   .  8D4D F0        LEA ECX,DWORD PTR SS:[EBP-10]
005701FE   .  BA 60035700    MOV EDX,rebuilde.00570360      ASCII "c_frmAbout_msgOutofDate"
00570203   .  B8 80035700    MOV EAX,rebuilde.00570380      ASCII "Your XPTools has expired
00570208   .  E8 2BA9FBFF    CALL rebuilde.0052AB38
```

-Lại một lệnh so sánh ,nếu lớn hơn thì nhảy luôn ,còn bé hơn hay bằng thì hiện NAG hết hạn ,vậy mình lại muốn nó nhảy ,patch JG thành JMP :

```
005701DB   .  8378 14 00     CMP DWORD PTR DS:[EAX+14],0
005701DF   v  EB 3F          JMP SHORT rebuilde.00570220
005701E1   .  33D2           XOR EDX,EDX
005701E3   .  8B83 4002000   MOV EAX,DWORD PTR DS:[EBX+240]
005701E9   .  E8 6661ECFF    CALL rebuilde.00436354
005701EE   .  33D2           XOR EDX,EDX
005701F0   .  8B83 3C02000   MOV EAX,DWORD PTR DS:[EBX+23C]
005701F6   .  E8 5961ECFF    CALL rebuilde.00436354
005701FB   .  8D4D F0        LEA ECX,DWORD PTR SS:[EBP-10]
005701FE   .  BA 60035700    MOV EDX,rebuilde.00570360      ASCII "c_frmAbout_msgOutofDate"
00570203   .  B8 80035700    MOV EAX,rebuilde.00570380      ASCII "Your XPTools has expired
00570208   .  E8 2BA9FBFF    CALL rebuilde.0052AB38
0057020D   .  8B55 F0        MOV EDX,DWORD PTR SS:[EBP-10]
```

-Goto tới cái thứ 3 ,address 0573CC3 :

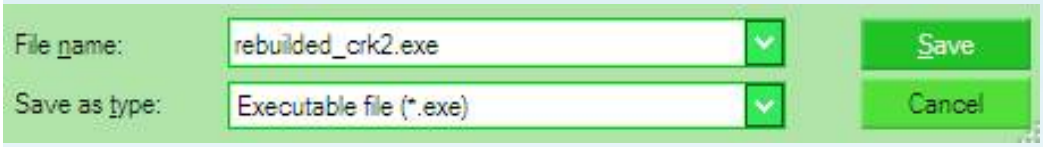
```
00573CAC   .  807D F3 00     CMP BYTE PTR SS:[EBP-D],0
00573CB0   .v 75 66          JNZ SHORT rebuilde.00573D18
00573CB2   .  66:A1 943F57   MOV AX,WORD PTR DS:[573F94]
00573CB8   .  50             PUSH EAX
00573CB9   .  6A 00          PUSH 0
00573CBB   .  8D4D E4        LEA ECX,DWORD PTR SS:[EBP-1C]
00573CBE   .  BA A03F5700    MOV EDX,rebuilde.00573FA0      ASCII "c_frmAbout_msgOutofDate"
00573CC3   .  B8 C03F5700    MOV EAX,rebuilde.00573FC0      ASCII "Your XPTools has expired
00573CC8   .  E8 6B6EFBFF    CALL rebuilde.0052AB38
00573CCD   .  8B55 E4        MOV EDX,DWORD PTR SS:[EBP-1C]
00573CD0   .  A1 48BF6400    MOV EAX,DWORD PTR DS:[64BF48]
```

-Suy luận như trên ,patch JNZ thành JMP :

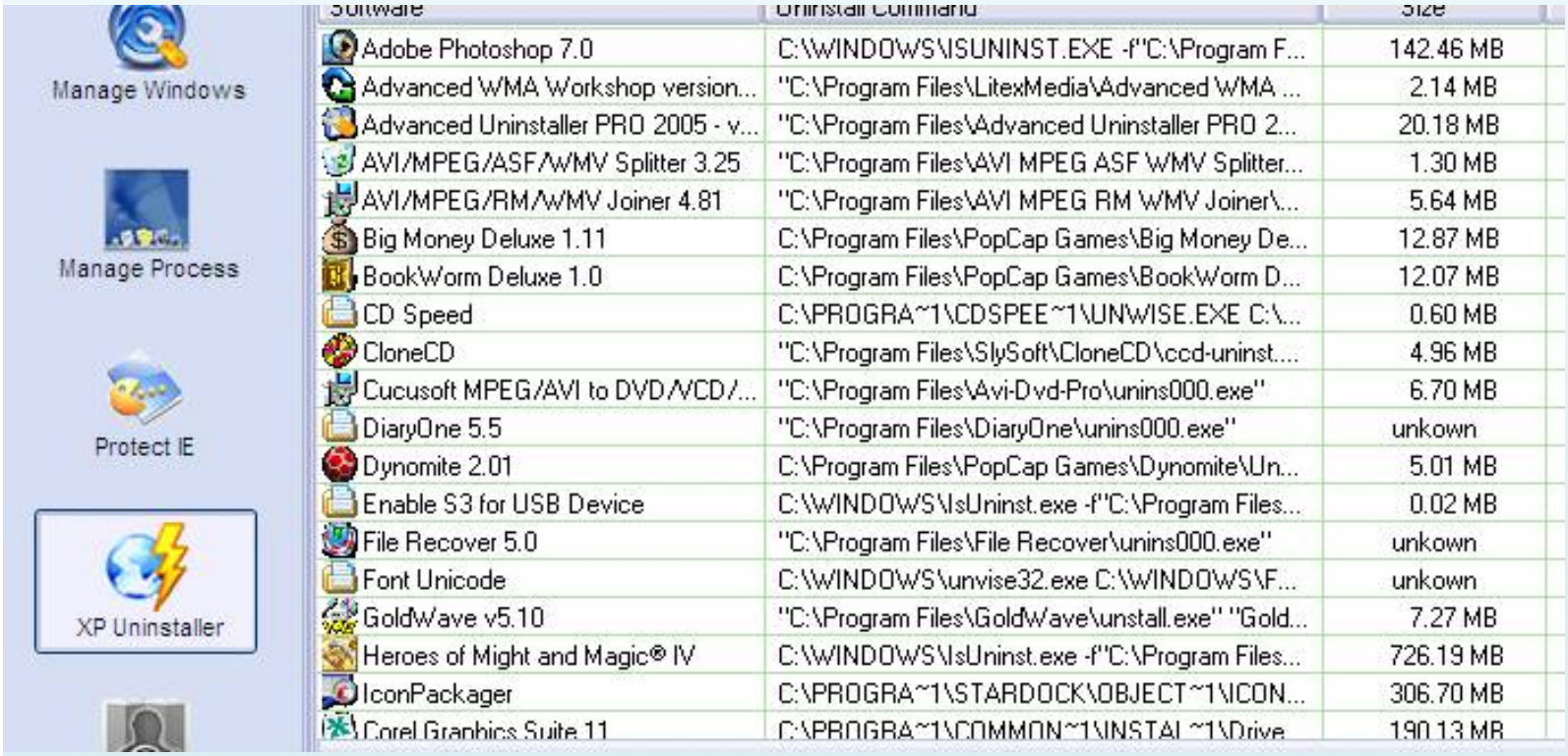
```
00573CAC   .  807D F3 00     CMP BYTE PTR SS:[EBP-D],0
00573CB0   v  EB 66          JMP SHORT rebuilde.00573D18
00573CB2   .  66:A1 943F57   MOV AX,WORD PTR DS:[573F94]
00573CB8   .  50             PUSH EAX
00573CB9   .  6A 00          PUSH 0
00573CBB   .  8D4D E4        LEA ECX,DWORD PTR SS:[EBP-1C]
00573CBE   .  BA A03F5700    MOV EDX,rebuilde.00573FA0      ASCII "c_frmAbout_msgOutofDate"
00573CC3   .  B8 C03F5700    MOV EAX,rebuilde.00573FC0      ASCII "Your XPTools has expired
00573CC8   .  E8 6B6EFBFF    CALL rebuilde.0052AB38
00573CCD   .  8B55 E4        MOV EDX,DWORD PTR SS:[EBP-1C]
```

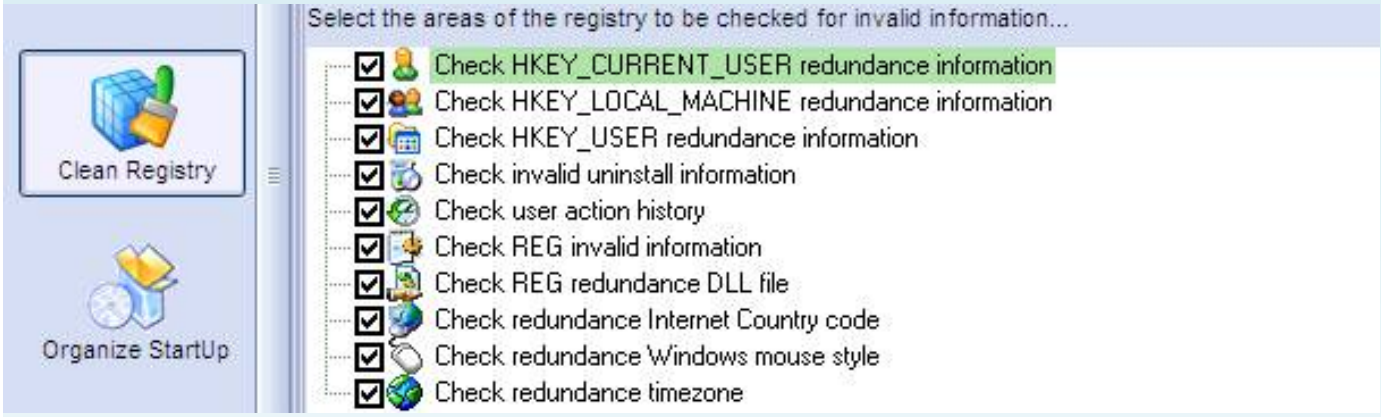
-Patch cho đã thì nhớ SAVE lại dùm mỗ :

-Thêm một cái tên nào :



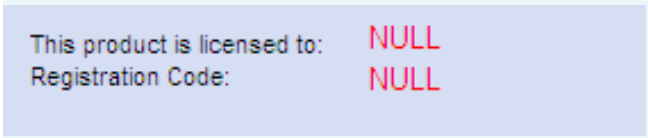
-Lại tăng thêm 12MB ,hix ...chạy **rebuilded_crk2.exe** .Nhấn Help -About ko thấy gì hết ,mừng tập 1.Thử thêm một vài Tool của nó:





-Mừng tập 2 rồi ha .Coi như tới đây đã xong quá trình ***Patch to use soft without register*** .

-Nhưng sự đời đôi khi ko đơn giản ,giả như một cao thủ ngộ ra thức nào đó thì lại muốn ngộ tiếp tầng cao hơn .Mỗ nhìn kĩ lại :

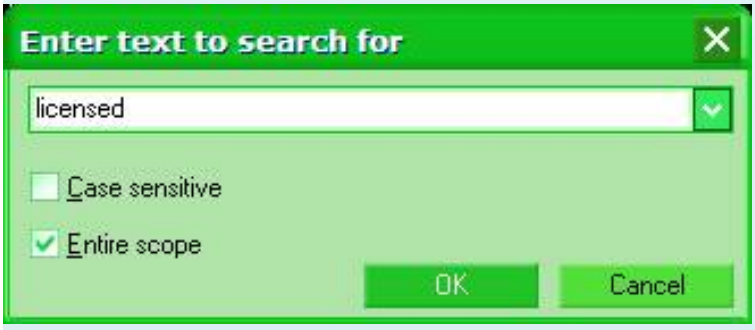


-Nãy giờ 100 mấy chục bức hình rồi mà cũng thế ,sao đời lắm chông gai ,còn lòng mỗ thì lại đầy ham muốn .Mỗ muốn trong soft có tên mình cơ ,có thêm Serial càng tốt .Tới đây ,mỗ cố nhét tên mình vào ,nhưng hậu quả là khi run soft ,nó bỏ qua các name mặc định thêm vào của các Tool ,chỉ để tên mỗ ,nên coi như thất bại :

Okie ,giờ mỗ ráng luyện lên tầng cao hơn nhá :

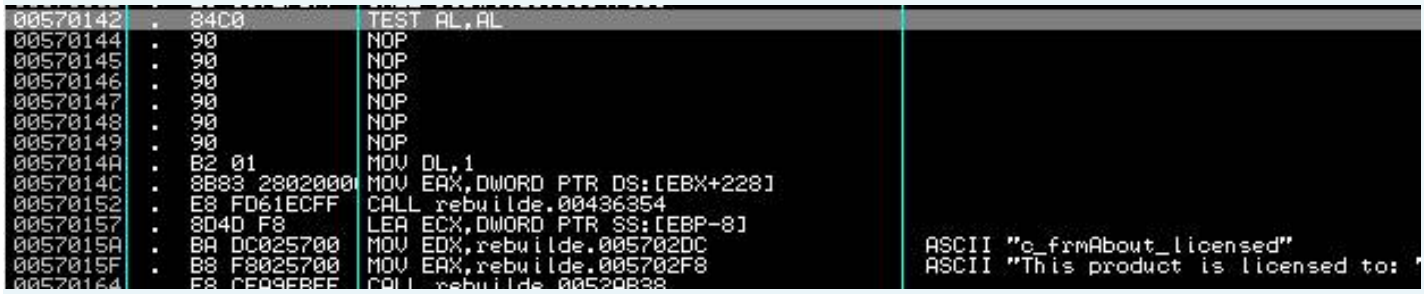
2/Find Real Serial (or Registration Code) :

-Thật ra ra ko bít là có tìm được Real Serial hay ko ,nhưng với cái kiểu tìm String dễ như trên thì ta cố tiếp xem sao .Mở file được Update mới nhất lên , **rebuilded_crk2.exe** .Dò với String :

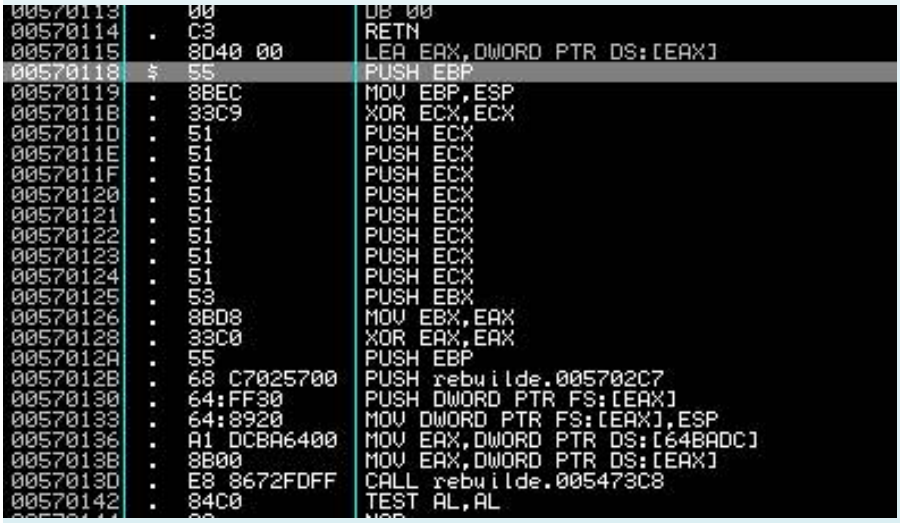



```
0057015A | MOV EDX,rebuilde.005702DC          | ASCII "c_frmAbout_licensed"
0057015F | MOV EAX,rebuilde.005702F8          | ASCII "This product is licensed to: "
00570176 | PUSH rebuilde.00570320             | ASCII "♪◙"
0057017E | MOV EDX,rebuilde.0057032C          | ASCII "c_frmAbout_code"
00570183 | MOV EAX,rebuilde.00570344          | ASCII "Registration Code: "
005701FE | MOV EDX,rebuilde.00570360          | ASCII "c_frmAbout_msgOutofDate"
00570203 | MOV EAX,rebuilde.00570380          | ASCII "Your XPTools has expired. Please purchase it online."
00570270 | MOV EDX,rebuilde.005703C0          | ASCII "c_frmAbout_prgLeft"
00570275 | MOV EAX,rebuilde.005703DC          | ASCII "You have %d days left to try XPTools."
```

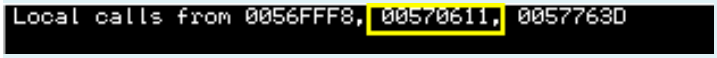
-Enter nó nào :



-Giờ ta kéo lên đầu hàm này xem trước khi nhảy thì nó được gòi từ đâu :

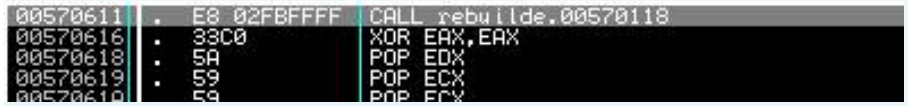


-Ở đây có 3 lời gọi:

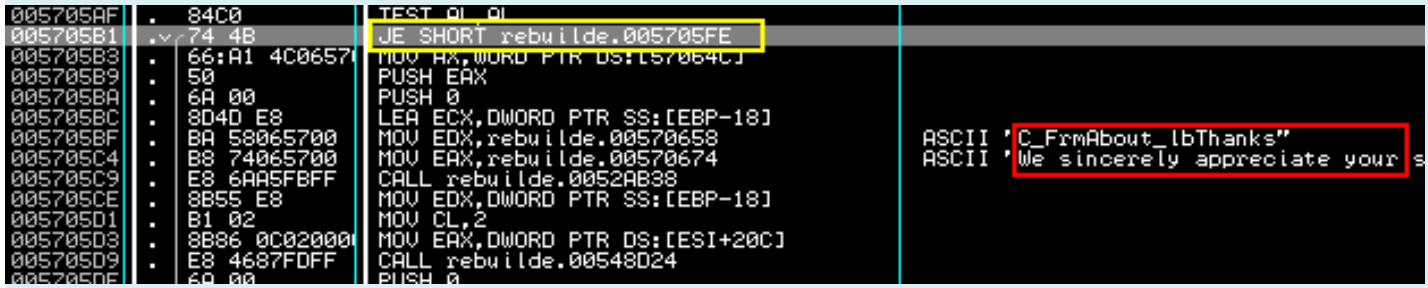


-Chư vị có thể goto tới từng thằng Call này ,BP nó ,rồi run soft ,Register với Fake Serial xem nó Break tại đâu .Ở đây mỗ thử trước dùm các vị nên ko cần làm như trên ,ta goto tới ẻm này luôn:

-Tới :



-Xem trước khi gọi thằng nì thì nó lại làm gì ở trên ,kéo lên nào , chaaaaaaaaa:



-Chà ,đang kéo lên tự nhiên thấy nàng ấy àh .Để ý lệnh **JE** đằng trước nó .Còn cái chuỗi bít nó là gì ko nào :

```
ASCII "C_FrmAbout_lbThanks"
ASCII "We sincerely appreciate your support of XPTools. Now you become a legal user of XPTools."
```

-Vậy là nếu bằng thì nhảy luôn ,còn ko thì hiện NAG chúc mừng đăng kí thành công .Patch thằng **JE** lại hả ,cho mỗi lần nhấn Register đều được chúc mừng sao ?Ậy ,nên nhớ ta đang luyện lên tầng cao hơn ,ko làm kiểu Sub_Pro đó nữa .Thường trước khi nhảy ,thì nó phải gọi hàm nào đó để kiểm tra các điều kiện ,và thường thì lệnh ***CALL gần nhất*** chính là lời gọi quan trọng sau cùng .Bít đâu nó gọi tới hàm tính Real Serial thì sao?Đặt BP lên nó :

-F9 run soft ,chiêu thức như cũ :

-Nhấn Register xem ,chòi ạ ..giờ cha nội mới chịu break hả ,sao làm khổ đời con thế :

-Còn đợi gì nữa ,Trace F7 vào lời gọi CALL này:

-Ở đây mỗ cũng Trace muốn khùng luôn ,nên cho mấy vị bít trước luôn ,Trace F8 tới lệnh *CALL thứ 3* :

```
00547514  $  55              PUSH EBP
00547515  .  8BEC            MOV EBP,ESP
00547517  .  83C4 F0         ADD ESP,-10
0054751A  .  53              PUSH EBX
0054751B  .  894D F8         MOV DWORD PTR SS:[EBP-8],ECX
0054751E  .  8955 FC         MOV DWORD PTR SS:[EBP-4],EDX
00547521  .  8BD8            MOV EBX,EAX
00547523  .  8B45 FC         MOV EAX,DWORD PTR SS:[EBP-4]
00547526  .  E8 45CFEBFF     CALL rebuilde.00404470
0054752B  .  8B45 F8         MOV EAX,DWORD PTR SS:[EBP-8]
0054752E  .  E8 3DCFEBFF     CALL rebuilde.00404470
00547533  .  33C0            XOR EAX,EAX
00547535  .  55              PUSH EBP
00547536  .  68 FF755400     PUSH rebuilde.005475FF
0054753B  .  64:FF30         PUSH DWORD PTR FS:[EAX]
0054753E  .  64:8920         MOV DWORD PTR FS:[EAX],ESP
00547541  .  8B4D F8         MOV ECX,DWORD PTR SS:[EBP-8]
00547544  .  8B55 FC         MOV EDX,DWORD PTR SS:[EBP-4]
00547547  .  8BC3            MOV EAX,EBX
00547549  .  E8 D6030000     CALL rebuilde.00547924
0054754E  .  8845 F7         MOV BYTE PTR SS:[EBP-9],AL
00547551  .  807D F7 00      CMP BYTE PTR SS:[EBP-9],0
```

-Tại sao lại là lệnh CALL này ,để ý trong quá trình Trace ,thấy trước lệnh CALL có 2 lệnh MOV vào ECX ,EDX từ 2 vùng nhớ là [EBP-8] , [EBP-4] .Mà 2 vùng nhớ này nhiều khả năng là Name và Fake Serial của chúng ta .Quả đúng thế :

```
Registers (FPU)                <
EAX 03694C90 ASCII "xqT"
ECX 03700F8C ASCII "1111-2222-3333-4444"
EDX 0370246C ASCII "Trickyboy"
EBX 03694C90 ASCII "xqT"
ESP 0012FAC4
EBP 0012FAE4
ESI 036E2C88
EDI 0012FD04

EIP 00547549 rebuilde.00547549
```

-Hừm đưa đã vào 2 thanh ghi thì phải làm gì với tụi nó chứ.Rồi Trace F7 vào nào :

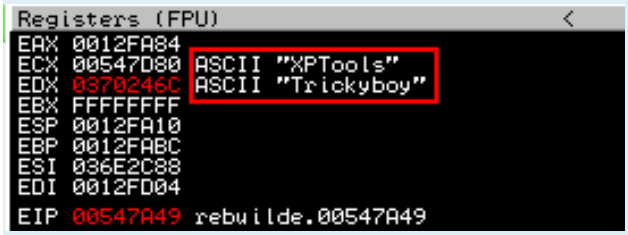
```
00547924  $  55              PUSH EBP
00547925  .  8BEC            MOV EBP,ESP
00547927  .  51              PUSH ECX
00547928  .  B9 0F000000     MOV ECX,0F
0054792D  >  6A 00           PUSH 0
0054792F  .  6A 00           PUSH 0
00547931  .  49              DEC ECX
00547932  .^ 75 F9           JNZ SHORT rebuilde.0054792D
00547934  .  51              PUSH ECX
00547935  .  874D FC         XCHG DWORD PTR SS:[EBP-4],ECX
```

-Trace F8 xuống cho đã đi nào ,cho tới khi thấy cái chuỗi "XPTools"

```
00547A38  > 6A 10            PUSH 10
00547A3A  .  8D45 D0         LEA EAX,DWORD PTR SS:[EBP-30]
00547A3D  .  50              PUSH EAX
00547A3E  .  8D45 C8         LEA EAX,DWORD PTR SS:[EBP-38]
00547A41  .  B9 807D5400     MOV ECX,rebuilde.00547D80      ASCII "XPTools"
00547A46  .  8B55 FC         MOV EDX,DWORD PTR SS:[EBP-4]
```

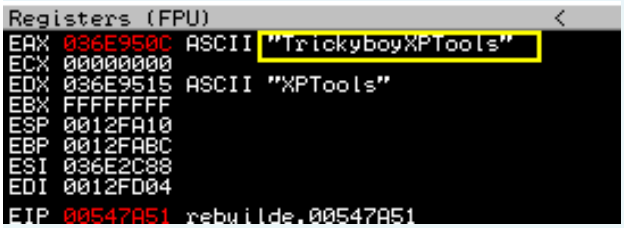
-Trace F8 wa nó tới đây xem:

```
00547A38  >  6A 10           PUSH 10
00547A3A  .  8D45 D0         LEA EAX,DWORD PTR SS:[EBP-30]
00547A3D  .  50              PUSH EAX
00547A3E  .  8D45 C8         LEA EAX,DWORD PTR SS:[EBP-38]
00547A41  .  B9 807D5400     MOV ECX,rebuilde.00547D80      ASCII "XPTools"
00547A46  .  8B55 FC         MOV EDX,DWORD PTR SS:[EBP-4]
00547A49  .  E8 BAC8EBFF     CALL rebuilde.00404308
00547A4E  .  8B45 C8         MOV EAX,DWORD PTR SS:[EBP-38]
00547A51  .  8D55 CC         LEA EDX,DWORD PTR SS:[EBP-34]
```



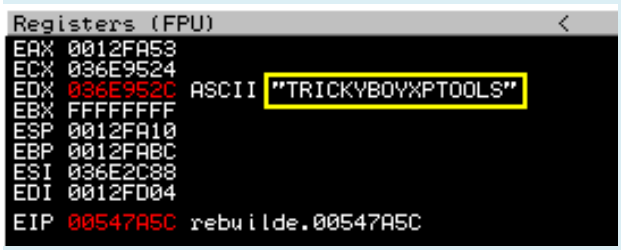
-Theo một số soft thông thường ,coi mòi nó sắp nối Name và chuỗi mặc định này lại lắm à .Trace tiếp :

-Quả đúng ...KINH :



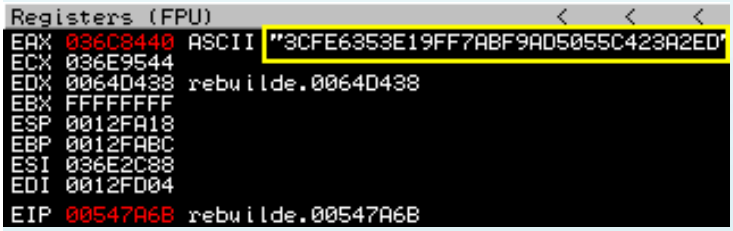
-Vậy nó mã hóa tiếp như thế nào ,đi tiếp mấy vị ơi :

-Chà tới đó thì nó viết hoa lên dồi ,ra là rứa :



-Lại lết từng bước nặng nhọc ,kiên nhẫn lên nào ,sắp đạt được cái gì đó rồi :

-Cha ,đúng là có chuyện lạ :



-Thế là từ chuỗi viết hoa trên ,nó cho ra một lô số đề dài thòong lòong ,đóan mệt xỉu ,thôi thì Trace tiếp :

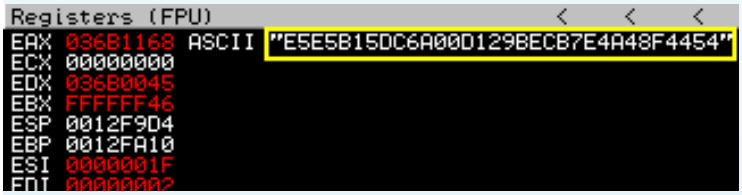
-Trace một phát tới đó rồi ngưng chư vị ơi ,phải coi nó làm quái gì với chuỗi đó chứ ,đây có thể là lệnh CALL gọi hàm mã hóa lô số đề này ,Trace F7 vào nó :

-Rồi Trace F8 như ngựa tới đây ,nhanh lên mấy nị ,chậm chân cúp điện là toi công :

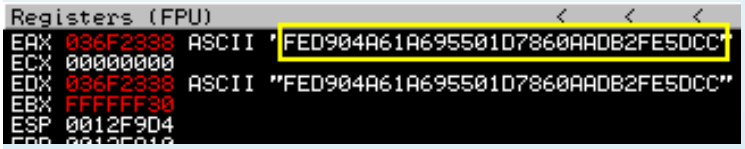
-Trace thêm một cái ,thấy ổng giảm kí tự đầu tiên của lô số đề đó đi 1giá trị :

-Giờ Trace tiếp thì gặp lệnh JNZ nhảy lùi về ,vậy set một bp ngay lệnh JNZ này (chắc ăn thì set thêm một bp ngay dưới lệnh JNZ vì ko bít chừng nào thóat ra vòng lặp này nữa) :

-Giờ nhấn F9 ,nó break tại bp ngay JNZ ,lúc này thì *kí tự kế tiếp bị giảm xuống 1 giá trị* ,và cứ thế nhấn F9 , *từng kí tự* của lô số đề giảm ào ào đi 1 giá trị (giá xăng giảm thế thì khỏe hỉ?) .Cho tới kí tự cuối cùng ,từ từ nào .F9 một cái ...àoooo :

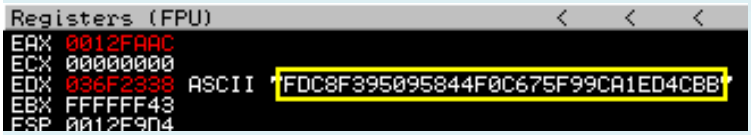


-Bây giờ cũng break nhưng lại cho ra một lô số đề mới ,cũng lại nhấn F9 đi vù vù ,lại giảm như điên ,cho tới khi ra thêm *lô số đề thứ 3* :

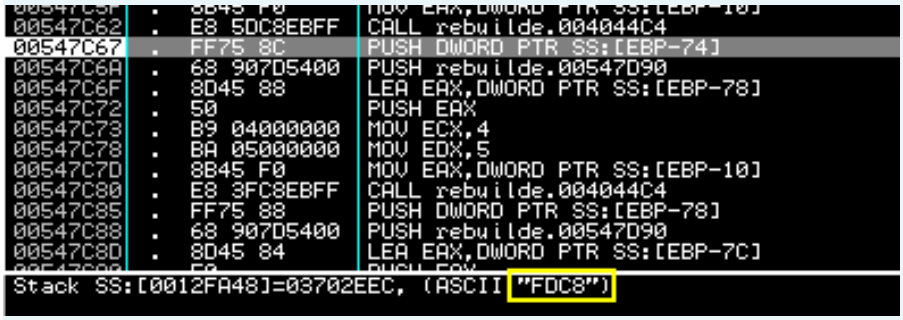


-Thêm một lần đè luôn F9 ,giảm zùn zụt (hi vọng là lần cuối) ,đến kí tự cuối cùng ,chưa set bp nào ở dưới thì set dùm mỗ ,ở đây mô set lên lệnh CALL ,rồi cho wa kí tự cuối luôn nào ,break :

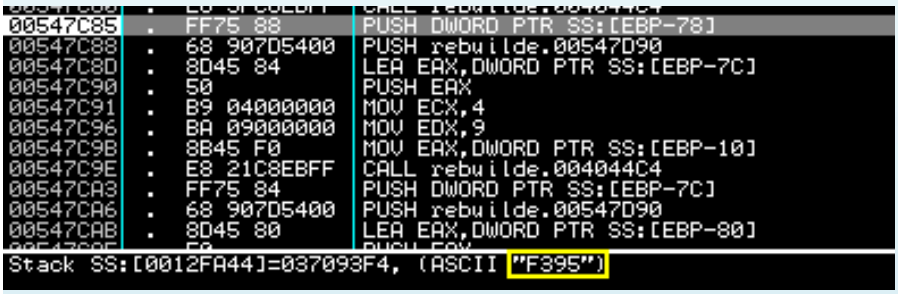
-À đây là lô cuối cùng sau khi hội đồng vé số dùng tích phân suy rộng ,nội suy La-Răng để tính ra :



-Cứ từ từ mà Trace F8 đi nào .cho tới khi nó RETN 2 lần ,đá ta văng ra ngòai .Rồi ta lại Trace F8 tiếp ,cho tới :

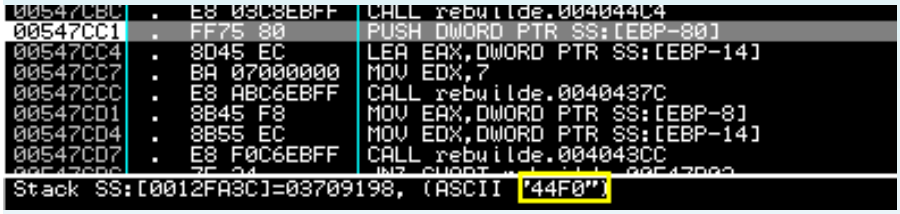


-Một nhóm gồm *4 số đầu tiên* trong cái *lô đề cuối cùng* trên .Nhớ lấy ,Trace tiếp :

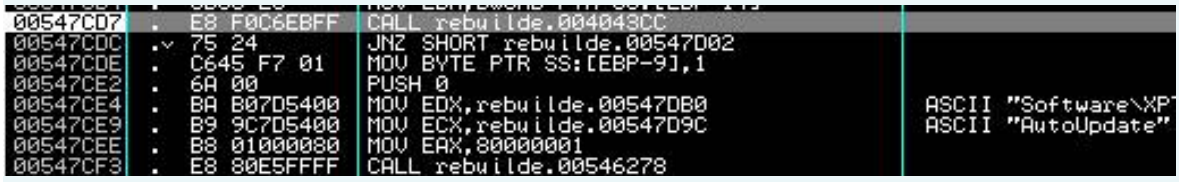


- *4 số kế tiếp trong lô* trên ,tiếp tiếp:

- *4 số tiếp theo trong lô* trên (cho tới giờ *chưa hề có thêm biến đổi* nào ,chỉ là cắt các số đầu tiên ra) .Lết tiếp :



-Lại *4 số kế tiếp* ,nhưng đủ rồi ,lóc còn lại bỏ đi ,ko xổ số tụi nó đâu .Trace F8 tới đây:



-Thế thế ,đời là thế ,chú mày so sánh 2 bộ như thế thì huynh bít đích thị đây là **Real Serial** rồi .

-Vậy **Real Serial** chính là **16 số đầu tiên** của *lô số đê sau cùng* .Cố Trace thêm nữa thì nó ra lại chỗ này :

-Vậy kiểm tra đã đời ,cu cậu chuẩn bị nhảy đây mà .Thôi thôi ,ghi lại **Real Serial** rồi .Close hết Olly một cách tự tin đi nào .Đã có Real Serial thì cần chi 3 cái file Dump ,Rebuild gì nữa ,chạy luôn file gốc **xptools.exe** đi nào (file ***chưa unpack***) .Bùm bùm ... huynh bít ,huynh chưa đăng kí ,cứ la hét đi ,nào Register :

-Úuuuuuuuu ...àaaaa .....

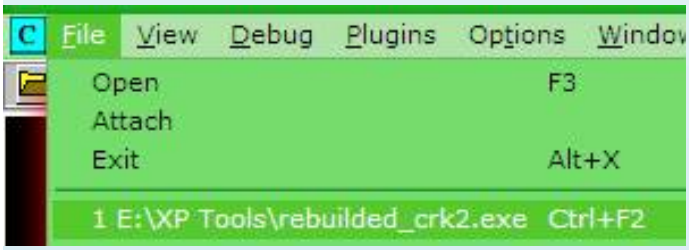
-Thằng cu ngáp luôn ...Mệt đứt hơi

-Mà khoan ,giờ ra ngòai cửa sổ Windows Explore cái ,soft này có một chức năng là *Lock with ExeLock* ,giúp bảo vệ riêng một file Execute nào đó .Chọn đại một em ,Click phải , *XPTools --> Lock with ExeLock* :

-Banggggg .... ui da ..ai quýnh mỗ :

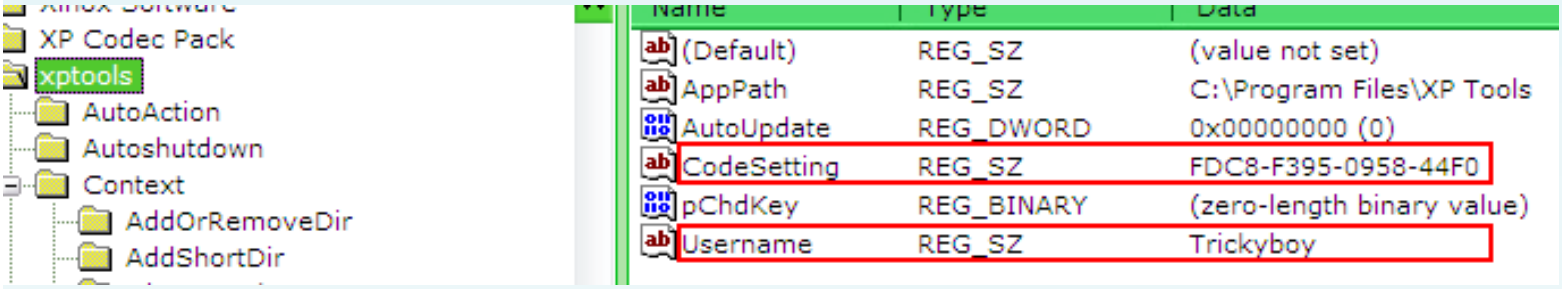
-Ủa ủa ,là sao rứa ,mỗ bỏ ngân lượng ra mua đàng hòang mà sao chỉ có **Xì-tan-đa** là sao? Lên lại homepage thì đúng là chỉ cho down về một file này thôi .như vậy soft này chia ra làm 2 loại đăng kí ,và có thể Serial nạp vào chỉ là Serial cho bản **Xì-tan-đa** .Ặc ....mỗ muốn Rồ ,cuộc đời thật nhục nhã khi ko Rồ .

-Load lại file **rebuilded_crk2.exe** :

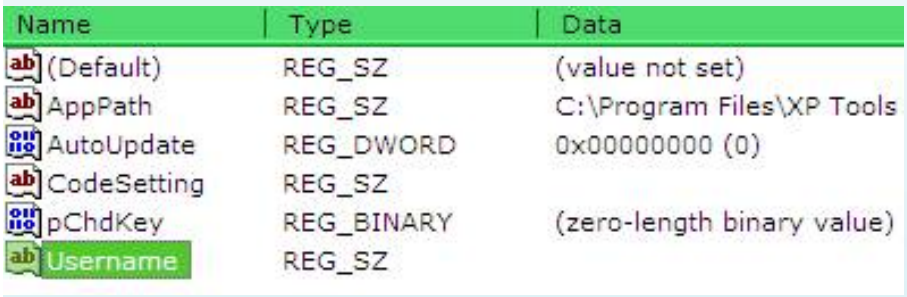


-Quên nữa ,đăng kí hợp lệ rồi thì có thể thông tin đang lưu trong Registry ,vào tìm khóa sau :

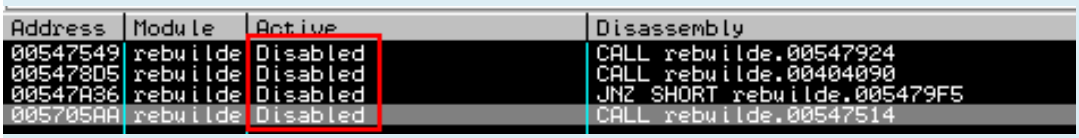
-Kéo xuống tới Software thì cho bung :



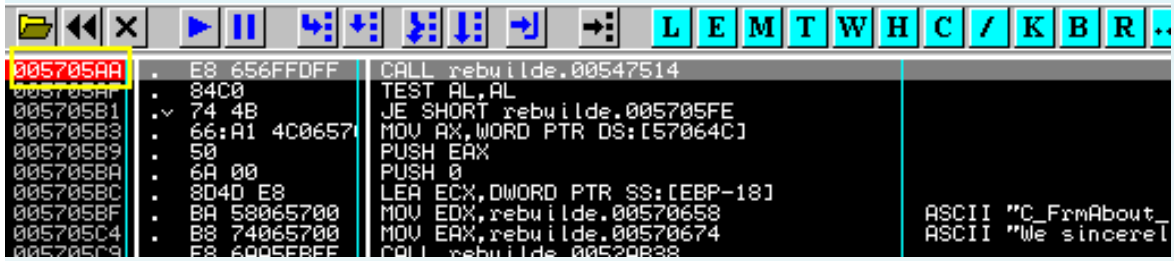
-Delete đi nào :



-Đóng ông đó đi ,ghét thấy cái mặt của mày lắm .Qua lại cưng Olly ,Alt-B cái:



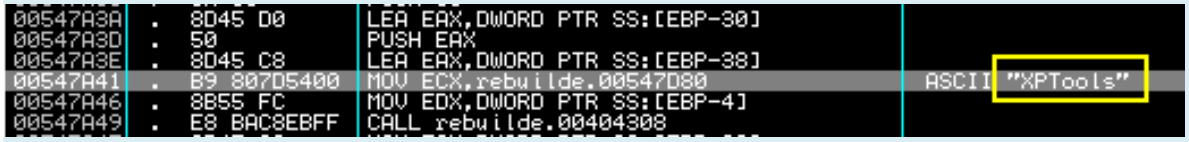
-Còn nhiều BP quá thì *Disable* nó đi (Click phải , *Disable All*) .Nhưng vẫn nhảy tới hàm CALL từ address 05705AA .Set lại bp cho nó :



-Cũng Run soft ,nhập Name và Fake Serial như cũ .Register ,break .

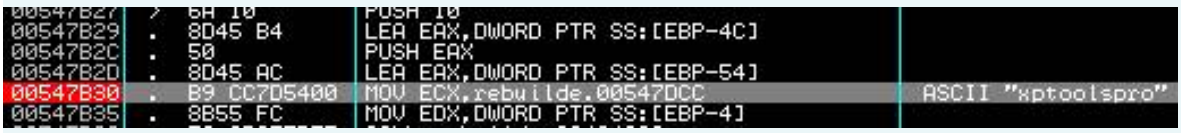
-Trace F7 vào lệnh CALL trên ,rồi cũng Trace F8 tới lệnh CALL thứ 3 (ko thì bp nó rồi F9 sẽ break tại đó) :

-F7 vào ,khoan trace tiếp ,giờ kéo xuống tìm chuỗi "XPTools" :

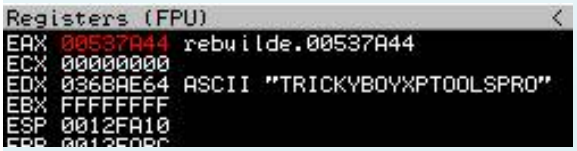


-Vậy mã hóa ở đây chỉ dành cho **Xì-tan-đa** ,Damn it ... Bỏ qua đi ,kéo xuống cho tới thằng Pro :

-Đúng là mày rồi ,chỉ mày mới là Pro ,set bp tại chuỗi này :

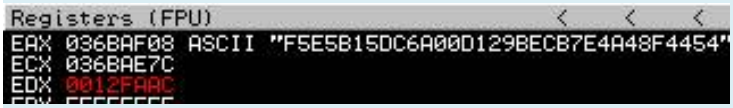


-F9 cho nó break tại đó .Việc làm tiếp theo nếu để mỗ nói nữa thì chắc các hạ đó bỏ nghề học món này được rồi đó .
Trace :



-Trace .....

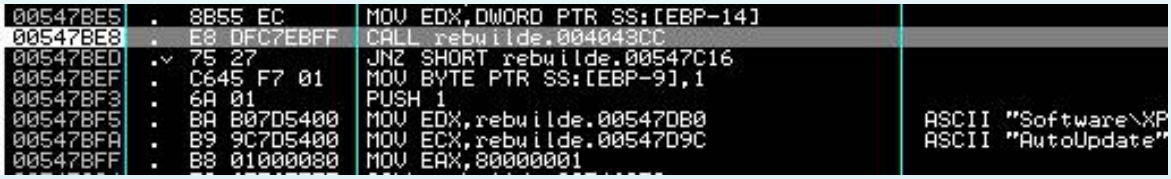
-Lô số đề thứ 1 đã ra lò :



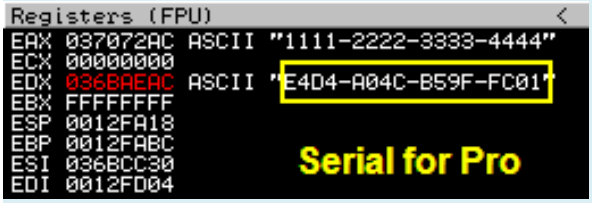
-Trace :

-Trace F7 vào nó Lại trace :

-Giảm cho đã đi em trai ,rồi lô số 2 ,và 3 , rồi Trace cho tới đây :

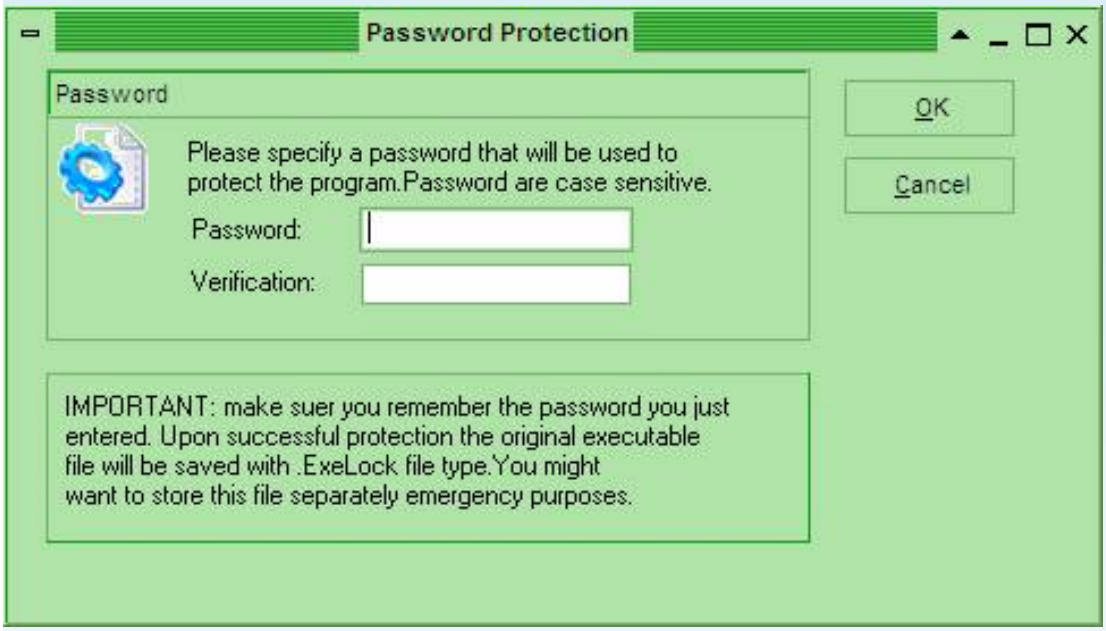


-Hảo hảo .... đích thị là mày :



-Chỉ muội mới xứng với huynh ,giống như chỉ Đại Tà Vương mới xứng với Dịch Phong. Giờ có thể vứt tụi Dump , Rebuild đi được rồi đó (Recycle Bin là nơi thích hợp nhất) :

-Thử lại chức năng *Lock with ExeLock* cho chắc ăn :



-DONE !!! nó cho ta nhập pass để bảo vệ file Execute rồi .Hì hì ,hự ...ự ... ko hiểu sao mỗ lại thổ huyết ,chắc do vận kình nhiều quá ,khí tụ đan điền ,khí tu đan điền ...dưỡng sức thôi ...

-Thế đấy ,giang hồ quả lắm chuyện kì ảo ,chém bằng kiếm hình (***Patch to use Soft without register***) thì nó ko chết mà chỉ khẩu phục chứ tâm chưa phục .Okie tâm gặp tâm ,ta dùng kiếm tâm để chém nó thì với **Xì-tan-đa** ,nó ngáp ngáp chứ chưa chết hẳn .Thêm một nhát kiếm ý **Pro** ,ngắt hẳn ,quắc cần câu .Khè khè ...

-Rồi ,mọi bước Unpack ,Patch và Find Serial đã quá rõ ràng ,cứ như "Tôi là Maria ".Code keygen xin nhường lại cho chư vị đồng đạo .Tại trình độ mỗ tính tới thời điểm hòan thành bí kíp này là 3 tháng tròn (mỗ chính thức nhập ma hồi 26/07/2005 ,lúc mỗ nghỉ hè) .Mong rằng vài tháng nữa biết code keygen ,mỗ mới vào tiết đầu về ASM thôi àh . À **Takada** ,số Serial huynh cho đệ hôm trước là của **Xì-tan-đa** ,khi viết Tut ,vô tình huynh ngộ thêm thức **Serial for Pro** này ,nên nếu đệ có Code keygen thì code thằng Pro nha .

-Trăm bức hình cũng ko bằng tấm **Armadillo 4.4** và **PEiD 0.94** của cụ **nho** ,cụ kinh thật ,khoe hàng nào là sốt món đó .Xong Tut này ,chắc mỗ chuyển nghề sang chụp hình wá ,mỗ thấy mỗ có khiếu chụp hình lắm .Vì quay phim Video thì mỗ ko có hứng và dễ làm người xem nôn nóng mà ko bít khúc nào khúc não cả .Mà nhắc hình thì lại ghét cha **MaDMAn** ,chả chụp hình có mười mấy tấm ,mà Tut nào cũng nặng tới mấy MB ,cũng phải chả chơi hình tòan dạng .BMP .Thằng cha đó Crack giỏi mà sao chụp hình ngu KINH ...hehehe

-Thôi ,dừng kiếm tại đây ,quay lại với nội suy La-Răng ,Niu-tơn và Súp bô chin .

- Chân thành cám ơn các anh chị Admin ,Mod và tất cả các thành viên của REA.

- Đặc biệt là anh hacnho (trong bài em gọi là cụ) .

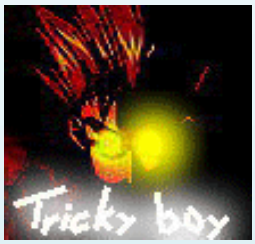
- Thanx to :

- MaDMAn_H3rCuL3s (I hate this guy)

- Ricardo Narvaja (I like this guy)

- And YOU ...

Written by Trickyboy (tự Tàn Kiếm)



(26/10/2005)

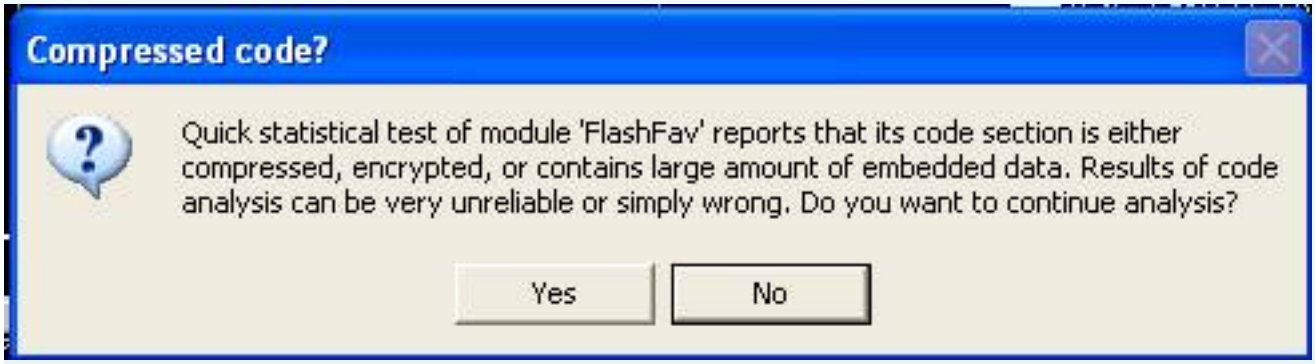
(Beta) unpack Armadillo - Standard protection only

Author: **Benina**

Target .....: **FlashFavorite v1. 4.5**
Website .....: http://www.pipisoft.com/
Protection ..: + Standard ARMADiLLO protection only
Difficulty ....: For Newbie
Tools Needed:
1.) Olly Debug v1.10 or better
2.) LordPE Deluxe
3.) Import Reconstructor v1.6 Final

Step 1: Find OEP

Load file FashFavorite.exe inOlly, appear a message:

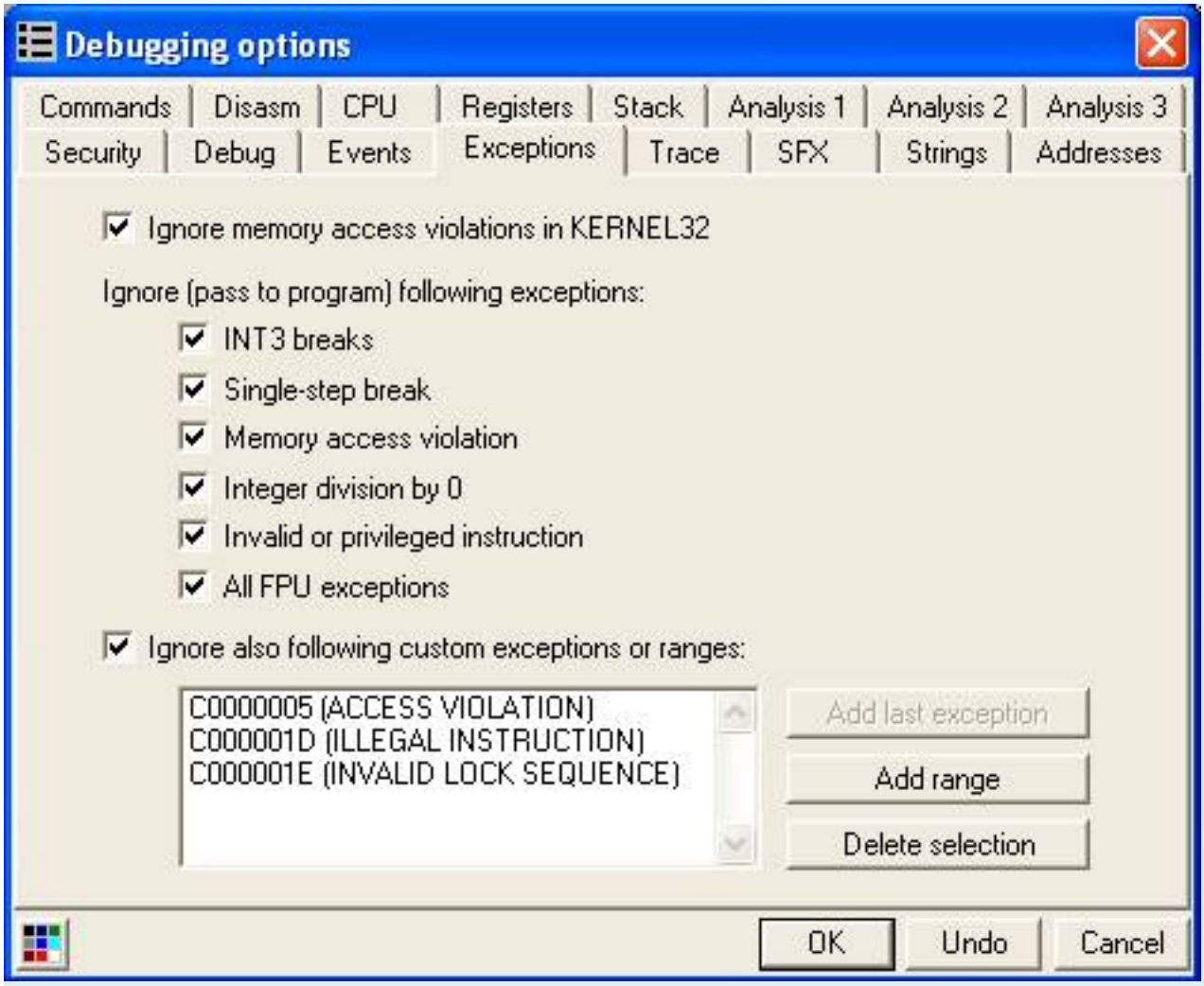


Human button "NO".
Armadillo's Entry Point will:

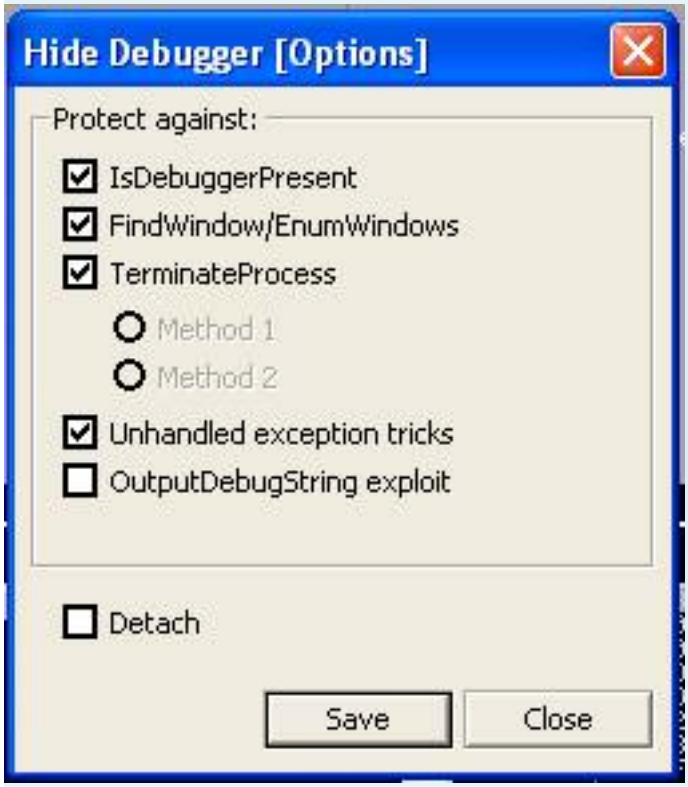
```
0044D000> 60 PUSHAD
0044D001 E8 00000000 CALL FlashFav.0044D006
0044D006 5D POP EBP
0044D007 50 PUSH EAX
0044D008 51 PUSH ECX
0044D009 0FCA BSWAP EDX
F7D2 NOT 0044D00B EDX
0044D00D PUSHFD 9C
F7D2 NOT 0044D00E EDX
0044D010 0FCA BSWAP EDX
0044D012 EB 0F JMP SHORT FlashFav.0044D023
0044D014 B9 EB0FB8EB MOV ECX, EBB80FEB
```

```
0044D019 07 POP ES; modification of segment register
0044D01A B9 EB0F90EB MOV ECX, EB900FEB
OR 08FD CH 0044D01F, BH
0044D021 EB 0B JMP SHORT FlashFav.0044D02E
0044D023 F2: prefix REPNE:; Superfluous prefix
0044D024 ^ EB F5 JMP SHORT FlashFav.0044D01B
0044D026 ^ EB F6 JMP SHORT FlashFav.0044D01E
0044D028 F2: prefix REPNE:; Superfluous prefix
0044D029 EB 08 JMP SHORT FlashFav.0044D033
0044D02B FD STD
0044D02C ^ E9 EB JMP SHORT FlashFav.0044D017
0044D02E F3: prefix REP:; Superfluous prefix
E4 ^ 0044D02F EB JMP SHORT FlashFav.0044D015
0044D031 FC CLD
0044D032 - E9 9D0FC98B JMP 8C0DDFD4
```

First, in Olly, we select the menu Options / debugging options, such as the image below:



And select Options HideDebugger of Plugins:



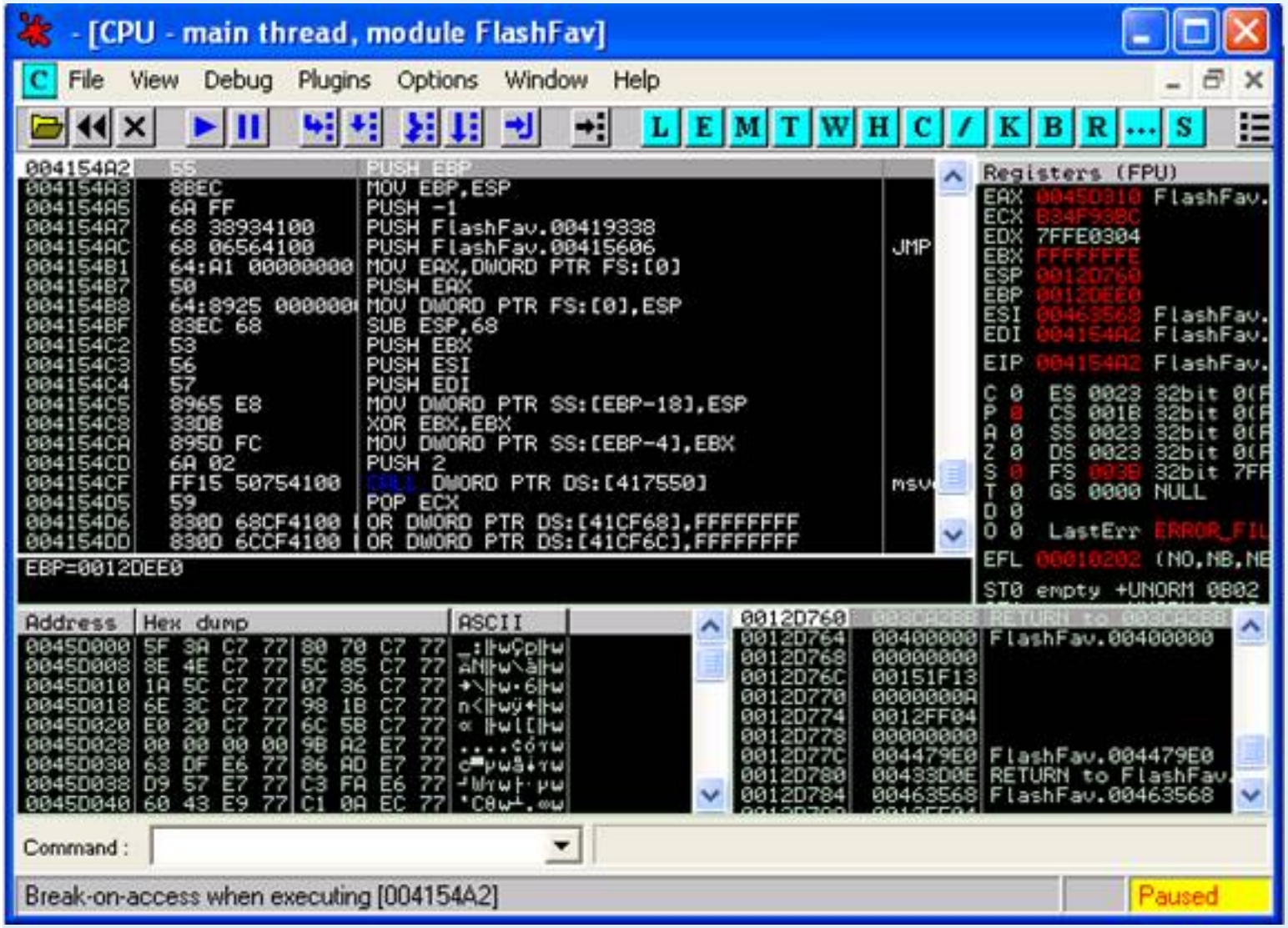
Armadillo will unpacking and decryption of data into trouble chep section. Text, then the enforcement of the directive section. Text. This section of the code not the original. So OEP will in this section. Therefore, we will set break-on-access on this section. The purpose of the program to access any data in this section will have a break

In Olly, open window [Memory map] (Alt + M), click on the section. Text and click to set F2 BP as image:

Address	Size	Owner	Section	Contains	Type	Access	Initial
00010000	00001000				Priv	RW	RW
00020000	00001000				Priv	RW	RW
0012C000	00001000				Priv	RW Gua	RW
0012D000	00003000			stack of ma	Priv	RW Gua	RW
00130000	00001000				Map	R	R
00140000	00002000				Map	R	R
00150000	00004000				Priv	RW	RW
00250000	00006000				Priv	RW	RW
00260000	00001000				Map	RW	RW
00270000	00016000				Map	R	R
00290000	00034000				Map	R	R
002D0000	00041000				Map	R	R
00320000	00006000				Map	R	R
00330000	00001000				Priv	RWE	RWE
00340000	00001000				Priv	RWE	RWE
00350000	00008000				Priv	RW	RW
00360000	00001000				Priv	RW	RW
00370000	00001000				Priv	RW	RW
00400000	00001000	FlashFav		PE header	Imag	R	RWE
00401000	00016000	FlashFav	.text		Imag	R	RWE
00417000	00005000	FlashFav	.rdata		Imag	R	RWE
0041C000	00001000	FlashFav	.data		Imag	R	RWE
0041D000	00030000	FlashFav	.text1	code	Imag	R	RWE
0044D000	00010000	FlashFav	.adata	code	Imag	R	RWE
0045D000	00020000	FlashFav	.data1	data, import	Imag	R	RWE
0047D000	00060000	FlashFav	.pdata		Imag	R	RWE
004DD000	00101000	FlashFav	.rsrc	resources	Imag	R	RWE

now, press Shift + F9, and it will stop here

```
004154A2 55 PUSH EBP
004154A3 8BEC MOV EBP, ESP
004154A5 6A FF PUSH -1
004154A7 68 38934100 PUSH FlashFav.00419338
004154AC 68 06564100 PUSH FlashFav.00415606; JMP to msvcrt._except_handler3
004154B1 64: A1 00000000 MOV EAX, DWORD PTR FS: [0]
004154B7 50 PUSH EAX
004154B8 64:8925 0000000> MOV DWORD PTR FS: [0], ESP
004154BF 83EC 68 SUB ESP, 68
004154C2 53 PUSH EBX
004154C3 56 PUSH ESI
004154C4 57 PUSH EDI
004154C5 8965 E8 MOV DWORD PTR SS: [EBP-18], ESP
004154C8 33DB XOR EBX, EBX
004154CA 895D FC MOV DWORD PTR SS: [EBP-4], EBX
004154CD 6A 02 PUSH 2
004154CF FF15 50754100 CALL DWORD PTR DS: [417550]; msvcrt.__set_app_type
```



In the state we find them "Break-on-access when executing [004154A2]", as well section. Text information as follows:
Address = 00401000
Size = 00016000 (90112.)
We see in the address 004154A2 section. Text. So
Address [004154A2] is the program's OEP

Step 2: Find an address any of the desire of the API program has original unpacking the section. Text, then set bp at this address:

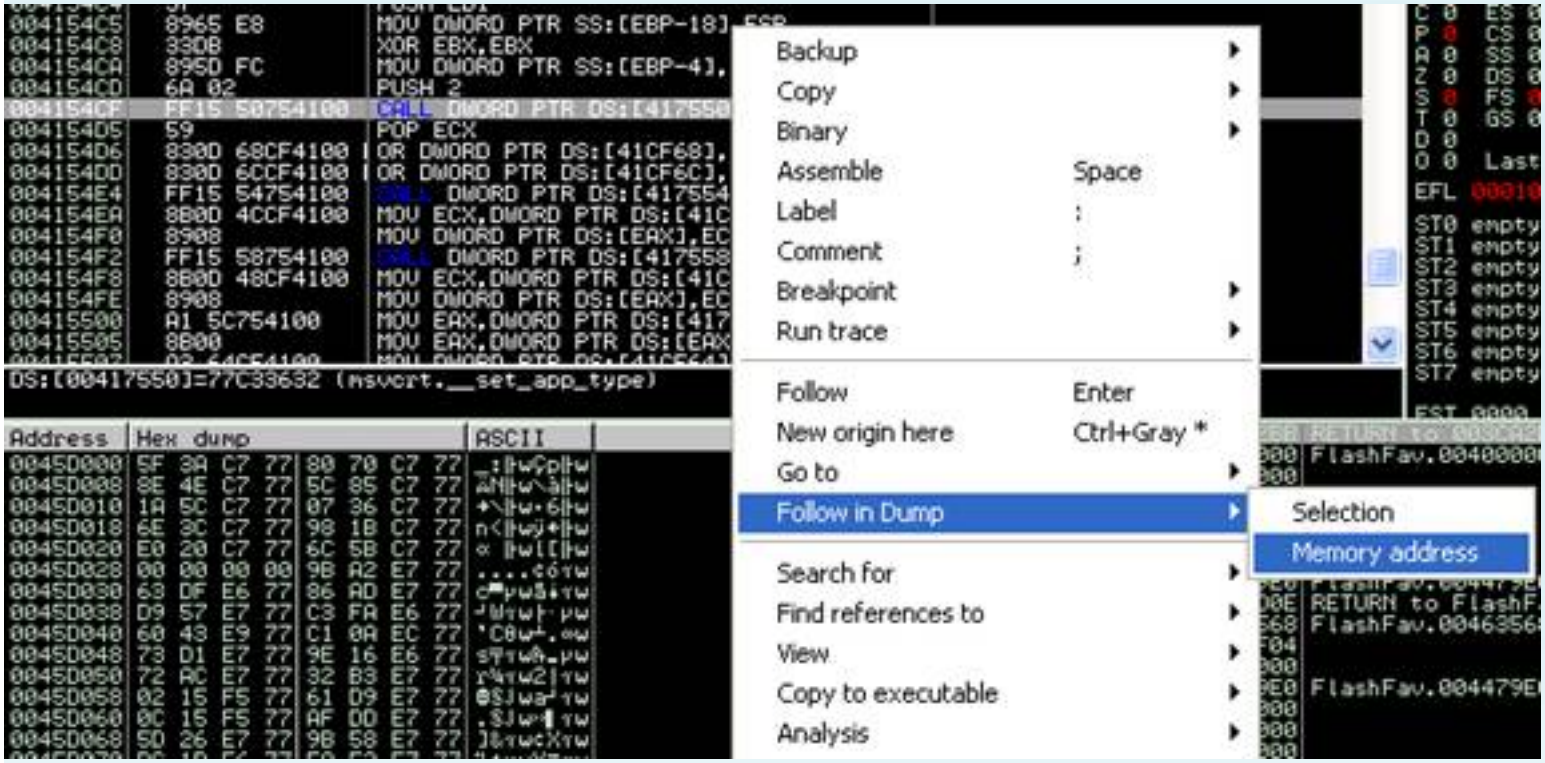
Armadillo blended IAT your original program. So, we will find the address 1 of 1 ham API any IAT table in the program set to original bp Hardware, on write at that address. The purpose of us is: when the Armadillo write bytes to the IAT (which is a specific message to the address we set bp), and Olly will stop for us to find code that Olly blended IAT table.

We see in the window of CPU Olly at 004154CF addr as follows:

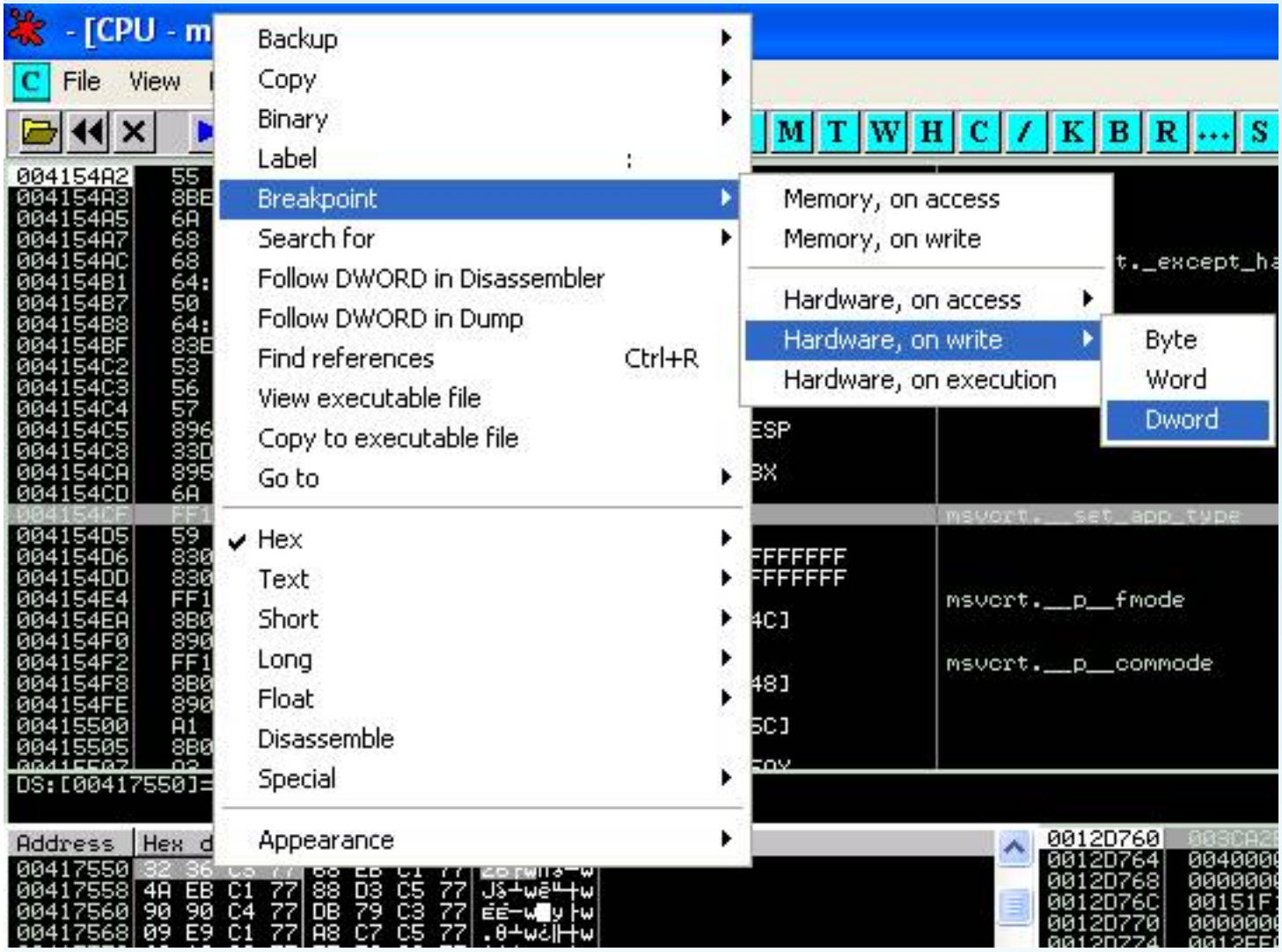
004154CF FF15 50754100 CALL DWORD PTR DS: [417550]; msvcrt.__set_app_type

So address [417,550] is 1 addr IAT table in the program's original.

Now we will dump it in the dump window of the mouse must Olly.Click 004154CF, Select in Folow dump / Memory address as image.



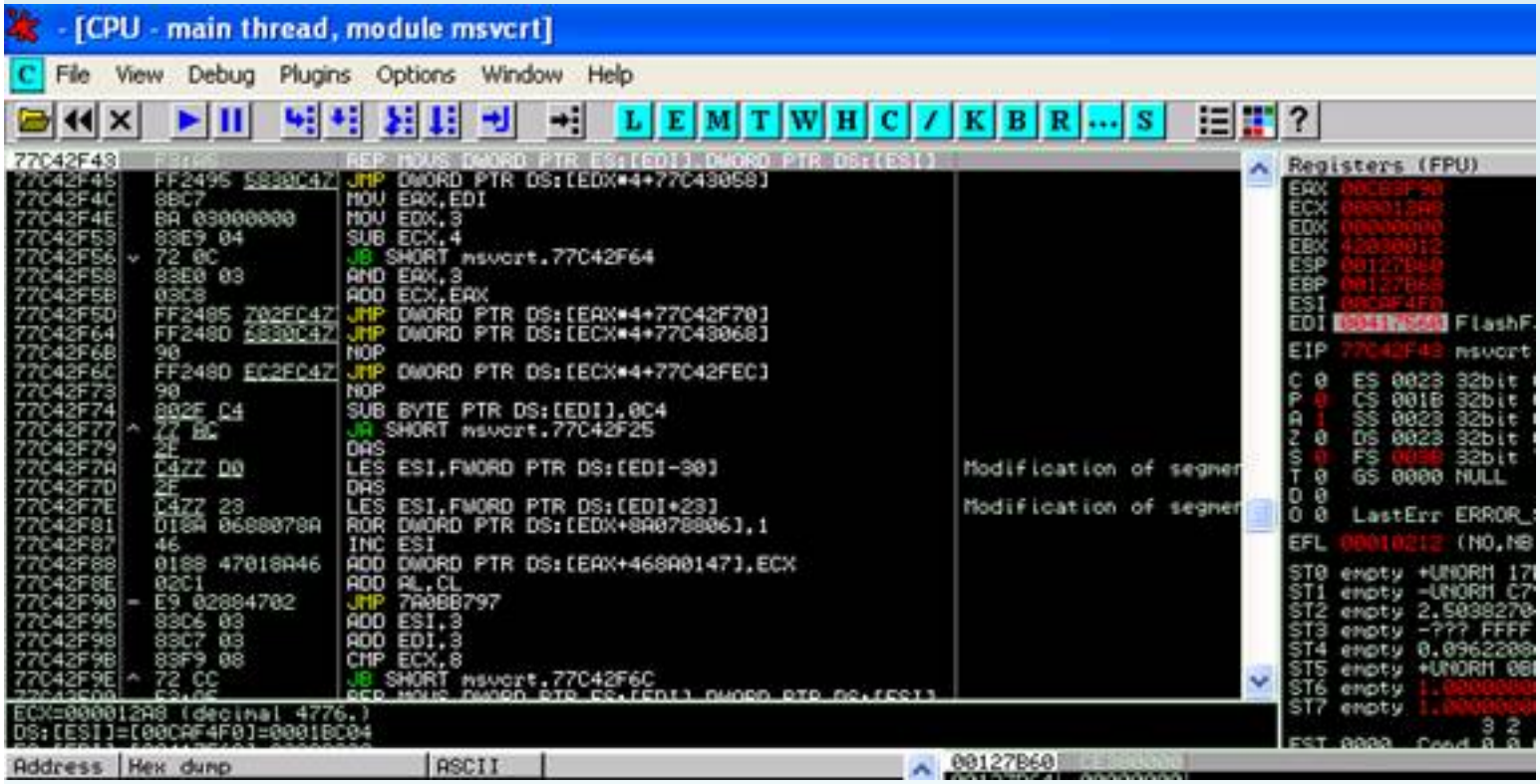
In dump window of Olly, we choose to click 4 bytes at 00417550, and set breakpiont Hardware, write on / Dword at address 00417550 image as follows:



Now we close them again Olly

Step 3: Find code blended IAT of Armadillo.

Load file FashFavorite.exe inOlly again. RUN with Shift + F9. Stop at breakpoint that we set Hardware set breakpiont, write on / Dword. We'll see the picture as follows:




```
77C42F43 F3: A5 REP MOVS DWORD PTR ES: [EDI], DWORD PTR DS: [ESI]
77C42F45 FF2495 5830C477 JMP DWORD PTR DS: [EDX * 4 +77 C43058]
77C42F4C 8BC7 MOV EAX, EDI
77C42F4E BA 03000000 MOV EDX, 3
77C42F53 83E9 04 SUB ECX, 4
77C42F56 72 0C JB SHORT msvcrt.77C42F64
77C42F58 83E0 03 AND EAX, 3
77C42F5B 03C8 ADD ECX, EAX
77C42F5D FF2485 702FC477 JMP DWORD PTR DS: [EAX * 4 +77 C42F70]
77C42F64 FF248D 6830C477 JMP DWORD PTR DS: [ECX * 4 +77 C43068]
77C42F6B 90 NOP
77C42F6C FF248D EC2FC477 JMP DWORD PTR DS: [ECX * 4 +77 C42FEC]
77C42F73 90 NOP
77C42F74 802F C4 SUB BYTE PTR DS: [EDI], 0C4
AC 77C42F77 ^ 77 JA SHORT msvcrt.77C42F25
```

In dump window, we Goto 00417550 to address that we set breakpoint in step 2.
Click on the window dump, Ctrl + G, go to the address "00417550" as the image below:

Press OK.

In window dump we see:

```
00417550 46 BC 01 00 38 BC 01 00 F ¼ ¼ .8.
00417558 28 BC 01 00 18 BC 01 00 (¼.¼.
00417560 00 00 00 00 00 00 00 00 ........
00417568 00 00 00 00 00 00 00 00 ........
```

The value at 00417550 ko must address is 1 of ham API (its value = 0001BC46, business addresses, such as ham API as follows 77xxxxxx), measured by our press F9 to continue to run. No stop at just Market follows:

```
003C70B3 8B85 04C8FFFF MOV EAX, DWORD PTR SS: [EBP-37FC]; FlashFav.00417550
003C70B9 83C0 04 ADD EAX, 4
003C70BC 8985 04C8FFFF MOV DWORD PTR SS: [EBP-37FC], EAX
003C70C2 ^ E9 CEFCFFFF JMP 003C6D95
003C70C7 FF15 9C023D00 CALL DWORD PTR DS: [3D029C]; kernel32.GetTickCount
```

Look at the window dump us see:

```
00417550 32 36 C3 77 38 BC 01 00 26Aw8 ¼.
00417558 28 BC 01 00 18 BC 01 00 (¼.¼.
00417560 04 BC 01 00 F8 BB 01 00
```

¼. Ø.

Value [77C33632] at address 00417550 is the address of 1 ham API. So, this is the area code area code that Armadillo after blended into chep IAT of original programs, this is the area code we

need to find:

```
003C70B3 8B85 04C8FFFF MOV EAX, DWORD PTR SS: [EBP-37FC]; FlashFav.00417550
003C70B9 83C0 04 ADD EAX, 4
003C70BC 8985 04C8FFFF MOV DWORD PTR SS: [EBP-37FC], EAX
003C70C2 ^ E9 CEFCFFFF JMP 003C6D95
003C70C7 FF15 9C023D00 CALL DWORD PTR DS: [3D029C]; kernel32.GetTickCount
```

two lines marked yellow to identify the code now

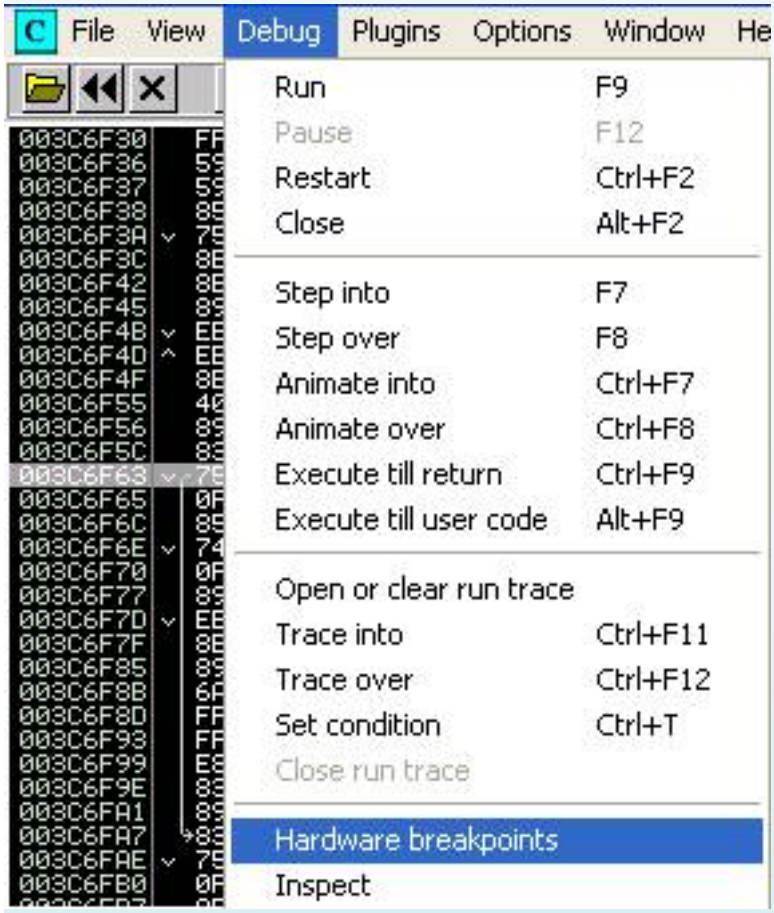
At the direction 003C70B3, Armadillo write values of the IAT ham API. Therefore, area code "upset, blended" IAT is in the direction of the CPU window nay.Trong Olly, up by a little, we will see the area code as below:

```
003C6F30 FF15 5C033D00 CALL DWORD PTR DS: [3D035C]; msvcrt._stricmp
003C6F36 59 POP ECX
003C6F37 59 POP ECX
003C6F38 85C0 TEST EAX, EAX
003C6F3A 75 11 JNZ SHORT 003C6F4D
003C6F3C 8B85 4CC2FFFF MOV EAX, DWORD PTR SS: [EBP-3DB4]
003C6F42 8B40 08 MOV EAX, DWORD PTR DS: [EAX +8]
003C6F45 8985 58C2FFFF MOV DWORD PTR SS: [EBP-3DA8], EAX
003C6F4B EB 02 JMP SHORT 003C6F4F
003C6F4D ^ 9D EB JMP SHORT 003C6EEC
003C6F4F 8B85 98C4FFFF MOV EAX, DWORD PTR SS: [EBP-3B68]
003C6F55 40 INC EAX
003C6F56 8985 98C4FFFF MOV DWORD PTR SS: [EBP-3B68], EAX
003C6F5C 83BD 58C2FFFF 0> Cmp DWORD PTR SS: [EBP-3DA8], 0
003C6F63 75 42 JNZ SHORT 003C6FA7
003C6F65 0FB785 5CC2FFFF MOVZX EAX, WORD PTR SS: [EBP-3DA4]
003C6F6C 85C0 TEST EAX, EAX
003C6F6E 74 0F JE SHORT 003C6F7F
003C6F70 0FB785 5CC2FFFF MOVZX EAX, WORD PTR SS: [EBP-3DA4]
003C6F77 8985 5CADFFFF MOV DWORD PTR SS: [EBP + FFFFAD5C], EAX
003C6F7D EB 0C JMP SHORT 003C6F8B
003C6F7F 8B85 54C2FFFF MOV EAX, DWORD PTR SS: [EBP-3DAC]
003C6F85 8985 5CADFFFF MOV DWORD PTR SS: [EBP + FFFFAD5C], EAX
003C6F8B 6A 01 PUSH 1
```

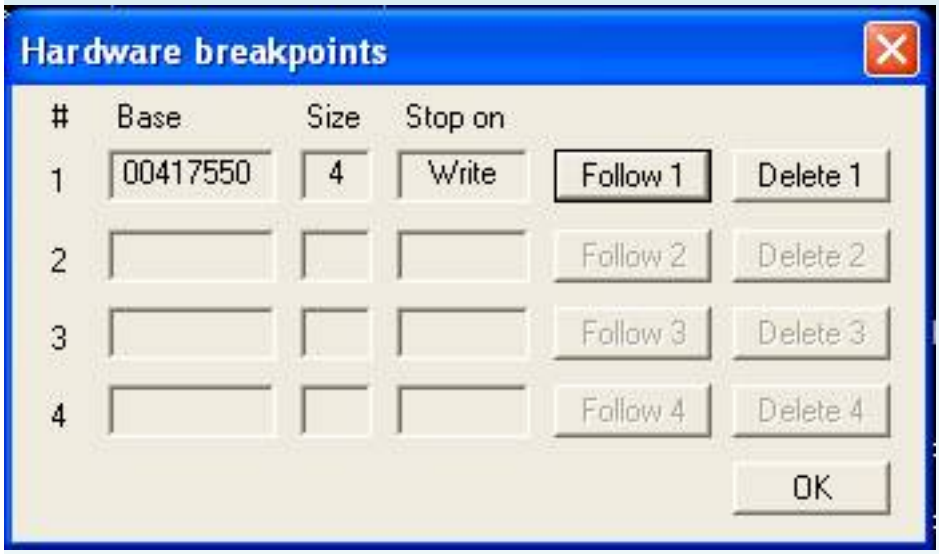
```
003C6F8D FFB5 5CADFFFF PUSH DWORD PTR SS: [EBP + FFFFAD5C]
003C6F93 FFB5 90C4FFFF PUSH DWORD PTR SS: [EBP-3B70]
003C6F99 E8 6E31FEFF CALL 003AA10C
003C6F9E 83C4 0C ADD ESP, 0C
003C6FA1 8985 58C2FFFF MOV DWORD PTR SS: [EBP-3DA8], EAX
003C6FA7 83BD 58C2FFFF 0> Cmp DWORD PTR SS: [EBP-3DA8], 0
003C6FAE 75 42 JNZ SHORT 003C6FF2
003C6FB0 0FB785 5CC2FFFF MOVZX EAX, WORD PTR SS: [EBP-3DA4]
003C6FB7 85C0 TEST EAX, EAX
003C6FB9 74 0F JE SHORT 003C6FCA
003C6FBB 0FB785 5CC2FFFF MOVZX EAX, WORD PTR SS: [EBP-3DA4]
003C6FC2 8985 58ADFFFF MOV DWORD PTR SS: [EBP + FFFFAD58], EAX
003C6FC8 EB 0C JMP SHORT 003C6FD6
003C6FCA 8B85 54C2FFFF MOV EAX, DWORD PTR SS: [EBP-3DAC]
003C6FD0 8985 58ADFFFF MOV DWORD PTR SS: [EBP + FFFFAD58], EAX
003C6FD6 6A 00 PUSH 0
003C6FD8 FFB5 58ADFFFF PUSH DWORD PTR SS: [EBP + FFFFAD58]
003C6FDE FFB5 90C4FFFF PUSH DWORD PTR SS: [EBP-3B70]
003C6FE4 E8 2331FEFF CALL 003AA10C
003C6FE9 83C4 0C ADD ESP, 0C
003C6FEC 8985 58C2FFFF MOV DWORD PTR SS: [EBP-3DA8], EAX
003C6FF2 83BD 58C2FFFF 0> Cmp DWORD PTR SS: [EBP-3DA8], 0
003C6FF9 0F85 98000000 JNZ 003C7097
003C6FFF 0FB785 5CC2FFFF MOVZX EAX, WORD PTR SS: [EBP-3DA4]
003C7006 85C0 TEST EAX, EAX
003C7008 74 54 JE SHORT 003C705E
003C700A FF15 E4003D00 CALL DWORD PTR DS: [3D00E4]; ntdll.RtlGetLastWin32Error
```

But the line I marked red, to identify the area code now
At 003C6F63 direction (of which 1 tut Spain called a pair of orders in 1 Magical jump Jump) direction is decided curl API ham or raw chep xi address your desire to IAT. If here, the Zero flag = 1, and ko "blended" chep addr of raw ham API to IAT, and if FZ = 0 will "upset"

Before going ahead, let bp clear that we set in step 2
Select the menu Debug / Hardware breakpoints:



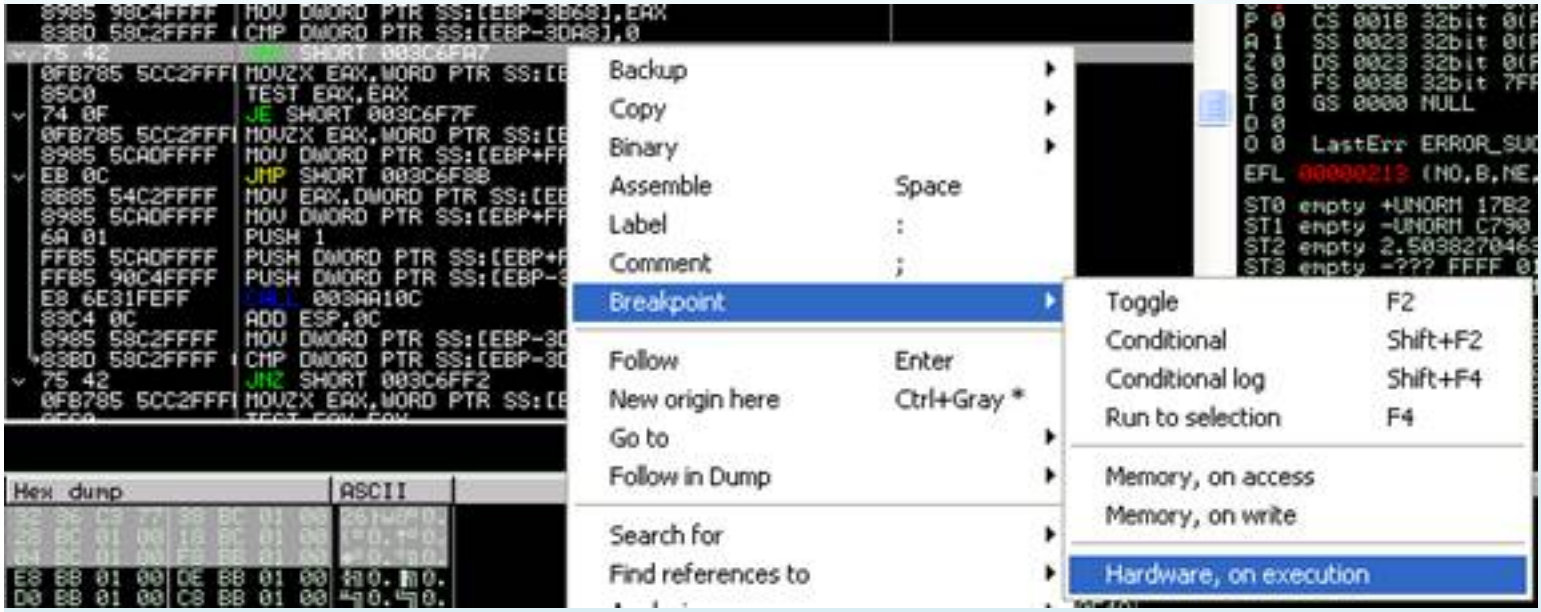
Appear:



Human button "Delete 1" to remove BP has set, and click OK

Let's set breakpiont **Hardware, execute on** 003C6F63 address at:

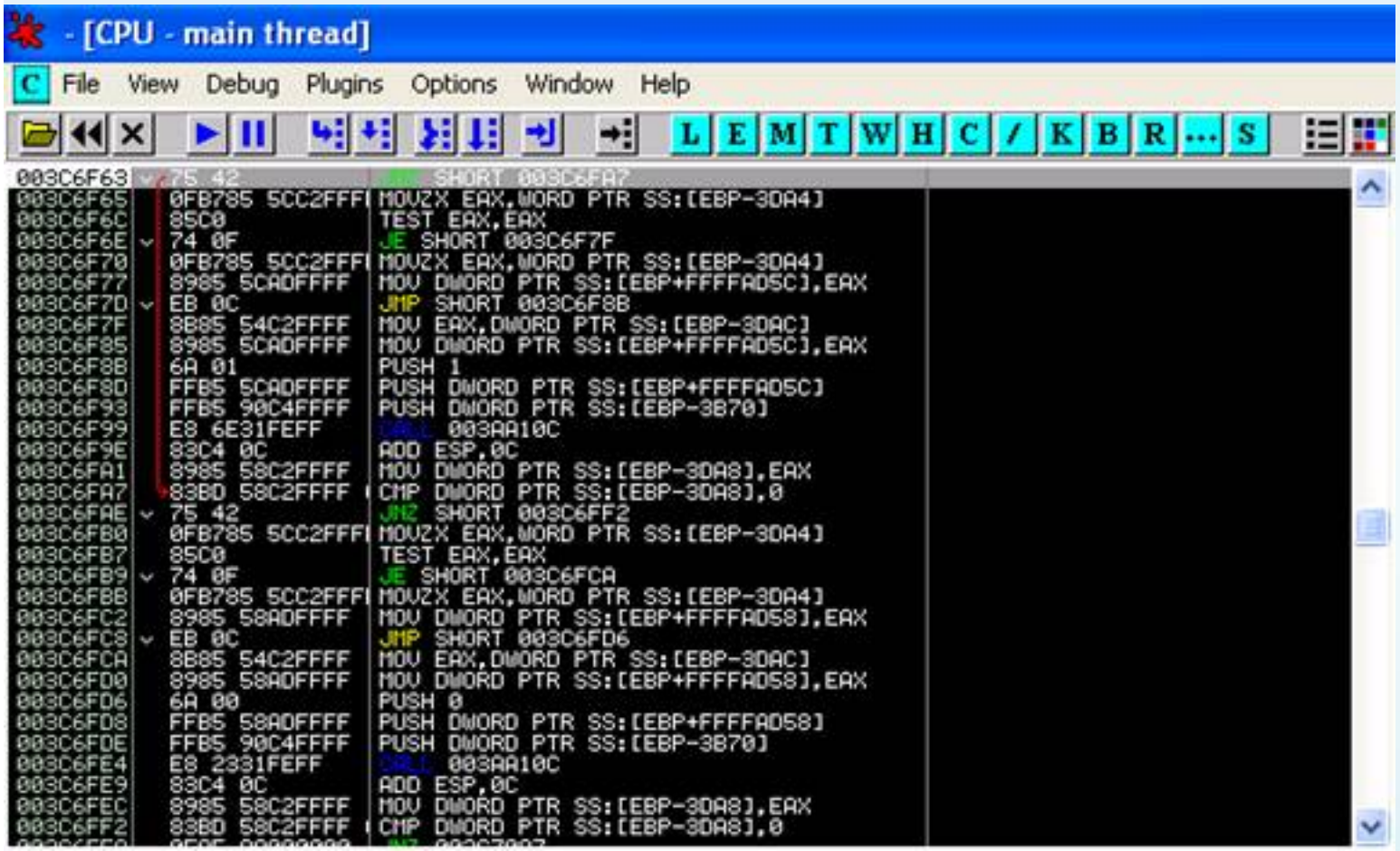
Click the mouse on the right direction and make 003C6F63 image as follows:



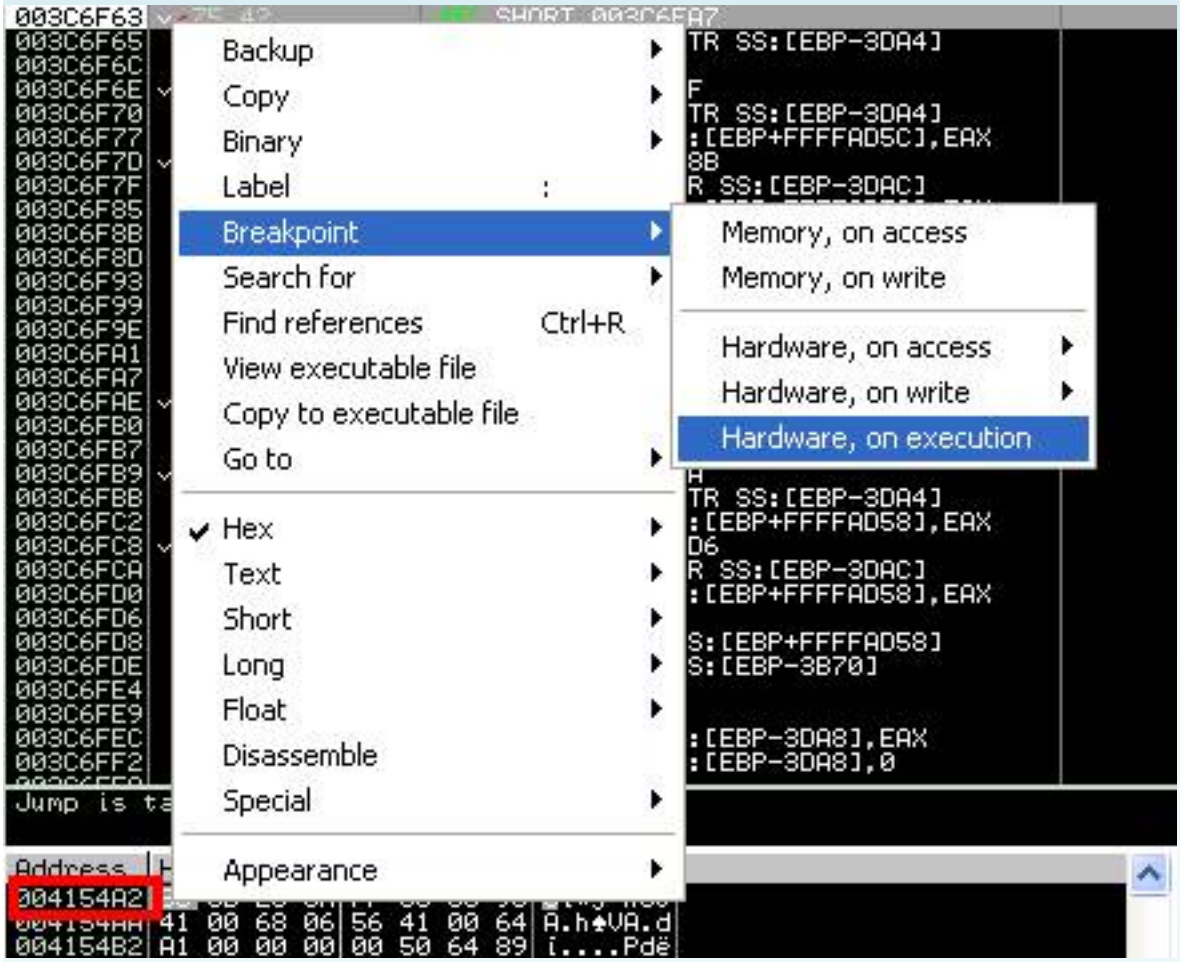
Now let Olly close again.

Step 4: Run 1 scripts corrective IAT:

Load file FashFavorite.exe inOlly again. Run by Shift + F9. We will stop at breakpiont BP has set Hardware, execute on the Step 3.

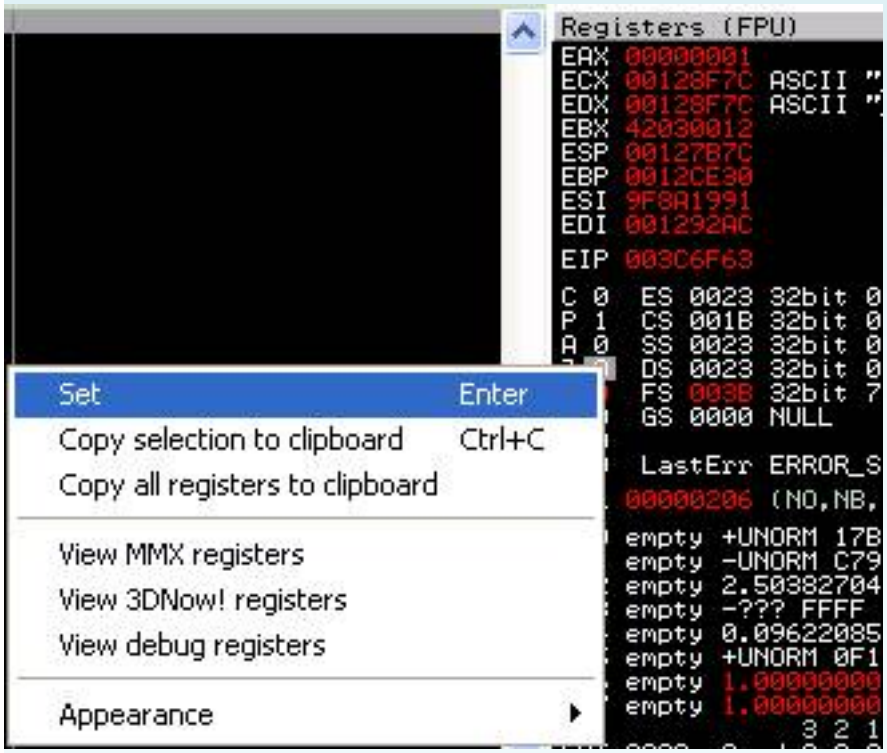


Before you run ollyscript, let us set breakpoint Hardware, execute on at OEP (004154A2) that we find in step 1. The goal is the complete script Olly run will stop here. In dump window, we Goto to addr 004154A2. Select 4 bytes, and must click the mouse on the selected bytes. BP set image as follows:



Note: Before running ollyscript

ZF = 0 If we let them set it equal to 1 (set zF = 1). Because if i ollsript run loss ham 1. We do the following, click on the Zero flag, right click, select "Set" as the image

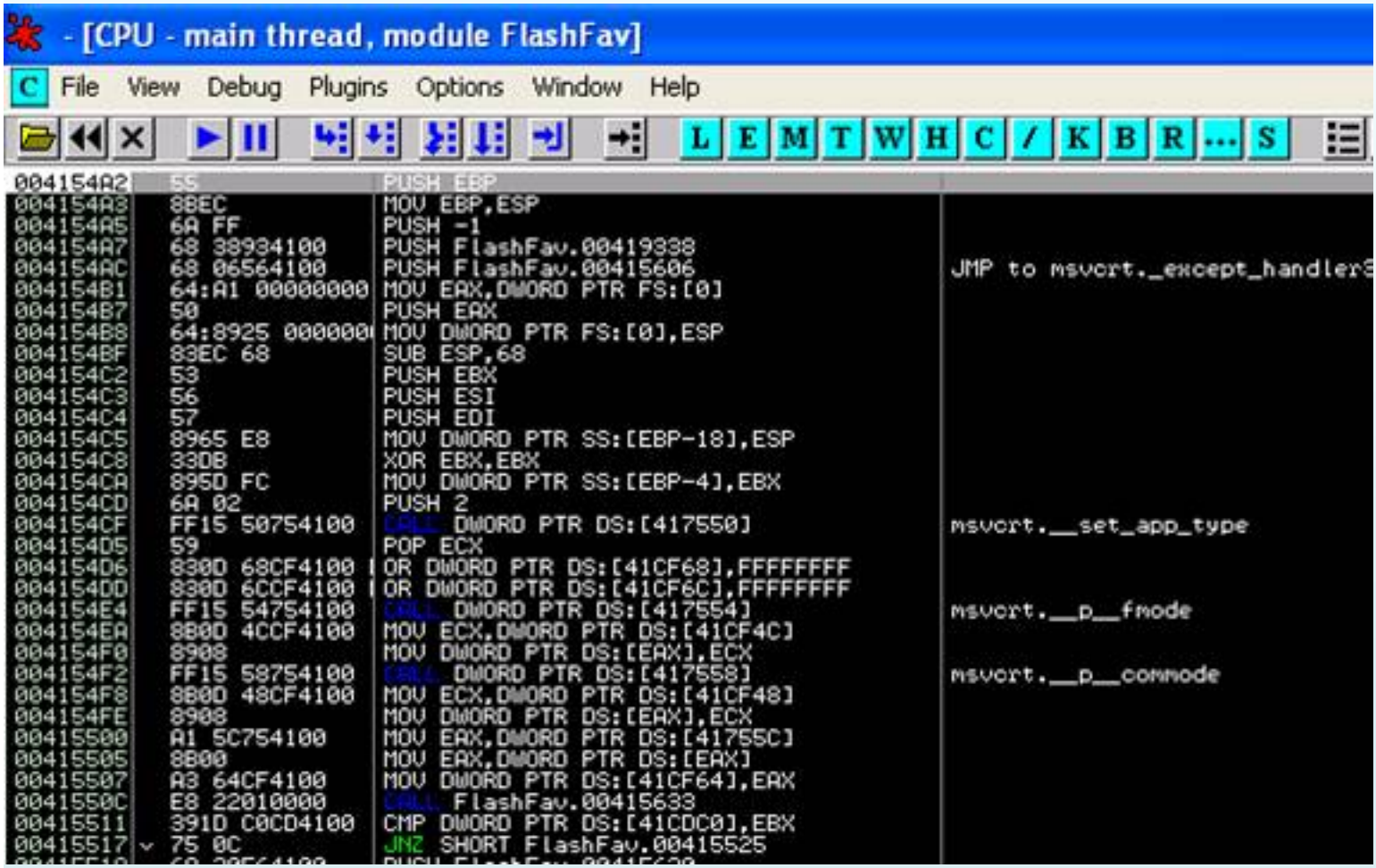


Ollyscript used to repair the file IATscript.osc IAT is as follows:

```
IATscript.osc
dbh
eoe LABEL
eob Babel
run

LABEL:
esto
jmp LABEL

Babel :
Cmp eip, 003C6F63
jne fin
mov! zF, 1
run
jmp Babel

Fin:
ret
```

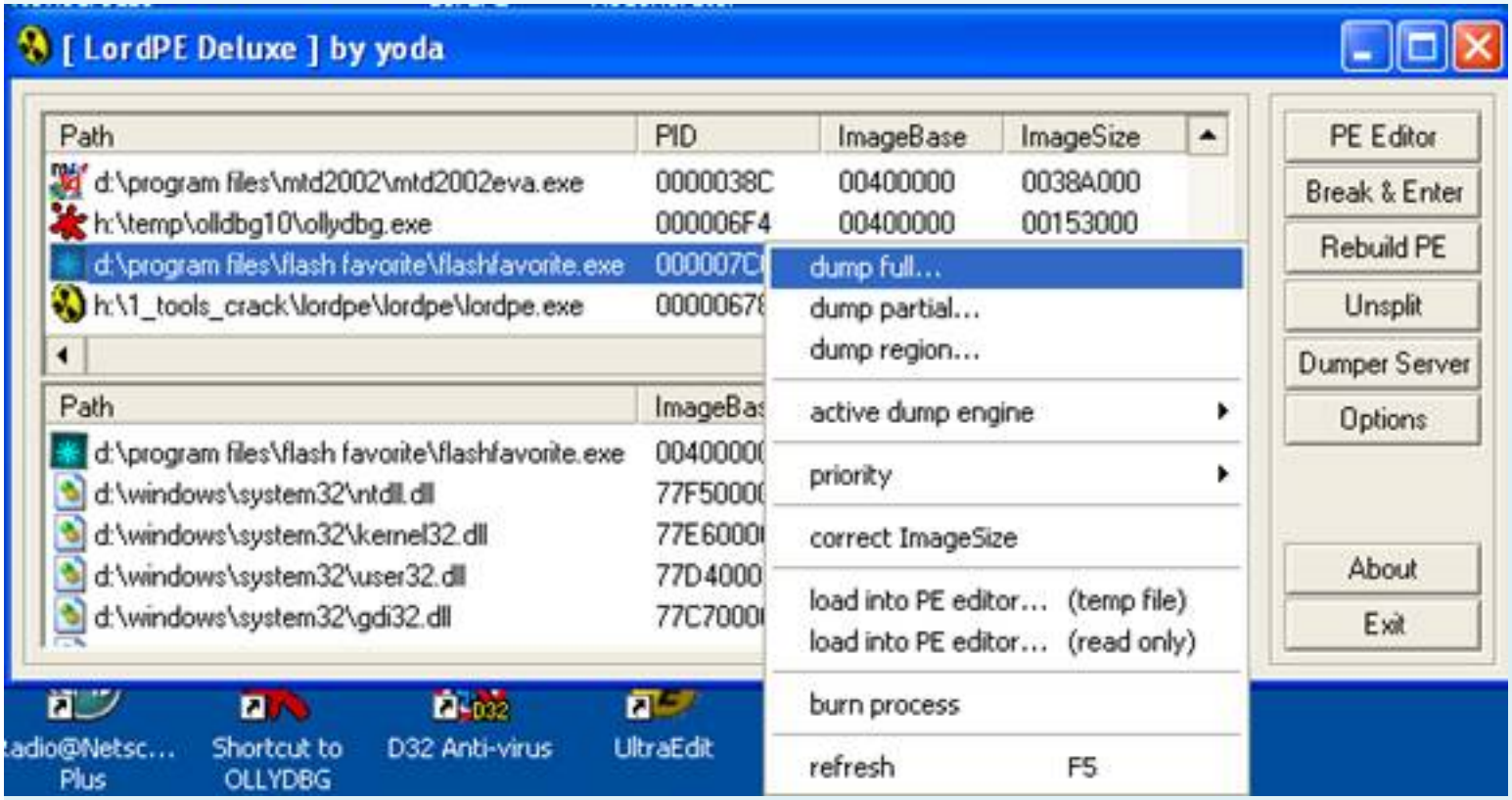
Address **003C6F63** addr in the script is that we find in step 3 (addr this as your computer)

Now, we IATscript.osc running and then it will stop at OEP we have set bp:



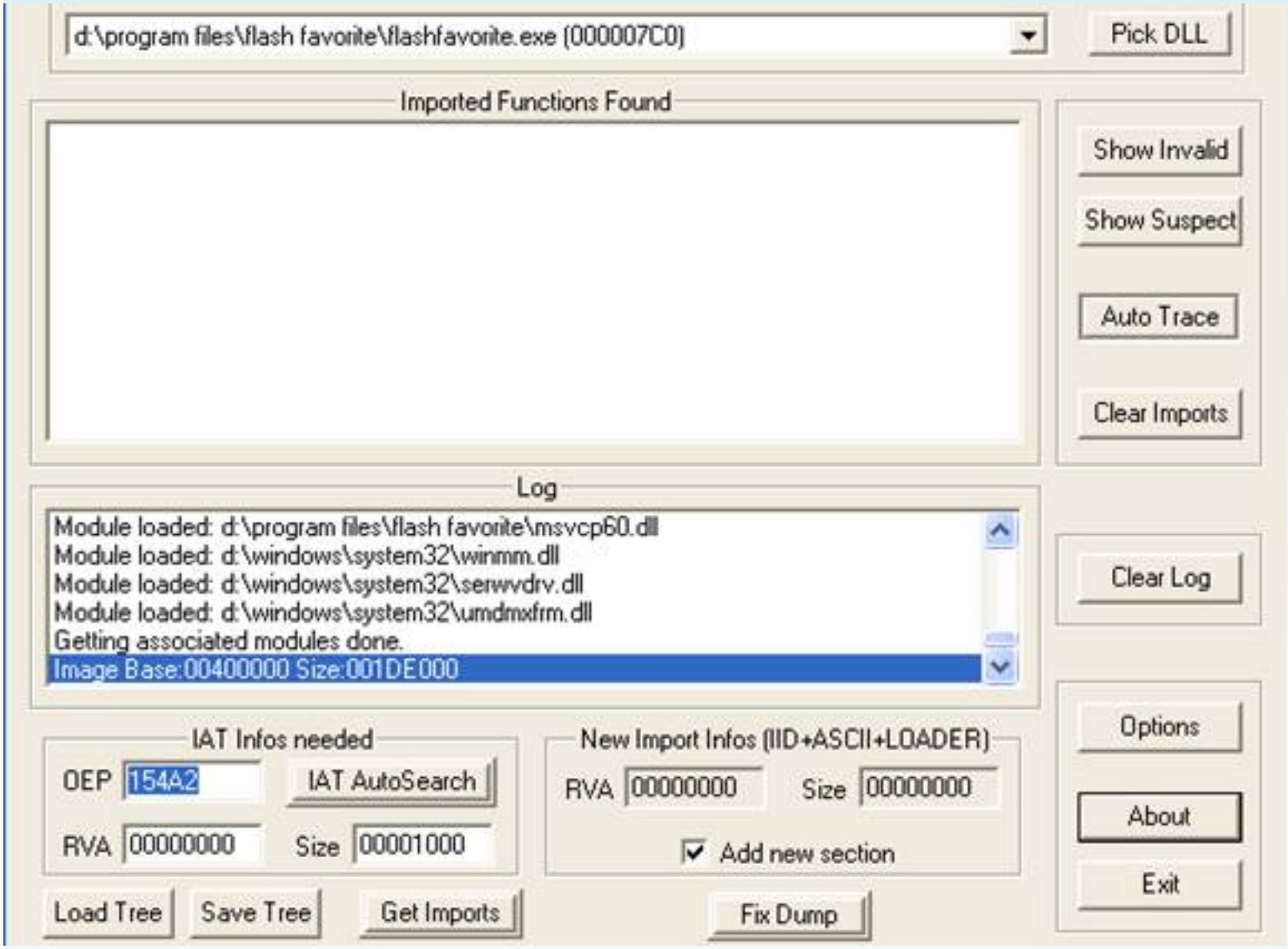
Step 5: dump:

We will dump the first full fashfavorite.exe process with LordPE files dumped.exe

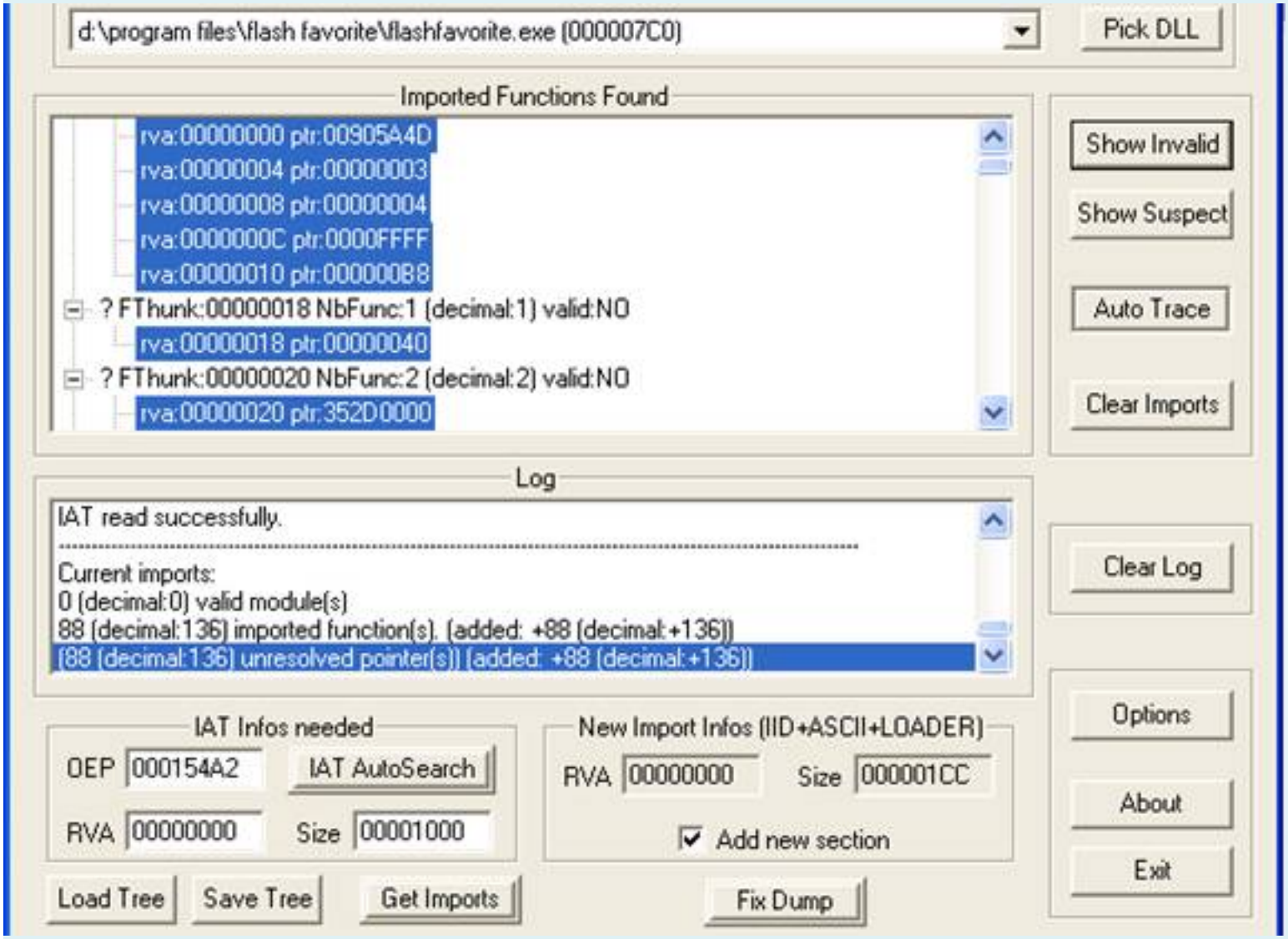


Step 6: Fix IAT:

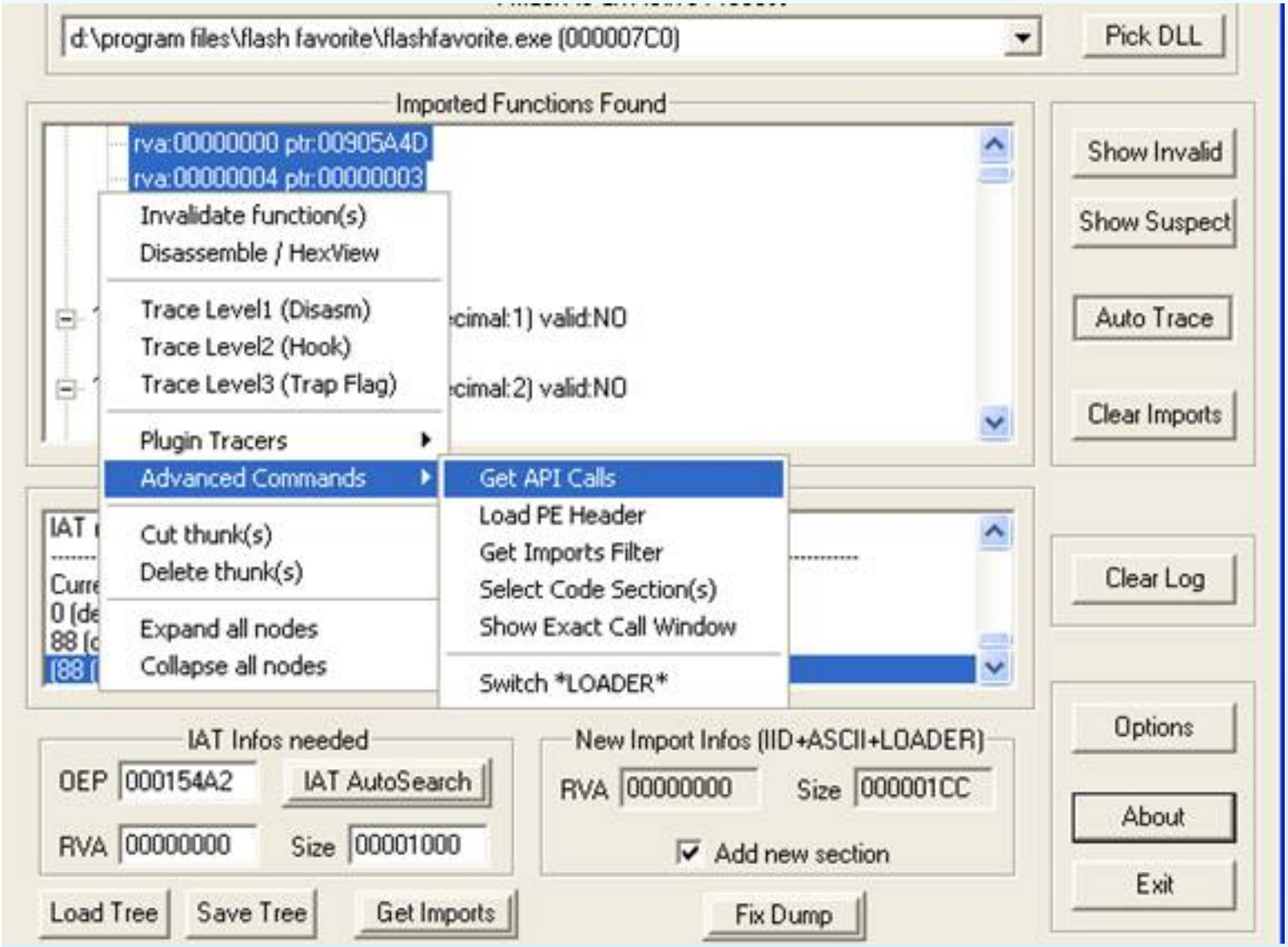
ImpRec Open, Select proccess is flashfavarite.exe.
Set OEP = 154A2 as image



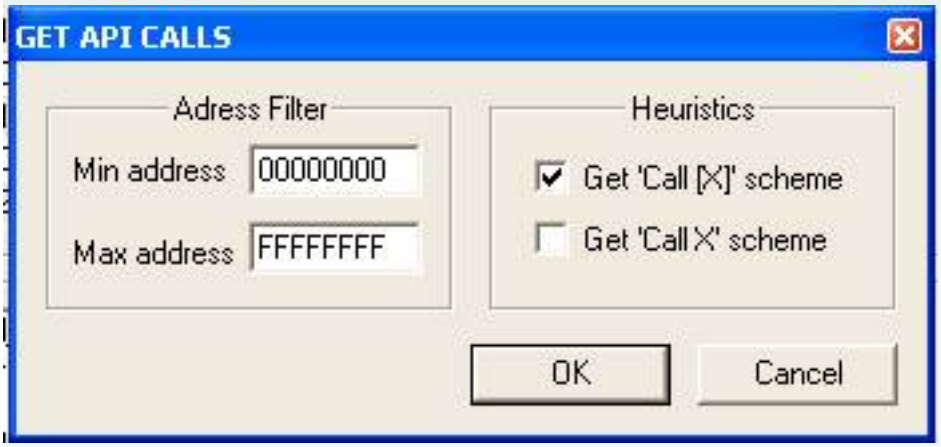
Press button "Get Imports" and then press button "Show Invalid" We'll have images as follows (Note the IAT AutoSearch ko)



Right click on the Fthunk do not recognize (such as green image above), select Advanced commands / Get API Calls

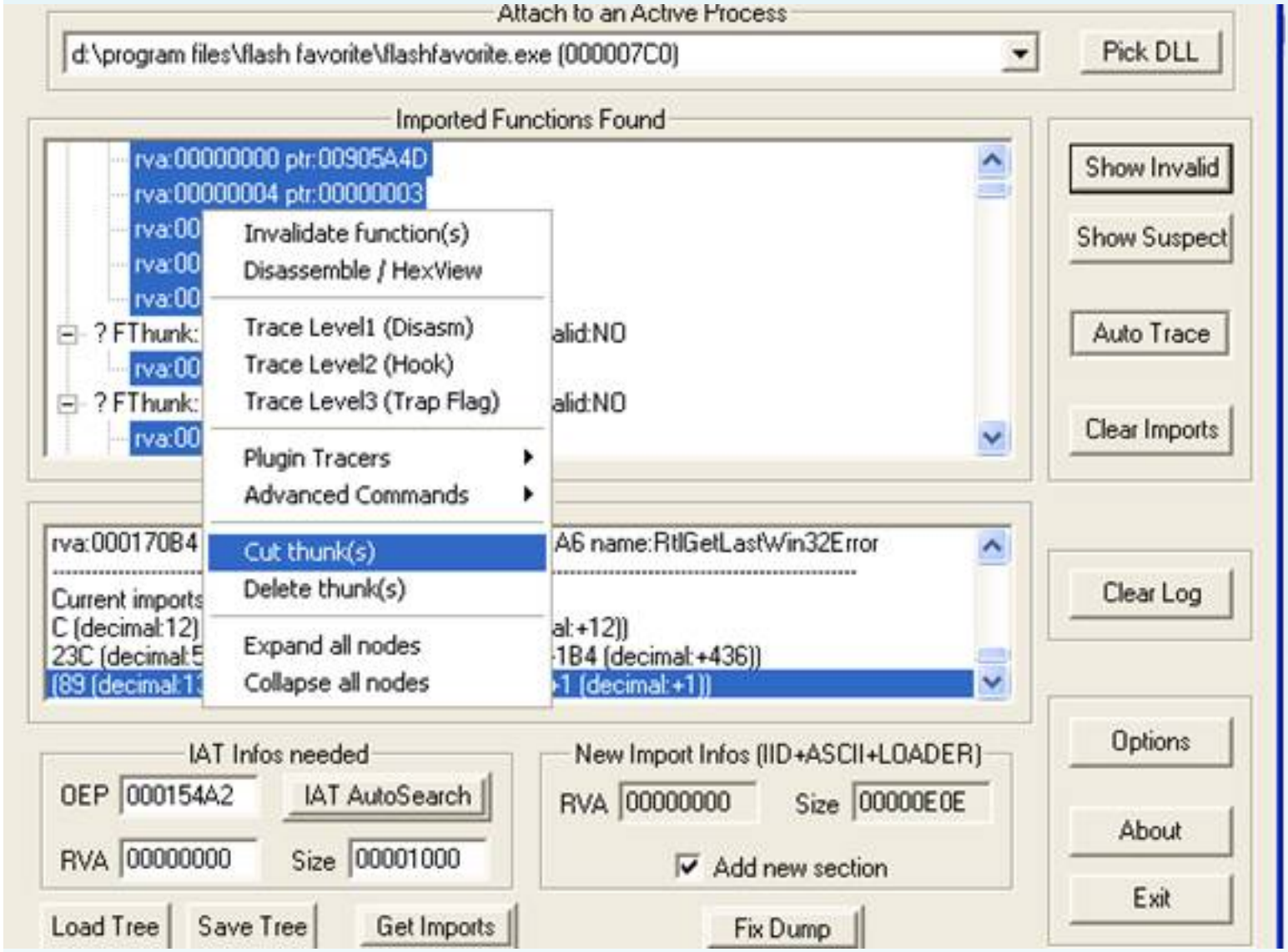


Appear:

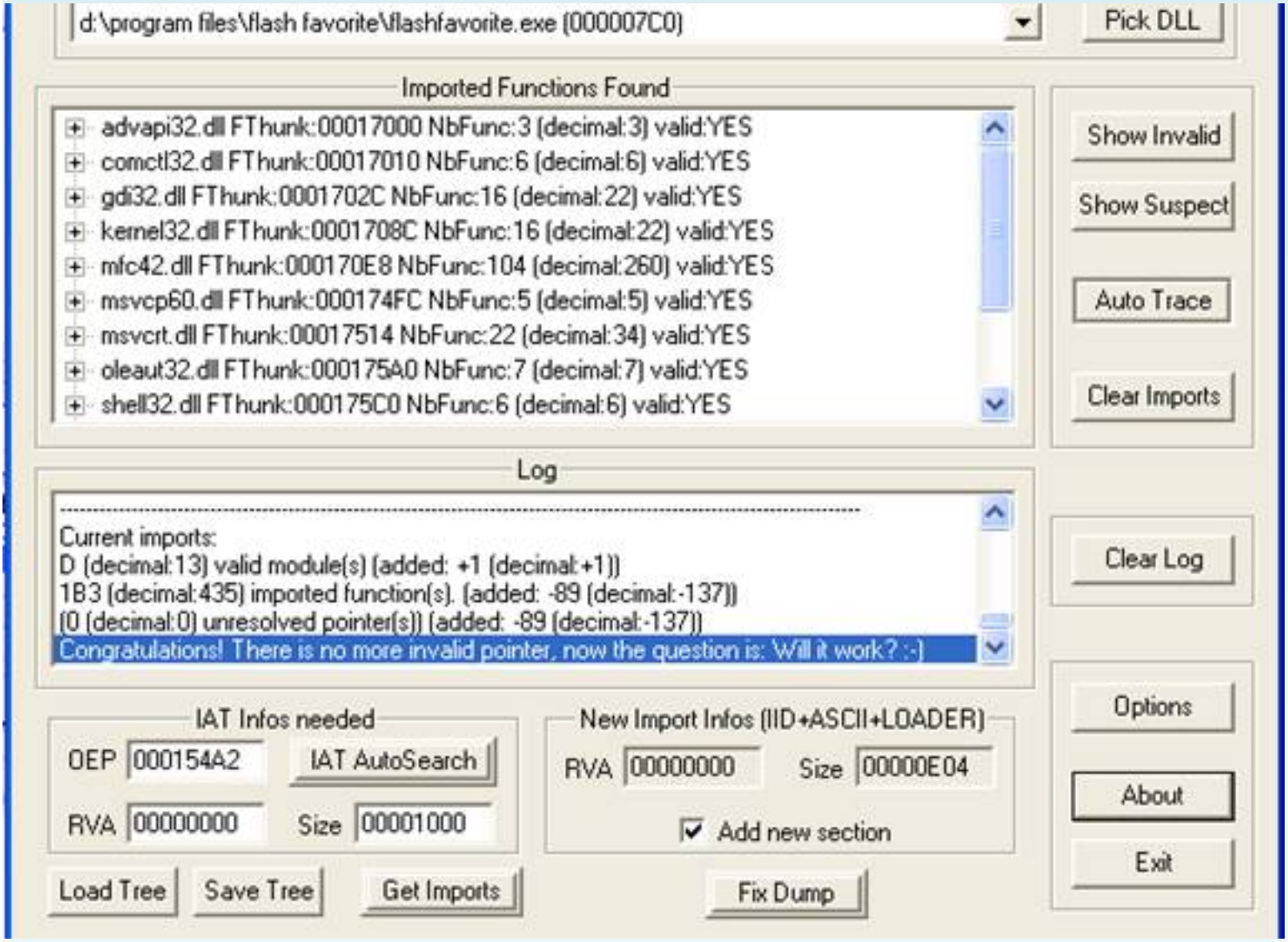


Press "OK"

After, press button "Show Invalid" again, and "Cut thunks"



We'll see the following:



Press button "Fix dump" file to fix IAT dumped.exe.

Run the file dumped_.exe ko be scrash.

Benina 15/5/2005

UnPaCkInG - ASPack 1.06b / 1.061b

Homepage: http://crackmes.de
Coder: FireWorx (FireWorx - Crackme 14 - Level 1)
Cracked File: Crackme14.exe (Borland Delphi 4.0 - 5.0)
Packed: ASPack 1.06b / 1.061b -> Alexey Solodovnikov
Crack Tool: OllyDbg 1.10b, PEiD 0.92, ImportREC 1.6F
Unpack Type: Manual

---------- ----------

- Use PEiD we know is the program is using **ASPack** PACK **1.06b / 1.061b -> Alexey Solodovnikov**
- Load up the program with Olly. Select No (not Analysis). I will come:

CODE

```
0041F6E0> 90
Submit <== We
here
0041F6E1 75 00
JNZ SHORT
Crackme1.0041F6E3
0041F6E3 - E9
18190300 JMP
Crackme1.00451000
```

- The F8 until we go to:

CODE

```
00451000 60
PUSHAD <== We
here
00451001 E8
00000000 CALL
Crackme1.00451006
```

- Press F8 one command line to the next. In the book **Registers (FPU)** we have to lick your mouse in the value **ESP** and **Follow Indump. Hex dump** window will switch to new window.

Select **the first 4 bytes** of this window and lick your mouse to select **BreakPoint ==> Hardware on access ==> Dword.** Then press **F9** to us:

CODE

```
0045104F - FFE0
JMP EAX;
Crackme1.004419F8
<== We here
00451051 80BD
A2AE4300 0> Cmp
BYTE PTR SS:
[EBP +43 AEA2], 0
00451058 74 1D
JE SHORT
Crackme1.00451077
```

- The next F8 again we will go to OEP (right now the value of EAX is OEP)

CODE

```
004419F8 55 PUSH
EBP <== We here
004419F9 8BEC
MOV EBP, ESP
004419FB 83C4 F4
ADD ESP, 0C -
004419FE b8
F0184400 MOV
EAX,
Crackme1.004418F0
00441A03 E8
9C41FCFF CALL
Crackme1.00405BA4
```

- Note: After coming here is not using the mouse or do anything on the screen move up and down. Because the command line will be lost and we must do from the beginning.

- Then select the next **Plugins ==> Olly dump ===> dump debugged process.** After you select

will be completed at the Entry Point in the box -> Modify is the value of the OEP. Click OK and save as you like (the extension is. Exe).

- Keep raw Olly xuot in the process. Use Import REConstructor v1.6F load © 2001-2003 program. Fill in the OEP OEP value is above. Select IAT Auto Search, then select Get Imports and finally dump Fix (file with the fix is a new file is created above). In this program does not have any balance at all thunk.

- I will be a new file. File this run entirely possible. To improve our conduct over the cleaning and reduce the file size of the file after Fix dump (to file as small as possible. However, if you do not like you can ignore). To implement this process we use Delux LordPE v1.4. Load up the program, select rebuild PE. Select File Fix we dump on, lick the Open and we have a complete new file to run CRACK.

- Check the file with PEiD, we know the program is written in Borland Delphi 4.0 - 5.0.

Production: DriveScrubber 2.0a
Copyright by: Eugene Roshal
Homepage: www.iolo.com
Packed: ASPack 2.1 -> Alexey Solodovnikov
Coder: Borland Delphi 4.0 - 5.0
Tools: OllyDbg 1.09d LordPE + + 1.6 ImportREC

After you load up with Olly DriveScrubber, ignored (click Yes / Ok) Dialog in the notice ...
I will start here ....

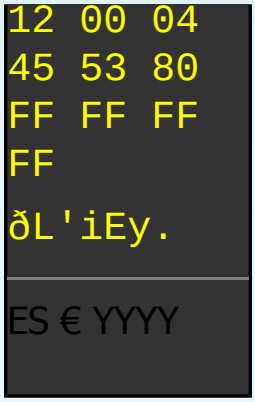
CODE

```
004B3001> 60
PUSHAD -> Olly
are here Paused
004B3002 E8
72050000 CALL
InstallD.004B3579
004B3007 EB 33
JMP SHORT
InstallD.004B303C
```

Press F8 to run to 004B3002 .. Now look through the window Registers value **ESP = 0012FFC4.**
Right Click on the ESP -> Follow in dump.
Continue in the window after selecting Hex Follow in the dump will jump to ....

CODE

```
0012FFC4
C7 14 E8
77 78 E0
12 00 F0
88 FA 77
00 F0 FD
7F to
ewxa. Ðuw.
ðy
0012FFD4
F0 4C 27
EF C8 FF
```



Select the first 4 bytes (C7 14 E8 77), Right Click -> BreakPoint -> Hardware, on access -> Dword.
Now the press F9 to run, Olly will pause again. Then we will in ...

CODE

```
004B34F4 / 75 08
JNZ SHORT
InstallD.004B34FE
-> You are here
004B34F6 | b8
01000000 MOV
EAX, 1
004B34FB | C2
0C00 RETN 0C
004B34FE \ 68
70EB4700 PUSH
InstallD.0047EB70
004B3503 C3 RETN
```

Press F8 to trace to 004B3503, click Next again to 1 Return on ....

CODE

```
0047EB6E
47 DB 47;
Char 'G'
0047EB6F
00 DB 00
0047EB70
55 DB 55;
Char 'U' -
> Pause
here
0047EB71
8B DB 8B
DB
0047EB72
EC EC
```

Now do not Olly **Analyse** should not see the code ... press Ctrl + A analysing Wait ... ... will have done the following code ....

CODE

```
0047EB6B 00 DB 00
0047EB6C
80E84700 DD
InstallD.0047E880
0047EB70. 55 PUSH
EBP -> OEP
0047EB71. 8BEC
MOV EBP, ESP
0047EB73. 83C4 F4
ADD ESP, 0C -
0047EB76. 53 PUSH
EBX
0047EB77. B8
A8E84700 MOV
EAX,
```

Right here .. Using LordPE, select the Process and Full dump ... I will be dumped.exe file.
Continue using ImportREC, select Process fill **OEP is 0047EB70 - 400,000 = 7EB70** -> Click IAT Auto Search.

RVA = 00082164 -> 00082200
Size = 0000074C -> 00000800

* Increase Size & reduce RVA aims to expand the home region Imports imports missing.
Ok .. Select ... Get Imports will ImportREC Import function of APIs for us ...
Because this information to select the balance should be the invalid -> Show Invalid -> Trace Level -> still invalid -> Show Invalid Cut Trunks and go ... Fix dump.

And we have complete files unpack ... Check PeiD DriveScrubber will receive the code with the Borland Delphi 4.0 - 5.0.

Practice unpack ASPack victim with Opera 7:23

Using PeiD we are following information: ASPack 2:12 -> Alexey Solodovnikov
Okai .. Use OllyDbg load up Opera. Press CTRL-B, type 61 and press CTRL-L to find the following code:

CODE

```
007303AF. 61
POPAD
```



```
EAX, 1
007303B7. C2
0C00 RETN 0C
007303BA> 68
31B16600 PUSH
opera.0066B131
007303BF. C3
RETN
```

Set bpx 007303AF. Now the press F9 to run the program, Olly will pause at 007303AF where we've set bpx.
Now press the F8 to find OEP Trace ... Every time a press F8 you will find the following code:

CODE

```
0066B131 00 DB
00
0066B132. 8BEC
MOV EBP, ESP
0066B134. 6A FF
PUSH -1
0066B136. 68
C0716C00 PUSH
opera.006C71C0
0066B13B. 68
D8B96600 PUSH
opera.0066B9D8;
SE handler
installation
0066B140. 64:
```

```
A1 0000000>
MOV EAX, DWORD
PTR FS: [0]
0066B146. 50
PUSH EAX
```

**.. Here Zombie mun a little note ... the first Zombie made it to the trace here is just a Byte 0 (DB 00), then press Ctrl-A to analsy. When the Code will appear more clearly. However hì .. .. .. hì After pressing CTRL-A in time to trace 0066B131 you'll see here is the code PUSH EBP ... And the next time it is a DB 00: (thui shelves .. it .. Every nho addr 0066B131 is called ...

Now the dump is full. Olly resources for the state Paused 0066B131, use LordPE load up Opera.exe process. RightClick select Full dump. It will save files in the folder dumped.exe Opera.exe.

Now it continues to fix the IAT. ImportREConstructor a tool to use for this ... As on. Select Process Opera.exe.

OEP is now: **0066B131-26B131 = 400000** ...

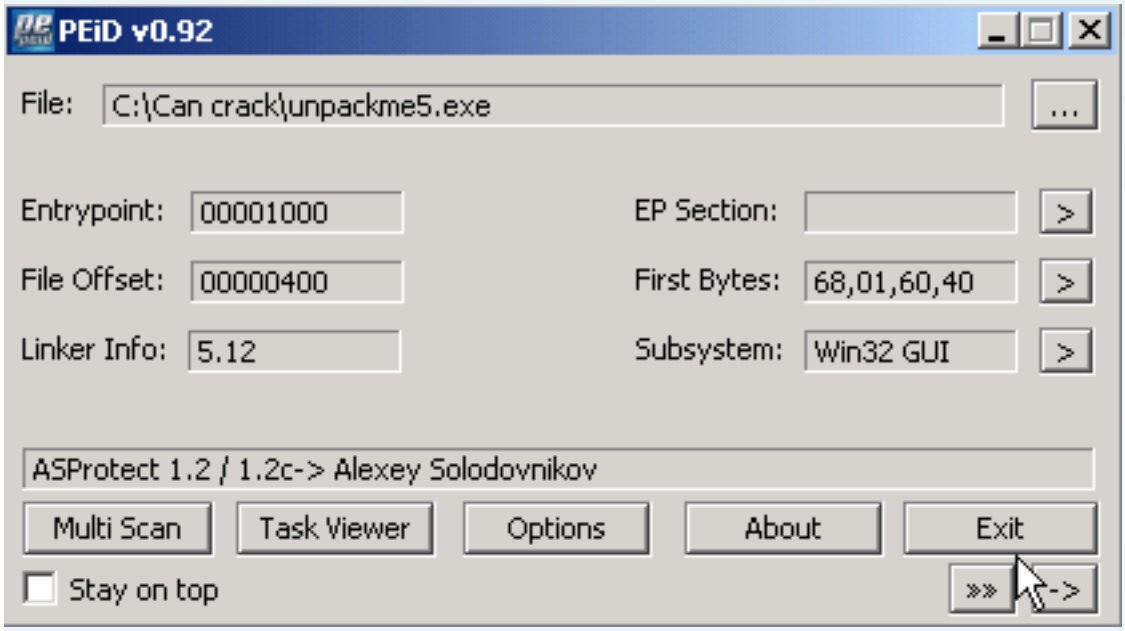
Enter OEP. Select IAT auto search ... It will enter the following information: **RVA = 0027A000 Size = 000007EC.**

But little thui ... Select Imports Get it imports all the APIs ... Done properly fix dump, select File dumped.exe This full dump -> Fixed dumped_.exe the file -> File is correct and Asia ...

Learning unpack Asprotect 1.2/1.2c

Target: unpackme # 5
Packer: Asprotect 1.2/1.2c
Download: http://nhandan.info/hacnho

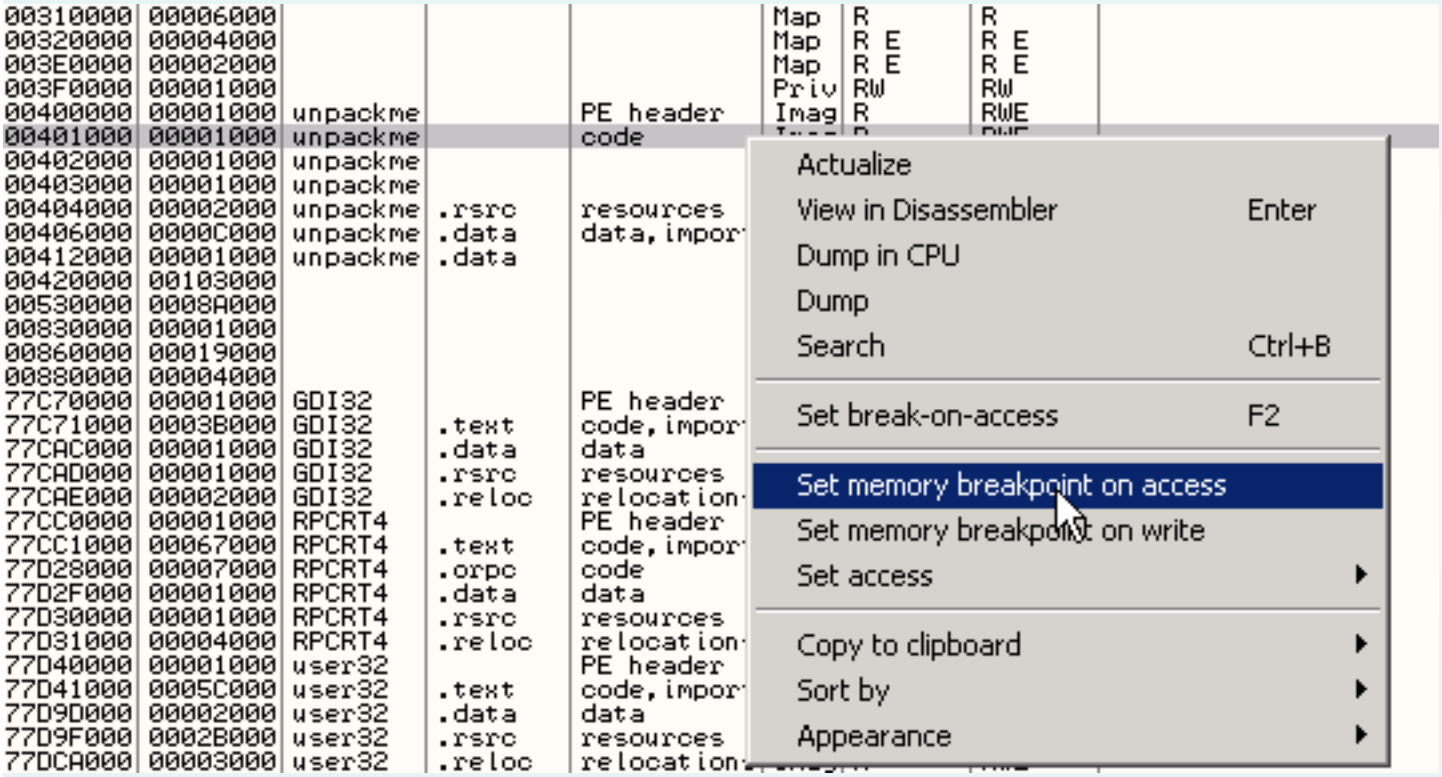
First used to see PEID pack it with anything.



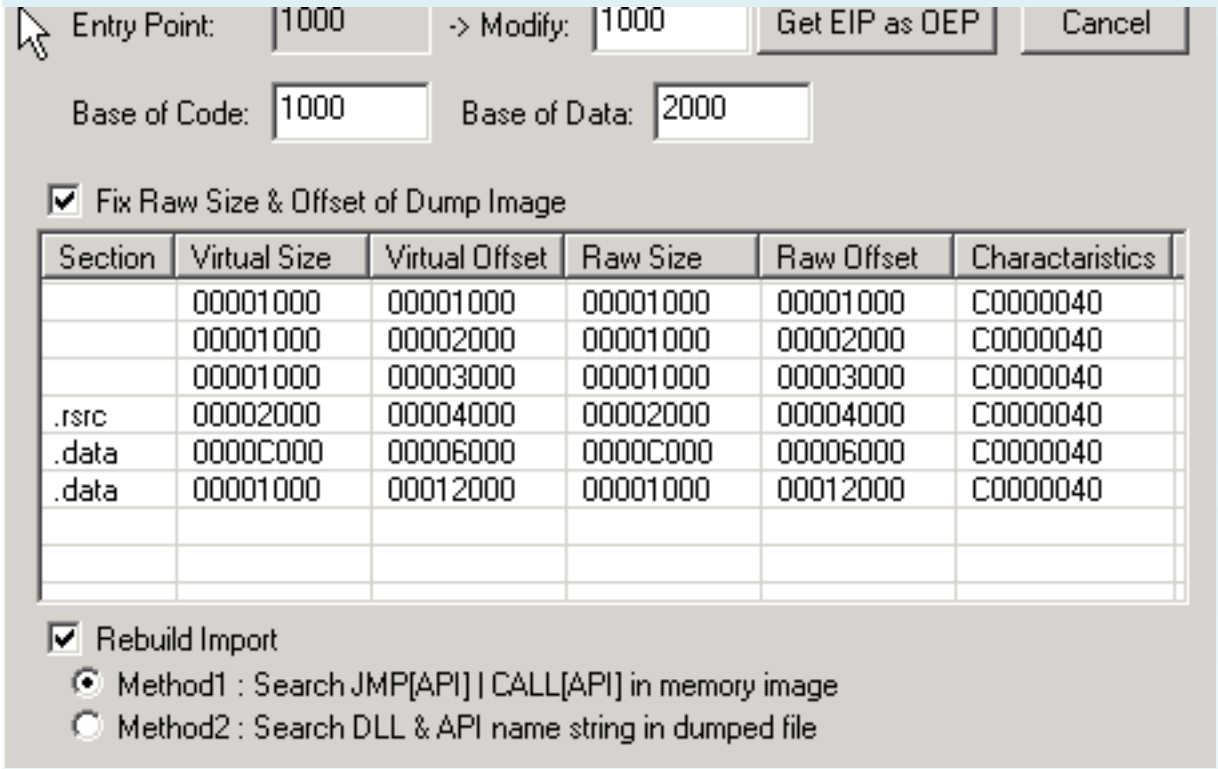
We see it in the pack Asprotect 1.2/1.2c. Use OllyDbg open file. Press Shift-F9 have been 21 times, the program runs. Load the program in OllyDbg (Ctrl-F2). Press Shift-F9 continuous 20 times. We at 88169A.

```
0088169A   FF02              INC DWORD PTR DS:[EDX]
0088169C ^ EB E8             JMP SHORT 00881686
0088169E   8BC1              MOV EAX,ECX
008816A0   2BF6              SUB ESI,ESI
008816A2   64:8F06           POP DWORD PTR FS:[ESI]
008816A5   5E                POP ESI
008816A6   E8 00000000       CALL 008816AB
008816AB   33C2              XOR EAX,EDX
008816AD   8B3C24            MOV EDI,DWORD PTR SS:[ESP]
008816B0   58                POP EAX
```

Press Alt-M to open Memory map. Set Breakpoint in section 2 (code).



Close Memory map. Press Shift-F9. We OEP at 401,000. Using OllyDump.



Them. Happy happy.

tlandn

<<<<->>>> **XP Utilities Lite** <<<<->>>>
Content PEiD we know is the program pack with **ASProtect 1:23 RC4 Registered -> Alexey Solodovnikov**
Load up the program with Olly. Select No (not Analysis). I will come:

QUOTE

```
00401000> 68
01B05200 PUSH
Adutils.0052B001
<=== We here
00401005 E8
01000000 CALL
Adutils.0040100B
```

As programs Anti-Debug so we must disable it by using your Olly Plugin (IsDebugPresent) choose Hide. Or, press **Ctrl-G** in the Hex dump window, go to **7FFDF002,** Ok people, at this location to see the value 01 to 00.

This made the per-call program with Olly.Nhan Shift-F9 28 times (29 times will run the program):

QUOTE

```
009F3D03
3100 XOR
DWORD PTR
DS:
[EAX],
EAX <====
We came
here
```

Or when one of us to italy the window stack, when you see the line:
0012FF5C 00A6A530 ASCII "lgJ4vADQtuw"
Contest appear chu italy, see the line:
0012FF80 00400000 ASCII "MZP"
appear stopped contest (as to when this is the time to 28)

People continue next Shift-Alt-F7.Nhan M to open a window onto Memory map. Select the engine Owner: Contains and Adutils: code. Lick mouse to select the Set breakpoint on memory access. Then the next F9 we will return to main screen right here:

QUOTE

```
0040619C
- FF25
80724C00
JMP DWORD
PTR DS:
[4C7280]
<=== We
here
004061A2
8BC0 MOV
EAX, EAX
004061A4
- FF25
7C724C00
JMP DWORD
PTR DS:
[4C727C]
004061AA
8BC0 MOV
EAX, EAX
004061AC
- FF25
78724C00
JMP DWORD
PTR DS:
[4C7278]
004061B2
8BC0 MOV
EAX, EAX
004061B4
- FF25
74724C00
JMP DWORD
PTR DS:
[4C7274]
004061BA
8BC0 MOV
EAX, EAX
```

Content LordPE delux 1.4 Adutils.exe load the file, select the full dump ...., I can file dumped. exe
Human F8 to jump ahead to the next order. One of F8 to jump to order RETN and through to the next order. Then we will go to here:

QUOTE

```
00406271 A3
68564C00 MOV
DWORD PTR DS:
[4C5668], EAX
<=== We here
00406276 A1
68564C00 MOV
EAX, DWORD PTR
DS: [4C5668]
0040627B A3
A8204C00 MOV
DWORD PTR DS:
[4C20A8], EAX
00406280 33C0
XOR EAX, EAX
00406282 A3
AC204C00 MOV
DWORD PTR DS:
[4C20AC], EAX
00406287 33C0
XOR EAX, EAX
00406289 A3
B0204C00 MOV
DWORD PTR DS:
[4C20B0], EAX
0040628E E8
C1FFFFFF CALL
Adutils.00406254
A4204C00 BA
00406293 MOV
EDX,
Adutils.004C20A4
00406298 8BC3
```

```
MOV EAX, EBX
<=========
Remember value
EAX
0040629A E8
BDDAFFFF CALL
Adutils.00403D5C
0040629F 5B POP
EBX
004062A0 C3
RETN <=== The
next F8 when
you come here.
```

And here we find the value of EAX = 004C1250 After the F8 RETN order for us to here

QUOTE

```
004C1781 0000
ADD BYTE PTR
DS: [EAX], AL
004C1783 E8
D84AF4FF CALL
Adutils.00406260
<= ===== OEP
C1783
(temporary)
004C1788 A1
40414C00 MOV
EAX, DWORD PTR
DS: [4C4140]
```

We find the value is unavailable OEP **C1783**
Stay in main screen. Press Ctrl-B, and go to the FF 25, then press Ctrl-L continue to search to đoạn:

QUOTE

```
00401254
- FF25
34724C00
JMP DWORD
PTR DS:
[4C7234]
0040125A
8BC0 MOV
EAX, EAX
0040125C
- FF25
30724C00
JMP DWORD
PTR DS:
[4C7230]
00401262
8BC0 MOV
EAX, EAX
00401264
- FF25
2C724C00
JMP DWORD
PTR DS:
[4C722C]
```

So we predicted IAT of programs
RVA = 4C7234 - 400,000 = C7234 (here we choose is C7000)
Size = 900

Use Import REConstructor v1.6F © 2001-2003 Adutils.exe load file. Prefill values above the **IAT infos needed.** Then the Get Imports, the next Show Invalid, then the **Trace level 1 (disasm).** After the trace is complete, the next **Show Invalid,** then lick the mouse and choose to continue **Plugin Tracers ====> ASProtect 1:23 RC4.** Trace Once completed, the next **Show Invalid,** then lick the mouse and choose to continue **Plugin Tracers = ===> ASProtect 1:22.** Finally the Show Invalid time more and more people Cut thunks. Then dump Fix (file with the fix is a new file is created above). Here we have a file dumped_.exe
Load file dumped_.exe up and we will go to here:

QUOTE

```
004C1778
0000 ADD
BYTE PTR
DS:
[EAX], AL
004C177A
0000 ADD
BYTE PTR
DS:
[EAX], AL
004C177C
0000 ADD
BYTE PTR
DS:
[EAX], AL
004C177E
0000 ADD
BYTE PTR
DS:
[EAX], AL
004C1780
0000 ADD
BYTE PTR
DS:
[EAX], AL
004C1782
00E8 ADD
AL, for I
am here
===
```

Notice is now here we have a case of 11 bytes. Complete Stolen Bytes. Once completed, we are now:

QUOTE

```
004C1778 55
PUSH EBP <====
real OEP
004C1779 8BEC
MOV EBP, ESP
004C177B b8
50124C00 MOV
EAX,
dumped_.004C1250
<== Instead
value EAX with
our values at
the heart
004C1780 83C4
F4 ADD ESP, 0C -
```

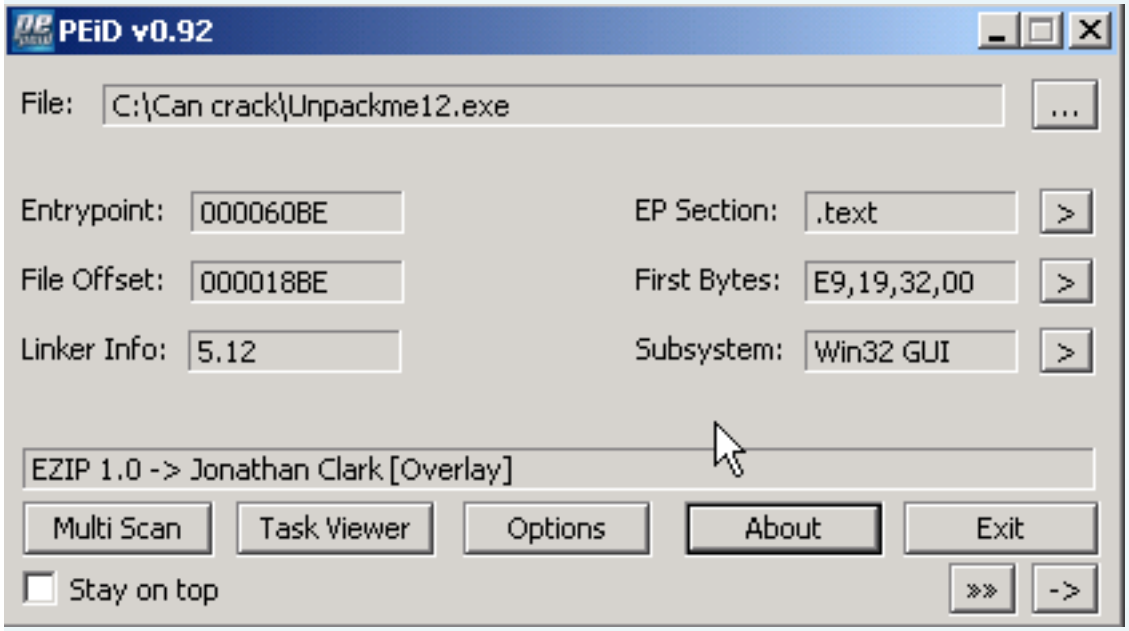
Once completed we will get real value OEP. Here:
OEP = 4C1778 - 400,000 = C1778

Must click and select: Copy to executable ==> All modification. Select Copy All next. At the new screen you must click the mouse and select Save File next. Save the file again with new names.
Here we have dumped_1.exe file. Content LordPE delux 1.4 load dumped_1.exe file, select PE Editor .... Dumped_1.exe selected file. At the new window, in the Entry Point to see the new value is C1778. Human Save and then OK.
Then select rebuild PE to initiate the process and remove RAC dimple Filesize programs then run honaf all good, not CRASH

Learning unpack Ezip 1.0

Target: unpackme # 12
Packer: Ezip 1.0
Download: http://nhandan.info/hacnho

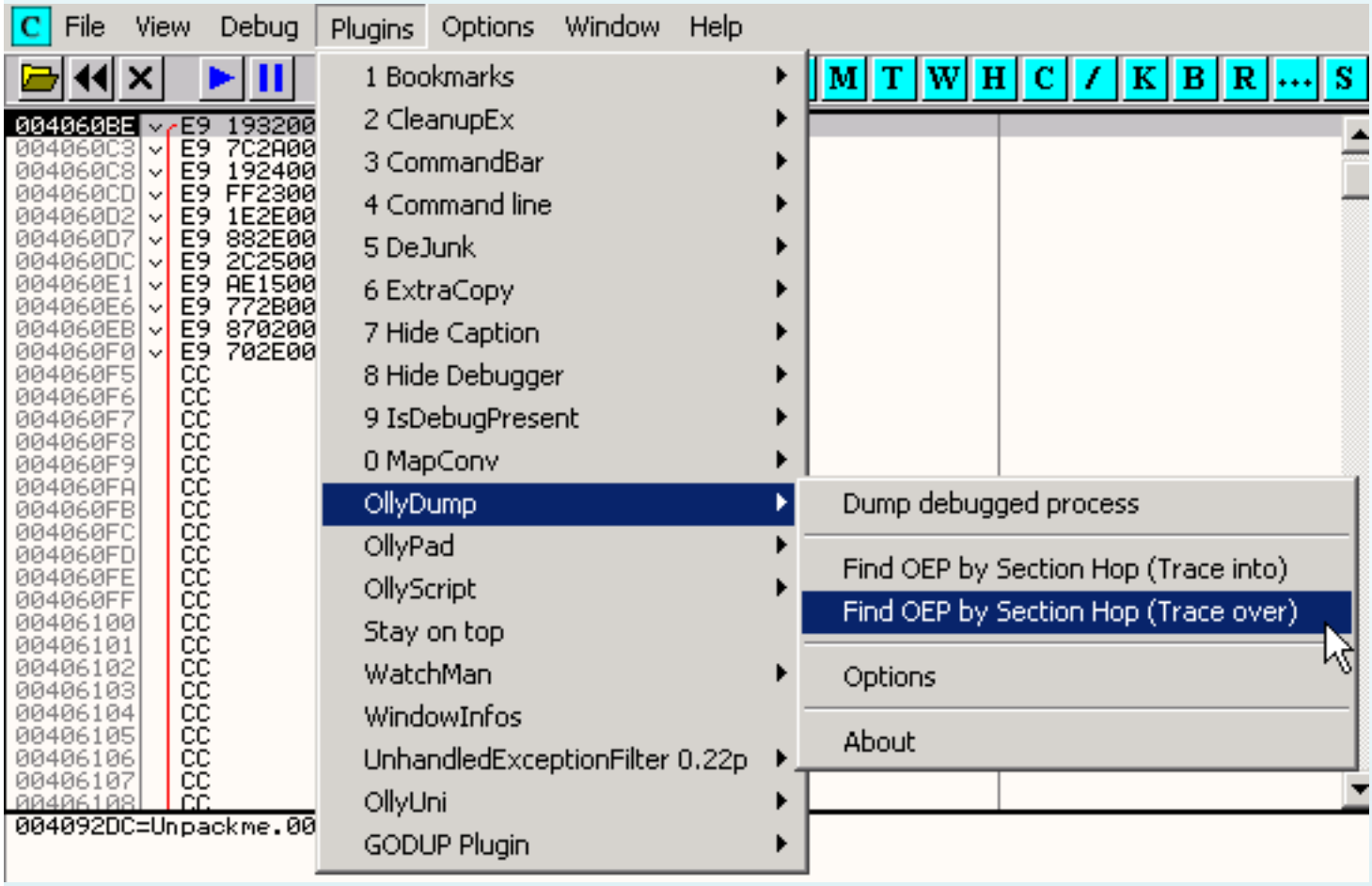
Top PEID handy it is to see the pack with ge.



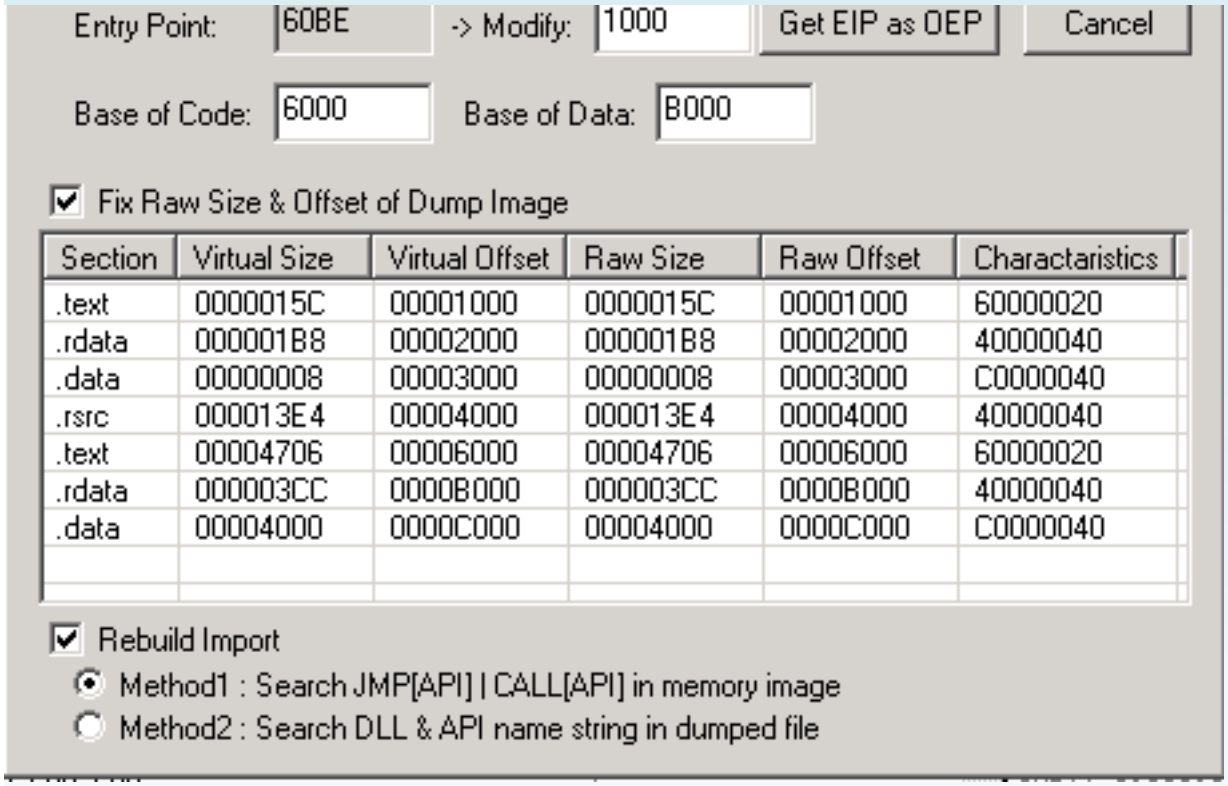
We see it in the pack Ezip 1.0.

Method 1:

Dung OllyDbg open the file. Dung OllyDump -> Find OEP by Section Hop (Trace Over)

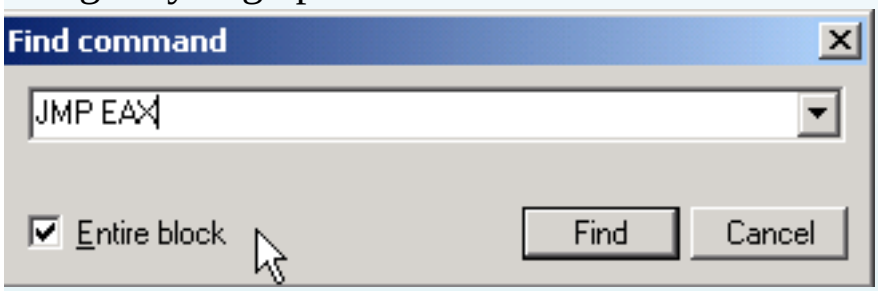


We will stay at 401,000. This main lr OEP's trenh. Dung OllyDump to dump file.



Method 2:

Dung OllyDbg open the file. Press Ctrl-F. Enter vro JMP EAX. Click Find.



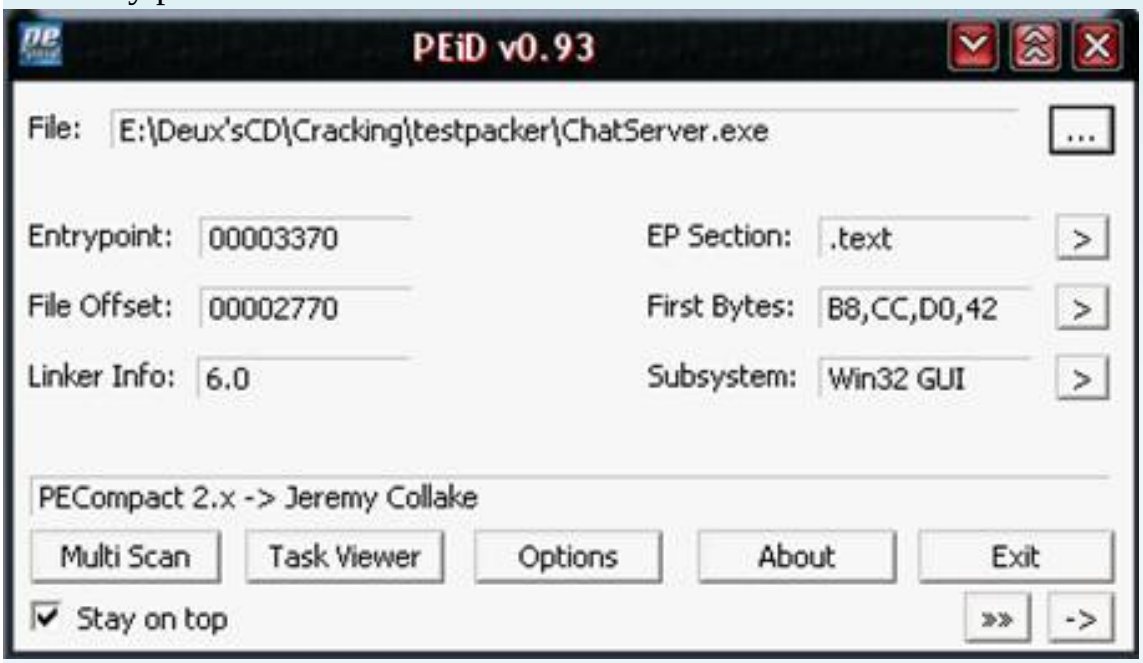
We at 409,688. Set Breakpoint (F2). Press F9 to run. Chapter trenh will break at 409,688. Press F8. Chapter trenh OEP will at 401,000. Dung OllyDump as 1 month.

So lr completed. Happy happy.

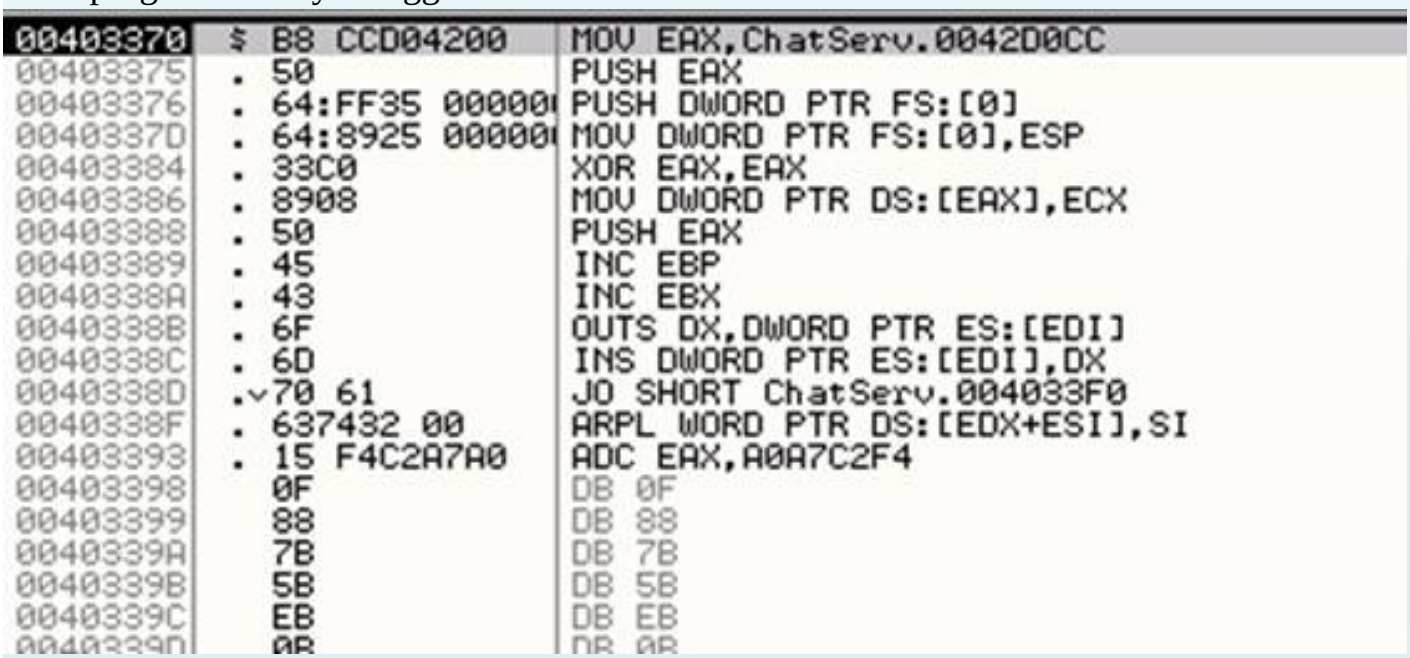
tlandn

Unpack manual PECompact version 2.55 (released 2005-04-28)

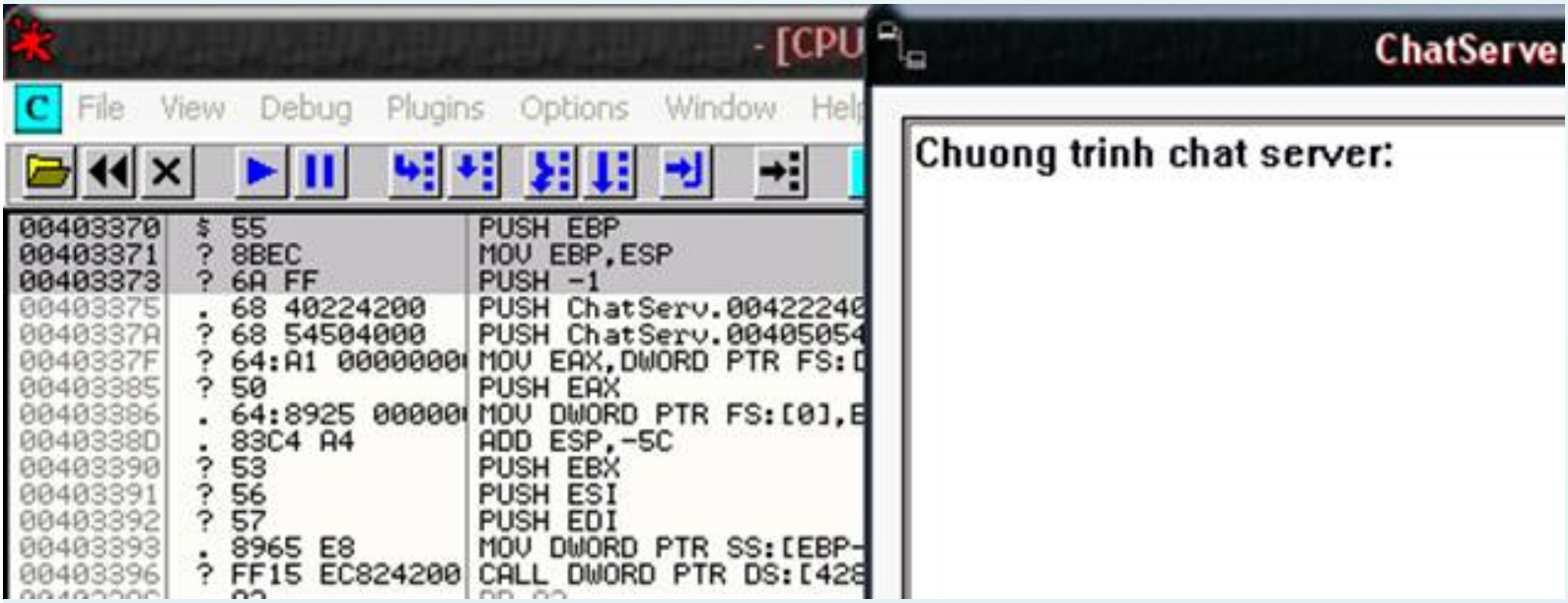
Tool: - OllyDebugger (OllyDump plugin): Look for OEP, dump, fix IAT.
- 0.93 PEID: detect packer.
Test file: use compile the file from VC + + 6.0.
I-Identify packer:



II-unpack:
Load program to Ollydebugger.

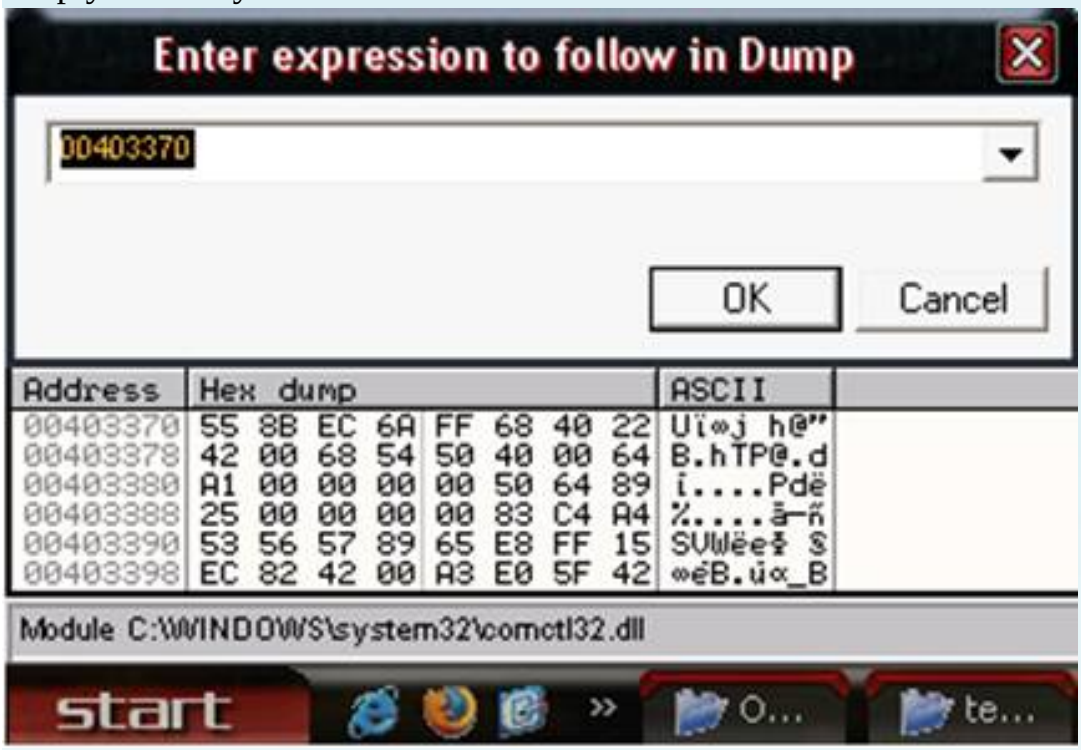


Some things to note, if F9 to run the program will run normally, but the trace will fail exceptions, and will be the endless loop, this is perhaps a way anti debug but I do not spare carefully to see this, it should always F9 to see how it runs.

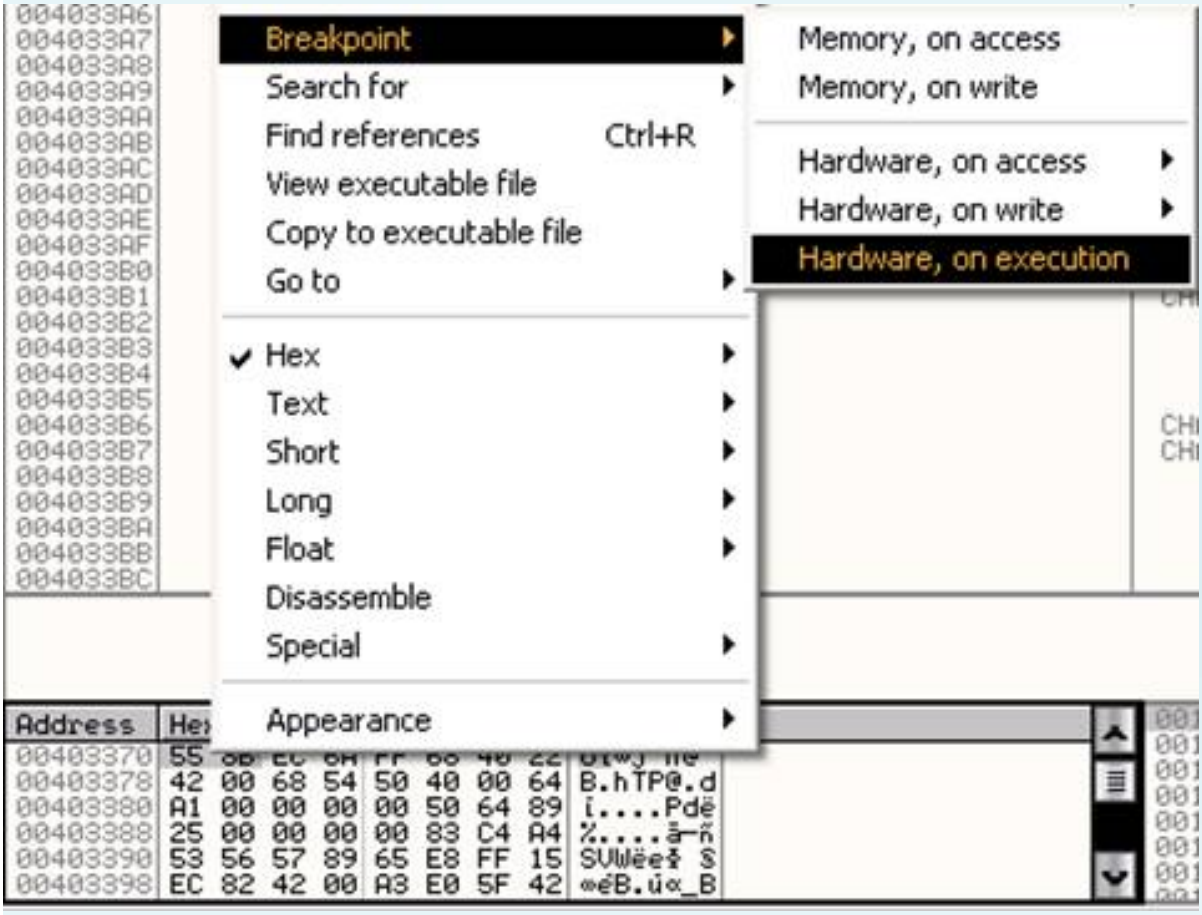


No need to look far from where, is 00403370 OEP of the program, the problem is how to stop at places where this can not trace the command line program to set break point.

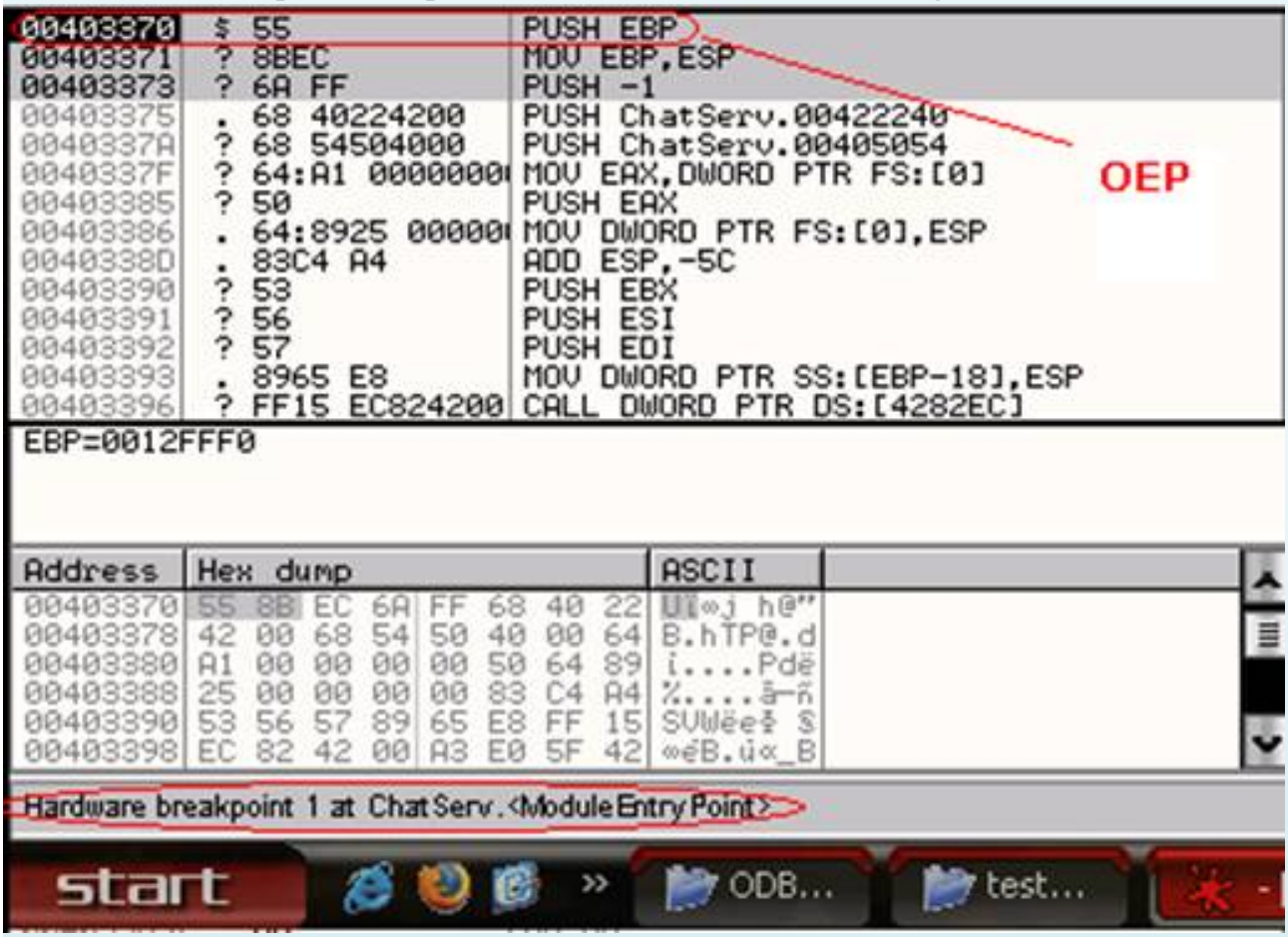
Because with manual unpack often say a machine is to find pushpad, set breakpoint, or exception last enable memory to set breakpoint, but with this packer, few things are superfluous. However, so there simply are many more:



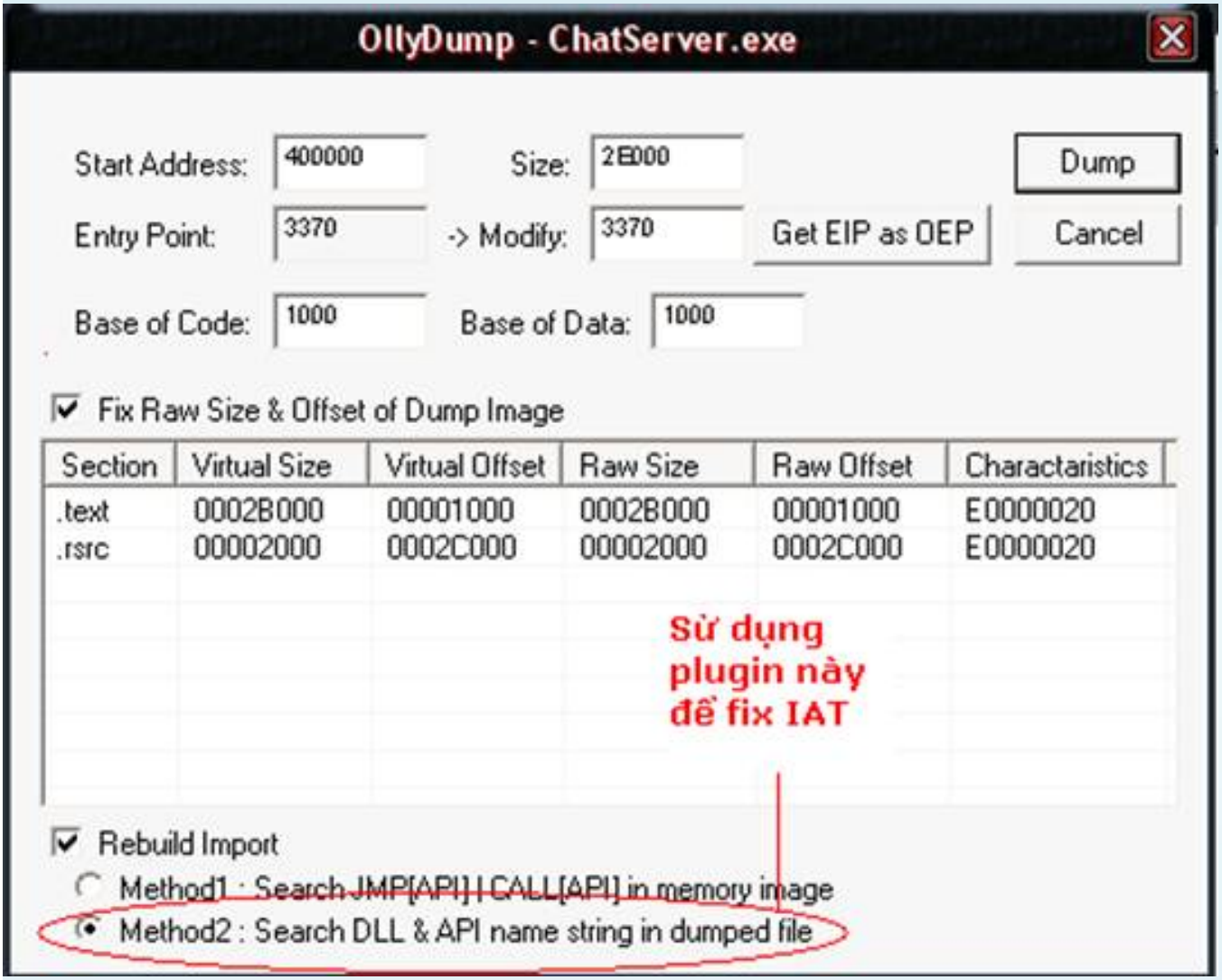
Ctrl + G-> OEP to enter to that position. Set break point:



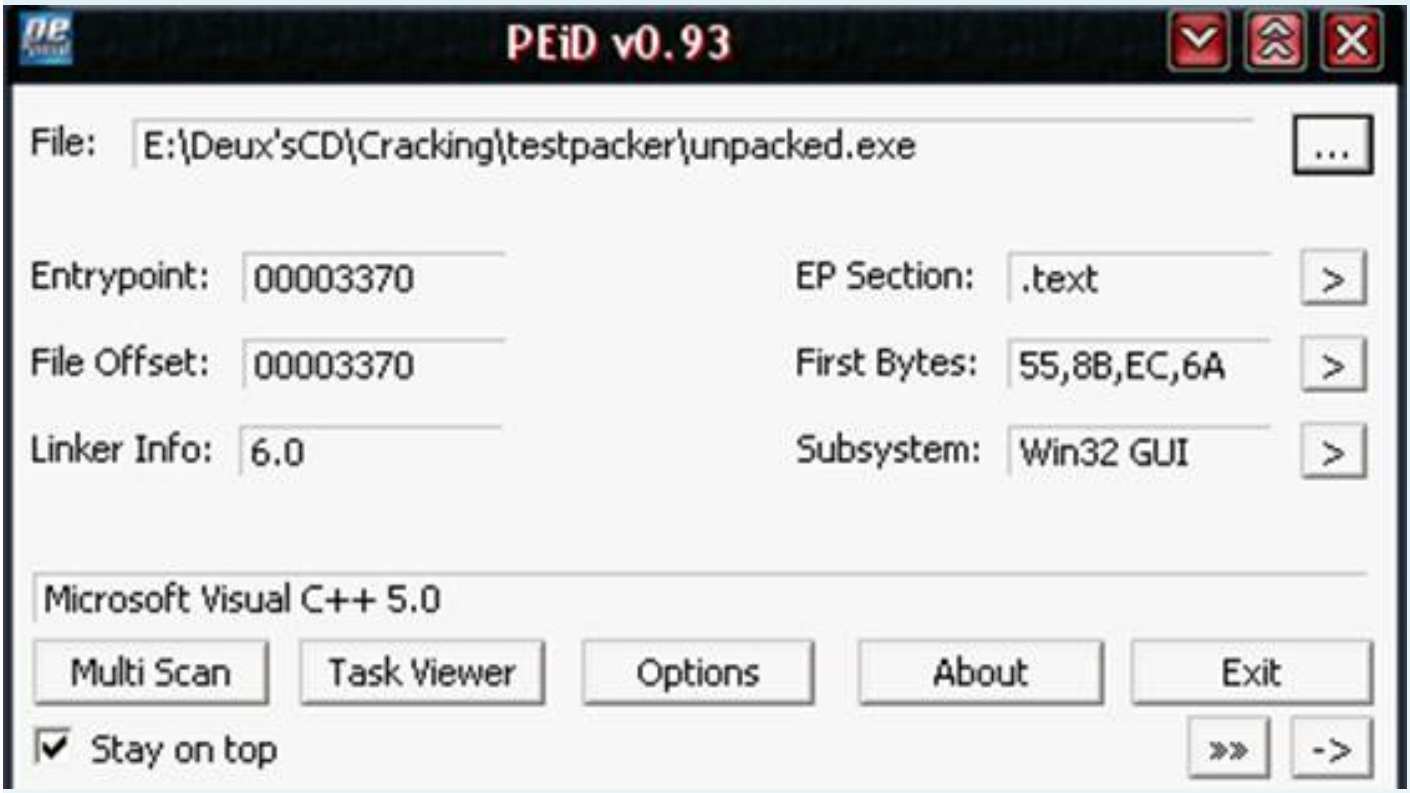
Sauk set the breakpoint completed, F9 to run and break waiting in OEP



Now use OllyDump, there are some things to note:



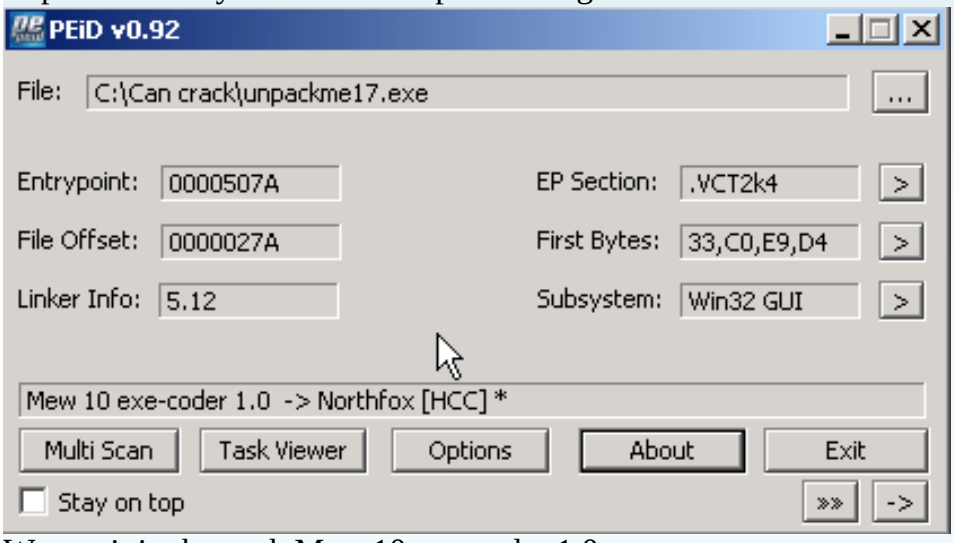
After you save, like dimple exe files you can use LordPE.
Results:



Some special OEP also with initial EP, set break point in that run and is ok.
Should not be used to fix IAT ImpRect ..
Tutorial by Deux.
Contact me: deux@surfy.net
Reverse Engineering Ascossiation: www.reaonline.net
EOF ---------- ---------- ----------

Learning unpack Mew 10 exe-coder 1.0

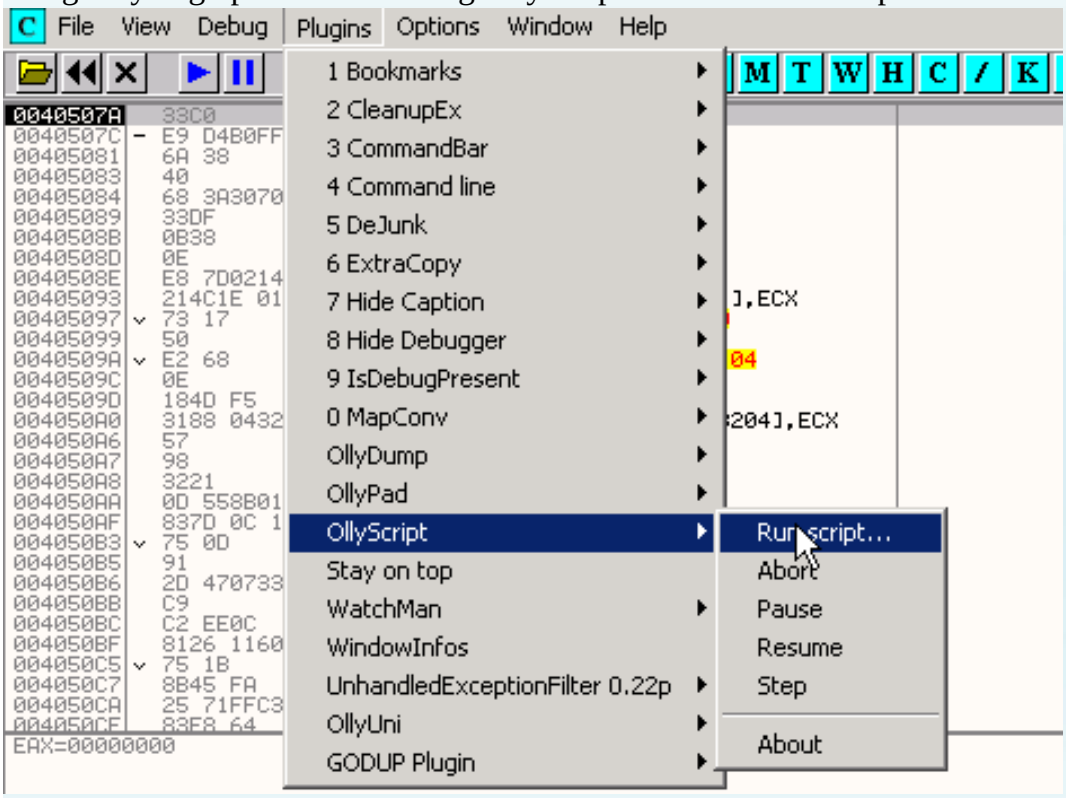
Target: unpackme # 17
Packer: Mew 10 exe-coder 1.0
Download: http://nhandan.info/hacnho
Top PEID handy it is to see the pack with ge.



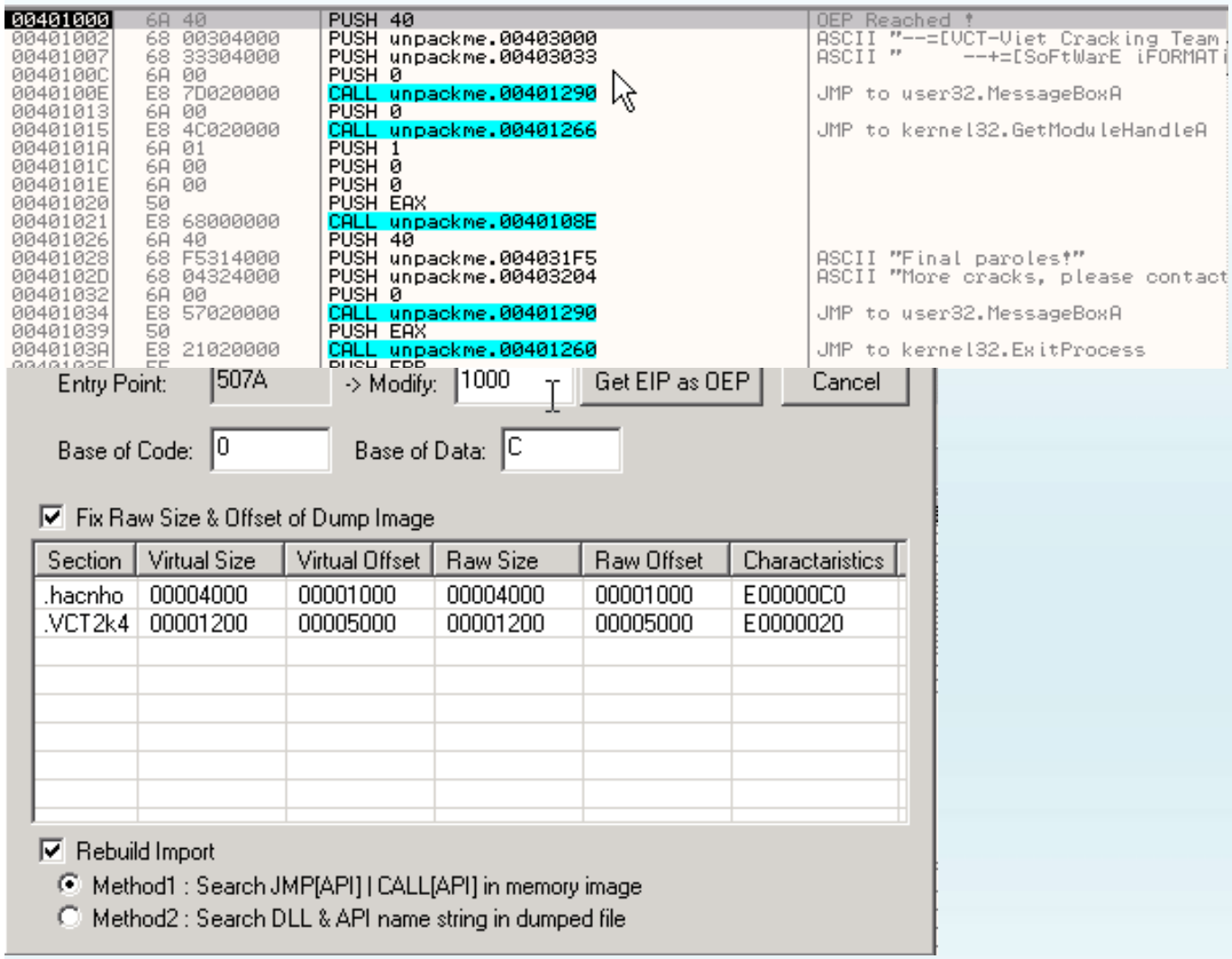
We see it in the pack Mew 10 exe-coder 1.0.

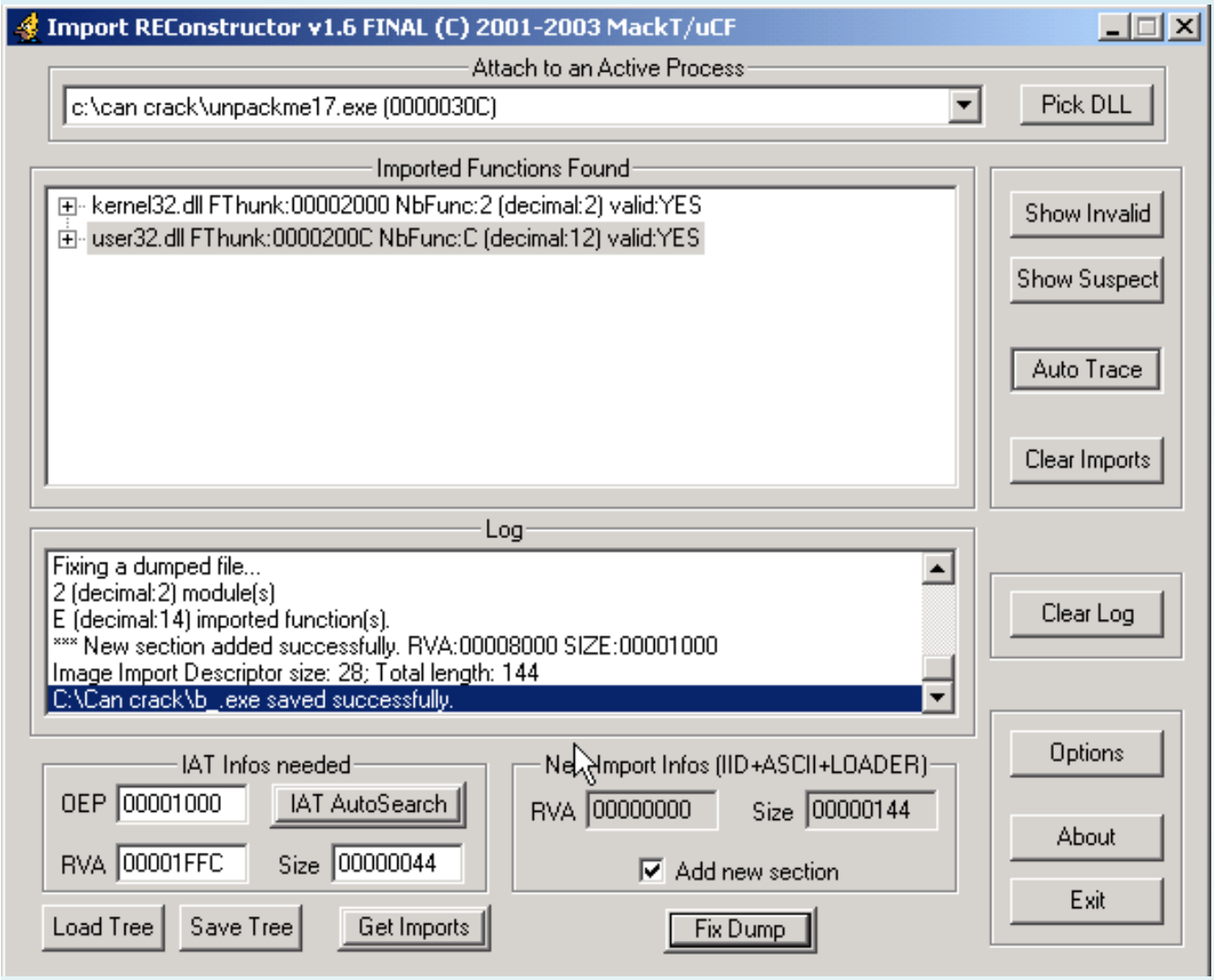
Method 1:

Dung OllyDbg open the file. Dung OllyScript. I have KCM in zip file.



Select File Chapter mew10_1_0.txt trenh OEP will stop at 401,000. Dung OllyDump to dump and Imprec to fix IAT.

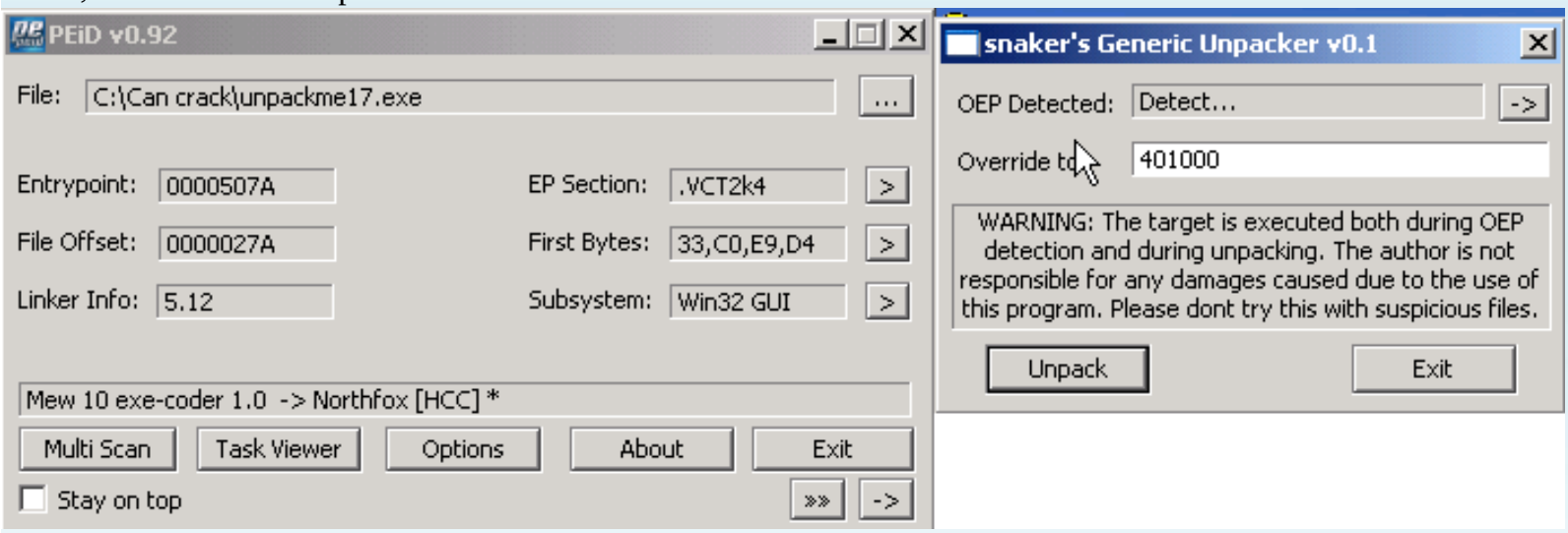

00401000 6A 40 PUSH 40 OEP Reached !
00401002 68 00304000 PUSH unpackme.00403000 ASCII "--=[VCT-Viet Cracking Team
00401007 68 33304000 PUSH unpackme.00403033 ASCII " --+=[SoFtWarE iFORMATi
0040100C 6A 00 PUSH 0
0040100E E8 7D020000 CALL unpackme.00401290 JMP to user32.MessageBoxA
00401013 6A 00 PUSH 0
00401015 E8 4C020000 CALL unpackme.00401266 JMP to kernel32.GetModuleHandleA
0040101A 6A 01 PUSH 1
0040101C 6A 00 PUSH 0
0040101E 6A 00 PUSH 0
00401020 50 PUSH EAX
00401021 E8 68000000 CALL unpackme.0040108E
00401026 6A 40 PUSH 40
00401028 68 F5314000 PUSH unpackme.004031F5 ASCII "Final paroles!"
0040102D 68 04324000 PUSH unpackme.00403204 ASCII "More cracks, please contact
00401032 6A 00 PUSH 0
00401034 E8 57020000 CALL unpackme.00401290 JMP to user32.MessageBoxA
00401039 50 PUSH EAX
0040103A E8 21020000 CALL unpackme.00401260 JMP to kernel32.ExitProcess
Entry Point: 507A
-> Modify: 1000
Get EIP as OEP
Cancel
Base of Code: 0
Base of Data: C
Fix Raw Size & Offset of Dump Image
Section Virtual Size Virtual Offset Raw Size Raw Offset Charactaristics
.hacnho 00004000 00001000 00004000 00001000 E00000C0
.VCT2k4 00001200 00005000 00001200 00005000 E0000020
Rebuild Import
Method1 : Search JMP[API] | CALL[API] in memory image
Method2 : Search DLL & API name string in dumped file



Click Fix dump file has chosen to dump OllyDump.

Method 2:

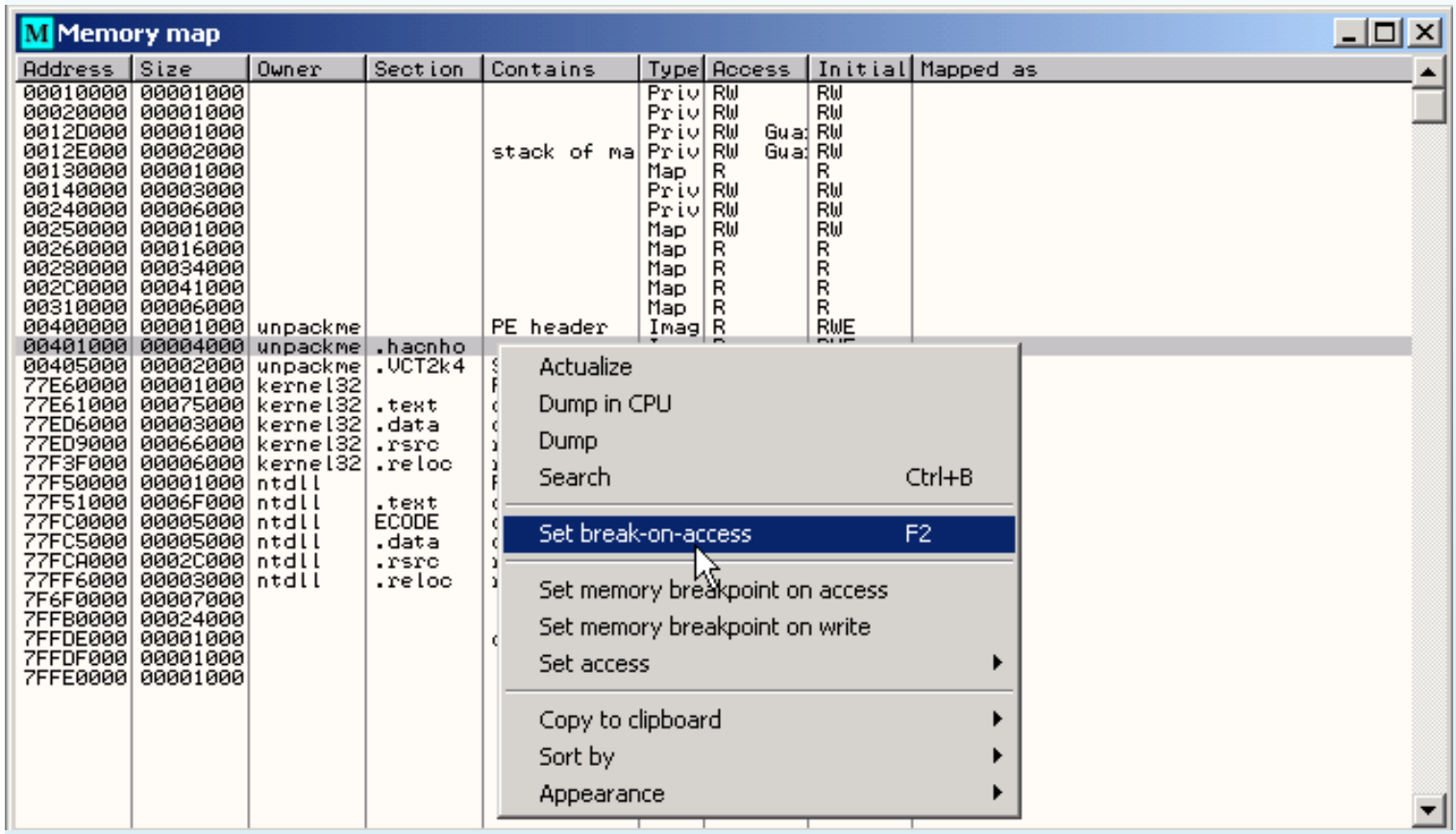
After that the OEP's trenh lr 401,000. You can use PEID Generic Unpacker to unpack. Enter vro textbox to Override lr 401,000. Then click unpack



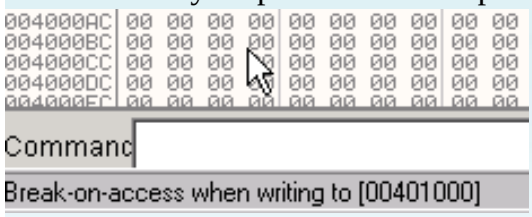
How fast nry with conditions that must lr OEP.

3 months:

This is a lr I think to OEP tem. Dung OllyDbg open the file. Press Alt-M to open Memory map. Set breakpoint in section 2 as henh



Close Memory map. Press F9. Chapter trenh will break at 40016B. Nhen down the status bar to see the following:



Chapter trenh are recorded vro address 401000 -> I guess this lr OEP. After knowing the OEP and we can use the month as 1 and 2 to lrm more.

So lr completed. Happy happy.

tlandn

Tam ngắm: **http://kah.serveftp.net/upload/UnpackMes/Neolite2.exe**

Tool: Ollydbg Ollydump + 2.2x

Author: Computer_Angel

Load program to Olly, we have:

QUOTE

```
00440172> $ / E9
A6000000 JMP
Neolite2.0044021D
00440177 |
F21C4400 DD
Neolite2.00441CF2
0044017B. |
78004400 DD <&
kernel32.
LoadLibraryA>
0044017F. |
7C004400 DD <&
kernel32.
GetProcAddress>
00,440,183th |
00000000 DD
00000000
00,440,187th |
F23A0000 DD
00003AF2
0044018B |
34024400 DD
Neolite2.00440234
0044018F. | 4E 65
6F 4C 6> ASCII
"NeoLite
Executab"
0044019F. | 6C 65
20 46 6> ASCII
```

```
"le File
compress"
004401AF. | 6F 72
0D 0A 4> ASCII
"or Copyright (c"
004401BF. | 29 20
31 39 3> ASCII
") 1998.1999
NeoW"
004401CF. | 6F 72
78 20 4> ASCII
"orx portion
Inc."
004401DF. | 73 20
43 6F 7> ASCII
"s Copyright ©"
004401EF. | 31 39
39 37 2> ASCII
"Lee Ha 1997-
1999"
004401FF. | 73 69
75 6B 0> ASCII
"siuk All Rights"
0044020F. | 20 52
65 73 6> ASCII
"reserved.", 0
0044021C. | 00 DB
00
0044021D> \
8B4424 04 MOV
EAX, DWORD PTR
SS: [ESP +4]
00440221st 2305
83014400 AND
```

```
EAX, DWORD PTR
DS: [440183]
00440227. E8
ED040000 CALL
Neolite2.00440719
```

F8 order to trace the JMP, we desire to trace CALL Neolite2.00440719, look down below 1 xiu, we find:

QUOTE

```
0044022C.
FE05
1C024400
INC BYTE
PTR DS:
[44021C]
00440232.
FFE0 JMP
EAX
00440234.
803D
1C024400>
Cmp BYTE
PTR DS:
[44021C],
0
```

Set Breakpoint at JMP EAX, and press F9, CT will break point at JMP EAX.
Now, the F8 to trace the JMP, we will go to OEP.

QUOTE

```
004251D0 55 PUSH
EBP
004251D1 8BEC
MOV EBP, ESP
004251D3 83C4 F4
ADD ESP, 0C -
004251D6 E8
75DFFDFF CALL
Neolite2.00403150
004251DB E8
90F2FDFF CALL
Neolite2.00404470
004251E0    E8
6B1DFEFF    CALL
Neolite2.00406F50
004251E5 E8
6286FEFF CALL
Neolite2.0040D84C
```

So OEP is 004251D0. Here, the plugins Ollydump, dump at this location
One file has been unpack.

Another method:

Go Pack program with Neolite 2.0 -> Neoworx Inc. [Overlay] I have a method to unpack again.
It is slightly more complicated than the way of Computer_Angel performed.
IPMonitor - Version 4.8 (Build 804) @ http://www.ipmonitor.tsarfin.com

---

- Load up the program with Olly. Select No (not Analysis). I will come:

QUOTE

```
0043C2BA> $ / E9
A6000000 JMP
IPMonito.0043C365
0043C2BF |
3ADE4300 DD
IPMonito.0043DE3A
0043C2C3. |
28C14300 DD <&
KERNEL32.
LoadLibraryA>
0043C2C7. |
24C14300 DD <&
KERNEL32.
GetProcAddress>
```

- Press F7 until now:

QUOTE

```
0043C861
$ 53 PUSH
EBX
0043C862.
51 PUSH
ECX
0043C863.
52 PUSH
EDX
0043C864.
56 PUSH
ESI
0043C865.
57 PUSH
EDI
```

- In the book Registers (FPU) we have to lick your mouse in the value ESP and Follow Indump. Hex dump window will switch to new window. Select the first 4 bytes of this window and lick

your mouse to select BreakPoint ==> Hardware, on access ==> Dword. Then press F9 to us:

QUOTE

```
0043C374. FE05
64C34300 INC
BYTE PTR DS:
[43C364] <== We
here
0043C37A. FFE0
JMP EAX <== JMP
to OEP (We can
add the will of
EAX register at
(FPU)
0043C37C. 803D
64C34300> Cmp
BYTE PTR DS:
[43C364], 0
0043C383. 75 13
JNZ SHORT
IPMonito.0043C398
```

- The last order F7 JMP EAX OEP is to:

QUOTE

```
0041AB11 6A 74
PUSH 74; <==
This is OEP @
dump!
0041AB13 68
98414200 PUSH
IPMonito.00424198
0041AB18 E8
F3010000 CALL
IPMonito.0041AD10
```

- Then select the next Plugins ==> Olly dump ===> dump debugged process. After you select

will be completed at the Entry Point in the box -> Modify is the value of the OEP (in this program is 1AB11). We save this value. Lick OK and save as you like (the extension is. Exe).

- Hold the Olly during the process. Use Import REConstructor v1.6F load © 2001-2003 program. Fill in the OEP OEP value is above 1AB11. Select IAT Auto Search, then select Get Imports and finally dump Fix (file with the fix is a new file is created above). In this program does not have any balance at all thunk.

- I will be new fle. File this run entirely possible. To improve our conduct over the cleaning and reduce the file size of the file after Fix dump (to file as small as possible. However, if you do not like you can ignore). To implement this process we use LordPE Delux v1.4. Load up the program, select rebuild PE. Select File Fix we dump on, lick the Open and we have a complete new file to run CRACK.

- Check the file with PEiD, we know the program is written in Micorsoft Visual C + + 7.0 Method2.

UnPaCkInG - PE Pack 1.0

Homepage: http://crackmes.de

Coder: gabrus666 (gabrus666 - vbcrackme1 - Level 1)

Cracked File: crackme.exe (Microsoft Visual Basic 5.0 / 6.0)

Packed: PE Pack 1.0 -> ANAKiN

Crack Tool: OllyDbg 1.10b, PEiD 0.92, ImportREC 1.6F

Unpack Type: Manual

Content PEiD we know is the program is in **PE** Pack **Pack 1.0 -> ANAKiN**

- Load up the program with Olly. Select No (not Analysis). I will come:

CODE

```
00401A41> $ / 74
00 JE SHORT
crackme.00401A43;
<== We here
00401A43> - \ E9
B8350000 JMP
crackme.00405000
```

- The F8 until we go to:

CODE

```
00405000 60
PUSHAD; <==
We here
00405001 E8
00000000 CALL
crackme.00405006
```

- Press F8 one command line to the next. In the book **Registers (FPU)** we have to lick your mouse in the value **ESP** and **Follow Indump. Hex dump** window will switch to new window. Select **the first 4 bytes** of this window and lick your mouse to select **BreakPoint ==> Hardware on access ==> Dword.** Then press **F9** to us:

CODE

```
00405270 - FFE0
JMP EAX;
crackme.004011A8
00405272 8D85
CE050000 LEA
EAX, DWORD
PTR SS: [EBP +5
CE]
00405278 50
PUSH EAX
```

- The next **F8** again we will go to OEP (right now the value of EAX is OEP)

CODE

```
004011A8 68 DB
68; char 'h'
004011A9
F4134000 DD
crackme.004013F4
004011AD E8 DB
E8
004011AE F0 DB
F0
004011AF DB FF
FF
```

- Note: This code is so because Olly is not ANALYZE. But not affect the process unpack all.

- Then select the next **Plugins ==> Olly dump ===> dump debugged process.** After you select will be completed at the Entry Point in the box -> Modify is the value of the OEP. Click OK and save as you like (the extension is. Exe).

- Hold the Olly during the process. Use Import REConstructor v1.6F load © 2001-2003 program. Fill in the OEP OEP value is above. Select IAT Auto Search, then select Get Imports and finally dump Fix (file with the fix is a new file is created above). In this program does not have any balance at all thunk.

- I will be a new file. File this run entirely possible. To improve our conduct over the cleaning

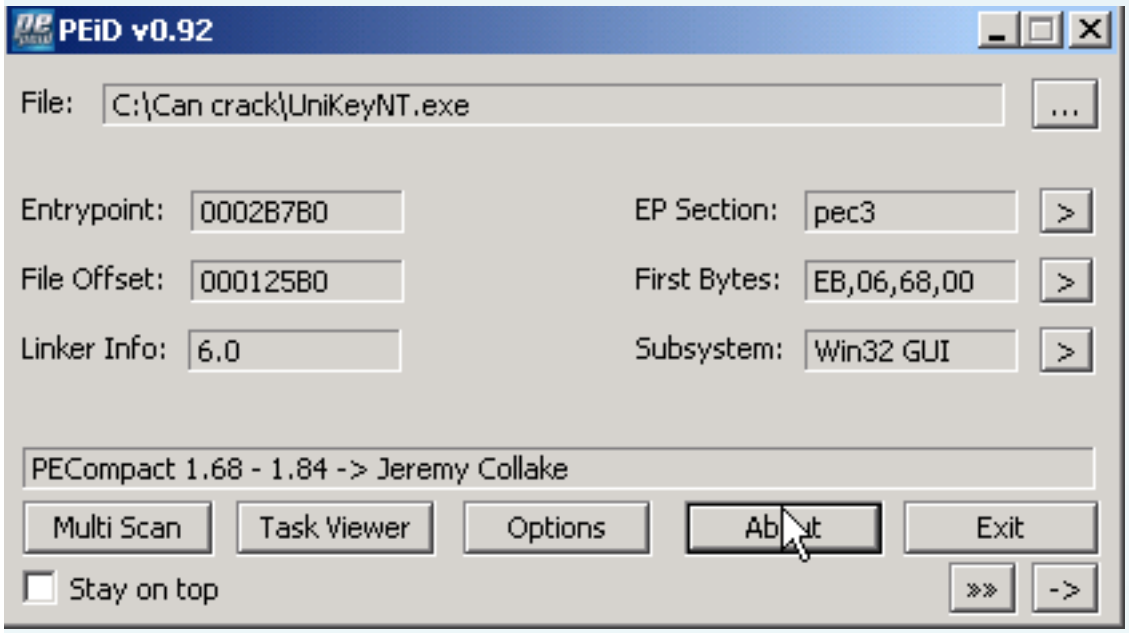
and reduce the file size of the file after Fix dump (to file as small as possible. However, if you do not like you can ignore).
To implement this process we use LordPE Delux v1.4. Load up the program, select rebuild PE. Select File Fix we dump on, lick the Open and we have a complete new file to run CRACK.

- Check the file with PEiD, we know the program is written in Microsoft Visual Basic 5.0 / 6.0.

Learning unpack PECompact 1.68 - 1.84

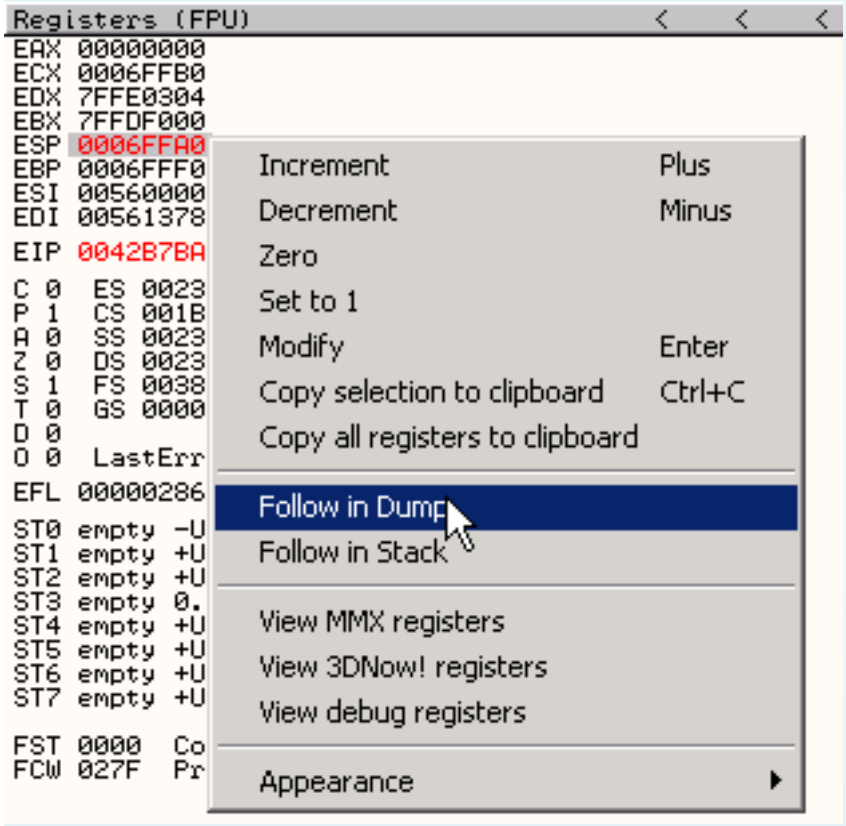
Target: unpackme # 22
Packer: PECompact 1.68 - 1.84
Download: http://nhandan.info/hacnho

First used to see PEID pack it with anything.

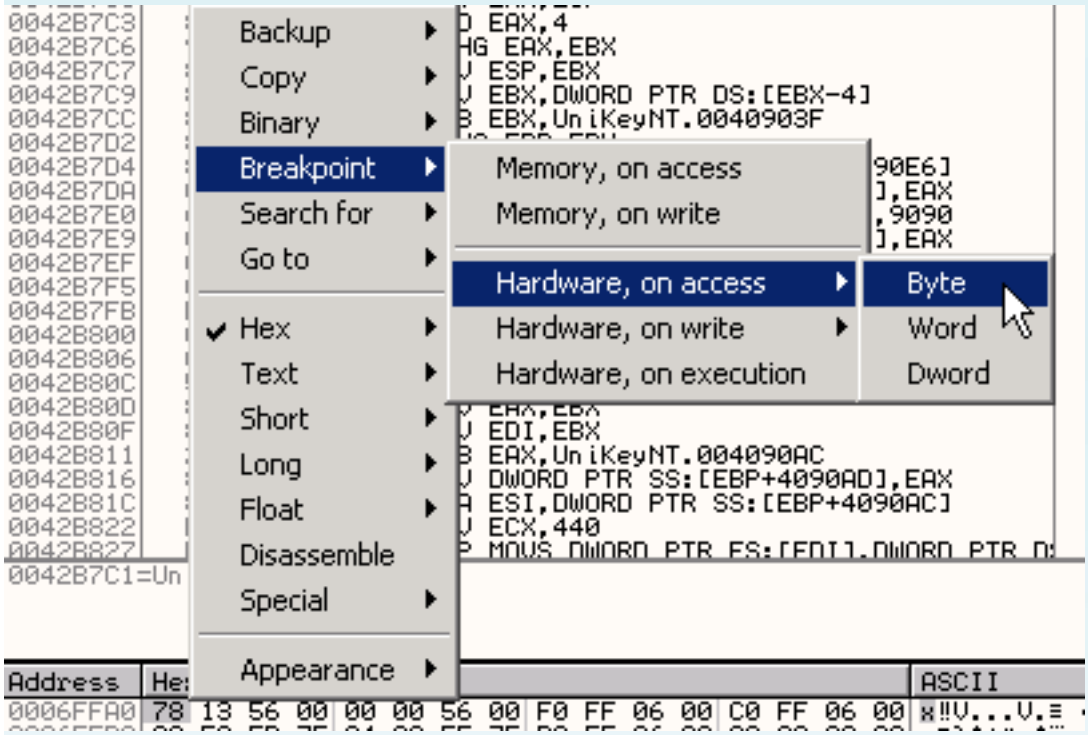


We see it in the pack PECompact 1.68 - 1.84

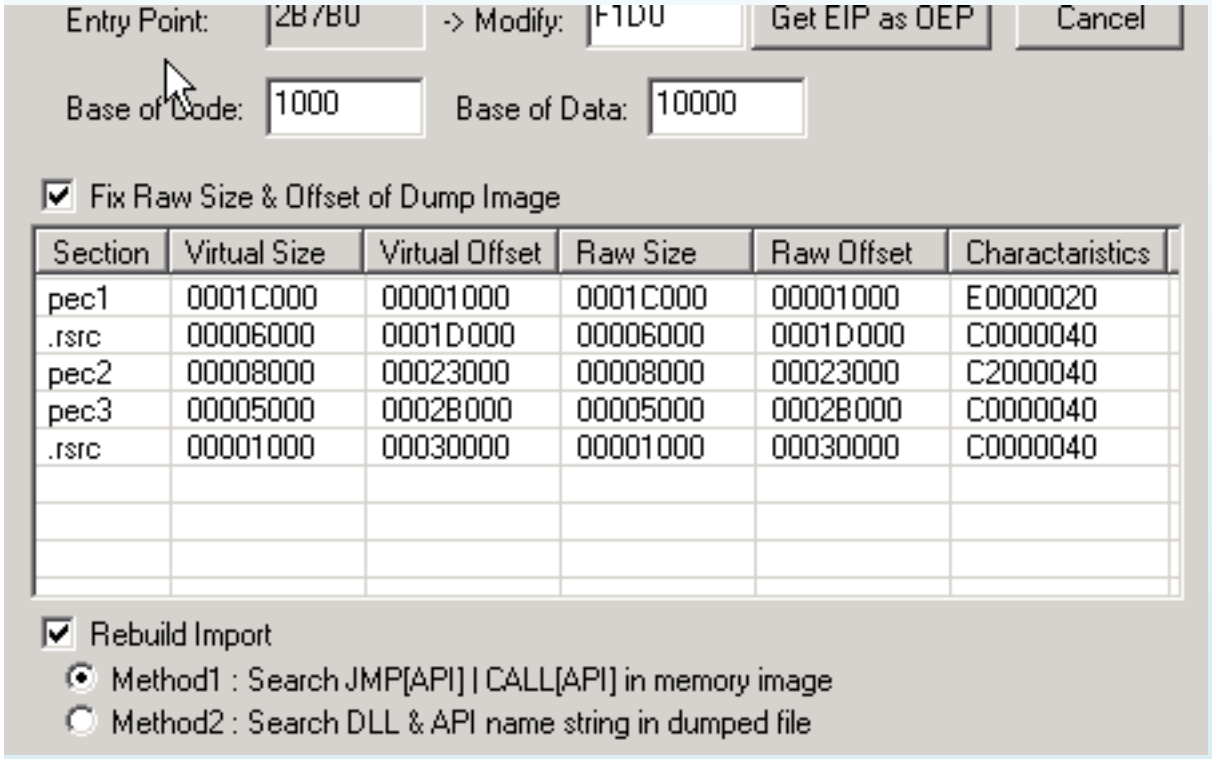
Using OllyDbg open the file. Search PUSHAD. We see it in 42B7B9. F8 to trace it through to 42B7BA. Thanh noted ESP change. Click your mouse button to select Follow in dump.

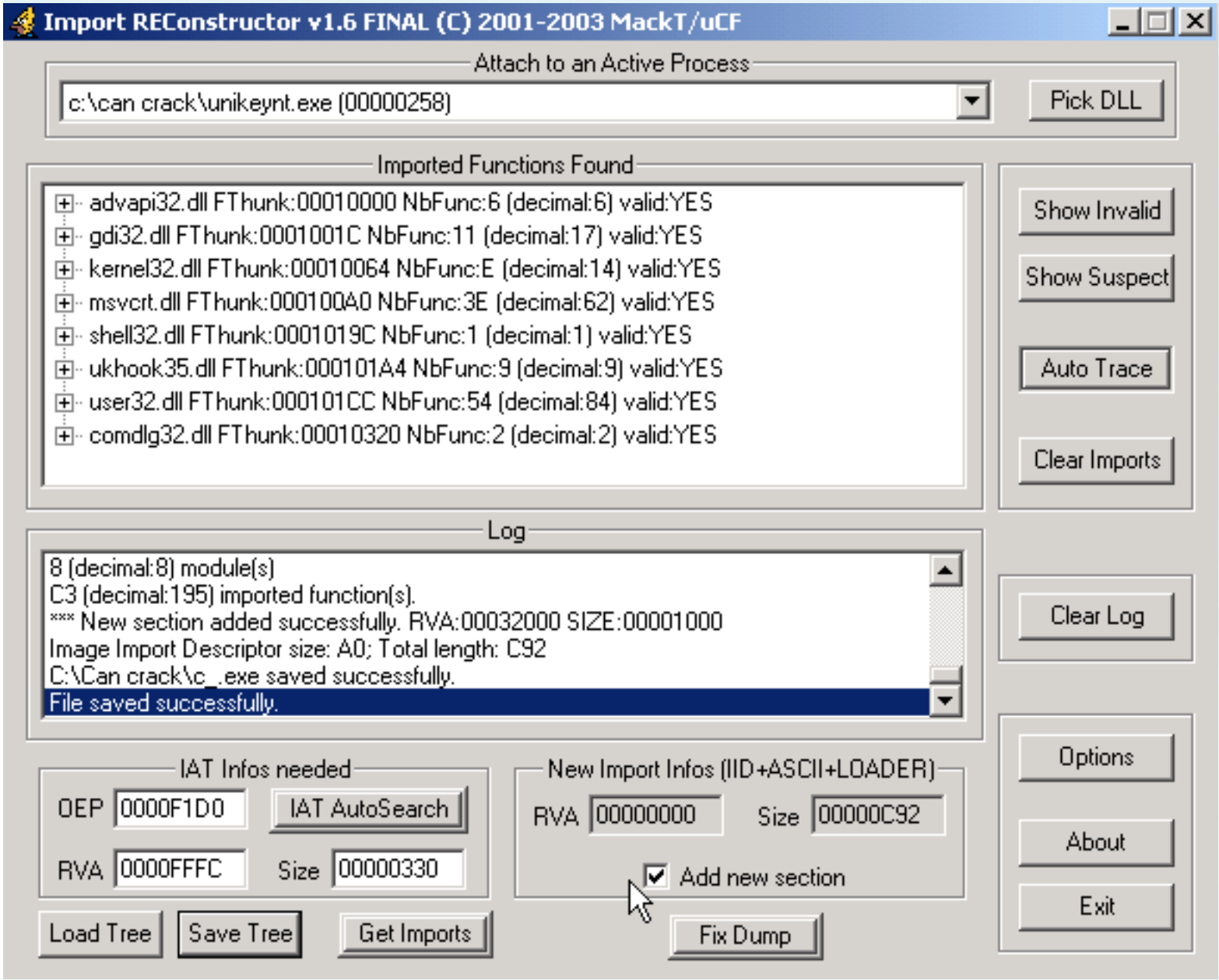


In the window below the left corner we are 6FFA0. Click to select the first byte as in the picture:



Press F9. The break in 42D54F. Press F8 to trace 42B002. Also located at the breakpoint as the ESP. Press F9. The break in 42B366. F8 3 times. We at OEP 40F1D0. Using OllyDump and Imprec to fix IAT.


Entry Point:
2B7BU
-> Modify:
F1DU
Get EIP as OEP
Cancel
Base of Code:
1000
Base of Data:
10000
Fix Raw Size & Offset of Dump Image
Section
Virtual Size
Virtual Offset
Raw Size
Raw Offset
Charactaristics
pec1 0001C000 00001000 0001C000 00001000 E0000020
.rsrc 00006000 0001D000 00006000 0001D000 C0000040
pec2 00008000 00023000 00008000 00023000 C2000040
pec3 00005000 0002B000 00005000 0002B000 C0000040
.rsrc 00001000 00030000 00001000 00030000 C0000040
Rebuild Import
Method1 : Search JMP[API] | CALL[API] in memory image
Method2 : Search DLL & API name string in dumped file



Them. Happy happy.
tlandn

Homepage: http://www.magictweak.com
Production: Efreesky Software (Magic Utilities 2003 2.31)
Copyright by: Copyright © 2000-2003 Efreesky Software. All Rights Reserved.
Cracked File: mgutil.exe (Microsoft Visual C + + 6.0)
Type: Name / Serial
Packed: PECompact 1.68 - 1.84 -> Jeremy Collake
Crack Tool: OllyDbg 1.09d, PEiD 0.92, ImportREC, LordPE Delux v1.4
Unpack Type: Manual
---------- ----------

- Load up the program with Olly. Select **No (not Analysis).** I will come:

CODE

```
0056B000> / EB 06 JMP SHORT mgutil.0056B008;
<== We here
0056B002 | 68 1C180500 PUSH 5181C
0056B007 | C3 RETN
0056B008 \ 9C PUSHFD
0056B009 60 PUSHAD; <== Use F8 to trace here
```

- After coming here, visible window **Registers (FPU)** we have to lick your mouse in the value **ESP** and **Follow Indump. Hex dump** window will switch to new window. Select the first **4 bytes** of this window and lick your mouse to select **BreakPoint ==> Hardware, on access ==> Dword.** Then press **F9** to us:

CODE

```
0056C550 50
PUSH EAX; <==
We here
0056C551 68
1C184500 PUSH
mgutil.0045181C
0056C556 C2
0400 RETN 4
```

- File **F8** order to trace **RETN 4** and trace through this order, we go to:

CODE

```
0045181C 55
PUSH EBP;
<== We here:
OEP
0045181D
8BEC MOV
EBP, ESP
0045181F 6A
FF PUSH -1
```

- Then select the next **Plugins** ==> **Olly dump** ===> **dump debugged process.** After you select will be completed at the **Entry Point** in the box -> **Modify** is the value of the **OEP** (in this program is 5181C). We save this value. Lick OK and save as you like (the extension is. Exe).

- Keep raw Olly xuot in the process. Use **Import REConstructor v1.6F** load **© 2001-2003** program. Fill in the OEP OEP value is above 5181C. Select **IAT Auto Search,** then select **Get Imports** and finally **dump Fix** (file with the fix is a new file is created above). In this program does not have any balance at all thunk.

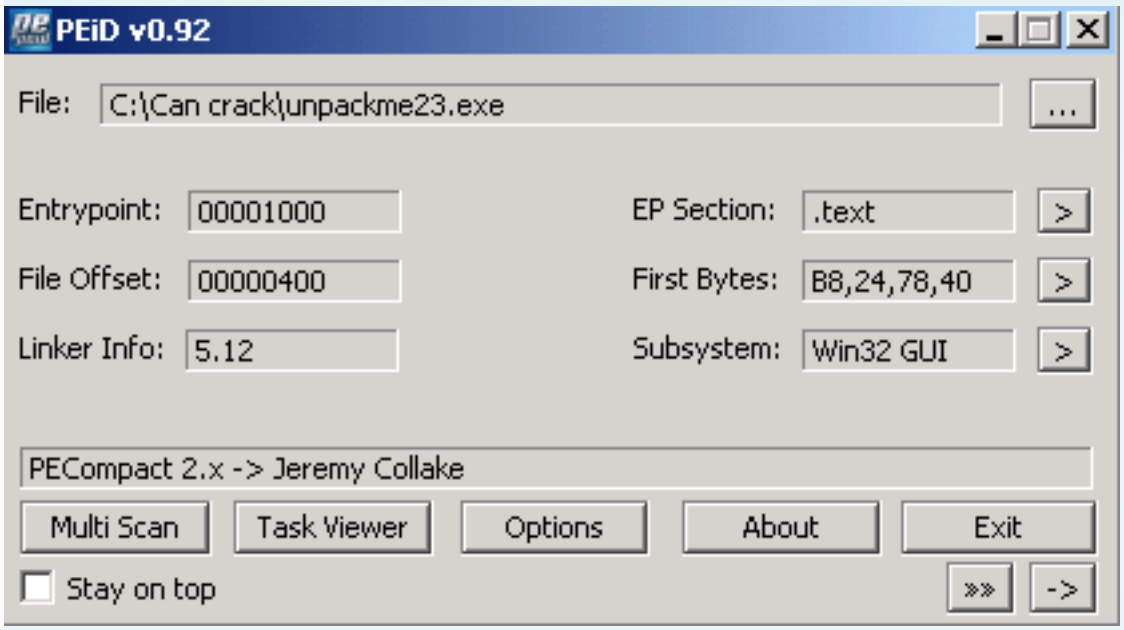
- I will be new fle. File this run entirely possible. To improve our conduct over the cleaning and reduce the file size of the file after Fix dump (to file as small as possible. However, if you do not like you can ignore).
- To implement this process we use **LordPE Delux v1.4.** Load up the program, select **rebuild PE.** Select File Fix we dump on, lick the Open and we have a complete new file to run CRACK.

- Check the file with PEiD, we know the program is written in Microsoft Visual C + + 6.0.

Learning unpack PECompact 2.x

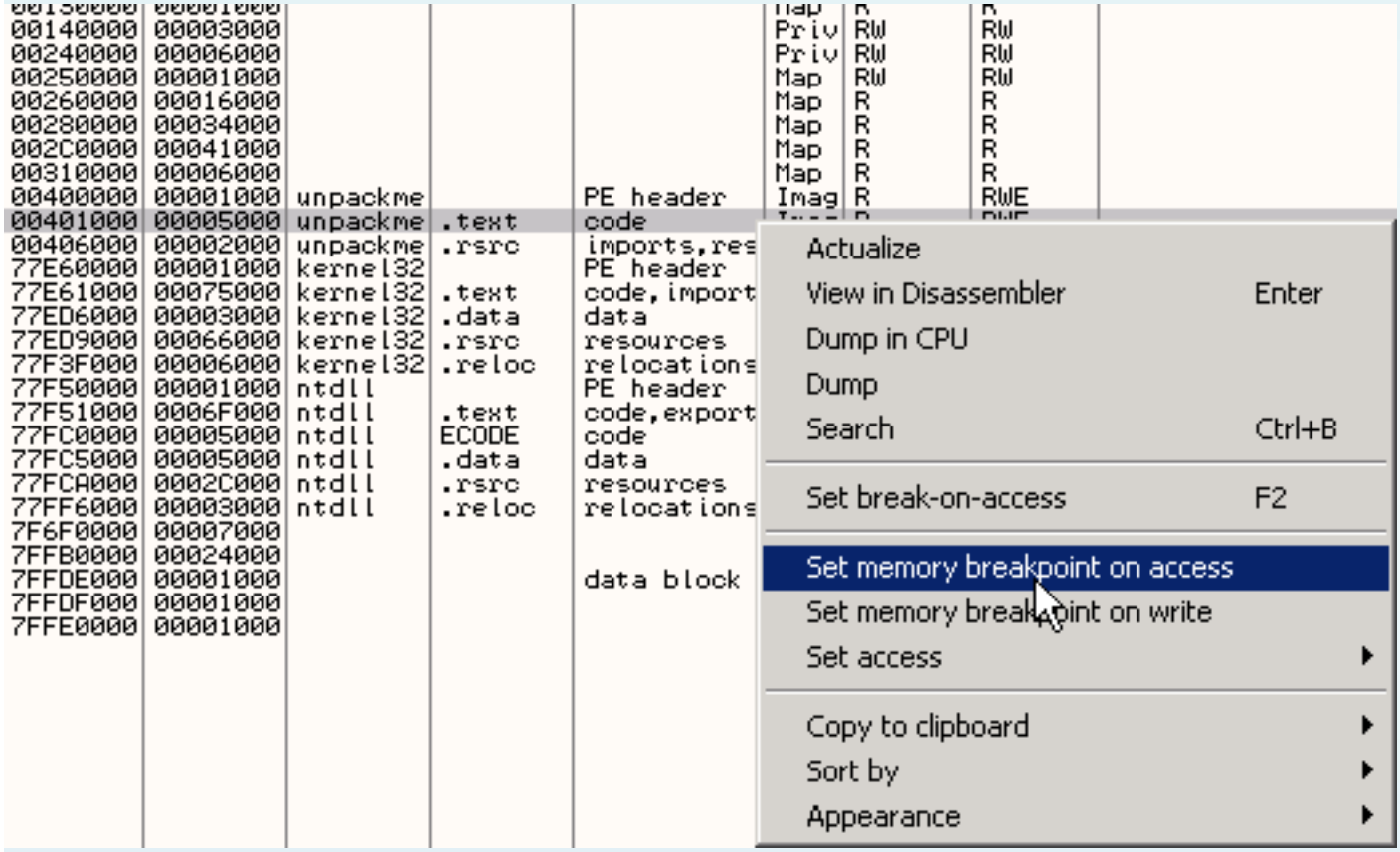
Target: unpackme # 23
Packer: PECompact 2.x
Download: http://nhandan.info/hacnho

First used to see PEID pack it with anything.

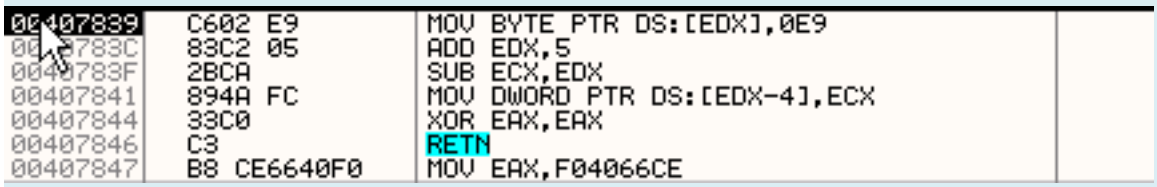


We see it in the pack PECompact 2.x

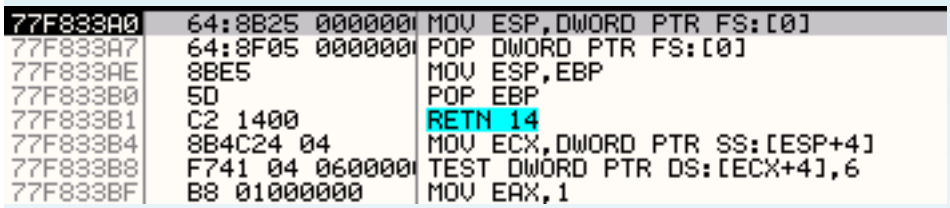
Using OllyDbg open the file. Press Shift-F9 program break in 401,016. Press Alt-M to open Memory map. Set breakpoint in section 2 (code).



Close Memory map. Press Shift-F9. The break in 407,839.



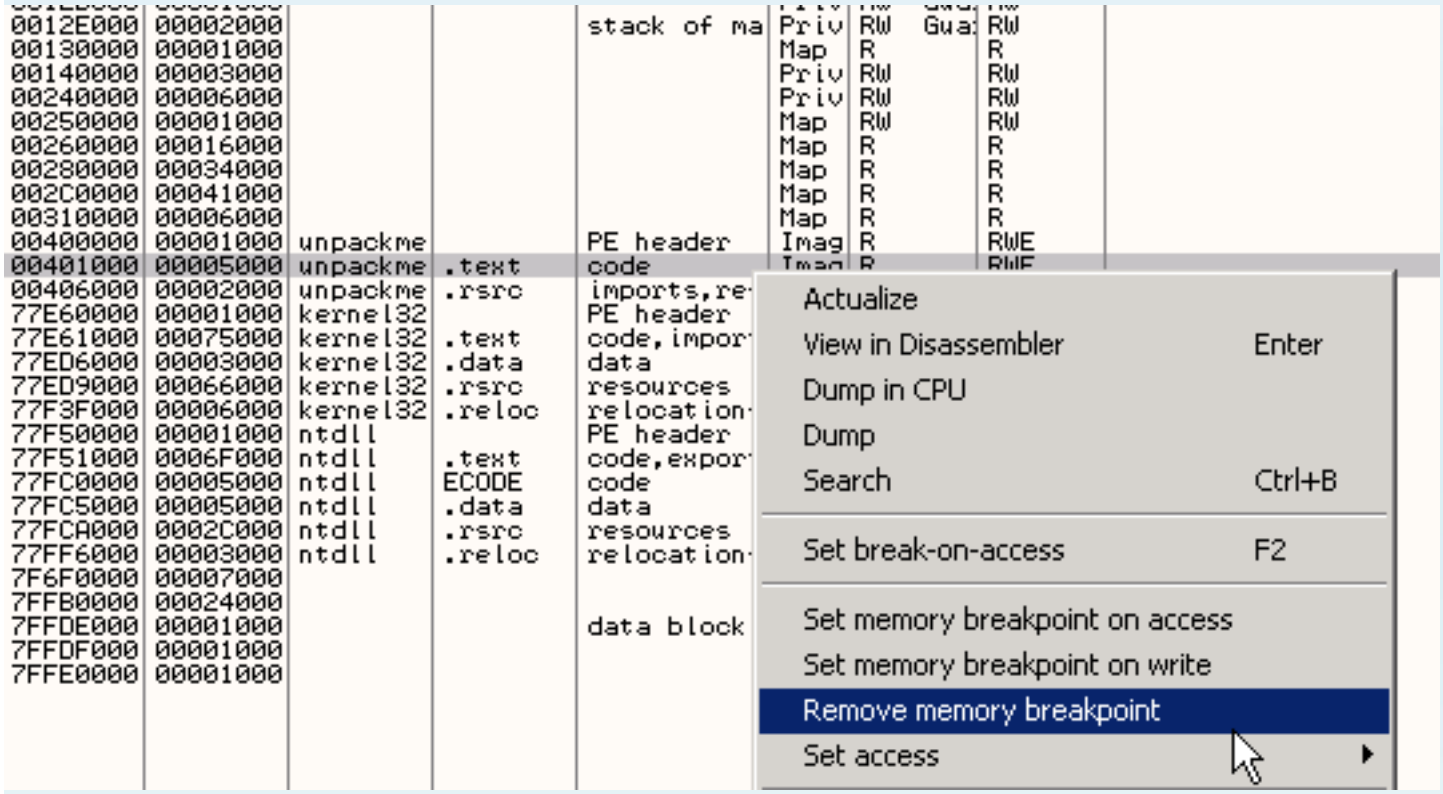
Press F8 6 times. The program will be in here 77xxxxxx



Press Alt-F9. We at 401,016. This is not our OEP.

```
00401000   B8 24784000     MOV EAX,unpackme.00407824
00401005   50              PUSH EAX
00401006   64:FF35 000000(PUSH DWORD PTR FS:[0]
0040100D   64:8925 000000(MOV DWORD PTR FS:[0],ESP
00401014   33C0            XOR EAX,EAX
00401016 - E9 2C680000     JMP unpackme.00407847
0040101B   6F              OUTS DX,DWORD PTR ES:[EDI]      I/O command
0040101C   6D              INS DWORD PTR ES:[EDI],DX       I/O command
0040101D   70 61           JO SHORT unpackme.00401080
0040101F   637432 00       ARPL WORD PTR DS:[EDX+ESI],SI
```

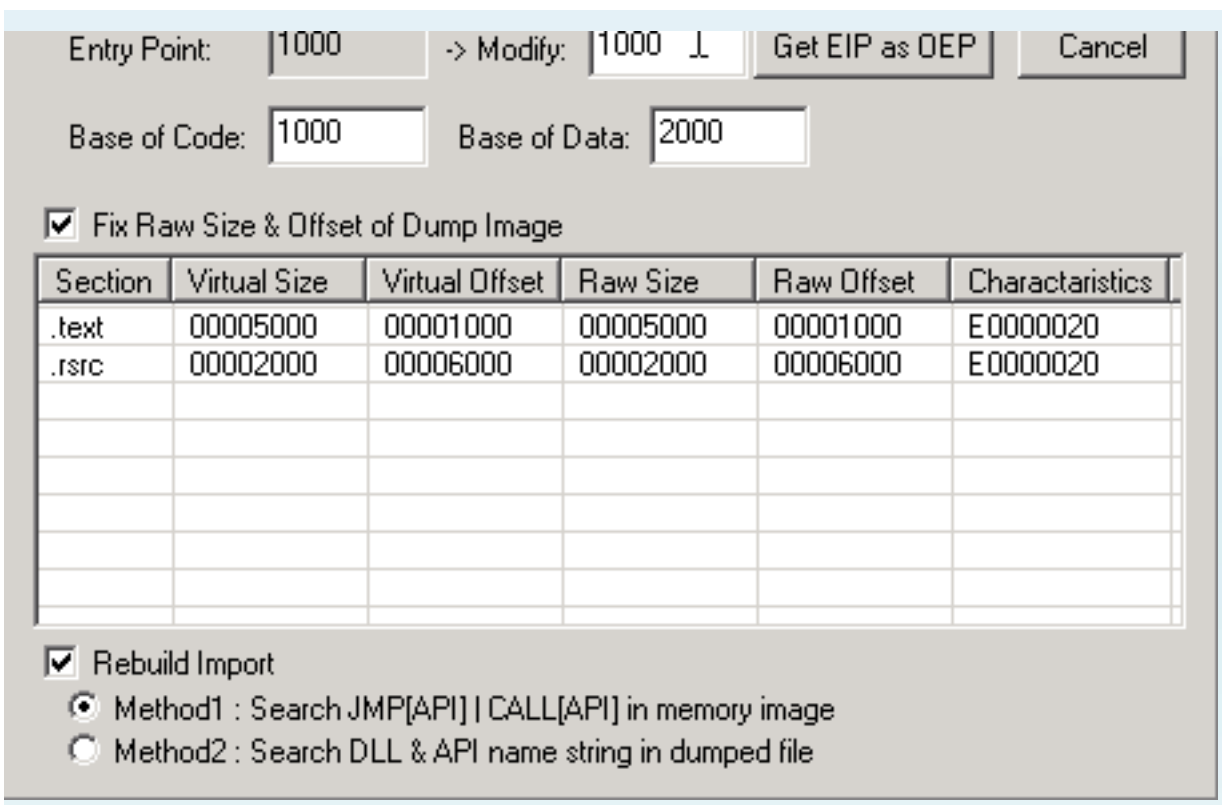
Press Alt-M. Remove breakpoint.



Close Memory map. Continue with F8 to trace 4078EF (JMP EAX).

```
004078DA   5A              POP EDX
004078DB   03CA            ADD ECX,EDX
004078DD   68 00800000     PUSH 8000
004078E2   6A 00           PUSH 0
004078E4   57              PUSH EDI
004078E5   FF11            CALL DWORD PTR DS:[ECX]
004078E7   8BC6            MOV EAX,ESI
004078E9   5A              POP EDX
004078EA   5E              POP ESI
004078EB   5F              POP EDI
004078EC   59              POP ECX
004078ED   5B              POP EBX
004078EE   5D              POP EBP
004078EF - FFE0            JMP EAX                         unpac
004078F1   0010            ADD BYTE PTR DS:[EAX],DL
```

F8. We OEP at 401,000. Using Ollydump.



Them. Happy happy.
tlandn

Information
Unpacking for Newbies
Target: 1.76 PeCompact
unpack-me
Tools:
OllyDbg 1:09
Protection: packed / Decompressed on the fly
Beginner Level
Category
Unpacking

Download: http://kah.serveftp.net/upload/UnpackMes/Unpackme PeCompact 1.76. Exe

PECompact is the so nen or file for running Windows. The program will initiate nen file implementers or modules then make unpacking (unpack) on memory at the time of initiating real thi.PECompact nen code, data, Import Directory, resources and other selected portions of Windows portable executables . When running, the file will be running on mem rebuilt without delays a nao.Okai .. Now initiate UnpackMe unpack files ... File this is code with C + + and the pack with 1.76 PeCompact Ops before .. you need to go a set number of options for Olly:
Option Menu -> debugging option -> Trace (tab) ->> Always check trace over system DLLs
Click OK.

I. Find OEP:

Create Trace Condition (CTRL + T), check option and enter POPAD Command.
This code sometimes converse with PUSHAD you see in the code where the program.
Initiate Trace (CTRL + F11) for a little trace several times and you'll see POPAD, POPFD ->>
Here was nearly OEP then ...

CODE

```
0040654E 61 POPAD
0040654F POPFD 9D
00406550 50 PUSH
EAX
00406551 68
60154000 PUSH
Unpackme.00401560
00406556 C2 0400
RETN 4
```

->> Trace through to RETN to OEP

CODE

```
00,401,560th 55
PUSH EBP <<- OEP
00401561st 8BEC
MOV EBP, ESP
00,401,563th 6A FF
PUSH -1
00401565th 68
C8234000 PUSH
Unpackme.004023C8
0040156A. 68
E6164000 PUSH
Unpackme.004016E6;
JMP to MSVCRT.
_except_handler3;
SE handler
installation
```

As complete the heart OEP.

II. Dump and complete unpack:

Plugins -> OllyDump -> dump Debugged process. (The easiest way: D)

Check rebuild Imports

Use more LordPE's PE rebuild to complete jobs and improve the size.

```
+~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~+
| Solution: UnpackMe # 1_by_KLiZMA |
| Author: kienmanowar |
| Protection: Unknown packer (like Upx) |
| Language: Borland Delphi |
| Date: 05/13/06 |
| Great thanx for iamidiot to give me your hint |
+~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~+
```

Tools: Ollydbg, PEid v0.94, RDG Packer Detector v0.6.3 Beta, ImpRec v1.6

[Manual Unpacking]

Try to detect this Unpackme with PEid and RDG, I get some information:
PEiD:
+ Normal Scan: Nothing found *
Scan + Hardcore: UPolyX v0.5 *
RDG:
+ Normal Scan: UG2002 Cruncher v0.3b3
+ Advanced Scan: UPX v0.8x (UPX Scrambler Heuristico)
With these information, I do not know what exactly packer in which this UnpackMe used. So I use PEid plugin (Generic OEP Finder) to find OEP of UnpackMe, it gives me: 00463C80. Okie:) May be this is the right OEP!
Close and open PeID Ollydbg to load this in UnpackMe. A messagebox apears, choose it. I have:

```
0047E000> 60 pushad <== Stop here (EP)
0047E001 E8 00000000 call unpackme.0047E006
0047E006 5D pop ebp
0047E007 81ED 48124000 sub ebp, unpackme.00401248
0047E00D 60 pushad
0047E00E E8 2B030000 call unpackme.0047E33E
0047E013 61 popad
0047E014 8A7D 60 mov bh, byte ptr ss: [ebp +60]
0047E017 6262 DB bound esp, qword ptr ds: [edx-25]
0047E01A 6A 62 push 62
6262 EF 0047E01C bound esp, qword ptr ds: [edx-11]
0047E01F D7 xlat byte ptr ds: [ebx + al]
0047E020 EA 7022628A 496> jmp far 6049:8 A622270
0047E027 6262 9D bound esp, qword ptr ds: [edx-63]
0047E02A F7?; Unknown command
22 Lea 0047E02B 8D70 esi, dword ptr ds: [eax +22]
0047E02E 62E9 bound ebp, ecx; Illegal use of register
0047E030 THREE F2F29DF7 mov edx, F79DF2F2
```

Oh! I see Pushad signature, like UPX. Press Alt + M to open Memory map window.
Memory map

```
Address Size (Owner Section Contains Type Access Initial Mapped as
..................................................... .....................................
00370000 00003000 (0 Map R R
00400000 00001000 (unpackme 0 PE header IMAG R RWE
00401000 0004B000 (unpackme 0. KLiZMA IMAG R RWE
0044C000 00031000 (unpackme 0. KLiZMA code IMAG R RWE
0047D000 00001000 (unpackme 0. Rsrc data, imports IMAG R RWE
0047E000 00001000 (unpackme 0. KLiZMA SFX R RWE IMAG
00480000 00004000 (0 Map RE RE
00540000 00002000 (0 Map RE RE
00550000 00103000 (0 Map R R
00660000 0006A000 (0 Map RE RE
..................................................... .....................................
```

In this window, select section:

```
00401000 0004B000 (unpackme 0. KLiZMA IMAG R RWE
```

And Right click and set a Memory Breakpoint on Access.And then Press F9 to Run, Olly breaks here:

```
0047CCA3 8807 mov byte ptr ds: [edi], al <== Stop here after Press F9 (1st)
0047CCA5 47 inc edi
0047CCA6 01DB add ebx, ebx
0047CCA8 75 07 jnz short unpackme.0047CCB1
0047CCAA 8B1E mov ebx, dword ptr ds: [esi]
0047CCAC 83EE FC sub esi, -4
ADC 0047CCAF 11DB ebx, ebx
72 ED 0047CCB1 ^ jb short unpackme.0047CCA0
```

Come back Memory Map Window and clear Memory BP.And then back to the CPU window, scroll down to find the signature:):

```
0047CDEB 83C3 04 add ebx, 4
EB 0047CDEE ^ E1 jmp short unpackme.0047CDD1
0047CDF0 FF96 near 84CE0700 call dword ptr ds: [esi +7 CE84]
0047CDF6 61 popad <=== Aha Popad
0047CDF7 ^ E9 846EFEFF jmp unpackme.00463C80 <=== Jmp to OEP (OEP Like found in Peid)
```

As you see, this signature like UPX. And now, BP set at 0047CDF7 ^ E9 846EFEFF jmp unpackme.00463C80

Press F9 to Run, Break at this BP, and remove this Press F8, kaka we stop at OEP of UnpackMe:

```
00463C80 55 push ebp <=== Right OEP
00463C81 8BEC mov ebp, esp
00463C83 83C4 F0 add esp, -10
00463C86 b8 903A4600 mov eax, unpackme.00463A90
00463C8B E8 A41FFAFF call unpackme.00405C34
00463C90 A1 F8584600 mov eax, dword ptr ds: [4658F8]
00463C95 8B00 mov eax, dword ptr ds: [eax]
00463C97 E8 14B2FEFF call unpackme.0044EEB0
```

Now, with dump Ollydump Plugin, not check Import Rebuilt. Press dump and save as: dumped. exe. Fire up ImportRec, select Process, write OEP, IAT Press Auto Search, Get Imports and finally Fix Dump.We have dumped_.exe. Test it: kaka it runs before I double-click:) lol detect and again by PEid: Borland Delphi 6.0 - 7.0.

[Cracking]

MUP UnpackMe After this, come to part 2 to change "unregistered" to "registered". To do this task, dumped_.exe Load into Ollydbg. Press F9 to run it, we'll see a beautiful girl with "unregistered" string below. Back to Ollydbg, Press Alt + M to open Windows Memory map, here we select:

```
Memory map, item 0
Address = 00010000
Size = 00001000 (4096.)
Owner = 00010000 (itself)
Section =
Type = 00021004 Priv
Access = RW
Initial access = RW
```

Right-click and select Search (or Ctrl + B), then type: unregistered in Ascii textbox and Press OK to Search this string.After that Olly break at:

```
Memory map, item 25
Address = 0047D000
Size = 00001000 (4096.)
Owner = 00400000 dumped_
Section =. rsrc
= Contains data, resources
Type = 01001002 IMAG
```

```
Access R =
Initial access = RWE

and we have in dump window:

00479140 55 4E 52 45 47 49 53 54 45 52 45 44 0C 46 6F 6E UNREGISTERED.Fon
00479150 74 2E 43 68 61 72 73 65 74 07 0F 44 45 46 41 55 t.CharsetDEFAU
00479160 4C 54 5F 43 48 41 52 53 45 54 0A 46 6F 6E 74 2E LT_CHARSET.Font.
00479170 43 6F 6C 6F 72 07 08 63 6C 57 69 6E 64 6F 77 0B Color clWindow
```

Okies, the string which we want to find is in Section. Rsrc (resource). So back to the CPU window, right click in dump Window and select Go to (Ctrl + G), we address the type of string: 00479140. Select string unregistered and registered to edit this. Finally, Save this edited file: dumped_edited.exe. Ok, Run this and see the result:).
Finish!
Best Regards
_ [Kienmanowar] _

[Thanz]

--+ + --= =[Greatz thanks to]= =--+ +--
My family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Merc, Hoadongnoi, Nini ... all REA's members, TQN, HacNho, RongChauA, Deux, tlandn, light.phoenix, dqtln, ARTEAM .... all my friend, and you.
Thanks to --+ + --= =[ ]= =--+ +--
iamidiot, WhyNotBar, trickyboy, dzungltvn, takada, hurt_heart, haule_nth, v. hytkl. v..
Special Thanks --+ + --= =[ ]= =--+ +--
And then thanx to the Author: KLiZMA and all the people read my Tutor!
>>>> If you have any suggestions, comments or corrections email me: kienbigmummy [at] gmail.com
Sorry my bad English. Because English is not my mother language, I'm Vietnamese.
Welcome to all: reaonline.net
UAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA ¿
³ ° ± ² ³ Û CONTACT INFORMATION
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAU
URL: http://www.reaonline.net
contact me: kienbigmummy@gmail.com

Manual unpack UPX 0.89.6 - 1.02 / 1.05 - 1:24

I - Find OEP:

- Use PEiD we know is the Pack with the UPX 0.89.6 - 1.02 / 1.05 - 1.24 (Delphi) stub -> Markus & Laszlo.
- Load up the program with Olly. Select No (not Analysis). I will come:

CODE

```
004A86C0> 60
PUSHAD <=== We
here.
004A86C1 BE
00E04600 MOV
ESI,
regedito.0046E000
004A86C6 8DBE
0030F9FF LEA
EDI, DWORD PTR
DS: [ESI
FFF93000 +]
```

- Pull the screen down the encounter until the command line:

CODE

```
004A8847 61 POPAD
004A8848 ^ E9
0322FDFF JMP
regedito.0047AA50
<=== Set
BreakPoint here
004A884D 0000
ADD BYTE PTR DS:
[EAX], AL
004A884F 0068 88
ADD BYTE PTR DS:
[EAX-78], CH
```

- After setting BreakPoint we press F9, the program will stop here. F7 to our staff:

CODE

```
0047AA50 55 PUSH EBP <== We here
0047AA51 8BEC MOV EBP, ESP
0047AA53 83C4 F4 ADD ESP, 0C -
```

- Right here we choose Plugins ===> OllyDump ===> dump debugged process. Write value at -> Modify. Human OK and save your program in any name what you like. With the extension is. Exe.

II - Find and RVA RVA size:

- You will find two ways: (1) IAT Auto Search, and (2) Manual
- You should find using IAT Auto Search for more quickly.
- However, in some cases IAT Auto Search can not find out RVA RVA and size so we must be heart by Manual.

II.1 - Content IAT Auto Search:

- Stay in the program, the program ImportREC v1.6 load the file, change the value OEP we just find the above.
- The IAT Auto Search
- Trade should we change the last two of RVA to RVA Size 00 and we should increase slightly
- Then Get the Imports, the next Show Invalid, then the Trace level 1 (disasm).
- Finally Fix the dump. Select the file that you get saved above.
- Fix then dump (file with the fix is a new file is created above).
- I will be a new file. If nothing special examination FILE has been successfully unpack.

II.2 - Manual:

- Stay in main screen. Press Ctrl-B screen in the CPU, and go to the FF 25, then press Ctrl-L continue to find code to the like this:

CODE

```
00497284 -
FF25
34214B00
JMP DWORD
PTR DS:
[4B2134];
advapi32.
GetUserNameA
```

- Press Ctrl-L to find out the code Similarly. In the heart, note the largest value max and min in most small DS: [4B2134].
- So we have:
OEP = value we find the above
RVA = min - 400,000
Size = max - min ==> usually increases slightly
- Use Import REConstructor v1.6F © 2001-2003 load file.
- Complete the value calculation above the IAT infos needed. Then Get the Imports, the next Show Invalid, then the Trace level 1 (disasm).
- After the trace is complete, the next Show Invalid, then the next Show Invalid, and the Cut thunks.
- Fix then dump (file with the fix is a new file is created above).
- I will be a new file. If nothing special examination FILE has been successfully unpack.

III - How clean and reduce the file size after unpack:

- To improve our conduct over the cleaning and reduce the file size of the file after Fix dump (to file as small as possible. However, if you do not like you can ignore).
- To implement this process we use LordPE Delux v1.4. Load up the program, select rebuild PE. Select File Fix we dump on, lick the Open and we have a complete new file to run CRACK.
- Check the file with PEiD, we know the language of the program.

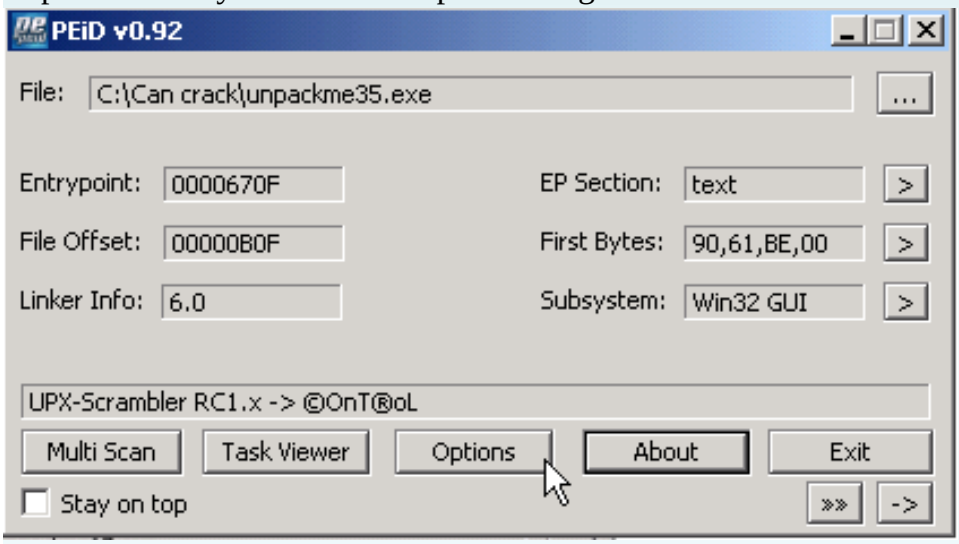
IV - Note:

- The instructions on here to correct most cases encountered in the SOFTWARE or CRACKME.
- Some special cases we need to initiate a slightly different take slightly. However the basic steps do not have the difference.

- Address in the instructions may vary, but you should note to order me. The question this order can not be different.

Learning unpack UPX Scramble RC 1st x

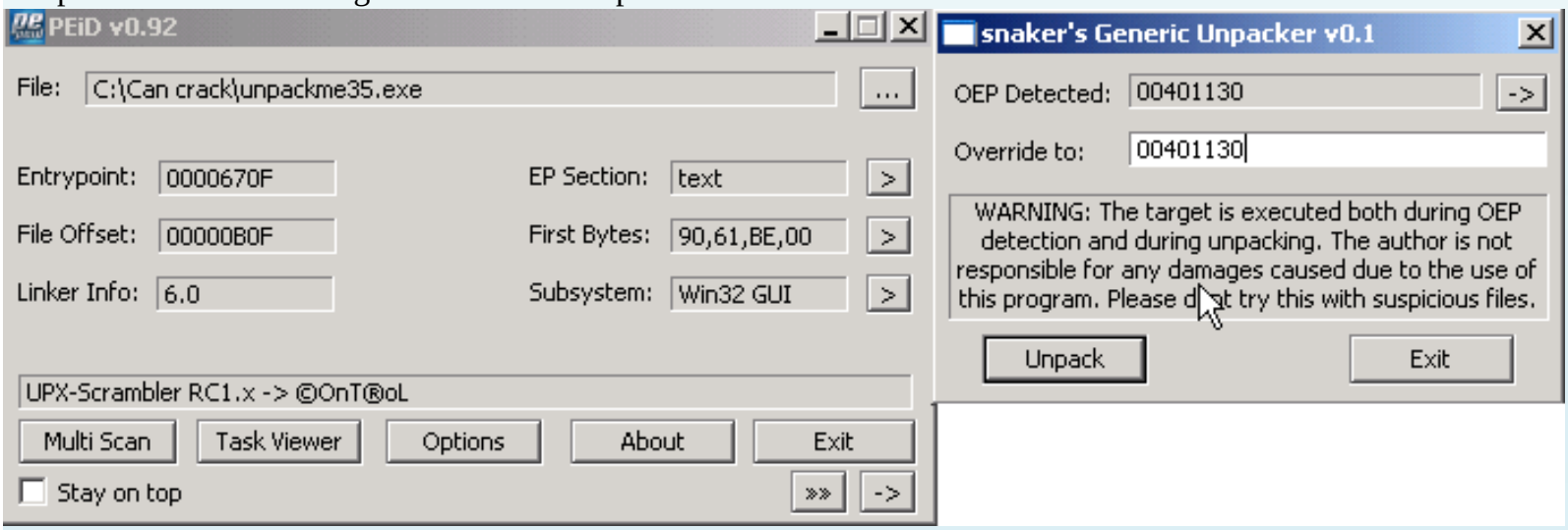
Target: unpackme # 35
Packer: RC 1.x UPX Scramble
Download: http://nhandan.info/hacnho
Top PEID handy it is to see the pack with ge.



We feel it is pack with UPX Scramble RC 1.x.

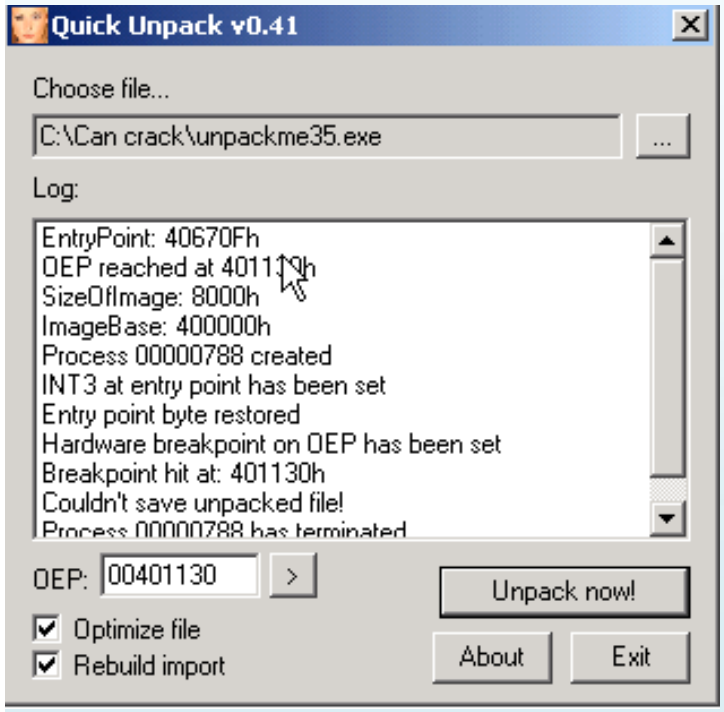
Method 1:

Simple and effective. Dung PEID Generic Unpacker.



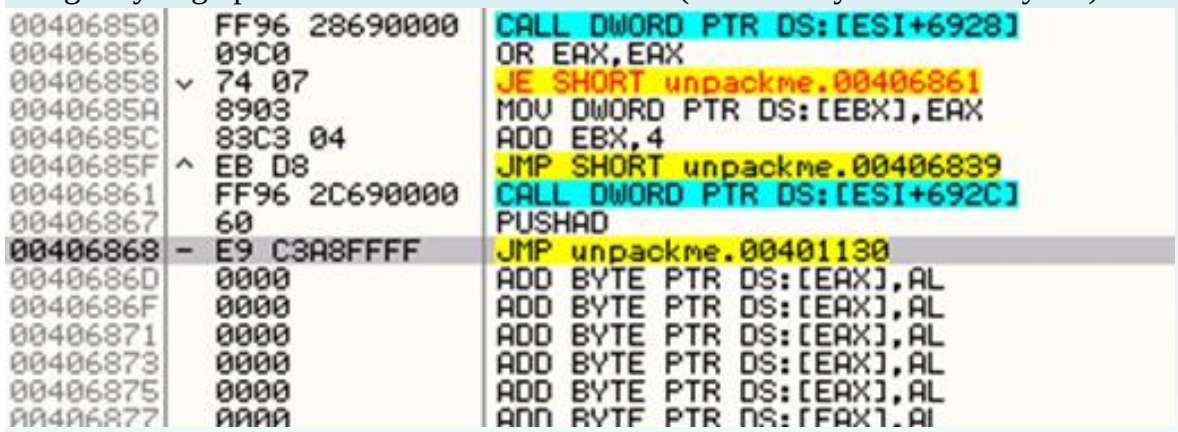
Method 2:

Dung Quick unpack 0:41.

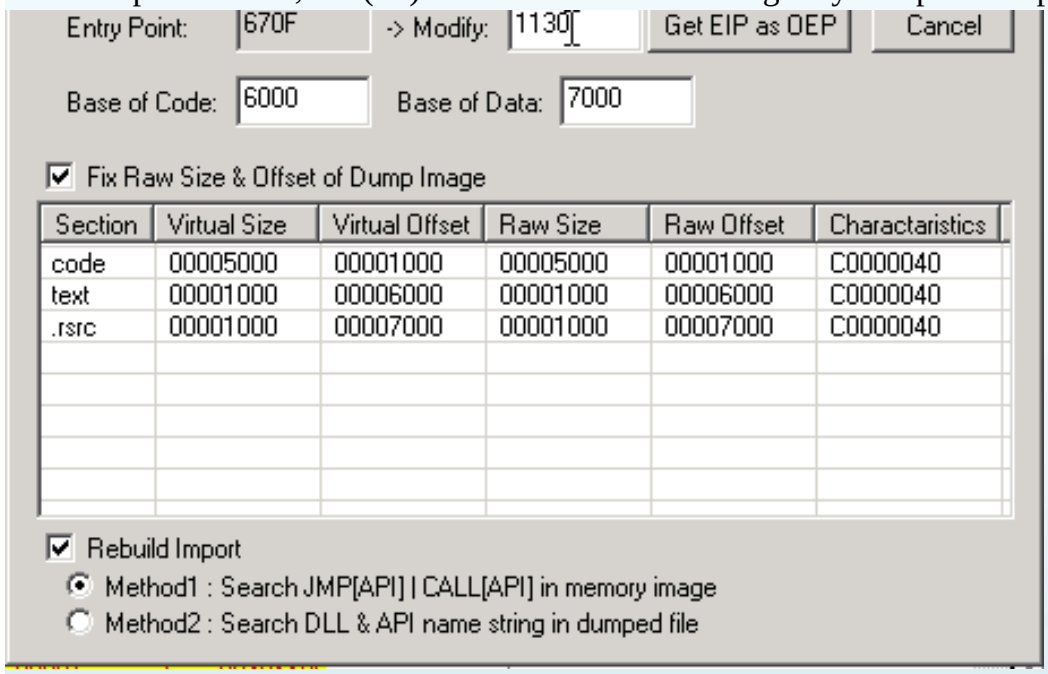


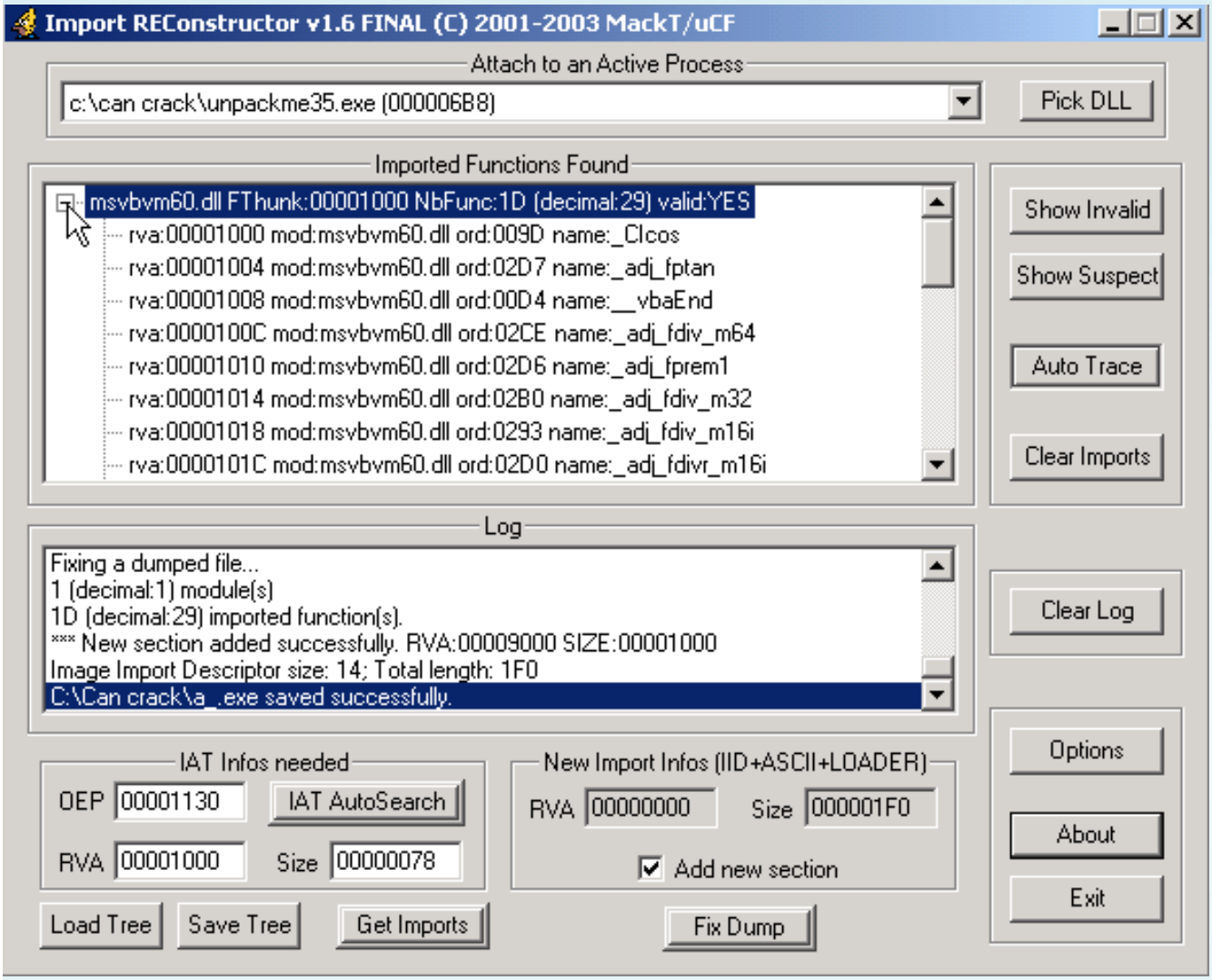
3 months:

Dung OllyDbg open the file. Pull down most file (Featured by a series of byte 0).



Set breakpoint at 406,868 (F2). F9.F8. We at OEP. Dung OllyDump to dump file and Imprec to fix IAT.



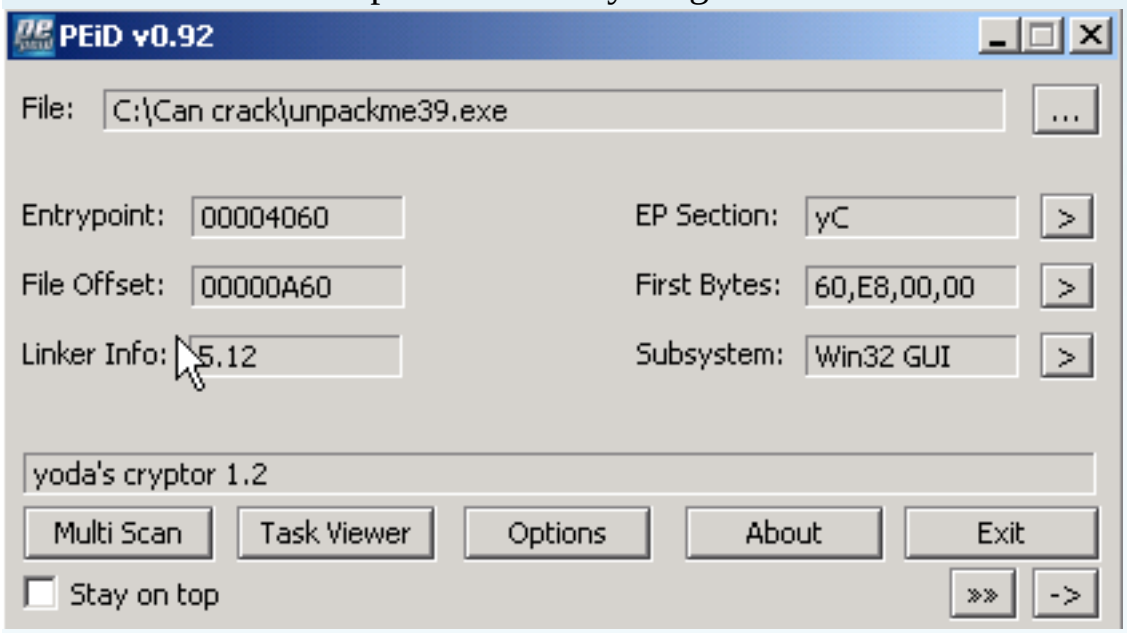


So lr completed. Happy happy.

tlandn

Learning unpack Yoda Cryptor 1.2

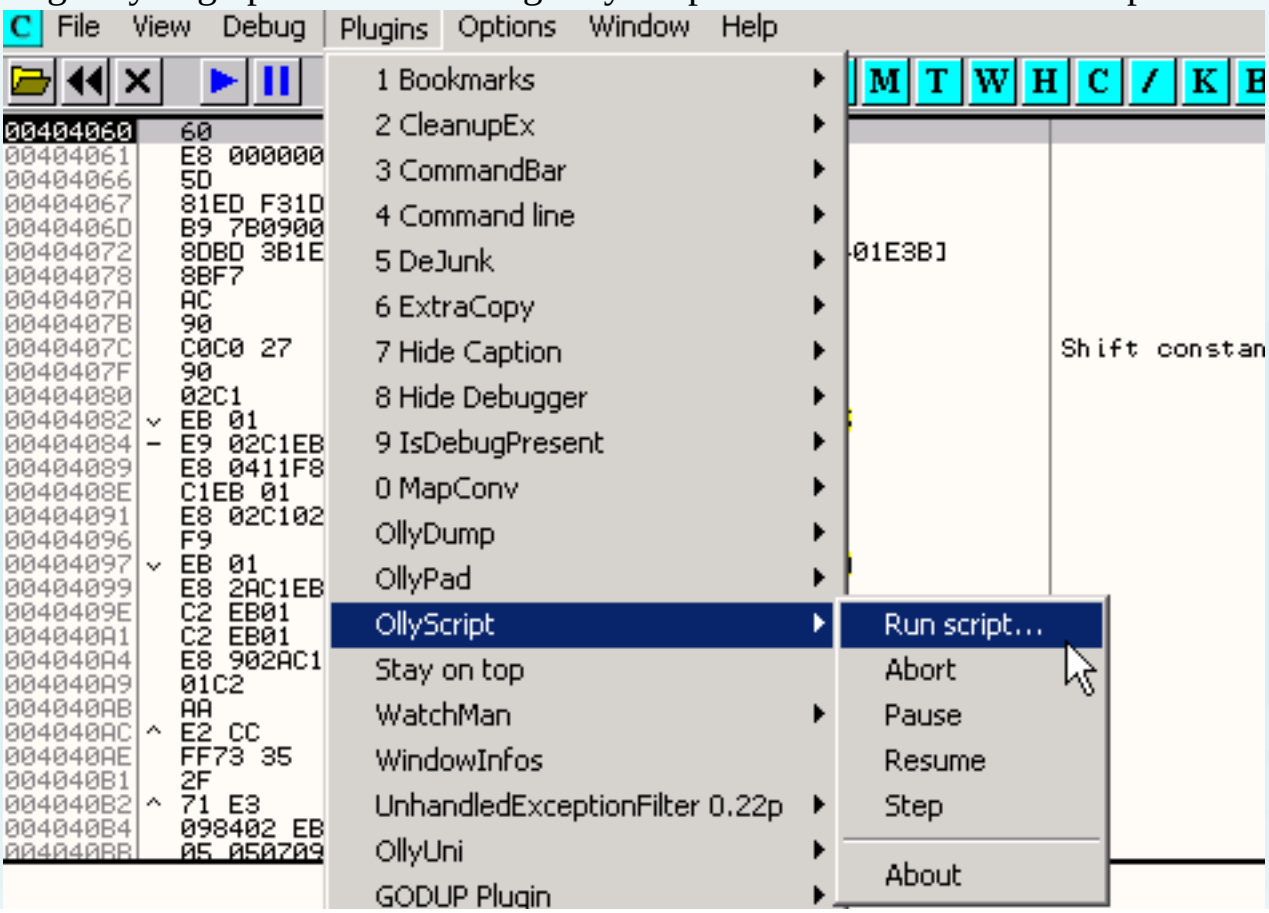
Target: unpackme # 39
Packer: Yoda Cryptor 1.2
Download: http://nhandan.info/hacnho
First used to see PEID pack it with anything.



We see it in the pack Yoda Cryptor 1.2.

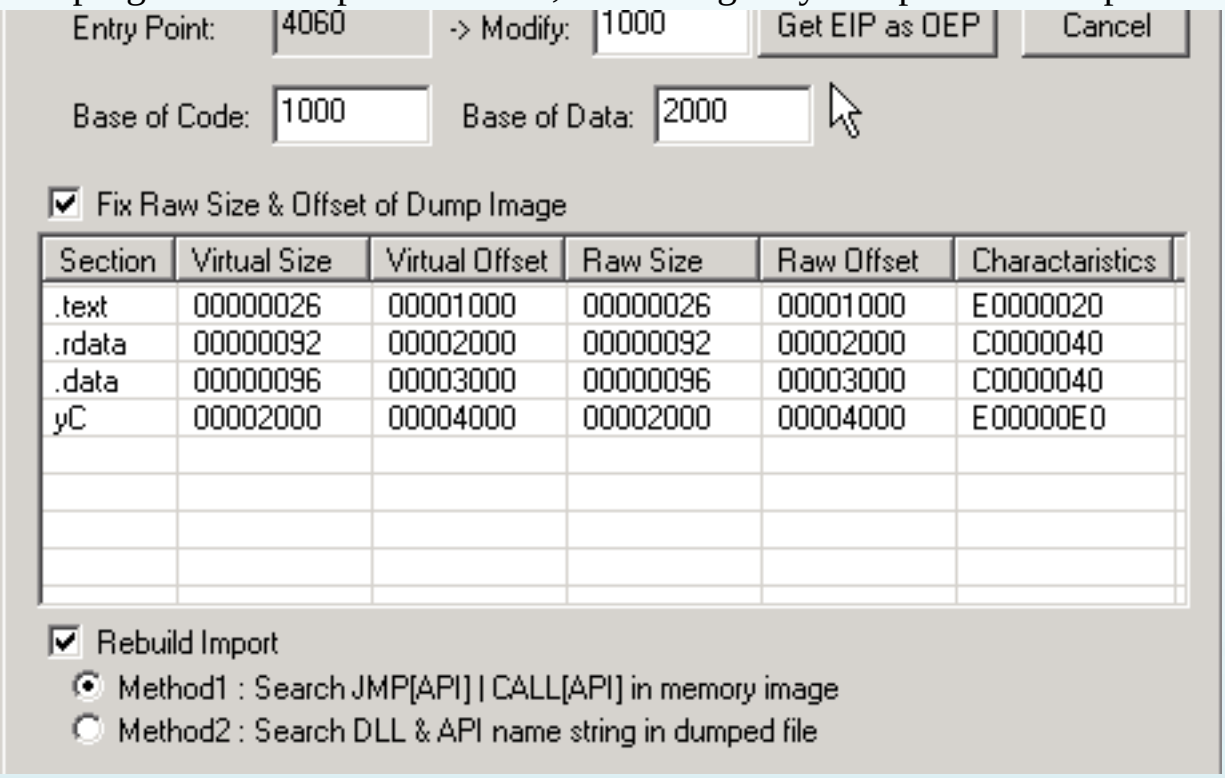
Method 1:

Using OllyDbg open the file. Using OllyScript. I have enclosed in the zip file



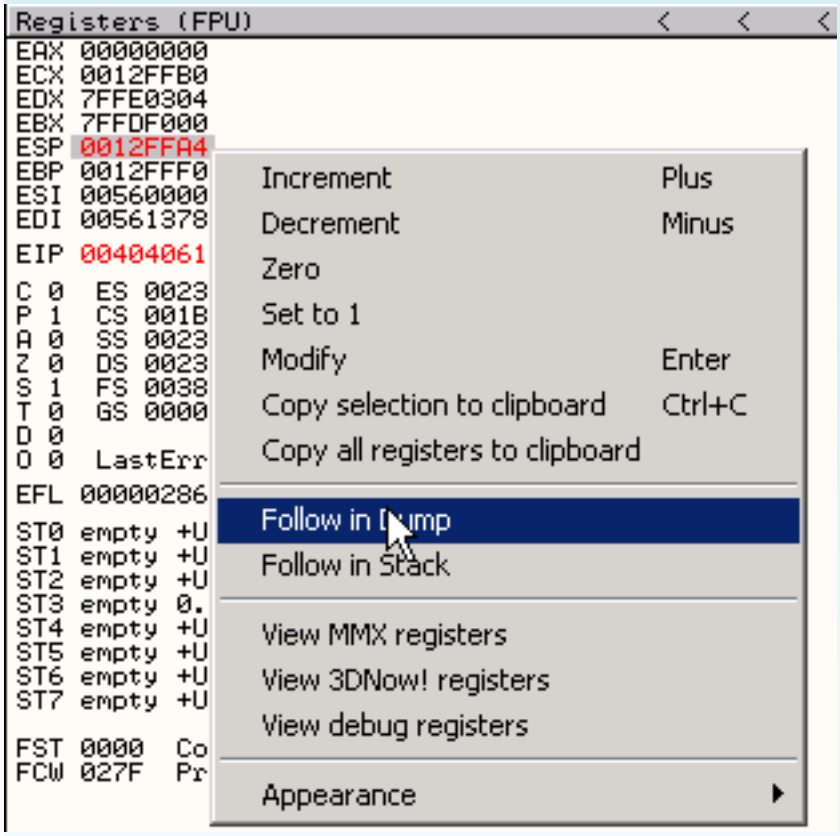
Select File y0da_crypter_1.2.txt

The program will stop at OEP 401,000. Using OllyDump to file dump

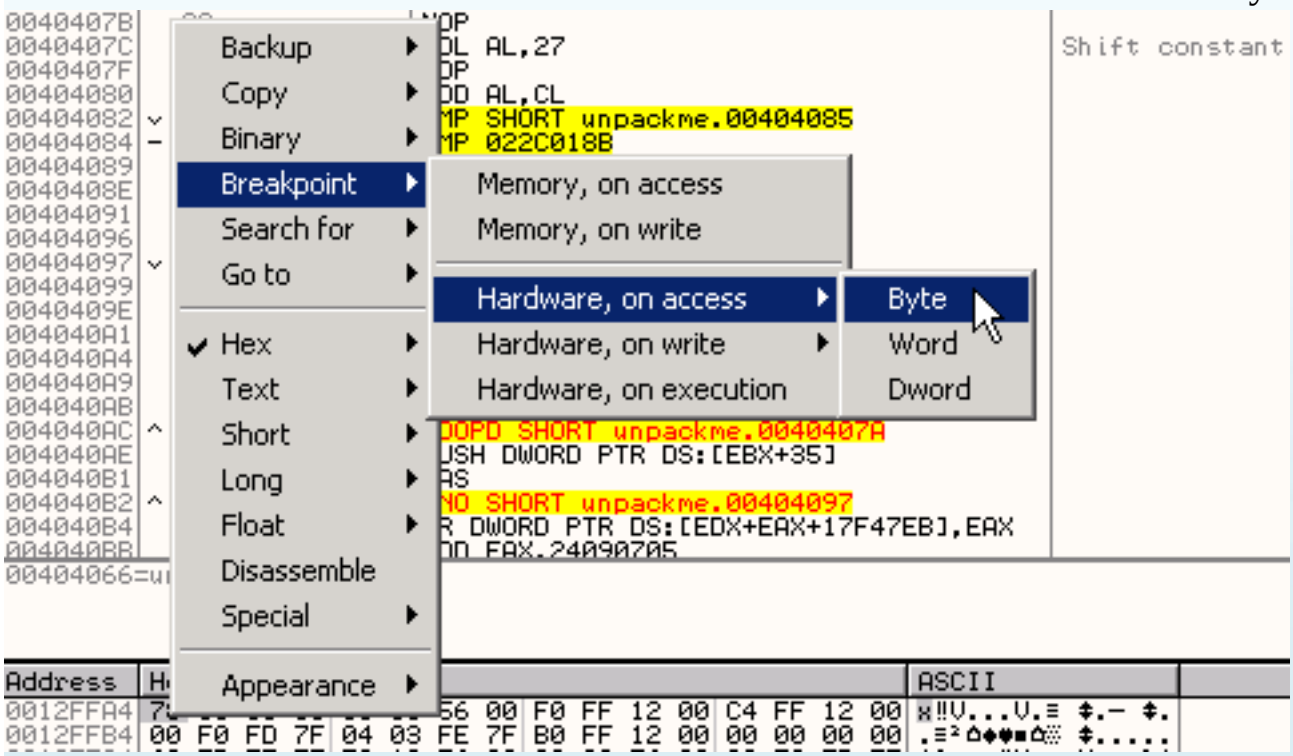


Method 2:

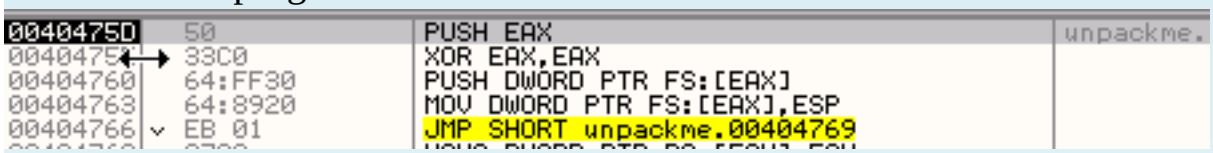
Using OllyDbg open the file. Search PUSHAD. May too, we are standing there. Press F8. Thanh noted ESP will change. Click on the button to select Follow ESP Print dump



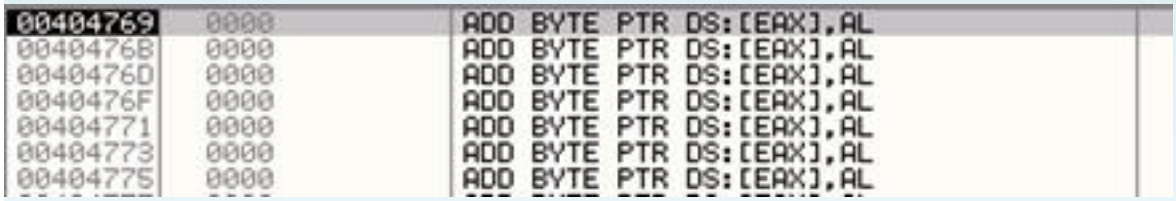
In the window below the left corner we are 12FFA4. Click to select the first byte as in the picture



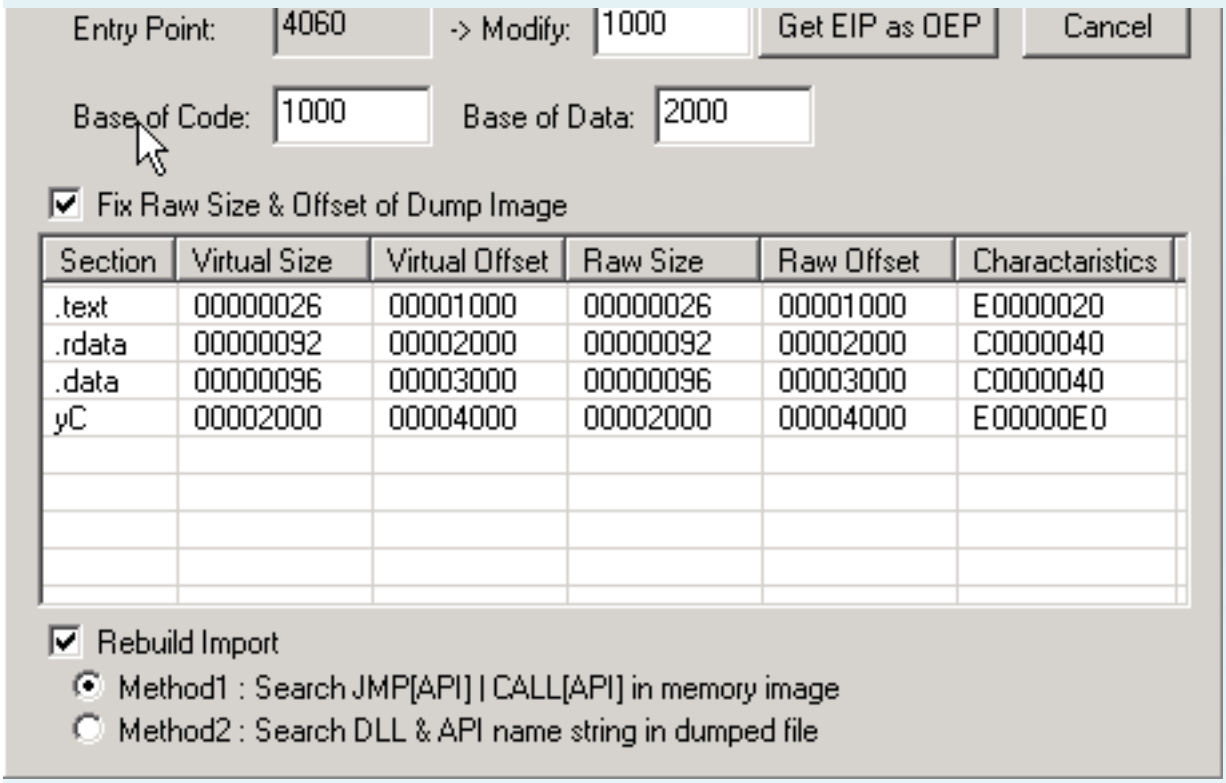
Press F9. The program will break at 40475D.



Press F8 6 times.



Press Shift-F9. We will be at 401,002. But this is not OEP. OEP located on a line that is at 401,000. We use OllyDump.



Them. Happy happy.

tlandn

*** Lam nhảm bomb:
-From the day that the homepage of ARTeam, I have a lot of down tut English, but much time do not follow (in English that dot).
-For the Newbie dot English bags a little more today, I would post a few lines based on 2 tut by gã MaDMAn_H3rCuL3s (gã I hate this). This is not translate the level I is not sufficient to all understand, the only, the tut-aged English I find this place has not the same as when you make enough, do not know where to stagger a few points when I stopped doing that any shortfalls are a few lines so lao.Do with that image in this article I have to capture to the Newbie bags to track more.

Then, throw out long bomb, the time to issue and that (for 2 to buy Bom).

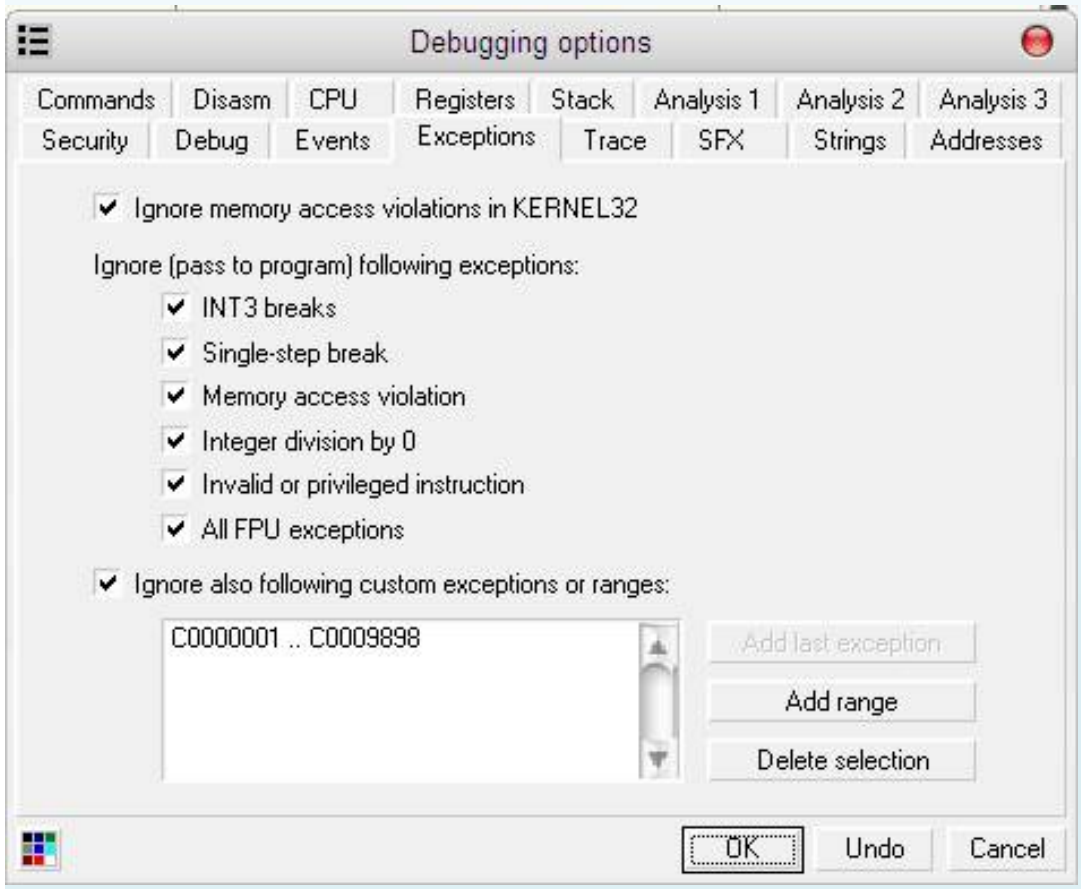
Section 1: Unpacking Armadillo v3.x anti-dump (first tut)

Target	GPS Express v3.2
Available	http://intechhosting.com/ ~ access/ARTeam/tools/GPSE3.exe
Tools	OllyDbg 1:10, ImpRec, LordPE, Olly Plugin: Hide Debugger, CMDBar

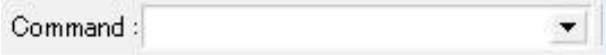
Note-you 2 plugin contributed by Olly quite important in this series tut.
-As for the current pack is often the (compressed) to combat some parents Cracker as we, and this is a style pack is quite popular, used Armadillo.
-Our mission is to find our real OEP program, dump it, then fix IAT.
-As the author said, is the message for the Newbie simple steps, short understandable. The explained further, please wait for the reference of his tut hacnho on small Armadillo.

I. Search and dumping OEP:

First-2 is a copy of Olly plugin to plugin directory of Olly nhé.
-Then, we have to edit like this in Olly (usually when unpack Armadillo). In the Options-debugging options Exception-selected card, then check the following:



-We check on the process to debug suon will be, at least fails.
-If you have the plugin Cmdbar.dll after Olly, will see this below:



Time-load thằng GSPExpress.exe vao.Sau wood like to CmdBar nhé:

-Enter one, it will set a break-Point elsewhere. (Want to know where you click "B" in Olly, double-click the line that will take us to where the break-Point).
Time-Shift-click the F9 to run it a bit, break it in just put BP (BP should remove go here). Press Ctrl-F9 continue to RENT in the order.

```
77E7BE53  55              PUSH EBP
77E7BE54  8BEC            MOV EBP,ESP
77E7BE56  FF75 1C         PUSH DWORD PTR SS:[EBP+1C]
77E7BE59  FF75 18         PUSH DWORD PTR SS:[EBP+18]
77E7BE5C  FF75 14         PUSH DWORD PTR SS:[EBP+14]
77E7BE5F  FF75 10         PUSH DWORD PTR SS:[EBP+10]
77E7BE62  FF75 0C         PUSH DWORD PTR SS:[EBP+C]
77E7BE65  FF75 08         PUSH DWORD PTR SS:[EBP+8]
77E7BE68  6A FF           PUSH -1
77E7BE6A  E8 30FEFFFF     CALL kernel32.CreateRemoteThread
77E7BE6F  5D              POP EBP
77E7BE70  C2 1800         RETN 18
```

F7-one to come:

```
00C2F8B2  5E              POP ESI
00C2F8B3  C9              LEAVE
00C2F8B4  C3              RETN
```

Lai-Ctrl-F9 to here:

```
00C2F8B2  5E              POP ESI
00C2F8B3  C9              LEAVE
00C2F8B4  C3              RETN
```

F7-the will to here:

```
00C49343   A1 D8E6C500      MOV EAX,DWORD PTR DS:[C5E6D8]
00C49348   59                POP ECX
00C49349   8B88 80000000     MOV ECX,DWORD PTR DS:[EAX+80]
00C4934F   3348 3C           XOR ECX,DWORD PTR DS:[EAX+3C]
00C49352   3348 30           XOR ECX,DWORD PTR DS:[EAX+30]
00C49355   F6C1 40           TEST CL,40
00C49358   75 08             JNZ SHORT 00C49362
00C4935A   6A 01             PUSH 1
00C4935C   E8 D5D7FDFF       CALL 00C26B36
00C49361   59                POP ECX
00C49362   6A 00             PUSH 0
00C49364   C705 B852C500 D   MOV DWORD PTR DS:[C552B8],0C55FD4      ASCII "RC"
00C4936E   E8 F402FEFF       CALL 00C29667
00C49373   59                POP ECX
00C49374   E8 FCF3FEFF       CALL 00C38775
00C49379   8BF8              MOV EDI,EAX
00C4937B   A1 D8E6C500       MOV EAX,DWORD PTR DS:[C5E6D8]
00C49380   8B48 70           MOV ECX,DWORD PTR DS:[EAX+70]
```

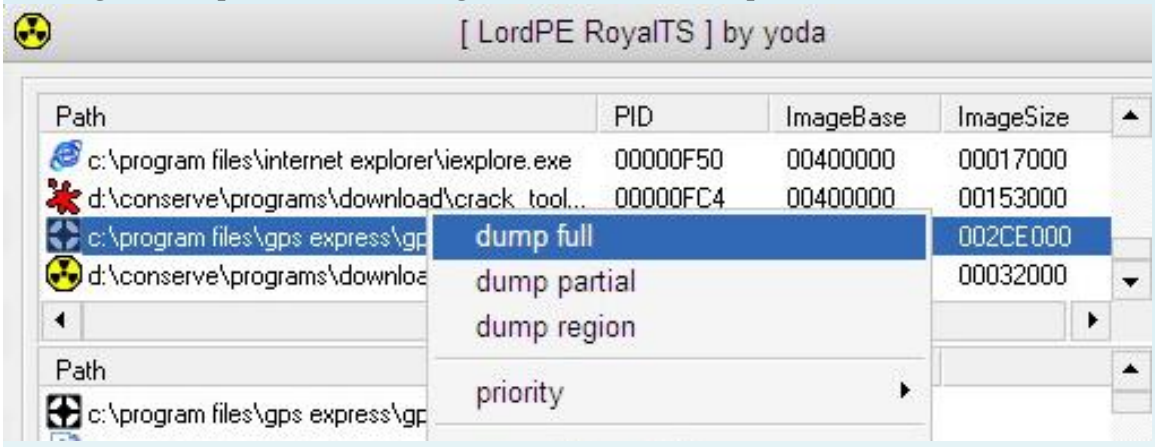
Now pull-down search command RETN me, in this order on me a bit with a CALL EDI:

```
00C493D3   A1 D8E6C500       MOV EAX,DWORD PTR DS:[C5E6D8]
00C493D8   8B48 74           MOV ECX,DWORD PTR DS:[EAX+74]
00C493DB   3348 3C           XOR ECX,DWORD PTR DS:[EAX+3C]
00C493DE   3348 10           XOR ECX,DWORD PTR DS:[EAX+10]
00C493E1   2BF9              SUB EDI,ECX
00C493E3   FFD7              CALL EDI
00C493E5   8BD8              MOV EBX,EAX
00C493E7   5F                POP EDI
00C493E8   8BC3              MOV EAX,EBX
00C493EA   5E                POP ESI
00C493EB   5B                POP EBX
00C493EC   C3                RETN
```

-You set a Break Point-like (F2) and then press Shift-F9 to break it in the (BP to delete). Now the press F7 small, we will come:

```
00401000   A1 FCB44F00       MOV EAX,DWORD PTR DS:[4FB4FC]
00401005   C1E0 02           SHL EAX,2
00401008   A3 00B54F00       MOV DWORD PTR DS:[4FB500],EAX
0040100D   57                PUSH EDI
0040100E   51                PUSH ECX
0040100F   33C0              XOR EAX,EAX
00401011   BF 58635200       MOV EDI,GPSExpre.00526358
00401016   B9 44AB5200       MOV ECX,GPSExpre.0052AB44
0040101B   3BCF              CMP ECX,EDI
0040101D   76 05             JBE SHORT GPSExpre.00401024
0040101F   2BCF              SUB ECX,EDI
```

Lao-authors say this is the OEP su.Chung we remember the 401,000 Address and now it's one small dump it. (To the original program and Olly OEP by it, not anything close) Open father Lord-up PE , select the file and then running GPSExpress.exe Click right, choose "full dump"

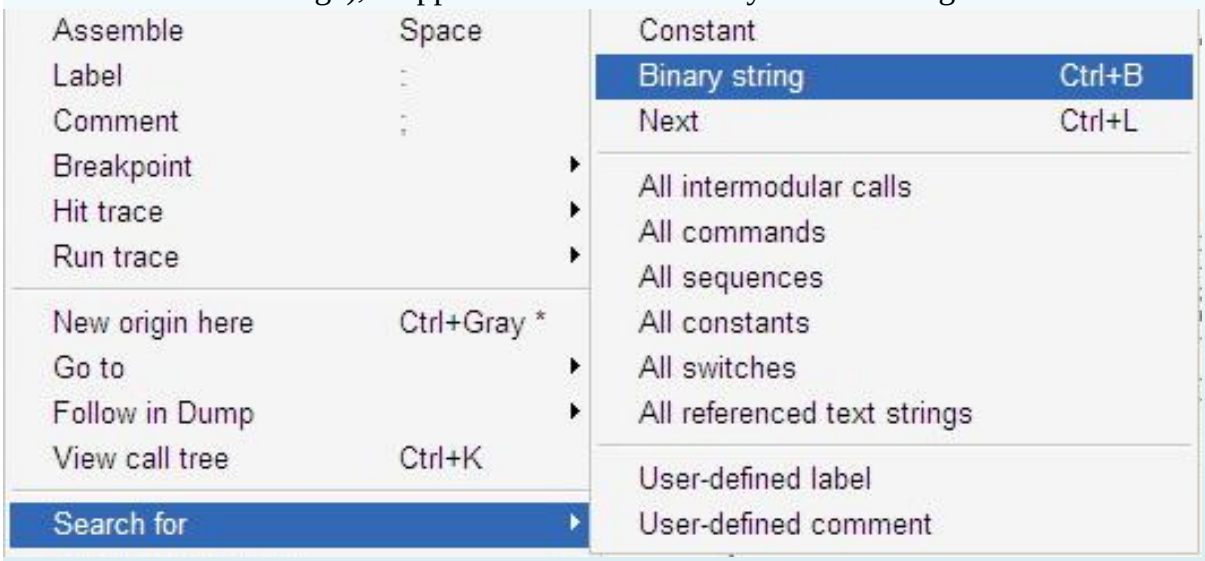


-Save will default to the name dumped.exe (if you do not change the name). Done is a code.

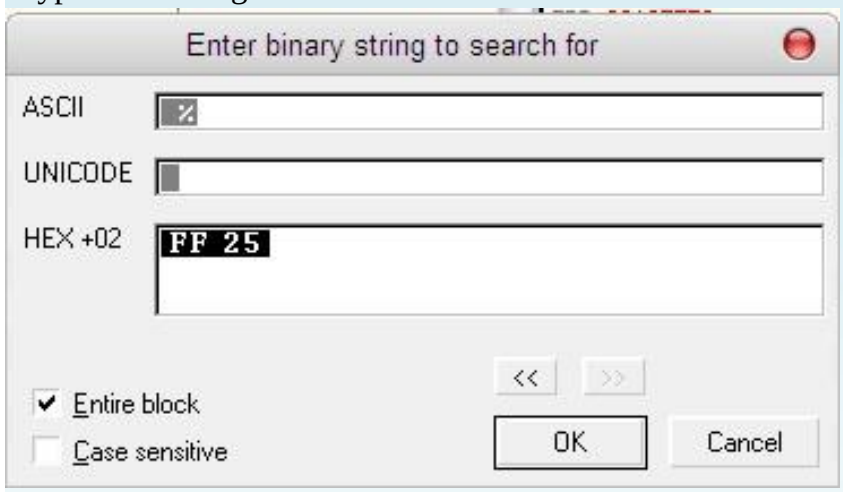
Removal II.Tieu anti-dump and revised IAT:

-As the name of the section 1, this program is pack it in and Armadillo have excellent anti-dump chiêu whether we

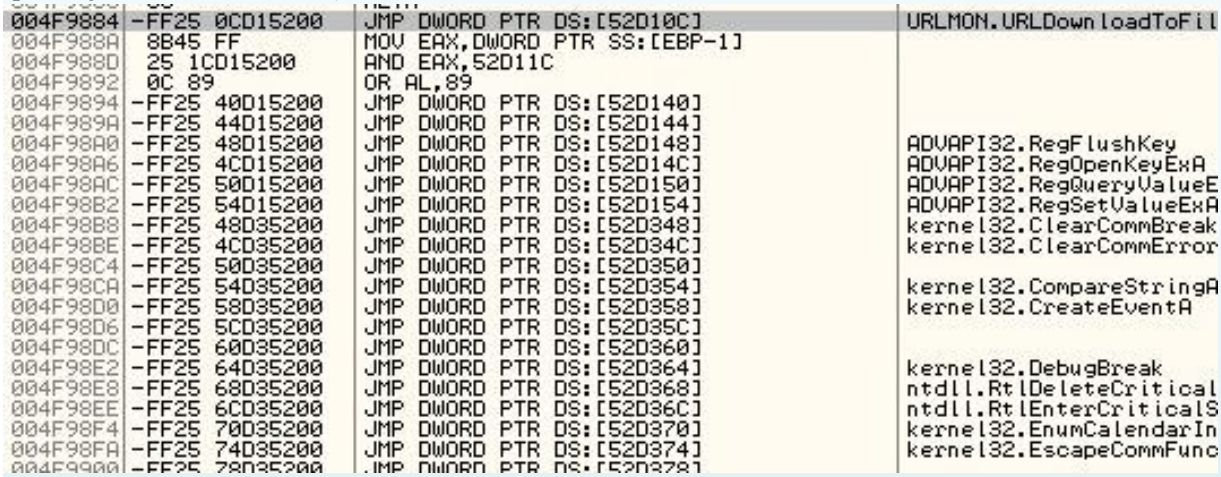
should find the OEP, it is the dump file dumped.exe Vần hong.Gio will fix IAT dump file to run perfect.
-Now they have told you the resources to Olly, one hour back, OEP are not really true? Press Ctrl-B (or right click and then select the image), it appears the box for Binary Search String:



-Type in the image:

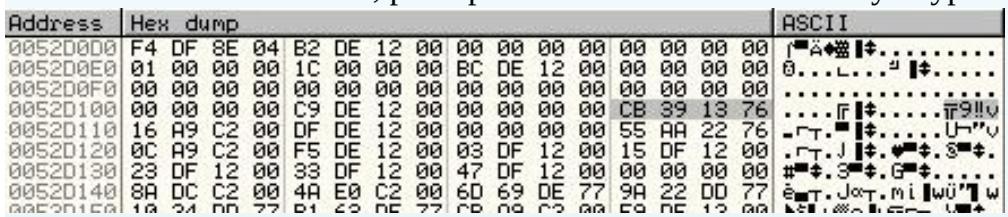


Then-OK.no Search start at first we just tien.Nhung Ctrl-B from its Search more, until the stop here (click wá quickly lose that bear àh):

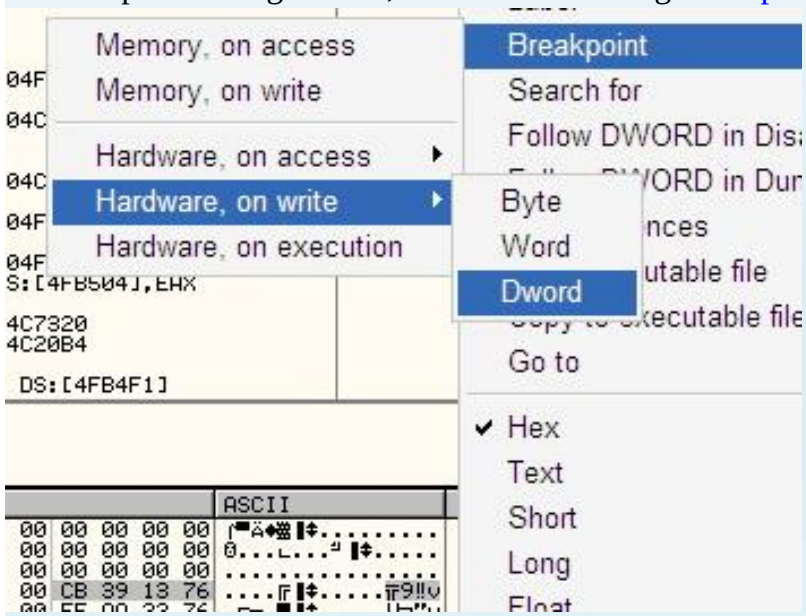


Then one-click to select this line at the dump Follow - Memory Address:

Look-down window below, pull up a bit and then the bowl as Byte type:



The Byte-by you may be different, but I aged and authors in the same Address 0052D100 it is.
-To complete the right-click, select the following Breakpoint - Hardware, write on - Dword:



-And now Restart the program there. (Ctrl-F2). Press Shift-F9, waiting for it to stop at first Breakpoint Hardware:

-It should not need to find points, press the Shift-F9 again, stop here:

```
00C461D3   8908            MOV DWORD PTR DS:[EAX],ECX
00C461D5   8B85 10C8FFFF   MOV EAX,DWORD PTR SS:[EBP-37F0]   GPSExpre.0052D10C
00C461DB   83C0 04         ADD EAX,4
00C461DE   8985 10C8FFFF   MOV DWORD PTR SS:[EBP-37F0],EAX
00C461E4  ^E9 CEFCFFFF     JMP 00C45EB7
00C461E9   FF15 90F2C400   CALL DWORD PTR DS:[C4F290]        kernel32.GetTickCount
00C461EF   2B85 A0C4FFFF   SUB EAX,DWORD PTR SS:[EBP-3B60]
00C461F5   8B8D A4C4FFFF   MOV ECX,DWORD PTR SS:[EBP-3B5C]
00C461FB   6BC9 32         IMUL ECX,ECX,32
00C461FE   81C1 D0070000   ADD ECX,7D0
```

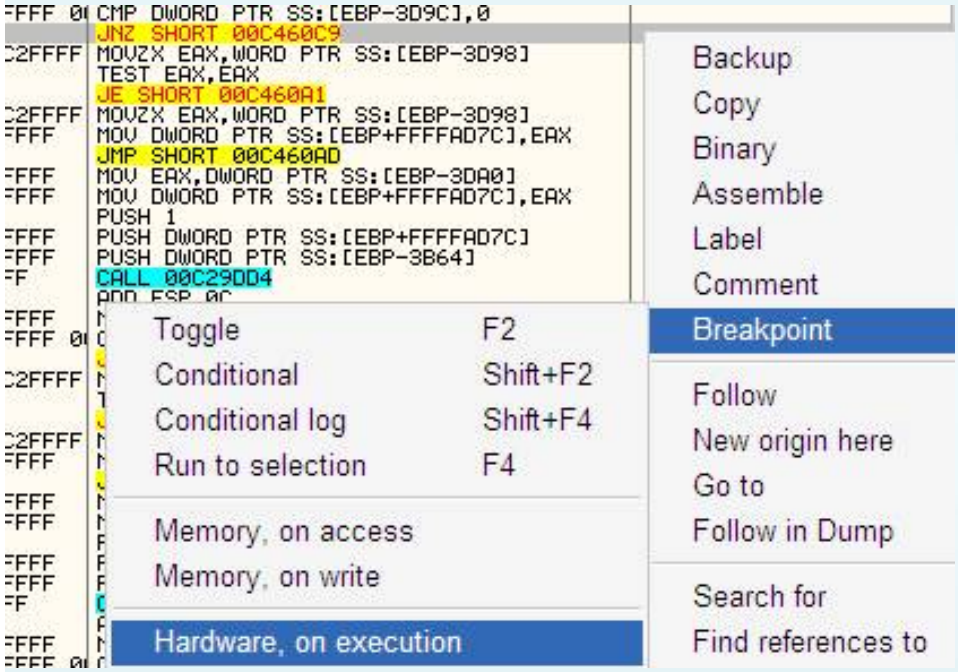
Now pull-up search msvcrt._stricmp (pulled up quite a lot smaller):

```
00C4604C   FFB5 60C2FFFF   PUSH DWORD PTR SS:[EBP-3DA0]
00C46052   FF15 48F3C400   CALL DWORD PTR DS:[C4F348]        msvcrt._stricmp
00C46058   59              POP ECX
00C46059   59              POP ECX
00C4605A   85C0            TEST EAX,EAX
00C4605C  v75 11           JNZ SHORT 00C4606F
```

-Now look down you'll see a JNZ, JMP 2 months, then again a month JNZ.Thang JNZ 2 is the need tim.No contribute to the anti-dump of the aged authors call it MAGIC JUMP. (chit out line) It will jump down his Cmp is below.

```
00C46052   FF15 48F3C400   CALL DWORD PTR DS:[C4F348]        msvcrt._stricmp
00C46058   59              POP ECX
00C46059   59              POP ECX
00C4605A   85C0            TEST EAX,EAX
00C4605C  v75 11           JNZ SHORT 00C4606F
00C4605E   8B85 58C2FFFF   MOV EAX,DWORD PTR SS:[EBP-3DA8]
00C46064   8B40 08         MOV EAX,DWORD PTR DS:[EAX+8]
00C46067   8985 64C2FFFF   MOV DWORD PTR SS:[EBP-3D9C],EAX
00C4606D  vEB 02           JMP SHORT 00C46071
00C4606F  ^EB 9D           JMP SHORT 00C4600E
00C46071   8B85 A4C4FFFF   MOV EAX,DWORD PTR SS:[EBP-3B5C]
00C46077   40              INC EAX
00C46078   8985 A4C4FFFF   MOV DWORD PTR SS:[EBP-3B5C],EAX
00C4607E   83BD 64C2FFFF 0 CMP DWORD PTR SS:[EBP-3D9C],0
00C46085  v75 42           JNZ SHORT 00C460C9
00C46087   0FB785 68C2FFFF MOVZX EAX,WORD PTR SS:[EBP-3D98]
```

-You must click here, select Breakpoint - Hardware, on Execution:



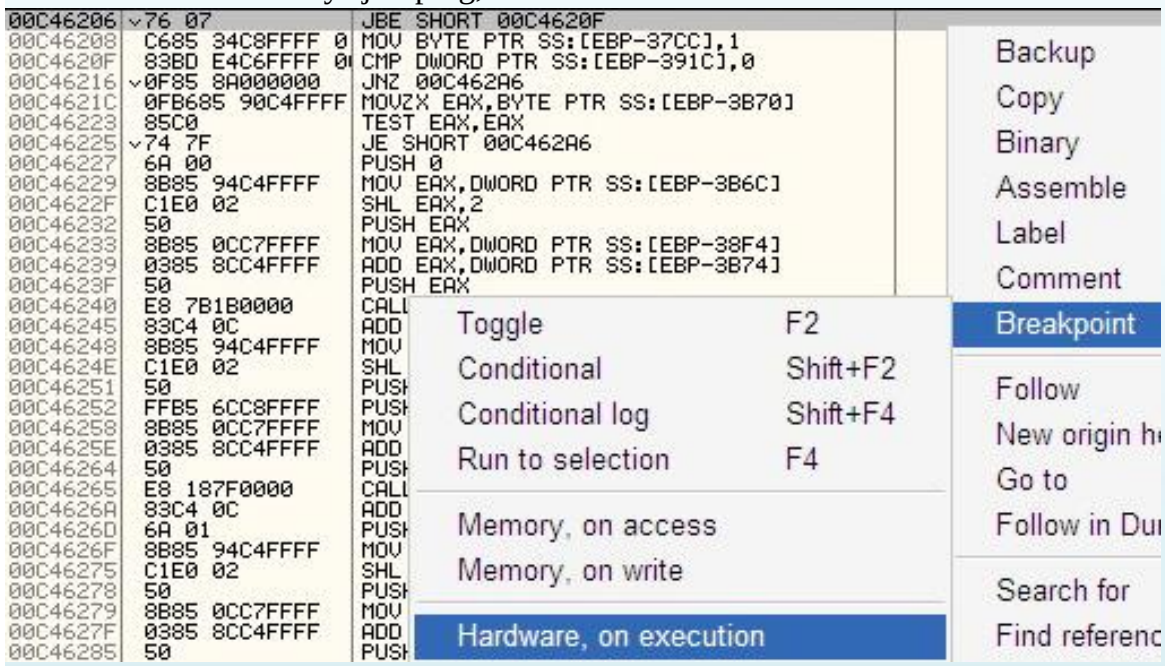
Now-back seats, the 2nd stop at this (press marked "-" for fast). Look down a few lines, see this:

```
00C461D5   8B85 10C8FFFF   MOV EAX,DWORD PTR SS:[EBP-37F0]          GPSExpre.0052D10C
00C461DB   83C0 04         ADD EAX,4
00C461DE   8985 10C8FFFF   MOV DWORD PTR SS:[EBP-37F0],EAX
00C461E4  ^E9 CEFCFFFF     JMP 00C45EB7
00C461E9   FF15 90F2C400   CALL DWORD PTR DS:[C4F290]               kernel32.GetTickCount
00C461EF   2B85 A0C4FFFF   SUB EAX,DWORD PTR SS:[EBP-3B60]
00C461F5   8B8D A4C4FFFF   MOV ECX,DWORD PTR SS:[EBP-3B5C]
00C461FB   6BC9 32         IMUL ECX,ECX,32
00C461FE   81C1 D0070000   ADD ECX,7D0
00C46204   3BC1            CMP EAX,ECX
00C46206   76 07           JBE SHORT 00C4620F
00C46208   C685 34C8FFFF 0 MOV BYTE PTR SS:[EBP-37CC],1
00C4620F   83BD E4C6FFFF 0 CMP DWORD PTR SS:[EBP-391C],0
```

Lao-authors say this is the place playing Anti-Dump.Ta look further down the father saw a JBE.

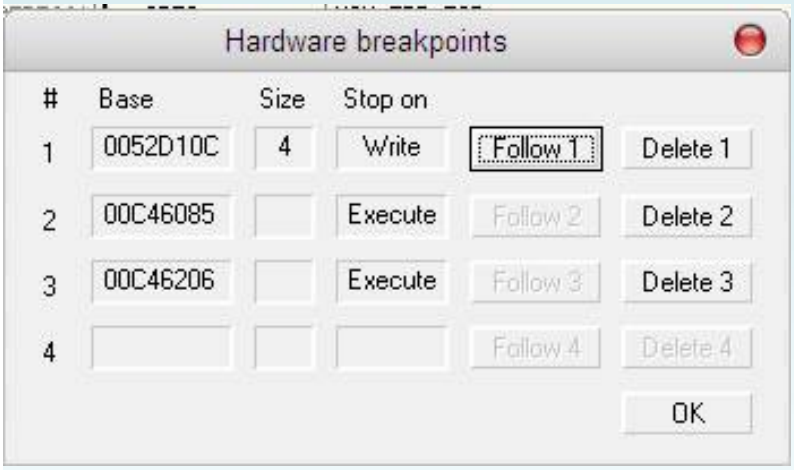
```
00C461D5   8B85 10C8FFFF   MOV EAX,DWORD PTR SS:[EBP-37F0]          GPSExpre.0052D10C
00C461DB   83C0 04         ADD EAX,4
00C461DE   8985 10C8FFFF   MOV DWORD PTR SS:[EBP-37F0],EAX
00C461E4  ^E9 CEFCFFFF     JMP 00C45EB7
00C461E9   FF15 90F2C400   CALL DWORD PTR DS:[C4F290]               kernel32.GetTickCount
00C461EF   2B85 A0C4FFFF   SUB EAX,DWORD PTR SS:[EBP-3B60]
00C461F5   8B8D A4C4FFFF   MOV ECX,DWORD PTR SS:[EBP-3B5C]
00C461FB   6BC9 32         IMUL ECX,ECX,32
00C461FE   81C1 D0070000   ADD ECX,7D0
00C46204   3BC1            CMP EAX,ECX
00C46206   76 07           JBE SHORT 00C4620F
00C46208   C685 34C8FFFF 0 MOV BYTE PTR SS:[EBP-37CC],1
00C4620F   83BD E4C6FFFF 0 CMP DWORD PTR SS:[EBP-391C],0
```

-And this father is always jumping, we also set a similar BP on here:

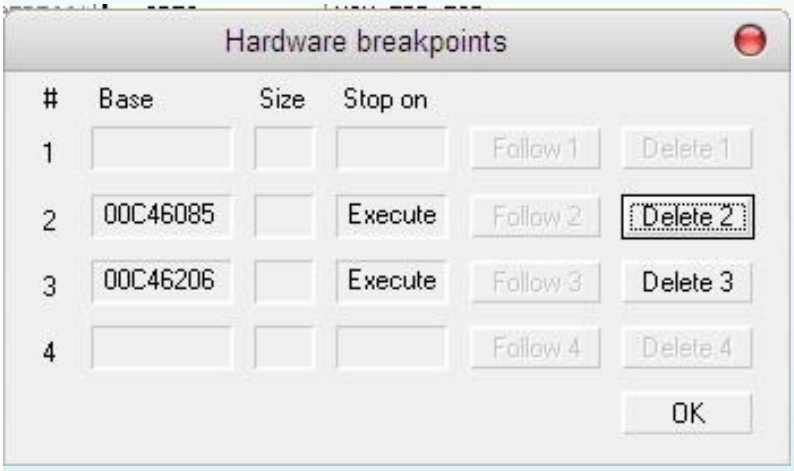


Restart-timer again. (Ctrl-F2). Before we must do to remove a HW BP excess Debug then go da.Chon Hardware breakpoints:

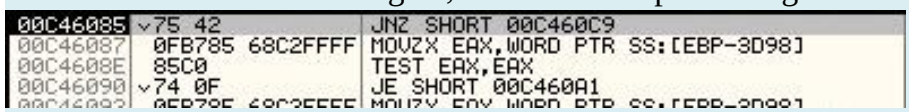
-Then see this:



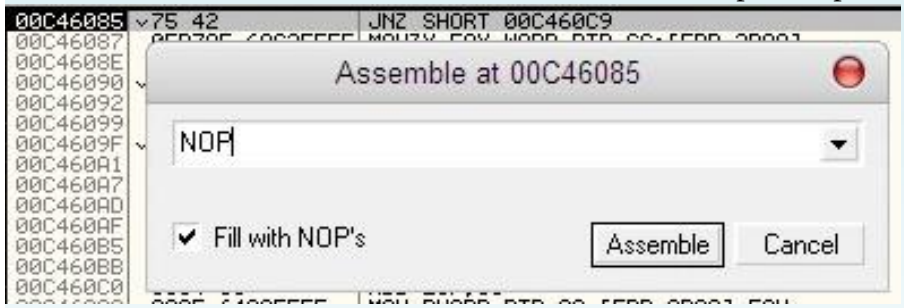
-Then, we delete father Write attend, for it is:



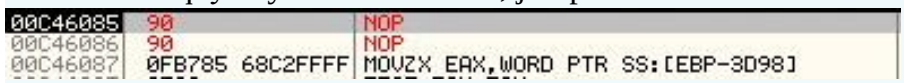
Then we OK.Gio-Shift-F9 again, and then it stops running at first HW BP:



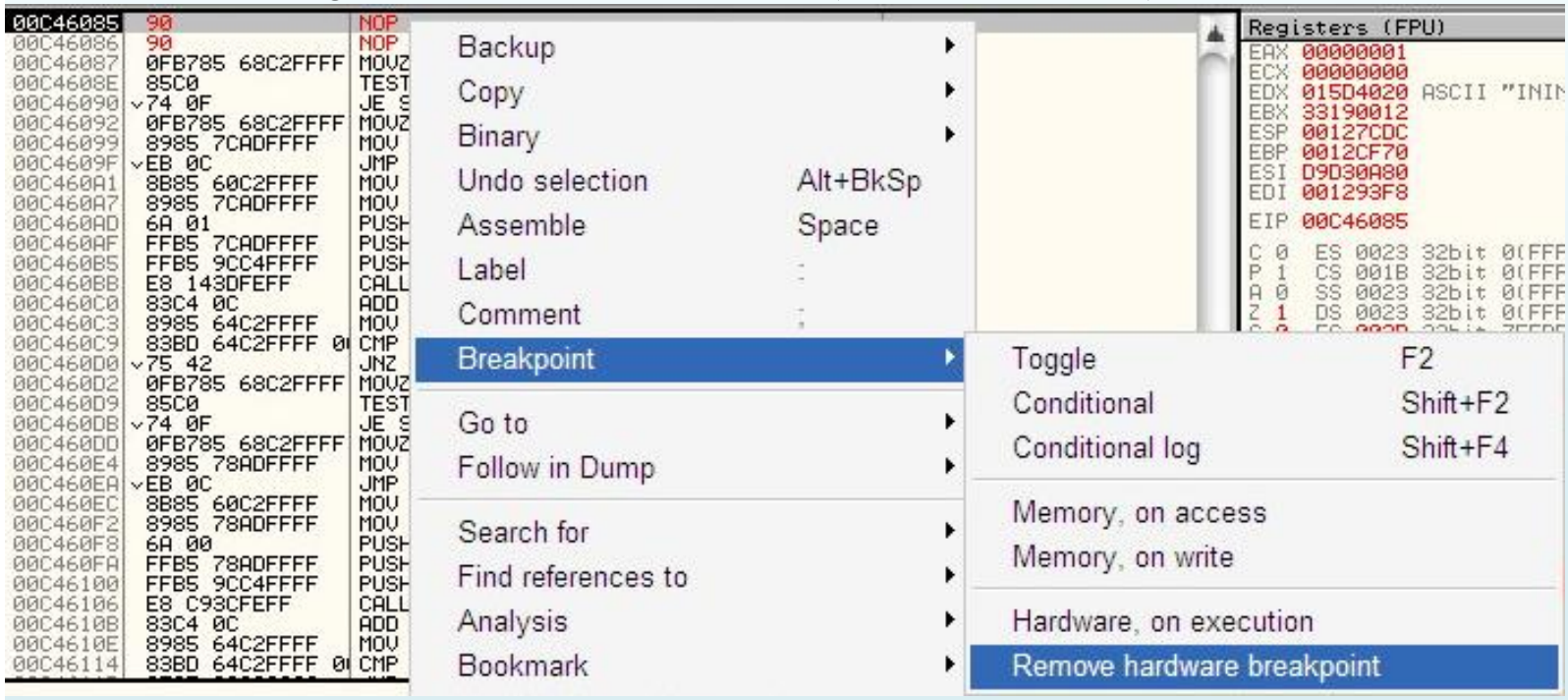
Time-out for it from us, we NOP for it then, and then press Space to like:



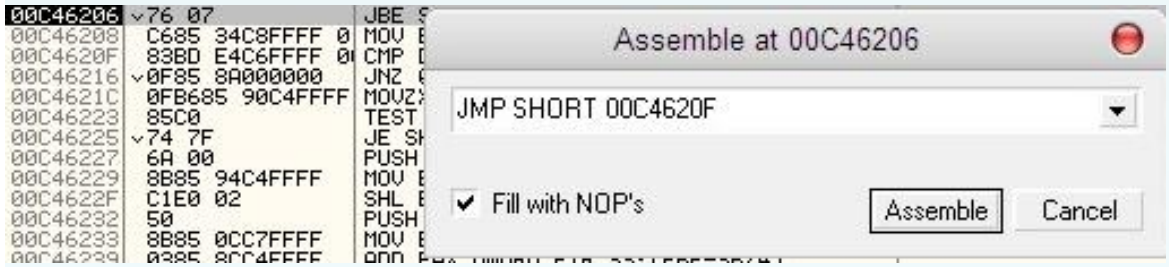
-Okie.Ta be quỷ nay.He the summer, jumped out small children.



Then one-click em.Ta right at it, and remove the HW BP this (the value of the benefit):

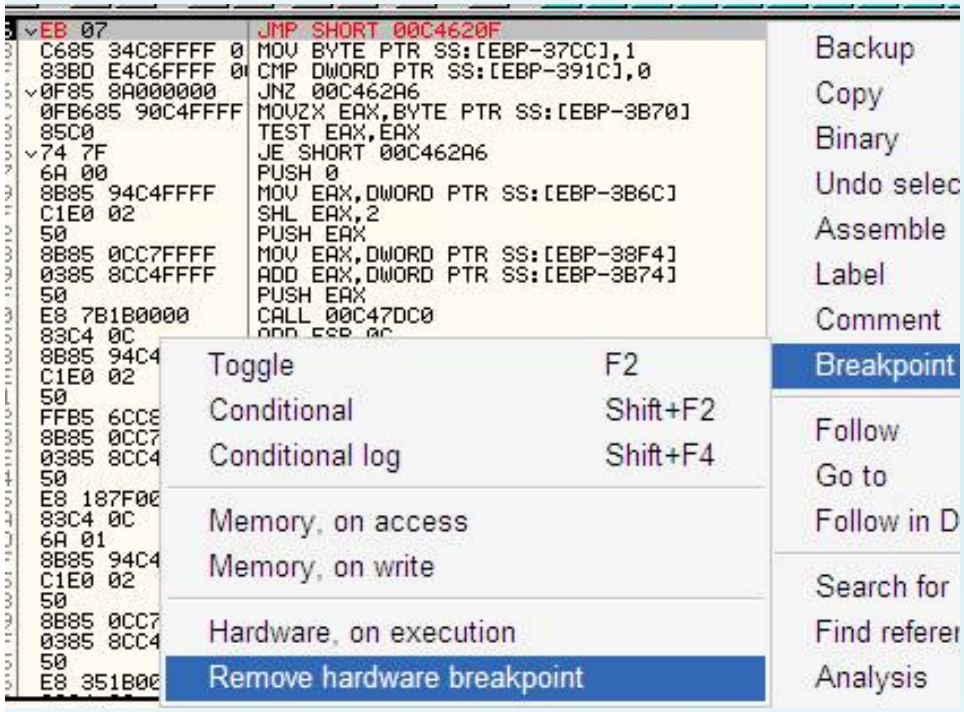


One-Shift-F9 to 2 children, and also edit it by (it always jump directly to the Cmp line under it 2):

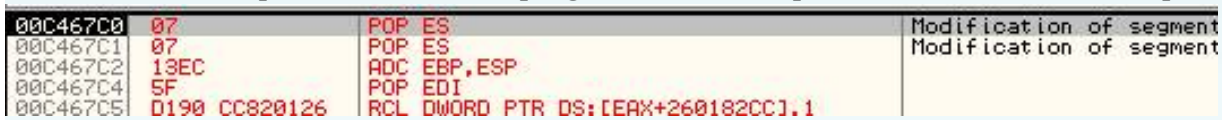


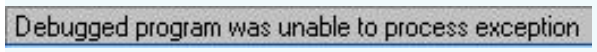
-Ready are:

Time-HW BP also removed seats in the new edit:

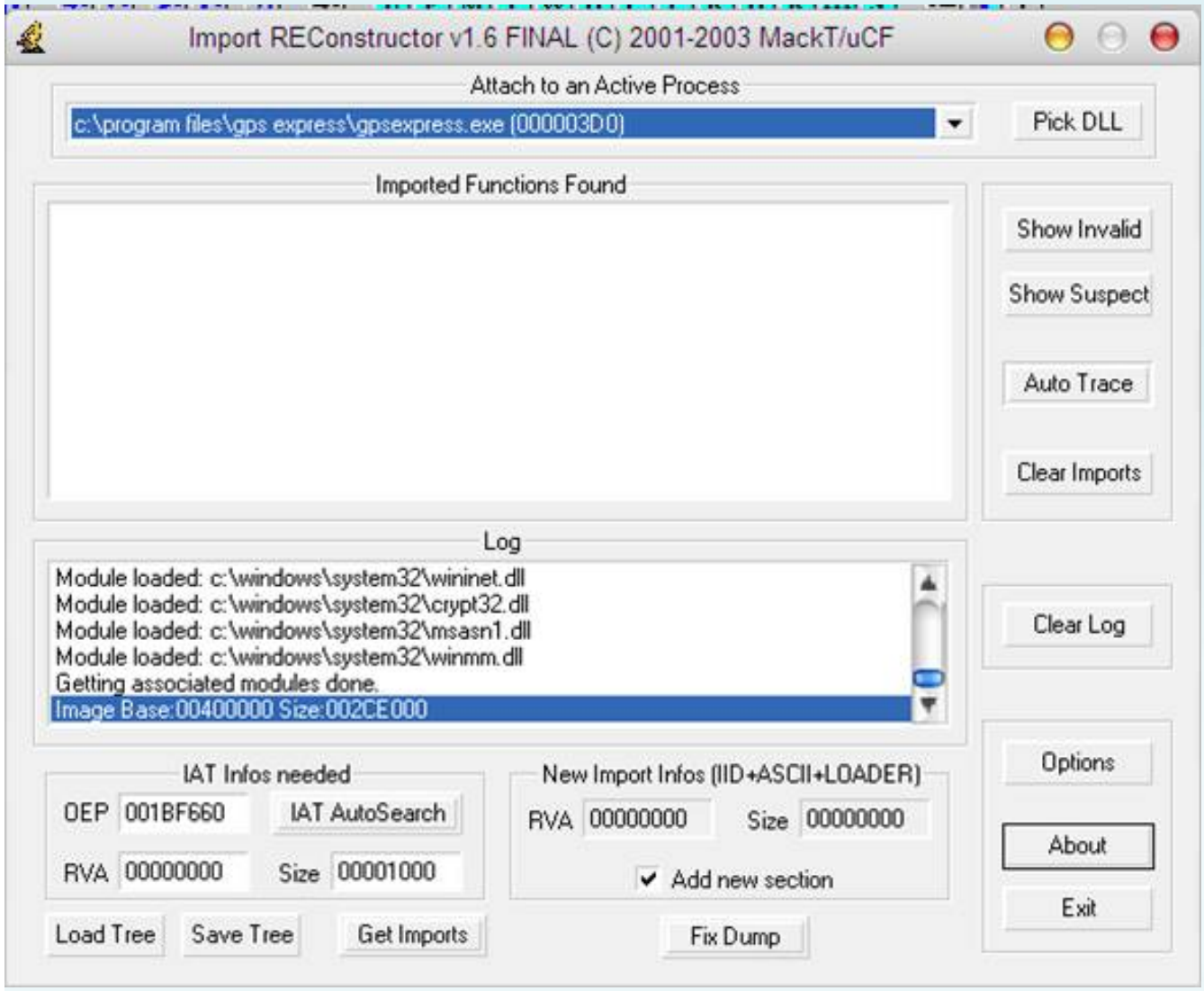


-And now to do is press F9 to run the program .. he he suspended, and then finish it up:



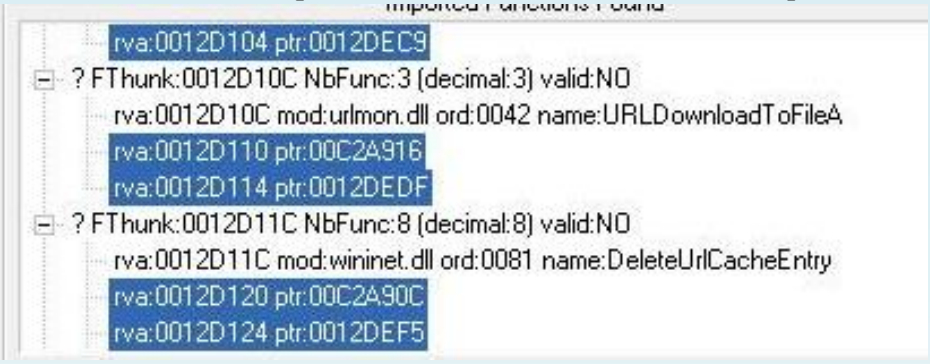


-To the principle of small, arm machines that I like the game. Now open them up ImportREC This, he he (to complete the happy, smiling for sướng):



-Select thằng gpsexpress.com you need to treat ly.Cac OEP also remember the original is not how many, heaven ơi I have to be sure that, as 401,000. I take exception to the 400,000 hectares in 1000 (down the wrong grade 1 school home). We enter 1000 on children in OEP This ImportREC. Then click IAT AutoSearch, is this:

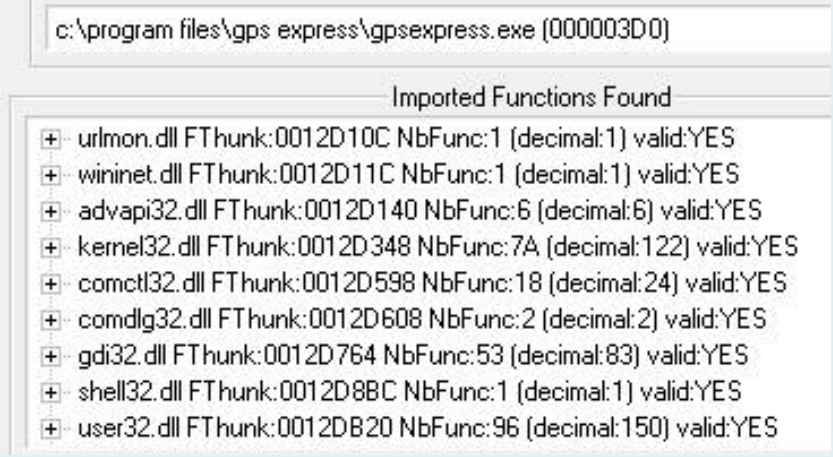
Now one-click Get Imports and then click Show Invalid report to see your child's treatment:



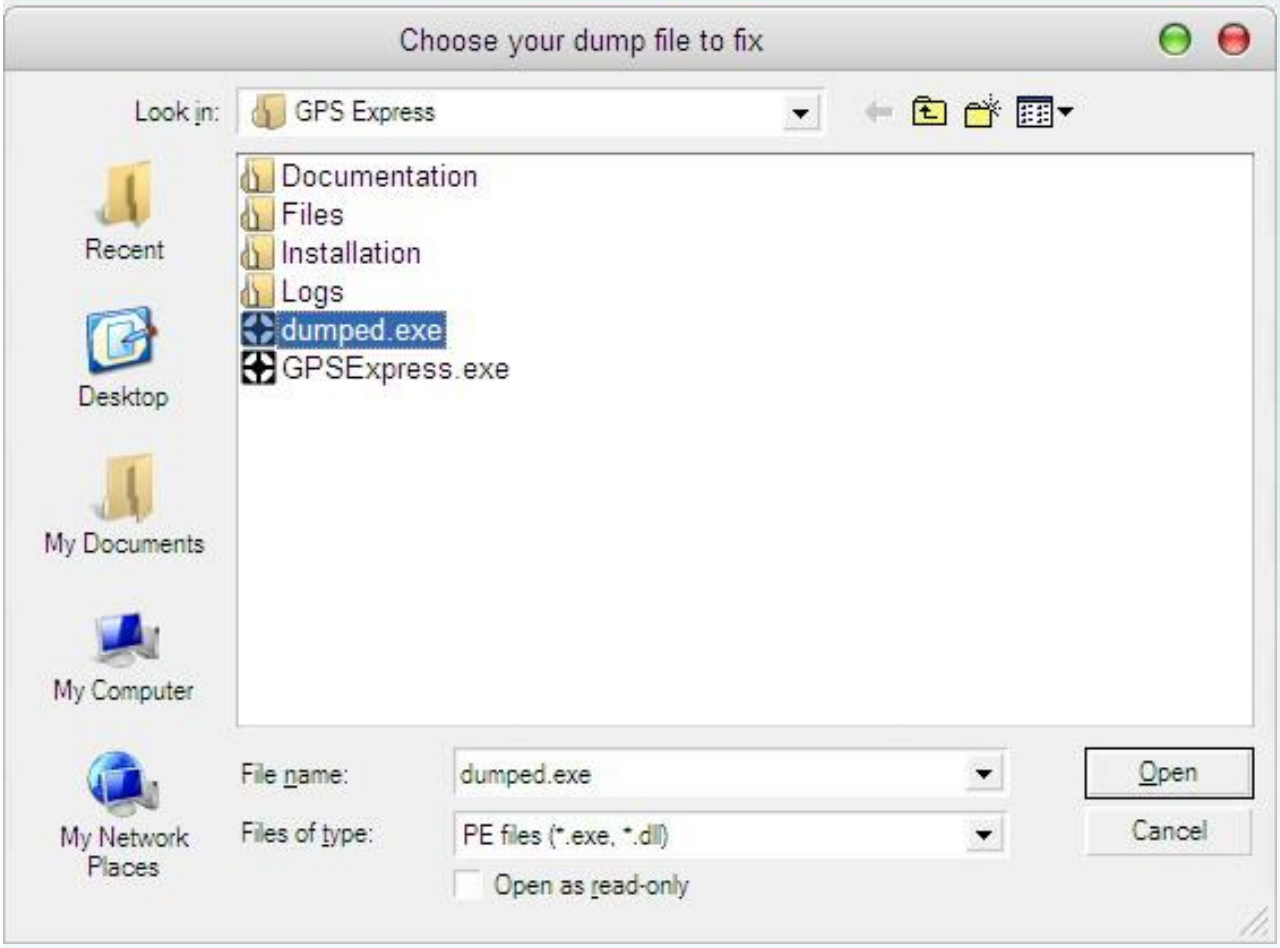
-A ha, they mec we are some months mắm this complaint nè, time we have to click on them, select Cut Thunk (s)

for both the children ("sever" bọn them home).

Cut-to complete the children also do all that ... YES other other:

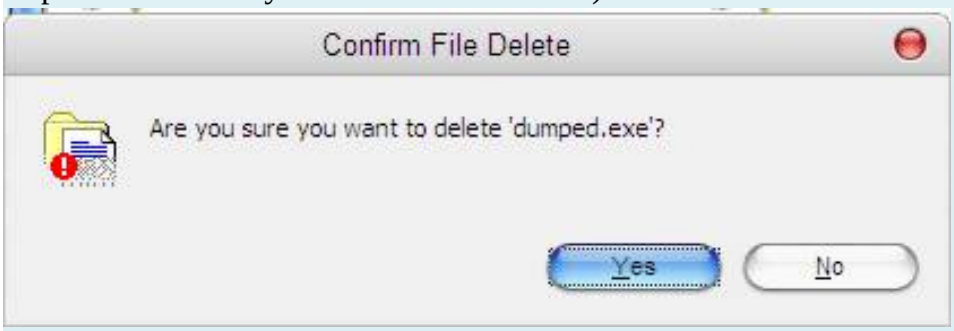


Dear-winning finish up, we ask them to dump Fix, we choose initial thằng dumped.exe are Orphaned kìa of offenders:

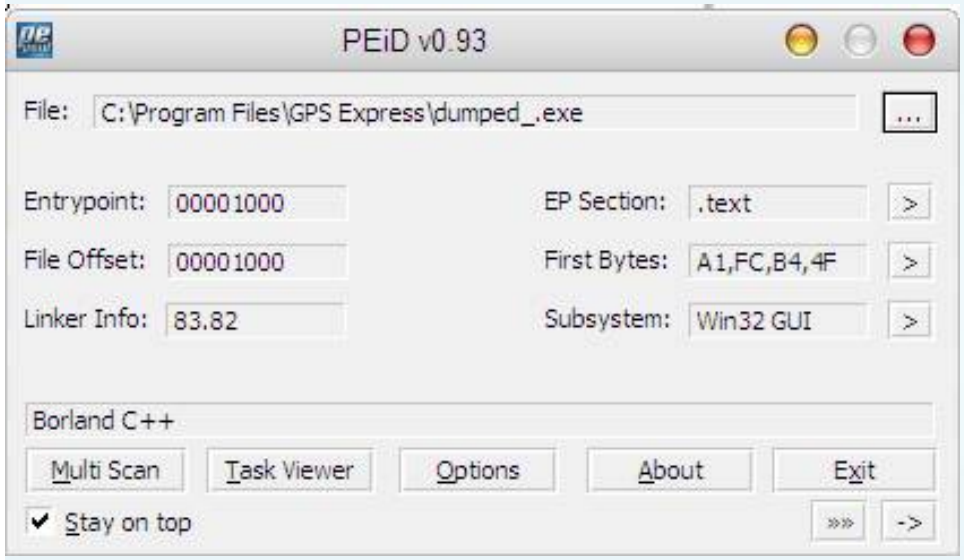


Okie-one, so that they will report suong nha.Ta temporary special children được rồi (ImportREC they were abusing value).

- (Thằng Orphaned dumped.exe This is also the.Em cows eventually fall for it, delete it always sướng mat.A this step is not necessary to make fun thoi.hi HI):



Other time-other is running the file that they dumped_.exe This Save for one, lickerish roi.Load it PEID report found:



-I's mission as completed, you want to do it any more Crack Crack, I just bít unpack only vague, but it is always Crack Source long, durable dot, hard training.
I self-summary some content next time, having this type of soft, you have the following steps:

-Check all items in part by Olly Exception to the Debug suon will be.
-Set a BP in the "BP CreateThread in Cmdbar.
Since the BP-jump to OEP are looking for. Note CALL command a previous order that RETN.
OEP dump-in and fix IAT similar manner on.

*** Knowledge in tut probably quite old, but also help us deal with some of the Soft pack in the old Armadillo.

But outside-soft form anti-dump also soft before touching associated anti-dump we must meet no less a gã coffee chosen as anti-Breakpoint, he disabled the majority of BP's we, as local Pets Olly suspend our nua.Vay of what he here? Please welcome to see part 2 small (not in a very complete Capture image)

The media-thank all of you in the REA has helped them get more knowledge and experience in Cracking. While writing tut confusing if errors have been expected forgiveness and guidance them.Hix ...

*** Bom Quang Volume 2:
- KHO ... human life is always part of any living being ... ardent, the explosion as something that is italy as having no good story! The number is calculated Trickyboy I wrote part 2 tut tut 1 day after the software that the "sanctity trời it" this "death machine"> ... <!
- "Death Machine" here he said this is the natural expiration using the procedure described in the only appropriate when the software is xài "Free Trial." The first should advise relatives xuc he want to do this by if they are in any free, then set it small, the complete set xuc but do not remove it .. xó (Do not know how the changes when it expires đành should say that, at the offender's bags Source wá it big ... hix hix ..)
In tut-2 also would raise a number of deficiencies in the Newbie 1.Dieu bags valued as a tut is the match between words and pictures anh.Tung steps must be clear, not too brief as readers from embarrassing ... to disappointment.
*(*** Update tut 1)*
As the part-1, I say the aged images that illustrate the author than any other time I do a few lines of command and distasteful this has answers roi.Do program expires at home so I use đành out services, but for the bags to the Windows XP Service Pack 2.Tinh flags as the new detection is the difference compared with aged ta.Ban first thought when the other operating system will be different and Offset (address command line) but the hours I know more about the other is a line lenh.Vay speak with her children when the test is on Windows XP SP2, 1.8GHz Celeron, see quite the same-aged, but I do successful in Windows SP 1, Pentium 4, 2.4GHz and from now, if anyone has any tut, I will always if information systems are used to the Newbie bags not be embarrassing. Okie?
(The difference relatives tut see more English and then compared with bags of home tut)
-In addition, differences in the operating system seem quite important, proof is how I do on Windows XP SP1 failed on SP2, cause the owners of the first sleeping bag, 2 bags are not out by all authors (as do the aged that are kia SP2), the objective is probably right that I sit in is crazy ^ _ ^.
-I have to find SP2 and have many functions to load the library when running programs (perhaps due to security is strong) and some of which affect the Debug is the soft end Pack.Nen Finally, I should let that be to find a SP1 not expire with this soft ... hix hix (the trial is probably always on Win 2000 but the date is 1 only 24 pieces of gold that!)

-As introduced in section 1, in this part 2 we will see a high of coffee chosen as his anti-Breakpoint. He just has this way is the most powerful or dissemble a few breakpoint (BP) which is set in Olly (or debug a program is). Khốn where BP is the important new chit chu.hix ...
-In this tut, aged authors infamous "Hec Cu Lec" (not want to consider a name more) Newbie ensure we have a basic knowledge of OutputDebugStringA and IsDebuggerPresent (say in the Newbie juiceless sources added). But Why not, I ensure that I read the tut as you will fulfill tun dropped (although Hồng understand anything, he he).
-And before I start from 2 to explain which "is the" Newbie đám we must understand, explain

briefly only small.

** OutputDebugStringA: conduct na say, this is a function is responsible for calling the error message when we attempt any Debug programs (such as Into Trace, Trace Over ...). And it has come apart, the Olly (or the Debug any) to close the door. Khổ that, so we must thoroughly it deceive, it does not appear again. (how is little more bit). Note always is when the xuc he's been soft Statistics of the Armadillo (3.x - 4.x), you should thoroughly immediately as soon as this function has soft Load in Olly.O's first soft bags do not do this because I do not see a computer error (on the SP2 see it now)

** IsDebuggerPresent: this is due as the name of it, "is" means test (the same as in the programming), "Debug" Debug is the "Present" means the current (same as the current which in English). In summary the "check immediately at the time there are thằng Debug programs or not? Yes, the springiness of a NAG chùi and App Close (close the program). Other other, but I say the chả bít What nha.Chung them where the trick is also how he said this is mồm to their work is the duoc.Tren SP1 occasionally it certainly is, but more often SP2. As work on SP1, having little trouble with it so I did not know how thoroughly no.Viec which means that "if tut follow us on SP2" == "failed not know" (you expect the high hand help).

-Add a new concept (with bags) that aged authors to consider using a script with OllyScript plugin. Talking about the past is always a script for her con.Cac script is actually the code is defined available (usually a text file format. "Txt"), for as fast a process that we have to do is step by step New duoc.Giong long as you find an exact OEP is too many steps in the Olly sometimes use Generic OEP Finder plugin or a script used to find the OEP faster.

-Here, Hec Cu Lec say that the script does not fit the soft pack with Armadillo type nay.Va I also try to use a script to the Armadillo thằng but is in a Target khac.Khi bring this through the soft thua . That is limited between the Script, Plugin compared with the "craft" is not always used duoc.Do the most important is you must have strong knowledge, experience wires, with 2 things that do not fear much dependent. (I lack of first 2 ^ _ ^)

-Oai, the bags of Bom then, only every third child of main dishes Lẩu today on, make sure not colic not pay (Bup.., Accordingly lost mine .. hix hix ...)

Section 2: Unpacking Armadillo v4.x (anti-BP) (2 tut by Trickyboy)

Target	Easy DVD to VCD burner v2.0.43
Available	http://intechhosting.com/ access ~ / ARTeam / tools / EasyDVDtoVCD.exe

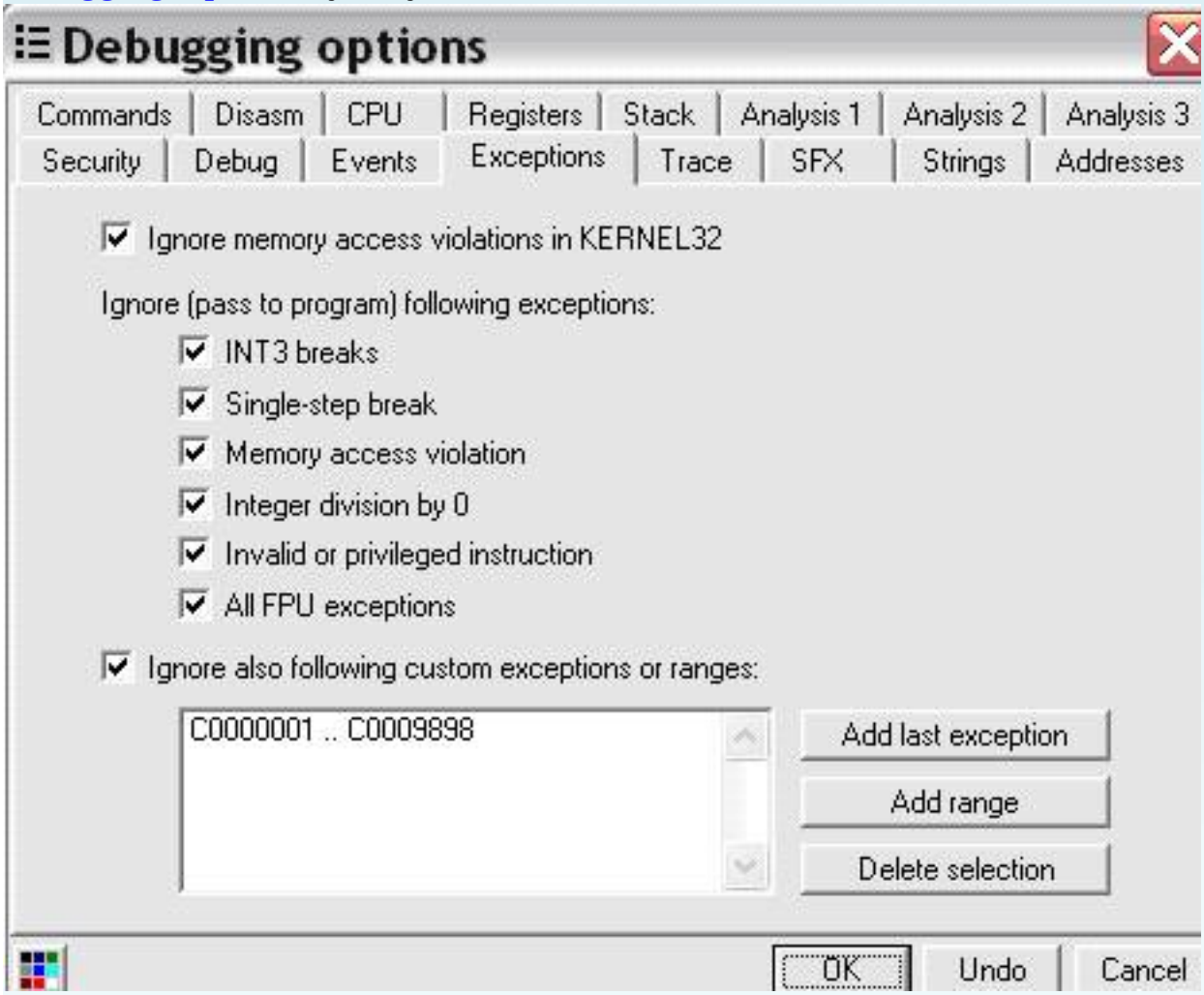
Tools	OllyDbg 1:10, ImpRec, LordPE, Armaccess.dll, Olly Plugin: Hide Debugger, CmdBar

(Test system is Windows XP SP1, Pentium 4)

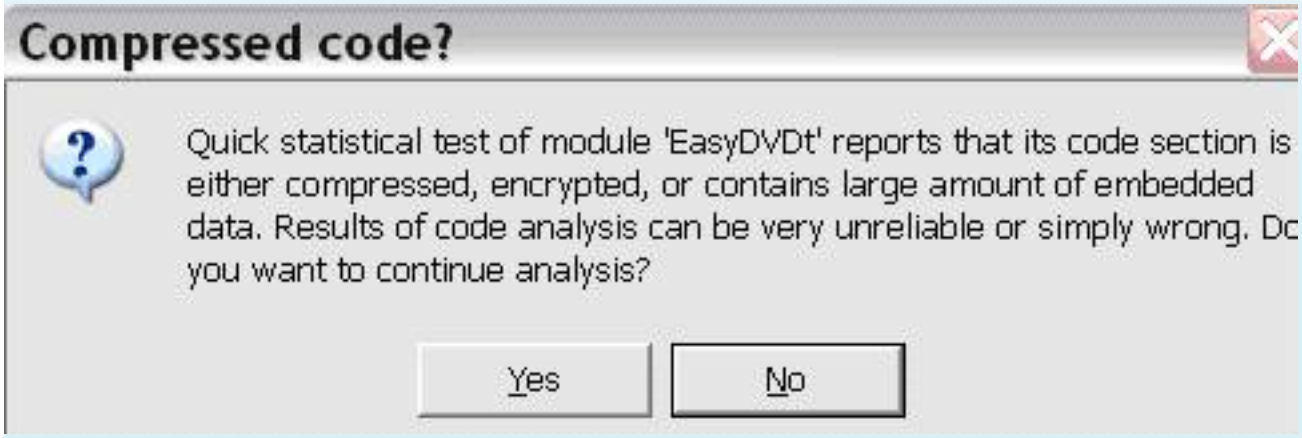
-Oai, toys kì also quite the same as the one hectare, he added a library thui Armacess.dll (explained below). Forget it, the 2 tut were aged Hec Cu Lec as Level: Intermediate (suffering, the new bít on this life, very intelligent man àh).

IVuot through anti-BP (also called the anti-anti Breakpoint, ha ha, Khoai said invasions ghê)

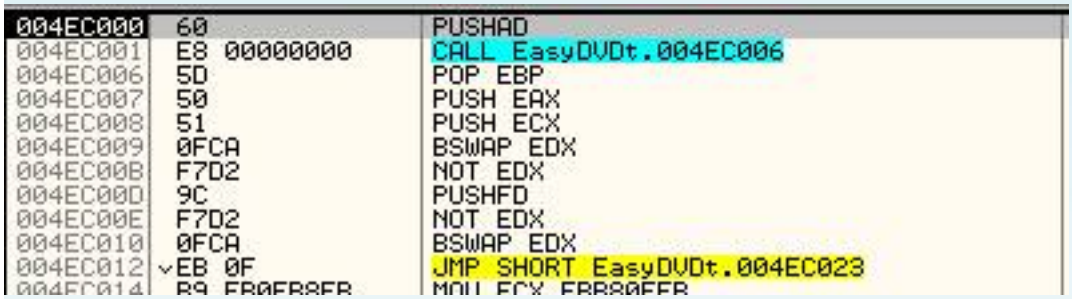
-The scenario is perfect Armadillo's children, we must also check all the cards in the Exception debugging Options by Olly.



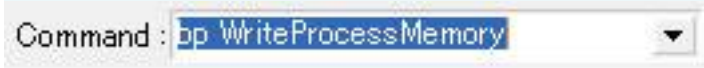
-Then, move on already available, she Target Load dễ thương to EasyDVDtoVCD.exe. (But he says they hate her attempt to make him lose a few days).
-If you have any message they choose NO nghen her children:



Life-ngộ that, it is that we welcome any NO Ah, he he "refuses to be much more than that." Now we're here in the house:



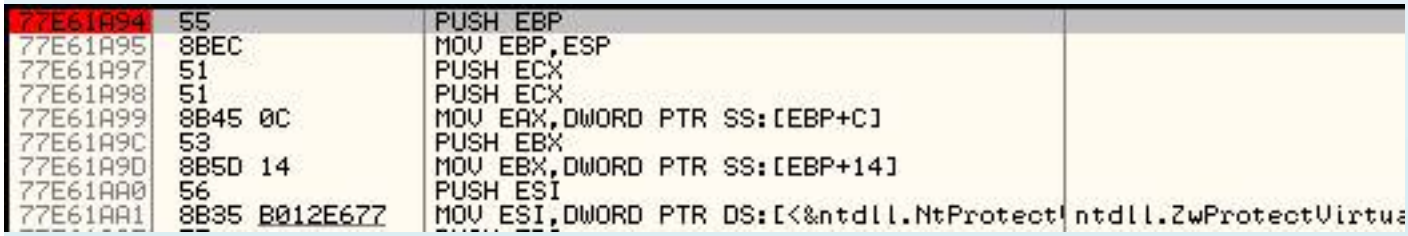
-Now is looking down below the CmdBar small, I typed a few things to do:



-Be sure not to type the incorrect capitalization nhé, then enter it to set a BP do.Muon where bít Where do the way in small tut part 1 (writing to create the perfect way to contact you).

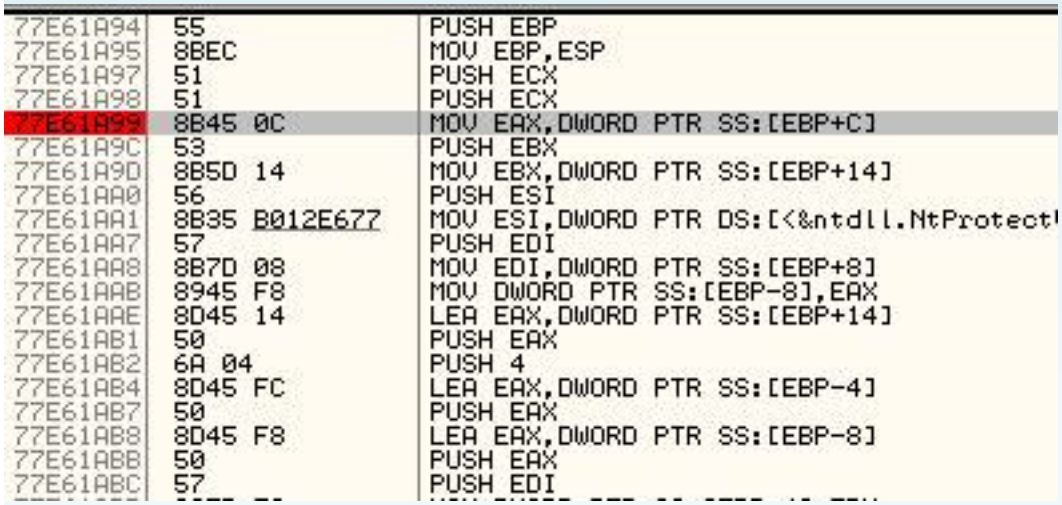
-But must also address àh (Huế less capital, he he). The reason is that when set in BP, if we try to Shift-F9 khốn nỗi it will not stop with BP that a pause in which to prepare Terminate (the Treo). Hix hix, to the local hard Olly undoubtedly households , one hour to press a button nhát **B** Olly nha.No out in this way:

One-double-click on this line will be to set points at BP:

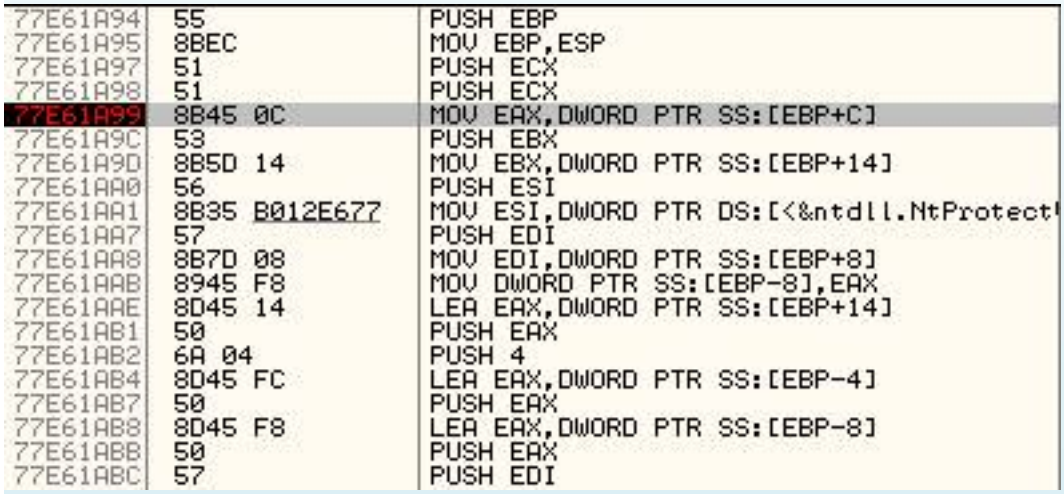


Ra-BP is set when the first function, the program will be detected immediately because of anti-

BP way of it, it should assign hours to go a little, small not accept the "xà you", we remove this BP seats, down nhich under a few lines (not a small line 2, have at it with his children on thằng, suffering ...), time set in BP is also where, blindly press the F2 (considered the shooting, UI skin, press F9 flipped):



-Now is an press Shift-F9 then. Break a (hate to leave), it stops at the King set BP:



-Then, remove BP place this (rule is clean mark after the cause). Then press Alt-F9 small, ragged here:

```
004CC356  v70 07          JO SHORT EasyDVDt.004CC35F
004CC358  v7C 03          JL SHORT EasyDVDt.004CC35D
004CC35A  vEB 05          JMP SHORT EasyDVDt.004CC361
004CC35C    E8 74FBEBF9   CALL FA38BED5
004CC361  vEB 5F          JMP SHORT EasyDVDt.004CC3C2
004CC363    8D55 FC       LEA EDX,DWORD PTR SS:[EBP-4]
004CC366    52            PUSH EDX
004CC367    6A 02         PUSH 2
004CC369    68 0C325000   PUSH EasyDVDt.0050320C
004CC36E    8B45 10       MOV EAX,DWORD PTR SS:[EBP+10]
004CC371    50            PUSH EAX                                  1
004CC372    8B4D 08       MOV ECX,WORD PTR SS:[E  BP+8]
004CC375    8B11          MOV EDX,        CX]
004CC377    52            PUSH EDX
004CC378    FF15 10C14F00 CALL DWORD PTR DS:[<&KERNEL32.WriteProc kernel32.WriteProcess
004CC37E    50            PUSH EAX
004CC37F    F7D0          NOT EAX
```

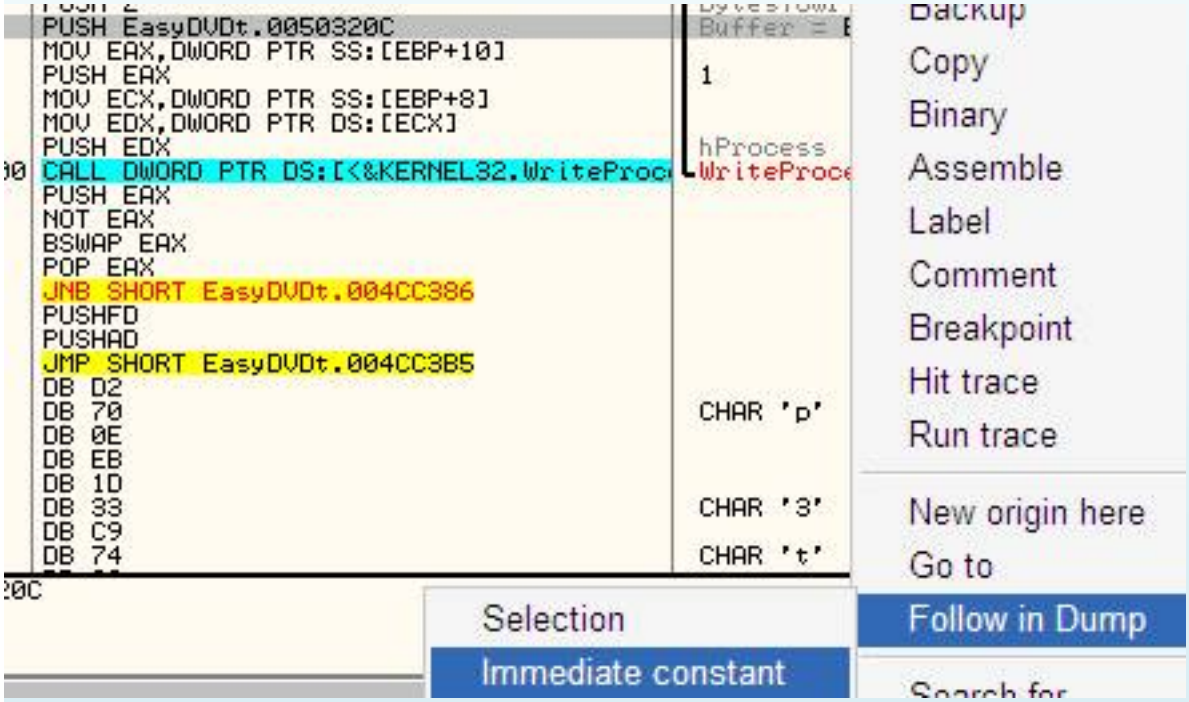
-There will be other bags, shelves, but it does wear out anything, we just Ctrl-A to identify it for sure the food, if it is the same as this is considered as the beginning of time, you have done true:

```
004CC356  .v70 07         JO SHORT EasyDVDt.004CC35F
004CC358  .v7C 03         JL SHORT EasyDVDt.004CC35D
004CC35A  >vEB 05         JMP SHORT EasyDVDt.004CC361
004CC35C    E8            DB E8
004CC35D  >^74 FB         JE SHORT EasyDVDt.004CC35A
004CC35F  >^EB F9         JMP SHORT EasyDVDt.004CC35A
004CC361  >vEB 5F         JMP SHORT EasyDVDt.004CC3C2
004CC363  > 8D55 FC       LEA EDX,DWORD PTR SS:[EBP-4]
004CC366  . 52            PUSH EDX                          pBytesWritten
004CC367  . 6A 02         PUSH 2                            BytesToWrite = 2
004CC369  . 68 0C325000   PUSH EasyDVDt.0050320C            Buffer = EasyDVDt.0050
004CC36E  . 8B45 10       MOV EAX,DWORD PTR SS:[EBP+10]
004CC371  . 50            PUSH EAX                          1
004CC372  . 8B4D 08       MOV ECX,DWORD PTR SS:[EBP+8]
004CC375  . 8B11          MOV EDX,DWORD PTR DS:[ECX]
004CC377  . 52            PUSH EDX                          hProcess
004CC378  . FF15 10C14F00 CALL DWORD PTR DS:[<&KERNEL32.WriteProc WriteProcessMemory
004CC37E  . 50            PUSH EAX
```

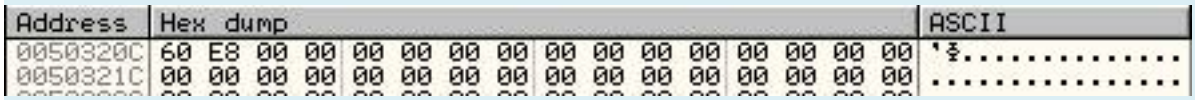
-Instead of this?

```
004CC369  . 68 0C325000   PUSH EasyDVDt.0050320C            Buffer = EasyDVDt.0050
```

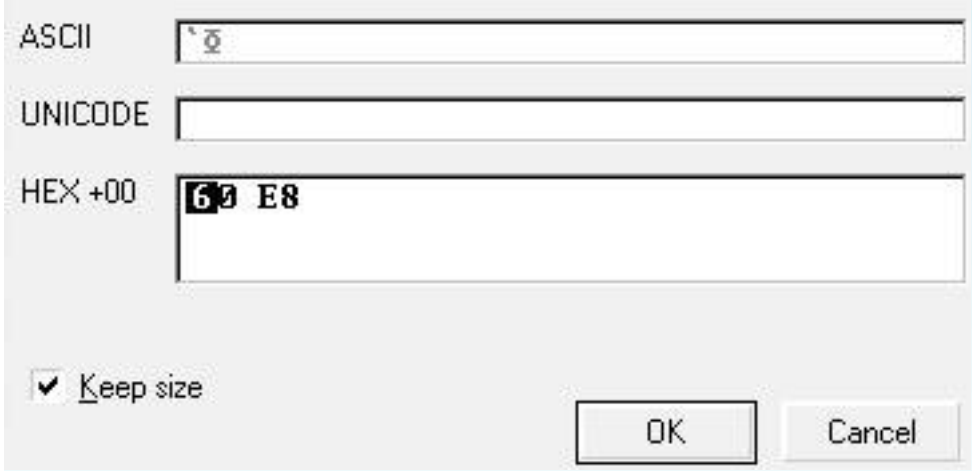
At the command-JO has a mellow, but the same here, our rules are not looking up nha.Gio we choose the Buffer must then click this, select the image:



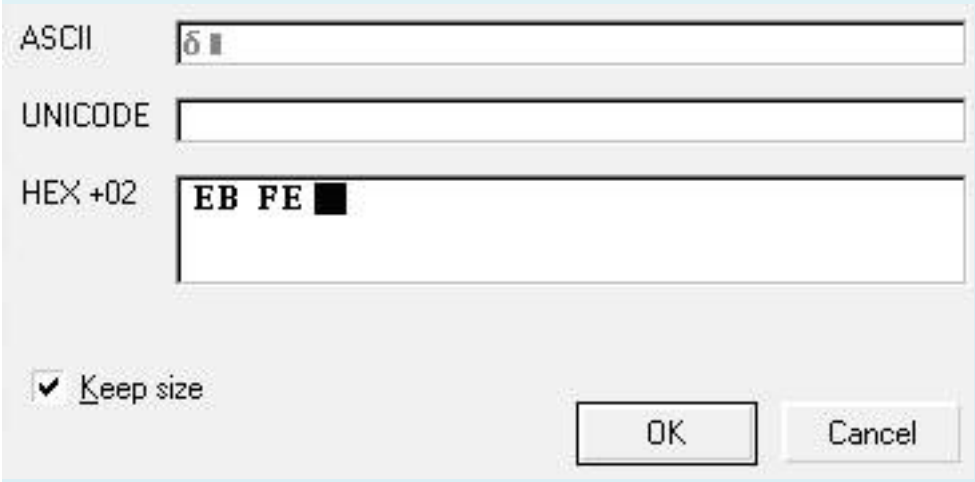
-Then look down the small window, saw this nè:



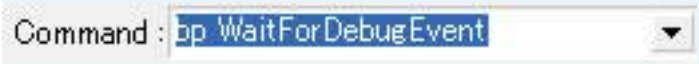
Now one-two tô 2 bytes and 60 E8 SpaceBar press to fix it:



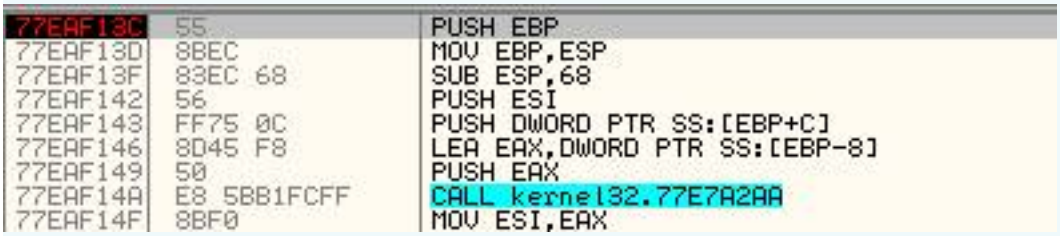
-City:



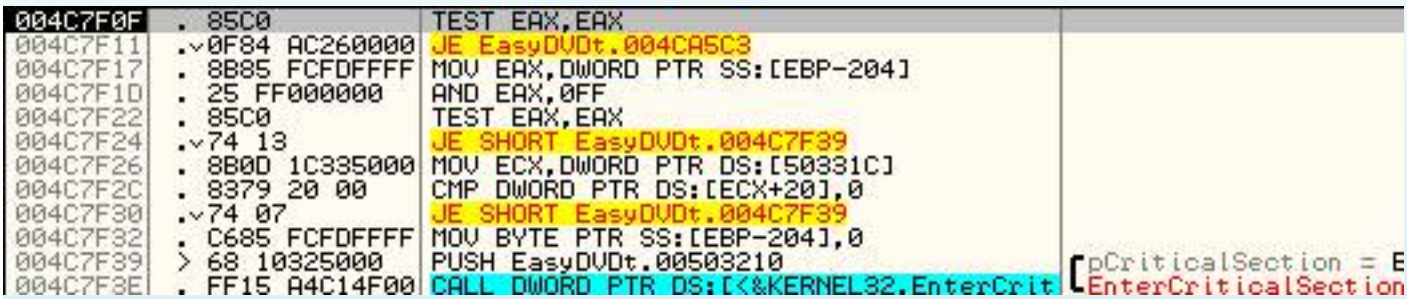
Okie-di.Roi, say a little more, I do try 2 soft, see the rules modified to EB FE like the fact that (under the school health) .. prices are different is 60 E8, each soft each other in the number of Buffer nay.Over!
Now back-type box CmdBar as follows:



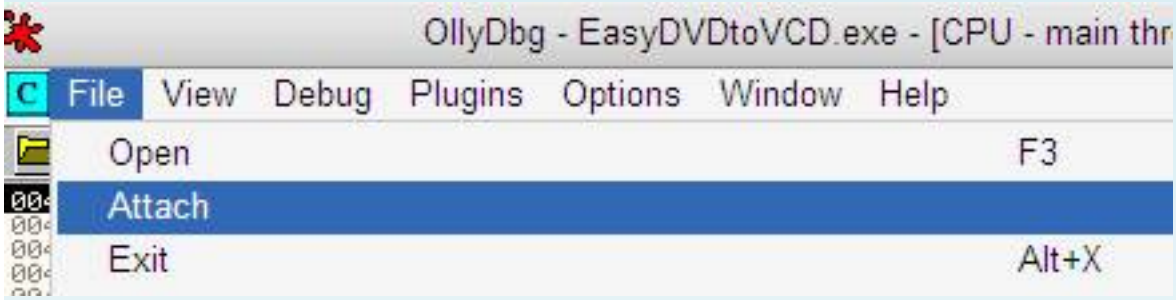
Enter cai.no re-set BP roi.Gio press F9 again to stop this at BP:



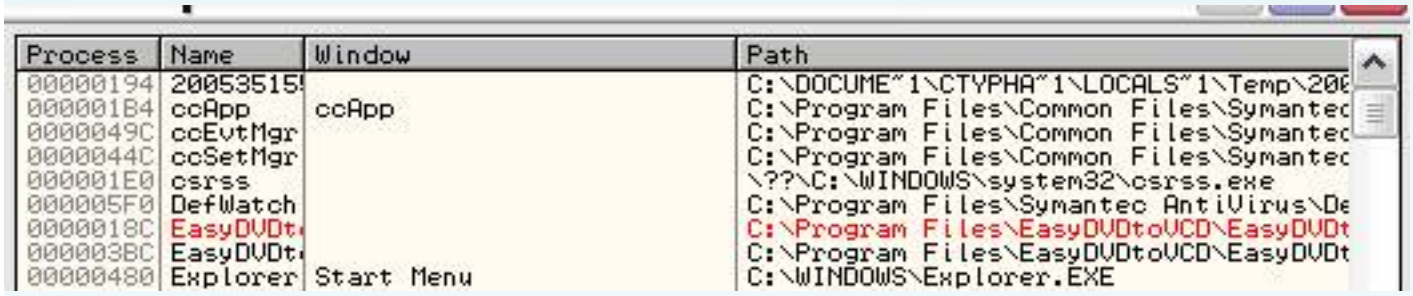
BP-I delete di.Roi here Alt-F9 a phat.Toi here:



-Be sure to be asked to order TEST EAX, EAX small.
-Now we select File-Attach:

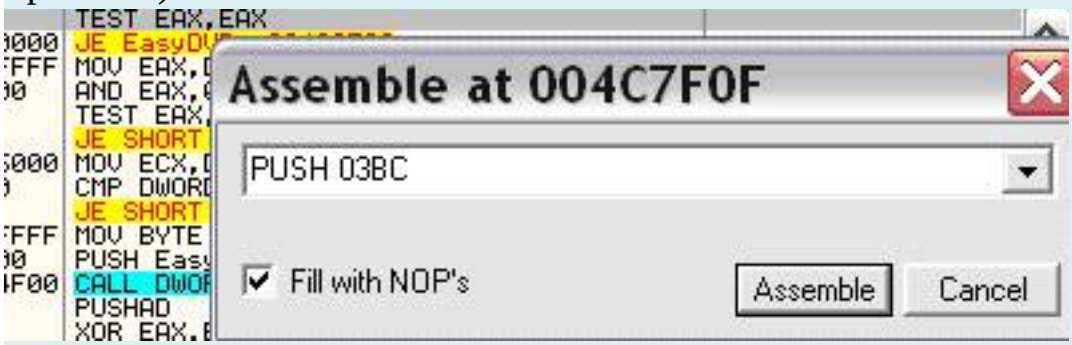


-Click the Name to the name ranked as follows:



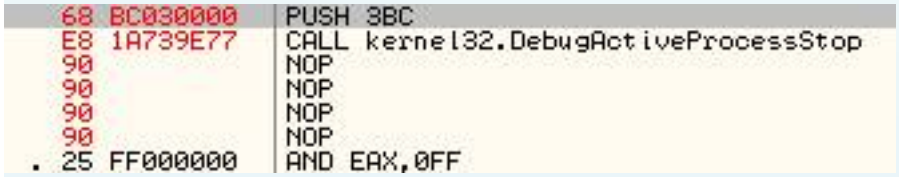
-Now have interesting day.Tu course, there are 2 files EasyDVDtoVCD.exe the load in memory, while we only have one child. So one month will not have the protection of anti-BP.Thang colored red is thằng we are working, so thằng rest is meat thằng need it. But if one more time again and then Olly Attach this month, the Cuc duoc.Ta have solved a number of stories have. Ba-con remember what month Offset 2 home, by this time I was 03BC (each work is that each other). And forget it, if in the process, and her children click Name to sort it but he was not the red again located on the much less will be failure in the steps ke.Do that, if it come up on , as more damaged, it must first work from home.

-Then Cancel Attach the window go. Start editing the command TEST EAX, EAX like this (press SpaceBar):



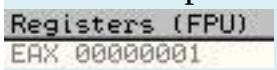
Okie-one, and then to fix the next:

-Finally, be as follows:



One-time press F8 a few things to it via the command line 2, when it is to:

Wa-one doubt the value to write EAX, it is 1 nhé (aged Cu Hec Lec must say it is 1 new warrant for next steps - such as formula> ..., including using script):



-Then, we can xuc his children now and then, we opened a second Olly 2 other (for Olly first for fun). Choose File-Attach. Then ranked Name to the name, choose File Offset is available as 03BC above (or select the file below):

One-Attach it nha.Roi Olly it OK for fun, we stop here:

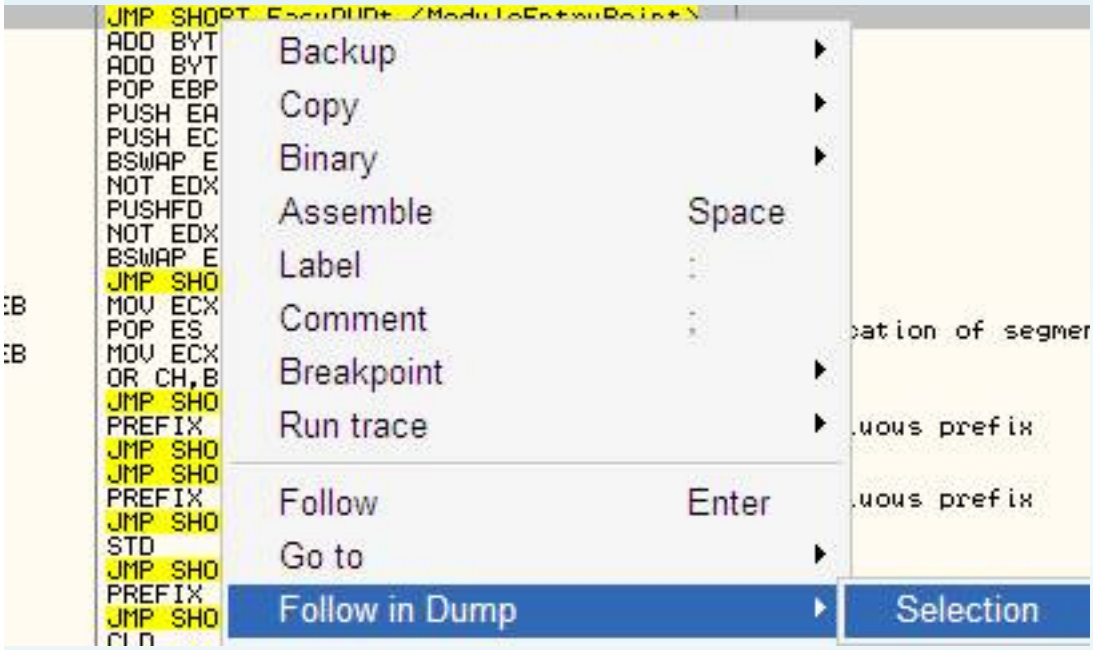
```
77F767CE  C3                RETN
77F767CF  CC                INT3
77F767D0  C3                RETN
77F767D1  8B4424 04         MOV EAX,DWORD PTR SS:[ESP+4]
77F767D5  CC                INT3
77F767D6  C2 0400           RETN 4
77F767D9  64:A1 18000000    MOV EAX,DWORD PTR FS:[18]
77F767DF  C3                RETN
77F767E0  57                PUSH EDI
77F767E1  8B7C24 0C         MOV EDI,DWORD PTR SS:[ESP+C]
77F767E5  8B5424 08         MOV EDX,DWORD PTR SS:[ESP+8]
77F767E9  C702 00000000     MOV DWORD PTR DS:[EDX],0
77F767EF  897A 04           MOV DWORD PTR DS:[EDX+4],EDI
77F767F2  0BFF              OR EDI,EDI
77F767F4  v74 11            JE SHORT ntdll.77F76807
```

OEP II.Tim real and dump it:

-Since Attach after, you have to actually kĩ gradually, if not, you may have to close out the 2 Olly to do from the beginning that, first and then told, that have suffered àh wrong.
-Now press F9 to run it (although not found anything, notice the word Running right). Then, press F12 to stop it at:

```
004EC000 -EB FE             JMP SHORT EasyDVDt.<ModuleEntryPoint>
004EC002  0000              ADD BYTE PTR DS:[EAX],AL
004EC004  0000              ADD BYTE PTR DS:[EAX],AL
004EC006  5D                POP EBP
004EC007  50                PUSH EAX
004EC008  51                PUSH ECX
```

Click-to this line, choose:



Looking down the small window shows:

```
Address   Hex dump
004EC000  EB FE 00 00 00 00 5D 50
```

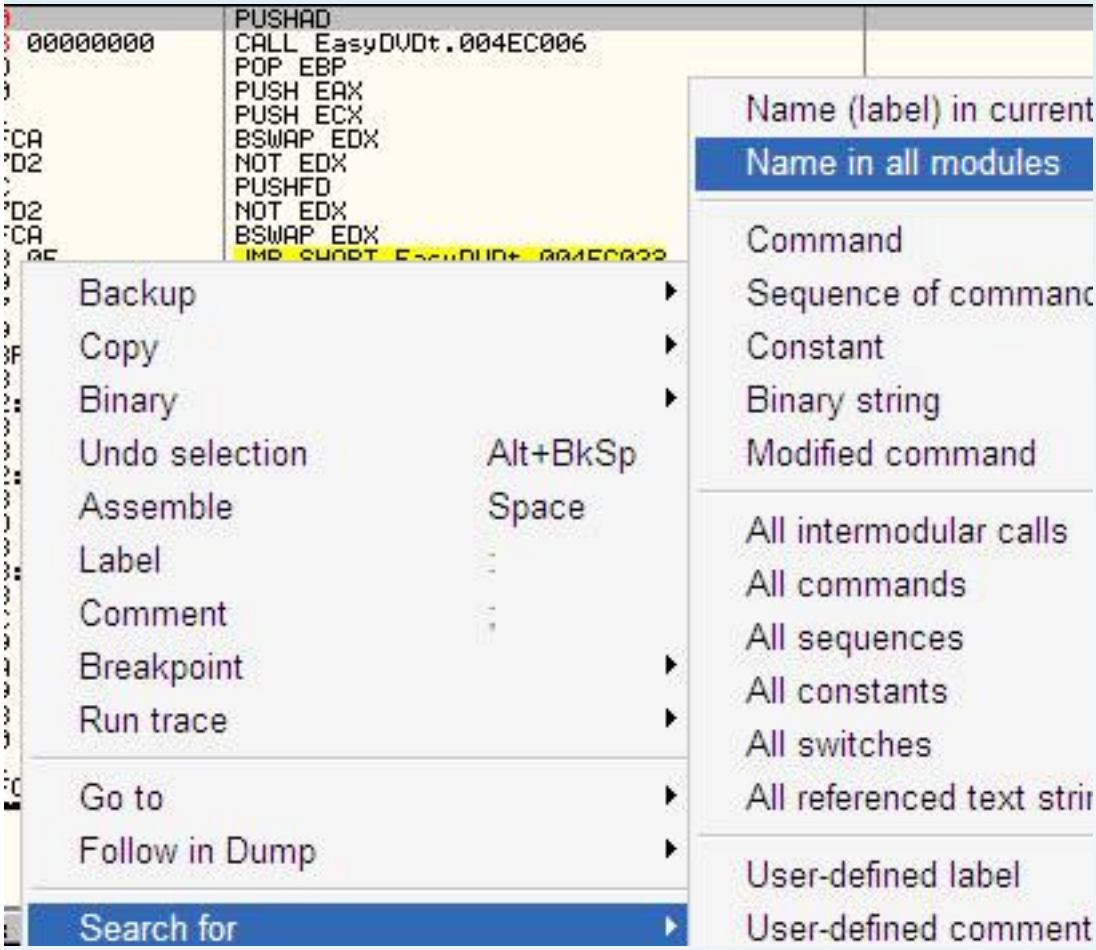
One bowl-two bytes EB FE revised to 60 E8 as the old house. (Repeat with the other soft may be different this)

-Ready on the find:

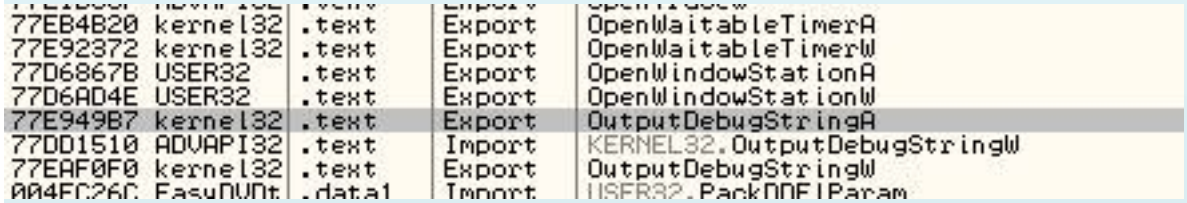
-Now is the time we made quite the same as part 1, this time no anti-BP and then again (please attach this month is no anti-dump as I said the part 1)
I-type to CmdBar following:

If time-Shift-F9 can to BP has been set but it will make more errors encountered day.Ma said then, if the wrong It is a step which must be done from the beginning of it, because thằng 2 process which we are doing is through xổ from the 1st, it only exists at this time only, she must ensure that every child walking, do not quay anything ah.

-Now her children are remembered and 2 OutputDebugStringA em IsDebuggerPresent not? Usually when they start xoi Armadillo time, we must also treat children OutputDebugStringA this before. But do we do in the process, joker 1 ho households do not see anything I should not say, and important objects that we need to play the thằng 2 hú co.Co this is in on it ne.O I said then, if we just try to Debug it could always be close Olly is the love, the reason he is at 2 this Ministry. Now they treat each small
Right-click your mouse, select Search for ---- Name in all modules (like):



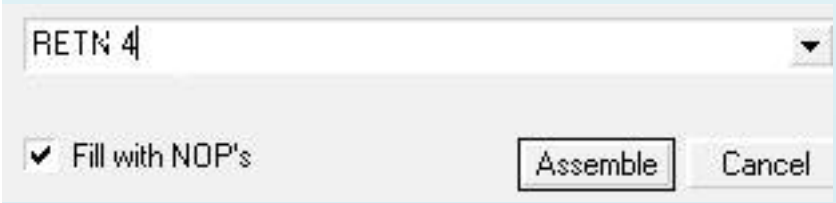
-It will appear a window correct? If the name intricate click to sort NAME lai.Roi pull down (or press repeatedly the word "O" and "U") for this child:



Double-click on it-what, to this:

```
77E949B7   68 2C020000      PUSH 22C
77E949BC   68 8853E977      PUSH kernel32.77E95388
77E949C1   E8 1259FEFF      CALL kernel32.77E7A2D8
77E949C6   8365 FC 00       AND DWORD PTR SS:[EBP-4],0
77E949CA   8B4D 08          MOV ECX,DWORD PTR SS:[EBP+8]
77E949CD   8BC1             MOV EAX,ECX
77E949CF   8D70 01          LEA ESI,DWORD PTR DS:[EAX+1]
77E949D2   8A10             MOV DL,BYTE PTR DS:[EAX]
77E949D4   40               INC EAX
77E949D5   84D2             TEST DL,DL
77E949D7  ^75 F9            JNZ SHORT kernel32.77E949D2
77E949D9   2BC6             SUB EAX,ESI
77E949DB   40               INC EAX
77E949DC   8945 E0          MOV DWORD PTR SS:[EBP-20],EAX
77E949DF   894D E4          MOV DWORD PTR SS:[EBP-1C],ECX
77E949E2   8D45 E0          LEA EAX,DWORD PTR SS:[EBP-20]
77E949E5   50               PUSH EAX
77E949E6   6A 02            PUSH 2
77E949E8   6A 00            PUSH 0
77E949EA   68 06000140      PUSH 40010006
77E949EF   E8 43EEFDFF      CALL kernel32.RaiseException
77E949F4   834D FC FF       OR DWORD PTR SS:[EBP-4],FFFFFFFF
77E949F8   E8 A259FEFF      CALL kernel32.77E7A39F
77E949FD   C2 0400          RETN 4
```

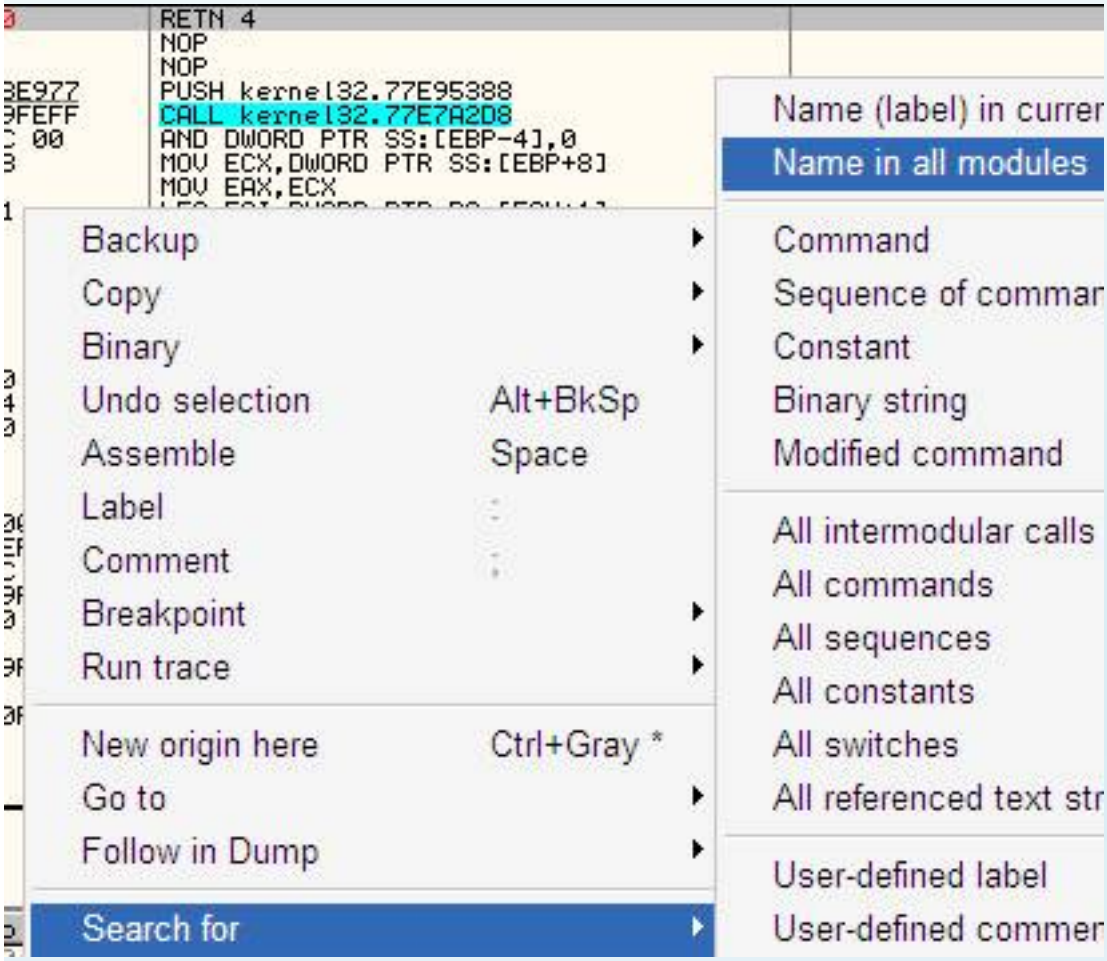
Ham-usually begins as a push-value is finished and is RETN 4, or RETN (the SP2). So this refers to the Cuc do all the right places PUSH 22C, is a SpaceBar, edit RETN to 4 are:



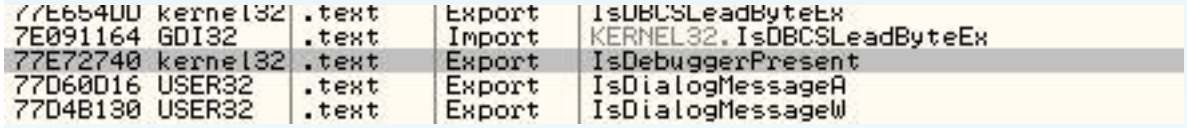
-Done are:

```
C2 0400          RETN 4
90               NOP
90               NOP
68 8853E977      PUSH kernel32.77E95388
E8 1259FEFF      CALL kernel32.77E7A2D8
```

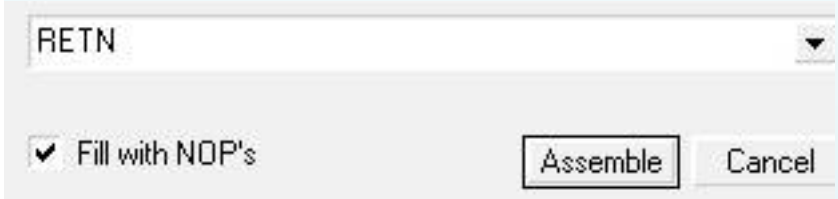
Now em-up to the other, must also click, ---- Name Search for in all modules:



-I find them IsDebuggerPresent right? Press "I" and "s" for fast and then drag it down a little is found àh (do not ask why they do not find this first order for the ABC is but I see them there should be more important xuc first):



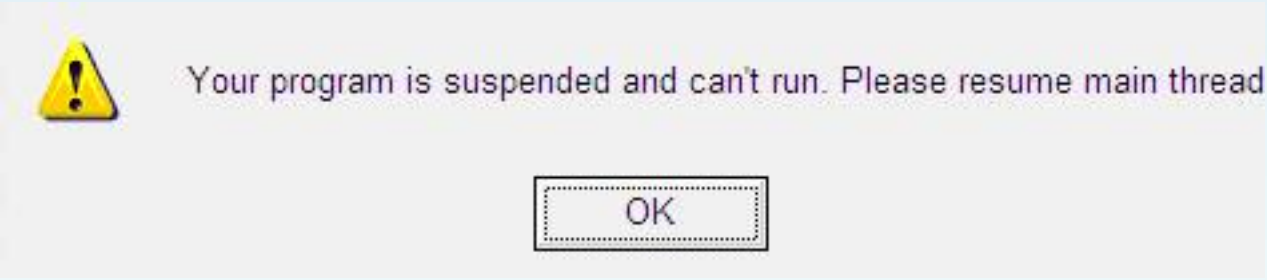
How xu-chang italy children there, double click, and then head for the last variable function function:

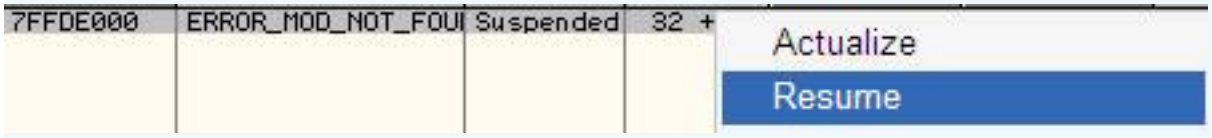


-Is this:

```
77E72740  C3              RETN
77E72741  90              NOP
77E72742  90              NOP
77E72743  90              NOP
77E72744  90              NOP
77E72745  90              NOP
77E72746  8B40 30         MOV EAX,DWORD PTR DS:[EAX+30]
77E72749  0FB640 02       MOVZX EAX,BYTE PTR DS:[EAX+2]
77E7274D  C3              RETN
```

So-2 is completed em.That many out how you can submit the question of command, only contain the command RETN is, or at the top of function, to jump to the end function using JMP also. Now click the button - C back to top khúc small. Press Shift-F9 to see what happens (quite long)? Also, it stopped at BP and, accordingly idea ... but then suspended machine. (Note that many here as you will see a message that the program failed What then, OK, then it does a window with a line loi.Ban click to select it to resume the program will stop at this BP):



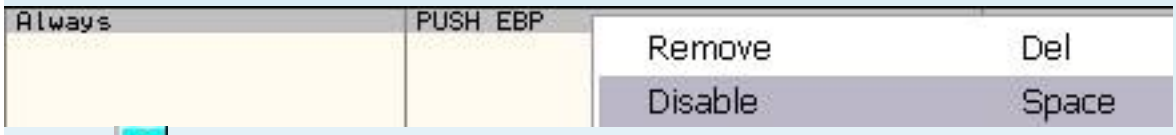


-We are stopped here right?:

```
77E7BE53  55              PUSH EBP
77E7BE54  8BEC            MOV EBP,ESP
77E7BE56  FF75 1C         PUSH DWORD PTR SS:[EBP+1C]
77E7BE59  FF75 18         PUSH DWORD PTR SS:[EBP+18]
77E7BE5C  FF75 14         PUSH DWORD PTR SS:[EBP+14]
77E7BE5F  FF75 10         PUSH DWORD PTR SS:[EBP+10]
77E7BE62  FF75 0C         PUSH DWORD PTR SS:[EBP+C]
77E7BE65  FF75 08         PUSH DWORD PTR SS:[EBP+8]
77E7BE68  6A FF           PUSH -1
77E7BE6A  E8 30FEFFFF     CALL kernel32.CreateRemoteThread
77E7BE6F  5D              POP EBP
```

The day-tut same as part 1 and then to Italy under do.Nho taskbar to see the benefit to the present moment is not small, at this time, the computer I see it:

-That is it then, but is being blocked by BP should not run tiep.Roi we Disable the BP for it to di. Nhan button B . Friar BP is set right? Click to it, select Disable (temporarily disabled, a little more xài):



-Click C BP back seat in treating ly.No disabled and that

```
77E7BE53  55          PUSH EBP
77E7BE54  8BEC        MOV EBP,ESP
77E7BE56  FF75 1C     PUSH DWORD PTR SS:[EBP+1C]
77E7BE59  FF75 18     PUSH DWORD PTR SS:[EBP+18]
77E7BE5C  FF75 14     PUSH DWORD PTR SS:[EBP+14]
```

Yes it is the right Ctrl-F9 as the part 1 to the more deeply in order to find the first order CALL RETN I say that the part that 1.Tu Trace to find OEP.Nhung the program before running with springiness to a table, click OK or cry registered so we must for the table appear to da.Nhan F9, springiness small table:

-Before you click OK, back Olly 2 was (now is the time to do that Olly 2 home). Stay in place at this time ha.Ta BP set to the BP di.Bam F2 it up:

```
77E7BE53  55          PUSH EBP
77E7BE54  8BEC        MOV EBP,ESP
77E7BE56  FF75 1C     PUSH DWORD PTR SS:[EBP+1C]
77E7BE59  FF75 18     PUSH DWORD PTR SS:[EBP+18]
77E7BE5C  FF75 14     PUSH DWORD PTR SS:[EBP+14]
77E7BE5F  FF75 10     PUSH DWORD PTR SS:[EBP+10]
77E7BE62  FF75 0C     PUSH DWORD PTR SS:[EBP+C]
77E7BE65  FF75 08     PUSH DWORD PTR SS:[EBP+8]
77E7BE68  6A FF       PUSH -1
77E7BE6A  E8 30FEFFFF CALL kernel32.CreateRemoteThread
77E7BE6F  5D          POP EBP
77E7BE70  C2 1800     RETN 18
```

Back-click OK the program, ah ... it stopped at BP and this home:

```
77E7BE53  55              PUSH EBP
77E7BE54  8BEC            MOV EBP,ESP
77E7BE56  FF75 1C         PUSH DWORD PTR SS:[EBP+1C]
77E7BE59  FF75 18         PUSH DWORD PTR SS:[EBP+18]
77E7BE5C  FF75 14         PUSH DWORD PTR SS:[EBP+14]
77E7BE5F  FF75 10         PUSH DWORD PTR SS:[EBP+10]
77E7BE62  FF75 0C         PUSH DWORD PTR SS:[EBP+C]
77E7BE65  FF75 08         PUSH DWORD PTR SS:[EBP+8]
77E7BE68  6A FF           PUSH -1
77E7BE6A  E8 30FEFFFF     CALL kernel32.CreateRemoteThread
77E7BE6F  5D              POP EBP
```

Delete BP-go here, then press Ctrl-F9 to order it to me RETN 18 below.

```
77E7BE53  55              PUSH EBP
77E7BE54  8BEC            MOV EBP,ESP
77E7BE56  FF75 1C         PUSH DWORD PTR SS:[EBP+1C]
77E7BE59  FF75 18         PUSH DWORD PTR SS:[EBP+18]
77E7BE5C  FF75 14         PUSH DWORD PTR SS:[EBP+14]
77E7BE5F  FF75 10         PUSH DWORD PTR SS:[EBP+10]
77E7BE62  FF75 0C         PUSH DWORD PTR SS:[EBP+C]
77E7BE65  FF75 08         PUSH DWORD PTR SS:[EBP+8]
77E7BE68  6A FF           PUSH -1
77E7BE6A  E8 30FEFFFF     CALL kernel32.CreateRemoteThread
77E7BE6F  5D              POP EBP
77E7BE70  C2 1800         RETN 18
```

Then-F7 to it here:

```
00AFB3DE  5F              POP EDI
00AFB3DF  5E              POP ESI
00AFB3E0  C9              LEAVE
00AFB3E1  C3              RETN
```

Lai-Ctrl-F9 to RETN more.

```
00AFB3DE  5F              POP EDI
00AFB3DF  5E              POP ESI
00AFB3E0  C9              LEAVE
00AFB3E1  C3              RETN
```

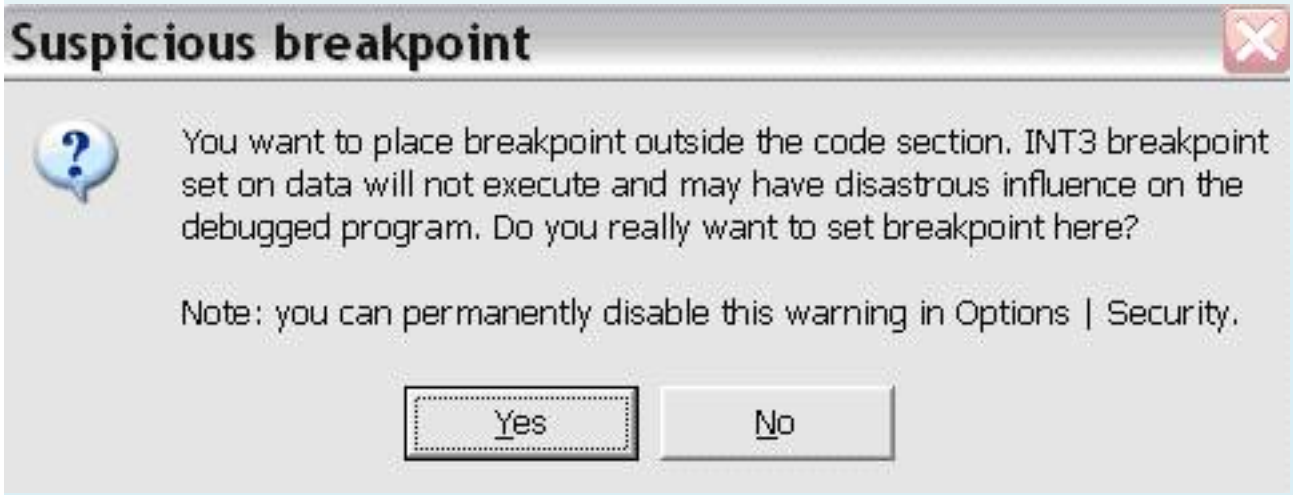
Then the-F7 again. Stop here:

```
00B0D825  59              POP ECX                                  kernel32.77E7BE
00B0D826  BF D8C8B100     MOV EDI,0B1C8D8
00B0D82B  8BCF            MOV ECX,EDI
00B0D82D  E8 84AAFDFF     CALL 00AE82B6
00B0D832  84C0            TEST AL,AL
00B0D834  75 09           JNZ SHORT 00B0D83F
00B0D836  6A 01           PUSH 1
00B0D838  8BCF            MOV ECX,EDI
00B0D83A  E8 54F8FDFF     CALL 00AED093
00B0D83F  B9 40BBB100     MOV ECX,0B1BB40
00B0D844  C705 7090B100 D MOV DWORD PTR DS:[B19070],0B19DD8        ASCII "RC"
00B0D84E  E8 C174FEFF     CALL 00AF4D14
00B0D853  6A 00           PUSH 0
00B0D855  E8 BA74FEFF     CALL 00AF4D14
00B0D85A  A1 20CFB100     MOV EAX,DWORD PTR DS:[B1CF20]
00B0D85F  59              POP ECX
00B0D860  8B15 38CFB100   MOV EDX,DWORD PTR DS:[B1CF38]            EasyDVDt.004000
```

Hì-time ... to find answers in the order RETN then that. Drag down to:

```
00B0D8A9  2BCA            SUB ECX,EDX
00B0D8AB  FFD1            CALL ECX
00B0D8AD  8BD8            MOV EBX,EAX
00B0D8AF  5F              POP EDI
00B0D8B0  8BC3            MOV EAX,EBX
00B0D8B2  5E              POP ESI
00B0D8B3  5B              POP EBX
00B0D8B4  C3              RETN
```

- Found and then looked up a few lines, he'll see a CALL something above, (is CALL ECX). I set him at a BP CALL EC X this, it asked what the press YES:




```
00B0D8AB  FFD1          CALL ECX
00B0D8AD  8BD8          MOV EBX,EAX
00B0D8AF  5F            POP EDI
00B0D8B0  8BC3          MOV EAX,EBX
00B0D8B2  5E            POP ESI
00B0D8B3  5B            POP EBX
00B0D8B4  C3            RETN
```

Click-Shift-F9 to stop it at this BP.

```
00B0D8AB  FFD1          CALL ECX
00B0D8AD  8BD8          MOV EBX,EAX
00B0D8AF  5F            POP EDI
00B0D8B0  8BC3          MOV EAX,EBX
00B0D8B2  5E            POP ESI
00B0D8B3  5B            POP EBX
00B0D8B4  C3            RETN
```

Delete BP-go, then an F7 phat.Oaiiiii OEP ... .. to actually program and then, tired ghê ...:

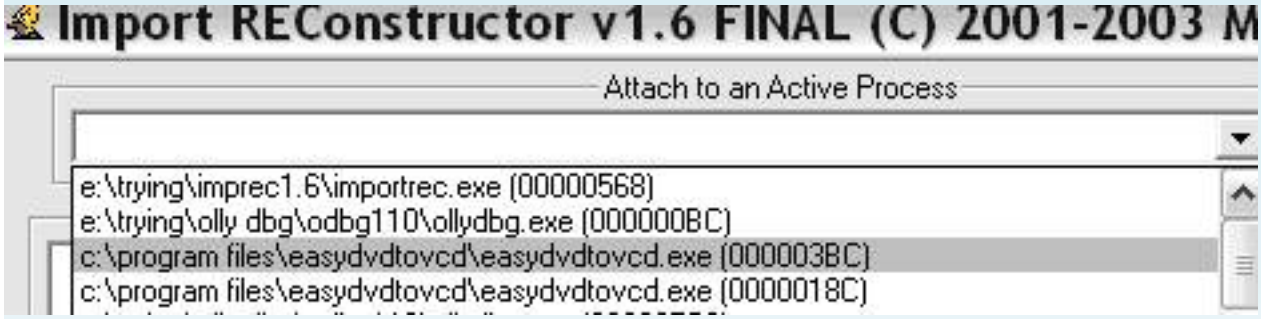
```
00401C5C  -FF25 FC104000  JMP DWORD PTR DS:[4010FC]
00401C62  -FF25 90114000  JMP DWORD PTR DS:[401190]
00401C68   68 88644000    PUSH EasyDVDt.00406488
00401C6D   E8 F0FFFFFF    CALL EasyDVDt.00401C62
00401C72   0000           ADD BYTE PTR DS:[EAX],AL
00401C74   50             PUSH EAX
00401C75   0000           ADD BYTE PTR DS:[EAX],AL
00401C77   0030           ADD BYTE PTR DS:[EAX],DH
00401C79   0000           ADD BYTE PTR DS:[EAX],AL
00401C7B   0048 00        ADD BYTE PTR DS:[EAX],CL
00401C7E   0000           ADD BYTE PTR DS:[EAX],AL
00401C80   0000           ADD BYTE PTR DS:[EAX],AL
```

-I called the OEP, but also aged Hec Cu Lec say the VB is something, say that quái .. Cuc explain anything. We just simply take small issues, but we are Newbie ... he he.Gio dump it then that she was a child, opening his "sovereign" to do PE, and then select the process is necessary xuc thằng process with this small (remember the others that you will):

Then right-click no.chon full dump is finished ... (and Olly still leave the house)

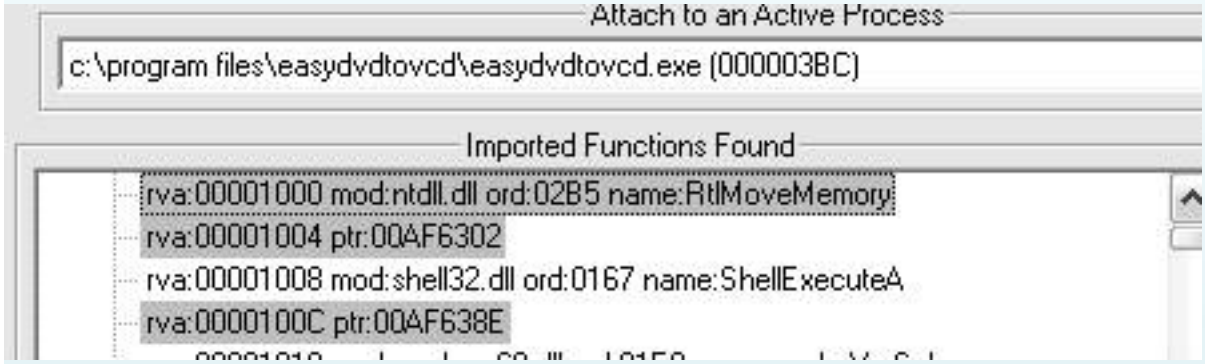
III.Sua IAT and the program (and rebuild Fix IAT):

-Now we connect with them on past treatment ImportREC, we miss them the stone tut part 1 hour should apologize a child.
--- Why yesterday he xu such treatment? (ImportREC) ---
--- I must know him, it is because the job ... --- (he he nhái-Lam Truong Asia)
-So they are working toward and that process should choose xuc he is 2 to address small 03BC:



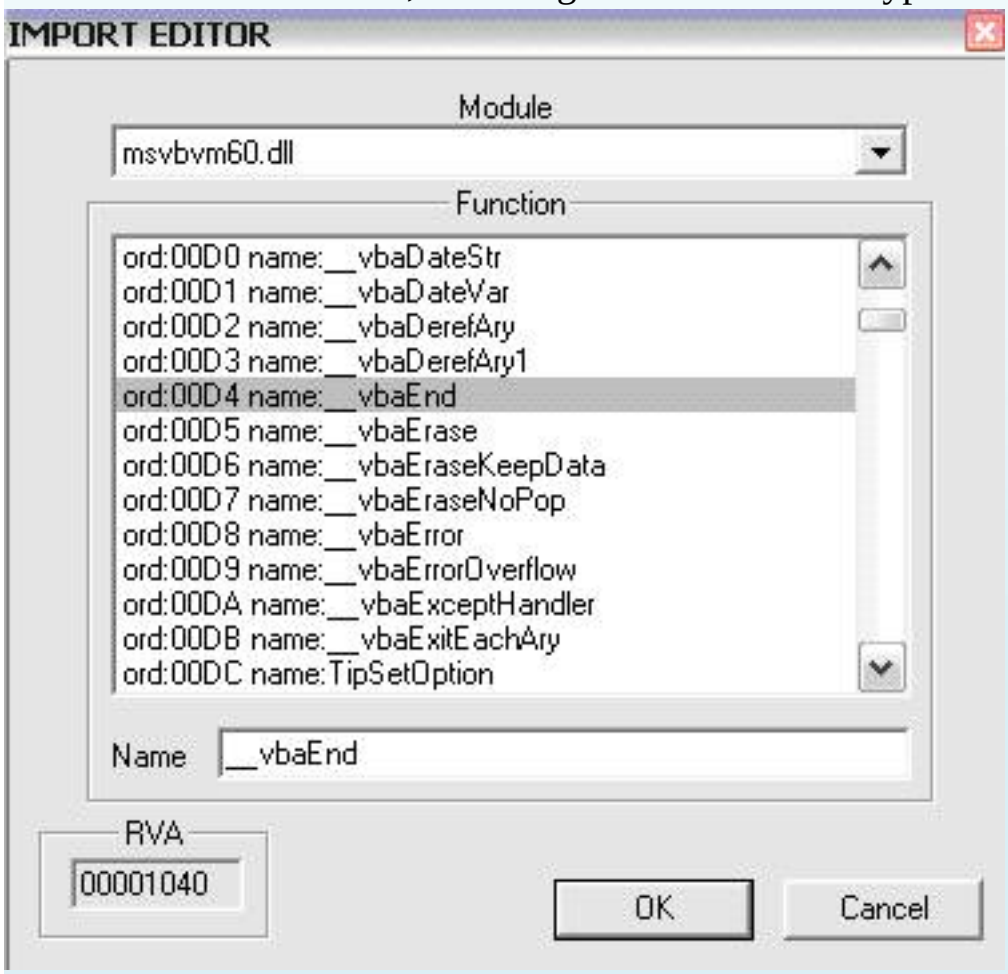
-Place OEP also fill the formula, except as the 400,000 tut part 1. What is OEP 401C68 -400000 = 1C68:

Then click-IAT AutoSearch ... Then click Show Invalid children to listen This report considered ghẹo who have more children?:

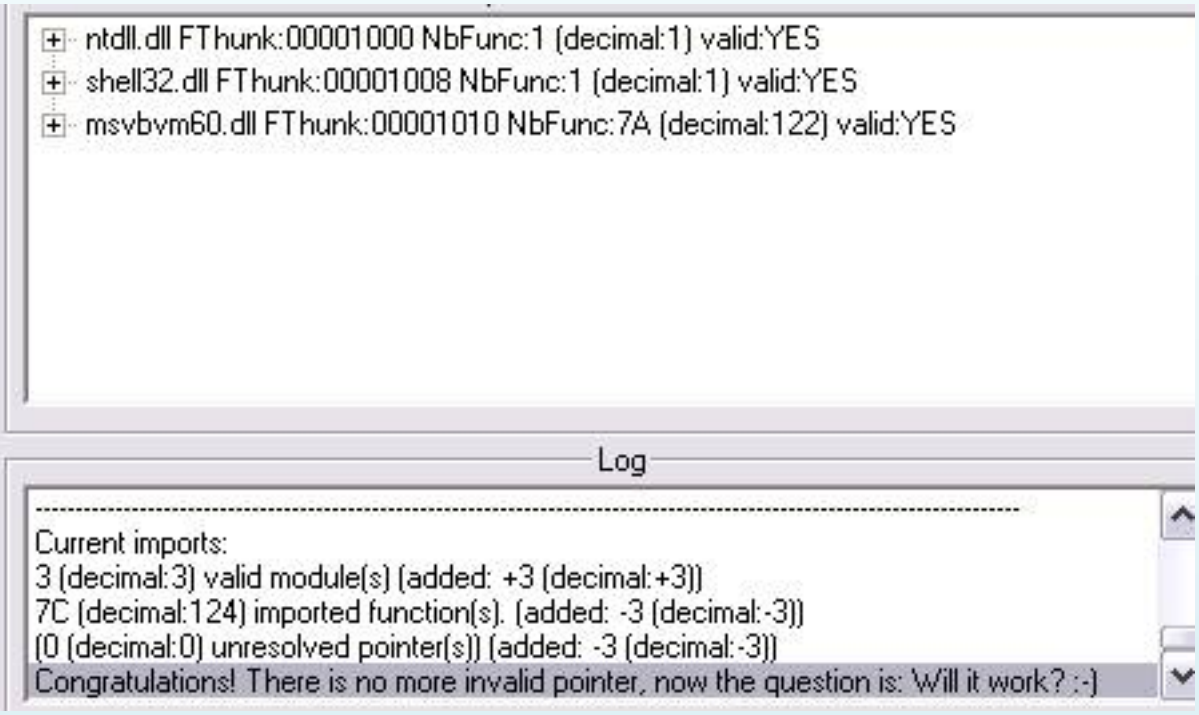


-A lot .. but the gang targeted thằng to "headless". ... You pull down the search of this (pay attention to address it, and I aged Cu Lec this same place):

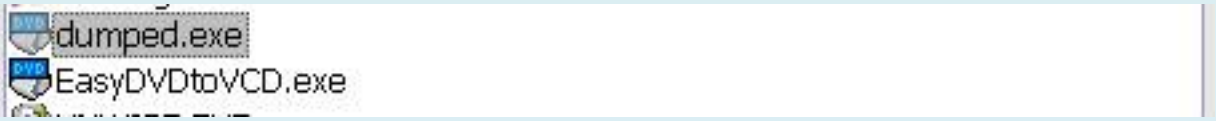
Double-click on him-this, then drag down to select or type in the image are:



Ok-a cai.Xong of life's ... ha ha .. but there đám garbage ha, if they are available when you click bold Show Invalid Click the time we must then select Cut .. Thunk (s) .... Ác WA. . clump again be prescind Em ... This is one of the problems again ..:

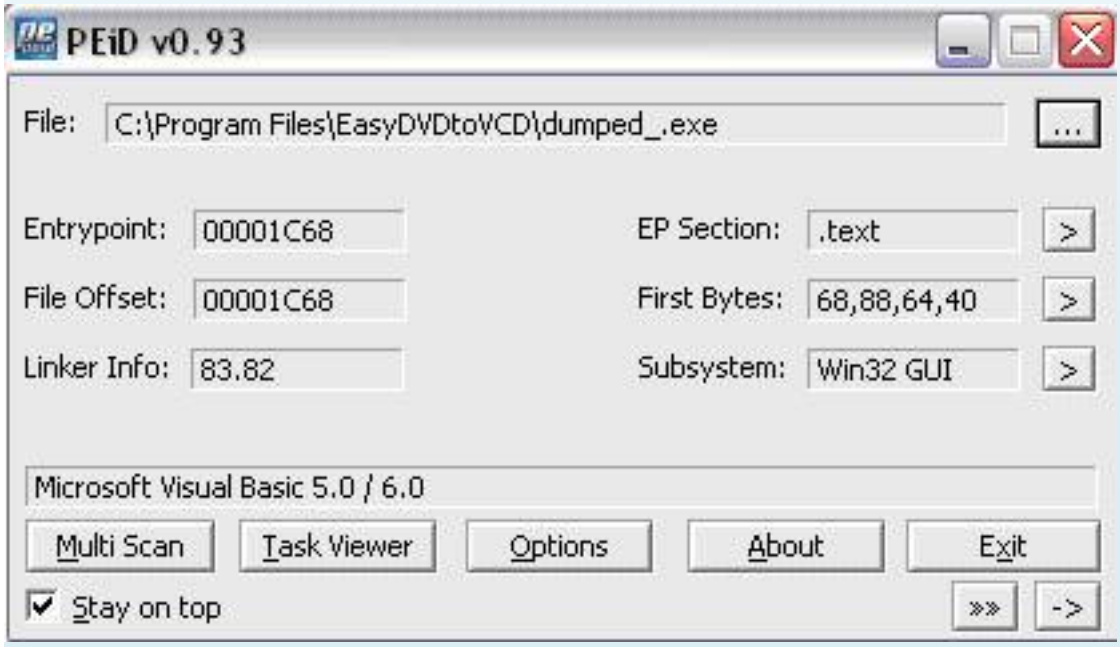


-Fix the time ... and then to dump Quách ... Choose brother Orphaned dumped.exe we created the nay (end of Part II) ...



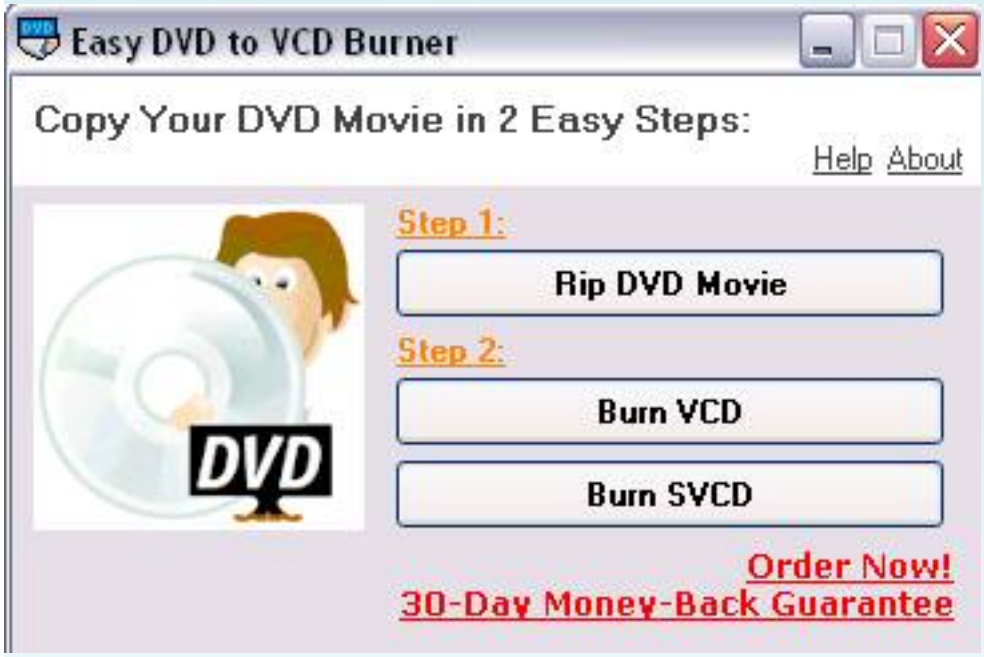
- OK ... save is successful, then it is ..
-Style bags Trickyboy the "old horse wen road ... they kick ImportREC .. (he is only banned bít hold the hearing children thét) ... The rest of the year Orphaned the fever for the garbage, should the new households use ... households:

Load-dumped_.exe to file PEID we see OKIE, code with Microsoft Visual Basic 5.0/6.0:



But do not jump-happy, but remember that the library Armaccess.dll that I have mentioned in the Tool does not need? Now you just RUN dumped_.exe file this view, will receive this message:

-So it must be more demanding file library under new Armaccess.dll run, so we just copy the file to the folder with them thằng dumped_.exe is completed.



-The media always say, some programs (including statements by Armadillo) after complete unpack the files have any claim under this new run, you are also considered as the heart smaller. And this file I do not know who out of it, I only Search only that the NET. (format as a Plugin)

-Now it has a problem problems ... File dump and fix this .. we have accidentally Crack it always zới (RUN always without registration springiness NAG) .... While the principle is still keeping unpack the Register Key functions of the people ... .. hix regret that knowledge shallow .. I just know this only to say ... (FFF group also see how that is the file's Crack FFF Armaccess.dll not need, but more in some places chả crack the pack to finish in 2:12 ASPack, and add more in the name to register it, while with this do not know who registered more ... hix hix)

Besides-ra.Tut also a mistake of this soft is also a file is VCDBurner.exe also pack in a style that Armadillo that if you want to use 100% soft then we have to unpack this thằng nhái more (father Cu Lec not, certainly not by the related topic is the Anti-BP)). A is a temporary period of gác always ... I continue to learn he was ... he ... households available information highway, he is using this code Borland Delphi, employers recognized this innovative soft U.S., the same program code, but with 2 stars loai.Tai hả know? considered the thought, I have in hand a complete and file Crack pack again with 2:12 ASPack FFF's in your hands again Quick has unpack v0.7 -> Over!

So-Sincerely relatives gambling! Newbie that many say is too afraid to U.S., expecting her child, if not more what is viewed as entertainment tut ha.

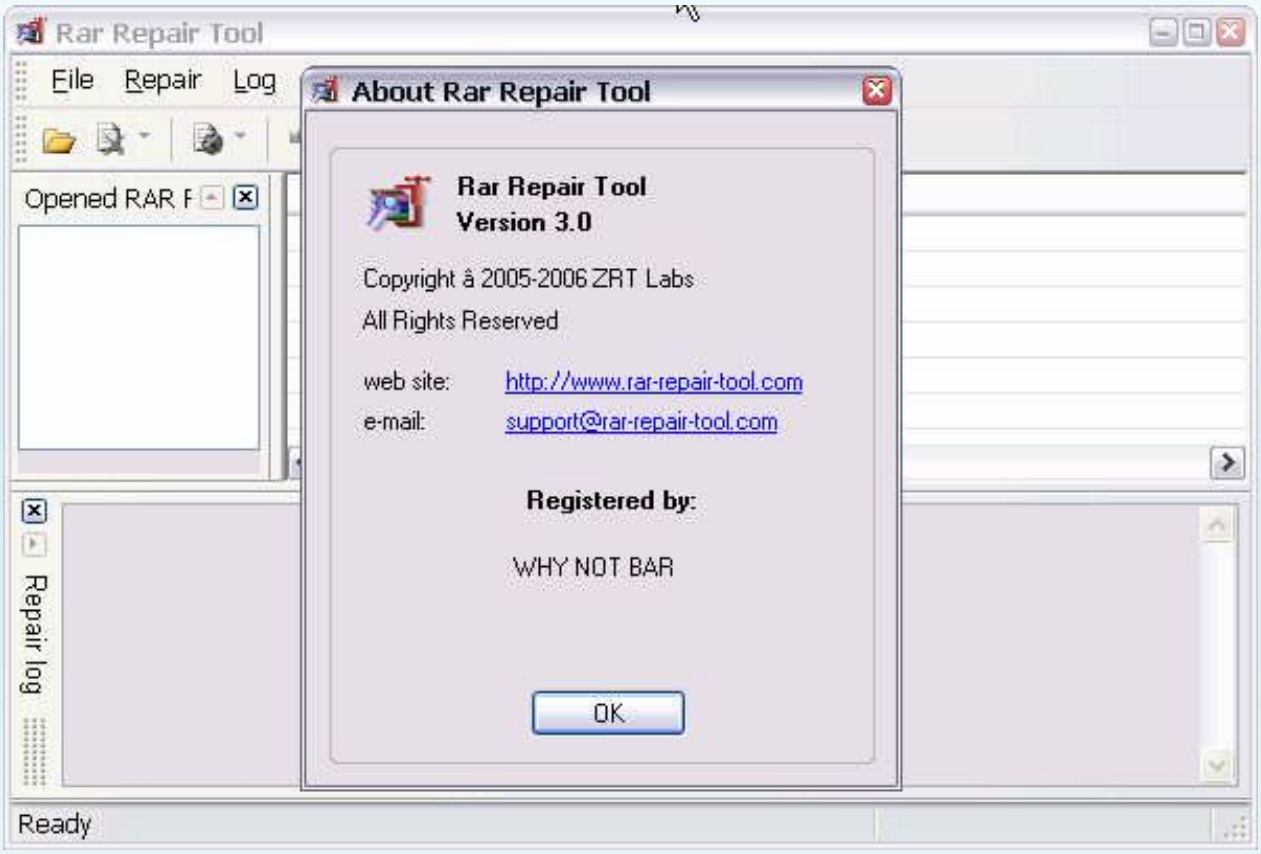
-Thanks again to all of you in the REA. Tut they have quite a bit thanks to the efforts of you ... hix hix ...

I. I nt r o d u c t i on:

RAR Repair Tool 3.0 is a Soft or rather it is designed to fix damaged RAR and SFX archives. You try to limit File Repair under 5Mb .... Full also want to take the almost 50 USD to buy the quyen. Nhung an hour to bring the members Reaonline which offers 50 USD to purchase the copyright ***"Nhuc Chi English Hung.*** If Bro have the same opinion with our children is the same meat Target this, this is by Pack ***EXE Cryptor v2.2.x.*** According to the evaluation of individual children Packer this more difficult to swallow and ***Asprotect Armadillo.***

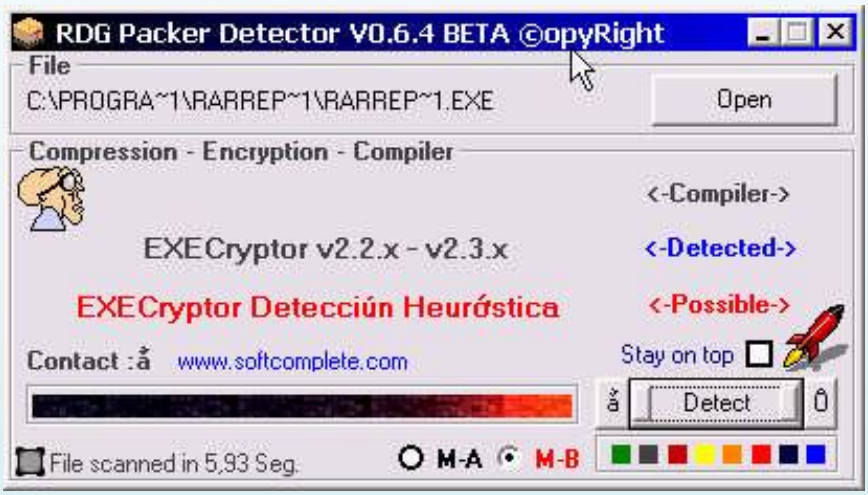
II. T oo l s:

- Tool v AC A P l c u d g in need ứng:
  - *LY D L O B G _ E x c e r italy ptor 1st 1 0*
  - *OE P f e d in RV X. Medicine. Zby d e r o o k*
  - *Lord P D e e e x lu*
  - *B O D i g Scr 1 pt. 4 8*
  - *I mport R E C 1. 6 F*
  - *R G D P a c k e r e t De ctor and 0. 6. 4*
  - *F C x FE plo e r r V*
- Sc r i *pt: "E x e c t ryp or 2. X I AT bui r l e d e r" by K a G and the 1st 1.*
- T a rg e t: ***R A R R E P T oo l air V 3rd 0 C yr p o i g h t © 2 0 05 - 200 6 Z R T A B L s.***
- Ho m e p a g *e:* **h tt p: / / www. R a r - e r a p i r - too momentum o m /**



III. U n p a c k i n g:

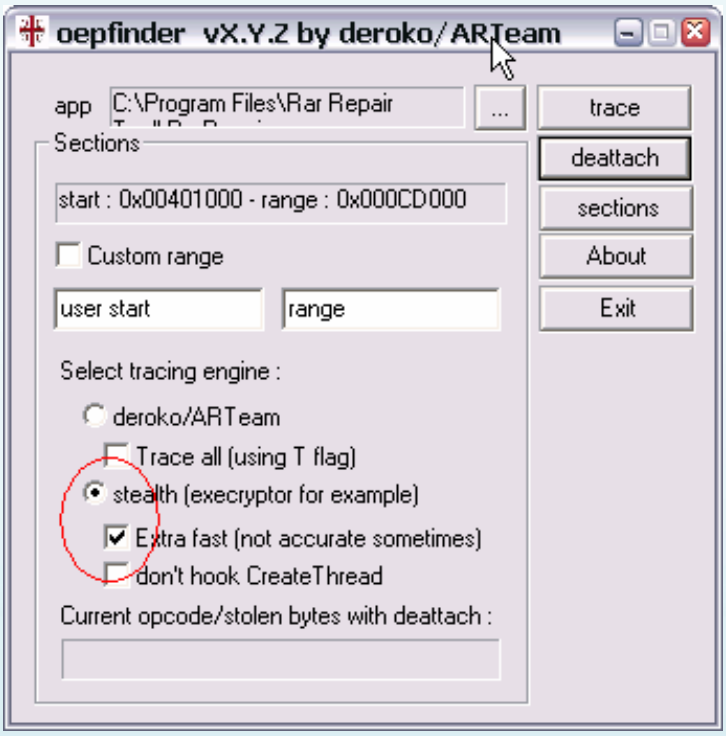
A job using familiar **RDG Packer Detector v0.6.4** Detect Target



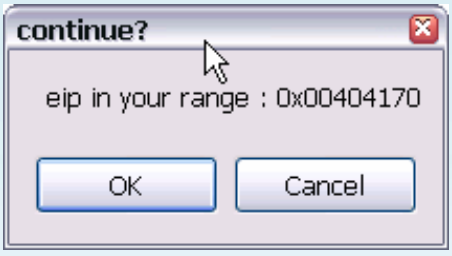
Packer see this as "every contract" gòi Anti debug ... It is in this khủng to identify you when you are on target Load OllyDBG you do not do the Run is .... But also on "Martial qit thickness varies with the Thai ... "and has appeared Patch for OllyDBG to bypass the AntiDBG this, it takes for people to have Patch and config it to create the OllyDBG For Download ***EXEcryptor*** you from loss of use of search. When has the OllyDBG For ***EXEcryptor*** and Tools necessary we

start Unpacking ... ..

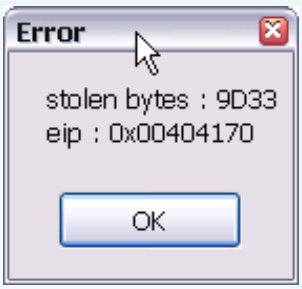
1st Run **OEPFinder vXYZ** deroko by selecting "RarRepair.exe"



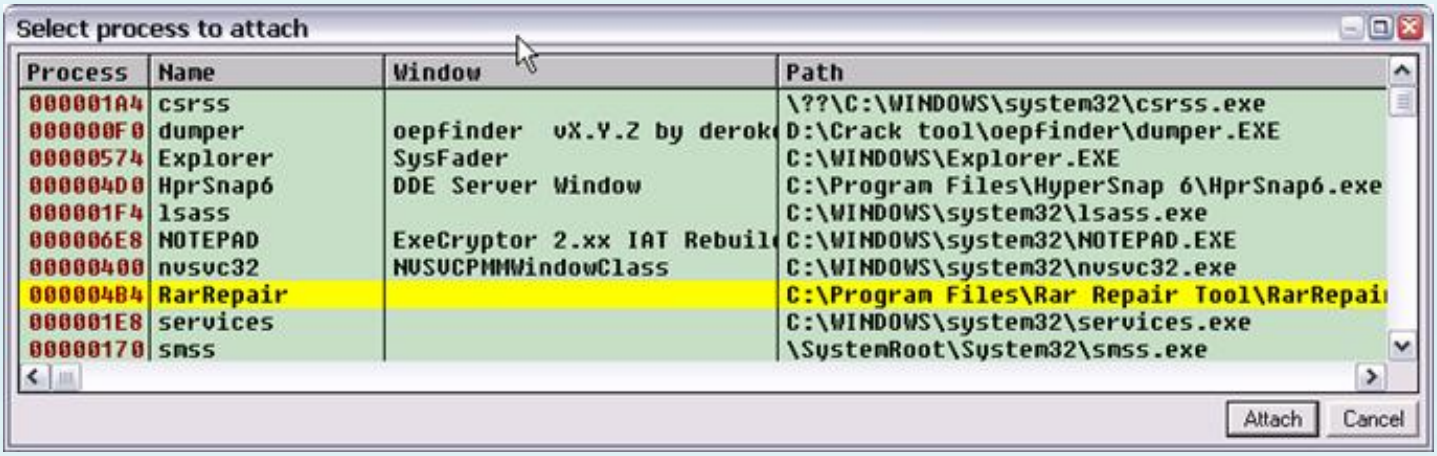
2nd Press **Trace** will appear this NAG



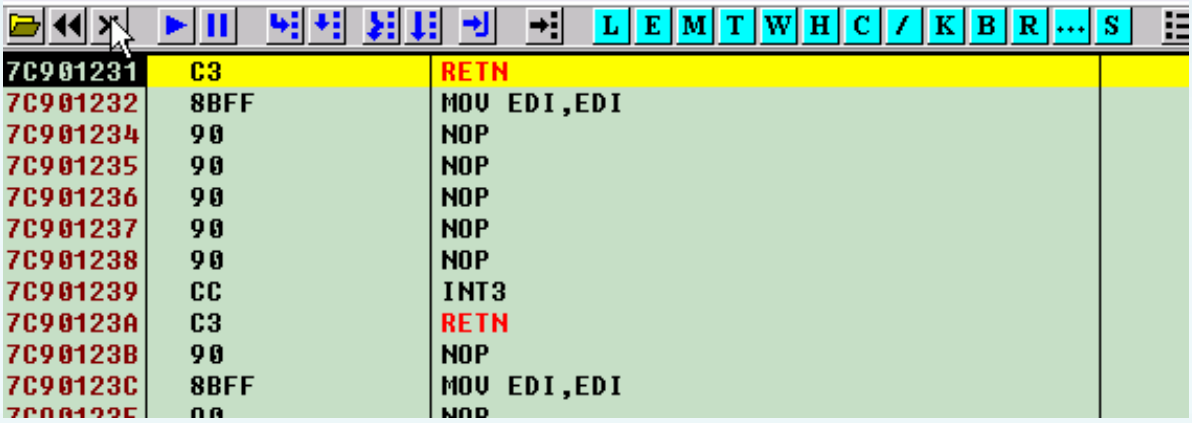
3. Click **Cancel**



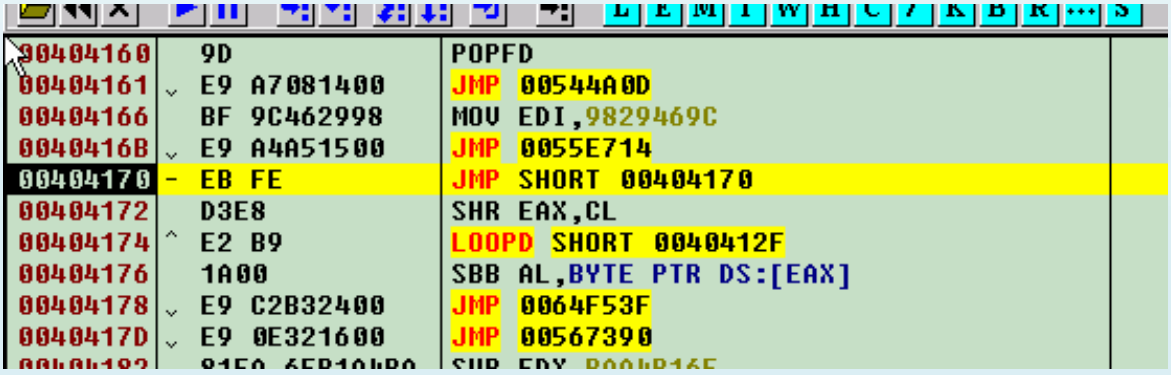
4. Remember the number, click **OK** and boot **OllyDBG_EXEcryptor** select the correct file and click **Attack**



5. You will stop here



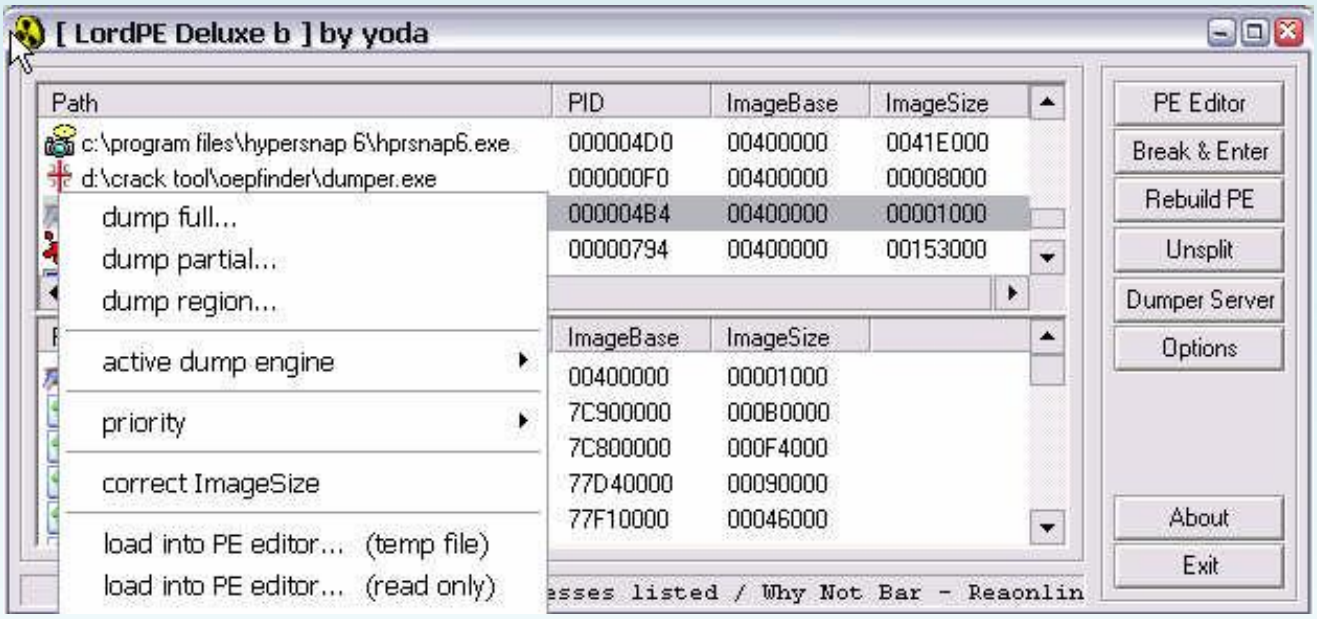
6th press **F9, F12** will stop here



7. Press **Ctrl + E** and the Patch

```
00404160    9D              POPFD
00404161  v E9 A7081400     JMP 00544A0D
00404166    BF 9C462998     MOV EDI,9829469C
0040416B  v E9 A4A51500     JMP 0055E714
00404170    9D              POPFD
00404171    33D3            XOR EDX,EBX
00404173    E8 E2B91A00     CALL 005AFB5A
00404178  v E9 C2B32400     JMP 0064F53F
0040417D  v E9 0E321600     JMP 00567390
00404182    81EA 6FB1A4BA   SUB EDX,BAA4B16F
00404188    81C2 9640034F   ADD EDX,4F034096
0040418E  v E9 92321900     JMP 00597425
00404193    9D              POPFD
```

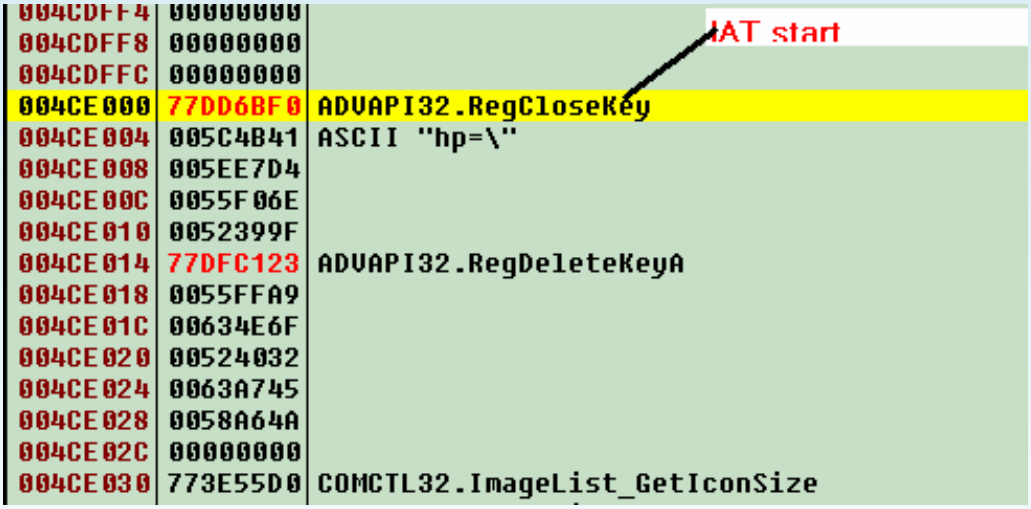
8. Press Shift + F9 Soft Run will complete ... This is can we say success is 20%. Hehe ... ... thui dump file using **LordPE.** Note should do is close **OllyDBG_EXEcryptor** working when they have not consider ....



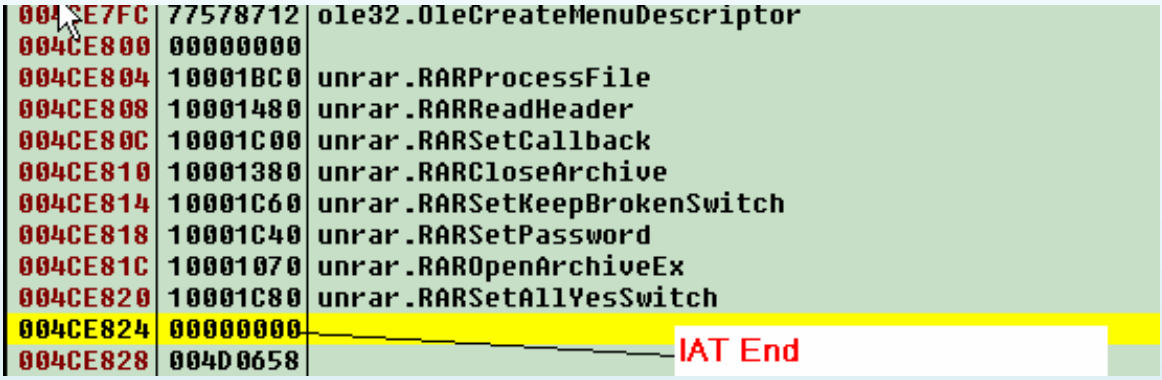
9th after Full dump, we need to determine the position start and end of the IAT.
In **OllyDBG_EXEcrypto** press **Ctrl + G** and enter 401000 and scroll down to 1 little mouse will see

```
00401054    E8 D74B0B00     CALL 004B5C30
00401059    E8 D24B0B00     CALL 004B5C30
0040105E    8B40 0C         MOV EAX,DWORD PTR DS:[EAX+C]
00401061    68 80000000     PUSH 80
00401066    50              PUSH EAX
00401067    FF15 ACE44C00   CALL NEAR DWORD PTR DS:[4CE4AC]   user32.LoadIconA
0040106D    8B4C24 08       MOV ECX,DWORD PTR SS:[ESP+8]
00401071    8946 5C         MOV DWORD PTR DS:[ESI+5C],EAX
```

10. And it is easy to identify the **IAT Start**

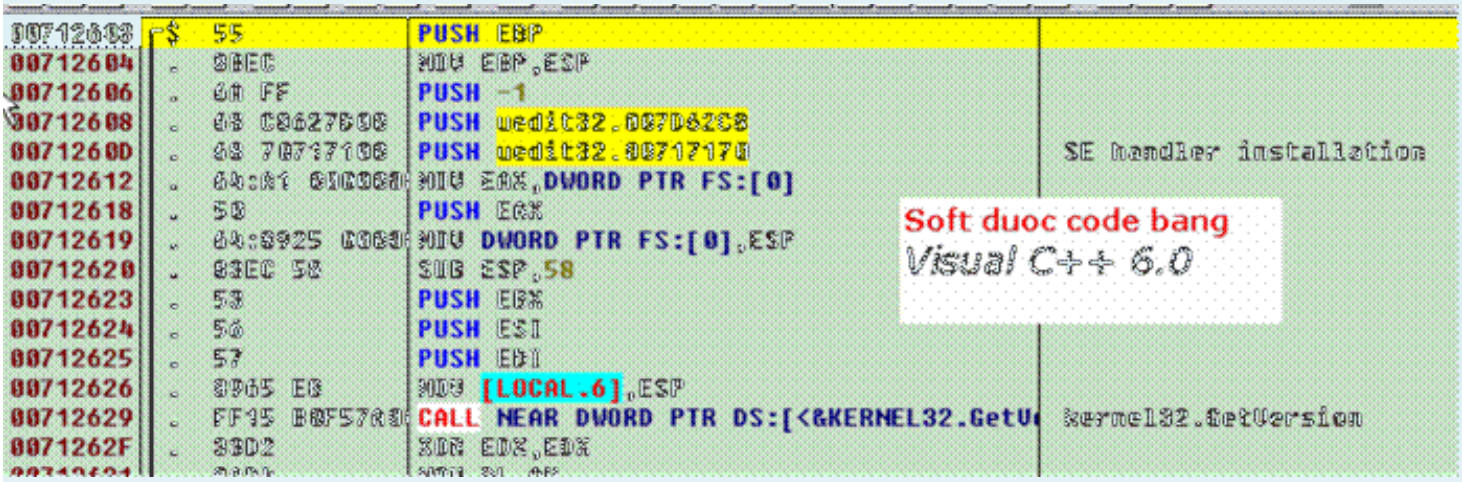


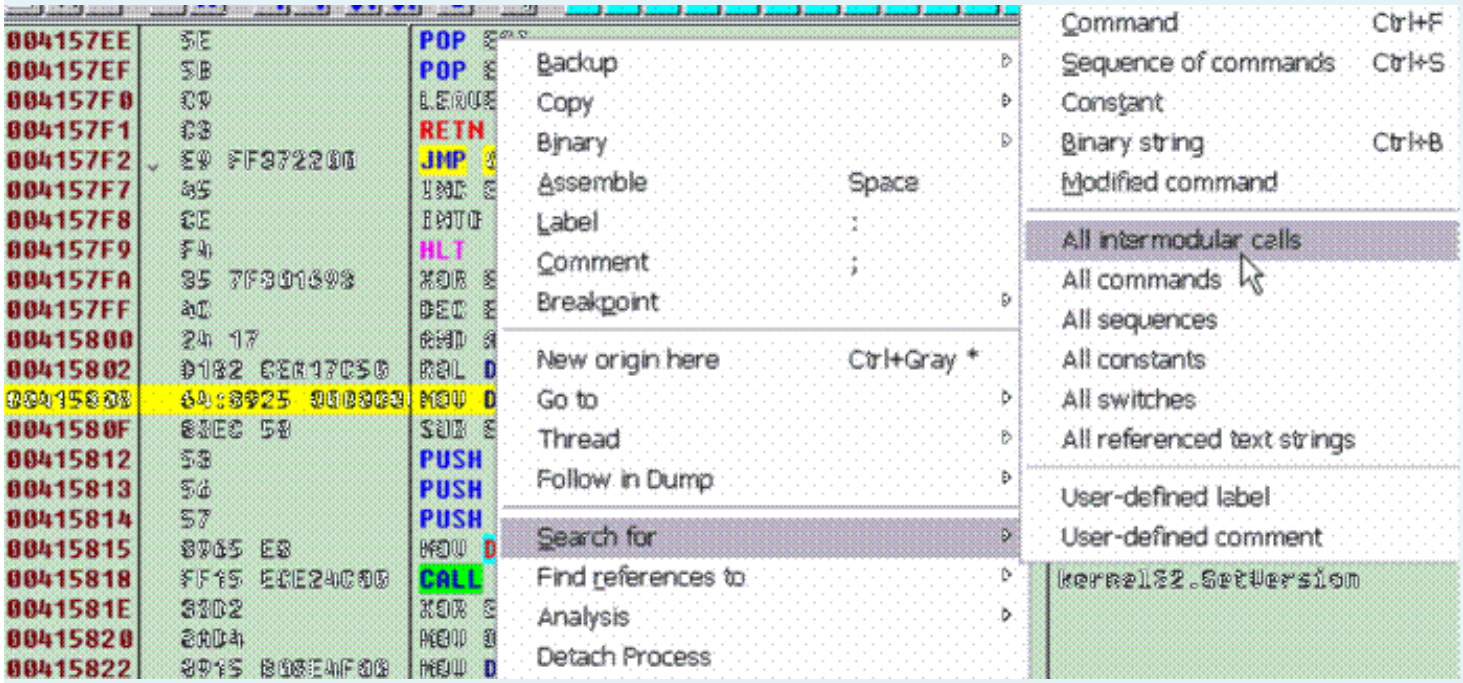
11. Scroll down we determine **IAT End**



12. Currently, we have 1 File Dumped by **LordPE** and determine the **IAT,** to determine the position start and end of the IAT is very important because the number will be used when using ***Srcipt.*** The remember that you should address when nay we stopped in **OllyDBG_EXEcryptor** not **OEP's** Soft so work is we must find the original **OEP.** To find the original OEP many hours looking for the basic but at least we must know **Soft** Code is what language? But currently we do not know exactly be? For we are using **RDG Packer Detector v0.6.4** Scan File **Dumped.exe** and will receive the following information:

13. So we know the Code with Soft *Visual C + + 6.0.* Now, we borrow or 1 Soft Crackme that you have the Code in *Visual C + + 6.0* Load **OllyDBG** to see the Code of **EntryPoint.** This is necessary because in addition to help us find the OEP in Target with our pack, but also useful for Fix Stolen Bytes in steps. Here they borrow **UltraEdit-32.** Load **UltraEdit-32** to 1 OllyDBG to observe and we'll see.





14. You easily notice Soft code in *Visual C + + 6.0* under OEP function is always the API **"GetVersion"** based on this we find to OEP for our target. Move over **OllyDBG_EXEcrypto** working with RarRepair.exe "press **F10** and select the image

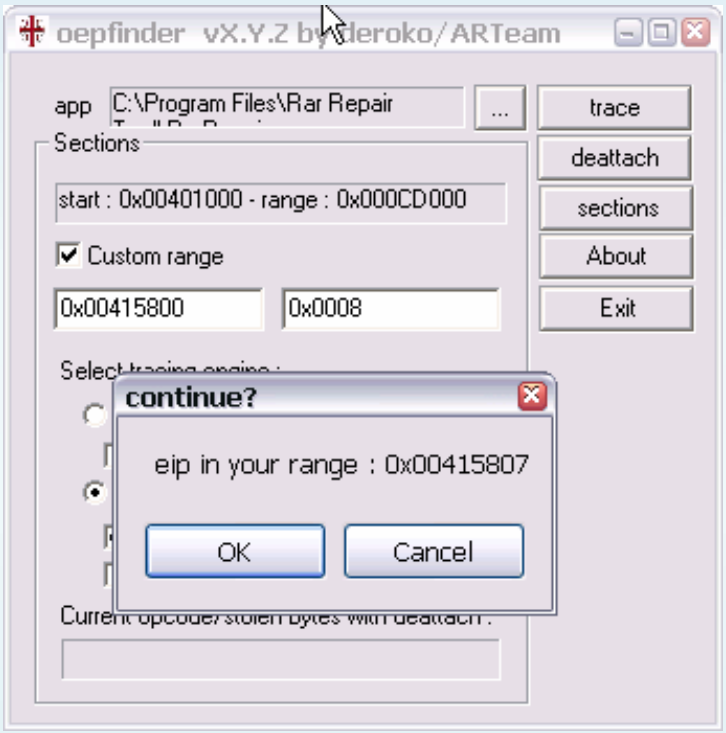
15th Search function **"GetVersion"** and we have nhusau:

```
CALL NEAR DWORD PTR DS:[4CE234]   kernel32.GetTimeZoneInformation
CALL NEAR DWORD PTR DS:[4CE520]   user32.GetTopWindow
CALL NEAR DWORD PTR DS:[4CE520]   user32.GetTopWindow
CALL NEAR DWORD PTR DS:[4CE2EC]   kernel32.GetVersion
CALL NEAR DWORD PTR DS:[4CE2EC]   kernel32.GetVersion
CALL NEAR DWORD PTR DS:[4CE2EC]   kernel32.GetVersion
CALL NEAR DWORD PTR DS:[4CE2EC]   kernel32.GetVersion
CALL NEAR DWORD PTR DS:[4CE2EC]   kernel32.GetVersion
CALL NEAR DWORD PTR DS:[4CE1E8]   kernel32.GetVersionExA
CALL NEAR DWORD PTR DS:[4CE1E8]   kernel32.GetVersionExA
```

```
POP EBX
LEAVE
RETN
JMP 93638FF6
INC EBP
INT3
HLT                                Privileged command
XOR EAX,9316807F
DEC ESP
AND AL,17
ROL DWORD PTR DS:[EDX+507CA1CE],1
MOV DWORD PTR FS:[0],ESP
SUB ESP,58
PUSH EBX
PUSH ESI
PUSH EDI
MOV DWORD PTR SS:[EBP-18],ESP
CALL NEAR DWORD PTR DS:[4CE2EC]    kernel32.GetVersion
XOR EDX,EDX
MOV BL,00
MOV DWORD PTR DS:[4F8EB0],EDX
MOV ECX,EAX
AND ECX,0FF
MOV DWORD PTR DS:[4F8EAC],ECX
```

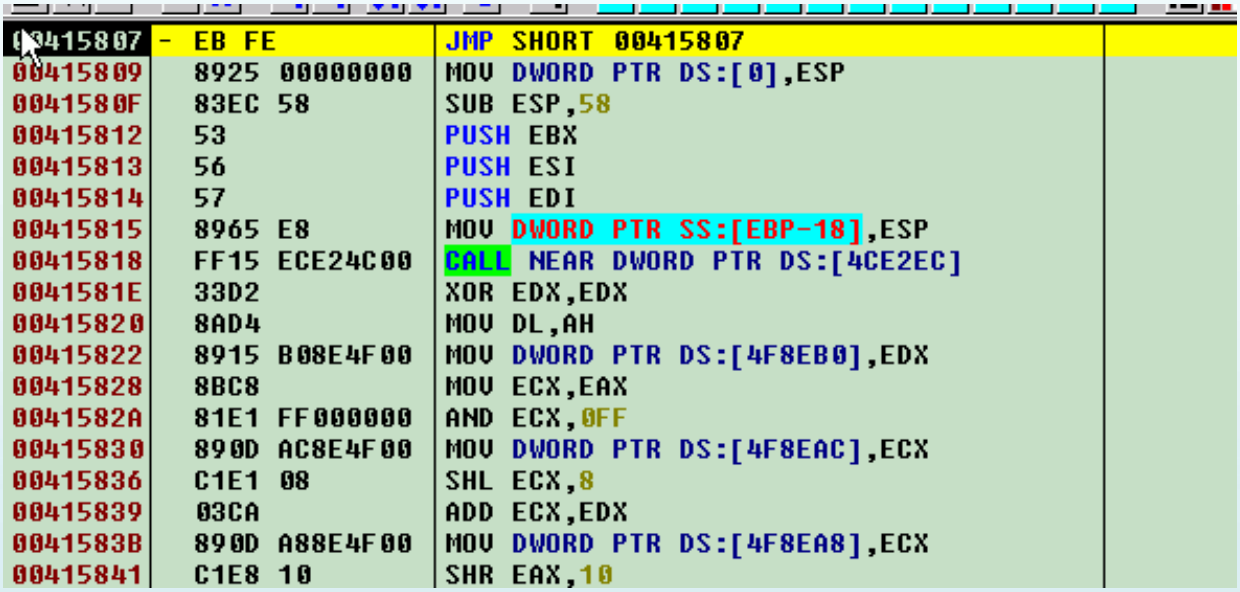
16. Double Click to function "**GetVersion**" 2 is here to

17. Đám code yellow to contain the **OEP** has been *Stolen bytes.* We'll Fix it. Again using **OEPfinder** the following options *(remember OllyDBG_EXEcrypto close and OEPfinder ago)*

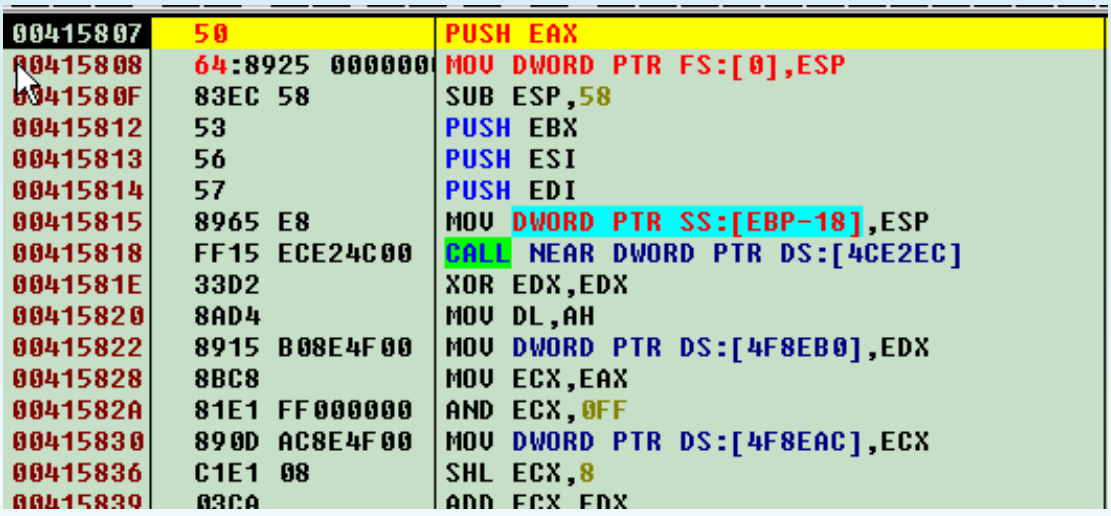


18. Click **Cancel**

19. Remember this information and click **OK, OllyDBG_EXEcrypto** open, select the PID, click **Attach, F9, F12** to us here:



20th press **Ctrl + E** and the nhusau Patch:

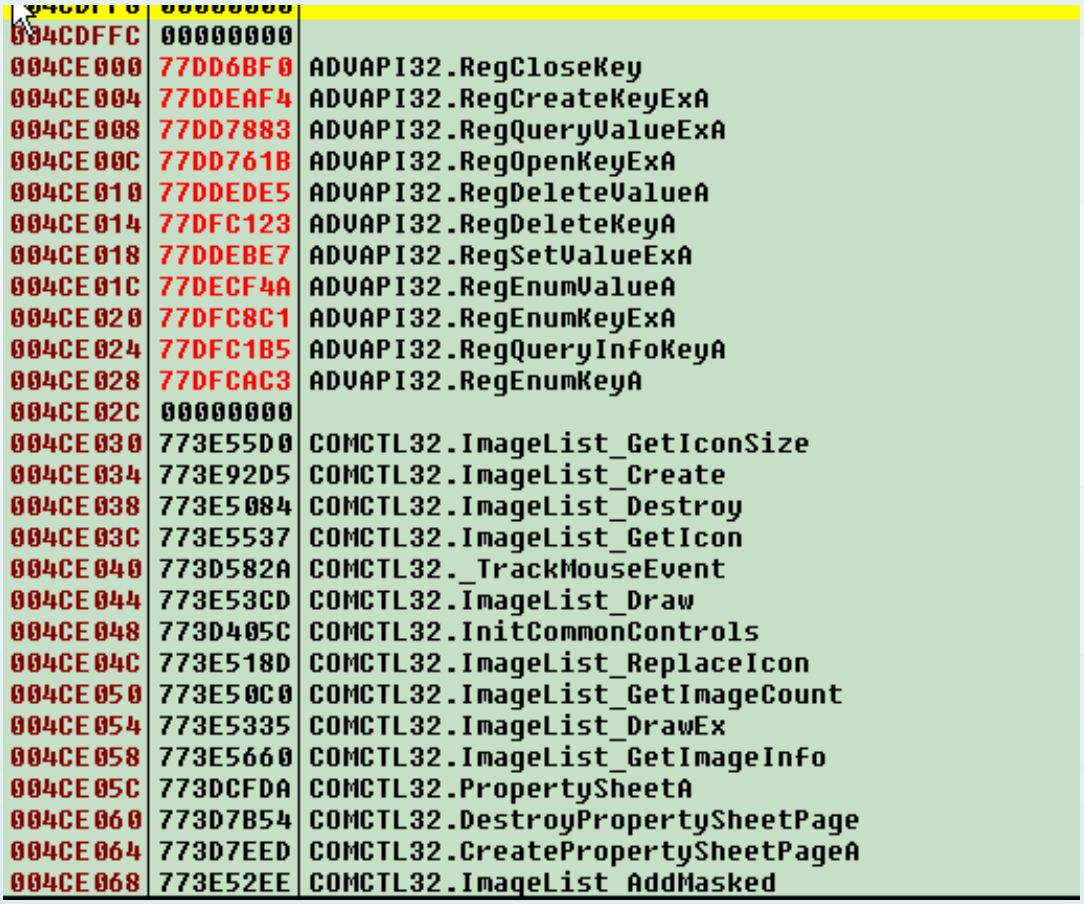


21. Now it was time to Fix IAT, you can manually Fix Scirpt but will use more quickly. But before the Run Srcipt we need to know when some 1 run for thoroughly to

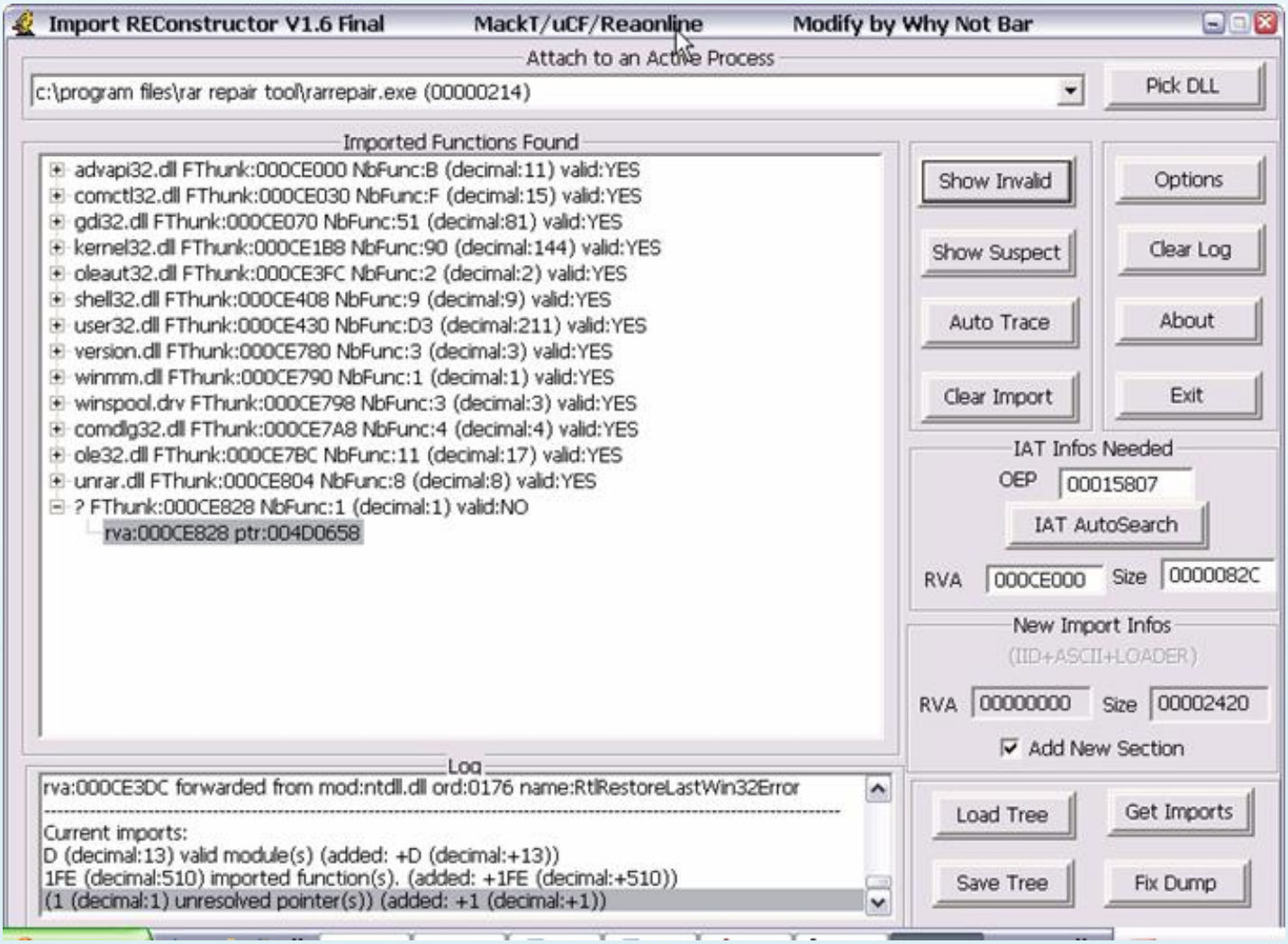
I m o v AT st ar t, 0 04 C E0 0 0 / / A T st art

one because of a Te d, 004 C E8 2 4 / / I n d A TE

22. Thugian Sitting waiting Scirpt little run we will have completed the IAT is Full

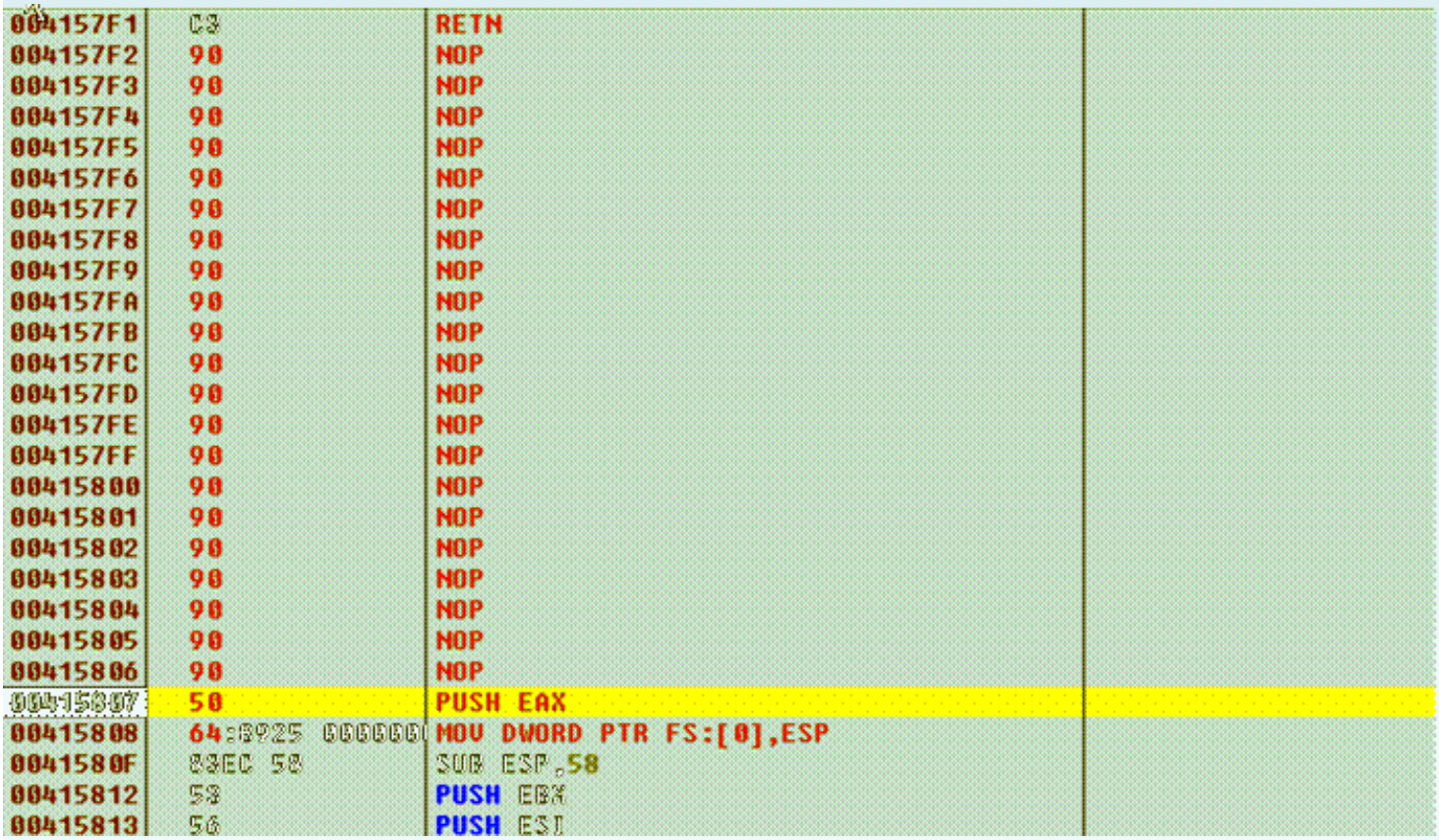


23. To ensure that we eat more **Dumped Full** and open again **ImportREC** enter parameters

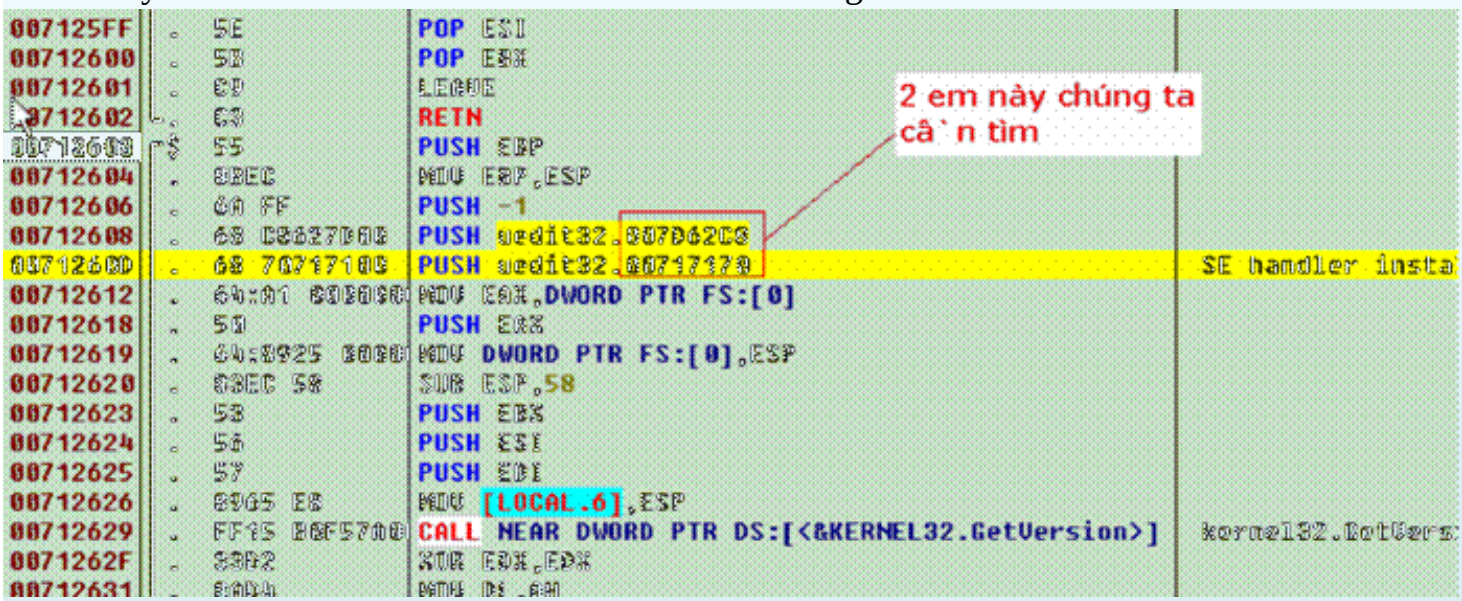


24. 1 Invalid function should be **thunk Cut (s),** then **dump Fix** nhubinh often, if you try to Run the File **Dumped_.exe** will run ko

very simple because we have not Fix Stolen Bytes. Now we start Recovery **OEP.** Load File **Dumped_.EXE** to **OllyDBG**


004157F1 C3 RETN
004157F2 90 NOP
004157F3 90 NOP
004157F4 90 NOP
004157F5 90 NOP
004157F6 90 NOP
004157F7 90 NOP
004157F8 90 NOP
004157F9 90 NOP
004157FA 90 NOP
004157FB 90 NOP
004157FC 90 NOP
004157FD 90 NOP
004157FE 90 NOP
004157FF 90 NOP
00415800 90 NOP
00415801 90 NOP
00415802 90 NOP
00415803 90 NOP
00415804 90 NOP
00415805 90 NOP
00415806 90 NOP
00415807 50 PUSH EAX
00415808 64:8925 000000 MOV DWORD PTR FS:[0],ESP
0041580F 83EC 58 SUB ESP,58
00415812 53 PUSH EBX
00415813 56 PUSH ESI

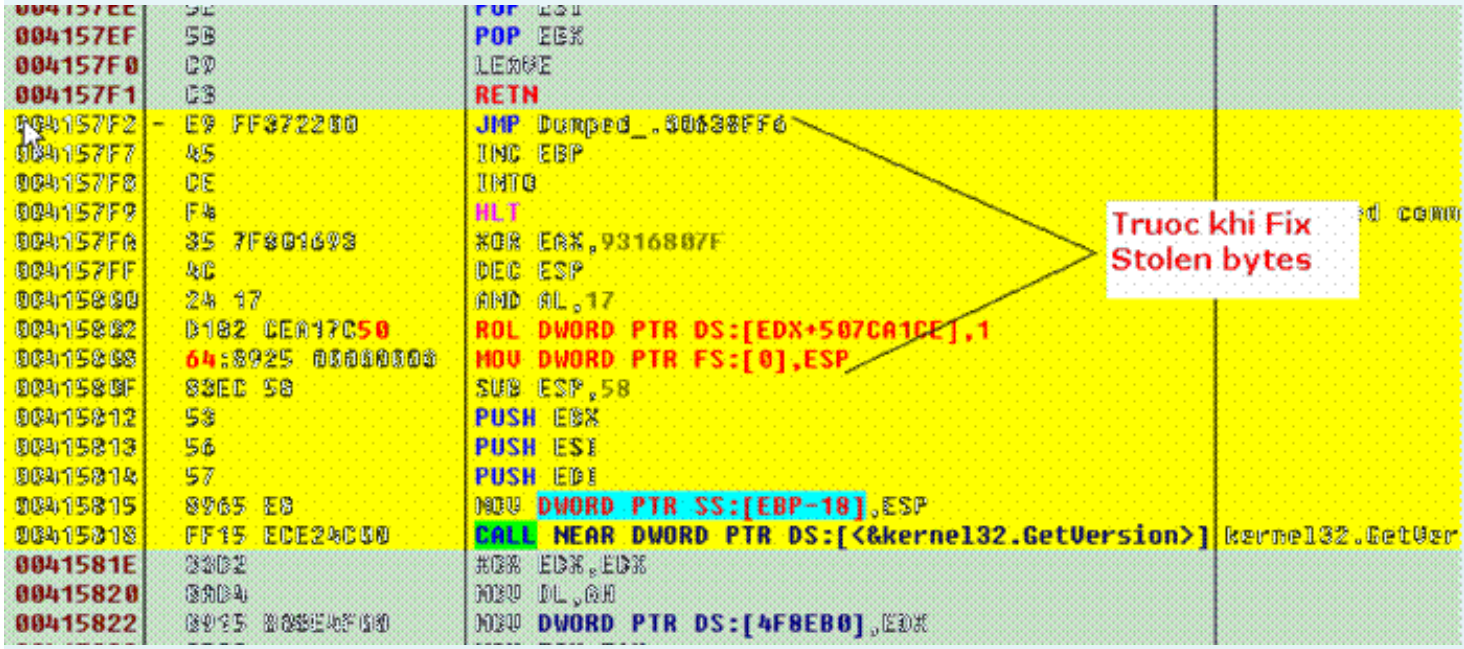
25. Đám code from 00415807 to 00415F72 queen code we need to Fix Stolen Bytes for valid. Back to the 13 you remember EP Soft standard code when using ***Visual C + + 6.0***

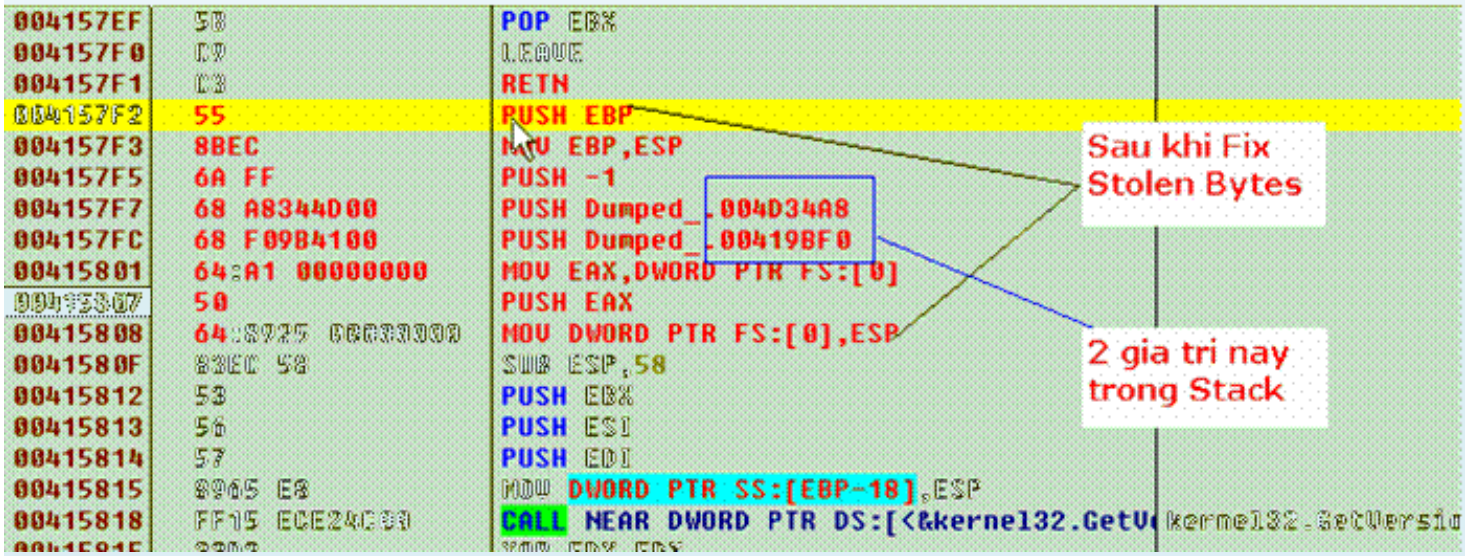


26. At issue is how we also are looking for exactly 2 address them as marked on the sides to fill in for valid. This ko too difficult and takes only 1 thui little ... you need to do from step 1 to step 8 for Soft Run completely and observe the Stack you will see

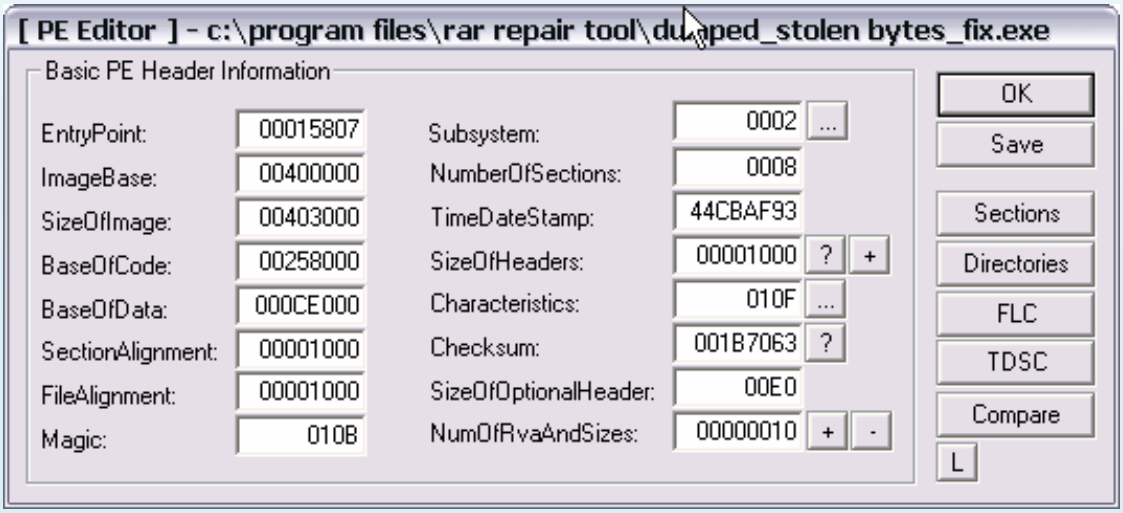
```
0012FFA4  FFFFFFFF
0012FFA8  0012FF4C
0012FFAC  0055FD9A
0012FFB0  0012FFE0  Pointer to next SEH record
0012FFB4  00419BF0  SE handler
0012FFB8  004D34A8
0012FFBC  00000000
0012FFC0  0012FFF0
0012FFC4  7C816D4F  RETURN to kernel32.7C816D4F
0012FFC8  00000000
0012FFCC  0000D347
0012FFD0  7FFDF000
0012FFD4  8054B038
0012FFD8  0012FFC8
0012FFDC  81967CA0
0012FFE0  FFFFFFFF  End of SEH chain
0012FFE4  7C8399F3  SE handler
0012FFE8  7C816D58  kernel32.7C816D58
0012FFEC  00000000
0012FFF0  00000000
0012FFF4  00000000
0012FFF8  007FFB91  <ModuleEntryPoint>
0012FFFC  00000000
```

27. Now we conduct nhusau Patch:

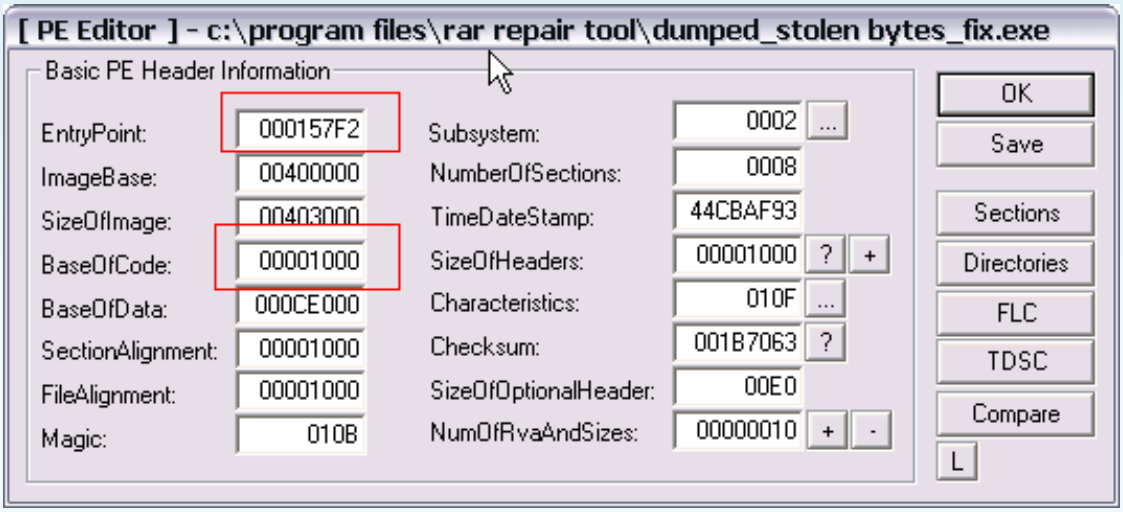



004157EF 58 POP EBX
004157F0 C9 LEAVE
004157F1 C3 RETN
004157F2 55 PUSH EBP
004157F3 8BEC MOV EBP,ESP
004157F5 6A FF PUSH -1
004157F7 68 A8344D00 PUSH Dumped_.004D34A8
004157FC 68 F09B4100 PUSH Dumped_.00419BF0
00415801 64:A1 00000000 MOV EAX,DWORD PTR FS:[0]
00415807 50 PUSH EAX
00415808 64:8925 00000000 MOV DWORD PTR FS:[0],ESP
0041580F 83EC 58 SUB ESP,58
00415812 53 PUSH EBX
00415813 56 PUSH ESI
00415814 57 PUSH EDI
00415815 8965 E8 MOV DWORD PTR SS:[EBP-18],ESP
00415818 FF15 ECE24D00 CALL NEAR DWORD PTR DS:[<&kernel32.GetV
Sau khi Fix Stolen Bytes
2 gia tri nay trong Stack

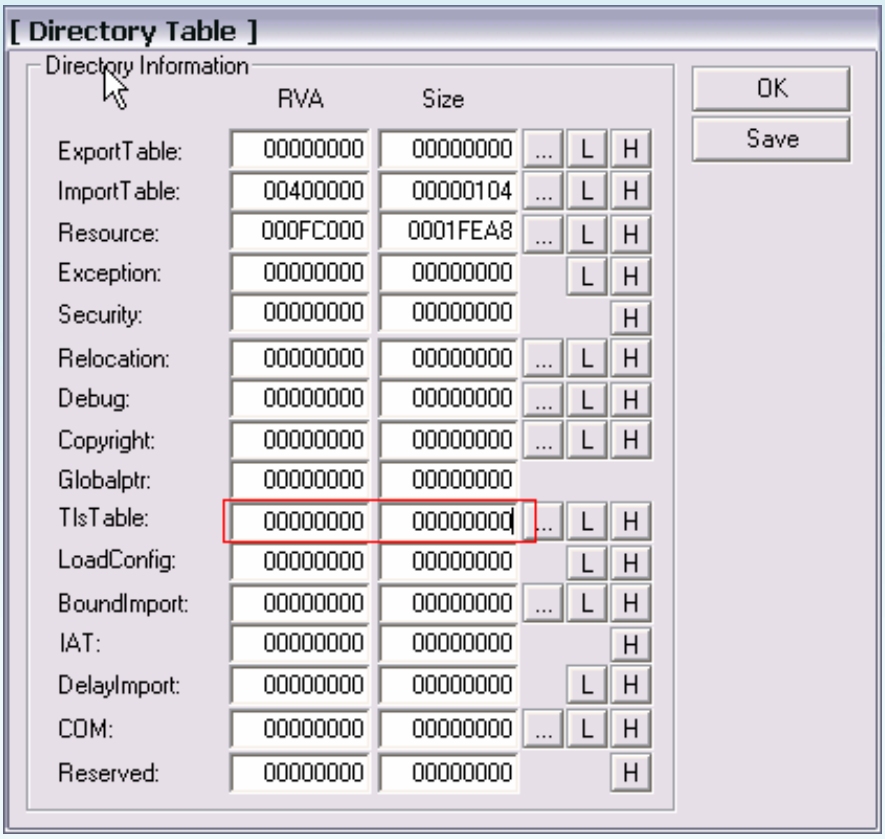
28th Hour Save the file with the name **Dumped_Stolen Bytes_Fix.exe.** huhu ... Target this sector yet it ... man tè of teaching that subject dek first run, including information systems they considered trial Bro Run like crazy ... đấm a fracture of the keyboard ... but always coming back here I think some clear target this quite similar some children pretty fresh, man tí for the district, including the brother lucid enough to find the man for hours with it ... to be taught how to watch ... Load **Dumped_Stolen** to **Bytes_Fix.exe PE Editor**



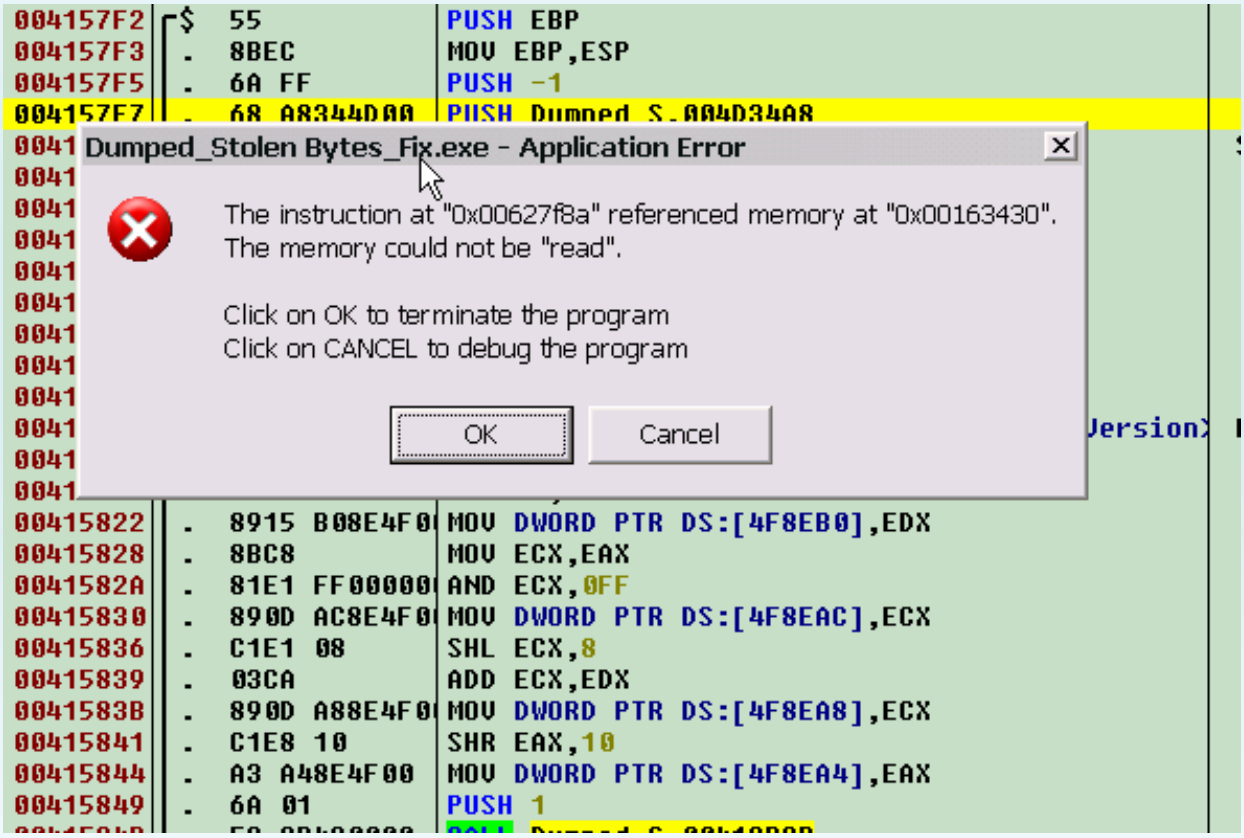
29. We need to edit and **EntryPoint BaseOfCode** properly



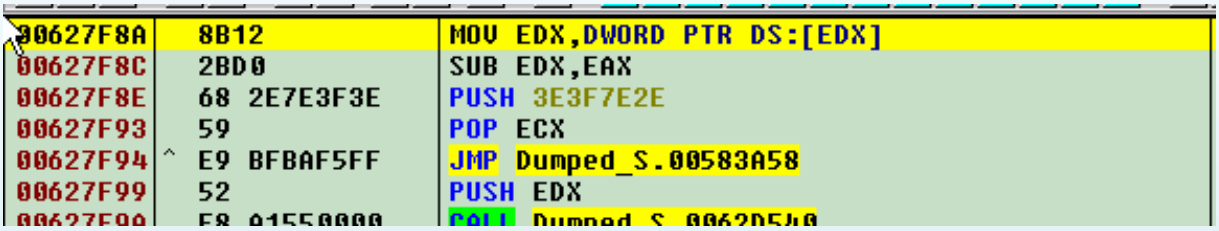
and



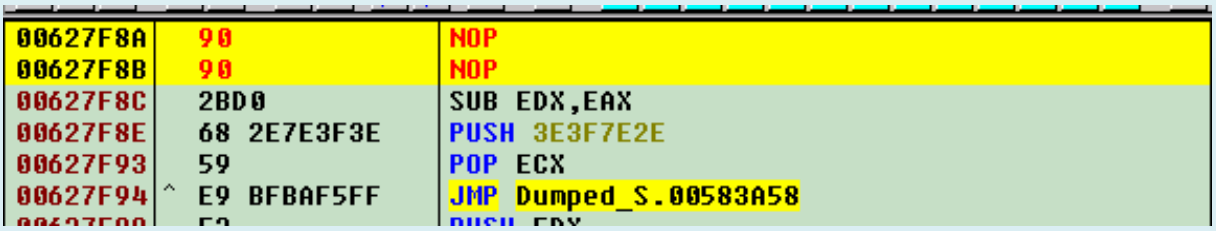
30th Yeah! Load **Dumped_Stolen Bytes_Fix.exe** to **OllyDBG** and press **Shift + F9,** appear this message



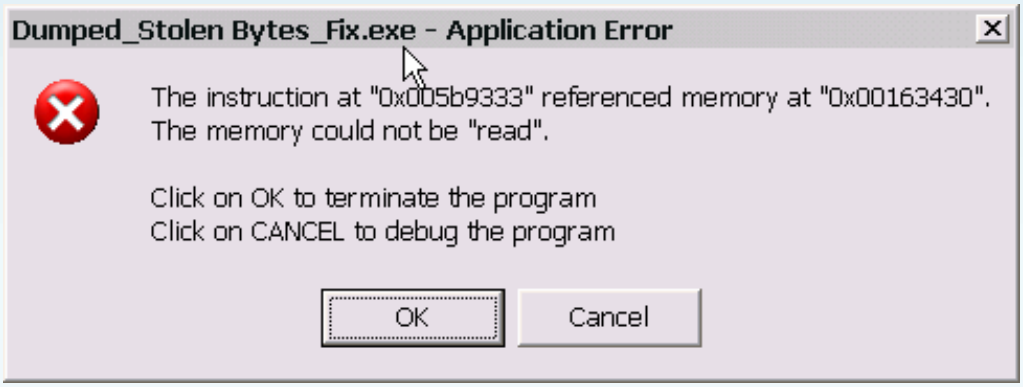
31. In **OllyDBG** press **Ctrl + G** to enter and come **00627F8A**

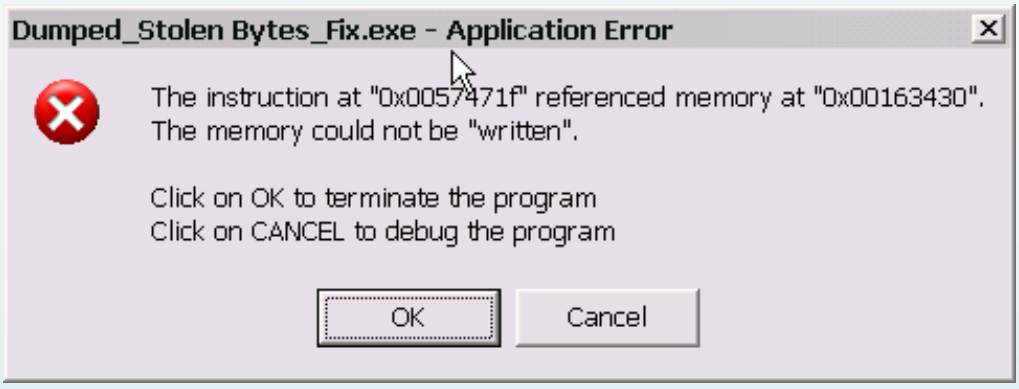


32. Very simple **NOP** it

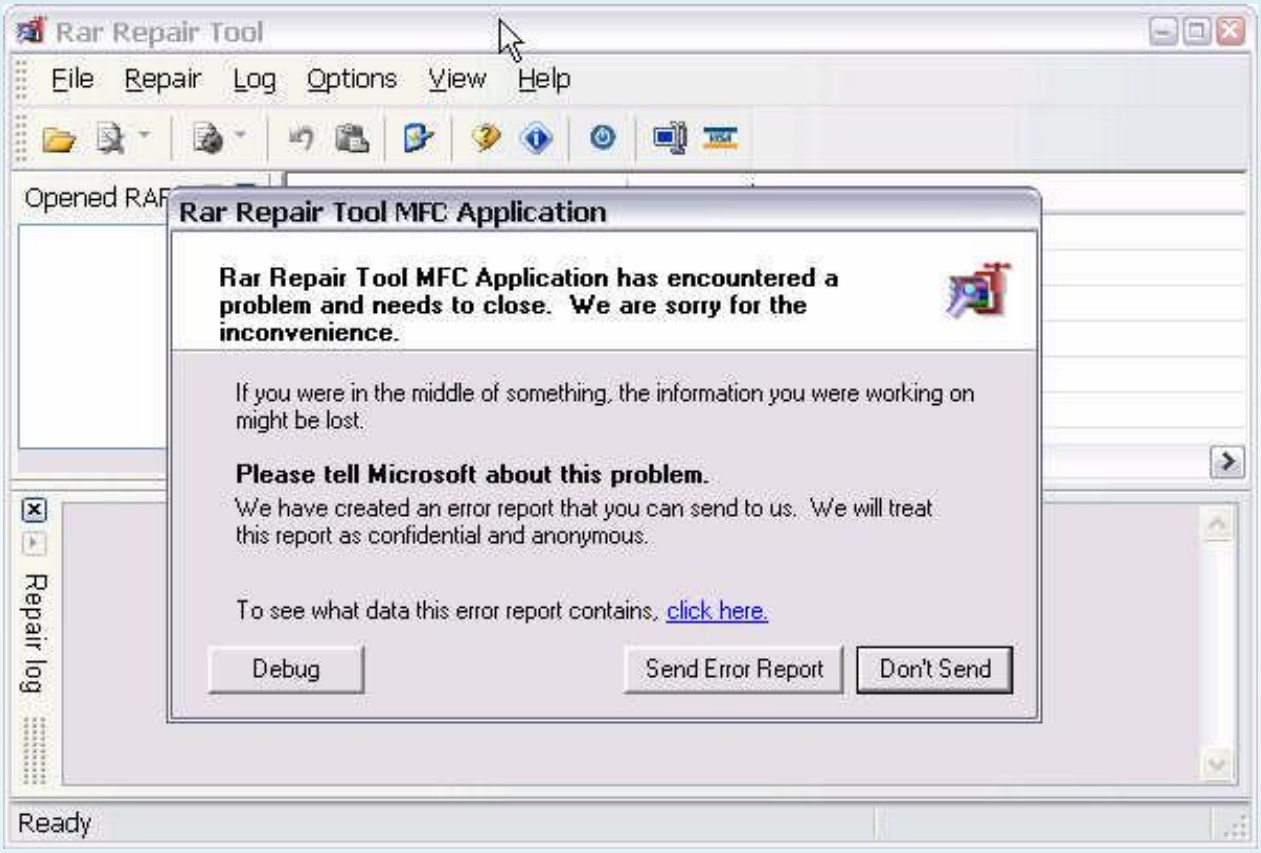


33. Save again, back to **OllyDBG** Load, press **Shift + F9** and will appear 2 NAG error message similar and you just Submitting nhutren

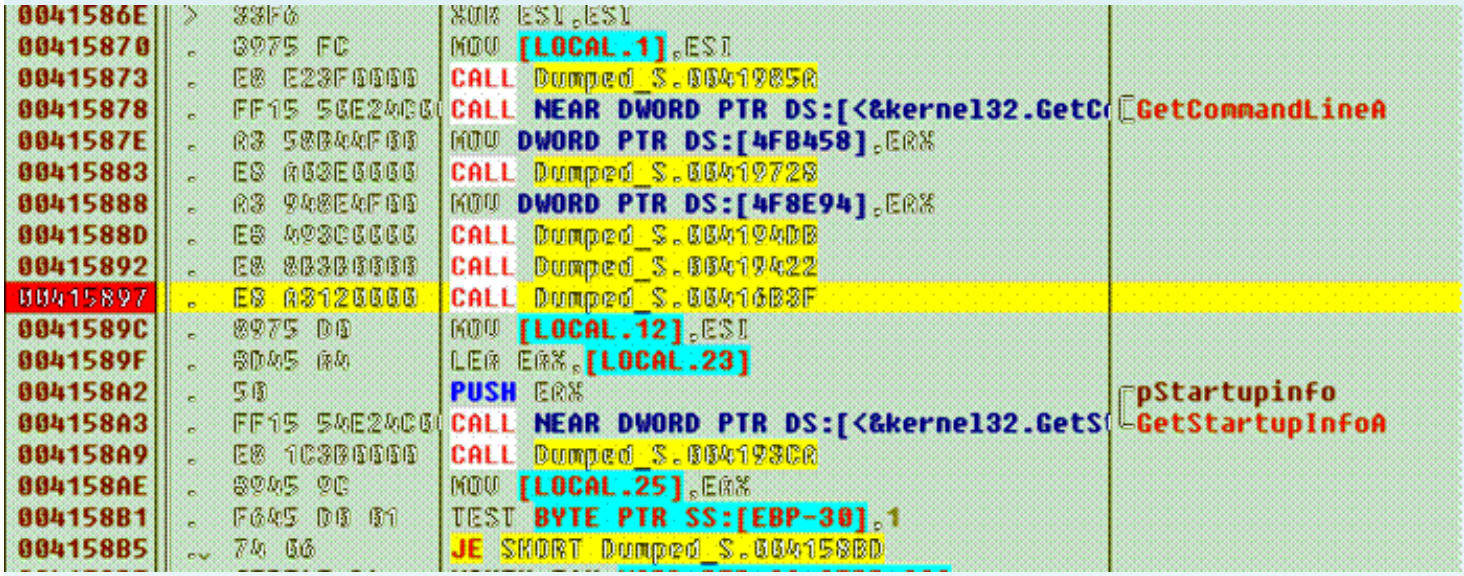




34th Hour meeting minutes to run ... File brothers try their new seo Fix see ... .. Hichic lickerish run but only 3 seconds thui then appear Nag error

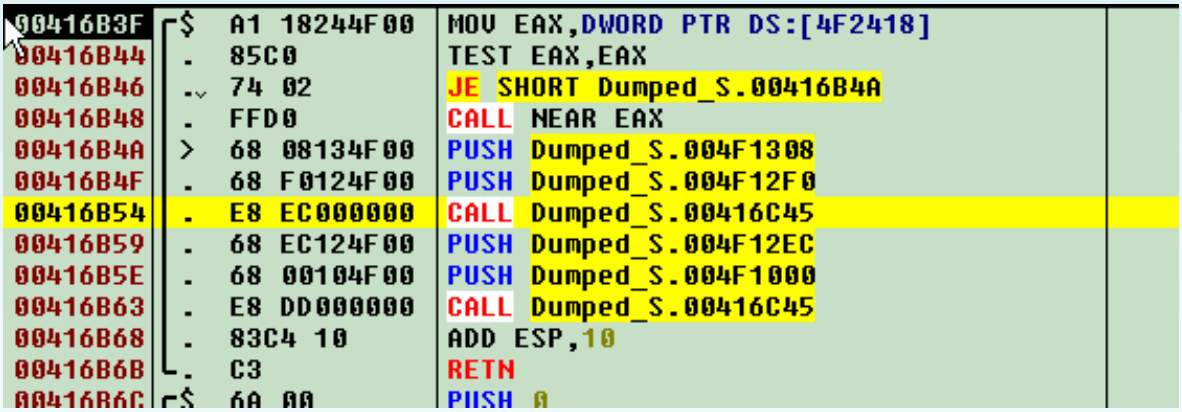


35.

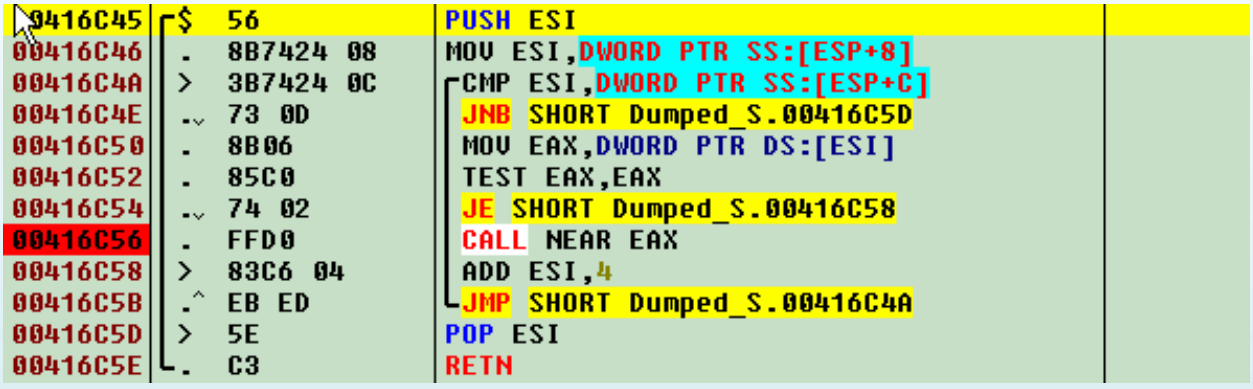


... hichic pain ơi brother too, must do our brothers action that is wrong screen **Check** the **CRC.** Brother sector do it? I also lột piece of cloth to cover themselves blindfold. Load the file to the new Fix **OllyDBG,** mouse scroll down a bit you'll see

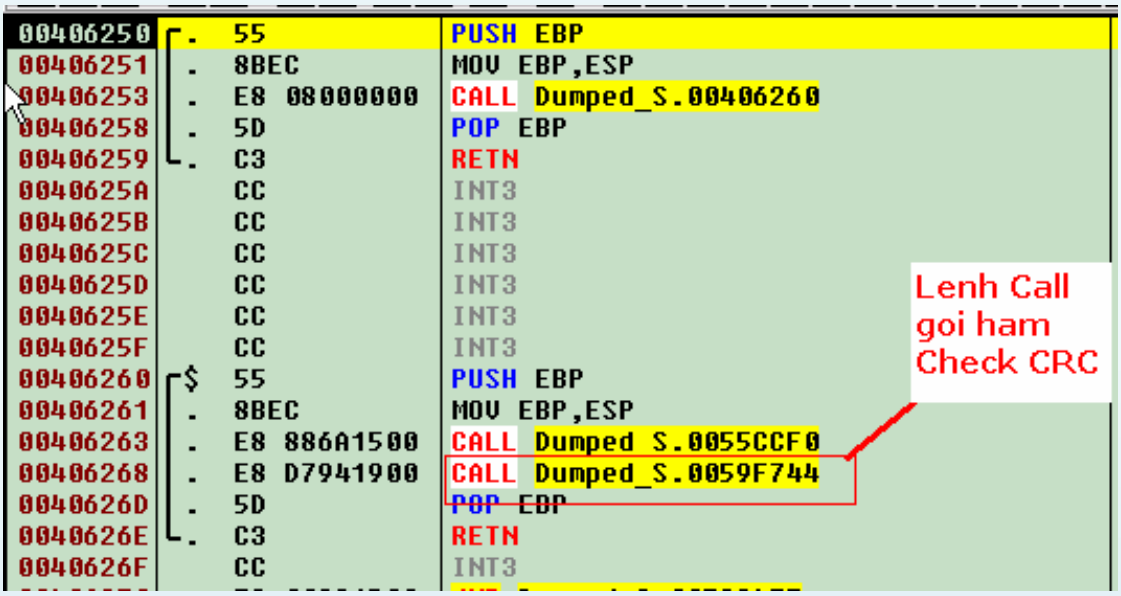
36. Nhuhinh Set 1 Breakpoint, press **F9, F7**



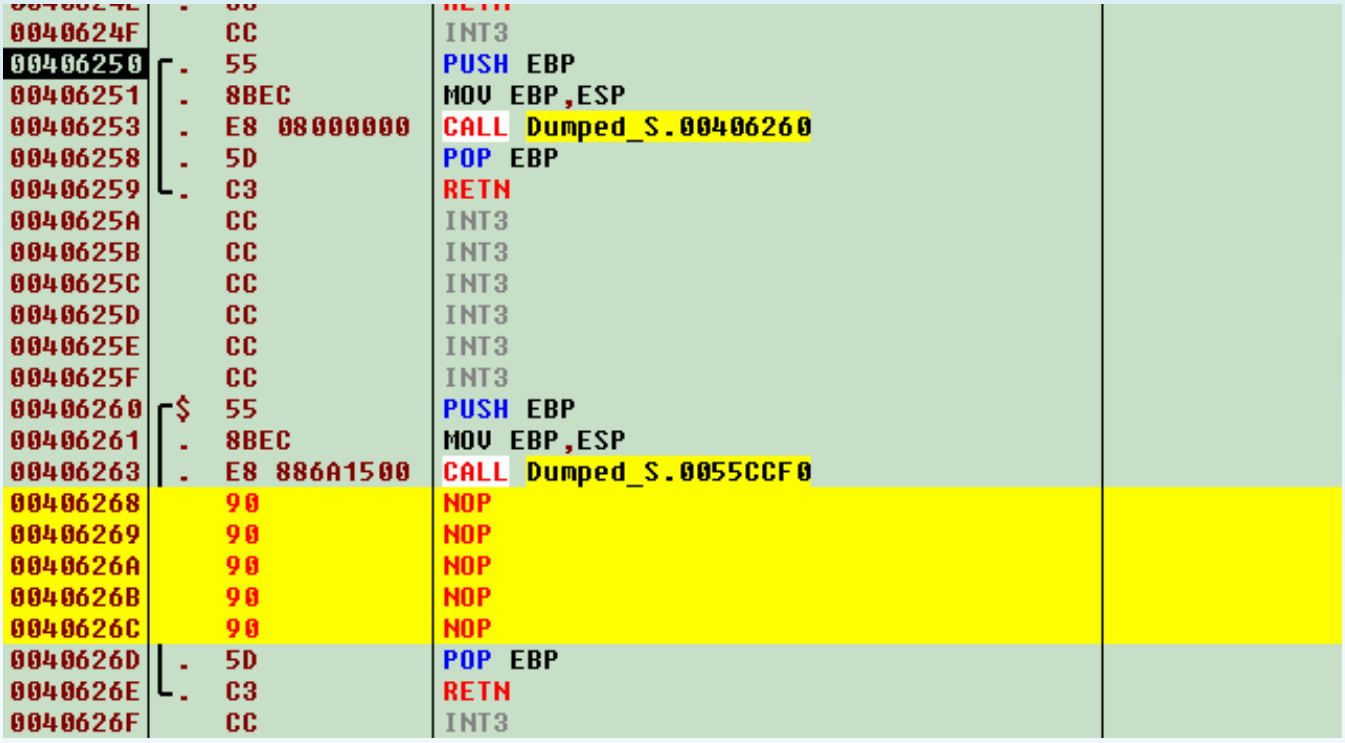
37. Press **Enter** to function **Call** spotting bright yellow



38. Set 1 BreakPoint nhuhinh in order Call, Press **Shift + F9 25 times** and hit **F7**



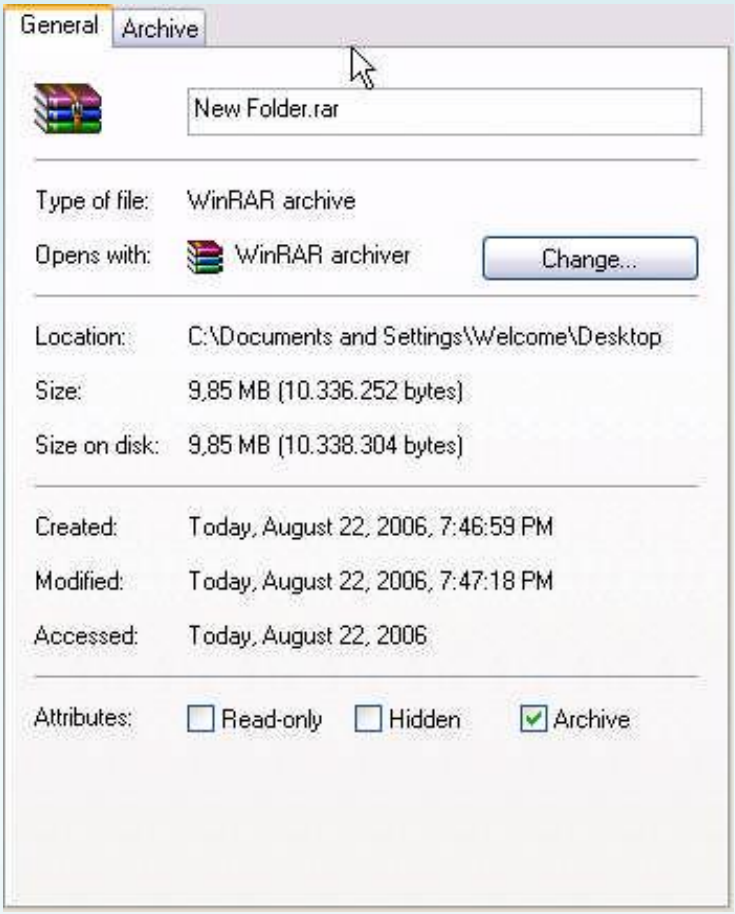
39. Call the NOP command



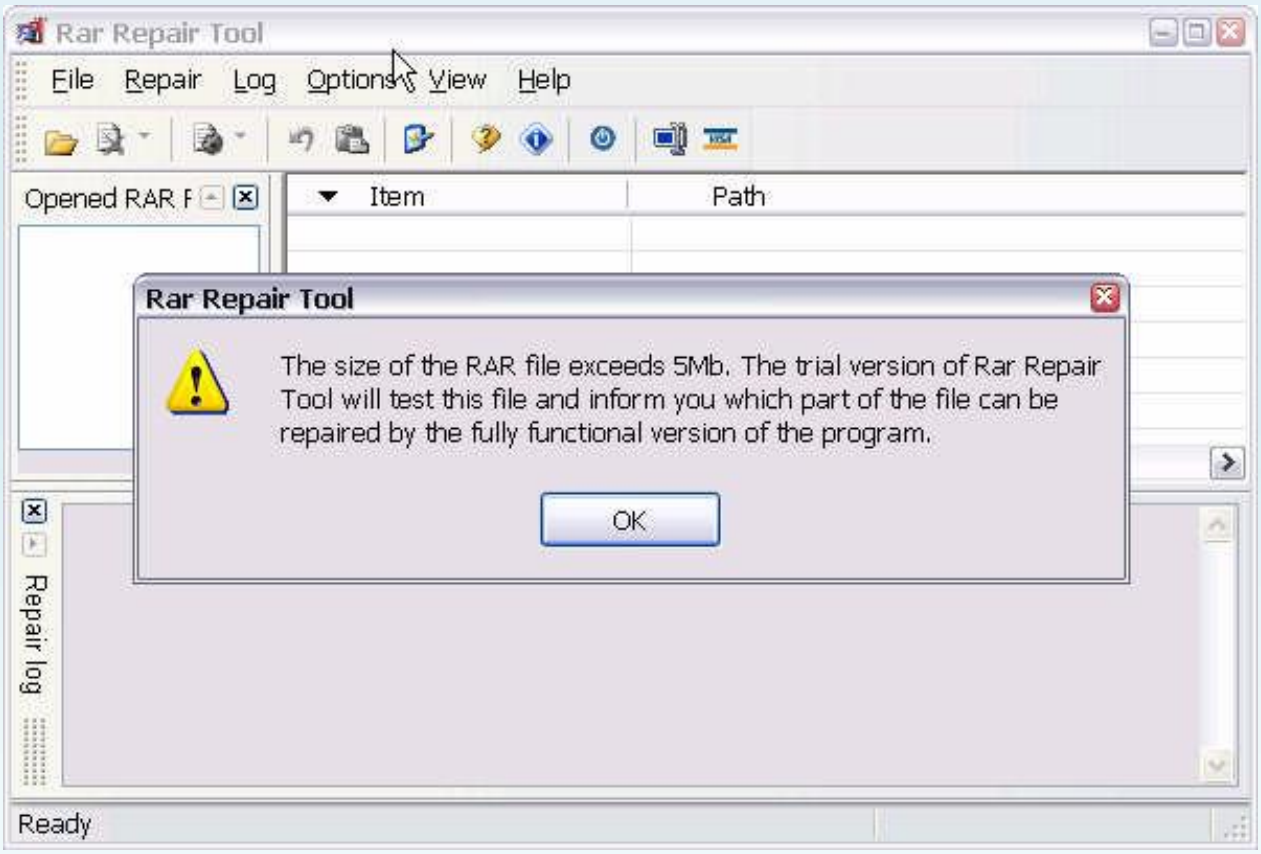
40th Save File Run Try Again ... . Hehehehe. Lickerish run, they end it kneel ...
Unpacked successful!

I V. C c k i n g:

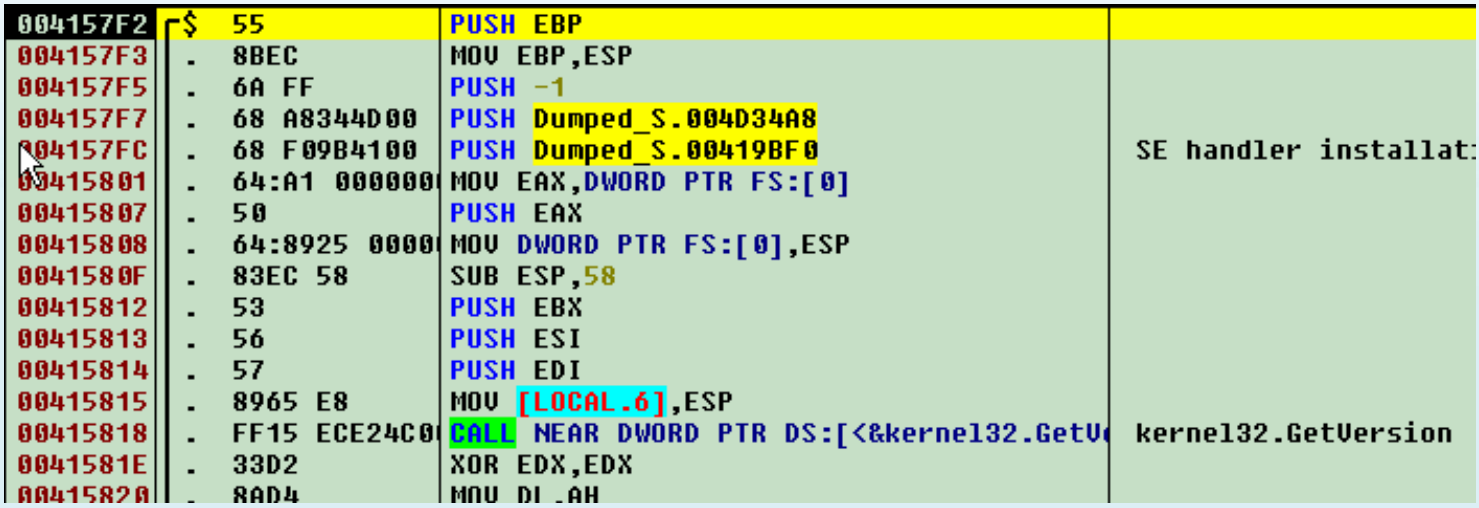
_ Preparing 1 *. RAR files have storage> 5Mb



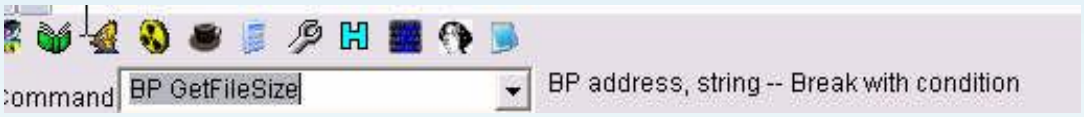
Unpacked _Run File and select File this



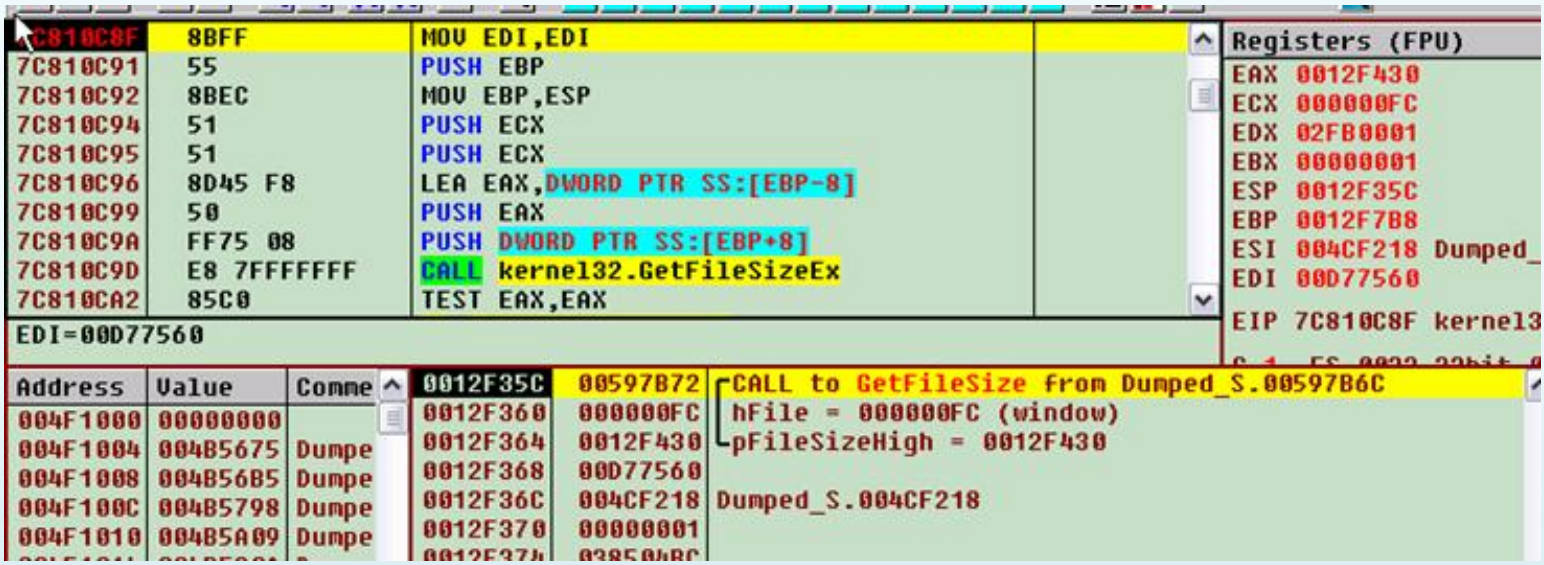
_ Bung the NAG teaching tools, is out ... it has limited storage files larger than 5Mb ... No need to think it is also bít CheckFileSize ... So we can use to Crack GetFileSize Ham this child ... OK, it is , and load files to OllyDBG Unpacked



_ Press **Shift + F9** to Run Soft completely, **Alt + F1** to enter **BP GetFileSize**



Select File _ *. RAR was prepared with the amount> 5Mb and you will stop here



_ **Alt + F9** to you here

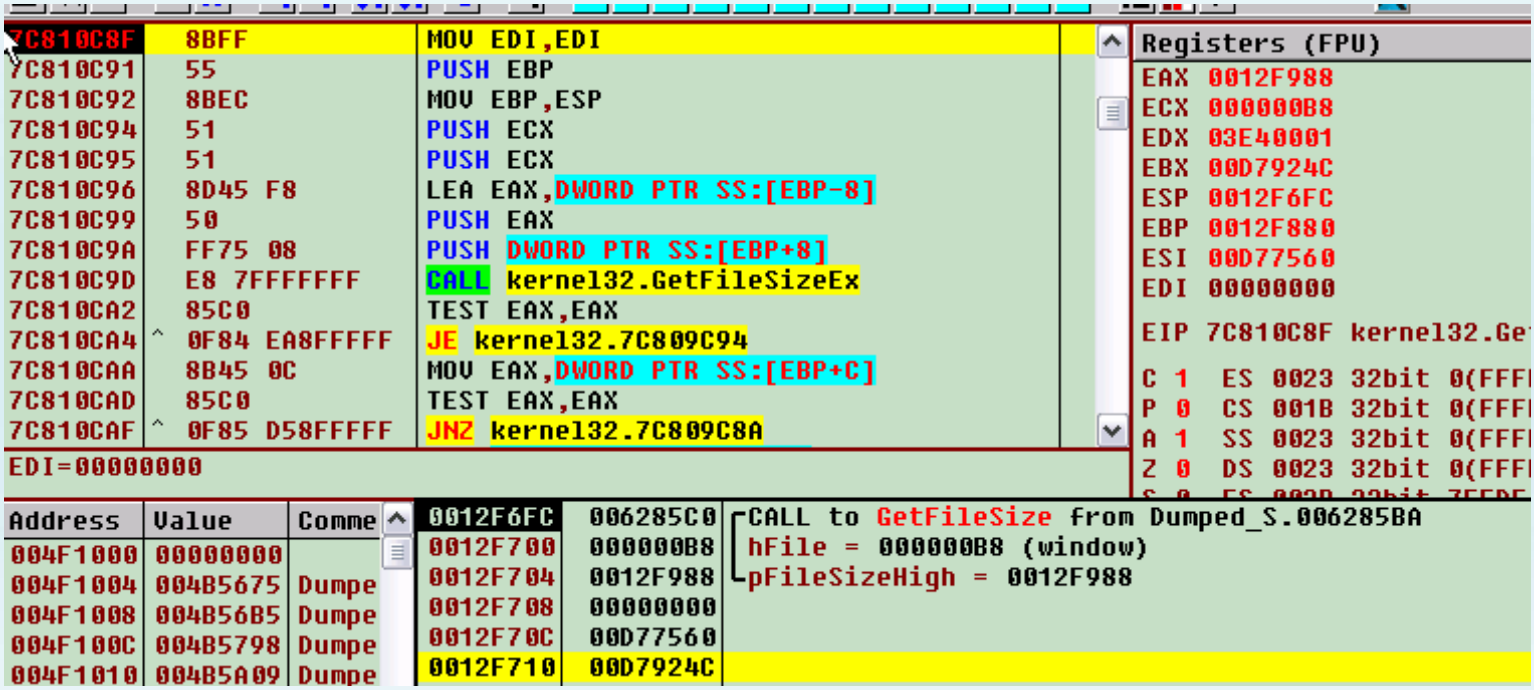
```
00597B63   F3:          PREFIX REP:                          Superfluous prefix
00597B64   8B09         MOV ECX,DWORD PTR DS:[ECX]
00597B66   53           PUSH EBX
00597B67   8BD9         MOV EBX,ECX
00597B69   871C24       XCHG DWORD PTR SS:[ESP],EBX
00597B6C   FF15 94E24C00 CALL NEAR DWORD PTR DS:[<&kernel32.GetF: kernel32.GetFileSize
00597B72   E8 3ED2FBFF  CALL Dumped_S.00554DB5
00597B77   5A           POP EDX
00597B78   B5 4D        MOV CH,4D
00597B7A   60           PUSHAD
00597B7B   60           PUSHAD
```

_ Very gently **NOP** Ham **Call GetFileSzie**

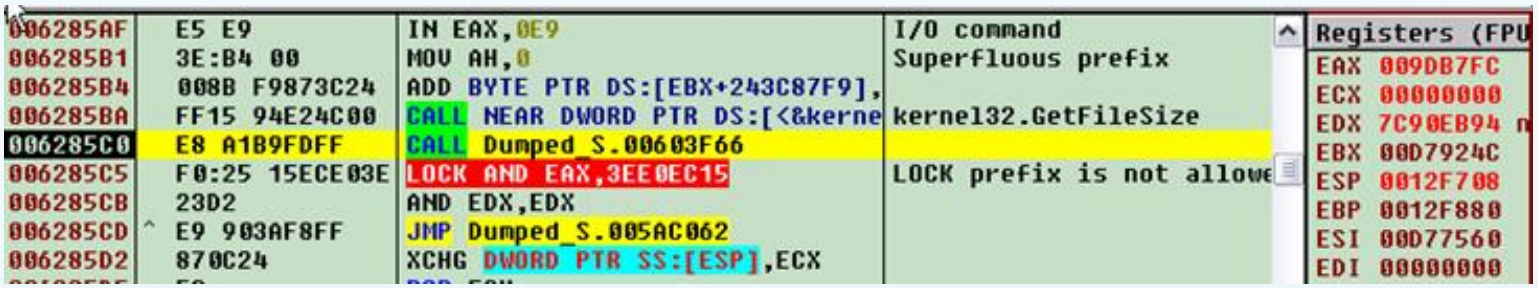
```
00597B64   8B09         MOV ECX,DWORD PTR DS:[ECX]
00597B66   53           PUSH EBX
00597B67   8BD9         MOV EBX,ECX
00597B69   871C24       XCHG DWORD PTR SS:[ESP],EBX
00597B6C   90           NOP
00597B6D   90           NOP
00597B6E   90           NOP
00597B6F   90           NOP
00597B70   90           NOP
00597B71   90           NOP
00597B72   E8 3ED2FBFF  CALL Dumped_S.00554DB5
00597B77   5A           POP EDX
```

_ **Save** the file and run the test results. Load File> 5Mb to do springiness **NAG** parentheses is the way it nỗi subject dek Save the results after conducting the Fix File Rar fail. Hichic ... quite Láu the Star ko load file just to patch **OllyDBG,** Press **Shift + F9** to run completely, select the file, type **Alt + F1** to **Bp GetFileSize and** nhuhinh

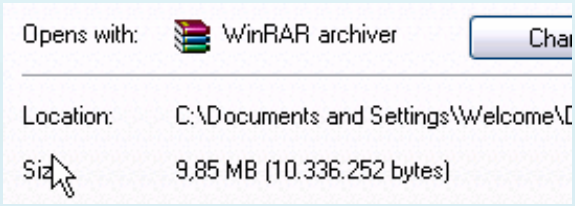
_ Select seats for Save need results and we will stop in Olly



_ Press **Alt + F9**



_ Observation you will see storage *. Rar file is contained in the acceptance on **EAX**



_ Where you can do **NOP** raw bạo nhutren that need lithe little children it is a new subject

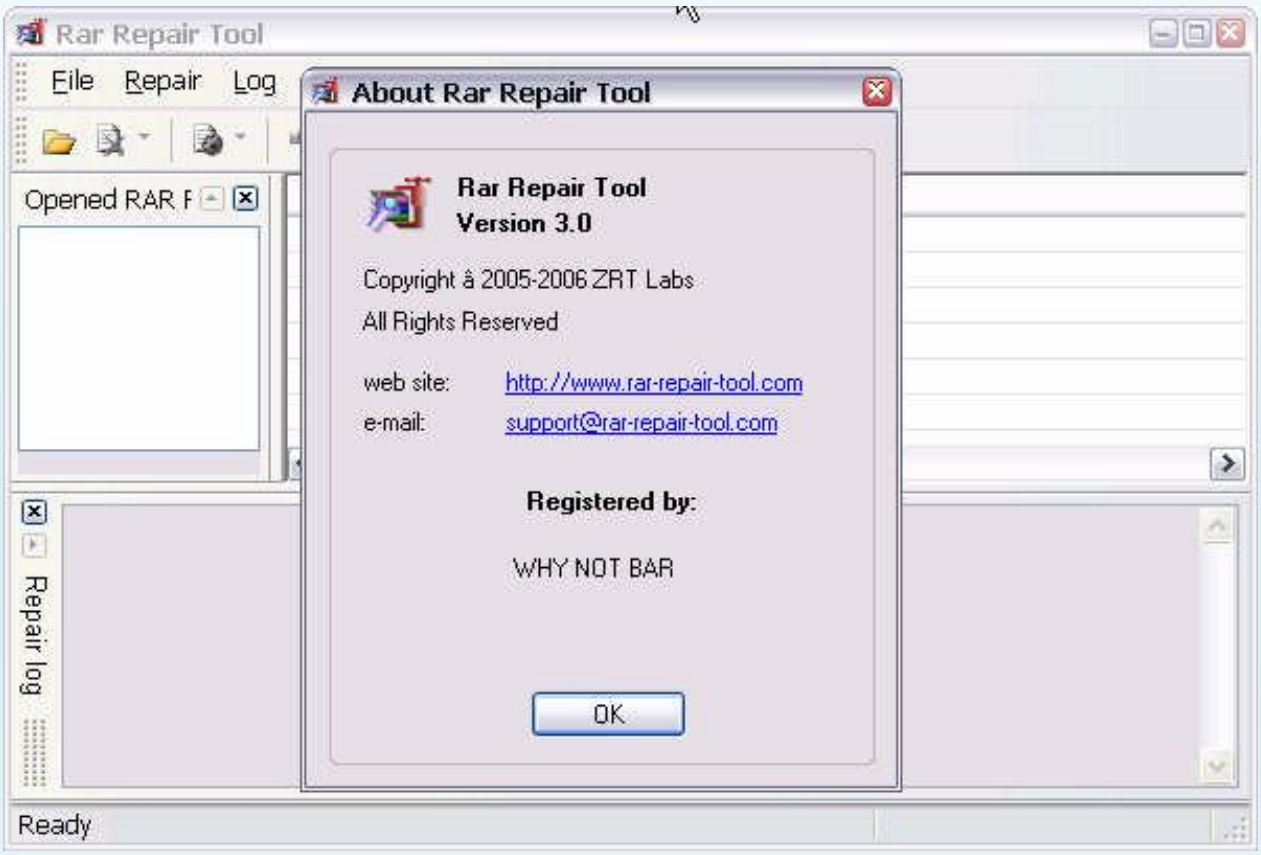
```
006285B1   3E:B4 00      MOV AH,0                    Superfluous prefix
006285B4   008B F9873C24 ADD BYTE PTR DS:[EBX+243C87F9],
006285BA   90            NOP
006285BB   58            POP EAX
006285BC   58            POP EAX
006285BD   90            NOP
006285BE   90            NOP
006285BF   90            NOP
006285C0   E8 A1B9FDFF   CALL Dumped_S.00603F66
006285C5   F0:25 15ECE03E LOCK AND EAX,3EE0EC15      LOCK prefix is not allowe
006285CB   23D2          AND EDX,EDX
006285CD ^ E9 903AF8FF   JMP Dumped_S.005AC062
006285D2   870C24        XCHG DWORD PTR SS:[ESP],ECX
006285D5   59            POP ECX
006285D6   50            PUSH EAX
```

_ Save the file .... Test try hahahha ... **Full Function** ... gòi only hours each eye is thistly thui

_ To treat thui load on **"UltraEdit-32"** Search string *Unregis* you will come

```
)00f12c0h: 0F 00 4C 00 57 00 4C 00 86 00 4C 00 2F 01 4C 00 ; ..L.W.L.†.L./.L.
)00f12d0h: 5C 01 4C 00 89 01 4C 00 B6 01 4C 00 57 02 4C 00 ; \.L.‰.L.¶.L.W.L.
)00f12e0h: 19 03 4C 00 7B 03 4C 00 71 05 4C 00 00 00 00 00 ; ..L.{.L.q.L.....
)00f12f0h: 00 00 00 00 25 4C 41 00 6F 75 41 00 AE DB 41 00 ; ....%LA.ouA.®ÛA.
)00f1300h: 28 7F 49 00 86 8C 41 00 00 00 00 00 00 00 00 00 ; (□I.†ŒA.........
)00f1310h: 56 DC 41 00 00 00 00 00 00 00 00 00 97 8C 41 00 ; VÜA.........—ŒA.
)00f1320h: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ; ................
)00f1330h: 55 4E 52 45 47 49 53 54 45 52 45 44 20 43 4F 50 ; UNREGISTERED COP
)00f1340h: 59 20 2D 20 50 4C 45 41 53 45 20 52 45 47 49 53 ; Y - PLEASE REGIS
)00f1350h: 54 45 52 00 53 65 72 69 61 6C 4E 75 6D 62 65 72 ; TER.SerialNumber
)00f1360h: 00 00 00 00 52 65 67 69 73 74 72 61 74 69 6F 6E ; ....Registration
)00f1370h: 4E 61 6D 65 00 00 00 00 2E 25 64 00 20 00 00 00 ; Name.....%d. ...
)00f1380h: 25 64 2E 25 64 00 00 00 6D 61 69 6C 74 6F 3A 00 ; %d.%d...mailto:.
)00f1390h: 43 34 00 00 43 33 00 00 43 32 00 00 43 6F 6C 75 ; C4..C3..C2..Colu
)00f13a0h: 6D 6E 73 57 69 64 74 68 00 00 00 00 43 31 00 00 ; mnsWidth....C1..
)00f13b0h: C8 13 4F 00 B8 13 4F 00 72 72 74 75 70 74 6D 70 ; È.O.¸.O.rrtuptmp
)00f13c0h: 2E 64 61 74 00 00 00 00 72 72 74 70 74 6D 70 00 ; .dat....rrtptmp.
```

_ To insert name them any treatment that they do have the ideas .... But they put the name of the children ....



_ If any aged Chum can Code Kegen Newbie ... She should be able to do is obscure the Pro level, they should abandon the thui other Bro. Bibi .. appointment in tut other time they called the man to tí This reduction xo chết ....

G re e Ts italy Ou F l t: *C om p ut _ An e r l e g, e Zombi, M oo n b by a, c H a grape, B e n i n a k e*

i n a m no w a r, o i Z, D x u e, M e rc, i l e g HT pho where x, c k ybo Tri italy, T a k a d a i a

midiot, and e nth a n d i n e, a nd you ...!

Ordenar all summer ... ...

Nha Trang, on 23 8 2006

Why Not Bar

Unpacking ActiveMark level 2 entry point

I. I nt r o d u c t i on:

There are a lot of game when down by Pack **ActiveMark.** Protect the one developed for this game and have caused many difficulties for us when the game meat that the presence of it. At first she has 1 tut Manual unpack ActiveMark 5.xx and to officially ActiveMark dust they write more about 1 tut unpack ActiveMark but as **level 2 entry point.** This type is quite prevalent and quite popular request should she wrote. In tut they presented to unpack ActiveMARK **level 2 entry point** to use tuManual Tool available. How how it will read more clearly and then ... ..

II. T oo l s:

• Tool and the AC A P l a c in g a n d ứng:

- ***Oll italy B D G 1. 1 0***
- ***Lord P E 1. 4***
- ***H x W e o r k s hop 4. 2***
- ***I mport R E C 1. 6***
- ***P I D E 0. 9 4va pl in the G E O F P r e d in***
- ***A M D u m p e r f o r e v CTI A M A R K***
- ***Activ e M a r k. V e rs i on***

• T a rg e t: **T h eDa V i n c i d e C o**
Hom e p a g e: http: / / w w w. b i g h f is a g e m s. C o m /

III. U n pa c k i n g:

1st T im e O PVA D u m u ll PF:

C á c h 1: Code of the al

_ D ung **Eid P** o c i t a t e rg a cop ck h a k o italy and use lugin P **O F EP de r i n**

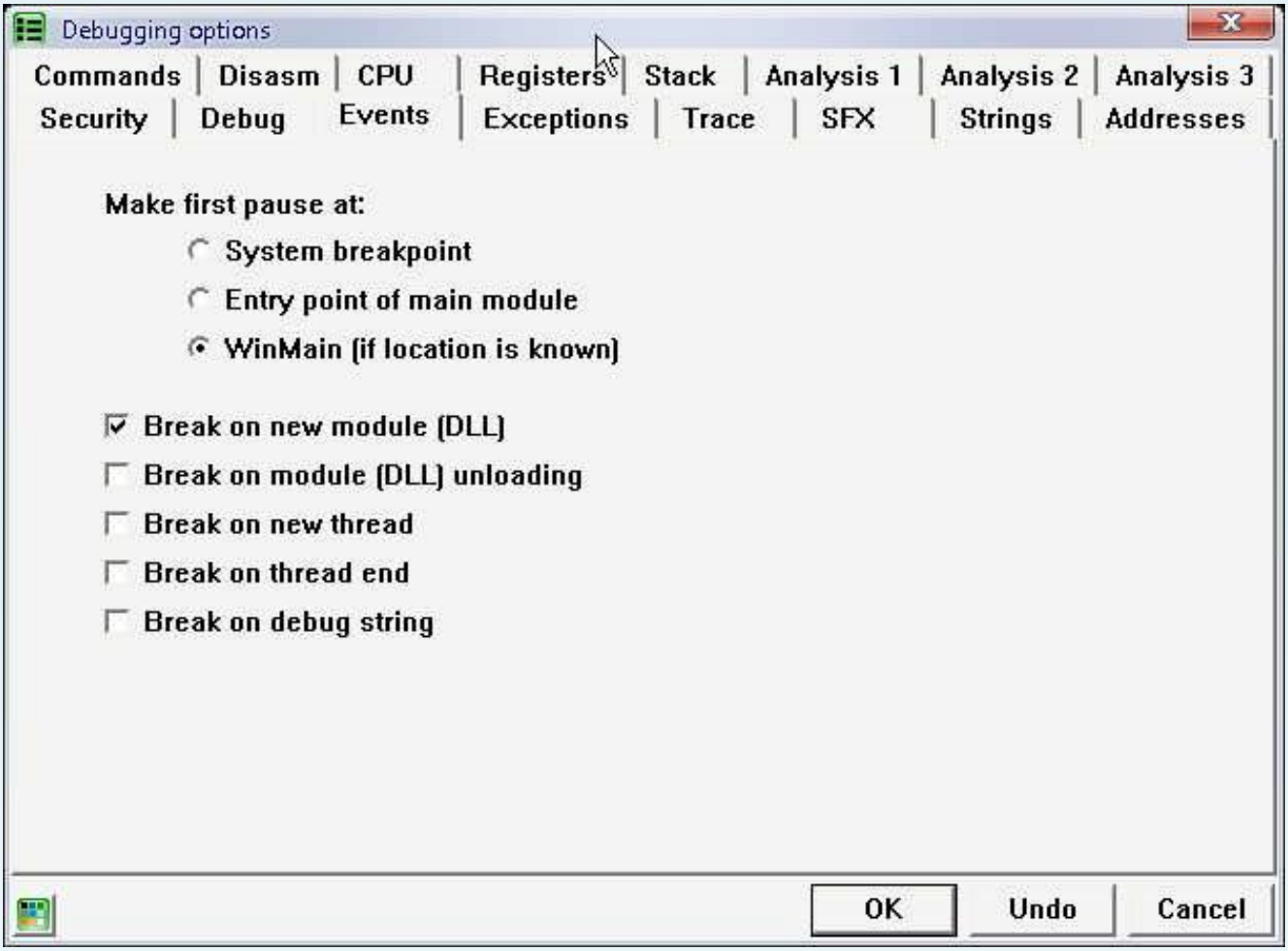
_ Although **PEiD** ko identify the target is by Protect **ActiveMark.** To assert that you can use **ActiveMark. Version**

_ Nhuvay we know exactly which version is used and ActiveMARK target this **OEP = 005EE7B3.** now we load

directly to Target **OllyDBG** and we stop here

Address	Hex dump	Disassembly	Comment
00738000	8925 04107500	MOV DWORD PTR DS:[751004],ESP	
00738006	68 2E807300	PUSH 73802E	
0073800B	7F 03	JG SHORT 00738010	00738010
0073800D	90	NOP	
0073800E	8D3F	LEA EDI,DWORD PTR DS:[EDI]	
00738010	7E 04	JLE SHORT 00738016	00738016
00738012	EB 02	JMP SHORT 00738016	00738016
00738014	FA	CLI	
00738015	B6 64	MOV DH,64	
00738017	FF35 00000000	PUSH DWORD PTR DS:[0]	
0073801D	64:8925 00000000	MOV DWORD PTR FS:[0],ESP	
00738024	EB 03	JMP SHORT 00738029	00738029
00738026	D089 A3E96504	ROR BYTE PTR DS:[ECX+465E9A3],	
0073802C	0000	ADD BYTE PTR DS:[EAX],AL	

_ Press **Alt** + **O** and select as follows:

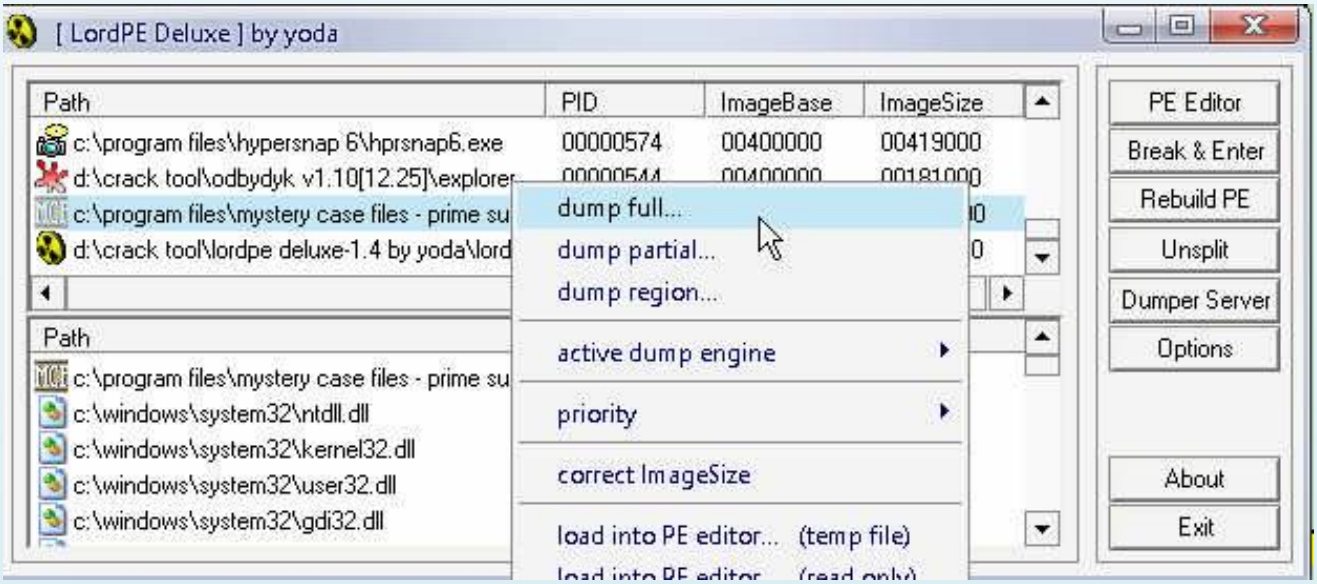


_ **Press** Alt + **F1** and **005EE7B3 He** Set 1

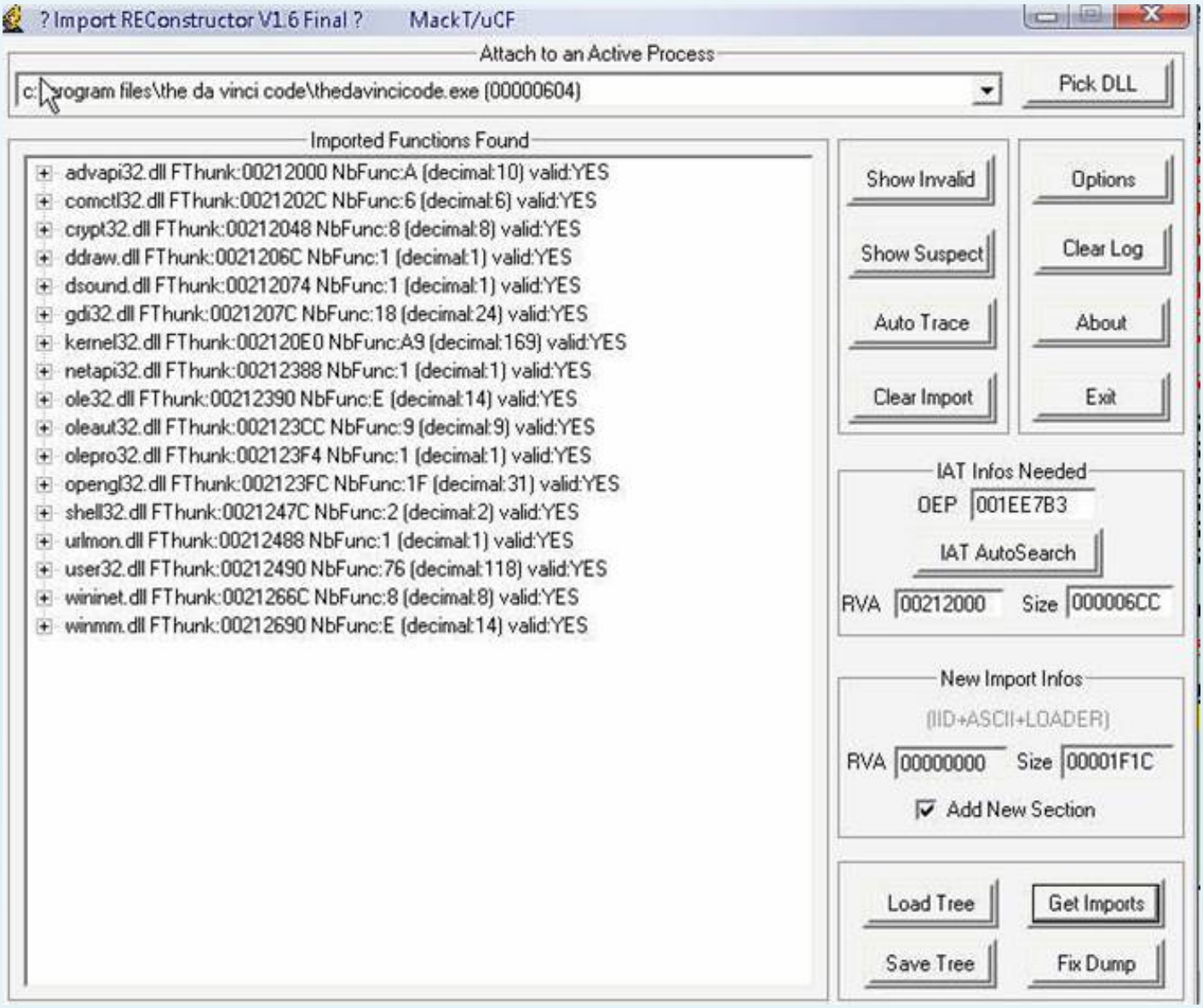
_ Continue to press **F9** to stop at the **Set Breakpoint** and is **OEP** (At this target, we hit 12 times F9)

Address	Hex dump	Disassembly	Comment
005EE7B3	55	PUSH EBP	<==OEP
005EE7B4	8BEC	MOV EBP,ESP	
005EE7B6	6A FF	PUSH -1	
005EE7B8	68 08F75000	PUSH 50F708	
005EE7BD	68 904B5F00	PUSH 5F4B90	
005EE7C2	64:A1 00000000	MOV EAX,DWORD PTR FS:[0]	
005EE7C8	50	PUSH EAX	
005EE7C9	64:8925 00000000	MOV DWORD PTR FS:[0],ESP	
005EE7D0	83EC 58	SUB ESP,58	
005EE7D3	53	PUSH EBX	
005EE7D4	56	PUSH ESI	
005EE7D5	57	PUSH EDI	
005EE7D6	8965 E8	MOV DWORD PTR SS:[EBP-18],ESP	
005EE7D9	FF15 24226100	CALL NEAR DWORD PTR DS:[612224	kernel32.GetVersion
005EE7DF	33D2	XOR EDX,EDX	
005EE7E1	8AD4	MOV DL,AH	
005EE7E3	8915 58D46000	MOV DWORD PTR DS:[60D458],EDX	
005EE7E9	8BC8	MOV ECX,EAX	
005EE7EB	81E1 FF000000	AND ECX,0FF	

_Dung **LordPE** to dump Full



_ Open **ImportREC** select and fill **PID OEP**

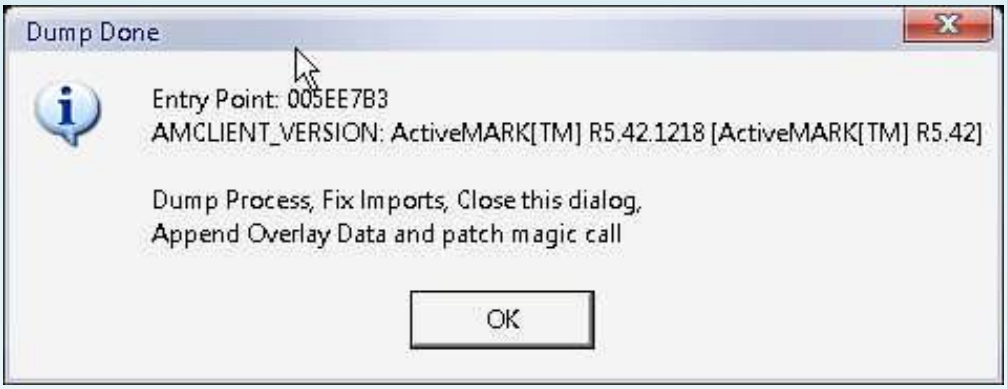


_ Click **Fix dump** select File **dumped.exe. Dumped_.exe** Run Test File. hahahaha ... they run chit line .... We need to add 1 more step encrypted data is copied from the original file to file, the file again **Dumped_.exe** new run

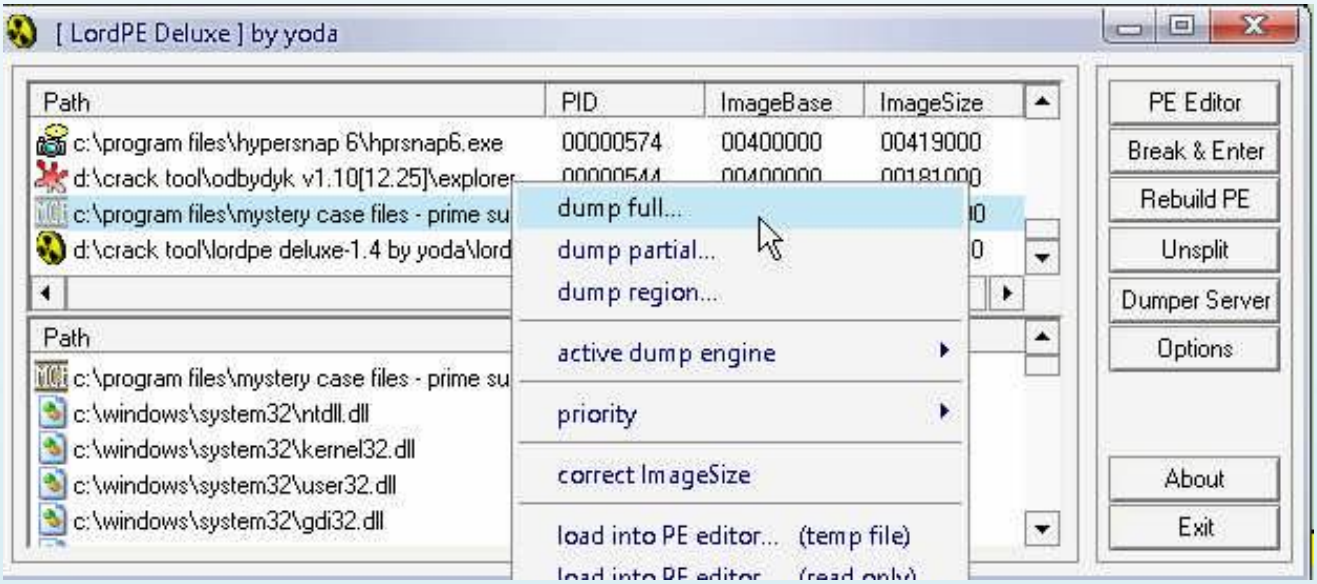
C á c h 2: d ùn oo g l t a d m u m p e r for r Ac t iv e M A R K

_ M in **A d m m u pe r:**

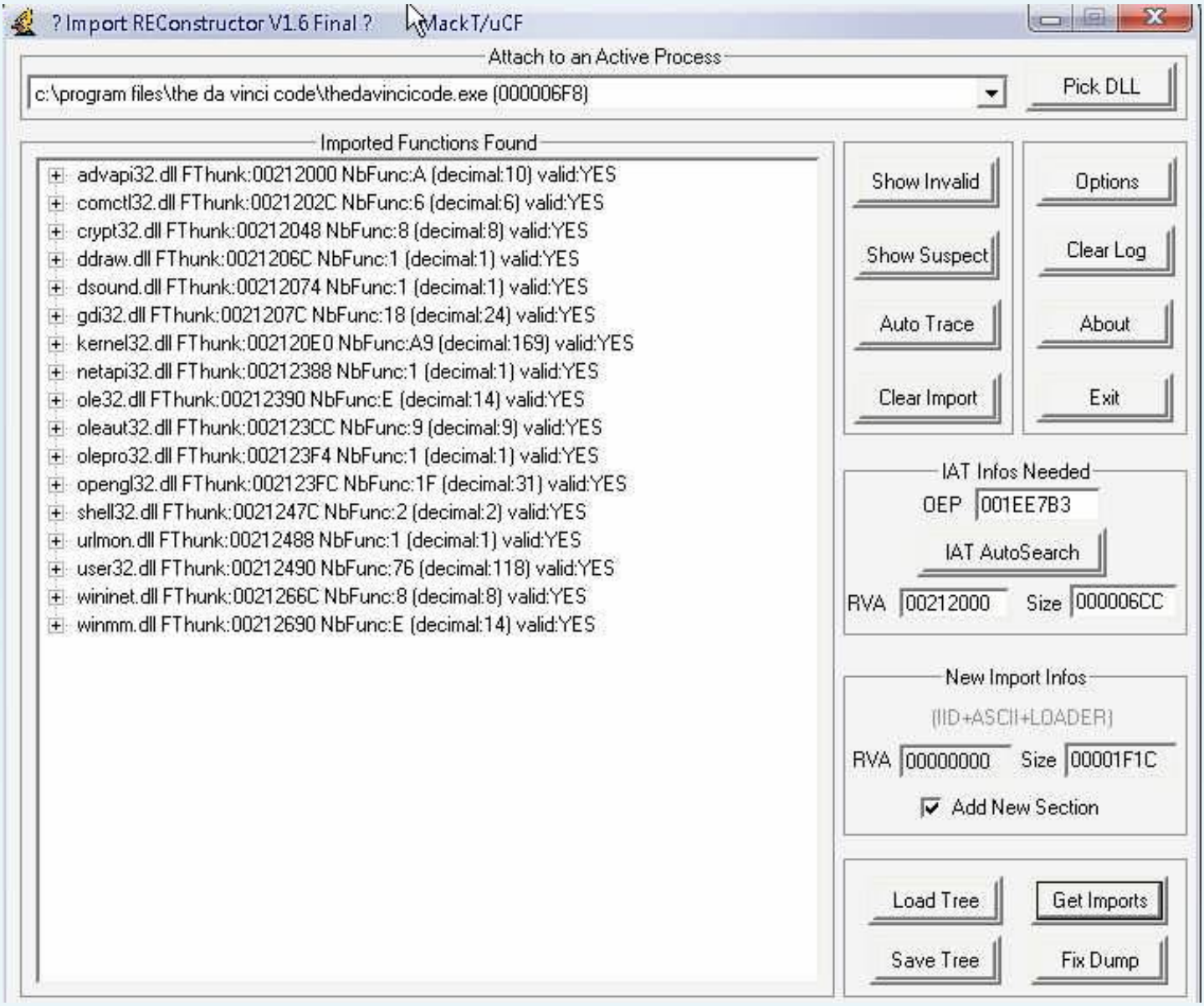
_ Select File **"TheDaVinciCode.exe"** wait you will see



___Using **LordPE** to dump Full



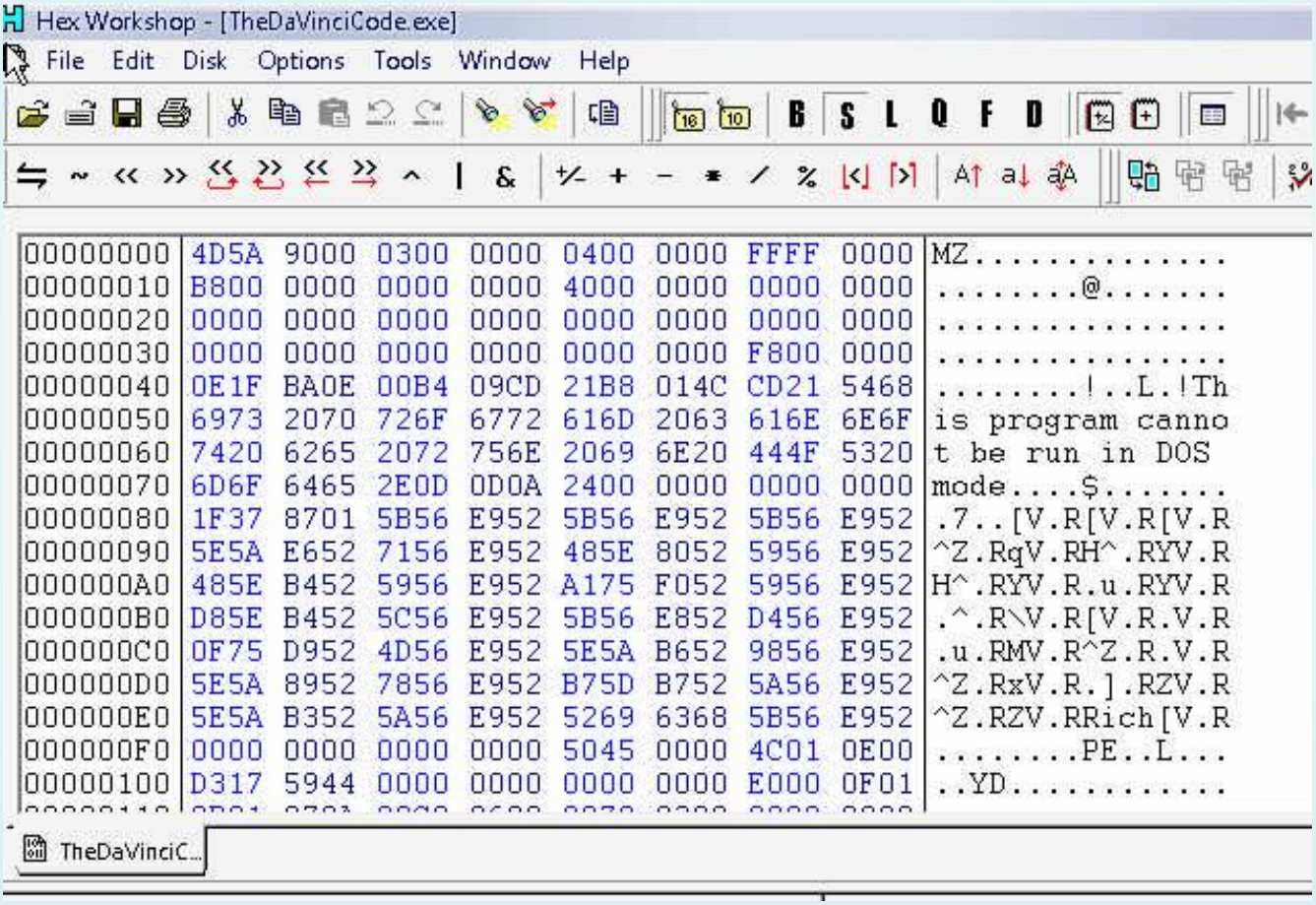
_ Open **ImportREC** select and fill **PID OEP**



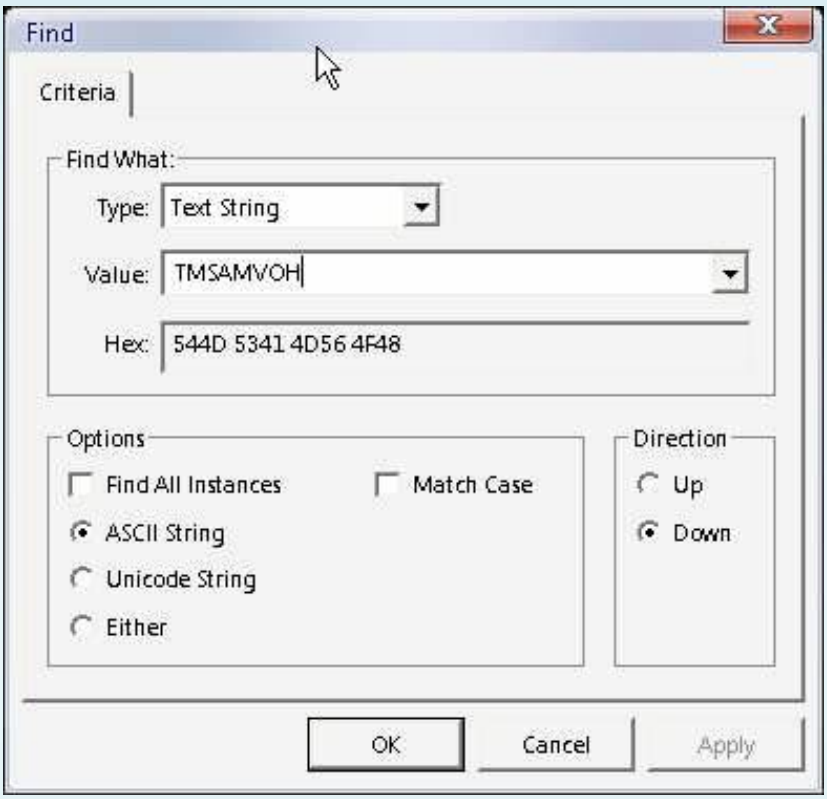
_ Hehe .. result similar way 1

2nd F i x i n g D e d p um _. E car

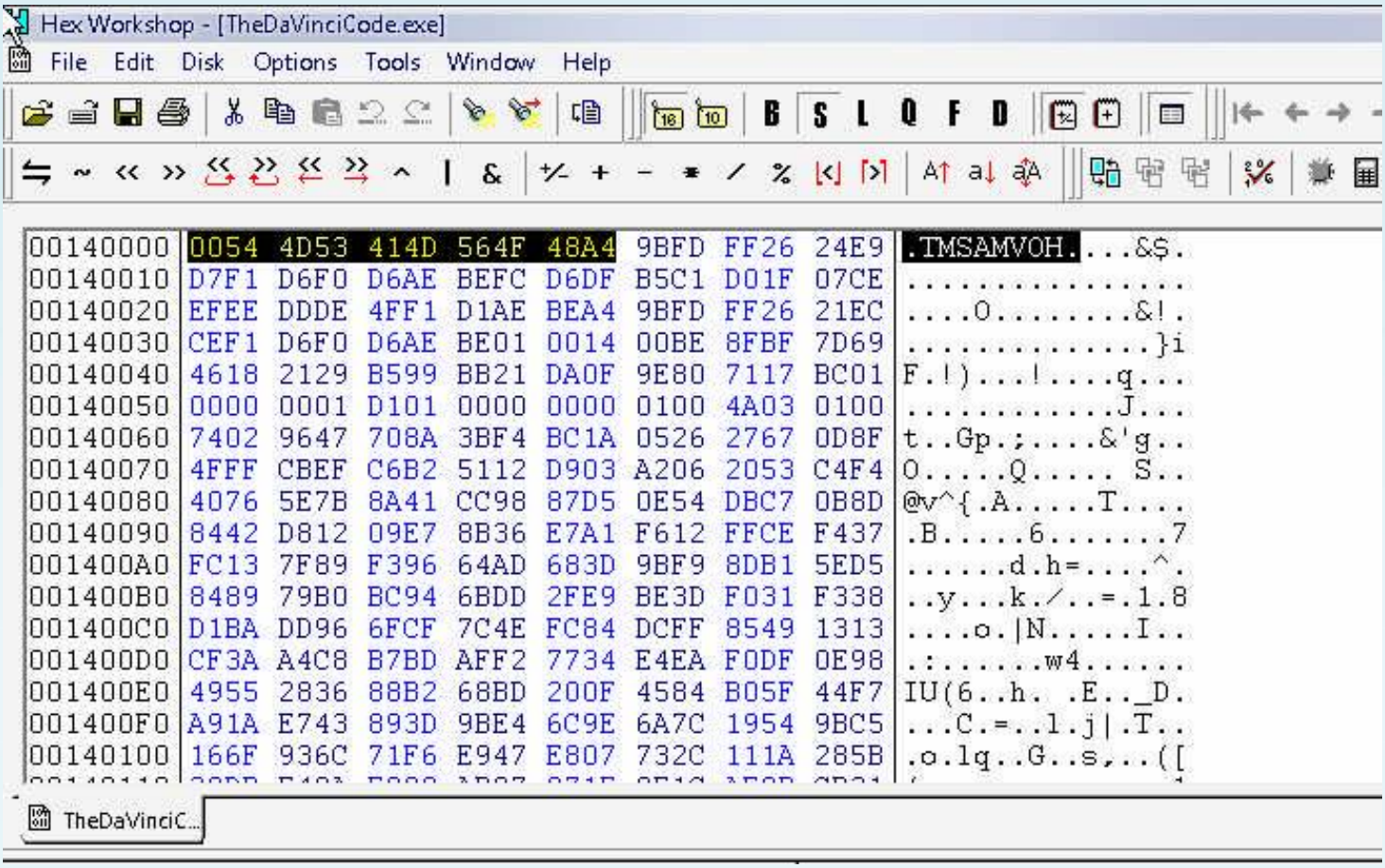
Bay Time we conducted Fix File **Dumped.exe.** Running ***Hex Workshop 4.2*** and select File **"TheDaVinciCode.exe"** and we are as follows



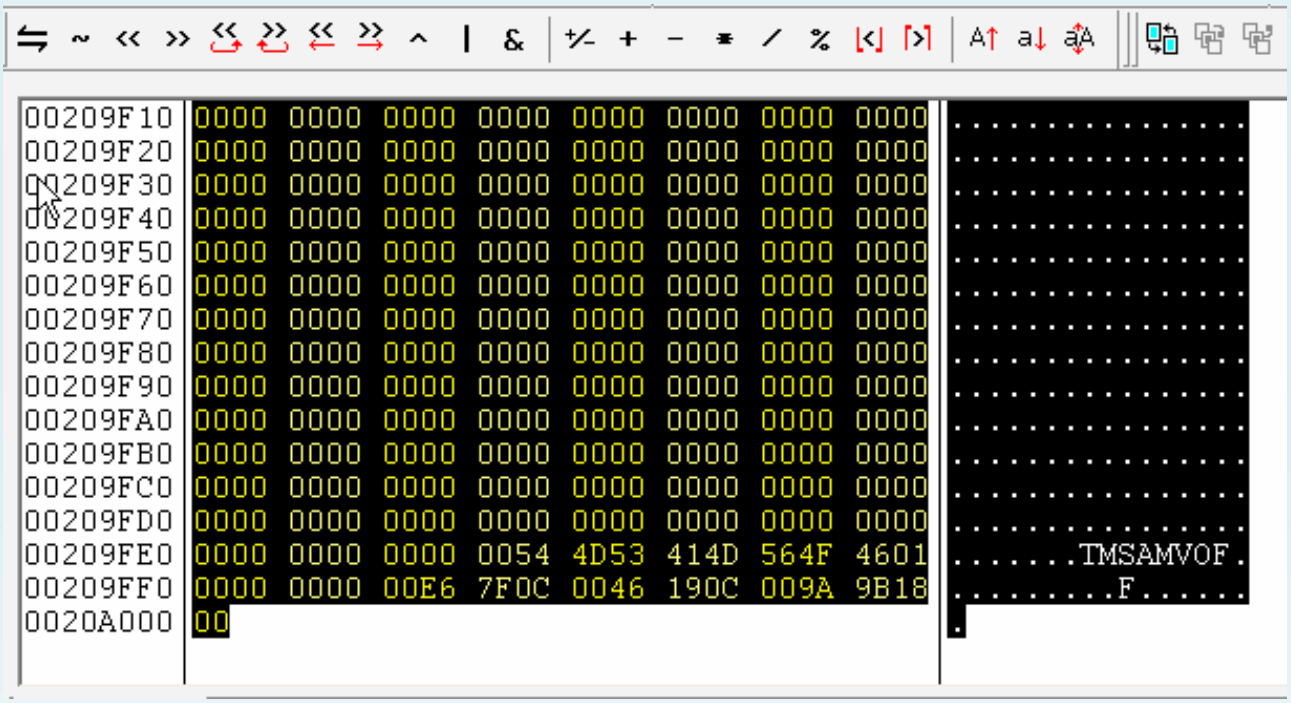
_ Press **Ctrl + F** and type "**TMSAMVOH**"



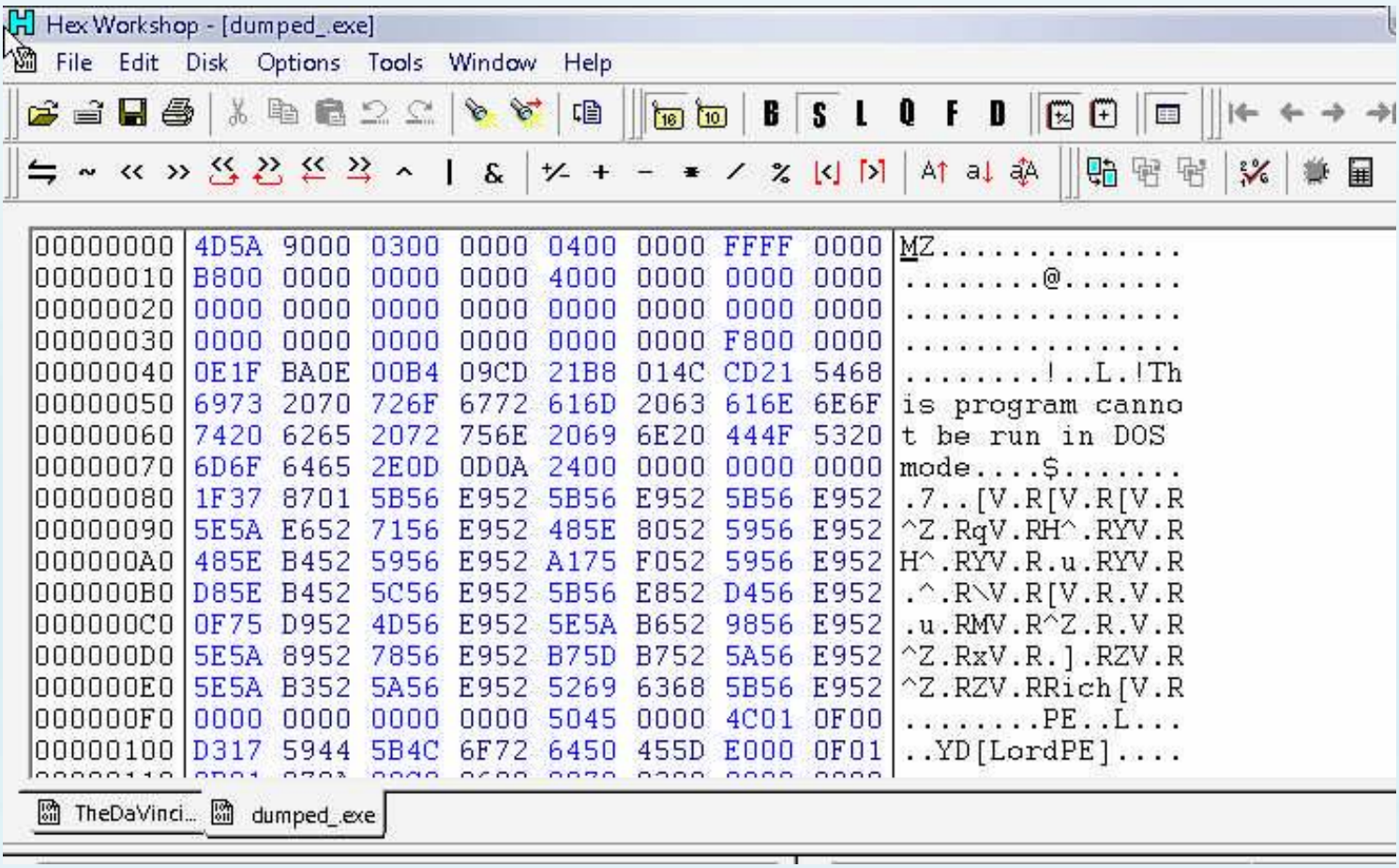
_ Click **OK** to you here



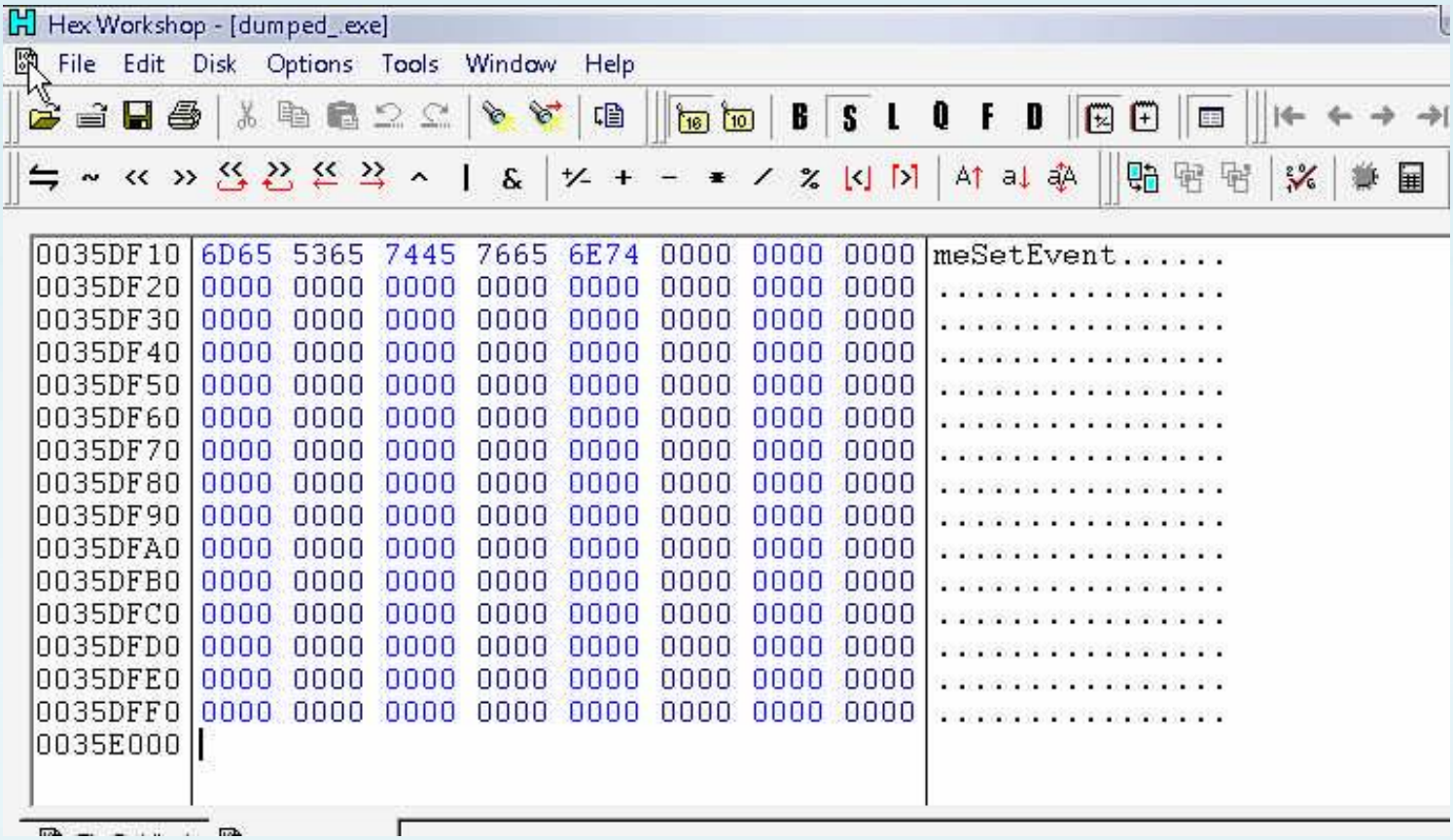
_ Follow from **00140000** to address final



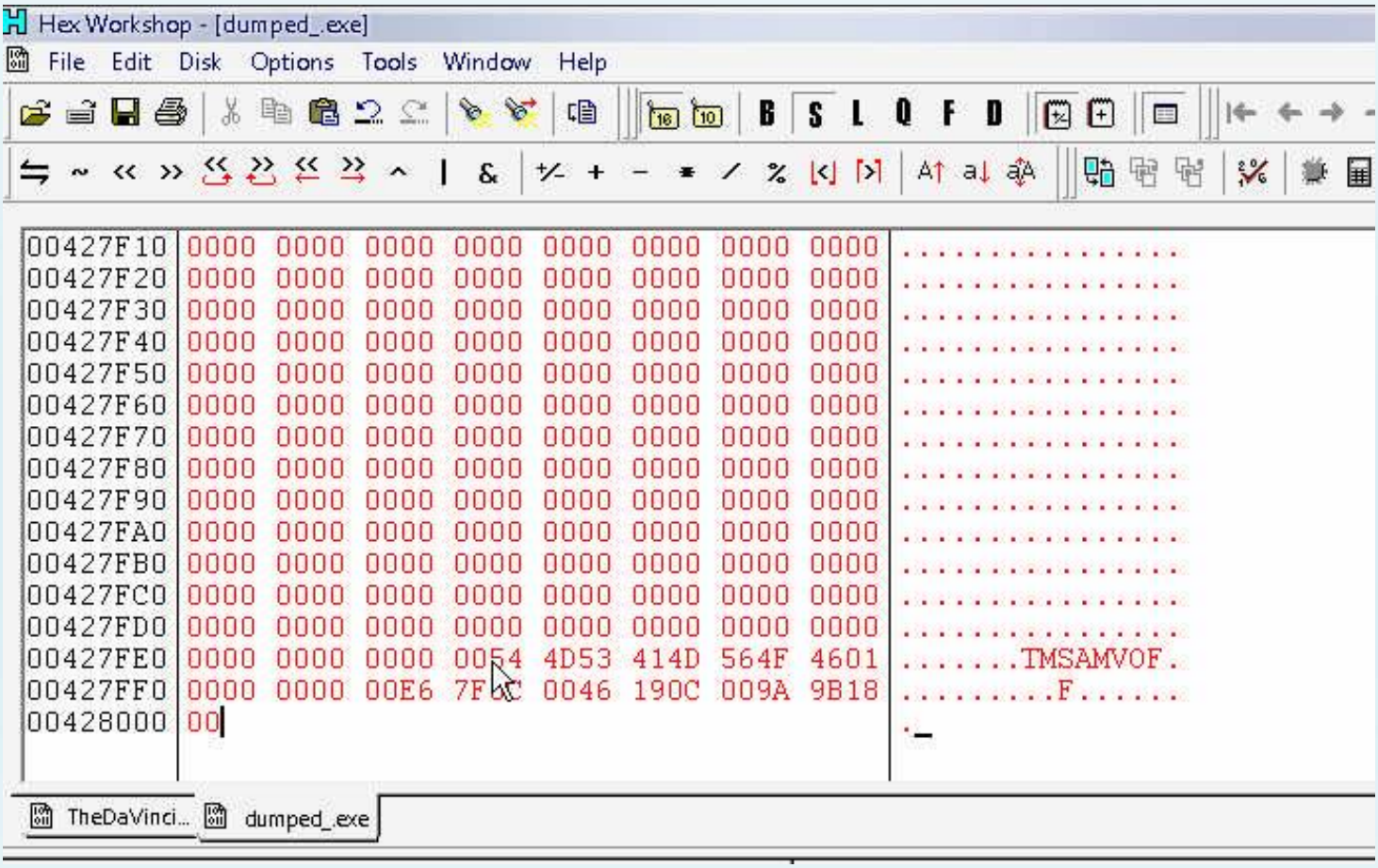
_ Press **Ctrl + C to** copy this code and use ***Hex Workshop 4.2*** to open files **Dumped_.exe**



_ Scroll down to the last address



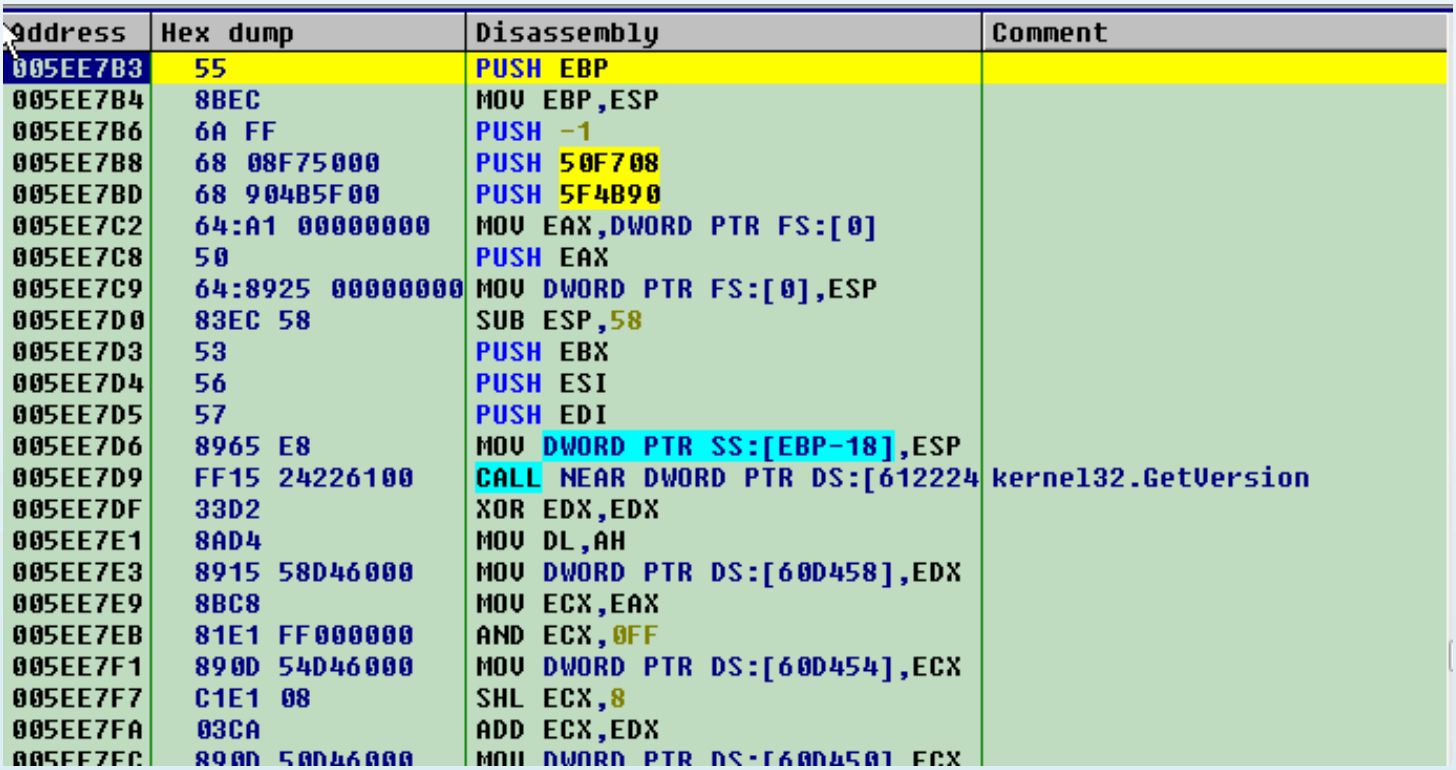
_ Press **Ctrl + V** to Paste the code we **Copy** ago when this



_ **Save** the time and name to **Unpacked.exe.** File test **Unpacked.exe** considered stars ... haha ... Numbness both running File lickerish **Unpacked successful** ... ...

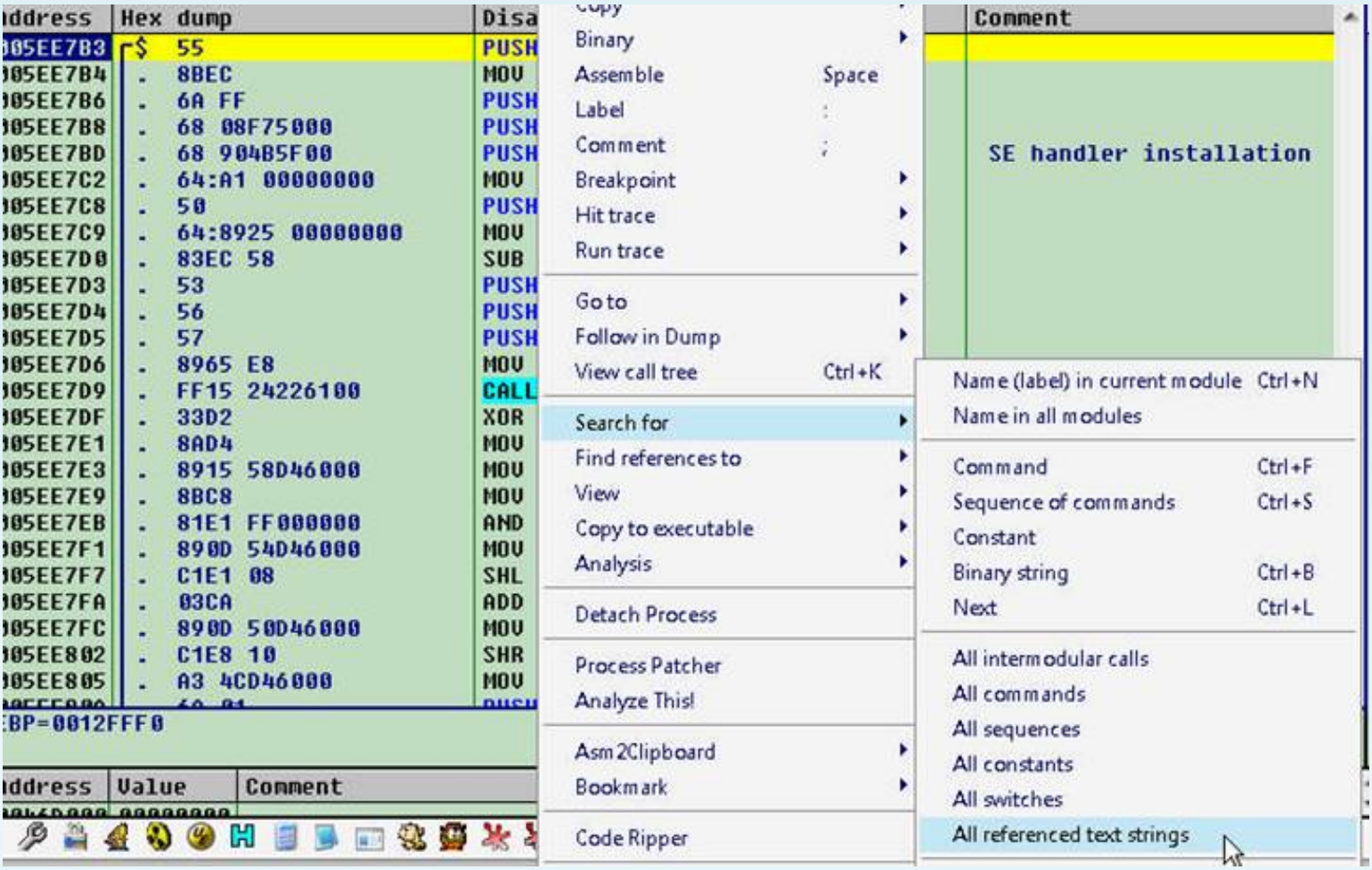
I V. Cr ac k i n g:

Thua win to finish we continue with the task to **Bypass** Cracking the **NAG** and **Remove Time limit** or say otherwise is to get the Full. Speaking as a Load File Unpacked.exe to Olly

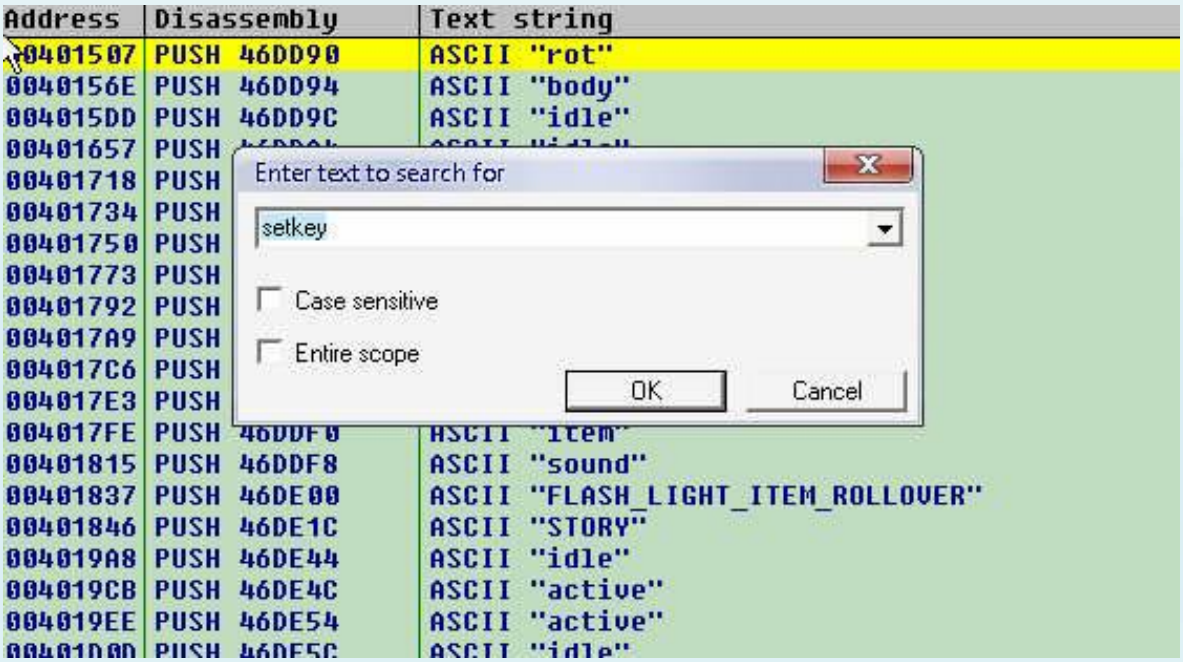


Address	Hex dump	Disassembly	Comment
005EE7B3	55	PUSH EBP	
005EE7B4	8BEC	MOV EBP,ESP	
005EE7B6	6A FF	PUSH -1	
005EE7B8	68 08F75000	PUSH 50F708	
005EE7BD	68 904B5F00	PUSH 5F4B90	
005EE7C2	64:A1 00000000	MOV EAX,DWORD PTR FS:[0]	
005EE7C8	50	PUSH EAX	
005EE7C9	64:8925 00000000	MOV DWORD PTR FS:[0],ESP	
005EE7D0	83EC 58	SUB ESP,58	
005EE7D3	53	PUSH EBX	
005EE7D4	56	PUSH ESI	
005EE7D5	57	PUSH EDI	
005EE7D6	8965 E8	MOV DWORD PTR SS:[EBP-18],ESP	
005EE7D9	FF15 24226100	CALL NEAR DWORD PTR DS:[612224	kernel32.GetVersion
005EE7DF	33D2	XOR EDX,EDX	
005EE7E1	8AD4	MOV DL,AH	
005EE7E3	8915 58D46000	MOV DWORD PTR DS:[60D458],EDX	
005EE7E9	8BC8	MOV ECX,EAX	
005EE7EB	81E1 FF000000	AND ECX,0FF	
005EE7F1	890D 54D46000	MOV DWORD PTR DS:[60D454],ECX	
005EE7F7	C1E1 08	SHL ECX,8	
005EE7FA	03CA	ADD ECX,EDX	
005EE7FC	890D 50D46000	MOV DWORD PTR DS:[60D450],ECX	

_ Click to select the image and



_ Next we work under nhuhinh



_ Click **OK** and **Ctrl + L,** we will come

```
0056DEC6  PUSH 4A8598              ASCII "OPEN_KILL"
0056E062  ASCII "p~",0
0056E1C3  MOV EDI,4A4F88           ASCII "GoOnline"
0056E215  PUSH 4A869C              ASCII "GetOfflineResponse"
0056E528  PUSH 4A8564              ASCII "out of memory"
0056E6[illegible]  PUSH 4A867C     ASCII "LoadStatePool"
0056E929  DD unpacked.0056E92F     ASCII "4jW"
0056E92E  ASCII "%4jW",0
0056EC22  ASCII "1(",0
0056EE3E  ASCII "#\J<W",0
0056F113  DD unpacked.0056F119     ASCII "mKW"
0056F117  ASCII ">PmKW",0
0056F4D9  ASCII "hyqW",0
0056F5BF  MOV EDI,4A8718           ASCII ".1cn"
0056F9EF  PUSH 4A86EC              ASCII "SetKey"
0057046C  PUSH 4A85D4              ASCII "TIMEOUT_KILL"
0057065E  ASCII "XZ"^W",0
00570763  ASCII "-y",0
00570A5C  ASCII "5c■W",0
00570D36  ASCII "5=■W",0
00570E39  ASCII "Kt"
005713A8  PUSH 4A4F04              ASCII "rb"
0057145B  ASCII "-{",0
005714E2  DD unpacked.0057A9B4     ASCII "PhX%W"
00571931  MOV ESI,4A85E4           ASCII "/stubinfo/shuffling"
00571AF9  ASCII "Nt"
```

Dup _ Click on the yellow one to come

```
Address   Hex dump     Disassembly                          Comment
0056F9E9  .  59        POP ECX
0056F9EA  .  C9        LEAVE
0056F9EB  >  EB 02     JMP SHORT 0056F9EF                   0056F9EF
0056F9ED     FF        DB FF
0056F9EE     24        DB 24                                CHAR '$'
0056F9EF  >  68 EC864A00  PUSH 4A86EC                       ASCII "SetKey"
0056F9F4  .  FF35 FDF95600  PUSH DWORD PTR DS:[56F9FD]       unpacked.0056E809
0056F9FA  .  C3        RET
0056F9FB     58        DB 58                                CHAR 'X'
0056F9FC     5A        DB 5A                                CHAR 'Z'
0056F9FD  .  09E85600  DD unpacked.0056E809
0056FA01  .  83EC 20   SUB ESP,20
0056FA04  .  EB 02     JMP SHORT 0056FA08                   0056FA08
0056FA06     FF        DB FF
0056FA07     15        DB 15
0056FA08  >  8D71 20   LEA ESI,DWORD PTR DS:[ECX+20]
0056FA0B  .  FF35 13FA5600  PUSH DWORD PTR DS:[56FA13]       unpacked.0057783D
0056FA11  .  C3        RET
0056FA12     E8        DB E8
0056FA13  .  3D785700  DD unpacked.0057783D
0056FA17     D0        DB D0
0056FA18  .  E8 4AEA0000  CALL 0057E467                      0057E467
```

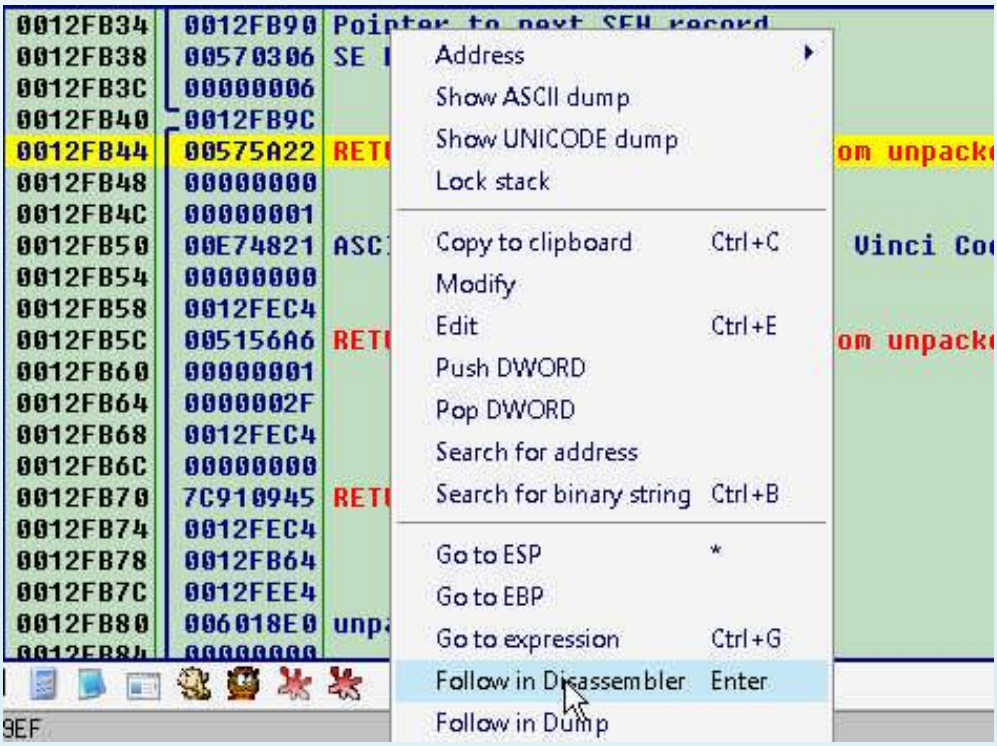
_ Press **F2** to **Set Breakpoint 1** at **56F96F** and press **F9** stop at **Breakpoint Set.** In the window you will see **Stack** as follows:

```
0012F9F4  0059C9F5  unpacked.0059C9F5
0012F9F8  0060AFA0  unpacked.0060AFA0
0012F9FC  00000000
0012FA00  00000000
0012FA04  00000000
0012FA08  00000000
0012FA0C  00000001
0012FA10  00000000
0012FA14  0012FE80
0012FA18  00000001
0012FA1C  0060AFA0  unpacked.0060AFA0
0012FA20  0012FE80
0012FA24  FFFFFFFF
0012FA28  0060AFA0  unpacked.0060AFA0
```

_ Scroll down until you see signs as follows

```
0012FB1C  00000000
0012FB20  00E77900
0012FB24  00000000
0012FB28  00000000
0012FB2C  00000000
0012FB30  0057B9D5  RETURN to unpacked.0057B9D5 from unpacked.005EE794
0012FB34  0012FB90  Pointer to next SEH record
0012FB38  00570306  SE handler
0012FB3C  00000006
0012FB40  0012FB9C
0012FB44  00575A22  RETURN to unpacked.00575A22 from unpacked.00570484
0012FB48  00000000
0012FB4C  00000001
0012FB50  00E74821  ASCII "C:\Program Files\The Da Vinci Code\unpacked.exe"
0012FB54  00000000
0012FB58  0012FEC4
0012FB5C  005156A6  RETURN to unpacked.005156A6 from unpacked.00514F53
0012FB60  00000001
0012FB64  0000002F
0012FB68  0012FEC4
```

_ Hehe ... this game coming gòi targets ... click to select the image



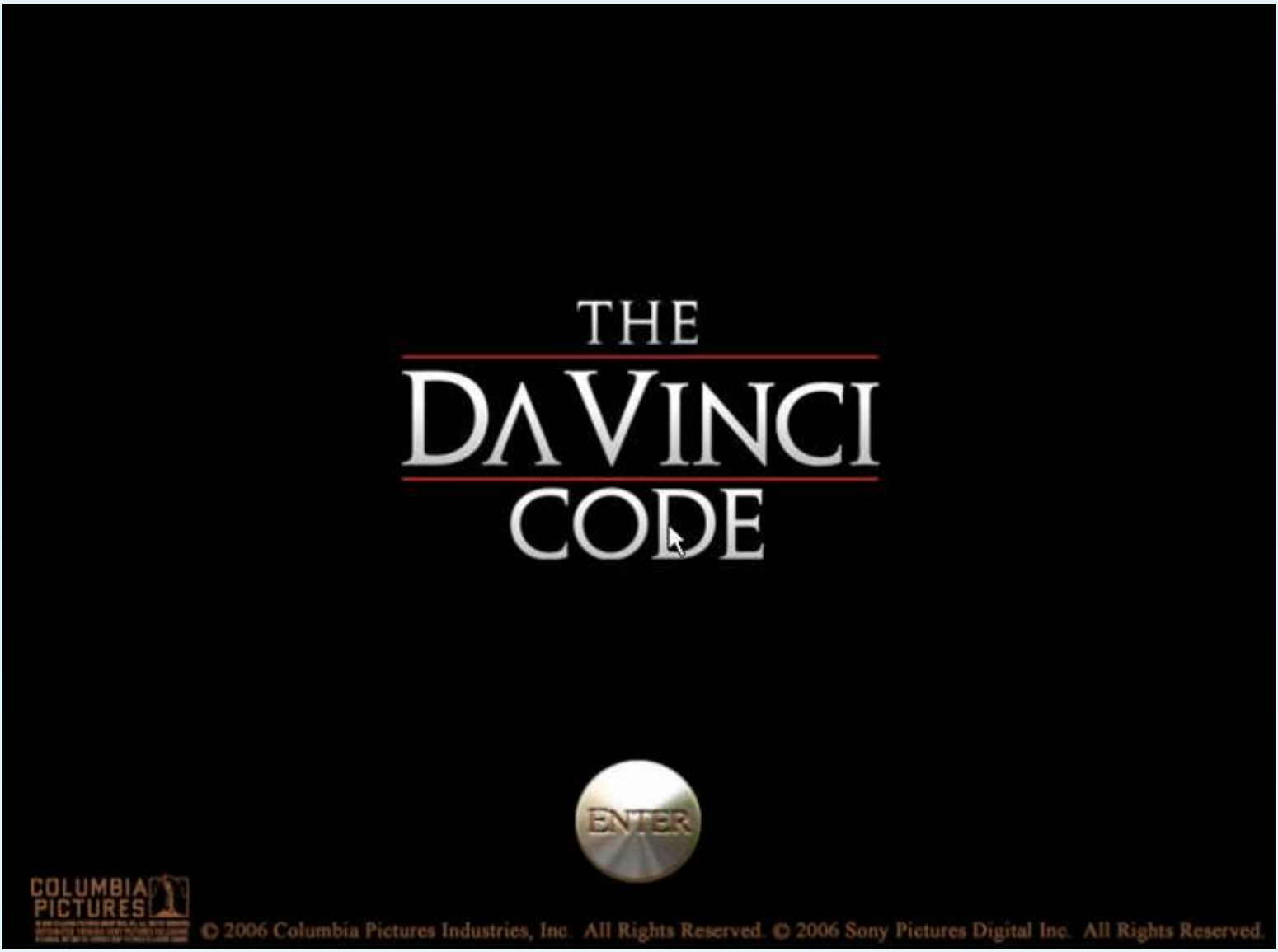
_va to us here

Address	Hex dump	Disassembly	Comment
00575A1A	C3	RET	
00575A1B	8BCE	MOV ECX,ESI	
00575A1D	E8 62AAFFFF	CALL 00570484	00570484
00575A22	EB 03	JMP SHORT 00575A27	00575A27
00575A24	EB	DB EB	
00575A25	F8	DB F8	
00575A26	B4	DB B4	
00575A27	E9 2CC8FFFF	JMP 00572258	00572258
00575A2C	EB 02	JMP SHORT 00575A30	00575A30
00575A2E	80	DB 80	
00575A2F	FA	CLI	
00575A30	E9 11C3FFFF	JMP 00571D46	00571D46
00575A35	8D	DB 8D	
00575A36	EB 03	JMP SHORT 00575A3B	00575A3B
00575A38	50	DB 50	CHAR 'P'
00575A39	46	DB 46	CHAR 'F'
00575A3A	7E	DB 7E	CHAR '~'

_ You see the command **JMP** order **Call** 1 ... haha ... and that is **Magic Call** ... Call you submit this order is also the time **ActiveMARK** officially dust.

Address	Hex dump	Disassembly	Comment
00575A1A	C3	RET	
00575A1B	8BCE	MOV ECX,ESI	
00575A1D	90	NOP	
00575A1E	90	NOP	
00575A1F	90	NOP	
00575A20	90	NOP	
00575A21	90	NOP	
00575A22	EB 03	JMP SHORT 00575A27	00575A27
00575A24	EB	DB EB	
00575A25	F8	DB F8	
00575A26	B4	DB B4	
00575A27	E9 2CC8FFFF	JMP 00572258	00572258
00575A2C	EB 02	JMP SHORT 00575A30	00575A30
00575A2E	80	DB 80	

_ Save the set and 1 for the name of the **gas-Unpacked Cracked.exe.** ... Test considered the more sướng again **NAG** no longer run into ... game. ... Crack Done



_ Almost all of the game is using Protect ActiveMARK have to resolve as on you from any work that meat ... There is also Amloader For ActiveMARK Tool can help you resolve the many that they must stand out we stop and you can refer to

G re e Ts F O italy u l t: *C om p ut _ An e r l e g, e Zombi, M oo n b by a, c H a grape, B e n i n a k i n e m a no a w r, o i Z, D x u e, M e rc, i l e g HT pho where x, c k ybo Tri italy, T a k a d a i a midiot, the light o e ni x, t h e i nth a n d e n a n dyou ...!*

N ha Tr a n g, italy 2 à The 4th Asia ng5 year 200 6

W hy N o t B ar

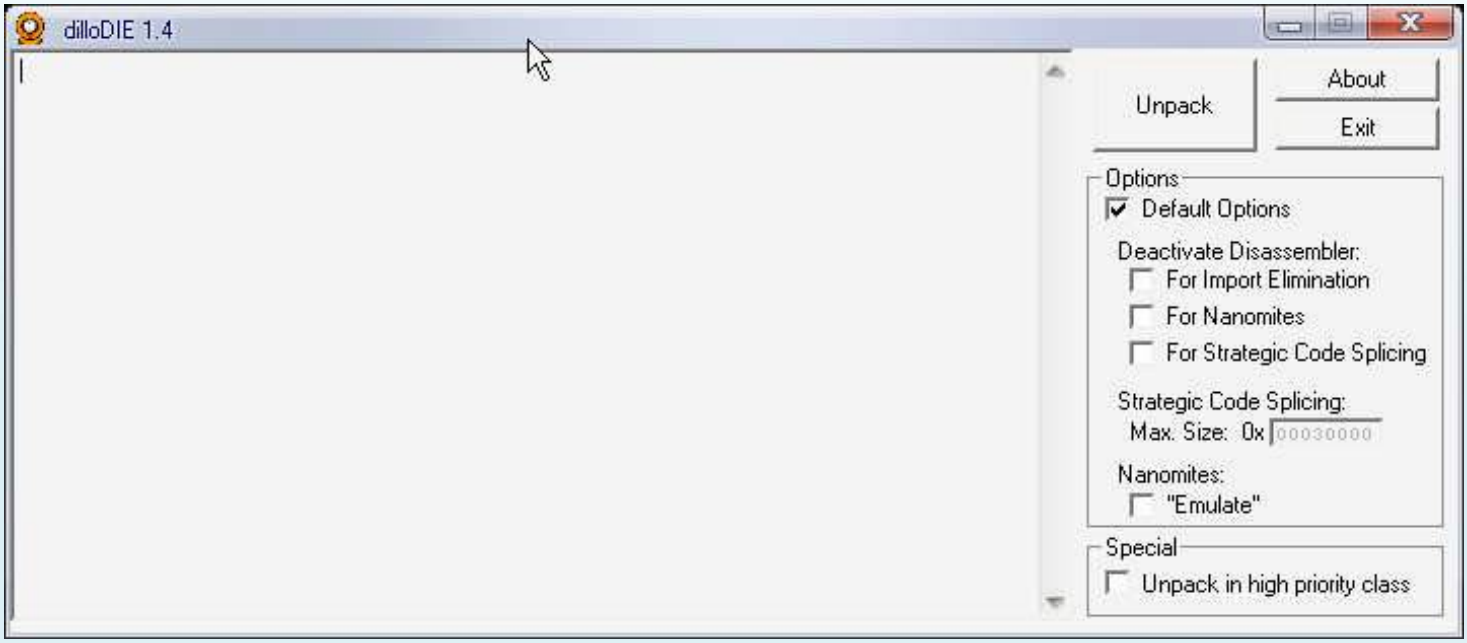
I. I nt r o d u c t i on:

Hi Newbie the brother of the first in TUT we learn 2 Tools help us to quickly unpack the Soft Pack with ***Armadillo.*** In this tut we continue to make 2 more familiar New Tool is **dilloDIE 1.4** and **ArmStripperv0.1beta2**

dilloDIE 1.4: the evaluation of the child Good Tools this operation because it is quite stable, unpack the lot Target

su pp o r t e d e f a r e s training:

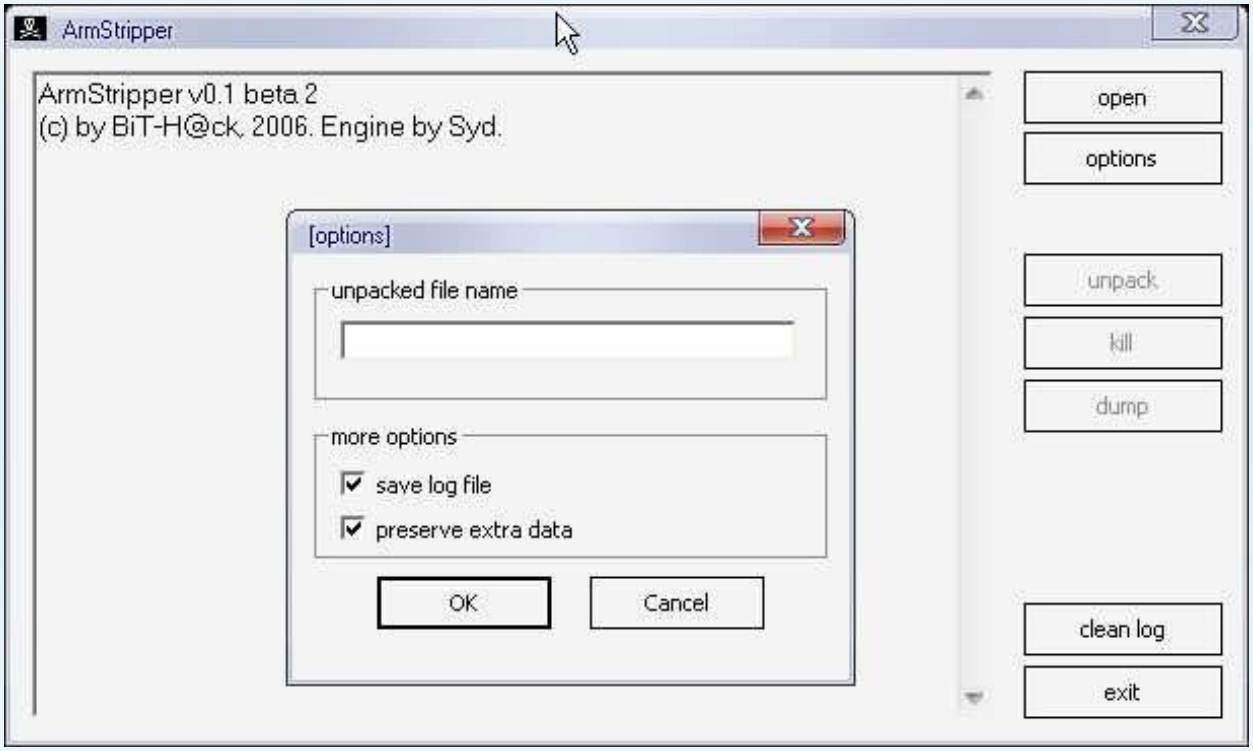
St a nd a rd F tur e e s a b De
ugb l oc k e r C op italy I M E I
N m a t e s nomi
I mport El min i o n a ti



A r m a d illo st ri p pe r b italy Belgium_T_-_H_c_@_k: Tools is in the process of development should be at the time not unpack

v e r s i o n 0. 1 to be a 2
- A d d e d i n f r DP otect opt i ons
A-d d d e d e s co plicing ill k e r (e r v italy unst a BL e)
A-d d e dd e bugbloc k e rs u p p ort
- F ix m a ny bu g s

*** R eq u i r e m e nts:**
-stri p p e r w o r k s only un d e r a nd k 2 X P, a lso youmust h a ve inistr a d m a t o r 's ri g hts;
- The e re w ill b e no w in 9 XV e rs i on;



II. T oo l s:

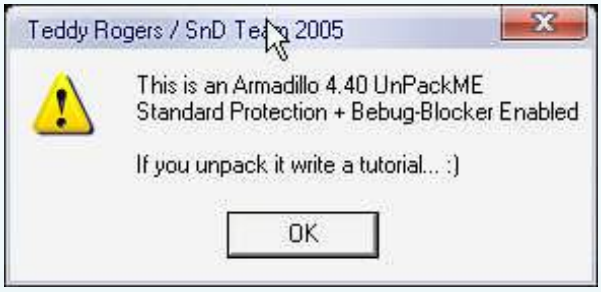
- ***T oo l c a n d g ùn***
  - *ARM dillo a F i n d P r e d otect V 1. 2*
  - *ARM dillostrip a pe r_B by the_T_-_H_@_ck about rsion 0. 1 e 2 is*
  - *D illo I D E 1. 4*
  - *P I D E 0. 9 4*
  - *C F FE x plo r r e I V*
  - *Oll italy DG B 1. 1*

- ***T ar of GE:***

Ea s italy C D - D AEx of the C to that of P r e ss i on al v9 .1. 1 u i l D3

H o m e p a g e: HT t p: / / ww w. K p o i osoft. C o m /

U n P a c k M _ A r e a d m _ e ill o4.40



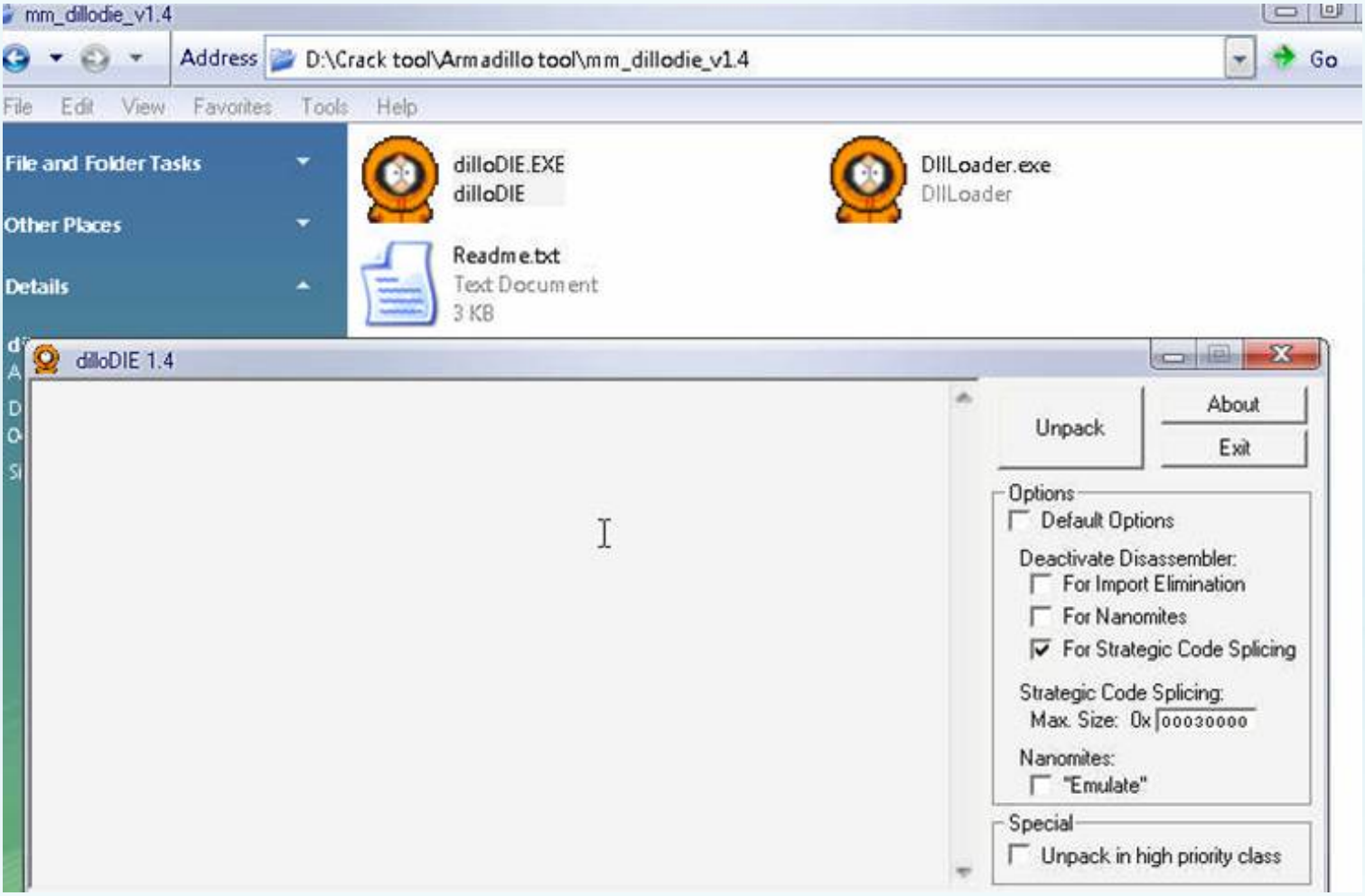
III. U n p a c k i n g:

T U T # 1: S using enough of gDill I D E O 1. 4

_ Use **PEiD 0.94** scans have been considered Soft pack and pack or do any kind?

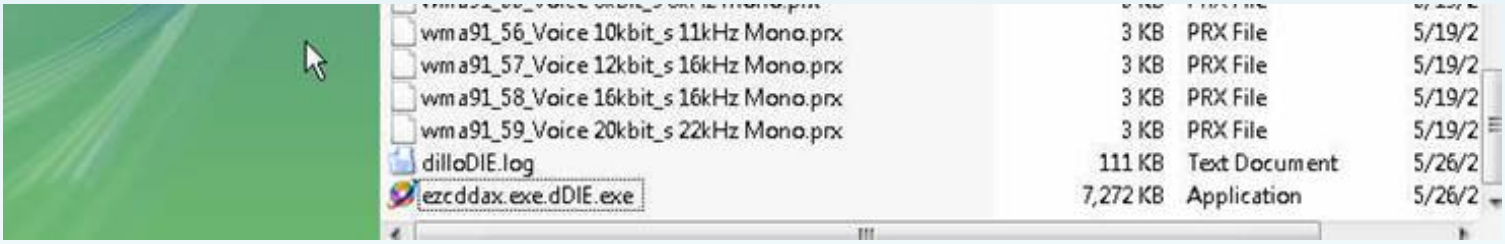
_ To know exactly in the Pack File **Protection Options** do we use **Armadillo FindProtected v1.2**

_ This is Hehe this has *Debug-Blocker, Enable Strategic Code SplicingStandard Protection.*
_ Time is running **DilloDIE 1.4** and below nhuhinh



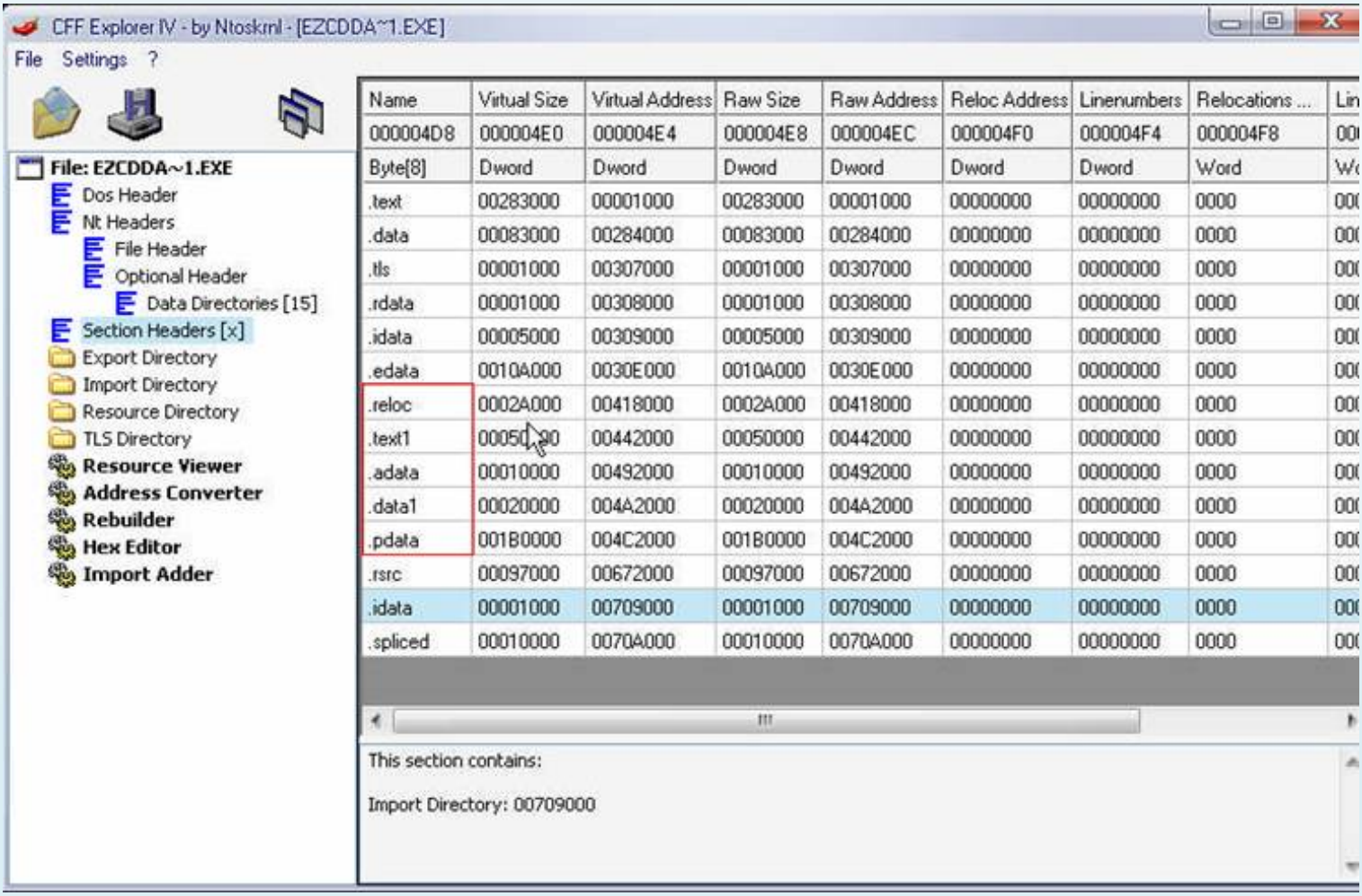
_ The file and select **"ezcddax.exe"** and now they sit waiting **DilloDIE** run đùi self treatment ...

_ Hahaha ... This is done When finished ... will create 2 files

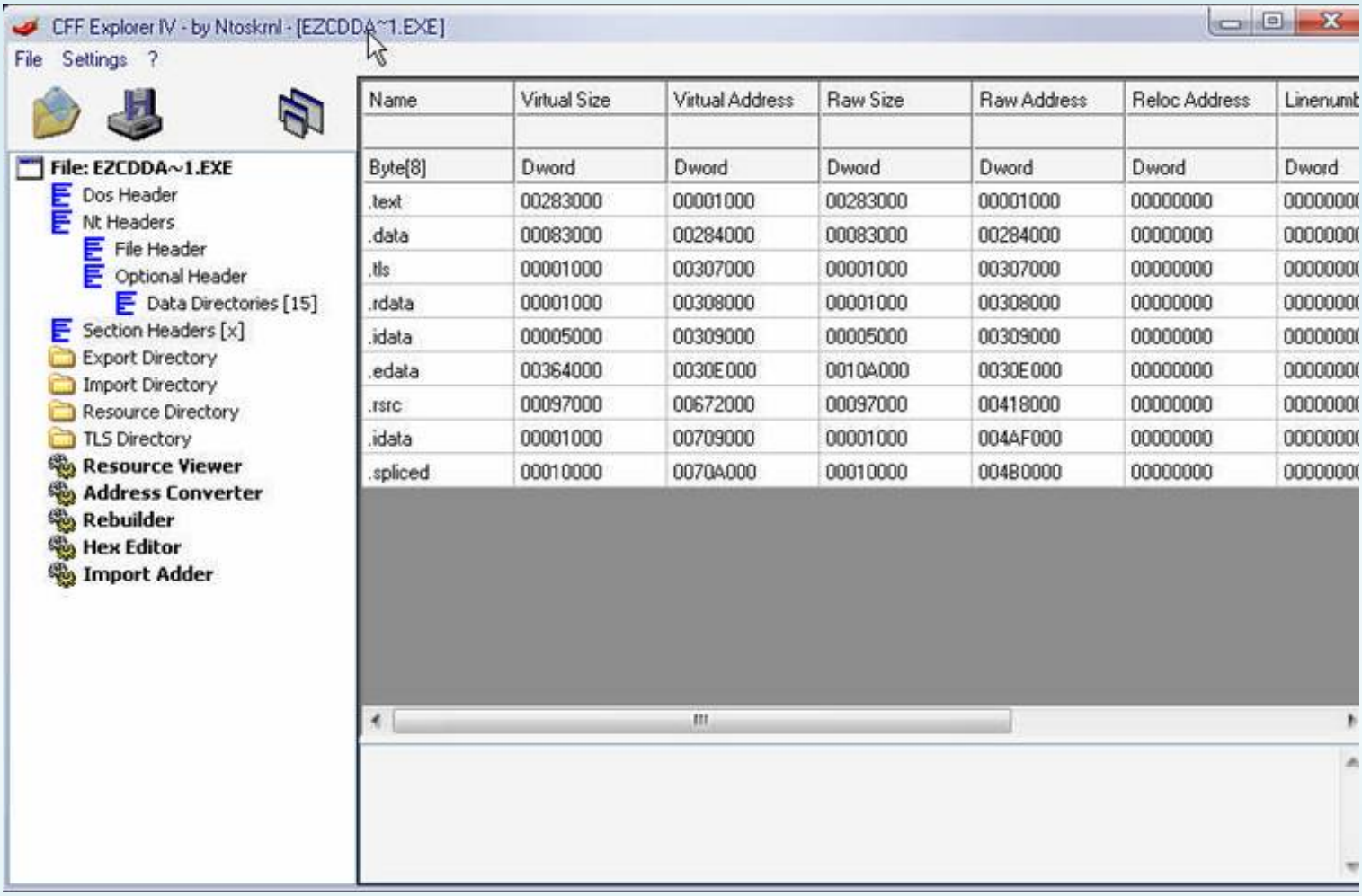


_ File dilloDIE.log is recorded over the handling of it is "ezcddax.exe.dDIE.exe" File is already unpack. Run test considered stars

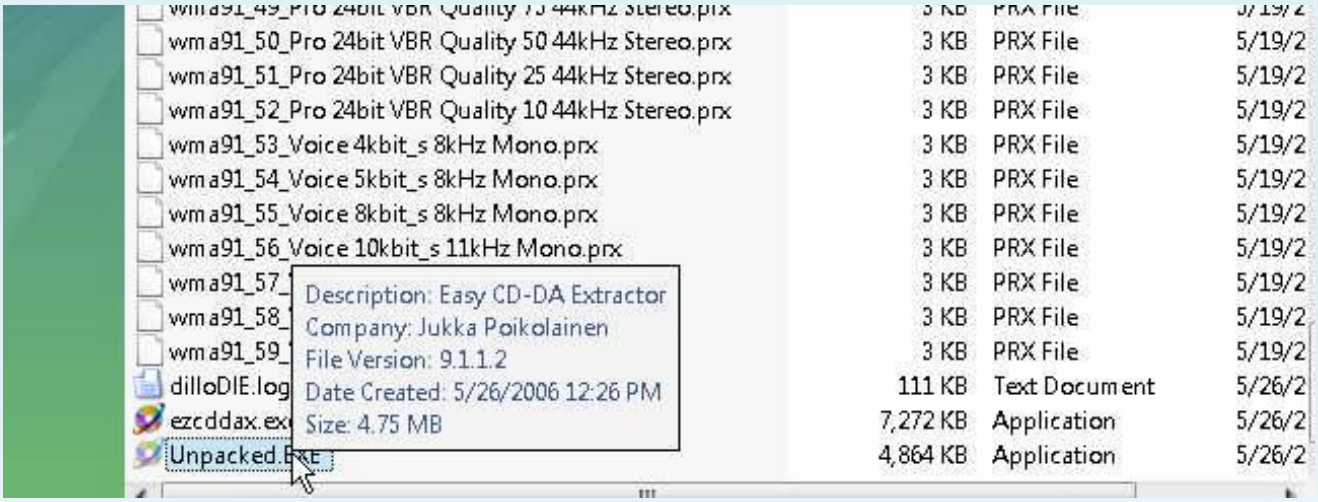
_ _Unpack Done ... Devay but also if you want to reduce the amount unpack the files using **CFF Explorer** to delete some of the **Section** is the Arma


CFF Explorer IV - by Ntoskrnl - [EZCDDA~1.EXE]
File Settings ?
File: EZCDDA~1.EXE
Dos Header
Nt Headers
File Header
Optional Header
Data Directories [15]
Section Headers [x]
Export Directory
Import Directory
Resource Directory
TLS Directory
Resource Viewer
Address Converter
Rebuilder
Hex Editor
Import Adder
Name | Virtual Size | Virtual Address | Raw Size | Raw Address | Reloc Address | Linenumbers | Relocations ...
000004D8 | 000004E0 | 000004E4 | 000004E8 | 000004EC | 000004F0 | 000004F4 | 000004F8
Byte[8] | Dword | Dword | Dword | Dword | Dword | Dword | Word
.text | 00283000 | 00001000 | 00283000 | 00001000 | 00000000 | 00000000 | 0000
.data | 00083000 | 00284000 | 00083000 | 00284000 | 00000000 | 00000000 | 0000
.tls | 00001000 | 00307000 | 00001000 | 00307000 | 00000000 | 00000000 | 0000
.rdata | 00001000 | 00308000 | 00001000 | 00308000 | 00000000 | 00000000 | 0000
.idata | 00005000 | 00309000 | 00005000 | 00309000 | 00000000 | 00000000 | 0000
.edata | 0010A000 | 0030E000 | 0010A000 | 0030E000 | 00000000 | 00000000 | 0000
.reloc | 0002A000 | 00418000 | 0002A000 | 00418000 | 00000000 | 00000000 | 0000
.text1 | 00050000 | 00442000 | 00050000 | 00442000 | 00000000 | 00000000 | 0000
.adata | 00010000 | 00492000 | 00010000 | 00492000 | 00000000 | 00000000 | 0000
.data1 | 00020000 | 004A2000 | 00020000 | 004A2000 | 00000000 | 00000000 | 0000
.pdata | 001B0000 | 004C2000 | 001B0000 | 004C2000 | 00000000 | 00000000 | 0000
.rsrc | 00097000 | 00672000 | 00097000 | 00672000 | 00000000 | 00000000 | 0000
.idata | 00001000 | 00709000 | 00001000 | 00709000 | 00000000 | 00000000 | 0000
.spliced | 00010000 | 0070A000 | 00010000 | 0070A000 | 00000000 | 00000000 | 0000
This section contains:
Import Directory: 00709000

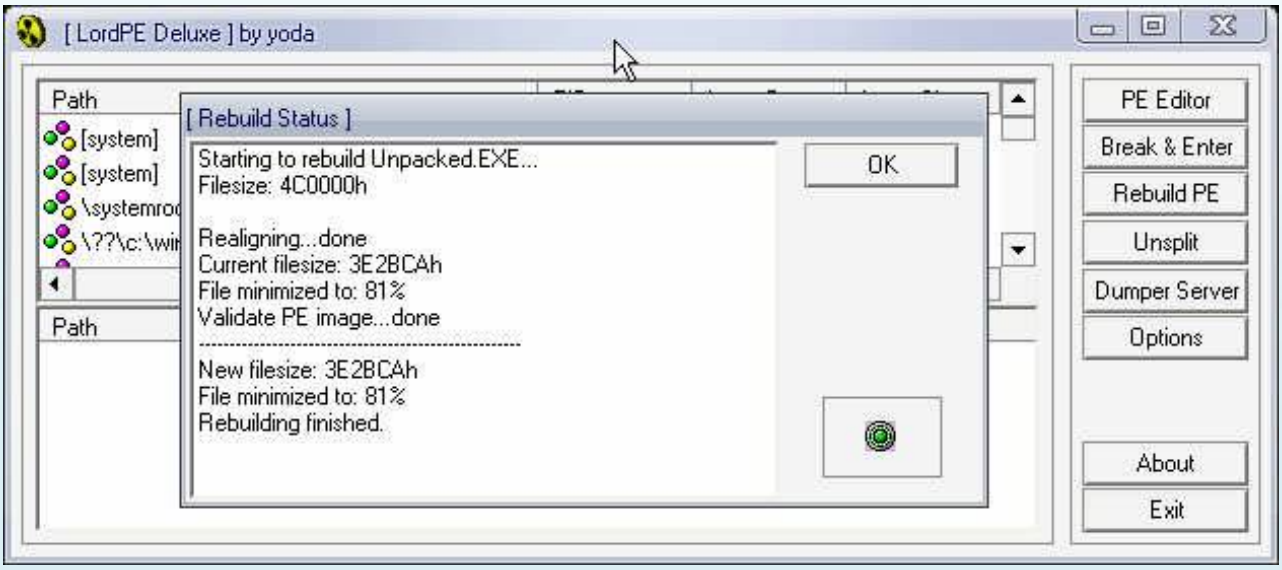
_ S a k u hiXoa

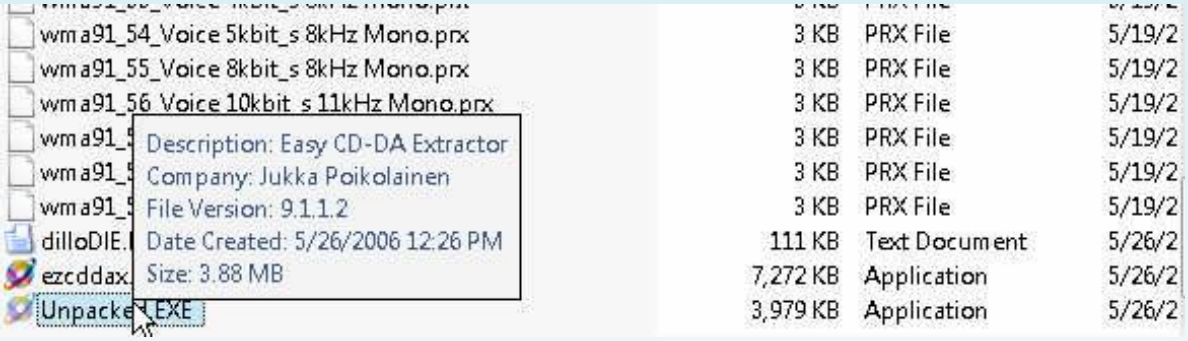


_ Save with a different name, such as **Unpacked.exe**



_ Test still tasty healthy, if still not fill you can give it a little more to **rebuild** the **PE LordPE**

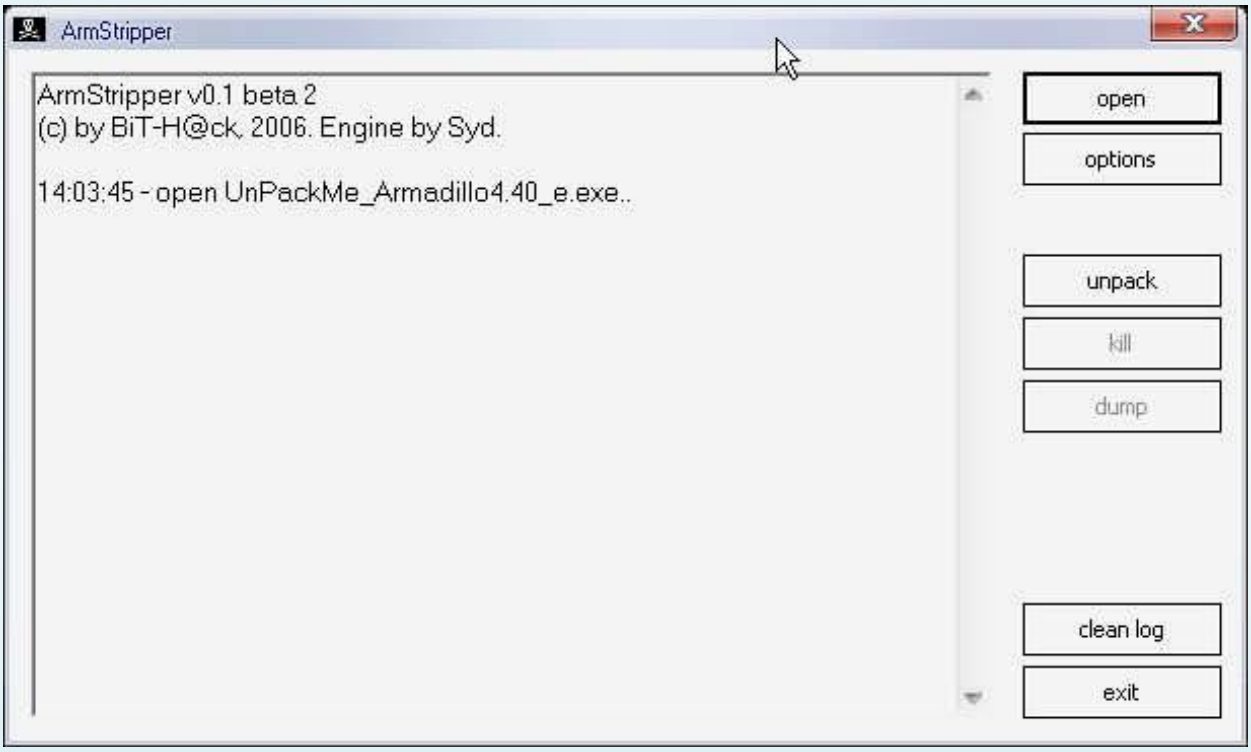




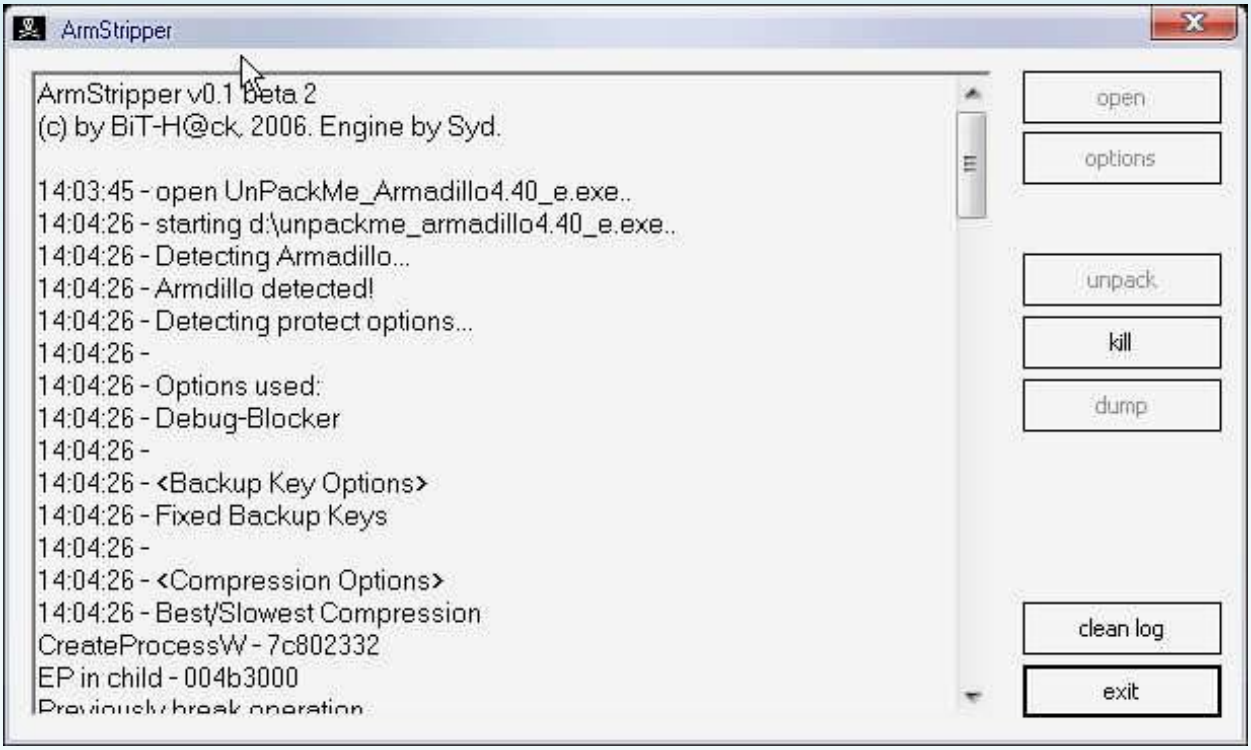
_ Test File **Unpacked.exe** good run. In addition, we are some ways to further reduce the file size, but quite complicated to do them here. As part **Cracking** the treatment you need to get ... If you can contact them to get cracked File

Tut # 2: D ùn g t h rm not a d i l l a r os i p p e rby B_i_T_-_H_@_c_k

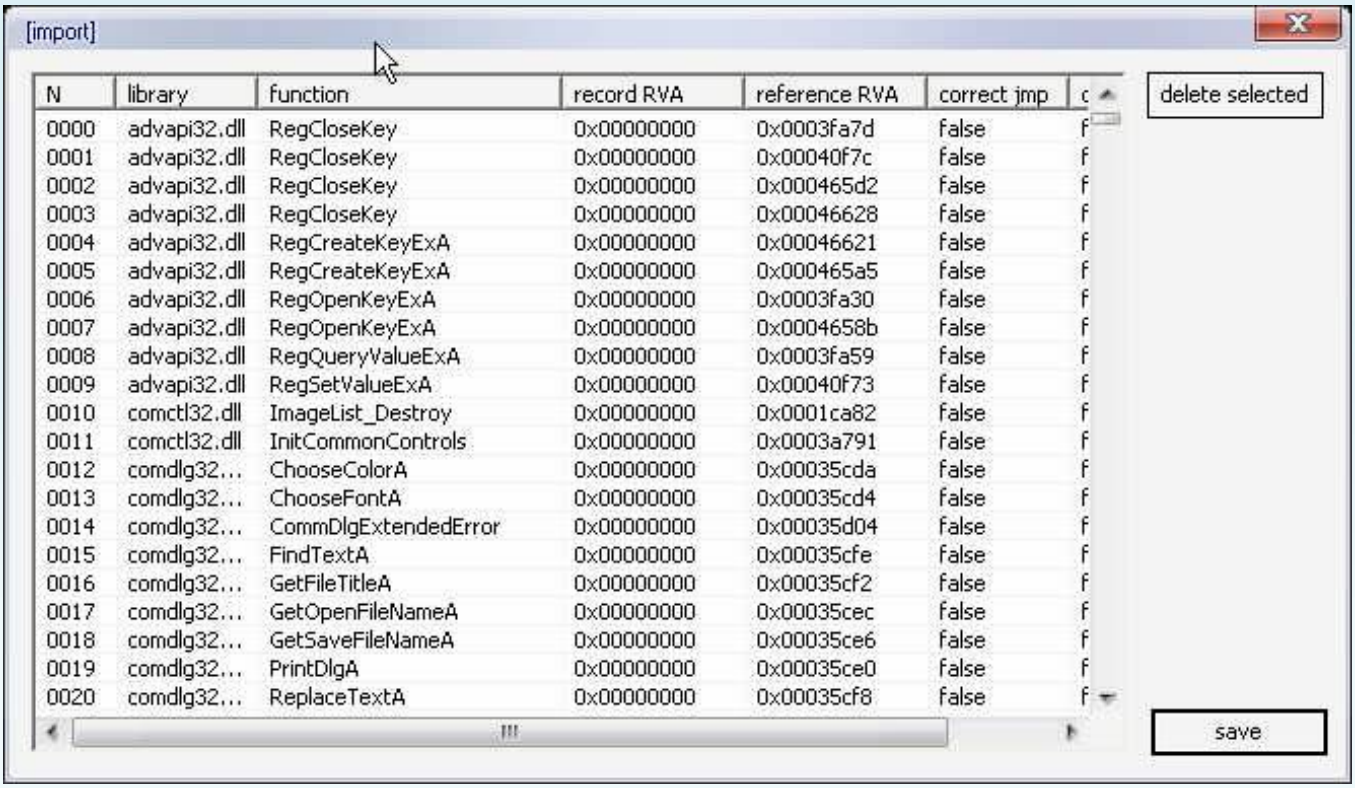
_ The children of this same **Stripper 2:13** to unpack a Soft Pack with Asprotect. **Armadillo** Run **stripper** and **Target** need to unpack



_ Click **unpack**



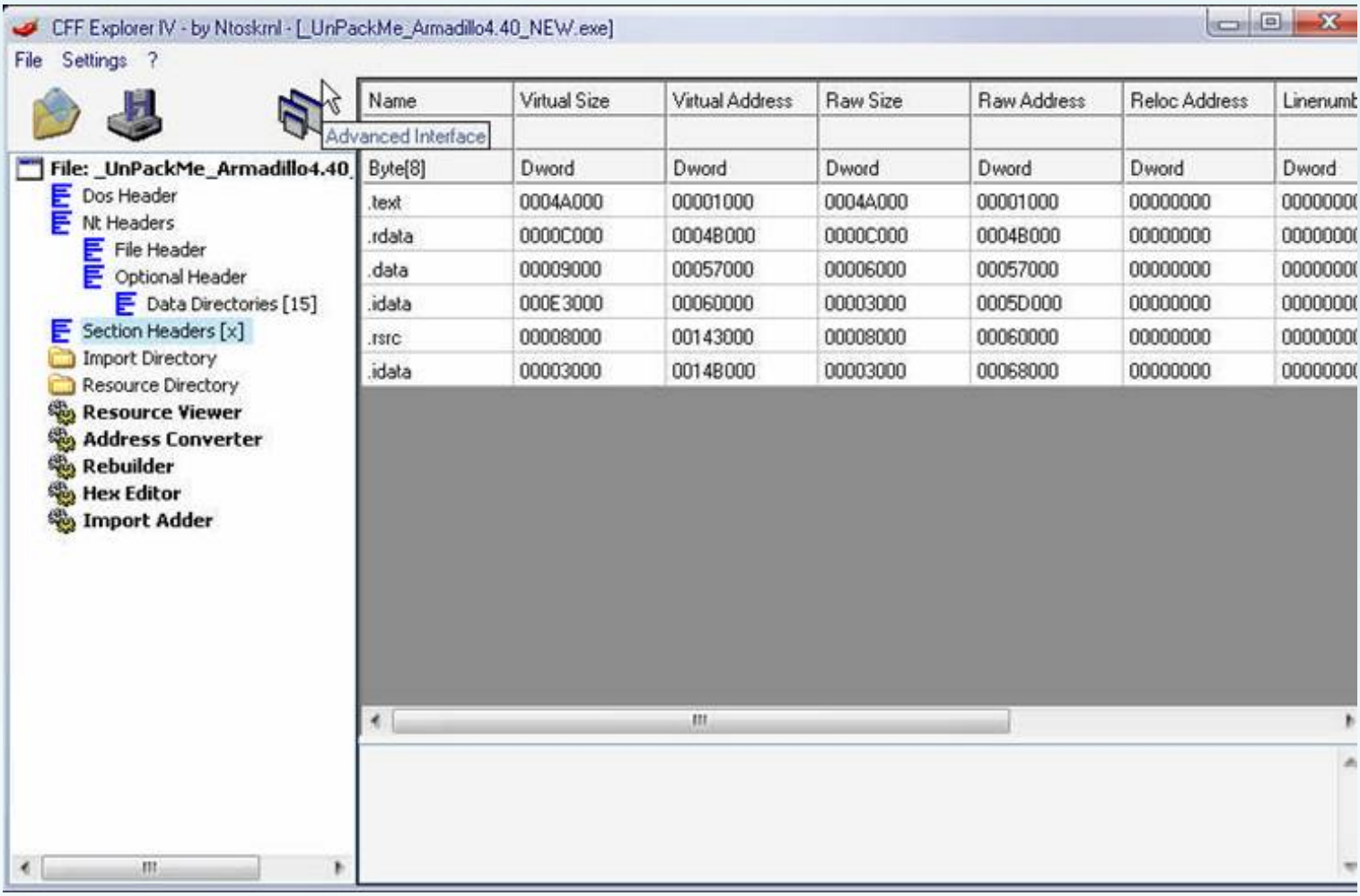
_va the **Import** window



N	library	function	record RVA	reference RVA	correct jmp
0000	advapi32.dll	RegCloseKey	0x00000000	0x0003fa7d	false
0001	advapi32.dll	RegCloseKey	0x00000000	0x00040f7c	false
0002	advapi32.dll	RegCloseKey	0x00000000	0x000465d2	false
0003	advapi32.dll	RegCloseKey	0x00000000	0x00046628	false
0004	advapi32.dll	RegCreateKeyExA	0x00000000	0x00046621	false
0005	advapi32.dll	RegCreateKeyExA	0x00000000	0x000465a5	false
0006	advapi32.dll	RegOpenKeyExA	0x00000000	0x0003fa30	false
0007	advapi32.dll	RegOpenKeyExA	0x00000000	0x0004658b	false
0008	advapi32.dll	RegQueryValueExA	0x00000000	0x0003fa59	false
0009	advapi32.dll	RegSetValueExA	0x00000000	0x00040f73	false
0010	comctl32.dll	ImageList_Destroy	0x00000000	0x0001ca82	false
0011	comctl32.dll	InitCommonControls	0x00000000	0x0003a791	false
0012	comdlg32...	ChooseColorA	0x00000000	0x00035cda	false
0013	comdlg32...	ChooseFontA	0x00000000	0x00035cd4	false
0014	comdlg32...	CommDlgExtendedError	0x00000000	0x00035d04	false
0015	comdlg32...	FindTextA	0x00000000	0x00035cfe	false
0016	comdlg32...	GetFileTitleA	0x00000000	0x00035cf2	false
0017	comdlg32...	GetOpenFileNameA	0x00000000	0x00035cec	false
0018	comdlg32...	GetSaveFileNameA	0x00000000	0x00035ce6	false
0019	comdlg32...	PrintDlgA	0x00000000	0x00035ce0	false
0020	comdlg32...	ReplaceTextA	0x00000000	0x00035cf8	false

_ Click **Save** is completed

_ Test File and File **_UnPackMe_Armadillo4.40_e.exe** good run .... Unpack Done ..!!!
_ Delete the Section legacy



_Bye You ... appointment in the tut ...

G R E E L F Ts italy Ou t: *C om p ut _ An e r l e g, e Zombi, M oo n b by a, c H a grape, B e n i n a k i n e m a no a w r, o i Z, D x u e, M e rc, the i c k ybo italy, T a k a d a i a midiot, HT l i g h p o e where x, and e nth a n d i n e, a nd you ...!*

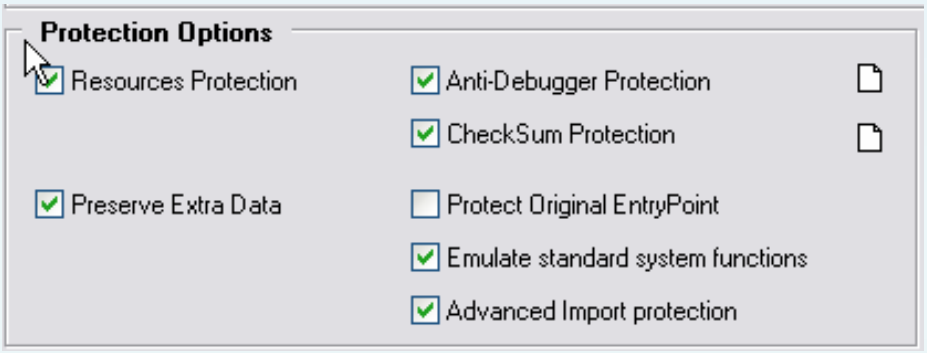
N A T h a n *g*, the *à italy* 2 6 *th a n n g* 5 *click* 200 6

W hy N o t B ar

UnipACKthe A S Prote CT2.3 S KEbuild06th 2 6

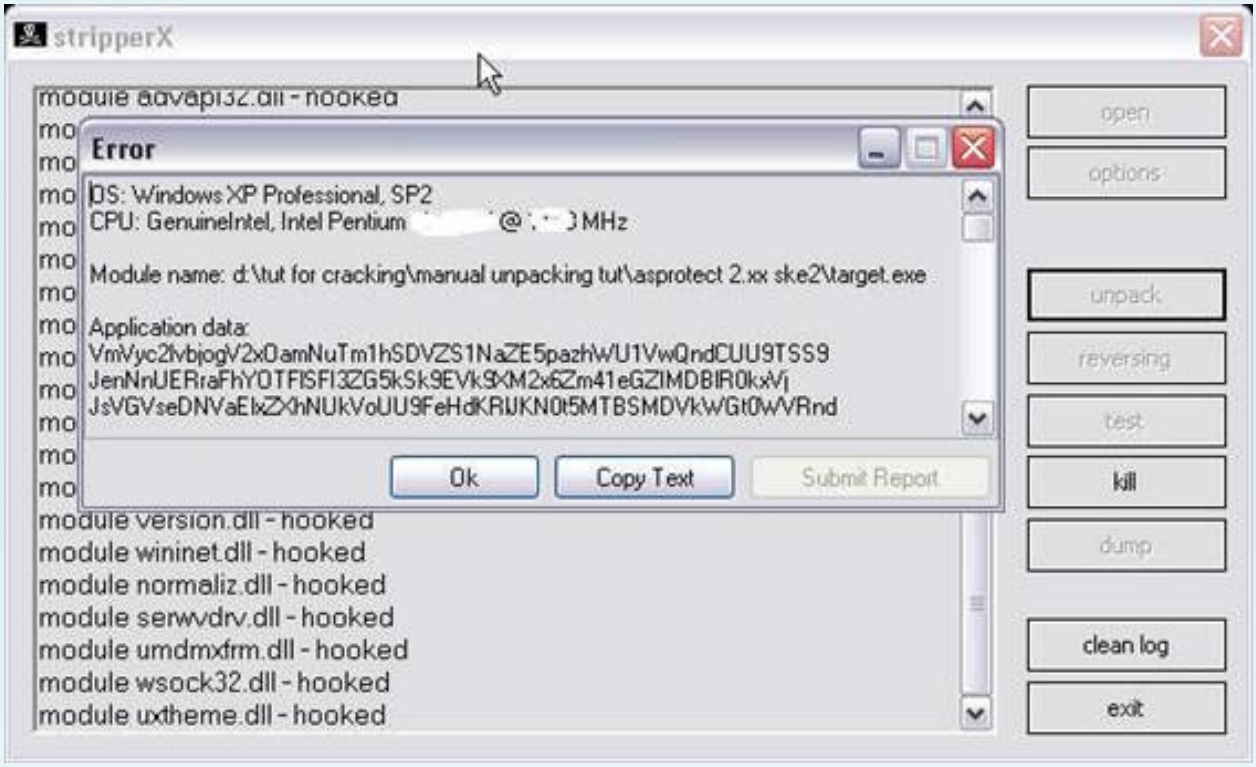
I -- Print d o t r u c t i o n:

Today, his children will learn how to unpack ASProtect 2.3 SKE Protection Options for the following:



And hope will continue to form Protect Original EntryPoint

_ With version 2.3 SKE ASProtect the tool Stripper 2:13 unpack not be



I I - T oo ls & T a g e r t:

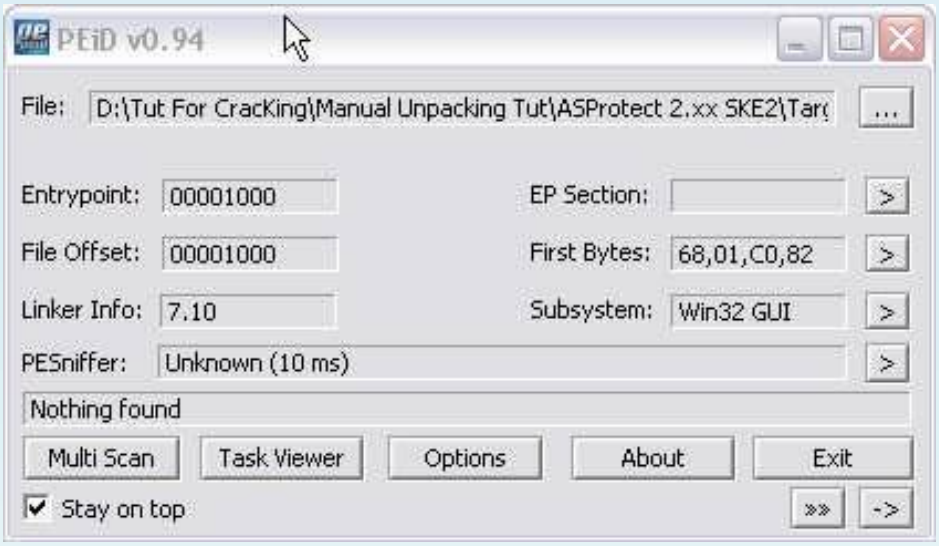
- **T oo L and P lug i n c a n d ứng:**

- **O LLY DBG 1:10**
- **Pe ID 0. 9 4 & V e r A 0:15 plugin**
- **I mp O R T R E C1.6f**
- **C FF E xpl or e r V**

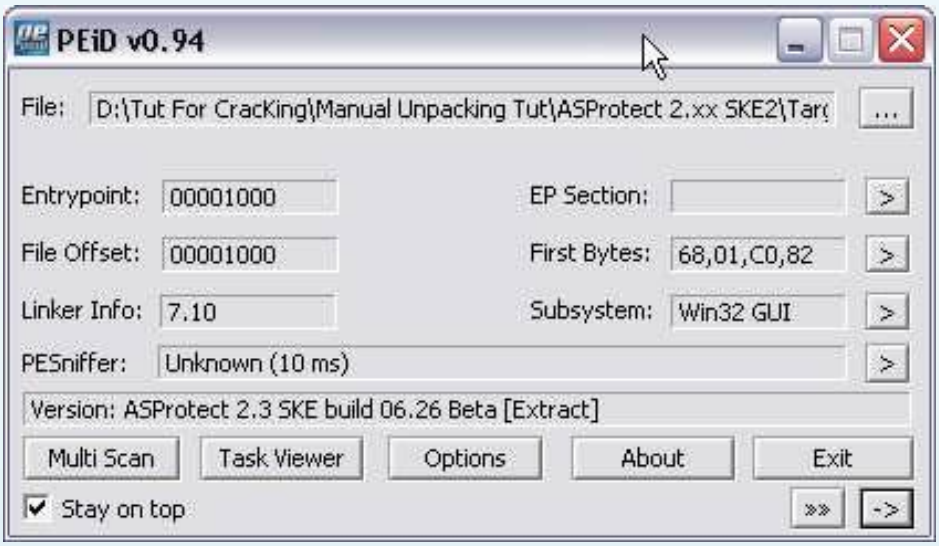
• **One g e r t:** ***K è m t h e t o ut***

II I - U n p a c k ing

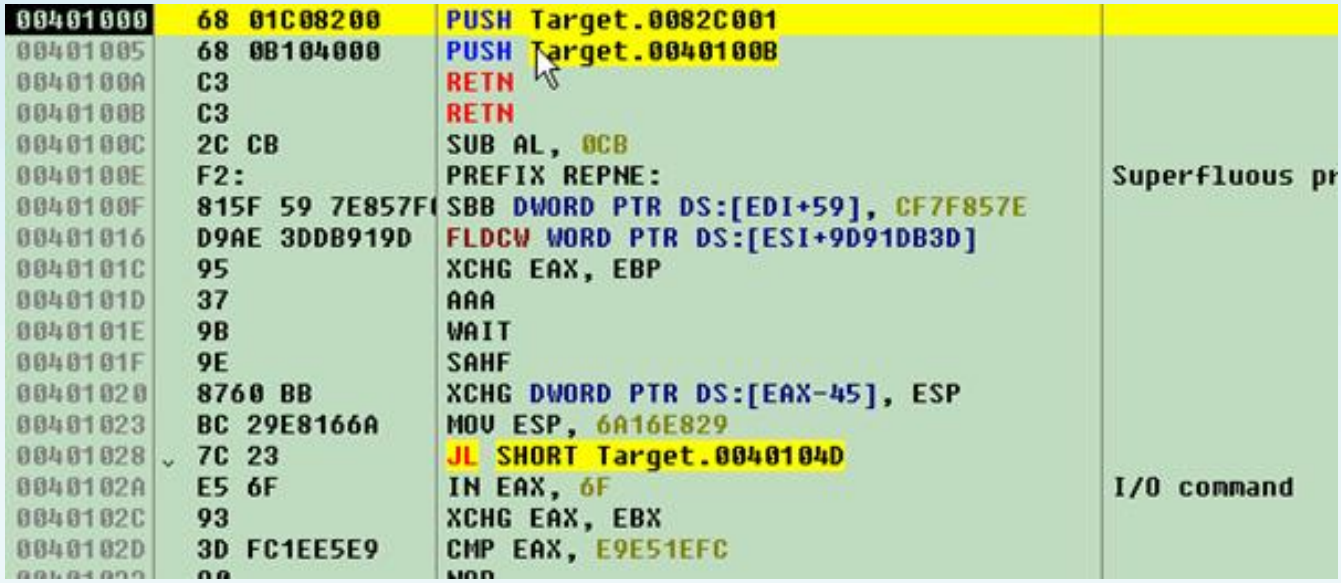
_ D ùn **I D PE** g **0. 9 4** s intervention in a g e r t



_ Enough **Ve** n g **r a p 0:15 lugin**

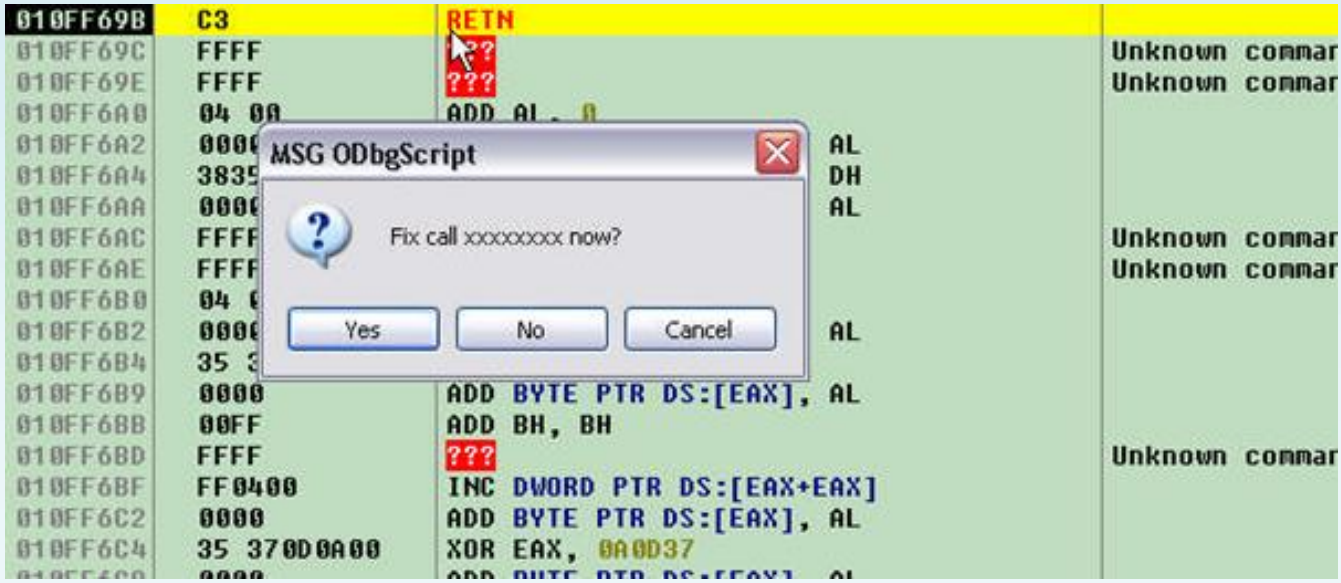


_ Lo **Ta** ad **g e r t** to **OllyDBG**

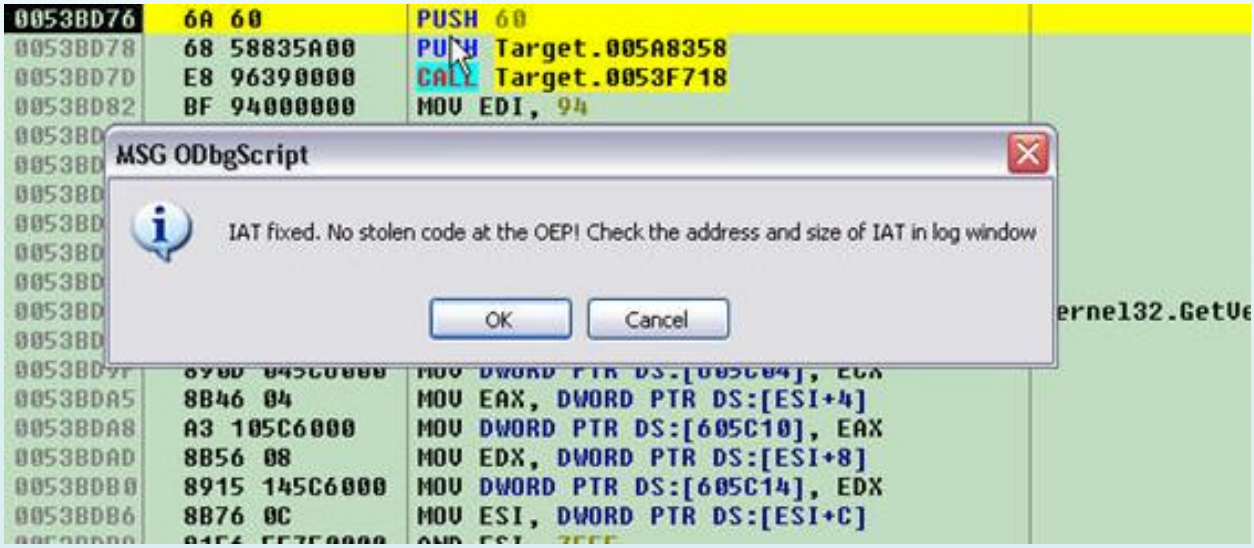


_O Ago they used Srcipt "**Aspr2.XX_IATfixer_v2.2s.osc**" to **Fix IAT** and to **OEP.** You can if you prefer **manual,** reference tut "**Aspro_SKE_211_Esyst_28ingl_29**" by doctors **ToolCracking** translated

_ Appears table options

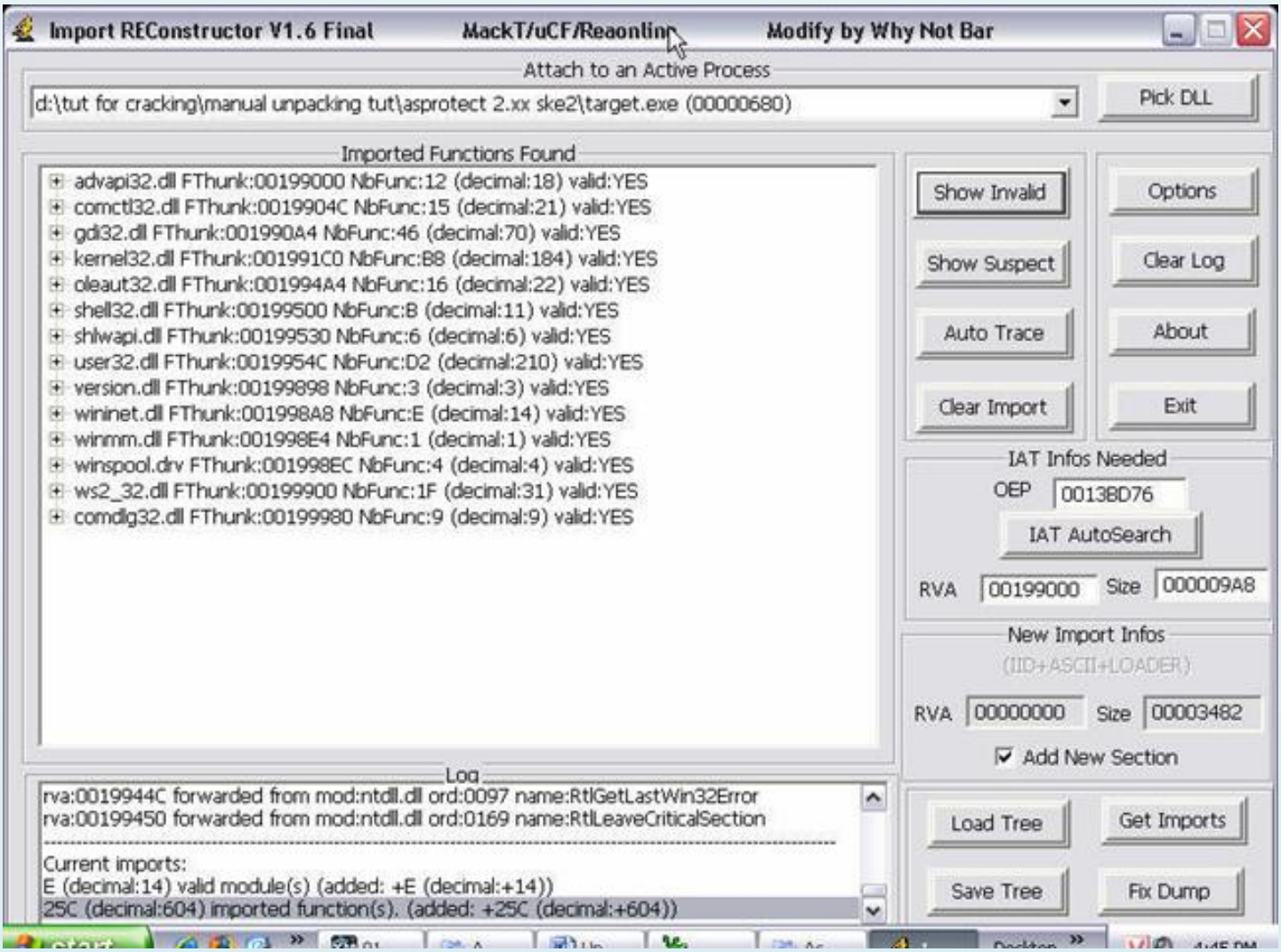


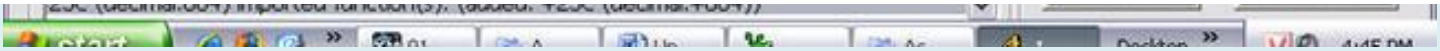
_N Han **e s Y**



OK _Nhan is finished **Fix IAT** and the **script** by **OEP.** In addition, this script also Tay from the dump file with the name **"un_Target.exe"** This takes out the **LordPE** used to dump

_ Open **ImportREC** up. Select **List** in **Process *target.exe.* OEP =** Enter **0053BD76 - 00,400,000 *(Imagebase)* = 0013BD76, *IAT AutoSearch*** Click -> ***Get Imports*** -> ***Show Invalid***



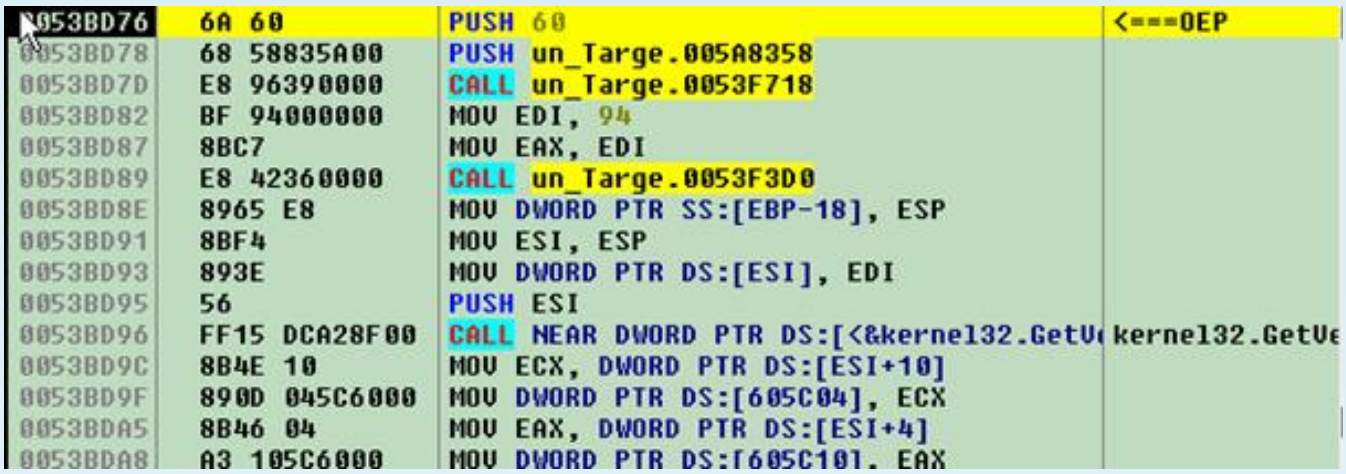


_ Hú complete .... I have any function ***Invalid*** ... OK, Click **Fix Dumped un_Target.exe** File and select Run Test ***(Note: do not close the window OllyDBG again because we still rely on it to Fix Code of steps. I call a temporary window is OllyDBG 1)***

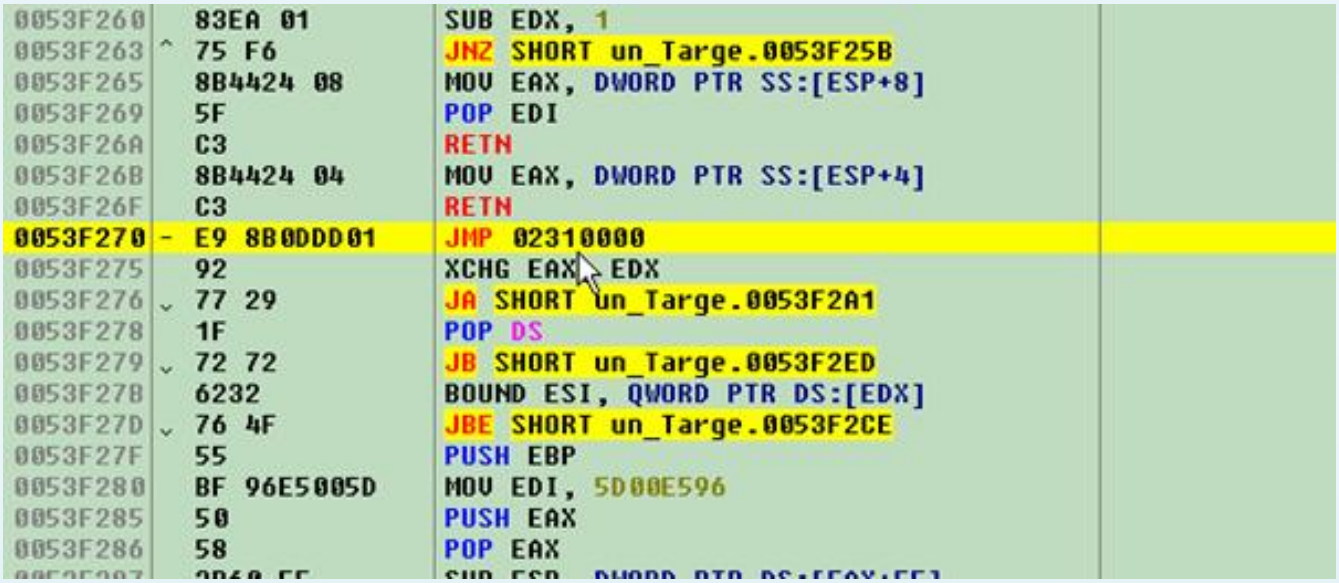
_ N han **C lick h e r e**

_ We easily found the address **02310000** is a memory address areas outside of Target and **SectionTable** tasks we

need a Fix for reasonable. Load "**un_Target_.exe**" to **OllyDBG 2**



_ N han **of the C + F,** G o **J 02310000 MP** and a far



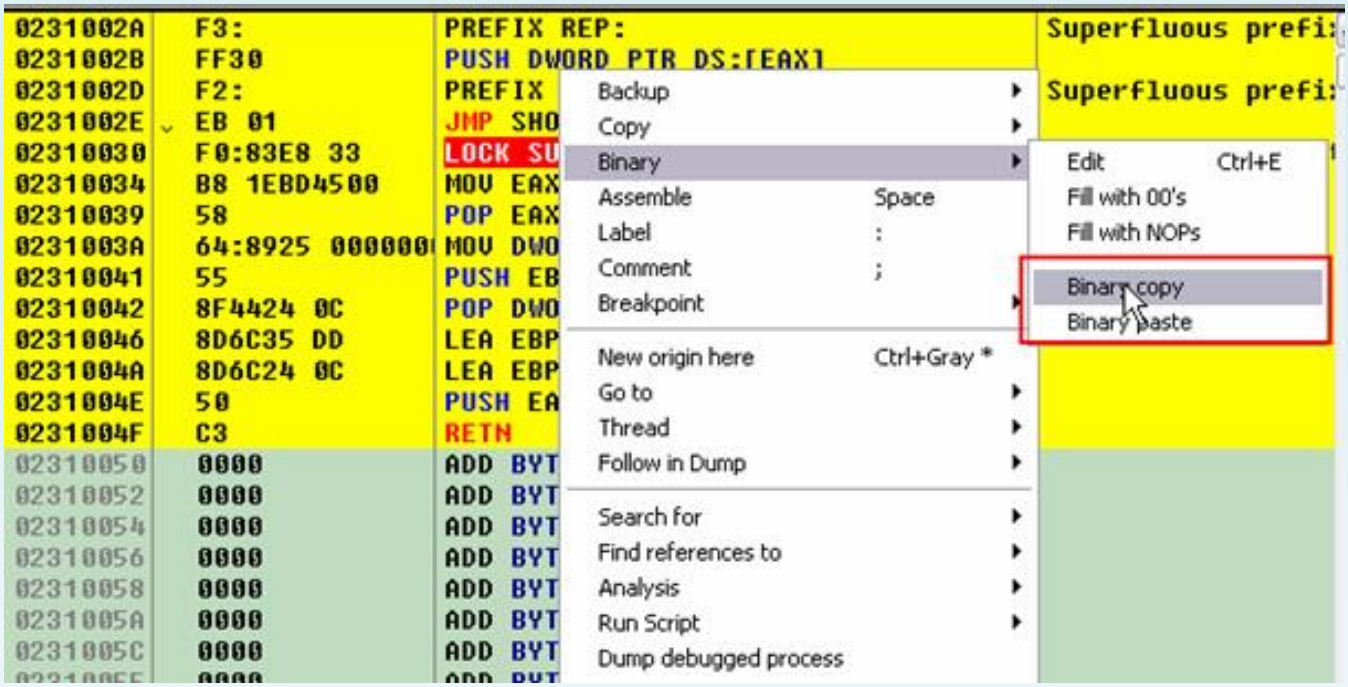
_ Press **Ctrl + L** also considered **JMP** order any more than the same teachings and in this case do? Only 1 Jump single command, appears to work quietly here. Back to the **OllyDBG 1,** press **Ctrl + G, type 02310000,** and we come

```
02310000   68 FFFFFFFF      PUSH -1
02310005   50               PUSH EAX
02310006   3E:EB 02         JMP SHORT 0231000B                 Superfluous prefi
02310009   CD 20            INT 20
0231000B   33C0             XOR EAX, EAX
0231000D   64:8B00          MOV EAX, DWORD PTR FS:[EAX]
02310010   50               PUSH EAX
02310011   13C1             ADC EAX, ECX
02310013   EB 01            JMP SHORT 02310016
02310015   9A B84EE445 00(  CALL FAR 0300:45E44EB8
0231001C   44               INC ESP
0231001D   24 18            AND AL, 18
0231001F   F3:               PREFIX REP:                       Superfluous prefi
02310020   EB 02            JMP SHORT 02310024
02310022   CD 20            INT 20
02310024   8D4424 0C        LEA EAX, DWORD PTR SS:[ESP+C]
02310028   EB 01            JMP SHORT 0231002B
0231002A   F3:               PREFIX REP:                       Superfluous prefi
0231002B   FF30             PUSH DWORD PTR DS:[EAX]
0231002D   F2:               PREFIX REPNE:                     Superfluous prefi
0231002E   EB 01            JMP SHORT 02310031
02310030   F0:83E8 33       LOCK SUB EAX, 33                  LOCK prefix is no
02310034   B8 1EBD4500      MOV EAX, 45BD1E
02310039   58               POP EAX
```

_ C hun g a t c h has 2ca F XC than the case of this

• **Method 1:** In the window **OllyDBG 1** copy from the end **0231000 RETN** code. Through the window **OllyDBG 2** find 1 area code blank paste code to just copy it, then the command Fix Jump jump to the new address for the right is OK

_ Copy code from **0,231,000** -> **RETN**



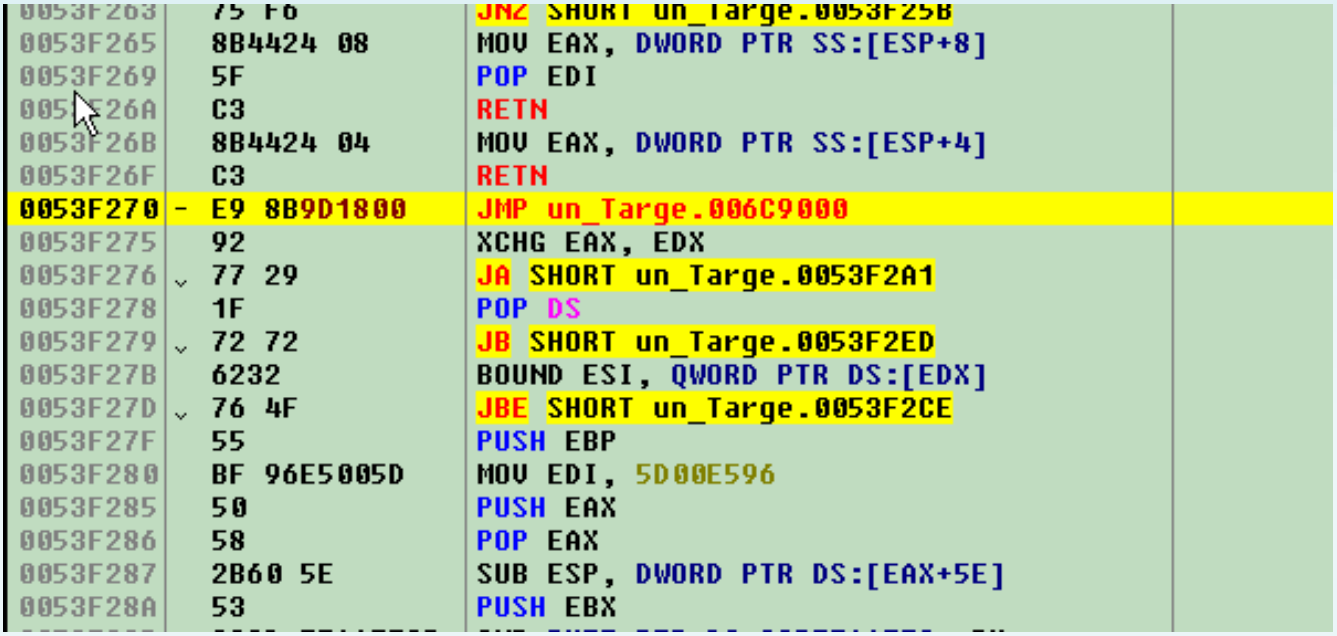
_ Through the window **OllyDBG 2** find 1 area code and here they found **006C9000**

```
006C9000   0000          ADD BYTE PTR DS:[EAX], AL
006C9002   0000          ADD BYTE PTR DS:[EAX], AL
006C9004   0000          ADD BYTE PTR DS:[EAX], AL
006C9006   0000          ADD BYTE PTR DS:[EAX], AL
006C9008   0000          ADD BYTE PTR DS:[EAX], AL
006C900A   0000          ADD BYTE PTR DS:[EAX], AL
006C900C   0000          ADD BYTE PTR DS:[EAX], AL
006C900E   0000          ADD BYTE PTR DS:[EAX], AL
006C9010   0000          ADD BYTE PTR DS:[EAX], AL
006C9012   0000          ADD BYTE PTR DS:[EAX], AL
006C9014   0000          ADD BYTE PTR DS:[EAX], AL
006C9016   0000          ADD BYTE PTR DS:[EAX], AL
```

_ Danvao paragraph c o d e C o p just italy B E N **OllyDBG1**

```
006C9013   EB 01         JMP SHORT un_Targe.006C9016
006C9015   9A B84EE445 00CALL FAR 0300:45E44EB8
006C901C   44            INC ESP
006C901D   24 18         AND AL, 18
006C901F   F3:           PREFIX REP:                          Superfluous pr
006C9020   EB 02         JMP SHORT un_Targe.006C9024
006C9022   CD 20         INT 20
006C9024   8D4424 0C      LEA EAX, DWORD PTR SS:[ESP+C]
006C9028   EB 01         JMP SHORT un_Targe.006C902B
006C902A   F3:           PREFIX REP:                          Superfluous pr
006C902B   FF30          PUSH DWORD PTR DS:[EAX]
006C902D   F2:           PREFIX REPNE:                        Superfluous pr
006C902E   EB 01         JMP SHORT un_Targe.006C9031
006C9030   F0:83E8 33    LOCK SUB EAX, 33                     LOCK prefix is
006C9034   B8 1EBD4500    MOV EAX, un_Targe.0045BD1E
006C9039   58            POP EAX
006C903A   64:8925 000000MOV DWORD PTR FS:[0], ESP
006C9041   55            PUSH EBP
006C9042   8F4424 0C      POP DWORD PTR SS:[ESP+C]
006C9046   8D6C35 DD      LEA EBP, DWORD PTR SS:[EBP+ESI-23]
006C904A   8D6C24 0C      LEA EBP, DWORD PTR SS:[ESP+C]
006C904E   50            PUSH EAX
006C904F   C3            RETN
006C9050   0000          ADD BYTE PTR DS:[EAX], AL
006C9052   0000          ADD BYTE PTR DS:[EAX], AL
```

_ **Save and 0053F270** to Fix the Jump command to correct



_ **Save again** ... Run ... khua test considered khua hen run gòi

• **Method 2:** This may seem more professional. You notice in the code from **02310000** -> **RETN** many spam code with 1 hairbreadth of **ASM,** you can MOD the code for other neat and patch directly in the order that **Jump 02310000** i need it to 1 new area code on nhucach

_Trong Window **OllyDBG 2,** press **Ctrl + A** in **0053F270** and we see

```
0053F26F  L.  C3              RETN
0053F270  $-  E9 8B0DDD01     JMP 02310000
0053F275      92              DB 92
0053F276      77              DB 77                 CHAR 'w'
0053F277      29              DB 29                 CHAR ')'
0053F278      1F              DB 1F
0053F279      72              DB 72                 CHAR 'r'
0053F27A      72              DB 72                 CHAR 'r'
0053F27B      62              DB 62                 CHAR 'b'
0053F27C      32              DB 32                 CHAR '2'
0053F27D      76              DB 76                 CHAR 'v'
0053F27E      4F              DB 4F                 CHAR 'O'
0053F27F      55              DB 55                 CHAR 'U'
0053F280      BF              DB BF
0053F281      96              DB 96
0053F282      E5              DB E5
0053F283      00              DB 00
0053F284      5D              DB 5D                 CHAR ']'
0053F285      50              DB 50                 CHAR 'P'
0053F286      58              DB 58                 CHAR 'X'
0053F287      2B              DB 2B                 CHAR '+'
0053F288      60              DB 60                 CHAR '`'
0053F289      5E              DB 5E                 CHAR '^'
0053F28A      53              DB 53                 CHAR 'S'
0053F28B      38              DB 38                 CHAR '8'
0053F28C      3D              DB 3D                 CHAR '='
0053F28D      7F              DB 7F
0053F28E      AA              DB AA
0053F28F  r$  55              PUSH EBP
0053F290      8BEC            MOV EBP, ESP
```

_Bay Hours of your MOD to the code from **0,231,000** -> **RETN** to insert the code from **0053F270** -> **0053F28E** on but just to ensure the right structure

C o d e G o C C O O D D I

```
02310000   68 FFFFFFFF      PUSH -1
02310005   50               PUSH EAX
02310006   3E:EB 02         JMP SHORT 0231000B
02310009   CD 20            INT 20
0231000B   33C0             XOR EAX, EAX
0231000D   64:8B00          MOV EAX, DWORD PTR FS:[EAX]
02310010   50               PUSH EAX
02310011   13C1             ADC EAX, ECX
02310013   EB 01            JMP SHORT 02310016
02310015   9A B84EE445 00    CALL FAR 0300:45E44EB8
0231001C   44               INC ESP
0231001D   24 18            AND AL, 18
0231001F   F3:               PREFIX REP:
02310020   EB 02            JMP SHORT 02310024
02310022   CD 20            INT 20
02310024   8D4424 0C         LEA EAX, DWORD PTR SS:[ESP+C]
02310028   EB 01            JMP SHORT 0231002B
0231002A   F3:               PREFIX REP:
0231002B   FF30             PUSH DWORD PTR DS:[EAX]
0231002D   F2:               PREFIX REPNE:
0231002E   EB 01            JMP SHORT 02310031
02310030   F0:83E8 33       LOCK SUB EAX, 33
02310034   B8 1EBD4500      MOV EAX, 45BD1E
02310039   58               POP EAX
0231003A   64:8925 000000    MOV DWORD PTR FS:[0], ESP
02310041   55               PUSH EBP
02310042   8F4424 0C         POP DWORD PTR SS:[ESP+C]
02310046   8D6C35 DD         LEA EBP, DWORD PTR SS:[EBP+ESI-23]
0231004A   8D6C24 0C         LEA EBP, DWORD PTR SS:[ESP+C]
```

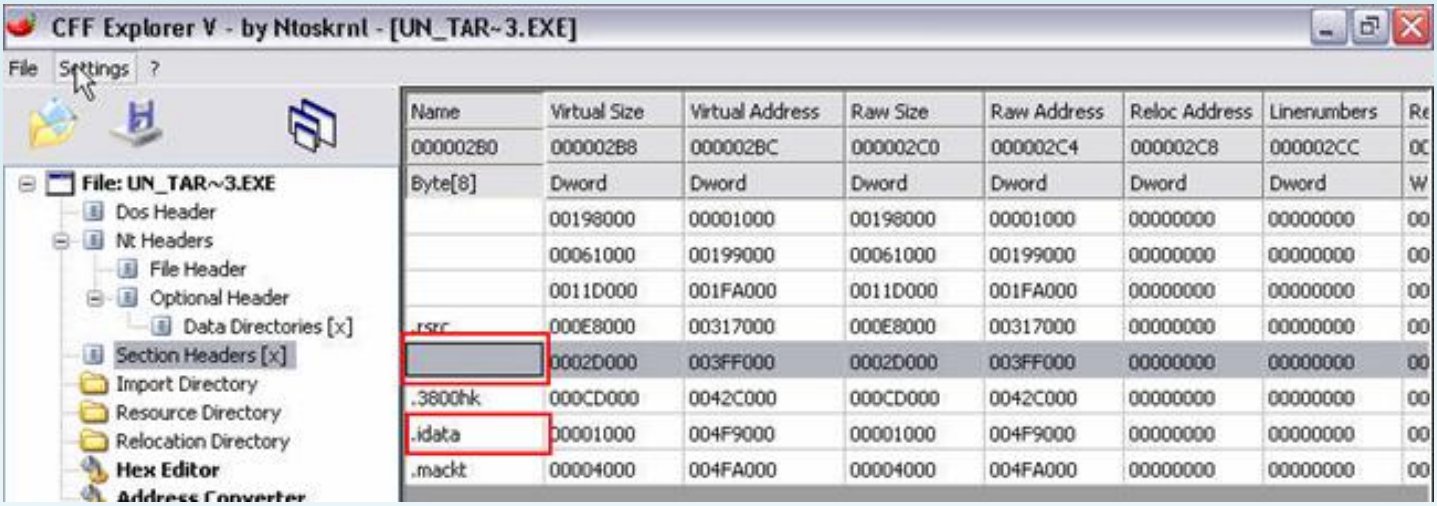
```
0053F26B  >   8B4424 04     MOV EAX, DWORD PTR SS:[ESP+4]
0053F26F  L.  C3            RETN
0053F270      6A FF         PUSH -1
0053F272      50            PUSH EAX
0053F273      64:A1 000000  MOV EAX, DWORD PTR FS:[0]
0053F279      50            PUSH EAX
0053F27A      8B4424 0C     MOV EAX, DWORD PTR SS:[ESP+C]
0053F27E      64:8925 0000  MOV DWORD PTR FS:[0], ESP
0053F285      896C24 0C     MOV DWORD PTR SS:[ESP+C], EBP
0053F289      8D6C24 0C     LEA EBP, DWORD PTR SS:[ESP+C]
0053F28D      50            PUSH EAX
0053F28E      C3            RETN
0053F28F  r$  55            PUSH EBP
0053F290  .   8BEC          MOV EBP, ESP
0053F292  .   83EC 20       SUB ESP, 20
0053F295  .   8B45 08       MOV EAX, [ARG.1]
0053F298  .   56            PUSH ESI
0053F299  .   57            PUSH EDI
0053F29A  .   6A 08         PUSH 8
0053F29C  .   59            POP ECX
0053F29D  .   BE E4845A00   MOV ESI, un_Targe.005A84E4
0053F2A2  .   8D7D E0       LEA EDI, [LOCAL.8]
0053F2A5  .   F3:A5         REP MOVS DWORD PTR ES:[EDI], D
0053F2A7  .   8945 F8       MOV [LOCAL.2], EAX
0053F2AA  .   8B45 0C       MOV EAX, [ARG.2]
0053F2AD  .   8945 FC       MOV [LOCAL.1], EAX
0053F2B0  .   8D45 F4       LEA EAX, [LOCAL.3]
```

```
0231004A   8D6C24 0C      LEA EBP, DWORD PTR SS:[ESP+C]
0231004E   50             PUSH EAX
0231004F   C3             RETN
```

```
0053F2B0   .  8D45 F4     LEA EAX, [LOCAL.3]
0053F2B3   .  50          PUSH EAX
0053F2B4   .  FF75 F0     PUSH [LOCAL.4]
```

_save Run and try to run nhuNgua considered ... ... **unpack Done!**

_ Ùn D G **C** x **FF** that will reduce a c t i o n admits



S ave _ again

G r l Ee TsF italy Ou the *Co mpu t e r A _ of e l, e mbi Z o, M A B oo nb italy, H o acnh, Nina B e, e ki nman o w*

ar, Z o i D e ux, M e r c, l o e ight to nix, T r o b icky italy, Takad a iamidi ot, of the e n t e n handi ... and italy o u!

The N h a n a g, Day 1 0 be a n g 1 1 20 0 6

WhotitalyNBar

I. I nt r o d u c t i on:

Armadillo ASProtect and certainly do not need to introduce sure you also know it is what the public and it causes difficulties for our nhuthe when the meat of Soft that the presence of it. Armadillo ***Hacnho*** *he was exposed to the bone with a series of impressive tut unpack Armadillo make "**Silicon Realms Toolworks**" Update regularly to ... hehe ... but on the ASProtect now also about to go to the dust that 4Rum large* ***Cracking Unpacking*** *and the world launch of a series of tut, Tool and Scripts to guide and 2.xx ASProtest unpack quickly. orientate the movement and help to many new people join REA can use the script to unpack Soft They should write this* ***TUT*** *for reference.*

II. T oo l s:

- Tool v AC A P l c u d g in need ứng:
  - *O ll italy D G B 1. 1 0*
  - *UM D Oll italy ppl u in g*
  - *B O D i g Scr 1 pt. 4 7*
  - *I mport R E C 1. 6*
  - *P I D E 0. 9 4*
- Sc r i pt:
  - *"As the rot e ct 2. XXSKE I AT F i x e RV 1st 0 2" by X V ol.*
  - *"As the rot e ct 2nd x xSKE O P e d e f r in" B VolX italy*

- Target: In this TUT get 2 children 2 to various forms you can easily grasp.

  1st h e n a nc e M ov e i 2. 1

  h xx p: / / mov a v i. c om / enh a nc e mov e i /

  2. 4 usics M M P 3 B it a te r C h a n r GE 1st 5

  h xx p: /_/_w_ww._usics_m_4._co_m_/_mp_3_-_MP_3_-_children_and_very_e_e_r._h_tm

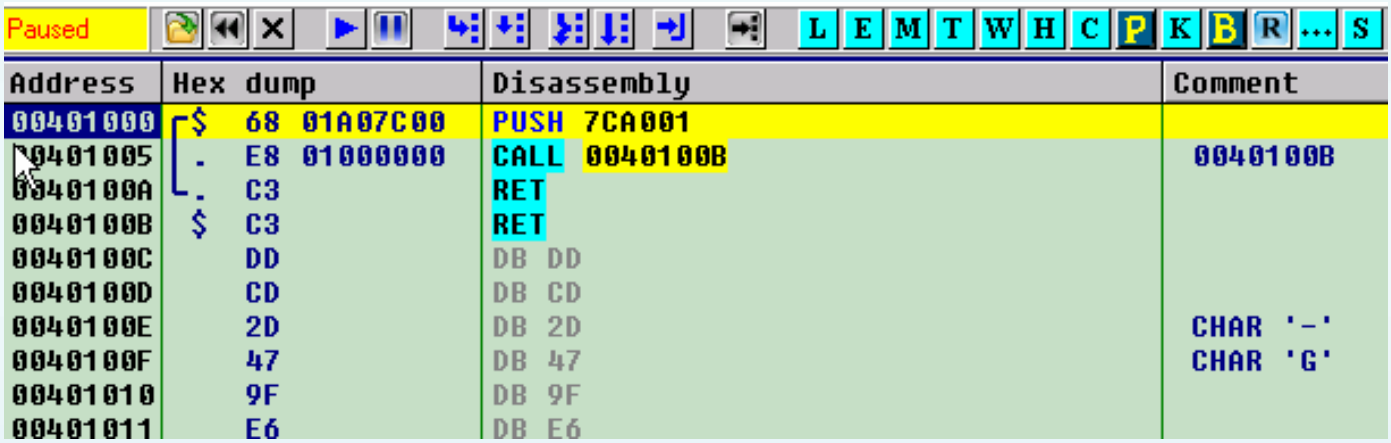
Please say any more Bro want MUP ASProtect 2.xx tut should read *"UN PA C K ING ASP R E C T OT V 2. 1 SK WI T H E A D and NCED I M P T OR P O R T EC T I O N "by M aD _ An M R C H 3 of 3 L s [R A T E A m].*

III. U n p a c k i n g:

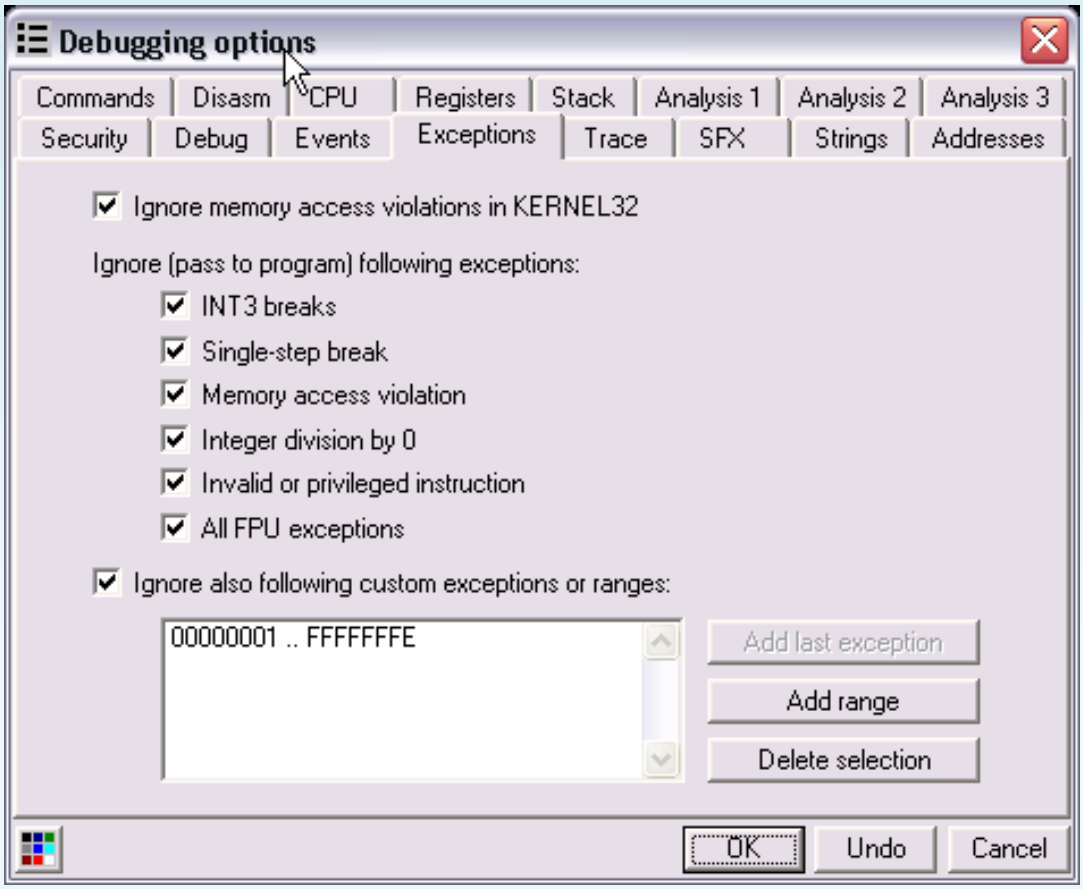
UT T # 1: U n p a c of the ce M a n o v e i 2. 1

_ First they treat statistics **EnhanceMovie 2.1** A operation is familiar to Detect **PEiD** considered it or pack ko?

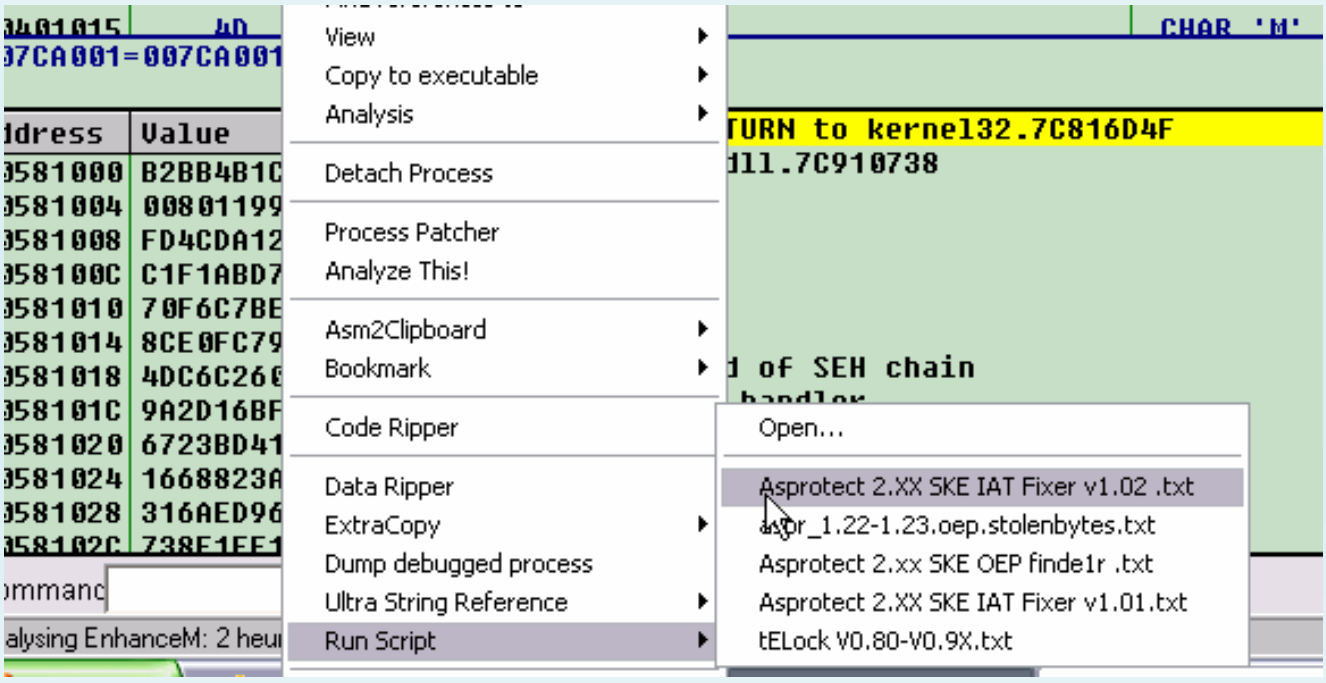
Hic hic _ see *"ASProtect 2.1x SKE -> Alexey Solodovnikov"* quai filed. breathe a very deep and Load target to **OllyDBG** and we stop here:



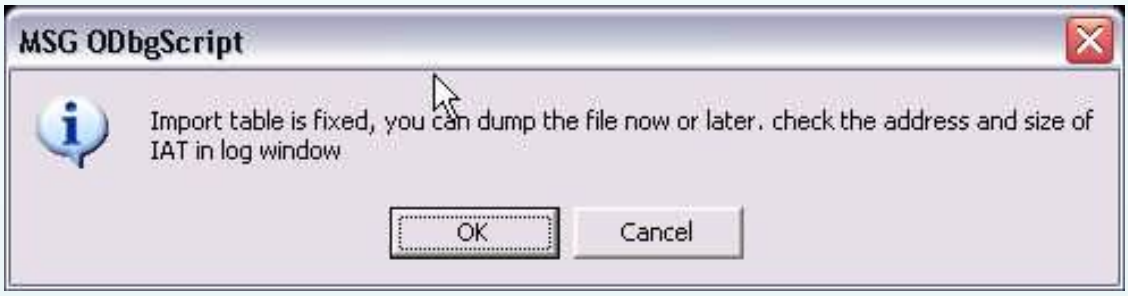
_ Han N **T A L O** V + achon as a u s:



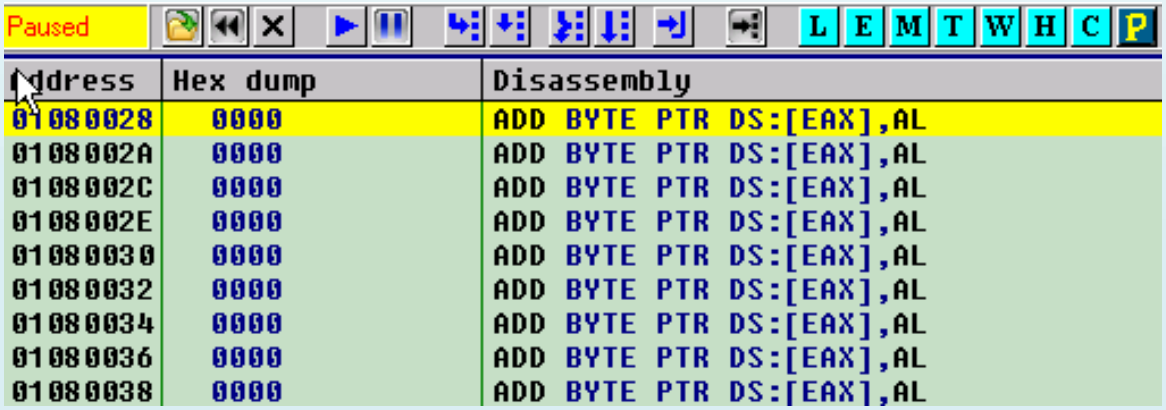
_ Now we run a script *"Asprotect 2.XX SKE IAT Fixer v1.02"* to automatically Hook APIs that have marked ASPR



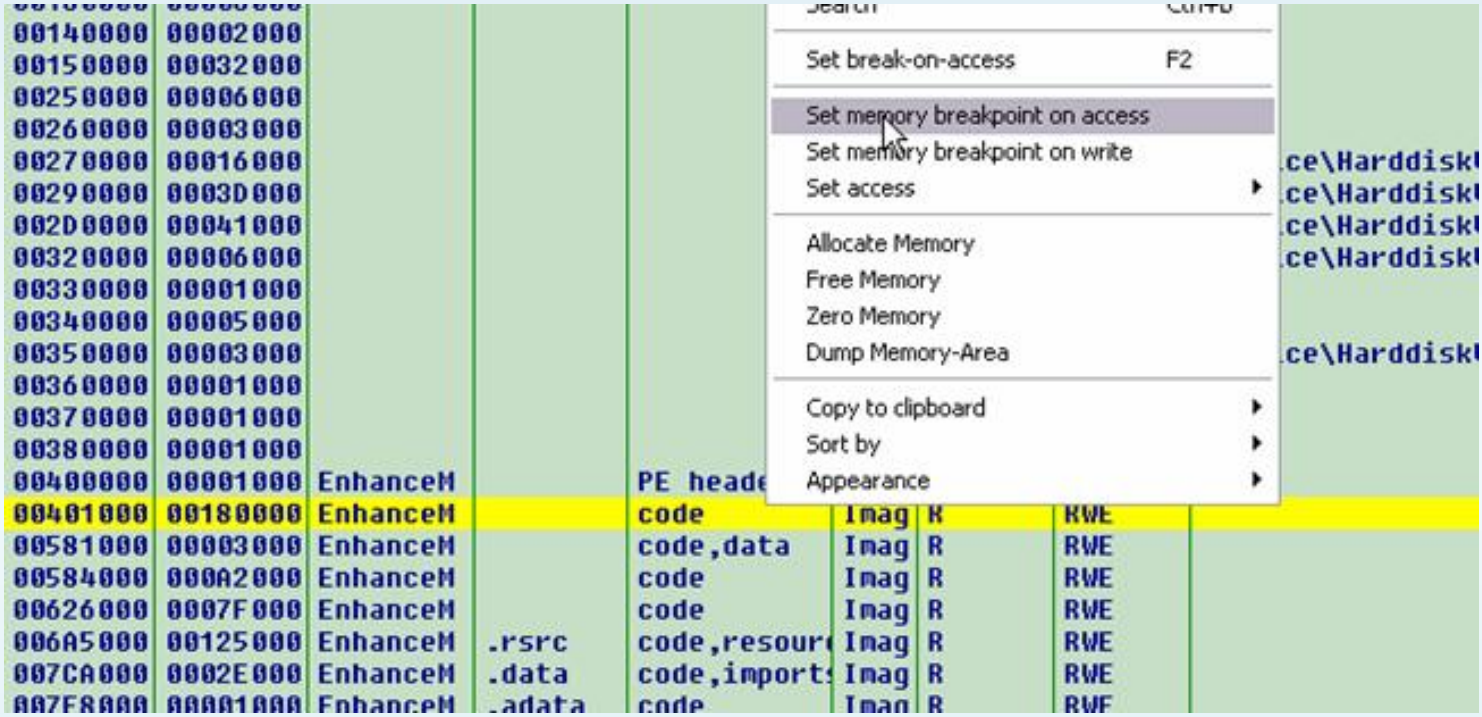
_ Haha, Script running very well and the following notice:



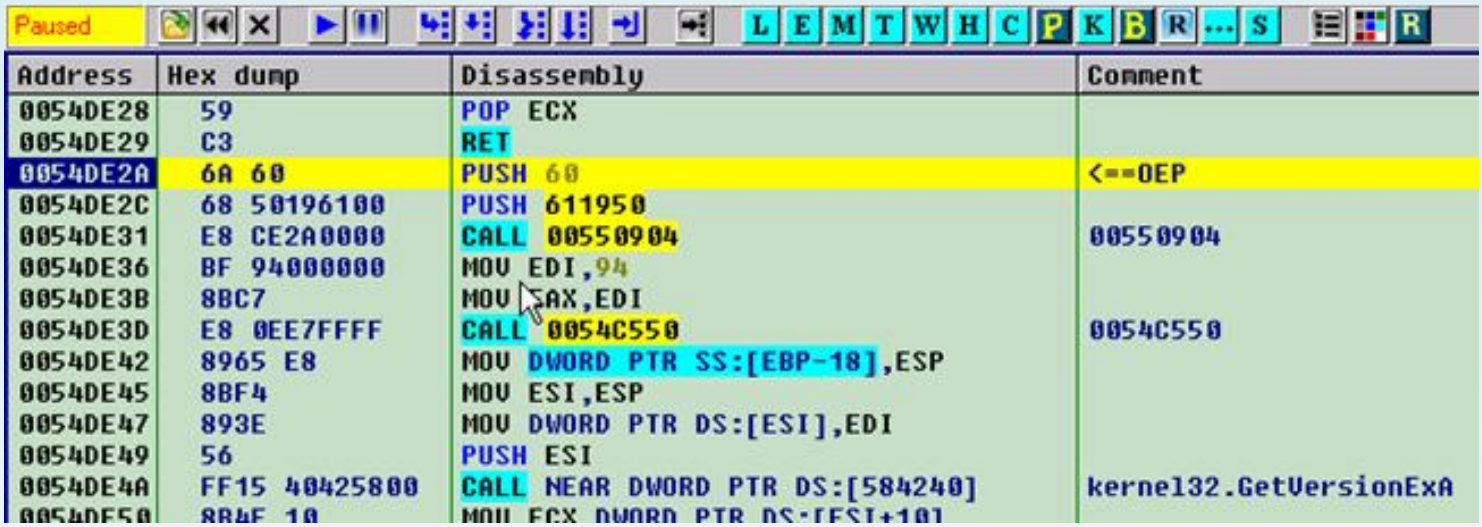
_ **In lly** we stop here:



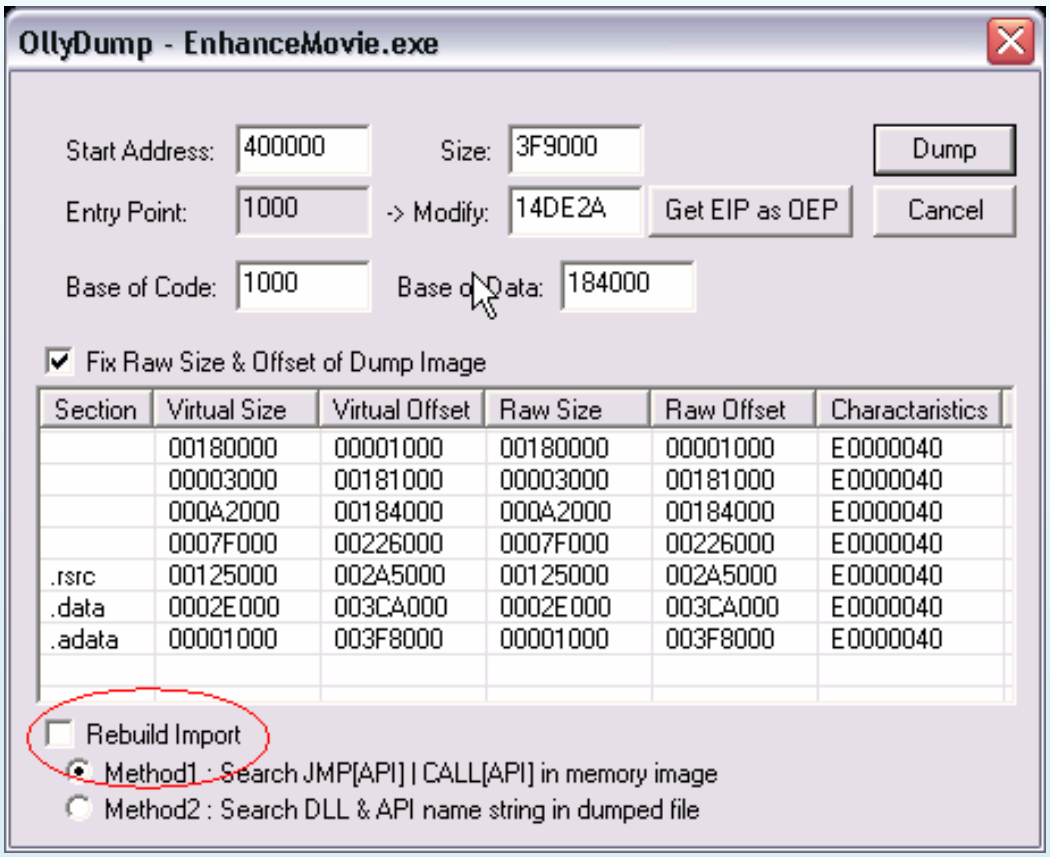
_Nhiem Of us now is to find the **OEP** to dump files. Press **Alt + M** and 1 *Memory Breakpoint* Set *on* the *Access* **Code Section**



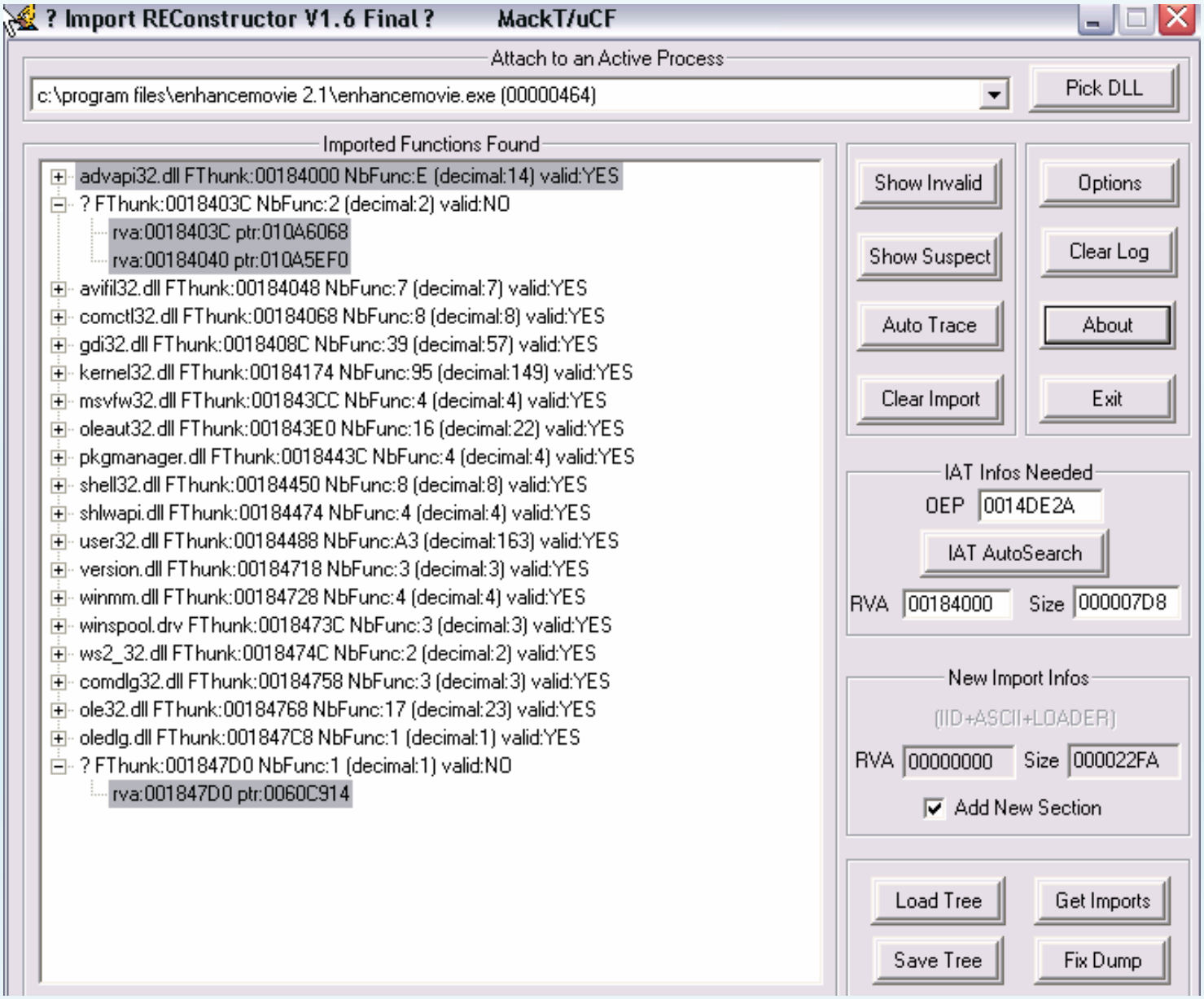
_ N han **F9** to our **O P E:**



_ And what further delay "dump" thui, where they used to dump **OllyDUMP plugin,** remember to choose the same as the image below



_ Open **ImportREC** and fill the **OEP, Get Imports -> Show Valid**



_ According to the experience they have been the Soft Code with *Microsoft Visual C + +* and the pack with *ASProtect 2.xx SKE* when Run Scripts to Fix IAT, the lack *FindResourceA* 2 function and *GetProcAddress.* I do not know exactly but i Soft most of the meat he has over this phenomenon. *(The Uncle MUP the situation has chan italy so they try gòi)*

_ So we need to change the nhusau (Double Click the need to change)

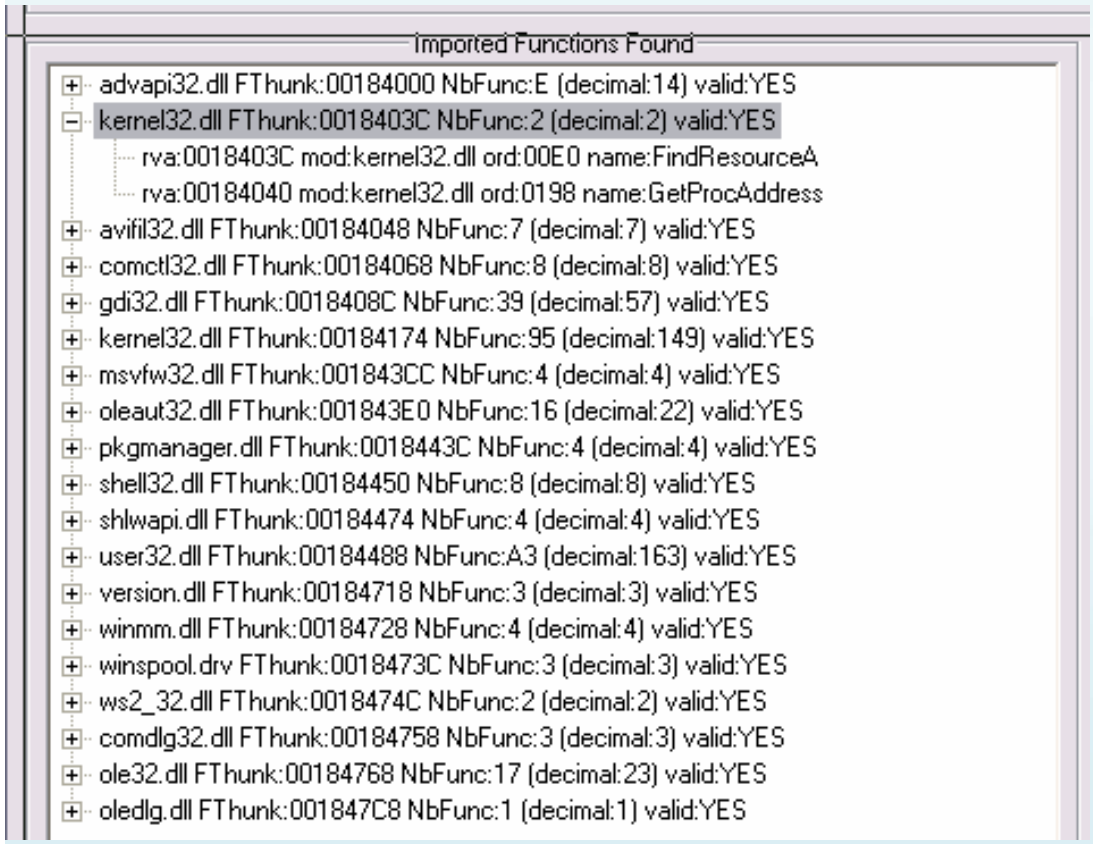
Thun k F: 00184 0 3 C N bFu the c: 00000 0 0 2

0	0018403 C	?	000 0	010 A 606 8
0	0018404 0	?	000 0	010 E A 5 F 0

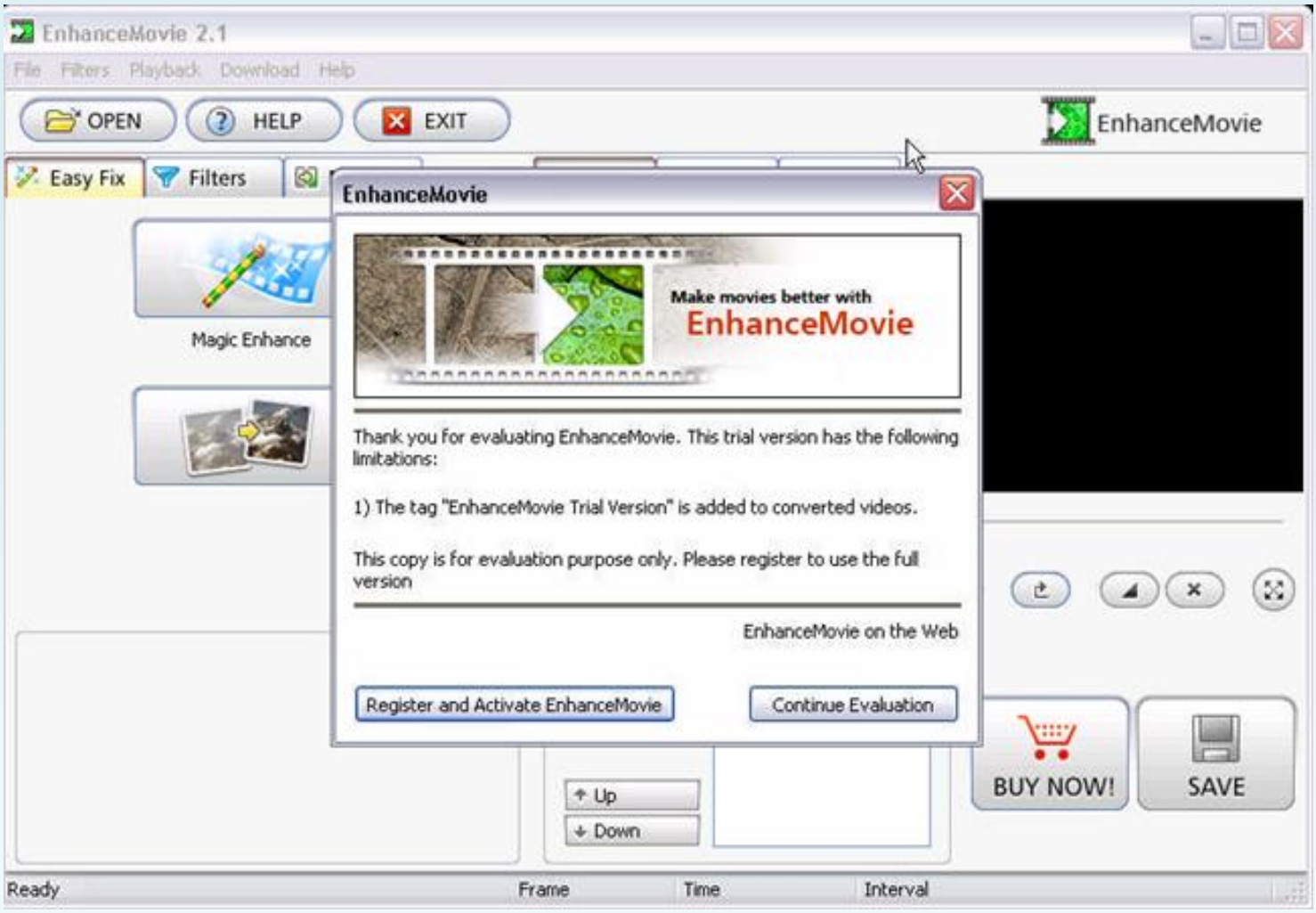
See the

Thun k F: 00184 0 3 C N bFu the c: 00000 0 0 2
1 0018403 C k e l e RN 3 2. D ll 00 E0 R F i e nd so u rc e A
1 0018404 0 k e l e RN 32. D ll 019 8 Ge t Ad P ro c d e r ss

Select **Show Valid-> Cut ThunK (s),** click to select File **Fix dump** dump



_ Test File Dumped_.exe, hahaha run lickerish



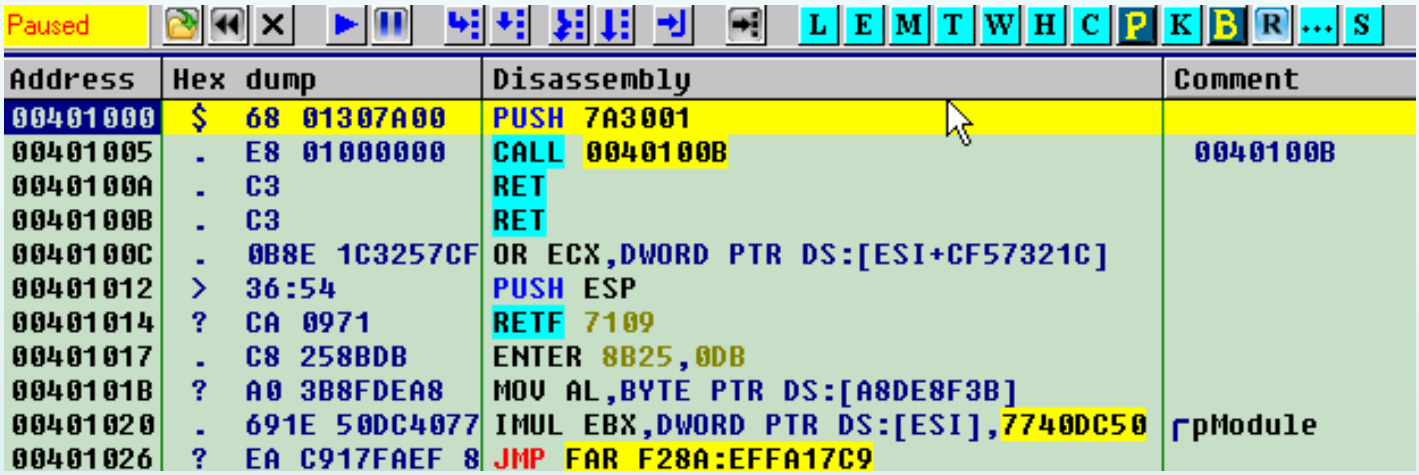
_D Ung **P I D E** q uế F i l t D e e d p um _. E x e

_ **Unpacked successful** .... Hopefully you can to the soft meat left on the form Hompage protect identical.

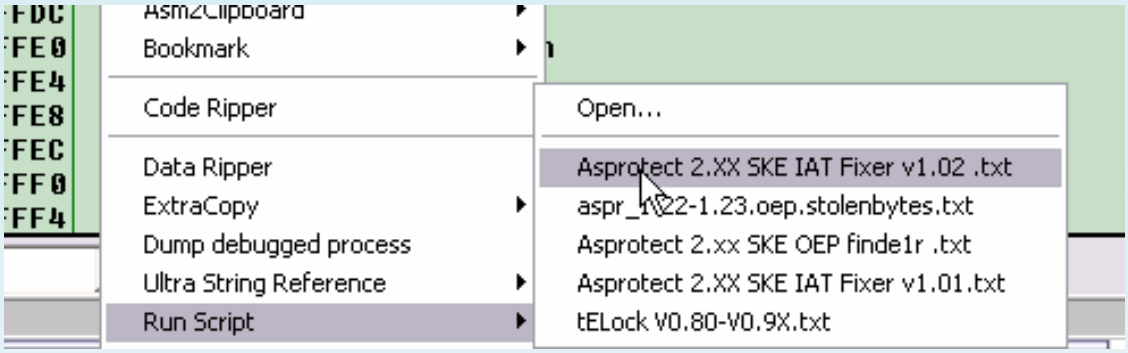
UTT # 2: U n p a c k 4 m i c s U.S. M P 3 B i t a t e C h a n g e r 1. 5

_ More of **us** em **4 M i c s M P 3 Belgium t r a t e C h a n g e r 1.5.**

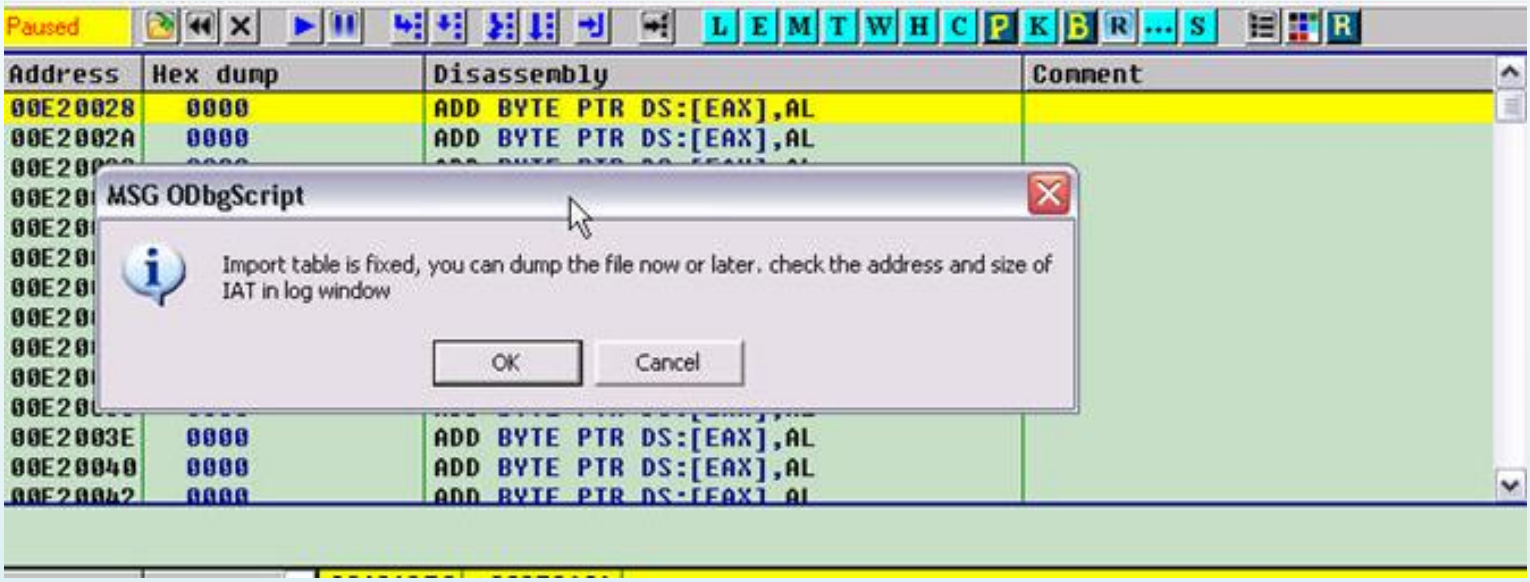
Lo _ a d T a rg e TV **O ll** A **B D G italy** and stop here:



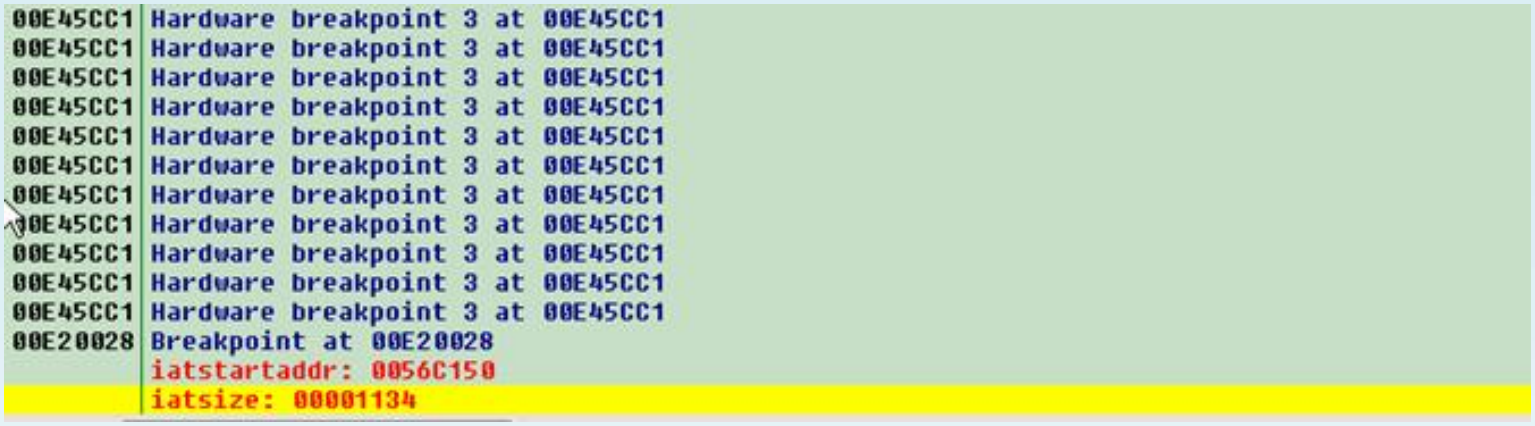
_ Just as the nrun Sc ê r r i pt *"A s e t o pr ct 2nd XX KE A S T F i x e RV 1st 0 2"*



_ Script run and finished the NAG report easy trade

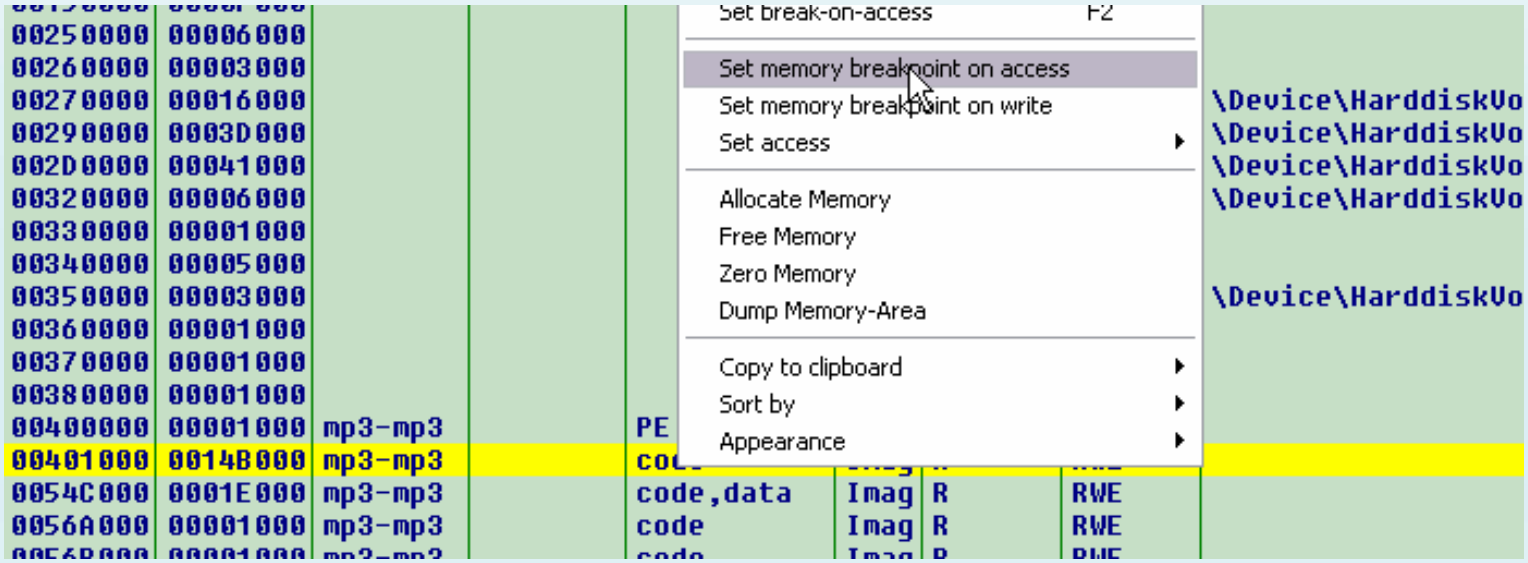


_ Han N **T A L + L** and C using a number of G L O

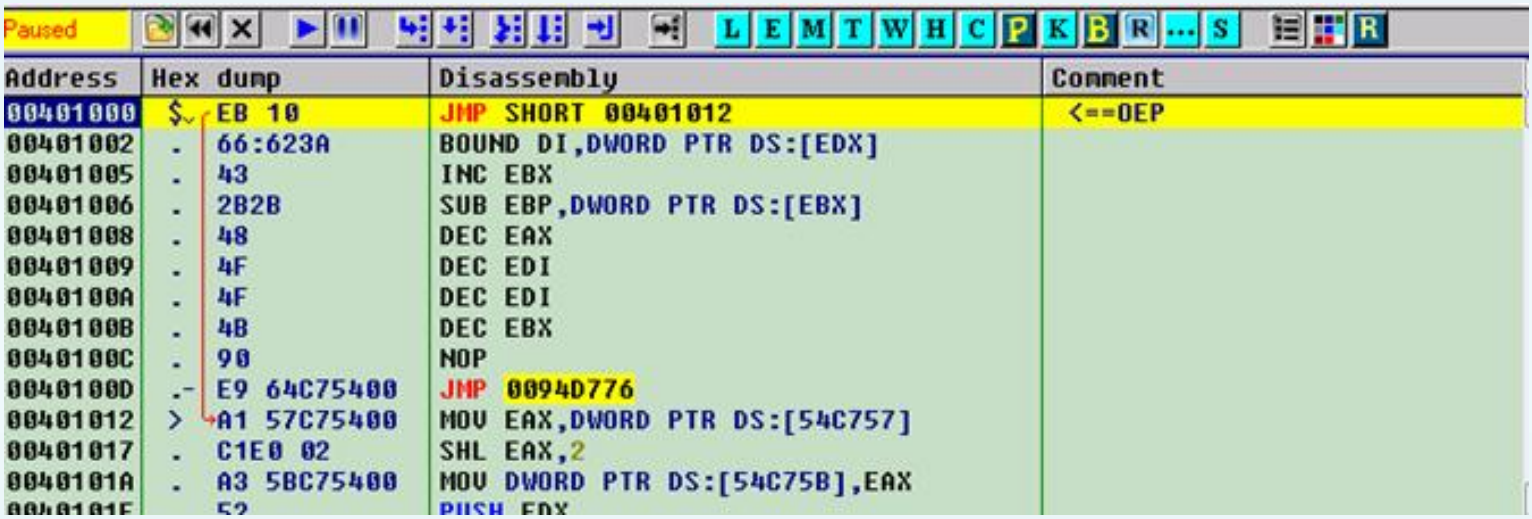


_ The case of a breakdown of the A T s t r a t: 0056 C 15 0
I AT S i z e: 0000113 4

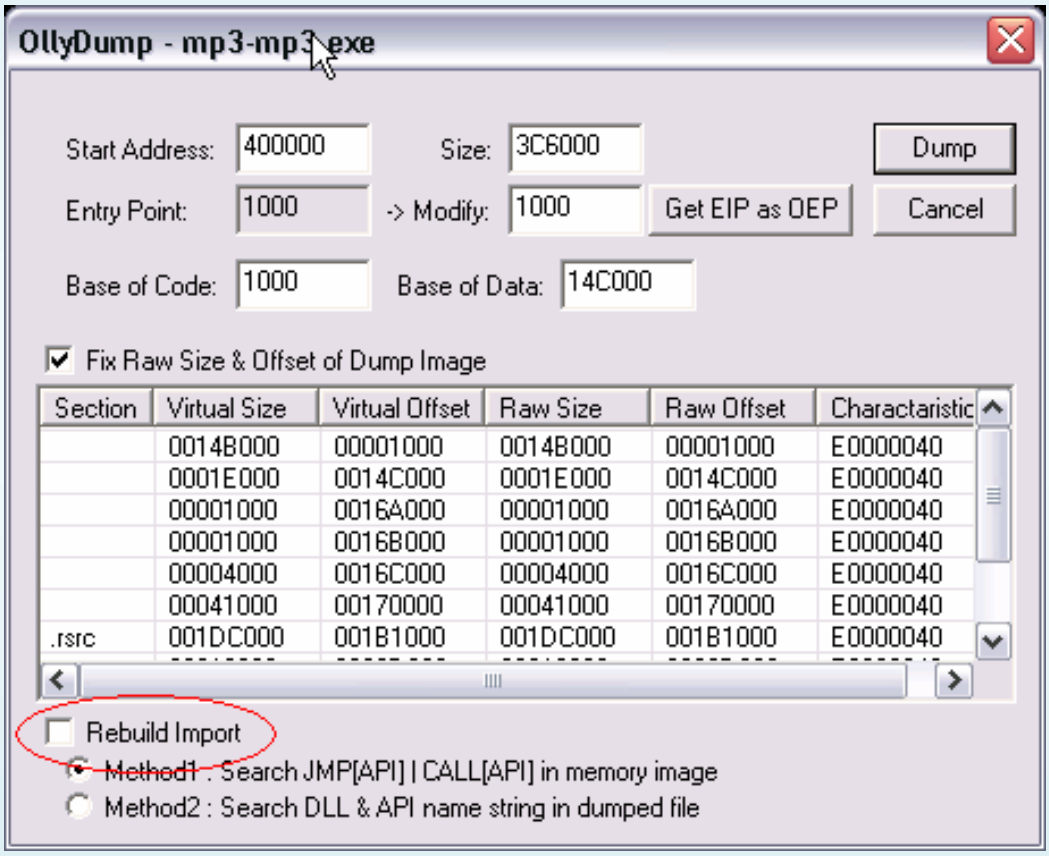
Yg _Ba at the hun g a t t I m to **O P E.** Han N **A L T + M** and S T E *M E mory* 1 *B r e a k pointon Acc e s s* of E N **S E C T I C o n o d e**



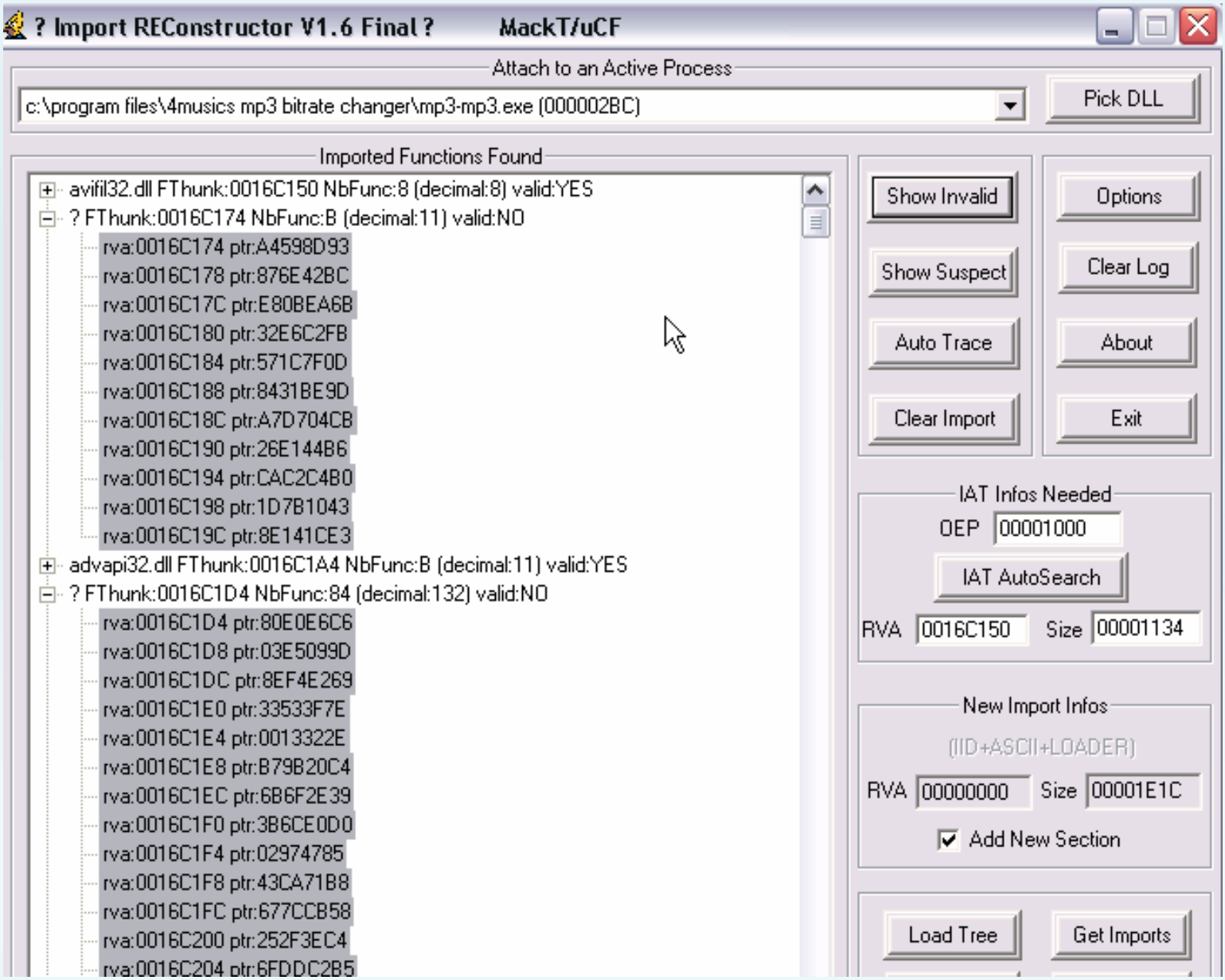
_ N han **F9** to **O EP** we need to im



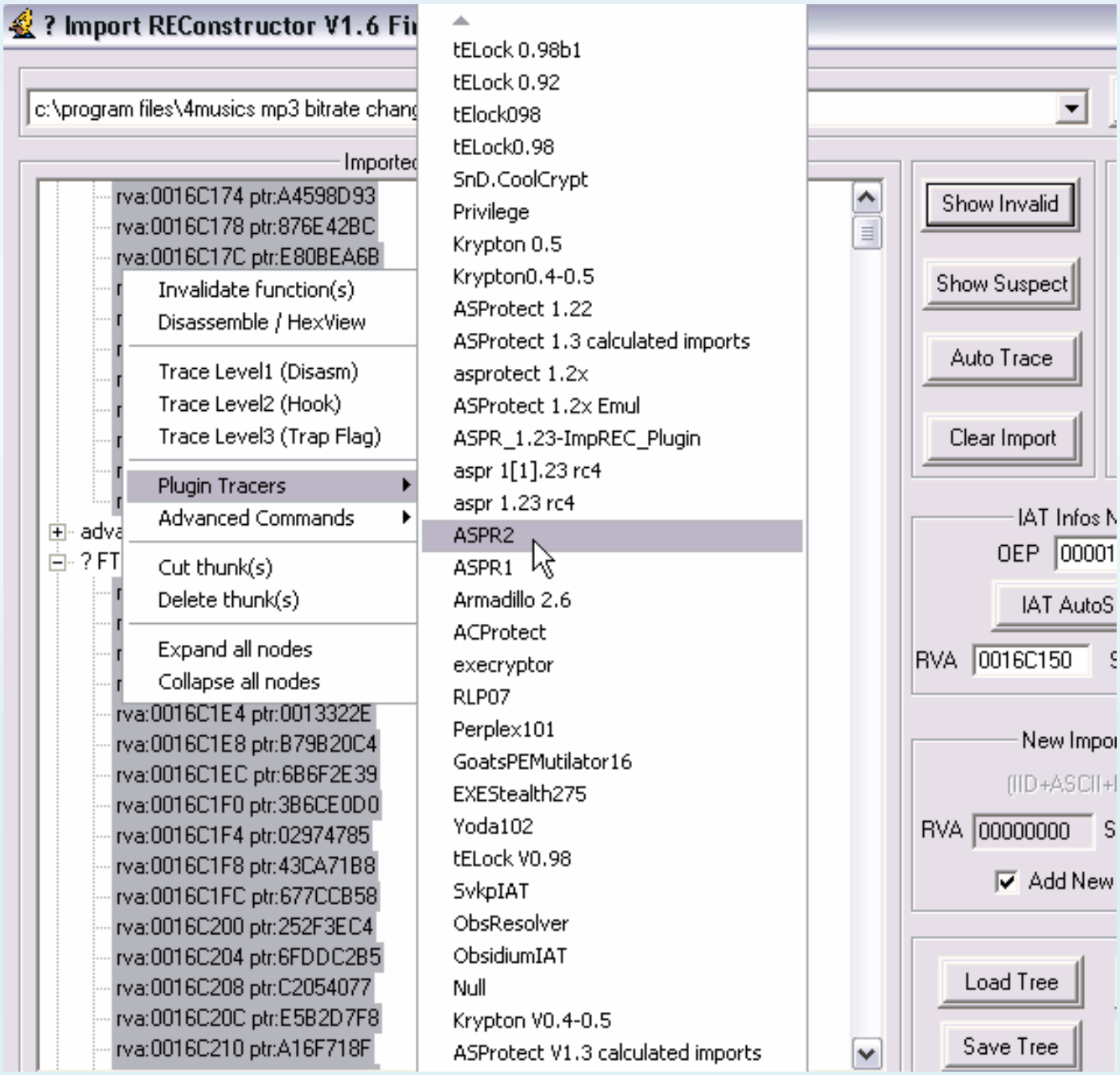
_ You yg at D u m p e F il and the more than C as The h



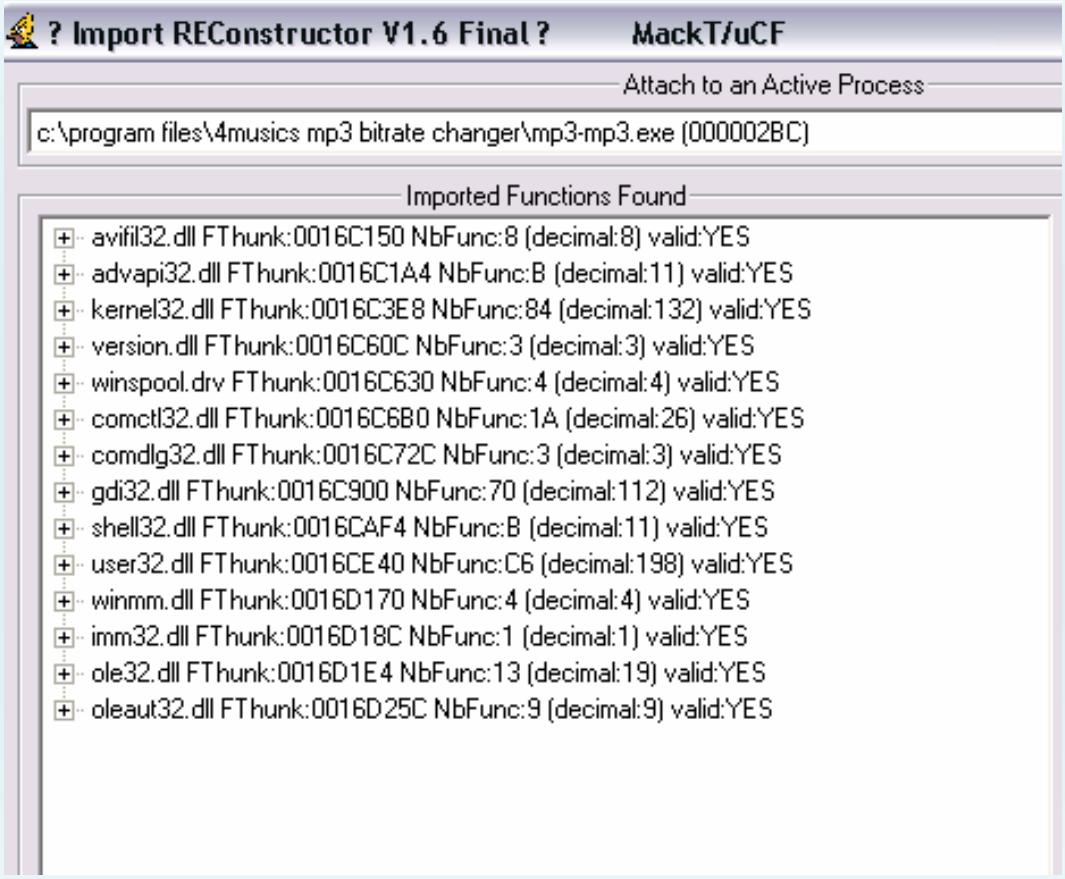
_ Open **ImportREC** and fill **OEP = 1000, RVA = 0016C150, size = 1134** hit **Get Imports -> Show Valid**



_ Click to select and **Plugin Tracers -> ASPR2**



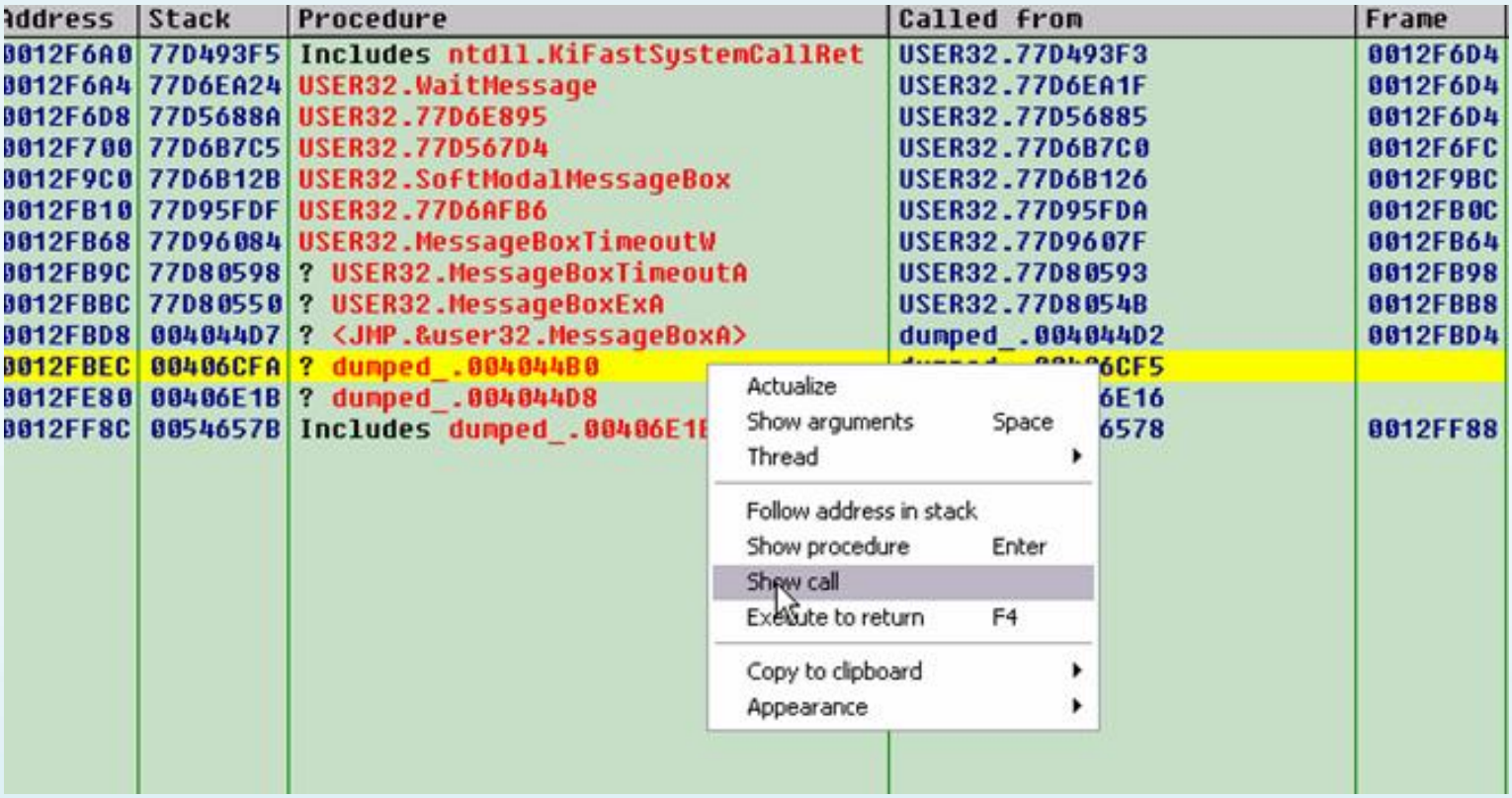
_ Wait for plugin finished running, select **Show Valid-> Cut ThunK (s),** click to select File Fix dump dump.



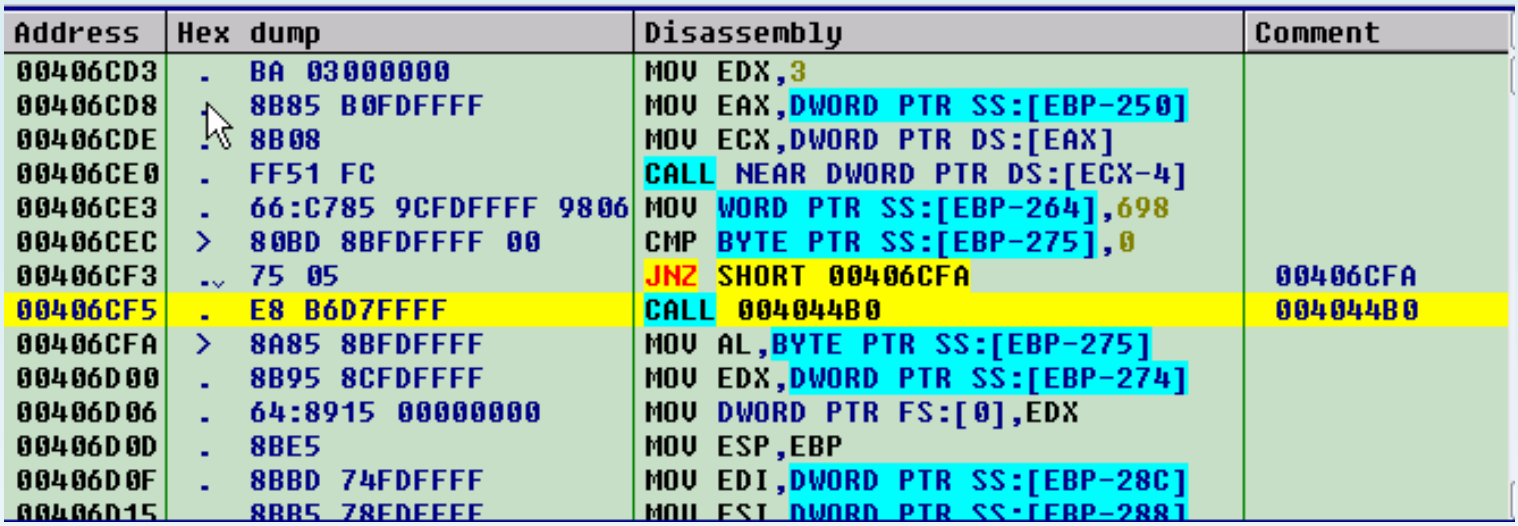
_ Or using the Fil Dumped _. Exe

_ Hichic, what teaching heaven ... calm thinking slices 1 *Check* sure this is *file size*. If true nhudu guess we Bypass it Path. Ok, Load File Dumped_.exe and **Olly** to stop here

_ N han **F 9, F 12, T A L K** + and C than that of h h h ì n



_ And here is to:



_ Set 1 in Bp **406CEC,** press **Ctrl + F2, F9** we stopped at BP Set

```
00406CE0  .  FF51 FC              CALL NEAR DWORD PTR DS:[ECX-4]
00406CE3  .  66:C785 9CFDFFFF 9806 MOV WORD PTR SS:[EBP-264],698
00406CEC  >  80BD 8BFDFFFF 00     CMP BYTE PTR SS:[EBP-275],0
00406CF3  .v 75 05                JNZ SHORT 00406CFA                00406CFA
00406CF5  .  E8 B6D7FFFF          CALL 004044B0                     004044B0
00406CFA  >  8A85 8BFDFFFF        MOV AL,BYTE PTR SS:[EBP-275]
00406D00  .  8B95 8CFDFFFF        MOV EDX,DWORD PTR SS:[EBP-274]
```

P _ a separated

00406 C F3 7 5 0 5 JNZSH OR 00406 T C FA

See the

00406 C F3 E B 0 5 J M PS H O R T C 0040 6 FA

_ Click **00406D22** press **F8** to **F7** we come

```
Address   Hex dump          Disassembly                       Comment
00406E16  .  E8 BDD6FFFF    CALL 004044D8                     004044D8
00406E1B  .  84C0           TEST AL,AL
00406E1D  .v 75 14          JNZ SHORT 00406E33                00406E33
00406E1F  .  33C0           XOR EAX,EAX
00406E21  .  8B95 0CFFFFFF  MOV EDX,DWORD PTR SS:[EBP-F4]
00406E27  .  64:8915 00000000 MOV DWORD PTR FS:[0],EDX
00406E2E  .v E9 680C0000    JMP 00407A9B                      00407A9B
00406E33  >  66:C785 1CFFFFFF 0800 MOV WORD PTR SS:[EBP-E4],8
00406E3C  .  C605 3FCC5400 00 MOV BYTE PTR DS:[54CC3F],0
00406E43  .  66:C785 1CFFFFFF 1400 MOV WORD PTR SS:[EBP-E4],14
00406E4C  .  68 D0A45400    PUSH 54A4D0                       Entry address
```

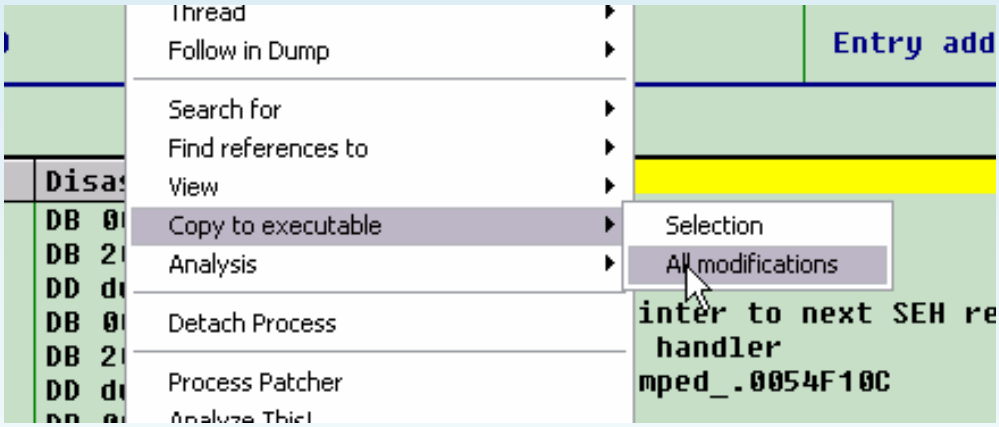
P _ a separated

00,406 E1D 7 5 1 4 J N T ZSH OR 0040 6 E33

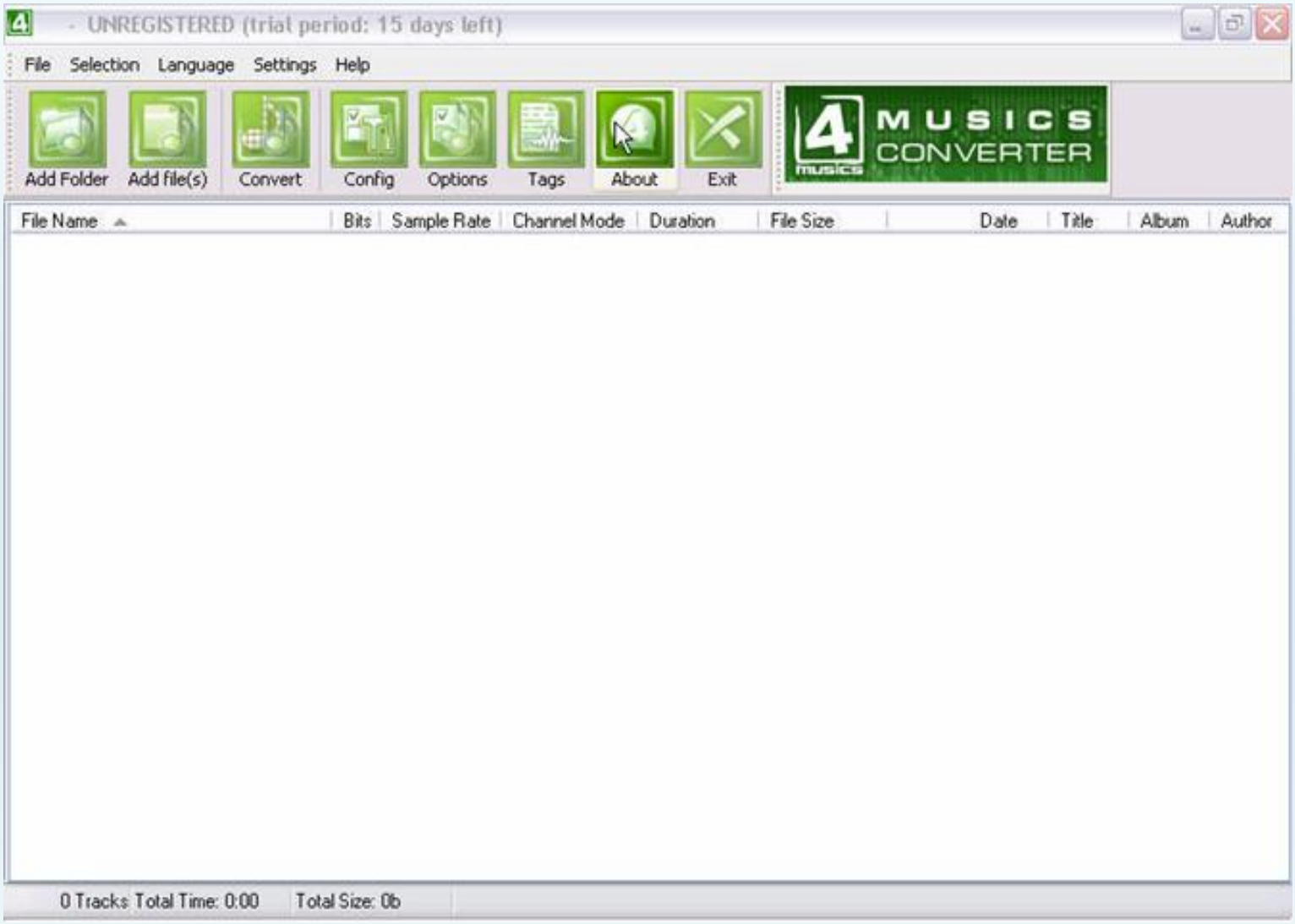
See the

00,406 E1D EB 1 4 JM PSH O R T 004 0 6 E33

_ S a u save it again



_ Temporary File name for this new Dumped_1.exe is, and try running



_ As we have already put the NAG error message. **PEiD** Using the File Scan Dumped_1.exe

_ H a h a h a h a h a **n** ... ... **U p a c k e d c su ce ll ssfu** ...

G re e Ts italy Ou F l t: *C om p ut _ An e r l e g, e Zombi, M oo n b by a, c H a grape, B e n i n a k e i n a m no w a r, o i Z, D x u e, M e rc, i l e g HT pho where x, c k ybo Tri italy, T a k a d a i a midiot, the light o e ni x , t h e i nth a n d n e, a nd VolX ... you!*

N ha Tr a n g, the à italy 2 8 see the 4-year 200 6

Why N o t Bar

I. I n t r u c od ti on:

After completing TUT ***"Unpacking & Cracking RAR Repair Tool 3.0"***
I think the society is ... But i really doubt, many brothers and external
Water Passion with Packer has IM and email to them a lot but
accomplishing them are the following: *"Your method is or if*
OEPfinder vX.YZ by deroko ko work is how to implement nhuTUT". Question
or are asked and also accidentally hit in the children's nhot ... hehe ...
because they also
pain bít comet. Thui jokes, Method which applies only 2.2x which EXEcryptor
only, but with the 2.3x EXEcryptor need another 1 ... How do nhuthe
the subject will be more difficult to see clearly ... ..

II. T oo l s:

- Tool and Plugin to use:

  - *LY D L O B G _ E x c e r italy ptor 1st 1 0*
  - *OT P R E C O NiDv The 5th 1 E*
  - *skE a T x pl o r e r l*
  - *B O D i g Scr 1 pt. 4 8*
  - *I mport R E C 1. 6 F*
  - *R G D P a c k e r e t De ctor and 0. 6. 4*

  - *F C x FE plo e r r V*

- Sc r i*pt: "E x e c t ryp or 2. X I AT bui r l e d e r" by K a G and the 1st 1.*
- T a rg e t: **G o l d e nFTP S e r v e r P rov2 .8 0**
- Ho m e p a g e*:* **htt_p: / / w ww. G o l de nft p s e r v e r. C o m**

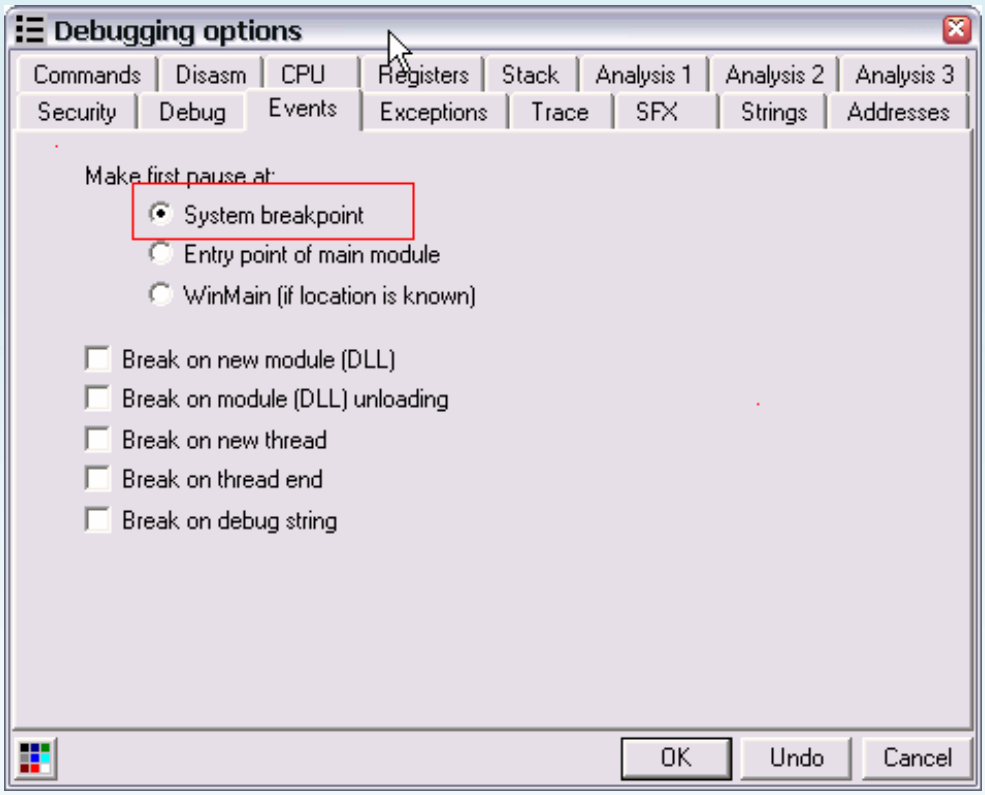
I I I. Unpa the i c k:

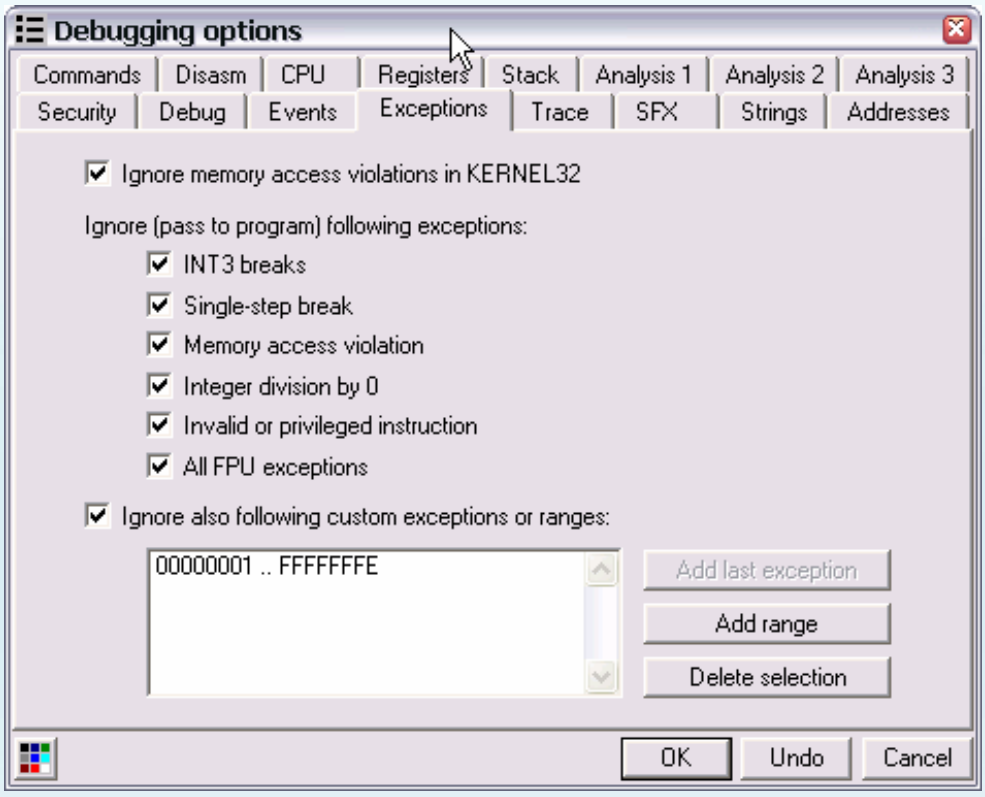
_A job using familiar **RDG Packer Detector v0.6.4** Detect Target

_ If *OEPfinder vX.YZ* used *by* the Target *deroko* do this is ... the very form it is the Pack with **EXEcryptor 2.3x.** Make sure there are many bottles, he asked why
they know well ... hehe ... Nothing subliminal they use **ID PROTECTION v5.1e** and the following results:

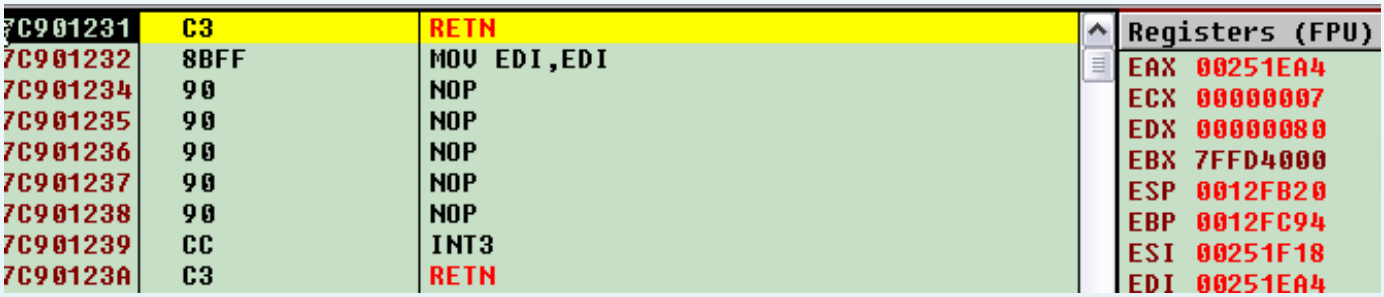
_ This result is also the answer why do ***OEPfinder*** work. And
the children know the **Deroko** Update tools will do this again .... So we must thui play by hand. Open **OllyDBG_EXEcryptor,** press **Alt + O** and configuration as

s a u:





_Target Load to **OllyDBG_EXEcryptor** and you'll stop here:



_ Next to his brother SET tua **Breakpoint** Trick of the new Soft Run entirely on Memory ko that was Crash. As they say should use lời Scripts ***"Bypass AntiDBG"***

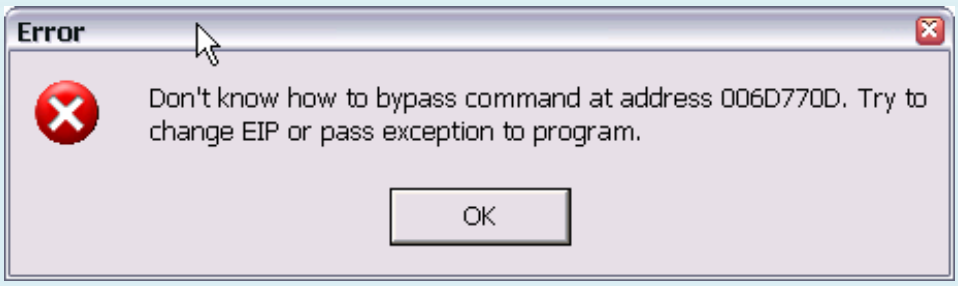
d a t a:
RH and I nst a nce and
a r e s e cod GV a g e r
VMS
v e r a r a PV PV o
e e a very mp
cod e:
g pa "With a rtu l F r ee", "RN k e l e 3 2. dl l"
b p w h s $ U R E S LT, "x"
run
b p c h w $ U R E S LT
rtu
mi g p i e, M O D B U LE ASE mov I
nst h a n c e, E $ R S T U LT mov e
mp, $ R ES U LT
dd e t a p m, 3 C
mov e mp t [t e mp]
A dd e m p t, h I n s t a nce
A dd t e m p 2 8

mov e mp t [t e mp] a dd e m

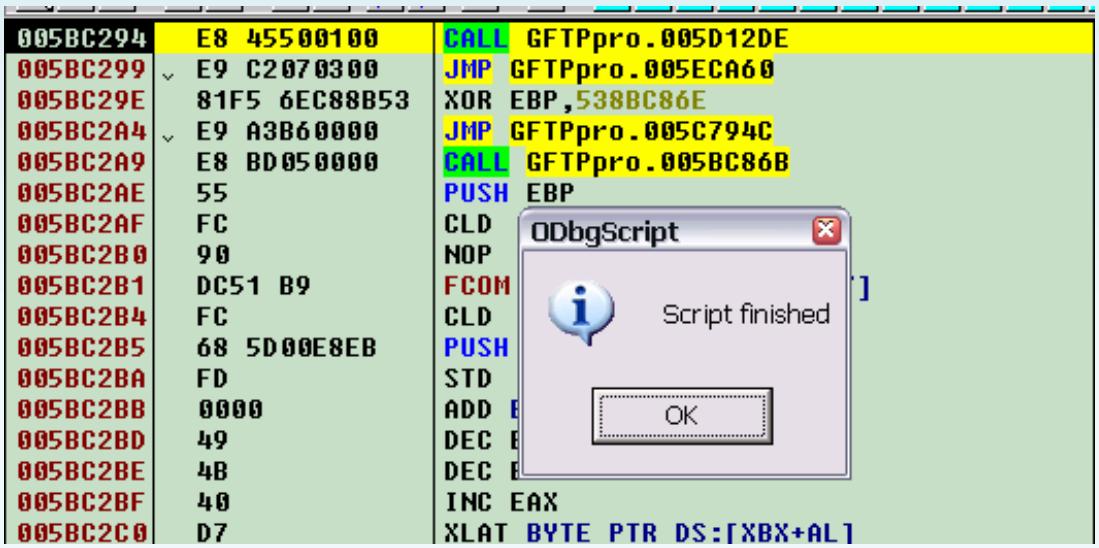
p t, h I n s t a t e nce bc m p

```
   mov e p t e mp


   mi e g e m p i, M O M E B A R Y SE
   mov co d e s e g, $ R ES U LT
   find $ ES R U L T, E # 2 C C # 9D
   mov [$ R ES U L T], # 2 in the 90 #
   g pa "u m e n W i s w o nd", "u s e r 32. dll"
   mov [$ R ES U L T], # 8 B C 09 C 85 C 09 D 20800 # 057856341 2C
   pa g "C r e t e a t h r e a d", "k e l e RN 32. dll"
   find $ ES R U L T, # FF7518 #
   mov [$ R ES U L T], A # 6 # 0490
   pa g "Z WC e r a t e a d e GLN", "to the dll. d ll"
   BP $ R ES U LT
loop 1:
   run
   m p e c i p, $ R E S U LT
   j ne loo p 1
   bc $ R ES U LT
BP e loop p 2:
   run
   m p e c i p p e j ne
   loop2 bc e p
   mov e t MP, co d e s e g t e
   mp sub, 1
   g m e t e m each, and M E M O R Y B A S E
   mov VM s e g, $ R ES U LT
   g m e t e m each, and M E M O R I YS ZE
   b p e rm v ms g, $ R ES U LT
   run
   b P mc
   mov e p o e x a STI
   b e p o p rm, 1
loop 3:
   run
   c m p p e i, p j e o ne
   loop3


   b p e r t mc
```

Scripts _Run some time to appear this message

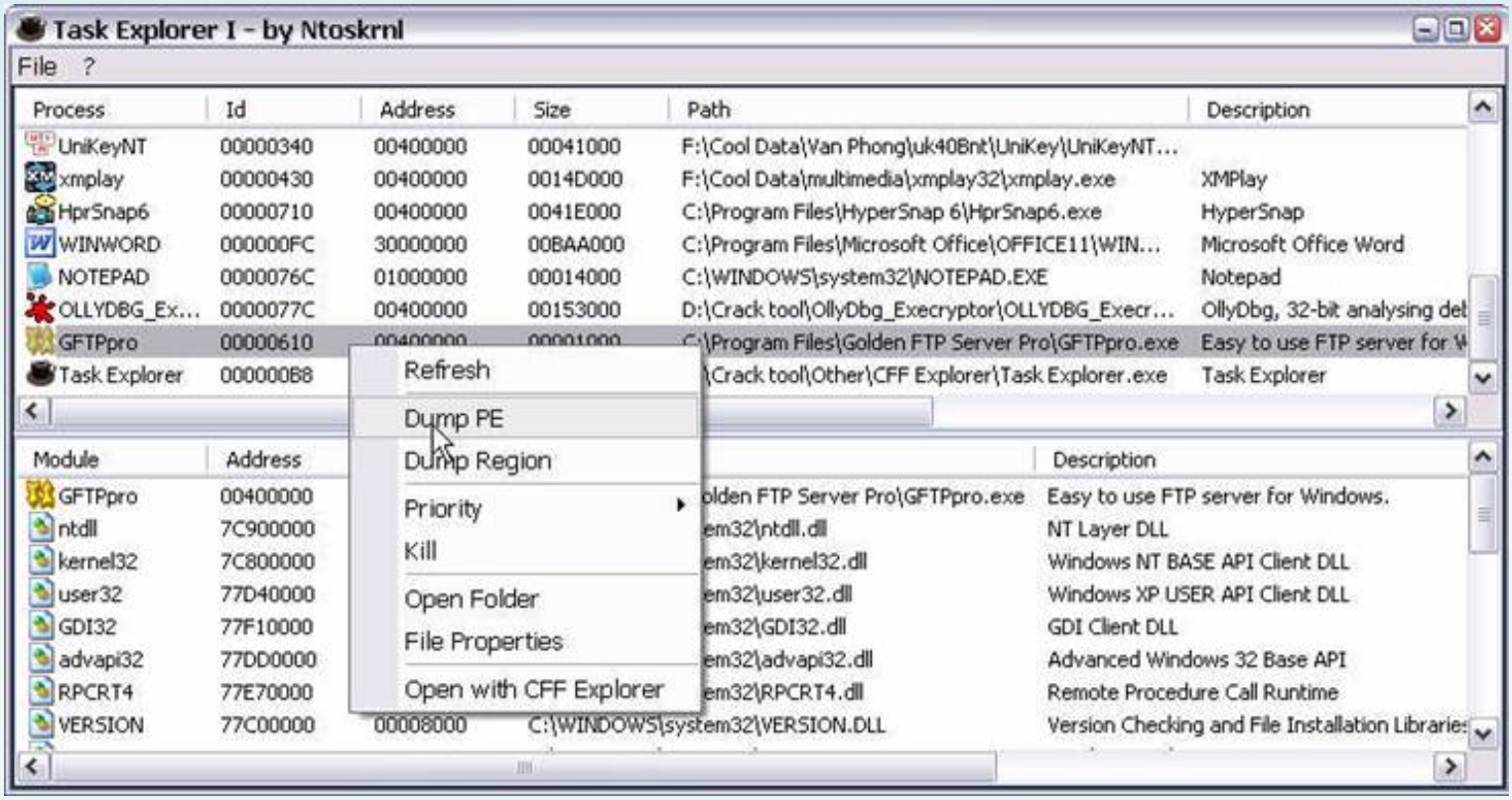


_Click **OK, Shift F9** until coming here:



_Press **Shift + F9** Soft will **run** completely

_NhuTut Just before you dump file and use **RDG Packer Detector v0.6.4** scan to determine the Soft Code with what? This helps us find **OEP** for this target.



_Now need to find Soft is code with ***Borland C + + 1999.*** She would like the us 1 soft computer that is also a **Winrar 3.6**

Lo _ a **n** d **Wi rar** and O **O D B ll italy G**

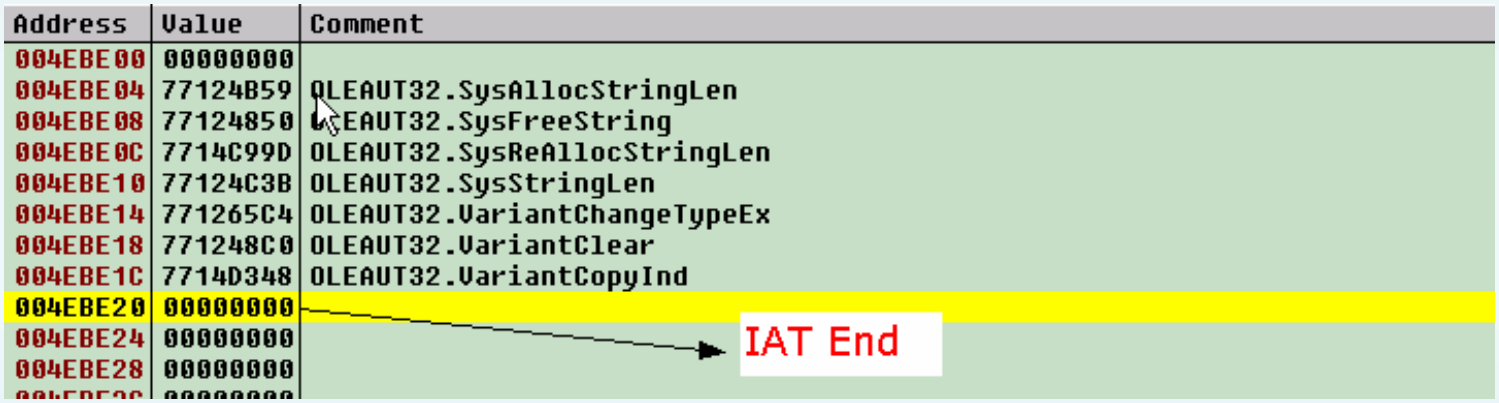
```
00401000   EB 10          JMP SHORT WinRAR.00401012
00401002   66:623A        BOUND DI,DWORD PTR DS:[EDX]
00401005   43             INC EBX
00401006   2B2B           SUB EBP,DWORD PTR DS:[EBX]
00401008   48             DEC EAX
00401009   4F             DEC EDI
0040100A   4F             DEC EDI
0040100B   4B             DEC EBX
0040100C   90             NOP
0040100D - E9 B4014A00    JMP 008A11C6
00401012   A1 A7014A00    MOV EAX,DWORD PTR DS:[4A01A7]
00401017   C1E0 02        SHL EAX,2
0040101A   A3 AB014A00    MOV DWORD PTR DS:[4A01AB],EAX
0040101F   52             PUSH EDX
00401020   6A 00          PUSH 0
00401022   E8 B3D90900    CALL <JMP.&KERNEL32.GetModuleHandleA>
00401027   8BD0           MOV EDX,EAX
```

1 _ or rather it is soft to the Code by ***Borland C + + 1999*** are **Entrypoint** is 1000. This may think of the OEP is **GFTPpro** 1000. This is soft Nhuday ko ***Stolen bytes*** are tired ... that .... Time to find location
beginning and end of the **IAT**

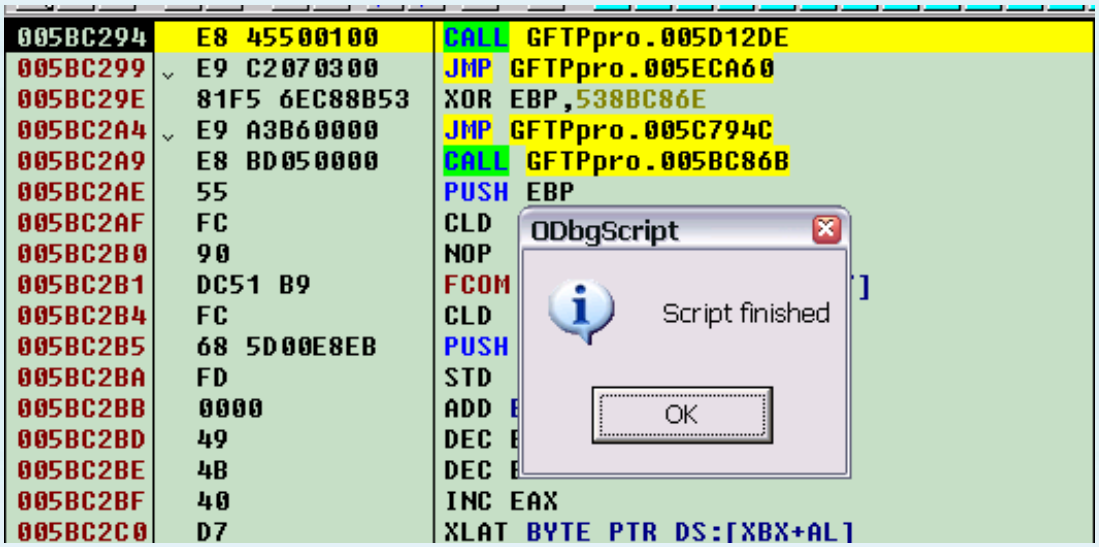
Address	Value	Comment
004EB100	00000000	
004EB104	00000000	
004EB108	77DD778E	advapi32.InitializeSecurityDescriptor
004EB10C	77DD6BF0	advapi32.RegCloseKey
004EB110	005A8B73	GFTPpro.005A8B73
004EB114	005C93B2	GFTPpro.005C93B2
004EB118	005E79D0	GFTPpro.005E79D0
004EB11C	005AB0BC	GFTPpro.005AB0BC
004EB120	005AD745	GFTPpro.005AD745
004EB124	005E9D1D	GFTPpro.005E9D1D
004EB128	77E0D2FD	advapi32.SetFileSecurityA

IAT start

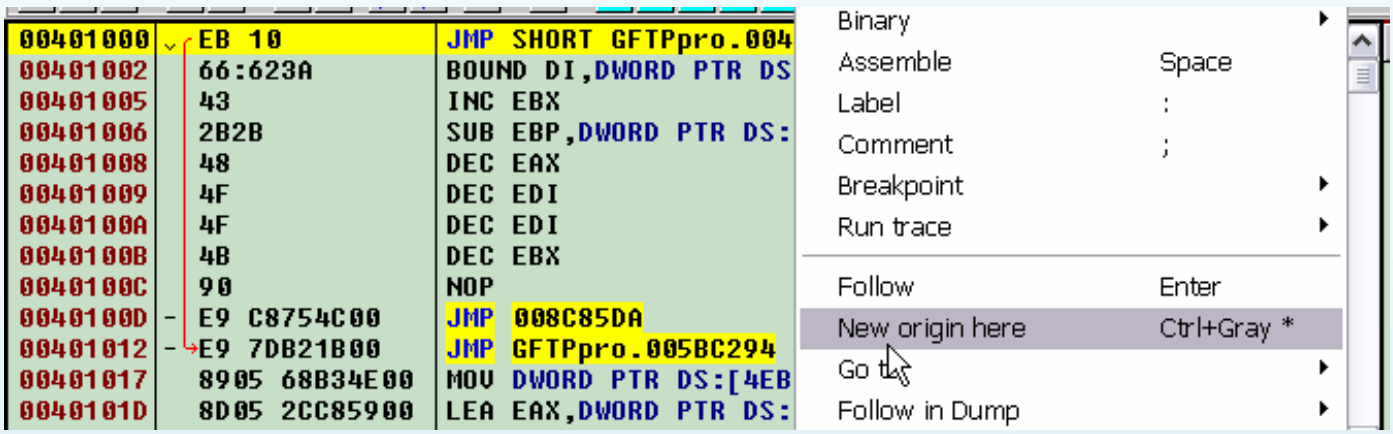
_Scroll down to the bottom we have **IAT End**



_Press **Ctrl +** F2 and Running Scripts ***"AntiDBG Bypass",*** press **Shift + F9** to when stop here

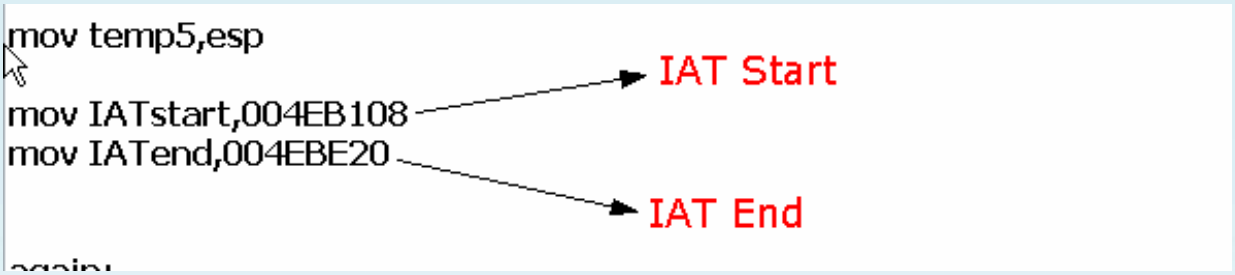


_Yeah, press Ctrl + G to enter and 401,000 Select like



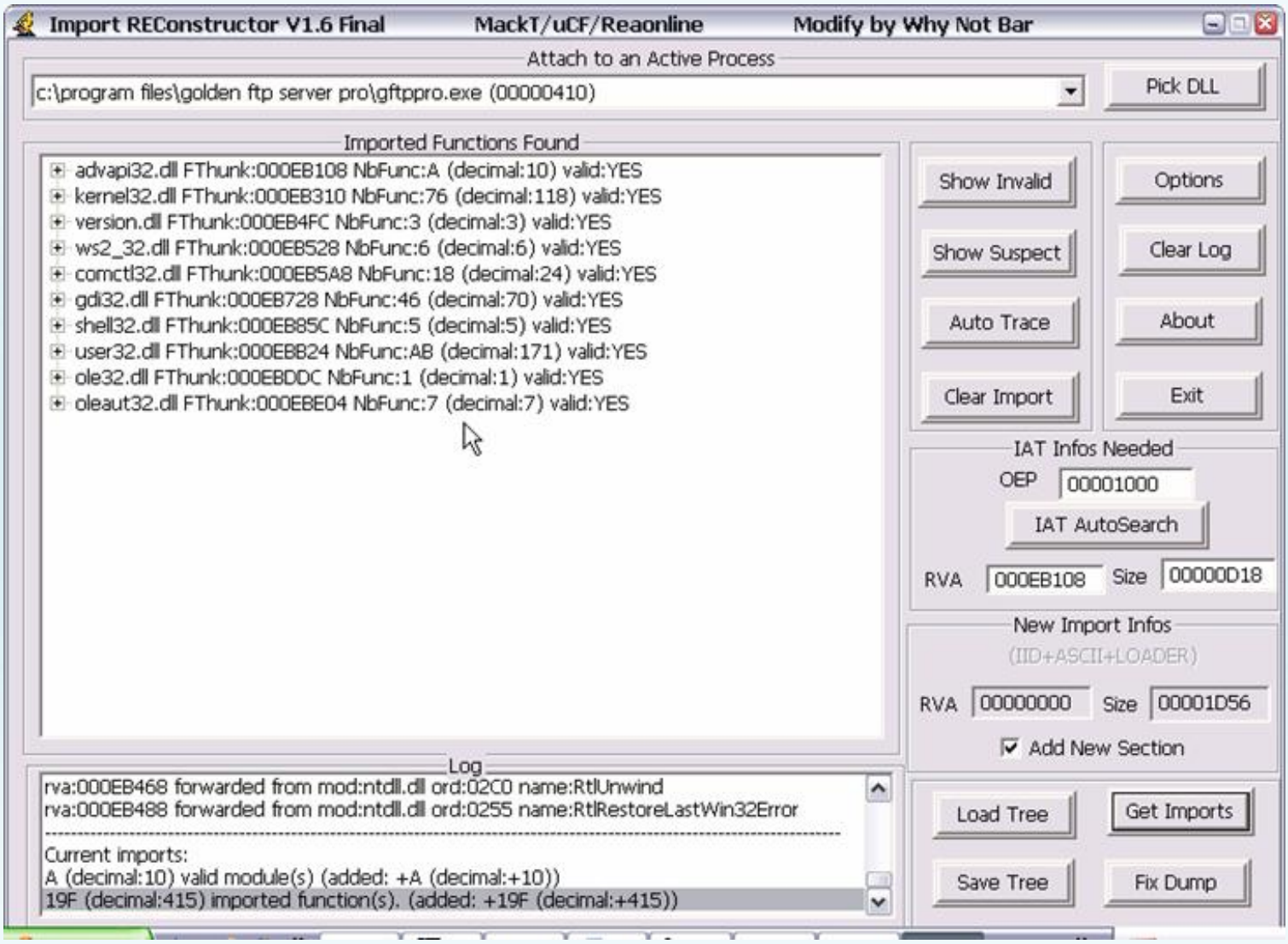
_Time running Scripts ***"Execryptor 2.x IAT rebuilder*** to Fix IAT but remember

Edit the nhusau



_Ok, time and Run Scripts waiting finished running we'll get the **Full IAT**

Dumped _Full time more and more open ImportREC enter parameters



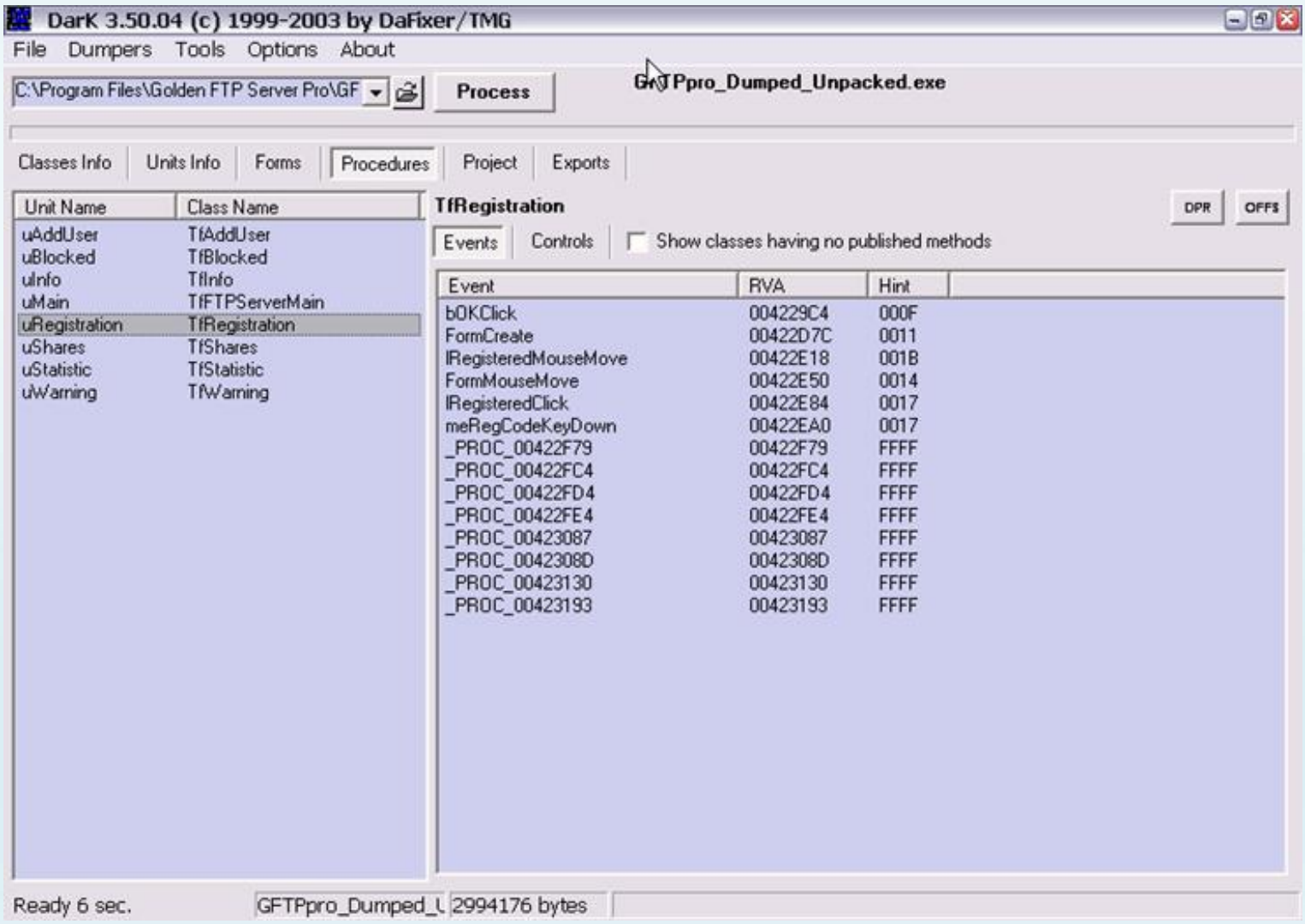
Ko has any function should **Fix** Invalid **dump** nhubinh often, try Run GFTPpro_Dumped_.exe khua khua ... . *Unpacked* nhungua run ***su cce ssfu l l!***

I V. Cr ac k i n g:

_ The Crack found this line too afraid ... .. I have to do is to Cracker đành franchise for a few ... Bro.

```
004031C5 MOV EDX,GFTPpro_.004C7F47   .log
00403275 MOV ESI,GFTPpro_.004C7F55   Default
00403295 PUSH GFTPpro_.004C7F5D      unregistered
004032A6 PUSH GFTPpro_.004C7F6A      unregistered
00403652 PUSH GFTPpro_.004C7F94      :)
00403657 PUSH GFTPpro_.004C7F77      Hi, cracker! :) How are you?
00403D56 MOV EDX,GFTPpro_.004C8006   .cfg
00403E1A MOV ESI,GFTPpro_.004C88D9   Golden FTP Server Pro
00403EF0 MOV ESI,GFTPpro_.004C88F1   Golden FTP Server
00403F40 PUSH GFTPpro_.004C8903      FTPServer
00403F61 PUSH GFTPpro_.004C890D      TfFTPServerMain
```

DeDe is _Dung lot of .... What's the treatment from the ... "I do not listen, they do
see, they do what bít brothers are Crack ... "



_Byebye .... In brothers in other tut

GRE T e s t Fly Ou: *C o m put _ An e r l e g, e Zo m belgium, each on a by b, c H a n ho, nin B e a k i a m e n no W A R, Z o i, D e u x, M rc e, i l e g HT pho where x, c k ybo Tri italy, T a k a d a i a midiot, and e nth a n d i n e, a nd you ...!*

N ha Tr a n g, italy 2 à The 5th Asia ng8 year 200 6

W h o t italy N Bar

Un p a ckiastheFlRechoveritaly2nd 35

I -- Print d o t r u c t i o n:

Flash Recovery is a 2:35 ExeCryptor by 2.3x extremely difficult to unpack, but it is a very Soft brother or review of its features:

"DiskInter the *als Fl* a *sh ecoveryisaflash* R m e *m ory file rec* o *very lt o* o t h i *ateverydig talca* m *eraowner*

shouldha and *ehandy.Es s entially, the spro g ram a marijuana" firstaidki the "ford of the gitalpho ograph*

RSA e n t a dcomesto therescue theex a cttimewhen t'snee i d *ed. Unfortun a tely, otog h p r o aphsare ftenacc*

a den of allydeletedorlost uetohardw a re d (e committed in italy rmemor) malfuncti n.Som o e e s heart,

flashm moryg e e e tsr - formatted.Theg o n od ewsisthatinallofthe s ecasesthe imagesarenotlo s tD

skInternalsFlashRec i o n verycanu deletea estorepho r n d t h ograp sinamatterof secondsorminu s. e t o w

Thisish it w orks. ouconnect Y italy ourc me a aorflashmemorysticktoPC.C o r o mputerrec gnizes it a s

anexternaldisk . T he rogramt p h t enstar ssc a nningme m ory, owi n s h u geverypict rethatc a nbe

recovered. A ll ofth anbedonewitht i s c h e EFR eevaluat nversi i o n o nofDiskInter alsFla hr s e covery.To

savethese i mages, italy ouneedtoreg sterthepr o i s gram.Di kIntern a lsF ashRecove l r s t yisnotju simple,

the it'sbrai - deads mple.Thereis i n s oneedtosetanyoptio of the e-ntireprocessisdone a uto m atically

withabu l t i -- inP h oto R ecoverywi z ARD. Theprog amrec o r o versimagesfr mhar d - dri v es,

externaldrives, or a merasandflashmemo ydevices R S suchas martMe d ia, CompactF l ash, M e mo r yStick,

Mic oDrive r, x l DPictureCardF ashCard, PC Card, Mu l timediaCa r d i gitalCard D Secure,

andmanyothers. "

I I -- Theools T&gerat:

- **T oo L and P lugin c a n d n g s:**
  - *LY D L O B G _ E x c e r italy ptor 1st 1 0*
  - *OTPRE C O NiDv The 5th 1 E*
  - *skE a T x pl o r e r I*
  - *B O D i g Scr 1 pt. 4 8*
  - *I mport R E C 1. 6 F*
  - *FC x FE plo e r r V*

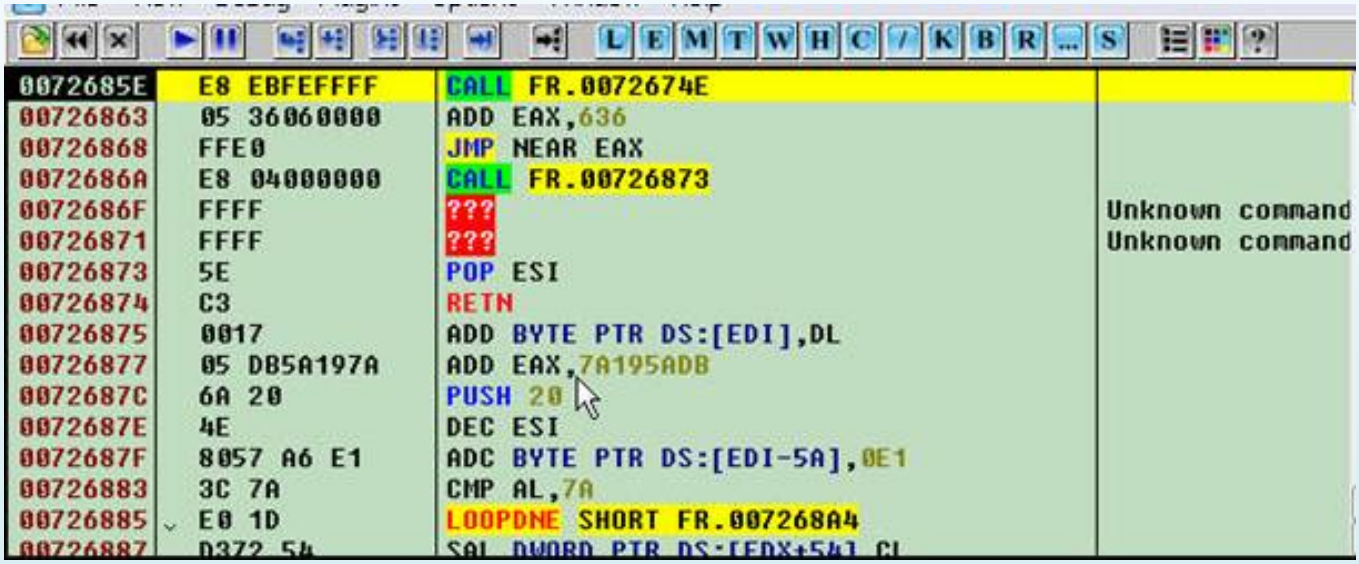
- **One g e r t:** F is a sh R ec o v e ry 2nd 3 5

  HT_t_p: / /_w_ww. di int er s k n a l s. c o m /

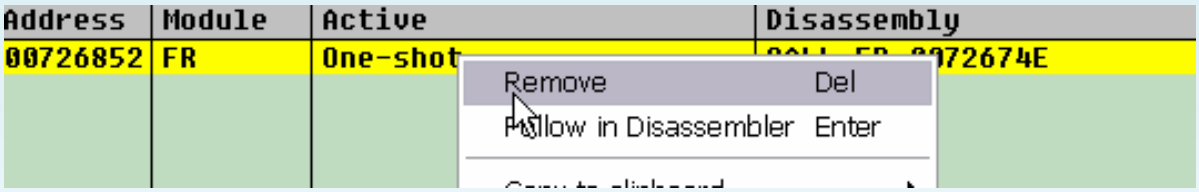
I I I - B italy ss P a n a t i g u Deb, D u m p i l e F & F ind O P E:

1st D ùn OTE G P R I C T I O N D v5. 1 f scan of a g e r t

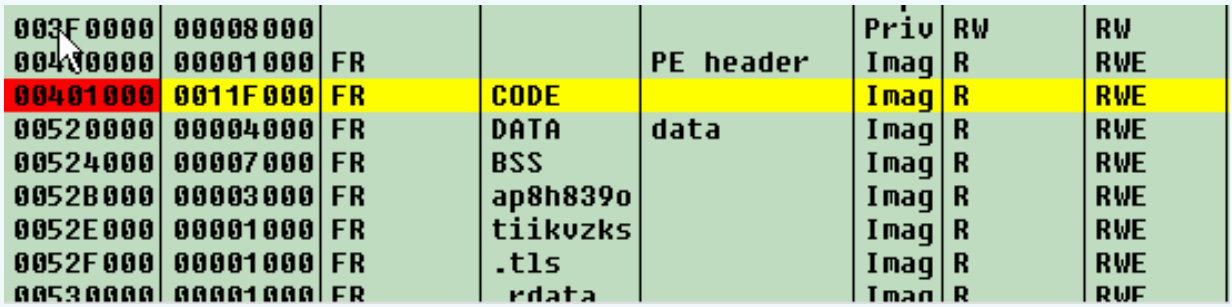
2nd O K, Lo ad in a g e r l tvao Ol yD B G _ EXEcr italy ptor and we stop here:



3rd press **Alt + B** 1 Breakpoint you see, please delete it



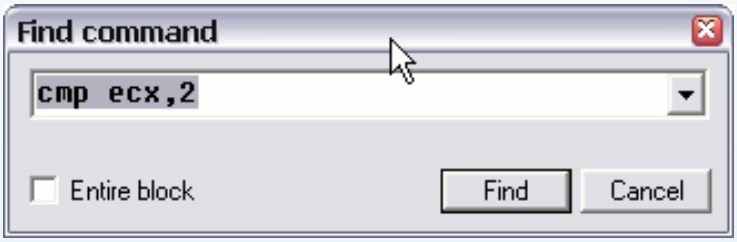
4th press **Alt + M** and press **F2** to set BP in Section **1. Code**



5. Press **Shift + F9** you stop here

```
00723609    E8 1F010000     CALL FR.0072372D
0072360E    0245 EF         ADD AL,BYTE PTR SS:[EBP-11]
00723611    AA              STOS BYTE PTR ES:[EDI]
00723612  ^ EB E9           JMP SHORT FR.007235FD
00723614    E8 FC000000     CALL FR.00723715
00723619  v 0F82 97000000   JB FR.007236B6
0072361F    E8 F1000000     CALL FR.00723715
00723624  v 73 5B           JNB SHORT FR.00723681
00723626    B9 04000000     MOV ECX,4
0072362B    E8 FD000000     CALL FR.0072372D
00723630    48              DEC EAX
00723631  ^ 74 DE           JE SHORT FR.00723611
00723633  v 0F89 C7000000   JNS FR.00723700
00723639    E8 D7000000     CALL FR.00723715
0072363E  v 73 1B           JNB SHORT FR.0072365B
00723640    55              PUSH EBP
```

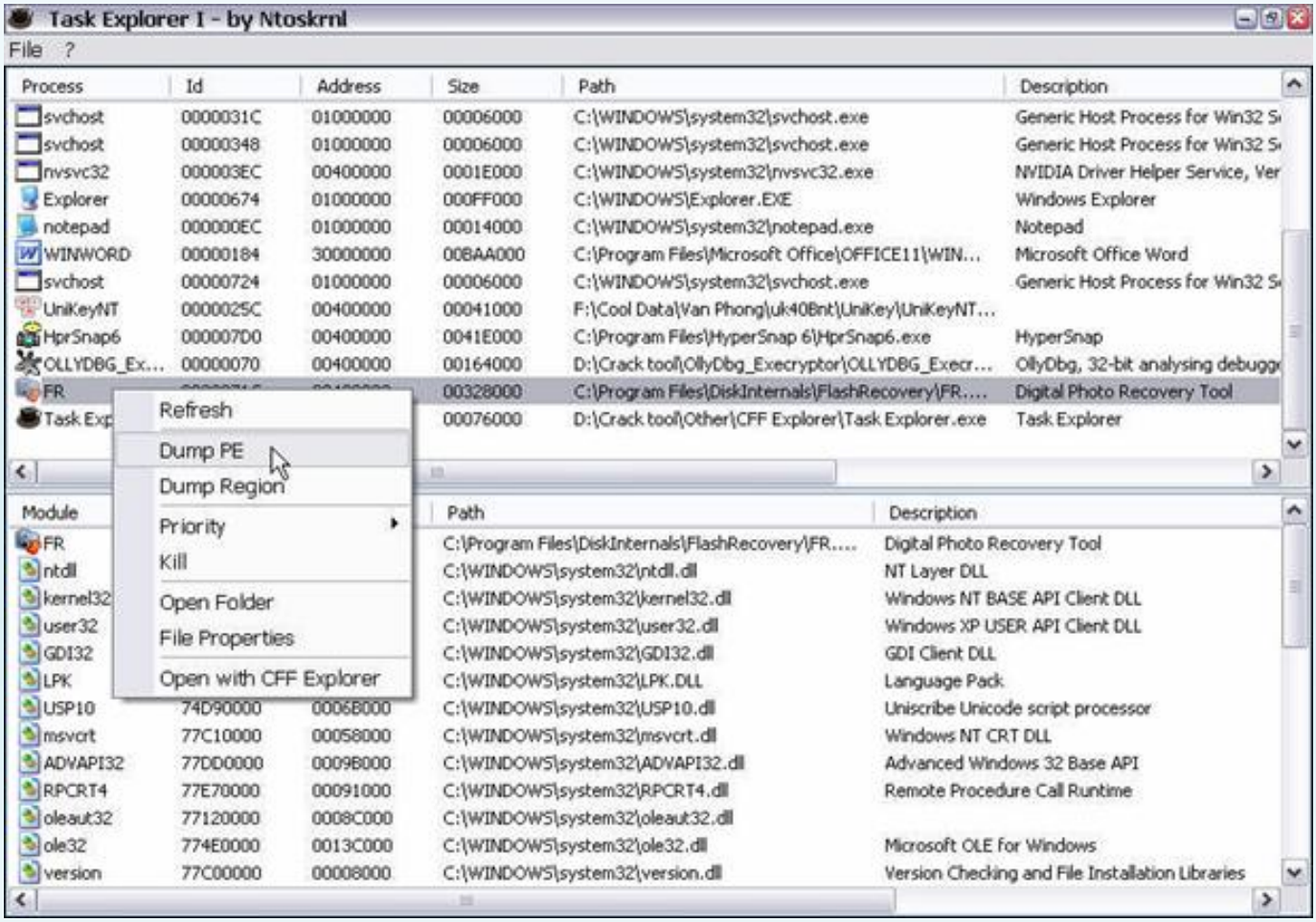
6. Press **Ctrl + F** to enter **Cmp ECX, 2**



7. Click **Find,** press **F2** to **set** it at **BP**

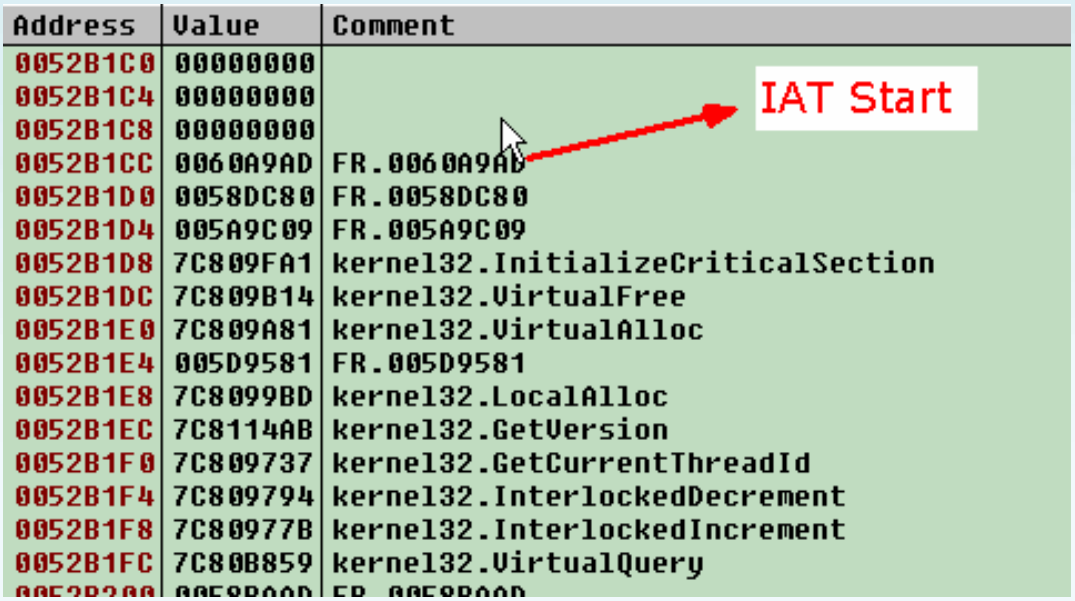
```
0072369B    09C0            OR EAX,EAX
0072369D  v 74 04           JE SHORT FR.007236A3
0072369F    89C3            MOV EBX,EAX
007236A1  v EB 5E           JMP SHORT FR.00723701
007236A3    83F9 02         CMP ECX,2
007236A6  v 74 66           JE SHORT FR.0072370E
007236A8    41              INC ECX
007236A9    E8 7F000000     CALL FR.0072372D
007236AE    8945 F4         MOV DWORD PTR SS:[EBP-C],EAX
007236B1  ^ E9 47FFFFFF     JMP FR.007235FD
007236B6    E8 7E000000     CALL FR.00723739
```

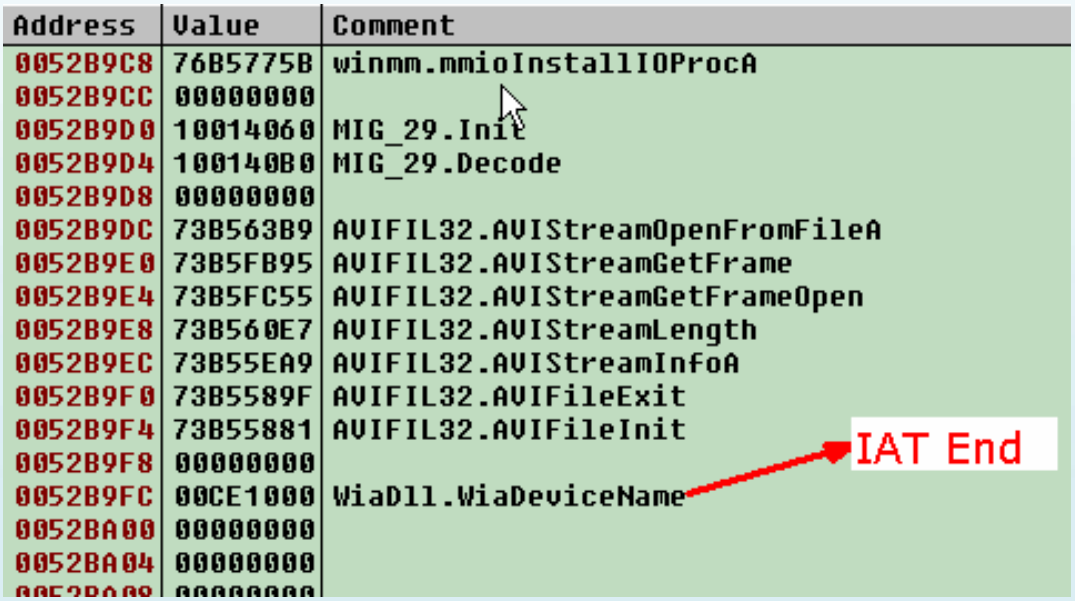
8. Press **Shift + F9 17 times** Soft Run will completely. Soft Run When we have identified and **IAT IAT Sart End** to conduct **Fix IAT** and i forgot to **dump** the **Full**
Soft considered to be in code to what it can to find **OEP.** First, dump the file has



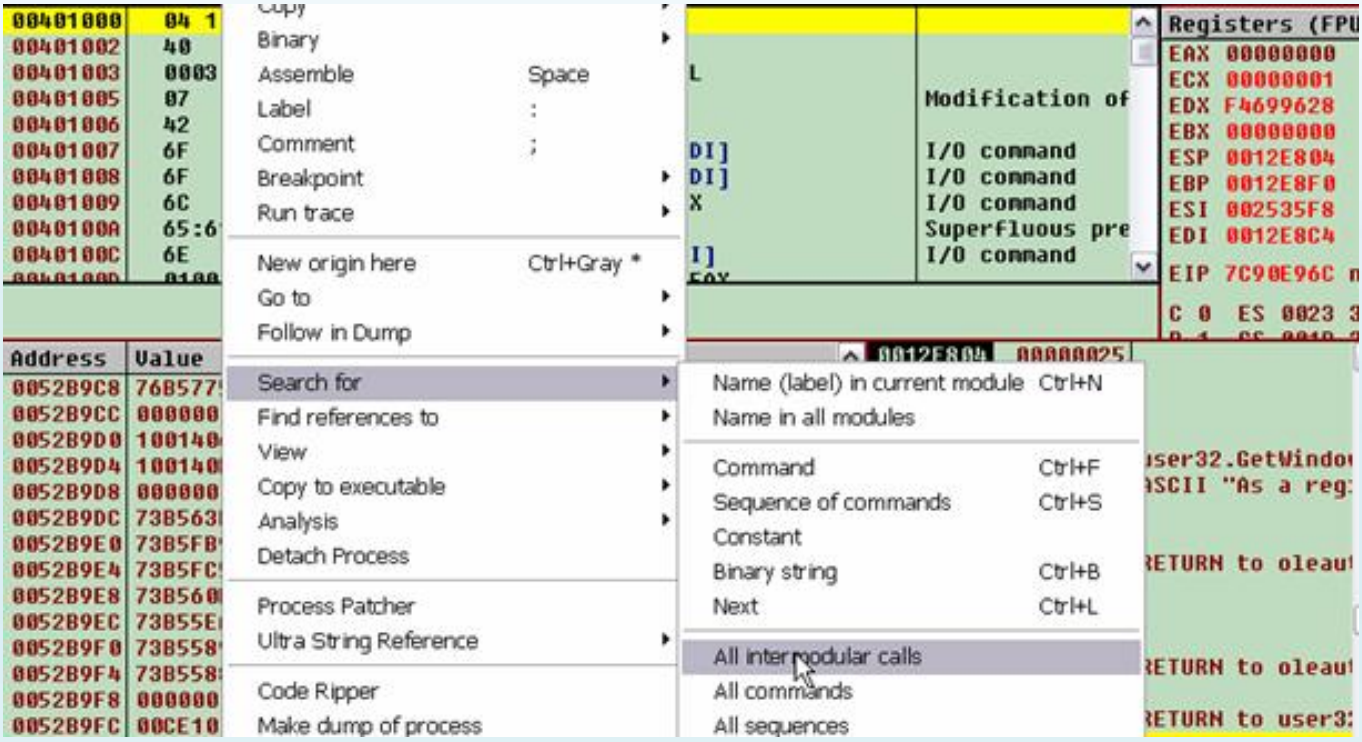
9. Use **RDG Packer Detector v0.6.4** Scan **File FR_Dumped.exe** and will receive the following information:

10th tolerable, Soft know what the code in our search gòi **IAT IAT Start** and **End** is very easy to find nhusau:

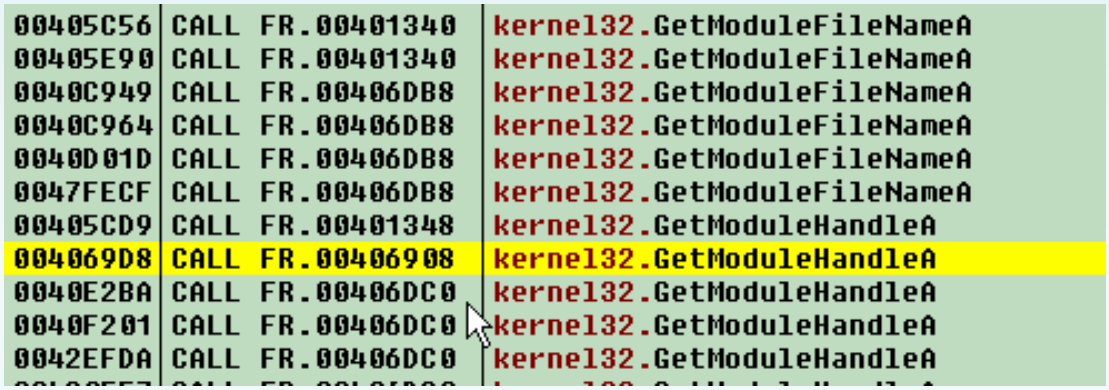




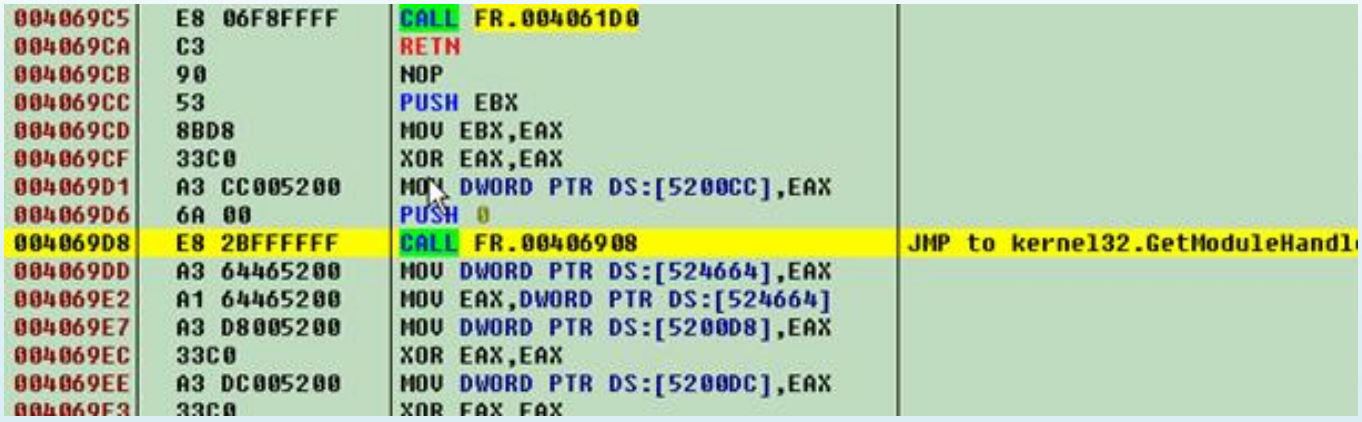
11. As we know Soft code using **Borland Delphi 6.0 - 7.0** Ham have always had **GetModuleHandleA** below. Based on this we quickly find the **OEP** of this Target. In **OllyDBG** press **Ctrl + G,** enter **401000** and choose the same image



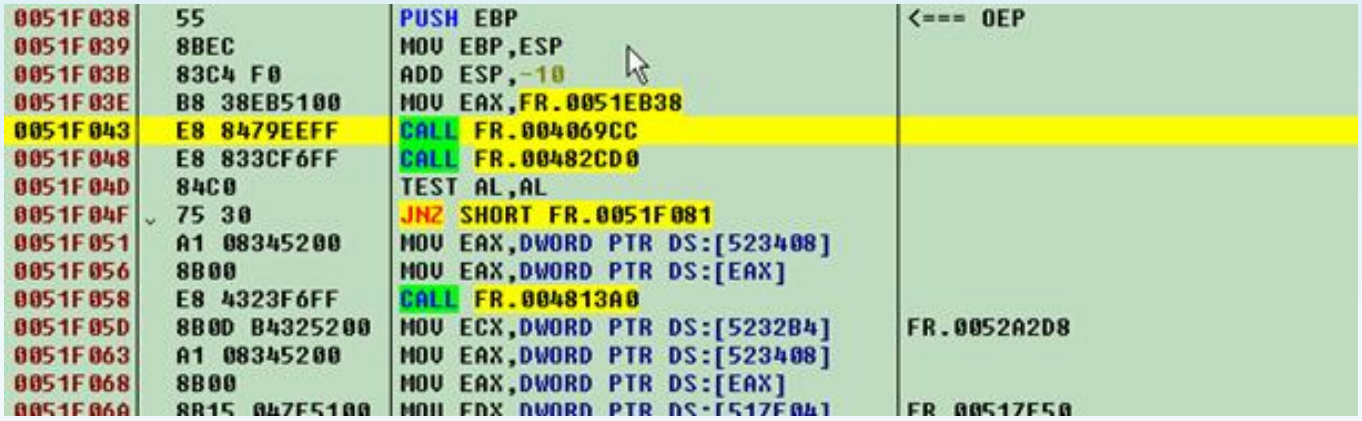
12. **GetModuleHandleA** and Type 2 function



13. Tatoi **Double Click** here



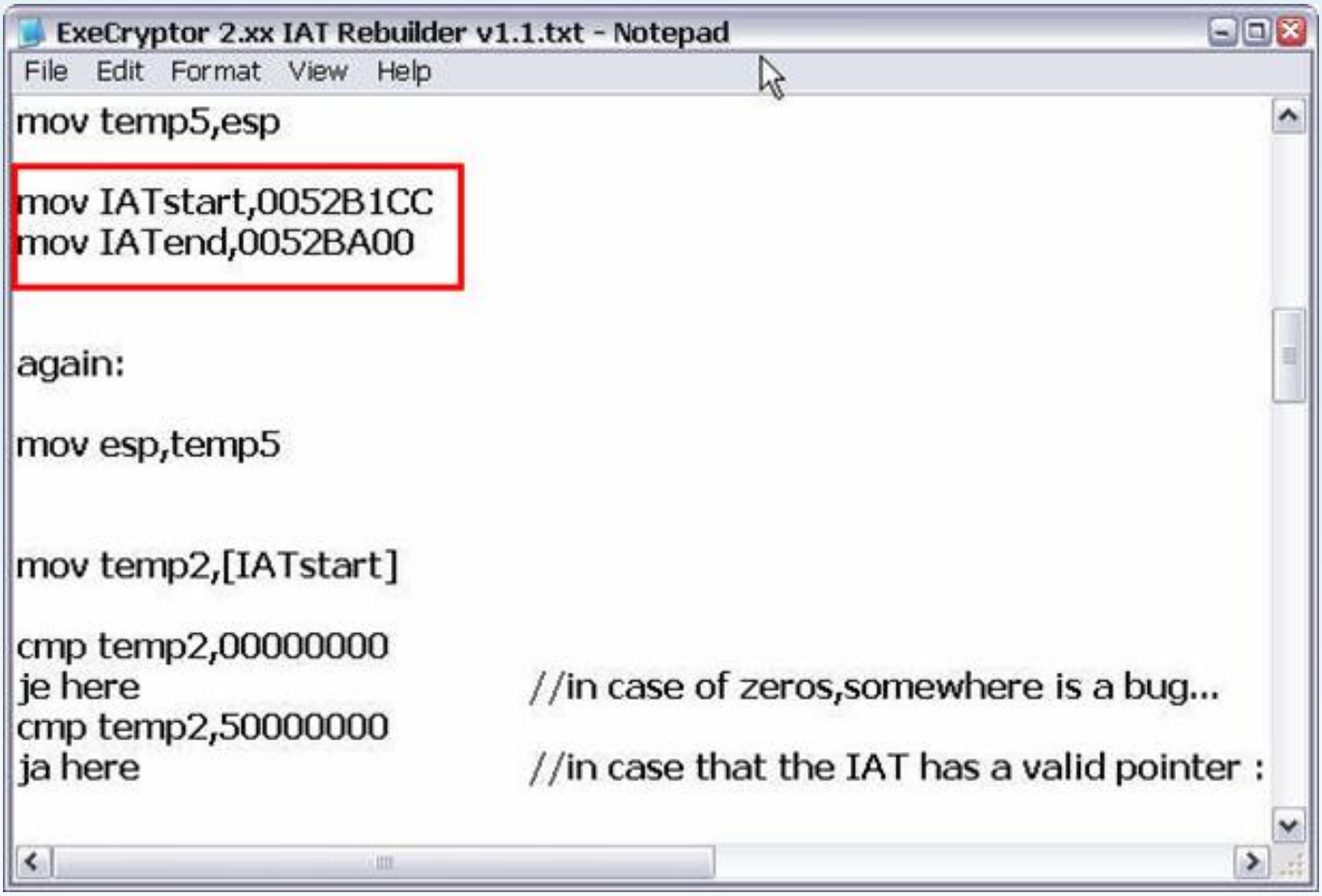
14. We need to find a command to call call this code, press **Ctrl + F** to enter **004069CC** and click **OK** to us here



15. Looking up little that is **...** very OEP may have ko **Stolen Bytes.** Press **Ctrl + F2** to prepare the next step

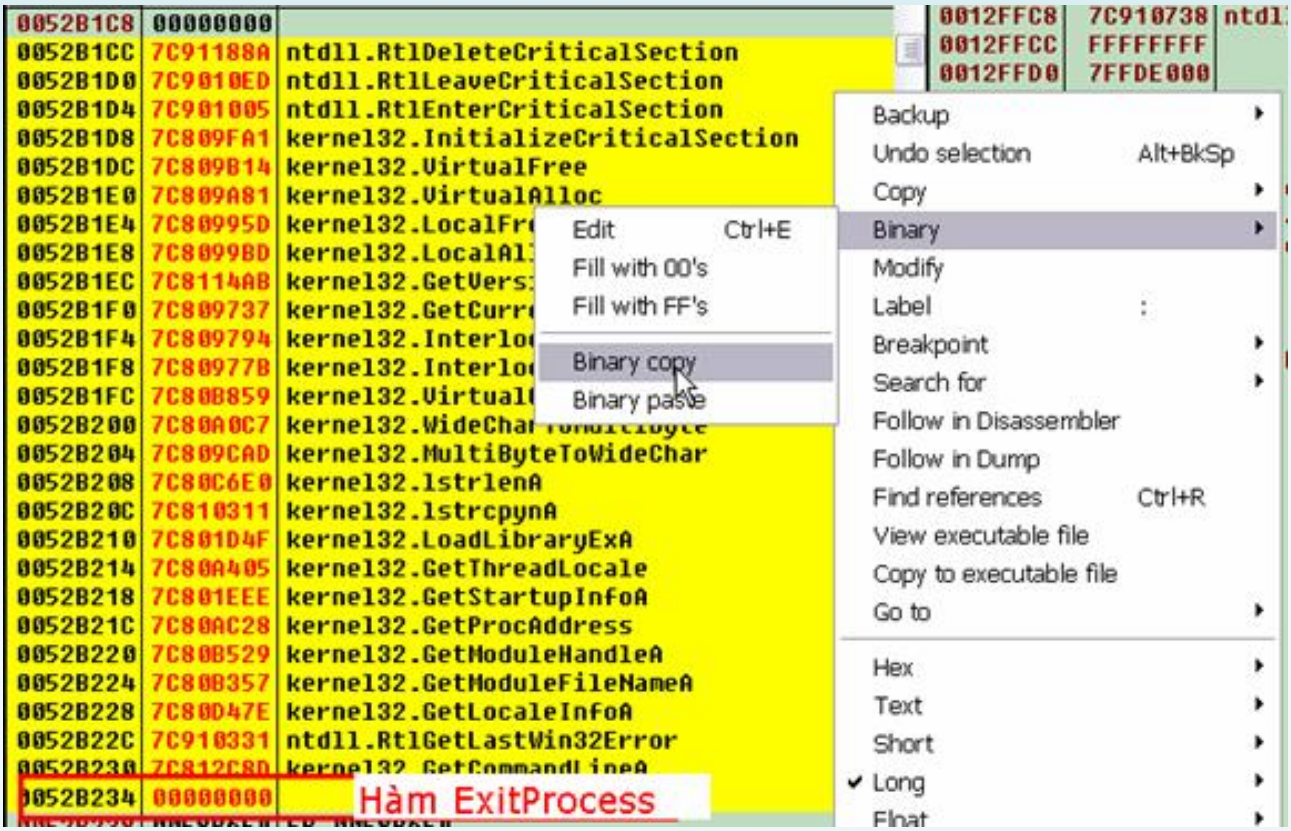
V I D E-Fix IA & T E R I build mp ort:

_ Repeat the steps from 3 -> 8 in part III, but remember to press **Shift + F9 16 times** for only **17** times soft **click Run** will. Ok, press **Ctrl + G** to enter **0051F038 (OEP)** and press **Shift + F9** we stopped at the **OEP.** To this, we use the script ***"ExeCryptor 2.xx IAT Rebuilder v1.1"*** to the Quick Fix IAT, but before you run memory Revising 2 address **IAT IAT Start** and **End** Scripts to run for exactly

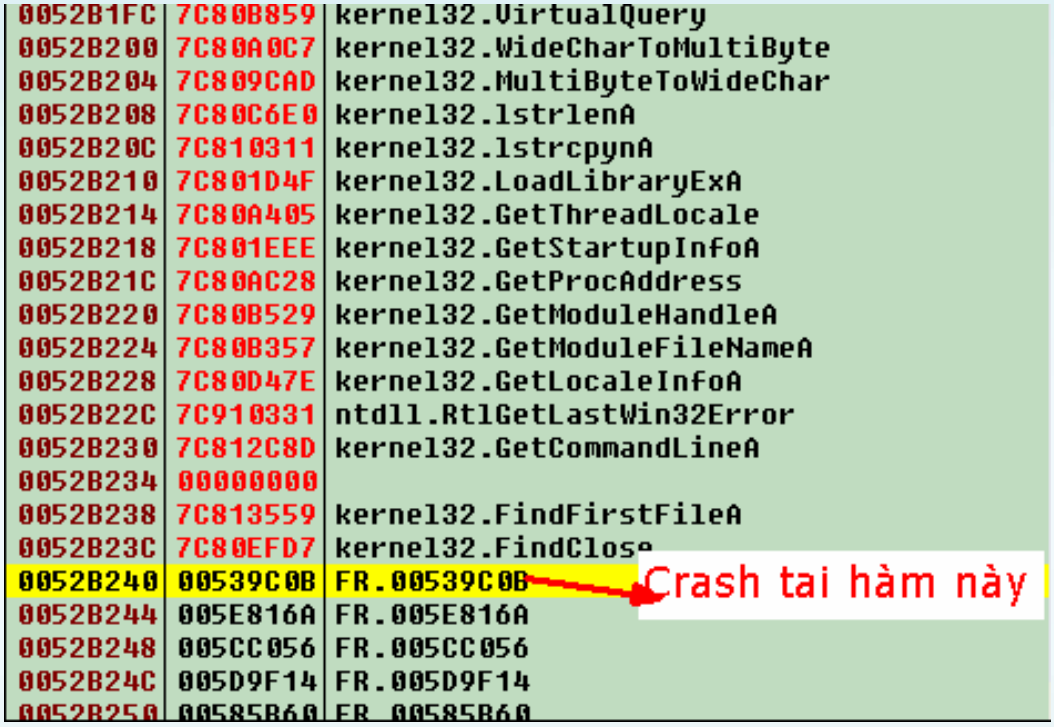


_ ***1:48 ODbgScript*** used to run a **script,** running time 1 it follows:

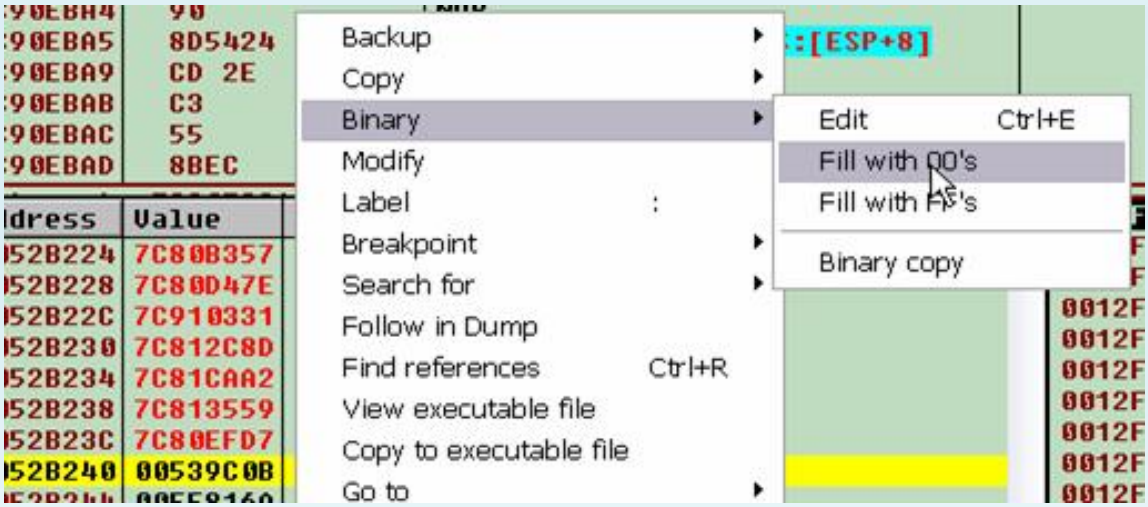
_Ko stars, click OK, the window we **dump** Copy that the IAT has Scripts and fix **Fill with 00's** for the function **"ExitProcess"** Fix Script because we do not properly function after Fix

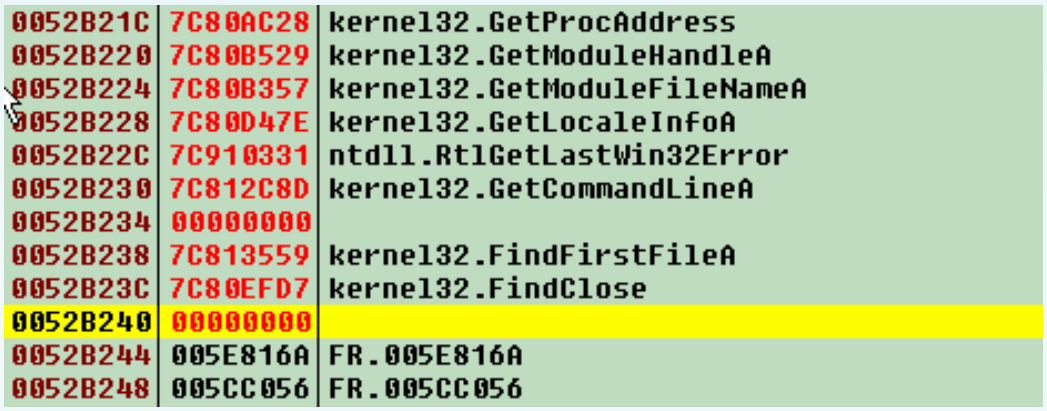


_ Ctrl + F2 and Repeat the steps from 3 -> 8 in part III, but remember to press Shift + F9 16 times for only 17 times soft click Run will. Ok, press Ctrl + G to enter 0051F038 (OEP) and press Shift + F9 we stopped at the OEP. In the window dump press Ctrl + G to enter 0052B1CC (IAT Start) and paste the IAT at our new Copy and Run Scripts. But fix it 2 more functions are being Crash ...



_Ta Conduct the IAT to copy this, repeat the above steps before running the script as thican nhusau to do is crash **Fill** it **with 00's** in **52B540**





_Ta Should ignore this function to Fix little later, the script runs at 1 long crash was similar in nhutren 2 address this

0052B2D4
0052B820

_cach do the same **with** nhutren **Fill 00's** with 2 function and wait script we finished running 4 conducted fix addresses that we **Fill with 00's**

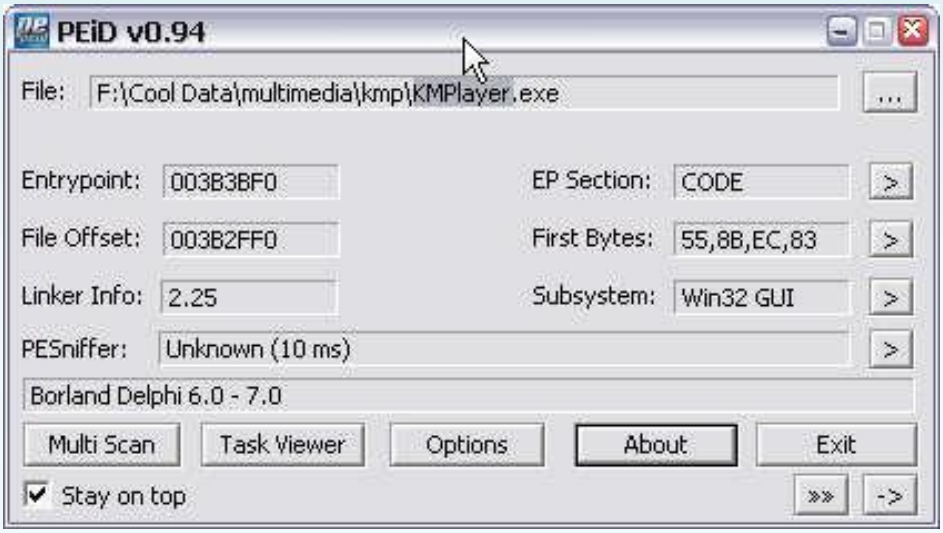
0052B234 0 0 00 0 000
0052B240 0 0 00 0 000
0052B2D4 00 0 0 0 000
0052B820 0 0 00 0 000

_ Here is how Fix IAT has nhuTrace by hand, but they use Plugin 1 quite well how effective is

1 soft loans to code in **Borland Delphi 6.0 - 7.0** review of the functions to Fix the scripts

that run when pó hand I choose this because many soft Code Try using **Delphi 6.0 - 7.0**

are usually table IAT sem sem together. Here they choose **KMPlayer**



_ Load **KMPlayer** to **OllyDBG** and easily identified with its IAT and conducting comparative

_Enough .... So they fix this 2

0052B234 0 0 00 0
000
0052B234 C80 A7A k e n e r L3 2nd F re e L a
66 r r ib italy

0052B240 0 0 00 0
000
0052B240 7C82 6 k e n e r l32. C r e a t e D i
219 r e c ya Tor

_Continue to address **0052B2D4**

KMPlayer (Delphi 6.0 - 7.0)

Address	Value	Comm
007E3318	7714C99D	oleaut32.SysReAllocStringLen
007E331C	77124B59	oleaut32.SysAllocStringLen
007E3320	00000000	
007E3324	7C809BF5	kernel32.TlsSetValue
007E3328	7C809750	kernel32.TlsGetValue
007E332C	7C8099BD	kernel32.LocalAlloc
007E3330	7C80B529	kernel32.GetModuleHandleA
007E3334	00000000	
007E3338	77DDD7CC	advapi32.RegSetValueExW
007E333C	77DDEBE7	advapi32.RegSetValueExA
007E3340	77E35FC2	advapi32.RegSetValueW
007E3344	77DE6F49	advapi32.RegSetValueA
007E3348	77DD6FC8	advapi32.RegQueryValueExW
007E334C	77DD7883	advapi32.RegQueryValueExA
007E3350	77DDD8E2	advapi32.RegQueryValueW
007E3354	77DFCC10	advapi32.RegQueryValueA
007E3358	77DFCCEF	advapi32.RegQueryInfoKeyW
007E335C	77DFC1B5	advapi32.RegQueryInfoKeyA

FlashRecovery (ExeCryptor)

Address	Value	Commer
0052B29C	77DD6BF0	ADVAPI
0052B2A0	00000000	
0052B2A4	77124850	oleaut32.SysFreeString
0052B2A8	7714C99D	oleaut32.SysReAllocStringLen
0052B2AC	77124B59	oleaut32.SysAllocStringLen
0052B2B0	00000000	
0052B2B4	7C809BF5	kernel32.TlsSetValue
0052B2B8	7C809750	kernel32.TlsGetValue
0052B2BC	7C80998D	kernel32.LocalAlloc
0052B2C0	7C80B529	kernel32.GetModuleHandleA
0052B2C4	00000000	
0052B2C8	77DDD7CC	ADVAPI32.RegSetValueExW
0052B2CC	77DDEBE7	ADVAPI32.RegSetValueExA
0052B2D0	77DD6FC8	ADVAPI32.RegQueryValueExW
0052B2D4	00000000	
0052B2D8	77DD6A78	ADVAPI32.RegOpenKeyExW
0052B2DC	77DD761B	ADVAPI32.RegOpenKeyExA
0052B2E0	77DEB908	ADVAPI32.RegFlushKey
0052B2E4	77DD7535	ADVAPI32.RegCreateKeyExW
0052B2E8	77DDEAF4	ADVAPI32.RegCreateKeyExA
0052B2EC	77DD6BF0	ADVAPI32.RegCloseKey

_ With **0052B820**

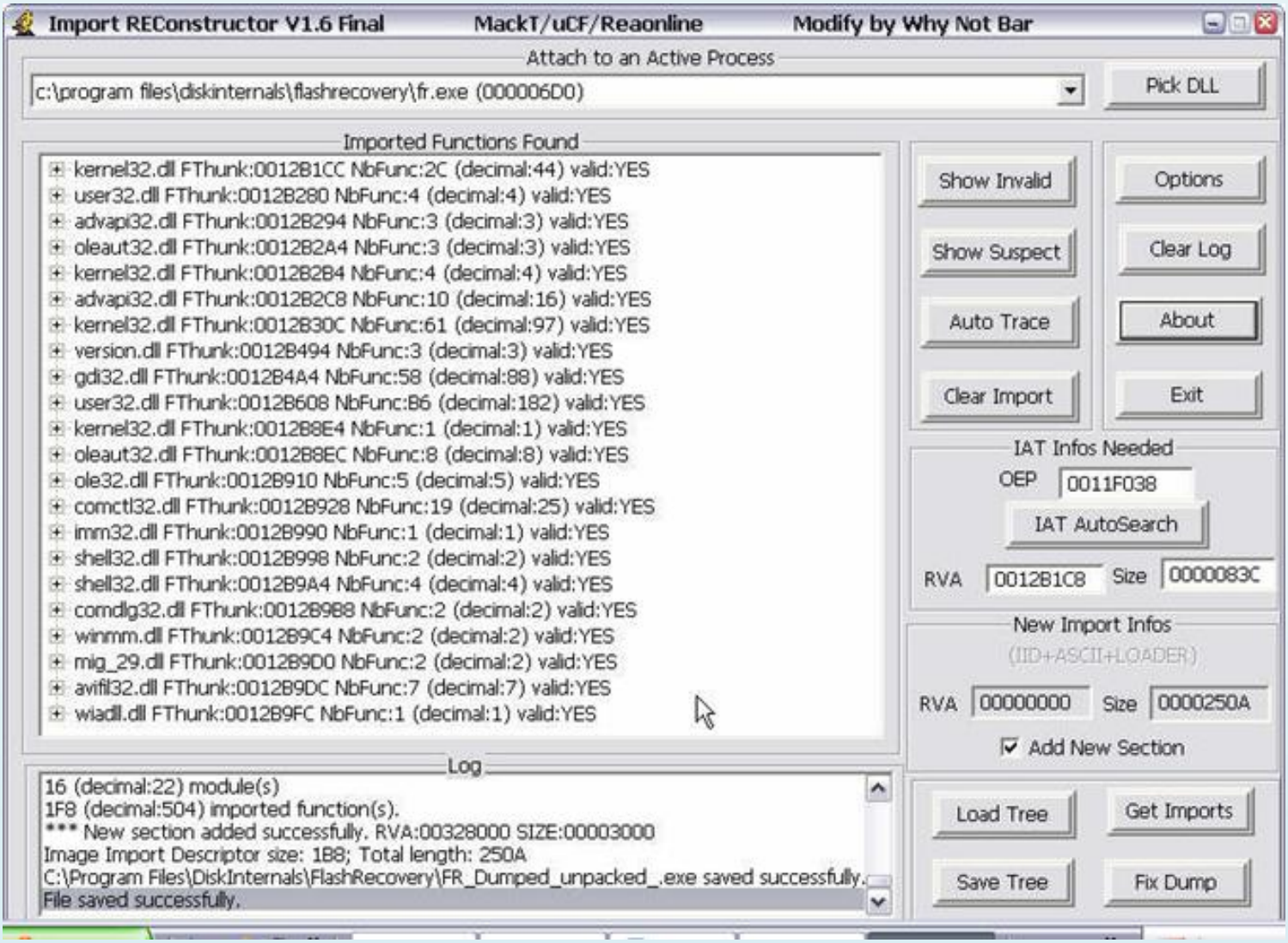
KMPlayer (Delphi 6.0 - 7.0)

Address	Value	Comm
007E3A70	77D4B556	user32.GetClientRect
007E3A74	77D4D470	user32.GetClassNameW
007E3A78	77D4E032	user32.GetClassNameA
007E3A7C	77D520D6	user32.GetClassInfoW
007E3A80	77D64D4A	user32.GetClassInfoA
007E3A84	77D494FF	user32.GetCapture
007E3A88	77D4DF1E	user32.GetActiveWindow
007E3A8C	77D4F5FE	user32.FrameRect
007E3A90	77D6F7D0	user32.FindWindowExA
007E3A94	77D6F3C6	user32.FindWindowA
007E3A98	77D4D3C5	user32.FillRect
007E3A9C	77D89E6D	user32.ExitWindowsEx
007E3AA0	77D4BDD1	user32.EqualRect
007E3AA4	77D4D935	user32.EnumWindows
007E3AA8	77D4FACD	user32.EnumThreadWindows
007E3AAC	77D65B91	user32.EnumDisplaySettingsA
007E3AB0	77D6DA71	user32.EnumClipboardFormats
007E3AB4	77D4E5BA	user32.EnumChildWindows

FlashRecovery (ExeCryptor)

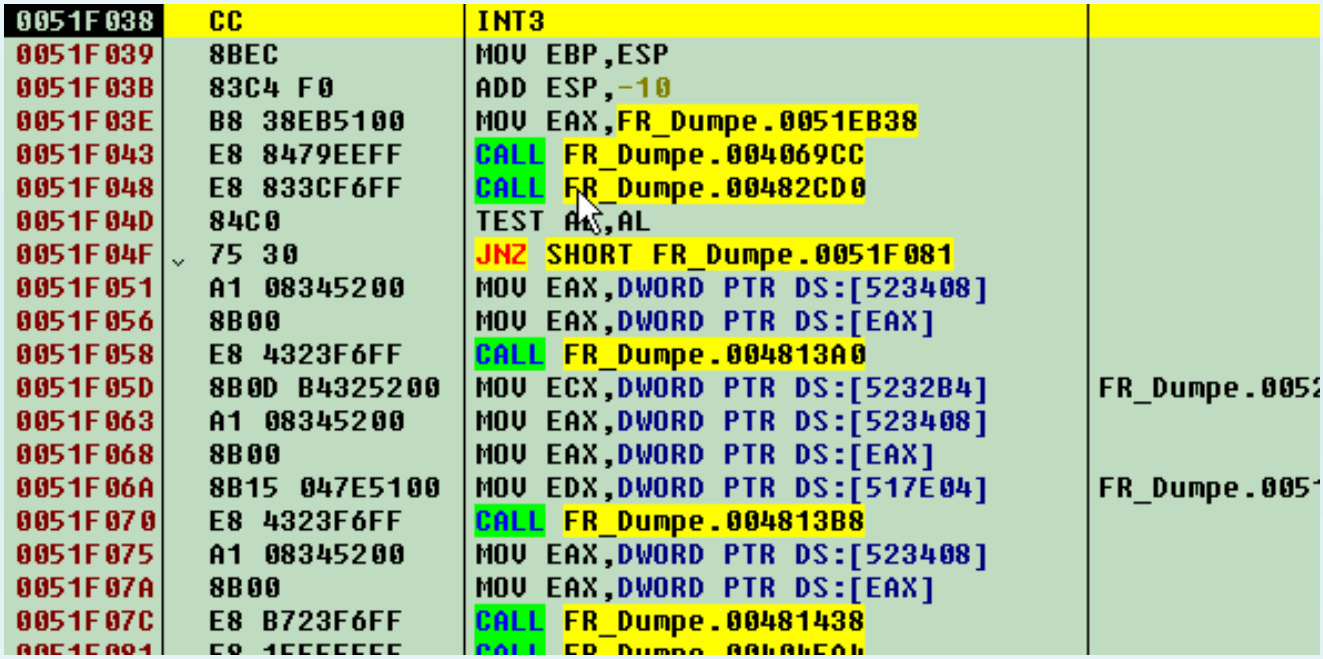
Address	Value	Commen
0052B7F0	77D4D7BB	user32
0052B7F4	77D4F21D	user32.GetDCEx
0052B7F8	77D48697	user32.GetDC
0052B7FC	77D4C566	user32.GetCursorPos
0052B800	77D4CECD	user32.GetCursor
0052B804	77D6FCB2	user32.GetClipboardData
0052B808	77D4B556	user32.GetClientRect
0052B80C	77D4E032	user32.GetClassNameA
0052B810	77D64D4A	user32.GetClassInfoA
0052B814	77D494FF	user32.GetCapture
0052B818	77D4DF1E	user32.GetActiveWindow
0052B81C	77D4F5FE	user32.FrameRect
0052B820	00000000	
0052B824	77D4D3C5	user32.FillRect
0052B828	77D4BDD1	user32.EqualRect
0052B82C	77D4D935	user32.EnumWindows
0052B830	77D4FACD	user32.EnumThreadWindows
0052B834	77D4E5BA	user32.EnumChildWindows
0052B838	77D4B4C5	user32.EndPaint
0052B83C	77D4C4D4	user32.EnableWindow

_Fix After we have completed the **full IAT, dump Full** and open only to **ImportREC.** Select **List** in **Process *FR.exe.*** Enter **OEP = 0051F038 - 00,400,000 *(Imagebase)* = 0011F038, *IAT AutoSearch*** Click -> ***Get Imports*** -> ***Show Invalid***

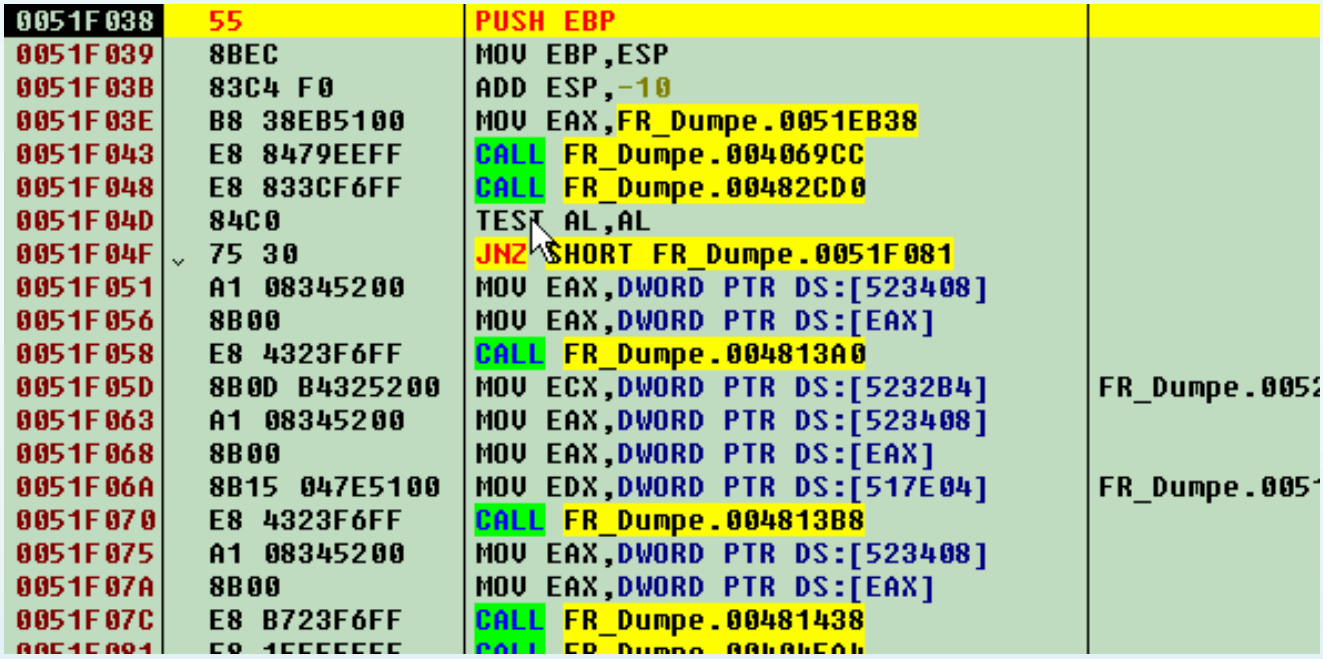


_Haha .... I have any function ***Invalid*** ... OK, click File Dumped.exe FR_Dumped.exe select Run and try File **FR_Dumped_.exe**

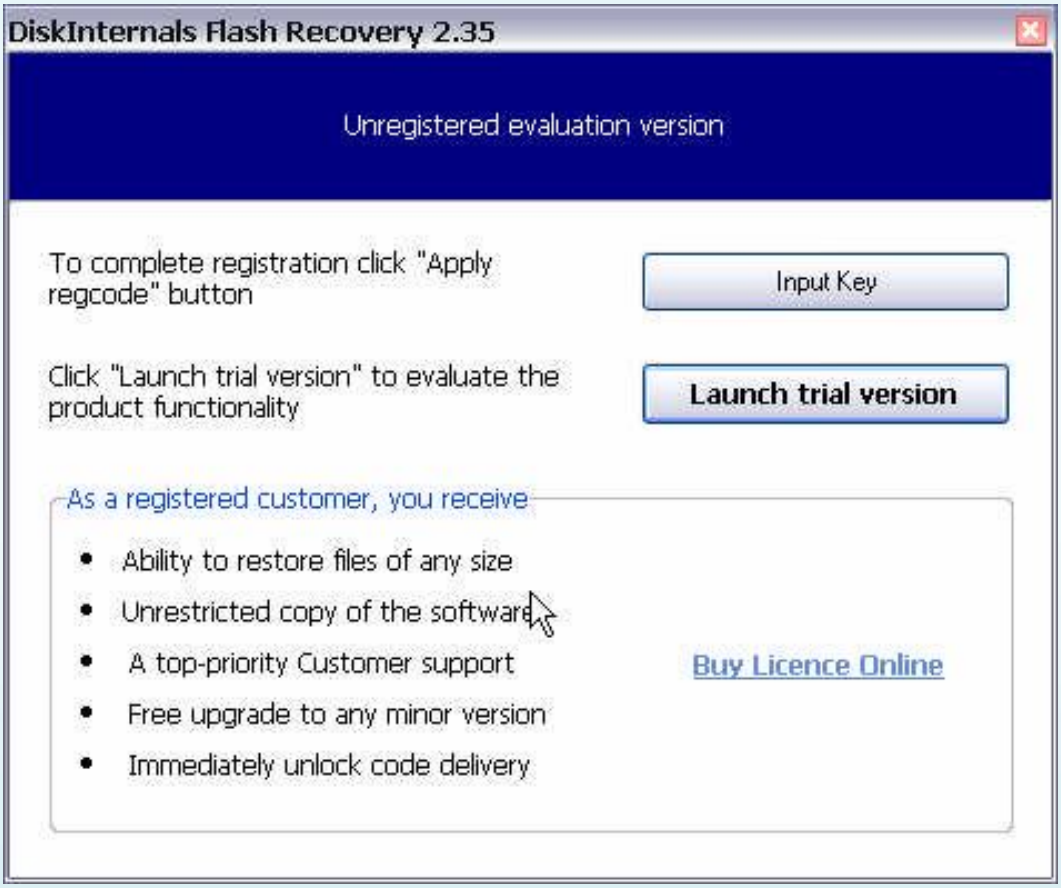
_Click **Debug** or Load **FR_Dumped_.exe** to **OllyDBG** we stop here



_ OEP we are teaching our SEO ... Press Ctrl + E and 55 to fix CC:

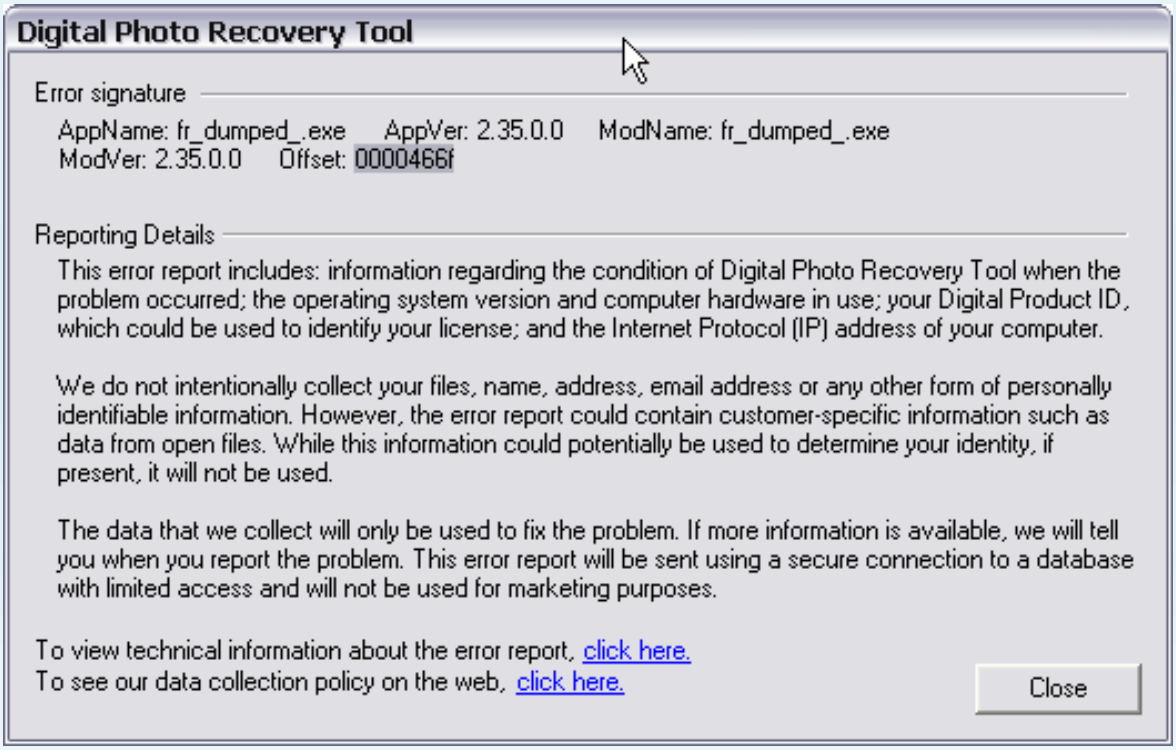


_ **Save** the Test **Run** ... considered. ... Haha **running nhuNgua**



_ But the press **Cancel**

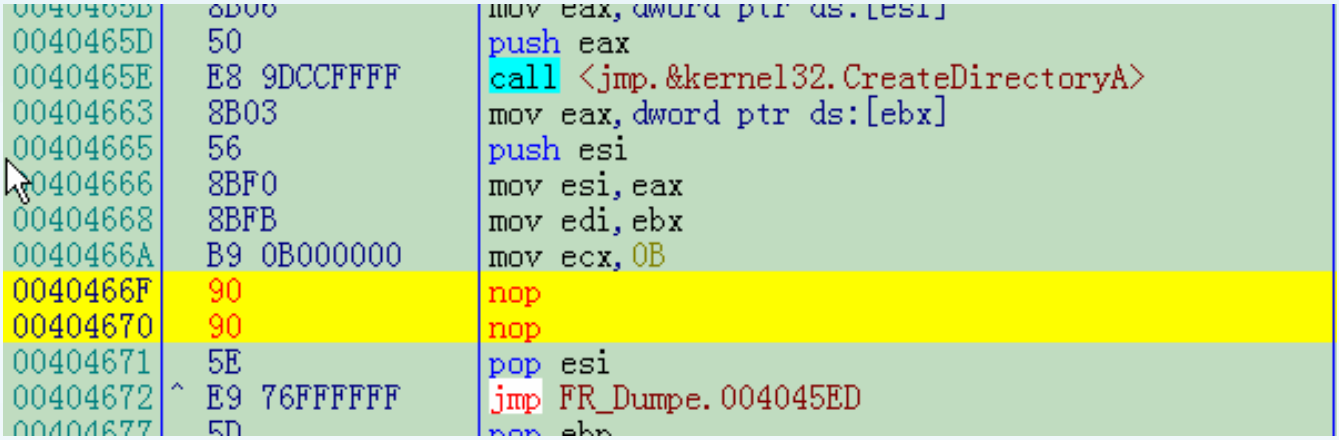
_ Click click **Debug** to stop us at the point of causing **Crash** or click **Click Here** to address causes crash



_ Nhuday in **OllyDBG** we will stop here

```
0040465B   8B06          mov eax,dword ptr ds:[esi]
0040465D   50            push eax
0040465E   E8 9DCCFFFF   call <jmp.&kernel32.CreateDirectoryA>
00404663   8B03          mov eax,dword ptr ds:[ebx]
00404665   56            push esi
00404666   8BF0          mov esi,eax
00404668   8BFB          mov edi,ebx
0040466A   B9 0B000000   mov ecx,0B
0040466F   F3:A5         rep movs dword ptr es:[edi],dword ptr ds:[esi]
00404671   5E            pop esi
00404672 ^ E9 76FFFFFF   jmp FR_Dumpe.004045ED
00404677   5D            pop ebp
00404678   5F            pop edi
00404679   5E            pop esi
```

_ **Submit** address this and **save** again.



_ When you click **Cancel** ko will also be more Crash **unpack** ... **Done!**

G r l Ee TsF italy Ou the *Co mpu t e r A _ of e l, e mbi Z o, M A B oo nb italy, H o*

acnh, Nina B e, e ki nman o w ar, Z o i D e ux, M e r c, l o e ight to nix, T r o b

icky italy, Takad a iamidi ot, of the e n t e n handi ... and italy o u!

***N ha T r an g,** 2 6 On the G9 a n 20 0 6*

Whot italyN Bar

I. I nt r o d u c t i on:

Today, we unpack SLVc0deProtector 1.1. This form pack he tland the English thie u. kienmanowar iamidiot and have had to unpack the da crackme.scp.exe in detail, but Target has Stolen code clearly ko ko even all of Stolen Code Fix also still running as horses. I find the soft pack as this but i find it đành used as the main SLVc0deProtector 1.1 Target for this tut. Tut considered this as a lie from the store's own children and those who like to unpack.

I. T oo l s:

- ***T oo L and P is the evil in the g a n d n g s:***
  - *O D D B italy YK 1st 1 0*
    - *R L! W e a l e s 0. 5p l ugi n* (RL! Weasle is OllyDBG plugin that can help you reslove invalid ImpRec imports. It feautures unique specialized tracers and several different levels for generic tracer protections that copy data from dlls and store space allocated to them. This is done by skipping obfuscation and hashing correct instructions that are then compared to original. dll ones)
  - *Lord P E 1. 4*
  - *I mport R E C 1. 6*
  - *P I D E 0. 9 4*

T ar of GE: **S LV c e d 0 P r ot ec to r 1. 1 (k è o m th e tut)**

III. I m O T E to PvaFixS l e C o n d e:

_ D ung **Eid P 0. 9 4** é a result of a g e r t:

Lo _ a dt a rg e t o **O** and **Y K DbyD**

_ Click **OK** to continue, and stop here

Address	Hex dump	Disassembly	Comment
00401000	E8 00000000	CALL 00401005	00401005
00401005	58	POP EAX	
00401006	C600 EB	MOV BYTE PTR DS:[EAX],0EB	
00401009	C640 01 08	MOV BYTE PTR DS:[EAX+1],8	
0040100D	FFE0	JMP NEAR EAX	
0040100F	- E9 4CD00000	JMP 0040E060	0040E060
00401014	2C E6	SUB AL,0E6	
00401016	F1	INT1	
00401017	60	PUSHAD	
00401018	D9A6 B1206068	FLDENV (28-BYTE) PTR DS:[ESI+68	
0040101E	^ 71 E1	JNO SHORT 00401001	00401001

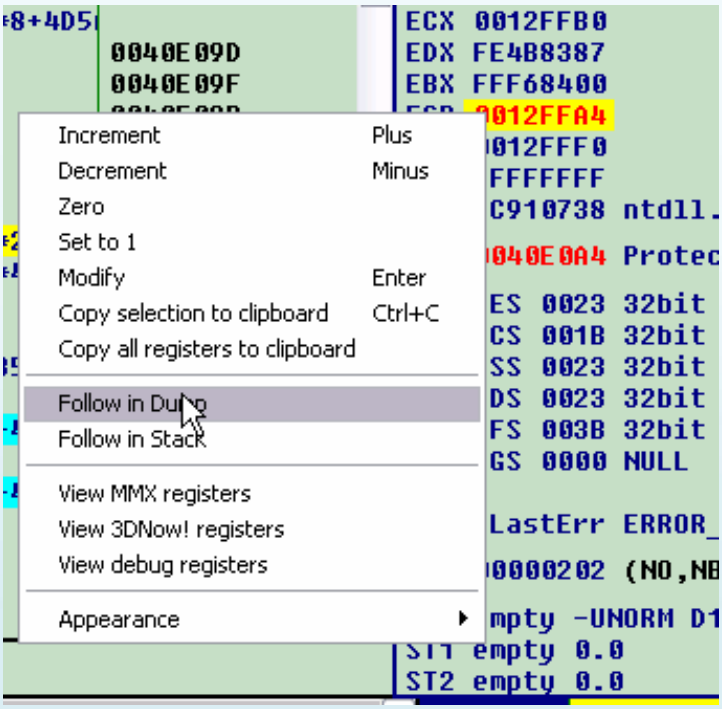
_ Order "**Jump 0040E060**" we are here to:

Address	Hex dump	Disassembly	Comment
0040E060	05 1D939270	ADD EAX,7092931D	
0040E065	F6D3	NOT BL	
0040E067	8D0445 1564453D	LEA EAX,DWORD PTR DS:[EAX*2+3D4	
0040E06E	v EB 02	JMP SHORT 0040E072	0040E072
0040E070	v EB 02	JMP SHORT 0040E074	0040E074
0040E072	^ EB FC	JMP SHORT 0040E070	0040E070
0040E074	81EA 0D68457E	SUB EDX,7E45680D	
0040E07A	2BCE	SUB ECX,ESI	
0040E07C	43	INC EBX	
0040E07D	69C0 B8AFE73D	IMUL EAX,EAX,3DE7AFB8	
0040E083	C1E3 E2	SHL EBX,0E2	
0040E086	8D0485 F4D27756	LEA EAX,DWORD PTR DS:[EAX*4+567	
0040E08D	05 E8F2B856	ADD EAX,56B8F2E8	
0040E092	8D04C5 5CE75A4D	LEA EAX,DWORD PTR DS:[EAX*8+4D5	
0040E099	v EB 02	JMP SHORT 0040E09D	0040E09D
0040E09B	v EB 02	JMP SHORT 0040E09F	0040E09F
0040E09D	^ EB FC	JMP SHORT 0040E09B	0040E09B
0040E09F	49	DEC ECX	
0040E0A0	F71424	NOT DWORD PTR SS:[ESP]	
0040E0A3	60	PUSHAD	
0040E0A4	8D0445 2C20D23E	LEA EAX,DWORD PTR DS:[EAX*2+3ED	

_ _Nhin Down slightly under 1 shows **PUSHAD** order. Set **Breakpoint** 1 at the press **F9,** and we stop at just Set BreakPoint

```
0040E070   EB 02          JMP SHORT 0040E074          0040E074
0040E072   EB FC          JMP SHORT 0040E070          0040E070
0040E074   81EA 0D68457E  SUB EDX,7E45680D
0040E07A   2BCE           SUB ECX,ESI
0040E07C   43             INC EBX
0040E07D   69C0 B8AFE73D  IMUL EAX,EAX,3DE7AFB8
0040E083   C1E3 E2        SHL EBX,0E2
0040E086   8D0485 F4D27756 LEA EAX,DWORD PTR DS:[EAX*4+567
0040E08D   05 E8F2B856    ADD EAX,56B8F2E8
0040E092   8D04C5 5CE75A4D LEA EAX,DWORD PTR DS:[EAX*8+4D5
0040E099   EB 02          JMP SHORT 0040E09D          0040E09D
0040E09B   EB 02          JMP SHORT 0040E09F          0040E09F
0040E09D   EB FC          JMP SHORT 0040E09B          0040E09B
0040E09F   49             DEC ECX
0040E0A0   F71424         NOT DWORD PTR SS:[ESP]
0040E0A3   60             PUSHAD
0040E0A4   8D0445 2C20D23E LEA EAX,DWORD PTR DS:[EAX*2+3ED
0040E0AB   8D0485 F8278B08 LEA EAX,DWORD PTR DS:[EAX*4+88B
0040E0B2   42             INC EDX
0040E0B3   E8 01000000    CALL 0040E0B9               0040E0B9
0040E0B8   A0 5DEB0169    MOV AL,BYTE PTR DS:[6901EB5D]
```

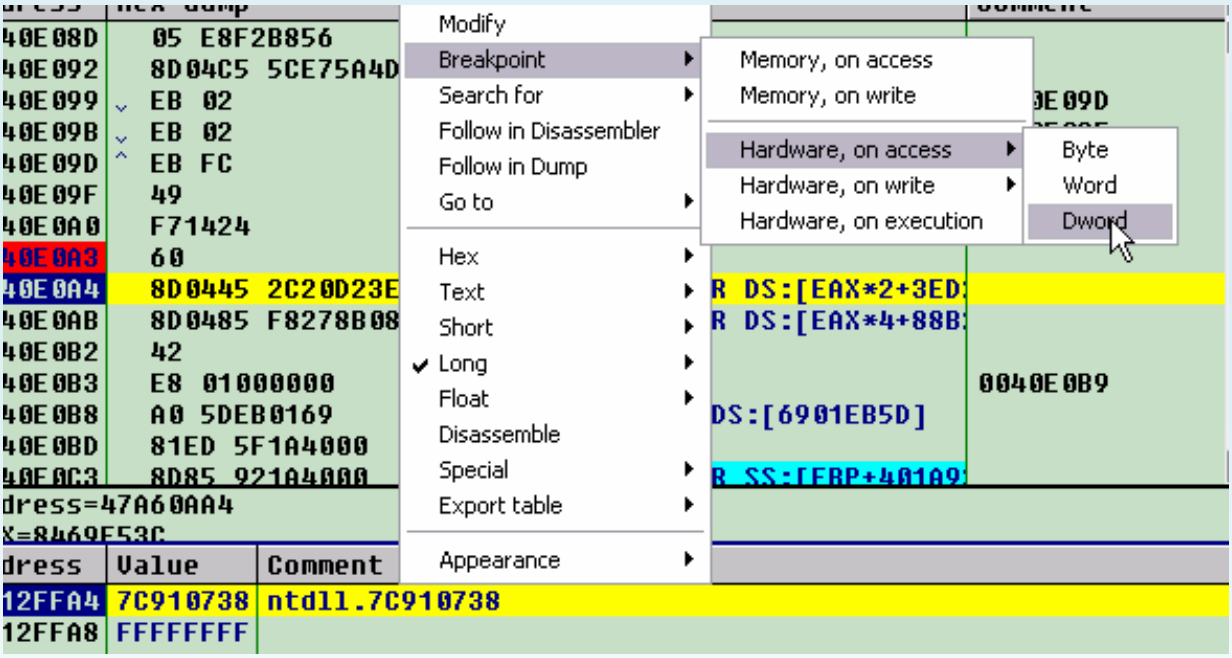
_ Press **F8** and Choose **ESP** -> **Follow in dump**



_ In the window **dump**

Address	Value	Comment
0012FFA4	7C910738	ntdll.7C910738
0012FFA8	FFFFFFFF	
0012FFAC	0012FFF0	
0012FFB0	0012FFC4	
0012FFB4	FFF68400	
0012FFB8	FE4B8387	
0012FFBC	0012FFB0	
0012FFC0	8469F53C	
0012FFC4	837E92B0	
0012FFC8	7C910738	ntdll.7C910738
0012FFCC	FFFFFFFF	

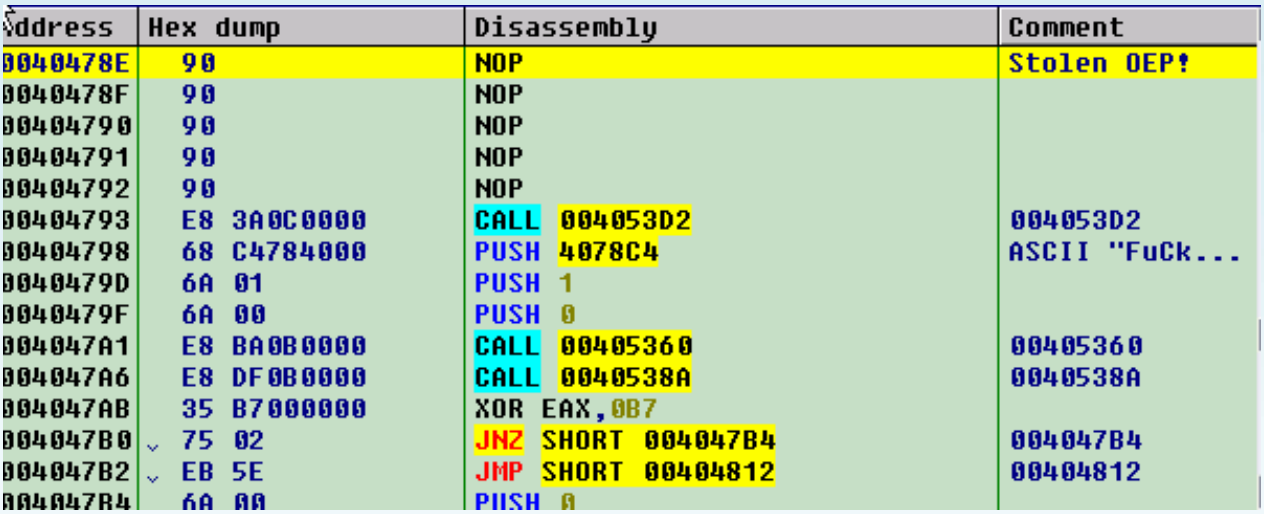
_ Next we need to **set 1 bp on hardware access in dword**



_ Press **Shift** + **F9** we stop here

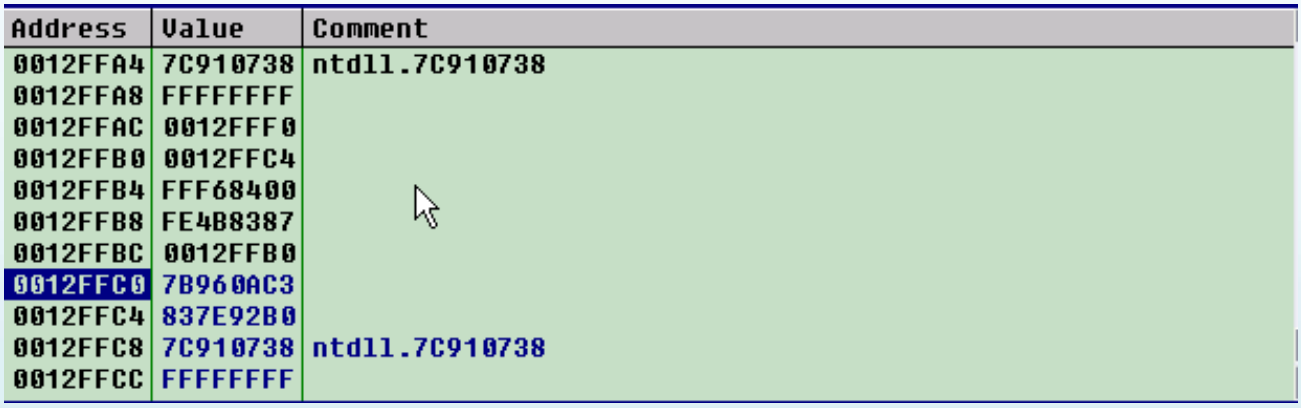
ddress	Hex dump	Disassembly	Comment
0040E56B	83C4 08	ADD ESP,8	
0040E56E	F71424	NOT DWORD PTR SS:[ESP]	
0040E571	68 73474000	PUSH 404773	
0040E576	90	NOP	
0040E577	90	NOP	
0040E578	90	NOP	
0040E579	90	NOP	
0040E57A	90	NOP	
0040E57B	90	NOP	
0040E57C	90	NOP	
0040E57D	90	NOP	

_ Press **F8 PUSH** 2 to **404,773,** Scroll down the code you see **PUSH 40478E.** haha **40478E** address the **OEP.** Press **Ctrl** + **G** to enter **40478E** to us here



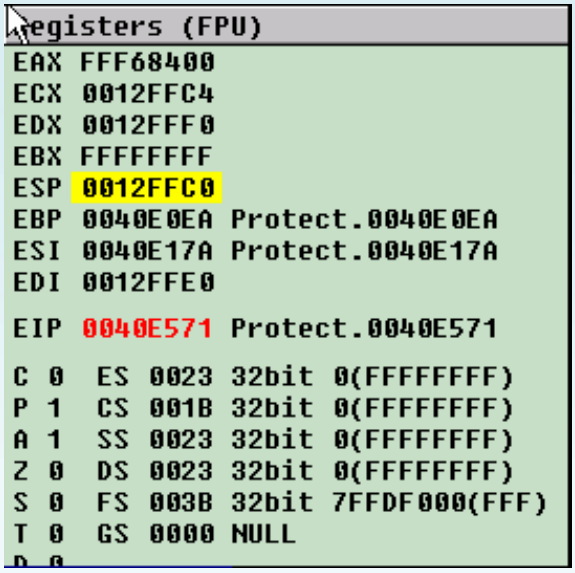
Address	Hex dump	Disassembly	Comment
0040478E	90	NOP	Stolen OEP!
0040478F	90	NOP	
00404790	90	NOP	
00404791	90	NOP	
00404792	90	NOP	
00404793	E8 3A0C0000	CALL 004053D2	004053D2
00404798	68 C4784000	PUSH 4078C4	ASCII "FuCk...
0040479D	6A 01	PUSH 1	
0040479F	6A 00	PUSH 0	
004047A1	E8 BA0B0000	CALL 00405360	00405360
004047A6	E8 DF0B0000	CALL 0040538A	0040538A
004047AB	35 B7000000	XOR EAX,0B7	
004047B0	75 02	JNZ SHORT 004047B4	004047B4
004047B2	EB 5E	JMP SHORT 00404812	00404812
004047B4	6A 00	PUSH 0	

_ Hichic! 4 command Submit and it is **Stolen Code.** We need to Fix it Fix ... but ... as seo first time to place this child is also deaf ... but a ray chợt am when they look up to see the window **dump "0012FFC0 7B960AC3"**



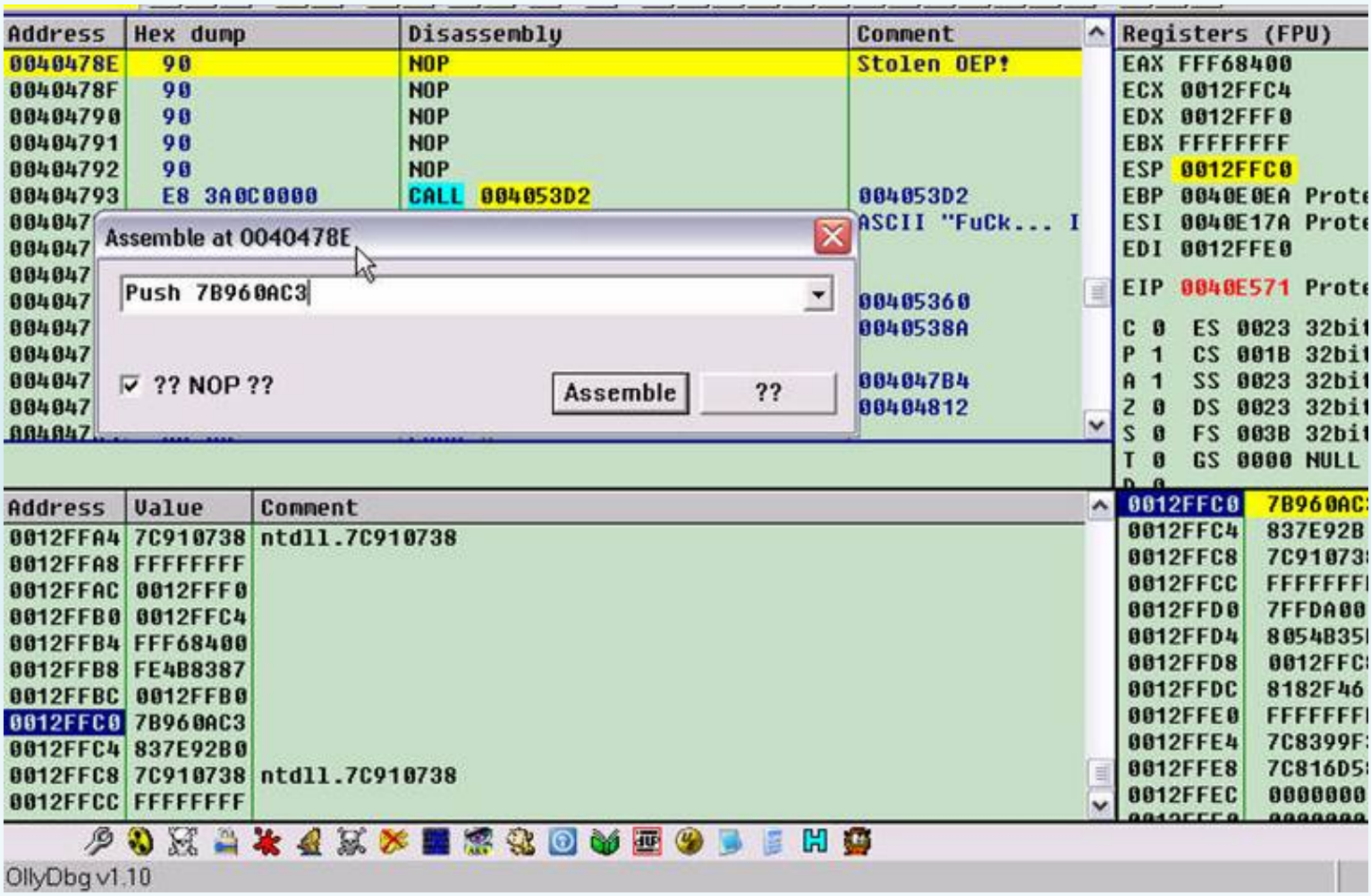
Address	Value	Comment
0012FFA4	7C910738	ntdll.7C910738
0012FFA8	FFFFFFFF	
0012FFAC	0012FFF0	
0012FFB0	0012FFC4	
0012FFB4	FFF68400	
0012FFB8	FE4B8387	
0012FFBC	0012FFB0	
0012FFC0	7B960AC3	
0012FFC4	837E92B0	
0012FFC8	7C910738	ntdll.7C910738
0012FFCC	FFFFFFFF	

_ Ngo **FPU** up window address bar is **0012FFC0 ESP**

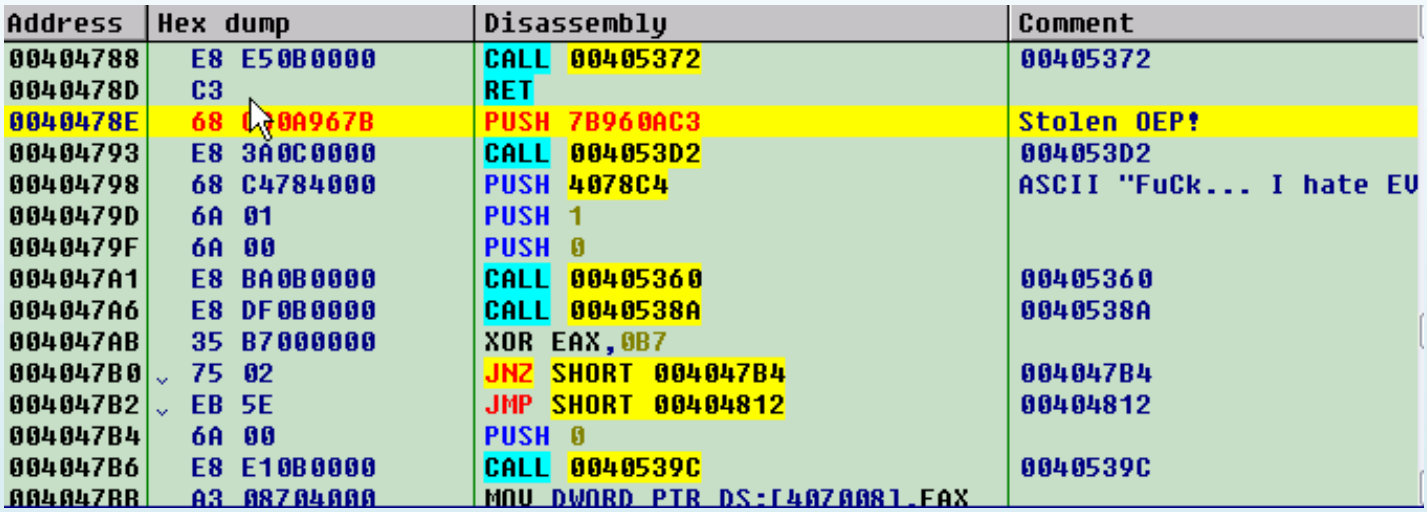


```
Registers (FPU)
EAX FFF68400
ECX 0012FFC4
EDX 0012FFF0
EBX FFFFFFFF
ESP 0012FFC0
EBP 0040E0EA Protect.0040E0EA
ESI 0040E17A Protect.0040E17A
EDI 0012FFE0

EIP 0040E571 Protect.0040E571

C 0  ES 0023 32bit 0(FFFFFFFF)
P 1  CS 001B 32bit 0(FFFFFFFF)
A 1  SS 0023 32bit 0(FFFFFFFF)
Z 0  DS 0023 32bit 0(FFFFFFFF)
S 0  FS 003B 32bit 7FFDF000(FFF)
T 0  GS 0000 NULL
D 0
```

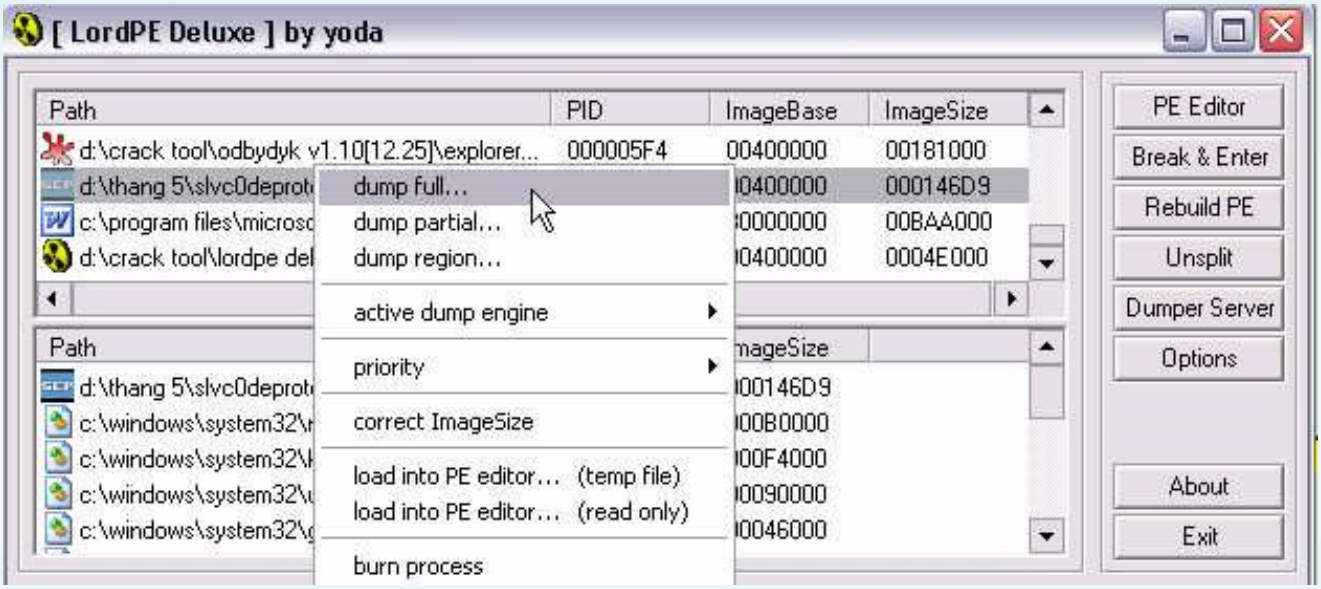
_ This is already clear, to **40478E** and revised as follows:



_ S a u k the F i x

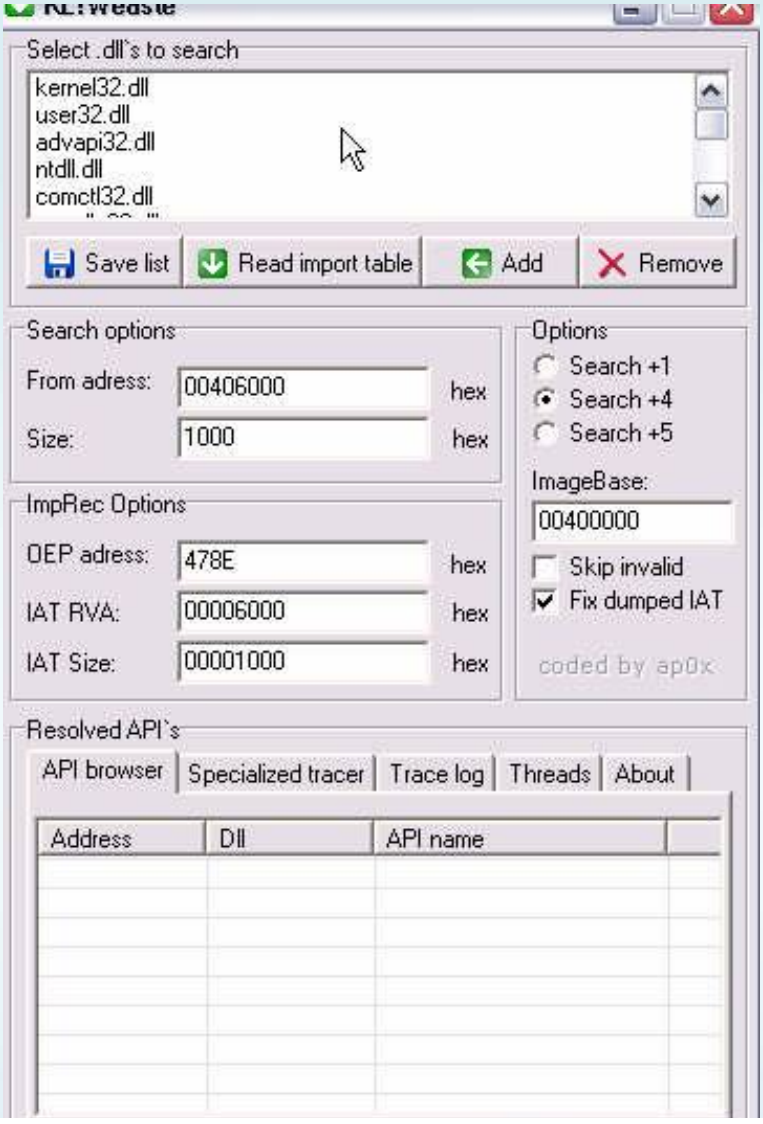


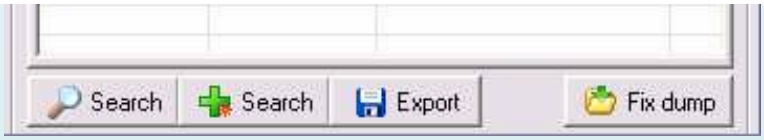
_ Khic haha ... just waiting ... what more full dump with only LordPE ..



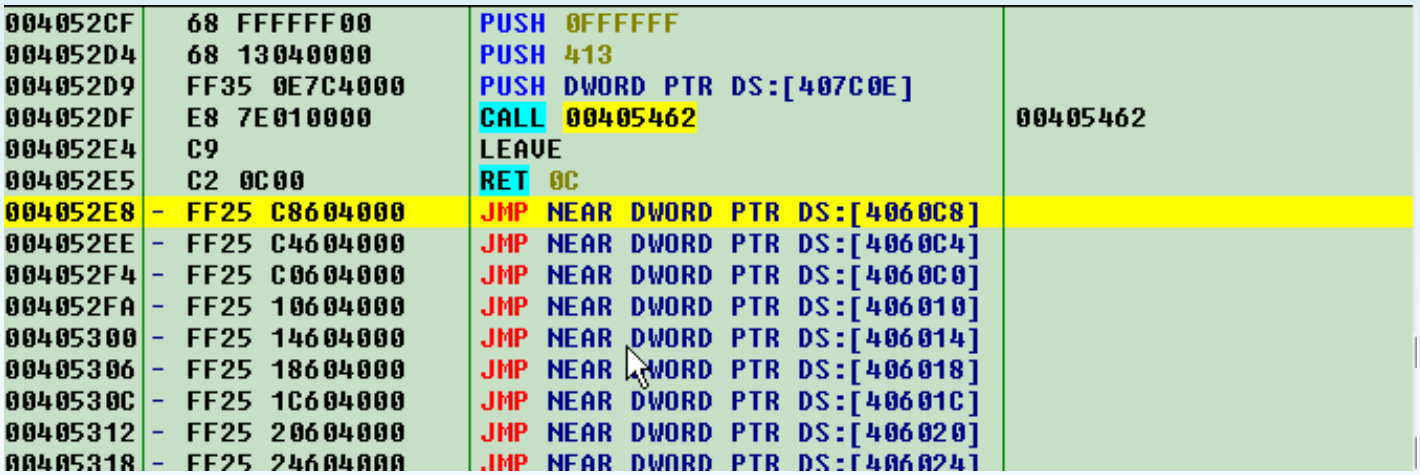
I V. Etna l e v AP I:

_ Now to the very important resolve the API, you can manually or use RL! Weasle. I choose RL! Weasle for fast and accurate ... (I lười lords). Plugin to choose RL! Weasle and fill the parameters as follows:

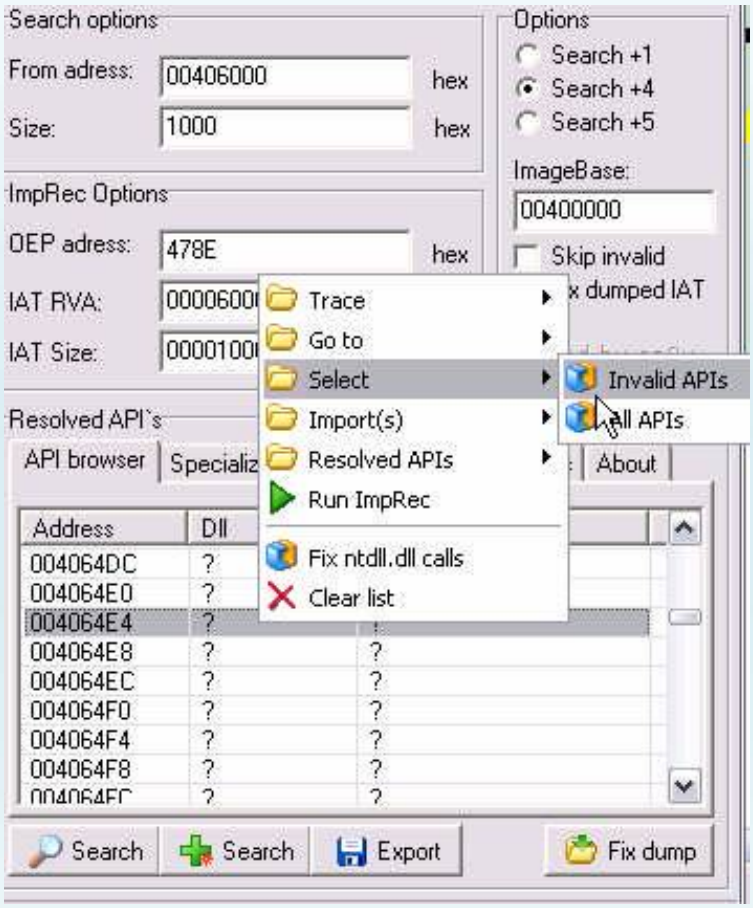




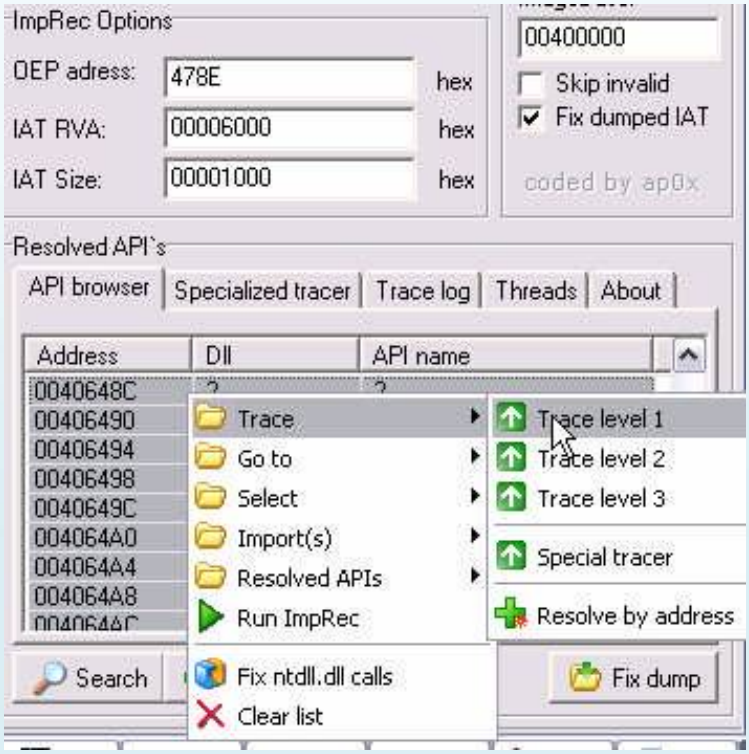
_ Make sure you ask why they filled **406,000.** Very simply because it is only the first Section of the table contains IAT. To determine where you pull up screen press Ctrl + B and enter the FF 25. But 47E8 is OEP



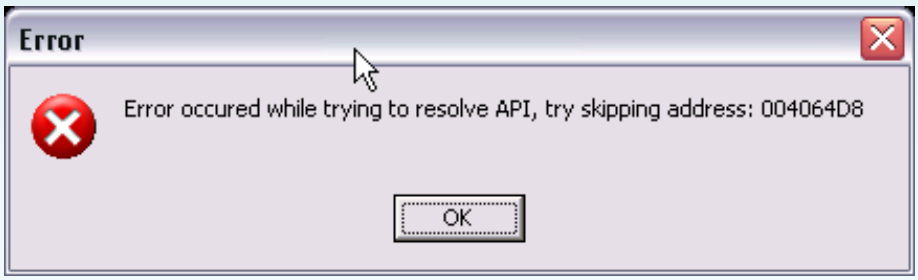
_ Done elsewhere click the **Search** button and select the image:



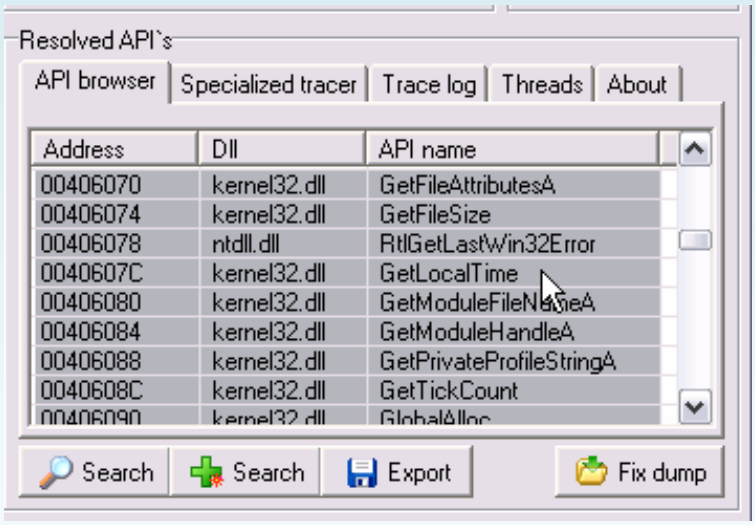
_va continue to choose Select-> **Invalid APIs-> Trace level 1**



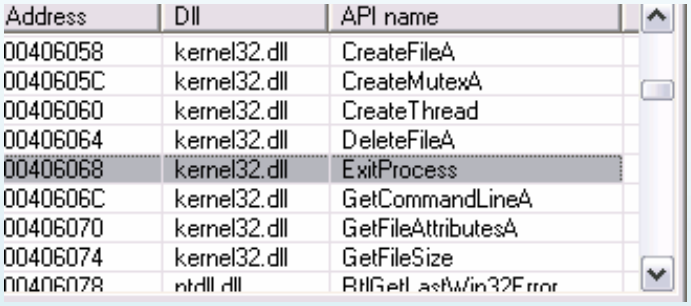
_ It appears



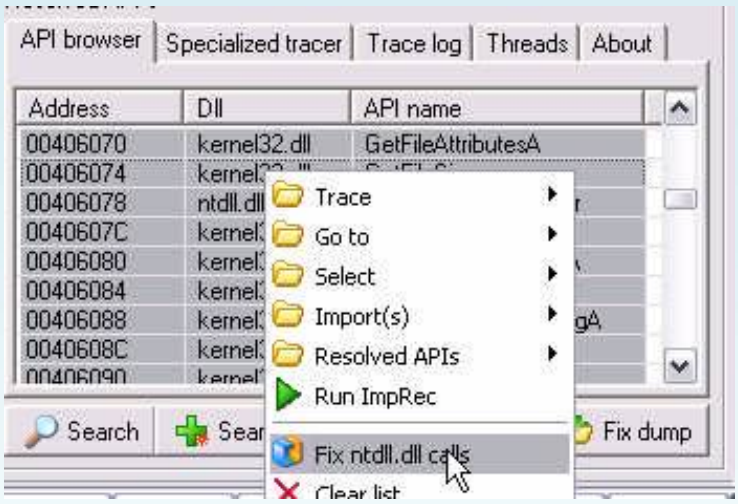
_ You just click OK to when all is the only way. And we have nhusau



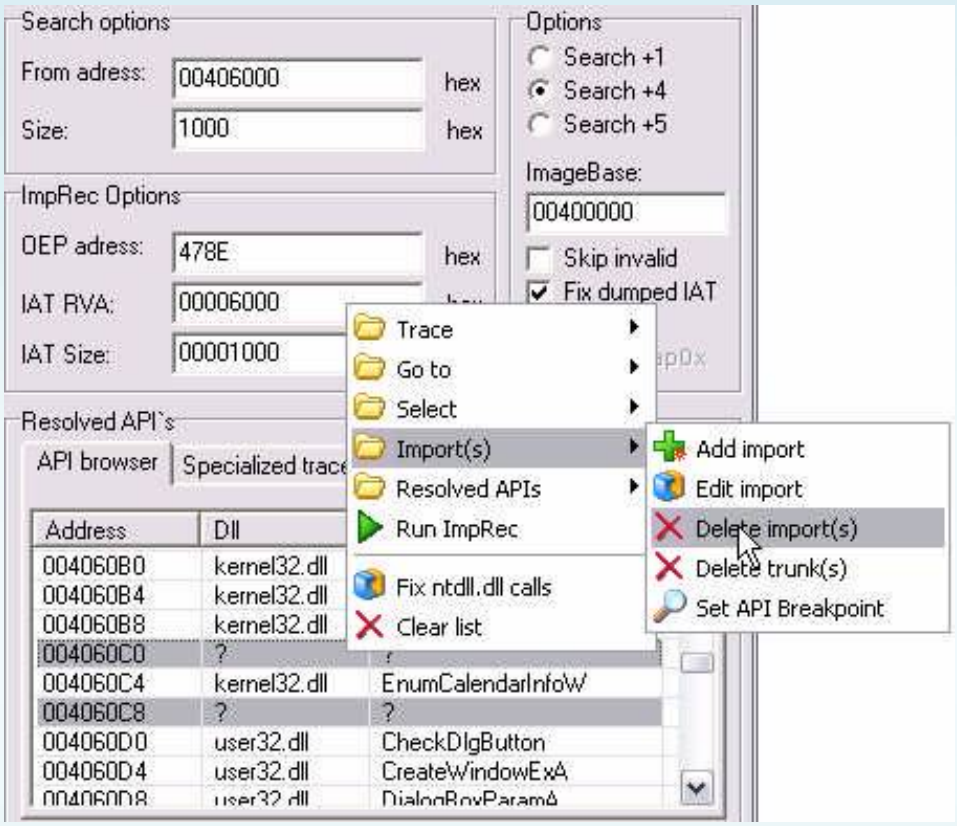
_ Select-> Invalid APIs-> Trace level 2. haha we Trace added this function



_ Next select **Fix NT d ll C a lls**

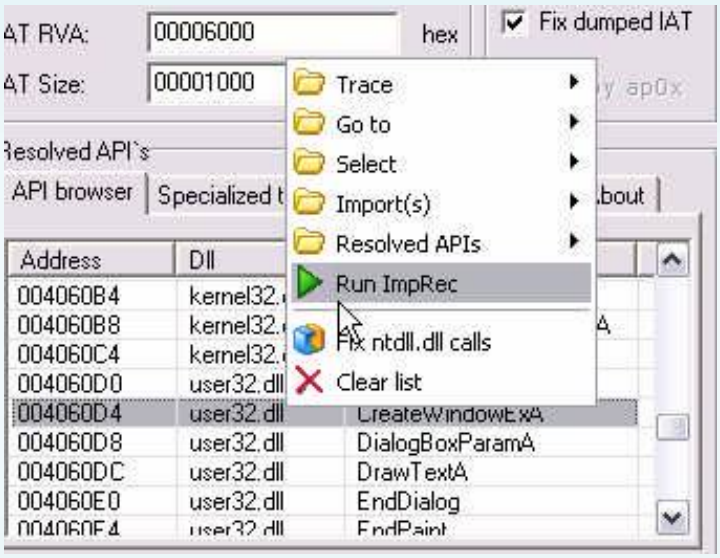


_ **S e l ec t** -> **I n d and the A** and **P is** to the end

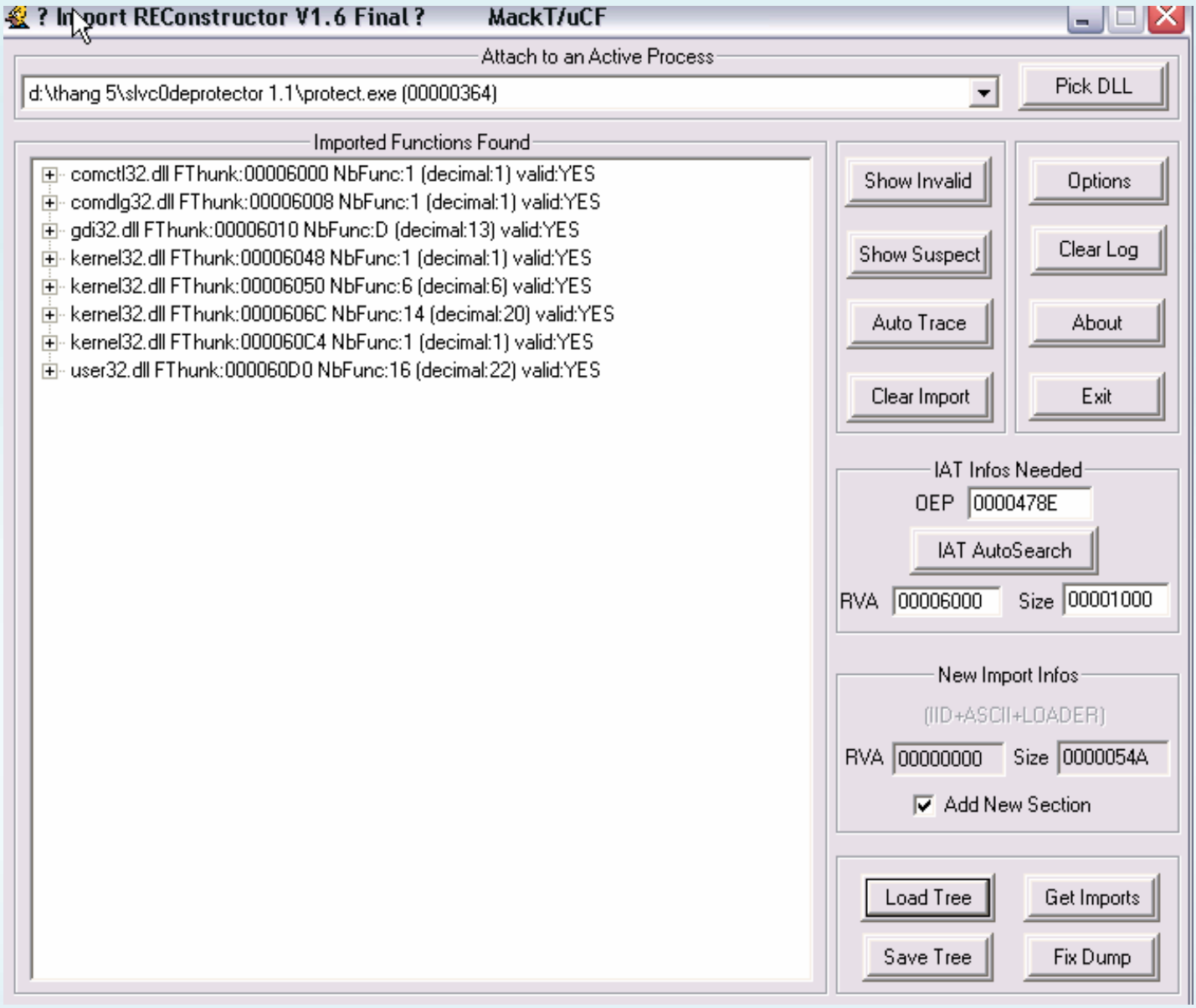


_ The **Export** button han

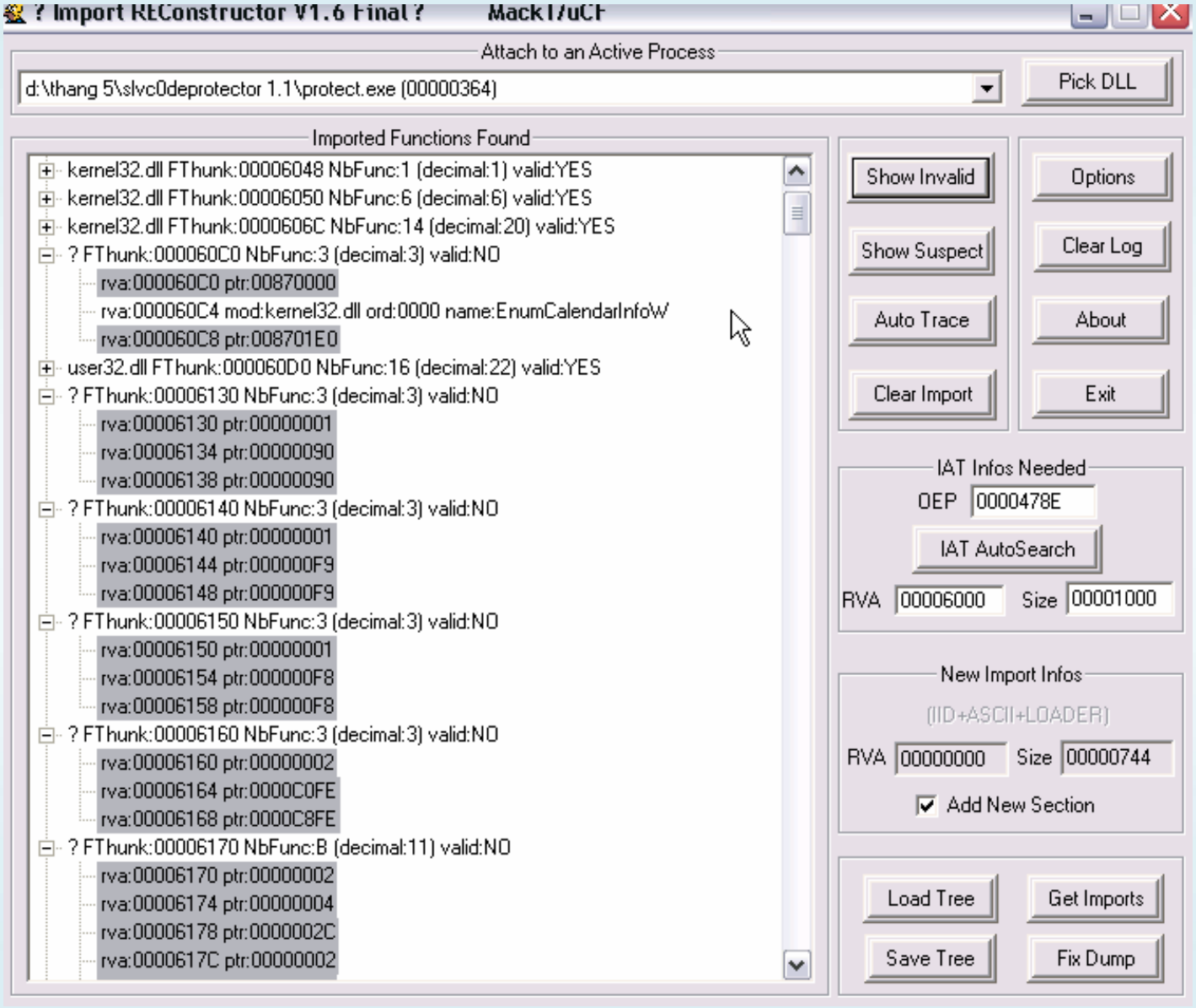
_ Now **I m** running **R p e c**



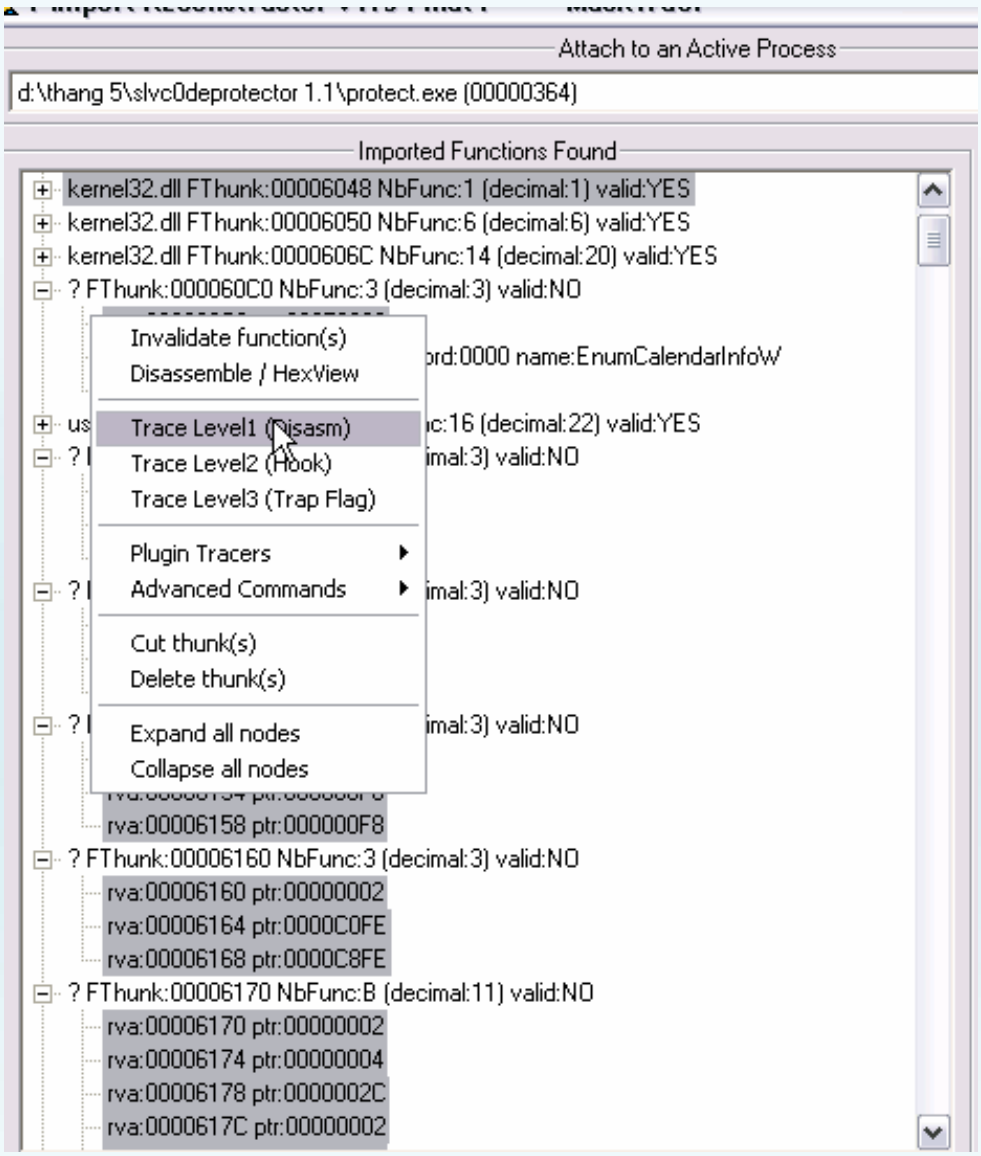
_ More than C **P ID** and **Lo ad T e r e** that we've **very Ex p o**



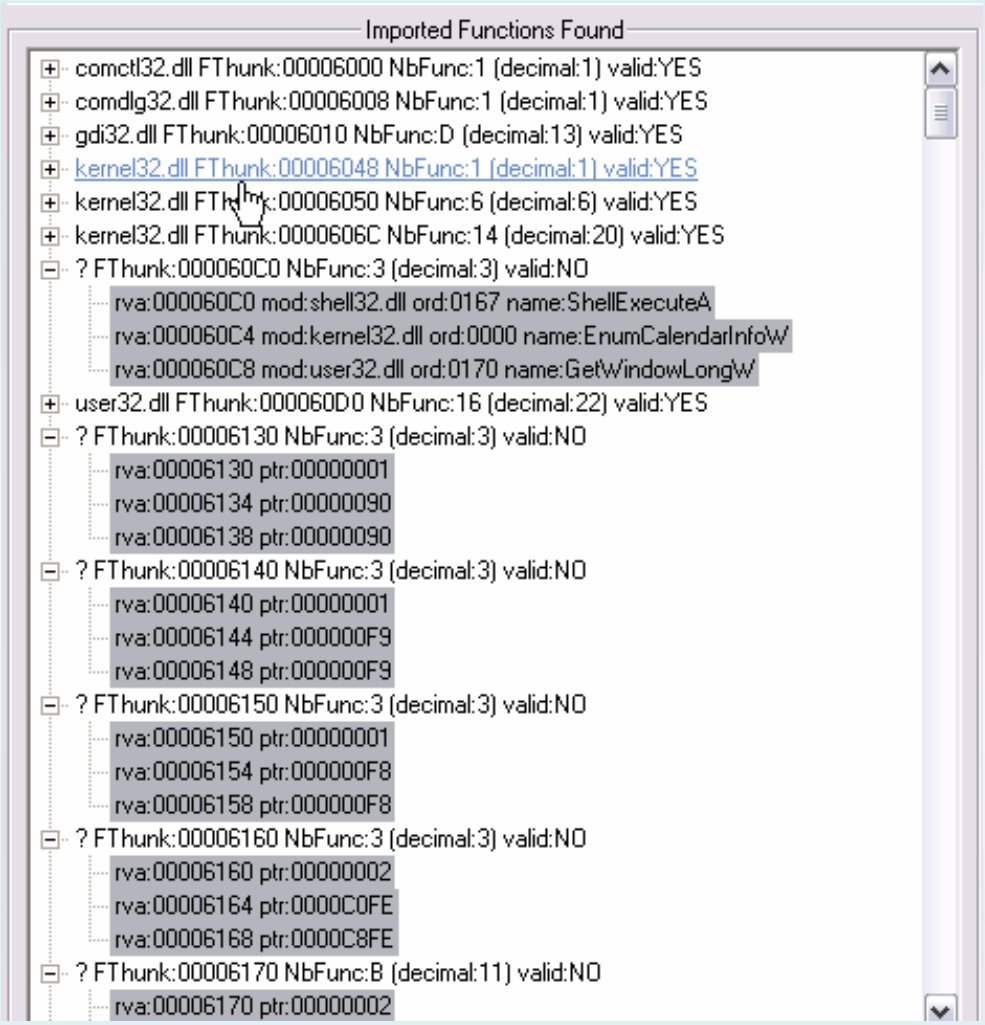
Fix _Dung hit with the **dump** we need Fix 1 little more ... if i will be eligible Crash tè ... **Get Imports** Click -> **Show Invalid**



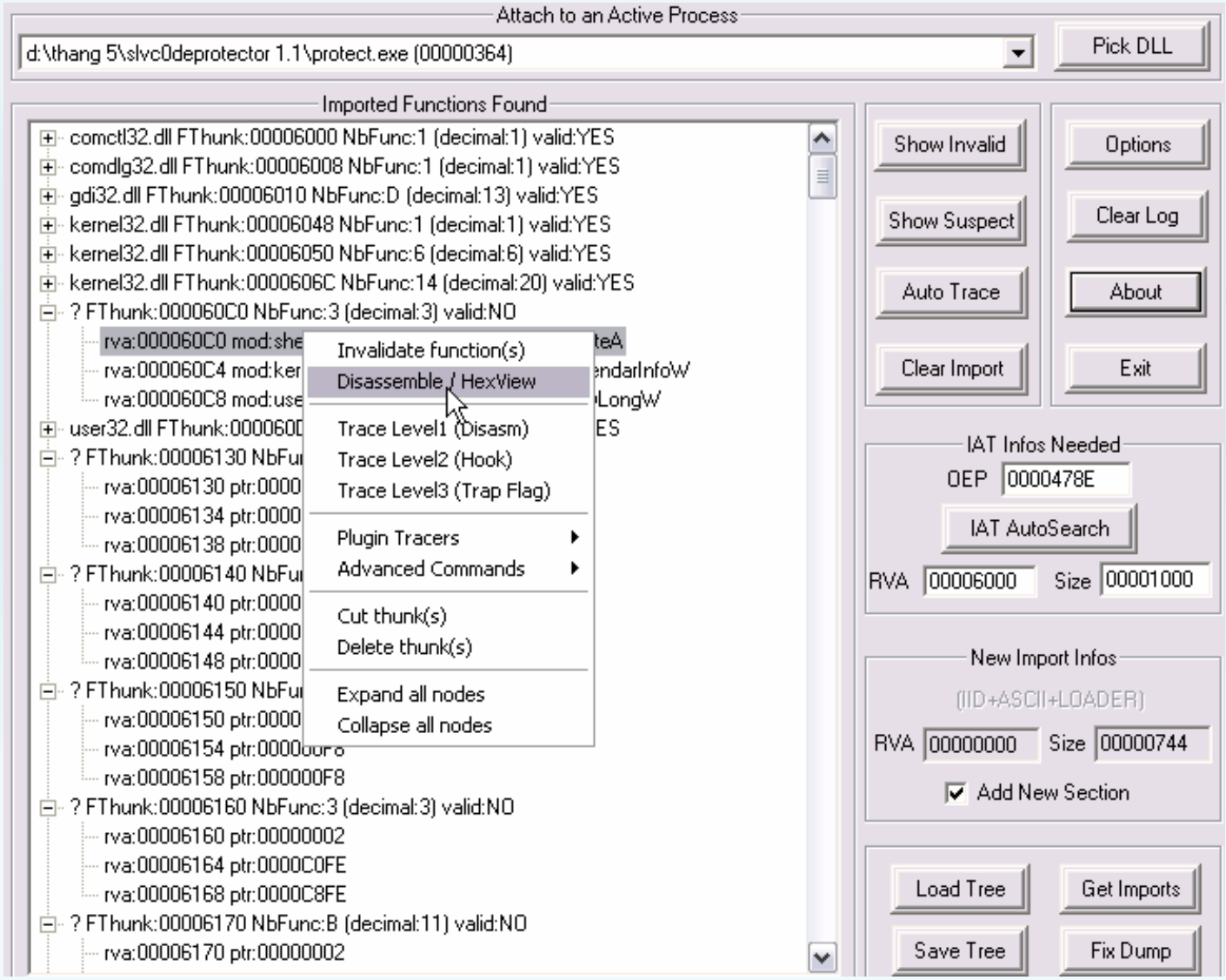
_ And click to select the image



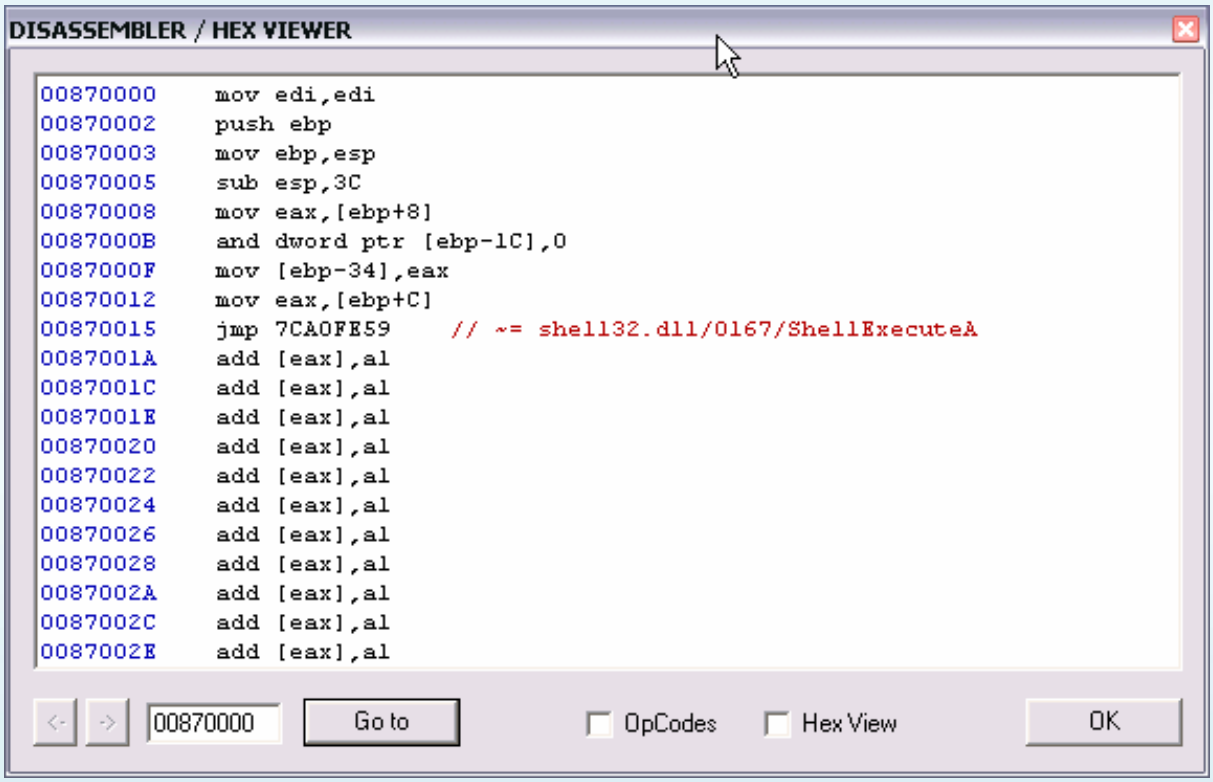
_ C than **S ho w I n v a lid** and you see the following



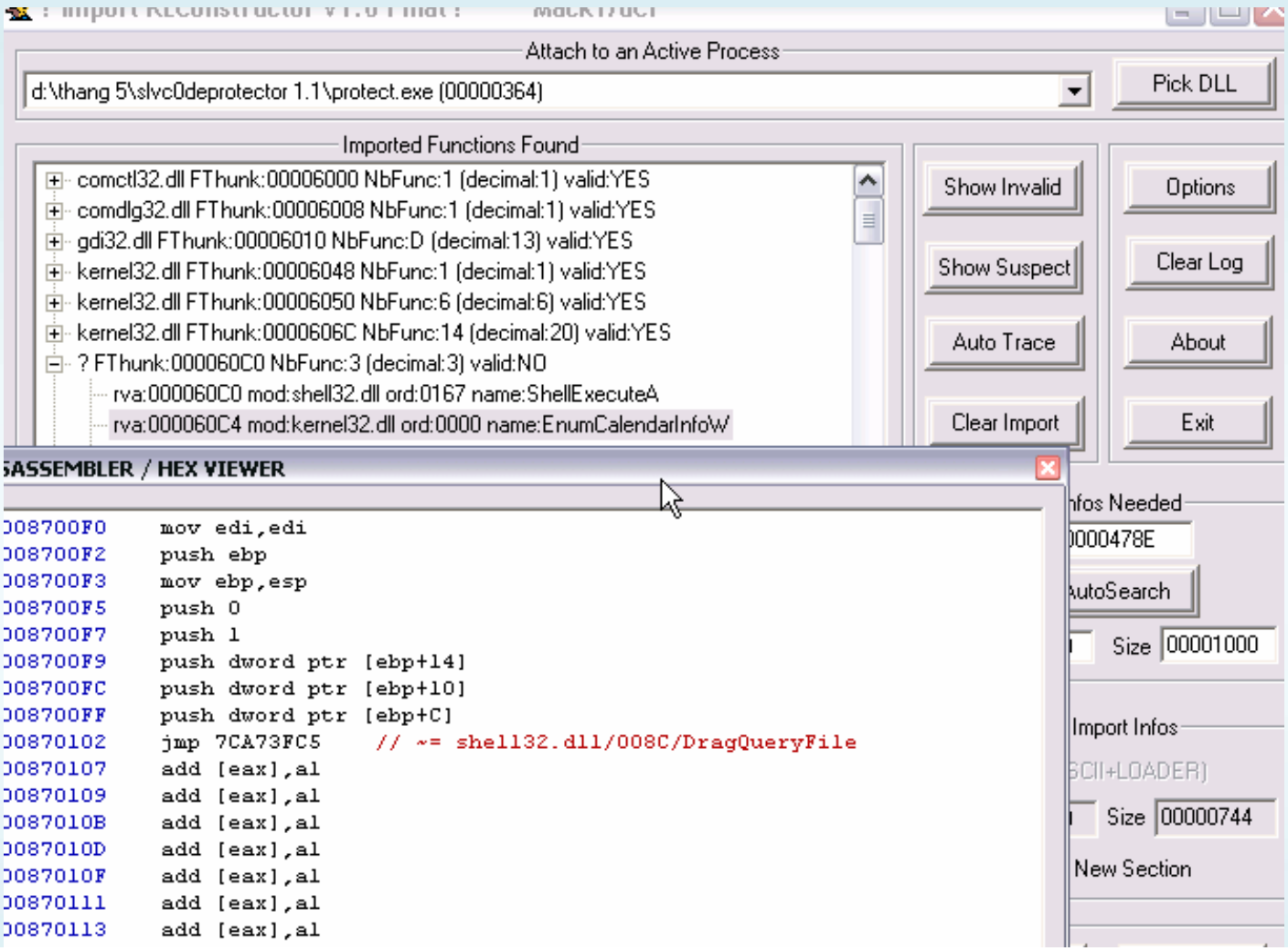
_ Hours seo ... **Cut thunks** all hả .... Ặc default line to dust ... we need to Fix hours each child an individual child. We start choosing them first



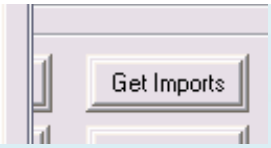
_ Appears window **DISASSEMBLER** 1 / **HEX viewer**



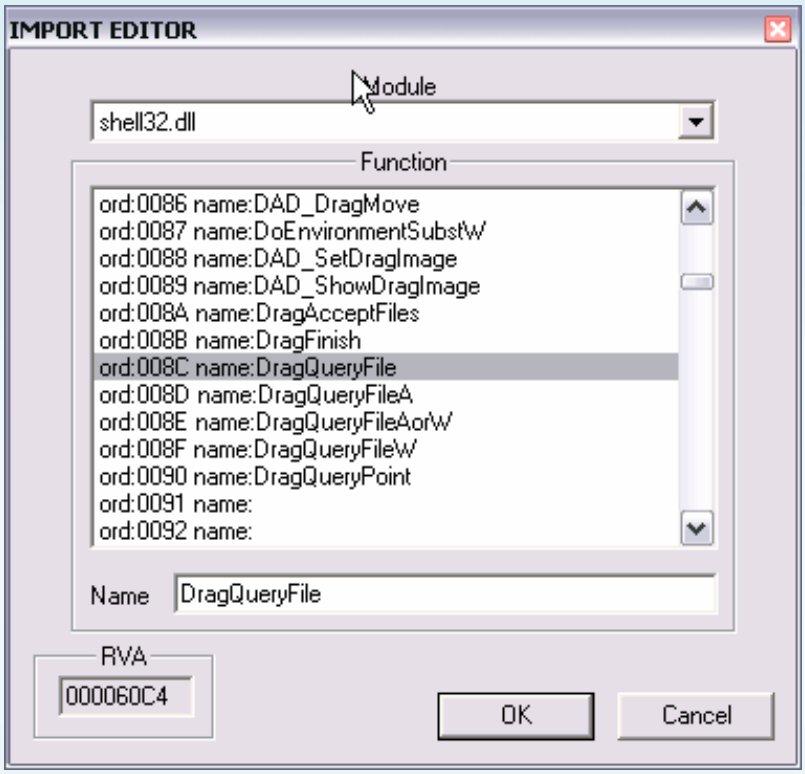
_hehe ... This is the function of this we do need to correct. Choose 2 more children



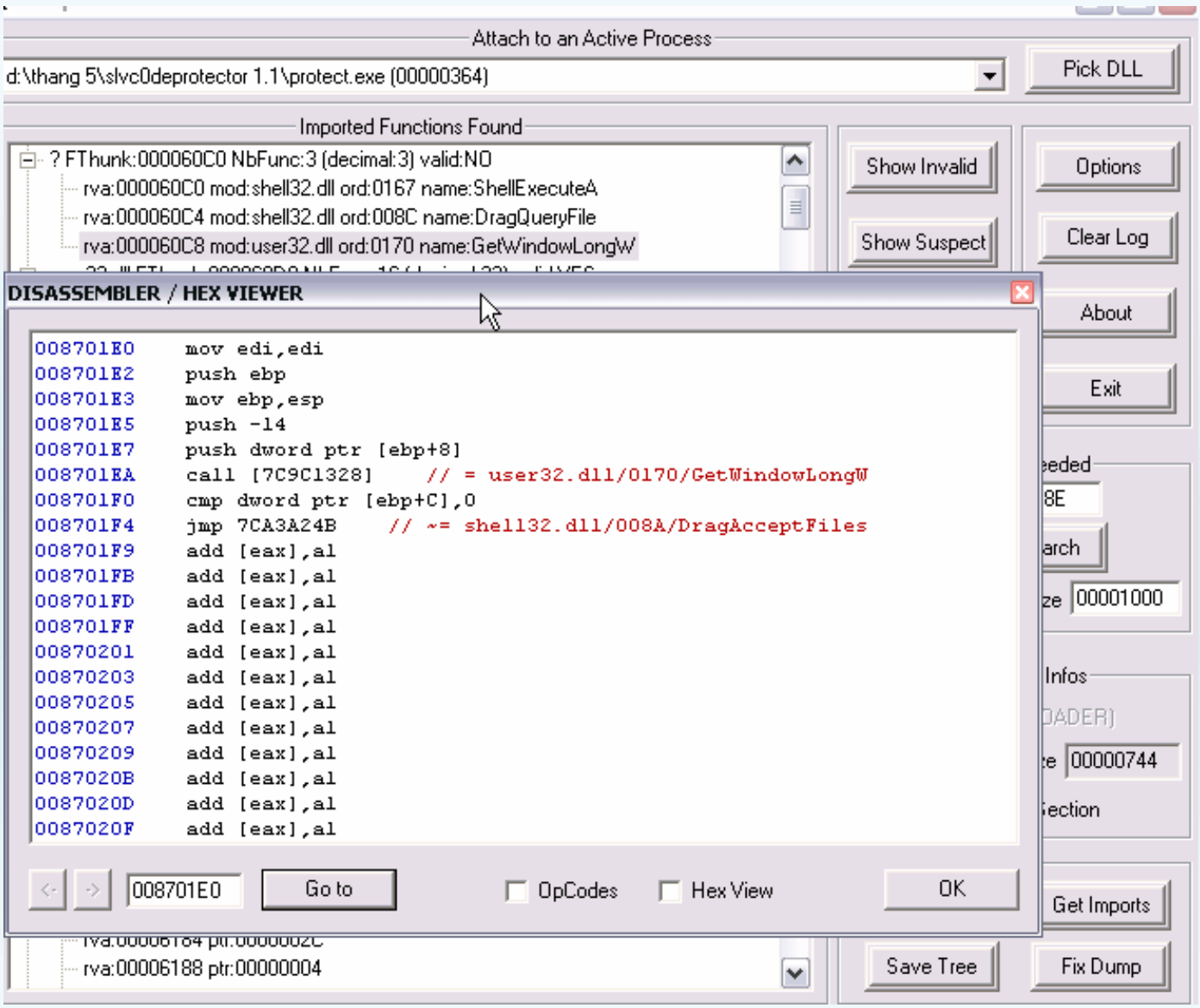
```
00870111    add [eax],al
00870113    add [eax],al
00870115    add [eax],al
00870117    add [eax],al
00870119    add [eax],al
```



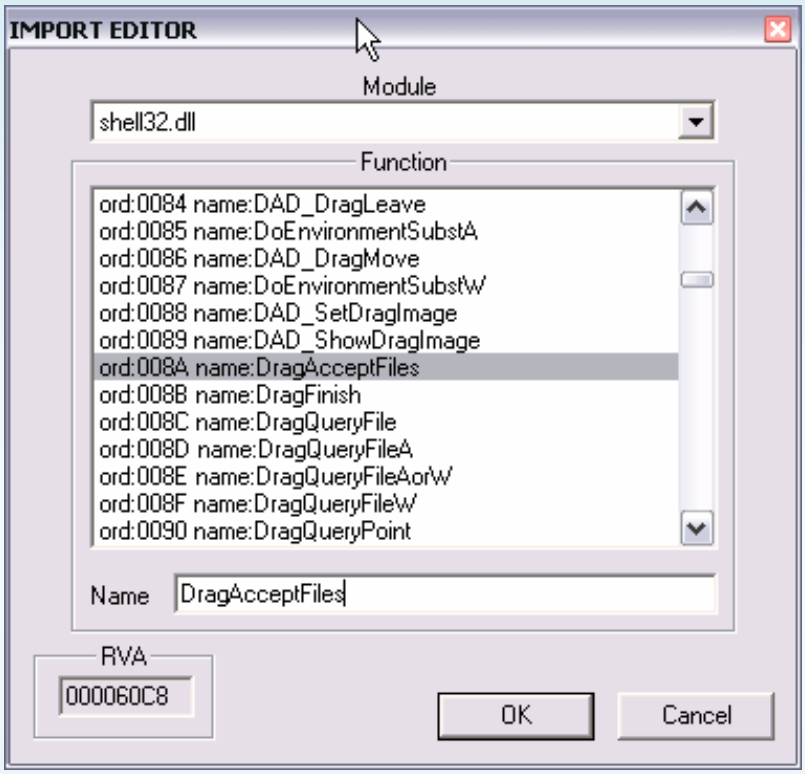
_ This function silkworms bay we revise nhusau:



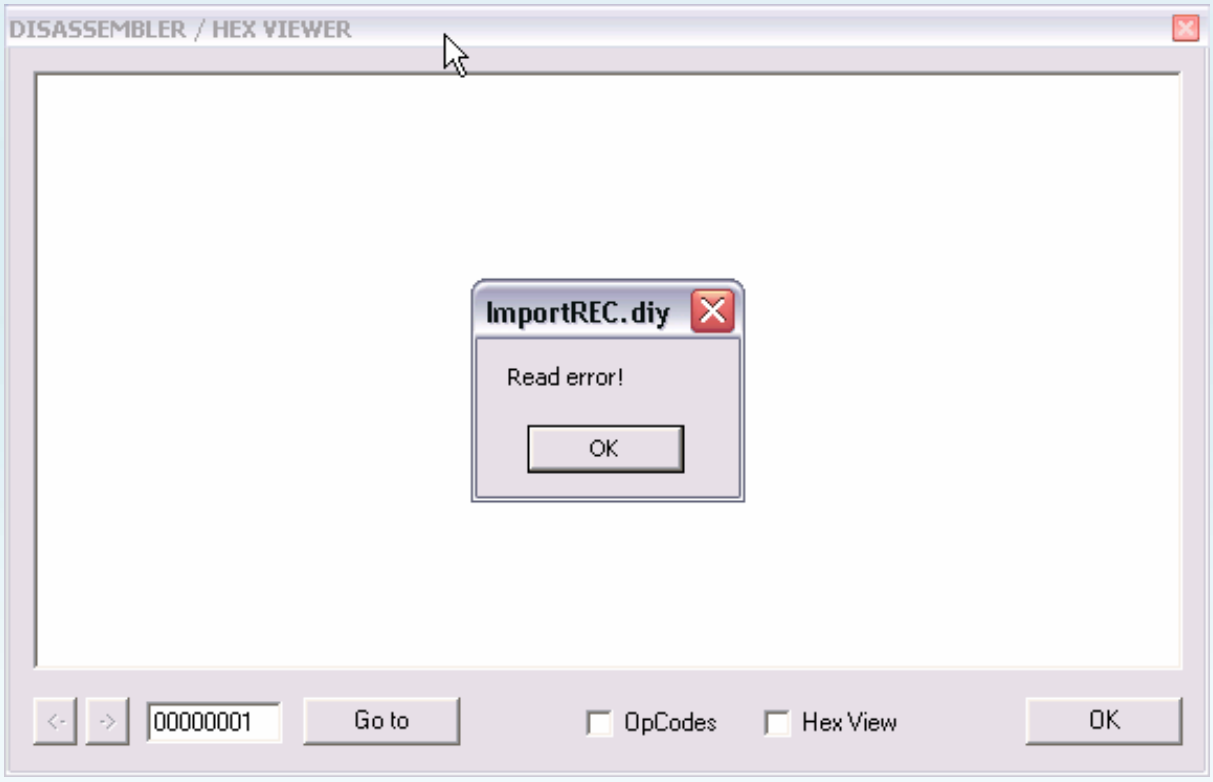
_Tiep 3 children



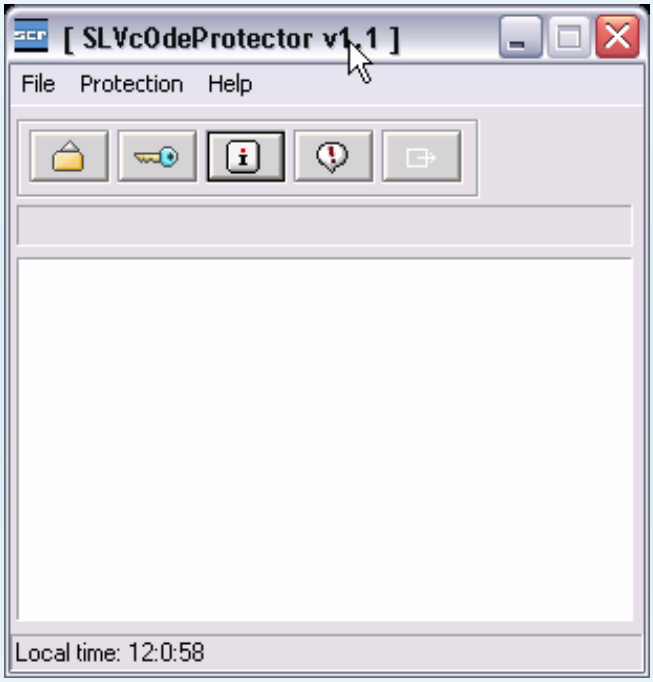
_ta to be revised nhus au:



_ N han **S or the WI and a lid** and the more that the h The h:



_ **Cut Thunks** time is up, select **Fix dump.** Run Test File **Dumped_.exe**



_ H a h a h a h a h a **n** ... ... **U p a c k e d c su ce ll ssfu** ...

G re e Ts italy Ou F l t: *C om p t u r e g _ An e l, e Zombi, M oo n b by a, c H a grape, B e n i n a k i n e m a no a w r, o i Z, D x u e, M e rc, i l e g HT pho where x, c k ybo Tri italy, T a k a d a i a midiot, the light o e ni x, t h e i nth a n d i n e, a n d quality of ... a nd yo u!*

N ha Tr a n g, italy 1 à The 8th Asia ng5 year 200 6

W hy N o t B ar

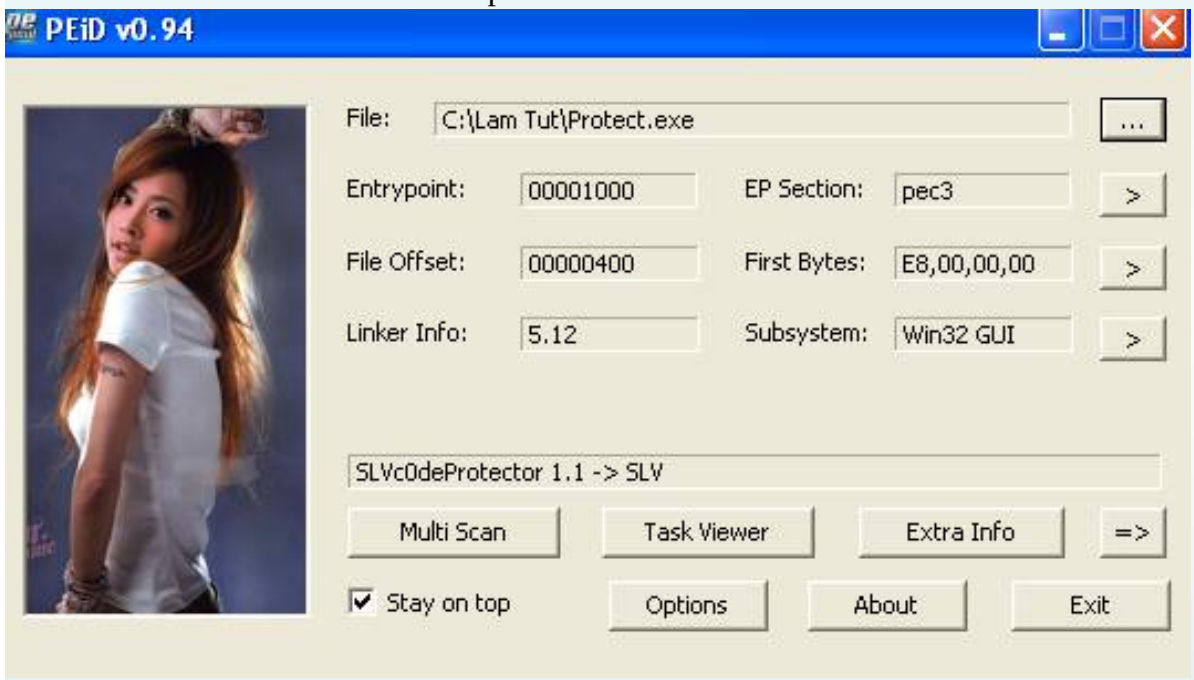
UNPACKING SLVc0deProtector 1:11 tut 1

tlandn

Target: Protect.exe (included)
Tools: Diablo OllyDbg (This in place or not to be used to fix OllyAdvanced NumOfRVA)
In this tut I try to give a general method to unpack (by hand, including fix IAT) of the target packed with SLV c0deProtector 1.11.

I) Find OEP:

As usual we PEId used to check the pack with what?

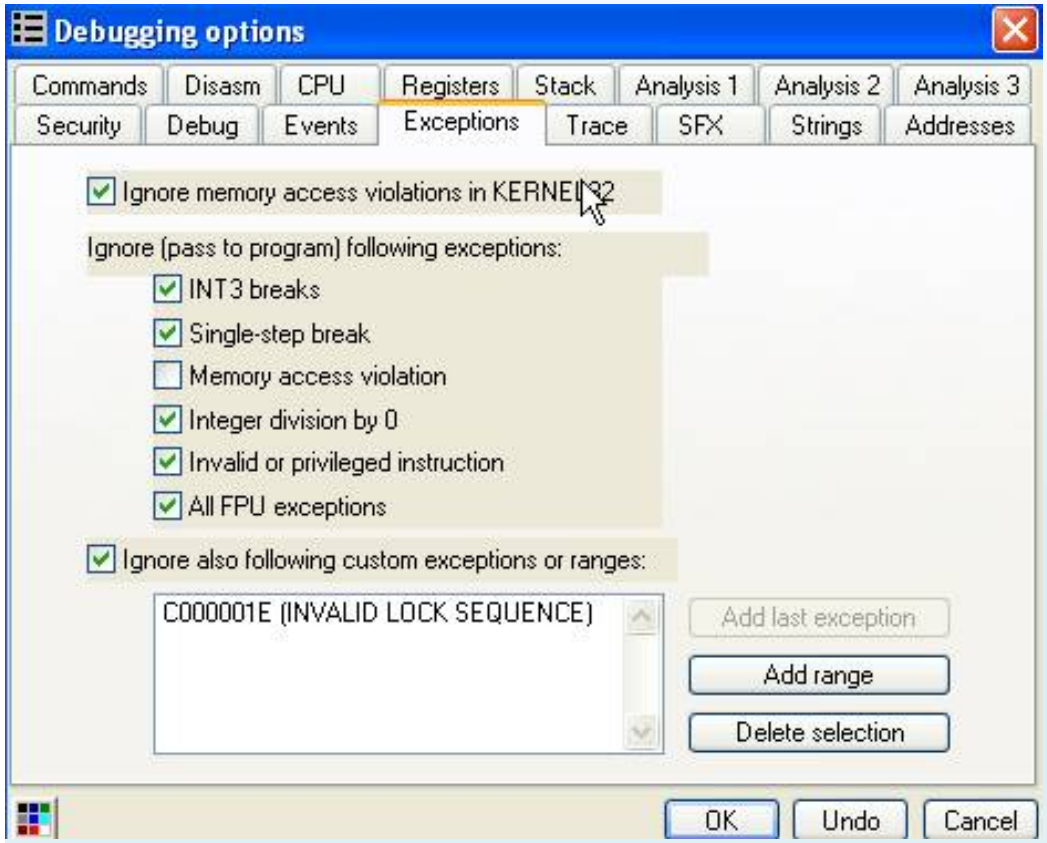


Clearly the program is pack with SLVc0deProtector 1.1
We start. Load program to OllyDbg. If you use a non OllyDbg Diablo xài OllyAdvanced or not the plugin you will get an error following:

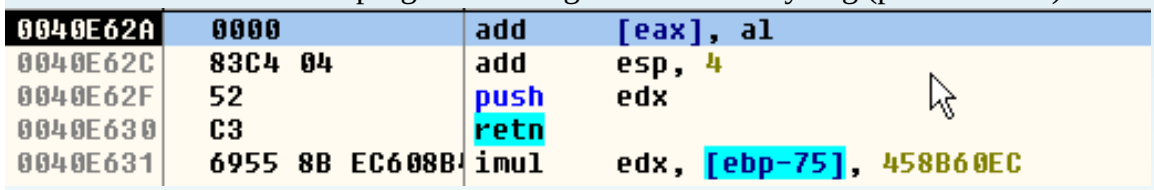
Therefore we will xài OllyDbg version of Diablo or OllyAdvanced plugin. Here I xài OllyDbg version of Diablo for Health. Load the program. We here.

```
00401000   E8 00000000      call    00401005
00401005   58               pop     eax
00401006   C600 EB          mov     byte ptr [eax], 0EB
00401009   C640 01 08       mov     byte ptr [eax+1], 8
```

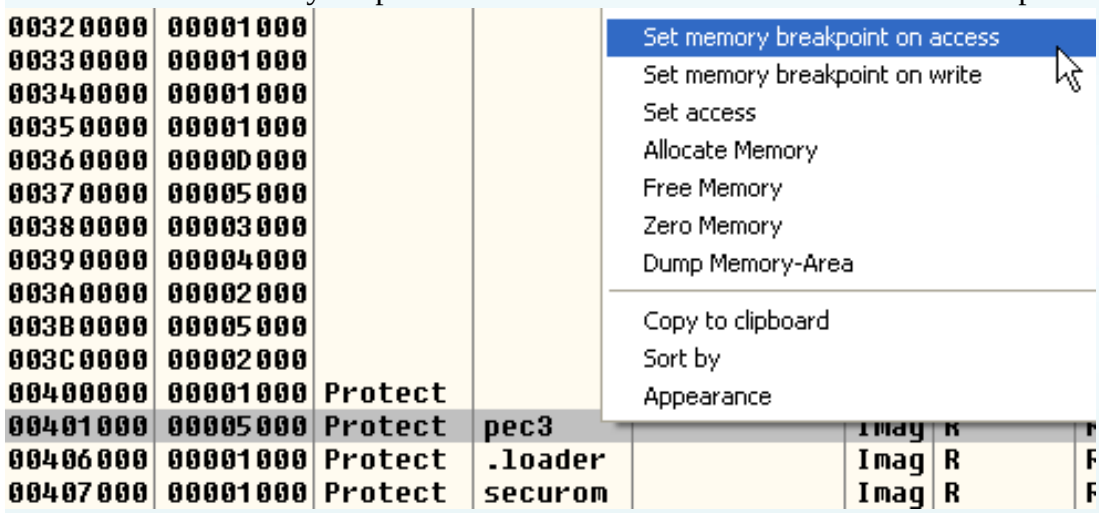
Revising Option OllyDbg by following the same:



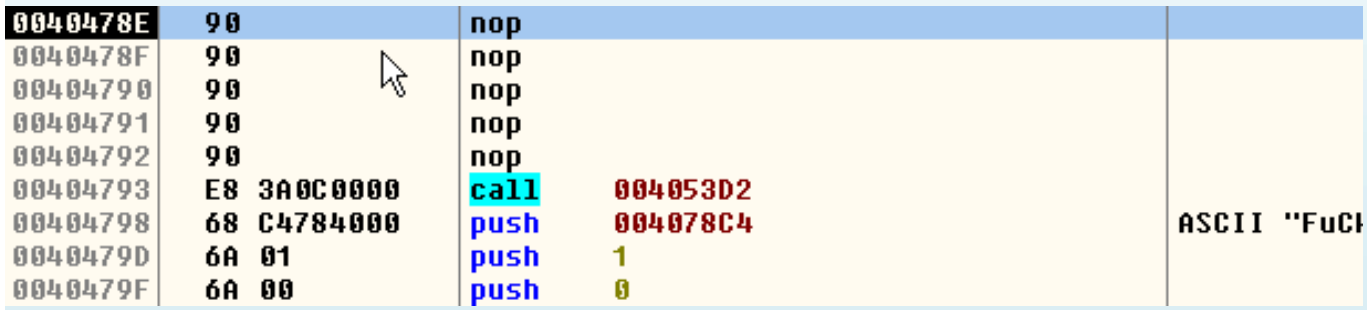
Press Shift-F9 5 times the program running. We restart OllyDbg (press Ctrl-F2). Press Shift-F9 4 times. We here:



Press Alt-M to Memory Map. Select the section and the second set as in the picture:

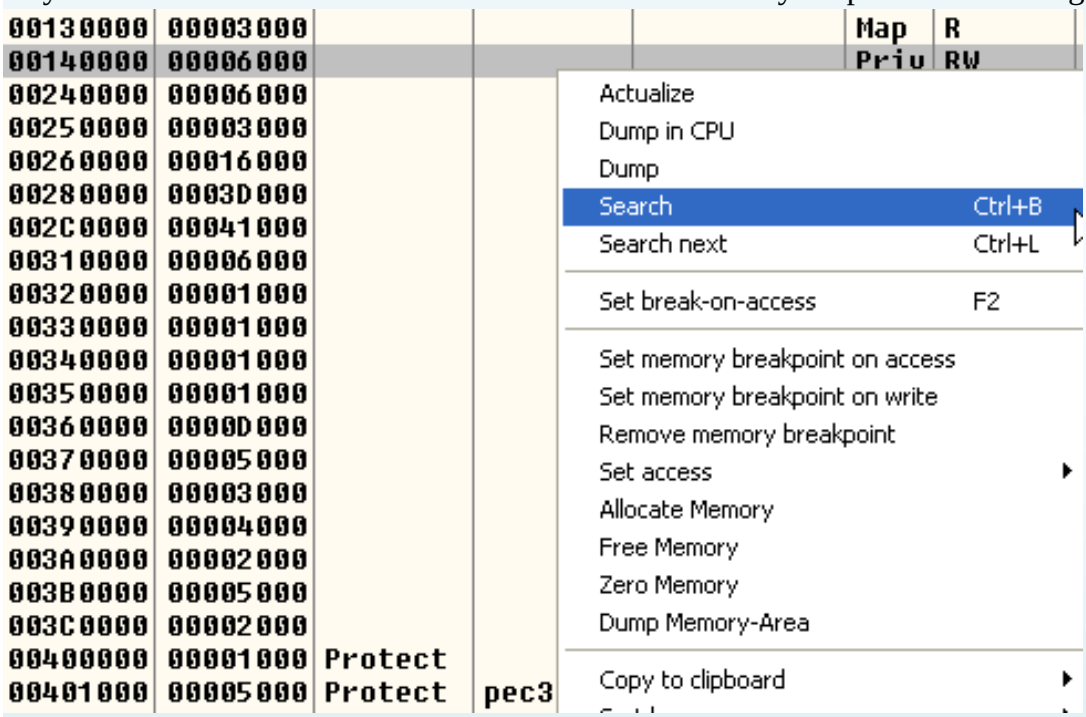


Press Shift-F9. We 0040478E in OEP.



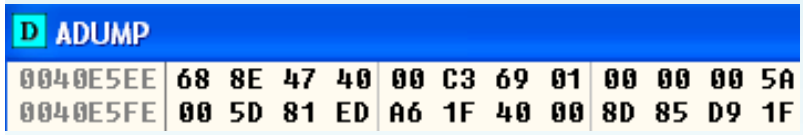
II) Search for "Stolen Bytes":

You note that here we have "stolen bytes". In this program is 5 bytes corresponding 5 orders submitted.
Here I try to find a general to be able to find "stolen bytes" in the target.
According guess I think the packer will implement "stolen bytes" where new and then jump to our OEP. We should stop in 0040478E guess I think there will be a command
PUSH 0040478E (This line is opcodes 68 8E 47 40 00)
RET
Or can the JMP 0040478E
I try on. We are at OEP 0040478E. Press Alt-M to Memory Map. Select the image as:



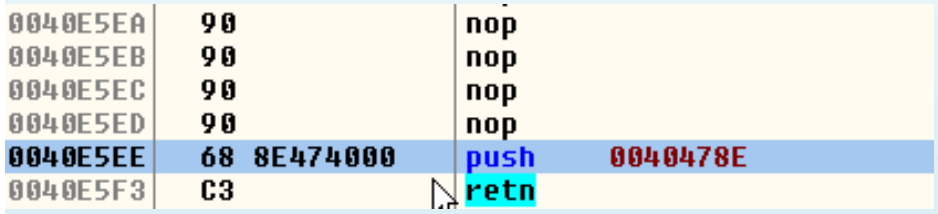
Enter 68 8E 47 40 00.

Click OK. We are.

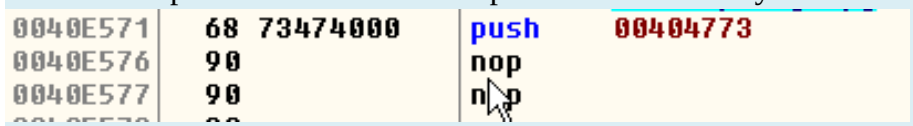


As a result 0040E5EE. We try to jump to see which stars. In the window CPU press Ctrl-G. Enter 0040E5EE.

Click OK. We here.



Just like we predicted. Now at the top is a little "stolen bytes". Pull up:

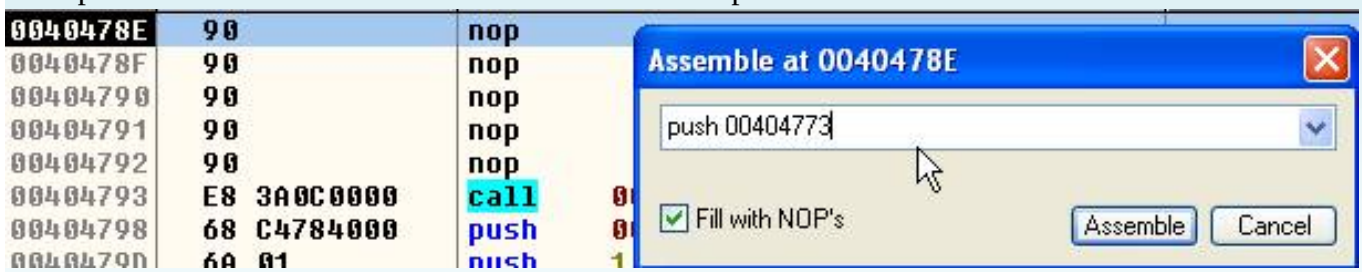


We find the line:

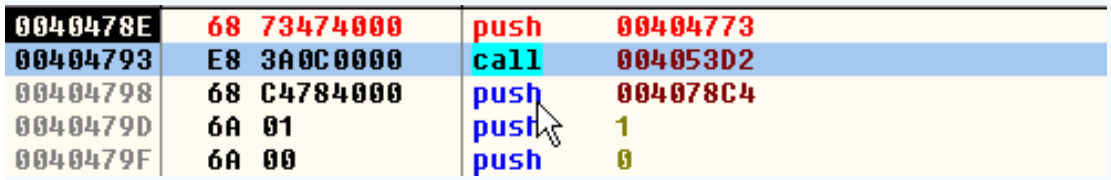
PUSH 00404773

This line corresponds 5 bytes (68 73 47 40 00). This is "stolen bytes" our.

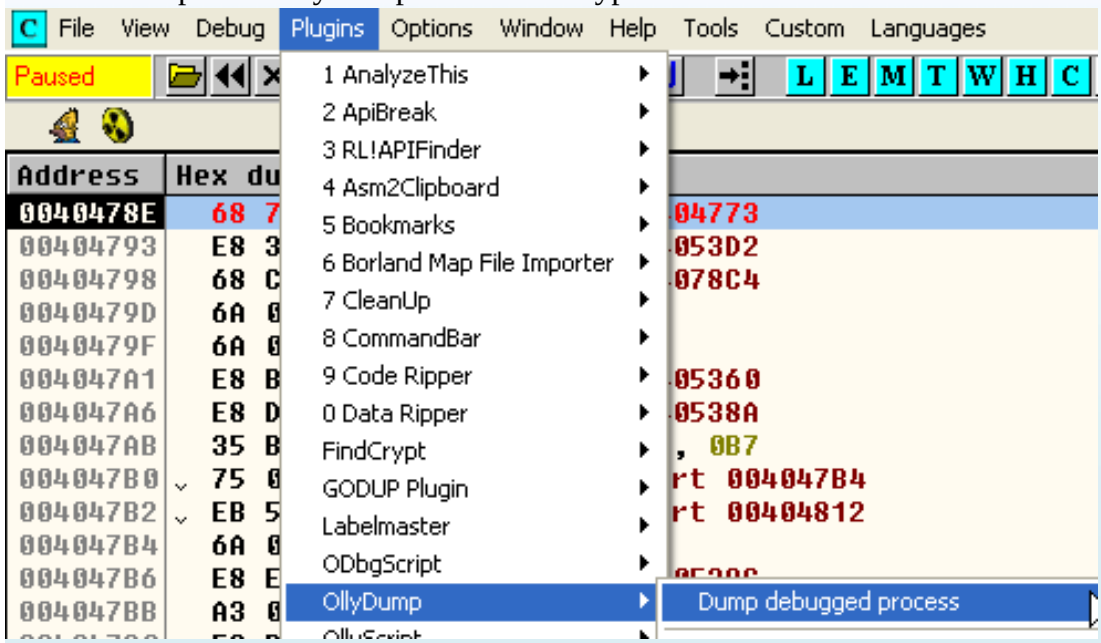
Now press the "*" to return to OEP 0040478E. Press Spacebar to enter the command line:



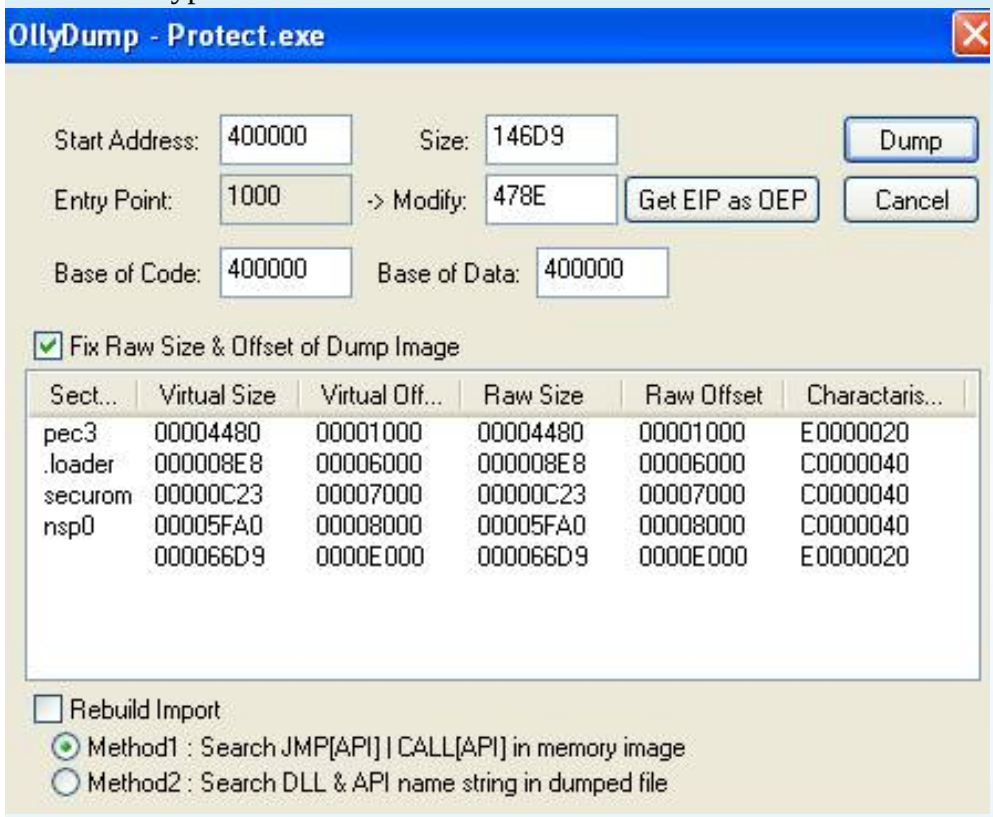
We are.



We will dump with OllyDump. Choose the type:



Choose the type:

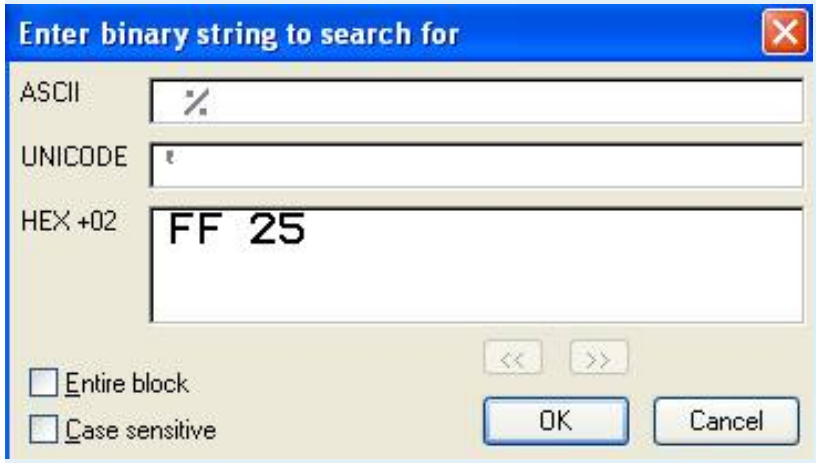


Click the "dump". File name is a.exe

III) Fix IAT:

Now to fix the period of IAT. I will find "magic point" and patch it.

At OEP. Press Ctrl-B. Fill FF 25.

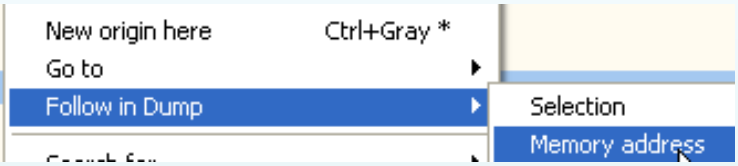


Click OK. We here:

```
004052DF    E8 7E010000     call    00405462
004052E4    C9              leave
004052E5    C2 0C00         retn    0C
004052E8  - FF25 C8604000   jmp     [4060C8]
004052EE  - FF25 C4604000   jmp     [4060C4]
004052F4  - FF25 C0604000   jmp     [4060C0]
004052FA  - FF25 10604000   jmp     [406010]
00405300  - FF25 14604000   jmp     [406014]
```

Click your mouse to select the image.

```
004052E4    C9              leave
004052E5    C2 0C00         retn    0C
004052E8  - FF25 C8604000   jmp     [4060C8]
004052EE  - FF25 C4604000   jmp     [4060C4]
```

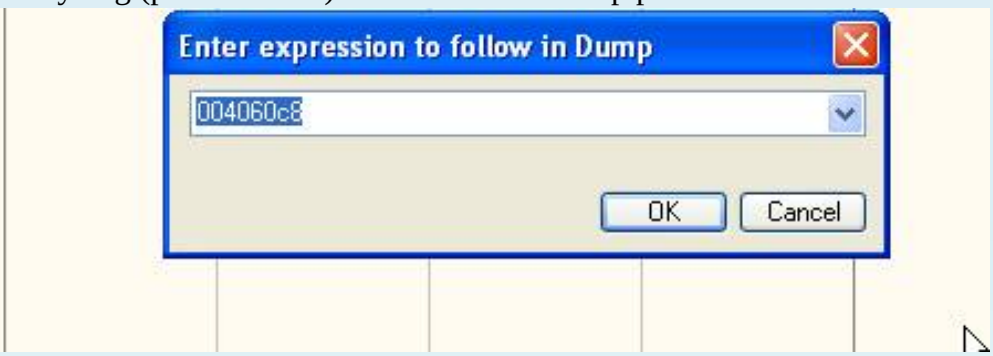


In the window dump.

```
004060C8  E0 01 39 00  00 00 00 00  30 2A 39 00  20 2B 39 00
004060D8  10 2C 39 00  00 2D 39 00  F0 2D 39 00  E0 2E 39 00
004060E8  D0 2F 39 00  C0 30 39 00  B0 31 39 00  A0 32 39 00
004060F8  90 33 39 00  80 34 39 00  70 35 39 00  60 36 39 00
```

The value false IAT form 0039XXXX (translated back from XX XX 39 00).

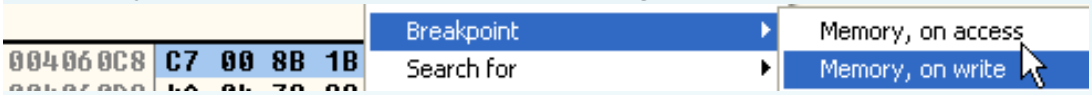
Now restart OllyDbg (press Ctrl-F2). In the window dump press Ctrl-G to enter 004060C8.



Click OK. We here.

```
004060C8  C7 00 8B 1B  2B 3B 4B DC  F6 83 FC AC  B8 43 BC 6C
004060D8  4A 04 7C 2C  DD C4 3C ED  E9 84 FD AD  05 44 BD 6D
```

Select 4 bytes and mouse click to select the image.



Now press Shift-F9. Stop here by Exception.

```
Address   Hex dump          Disassembly
0040E20B    AD              lods    dword ptr [esi]
0040E20C    A0 8B642414     mov     al, [1424648B]
0040E211    64:8F05 000000( pop     dword ptr fs:[0]
```

Press Shift-F9 again. Stop here

```
Address   Hex dump          Disassembly
0040F40C    AA              stos    byte ptr es:[edi]
0040F40D  ^ E2 B9           loopd   short 0040F3C8
0040F40F  v EB 01           jmp     short 0040F412
0040F411    69C3 696183C6   imul    eax, ebx, C6836169
```

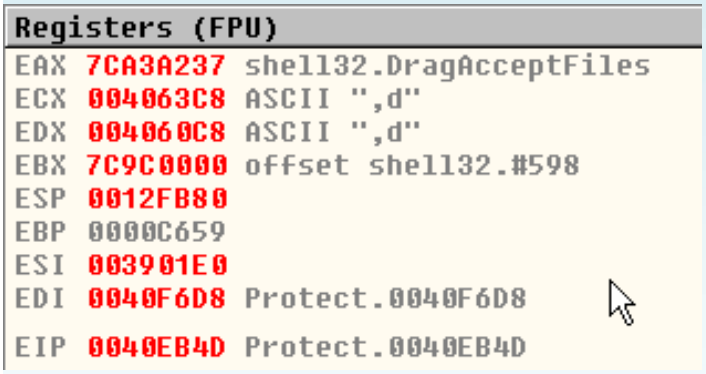
This is not important. Continue pressing F9 4 times more. We stop here:

```
0040EB46    8D7F 01         lea     edi, [edi+1]
0040EB49    8B77 04         mov     esi, [edi+4]
0040EB4C    56              push    esi
0040EB4D    8F02            pop     dword ptr [edx]     003901E0
0040EB4F    83F0 01         xor     eax, 1
0040EB52  v EB 01           jmp     short 0040EB55
```

This new place is really important. Look below the window.

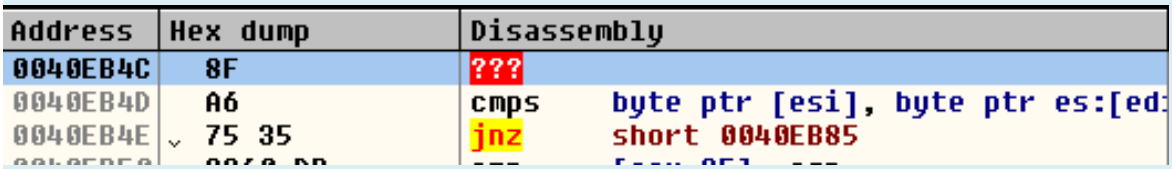
```
Stack [0012FB80]=003901E0 (003901E0)
ds:[004060C8]=0000642C
```

Packer is trying to record the value 003901E0 to address 004060C8. Looking through the window to write.

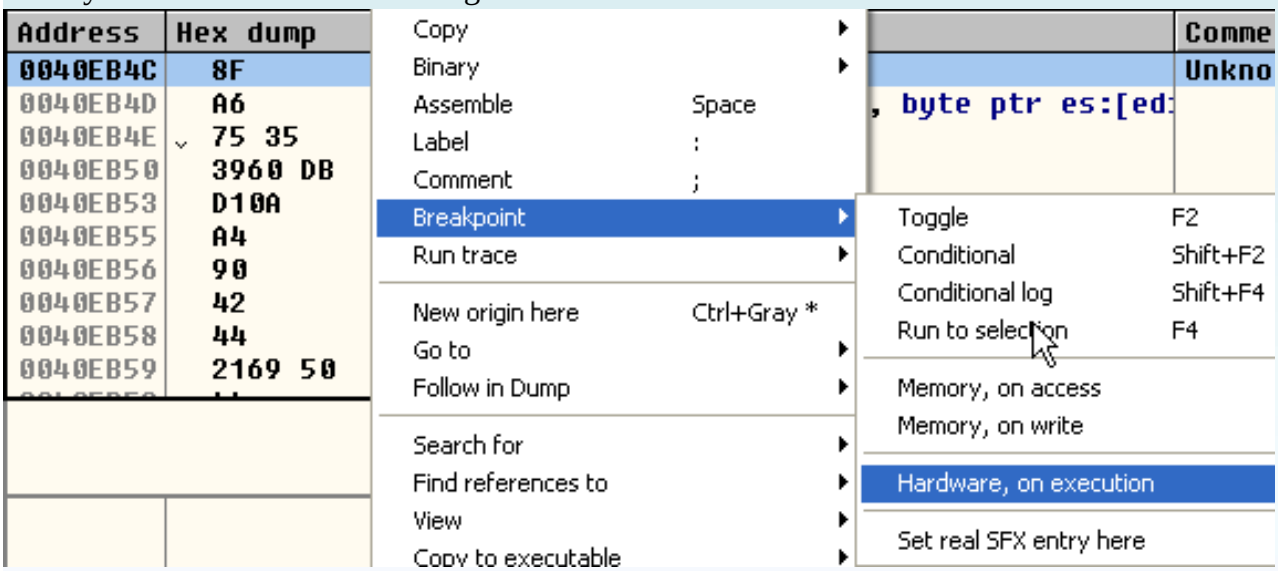


EAX contains the address is real function. ESI also contains only fake address.
So now resolve how? Very simple. We change
0040EB4C. 56 push esi
0040EB4D. 8F02 pop dword ptr [edx]; 003901E0
with
0040EB4C. 56 push eax
0040EB4D. 8F02 pop dword ptr [edx]; 003901E0
Simply changing the ESI to EAX.
You remember the "magic point" we are 0040EB4C.
Press Ctrl-F2 reboot. Press Ctrl-G fill 0040EB4C.

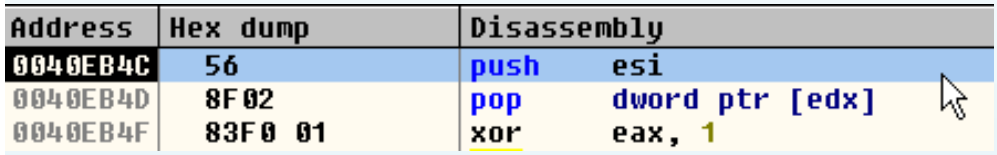
Click OK.



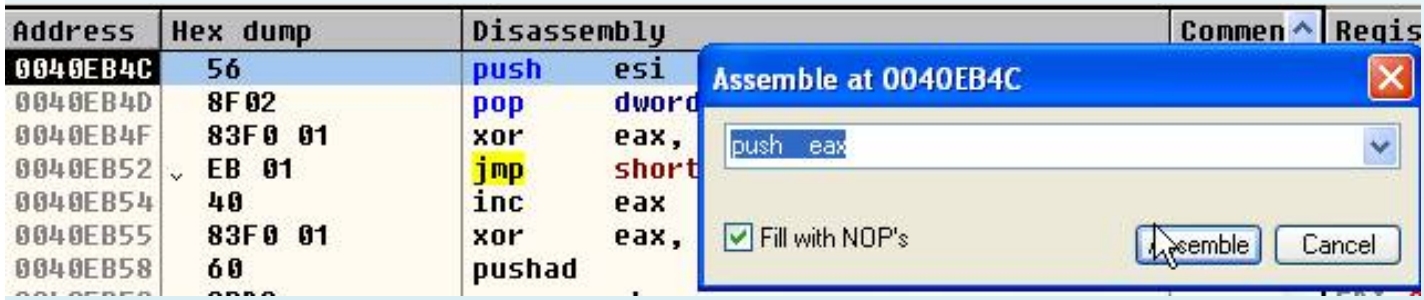
Click your mouse to select the image.



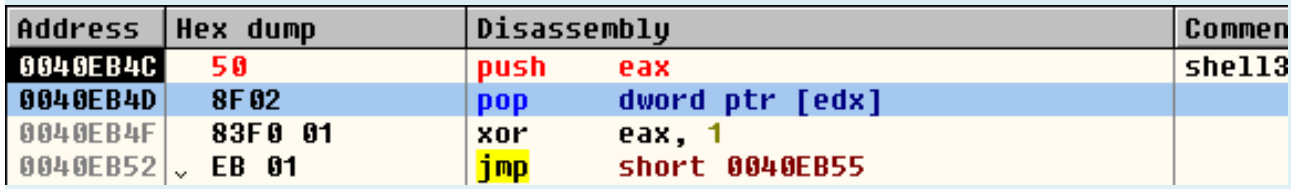
Now press Shift-F9 to break in when 0040EB4C (2).



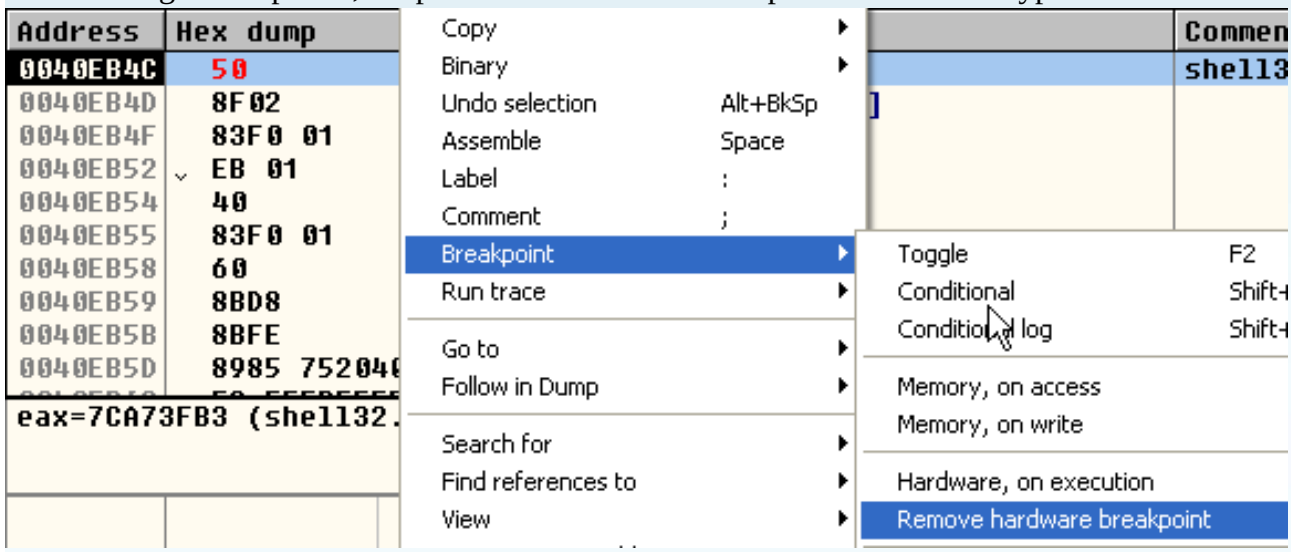
Edit the ESI PUSH PUSH EAX. Press Spacebar to enter the picture:



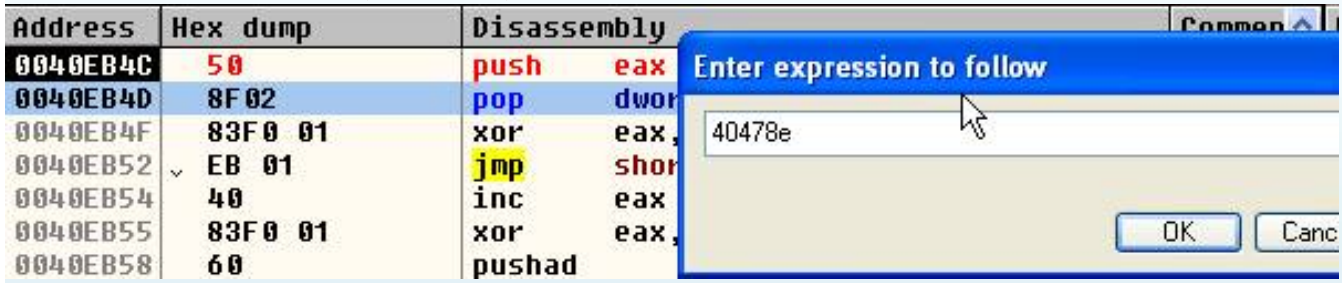
Click assemble.



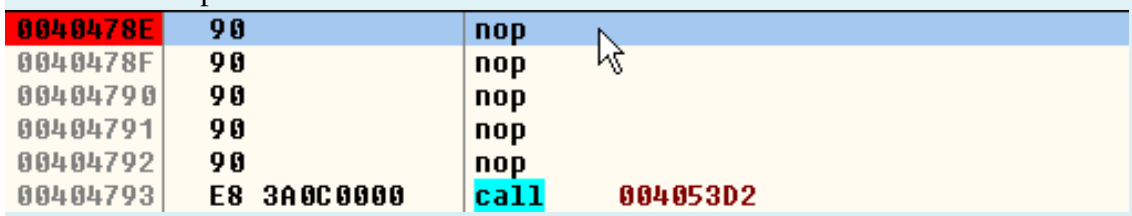
After editing is completed, we put in the Hardware Breakpoint. Choose the type:



Press Ctrl-G to enter OEP (0040478E).



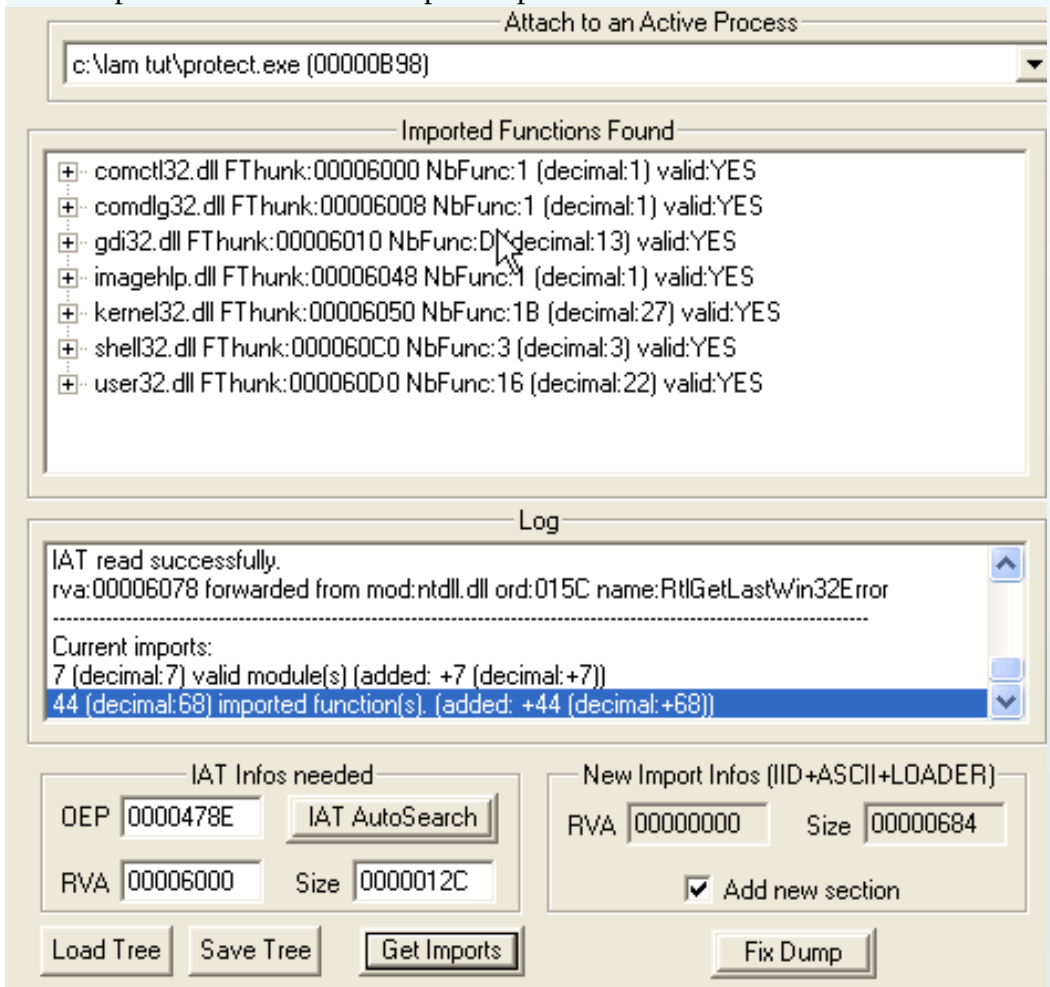
Press F2 breakpoint in the set.



Uncheck Hardware Breakpoint.

Press Shift-F9 until the break in the OEP (4 times).

Now Imprec used to fix IAT. Open Imprec. Enter OEP: 478E. Click "IAT AutoSearch". Then "Get Imports".



Click "Fix dump" file selected a.exe. We are a_.exe file. Test. Good!

IV) SLVc0deProtector Killer v1.1:

This is a program for SLVc0deProtector unpacker v1.1 written by Super Cracker. You can use this program to unpack our target (you note for a target program is not unpack).

Them. Happy happy. Hopefully you will learn something new through this tut.

Greetingz: All Members Reaonline.net and you.

tlandn

20-May-2006

UNPACKING SLVc0deProtector 1:11 tut 2

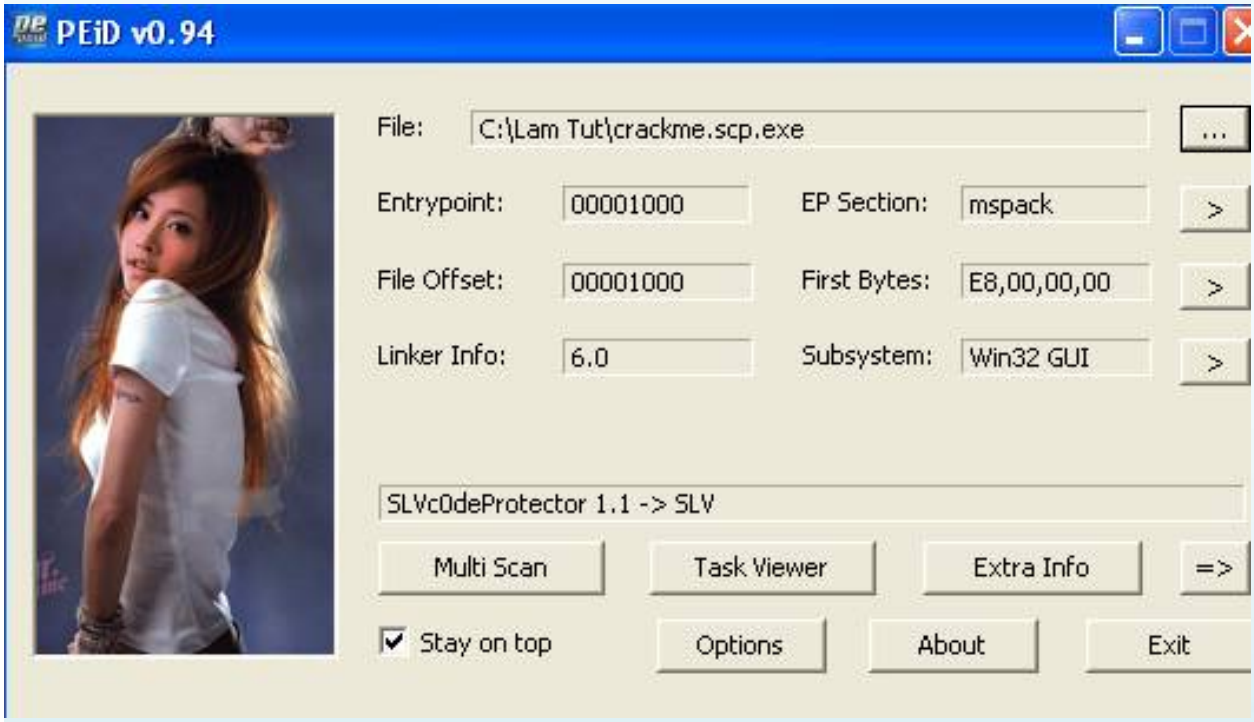
tlandn

Target: crackme.scp.exe (included)
Tools: Diablo OllyDbg, weasle 0.5, the script (included)

Sitting sad do not know what to write tut for your reference. At 1 in the tut I explained very well how to unpack by hand (including fix IAT). However, in human life is often like something so fast in this tut I will talk about how to use scripts and unpack plugin 0.5 weasle

I) Find Stolen OEP and Bytes:

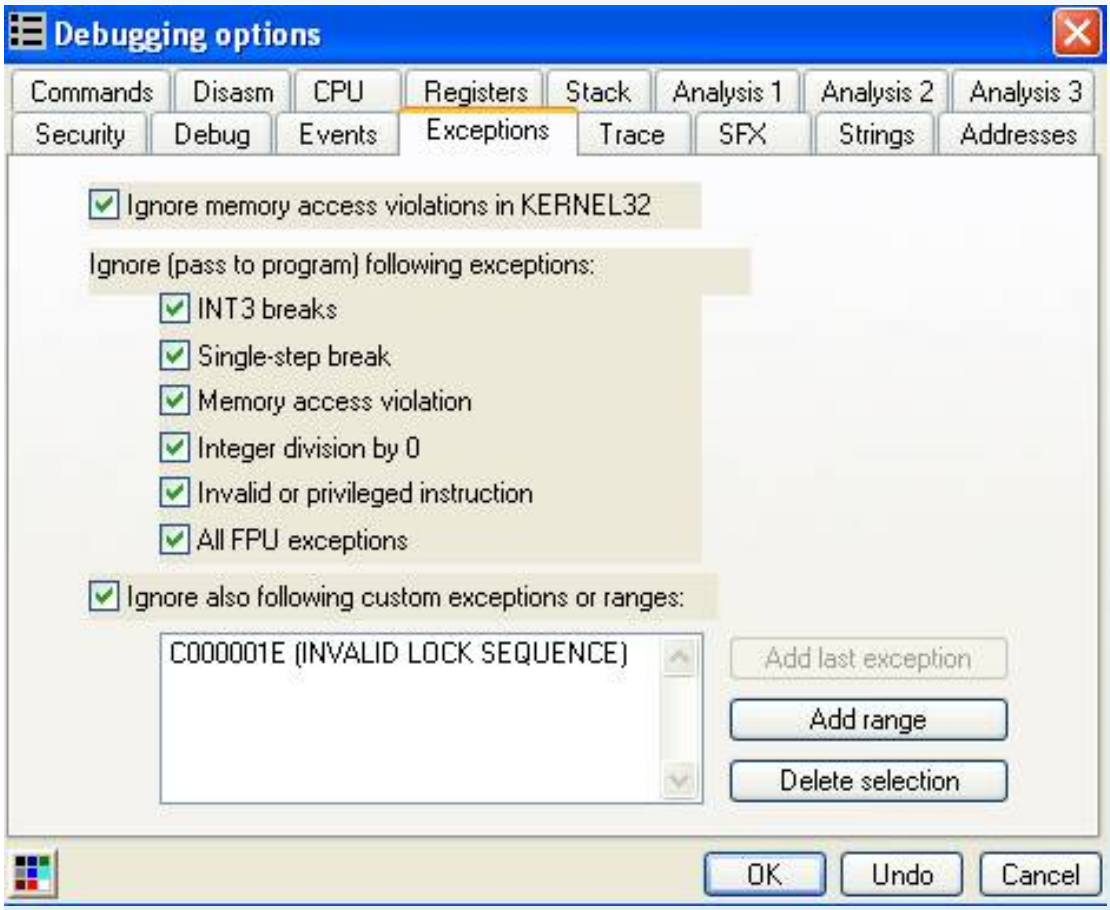
As usual we PEId used to check the pack with what?



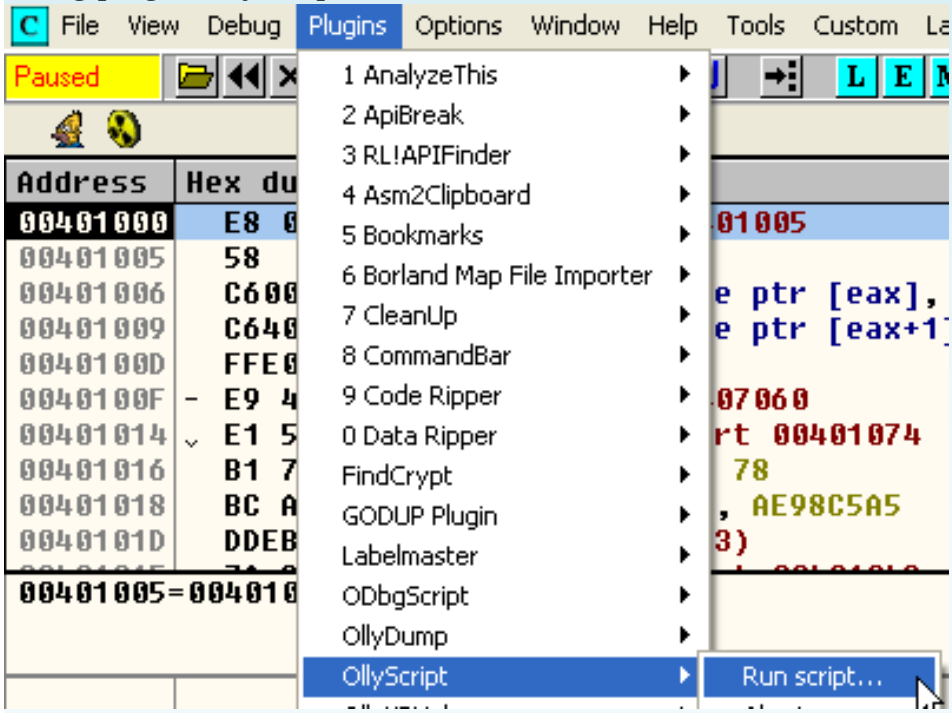
Clearly the program is pack with SLVc0deProtector 1.1
We start. Load program to OllyDbg.

Address	Hex dump	Disassembly
00401000	E8 00000000	call 00401005
00401005	58	pop eax
00401006	C600 EB	mov byte ptr [eax], 0EB
00401009	C640 01 08	mov byte ptr [eax+1], 8

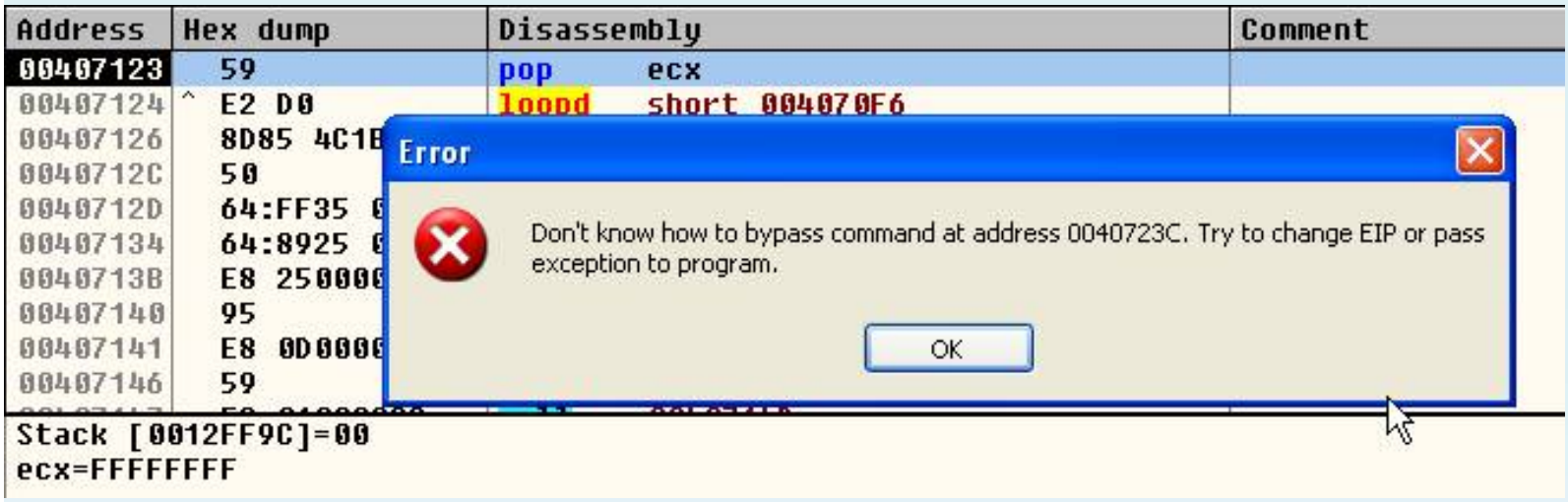
Adjust the number of Option OllyDbg similar to following:



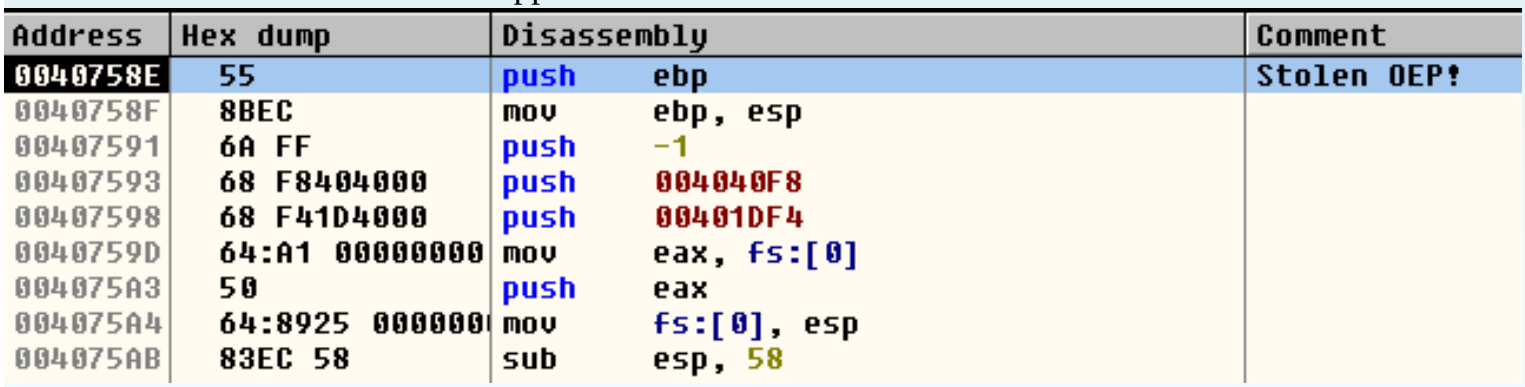
Using plugin OllyScript.



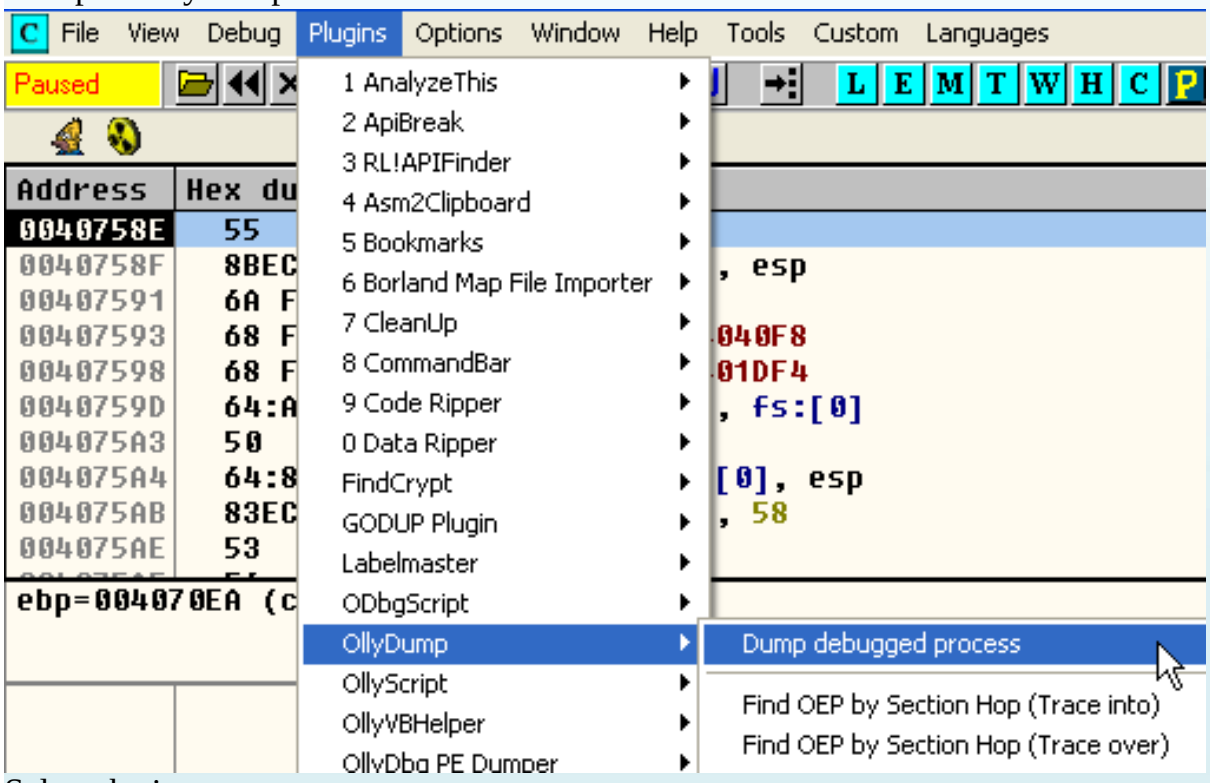
Select the script file "SLVc0deProtector 1.1.txt" (accompanied by tut). It runs a stop to it here:



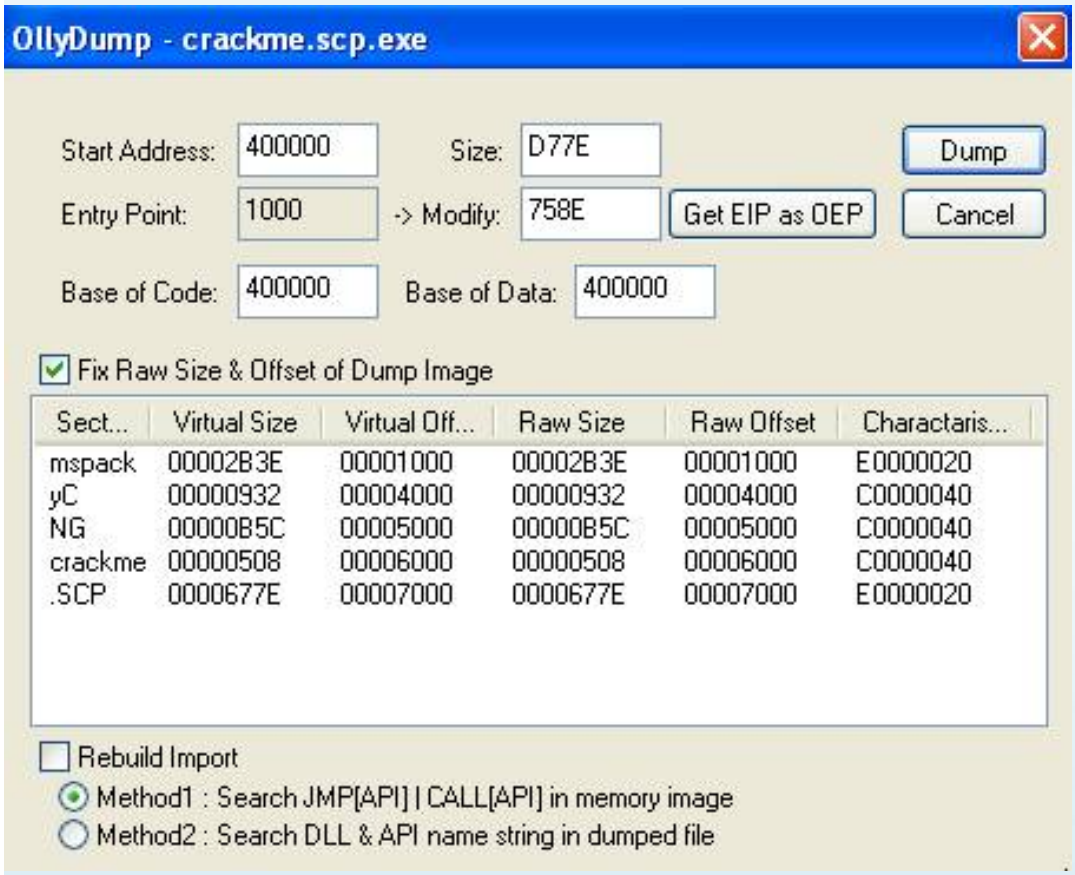
Click OK and then Shift-F9. We stopped at the OEP 0040758E.



Dump in OllyDump.



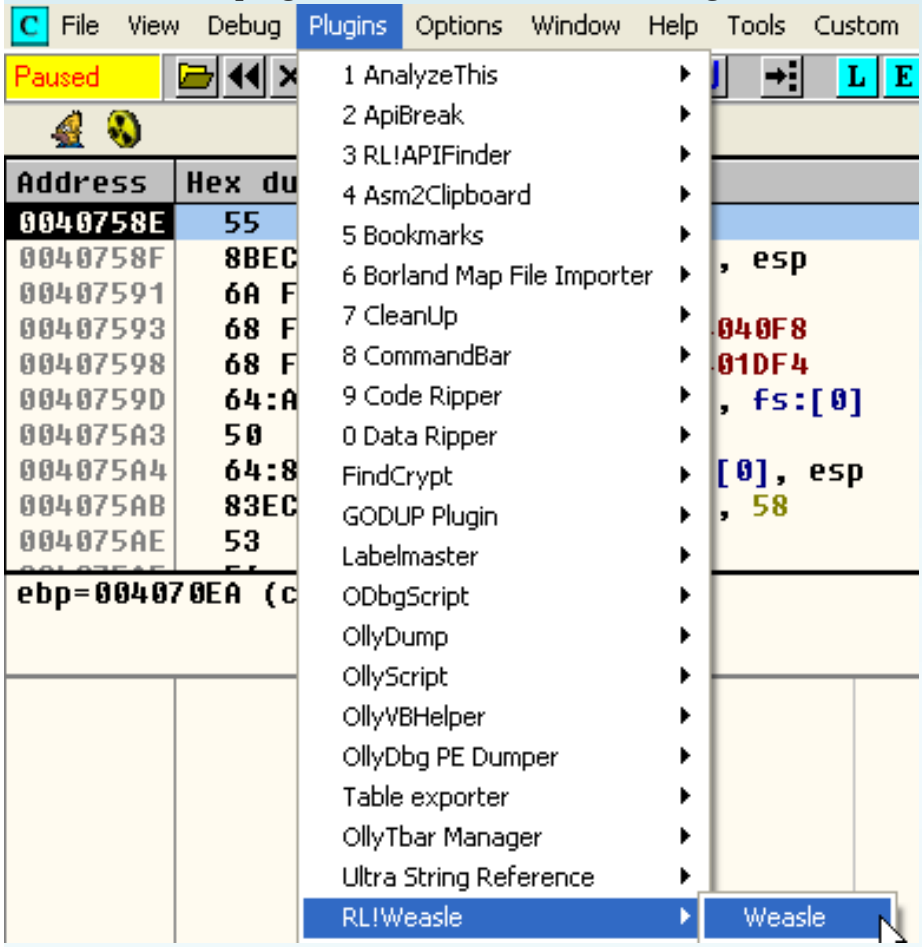
Select the image.



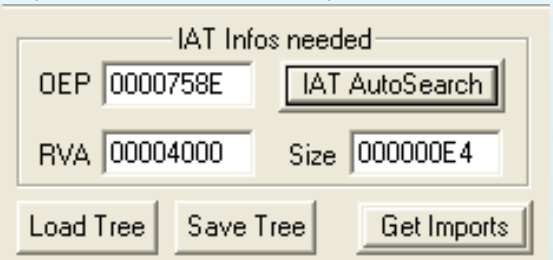
Name the file a.exe

II) Fix IAT:

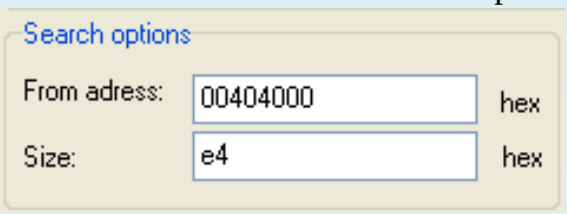
We will use 0.5 plugin weasle to fix IAT. Running weasle.



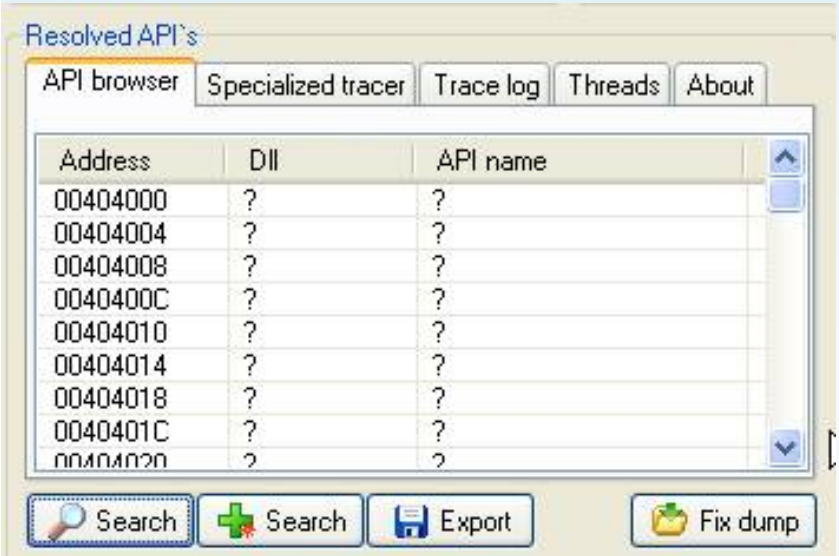
We will make a few details to fill in weasle Imprec. Booting Imprec. Select the correct process (crackme.scp. exe). Enter OEP: 758E (0040758E - 00,400,000). Click "IAT AutoSearch".



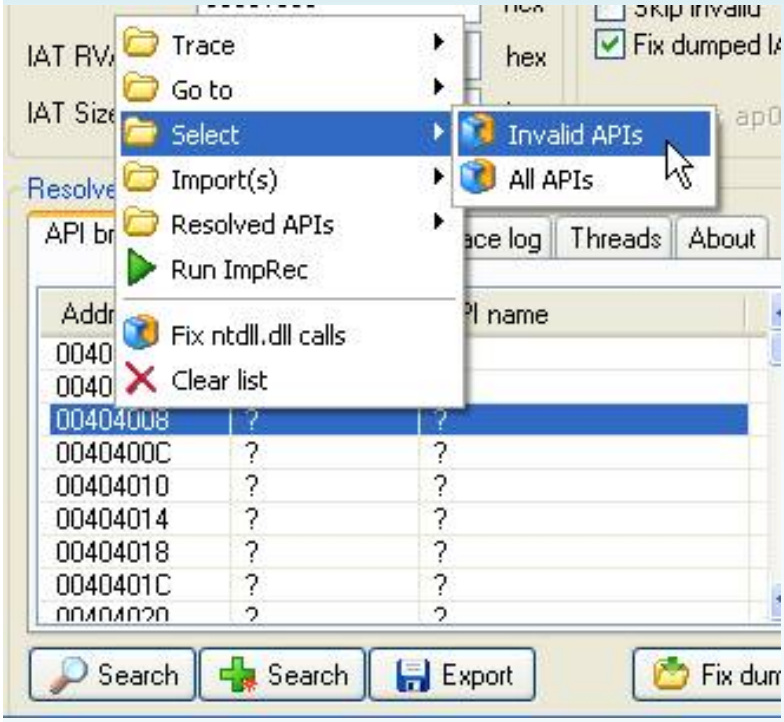
Search the RVA: 00004000 and Size: E4
Enter the number on the "Search Options" in weasle like in the picture:



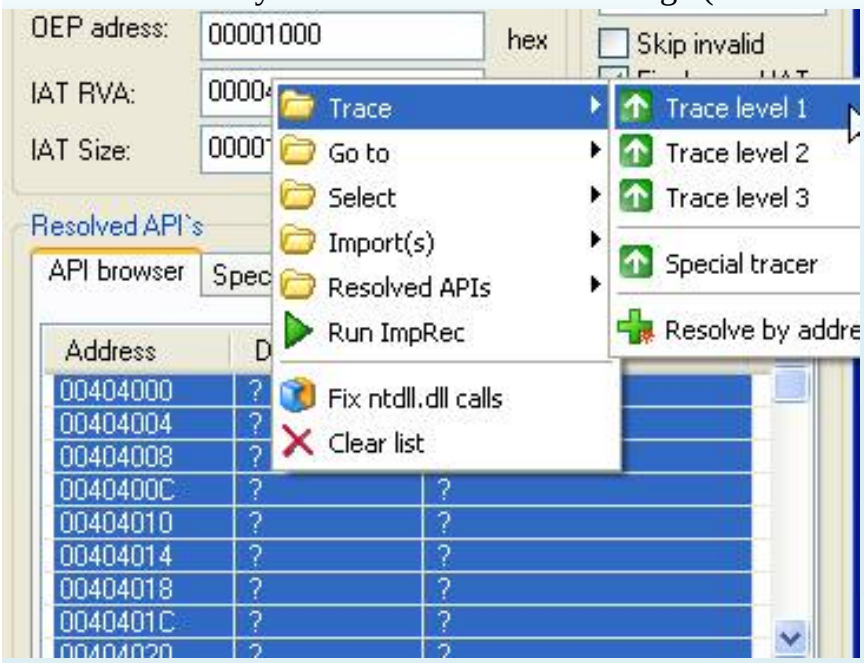
Note the fill the "From adress:" we must add to RVA 00400000 (get in Imprec)
Click "Search."



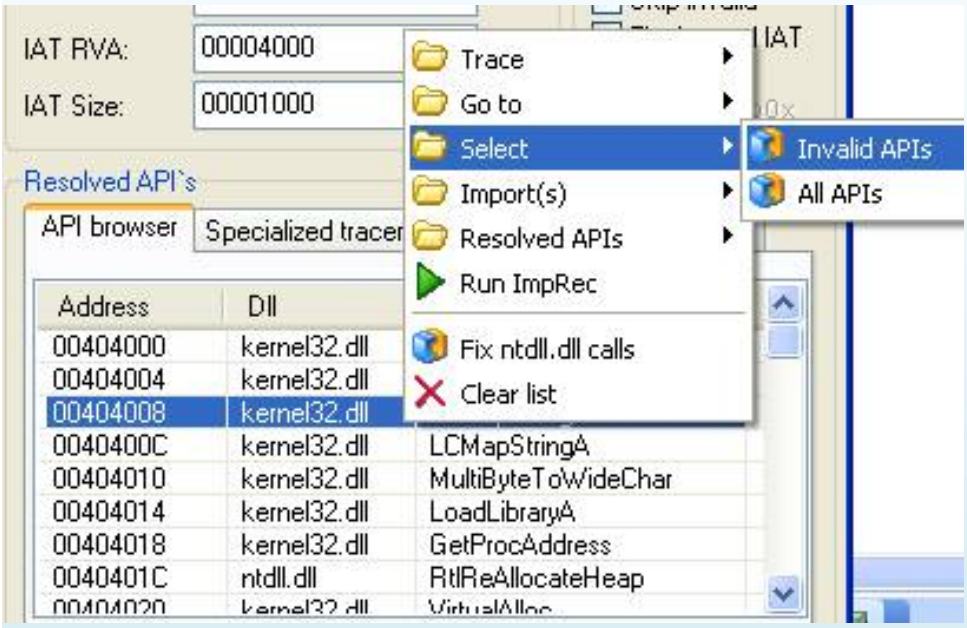
Click your mouse to select the image:



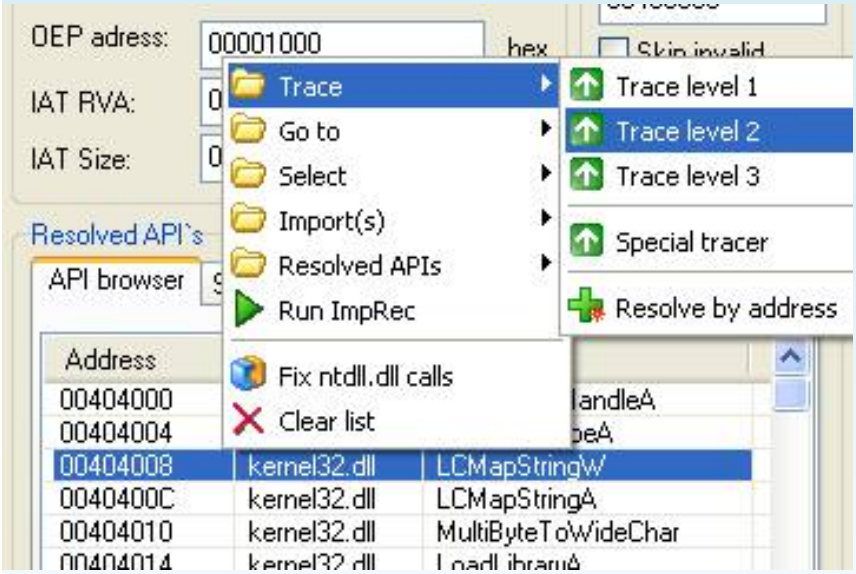
Continue to click your mouse to select the image (Trace Level 1).



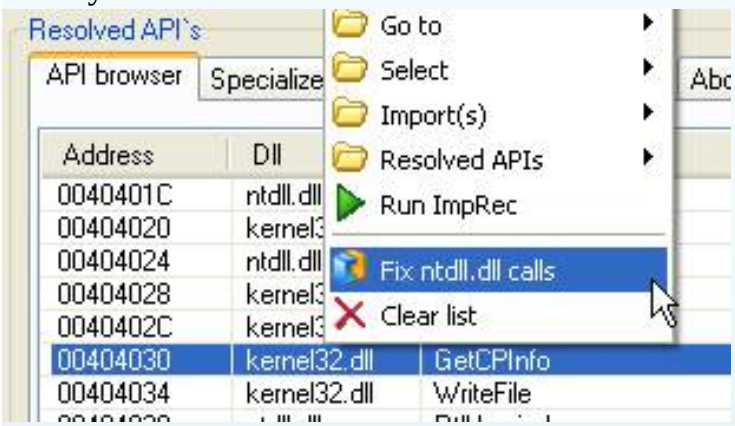
Try again with Trace Level 2. Click your mouse to select the image:



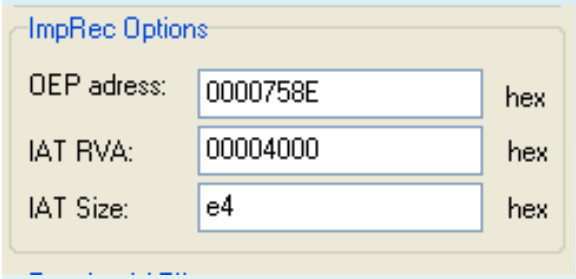
Then click the mouse to select the image (Trace Level 2).



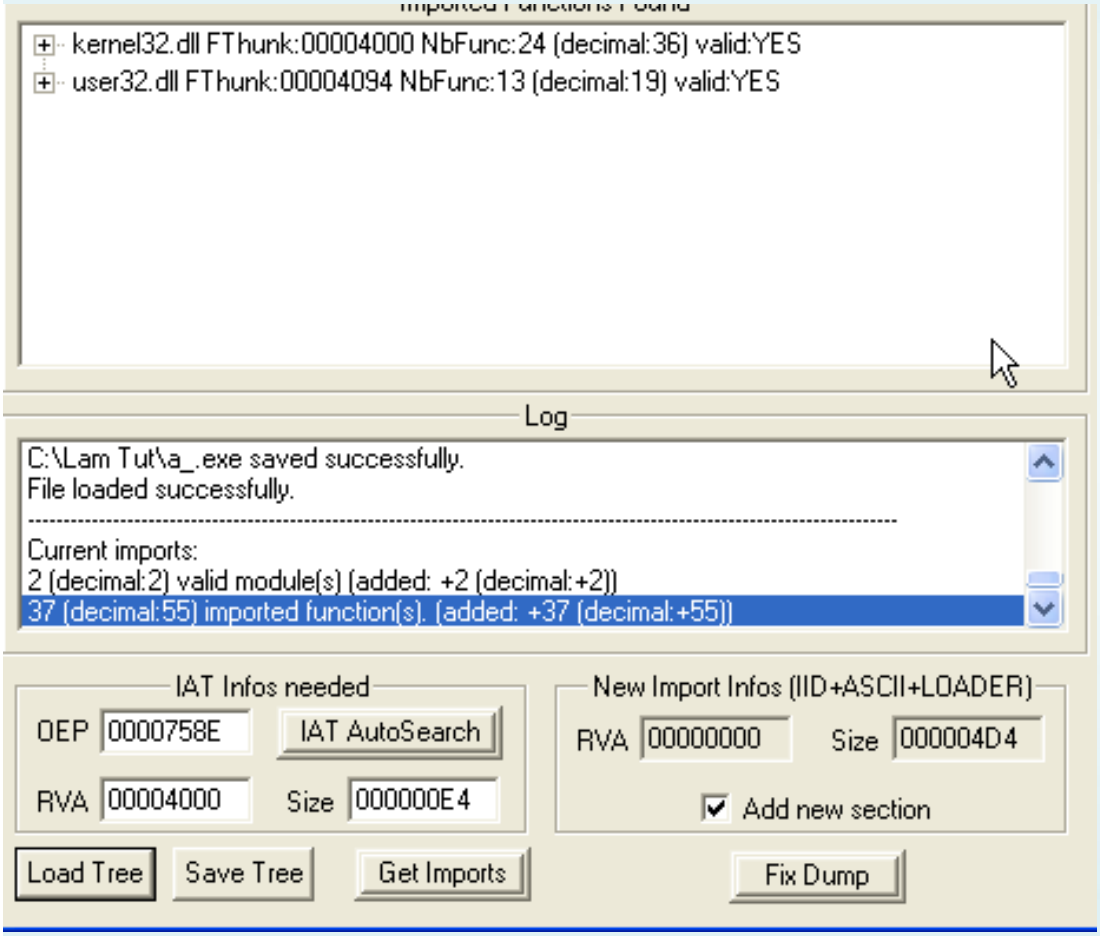
Click your mouse to select the "Fix ntdll.dll calls."



Before export IAT this Imprec we must enter the parameters to the "Options Imprec"



Click the Export button. Save as IAT.txt
Close weasle again. Using Imprec IAT.txt to load the file (click "Load Tree")



Click "Fix dump" file selected a.exe. We are a_.exe file. Test. Good!

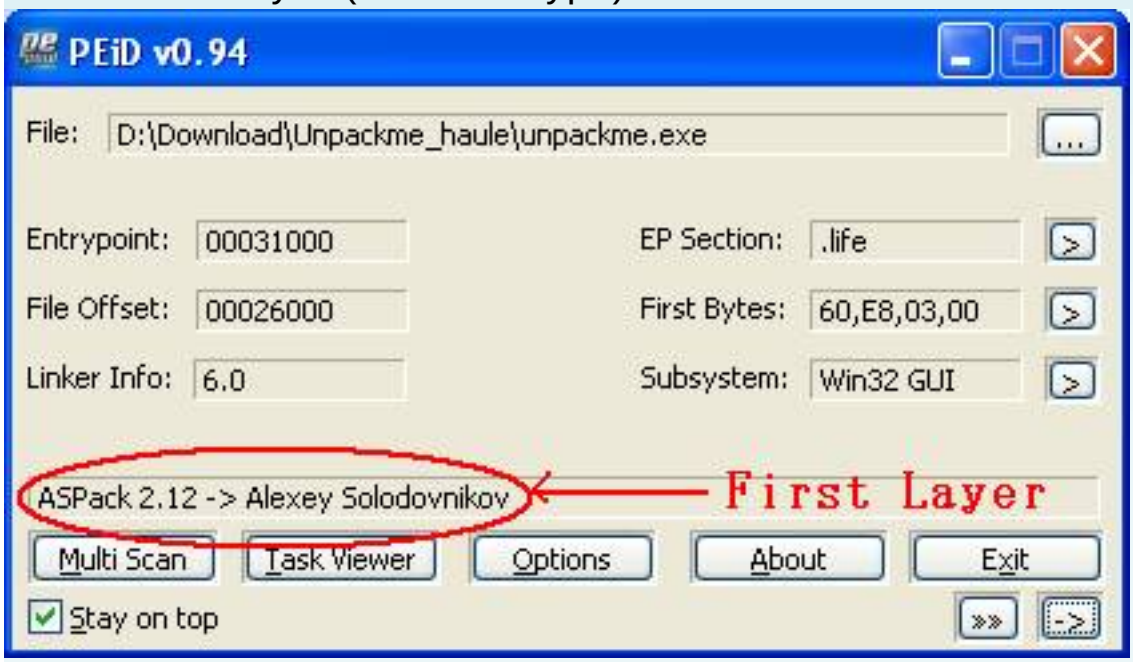
IV) SLVc0deProtector Killer v1.1:

For targer this program does not work.
Them. Happy happy. Hopefully you will learn something new through this tut.
Greetingz: All Members Reaonline.net and you.
tlandn
20-May-2006

Unpacking Unpackme (ASPack MSLRH +)
Author: REA trickyboy ()

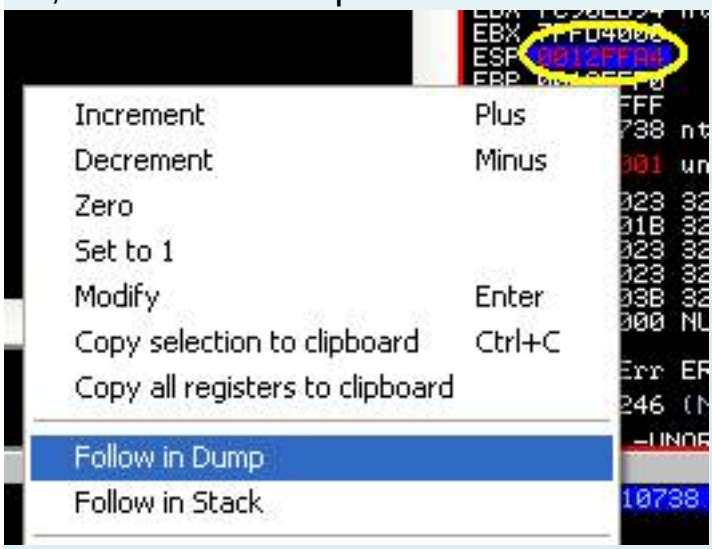
Tools: OllyDBG, Plugin HideOD, PETools, LordPE ... and more: D

ASPack first layer (or of the type):

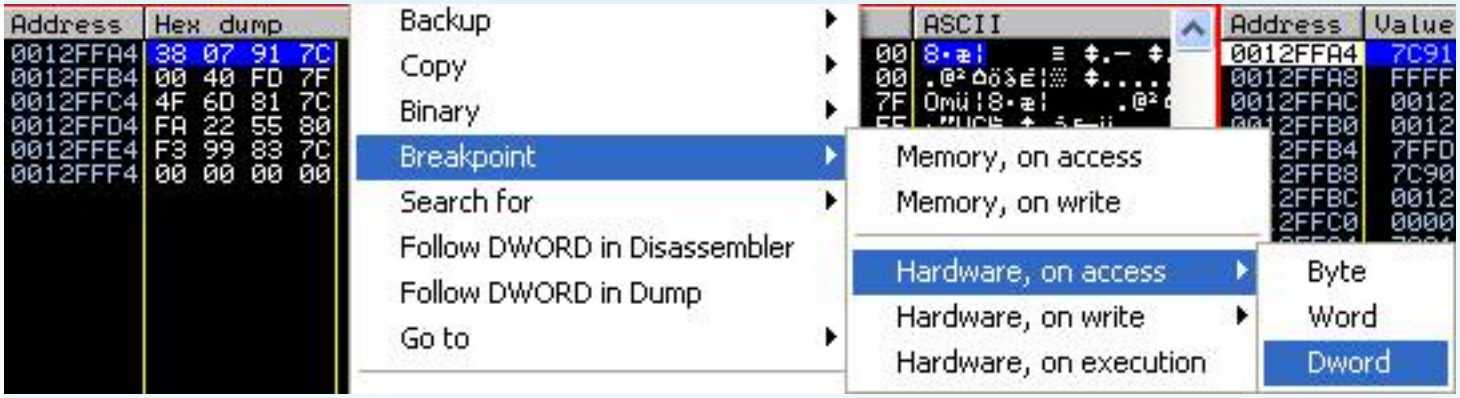


Load Olly:

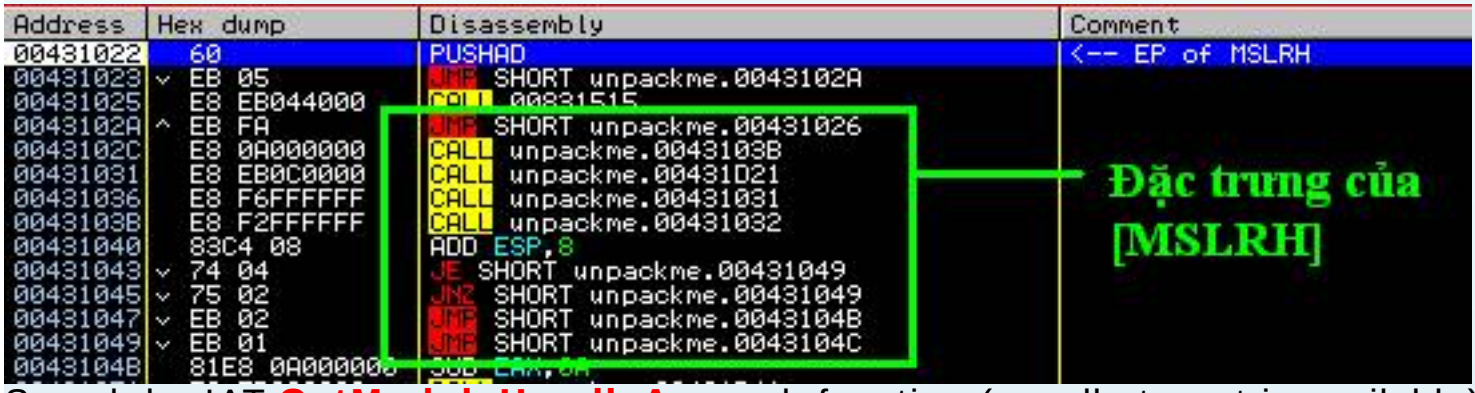
F8, and then dump to Follow in record ESP:



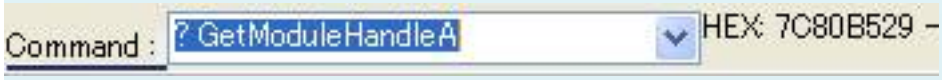
Fill up to 4 bytes, click to select:



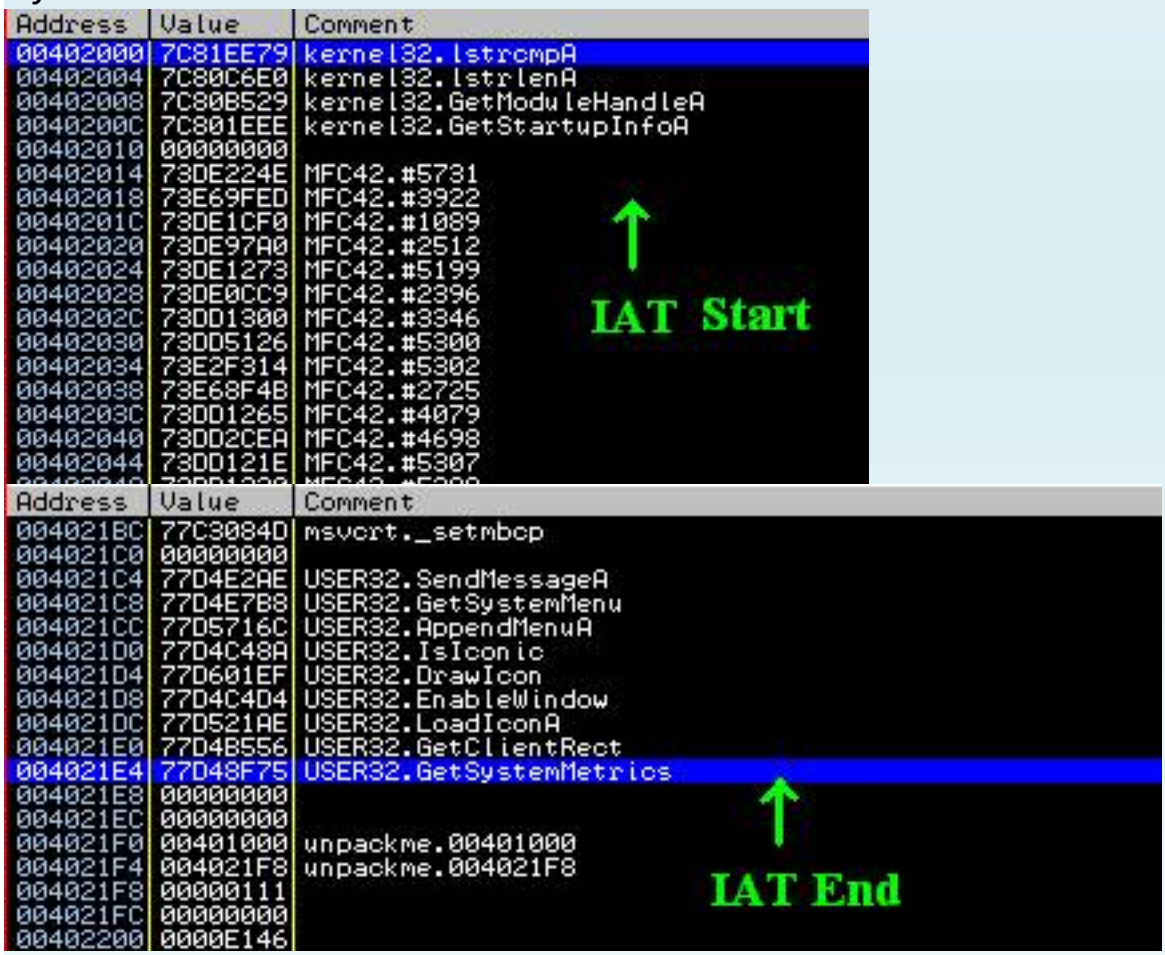
F9 one, the EP's MSLRH, preparing to dump Top Layer:



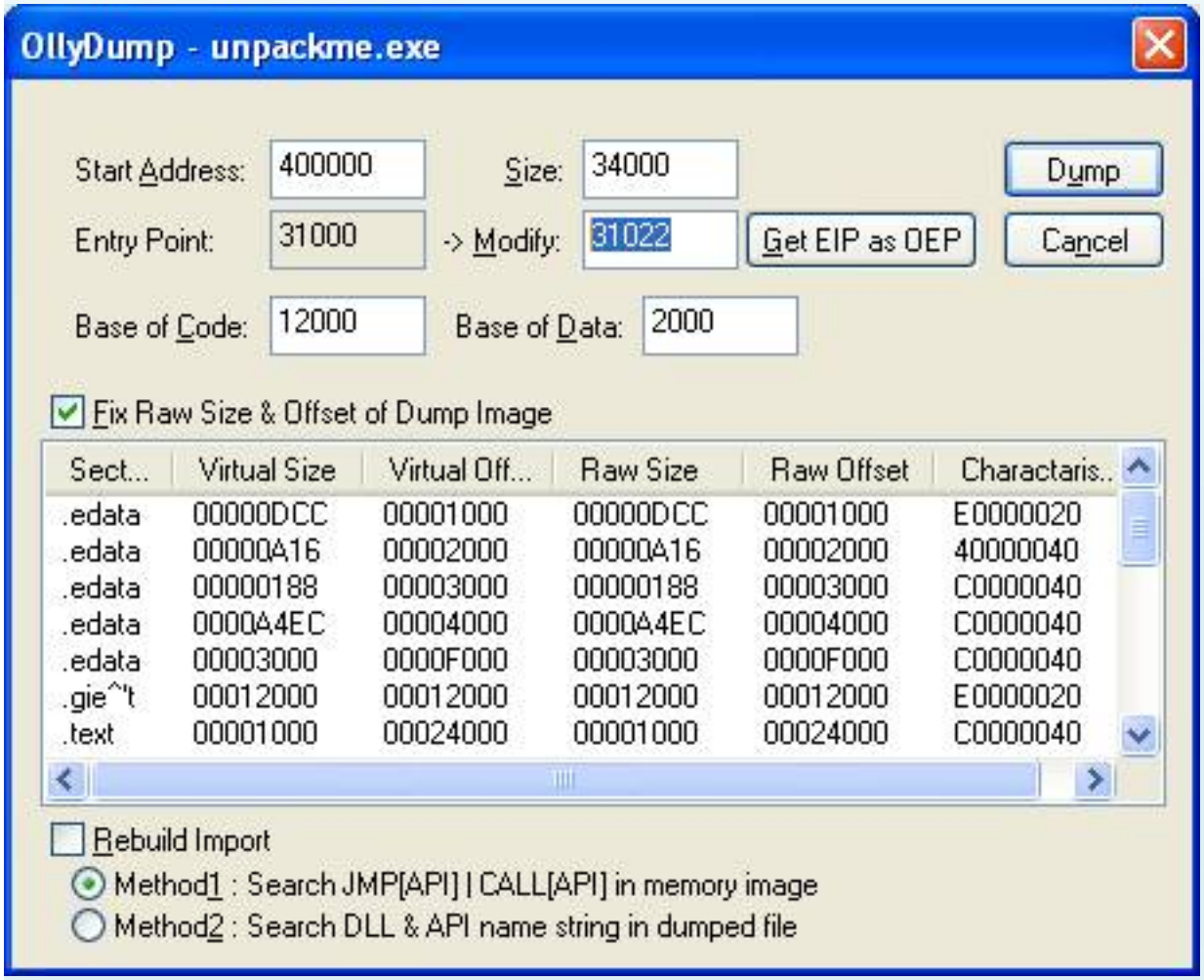
Search by IAT **GetModuleHandleA** search function (usually target is available):



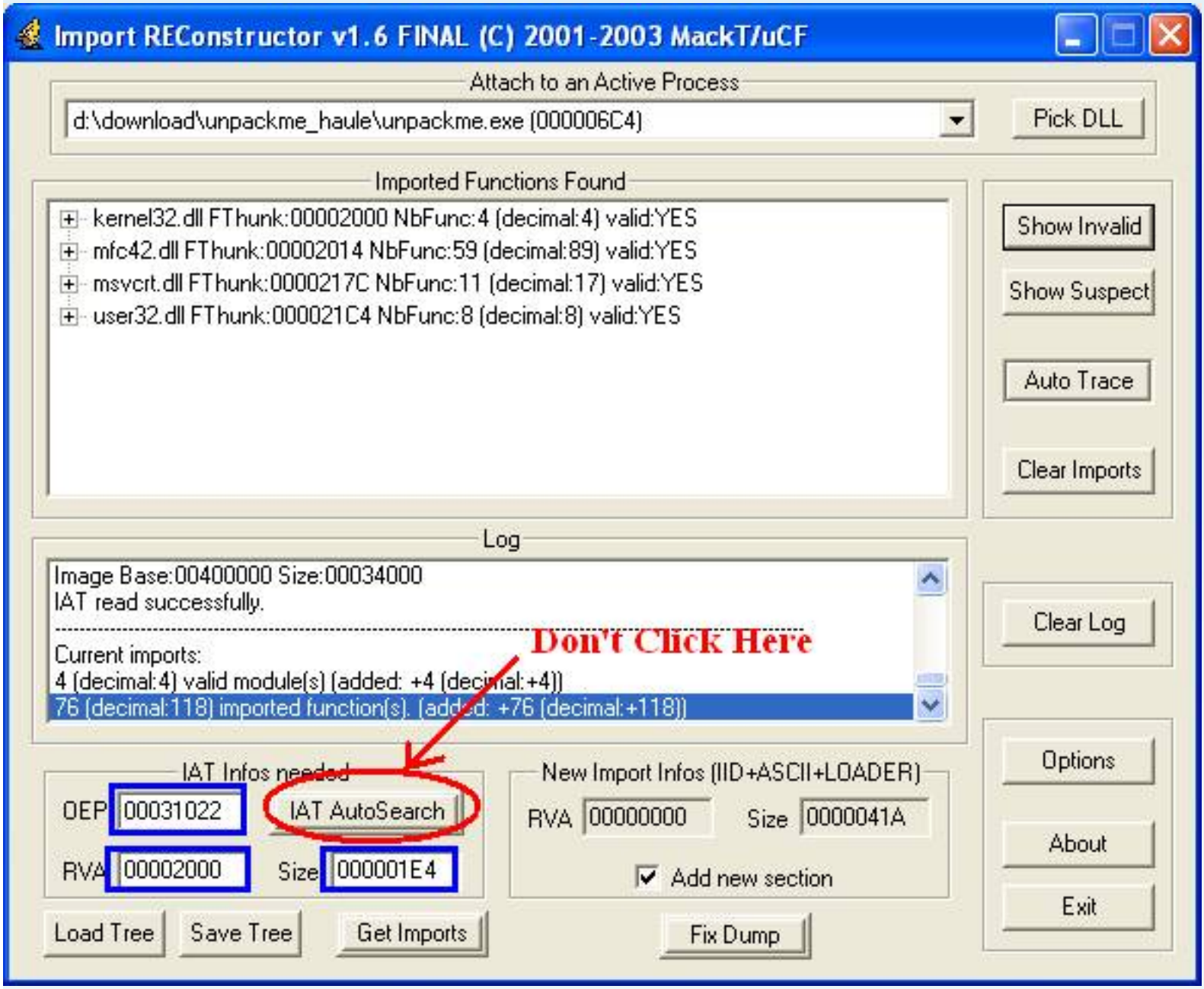
Byte reverse search function on the table will see IAT here:



IAT and then have the dump:

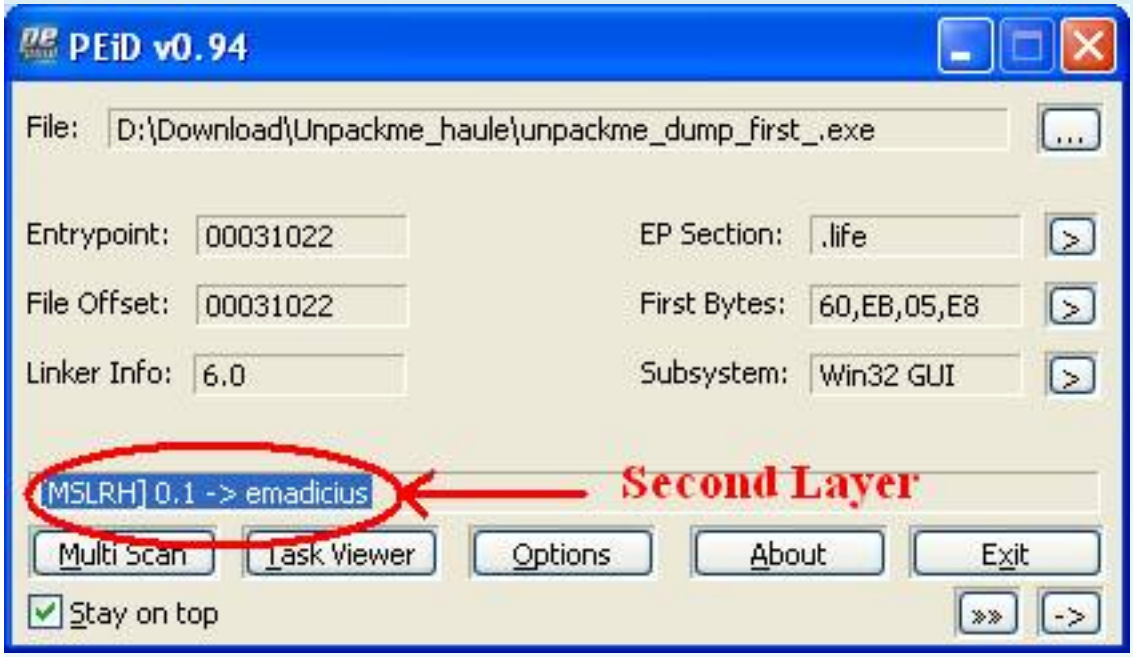


No IAT click Auto Search which to enter the number:



Fix dump. Save the file unpackme_dump_first_.exe

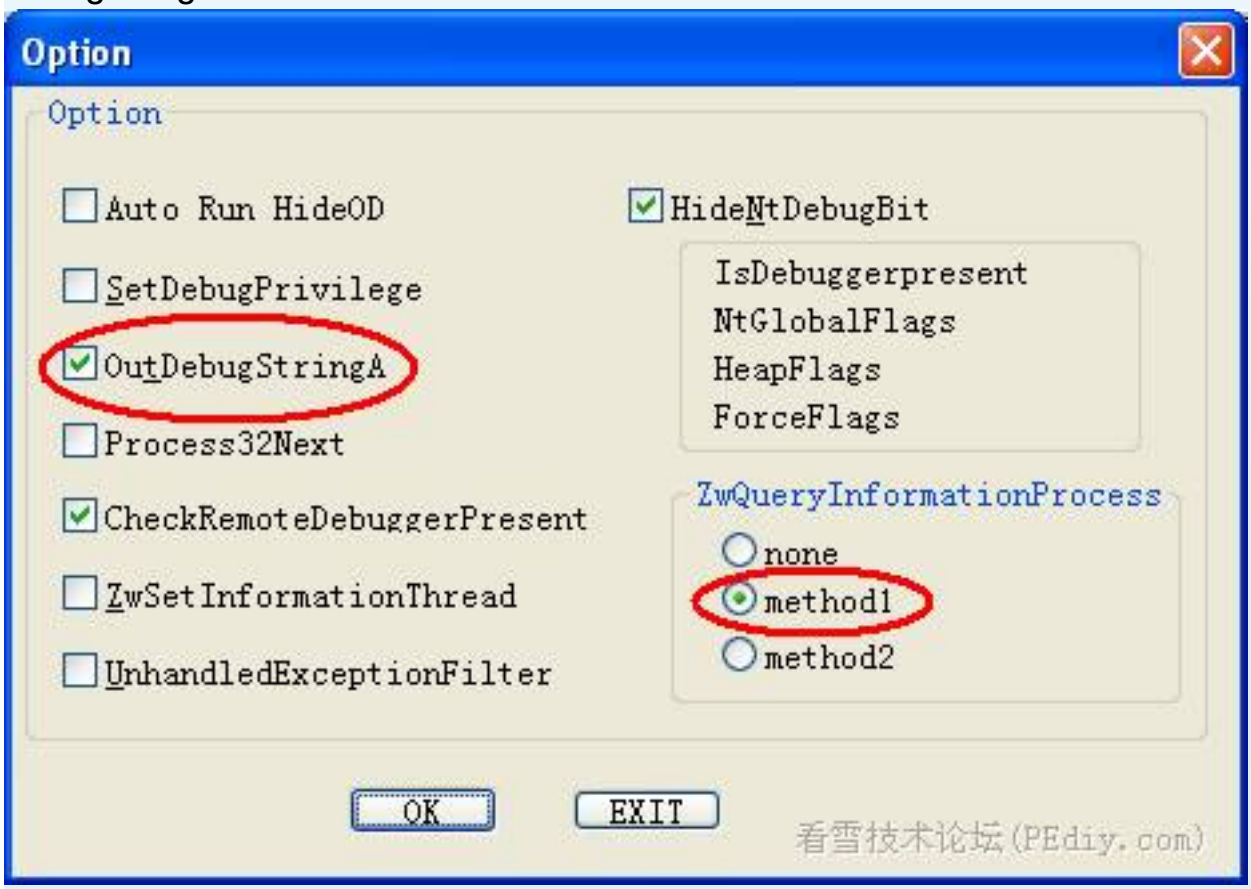
Clearly layer 2 is MSLRH:



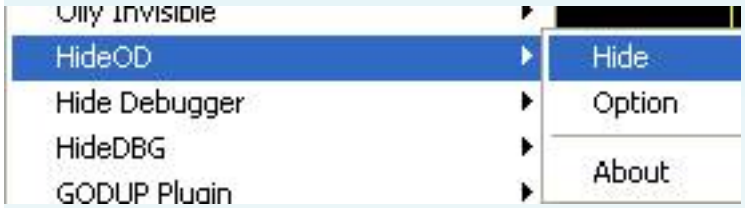
Load dump file just to fix (or do you do now to remove the layer 1 BPOA in the other 4 bytes memory and save the file with ImportREC Tree)

This month is mainly used OutputDebugStringA, IsDebugPresent ZwQueryInformationProcess to Detect and the Debugger.

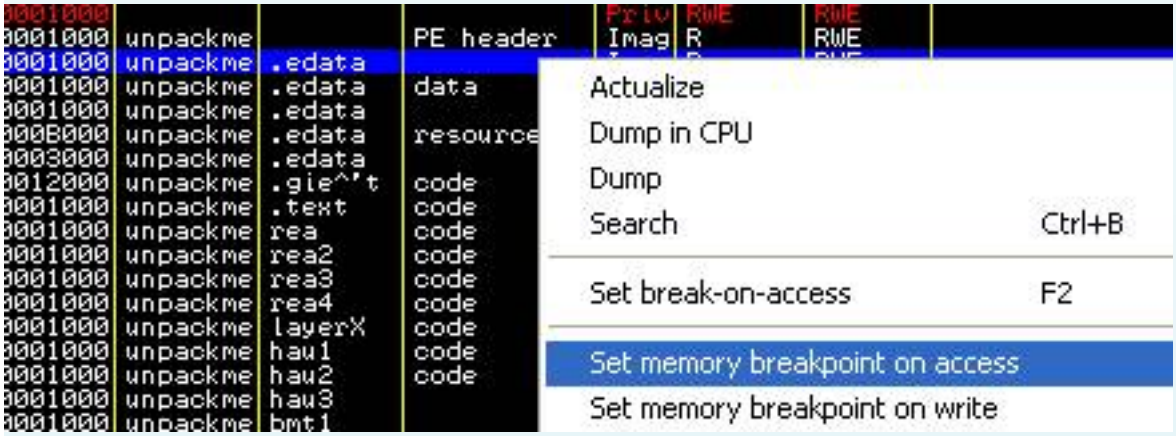
Using Plugin HideOD:



Enable it:

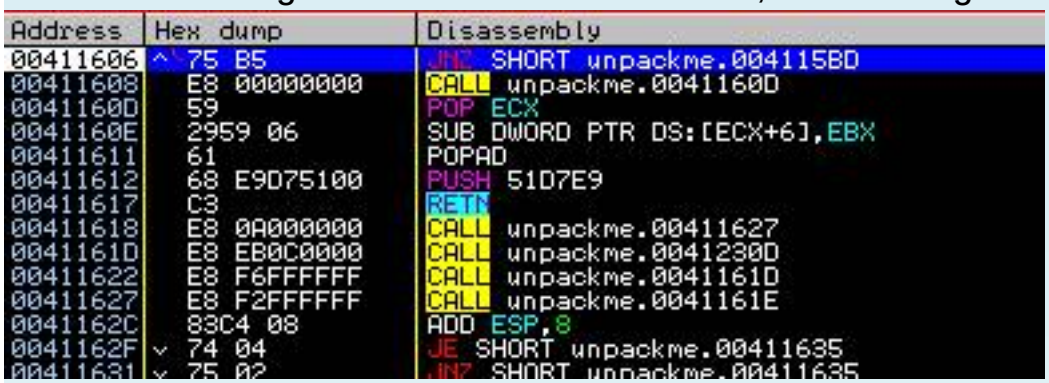


Set breakpoint on memory access (MBOA) in the code section (a guess: D):

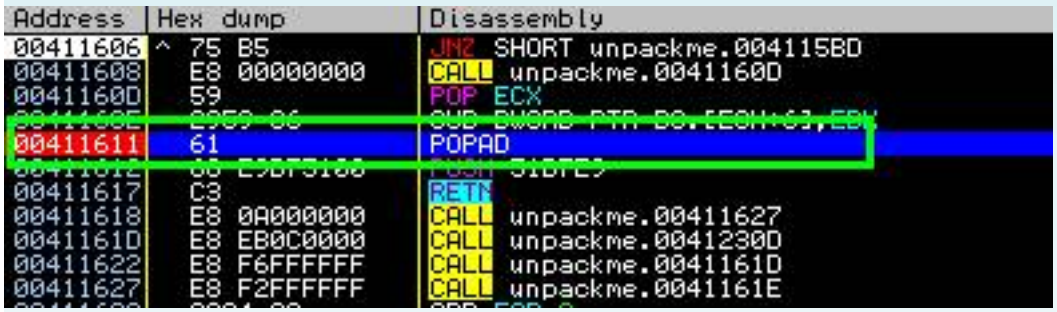


The F9, break:

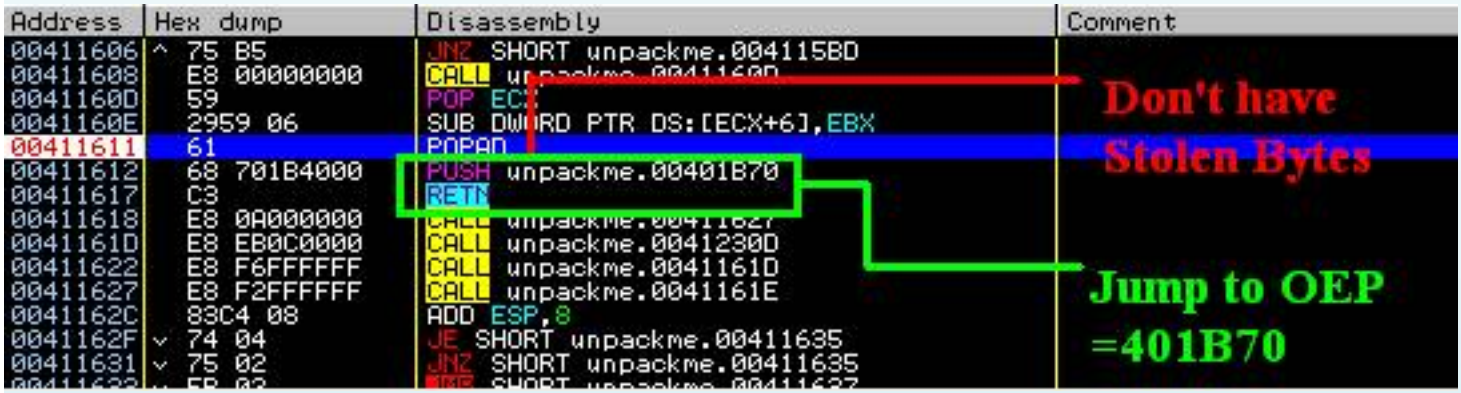
Trace F7 through JMP command until far, 1 JNZ single command:



For that function under POPAD, set it at BP:

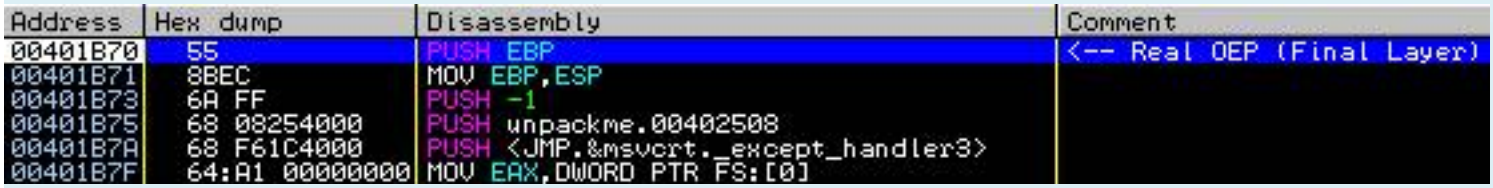


Delete the MBOA. F9 exit loop and Bread:

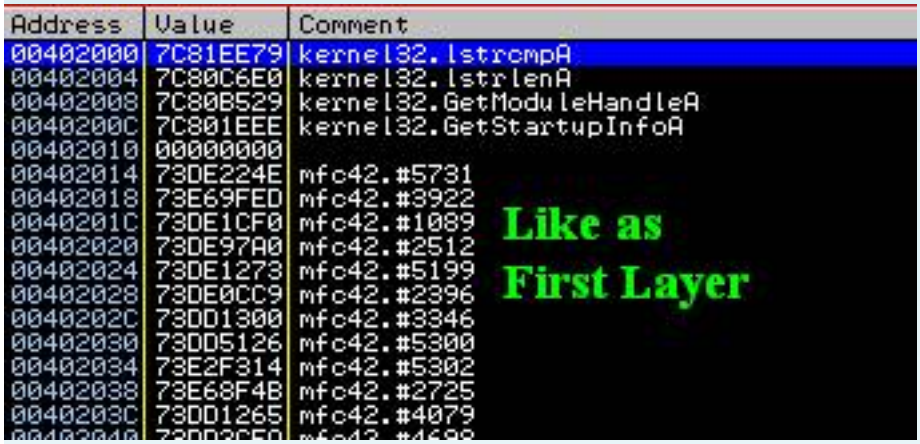


After POPAD do have Stolen Bytes, about 1 PUSH xxxxxx command and RETN equivalent JMP xxxxxx order, here is the OEP = 401B70.

Trace it to:



IAT italy chang at first, i need to find even more should be used ImportREC ko ko also stars.

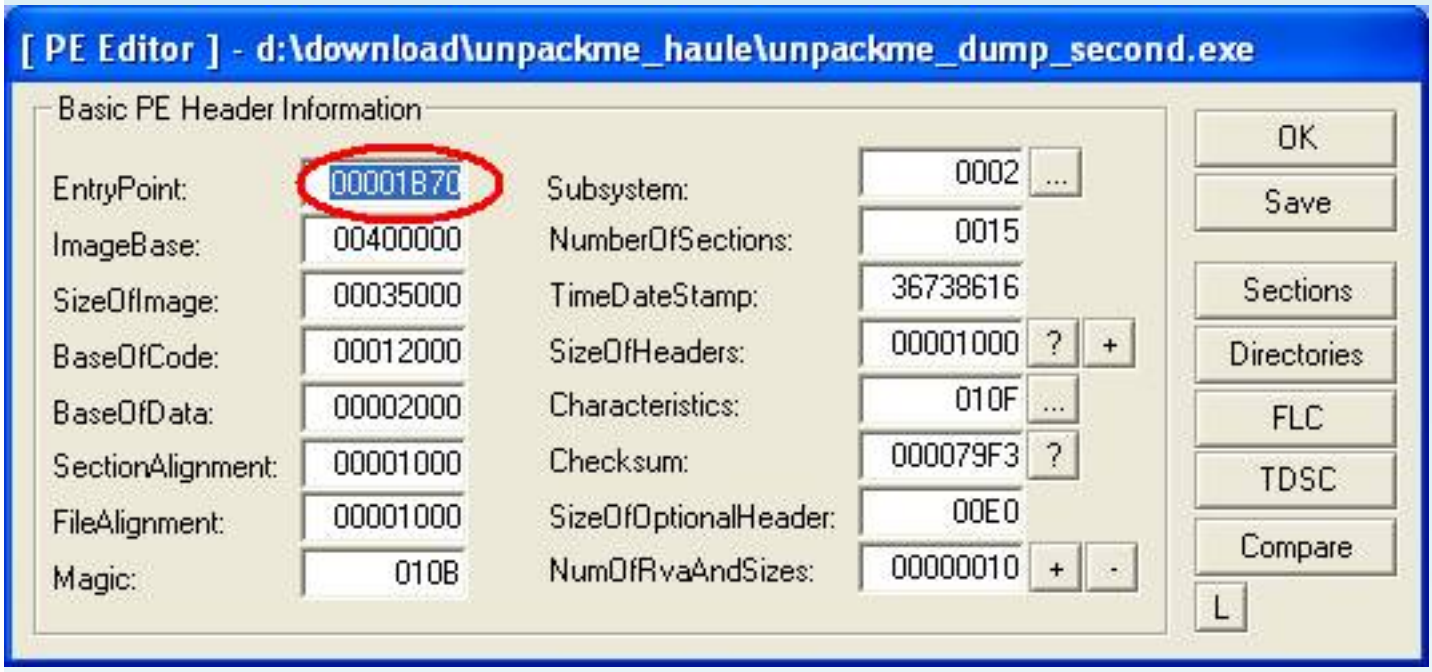


Full dump it in PETools (by LordPE and OllyDump been Detect):

Now you wonder, do not fix hả IAT choi? OEP has not loaded into the dump? Hong Where do you àh.

1, IAT as old as the dump, it fly by ơi.

2, because when you dump that Packer was fully unpack the source code, just fix EP by OEP there is more complete. How to: open LordPE -> PE Editor, the fix:



Save. Running lickerish.

Collapse file, use CFF Explorer, delete all the section, until only:

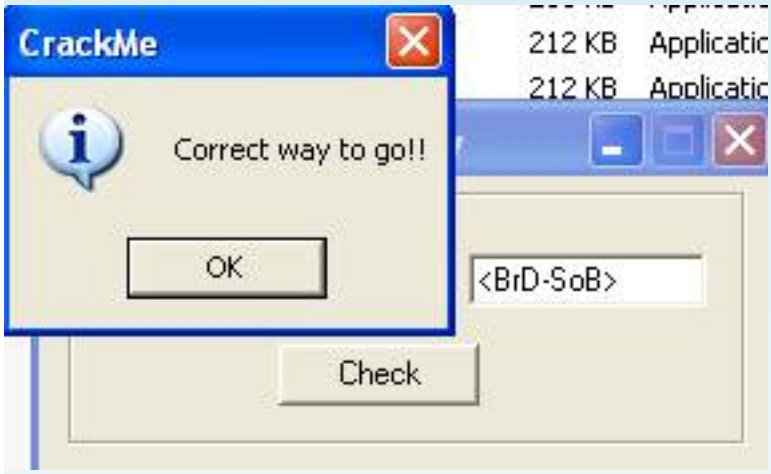
Byte[8]	Dword	Dword	Dword	Dword
.edata	00001000	00001000	00000DCC	00001000
.edata	00001000	00002000	00000A16	00002000
.edata	00001000	00003000	00000188	00003000
.edata	00020000	00004000	0000A4EC	00004000
.text	00010000	00024000	00001000	0000F000
.mackt	00001000	00034000	00001000	00010000

Always remember revised Code Of Base properly, to support the Crack:

AddressOfEntryPoint	00000108	Dword	00001B70
BaseOfCode	0000010C	Dword	00001000
BaseOfData	00000110	Dword	00002000
ImageBase	00000114	Dword	00400000

Then use LordPE rebuild.

Cracking: a serial <BrD-SoB> (is it as entertaining, is not tricky home)



DONE!
Enjoy It!

UNPACKING wrapper USED BY GAMEHOUSE.COM

tlandn

Target: Sudoku (GameHouse)

Tools: OllyDbg

Then I have just read the tut on unpacking ColdIce wrapper used by GameHouse. Or to see and modify slightly for your reference J

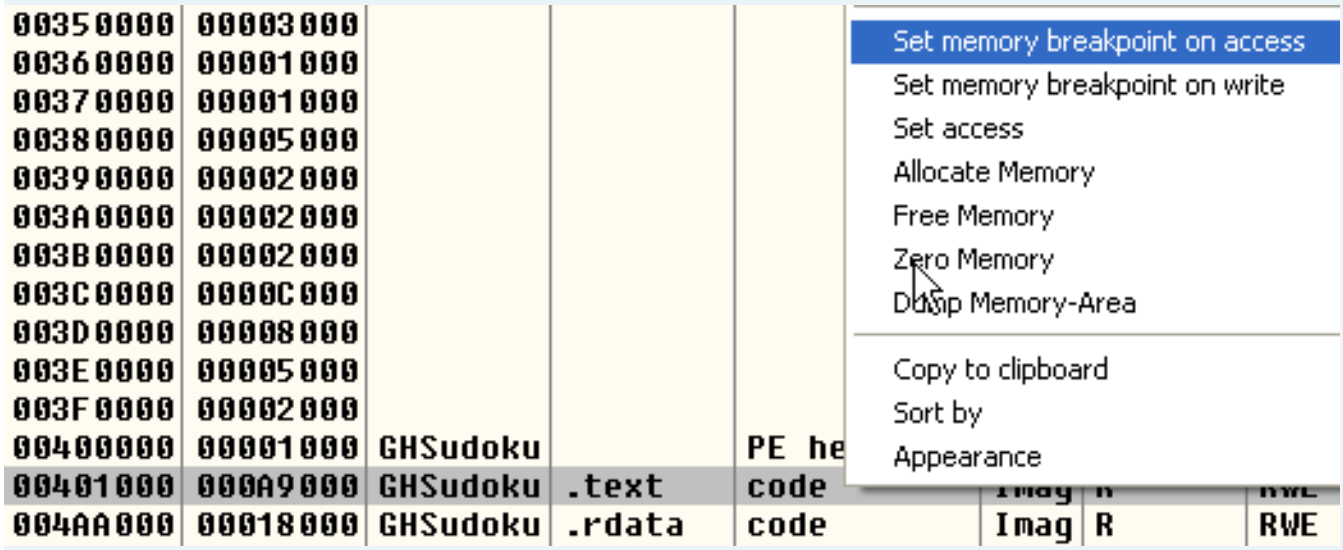
I) Unpacking:

We start. Load program to OllyDbg. We here.

```
00502000   68 80205000      push    00502080
00502005   FF15 74265000    call    [<&sudoku.mainDLLInit>]      sudoku
0050200B   0000             add     [eax], al
0050200D   0000             add     [eax], al
```

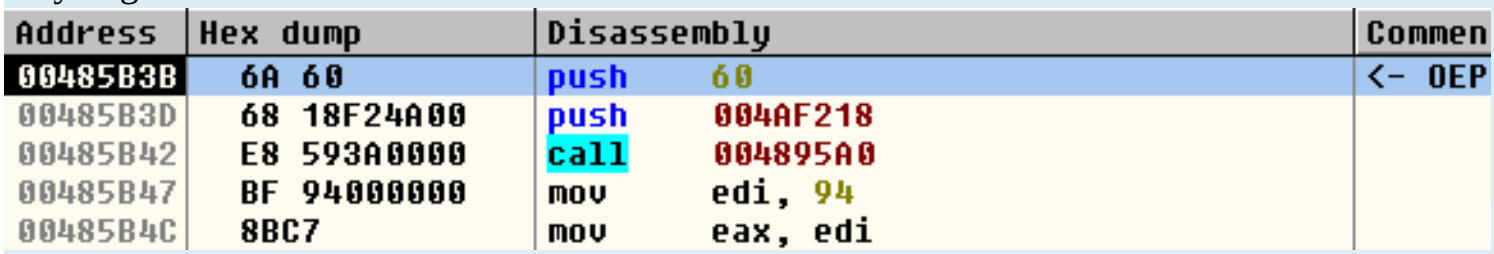
Press F9. A Nag appear.

Now in OllyDbg press Alt-M. Memory window appear. Select section. Text must click the mouse to select the image:

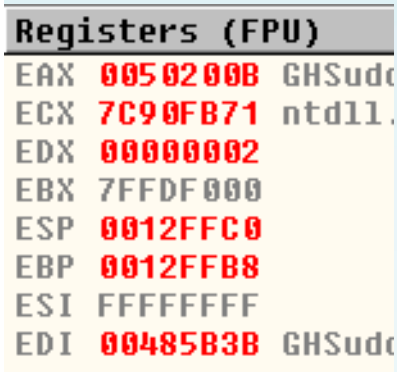


Now in the window NAG. Click the "Try Now."

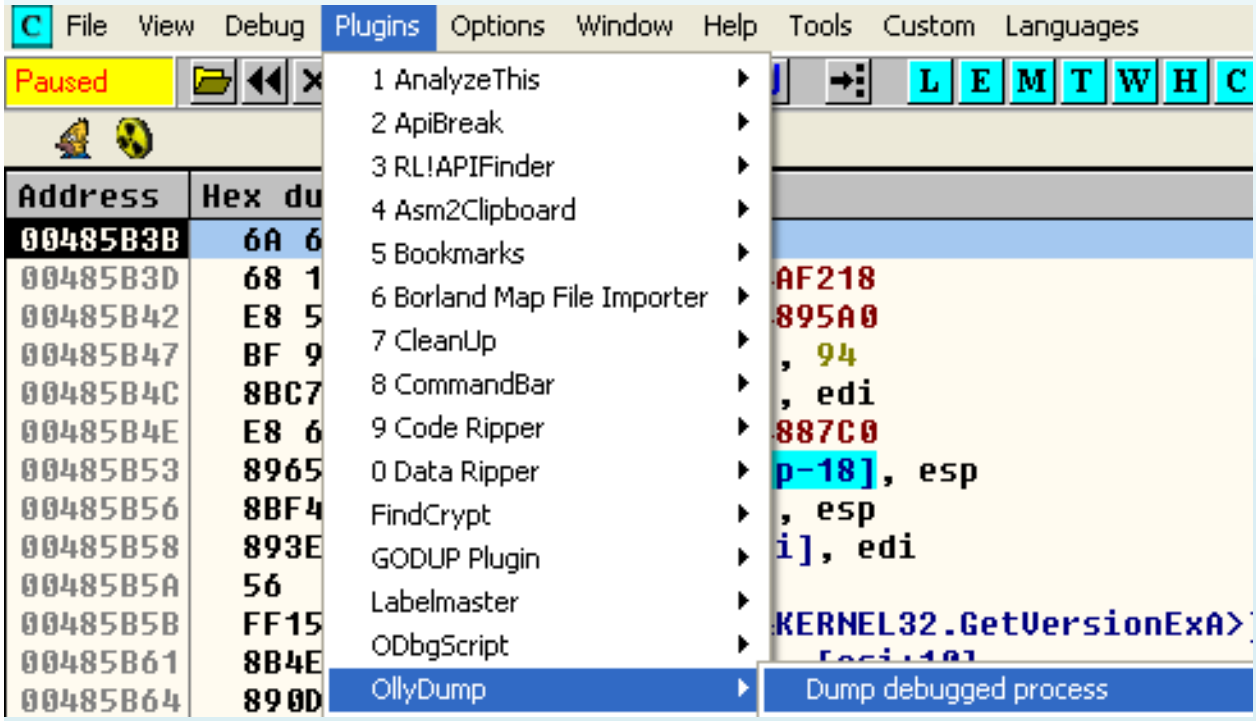
OllyDbg will break in 00485B3B



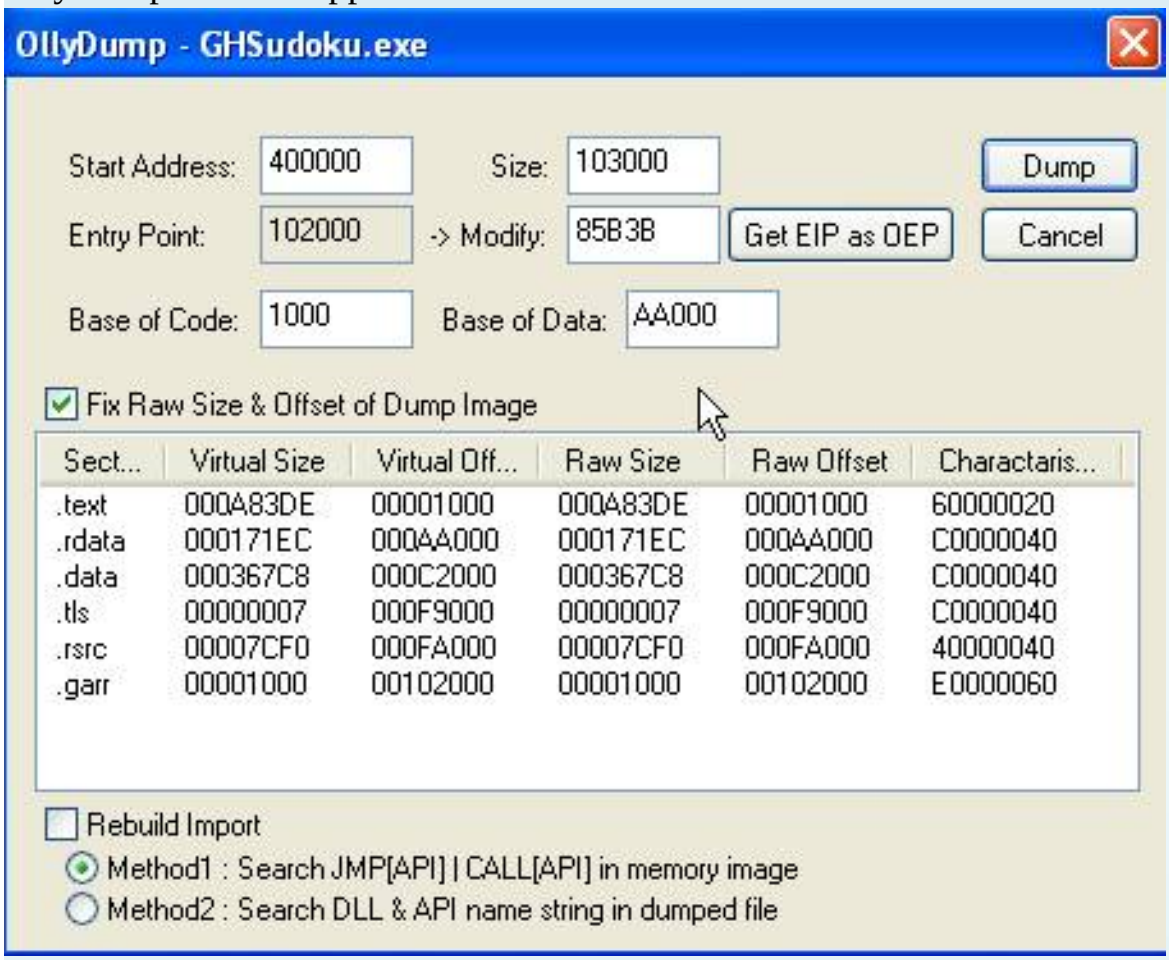
This is the OEP of the program (after unwrap). Looking through the window to see our record contains EDI 00485B3B (OEP of us, you remember it to write scripts in the following).



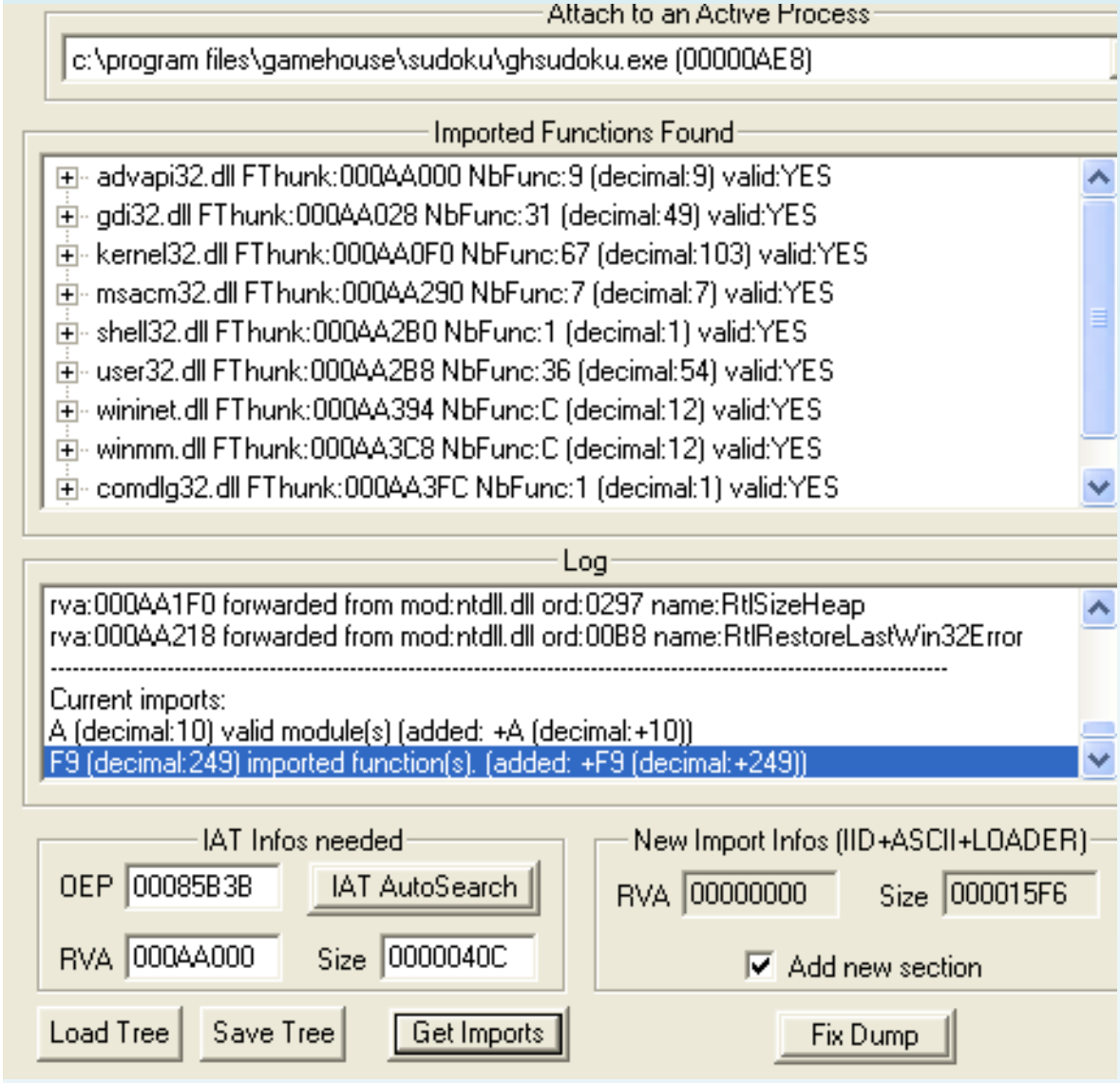
Now we will dump and fix IAT Imprec use. Choose the type:



OllyDump window appear.



Select as the image. Click "dump". Name the file a.exe.
Now run Imprec.
Enter OEP: 85B3B (00485B3B - 00400000)
Click "IAT AutoSearch." Then, "Get Imports".



Click "Fix dump" file selected a.exe. We are a_.exe file. Test this file. Good!.

II) Script Writing:

You also remember when we break in the OEP EDI contains the address OEP. Therefore we deduce wrapper program will jump to OEP our JMP using EDI (May packer often jump to OEP using JMP thanh_ghi).

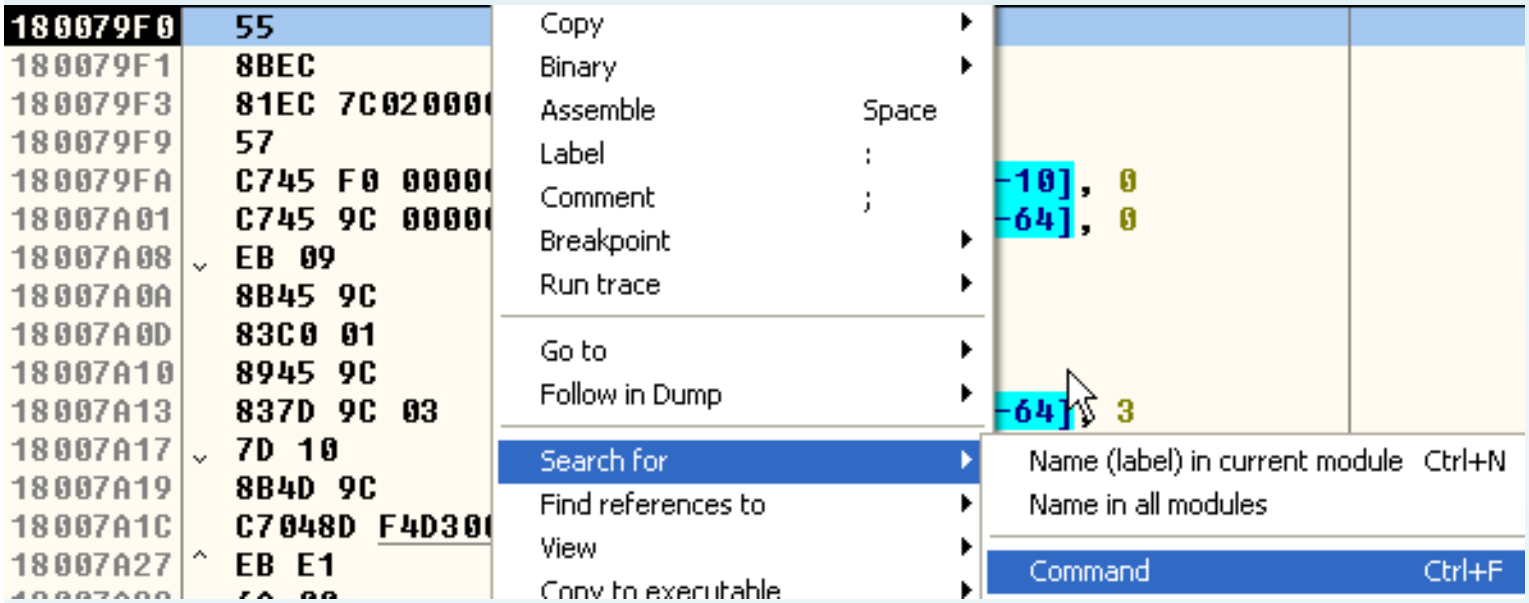
We will try to deduce our Correct. Using OllyDbg open programs.

```
00502000   68 80205000      push    00502080
00502005   FF15 74265000    call    [<&sudoku.mainDLLInit>]
```

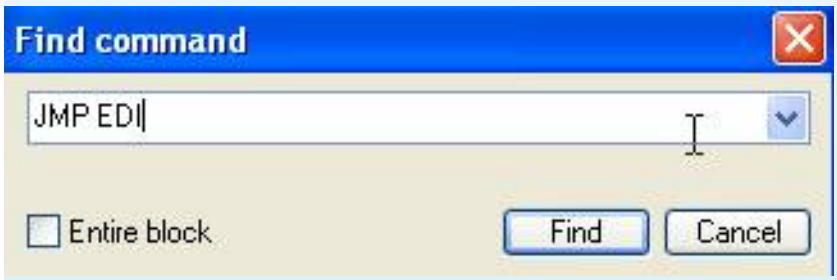
Press F7 2. We here:

```
180079F0   55               push    ebp
180079F1   8BEC             mov     ebp, esp
180079F3   81EC 7C020000    sub     esp, 27C
180079F9   57               push    edi
180079FA   C745 F0 000000   mov     dword ptr [ebp-10], 0
18007A01   C745 9C 000000   mov     dword ptr [ebp-64], 0
18007A08   EB 09            jmp     short 18007A13
```

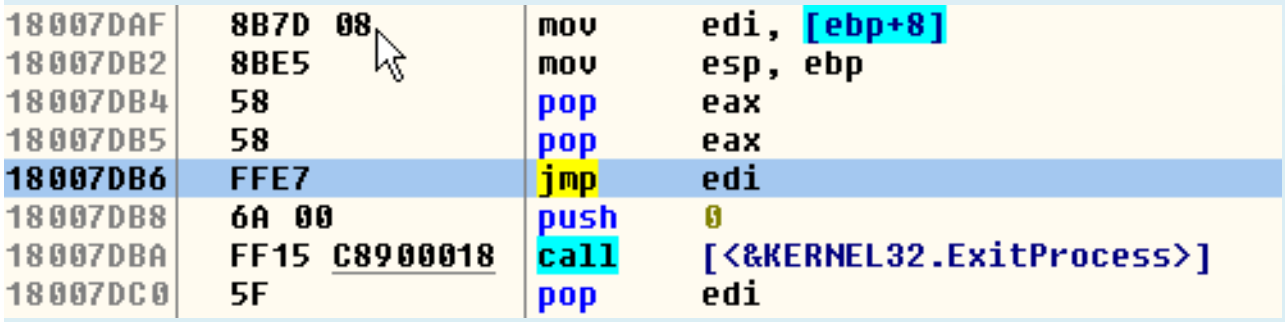
Now we find command JMP EDI. Click your mouse to select the image:



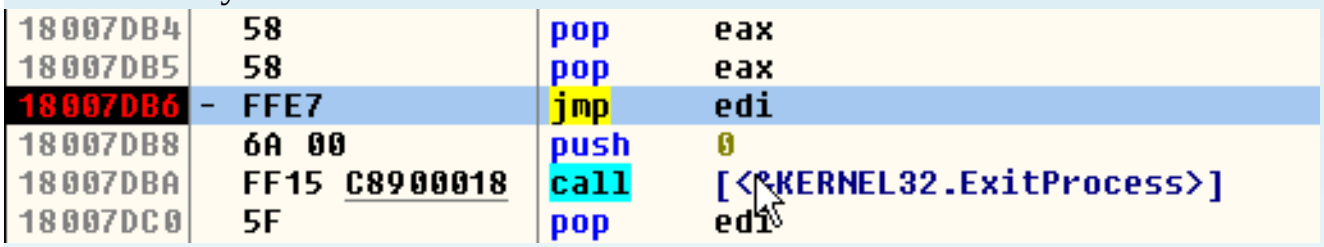
Enter:



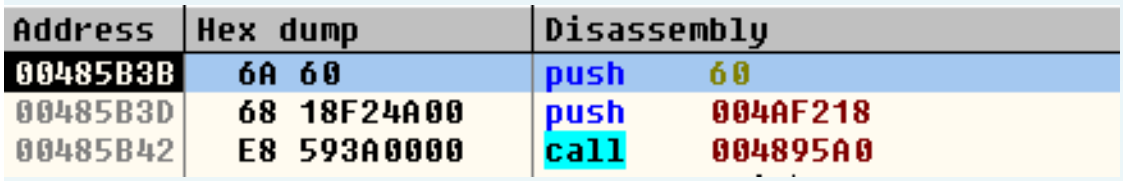
Click "Find". We are:



Only 1 match. Press F2 to set a breakpoint in 18007DB6. Press F9 to run the program. After pressing the button "Try Now" in the NAG screen. We break in 18007DB6



Press F8. We at J OEP



With all the information we can write a generic script for all the games in GameHouse.

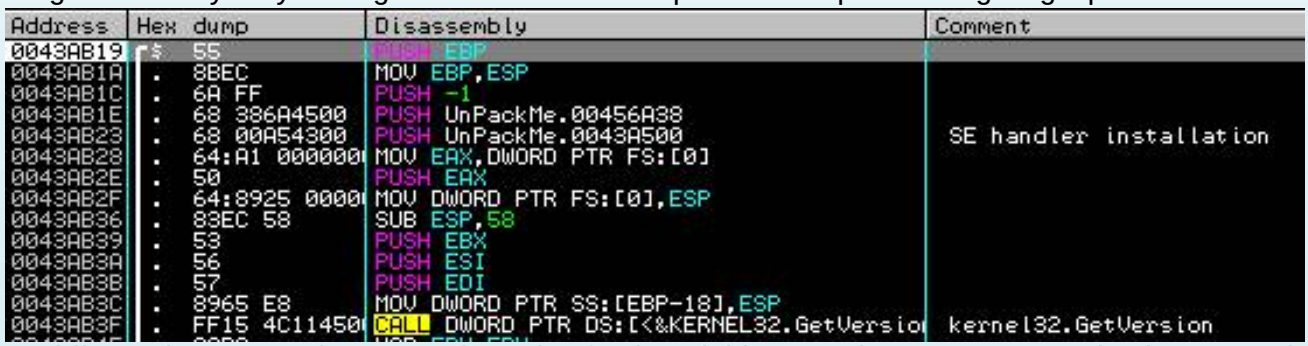
```
msgyn "You must checked all the exceptions to proceed, continue?"
```

```
STI / / F7
STI / / F7
find eip, # # FFE7 / / Search for JMP EDI (corresponding FFE7)
msg "Press' Try Now 'button appears when the Dialog"
go $ RESULT / / Run the program to place JMP EDI we found
Sto / / F8
CMT eip, "<- OEP"
msg "Bam! You're at the OEP, now dump'n'fix ImpRec with the IAT.
Locu/06"
ret
```

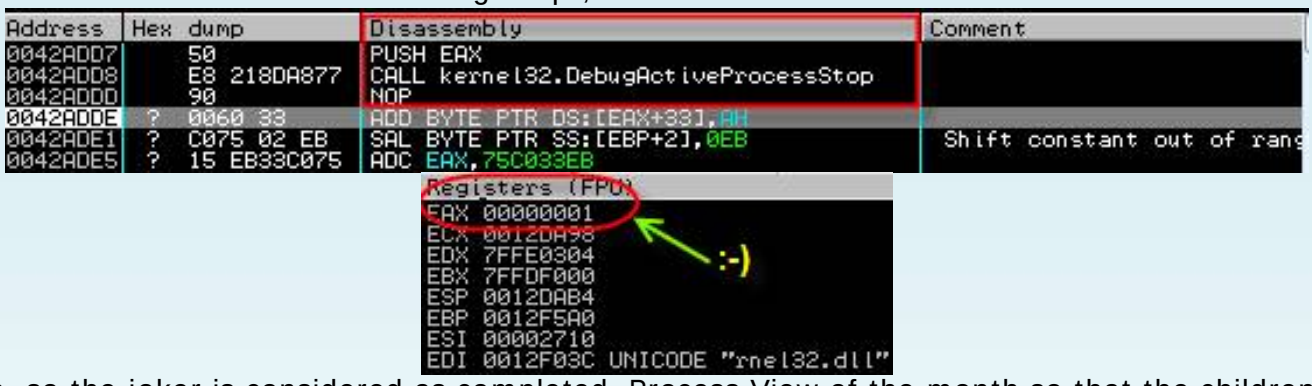
You can download gamehouse.com on the targer on trial.
Them. Happy happy. Hopefully you will learn something new through this tut.
Greetingz: All Reaonline.net Members, ColdIce, and you Locu/06.
tlandn
20-May-2006

TUT # 5: snd Unpackme - Armadillo 3.70a-Debug-Blocker

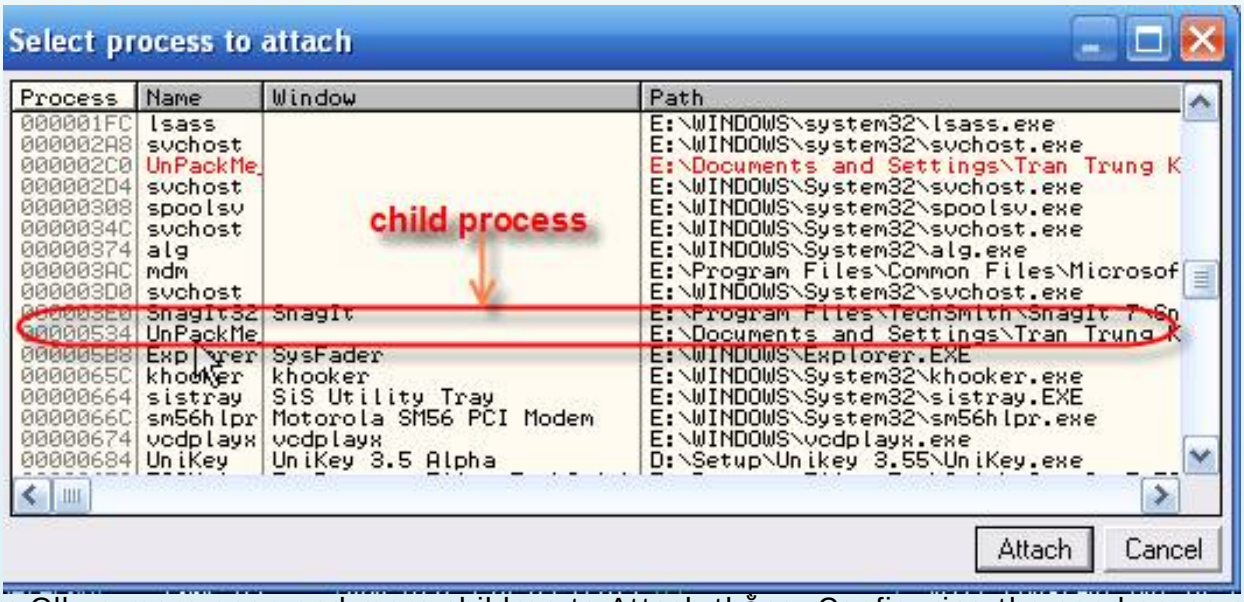
_Hiiii Although aged grape was 7 tut to the children of Armadillo, but I am old and not enough health to run a race with grapes and aged for you: (. Now I try to new tut second, what they do first but then the child is the tit Ngoi. Although the OEP, dump full, Fix IAT, what is done only for each Run unpack the files have not done it all:). The pile, if aged grapes that stand beside me now I sure he aged throttle too:).
_Sau Try the test with Target's aged in small given tut 1 and 2, I draw a number of articles as follows: stage find OEP seems most easily, just buckle and dump Fix IAT is hard. Hix I use the LordPE I still xài, full dump, but the fix IAT Cuc. When the full dump and fix the IAT is run it does not run. When I xài the aged in small, AC dump and fix IAT lickerish, run away alcohol. Only the children **PE Tools v1.5.600.2005** at the time was not. And the media always say in my home computer using OS XP Pro not have 1 or 2 Pack ráo anything, so when Olly's aged a little but when BP **ArmaDetach.dll** plug on the Access Memory, press Shif + F9 is considered as having such as break wind, not in OEP Break:). So I đành ngam ngui suffer as they put into this xó.
_Dang Read the tut 2 on the Target, see aged remember that you write. Reliance on skilled their Super Newbie, I do a circuit from the beginning to end. Everything Okie, but when run, they ặc not run:) but also errors in the load User32.dll children.
_Thoi Card and then say, I will write a tut for this target. Uncle do not try it can be reference or higher is done manually and then, seeing how I do it to ignore.
_Load To target and Olly Olly configured to handle the process as parents aged grapes said:



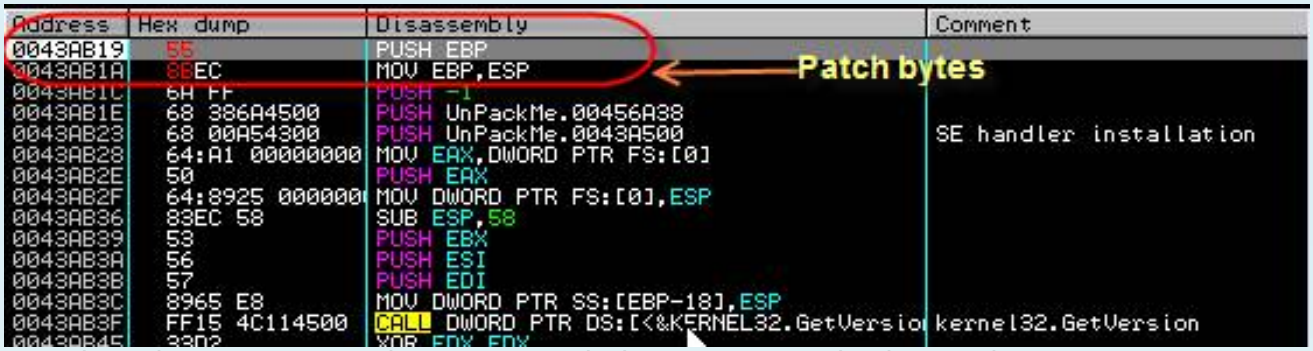
_De Flush public, I always used to Detach Script for it quickly. But doctors want to do the Manual comfortable no matter what. After running script, I have been as follows:



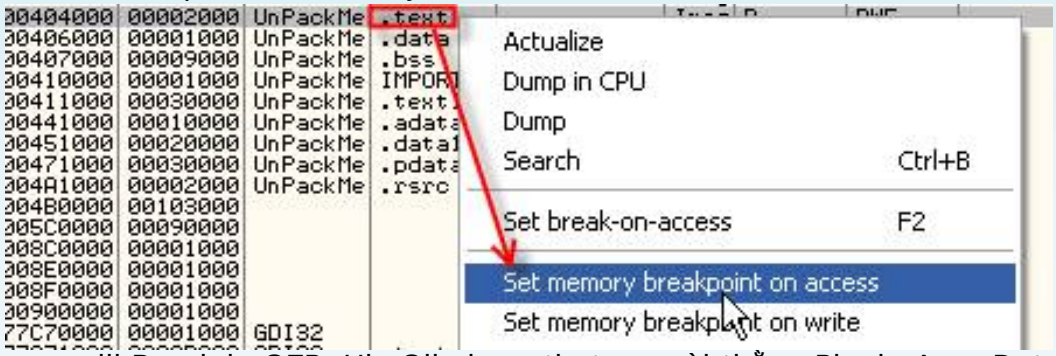
_Kha Kha, so the joker is considered as completed. Process View of the month so that the children know which street Attach. I have been as follows:



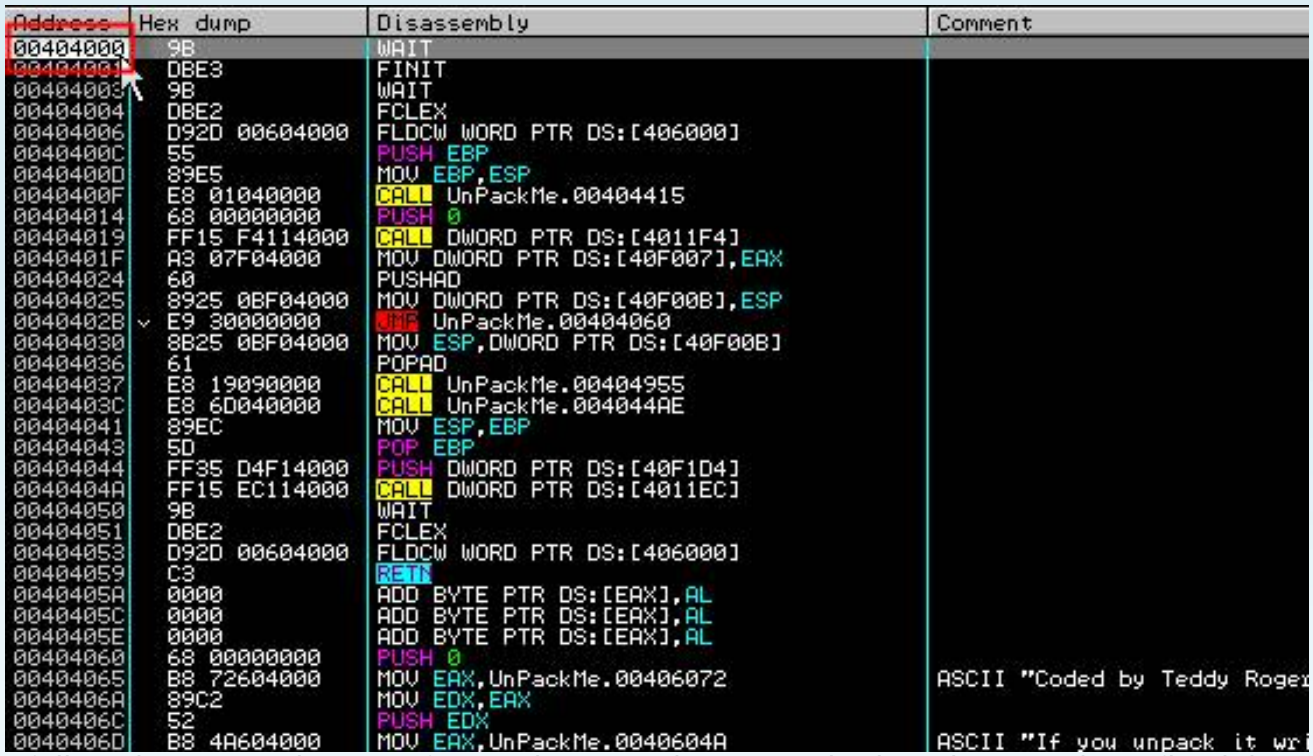
_Okie, Hours Olly a more open and more children to Attach thắng. Configuring the aged grape as Olly said in the tut. Then press F9, F12, and we Patch bytes are as follows:



_Tiep By pressing Alt + M to open the Memory windows, set a BP in the section on access text:



_Nhan Shift + F9, you will Break in OEP. Hix Olly here that my xài thắng Plugin ArmaDetach.dll break is regarded as always:).



Address	Hex dump	Disassembly	Comment
00404000	9B	WAIT	
00404001	DBE3	FINIT	
00404003	9B	WAIT	
00404004	DBE2	FCLEX	
00404006	D92D 00604000	FLDCW WORD PTR DS:[406000]	
0040400C	55	PUSH EBP	
0040400D	89E5	MOV EBP,ESP	
0040400F	E8 01040000	CALL UnPackMe.00404415	
00404014	68 00000000	PUSH 0	
00404019	FF15 F4114000	CALL DWORD PTR DS:[4011F4]	
0040401F	A3 07F04000	MOV DWORD PTR DS:[40F007],EAX	
00404024	60	PUSHAD	
00404025	8925 0BF04000	MOV DWORD PTR DS:[40F00B],ESP	
0040402B	E9 30000000	JMP UnPackMe.00404060	
00404030	8B25 0BF04000	MOV ESP,DWORD PTR DS:[40F00B]	
00404036	61	POPAD	
00404037	E8 19090000	CALL UnPackMe.00404955	
0040403C	E8 6D040000	CALL UnPackMe.004044AE	
00404041	89EC	MOV ESP,EBP	
00404043	5D	POP EBP	
00404044	FF35 D4F14000	PUSH DWORD PTR DS:[40F1D4]	
0040404A	FF15 EC114000	CALL DWORD PTR DS:[4011EC]	
00404050	9B	WAIT	
00404051	DBE2	FCLEX	
00404053	D92D 00604000	FLDCW WORD PTR DS:[406000]	
00404059	C3	RETN	
0040405A	0000	ADD BYTE PTR DS:[EAX],AL	
0040405C	0000	ADD BYTE PTR DS:[EAX],AL	
0040405E	0000	ADD BYTE PTR DS:[EAX],AL	
00404060	68 00000000	PUSH 0	
00404065	B8 72604000	MOV EAX,UnPackMe.00406072	ASCII "Coded by Teddy Roge
0040406A	89C2	MOV EDX,EAX	
0040406C	52	PUSH EDX	
0040406D	B8 4A604000	MOV EAX,UnPackMe.0040604A	ASCII "If you unpack it wr

_Hii If you follow the tut aged grapes for Magic Jump also. But I do then dump and run fix ok but they do not chay.Ly is in place Fix IAT, because when ImportREC to implement IAT Auto Search, it will address omission of the IAT. So I made the classic way as follows: at the OEP, press Ctrl + B and enter the **FF** is **15,** why is **FF 15** that is not **FF 25.** Please Dear with you that I have but then Search no. You will find the first code as follows:

00404019 FF15 F4114000 CALL DWORD PTR DS: [4011F4]

_Nhan Ctrl + L to continue to search all the code similar to that. Fortunately in this target it is less, but more sure I am always filled. During the search, note value of the largest and smallest **max min** in **DS: [4011F4]**

_Sau A search I have been the final results as follows:

```
00404EF2 FF15 9C114000 CALL DWORD PTR DS: [40119C]; USER32.CallNextHookEx

00404019 FF15 F4114000 CALL DWORD PTR DS: [4011F4]

0040404A FF15 EC114000 CALL DWORD PTR DS: [4011EC]

00404326 FF15 14124000 CALL DWORD PTR DS: [401214]; kernel32.lstrcatA

00404453 FF15 08124000 CALL DWORD PTR DS: [401208]; kernel32.HeapCreate

00404584 FF15 0C124000 CALL DWORD PTR DS: [40120C]; kernel32.HeapDestroy

004045EF FF15 00124000 CALL DWORD PTR DS: [401200]; ntdll.RtlAllocateHeap

00404622 FF15 04124000 CALL DWORD PTR DS: [401204]; kernel32.HeapCompact

004046DD FF15 10124000 CALL DWORD PTR DS: [401210]; ntdll.RtlFreeHeap

00404C17 FF15 B0114000 CALL DWORD PTR DS: [4011B0]; USER32.SystemParametersInfoA

00404C66 FF15 A0114000 CALL DWORD PTR DS: [4011A0]; USER32.GetDesktopWindow
```

```
00404C7F FF15 A4114000 CALL DWORD PTR DS: [4011A4]; USER32.GetWindowRect

00404EF2 FF15 9C114000 CALL DWORD PTR DS: [40119C]; USER32.CallNextHookEx

00404F89 FF15 F0114000 CALL DWORD PTR DS: [4011F0]; kernel32.GetCurrentThreadId

00404FA4 FF15 AC114000 CALL DWORD PTR DS: [4011AC]; USER32.SetWindowsHookExA

00404FC9 FF15 A8114000 CALL DWORD PTR DS: [4011A8]

00404FDB FF15 B4114000 CALL DWORD PTR DS: [4011B4]; USER32.UnhookWindowsHookEx

00405614 FF15 FC114000 CALL DWORD PTR DS: [4011FC]; kernel32.GlobalFree

004057CE FF15 F8114000 CALL DWORD PTR DS: [4011F8]
```

_Keke If you do find a way Magic Jump I do not know your computer is still on but when I finished Fix IAT, they run as they error during load User32. And in the process fix IAT I have not seen any in the User32. Hix but if I do say in how the right is the real User32. I notice not so little any wrong:).

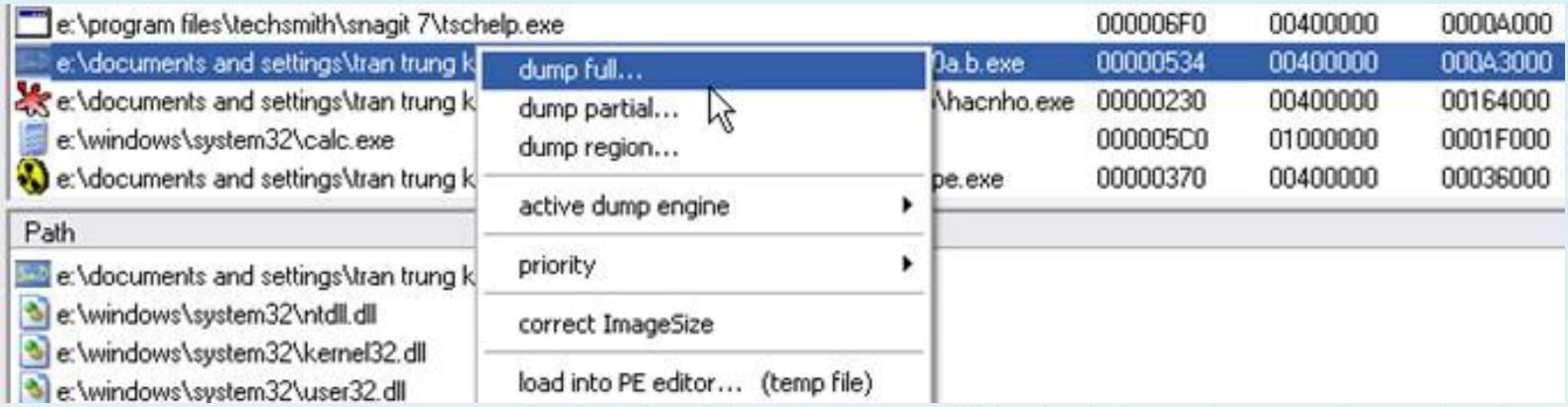
_Sau When the results as above. I will be as follows:

OEP = value that we found in the = 404000 - 400000 = 4000

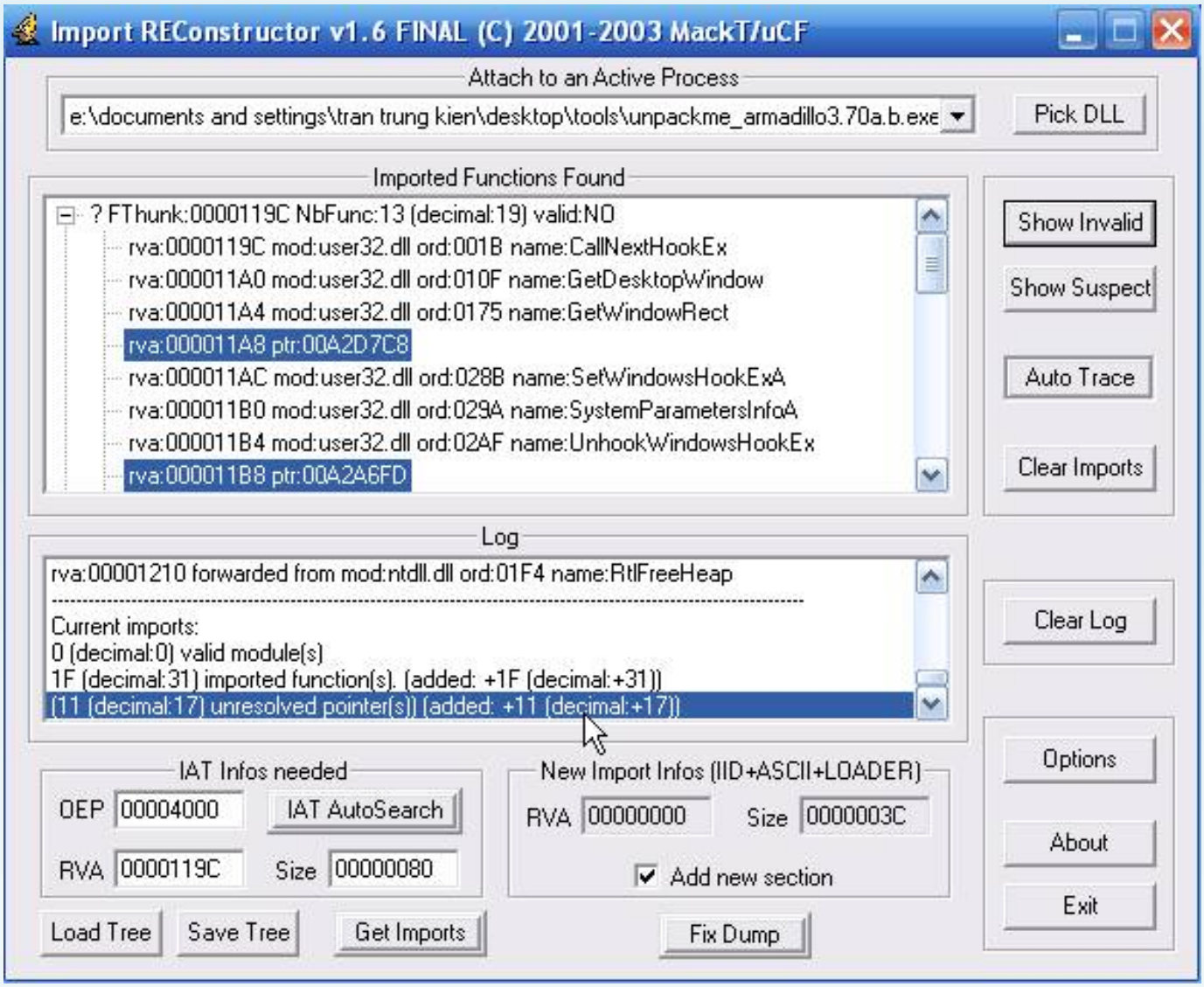
RVA = min - **40119C** = 400,000 **-** 400,000 = **119C**

Size = max - min = **401214 - 40119C = 78** (rounded to 80)

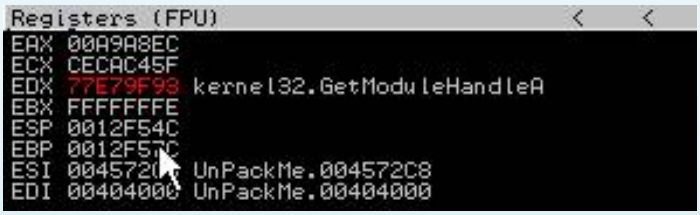
_Okie, Next LordPE used to dump full. Remember to choose the right Process nhé.



_Tiep As we open up ImportREC. Selecting the right process and fill in the information exactly as what is found above. Do not click Search IAT Auto Imports Get the press. I will be as follows:



_ According to what we have found above. We will just go back to Fix the do.Dau address is: 00404019 FF15 F4114000 CALL DWORD PTR DS: [4011F4]. At this location, click to select the New Origin here.Sau press F7 to this function, according to press F7 to trace into this function. Results will be as follows:

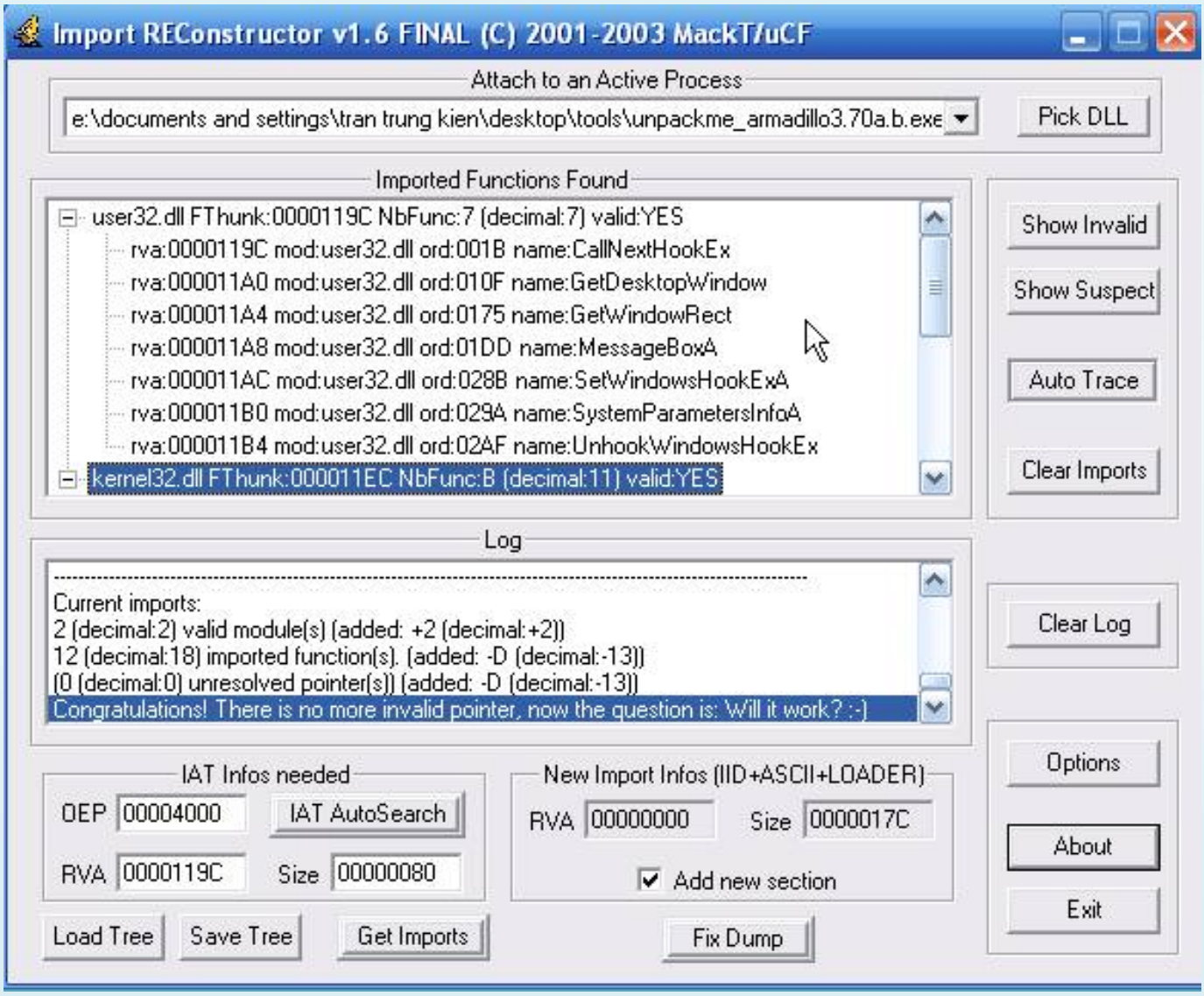


_Vay In ImportRec will Fix is **GetModuleHandleA.** Next is 0040404A FF15 EC114000 CALL DWORD PTR DS: [4011EC], we have a **ExitProcess.** Continue will be as follows:

00404FC9 FF15 A8114000 CALL DWORD PTR DS: [4011A8]; **MessageBoxA**

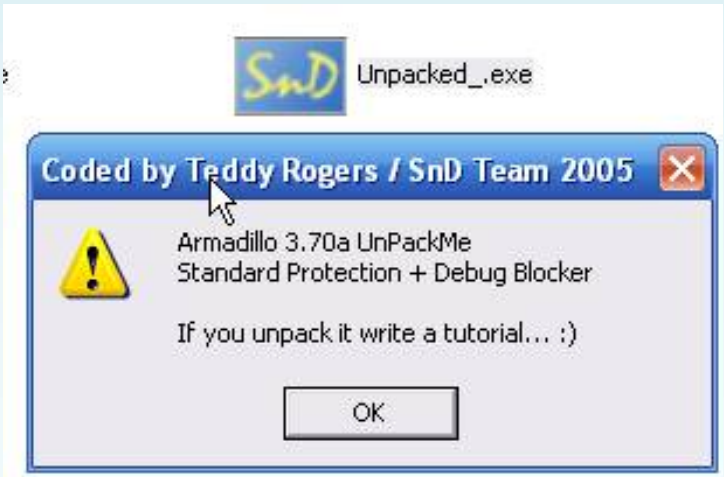
004057CE FF15 F8114000 CALL DWORD PTR DS: [4011F8]; **GlobalAlloc**

Invalid _Con what do we Thunk Cut off, not to release them hiiiii.



_Buoc Final step and is meeting Fix dump. Hiii not know when to fix them will finish what is known as nhi. Chi Fix the report is found ImportREC Success. Success does not know is not true:).

_Hix Hix, they try to run one, prince falter. Ola enough, they run without a roar yet, but can. I think he does not run always run!



_Okie So it is Done nhé. I look back:)

- Finished - September 27, 2005

--+--==[Greatz thanks to]==--+--

- Thank to my family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Hoadongnoi, Nini, L ight.phoenix, Merc ... all REA's members, HacNho, RongChauA, Deux, tlandn, dqtln, CracksLatinos, ARTEAM .... all my friend, and you.

Special thanks to --+--==[ ]==--+--

coruso_trac, patmsvn, tm_tr v. .. v.. VSEC in all brothers.

>>>> If you have any suggestions, comments or corrections email me: **kienbigmummy [at] gmail.com**

REVERSE ENGINEERING ASSOCIATION

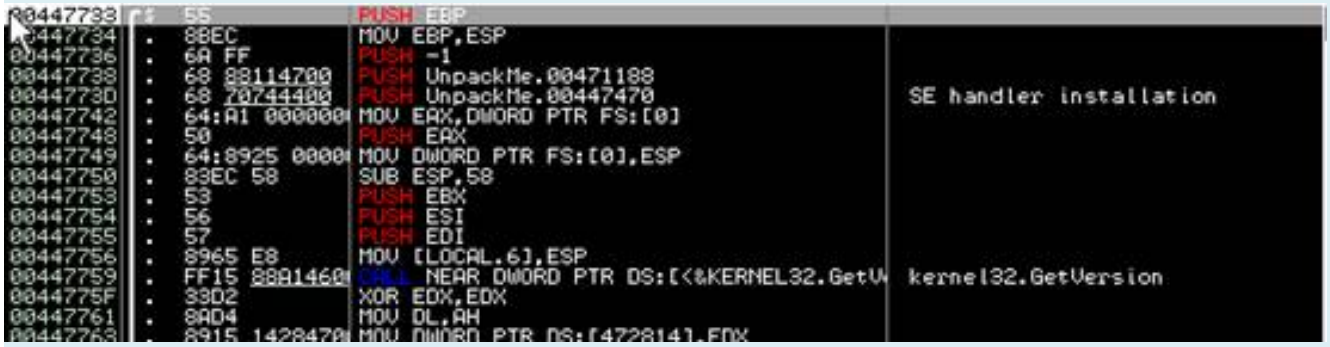
http://www.reaonline.net

+ + CopyMemII Debugblocker IAT elimination + Code Splicing + Nanomites

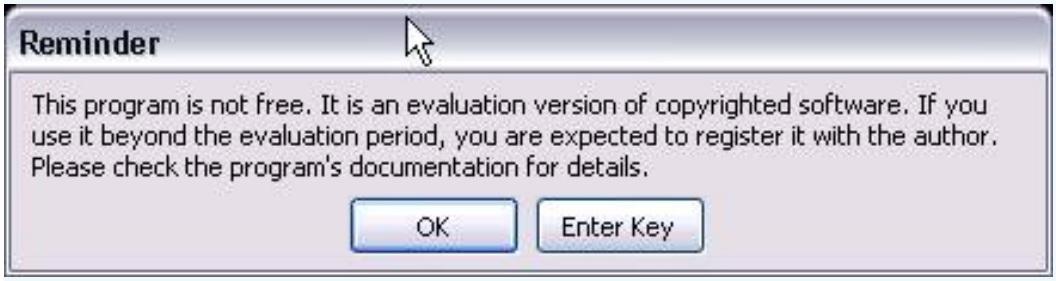
Target : **UnpackMe** *(4.30 + Nanomites Armadillo)*
Crack Tool *1.* ***OllyDBG by hacnho.***
2. LordPE Deluxe 1.4-by yoda
3.Import REConstructor 1.6 Final
4. ArmInline 0.71
Author : **Why Not Bar**

Party Web site by Hacnho 4 UnpackMe I clean meat packages. But I have to thằng UnpackME *Nanomites.* We unpack it home!

Target _Load to Olly

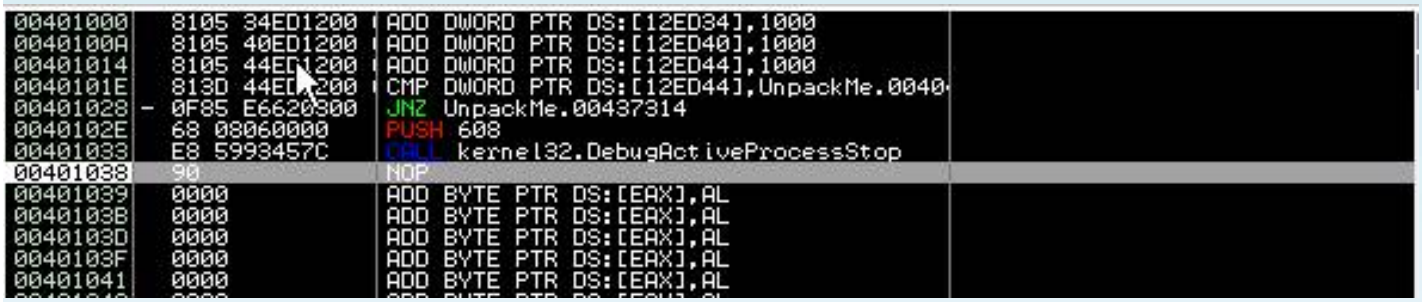


_Su To 0.92 OllyScript run script "DetachFarther_MethodRicardo_hipu_benina." There notification

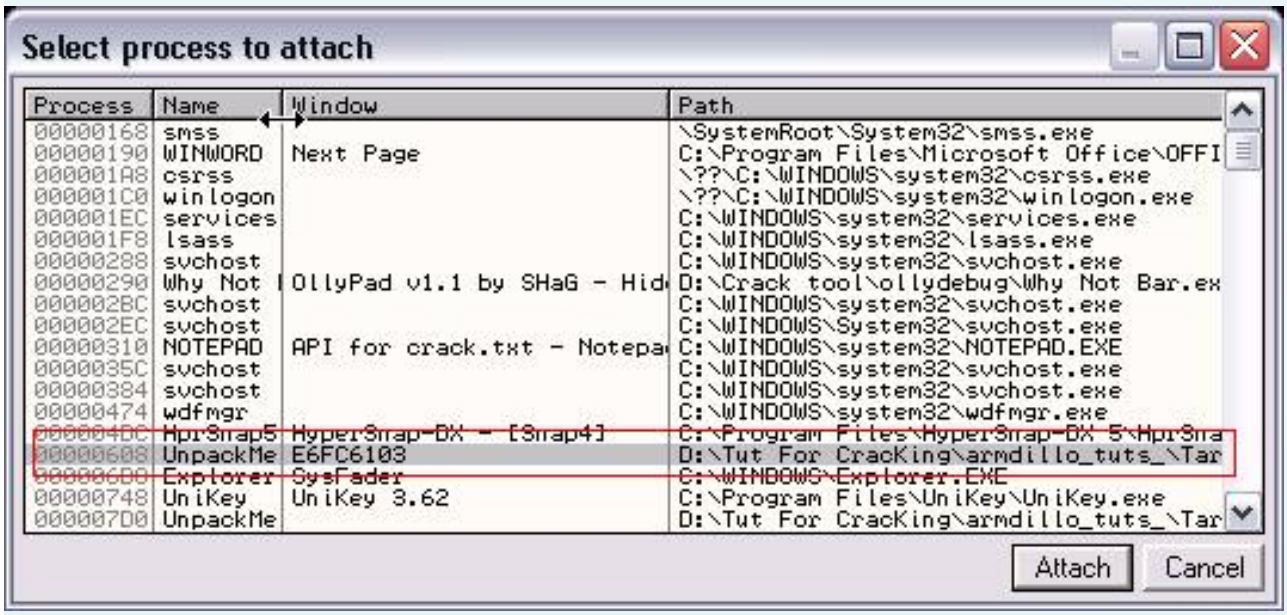


_Nhan OK to continue

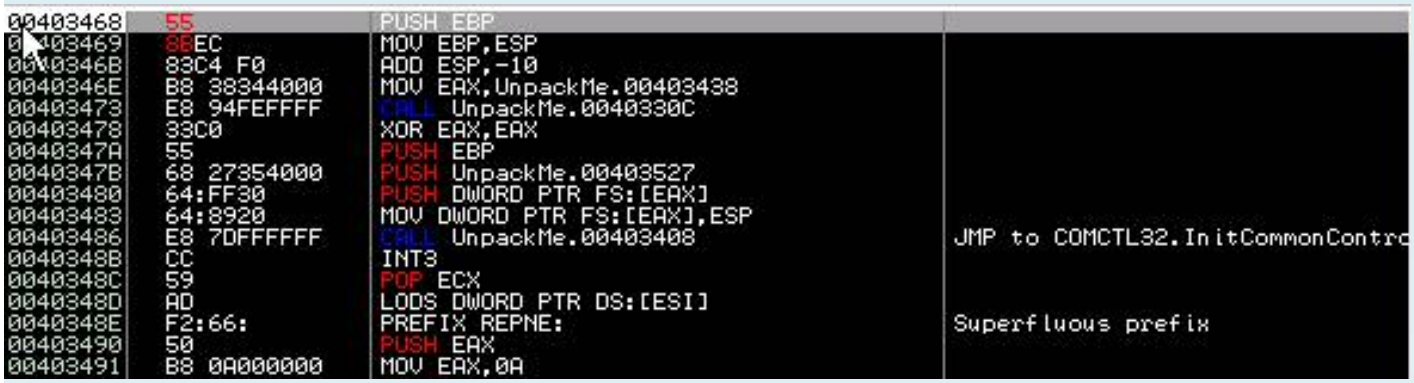
558B _Ghi remember and click OK. Continue you click OK 3 times longer to complete the run script is here to



1 _Mo window and Olly Attach PID child

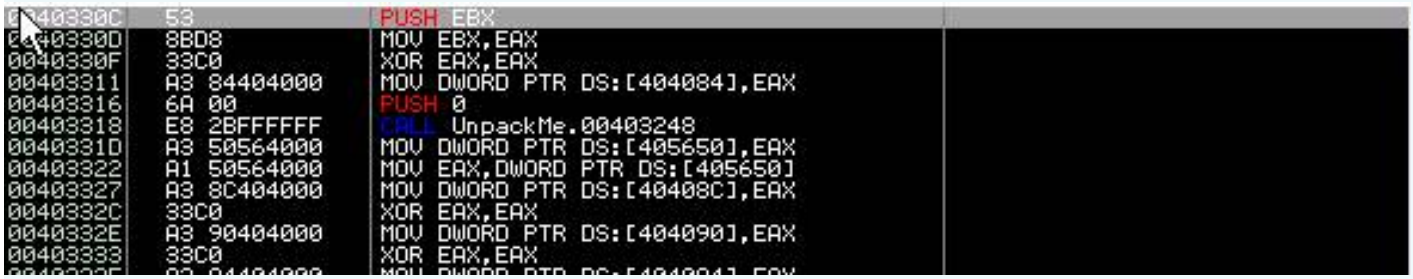


Attach _Nhan, F9, F12 and edit the 558B

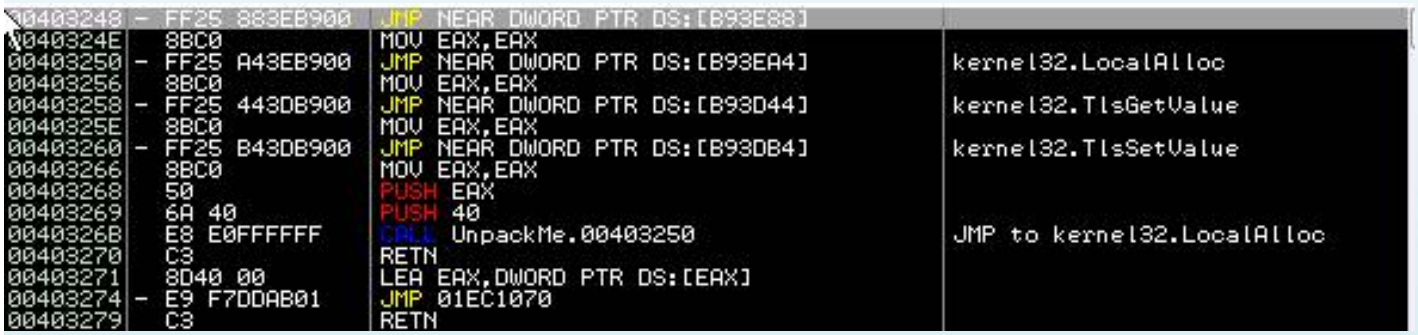


_Bay Time we find the address IAT. How to find IAT as follows: you point your mouse to command the first Call
00403473 E8 94FEFFFF CALL UnpackMe.0040330C

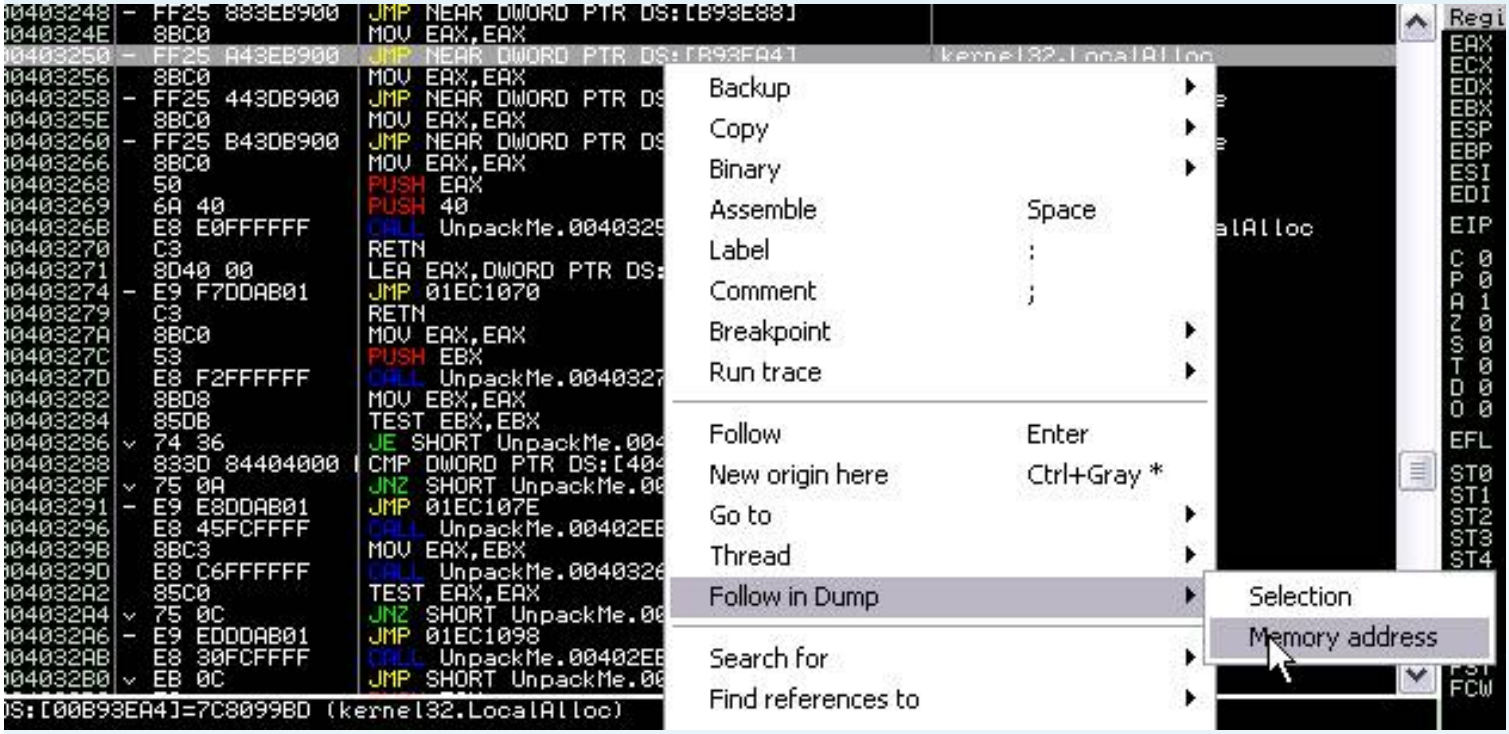
And press Enter you here to



_Thay Below 1 Call command again we also point to the mouse and press Enter to you here:



_O You should remember "kernel32.LocalAlloc" to little more we find IAT complete easily. Remember completed as selected pictures

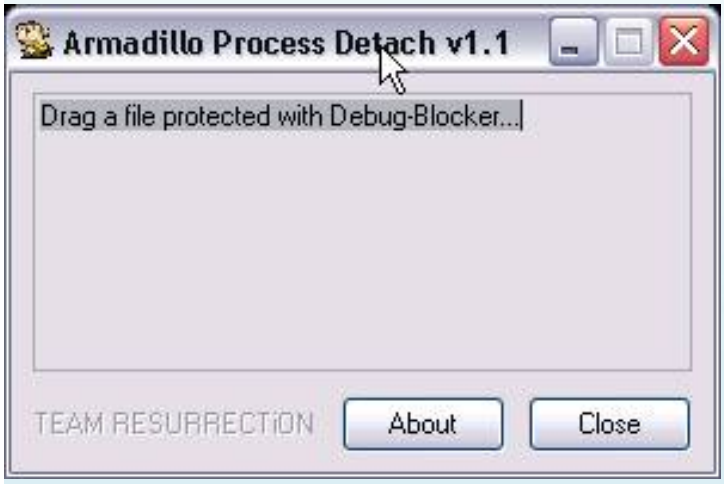


_ Scroll back up the mouse to find the IAT start: 00B93C44

_cuon down the search IAT end: 00B93EF0

Yes length: 2AC

_Ok Them. IAT now find complete paste is complete. Hold the window Olly 2. ArmaDetach 1.1 Open

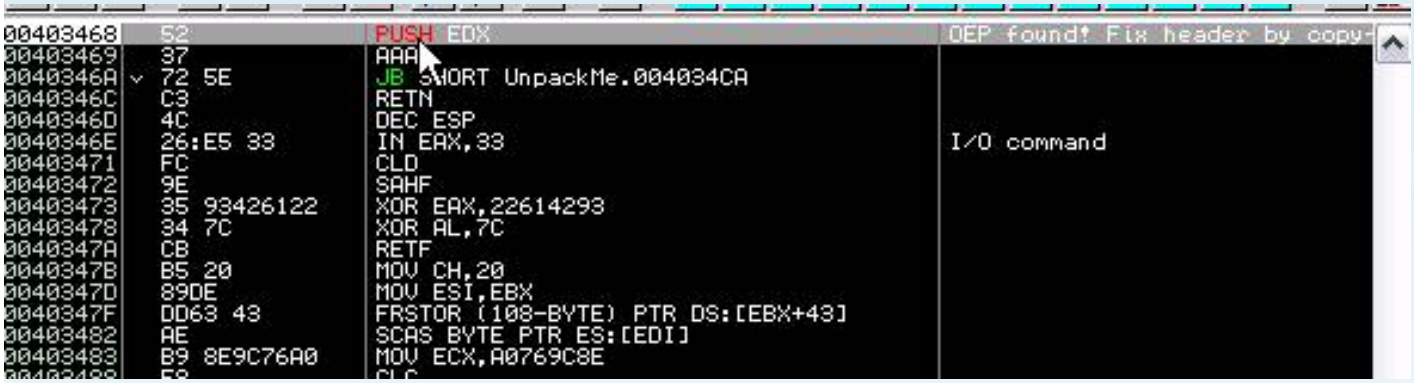


_Loi UnpackMe released into the window to see the program as follows:

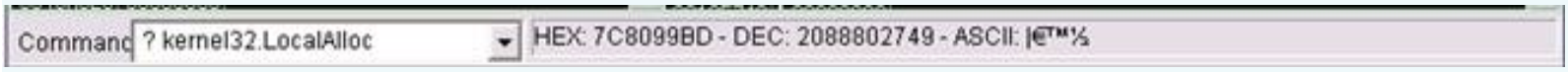
1 _Mo Olly again and Child process ID and Attach. F9, F12, to patch 558B

```
00447733   55              PUSH EBP
00447734   8BEC            MOV EBP,ESP
00447736   6A FF           PUSH -1
00447738   68 88114700     PUSH UnpackMe.00471188
0044773D   68 70744400     PUSH UnpackMe.00447470                SE handler installation
00447742   64:A1 00000000  MOV EAX,DWORD PTR FS:[0]
00447748   50              PUSH EAX
00447749   64:8925 000000( MOV DWORD PTR FS:[0],ESP
00447750   83EC 58         SUB ESP,58
00447753   53              PUSH EBX
00447754   56              PUSH ESI
00447755   57              PUSH EDI
00447756   8965 E8         MOV DWORD PTR SS:[EBP-18],ESP
00447759   FF15 88A14600    CALL NEAR DWORD PTR DS:[<&KERNEL32.GetV kernel32.GetVersion
0044775F   33D2            XOR EDX,EDX
00447761   8AD4            MOV DL,AH
00447763   8915 14284700   MOV DWORD PTR DS:[472814],EDX
```

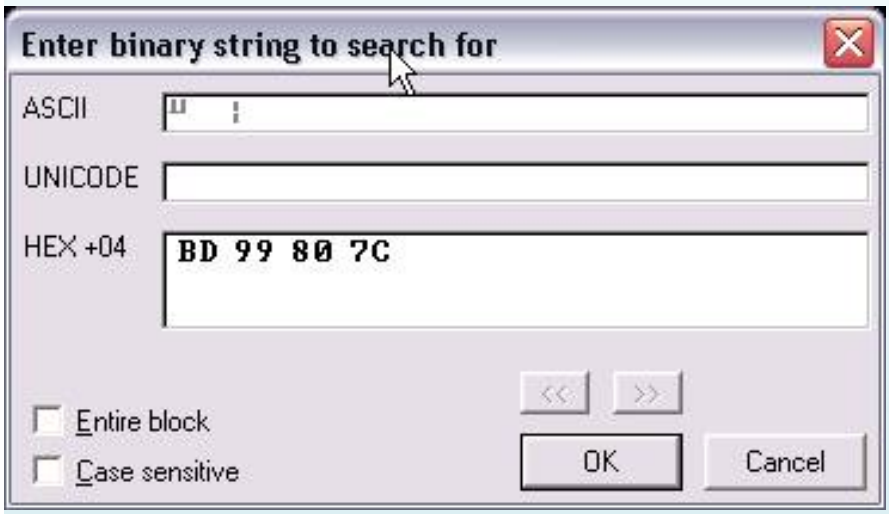
_ Use OllyScript 0.92 Script run "Armadillo 4.30a - standard script (with the tut). The script is finished running to you here.



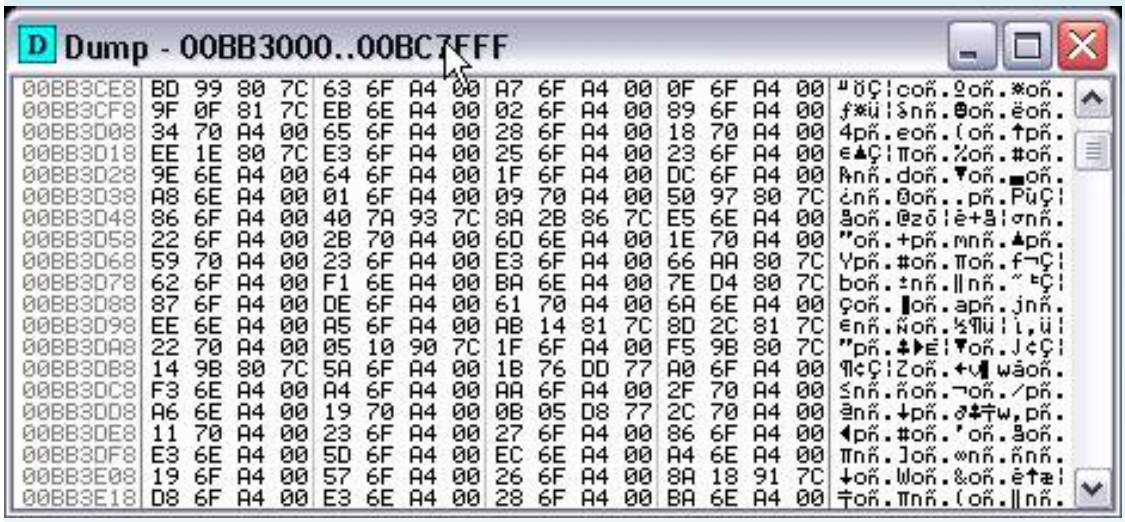
_ You remember "kernel32.LocalAlloc" at this time to consider that you do not remember? Now time to use it gòi! Ok, type the following:



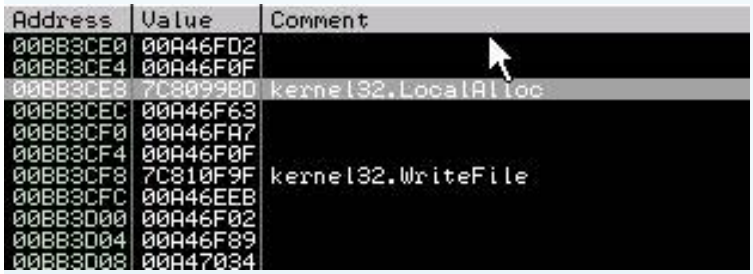
_Alt + M, Ctrl + B, reverse the number again as follows:



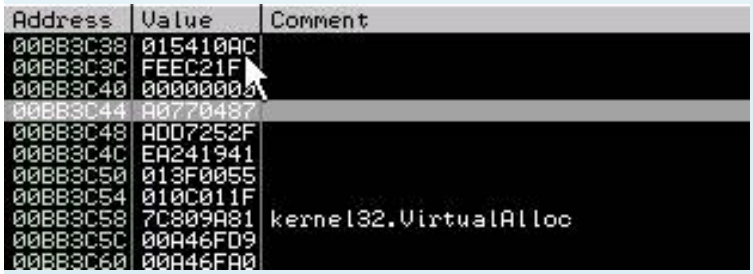
_nhan Ok we are as follows:



_Alt + C, in the window dump press Ctrl + G and enter: 00bb3CE8

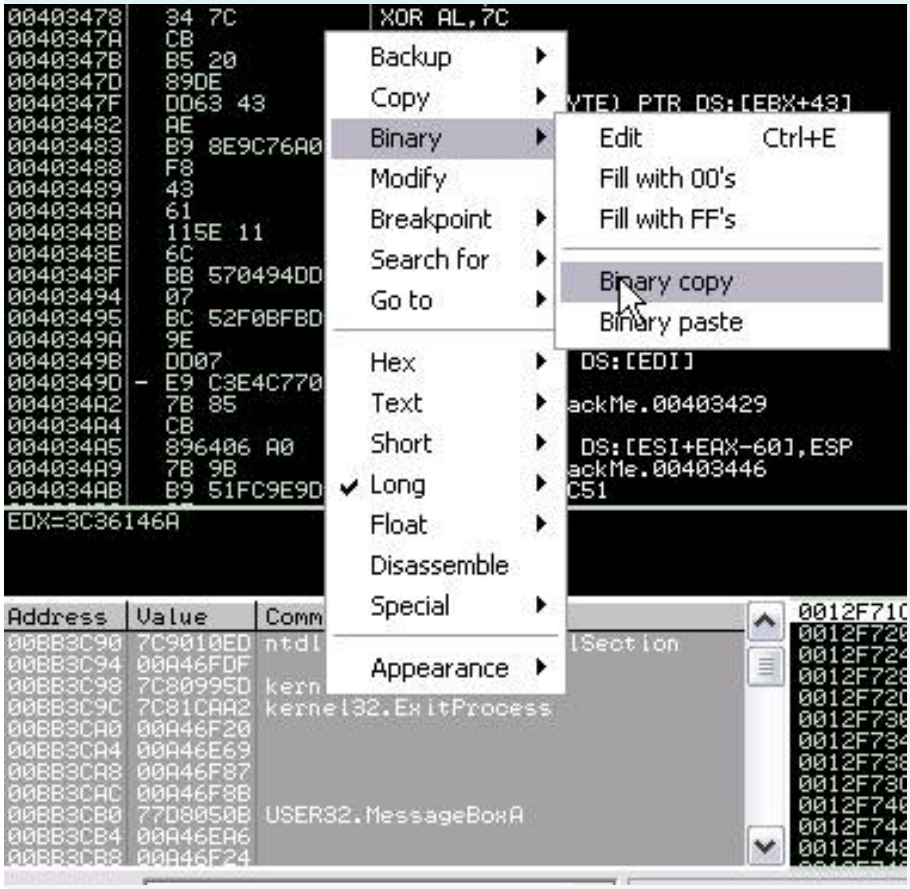


_cuon upturn find IAT start: 00BB3C44

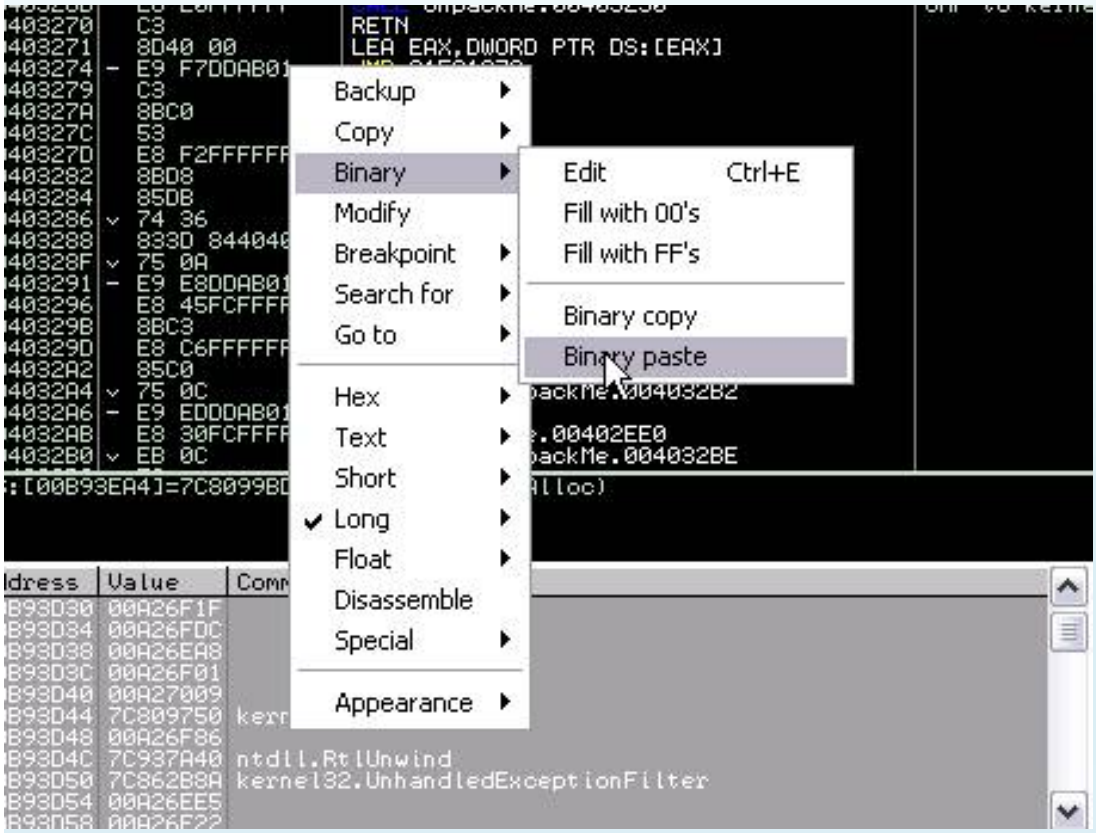


_Cuon To find IAT end: 00BB3EF0

_co length: 2AC
_Danh Mark from the start to IAT IAT End and select as follows:

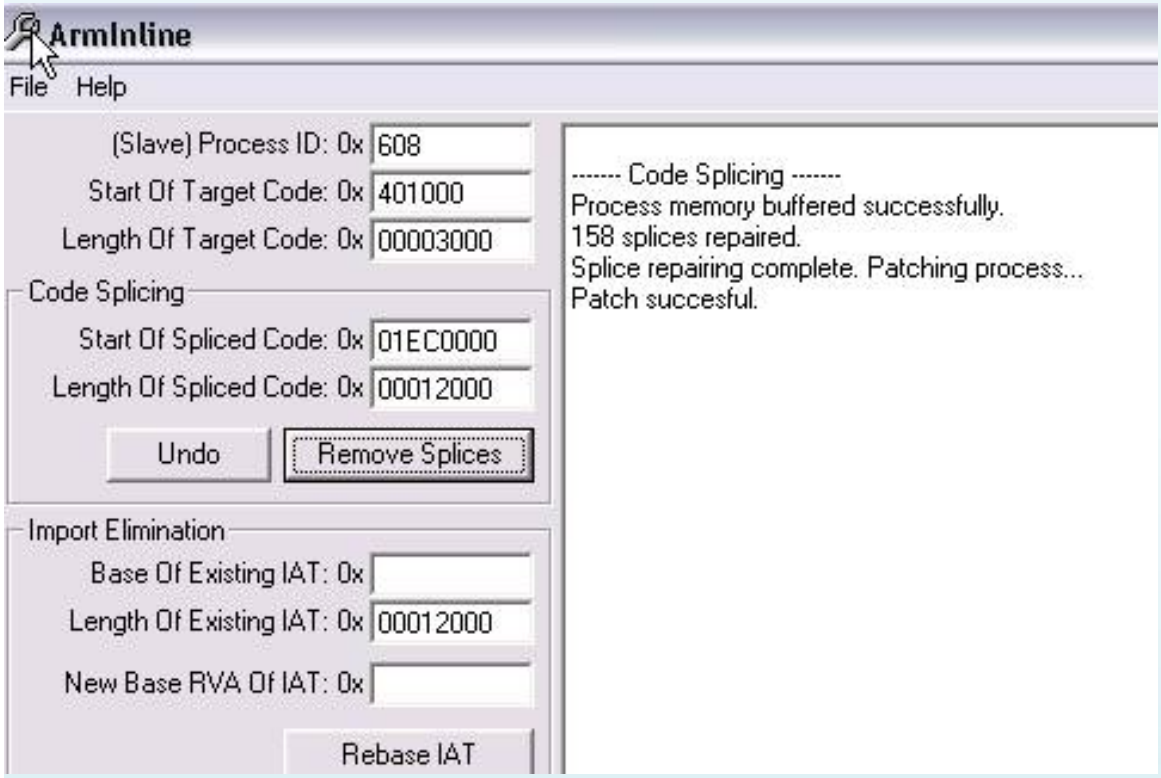


_Ok! now you work we now paste the IAT is not complete only.

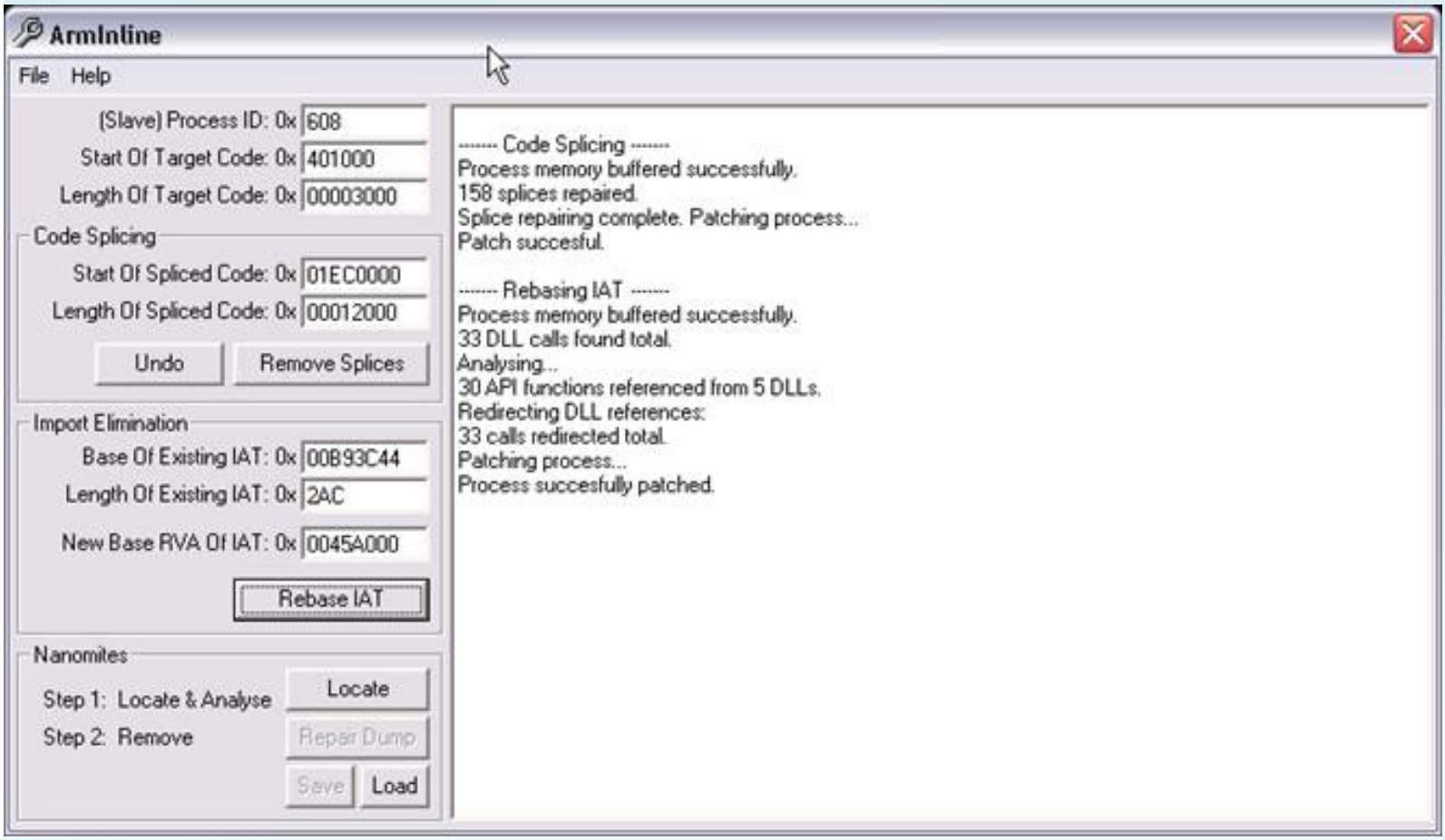


_Nhu This is our Fix the IAT. ArmaDetach now closed and olly there again. Next we Fix IAT elimination +

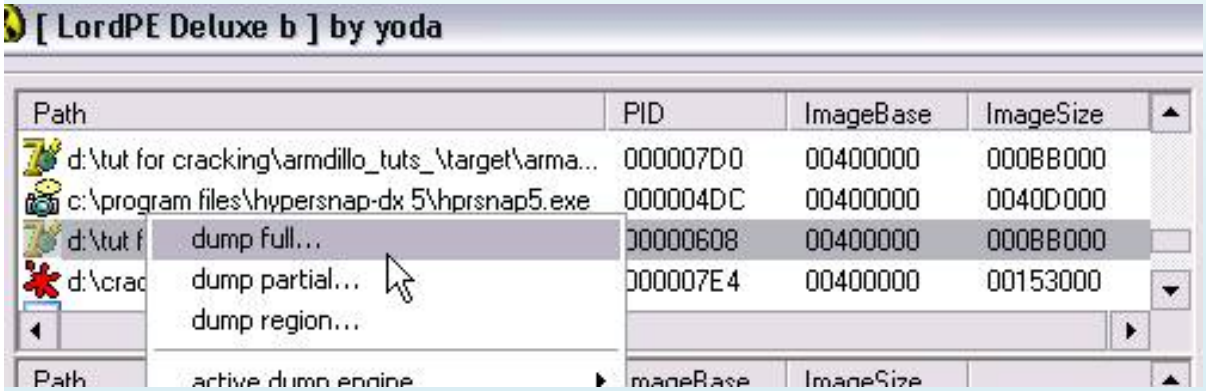
Code Splicing. ArmaInline M in to fill up as follows:



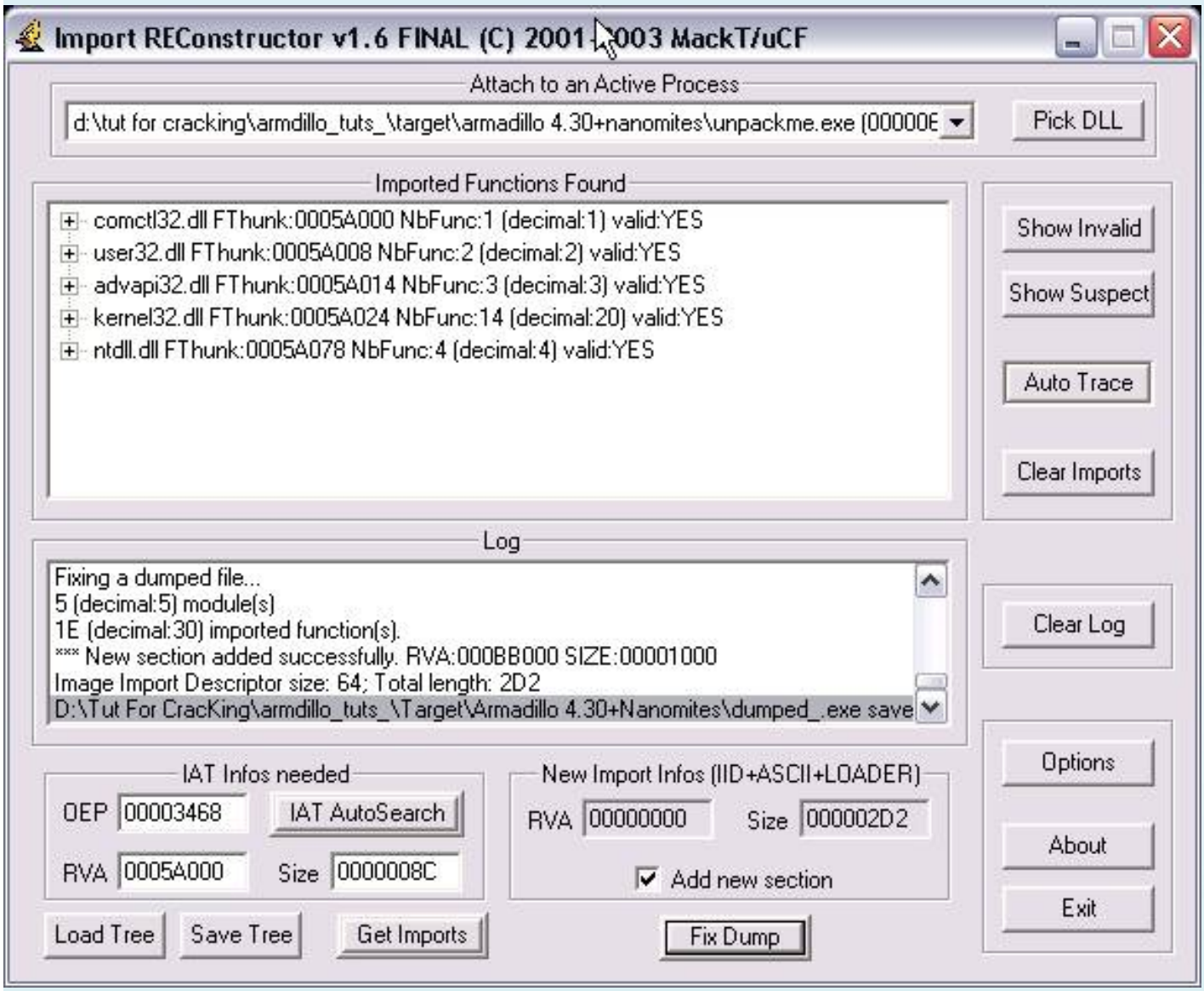
_Xong Thằng Code Splicing g io to IAT elimination



_Tot Call, dump Full stop! Use LordPE



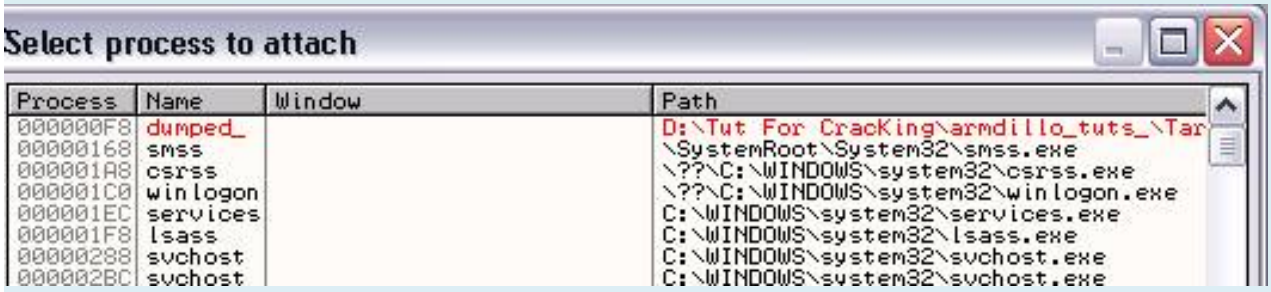
_ Open ImportREC fill and dump Fix



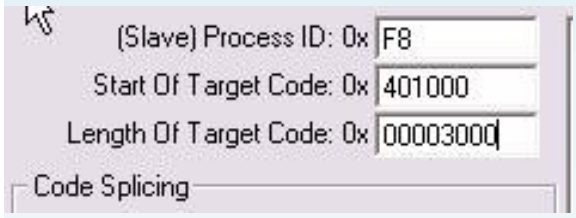
_ Run the file to try "dumped_.exe"

_ Do not Send button Press

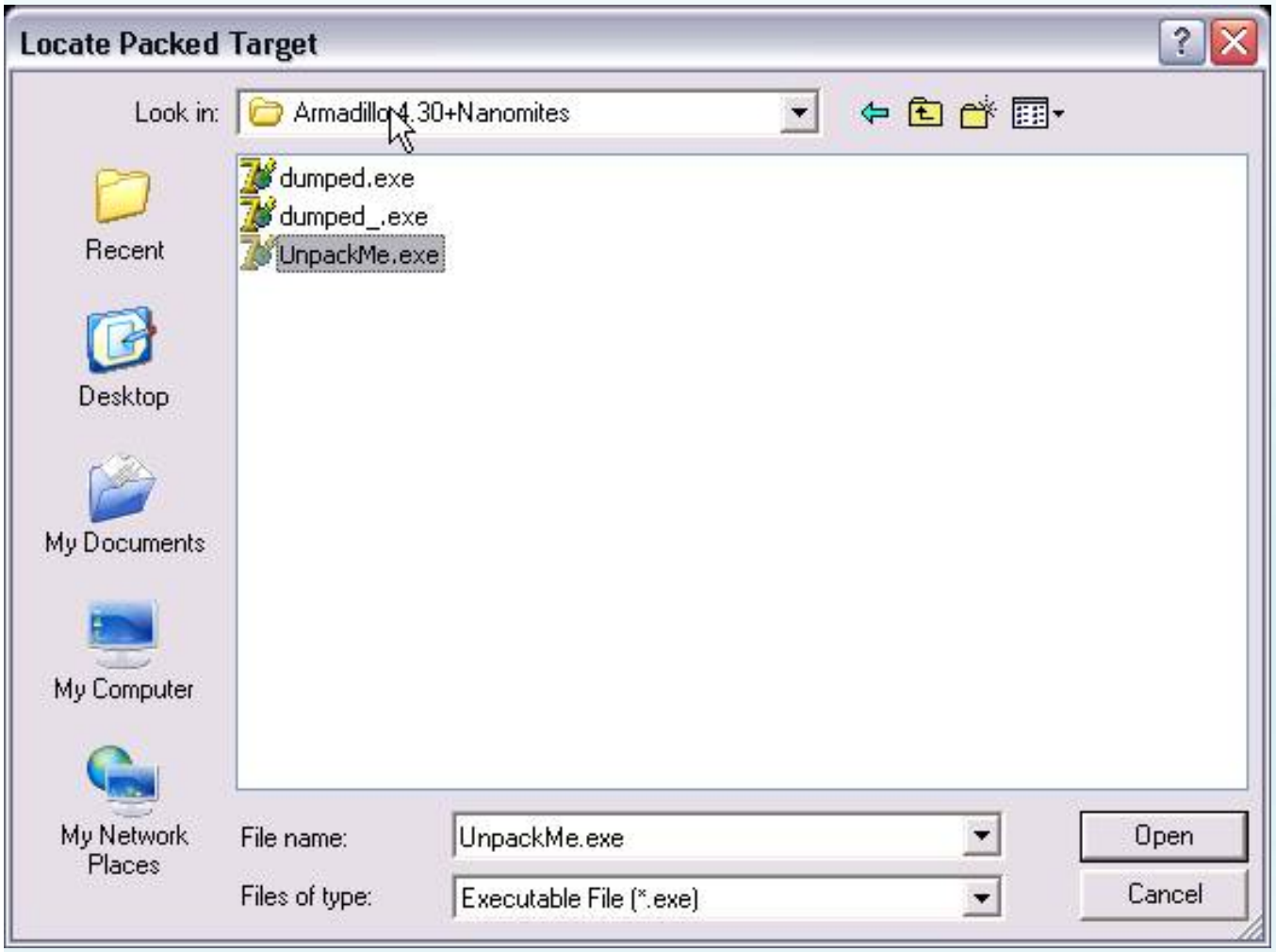
_ He he! Meet cases this is not our governor is the wrong signal by the Ministry of Nano appears that that! If these children are sure daughter named Nanomite s was very difficult to unpack it! He he. Right now, Close to 2 of the book Olly always. Load File "dumped_.exe" to Olly and PID



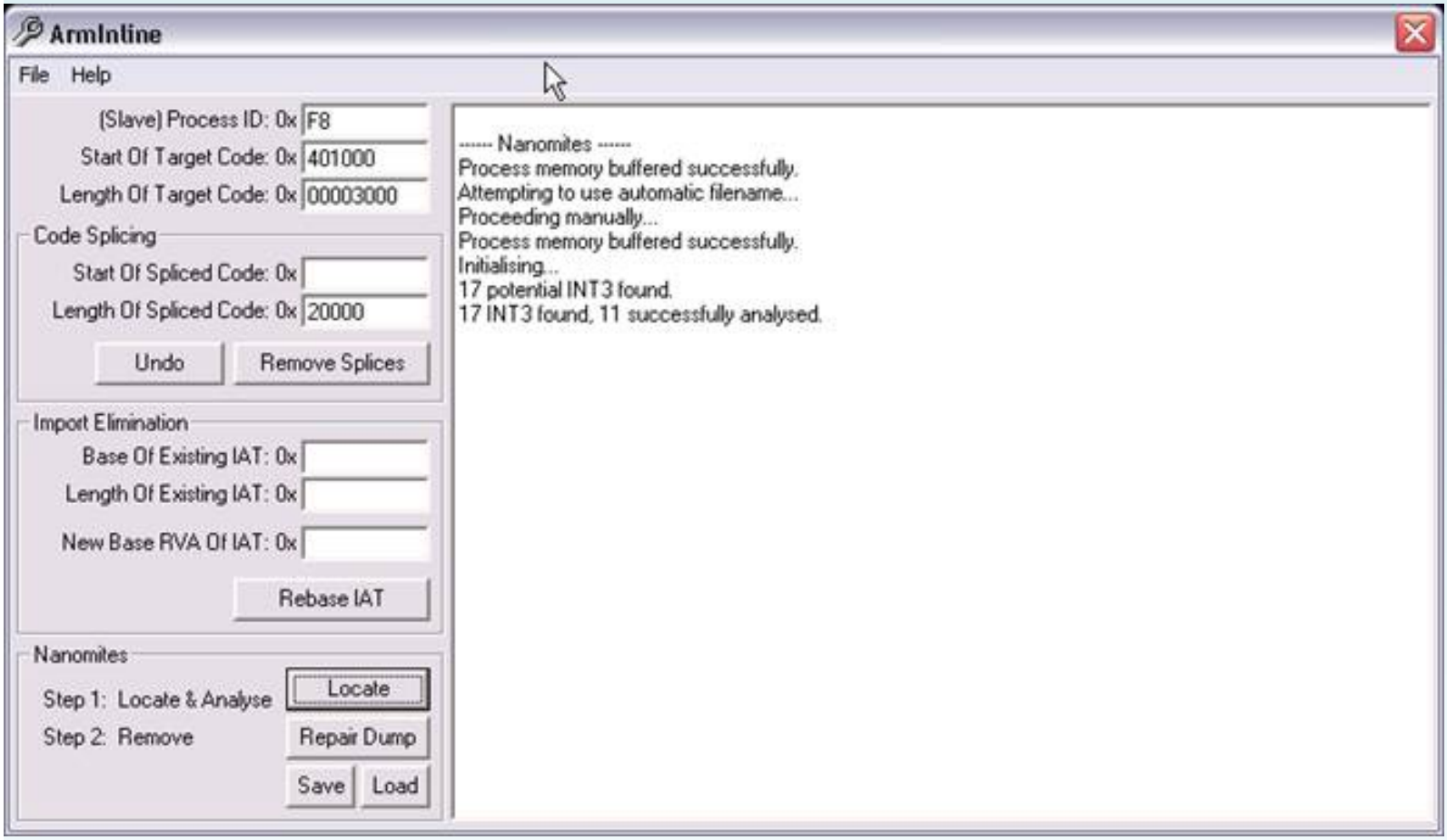
_Dien To ArmInline

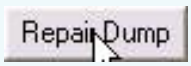


_ Click  and select File UnpackMe

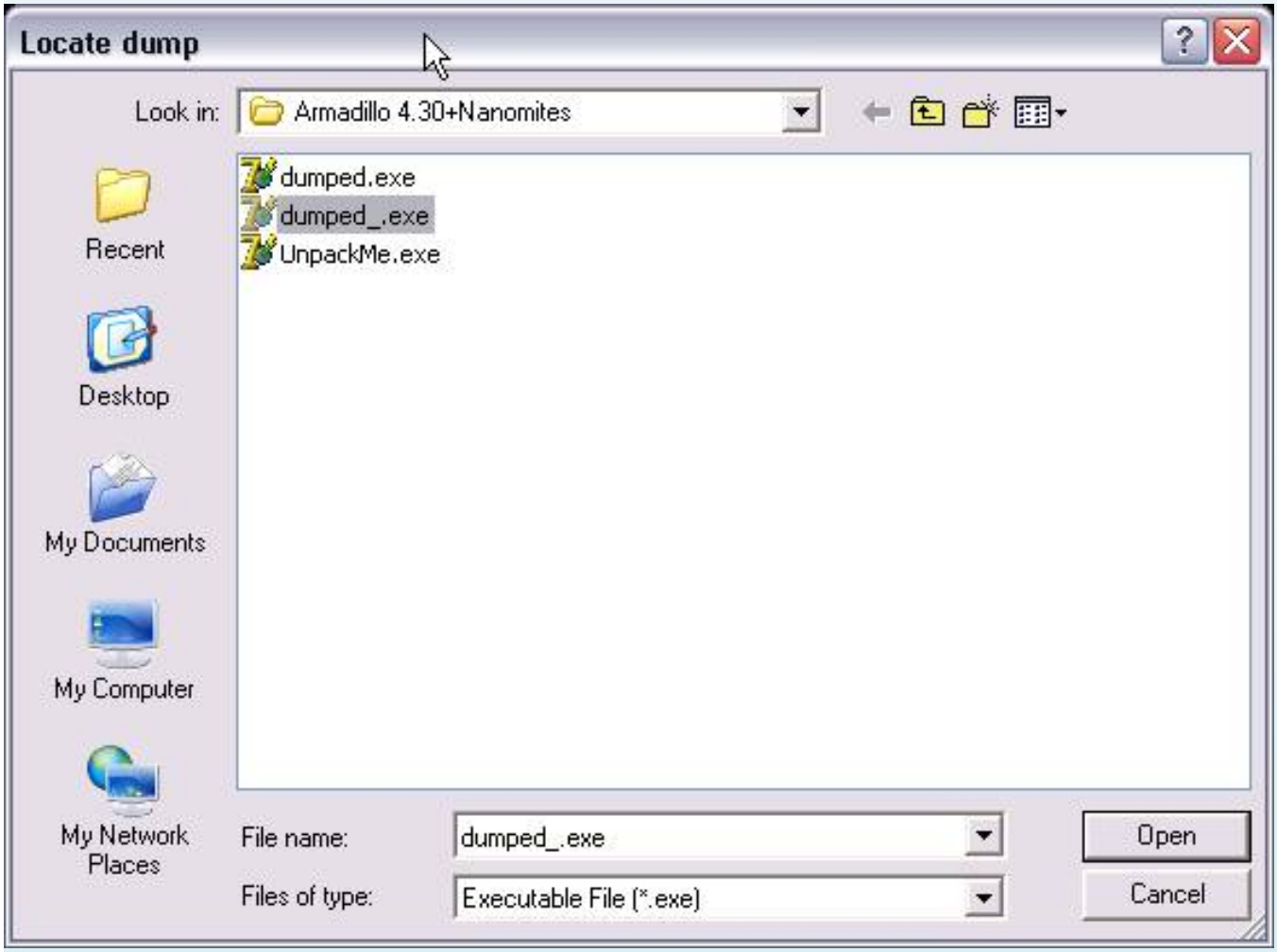


_ta found as follows:

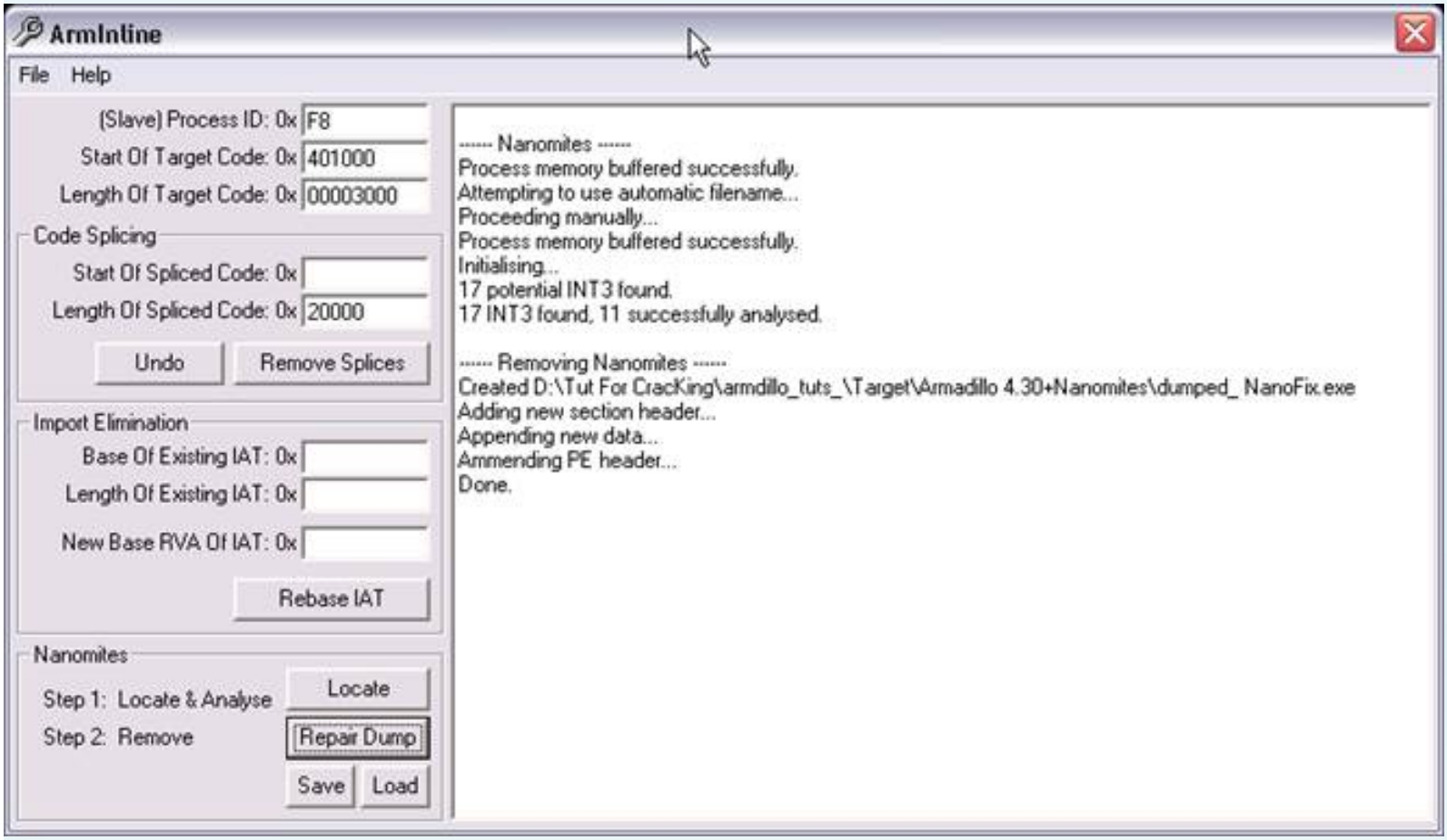


_Nhan More 

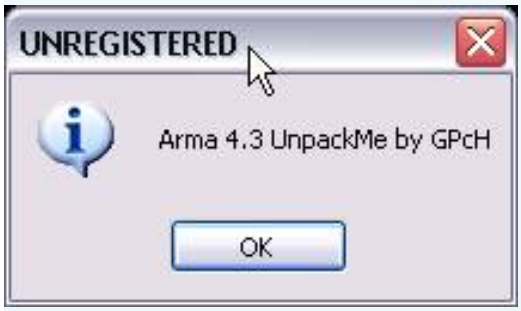
select "dumped_.exe"



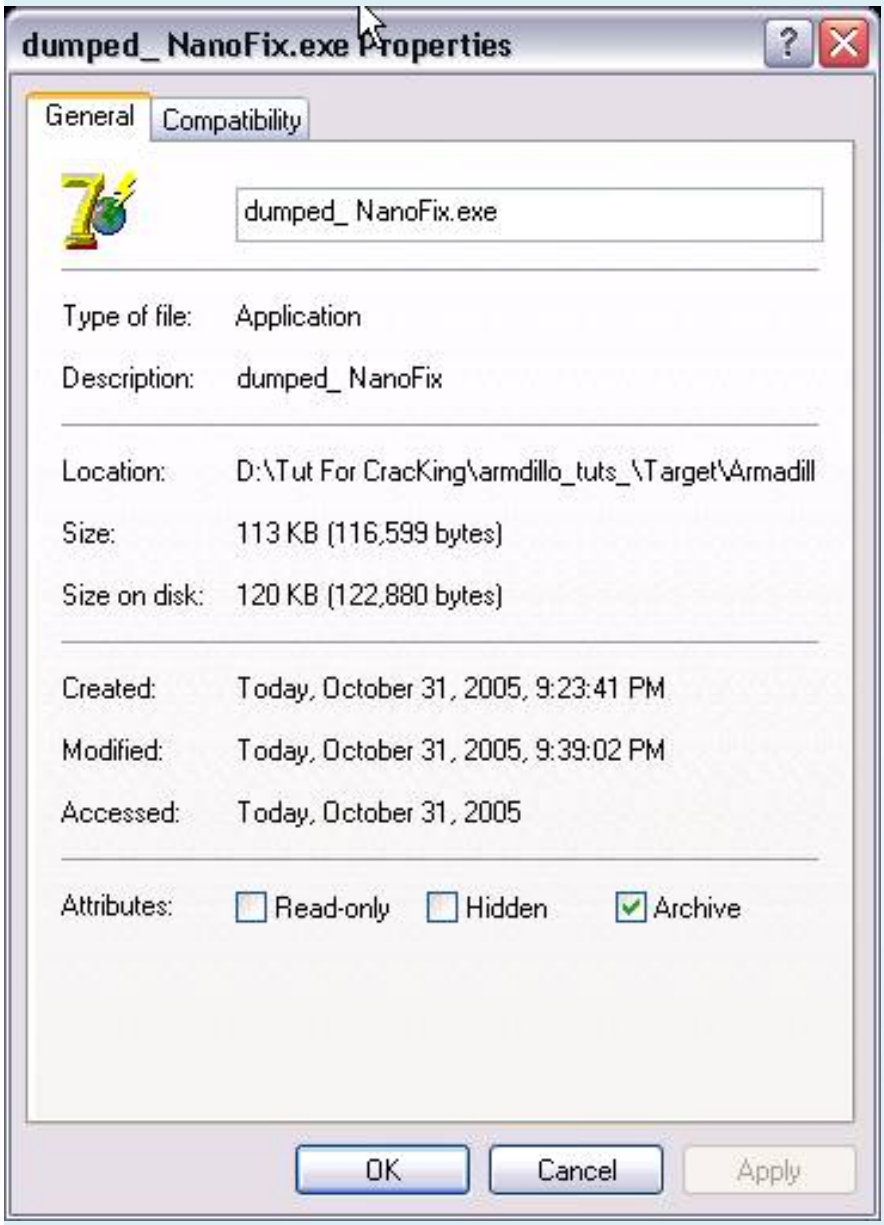
_ He he! Done gòi of Uncle ơi.



Chay "Dumped NanoFix.exe" see the stars



CFF _Dung Delete Section admit they have one new File Size 113 Kb



_Unpack Done !!!!!!!! Bye

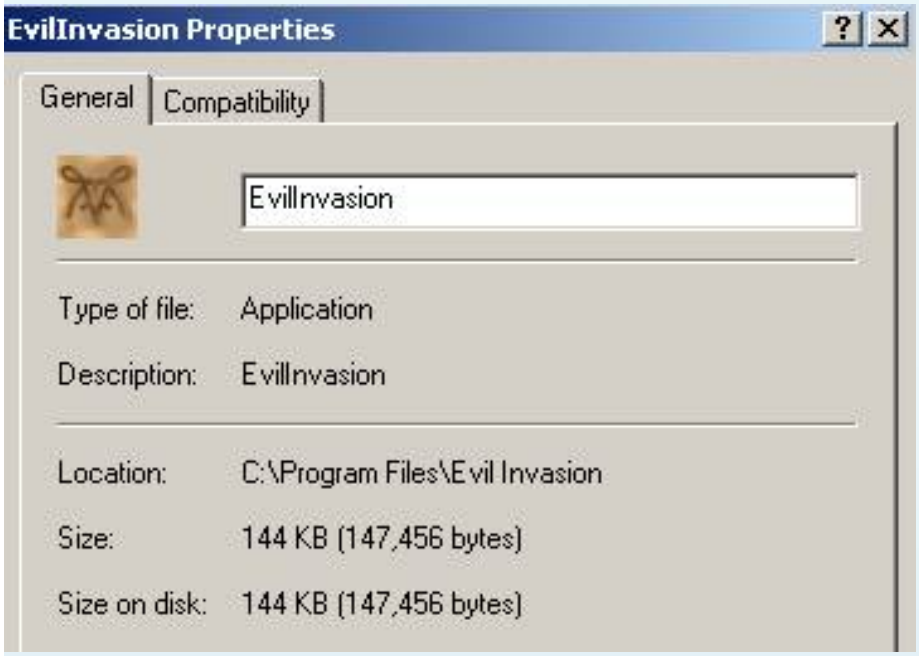
Written by Why Not Bar

Unwrapping_Reflexive_Arcade_EvilInvasion

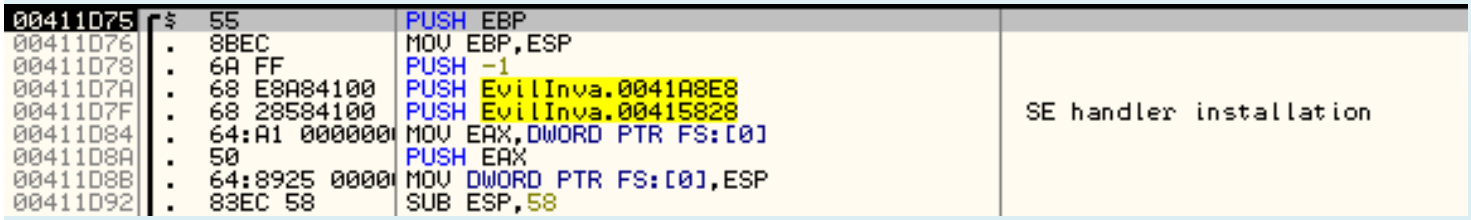
tlandn

Target: Evil Invasion
Download: http://www.reflexive.com/ (Use the search function to find the game)
Toolz: OllyDbg J
Then I have just read by tut HighEnergy about unwrap the game's site http://www.reflexive.com/. Look or should refer to write this tut for you.
Ok. We start. Install program. View the folder settings to see what's:

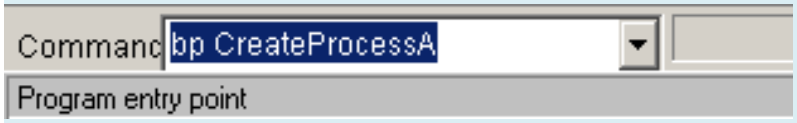
You see the size of the file EvilInvasion.exe.



Only 144 KB. We find this size too small for 1 game.
OK. Open OllyDbg load file EvilInvasion.exe.

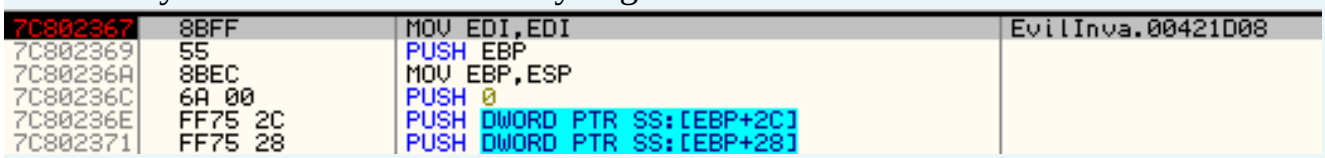


Set CreateProcessA BP:



Press F9. Info on the register:

Click "Play Game". We break in OllyDbg at:



Look Stack window:

```
0012F054  00401F8F  CALL to CreateProcessA from EvilInva.00401F89
0012F058  00421D2C  ModuleFileName = "EvilInvasion.RWG"
0012F05C  0012F08C  CommandLine = ""EvilInvasion.RWG" "
0012F060  00000000  pProcessSecurity = NULL
0012F064  00000000  pThreadSecurity = NULL
0012F068  00000000  InheritHandles = FALSE
0012F06C  00000004  CreationFlags = CREATE_SUSPENDED
0012F070  00000000  pEnvironment = NULL
0012F074  00421E3C  CurrentDir = "C:\Program Files\Evil Invasion"
0012F078  0012FC88  pStartupInfo = 0012FC88
0012F07C  00421D18  pProcessInfo = EvilInva.00421D18
0012F080  00421D2C  ASCII "EvilInvasion.RWG"
0012F084  00421D08  EvilInva.00421D08
```

You note their seats. The program will load the file into EvilInvasion.RWG. Press Alt-F9.

```
00401F7E  .  8D85 B8F3FFF  LEA EAX,[LOCAL.786]
00401F84  .  53            PUSH EBX                          pProcessSecurity
00401F85  .  50            PUSH EAX                          CommandLine
00401F86  .  FF75 08       PUSH [ARG.1]                      ModuleFileName
00401F89  .  FF15 64A1410  CALL DWORD PTR DS:[<&KERNEL32.CreatePro  CreateProcessA
00401F8F  .  FF77 18       PUSH DWORD PTR DS:[EDI+18]        ProcessId = E14
00401F92  .  53            PUSH EBX                          Inheritable
00401F93  .  68 FF0F1F00   PUSH 1F0FFF                       Access = PROCESS_ALL_AC
00401F98  .  FF15 70A1410  CALL DWORD PTR DS:[<&KERNEL32.OpenProce  OpenProcess
00401F9E  .  3BC3          CMP EAX,EBX
00401FA0  .  8945 FC       MOV [LOCAL.1],EAX
00401FA3  .v 0F84 B000000  JE EvilInva.00402059
```

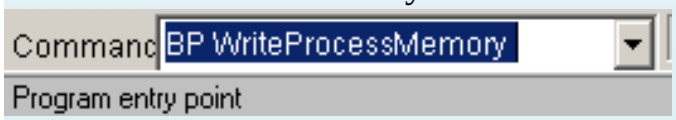
Pull down 1 billion, you see:

```
00401FC2  .  85C0          TEST EAX,EAX
00401FC4  .v 74 37         JE SHORT EvilInva.00401FFD
00401FC6  .  FFB7 2801000  PUSH DWORD PTR DS:[EDI+128]
00401FCC  .  8D8D B8FBFFF  LEA ECX,[LOCAL.274]
00401FD2  .  E8 84370000   CALL EvilInva.0040575B
00401FD7  .  391E          CMP DWORD PTR DS:[ESI],EBX
00401FD9  .  895D 08       MOV [ARG.1],EBX
00401FDC  .v 76 2C         JBE SHORT EvilInva.0040200A
00401FDE  >  8D8D B8FBFFF  LEA ECX,[LOCAL.274]
00401FE4  .  E8 89F1FFFF   CALL EvilInva.00401172
00401FE9  .  8B4E 08       MOV ECX,DWORD PTR DS:[ESI+8]
00401FEC  .  8B55 08       MOV EDX,[ARG.1]
00401FEF  .  03CA          ADD ECX,EDX
00401FF1  .  2801          SUB BYTE PTR DS:[ECX],AL
00401FF3  .  42            INC EDX
00401FF4  .  3B16          CMP EDX,DWORD PTR DS:[ESI]
00401FF6  .  8955 08       MOV [ARG.1],EDX
00401FF9  .^ 72 E3         JB SHORT EvilInva.00401FDE
00401FFB  .v EB 0D         JMP SHORT EvilInva.0040200A
00401FFD  >  68 74C44100   PUSH EvilInva.0041C474            ASCII "Could not Read encrypted EXE."
00402002  .  53            PUSH EBX
00402003  .  E8 22380000   CALL EvilInva.0040582A
00402008  .  59            POP ECX
00402009  .  59            POP ECX
0040200A  >  8D45 0C       LEA EAX,[ARG.2]
0040200D  .  895D 0C       MOV [ARG.2],EBX
00402010  .  50            PUSH EAX                          pBytesWritten
00402011  .  FF36          PUSH DWORD PTR DS:[ESI]           BytesToWrite
00402013  .  FF76 08       PUSH DWORD PTR DS:[ESI+8]         Buffer
00402016  .  FF76 04       PUSH DWORD PTR DS:[ESI+4]         Address
00402019  .  FF75 FC       PUSH [LOCAL.1]                    hProcess
0040201C  .  FF15 6CA1410  CALL DWORD PTR DS:[<&KERNEL32.WriteProc  WriteProcessMemory
```

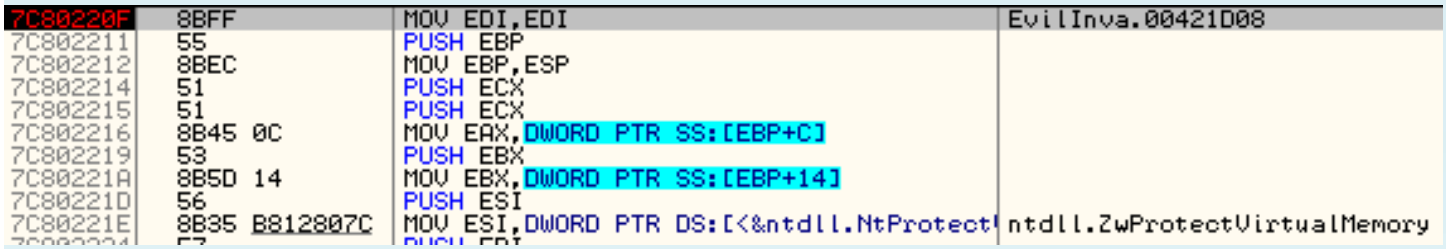
OK. Talking na conduct is this: file EvilInvasion.exe role as a loader, it displays notifications to register and decrypt files EvilInvasion.RWG. Done through it will write the byte code has a good memory and run areas. EvilInvasion.RWG file as an exe files have been encrypted.

So how to resolve how? Very simply, we will wait encrypted when it is finished copying the area code has been on a file that, rename the file extensions. Exe is finished.

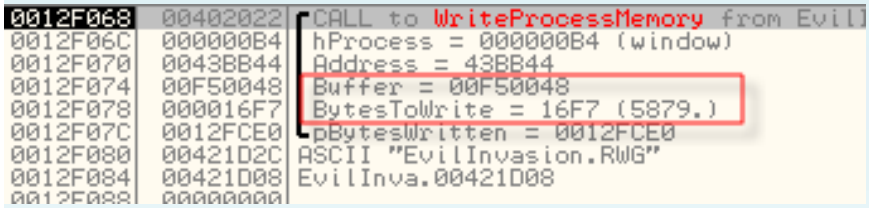
Press Ctrl-F2 to restart Olly. Set WriteProcessMemory BP:



Press F9. Notification window appear. Click "Play Game". We will stop here:

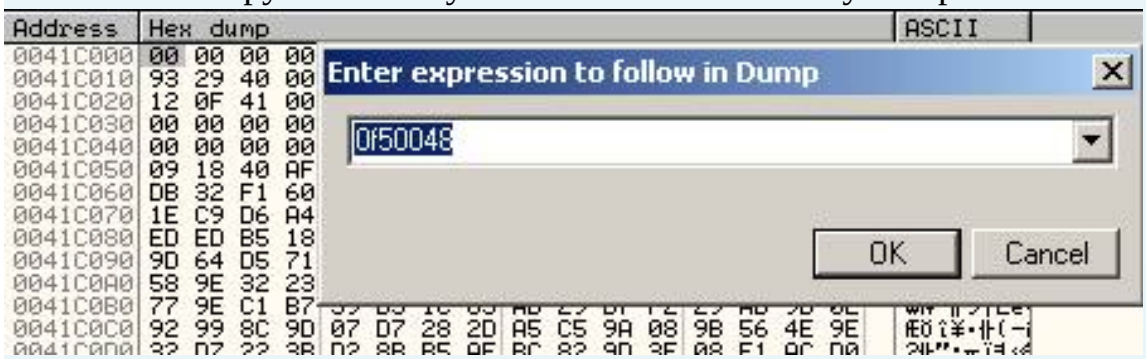


Stack window:

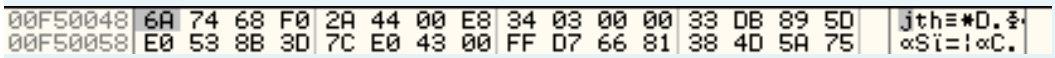


The attention you place on their image. Region byte is encrypted as 00F50048 (your computer may be different) and the length is 16F7.

OK. We will copy this area bytes. In the window of Olly dump. Press Ctrl-G. 00F50048 Enter:

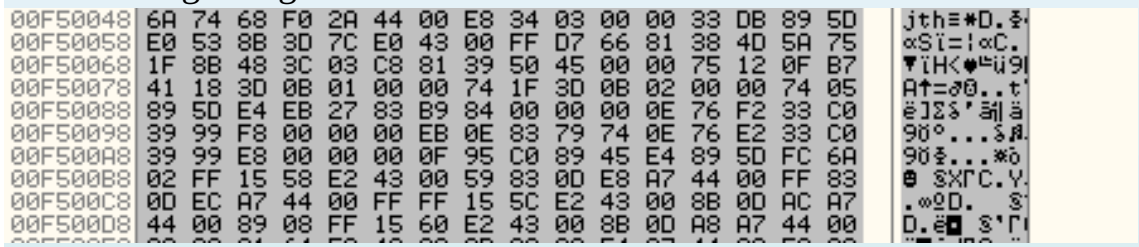


Click OK. We here:

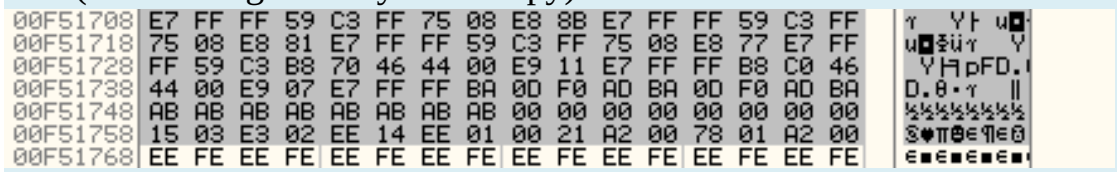


We will select areas bytes beginning 00F50048 extended to 0F5173F (00F50048 + 16F7 = 0F5173F).

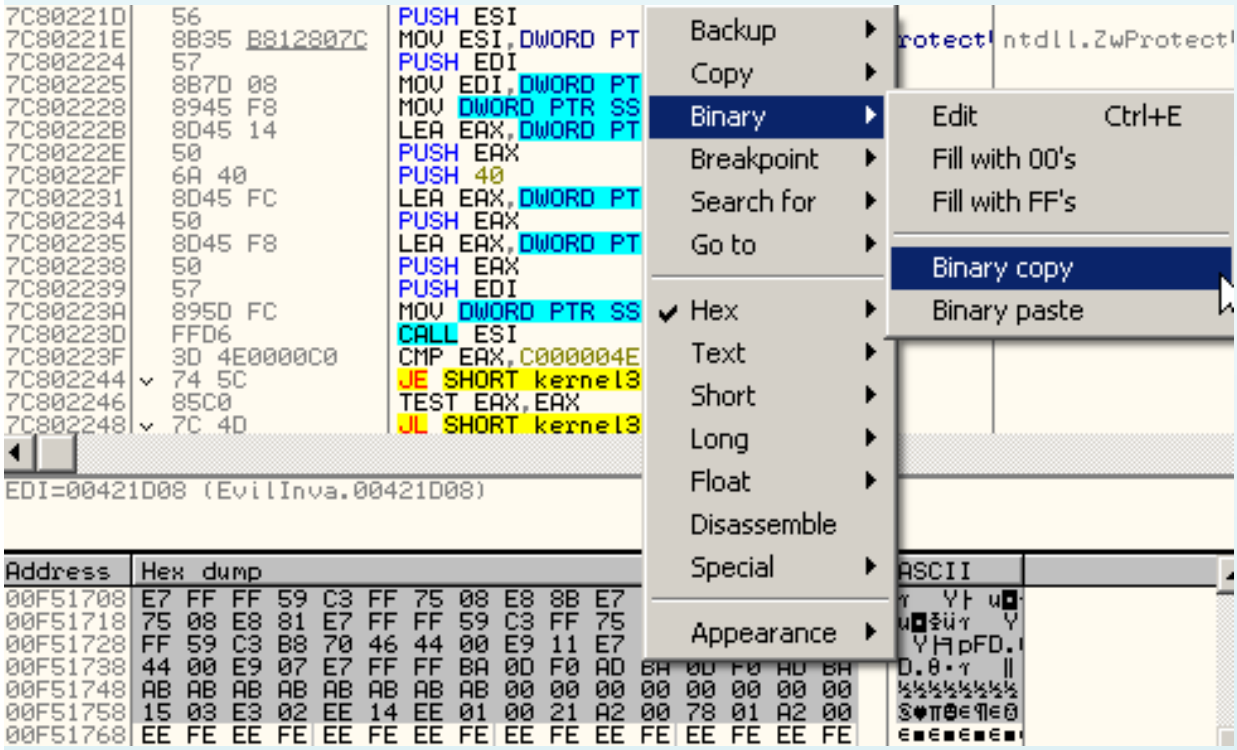
OK. The beginning:



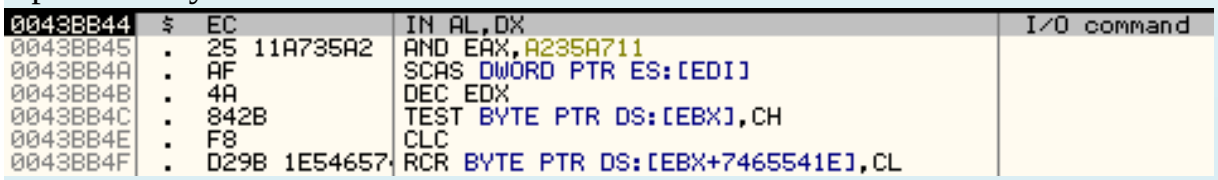
End (note: enough money nor a copy):



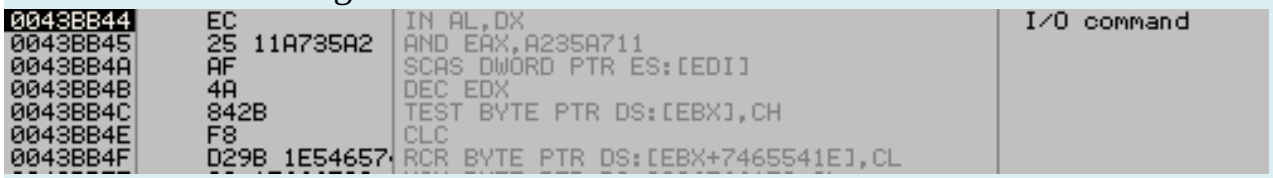
Click your mouse to select the image as:



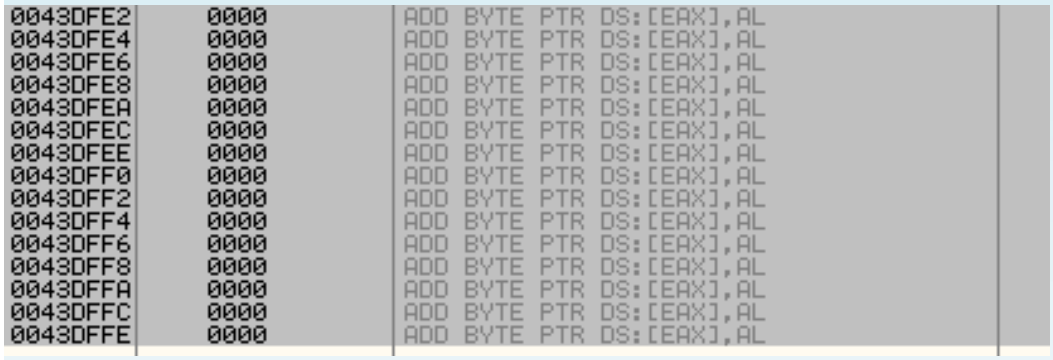
Open an Olly 2. Load file EvilInvasion.RWG:



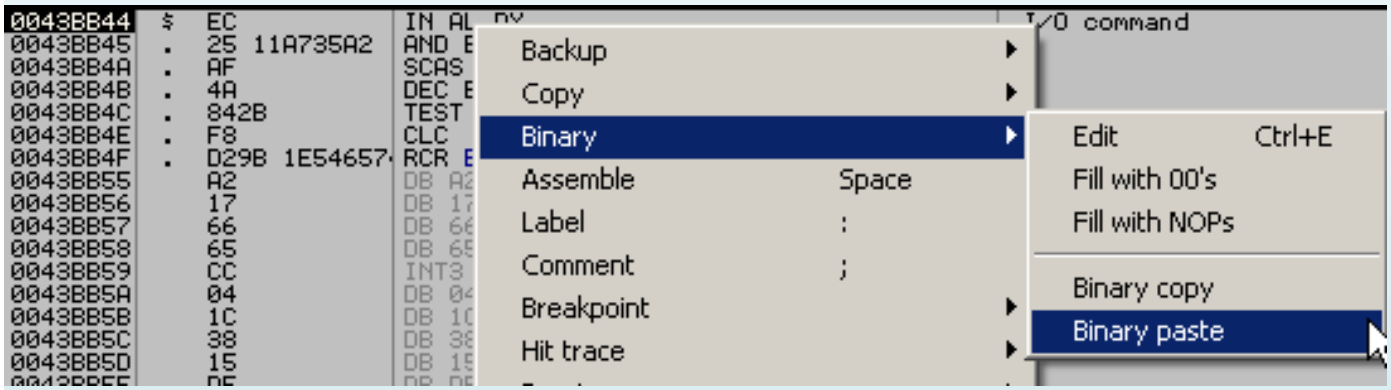
We will choose the region since the end 0043BB44 file. Start:



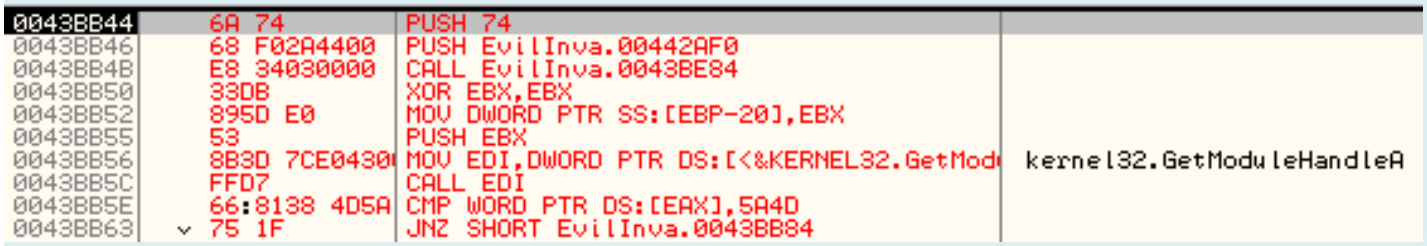
Finish:



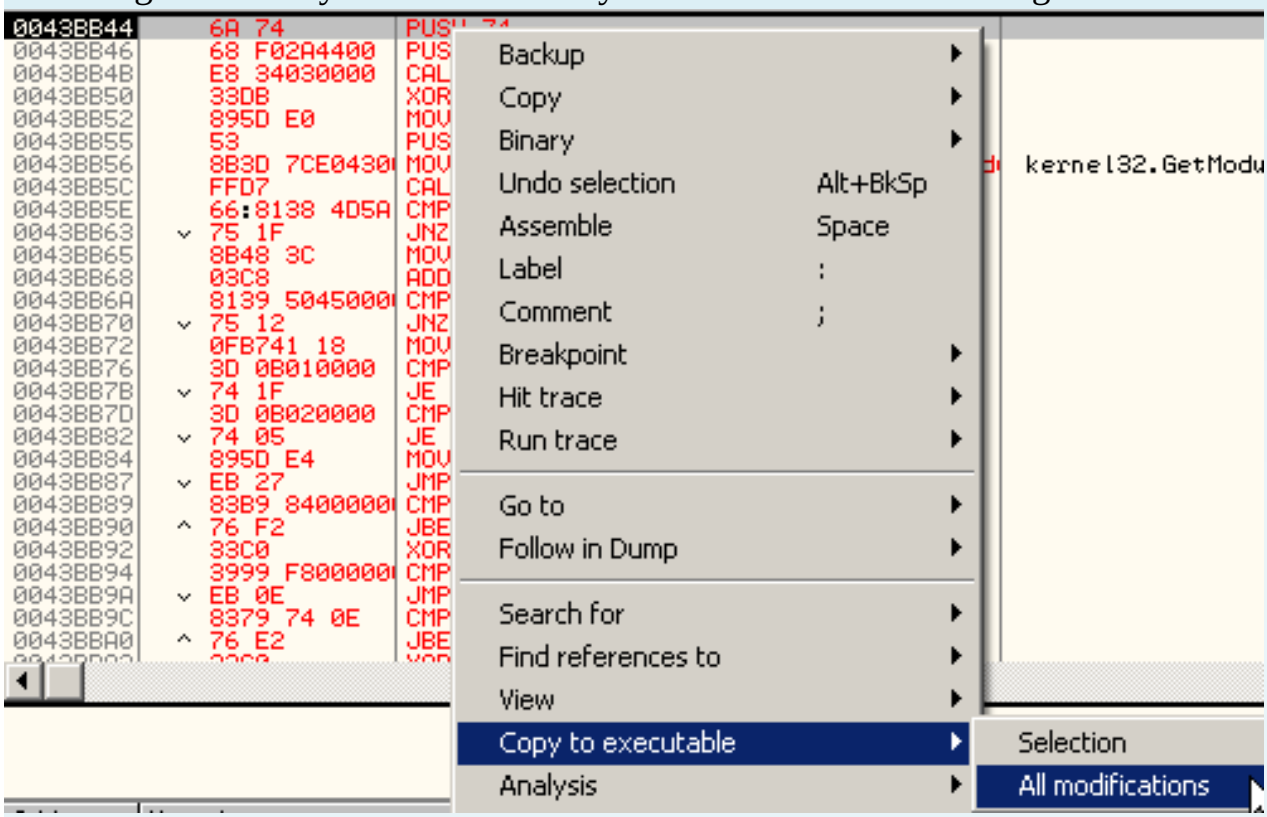
Click your mouse to select the image:



We are:

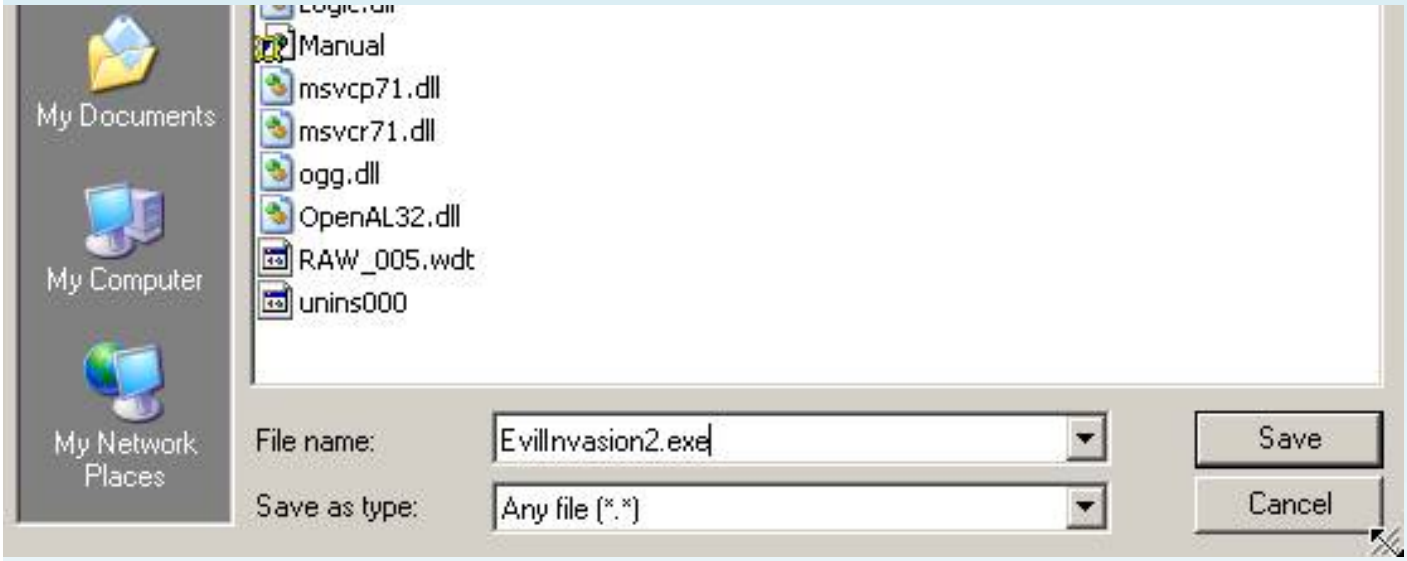


Breathing more easily and J . Click your mouse to select the image:



Report on the button click "Copy All". Click your mouse to select the image:

Name the file is EvilInvasion2.exe:

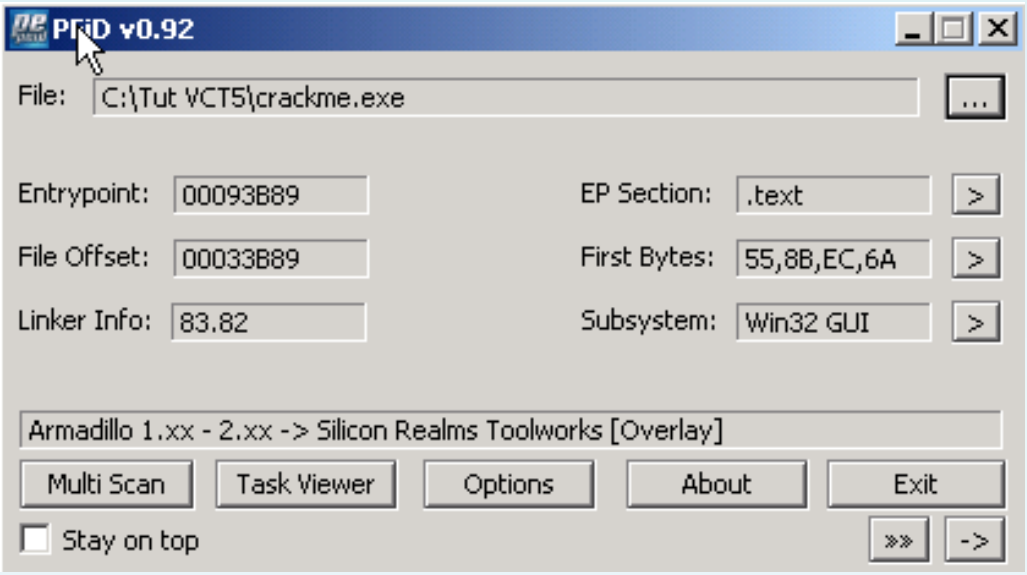


Test file EvilInvasion2.exe. Run the J

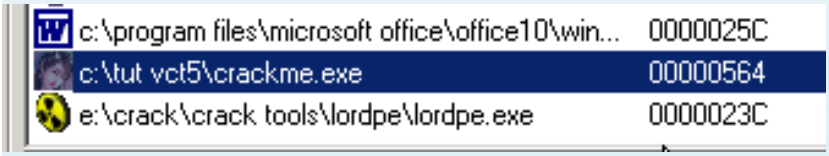
Have fun!
tlandn
Greetz: All VCT memberz, HighEnergy, and you ... J

ARMADILLO unpack 3.70a

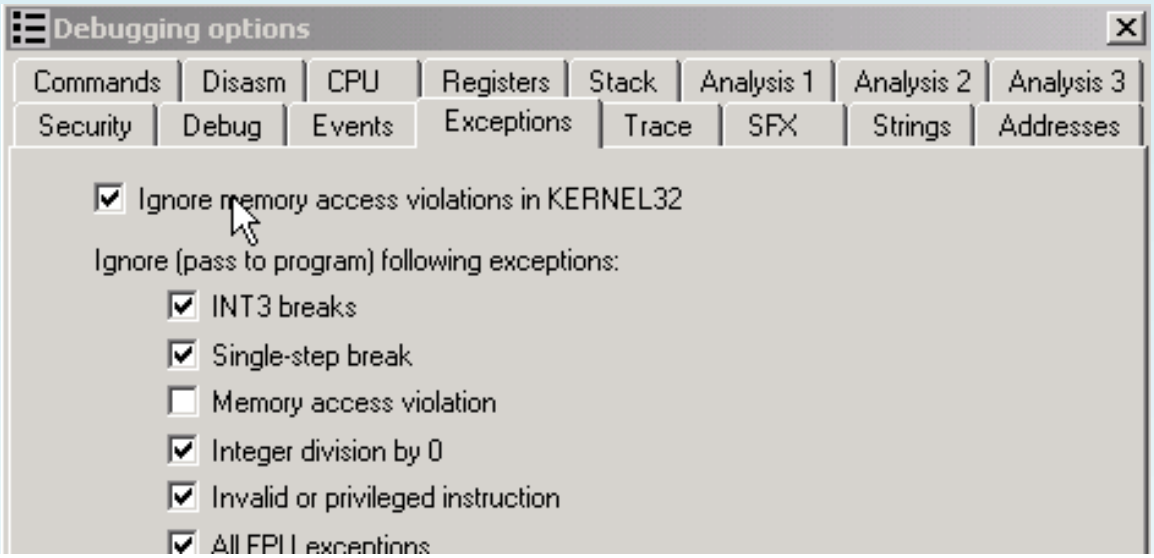
Target: VCT crackme # 5
Download: http://tothesky.us
Tut maker: tlandn
PEID first used to determine the pack with what?

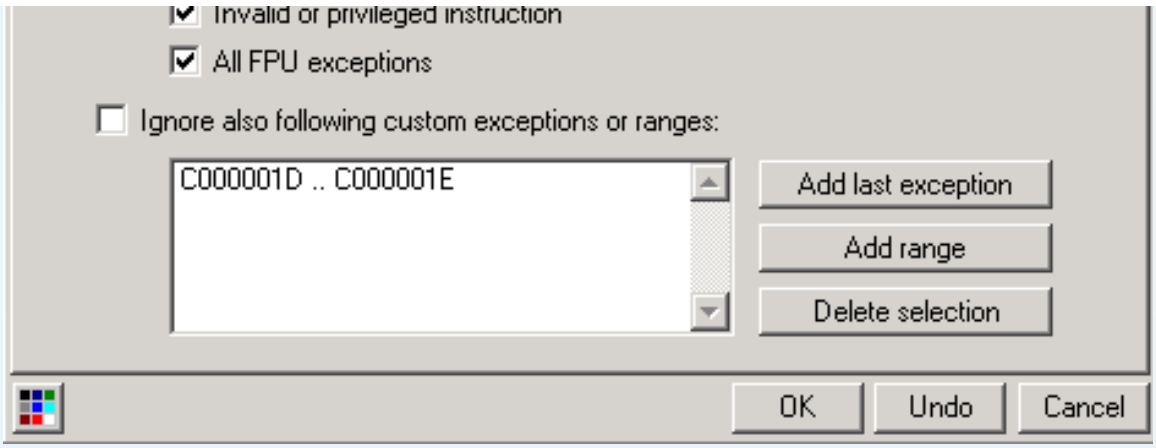


0. **Identify strategies to cope with the Armadillo:**
As in many Armadillo option allows choosing the type of protection many different so we must consider the file crackme.exe our protection like?
Run the file crackme.exe. Open LordPE we see a process crackme.exe

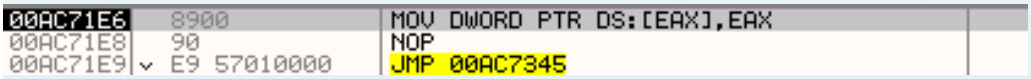


This signal is praiseworthy. Because it lets us know the program is not protected or CopyMemII Nanomites (this is very touching, the more tired).
We see the pack in the Armadillo. PEID But we know only the general like it. The problem is we want to know exactly which version Armadillo hacnho use.
I **find the exact version of the Armadillo:**
First refined setting for OllyDbg as follows:

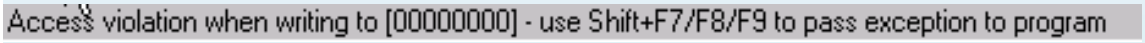




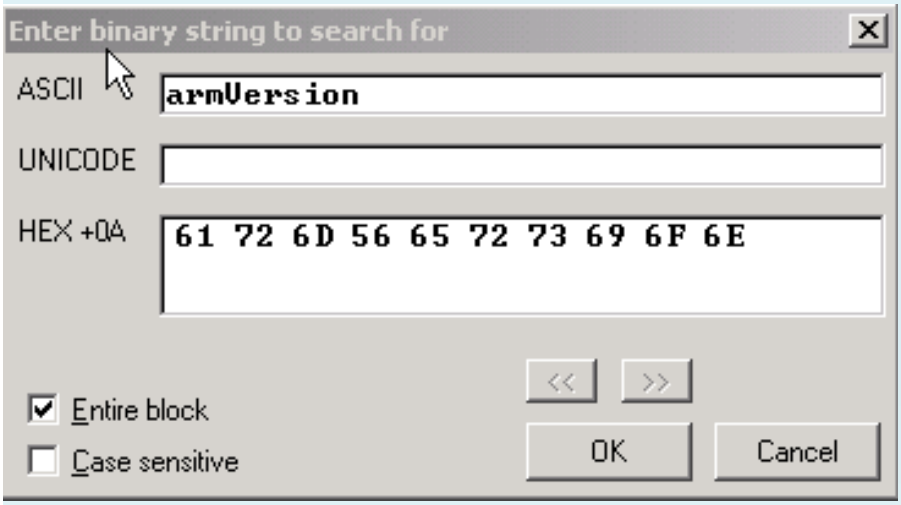
Then open crackme.exe. Press F9 (Run). The program will stop here.



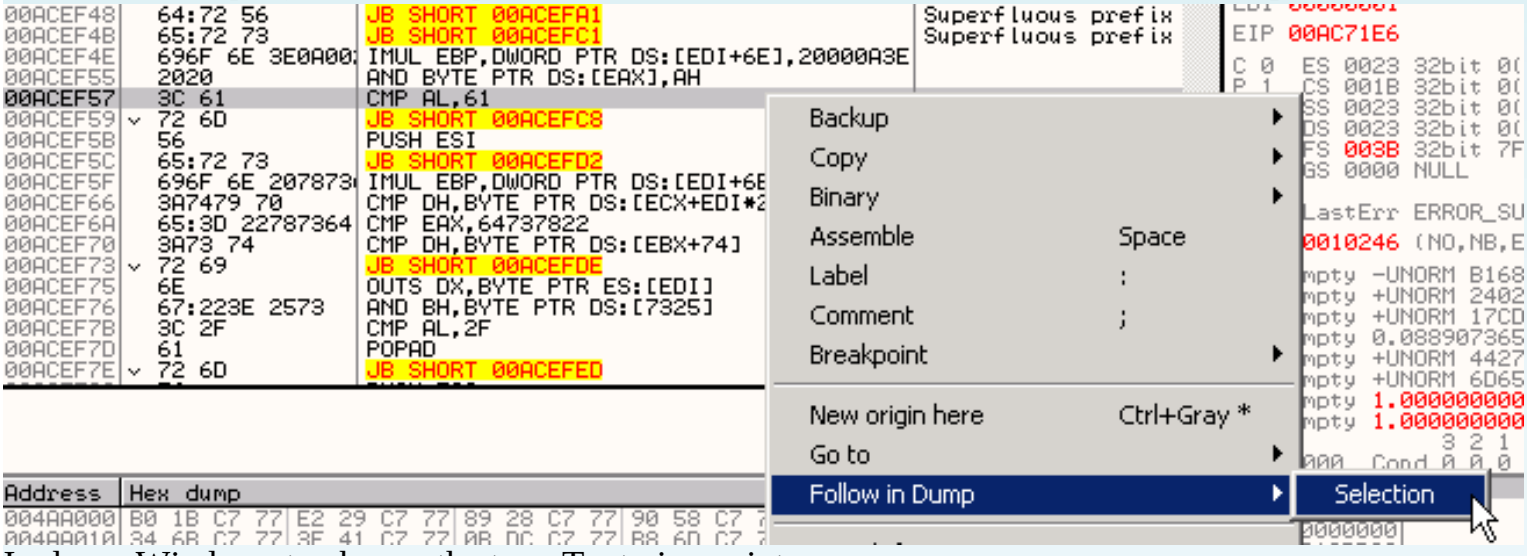
Error follows:



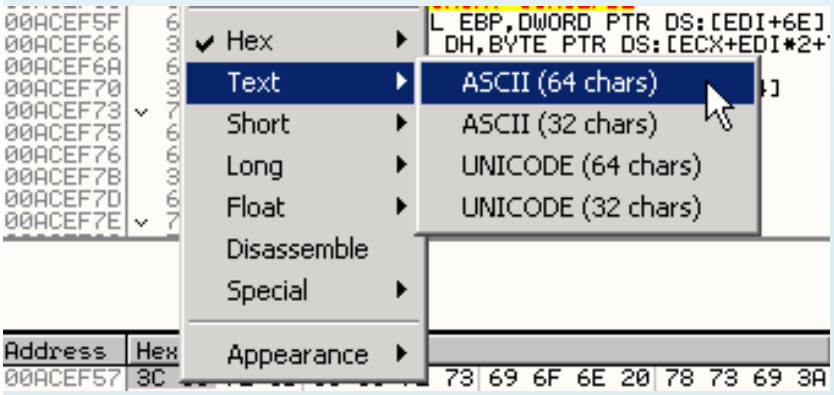
Press Ctrl-B. Enter as follows:



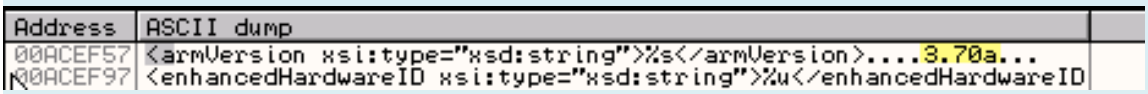
Click OK. The program will stop. Click your mouse button to select Print Follow dump -> Selection.



In dump Windows to change the type Text viewpoint.



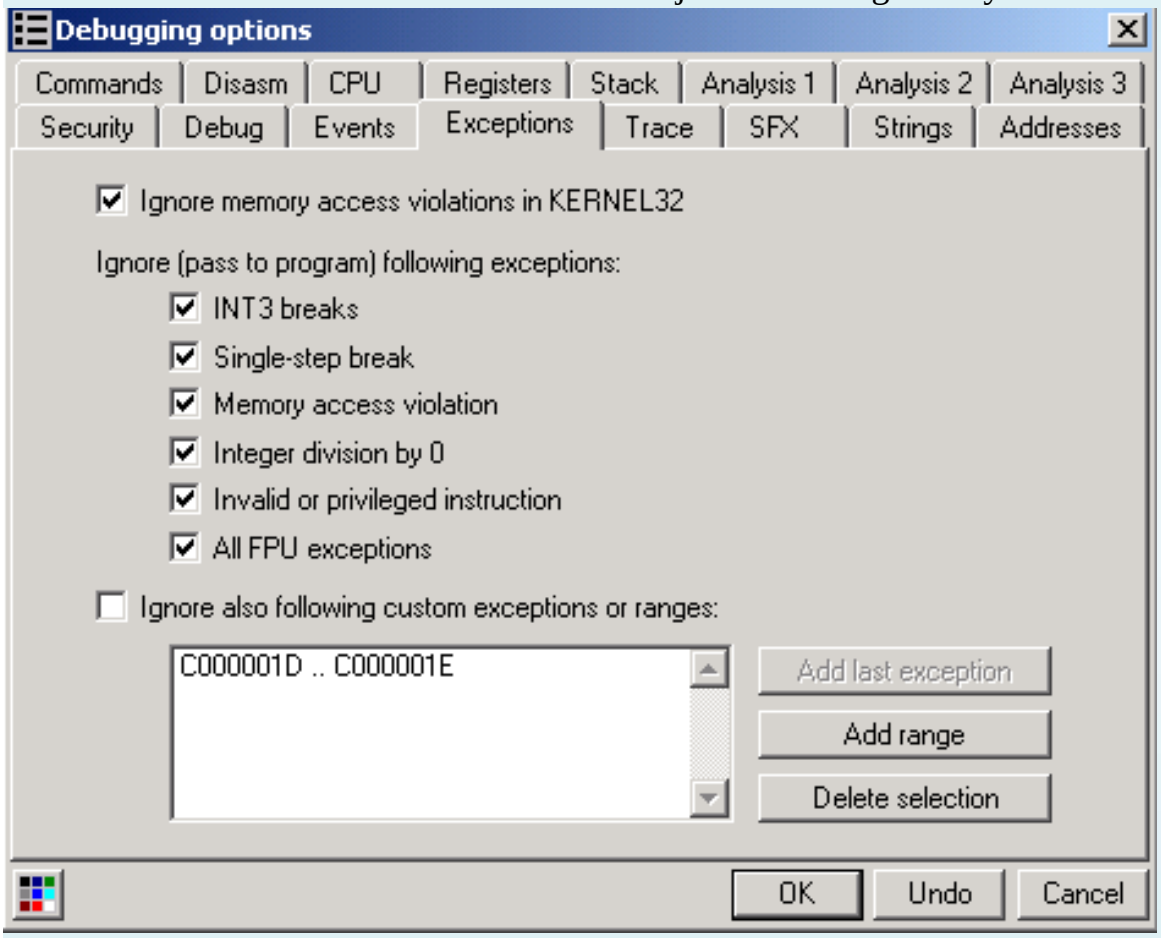
We found as follows:



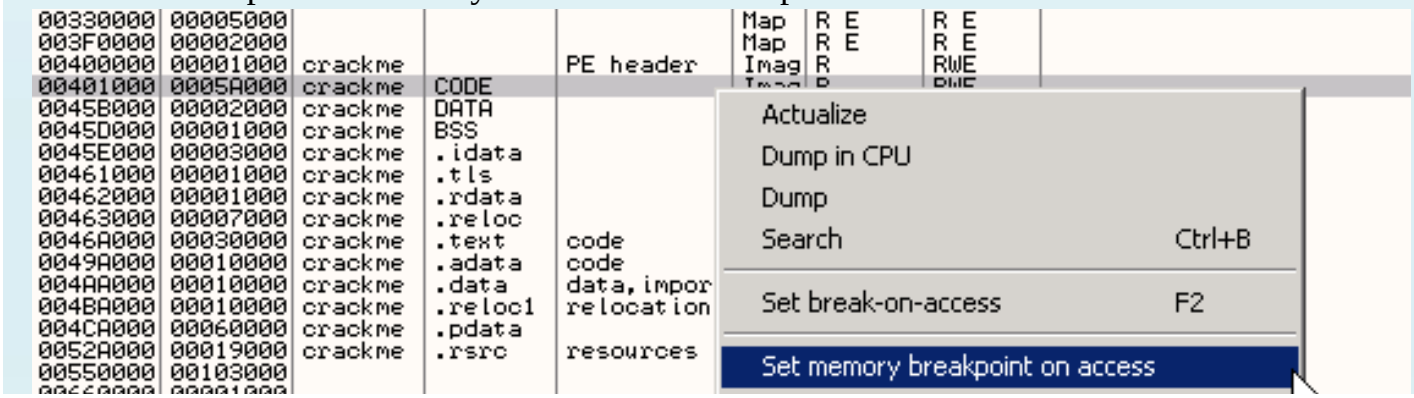
Note seats are yellow J We see that version 3.70a J

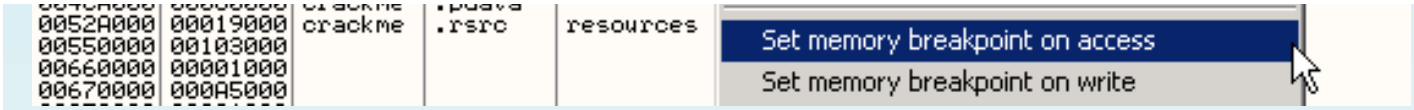
II. **OEP Search:**

Press Ctrl-F2 to load the file crackme.exe. Adjust the setting in Olly as follows:

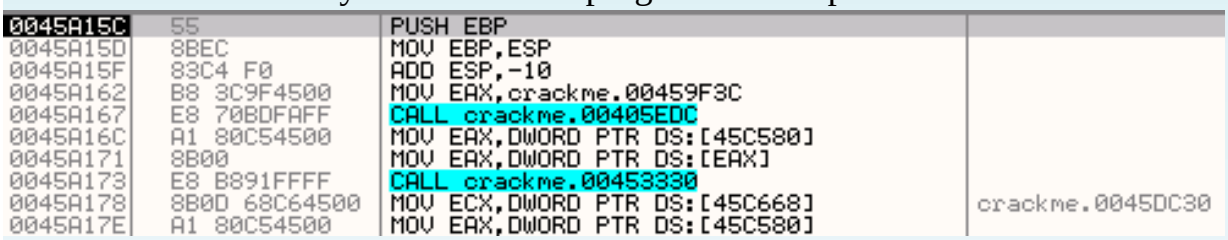


Press Alt-M to open the Memory Window. Set breakpoint in the section on access code.





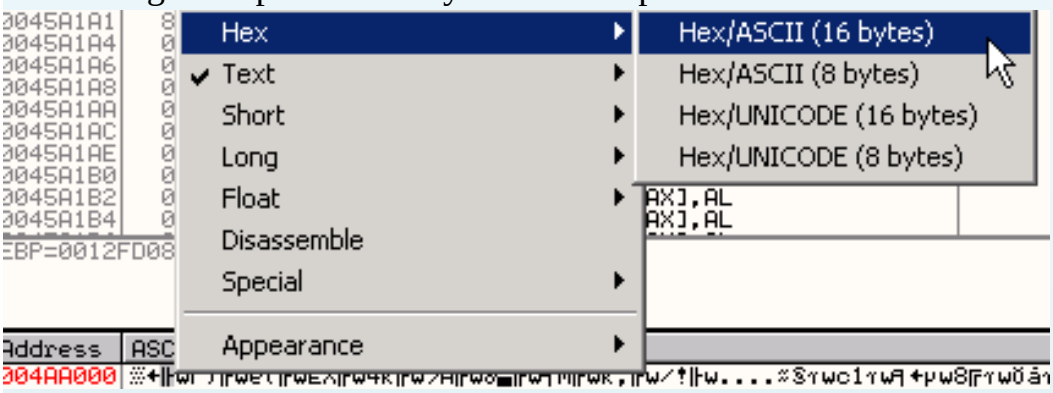
Close Window Memory. Press F9. The program will stop at 0045A15C.



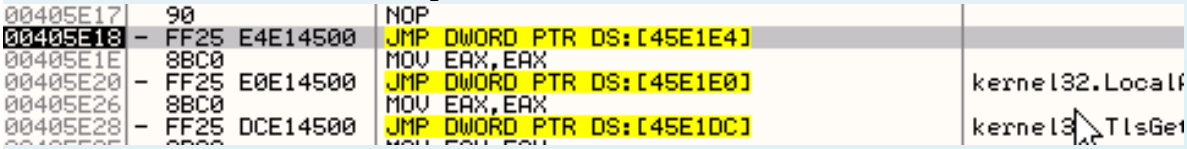
So: OEP = 0045A15C.

III. **RVA Search Start and End RVA:**

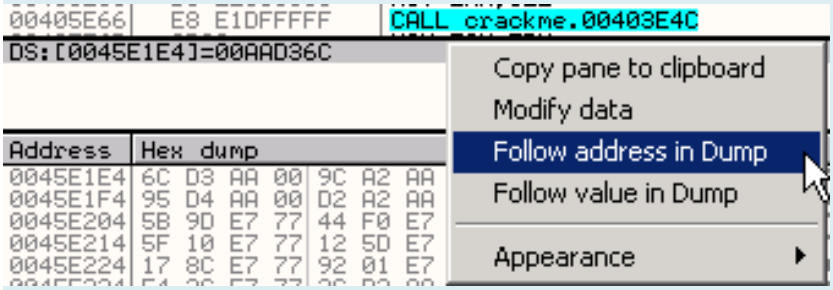
In exchange dump Window style Hex viewpoint.



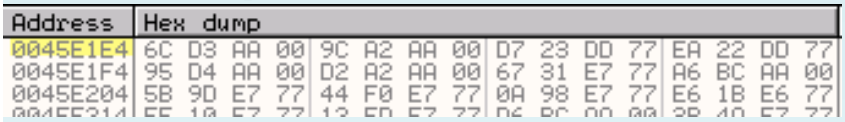
At OEP trace with F7 to this place



We see 45E1E4. In the window a little click to select Address Follow in dump.

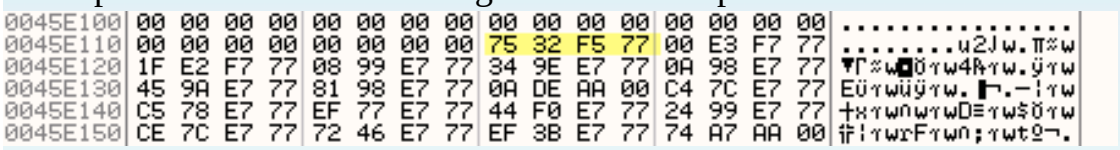


In Window dump we found as follows:



Around which we have seen a lot 77. We will find the starting point and end of the RVA.

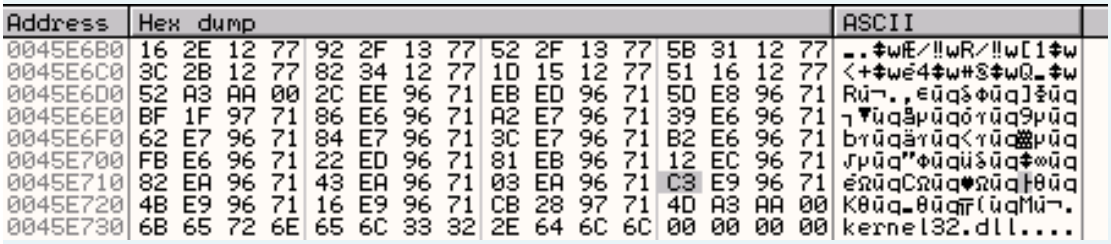
Roll up the window to see the signs of the 77 stops. We are.



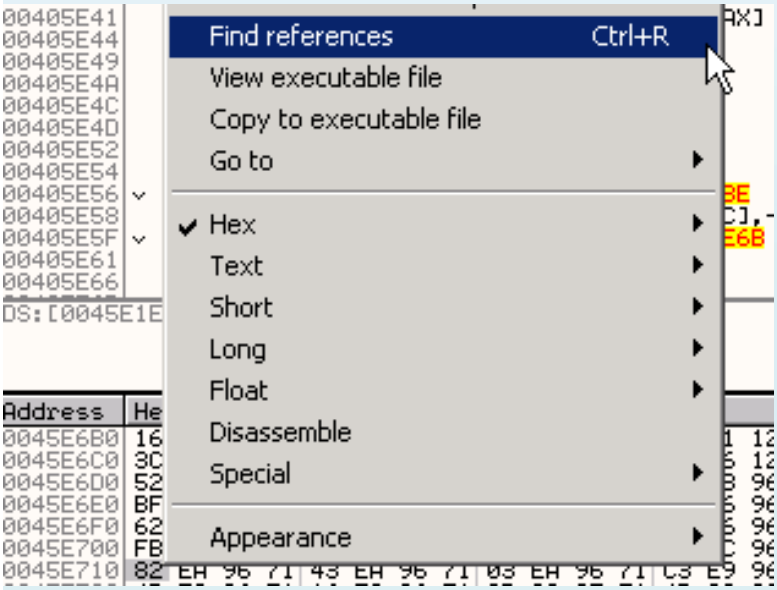
The attention you give me a bowl of gold starting point RVA address is 45E118.

Start RVA = 45E118

Now points to finish RVA. Scroll down the window dump also see signs of the 77 stops. We are.

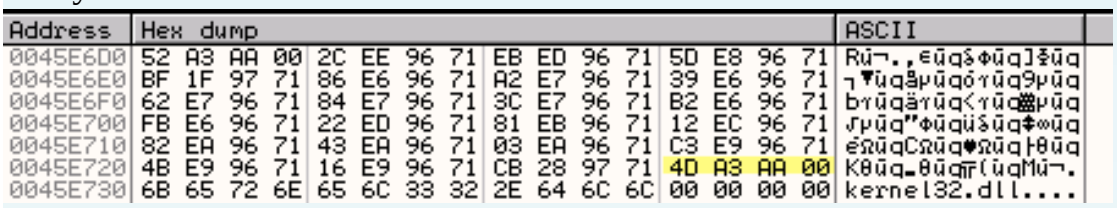


Now there is a problem we appear to see the number 71. For No. 71 which belonged RVA not we do the following: Choose an address that contains the number 71. Here I choose 45E710. Click the button to select Find References



A window appear

We see here a function of ImageList_GetBkColor COMCTL32.DLL. So this is good value -> Select always 71.



Note of gold was ended by RVA.

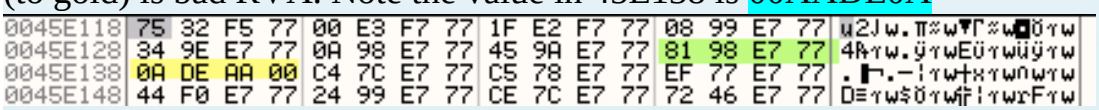
End = 45E72C RVA

Length = RVA End - Start RVA = 45E72C - 45E118 = 614 (hex)

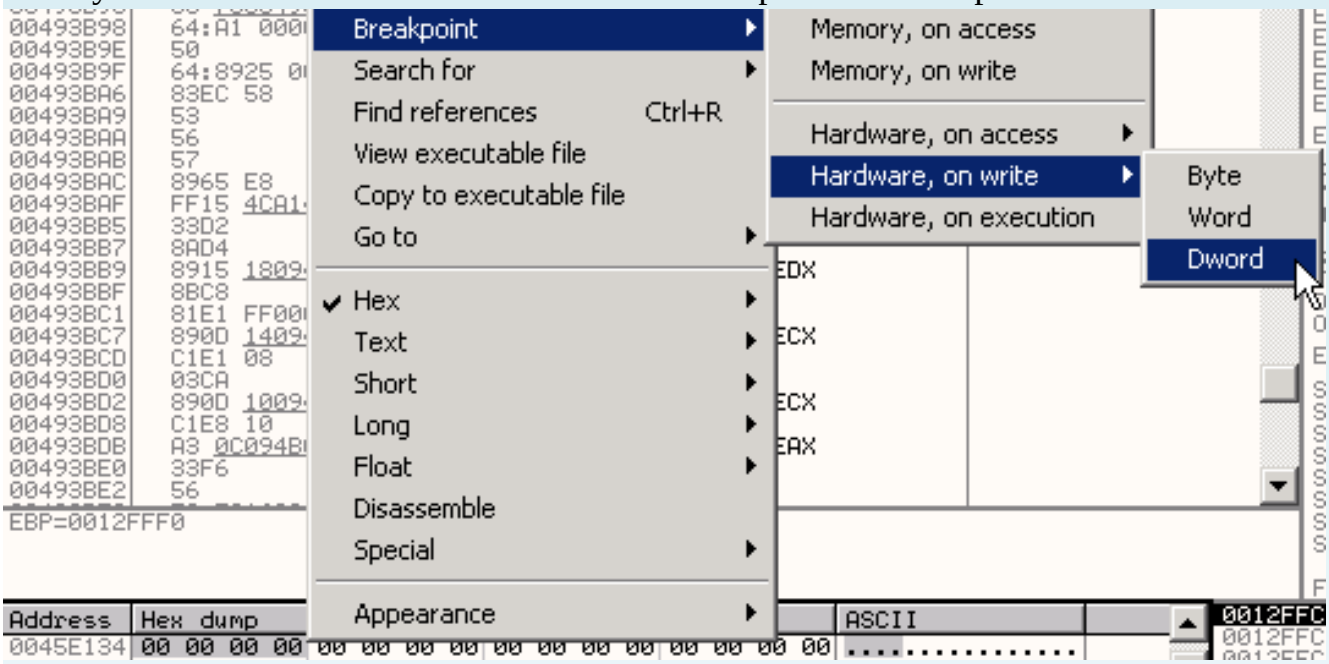
IV. **Find Magic Jump:**

So Magic Jump ear is what? Speaking conduct na Magic Jump is set to decide that Armadillo will damage our IAT table or not. We will fix it so that it does not damage our table IAT.

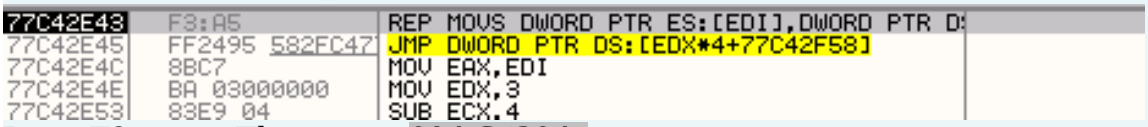
What steps will be like? First dump in Windows press Ctrl-G. Enter the address begins by RVA: 45E118. From here one doubt them down for a billion bad IAT (which does not contain seats 77). We see 45E138 (to gold) is bad RVA. Note the value in 45E138 is 00AADE0A



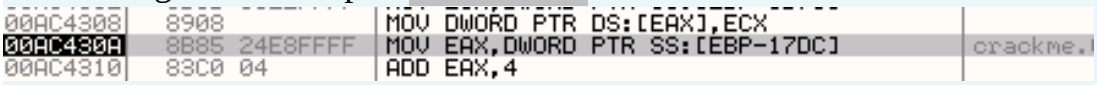
We will get a first 45E138 address is 45E134 (to green).
Press Ctrl-F2 to open the file crackme.exe. In dump Windows press Ctrl-G. Enter 45E134. Select 4 bytes.
Click your mouse button to set the Hardware Breakpoint as in the picture.



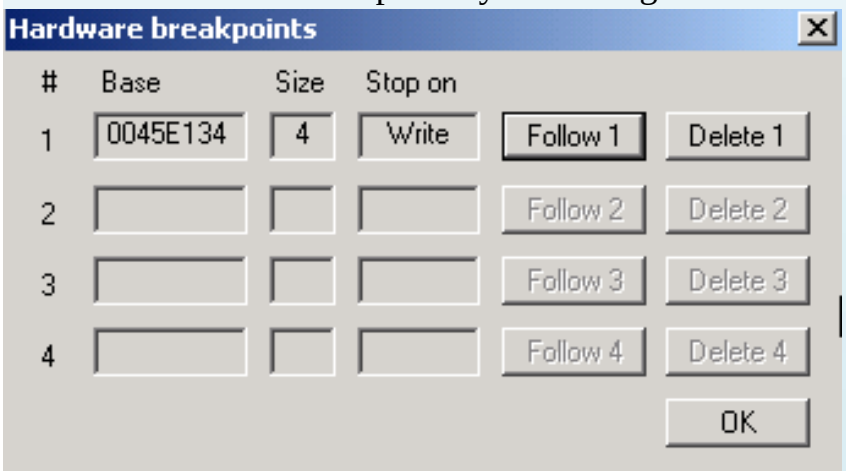
Press F9. Program stops here.



Press F9 again. The stop in 00AC430A.



In a line we see the value of ECX is to IAT.
Remove Hardware Breakpoint by the Debug menu -> Hardware Breakpoints



Click Delete to delete 1 Hardware Breakpoints. Click OK.
We will trace to find the Magic Jump. Trace the F8. You note that JE, JNZ. You should write a paper with JE, JNZ that it does not jump or dance.
00AC4059 JE 00AC431E not jump
00AC4080 JNZ SHORT 00AC40C6 Jumping
00AC40D4 JNZ 00AC4164 Jumping
00AC408E JE SHORT 00AC4201 not jump
00AC41B7 JE SHORT 00AC4201 not jump

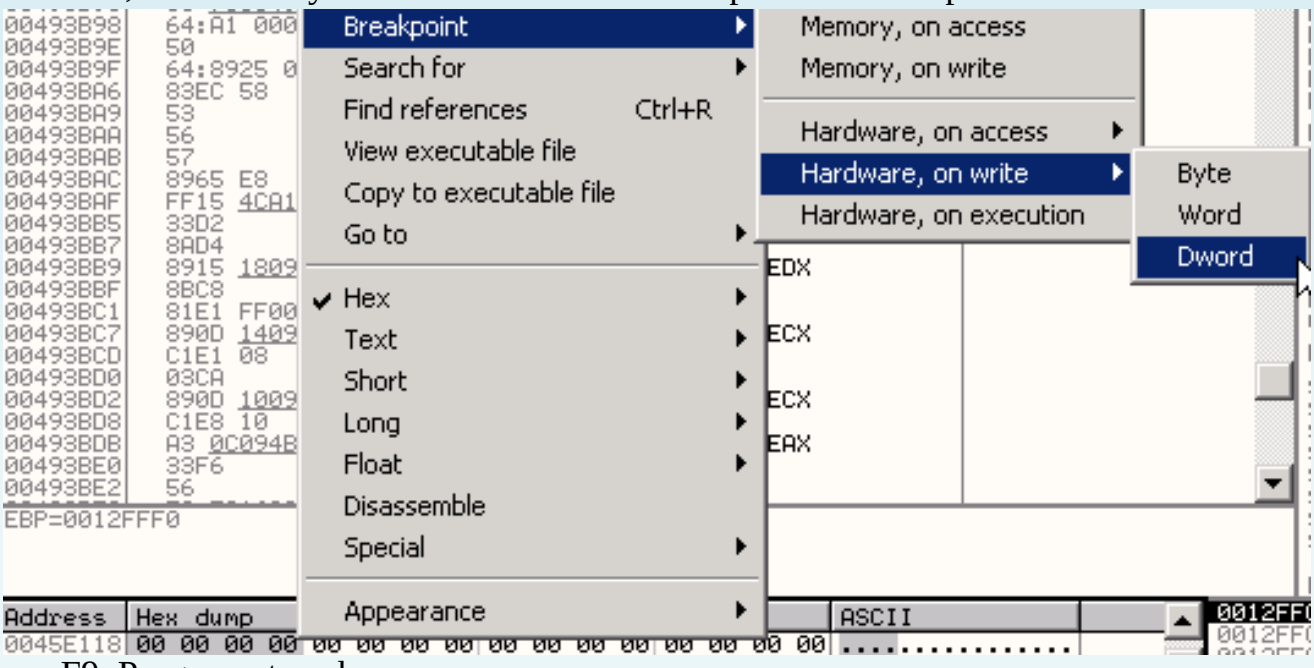
00AC41EC JNZ SHORT 00AC41FF Jumping
Here we will fall into the loop. Set Breakpoint at 00AC4201 and press F9 to exit the loop. We will in 00AC4201.

```
00AC41EA   85C0            TEST EAX,EAX
00AC41EC v 75 11           JNZ SHORT 00AC41FF
00AC41EE   8B85 7CE2FFFF   MOV EAX,DWORD PTR SS:[EBP-1D84]
00AC41F4   8B40 08         MOV EAX,DWORD PTR DS:[EAX+8]
00AC41F7   8985 88E2FFFF   MOV DWORD PTR SS:[EBP-1D78],EAX
00AC41FD v EB 02           JMP SHORT 00AC4201
00AC41FF ^ EB 9D           JMP SHORT 00AC419E
00AC4201   83BD 88E2FFFF   CMP DWORD PTR SS:[EBP-1D78],0
00AC4208 v 75 3F           JNZ SHORT 00AC4249
```

Continue to trace F8 and more notes.
00AC4208 JNZ SHORT 00AC4249 NHAY
00AC4250 JNZ 00AC42EE NHAY
Trace 00AC430A to stop it. Start from here to trace the F8 (no need to write paper) and compare the orders jumped to the record we have seen in the changes do not. Here I record for easy tracking.
00AC4059 JE 00AC431E not jump
00AC4080 JNZ SHORT 00AC40C6 Jumping
00AC40D4 JNZ 00AC4164 Jumping
00AC408E JE SHORT 00AC4201 not jump
00AC41B7 JE SHORT 00AC4201 not jump
00AC41EC JNZ SHORT 00AC41FF Jumping
Also set breakpoint at 00AC4201 and press F9 to exit the loop. To trace
00AC4208 JNZ SHORT 00AC4249 unwinking >>>>>> Note: This on the other.
So is Magic Jump 00AC4208. We will correct
00AC4208 JNZ SHORT 00AC4249
to
00AC4208 NOP

V. **Fix Magic Jump, dump and IAT Fix:**

Press Ctrl-F2 to reboot crackme.exe. In dump Windows press Ctrl-G. Enter the address start RVA: 0045E118, marked 4 bytes and set Hardware Breakpoint as in the picture



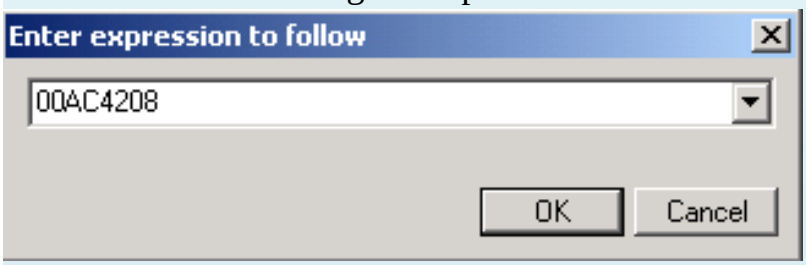
Press F9. Program stops here.

```
77C42E43    F3:A5           REP MOVS DWORD PTR ES:[EDI],DWORD PTR DS
77C42E45    FF2495 582FC47  JMP DWORD PTR DS:[EDX*4+77C42F58]
77C42E4C    8BC7            MOV EAX,EDI
```

F9 again stop here.

```
00AC430A    8B85 24E8FFFF   MOV EAX,DWORD PTR SS:[EBP-17DC]      crackme.
00AC4310    83C0 04         ADD EAX,4
00AC4313    8985 24E8FFFF   MOV DWORD PTR SS:[EBP-17DC],EAX
00AC4319  ^ E9 36FDFFFF     JMP 00AC4054
```

To this we will edit Magic Jump. Press Ctrl-G. Enter the address Magic Jump.



Click OK. Edit 00AC4208 to NOP submitted. Note 2 bytes to do.

```
00AC41FD  v EB 02           JMP SHORT 00AC4201
00AC41FF  ^ EB 9D           JMP SHORT 00AC419E
00AC4201    83BD 88E2FFFF   CMP DWORD PTR SS:[EBP-1D78],0
00AC4208    90              NOP
00AC4209    90              NOP
00AC420A    0FB785 8CE2FFF  MOVZX EAX,WORD PTR SS:[EBP-1D74]
```

Press F9 and the crash? ;)

```
00AC3728    1890 6D7725CB   SBB BYTE PTR DS:[EAX+CB25776D],DL
00AC372E  ^ 75 9F           JNZ SHORT 00AC36CF
00AC3730    FD              STD
00AC3731    68 74C26BF3     PUSH F36BC274
00AC3736    8EB8 0E387016   MOV SEG?,WORD PTR DS:[EAX+1670380E]      Undefin
```

We expect the program to run normally with IAT is intact. But the crash was. So how to fix IAT and dump? Speaking as the song of Musicians Tuan Khanh is: Small?

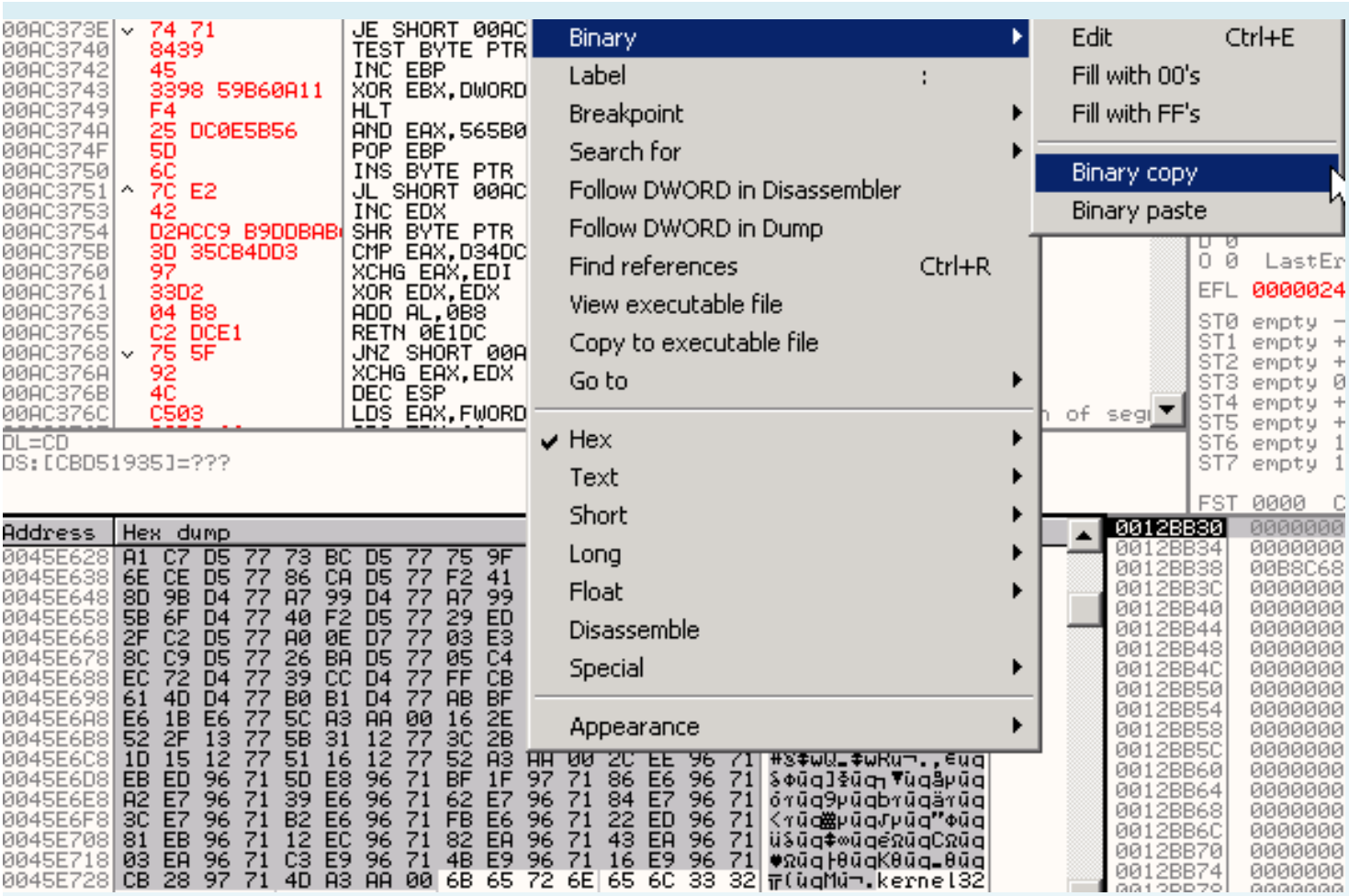
You pay attention, although the crash was the IAT we still intact.

You open up a OllyDbg other (called the Olly2 and we are open before Olly1) and open the file in Olly2 crackme.exe. Set breakpoint on memory access in section CODE to OEP (if not understand the review above). Press F9. In Olly2 we are in OEP 0045A15C. Now we will copy the original IAT in Olly1 bring to Olly2.

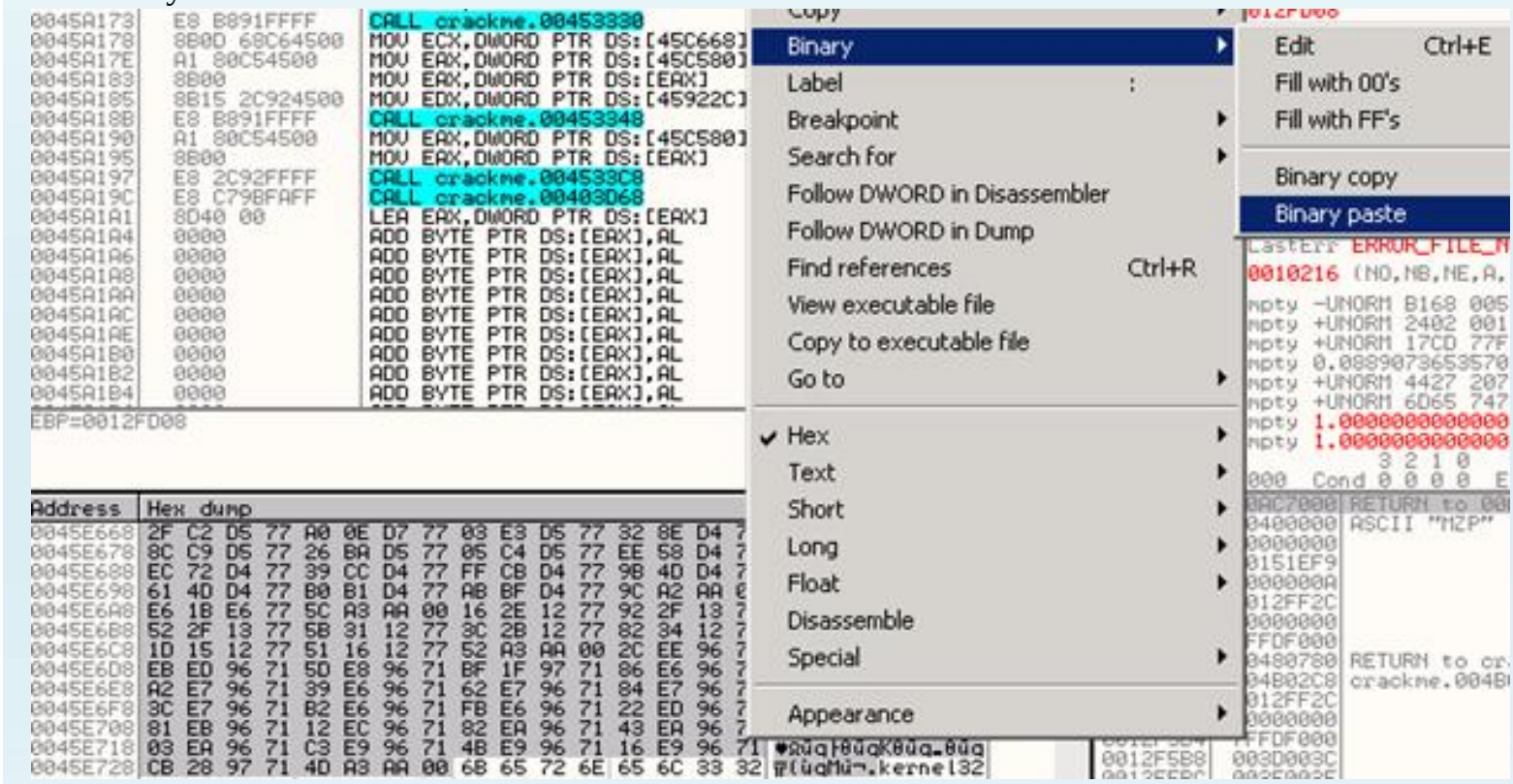
In Olly1 mark from the original starting point for RVA points to end RVA (from 0045E118 to 0045E72C)

```
0045E118  75 32 F5 77 00 E3 F7 77 1F E2 F7 77 08 99 E7 77  u2Jw.π≈w▼Γ≈w◘ö↑w
0045E128  34 9E E7 77 0A 98 E7 77 45 9A E7 77 81 98 E7 77  4₧↑w.ÿ↑wEÜ↑wüÿ↑w
0045E138  86 C4 E7 77 C4 7C E7 77 C5 78 E7 77 EF 77 E7 77  ┼─↑w─¦↑w+x↑wn↑w
0045E148  44 F0 E7 77 24 99 E7 77 CE 7C E7 77 72 46 E7 77  D≡↑w$Ö↑w╬¦↑wrF↑w
0045E158  EF 3B E7 77 B8 05 E8 77 21 7F E7 77 7A 17 E6 77  n;↑w╕♣ş w!⌂↑wz‡µw
0045E168  FD A5 E7 77 93 9F E7 77 99 A0 E7 77 3C 51 E7 77  ²Ñ↑wôƒ↑wŏá↑w<Q↑w
0045E178  38 C9 E7 77 18 06 E8 77 9E 5D E7 77 AA 8E E7 77  8╔↑w↑♠ş wₖ]↑w¬Ä↑w
0045E6B8  52 2F 13 77 5B 31 12 77 3C 2B 12 77 82 34 12 77  R/‼w[1↕w<+↕wé4↕w
0045E6C8  1D 15 12 77 51 16 12 77 52 A3 AA 00 2C EE 96 71  ↔§↕wQ▬↕wRú¬.,e ûq
0045E6D8  EB ED 96 71 5D E8 96 71 BF 1F 97 71 86 E6 96 71  δΦûq]şûq┐▼ûqåµûq
0045E6E8  A2 E7 96 71 39 E6 96 71 62 E7 96 71 84 E7 96 71  ó↑ûq9µûqb↑ûqä↑ûq
0045E6F8  3C E7 96 71 B2 E6 96 71 FB E6 96 71 22 ED 96 71  <↑ûq▒µûq√µûq"Φûq
0045E708  81 EB 96 71 12 EC 96 71 82 EA 96 71 43 EA 96 71  üδûq↕∞ûqéΩûqCΩûq
0045E718  03 EA 96 71 C3 E9 96 71 4B E9 96 71 16 E9 96 71  ♥Ωûq├θûqKθûq▬θûq
0045E728  CB 28 97 71 4D A3 AA 00 6B 65 72 6E 65 6C 33 32  ╦(ûqMú¬.kernel32
```

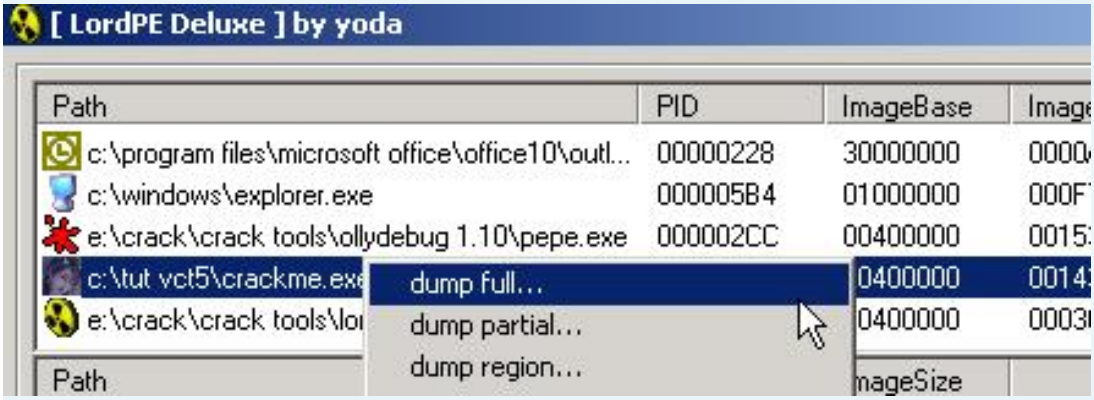
Click your mouse to select Binary -> Binary copy



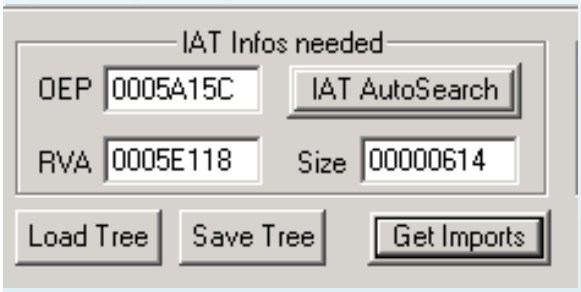
In Olly2 also marked the resources from 0045E118 to 0045E72C. Click the mouse to select Binary -> Paste Binary



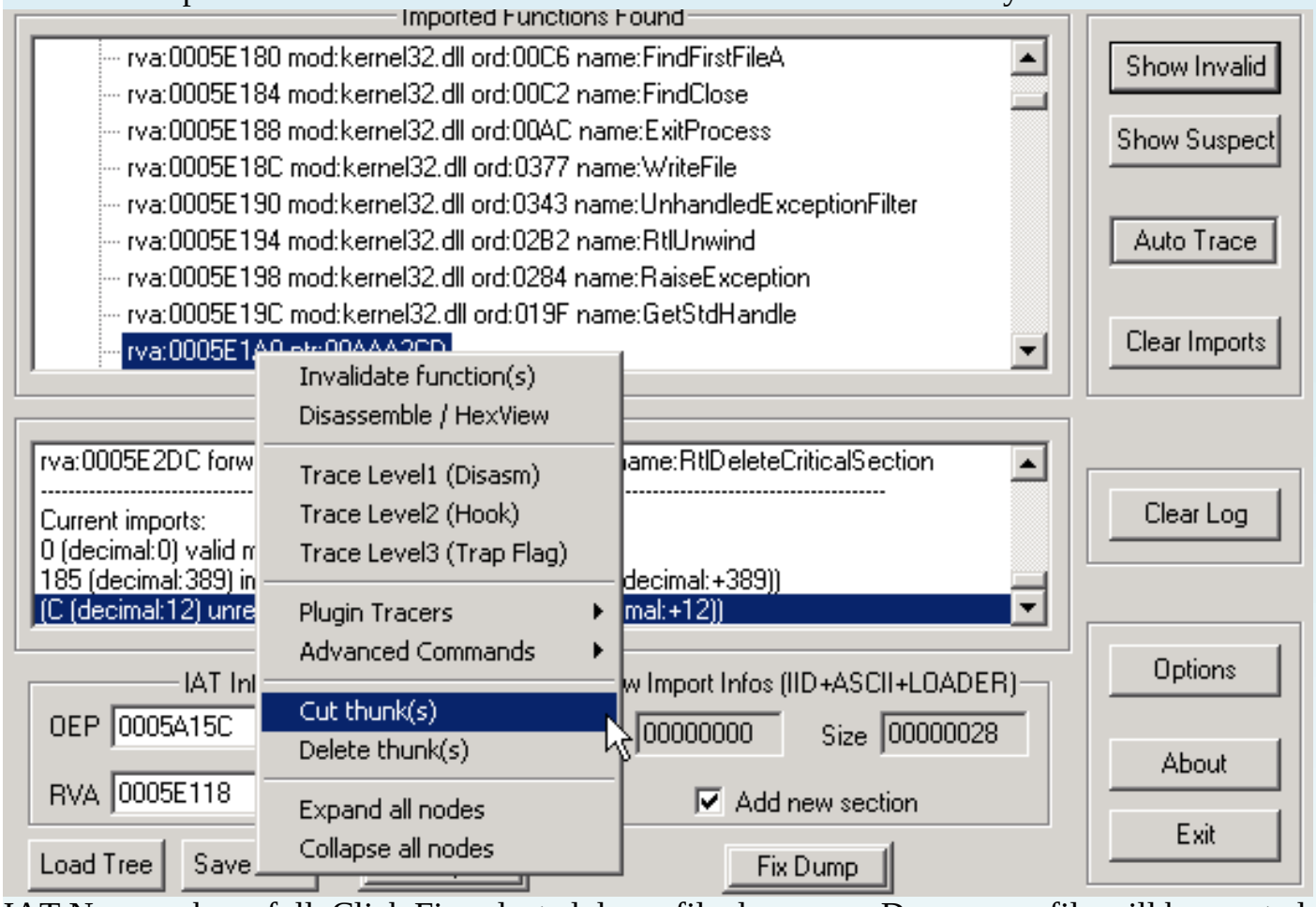
Close Olly1 again. Using LordPE dump file into crackme.exe dump.exe



Open Imprec up. Select crackme.exe. Fill in the parameters of the following:

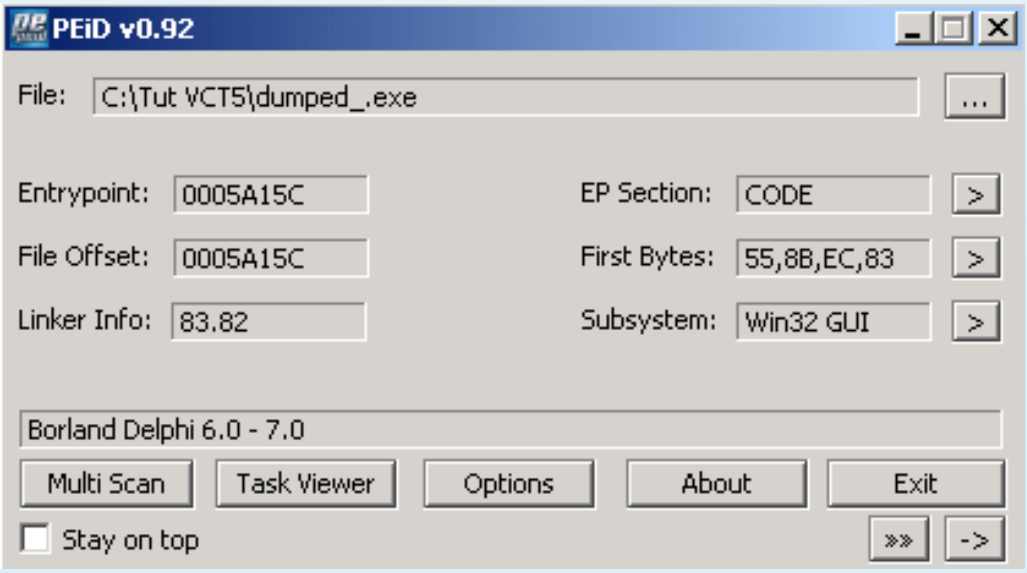


Click Get Imports. Invalid still some Thunks. Click Show Invalid. Click your mouse to select Cut Thunks.



IAT Now we have full. Click Fix selected dump file dump.exe. Dump_.exe file will be created. Test file dump_.exe J Good!

Using PEID review.

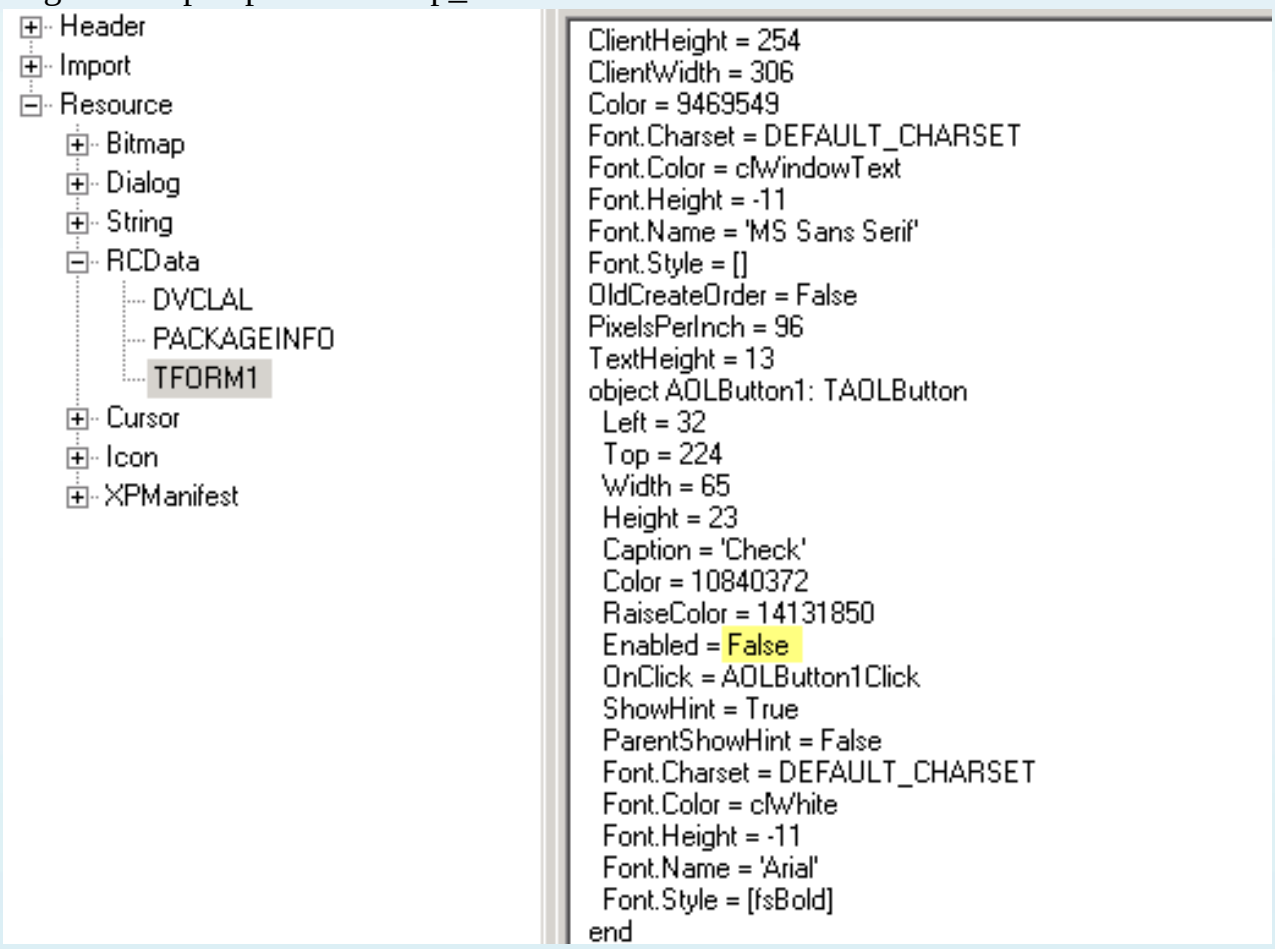


Bonus) **Check Enable Button:**

When we run and press crackme Check not find work. In rule.txt attached crackme we find the task to Check Enable button.

We will use ExeScope to perform tasks seems like this complex.

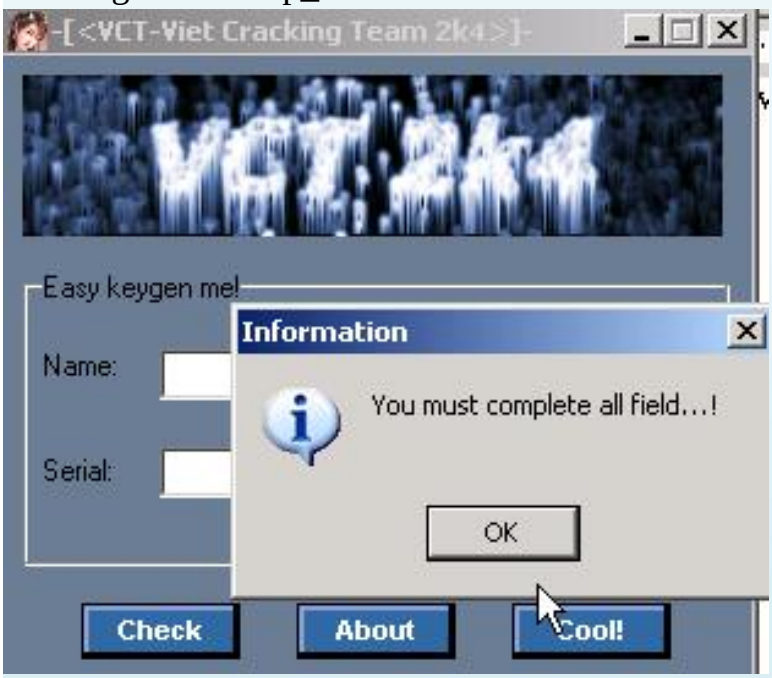
Using ExeScope open file dump_.exe. In the Resource -> RCData -> Tform1 we found as follows:



You note of gold. We will be revised to True. Save the file and close ExeScope.

```
object AOLButton1: TAOLButton
  Left = 32
  Top = 224
  Width = 65
  Height = 23
  Caption = 'Check'
  Color = 10840372
  RaiseColor = 14131850
  Enabled = True
  OnClick = AOLButton1Click
  ShowHint = True
  ParentShowHint = False
  Font.Charset = DEFAULT_CHARSET
  Font.Color = clWhite
  Font.Height = -11
  Font.Name = 'Arial'
  Font.Style = [fsBold]
end
```

Running back dump_.exe. Click Check.



Them. Happy happy.
tlandn

slayer	Various Asprotect Loader Tricks	Snd
takada REA	Tools you need:	REA
	OllyDbg, ABEL, PELG, DUP	

Difficult: easy

Instruction

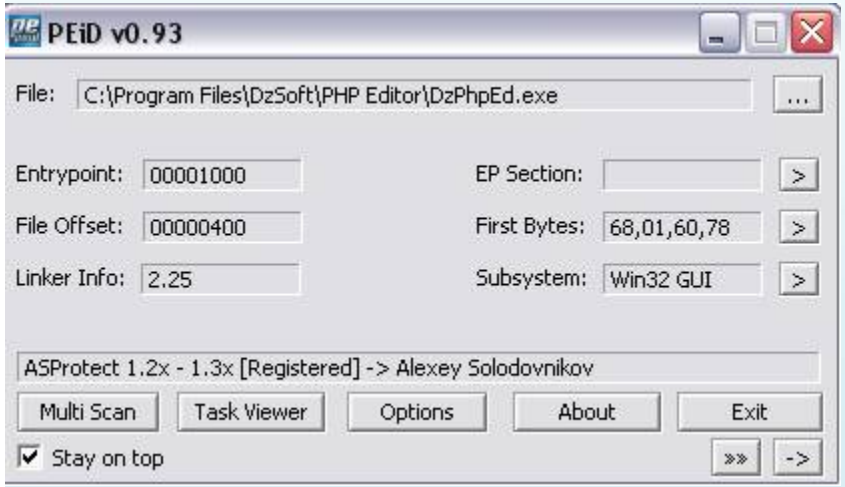
Hi everyone =)
Today we will learn tricks of the tool to create different loader, which can be used to create loader against asprotect.Target I use will be introduced below, (after understand you can also use other target to practice):)
LETS GO! = D

How to crack

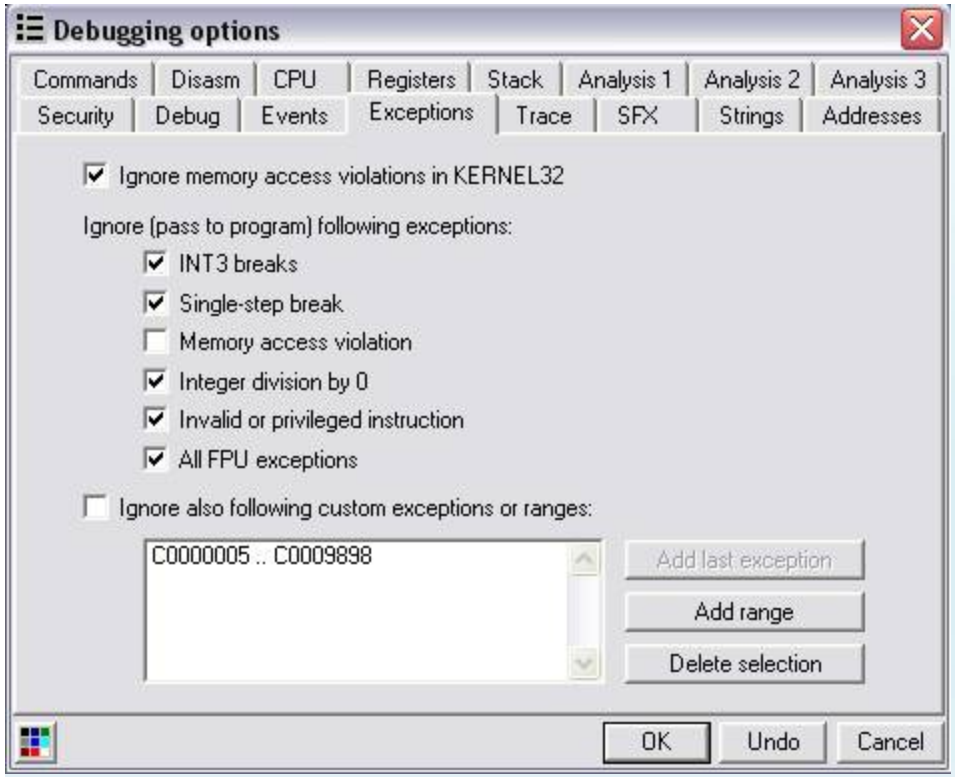
Asprotect have CRC check, so the normal 1 loader can do is work :-(but we can use 1 features other loader to help us see them as nhuung features gi.Trick first, I will you only use the option "Window Caption" options in ABEL (a loader generator with many features are excellent). Target will be selected as DzSoft PHP Editor = 3.6)

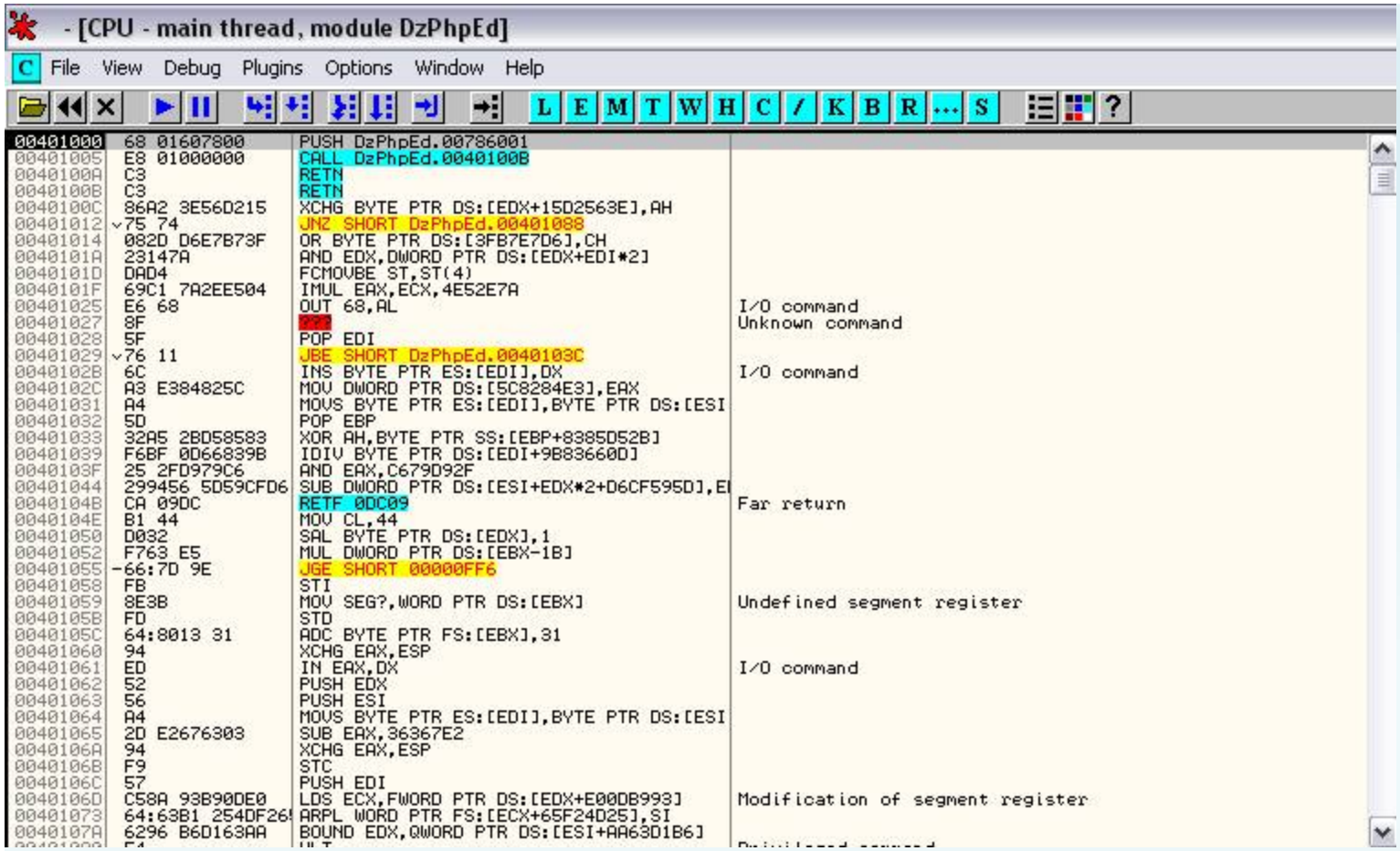
Ok, many people asked me that how to set hardware breakpoints 1 working in asprotect appz. This is the answer. To crack any aspr appz trial, any limitations, we must also break for Olly there, so we need to code in the program and then set by BP, the BP will work. Do it like?.
Simple. We will seek exception to the final, looked up to see 1 RETN command set in which BP then open memory map and set membp 1 (F2) in the code section, then press F9, Olly will break at OEP =). Sometimes i will break the OEP but I sure it will break the code in the program =)

Now they look to target our

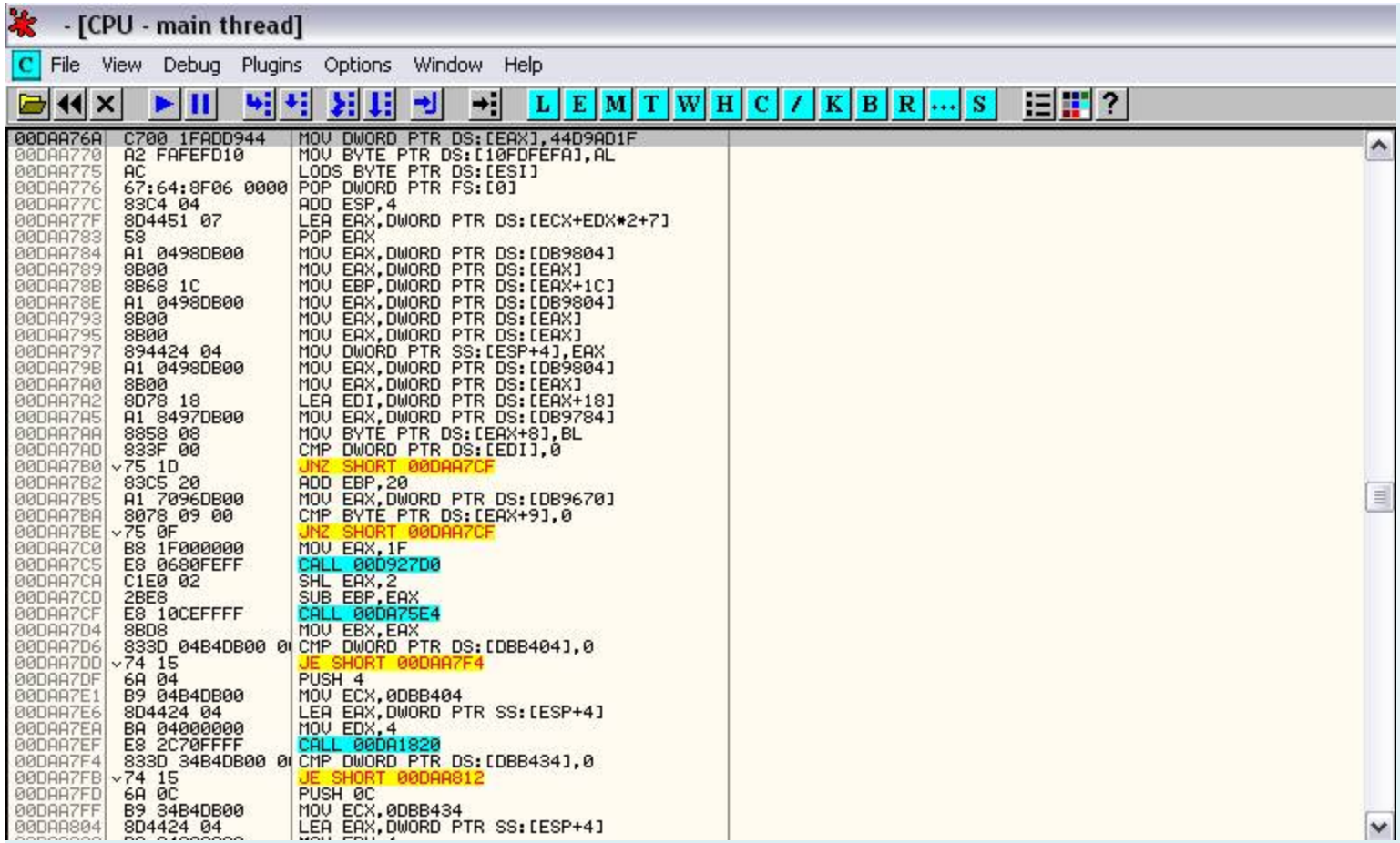


30 day trial and more promotional aspr =). Load target to Olly.
Set exceptions like image below

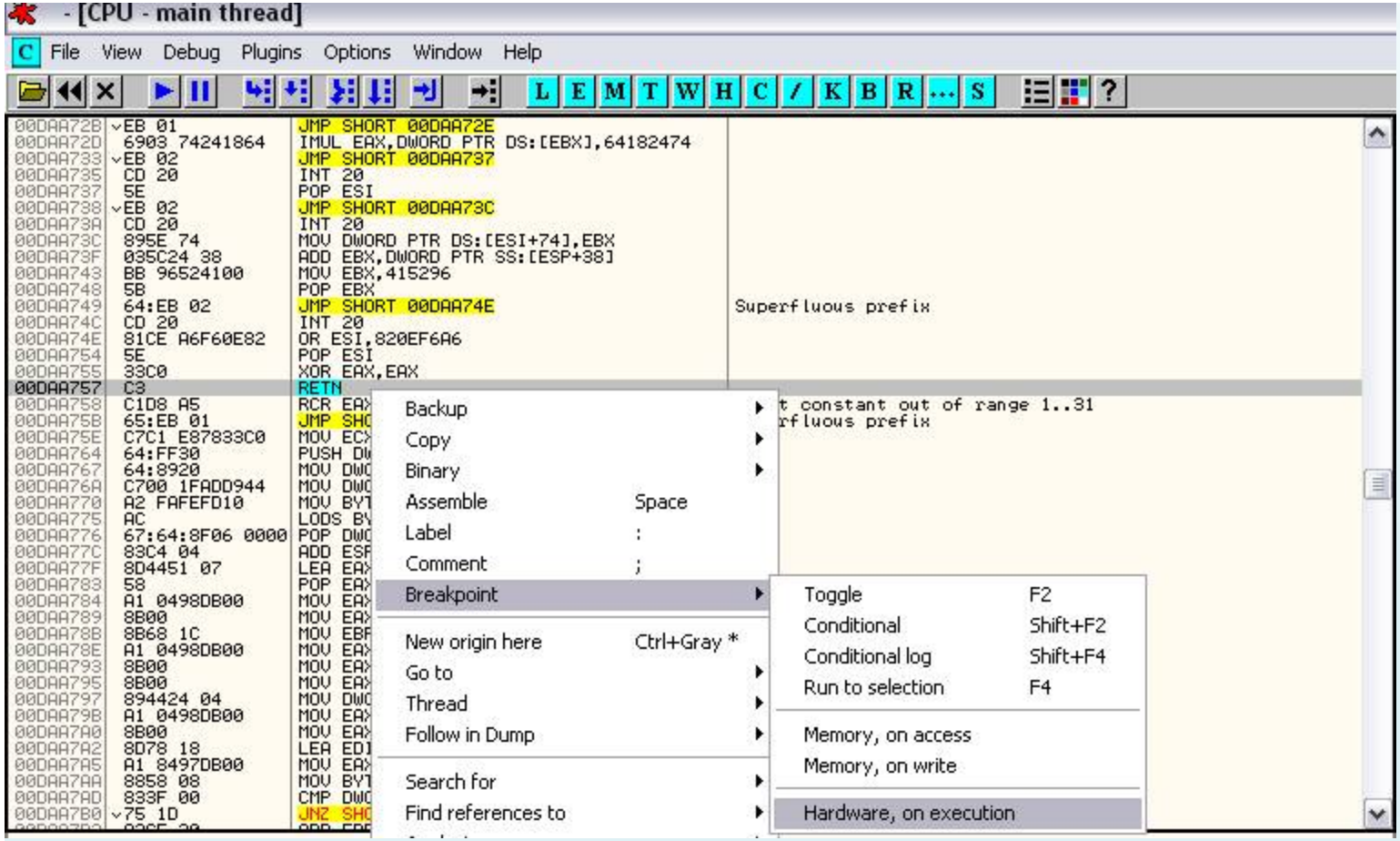

Debugging options
Commands
Disasm
CPU
Registers
Stack
Analysis 1
Analysis 2
Analysis 3
Security
Debug
Events
Exceptions
Trace
SFX
Strings
Addresses
Ignore memory access violations in KERNEL32
Ignore (pass to program) following exceptions:
INT3 breaks
Single-step break
Memory access violation
Integer division by 0
Invalid or privileged instruction
All FPU exceptions
Ignore also following custom exceptions or ranges:
C0000005 .. C0009898
Add last exception
Add range
Delete selection
OK
Undo
Cancel



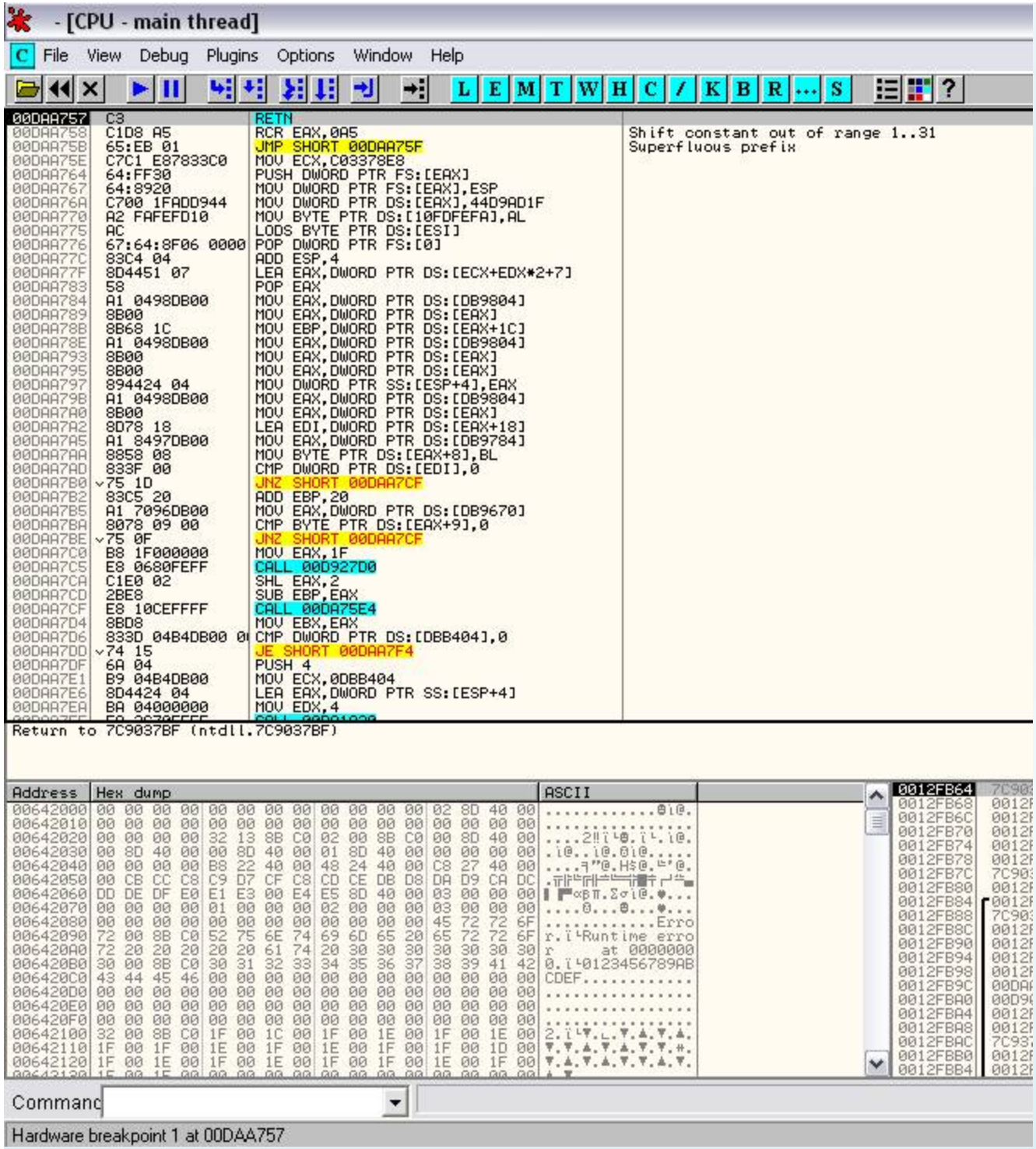
We are at EP. Now, press Shift-F9 continued to run the program. Back to the code window of Olly, Olly you will see constantly in the final exception;). Just so



Scroll up a little and you will see 1 order RETN

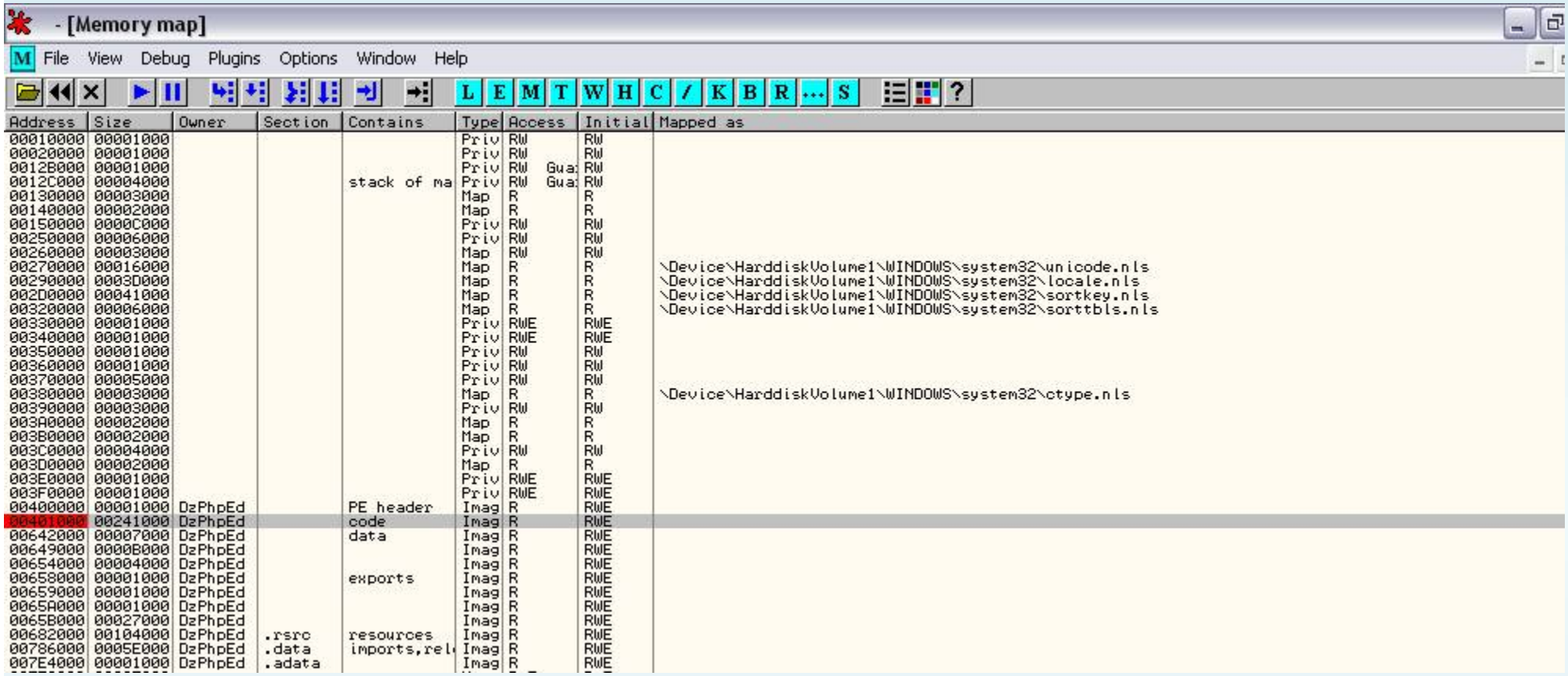


Set a hardware bp on execution like image. Olly restart the program. Now you can check all the exceptions in Olly, we not need them. We stopped in the EP's packer
Press Shift-F9 to run program and we will break the hardware breakpoint was set;)

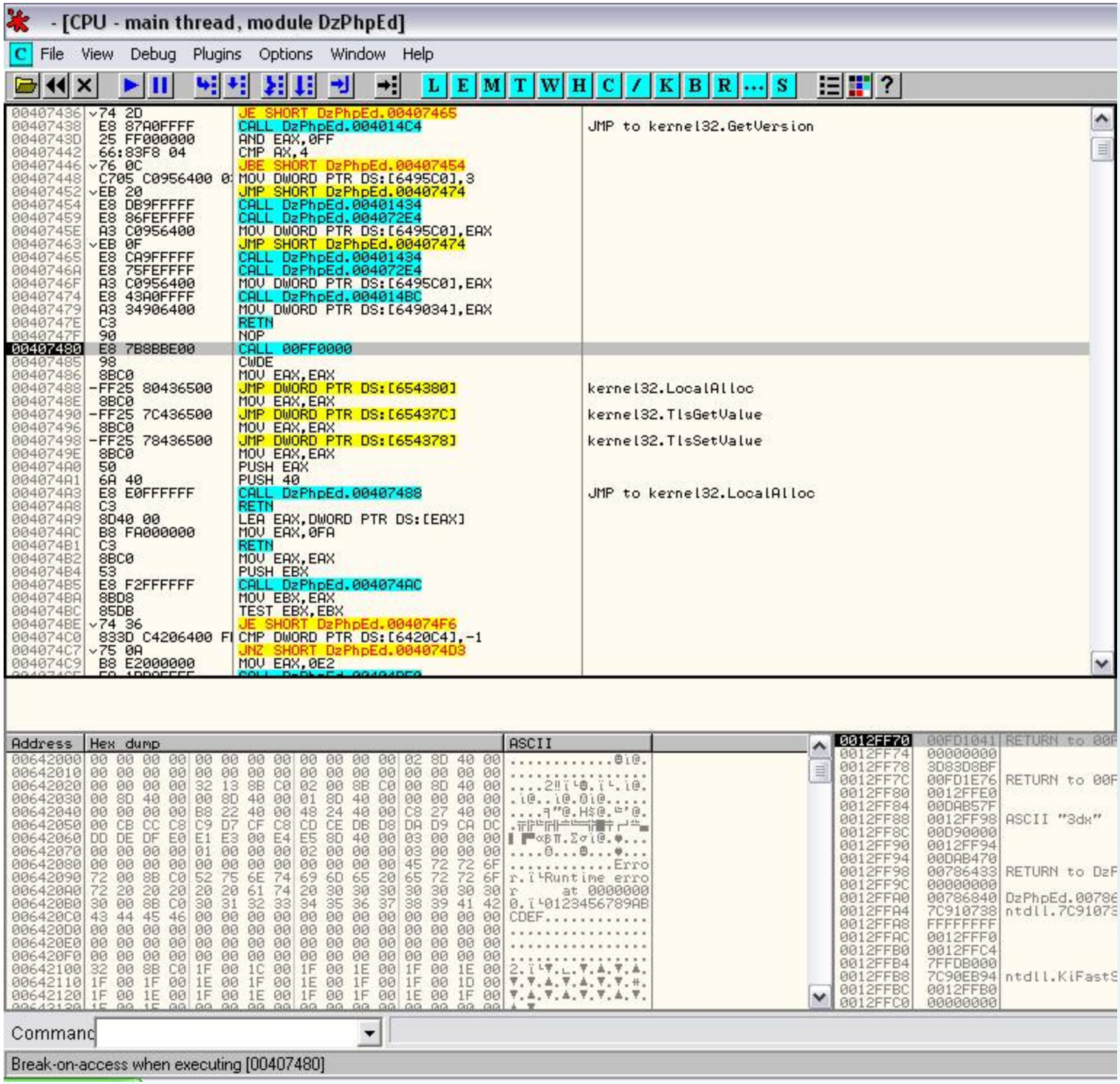


Open Memory map and set mem 1 bp in the section on access code

like following

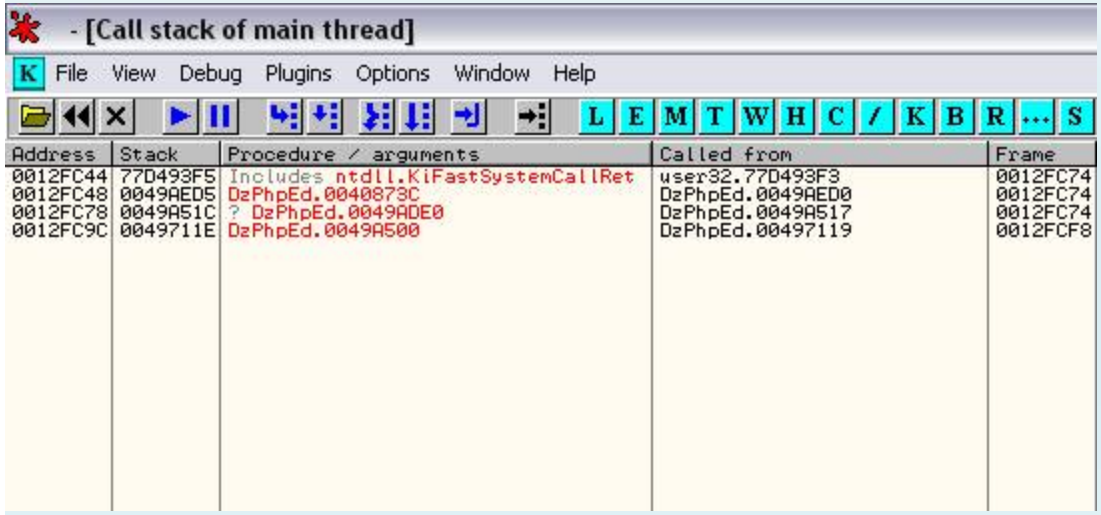


Press F9 to continue to run soft, we will stop the code below

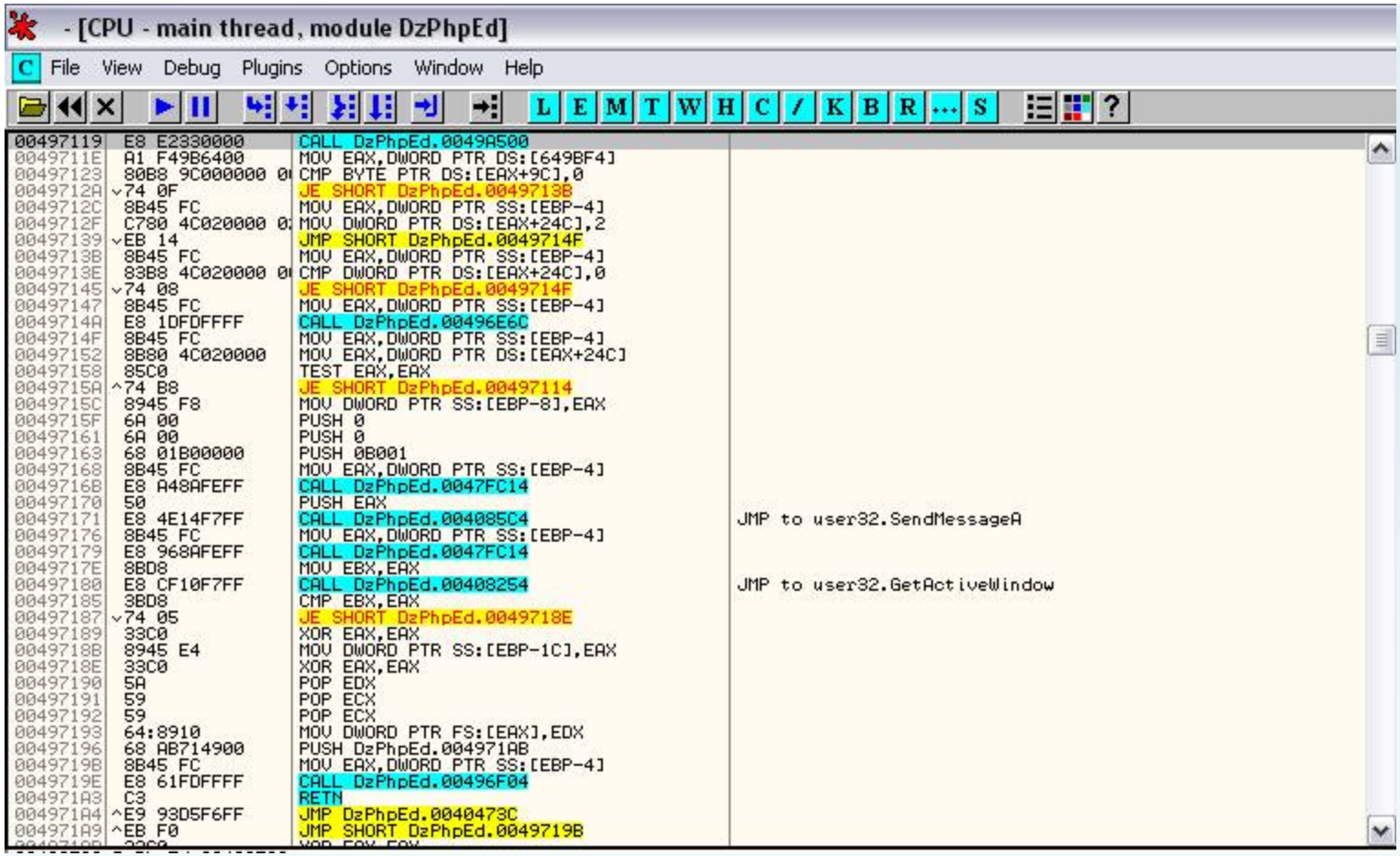

- [CPU - main thread, module DzPhpEd]
File View Debug Plugins Options Window Help
00407436 74 2D JE SHORT DzPhpEd.00407465
00407438 E8 87A0FFFF CALL DzPhpEd.004014C4 JMP to kernel32.GetVersion
0040743D 25 FF000000 AND EAX,0FF
00407442 66:83F8 04 CMP AX,4
00407446 76 0C JBE SHORT DzPhpEd.00407454
00407448 C705 C0956400 0 MOV DWORD PTR DS:[6495C0],3
00407452 EB 20 JMP SHORT DzPhpEd.00407474
00407454 E8 DB9FFFFF CALL DzPhpEd.00401434
00407459 E8 86FEFFFF CALL DzPhpEd.004072E4
0040745E A3 C0956400 MOV DWORD PTR DS:[6495C0],EAX
00407463 EB 0F JMP SHORT DzPhpEd.00407474
00407465 E8 CA9FFFFF CALL DzPhpEd.00401434
0040746A E8 75FEFFFF CALL DzPhpEd.004072E4
0040746F A3 C0956400 MOV DWORD PTR DS:[6495C0],EAX
00407474 E8 43A0FFFF CALL DzPhpEd.004014BC
00407479 A3 34906400 MOV DWORD PTR DS:[649034],EAX
0040747E C3 RETN
0040747F 90 NOP
00407480 E8 7B8BBE00 CALL 00FF0000
00407485 98 CWDE
00407486 8BC0 MOV EAX,EAX
00407488 FF25 80436500 JMP DWORD PTR DS:[654380] kernel32.LocalAlloc
0040748E 8BC0 MOV EAX,EAX
00407490 FF25 7C436500 JMP DWORD PTR DS:[65437C] kernel32.TlsGetValue
00407496 8BC0 MOV EAX,EAX
00407498 FF25 78436500 JMP DWORD PTR DS:[654378] kernel32.TlsSetValue
0040749E 8BC0 MOV EAX,EAX
004074A0 50 PUSH EAX
004074A1 6A 40 PUSH 40
004074A3 E8 E0FFFFFF CALL DzPhpEd.00407488 JMP to kernel32.LocalAlloc
004074A8 C3 RETN
004074A9 8D40 00 LEA EAX,DWORD PTR DS:[EAX]
004074AC B8 FA000000 MOV EAX,0FA
004074B1 C3 RETN
004074B2 8BC0 MOV EAX,EAX
004074B4 53 PUSH EBX
004074B5 E8 F2FFFFFF CALL DzPhpEd.004074AC
004074BA 8BD8 MOV EBX,EAX
004074BC 85DB TEST EBX,EBX
004074BE 74 36 JE SHORT DzPhpEd.004074F6
004074C0 833D C4206400 FF CMP DWORD PTR DS:[6420C4],-1
004074C7 75 0A JNZ SHORT DzPhpEd.004074D3
004074C9 B8 E2000000 MOV EAX,0E2
Address Hex dump ASCII
00642000 00 00 00 00 00 00 00 00 00 00 00 00 02 8D 40 00
00642010 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00642020 00 00 00 00 32 13 8B C0 02 00 8B C0 00 8D 40 00
00642030 00 8D 40 00 00 8D 40 00 01 8D 40 00 00 00 00 00
00642040 00 00 00 00 B8 22 40 00 48 24 40 00 C8 27 40 00
00642050 00 CB CC C8 C9 D7 CF C8 CD CE DB D8 DA D9 CA DC
00642060 DD DE DF E0 E1 E3 00 E4 E5 8D 40 00 03 00 00 00
00642070 00 00 00 00 01 00 00 00 02 00 00 00 03 00 00 00
00642080 00 00 00 00 00 00 00 00 00 00 00 00 45 72 72 6F
00642090 72 00 8B C0 52 75 6E 74 69 6D 65 20 65 72 72 6F
006420A0 72 20 20 20 20 61 74 20 30 30 30 30 30 30 30 30
006420B0 30 00 8B C0 30 31 32 33 34 35 36 37 38 39 41 42
006420C0 43 44 45 46 00 00 00 00 00 00 00 00 00 00 00 00
006420D0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
006420E0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
006420F0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00642100 32 00 8B C0 1F 00 1C 00 1F 00 1E 00 1F 00 1E 00
00642110 1F 00 1F 00 1E 00 1F 00 1E 00 1F 00 1F 00 1D 00
00642120 1F 00 1E 00 1F 00 1E 00 1F 00 1E 00 1F 00
0012FF70 00FD1041 RETURN to 00F
0012FF74 00000000
0012FF78 3D83D8BF
0012FF7C 00FD1E76 RETURN to 00F
0012FF80 0012FFE0
0012FF84 00DAB57F
0012FF88 0012FF98 ASCII "3dx"
0012FF8C 00D90000
0012FF90 0012FF94
0012FF94 00DAB470
0012FF98 00786433 RETURN to DzP
0012FF9C 00000000
0012FFA0 00786840 DzPhpEd.00786
0012FFA4 7C910738 ntdll.7C9107
0012FFA8 FFFFFFFF
0012FFAC 0012FFF0
0012FFB0 0012FFC4
0012FFB4 7FFDB000
0012FFB8 7C90EB94 ntdll.KiFastS
0012FFBC 0012FFB0
0012FFC0 00000000
Command
Break-on-access when executing [00407480]

Usually we are at the OEP khong.OK this time, do not have worry anything, we're in the code of the program and our target was completely unpack in memory:) from the time, the BP is set to work.Buoc next trial is to find the screen and then find bytes to patch loader is in memory
In this program, I will nag you how to find simple:)
Back Olly. Restart, press Shift-F9, open the Memory map -> set bp on access code in the section, press Shift + F9 to press Shift + F9 to run a trial program and screen appear

Now, press F12 to pause in Olly again, press ALT + K to open the window Call stack

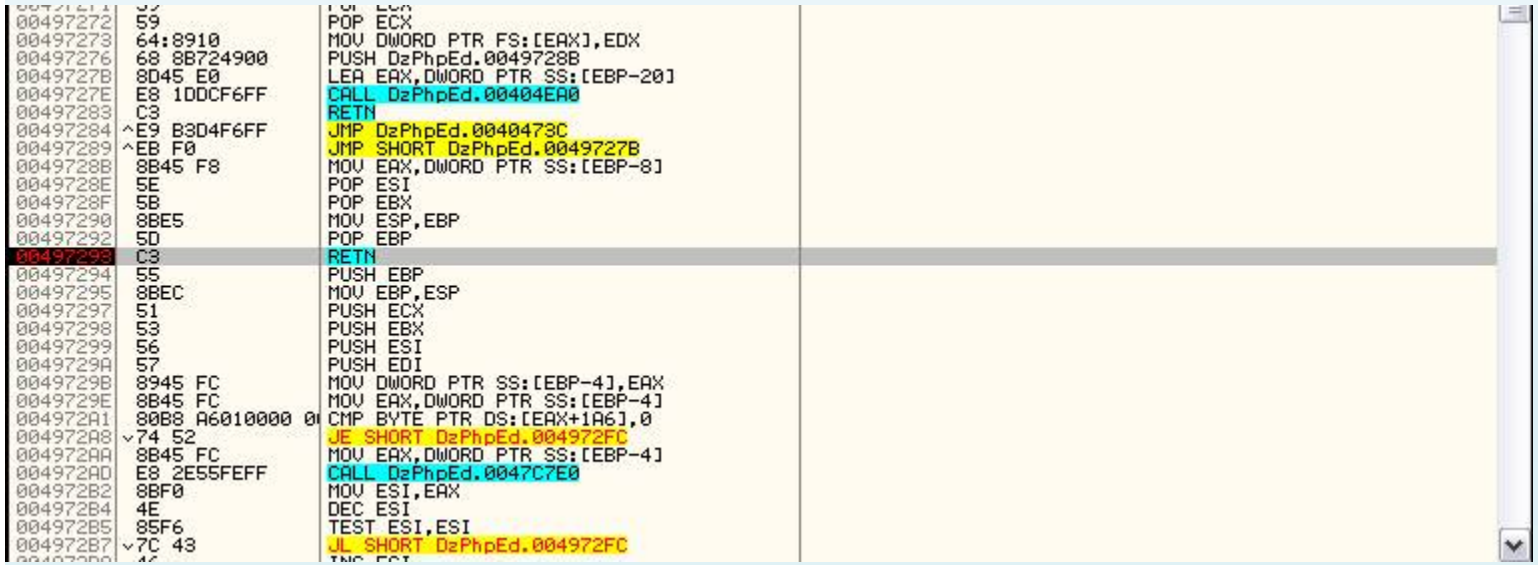


Enter Call functions 3 and we will be here.

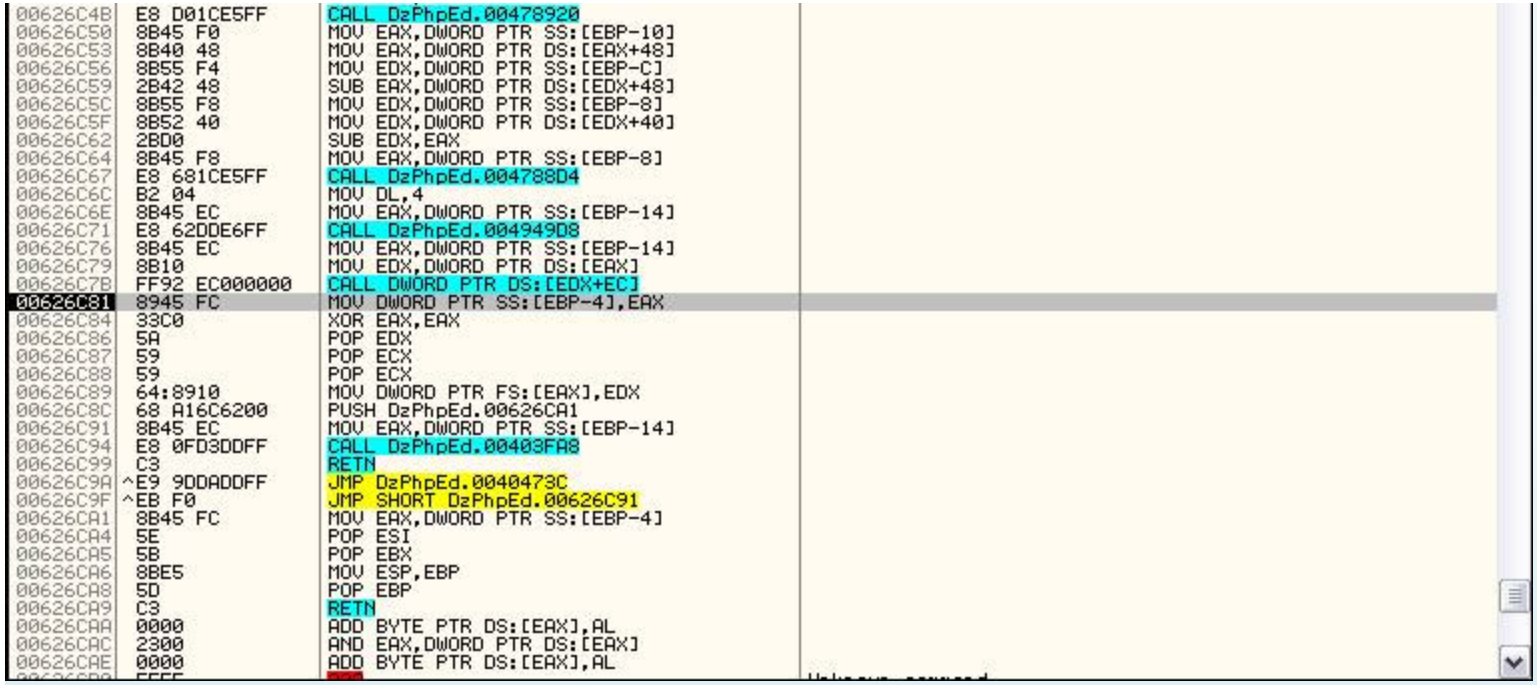


This is nag routine we need to find the end of this routine
scroll down!

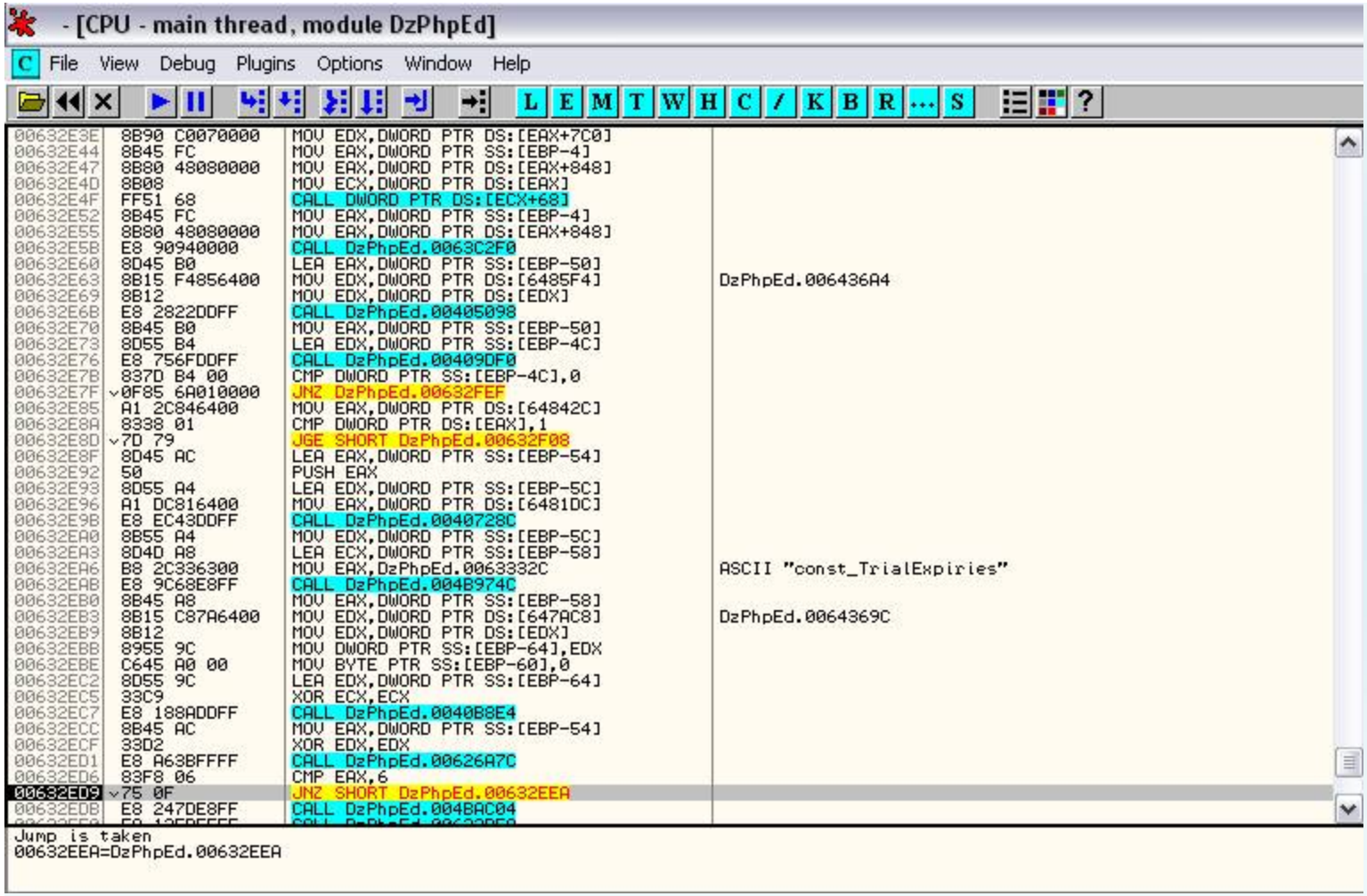
1 at a BP 00497293 C3 RETN
Press Shift-F9, then select "NO" in the nag screen



RETN command will take us to nag exit routine, so pressing F8
We use here



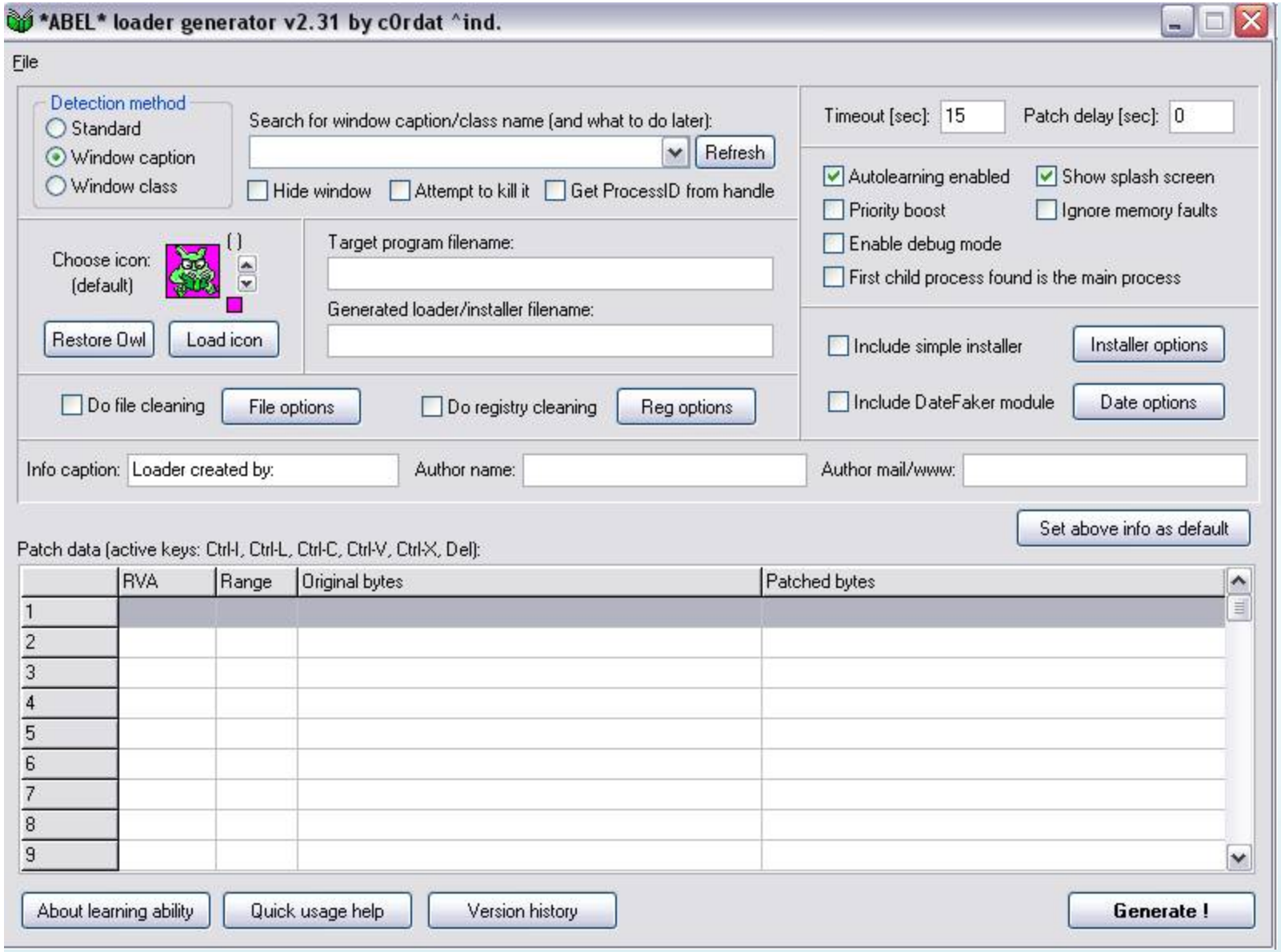
Ham Call you see, is a function called nag screen;). We are not in the right place, so trace back with F8, the carrots we also stop here



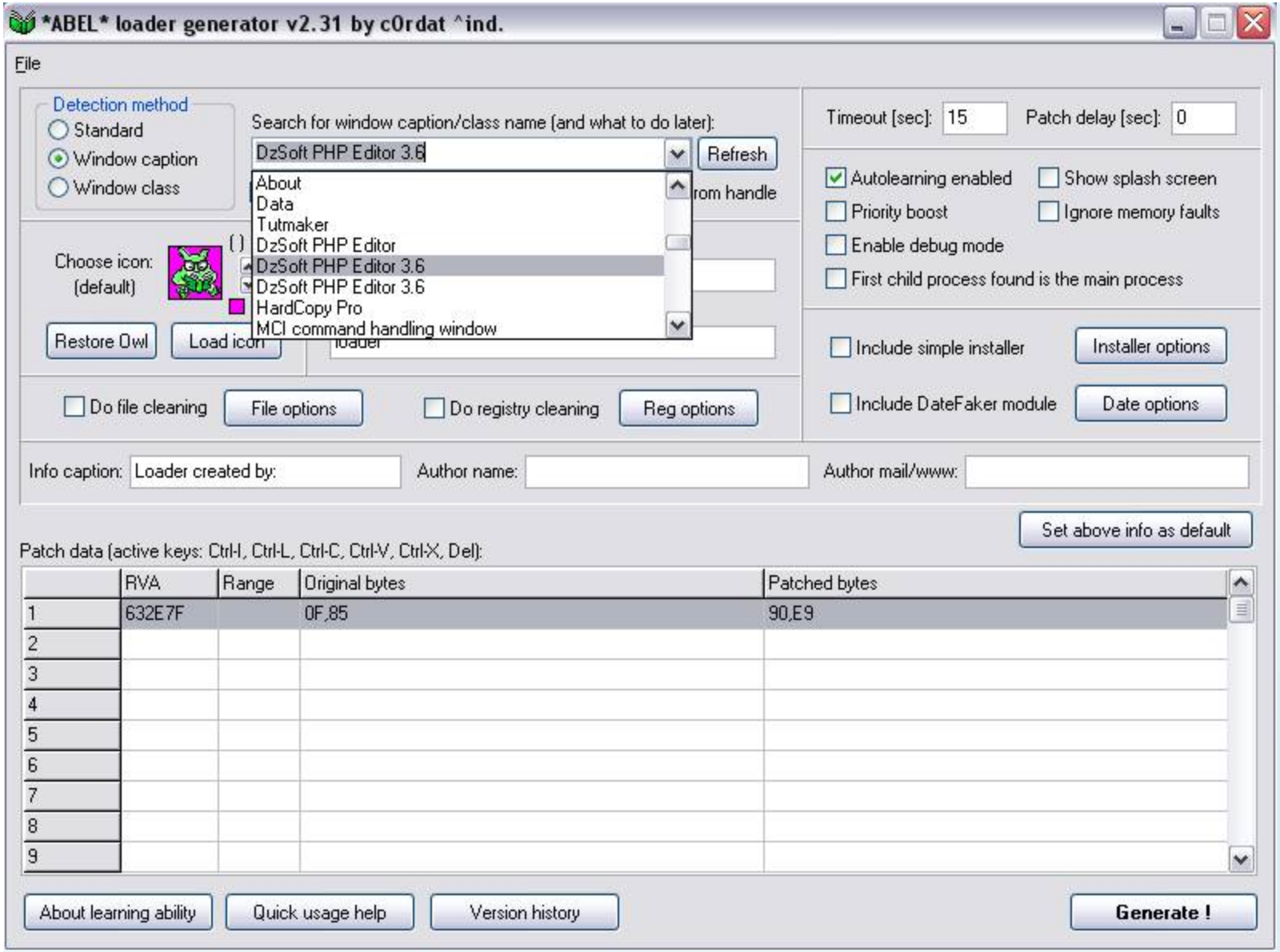
hehe, very clear, do not need to explain anything more. I do not go into here

If we change the 00632E7F JNZ to JMP, will always jump over the trial that is already screen bypass trial;). If you want to check, then set 1 bp hardware in order jnz and then follow the steps on (the memmap - -> Code Section BP and stuff: P) you will break in order jnz then you or learn;)
Now we will move to 1 part interesting
Created loader:)

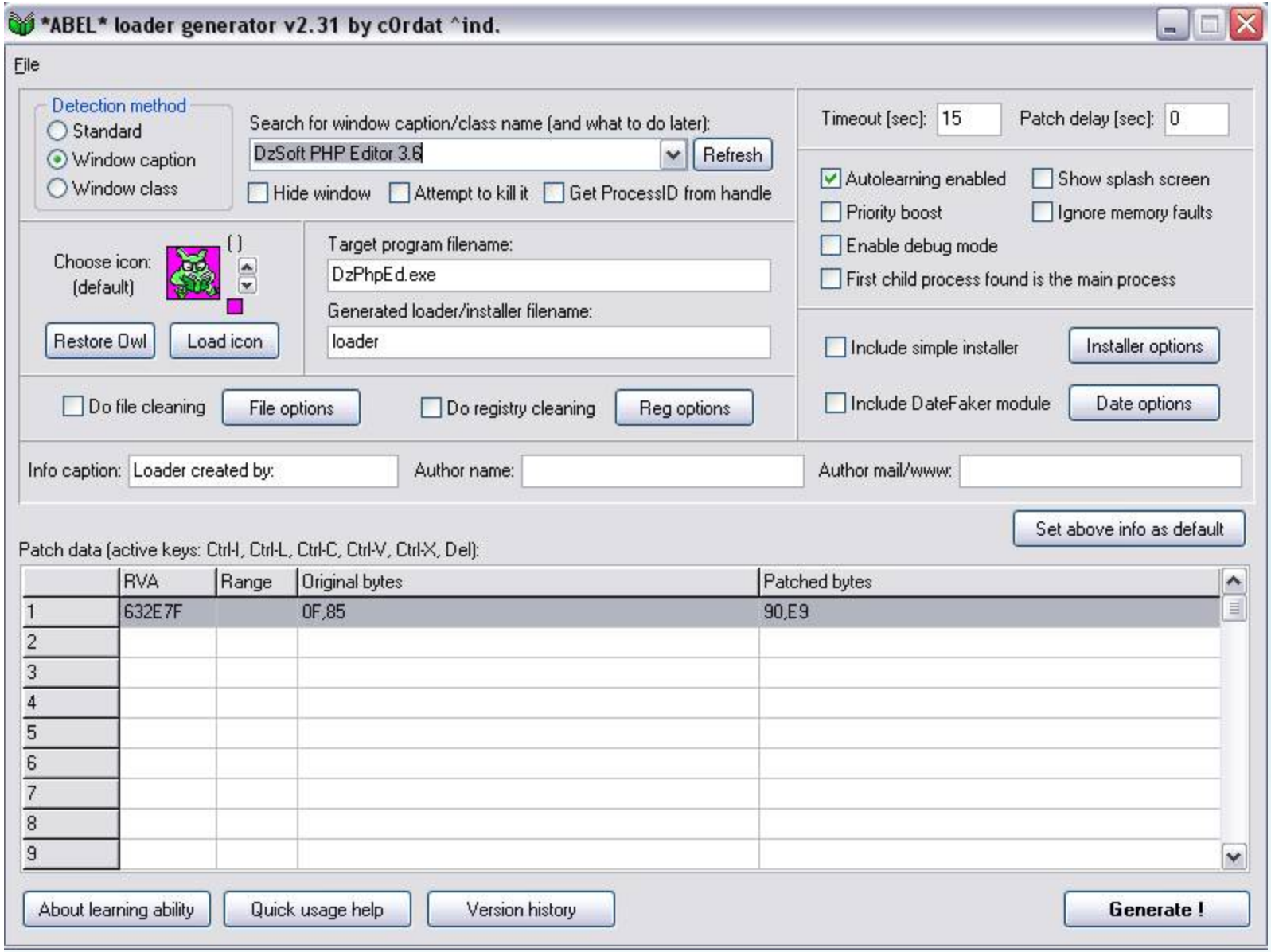
For this program we will use the feature "window caption" Ok, open ABEL. Now, please write to address JNZ order and we can close Olly.
Select "Window Caption" as following



Now program run normally, then click "refresh" in the ABEL immediately when you see the nag screen. Click on the arrow next to



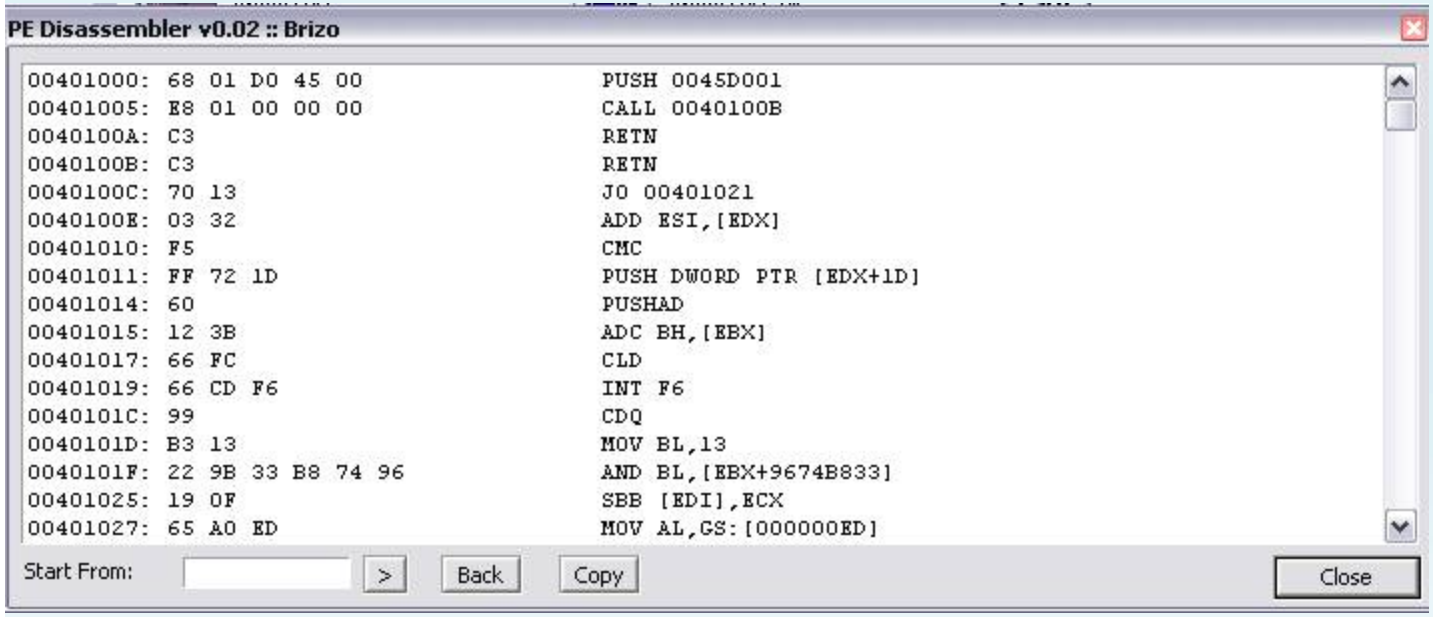
Due to the CRC check asprotect loader should be able to do patch in memory is normal because we use the "window caption, it will patch program right time we need =) now need to enter the patch as the image =)



Now, run loader just created, and see the results =) It (should) work = D
Some notes: - Sometimes when you install, the program folder name matches the program's window caption. When it is, we should reduce the Explorer Windoww di.Boi because records are also ABEl caption = Windows Explorer). Then click the button "refresh" the ABEL only the caption of the window we need to patch program but also note that you can use other features but do not necessarily use the "Window caption":))
OK, now we will see a different trick =)

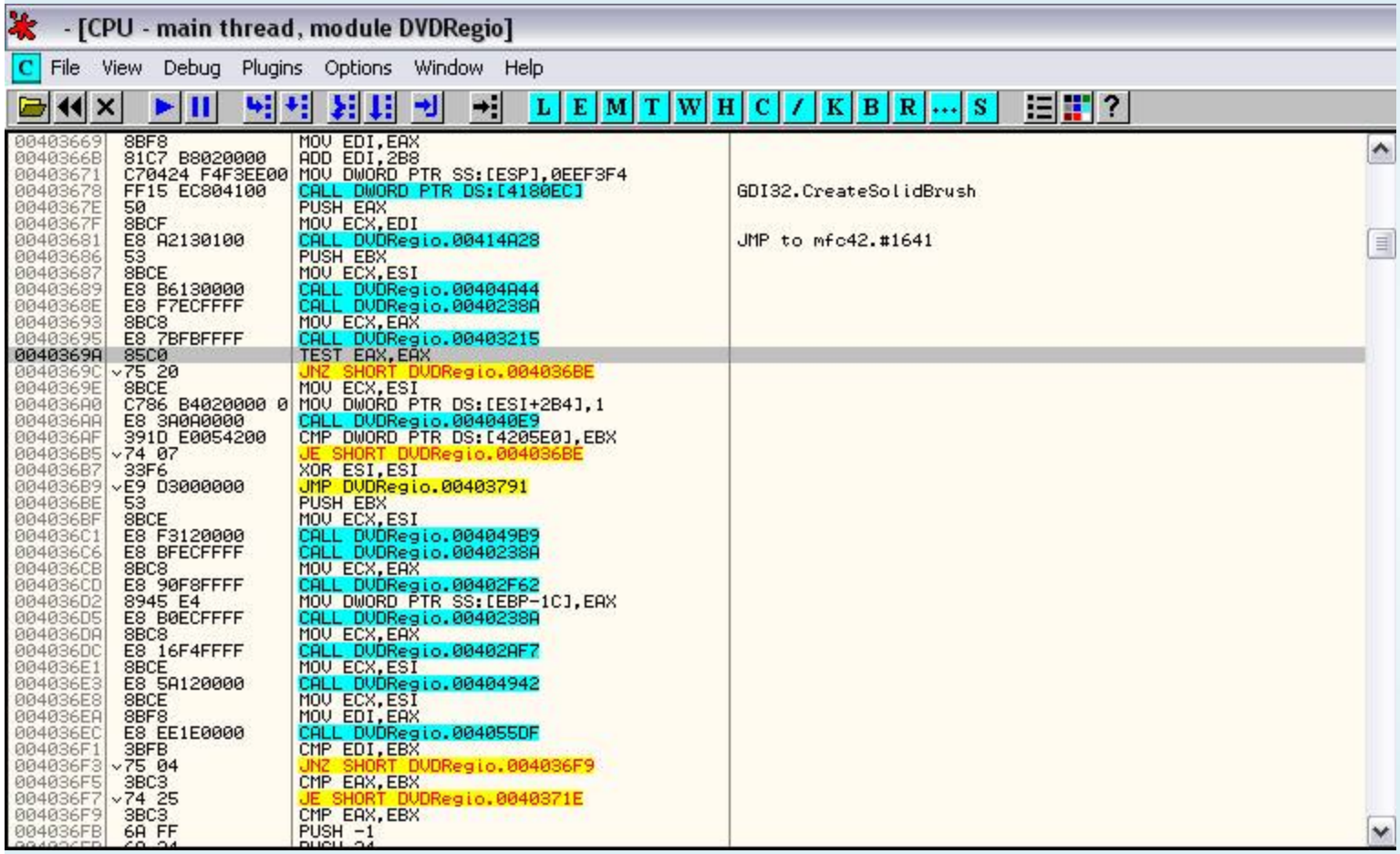
"The window CLASS TRICK"

Target selected are DVD Region + CSS Free =)
First analyze target



30 day trial =)

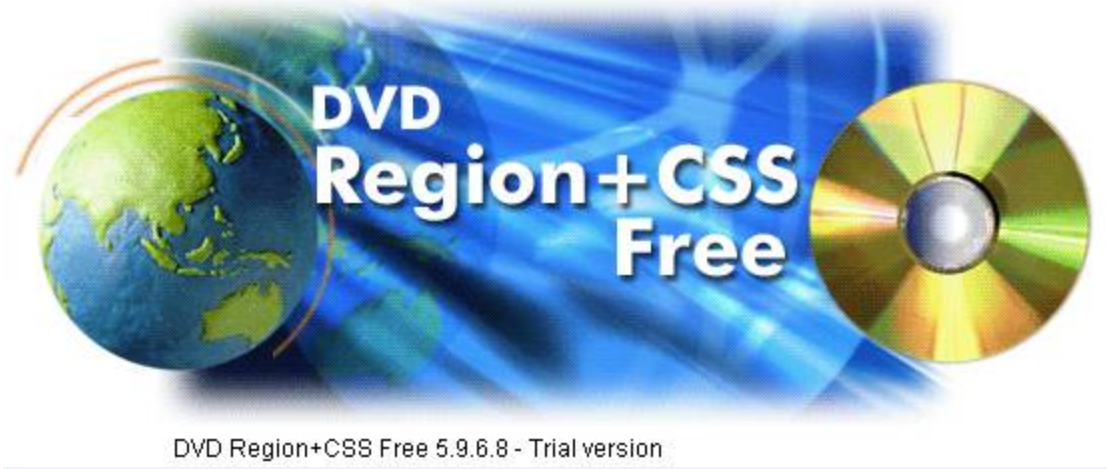
I do not repeat the action on working to create breakpoints because I sure you know how = D Ok, so do take the time we go crack 30 day trial
After the trace me to the conclusion



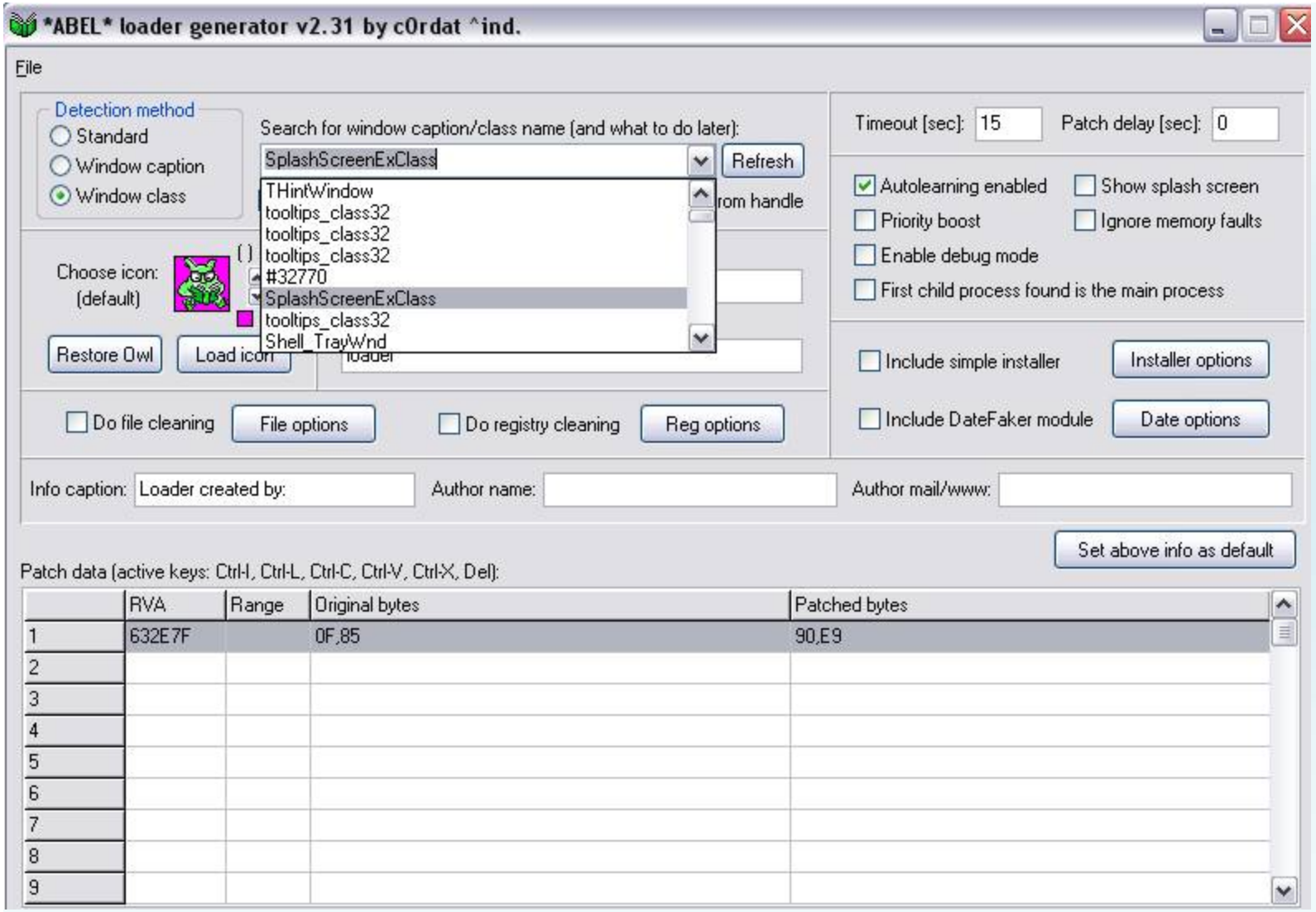
004036AA E8 3A0A0000 CALL DVDRegio.004040E9, this function is called nag =) and in JNZ 0040369C will jump over it =)

Now let's see, how to create perfect loader 1 =)
ABEL open up, but this time we do not use "Window captions" = (because you will receive error error 45 = (

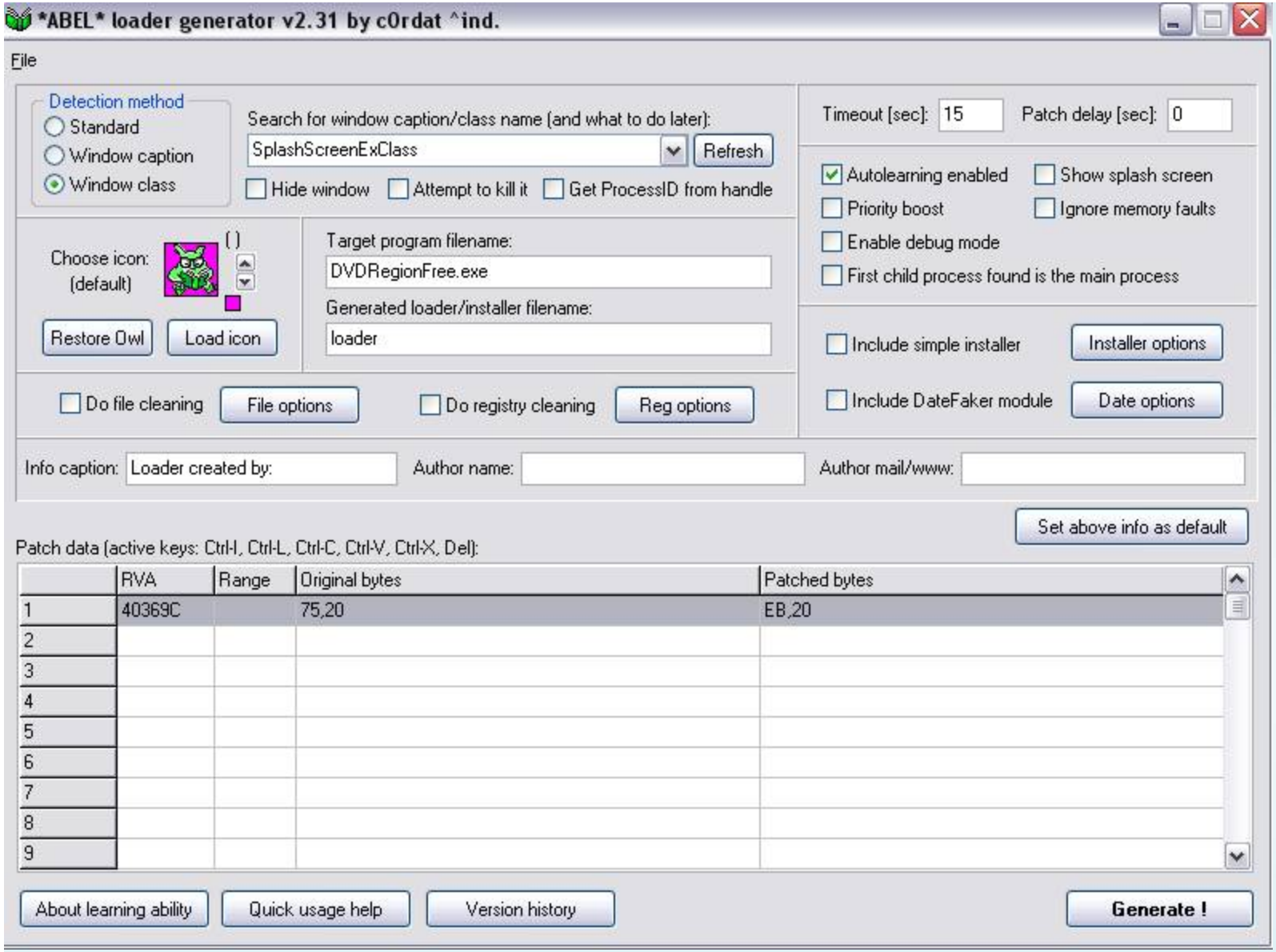
Well, in the run when this target will appear SlpashScreen = 1)



hehe we can use 1 features or other quite well =)
Now in Class ABEL select Window and then click the arrow buttons scroll down a little and you will find interesting =)



hehehe, select window class and then enter the values need to patch
as following

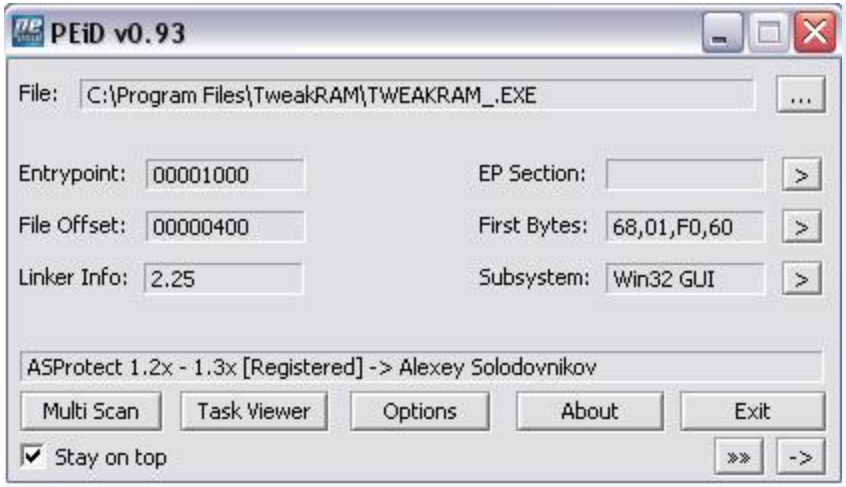


Run loader and see ... … ... ... =)

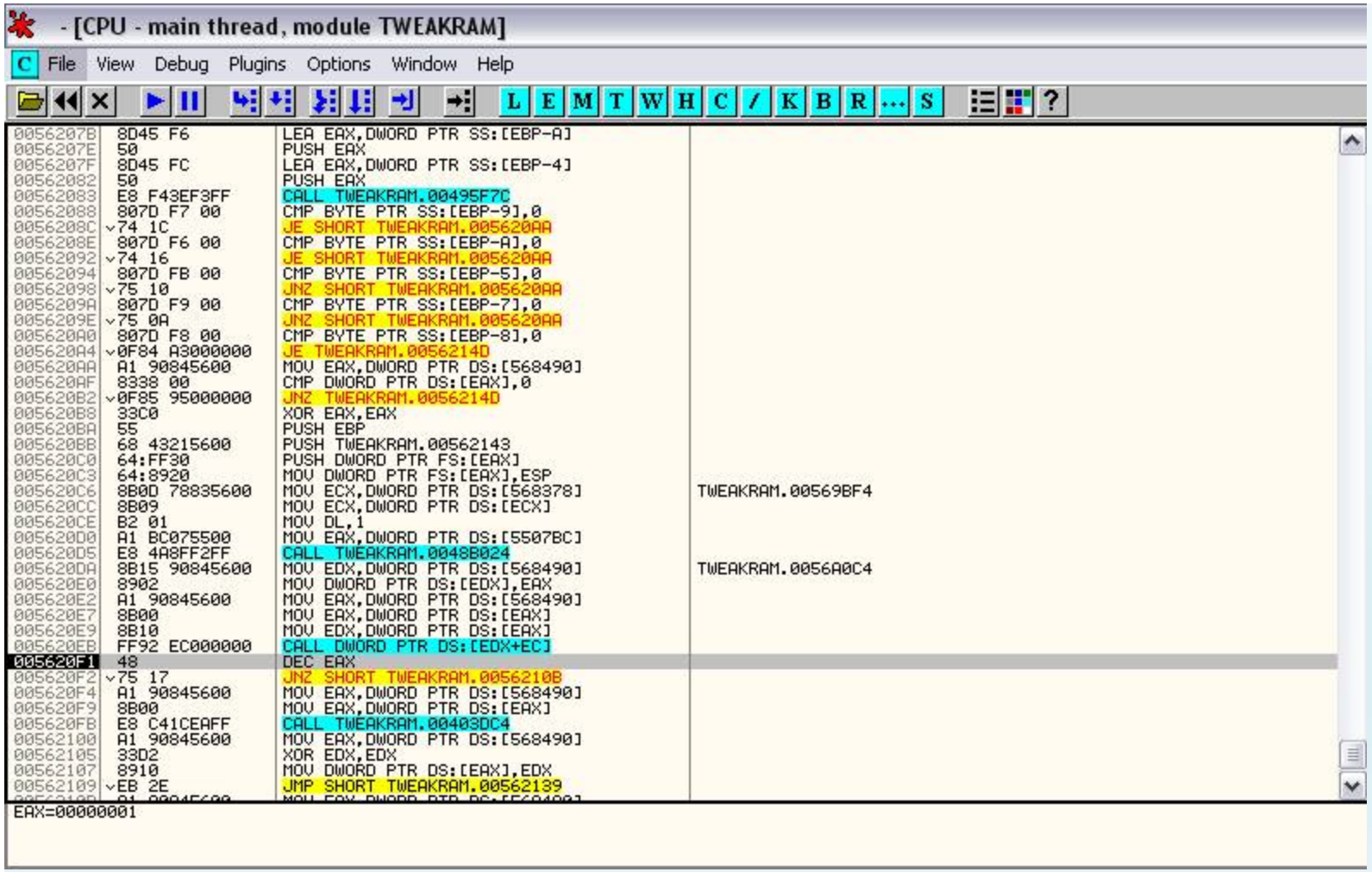
The trick to 1 more

"The PELG Trick" = P

My target is to use TwaekRAM = 5.3)



30 day trial + aspr
Search function calls Call nag

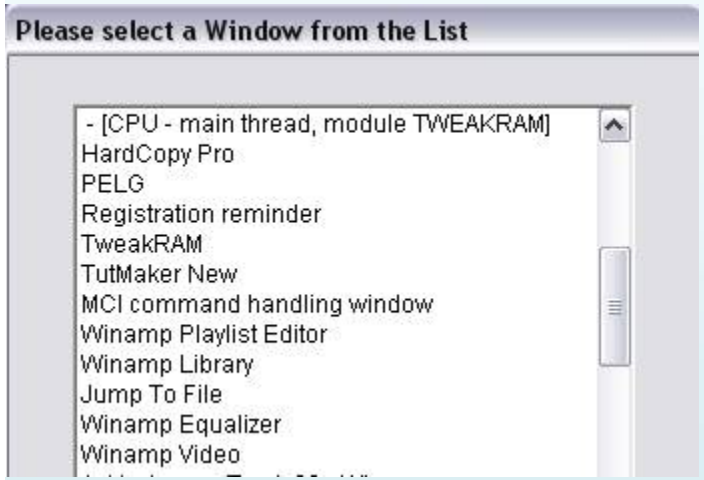


005620EB FF92 EC000000 CALL DWORD PTR DS: [EDX + EC]

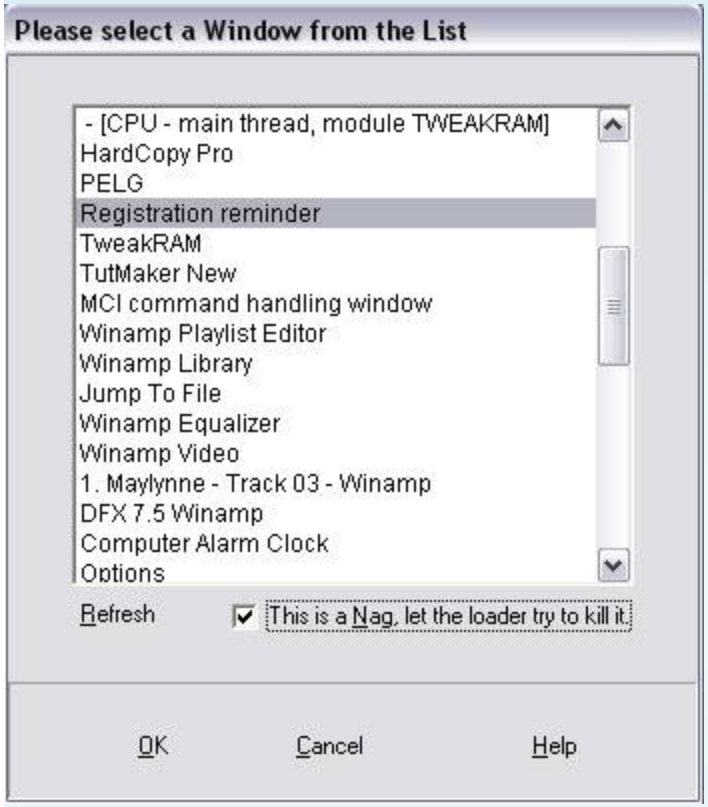
Yeah, it is =)

See how to create 1 pelg loader nice =)
Open up PELG

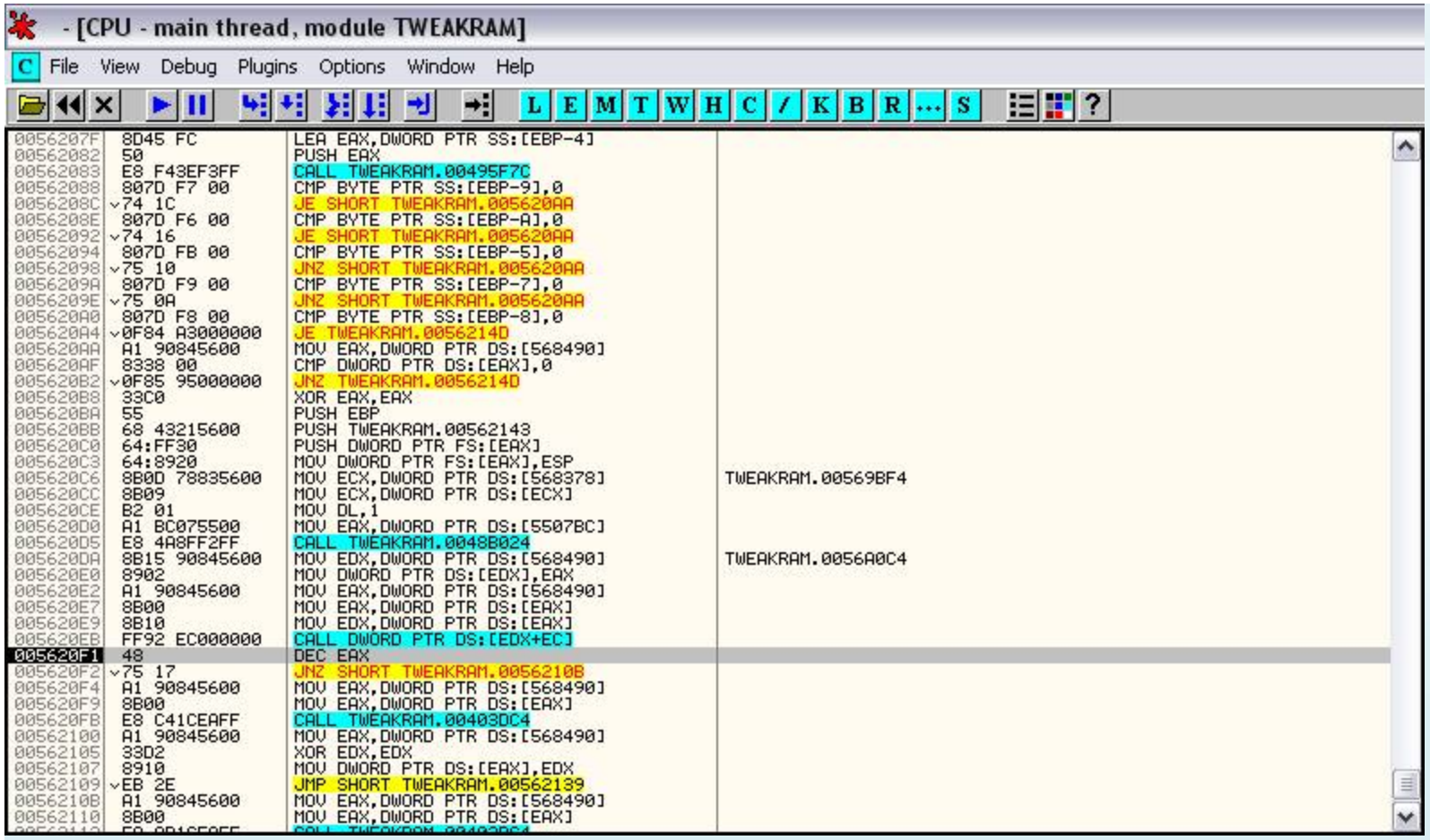
Select the window title and then click the button bowse near the "name" It will show all the window title
Scroll down to 1 little window title to the registration of our



You can see "Regsitration reminder"? Yep, that's nag title =)
Select the check and then on "This is a nag, let the loader try to kill it"



Now, click OK to create a loader and then run loader test, you will see the loader kills the nag screen and load the program do not have nag.Nhung complete, loader still having little Iraq roi.Chinh clock to 2 years and then run loader test. At this time, do not run program again = (
Back to where we have found in Olly nag

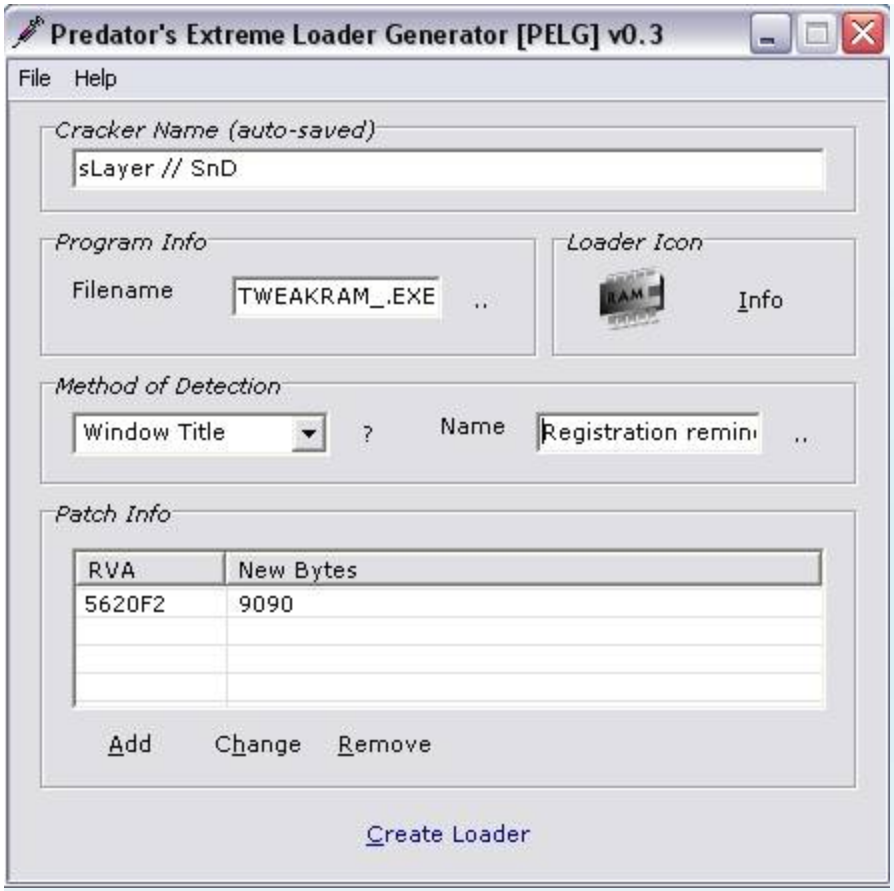


Look here kĩ

```
005620EB FF92 EC000000 CALL DWORD PTRDS: [EDX + ]----> EC Nag
005620F1 48 DEC EAX
005620F2 75 17 JNZ SHORTTWEAKRAM.0056210B--> If overdue trial
```

Then jump to close program, if i continue to load the program =)

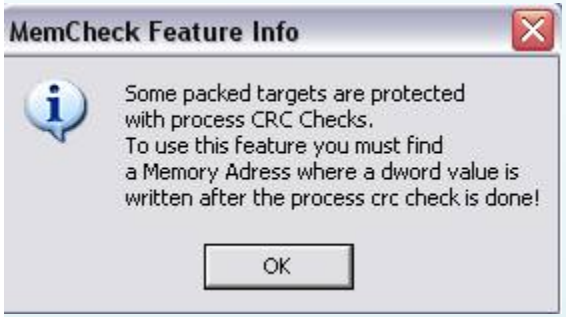
In PELG (select window title) to enter data patch
as following



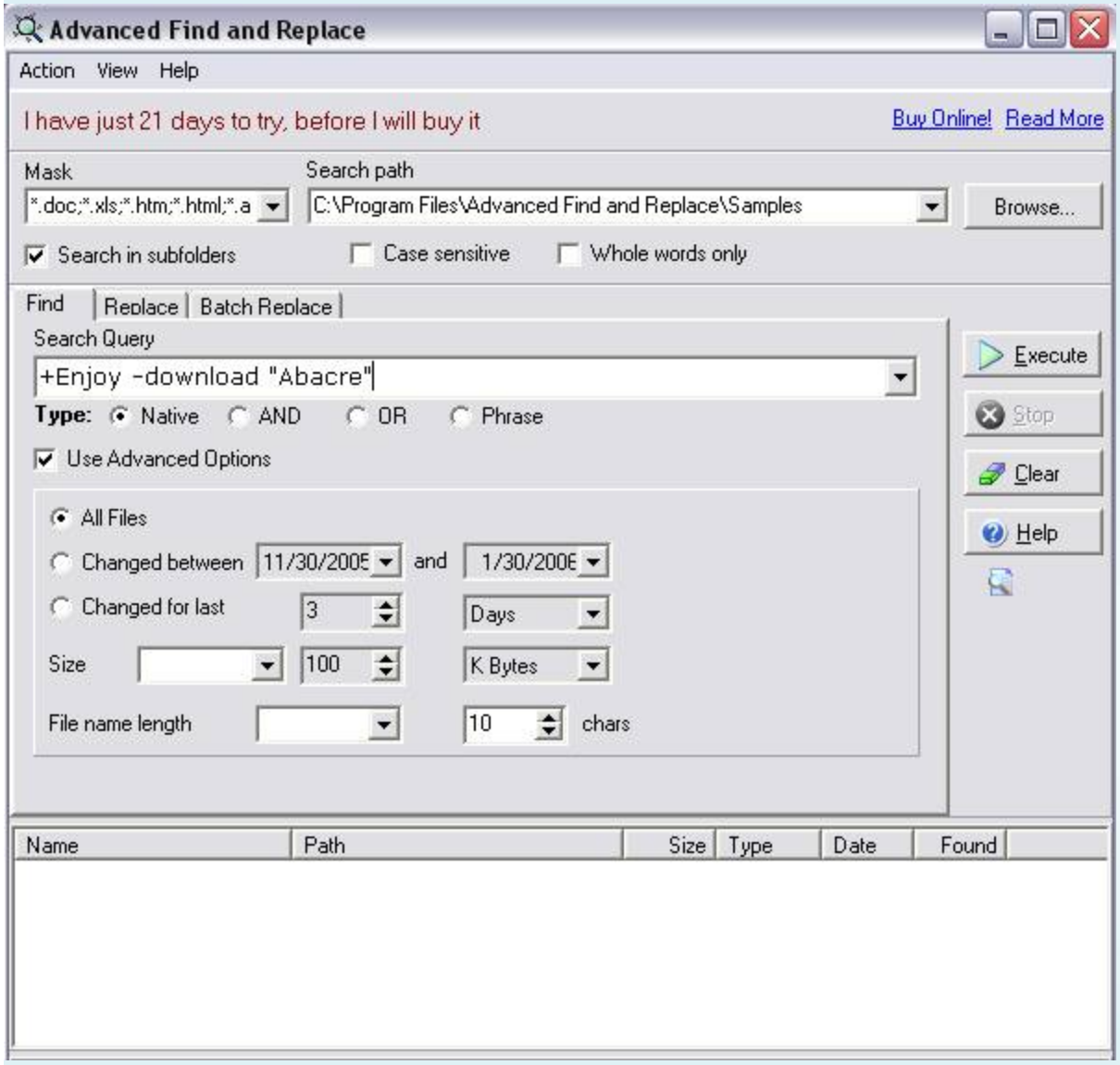
Create loader then run view, the smooth as i have what happened =)

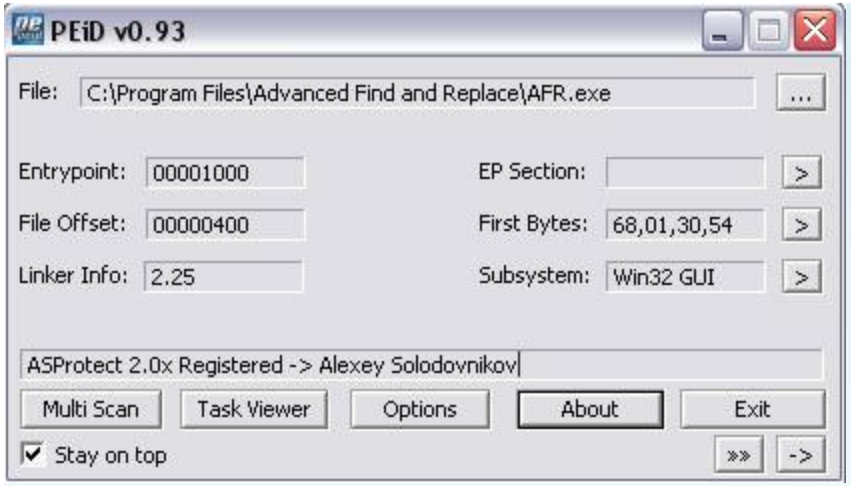
The DUP Trick ** ** = P

Trick for DUP (1 tools are quite common)
we will use 1 or features quite a memcheck "
see what it is. 1 short description of this feature as follows:



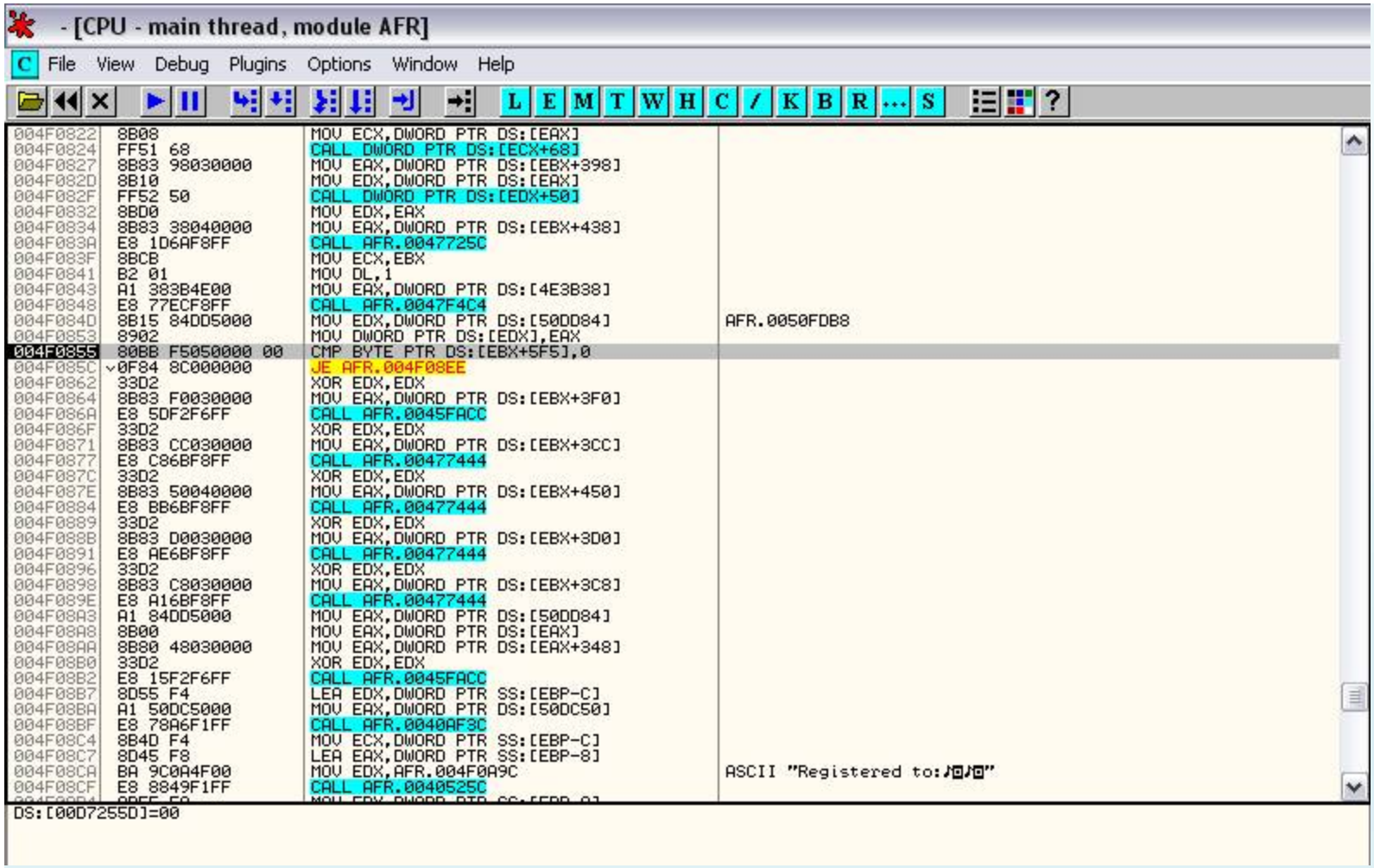
Preview we can find the address and value how =)
Target for this trick is Advanced Find and Replace 2.3





21 day trial are more aspr

First, I will show you the bytes need to patch program run as reg
(you are responsible for finding that the bytes in detail =))



004F0855 80BB F5050000 00 Cmp BYTE PTR DS: [EBX +5 F5], 0

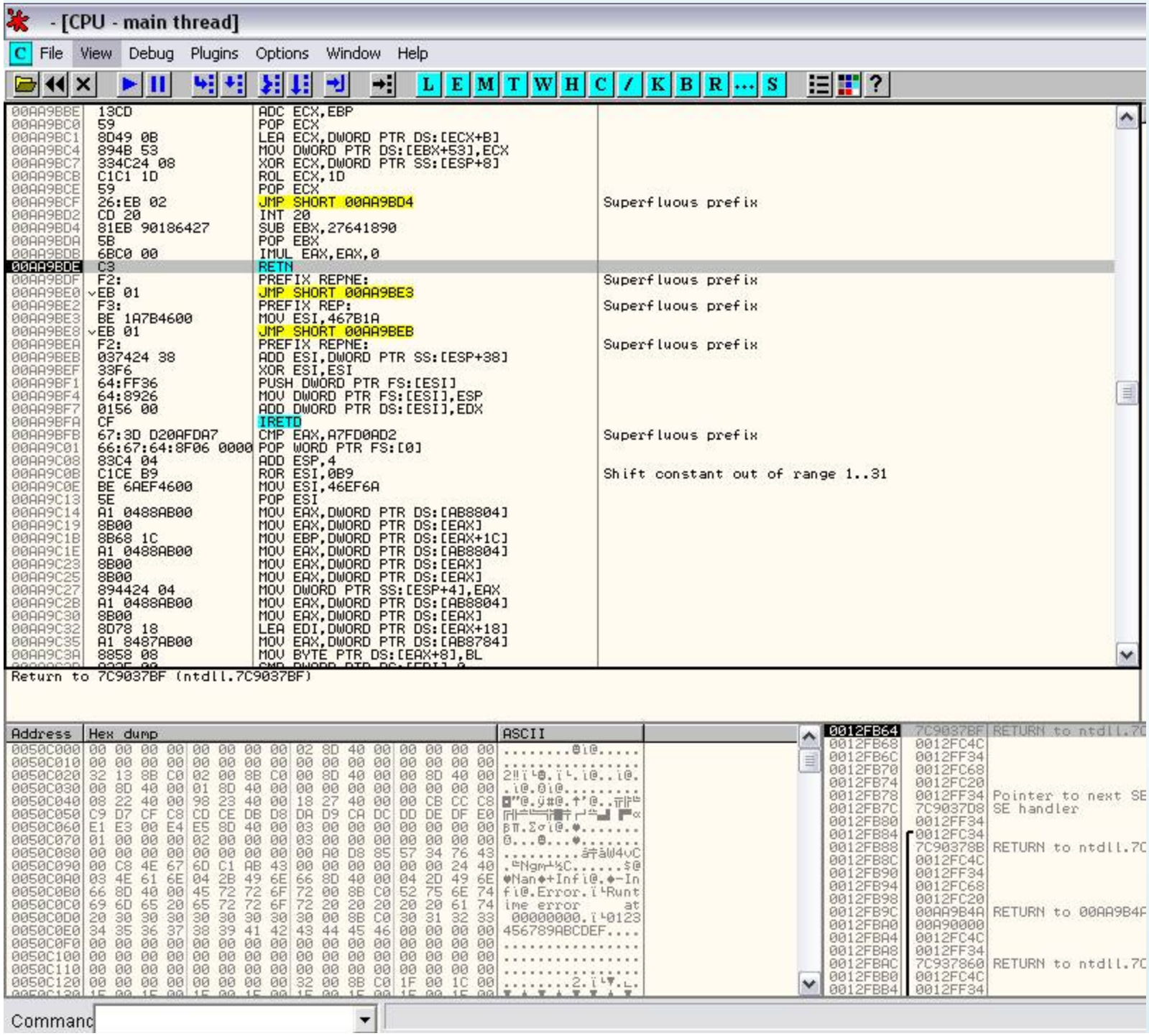
Change the following

004F0855 80BB F5050000 01 Cmp BYTE PTR DS: [EBX +5 F5], 1

program has been reg =)

Now to the new attractions =)
We must find the address and the value of memcheck
Hum, you need time to think why I just set 1 working
breakpoint (how I've said in the first tut)
hihi, because it will be useful at this time =).

Ok, Load target to Olly, exception to the final
look up 1 RETN command, set in the BP



```
Hardware breakpoint 1 at 00AA9BDE
```

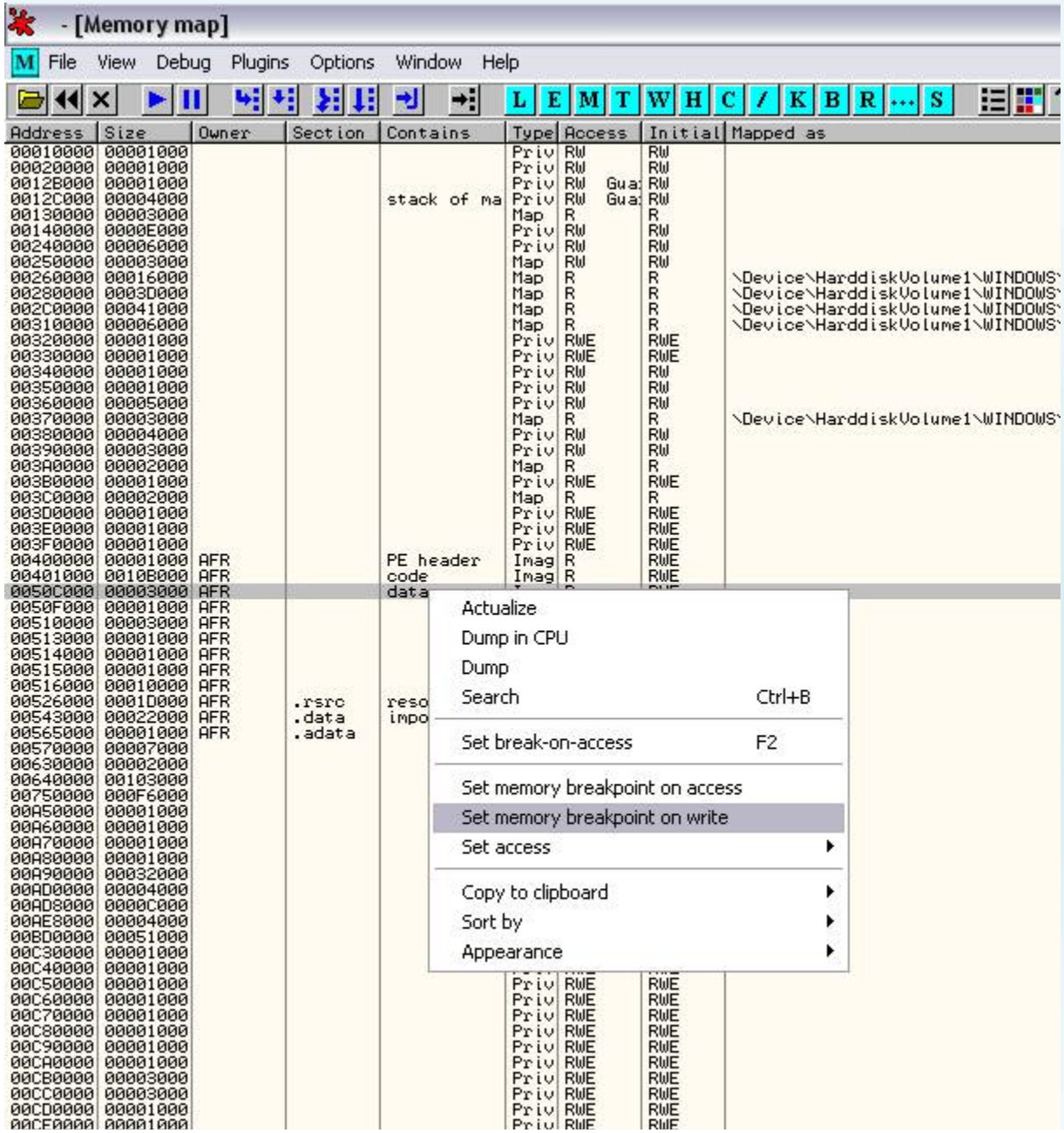
Open memory map (ALT + M) and then set on 1 bp code section

```
003B0000 00001000                          Priv RWE    RWE
003C0000 00002000                          Map  R      R
003D0000 00001000                          Priv RWE    RWE
003E0000 00001000                          Priv RWE    RWE
003F0000 00001000                          Priv RWE    RWE
00400000 00001000 AFR                      PE header  Imag R      RWE
00401000 0010B000 AFR                      code       Imag R      RWE
0050C000 00003000 AFR                      data       Imag R      RWE
0050F000 00001000 AFR                                 Imag R      RWE
00510000 00003000 AFR                                 Imag R      RWE
00513000 00001000 AFR                                 Imag R      RWE
00514000 00001000 AFR                                 Imag R      RWE
00515000 00001000 AFR                                 Imag R      RWE
00516000 00010000 AFR                                 Imag R      RWE
00526000 0001D000 AFR      .rsrc      resources  Imag R      RWE
00543000 00022000 AFR      .data      imports,rel Imag R      RWE
00565000 00001000 AFR      .adata                 Imag R      RWE
```

Press F9 and we will stop here

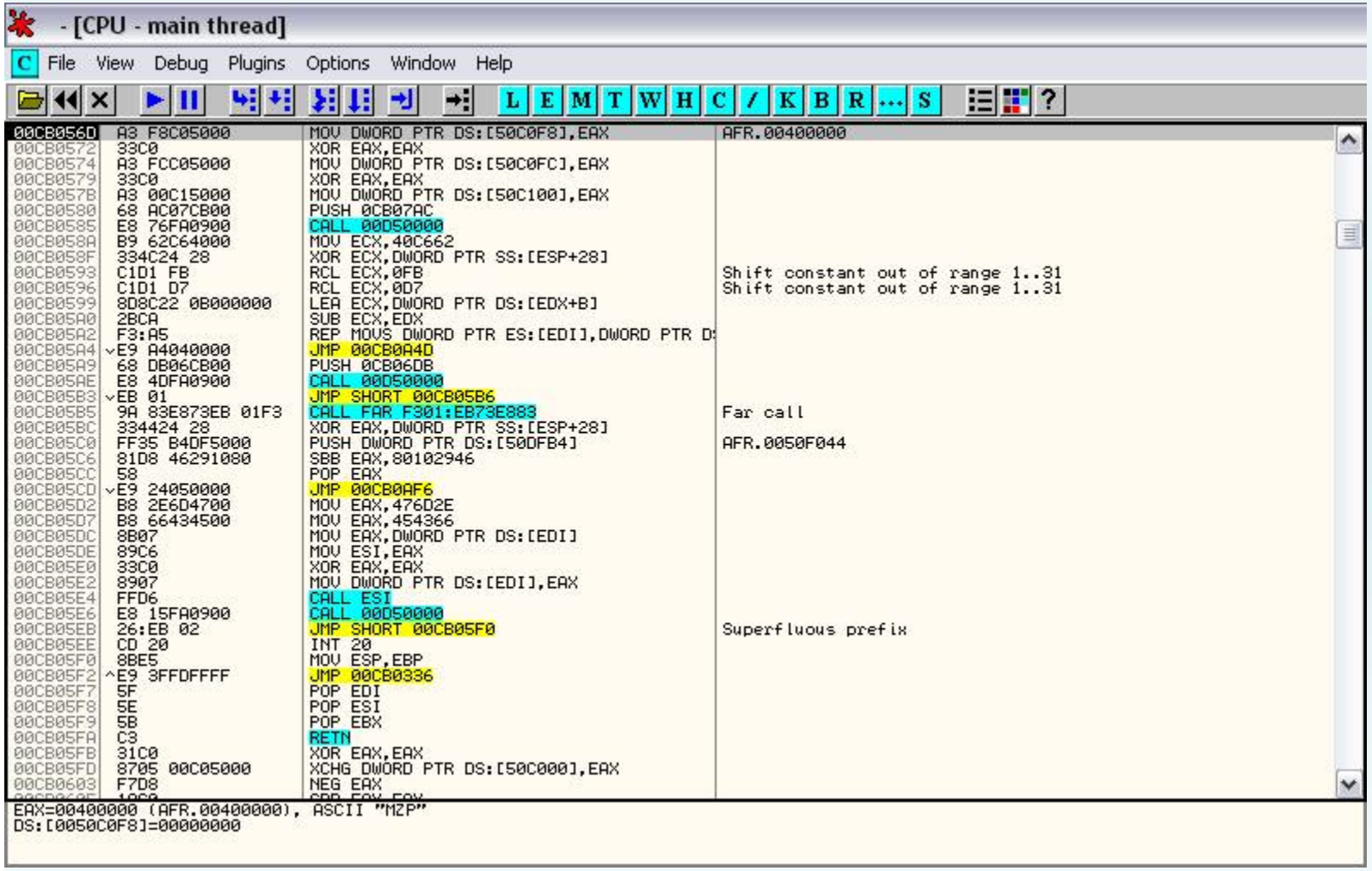
```
- [CPU - main thread, module AFR]
C File View Debug Plugins Options Window Help
00407412  C3                RETN
00407413  90                NOP
00407414  E8 E78B8C00       CALL 00CD0000
00407419  D9                ???                    Unknown command
0040741A  8BC0              MOV EAX,EAX
0040741C -FF25 90025100     JMP DWORD PTR DS:[510290]   kernel32.LocalAlloc
00407422  8BC0              MOV EAX,EAX
00407424 -FF25 8C025100     JMP DWORD PTR DS:[51028C]   kernel32.TlsGetValue
0040742A  8BC0              MOV EAX,EAX
0040742C -FF25 88025100     JMP DWORD PTR DS:[510288]   kernel32.TlsSetValue
00407432  8BC0              MOV EAX,EAX
00407434  50                PUSH EAX
00407435  6A 40             PUSH 40
00407437  E8 E0FFFFFF       CALL AFR.0040741C      JMP to kernel32.LocalAlloc
0040743C  C3                RETN
0040743D  8D40 00           LEA EAX,DWORD PTR DS:[EAX]
00407440  B8 34000000       MOV EAX,34
00407445  C3                RETN
00407446  8BC0              MOV EAX,EAX
00407448  53                PUSH EBX
00407449  E8 F2FFFFFF       CALL AFR.00407440
0040744E  8BD8              MOV EBX,EAX
00407450  85DB              TEST EBX,EBX
00407452 v74 36             JE SHORT AFR.0040748A
00407454  833D ECC05000 FF  CMP DWORD PTR DS:[50C0EC],-1
0040745B v75 0A             JNZ SHORT AFR.00407467
0040745D  B8 E2000000       MOV EAX,0E2
00407462  E8 DDDAFFFF       CALL AFR.00404F44
00407467  8BC3              MOV EAX,EBX
00407469  E8 C6FFFFFF       CALL AFR.00407434
0040746E  85C0              TEST EAX,EAX
00407470 v75 0C             JNZ SHORT AFR.0040747E
00407472  B8 E2000000       MOV EAX,0E2
00407477  E8 C8DAFFFF       CALL AFR.00404F44
0040747C vEB 0C             JMP SHORT AFR.0040748A
0040747E  50                PUSH EAX
0040747F  A1 ECC05000       MOV EAX,DWORD PTR DS:[50C0EC]
00407484  50                PUSH EAX
00407485  E8 A2FFFFFF       CALL AFR.0040742C      JMP to kernel32.TlsSetValue
0040748A  5B                POP EBX
0040748B  C3                RETN
0040748C  8A0D 64F65000     MOV CL,BYTE PTR DS:[50F664]
00407492  A1 ECC05000       MOV EAX,DWORD PTR DS:[50C0EC]
```

We are in the code of the program =). We have not to OEP
but i do, still OK.
Now, open the memory map and then set a breakpoint on memory write "
section in the image data such as =)



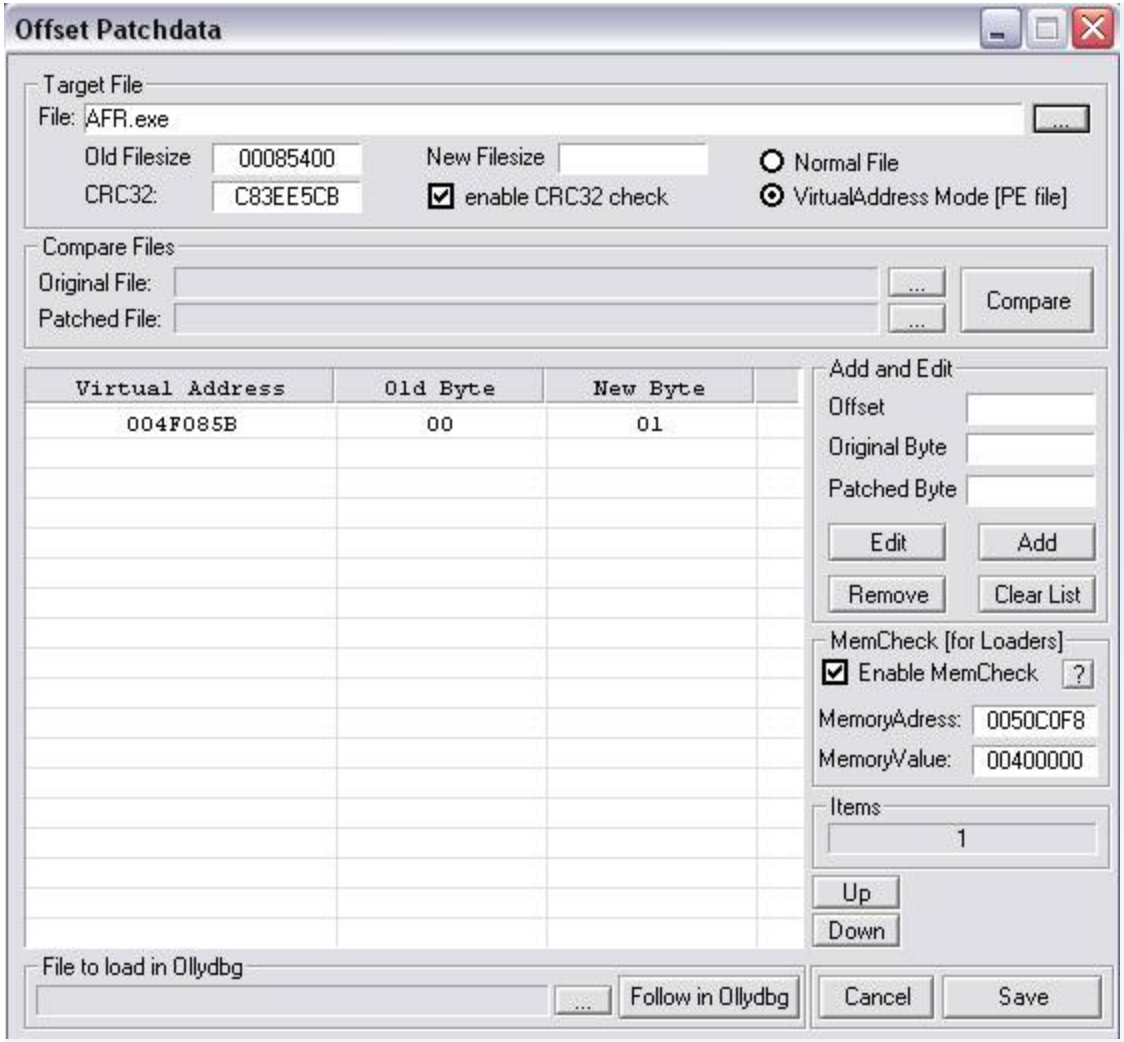
```
00CF0000 00001000                          Priv RWE    RWE
00D00000 00001000                          Priv RWE    RWE
00D10000 00001000                          Priv RWE    RWE
00D20000 00001000                          Priv RWE    RWE
00D30000 00001000                          Priv RWE    RWE
```

Press F9 and you will be here ..

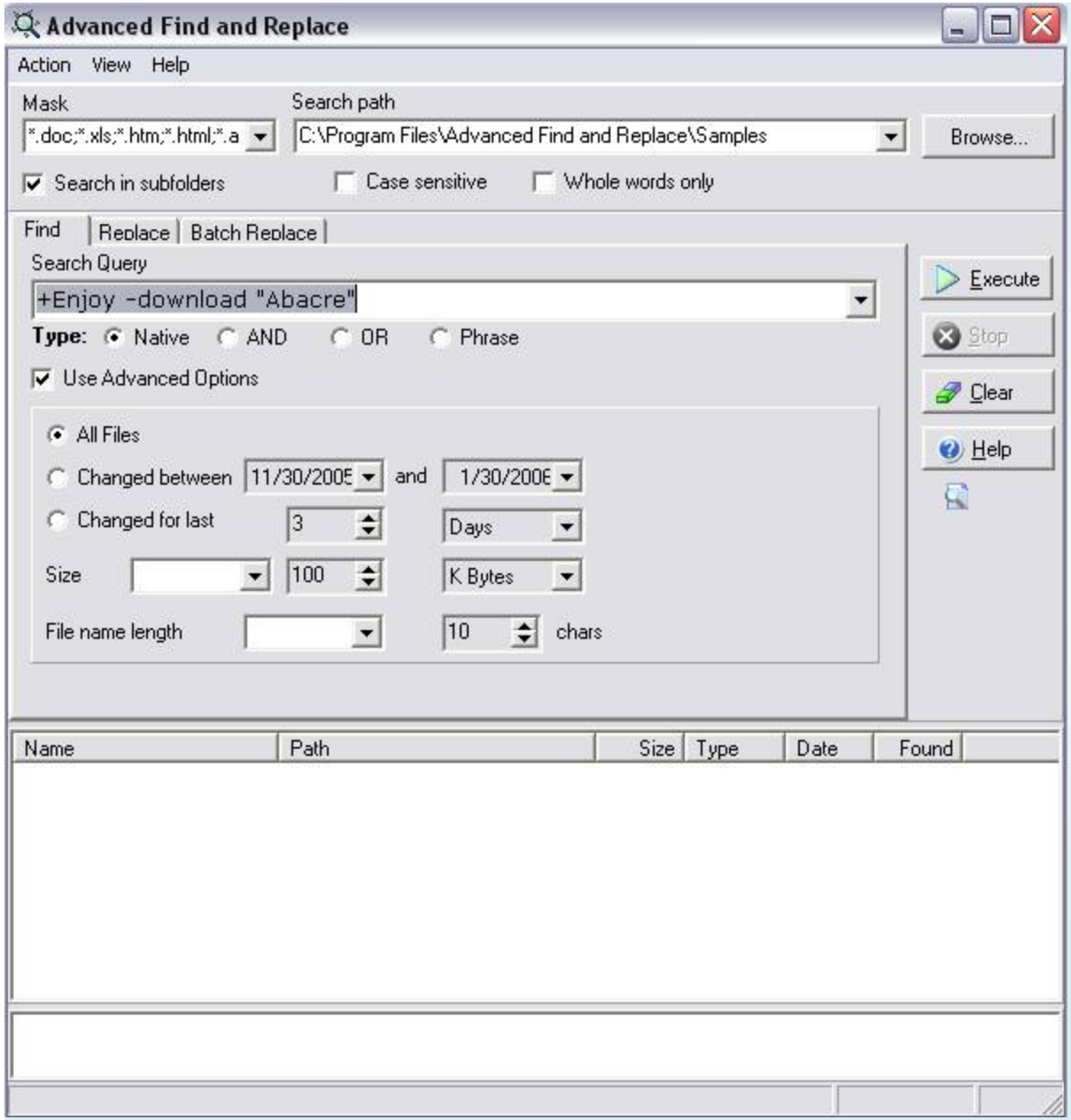


hehe try dom considered = D.
00400000 written at 0050C0F8 this is done
after aspr completed CRC check =) so we will use this value for DUP =)

Look down below pictures to see how to create loader =)



Run loader and see the results ... ... =)



hehe =)

About 1 second but I forgot to mention at the top
is a program to crack 1 asprotect trial
I will go through with basic 1 items

Target is DVD Catalyst 1:01

It uses asprotected trial, you crack how it addresses below may be different in your computer to DVDCatalyst.
exe Load Olly then press Shift + F9. If there are exceptions, the press Shift-F9 until you notice " sorry your 5 day trial has expired "
Now press F12 and then press ALT + K to call call stack window. It will be like after

```
Call stack of main thread
Address Stack Procedure / arguments Called from Frame
0012F934 77D493F5 Includes ntdll.KiFastSystemCallRet USER32.77D493F3 0012F968
0012F938 77D6EA24 USER32.WaitMessage USER32.77D6EA1F 0012F968
0012F96C 77D5688A USER32.77D6E895 USER32.77D56885 0012F968
0012F994 77D6B7C5 USER32.77D567D4 USER32.77D6B7C0 0012F990
0012FC54 77D6B12B USER32.SoftModalMessageBox USER32.77D6B126 0012FC50
0012FDA4 77D95FDF USER32.77D6AFB6 USER32.77D95FDA 0012FDA0
0012FDFC 77D96084 USER32.MessageBoxTimeoutW USER32.77D9607F 0012FDF8
0012FE30 77D80598? USER32.MessageBoxTimeoutA USER32.77D80593 0012FE2C
0012FE50 77D80550? USER32.MessageBoxExA USER32.77D8054B 0012FE4C
0012FE54 00000000 hOwner = null
0012FE58 00C2D231 Text = "Sorry, but your 5-day tria
0012FE5C 00C2D287 title = "Trial Version"
0012FE60 00000010 Style = MB_OK | MB_ICONHAND | MB_APPLM
0012FE64 00000000 LanguageID = 0 (LANG_NEUTRAL)
0012FE6C 00BF53DB? 00BE587C 00BF53D6 0012FE68
0012FE70 00000000 hOwner = null
0012FE74 00C2D231 Text = "Sorry, but your 5-day tria
0012FE78 00C2D287 title = "Trial Version"
0012FE7C 00000010 Style = MB_OK | MB_ICONHAND | MB_APPLM
0012FE88 00BF54C2? 00BF53C800BF54BD ---------> Follow Call to function in Olly 0012FE84
0012FF24 00BFBE85 00BF5454 00BFBE80 0012FF78
0012FE88 00BF54C2? 00BF53C8 00BF54BD
```

right click on the line and then select follow in disassembler. You will be here

```
00BF5487 0F85 8C000000 JNZ 00BF5519
00BF548D 807C24 65 00 Cmp BYTE PTR SS: [ESP +65], 0
00BF5492 75 07 JNZ SHORT 00BF549B
00BF5494 807C24 64 00 Cmp BYTE PTR SS: [ESP +64], 0
00BF5499 74 65 JE SHORT 00BF5500
00BF549B 807C24 65 00 Cmp BYTE PTR SS: [ESP +65], 0
00BF54A0 75 10 JNZ SHORT 00BF54B2
00BF54A2 66:837 C24 40 00 Cmp WORD PTR SS: [ESP +40], 0
00BF54A8 75 1A JNZ SHORT 00BF54C4
```

```
00BF54AA 66:837 C24 3C 00 Cmp WORD PTR SS: [ESP +3 C], 0
00BF54B0 74 12 JE SHORT 00BF54C4
00BF54B2 8B5424 6D MOV EDX, DWORD PTR SS: [ESP +6 D]
00BF54B6 8B8424 85000000 MOV EAX, DWORD PTR SS: [ESP +85]
00BF54BD E8 06FFFFFF CALL 00BF53C8
00BF54C2 EB 55 JMP SHORT 00BF5519
00BF54C4 66:837 C24 46 00 Cmp WORD PTR SS: [ESP +46], 0
00BF54CA 75 1A JNZ SHORT 00BF54E6
```

Now set at 1 bp hardware BF5494 then restart and run the program in Olly
it will break in the hardware you set bp

Please change 00BF5494 807C24 64 00 Cmp BYTE PTR SS: [ESP +64], 0

to

00BF5494 807C24 64 01 Cmp BYTE PTR SS: [ESP +64], 1

then press F9, hehe, run a very good program. Aspr trial was defeate
loader to enter the address and bytes to the DUP or enter ABEL
the CRC check bytes tut because of me or because aspr CRC
check = locator)

Well thats it from my side.
Cya all and take care =)

Closing words

My main emphasis here was not on any patching asprotect appbut to show the different methods =)

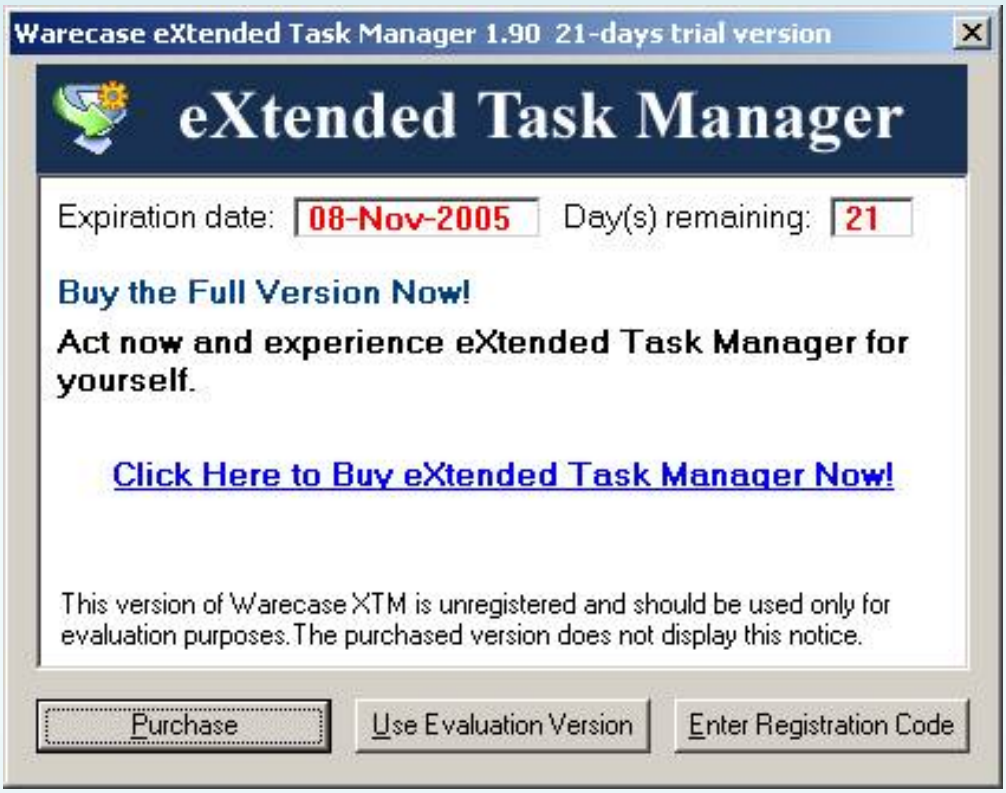
Greetz fly out to all snd, ICU, Mp2K, ARTEAM, TSRh Team Members
and special greets to Cordat, d2k2, Predator for their outstanding tools
=)

Adios
slayer / / snd

Takada

Armadillo collect sand-stone

Warecase (TM) extended Task Manager (TM) <|> ARM 4.xx - Standard Protection + Code Splicing + IAT elimination



Product Name	License Type	Product ID	Price, USD	Online Store
eXtended Task Manager for Windows 2000/XP/2003	Home	10786-1	$55.00	Order Now!
	Enterprise	10786-6	$85.00	Order Now!

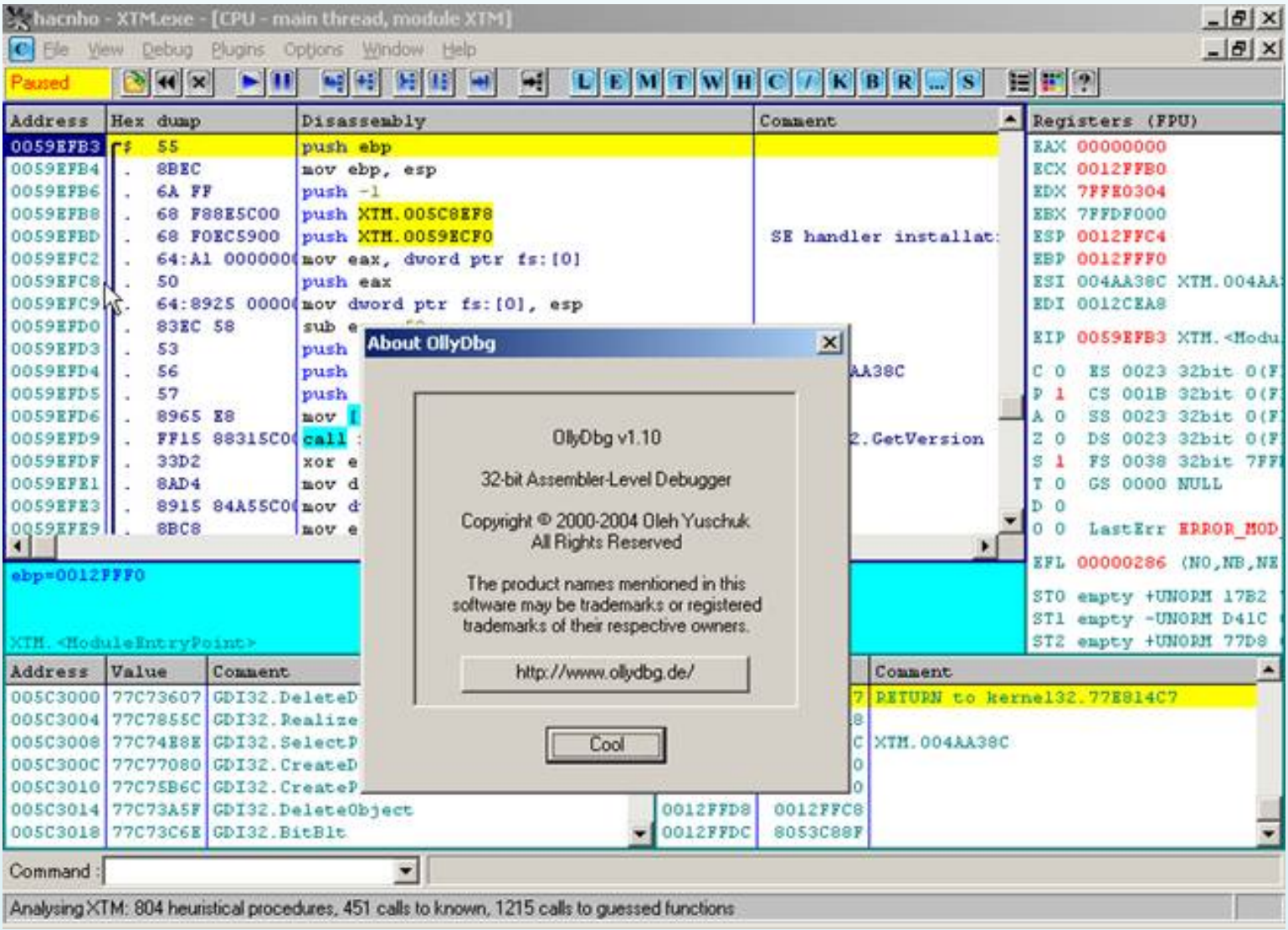
C laos this one can unpack, but I do tuts to introduce new tools: D.

1. Tools:

_OllyDBG Vs Armadillo MOD by **hacnho** (Version 0.2 Fixed OutputDebugStringW).
_LordPE 1.4 Deluxe **kanxue** by MOD
_ImpREC 1.6 Final by **MaRKuS_TH MOD-DJM**

2. Unpack

_Load Target:

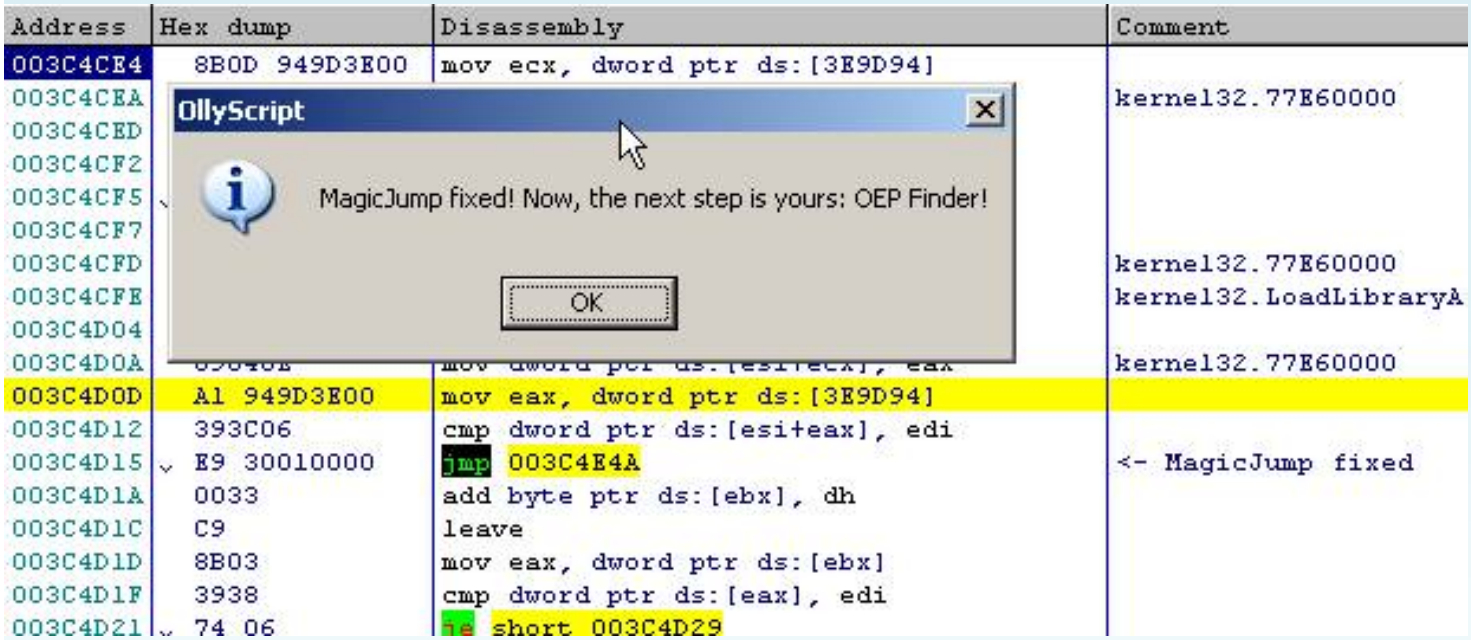


_Chay Script:

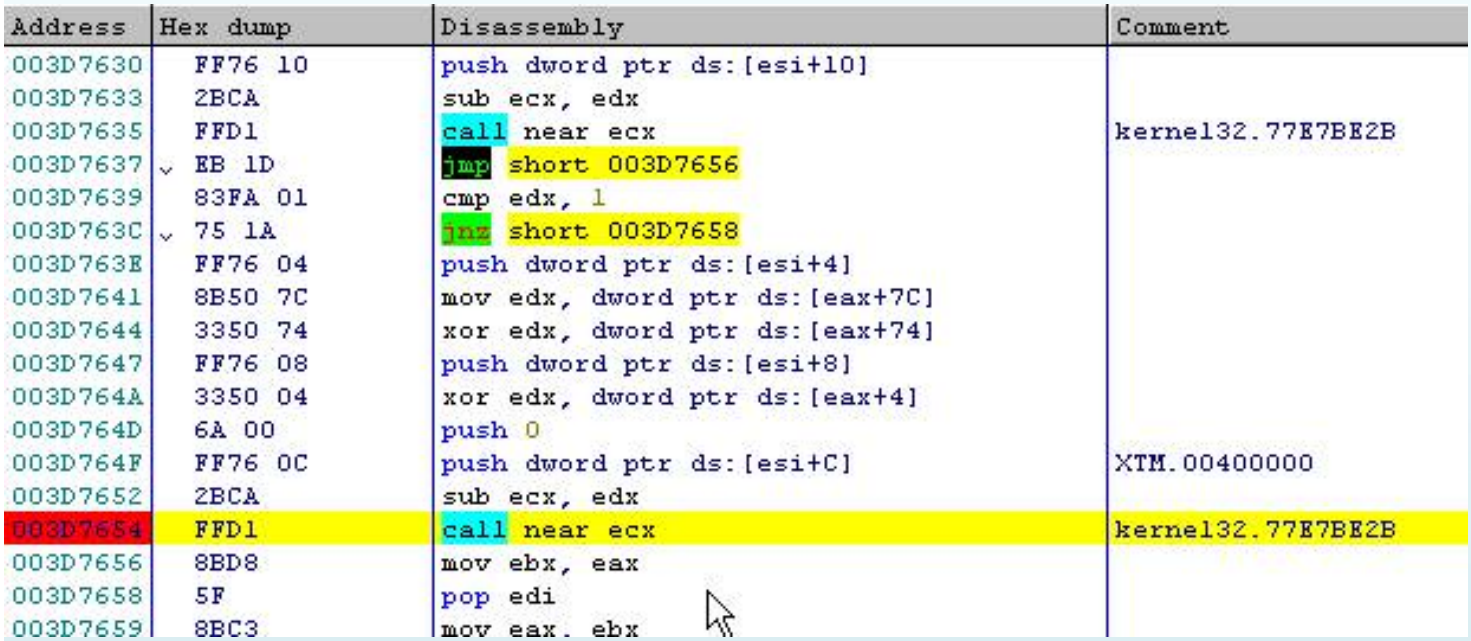
```
var GetModuleHandleA
var AddressOfMagicJump
var LenOfMagicJump

GPA "GetModuleHandleA", "kernel32.dll"
mov GetModuleHandleA, $ RESULT

bphws GetModuleHandleA, "x"
repeat:
esto
rtu
find eip, # 0F84 ???????????????????? 74 ?????????? EB? #
Cmp $ result, 0
je repeat
bphwc GetModuleHandleA

mov AddressOfMagicJump, $ RESULT
mov LenOfMagicJump, AddressOfMagicJump
add LenOfMagicJump, 2
mov LenOfMagicJump, [LenOfMagicJump]
inc LenOfMagicJump
mov [AddressOfMagicJump], 0E9
inc AddressOfMagicJump
mov [AddressOfMagicJump], LenOfMagicJump
```

```
CMT $ result, "<- MagicJump fixed"
msg "MagicJump fixed! Now, the next step is yours: OEP Finder!"
ret
```

_Sau When to run here:



_BP CreateThread, F9, Ctrl + F9, F8, Ctrl + F9, F8:



_F9, F7: OEP:

Address	Hex dump	Disassembly	Comment
0050C720	55	push ebp	
0050C721	8BEC	mov ebp, esp	
0050C723	6A FF	push -1	
0050C725	68 082A5300	push XTM.00532A08	
0050C72A	68 8AC85000	push XTM.0050C88A	jmp to msvcrt._except_
0050C72F	64:A1 00000000	mov eax, dword ptr fs:[0]	
0050C735	50	push eax	XTM.005C3370
0050C736	64:8925 0000000(	mov dword ptr fs:[0], esp	
0050C73D	83EC 68	sub esp, 68	
0050C740	53	push ebx	
0050C741	56	push esi	XTM.005C9E08
0050C742	57	push edi	
0050C743	8965 E8	mov dword ptr ss:[ebp-18], esp	
0050C746	33DB	xor ebx, ebx	
0050C748	895D FC	mov dword ptr ss:[ebp-4], ebx	
0050C74B	6A 02	push 2	
0050C74D	FF15 3413EA00	call dword ptr ds:[EA1334]	msvcrt.__set_app_type
0050C753	59	pop ecx	003D7656

_IAT Elimination:

Address	Hex dump	Disassembly	Comment
0043CBEF	90	nop	
0043CBF0	C705 74865500	mov dword ptr ds:[558674], XTM.0051F	
0043CBFA	C3	retn	
0043CBFB	90	nop	
0043CBFC	90	nop	
0043CBFD	90	nop	
0043CBFE	90	nop	
0043CBFF	90	nop	
0043CC00	- FF25 C01DEA00	jmp dword ptr ds:[EA1DC0]	XTMExtUI.CHookDialog:
0043CC06	- FF25 981CEA00	jmp dword ptr ds:[EA1C98]	XTMExtUI.CColorListVi
0043CC0C	- FF25 8C1CEA00	jmp dword ptr ds:[EA1C8C]	XTMExtUI.CColorListVi
0043CC12	- FF25 881CEA00	jmp dword ptr ds:[EA1C88]	XTMExtUI.CColorListVi
0043CC18	- FF25 801CEA00	jmp dword ptr ds:[EA1C80]	XTMExtUI.CColorListVi
0043CC1E	- FF25 7C1CEA00	jmp dword ptr ds:[EA1C7C]	XTMExtUI.CColorListVi
0043CC24	- FF25 B41BEA00	jmp dword ptr ds:[EA1BB4]	XTMExtUI.CHookFrameWn
0043CC2A	CC	int3	
0043CC2B	CC	int3	
0043CC2C	CC	int3	

_IAT Start:

Address	Value	Comment
00EA12D4	00080102	
00EA12D8	7712174B	OLEAUT32.SysFreeString
00EA12DC	77123D8F	OLEAUT32.SysStringLen
00EA12E0	73DD6784	MFC42.#324_CDialog::CDialog
00EA12E4	73E6067B	MFC42.#952_??_afxSOCK@@3UAFX_SOCK_CAL
00EA12E8	77121650	OLEAUT32.SysAllocString
00EA12EC	003C5DED	

_IAT End:

Address	Value	Comment
00EA2DF0	00060009	
00EA2DF4	00080102	
00EA2DF8	77C10000	msvcrt.77C10000
00EA2DFC	771B0000	OLE32.771B0000
00EA2E00	8000101B	
00EA2E04	80000ED5	
00EA2E08	800012F6	

_ Splicing Code:

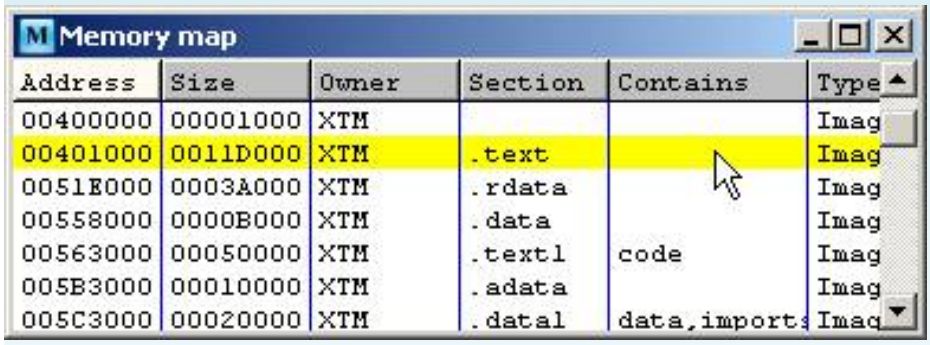
Memory map

Address	Size	Owner	Section	Contains	Type
015C6000	00001000	XTMEngn	.rsrc	resources	Imag
015C7000	00006000	XTMEngn	.reloc	relocations	Imag
015D0000	00020000				Priv
015F0000	00001000	XTMGen		PE header	Imag
015F1000	00006000	XTMGen	.text	code	Imag
015F7000	00004000	XTMGen	.rdata	imports,exp	Imag
015FB000	00002000	XTMGen	.data	data	Imag

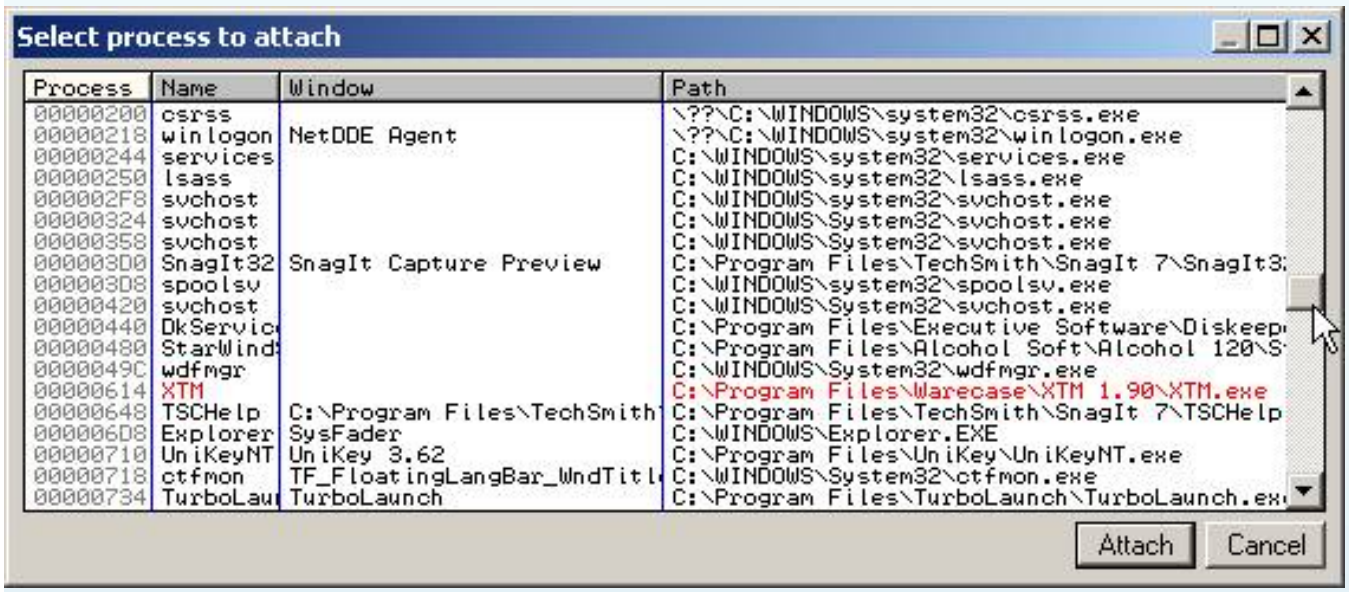
Dump - 015D0000..015EFFFF

```
015D0000    55            push    ebp
015D0001    8BEC          mov     ebp, esp
015D0003    51            push    ecx
015D0004    53            push    ebx
015D0005  v EB 00         jmp     short 015D0007
015D0007    66:87CB       xchg    bx, cx
015D000A    F7D7          not     edi
015D000C    F7D7          not     edi
015D000E    66:87CB       xchg    bx, cx
015D0011    5B            pop     ebx
015D0012    53            push    ebx
015D0013    56            push    esi
015D0014    57            push    edi
015D0015    894D FC       mov     dword ptr ss:[ebp-4], ecx
015D0018  - E9 381BE3FE   jmp     XTM.00401B55
015D001D    66:87F2       xchg    dx, si
015D0020  v 70 02         jo      short 015D0024
015D0022  v 70 27         jo      short 015D004B
015D0024    66:97         xchg    ax, di
015D0026    F7D3          not     ebx
```

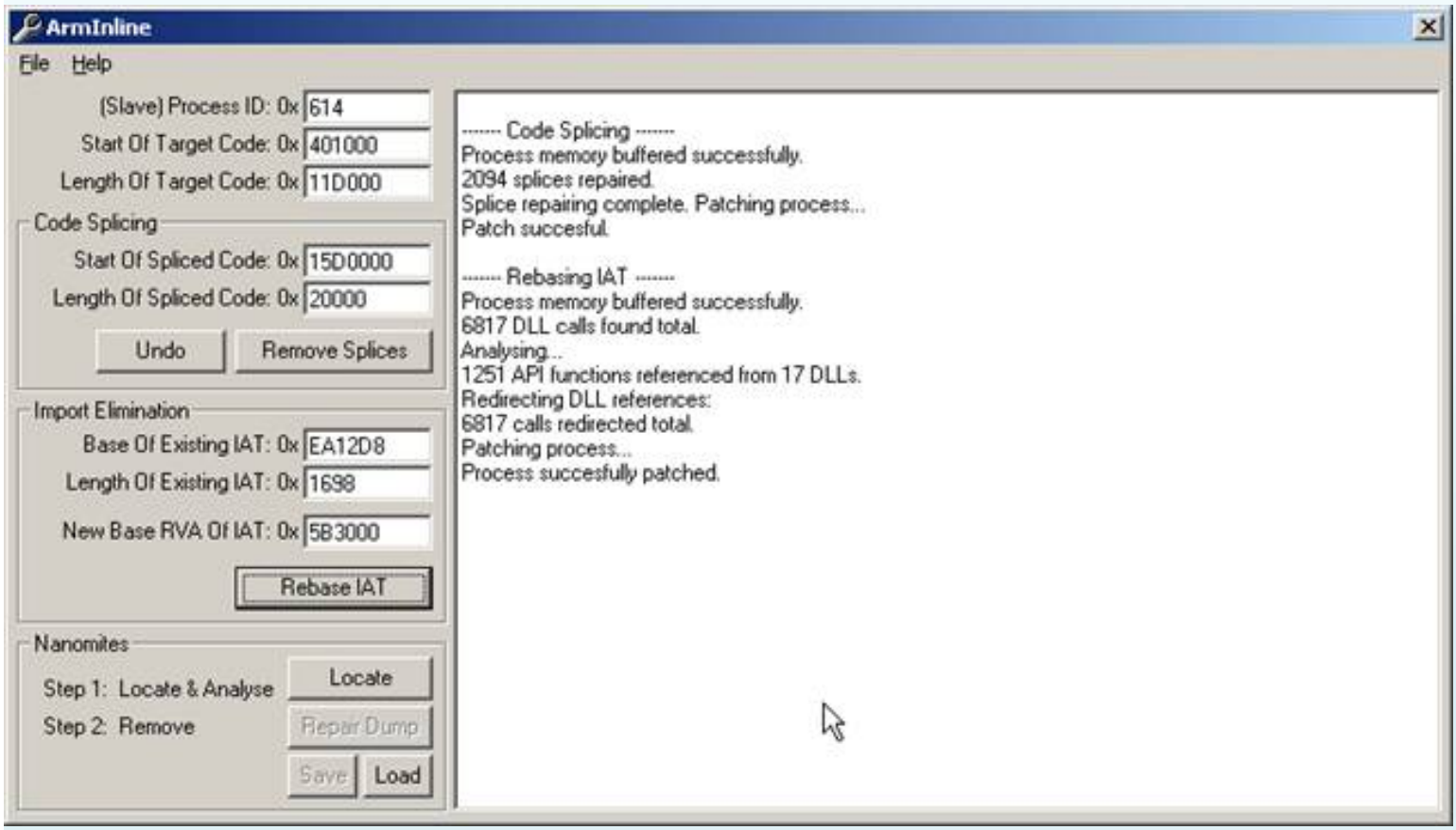
_Sections:



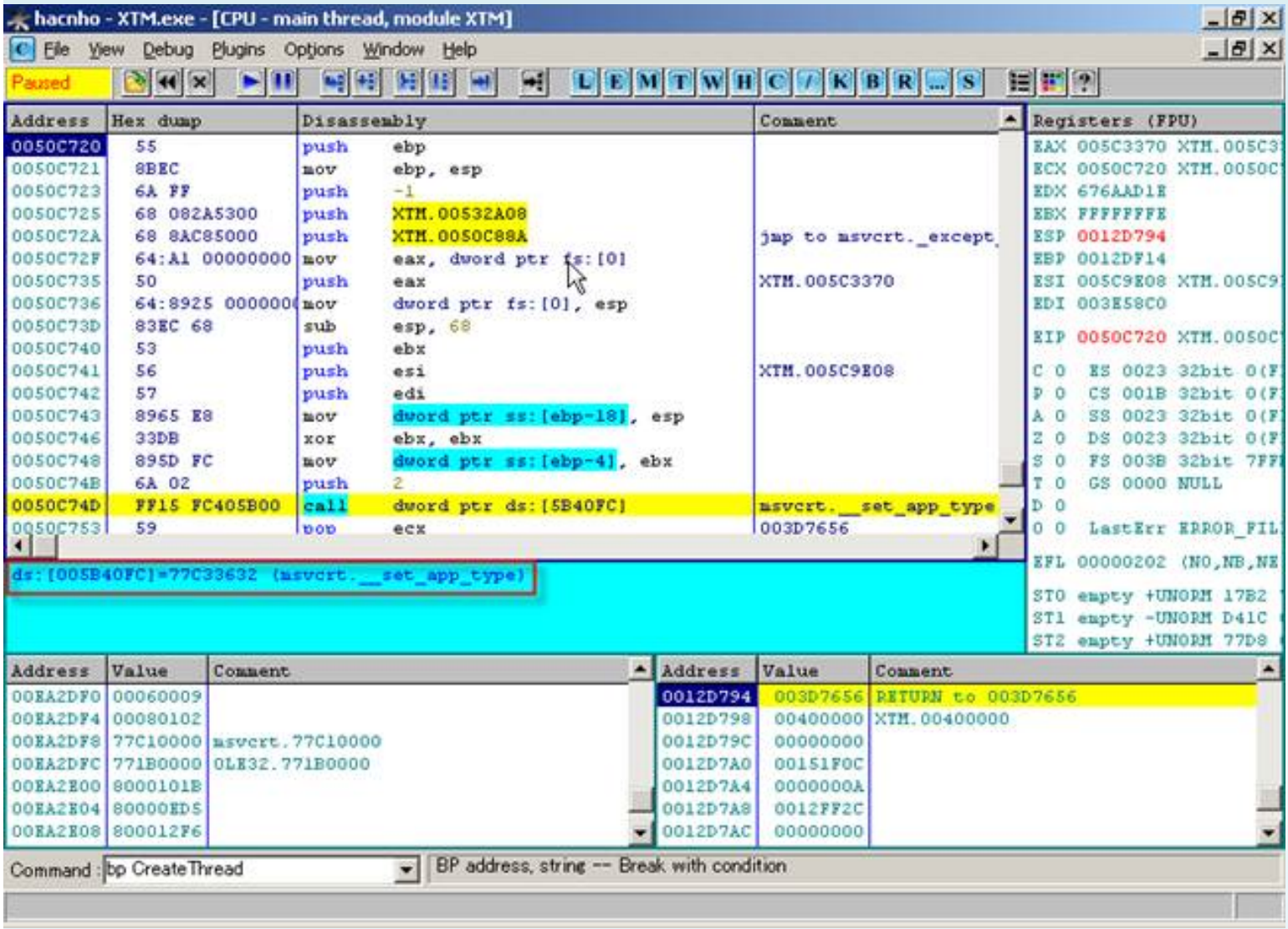
_PiD



0.71 _ArmInline:

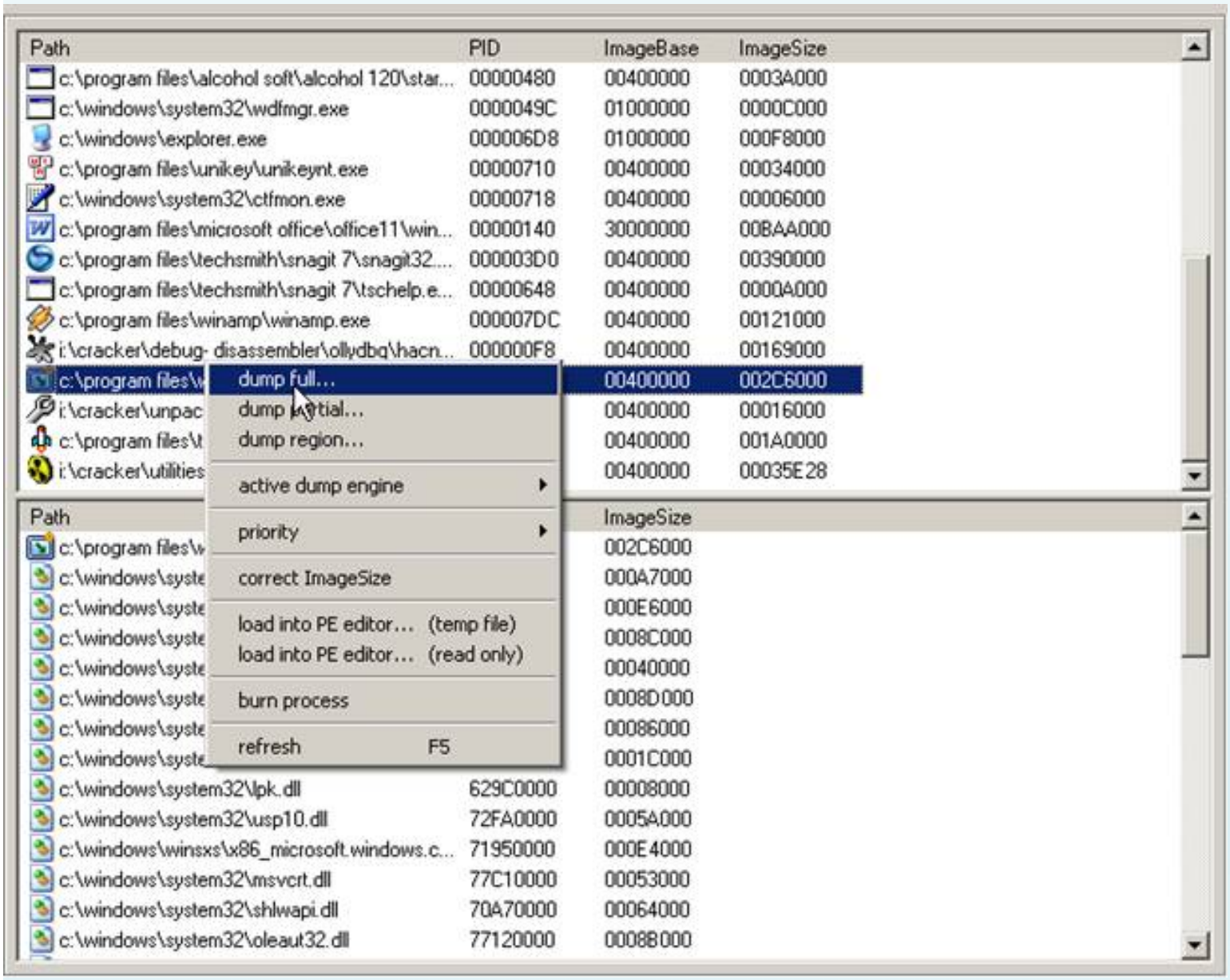

ArmInline
File Help
(Slave) Process ID: 0x 614
Start Of Target Code: 0x 401000
Length Of Target Code: 0x 11D000
Code Splicing
Start Of Spliced Code: 0x 15D0000
Length Of Spliced Code: 0x 20000
Undo
Remove Splices
Import Elimination
Base Of Existing IAT: 0x EA12D8
Length Of Existing IAT: 0x 1698
New Base RVA Of IAT: 0x 5B3000
Rebase IAT
Nanomites
Step 1: Locate & Analyse
Locate
Step 2: Remove
Repair Dump
Save
Load
------- Code Splicing -------
Process memory buffered successfully.
2094 splices repaired.
Splice repairing complete. Patching process...
Patch succesful.
------- Rebasing IAT -------
Process memory buffered successfully.
6817 DLL calls found total.
Analysing...
1251 API functions referenced from 17 DLLs.
Redirecting DLL references:
6817 calls redirected total.
Patching process...
Process succesfully patched.

_OllyDBG:

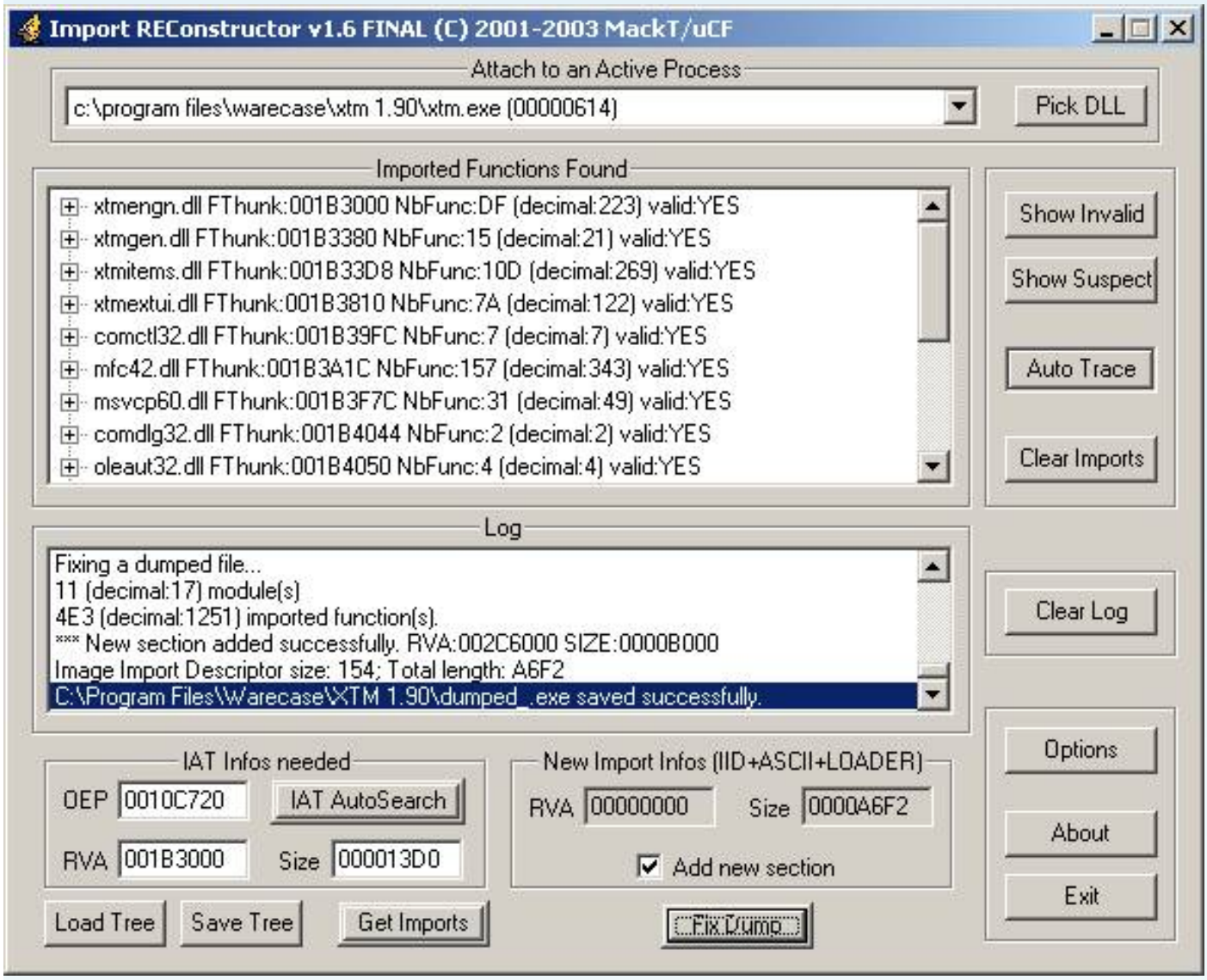

hacnho - XTM.exe - [CPU - main thread, module XTM]
File View Debug Plugins Options Window Help
Paused
Address Hex dump Disassembly Comment
0050C720 55 push ebp
0050C721 8BEC mov ebp, esp
0050C723 6A FF push -1
0050C725 68 082A5300 push XTM.00532A08
0050C72A 68 8AC85000 push XTM.0050C88A jmp to msvcrt._except_
0050C72F 64:A1 00000000 mov eax, dword ptr fs:[0]
0050C735 50 push eax XTM.005C3370
0050C736 64:8925 000000 mov dword ptr fs:[0], esp
0050C73D 83EC 68 sub esp, 68
0050C740 53 push ebx
0050C741 56 push esi XTM.005C9E08
0050C742 57 push edi
0050C743 8965 E8 mov dword ptr ss:[ebp-18], esp
0050C746 33DB xor ebx, ebx
0050C748 895D FC mov dword ptr ss:[ebp-4], ebx
0050C74B 6A 02 push 2
0050C74D FF15 FC405B00 call dword ptr ds:[5B40FC] msvcrt.__set_app_type
0050C753 59 pop ecx 003D7656
ds:[005B40FC]=77C33632 (msvcrt.__set_app_type)
Registers (FPU)
EAX 005C3370 XTM.005C3
ECX 0050C720 XTM.0050C
EDX 676AAD1E
EBX FFFFFFFE
ESP 0012D794
EBP 0012DF14
ESI 005C9E08 XTM.005C9
EDI 003E58C0
EIP 0050C720 XTM.0050C
C 0 ES 0023 32bit 0(F
P 0 CS 001B 32bit 0(F
A 0 SS 0023 32bit 0(F
Z 0 DS 0023 32bit 0(F
S 0 FS 003B 32bit 7FF
T 0 GS 0000 NULL
D 0
O 0 LastErr ERROR_FIL
EFL 00000202 (NO,NB,NE
ST0 empty +UNORM 17B2
ST1 empty -UNORM D41C
ST2 empty +UNORM 77D8
Address Value Comment
00EA2DF0 00060009
00EA2DF4 00080102
00EA2DF8 77C10000 msvcrt.77C10000
00EA2DFC 771B0000 OLE32.771B0000
00EA2E00 8000101B
00EA2E04 80000ED5
00EA2E08 800012F6
Address Value Comment
0012D794 003D7656 RETURN to 003D7656
0012D798 00400000 XTM.00400000
0012D79C 00000000
0012D7A0 00151F0C
0012D7A4 0000000A
0012D7A8 0012FF2C
0012D7AC 00000000
Command : bp CreateThread
BP address, string -- Break with condition

_LordPE:

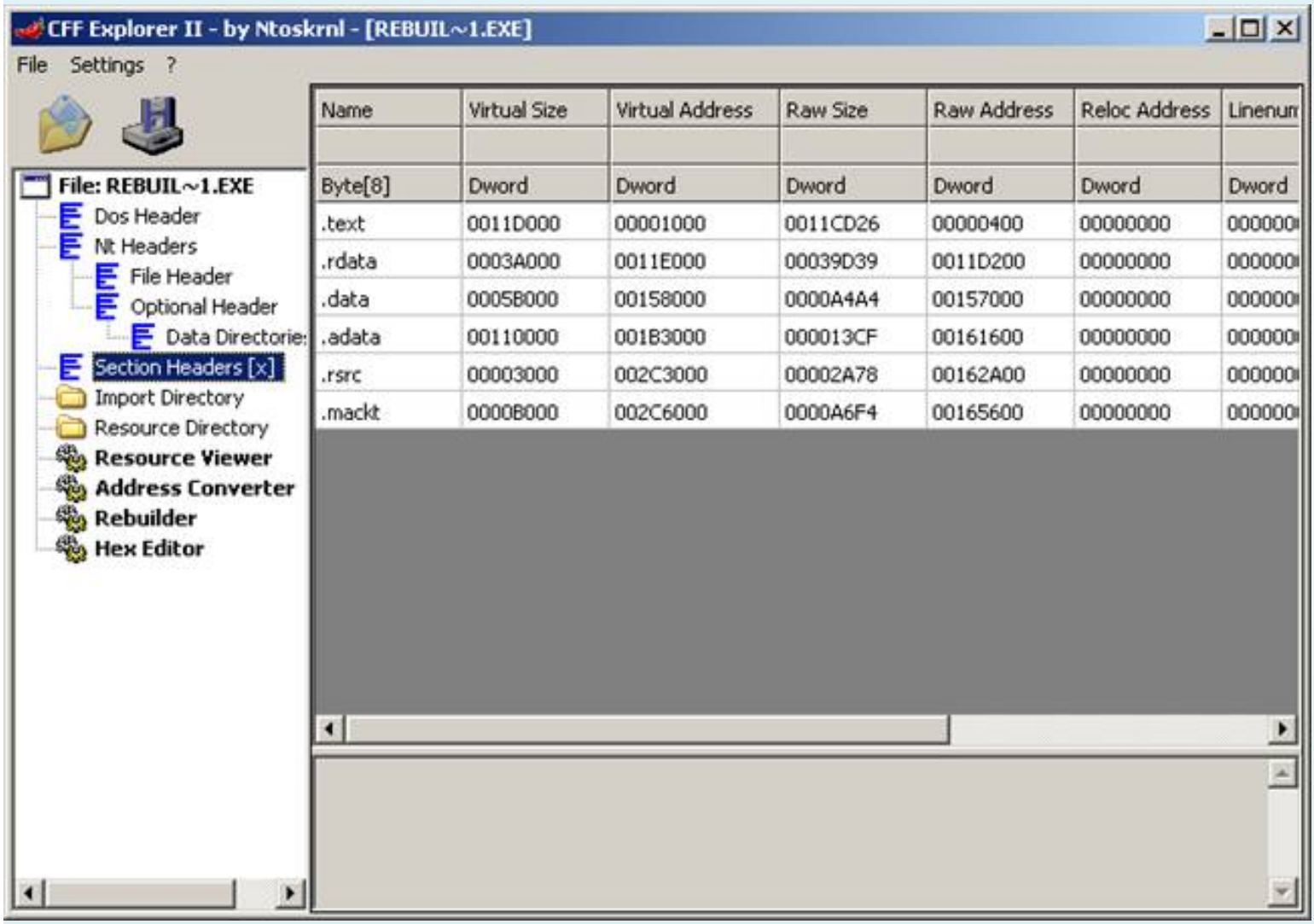

LordPE_fixed
PM 10:01:12 on Tuesday, October 18, 2005


Path
PID
ImageBase
ImageSize
c:\program files\alcohol soft\alcohol 120\star... 00000480 00400000 0003A000
c:\windows\system32\wdfmgr.exe 0000049C 01000000 0000C000
c:\windows\explorer.exe 000006D8 01000000 000F8000
c:\program files\unikey\unikeynt.exe 00000710 00400000 00034000
c:\windows\system32\ctfmon.exe 00000718 00400000 00006000
c:\program files\microsoft office\office11\win... 00000140 30000000 00BAA000
c:\program files\techsmith\snagit 7\snagit32.... 000003D0 00400000 00390000
c:\program files\techsmith\snagit 7\tschelp.e... 00000648 00400000 0000A000
c:\program files\winamp\winamp.exe 000007DC 00400000 00121000
i:\cracker\debug- disassembler\ollydbg\hacn... 000000F8 00400000 00169000
c:\program files\ 00400000 002C6000
i:\cracker\unpac 00400000 00016000
c:\program files\t 00400000 001A0000
i:\cracker\utilities 00400000 00035E28
dump full...
dump partial...
dump region...
active dump engine
priority
correct ImageSize
load into PE editor... (temp file)
load into PE editor... (read only)
burn process
refresh F5
Path
ImageSize
c:\program files\w 002C6000
c:\windows\syste 000A7000
c:\windows\syste 000E6000
c:\windows\syste 0008C000
c:\windows\syste 00040000
c:\windows\syste 0008D000
c:\windows\syste 00086000
c:\windows\syste 0001C000
c:\windows\system32\lpk.dll 629C0000 00008000
c:\windows\system32\usp10.dll 72FA0000 0005A000
c:\windows\winsxs\x86_microsoft.windows.c... 71950000 000E4000
c:\windows\system32\msvcrt.dll 77C10000 00053000
c:\windows\system32\shlwapi.dll 70A70000 00064000
c:\windows\system32\oleaut32.dll 77120000 00088000

_ ImpREC:

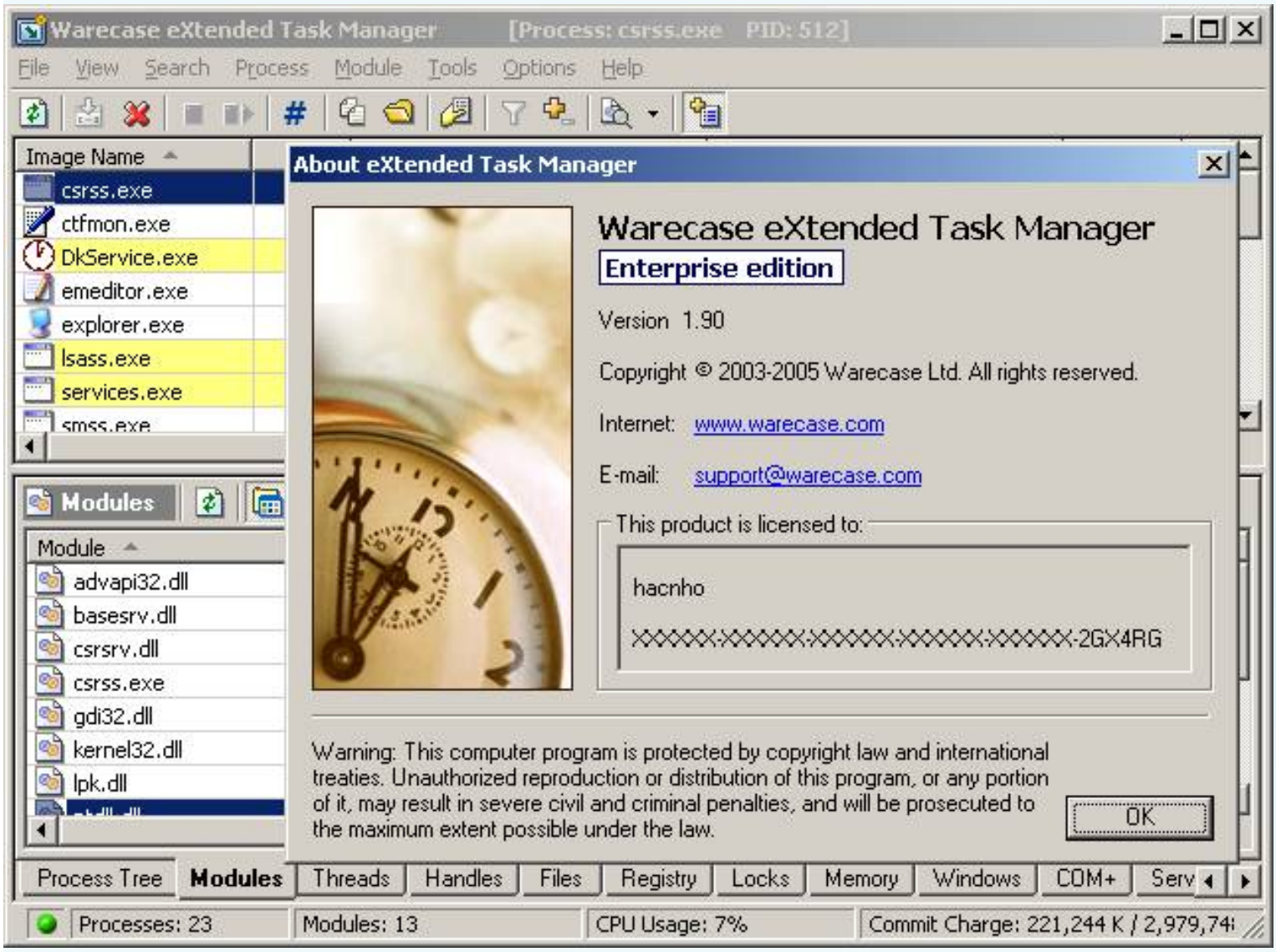

Import REConstructor v1.6 FINAL (C) 2001-2003 MackT/uCF
Attach to an Active Process
c:\program files\warecase\xtm 1.90\xtm.exe (00000614)
Pick DLL
Imported Functions Found
xtmengn.dll FThunk:001B3000 NbFunc:DF (decimal:223) valid:YES
xtmgen.dll FThunk:001B3380 NbFunc:15 (decimal:21) valid:YES
xtmitems.dll FThunk:001B33D8 NbFunc:10D (decimal:269) valid:YES
xtmextui.dll FThunk:001B3810 NbFunc:7A (decimal:122) valid:YES
comctl32.dll FThunk:001B39FC NbFunc:7 (decimal:7) valid:YES
mfc42.dll FThunk:001B3A1C NbFunc:157 (decimal:343) valid:YES
msvcp60.dll FThunk:001B3F7C NbFunc:31 (decimal:49) valid:YES
comdlg32.dll FThunk:001B4044 NbFunc:2 (decimal:2) valid:YES
oleaut32.dll FThunk:001B4050 NbFunc:4 (decimal:4) valid:YES
Show Invalid
Show Suspect
Auto Trace
Clear Imports
Log
Fixing a dumped file...
11 (decimal:17) module(s)
4E3 (decimal:1251) imported function(s).
*** New section added successfully. RVA:002C6000 SIZE:0000B000
Image Import Descriptor size: 154; Total length: A6F2
C:\Program Files\Warecase\XTM 1.90\dumped_.exe saved successfully.
Clear Log
IAT Infos needed
OEP 0010C720
IAT AutoSearch
RVA 001B3000
Size 000013D0
New Import Infos (IID+ASCII+LOADER)
RVA 00000000
Size 0000A6F2
Add new section
Options
About
Exit
Load Tree
Save Tree
Get Imports
Fix Dump

_Rebuild:


CFF Explorer II - by Ntoskrnl - [REBUIL~1.EXE]
File Settings ?
File: REBUIL~1.EXE
Dos Header
Nt Headers
File Header
Optional Header
Data Directorie:
Section Headers [x]
Import Directory
Resource Directory
Resource Viewer
Address Converter
Rebuilder
Hex Editor
Name Virtual Size Virtual Address Raw Size Raw Address Reloc Address Linenum
Byte[8] Dword Dword Dword Dword Dword Dword
.text 0011D000 00001000 0011CD26 00000400 00000000 000000
.rdata 0003A000 0011E000 00039D39 0011D200 00000000 000000
.data 0005B000 00158000 0000A4A4 00157000 00000000 000000
.adata 00110000 001B3000 000013CF 00161600 00000000 000000
.rsrc 00003000 002C3000 00002A78 00162A00 00000000 000000
.mackt 0000B000 002C6000 0000A6F4 00165600 00000000 000000

_Run Try:


Warecase
www.warecase.com
Version 1.90
eXtended Task Manager
Enterprise edition
Copyright © 2003-2005 Warecase Ltd. All rights reserved.
Warecase™ is either a trademark or registered trademark of
Warecase Company.



_Unpacked.Cracked.by.hacnho

附言:如果您在我的网站喜欢有些讲解,与我联系! 我为您将翻译!

嘿儒: hacnho in Chinese.

GrEeTs Fly Out: Deux, infinite, Computer_Angel, Zombie, NVH (c), softcracker_vn, luucorp, Aaron, JMI, Canterwood, hhphong, R @ dier, tlandn, RCA, CTL, Moonbaby, kienmanowar, benina, TQN, the_lighthouse, Nini , hoadongnoi, dqtln, hosiminh, Nilrem, fly, MaDMAn_H3rCul3s, Teerayoot, Ferrari, Kruger, Kelvin, Devilz, NXL, Phoenix light, iamidiot, WhyNotBar, trickyboy ... and you!

Special Thanx Cracks Latinos.

Thanx OllyDBG of the authors.

To be continued ...

Written by **hacnho** (tutorial date: VietNam 15/10/2005)

Sa they are a nui

One lost a child

Miraculous united Lu

Integration hunger Giang Ho

Yoda's Protector v1.02 - manually unpacking tutorial

(_kienmanowar_)

I. Introduction:

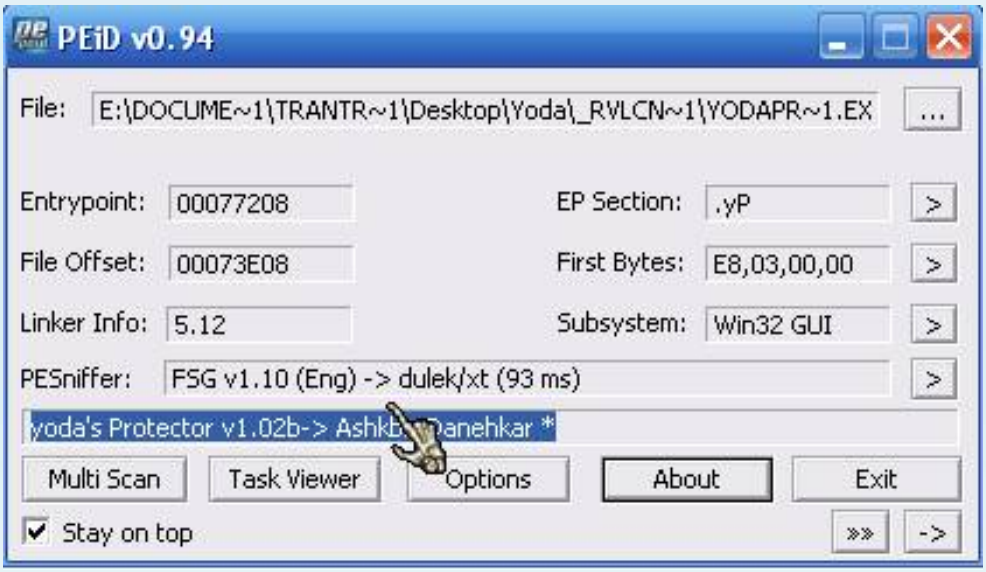
Hi all! To continue with a series of messages about how **MUP Yoda's Protector,** today I will be with you with a different version is **v1.02.** In the first part and I **Whynotbar** provided for how the number 1 on the latest versions of Yoda's. Version of this article, though quite old, but by the interests of my collection like I should write this tut **(based on the tut of the TBN + NCR),** and more important, though it is old but when many hiii not be touched sure we know how MUP J .

II. Tools & Target:

_ OllyDbg_final [Fixed by hacnho]
_ PeiD v0.94
_ RDG Packer Detector
_ LordPE
_ ImportRec v1.6
_ Target is protected by Yoda's Protector v1.02

III. MUPing:

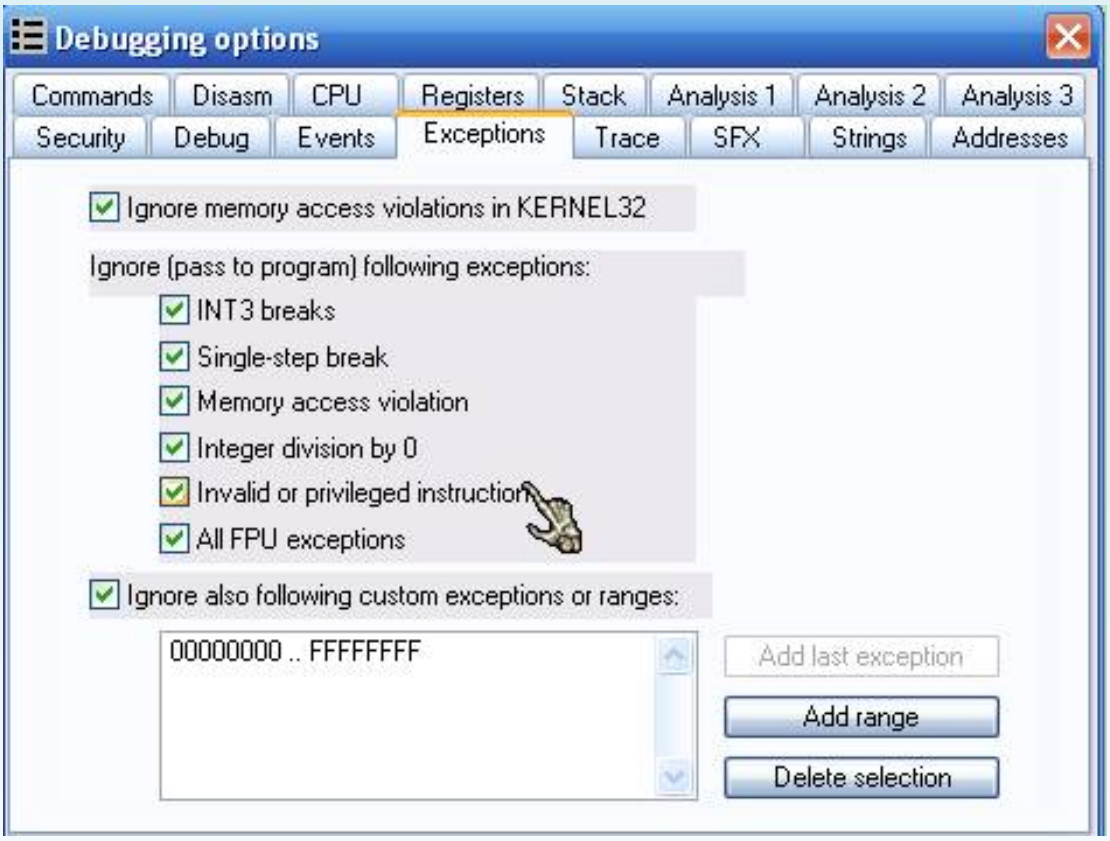
_Dung **PeiD** and **RDG Packer Detector** to get information on target:



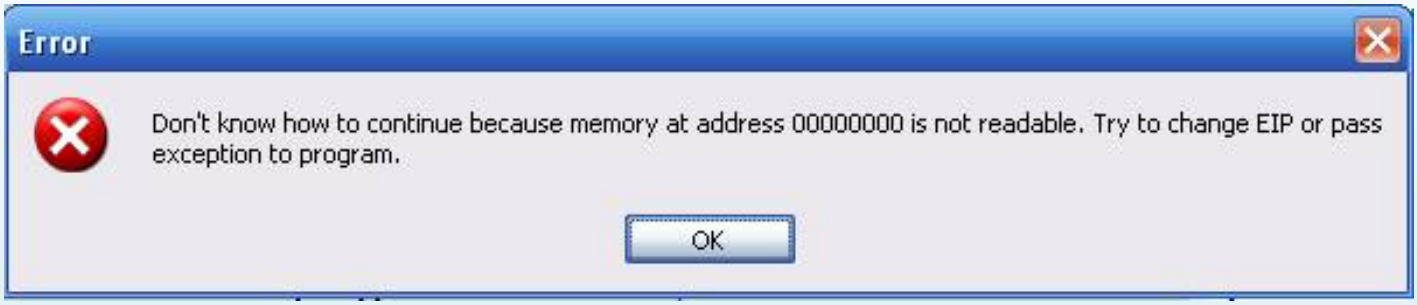
Olly _Mo and load up on target in Olly. We stopped here in Olly:

Address	Hex dump	Disassembly	Comment
00477208	E8 03000000	CALL YodaProt.00477210	
0047720D	EB 01	JMP SHORT YodaProt.00477210	
0047720F	E8 BB550000	CALL 0047C7CF	
00477214	00E8	ADD AL, CH	
00477216	0300	ADD EAX, DWORD PTR DS:[EAX]	
00477218	0000	ADD BYTE PTR DS:[EAX], AL	
0047721A	EB 01	JMP SHORT YodaProt.0047721D	
0047721C	E9 E88F0000	JMP 00480209	
00477221	00E8	ADD AL, CH	
00477223	0300	ADD EAX, DWORD PTR DS:[EAX]	
00477225	0000	ADD BYTE PTR DS:[EAX], AL	
00477227	EB 01	JMP SHORT YodaProt.0047722A	
00477229	E9 E8820000	JMP 0047F516	
0047722E	00E8	ADD AL, CH	
00477230	0300	ADD EAX, DWORD PTR DS:[EAX]	
00477232	0000	ADD BYTE PTR DS:[EAX], AL	
00477234	EB 01	JMP SHORT YodaProt.00477237	
00477236	E8 E8B80000	CALL 00482B23	
0047723B	00E8	ADD AL, CH	
0047723D	0300	ADD EAX, DWORD PTR DS:[EAX]	
0047723F	0000	ADD BYTE PTR DS:[EAX], AL	
00477241	EB 01	JMP SHORT YodaProt.00477244	
00477243	E8 E8AB0000	CALL 00481E30	
00477248	00E8	ADD AL, CH	
0047724A	0300	ADD EAX, DWORD PTR DS:[EAX]	
0047724C	0000	ADD BYTE PTR DS:[EAX], AL	

_Do The **EP** (Entry Point) by Packer. The goal of us now is how to find the OEP, as well as the dump file and Rebuilt again with IAT. First we will find the way to the OEP, to do this is to configure the **Exceptions** in Olly as follows:



_Ok Now press **F9** to implement the program, immediately, we will use exception to the first:



_Khong Have anything to worry about both, you just click OK to accept the notice then press **Shift + F9** to bypass no.Chung we will stop here in Olly:

Address	Hex dump	Disassembly	Comment
004773FE	5B	POP EBX	
004773FF	5F	POP EDI	YodaProt.0047975E
00477400	79 DC	JNS SHORT YodaProt.004773DE	
00477402	86E0	XCHG AL, AH	
00477404	9A B45A3290 8F27	CALL FAR 278F:90325AB4	
0047740B	A4	MOVS BYTE PTR ES:[EDI], BYTE PTR DS:[ESI]	
0047740C	E5 FC	IN EAX, 0FC	
0047740E	12D3	ADC DL, BL	
00477410	3008	XOR BYTE PTR DS:[EAX], CL	
00477412	8901	MOV DWORD PTR DS:[ECX], EAX	
00477414	9A 9E40AE40 9BB4	CALL FAR B49B:40AE409E	
0047741B	9D	POPFD	
0047741C	7C 6E	JL SHORT YodaProt.0047748C	
0047741E	A2 A2838834	MOV BYTE PTR DS:[348883A2], AL	
00477423	94	XCHG EAX, ESP	
00477424	396432 EF	CMP DWORD PTR DS:[EDX+ESI-11], ESP	
00477428	1A20	SBB AH, BYTE PTR DS:[EAX]	
0047742A	B9 977B519C	MOV ECX, 9C517B97	
0047742F	B1 56	MOV CL, 56	
00477431	65:63F8	ARPL AX, DI	
00477434	EA A3976B32 FDB3	JMP FAR B3FD:326B97A3	
0047743B	BE AD268E90	MOV ESI, 908E26AD	
00477440	14 EF	ADC AL, 0EF	

_Hic Status Bar if the information on it as we went to dust and then, as any one of the other is considered to terminate the line, so we must find another way to OEP only. Uncheck all **Exceptions** that we have set in, then press **F9** 1 times we here at Break:

Address	Hex dump	Disassembly	Comment
004772BB	C3	RETN	
004772BC	E8 03000000	CALL YodaProt.004772C4	
004772C1	EB 01	JMP SHORT YodaProt.004772C4	
004772C3	E9 33DBB984	JMP 85014DFB	
004772C8	4E	DEC ESI	
004772C9	42	INC EDX	
004772CA	0081 E98D2A42	ADD BYTE PTR DS:[ECX+422A8DE9], AL	
004772D0	008B D581C28D	ADD BYTE PTR DS:[EBX+8DC281D5], CL	
004772D6	2A42 00	SUB AL, BYTE PTR DS:[EDX]	
004772D9	8D3A	LEA EDI, DWORD PTR DS:[EDX]	
004772DB	8BF7	MOV ESI, EDI	
004772DD	33C0	XOR EAX, EAX	
004772DF	E8 03000000	CALL YodaProt.004772E7	
004772E4	EB 01	JMP SHORT YodaProt.004772E7	
004772E6	E9 E8170000	JMP YodaProt.00478AD3	
004772EB	0090 9090E9C1	ADD BYTE PTR DS:[EAX+C1E99090], DL	
004772F1	1D 000033C0	SBB EAX, C0330000	
004772F6	64:FF30	PUSH DWORD PTR FS:[EAX]	
004772F9	64:8920	MOV DWORD PTR FS:[EAX], ESP	
004772FC	43	INC EBX	
004772FD	CC	INT3	
004772FE	C3	RETN	

_Chung We bypass it by pressing **Shift + F7** and press **F9** to run. Once again we are back at Break position on:

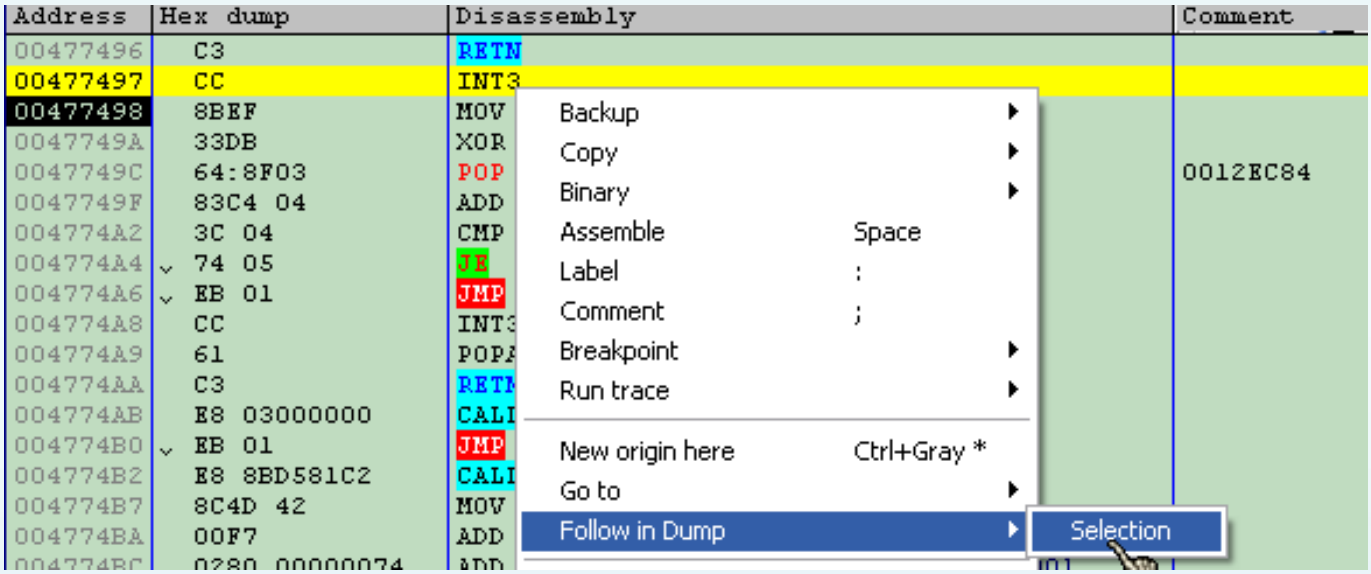
Address	Hex dump	Disassembly	Comment
004772BB	C3	RETN	
004772BC	E8 03000000	CALL YodaProt.004772C4	
004772C1	EB 01	JMP SHORT YodaProt.004772C4	
004772C3	E9 33DBB984	JMP 85014DFB	
004772C8	4E	DEC ESI	
004772C9	42	INC EDX	ntdll.77F833B4
004772CA	0081 E98D2A42	ADD BYTE PTR DS:[ECX+422A8DE9], AL	
004772D0	008B D581C28D	ADD BYTE PTR DS:[EBX+8DC281D5], CL	
004772D6	2A42 00	SUB AL, BYTE PTR DS:[EDX]	
004772D9	8D3A	LEA EDI, DWORD PTR DS:[EDX]	
004772DB	8BF7	MOV ESI, EDI	
004772DD	33C0	XOR EAX, EAX	
004772DF	E8 03000000	CALL YodaProt.004772E7	
004772E4	EB 01	JMP SHORT YodaProt.004772E7	
004772E6	E9 E8170000	JMP YodaProt.00478AD3	
004772EB	0090 9090E9C1	ADD BYTE PTR DS:[EAX+C1E99090], DL	
004772F1	1D 000033C0	SBB EAX, C0330000	
004772F6	64:FF30	PUSH DWORD PTR FS:[EAX]	
004772F9	64:8920	MOV DWORD PTR FS:[EAX], ESP	
004772FC	43	INC EBX	
004772FD	CC	INT3	
004772FE	C3	RETN	
004772FF	90	NOP	

_Tiep To add a few more times until you come in Olly (my 4 times press **Shift + F7, F9**):

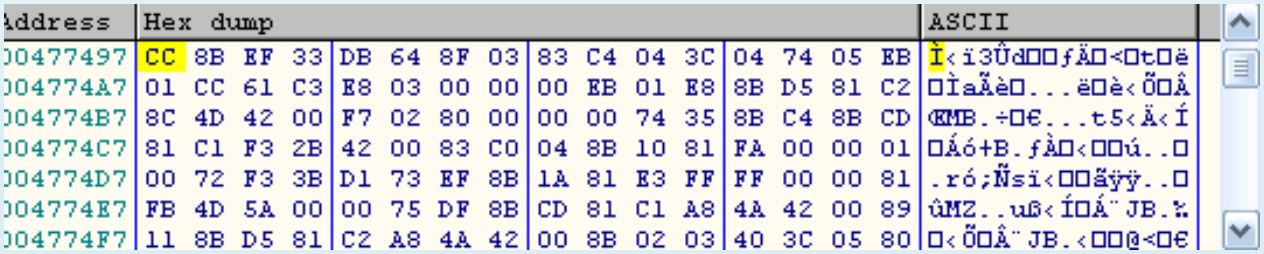
Address	Hex dump	Disassembly	Comment
0047747B	8BFD	MOV EDI, EBP	
0047747D	8BD5	MOV EDX, EBP	
0047747F	81C2 2A4A4200	ADD EDX, YodaProt.00424A2A	
00477485	8D02	LEA EAX, DWORD PTR DS:[EDX]	
00477487	33DB	XOR EBX, EBX	
00477489	50	PUSH EAX	YodaProt.00470004
0047748A	64:FF33	PUSH DWORD PTR FS:[EBX]	
0047748D	64:8923	MOV DWORD PTR FS:[EBX], ESP	
00477490	66:B8 0400	MOV AX, 4	
00477494	EB 01	JMP SHORT YodaProt.00477497	
00477496	C3	RETN	
00477497	CC	INT3	
00477498	8BEF	MOV EBP, EDI	
0047749A	33DB	XOR EBX, EBX	
0047749C	64:8F03	POP DWORD PTR FS:[EBX]	0012EC84
0047749F	83C4 04	ADD ESP, 4	
004774A2	3C 04	CMP AL, 4	
004774A4	74 05	JE SHORT YodaProt.004774AB	
004774A6	EB 01	JMP SHORT YodaProt.004774A9	
004774A8	CC	INT3	
004774A9	61	POPAD	
004774AA	C3	RETN	

_Tai Here for our comments on the position that we have Break **INT3** command, this command is responsible for the exception in that we are using that tai.De hairbreadth below you will see a command comparison with AL 4 and ordered a conditional jump **JE.** Orders jumped conditions for implementation of this exception, it will perform in the AL 4 and jump when the command is implemented, the means is the process by Debugger we were Detect. However, if the way that we make the jump this order can not be made, that is our command at **JMP JE** orders below the means of the Debugger we have escaped the detection.

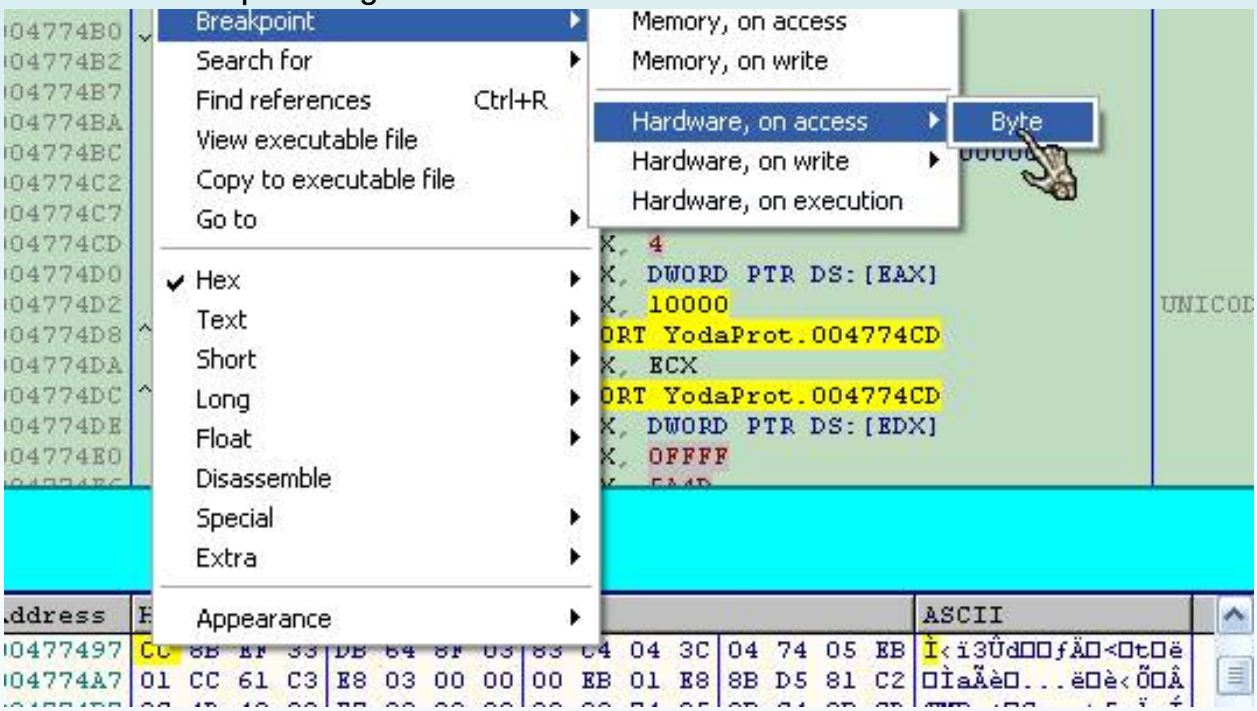
_Ok We will bypass and avoid the exception to this is right at hien.Chuot **00477497 CC INT3,** select **Follow in dump -> Selection:**



_Ta Information is as follows in the dump:



_Ta'll See **0xCC** corresponding to **INT3.** Mouse set to 1 and BP as follows:



_Bay Hour press **Ctrl + F2** to Restart the program. Then press **F9** to implement and bypass the **Exceptions** until we Break BP in which we have set:

Address	Hex dump	Disassembly		Comment
00477304	EB 01	JMP	SHORT YodaProt.00477307	
00477306	E9 FEC8EB01	JMP	02333C09	
0047730B	E9 F9C0C084	JMP	85083409	
00477310	FEC8	DEC	AL	
00477312	EB 01	JMP	SHORT YodaProt.00477315	
00477314	E8 EB01C234	CALL	35097504	
00477319	EC	IN	AL, DX	
0047731A	EB 01	JMP	SHORT YodaProt.0047731D	
0047731C	E8 F8EB01C2	CALL	C2495F19	
00477321	EB 01	JMP	SHORT YodaProt.00477324	
00477323	E8 F8EB01E8	CALL	E8495F20	
00477328	EB 01	JMP	SHORT YodaProt.0047732B	
0047732A	E8 02C1902A	CALL	2AD83431	
0047732F	C102 C1	ROL	DWORD PTR DS:[EDX], 0C1	
00477332	EB 01	JMP	SHORT YodaProt.00477335	
00477334	E8 3495EB01	CALL	0233086D	
00477339	E8 EB01E904	CALL	05307529	
0047733E	D6	SALC		
0047733F	EB 01	JMP	SHORT YodaProt.00477342	
00477341	E8 EB01C202	CALL	03097531	

Hardware breakpoint 1 at YodaProt.00477304 - EIP points to next instruction

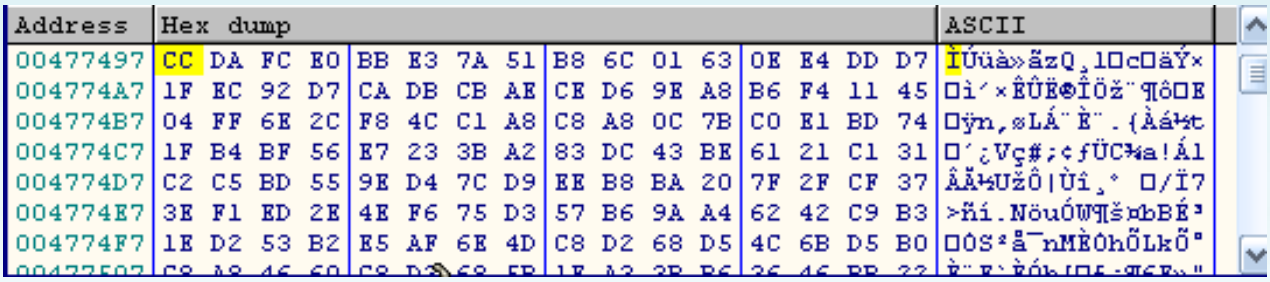
_Trong Dump window jump to the position that we have set BP, we will see that **0xCC** is not written to that location:

Address	Hex dump																ASCII
00477497	10	DA	FC	E0	BB	E3	7A	51	B8	6C	01	63	0E	E4	DD	D7	□Úüà»ãzQ¸l□c□äÝ×
004774A7	1F	EC	92	D7	CA	DB	CB	AE	CE	D6	9E	A8	B6	F4	11	45	□ì'×ÊÛË®ÎÖž¨¶ô□E
004774B7	04	FF	6E	2C	F8	4C	C1	A8	C8	A8	0C	7B	C0	E1	BD	74	□ÿn,øLÁ¨È¨.{Àá½t
004774C7	1F	B4	BF	56	E7	23	3B	A2	83	DC	43	BE	61	21	C1	31	□´¿Vç#;¢ƒÜC¾a!Á1
004774D7	C2	C5	BD	55	9E	D4	7C	D9	EE	B8	BA	20	7F	2F	CF	37	ÂÅ½UžÔ|Ùî¸° □/Ï7
004774E7	3E	F1	ED	2E	4E	F6	79	13	57	B6	9A	A4	62	42	C9	B3	>ñí.NöuÓW¶šbBÉ³
004774F7	1E	D2	53	B2	E5	AF	6E	[illegible]	C8	D2	68	D5	4C	6B	D5	B0	□ÒS²å¯nMÈÒhÕLkÕ°

_Tiep To press **F9** to Run again, we break here:

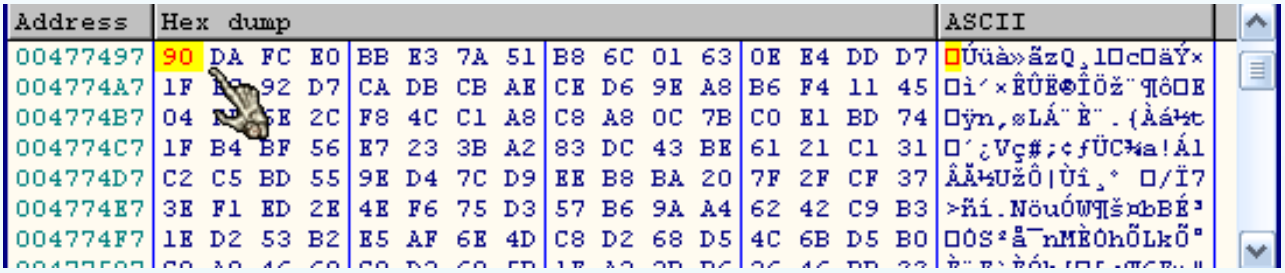
Address	Hex dump	Disassembly		Comment
00477361	01E8	ADD	EAX, EBP	
00477363	90	NOP		
00477364	AA	STOS	BYTE PTR ES:[EDI]	
00477365	E2 9C	LOOPD	SHORT YodaProt.00477303	
00477367	E8 03000000	CALL	YodaProt.0047736F	
0047736C	EB 01	JMP	SHORT YodaProt.0047736F	
0047736E	E9 33DBB92E	JMP	2F014EA6	
00477373	2942 00	SUB	DWORD PTR DS:[EDX], EAX	
00477376	81E9 86274200	SUB	ECX, YodaProt.00422786	
0047737C	8BD5	MOV	EDX, EBP	
0047737E	81C2 86274200	ADD	EDX, YodaProt.00422786	
00477384	8D3A	LEA	EDI, DWORD PTR DS:[EDX]	
00477386	8BF7	MOV	ESI, EDI	YodaProt.00477498
00477388	33C0	XOR	EAX, EAX	

_Aha Now is **0xCC** was recorded in the position we set BP:



Address	Hex dump																ASCII
00477497	CC	DA	FC	E0	BB	E3	7A	51	B8	6C	01	63	0E	E4	DD	D7	ÌÚüà»ãzQ¸l□c□äÝ×
004774A7	1F	EC	92	D7	CA	DB	CB	AE	CE	D6	9E	A8	B6	F4	11	45	□ì´×ÊÛË®ÎÖž¨¶ô□E
004774B7	04	FF	6E	2C	F8	4C	C1	A8	C8	A8	0C	7B	C0	E1	BD	74	□ÿn,øLÁ¨È¨.{Àá½t
004774C7	1F	B4	BF	56	E7	23	3B	A2	83	DC	43	BE	61	21	C1	31	□´¿Vç#;¢ƒÜC¾a!Á1
004774D7	C2	C5	BD	55	9E	D4	7C	D9	EE	B8	BA	20	7F	2F	CF	37	ÂÅ½UžÔ|Ùî¸° □/Ï7
004774E7	3E	F1	ED	2E	4E	F6	75	D3	57	B6	9A	A4	62	42	C9	B3	>ñí.NöuÓW¶šbBÉ³
004774F7	1E	D2	53	B2	E5	AF	6E	4D	C8	D2	68	D5	4C	6B	D5	B0	□ÒS²å¯nMÈÒhÕLkÕ°

_Okie We change **0xCC** to **0x90** (NOP), in press **Ctri 0xCC + B** and modified to **90:**



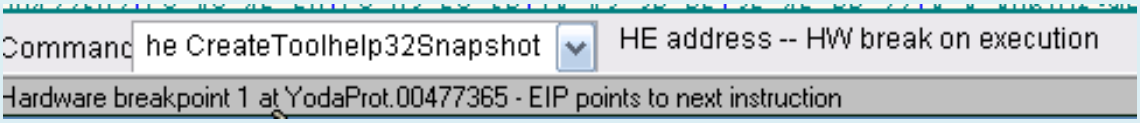
Address	Hex dump																ASCII
00477497	90	DA	FC	E0	BB	E3	7A	51	B8	6C	01	63	0E	E4	DD	D7	□Úüà»ãzQ¸l□c□äÝ×
004774A7	1F	EC	92	D7	CA	DB	CB	AE	CE	D6	9E	A8	B6	F4	11	45	□ì´×ÊÛË®ÎÖž¨¶ô□E
004774B7	04	FF	6E	2C	F8	4C	C1	A8	C8	A8	0C	7B	C0	E1	BD	74	□ÿn,øLÁ¨È¨.{Àá½t
004774C7	1F	B4	BF	56	E7	23	3B	A2	83	DC	43	BE	61	21	C1	31	□´¿Vç#;¢ƒÜC¾a!Á1
004774D7	C2	C5	BD	55	9E	D4	7C	D9	EE	B8	BA	20	7F	2F	CF	37	ÂÅ½UžÔ|Ùî¸° □/Ï7
004774E7	3E	F1	ED	2E	4E	F6	75	D3	57	B6	9A	A4	62	42	C9	B3	>ñí.NöuÓW¶šbBÉ³
004774F7	1E	D2	53	B2	E5	AF	6E	4D	C8	D2	68	D5	4C	6B	D5	B0	□ÒS²å¯nMÈÒhÕLkÕ°

_Vay Is completed, the next we do? As has been said to you on when we used to detect PEiD information, we know the version of Yoda's used to protect the target, but if you use the Plugin PEid for the OEP immediately be PEiD Terminate contact. Mechanism of it as tut by **+ NCR** as follows:

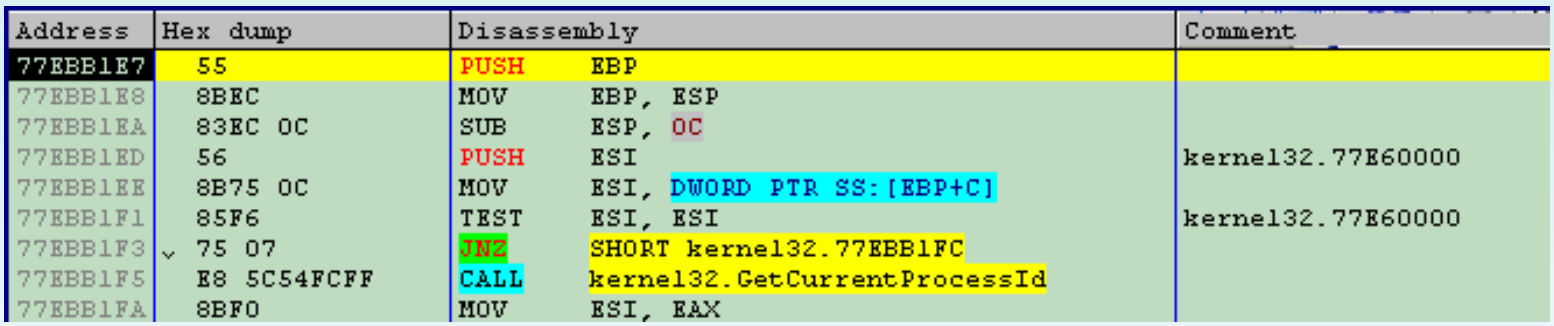
*This made me remember the old ACProtect in which it was detected when debugger by means of a disguised and quite dirty trick. Becomes what one is to verify that PID (Process ID) that sent the program, in this case crackme, was one of the **explorer.exe** that is the same OS and not another application. If the PIDs does not agree then chau, it has to debugger or loader to playing with the application, but we followed as if nothing;). In order to make that trick there are several ways, but I believe that it is commonest to use the function **CreateToolhelp32Snapshot Process32Firts or Process32Next** along with. These three functions which do are to work together to cross all the processes loaded in memory and to detect different things, for example caption of a window, the class of the window, or in this case the PID.*

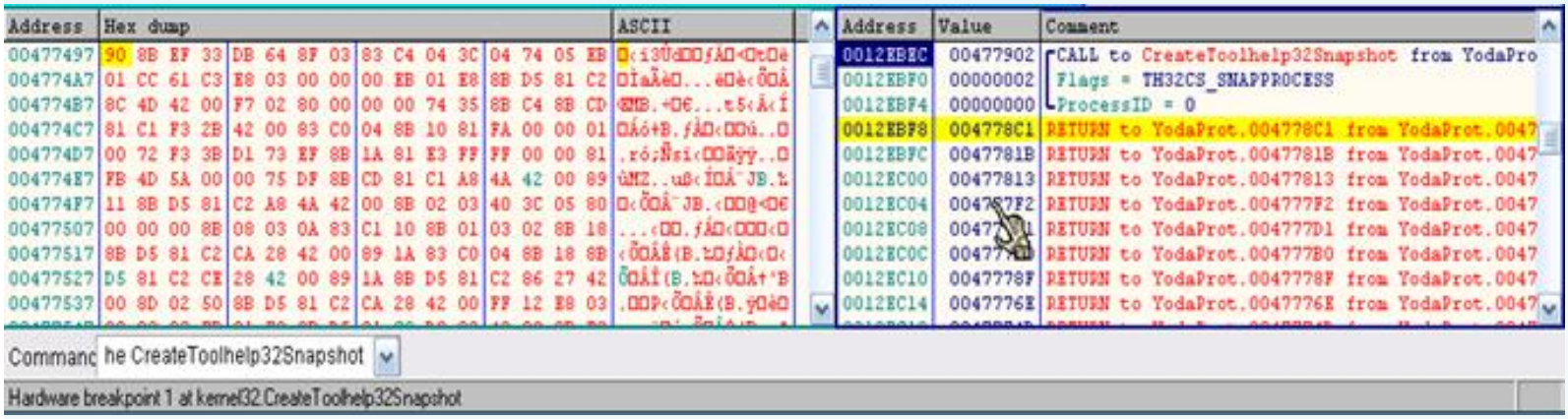
_Tom By my understanding is that is Target PID will check to see it from where the load, if it is load it from Explorer.exe run a normal. But if through Loader Debugger or it will Terminate line.

_Do The next job we as follows: Delete BP we've set, a set in the API function: **CreateToolhelp32Snapshot**

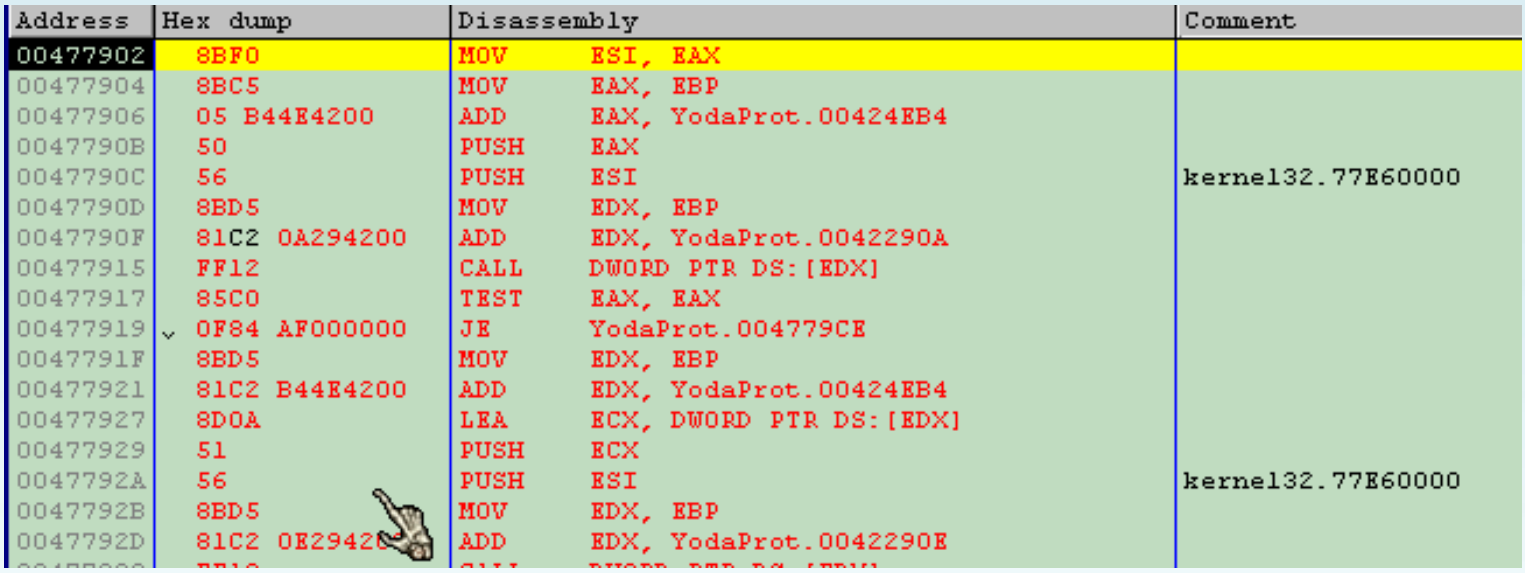


F9 Run _Nhan to target, we will Break in API function:



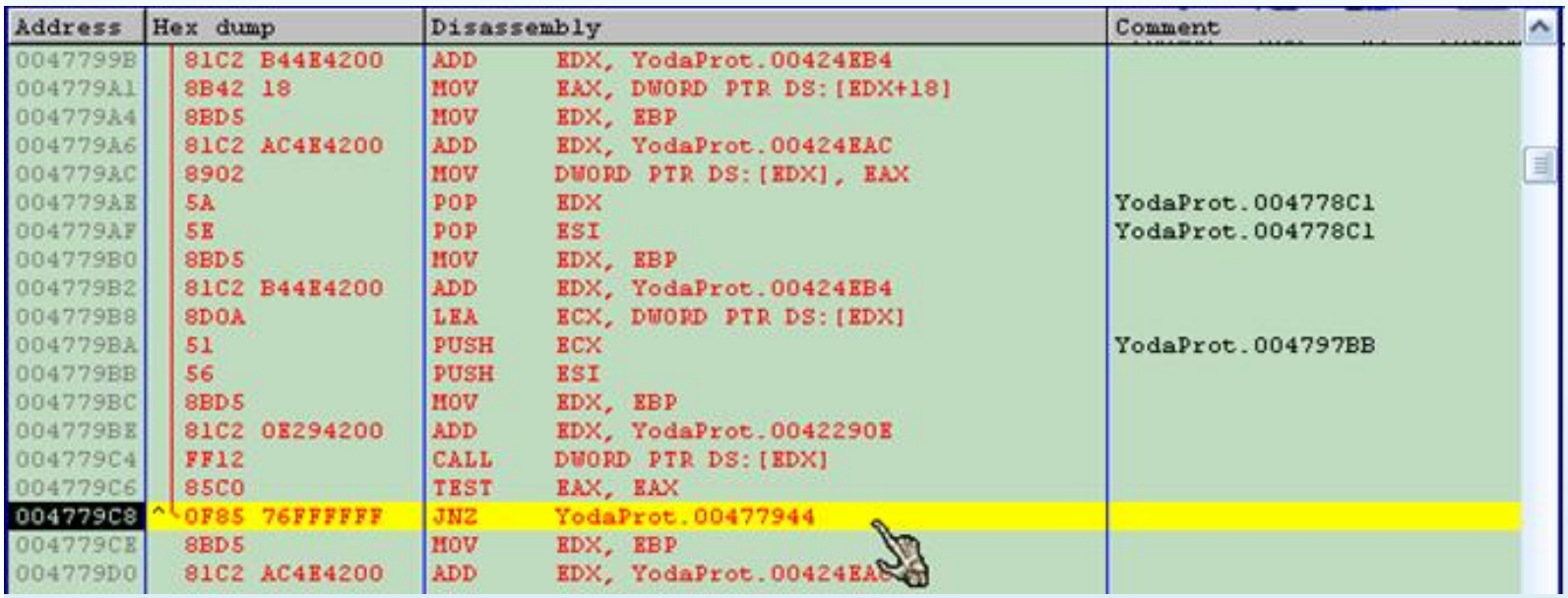


_Nhan **Ctrl + F9 (execute till Return)** and press **F7** we stop here in Olly:



Address	Hex dump	Disassembly	Comment
00477902	8BF0	MOV ESI, EAX	
00477904	8BC5	MOV EAX, EBP	
00477906	05 B44E4200	ADD EAX, YodaProt.00424EB4	
0047790B	50	PUSH EAX	
0047790C	56	PUSH ESI	kernel32.77E60000
0047790D	8BD5	MOV EDX, EBP	
0047790F	81C2 0A294200	ADD EDX, YodaProt.0042290A	
00477915	FF12	CALL DWORD PTR DS:[EDX]	
00477917	85C0	TEST EAX, EAX	
00477919	0F84 AF000000	JE YodaProt.004779CE	
0047791F	8BD5	MOV EDX, EBP	
00477921	81C2 B44E4200	ADD EDX, YodaProt.00424EB4	
00477927	8D0A	LEA ECX, DWORD PTR DS:[EDX]	
00477929	51	PUSH ECX	
0047792A	56	PUSH ESI	kernel32.77E60000
0047792B	8BD5	MOV EDX, EBP	
0047792D	81C2 0E2942	ADD EDX, YodaProt.0042290E	

_Chung We are in code enforcement of trinh.Tai here we press **F8** to trace until after having jumped order:

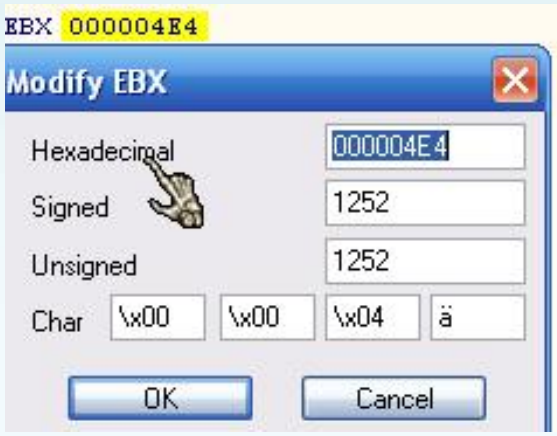


Address	Hex dump	Disassembly	Comment
0047799B	81C2 B44E4200	ADD EDX, YodaProt.00424EB4	
004779A1	8B42 18	MOV EAX, DWORD PTR DS:[EDX+18]	
004779A4	8BD5	MOV EDX, EBP	
004779A6	81C2 AC4E4200	ADD EDX, YodaProt.00424EAC	
004779AC	8902	MOV DWORD PTR DS:[EDX], EAX	
004779AE	5A	POP EDX	YodaProt.004778C1
004779AF	5E	POP ESI	YodaProt.004778C1
004779B0	8BD5	MOV EDX, EBP	
004779B2	81C2 B44E4200	ADD EDX, YodaProt.00424EB4	
004779B8	8D0A	LEA ECX, DWORD PTR DS:[EDX]	
004779BA	51	PUSH ECX	YodaProt.004797BB
004779BB	56	PUSH ESI	
004779BC	8BD5	MOV EDX, EBP	
004779BE	81C2 0E294200	ADD EDX, YodaProt.0042290E	
004779C4	FF12	CALL DWORD PTR DS:[EDX]	
004779C6	85C0	TEST EAX, EAX	
004779C8	0F85 76FFFFFF	JNZ YodaProt.00477944	
004779CE	8BD5	MOV EDX, EBP	
004779D0	81C2 AC4E4200	ADD EDX, YodaProt.00424EAC	

_Day A loop for all Dectect Process are implemented. To bypass this loop is set by BP in command under the command then jumped on the press **F9** to Run will Break here:

Address	Hex dump	Disassembly	Comment
004779CE	8BD5	MOV EDX, EBP	
004779D0	81C2 AC4E4200	ADD EDX, YodaProt.00424EAC	
004779D6	8B02	MOV EAX, DWORD PTR DS:[EDX]	
004779D8	3BC3	CMP EAX, EBX	
004779DA	74 30	JE SHORT YodaProt.00477A0C	
004779DC	8BD5	MOV EDX, EBP	
004779DE	81C2 8C4D4200	ADD EDX, YodaProt.00424D8C	
004779E4	F702 80000000	TEST DWORD PTR DS:[EDX], 80	
004779EA	75 20	JNZ SHORT YodaProt.00477A0C	
004779EC	50	PUSH EAX	
004779ED	6A 01	PUSH 1	
004779EF	68 FF0F1F00	PUSH 1F0FFF	
004779F4	8BD5	MOV EDX, EBP	

_Nhin Down to see a comparison between the command EAX and EBX, this is a very important order, it will compare PID.Nhan F8 to trace down to see we will have to record in 2 EAX and EBX:



_Dung **LordPE** to see a list of our process and observe the PIDs:

Path	PID	ImageBase	ImageSize
e:\windows\system32\svchost.exe	00000354	01000000	00006000
e:\windows\system32\spoolsv.exe	000003AC	01000000	0000F000
e:\windows\system32\svchost.exe	0000042C	01000000	00006000
e:\program files\alcohol soft\alcohol 120\star...	00000478	00400000	0003A000
e:\windows\system32\svchost.exe	00000484	01000000	00006000
e:\windows\explorer.exe	000004E4	01000000	000F7000
d:\setup\unikey\unikeynt.exe	000003C8	00400000	00034000
e:\windows\integrator.exe	00000400	00400000	00029000
e:\program files\getdiz\getdiz.exe	000003E8	00400000	0009D000
e:\docume~1\trantr~1\desktop\foxitr~1.exe	000006B0	00400000	0029E000
e:\program files\microsoft office\office11\win...	000007E4	30000000	00BAA000
e:\program files\techsmith\snagit 7\snagit32....	000006A8	00400000	00390000
e:\program files\techsmith\snagit 7\tschelp.exe	00000504	00400000	0000A000
e:\program files\lmtd300\qviewmtd.exe	00000518	00400000	00102000
e:\program files\lmtd300\qshlfmtd.exe	0000039C	00400000	00052000
e:\documents and settings\tran trung kien\m...	000001A4	00400000	00154000
e:\program files\mozilla firefox\firefox.exe	000006DC	00400000	006EE000
e:\documents and settings\tran trung kien\de...	00000530	00400000	0007C000
e:\documents and settings\tran trung kien\m...	000000C0	00400000	00036000

_Nhu So we see that it will compare with the PID's Olly Explorer.exe.Tuc target is to check that it is load from **Explorer.exe** Correct? Therefore we will modify the content by recording it to EAX same EBX:

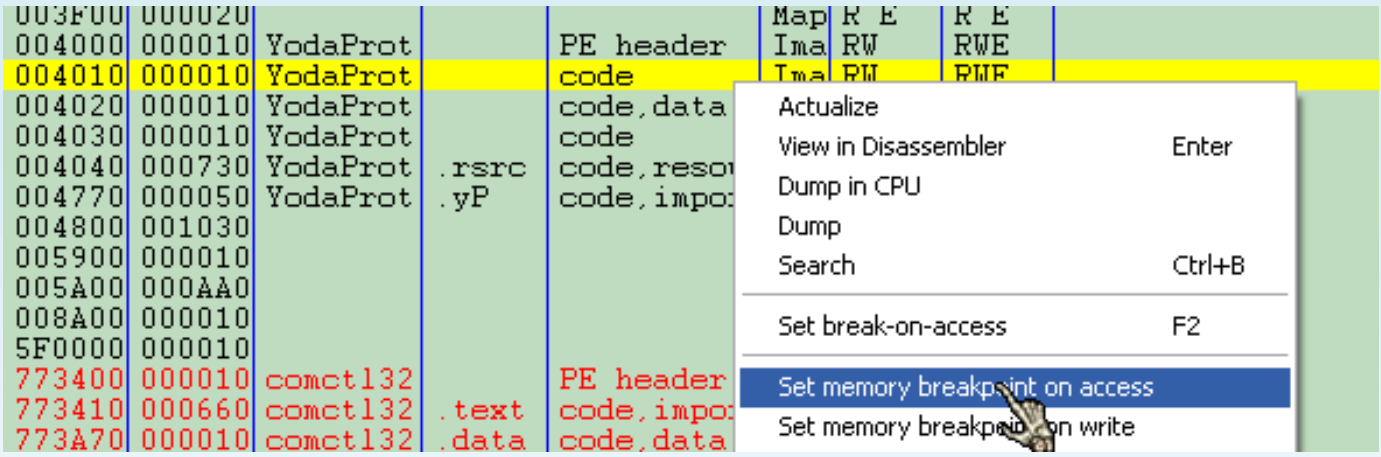
```
Registers (FPU)
EAX 000004E4
ECX 004797BF YodaProt.004797BF
EDX 00479786 YodaProt.00479786
EBX 000004E4
ESP 0012EBF8
EBP 0005[illegible]8DA
ESI 0000[illegible]C
EDI 0047[illegible] ASCII "XPLORER.EXE"
```

_Nhan **F9** to run, we Break the API in which we set BP, the implementation process of the bypass and on to the final press **F9** we will stop here in Olly:

Address	Hex dump	Disassembly	Comment
004792F1	0000	ADD BYTE PTR DS:[EAX], AL	
004792F3	0000	ADD BYTE PTR DS:[EAX], AL	
004792F5	0000	ADD BYTE PTR DS:[EAX], AL	
004792F7	0000	ADD BYTE PTR DS:[EAX], AL	
004792F9	0000	ADD BYTE PTR DS:[EAX], AL	
004792FB	0000	ADD BYTE PTR DS:[EAX], AL	
004792FD	0000	ADD BYTE PTR DS:[EAX], AL	
004792FF	0000	ADD BYTE PTR DS:[EAX], AL	
00479301	0000	ADD BYTE PTR DS:[EAX], AL	
00479303	0000	ADD BYTE PTR DS:[EAX], AL	
00479305	0000	ADD BYTE PTR DS:[EAX], AL	
00479307	0000	ADD BYTE PTR DS:[EAX], AL	
00479309	0000	ADD BYTE PTR DS:[EAX], AL	
0047930B	0000	ADD BYTE PTR DS:[EAX], AL	
0047930D	0000	ADD BYTE PTR DS:[EAX], AL	
0047930F	0000	ADD BYTE PTR DS:[EAX], AL	
00479311	0000	ADD BYTE PTR DS:[EAX], AL	
00479313	0000	ADD BYTE PTR DS:[EAX], AL	
00479315	0000	ADD BYTE PTR DS:[EAX], AL	
00479317	0000	ADD BYTE PTR DS:[EAX], AL	
00479319	0000	ADD BYTE PTR DS:[EAX], AL	
0047931B	0000	ADD BYTE PTR DS:[EAX], AL	
0047931D	0000	ADD BYTE PTR DS:[EAX], AL	

Access violation when writing to [00000000] - use Shift+F7/F8/F9 to pass exception to program

_Tai Ago we press **Alt + M** to open the Memory window, then set at BP's target code section:

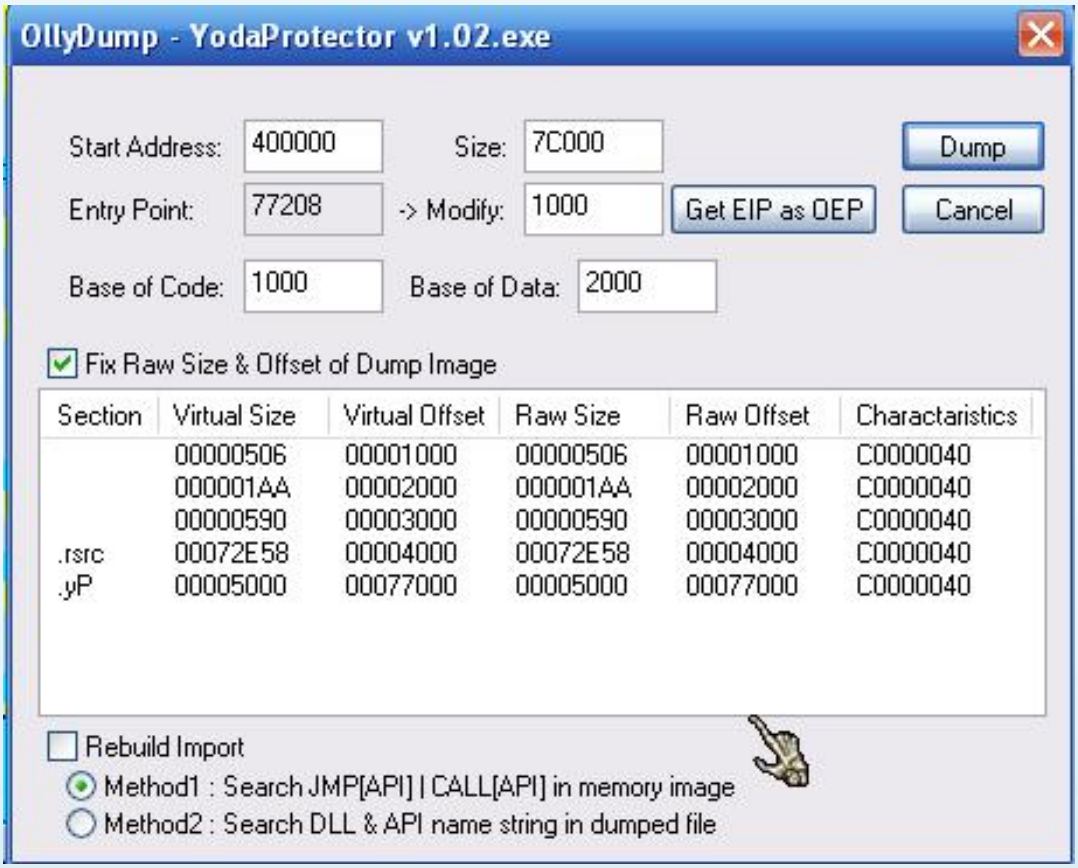


_Tiep By pressing **Shift + F7, F9,** we will stop at the OEP of the program:

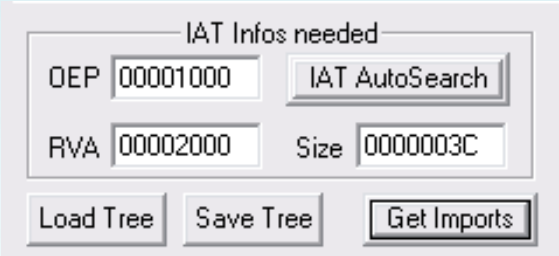
Address	Hex dump	Disassembly		Comment
00401000	6A 00	PUSH	0	
00401002	E8 BD040000	CALL	YodaProt.004014C4	
00401007	A3 78324000	MOV	DWORD PTR DS:[403278], EAX	
0040100C	E8 EF040000	CALL	YodaProt.00401500	
00401011	6A 00	PUSH	0	
00401013	68 2E104000	PUSH	YodaProt.0040102E	
00401018	6A 00	PUSH	0	
0040101A	6A 65	PUSH	65	
0040101C	FF35 78324000	PUSH	DWORD PTR DS:[403278]	
00401022	E8 A9040000	CALL	YodaProt.004014D0	
00401027	6A 00	PUSH	0	
00401029	E8 90040000	CALL	YodaProt.004014BE	
0040102E	55	PUSH	EBP	YodaProt.00477
0040102F	8BEC	MOV	EBP, ESP	
00401031	8B45 0C	MOV	EAX, DWORD PTR SS:[EBP+C]	
00401034	3D 10010000	CMP	EAX, 110	
00401039	0F85 96000000	JNZ	YodaProt.004010D5	
0040103F	68 20030000	PUSH	320	

Memory breakpoint when executing [00401000]

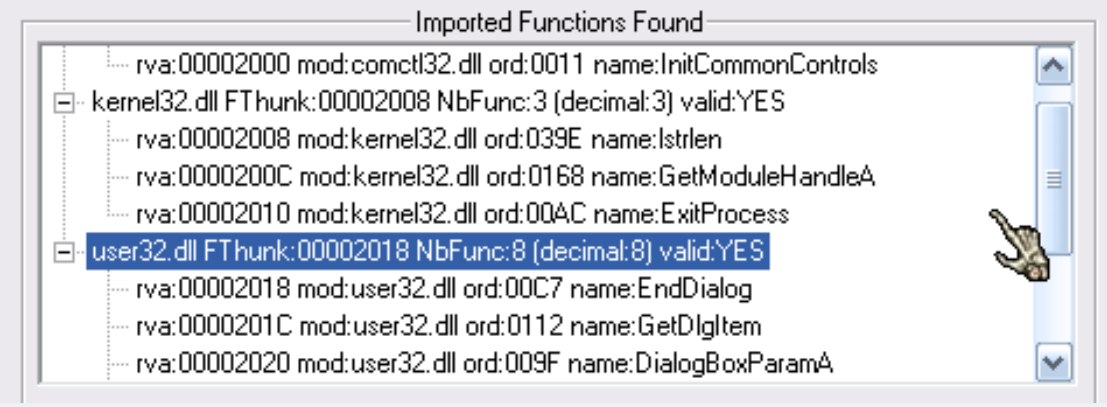
_Wow! OEP kìa dump only. Conduct dump file by using Olly Plugin and save less than 1 then another, for example: **dumped.exe.**



_Mo **ImportRec** up to conduct Fix IAT. Complete information on IAT as follows:



Get _Nhan **Imports,** we are all Invalids. Do not worry, do the tuts first mouse to select **Trace Level1 (DisAsm):**



_Cuoi **Fix** the **dump** file and test that we take the time to unpack, phew ..... then run it decently J:

_Bai Written here is to end. See you again in other tuts! J

_

Best Regards

_ ***[Kienmanowar]*** _

--++--==[Greatz thanks to]==--++--

My family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Merc, Hoadongnoi, Nini ... all REA's members, TQN, HacNho, RongChauA, Deux, tlandn, light.phoenix, dqtln, ARTEAM .... all my friend, and you.

Thanks to --++--==[ ]==--++--

iamidiot, WhyNotBar, trickyboy, dzungltvn, takada, hurt_heart, haule_nth, v. hytkl. v.. You have contributed greatly to the REA. Hope you will continue to promote J

>>>> If you have any suggestions, comments or corrections email me: **kienbigmummy [at] gmail. com**

Yoda's Protector v1.03.2 beta3 - manually unpacking tutorial
(_kienmanowar_)

I. Introduction:

This is the **hangar** by tut reversing.be, I consult and write for the purpose of the collection and write tru.Bai this focus on the latest version of **Yoda's Protector,** the later versions of Yoda has a lot of the anti-debug, which is next to the API as **BlockInput (The BlockInput function blocks keyboard and mouse input events from reaching applications)** etc.. etc.., to our disappointment in the MUPing.

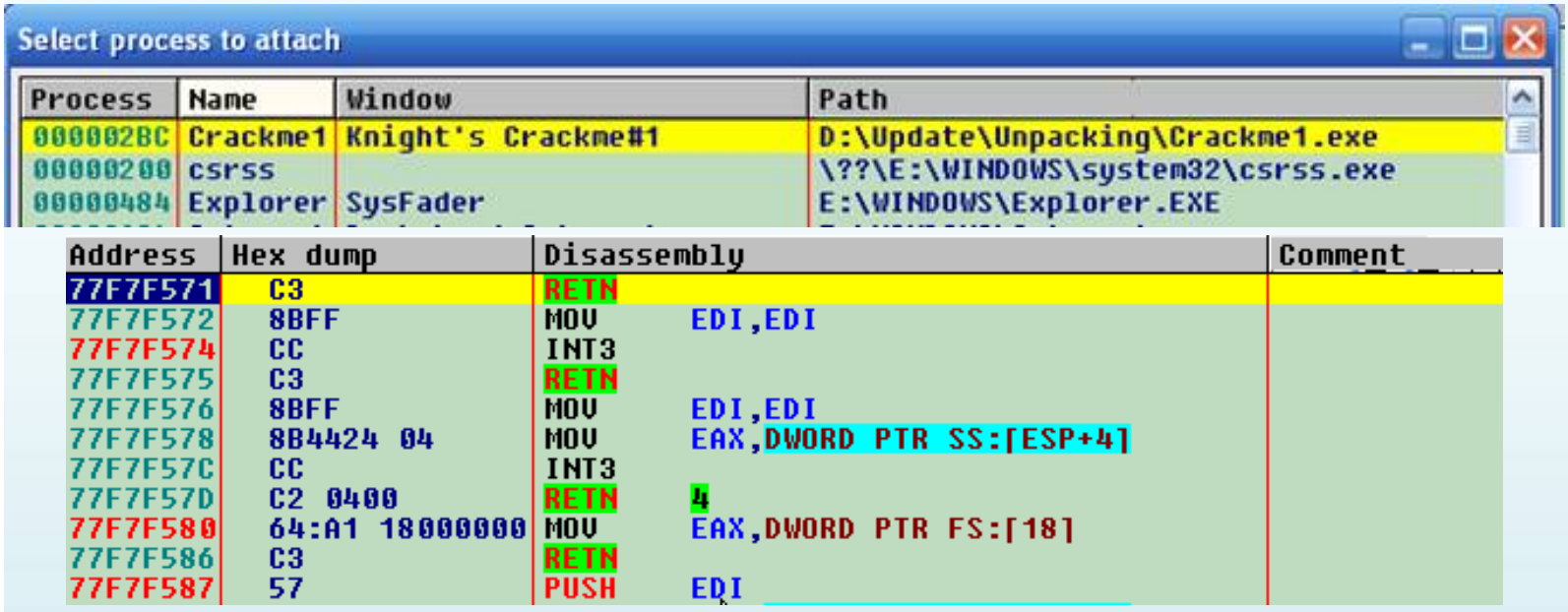
II. Tools & Target:

_ ODbyDYK v1.10
_ PeiD v0.94
_ LordPE
_ ImportRec v1.6
_dup2 v2.13 BETA 25
_ YP PEiD signatures.txt
_ Crackme1.exe

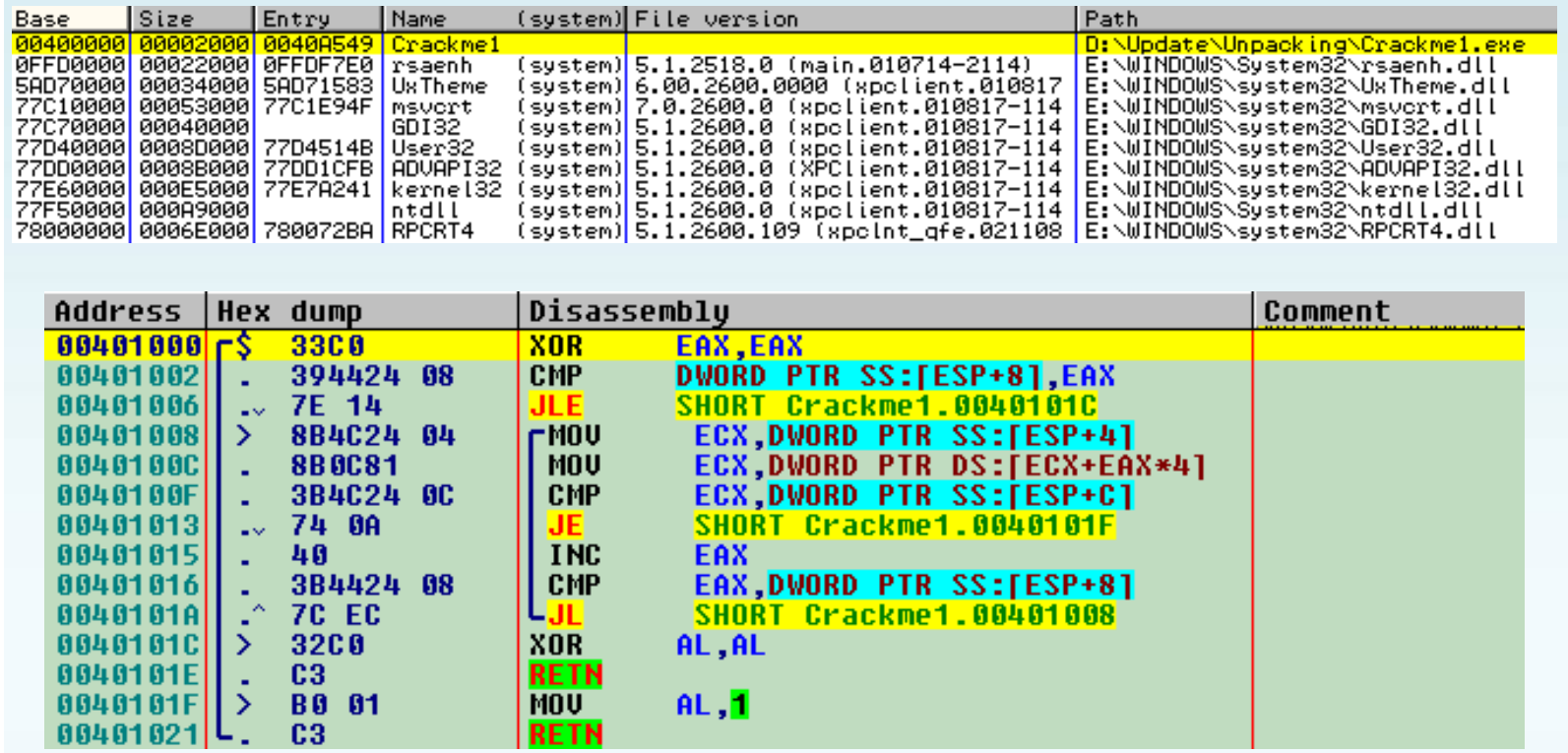
III. MUPing:

_Dung **PeiD** to get information on target:

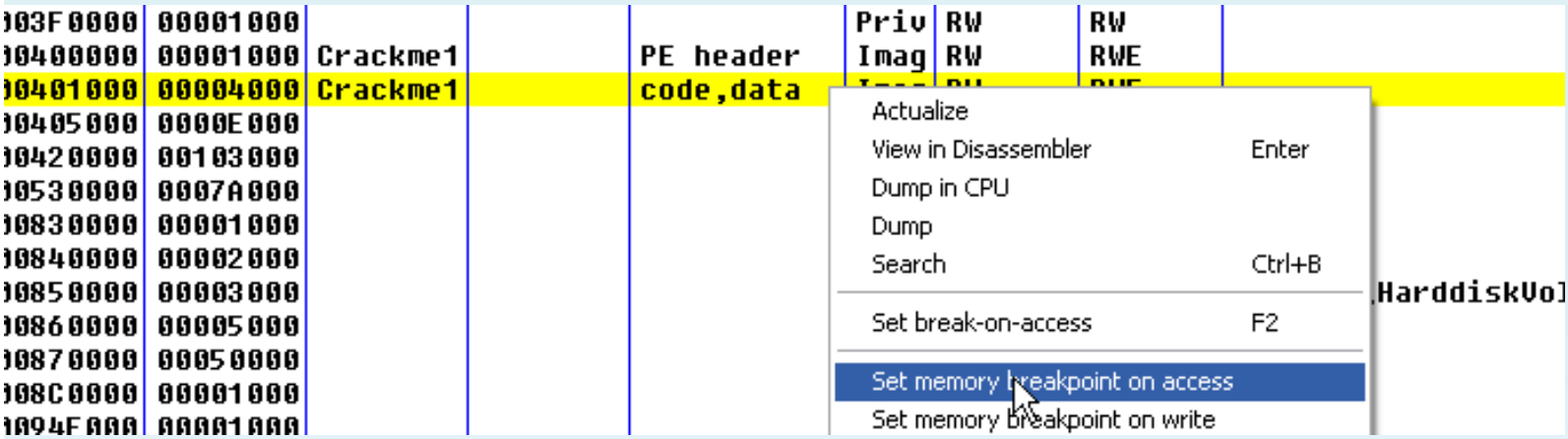
_Run Target, then open up Olly. In Olly, select functions **File -> Attach** to Attach to the target Olly:



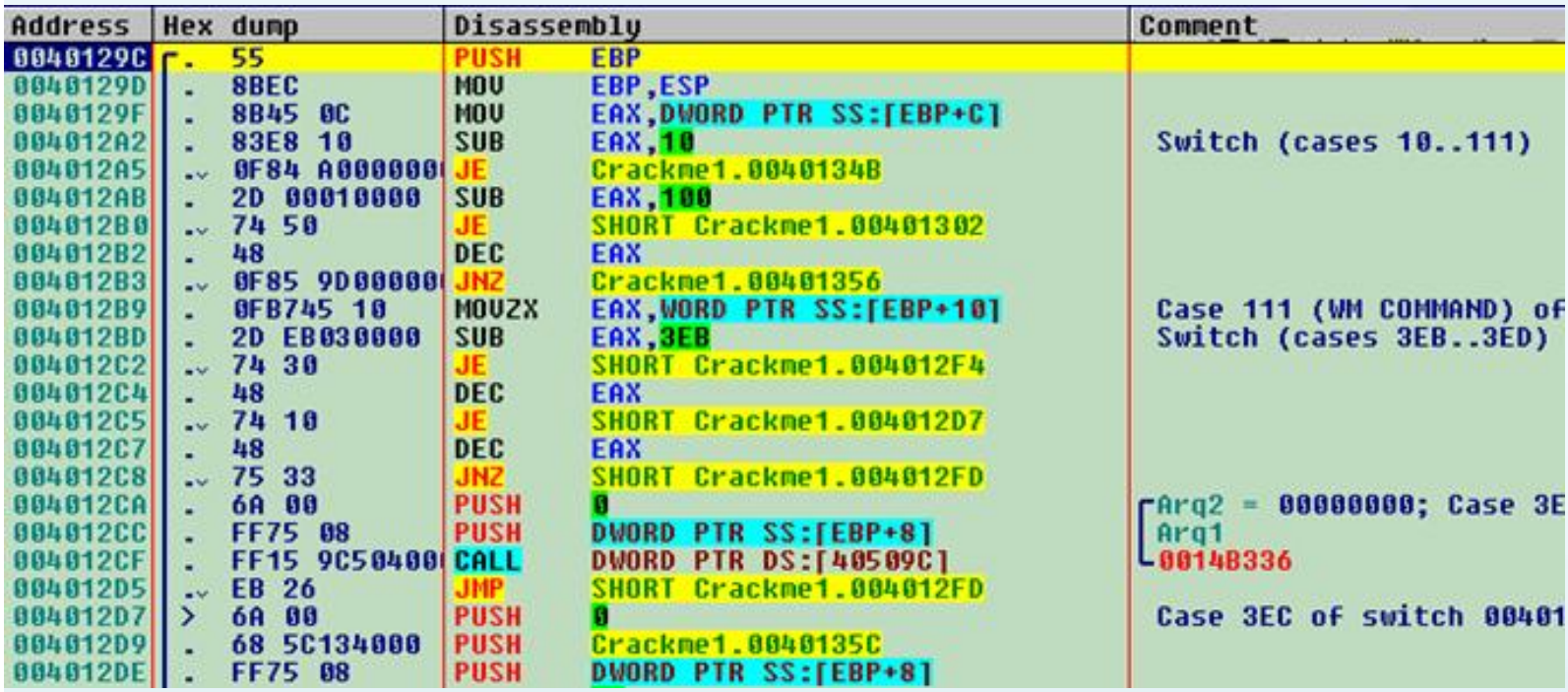
Attach _Sau when we stopped at the system as BP's on, here we press **Alt + E** to open the window **Executables.** Select a target and Double Click, we will in turn return to the screen by Olly CPU:



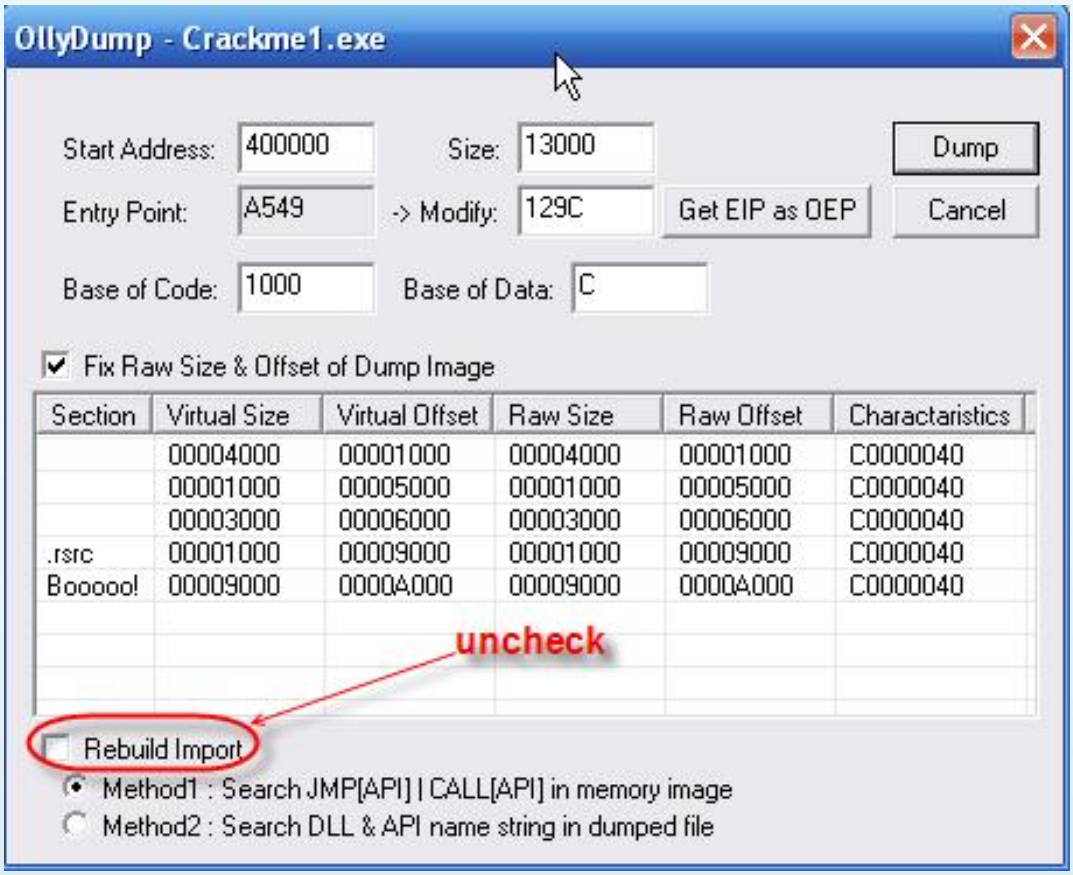
_Oki We are in the target code. At press **F9** to run a target normally. The next step we will find it to OEP. Press **Alt + M** to open the window **memory,** we set a BP in the following code section of the target:



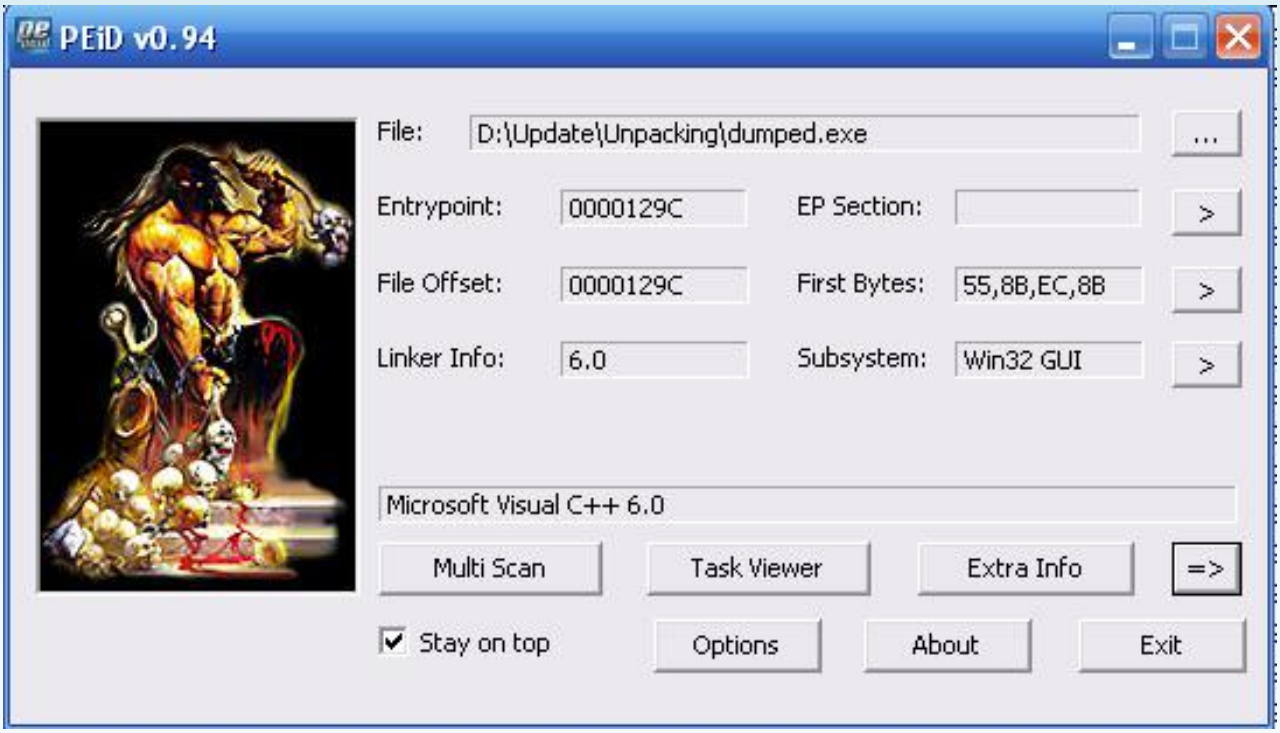
_Sau When placed on the BP, one click is run target, immediately Olly will break here:



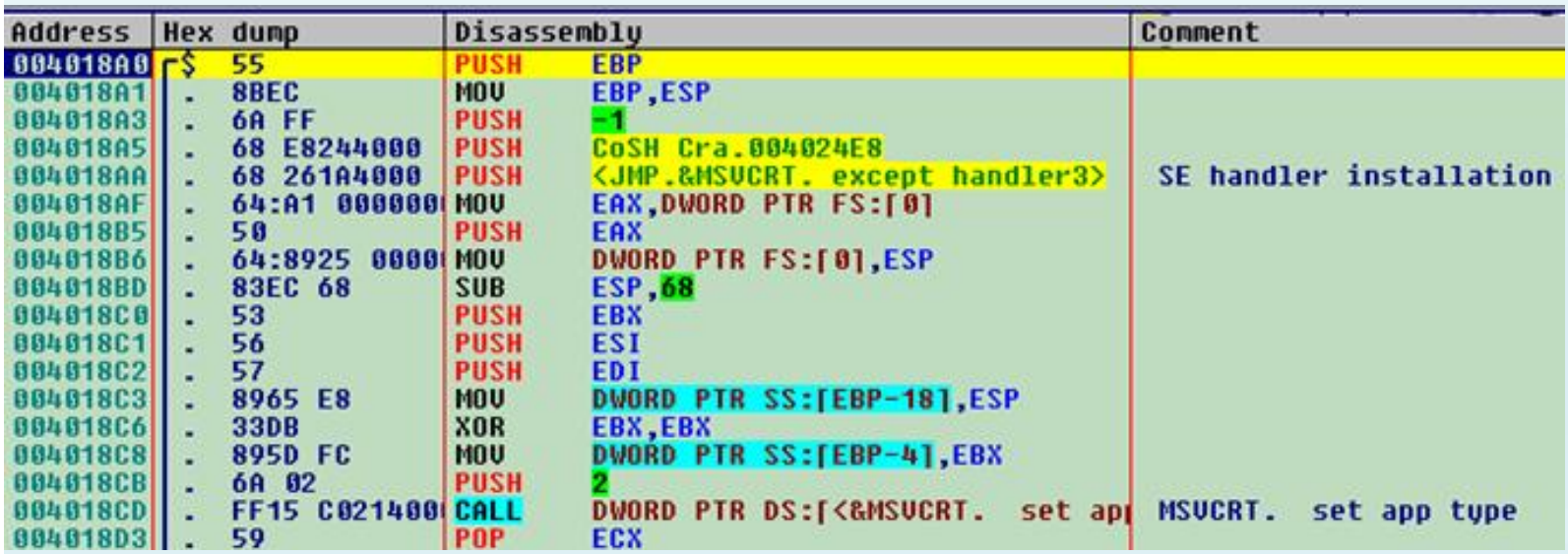
_Tai Here we will dump the target using **OllyDump Plugin** by Olly. Save with a name any, do not close the Olly:



_Dung PeID to scan the dump file, we have information as follows:

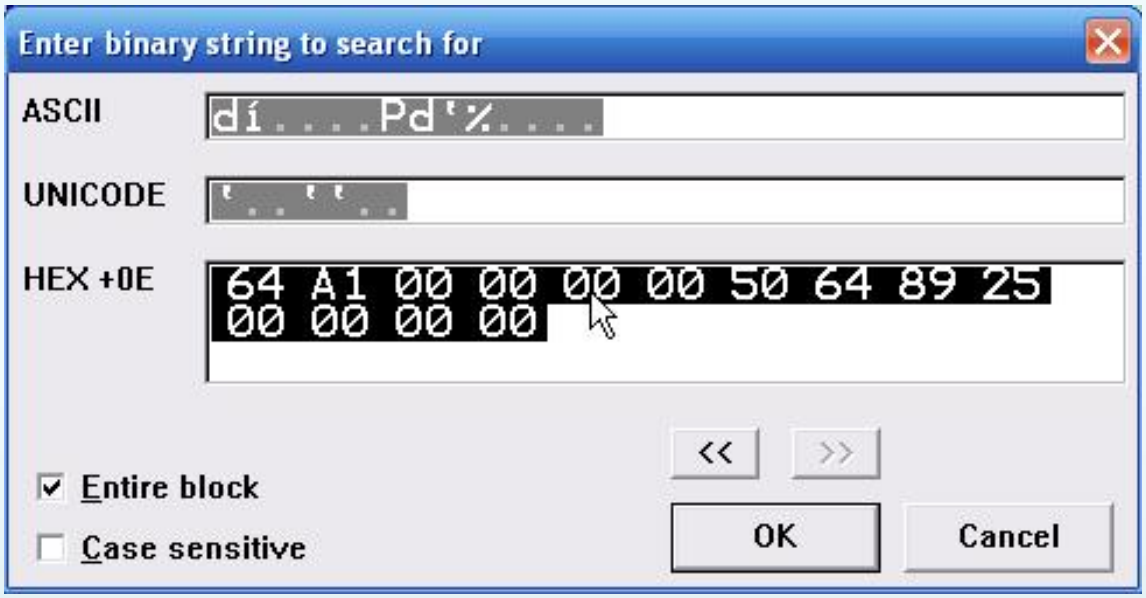


_Day Information is very important for the next step of us. Using **PeiD** to find a file that is compiled using **MS Visual C + + 6.0.** For example, I found 1 files follows: **# CoSH Crackme 2.exe.** Open a window Olly and other files to load. We have been as follows:

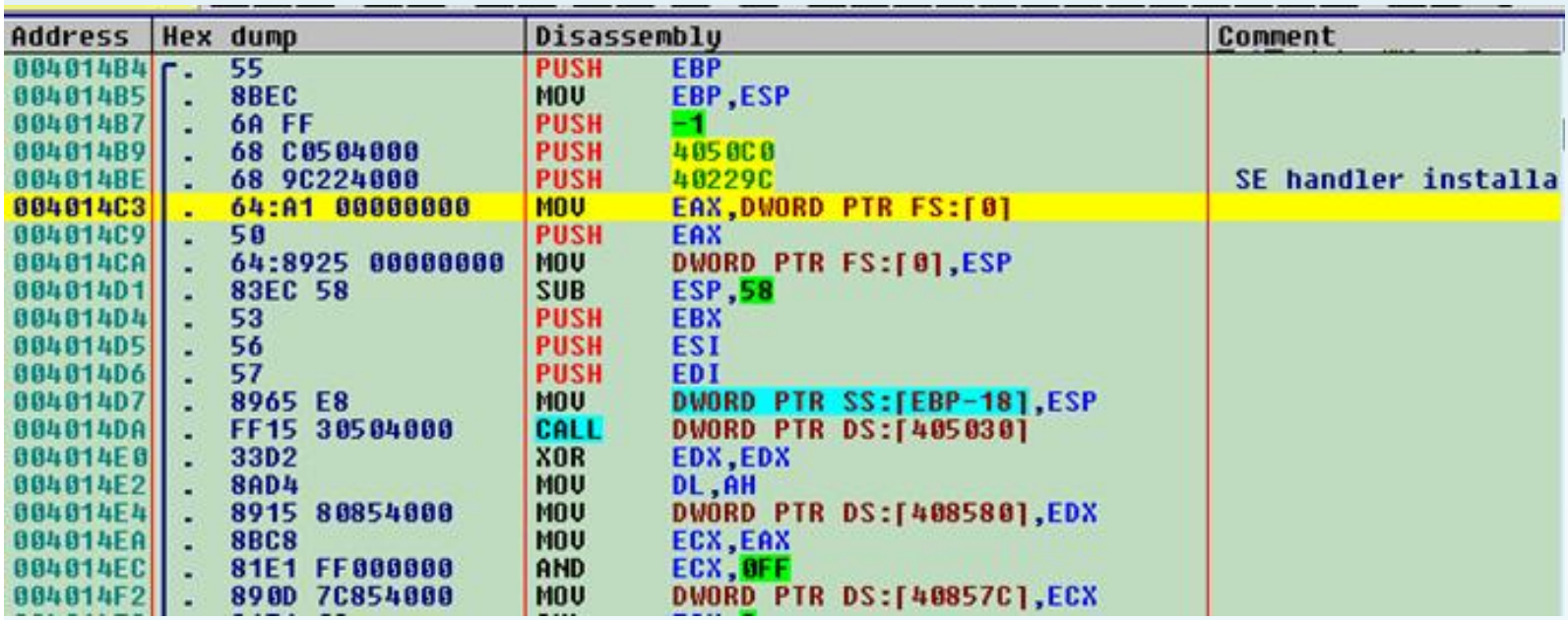


Address	Hex dump	Disassembly	Comment
004018A0	$ 55	PUSH EBP	
004018A1	. 8BEC	MOV EBP,ESP	
004018A3	. 6A FF	PUSH -1	
004018A5	. 68 E8244000	PUSH CoSH Cra.004024E8	
004018AA	. 68 261A4000	PUSH <JMP.&MSVCRT. except handler3>	SE handler installation
004018AF	. 64:A1 000000	MOV EAX,DWORD PTR FS:[0]	
004018B5	. 50	PUSH EAX	
004018B6	. 64:8925 0000	MOV DWORD PTR FS:[0],ESP	
004018BD	. 83EC 68	SUB ESP,68	
004018C0	. 53	PUSH EBX	
004018C1	. 56	PUSH ESI	
004018C2	. 57	PUSH EDI	
004018C3	. 8965 E8	MOV DWORD PTR SS:[EBP-18],ESP	
004018C6	. 33DB	XOR EBX,EBX	
004018C8	. 895D FC	MOV DWORD PTR SS:[EBP-4],EBX	
004018CB	. 6A 02	PUSH 2	
004018CD	. FF15 C0214000	CALL DWORD PTR DS:[<&MSVCRT. set ap	MSVCRT. set app type
004018D3	. 59	POP ECX	

OEP _Ta found packed in a file that we find similar to what we have been in the picture, so we need to find information on opcodes in this file has the features dump.Su **Binary copy** of Olly to copy information from **0x004018AF** to address **0x004018B6,** then return to the screen by Olly target, roll your mouse over to the address **0x00401000.** Click to select **Search> Binary String (Ctrl + B)** and paste the following:



_Sau Then click OK, we'll stop here in Olly:



Address	Hex dump	Disassembly	Comment
004014B4	55	PUSH EBP	
004014B5	8BEC	MOV EBP,ESP	
004014B7	6A FF	PUSH -1	
004014B9	68 C0504000	PUSH 4050C0	
004014BE	68 9C224000	PUSH 40229C	SE handler installa
004014C3	64:A1 00000000	MOV EAX,DWORD PTR FS:[0]	
004014C9	50	PUSH EAX	
004014CA	64:8925 00000000	MOV DWORD PTR FS:[0],ESP	
004014D1	83EC 58	SUB ESP,58	
004014D4	53	PUSH EBX	
004014D5	56	PUSH ESI	
004014D6	57	PUSH EDI	
004014D7	8965 E8	MOV DWORD PTR SS:[EBP-18],ESP	
004014DA	FF15 30504000	CALL DWORD PTR DS:[405030]	
004014E0	33D2	XOR EDX,EDX	
004014E2	8AD4	MOV DL,AH	
004014E4	8915 80854000	MOV DWORD PTR DS:[408580],EDX	
004014EA	8BC8	MOV ECX,EAX	
004014EC	81E1 FF000000	AND ECX,0FF	
004014F2	890D 7C854000	MOV DWORD PTR DS:[40857C],ECX	

_Trong Case if you find another similar position we need to consider with care. Next, select the **004014DA |. FF15 30504000 CALL DWORD PTR DS: [405030],** press **Enter** to follow orders CALL see this as anything, we have the following information:

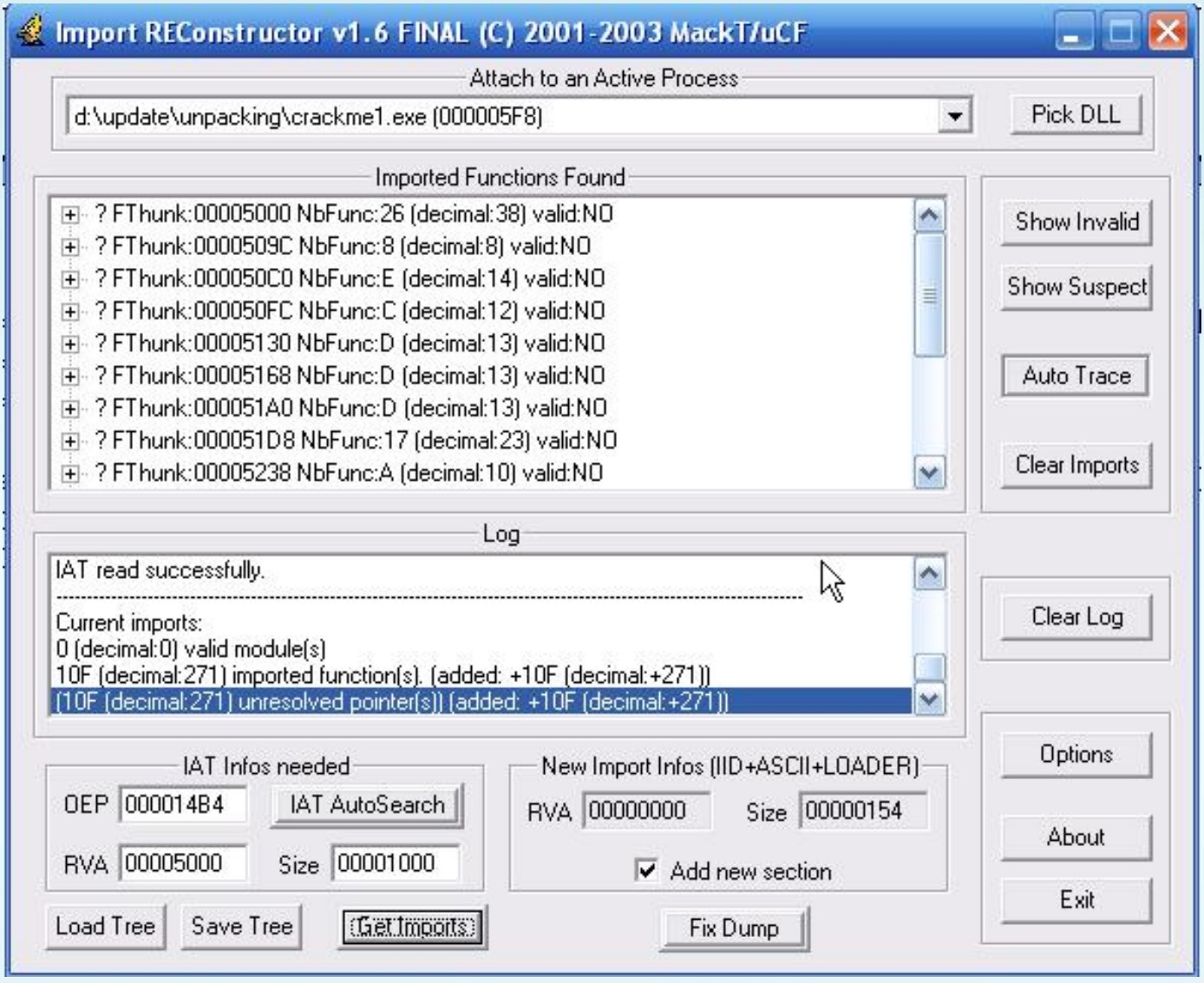
Address	Hex dump	Disassembly	Comment
0014B2B4	E9 CD11D377	JMP kernel32.GetVersion	
0014B2B9	E9 F7A9D277	JMP kernel32.ExitProcess	
0014B2BE	E9 D462E077	JMP ntdll.RtlFreeHeap	
0014B2C3	E9 3064E077	JMP ntdll.RtlAllocateHeap	
0014B2C8	E9 E763D177	JMP kernel32.TerminateProcess	
0014B2CD	E9 BEE9D277	JMP kernel32.GetCurrentProcess	
0014B2D2	E9 ADE7D677	JMP kernel32.UnhandledExceptionFilt	
0014B2D7	E9 BDEDD277	JMP kernel32.GetModuleFileNameA	
0014B2DC	E9 D012D577	JMP kernel32.FreeEnvironmentStringsA	
0014B2E1	E9 FB16D377	JMP kernel32.FreeEnvironmentStringsW	
0014B2E6	E9 39E6D277	JMP kernel32.WideCharToMultiByte	
0014B2EB	E9 12C4D177	JMP kernel32.GetEnvironmentStringsA	
0014B2F0	E9 ECCBD277	JMP kernel32.GetEnvironmentStringsW	
0014B2F5	E9 3716D377	JMP kernel32.SetHandleCount	
0014B2FA	E9 3EE9D277	JMP kernel32.GetStdHandle	
0014B2FF	E9 02D1D277	JMP kernel32.GetFileType	
0014B304	E9 55F9D277	JMP kernel32.GetEnvironmentVariable	

_Chung We notice that it points to Redirected API, in the position as we see the pictures that **GetVersion** API, the API is often used in the first version of the VC + +. From that we conclude we are in need to find OEP:

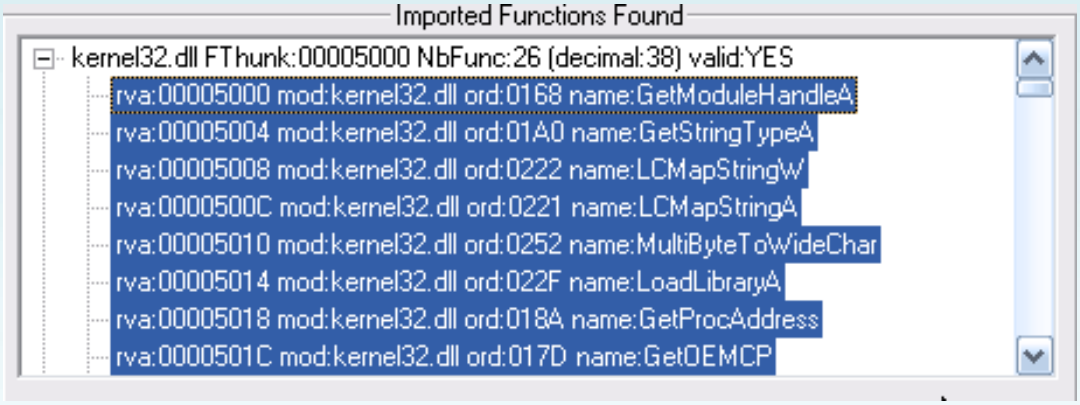
```
004014B4 /. 55 PUSH EBP <== Our OEP
004014B5 |. 8BEC MOV EBP, ESP
004014B7 |. 6A FF PUSH -1
```

_Tai Will have 2 hours to fix IAT, the first **ImportRec** open up, select the correct process is our target and complete information to OEP as follows: **000014B4. IAT** Click **Auto Search** we receive notice as follows:

Ok _Nhan Size and enter the ImportRec have suggestions for which ta.Sau **Get Imports,** AC we are all Invalid:



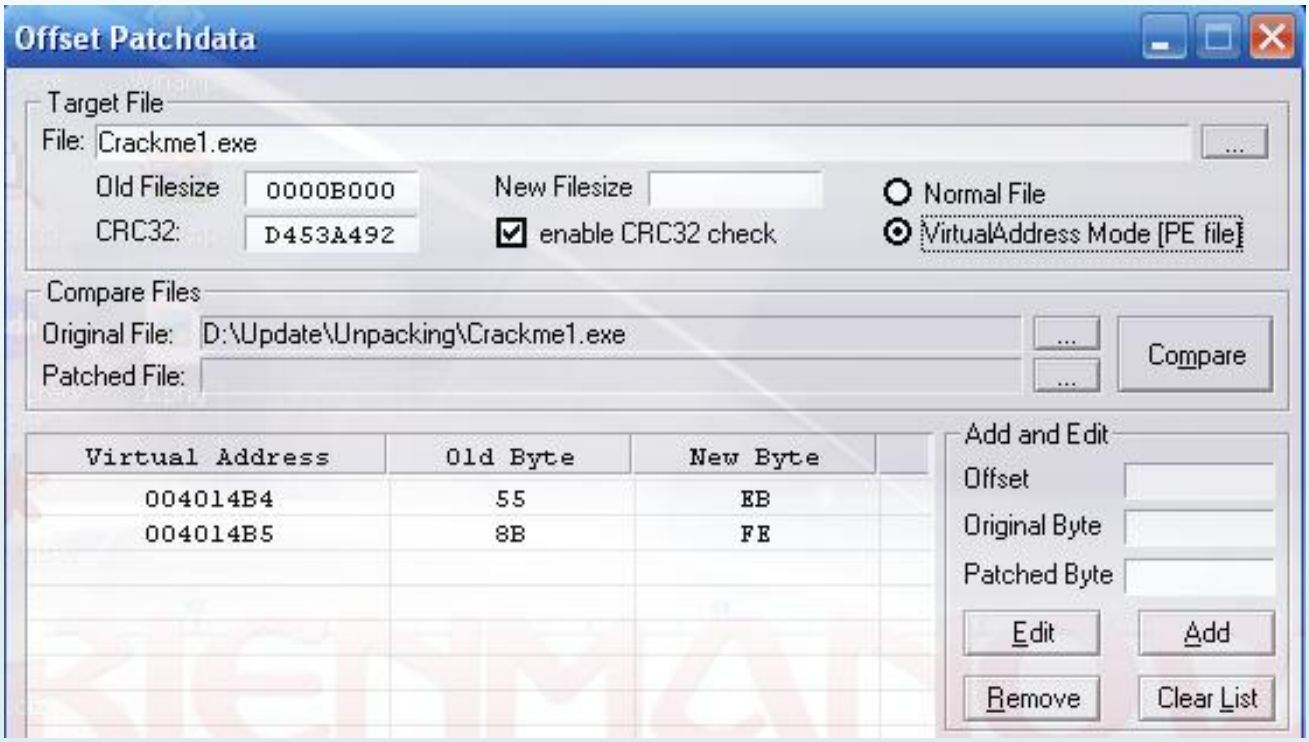
_Khong Stars, we will use the features of ImportRec for the API. Click on **Show Invalid,** right on the mouse and select Rva **Trace Level1 (Diasm)** we have been as follows:



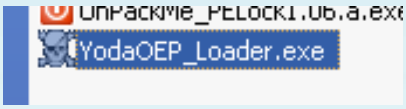
Show hit by _Tiep **Invalid Cut** and **thunks** all, finally selecting **Fix dump** file and have them dump ta.Thoat Import Rec try and test the file has Fix IAT. Keke Run it then kìa:

_Den Is complete, we are then MUPing it. However, do not understand why aged **Hangar** do in this manner is not, the file of Laos after being run IAT Fix crash. Self-aged and do not understand the real cause lies where, aged said that should not run to Target and then dump it. Must stop at the OEP, then a new dump and fix imports. Therefore aged this idea as follows: to create a loader implementation of the OEP to find and then replaced by **EBFE.** This is an endless loop, this means that the file on the memory will unpack a whole, but will not be thi.Sau that we can Attach target and make the rest of the story. Tolerable seems complex includes J .

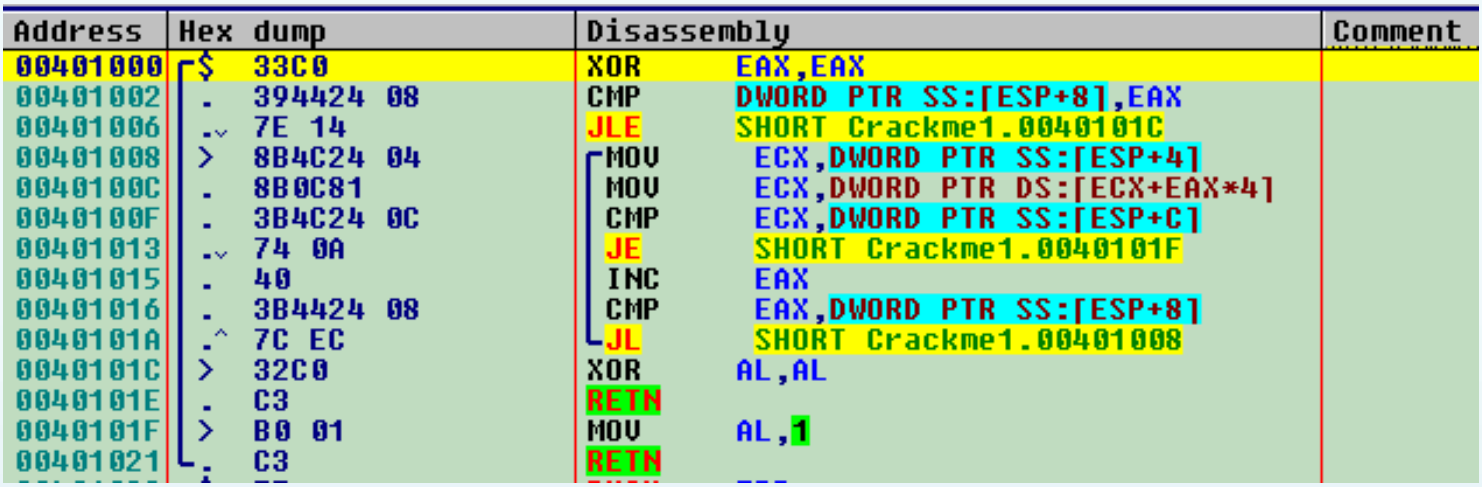
_De Create loader we will use **Dup2** by **diablo2oo2:**



_Save Loader in this folder contains our Target.



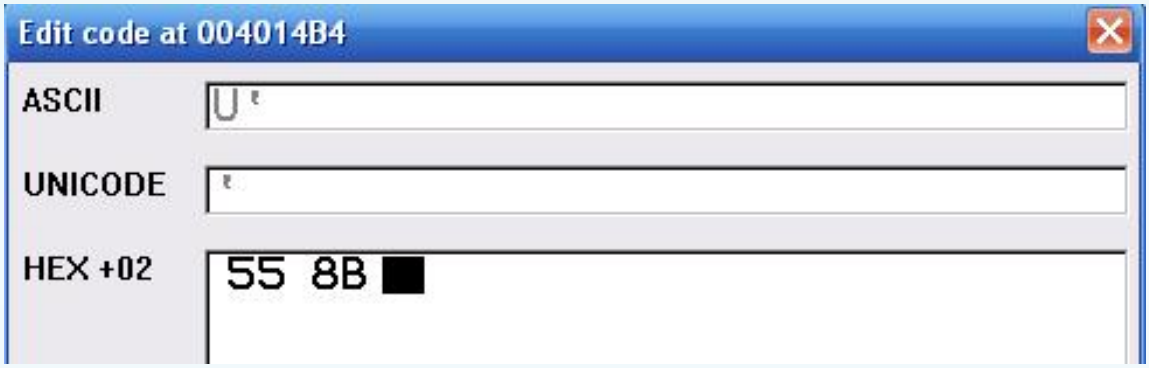
Loader _Double click create, AC automatically stop seeing khiếp always slow machines, up 100% CPU, hii simply because we are a respectable infinite loop. It is a good sign because loader we create has the right job that it needs to do. Now we open up and Olly Attach to target Olly. **Alt + E Exectutables** open window, select the target and double click on it, we return to the main screen by Olly:



_Sau The open window **Memory (Alt + M),** BP set on the access code section.Tiep the press **F9** to run, we will OEP at Break:

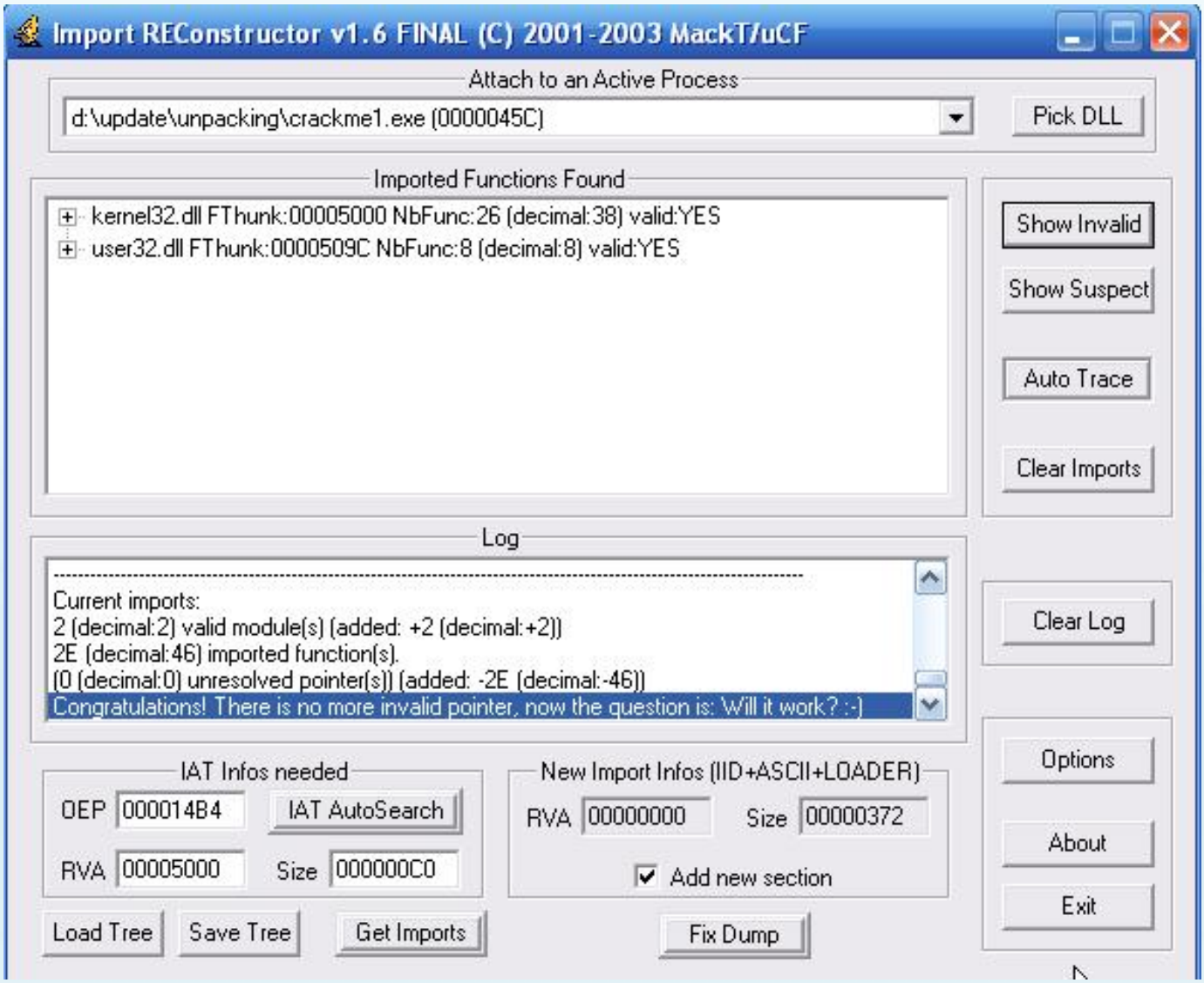
```
Address   Hex dump            Disassembly                          Comment
004014B4  >-EB FE             JMP     SHORT Crackme1.004014B4      <== Our OEP
004014B6  .  EC               IN      AL,DX
004014B7  .  6A FF            PUSH    -1
004014B9  .  68 C0504000      PUSH    4050C0
004014BE  .  68 9C224000      PUSH    40229C                       SE handler installa
004014C3  .  64:A1 00000000   MOV     EAX,DWORD PTR FS:[0]
004014C9  .  50               PUSH    EAX
004014CA  .  64:8925 00000000 MOV     DWORD PTR FS:[0],ESP
004014D1  .  83EC 58          SUB     ESP,58
004014D4  .  53               PUSH    EBX
004014D5  .  56               PUSH    ESI
004014D6  .  57               PUSH    EDI
```

Kha _Kha you have not seen anything, we're in OEP (infinite loop), the next one is replacing **EBFE on 558B.** At press **Ctrl + E** and edit:




```
Address   Hex dump            Disassembly                          Comment
004014B4     55               PUSH    EBP                          <== Our OEP
004014B5     8BEC             MOV     EBP,ESP
004014B7  .  6A FF            PUSH    -1
004014B9  .  68 C0504000      PUSH    4050C0
004014BE  .  68 9C224000      PUSH    40229C                       SE handler installa
```

_Phu, Not writing long tut tired out phết J. Now the end of last MUPing stories. Dump in the target as the Olly said, then open ImportRec fill OEP and dump Fix:



_Run Try to see what what kaka run the service. So **yoda's protector 1.03.2** officially dust and J:

Best Regards
_ ***[Kienmanowar]*** _

--++--==[Greatz thanks to]==--++--
My family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Merc, Hoadongnoi, Nini ... all REA's members, TQN, HacNho, RongChauA, Deux, tlandn, light.phoenix, dqtln, ARTEAM .... All my friend, and you.

Thanks to --++--==[ ]==--++--

iamidiot, WhyNotBar, trickyboy, dzungltvn, takada, hurt_heart, haule_nth, v. hytkl. v.. You have contributed greatly to the REA. Hope you will continue to promote J

>>>> If you have any suggestions, comments or corrections email me: **kienbigmummy [at] gmail. com**

Yoda's Protector v1.03.2 - manually unpacking tutorial
(_kienmanowar_)

I. Introduction:

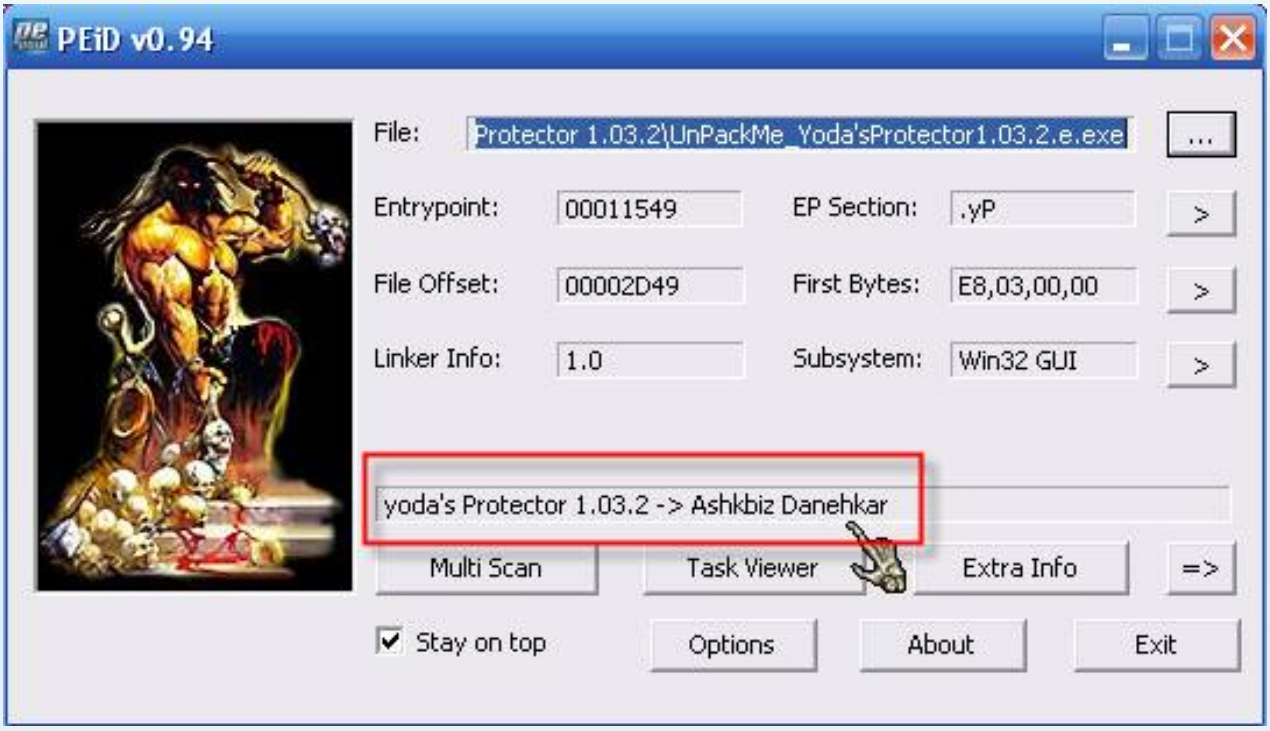
I wrote some tutorials about MUP protector for this forum (www.reaonline.net), but in English. Today, I try to MUP unpackme from an www.tuts4you.com **(UnPackMe_Yoda'sProtector1 .03.2. E.exe)** and decide to write another tutorial about this protector. I hope with this tutorial, it can give you some idea to work with this protector. Have fun and enjoy it! J

II. Tools & Target:

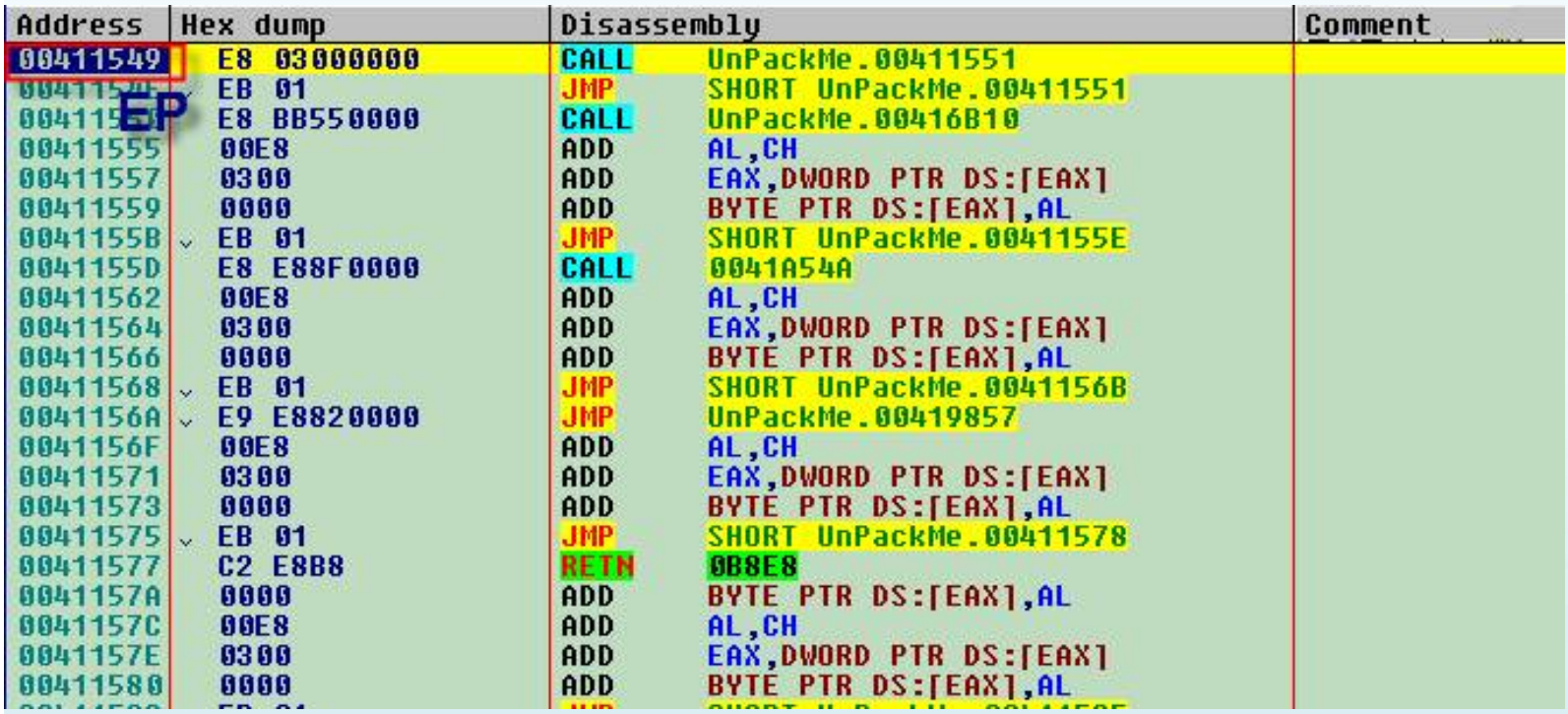
_ ODbyDYK v1.10
_ PeiD v0.94
_ ImportRec v1.6
_ UnPackMe_Yoda'sProtector1 .03.2. E.exe

III. MUPing:

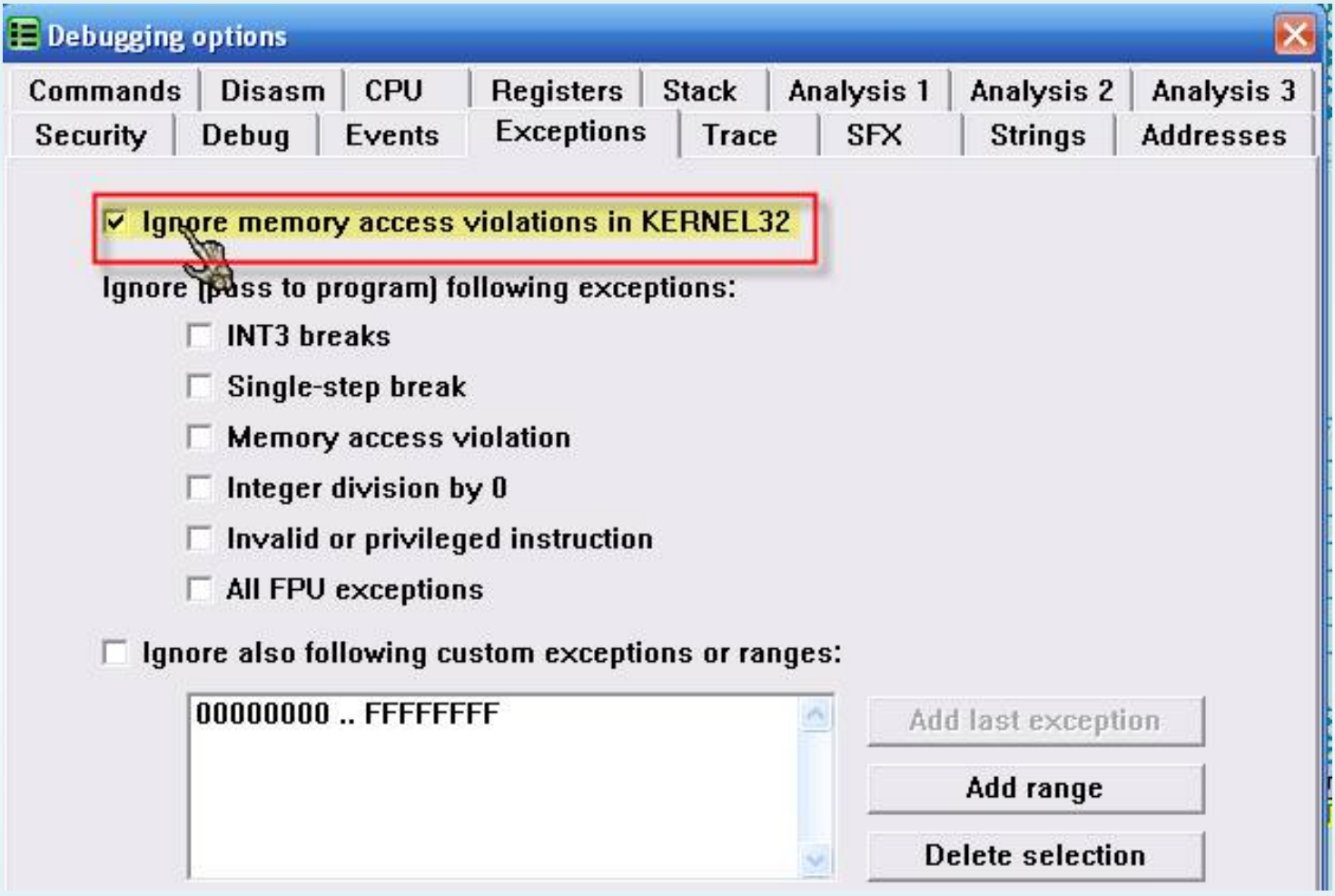
_Use **PEiD v.0.94** to detect and get some information:



_After That, **Ollydbg** open and load it into target. If a message box appears **"... Do you want to continue analysis,** click **No** to continue:

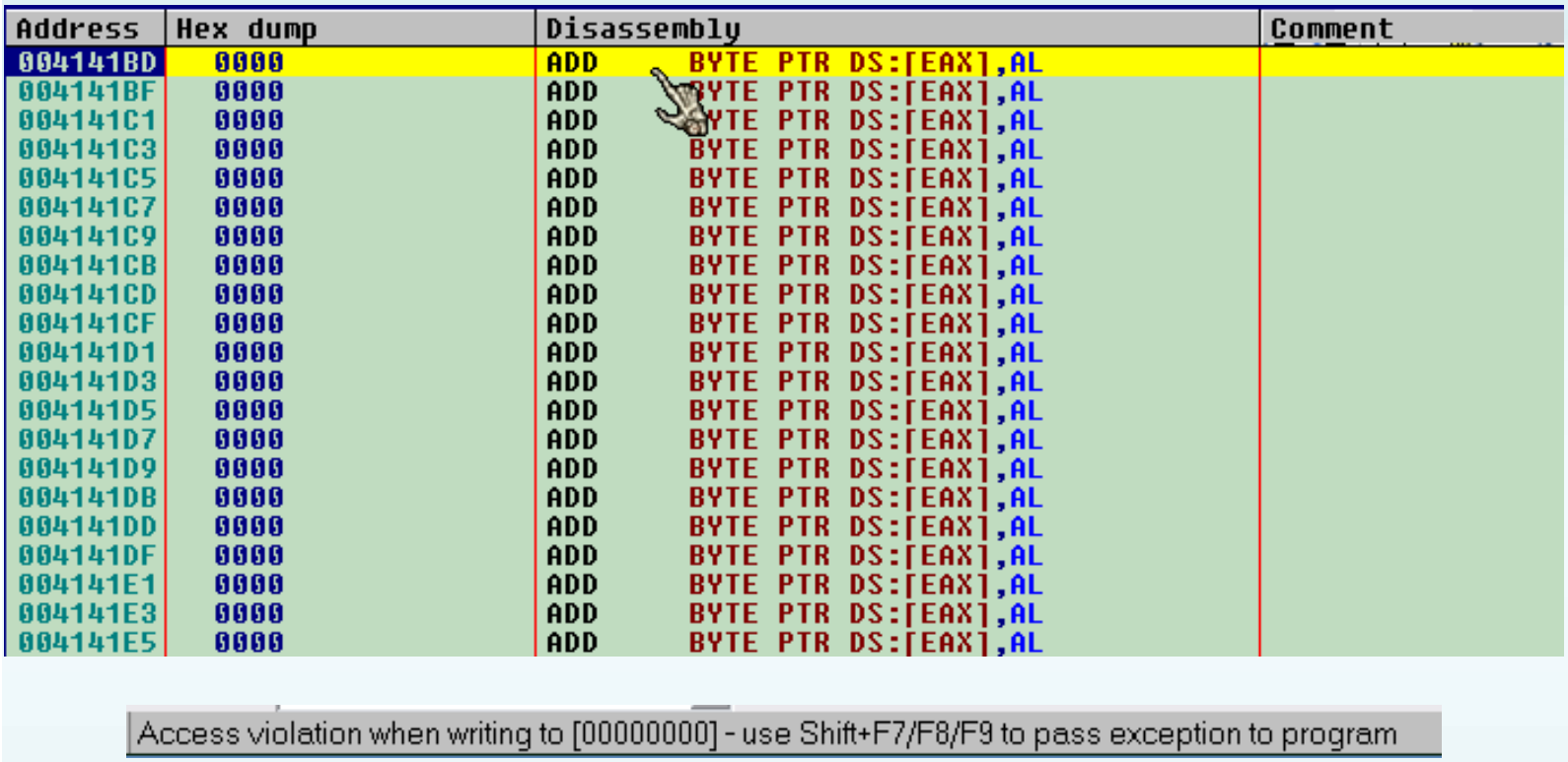


We stop at _Okie **Entry point** of this target. Now we have to configure **Exceptions** in Ollydbg target to work with. Uncheck **Ignore** all exceptions except **memory access violations in KERNEL32.**



_Then Press **OK** to accept this configuration. Print Ollydbg, press **Shift + F9** and count how many times until our target runs completely. On my machine, I press 8 times (may be differ from your machine)

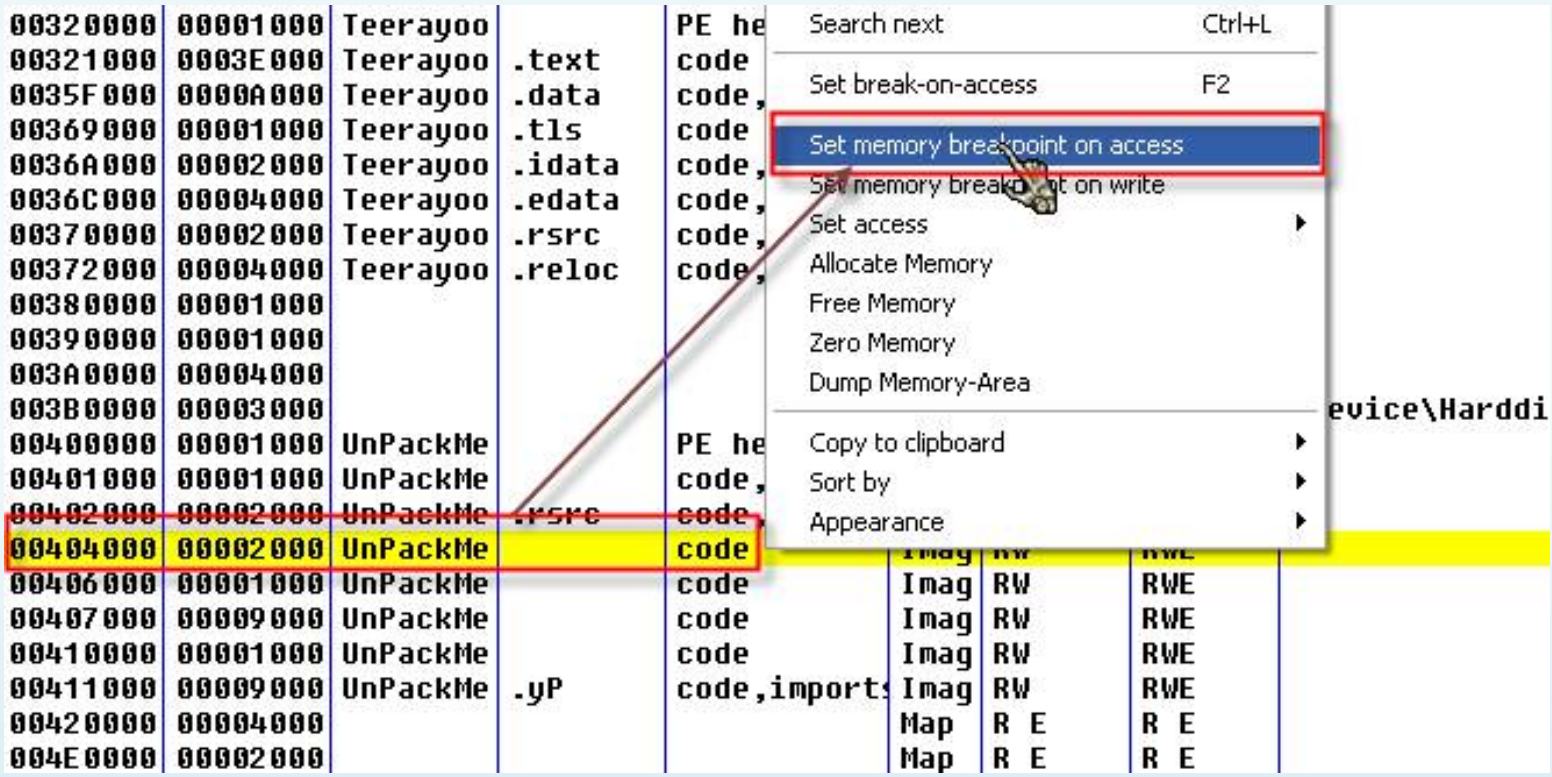
_ **Ctrl + F2** to restart our target and press **Shift + F9** (n-1) times. Olly will pause at last exception as the following picture below:



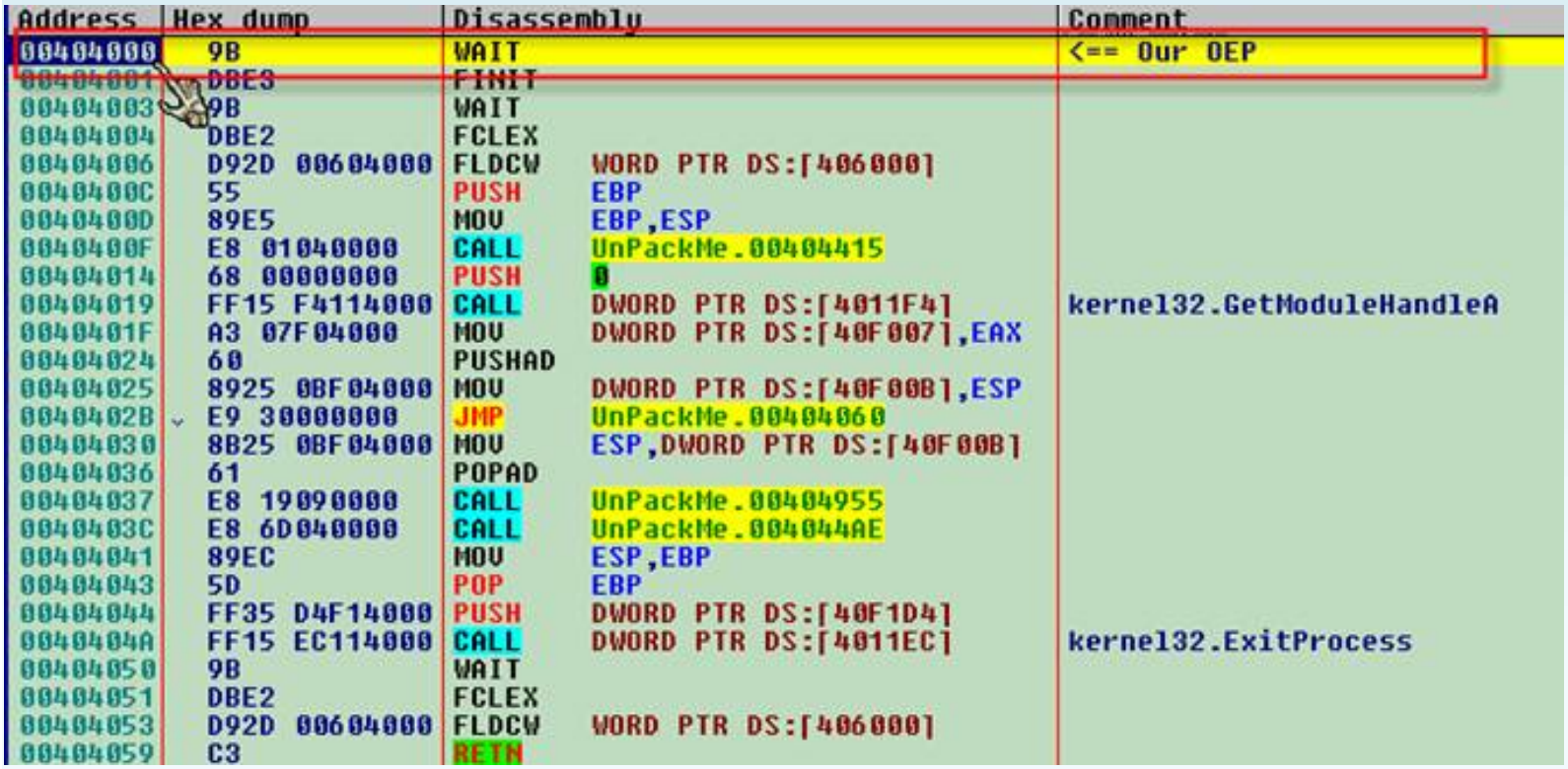
_At This position, we have two methods to find the **OEP** of this protector. I will show you now.

1 st Method:

_Press **Alt + M** to open the **Memory Map Window,** and set a breakpoint on memory access code section at the target. Like the following picture below:

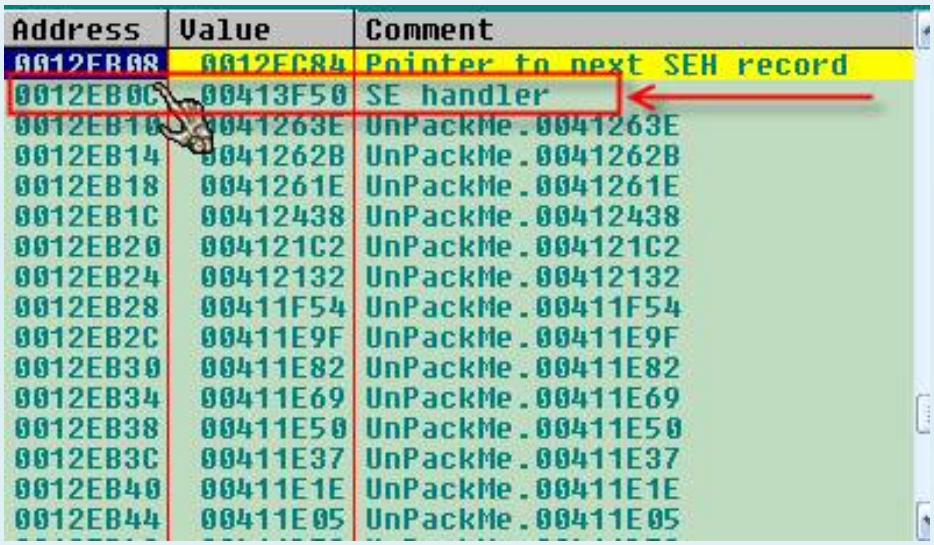


_Okie, Finish him now! J . Press **Shift + F9** times and only one kaka **OEP** we land at the target:

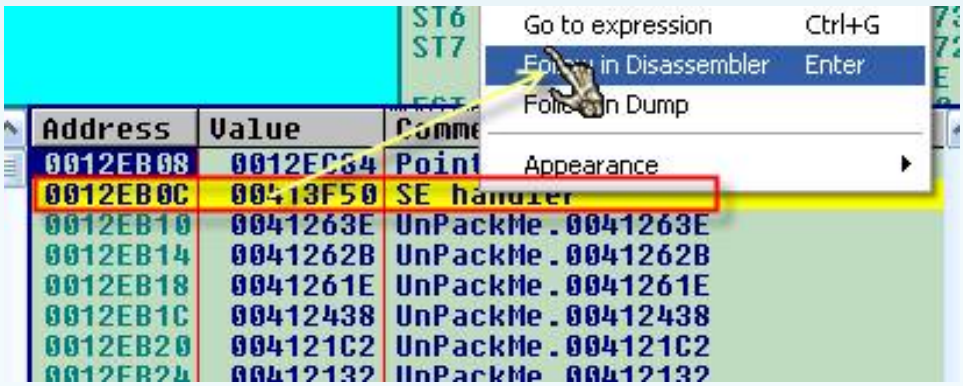


2 nd method:

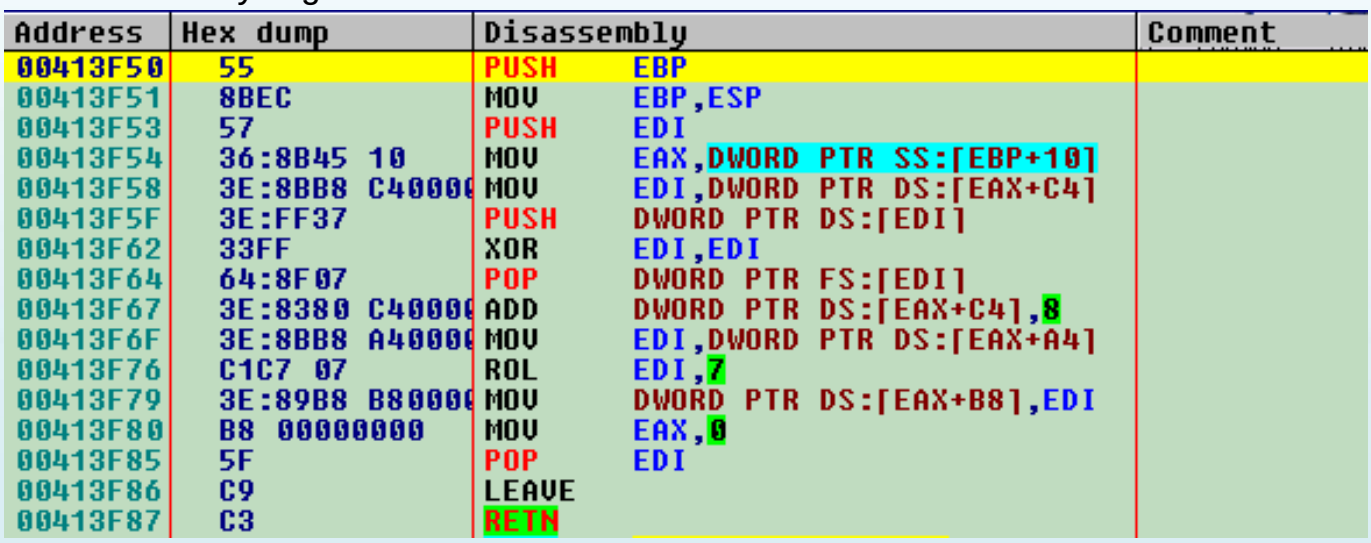
_At The last exception which we pause as you see in the picture above. Check the **Stack Window** and you will yoda's address of exception handler:



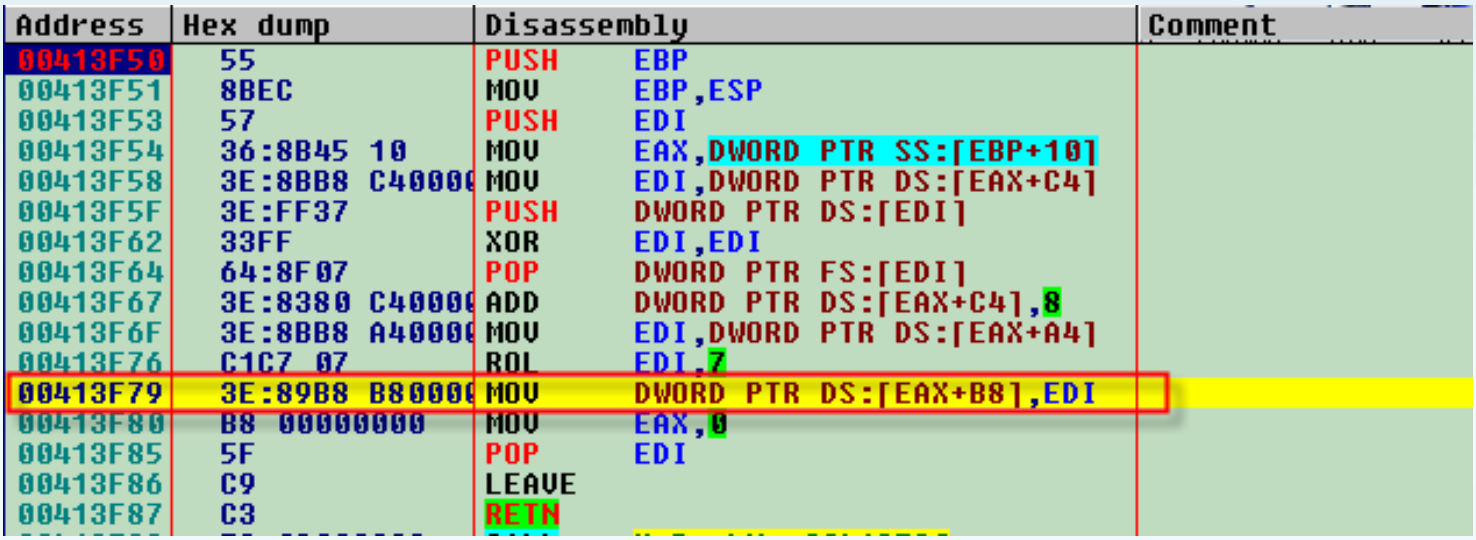
Click on _Right address of SE Handler and select: **Follow in Disassembler**



_We Are here in Ollydbg:

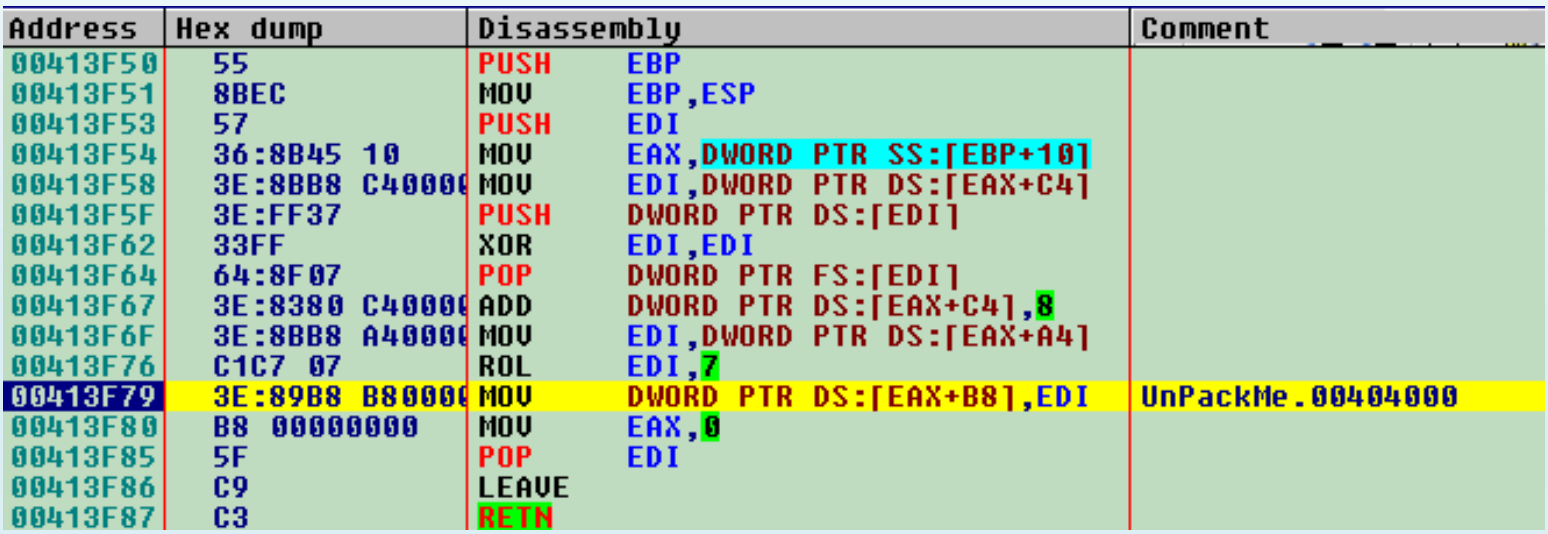


_Press **F2** to set BP at **0x00413F50,** then Press **Shift + F9** and you'll break there:



Address	Hex dump	Disassembly	Comment
00413F50	55	PUSH EBP	
00413F51	8BEC	MOV EBP,ESP	
00413F53	57	PUSH EDI	
00413F54	36:8B45 10	MOV EAX,DWORD PTR SS:[EBP+10]	
00413F58	3E:8BB8 C40000	MOV EDI,DWORD PTR DS:[EAX+C4]	
00413F5F	3E:FF37	PUSH DWORD PTR DS:[EDI]	
00413F62	33FF	XOR EDI,EDI	
00413F64	64:8F07	POP DWORD PTR FS:[EDI]	
00413F67	3E:8380 C40000	ADD DWORD PTR DS:[EAX+C4],8	
00413F6F	3E:8BB8 A40000	MOV EDI,DWORD PTR DS:[EAX+A4]	
00413F76	C1C7 07	ROL EDI,7	
00413F79	3E:89B8 B80000	MOV DWORD PTR DS:[EAX+B8],EDI	
00413F80	B8 00000000	MOV EAX,0	
00413F85	5F	POP EDI	
00413F86	C9	LEAVE	
00413F87	C3	RETN	

_Remove Break point and Press **F8** to trace down the line as marked in the picture above.



Address	Hex dump	Disassembly	Comment
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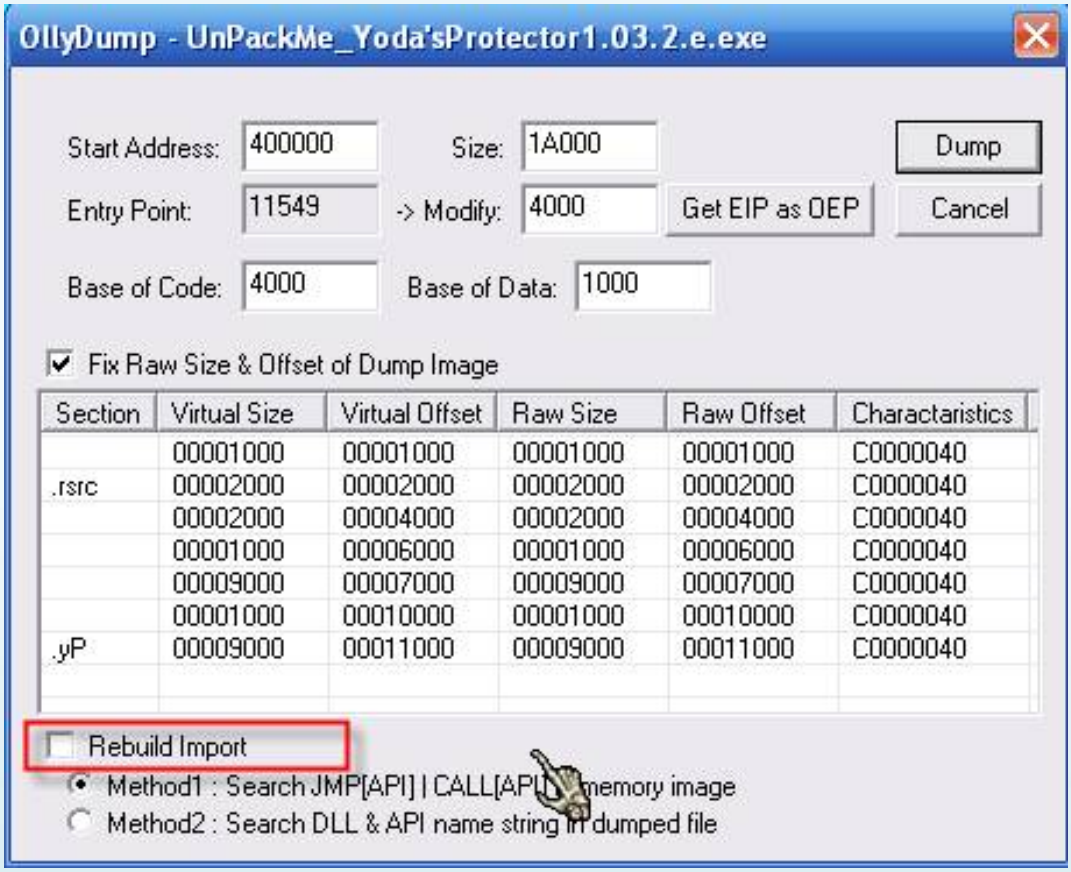
00413F5F	3E:FF37	PUSH DWORD PTR DS:[EDI]	
00413F62	33FF	XOR EDI,EDI	
00413F64	64:8F07	POP DWORD PTR FS:[EDI]	
00413F67	3E:8380 C40000	ADD DWORD PTR DS:[EAX+C4],8	
00413F6F	3E:8BB8 A40000	MOV EDI,DWORD PTR DS:[EAX+A4]	
00413F76	C1C7 07	ROL EDI,7	
00413F79	3E:89B8 B80000	MOV DWORD PTR DS:[EAX+B8],EDI	UnPackMe.00404000
00413F80	B8 00000000	MOV EAX,0	
00413F85	5F	POP EDI	
00413F86	C9	LEAVE	
00413F87	C3	RETN	

_EDI Hold **0x00404000** value which is **OEP** address. Simply go to **0x00404000,** BP place there and press **Shif + F9.** You will break on **OEP:**

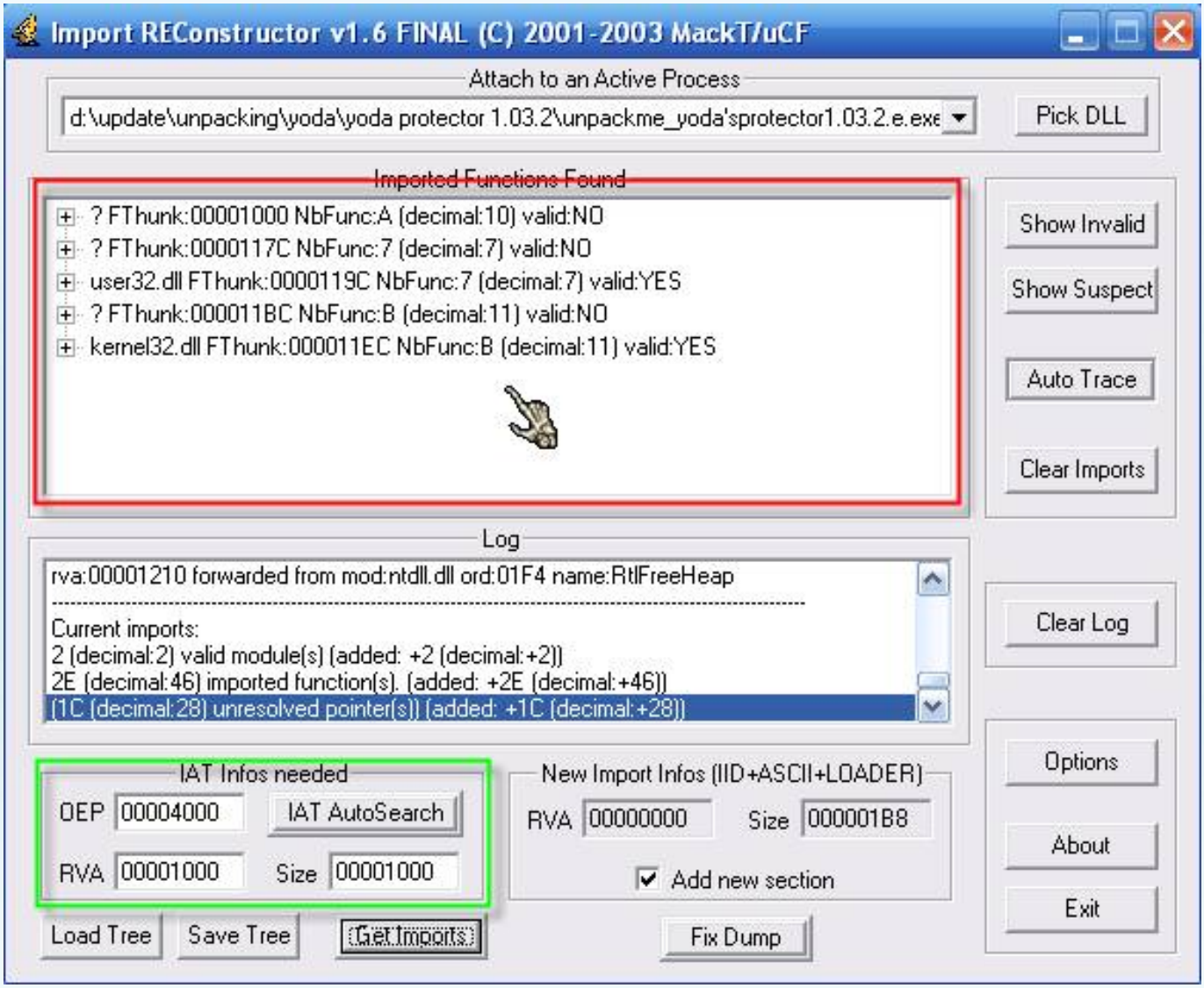
Address	Hex dump	Disassembly	Comment
00404000	9B	WAIT	<== Our OEP
00404001	DBE3	FINIT	
00404003	9B	WAIT	
00404004	DBE2	FCLEX	
00404006	D92D 00604000	FLDCW WORD PTR DS:[406000]	
0040400C	55	PUSH EBP	
0040400D	89E5	MOV EBP,ESP	
0040400F	E8 01040000	CALL UnPackMe.00404415	
00404014	68 00000000	PUSH 0	
00404019	FF15 F4114000	CALL DWORD PTR DS:[4011F4]	kernel32.GetModuleHandle
0040401F	A3 07F04000	MOV DWORD PTR DS:[40F007],EAX	
00404024	60	PUSHAD	
00404025	8925 0BF04000	MOV DWORD PTR DS:[40F00B],ESP	
0040402B	E9 30000000	JMP UnPackMe.00404060	
00404030	8B25 0BF04000	MOV ESP,DWORD PTR DS:[40F00B]	
00404036	61	POPAD	
00404037	E8 19090000	CALL UnPackMe.00404955	
0040403C	E8 6D040000	CALL UnPackMe.004044AE	
00404041	89EC	MOV ESP,EBP	
00404043	5D	POP EBP	
00404044	FF35 D4F14000	PUSH DWORD PTR DS:[40F1D4]	
0040404A	FF15 EC114000	CALL DWORD PTR DS:[4011EC]	kernel32.ExitProcess

OEP _After stop at the target, we will dump and Fix IAT. Use **Ollydump** Plugin to dump and save as with any name you want.



_Open **ImportRec,** load Process OEP and modify information in the IAT. Then press **IAT AutoSearch,** we get a messagebox:

Size and _Modify **RVA** same values as information which suggested ImportRec for us. **Get** Press **Imports** and we receive:



Show press _Next **Invalid Cut** and **thunks** all invalid thunks, press **Fix** Finally **dump** dumped the file and select to fix. Quit **ImportRec** and test our fixed file. Wow! Runs it

immediately:

_And That was all. It was not hard, is not it:)

Best Regards
_ [Kienmanowar] _

--++--==[Greatz thanks to]==--++--
My family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Merc, Hoadongnoi, Nini ... all REA's members, TQN, HacNho, RongChauA, Deux, tlandn, light.phoenix, dqtln, ARTEAM .... all my friend, and you.

Thanks to --++--==[ ]==--++--
iamidiot, WhyNotBar, trickyboy, dzungltvn, takada, hurt_heart, haule_nth, v. hytkl. v..

I want to thank **Teddy Roggers** for his great site, **Reversing.be** folks, **Arteam** folks and all folks on **crackmes.de,** thank to all members of unpack.cn (especially **fly** and **linhanshi).**

Sorry guys for gramar lot of mistakes, I tried my best but who has strenght for checking text after Writting. Because English is not my mother language J . See you!

>>>> If you have any suggestions, comments or corrections email me: **kienbigmummy [at] gmail.com**

Yoda's Protector v1.03.3 - manually unpacking tutorial

(_kienmanowar_)

I. Introduction:

In previous articles I have to guide you on MUP **version 1.03.2,** adding that **Whynotbar** also mentioned the way to work on this version. Posts follow me here and you will also work on other version is: **v1.03.3.** As I know it probably is the final version of **Yoda's Protector** and the author of it also has decided not relax and develop more ... hii .. but planning to start a Newer solutions J. This new version of Yoda's Protector have mechanisms Terminating Olly and can make the OS we were close with hic hic.

Yoda Protector on Yoda's Cryptor, by the time the new technical to be applied to how to protect programs Protect by Yoda. The technical old was applied is **erasing PE header, CRC checking (code and file), check IsDebuggerPresent, API Redirecting** and **destroying import technical information,** to learn about the technical and this you can learn more about **ExeStealth v2.74a** (a protected Rip whole way of Yoda). The new technical later be applied as follows:

C of the Asian Anti - olly's where as follows, to use the combination of the Asian c h à m API to obtain the PID of all of Asia is the process to run the E N that of italy not for us. Then where will I m the search process has be Started (in the case of italy à l à Ollydbg) and to terminate that. It compares the PID of the process with its PID . If the PID is not the same (. Exe was started in Olly) it will terminate the process.

One way but it makes use we feel very distasteful that it is using the API **BlockInput** before it using the other test. API function will block all imported equipment as standard keyboard, mouse etc.. Etc.. so we are block from your system. Then it will implement measures to check and good conduct code. If during this time they stop at an Exception or it is found Olly, the system we will wait response from us (we are waiting for the impact) but we can not achieve any any impact except the single Restart the computer default default L .... If everything is pass by a good, it will again use the API function on again to unblock the device for us ... This can say is how fairly or Protect!

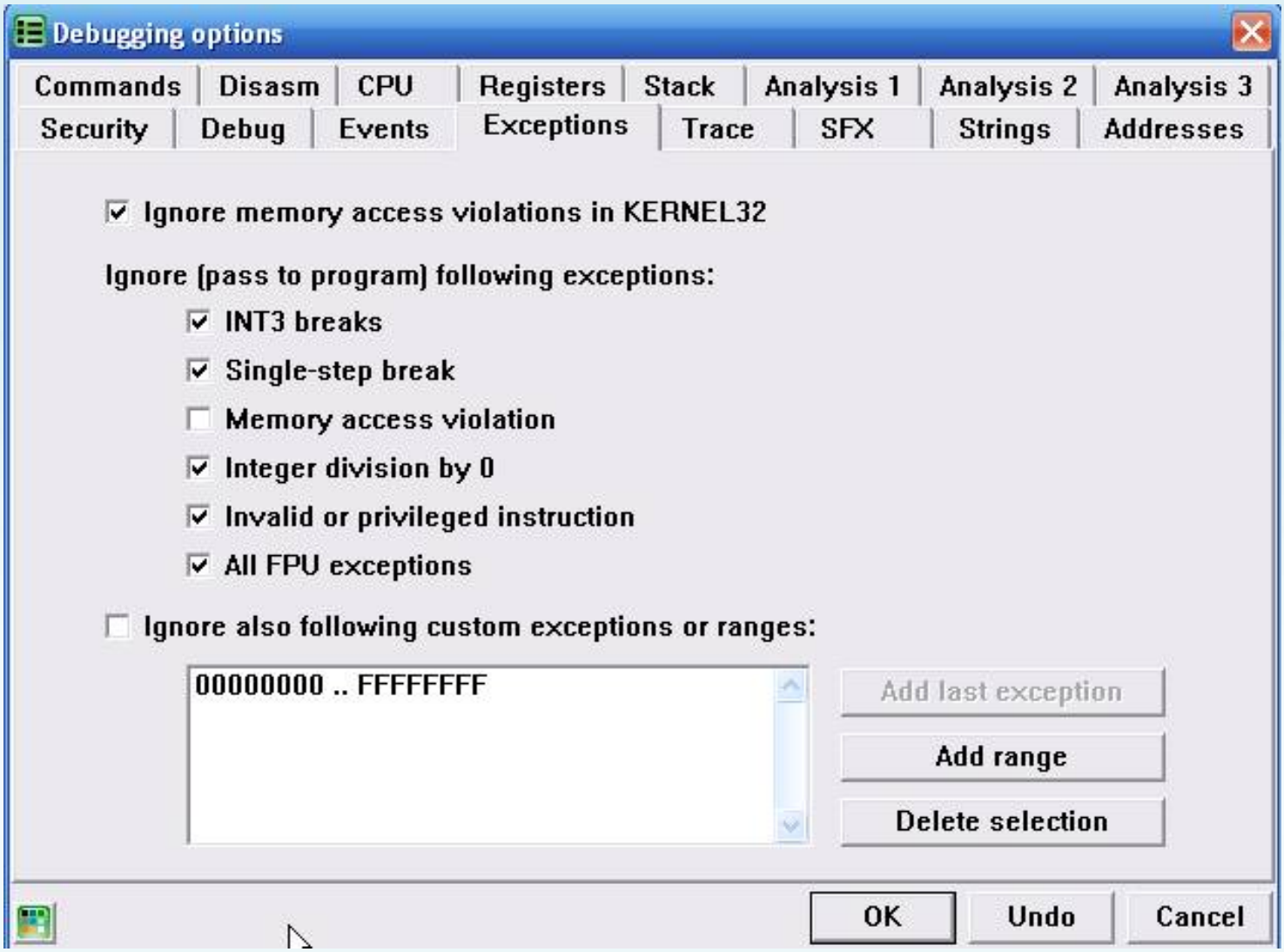
II. Tools & Target:

_ ***ODbyDYK v1.10***
_ ***PeiD v0.94***
_ ***LordPE***
_ ***ImportRec v1.6***
_ ***Crackme05.exe***

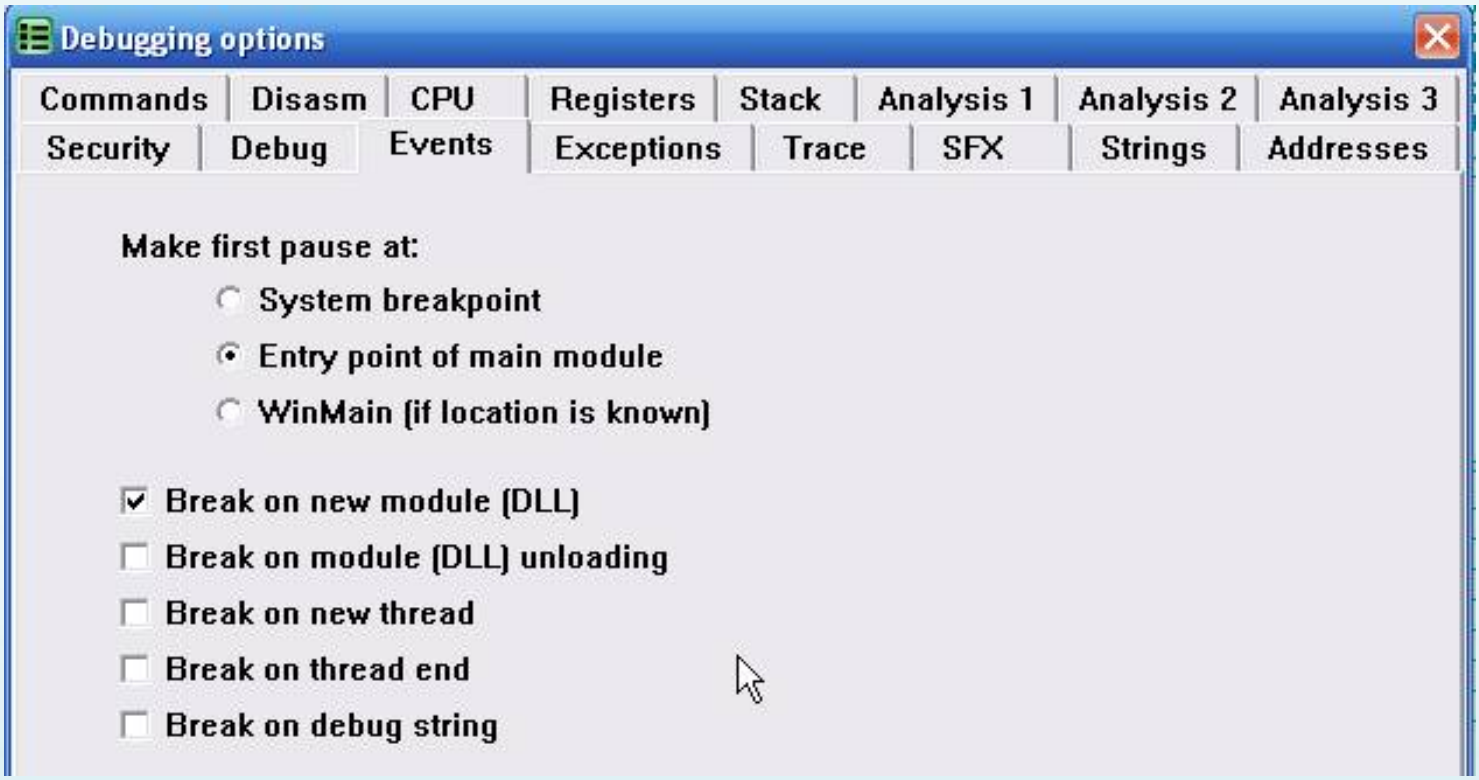
III. MUPing:

_Dung **PeiD** to get information on target:

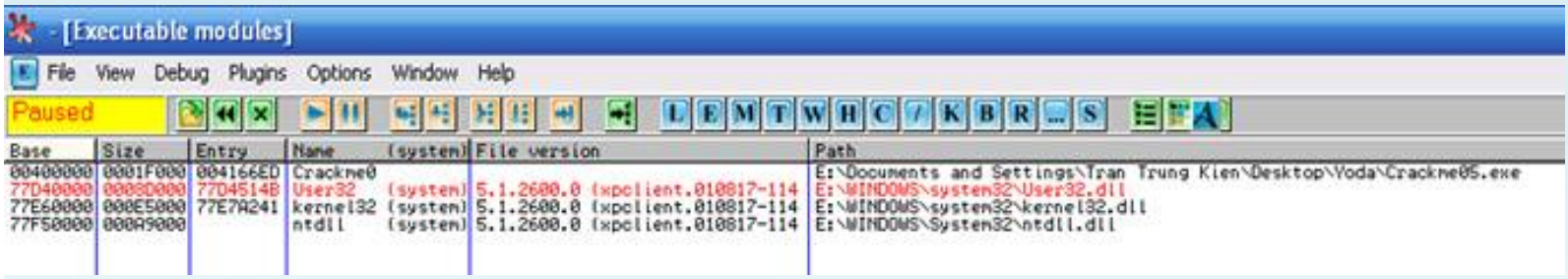
Olly _Mo and load up on target in Olly. In Olly you configure the Exceptions as follows:



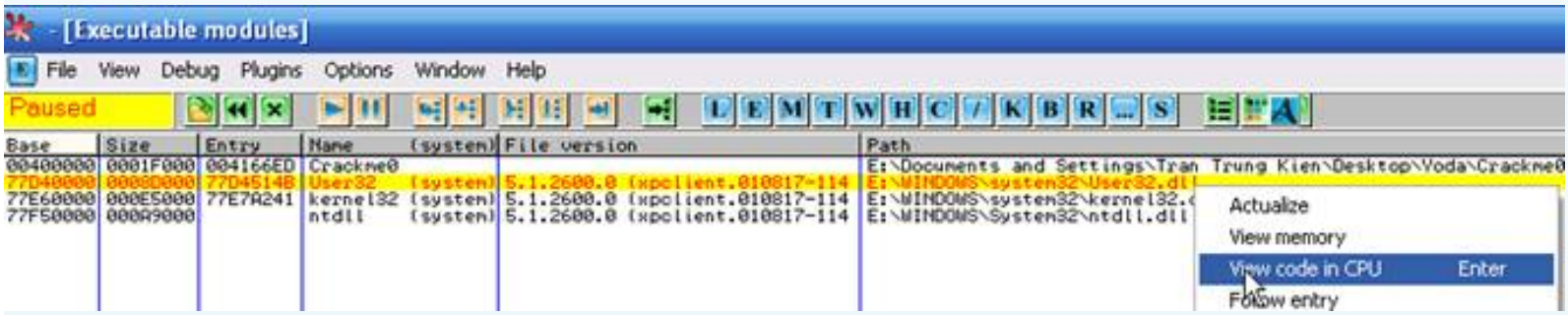
_Tiep **Events** tab in our configuration as follows:



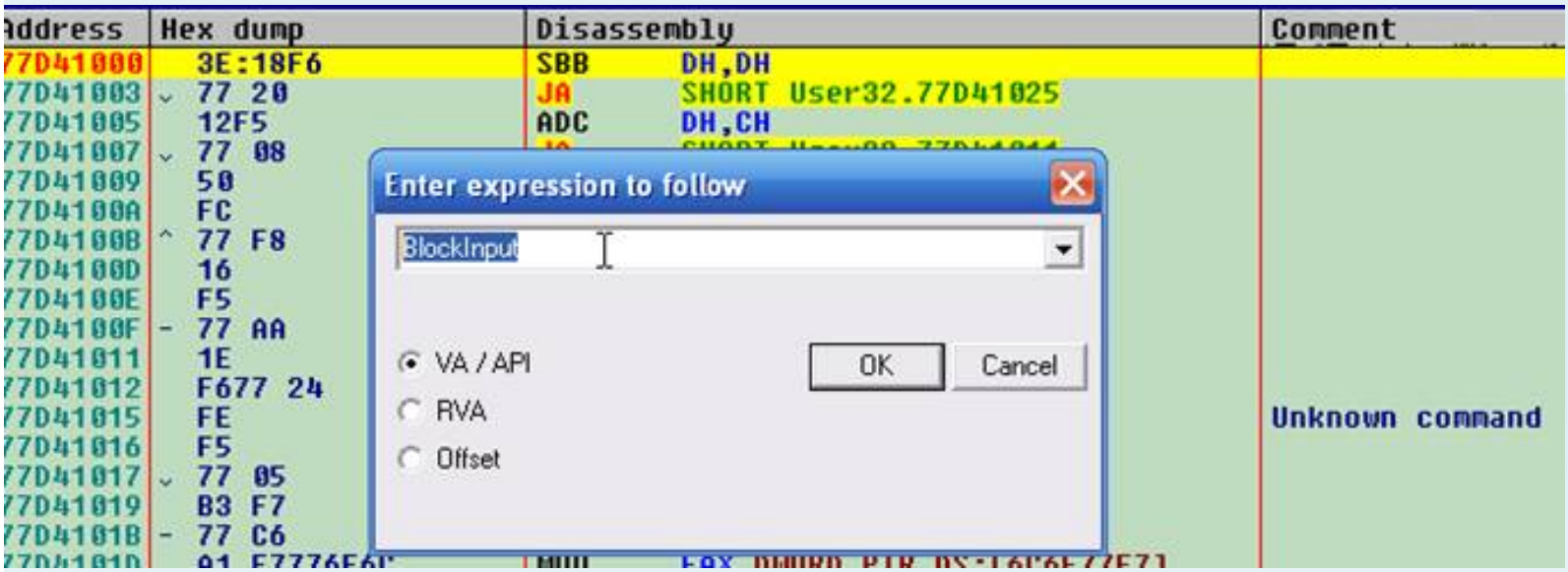
_Cau Pictures by such we do not want to block the enforcement functions in **user32.dll** **BlockInput.** So when does it target Run Break when the load on **user32.dll.** After such a configuration, press **F9** to run target and observations in the window when **Executables** to load the **user32.dll** up:



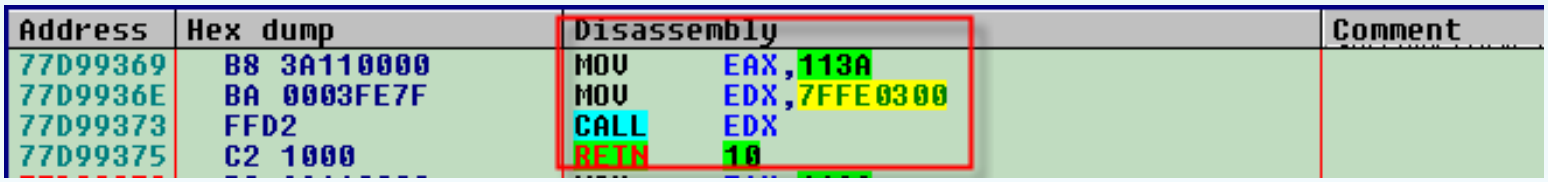
User32.dll _Sau when the load up, re-configured to select Olly function **Break on new modules (dll).** Next we'll patch it to function **BlockInput** not have the opportunity to lock the devices they ta.Tai screen **Executables,** right on the mouse and select **user32. dll** as follows:



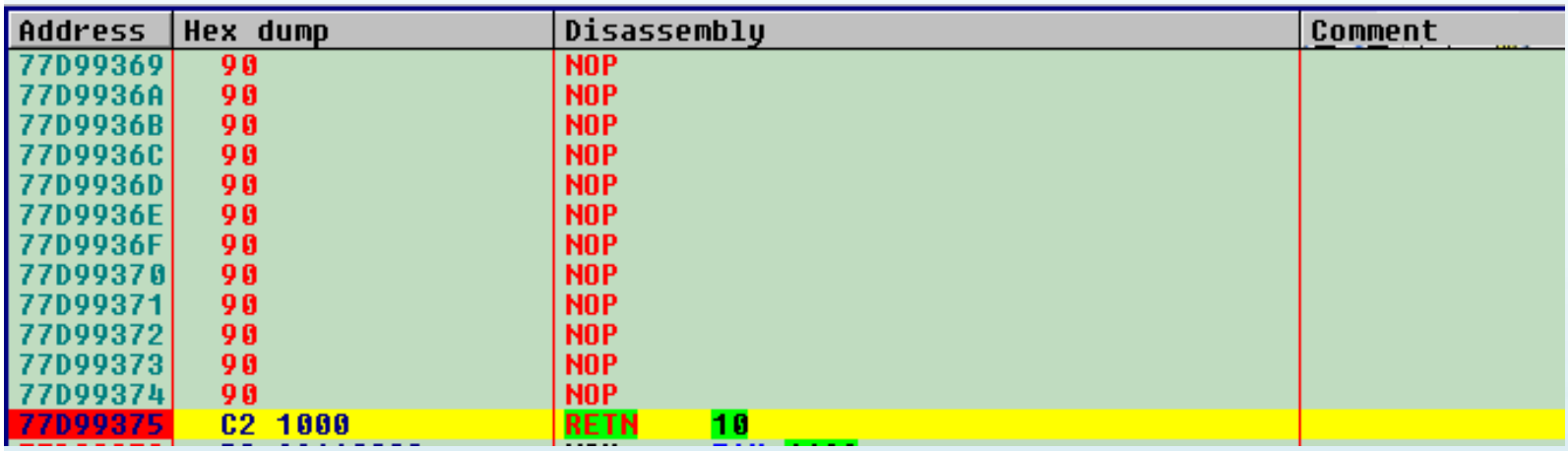
_Sau Screen at the CPU press **Ctrl + G** to conduct search function API **BlockInput:**



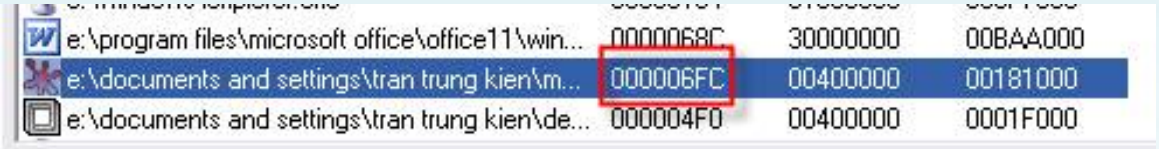
_Nhan Ok, we'll stay in here in Olly:



_Tien The patch by **NOP** 3 commands except command Retn 10, and set 1 in order BP Retn 10 as follows:



_Coi As we kill the API and has been avoided from locked handcuffs leg hehe, hic next steps we must fight the anti Olly. How to bypass also are not very difficult, because Yoda use **CreateToolhelp32Snapshot** API function to get all the processes, and functions to get PID **GetCurrentProcessId** by itself. Then Yoda will check process that opened it coincides with PID it does not, if not the same as it will now Terminate the process. To bypass this process is done as follows: open **LordPE** and find information about PID by Olly:



_Sau It back Olly and press **Ctrl + G,** enter the name refers to **GetCurrentProcessId** to find it:

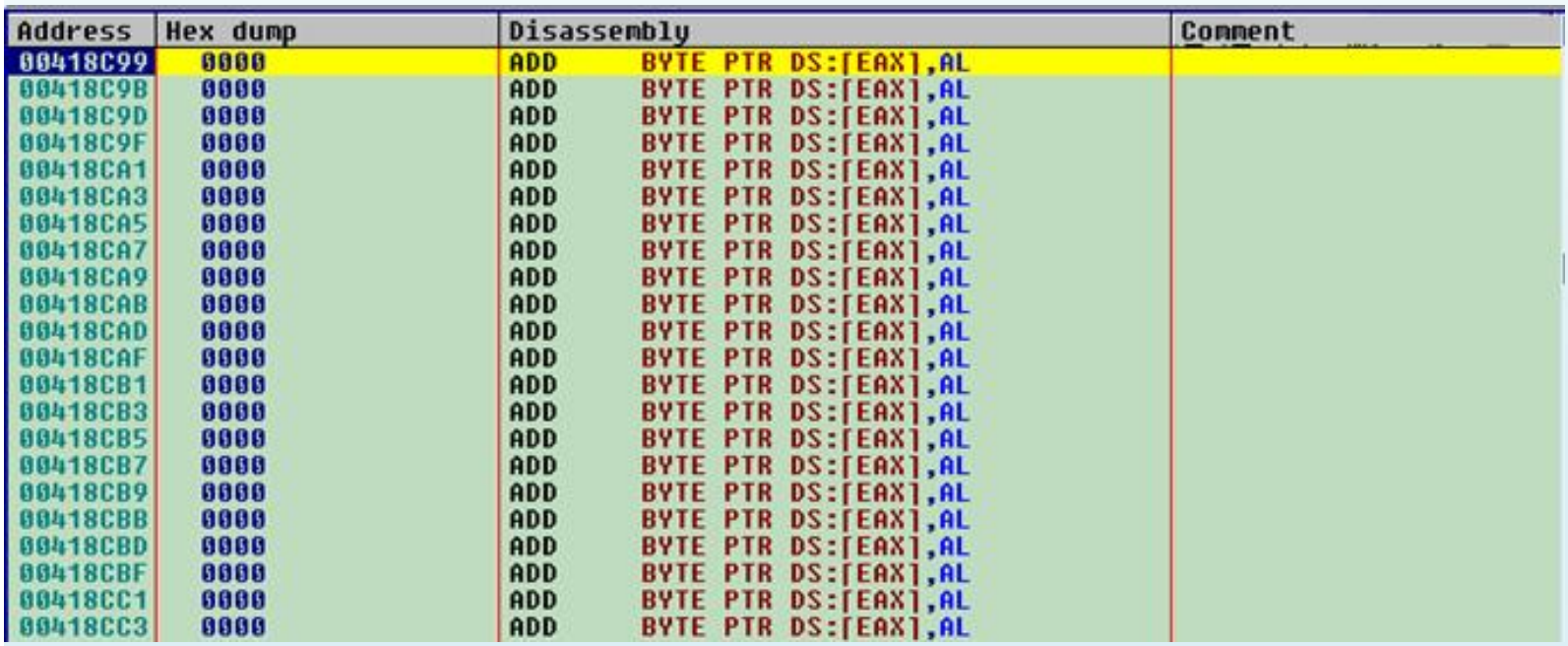
OK we will _Nhan in here in Olly:

Address	Hex dump	Disassembly	Comment
77E80656	64:A1 18000000	MOV EAX,DWORD PTR FS:[18]	
77E8065C	8B40 20	MOV EAX,DWORD PTR DS:[EAX+20]	
77E8065F	C3	RETN	

_Ham API will return PID Protected by file, but we will patch it so that it returns the value of the PID Olly. One patch as follows:

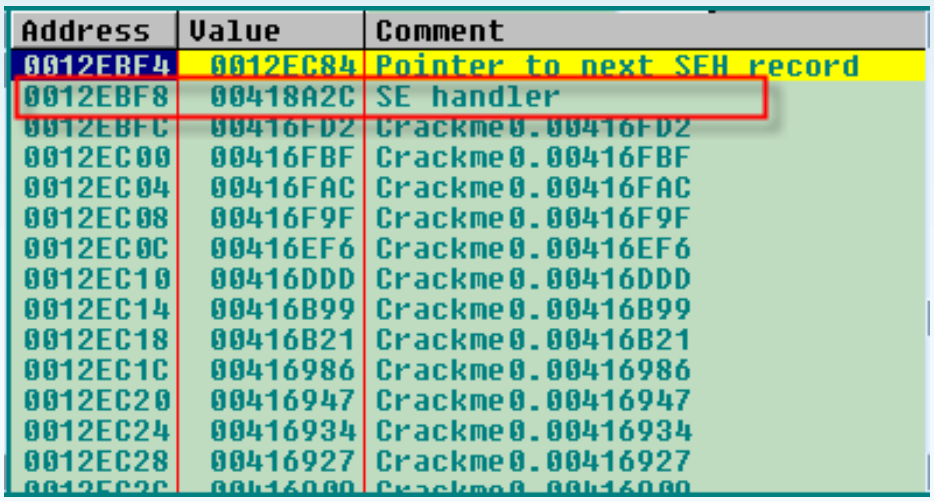
Address	Hex dump	Disassembly	Comment
77E80656	B8 FC060000	MOV EAX,6FC	
77E8065B	90	NOP	
77E8065C	90	NOP	
77E8065D	90	NOP	
77E8065E	90	NOP	
77E8065F	C3	RETN	

_Oki Is so complete, we now press **F9** to Run, Olly Break will happen again because Exception is a good sign for us:



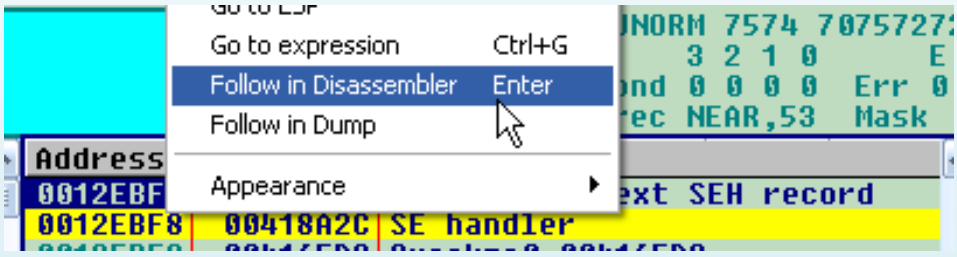
Address	Hex dump	Disassembly	Comment
00418C99	0000	ADD BYTE PTR DS:[EAX],AL	
00418C9B	0000	ADD BYTE PTR DS:[EAX],AL	
00418C9D	0000	ADD BYTE PTR DS:[EAX],AL	
00418C9F	0000	ADD BYTE PTR DS:[EAX],AL	
00418CA1	0000	ADD BYTE PTR DS:[EAX],AL	
00418CA3	0000	ADD BYTE PTR DS:[EAX],AL	
00418CA5	0000	ADD BYTE PTR DS:[EAX],AL	
00418CA7	0000	ADD BYTE PTR DS:[EAX],AL	
00418CA9	0000	ADD BYTE PTR DS:[EAX],AL	
00418CAB	0000	ADD BYTE PTR DS:[EAX],AL	
00418CAD	0000	ADD BYTE PTR DS:[EAX],AL	
00418CAF	0000	ADD BYTE PTR DS:[EAX],AL	
00418CB1	0000	ADD BYTE PTR DS:[EAX],AL	
00418CB3	0000	ADD BYTE PTR DS:[EAX],AL	
00418CB5	0000	ADD BYTE PTR DS:[EAX],AL	
00418CB7	0000	ADD BYTE PTR DS:[EAX],AL	
00418CB9	0000	ADD BYTE PTR DS:[EAX],AL	
00418CBB	0000	ADD BYTE PTR DS:[EAX],AL	
00418CBD	0000	ADD BYTE PTR DS:[EAX],AL	
00418CBF	0000	ADD BYTE PTR DS:[EAX],AL	
00418CC1	0000	ADD BYTE PTR DS:[EAX],AL	
00418CC3	0000	ADD BYTE PTR DS:[EAX],AL	

_Quan In the **Stack Window** window, we see the following:

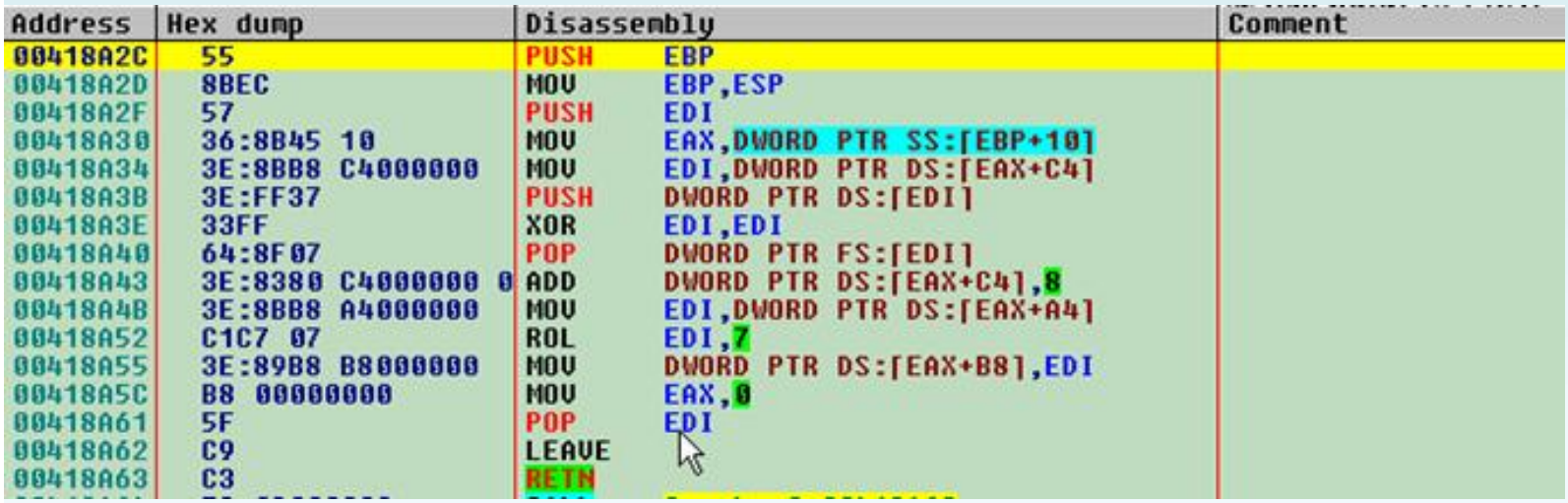


Address	Value	Comment
0012EBF4	0012EC84	Pointer to next SEH record
0012EBF8	00418A2C	SE handler
0012EBFC	00416FD2	Crackme0.00416FD2
0012EC00	00416FBF	Crackme0.00416FBF
0012EC04	00416FAC	Crackme0.00416FAC
0012EC08	00416F9F	Crackme0.00416F9F
0012EC0C	00416EF6	Crackme0.00416EF6
0012EC10	00416DDD	Crackme0.00416DDD
0012EC14	00416B99	Crackme0.00416B99
0012EC18	00416B21	Crackme0.00416B21
0012EC1C	00416986	Crackme0.00416986
0012EC20	00416947	Crackme0.00416947
0012EC24	00416934	Crackme0.00416934
0012EC28	00416927	Crackme0.00416927

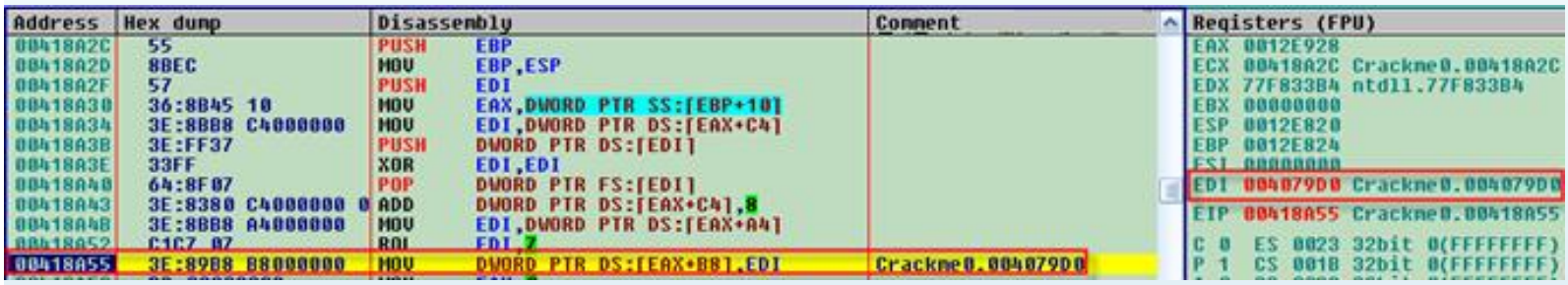
_Chuot Must address by yoda's exception handler, select **Follow in Disassembler (Enter):**



_Ta Be here in Olly:



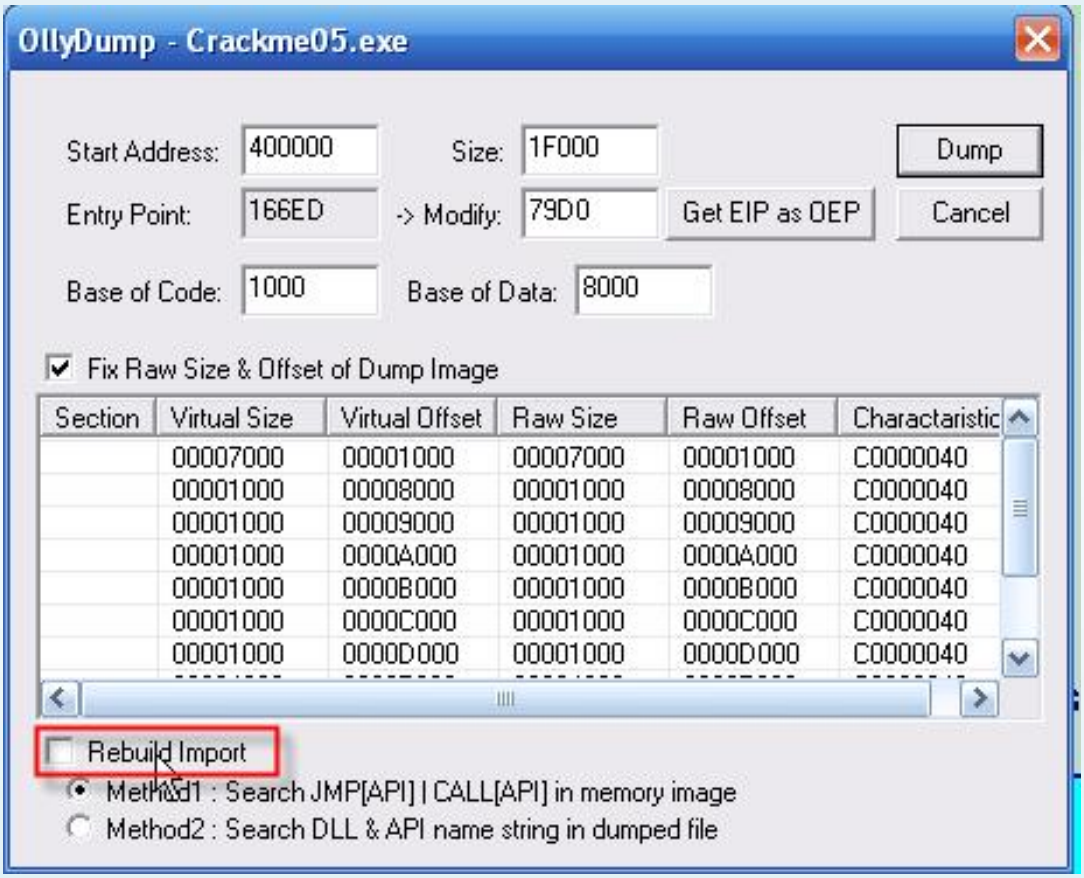
_Tai This press **F2** to set BP, then press **Shift + F9** to bypass Exception, we will address Break **00418A2C.** Un BP we've set out, then press **F8** to trace to address **00418A55.** Observations Registers the window we are seeing record **EDI** are stored address our OEP:



_Chuot Must write in to choose **Follow in EDI Disassembler,** then set at 1 BP OEP of our last press **Shift + F9** we OEP at Break:

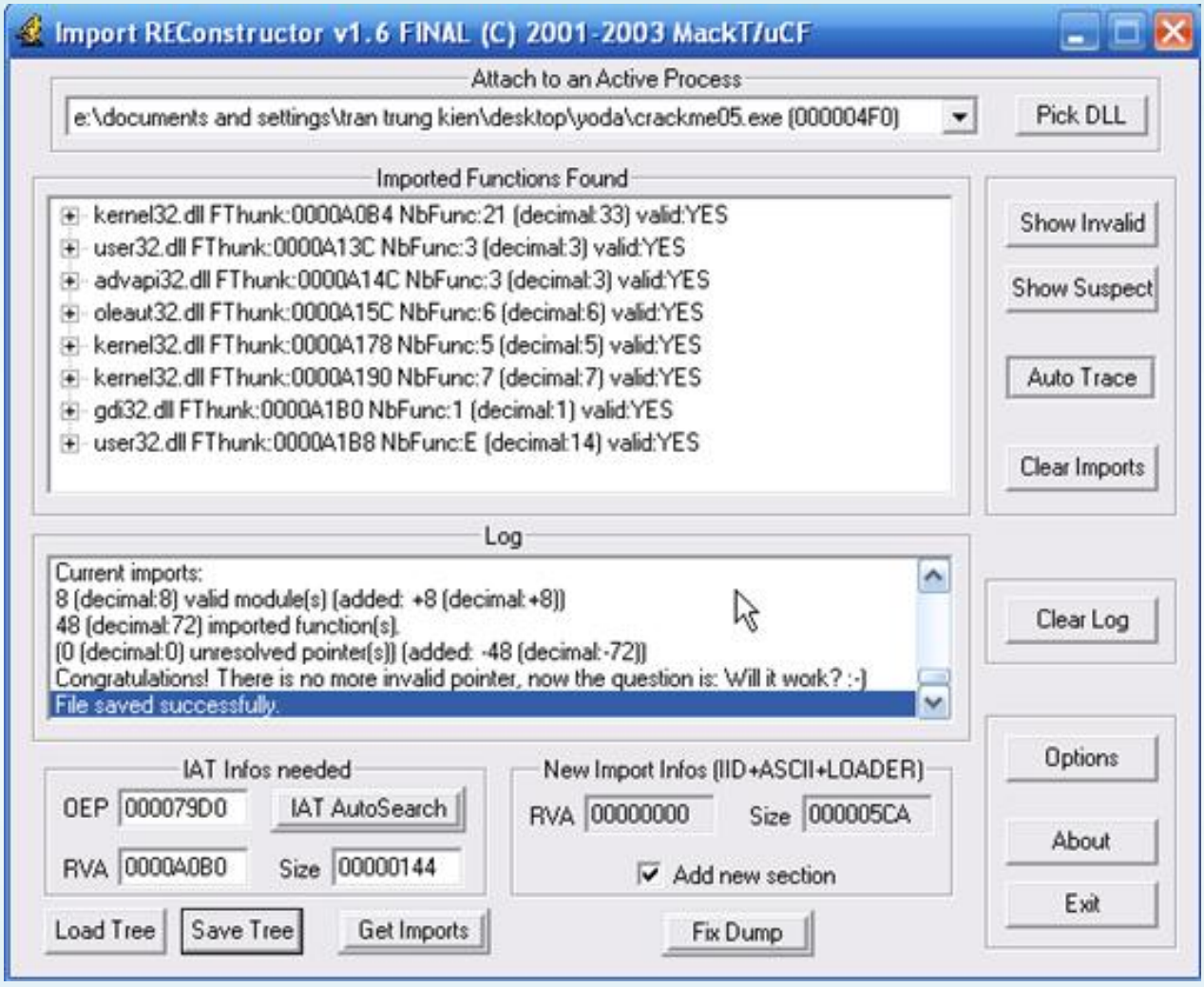
```
Address   Hex dump          Disassembly                          Comment
00407900  55               PUSH    EBP                          Crackme0.00417058
004079D1  8BEC             MOV     EBP,ESP
004079D3  83C4 F4          ADD     ESP,-0C
004079D6  53               PUSH    EBX
004079D7  56               PUSH    ESI
004079D8  57               PUSH    EDI
004079D9  B8 98794000      MOV     EAX,Crackme0.00407998
004079DE  E8 D1CBFFFF      CALL    Crackme0.004045B4
004079E3  BE CC954000      MOV     ESI,Crackme0.004095CC
004079E8  BF E4954000      MOV     EDI,Crackme0.004095E4
004079ED  BB A0954000      MOV     EBX,Crackme0.004095A0
004079F2  33C0             XOR     EAX,EAX
004079F4  55               PUSH    EBP
004079F5  68 847C4000      PUSH    Crackme0.00407C84
004079FA  64:FF30          PUSH    DWORD PTR FS:[EAX]
004079FD  64:8920          MOV     DWORD PTR FS:[EAX],ESP
00407A00  A1 80824000      MOV     EAX,DWORD PTR DS:[408280]
00407A05  8B00             MOV     EAX,DWORD PTR DS:[EAX]
00407A07  A3 C8954000      MOV     DWORD PTR DS:[4095C8],EAX
00407A0C  C703 C0000000    MOV     DWORD PTR DS:[EBX],0C0
00407A12  C743 04 90784000 MOV     DWORD PTR DS:[EBX+4],Crackme0.00
00407A19  A1 C8954000      MOV     EAX,DWORD PTR DS:[4095C8]
00407A1E  8943 10          MOV     DWORD PTR DS:[EBX+10],EAX
00407A21  C743 1C 10000000 MOV     DWORD PTR DS:[EBX+1C],10
00407A28  B8 947C4000      MOV     EAX,Crackme0.00407C94        ASCII "GLAVNI PROZOR"
00407A2D  8943 24          MOV     DWORD PTR DS:[EBX+24],EAX
00407A30  68 007F0000      PUSH    7F00
```

_Bay Hour final stage is a dump file and Fix IAT. You can use **LordPE** to dump file, but the target was to Protect by Yoda, the dump with LordPE or lose the icon. So with this case I will use the Plugin Ollydump to dump file:

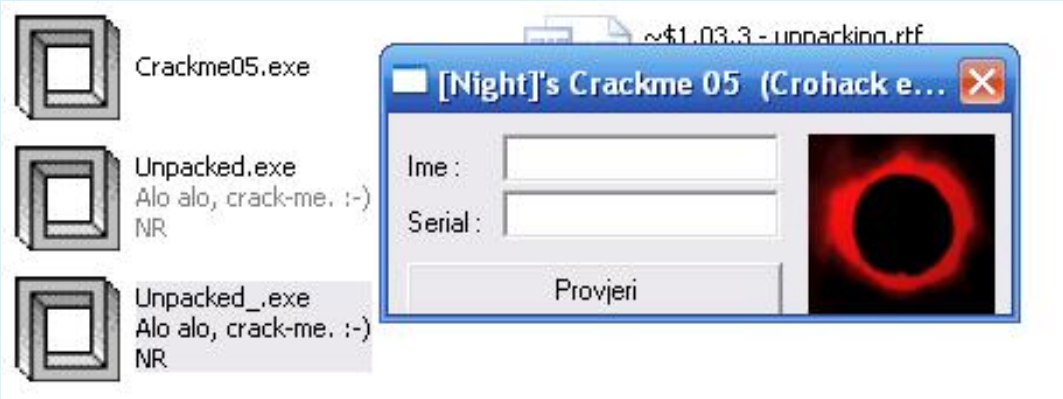


_Tiep By **ImportRec** open up and load the correct process is our target. Fill in the OEP,

click **IAT AutoSearch** and finally click **Get Imports.** Khuc we receive an Invalid Thunk but do not, you click Show Invalid then right click on Invalid thunk and **Trace Level1 (Disasm).** We are as follows:



Fix dump _Hehe stop, then try the test file was unpacked. Wow! Run then kìa tolerable:



_Hen Meet you again in the following message! J

Best Regards
_ ***[Kienmanowar]*** _

--++--==[Greatz thanks to]==--++--
My family, Computer_Angel, Moonbaby, Zombie_Deathman, Littleboy, Benina, QHQCrker, the_Lighthouse, Merc, Hoadongnoi, Nini ... all REA's members, TQN, HacNho, RongChauA, Deux, tlandn, light.phoenix, dqtln, ARTEAM .... all my friend, and you.

Thanks to --++--==[ ]==--++--
iamidiot, WhyNotBar, trickyboy, dzungltvn, takada, hurt_heart, haule_nth, v. hytkl. v.. You have contributed greatly to the REA. Hope you will continue to promote J

>>>> If you have any suggestions, comments or corrections email me: **kienbigmummy [at] gmail. com**