

## Image File의 System 정보

```
C:\WPYthon27\Lib\site-packages\volatility-master>python2 vol.py -f C:\Wdf\Wdump\Wdump.img imageinfo
Volatility Foundation Volatility Framework 2.6
INFO : volatility.debug : Determining profile based on KDBG search...
      Suggested Profile(s) : WinXPSP2x86, WinXPSP3x86 (Instantiated with WinXPSP2x86)
                        AS Layer1 : IA32PagedMemoryPae (Kernel AS)
                        AS Layer2 : FileAddressSpace (C:\Wdf\Wdump\Wdump.img)
                        PAE type : PAE
                        DTB : 0xa02000L
                        KDBG : 0x80547ae0L
      Number of Processors : 1
      Image Type (Service Pack) : 3
                        KPCR for CPU 0 : 0xffdff000L
                        KUSER_SHARED_DATA : 0xffdf0000L
      Image date and time : 2019-03-21 00:51:11 UTC+0000
      Image local date and time : 2019-03-21 09:51:11 +0900
```

## Image 정보

### - kdbgscan

```
C:\WPYthon27\Lib\site-packages\volatility-master>python2 vol.py --profile=WinXPSP3x86 -f C:\Wdf\Wdump\Wdump.img kdbgscan
Volatility Foundation Volatility Framework 2.6
*****
Instantiating KDBG using: Kernel AS WinXPSP3x86 (5.1.0 32bit)
Offset (V) : 0x80547ae0
Offset (P) : 0x547ae0
KDBG owner tag check : True
Profile suggestion (KDBGHeader): WinXPSP3x86
Version64 : 0x80547ab8 (Major: 15, Minor: 2600)
Service Pack (CmNtCSDVersion) : 3
Build string (NtBuildLab) : 2600.xpsp.080413-2111
PsActiveProcessHead : 0x8055c158 (23 processes)
PsLoadedModuleList : 0x80555fc0 (107 modules)
KernelBase : 0x804d9000 (Matches MZ: True)
Major (OptionalHeader) : 5
Minor (OptionalHeader) : 1
KPCR : 0xffdff000 (CPU 0)

*****
Instantiating KDBG using: Kernel AS WinXPSP3x86 (5.1.0 32bit)
Offset (V) : 0x80547ae0
Offset (P) : 0x547ae0
KDBG owner tag check : True
Profile suggestion (KDBGHeader): WinXPSP2x86
Version64 : 0x80547ab8 (Major: 15, Minor: 2600)
Service Pack (CmNtCSDVersion) : 3
Build string (NtBuildLab) : 2600.xpsp.080413-2111
PsActiveProcessHead : 0x8055c158 (23 processes)
PsLoadedModuleList : 0x80555fc0 (107 modules)
KernelBase : 0x804d9000 (Matches MZ: True)
Major (OptionalHeader) : 5
Minor (OptionalHeader) : 1
KPCR : 0xffdff000 (CPU 0)
```

### - kprscan

```
*****
Offset (V) : 0xffdff000
Offset (P) : 0x40000
KdVersionBlock : 0x80547ab8
IDT : 0x8003f400
GDT : 0x8003f000
CurrentThread : 0x820da020 TID 1248 (mdd.exe:1324)
IdleThread : 0x80554740 TID 0 (-:0)
Details : CPU 0 (GenuineIntel @ 3200 MHz)
CR3/DTB : 0xa02000
```

pslist

Offset(V)	Name	PID	PPID	Thds	Hnds	Sess	Wow64	Start	Exit
-----									
-----									
0x821b97f8	System	4	0	53	250	-----	0		
0x82021b08	smss.exe	356	4	3	19	-----	0	2019-03-21 00:40:15 UTC+0000	
0x81e1fae8	csrss.exe	500	356	10	349	0	0	2019-03-21 00:40:15 UTC+0000	
0x81fd1390	winlogon.exe	592	356	18	533	0	0	2019-03-21 00:40:15 UTC+0000	
0x81fba2f8	services.exe	636	592	16	331	0	0	2019-03-21 00:40:16 UTC+0000	
0x82064a98	lsass.exe	648	592	18	326	0	0	2019-03-21 00:40:16 UTC+0000	
0x81cb6da0	svchost.exe	836	636	17	193	0	0	2019-03-21 00:40:16 UTC+0000	
0x81c2b2e0	svchost.exe	892	636	11	251	0	0	2019-03-21 00:40:16 UTC+0000	
0x81fdfa0	svchost.exe	1020	636	75	1565	0	0	2019-03-21 00:40:17 UTC+0000	
0x81fd8da0	svchost.exe	1288	636	4	77	0	0	2019-03-21 00:40:43 UTC+0000	
0x820ad468	svchost.exe	1340	636	13	193	0	0	2019-03-21 00:40:43 UTC+0000	
0x81c1f598	spoolsv.exe	1556	636	12	116	0	0	2019-03-21 00:40:43 UTC+0000	
0x81c4d770	svchost.exe	1660	636	4	84	0	0	2019-03-21 00:41:01 UTC+0000	
0x8204c270	wmiprvse.exe	388	836	5	147	0	0	2019-03-21 00:41:02 UTC+0000	
0x820e0b68	alg.exe	768	636	6	105	0	0	2019-03-21 00:41:09 UTC+0000	
0x81d29b88	explorer.exe	364	300	12	543	0	0	2019-03-21 00:41:56 UTC+0000	
0x81c06da0	wscntfy.exe	1100	1020	1	38	0	0	2019-03-21 00:41:57 UTC+0000	
0x81bfa6d0	msiexec.exe	780	636	4	103	0	0	2019-03-21 00:42:02 UTC+0000	
0x81be55a8	rundll32.exe	508	364	4	99	0	0	2019-03-21 00:42:04 UTC+0000	
0x81f898a8	ctfmon.exe	532	364	1	87	0	0	2019-03-21 00:42:04 UTC+0000	
0x81bdb698	cmd.exe	208	364	1	35	0	0	2019-03-21 00:46:45 UTC+0000	
0x81f37c78	conime.exe	164	208	1	39	0	0	2019-03-21 00:46:45 UTC+0000	
0x81fe4020	mdd.exe	1324	208	1	24	0	0	2019-03-21 00:51:11 UTC+0000	

pslist -p

Offset(P)	Name	PID	PPID	Thds	Hnds	Sess	Wow64	Start	Exit
-----									
-----									
0x025b97f8	System	4	0	53	250	-----	0		
0x02421b08	smss.exe	356	4	3	19	-----	0	2019-03-21 00:40:15 UTC+0000	
0x0221fae8	csrss.exe	500	356	10	349	0	0	2019-03-21 00:40:15 UTC+0000	
0x023d1390	winlogon.exe	592	356	18	533	0	0	2019-03-21 00:40:15 UTC+0000	
0x023ba2f8	services.exe	636	592	16	331	0	0	2019-03-21 00:40:16 UTC+0000	
0x02464a98	lsass.exe	648	592	18	326	0	0	2019-03-21 00:40:16 UTC+0000	
0x020b6da0	svchost.exe	836	636	17	193	0	0	2019-03-21 00:40:16 UTC+0000	
0x0202b2e0	svchost.exe	892	636	11	251	0	0	2019-03-21 00:40:16 UTC+0000	
0x023dfa0	svchost.exe	1020	636	75	1565	0	0	2019-03-21 00:40:17 UTC+0000	
0x023d8da0	svchost.exe	1288	636	4	77	0	0	2019-03-21 00:40:43 UTC+0000	
0x024ad468	svchost.exe	1340	636	13	193	0	0	2019-03-21 00:40:43 UTC+0000	
0x0201f598	spoolsv.exe	1556	636	12	116	0	0	2019-03-21 00:40:43 UTC+0000	
0x0204d770	svchost.exe	1660	636	4	84	0	0	2019-03-21 00:41:01 UTC+0000	
0x0244c270	wmiprvse.exe	388	836	5	147	0	0	2019-03-21 00:41:02 UTC+0000	
0x024e0b68	alg.exe	768	636	6	105	0	0	2019-03-21 00:41:09 UTC+0000	
0x02129b88	explorer.exe	364	300	12	543	0	0	2019-03-21 00:41:56 UTC+0000	
0x02006da0	wscntfy.exe	1100	1020	1	38	0	0	2019-03-21 00:41:57 UTC+0000	
0x01ffa6d0	msiexec.exe	780	636	4	103	0	0	2019-03-21 00:42:02 UTC+0000	
0x01fe55a8	rundll32.exe	508	364	4	99	0	0	2019-03-21 00:42:04 UTC+0000	
0x023898a8	ctfmon.exe	532	364	1	87	0	0	2019-03-21 00:42:04 UTC+0000	
0x01fdb698	cmd.exe	208	364	1	35	0	0	2019-03-21 00:46:45 UTC+0000	
0x02337c78	conime.exe	164	208	1	39	0	0	2019-03-21 00:46:45 UTC+0000	
0x023e4020	mdd.exe	1324	208	1	24	0	0	2019-03-21 00:51:11 UTC+0000	



# psscan

Offset(P)	Name	PID	PPID	PDB	Time created	Time exited
0x0000000001f7ada0	alg.exe	1172	244	0x03440160	2019-03-21 00:38:29 UTC+0000	
0x0000000001fa7540	dllhost.exe	912	244	0x034402a0	2019-03-21 00:38:43 UTC+0000	
0x0000000001fdb698	cmd.exe	208	364	0x03c00340	2019-03-21 00:46:45 UTC+0000	
0x0000000001fe55a8	rundll32.exe	508	364	0x03c00320	2019-03-21 00:42:04 UTC+0000	
0x0000000001ffa6d0	msiexec.exe	780	636	0x03c00260	2019-03-21 00:42:02 UTC+0000	
0x0000000002006da0	wscntfy.exe	1100	1020	0x03c002a0	2019-03-21 00:41:57 UTC+0000	
0x000000000201f598	spoolsv.exe	1556	636	0x03c001a0	2019-03-21 00:40:43 UTC+0000	
0x000000000202b2e0	svchost.exe	892	636	0x03c00100	2019-03-21 00:40:16 UTC+0000	
0x000000000204d770	svchost.exe	1660	636	0x03c001c0	2019-03-21 00:41:01 UTC+0000	
0x00000000020b6da0	svchost.exe	836	636	0x03c000e0	2019-03-21 00:40:16 UTC+0000	
0x0000000002129b88	explorer.exe	364	300	0x03c00240	2019-03-21 00:41:56 UTC+0000	
0x000000000221fae8	csrss.exe	500	356	0x03c00040	2019-03-21 00:40:15 UTC+0000	
0x0000000002337c78	conime.exe	164	208	0x03c00220	2019-03-21 00:46:45 UTC+0000	
0x00000000023898a8	ctfmon.exe	532	364	0x03c002e0	2019-03-21 00:42:04 UTC+0000	
0x00000000023ba2f8	services.exe	636	592	0x03c00080	2019-03-21 00:40:16 UTC+0000	
0x00000000023d1390	winlogon.exe	592	356	0x03c00060	2019-03-21 00:40:15 UTC+0000	
0x00000000023d8da0	svchost.exe	1288	636	0x03c00160	2019-03-21 00:40:43 UTC+0000	
0x00000000023dfda0	svchost.exe	1020	636	0x03c00120	2019-03-21 00:40:17 UTC+0000	
0x00000000023e4020	mdd.exe	1324	208	0x03c000c0	2019-03-21 00:51:11 UTC+0000	
0x0000000002421b08	smss.exe	356	4	0x03c00020	2019-03-21 00:40:15 UTC+0000	
0x000000000244c270	wmiprvse.exe	388	836	0x03c001e0	2019-03-21 00:41:02 UTC+0000	
0x0000000002464a98	lsass.exe	648	592	0x03c000a0	2019-03-21 00:40:16 UTC+0000	
0x00000000024ad468	svchost.exe	1340	636	0x03c00180	2019-03-21 00:40:43 UTC+0000	
0x00000000024e0b68	alg.exe	768	636	0x03c00200	2019-03-21 00:41:09 UTC+0000	
0x00000000025b97f8	System	4	0	0x00a02000		
0x000000000282cc78	conime.exe	164	208	0x03c00220	2019-03-21 00:46:45 UTC+0000	
0x00000000052f5598	spoolsv.exe	1556	636	0x03c001a0	2019-03-21 00:40:43 UTC+0000	
0x00000000060615a8	rundll32.exe	508	364	0x03c00320	2019-03-21 00:42:04 UTC+0000	
0x000000000882cda0	alg.exe	1172	244	0x03440160	2019-03-21 00:38:29 UTC+0000	
0x000000000a2f78a8	ctfmon.exe	532	364	0x03c002e0	2019-03-21 00:42:04 UTC+0000	

# pstree

Name	Pid	PPid	Thds	Hnds	Time
0x821b97f8:System	4	0	53	250	1970-01-01 00:00:00 UTC+0000
0x82021b08:smss.exe	356	4	3	19	2019-03-21 00:40:15 UTC+0000
0x81fd1390:winlogon.exe	592	356	18	533	2019-03-21 00:40:15 UTC+0000
0x82064a98:lsass.exe	648	592	18	326	2019-03-21 00:40:16 UTC+0000
0x81fba2f8:services.exe	636	592	16	331	2019-03-21 00:40:16 UTC+0000
0x820e0b68:alg.exe	768	636	6	105	2019-03-21 00:41:09 UTC+0000
0x81bfa6d0:msiexec.exe	780	636	4	103	2019-03-21 00:42:02 UTC+0000
0x81fdfd0:svchost.exe	1020	636	75	1565	2019-03-21 00:40:17 UTC+0000
0x81c06da0:wscntfy.exe	1100	1020	1	38	2019-03-21 00:41:57 UTC+0000
0x81fd8da0:svchost.exe	1288	636	4	77	2019-03-21 00:40:43 UTC+0000
0x820ad468:svchost.exe	1340	636	13	193	2019-03-21 00:40:43 UTC+0000
0x81cb6da0:svchost.exe	836	636	17	193	2019-03-21 00:40:16 UTC+0000
0x8204c270:wmiprvse.exe	388	836	5	147	2019-03-21 00:41:02 UTC+0000
0x81c2b2e0:svchost.exe	892	636	11	251	2019-03-21 00:40:16 UTC+0000
0x81c1f598:spoolsv.exe	1556	636	12	116	2019-03-21 00:40:43 UTC+0000
0x81c4d770:svchost.exe	1660	636	4	84	2019-03-21 00:41:01 UTC+0000
0x81e1fae8:csrss.exe	500	356	10	349	2019-03-21 00:40:15 UTC+0000
0x81d29b88:explorer.exe	364	300	12	543	2019-03-21 00:41:56 UTC+0000
0x81f898a8:ctfmon.exe	532	364	1	87	2019-03-21 00:42:04 UTC+0000
0x81be55a8:rundll32.exe	508	364	4	99	2019-03-21 00:42:04 UTC+0000
0x81bdb698:cmd.exe	208	364	1	35	2019-03-21 00:46:45 UTC+0000
0x81f37c78:conime.exe	164	208	1	39	2019-03-21 00:46:45 UTC+0000
0x81fe4020:mdd.exe	1324	208	1	24	2019-03-21 00:51:11 UTC+0000

## dlllist

```
C:\Python27\Lib\site-packages\volatility-master>python2 vol.py --profile=WinXPSP3x86 -f C:\WdfWdump\Wdump.img dlllist
Volatility Foundation Volatility Framework 2.6
*****
System pid: 4
Unable to read PEB for task.
*****
smss.exe pid: 356
Command line : WSystemRoot\System32\smss.exe

Base          Size  LoadCount Path
-----
0x48580000    0xf000    0xffff WSystemRoot\System32\smss.exe
0x7c930000    0x9b000    0xffff C:\WINDOWS\system32\ntdll.dll
*****
csrss.exe pid: 500
Command line : C:\WINDOWS\system32\csrss.exe ObjectDirectory=\Windows SharedSection=1024,3072,512 Windows=0n SubSystemType=Windows ServerDll=basesrv,1 ServerDll=winsrv:UserServerDllInitialization,3 ServerDll=winsrv:ConServerDllInitialization,2 ProfileControl=Off MaxRequestThreads=16
Service Pack 3

Base          Size  LoadCount Path
-----
*****
winlogon.exe pid: 592
Command line : winlogon.exe
Service Pack 3
```

## dlllist pid 1324

```
*****
mdd.exe pid: 1324
Command line : mdd.exe -o c:\WdfWdump\Wdump.img
Service Pack 3

Base          Size  LoadCount Path
-----
0x00400000    0x19000    0xffff C:\WdfWmdd.exe
0x7c930000    0x9b000    0xffff C:\WINDOWS\system32\ntdll.dll
0x7c800000    0x130000    0xffff C:\WINDOWS\system32\kernel32.dll
0x77f50000    0xa8000    0xffff C:\WINDOWS\system32\ADVAPI32.dll
0x77d80000    0x92000    0xffff C:\WINDOWS\system32\RPCRT4.dll
0x77ef0000    0x11000    0xffff C:\WINDOWS\system32\Secur32.dll
0x7d5a0000    0x7fd00    0xffff C:\WINDOWS\system32\SHELL32.dll
0x77e20000    0x49000    0xffff C:\WINDOWS\system32\GDI32.dll
0x77cf0000    0x90000    0xffff C:\WINDOWS\system32\USER32.dll
0x77bc0000    0x58000    0xffff C:\WINDOWS\system32\msvcrt.dll
0x77e70000    0x76000    0xffff C:\WINDOWS\system32\SHLWAPI.dll
0x762e0000    0x1d000     0x2 C:\WINDOWS\system32\IMM32.DLL
0x62340000    0x9000     0x1 C:\WINDOWS\system32\LPK.DLL
0x73f80000    0x6b000     0x1 C:\WINDOWS\system32\USP10.dll
0x77160000    0x103000     0x1 C:\WINDOWS\WinSxS\x86_Microsoft.Windows.Common-Controls_
6595b64144ccf1df_6.0.2600.5512_x-ww_35d4ce83\comctl32.dll
0x5c820000    0x9a000     0x1 C:\WINDOWS\system32\comctl32.dll
0x68000000    0x36000     0x1 C:\WINDOWS\system32\rsaenh.dll
```



## dlllist offset

```
*****
mdd.exe pid: 1324
Command line : mdd.exe -o c:\Wdf\Wdmp\Wdump.img
Service Pack 3

Base          Size  LoadCount Path
-----
0x00400000    0x19000    0xffff C:\Wdf\Wmdd.exe
0x7c930000    0x9b000    0xffff C:\WINDOWS\system32\ntdll.dll
0x7c800000    0x130000    0xffff C:\WINDOWS\system32\kernel32.dll
0x77f50000    0xa8000    0xffff C:\WINDOWS\system32\ADVAPI32.dll
0x77d80000    0x92000    0xffff C:\WINDOWS\system32\RPCRT4.dll
0x77ef0000    0x11000    0xffff C:\WINDOWS\system32\Secur32.dll
0x7d5a0000    0x7fd000    0xffff C:\WINDOWS\system32\SHELL32.dll
0x77e20000    0x49000    0xffff C:\WINDOWS\system32\GDI32.dll
0x77cf0000    0x90000    0xffff C:\WINDOWS\system32\USER32.dll
0x77bc0000    0x58000    0xffff C:\WINDOWS\system32\msvcrt.dll
0x77e70000    0x76000    0xffff C:\WINDOWS\system32\SHLWAPI.dll
0x762e0000    0x1d000     0x2 C:\WINDOWS\system32\IMM32.DLL
0x62340000    0x9000     0x1 C:\WINDOWS\system32\LPK.DLL
0x73f80000    0x6b000     0x1 C:\WINDOWS\system32\USP10.dll
0x77160000    0x103000    0x1 C:\WINDOWS\WinSxS\x86_Microsoft.Windows.Common-Controls_
6595b64144ccf1df_6.0.2600.5512_x-ww_35d4ce83\comctl32.dll
0x5c820000    0x9a000     0x1 C:\WINDOWS\system32\comctl32.dll
0x68000000    0x36000     0x1 C:\WINDOWS\system32\rsaenh.dll
```

## handles

Offset(V)	Pid	Handle	Access Type	Details
0x821b97f8	4	0x4	0x1f0fff Process	System(4)
0x821b9138	4	0x8	0x0 Thread	TID 12 PID 4
0xe1036438	4	0xc	0xf003f Key	MACHINE\SYSTEM\CONTROLSET001\CONTROL\SESSION MANAGER\MEMORY MANAGEMENT\WPFETCH\PARAMETERS
0xe1011490	4	0x10	0x0 Key	
0xe1458470	4	0x14	0x2001f Key	MACHINE\SYSTEM\SETUP
0xe1151460	4	0x18	0x20019 Key	MACHINE\HARDWARE\DESCRIPTION\SYSTEM MULTIFUNCTIONADAPTER
0xe1162430	4	0x1c	0x20019 Key	MACHINE\SYSTEM\WPA\PNP
0xe114ebe0	4	0x20	0x20019 Key	MACHINE\SYSTEM\WPA\MEDIACENTER
0xe100b828	4	0x24	0x2001f Key	MACHINE\SYSTEM\CONTROLSET001\CONTROL PRODUCTOPTIONS
0xe1020c20	4	0x28	0x20019 Key	MACHINE\SYSTEM\CONTROLSET001\SERVICES\EVENTLOG
0x821b27e8	4	0x2c	0x1f0003 Event	TRK\WKS_EVENT
0x81d4eb78	4	0x30	0x12019f File	\Device\Udp
0x82018720	4	0x34	0x3 File	\Device\HarddiskVolume1\WINDOWS\system32\config system.LOG
0xe163e5e0	4	0x38	0x1f0001 Port	
0x820be618	4	0x3c	0x2000003 File	\Device\HarddiskVolume1\WINDOWS\system32\config software
0x81fff028	4	0x40	0x3 File	\Device\HarddiskVolume1\WINDOWS\system32\config system
0x82018cb8	4	0x44	0x2000003 File	\Device\HarddiskVolume1\WINDOWS\system32\config default.LOG
0x8201c858	4	0x48	0x2000003 File	\Device\HarddiskVolume1\WINDOWS\system32\config SECURITY
0x81ccda8	4	0x4c	0x1f03ff Thread	TID 280 PID 4
0x820af8f8	4	0x50	0x2000003 File	\Device\HarddiskVolume1\Documents and Settings LocalService\ntuser.dat.LOG

handles -p

Offset(V)	Pid	Handle	Access Type	Details
0x821b97f8	4	0x4	0x1f0fff Process	System(4)
0x82064a98	4	0xe4	0x28 Process	lsass.exe(648)
0x82064a98	4	0x1d0	0x438 Process	lsass.exe(648)
0x81d29b88	4	0x3cc	0x1f03ff Process	explorer.exe(364)
0x81fd1390	4	0x3d8	0x1f03ff Process	winlogon.exe(592)
0x81fd8da0	4	0x41c	0x1f03ff Process	svchost.exe(1288)
0x81c1f598	4	0x428	0x1f03ff Process	spoolsv.exe(1556)
0x82064a98	4	0x438	0x1f03ff Process	lsass.exe(648)
0x8204c270	4	0x448	0x1f03ff Process	wmiprvse.exe(388)
0x81fd8da0	4	0x460	0x1f03ff Process	svchost.exe(1020)

getsids

System (4): S-1-5-18 (Local System)  
System (4): S-1-5-32-544 (Administrators)  
System (4): S-1-1-0 (Everyone)  
System (4): S-1-5-11 (Authenticated Users)  
smss.exe (356): S-1-5-18 (Local System)  
smss.exe (356): S-1-5-32-544 (Administrators)  
smss.exe (356): S-1-1-0 (Everyone)  
smss.exe (356): S-1-5-11 (Authenticated Users)  
csrss.exe (500): S-1-5-18 (Local System)  
csrss.exe (500): S-1-5-32-544 (Administrators)  
csrss.exe (500): S-1-1-0 (Everyone)  
csrss.exe (500): S-1-5-11 (Authenticated Users)  
winlogon.exe (592): S-1-5-18 (Local System)  
winlogon.exe (592): S-1-5-32-544 (Administrators)  
winlogon.exe (592): S-1-1-0 (Everyone)  
winlogon.exe (592): S-1-5-11 (Authenticated Users)  
services.exe (636): S-1-5-18 (Local System)  
services.exe (636): S-1-5-32-544 (Administrators)  
services.exe (636): S-1-1-0 (Everyone)  
services.exe (636): S-1-5-11 (Authenticated Users)  
lsass.exe (648): S-1-5-18 (Local System)  
lsass.exe (648): S-1-5-32-544 (Administrators)  
lsass.exe (648): S-1-1-0 (Everyone)



verinfo

```
W\SystemRoot\System32\smss.exe
C:\WINDOWS\system32\ntdll.dll
W??C:\WINDOWS\system32\winlogon.exe
C:\WINDOWS\system32\ntdll.dll
C:\WINDOWS\system32\kernel32.dll
C:\WINDOWS\system32\ADVAPI32.dll
C:\WINDOWS\system32\RPCRT4.dll
C:\WINDOWS\system32\Secur32.dll
C:\WINDOWS\system32\msvcrt.dll
C:\WINDOWS\system32\CRYPT32.dll
C:\WINDOWS\system32\USER32.dll
C:\WINDOWS\system32\GDI32.dll
C:\WINDOWS\system32\NETAPI32.dll
C:\WINDOWS\system32\USERENV.dll
File version   : 5.1.2600.5512
Product version : 5.1.2600.5512
Flags         :
OS            : Windows NT
File Type     : Application
File Date     :
CompanyName   : Microsoft Corporation
FileDescription : Userenv
FileVersion   : 5.1.2600.5512 (xpsp.080413-2113)
InternalName  : userenv
LegalCopyright : (C)Microsoft Corporation. All rights reserved.
OriginalFilename : userenv.dll
ProductName   : Microsoft(R) Windows(R) Operating System
```

memmap pid 364

explorer.exe pid: 364				
Virtual	Physical	Size	DumpFileOffset	
-----				
0x00010000	0x163c5000	0x1000	0x0	
0x00020000	0x16346000	0x1000	0x1000	
0x00030000	0x15f7e000	0x1000	0x2000	
0x00031000	0x15fbf000	0x1000	0x3000	
0x00032000	0x19889000	0x1000	0x4000	
0x00035000	0x1ad75000	0x1000	0x5000	
0x0003a000	0x151fd000	0x1000	0x6000	
0x0003d000	0x14e4c000	0x1000	0x7000	
0x0007e000	0x15f57000	0x1000	0x8000	
0x0007f000	0x16389000	0x1000	0x9000	
0x00080000	0x15e97000	0x1000	0xa000	
0x00081000	0x15fd8000	0x1000	0xb000	
0x00090000	0x15f4e000	0x1000	0xc000	

memdump 364 dump



procdump

```
C:\WP\Python27\Lib\site-packages\volatility-master>python2 vol.py --profile=WinXPSP3x86 -f C:\Wdf\Wdump\Wdump.img -p 364 procdump -D C:\Wdf\Wfile\W
Volatility Foundation Volatility Framework 2.6
Process(V) ImageBase Name Result
0x81d29b88 0x01000000 explorer.exe Error: ImageBaseAddress at 0x1000000 is unavailable (possibly due to paging)
```



vadinfo

```
Pid: 364
Address  Parent  Left    Right   Start   End      Tag
-----
0x81f688a0 0x00000000 0x81ced7b8 0x81d44c10 0x02e90000 0x02e9ffff VadS
0x81ced7b8 0x81f688a0 0x81ca26a8 0x81d2c930 0x022d0000 0x022f4fff VadI
0x81ca26a8 0x81ced7b8 0x81d2c9d0 0x81c4c1a8 0x01000000 0x010fdfff VadI
0x81d2c9d0 0x81ca26a8 0x81c444a8 0x81c16468 0x00b60000 0x00b89fff VadI
0x81c444a8 0x81d2c9d0 0x81ce1c40 0x81f6e0f0 0x00b20000 0x00b21fff VadI
0x81ce1c40 0x81c444a8 0x81c07488 0x81d28170 0x009d0000 0x009effff VadS
0x81c07488 0x81ce1c40 0x81d290e0 0x81f88ee8 0x00430000 0x00432fff Vad
0x81d290e0 0x81c07488 0x81d29690 0x81d29378 0x002d0000 0x002d1fff Vad
0x81d29690 0x81d290e0 0x81d29b10 0x81d294c8 0x00190000 0x0019ffff VadS
0x81d29b10 0x81d29690 0x81d29b30 0x81d29848 0x00020000 0x00020fff VadS
0x81d29b30 0x81d29b10 0x00000000 0x00000000 0x00010000 0x00010fff VadS
0x81d29848 0x81d29b10 0x81d29b50 0x81d4eaf0 0x00080000 0x00082fff Vad
0x81d29b50 0x81d29848 0x81d29af0 0x00000000 0x00040000 0x0007ffff VadS
0x81d29af0 0x81d29b50 0x00000000 0x00000000 0x00030000 0x0003ffff VadS
0x81d4eaf0 0x81d29848 0x00000000 0x00000000 0x00090000 0x0018ffff VadI
0x81d294c8 0x81d29690 0x81d29528 0x81d29468 0x00220000 0x00260fff Vad
0x81d29528 0x81d294c8 0x81d295b8 0x81d294f8 0x001b0000 0x001c5fff Vad
0x81d295b8 0x81d29528 0x00000000 0x00000000 0x001a0000 0x001affff Vad
```

vadwalk

```
*****
Pid: 4
VAD node @ 0x821b5260 Start 0x00010000 End 0x00042fff Tag Vad
Flags: Protection: 4
Protection: PAGE_READWRITE
ControlArea @821b5290 Segment e100f618
NumberOfSectionReferences: 1 NumberOfPfnReferences: 0
NumberOfMappedViews: 24 NumberOfUserReferences: 24
Control Flags: Commit: 1, HadUserReference: 1
First prototype PTE: e100f658 Last contiguous PTE: e100f7e8
Flags2: Inherit: 1

VAD node @ 0x82081068 Start 0x7c930000 End 0x7c9cafff Tag Vad
Flags: CommitCharge: 5, ImageMap: 1, Protection: 7
Protection: PAGE_EXECUTE_WRITECOPY
ControlArea @821b72d8 Segment e12c8ab8
NumberOfSectionReferences: 1 NumberOfPfnReferences: 86
NumberOfMappedViews: 23 NumberOfUserReferences: 24
Control Flags: Accessed: 1, DebugSymbolsLoaded: 1, File: 1, HadUserReference: 1, Image: 1
FileObject @820c11f8, Name: \Device\HarddiskVolume1\WINDOWS\system32\ntdll.dll
First prototype PTE: e12c8af8 Last contiguous PTE: ffffffff
Flags2: Inherit: 1
```

vadtree

```
Pid: 364
0x02e90000 - 0x02e9ffff
0x022d0000 - 0x022f4fff
0x01000000 - 0x010fdfff
0x00b60000 - 0x00b89fff
0x00b20000 - 0x00b21fff
0x009d0000 - 0x009effff
0x00430000 - 0x00432fff
0x002d0000 - 0x002d1fff
0x00190000 - 0x0019ffff
0x00020000 - 0x00020fff
0x00010000 - 0x00010fff
0x00080000 - 0x00082fff
0x00040000 - 0x0007ffff
0x00030000 - 0x0003ffff
0x00090000 - 0x0018ffff
```

vaddump

```
C:\WP\Python27\Lib\site-packages\volatility-master>python2 vol.py --profile=WinXPSP3x86 -f C:\WdfWdump\Wdump.img vaddump -D C:\WdfWfile\Wvaddump\W
Volatility Foundation Volatility Framework 2.6
Pid Process Start End Result
-----
4 System 0x00010000 0x00042fff C:\WdfWfile\Wvaddump\System,25b97f8,0x00010000-0x00042fff.dmp
4 System 0x7c930000 0x7c9cafff C:\WdfWfile\Wvaddump\System,25b97f8,0x7c930000-0x7c9cafff.dmp
4 System 0x00070000 0x00070fff C:\WdfWfile\Wvaddump\System,25b97f8,0x00070000-0x00070fff.dmp
4 System 0x00080000 0x0017ffff C:\WdfWfile\Wvaddump\System,25b97f8,0x00080000-0x0017ffff.dmp
356 smss.exe 0x48580000 0x4858ffff C:\WdfWfile\Wvaddump\smss.exe,2421b08,0x48580000-0x4858ffff.dmp
356 smss.exe 0x00000000 0x000fffff C:\WdfWfile\Wvaddump\smss.exe,2421b08,0x00000000-0x000fffff.dmp
356 smss.exe 0x00100000 0x00100fff C:\WdfWfile\Wvaddump\smss.exe,2421b08,0x00100000-0x00100fff.dmp
356 smss.exe 0x00110000 0x00110fff C:\WdfWfile\Wvaddump\smss.exe,2421b08,0x00110000-0x00110fff.dmp
356 smss.exe 0x00120000 0x0015ffff C:\WdfWfile\Wvaddump\smss.exe,2421b08,0x00120000-0x0015ffff.dmp
356 smss.exe 0x00160000 0x0025ffff C:\WdfWfile\Wvaddump\smss.exe,2421b08,0x00160000-0x0025ffff.dmp
356 smss.exe 0x00260000 0x0026ffff C:\WdfWfile\Wvaddump\smss.exe,2421b08,0x00260000-0x0026ffff.dmp
356 smss.exe 0x00270000 0x002affff C:\WdfWfile\Wvaddump\smss.exe,2421b08,0x00270000-0x002affff.dmp
356 smss.exe 0x002b0000 0x002effff C:\WdfWfile\Wvaddump\smss.exe,2421b08,0x002b0000-0x002effff.dmp
356 smss.exe 0x002f0000 0x002f0fff C:\WdfWfile\Wvaddump\smss.exe,2421b08,0x002f0000-0x002f0fff.dmp
356 smss.exe 0x7c930000 0x7c9cafff C:\WdfWfile\Wvaddump\smss.exe,2421b08,0x7c930000-0x7c9cafff.dmp
```

modules(v)

Offset(V)	Name	Base	Size	File
0x821fc3a0	ntoskrnl.exe	0x804d9000	0x1f8c80	\\WINDOWS\system32\ntkrnlpa.exe
0x821fc338	hal.dll	0x806d2000	0x20300	\\WINDOWS\system32\hal.dll
0x821fc2d0	kdcom.dll	0xf8b9a000	0x2000	\\WINDOWS\system32\KDCOM.DLL
0x821fc260	BOOTVID.dll	0xf8aaa000	0x3000	\\WINDOWS\system32\BOOTVID.dll
0x821fc1f8	ACPI.sys	0xf856b000	0x2e000	ACPI.sys
0x821fc188	WMILIB.SYS	0xf8b9c000	0x2000	\\WINDOWS\system32\DRIVERS\WMILIB.SYS
0x821fc120	pci.sys	0xf855a000	0x11000	pci.sys
0x821fc0b0	isapnp.sys	0xf869a000	0x9000	isapnp.sys
0x821fc040	compbatt.sys	0xf8aae000	0x3000	compbatt.sys
0x821ed008	BATTC.SYS	0xf8ab2000	0x4000	\\WINDOWS\system32\DRIVERS\BATTC.SYS



## modules(P)

Offset(P)	Name	Base	Size	File
0x025fc3a0	ntoskrnl.exe	0x804d9000	0x1f8c80	\\WINDOWS\\system32\\ntkrnlpa.exe
0x025fc338	hal.dll	0x806d2000	0x20300	\\WINDOWS\\system32\\hal.dll
0x025fc2d0	kdcom.dll	0xf8b9a000	0x2000	\\WINDOWS\\system32\\KDCOM.DLL
0x025fc260	BOOTVID.dll	0xf8aaa000	0x3000	\\WINDOWS\\system32\\BOOTVID.dll
0x025fc1f8	ACPI.sys	0xf856b000	0x2e000	ACPI.sys
0x025fc188	WMILIB.SYS	0xf8b9c000	0x2000	\\WINDOWS\\system32\\DRIVERS\\WMILIB.SYS
0x025fc120	pci.sys	0xf855a000	0x11000	pci.sys
0x025fc0b0	isapnp.sys	0xf869a000	0x9000	isapnp.sys
0x025fc040	compbatt.sys	0xf8aae000	0x3000	compbatt.sys
0x025ed008	BATTC.SYS	0xf8ab2000	0x4000	\\WINDOWS\\system32\\DRIVERS\\BATTC.SYS

## modscan

Offset(P)	Name	Base	Size	File
0x0000000000803040	compbatt.sys	0xf8aae000	0x3000	compbatt.sys
0x00000000008030b0	isapnp.sys	0xf869a000	0x9000	isapnp.sys
0x0000000000803120	pci.sys	0xf855a000	0x11000	pci.sys
0x0000000000803188	WMILIB.SYS	0xf8b9c000	0x2000	\\WINDOWS\\system32\\DRIVERS\\WMILIB.SYS
0x00000000008031f8	ACPI.sys	0xf856b000	0x2e000	ACPI.sys
0x0000000000803260	BOOTVID.dll	0xf8aaa000	0x3000	\\WINDOWS\\system32\\BOOTVID.dll
0x00000000008032d0	kdcom.dll	0xf8b9a000	0x2000	\\WINDOWS\\system32\\KDCOM.DLL
0x0000000000803338	hal.dll	0x806d2000	0x20300	\\WINDOWS\\system32\\hal.dll
0x00000000008033a0	ntoskrnl.exe	0x804d9000	0x1f8c80	\\WINDOWS\\system32\\ntkrnlpa.exe
0x000000000092f4a8	i8042prt.sys	0xf871a000	0xc000	\\SystemRoot\\system32\\DRIVERS\\i8042prt.sys
0x000000000092f578	kbdclass.sys	0xf8942000	0x6000	\\SystemRoot\\system32\\DRIVERS\\kbdclass.sys
0x0000000000d07ab8	bthport.sys	0xf7a4e000	0x43000	\\SystemRoot\\System32\\Drivers\\bthport.sys

## moddump

moddump 검색		
이름	수정된 날짜	유형
driver.804d9000.sys	2024-10-29 오후 4:32	시스템 파일
driver.806d2000.sys	2024-10-29 오후 4:32	시스템 파일
driver.bf9c3000.sys	2024-10-29 오후 4:32	시스템 파일
driver.bf800000.sys	2024-10-29 오후 4:32	시스템 파일
driver.bff70000.sys	2024-10-29 오후 4:32	시스템 파일
driver.f7a4e000.sys	2024-10-29 오후 4:32	시스템 파일
driver.f7a9d000.sys	2024-10-29 오후 4:32	시스템 파일
driver.f7a35000.sys	2024-10-29 오후 4:32	시스템 파일
driver.f7bb5000.sys	2024-10-29 오후 4:32	시스템 파일
driver.f7ec1000.sys	2024-10-29 오후 4:32	시스템 파일
driver.f7ef9000.sys	2024-10-29 오후 4:32	시스템 파일
driver.f7f01000.sys	2024-10-29 오후 4:32	시스템 파일

ssdt

```
[x86] Gathering all referenced SSDTs from KTHREADs...
Finding appropriate address space for tables...
SSDT[0] at 80503b8c with 284 entries
Entry 0x0000: 0x8059b948 (NtAcceptConnectPort) owned by ntoskrnl.exe
Entry 0x0001: 0x805e8db6 (NtAccessCheck) owned by ntoskrnl.exe
Entry 0x0002: 0x805ec5fc (NtAccessCheckAndAuditAlarm) owned by ntoskrnl.exe
Entry 0x0003: 0x805e8de8 (NtAccessCheckByType) owned by ntoskrnl.exe
Entry 0x0004: 0x805ec636 (NtAccessCheckByTypeAndAuditAlarm) owned by ntoskrnl.exe
Entry 0x0005: 0x805e8e1e (NtAccessCheckByTypeResultList) owned by ntoskrnl.exe
Entry 0x0006: 0x805ec67a (NtAccessCheckByTypeResultListAndAuditAlarm) owned by ntoskrnl.exe
Entry 0x0007: 0x805ec6be (NtAccessCheckByTypeResultListAndAuditAlarmByHandle) owned by ntoskrnl.exe
Entry 0x0008: 0x8060ddfe (NtAddAtom) owned by ntoskrnl.exe
Entry 0x0009: 0x8060eb50 (NtAddBootEntry) owned by ntoskrnl.exe
Entry 0x000a: 0x805e41b4 (NtAdjustGroupsToken) owned by ntoskrnl.exe
Entry 0x000b: 0x805e3e0c (NtAdjustPrivilegesToken) owned by ntoskrnl.exe
Entry 0x000c: 0x805ccde6 (NtAlertResumeThread) owned by ntoskrnl.exe
Entry 0x000d: 0x805ccd96 (NtAlertThread) owned by ntoskrnl.exe
Entry 0x000e: 0x8060e424 (NtAllocateLocallyUniqueId) owned by ntoskrnl.exe
```

driverscan

Offset(P)	#Ptr	#Hnd	Start	Size	Service	Key	Name	Driver Name
0x0000000000e5acb8	3	0	0xf87ea000	0x8780	NetBIOS		NetBIOS	WFileSystemWNetBIOS
0x0000000000e86030	3	0	0xf8cb9000	0xb80	Null		Null	WDriverWNull
0x0000000000e86f38	3	0	0xf8065000	0x12600	IPSec		IPSec	WDriverWIPSec
0x0000000001fe71c0	4	0	0xf897a000	0x6700	USBSTOR		USBSTOR	WDriverWUSBSTOR
0x0000000001ffe700	5	0	0xf71a9000	0x23180	Fastfat		Fastfat	WFileSystemWFastfat
0x0000000002021a00	3	0	0xf78c8000	0x2c180	MRxDAV		MRxDAV	WFileSystemWMRxDAV
0x0000000002025098	3	0	0xf7a9d000	0x3900	Ndisuio		Ndisuio	WDriverWNdisuio
0x0000000002062430	4	0	0xf7f27000	0x6f780	MRxSmb		MRxSmb	WFileSystemWMRxSmb
0x00000000020663a8	3	0	0xf878a000	0xa200	RasPppoe		RasPppoe	WDriverWRasPppoe
0x000000000207a828	4	0	0xf823b000	0x16580	NdisWan		NdisWan	WDriverWNdisWan
0x000000000207ad18	6	0	0xf8b52000	0x2780	NdisTapi		NdisTapi	WDriverWNdisTapi
0x000000000207b478	3	0	0xf877a000	0xc880	Rasl2tp		Rasl2tp	WDriverWRasl2tp
0x000000000207bdb0	7	0	0xf8c7a000	0xc00	audstub		audstub	WDriverWaudstub

filesan

Offset(P)	#Ptr	#Hnd	Access	Name
0x000000000046028	1	0	R--r--	WDeviceWHarddiskVolume1\프로그래밍\Documents and Settings\Default User\WTemplates\lotus.wk4
0x0000000000460c8	1	0	-WD---	WDeviceWHarddiskVolume1\프로그래밍\Documents and Settings\Wkms\Local Settings\Temporary Internet Files\Content.IE5\WDR3GWYC\desktop.i
0x000000000046408	1	0	-WD---	WDeviceWHarddiskVolume1\프로그래밍\gram Files\Common Files\Microsoft Shared\web server extensions\40\Wbin\Wfp4autl.d
0x000000000046680	3	1	R--rwd	WDeviceWDP(1)0-0+5\W디지탈포렌식\soft
0x000000000046998	1	0	R--r-d	WDeviceWHarddiskVolume1\프로그래밍\INDOWS\system32\msdtcprx.dll
0x000000000046b08	1	0	-WD---	WDeviceWHarddiskVolume1\프로그래밍\Documents and Settings\Wkms\WTemplates\lotus.wk4



# symlinkscan

Offset(P)	#Ptr	#Hnd	Creation time	From	To
0x0000000002ab9518	1	0	2019-03-21 00:40:12 UTC+0000	Global	WGLOBAL??
0x0000000002ab9828	1	0	2019-03-21 00:40:15 UTC+0000	MAILSLOT	WDeviceWMailSlot
0x0000000002af4c98	1	0	2019-03-21 00:40:14 UTC+0000	Root#SYST...fc3358c}	WDeviceW0000002d
0x0000000002afc0b8	1	0	2019-03-21 00:40:14 UTC+0000	MountPointManager	WDevice
WMountPointManager					
0x0000000002afd960	1	0	2019-03-21 00:40:14 UTC+0000	CdRom0	WDeviceWCdRom0
0x0000000002aff0c0	1	0	2019-03-21 00:40:14 UTC+0000	STORAGE#V...91efb8b}	WDevice
WHarddiskVolume1					
0x0000000002b02470	1	0	2019-03-21 00:40:15 UTC+0000	IPNAT	WDeviceWIPNAT
0x0000000002b07270	1	0	2019-03-21 00:40:13 UTC+0000	ACPI#Fixe...9062857}	WDeviceW00000035
0x0000000002b43e60	1	0	2019-03-21 00:40:15 UTC+0000	PRN	WDosDevicesWLP1
0x0000000002b56298	1	0	2019-03-21 00:40:14 UTC+0000	PTILINK1	WDeviceWParTechInc0
0x0000000002b8fe88	1	0	2019-03-21 00:40:14 UTC+0000	Root#MS_L...fc3358c}	WDeviceW00000023
0x0000000002bc0728	1	0	2019-03-21 00:40:12 UTC+0000	DosDevices	W??

# thrdscan

Offset(P)	PID	TID	Start Address	Create Time	Exit Time
0x0000000000046710	1020	584	0x7c8106e9	2019-03-21 00:41:55 UTC+0000	
0x0000000000077a18	1020	1428	0x7c8106e9	2019-03-21 00:41:26 UTC+0000	
0x000000000001d6d78	1020	2028	0x7c8106e9	2019-03-21 00:41:56 UTC+0000	
0x000000000004ac218	648	676	0x7c8106e9	2019-03-21 00:40:16 UTC+0000	
0x000000000004ac5d0	648	672	0x7c8106e9	2019-03-21 00:40:16 UTC+0000	
0x00000000000d8f7a0	1020	1368	0x7c8106e9	2019-03-21 00:41:26 UTC+0000	
0x00000000000f88020	1020	452	0x7c8106e9	2019-03-21 00:41:09 UTC+0000	
0x000000000001ea25a8	4	144	0xf840391e	2019-03-21 09:27:22 UTC+0000	
0x000000000001ea2820	4	140	0xf840391e	2019-03-21 09:27:22 UTC+0000	
0x000000000001ea2a98	4	136	0xf840391e	2019-03-21 09:27:22 UTC+0000	
0x000000000001ea2d10	4	132	0xf840391e	2019-03-21 09:27:22 UTC+0000	
0x000000000001eb7148	4	120	0xf840391e	2019-03-21 09:27:21 UTC+0000	
0x000000000001f03020	156	164	0x485816b2	2019-03-21 09:27:24 UTC+0000	
0x000000000001f73020	912	1052	0x7c8106e9	2019-03-21 00:38:43 UTC+0000	
0x000000000001f732a8	912	1056	0x7c8106e9	2019-03-21 00:38:43 UTC+0000	

# connections

Offset(V)	Local Address	Remote Address	Pid
-----	-----	-----	---

connscan

Offset(P)	Local Address	Remote Address	Pid
0x02450008	192.168.127.131:1034	66.119.150.163:80	692
0x0dd64008	192.168.127.131:1034	66.119.150.163:80	692

hivelist

```
Virtual  Physical  Name
-----  -
0xe1b5c820 0x15591820 W??WC:WDocuments and SettingsWkmsWLocal SettingsWApplication DataWMicrosoft
WWindowsWUsrClass.dat
0xe16a3820 0x152bb820 WDeviceWHarddiskVolume1WDocuments and SettingsWkmsWNTUSER.DAT
0xe15d1790 0x0c5dc790 W??WC:WDocuments and SettingsWLocalServiceWLocal SettingsWApplication DataWMicrosoft
WWindowsWUsrClass.dat
0xe15e6820 0x0c7d9820 WDeviceWHarddiskVolume1WDocuments and SettingsWLocalServiceWNTUSER.DAT
0xe103e640 0x09874640 W??WC:WDocuments and SettingsWNetworkServiceWLocal SettingsWApplication Data
WMicrosoftWWindowsWUsrClass.dat
0xe10cf1c0 0x0a3d01c0 WDeviceWHarddiskVolume1WDocuments and SettingsWNetworkServiceWNTUSER.DAT
0xe131d008 0x03cab008 WDeviceWHarddiskVolume1WWINDOWSWsystem32WconfigWsoftware
0xe1165b60 0x03c18b60 WDeviceWHarddiskVolume1WWINDOWSWsystem32WconfigWSECURITY
0xe1340648 0x03e25648 WDeviceWHarddiskVolume1WWINDOWSWsystem32WconfigWdefault
0xe12f7b60 0x03b29b60 WDeviceWHarddiskVolume1WWINDOWSWsystem32WconfigWSAM
0xe1154758 0x02c76758 [no name]
0xe1035b60 0x02b55b60 WDeviceWHarddiskVolume1WWINDOWSWsystem32WconfigWsystem
0xe102e008 0x02b8f008 [no name]
```

printkey

Legend: (S) = Stable (V) = Volatile

-----  
Registry: W??WC:WDocuments and SettingsWkmsWLocal SettingsWApplication DataWMicrosoftWWindows  
WUsrClass.dat

Key name: S-1-5-21-1078081533-1500820517-682003330-1003\_Classes (S)

Last updated: 2019-03-21 00:42:01 UTC+0000

Subkeys:

(S) Software

Values:

-----  
Registry: WDeviceWHarddiskVolume1WDocuments and SettingsWkmsWNTUSER.DAT

Key name: \$\$\$PROTO.HIV (S)

Last updated: 2019-03-21 00:42:23 UTC+0000

Subkeys:

(S) AppEvents

(S) Console

(S) Control Panel



printkey -o

Legend: (S) = Stable (V) = Volatile

-----

Registry: \Device\HarddiskVolume1\WINDOWS\system32\config\software

Key name: \$\$\$PROTO.HIV (S)

Last updated: 2019-03-21 00:41:53 UTC+0000

Subkeys:

(S) C07ft5Y

(S) Classes

(S) Clients

(S) Gemplus

(S) Microsoft

(S) ODBC

(S) Policies

(S) Program Groups

(S) Schlumberger

(S) Secure

(S) Windows 3.1 Migration Status

Values:

hivedump -o

Last Written	Key
2019-03-21 00:41:53 UTC+0000	\$\$\$PROTO.HIV
2019-03-21 00:38:17 UTC+0000	\$\$\$PROTO.HIV\C07ft5Y
2019-03-21 00:38:17 UTC+0000	\$\$\$PROTO.HIV\C07ft5Y\WinXP
2019-03-21 00:42:03 UTC+0000	\$\$\$PROTO.HIV\Classes
2019-03-21 00:38:21 UTC+0000	\$\$\$PROTO.HIV\Classes\*
2019-03-21 00:38:21 UTC+0000	\$\$\$PROTO.HIV\Classes\*\OpenWithList
2019-03-21 00:38:21 UTC+0000	\$\$\$PROTO.HIV\Classes\*\OpenWithList\Excel.exe
2019-03-21 00:38:21 UTC+0000	\$\$\$PROTO.HIV\Classes\*\OpenWithList\IExplore.exe
2019-03-21 00:37:49 UTC+0000	\$\$\$PROTO.HIV\Classes\*\OpenWithList\MSPaint.exe
2019-03-21 00:31:32 UTC+0000	\$\$\$PROTO.HIV\Classes\*\OpenWithList\Notepad.exe
2019-03-21 00:38:21 UTC+0000	\$\$\$PROTO.HIV\Classes\*\OpenWithList\Winword.exe
2019-03-21 00:37:49 UTC+0000	\$\$\$PROTO.HIV\Classes\*\OpenWithList\WordPad.exe
2019-03-21 00:31:32 UTC+0000	\$\$\$PROTO.HIV\Classes\*\shellex
2019-03-21 00:38:29 UTC+0000	\$\$\$PROTO.HIV\Classes\*\shellex\ContextMenuHandlers

userassist

```
-----
Registry: \Device\HarddiskVolume1\Documents and Settings\kms\NTUSER.DAT
Path: Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{5E6AB780-7743-11CF-
A12B-00AA004AE837}\Count
Last updated: 2019-03-21 00:46:34 UTC+0000

Subkeys:

Values:

REG_BINARY    UEME_CTLSESSION : Raw Data:
0x00000000 fc fb a6 0e 01 00 00 00          .....
-----
Registry: \Device\HarddiskVolume1\Documents and Settings\kms\NTUSER.DAT
Path: Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-
EF1F-11D0-9888-006097DEACF9}\Count
Last updated: 2019-03-21 00:46:45 UTC+0000
```