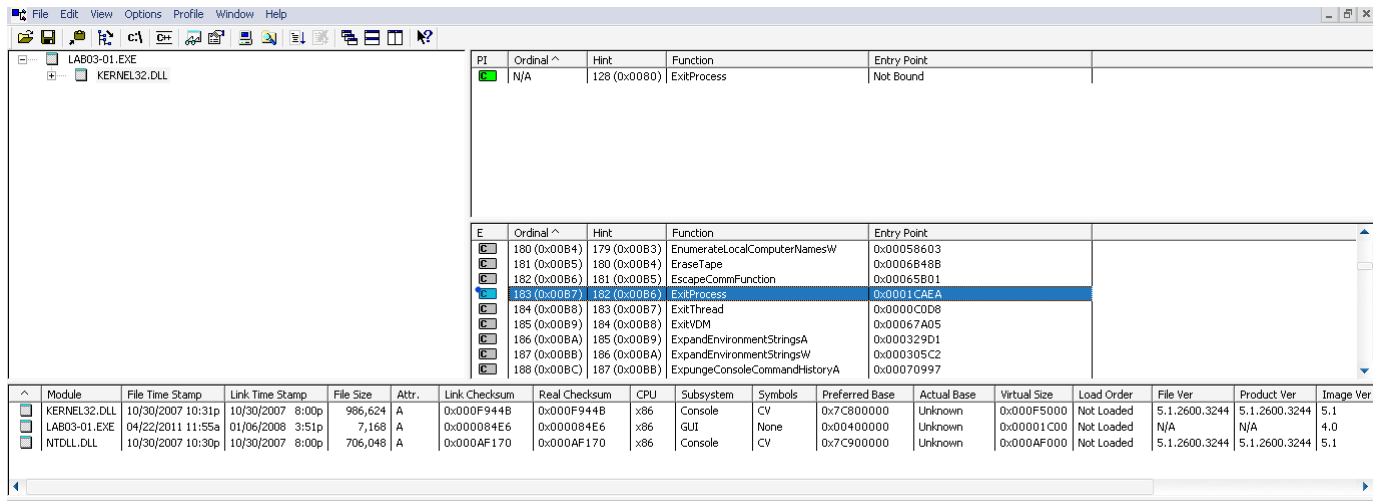


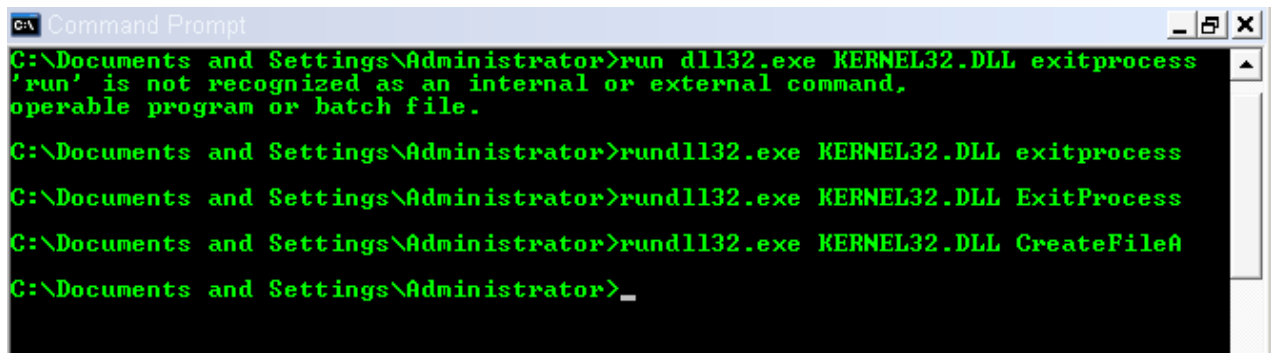
Lab 3-01



PI	Ordinal ^	Hint	Function	Entry Point
1	N/A	128 (0x0080)	ExitProcess	Not Bound

E	Ordinal ^	Hint	Function	Entry Point
180 (0x00B4)	179 (0x00B3)		EnumerateLocalComputerNamesW	0x00058603
181 (0x00B5)	180 (0x00B4)		EraseTape	0x0006B48B
182 (0x00B6)	181 (0x00B5)		EscapeCommFunction	0x00065B01
183 (0x00B7)	182 (0x00B6)		ExitProcess	0x0001CAEA
184 (0x00B8)	183 (0x00B7)		ExitThread	0x0000C0D8
185 (0x00B9)	184 (0x00B8)		ExitVDM	0x00067A05
186 (0x00BA)	185 (0x00B9)		ExpandEnvironmentStringsA	0x000329D1
187 (0x00BB)	186 (0x00BA)		ExpandEnvironmentStringsW	0x000305C2
188 (0x00BC)	187 (0x00BB)		ExpungeConsoleCommandHistoryA	0x00070997

Module	File Time Stamp	Link Time Stamp	File Size	Attr.	Link Checksum	Real Checksum	CPU	Subsystem	Symbols	Preferred Base	Actual Base	Virtual Size	Load Order	File Ver	Product Ver	Image Ver
KERNEL32.DLL	10/30/2007 10:31p	10/30/2007 8:00p	986,624	A	0x000F944B	0x000F944B	x86	Console	CV	0x7C800000	Unknown	0x000F5000	Not Loaded	5.1.2600.3244	5.1.2600.3244	5.1
LAB03-01.EXE	04/22/2011 11:55a	01/06/2008 3:51p	7,168	A	0x000084E6	0x000084E6	x86	GUI	None	0x00400000	Unknown	0x00001C00	Not Loaded	N/A	N/A	4.0
NTDLL.DLL	10/30/2007 10:30p	10/30/2007 8:00p	706,048	A	0x000AF170	0x000AF170	x86	Console	CV	0x7C900000	Unknown	0x000AF000	Not Loaded	5.1.2600.3244	5.1.2600.3244	5.1



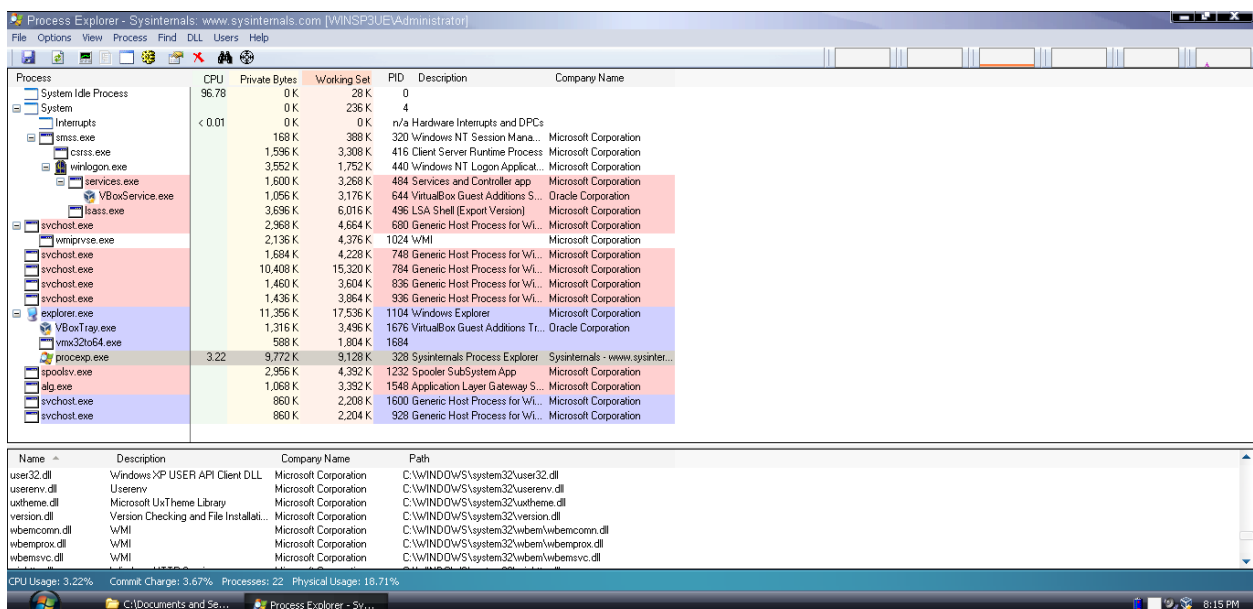
```
C:\Documents and Settings\Administrator>run dll132.exe KERNEL32.DLL exitprocess
'run' is not recognized as an internal or external command,
operable program or batch file.

C:\Documents and Settings\Administrator>rundll32.exe KERNEL32.DLL exitprocess

C:\Documents and Settings\Administrator>rundll32.exe KERNEL32.DLL ExitProcess

C:\Documents and Settings\Administrator>rundll32.exe KERNEL32.DLL CreateFileA

C:\Documents and Settings\Administrator>_
```



Process	CPU	Private Bytes	Working Set	PID	Description	Company Name
System Idle Process	96.78	0 K	28 K	0		
System	0 K	236 K	4			
smss.exe	< 0.01	168 K	388 K	320	Windows NT Session Mana...	Microsoft Corporation
csrss.exe	1.596 K	3,308 K	416	Client Server Runtime Process	Microsoft Corporation	
winlogon.exe	3.552 K	1,752 K	440	Windows NT Logon Applicat...	Microsoft Corporation	
services.exe	1.600 K	3,268 K	484	Services and Controller app	Microsoft Corporation	
VBoxService.exe	1.056 K	3,176 K	644	VirtualBox Guest Additions S...	Oracle Corporation	
lsass.exe	3.696 K	6,016 K	496	LSA Shell (Export Version)	Microsoft Corporation	
svchost.exe	2.968 K	4,664 K	680	Generic Host Process for W...	Microsoft Corporation	
wmiprvse.exe	2.136 K	4,376 K	1024	WMI	Microsoft Corporation	
svchost.exe	1.684 K	4,228 K	748	Generic Host Process for W...	Microsoft Corporation	
svchost.exe	10.408 K	15,320 K	784	Generic Host Process for W...	Microsoft Corporation	
svchost.exe	1.460 K	3,604 K	836	Generic Host Process for W...	Microsoft Corporation	
svchost.exe	1.436 K	3,864 K	936	Generic Host Process for W...	Microsoft Corporation	
explorer.exe	11.356 K	17,536 K	1104	Windows Explorer	Microsoft Corporation	
VBoxTray.exe	1.316 K	3,496 K	1676	VirtualBox Guest Additions Tr...	Oracle Corporation	
vmtoolsd.exe	588 K	1,804 K	1684			
procexp.exe	3.22	9,772 K	9,128 K	328	Sysinternals Process Explorer	Sysinternals - www.sysinter...
spoolsv.exe	2.956 K	4,392 K	1232	Spooler SubSystem App	Microsoft Corporation	
alg.exe	1.068 K	3,392 K	1548	Application Layer Gateway S...	Microsoft Corporation	
svchost.exe	860 K	2,208 K	1600	Generic Host Process for W...	Microsoft Corporation	
svchost.exe	860 K	2,204 K	928	Generic Host Process for W...	Microsoft Corporation	

Name	Description	Company Name	Path
user32.dll	Windows XP USER API Client DLL	Microsoft Corporation	C:\WINDOWS\system32\user32.dll
userenv.dll	Userenv	Microsoft Corporation	C:\WINDOWS\system32\userenv.dll
uxtheme.dll	Microsoft UxTheme Library	Microsoft Corporation	C:\WINDOWS\system32\uxtheme.dll
version.dll	Version Checking and File Install...	Microsoft Corporation	C:\WINDOWS\system32\version.dll
wbemcomn.dll	WMI	Microsoft Corporation	C:\WINDOWS\system32\wbem\wbemcomn.dll
wbemprox.dll	WMI	Microsoft Corporation	C:\WINDOWS\system32\wbem\wbemprox.dll
wbemsvc.dll	WMI	Microsoft Corporation	C:\WINDOWS\system32\wbem\wbemsvc.dll

CPU Usage: 3.22% Commit Charge: 3.67% Processes: 22 Physical Usage: 18.71%

Process Monitor - Sysinternals: www.sysinternals.com					
File Edit Event Filter Tools Options Help					
Time...	Process Name	PID	Operation	Path	Result Detail
7:55:1...	Lab03-01.exe	1488	Process Start		SUCCESS Parent PID: 1104, ...
7:55:1...	Lab03-01.exe	1488	Thread Create		SUCCESS Thread ID: 344
7:55:1...	Lab03-01.exe	1488	QueryNameInfo	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	SUCCESS Name: \Document...
7:55:1...	Lab03-01.exe	1488	Load Image	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	SUCCESS Image Base: 0x400...
7:55:1...	Lab03-01.exe	1488	Load Image	C:\WINDOWS\System32\ntdll.dll	SUCCESS Image Base: 0x7c9...
7:55:1...	Lab03-01.exe	1488	RegOpenKey	HKLM\Software\Microsoft\Windows NT\CurrentVersion\Image File Execution Options\Lab03-01.exe	NAME NOT FOUND Desired Access: R...
7:55:1...	Lab03-01.exe	1488	CreateFile	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	SUCCESS Desired Access: E...
7:55:1...	Lab03-01.exe	1488	FileSystemControl	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	SUCCESS Control: FSCTL_1S...
7:55:1...	Lab03-01.exe	1488	QueryOpen	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	NAME NOT FOUND
7:55:1...	Lab03-01.exe	1488	Load Image	C:\WINDOWS\System32\kernel32.dll	SUCCESS Image Base: 0x7c8...
7:55:1...	Lab03-01.exe	1488	RegOpenKey	HKLM\System\CurrentControlSet\Control\Terminal Server	SUCCESS Desired Access: R...
7:55:1...	Lab03-01.exe	1488	RegQueryValue	HKLM\System\CurrentControlSet\Control\Terminal Server\TSAppCompat	SUCCESS Type: REG_DW0...
7:55:1...	Lab03-01.exe	1488	RegCloseKey	HKLM\System\CurrentControlSet\Control\Terminal Server	SUCCESS
7:55:1...	Lab03-01.exe	1488	RegOpenKey	HKLM\System\CurrentControlSet\Control\Terminal Server	SUCCESS Desired Access: R...
7:55:1...	Lab03-01.exe	1488	RegQueryValue	HKLM\System\CurrentControlSet\Control\Terminal Server\TSAppCompat	SUCCESS Type: REG_DW0...
7:55:1...	Lab03-01.exe	1488	RegCloseKey	HKLM\System\CurrentControlSet\Control\Terminal Server	SUCCESS
7:55:1...	Lab03-01.exe	1488	RegOpenKey	HKLM\System\CurrentControlSet\Control\Session Manager	SUCCESS Desired Access: Q...
7:55:1...	Lab03-01.exe	1488	RegQueryValue	HKLM\System\CurrentControlSet\Control\Session Manager\SafeDllSearchMode	NAME NOT FOUND Length: 16
7:55:1...	Lab03-01.exe	1488	RegCloseKey	HKLM\System\CurrentControlSet\Control\Session Manager	SUCCESS
7:55:1...	Lab03-01.exe	1488	Load Image	C:\WINDOWS\System32\advapi32.dll	SUCCESS Image Base: 0x77d...
7:55:1...	Lab03-01.exe	1488	Load Image	C:\WINDOWS\System32\iprt.dll	SUCCESS Image Base: 0x77e...
7:55:1...	Lab03-01.exe	1488	Load Image	C:\WINDOWS\System32\secur32.dll	SUCCESS Image Base: 0x77f...
7:55:1...	Lab03-01.exe	1488	RegOpenKey	HKLM\Software\Microsoft\Windows NT\CurrentVersion\Image File Execution Options\Secur32.dll	NAME NOT FOUND Desired Access: R...
7:55:1...	Lab03-01.exe	1488	RegOpenKey	HKLM\Software\Microsoft\Windows NT\CurrentVersion\Image File Execution Options\RPCRT4.dll	NAME NOT FOUND Desired Access: R...
7:55:1...	Lab03-01.exe	1488	RegOpenKey	HKLM\Software\Microsoft\Windows NT\CurrentVersion\Image File Execution Options\advapi32.dll	NAME NOT FOUND Desired Access: R...
7:55:1...	Lab03-01.exe	1488	RegOpenKey	HKLM\System\CurrentControlSet\Control\Terminal Server	SUCCESS Desired Access: R...
7:55:1...	Lab03-01.exe	1488	RegQueryValue	HKLM\System\CurrentControlSet\Control\Terminal Server\TSAppCompat	SUCCESS Type: REG_DW0...
7:55:1...	Lab03-01.exe	1488	RegCloseKey	HKLM\System\CurrentControlSet\Control\Terminal Server	SUCCESS Type: REG_DW0...
7:55:1...	Lab03-01.exe	1488	RegOpenKey	HKLM\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon	SUCCESS Desired Access: R...
7:55:1...	Lab03-01.exe	1488	RegQueryValue	HKLM\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon\LeakTrack	NAME NOT FOUND Length: 144
7:55:1...	Lab03-01.exe	1488	RegCloseKey	HKLM\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon	SUCCESS
7:55:1...	Lab03-01.exe	1488	RegOpenKey	HKLM	SUCCESS Desired Access: M...
7:55:1...	Lab03-01.exe	1488	RegOpenKey	HKLM\Software\Microsoft\Windows NT\CurrentVersion\Diagnostics	NAME NOT FOUND Desired Access: R...
7:55:1...	Lab03-01.exe	1488	RegOpenKey	HKLM\Software\Microsoft\Windows NT\CurrentVersion\Image File Execution Options\ntdll.dll	NAME NOT FOUND Desired Access: B...

Showing 96 of 22,518 events (0.42%)

Backed by virtual memory

~res-x86_0002 - Notepad	
File Edit Format View Help	
Regshot 1.9.0 x86 ANSI	
Comments:	
Datetime: 2021/12/1 19:20:41 , 2021/12/1 19:21:08	
Computer: WINSP3UE , WINSP3UE	
Username: Administrator , Administrator	

Keys added: 1	

HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\opensaveMRU\hiv	

Values added: 4	

HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\LastVisitedMRU\c: 52 00 65 00 67 00 73 00 68 00 6F 00 74 0	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\opensaveMRU*c: "C:\Documents and Settings\Administrator\	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\opensaveMRU\hiv\c: "C:\Documents and Settings\Administrator	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\opensaveMRU\hiv\MRUList: "a	

Values modified: 6	

HKLM\SOFTWARE\Microsoft\Cryptography\RNG\Seed: 42 27 24 E7 DF 7B EC B9 48 AF 12 38 8A D3 89 2E FA 20 DF C6 14 03 F8 ED 52 03 FE 81 A4 25 89 DB 13 19 CF F5 9E 99 87 53	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\LastVisitedMRU\MRUList: "ba"	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\LastVisitedMRU\MRUList: "cba"	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\opensaveMRU*MRUList: "ab"	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\opensaveMRU*MRUList: "cab"	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\Shell\NoRoam\BagMRU\MRUListEx: 05 00 00 00 01 00 00 00 00 00 00 00 00 00 04 00 00 00 0	
Total changes: 11	

Lab 3-02

Warning: At least one delay-load dependency module was not found.
Warning: At least one module has an unresolved import due to a missing export function in a delay-load dependent module.

```
C:\> Command Prompt

Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>rundll32.exe KERNEL32.DLL CopyFileA

C:\Documents and Settings\Administrator>rundll32.exe KERNEL32.DLL CreateFileMapping

C:\Documents and Settings\Administrator>
```

LAB03-02.DLL

KERNEL32.DLL

ADVAPI32.DLL

WS2_32.DLL

WININET.DLL

MSVCRT.DLL

PT	Ordinal ^	Hint	Function	Entry Point
	N/A	27 (0x001B)	CloseHandle	Not Bound
	N/A	67 (0x0043)	CreatePipe	Not Bound
	N/A	68 (0x0044)	CreateProcessA	Not Bound
	N/A	74 (0x004A)	CreateThread	Not Bound
	N/A	245 (0x00F5)	GetCurrentDirectoryA	Not Bound
	N/A	282 (0x011A)	GetLastError	Not Bound
	N/A	289 (0x0121)	GetLongPathNameA	Not Bound
	N/A	292 (0x0124)	GetModuleFileNameA	Not Bound

E	Ordinal ^	Hint	Function	Entry Point
	64 (0x0040)	63 (0x003F)	CopyFileA	0x000286C6
	65 (0x0041)	64 (0x0040)	CopyFileExA	0x0005E624
	66 (0x0042)	65 (0x0041)	CopyFileExW	0x00027B0A
	67 (0x0043)	66 (0x0042)	CopyFileW	0x0002F63F
	68 (0x0044)	67 (0x0043)	CopyLZFile	0x0005960E
	69 (0x0045)	68 (0x0044)	CreateActCtxA	0x0006BB15
	70 (0x0046)	69 (0x0045)	CreateActCtxW	0x000154DC

Module	File Time Stamp	Link Time Stamp	File Size	Attr.	Link Checksum	Real Checksum	CPU	Subsystem	Symbols	Preferred Base	Actual Base	Virtual Size	Load Order	File Ver	Product Ver
MSJAVA.DLL	Error opening file. The system cannot find the file specified (2).														
MPR.DLL	10/30/2007 10:31p	10/30/2007 7:59p	59,904	A	0x00018FCC	0x00018FCC	x86	Console	CV	0x71B20000	Unknown	0x00012000	Not Loaded	5.1.2600.3244	5.1.2600.3244
ADVAPI32.DLL	10/30/2007 10:31p	10/30/2007 7:57p	617,472	A	0x000996BA	0x000996BA	x86	Console	CV	0x77000000	Unknown	0x00098000	Not Loaded	5.1.2600.3244	5.1.2600.3244
CRYPT32.DLL	10/30/2007 10:31p	10/30/2007 7:58p	599,552	A	0x00094B92	0x00094B92	x86	GUI	CV	0x77A80000	Unknown	0x00095000	Not Loaded	5.131.2600.3244	5.131.2600.3244
GDI32.DLL	10/30/2007 10:31p	10/30/2007 7:58p	284,672	A	0x0004F4DA	0x0004F4DA	x86	Console	CV	0x77F10000	Unknown	0x00049000	Not Loaded	5.1.2600.3244	5.1.2600.3244
KERNEL32.DLL	10/30/2007 10:31p	10/30/2007 8:00p	986,624	A	0x000F944B	0x000F944B	x86	Console	CV	0x7C800000	Unknown	0x000F5000	Not Loaded	5.1.2600.3244	5.1.2600.3244

Warning: At least one delay-load dependency module was not found.

Warning: At least one module has an unresolved import due to a missing export function in a delay-load dependent module.

Lab 3-03

File Edit View Options Window Help														
<div> <div> LAB03-03.EXE <div> <div>KERNEL32.DLL</div> </div> </div> </div>														
P/I	Ordinal ^	Hint	Function	Entry Point										
	N/A	27 (0x001B)	CloseHandle	Not Bound										
	N/A	52 (0x0034)	CreateFileA	Not Bound										
	N/A	68 (0x0044)	CreateProcessA	Not Bound										
	N/A	125 (0x007D)	ExitProcess	Not Bound										
	N/A	163 (0x00A3)	FindResourceA	Not Bound										
	N/A	178 (0x00B2)	FreeEnvironmentStringsA	Not Bound										
	N/A	179 (0x00B3)	FreeEnvironmentStringsW	Not Bound										
	N/A	182 (0x00B6)	FreeResource	Not Bound										
E	Ordinal ^	Hint	Function	Entry Point										
	98 (0x0062)	97 (0x0061)	CreatePipe	0x0001D817										
	99 (0x0063)	98 (0x0062)	CreateProcessA	0x00002367										
	100 (0x0064)	99 (0x0063)	CreateProcessInternalA	0x00010526										
	101 (0x0065)	100 (0x0064)	CreateProcessInternalW	0x0001978C										
	102 (0x0066)	101 (0x0065)	CreateProcessInternalWSecure	0x0007EE3D										
	103 (0x0067)	102 (0x0066)	CreateProcessW	0x00002332										
	104 (0x0068)	103 (0x0067)	CreateRemoteThread	0x000104AC										
	105 (0x0069)	104 (0x0068)	CreateThread	0x000104AC										

Module	File Time Stamp	Link Time Stamp	File Size	Attr.	Link Checksum	Real Checksum	CPU	Subsystem	Symbols	Preferred Base	Actual Base	Virtual Size	Load Order	File Ver	Product Ver	Image Ver
KERNEL32.DLL	10/30/2007 10:31p	10/30/2007 8:00p	986,624	A	0x000F944B	0x000F944B	x86	Console	CV	0x7C800000	Unknown	0x000F5000	Not Loaded	5.1.2600.3244	5.1.2600.3244	5.1
LAB03-03.EXE	04/08/2011 11:54a	04/08/2011 6:54p	53,248	A	0x00000000	0x000195A9	x86	Console	None	0x00400000	Unknown	0x0000D000	Not Loaded	N/A	N/A	0.0
NTDLL.DLL	10/30/2007 10:30p	10/30/2007 8:00p	706,048	A	0x000AF170	0x000AF170	x86	Console	CV	0x7C900000	Unknown	0x000AF000	Not Loaded	5.1.2600.3244	5.1.2600.3244	5.1

The screenshot shows a Windows XP desktop with a black command prompt window in the foreground. The command prompt displays the following text:

```
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>rundll32.exe KERNEL32.DLL CopyFileA
C:\Documents and Settings\Administrator>rundll32.exe KERNEL32.DLL CreateFileMapping
C:\Documents and Settings\Administrator>rundll32.exe KERNEL32.DLL CreateProcessA
C:\Documents and Settings\Administrator>rundll32.exe KERNEL32.DLL CreateFileA
C:\Documents and Settings\Administrator>
```

In the background, a portion of a table is visible, showing columns for 'Entry Point' and 'Address'. The table contains several rows of data, including 'Not Bound', '0x0000A', '0x0002F', and '0x0002F'.

An error dialog box titled 'RUNDLL' is open in the foreground. It features a red 'X' icon and the message: 'An exception occurred while trying to run "KERNEL32.DLL CreateFileA"'. The dialog has an 'OK' button at the bottom.

Process Explorer - Sysinternals: www.sysinternals.com [WINSP3UEVAdministrator]						
Process	CPU	Private Bytes	Working Set	PID	Description	Company Name
smss.exe		168 K	388 K	320	Windows NT Session Mana...	Microsoft Corporation
csrss.exe		1,596 K	1,504 K	416	Client Server Runtime Process	Microsoft Corporation
winlogon.exe		4,636 K	3,216 K	440	Windows NT Logon Applicat...	Microsoft Corporation
services.exe	0.91	1,600 K	3,272 K	484	Services and Controller app	Microsoft Corporation
VBService.exe		1,068 K	3,188 K	644	VirtualBox Guest Additions S...	Oracle Corporation
lsass.exe		3,636 K	6,016 K	496	LSA Shell (Export Version)	Microsoft Corporation
svchost.exe		2,972 K	4,688 K	680	Generic Host Process for W...	Microsoft Corporation
wmiprvse.exe		1,800 K	4,664 K	1448	WMI	Microsoft Corporation
svchost.exe		1,724 K	4,276 K	748	Generic Host Process for W...	Microsoft Corporation
svchost.exe		10,752 K	15,712 K	784	Generic Host Process for W...	Microsoft Corporation
svchost.exe		1,460 K	3,604 K	836	Generic Host Process for W...	Microsoft Corporation
svchost.exe		1,436 K	3,864 K	936	Generic Host Process for W...	Microsoft Corporation
explorer.exe		12,648 K	19,136 K	1104	Windows Explorer	Microsoft Corporation
VBioTrap.exe		1,316 K	3,496 K	1676	VirtualBox Guest Additions Tr...	Oracle Corporation
vmtoolsd.exe		598 K	1,804 K	1684		
depends.exe		6,372 K	10,320 K	1840	Dependency Walker for Win...	Microsoft Corporation
proceexp.exe	3.64	8,308 K	11,344 K	1984	Sysinternals Process Explorer	Sysinternals - www.sysinter...
Lab03-03.exe	0.94	276 K	1,000 K	1052		
svchost.exe		860 K	2,208 K	364	Generic Host Process for W...	Microsoft Corporation
spoolsv.exe		2,956 K	4,392 K	1232	Spooler Subsystem App	Microsoft Corporation
alg.exe		1,068 K	3,392 K	1548	Application Layer Gateway S...	Microsoft Corporation
svchost.exe		860 K	2,288 K	1600	Generic Host Process for W...	Microsoft Corporation
svchost.exe		860 K	2,292 K	928	Generic Host Process for W...	Microsoft Corporation
svchost.exe		860 K	2,272 K	1020	Generic Host Process for W...	Microsoft Corporation

Name	Description	Company Name	Path
------	-------------	--------------	------

Process Monitor - Sysinternals: www.sysinternals.com				
Time...	Process Name	PID	Operation	Path
8:43:5...	Lab03-03.exe	180	Process Start	SUCCESS
8:43:5...	Lab03-03.exe	180	Thread Create	SUCCESS
8:43:5...	Lab03-03.exe	180	QueryNameInfo...	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...
8:43:5...	Lab03-03.exe	180	Load Image	C:\WINDOWS\system32\ntdll.dll
8:43:5...	Lab03-03.exe	180	Load Image	C:\WINDOWS\system32\kernel32.dll
8:43:5...	Lab03-03.exe	180	RegOpenKey	HKLM\Software\Microsoft\Windows NT\CurrentVersion\Image File Execution Options\Lab03-03.exe
8:43:5...	Lab03-03.exe	180	CreateFile	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...
8:43:5...	Lab03-03.exe	180	FileSystemControl	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...
8:43:5...	Lab03-03.exe	180	QueryOpen	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...
8:43:5...	Lab03-03.exe	180	Load Image	C:\WINDOWS\system32\kernel32.dll
8:43:5...	Lab03-03.exe	180	RegOpenKey	HKLM\System\CurrentControlSet\Control\Terminal Server
8:43:5...	Lab03-03.exe	180	RegQueryValue	HKLM\System\CurrentControlSet\Control\Terminal Server\TSAppCompat
8:43:5...	Lab03-03.exe	180	RegCloseKey	HKLM\System\CurrentControlSet\Control\Terminal Server
8:43:5...	Lab03-03.exe	180	RegOpenKey	HKLM\System\CurrentControlSet\Control\Terminal Server
8:43:5...	Lab03-03.exe	180	RegQueryValue	HKLM\System\CurrentControlSet\Control\Terminal Server\TSAppCompat
8:43:5...	Lab03-03.exe	180	RegCloseKey	HKLM\System\CurrentControlSet\Control\Terminal Server
8:43:5...	Lab03-03.exe	180	CreateFile	C:\WINDOWS\system32\svchost.exe
8:43:5...	Lab03-03.exe	180	CreateFileMap...	C:\WINDOWS\system32\svchost.exe
8:43:5...	Lab03-03.exe	180	CreateFileMap...	C:\WINDOWS\system32\svchost.exe
8:43:5...	Lab03-03.exe	180	RegOpenKey	HKLM\System\CurrentControlSet\Control\Session Manager\AppCertDlls
8:43:5...	Lab03-03.exe	180	RegOpenKey	HKLM\System\CurrentControlSet\Control\Session Manager\AppCompatibility
8:43:5...	Lab03-03.exe	180	RegQueryValue	HKLM\System\CurrentControlSet\Control\Session Manager\AppCompatibility\DisableAppCompat
8:43:5...	Lab03-03.exe	180	RegCloseKey	HKLM\System\CurrentControlSet\Control\Session Manager\AppCompatibility
8:43:5...	Lab03-03.exe	180	QueryOpen	C:\WINDOWS\system32\apphelp.dll
8:43:5...	Lab03-03.exe	180	CreateFile	C:\WINDOWS\system32\apphelp.dll
8:43:5...	Lab03-03.exe	180	CreateFileMap...	C:\WINDOWS\system32\apphelp.dll
8:43:5...	Lab03-03.exe	180	QueryStandard...	C:\WINDOWS\system32\apphelp.dll
8:43:5...	Lab03-03.exe	180	CreateFileMap...	C:\WINDOWS\system32\apphelp.dll
8:43:5...	Lab03-03.exe	180	CloseFile	C:\WINDOWS\system32\apphelp.dll
8:43:5...	Lab03-03.exe	180	QueryOpen	C:\WINDOWS\system32\apphelp.dll
8:43:5...	Lab03-03.exe	180	CreateFile	C:\WINDOWS\system32\apphelp.dll
8:43:5...	Lab03-03.exe	180	CreateFileMap...	C:\WINDOWS\system32\apphelp.dll
8:43:5...	Lab03-03.exe	180	CreateFileMap...	C:\WINDOWS\system32\apphelp.dll
8:43:5...	Lab03-03.exe	180	RegOpenKey	HKLM\System\CurrentControlSet\Control\SafeBoot\Option
8:43:5...	Lab03-03.exe	180	RegOpenKey	HKLM\System\CurrentControlSet\Control\SafeBoot\Option

Showing 254 of 33,247 events (0.76%)

```
~res-x86_0003 - Notepad
File Edit Format View Help
Regshot 1.9.0 x86 ANSI
Comments:
Datetime: 2021/12/1 19:49:13 , 2021/12/1 19:49:31
Computer: WINSP3UE WINSP3UE
Username: Administrator , Administrator

-----
values added: 2
-----
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\OpenSaveMRU\*\e: "C:\Documents and Settings\Administrator\D
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\OpenSaveMRU\hiv\c: "C:\Documents and Settings\Administrator

-----
values modified: 7
-----
HKLM\Software\Microsoft\Cryptography\RNG\Seed: AA 16 36 46 B2 4B 46 FA 69 38 30 23 F9 93 BB 3E 23 BF 70 BF AF 12 2B 4A 28 09 2E 84 00 19 92 2C D5 1F 4C 17 BC B2 CF 38
HKLM\Software\Microsoft\Cryptography\RNG\Seed: 6B 01 6F CA 7F A3 2A 73 26 1B 82 39 60 CE 76 F3 B9 F4 86 F8 C3 4A D4 3B 7E 73 BC 5A 3C 9B 6F 12 E8 26 AA E2 B3 B7 86 B5
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\LastVisitedMRU\MRUList: "acb"
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\LastVisitedMRU\MRUList: "cab"
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\OpenSaveMRU\*\MRUList: "dcab"
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\OpenSaveMRU\*\MRUList: "edcab"
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\OpenSaveMRU\hiv\MRUList: "ba"
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComDlg32\OpenSaveMRU\hiv\MRUList: "cba"
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\Shell\NoRoam\BagMRU\S\MRUListEx: 02 00 00 00 00 00 00 01 00 00 00 FF FF FF FF
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\Shell\NoRoam\BagMRU\S\MRUListEx: 00 00 00 00 02 00 00 00 01 00 00 00 FF FF FF FF

-----
Total changes: 9
-----
```


Lab 3-04

Dependency Walker - [Lab03-04]

File Edit View Options Profile Window Help

LAB03-04.EXE

- KERNEL32.DLL
- ADVAPI32.DLL
- SHELL32.DLL
- WS2_32.DLL

PI	Ordinal ^	Hint	Function	Entry Point
N/A	27 (0x001B)		CloseHandle	Not Bound
N/A	33 (0x0021)		CompareStringA	Not Bound
N/A	34 (0x0022)		CompareStringW	Not Bound
N/A	40 (0x0028)		CopyFileA	Not Bound
N/A	52 (0x0034)		CreateFileA	Not Bound
N/A	67 (0x0043)		CreatePipe	Not Bound
N/A	68 (0x0044)		CreateProcessA	Not Bound
N/A	87 (0x0057)		DeleteFileA	Not Bound

E	Ordinal ^	Hint	Function	Entry Point
459 (0x01CB)	458 (0x01CA)		GetTempFileNameW	0x000359AF
460 (0x01CC)	459 (0x01CB)		GetTempPathA	0x00035DC2
461 (0x01CD)	460 (0x01CC)		GetTempPathW	0x00030755
462 (0x01CE)	461 (0x01CD)		GetThreadContext	0x00039705
463 (0x01CF)	462 (0x01CE)		GetThreadLocal	0x000630A1
464 (0x01D0)	463 (0x01CF)		GetThreadPriority	0x0000A495
465 (0x01D1)	464 (0x01D0)		GetThreadPriority	0x0000A813

Module	File Time Stamp	Link Time Stamp	File Size	Attr.	Link Checksum	Real Checksum	CPU	Subsystem	Symbols	Preferred Base	Actual Base	Virtual Size	Load Order	File Ver	Product Ver
MSJAVA.DLL	10/30/2007 10:31p	10/30/2007 7:59p	59,904	A	0x00018FCC	0x00018FCC	x86	Console	CV	0x71B20000	Unknown	0x00012000	Not Loaded	5.1.2600.3244	5.1.2600.3244
MPR.DLL	10/30/2007 10:31p	10/30/2007 7:57p	617,472	A	0x000996BA	0x000996BA	x86	Console	CV	0x77DD0000	Unknown	0x0009B000	Not Loaded	5.1.2600.3244	5.1.2600.3244
ADVAPI32.DLL	10/30/2007 10:31p	10/30/2007 7:58p	284,672	A	0x0004F4DA	0x0004F4DA	x86	Console	CV	0x77F10000	Unknown	0x00049000	Not Loaded	5.1.2600.3244	5.1.2600.3244
GDI32.DLL	10/30/2007 10:31p	10/30/2007 8:00p	986,624	A	0x000F9448	0x000F9448	x86	Console	CV	0x7C800000	Unknown	0x000F5000	Not Loaded	5.1.2600.3244	5.1.2600.3244
KERNEL32.DLL	10/18/2011 12:46p	10/18/2011 7:46p	61,440	A	0x00000000	0x000136C7	x86	Console	None	0x00400000	Unknown	0x00011000	Not Loaded	N/A	N/A

Warning: At least one delay-load dependency module was not found.
Warning: At least one module has an unresolved import due to a missing export function in a delay-load dependent module.

```
C:\> Command Prompt

Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>rundll32.exe KERNEL32.DLL GetTempPathA

C:\Documents and Settings\Administrator>rundll32.exe KERNEL32.DLL GetWindowsDirectoryA

C:\Documents and Settings\Administrator>
```

Process Monitor - Sysinternals: www.sysinternals.com					
File Edit Event Filter Tools Options Help					
Time...	Process Name	PID	Operation	Path	Result Detail
9:01:4...	Lab03-04.exe	1080	Process Start		SUCCESS Parent PID: 1104, ...
9:01:4...	Lab03-04.exe	1080	Thread Create		SUCCESS Thread ID: 1072
9:01:4...	Lab03-04.exe	1080	QueryNameInfo	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	SUCCESS Name: \document...
9:01:4...	Lab03-04.exe	1080	Load Image	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	SUCCESS Image Base: 0x400...
9:01:4...	Lab03-04.exe	1080	Load Image	C:\WINDOWS\system32\kernel.dll	SUCCESS Image Base: 0x7c9...
9:01:4...	Lab03-04.exe	1080	RegOpenKey	HKLM\Software\Microsoft\Windows NT\CurrentVersion\Image File Execution Options\Lab03-04.exe	NAME NOT FOUND Desired Access: R...
9:01:4...	Lab03-04.exe	1080	CreateFile	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	SUCCESS Desired Access: E...
9:01:4...	Lab03-04.exe	1080	FileSystemControl	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	SUCCESS Control: FSCTL_IS...
9:01:4...	Lab03-04.exe	1080	QueryOpen	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	NAME NOT FOUND
9:01:4...	Lab03-04.exe	1080	Load Image	C:\WINDOWS\system32\kernel32.dll	SUCCESS Image Base: 0x7c8...
9:01:4...	Lab03-04.exe	1080	RegOpenKey	HKLM\System\CurrentControlSet\Control\Terminal Server	SUCCESS Desired Access: R...
9:01:4...	Lab03-04.exe	1080	RegQueryValue	HKLM\System\CurrentControlSet\Control\Terminal Server\TSAppCompat	SUCCESS Type: REG_DW...
9:01:4...	Lab03-04.exe	1080	RegCloseKey	HKLM\System\CurrentControlSet\Control\Terminal Server	SUCCESS
9:01:4...	Lab03-04.exe	1080	ReadFile	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	SUCCESS Offset: 45,056, Len...
9:01:4...	Lab03-04.exe	1080	Load Image	C:\WINDOWS\system32\advapi32.dll	SUCCESS Image Base: 0x77d...
9:01:4...	Lab03-04.exe	1080	Load Image	C:\WINDOWS\system32\user32.dll	SUCCESS Image Base: 0x77e...
9:01:4...	Lab03-04.exe	1080	Load Image	C:\WINDOWS\system32\securlib.dll	SUCCESS Image Base: 0x77f...
9:01:4...	Lab03-04.exe	1080	Load Image	C:\WINDOWS\system32\shell32.dll	SUCCESS Image Base: 0x7c9...
9:01:4...	Lab03-04.exe	1080	Load Image	C:\WINDOWS\system32\gdi32.dll	SUCCESS Image Base: 0x771...
9:01:4...	Lab03-04.exe	1080	Load Image	C:\WINDOWS\system32\user32.dll	SUCCESS Image Base: 0x7e4...
9:01:4...	Lab03-04.exe	1080	Load Image	C:\WINDOWS\system32\msvrt.dll	SUCCESS Image Base: 0x77c...
9:01:4...	Lab03-04.exe	1080	Load Image	C:\WINDOWS\system32\shlwapi.dll	SUCCESS Image Base: 0x771...
9:01:4...	Lab03-04.exe	1080	QueryOpen	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	NAME NOT FOUND
9:01:4...	Lab03-04.exe	1080	QueryOpen	C:\WINDOWS\system32\ws2_32.dll	SUCCESS CreationTime: 10/3...
9:01:4...	Lab03-04.exe	1080	CreateFile	C:\WINDOWS\system32\ws2_32.dll	SUCCESS Desired Access: E...
9:01:4...	Lab03-04.exe	1080	CreateFileMapp	C:\WINDOWS\system32\ws2_32.dll	SUCCESS SyncType: SyncT...
9:01:4...	Lab03-04.exe	1080	CreateFileMapp	C:\WINDOWS\system32\ws2_32.dll	SUCCESS SyncType: SyncT...
9:01:4...	Lab03-04.exe	1080	RegOpenKey	HKLM\System\CurrentControlSet\Control\Security\Options	NAME NOT FOUND Desired Access: Q...
9:01:4...	Lab03-04.exe	1080	RegOpenKey	HKLM\Software\Policies\Microsoft\Windows\Safer\CodeIdentifiers	SUCCESS Desired Access: Q...
9:01:4...	Lab03-04.exe	1080	RegQueryValue	HKLM\SOFTWARE\Policies\Microsoft\Windows\Safer\CodeIdentifiers\TransparentEnabled	SUCCESS Type: REG_DW...
9:01:4...	Lab03-04.exe	1080	RegCloseKey	HKLM\SOFTWARE\Policies\Microsoft\Windows\Safer\CodeIdentifiers	SUCCESS
9:01:4...	Lab03-04.exe	1080	RegOpenKey	HKLM\Software\Policies\Microsoft\Windows\Safer\CodeIdentifiers	NAME NOT FOUND Desired Access: Q...
9:01:4...	Lab03-04.exe	1080	RegCloseKey	C:\WINDOWS\system32\ws2_32.dll	SUCCESS
9:01:4...	Lab03-04.exe	1080	Load Image	C:\WINDOWS\system32\ws2_32.dll	SUCCESS Image Base: 0x71a...
9:01:4...	Lab03-04.exe	1080	QueryOpen	C:\Documents and Settings\Administrator\Desktop\Tools and Labs\Labs to work on\PracticalMalwareAnalysis-Labs\Practi...	NAME NOT FOUND

Showing 1,802 of 62,187 events (2.8%)

Backed by virtual memory

~res-x86_0004 - Notepad	
File Edit Format View Help	
Regshot 1.9.0 x86 ANSI	
Comments:	
Datetime: 2021/12/1 20:07:06 , 2021/12/1 20:07:22	
Computer: WINSP3UE , WINSP3UE	
Username: Administrator , Administrator	

Values added: 2	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComD1g32\OpenSaveMRU*\h: "c:\Documents and Settings\Administrator\D	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComD1g32\OpenSaveMRU\hiv: "c:\Documents and Settings\Administrator	

Values modified: 6	
HKLM\SOFTWARE\Microsoft\Cryptography\RNG\Seed: E2 A0 A8 4D 96 2B 4B C0 8D AF 72 F5 F9 BD 01 64 18 76 31 1A D6 03 D0 B6 2C 6D CB 7E 43 AF 7B 7A 26 C8 DD 6B A0 DB 48 8A	
HKLM\SOFTWARE\Microsoft\Cryptography\RNG\Seed: 09 36 68 1A CA 58 C4 00 0E 0B A9 76 A6 59 CD 0F 2D 96 F2 BA 8B 7B F3 CB 03 D4 F3 44 B4 39 63 AE B4 73 37 29 B5 6D 29 72	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComD1g32\LastVisitedMRU\VRUL1st: "bac"	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComD1g32\LastVisitedMRU\VRUL1st: "cba"	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComD1g32\OpenSaveMRU*\VRUL1st: "hgFedcab"	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComD1g32\OpenSaveMRU\hiv\VRUL1st: "dcba"	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\ComD1g32\OpenSaveMRU\hiv\VRUL1st: "edcba"	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU	
HKU\S-1-5-21-790525478-1682526488-1060284298-500\Software\Microsoft\Windows\CurrentVersion\Explorer\UserAssist\{75048700-EF1F-11D0-9888-006097DEACF9}\Count\HRZR_EHACNGU	
Total changes: 8	