Malware Analysis Appliance by Blue Coat Systems, Inc.

Task Details

Host: mag2, Sample ID: 630, Task ID: 2465

Task ID: 2465 Risk Level: 10

Date Processed: 2016-02-22 05:33:03 (UTC)

Processing Time: 62.63 seconds
Virtual Environment: IntelliVM

Execution Arguments:

c:\windows\temp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe"

Sample ID: 630 Type: basic Owner: admin

Label: d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33

Date Added: 2016-02-22 05:26:50 (UTC)

File Type: PE32:win32:gui File Size: 29616 bytes

MD5: 6a2ea24ed959ef96d270af5cdc2f70a7

SHA256: d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33

Description: None

Pattern Matching Results

5 Modifies Windows Registry from the command line

6 Modifies registry autorun entries

2 PE: Nonstandard section

8 Creates Suspicious Events: Localhost Ping

5 Adds autostart object

6 PE: Jumps to the last section near the entrypoint

4 Terminates process under Windows subfolder

10 YARA score 10

Static Events

YARA rule hit:	Hurix
Anomaly:	PE: No DOS stub
Anomaly:	PE: Contains one or more non-standard sections
Anomaly:	PE: Jumps to the last section near the entrypoint

Process/Thread Events

Creates process

 $\hbox{$C: \widehat{\theta}_0^2 = C: \widehat{\theta}_0^2 = C. windows \emp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe $$ ["C: \widehat{\theta}_0^2 = C. \widehat$

Creates process: C:\Windows\SysWOW64\cmd.exe [cmd.exe /c reg add

"C:\ProgramData\CitrixReciever\CitrixReciever.exe"]

Creates process: C:\Windows\SysWOW64\cmd.exe [cmd.exe /c cmd.exe /c cmd.exe /c cmd.exe /c

cmd.exe /c cmd.exe /c "C:\ProgramData\CitrixReciever\CitrixReciever.exe"]

Creates process: C:\Windows\SysWOW64\cmd.exe [cmd.exe /c ping 127.0.0.1 & del "C:\windows\temp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe"]

Creates process: \SystemRoot\System32\Conhost.exe [\??\C:\Windows\system32\conhost.exe

0xffffffff]

Creates process: C:\Windows\SysWOW64\PING.EXE [ping 127.0.0.1]

Creates process: C:\Windows\SysWOW64\cmd.exe [cmd.exe /c cmd.exe /c cmd.exe /c cmd.exe /c

cmd.exe /c "C:\ProgramData\CitrixReciever\CitrixReciever.exe"]

Creates process: C:\Windows\SysWOW64\cmd.exe [cmd.exe /c cmd.exe /c cmd.exe /c cmd.exe /c cmd.exe /c

"C:\ProgramData\CitrixReciever\CitrixReciever.exe"]

Creates process: C:\Windows\SysWOW64\reg.exe [reg add

HKLM\Software\Microsoft\Windows\CurrentVersion\Run /v "CitrixXenAppReciever" /t REG_SZ /d

"C:\ProgramData\CitrixReciever\CitrixReciever.exe"]

Creates process: C:\Windows\SysWOW64\cmd.exe [cmd.exe /c cmd.exe /c cmd.exe /c

"C:\ProgramData\CitrixReciever\CitrixReciever.exe"]

Creates process: C:\Windows\SysWOW64\cmd.exe [cmd.exe /c cmd.exe /c "C:\ProgramData\CitrixReciever\CitrixReciever.exe"]

Creates process: C:\Windows\SysWOW64\cmd.exe [cmd.exe /c

C. \WINDOWS\5yswowo4\cinu.exe [cinu.exe /c

"C:\ProgramData\CitrixReciever\CitrixReciever.exe"]

Creates process: C:\ProgramData\CitrixReciever\CitrixReciever.exe

[C:\ProgramData\CitrixReciever\CitrixReciever.exe]

Terminates process:

Terminates process: C:\Windows\Sys\W0\64\reg.exe
Terminates process: C:\Windows\Sys\W0\64\cmd.exe
Terminates process: C:\Windows\System32\conhost.exe
Terminates process: C:\Windows\Sys\W0\64\PING.EXE

Named Object Events

File System Events

Reads from:

```
C:\ProgramData\CitrixReciever
 Creates:
                         C:\ProgramData\CitrixReciever\CitrixReciever.exe
 Opens:
                         C:\Windows\Prefetch\D269F3AF57167A25A289BC6FD3375-30096F52.pf
 Opens:
                         C:\Windows\System32\wow64.dll
 Opens:
 Opens:
                         C:\Windows\SysWOW64
 Opens:
                         C:\Windows\SysWOW64\apphelp.dll
 Opens:
C:\Windows\Temp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe
 Opens:
                         C:\Windows\SysWOW64\ntdll.dll
                         C:\Windows\SysWOW64\kernel32.dll
 Opens:
 Opens:
                         C:\Windows\SysWOW64\KernelBase.dll
 Opens:
                         C:\Windows\apppatch\sysmain.sdb
 Opens:
                         C:\Windows\SysWOW64\combase.dll
 Opens:
                         C:\Windows\SysWOW64\sechost.dll
 Opens:
                         C:\Windows\SysWOW64\gdi32.dll
 Opens:
                         C:\Windows\SysWOW64\user32.dll
 Opens:
                         C:\Windows\SysWOW64\msvcrt.dll
 Opens:
                         C:\Windows\SysWOW64\bcryptprimitives.dll
 Opens:
                         C:\Windows\SysWOW64\cryptbase.dll
 Opens:
                         C:\Windows\SysWOW64\sspicli.dll
 Opens:
                         C:\Windows\SysWOW64\rpcrt4.dll
 Opens:
                         C:\Windows\SysWOW64\iertutil.dll
 Opens:
                         C:\Windows\SysWOW64\wininet.dll
 Opens:
                         C:\Windows\SysWOW64\shlwapi.dll
                         C:\Windows\SysWOW64\shell32.dll
 Opens:
 Opens:
                         C:\Windows\SysWOW64\advapi32.dll
 Opens:
                         C:\Windows\SysWOW64\imm32.dll
                         C:\Windows\SysWOW64\msctf.dll
 Opens:
 Opens:
                         C:\
 Opens:
                         C:\ProgramData\CitrixReciever\CitrixReciever.exe
 Opens:
                         C:\Windows\SysWOW64\cmd.exe
 Opens:
                         C:\Windows\Prefetch\CMD.EXE-AC113AA8.pf
 Opens:
                         C:
                         C:\Windows\Globalization
 Opens:
 Opens:
                         C:\Windows\Globalization\Sorting
 Opens:
                         C:\Windows\System32
 Opens:
                         C:\Windows\SysWOW64\wbem
 Opens:
                         C:\Windows\System32\conhost.exe
 Opens:
                         C:\Windows\System32\ntdll.dll
 Opens:
                         C:\Windows\System32\wow64win.dll
 Opens:
                         C:\Windows\System32\wow64cpu.dll
 Opens:
                         C:\Windows\System32\kernel32.dll
 Opens:
                         C:\Windows\System32\user32.dll
                         C:\Windows\System32\locale.nls
 Opens:
 Opens:
                         C:\Windows\Globalization\Sorting\SortDefault.nls
 Opens:
                         C:\Windows\SysWOW64\wbem\WMIC.exe
 Opens:
                         C:\Windows\System32\combase.dll
 Opens:
                         C:\Windows\System32\en-US\conhost.exe.mui
 Opens:
                         C:\Windows\System32\ole32.dll
 Opens:
                         C:\Windows\System32\uxtheme.dll
 Opens:
                         C:\Windows\System32\cmd.exe
 Opens:
                         C:\Windows\System32\en-US\cmd.exe.mui
 Opens:
                         C:\Windows\System32\dwmapi.dll
                         C:\Windows\System32\en-US\user32.dll.mui
 Opens:
 Opens:
                         C:\Windows\system32\uxtheme.dll.Config
 Opens:
                         C:\Windows\WinSxS\amd64_microsoft.windows.common-
controls_6595b64144ccf1df_6.0.9200.16384_none_418c2a697189c07f
 Opens:
                         C:\Windows\WinSxS\amd64_microsoft.windows.common-
controls_6595b64144ccf1df_6.0.9200.16384_none_418c2a697189c07f\comctl32.dll
                         C:\Windows\WindowsShell.Manifest
 Opens:
 Opens:
                         C:\Windows\System32\SHCore.dll
 Opens:
                         C:\Windows\SysWOW64\PING.EXE
 Opens:
                         C:\Windows\Prefetch\PING.EXE-371F41E2.pf
 Opens:
                         C:\Windows\SysWOW64\reg.exe
 Opens:
                         C:\Windows\SysWOW64\IPHLPAPI.DLL
 Opens:
                         C:\Windows\SysWOW64\winnsi.dll
 Opens:
                         C:\Windows\SysWOW64\nsi.dll
 Opens:
                         C:\Windows\SysWOW64\ws2_32.dll
 Opens:
                         C:\Windows\Prefetch\REG.EXE-4978446A.pf
 Opens:
                         C:\Windows\SysWOW64\en-US\reg.exe.mui
 Opens:
                         C:\Windows\SysWOW64\en-US\KernelBase.dll.mui
 Opens:
                         C:\Windows\SysWOW64\mswsock.dll
 Opens:
                         C:\Windows\SysWOW64\en-US\ping.exe.mui
 Opens:
                         C:\ProgramData\CitrixReciever
                         C:\Windows\Prefetch\CITRIXRECIEVER.EXE-42285A69.pf
 Opens:
 Opens:
                         C:\Windows\Temp
 Writes to:
                         C:\ProgramData\CitrixReciever\CitrixReciever.exe
 Reads from:
C:\Windows\Temp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe
```

C:\Windows\SysWOW64\cmd.exe

Reads from: C:\Windows\Prefetch\CMD.EXE-AC113AA8.pf

Reads from: C:\Windows\SysWOW64\PING.EXE C:\Windows\SysWOW64\reg.exe Reads from:

Reads from: C:\ProgramData\CitrixReciever\CitrixReciever.exe

Windows Registry Events

Creates key: $HKLM \verb|\software\\| wow 6432 node \verb|\microsoft\\| windows \verb|\currentversion\\| run$

Opens key: HKLM\software\microsoft\wow64

HKLM\system\currentcontrolset\control\terminal server Opens key: Opens key: HKLM\system\currentcontrolset\control\safeboot\option Opens kev: HKLM\system\currentcontrolset\control\srp\gp\dll

Opens key:

HKLM\software\wow6432node\policies\microsoft\windows\safer\codeidentifiers

HKLM\software\policies\microsoft\windows\safer\codeidentifiers Opens key: Opens key: HKCU\software\policies\microsoft\windows\safer\codeidentifiers

Opens key: HKLM\system\currentcontrolset\control\nls\customlocale Opens key: ${\tt HKLM \ } system \verb|\ current control set \verb|\ control \verb|\ nls \verb|\ language \\$ Opens key: HKLM\system\currentcontrolset\control\mui\uilanguages HKLM\system\currentcontrolset\control\mui\uilanguages\en-us Opens key: Opens key: HKLM\system\currentcontrolset\control\mui\uilanguages\pendingdelete

Opens key: HKLM\software\wow6432node\policies\microsoft\mui\settings

Opens key: HKLM\software\policies\microsoft\mui\settings

HKCU\ Opens key:

 $\label{thm:local_machine} \begin{tabular}{ll} HKCU \control panel \desktop \muicached \machine \label{thm:local_machine} anguage \configuration \end{tabular}$ Opens key: Opens key: HKLM\system\currentcontrolset\control\mui\settings\languageconfiguration

Opens key: HKCU\software\policies\microsoft\control panel\desktop Opens key: HKCU\control panel\desktop\languageconfiguration

Opens key: HKCU\control panel\desktop

HKCU\control panel\desktop\muicached Opens kev:

Opens key: HKLM\software\wow6432node\microsoft\windows\currentversion\sidebyside

Opens key: HKLM\system\currentcontrolset\control\nls\sorting\versions

Opens key: HKLM\software\microsoft\windows nt\currentversion\appcompatflags\dbglog Opens key: HKCU\software\microsoft\windows nt\currentversion\appcompatflags

Opens key: HKLM\software\microsoft\windows

nt\currentversion\appcompatflags\disable8and16bitmitigation

Opens key: HKLM\software\wow6432node\microsoft\windows nt\currentversion\image file

execution options

HKLM\software\microsoft\windows nt\currentversion\image file execution Opens key:

options

Opens key: HKLM\software\microsoft\windows nt\currentversion\image file execution

options\dllnxoptions

Opens key: HKLM\software\wow6432node\microsoft\windows

nt\currentversion\gre_initialize

Opens key: HKLM\software\wow6432node\microsoft\windows

nt\currentversion\compatibility32

Opens key: HKLM\software\wow6432node\microsoft\windows nt\currentversion\ime

compatibility

Opens key:

Opens key: HKLM\software\wow6432node\microsoft\windows nt\currentversion\windows

Opens key: $HKLM \verb|\system| current control \verb|\sa| fips algorithm policy$

Opens key: HKLM\system\currentcontrolset\control\lsa

Opens key:

Opens key: HKLM\software\wow6432node\microsoft\ole

Opens key: HKLM\software\microsoft\ole

HKLM\software\wow6432node\microsoft\ole\tracing Opens kev: Opens key: HKLM\software\microsoft\ole\tracing

Opens key: HKLM\system\currentcontrolset\control\computername

Opens key: ${\tt HKLM \ } system \verb|\ control \ \verb|\ computername \ \verb|\ active \ computername \ |}$

Opens key: HKLM\system\setup

Opens key: HKLM\software\microsoft\windows nt\currentversion\image file execution

options\cmd.exe

Opens key: HKLM\system\currentcontrolset\control\session manager\appcertdlls Opens key: HKLM\system\currentcontrolset\control\session manager\appcompatibility Opens key: HKLM\software\wow6432node\policies\microsoft\windows\appcompat

Opens key: HKLM\software\policies\microsoft\windows\appcompat Opens key: HKCU\software\microsoft\windows nt\currentversion

HKCU\software\microsoft\windows nt\currentversion\appcompatflags\layers Opens key:

Opens key: HKLM\software\wow6432node\microsoft\windows

nt\currentversion\appcompatflags

HKLM\software\wow6432node\microsoft\windows Opens key:

nt\currentversion\appcompatflags\custom\cmd.exe

Opens key: HKCU\software\microsoft\windows\currentversion\explorer\shell folders $\label{thm:local_hammon_hammon} \begin{tabular}{ll} HKLM \label{thm:local_hammon} software \end{tabular} in the local hammon \begin{tabular}{ll} HKLM \end{tabular} software \end{tabular} in the local hammon \begin{tabular}{ll} HKLM \end{tabular} software \end{tabular} in the local hammon \begin{tabular}{ll} HKLM \end{tabular} software \end{tabular} in the local hammon \begin{tabular}{ll} HKLM \end{tabular} software \end{tabular} in the local hammon \begin{tabular}{ll} HKLM \end{tabular} software \e$ Opens key:

HKLM\software\microsoft\windows Opens key:

nt\currentversion\appcompatflags\custom\cmd.exe

HKLM\software\microsoft\windows nt\currentversion\image file execution Opens key:

options\conhost.exe

Opens key: HKLM\software\microsoft\windows\currentversion\sidebyside Opens key: HKLM\system\currentcontrolset\control\error message instrument\ Opens key: HKLM\system\currentcontrolset\control\error message instrument Opens kev: HKLM\software\microsoft\windows nt\currentversion\gre_initialize

Opens key: HKLM\software\microsoft\windows nt\currentversion\compatibility32 Opens key: HKLM\software\microsoft\windows nt\currentversion\ime compatibility Opens key: HKLM\system\currentcontrolset\control\cmf\config HKLM\software\microsoft\windows nt\currentversion\windows Opens key: Opens key: HKLM\software\microsoft\oleaut Opens key: HKLM\software\microsoft\windows nt\currentversion\console\truetypefont HKLM\software\microsoft\windows nt\currentversion\console\fullscreen Opens key: HKCU\console Opens key: Opens key: HKCU\console\ Opens key: HKLM\software\policies\microsoft\sqmclient\windows HKLM\software\microsoft\samclient\windows Opens key: Opens key: Opens key: HKLM\system\currentcontrolset\control\session manager Opens key: HKCU\console\%systemroot%_system32_cmd.exe Opens key: HKCU\console\%systemroot%\system32\cmd.exe Opens key: HKLM\system\currentcontrolset\control\nls\extendedlocale Opens kev: HKLM\svstem\currentcontrolset\control\nls\locale Opens key: HKLM\system\currentcontrolset\control\nls\locale\alternate sorts Opens key: HKLM\system\currentcontrolset\control\nls\language groups Opens key: Opens key: HKCU\software\microsoft\windows\currentversion\directmanipulation Opens key: HKLM\software\microsoft\ctf\compatibility\conhost.exe Opens kev: HKLM\software\microsoft\windows\windows error reporting\wmr Opens key: HKLM\software\microsoft\windows\currentversion\sidebyside\assemblystorageroots HKLM\software\microsoft\windows\currentversion\policies\explorer Opens key: Opens key: HKCU\software\microsoft\windows\currentversion\policies\explorer Opens key: HKCU\software\policies\microsoft\windows\system $HKLM \setminus software \setminus wow 6432 node \setminus microsoft \setminus command processor$ Opens key: Opens key: HKCU\software\microsoft\command processor Opens key: HKLM\software\microsoft\windows nt\currentversion\image file execution options\ping.exe HKLM\software\wow6432node\microsoft\windows Opens key: nt\currentversion\appcompatflags\custom\ping.exe HKLM\software\microsoft\windows Opens key: nt\currentversion\appcompatflags\custom\ping.exe Opens key: HKLM\software\microsoft\windows nt\currentversion\image file execution options\reg.exe HKLM\software\wow6432node\microsoft\windows Opens key: nt\currentversion\appcompatflags\custom\reg.exe HKLM\software\microsoft\windows Opens key: nt\currentversion\appcompatflags\custom\reg.exe HKLM\system\currentcontrolset\services\winsock2\parameters Opens kev: Opens key: HKLM\system\currentcontrolset\services\winsock2\parameters\appid_catalog Opens kev: HKLM\system\currentcontrolset\services\winsock2\parameters\appid_catalog\111cc00d-1058ed91 Opens key: Opens kev: HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9 Opens kev: HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\00000005 Opens key: HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries Opens kev: HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\00000000001 Opens kev: Opens key: HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000003 Opens key: Opens key: HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000005 Opens key: Opens key: Opens key: HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000008 Opens key: HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000000 Opens kev:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5 Opens key: HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\00000014 Opens kev:

Opens key:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries Opens key:

 $HKLM \ system \ (current control set \ services \ winsock 2 \ parameters \ name space_catalog 5 \ (catalog_entries \ 0000000000001)$ Opens key:

```
HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000000
  Opens kev:
HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000003
  Opens key:
Opens key:
HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\0000000000005
  Opens key:
HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000006
  Opens key:
                                    HKLM\system\currentcontrolset\services\tcpip\parameters
                                    HKCU\software\microsoft\windows\currentversion\policies\system
  Opens key:
  Opens key:
                                    HKLM\software\wow6432node\microsoft\rpc
  Opens key:
                                    HKLM\software\microsoft\rpc
  Opens key:
                                    HKLM\software\wow6432node\policies\microsoft\windows nt\rpc
  Opens key:
                                    HKLM\software\policies\microsoft\windows nt\rpc
  Opens key:
                                    HKLM\software\wow6432node\microsoft\windows\windows error reporting\wmr
  Opens kev:
                                    HKLM\svstem\currentcontrolset\services\winsock\parameters
  Opens key:
                                    HKLM\system\currentcontrolset\services\tcpip\parameters\winsock
  Opens key:
                                    HKLM\system\currentcontrolset\services\winsock\setup migration\providers
  Opens key:
                                    {\tt HKLM \ } system \verb| current control set \verb| services \verb| winsock \verb| setup | \\
migration\providers\tcpip
  Opens key:
                                    HKLM\software\microsoft\windows nt\currentversion\image file execution
options\citrixreciever.exe
                                    HKLM\software\microsoft\windows
  Opens key:
nt\currentversion\appcompatflags\custom\citrixreciever.exe
                                    HKLM\system\currentcontrolset\control\terminal server[tsappcompat]
  Queries value:
  Queries value:
                                    HKLM\system\currentcontrolset\control\terminal server[tsuserenabled]
  Queries value:
HKLM\software\policies\microsoft\windows\safer\codeidentifiers[transparentenabled]
                                    HKLM\system\currentcontrolset\control\nls\customlocale[empty]
  Queries value:
  Oueries value:
HKLM\system\currentcontrolset\control\nls\language[installlanguagefallback]
                                    \label{lem:hklm} \verb+Kklm \system \current control \ \verb+wui \uilanguages \en-us[type]
  Queries value:
                                    HKLM\system\currentcontrolset\control\mui\uilanguages\en-
  Queries value:
us[alternatecodepage]
  Queries value:
                                    HKCU\control panel\desktop[preferreduilanguages]
  Queries value:
                                    HKCU\control panel\desktop\muicached[machinepreferreduilanguages]
  Oueries value:
HKLM\system\currentcontrolset\control\nls\sorting\versions[]
  Queries value:
                                    {\tt HKCU \ } software \verb|\ microsoft \verb|\ windows|
  Oueries value:
nt\currentversion\appcompatflags[showdebuginfo]
                                    HKLM\software\microsoft\windows nt\currentversion\image file execution
  Oueries value:
options\dllnxoptions[usefilter]
                                    HKLM\software\microsoft\windows nt\currentversion\image file execution
  Oueries value:
options\dllnxoptions[d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe]
  Oueries value:
                                    HKLM\software\microsoft\windows
nt\currentversion\gre_initialize[disablemetafiles]
                                    HKLM\software\wow6432node\microsoft\windows
  Oueries value:
nt \verb|\currentversion| compatibility 32[d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33]| the substitution of the substitution o
                                    HKLM\software\wow6432node\microsoft\windows
  Oueries value:
nt\currentversion\windows[loadappinit dlls]
  Queries value:
                                    HKLM\system\currentcontrolset\control\lsa\fipsalgorithmpolicy[enabled]
                                    HKLM\system\currentcontrolset\control\lsa[fipsalgorithmpolicy]
  Queries value:
  Oueries value:
                                    HKLM\software\microsoft\ole[pageallocatorusesystemheap]
  Queries value:
                                    HKLM\software\microsoft\ole[pageallocatorsystemheapisprivate]
                                    HKLM\software\microsoft\ole[aggressivemtatesting]
  Oueries value:
  Oueries value:
HKLM\system\currentcontrolset\control\computername\activecomputername[computername]
                                    HKLM\system\setup[oobeinprogress]
  Queries value:
  Queries value:
                                    HKLM\system\setup[systemsetupinprogress]
  Oueries value:
\label{lem:hklm} \begin{tabular}{ll} HKLM \end{tabular} Software \policies \mbox{$microsoft\windows\safer\code} identifiers \parbox{$[authenticodeenabled]$} \end{tabular}
                                    HKCU\software\microsoft\windows\currentversion\explorer\shell
  Oueries value:
folders[cache]
  Oueries value:
HKLM\software\microsoft\windows\currentversion\sidebyside[preferexternalmanifest]
  Oueries value:
                                    HKLM\software\microsoft\windows
nt\currentversion\compatibility32[conhost]
                                    HKLM\system\currentcontrolset\control\cmf\config[system]
  Oueries value:
  Queries value:
                                    HKLM\software\microsoft\windows
nt\currentversion\windows[loadappinit_dlls]
  Oueries value:
                                    HKCU\console[screencolors]
  Oueries value:
                                    HKCU\console[popupcolors]
  Queries value:
                                    HKCU\console[insertmode]
  Queries value:
                                    HKCU\console[quickedit]
  Queries value:
                                    HKCU\console[codepage]
                                    HKCU\console[screenbuffersize]
  Oueries value:
  Oueries value:
                                    HKCU\console[windowsize]
  Oueries value:
                                    HKCU\console[windowposition]
  Queries value:
                                    HKCU\console[fontsize]
```

Oueries value:

Queries value:

HKCU\console[fontfamilv]

HKCU\console[fontweight]

```
Oueries value:
                                     HKCU\console[cursorsize]
  Oueries value:
                                     HKCU\console[historybuffersize]
  Queries value:
                                     HKCU\console[numberofhistorybuffers]
                                     HKCU\console[historynodup]
  Oueries value:
  Queries value:
                                     HKCU\console[colortable00]
  Oueries value:
                                     HKCU\console[colortable01]
  Oueries value:
                                     HKCU\console[colortable021
  Oueries value:
                                     HKCU\console[colortable03]
  Oueries value:
                                     HKCU\console[colortable04]
  Oueries value:
                                     HKCU\console[colortable051
  Queries value:
                                     HKCU\console[colortable06]
  Oueries value:
                                     HKCU\console[colortable07]
  Oueries value:
                                     HKCU\console[colortable08]
  Queries value:
                                     HKCU\console[colortable09]
  Queries value:
                                     HKCU\console[colortable10]
  Oueries value:
                                     HKCU\console[colortable111
  Queries value:
                                     HKCU\console[colortable12]
  Queries value:
                                     HKCU\console[colortable13]
  Oueries value:
                                     HKCU\console[colortable14]
  Queries value:
                                     HKCU\console[colortable15]
  Queries value:
                                     HKCU\console[loadconime]
                                     HKCU\console[extendededitkev]
  Oueries value:
  Queries value:
                                     HKCU\console[extendededitkeycustom]
  Queries value:
                                     HKCU\console[worddelimiters]
  Queries value:
                                     HKCU\console[trimleadingzeros]
                                     HKCU\console[enablecolorselection]
  Queries value:
  Queries value:
                                     HKCU\console[scrollscale]
                                     HKLM\software\microsoft\sqmclient\windows[ceipenable]
  Oueries value:
                                     HKLM\system\currentcontrolset\control\nls\sorting\versions[000602xx]
  Queries value:
                                     HKLM\system\currentcontrolset\control\session
  Oueries value:
manager[safeprocesssearchmode]
                                     HKLM\system\currentcontrolset\control\session manager[safedllsearchmode]
  Queries value:
  Queries value:
                                     HKLM\system\currentcontrolset\control\nls\customlocale[en-us]
  Oueries value:
                                     HKLM\system\currentcontrolset\control\nls\extendedlocale[en-us]
                                     HKLM \verb|\system| current controlset \verb|\control| nls \verb|\locale| [00000409] 
  Queries value:
  Oueries value:
                                     HKLM\svstem\currentcontrolset\control\nls\language groups[1]
  Oueries value:
                                     HKLM\system\currentcontrolset\control\nls\codepage\eudccoderange[1252]
  Queries value:
                                     HKLM\software\microsoft\windows\windows error reporting\wmr[disable]
  Queries value:
HKLM \ software \ microsoft \ windows \ current version \ policies \ explorer [turn off spianimations]
                                     HKLM\software\wow6432node\microsoft\command processor[disableunccheck]
  Queries value:
                                     Oueries value:
  Queries value:
                                     HKLM\software\wow6432node\microsoft\command processor[delayedexpansion]
                                     \label{local-observable} HKLM \label{local-observable} IKLM \lab
  Oueries value:
                                     HKLM\software\wow6432node\microsoft\command processor[completionchar]
  Queries value:
  Queries value:
                                    HKLM\software\wow6432node\microsoft\command
processor[pathcompletionchar]
                                    HKLM\software\wow6432node\microsoft\command processor[autorun]
  Oueries value:
  Queries value:
                                     HKCU\software\microsoft\command processor[disableunccheck]
  Oueries value:
                                     HKCU\software\microsoft\command processor[enableextensions]
  Oueries value:
                                     HKCU\software\microsoft\command processor[delayedexpansion]
  Queries value:
                                     HKCU\software\microsoft\command processor[defaultcolor]
  Queries value:
                                     HKCU\software\microsoft\command processor[completionchar]
                                     \label{lem:hkcu} \verb+KKCU\+ software \verb+\microsoft\+ command processor[pathcompletionchar]
  Oueries value:
  Queries value:
                                     HKCU\software\microsoft\command processor[autorun]
  Oueries value:
                                     HKLM\system\currentcontrolset\control\nls\sorting\ids[en-us]
  Oueries value:
                                     HKLM\system\currentcontrolset\control\nls\sorting\ids[en]
  Oueries value:
HKLM\system\currentcontrolset\services\winsock2\parameters[winsock_registry_version]
  Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters[namespace_callout]
  Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9[serial_access_num]
  Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9[next_catalog_entry_id]
  Queries value:
Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\00000000001[packedcatalogitem]
  Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000002[packedcatalogitem]
  Oueries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000003[packedcatalogitem]
  Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\00000000004[packedcatalogitem]
  Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000005[packedcatalogitem]
  Oueries value:
```

 $HKLM \ system \ current control set \ services \ winsock 2 \ parameters \ protocol_catalog 9 \ catalog_entries \ 0000000000006 \ [packed catalog item]$

 $HKLM \ system \ (current control set \ services \ winsock 2 \ parameters \ protocol_catalog \ entries \ (000000000007 [packed catalog item]) \ details \ d$

Oueries value:

Queries value:

Queries value:

HKCU\console[facename]

- HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000008[packedcatalogitem] Oueries value:

- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5[serial_access_num]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5[num_catalog_entries]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000001[librarypath] Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000001[displaystring]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000001[providerid] Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000001[addressfamily]
 Queries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000001[supportednamespace]
 Oueries value:
- $HKLM \ system \ current control set \ services \ winsock 2 \ parameters \ name space_catalog 5 \ catalog_entries \ 000000000001 \ [enabled] \ Oueries \ value:$
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000001[version] Oueries value:
- $HKLM \system \current control set \services \winsock 2 \parameters \namespace_catalog 5 \catalog_entries \$
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000001[providerinfo] Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000002[librarypath]
 Queries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000002[displaystring]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000002[providerid]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000002[addressfamily]
 Queries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\0000000000002[supportednamespace]
 Queries value:
- $\label{lem:hklmsystem} HKLM \system \current control set \services \winsock 2 \parameters \namespace_catalog 5 \catalog_entries \namespace_catal$
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000002[version]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000002[storesserviceclassinfo] Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000002[providerinfo] Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000003[librarypath]
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000003[displaystring]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000003[providerid]
 Queries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000003[addressfamily]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000003[supportednamespace]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000003[enabled]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000003[version]
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000003[storesserviceclassinfo] Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000003[providerinfo]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000004[librarypath]
 Queries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000004[displaystring] Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000004[providerid]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000004[addressfamily]
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000004[supportednamespace]
 Queries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000004[enabled]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000004[version]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000004[storesserviceclassinfo] Queries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000004[providerinfo]
 Oueries value:

Oueries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000005[displaystring]
Oueries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000005[providerid]
Oueries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000005[addressfamily]
Oueries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000005[supportednamespace]
Oueries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000005[enabled]
Oueries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000005[version]

Queries value: HKLM\software\wow6432node\microsoft\windows

nt\currentversion\compatibility32[reg]

Queries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000005[storesserviceclassinfo]
 Oueries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000005[providerinfo] Oueries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000006[librarypath]
Queries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000006[displaystring]
Oueries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000006[providerid]
 Oueries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000006[addressfamily]

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000006[supportednamespace]
Queries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000006[enabled]
Queries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000006[version]

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000006[storesserviceclassinfo]
 Oueries value:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000006[providerinfo]

Queries value:

HKLM\system\currentcontrolset\services\winsock2\parameters[ws2_32numhandlebuckets]

Queries value: HKLM\system\currentcontrolset\services\tcpip\parameters[defaulttt1]

Queries value: HKLM\software\microsoft\rpc[maxrpcsize]
Queries value: HKLM\software\microsoft\rpc[idletimerwindow]

Queries value:

HKLM\software\wow6432node\microsoft\windows\currentversion\run[citrixxenappreciever]
Queries value: HKLM\software\wow6432node\microsoft\windows\windows error

reporting\wmr[disable]

Queries value: HKLM\system\currentcontrolset\services\winsock\parameters[transports]
Queries value: HKLM\system\currentcontrolset\services\tcpip\parameters\winsock[mapping]

Queries value: HKLM\system\currentcontrolset\services\winsock\setup

migration\providers\tcpip[winsock 2.0 provider id]

Queries value:

Oueries value:

Queries value

Queries value: HKLM\software\microsoft\windows nt\currentversion\image file execution

options\dllnxoptions[citrixreciever.exe]

Queries value: HKLM\software\wow6432node\microsoft\windows

nt\currentversion\compatibility32[citrixreciever]

Sets/Creates value:

HKLM\software\wow6432node\microsoft\windows\currentversion\run[citrixxenappreciever]