Malware Analysis Appliance by Blue Coat Systems, Inc.

Task Details

Host: mag2, Sample ID: 630, Task ID: 2467

Task ID: 2467 Risk Level: 10

Date Processed: 2016-02-22 05:33:17 (UTC)

Processing Time: 62.34 seconds IntelliVM Virtual Environment:

Execution Arguments:

c:\windows\temp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe"

Sample ID: 630 basic Type: Owner: admin

d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33 Label:

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

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

6a2ea24ed959ef96d270af5cdc2f70a7 MD5:

SHA256: d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33

Description:

Pattern Matching Results

5 Modifies Windows Registry from the command line

2 PE: Nonstandard section

6 Modifies registry autorun entries

8 Creates Suspicious Events: Localhost Ping

5 Adds autostart object

6 PE: Jumps to the last section near the entrypoint

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

C:\windows\temp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe ["C:\windows\temp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe"]

C:\Windows\system32\cmd.exe [cmd.exe /c reg add

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

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

C:\Windows\system32\cmd.exe [cmd.exe /c cmd.exe /c cmd.exe /c cmd.exe /c Creates process:

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

C:\Windows\system32\cmd.exe [cmd.exe /c ping 127.0.0.1 & del "C:\windows\temp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe"]

Creates process: C:\Windows\system32\PING.EXE [ping 127.0.0.1]

C:\Windows\system32\reg.exe [reg add Creates process:

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

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

C:\Windows\system32\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\system32\cmd.exe [cmd.exe /c cmd.exe /c cmd.exe /c cmd.exe /c "C:\ProgramData\CitrixReciever\CitrixReciever.exe"]

Creates process: C:\Windows\system32\cmd.exe [cmd.exe /c cmd.exe /c cmd.exe /c

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

Creates process: C:\Windows\system32\cmd.exe [cmd.exe /c cmd.exe /c

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

Creates process: C:\Windows\system32\cmd.exe [cmd.exe /c

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

Creates process:

C:\ProgramData\CitrixReciever\CitrixReciever.exe

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

Terminates process:

C:\Windows\Temp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe

Terminates process: C:\Windows\System32\reg.exe Terminates process: C:\Windows\System32\cmd.exe Terminates process: C:\Windows\System32\PING.EXE

Named Object Events

Creates mutex: \Sessions\1\BaseNamedObjects\DBWinMutex Creates event: \BaseNamedObjects\ConsoleEvent-0x00000A10 Creates event: \BaseNamedObjects\ConsoleEvent-0x00000A18 \BaseNamedObjects\ConsoleEvent-0x00000A20 Creates event:

File System Events

C:\ProgramData\CitrixReciever Creates: C:\ProgramData\CitrixReciever\CitrixReciever.exe Opens: C:\Windows\Prefetch\D269F3AF57167A25A289BC6FD3375-30096F52.pf Opens: C:\Windows\System32 Opens: C:\Windows\System32\sechost.dll Opens: C:\Windows\System32\imm32.dll Opens: Opens: C:\ProgramData\CitrixReciever\CitrixReciever.exe Opens: C:\Windows\Temp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe Opens: C:\windows\temp\cmd.exe Opens: C:\Windows\System32\cmd.exe Opens: C:\Windows\System32\apphelp.dll Opens: C:\Windows\Prefetch\CMD.EXE-4A81B364.pf Opens: Opens: C:\Program Files Opens: C:\Program Files\Adobe Opens: C:\Program Files\Adobe\Reader 9.0 Opens: C:\Program Files\Adobe\Reader 9.0\Reader C:\Windows Opens: Opens: C:\Windows\Branding Opens: C:\Windows\Branding\Basebrd ${\tt C:\Windows\Branding\Basebrd\en-US}$ Opens: Opens: C:\Windows\Globalization Opens: C:\Windows\Globalization\Sorting Opens: C:\Windows\System32\en-US Opens: C:\Windows\System32\ntdll.dll Opens: C:\Windows\System32\kernel32.dll Opens: C:\Windows\System32\apisetschema.dll Opens: C:\Windows\System32\KernelBase.dll C:\Windows\System32\locale.nls Opens: Opens: C:\Windows\System32\msvcrt.dll Opens: C:\Windows\System32\winbrand.dll Opens: C:\Windows\System32\user32.dll Opens: C:\Windows\System32\gdi32.dll Opens: C:\Windows\System32\lpk.dll C:\Windows\System32\usp10.dll Opens: Opens: C:\Windows\System32\msctf.dll C:\Windows\System32\en-US\cmd.exe.mui Opens: Opens: C:\Windows\Branding\Basebrd\basebrd.dll Opens: C:\Windows\Branding\Basebrd\en-US\basebrd.dll.mui Opens: C:\Windows\Globalization\Sorting\SortDefault.nls C:\Program Files\Adobe\Reader 9.0\Reader\icucnv36.dll Opens: Opens: C:\Windows\System32\PING.EXE Opens: C:\Windows\AppPatch\sysmain.sdb C:\Windows\System32\reg.exe Opens: Opens: C:\Windows\system32\ui\SwDRM.dll Opens: C:\Windows\Prefetch\REG.EXE-E7E8BD26.pf C:\Windows\Prefetch\PING.EXE-7E94E73E.pf Opens: Opens: C:\Windows\System32\IPHLPAPI.DLL Opens: C:\Windows\System32\winnsi.dll Opens: C:\Windows\System32\en-US\ping.exe.mui Opens: C:\Windows\System32\en-US\reg.exe.mui Opens: C:\Windows\System32\en-US\KernelBase.dll.mui Opens: C:\Windows\System32\mswsock.dll Opens: C:\Windows\System32\wshqos.dll Opens: C:\Windows\System32\WSHTCPIP.DLL C:\Windows\System32\wship6.dll Opens: Opens: C:\ProgramData\CitrixReciever Opens: C:\ProgramData\CitrixReciever\ui\SwDRM.dll Opens: C:\Windows\Prefetch\CITRIXRECIEVER.EXE-42285A69.pf Opens: C:\Windows\Temp Writes to: C:\ProgramData\CitrixReciever\CitrixReciever.exe Reads from: C:\Windows\Temp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe Reads from: C:\Windows\Prefetch\CMD.EXE-4A81B364.pf Reads from: C:\Windows\System32\PING.EXE Reads from: C:\ProgramData\CitrixReciever\CitrixReciever.exe C:\Windows\Temp\d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33.exe

Windows Registry Events

·····s································	
HKLM\software\microsoft\windows\currentversion\run	
HKLM\system\currentcontrolset\control\session manager	
<pre>HKLM\system\currentcontrolset\control\terminal server</pre>	
<pre>HKLM\system\currentcontrolset\control\safeboot\option</pre>	
<pre>HKLM\system\currentcontrolset\control\srp\gp\dll</pre>	
<pre>HKLM\software\policies\microsoft\windows\safer\codeidentifiers</pre>	
<pre>HKCU\software\policies\microsoft\windows\safer\codeidentifiers</pre>	
HKCU\	

```
HKCU\control panel\desktop\muicached\machinelanguageconfiguration
  Opens key:
  Opens key:
                                 HKLM\software\policies\microsoft\mui\settings
                                 HKCU\software\policies\microsoft\control panel\desktop
  Opens kev:
  Opens key:
                                 HKCU\control panel\desktop\languageconfiguration
  Opens key:
                                 HKCU\control panel\desktop
  Opens key:
                                 HKCU\control panel\desktop\muicached
  Opens key:
                                 HKLM\software\microsoft\windows\currentversion\sidebyside
  Opens key:
                                 HKLM\system\currentcontrolset\control\nls\sorting\versions
                                 HKLM\system\currentcontrolset\control\error message instrument\
  Opens key:
                                 HKLM\system\currentcontrolset\control\error message instrument
  Opens key:
  Opens key:
                                 HKLM\software\microsoft\windows nt\currentversion\gre_initialize
  Opens key:
                                 \label{lem:hklm} \verb+Kklm\+ software\+ microsoft\+ windows nt\+ current version\+ compatibility 32
  Opens key:
                                 HKLM\software\microsoft\windows nt\currentversion\ime compatibility
                                 HKLM\
  Opens key:
  Opens key:
                                 HKLM\software\microsoft\windows nt\currentversion\windows
  Opens key:
                                 HKLM\software\microsoft\windows nt\currentversion\diagnostics
                                 HKLM\software\microsoft\ole
  Opens kev:
  Opens key:
                                 HKLM\software\microsoft\ole\tracing
  Opens key:
                                 HKLM\software\microsoft\oleaut
  Opens key:
                                 HKLM\system\currentcontrolset\services\crypt32
  Opens key:
                                 HKLM\software\microsoft\windows\currentversion\internet settings
  Opens key:
                                 HKLM\software\policies\microsoft\windows\currentversion\internet
settings
  Opens key:
                                 HKLM\system\currentcontrolset\control\computername
  Opens key:
                                 HKLM\system\currentcontrolset\control\computername\activecomputername
  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\policies\microsoft\windows\appcompat
  Opens key:
                                 HKCU\software\microsoft\windows nt\currentversion
  Opens key:
                                 HKCU\software\microsoft\windows nt\currentversion\appcompatflags\layers
  Opens key:
                                 HKLM\software\microsoft\windows nt\currentversion\appcompatflags
  Opens kev:
                                 HKLM\software\microsoft\windows
nt\currentversion\appcompatflags\custom\cmd.exe
  Opens key:
                                 HKLM\software\microsoft\windows nt\currentversion\image file execution
options
  Opens key:
                                 HKLM\system\currentcontrolset\control\cmf\config
  Opens key:
                                 HKCU\software\policies\microsoft\windows\system
                                 HKLM\software\microsoft\command processor
  Opens key:
                                 HKCU\software\microsoft\command processor
  Opens key:
  Opens key:
                                 HKLM\system\currentcontrolset\control\nls\customlocale
                                 Opens key:
  Opens key:
                                 HKLM\system\currentcontrolset\control\nls\locale
  Opens key:
                                 HKLM\system\currentcontrolset\control\nls\locale\alternate sorts
  Opens key:
                                 \label{lem:hklm} \verb+ HKLM \ system \ current control \ \ language groups
  Opens key:
                                 HKLM\software\microsoft\windows nt\currentversion\image file execution
options\ping.exe
                                 \label{lem:hkcu} \verb+KKCU \software \verb+ microsoft \verb+ windows \verb+ current version \verb+ explorer \verb+ shell folders + of the last of t
  Opens key:
  Opens key:
                                 HKLM\software\microsoft\windows nt\currentversion\appcompatflags\layers
  Opens key:
                                 HKLM\software\microsoft\windows
nt\currentversion\appcompatflags\custom\ping.exe
                                 HKLM\software\microsoft\windows nt\currentversion\image file execution
  Opens key:
options\reg.exe
                                 HKLM\software\microsoft\windows
  Opens key:
nt\currentversion\appcompatflags\custom\reg.exe
                                 HKLM\software\policies\microsoft\sqmclient\windows
  Opens key:
                                 HKLM\software\microsoft\sqmclient\windows
  Opens key:
  Opens key:
                                 HKLM\system\currentcontrolset\services\winsock2\parameters
  Opens key:
                                 HKLM\system\currentcontrolset\services\winsock2\parameters\appid_catalog
  Opens key:
HKLM\system\currentcontrolset\services\winsock2\parameters\appid_catalog\143b4853-1058ed91
  Opens kev:
HKLM\system\currentcontrolset\services\winsock2\parameters\appid_catalog\143b4853
  Opens kev:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9
  Opens key:
Opens kev:
HKLM \ system \ current controls et \ services \ winsock 2 \ parameters \ protocol\_catalog 9 \ catalog\_entries
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol catalog9\catalog entries\00000000001
  Opens key:
                                 HKCU\software\microsoft\windows\currentversion\policies\system
  Opens key:
Opens key:
HKLM\software\microsoft\windows\windows error reporting\wmr
  Opens kev:
  Opens key:
Opens kev:
```

Opens key:

HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000000

HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000000

HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000010
Opens kev:

 $\label{lem:hklmsystem} HKLM \system \current controls et \services \winsock 2 \parameters \protocol_catalog 9 \catalog_entries \000000000011 \parameters \end{substitute} Opens key:$

HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000012
Opens key:

HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000013
Opens kev:

 $\label{lem:hklmsystem} HKLM \system \current controls et \services \winsock 2 \parameters \protocol_catalog 9 \catalog_entries \000000000014 \parameters \end{substitute} Opens key:$

HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000015
Opens key:

HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000016
Opens key:

HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000017
Opens key:

HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000018
Opens kev:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5

Opens key:

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\0000000c
Opens kev:

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

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000001
Opens key:

 $Opens\;key: \\ \qquad \qquad \text{HKLM} \\ system \\ \texttt{current} \\ controlset \\ \texttt{services} \\ \texttt{tcpip} \\ \texttt{parameters} \\$

Opens key: HKLM\software\microsoft\rpc

Opens key: HKLM\software\policies\microsoft\windows nt\rpc

Opens key: HKLM\system\currentcontrolset\services\winsock\parameters
Opens key: HKLM\system\currentcontrolset\services\tcpip6\parameters\winsock
Opens key: HKLM\system\currentcontrolset\services\psched\parameters\winsock
Opens key: HKLM\system\currentcontrolset\services\winsock\setup migration\providers

Opens key: HKLM\system\currentcontrolset\services\winsock\setup

 $\verb|migration\providers\psched|\\$

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

options\citrixreciever.exe

Opens key: HKLM\software\microsoft\windows nt\currentversion\appcompatflags\custom\citrixreciever.exe

 $\label{thm:current} Queries \ value: \\ HKLM\system\currentcontrolset\control\session$

manager[cwdillegalindllsearch]

Queries value: HKLM\system\currentcontrolset\control\terminal server[tsappcompat]
Queries value: HKLM\system\currentcontrolset\control\terminal server[tsuserenabled]
Oueries value:

 $HKLM \setminus software \setminus policies \setminus microsoft \setminus windows \setminus safer \setminus code identifiers [transparentenabled]$

Queries value: HKCU\control panel\desktop[preferreduilanguages]

Queries value: HKCU\control panel\desktop\muicached[machinepreferreduilanguages]

Queries value:

HKLM\software\microsoft\windows\currentversion\sidebyside[preferexternalmanifest]
Queries value: HKLM\system\currentcontrolset\control\nls\sorting\versions[]

Queries value: HKLM\system\currentcontrolset\control\session manager[safedllsearchmode]

Queries value: HKLM\software\microsoft\windows nt\currentversion\gre_initialize[disablemetafiles]
Queries value: HKLM\software\microsoft\windows

 $nt \verb| current version \verb| compatibility 32[d269f3af57167a25a289bc6fd3375c3f03d79044d9569e1de63a90c70fb7be33]| to the following the following$

Queries value: HKLM\software\microsoft\windows

nt\currentversion\windows[loadappinit_dlls]

 Queries value:
 HKLM\software\microsoft\ole[pageallocatorusesystemheap]

 Queries value:
 HKLM\software\microsoft\ole[pageallocatorsystemheapisprivate]

 Queries value:
 HKLM\system\currentcontrolset\services\crypt32[debugheapflags]

 Queries value:
 HKLM\software\microsoft\windows\currentversion\internet

settings[disableimprovedzonecheck]

Queries value: HKLM\software\policies\microsoft\windows\currentversion\internet

settings[security_hklm_only]

Queries value:

```
HKLM\system\currentcontrolset\control\computername[activecomputername]
  Oueries value:
                                  HKLM\system\setup[oobeinprogress]
  Queries value:
                                  HKLM\system\setup[systemsetupinprogress]
  Queries value:
Queries value:
                                  HKLM\software\microsoft\windows nt\currentversion\image file execution
options[disablelocaloverride]
                                 HKLM\software\microsoft\windows nt\currentversion\compatibility32[cmd]
  Oueries value:
  Oueries value:
                                  HKLM\system\currentcontrolset\control\cmf\config[system]
  Queries value:
                                  HKLM\software\microsoft\command processor[disableunccheck]
  Oueries value:
                                  HKLM\software\microsoft\command processor[enableextensions]
  Queries value:
                                  HKLM\software\microsoft\command processor[delayedexpansion]
  Oueries value:
                                  HKLM\software\microsoft\command processor[defaultcolor]
  Oueries value:
                                  HKLM\software\microsoft\command processor[completionchar]
  Queries value:
                                  HKLM\software\microsoft\command processor[pathcompletionchar]
  Queries value:
                                  HKLM\software\microsoft\command processor[autorun]
  Oueries value:
                                  HKCU\software\microsoft\command processor[disableunccheck]
  Queries value:
                                  HKCU\software\microsoft\command processor[enableextensions]
  Queries value:
                                  HKCU\software\microsoft\command processor[delayedexpansion]
                                  \label{lem:hkcu} \verb+KKCU \software \verb+microsoft \verb+\command processor[defaultcolor]+ \\
  Oueries value:
  Queries value:
                                  HKCU\software\microsoft\command processor[completionchar]
  Queries value:
                                  HKCU\software\microsoft\command processor[pathcompletionchar]
  Oueries value:
                                  HKCU\software\microsoft\command processor[autorun]
  Queries value:
                                  HKLM\system\currentcontrolset\control\nls\customlocale[en-us]
  Queries value:
                                  HKLM\system\currentcontrolset\control\nls\extendedlocale[en-us]
  Queries value:
                                  HKLM\system\currentcontrolset\control\nls\locale[00000409]
                                  HKLM\system\currentcontrolset\control\nls\language groups[1]
  Queries value:
  Queries value:
                                  HKCU\software\microsoft\windows\currentversion\explorer\shell
folders[cache]
                                  HKLM\software\microsoft\windows
  Queries value:
nt\currentversion\appcompatflags\layers[c:\windows\system32\ping.exe]
                                  HKLM\software\microsoft\windows nt\currentversion\compatibility32[ping]
  Queries value:
                                  HKLM\software\microsoft\sqmclient\windows[ceipenable]
  Queries value:
  Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters[namespace_callout]
  Queries value:
                                  HKLM\software\microsoft\windows nt\currentversion\compatibility32[reg]
  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]
  Oueries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9[num_catalog_entries]
  Oueries value:
HKLM \ system \ (current control set \ services \ winsock 2 \ parameters \ protocol\_catalog \ entries \ (000000000001[packed catalog item]) \ details \ de
  Queries value:
HKLM\software\microsoft\windows\currentversion\run[citrixxenappreciever]
  Oueries value:
  Queries value:
HKLM \ system \ (current control set \ services \ winsock 2 \ parameters \ protocol\_catalog \ entries \ (000000000003 \ [packed catalog item]
  Oueries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000004[packedcatalogitem]
  Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000005[packedcatalogitem]
  Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000006[packedcatalogitem]
                                  HKLM\software\microsoft\windows\windows error reporting\wmr[disable]
  Oueries value:
  Oueries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000007[packedcatalogitem]
  Queries value:
Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\00000000009[packedcatalogitem]
  Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000010[packedcatalogitem]
  Queries value:
HKLM \ system \ current control set \ services \ winsock 2 \ parameters \ protocol\_catalog \ entries \ 000000000011 \ [packed catalog item]
  Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000012[packedcatalogitem]
  Queries value:
HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000013[packedcatalogitem]
  Oueries value:
```

HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000014[packedcatalogitem]

HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000015[packedcatalogitem]

HKLM\system\currentcontrolset\services\winsock2\parameters\protocol_catalog9\catalog_entries\000000000016[packedcatalogitem]

 $HKLM \ system \ current control set \ services \ winsock 2 \ parameters \ protocol_catalog \ entries \ 000000000017 \ [packed catalog item]$

Queries value:

Queries value:

Oueries value:

Queries value:

Queries 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\00000000001[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\00000000001[providerid]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000001[addressfamily]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000001[supportednamespace]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000001[enabled] Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000001[version]
 Queries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000001[storesserviceclassinfo]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000001[providerinfo] Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000002[librarypath] Oueries value:
- $HKLM \ system \ (current control set \ services \ winsock 2 \ parameters \ names pace_catalog 5 \ catalog_entries \ 00000000000002 \ [displaystring] \ Queries \ value:$
- $\label{lem:hklmsystem} HKLM \system \current controlset \services \winsock 2 \parameters \namespace_catalog \shape \current \shape \s$
- 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]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000002[enabled]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000002[version]
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\0000000000002[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\00000000003[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\000000000003[providerid]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000003[addressfamily]
- 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]
 Queries value:
- $HKLM \ system \ current control set \ services \ winsock 2 \ parameters \ name space_catalog 5 \ catalog_entries \ 0000000000003 \ [version] \ Oueries \ value:$
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000003[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\000000000004[librarypath]
- 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]
 Queries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000004[supportednamespace]
 Oueries 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]
- $\label{lem:hklm} \begin{tabular}{ll} HKLM\system \current control set \services \winsock 2 \parameters \namespace_catalog 5 \catalog_entries \namespace_catalog 5 \catalog_entries \namespace] \end{tabular} \begin{tabular}{ll} Queries value: \namespace_catalog 5 \catalog_entries \namespace_catalog$
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\000000000004[providerinfo]
 Oueries value:
- HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000005[librarypath]
 Queries 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:

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\000000000005[version]
Oueries value:

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

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

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

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

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

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

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

HKLM\system\currentcontrolset\services\winsock2\parameters\namespace_catalog5\catalog_entries\00000000006[enabled]
Queries value:

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

 $HKLM \system \current control set \services \winsock 2 \parameters \namespace_catalog5 \catalog_entries \namespace_catalog5 \catalog3 \catalog5 \catalog6 \catalog6 \catalog6 \catalog6 \catalog6 \catalog6 \catalog6 \catalog6 \catalo$

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

Oueries value:

HKLM\system\currentcontrolset\services\winsock2\parameters[ws2_32spincount]

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

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

 $\label{thm:linear} Queries \ value: \\ HKLM \ system \ current controls et \ services \ winsock \ parameters [transports]$

Queries value:

HKLM\system\currentcontrolset\services\tcpip6\parameters\winsock[mapping]

Queries value:

HKLM\system\currentcontrolset\services\psched\parameters\winsock[mapping]
Queries value: HKLM\system\currentcontrolset\services\winsock\setup

migration\providers\psched[winsock 2.0 provider id]

Oueries value:

 $HKLM \setminus system \setminus current control set \setminus services \setminus psched \setminus parameters \setminus winsock [minsock addrlength]$

Queries value:

Queries value:

 $\label{thm:local_ham} \begin{tabular}{ll} HKLM \end{tabular} system \current control set \end{tabular} set \end{tabular} expected \end{tabular} and \end{tabular} is a simple control set \end{tabular} set \end{tabular} expected \end{tabular} is a simple control set \end{tabular} set \end{tabular} is a simple control set \end{tabular} set \end{tabular} expected \end{tabular} is a simple control set \end{tabular} set \end{tabular} set \end{tabular} expected \end{tabular} set \$

Queries value:

 $HKLM \setminus system \setminus current control set \setminus services \setminus psched \setminus parameters \setminus winsock [helperdllname]$

Queries value: HKLM\software\microsoft\windows

 $nt \verb|\currentversion| app compatflags \verb|\layers| [c:\programdata| citrix reciever| citrix reciever.exe]|$

Queries value: HKLM\software\microsoft\windows

nt\currentversion\compatibility32[citrixreciever]

Sets/Creates value: HKLM\software\microsoft\windows\currentversion\run[citrixxenappreciever]