



Juniper Networks Secure Access

Client-Side Changes Guide

Release 6.0

Juniper Networks, Inc.

1194 North Mathilda Avenue
Sunnyvale, CA 94089

USA

408-745-2000

www.juniper.net

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Client-Side Changes Guide

This guide lists the package file names used by the IVE to install client-side components, files the packages install and uninstall, and registry changes they make to the user's system. It also describes the rights that are required in order to install and run various Instant Virtual Network (IVE) client-side components. Topics in this section include:

- “Client-Side changes made by IVE applications” on page 1
- “Required rights to run and install applications” on page 29

Client-Side changes made by IVE applications

This section describes the components that the IVE uses to install and run its client-side applications. The following descriptions include the components' names, installer locations, and log directories, as well as registry changes that the components make during installation:

- “Juniper Installer Service” on page 2
- “Juniper Setup” on page 3
- “Host Checker” on page 7
- “Secure Virtual Workspace” on page 10
- “Cache Cleaner” on page 10
- “Secure Meeting” on page 12
- “Windows Secure Application Manager (WSAM)” on page 14
- “Java Secure Application Manager (JSAM)” on page 19
- “Network Connect and GINA” on page 21
- “Windows Terminal Services” on page 25
- “Citrix Terminal Services” on page 27

Juniper Installer Service

When installing a Windows-based IVE client application on a user's Windows system, the Juniper Installer Service deploys two files on the client machine:

- JuniperSetup.ocx
- NeoterisSetupService.exe (The IVE auto-starts this service on installation, then stops and removes it on uninstall.)

Package file and file location

The IVE loads the installer service files in the following locations:

- C:\Program files\Juniper Networks\Installer ServiceFolder\NeoterisSetupService.exe
- C:\WINNT\Downloaded Program Files\JuniperSetupSP1Control.ocx (Windows NT and 2000)
- C:\Windows\Downloaded Program Files\JuniperSetupSP1Control.ocx (Windows XP)

Additional files installed by package and file locations

Windows NT and Windows 2000

The Juniper Installer Service installs the following files in C:\WINNT\Downloaded Program Files:

- string_de.properties
- string_en.properties
- string_es.properties
- string_fr.properties
- string_ja.properties
- string_ko.properties
- string_zh.properties
- string_zh_cn.properties

Windows XP

The Juniper Installer Service installs the following files in C:\Windows\Downloaded Program Files:

- string_de.properties
- string_en.properties
- string_es.properties
- string_fr.properties

- string_ja.properties
- string_ko.properties
- string_zh.properties
- string_zh_cn.properties

Files remaining after uninstall

When the ActiveX control is deleted from within Internet Explorer, it leaves the following files behind:

- C:\Documents and Settings\\Application Data\Juniper Networks\Setup\JuniperSetupCtl.log
- C:\Program Files\Juniper Networks\Installer Service\NeoterisSetupService.log

Registry modifications

The installer package creates a registry key under HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\Neoteris Setup Service

Log file location

C:\Program Files\Juniper Networks\Installer Service

Juniper Setup

When a Windows user signs in to the IVE, the IVE attempts to install an ActiveX control (Juniper Setup) on the user's system. If the IVE successfully installs Juniper Setup, Juniper Setup manages the installation of Windows-based IVE client applications.

Package files

The IVE loads the following installer files.

- Windows XP and Windows 2000
 - JuniperSetupSP1.cab
 - JuniperSetup.exe.cab
- Windows Vista
 - JuniperSetupClient.cab
 - JuniperSetupClientInstaller.exe

Additional files installed by package and file locations

Windows XP and Windows 2000

The Juniper Setup installs the following files in C:\Documents and Settings\\Application Data\Juniper Networks\Setup:

- dsmmf.exe
- dsmmf.log
- dsmmfres_de.dll
- dsmmfres_es.dll
- dsmmfres_fr.dll
- dsmmfres_ja.dll
- dsmmfres_ko.dll
- dsmmfres_zh.dll
- dsmmfres_zh_cn.dll
- JuniperSetupApp.exe
- JuniperSetupApp.log
- JuniperSetupCtrl.log
- JuniperSetupDLL.dll
- JuniperSetupDLL.log
- NeoterisSetup.ocx
- setupResource_de.dll
- setupResource_en.dll
- setupResource_es.dll
- setupResource_fr.dll
- setupResource_ja.dll
- setupResource_ko.dll
- setupResource_zh.dll
- setupResource_zh_cn.dll
- string_de.properties
- string_en.properties
- string_es.properties
- string_fr.properties
- string_ja.properties
- string_ko.properties
- string_zh.properties
- string_zh_cn.properties

- uninstall.exe
- versionInfo.ini

Windows Vista

The Juniper Setup installs the following files in
C:\Users\\AppData\Roaming\Juniper Networks\Setup Client:

- dsmmfs.exe
- dsmmfres_de.dll
- dsmmfres_es.dll
- dsmmfres_fr.dll
- dsmmfres_ja.dll
- dsmmfres_ko.dll
- dsmmfres_zh.dll
- dsmmfres_zh_cn.dll
- JuniperExt.log
- JuniperSetupClient.exe
- JuniperSetupClient.ini
- JuniperSetupClient.log
- JuniperSetupClientDll.log
- JuniperSetupDll.dll
- JuniperSetupOCX.exe
- setupResource_de.dll
- setupResource_en.dll
- setupResource_es.dll
- setupResource_fr.dll
- setupResource_ja.dll
- setupResource_ko.dll
- setupResource_zh.dll
- setupResource_zh_cn.dll
- string_de.properties
- string_en.properties
- string_es.properties

- string_fr.properties
- string_ja.properties
- string_ko.properties
- string_zh.properties
- string_zh_cn.properties
- uninstall.exe

Registry modifications

For Windows Vista, the Juniper Setup creates the following registry keys in HKEY_CURRENT_USER\SOFTWARE\Microsoft\Internet Explorer\Low Rights\ElevationPolicy\{3E8944DC-79B5-4650-9C2E-83885548A119}:

- String: AppName. Set to “JuniperSetupClient.exe.”
- String AppPath. Set to “\$OUTDIR”
- String Policy. Set to “3”

Additionally, the Juniper Setup creates the following registry keys in HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\\${NEO_FULL_NAME}:

- String DisplayName. Set to “\${NEO_COMPANY_NAME} \${NEO_DISPLAY_NAME}”
- String UninstallString. Set to “\$INSTDIR\uninstall.exe”
- String StartupApp. Set to “\$INSTDIR\JuniperSetupClient.exe”
- String StopApp. Set to “\$INSTDIR\JuniperSetupClient.exe -stop”
- String DisplayVersion. Set to “\${NEO_SETUP_CLIENT_VERSION}”
- String Publisher. Set to “{NEO_COMPANY_NAME}”
- String URLInfoAbout. Set to “http://www.juniper.net”

Log file location

Windows XP and Windows 2000

- C:\Documents and Settings\\Application Data\Juniper Networks\

Windows Vista

- C:\Users\\AppData\Roaming\Juniper Networks\

For low-integrity processes, such as Internet Explorer 7, the ActiveX installer installs the following log files in C:\Users\\AppData\Local\Temp\Low:

- JuniperSetupClientCtrl.log

- JuniperSetupDll.log

Host Checker

Windows clients

To run Host Checker, the IVE downloads the dsHostCheckerSetup.exe.cab package to the user's client. This package is responsible for downloading additional files to the user's system in order to run Host Checker. Host Checker deletes the dsHostCheckerSetup.exe.cab package after installation is complete.

Package file and file location

C:\Documents and Settings\\Local Settings\Temp\dsHostCheckerSetup.exe.cab

Additional files installed by package and file locations

Host Checker installs the following additional files on the client in C:\Documents and Settings\\Application Data\Juniper Networks\Host Checker:

- dsHostChecker.exe
- dsHostCheckerProxy.exe
- dsHostCheckerResource_de.dll
- dsHostCheckerResource_en.dll
- dsHostCheckerResource_es.dll
- dsHostCheckerResource_fr.dll
- dsHostCheckerResource_ja.dll
- dsHostCheckerResource_ko.dll
- dsHostCheckerResource_zh.dll
- dsHostCheckerResource_zh_cn.dll
- dshttpcommon.dll
- dsnsisdll.dll
- dsWinClient.dll
- EPCheck.dll
- psapi.dll
- restore_win2k.txt
- restore_win98.txt
- uninstall.exe
- versionInfo.ini

Host Checker installs the additional files in: C:\Documents and Settings\\Application Data\Juniper Networks\HostChecker.

In addition, if you implement policies that download or check for third-party software, Host Checker may install additional DLLs in sub-folders of: C:\Documents and Settings\\Application Data\Juniper Networks\HostChecker.

For example:

- If you implement Advanced Endpoint Defense Malware Protection policies, Host Checker creates a sub-folder called `policy_x` in this directory and installs Whole Security DLLs in this folder.
- If you implement a pre-defined rule, Host Checker creates a sub-folder called `AV` and installs the DLLs needed to check for the integrated third-party software.

Files remaining after uninstall

`jnprvamgr.sys`.

Registry modifications

Host Checker sets the following registry values:

- Strings: `LogFile` and `level` are set in `HKEY_CURRENT_USER\SOFTWARE\Juniper Networks\Host Checker\Debug\dsHostChecker`
- Strings: `Language` and `InstallPath` are set in `HKEY_CURRENT_USER\SOFTWARE\Juniper Networks\Host Checker`

Additionally, Host Checker sets the following values in `HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Uninstall\Neoteris_Host_Checker`:

- String: `DisplayName`. Set to "Juniper Networks Host Checker"
- String: `DisplayVersion`. Set to current product version number.
- String: `Publisher`. Set to "Juniper Networks"
- String: `QuietUninstallString`. Set to "C:\Documents and Settings\\Application Data\Juniper Networks\Cache Cleaner <version number>\uninstall.exe" /S"
- String: `StartupApp`. Set to "C:\Documents and Settings\\Application Data\Juniper Networks\Host Checker\dsHostChecker.exe"
- String: `StopApp`. Set to "C:\Documents and Settings\\Application Data\Juniper Networks\Host Checker\dsHostChecker.exe" -stop".
- String: `UninstallString`. Set to "C:\Documents and Settings\\Application Data\Juniper Networks\Host Checker\uninstall.exe"
- String: `URLInfoAbout`. Set to "http://www.juniper.net"

Log file locations

You can enable or disable client-side logs through the **System > Log/Monitoring > Client Logs > Settings** tab of the Web console.

When you enable logging, Host Checker adds log files to the following locations:

- C:\Documents and Settings\\Application Data\Juniper Networks\Host Checker\dsHostChecker.log
- C:\Documents and Settings\\Application Data\Juniper Networks\EPCheck\EPCheck.log
- C:\Documents and Settings\\Application Data\Juniper Networks\Host Checker\dsHostCheckerProxy.log

Linux clients**Application and additional files installed by Host Checker**

Host Checker installs \$HOME/.juniper_networks/hostchecker.jar on the Linux client:

Files remaining after uninstall

The following files remain on the Linux client after uninstall:

- \$HOME/.juniper_networks/dsHCLauncher_linux1.log
- \$HOME/.juniper_networks/dsHostChecker_linux1.log

Log files installed by Host Checker

Host Checker installs the following log files on Linux systems.

- \$HOME/.juniper_networks/dsHCLauncher_linux1.log
- \$HOME/.juniper_networks/dsHostChecker_linux1.log

Macintosh clients**Application and additional files installed by Host Checker**

Host Checker installs the following files on the Macintosh client:

- ~/Library/Application Support/Juniper Networks/hostchecker.jar
- ~/Library/Application Support/Juniper Networks/hcport.txt
- ~/Library/Application Support/Juniper Networks/ preauthCookie.txt

Files remaining after uninstall

There is no Host Checker uninstall on the Macintosh client.

Log files installed by Host Checker

Host Checker stores the log files in the following location on the Macintosh client:
~/Library/Logs/Juniper Networks.

Secure Virtual Workspace

If you implement Secure Virtual Workspace (SVW), Host Checker downloads neoSVWData.zip and neoSVWDlls.zip. Then, Host Checker unzips the following files onto the client computer under C:\Documents and Settings\\Application Data\Juniper Networks\Host Checker\policy_<number>:

- wallpaper.bmp
- dsjvd.dll
- dsjvdsvc.dll
- dsmonitor.dll
- dsVdeskPackage.dll

neoSVWData.zip and neoSVWDlls.zip are removed after unzipping the files.

Registry modifications

SVW creates the key HKEY_CURRENT_USER\SOFTWARE\Juniper Networks\VDesk.

Files remaining after uninstall

None. Host Checker uninstalls SVW as part of the Host Checker uninstallation process.

Log file locations

SVW adds the following log files to C:\Documents and Settings\\Application Data\Juniper Networks\Host Checker\policy_<number>:

- dsvdPackage.log
- dsjvdsvc.log

Cache Cleaner

To execute Cache Cleaner, the IVE downloads the neoCacheCleanerSetup.exe.cab package to the user's client. This package is responsible for downloading additional files to the user's system in order to execute Cache Cleaner.

Package file and file location

C:\Documents and Settings\\Local Settings\Temp\neoCacheCleanerSetup.exe.cab

Additional files installed by package and file locations

Cache Cleaner installs the following additional files on the client in C:\Documents and Settings\\Application Data\Juniper Networks\CacheCleaner <version number>:

- dsCacheCleaner.exe
- uninstall.exe
- versionInfo.ini

For Vista, Cache Cleaner is installed in C:\Users\\AppData\Roaming\Juniper Networks\Cache Cleaner <version number>.

Files remaining after uninstall

None

Registry modifications

Cache Cleaner sets the following registry values in HKEY_CURRENT_USER\SOFTWARE\Juniper Networks\Cache Cleaner <version number>\Debug\dsCacheCleaner:

- String: LogFile
- String: level

Additionally, Cache Cleaner sets the following string registry values in HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\Uninstall\Juniper_Networks_Cache_Cleaner <version number>:

- String: DisplayName. Set to “Juniper Networks Cache Cleaner <version>”
- String: DisplayVersion. Set to the current software version
- String: folders. Set to the folders that Cache Cleaner must clear when it is done
- String: IVEHost. Set to the URL of the IVE
- String: Publisher. Set to “Juniper Networks”
- String: QuietUninstallString. Set to "C:\Documents and Settings\\Application Data\Juniper Networks\Cache Cleaner\uninstall.exe" /S"
- String: StartupApp. Set to “C:\Documents and Settings\\Application Data\Juniper Networks\Cache Cleaner\dsCacheCleaner.exe”
- String: StopApp. Set to “C:\Documents and Settings\\Application Data\Juniper Networks\Cache Cleaner\dsCacheCleaner.exe” -action stop -nodelete 1”

- String: UninstallString. Set to “C:\Documents and Settings\\Application Data\Juniper Networks\Cache Cleaner\uninstall.exe”
- String: URLInfoAbout. Set to “http://www.juniper.net”

Log file location

You can enable or disable client-side logs through the **System > Log/Monitoring > Client Logs > Settings** tab of the Web console. When you enable logging, Cache Cleaner adds log files to: C:\Documents and Settings\\Application Data\Juniper Networks\CacheCleaner <version number>\dsCacheCleaner.log.

For Vista, Cache Cleaner adds log files to C:\Users\\AppData\Roaming\Juniper Networks\Cache Cleaner <version number>.

Secure Meeting

Windows clients

To execute the Windows version of Secure Meeting, the IVE downloads the neoCBoxSetup.exe.cab package to the user’s client. This package is responsible for downloading additional files to the user’s system in order to execute Secure Meeting.

Package file and file location

C:\Documents and Settings\\Local Settings\Temp\neoCBoxSetup.exe.cab

Additional files installed by package and file locations

With an Active-X based install, Secure Meeting installs additional files in: C:\Documents and Settings\\Application Data\Juniper Networks\Secure Meeting <version number>. (See directory for a complete list of files.)

Files remaining after uninstall

After Secure Meeting uninstalls, the cbox_cfg.ini and cbox_cfg.txt (for the Java client) files remain on the client:

Registry modifications

Secure Meeting sets the following registry values:

- String: Language is set in HKEY_CURRENT_USER\Software\Juniper Networks\Secure Meeting <version number>
- String: level is set in HKEY_CURRENT_USER\Software\Juniper Networks\Secure Meeting <version number>\Debug\dsCboxUI_win

Log file locations

You can enable or disable client-side logs through the **System > Log/Monitoring > Client Logs > Settings** tab of the Web console.



NOTE: The maximum file size for each of the Secure Meeting log files is 10 MB.

When you enable logging, Secure Meeting adds log files to the following locations:

- C:\Users\- C:\Users\- C:\Users\- C:\Users\- C:\Users\- C:\Users\- C:\Users\

Macintosh clients**Application and additional files installed by Secure Meeting**

Secure Meeting installs the following files on the Macintosh client:

- ~/Library/Application Support/Juniper Networks/meetingAppMac.jar
- ~/Library/Application Support/Juniper Networks/cbox_cnfg.txt
- ~/Library/Application Support/Juniper Networks/meeting.icns

Files remaining after uninstall

There is no Secure Meeting uninstall on the Macintosh client.

Log files installed by Secure Meeting

Secure Meeting installs log files in the following location on the Macintosh client:

- ~/Library/Logs/Juniper Networks/dsCboxLauncher_mac<x>.log where <x> is 0 or 1
- ~/Library/Logs/Juniper Networks/dsCboxUI_mac<x>.log where <x> is 0 or 1

- ~/Library/Logs/Juniper Networks/dsCboxUISummary_mac<x>.log where <x> is 0 or 1
- ~/Library/Logs/Juniper Networks/MacPresenter.log

Linux clients

Application and additional files installed by Secure Meeting

Secure Meeting installs the following files on the Linux client:

- ~/.juniper_networks/meetingAppSun.jar
- ~/.juniper_networks/libSMJNIXWinLinux.so

Log files installed by Secure Meeting

- ~/.juniper_networks/LinuxPresenter<x>.log where <x> is 0 or 1
- ~/.juniper_networks/dsCboxUISummary_linux<x>.log where <x> is 0 or 1
- ~/.juniper_networks/dsCboxUI_linux<x>.log where <x> is 0 or 1
- ~/.juniper_networks/dsCboxLauncher_linux<x>.log where <x> is 0 or 1

Secure Meeting Plug-In

File Location

\\Documents and Settings\\<user>\\Application Data\\Juniper Networks\\Secure Meeting Outlook Plugin

Files remaining after uninstall

SecureMeetingOutlook.log

Registry modifications

String: Language is set in HKEY_CURRENT_USER\\Software\\Juniper Networks\\Secure Meeting Outlook Plugin

Windows Secure Application Manager (WSAM)

To execute WSAM, the IVE downloads the `samsetup.exe.cab` or `samsetupnt.exe.cab` package to the user's client, depending on the user's platform. These packages are responsible for downloading additional files to the user's system in order to execute WSAM.

Package file and file location

WSAM downloads its package files to the following locations:

- Windows 2000 and Windows XP:
C:\\Documents and Settings\\<username>\\Local Settings\\Temp\\samsetupnt.exe.cab



NOTE: You may choose to use a WSAM stand-alone installer or scriptable installer instead of the standard Web installers mentioned above. If you do, the installers are located where you save them, which may not be the same directories listed above. The file names for these downloadable installers are:

- WSAMInstNt.exe—WSAM stand-alone installer for Windows 2000/XP systems
 - SamLauncher.exe—Scriptable WSAM installer
 - WSAM.ppc2003_arm.cab—WSAM stand-alone installer for Pocket PC systems
-

Additional files installed by package and file locations

WSAM installs the following additional files on the client:

- dsSamProxy.exe
- dsSamResource_DE.dll
- dsSamResource_EN.dll
- dsSamResource_ES.dll
- dsSamResource_FR.dll
- dsSamResource_JA.dll
- dsSamResource_KO.dll
- dsSamResource_ZH.dll
- dsSamResource_ZH_CN.dll
- dsSamUI.exe
- dsWinClient.dll
- dsWinClientResource_DE.dll
- dsWinClientResource_EN.dll
- dsWinClientResource_ES.dll
- dsWinClientResource_FR.dll
- dsWinClientResource_JA.dll
- dsWinClientResource_KO.dll
- dsWinClientResource_ZH.dll
- dsWinClientResource_ZH_CN.dll
- gaptbar.dll
- install.log
- samclean.exe

- samdiagEx.dll (Windows 2000 and Windows XP only)
- SAMNB.dll (Windows 2000 and Windows XP only)
- samnsp.dll (Windows 2000 and Windows XP only)
- UninstallSAM.exe
- versionInfo.ini

WSAM installs the additional files in: C:\Program Files\Juniper Networks\Secure Application Manager

On Windows 2000 and Windows XP systems, WSAM also installs a TDI driver (neofltr_<release number>_<build number>.sys) in \$SystemRoot\system32\drivers. (For example, for release 5.2.0.9300, WSAM installs NEOFLTR_520_9300.sys in C:\WINDOWS\System32\drivers\)

Files remaining after uninstall

After WSAM uninstalls, the following files remain on the client:

- Windows 2000/XP
 - samnsp.dll
 - samclean.exe

Registry modifications

WSAM sets the following registry values:

Installation values

WSAM sets the following installation values in HKEY_LOCAL_MACHINE\SOFTWARE\Juniper Networks\Secure Application Manager:

- String: InstallPath. Set to: C:\Program Files\Juniper Networks\Secure Application Manager
- String: Language. Set to: EN (or appropriate language value)

Uninstallation values

WSAM sets the following uninstall values in HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\Netoris_Secure_Application_Manager\Commands:

Windows 2000/XP:

- String: RegisterLSP. Set to: C:\Program Files\Juniper Networks\Secure Application Manager\samnsp.dll",DllRegisterServer
- String: SyncBypassList. Set to: C:\Program Files\Juniper Networks\Secure Application Manager\samnsp.dll",SyncBypassList

- HKEY_CURRENT_USER\SOFTWARE\Neoteris\Secure Application Manager\SessionEstablishTasks
- HKEY_CURRENT_USER\SOFTWARE\Neoteris\Secure Application Manager\SessionCleanupTasks

Current Version values

WSAM sets the following uninstall and version information values in HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\Neoteris_Secure_Application_Manager:

- String: DisplayName. Set to: “Juniper Networks Secure Application Manager”
- String: DisplayVersion. Set to: < version number > < build number >
- String: Publisher. Set to: Juniper Networks
- String: QuietUninstallString. Set to: C:\Program Files\Juniper Networks\Secure Application Manager\UninstallSAM.exe
- String: StartupApp. Set to: C:\Program Files\Juniper Networks\Secure Application Manager\dsSamProxy.exe
- String: UninstallString. Set to: C:\Program Files\Juniper Networks\Secure Application Manager\UninstallSAM.exe
- String: URLInfoAbout. Set to: <http://www.juniper.net/products/ssl>

In addition, WSAM sets the following version values:

- Location:
HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Internet Settings\Zones\1

Set: 1A00 to: 1
- Location:
HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Internet Settings\Zones\1

Set: 1A00 to: 1

TDI driver values (Windows 2000/XP only)

WSAM sets the following values for the TDI driver on Windows 2000 and Windows XP systems in

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\NEOFLTR_< release number >_< build number > :

- String: DisplayName. Set to: Juniper Networks TDI Filter Driver (NEOFLTR_< release number >_< build number >)
- String: Imagepath. Set to: \C:\WINDOWS\System32\Drivers\NEOFLTR_< release number >_< build number > .SYS

In addition, WSAM sets the following values in HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\NEOFLTR_ < release number > _ < build number > \Enum:

- String: 0. Set to: Root\LEGACY_NEOFLTR_ < release number > _ < build number > \0000
- DWord: Count. Set to: 0x00000001
- DWord: NextInstance. Set to: 0x00000001

Debug values

- HKEY_CURRENT_USER\Software\Juniper Networks\Secure Application Manager\Debug\SamNB (For file-sharing option only)
 - String: "LogFile", Value: "dsSamDebug.log"
- HKEY_CURRENT_USER\Software\Juniper Networks\Secure Application Manager\Debug\SamUI
 - String: "LogFile", Value: "dsSamDebug.log"
- HKEY_CURRENT_USER\Software\Juniper Networks\Secure Application Manager\Debug\Setup
 - String: "LogFile", Value: "dsSamDebug.log"
- HKEY_CURRENT_USER\Software\Juniper Networks\Secure Application Manager\Debug\Proxy

Miscellaneous

WSAM sets the following miscellaneous registry values:

- Location: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\WinSock2\Parameters\NameSpace_Catalog5\Catalog_Entries\0000000000X (where X is a number between 1 and 7). Description: WSAM creates these keys when it runs from an administrator account for the first time. These keys register the namespace provider (NSP) installed by WSAM.
- String: IntranetAuthOptions is set in HKEY_LOCAL_MACHINE\SOFTWARE\Neoteris\Secure Application Manager\Backup and HKEY_CURRENT_USER\SOFTWARE\Neoteris\Secure Application Manager\Backup.
- The list of LSPs ignored when running WSAM are in HKEY_CURRENT_USER\SOFTWARE\Juniper Networks\Secure Application Manager\AllowedLsp.

Log file location

You can enable or disable client-side logs through the **System > Log/Monitoring > Client Logs > Settings** tab of the Web console. When you enable logging, WSAM adds log files to the following location: C:\Documents and Settings\\Application Data\Juniper Networks\Secure Application Manager.

WSAM also adds an installation log file to the C:\Program Files\Juniper Networks\Secure Application Manager directory.

For Windows Mobile 5 users, WSAM adds log files to the \Program Files\Juniper Networks\WSAM\Log directory.

Java Secure Application Manager (JSAM)

To execute JSAM, the IVE launches an applet on the user's client. This applet handles downloading additional files to the user's system in order to execute JSAM.

In addition, JSAM modifies the hosts file if you choose **Automatic host-mapping** under **Users > User Roles > Role > SAM > Options > Java SAM Options**.

Windows clients**Location of additional files**

JSAM installs additional files in the following location: C:\Documents and Settings\\Application Data\Juniper Networks\Java Secure Application Manager

Files remaining after uninstall

After JSAM uninstalls, only the log files remain on the client, as described in "Log file locations" on page 20.

Registry modifications

JSAM sets the following registry values:

- If you configure a standard NetBIOS application through JSAM, or you configure a custom application on port 137, 138, or 139, JSAM makes the following registry key modification on Windows XP machines (Administrator privileges required): SMBDeviceEnabled=dword:00000000 is set in the registry location: HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\NetBT\Parameters
- If you enable Outlook 5.5, 2000, or 2002 (Administrator privileges required), JSAM adds HKEY_LOCAL_MACHINE\Software\Microsoft\Exchange\Exchange Provider\Rpc_Binding_Order to the registry. (The second entry for this registry key is changed to ncaen_http.)

The original value of this setting is:

```
ncalrpc,ncacn_ip_tcp,ncacn_spx,ncacn_np,netbios,ncacn_vns_spp
```

After JSAM is initially used, the value of this setting is:

```
ncalrpc,ncacn_http,ncacn_ip_tcp,ncacn_spx,ncacn_np,netbios,ncacn_vns_spp
```

- If you disable the **Skip Web Proxy Registry Check** option under **Users > User Roles > Role > SAM > Options > Java SAM Options** (User read access required), JSAM sets:
HKEY_CURRENT_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Internet Settings\ProxyEnable

Log file locations

You can enable or disable client-side logs through the **System > Log/Monitoring > Client Logs > Settings** tab of the Web console. When you enable logging, JSAM adds log files to the following locations:

```
C:\Documents and Settings\\Application Data\Juniper Networks\Java Secure Application Manager\dsJSAM_win0.log and dsJSAM_win1.log
```

Macintosh clients

Application and additional files installed by JSAM

JSAM installs the following files on the Macintosh client:

- ~/Library/Application Support/Juniper Networks/NeoterisMac.jar
- ~/Library/Java/Extensions/libJNPRAuthKit.jnilib
- ~/Library/Application Support/Juniper Networks/jsam.icns
- ~/Library/Application Support/Juniper Networks/logo.gif

Files remaining after uninstall

The following files remain on the Macintosh client after uninstall:

- ~/Library/Logs/Juniper Networks/Java Secure Application Manager

Log files installed by JSAM

JSAM installs log files in the following location on the Macintosh client:

- ~/Library/Logs/Juniper Networks/Java Secure Application Manager

Linux clients

Application and additional files installed by JSAM

JSAM does not install any application files on the Linux client.

Files remaining after uninstall

The only files that remain on the Linux client after uninstall are the log files (described below).

Log files installed by JSAM

JSAM adds log files to the `~/juniper_networks` directory.

Network Connect and GINA**Windows clients**

To execute Network Connect and Graphical Identification and Authorization (GINA), the IVE downloads the `NcSetup.exe.cab` package to the user's client. This package is responsible for downloading additional files to the user's system in order to execute Network Connect and GINA.

Package file and file location

`C:\Documents and Settings\\Local Settings\Temp\neoNCsetup.exe.cab`

Hosts file change

A hosts file entry is added by Network Connect to support the following case:

- If, when Network Connect connects, split tunneling is disabled and the original externally resolved hostname (the hostname the user initially connected to prior to the NC launch) resolves to another IP address against the internal DNS, the browser will redirect to a *Server not found* page, because no route is defined within the client system.
- At a graceful termination (sign-out or timeout) of the Network Connect client connection, the hosts file is restored. If the hosts file was not restored in a prior case due to an ungraceful termination, the hosts file will be restored the next time the user launches Network Connect.

Additional files installed by package and file locations

On Windows 2000, Windows XP and Windows Vista, Network Connect installs the following additional files on the client in the following locations. The following files are installed in `C:\Program Files\Juniper Networks\Network Connect <version number>`:

- `dsNcAdmin.dll`
- `dsNetworkConnect.exe`
- `dsNcDiag.dll`
- `versionInfo.ini`
- `dsNcGina.dll`
- `dsNcResource_EN.dll`
- `dsNcResource_DE.dll`

- dsNCResource_ES.dll
- dsNCResource_FR.dll
- dsNCResource_JA.dll
- dsNCResource_KO.dll
- dsNCResource_ZH.dll
- dsNCResource_ZH_CN.dll
- dsWinClient.dll
- dsWinClientResource_EN.dll
- dsWinClientResource_DE.dll
- dsWinClientResource_ES.dll
- dsWinClientResource_FR.dll
- dsWinClientResource_JA.dll
- dsWinClientResource_KO.dll
- dsWinClientResource_ZH.dll
- dsWinClientResource_ZH_CN.dll
- NCInst16.exe
- uninstall.exe
- dsNCInst64.exe
- nclauncher.exe
- setproxy.html

Network Connect also installs the following files:

- C:\Program Files\Juniper Networks\Common Files\dsNcService.exe
- C:\<WINDIR>\system32\drivers\dsNcAdpt.sys
- C:\<WINDIR>\system32\dsGinaLoader.dll (Windows 2000 and Windows XP)

Files remaining after uninstall

After Network Connect uninstalls, the following files remain on the client:

- dsGinaLoader.dll
- C:\Program Files\Juniper Networks\Common Files\Config.ini

Registry modifications

The HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\RunOnce is required to remain “as is” on the client or Network Connect installation and launch fails.

Additionally, if GINA is enabled in the Admin Web console, Network Connect sets following string registry value in HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon:

- String: GinaDLL. Set to “dsGinaLoader.dll”

Network Connect creates the following keys:

- HKEY_LOCAL_MACHINE\SOFTWARE\Juniper Networks\Network Connect < version number
- HKEY_CURRENT_USER\Software\Juniper Networks\Network Connect < version number >

Log file location

You can enable or disable client-side logs through the **System > Log/Monitoring > Client Logs > Settings** tab of the Web console.

When you enable logging, Network Connect adds log files to the following location:

- For Windows NT and Windows 2000:
C:\Documents and Settings\\Application Data\Juniper Networks\Network Connect <version number>
- For Windows Vista:
\\Users\\AppData\roaming\Juniper Networks\Network Connect X.X.X

Linux clients**Application and additional files installed by Network Connect**

Network Connect installs the following files on the Linux client:

- ~/.juniper_networks/ncLinuxApp.jar
- ~/.juniper_networks/network_connect/installNC.sh
- ~/.juniper_networks/network_connect/libncui.so
- ~/.juniper_networks/network_connect/missing.info
- ~/.juniper_networks/network_connect/ncdiag
- ~/.juniper_networks/network_connect/NC.jar
- ~/.juniper_networks/network_connect/ncsvc
- ~/.juniper_networks/network_connect/version.txt

- `~/juniper_networks/network_connect/xlaunchNC.sh`

Files remaining after uninstall

No files remain on the Linux client after uninstall, but the `~/juniper_networks/network_connect/` directory does remain.

Log files installed by Network Connect

Network Connect installs the following log files on Linux systems:

- `~/juniper_networks/network_connect/installnc.log`
- `~/juniper_networks/network_connect/ncsvc.log`
- `~/juniper_networks/network_connect/ncuijava.log`
- `~/juniper_networks/network_connect/ncui.log`

Macintosh clients

Application and additional files installed by Network Connect

Network Connect installs the following files on the Macintosh client:

- `/Applications/Network Connect.app`
- `/usr/local/juniper/nc/<IVE_version>/ncproxyd`
- `/usr/local/juniper/nc/<IVE_version>/nctun[_tiger].kext`
- `~/Library/Application Support/Juniper Networks/`
- `NetworkConnectMac_de.jar`
- `NetworkConnectMac_en.jar`
- `NetworkConnectMac_es.jar`
- `NetworkConnectMac_fr.jar`
- `NetworkConnectMac_ja.jar`
- `NetworkConnectMac_ko.jar`
- `NetworkConnectMac_zh.jar`
- `NetworkConnectMac_zh-cn.jar`
- `~/Library/Application Support/Juniper Networks/`
- `NetworkConnectMac_ppc.jar` (PowerPC-based Macintoshes)
- `NetworkConnectMac_i386.jar` (Intel-based Macintoshes)
- `~/Library/Java/Extensions/libJNPRAuthKit.jnilib`
- `/usr/local/juniper/nc/install/NCJarVerify.jar`

- /usr/local/juniper/nc/install/installer.common
- /usr/local/juniper/nc/install/ncinstallhelper
- /usr/local/juniper/nc/install/fwk_reference_tool
- /usr/local/juniper/nc/install/uninstall_nc.sh
- /usr/local/juniper/nc/install/version

Files remaining after uninstall

The following files remain on the Macintosh client after uninstall:

- All files in ~/Library/Logs/Juniper Networks/Network Connect
- /usr/local/juniper/nc/install/NCJarVerify.jar
- /usr/local/juniper/nc/install/installer.common
- /usr/local/juniper/nc/install/ncinstallhelper
- /usr/local/juniper/nc/install/fwk_reference_tool
- /usr/local/juniper/nc/install/uninstall_nc.sh

Log files installed by Network Connect

Network Connect stores the log files in the following location on the Macintosh client: ~/Library/Logs/Juniper Networks/Network Connect.

Windows Terminal Services

To execute Windows Terminal Services, the IVE downloads the Neotermsetup.exe.cab package (or the NeotermsetupNT.exe.cab package for Windows 2000 and earlier) to the user's client. This package is responsible for downloading additional files to the user's system in order to execute Terminal Services.

Package file and file location

The IVE downloads Neotermsetup.exe.cab (or the NeotermsetupNT.exe.cab package for Windows 2000 and earlier) to the user's %Temp% directory and deletes it once the installation is complete.

Additional files installed by package and file locations

The Windows Terminal Services client installs additional Juniper proxy files in the following locations on the client:

- For Windows 2000/XP:
 - \Documents and Settings\\Application Data\Juniper Networks\Juniper Terminal Services Client
- For Windows Vista:

- \Users\<>username>\AppData\Roaming\Juniper Networks\Juniper Terminal Services Client

The Windows Terminal Services client installs the following Juniper proxy files on the client:

- dsTermServ.exe
- dsTermServ.log (this file exists only when terminal services client-side logging is enabled)
- dsTermServProxy.dll
- dsTermServResource_DE.dll
- dsTermServResource_en.dll
- dsTermServResource_ES.dll
- dsTermServResource_FR.dll
- dsTermServResource_JA.dll
- dsTermServResource_KO.dll
- dsTermServResource_ZH.dll
- dsTermServResource_ZH_CN.dll
- dsWinClient.dll
- dsWinClientResource_DE.dll
- dsWinClientResource_EN.dll
- dsWinClientResource_ES.dll
- dsWinClientResource_FR.dll
- dsWinClientResource_JA.dll
- dsWinClientResource_KO.dll
- dsWinClientResource_ZH.dll
- dsWinClientResource_ZH_CN.dll
- uninstall.exe
- versionInfo.ini

Files remaining after uninstall

None

Registry modifications

The Terminal Services client adds the level REG_SZ key to:
 HKEY_CURRENT_USER\Software\Juniper Networks\Juniper Terminal Services Client\Debug\dsTermServ\level.

The Terminal Services client adds a registry key under HKEY_CURRENT_USER\Software\Juniper Networks\Juniper Terminal Services Client.

Log file location

You can enable or disable client-side logs through the **System > Log/Monitoring > Client Logs > Settings** tab of the Web console. When you enable logging, the Terminal Services client adds the `dsTermServ.log` file to the following locations:

- **Windows 2000/XP:** Documents and Settings\\Application Data\Juniper Networks\Juniper Terminal Services Client
- **Windows Vista:** Users\\AppData\Roaming\Juniper Networks\Juniper Terminal Services Client

Citrix Terminal Services

To execute Citrix Terminal Services, the IVE downloads the `neoCitrixServSetup.exe.cab` package to the user's client. This package is responsible for downloading additional files to the user's system in order to execute Terminal Services.

Package file and file location

The IVE downloads `Neocitrixsrvsetup.exe.cab` to the user's `%Temp%` directory and deletes it once the installation is complete.

Additional files installed by package and file locations

The Citrix Terminal Services client installs the following Juniper proxy files on the client:

- `dsCitrixConnector.dll`
- `dsCitrixProxy.exe`
- `dsCitrixProxyResource_DE.dll`
- `dsCitrixProxyResource_en.dll`
- `dsCitrixProxyResource_ES.dll`
- `dsCitrixProxyResource_FR.dll`
- `dsCitrixProxyResource_JA.dll`
- `dsCitrixProxyResource_KO.dll`
- `dsCitrixProxyResource_ZH.dll`
- `dsCitrixProxyResource_ZH_CN.dll`
- `dsCitrixServ.log` (exists only when terminal services client side logging is enabled)
- `dsWinClient.dll`
- `dsWinClientResource_DE.dll`

- dsWinClientResource_EN.dll
- dsWinClientResource_ES.dll
- dsWinClientResource_FR.dll
- dsWinClientResource_JA.dll
- dsWinClientResource_KO.dll
- dsWinClientResource_ZH.dll
- dsWinClientResource_ZH_CN.dll
- uninstall.exe
- versionInfo.ini

The Citrix Terminal Services client installs the proxy files in the following locations:

- **Restricted users:** \Documents and Settings\<<USERNAME>\Application Data\Juniper Networks\Juniper Citrix Services Client
- **Administrators or restricted users with installer service:** \Program Files\Neoteris\Juniper Citrix Services Client and C:\Program Files\Citrix\icacab

Registry modifications

The Citrix Terminal Services client adds the level REG_SZ key to HKEY_CURRENT_USER\Software\Juniper Networks\Juniper Citrix Services Client\Debug\dsCitrixServ\level

The Terminal Services client adds a registry key under HKEY_CURRENT_USER\Software\Juniper Networks\Juniper Citrix Services Client

Files remaining after uninstall

None

Log file location

You can enable or disable client-side logs through the **System > Log/Monitoring > Client Logs > Settings** tab of the Web console. When you enable logging, the Terminal Services client adds the dsCitrixServ.log file to the following location:

- **Windows 2000/XP:** \Documents and Settings\<<username>\Application Data\Juniper Networks\Juniper Citrix Services Client
- **Windows Vista:** \Users\<<username>\AppData\Roaming\Juniper Networks\Juniper Citrix Services Client

Required rights to run and install applications

The following tables outline the rights that are required to install and run the following IVE client-side components using the IVE's ActiveX, ActiveX installer service, and Java mechanisms:

- “Windows Secure Application Manager (WSAM)” on page 29
- “Java Secure Application Manager (JSAM)” on page 30
- “Network Connect” on page 30
- “Terminal Services Component” on page 30
- “Citrix Terminal Services Component” on page 31
- “Host Checker” on page 31
- “Cache Cleaner” on page 31
- “Secure Meeting” on page 32

Where applicable, the tables contain links to topics that describe in further detail the components that the IVE uses to install and run its client-side applications.

Table 1: Windows Secure Application Manager (WSAM)

	ActiveX	ActiveX: Installer Service	Java	Java	
Client/Action	Windows	Windows	Windows	Mac/Linux	More Information
Install	Admin	Restricted, Power User, or Admin	Admin	Not Applicable	See “Windows Secure Application Manager (WSAM)” on page 14
Run	Power User or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	See “Windows Secure Application Manager (WSAM)” on page 14

Notes:

- Restricted users can perform the initial installation of WSAM with the installer service only if they start the installation by clicking the WSAM link in the user's portal page.
- The ActiveX installer requires users to reboot their systems after an installation or upgrade.
- Users must have ActiveX components or Java enabled through their browsers to use the WSAM installers.

Table 2: Java Secure Application Manager (JSAM)

	ActiveX	ActiveX: Installer Service	Java	Java	
Client/Action	Windows	Windows	Windows	Mac/Linux	More Information
JSAM					
Run	Not Applicable	Not Applicable	Restricted, Power User, or Admin	User	See “Java Secure Application Manager (JSAM)” on page 19
JSAM with Host File Modification					
Run	Not Applicable	Not Applicable	Admin	Admin/Root	See “Java Secure Application Manager (JSAM)” on page 19
Notes				Client system asks for the administrator password when JSAM launches.	

Table 3: Network Connect

	ActiveX	ActiveX: Installer Service	Java	Java	
Action	Windows	Windows	Windows	Mac/Linux	More Information
Install	Admin	Restricted, Power User, or Admin	Admin	Admin ^a	See “Network Connect and GINA” on page 21
Run	Power User or Admin	Restricted, Power User, or Admin	Power User or Admin	Standard User	See “Network Connect and GINA” on page 21

Note:

- Restricted users can perform the initial installation of Network Connect with the installer service only if they start the installation by clicking the Network Connect link in the user’s portal page.

a. Linux also requires Admin rights to upgrade or downgrade Network Connect. Macintosh does not have this restriction.

Table 4: Terminal Services Component

	ActiveX	ActiveX: Installer Service	Java	Java	
Action	Windows	Windows	Windows	Mac/Linux	More Information
Install	Power User or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	See “Windows Terminal Services” on page 25
Run	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	See “Windows Terminal Services” on page 25

Table 5: Citrix Terminal Services Component

	ActiveX	ActiveX: Installer Service	Java	Java		
Action	Windows	Windows	Windows	Mac/Linux	Citrix Client	More Information
Install	Power User or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	Power User or Admin	See “Windows Terminal Services” on page 25
Run	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	Restricted, Power User, or Admin	See “Windows Terminal Services” on page 25

Table 6: Host Checker

	ActiveX	ActiveX: Installer Service	Java	Java		
Action	Windows	Windows	Windows	Mac/Linux	More Information	
Install	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	See “Host Checker” on page 7	
Run	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	See “Host Checker” on page 7	

NOTE: If you implement SVW through Host Checker, note that restricted users, power users, and admins all have adequate rights to install and run SVW.



NOTE: If you enable the **Advanced Endpoint Defense Malware Detection** Host Checker option and enforce the policy to install the Whole Security Confidence Online software on users’ computers, be aware of the following:

- **Category 1 and Category 2 Signature Scans**—Restricted users, power users, and administrators can install and run the scanning feature in Confidence Online. The scanning feature is supported on Windows NT4, Windows 2000, and Windows XP systems.
- **Behavior Blocker**—Only administrators can install and run the behavior blocker feature in Confidence Online. The behavior blocker feature is supported on Windows 2000 and Windows XP systems.

Table 7: Cache Cleaner

	ActiveX	ActiveX: Installer Service	Java	Java		
Action	Windows	Windows	Windows	Mac/Linux	More Information	
Install	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	See “Cache Cleaner” on page 10	

Table 7: Cache Cleaner (Continued)

	ActiveX	ActiveX: Installer Service	Java	Java	
Action	Windows	Windows	Windows	Mac/Linux	More Information
Run	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	See “Cache Cleaner” on page 10

Table 8: Secure Meeting

	ActiveX	ActiveX: Installer Service	Java	Java	
Action	Windows	Windows	Windows	Mac/Linux	More Information
Secure Meeting: Win32					
Install	Restricted, Power User, or Admin	Not Applicable	Restricted, Power User, or Admin	Not Applicable	See “Secure Meeting” on page 12
Run	Restricted, Power User, or Admin	Not Applicable	Restricted, Power User, or Admin	Not Applicable	See “Secure Meeting” on page 12
Secure Meeting: Java					
Install	Restricted, Power User, or Admin	Not Applicable	Restricted, Power User, or Admin	User	See “Secure Meeting” on page 12
Run	Restricted, Power User, or Admin	Not Applicable	Restricted, Power User, or Admin	User	See “Secure Meeting” on page 12
Secure Meeting: Outlook Plug-in					
Install	Power User, or Admin	Not Applicable	Power User, or Admin	Not Applicable	See “Secure Meeting” on page 12
Run	Restricted, Power User, or Admin	Not Applicable	Restricted, Power User, or Admin	Not Applicable	See “Secure Meeting” on page 12