



**Juniper Networks Secure Access**

## **Client-Side Changes Guide**

*Release 6.5*

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# Client-Side Application Changes Guide

This guide lists the names of the package files used by the IVE to install client-side components, the names of the files the packages install and uninstall, and the registry changes the files make to the user's system. It also describes the permissions that are required to install and run various Instant Virtual Network (IVE) client-side components.

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## Environmental Variable Definitions

Environment variables are used throughout this guide. The environment variable definitions are as follows.

For Windows 2000 and Windows XP:

- %USERPROFILE% =%SystemDrive%\Documents and Settings\%USERNAME%

- %ALLUSERSPROFILE%=%SystemDrive%\Documents and Settings\All User
- %APPDATA% =%USERPROFILE%\Application Data
- %TEMP% =%USERPROFILE%\Local Settings\Temp

For Windows Vista and Windows 7:

- %USERPROFILE% =%SystemDrive%\Users\%USERNAME%
- %APPDATA% =%USERPROFILE%\AppData\Roaming

For low medium/high integrity processes:

- %TEMP% =%USERPROFILE%\AppData\Local\Temp

For low integrity processes:

- %TEMP% =%USERPROFILE%\AppData\Local\Temp\low

## Juniper Networks 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:

- JuniperSetupSP1Control.ocx
- AccessServiceComponent.exe (The IVE auto-starts this service when installing, and , then stops and removes it when uninstalling.)

If you plan to use the Juniper Networks Installer MSI package, you will need administrator rights to install onto your client systems.

### **Installer Package File and File Location**

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

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

### **Additional Package Files and File Locations**

The Juniper Installer Service installs the following files in C:\WINNT\Downloaded Program Files for Windows NT/2000 and in C:\Windows\Downloaded Program Files for Windows XP/Vista and Windows 7.

- install.log
- JuniperExt.exe

- JuniperSetup.inf
- JuniperSetup.ocx
- JuniperSetupClient.inf
- JuniperSetupClient.ocx
- JuniperSetupClientCtrlUninstaller.exe
- 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

The Juniper Installer Service also installs the following files in C:\Program Files\Juniper Networks\Installer Service:

- AccessServiceComponent.x86.exe
- install.log
- jis.dep
- JuniperSetupClientOCX.exe
- JuniperSetupOCX.exe
- Uninstall.exe
- versionInfo.ini
- x86\_Microsoft.VC80.CRTP\_8.0.50727.762.exe
- x86\_Microsoft.VC80.CRTR\_8.0.50727.762.exe

The Juniper Installer Service also creates the following files:

- C:\Documents and Settings\All Users\Application Data\Juniper Networks\Logging\debuglog.log (Windows NT/2000/XP)
- C:\Users\Public\Juniper Networks\Logging\debuglog.log (Windows Vista/Windows 7)
- C:\Users\admin\AppData\Roaming\Juniper Networks\Logging\debuglog.log (Windows Vista/Windows 7)

### **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\JuniperAccessService and HKEY\_LOCAL\_MACHINE\SOFTWARE\Juniper Networks.

### **Log File Location**

The Juniper Networks Installer Service installs the log files in the following location:  
C:\Program Files\Juniper Networks\Installer Service

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## **Juniper Networks Setup**

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

### **Installer Package Files**

The IVE loads the following installer file.

- JuniperSetupClient.cab

### **Additional Package Files and File Locations**

The Juniper Networks Setup installs the following additional files under C:\Windows\Downloaded Program Files (Windows XP/2000) or C:\Windows\Downloaded Program Files (Windows Vista and Windows 7):

- install.log
- JuniperExt.exe
- JuniperSetup.inf
- JuniperSetup.ocx
- JuniperSetupClient.inf
- JuniperSetupClient.ocx
- JuniperSetupClientCtrlUninstaller.exe
- 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

In addition, the following folder is created.

C:\Documents and Settings\

If the administrator configures a list of IVEs that the client can trust, this list of IVEs is stored in the following files:

%ProgramFiles%\Juniper Networks\Whitelist.txt (Windows)

/usr/local/juniper/whitelist.txt (Macintosh and Linux)

In addition, users can themselves make the decision to trust an IVE. When the user makes a decision to trust an IVE, the IVE is added to the user whitelist. User whitelist files are located in:

%AppData%\Juniper Networks\Whitelist.txt (Windows)

/~/Library/Application Support/Juniper Networks/whitelist.txt (Macintosh)

/~/juniper\_networks/whitelist.txt (Linux)

## Registry Modifications

For Windows Vista and Windows 7, the following registry keys are created:

- HKEY\_CURRENT\_USER\Software\Microsoft\Internet Explorer\InternetRegistry\REGISTRY\USER\S-1-5-21-68661237-3255334891-3485583729-1000\SOFTWARE\Juniper Networks
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Classes\AppID\{CFE2313F-F5C4-45DC-A667-42C339E859FF}
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Classes\AppID\JuniperSetupClient.ocx
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Classes\CLSID\{107AD0CA-8339-40C5-B554-AE361FB31090}\InProcServer32
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Classes\CLSID\{F27237D7-93C8-44C2-AC6E-D6057B9A918F}
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Classes\dsATLSetupCtrl.JuniperSetupClientCont.1

- HKEY\_LOCAL\_MACHINE\SOFTWARE\Classes\dsATLSetupCtrl.JuniperSetupClientContro
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Classes\Interface\{107AD0CA-8339-40C5-B554-AE361FB31090}
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Classes\TypeLib\{1FEB5880-8108-4CA6-9FF0-BA5191352FCC}\1.0
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Classes\TypeLib\{1FEB5880-8108-4CA6-9FF0-BA5191352FCC}\1.0\0\win32
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Code Store Database\Distribution Units\{F27237D7-93C8-44C2-AC6E-D6057B9A918F}\Contains\Files
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Code Store Database\Distribution Units\{F27237D7-93C8-44C2-AC6E-D6057B9A918F}\Contains\FilesFlags\JuniperExt.exe
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Code Store Database\Distribution Units\{F27237D7-93C8-44C2-AC6E-D6057B9A918F}\Contains\FilesFlags\JuniperSetupClient.ocx
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Internet Explorer\Low Rights\ElevationPolicy\{3EEDF1D3-9D79-4b3e-B8EB-84DB35D7F282}
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Internet Explorer\Low Rights\ElevationPolicy\{3FB35533-A034-42dc-B051-95F1819F6A9A}
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\ModuleUsage\C:/Windows/Downloaded Program Files/JuniperExt.exe
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\ModuleUsage\C:/Windows/Downloaded Program Files/JuniperSetupClient.ocx
- HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\SharedDLLs
- HKEY\_USERS\S-1-5-21-68661237-3255334891-3485583729-1000\Software\Microsoft\Internet Explorer\InternetRegistry\REGISTRY\USER\S-1-5-21-68661237-3255334891-3485583729-1000\SOFTWARE\Juniper Networks

## Log File Location

The Juniper Networks Setup installs the log files in the following locations.

For Windows XP and Windows 2000:

- C:\Documents and Settings\All Users\Application Data\Juniper Networks\Logging\debuglog.log
- C:\Documents and Settings\\Application Data\Juniper Networks\Setup\JuniperSetupControlXPlog (ActiveX logs)

For Windows Vista and Windows 7:

- C:\Users\username\AppData\Roaming\Juniper Networks\Logging\debuglog.log

- C:\Users\username\AppData\Local\Temp\Low\JuniperSetupClientControl.log  
(for ActiveX logs)

For low-integrity processes, such as Internet Explorer 7, the ActiveX installer installs the following log files in C:\Users\username\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.

### **Installer Package Files and File Location**

Host Checker installs the following CAB file: %TEMP%\dsHostCheckerSetup.exe.cab

### **Additional Installer Package Files and File Locations**

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

- CertAuthIMC.dll
- 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
- dsInstallerClient.dll
- dsnsisdll.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
- EPCheck.dll
- hcimc.dll
- install.log
- InstallHelper.exe
- JSystemIMC.dll
- JuniperSetupClientOCX.exe (stand-alone installer only)
- /Microsoft.VC80.CRT/Microsoft.VC80.CRT.manifest (when using set-up client)
- /Microsoft.VC80.CRT/msvcp80.dll (when using set-up client)
- /Microsoft.VC80.CRT/msvcr80.dll (when using set-up client)
- msvcp60.dll
- Pluginclnt.dll
- restore\_win2k.txt
- restore\_win98.txt
- ShavlikIMC.dll
- /temp
- tnc\_config
- uninstall.exe
- versionInfo.ini

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

### **Files Remaining After Uninstall**

jnprvamgr.sys.

### 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\All Users\Application Data\Juniper Networks\Logging\debuglog.log (Windows XP)
- C:\users\username\AppData\Roaming\Juniper Networks\Logging\debuglog.log (Windows Vista and Windows 7)
- C:\Users\Public\Juniper Networks\Logging\debuglog.log (Windows Vista and Windows 7)

### Macintosh Clients

The following information applies to Macintosh clients only.

#### Application and Additional Files Installed by Host Checker

Host Checker installs the following files on the Macintosh client:

- ~/Library/Application Support/Juniper Networks/tnc.jar
- ~/Library/Application Support/Juniper Networks/hcport.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.

### Linux Clients

The following information applies to Linux clients only.

#### Application and Additional Files Installed by Host Checker

Host Checker installs \$HOME/.juniper\_networks/tnc.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

### ***Anti-Virus, Firewall or Anti-Spyware Checking***

When Host Checker is used for Anti-Virus, Firewall or Anti-Spyware checks, the following files are installed:

- AVManagerUnified.dll
- CAntiVirusCOM.dll
- CertAuthIMC.dll
- CFireWallCOM.dll
- 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
- dsInstallerClient.dll
- dsnsisdll.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
- efc.dat
- EPCheck.dll

- FWManager.dll
- hcimc.dll
- Impl\_AntivirusLib.dll
- Impl\_FirewallLib.dll
- Impl\_SoftwareProductLib.dll
- install.log
- InstallHelper.exe
- JSystemIMC.dll
- msvcp60.dll
- OESISCore.dll
- OPSWATProcessesScanner.dll
- PluginClient.dll
- restore\_win2k.txt
- restore\_win98.txt
- scpt.dat
- ShavlikIMC.dll
- tables.dat
- tnc\_config
- UnifiedSDK.ini
- uninstall.exe
- versionInfo.ini



**NOTE:** If both anti-virus and patch assessment rules are configured, a combined set of files listed here and in “Patch Assessment Rule” on page 11 are installed.

---



**NOTE:** A complete list of installed files depends on the third-party package versions and can vary. For example, `doSilent.txt` may be installed in certain versions of ESAP but not others.

---

### **Patch Assessment Rule**

When the Patch Assessment Host Checker rule is set, host checker downloads the Shavlik SDK and the following files are installed:

- CertAuthIMC.dll

- 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
- dsInstallerClient.dll
- dsnsisdll.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
- EPCheck.dll
- hcimc.dll
- hfnetchk6b.xml
- HFVersions.cab
- install.log
- InstallHelper.exe
- JSystemIMC.dll
- Manifest.xml
- msvcp60.dll
- PluginClient.dll

- restore\_win2k.txt
- restore\_win98.txt
- ShavlikIMC.dll
- stPatchAssessment.dll
- stUpdateManager.dll
- tnc\_config
- uninstall.exe
- versionInfo.ini



**NOTE:** If both anti-virus and patch assessment rules are configured, a combined set of files listed here and in “Anti-Virus, Firewall or Anti-Spyware Checking” on page 10 are installed.

---

## Enhanced Endpoint Security

Enhanced Endpoint Security (EES) requires a two-phase installation process. During the first phase, the EES installer is downloaded and installs Juniper Networks binaries. The second phase downloads the WebRoot SDK installer which installs the WebRoot components and an initial set of malware signatures.



**NOTE:** EES requires you to have administrator privileges in order to install.

EES is a JUNS plug-in and requires JUNS Access Service to be installed on the client system. A JUNS plug-in is a component, such as EES or Host Checker, that runs under the Juniper Unified Network Service (a Windows NT service). If JUNS is not already installed, EES automatically installs it. If a JUNS service already installed on the end-user system, EES is installed with limited user privilege.

### **Installer Package Files and File Location**

EES installs the following CAB file: EndpointDefenseInstaller.exe

### **Additional Installer Package Files and File Locations**

EES installs the following additional files on the client in %CommonProgramFiles%\Juniper Networks\Endpoint Defense:

- dsWRService.dll
- EPD.dep
- install.log (installed when both EES and WebRoot SDK is installed)
- uninstall.exe

- versionInfo.ini
- WRSS.log ( installed when both EES and WebRoot SDK is installed)

EES installs the WebRoot SDK in %CommonProgramFiles%\Juniper Networks\Endpoint Defense\WRSSMini and includes the following files and folders. Note that different versions of WebRoot SDK may change the files in this list.

- CoreScan.dll
- dbghelp.dll
- Lockbox.dll
- pcre3.dll
- SSU.exe
- WRSSMini.dll
- ZipTV06.dll
- ztvcabinet.dll
- ztvunrar3.dll
- drv\WRSSMini.inf
- drv/amd64\SSFSFD.sys
- drv/amd64\SSIDRV.sys
- drv/amd64\SsiEfr.exe
- drv/i386\SSFSFD.sys
- drv/i386\SSHRMD.sys
- drv/i386\SSIDRV.sys
- drv/i386\SsiEfr.exe
- Masters\inst.const
- Masters\inst.mst
- Masters\Masters.bak
- Masters\masters.const
- Masters\masters.mst

### ***JUNS plug-in registration***

dsWRSservice.dll needs to be registered with JUNS Access Service to run as a plug-in. The JUNS Access Service maintains a record of plug-ins in %CommonProgramFiles%\Juniper Networks\JUNS\access.ini. The bolded entries shown below are created by the EES installer.

```
[Plugins]
InstallerService=C:\Program Files\Common Files\Juniper
Networks\JUNS\dsInstallerService.dll
EndpointDefense=C:\Program Files\Common Files\Juniper Networks\Endpoint
Defense\dsWRSservice.dll
[InstallerService]
StartType=Auto
[EndpointDefense]
StartType=Auto
```

If the JUNS plug-in is enabled on the end-user system, you should not expect any other .exe applications running on the end-user system.

If Host Checker is running as a user mode process (dsAccessService.exe is running), EES is loaded into that process.

### Registry Modifications

EES sets the following registry values under  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Juniper Networks\Host Checker:

String	Set to
WebrootInstallPath	The installation directory, for example, "C:\Program Files\Common Files\Juniper Networks\Endpoint Defense\". The actual path is dependent on the CommonProgramFiles variable.
WebrootInstallVersion	6.5.1.102

### Files Remaining After Uninstall

%CommonProgramFiles%\Juniper Networks\Endpoint Defense\install.log

%CommonProgramFiles%\Juniper Networks\Endpoint Defense\WRSS.log

### Log File Location

EES log messages are included in the Juniper debug log files on the end-user systems.

WebRoot debug logs are located in <%AllUsersProfile%\Application Data\Webroot\WRSSMini\Logs>. Only the last three logs are saved to conserve disk space.

WebRoot memory dumps are also located in <%AllUsersProfile%\Application Data\Webroot\WRSSMini\Logs>.

---

## Secure Virtual Workspace

To run 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\username\Application Data\Juniper Networks\Host Checker\policy_number`:

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

Host Checker deletes `neoSVWData.zip` and `neoSVWDlls.zip` 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.

---

## Cache Cleaner

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

### **Installer Package File and File Locations**

Cache Cleaner installs the `Setup.exe` file on the Windows client in `%TEMP%\neoCacheCleanerSetup.exe`.

This file is removed once the installation is complete.

### **Additional Files Installed by Package and File Locations**

Cache Cleaner installs the following additional files on the client in `%APPDATA%\Juniper Networks\Cache Cleaner version_number`:

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

Cache Cleaner also installs the following files on the client in %APPDATA%\Juniper Networks\Cache Cleaner *version number*\Microsoft.VC80.CRT:

- Microsoft.VC80.CRT.manifest
- msvcr80.dll

### Files Remaining After Uninstall

None.

### Registry Modifications

Cache Cleaner sets the following string registry values in HKEY\_CURRENT\_USER\Software\Microsoft\Windows\CurrentVersion\Uninstall\Juniper\_Networks\_Cache\_Cleaner <version number>:

String	Set to
DisplayName	“Juniper Networks Cache Cleaner <version>”
DisplayVersion	the current software version
Publisher	“Juniper Networks”
QuietUninstallString	“%APPDATA%\Juniper Networks\Cache Cleaner <version number>\uninstall.exe /S”
StartupApp	“%APPDATA%\Juniper Networks\Cache Cleaner<version number>\dsCacheCleaner.exe”
StopApp	“%APPDATA%\Juniper Networks\Cache Cleaner<version number>\dsCacheCleaner.exe” -action stop -nodelete 1”
UninstallString	“%APPDATA%\Juniper Networks\Cache Cleaner<version number>\uninstall.exe”
URLInfoAbout	“http://www.juniper.net”

### Log File Location

You can enable or disable client-side logs by clicking **System > Log/Monitoring > Client Logs > Settings** in the Web console. For Windows 2000 and Windows XP, when you enable logging Cache Cleaner adds log files to %ALLUSERSPROFILE%\Application Data\Juniper Networks\Logging\debuglog.log.

For Windows Vista and Windows 7, Cache Cleaner adds log files to %APPDATA%\Juniper Networks\Logging\debuglog.log.

---

## Secure Meeting

To execute the Windows version of Secure Meeting, the IVE downloads the neoCBoxSetup.exe.cab package to the user's computer.

### Installer Package File and File Location

Secure Meeting installs the neoCBoxSetup.exe.cab file on the Windows client in C:\Documents and Settings\username\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:

- (Windows NT/2000/XP) C:\Documents and Settings\username\Application Data\Juniper Networks\Secure Meeting *version\_number*
- (Windows Vista and Windows 7) C:\Program Files\Juniper Networks\Secure Meeting *version\_number*

See the Secure Meeting directory for a complete list of files.

### Files Remaining After Uninstall

After Secure Meeting uninstalls, the cbox\_cfg.ini and cbox\_cfg.txt files (for the Java client) remain on the client.

### Registry modifications

Secure Meeting sets the following registry values:

String	Set in
Language	HKEY_CURRENT_USER\Software\Juniper Networks\Secure Meeting <version number>
level	HKLM\Software\Juniper Networks\Logging\Level

### Log file locations

You can enable or disable client-side logs by clicking **System > Log/Monitoring > Client Logs > Settings** in 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 for Windows XP:

- C:\Documents and Settings\All Users\Application Data\Juniper Networks\Logging\debuglog.log
- C:\Documents and Settings\username\Application Data\Juniper Networks\Logging\debuglog.log
- C:\Documents and Settings\username\Application Data\Juniper Networks\Secure Meeting <version number>\SecureMeetingOutlook.log -and- SecureMeetingOutlook.log.old
- C:\Documents and Settings\username\Application Data\Juniper Networks\Secure Meeting <version number>\SecureMeetingOutlookApp.log -and- SecureMeetingOutlookApp.log.old

When you enable logging, Secure Meeting adds log files to the following locations for Windows Vista and Windows 7:

- C:\Users\Public\Juniper Networks\Logging\debuglog.log
- C:\Users\username\AppData\Roaming\Juniper Networks\Logging\debuglog.log
- C:\Users\username\AppData\Roaming\Juniper Networks\Secure Meeting <version number>\SecureMeetingOutlook.log -and- SecureMeetingOutlook.log.old
- C:\Users\username\AppData\Roaming\Juniper Networks\Secure Meeting <version number>\SecureMeetingOutlookApp.log -and- SecureMeetingOutlookApp.log.old

## Macintosh Clients

The following information applies to Macintosh clients only.

### 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\_cfg.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 locations 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

The following information applies to Linux clients only.

### 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

Secure Meeting installs log files in the following locations on the Linux client:

- `~/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

To run the Secure Meeting plug-in, the IVE downloads the Secure Meeting Outlook plug-in to the user's client.

### File Location

The Secure Meeting plug-in is installed on the Windows client in `\Documents and Settings\<user>\Application Data\Juniper Networks\Secure Meeting Outlook Plugin`

### Files remaining after uninstall

After the Secure meeting plug-in is uninstalled, the `SecureMeetingOutlook.log` file remains on the client.

### Registry modifications

String	Set in
Language	HKEY_CURRENT_USER\Software\Juniper Networks\Secure Meeting Outlook Plugin

---

## Windows Secure Application Manager (WSAM)

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

## Installer Package Files and File Locations

WSAM downloads its package files to the following locations:

- Windows 2000 and Windows XP (32- and 64-bit):  
C:\Documents and Settings\username\Local Settings\Temp\samsetupnt.exe
- Windows Vista and Windows 7 (32- & 64-bit):  
\Users\username\AppData\Local\Temp
- Windows Mobile 6.0 Pocket PC/6.0 Classic/6.0 Professional:  
\My Documents\WSAMInstARM.cab
- Windows Mobile 5.0 SmartPhone/6.0 Standard:  
\My Document\WSAMInstARMSPcab



**NOTE:** You may choose to use a WSAM standalone installer or scriptable installer instead of the standard Web installers already mentioned. If you do, the installers are located where you save them, which may not be the same directories listed here. The filenames for these downloadable installers are:

- WSAMInstNt.exe—WSAM standalone installer for Windows 2000/XP/Vista/Windows7 (including 32- & 64-bit) systems
  - WSAMInstARM.cab—WSAM standalone installer for Windows Mobile 5.0 PocketPC/6.0 Classic/6.0 Professional
  - WSAMInstARMSPcab—WSAM standalone installer for Windows Mobile 5.0 Smartphone/6.0 Standard
- 

## Additional Files Installed by Package and File Locations

For Windows XP, Windows Vista and Windows 7, WSAM installs the following additional files on the client in C:\Program Files\Juniper Networks\Secure Application Manager or C:\Program Files (x86)\Juniper Networks\Secure Application Manager for 64-bit Windows operating systems:

- 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
- Microsoft.VC80.CRT/Microsoft.VC80.CRT.manifest
- Microsoft.VC80.CRT/msvcp80.dll
- Microsoft.VC80.CRT/msvcr80.dll
- pending.reboot
- samclean.exe
- samdiagEx.dll (Windows 2000/XP/Vista/Windows 7 only)
- samlauncher.exe
- SAMNB.dll (Windows 2000/XP/Vista/Windows 7 only)
- UninstallSAM.exe
- versionInfo.ini

On Windows 2000, XP, Vista and Windows 7 systems, WSAM also installs a TDI driver (neofltr\_<release number>\_<build number>.sys) in \$SystemRoot\system32\drivers.

For Windows mobile, WSAM installs the following additional files on the client in \Program Files\Juniper Networks\WSAM:

File	Location
dsSamProxy.exe	\Program Files\Juniper Networks\WSAM
gapsp.dll	\Windows
SamResource_DE.dll	\Program Files\Juniper Networks\WSAM
SamResource_EN.dll	\Program Files\Juniper Networks\WSAM
SamResource_ES.dll	\Program Files\Juniper Networks\WSAM
SamResource_FR.dll	\Program Files\Juniper Networks\WSAM

File	Location
SamResource_JA.dll	\Program Files\Juniper Networks\WSAM
SamResource_KO.dll	\Program Files\Juniper Networks\WSAM
SamResource_ZH.dll	\Program Files\Juniper Networks\WSAM
SamResource_ZH_CN.dll	\Program Files\Juniper Networks\WSAM
SamUI.exe	\Program Files\Juniper Networks\WSAM

### Files Remaining After Uninstall

After WSAM uninstalls, the following files remain on the Windows XP/2000/Vista and Windows 7 client:

- Microsoft.VC80.CRT/Microsoft.VC80.CRT.manifest
- Microsoft.VC80.CRT/msvcp80.dll
- Microsoft.VC80.CRT/msvcr80.dll
- pending.reboot
- samclean.exe

### Registry Modifications

WSAM sets the following registry values for the installation, uninstallation, current version, TDI driver for Windows 2000, XP, Vista and Windows 7 only, and miscellaneous:

#### Installation Values

For Windows XP, Windows Vista and Windows 7, WSAM sets the following installation values in HKEY\_LOCAL\_MACHINE\SOFTWARE\Juniper Networks\Secure Application Manager:

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

For Windows Mobile, WSAM sets the following installation values:

- In HKEY\_LOCAL\_MACHINE\SOFTWARE\Juniper Networks\WSAM:

String	Set to
AutoStart	0 or 1
ProductVersion	<version number><build number>
ProductName	WSAM

- HKEY\_LOCAL\_MACHINE\SOFTWARE\Juniper Networks\WSAM\Config

String	Set to
Url1	???

- HKEY\_LOCAL\_MACHINE\SOFTWARE\Juniper Networks\WSAM\Log:

String	Set to
LoggingApps	iexplore.exe; tmail.exe
LogLevel	3
ProductLocation	\Program Files\Juniper Networks\WSAM

- HKEY\_LOCAL\_MACHINE\SOFTWARE\Juniper Networks\WSAM

String	Set to
EnableLogSvr	0 or 1 (depending upon server side log setting)

- HKEY\_CURRENT\_USER\SOFTWARE\Juniper Networks\WSAM

String	Set to
UpgradeFlag	2 or 3 (depending upon auto profile generation requirement)

### Uninstallation Values

WSAM sets the following uninstall values in HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\Neteris\_Secure\_Application\_Manager\Commands for Windows 2000, XP, Windows Vista and Windows 7.

String	Set to
DelRV	"C:\Program Files\Juniper Networks\Secure Application Manager\samnb.dll",SFS_DeleteRebootValue
FlushC	"C:\Program Files\Juniper Networks\Secure Application Manager\samnb.dll",SFS_FlushCache

WSAM also sets the following locations:

- HKEY\_CURRENT\_USER\SOFTWARE\Juniper Networks\Secure Application Manager\SessionEstablishTasks
- HKEY\_CURRENT\_USER\SOFTWARE\Juniper Networks\Secure Application Manager\SessionCleanupTasks
- HKEY\_CURRENT\_USER\SOFTWARE\Juniper networks\Secure Application Manager\EnableLogSvr (Set to 0 or 1, depending on server side log setting)

### Current Version Values

WSAM sets the following uninstall and version information values in HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\Netis\_Secure\_Application\_Manager:

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

In addition, WSAM sets the following version values:

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

### TDI driver values (Windows 2000/XP/Vista/Windows 7 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\_releaseNumber\_buildNumber:

String	Set to
DisplayName	Juniper Networks TDI Filter Driver (NEOFLTR_releaseNumber_buildNumber)
ImagePath	C:\WINDOWS\System32\Drivers\NEOFLTR_releaseNumber_buildNumber.SYS

WSAM sets the following values in HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\NEOFLTR\_releaseNumber\_buildNumber\Enum:

Type	Name	Value
String	0	Root\LEGACY_NEOFLTR_releaseNumber_buildNumber\000
DWord	Count	0x00000001

Type	Name	Value
DWord	NextInstance	0x00000001

WSAM sets the following value in  
HKEY\_LOCAL\_MACHINE\SYSTEM\CurrentControlSet\Services\AFD\Parameters

String	Set to
IrpStackSize	Applicable TDI Irp stack size, if required

### Miscellaneous

WSAM sets the following miscellaneous registry values:

- String: IntranetAuthOptions is set in  
HKEY\_LOCAL\_MACHINE\SOFTWARE\Neoteris\Secure Application Manager\Backup and HKEY\_CURRENT\_USER\SOFTWARE\Neoteris\Secure Application Manager\Backup.

### Log file location

You can enable or disable client-side logs by clicking **System > Log/Monitoring > Client Logs > Settings** in the Web console. When you enable logging, WSAM adds log files to the following location:

For Windows 2000/XP:

- C:\Documents and Settings\All Users \Application Data\Juniper Networks\Secure Application Manager
- C:\Documents and Settings\All Users \Application Data\Juniper Networks\Logging

For Windows Vista and Windows 7:

- C:\Users\username\AppData\Roaming\Juniper Networks\Secure Application Manager
- C:\Users\username\AppData\Roaming\Juniper Networks\Logging

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 run 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 run 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

### Additional Files Installed by Package and File Locations

For Windows 2000/XP, JSAM installs additional files in: C:\Documents and Settings\*username*\Application Data\Juniper Networks\Java Secure Application Manager

For Windows Vista and Windows 7:

- If UAC is disabled, JSAM installs C:\Users\*username*\AppData\Roaming\Juniper Networks\jsamtool.exe.
- If UAC is enabled, JSAM installs C:\Users\*username*\AppData\Local\Temp\Low\Juniper Networks\Java Secure Application Manager\jsamtool.exe.

### Files Remaining After Uninstall

For Windows 2000/XP, after JSAM uninstalls, only the log files remain on the client, as described in “Log file locations” on page 28.

For Windows Vista and Windows 7, after JSAM uninstalls, files in C:\Users\*username*\AppData\Local\Temp\Low\Juniper Networks\Java Secure Application Manager remain.

### 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 ncacn\_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 reads: HKEY\_CURRENT\_USER\SOFTWARE\Microsoft\Windows\CurrentVersion\Internet Settings\ProxyEnable

**Log file locations**

You can enable or disable client-side logs by clicking **System > Log/Monitoring > Client Logs > Settings** in the Web console.

For Windows 2000/XP, when you enable logging, JSAM adds C:\Documents and Settings\*username*\Application Data\Juniper Networks\Java Secure Application Manager\dsJSAM\_win0.log and dsJSAM\_win1.log

For Windows Vista and Windows 7, when you enable logging, JSAM adds C:\Users\*username* \AppData\Local\Temp\Low\Juniper Networks\Java Secure Application Manager\jsamtool.log and dsJSAM\_win1.log.

**Macintosh Clients**

The following information applies to Macintosh clients only.

**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 file remains 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**

The following information applies to Linux clients only.

**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.

**Log Files Installed by JSAM**

JSAM adds log files to the ~/.juniper\_networks directory.

---

## Network Connect and GINA

### Windows Clients

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

#### Installer Package Files and File Locations

- `C:\Documents and Settings\username\Local Settings\Temp\neoNCsetup.exe.cab` (Windows 2000/XP)
- `C:\Users\username\AppData\Local\Temp\neoNCSetup.exe` (Windows Vista and Windows 7)
- For FIPS compliant systems, the following additional packages are downloaded:
  - `C:\Documents and Settings\username\Application Data\Juniper Networks\Setup Client\neoFIPSSetup_6.5.x.xxxx.exe` (Windows 2000/XP)
  - `C:\Users\username\AppData\Roaming\Juniper Networks\Setup Client\neoFIPSSetup_6.5.x.xxxx.exe` (Windows Vista and Windows 7)

#### 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, XP, Windows Vista and Windows 7, 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`
- `dsNcCredProv.dll`
- `dsNetworkConnect.exe`
- `dsNcDiag.dll`

- dsNcGina.dll
- dsNCGINACompatible.txt
- dsNCRResource\_EN.dll
- dsNCRResource\_DE.dll
- dsNCRResource\_ES.dll
- dsNCRResource\_FR.dll
- dsNCRResource\_JA.dll
- dsNCRResource\_KO.dll
- dsNCRResource\_ZH.dll
- dsNCRResource\_ZH\_CN.dll
- dsNcSmartCardProv.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
- install.log
- JuniperSetupClientOCX.exe (stand-alone installer only)
- nclauncher.exe
- setproxy.html
- uninstall.exe
- versionInfo.ini
- x86\_Microsoft.VC80.ATL\_8.0.50727.762.exe (stand-alone installer only)
- x86\_Microsoft.VC80.CRPT\_8.0.50727.762.exe (stand-alone installer only)
- x86\_Microsoft.VC80.CRTR\_8.0.50727.762.exe (stand-alone installer only)
- /Microsoft.VC80.ATL/atl80.dll (stand-alone installer only)
- /Microsoft.VC80.ATL/Microsoft.VC80.ATL.manifest (stand-alone installer only)

- /Microsoft.VC80.CRT/Microsoft.VC80.CRT.manifest
- /Microsoft.VC80.CRT/msvcp80.dll
- /Microsoft.VC80.CRT/msvcr80.dll

Network Connect also installs the following files:

- C:\Program Files\Juniper Networks\Common Files\dsNcService.exe
- C:\Program Files\Juniper Networks\Common Files\odFips2.dll (FIPS only)
- C:\Program Files\Juniper Networks\Common Files\odFips2.dll.icv (FIPS only)
- C:\Program Files\Juniper Networks\Common Files\salib\_OSSL.dll (FIPS only)
- C:\<WINDIR>\system32\drivers\dsNcAdpt.sys
- C:\<WINDIR>\system32\dsGinaLoader.dll (Windows 2000 and Windows XP)

For Windows Vista and Windows 7, Network Connect also installs the following files:

- %windows%\system32\dsNCCredProv.dll
- %windows%\system32\dsNcSmartCardProv.dll

### Files Remaining After Uninstall

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

- dsGinaLoader.dll

If only one Network Connect installation is present on the client, this file is removed after you reboot. If there are multiple versions of Network Connect installed on the client, this file remains on the client.

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

### Registry Modifications

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  
 (Windows 2000 and Windows XP only):

String	Set to
GinaDLL	"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 >

- (Windows Vista and Windows 7 only) HKEY\_LOCAL\_MACHINE  
"SOFTWARE\Microsoft\Windows\CurrentVersion\Authentication\PLAP  
Providers\{9f4a51de-92b1-483a-b717-dd7d3bb7d3db}"
- (Windows Vista and Windows 7 only) HKEY\_CLASSES\_ROOT  
"CLSID\{9f4a51de-92b1-483a-b717-dd7d3bb7d3db}"
- (Windows Vista and Windows 7 only) HKEY\_LOCAL\_MACHINE  
"SOFTWARE\Microsoft\Windows\CurrentVersion\Authentication\PLAP  
Providers\{60442b50-aac2-4db7-b9b0-813d2107287d}"
- (Windows Vista and Windows 7 only) HKEY\_CLASSES\_ROOT  
"CLSID\{60442b50-aac2-4db7-b9b0-813d2107287d}"

### Log file Location

You can enable or disable client-side logs by clicking **System > Log/Monitoring > Client Logs > Settings** in the Web console.

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

For Windows 2000/XP:

C:\Documents and Settings\user\Application Data\Juniper Networks\Network  
Connect <version number>\debug.log

For Windows Vista and Windows 7:

C:\Users\username\AppData\roaming\Juniper Networks\logging\debuglog.log and  
C:\Users\public\Juniper Networks\logging\debuglog.log

## Linux Clients

The following information applies to Linux clients only.

### 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

The following information applies to Macintosh clients only.

### 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.

## Juniper Terminal Services Client

To run Juniper Terminal Services Client, the IVE downloads the Neotermsetup.exe file (or the NeotermsetupNT.exe file 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.

### **Installer Package Files and File Locations**

The IVE downloads Neotermsetup.exe (or NeotermsetupNT.exe 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 Juniper Terminal Services Client installs additional Juniper proxy files in %APPDATA%\Juniper Networks\Juniper Terminal Services Client on the client:

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

- dsTermServ.exe
- dsTermServDt.dll
- 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

The Juniper Terminal Services Client installs the following files in %APPDATA%\Juniper Networks\Juniper Terminal Services Client\Microsoft.VC80.CRT:

- Microsoft.VC80.CRT.manifest
- msvcp80.dll
- msucr80.dll

### ***Files Remaining After Uninstall***

None

### ***Registry Modifications***

The Juniper Terminal Services Client adds the following registry values under the registry key, HKEY\_CURRENT\_USER\Software\Juniper Networks\Juniper Terminal Services Client.

Type	Name	Value
REG_SZ	InstallPath	%APPDATA%\Juniper Networks\Juniper Terminal Services Client
REG_SZ	Language	<user locale>. The default is en.

Juniper Terminal Services Client sets the following string registry values in HKEY\_CURRENT\_USER\Software\Microsoft\Windows\CurrentVersion\Uninstall\Juniper\_Term\_Services.

Type	Name	Value
String	DisplayName	"Juniper Terminal Services Client"
String	DisplayVersion	Set to the current software version
String	Publisher	"Juniper Networks"
String	QuietUninstallString	"%APPDATA%\Juniper Networks\Juniper Terminal Services Client\uninstall.exe" /S
String	StartupApp	"%APPDATA%\Juniper Networks\Juniper Terminal Services Client\dsTermServ.exe"
String	StopApp	"%APPDATA%\Juniper Networks\Juniper Terminal Services Client\dsTermServ.exe" – stop
String	UninstallString	"%APPDATA%\Juniper Networks\Juniper Terminal Services Client\uninstall.exe"
String	URLInfoAbout	http://www.juniper.net

### Log File Location

You can enable or disable client-side logs by clicking **System > Log/Monitoring > Client Logs > Settings** in the Web console.

When you enable logging, the Juniper Terminal Services Client adds the debuglog.log file to the following locations:

For Windows 2000/XP: %ALLUSERSPROFILE%\Application Data\Juniper Networks\Juniper Terminal Services Client

For Windows Vista and Windows 7: %APPDATA%\Juniper Networks\Juniper Terminal Services Client

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## Juniper Citrix Services Client

To execute the Juniper Citrix Services Client, the IVE downloads neoCitrixServSetup.exe to the user's client. This executable downloads additional files to the user's system.

## **Installer Package Files and File Locations**

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

### **Additional Files Installed by Package and File Locations**

The Juniper Citrix Services Client installs the following Juniper proxy files on the client in %APPDATA%\Juniper Networks\Juniper Citrix Services Client.

For administrators, Citrix client files are also installed to %ProgramFiles%\Citrix where %ProgramFiles% =%SystemDrive%\Program Files.

- 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
- 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

Juniper Citrix Services Client also installs the following files in %APPDATA%\Juniper Networks\Juniper Citrix Services Client \Microsoft.VC80.CRT:

- Microsoft.VC80.CRT.manifest

- msvc80.dll
- msucr80.dll

### Files Remaining After Uninstall

None

### Registry Modifications

The Juniper Citrix Services client adds the following registry value under HKEY\_CURRENT\_USER\Software\Juniper Networks\Juniper Citrix Services Client

Type	Name	Value
REG_SZ	Language	<user locale>. The default is en.

The Juniper Citrix Services Client also sets the following registry values in HKEY\_CURRENT\_USER\Software\Microsoft\Windows\CurrentVersion\Uninstall\Juniper\_Citrix\_Services:

Type	Name	Value
String	DisplayName	“Juniper Citrix Services Client”
String	DisplayVersion	Set to the current software version
String	Publisher	“Juniper Networks”
String	QuietUninstallString	“%APPDATA%\Juniper Networks\Juniper Citrix Services Client\uninstall.exe" /S
String	StartupApp	“%APPDATA%\Juniper Networks\Juniper Citrix Services Client\dsCitrixProxy.exe”
String	StopApp	“%APPDATA%\Juniper Networks\Juniper Citrix Services Client\dsCitrixProxy.exe" –stop
String	UninstallString	“%APPDATA%\Juniper Networks\Juniper Citrix Services Client\uninstall.exe”
String	URLInfoAbout	http://www.juniper.net

### Log File Location

You can enable or disable client-side logs by clicking **System > Log/Monitoring > Client Logs > Settings** in the Web console. When you enable logging, the Juniper Citrix Services Client adds the dsCitrixServ.log file to the following location:

For Windows 2000/XP: \Documents and Settings\username\Application Data\Juniper Networks\Juniper Citrix Services Client

For Windows Vista and Windows 7: \Users\username\AppData\Roaming\Juniper Networks\Juniper Citrix Services Client

## ESAP

ESAP is a package containing third-party binaries used by Host Checker for running certain host checks. Currently it contains:

- Opswat SDK—for evaluating Anti-Virus/Firewall/Anti-Spyware checks
- Shavlik SDK—for detecting what patches are installed on endpoint and deploying missing patches

The ESAP package is downloaded to the SA Series Appliance or IC Series Appliance but is not downloaded to the endpoints. Individual content, such as Opswat SDK, is downloaded when relevant host check (such as anti-virus rule) needs to be done.

## 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 39
- “Java Secure Application Manager (JSAM)” on page 40
- “Network Connect” on page 41
- “Terminal Services Component” on page 41
- “Citrix Terminal Services Component” on page 41
- “Host Checker (includes Secure Virtual Workspace)” on page 42
- “Enhanced Endpoint Security” on page 42
- “Cache Cleaner” on page 42
- “Secure Meeting” on page 42

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 20

**Table 1: Windows Secure Application Manager (WSAM) (Continued)**

	ActiveX	ActiveX: Installer Service	Java	Java	
Client/Action	Windows	Windows	Windows	Mac/Linux	More Information
Run	Standard User	Standard User	Standard User	Not Applicable	See “Windows Secure Application Manager (WSAM)” on page 20

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 (Windows Mobile only).
- 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
<b>JSAM</b>					
Run	Not Applicable	Not Applicable	Restricted, Power User, or Admin	User	See “Java Secure Application Manager (JSAM)” on page 26

**JSAM with Host File Modification**

Run	Not Applicable	Not Applicable	Admin	Admin/Root Note: Client system asks for the administrator password when JSAM launches.	See “Java Secure Application Manager (JSAM)” on page 26
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Notes:

- JSAM Windows XP/2000:
  - Automatic host mapping: you must have the rights to run regedit.exe in “read-only” mode, and the rights to modify the hosts file.
  - Outlook and NetBIOS applications: you must have the rights to run regedit.exe in “read/write” mode.
- JSAM Windows Vista and Windows 7:
  - Automatic host mapping: you must have the rights to install jsamtool.exe on the system and run it.
  - Outlook and NetBIOS applications: you must have the rights to install jsamtool.exe on the system and run it.
- JSAM Mac OS X:
  - Automatic host mapping: you must provide the administrator password when JSAM prompts for it at launch.
  - Any applications that listen on ports below 1024: you must provide the administrator password when JSAM prompts for it at launch.
- JSAM Linux:
  - Automatic host mapping: you must be the root user.
  - Any applications that listen on ports below 1024: you must be the root user.

**Table 3: Network Connect**

	<b>ActiveX</b>	<b>ActiveX: Installer Service</b>	<b>Java</b>	<b>Java</b>	
<b>Action</b>	<b>Windows</b>	<b>Windows</b>	<b>Windows</b>	<b>Mac/Linux</b>	<b>More Information</b>
Install	Admin	Restricted, Power User, or Admin	Admin	Admin <sup>a</sup>	See “Network Connect and GINA” on page 29
Run	Standard User	Standard User	Standard User	Standard User	See “Network Connect and GINA” on page 29

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.
- (Mac only) When Network Connect is first installed (before ncinstallhelper exists on the system), you must provide the administrator password when prompted during the installation. On subsequent launches no special privileges are required.
- When the installer service is running, uninstalling Network Connect as a restricted user should be done from the user browser's preference page.

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

**Table 4: Terminal Services Component**

	<b>ActiveX</b>	<b>ActiveX: Installer Service</b>	<b>Java</b>	<b>Java</b>	
<b>Action</b>	<b>Windows</b>	<b>Windows</b>	<b>Windows</b>	<b>Mac/Linux</b>	<b>More Information</b>
Install	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	See “Juniper Terminal Services Client” on page 34
Run	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	See “Juniper Terminal Services Client” on page 34

**Table 5: Citrix Terminal Services Component**

	<b>ActiveX</b>	<b>ActiveX: Installer Service</b>	<b>Java</b>	<b>Java</b>		
<b>Action</b>	<b>Windows</b>	<b>Windows</b>	<b>Windows</b>	<b>Mac/Linux</b>	<b>Citrix Client</b>	<b>More Information</b>
Install	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	Power User or Admin	See “Juniper Terminal Services Client” on page 34
Run	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	Restricted, Power User, or Admin	See “Juniper Terminal Services Client” on page 34

**Table 6: Host Checker (includes Secure Virtual Workspace)**

	<b>ActiveX</b>	<b>ActiveX: Installer Service</b>	<b>Java</b>	<b>Java</b>	
<b>Action</b>	<b>Windows</b>	<b>Windows</b>	<b>Windows</b>	<b>Mac/Linux</b>	<b>More Information</b>
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.

**Table 7: Enhanced Endpoint Security**

<b>Action</b>	<b>EES on Windows without installer service</b>	<b>EES on Windows with installer service</b>
Install	Power User, Admin	Restricted, Power User, or Admin
Run	Restricted, Power User, or Admin	Restricted, Power User, or Admin

**Table 8: Cache Cleaner**

	<b>ActiveX</b>	<b>ActiveX: Installer Service</b>	<b>Java</b>	<b>Java</b>	
<b>Action</b>	<b>Windows</b>	<b>Windows</b>	<b>Windows</b>	<b>Mac/Linux</b>	<b>More Information</b>
Install	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	See “Cache Cleaner” on page 16
Run	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Restricted, Power User, or Admin	Not Applicable	See “Cache Cleaner” on page 16

**Table 9: Secure Meeting**

	<b>ActiveX</b>	<b>ActiveX: Installer Service</b>	<b>Java</b>	<b>Java</b>	
<b>Action</b>	<b>Windows</b>	<b>Windows</b>	<b>Windows</b>	<b>Mac/Linux</b>	<b>More Information</b>
<b>Secure Meeting: Win32</b>					
Install	Restricted, Power User, or Admin	Not Applicable	Restricted, Power User, or Admin	Not Applicable	See “Secure Meeting” on page 18
Run	Restricted, Power User, or Admin	Not Applicable	Restricted, Power User, or Admin	Not Applicable	See “Secure Meeting” on page 18
<b>Secure Meeting: Java</b>					
Install	Restricted, Power User, or Admin	Not Applicable	Restricted, Power User, or Admin	User	See “Secure Meeting” on page 18

**Table 9: Secure Meeting (Continued)**

	<b>ActiveX</b>	<b>ActiveX: Installer Service</b>	<b>Java</b>	<b>Java</b>	
<b>Action</b>	<b>Windows</b>	<b>Windows</b>	<b>Windows</b>	<b>Mac/Linux</b>	<b>More Information</b>
Run	Restricted, Power User, or Admin	Not Applicable	Restricted, Power User, or Admin	User	See “Secure Meeting” on page 18
<b>Secure Meeting: Outlook Plug-in</b>					
Install	Power User, or Admin	Not Applicable	Power User, or Admin	Not Applicable	See “Secure Meeting” on page 18
Run	Restricted, Power User, or Admin	Not Applicable	Restricted, Power User, or Admin	Not Applicable	See “Secure Meeting” on page 18

NOTE: On Vista and Windows 7, if Secure Meeting is installed with restricted user privilege, remote control of high privilege processes (such as regedit and so forth) is not available.

