



Windows Installer (MSI) Information

This chapter describes how to use the Microsoft Windows Installer for the network administrator. For end user instructions, see *Cisco VPN Client for Windows User Guide*, Chapter 2. For information on customizing the VPN Client applications, see “[Customizing the VPN Client Using an MSI Transform](#).” For installing MSI without user interaction, see “[Installing the VPN Client Without User Interaction](#).”

This chapter includes the following main topics:

[Differences Between InstallShield and MSI](#)

[Starting the VPN Client MSI](#)

[Logging During Installation](#)

Differences Between InstallShield and MSI

[Table 9-1](#) describes the differences between InstallShield and MSI installation.

Table 9-1 *InstallShield and MSI Features Compared*

InstallShield	MSI
Supported on all platforms including Windows 9.x	Supported only on Windows NT SP6, Windows 2000, and Windows XP.
Detects and uninstalls an older VPN Client.	Detects but does not automatically uninstall an older VPN Client. Remove previous versions via Add/Remove programs.
Provides a proprietary installation package and customizing process.	Provides a standard installation package and customizing process.
Silent installation suppresses all dialogs and messages, including errors.	Silent installation can be customized to include error reporting.
Provides no automatic rollback when installation fails.	Provides automatic rollback in case of installation failure; undoes changes to the system made during attempted installation.
No automatic replacement of deleted or corrupted files upon first use	Automatic replacement of deleted or corrupted files upon first use. Replaces registry keys associated with shortcuts under Start Program Files.

Starting the VPN Client MSI

Installing the VPN Client 4.0 via MSI requires Windows Installer version 2.0, which is standard with Windows XP but not with Windows NT 4.0 (SP6) or Windows 2000. When using MSI to install the VPN Client on Windows NT and Windows 2000, the installation application installs or upgrades Windows Installer to version 2.0. This occurs only once.

To install the VPN Client, you must be an administrator or a restricted user with elevated privileges. However, for the restricted user with elevated privileges, the installation program adds the VPN Client to the Program Menu for only the user that installed the VPN Client, not for all users.

Alternative Ways to Launch MSI

There are various ways to launch MSI. *Cisco VPN Client User Guide for Windows* explains how to install the VPN Client using an executable that runs a wizard (vpnclient_en.exe). This method automatically installs or upgrades the Windows Installer to version 2.0 if necessary. However, this is only one way to install the application.

Launching MSI via Command Line

If Windows Installer 2.0 is already installed, you can install the VPN Client using the msiexec.exe command on the command line as follows.

```
msiexec.exe /i vpnclient_en.msi [options]
```

where

/i is the installation switch.

vpnclient_en.msi is the application to be installed.

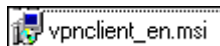
**Note**

For complete documentation on the msiexec.exe command, see *Windows Installer version 2.0*, Microsoft Platform SDK, August 2001.

Launching MSI via the MSI Icon

If Windows Installer is already installed, you can launch the installation package by double-clicking the MSI icon.

Figure 9-1 MSI icon



Logging During Installation

To better understand what is happening while MSI is installing the VPN Client, you should initiate logging on the command line by executing the `msiexec.exe` command with the following options:

```
msiexec.exe /l [ilwlealrlulclmlolplv!+!*] logfile
```

where:

`/l` is the switch that turns on logging.

`logfile` is the name of the file to receive the logging information.

Example 9-1 Installing with Logging

Option	Information Provided
i	Status messages
w	Non-fatal warnings
e	All error messages
a	Start up actions
r	Action-specific records
u	User requests
c	Initial user interface parameters
m	Out-of-memory or fatal exit information
o	Out-of-disk-space messages
p	Terminal properties
v	Verbose output
+	Append to existing file
!	Send each line to the log
*	Log all information except for what the verbose option generates.

The following command installs the VPN Client and includes a log of all information (*v). It also specifies sending each line to the log file (!).

```
msiexec /i vpnclient_en.msi /l*v! vpnclient_msi.log
```

Example 9-2 Installing via the Executable from the Command Line with Logging

The following command installs the VPN Client and logs all information to a log file.

```
vpnclient_en.exe /l*v! vpnclient_msi.log
```



Note

You should always include the `!` option for logging, since many of the installer events are not recorded if you do not include this option.

