Release Notes for VPN Client, Release 4.6.00

Date: August 25, 2004
Part Number: OL-6500-01

These release notes support Cisco VPN Client software Release 4.6.00.045. Release 4.6.00.045 is the first VPN Client 4.6 release.

These release notes describe new features, limitations and restrictions, caveats, and related documentation. Please read the release notes carefully prior to installation. The section, “Usage Notes,” describes interoperability considerations and other issues you should be aware of when installing and using the VPN Client.

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Introduction

The VPN Client is an application that runs on a Microsoft® Windows®-based PC, a Sun ultraSPARC workstations, a Linux desktop, or a Macintosh (Mac) personal computer that meets the system requirements stated in the next section. In this document, the term “PC” applies generically to all these computers, unless specified otherwise.

The VPN Client on a remote PC, communicating with a Cisco VPN device at an enterprise or service provider, creates a secure connection over the Internet that lets you access a private network as if you were an on-site user. This secure connection is a Virtual Private Network (VPN).

System Requirements

Refer to Chapter 2, “Installing the VPN Client,” in the Cisco VPN Client User Guide for Windows or Cisco VPN Client User Guide for Mac OS X, as appropriate for your platform, for a complete list of system requirements and installation instructions.

- To install the VPN Client on any system, you need
  - CD-ROM drive (if you are installing from CD-ROM)
  - Administrator privileges
- The following table indicates the system requirements to install the VPN Client on each of the supported platforms.
System Requirements

The VPN Client supports the following Cisco VPN devices:

- Cisco VPN 3000 Concentrator Series, Version 3.0 and later.
- Cisco PIX Firewall, Version 6.2.2(122) or Version 6.3(1).
- Cisco IOS Routers, Version 12.2(8)T and later

If you are using Internet Explorer, use version 5.0, Service Pack 2 or higher.

<table>
<thead>
<tr>
<th>Computer</th>
<th>Operating System</th>
<th>Requirements</th>
</tr>
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</table>
| Computer with a Pentium®-class processor or greater | • Microsoft® Windows® 98 or Windows 98 (second edition)  
• Windows ME  
• Windows NT® 4.0 (with Service Pack 6, or higher)  
• Windows 2000  
• Windows XP | • Microsoft TCP/IP installed.  
(Confirm via Start > Settings > Control Panel > Network > Protocols or Configuration.)  
• 50 MB hard disk space.  
• RAM:  
  - 32 MB for Windows 98  
  - 64 MB for Windows NT and Windows ME  
  - 64 MB for Windows 2000  
  (128 MB recommended)  
  - 128 MB for Windows XP  
  (256 MB recommended) |

Note: The VPN Client does not support SMP (multiprocessor) or 64-bit processor kernels.

<table>
<thead>
<tr>
<th>Computer</th>
<th>Operating System</th>
<th>Requirements</th>
</tr>
</thead>
</table>
| Computer with and Intel x86 processor | RedHat Version 6.2 or later Linux (Intel), or compatible libraries with glibc Version 2.1.1-6 or later, using kernel Versions 2.2.12 or later | • 32 MB Ram  
• 50 MB hard disk space |

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- Cisco IOS Routers, Version 12.2(8)T and later

If you are using Internet Explorer, use version 5.0, Service Pack 2 or higher.
Installation Notes

The following files are included in this release:

- vpnclient-win-msi-4.6.00.0049-k9.zip Windows client MSI installer
- vpnclient-win-is-4.6.00.0045-k9.zip Windows client IS installer
- vpnclient-darwin-4.6.00.0045-GUI-k9.dmg Mac OS X installer
- vpnclient-linux-4.6.00.0045-k9.tar.gz Linux package
- vpnclient-solaris-4.6.00.0045-k9.tar.Z Solaris package
- vpn3000-4.1.6.bin VPN 30xx Concentrator code
- vpn3005-4.1.6.bin VPN 3005 Concentrator code
- update-4.6.00.0045.zip VPN Client AutoUpdate package

Because of platform differences, the installation instructions for Windows and non-Windows platforms also differ.

- Refer to the *Cisco VPN Client User Guide for Windows*, Chapter 2, for complete installation instructions for Windows users.
- Refer to the *Cisco VPN Client User Guide for Mac OS X*, Chapter 2, for complete installation information for those platforms.

The following notes are important for users who are upgrading to Windows XP and users who want to downgrade to an earlier version of the VPN Client software.
Installation Notes - Windows Platforms

Release 4.6 includes the following installation considerations for Windows users:

Installing the VPN Client Software Using InstallShield

Installing the VPN Client software on Windows NT, Windows 2000, or Windows XP with InstallShield requires Administrator privileges. If you do not have Administrator privileges, you must have someone who has Administrator privileges install the product for you.

Note: The VPN Client Installer does not allow installations from a network drive (CSCeb43490).

Installing the VPN Client Software Using the MSI Installer

Note: The Windows MSI installation package was first released with version number 4.6.00.0049. No other packages were released from build number 4.6.00.0049.

If you are using the MSI installer, you must have Windows NT-based products such as Windows NT 4.0 (with SP6), Windows 2000, or Windows XP. Installing with MSI also requires Administrator privileges.

When installing the Windows MSI installation package, the user must manually uninstall the previous VPN Client if it is older than version 4.6. The version 4.6 MSI installer does not detect older versions, and the installer will attempt to install before aborting gracefully. Once a version 4.6 MSI package has been installed, future client versions will be able to detect the existing version 4.6 installation and automatically begin the uninstallation process.

Note: Windows Installer 2.0 must be installed on a Windows NT or Windows 2000 PC before configuring the PC for a Restricted User with Elevated Privileges (CSCea37900).
VPN Client Installation Using Windows Installer (MSI) Requires Windows NT SP6

When you attempt to install the VPN Client using MSI install (vpnclient_en.exe) on NT SP3, SP4, or SP5, the error messages do not indicate that the VPN Client cannot be installed on those operating systems because they are unsupported. Once the errors occur, no other messages are displayed and the installation is aborted.

When you attempt to run vpnclient_en.exe on Windows NT SP3, SP4, or SP5 you see the following messages:

“Cannot find the file instmsiw.exe (or one of its components). Make sure the path and filename are correct and that all the required libraries are available.”

-then-

“Cannot find the file MSIEXEC (or one of its components). Make sure the path and filename are correct and that all the required libraries are available.”

The Windows Installer (MSI) can be installed only on NT SP6, so the error messages you see using earlier service packs are due to an MSI incompatibility (CSCdy05049).

Installation Notes - Solaris Platforms

The following sections describe actions you must take when installing the VPN Client on a Solaris platform.

Uninstall an Older VPN Client If Present on a Solaris Platform

If you have a previous version of the VPN Client running under Solaris, you must uninstall the older VPN Client before installing a new VPN Client. You are not required to uninstall an old VPN Client, if one is present, before installing a new VPN Client for Linux or Mac OS X.

Refer to the Cisco VPN Client User Guide for Linux, Solaris, and Mac OS X, Chapter 2, for complete uninstallation information.
Disable the ipfilter Firewall Kernel Module Before Installing the VPN Client on a Solaris Platform

If you have an IP firewall installed on your workstation, the reboot after installation of the VPN Client takes an inordinate amount of time. This is caused by a conflict between the vpnclient kernel module cipsec and the ipfilter firewall module. To work around this issue, disable the ipfilter firewall kernel module before you install the VPN Client (CSCdw27781).

Using the VPN Client

- To use the VPN Client, you need
  - Direct network connection (cable or DSL modem and network adapter/interface card), or
  - Internal or external modem, and
- To connect using a digital certificate for authentication, you need a digital certificate signed by one of the following Certificate Authorities (CAs) installed on your PC:
  - Baltimore Technologies (www.baltimoretechnologies.com)
  - Entrust Technologies (www.entrust.com)
  - Netscape (www.netscape.com)
  - Verisign, Inc. (www.verisign.com)
  - Microsoft Certificate Services — Windows 2000
  - A digital certificate stored on a smart card. The VPN Client supports smart cards via the MS CAPI Interface.
New Features in Release 4.6.00

Release 4.6.00 of the VPN Client software includes the following new features.

- Mutual Group Authentication
- Auto Update (Windows 2000 and Windows XP only)
- Browser Proxy Config (Internet Explorer for Windows only)
- Client API support (all platforms except Solaris)
- Connect on Open (Windows and Macintosh)
- 508 Accessibility Compliance (Windows)

Mutual Group Authentication

Group Authentication is a method that uses pre-shared keys for mutual authentication. In this method, the VPN Client and the VPN central-site device use a group name and password to validate the connection. This is a symmetrical form of authentication since both sides use the same authentication method during their negotiations.

Mutual group authentication is asymmetrical in that each side uses a different method to authenticate the other while establishing a secure tunnel to form the basis for group authentication. In this method, authentication happens in two stages. During the first stage, the VPN central-site device authenticates itself using public-key techniques (digital signature) and the two sides negotiate to establish a secure channel for communication. During the second stage, the actual authentication of the VPN Client user by the central-site VPN device takes place. Since this approach does not use pre-shared keys for peer authentication, it provides greater security than group authentication alone, as it is not vulnerable to a man-in-the-middle attack.

To use mutual group authentication, the remote user’s VPN Client system must have a root certificate installed. If needed, you can install a root certificate automatically by placing it on the VPN Client system during installation. The certificate must be in a file named rootcert, with no extension, and must be placed in the installation directory for the remote user’s VPN Client system.

For more information on mutual group authentication, see the VPN Client Administrator Guide, Chapter 1.
You must configure both the VPN Client and the VPN Concentrator to allow mutual group authentication (Hybrid mode). Ensure that the Certificate Authority being used on both the VPN Client and the VPN Concentrator is the same. Configure the VPN Concentrator in a similar fashion to the use of User Certificates.

1. Select an IKE Proposal that allows HYBRID mode authentication such as those listed in Table 8-3 of the VPN Client Administrator's Guide. HYBRID-AES256-SHA-RSA for example.

2. Configure an IPSec SA to use the appropriate Identity Certificate to be authenticated with the CA certificate of the VPN Client. If certificates have not yet been obtained for the VPN Concentrator, please refer to the VPN 3000 Series Concentrator Reference Volume I: Configuration Release 4.1.

3. Configure a VPN Group to use the new IPSec SA from step 2. The VPN Clients under test for Mutual Group Authentication will be connecting to this group.

**Automatic Updates**

In an automatic update, the VPN Client downloads a new version of the software and installs all related components automatically for users. This feature also allows the administrator to distribute and update profiles automatically.

Once Windows VPN Client version 4.6.00 has been installed, only the concentrator and Web server need be configured to initiate Automatic Updates of the client. Please refer to the *VPN Client Administrator's Guide*, Chapter 3, for details on the configuration options.

For the initial release, the update-4.6.00.0045.zip file provided is for use by users who participated in the Beta program so that they may use AutoUpdate to upgrade their Beta clients to the released version. Otherwise, the update file adds no value to users installing the initial version 4.6 Windows VPN Client other than reviewing its contents to become familiar with its components.
About Version Numbers

Beginning with the VPN Client 4.6 release, an all-numeric version numbering system has been adopted for VPN Client software to facilitate the automatic update function. Release numbers are represented in the format:

<major release>:<minor release>:<sustaining release>:<build>

The major and minor release numbers represent the feature level of the product. Major and minor releases implement new product capabilities. The sustaining and build release numbers represent significant or minor patch levels, respectively. For example, 4.6.00.0045 represents feature release 4.6, build 45.

All sustaining and build releases are cumulative, and not all build numbers will be released externally. These release notes specify which build numbers have been released.

These release notes refer to the VPN Client 4.6 software generically where appropriate, and more specifically where necessary to differentiate between patch releases.

Browser Proxy Configuration

Browser proxy configuration is ONLY available using the Release 4.1.6 VPN Concentrator code.

During mode config, the VPN Client negotiates a new mode config attribute to determine whether to change the value of a user’s browser proxy setting. The VPN Client administrator controls the setting of the attribute through a parameter in the PCF file. This feature is being implemented for Windows (all platforms) only and for Internet Explorer only.

You can configure the VPN Concentrator to push proxy configuration settings into Microsoft Internet Explorer when Windows clients connect to it. The settings are on the Client Config tab of Group configuration. You can configure the VPN Concentrator to not modify proxy settings ("Do not modify proxy settings"), to push settings to disable existing proxy configuration ("No Proxy Settings"), to push settings to auto-detect a proxy ("Auto-Detect Proxy settings"), and to push explicit proxy settings ("Use Proxy Server/Port listed below").

With the "Use Proxy Server/Port listed below" setting, you can push a proxy server address, a proxy exception list, and whether the browser will exclude the proxy for local addresses.
After disconnecting, proxy settings are restored to what they were before the VPN connection was established. If a workstation is improperly shut down or rebooted while a VPN connection is established, proxy settings will be restored on boot-up.

Client API Support

Release 4.6.00 provides an API for performing VPN Client operations without using the command-line or GUI interfaces that Cisco provides. To obtain documentation, a sample program, or help for the use of the API please send mail to vpn-client-api-support@cisco.com.

Connect on Open

Connect on open lets a user connect to the default user profile when starting the VPN Client. This feature is implemented on all platforms except Linux and Solaris.

You can configure the Windows and Macintosh VPN clients to connect automatically to the default connection profile when the VPN Client is launched. Configure this in the “Options” dialog of the VPN Client, by checking the “Auto-connect to Default on open” check box.

508 Accessibility Compliance

This release brings the VPN Client in compliance with all 508 standards for accessibility. This feature is implemented on all Windows platforms.

Usage Notes

This section lists issues to consider before installing Release 4.6 of the VPN Client software.

In addition, you should be aware of the open caveats regarding this release. Refer to “Open Caveats” on page 34 of these Release Notes for the list of known problems.
Potential Application Compatibility Issues

You might encounter the following compatibility issues when using the VPN Client with specific applications. Whenever possible, this list describes the circumstances under which an issue might occur and workarounds for potential problems.

Windows Interoperability Issues

The following known issues might occur with the indicated Microsoft Windows operating systems and applications software.

WINS Support

On Windows 95 and Windows 98, dynamic WINS support works with DHCP-enabled adapters (for example, PPP or NIC adapters that get their IP information dynamically). For static configurations, users must manually configure the adapters with WINS information.

Windows NT

Users running Windows NT 4.0 with Service Pack 4 require a hot fix from Microsoft for proper operation. This fix is available on the Microsoft GetHostByName API Returns Unbindable Address page: http://support.microsoft.com/support/kb/articles/Q217/0/01.ASP.

Importing a Microsoft Certificate Using Windows NT SP3

The following problem has occurred on some Windows NT SP3 systems (CSCdt11315).

When using the Client with digital certificates stored in the Microsoft certificate store, the Client may fail to connect. This is accompanied by the following Client event in the Log Viewer:

4101 13:41:48.557 01/05/01 Sev=Warning/2 CERT/0xA3600002
Could not load certificate (null) from the store.
Usage Notes

Workaround: Two workarounds exist. Choose one of the following:


- Alternatively, upgrade to a Windows Service Pack later than SP3.

VPN Client Cannot Launch Microsoft Connection Manager

The VPN Client does not see a dialup connection made with Microsoft Connection Manager because of incompatibilities between the requirements of the two applications (CSCdx85663).

Windows 98 Might Hang on Shutdown

On some Windows 98 PCs with the VPN Client installed, if you restart the PC, it may stop responding (that is, “hang”) on the screen that says “Windows is shutting down”.

Wait a minute. If the PC is still not responding, press the reset button. When the PC reboots, it should not run through ScanDisk, indicating the shutdown was successful in closing all open files. This problem may occur on some PCs and not on others, and we are looking for a solution. Windows 98 shutdown has numerous issues, as can be seen the following Microsoft Knowledge Base Article:


Windows 2000 (only) Requires Adding Client for MS Networks for Dialup Connections

For the Cisco VPN Client running on a Windows 2000 system, you cannot access Microsoft resources unless you add the Client for Microsoft Networks for the Dial-up adapter.

Aladdin Runtime Environment (RTE) Issue with Windows NT and Windows 2000

Using versions of the Aladdin Runtime Environment (RTE) on Windows NT and Windows 2000 can cause the following behavior. The login prompt that is posted by the Aladdin etoken when connecting the VPN Client can get hidden in the background. If this happens, the VPN connection can timeout and fail with the following event:
“System Error: Connection Manager failed to respond.”

A side effect of this is that the VPN Client’s service and dialer might become out of synch, and the PC might need to be restarted (CSCdv47999). To avoid this issue, use the Aladdin Runtime Environment (RTE) version 2.65 or later.

**Microsoft MSN Installation**

Microsoft’s MSN installation fails if you have already installed the VPN Client. Uninstall the VPN Client before you install MSN. After MSN has completed installation, you can install the VPN Client.

**WINS Information Might Not Be Removed from Windows Servers If Not Disconnected Before Shutdown**

If the VPN Concentrator is configured to send WINS server addresses down to the VPN Client and the PC is shut down or restarted without first disconnecting the VPN Client, the WINS servers are not removed from the network properties. This might cause local PC registration and name resolution problems while not connected with VPN.

To work around this problem, do one of the following:

- Be sure to disconnect the VPN Client before shutting down. If you are having problems, check your network properties and remove the WINS entries if they are not correct for your network.
- Alternatively, enable “Disconnect VPN connection when logging off”. Go to Options > Windows Logon Properties, check Disconnect VPN connection when logging off (CSCdv65165).

**VPN Client May Falsely Trigger Auto Initiation Connection Event though the NIC Card Has Been Removed**

The 4.6 VPN Client with Auto Initiation enabled on a Windows NT system may exhibit the following behavior. After removing a NIC card, the VPN Client may continue to trigger an Auto Initiation connection event though the NIC card has been removed. To stop its connection attempts, you can place the VPN Client in Suspended mode after a failed or canceled VPN connection. You can also disable this feature from the GUI by using Options > Automatic VPN Initiation, and unchecking “Enable”. If you add a new NIC, the problem goes away. (CSCdx46812).
DNS

For DNS resolution, if the DOMAIN NAME is not configured on the network interface, you need to enter the fully qualified domain name of the host that needs to be resolved.

Network Interfaces

- The VPN Client does not support Point-to-Point Protocol over ATM (PPPoA).
- The VPN Client cannot establish tunnels over Token Ring. However, it does not conflict with an installed Token Ring interface.
- DELL Docking Station users running the VPN Client on Windows NT may experience bluescreen failures if the latest version of Softex Docking Services has not been installed. The Softex Docking Service utilities are available directly from the DELL Support Web site, http://search.dell.com/index.asp. Select the checkbox for the File Library and search for the term “Softex Docking Services”.

Network ICE BlackICE Defender Configuration

Network ICE's BlackICE Defender is a traffic monitoring security product. If you properly configure it, BlackICE Defender can work with the VPN Client. You must configure BlackICE Defender for Trusting, Nervous, or Cautious mode. If you use Nervous or Cautious mode, add the public IP address of the VPN Concentrator to the list of trusted addresses. You can now configure the VPN Client to work with BlackICE Defender configured for Paranoid mode when in Tunnel-everything mode. Split Tunneling requires BlackICE to be in Trusting, Nervous, or Cautious mode.

The Cisco VPN Client firewall has the following requirements for BlackICE (BlackICE Defender 2.5 or greater or BlackICE Agent 2.5 or greater). For BlackICE Defender 2.5, copy the BICTRL.DLL file from the Cisco installation release medium to the BlackICE installation directory on the VPN Client PC. This is a mandatory step for making a connection requiring BlackICE.

BlackICE Defender version 2.9 and greater includes the BICTRL.DLL file in the Network ICE distribution medium, so that you do not need to copy it from the Cisco installation release medium.
Microsoft Outlook Error Occurs on Connection or Disconnect

The following Microsoft Outlook error might occur when the VPN Client connects or disconnects:

“Either there is no default mail client, or the current mail client cannot fulfill the messaging request. Run Microsoft Outlook and set it as the default mail client.”

This message does not affect operation of the VPN Client. The issue occurs when Microsoft Outlook is installed but not configured for email, although it is the default mail client. It is caused by a Registry Key that is set when the user installs Outlook.

To eliminate this message, do one of the following:

- Right-click the Outlook icon, go to Properties, and configure it to use Microsoft Exchange or Internet Mail as the default mail client.
- Use Internet Explorer to configure the system to have no default mail client.
- Configure Outlook as the default mail client (CSCdv67594).

Adjusting the Maximum Transmission Unit (MTU) Value - Windows Only

VPN Encapsulation adds to the overall message length. To avoid refragmentation of packets, the VPN Client must reduce the MTU settings. The default MTU adjusted value is 1300 for all adapters. If the default adjustments are not sufficient, you may experience problems sending and receiving data. To avoid fragmented packets, you can change the MTU size, usually to a lower value than the default. To change the MTU size, use the VPN Client SetMTU utility. If you are using PPPoE, you may also have to set the MTU in other locations. Refer to the following table for the specific procedures for each type of connection.

The MTU is the largest number of bytes a frame can carry, not counting the frame’s header and trailer. A frame is a single unit of transportation on the Data Link Layer. It consists of header data, plus data that was passed down from the Network Layer, plus (sometimes) trailer data. An Ethernet frame has an MTU of 1500 bytes, but the actual size of the frame can be up to 1526 bytes (22-byte header, 4-byte CRC trailer).

Recognizing a Potential MTU Problem

If you can connect with the Cisco VPN Client but cannot send or receive data, this is likely an MTU problem. Common failure indications include the following:
• You can receive data, such as mail, but not send it.
• You can send small messages (about 10 lines), but larger ones time out.
• You cannot send attachments in email.

Setting the MTU Value

If you are not experiencing a problem, do not change the MTU value. Usually, an MTU value of 1300 works. If it doesn’t, the end user must decrease the value until the Cisco VPN Client passes data. Decrement the MaxFrameSize value by 50 or 100 until it works.

The following table shows how to set the MTU value for each type of connection.

<table>
<thead>
<tr>
<th>Connection Type</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Adapters</td>
<td>Use the SetMTU utility supplied with the Cisco VPN Client.</td>
</tr>
<tr>
<td>Dial-up</td>
<td>Use the SetMTU utility supplied with the Cisco VPN Client.</td>
</tr>
<tr>
<td>PPPoE - All Vendors</td>
<td><strong>Windows XP only</strong> Use SetMTU</td>
</tr>
</tbody>
</table>
## Usage Notes

### Connection Type | Procedure
--- | ---
**PPPoE - EnterNet** | **Windows 98**
- On the main desktop, right click on My Network Places and go to Properties. The Network window opens.
- Double-click the Network TeleSystems PPPoE Adapter.
- On the Network TeleSystems window, click the Advanced tab, and then click MaxFrameSize. Change the value here. The value varies from case to case. The range can be from 1200 to 1400.

**Windows 2000**
- On the main desktop, right-click My Network Places and go to Properties. The Network and Dial-Up Connections window opens.
- Right-click and go to Properties on each connection until you find the connection that has the NTS EnterNet PPPoE Adapter.
- Once you find the correct connection, click Configure on the right side of the window.
- On the next window, click the Advanced tab, then click MaxFrameSize. Change the value here. The value varies from case to case. The range can be from 1200 to 1400.
## Usage Notes

### PPPoE - WinPoet

<table>
<thead>
<tr>
<th>Connection Type</th>
<th>Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Windows 98</strong></td>
<td>WinPoet does not provide user control over the PPPoE MTU under Windows 98.</td>
</tr>
</tbody>
</table>
| **Windows 2000** | WinPoet does not provide a user interface to control the MTU size, but you can control it by explicitly setting the following registry key:  
HKLM/system/currentcontrolset/control/class/<guid>/<adapternumber>  
adapter(000x):  
Value: MaxFrameSize  
Value type: DWORD  
Data: 1300 (or less)  
The GUID and adapter number can vary on different systems. Browse through the registry, looking for the MaxFrameSize value (CSCdu80463). |

**Caution**  
Edit the registry only if you are comfortable doing so. Incorrect registry entries can make your PC unstable or unusable.

### PPPoE - RasPPPoE

<table>
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<th>Connection Type</th>
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</tr>
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<tbody>
<tr>
<td><strong>Windows 98</strong></td>
<td></td>
</tr>
</tbody>
</table>
- On the main desktop, right-click My Network Places and go to Properties. The Network window opens.  
- Find the PPP over Ethernet Protocol that is bound to the Network card that is in your PC, then double click on it.  
- In the General Tab check Override Maximum Transfer Unit. Change the value here. The value varies from case to case. The range can be from 1200 to 1400. |
| **Windows 2000** |  
- On the main desktop, right-click My Network Places and go to properties. The Network and Dial-Up Connections window opens.  
- Right-click the connection the PPPoE Protocol was installed to, and go to properties.  
- When the window opens, double-click PPP over Ethernet Protocol.  
- In the General Tab, check Override Maximum Transfer Unit. Change the value here. The value varies from case to case. The range can be from 1200 to 1400. |
Asante FR3004 Cable/DSL Routers Require Asante Firmware Version 2.15 or Later

Versions of the Asante firmware caused a problem with rekeying and keepalives when a VPN Client had an all-or-nothing connection to a VPN Concentrator through an Asante FR3004 Cable/DSL router. Version 2.15 (or later) of the Asante firmware resolves these issues. For more information about Asante cable/DSL routers, see the following Web sites:

- http://www.practicallynetworked.com/pg/router_guide_index.asp

Using Nexland Cable/DSL Routers for Multiple Client Connections

All Nexland Pro routers support passing multiple IPSec sessions through to Cisco VPN 3000 Series Concentrators. To enable this function, the Nexland user must select IPSec Type 2SPI-C on the Nexland options page.

The discontinued Nexland ISB2LAN product correctly handles a single connection, but problems can occur when attempting to make multiple client connections to the same Secure Gateway from behind an ISB2LAN Nexland Cable/DSL router. Nexland has fixed this problem in the Nexland Pro series of routers (CSCdt10266).

Cert DN Matching Cannot Match on Email Field EA

You cannot match on the Cert DN field (EA) when using the Peer Cert DN Verification feature because the VPN Concentrator does not assign a value to that field (CSCdx25994).

VPN Dialer Application Can Load During OS Shutdown or Restart

When using the VPN Client's Start Before Logon feature (Windows NT, Windows 2000, or Windows XP) in “fallback” mode, the VPN dialer application loads during a shutdown or restart of the operating system. This will not cause any problems and can be ignored (CSCdu02071).
America Online (AOL) Interoperability Issues

AOL Versions 5.0 and 6.0

The VPN Client supports AOL Version 5.0. AOL Version 6.0 is also supported, with one limitation: when connected, browsing in the network neighborhood is not available.

AOL Version 7.0

AOL Version 7.0 uses a proprietary heartbeat polling of connected clients. This requires the use of split tunneling to support the polling mechanism. Without split tunneling, AOL disconnects after a period of time between 5 and 30 minutes.

AOL 7 Disconnects after VPN Authentication

When making a dialup connection with AOL 7.0 Revision 4114.537 (for Windows 95, 98, ME, Windows 2000 and XP), then attempting to connect with the VPN Client, AOL might disconnect while the user is being authenticated. This is an AOL issue, not a VPN Client problem (CSCdy45351).

VPN Client Fails to Connect over Some AOL Dialup Connections

The Cisco VPN Client connecting over an AOL dialup connection fails to complete the connection, particularly when using AOL 7.0 and 8.0.

The AOL dialup process uses a fallback method which, if your initial attempt to connect fails, resorts to a different connection type for the second attempt. This second attempt can sometimes cause AOL to communicate over two PPP adapters (visible in ipconfig /all output). When this happens, the VPN Client cannot connect. This is a known issue, and AOL is investigating the problem.

The workaround is to try to reconnect the dialup connection to try to avoid getting two PPP adapters (CSCea29056).
Browser Interoperability Issues

The following known issues might occur when using the VPN Client with the indicated browser software.

Issues Loading Digital Certificate from Microsoft Certificate Store on Windows NT SP5 and on IE 4.0 SP2

The following error occurs in the VPN Client log when using a Digital Certificate from the Microsoft Certificate Store. This can occur on Windows NT 4.0 with Service Pack 5 and on Internet Explorer 4.0 with SP2 and using the VPN Client v3.1 or v3.5:

“Could not load certificate cn=Joe Smith,ou=Engineering,o=MyCompany,l=Buffalo, st=new york,c=US,e=jsmith@mycompany.com from the Unsupported Store store”

Both the VPN Client and the Certificate Manager can see and validate the Certificate, but when you try to connect using that Certificate, you get a message in the Connection History dialog that says, “Failed to establish a secure connection to the security gateway”.

To fix this problem, do one of the following:

• Upgrade to Internet Explorer v5.0 or greater.
• Upgrade the PC to Service Pack 6.0a (CSCdv70215).

Requirements for using VPN Client for Windows Using Digital Certificate With Non-exportable Keys

To use certificates with non-exportable keys, you must have the VPN Client, Release 3.6, 4.0 or 4.6, and your PC must have Internet Explorer version 5.0 SP2 or later installed to function properly. (CSCdx90228).
**Entrust Entelligence Issues**

The following known issues might occur when using Entrust Entelligence software with the VPN Client.

**Potential Connection Delay**

Using the VPN Client with Entrust Entelligence might result in a delay of approximately 30 seconds if you are trying to connect while Entrust is “online” with the CA. This delay varies, depending on your Entrust CA configuration. If the Entrust CA is on the private network, then the chance of Entrust being online are low, since the VPN connection is needed to communicate with the CA.

If you experience this delay, do one of the following:

- Wait for the delay to end and proceed with the VPN connection normally.
- Before initiating the VPN Client connection, log out of Entrust. The VPN Client will initiate the Entrust Login Interface with the “work offline” checkbox checked, which alleviates the problem. The easiest way to log out of Entrust is to right-click on the Entrust tray icon (gold key) and select “Log out of Entrust” (CSCdu25495).

**Entrust System Tray Icon Might Erroneously Indicate Logout**

When using VPN Client with Start Before Logon (Windows NT and 2000) and Entrust Entelligence, the Entrust system tray icon indicates that it is “logged out” once in Windows. It is really logged in, just not in the normal Windows desktop. The reason for this is that the context that Entrust was logged into was on the “Logon desktop”. This is an Entrust issue, not a VPN Client problem.

Entrust operates normally once logged into within Windows (CSCdu29239).

**Entrust Client May Appear Offline**

After establishing a VPN connection with Entrust Entelligence certificates, the Entrust client may appear offline. It may appear this way even after the Entrust client has successfully communicated with the Entrust i500 directory.

To work around this issue, do one of the following:

- Upgrade to Entrust Entelligence version 5.1 SP3 or later.
Usage Notes

- Once connected, right click on the Entrust tray icon (gold key) and uncheck “Work Offline”. This manually puts Entrust online (CSCdu33638).

Use Entrust Entelligence 4.0 with VPN Client Release 3.5.1 or 3.1 Start Before Logon

When using the Release 3.5.1 or 3.1 VPN Client with the Entrust Entelligence 4.0 software, the Start Before Logon feature does not function properly. Upgrading to Entrust Entelligence 5.1 resolves this problem (CSCdu61926).

Some Entrust Dialogs Do Not Display Properly When Using VPN Client Start Before Logon

When using the VPN Client with Start Before Logon and Entrust Entelligence, some Entrust dialogs do not display properly on the logon desktop that displays before going into Windows NT or Windows 2000. The first time the VPN Client dialer and service access the Entrust certificates, it prompts for a security check. This prompt displays in Windows, but not at the logon screen.

To work around this problem, connect the VPN Client once, while in Windows and after installing, to register the VPN applications (ipsecdialer.exe and cvpnd.exe) with Entrust. Once you have done this you can use it at the logon desktop (CSCdu62212).

Renewing Entrust Entelligence Certificate (Key Update) Requires Entrust Version 5.1 SP 3 or Later

Entrust Entelligence certificate renewal (key update) will not work over a VPN Client connection unless Entrust Entelligence version 5.1 SP3 or later is being used. Other Entrust Entelligence operations using older versions work properly.

To work around this issue, do one of the following:
- Upgrade to Entrust Entelligence version 5.1 SP3 or later.
- Computers need to have Entrust digital certificates renewed by placing them directly on the network during the renewal period to get updated (CSCdu84038).
Accessing Online Glossary Requires Connection to Cisco.com

The Glossary button at the top of all Help screens tries to contact univerced at www.cisco.com (the Cisco documentation site). This connection requires connectivity to Cisco's main web site. If your PC does not have a corporate Internet connection or your firewall blocks access, the following error appears when you attempt to access the Glossary:

“The page cannot be displayed.”

To access the Glossary, you must be connected to www.cisco.com (CSCdy14238).

ZoneAlarm Plus Versions 3.1.274 and Earlier Are Incompatible with VPN Client

The following known incompatibility exists between the Cisco VPN Client and Zone Labs ZoneAlarm Plus version 3.1.274 and earlier. If you are using such a version of ZoneAlarm Plus, please visit http://www.zonelabs.com or contact your Zone Labs representative for an update.

On a PC with ZoneAlarm Plus version 3.1.274 (or earlier) and the VPN Client, the following errors occur when the PC boots:

On Windows 2000:

ZAPLUS.exe has generated errors and will be closed by Windows. You will need to restart the program.

An error log is being generated.

The Application Log states:

The application, ZAPLUS.EXE, generated an application error. The error occurred on 7/23/2002... The exception was c0000005 at address 00401881 (<nosymbols>).

Similar errors occur on other Windows operating systems.

The result of this error is that the ZoneAlarm GUI does not run, and therefore a user cannot change any settings in ZoneAlarm Plus or allow new programs to access the Internet.(CSCdy16607).
Usage Notes

ZoneLabs Automatically Adds Loopback and VPN 3000 Concentrator Addresses to Trusted Zone for Windows NT PCs

The Loopback address and the VPN 3000 Concentrator’s address are automatically added to the ZoneLabs “Trusted Zone” on Windows NT-based systems.

If a Windows NT based-PC has ZoneAlarm, ZoneAlarm Pro, or Zone Labs Integrity Agent, and the VPN Client Release 4.0 installed on it, the loopback address (127.0.0.1) is automatically added to Zone Labs “Trusted Zone” when the Client service is started. Additionally, the VPN 3000 Concentrator’s address is automatically added to the “Trusted Zone” when a connection is made (CSCea61272).

Upgrading Zone-Alarm Pro to Version 3.7.098 Causes Error When VPN Client Is Already Installed on the PC

Upgrading ZoneAlarm Pro version 3.5.xxx to ZoneAlarm Pro version 3.7.098 when the VPN Client is installed on the PC might cause the following error to appear:

“The procedure entry point DbgProcessReset could not be located in the dynamic link library VSUTIL.dll.”

Click OK, and the installation continues (CSCea25991). See ZoneLabs’ bug number 10182.

Harmless Warning Might Occur with Linux Kernel 2.4

Linux users running 2.4 kernels may encounter the following warning when the VPN Client kernel module is loaded:

Warning: loading /lib/modules/2.4.18-3/CiscoVPN/cisco_ipsec will taint the kernel: no license

This message indicates that the VPN Client kernel module is not licensed under the GPL, so the Linux kernel developers will not debug any kernel problems that occur while this kernel module is loaded. This message does not affect the operation of the VPN Client in any way (CSCdy31826).
DHCP Route Renewal in Windows 2000 and Windows XP

In a Windows 2000 or Windows XP environment, if the public network matches the private network (for example, a public IP address of 192.168.1.5, with a subnet mask of 255.255.0.0, and an identical private IP address) and the public network’s route metric is 1, then traffic might not be tunneled to the private network (CSCd88896). The same problem can occur if you are using a virtual adapter and the public metric is smaller than the virtual adapter metric.

In Windows 2000 and Windows XP, you can increase the metric of the public network by doing the following steps:

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Select Start &gt; Settings &gt; Control Panel &gt; Network and Dial-up Connections.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>Select the public interface and click properties for the public interface.</td>
</tr>
<tr>
<td>Step 3</td>
<td>Select Internet Protocol (TCP/IP) and get the properties for the Internet Protocol (TCP/IP).</td>
</tr>
<tr>
<td>Step 4</td>
<td>Click Advanced, and set the interface metric to 2 or greater.</td>
</tr>
</tbody>
</table>

Solaris Client Using Routed RIP Might Lose Connectivity

If the VPN Client running in the Solaris environment uses routed RIP to learn its default route, you might lose connectivity. This is because RIP is blocked when the VPN Client is connected in all tunneling mode (CSCdV75825).

Data Meant for Private Network Stays Local if VPN Client’s Local Network Is on Same IP Subnet as Remote Private Network

This problem occurs only with the VPN Client, Release 4.6 and only with Virtual Adapter (Windows 2000 and Windows XP), when the VPN Client’s local network is on the same IP subnet as the remote private network. When a VPN connection is up, data meant for the private network stays local. For example: 192.168.1.0/255.255.255.0
Usage Notes

The VPN Client, Release 4.6, with Virtual Adapter attempts to modify local route metrics to allow data to pass over the VPN tunnel. In some cases, it is impossible for the VPN Client to make this modification (CSCdz38680).

To work around this problem, make the change manually, using the following procedure:

Step 1  Run > Control Panel > Network and Dialup Connections.
Step 2  Right-click on the adapter in question and select Properties.
Step 3  From the Adapter Properties dialog, select TCP/IP from the list and click Properties.
Step 4  Click Advanced and increase the number in the “Interface metric” box by 1 (it is usually 1, so making it 2 works).
Step 5  Click OK to exit out of all dialogs.
Step 6  The VPN connection should now work.

DNS Server on Private Network with Split DNS Causes Problems

When an ISP’s DNS server is included in the Split Tunneling Network List and Split DNS Names are configured, all DNS queries to domains other than those in the Split DNS Names list are not resolved.

By definition, split DNS is used so that only certain domains get resolved by corporate DNS servers, while rest go to public (ISP-assigned) DNS servers. To enforce this feature, the VPN Client directs DNS queries that are about hosts on the Split DNS Names list to corporate DNS servers, and discards all DNS queries that are not part of the Split DNS Names list.

The problem is when the ISP-assigned DNS servers are in the range of the Split Tunneling Network List. In that case, all DNS queries for non-split-DNS domains are discarded by the VPN Client.

To avoid this problem, remove the ISP-assigned DNS server from the range of the Split Tunneling Network List, or do not configure split DNS (CSCee66180).
Usage Notes

VPN Client Supports Sygate Personal Firewall V. 5.0, Build 1175

The supported version of Sygate Personal Firewall is version 5.0, build 1175. Earlier versions might cause the following Blue screen to occur on a Windows NT-based system that has made many connects/disconnects with the VPN Client (CSCdy62426):

Stop: 000000d1 (BAD0B0B8, 00000002, 00000000, BFF12392)

Driver_IRQL_Not_Less_Or_Equal

***Address BFF12392 base at BFF10000, Datestamp 3CCDEC2C - Teefer.sys

The 4.6 VPN Client Is Not Supported on Windows 95

The VPN Client for Windows, Release 4.0 and higher, requires the use of the Windows 98 or later operating system. We recommend updating your operating system to a newer version of Windows (CSCea06231).

VPN Client Not Supported on Windows NT Servers

The VPN Client is not supported on any Windows NT server version (including Windows 2000 and Windows XP/.NET/2003 servers). Only Windows NT 4.0 Workstation and Windows 2000 Workstation are supported platforms.

No Limit to Size of Log File

When logging is enabled on the VPN Client, all of the log files are placed in the Program Files\Cisco Systems\VPN Client\logs directory and are date and time stamped. There is no limit to the size of the log when logging is enabled. The file will continue to grow in size until logging is disabled or the VPN Client program is closed. The log is still available for viewing until the VPN Client program is re-launched, at which time the display on the log tab and log window are cleared (CSCdy87504). The log file remains on the system and a new log file is created when the VPN Client, with logging enabled, is launched.
Start Before Logon and Microsoft Certificate with Private Key Protect Fails

Trying to connect the VPN client using Start Before Logon (SBL) and Microsoft Machine-based certificates fails. This is a Microsoft issue, not a VPN Client problem.

If your certificate has private key protection enabled, every time you use the certificate keys you are either prompted for a password to access the key, or notified with a dialog and asked to click OK.

The prompt displayed when using a certificate with private key protection appears on the Windows Desktop. You do not see this message while at the “Logon” desktop, therefore the VPN Client cannot gain the access to the certificate needed to connect.

Use one of the following workarounds:

- Get a certificate without private key protection (just make sure it is machine-based, otherwise it won’t be accessible before logging on).
- Instead of using Start Before Logon, log on to the PC using cached credentials, make the VPN connection, and— using the “stay connected at logoff” feature—logoff/logon with the VPN established to complete the domain logon (CSCea03349).

Downgrading VPN Client from Release 4.6 Causes Start Before Logon Failure

Start Before Logon fails if the VPN Client is downgraded from Release 4.6 to 3.6. The reason for this is that the file csgina.dll is upgraded when the VPN Client version 4.6 is installed. If the VPN Client is downgraded to version 3.6, the csgina.dll file for version 4.6 is not replaced, and this breaks ability in the VPN Client version 3.6 to Start Before Logon (CSCea03685).

Follow this procedure to drop back to the VPN Client version 3.6 from version 4.6.

---

Step 1 Uninstall the VPN Client version 4.6.
Step 2 After rebooting, search for csgina.dll. This file is found in the System32 directory.
Usage Notes

Step 3  Rename csgina.dll to something like csgina.old.

Step 4  Install the VPN Client version 3.6.

Linksys Wireless AP Cable/DSL Router Version 1.44 or Higher Firmware Requirement

To use the VPN Client behind a Linksys Wireless AP Cable/DSL router model BEFW11S4, the Linksys router must be running version 1.44 or higher firmware. The VPN Client cannot connect when located behind a Linksys Wireless AP Cable/DSL router model BEFW11S4 running version 1.42.7 firmware. The VPN Client may see the prompt for username/password, then it disappears (CSCdz52156).

Certificates exported from Netscape 7 do not import into the VPN Client Macintosh Version

This incompatibility exists with Netscape 7.0 and the Release 3.7.x Macintosh versions of the VPN Client. Netscape 7.0 uses the latest RSA libraries that are not compatible with the previous RSA libraries that the Clients are using. Previous versions of Netscape are still compatible with the VPN Client.

To work around this issue, export the certificate using a browser other than Netscape 7.

On the Mac OS X platform, Internet Explorer 5.2 that comes installed does not allow certificates to be exported. The best course of action for these users is to either enroll and export the certificate from a Windows workstation and email it to the Mac user or to use direct enrollment from the Client itself.

Verisign works fine with the Macintosh version of the VPN Client. But the “browsers” available on the Macintosh don’t export certificates (Verisign or others) in the proper format for the VPN Client to receive them, or they don’t allow the export of certificates at all (IE). This is because IE is a Windows product and doesn’t support on the Macintosh platform everything the normal Windows IE does (CSCdz23397).
VPN Client Can Require Smart Card When Using Certificates

For Windows 2000 and Windows XP systems, you can configure the VPN Client to require the presence of a Smart Card when Certificates are used. If this feature is configured, the VPN Client displays an error message if a Smart Card is not present. The Certificates need not be present on the Smart Card itself. To configure this feature, add the following line to the user’s client profile, specifying the appropriate vendor for your Smart Card:

SmartCardName=<Name of Smart Card Vendor>

If you are using pre-shared keys instead of Certificates, this requirement is not enforced, even if configured.

To disable the Smart Card verification function, completely delete the entry: SmartCardName=<text> from the user’s client profile (CSCec82220).

VPN Client GUI Connection History Display Lists Certificate Used

Since Release 4.0.3.C, the VPN Client GUI connection history dialog box displays as the first entry the name of the certificate used for establishing the connection (CSCec79691).

Use Zone Labs Integrity Server 2.1.052.0 or Higher with VPN Client 4.0

Versions of the Zone Labs Integrity Server earlier than 2.1.052.0 exhibit the following problem. If two or more VPN Clients (running on Windows 2000 or XP) are connected to a VPN 3000 Series Concentrator and receive firewall policy from a ZoneLabs Integrity Server, the Integrity Server registers only one connection.

On the Integrity Flex (client agent), under “Policies”, the “Integrity Server” column flashes “Connected” then “Disconnected” over and over. Also, the VPN Client log includes the following event: “The firewall, configured for Client/Server, returned a status of lost connection to server.” Zone Labs Integrity Server version 2.1.052.0 fixes this issue (CSCea66549).
Restart VPN Client Service If You Install VPN Client Before Zone Alarm

The Firewall Enhancement, “Prevent VPN Traffic Blocking”, automatically adds the Loopback address (127.0.0.1) and the address of the VPN 3000 Concentrator to the ZoneAlarm or ZoneAlarmPro trusted zone.

An exception to this, however, occurs if the VPN Client is installed before Zone Alarm. Then the VPN Client’s service must be restarted by rebooting the PC or stopping and restarting the service through the Control Panel (on Windows NT-based PCs) (CSCea16012).

InstallShield Error Might occur during VPN Client Installation

The following error message might occur during VPN Client installation:

İKernel.exe - Application Error

The instruction at “0x771c741a” referenced memory at “0x00163648”. The memory could not be “read”.

This error is caused by an InstallShield component, possibly because of a run-once stale remnant. To recover, you must reboot.

The InstallShield Knowledge base article q108020 addresses this problem. To view this article go to the following URL (CSCea43117):

http://support.installshield.com/kb/view.asp?articleid=q108020

Microsoft has a fix for this issue. For more information and to obtain the fix, go to the following URL:

http://support.microsoft.com/default.aspx?scid=kb;en-us;329623

VPN Client cTCP Connection Fails If Checkpoint Client Is Installed

When the Checkpoint VPN-1 Securemote client is installed with the 4.6 VPN Client, and the VPN Client attempts to connect using cTCP, the 4.6 VPN Client cannot make the connection. Connections do work with UDP, NAT-T, and non-NAT connections.
To make a connection with cTCP when the Checkpoint VPN-1 Securemote is installed, you must disable the Check Point SecuRemote driver in the Connections Properties. To do this, you must be administrator. Follow these steps:

**Step 1** Click Start > Settings > Control Panel > Network and Dial-up Connections.

**Step 2** Select the Local Area Connection you use.

**Step 3** Click on File > Properties.

**Step 4** Uncheck Check Point SecuRemote, and click OK.

(CSCea31192)

Open Caveats

Caveats describe unexpected behavior or defects in Cisco software releases. The following lists are sorted by identifier number.

**Note** If you have an account with CCO, you can use Bug Navigator II to find caveats of any severity for any release. To reach Bug Navigator II on CCO, choose Software & Support: Online Technical Support: Software Bug Toolkit or navigate to http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl.

- **CSCdt07491**
  The VPN Client may swap Primary and Secondary WINS received from the Concentrator. In a few cases, the VPN Client receives a Primary and a Secondary WINS server from the Concentrator but swaps them when they are added to the IP Configuration. If this happens, it may cause browsing problems if the Secondary WINS server is not as populated as the Primary. Disconnecting and reconnecting may fix the problem.

- **CSCdt07673**
  When the VPN Client is installed on a Windows 2000 PC with the Efficient Networks NTS EnterNet 300 PPPoE version 1.41 or 1.5c, the following message appears:
“EnterNet could not find the (adapter) for complete pc management NIC (adapter). But it did locate the (adapter) for complete pc management NIC (adapter) - Deterministic Network Enhancer Miniport adapter through which your network server is reachable. Do you want to switch to this adapter?”

Answer Yes every time this question appears. The installation then continues normally. A similar message appears on Windows NT 4.0. The message is:

“EnterNet could not find the (adapter). But it did locate the (adapter) through which your network server is reachable. Do you want to switch? Yes No”

Answer Yes to this question. The installation then continues normally.

If the VPN Client is uninstalled, the next time the NTS EnterNet 300 PPPoE version 1.41 is used the message, “EnterNet could not find the (adapter). But it did locate the (adapter) through which your network server is reachable. Do you want to switch? Yes No”

Answer Yes to this question. The installation then continues normally.

- CSCdt07787
  Problems have occurred when an ISA legacy NIC card (IBM Etherjet 10MB) is used in a PC with PnP OS enabled. The WINS servers did not function correctly when a VPN Client connection was made. This could be an issue with other legacy NIC cards as well.
  The end results are that the WINS servers sent from the Secure Gateway cannot be viewed in the Network configuration, and problems with browsing/logon over the VPN connection may occur.
  Workaround:
  Disable PnP OS in the PC's BIOS or statically configure the WINS servers.

- CSCdt13380
  When you connect the VPN Client to a VPN 3000 Concentrator that issues two DNS servers, both appear under ipconfig /all, but only one appears under the Network settings TCP/IP Properties. DNS server appears to be missing under TCP/IP Properties (Advanced button, DNS TAB). We do not know whether this causes any problems.

- CSCdt56343
  You might see the following problem on systems running Windows NT and Windows 2000 when you are using the Start Before Logon feature of the VPN Client with third-party dialer. If the third-party dialer does not get set to the
foreground when launched, add the following parameter to the vpnclient.ini file in the VPN Client directory (\Program Files\Cisco Systems\VPN Client\Profiles):

[main]
TopMostDelay=2500

The value is the time in milliseconds that the VPN Client waits for the third party dialer to load before attempting to place it in the foreground. The default time is 1000 milliseconds.

Workaround:
For problem dialers/applications, try 2500 milliseconds or greater.

- CSCdu22174
SCEP enrollment might fail to complete successfully after the PKI administrator has granted your request.

Workaround:
If this happens, delete your failed request and submit a new one. To delete the request, click the Certificate tab, select the failed request, and click Delete on the toolbar. Alternatively, open the Certificates menu and select Delete.

- CSCdu50445
The following issue can exist when using the VPN Client Start Before Logon feature with Entrust SignOn. Entrust SignOn is an add-on to the Entrust Entelligence client that allows logging into the Entrust profile and the NT domain from a single login.

The Entrust SignOn GINA dll does not support chaining to other GINA dll files. To make the Entrust SignOn product and the VPN Client with Start Before Logon function properly together, install the VPN Client after Entrust SignOn. The VPN Client replaces the Entrust GINA (etabegin.dll) with its own (csgina.dll).

- CSCdu62275
VPN Client and Entrust Entelligence - VPN Connection timeout.

In version 3.1, the potential exists for the VPN Client Connection Manager and the VPN dialer to get out of sync with each other. This occurs only after a VPN Client upgrade on the first time the VPN Client accesses a given Entrust profile. The following sequence outlines how a user could get the connection into this state:
Step 1  In the VPN dialer, the user clicks Connect.
Step 2  Entrust prompts for password and security hash check. The user clicks Yes.
Step 3  Entrust prompts for password for cvpnd.exe security access. If the user waits or walks away, the VPN Connection times out in 3 minutes.
Step 4  The user returns and enters the Entrust password, then clicks Yes to the security hash check question.
Step 5  The VPN connection completes, and data can be passed. The VPN dialer appears as not connected.
Step 6  Clicking Connect returns, “A connection already exists.” The user clicks Cancel, and the dialer appears connected in the system tray.

The VPN connection can be used as a normal connection.

- CSCdu70660

  This issue occurs on a Windows NT PC that is running ZoneAlarm or Sygate Personal Firewall, if the VPN Client is set to Start Before Logon and an upgrade to the VPN Client is implemented. Do not attempt a connection before the logon when you reboot, because both firewalls do not automatically give the VPN Client permission to access the Internet. Both firewalls see the upgrade as a new application attempting to access the Internet, and it requires user permission through its pop-up menus. The user must logon to the Windows NT PC using cached credentials, then launch a VPN connection. The firewall then asks permission to allow the VPN Client to connect. Answer yes to each connection. After that, Start Before Logon works fine.

- CSCdu77405

  The message, “The necessary VPN sub-system is not available. You will not be able to make a connection to the remote IPSec server.” might appear on a PC when Start Before Logon is enabled on the Client and ZoneAlarm is also running. The message appears when the ctrl+alt+del key combination is pressed. This has happened because the Cisco Systems VPN Service has terminated unexpectedly.

  Workaround:
Logon to the PC with cached credentials, open “Services” in control panel and start the VPN service. A connection to the VPN Concentrator will be possible once the service has started.

- **CSCdu81905**
  When connecting to a VPN 3000 Concentrator over PPPoE using the EnterNet 300 client software from Efficient Networks, Inc., if a firewall is required by the VPN Concentrator, the following message might appear:
  “The Client did not match any of the Concentrator's firewall configurations...”
  If this message appears, click OK and then click Connect. The connection to the VPN Concentrator then proceeds successfully.

- **CSCdu83054**
  If you make connections from the command line interface, the following problem can occur. When a firewall is required to connect and the firewall fails or is shut down, you do not see any message giving the reason for the lost connection.

- **CSCdu86399**
  If you use the VPN Client with a Digital Certificate and your Client sits behind a Cable/DSL router or some other NAT device, you might not be able to connect to your VPN Gateway device (that is, the VPN 3000 Concentrator). The problem is not with the VPN Client or the Gateway; it is with the Cable/DSL router. When the VPN Client uses a Digital Certificate, it sends the Certificate to the VPN Gateway. Most of the time, the packet with the Certificate is too big for a standard Ethernet frame (1500), so it is fragmented. Many Cable/DSL routers do not transmit fragmented packets, so the connection negotiation fails (IKE negotiation).
  This problem might not occur if the Digital Certificate you are using is small enough, but this is only in rare cases. This fragmentation problem happens with the D-Link DI-704 and many other Cable/DSL routers on the market. We have been in contact with a few of these vendors to try to resolve the issue.

  Testing with the VPN Client Release 3.1 indicates that VPN Client connections using Digital Certificates can be made using the following Cable/DSL routers with the following firmware:

  - Linksys BEFSRxx v1.39 or v1.40.1
  - SMC 7004BR Barricade R1.93e
  - Nexland Pro400 V1 Rel 3M
NetGear RT314       V3.24(CA.0)
Asante FR3004       V2.15 or later
Others like 3COM 3C510, and D-Link DI-704 either had updated firmware
that was tested and failed, or had Beta firmware that was NOT tested because
the firmware notes did not indicate a fix specifically for fragmentation.

• CSCdu87521
  The following message might appear when a connection using the EnterNet
  300 version 1.4 PPPoE software and transferring via FTP:
  
  93  09:42:06.020 08/02/01  Sev=Warning/2  IPSEC/0xE3700002
  Function CniInjectSend() failed with an error code of 0xe4510000
  (IPSecDrvCB:517)

  This does not interfere with your connection. You can ignore this message.

• CSCdv40009
  When Zone Alarm's Internet setting is set to high and the VPN Concentrator
  sends a CPP firewall policy that allows inbound traffic on a specific port, the
  CPP rule takes precedence over the Zone Alarm rule allowing the specified
  port to be open.

• CSCdv42414
  Importing a PKCS12 (*.p12 or *.pfx) certificate using the Certificate
  Manager that has not been password protected will fail with the following
  error:

  “Please make sure your import password and your certificate protection
  password (if for file based enrollment) are correct and try again.”

  Workaround:

  Get a *.p12 certificate that has been password protected.

• CSCdv44529
  Attempting to install/uninstall Gemplus Workstation version 2.x or earlier
  while the Cisco VPN Client and its GINA (csgina.dll) is installed will cause
  the following error, and Gemplus will not install/uninstall:

  “A 3rd party GINA has been detected on your system. Please uninstall it
  before installing this product.”
Workaround:
Do one of the following:
- Uninstall the VPN Client and reinstall it after Gemplus software.
or
- Use Gemplus version 3.0.30 that no longer installs the gemgina.dll

• CSCdv46591
When a CPP Firewall policy is in place that drops all inbound and outbound traffic and no WINS address is sent to the VPN Client from the 3000 series Concentrator, Start Before Logon fails. If a WINS address is in place, Start Before Logon works fine. Also, if a WINS address is sent and the CPP rule drops all inbound traffic, but allows all outbound traffic, Start Before Logon works fine.

• CSCdv46937
Using the Aladdin “R2” model etoken, certain functions can be performed using the certificate even after the R2 token has been detached from the system (USB port). The VPN Client, for instance, can perform an IKE rekey without the token attached to the system. The reason for this is the design of the “R2” etoken: it does not contain the RSA key functions needed and must upload the private key to the system for these functions.

In contrast, the Aladdin “PRO” etoken must be connected to the USB port during an IKE rekey, otherwise the VPN Client connection terminates. This is Aladdin’s problem; it is not a VPN Client problem.

• CSCdv55730
Using the Solaris VPN Client, some applications are unable to operate properly. A possible indicator of the problem is that a large ping is unable to pass through the VPN Tunnel.

No problem exists when passing large packets using cTcp or normal IPSec. When using IPSec over UDP, Path MTU Discovery problems exist, as a result of which large packets cannot be transmitted.

An MTU issue currently exists with the Solaris VPN Client that causes fragmentation errors that might affect applications passing traffic through the VPN Tunnel.

To identify whether the VPN Client is properly fragmenting packets, use the following commands:
ping -n <known good ping target address>

ping -n -s <known good ping target address> 2500

The first command ensures that the target is reachable, and the second determines whether fragmentation is an issue

**Workaround:**

**Step 1**
Before opening the tunnel, bring down the MTU of the point-to-point interface to the MTU of the rest of the path to the concentrator (generally 1500). This would allow large packets to pass through, when using IPSec over UDP. No problems exist when using normal IPSec or cTcp.

**Step 2**
Set IP Compression to “LZS” in the VPN Group on the Concentrator. This decreases the size of the encrypted packet and might allow the smaller packet to avoid fragmentation. If you are using NAT, switching the NAT method of the client from cTCP (TunnelingMode=1) to UDP (TunnelingMode=0) might also reduce the size of the packet.

- **CSCdv62613**

  When you have multiple VPN Client connections behind Linksys Cable/DSL router, the following problem can occur. Due to a Linksys problem with firmware versions 1.39 and 1.40.1, making multiple VPN Client connections enabling the feature “Allow IPSec over UDP” (transparent tunneling) may cause data transfer problems.

  Allow IPSec over UDP is a VPN Client feature that allows ESP packets to be encapsulated in UDP packets so they traverse firewall and NAT/PAT devices. Some or all of the clients may not be able to send data. This is due to a Linksys port mapping problem, that Linksys has been notified of.

  **Workaround:**

  Use a newer version of Linksys code (higher than firmware version 1.40.1).
  If you must use one of the problem versions, do not use the “Allow IPSec over UDP” (transparent tunneling) feature when you have multiple VPN Client connections behind Linksys Cable/DSL router.
• CSCdv67594

The following Microsoft Outlook error might occur when the VPN Client connects or disconnects. This occurs when Microsoft Outlook is installed but not configured.

Either there is no default mail client or the current mail client cannot fulfill the messaging request. Run Microsoft Outlook and set it as the default mail client.

To set Microsoft Outlook as the default mail client, right-click on the Outlook icon, go to Properties, and configure it to use Microsoft Exchange or Internet Mail.

• CSCdv73541

The make module process fails during installation of the VPN Client for Linux.

Workaround:

The module build process must use the same configuration information as your running kernel. To work around this problem, do one of the following:

- If you are running the kernels from Red Hat, you must install the corresponding kernel-sources rpm. On a Red Hat system with kernel-sources installed, there is a symlink from /lib/modules/2.4.2-2/build to the source directory. The VPN Client looks for this link first, and it should appear as the default value at the kernel source prompt.

- If you are running your own kernel, you must use the build tree from the running kernel to build the VPN Client. Merely unpacking the source code for the version of the kernel you are running is insufficient.

• CSCdw60866

Getting Entrust certificates using SCEP does not get the Root CA certificate. The Entrust CA does not send the whole certificate chain when enrolling with SCEP. Therefore, making a VPN Client connection might require the manual installation of the Root certificate before or after SCEP enrollment. Without the existence of the Root CA certificate, the VPN Client fails to validate the certificate and fails with the following VPN Client event/error messages:

“Get certificate validity failed”
“System Error: Unable to perform validation of certificate <certificate_name>.”
• CSCdw73886

If an attempt to load the VPN Client is made before the Clients Service loads, the following error occurs: “The necessary VPN sub-system is not available. You will not be able to make a connection to the remote IPSec server.”

Workaround:

Wait until the Service has loaded, then start the VPN Client.

• CSCdx04343

A customer had problems enrolling the Mac OS version of the VPN Client. Following some troublesome attempts at debugging the enrollment of the MacOS VPN Client with a Baltimore CA, it was felt that the Documentation should be improved and the Certificate Manager enhanced.

Workaround:

It seems that the critical thing as far as Baltimore is concerned is to put either or both of the challenge phrase (-chall) and the host's FQDN (-dn) in the request. This appears to be similar for the successful SCEP enrolment in a Verisign Onsite PKI. Perhaps there's a case for tweaking the interface a bit, or at least making some notes in the manual!

Just doing cisco_cert_mgr -U -op enroll only asks for a Common Name, which is not enough. The request that succeeded on two separate Baltimore installations, one of which had an expired RA certificate, was as follows (switches only shown for brevity):

cisco_cert_mgr -U -op enroll -cn -ou -o -c -caurl -cadn -chall -dn

The ou is required for connecting to a Cisco 3030 VPN Concentrator and is the group name. On almost every attempt, the certificate manager dies after starting to poll the CA, with an error in the log: “Could not get data portion of HTTP request”.

If this happens, it is possible to resume the enrollment with cisco_cert_mgr -E -op enroll_resume. The last attempt didn't fail at all though, and the certificate manager kept running until the request was approved, which is how it should behave.

• CSCdx51632

If the computer is powered off or loses power during an MSI installation of the VPN Client, the VPN Client may not be registered in Control Panel, and the following may occur when attempting to reinstall:
- A message may appear stating: Deterministic Network Enhancer Add Plugin Failed
  Click the “OK” button.

- Error 1722. There is a problem with this Windows Installer package. A program as part of the setup did not finish as expected. Contact your Support personnel or package vendor. Click the “OK” button.

- Error 1101. Error reading from file \config.msi\laff4.rbs. Verify that the file exits and you can access it. Click the “OK” button.

- Error 1712. One or more of the files required to restore your computer to its previous state could not be found. Restoration is not possible. Click the “OK” button.

After clearing the last message box, restart MSI installation. It should successfully install the VPN Client.

- CSCdx57197

  If IOS sends a split tunnel attribute that is host-based (255.255.255.255 mask), the VPN Client uses the host in a QM, but it passes the IPV4_ADDR_SUBNET in the ID payload.
  
  IOS expects IPV4_ADDR, as this is a host ID. This causes connectivity issues.

- CSCdx70223

  The VPN Client’s xauth dialog always stays in the foreground so it doesn’t get “lost” (on XP it goes to the background and then jumps forward within seconds). The xauth dialog does not have focus, however, and it can be difficult to enter the username/password without first clicking on it with the mouse. This was observed on Windows 2000 and Windows XP; we have not checked Windows 98.

- CSCdx72463

  Installing the VPN Client using the Microsoft Windows Installer (MSI) displays “Time Remaining” for the installation. This time is not very accurate and should be ignored.

- CSCdx77292

  Microsoft article Q234859 states that for the resiliency feature to work on Windows 4.0, IE 4.01 sp1 and shell32.dll version 4.72.3110.0 or greater must be installed on the computer.
Open Caveats

• CSCdx78868
The Microsoft Installer (MSI) resiliency (self healing) feature does not restore all files that are installed with the VPN Client. The files that will be restored are files that are associated with the shortcuts under Start | Program Files | Cisco Systems VPN Client.

• CSCdx81491
An issue can occur when using the Release 4.0 VPN Client with Start Before Logon (SBL), after enabling SBL. The first time you log out of Windows, the VPN Client does not load after you press the CTRL+ALT+DEL key combination at the Windows logon prompt.

Workaround
Reboot the PC after enabling Start Before Logon; after a subsequent logout, the VPN Client should operate properly.

• CSCdx83687
The following error occurs after the resiliency feature has reinstalled a missing file on Windows NT 4.0:

c:\winnt\profiles\all users\start menu\programs\cisco systems
vpnclient\xxx.lnk

The Windows installer failed to install the program associated with this file.

Please contact your system administrator.

xxx.lnk is whatever file is being restored.

When you click OK, the PC reboots and the file is restored. The resiliency feature is working, but the error should not appear.

• CSCdx88063
When attempting to launch the dialer when the dialer is already running on the logon desktop (due to SBL or SBL and AI), the following error occurs instead of the VPN Client dialer loading.

“Single dialer instance event creation failed with error 5.”

This is most likely to happen when Start Before Logon and Auto Initiate are being used on a Windows NT/2000/XP system.
Workaround

This is due to the fact that the VPN Client dialer is already running on the “logon desktop”. Most likely during Windows logon the dialer launched and posted an error, the Windows logon was completed and the error was never closed. To work around this error, do the following:

**Step 1** Press CTRL+ALT+DEL to get to the logon desktop.

**Step 2** Look for and close any VPN Client error dialogs.

**Step 3** Press ESC to return to the normal Windows desktop; the VPN Client should load normally.

- **CSCdy14218**
  During installation of the VPN Client on a PC that already has the Enternet v.1.5c or v. 1.5c SP2, the following error might appear:
  “SVCHOST.EXE has generated errors and will be closed by Windows.”
  **Workaround:**
  If this message appears, click OK, then reboot the PC when the VPN Client prompts for the reboot. After this, The message does not reappear and all connections work fine.

- **CSCdy50648**
  InstallShield’s “Tuner” application produces warnings and errors when validating the Cisco MSI installation package.

- **CSCdy68888**
  On a Windows 98 PC that has the Sygate Personal Firewall, the following message may appear in the VPN Client log file:
  “Packet size greater than ip header”
  This message does not interfere with the VPN Client’s ability to pass data and can be ignored.

- **CSCdy70168**
  A user with the VPN Client cannot establish an IPSec tunnel to a VPN Concentrator running over an Internet satellite connection.
There are three observed results:
- User is never prompted for XAUTH username and password.
- After successfully authenticating, the user cannot transmit/receive any data.
- After successfully transmitting data for approximately 5 minutes, the VPN session is disconnected regardless of the user activity at the time of disconnect.

This problem occurs only if IPSec over TCP is used.

Workaround:
Use IPSec over UDP.

• CSCdy79358
The following error might occur on Windows 98 when making many VPN connections without closing the VPN Client between connections:
VPNGUI caused an invalid page fault in module MSVCRT.DLL at 0167:7800f52.
To avoid this error, exit the VPN Client after disconnecting.

• CSCdz48584
The VPN Client on Windows XP using native XP PPPoE client fails to connect when using IPSec/TCP.

Workaround:
Make sure that the Windows XP Internet Connection Firewall is disabled for the PPPoE connection. This feature defaults to enabled when the connection entry is created. To disable it do the following.

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Run Control Panel, then click on Network Connections.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>Right click on the PPPoE connection entry (may be called “Broadband”) and select “Properties”.</td>
</tr>
<tr>
<td>Step 3</td>
<td>Change to the Advanced Tab and uncheck the “Internet Connection Firewall” option.</td>
</tr>
</tbody>
</table>
• CSCdz56076
Some AOL applications might not be usable while a 4.0 VPN Client connection is active. These include the AOL integrated web browser and some internal links. Using external web browsers and other applications should work over the VPN. These issues were seen most recently using AOL version 7.0 and 8.0.

• CSCdz71367
To connect to a VPN 3000 Concentrator requiring Sygate Personal Firewall, Sygate Personal Firewall Pro, using Are You There (AYT), the version of the firewall must be 5.0, build 1175 or later. The VPN Client might not detect an earlier version of the Sygate Personal Firewall and therefore, a connection will not be allowed.

• CSCdz74310
After upgrading, the VPN Client is unable to connect to the VPN 3000 Concentrator. The ability for the VPN Client to negotiate an AES-192 IKE Proposal has been removed. This change affects all VPN Client versions greater than 3.7.2.

*Workaround*
Reconfigure the VPN Concentrator so that it does not require an AES-192 IKE Proposal for VPN Client connections.

• CSCdz75892
The Equant remote access dialer does not automatically connect the Release 4.0 VPN Client, as it could when using the Release 3.x VPN Client. If you have the Equant dialer configured to establish your VPN connection, the VPN Client appears, but you must manually click Connect to connect. An updated, Cisco-specific .dll file is available from Equant to fix this problem.

• CSCdz87404
The 4.0 VPN Client (on Windows 2000 or Windows XP) connects but is unable to pass data over the VPN tunnel. Viewing the routing table using “route print” at a command prompt shows the default gateway has been modified incorrectly as in the example below.

```
 0.0.0.0    255.255.255.255    n.n.n.n    n.n.n.n    1
```
Where n.n.n.n is the IP address assigned to the VPN.
Workaround:

This is due to a misconfiguration on the VPN3000 at the central site. Make sure that the Group | Client Config settings for Split Tunneling Policy are correct. If the group is set to “Only tunnel networks in the list” and the Split Tunneling Network List is the predefined “VPN Client Local LAN” list this problem will occur.

If split tunneling is the desired result, change the Split Tunneling Network List to an appropriate list, otherwise make sure that the Split Tunneling Policy is set to “Tunnel Everything” and check “Allow the networks in the list to bypass the tunnel”. This allows for proper Local LAN functionality.

- CSCea03597

When the VPN Client is installed and Start before Logon is configured, logging into an Active Directory Domain might take a long time, with or without a VPN connection.

This issue occurs under the following conditions:
- The VPN Client is installed on Windows 2000 or Windows XP Professional.
- You have enabled “Start before Logon” in the VPN Client.
- You are logging in to a Windows Active Directory domain (not an NT 4 Domain).

Workaround:

This problem occurs because of a fix that was added for CSCdu20804. This fix adds the following parameter to the registry every time Start before Logon is enabled:

```
HKEY_LOCAL_MACHINE\System\CurrentControlSet\Services\NetLogon\Parameters
ExpectedDialupDelay
```

Removing “ExpectedDialupDelay” from the registry (then rebooting) should fix the problem with slow logons to an Active Directory Domain.

⚠️ Caution

This procedure contains information about editing the registry. Before you edit the registry, make sure you understand how to restore it if a problem occurs.
Open Caveats

Note

If you disable, then re-enable Start before Logon, this entry is added again and must be removed.

• CSCea16482

If the Digital Certificate you are using has expired, the Windows VPN Client GUI does not popup with an error message indicating it has expired. The only indication you have is in the log file.

A message does appear if you are using the VPN Client command line - vpnclient.exe

• CSCea17705

If a ZoneLabs product such as ZoneAlarm or ZoneAlarm Pro is installed on the PC and the VPN Client is installed or upgraded, ZoneAlarm blocks the VPN Client service (cvpnd.exe). The VPN Client’s splash screen appears, but the GUI does not. ZoneAlarm does not ask the user whether to allow the VPN Client to access the Internet. Additionally, the following error appears after about two minutes:

“The necessary VPN sub-system is not available. You cannot connect to the remote VPN server.”

Workaround:

Do the following steps:

Step 1
Open the ZoneLabs product and select “Program Control”.

Step 2
Click on the “Programs” Tab

Step 3
Cisco Systems VPN Client’s Access permission is a ?. Click under “Trusted” and select “Allow”. The ? mark changes change to a Check mark.

Step 4
Reboot the PC.

Step 5
When the PC boots back up, the client will launch normally.
Open Caveats

• CSCea25682
The following Notification might occur if the Cisco Systems Integrated Client is required to make a connection.

“The Client did not match the firewall configured on the central site VPN device. Cisco Systems Integrated Client should be enabled or installed on your computer.”

When this occurs, the connection is not allowed. If this Notification appears, click Close and attempt to reconnect. If this second attempt to connect fails, reboot the PC. The connection should succeed at this point.

• CSCea27524
This problem has two facets. You cannot select text from the VPN Client log tab, and trying to save the VPN Client log results in an empty (zero byte) file. This problem might occur if the VPN Client logging has been enabled, disabled, or cleared.

Workaround:
If the all or part of the log must saved, you can select the text with the mouse or by using CTRL+A, and then copy it using CTRL+C. You can then paste it as usual using CTRL+V in Notepad or your favorite editor.

As an alternative, the VPN Client log files are saved to the directory c:\Program Files\Cisco Systems\VPN Client\Logs by default and can be opened and viewed using a text editor and saved as a different name if needed.

• CSCea29976
After the user enters the username and password, the VPN Client machine might go blank for a moment and then continue. This behavior has not shown any negative effect on the tunnel connection or the user's ability to use the PC.

• CSCea44601
The VPN Client does not put any limit to the number of log files that are saved in the \VPN Client\Logs directory. Users must manually delete these files to remove all or some of them.

• CSCea62229
Using the 4.0 VPN Client with Entrust Entelligence certificates, the “Send CA Certificate Chain” option should be grayed out and unavailable, but it is not.
Workaround:

Checking the “Send CA Certificate Chain” option when using Entrust
Entelligence certificates makes the VPN Client connection fail to complete,
leave this option unchecked.

- CSCea63957

If you uninstall the VPN Client from a Windows 2000 or Windows XP
Computer with RASPPPOE, the following message box might appear:

Failed to uninstall the Cisco Network Adaptor.
Error: 0xe000020b

Click OK. The Client uninstallation then continues normally.

- CSCea75956

The following problem has occurred with non-Windows VPN Clients. While
connected to the VPN Client, DNS resolution to the internal network works
at first but fails later in the connection.

If the workstation is set to use DHCP and receives a DNS address from the
DHCP server, the new DNS overwrites the VPN Concentrator’s pushed DNS
that had been resolving internal network devices. Once the new DNS has
overwritten the Concentrator-pushed DNS, internal devices are no longer
resolved properly.

Workaround:

After connecting to the ISP, record the DNS addresses assigned by the DHCP
server and hard code them into the workstation. This prevents the workstation
from accepting the DHCP-pushed DNS addresses in the future but still allows
resolution when not connected over VPN.

The drawback of this is that if the ISP changes their DNS server addresses,
the user must find out the hard way and hard code these new addresses once
more.

- CSCea92185

The PKCS#10 thumbprint for the certificate request is missing on 4.x VPN
Client, so it is impossible for the CA to verify the user’s request by comparing
the thumbprint.

Workaround:

Downgrade to 3.6.X VPN Client.
- **CSCea93535**
  Performance issues exist with H.323 and the 4.0 VPN Client virtual adapter. These performance issues could be related to MTU.
  
  **Workaround:**
  To use this workaround, you need to be running VPN Client Release 4.0.3.C or later. Set the Virtual Adapter MTU at the MAC layer to 1500 (default value is 1300). To do this, run the command “SetMTU.exe /va 1500”, then re-establishing the tunnel. (A reboot is not required.) SetMTU.exe should be located in the VPN Client installation directory. Please use “SetMTU.exe /?” for other options.

- **CSCeb11271**
  When trying to import a certificate, on the GUI, the “Unable to import certificate” message is displayed. A password has been provided when generating the Certificate request file. This password has been correctly re-entered in the “Import Password” field.
  
  **Workaround:**
  Put this password in both “New Password” and “Confirm Password” fields.

- **CSCeb15093**
  When a connection is made with the VPN Client using a Certificate that does not contain a password, a command line option ’nocertpwd’ was added in order to not prompt the user to enter a password (which there is none) to unlock this certificate. There is no PCF equivalent for this option for a connection not made using the command line. This problem happens only if the certificate is in Cisco store.
  
  **Workaround:**
  Use CAPI store to store the cert.

- **CSCeb37161**
  Using the Mac OS X VPN Client, Release 4.0 or higher, a profile using certificates works fine with the Command Line Interface client, but fails to connect with the VPN Client GUI. The Release 4.0 VPN Client fails to connect, while the Release 4.0.1.A VPN Client warns that the certificate cannot be found. The VPN Client GUI requires the “CertSubjectName” field to be filled out in the profile when using certificates. The CLI does not fill in this line or require it.
Workaround:
Using the GUI, modify the profile and select the proper certificate and same the profile. This fills in the GUI required “CertSubjectName” field. Initially, creating the certificate profile in the GUI also bypasses this issue.

- CSCeb48663
  The ‘vpnc client stat firewall’ command cannot be run while not connected. This command should return the state of the firewall at all times, not just when the VPN Client is connected.

- CSCeb68102
  CVPND does not free file handles when it disconnects from the VPN gateway. This might cause an out-of-resources situation. This problem occurred under Windows NT, running VPN Client version 4.0. No problem running with Windows 2000.

- CSCeb83746
  The following problem occurs when using the VPN Client, Release 4.0 running on MS Windows 2000 or Windows XP. After connecting, a “classfull” route is installed in the routing table, due to not receiving a subnet mask.

- CSCec00525
  IPSec SA rekeying fails on VPN Client 4.0.2A/B. The VPN4.0.2A/B and IPSec SA Lifetime Measurement is configured as Data on the VPN 3000 Concentrator.

  Workaround:
  Use Time Lifetime on the VPN 3000 Concentrator.

- CSCec18923
  After the Cisco VPN Client is connected, the PC stops receiving the local multicast traffic. The “Allow Local LAN Access” check box is checked, and the multicast addresses are also included in the bypass list on the VPN 3000 Concentrator.

- CSCec20680
  The ForceNetLogin feature might not work properly with Entrust Intelligence client version 6.1
Open Caveats

- **CSCec22783**
  VPN Client sends the first esp packet after IKE negotiation is successful using an SPI number that doesn't exist. Then the central-site Concentrator sends back a delete notification, which the client ignores because the SPI doesn't actually exist in the VPN Client. This does not affect any functions.

- **CSCec30347**
  A customer installed an RSA Keon CA server with root and subordinate CA. When we are using the VPN Client, Release 3.1 with the certificates, we can connect to VPN 3000 Concentrator running either 3.x or 4.0.1D (Concentrator code does not matter).

  Once I upgrade the VPN Client to 3.6.x or 4.0.x, I can no longer get a connection to VPN 3000 Concentrator.

  I play around all the settings including “check uncheck CA chain” on the Client end, as well as the Concentrator end, “Certificate Group Matching”. IKE group 1 or group2, no matter what I do, it does not work.

  **Workaround:**
  Downgrade the VPN client to 3.1.

- **CSCec47637**
  Using VPN Client version is 4.0.1 with a multiple-monitor display enabled on a Windows XP machine, the VPN Client authentication dialog box appears split between the two monitors rather than completely in one side or the other.

- **CSCed05004**
  With the VPN Client, Release 4.0.x installed on a Windows XP (tablet edition) system, whenever the VPN dialer is opened we get an error “System Error: IPC Socket allocation failed with error ffffff8f” and then it cannot go out to the DHCP server and get an ip address

- **CSCed11256**
  When installing a customized VPN Client InstallPath, a pop-up box appears during the installation with the following message:

    Usage:
    
    VAInstaller i <INF Location> <HardwareID>
    r <HardwareID>
    f <HardwareID>
Options:
 i - installs the Virtual Adapter
 r - removes the Virtual Adapter
 f - finds if the Virtual Adapter is installed

Workaround:
If the installation path includes $BASEDIR\Program Files\, then the InstallPath works.

• CSCed26068
  Using VPN Client, Release 4.0.3.C running under Windows 95, Windows 98, or Windows ME, we can not log in to the Microsoft network using the Command-Line Interface to connect VPN communication. NetBIOS packets fail to be encrypted.

• CSCee08782
  Mac OS X VPN Client Release 4.0.3.E and higher no longer supports Mac OS X 10.1.5. VPN Client Release 4.0.2.C is the last released client compatible with Mac OS X 10.1.5.
  Workaround:
  Install the Mac OS X VPN Client Release 4.0.2.C.

• CSCee60154
  After making a VPN Client connection, some traffic types no longer work. Specifically applications that send large packets like SMTP, HTTP, and SSH. The 2.6.4 Kernel enabled a feature of certain Ethernet cards that discards packets larger than the configured MTU. Since the VPN Client lowers the MTU visible to the applications in order to add its overhead without exceeding the original MTU, the resulting packets are bigger than the newly configured MTU. Therefore the card throws out the large encrypted packets.

• CSCee68280
  When attempting to tab through the options of a new profile, the Mutual Group Authentication button is never highlighted. It should be highlighted right after the Group Authentication button.

• CSCee74900
  On a linux multiprocessor kernel the VPN Client seems to pass traffic much slower than on a single processor kernel with the same hardware.
In order to work with an SMP kernel the VPN Client was modified in such a way that the performance is lower than the same client run with a single processor kernel.

**Workaround:**

Use a single processor kernel with the VPN Client.

- **CSCef26762**

  When you uninstall the Solaris VPN Client, the contents of `/etc/system` are replaced with a copy of the file captured during the original VPN Client installation. Since another application could have been installed and made its own modifications to the `/etc/system` file, replacing it with an earlier version may disable the application.

  **Workaround:**

  Before uninstalling the VPN Client, make a copy of the `/etc/system` file and use it once the VPN Client has been removed.

- **CSCef46761**

  On a clean installation of Windows NT 4.0 SP6, the following error appears after installing the VPN Client:

  `CVPND.EXE - Unable to Locate DLL The dynamic link library RASAPI32.DLL could not be found in the specified path`

  After you click the OK button, the message, "At least one service or driver failed during startup" appears. The event viewer displays the following: "Event ID: 7000 The Cisco Systems VPN Service failed to start due to the following error: The service did not respond to the request in a timely fashion."

  After you click OK again, another message appears: "VPNClient - The InstallShield engine (iKernel.exe) could not be launched. RPC Server is unavailable." This message did not appear when installing the VPN Client version 4.0.5. It appears that the VPN Client version 4.6 requires RASAPI32.dll in order for the Clients service to start.

- **CSCef51072**

  Problem after receiving a Novell log message using Internet Explorer browser proxy. Using the Windows 4.6 VPN Client, the client or service crashes soon after making a successful connection. The last log message from the client is "Novell not installed."
Caveats Resolved in Release 4.6.00.0045

Release 4.6.00.0045 is the first VPN Client 4.6 release.

This list is based on issues resolved independent of the Cisco VPN Client Release 4.0.4.D software. Refer to the release notes for Release 4.0.4.D for additional caveats resolved since Release 4.0.

Release 4.6.00.0045 resolves the following issues:

- CSCee27420
  The Linux VPN Client does not work with DNS requests and SMTP.

- CSCee32555
  Microsoft had made a change in Windows XP SP2 beta1 that was incompatible with the Cisco VPN Client. After our conversations, Microsoft has decided to remove the incompatible changes from the final release of Windows XP SP2. Customers should upgrade to the final release of Windows XP SP2 when available.

- CSCee60160
  The Linux VPN Client will not work properly with the tg3 Ethernet driver. The tg3 driver is a new Linux driver that has not yet had all of its own issues resolved.

Workaround:
Go into Internet Explorer and uncheck the Proxy Server checkbox found under Internet Options | Connections | LAN Settings.

- CSCef52730
  Windows AutoUpdate dialup cannot uninstall while dialed up. While attempting to AutoUpdate a Windows VPN Client over dialup on Windows XP, error 28004 appears. Remote dialup connections should be disabled prior to uninstalling the client.

Workaround:
When prompted with an OK box notifying the user that a previous client is about to be uninstalled, the user should disconnect all dialup connections.
Documentation Updates

When the user is allowed to put a password on a User Certificate, the 4.6 Beta CLI certificate manager allows invalid passwords to be matched. This happens on all platforms.

Reinstalling or upgrading the Mac OS X VPN Client replaces the vpnclient.ini file.

If you are using IPSEC over TCP, the VPN Client does not work with Windows XP SP2.

Documentation Updates

The following VPN Client documentation has been updated for Release 4.6. These documents contain information for all platforms on which the VPN Client runs:

- Cisco VPN Client Administrator Guide, Release 4.6
- Cisco VPN Client User Guide for Windows, Release 4.6
- Cisco VPN Client User Guide for Mac OS X, Release 4.6
- Cisco VPN Client User Guide for Linux and Solaris, Release 4.6

Related Documentation

- VPN 3000 Series Concentrator Reference Volume I: Configuration, Release 4.1
- VPN 3000 Series Concentrator Reference Volume II: Administration and Management, Release 4.1
- VPN 3000 Series Concentrator Getting Started, Release 4.1
Obtaining Documentation

Cisco provides several ways to obtain documentation, technical assistance, and other technical resources. These sections explain how to obtain technical information from Cisco Systems.

Cisco.com

You can access the most current Cisco documentation on the World Wide Web at this URL:

http://www.cisco.com/univercd/home/home.htm

You can access the Cisco website at this URL:

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International Cisco websites can be accessed from this URL:


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- Registered Cisco.com users (Cisco direct customers) can order Cisco product
documentation from the Networking Products MarketPlace:
- Nonregistered Cisco.com users can order documentation through a local
  account representative by calling Cisco Systems Corporate Headquarters
  (California, U.S.A.) at 408 526-7208 or, elsewhere in North America, by
  calling 800 553-NETS (6387).

Documentation Feedback

You can submit comments electronically on Cisco.com. On the Cisco
Documentation home page, click Feedback at the top of the page.

You can e-mail your comments to bug-doc@cisco.com.

You can submit comments by using the response card (if present) behind the front
cover of your document or by writing to the following address:

Cisco Systems
Attn: Customer Document Ordering
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com, which includes the Cisco Technical Assistance Center
(TAC) website, as a starting point for all technical assistance. Customers and
partners can obtain online documentation, troubleshooting tips, and sample
configurations from the Cisco TAC website. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC website, including TAC tools and utilities.

Cisco.com

Cisco.com offers a suite of interactive, networked services that let you access Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com provides a broad range of features and services to help you with these tasks:

- Streamline business processes and improve productivity
- Resolve technical issues with online support
- Download and test software packages
- Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

To obtain customized information and service, you can self-register on Cisco.com at this URL:


Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available: the Cisco TAC website and the Cisco TAC Escalation Center. The type of support that you choose depends on the priority of the problem and the conditions stated in service contracts, when applicable.

We categorize Cisco TAC inquiries according to urgency:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration. There is little or no impact to your business operations.
Obtaining Technical Assistance

- Priority level 3 (P3)—Operational performance of the network is impaired, but most business operations remain functional. You and Cisco are willing to commit resources during normal business hours to restore service to satisfactory levels.
- Priority level 2 (P2)—Operation of an existing network is severely degraded, or significant aspects of your business operations are negatively impacted by inadequate performance of Cisco products. You and Cisco will commit full-time resources during normal business hours to resolve the situation.
- Priority level 1 (P1)—An existing network is “down,” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

Cisco TAC Website

The Cisco TAC website provides online documents and tools to help troubleshoot and resolve technical issues with Cisco products and technologies. To access the Cisco TAC website, go to this URL:

http://www.cisco.com/tac

All customers, partners, and resellers who have a valid Cisco service contract have complete access to the technical support resources on the Cisco TAC website. Some services on the Cisco TAC website require a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to this URL to register:


If you are a Cisco.com registered user, and you cannot resolve your technical issues by using the Cisco TAC website, you can open a case online at this URL:

http://www.cisco.com/tac/caseopen

If you have Internet access, we recommend that you open P3 and P4 cases online so that you can fully describe the situation and attach any necessary files.

Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses priority level 1 or priority level 2 issues. These classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer automatically opens a case.
To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to this URL:


Before calling, please check with your network operations center to determine the Cisco support services to which your company is entitled: for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). When you call the center, please have available your service agreement number and your product serial number.

Obtaining Additional Publications and Information

Information about Cisco products, technologies, and network solutions is available from various online and printed sources.

- Cisco Marketplace provides a variety of Cisco books, reference guides, and logo merchandise. Go to this URL to visit the company store:
  http://www.cisco.com/go/marketplace/

- The Cisco Product Catalog describes the networking products offered by Cisco Systems, as well as ordering and customer support services. Access the Cisco Product Catalog at this URL:
  http://cisco.com/univercd/cc/td/doc/pcat/

- Cisco Press publishes a wide range of general networking, training and certification titles. Both new and experienced users will benefit from these publications. For current Cisco Press titles and other information, go to Cisco Press online at this URL:
  http://www.ciscopress.com

- Packet magazine is the Cisco quarterly publication that provides the latest networking trends, technology breakthroughs, and Cisco products and solutions to help industry professionals get the most from their networking investment. Included are networking deployment and troubleshooting tips, configuration examples, customer case studies, tutorials and training, certification information, and links to numerous in-depth online resources. You can access Packet magazine at this URL:
  http://www.cisco.com/packet
Obtaining Additional Publications and Information

- **iQ Magazine** is the Cisco bimonthly publication that delivers the latest information about Internet business strategies for executives. You can access iQ Magazine at this URL:
  
  http://www.cisco.com/go/iqmagazine

- **Internet Protocol Journal** is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets. You can access the Internet Protocol Journal at this URL:
  
  http://www.cisco.com/ipj

- Training—Cisco offers world-class networking training. Current offerings in network training are listed at this URL:
  