Name of the Document		Minimum Requirements	
Classification	General	Audience	NIC VPN Users
Version	2.1	Date of last change	23/03/2018

Minimum Requirements for the New Setup

NIC is upgrading its VPN services to allow users to connect to NICNET through VPN in a more secure and user friendly way. This new interface automatically identifies the platform of the client machine and downloads & installs the compatible VPN client software, unlike the older options where the client software has to be installed and configured by the user. As per the **Information Technology Act 2000**, the users will now have to take Digital Certificate in PKCS#12 format on Hardware Security Modules from NIC for availing VPN services. Also the username will be pre-filled (picked up from the Digital Certificate) and the users will have to enter their passwords only. The new VPN client can make an ikev2 IPSec and SSL connection depending upon the requirement.

System Requirements

Any Connect 4.5 installations can coexist with other VPN clients, including IPsec clients, on all supported endpoints; however, we do not support running Any Connect while other VPN clients are running.

The following sections identify the minimum system requirements:

- Microsoft Windows (Windows 7, 8, 8.1, 10, 10 RS1, RS2, & RS3 x86(32-bit) and x64(64-bit)
- Linux (Linux Red Hat 6, 7 & Ubuntu 14.04 (LTS) and 16.04 (LTS) (64-bit only))
- Mac OS (Mac OS 10.11, 10.12, and 10.13)

MICROSOFT WINDOWS

Windows Requirements

- Pentium class processor or greater.
- 100 MB hard disk space.
- Microsoft Installer, version 3.1.
- Upgrading to Windows 8.1 from any previous Windows release requires you to uninstall AnyConnect, and reinstall it after your Windows upgrade is complete.
- Upgrading from Windows XP to any later Windows release requires a clean install since the Cisco
 AnyConnect Virtual Adapter is not preserved during the upgrade. Manually uninstall AnyConnect, upgrade
 Windows, then reinstall AnyConnect manually or via WebLaunch.
- To start AnyConnect with WebLaunch, you must use the 32-bit version of Firefox 3.0+ and enable ActiveX or install Sun JRE 1.4+.

Windows Limitations

- Other third-party product's incompatibility with Windows 8 prevents AnyConnect from establishing a VPN connection over wireless networks. Here are two examples of this problem:
- WinPcap service "Remote Packet Capture Protocol v.0 (experimental)" distributed with Wireshark does not support Windows 8.
- To work around this problem, uninstall Wireshark or disable the WinPcap service, reboot your Windows 8 computer, and attempt the AnyConnect connection again.

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- Out-dated wireless cards or wireless card drivers that do not support Windows 8 prevent AnyConnect from establishing a VPN connection.
- To work around this problem, make sure you have the latest wireless network cards or drivers that support Windows 8 installed on your Windows 8 computer.
- AnyConnect is not integrated with the new UI framework, known as the Metro design language, that is deployed on Windows 8; however, AnyConnect does run on Windows 8 in desktop mode.
- HP Protect tools do not work with AnyConnect on Windows 8.x.
- Windows 2008 is not supported; however, we do not prevent the installation of AnyConnect on this OS. Also, Windows Server 2008 R2 requires the optional SysWow64 component
- If you are using Network Access Manager on a system that supports standby, Cisco recommends that the default Windows 8.x association timer value (5 seconds) is used. If you find the Scanlist in Windows appears shorter than expected, increase the association timer so that the driver can complete a network scan and populate the scanlist.

AnyConnect requires a clean install if you upgrade from Windows XP to Windows 7 or later versions of Windows. If you upgrade from Windows Vista to Windows 7 or later version of Windows, manually uninstall AnyConnect first, then after the upgrade, reinstall it manually or by establishing a web-based connection to a security appliance configured to install it. Uninstalling before the upgrade and reinstalling AnyConnect afterwards is necessary because the upgrade does not preserve the Cisco AnyConnect Virtual Adapter. AnyConnect VPN is compatible with 3G data cards which interface with Windows 7 via a WWAN adapter.

LINUX

The following sections show the supported Linux distributions and requirements.

Linux Distributions

- Red Hat Enterprise Linux 6 & 7 Desktop(64 Bit only)
- Ubuntu 14.x and 16.x(64 Bit only)

You can use it on other distributions also, but we do not support them.

Linux Requirements

- x86 instruction set.
- 64-bit processor.
- 32 MB RAM.
- 20 MB hard disk space.
- Dependency on network-manager and libnm library to support NVM.
- Superuser privileges are required for installation.
- libstdc++ users must have libstdc++.so.6(GLIBCXX_3.4) or higher, but below version 4.
- Java 5 (1.5) or later. The only version that works for web installation is Sun Java. You must install Sun Java and configure your browser to use that instead of the default package.

• zlib - to support SSL deflate compression

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- xterm only required if you're doing initial deployment of AnyConnect via Weblaunch from ASA clientless portal.
- gtk 2.0.0.
- gdk 2.0.0.
- libpango 1.0.
- iptables 1.2.7a or later.
- tun module supplied with kernel 2.4.21 or 2.6

MAC OS X

Mac Requirements

- AnyConnect requires 50MB of hard disk space.
- To operate correctly with Mac, AnyConnect requires a minimum display resolution of 1024 by 640 pixels.

Mac Guidelines

- Mac OS X 10.8 introduces a new feature called Gatekeeper that restricts which applications are allowed to run on the system. You can choose to permit applications downloaded from:
 - Mac App Store
 - Mac App Store and identified developers
 - Anywhere

The default setting is Mac App Store and identified developers (signed applications). AnyConnect is a signed application, but it is not signed using an Apple certificate. This means that you must either select the Anywhere setting or use Control-click to bypass the selected setting to install and run AnyConnect from a pre-deploy installation. Users who web deploy or who already have AnyConnect installed are not impacted.

If you upgrade from one major Mac OS X release to another (for example, 10.11 to 10.12), manually uninstall AnyConnect first, then after the upgrade, reinstall it manually or by establishing a web-based connection to a security appliance configured to install it.

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