



AnyConnect Secure Mobility Client Features, Licenses, and OSs, Release 4.8

This document identifies the AnyConnect release 4.8 features, license requirements, and endpoint operating systems that AnyConnect features support.

Supported Operating Systems

Cisco AnyConnect Secure Mobility Client 4.8 supports the following operating systems.

Operating System	Version
Windows	Microsoft-supported versions of Windows 10 for ARM64-based PCs (Supported in VPN client and DART only) Current Microsoft supported versions of Windows 10 x86(32-bit) and x64(64-bit) Windows 8.1 x86(32-bit) and x64(64-bit) Windows 8 x86(32-bit) and x64(64-bit) Windows 7 SP1 x86(32-bit) and x64(64-bit)
macOS	macOS 10.13*, 10.14(64-bit), 10.15(64-bit)
Linux	Red Hat 6 and 7 (64-bit) Ubuntu 16.04 (LTS) and 18.04 (LTS) (all 64-bit)

*To use AnyConnect with macOS 10.13 (High Sierra), you must follow a manual process to leverage AnyConnect's complete capabilities. AnyConnect 4.5.02033 has warnings to guide you through the steps. During AnyConnect installation of 4.5.02033, you see a "System Extension Blocked" message that says that if you want to enable this kernel extension, you must open Security and Privacy System Preferences. By clicking OK at this message, a window pops up that details what attention is required to enable the system extension. The window prompts you to **Open Preferences** and **Allow** the Cisco system software in the Security & Privacy screen.

Note: Cisco no longer supports AnyConnect releases for Windows XP.

See the [Release Notes for Cisco AnyConnect Secure Mobility Client](#) for OS requirements and support notes. See the [Supplemental End User Agreement \(SEULA\)](#) for licensing terms and conditions. See the [Cisco AnyConnect Ordering Guide](#) for a breakdown of orderability and the specific terms and conditions of the various licenses.

See the Feature Matrix below for license information and operating system limitations that apply to AnyConnect modules and features.

AnyConnect 4.3 (and later) has moved to the Visual Studio (VS) 2015 build environment and requires VS redistributable files for its Network Access Manager module functionality. These files are installed as part of the install package. You can use the .msi files to upgrade the Network Access Manager module to 4.3 (or later), but the AnyConnect Security Mobility Client must be upgraded first and running release 4.3 (or later).

Also, with the addition of the AnyConnect Umbrella Roaming Security Module, Microsoft .NET 4.0 is required.

License Options

Use of the AnyConnect Secure Mobility Client 4.8 requires that you purchase either an AnyConnect Plus or AnyConnect Apex license. The license(s) required depends on the AnyConnect VPN Client and Secure Mobility features that you plan to use, and the number of sessions that you want to support. These user-based licenses include access to support and software updates to align with general BYOD trends.

AnyConnect 4.8 licenses are used with Cisco ASA 5500 Series Adaptive Security Appliances (ASA), Integrated Services Routers (ISR), Cloud Services Routers (CSR), and Aggregated Services Routers (ASR), as well as other non-VPN headends such as Identity Services Engine (ISE), Cloud Web Security (CWS), and Web Security Appliance (WSA). A consistent model is used regardless of the headend, so there is no impact when headend migrations occur.

One or more of the following AnyConnect licenses may be required for your deployment:

License	Description
AnyConnect Plus	Supports basic AnyConnect features such as VPN functionality for PC and mobile platforms (AnyConnect and standards-based IPsec IKEv2 software clients), FIPS, basic endpoint context collection, 802.1x Windows supplicant, and web security SSL VPN. Plus licenses are most applicable to environments previously served by the AnyConnect Essentials license and users of Network Access Manager or Web Security modules.
AnyConnect Apex	Supports all basic AnyConnect Plus features in addition to advanced features such as clientless VPN, VPN posture agent, unified posture agent, Next Generation Encryption/Suite B, SAML, all plus services and flex licenses. Apex licenses are most applicable to environments previously served by the AnyConnect Premium, Shared, Flex, and Advanced Endpoint Assessment licenses.
VPN Only (Perpetual)	Supports VPN functionality for PC and mobile platforms, clientless (browser-based) VPN termination on ASA, VPN-only compliance and posture agent in conjunction with ASA, FIPS compliance, and next-generation encryption (Suite B) with AnyConnect and third-party IKEv2 VPN clients. VPN only licenses are most applicable to environments wanting to use AnyConnect exclusively for remote access VPN services but with high or unpredictable total user counts. No other AnyConnect function or service (such as Web Security module, Cisco Umbrella Roaming, ISE Posture, Network Visibility module, or Network Access Manager) is available with this license.

AnyConnect Plus and Apex Licenses

From the Cisco Commerce Workspace website, choose the service tier (Apex or Plus) and the length of term (1, 3, or 5 year). The number of licenses that are needed is based on the number of unique or authorized users that will make use of AnyConnect. AnyConnect 4.7 is not licensed based on simultaneous connections. You can mix Apex and Plus licenses in the same environment, and only one license is required for each user.

AnyConnect 4.7 licensed customers are also entitled to earlier AnyConnect releases.

Features Matrix

AnyConnect 4.8 modules and features, with their minimum release requirements, license requirements, and supported operating systems are listed in the following sections:

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- [AMP Enabler](#)
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- [Umbrella Roaming Security Module](#)

AnyConnect Deployment and Configuration

Feature	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
Deferred Upgrades	ASA 9.0 ASDM 7.0	Plus	yes	yes	yes
Windows Services Lockdown	ASA 8.0(4) ASDM 6.4(1)	Plus	yes	no	no
Update Policy, Software and Profile Lock	ASA 8.0(4) ASDM 6.4(1)	Plus	yes	yes	yes
Auto Update	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes
Web Launch (32 bit browsers only)	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes
Pre-deployment	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes

Feature	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
Auto Update Client Profiles	ASA 8.0(4) ASDM 6.4(1)	Plus	yes	yes	yes
AnyConnect Profile Editor	ASA 8.4(1) ASDM 6.4(1)	Plus	yes	yes	yes
User Controllable Features	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	no

AnyConnect Core VPN Client

Core Features

Feature	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
SSL (TLS & DTLS), including Per App VPN	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes
TLS Compression	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes
DTLS fallback to TLS	ASA 8.4.2.8 ASDM 6.3(1)	Plus	yes	yes	yes
IPsec/IKEv2	ASA 8.4(1) ASDM 6.4(1)	Plus	yes	yes	yes
Split tunneling	ASA 8.0(x) ASDM 6.3(1)	Plus	yes	yes	yes
Dynamic Split Tunneling	ASA 9.0	Plus, Apex, or VPN-only	yes	yes	no
Enhanced Dynamic Split Tunneling	ASA 9.0	Plus, Apex, or VPN-only	yes	yes	no
Split DNS	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	no
Ignore Browser Proxy	ASA 8.3(1) ASDM 6.3(1)	Plus	yes	yes	no
Proxy Auto Config (PAC) file generation	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	no	no
Internet Explorer Connections tab lockdown	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	no	no
Optimal Gateway Selection	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	no
Global Site Selector (GSS) compatibility	ASA 8.0(4) ASDM 6.4(1)	Plus	yes	yes	yes
Local LAN Access	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes
Tethered device access via client firewall rules, for synchronization	ASA 8.3(1) ASDM 6.3(1)	Plus	yes	yes	yes
Local printer access via client firewall rules	ASA 8.3(1) ASDM 6.3(1)	Plus	yes	yes	yes

Feature	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
IPv6	ASA 9.0 ASDM 7.0	Plus	yes	yes	no
Further IPv6 implementation	ASA 9.7.1 ASDM 7.7.1	Plus	yes	yes	yes
Certificate Pinning	no dependency	Plus, Apex, or VPN-only	yes	yes	yes
Management VPN tunnel	ASA 9.0 ASDM 7.10.1	Apex	yes	yes	no

Connect and Disconnect Features

Feature	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
Simultaneous Clientless & AnyConnect connections	ASA 8.0(4) ASDM 6.3(1)	Apex	yes	yes	yes
Start Before Logon (SBL)	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	no	no
Run script on connect & disconnect	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes
Minimize on connect	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes
Auto connect on start	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes
Auto reconnect (disconnect on system suspend, reconnect on system resume)	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	no
Remote User VPN Establishment (permitted or denied)	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	no	no
Logon Enforcement (terminate VPN session if another user logs in)	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	no	no
Retain VPN session (when user logs off, and then when this or another user logs in)	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	no	no
Trusted Network Detection (TND)	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes
Always on (VPN must be connected to access network)	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	no
Always on exemption via DAP	ASA 8.3(1) ASDM 6.3(1)	Plus	yes	yes	no
Connect Failure Policy (Internet access allowed or disallowed if VPN connection fails)	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	no

Feature	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
Captive Portal Detection	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes
Captive Portal Remediation	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	no
Enhanced Captive Portal Remediation	no dependency	Plus	yes	no	no

Authentication and Encryption Features

Feature	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
Certificate only authentication	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes
RSA SecurID /SoftID integration		Plus	yes	no	no
Smartcard support		Plus	yes	yes	no
SCEP (requires Posture Module if Machine ID is used)		Plus	yes	yes	no
List & select certificates		Plus	yes	no	no
FIPS		Plus	yes	yes	yes
SHA-2 for IPsec IKEv2 (Digital Signatures, Integrity, & PRF)	ASA 8.0(4) ASDM 6.4(1)	Plus	yes	yes	yes
Strong Encryption (AES-256 & 3des-168)		Plus	yes	yes	yes
NSA Suite-B (IPsec only)	ASA 9.0 ASDM 7.0	Apex	yes	yes	yes
Enable CRL check	n/a	Apex	yes	no	no
SAML 2.0 SSO	ASA 9.7.1 ASDM 7.7.1	Apex or VPN only	yes	yes	yes
Enhanced SAML 2.0	ASA 9.7.1.24 ASA 9.8.2.28 ASA 9.9.2.1	Apex or VPN only	yes	yes	yes
Multiple-certificate authentication	ASA 9.7.1 ASDM 7.7.1	Plus, Apex, or VPN only	yes	yes	yes

Interfaces

Feature	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
GUI	ASA 8.0(4)	Plus	yes	yes	yes
Command Line	ASDM 6.3(1)		yes	yes	yes
API			yes	yes	yes
Microsoft Component Object Module (COM)			yes	no	no
Localization of User Messages			yes	yes	no
Custom MSI transforms			yes	no	no
User defined resource files			yes	yes	no
Client Help			ASA 9.0 ASDM 7.0	yes	yes

AnyConnect Network Access Manager

Feature	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
Core	ASA 8.4(1) ASDM 6.4(1)	Plus	yes	no	no
Wired support IEEE 802.3			yes		
Wireless support IEEE 802.11			yes		
Pre-logon & Single Sign on Authentication			yes		
IEEE 802.1X			yes		
IEEE 802.1AE MACsec			yes		
EAP methods			yes		
FIPS 140-2 Level 1			yes		
Mobile Broadband support	ASA 8.4(1) ASDM 7.0		yes		
IPv6	ASA 9.0		yes		
NGE and NSA Suite-B	ASDM 7.0		yes		
TLS 1.2 for VPN connectivity*	n/a		yes	no	no

* If you are using ISE as a RADIUS server, note the following guideline:

ISE started support for TLS 1.2 in release 2.0. Network Access Manager and ISE will negotiate to TLS 1.0 if you have the AnyConnect 4.7 version with TLS 1.2 and an ISE release prior to 2.0. Therefore, if you upgrade AnyConnect Network Access Manager to 4.7 and use EAP-FAST with ISE 2.0 (or later) for RADIUS servers, you must upgrade to the 2.4p5 release of ISE.

AnyConnect Secure Mobility Modules

HostScan and Posture Assessment

Feature	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
Endpoint Assessment	ASA 8.0(4)	Apex	yes	yes	yes
Endpoint Remediation	ASDM 6.3(1)	Apex	yes	yes	yes
Quarantine		Apex	yes	yes	yes
Quarantine status & terminate message	ASA 8.3(1) ASDM 6.3(1)	Apex	yes	yes	yes
HostScan Package Update	ASA 8.4(1) ASDM 6.4(1)	Apex	yes	yes	yes
Host Emulation Detection		Apex	yes	no	no
OPSWAT v4	ASA 9.9(1) ASDM 7.9(1)	Apex	yes	yes	yes

ISE Posture

Feature	Minimum AnyConnect Release	Minimum ASA/ASDM Release	Minimum ISE Release	License Required	Windows	macOS	Linux
Change of Authorization (CoA)	4.0	ASA 9.2.1 ASDM 7.2.1	2.0	Plus	yes	yes	yes
ISE Posture Profile Editor	4.0	ASA 9.2.1 ASDM 7.2.1	n/a	Apex	yes	yes	yes
AC Identity Extensions (ACIDex)	4.0	n/a	2.0	Plus	yes	yes	yes
ISE Posture Module	4.0	n/a	2.0	Apex	yes	yes	no
Detection of USB mass storage devices (v4 only)	4.3	n/a	2.1	Apex	yes	no	no
OPSWAT v4	4.3	n/a	2.1	Apex	yes	yes	no
Stealth Agent for posture	4.4	n/a	2.2	Apex	yes	yes	no
Continuous endpoint monitoring	4.4	n/a	2.2	Apex	yes	yes	no
Next-generation provisioning and discovery	4.4	n/a	2.2	Apex	yes	yes	no
Application kill and uninstall capabilities	4.4	n/a	2.2	Apex	yes	yes	no
Cisco Temporal Agent	4.5	n/a	2.3	ISE Apex	yes	yes	no

Feature	Minimum AnyConnect Release	Minimum ASA/ASDM Release	Minimum ISE Release	License Required	Windows	macOS	Linux
Enhanced SCCM approach	4.5	n/a	2.3	AC Apex and ISE Apex	yes	no	no
Posture policy enhancements for optional mode	4.5	n/a	2.3	AC Apex and ISE Apex	yes	yes	no
Periodic probe interval in profile editor	4.5	n/a	2.3	AC Apex and ISE Apex	yes	yes	no
Visibility into hardware inventory	4.5	n/a	2.3	AC Apex and ISE Apex	yes	yes	no
Grace period for noncompliant devices	4.6	n/a	2.4	AC Apex and ISE Apex	yes	yes	no
Posture rescan	4.6	n/a	2.4	AC Apex and ISE Apex	yes	yes	no
AnyConnect stealth mode notifications	4.6	n/a	2.4	AC Apex and ISE Apex	yes	yes	no
Disabling UAC prompt	4.6	n/a	2.4	AC Apex and ISE Apex	yes	no	no
Enhanced grace period	4.7	n/a	2.6	AC Apex and ISE Apex	yes	yes	no
Custom notification controls and revamp of remediation windows	4.7	n/a	2.6	AC Apex and ISE Apex	yes	yes	no

Warning!

Incompatibility warning: If you are an ISE customer running 2.0 or higher you must read this before proceeding!

The ISE RADIUS has supported TLS 1.2 since release 2.0, however there is a defect in the ISE implementation of EAP-FAST using TLS 1.2 tracked by CSCvm03681. The defect has been fixed in the 2.4p5 release of ISE.

If NAM 4.7 is used to authenticate using EAP-FAST with any ISE releases that support TLS 1.2 prior to the above releases, the authentication will fail and the endpoint will not have access to the network.

Web Security

Feature	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
Core	ASA 8.4(1)	Plus	Yes	yes	no
Cloud-Hosted Configuration	ASDM 6.4(1)		Yes		
Secure Trusted Network Detection	ASA 8.4(1) ASDM 7.0				
Dynamic Configuration Elements					
Fail Close / Fail Open Policy					

AMP Enabler

Feature	Minimum ASA/ASDM Release	Minimum ISE Release	License Required	Windows	macOS	Linux
AMP enabler	ASDM 7.4.2 ASA 9.4.1	ISE 1.4	Plus	Yes	Yes	No

Network Visibility Module

Feature	Minimum ASA/ASDM Release	Minimum ISE Release	License Required	Windows	macOS	Linux
Network Visibility Module	ASDM 7.5.1 ASA 9.5.1	no ISE dependency	Apex	Yes	Yes	Yes
Adjustment to the rate at which data is sent	ASDM 7.5.1 ASA 9.5.1	no ISE dependency	Apex	Yes	Yes	Yes
Customization of NVM timer	ASDM 7.5.1 ASA 9.5.1	no ISE dependency	Apex	Yes	Yes	Yes
Broadcast and multicast option for data collection	ASDM 7.5.1 ASA 9.5.1	no ISE dependency	Apex	Yes	Yes	Yes
Creation of anonymization profiles	ASDM 7.5.1 ASA 9.5.1	no ISE dependency	Apex	Yes	Yes	Yes
Broader data collection and anonymization with hashing	ASDM 7.7.1 ASA 9.7.1	no ISE dependency	Apex	Yes	Yes	Yes
Support for Java as a container	ASDM 7.7.1 ASA 9.7.1	no ISE dependency	Apex	Yes	Yes	Yes
Configuration of cache to customize	ASDM 7.7.1 ASA 9.7.1	no ISE dependency	Apex	Yes	Yes	Yes
Periodic flow reporting	ASDM 7.7.1 ASA 9.7.1	no ISE dependency	Apex	Yes	Yes	Yes
Flow filter	n/a	no ISE dependency	Apex	Yes	Yes	Yes
Standalone NVM	n/a	n/a	Apex	Yes	Yes	Yes

Umbrella Roaming Security Module

Feature	Minimum ASA/ASDM Release	Minimum ISE Release	License Required	Windows	macOS	Linux
Umbrella Roaming Security Module	ASDM 7.6.2 ASA 9.4.1	ISE 2.0	Either Plus or Apex Umbrella licensing is mandatory	Yes	Yes	No
Umbrella Secure Web Gateway	n/a	n/a	SIG Essential package from Umbrella	Yes	Yes	No
OpenDNS IPv6 support	n/a	n/a	n/a	Yes	Yes	No

For information on Umbrella licensing, see <https://www.opendns.com/enterprise-security/threat-enforcement/packages/>.

Reporting and Troubleshooting Modules

Customer Experience Feedback

Feature	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
Customer Experience Feedback	ASA 8.4(1) ASDM 7.0	Plus	yes	yes	no

Diagnostic and Report Tool (DART)

Log Type	Minimum ASA/ASDM Release	License Required	Windows	macOS	Linux
VPN	ASA 8.0(4) ASDM 6.3(1)	Plus	yes	yes	yes
Network Access Manager	ASA 8.4(1) ASDM 6.4(1)	Apex	yes	no	no
Posture Assessment			yes	yes	yes
Web Security			yes	yes	no

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