# CISCO

# Cisco ASA Compatibility

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This document lists the Cisco ASA software and hardware compatibility and requirements.

- ASA and ASDM Compatibility, page 1
- ASA and VPN Compatibility, page 6
- ASA and FXOS Compatibility, page 7
- ASA Services Module, IOS, and Switch Compatibility, page 7
- ASAv Hypervisor Compatibility, page 8
- ASA REST API Compatibility, page 10
- ASA 5506W-X Wireless Access Point Software Compatibility, page 11
- ASA 5500 and Module Compatibility, page 11
- ASA Clustering External Hardware Support, page 20
- ASA and Cisco Application Policy Infrastructure Controller (APIC) Compatibility, page 21
- ASA 1000V Compatibility, page 22
- ASA Memory Information, page 22

## ASA and ASDM Compatibility

This section lists ASA and ASDM compatibility for current and legacy ASA models.

- Current Models, page 1
- Legacy Models, page 5

## **Current Models**

The following table lists ASA and ASDM compatibility for current models.

Note: ASDM 6.0 and later is backwards compatible, so we recommend that you upgrade to the latest version.

- ASA and ASDM Compatibility: 9.6 to 9.5, Current Models, page 2
- ASA and ASDM Compatibility: 9.4 to 9.3, Current Models, page 3
- ASA and ASDM Compatibility: 9.2 to 9.1, Current Models, page 3
- ASA and ASDM Compatibility: 9.0 to 8.4, Current Models, page 4
- ASA and ASDM Compatibility: 8.3 to 7.2, Current Models, page 5

 Table 1
 ASA and ASDM Compatibility: 9.6 to 9.5, Current Models

ASA	ASDM	ASA M	lodel:							
		ASA 5505	ASA 5506-X 5506H-X 5506W-X 5508-X 5516-X	ASA 5512-X 5515-X 5525-X 5545-X 5555-X	ASA 5585-X	ASAv	ASASM	ASA on Firepower 4110 4120 4140 4150	ASA on Firepower 9300	ISA 3000
9.6(2)	7.6(2)+	No	YES	YES	YES	YES	YES	YES	YES	YES
9.6(1)	7.6(1)+	No	YES	YES	YES	YES	YES	YES (except 4150)	YES	YES
9.5(2.200)	7.5(2.153)+	No	No	No	No	YES	No	No	No	No
9.5(2.2)	7.5(2)+	No	No	No	No	No	No	No	YES	No
9.5(2.1)	7.5(2)+	No	No	No	No	No	No	No	YES	No
9.5(2)	7.5(2)+	No	YES	YES	YES	YES	YES	No	No	YES
9.5(1.200)	7.5(1)+	No	No	No	No	YES	No	No	No	No
9.5(1.5)	7.5(1.112)+	No	YES	YES	YES	YES	YES	No	No	No
9.5(1)	7.5(1)+	No	YES	YES	YES	YES	YES	No	No	No

 Table 2
 ASA and ASDM Compatibility: 9.4 to 9.3, Current Models

ASA	ASDM	ASA N	lodel:							
		ASA 5505	ASA 5506-X 5506H-X 5506W-X 5508-X 5516-X	ASA 5512-X 5515-X 5525-X 5545-X 5555-X	ASA 5585-X	ASAv	ASASM	ASA on Firepower 4110 4120 4140 4150	ASA on Firepower 9300	ISA 3000
9.4(3)	7.6(1)	No	YES	YES	YES	YES	YES	No	No	No
9.4(2.146)	7.5(1.112)+	No	No	No	No	No	No	No	YES	No
9.4(2.145)	7.5(1.112)+	No	No	No	No	No	No	No	YES	No
9.4(2)	7.5(1)+	No	YES	YES	YES	YES	YES	No	No	No
9.4(1.225)	7.5(1)+	No	No	No	No	No	No	No	No	YES
9.4(1.200)	7.4(2)+	No	No	No	No	YES	No	No	No	No
9.4(1.152)	7.4(3)+	No	No	No	No	No	No	No	YES	No
9.4(1)	7.4(1)+	No	YES	YES	YES	YES	YES	No	No	No
9.3(3.8)	7.4(1)+	No	YES	YES	YES	YES	YES	No	No	No
9.3(3)	7.4(1)+	No	YES	YES	YES	YES	YES	No	No	No
9.3(2.200)	7.3(2)+	No	No	No	No	YES	No	No	No	No
9.3(2)	7.3(3)+	No	<b>YES</b> (5506-X only)	YES	YES	YES	YES	No	No	No
	7.3(2)+	No	<b>YES</b> (5506-X only)	YES	YES	YES	YES	No	No	No
9.3(1)	7.3(1)+	No	No	YES	YES	YES	YES	No	No	No

 Table 3
 ASA and ASDM Compatibility: 9.2 to 9.1, Current Models

ASA	ASDM	ASA M	lodel:							
		ASA 5505	ASA 5506-X 5506H-X 5506W-X 5508-X 5516-X	ASA 5512-X 5515-X 5525-X 5545-X 5555-X	ASA 5585-X	ASAv	ASASM	ASA on Firepower 4110 4120 4140 4150	ASA on Firepower 9300	ISA 3000
9.2(4.5)	7.4(3)+	YES	No	YES	YES	YES	YES	No	No	No
9.2(4)	7.4(3)+	YES	No	YES	YES	YES	YES	No	No	No
9.2(3)	7.3(1.101)+	YES	No	YES	YES	YES	YES	No	No	No
9.2(2.4)	7.2(2)+	YES	No	YES	YES	YES	YES	No	No	No
9.2(1)	7.2(1)+	YES	No	YES	YES	YES	YES	No	No	No
9.1(7.4)	7.5(2)+	YES	No	YES	YES	No	YES	No	No	No
9.1(6)	7.1(7)+	YES	No	YES	YES	No	YES	No	No	No
9.1(5)	7.1(6)+	YES	No	YES	YES	No	YES	No	No	No

 Table 3
 ASA and ASDM Compatibility: 9.2 to 9.1, Current Models (continued)

ASA	ASDM	ASA N	lodel:							
	ASA 5505	ASA 5506-X 5506H-X 5506W-X 5508-X 5516-X	ASA 5512-X 5515-X 5525-X 5545-X 5555-X	ASA 5585-X	ASAv	ASASM	ASA on Firepower 4110 4120 4140 4150	ASA on Firepower 9300	ISA 3000	
9.1(4)	7.1(5)+	YES	No	YES	YES	No	YES	No	No	No
9.1(3)	7.1(4)+	YES	No	YES	YES	No	YES	No	No	No
9.1(2)	7.1(3)+	YES	No	YES	YES	No	YES	No	No	No
9.1(1)	7.1(1)+	YES	No	YES	YES	No	YES	No	No	No

 Table 4
 ASA and ASDM Compatibility: 9.0 to 8.4, Current Models

ASA	ASDM	ASA M	lodel:							
		ASA 5505	ASA 5506-X 5506H-X 5506W-X 5508-X 5516-X	ASA 5512-X 5515-X 5525-X 5545-X 5555-X	ASA 5585-X	ASAv	ASASM	ASA on Firepower 4110 4120 4140 4150	ASA on Firepower 9300	ISA 3000
9.0(4)	7.1(4)+	YES	No	YES	YES	No	YES	No	No	No
9.0(3)	7.1(3)+	YES	No	YES	YES	No	YES	No	No	No
9.0(2)	7.1(2)+	YES	No	YES	YES	No	YES	No	No	No
9.0(1)	7.0(1)+	YES	No	YES	YES	No	YES	No	No	No
8.7(1.1)	6.7(1)	No	No	No	No	No	No	No	No	No
8.6(1)	6.6(1)	No	No	YES	No	No	No	No	No	No
8.5(1)	6.5(1)	No	No	No	No	No	YES	No	No	No
8.4(7)	7.1(3)+	YES	No	No	YES	No	No	No	No	No
8.4(6)	7.1(2.102)+	YES	No	No	YES	No	No	No	No	No
8.4(5)	7.0(2)+	YES	No	No	YES	No	No	No	No	No
8.4(4.1)	6.4(9)+	YES	No	No	YES	No	No	No	No	No
8.4(3)	6.4(7)+	YES	No	No	YES	No	No	No	No	No
8.4(2)	6.4(5)+	YES	No	No	YES	No	No	No	No	No
8.4(1)	6.4(1)+	YES	No	No	YES	No	No	No	No	No

**Note:** For ASA 8.0(2), 8.0(3), and 8.0(4), ASDM 6.2 and later are not compatible for read-only users unless you add the following command: **privilege cmd level 5 mode exec command copy**.

**ASA ASDM ASA Model: ASA ASA** ASA **ASAv ASASM** ASA on ISA **ASA** ASA on 5585-X 3000 5505 5506-X 5512-X **Firepower Firepower** 5506H-X 5515-X 4110 9300 5506W-X 5525-X 4120 5508-X 5545-X 4140 5516-X 5555-X 4150 8.3(2) 6.3(2) +**YES** No No No No No No No No 8.3(1) 6.3(1)+ **YES** No No No No No No No No 8.2(5) 6.4(3) +**YES** No No **YES** No No No No No 8.2(4) 6.3(5) +**YES YES** No No No No No No No 8.2(3) 6.3(4) +**YES YES** No No No No No No No 8.2(2) 6.2(5)+**YES** No No No No No No No No 8.2(1) 6.2(1)+**YES** No No No No No No No No 8.1(2) 6.1(5)+ No No No No No No No No No 8.1(1) 6.1(1)+No No No No No No No No No 8.0(5) 6.2(3) +**YES** No No No No No No No No 8.0(4) 6.1(3)+**YES** No No No No No No No No 8.0(3) 6.0(3)+**YES** No No No No No No No No 8.0(2) 6.0(2) +**YES** No No No No No No No No 7.2 5.2 **YES** No No No No No No No No

 Table 5
 ASA and ASDM Compatibility: 8.3 to 7.2, Current Models

## Legacy Models

The following table lists ASA and ASDM compatibility for legacy ASA models.

**Note:** For ASA 8.0(2), 8.0(3), and 8.0(4), ASDM 6.2 and later are not compatible for read-only users unless you add the following command: **privilege cmd level 5 mode exec command copy**.

**Table 6** ASA and ASDM Compatibility: Legacy Models

ASA	ASDM	ASA Model:			
		ASA 5510, 5520, 5540	ASA 5550	ASA 5580	ASA 1000V
9.2(1)	7.2(1)+	No	No	No	No
9.1(7.4)	7.5(2)+	YES	YES	YES	No
9.1(6)	7.1(7)+	YES	YES	YES	No
9.1(5)	7.1(6)+	YES	YES	YES	No
9.1(4)	7.1(5)+	YES	YES	YES	No
9.1(3)	7.1(4)+	YES	YES	YES	No
9.1(2)	7.1(3)+	YES	YES	YES	No
9.1(1)	7.1(1)+	YES	YES	YES	No
9.0(4)	7.1(4)+	YES	YES	YES	No

 Table 6
 ASA and ASDM Compatibility: Legacy Models (continued)

ASA	ASDM	ASA Model:			
		ASA 5510, 5520, 5540	ASA 5550	ASA 5580	ASA 1000V
9.0(3)	7.1(3)+	YES	YES	YES	No
9.0(2)	7.1(2)+	YES	YES	YES	No
9.0(1)	7.0(1)+	YES	YES	YES	No
8.7(1.1)	6.7(1)	No	No	No	YES
8.6(1)	6.6(1)	No	No	No	No
8.5(1)	6.5(1)	No	No	No	No
8.4(7)	7.1(3)+	YES	YES	YES	No
8.4(6)	7.1(2.102)+	YES	YES	YES	No
8.4(5)	7.0(2)+	YES	YES	YES	No
8.4(4.1)	6.4(9)+	YES	YES	YES	No
8.4(3)	6.4(7)+	YES	YES	YES	No
8.4(2)	6.4(5)+	YES	YES	YES	No
8.4(1)	6.4(1)+	YES	YES	YES	No
8.3(2)	6.3(2)+	YES	YES	YES	No
8.3(1)	6.3(1)+	YES	YES	YES	No
8.2(5)	6.4(3)+	YES	YES	YES	No
8.2(4)	6.3(5)+	YES	YES	YES	No
8.2(3)	6.3(4)+	YES	YES	YES	No
8.2(2)	6.2(5)+	YES	YES	YES	No
8.2(1)	6.2(1)+	YES	YES	YES	No
8.1(2)	6.1(5)+	No	No	YES	No
8.1(1)	6.1(1)+	No	No	YES	No
8.0(5)	6.2(3)+	YES	YES	No	No
8.0(4)	6.1(3)+	YES	YES	No	No
8.0(3)	6.0(3)+	YES	YES	No	No
8.0(2)	6.0(2)+	YES	YES	No	No
7.2	5.2	YES	YES	No	No
7.1(2)	5.1(2)	YES	YES	No	No
7.1(1)	5.1	YES	No	No	No
7.0	5.0	YES	No	No	No

# ASA and VPN Compatibility

For ASA and VPN compatibility, see Supported VPN Platforms, Cisco ASA 5500 Series.

## ASA and FXOS Compatibility

The following table lists compatibility between the ASA OS, FXOS, and Firepower models.

 Table 7
 ASA and FXOS Compatibility

FXOS	Firepower Model	ASA OS
1.1(1.147)	Firepower 9300	9.4(1.152)
1.1(1.160)	Firepower 9300	9.4(1.152)
1.1(2.51)	Firepower 9300	9.4(1.152)
1.1(2.178)	Firepower 9300	9.4(1.152) 9.4(2.145) 9.4(2.146)
1.1(3.84)	Firepower 9300	9.5(2.1)
1.1(3.86)	Firepower 9300	9.5(2.2)
1.1(3.97)	Firepower 9300	9.5(2.2)
1.1(4.95)	Firepower 4110 Firepower 4120 Firepower 4140	9.6(1) 9.6(2)
	Firepower 9300	
1.1(4.117)	Firepower 4110 Firepower 4120 Firepower 4140	9.6(1) 9.6(2)
	Firepower 9300	
2.0(1.37)	Firepower 4110 Firepower 4120 Firepower 4140 Firepower 4150	9.6(1) 9.6(2)
	Firepower 9300	
2.0(1.68)	Firepower 4110 Firepower 4120 Firepower 4140 Firepower 4150	9.6(1) 9.6(2)
	Firepower 9300	

# ASA Services Module, IOS, and Switch Compatibility

The following table shows the switch hardware and software compatibility.

**Table 8** Support for the ASASM

ASA OS	Switch Hardware	Supervisor Engine or Route Switch Processor	Cisco IOS Release
9.0(1) and	Cisco 7604,	SUP 2T with MSFC5 & PFC4 (VS-S2T-10G)	15.1(1)SY and
later	7609-S, 7613-S	SUP 2T with MSFC5 & PFC4XL (VS-S2T-10G-XL)	later

 Table 8
 Support for the ASASM

ASA OS	Switch Hardware	Supervisor Engine or Route Switch Processor	Cisco IOS Release	
9.0(1) and later	Cisco 7606-S, 7609-S	RSP 720 with 10GE ports, MSFC4 & PFC-3C (RSP720-3C-10GE)	15.2(4)S2 or later	
		RSP 720 with 10GE ports, MSFC4 & PFC-3CXL (RSP720-3CXL-10GE)		
		RSP 720 with 2GE ports, MSFC4 & PFC-3C (RSP720-3C-GE)		
		RSP 720 with 2GE ports, MSFC4 & PFC-3CXL (RSP720-3CXL-GE)		
		SUP 720 with MSFC3 & PFC3B (WS-SUP720-3B)		
		SUP 720 with MSFC3 & PFC3BXL (WS-SUP720-3BXL)		
8.5(1.7) and	Catalyst 6500-E	SUP 2T with MSFC5 & PFC4 (VS-S2T-10G)	15.0(1)SY1 and	
later		SUP 2T with MSFC5 & PFC4XL (VS-S2T-10G-XL)	later	
8.5(1) and	Catalyst 6500-E	SUP 720-10GE with MSFC3 & PFC3C (VS-S720-10G-3C)	12.2(33)SXJ2	
later		SUP 720-10GE with MSFC3 & PFC3CXL (VS-S720-10G-3CXL)	and later (Originally-supp	
		SUP 720 with MSFC3 & PFC3B (WS-SUP720-3B)	orted Cisco IOS	
		SUP 720 with MSFC3 & PFC3BXL (WS-SUP720-3BXL)	Version 12.2(33)SXJ1 has a caveat (CSCts88817) that can cause the ASASM to reload under certain circumstances. Therefore, we recommend using Version 12.2(33)SXJ2 or later.)	
8.5(1) and	Catalyst 6800	SUP 2T with MSFC5 & PFC4 (VS-S2T-10G)	15.1(2)SY1 and	
later	series	SUP 2T with MSFC5 & PFC4XL (VS-S2T-10G-XL)	later	

# **ASAv Hypervisor Compatibility**

You can deploy the ASAv on the following hypervisors.

 Table 9
 ASAv Hypervisor Compatibility

Hypervisor	Version and Details	ASAv OS
Amazon Web Services	Amazon Web Services only supports models ASAv10 and ASAv30.	ASA 9.4(1.200), 9.5(1) and later
Kernel-based Virtual Machine (KVM)	qemu-kvm, libvirt-bin, bridge-utils, virt-manager, genisoimage, virtinst, and virsh tools (part of KVM installation).	ASA 9.3(2.200), 9.4(1) and later
	Linux Ubuntu 14.04 LTS host.	
	The ASAv has been extensively tested on an Ubuntu 14.04 LTS host, but you can use other Linux distributions.	
Microsoft Azure	The ASAv10 is supported on a Standard D3 virtual machine.	ASA 9.5(2.200),9.6(2) and later
Microsoft Hyper-V supervisor		ASA 9.5(1.200) and later
VMware vSphere	5.x:	ASA 9.2(1) and later
	■ ESXi Server	
	■ vCenter Server	
	<ul> <li>vSphere Web Client or vSphere Client for Windows or Linux</li> </ul>	
	See the VMware documentation for more information about vSphere and hardware requirements:	
	http://www.vmware.com/support/pubs/	
	<b>Note:</b> You cannot install the ASAv directly on an ESXi host without using vCenter.	
	Note: You cannot deploy the ASAv using vCloud Director.	
	You can now install the ASAv directly on an ESXi host without using vCenter.	ASA 9.4(1.200), 9.5(1) and later
	<ul><li>OVFTool support</li></ul>	
	6.x:	ASA 9.4(1.200), 9.5(1)
	■ ESXi Server	and later
	(Optional) vCenter Server	
	<ul> <li>vSphere Web Client, vSphere Client, or OVFTool for Windows or Linux</li> </ul>	
	See the VMware documentation for more information about vSphere and hardware requirements:	
	http://www.vmware.com/support/pubs/	
	Note: You cannot deploy the ASAv using vCloud Director.	

# ASA REST API Compatibility

The following table lists ASA REST API and ASA compatibility.

Table 10 ASA REST API Compatibility

ASA	ASA REST API	ASA M	lodel:							
		ASA 5505	ASA 5506-X 5506H-X 5506W-X 5508-X 5516-X	ASA 5512-X 5515-X 5525-X 5545-X 5555-X	ASA 5585-X	ASAv	ASASM	ASA on Firepower 4110 4120 4140 4150	ASA on Firepower 9300	ISA 3000
9.6(2)	1.3(2)	No	YES	YES	YES	YES	No	YES	YES	YES
9.6(1)	1.3(1)+	No	YES	YES	YES	YES	No	YES (except 4150)	YES	YES
9.5(2.200)	1.2(2.200)+	No	No	No	No	YES	No	No	No	No
9.5(2.2)	1.2(2)+	No	No	No	No	No	No	No	YES	No
9.5(2.1)	1.2(2)+	No	No	No	No	No	No	No	YES	No
9.5(2)	1.2(2)+	No	YES	YES	YES	YES	No	No	No	YES
9.5(1.200)	1.2(1)+	No	No	No	No	YES	No	No	No	No
9.5(1.5)	1.2(1)+	No	YES	YES	YES	YES	No	No	No	No
9.5(1)	1.2(1)+	No	YES	YES	YES	YES	No	No	No	No
9.4(3)	1.1(1), 1.2(1)+	No	YES	YES	YES	YES	No	No	No	No
9.4(2.146)	1.1(2)+	No	No	No	No	No	No	No	YES	No
9.4(2.145)	1.1(2)+	No	No	No	No	No	No	No	YES	No
9.4(2)	1.1(1), 1.2(1)+	No	YES	YES	YES	YES	No	No	No	No
9.4(1.225)	1.2(1)+	No	No	No	No	No	No	No	No	YES
9.4(1.200)	1.1(1), 1.2(1)+	No	No	No	No	YES	No	No	No	No
9.4(1.152)	1.1(2)+	No	No	No	No	No	No	No	YES	No
9.4(1)	1.1(1), 1.2(1)+	No	YES	YES	YES	YES	No	No	No	No
9.3(2.200)	1.0(1), 1.1(1), 1.2(1)+	No	No	No	No	YES	No	No	No	No
9.3(2)	1.0(1), 1.1(1), 1.2(1)+	No	<b>YES</b> (5506-X only)	YES	YES	YES	No	No	No	No

# ASA 5506W-X Wireless Access Point Software Compatibility

The ASA 5506W-X includes a Cisco Aironet 702i wireless access point integrated into the ASA. The access point includes an *autonomous* Cisco IOS image, which enables individual device management. You can install the *lightweight* image if you want to add the ASA 5506W-X to a Cisco Unified Wireless Network and use a wireless LAN controller. See the Converting Autonomous Access Points to Lightweight Mode chapter in the Cisco Wireless Control Configuration Guide for more information about using the lightweight image in unified mode.

The following table shows the supported software for the access point as well as the supported Cisco Wireless LAN Controller software if you convert to unified mode.

Table 11 ASA 5506W-X Wireless Access Point Software Compatibility

<b>Built-in Access Point</b>	Cisco IOS Release	Cisco Wireless LAN Controller Release
Aironet 702i	15.3(3)JBB and later	8.1.102.0 and later

## ASA 5500 and Module Compatibility

Many ASA models support service and I/O modules. This section lists the modules supported for current and legacy ASA models.

- Current Models, page 11
- Legacy Models, page 18

#### **Current Models**

The following sections show the modules supported on each ASA model. To see the ASDM versions supported for each ASA version on your model, see ASA and ASDM Compatibility, page 1.

- ASA 5505 Advanced Inspection and Prevention (AIP) SSC-5, page 11
- ASA 5506-X Series, ASA 5508-X, ASA 5516-X FirePOWER Software Module, page 12
- ASA 5512-X, 5515-X, 5525-X, 5545-X, 5555-X Modules, page 12
- ASA 5585-X Modules, page 14
- ISA 3000 FirePOWER Software Module, page 17

#### Notes:

- For the IPS module, ASDM 7.1(6) and later are not compatible with IPS 7.3(2) and earlier. To manage an IPS module on an ASA, you must connect to the IPS IP address directly through your browser.
- Except for ASA CX 9.3(2), ASA Software 9.1(5) is supported up to 9.1(5.21). With 9.1(5.21) and higher, CX 9.3(2) or higher are the only supported CX releases.

## ASA 5505 Advanced Inspection and Prevention (AIP) SSC-5

Table 12 ASA 5505 AIP SSC Software Compatibility

IPS Module OS	ASA OS
6.2	ASA 8.2(1) and later
(IPS 7.0 and later is not supported)	

#### ASA 5506-X Series, ASA 5508-X, ASA 5516-X FirePOWER Software Module

Table 13 ASA 5506-X, 5508-X, and 5516-X FirePOWER Software Compatibility

FirePOWER Module OS	ASA OS
6.1	ASA 9.5(2) and later
Management:	ASA 9.6(1) and later
■ ASDM 7.6(2) and later	
■ Firepower Management Center 6.1	
6.0.1	ASA 9.4(2) and later
Management:	ASA 9.5(1.5) and later ASA 9.6(1) and later
■ ASDM 7.6(1) and later (no 9.4(x) support)	, ,
■ Firepower Management Center 6.0.1	
6.0	ASA 9.4(2) and later
Management:	ASA 9.5(1.5) and later ASA 9.6(1) and later
<ul> <li>ASDM 7.5(1.112) and later (no 9.4(x) support)</li> </ul>	
Firepower Management Center 6.0	
5.4.1	ASA 9.3(3.8) and later (5506-X only)
Management:	ASA 9.4(2) and later ASA 9.5(1.5) and later
■ ASDM 7.3(3) and later	ASA 9.6(1) and later
■ FireSIGHT Manager 5.4.1	

### ASA 5512-X, 5515-X, 5525-X, 5545-X, 5555-X Modules

- ASA 5512-X through 5555-X FirePOWER Software Module, page 12
- ASA 5512-X through 5555-X CX SSP Software Module, page 13
- ASA 5512-X through 5555-X IPS SSP Software Module, page 14

#### ASA 5512-X through 5555-X FirePOWER Software Module

Requirements: Cisco solid state drive (SSD)

 Table 14
 ASA 5512-X through 5555-X FirePOWER Software Compatibility

FirePOWER Module OS	ASA OS
6.1	ASA 9.5(2) and later
Management:	ASA 9.6(1) and later
■ ASDM 7.6(2)	
■ Firepower Management Center 6.1	
6.0.1	ASA 9.4(2) and later
Management:	ASA 9.5(1.5) and later ASA 9.6(1) and later
■ ASDM 7.6(1) (no 9.4(x) support)	` ,
■ Firepower Management Center 6.0.1	
6.0	ASA 9.4(2) and later
Management:	ASA 9.5(1.5) and later ASA 9.6(1) and later
<ul><li>ASDM 7.5(1.112) and later (no 9.4(x) support)</li></ul>	. ,
Firepower Management Center 6.0	
5.4.0.2+	ASA 9.3(3.8) and later
(5.4.1.x is not supported)	ASA 9.4(2) and later ASA 9.5(1.5) and later
Management: FireSIGHT Manager 5.4.0.2+	ASA 9.6(1) and later
5.3.1, 5.4.0.1 (but not 5.4.0.2+)	ASA 9.2(4.5)
Management: FireSIGHT Manager 5.3.1, 5.4.0.1	

#### ASA 5512-X through 5555-X CX SSP Software Module

Requirements: Cisco solid state drive (SSD)

**Note:** For ASA Version 9.3(2) and later, only ASA CX Version 9.3(2.1) and later is supported. When upgrading your ASA, first upgrade the ASA CX software; otherwise the ASA CX module can become unresponsive.

 Table 15
 ASA 5512-X through 5555-X CX SSP Software Compatibility

CX Module OS	ASA OS
9.3(2+)	ASA 9.1(5) and later
9.3(1)	ASA 9.1(5, but not 5.21+) ASA 9.2(1-2) ASA 9.3(1)
9.2(1)	ASA 9.1(5, but not 5.21+) ASA 9.2(1-2) ASA 9.3(1)

 Table 15
 ASA 5512-X through 5555-X CX SSP Software Compatibility (continued)

CX Module OS	ASA OS
9.1(3)	ASA 9.1(3-5, but not 5.21+) ASA 9.2(1-2) ASA 9.3(1)
9.1(2)	ASA 9.1(2-5, but not 5.21+) ASA 9.2(1-2) ASA 9.3(1)
9.1(1)	ASA 9.1(1-5, but not 5.21+)

#### ASA 5512-X through 5555-X IPS SSP Software Module

Table 16 ASA 5512-X through 5555-X IPS SSP Software Compatibility

IPS Module OS	ASA OS
7.3	ASA 8.6(1) and later
7.2	ASA 8.6(1) and later
7.1(3)	ASA 8.6(1) and later

#### ASA 5585-X Modules

- ASA 5585-X SSP Modules, page 14
- ASA 5585-X Network Modules, page 15
- ASA 5585-X FirePOWER Modules, page 16
- ASA 5585-X CX SSP Modules, page 17
- ASA 5585-X IPS SSP Modules, page 17

#### ASA 5585-X SSP Modules

 Table 17
 ASA 5585-X ASA Module Compatibility

Modules Supported	ASA OS	
ASA SSP-20 and -60	ASA 8.2(3) and later; 8.4(1) and later	
Requirements: Single ASA SSP in slot 0		

 Table 17
 ASA 5585-X ASA Module Compatibility (continued)

Modules Supported	ASA OS
ASA SSP-10 and -40	ASA 8.2(4) and later; 8.4(1) and later
Requirements: Single ASA SSP in slot 0	
Dual ASA SSPs:	ASA 8.4(2) and later
■ Dual ASA SSP-40s	
■ Dual ASA SSP-60s	
Requirements: Matching-level for both SSPs	
Dual ASA SSPs:	ASA 9.0(1) and later
■ Dual ASA SSP-10s	
■ Dual ASA SSP-20s	
Requirements: Matching-level for both SSPs	

#### ASA 5585-X Network Modules

 Table 18
 ASA 5585-X Network Module Compatibility

Modules Supported	ASA OS
■ ASA 4-port 10G Network Module	ASA 8.4(4.1) and later; 9.1(2)
■ ASA 8-port 10G Network Module	
<ul> <li>ASA 20-port 1G Network Module</li> </ul>	
Requirements: Install one or two network modules in slot 1, with ASA SSP in slot 0	

#### ASA 5585-X FirePOWER Modules

 Table 19
 ASA 5585-X FirePOWER Module Compatibility

Modules Supported	FirePOWER Module OS	ASA OS	
Same level SSPs	6.1	ASA 9.5(2) and later	
ASA FirePOWER SSP -10, -20, -40, and -60	Management:	ASA 9.6(1) and later	
Requirements: Install in slot 1, with matching-level	■ ASDM 7.6(2)		
ASA SSP in slot 0	■ Firepower Management		
Mixed level SSPs	Center 6.1		
Support for the following combinations starts with version	6.0.1	ASA 9.4(2) and later ASA 9.5(1.5) and later	
5.4.0.1.	Management:	ASA 9.6(1) and later	
■ ASA SSP-10/ASA FirePOWER SSP-40	■ ASDM 7.6(1) (no 9.4(x)	, ,	
■ ASA SSP-20/ASA FirePOWER SSP-60	support)		
■ ASA SSP-40/ASA FirePOWER SSP-60	<ul><li>Firepower Management Center 6.0.1</li></ul>		
Requirements: ASA SSP in slot 0, ASA FirePOWER SSP in	6.0	ASA 9.4(2) and later	
slot 1		ASA 9.4(2) and later	
Note: For the SSP40/60 combination, you might see an	Management:	ASA 9.6(1) and later	
error message that this combination is not supported. You can ignore the message.	<ul> <li>ASDM 7.5(1.112) and later (no 9.4(x) support)</li> </ul>		
	Firepower Management Center 6.0		
	5.4.0.2+	ASA 9.3(3.8) and later	
		ASA 9.4(2) and later	
	(5.4.1.x is not supported)	ASA 9.5(1.5) and later	
	Management: FireSIGHT Manager 5.4.0.2+	ASA 9.6(1) and later	
	5.3.1, 5.4.0.1 (but not 5.4.0.2+)	ASA 9.2(4.5)	
	Management: FireSIGHT Manager 5.3.1, 5.4.0.1		

#### ASA 5585-X CX SSP Modules

Table 20 ASA 5585-X CX SSP Module Compatibility

Modules Supported	CX Module OS	ASA OS
ASA CX SSP-10 and -20	9.3(2+)	ASA 9.1(5) and later
Requirements: Install in slot 1, with matching-level ASA SSP in slot 0  Note: For ASA Version 9.3(2) and later, only ASA CX Version 9.3(2.1) and later is supported. When upgrading your ASA, first upgrade the ASA CX software; otherwise the ASA CX module can become unresponsive.	9.3(1)	ASA 9.1(5, but not 5.21+) ASA 9.2(1-2) ASA 9.3(1)
	9.2(1)	ASA 9.1(5, but not 5.21+) ASA 9.2(1-2) ASA 9.3(1)
	9.1(3)	ASA 9.1(3-5, but not ASA 5.21+) ASA 9.2(1-2) ASA 9.3(1)
	9.1(2)	ASA 9.1(2-5, but not 5.21+) ASA 9.2(1-2) ASA 9.3(1)
	9.0	ASA 8.4(4.1)
ASA CX SSP-40 and -60	9.3(2+)	ASA 9.1(5) and later
Requirements: Install in slot 1, with matching-level ASA SSP in slot 0  Note: For ASA Version 9.3(2) and later, only ASA CX Version 9.3.2.1 and later is supported. When upgrading your ASA, first upgrade the ASA CX software; otherwise the ASA CX module can become unresponsive.	9.3(1)	ASA 9.1(5, but not 5.21+) ASA 9.2(1-2) ASA 9.3(1)
	9.2(1)	ASA 9.1(5, but not 5.21+) ASA 9.2(1-2) ASA 9.3(1)

#### ASA 5585-X IPS SSP Modules

 Table 21
 ASA 5585-X IPS SSP Module Compatibility

Modules Supported	IPS Module OS	ASA OS
ASA IPS SSP-10, -20, -40, and -60	7.3	ASA 8.2(5) and later; 8.4(2) and later
Requirements: Install in slot 1, with matching-level ASA SSP in slot 0	7.2	ASA 8.2(5) and later; 8.4(2) and later
	7.1	ASA 8.2(5) and later; 8.4(2) and later

#### ISA 3000 FirePOWER Software Module

 Table 22
 ISA 3000 FirePOWER Software Compatibility

FirePOWER Module OS	ASA OS
5.4.1.7+	ASA 9.4(1.225)
Management:	ASA 9.5(2) and later ASA 9.6(1) and later
<ul><li>ASDM 7.5(1.112) and later</li></ul>	
■ FireSIGHT Manager 5.4.1.7	

## Legacy Models

The following table shows the modules supported on each ASA model. To see the ASDM versions supported for each ASA version on your model, see ASA and ASDM Compatibility, page 1.

**Note:** For the IPS module, ASDM 7.1(6) and later are not compatible with IDM. To manage an IPS module on an ASA, you must connect to the IPS IP address directly through your browser or in the ASDM-IDM Launcher.

Table 23 ASA Module Compatibility

ASA Model	Modules Supported	Module OS	ASA OS
ASA 5510	ASA AIP SSM-10	7.1	ASA 8.0(2) and later
	(ASDM 5.2 and later lets you launch IDM from ASDM	7.0	ASA 8.0(2) and later
	to manage IPS release 5.0 and 5.1. For	6.2	ASA 8.0(2) and later
	natively-integrated management, use IPS 6.0 and later.)	6.1	ASA 8.0(2) and later
	,	6.0	ASA 7.2(1) and later
		5.1	ASA 7.0(1) and later
		5.0	ASA 7.0(1) and later
	ASA Content Security and Control (CSC) SSM-10 and -20  (ASDM 5.2 and above lets you launch Trend Micro Content Security from ASDM to manage CSC 6.0,	6.6	ASA 8.4(2) and later. Versions earlier than 8.4.2 are supported; however, HTTPS filtering is not possible.
	6.1, and 6.2. For natively-integrated management, use CSC 6.3 and above with ASDM 6.2(3) and above.)	6.3	ASA 7.1(1) and later
		6.2	ASA 7.1(1) and later
		6.1	ASA 7.1(1) and later
		6.0	ASA 7.1(1)
	ASA 4GE SSM	N/A	ASA 7.0(4) and later

 Table 23
 ASA Module Compatibility (continued)

ASA Model	Modules Supported	Module OS	ASA OS
ASA 5520	ASA AIP SSM-10 and -20	7.1	ASA 8.0(2) and later
		7.0	ASA 8.0(2) and later
		6.2	ASA 8.0(2) and later
		6.1	ASA 8.0(2) and later
		6.0	ASA 7.2(1) and later
		5.1	ASA 7.0(1) and later
		5.0	ASA 7.0(1) and later
	ASA AIP SSM-40	7.1	ASA 8.0(4) and later
		7.0	ASA 8.0(4) and later
		6.2	ASA 8.0(4) and later
		6.1	ASA 8.0(4) and later
		6.0(4)	ASA 8.0(4) and later
	ASA CSC SSM-10 and -20	6.6	ASA 8.4(2) and later. Versions earlier than 8.4(2) are supported; however, HTTPS filtering is not possible.
		6.3	ASA 7.2(1) and later
		6.2	ASA 7.2(1) and later
		6.1	ASA 7.1(2) and later
		6.0	ASA 7.1(1)
	ASA 4GE SSM	N/A	ASA 7.0(4) and later

Table 23 ASA Module Compatibility (continued)

ASA Model	Modules Supported	Module OS	ASA OS
ASA 5540	ASA AIP SSM-20	7.1	ASA 8.0(2) and later
		7.0	ASA 8.0(2) and later
		6.2	ASA 8.0(2) and later
		6.1	ASA 8.0(2) and later
		6.0	ASA 7.2(1) and later
		5.1	ASA 7.0(1) and later
		5.0	ASA 7.0(1) and later
	ASA AIP SSM-40	7.1	ASA 8.0(4) and later
		7.0	ASA 8.0(4) and later
		6.2	ASA 8.0(4) and later
		6.1	ASA 8.0(4) and later
		6.0(4)	ASA 8.0(4) and later
	ASA CSC SSM-10 and -20	6.6	ASA 8.4(2) and later. Versions earlier than 8.4(2) are supported; however, HTTPS filtering is not possible.
		6.3	ASA 7.2(1) and later
		6.2	ASA 7.2(1) and later
		6.1	ASA 7.1(2) and later
		6.0	ASA 7.1(1)
	ASA 4GE SSM	N/A	ASA 7.0(4) and later
ASA 5550	No support (the ASA 4GE SSM is built-in and not user-removable)	N/A	N/A
ASA 5580	No support	N/A	N/A

# ASA Clustering External Hardware Support

The following table lists supported external hardware and software to interoperate with ASA clustering.

**Note:** For the Firepower 9300 ASA cluster, intra-chassis clustering can operate with any switch because Firepower 9300-to-switch connections use standard interface types.

External Hardware	<b>External Software</b>	ASA Version
Cisco ASR 9000 with RSP 440	Cisco IOS XR 5.3(1) and later	9.5(1) and later
Cisco Nexus 9500	Cisco NX-OS 6.1(2)I2(1) and later	9.2(1) and later
	APIC 1.0(1) and later	
Cisco Nexus 9300	Cisco NX-OS 6.1(2)I2(1) and later	9.2(1) and later
	APIC 1.0(1) and later	

External Hardware	External Software	ASA Version
Cisco Nexus 7000	Cisco NX-OS 5.2(5) and later	9.0(1) and later
Note: You can use F1-series line cards for the cluster control link, but we do not recommend using them for data EtherChannels in Spanned EtherChannel mode due to asymmetric load-balancing, which can cause performance degradation for data throughput on the cluster.		
Cisco Nexus 6000	Cisco NX-OS 7.0(2)N1(1) and later	9.3(2) and later
Cisco Nexus 5000	Cisco NX-OS 7.0(1) and later	9.1(4) and later
Catalyst 6800 with Supervisor 2T	Cisco IOS 15.1(2)SY5 and later	9.1(5) and later
Catalyst 6500 with Supervisor 32, 720, and 720-10GE	Cisco IOS 12.2(33)SXI7, SXI8, and SXI9 and later	9.0(1) and later
Catalyst 6500 with Supervisor 2T	Cisco IOS 15.1(2)SY5 and later	9.1(5) and later
Catalyst 4500-X	Cisco IOS 3.6(3) and later	9.5(2) and later
Note: We do not recommend using this switch for data EtherChannels in Spanned EtherChannel mode due to asymmetric load-balancing, which can cause performance degradation for data throughput on the cluster. You can use the switch for the cluster control link or for interfaces in Individual Interface mode.		
Catalyst 4500 with Supervisor 8-E	Cisco IOS XE 3.7(1E) and later	9.5(1) and later
Note: We do not recommend using this switch for data EtherChannels in Spanned EtherChannel mode due to asymmetric load-balancing, which can cause performance degradation for data throughput on the cluster. You can use the switch for the cluster control link or for interfaces in Individual Interface mode.	Cisco IOS 3.7(3) and later	9.5(2) and later
Catalyst 3750-X	Cisco IOS 15.0(2) and later	9.1(4) and later

# ASA and Cisco Application Policy Infrastructure Controller (APIC) Compatibility

The following table lists the supported ASA models, ASA software, and APIC versions.

ASA Models	ASA Version	ASA Device Package Version	<b>APIC Version</b>
ASA 5512-X, 5515-X, 5525-X, 5545-X, 5555-X	8.4(1) and later	1.2(1.2) and later	1.0(1g) and later
ASA 5585-X	8.4(1) and later	1.2(1.2) and later	1.0(1g) and later
ASAv	9.2(1) and later	1.2(1.2) and later	1.0(1g) and later

**Note:** If you are running an earlier version of the ASA device package or APIC, for best stability we recommend that you upgrade to the minimum versions in the above table.

## ASA 1000V Compatibility

The following table lists the supported hardware and software for each ASA 1000V release.

Table 24 ASA 1000V Compatibility

ASA 1000V OS	ASDM	Nexus 1000V OS, with VSM and VEM	VNMC	VMware vCenter VSphere Hypervisor, Enterprise Plus	VMware vCenter Server and vSphere Client, Enterprise Plus
ASA 8.7(1.1)	ASDM 6.7(1)	Nexus 4.2(1)SV1(5.2)	VNMC 2.0	4.1, 5.0	4.1, 5.0

## **ASA Memory Information**

The ASA includes DRAM (also referred to as DIMM) and internal flash memory. On some models, you can optionally use an external flash memory as well. This section includes the following topics:

- Memory Requirements, page 22
- Viewing Flash Memory, page 24
- DRAM, Flash Memory, and Failover or ASA Clustering, page 25

## Memory Requirements

The following sections list the standard and recommended flash memory and DRAM.

#### **Current Models**

- Shipping Memory, page 22
- Memory Kits, page 23

#### **Shipping Memory**

See the following guidelines:

- The ASA 5500-X models can run a software module such as the ASA IPS or ASA CX alongside the ASA firewall and VPN functions. For these models, DRAM is evenly and statically distributed between the Firewall/VPN functionality and the software module functionality, with 50% allocated to each. Memory for the software module is reserved even if you are not running a software module; you cannot use that memory for firewall and VPN functions. For other models with hardware modules, such as the ASA 5585-X, the modules include their own memory, so all of the ASA memory is used for firewall and VPN.
- For the ASA 5505 with Version 8.3 through 9.1, only the Unlimited Hosts license and the Security Plus license with failover enabled require 512 MB; other licenses can use 256 MB. For Version 9.2 and later, all ASA 5505 licenses require 512 MB.

Table 25 Standard Memory and Memory Requirements for the Cisco ASA Series Current Models

ASA Model	Internal Flash Memory (Default Shipping)	Total DRAM (Default Shipping)	DRAM Allocated to FW/VPN	DRAM Allocated to Module
5505	128 MB	Before Feb. 2010: 256 MB After Feb. 2010: 512 MB	512 MB	On module
5506-X, 5506H-X, 5506W-X	8 GB	4 GB	1.8 GB	2.2 GB
5508-X	8 GB	8 GB	4 GB	4 GB
5512-X	4 GB	4 GB	2 GB	2 GB
5515-X	8 GB	8 GB	4 GB	4 GB
5516-X	8 GB	8 GB	4 GB	4 GB
5525-X	8 GB	8 GB	4 GB	4 GB
5545-X	8 GB	12 GB	6 GB	6 GB
5555-X	8 GB	16 GB	8 GB	8 GB
5585-X with SSP-10	2 GB	6 GB	6 GB	On module
5585-X with SSP-20	2 GB	12 GB	12 GB	On module
5585-X with SSP-40	2 GB	12 GB	12 GB	On module
5585-X with SSP-60	2 GB	24 GB	24 GB	On module
ASASM	8 GB	24 GB	24 GB	N/A

#### Memory Kits

The following table lists the DRAM (also referred to as DIMM) kits.

Table 26 DRAM Kits

Model	Size	Part Number
ASA 5505	512 MB	ASA5505-MEM-512=

## Legacy Models

- Shipping Memory, page 23
- Memory Kits, page 24

#### **Shipping Memory**

See the following guidelines:

- Note that the shipping DRAM increased after February 2010; the DRAM requirements for 8.3 and higher match the newer default shipping sizes. The newer default shipping DRAM is the current maximum DRAM you can install in your unit. See Memory Kits, page 24 to order an upgrade kit.
- ASA 5520s and ASA 5540s manufactured before August 2011 have four DIMM sockets. ASA 5520s and ASA 5540s manufactured after this date have two DIMM sockets. All ASA 5550s have four DIMM sockets.

- For the ASA 5510 through 5550, you might need to upgrade the internal flash memory to 512 MB or add external flash memory if you load multiple images of the AnyConnect client along with one or more images of the ASA software, ASDM, client/server plugins, or Cisco Secure Desktop. In particular, you might need to upgrade for multiple AnyConnect 3.0 and higher clients with optional modules.
- The default internal flash memory for some models was 64 MB in the past; if you have one of these early units, we recommend upgrading your flash memory to at least the new shipping default.

Table 27 Standard Memory and Memory Requirements for the Cisco ASA Series Legacy Models

ASA Model	Internal Flash	Total DRAM	(Default Shipping)	DRAM Allocated	DRAM
	Memory (Default Shipping)	ng) Before After Feb. 2010 (Req'd for 8.3 and Higher)		to FW/VPN	Allocated to Module
5510	256 MB	256 MB	1 GB	1 GB	On module
5520	256 MB	512 MB	2 GB	2 GB	On module
5540	256 MB	1 GB	2 GB	2 GB	On module
5550	256 MB	4 GB	4 GB	4 GB	On module
5580-20	1 GB	8 GB	8 GB	8 GB	N/A
5580-40	1 GB	12 GB	12 GB	12 GB	N/A

#### Memory Kits

The following table lists the DRAM (also referred to as DIMM) kits.

Table 28 DRAM Kits

Model	Size	Part Number
ASA 5510	1 GB	ASA5510-MEM-1GB=
(If you previously purchased the 512 MB upgrade kit for the ASA 5510 (ASA5510-MEM-512=), you must upgrade to the 1 GB memory upgrade kit to run Version 8.3.)		
ASA 5520	2 GB	ASA5520-MEM-2GB=
ASA 5540	2 GB	ASA5540-MEM-2GB=
ASA 5550	4 GB	2 x ASA5540-MEM-2GB=

The following table lists the CompactFlash upgrade kits available for the ASA 5510 through ASA 5550, for use as internal or external flash memory.

 Table 29
 CompactFlash Upgrade Kits

Model	Size	Part Number
ASA 5510 through ASA 5550	256 MB	ASA5500-CF-256MB=
ASA 5510 through ASA 5550	512 MB	ASA5500-CF-512MB=

## Viewing Flash Memory

You can check the size of internal flash and the amount of free flash memory on the ASA by doing the following:

ASDM-Choose Tools > File Management. The amounts of total and available flash memory appear on the bottom left in the pane.

CLI—In Privileged EXEC mode, enter the dir command. The amounts of total and available flash memory appear
on the bottom of the output.

#### Example:

```
hostname # dir
Directory of disk0:/
43
                       08:46:02 Feb 19 2007 cdisk.bin
      -rwx 14358528
                                             asdmfile
136
                        10:25:08 Feb 20 2007
      -rwx 12456368
58
            6342320
                        08:44:54 Feb 19 2007 asdm-600110.bin
      -rwx
            416354
                        11:50:58 Feb 07 2007
                                             sslclient-win-1.1.3.173.pkg
      -rwx
      -rwx 23689
                        08:48:04 Jan 30 2007 asa1_backup.cfg
66
      -rwx 425
                        11:45:52 Dec 05 2006 anyconnect
70
      -rwx 774
                        05:57:48 Nov 22 2006 cvcprofile.xml
71
      -rwx 338
                        15:48:40 Nov 29 2006 tmpAsdmCustomization430406526
72
      -rwx 32
                        09:35:40 Dec 08 2006 LOCAL-CA-SERVER.ser
      -rwx 2205678
73
                        07:19:22 Jan 05 2007 vpn-win32-Release-2.0.0156-k9.pkg
74
      -rwx 3380111
                        11:39:36 Feb 12 2007 securedesktop_asa_3_2_0_56.pkg
62881792 bytes total (3854336 bytes free)
```

## DRAM, Flash Memory, and Failover or ASA Clustering

In a failover or cluster configuration, the units must have the same amount of DRAM. You do not have to have the same amount of flash memory. For more information, see the failover or clustering chapters in the configuration guide.

**Note:** If you use units with different flash memory sizes, make sure that the units with the smaller flash memory has enough space for the software images and configuration files.

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ASA Memory Information