

# **System Requirements**

This document includes the system requirements for Version 6.7.

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# **Device Platforms**

Cisco Firepower devices monitor network traffic and decide whether to allow or block specific traffic based on a defined set of security rules. Some Firepower devices run Firepower Threat Defense (FTD) software; some run NGIPS/ASA FirePOWER software. Some can run either—but not both at the same time.



Note

These release notes list the supported devices for *this* release. Even if an older device has reached EOL and you can no longer upgrade, you can still manage that device with a newer FMC, up to a few versions ahead. Similarly, newer versions of ASDM can manage older ASA FirePOWER modules. For supported management methods, including backwards compatibility, see Manager-Device Compatibility, on page 5. For general compatibility information, see the Cisco Secure Firewall Threat Defense Compatibility Guide or the Cisco Firepower Classic Device Compatibility Guide.

Table 1: Firepower Threat Defense in Version 6.7.0/6.7.x

FTD Platform	OS/Hypervisor	Additional Details
Firepower 1010, 1120, 1140, 1150	—	—
Firepower 2110, 2120, 2130, 2140		

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FTD Platform	OS/Hypervisor	Additional Details
Firepower 4110, 4120, 4140, 4150	FXOS 2.9.1.131 or later build	Upgrade FXOS first.
Firepower 4112, 4115, 4125, 4145		To resolve issues, you may need to
Firepower 9300: SM-24, SM-36, SM-44 modules		upgrade FXOS to the latest build. To help you decide, see the Cisco FXOS Release Notes, 2.9(1).
Firepower 9300: SM-40, SM-48, SM-56 modules		,,(-).
ASA 5508-X, 5516-X		Although you do not separately
ISA 3000		upgrade the operating system on these devices in FTD deployments, you should make sure you have the latest ROMMON image. See the instructions in the Cisco ASA and Firepower Threat Defense Reimage Guide.

FTD Platform	OS/Hypervisor	Additional Details
Firepower Threat Defense Virtual (FTDv)	<ul> <li>Any of:</li> <li>AWS: Amazon Web Services</li> <li>Azure: Microsoft Azure</li> <li>GCP: Google Cloud Platform</li> <li>OCI: Oracle Cloud Infrastructure</li> <li>KVM: Kernel-based Virtual Machine</li> <li>VMware vSphere/VMware ESXi 6.0, 6.5, or 6.7</li> </ul>	For supported instances, see the appropriate FTDv Getting Started guide.

Table 2: NGIPS/ASA FirePOWER in Version 6.7.0/6.7.x

NGIPS/ASA FirePOWER Platform	OS/Hypervisor	Additional Details
ASA 5508-X, 5516-X ISA 3000	ASA 9.5(2) to 9.16(x)	There is wide compatibility between ASA and ASA FirePOWER versions. However, upgrading allows you to take advantage of new features and resolved issues. See the Cisco ASA
		Upgrade Guide for order of operations. You should also make sure you have the latest ROMMON image. See the instructions in the Cisco ASA and Firepower Threat Defense Reimage Guide.
NGIPSv	VMware vSphere/VMware ESXi 6.0, 6.5, or 6.7	For supported instances, see the Cisco Firepower NGIPSv Quick Start Guide for VMware.

# **FMC Platforms**

The FMC provides a centralized firewall management console. For device compatibility with the FMC, see Device Management. For general compatibility information, see the Cisco Secure Firewall Management Center Compatibility Guide.

# **FMC** Hardware

Version 6.7 supports the following FMC hardware:

- Firepower Management Center 1600, 2600, 4600
- Firepower Management Center 1000, 2500, 4500

You should also keep the BIOS and RAID controller firmware up to date; see the Cisco Secure Firewall Threat Defense/Firepower Hotfix Release Notes.

# FMCv

Version 6.7 supports FMCv deployments in both public and private clouds.

With the FMCv, you can purchase a license to manage 2, 10, or 25 devices. Some platforms support 300 devices. Note that two-device licenses do not support FMC high availability. For full details on supported instances, see the Cisco Secure Firewall Management Center Virtual Getting Started Guide.

Platform	Devices Managed		High Availability
	2, 10, 25	300	
Public Cloud	<u> </u>		I
Amazon Web Services (AWS)	YES	—	
Google Cloud Platform (GCP)	YES	—	—
Microsoft Azure	YES		—
Oracle Cloud Infrastructure (OCI)	YES		—
Private Cloud	<u> </u>		I
Kernel-based virtual machine (KVM)	YES	—	
VMware vSphere/VMware ESXi 6.0, 6.5, or 6.7	YES	YES	YES

# **Cloud-delivered Firewall Management Center**

The Cisco cloud-delivered Firewall Management Center is delivered via the Cisco Defense Orchestrator (CDO) platform, which unites management across multiple Cisco security solutions. We take care of feature updates. Note that a customer-deployed management center is often referred to as *on-prem*, even for virtual platforms.

At the time this document was published, the cloud-delivered Firewall Management Center could manage devices running threat defense . For up-to-date compatibility information, see the Cisco Cloud-Delivered Firewall Management Center Release Notes.

# **Manager-Device Compatibility**

# **Firepower Management Center**

All devices support remote management with the Firepower Management Center, which can manage multiple devices. The FMC must run the *same or newer* version as its managed devices. You *cannot* upgrade a device past the FMC. Even for maintenance (third-digit) releases, you must upgrade the FMC first.

A newer FMC can manage older devices up to a few major versions back, as listed in the following table. However, we recommend you always update your entire deployment. New features and resolved issues often require the latest release on both the FMC and its managed devices.

FMC Version	Oldest Device Version You Can Manage
6.7.x	6.3.0
6.6.x	6.2.3
6.5.0	6.2.3
6.4.0	6.1.0
6.3.0	6.1.0
6.2.3	6.1.0

Table 4: FMC-Device Compatibility

### **Firepower Device Manager and Cisco Defense Orchestrator**

As an alternative to the FMC, many FTD devices support Firepower Device Manager and Cisco Defense Orchestrator management:

• Firepower Device Manager is built into FTD and can manage a single device.

This lets you configure the basic features of the software that are most commonly used for small or mid-size networks.

Cisco Defense Orchestrator (CDO) is cloud-based and can manage multiple FTD devices.

This allows you to establish and maintain consistent security policies across your deployment without using the FMC. Although some configurations still require FDM, CDO allows you to establish and maintain consistent security policies across multiple Firepower Threat Defense devices.

All FTD devices that support local management with the FDM also support CDO concurrently.

#### Table 5: FDM/CDO Compatibility with FTD

FTD Platform	FDM Compatibility	CDO Compatibility
Firepower 1000 series	6.4.0+	6.4.0+
Firepower 2100 series	6.2.1+	6.4.0+

FTD Platform	FDM Compatibility	CDO Compatibility
Firepower 4100/9300	6.5.0+	6.5.0+
ASA 5500-X series	6.1.0 to 7.0.x	6.4.0 to 7.0.x
ISA 3000	6.2.3+	6.4.0+
FTDv for AWS	6.6.0+	6.6.0+
FTDv for Azure	6.5.0+	6.5.0+
FTDv for GCP		—
FTDv for KVM	6.2.3+	6.4.0+
FTDv for OCI		_
FTDv for VMware	6.2.2+	6.4.0+

# **Adaptive Security Device Manager**

ASA with FirePOWER Services is an ASA firewall that runs Firepower NGIPS software as a separate application, also called the ASA FirePOWER module. You can use Cisco Adaptive Security Device Manager (ASDM) to manage both applications.

In most cases, newer ASDM versions are backwards compatible with all previous ASA versions. However, there are some exceptions. For example, ASDM 7.13(1) can manage an ASA 5516-X on ASA 9.10(1). ASDM 7.13(1) and ASDM 7.14(1) did not support ASA 5512-X, 5515-X, 5585-X, and ASASM; you must upgrade to ASDM 7.13(1.101) or 7.14(1.48) to restore ASDM support. For details, see Cisco ASA Compatibility.

A newer ASA FirePOWER module requires a newer version of ASDM, as listed in the following table.

#### Table 6: ASDM-ASA FirePOWER Compatibility

ASA FirePOWER Version	Minimum ASDM Version
6.7.x	7.15.1
6.6.x	7.14.1
6.5.0	7.13.1
6.4.0	7.12.1
6.3.0	7.10.1
6.2.3	7.9.2

# **Browser Requirements**

# **Browsers**

We test with the latest versions of these popular browsers, running on currently supported versions of macOS and Microsoft Windows:

- Google Chrome
- Mozilla Firefox
- Microsoft Edge (Windows only)

If you encounter issues with any other browser, or are running an operating system that has reached end of life, we ask that you switch or upgrade. If you continue to encounter issues, contact Cisco TAC.



Note

We do not perform extensive testing with Apple Safari, nor do we extensively test Microsoft Edge with FMC How-Tos. However, Cisco TAC welcomes feedback on issues you encounter.

### **Browser Settings and Extensions**

Regardless of browser, you must make sure JavaScript, cookies, and TLS v1.2 remain enabled. If you are using Microsoft Edge, do *not* enable IE mode.

Note that some browser extensions can prevent you from saving values in fields like the certificate and key in PKI objects. These extensions include, but are not limited to, Grammarly and Whatfix Editor. This happens because these extensions insert characters (such as HTML) in the fields, which causes the system to see them invalid. We recommend you disable these extensions while you're logged into our products.

# **Screen Resolution**

Interface	Minimum Resolution
ASDM managing an ASA FirePOWER module	1024 x 768
Firepower Chassis Manager for the Firepower 4100/9300	1024 x 768

# **Securing Communications**

When you first log in, the system uses a self-signed digital certificate to secure web communications. Your browser should display an untrusted authority warning, but also should allow you to add the certificate to the trust store. Although this will allow you to continue, we do recommend that you replace the self-signed certificate with a certificate signed by a globally known or internally trusted certificate authority (CA).

To begin replacing the self-signed certificate:

• FMC: Choose System ( )> Configuration > HTTPS Certificate.

• FDM: Click **Device**, then the **System Settings** > **Management Access** link, then the **Management Web Server** tab.

For detailed procedures, see the online help or the configuration guide for your product.



Note If you do not replace the self-signed certificate:

- Google Chrome does not cache static content, such as images, CSS, or JavaScript. Especially in low bandwidth environments, this can extend page load times.
- Mozilla Firefox can stop trusting the self-signed certificate when the browser updates. If this happens, you can refresh Firefox, keeping in mind that you will lose some settings; see Mozilla's Refresh Firefox support page.

# **Browsing from a Monitored Network**

Many browsers use Transport Layer Security (TLS) v1.3 by default. If you are using an SSL policy to handle encrypted traffic, and people in your monitored network use browsers with TLS v1.3 enabled, websites that support TLS v1.3 may fail to load. For more information, see the software advisory titled: *Failures loading websites using TLS 1.3 with SSL inspection enabled*.