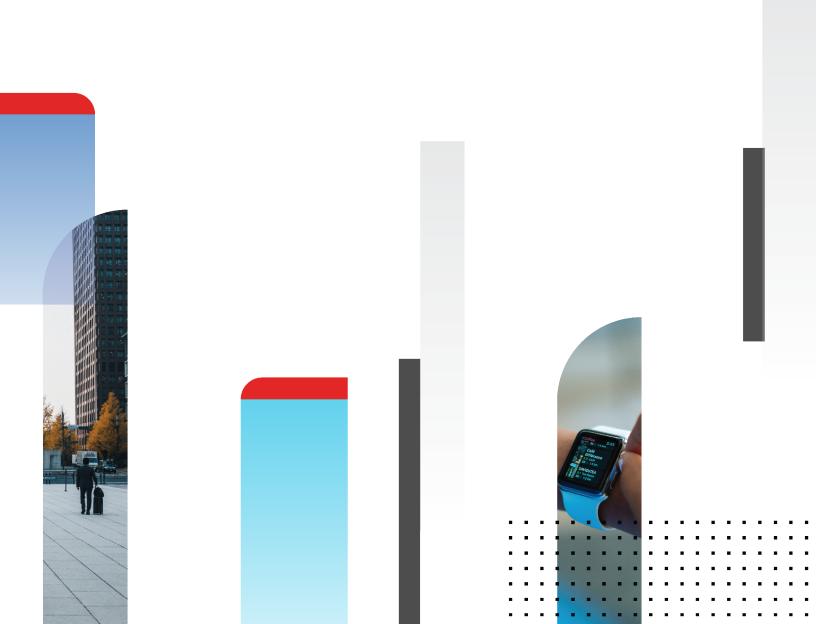


# **Release Notes**

FortiManager 7.0.0



#### FORTINET DOCUMENT LIBRARY

https://docs.fortinet.com

#### **FORTINET VIDEO GUIDE**

https://video.fortinet.com

#### **FORTINET BLOG**

https://blog.fortinet.com

#### **CUSTOMER SERVICE & SUPPORT**

https://support.fortinet.com

#### **FORTINET TRAINING & CERTIFICATION PROGRAM**

https://www.fortinet.com/support-and-training/training.html

#### **NSE INSTITUTE**

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#### **END USER LICENSE AGREEMENT**

https://www.fortinet.com/doc/legal/EULA.pdf

#### **FEEDBACK**

Email: techdoc@fortinet.com



January 5, 2024 FortiManager 7.0.0 Release Notes 02-700-690783-20240105

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# **Change Log**

Date	Change Description
2021-04-22	Initial release.
2021-04-23	Updated FortiGate models on page 21 and FortiGate special branch models on page 23.
2021-04-26	Updated Special Notices on page 9.
2021-06-18	Updated Resolved Issues on page 30 and Known Issues on page 42.
2021-06-23	Updated FortiGate special branch models on page 23.
2021-06-28	Added note about ports to Management extension applications on page 7.
2021-07-08	Added FortiSandbox 3.2 and 4.0 support to FortiSandbox on page 17 and FortiSandbox models on page 26.
2021-07-22	Updated FortiClient on page 17.
2021-07-29	Added Scheduling firmware upgrades for managed devices to Special Notices on page 9.  Added 713714 to Known Issues on page 42.
2021-11-26	Added Microsoft Hyper-V Server 2019 to Virtualization on page 18 and added 695782 to Resolved Issues on page 30.
2024-01-05	Updated Special Notices on page 9.

## FortiManager 7.0.0 Release

This document provides information about FortiManager version 7.0.0 build 0047.



The recommended minimum screen resolution for the FortiManager GUI is 1920 x 1080. Please adjust the screen resolution accordingly. Otherwise, the GUI may not display properly.

This section includes the following topics:

- Supported models on page 6
- FortiManager VM subscription license on page 6
- Management extension applications on page 7

## **Supported models**

FortiManager version 7.0.0 supports the following models:

FortiManager	FMG-200F, FMG-200G, FMG-300F, FMG-400E, FMG-1000F, FMG-2000E FMG-3000F, FMG-3000G, FMG-3700F, and FMG-3900E.
FortiManager VM	FMG-VM64, FMG-VM64-AWS, FMG-VM64-Azure, FMG-VM64-GCP, FMG-VM64-HV (including Hyper-V 2016, 2019), FMG-VM64-KVM, FMG-VM64-OPC, FMG-VM64-XEN (for both Citrix and Open Source Xen).

## FortiManager VM subscription license

The FortiManager VM subscription license supports FortiManager version 6.4.1 and later. For information about supported firmware, see FortiManager VM firmware on page 12.

See also Appendix B - Default and maximum number of ADOMs supported on page 48.



You can use the FortiManager VM subscription license with new FMG-VM installations. For existing FMG-VM installations, you cannot upgrade to a FortiManager VM subscription license. Instead, you must migrate data from the existing FMG-VM to a new FMG-VM with subscription license.

## **Management extension applications**

The following section describes supported models and minimum system requirements for management extension applications (MEA) in FortiManager7.0.0.



FortiManager uses port TCP/443 or TCP/4443 to connect to the Fortinet registry and download MEAs. Ensure that the port is also open on any upstream FortiGates. For more information about incoming and outgoing ports, see the FortiManager 7.0 Ports Guide.

### Supported models for MEA

You can use any of the following FortiManager models as a host for management extension applications:

FortiManager	FMG-3000F, FMG-3000G, FMG-3700F, and FMG-3900E.
FortiManager VM	FMG-VM64, FMG-VM64-AWS, FMG-VM64-Azure, FMG-VM64-GCP, FMG-VM64-HV (including Hyper-V 2016, 2019), FMG-VM64-KVM, FMG-VM64-OPC, FMG-VM64-XEN (for both Citrix and Open Source Xen).

### **Minimum system requirements**

By default FortiManager VMs use the following system resource settings:

- 4 vCPU
- 8 GB RAM
- 500 GB disk space

Starting with FortiManager 7.0.0, RAM and CPU is capped at 50% for MEAs. (Use the <code>config system docker</code> command to view the setting.) If FortiManager has 8 CPUs and 16 GB RAM, then only 4 CPUs and 8 GB RAM are available to MEAs by default, and the 4 CPUs and 8 GB RAM are used for all enabled MEAs.

Some management extension applications have minimum system requirements that require you to increase system resources. The following table identifies the minimum requirements for each MEA as well as the recommended system resources to function well in a production environment.

MEA minimum system requirements apply only to the individual MEA and do not take into consideration any system requirements for resource-sensitive FortiManager features or multiple, enabled MEAs. If you are using multiple MEAs, you must increase the system resources to meet the cumulative need of each MEA.

Management Extension Application	Minimum system requirements	Recommended system resources for production*
FortiAuthenticator	<ul><li>4 vCPU</li><li>8 GB RAM</li></ul>	No change
FortiPortal	<ul><li>4 vCPU</li><li>8 GB RAM</li></ul>	No change

Management Extension Application	Minimum system requirements	Recommended system resources for production*
FortiSigConverter	<ul><li>4 vCPU</li><li>8 GB RAM</li></ul>	No change
FortiSOAR	<ul><li>4 vCPU</li><li>8 GB RAM</li><li>500 GB disk storage</li></ul>	<ul><li>16 vCPU</li><li>64 GB RAM</li><li>No change for disk storage</li></ul>
SD-WAN Orchestrator	<ul><li>4 vCPU</li><li>8 GB RAM</li></ul>	<ul><li>4 vCPU</li><li>12 GB RAM</li></ul>
Wireless Manager (FortiWLM)	<ul><li>4 vCPU</li><li>8 GB RAM</li></ul>	No change

<sup>\*</sup>The numbers in the *Recommended system resources for production* column are a combination of the default system resource settings for FortiManager plus the minimum system requirements for the MEA.

## **Special Notices**

This section highlights some of the operational changes that administrators should be aware of in 7.0.0.

## FortiManager 7.2.3 and later firmware on FortiGuard

Starting in FortiManager 7.2.1, a setup wizard executes to prompt the user for various configuration steps and registration with FortiCare. During the execution, the FortiManager unit attempts to communicate with FortiGuard for a list of FortiManager firmware images currently available on FortiGuard – older and newer.

In the case of FortiManager 7.2.2, a bug in the GUI prevents the wizard from completing and prevents the user from accessing the FortiManager unit. The issue has been fixed in 7.2.3 and later and a CLI command has been added to bypass the setup wizard at login time.

```
config system admin setting
  set firmware-upgrade-check disable
end
```

Fortinet has not uploaded FortiManager 7.2.3 and later firmware to FortiGuard in order to work around the GUI bug, however, the firmware is available for download from the Fortinet Support web site https://support.fortinet.com.

## Scheduling firmware upgrades for managed devices

Starting in FortiManager 7.0.0, firmware templates should be used to schedule firmware upgrades on managed FortiGates. Attempting firmware upgrade from the FortiManager GUI by using legacy methods may ignore the *schedule upgrade* option and result in FortiGates being upgraded immediately.

## **ADOM Upgrade for FortiManager 7.0**

Currently, there is no ADOM upgrade option for ADOM version 6.4 to move to version 7.0. In order to manage FortiGates running 7.0, please add the devices to a 7.0 ADOM.

## SD-WAN with upgrade to 7.0

Due to design change with SD-WAN Template, upgrading to FortiManager 7.0 may be unable to maintain dynamic mappings for all SD-WAN interface members. Please reconfigure all the missing interface mappings after upgrade.

## Citrix XenServer default limits and upgrade

Citrix XenServer limits ramdisk to 128M by default. However the FMG-VM64-XEN image is larger than 128M. Before updating to FortiManager 6.4, increase the size of the ramdisk setting on Citrix XenServer.

#### To increase the size of the ramdisk setting:

1. On Citrix XenServer, run the following command:

```
xenstore-write /mh/limits/pv-ramdisk-max-size 536,870,912
```

**2.** Confirm the setting is in effect by running xenstore-ls.

```
limits = ""
pv-kernel-max-size = "33554432"
pv-ramdisk-max-size = "536,870,912"
boot-time = ""
```

**3.** Remove the pending files left in /run/xen/pygrub.



The ramdisk setting returns to the default value after rebooting.

## Multi-step firmware upgrades

Prior to using the FortiManager to push a multi-step firmware upgrade, confirm the upgrade path matches the path outlined on our support site. To confirm the path, please run:

```
dia fwmanager show-dev-upgrade-path <device name> <target firmware>
```

Alternatively, you can push one firmware step at a time.

## Hyper-V FortiManager-VM running on an AMD CPU

A Hyper-V FMG-VM running on a PC with an AMD CPU may experience a kernel panic. Fortinet recommends running VMs on an Intel-based PC.

## SSLv3 on FortiManager-VM64-AWS

Due to known vulnerabilities in the SSLv3 protocol, FortiManager-VM64-AWS only enables TLSv1 by default. All other models enable both TLSv1 and SSLv3. If you wish to disable SSLv3 support, please run:

```
config system global
set ssl-protocol t1sv1
```

Fortinet Technologies Inc.

end

## **Upgrade Information**

You can upgrade FortiManager 6.4.0 or later directly to 7.0.0.



For other upgrade paths and details about upgrading your FortiManager device, see the *FortiManager Upgrade Guide*.

This section contains the following topics:

- Downgrading to previous firmware versions on page 12
- Firmware image checksums on page 12
- FortiManager VM firmware on page 12
- · SNMP MIB files on page 14

## **Downgrading to previous firmware versions**

FortiManager does not provide a full downgrade path. You can downgrade to a previous firmware release via the GUI or CLI, but doing so results in configuration loss. A system reset is required after the firmware downgrading process has completed. To reset the system, use the following CLI commands via a console port connection:

```
execute reset {all-settings | all-except-ip}
execute format {disk | disk-ext4 | disk-ext3}
```

## Firmware image checksums

The MD5 checksums for all Fortinet software and firmware releases are available at the Customer Service & Support portal, https://support.fortinet.com. After logging in select *Download > Firmware Image Checksums*, enter the image file name including the extension, and select *Get Checksum Code*.

## FortiManager VM firmware

Fortinet provides FortiManager VM firmware images for Amazon AWS, Citrix and Open Source XenServer, Linux KVM, Microsoft Hyper-V Server, and VMware ESX/ESXi virtualization environments.

#### Amazon Web Services

• The 64-bit Amazon Machine Image (AMI) is available on the AWS marketplace.

#### Citrix XenServer and Open Source XenServer

- out: Download the 64-bit firmware image to upgrade your existing FortiManager VM installation.
- .out.OpenXen.zip: Download the 64-bit package for a new FortiManager VM installation. This package contains the QCOW2 file for the Open Source Xen Server.
- .out.CitrixXen.zip: Download the 64-bit package for a new FortiManager VM installation. This package contains the Citrix XenServer Virtual Appliance (XVA), Virtual Hard Disk (VHD), and OVF files.

#### Google Cloud Platform

- out: Download the 64-bit firmware image to upgrade your existing FortiManager VM installation.
- .out.gcp.zip: Download the 64-bit package for a new FortiManager VM installation.

#### Linux KVM

- .out: Download the 64-bit firmware image to upgrade your existing FortiManager VM installation.
- .out.kvm.zip: Download the 64-bit package for a new FortiManager VM installation. This package contains QCOW2 that can be used by gemu.

#### **Microsoft Azure**

The files for Microsoft Azure have AZURE in the filenames, for example FMG\_VM64\_AZURE-v<number>-build<number>-FORTINET.out.hyperv.zip.

• .out: Download the firmware image to upgrade your existing FortiManager VM installation.

#### Microsoft Hyper-V Server

The files for Microsoft Hyper-V Server have HV in the filenames, for example, FMG\_VM64\_HV-v<number>-build<number>-FORTINET.out.hyperv.zip.

- .out: Download the firmware image to upgrade your existing FortiManager VM installation.
- .hyperv.zip: Download the package for a new FortiManager VM installation. This package contains a Virtual Hard Disk (VHD) file for Microsoft Hyper-V Server.



Microsoft Hyper-V 2016 is supported.

#### **Oracle Private Cloud**

- out: Download the 64-bit firmware image to upgrade your existing FortiManager VM installation.
- .out.opc.zip: Download the 64-bit package for a new FortiManager VM installation.

#### VMware ESX/ESXi

- .out: Download the 64-bit firmware image to upgrade your existing VM installation.
- .ovf.zip: Download either the 64-bit package for a new VM installation. This package contains an Open
  Virtualization Format (OVF) file for VMware and two Virtual Machine Disk Format (VMDK) files used by the OVF file
  during deployment.



For more information see the FortiManager Data Sheet available on the Fortinet web site. VM installation guides are available in the Fortinet Document Library.

## **SNMP MIB files**

You can download the FORTINET-FORTIMANAGER-FORTIANALYZER.mib MIB file in the firmware image file folder. The Fortinet Core MIB file is located in the main FortiManager version 5.00 file folder.

## **Product Integration and Support**

This section lists FortiManager 7.0.0 support of other Fortinet products. It also identifies what FortiManager features are supported for managed platforms and what languages FortiManager supports. It also lists which Fortinet models can be managed by FortiManager.

The section contains the following topics:

- FortiManager 7.0.0 support on page 15
- Feature support on page 19
- Language support on page 19
- Supported models on page 20

## FortiManager 7.0.0 support

This section identifies FortiManager 7.0.0 product integration and support information:

- Web browsers on page 16
- FortiOS/FortiOS Carrier on page 16
- FortiADC on page 16
- FortiAnalyzer on page 16
- FortiAuthenticator on page 16
- FortiCache on page 16
- FortiClient on page 17
- FortiDDoS on page 17
- FortiMail on page 17
- FortiSandbox on page 17
- FortiSOAR on page 18
- FortiSwitch ATCA on page 18
- FortiWeb on page 18
- Virtualization on page 18



To confirm that a device model or firmware version is supported by the current firmware version running on FortiManager, run the following CLI command:

diagnose dvm supported-platforms list



Always review the Release Notes of the supported platform firmware version before upgrading your device.

#### Web browsers

This section lists FortiManager 7.0.0 product integration and support for web browsers:

- Microsoft Edge 80 (80.0.361 or later)
- Mozilla Firefox version 88
- Google Chrome version 90

Other web browsers may function correctly, but are not supported by Fortinet.

#### FortiOS/FortiOS Carrier

This section lists FortiManager 7.0.0 product integration and support for FortiOS/FortiOS Carrier:

- 7.0.0
- 6.4.0 to 6.4.5
- 6.2.0 to 6.2.7

#### **FortiADC**

This section lists FortiManager 7.0.0 product integration and support for FortiADC:

- 6.0.1
- 5.4.5

### **FortiAnalyzer**

This section lists FortiManager 7.0.0 product integration and support for FortiAnalyzer:

- 7.0.0
- 6.4.0 and later
- 6.2.0 and later
- 6.0.0 and later
- 5.6.0 and later
- 5.4.0 and later

#### **FortiAuthenticator**

This section lists FortiManager 7.0.0 product integration and support for FortiAuthenticator:

- 6.0. to 6.2
- 5.0 to 5.5
- · 4.3 and later

#### **FortiCache**

This section lists FortiManager 7.0.0 product integration and support for FortiCache:

- 4.2.9
- 4.1.6
- 4.0.4

#### **FortiClient**

This section lists FortiManager 7.0.0 product integration and support for FortiClient:

- 6.4.0 and later
- 6.2.1 and later
- 6.0.0 and later

#### **FortiDDoS**

This section lists FortiManager 7.0.0 product integration and support for FortiDDoS:

- 5.3.1
- 5.2.0
- 5.1.0
- 5.0.0
- 4.7.0
- 4.6.0
- 4.5.0
- 4.4.2
- 4.3.2
- 4.2.3

Limited support. For more information, see Feature support on page 19.

#### **FortiMail**

This section lists FortiManager 7.0.0 product integration and support for FortiMail:

- 6.4.0 and later
- 6.2.0 and later
- 6.0.10 and later
- 5.4.12
- 5.3.13

#### **FortiSandbox**

This section lists FortiManager 7.0.0 product integration and support for FortiSandbox:

- 4.0.0
- 3.2.2
- 3.1.4
- 3.0.6

- 2.5.2
- 2.4.1
- 2.3.3
- 2.2.2

#### **FortiSOAR**

This section lists FortiManager 7.0.0 product integration and support for FortiSOAR:

- 6.4.0 and later
- 6.0.0 and later

#### FortiSwitch ATCA

This section lists FortiManager 7.0.0 product integration and support for FortiSwitch ATCA:

- 5.2.3
- 5.0.0 and later

#### **FortiWeb**

This section lists FortiManager 7.0.0 product integration and support for FortiWeb:

- 6.3.11
- 6.2.4
- 6.1.2
- 6.0.7
- 5.9.1
- 5.8.6
- 5.7.3
- 5.6.2
- 5.5.7
- 5.4.1

#### **Virtualization**

This section lists FortiManager 7.0.0 product integration and support for virtualization:

- Amazon Web Service AMI, Amazon EC2, Amazon EBS
- Citrix XenServer 7.2
- · Google Cloud Platform
- Linux KVM Redhat 7.1
- Microsoft Azure
- · Microsoft Hyper-V Server 2012, 2016, and 2019
- Nutanix AHV (AOS 5.10.5)
- OpenSource XenServer 4.2.5

- Oracle Private Cloud
- VMware ESXi versions 5.0, 5.5, 6.0, 6.5, 6.7, and 7.0

## **Feature support**

The following table lists FortiManager feature support for managed platforms.

Platform	Management Features	FortiGuard Update Services	Reports	Logging
FortiGate	✓	✓	✓	✓
FortiCarrier	$\checkmark$	✓	✓	✓
FortiADC		✓		
FortiAnalyzer			✓	✓
FortiAuthenticator				✓
FortiCache			✓	✓
FortiClient		✓	✓	✓
FortiDDoS			✓	✓
FortiMail		✓	✓	✓
FortiSandbox		✓	✓	✓
FortiSOAR		✓		
FortiSwitch ATCA	✓			
FortiWeb		✓	✓	✓
Syslog				✓

## Language support

The following table lists FortiManager language support information.

Language	GUI	Reports
English	✓	✓
Chinese (Simplified)	✓	$\checkmark$
Chinese (Traditional)	✓	$\checkmark$
French		$\checkmark$

Language	GUI	Reports
Japanese	✓	✓
Korean	✓	✓
Portuguese		✓
Spanish		✓

To change the FortiManager language setting, go to *System Settings > Admin > Admin Settings*, in *Administrative Settings > Language* select the desired language on the drop-down menu. The default value is *Auto Detect*.

Russian, Hebrew, and Hungarian are not included in the default report languages. You can create your own language translation files for these languages by exporting a predefined language from FortiManager, modifying the text to a different language, saving the file as a different language name, and then importing the file into FortiManager. For more information, see the *FortiAnalyzer Administration Guide*.

## Supported models

The following tables list which FortiGate, FortiCarrier, FortiDDoS, FortiAnalyzer, FortiMail, FortiSandbox, FortiSwitch ATCA, FortiWeb, FortiCache, FortiProxy, and FortiAuthenticator models and firmware versions that can be managed by a FortiManager or send logs to a FortiManager running version 7.0.0.



Software license activated LENC devices are supported, if their platforms are in the supported models list. For example, support of FG-3200D indicates support of FG-3200D-LENC.

#### This section contains the following topics:

- · FortiGate models on page 21
- FortiGate special branch models on page 23
- FortiCarrier models on page 23
- · FortiADC models on page 24
- FortiAnalyzer models on page 24
- FortiAuthenticator models on page 25
- FortiCache models on page 25
- FortiDDoS models on page 26
- FortiMail models on page 26
- FortiProxy models on page 26
- FortiSandbox models on page 26
- FortiSOAR models on page 27
- FortiSwitch ATCA models on page 27
- FortiWeb models on page 27

### FortiGate models

Model	Firmware Version
FortiGate: FortiGate-40F, FortiGate-40F-3G4G, FortiGate-60E, FortiGate-60E-DSL, FortiGate-60EDSLJ, FortiGate-60E-POE, FortiGate-60F, FortiGate-61E, FortiGate-61F, FortiGate-80E, FortiGate80E-POE, FortiGate-81E, FortiGate-81E-POE, FortiGate-90E, FortiGate-91E, FortiGate-100E, FortiGate-100EF, FortiGate-100F, FortiGate-101E, FortiGate-101F, FortiGate-140E, FortiGate-140E-POE, FortiGate-200E, FortiGate-201E, FortiGate-300D, FortiGate-300E, FortiGate301E, FortiGate-400D, FortiGate-400E, FortiGate-401E, FortiGate-500D, FortiGate-500E, FortiGate-501E, FortiGate-600D, FortiGate-601E, FortiGate-800D, FortiGate-900D, FortiGate-1000D, FortiGate-1100E, FortiGate-1101E, FortiGate-1200D, FortiGate-1500D, FortiGate-1500DT, FortiGate-2200E, FortiGate-2201E, FortiGate-2500E, FortiGate-3000D, FortiGate-3100D, FortiGate-3200D, FortiGate-3300E, FortiGate-3301E, FortiGate-3400E, FortiGate-3401E, FortiGate-3600E, FortiGate-3601E, FortiGate-3700D, FortiGate-3810D, FortiGate-3815D, FortiGate-3960E, FortiGate-5001D, FortiGate-5001E, FortiGate-5001E1	7.0
FortiGate DC: FortiGate-401E-DC, FortiGate-800D-DC, FortiGate-1100E-DC, FortiGate-1500D-DC, FortiGate-3000D-DC, FortiGate-3100D-DC, FortiGate-3200D-DC, FortiGate-3400E-DC, FortiGate-3401E-DC, FortiGate-3600E-DC, FortiGate-3700D-DC, FortiGate-3800D-DC, FortiGate-3810D-DC, FortiGate-3815D-DC, FortiGate-3960E-DC, FortiGate-3980E-DC  FortiWiFi: FortiWiFi-40F, FortiWiFi-40F-3G4G, FortiWiFi-60E, FortiWiFi-60E-DSL, FortiWiFi-60E-DSLJ, FortiWiFi-60F, FortiWiFi-61E, FortiWiFi-61F  FortiGate VM: FortiGate-VM64, FortiGate-VM64-ALI, FortiGate-VM64-AWS, FortiGate-VM64-AZURE, FortiGate-VM64-GCP, FortiGate-VM64-HV, FortiGate-VM64-KVM, FortiGate-VM64-OPC, FortiGate-VM64-RAXONDEMAND, FortiGate-VM64-Xen, FortiGate-VMX-Service-Manager, FortiGate-VM64-IBM  FortiOS: FortiOS-VM64, FortiOS-VM64-HV, FortiOS-VM64-KVM, FortiOS-VM64-Xen  FortiGateRugged: FortiGateRugged-60F, FortiGateRugged-60F-3G4G	
FortiGate: FortiGate-40F, FortiGate-40F-3G4G, FortiGate-60E, FortiGate-60E-DSL, FortiGate-60E-DSLJ, FortiGate-60F, FortiGate-60F, FortiGate-60F, FortiGate-61F, FortiGate-80E, FortiGate-80E-POE, FortiGate-81E, FortiGate-81E-POE, FortiGate-90E, FortiGate-91E, FortiGate-100D, FortiGate-100E, FortiGate-100EF, FortiGate-100F, FortiGate-101F, FortiGate-101F, FortiGate-140E, FortiGate-140E-POE, FortiGate-200E, FortiGate-201E, FortiGate-300D, FortiGate-300E, FortiGate-300E, FortiGate-300E, FortiGate-300D, FortiGate-300D, FortiGate-600D, FortiGate-600E, FortiGate-601E, FortiGate-800D, FortiGate-900D, FortiGate-1000D, FortiGate-1100E, FortiGate-101E, FortiGate-1200D, FortiGate-1500D, FortiGate-1500DT, FortiGate-2000E, FortiGate-2500E, FortiGate-3000D, FortiGate-3100D, FortiGate-3200D, FortiGate-2200E, FortiGate-2201E, FortiGate-3300E, FortiGate-3301E, FortiGate-3400E, FortiGate-3401E, FortiGate-3600E, FortiGate-3700D, FortiGate-3800D, FortiGate-3815D, FortiGate-3980E  FortiGate 5000 Series: FortiGate-5001D, FortiGate-5001E, FortiGate-5001E1  FortiGate DC:FortiGate-401E-DC, FortiGate-800D-DC, FortiGate-1100E-DC, FortiGate-1500D-DC, FortiGate-3100D-DC, FortiGate-3200D-DC, FortiGate-3400E-DC, FortiGate-3400E-DC, FortiGate-3400E-DC, FortiGate-3400E-DC, FortiGate-3400E-DC, FortiGate-3400E-DC, FortiGate-3810D-DC, FortiGate-3800D-DC, FortiGa	6.4

Model Firmware Version

FortiGate Hardware Low Encryption: FortiGate-100D-LENC

**FortiWiFi:** FortiWiFi-60E, FortiWiFi-60E-DSL, FortiWiFi-60E-DSLJ, FortiWiFi-61E, FortiWiFi-60F, FortiWiFi-61F,

**FortiGate VM:** FortiGate-VM64, FortiGate-VM64-ALI, FortiGate-VM64-AWS, FortiGate-VM64-AZURE, FortiGate-VM64-AZUREONDEMAND, FortiGate-VM64-GCP, FortiGate-VM64-GCPONDEMAND, FortiGate-VM64-HV, FortiGate-VM64-KVM, FortiGate-VM64-OPC, FortiGate-VM64-Xen, FortiGate-VMX-Service-Manager, FortiGate-VM64-IBM

FortiOS: FortiOS-VM64, FortiOS-VM64-HV, FortiOS-VM64-KVM, FortiOS-VM64-Xen

FortiGateRugged: FortiGateRugged-60F, FortiGateRugged-60F-3G4G

FortiGate: FortiGate-30E, FortiGate-30E-3G4G-INTL, FortiGate-30E-3G4G-NAM, FortiGate-40F, FortiGate-40F-3G4G, FortiGate-50E, FortiGate-51E, FortiGate-52E, FortiGate-60E, FG-60E-DSL, FortiGate-60E-POE, FortiGate-61E, FortiGate-60F, FortiGate-61F, FortiGate-80D, FortiGate-80E, FortiGate-80E-POE, FortiGate-81E, FortiGate-81E-POE, FortiGate-90E, FortiGate-91E, FortiGate-92D, FortiGate-100D, FortiGate-100E, FortiGate-100EF, FortiGate-101E, FortiGate-100F, FortiGate-101F, FortiGate-140D, FortiGate-140D-POE, FortiGate-140E, FortiGate-140E-POE, FortiGate-200E, FortiGate-201E, FortiGate-300D, FortiGate-300E, FortiGate-301E, FortiGate-400D, FG-400E, FG-401E, FortiGate-500D, FortiGate-500E, FortiGate-501E, FortiGate-600D, FortiGate-600E, FortiGate-601E, FortiGate-800D, FortiGate-900D, FortiGate-1000D, FortiGate-1200D, FortiGate-1500D, FortiGate-1100E, FortiGate-300D, FortiGate-300D, FortiGate-300D, FortiGate-300D, FortiGate-300D, FortiGate-300D, FortiGate-300D, FortiGate-300D, FortiGate-300D, FortiGate-300E, FortiGate

FortiGate 5000 Series: FortiGate-5001D, FortiGate-5001E, FortiGate-5001E1

**FortiGate DC:** FortiGate-80C-DC, FortiGate-401E-DC, FortiGate-600C-DC, RortiGate-800C-DC, FortiGate-800D-DC, FortiGate-1000C-DC, FortiGate-1100E-DC, FortiGate-1500D-DC, FortiGate-3000D-DC, FortiGate-3200D-DC, FortiGate-3240C-DC, FortiGate-3400E-DC, FortiGate-3401E-DC, FortiGate-3600C-DC, FortiGate-3600E-DC, FortiGate-3700D-DC, FortiGate-3800D-DC, FortiGate-3810D-DC, FortiGate-3815D-DC, FortiGate-3960E-DC, FortiGate-3980E-DC

**FortiGate Hardware Low Encryption:** FortiGate-80C-LENC, FortiGate-600C-LENC, FortiGate-1000C-LENC

**FortiWiFi:** FortiWiFi-30D, FortiWiFi-30D-POE, FortiWiFi-30E, FortiWiFi-30E-3G4G-INTL, FortiWiFi-30E-3G4G-NAM, FortiWiFi-50E, FortiWiFi-50E-2R, FortiWiFi-51E, FortiWiFi-60E, FortiWiFi-60E-DSL, FortiWiFi-60E-DSLJ, FortiWiFi-61E, FortiWiFi-80CM, FortiWiFi-81CM, FortiWiFi-60F, FortiWiFi-61F

**FortiGate-VM:** FortiGate-VM64, FortiGate-VM64-ALI, FortiGate-VM64-ALIONDEMAND, FortiGate-VM64-AWS, FortiGate-VM64-AWSONDEMAND, FortiGate-VM64-AZUREONDEMAND, FortiGate-VM64-Azure, FortiGate-VM64-GCP, FortiGate-VM64-GCPONDEMAND, FortiGate-VM64-HV, FortiGate-VM64-KVM, FortiGate-VM64-OPC, FortiGate-VM64-Xen, FortiGate-VMX-Service-Manager

**FortiGate Rugged:** FortiGateRugged-30D, FortiGateRugged-30D-ADSL-A, FortiGateRugged-35D, FortiGateRugged-60F, FortiGateRugged-60F-3G4G

FortiOS: FortiOS-VM64, FortiOS-VM64-HV, FortiOS-VM64-KVM, FortiOS-VM64-Xen

6.2

## FortiGate special branch models

The following FortiGate models are released on a special branch of FortiOS. FortiManager supports these models.

Model	Firmware Version
<b>FortiGate:</b> FortiGate-80F, FortiGate-80F-Bypass, FortiGate-81F, FortiGate-200F <b>FortiWiFi:</b> FortiWiFi-40F, FortiWiFi-40F-3G4G	6.4
<b>FortiGate:</b> FortiGate-30E-3G4G-GBL, FortiGate-60E, FortiGate-60E-DSL, FortiGate-60E-DSLJ, FortiGate-80F, FortiGate-80F-Bypass, FortiGate-81F, FortiGate-200F, FortiGate-201F, FortiGate-400E-Bypass, FortiGate-1800F, FortiGate-1801F, FortiGate-2600F, FortiGate-2601F, FortiGate-4200F, FortiGate-4201F	6.2
FortiGate 6000 Series: FortiGate-6000F	
FortiGate 7000 Series: FortiGate-7000E	
<b>FortiGate DC:</b> FortiGate-1800F-DC, FortiGate-1801F-DC, FortiGate-4200F-DC, FortiGate-4201F-DC	
FortiGate Rugged: FortiGateRugged-90D	
FortiWiFi: FortiWiFi-40F, FortiWiFi-40F-3G4G, FortiWifi-60E-DSL, FortiWiFi-60E-DSLJ,	

### FortiCarrier models

Model	Firmware Version
<b>FortiCarrier</b> : FortiCarrier-3000D, FortiCarrier-3100D, FortiCarrier-3200D, FortiCarrier-3300E, FortiCarrier-3301E, FortiCarrier-3400E, FortiCarrier-3401E, FortiCarrier-3600E, FortiCarrier-3601E, FortiCarrier-3700D, FortiCarrier-3800D, FortiCarrier-3810D, FortiCarrier-3960E, FortiCarrier-3980E, FortiCarrier-5001D, FortiCarrier-5001E, FortiCarrier-5001E1	7.0
<b>FortiCarrier-DC</b> : FortiCarrier-3000D-DC, FortiCarrier-3100D-DC, FortiCarrier-3200D-DC, FortiCarrier-3400E-DC, FortiCarrier-3401E-DC, FortiCarrier-3600E-DC, FortiCarrier-3700D-DC, FortiCarrier-3800D-DC, FortiCarrier-3810D-DC, FortiCarrier-3815D-DC, FortiCarrier-3960E-DC, FortiCarrier-3980E-DC	
<b>FortiCarrier-VM</b> : FortiCarrier-VM64, FortiCarrier-VM64-ALI, FortiCarrier-VM64-AWS, FortiCarrier-VM64-Azure, FortiCarrier-VM64-GCP, FortiCarrier-VM64-HV, FortiCarrier-VM64-IBM, FortiCarrier-VM64-KVM, FortiCarrier-VM64-OPC, FortiCarrier-VM64-Xen	
FortiCarrier: FortiCarrier-3000D, FortiCarrier-3100D, FortiCarrier-3200D, FortiCarrier-3400E, FortiCarrier-3600E, FortiCarrier-3601E, FortiCarrier-3700D, FortiCarrier-3800D, FortiCarrier-3815D, FortiCarrier-3960E, FortiCarrier-3980E, FortiCarrier-5001D, FortiCarrier-5001E1  FortiCarrier-DC: FortiCarrier-3000D-DC, FortiCarrier-3100D-DC, FortiCarrier-3200D-DC, FortiCarrier-3400E, FortiCarrier-3401E, FortiCarrier-3400E-DC, FortiCarrier-3401E-DC,	6.4
FortiCarrier-3700D-DC, FortiCarrier-3800D-DC, FortiCarrier-3810D-DC, FortiCarrier-3815D-DC, FortiCarrier-3960E-DC, FortiCarrier-3980E-DC	

Model	Firmware Version
FortiCarrier-VM: FortiCarrier-VM64, FortiCarrier-VM64-ALI, FortiCarrier-VM64-AWS, FortiCarrier-VM64-Azure, FortiCarrier-VM64-GCP, FortiCarrier-VM64-HV, FortiCarrier-VM64-KVM, FortiCarrier-VM64-OPC, FortiCarrier-VM64-Xen	
<b>FortiCarrier:</b> FortiCarrier-3000D, FortiCarrier-3100D, FortiCarrier-3200D, FortiCarrier-3700D, FortiCarrier-3800D, FortiCarrier-3815D, FortiCarrier-3960E, FortiCarrier-5001D, FortiCarrier-5001E, FortiCarrier-5001E1	6.2
FortiCarrier-DC: FortiCarrier-3000D-DC, FortiCarrier-3100D-DC, FortiCarrier-3200D-DC, FortiCarrier-3400E, FortiCarrier-3401E, FortiCarrier-3400E-DC, FortiCarrier-3401E-DC, FortiCarrier-3700D-DC, FortiCarrier-3800D-DC, FortiCarrier-3810D-DC, FortiCarrier-3815D-DC, FortiCarrier-3960E-DC	
<b>FortiCarrier-VM:</b> FortiCarrier-VM64, FortiCarrier-VM64-ALI, FortiCarrier-VM64-AWS, FortiCarrier-VM64-Azure, FortiCarrier-VM64-GCP, FortiCarrier-VM64-HV, FortiCarrier-VM64-KVM, FortiCarrier-VM64-OPC, FortiCarrier-VM64-Xen	

## FortiADC models

Model	Firmware Version
FortiADC-100F, FortiADC-200D, FortiADC-200F, FortiADC-300D, FortiADC-300F, FortiADC-400D, FortiADC-400F, FortiADC-700D, FortiADC-1000F, FortiADC-1500D, FortiADC-2000D, FortiADC-2000F, FortiADC-4000D, FortiADC-4000F, FortiADC-5000F, FortiADC-VM	6.0
FortiADC-100F, FortiADC-200D, FortiADC-200F, FortiADC-300D, FortiADC-300F, FortiADC-400D, FortiADC-400F, FortiADC-700D, FortiADC-1000F, FortiADC-1500D, FortiADC-2000D, FortiADC-2000F, FortiADC-4000D, FortiADC-4000F, FortiADC-5000F, FortiADC-VM	5.4

## FortiAnalyzer models

Model	Firmware Version
FortiAnalyzer: FortiAnalyzer-150G, FortiAnalyzer-300F, FortiAnalyzer-300G, FortiAnalyzer-400E, FortiAnalyzer-800F, FortiAnalyzer-1000F, FortiAnalyzer-2000E, FortiAnalyzer-3000F, FortiAnalyzer-3500G, FortiAnalyzer-3500G, FortiAnalyzer-3500F, FortiAnalyzer-3500G, FortiAnalyzer-3700F, FortiAnalyzer-3900E  FortiAnalyzerVM: FortiAnalyzer-VM64, FortiAnalyzer-VM64-AWS, FortiAnalyzer-VM64-Azure, FortiAnalyzer-VM64-GCP, FortiAnalyzer-VM64-HV, FortiAnalyzer-VM64-KVM, FortiAnalyzer-VM64-OPC, FortiAnalyzer-VM64-Xen	7.0.0
<b>FortiAnalyzer:</b> FortiAnalyzer-200F, FortiAnalyzer-300F, FortiAnalyzer-400E, FortiAnalyzer-800F, FortiAnalyzer-1000E, FortiAnalyzer-1000E, FortiAnalyzer-2000E, FortiAnalyzer-3000E, FortiAnalyzer-3500E, FortiAnalyzer-3500F, FortiAnalyzer-3500G, FortiAnalyzer-3700F, FortiAnalyzer-3900E	6.4

Model	Firmware Version
FortiAnalyzer VM: FortiAnalyzer-VM64, FortiAnalyzer-VM64-ALI, FortiAnalyzer-VM64-ALI-OnDemand, FortiAnalyzer-VM64-AWS, FortiAnalyzer-VM64-AWSOnDemand, FortiAnalyzer-VM64-Azure, FortiAnalyzer-VM64-Azure-OnDemand, FortiAnalyzer-VM64-GCP, FortiAnalyzer-VM64-GCP-OnDemand, FortiAnalyzer-VM64-HV, FortiAnalyzer-VM64-KVM, FortiAnalyzer-VM64-KVM-CLOUD, FortiAnalyzer-VM64-OPC, FortiAnalyzer-VM64-Xen	
FortiAnalyzer: FAZ-200F, FAZ-300F, FAZ-400E, FAZ-800F, FAZ-1000E, FAZ-2000E, FAZ-3000E, FAZ-3500E, FAZ-3500E, FAZ-3500F, FAZ-3700F and FAZ-3900E.  FortiAnalyzer VM: FAZ-VM64, FAZ-VM64-Ali, FAZ-VM64-AWS, FAZ-VM64-AWS-OnDemand, FAZ-VM64-Azure, FAZ-VM64-GCP, FAZ-VM64-HV, FAZ-VM64-KVM, FAZ-VM64-OPC, and FAZ-VM64-XEN (Citrix XenServer and Open Source Xen).	6.2
FortiAnalyzer: FAZ-200D, FAZ-300D, FAZ-400E, FAZ-1000D, FAZ-1000E, FAZ-2000B, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, and FAZ-3900E.  FortiAnalyzer VM: FAZ-VM64, FAZ-VM64-AWS, FMG-VM64-Azure, FAZ-VM64-HV, FAZ-VM64-KVM, and FAZ-VM64-XEN (Citrix XenServer and Open Source Xen).	6.0
FortiAnalyzer: FAZ-200D, FAZ-300D, FAZ-400E, FAZ-1000D, FAZ-1000E, FAZ-2000B, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, and FAZ-3900E.  FortiAnalyzer VM: FAZ-VM64, FAZ-VM64-AWS, FMG-VM64-Azure, FAZ-VM64-HV, FAZ-VM64-KVM, and FAZ-VM64-XEN (Citrix XenServer and Open Source Xen).	5.6
FortiAnalyzer: FAZ-200D, FAZ-300D, FAZ-400E, FAZ-1000D, FAZ-1000E, FAZ-2000B, FAZ-2000E, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, FAZ-3900E, and FAZ-4000B.  FortiAnalyzer VM: FAZ-VM64, FMG-VM64-Azure, FAZ-VM64-HV, FAZ-VM64-XEN (Citrix	5.4
XenServer and Open Source Xen), FAZ-VM64-KVM, and FAZ-VM64-AWS.	

### FortiAuthenticator models

Model	Firmware Version
FortiAuthenticator: FAC-200D, FAC-200E, FAC-400C, FAC-400E, FAC-1000C, FAC-1000D, FAC-2000E, FAC-3000B, FAC-3000D, FAC-3000E	4.3, 5.0-5.5, 6.0
FortiAuthenticator VM: FAC-VM	

### FortiCache models

Model	Firmware Version
<b>FortiCache:</b> FCH-400C, FCH-400E, FCH-1000C, FCH-1000D, FCH-3000C, FCH-3000D, FCH-3000E, FCH-3900E	4.0, 4.1, 4.2
FortiCache VM: FCH-VM64, FCH-KVM	

### **FortiDDoS models**

Model	Firmware Version
FortiDDoS: FortiDDoS-200B, FortiDDoS-400B, FortiDDoS-600B, FortiDDoS-800B, FortiDDoS-900B, FortiDDoS-1000B, FortiDDoS-1200B, FortiDDoS-1500E, FortiDDoS-2000B, FortiDDoS-2000E	5.2, 5.3
<b>FortiDDoS:</b> FI-200B, FI-400B, FI-600B, FI-800B, FI-900B, FI-1000B, FI-1200B, FI-1500B, FI-2000B, FI-2000E	5.1
FortiDDoS: FI-1500E, FI-2000E	5.0
<b>FortiDDoS:</b> FI-200B, FI400B, FI-600B, FI-800B, FI-900B, FI-1000B, FI-1200B, FI-2000B, FI-3000B	4.2, 4.3, 4.4, 4.5, 4.7

### FortiMail models

Model	Firmware Version
<b>FortiMail:</b> FE-60D, FE-200D, FE-200E, FE-400E, FE-1000D, FE-2000E, FE-3000D, FE-3000E, FE-3200E, FE-VM, FML-200F, FML-400F, FML-900F	6.0
FortiMail: FE-60D, FE-200D, FE-200E, FE-400C, FE-400E, FE-1000D, FE-2000B, FE-2000E, FE-3000C, FE-3000E, FE-3200E  FortiMail Low Encryption: FE-3000C-LENC	5.4
<b>FortiMail:</b> FE-60D, FE-200D, FE-200E, FE-400C, FE-400E, FE-1000D, FE-2000B, FE-2000E, FE-3000C, FE-3000D, FE-3000E, FE-5002B	5.3
FortiMail Low Encryption: FE-3000C-LENC	
FortiMail VM: FE-VM64, FE-VM64-HV, FE-VM64-XEN	

## FortiProxy models

Model	Firmware Version
FortiProxy: FPX-400E, FPX-2000E, FPX-4000E	1.0, 1.1, 1.2
FortiProxy VM: FPX-KVM, FPX-VM64	

### FortiSandbox models

Model	Firmware Version
FortiSandbox: FSA-500F, FSA-1000F, FSA-2000E, FSA-3000E	4.0
FortiSandbox-VM: FSA-AWS, FSA-VM	

Model	Firmware Version
FortiSandbox: FSA-500F, FSA-1000D, FSA-1000F, FSA-2000E, FSA-3000D, FSA-3000E, FSA-3500D FortiSandbox-VM: FSA-AWS, FSA-VM	3.2
FortiSandbox: FSA-500F, FSA-1000D, FSA-1000F, FSA-2000E, FSA-3000D, FSA-3000E, FSA-3500D FortiSandbox-VM: FSA-AWS, FSA-VM	3.1
FortiSandbox: FSA-500F, FSA-1000D, FSA-1000F, FSA-2000E, FSA-3000D, FSA-3000E, FSA-3500D FortiSandbox VM: FSA-AWS, FSA-VM	3.0
FortiSandbox: FSA-1000D, FSA-2000E, FSA-3000D, FSA-3000E, FSA-3500D FortiSandbox VM: FSA-KVM, FSA-VM	2.5.2
FortiSandbox: FSA-1000D, FSA-2000E, FSA-3000D, FSA-3000E, FSA-3500D FortiSandbox VM: FSA-VM	2.4.1 2.3.3
FortiSandbox: FSA-1000D, FSA-3000D, FSA-3500D FortiSandbox VM: FSA-VM	2.2.0

### FortiSOAR models

Model	Firmware Version
FortiSOAR VM: FSR-VM	6.4
FortiSOAR VM: FSR-VM	6.0

### FortiSwitch ATCA models

Model	Firmware Version
FortiController: FTCL-5103B, FTCL-5902D, FTCL-5903C, FTCL-5913C	5.2.0
FortiSwitch-ATCA: FS-5003A, FS-5003B	5.0.0
FortiController: FTCL-5103B, FTCL-5903C, FTCL-5913C	

### FortiWeb models

Model	Firmware Version
FortiWeb: FortiWeb-100D, FortiWeb-400C, ortiWeb-400D, FortiWeb-600D, FortiWeb-1000D, FortiWeb-1000E, FortiWeb-2000E, FortiWeb-3000C, FortiWeb-3000CFSX, FortiWeb-3000D, FortiWeb-3000DFSX, FortiWeb-3000E, FortiWeb-3010E, FortiWeb-4000E	6.2, 6.3 C,

Model	Firmware Version
<b>FortiWeb VM:</b> FortiWeb-Azure, FortiWeb-Azure_OnDemand, FortiWeb-GCP, FortiWeb-GCP_OnDemand, FortiWeb-HyperV, FortiWeb-VM, FortiWeb-XENOpenSource, FortiWeb-XENServer	
FortiWeb: FortiWeb-100D, FortiWeb-400C, FortiWeb-400D, FortiWeb-600D, FortiWeb-1000D, FortiWeb-1000E, FortiWeb-1000E, FortiWeb-2000E, FortiWeb-3000C, FortiWeb-3000CFSX, FortiWeb-3000D, FortiWeb-3000DFSX, FortiWeb-3000E, FortiWeb-3010E, FortiWeb-4000C, FortiWeb-4000D, FortiWeb-4000E  FortiWeb VM: FortiWeb-Azure, FortiWeb-Azure_OnDemand, FortiWeb-Docker, FortiWeb-GCP, FortiWeb-GCP_OnDemand, FortiWeb-HyperV, FortiWeb-VM, FortiWeb-XENOpenSource, FortiWeb-XenServer	6.1
FortiWeb: FWB-100D, FWB-400C, FWB-400D, FWB-600D, FWB-1000D, FWB-1000E, FWB-2000E, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-3010E, FWB-4000C, FWB-4000D, FWB-4000E  FortiWeb VM: FWB-VM, FWB-HYPERV, FWB-XENOPEN, FWB-XENSERVER	6.0.1
FortiWeb: FWB-1000D, FWB-1000E, FWB-100D, FWB-2000E, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-3010E, FWB-4000C, FWB-4000D, FWB-4000E, FWB-400C, FWB-400D, FWB-600D  FortiWeb VM: FWB-Azure, FWB-CMINTF, FWB-HYPERV, FWB-KVM, FWB-KVM-PAYG, FWB-VM, FWB-VM-PAYG, FWB-XENAWS, FWB-XENAWS-Ondemand, FWB-XENOPEN	5.9.1
FortiWeb: FWB-1000C, FWB-1000D, FWB-1000E, FWB-100D, FWB-2000E, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-3010E, FWB-4000C, FWB-4000D, FWB-4000E, FWB-400D, FWB-600D  FortiWeb VM: FWB-Azure, FWB-Azure-Ondemand, FWB-CMINTF, FWB-HYPERV, FWB-KVM, FWB-KVM-PAYG, FWB-VM-PAYG, FWB-XENAWS, FWB-XENAWS-Ondemand, FWB-XENOPEN	5.8.6
FortiWeb: FWB-1000C, FWB-1000D, FWB-100D, FWB-2000E, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-4000C, FWB-4000D, FWB-4000E, FWB-400C, FWB-400D, FWB-600D  FortiWeb VM: FWB-Azure, FWB-HYPERV, FWB-KVM, FWB-OS1, FWB-VM, FWB-XENAWS, FWB-XENAWS-Ondemand, FWB-XENOPEN	5.7.2
FortiWeb: FWB-1000C, FWB-1000D, FWB-100D, FWB-2000E, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-3010E, FWB-4000C, FWB-4000D, FWB-4000E, FWB-400C, FWB-400D, FWB-600D  FortiWeb VM: FWB-Azure, FWB-HYPERV, FWB-KVM, FWB-VM, FWB-XENAWS, FWB-XENAWS-Ondemand, FWB-XENOPEN	5.6.1
<b>FortiWeb:</b> FWB-100D, FWB-400C, FWB-400D, FWB-1000C, FWB-1000D, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-3010E, FWB-4000C, FWB-4000D, FWB-4000E	5.5.6
<b>FortiWeb VM:</b> FWB-VM-64, FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER, FWB-HYPERV, FWB-KVM, FWB-AZURE	

Model	Firmware Version
<b>FortiWeb:</b> FWB-100D, FWB-400C, FWB-1000C, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-4000C, FWB-4000D, FWB-4000E	5.4.1
$\textbf{FortiWeb VM:} \ \textbf{FWB-VM64}, \ \textbf{FWB-XENAWS}, \ \textbf{FWB-XENOPEN}, \ \textbf{FWB-XENSERVER}, \ \textbf{FWB-HYPERV}$	

## **Resolved Issues**

The following issues have been fixed in 7.0.0. For inquires about a particular bug, please contact Customer Service & Support.

## **AP Manager**

Bug ID	Description
590098	When adding a new WTP profile, FortiManager tries to set a default <i>handoff-sta-thresh</i> and unset radio bands, which do not match the defaults for many of the E-series APs.
593168	DFS channel list in WiFi template is inconsistent between FortiManager and FortiGate.
635643	5G channels be mismatch between FortiManager and FortiGate for <i>radio-1</i> and <i>radio-2</i> with <i>FAP-231E</i> .
648812	DHCP server is created incorrectly for Bridge SSID.
667215	FortiManager should be able to classify Rogue FortiAPs.
669906	FortiManager may not be able to install mpsk-key from AP Manager.
679115	An available interface cannot be selected when authorizing FortiExtender.
692911	FortiManager may not be able to display correct information for wireless radio in wireless profile for FortiWiFi-80F-2R.

## **Device Manager**

Bug ID	Description
485037	Monitor > map view may fail if proxy is enabled.
594211	FortiManager should be able to create new VLAN interface on fabric interface and install to FortiGate.
604855	CLI Template should not prevent the lan interface from being deleted once all the dependencies have been removed.
609744	Device Manager > System > Interface may not be able to delete SSID interface.
610134	FortiManager may not be able to save the admin setting page.
610585	Device Manager cannot save DHCP for Unknown MAC address with action sets to block.
616387	Device configuration dashboard cannot update hostname or VDOM.

Bug ID	Description
624325	Creating or editing transparent VDOM to disable may stall at 20%.
627664	FortiManager cannot cooperate with socket-size 0 and changes it to 1 automatically.
636012	Importing a policy may report conflict for the default SSH CA certificates.
643845	After auto link, FortiGate HA cluster members have the same <i>hostname</i> .
645086	Policy Lookup shows an error even though the device is in sync.
646421	FortiManager may not be able to configure VDOM property resources setting.
649785	SD-WAN > Monitor may hang for an ADOM with 1500 devices.
649821	Installation may fail for FortiGate-600D.
654611	Under Advanced mode and within a VDOM, clicking "Device Manager" on the top menu returns the no permission error.
655264	VDOM count is not correct when <i>vdom-mode split-vdom</i> is configured on FortiGate with <i>VM0xV</i> license.
656433	FortiManager device delete process may hang .
657988	FortiManager may lose connection and fail to install after FortiGate HA switching roll.
659387	FortiManager should be able to provision <i>CLI-template</i> , <i>SD-WAN-template</i> , and <i>Policy Package</i> together to the model device.
662243	FortiManager is unable to clone SNMP Community under System Templates.
662656	When importing polices that contain <i>policy block</i> or <i>global policy</i> ,the import wizard should provide a warning that those polices will not be imported.
665344	Users with full <i>R/W DVM</i> privileges should be allowed to see and modify the <i>System Provisioning Templates</i> .
666833	GUI returns no warning when 4-byte AS or invalid community is configured on Standard community.
667826	Device Manager may show "No entry found" with rtmmond and the security console crashes.
669129	FortiManager does not create dynamic mapping for an address group causing import failure.
669155	SD-WAN monitor hangs at loading when the admin profile is set to <i>Read-Only</i> for SD-WAN.
669704	FortiManager does not allow user to configure FortiGate admin password longer than 32 characters.
670535	Install fails when creating a new DHCP reservation due to missing MAC address.
670839	FortiManager should be able to configure IPSec Phase2 selector using the same IP range.
671348	FortiManager should allow more than ten incoming source interfaces for policy routing decision.
672319	View Config, View Install Log, and Revision Diff in Workspace mode should not be greyed out when the ADOM is unlocked.

672338	
	FortiManager may unset interface weight in SD-WAN when installing within 6.0 ADOM.
673008	SD-WAN Rules order changes to the default when creating a rule and moving it to the top.
	When creating a policy, all the <i>vwpare</i> names are shown and not only the names from the installation target.
	FortiManager sends <i>unset entry-id</i> if the FortiGate implements NAC access-mode at FortiSwitch <i>switchport</i> level.
674938	FortiManager should add support for set use-shortcut-sla option in SD-WAN rules.
	FortiManager is not allowing to re-install policy when user selects all devices with VDOMs from Device Manager.
	Interface speed is set incorrectly on the port group due to missing aggregate membership verification.
678066	Install may fail when changing FortiGate admin password from FortiManager.
680516	Host Name is truncated when the name has more than 31 characters.
681627	FortiManager is accepting DNS source IP even though it is not part of the available interfaces.
	When using VDOMs, the <i>Policy Package</i> status remains in modified status after using <i>Push to device</i> .
	FortiManager truncates the device configuration when downloading from <i>View configuration</i> option.
688541	FortiManager should not unset <i>dynamic-vlan</i> of wireless-controller VAP and gateway of router settings after import.
	FortiManager may return an error when changing FortiGate device log configuration from FortiManager with management VDOM moved to another VDOM.
	FortiWeb serial number may not be correctly recognized and firmware version is not available in the <i>Add device</i> wizard.
	Changing the value of a meta-data field for a device should trigger the change with configuration status.
	FortiManager may fail to auto-link with FortiGate with the error: Failed to update device management data 'invalid value - devmgmtdatafailed\invalid value.
690566	Changes to the <i>Disclaimer Page</i> may not be saved and displays an error.
	Browser may display a message, <i>A webpage is slowing down your browser</i> , while checking revision difference.
	There may be inconsistent behavior between FortiGate and FortiManager when changing port speeds for FortiGate-3600E or FortiGate-3601E.
696136	Auto-link may fail due to the input device in SD-WAN.
696496	Auto-link may fail when Workspace is enabled.

Bug ID	Description
696848	Users may not be able to retrieve configuration or import policy from managed devices and dvmcore crashes frequently.
697098	Retrieving HA configuration may fail when adding FortiGate.
697535	Device Manager should not allow user to add ssl.root to a zone.
697746	FortiManager needs to support adding FortiAnalyzer devices with serial numbers that have a prefix of <i>FAVMXX</i> .
697924	When there are many devices, all managed FortiGates may show connection down state.
698625	FortiManager may not be able to view, add, or edit software switch members.
698709	When importing policies, firewall policies may not be loaded.
699182	FortiManager may fail to add FortiGate-101F as model device.
699450	The SDWAN monitor is showing historical traffic for an interface when it is <i>Down</i> in the defined time period.
701446	SD-WAN monitor may take several minutes to display a map if the device tunnel is flapping.
702555	FortiManager may lose device <i>admin user</i> and geo-location information during the onboard process for a model device.
702590	The System template may stop being displayed on the Devices & Groups page.
704197	FortiManager may fail to create a FortiSwitch in a 6.0 ADOM.
704789	SD-WAN monitor is missing Health Check Status information and probes.
705547	Route monitor may shows incorrect interface information.
710616	FortiManager may not be able to set a <i>HTTPS</i> or <i>SHH Port</i> to value higher than 63335 under <i>Provisioning Templates</i> .
711034	There may be to displaying <i>Meta Fields</i> data when creating or editing a <i>Device Group</i> .

## **Fabric View**

Bug ID	Description
554251	A user may not be able to see the fabric topology of devices in the user's assigned ADOM.

## **FortiSwitch Manager**

Bug ID	Description
650453	FortiSwitch template and VLAN shall appear for firewall policy creation.
667703	After adding a FortiSwitch, running a script to provision may fail.
678804	FortiSwitch template is not working as expected in switchport NAC access-mode.
690995	FortiSwitch Manager should not install the auto-detected setting to FortiGate.
700023	<pre>Install may fail with switch-controller managed-switch:poe-pre-standard- detection after upgrade.</pre>
700136	In FortiSwitch Manager, the <i>Map to Normalized interface</i> menu always displays <i>none</i> when editing a VLAN.
706953	A maximum of one device entry can be found in <i>Device Information</i> column under FortiSwitch port.
707909	Template may be removed, and FortiLink interface and Comments fields may be empty.
708901	The assigned FortiSwitch template name that has more than sixteen characters may fail ADOM integrity check.

## **Global ADOM**

Bug ID	Description
632400	When installing a global policy, FortiManager may delete policy routes and settings on an ADOM.
662216	Searching for Where Used in a Global ADOM may not show object usage in an ADOM.
667423	Assigned header policy from the global ADOM shows up on excluded policy package.
670280	Promoting the Profile Group object should not promote the default <i>Protocol</i> option.
689965	Replacement message type UTM is not being pushed from global ADOM to local ADOM.

## **Others**

Bug ID	Description
649399	After upgrade, install may fail if a FortiGate was assigned to a system template.
656956	There may be crashes with rtmmond when FortiWLM is enabled.

Bug ID	Description
659916	FortiManager may consume high memory usage by the svc sys daemon.
661069	ADOM restricted access user is able to pull Device Manager information from ADOMs via JSON API.
665617	FortiManager may consume high CPU resource when locking ADOM or loading policy.
667421	FortiManager may report repeated <i>miglogd</i> crashes which causes lost logs.
667442	FortiManager may not be able to connect to FortiGate CLI via SSH widget or execute TCL scripts.
670479	FortiManager configuration file size may be large due to a bulk of resync files.
671444	FortiManager may fail to check-in configuration revision with the HA secondary unit.
673210	When checking unused policy, implicit policy information is not included.
681707	The diagnose cdb upgrade check +all command may unset defmap-intf.
682404	The <i>rtmmond</i> process memory usage may constantly increasing.
683841	FortiManager databases may randomly lose integrity.
686460	ADOM integrity check may run slowly and it takes several minutes to response for each ADOM.
687155	FortiManager should improve the error message for running CLI Template.
690969	The dmworker process may consume high memory and CPU resources with failures due to busy handler.
691568	FortiManager GUI may randomly becomes non responsive.
695549	The _created timestamp is missing in the REST API return data for <i>Policy</i> .
695782	Connection to FortiGate may fail with multiple fgfmsd crashes.
697132	In some circumstances, FortiManager is not accessible unless the device is rebooted every couple of days.

## **Policy and Objects**

Bug ID	Description
494367	Users cannot search for an address in a policy where the address is a part of a nested group.
523350	FortiManager does not show the default certificate under SSL/SSH Inspection within policy.
547052	FortiManager GUI should not allow creating Security Profiles without any SSL/SSH Inspection Profile defined.
565301	Exporting policy package to Excel may not work.
587634	FortiManager may not be able to create new wildcard FQDN type address to FortiGate 6.2.

Bug ID	Description
601229	FortiManager is missing device-type option for custom device dynamic mapping.
608268	Users may not be able to edit firewall policy due to session-ttl:out of range in v5.6 or v6.0 ADOM.
612317	FortiManager shows incorrect country code for Cyprus under User definition.
615936	FortiManager is missing the SSH protocol in DLP filter.
617894	FortiManager is missing IPV6 none values after modifying policy.
630431	Some application and filter overrides are not displayed in the GUI.
633727	FortiManager is unable to display summary of policy package diff for a VDOM with a long name.
647189	FortiManager dynamic object filter generator is adding an "s" at the end of the tag preventing the object from working.
651991	After adding and removing Security Profile, the policy Security Profile changes from no-inspection to empty.
657026	GUI hangs during loading when applying changes made to Anti Virus profile.
658528	The URL remote category, <i>FortiGuard Threat Feed</i> , is not available in the dropdown menu for <i>Proxy Address</i> .
660483	IPS signatures may not match between FortiGate and FortiManager.
661590	FortiManager should fail the install with a proper error message without selecting security profile group on proxy policy.
667414	FortiManager may freeze when editing the <i>Comment</i> field in a policy package with many policies.
668649	Install may hang at 75% when no VLAN interface is configured for fsp managed-switch.
669389	Install may fail due to web filter profile in flow mode with setting changes available in proxy mode only.
670019	There is no <i>Decrypted Traffic Mirror</i> option in policy when only one port mapping is enabled in <i>Full SSL/SSH</i> Inspection.
670833	Search box for address may not always work.
671265	Global object assignment may not work.
671693	Internet Service Group should show an error or a warning when the direction setting is not the same.
671985	Decrypted Traffic Mirror setting is not being removed from policy after it is changed in the SSL Inspection method.
671988	FortiManager is not able to push dynamic objects to FortiGate after receiving the configurations from NSXT connector.
673305	Policy package install may hang and fail due to high memory usage.

Bug ID	Description
673311	Full SSL/SSH Inspection profile's Invalid SSL Certificates setting does not take effect when Inspect All Ports is selected.
673554	FortiManager should not allow a policy to set the destination address with a <i>Virtual Server</i> when inspection-mode is set as <i>flow</i> .
673554	FortiManager should not allow a policy to set the destination address with a Virtual Server when inspection-mode is set as <i>flow</i> .
674899	FortiManager may not be able to edit proxy addresses objects.
675199	Local web category override is not installed if web filter is part of policy block package.
675501	Policy check may show negative values.
675509	FortiManager may randomly set IPv4 IP Pool object to overload.
675541	Deleting an override entry should trigger modified status for policy packages with FortiGuard Category Based Filter enabled within web filter profile.
675587	Firewall VIP hover-over popup should not show ports when port forwarding is disabled.
677385	IPS profile may not load.
678439	FortiManager may always configure empty application parameter values.
681342	Devices are evicted from Installation target after authorizing a new device.
682370	Having changed an IPS profile on security profile, the change is not visible when editing the policy again.
686591	FortiManager may not be able to add individual VWP interface members to multicast policy.
688589	Setting the Local Webfilter Category action to Allow should not disable the action when installed on FortiGate.
690509	FortiManager may fail to install ACI-Direct connector to FortiGate due to server-list command.
692114	Where Used returns no record found when IPS Custom Signature is being used.
693763	Saving address object may return error: firewall/address/organization: The data is invalid for selected url.
694605	FortiManager may not be able to push the entire Azure SDN Connector configuration.
696072	FortiManager GUI should allow users to configure HTTPS health check monitor including fields such as http-match and http-get in the monitor.
700743	Viewing Policy and Objects may be slower after upgrade.
701290	FortiManager should not allow users to create a wildcard FQDN address object with non-wildcard FQDN.
702138	NGFW security policy Application category <i>Unknown applications</i> is missing on FortiManager while it is present on FortiGate.
703639	Installing policy package for a device using CLI template may stall.

# **Revision History**

Bug ID	Description
579286	Installation may fail for FortiGate 6.2 within ADOM 6.0 due to configuration changes with virtual-wan-link member weight and volume-ratio, and internet-service-ctrl.
637465	Installation fails when installing global v6.2 IPv4 policy to v6.4 FortiGate.
642075	Install may fail with delete <i>metadata-server</i> error.
657344	Installing from 6.0 ADOM may try to "unset inspection-mode and unset ssl-ssh-profile on FortiGate 6.2.
657344	Installing from 6.0 ADOM may try to <i>unset inspection-mode</i> and <i>unset ssl-ssh-profile</i> on FortiGate 6.2.
660525	Installing from FortiManager, may unset <i>comment</i> , <i>organization</i> , and <i>subnet-name</i> during install.
662438	FortiManager may try to purge all web rating override entries.
662661	Default value of <i>global: system npu ip-reassembly:max-timeout</i> NPU setting in ADOM 6.0 for FortiGate-1800F should be changed to 10000 to avoid Conflict status.
667148	When a policy install is performed, Install preview shows a lot of firewall policies with <i>metafield</i> changes without any actual change being performed.
673101	When set cfg-save manual is configured, FortiManager may try to delete objects that do not exist in the FortiGate configuration.
673327	With traffic shaper in <i>Mbps</i> or <i>Gbps</i> , FortiManager should convert it to Kbps if installation target is non 64 bits FortiGate model.
677659	FortiManager may fail to retrieve device configuration on web category with log threat-weight.
679139	When a policy package is shared between many firewalls, web rating override purge may fail in some scenarios.
683728	Installation fail due to VIP mapped IP range error when installing v6.2 policy package to v6.4 device.
686036	FortiManager may remove <i>Allow Access</i> configurations for secondary IP when a policy package is installed.
689270	The following attributes under <i>configs vpn ssl setting</i> may have an invalid range: <i>login-attempt-limit</i> , <i>login-block-time</i> , <i>http-request-header-timeout</i> , <i>http-request-body-timeout</i> and <i>router bgp keep-alive-timer</i> .
691240	FortiManager should not unset the value forward-error-correction with certain FortiGate platforms.
691835	FortiManager should be able to move one VLAN to a different zone without deleting many rules or zones.
693231	FortiManager tries to purge webfilter <i>ftgd-local-rating</i> when directly referenced in URL Category of a policy.

Bug ID	Description
698350	Install may fail with error: [VPN manager] failed to update vpn node with device info.
700495	FortiManager 6.2 ADOM may be sending set synproxy to FortiGate-1801F.
701870	Process may get stuck at 85% when pushing multiple policy packages from Global ADOM.
709456	FortiManager may be missing configuration revisions after performing HA failover.
688474	FortiManager may fail to retrieve FortiGate configuration when adding a device due to invalid data source with wtp-profile.

# Script

Bug ID	Description
663820	The <i>LDAP</i> port value remains 636 on device database and FortiManager is not accepting custom port number via CLI script.
668947	Changes using CLI Script may not be applied to devices in the container or folder.
671998	TCL scripts may not work when ssh-kex-sha1 and ssh-mac-weak are not enabled on FortiGate.
702576	Objects may not be present on the corresponding device configuration after running a script to rename objects.

#### Services

Bug ID	Description
644021	FortiManager should be able to use custom certificate for the update related services.
644173	FortiManager should improve FortiGuard disk space quota usage logging and inquiry.
671387	FortiManager installs the latest IPS and application control signatures on managed device despite that <i>To Be Deployed Version</i> is configured.
673307	FortiManager may return invalid license to FortiMail and cause AntiSpam license to expire.
674511	FortiManager should count FMG expired device number.
677875	Scheduling firmware upgrades may cause fds_svrd to consume 100% CPU resource.
691738	FortiManager may not be able to connect to FDS server via IPv6 proxy.
694903	There may be issues with some firmware upgrade paths.
699768	FortiManager should add 06002000NIDS02504 extend IPS database to default download list.

Bug ID	Description
701341	FortiGuard Firmware Images may not show up-to-date FortiOS versions.
704584	FAP firmware may not be listed and cannot be imported.

## **System Settings**

Bug ID	Description
553488	TACACS is unable to assign multiple ADOMs to admins.
598194	FortiManager two-factor authentication <i>admin login</i> is missing the option for <i>FTK Mobile</i> push notification authentication.
623457	FortiManager prompts error while importing CA certificate.
631733	Changing trusted IP can be saved and installed.
642205	While FortiAnalyzer model is disabled, FortiManager may fail to create an ADOM due to over size with disk quota.
654370	Users may not be able to access Java console with an error message: <i>Too many concurrent connections</i> .
660226	HA may crash when upgrading.
662970	Firewall addresses may not be not visible on GUI after upgrading FortiManager.
667445	FortiManager may show errors on dynamic_mapping.local-int during upgrade.
674661	After upgrade, FortiGate VDOM that contains FortiToken user cannot be managed anymore and policy install generates an error.
677118	Upgrading ADOM from 6.2 to 6.4 may fail due to replacement message.
677461	FortiManager is not able to identify ADOMs that are locked by non super user administrators.
684907	Changing the FortiGuard Server Location in the License Information dashboard may not take any effect.
686569	Creating and deleting the static route may remove a specific connected route.
687223	Users may not be able to upgrade an ADOM because of profile-protocol-options.
688517	Upgrading an ADOM may fail due to a FortiExtender Object.
689917	If a policy is configured with a <i>Proxy Options</i> profile with <i>HTTP Policy Redirect</i> enabled, the ADOM upgrade should enable the related option <i>set http-policy-redirect enable</i> to preserve the HTTP redirect feature.
690400	System Admin User ssh-public-key cannot choose ed25519.
690921	Upgrading an ADOM from 6.0 to 6.2 should not add custom <i>ssl-ssh-profile</i> to policies which were not configured for SSL inspection.

Bug ID	Description
695058	Radius response packets should not timeout with less of the remoteauthtimeout setting.
695360	ADOM upgrade may be slow and it may take several minutes to start.
699185	If Management Extension Applications (MEA) are enabled, all system settings may be lost after upgrading FortiManager.
699253	Admin profile should not need system level access to view list of time zones in Device Manager.
704504	License Information may keep loading for admin user with FortiGuard and System Settings with read-write permissions.
705762	Session can be approved twice by different users of the same approval group.
614127	FortiManager should show details in the fnbamd debug if login fails due to trusted hosts.

# **VPN Manager**

Bug ID	Description
596953	Go to VPN manager > monitor and select a specific community from the tree menu to show only that community's tunnels and the monitor page displays a white screen.
608221	There is no XAUTH USER column in VPN Manager Monitor.
620801	SSLVPN > Edit SSLVPN Settings > IP Range, only shows configuration from ADOM database objects.
647394	VPN Manager with VPN zone feature disabled may trigger policy copy failure.
653328	FortiManager is unable to edit a SSL portal in VPN Manager containing "/" special character.
658221	The dns-suffix on SSL VPN portal is not installed if web-mode is disabled.
681110	VPN manager may not push any configuration on ADOM 6.0 for dial up VPN on FortiGate.
697308	VPN Manager is setting dst-name to All when using dst-name object group address in a protected subnet.
701772	AP may not show up in AP Manager after running CLI templates.
704614	FortiManager may not be able to push policy package due to VPN related error.

#### **Known Issues**

The following issues have been identified in 7.0.0. For inquires about a particular bug or to report a bug, please contact Customer Service & Support.

#### **AP Manager**

Bug ID	Description
633171	There may be DFS Channel mismatch between FortiManager and FortiGate for FAP-223E.
674636	SSID may be empty in AP Manager> WiFi Profiles> SSID column.
701487	FortiManager may not be able to assign AP profile after upgrading the firmware.
706233	FortiManager may not detect changes in AP Manager > SSID > Pre-shared Key Password and display the message No record found.
712669	FortiManager may set darrp as enable on radio in monitor mode resulting in installation failure.

#### **Device Manager**

Bug ID	Description
521976	Users may not be able to enable CSV format within system template.
649260	Device Manager may return an error when deleting VPN phase1.
664120	When FortiGate HA secondary unit is down, action is displayed as promote on Device Manager.
672344	If managed FortiAnalyzer is in HA, setting <i>Send Logs</i> to <i>Managed FortiAnalyzer</i> in the system template may cause an install error.
692200	FortiManager may return conflict after a zero-touch-provisioning cluster deployment.
696576	Explicit FTP proxy available certificates are not consistent with the ones available in the FortiGate.
700566	FortiManager should allow user to select different VDOMs when creating an EMAC VLAN.
701348	Once VRPP instance is created, user should be able to edit or delete it.
702906	DHCP Relay Service may not be deleted when it is configured on VLAN interface.

Bug ID	Description
708937	FortiManager may randomly update the geographical coordinates of a FortiGate device.
709214	System template should allow <i>source</i> interface to be selected when <i>specify</i> is activated as <i>interface-select-method</i> .
709302	SD-WAN monitor search function on the table view does not actually search but highlight.
710570	Any statement is not accepted by FortiManager in the prefix-list configuration.
713267	Searching for a FortiGate name when editing a device group should display the FortiGate device name with all the VDOMs.
713714	Legacy device and group schedule firmware upgrade will be ignored. FortiGates are upgraded immediately.
714710	Secondary interface configuration may not appear in Device Manager.

## **FortiSwitch Manager**

Bug ID	Description
667703	After adding a FortiSwitch, running a script to provision may fail.
713492	In the per-device mapping of the VLANs in FortiSwitch Manager, the <i>Specify</i> option for the gateway is not saved in the database.
713553	FortiSwitch Template sflow counter displays an interval value variance between 6.0 and 6.2 ADOMs.

#### **Global ADOM**

Bug ID	Description
693510	Display Options for Object Config will reset to default unexpectedly.

#### **Others**

Bug ID	Description
669191	The fdssvd daemon may randomly crash.
704545	When there is a lot of workflow sessions and users try to disable the workflow mode via GUI, FortiManager may stop responding.
706516	Securityconsole may crash when there are quotes around group name.

# **Policy & Objects**

Bug ID	Description
487186	FortiManager may install a different local category ID to FortiGate causing conflict with custom URL rating list.
636537	CLI Only Objects > user > peergrp is not able to delete peergrp.
642708	View Mode may unexpectedly change from Interface Pair View to By Sequence mode.
654172	There may be webfilter local category ID mismatch between FortiManager and FortiGate causing incorrect action when using <i>Custom URL List</i> .
659543	FortiManager is not allowing reorder between Policy Blocks.
672035	There may be an error when importing and AWS credential from FortiGate to FortiManager.
684728	FortiManager and FortiGate should have equivalent filter list entries.
688586	Exporting Policy Package to $CSV$ shows $certificate-inspection$ in the $ssl-ssh-profil$ column even when the profile is not in use.
702621	When adding a remote user group when the LDAP service is unreachable, the <i>Manually specify</i> option is only available after a timeout.
704637	Firewall policy and VIPs may get deleted on policy package installation.
705025	Find Unused Policies may report incorrect session data for security policy.
707953	IPS sensor may incorrectly set the action to <i>pass</i> instead <i>block</i> when quarantine is set.
708877	FortiManager 6.0 ADOM should not allow users to set ISDB objects that are not supported on FortiOS 6.0.
709435	FortiManager may not be able to import existing Azure SDN Connector from FortiGate.
711121	Enabling FortiGuard Outbreak Prevention database does not match FortiGate's behavior.
711964	Wildcard certificate should be able to be used for Deep Inspection.
712150	Search in Address may not work after upgrading FortiManager to 6.4.5.
713216	When policy package is large, there is slowness loading policy package, installing policy package, or viewing sessions revision diff in workflow mode.
719104	FortiManager may not be able to select <i>Internet Service</i> group members when creating <i>Internet Service</i> group.

## **Revision History**

Bug ID	Description
638060	Installing an existing revision or renaming a revision should be allowed in a backup ADOM.
685509	FortiManager may unset authmethod-remote causing install failure.
693225	FortiManager may install unset inspection-mode to FortiGate 6.2 device in 6.0 ADOM.
694380	Installation may fail when set safelist enable in ssl-ssh-profile is pushed to FortiGate 6.2 from an 6.0 ADOM.
715313	FortiManager may not enable the option <i>FortiGuard Category Based Filter</i> after FortiManager is synchronized with FortiGate.

## **Script**

Bug ID	Description
688479	Using TCL Script to take device configuration backup may not work.
715305	When changing System Setting opmode from nat to transparent via a script, FortiManager may return failure to commit to database stating that there is no interface.
715623	Running a script on device database may not update Save status.

#### Services

Bug ID	Description
695685	FortiGate HA firmware upgrade may fail when both HA units need disk check.
701777	Application ID is not being configured after policy script execution.
714596	For web filter query, FortiManager should support Category 9 mapping data.
714787	FortiManager should have a diagnose command to force web filtering database merge.

## **System Settings**

Bug ID	Description
625683	Changes made by ADOM upgrade may not update Last Modified date/time and user admin.

Bug ID	Description
637377	If <i>Manage Device Configurations</i> is <i>none</i> in admin profile, the user may not be able to see the interface in the policy.
667284	FortiManager should have better log message when aborting device upgrade.
687171	Users may not be able to assign devices to the ADOMs to which they have full access.
690926	FortiManager is removing SD-WAN field description upon ADOM upgrading from 6.2 to 6.4.
697082	Schedule SCP backup may fail due to incorrect default port number.
700142	FortiManager should allow users to configure more than eight hosts per SNMP community.
705185	ADOM upgrade may cause per-device mapping of VLANs in FortiSwitch Manager change to 0.
708939	Dashboard is showing incorrect <i>GB per day</i> and <i>device quota</i> information when <i>FortiManager</i> is enabled.
709873	Global task assignment time may not be accurate.
711446	Copy may fail due to invalid protocol options when both FortiGate and ADOM are upgraded to v6.2.
713233	FortiManager may fail to upgrade firmware resulting in cdbupgrade task error on console and process crashes.
714210	LDAP admin group search should be done with the service or administrator bind account.
714635	FortiManager backup file size may increasing gradually when IPS package is updated.

# **VPN Manager**

Bug ID	Description
695879	Editing a community may not be able to set VPN zone to Off via GUI.
699759	When installing a policy package, per device mapped object used in SSL VPN cannot be installed.
712633	VPN Manager pushes default "dpd-retrycount" and "dpd-retryinterval", but it cannot display them.

### Appendix A - FortiGuard Distribution Servers (FDS)

In order for the FortiManager to request and retrieve updates from FDS, and for FortiManager to serve as a FDS, please configure the necessary settings on all devices between FortiManager and FDS, or between FortiManager and FortiGate devices based on the items listed below:

- FortiManager accesses FDS for antivirus and attack updates through TCP/SSL port 443.
- If there is a proxy server between FortiManager and FDS, FortiManager uses port 80 to communicate with the proxy server by default and connects to the proxy server using HTTP protocol.
- If FortiManager manages a FortiGate device located behind a proxy server, the proxy server permits TCP/SSL traffic to pass through via port 443.

#### FortiGuard Center update support

You can configure FortiManager as a local FDS to provide FortiGuard updates to other Fortinet devices and agents on your network. The following table lists which updates are available per platform/version:

Platform	Antivirus	WebFilter	Vulnerability Scan	Software
FortiClient (Windows)	<b>√</b>	✓	✓	✓
FortiClient (Mac OS X)	✓		$\checkmark$	
FortiMail	✓			
FortiSandbox	$\checkmark$			
FortiWeb	✓			



To enable FortiGuard Center updates for FortiMail version 4.2 enter the following CLI command:

config fmupdate support-pre-fgt-43
set status enable
end

# Appendix B - Default and maximum number of ADOMs supported

This section identifies the supported number of ADOMs for FortiManager hardware models and virtual machines.

#### Hardware models

The following table identifies the default number of ADOMs supported for FortiManager hardware models G series and later. It also identifies the hardware models that support the ADOM subscription license and the maximum number of ADOMs supported.

FortiManager Platform	Default number of ADOMs	ADOM license support?	Maximum number of ADOMs
3000G Series	500	✓	1200

For FortiManager F series and earlier, the maximum number of ADOMs is equal to the maximum devices/VDOMs as described in the FortiManager Data Sheet.

#### **Virtual Machines**

FortiManager VM subscription license includes five (5) ADOMs. Licenses are non-stackable. Additional ADOMs can be purchased with an ADOM subscription license.

For FortiManager VM perpetual license, the maximum number of ADOMs is equal to the maximum number of Devices/VDOMs listed in the FortiManager Data Sheet.



publication shall be applicable.