FortiManager - Release Notes

Version 6.0.4

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

https://training.fortinet.com

FORTIGUARD CENTER

https://fortiguard.com/

END USER LICENSE AGREEMENT

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

FEEDBACK

Email: techdoc@fortinet.com

September 17, 2019
FortiManager 6.0.4 Release Notes
02-604-529989-20190917

TABLE OF CONTENTS

FortiManager 6.0.4 Release

This document provides information about FortiManager version 6.0.4 build 292.

The recommended minimum screen resolution for the FortiManager GUI is 1280 x 800. Please adjust the screen resolution accordingly. Otherwise, the GUI may not display properly.

This section includes the following topics:

Supported models

FortiManager version 6.0.4 supports the following models:

FortiManager	FMG-200D, FMG-200F, FMG-300D, FMG-300E, FMG-300F, FMG-400E, FMG-1000D, FMG-1000F, FMG-2000E, FMG-3000F, FMG-3900E, FMG-4000D, FMG-4000E, and FMG-MFGD.
FortiManager VM	FMG-VM64, FMG-VM64-ALI, FMG-VM64-AWS, FMG-VM64-Azure, FMG-VM64-GCP, FMG-VM64-HV (including Hyper-V 2016), FMG-VM64-KVM, FMG-VM64-OPC, FMG-VM64-XEN (for both Citrix and Open Source Xen).

What’s new in FortiManager 6.0.4

The following is a list of new features and enhancements in 6.0.4. For details, see the *FortiManager Administrator Guide*:

Not all features/enhancements listed below are supported on all models

Special Notices

This section highlights some of the operational changes that administrators should be aware of in 6.0.4.

Managing FortiGate with VDOMs that use Global Profiles

FortiManager managing FortiGates with VDOMs enabled and running FortiOS 6.0.0 or later is unable to import global ADOM objects from FortiGate devices. Before adding the FortiGate units to FortiManager, perform the following steps to unset the global ADOM objects. After the default configurations are unset, you can successfully add the FortiGate units to FortiManager.

1. On the Fortigate for each VDOM, unset the following global ADOM objects by using the CLI:

```
config wireless-controller utm-profile
    edit "wifi-default"
        set comment "Default configuration for offloading WiFi traffic."
    next
    edit "g-wifi-default"
        set comment "Default configuration for offloading WiFi traffic."
        set ips-sensor "g-wifi-default"
        set application-list "g-wifi-default"
        set antivirus-profile "g-wifi-default"
        set webfilter-profile "g-wifi-default"
        set firewall-profile-protocol-options "g-wifi-default"
        set firewall-ssl-ssh-profile "g-wifi-default"
    next
end

FGVMULCV30310000 (utm-profile) # ed g-wifi-default
FGVMULCV30310000 (g-wifi-default) # sh
config wireless-controller utm-profile
    edit "g-wifi-default"
        set comment "Default configuration for offloading WiFi traffic."
    next
end
```

2. After the global ADOM objects are unset, you can add the FortiGate unit to FortiManager.

IOC Support on FortiManager

Please note that FortiManager does not support IOC related features even when FortiAnalyzer mode is enabled.

FortiManager 6.0.2 support for FortiOS 6.0.3

FortiManager 6.0.2 treats the `status` field of firewall policies as a mandatory field, and it is set to `enable` by default. FortiOS 6.0.3 has reverted this change. As a result, FortiManager may report verification failures on installations. The verification report shows that the policy `status` field has to be installed with the `enable` setting:

```
"---> generating verification report
   (vdom root: firewall policy 1:status)
   remote original:
   to be installed: enable

<--- done generating verification report


install failed"
```

Reconfigure SD-WAN after Upgrade

The SD-WAN module has been fully redesigned in FortiManager v6.0 to provide granular monitor and control. Upgrading SD-WAN settings from 5.6 to 6.0 is not supported. Please reconfigure SD-WAN after upgraded to v6.0.

FortiGate VM 16/32/UL license support

FortiOS 5.4.4 introduces new VM license types to support additional vCPUs. FortiManager 5.6.0 supports these new licenses with the prefixes of FGVM16, FGVM32, and FGVMUL.

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.

VM License (VM-10K-UG) Support

FortiManager 5.4.2 introduces a new VM license (VM-10K-UG) that supports 10,000 devices. It is recommended to upgrade to FortiManager 5.4.2 or later before applying the new license to avoid benign GUI issues.

Recreate Guest List for Guest user group

After upgrading to FortiManager 6.0.3, recreate the guest list for the *Guest* user group in ADOM Policy Object before installing device settings to FortiGate devices. For more information, see Bug ID 499568 in *Resolved Issues*.

FortiOS 5.4.0 Support

With the enhancement in password encryption, FortiManager 5.4.2 and later no longer supports FortiOS 5.4.0. Please upgrade FortiGate to 5.4.2 or later.

The following ADOM versions are not affected: 5.0 and 5.2.

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
end
```

Upgrade Information

You can upgrade FortiManager 5.6.0 or later directly to 6.0.4. If you are upgrading from versions earlier than 5.6.x, you should upgrade to the latest patch version of FortiManager 5.6, then 6.0.0.

For details about upgrading your FortiManager device, see the *FortiManager Upgrade Guide*.

This section contains the following topics:

- Downgrading to previous firmware versions on page 10
- Firmware image checksums on page 10
- FortiManager VM firmware on page 10
- SNMP MIB files on page 12

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.

Aliyun

- `.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 qemu.

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 GCP

- `.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 qemu.

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.
- `.hyperv.zip`: Download the package for a new FortiManager VM installation. This package contains a Virtual Hard Disk (VHD) file for Microsoft Azure.

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.

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 product data sheet available on the Fortinet web site, http://www.fortinet.com/products/fortimanager/virtualappliances.html. 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 6.0.4 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 6.0.4 support on page 13
- Feature support on page 16
- Language support on page 16
- Supported models on page 17

FortiManager 6.0.4 support

The following table lists 6.0.4 product integration and support information:

Web Browsers	• Microsoft Internet Explorer version 11 or Edge 40 Due to limitation on Microsoft Internet Explorer or Edge, it may not completely render a page with a large set of policies or objects. • Mozilla Firefox version 61 • Google Chrome version 68 Other web browsers may function correctly, but are not supported by Fortinet.
FortiOS/FortiOS Carrier	• 6.0.0 to 6.0.4 • 5.6.5 to 5.6.7 • 5.6.4 FortiManager 5.6.3 is fully tested as compatible with FortiOS/FortiOS Carrier 5.6.4, with some minor interoperability issues. For information, see FortiOS 5.6.4 compatibility issues on page 26. • 5.6.2 to 5.6.3 FortiManager 5.6.1 is fully tested as compatible with FortiOS/FortiOS Carrier 5.6.2 to 5.6.3, with some minor interoperability issues. For information, see FortiOS 5.6.3 compatibility issues on page 26. • 5.6.0 to 5.6.1 FortiManager 5.6.0 is fully tested as compatible with FortiOS/FortiOS Carrier 5.6.0 to 5.6.1, with some minor interoperability issues. For information, see FortiOS 5.6.0 and 5.6.1 compatibility issues on page 27. • 5.4.10 FortiManager 5.4.5 is fully tested as compatible with FortiOS/FortiOS Carrier 5.4.10, with some minor interoperability issues. For information, see FortiOS 5.4.10 compatibility issues on page 27. • 5.4.9

	FortiManager 5.6.3 is fully tested as compatible with FortiOS/FortiOS Carrier 5.4.9, with some minor interoperability issues. For information, see FortiOS 5.4.9 compatibility issues on page 27. • 5.4.1 to 5.4.8 • 5.2.8 to 5.2.13 FortiManager 5.4.1 is fully tested as compatible with FortiOS/FortiOS Carrier 5.2.10, with some minor interoperability issues. For information, see FortiOS 5.2.10 compatibility issues on page 28. • 5.2.7 FortiManager 5.2.6 is fully tested as compatible with FortiOS/FortiOS Carrier 5.2.7, with some minor interoperability issues. For information, see FortiOS 5.2.7 compatibility issues on page 28. • 5.2.6 FortiManager 5.2.4 is fully tested as compatible with FortiOS/FortiOS Carrier 5.2.6, with some minor interoperability issues. For information, see FortiOS 5.2.6 compatibility issues on page 28. • 5.2.2 to 5.2.5 • 5.2.1 FortiManager 5.2.1 is fully tested as compatible with FortiOS/FortiOS Carrier 5.2.1, with some minor interoperability issues. For information, see FortiOS 5.2.1 compatibility issues on page 28. • 5.2.0 FortiManager 5.2.1 is fully tested as compatible with FortiOS/FortiOS Carrier 5.2.0, with some minor interoperability issues .For information, see FortiOS 5.2.0 compatibility issues on page 29.
FortiAnalyzer	• 6.0.0 and later • 5.6.0 and later • 5.4.0 and later • 5.2.0 and later • 5.0.0 and later
FortiAuthenticator	• 5.0 to 5.3 • 4.0 to 4.3
FortiCache	• 4.2.7 • 4.2.6 • 4.1.2 • 4.0.0 to 4.0.4
FortiClient	• 6.0.0 and later • 5.6.0 and later • 5.4.0 and later • 5.2.0 and later
FortiMail	• 5.4.5 • 5.3.12 • 5.2.10 • 5.1.7

	• 5.0.10
FortiSandbox	• 2.5.0 to 2.5.2 • 2.4.0 and 2.4.1 • 2.3.2 and 2.3.3 • 2.2.2 • 2.1.3 • 1.4.0 and later • 1.3.0 • 1.2.0 and later
FortiSwitch ATCA	• 5.2.3 • 5.0.0 and later • 4.3.0 and later • 4.2.0 and later
FortiWeb	• 6.0.1 • 5.9.1 • 5.8.6 • 5.8.3 • 5.8.1 • 5.8.0 • 5.7.2 • 5.6.1 • 5.5.6 • 5.4.1 • 5.3.9 • 5.2.4 • 5.1.4 • 5.0.6
FortiDDoS	• 4.5.0 • 4.4.1 • 4.2.3 • 4.1.11 Limited support. For more information, see Feature support on page 16.
Virtualization	• Amazon Web Service AMI, Amazon EC2, Amazon EBS • Citrix XenServer 7.2 • Linux KVM Redhat 7.1 • Microsoft Azure • Microsoft Hyper-V Server 2012 and 2016 • OpenSource XenServer 4.2.5 • VMware ESXi versions 5.0, 5.5, 6.0, 6.5 and 6.7

To confirm that a device model or firmware version is supported by 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.

Feature support

The following table lists FortiManager feature support for managed platforms.

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

Language support

The following table lists FortiManager language support information.

Language	GUI	Reports
English	✓	✓
Chinese (Simplified)	✓	✓
Chinese (Traditional)	✓	✓
French		✓
Japanese	✓	✓

Language	GUI	Reports
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 6.0.4.

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 18
- FortiCarrier models on page 20
- FortiDDoS models on page 21
- FortiAnalyzer models on page 21
- FortiMail models on page 22
- FortiSandbox models on page 22
- FortiSwitch ATCA models on page 23
- FortiSwitch models on page 23
- FortiWeb models on page 23
- FortiCache models on page 25
- FortiProxy models on page 25
- FortiAuthenticator models on page 25

FortiGate models

Model	Firmware Version
FortiGate: FG-30D, FG-30D-POE, FG-30E, FG-30E-3G4G-INTL, FG-30E-3G4G-NAM, FG50E, FG-51E, FG-52E, FG-60D, FG-60D-POE, FG-60E, FG-60E-POE, FG-61E, FG-70D, FG-70D-POE, FG-80D, FG-80E, FG-80E-POE, FG-81E, FG-81E-POE, FG-90D, FG-90D-POE, FG-90E, FG-91E, FG-92D, FG-94D-POE, FG-98D-POE, FG-100D, FG-100E, FG-100EF, FG-101E, FG-140D, FG-140D-POE, FG-140E, FG-140E-POE, FG200D, FG-200D-POE, FG-200E, FG-201E, FG-240D, FG-240-POE, FG-280D-POE, FG300D, FG-300E, FG-301E, FG-400D, FG-500D, FG-500E, FG-501E, FG-600D, FG-800D, FG-900D, FG-1000D, FG-1200D, FG-1500D, FG-1500DT, FG-2000E, FG-2500E, FG-3000D, FG-3100D, FG-3200D, FG-3600C, FG3700D, FG-3800D, FG-3810D, FG-3815D, FG-3960E, FG-3980E **FortiGate 5000 Series:** FG-5001D, FG-5001E, FG-5001E1 **FortiGate DC:** FG1500D-DC, FG-3000D-DC, FG-3100D-DC, FG-3200D-DC, FG-3700D-DC, FG-3800D-DC, FG-3810D-DC, FG-3815D-DC **FortiGate Hardware Low Encryption:** FG-100D-LENC, FG-600C-LENC **Note:** All license-based LENC is supported based on the FortiGate support list. **FortiWiFi:** FWF-30D, FWF-30E, FWF-30E-3G4G-INTL, FWF-30E-3G4G-NAM, FWF-50E, FWF-50E-2R, FWF-51E, FWF-60D, FWF-60D-POE, FWF-60E, FWF-61E, FWF-90D, FWF-90D-POE, FWF-92D **FortiGate VM:** FG-VM64, FG-VM64-AWS, FG-VM64-AWSONDEMAND, FG-VM64-AZUREONDEMAND, FG-VM64-Azure, FG-VM64-GCP,VM64-GCPONDEMAND, FG-VM64-HV, FG-VM64-KVM, FG-VM64-OPC, FG-VM64-XEN, FG-VMX-Service-Manager, FOS-VM64, FOS-VM64-KVM, FOS-VM64-Xen **FortiGate Rugged:** FGR-30D, FGR-35D, FGR-60D, FGR-90D	6.0
FortiGate: FG-30D, FG-30D-POE, FG-30E, FG-30E-3G4G-INTL, FG-30E-3G4G-NAM, FG-50E, FG-51E, FG-52E, FG-60D, FG-60D-POE, FG-60E, FG-60E-POE, FG-60E-DSL, FG-61E, FG-70D, FG-70D-POE, FG-80C, FG-80CM, FG-80D, FG-80E, FG-80E-POE, FG-81E, FG-81E-POE, FG-90D, FG-90D-POE, FG-90E, FG-91E, FG-92D, FG-94D-POE, FG-98D-POE, FG-100D, FG-100E, FG-100EF, FG-101E, FG-140D, FG-140D-POE, FG-140E, FG-140E-POE, FG-200D, FG-200D-POE, FG-200E, FG-201E, FG-240D, FG-240-POE, FG-280D-POE, FG-300D, FG-300E, FG-301E, FG-400D, FG-500D, FG-500E, FG-501E, FG-600C,FG-600D, FG-800C, FG-800D, FG-900D, FG-1000C, FG-1000D, FG-1200D, FG-1500D, FG-1500DT, FG-2000E, FG-2500E, FG-3000D, FG-3100D, FG-3200D, FG-3240C, FG-3600C, FG-3700D, FG-3700DX, FG-3800D, FG-3810D, FG-3815D, FG-3960E, FG-3980E **FortiGate 5000 Series:** FG-5001C, FG-5001D, FG-5001E, FG-5001E1 **FortiGate 6000 Series:** FG-6300F, FG-6301F, FG-6500F, FG-6501F **FortiGate 7000 Series:** FG-7030E, FG-7040E, FG-7060E **FortiGate DC:** FG-80C-DC, FG-600C-DC, FG-800C-DC, FG-800D-DC, FG-1000C-DC, FG-1500D-DC, FG-3000D-DC, FG-3100D-DC, FG-3200D-DC, FG-3240C-DC, FG-3600C-DC, FG-3700D-DC, FG-3800D-DC, FG-3810D-DC, FG-3815D-DC, FG-7060E-8-DC **FortiGate Hardware Low Encryption:** FG-80C-LENC, FG-100D-LENC, FG-600C-LENC, FG-1000C-LENC **Note:** All license-based LENC is supported based on the FortiGate support list.	5.6

Model	Firmware Version
FortiWiFi: FWF-30D, FWF-30D-POE, FWF-30E, FWF-30E-3G4G-INTL, FWF-30E-3G4G-NAM, FWF-50E, FWF-50E-2R, FWF-51E, FWF-60D, FWF-60D-POE, FWF-60E, FWF-61E, FWF-80CM, FWF-81CM, FWF-90D, FWF-90D-POE, FWF-92D **FortiGate VM:** FG-VM64, FG-VM64-AWS, FG-VM64-AWSONDEMAND, FG-VM64-Azure, FG-VM64-AZUREONDEMAND, FG-VM64-GCP, FG-VM64-HV, FG-VM64-KVM, FG-VM64-OPC, FG-VM64-XEN, FG-VMX-Service-Manager, FOSVM64, FOSVM64-KVM, FOS-VM64-Xen **FortiGate Rugged:** FGR-30D, FGR-35D, FGR-60D, FGR-90D	
FortiGate: FG-30D, FG-30D-POE, FG-30E, FG-30E-3G4G-INTL, FG-30E-3G4G-NAM, FG-50E, FG-51E, FG-52E, FG-60D, FG-60D-POE, FG-60E, FG-60E-DSL, FG-60E-POE, FG-61E, FG-70D, FG-70D-POE, FG-80C, FG-80CM, FG-80D, FG-80E, FG-80E-POE, FG-81E, FG-81E-POE, FG-90D, FG-90D-POE,FG-90E, FG-91E, FG-92D, FG-94D-POE, FG-98D-POE, FG-100D, FG-100E, FG-100EF, FG-101E, FG-140D, FG-140D-POE, FG-140E, FG-140-POE, FG-200D, FG-200D-POE, FG-240D, FG-240D-POE, FG-280D-POE, FG-200E, FG-201E, FGT-300D, FGT-300E, FGT-301E, FG-400D, FG-500D, FG-500E, FG-501E, FG-600C, FG-600D, FG-800C, FG-800D, FG-900D, FG-1000C, FG-1000D, FG-1200D, FG-1500D, FG-1500DT, FG-3000D, FG-3100D, FG-3200D, FG-3240C, FG-3600C, FG-3700D, FG-3700DX, FG 3800D, FG-3810D, FG-3815D, FG-3960E, FG3980E, FG-2000E, FG-2500E **FortiGate 5000 Series:** FG-5001C, FG-5001D, FG-5001E, FG-5001E1 **FortiGate 6000 Series:** FG-6300F, FG-6301F, FG-6500F, FG-6501F **FortiGate 7000 Series:** FG-7030E-Q, FG-7030E-S, FG-7040E-1, FG-7040E-2, FG-7040E-3, FG-7040E-4, FG-7040E-5, FG-7040E-6, FG-7040E-8, FG-7040E-8-DC, FG-7060E-1, FG-7060E-2, FG-7060E-3, FG-7060E-4, FG-7060E-5, FG-7060E-6, FG-7060E-8 **FortiGate DC:** FG-80C-DC, FG-600C-DC, FG-800C-DC, FG-800D-DC, FG-1000C-DC, FG-1500D-DC, FG-3000D-DC, FG-3100D-DC, FG-3200D-DC, FG-3240C-DC, FG-3600C-DC, FG-3700D-DC, FG-3800D-DC, FG-3810D-DC, FG-3815DC, FG-7060E-8-DC **FortiGate Hardware Low Encryption:** FG-80C-LENC, FG-100D-LENC, FG-600C-LENC, FG-1000C-LENC **Note:** All license-based LENC is supported based on the FortiGate support list. **FortiWiFi:** FWF-30D, FWF-30D-POE, FWF-30E, FWF-30E-3G4G-INTL, FWF-30E-3G4G-NAM, FWF-50E, FWF-50E-2R, FWF-51E, FWF-60D, FWF-60D-POE, FWF-60E-DSL, FWF-60E, FWF-61E, FWF-80CM, FWF-81CM, FWF-90D, FWF-90D-POE, FWF-92D **FortiGate VM:** FG-VM, FG-VM64, FG-VM64-AWS, FG-VM64-AWSONDEMAND, FG-VM64-HV, FG-VM64-KVM, FG-VM64-OPC, FG-VM64-XEN, FG-VMX-Service-Manager, FOS-VM64, FOS-VM64-KVM **FortiGate Rugged:** FGR-30D, FGR-30D-ADSL-A, FGR-35D, FGR-60D, FGR-90D	5.4
FortiGate: FG-20C, FG-20C-ADSL-A, FG-30D, FG-30D-POE, FG-40C, FG-60C, FG-60C-POE, FG-60C-SFP, FG-60D, FG-60D-3G4G-VZW, FG-60D-POE, FG-70D, FG-70D-POE, FG-80C, FG-80CM, FG-80D, FG-90D, FG-90D-POE, FG-92D, FG-94D-POE, FG-98D-POE, FG-100D, FG-110C, FG-111C, FG-140D, FG-140D-POE, FG-140D-POE-T1, FG-200B, FG-200B-POE, FG-200D, FG-200D-POE, FG-240D, FG-240D-POE, FG-280D-POE, FG-300C, FG-300D, FG-310B, FG-311B, FG-400D, FG-500D, FG-600C, FG-600D, FG-620B, FG-621B, FG-800C, FG-800D, FG-900D, FG-1000C, FG-1000D, FG-1200D, FG-1240B, FG-1500D, FG-1500DT, FG-3000D, FG-3016B, FG-3040B, FG-3100D, FG-3140B, FG-3200D, FG-3240C, FG-3600C,FG-3700D, FG-3700DX, FG-3810A, FG-3810D, FG-3815D, FG-3950B, FG-3951B	5.2

Model	Firmware Version
FortiGate 5000 Series: FG-5001A, FG-5001A-SW, FG-5001A-LENC, FG-5001A-DW-LENC, FG-5001A-SW-LENC, FG-5001B, FG-5001C, FG-5001D, FG-5101C **FortiGate DC:** FG-80C-DC, FG-300C-DC, FG-310B-DC, FG-600C-DC, FG-620B-DC, FG-621B-DC, FG-800C-DC, FG-800D-DC, FG-1000C-DC, FG-1240B-DC, FG-1500D-DC, FG-3000D-DC, FG-3040B-DC, FG-3100D-DC, FG-3140B-DC, FG-3200D-DC, FG-3240C-DC, FG-3600C-DC, G-3700D-DC, FG-3810A-DC, FG-3810D-DC, FG-3815D-DC, FG-3950B-DC, FG-3951B-DC **FortiGate Low Encryption:** FG-20C-LENC, FG-40C-LENC, FG-60C-LENC, FG-80C-LENC, FG-100D-LENC, FG-200B-LENC, FG-300C-LENC, FG-310B-LENC, FG-600C-LENC, FG-620B-LENC, FG-1000C-LENC, FG-1240B-LENC, FG-3040B-LENC, FG-3140B-LENC, FG-3810A-LENC, FG-3950B-LENC **FortiWiFi:** FWF-20C, FWF-20C-ADSL-A, FWF-30D, FWF-30D-POE, FWF-40C, FWF-60C, FWF-60CM, FWF-60CX-ADSL-A, FWF-60D, FWF-60D-3G4G-VZW, FWF-60D-POE, FWF-80CM, FWF-81CM, FWF-90D, FWF-90D-POE, FWF-92D **FortiGate Rugged:** FGR-60D, FGR-100C **FortiGate VM:** FG-VM, FG-VM64, FG-VM64-AWSONDEMAND, FG-VM-Azure, FG-VM64-HV, FG-VM64-KVM, FG-VM64-XEN **FortiSwitch:** FS-5203B, FCT-5902D	

FortiCarrier models

Model	Firmware Version
FortiCarrier: FGT-3000D, FGT-3100D, FGT-3200D, FGT-3700D, FGT-3800D, FGT-3810D, FGT-3960E, FGT-3980E, FGT-5001D, FGT-5001E **FortiCarrier-DC:** FGT-3000D-DC, FGT-3100D-DC, FGT-3200D-DC, FGT-3700D-DC, FGT-3800D-DC, FGT-3810D-DC, FGT-3960E-DC, FGT-3980E-DC **FortiCarrier-VM:** FG-VM, FG-VM64, FG-VM64-AWS, FG-VM64-Azure, FG-VM64-GCP, FG-VM64-HV, FG-VM64-KVM, FG-VM64-OPC, FG-VM64-Xen	6.0
FortiCarrier: FGT-3000D, FGT-3100D, FGT-3200D, FGT-3240C, FGT-3600C, FGT-3700D, FGT-3700DX, FGT-3800D, FGT-3810D, FGT-3960E, FGT-3980E, FGT-5001C, FGT-5001D, FGT-5001E **FortiCarrier 6000 Series:** FG-6300F, FG-6301F, FG-6500F, FG-6501F **FortiCarrier 7000 Series:** FG-7030E, FG-7040E, FG-7060E **FortiCarrier-DC:** FGT-3000D-DC, FGC-3100D-DC, FGT-3200D-DC, FGT-3240C-DC, FGT-3600C-DC, FGT-3700D-DC, FGT-3800D-DC, FGT-3810D-DC, FGT-3960E-DC, FGT-3980E-DC, FCR-3810D-DC **FortiCarrier-VM:** FG-VM, FG-VM64, FG-VM64-AWS, FG-VM64-AWS-AWSONDEMAND, FG-VM64-Azure, FG-VM64-GCP, FG-VM64-HV, FG-VM64-KVM, FG-VM64-OPC, FG-VM64-Xen	5.6
FortiCarrier: FGT-3000D, FGT-3100D, FGT-3200D, FGT-3240C, FGT-3600C, FGT-3700D, FGT-3700DX, FGT-3800D, FGT-3810D, FGT-5001C, FGT-5001D, FGT-7030E, FGT-7040E	5.4

Model	Firmware Version
FortiCarrier 6000 Series: FG-6300F, FG-6301F, FG-6500F, FG-6501F **FortiCarrier 7000 Series:** FG-7030E, FG-7040E, FG-7060E **FortiCarrier-DC:** FGT-3000D-DC, FGC-3100D-DC, FGT-3200D-DC, FGT-3240C-DC, FGT-3600C-DC, FGT-3700D-DC, FGT-3800D-DC, FGT-3810D-DC, FCR-3810D-DC **FortiCarrier-VM:** FG-VM, FG-VM64, FG-VM64-AWS, FG-VM64-AWS-AWSONDEMAND, FG-VM64-Azure, FG-VM64-HV, FG-VM64-KVM, FG-VM64-OPC, FG-VM64-Xen	
FortiCarrier: FGT-3000D, FGT-3100D, FGT-3200D, FGT-3240C, FGT-3600C, FGT-3700D, FGT-3700DX, , FGT-3810A, FGT-3810D, FGT-3950B, FGT-3951B, FGT-5100B, FGT-5100C, FGT-5001D, FGT-5101C, FS-5203B, FT-5902D **FortiCarrier-DC:** FGT-3000D-DC, FGT-3100D-DC, FGT-3200D-DC, FGT-3240C-DC, FGT-3600C-DC, FGT-3700D-DC, FGT-3810A-DC, FGT-3810D-DC, FGT-3950B-DC, FGT-3951B-DC **FortiCarrier-VM:** FG-VM, FG-VM64, FG-VM64-AWS, FG-VM64-AWS-AWSONDEMAND, FG-VM64-HV, FG-VM64-KVM, FG-VM64-Xen	5.2

FortiDDoS models

Model	Firmware Version
FortiDDoS: FI-200B, FI400B, FI-600B, FI-800B, FI-900B, FI-1000B, FI-1200B, FI-2000B, FI-3000B	4.2, 4.1, 4.0

FortiAnalyzer models

Model	Firmware Version
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 XenServer and Open Source Xen), FAZ-VM64-KVM, and FAZ-VM64-AWS.	5.4
FortiAnalyzer: FAZ-100C, FAZ-200D, FAZ-300D, FAZ-400C, FAZ-400E, FAZ-1000C, FAZ-1000D, FAZ-1000E, FAZ-2000B, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, FAZ-3900E, FAZ-4000B **FortiAnalyzer VM:** FAZ-VM, FAZ-VM-AWS, FAZ-VM64, FAZ-VM64-Azure, FAZ-VM64-HV, FAZ-VM64-KVM, FAZ-VM64-XEN	5.2

Model	Firmware Version
FortiAnalyzer: FAZ-100C, FAZ-200D, FAZ-300D, FAZ-400B, FAZ-400C, FAZ-400E, FAZ-1000B, FAZ-1000C, FAZ-1000D, FAZ-1000E, FAZ-2000A, FAZ-2000B, FAZ-3000D, FAZ-3000E, FAZ-3000F, FAZ-3500E, FAZ-3500F, FAZ-4000A, FAZ-4000B **FortiAnalyzer VM:** FAZ-VM, FAZ-VM64, FAZ-VM64-AWS, FAZ-VM64-Azure, FAZ-VM64-HV, FAZ-VM-KVM, FAZ-VM-XEN	5.0

FortiMail models

Model	Firmware Version
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	5.4.5
FortiMail: FE-60D, FE-200D, FE-200E, FE-400C, FE-400E, FE-1000D, FE-2000B, FE-2000E, FE-3000C, FE-3000D, FE-3000E, FE-3200E, FE-5002B **FortiMail Low Encryption:** FE-3000C-LENC **FortiMail VM:** FE-VM64, FE-VM64-HV, FE-VM64-XEN	5.3.12
FortiMail: FE-60D, FE-200D, FE-200E, FE-400C, FE-400E, FE-1000D, FE-2000B, FE-3000C, FE-3000D, FE-5002B **FortiMail VM:** FE-VM64, FE-VM64-HV, FE-VM64-XEN	5.2.10
FortiMail: FE-100C, FE-200D, FE-200E, FE-400B, FE-400C, FE-400E, FE-1000D, FE-2000B, FE-3000C, FE-3000D, FE-5001A, FE-5002B **FortiMail VM:** FE-VM64	5.1.7
FortiMail: FE-100C, FE-200D, FE-200E, FE-400B, FE-400C, FE-1000D, FE-2000A, FE-2000B, FE-3000C, FE-3000D, FE-4000A, FE-5001A, FE-5002B **FortiMail VM:** FE-VM64	5.0.10

FortiSandbox models

Model	Firmware Version
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 2.1.3
FortiSandbox: FSA-1000D, FSA-3000D **FortiSandbox VM:** FSA-VM	2.0.3 1.4.2

Model	Firmware Version
FortiSandbox: FSA-1000D, FSA-3000D	1.4.0 and 1.4.1 1.3.0 1.2.0 and later

FortiSwitch ATCA models

Model	Firmware Version
FortiController: FTCL-5103B, FTCL-5903C, FTCL-5913C	5.2.0
FortiSwitch-ATCA: FS-5003A, FS-5003B **FortiController:** FTCL-5103B	5.0.0
FortiSwitch-ATCA: FS-5003A, FS-5003B	4.3.0 4.2.0

FortiSwitch models

Model	Firmware Version
FortiSwitch: FortiSwitch-108D-POE, FortiSwitch-108D-VM, FortiSwitch-108E, FortiSwitch-108E-POE, FortiSwitch-108E-FPOE, FortiSwitchRugged-112D-POE, FortiSwitch-124D, FortiSwitch-124D-POE, FortiSwitchRugged-124D, FortiSwitch-124E, FortiSwitch-124E-POE, FortiSwitch-124E-FPOE, FortiSwitch-224D-POE, FortiSwitch-224D-FPOE, FortiSwitch-224E, FortiSwitch-224E-POE, FortiSwitch-224E-FPOE, FortiSwitch-248D, FortiSwitch-248D-POE, FortiSwitch-248D-FPOE, FortiSwitch-248E-POE, FortiSwitch-248E-FPOE, FortiSwitch-424D, FortiSwitch-424D-POE , FortiSwitch-424D-FPOE, FortiSwitch-448D, FortiSwitch-448D-POE, FortiSwitch-448D-FPOE, FortiSwitch-524D, FortiSwitch-524D-FPOE, FortiSwitch-548D, FortiSwitch-548D-FPOE, FortiSwitch-1024D, FortiSwitch-1048D, FortiSwitch-1048E, FortiSwitch-3032D, FortiSwitch-3632D	N/A There is no fixed supported firmware versions. If FortiGate supports it, FortiManager will support it.

FortiWeb models

Model	Firmware Version
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	5.9.1

Model	Firmware Version
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	
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-400C, FWB-400D, FWB-600D **FortiWeb VM:** FWB-Azure, FWB-Azure-Ondemand, FWB-CMINTF, FWB-HYPERV, FWB-KVM, FWB-KVM-PAYG, FWB-VM, 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-3010E, 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
FortiWeb: 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 **FortiWeb VM:** FWB-VM-64, FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER, FWB-HYPERV, FWB-KVM, FWB-AZURE	5.5.6
FortiWeb: FWB-100D, FWB-400C, FWB-1000C, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-4000C, FWB-4000D, FWB-4000E **FortiWeb VM:** FWB-VM64, FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER, FWB-HYPERV	5.4.1
FortiWeb: FWB-100D, FWB-400B, FWB-400C, FWB-1000B, FWB-1000C, FWB-1000D, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-4000C, FWB-4000D, FWB-4000E **FortiWeb VM:** FWB-VM64, FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER, and FWB-HYPERV	5.3.9
FortiWeb: FWB-100D, FWB-400B, FWB-400C, FWB-1000B, FWB-1000C, FWB-1000D, FWB-3000C, FWB-3000CFSX, FWB-3000D, FWB-3000DFSX, FWB-3000E, FWB-4000C, FWB-4000D, FWB-4000E **FortiWeb VM:** FWB-VM64, FWB-HYPERV,FWB-XENAWS, FWB-XENOPEN, FWB-XENSERVER	5.2.4

FortiCache models

Model	Firmware Version
FortiCache: FCH-400C, FCH-400E, FCH-1000C, FCH-1000D, FCH-3000C, FCH-3000D, FCH-3900E **FortiCache VM:** FCH-VM64	4.0

FortiProxy models

Model	Firmware Version
FortiProxy: FPX-400E, FPX-2000E **FortiProxy VM:** FPX-KVM, FPX-VM64	1.0

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 **FortiAuthenticator VM:** FAC-VM	4.3 and 5.0-5.3
FortiAuthenticator: FAC-200D, FAC-200E, FAC-400C, FAC-400E, FAC-1000C, FAC-1000D, FAC-3000B, FAC-3000D, FAC-3000E **FortiAuthenticator VM:** FAC-VM	4.0-4.2

Compatibility with FortiOS Versions

This section highlights compatibility issues that administrators should be aware of in FortiManager 6.0.4. Compatibility issues have been identified for the following FortiOS releases:

FortiOS 5.6	FortiOS 5.6.4 compatibility issues on page 26
	FortiOS 5.6.3 compatibility issues on page 26
	FortiOS 5.6.0 and 5.6.1 compatibility issues on page 27
FortiOS 5.4	FortiOS 5.4.10 compatibility issues on page 27
	FortiOS 5.4.9 compatibility issues on page 27
FortiOS 5.2	FortiOS 5.2.10 compatibility issues on page 28
	FortiOS 5.2.7 compatibility issues on page 28
	FortiOS 5.2.6 compatibility issues on page 28
	FortiOS 5.2.1 compatibility issues on page 28
	FortiOS 5.2.0 compatibility issues on page 29

FortiOS 5.6.4 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager version 5.6.3 and FortiOS 5.6.4.

Bug ID	Description
486921	FortiManager may not be able to support the syntax for the following objects: • `rsso-endpoint-block-attribute`, `rsso-endpoint-block-attribute`, or `sso-attribute` for RADIUS users. • `sdn` and its `filter` attributes for firewall address objects. • `azure` SDN connector type. • `ca-cert` attribute for LDAP users.

FortiOS 5.6.3 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager version 5.6.1 and FortiOS 5.6.3.

Bug ID	Description
469993	FortiManager has a different default value for switch-controller-dhcp-snooping from that on FortiGate.

FortiOS 5.6.0 and 5.6.1 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager version 5.6.0 and FortiOS 5.6.0 and 5.6.1.

Bug ID	Description
451036	FortiManager may return verification error on `proxy enable` when installing a policy package.
460639	FortiManager may return verification error on `wtp-profile` when creating a new VDOM.

FortiOS 5.4.10 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager version 5.4.5 and FortiOS 5.4.10.

Bug ID	Description
508337	FortiManager cannot edit the following configurations for replacement message: • `system replacemsg mail "email-decompress-limit"` • `system replacemsg mail "smtp-decompress-limit"` • `system replacemsg nntp "email-decompress-limit"`

FortiOS 5.4.9 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager version 5.6.3 and FortiOS 5.4.9.

Bug ID	Description

486592	FortiManager may report verification failure on the following attributes for RADIUS users:
	`rsso-endpoint-attribute`
	`rsso-endpoint-block-attribute`
	`sso-attribute`

FortiOS 5.2.10 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager version 5.4.1 and FortiOS 5.2.10.

Bug ID	Description
397220	FortiOS 5.2.10 increased the maximum number of the firewall schedule objects for 1U and 2U+ appliances. As a result, a retrieve may fail if more than the maximum objects are configured.

FortiOS 5.2.7 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager version 5.2.6 and FortiOS 5.2.7.

Bug ID	Description
365757	Retrieve may fail on LDAP User Group if object filter has more than 511 characters.
365766	Retrieve may fail when there are more than 50 portals within a VDOM.
365782	Install may fail on system global optimize or system fips-cc entropy-token.

FortiOS 5.2.6 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager version 5.2.4 and FortiOS 5.2.6.

Bug ID	Description
308294	1) New default wtp-profile settings on FOS 5.2.6 cause verification errors during installation. 2) FortiManager only supports 10,000 firewall addresses while FortiOS 5.2.6 supports 20,000 firewall addresses.

FortiOS 5.2.1 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager version 5.2.1 and FortiOS version 5.2.1.

Bug ID	Description
262584	When creating a VDOM for the first time it fails.
263896	If it contains the certificate: `Fortinet_CA_SSLProxy` or `Fortinet_SSLProxy`, `retrieve` may not work as expected.

FortiOS 5.2.0 compatibility issues

The following table lists known interoperability issues that have been identified with FortiManager version 5.2.1 and FortiOS version 5.2.0.

Bug ID	Description
262584	When creating a VDOM for the first time it fails.
263949	Installing a VIP with port forwarding and ICMP to a 5.2.0 FortiGate fails.

Resolved Issues

The following issues have been fixed in 6.0.4. For inquires about a particular bug, please contact Customer Service & Support.

Bug ID	Description
356454	The Central SSL-VPN or SSL-VPN query unexpectedly shows users from all VDOMs that are managed in another ADOM.
411314	The "diagnose cdb check adom-integrity" command cannot recover ADOM with address name that has a leading or trailing space.
417358	Search result is lost after editing an object.
434611	Policy check should detect policies with "none" objects and report them as a specific category under Policy Consistency Check.
478257	VPN Manager should filter out invalid interfaces for the default VPN interface.
485541	Cannot save changes made in interface type Hardware Switch or Software Switch settings.
486445	Scheduled TCL scripts fail when executed against a single device, multiple devices, or a Device Group.
496827	Unable to delete the LDAP server, if the user group is deleted before removing the LDAP members.
497179	The Monitor in the VPN Manager does not respect the units when sorting by incoming or outgoing data.
500069	DOS Policy Anomaly configuration settings are missing the Quarantine, Quarantine-Expiry, and Quarantine-Log options.
500410	FortiManager GUI should allow configuring Phase 2 Selector Local and Destination addresses with an IPv6 type with subnet, range, IP, or name.
500991	There should be a clear error message on why the policy package install failed after reclaimed tunnel.
501202	AP Manager Wi-Fi profiles missing LAN ports configuration settings on FortiManager GUI.
503915	Users may not be able to change device password via JSON APIs.
504302	The "IPv4 Split include" option for IPSec should be available under the Range assignment mode.
506163	Device Manager GUI no longer displays interface zone members following upgrade.
506697	Under HA's Port monitor, we should be able to see all port-monitored interfaces, such as aggregated, loop-back, or VLAN interface.
507107	FortiManager should not unset the "switch-controller-igmp-snooping" and "switch-controller-dhcp-snooping" settings.

Bug ID	Description
510665	After an interface is created, the config status is not updated.
511256	Policy Package status should show as modified after making changes in web filter profile.
511580	After upgrade, install may fail on web filtering profile.
513675	Policy push should not be allowed if another user has the device locked.
513763	User should be allowed to change country code in existing or cloned AP profile settings.
513799	FortiManager should only display detected rogue APs that are online.
515541	FortiManager is not updating the password of FortiGates under managed FortiAnalyzer.
516158	FortiManager should not add domain-filter syntax during ADOM upgrade.
516621	When a new profile with password/secret field, such as TACACS, Radius, etc., is created, FortiManager populates secret values with a dummy value that is longer than the allowed maximum length.
517060	User should able to change the action for multiple signatures at once.
517232	Invalid Source/Destination "Negate Cell" option for certain policy types and missing "Negate Cell" for IPv4 policy source address.
517618	Users should be able to use "Header" type Explicit Policy address as Source Address in Explicit Proxy policies.
517768	FortiManager should allow users to create routes with interface that is dedicated to management.
517874	FortiManager should be able to use 'US only' FortiGaurd servers with any license configuration.
518148	The System replacement messages for "Manage Images" should not be grayed out.
518680	IP Pool not imported due to an error while creating mapping failed due to "arp-intf" which is a member of a zone setting in IP pool.
518708	When viewing the devices in Device Manager, the list automatically scrolls back to the top for every heartbeat interval.
518756	When "vdom-netflow" is disabled, FortiManager should not push any collector-ip and source-ip settings to FortiGate.
518949	When exporting a Policy Package using CSV, it does not include Footer policies.
518984	Cluster members should show consistent results in dashboard and device settings.
519108	Scheduled Remote CLI Scripts are struck at 1%.
519229	When using workspace mode, modification to device group is not recognized as a change.
519252	After FortiManager was upgraded, cloning a policy package changes the package inspection mode.
519297	When FortiManager manages FortiGate v5.6 or earlier devices, FortiManager should not support fsso-type group for switch-controller security-policy.
519487	FortiGate fails to receive FortiGuard updates from FortiManager when ssl-static-key-ciphers is

Bug ID	Description
	disabled.
520092	FortiManager should not update any dynamic attributes for SCEP generated objects.
520108	Policy Package Import stuck at 5% and security console demon crashes.
520123	0255: After installing to 500 devices, multiple devices are out of sync when auto-update disabled.
520548	It should be possible to close the pop up window and see current number of successful tasks for the policy assignment of a global package.
520899	When opening an edit dialog in firewall address group per-device mapping, members multiple-select is not pre-populated with entries.
520976	Revision diff always shows changes with policy package settings.
521117	FortiManager should not check for empty service when internet-service is disabled, which may cause copy to fail.
521379	FortiManager may disable the reliable option for FortiAnalyzer log settings.
521673	FortiManager does not trigger policy package status to shown as modified when LDAP configuration is changed.
522025	Under Policy & Objects, the frame column width is reset to default when user refreshes or re-enters the same object list.
522310	Unable to edit Global ADOM DB to change global version from GUI (which will reset Global config). As a workaround, use CLI "exec reset adom-settings Global" or upgrade global version.
522440	FortiManager should support the IPS signature syntax,"--icmp.type !=".
522713	ADOM upgrade stuck at 5%.
522720	After upgrade from 6.0.2 to 6.0.3, unexpected changes in guest group users appear.
522779	Secured backups fail due to issue with the SSH certificate.
523639	VPN Manager Monitor page stuck loading when an external gateway is defined.
523878	FortiManager should not install the CLIs, "system csf {upstream-ip upstream-port group-name group-password}", which are read-only attributes on FGT-6000F.
524202	Upgrading Global Database removes all ADOMs from policy package Assignment section.
524572	0270: Unable to edit hardware switch interface on FortiManager 6.0.3.
524752	IPS custom signature using protocol type icmp is valid in FortiOS syntax and therefore should be able to import into FortiManager.
526932	B255/B8054 : Can't save changes made in interface type hardware switch settings.
526934	Web UI should not enable HTTP access under Interface Settings when a user views interface settings.
526938	Searching an IP address in interface list should show the interface and the zone in which the interface is a member of.

Known Issues

The following issues have been identified in 6.0.4. For inquires about a particular bug or to report a bug, please contact Customer Service & Support.

Bug ID	Description
462710	FortiManager cannot detect unauthorized FortiAP units that have been automatically added to managed FortiGate units. As a workaround, perform a manually retrieve operation on the managed FortiGate.
529343	FortiManager installation always fails on 6.0.x FGT-VMX.
530493	System Information widget on the slave FortiManager is showing both nodes as master.
530717	When adding an address via the right-click menu on the policy page, the page is stuck at the loading status.
530735	FortiManager may not be able to configure full mesh VPN among FortiGate devices with multiple VDOMS, and each VDOM containing an interface within it.
530792	When creating a Virtual Server, users cannot configure multiple Real Servers or set Real Server Mode for per-device mapping.
530837	User should not be allowed to delete default Meta fields.
531338	Unused object window size should be customizable and Column size under unused objects should stay to the set value.
531963	SSH Profile should not be allowed to enable "Allow Invalid SSL Certificates" when Inspection mode is "SSL Certificate Inspection"
531968	There should be an option to define the domain name for DHCP Server while configuring the VLANs' per device mappings with FortiSwitch.
532075	When editing comment/description, FortiManager may display the slash character, "/", as "&#x2F".
533908	When promoting at the same time multiple FortiGates that have VDOMs, FortiManager Device Manager might fail to show the FortiGate VDOM name. As a workaround, delete and re-add the FortiGate.

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	Version	Antivirus	WebFilter	Vulnerability Scan	Software
FortiClient (Windows)	• 6.0.0 and later	✓	✓	✓	✓
FortiClient (Windows)	• 5.6.0 and later • 5.4.0 and later	✓		✓	
FortiClient (Mac OS X)	• 6.0.0 and later • 5.6.0 and later • 5.4.0 and later	✓		✓	
FortiMail	• 5.4.5 • 5.4.2 • 4.3.7 • 4.2.9 • 5.1.6	✓			
FortiSandbox	• 2.5.0, 2.5.1 • 2.4.0, 2.4.1 • 2.3.2 • 2.2.1 • 2.1.2 • 1.4.0 and later • 1.3.0 • 1.2.0, 1.2.3	✓			
FortiWeb	• 5.9.0	✓			

Platform	Version	Antivirus	WebFilter	Vulnerability Scan	Software
	• 5.8.6 • 5.6.0 • 5.5.4 • 5.4.1 • 5.3.8 • 5.2.4 • 5.1.4 • 5.0.6				

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
```

Change Log

Date	Change Description
2019-01-10	Initial release of 6.0.4.
2019-01-11	520899 and 520108 added to *Resolved Issues*. Updated *Special Notices* and *Product Integration*.
2019-02-06	Clarified description of 530735, added 522720 to *Resolved Issues*, and updated FortiAuthenticator support in *Feature Support* table.
2019-02-11	Added 533908 and 462710 to *Known Issues*.
2019-02-20	Modified 529343 in *Known Issues*.
2019-03-04	Added 520123, 524572, 526932 to *Resolved Issues*.
2019-03-18	Updated *Product Integration and Support* > *Supported Models* > *FortiGate models* for 5.6 and 5.4 to add FortiGate 6000 Series, FortiGate 7000 Series, FG-7060E-8-DC, FortiCarrier 6000 Series, FortiCarrier 7000 Series, and FCR-7060E-8-DC.
2019-05-10	Added FortiClient 6.0.0 and later to *Product Integration and Support* > *FortiManager Support*.
2019-05-21	Added FMG-1000F to *Supported Models*.
2019-09-17	Added a special notice.