FortiManager - Release Notes

Version 6.4.1

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://www.fortiguard.com

END USER LICENSE AGREEMENT
https://www.fortinet.com/doc/legal/EULA.pdf

FEEDBACK
Email: techdoc@fortinet.com

May 7, 2021
FortiManager 6.4.1 Release Notes
02-641-636603-20210507

TABLE OF CONTENTS

Change Log

Date	Change Description
2020-06-15	Initial release.
2020-05-16	Added 642348 to Known Issues on page 33.
2020-07-02	Added 645929 to Known Issues on page 33.
2020-07-13	Added 636012 to Known Issues on page 33.
2020-07-23	Updated FortiGate special branch models on page 20 and FortiGate models on page 18.
2020-08027	Updated Known Issues on page 33.
2020-09-16	Updated FortiOS/FortiOS Carrier on page 14.
2021-02-18	Updated Supported models on page 6.
2021-02-22	Updated Virtualization on page 16.
2021-03-04	Added Management extension applications on page 6.
2021-04-12	Added FortiManager VM subscription license on page 6.
2021-05-07	Updated Downgrading to previous firmware versions on page 10.

FortiManager 6.4.1 Release

This document provides information about FortiManager version 6.4.1 build 2072.

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

FortiManager version 6.4.1 supports the following models:

FortiManager	FMG-200F, FMG-300E, FMG-300F, FMG-400E, FMG-1000F, FMG-2000E, FMG-3000F, FMG-3700F, FMG-3900E, and FMG-4000E.
FortiManager VM	FMG-VM64, FMG-VM64-Ali, FMG-VM64-AWS, FMG-VM64-AWSOnDemand, 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 10.

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 FortiManager 6.4.1.

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, FMG-3900E, and FMG-4000E.
FortiManager VM	FMG-VM64, FMG-VM64-Ali, FMG-VM64-AWS, FMG-VM64-AWSOnDemand, 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

Some management extension applications supported by FortiManager 6.4.1 have minimum system requirements. See the following table:

Management Extension Application	Minimum system requirement
SD-WAN Orchestrator	SD-WAN Orchestrator MEA requires 8 GB of RAM.
Wireless Manager (WLM)	A minimum of 4 CPU cores and 8 GB RAM is typically required. Depending on the number of running applications, the allocated resources should be increased.

Special Notices

This section highlights some of the operational changes that administrators should be aware of in 6.4.1.

Support for FortiOS 6.4 SD-WAN Zones

In 6.4 ADOMs, SD-WAN member interfaces are grouped into SD-WAN zones. These zones can be imported as normalized interfaces and used in firewall policies.

FortiGuard Rating Services with FortiGate 6.4.1 or Later

FortiManager 6.4.1 or later is the supported version to provide FortiGuard rating services to FortiGate 6.4.1 or later.

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
end
```

Upgrade Information

You can upgrade FortiManager 6.2.0 or later directly to 6.4.1.

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

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. In addition the local password is erased.

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.

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 6.4.1 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 6.4.1 support

This section identifies FortiManager 6.4.1 product integration and support information:

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 6.4.1 product integration and support for web browsers:

- Microsoft Edge 80 (80.0.361 or later)
- Mozilla Firefox version 74
- Google Chrome version 80

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

FortiOS/FortiOS Carrier

This section lists FortiManager 6.4.1 product integration and support for FortiOS/FortiOS Carrier:

- 6.4.0 to 6.4.1
- 6.2.0 to 6.2.4
- 6.0.0 to 6.0.9

FortiAnalyzer

This section lists FortiManager 6.4.1 product integration and support for FortiAnalyzer:

- 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 6.4.1 product integration and support for FortiAuthenticator:

- 6.0.0 and later
- 5.0 to 5.5
- 4.3 and later

FortiCache

This section lists FortiManager 6.4.1 product integration and support for FortiCache:

- 4.2.9
- 4.1.6
- 4.0.4

FortiClient

This section lists FortiManager 6.4.1 product integration and support for FortiClient:

- 6.2.7
- 5.6.6
- 5.4.0 and later

FortiMail

This section lists FortiManager 6.4.1 product integration and support for FortiMail:

- 6.0.9
- 5.4.11
- 5.3.13

FortiSandbox

This section lists FortiManager 6.4.1 product integration and support for FortiSandbox:

- 3.1.2
- 3.0.6
- 2.5.2
- 2.4.1
- 2.3.3
- 2.2.2

FortiSwitch ATCA

This section lists FortiManager 6.4.1 product integration and support for FortiSwitch ATCA:

- 5.2.3
- 5.0.0 and later

FortiWeb

This section lists FortiManager 6.4.1 product integration and support for FortiWeb:

- 6.3.2
- 6.2.3
- 6.1.2
- 6.1.7
- 5.9.1
- 5.8.6
- 5.7.2
- 5.6.1
- 5.5.6
- 5.4.1

FortiDDoS

This section lists FortiManager 6.4.1 product integration and support for FortiDDoS:

- 5.3.0
- 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 16.

Virtualization

This section lists FortiManager 6.4.1 product integration and support for 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
- Nutanix AHV (AOS 5.10.5)
- OpenSource XenServer 4.2.5
- VMware ESXi versions 5.0, 5.5, 6.0, 6.5 and 6.7

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		✓	✓	✓

Platform	Management Features	FortiGuard Update Services	Reports	Logging
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	✓	✓
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 6.4.1.

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

Model	Firmware Version
FortiGate:FortiGate-60E, FortiGate-60E-DSL, FortiGate-60E-DSLJ, FortiGate-60E-POE, FortiGate-61E, FortiGate-80E, FortiGate-80E-POE, FortiGate-81E, FortiGate-81E-POE, FortiGate-90E, FortiGate-91E, FortiGate-100D, FortiGate-100E, FortiGate-100EF, FortiGate-101E, FortiGate-101F, FortiGate-140E, FortiGate-140E-POE, FortiGate-200E, FortiGate-201E, FortiGate-300D, FortiGate-300E, FortiGate-301E, FortiGate-400D, FortiGate-500D,FortiGate-500E, FortiGate-501E, FortiGate-600D, FortiGate-600E, FortiGate-601E, FortiGate-800D, FortiGate-900D,FortiGate-1000D, FortiGate-1100E, FortiGate-1101E, FortiGate-1200D, FortiGate-1500D, FortiGate-1500DT,FortiGate-2000E, FortiGate-2500E, FortiGate-3000D, FortiGate-3100D, FortiGate-3200D, FortiGate-3301E, FortiGate-3400E,FortiGate-3401E, FortiGate-3600E, FortiGate-3601E, FortiGate-3700D, FortiGate-3800D, FortiGate-3810D,FortiGate-3815D, FortiGate-3960E, 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-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 **FortiGate Hardware Low Encryption:** FortiGate-100D-LENC **FortiWiFi:** FortiWiFi-60E, FortiWiFi-60E-DSL, FortiWiFi-60E-DSLJ, FortiWiFi-61E **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 **FortiOS:** FortiOS-VM64, FortiOS-VM64-HV, FortiOS-VM64-KVM, FortiOS-VM64-Xen	6.4

Model	Firmware Version
FortiGate: FortiGate-30E, FortiGate-30E-3G4G-INTL, FortiGate-30E-3G4G-NAM, FortiGate-50E, FortiGate-51E, FortiGate-52E, FortiGate-60E, FG-60E-DSL, FortiGate-60E-POE, FortiGate-61E, 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-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-1500DT, FortiGate-2000E, FortiGate-2500E, FortiGate-3000D, FortiGate-3100D, FortiGate-3200D, FortiGate-3700D, FortiGate-3800D, FortiGate-3301E, FortiGate-3810D, FortiGate-3815D, FortiGate-3960E, FortiGate-3980E **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-3100D-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 **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 **FortiOS:** FortiOS-VM64, FortiOS-VM64-HV, FortiOS-VM64-KVM, FortiOS-VM64-Xen	6.2
FortiGate: FG-30D, FG-30D-POE, FG-30E, FG-30E-3G4G-GBL, 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-DSLJ, FG-60E-POE, FG-60F, FG-61F, 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, FG-200D, 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, FortiGate-3301E, FG-3000D, FG-3100D, FG-3200D, FG-3600C, FG-3700D, FG-3800D, FG-3810D, FG-3815D, FG-3960E, FG-3980E **FortiGate 5000 Series:** FG-5001D, FG-5001E, FG-5001E1 **FortiGate DC:** FG-401E-DC, FG1500D-DC, FG-3000D-DC, FG-3100D-DC, FG-3200D-DC, FG-3600E-DC, FG-3700D-DC, FG-3800D-DC, FG-3810D-DC, FG-3815D-DC **FortiGate Hardware Low Encryption:** FG-100D-LENC, FG-600C-LENC	6.0

Model	Firmware Version
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	

FortiGate special branch models

Model	Firmware Version
FortiGate: FortiGate-40F, FortiGate-40F-3G4G, FortiGate-100F, FortiGate-101F, FortiGate-2200E, FortiGate-2201E, FortiGate-3300E **FortiWiFi**: FortiWiFi-40F, FortiWiFi-40F-3G4G	6.4
FortiGate: FortiGate-30E-3G4G-GBL, FortiGate-40F, FortiGate-40F-3G4G, FortiGate-60E-DSL, FortiGate-60E-DSLJ, FortiGate-60F, FortiGate-61F, FortiGate-100F, FortiGate-101F,FortiGate-1100E, FortiGate-1101E **FortiGate 6000 Series:** FortiGate-6000F **FortiGate 7000 Series:** FortiGate-7000E **FortiGate Rugged:** FortiGateRugged-90D **FortiWiFi:** FortiWiFi-40F, FortiWiFi-40F-3G4G, FortiWifi-60E-DSL, FortiWiFi-60E-DSLJ, FortiWiFi-60F, FortiWiFi-61F	6.2
FortiGate: FortiGate-30E-3G4G-GBL, FortiGate-40F, FortiGate-40F-3G4G, FortiGate-60E-DSL, FortiGate-60E-DSLJ, FortiGate-60F, FortiGate-61F, FortiGate-100F, FortiGate-101F, FortiGate-400E, FortiGate-401E, FortiGate-600E, FortiGate-601E, FortiGate-1100E, FortiGate-1101E, FortiGate-2200E, FortiGate-2201E, FortiGate-3300E, FortiGate-3400E, FortiGate-3401E, FortiGate-3600E, FortiGate-3601E **FortiGate 6000 Series:** FortiGate-6000F, FortiGate-6300F, FortiGate-6301F, FortiGate-6500F, FortiGate-6501F **FortiGate 7000 Series:** FortiGate-7000E, FortiGate-7030E, FortiGate-7040E, FortiGate-7060E, FortiGate-7060E-8-DC **FortiGate DC:** FortiGate-1100E-DC, FortiGate-3400E-DC, FortiGate-3401E-DC **FortiGate VM:** FortiGate-VM64-RAXONDEMAND **FortiWiFi:** FortiWiFi-40F, FortiWiFi-40F-3G4G, FortiWiFi-60F, FortiWiFi-61F	6.0

FortiCarrier models

Model	Firmware Version
FortiCarrier: FortiCarrier-3000D, FortiCarrier-3100D, FortiCarrier-3200D, FortiCarrier-3400E, FortiCarrier-3600E, FortiCarrier-3601E, FortiCarrier-3700D, FortiCarrier-3800D, FortiCarrier-3810D, FortiCarrier-3815D, FortiCarrier-3960E, FortiCarrier-3980E, FortiCarrier-5001D, FortiCarrier-5001E, FortiCarrier-5001E1 **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, FortiCarrier-3980E-DC **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	6.4
FortiCarrier: FortiCarrier-3000D, FortiCarrier-3100D, FortiCarrier-3200D, FortiCarrier-3700D, FortiCarrier-3800D, FortiCarrier-3810D, FortiCarrier-3815D, FortiCarrier-3960E, FortiCarrier-5001D, FortiCarrier-5001E, FortiCarrier-5001E1 **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 **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	6.2
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

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
FortiDDoS: 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
FortiDDoS: FI-200B, FI400B, FI-600B, FI-800B, FI-900B, FI-1000B, FI-1200B, FI-2000B, FI-3000B	4.0, 4.1, 4.2, 4.3, 4.4, 4.5, 4.7

FortiAnalyzer models

Model	Firmware Version
FortiAnalyzer: FortiAnalyzer-200F, FortiAnalyzer-300F, FortiAnalyzer-400E, FortiAnalyzer-800F, FortiAnalyzer-1000E, FortiAnalyzer-1000F, FortiAnalyzer-2000E, FortiAnalyzer-3000E, FortiAnalyzer-3000F, FortiAnalyzer-3500E, FortiAnalyzer-3500F, FortiAnalyzer-3500G, FortiAnalyzer-3700F, FortiAnalyzer-3900E **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	6.4
FortiAnalyzer: FAZ-200F, FAZ-300F, FAZ-400E, FAZ-800F, FAZ-1000E, FAZ-2000E, FAZ-3000E, FAZ-3000F, 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 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
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	5.0

Model	Firmware Version
FortiAnalyzer VM: FAZ-VM, FAZ-VM64, FAZ-VM64-AWS, FAZ-VM64-Azure, FAZ-VM64-HV, FAZ-VM-KVM, FAZ-VM-XEN	

FortiMail models

Model	Firmware Version
FortiMail: 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
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
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
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
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

FortiSandbox models

Model	Firmware Version
FortiSandbox: FSA-500F, FSA-1000D, FSA-1000F, FSA-2000E, FSA-3000D, FSA-3000E, FSA-3500D **FortiSandbox-VM:** FSA-AWS, FSA-VM	3.1
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	2.4.1

Model	Firmware Version
FortiSandbox VM: FSA-VM	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
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-5902D, FTCL-5903C, FTCL-5913C	5.2.0
FortiSwitch-ATCA: FS-5003A, FS-5003B **FortiController:** FTCL-5103B, FTCL-5903C, FTCL-5913C	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: 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-4000C, FortiWeb-4000D, FortiWeb-4000E **FortiWeb VM:** FortiWeb-Azure, FortiWeb-Azure_OnDemand, FortiWeb-GCP, FortiWeb-GCP_OnDemand, FortiWeb-HyperV, FortiWeb-VM, FortiWeb-XENOpenSource, FortiWeb-XENServer	6.2, 6.3
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-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

Model	Firmware Version
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-3000E, FCH-3900E **FortiCache VM:** FCH-VM64, FCH-KVM	4.0, 4.1, 4.2

FortiProxy models

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

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, 5.0-5.5, 6.0
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

Resolved Issues

The following issues have been fixed in 6.4.1. For inquires about a particular bug, please contact Customer Service & Support.

AP Manager

Bug ID	Description
555159	After deleting an SSID from Device Manager, AP Manager still shows the SSID.
620117	AP Manager needs to support of FortiAP-U431F and FortiAP-U433F.
629182	Verification may fail with wtp-profile for FAPU431F-default or FAPU433F-default with radio 3 mode set as ap.

Device Manager

Bug ID	Description
525051	Automation stitch cannot add FortiGates to automation.
543824	User with restricted permissions may be able to access global settings.
544982	Policy Package Status may become out-of-sync for all devices when adding one device to *Install On*.
589453	Application group of type category should not be used for SD-WAN rules.
601692	FortiManager is unable to overwrite IPv6 default route.
603286	Device Manager's dashboard *System Time* and *HA Mode* buttons do not work.
610071	When creating a new interface based VPN phase1, FortiManager should not allow duplicated names.
610585	Device Manager cannot save DHCP for Unknown MAC address with action set to block.
610937	In non-root management VDOM, FortiManager prompts no permission error when accessing device interface.
611315	SD-WAN should be allowed to configure port for HTTP health-check server.
613426	VDOMs may show up twice in Device Manager.
613762	Connecting to CLI via SSH may not work when FortiGate is behind NAT.

Bug ID	Description
615092	FortiManager should allow using FQDN for FortiAnalyzer logging.
616264	IPv6 extra-address may not convert properly.
616537	FortiGate and FortiManager GUI should use similar terminology for configuring weight and volume-ratio in SD-WAN.
620029	Deleting a VDOM may prompt "Internal Error".
622353	Cloning VPN Phase1-Interface does not clone Phase1 proposals.
625691	FortiManager does not allow DHCP lease time to be disabled.
626152	Adding FortiGate-100E may fail at "user group.guest".
627351	System Templates are unable to apply or import certificate in syslog settings for v6.0 ADOMs.
624596	Device Manager's Connect to CLI function with SSH may prompt an error message.
625831	Deleting a device from Device Manager may take a long time and FortiManager becomes very slow.
631576	Device list may be empty under device group when trying to edit it.
638351	FortiManager is unable to set FAZ IP override setting as global setting.

FortiSwitch Manager

Bug ID	Description
624143	FortiSwitch Manager may not install VLAN to FortiGate.

Others

Bug ID	Description
622411	Valid zone and interface mappings are deleted after running the *diag cdb check policy-packages* command.
623147	FortiManager may never form a HA due to variance in certificates.
629332	`Securityconsole` may crash when copying policy package.
635616	The ADOM integrity check may fail with SD-WAN dynamic interface members.

Policy and Objects

Bug ID	Description
553462	FortiManager may prompt error, when Zone member VLAN is used by another zone, when installing policy package.
577201	Next button should be inactive until zone validation is fixed in the case of *Re-Install Policy*.
577816	Policy-based rule shows NAT status as disabled or empty.
577818	When a policy package in an ADOM v6.0 is enabled with policy-based mode, the rules do not show the application column.
580166	Bulk installation gets stuck with fake policy package.
581588	Central SNAT policy does not support showing IPv6 address on table.
582255	FortiManager is unable to lock ADOM if another admin is installing a policy to same FortiGate in a different ADOM.
596533	Renaming policy package changes the implicit policy's "Log Violation Traffic" setting to "No Log".
599780	If one or more devices has a policy validation error, FortiManager does not show other devices that are "ready to install".
601320	FortiManager should be able to display IPv4 policies in *Interface Pair View* mode.
607281	*pxgrid* connector on FortiManager may not work with Cisco ISE version 2.7.
609300	FortiManager may not be able to import all Cisco ACI Fabric Connector address.
612445	Policy package for v5.6 cannot be installed on v6.0 devices if default deep SSL inspection is used.
613840	Process bar does not show correct status when an address fails to import for fabric connector.
614710	Result of search in device interface should display zone that the interface is a member of.
618711	Install to FortiGate may fails for dhcp-relay-agent-option.
622129	FortiManager may return validation error when creating a policy within a profile based policy package.
623104	FortiManager may not be able to promote the Web Filter object from any ADOM to Global ADOM.
624561	Changing an Accept policy with proxy-based inspection mode to Deny may lead to installation failure.
624586	FortiManager may try to unset "server-identity-check " while pushing a new LDAP server.
628830	FortiManager should be able to select a device to install after adding a group object member to a nested group.
629412	ADOM v6.0 ssl-ssh-profile with deep inspection disabled is changed with deep inspection when installing to a FortiGate v6.2 device.

Bug ID	Description
620890	Unlock and discard changes on policy package may create duplicate section titles.
625665	Policy package installation may fail due to certificates errors after creating a new VDOM.
627796	FortiManager may prompt copy failure on webfilter ftgd-local-rating.
628326	FortiManager may delete reserved address on FortiGate AWS causing installation failure.
629961	When installing to a FortiGate 6.0 device, ssl-ssh-profile status is changed to deep inspection after policy package install.
631138	Copy may fail due to missing SDN connector configuration.
631405	FortiManager should check for 'mgmt' interface configuration for 'dedicated to mgmt' setting before allow using the interface on a policy.
632545	Installing policy package may result in an error: "Could not read zone validation results".
633248	Web proxy profile is not being installed on FortiGate when the proxy type is "Transparent-web".
633870	Installing geneve configuration may fail at verification stage.
634597	FortiManager may unset speed on ports which are configured with 10000full.
636732	Copying policy causes interface binding contradiction for object member.

Revision History

Bug ID	Description
604680	FortiManager sets FSSO to disable even though FSSO group is in use.
604738	Verification fails for replacemsg "auth-authorization-fail" after upgraded FortiManager and installed to FortiGate with system template assigned.
608051	Policy package install time increases when using policy package diff option.
624583	When pushing a new configuration, FortiManager may try to change the Kerberos keytab on the FortiGate causing install failure.

Services

Bug ID	Description
591519	FortiManager adds upgrade support for FortiAP-231E.
633485	FortiManager as a FortiGuard server for FortiClient web filtering queries may not be available.

Bug ID	Description
633534	Validation license process is not working for model device preventing firmware upgrade upon discovery.

System Settings

Bug ID	Description
557949	Changing password should be enabled by default for all admin users.
579563	*Workflow Session List* menu seems to always match the first wildcard TACACS admin.
623149	The list to select device is not consistent with All except ADOMs list restriction.
626773	FortiManager cannot perform system backup when SD-WAN Orchestrator is enabled.

VPN Manager

Bug ID	Description
621209	VPN monitor should show the corresponding VPN community tunnels only under each community.

Known Issues

The following issues have been identified in 6.4.1. For inquires about a particular bug or to report a bug, please contact Customer Service & Support.

AP Manager

Bug ID	Description
607107	FortiManager prompts installation errors when certain channels are selected for Radio 2 in 5 GHZ band of FAP-421E.

Device Manager

Bug ID	Description
547768	FortiManager should allow easier management of the compliance exempt lists.
552492	VAP is always loading under CLI configuration.
558176	Interface-subnet type addresses' interface are re-set to zone after imported leading to copy fail during install.
593364	FortiManager does not install md5 key for OSPF interface configured from Device Manager.
595058	When customer sets "Scheduled Updates" configuration to "1 hour" in FortiGuard on Device Manager, FortiManager installation preview is configured as "set time 1:60".
598916	When creating user groups via *CLI Only Objects*, comma separated values are treated as a string instead of a list.
599819	Changing static route from subnet to named address does not push the change to FortiGate.
610568	FortiManager may not follow the order in CLI Script template.
619106	When importing a policy, the conflict page may truncate outputs.
627749	Admin user with device-config set as read in admin profile cannot download configuration revision.
634206	SD-WAN Monitoring Table view is broken if a spoke is down.
637630	FortiManager is not showing interface status in Device Manager interface page.
640907	FortiManager is unable to configure FortiSwitch port mirroring.

Bug ID	Description
642348	Device Manager package diff may not work. User may need to perform the package diff from the package install wizard first and go back to Device Manger and perform the diff again.
642512	FortiManager may prompt the "following Member is in use" error when editing a SD-WAN interface member.
642817	Importing interface may report an error when trying to map an interface to a normalized interface with a different name.
642831	SD-WAN may not list VLAN SD-WAN interface members when creating a VPN.
645929	During installation, FortiManager tries to delete internet-service-name, but cannot (static entry). Service name mismatch. Same ISDB ver.

Global ADOM

Bug ID	Description
632400	When installing global policy, FortiManager may delete policy routes and settings on an ADOM.

Others

Bug ID	Description
626338	The `exec fmpolicy` CLI command may not print out policy package correctly.
632822	The merged_daemons process goes to 100% usage and prevents radius authentication.
642580	FortiManager may not be able to edit any existing SD-WAN entry after upgrade to 6.4.1.
647337	FortiManager fails to retrieve FSSO user groups via FortiGate.

Policy & Objects

Bug ID	Description
523350	FortiManager does not show the default certificate under *SSL/SSH Inspection* within policy.
545759	*From* or *To* column filter displays unmapped interfaces in the drop-down list.
547052	FortiManager GUI should not allow creating Security Profiles without any SSL/SSH Inspection Profile defined.

Bug ID	Description
578501	FortiManager should show global icon for global objects assigned to ADOMs.
586026	FortiManager should display zone icon based on existing and non existing dynamic mappings.
612317	FortiManager shows incorrect country code for Cyprus under User definition.
617031	Right-clicking on *IPv4/Proxy Policy* or *Installation Targets* should not reload the page if the related information is already displayed.
618321	FortiManager is unable to create RSSO Group if Agent is configured with custom name.
618499	Right-click to edit zone incorrectly prompts dynamic interface window.
620092	Interface Pair View is not working for Security Policies.
623100	FortiManager is constantly changing UUID for firewall address object.
628389	When workspace is enabled, Policy Package Status may change to "Modified" but there is nothing to be installed.
630055	Some custom application signatures have id 0 in application list.
630431	Some application and filter overrides are not displayed on GUI.
631158	FortiManager is unable to import firewall objects of fsso fortiems-cloud user due to Server cannot be empty.
632715	In DoS policy, changing quarantine from attacker to none keeps quarantine-expiry set incorrectly.
633431	Changing to Classical Dual Pane disables Policy Hit Count.
634241	VIP created using CLI script is not available to use in policy.
635966	Azure SDN connector only fetches the first page of results.
636010	FortiManager cannot push custom application signatures from different policy packages to the same FortiGate.
636133	When is bfd disabled, FortiManager should exclude "bfd-desired-min-tx" and "bfd-required-min-rx" from installation.
639753	After a FortiToken is activated on the FortiGate, the next policy install from FortiManager would unset "reg-id" and "os-ver" on the token.
640157	Verification may fail due to wrong default setting of 'log.memory.global-setting' > 'set max-size'.
640662	Policy page shows a blank entry for the Users column when device group is selected.
642807	Find and Replace may not work.
636012	Build 1307: FortiManager reports a conflict for the default SSH CA certificate when importing a policy from a new FortiGate.

Revision History

Bug ID	Description
594933	Re-installing Policy Package cannot skip to install policy Package, which fails validation.
597650	FortiManager cannot install allowed DNS and URL threat feed configuration.
604927	FortiManager can create custom device without category which may lead to failed installation.

Script

Bug ID	Description
630016	FortiGate users can see scripts from all ADOMs.
632014	When editing CLI script group, user cannot see full CLI script name.
634242	After applying profile-type group on a firewall policy via a script, proxy and SSL profiles should be removed from the corresponding firewall policy.

Services

Bug ID	Description
437935	FAD-VM license may not be validated on FortiManager.
541192	FortiManager should keep firmware image files when the files are for different FortiExtender devices.

System Settings

Bug ID	Description
556334	Standard ADOM users should be able to assign system templates to FortiGate devices.
586626	Users should be able to identify who locked their assigned ADOM.
611215	SNMP Hosts in SNMP Community are not displayed in the GUI if ADOM is unlocked.
628006	Even though a user has 'Manage Device Configurations' R/W privileges, the user appears to have partial permissions within Device Manager.
630000	SNMP trap is not sent immediately when connecting or disconnecting FortiManager cable.

Bug ID	Description
631733	Changing "trusted IP" can be saved and installed.
641018	Upgrading Global ADOM may fail due to Fortinet_NSX local certificate.

VPN Manager

Bug ID	Description
596953	*VPN manager* > *monitor* > Select a specific community from the tree menu to show only that community's tunnels, the monitor page displays a white screen.

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)	✓	✓	✓	✓
FortiClient (Mac OS X)	✓		✓	
FortiMail	✓			
FortiSandbox	✓			
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
```