FortiManager - Release Notes

Version 6.2.1

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FortiManager 6.2.1 Release Notes
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FortiManager 6.2.1 Release

This document provides information about FortiManager version 6.2.1 build 1121.

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

This section includes the following topics:

- Supported models on page 5
- What’s new on page 5

Supported models

FortiManager version 6.2.1 supports the following models:

FortiManager	FMG-200D, FMG-200F, FMG-300E, FMG-300F, FMG-400E, FMG-1000F, FMG-2000E, FMG-3000F, FMG-3700F, FMG-3900E, FMG-4000E, and FMG-MFGD.
FortiManager VM	FMG-VM64, FMG-VM64-Cloud, 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

For information about what's new in FortiManager 6.2.1, see the FortiManager New Features Guide.

Not all features/enhancements are supported on all models.

Special Notices

This section highlights some of the operational changes that administrators should be aware of in 6.2.1.

Import Authentication Rules and Schemes

With FortiManager support of Explicit Proxy Authentication at the ADOM level, FortiManager must import all authentication rules and authentication schemes to the ADOM after upgrade.

Common Vulnerabilities and Exposures

FortiManager 6.2.1 is no longer vulnerable to the issue described in the following link - https://fortiguard.com/psirt/FG-IR-19-144.

Support of the NGFW mode in 6.2.1

Within a version 6.2 ADOM, policy package with NGFW mode set as policy based only supports FortiOS 6.2.1.

Managing FortiGate with VDOMs that use Global, Shared Profiles

FortiManager managing FortiGates with global, shared g-xx profiles in VDOMs and running FortiOS 6.0.0 or later is unable to import global, shared g-xx profiles 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.

Managing FortiAnalyzer Devices

FortiManager 6.2 can only manage and process logs for FortiAnalyzer 6.2 devices.

IOC Support on FortiManager

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

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 6.0.3 or later directly to 6.2.1.

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 on page 8
- Firmware image checksums on page 8
- FortiManager VM firmware on page 8
- SNMP MIB files on page 10

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.

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 6.2.1 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 6.2.1 support on page 11
- Feature support on page 15
- Language support on page 16
- Supported models on page 16

FortiManager 6.2.1 support

This section identifies FortiManager 6.2.1 product integration and support information:

- Web browsers on page 11
- FortiOS/FortiOS Carrier on page 12
- FortiAnalyzer on page 13
- FortiAuthenticator on page 13
- FortiCache on page 13
- FortiClient on page 13
- FortiMail on page 13
- FortiSandbox on page 14
- FortiSwitch ATCA on page 14
- FortiWeb on page 14
- FortiDDoS on page 15
- Virtualization on page 15

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 6.2.1 product integration and support for web browsers:

- Microsoft Edge 40
- Mozilla Firefox version 67
- Google Chrome version 75

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

FortiOS/FortiOS Carrier

This section lists FortiManager 6.2.1 product integration and support for FortiOS/FortiOS Carrier:

FortiOS or FortiOS Carrier		Compatibility Issues
6.2	6.2.1	
6.0	6.0.4 to 6.0.6	
	6.0.0 to 6.0.3	FortiManager 6.0.2 is fully tested as compatible with FortiOS/FortiOS Carrier 6.0.3, with some minor interoperability issues. For information, see FortiManager 6.0.2 and FortiOS 6.0.3 compatibility issues on page 27.
5.6	5.6.7 to 5.6.11	
	5.6.5 to 5.6.6	FortiManager 5.6.5 is fully tested as compatible with FortiOS/FortiOS Carrier 5.6.6, with some minor interoperability issues. For information, see FortiManager 5.6.5 and FortiOS 5.6.6 compatibility issues on page 27.
	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 FortiManager 5.6.3 and FortiOS 5.6.4 compatibility issues on page 28.
	5.6.2 to 5.6.3	FortiManager 5.6.1 is fully tested as compatible with FortiOS/FortiOS Carrier 5.6.3, with some minor interoperability issues. For information, see FortiManager 5.6.1 and FortiOS 5.6.3 compatibility issues on page 28.
	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 FortiManager 5.6.0 and FortiOS 5.6.0 and 5.6.1 compatibility issues on page 28.
5.4	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 FortiManager 5.4.5 and FortiOS 5.4.10 compatibility issues on page 29.
	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 FortiManager 5.6.3 and FortiOS 5.4.9 compatibility issues on page 29.
	5.4.1 to 5.4.8	FortiManager 6.2.1 is fully tested as compatible with FortiOS/FortiOS Carrier 5.4.8, with some minor interoperability issues. For information, see FortiManager 5.4.4 and FortiOS 5.4.8 compatibility issues on page 29.

FortiAnalyzer

This section lists FortiManager 6.2.1 product integration and support for FortiAnalyzer:

- 6.2.0
- 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

This section lists FortiManager 6.2.1 product integration and support for FortiAuthenticator:

- 6.0
- 5.0 to 5.5
- 4.3

FortiCache

This section lists FortiManager 6.2.1 product integration and support for FortiCache:

- 4.2.9
- 4.2.7
- 4.2.6
- 4.1.6
- 4.1.2
- 4.0.4

FortiClient

This section lists FortiManager 6.2.1 product integration and support for FortiClient:

- 6.0.7
- 6.0.0
- 5.6.6
- 5.6.3
- 5.6.0
- 5.4.0 and later
- 5.2.0 and later

FortiMail

This section lists FortiManager 6.2.1 product integration and support for FortiMail:

- 6.0.5
- 5.4.9
- 5.4.5
- 5.3.12
- 5.2.10
- 5.1.7
- 5.0.10

FortiSandbox

This section lists FortiManager 6.2.1 product integration and support for FortiSandbox:

- 3.0.5
- 2.5.2
- 2.4.1
- 2.3.3
- 2.2.2
- 2.1.3
- 1.4.0 and later
- 1.3.0
- 1.2.0 and later

FortiSwitch ATCA

This section lists FortiManager 6.2.1 product integration and support for FortiSwitch ATCA:

- 5.2.3
- 5.0.0 and later
- 4.3.0 and later
- 4.2.0 and later

FortiWeb

This section lists FortiManager 6.2.1 product integration and support for FortiWeb:

- 6.1.1
- 6.0.5
- 5.9.1
- 5.8.6
- 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

This section lists FortiManager 6.2.1 product integration and support for FortiDDoS:

- 5.0.0
- 4.7.0
- 4.5.0
- 4.4.2
- 4.3.2
- 4.2.3
- 4.1.11
  Limited support. For more information, see Feature support on page 15.

Virtualization

This section lists FortiManager 6.2.1 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
- 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		✓	✓	✓

Platform	Management Features	FortiGuard Update Services	Reports	Logging
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	✓	✓
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 6.2.1.

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-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-3810D, FortiGate-3815D, FortiGate-3960E, FortiGate-3980E **FortiGate 5000 Series:** FortiGate-5001D, FortiGate-5001E, FortiGate-5001E1 **FortiGate DC:** FortiGate-80C-DC, FortiGate-600C-DC, RortiGate-800C-DC, FortiGate-800D-DC, FortiGate-1000C-DC, FortiGate-1500D-DC, FortiGate-3000D-DC, FortiGate-3100D-DC, FortiGate-3200D-DC, FortiGate-3240C-DC, FortiGate-3600C-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	6.2

Model	Firmware Version
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	
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-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-100F, FG-101F, 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-400E, FG-401E, FG-500D, FG-500E, FG-501E, FG-600D, FG-600E, FG-601E, FG-800D, FG-900D, FG-1000D, FG-1200D, FG-1500D, FG-1500DT, FG-2000E, FG-2500E, FG-3000D, FG-3100D, FG-3200D, FG-3400E, FG-3401E, FG-3600C, FG-3600E, FG-3601E, FG-3700D, FG-3800D, FG-3810D, FG-3815D, FG-3960E, FG-3980E **FortiGate 5000 Series:** 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, FG-7060E-8-DC **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, FW-60E-DSL, FW-60E-DSLJ, 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

Model	Firmware Version
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-DSLJ, FG-60E-POE, FG-60E-DSL, FG-60E-DSLJ, 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, FG-7060E-8-DC **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. **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, FW-60E-DSL, FW-60E-DSLJ, 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	5.6
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	5.4

Model	Firmware Version
FortiGate 7000 Series:FG-7030E 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 **(Update only) FortiGate 7000 series:** FG-7030E, FG-7040E, FG-7060E, FG-7060E-8-DC **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	

FortiCarrier models

Model	Firmware Version
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-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 **FortiGate 6000 series:** FG-6300F, FG-6301F, FG-6500F, FG-6501F **FortiGate 7000 series:** FG-7030E, FG-7040E, FG-7060E, FG-7060E-8-DC **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	5.6

Model	Firmware Version
FortiCarrier 7000 Series: FG-7030E, FG-7040E, FG-7060E, FG-7060E-8-DC **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	
FortiCarrier: FGT-3000D, FGT-3100D, FGT-3200D, FGT-3240C, FGT-3600C, FG-3600E, FGT-3700D, FGT-3700DX, FGT-3800D, FGT-3810D, FGT-5001C, FGT-5001D, FGT-7030E, FGT-7040E **FortiCarrier 6000 Series:** FG-6300F, FG-6301F, FG-6500F, FG-6501F **FortiCarrier 7000 Series:** FG-7030E, FG-7040E, FG-7060E, FG-7060E-8-DC **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	5.4

FortiDDoS models

Model	Firmware Version
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: 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

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
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-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

Model	Firmware Version
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	3.0
FortiSandbox: FSA-1000D, FSA-2000E, FSA-3000D, FSA-3000E, FSA-3500D **FortiSandbox VM:** FSA-KVM, FSA-VM	2.5.2
FortiSandbox: FSA-1000D, FSA-2000E, FSA-3000D, FSA-3000E, FSA-3500D **FortiSandbox VM:** FSA-VM	2.4.1 2.3.3
FortiSandbox: FSA-1000D, FSA-3000D, FSA-3500D **FortiSandbox VM:** FSA-VM	2.2.0 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, 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	5.7.2

Model	Firmware Version
FortiWeb VM: FWB-Azure, FWB-HYPERV, FWB-KVM, FWB-OS1, FWB-VM, FWB-XENAWS, FWB-XENAWS-Ondemand, FWB-XENOPEN	
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-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

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

Compatibility with FortiOS Versions

This section highlights compatibility issues that administrators should be aware of in FortiManager 6.2.1. Compatibility issues have been identified for the following FortiOS releases:

FortiOS 6.0	FortiManager 6.0.2 and FortiOS 6.0.3 compatibility issues on page 27
FortiOS 5.6	FortiManager 5.6.5 and FortiOS 5.6.6 compatibility issues on page 27
	FortiManager 5.6.3 and FortiOS 5.6.4 compatibility issues on page 28
	FortiManager 5.6.1 and FortiOS 5.6.3 compatibility issues on page 28
	FortiManager 5.6.0 and FortiOS 5.6.0 and 5.6.1 compatibility issues on page 28
FortiOS 5.4	FortiManager 5.4.5 and FortiOS 5.4.10 compatibility issues on page 29
	FortiManager 5.6.3 and FortiOS 5.4.9 compatibility issues on page 29
	FortiManager 5.4.4 and FortiOS 5.4.8 compatibility issues on page 29

FortiManager 6.0.2 and FortiOS 6.0.3 compatibility issues

The following table lists known interoperability issues that have been identified with FortiManager 6.0.2 and FortiOS 6.0.3.

Bug ID	Description
516113	Install verification may fail on policy status field. For details, see the following Special Notice: Special Notices on page 6.
516242	Install verification may fail on the wtp profile's `handoff-sta-thresh` parameter.

FortiManager 5.6.5 and FortiOS 5.6.6 compatibility issues

The following table lists known interoperability issues that have been identified with FortiManager 5.6.5 and FortiOS 5.6.6.

Bug ID	Description
513066	FortiManager 5.6.5 does not support the following new value in FortiOS 5.6.6: `system sdn-connector` command with the `azure-region` variable set to `germany usgov local`. If set on FortiGate, the values will be unset during the next configuration installation from FortiManager.

Bug ID	Description
513069	FortiManager 5.6.5 does not support the following new value in FortiOS 5.6.6: `system snmp user` command with the `community events` variable set to `av-oversize-blocked` or `faz-disconnect`. If set on FortiGate, the values will be unset during the next configuration installation from FortiManager.

FortiManager 5.6.3 and FortiOS 5.6.4 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager 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.

FortiManager 5.6.1 and FortiOS 5.6.3 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager 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.

FortiManager 5.6.0 and FortiOS 5.6.0 and 5.6.1 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager 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.

FortiManager 5.4.5 and FortiOS 5.4.10 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager 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"`

FortiManager 5.6.3 and FortiOS 5.4.9 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager 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`

FortiManager 5.4.4 and FortiOS 5.4.8 compatibility issues

The following table lists interoperability issues that have been identified with FortiManager 5.4.4 and FortiOS 5.4.8.

Bug ID	Description
469700	FortiManager is missing three wtp-profiles: FAP221E, FAP222E, and FAP223E.

Resolved Issues

The following issues have been fixed in 6.2.1. For inquires about a particular bug, please contact Customer Service & Support.

Bug ID	Description
460615	FortiManager should adjust Radius configuration on SSID when renaming a Radius server.
482441	VPN Phase 2 Address Selector is not updated when Named Address is updated in Policy and Objects.
500037	FortiToken provision does not work.
500922	When renaming a local certificate in Device Manager, the related dynamic mapping is not updated.
508020	Web & IPS conflict information is not visible while importing Policy Package.
513317	FortiManager may fail to install policy after FortiGate failover on Azure.
523208	FortiManager may try to unset category for user device when installing policy package.
523228	Search in zone does not work after upgrade.
524684	API request returns all the devices even when the user does not have access to other ADOMs.
529771	Upgrading ADOM may be very timing consuming.
531162	FortiManager may try to push unexpected changes after ADOM upgrade.
533603	Policy hit count needs to support proxy policy.
533835	After upgrade, the URL, pm/pkg/adom/<adom_name>/<name>/scope member, returns the error: The data is invalid for selected url.
534220	Users cannot add entries for per device mapping with existing VIP group when a VIP binds to a port that is part of SD-WAN.
534468	Vulnerability scan should not disrupt HA or trigger re-synchronization.
534847	CLI Script fails to change config system auto-update schedule settings with invalid value error.
535521	Encrypt Log Transmission for FortiAnalyzer is not properly configured within Device Manager.
536113	AP Manager is still trying to 'unset wtp-mode remote' when the option is configured on FortiGate.
538915	Firmware version is not displayed on NOC - SOC page.
538934	When configuration file is large, installing to device may delete configuration on FortiGate.
540657	There is an ordering issue on admin users where multiple wildcard users are configured on the same server.
540684	Verification fails after moving VDOM across vclusters from FortiGate GUI followed by an auto-update.

Bug ID	Description
541157	GUI should support proxy address.
541880	The dmserver daemon may crash when installing to multiple devices and CPU usage reaches 100%.
542024	'Where Used' may not point to the entity using the object.
543133	Global user groups are not listed when creating an SSID in Per-Device AP management mode.
543734	Key Type specified as elliptic curve is not functional when generating a CSR.
544121	Installation log is missing due to dpm-logsize limited to 10 MB.
544142	Installation fails due to DNS server "SameasInterfaceIP" option inside device interface configuration.
544580	Two SSL-SSH profiles added by FortiManager may cause installation issues.
544880	FortiManager should not allow adding loopback interface to a zone.
544886	When importing device list of multiple model devices with PSKs, FortiManager prompts the error,"Serial number already in use".
545143	Adding wildcard FQDN for SSL inspection exemption list from FortiManager fails.
546340	If a script is used to update SNMP passwords with "?" character, the installation fails during validation.
547361	AP Profile in AP Manager offers redundant options for specific AP models which can lead to failed installation.
548320	User should be able to create a FortiGate admin account with Restricted Administrator to Guest Account Provisioning Only option selected with VDOM(s) guest group(s).
548416	Changes on Existing Static Route is not displayed on Installation Preview.
549159	FortiManager may have a memory leak when running copy & install with a sub-admin.
549638	MAC address Access Control List entries under DHCP server get duplicated when editing an entry.
549647	It is possible to cause a DoS for remote user authentication by trying to login with a password of specific length.
550237	Read-only admin should not be allowed to add detected devices.
550239	System SNMP user is missing the value 'aes256cisco' for the field 'priv-proto'.
550240	FortiGuard service event logs should always be generated with an internal FortiManager user.
550502	Installing DDoS policies via a CLI script may fail.
551057	FortiManager does not give an option to choose RSA4096 and Elliptic Curve algorithms in certificates.
551072	Assignment of 'object-tag' from 5.6 Global ADOM to 6.0 ADOM should not fail.
551077	FortiManager may not be able to import policies from FortiGate SLBC.

Bug ID	Description
551096	FortiMeter Program License is expired and it is displayed as FREZ even though FortiGate Traffic is still passing.
551392	A failed retrieve operation may result in empty device configuration.
551701	FortiManager is unable to set OSPF Interface Network Type as P2MP.
552069	FortiManager may fail to install local certificate on FortiGate and private key is missing after saving the configuration.
552192	The fmgd daemon may crash after upgrading FortiManager.
552991	FortiManager prompts Runtime Error when trying to import an AP profile that has a SSID with space character.
553491	Enabling or disabling multiple interfaces should be allowed in Device Manager.
553704	FortiManager may be stuck at loading when using the "Find Duplicate Objects" function.
554092	FortiManager is unable to use interface member of a zone as Source Interface filter for VIP object.
554094	FortiManager may not be able to upgrade ADOM from 5.4 to 5.6 with the error, "Fail (errno=0):invalid value".
554154	FortiManager should be able to select multiple FortiExtenders for upgrade from the Extender Tab.
554608	FortiManager should be able to save longer description for SD-WAN template.
554857	Policy package does not go out-of-sync after VPN manager is enabled.
555635	Certificate is not visible on GUI after restoring the configuration which was exported from FortiManager.
555796	Installing policy on 6K series FortiGate may remove the interface setting "set forward-error-correction rs-fec".
556609	When user wants to move a policy package to a different folder, the pop-up window does not list folders in alphabetical order.
557355	FortiManager may not connect to Fortiguard when fds-ssl-protocol is set to either tlsv1.1 or tlsv1.2.
558781	GUI response is slow with a large numbers of address objects.
559104	Incorrect ADOM name may be displayed in where Used.
559112	FortiManager may not be able to edit a proxy policy that was inserted above or below.
559751	Duplicated ##seq appears in policy packages and they cannot be fixed with diagnose command.
559844	FortiManager may not be able to set client-idle-timeout to 0 in device database.
560410	FortiManager may not accept the Log FortiAnalyzer setting without FortiAnalyzer serial number.
560694	If hitcount is updated while ADOM is locked, policies matched by traffic are highlighted as modified.

Bug ID	Description
561033	SD-WAN Bandwidth Overview widget may not display the correct data.
561279	The newcli process may crash when running the "diagnose cdb upgrade check +all" command.
562160	FortiManager should be able to create dynamic mapping for object-tagging category.
563169	When user changes webfilter settings, username in last modified column should always be updated.
565016	The exchange-interface-ip should be available in VPN Manager.
565436	After FortiManager processed many auto-update requests, FortiManager may not be able to create a new revision.
565970	One specific unused adgrp is getting pushed to FortiGate that does not use FSSO anywhere.
566912	FortiManager should support firmware upgrade for FortiExtender 200 series.

Common Vulnerabilities and Exposures

Visit https://fortiguard.com/psirt for more information.

Vulnerability
FortiManager 6.2.1 is no longer vulnerable to the issue described in the following link - https://fortiguard.com/psirt/FG-IR-19-144.

Bug ID	Description
542636	FortiManager 6.2.1 is no longer vulnerable to the following CVE Reference: • CVE-2019-6695

Known Issues

The following issues have been identified in 6.2.1. For inquires about a particular bug or to report a bug, please contact Customer Service & Support.

Bug ID	Description
468776	Unable to retrieve device due to data not exist (g-xxxx firewall object).
546246	Restore ADOM revision does not restore removed installation targets.
547854	FortiManager cannot manage shaping profiles with the same name from multiple FortiGate.
548976	Unauthorized device alert directs to a page showing duplicate devices.
549113	In the case that FortiGate is in NGFW policy-based mode, URL/Application control profiles should not be visible on FortiManager side.
549175	FortiManager does not install active directory group filter changes to FortiGate.
549384	FortiManager cannot show any query when FortiGate has CSF enabled but the CSF group is not established on FortiManager.
549504	Wildcard remote admin cannot run schedule install.
549546	If an address group contains many addresses, user cannot hover the number icon to view the address members.
549566	Device Manager does not show a FortiGate in a CSF group when the FortiGate is connected to the root FortiGate's FG-Traffic VDOM.
549587	All the FortiSwitch ports are incorrectly displayed as POE enabled.
549818	FortiManager cannot display external resource setting on consolidated policy list.
549824	Consolidated policy page is missing external resource as data source.
550015	FortiManager can communicate with mail server with secure option enabled.
550157	Assigned AP profile is not shown while editing APs from Map View.
550161	Under per-device management, managed AP status information is missing in Map View.
550344	FortiManager is unable to import firewall policy due to invalid FQDN error.
550441	After upgrade, verification fails for company-identifier with a DLP sensor.
550460	Duplicated default QoS profiles are listed when editing a FortiSwitch template.
551231	Under per-device management, editing a SD-WAN rule generates duplicate entry.
552403	FortiManager does not does not reflect the negation of either source or destination fields.
554892	Internet Service Groups need to be filtered by direction.
556967	Re-Install policy may hang when a Security Fabric cluster is selected.

Bug ID	Description
561008	Second IP in central-management may be removed by master FortiManager on re-connection.
561262	Users cannot use question mark in CLI while setting password for an admin user.
561481	Under Device Manager, VPN IPsec phase2 should not allow user to save settings if phase 1 name is not set.
562041	Import with AP Manager cannot create dynamic mapping for SSIDs.
563373	FortiManager may not be able to add FortiGate VM FNDN.
563606	Authorizing or de-authorizing a FortiSwitch may not work.
563689	Import All Objects fails when security policy is defined for FortiSwitch.
564400	ADOM upgrade may show the error "firewall ssl-ssh-profile ssl-exempt wildcard-fqdn. detail: table limit".
564497	Installing policy package will delete host-check-software after FortiManager and FortiGate are upgraded to 6.2.1.
564959	Creating a new neighbor should only list not-configured neighbors.
565138	Installation to FortiGate failed for passphrase and password when *private-data-encryption* was enabled.
565636	The global address, gall, may trigger FortiManager to display validation error.
565751	FortiSwitch Manager may not be able to select multiple FortiSwitch for upgrade.
565772	When adding a black hole route with Named Address option, it fails with the error message.
566034	JSON API or GUI does not work when user is restricted to a Policy package.
566298	Device Manager may not be able to add member to an empty aggregate interface.
566346	SD-WAN rules are lack of way to add Internet Service, Custom Internet, Application groups, and Custom Internet Service.
566409	When an object contains 79 characters, tool-tip with mouse over cannot properly show the object name.
566947	FortiManager should not allow users to configure ICAP profile and WAF profile under flow-based policy.
567534	Editing or importing email filter profile protocol may append an extra ":" to the end of tag-msg causing installation to fail.
568626	Users can only modify the order of DNS forwarder if the IP addresses are in quotes ("") and when the IP addresses are not separated by comma.
568631	Per-Device Mapping for FortiAP SSID in Bridge mode is incorrect.
568955	Installation may fail for consolidated policy after changed package to profile mode.
568988	Users may not be able to create access-list entries with IPv6 format based subnet mask or wild card.

Bug ID	Description
569066	FortiSwitch manager does not display FortiSwitch online status correctly.
569253	The Managed APs summary page may not properly display assigned SSID.
569266	FortiManager may not turn off the "Schedule background scan disable" option within the WIDS profile.
569306	FortiManager may fail to edit the property of a VDOM when there are more than 50 VDOMs on a 7000 series FortiGate unit.
569515	SD-WAN Monitor map view should have ability to drill down into individual details.
570220	FortiManager may not list upgrade images for 6000 or 7000 series of FortiGate units.

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
```

Change Log

Date	Change Description
2019-07-18	Initial release of 6.2.1.
2019-07-24	Updated the *Product Integration* section.
2019-07-29	Updated a Special Notice. Removed a Special Notice. Added 564400 to Known Issues.
2019-08-08	Updated the *Product Integration* section.
2019-08-13	Added CVE Reference CVE-2019-6695 to *Resolved Issues*.
2019-08-19	Added FMG-VM64-Cloud to *Supported models*.
2019-08-29	Added FMG-200D to *Supported models*.
2019-09-03	Added support for FortiOS 5.6.11.
2019-09-04	Removed a note on limitation for web browsers.
2019-09-09	Added support for FortiMail FML-200F, FML-400F, and FML-900F.
2019-09-17	Added a special notice.
2019-11-28	Added a special notice.
2020-09-01	Updated a special notice and added 468776 to Known Issues.