



FortiSwitch Release Notes

Version 3.6.7

FORTINET DOCUMENT LIBRARY

<http://docs.fortinet.com>

FORTINET VIDEO GUIDE

<http://video.fortinet.com>

FORTINET BLOG

<https://blog.fortinet.com>

CUSTOMER SERVICE & SUPPORT

<https://support.fortinet.com>

FORTIGATE COOKBOOK

<http://cookbook.fortinet.com>

FORTINET TRAINING SERVICES

<http://www.fortinet.com/training>

FORTIGUARD CENTER

<http://www.fortiguard.com>

END USER LICENSE AGREEMENT

<http://www.fortinet.com/doc/legal/EULA.pdf>

FEEDBACK

Email: techdocs@fortinet.com



November 8, 2019

FortiSwitch 3.6.7 Release Notes

11-367-495553-20191108

TABLE OF CONTENTS

Change log	4
Introduction	5
Supported models	5
What's new in 3.6.7	5
Special notices	6
Supported features for FortiSwitchOS 3.6	6
Connecting multiple FSW-R-112D-POE switches	11
Upgrade information	12
Cooperative Security Fabric upgrade	12
Product integration and support	13
FortiSwitch 3.6.7 support	13
Resolved issues	15
Known issues	16

Change log

Date	Change Description
July 3, 2018	Initial release
August 1, 2018	Added bug 505911 to the “Known Issues” section.
September 18, 2018	Added bug 510943 to the “Known Issues” section.
February 5, 2019	Added bug 535736 to the “Known Issues” section.
November 8, 2019	Added bug 593993 to the “Known Issues” section.

Introduction

This document provides the following information for FortiSwitch 3.6.7 build: 0418.

- Supported models on page 5
- Special notices on page 6
- Upgrade information on page 12
- Product integration and support on page 13
- Resolved issues on page 15
- Known issues on page 16

See the [Fortinet Document Library](#) for FortiSwitch documentation.

Supported models

FortiSwitch 3.6.7 supports the following models:

FortiSwitch	FSW-108D-POE, FSW-124D, FSW-124D-POE, FSW-224D-FPOE, FSW-224D-POE, FSW-248D-FPOE, FSW-248D-POE, FSW-248D, FSW-424D, FSW-424D-FPOE, FSW-424D-POE, FSW-448D, FSW-448D-FPOE, FSW-448D-POE, FSW-524D-FPOE, FSW-524D, FSW-548D, FSW-548D-FPOE, FSW-1024D, FSW-1048D, FSW-3032D
FortiSwitch Rugged	FSR-112D-POE, FSR-124D

What's new in 3.6.7

FortiSwitch 3.6.7 is a patch release only. No new features or enhancements have been implemented in this release.

Special notices

Supported features for FortiSwitchOS 3.6

The following table lists the FortiSwitch features in Release 3.6 that are supported on each series of FortiSwitch models. All features are available in Release 3.6.0, unless otherwise stated.

Feature	GUI supported	108D-POE 112D-POE 224D-POE	124D 124D-POE 200 Series 400 Series	500 Series	1024D 1048D	3032D
Link aggregation group size (maximum number of ports) (See Note 2.)	✓	8	8	24/48	24/48	24 (3.5.0) 64 (3.5.1)
Auto module max speed detection and notification	✓	—	—	✓	✓	—
IP conflict detection and notification	—	✓	✓	✓	✓	✓
IP-MAC binding	✓	—	—	✓	✓	✓
Static BFD	—	—	—	—	✓	✓
Hardware-based ECMP	—	—	—	✓	✓	✓
Private VLANs	✓	—	✓	✓	✓	✓
LLDP transmit	—	✓	✓	✓	✓	✓
Loop guard	✓	✓	✓	✓	✓	✓
LAG min-max-bundle	—	✓	✓	✓	✓	✓
sFlow	✓	✓	✓	✓	✓	✓
Storm control	✓	✓	✓	✓	✓	✓
ACL	—	—	✓	✓	✓	✓
Static L3/hardware-based routing	✓	—	✓	✓	✓	✓

Feature	GUI supported	108D-POE 112D-POE 224D-POE	124D 124D-POE 200 Series 400 Series	500 Series	1024D 1048D	3032D
Software routing only	✓	✓	—	—	—	—
CPLD software upgrade support for OS	—	—	—	—	1024D 1048D	—
PoE-pre-standard detection (See Note 1.)	✓	✓	✓	✓	—	—
VLAN tag by ACL	—	—	✓	✓	✓	✓
ACL redirect to mirror destination as trunk/LAG	—	—	✓	✓	✓	✓
MAC/IP/protocol-based VLAN assignment	✓	✓	✓	✓	✓	✓
802.1x port mode	✓	✓	✓	✓	✓	✓
802.1x MAC-based security mode	✓	✓	✓	✓	✓	✓
User-based (802.1x) VLAN assignment	✓	✓	✓	✓	✓	✓
Virtual wire	✓	—	✓	✓	✓	✓
HTTP REST APIs for configuration and monitoring	—	✓	✓	✓	✓	✓
Split port	—	—	—	✓	—	✓
IGMP snooping	—	—	✓	✓	✓	✓
Per-port max for learned MACs	—	—	✓	✓	—	—
802.1p support, including priority queuing trunk and WRED (release 3.5.1)	—	—	✓	✓	✓	✓
DHCP snooping	—	—	✓	✓	✓	✓
LLDP-MED	—	✓	✓	✓	✓	✓
DHCP relay feature	—	—	✓	✓	✓	✓

Feature	GUI supported	108D-POE 112D-POE 224D-POE	124D 124D-POE 200 Series 400 Series	500 Series	1024D 1048D	3032D
Support for switch SNMP OID	—	✓	✓	✓	✓	✓
Access VLANs (See Note 5.)	—	—	✓	✓	✓	✓
802.1x enhancements, including MAB (release 3.5.1)	✓	✓	✓	✓	✓	✓
Multi-stage load bal- ancing (release 3.5.1)	—	—	—	—	✓	✓
MCLAG (multichassis link aggregation)(release 3.6.0)	—	—	✓ (not on 124D/124D- POE)	✓	✓	✓
Dynamic layer-3 protocols (OSPF, RIP, and VRRP) (release 3.6.0) (See Note 3.)	✓	—	✓ (not on 124D/124D- POE)	✓	✓	✓
Dynamic ARP inspection (release 3.6.0)	—	—	✓	✓	✓	✓
Firmware image rotation (dual-firmware image sup- port) (release 3.6.0)	—	✓ (not on 108D-POE)	✓	✓	✓	✓
TDR (time-domain reflec- tometer)/cable dia- gnostics support (release 3.6.0)	✓	—	✓	✓	✓	✓
MAC learning limit (release 3.6.0) (See Note 4.)	—	—	✓	✓	—	—
Sticky MAC on switch interfaces (release 3.6.0)	—	—	✓	✓	✓	✓

Feature	GUI supported	108D-POE 112D-POE 224D-POE	124D 124D-POE 200 Series 400 Series	500 Series	1024D 1048D	3032D
PoE modes support: first come, first served or priority based (PoE models) (release 3.6.0)	—	✓	✓	✓	—	—
ACL: egress mask action support (release 3.6.0)	—	—	✓	✓	✓	✓
Monitor system temperature (threshold configuration and SNMP trap support) (release 3.6.0)	—	✓	✓	✓	✓	✓
'forced-untagged' or 'force-tagged' setting on switch interfaces (release 3.6.0)	—	✓	✓	✓	✓	✓
Selective packet sampling to CPU (useful diagnostic tool) (release 3.6.0)	—	—	✓	✓	✓	3.6.1
Add CLI to show the details of port statistics (release 3.6.0)	—	✓	✓	✓	✓	✓
Display progress (%) during firmware upgrade (release 3.6.0)	✓	✓	✓	✓	✓	✓
STP root guard (release 3.6.2)	—	✓	✓	✓	✓	✓
STP BPDU guard (release 3.6.2)	—	✓	✓	✓	✓	✓
IGMP snooping: static multicast groups (release 3.6.2)	—	—	✓	✓	✓	✓
DHCP snooping: entry limit per port (release 3.6.2)	—	—	✓	✓	✓	✓

Feature	GUI supported	108D-POE 112D-POE 224D-POE	124D 124D-POE 200 Series 400 Series	500 Series	1024D 1048D	3032D
Network device detection (release 3.6.2)	—	—	✓	✓	✓	✓
QoS queue counters (releases 3.6.2 and 3.6.3)	—	—	✓	✓	✓	✓
Support of the RADIUS accounting server (release 3.6.3)	—	✓	✓	✓	✓	✓
Support of RADIUS CoA and disconnect messages (release 3.6.3)	—	✓	✓	✓	✓	✓
802.1x authentication: EAP-TLS support (release 3.6.3)	—	✓	✓	✓	✓	✓
DHCP snooping: CLI for DHCP-snooping server database (release 3.6.3)	—	—	✓	✓	✓	✓
Unicast hashing (release 3.6.4)	—	—	✓	✓	✓	✓
STP supported in MCLAGs (release 3.6.4)	—	—	✓ (not on 124D/124D- POE)	✓	✓	✓
QoS marking (release 3.6.4)	—	—	✓	✓	✓	✓
MAB reauthentication disabled (release 3.6.4)	—	✓	✓	✓	✓	✓
Cut-through switching (release 3.6.4)	—	—	—	—	✓	✓
Control of temperature and PoE alerts (release 3.6.4)	—	✓	✓	✓	✓	✓
IGMP querier (release 3.6.4)	—	—	✓	✓	✓	✓

Feature	GUI supported	108D-POE 112D-POE 224D-POE	124D 124D-POE 200 Series 400 Series	500 Series	1024D 1048D	3032D
Configuration of the QSFP low-power mode (release 3.6.4)	—	—	—	✓	1048D	✓
Learning limit violation log (release 3.6.4) (See Note 4.)	—	—	✓	✓	—	—
Sticky MAC addresses saved to static MAC table (release 3.6.4)	—	—	✓	✓	✓	✓
Enabling packet forwarding to CPU (release 3.6.4)	—	—	✓	—	—	—

Notes

- PoE features are applicable only to the model numbers with a POE or FPOE suffix.
- 24-port LAG is applicable to 524D, 524_FPOE, 1024D, and 3032D models. 48-port LAG is applicable to 548D, 548-FPOE, and 1048D models.
- To use the dynamic layer-3 protocols, you must have an advanced features license.
- The per-VLAN learning limit and per-trunk learning limit are not supported on dual-chip platforms (248 and 448 series).
- Access VLANs are not supported on 108D-POE, 224D-POE, or 112D-POE.

Connecting multiple FSW-R-112D-POE switches

The FSW-R-112D-POE switch does not support interconnectivity to other FSW-R-112D-POE switches using the PoE ports. Fortinet recommends using the SFP ports to interconnect switches.

Upgrade information

FortiSwitch 3.6.7 supports upgrading from FortiSwitch 3.5.0 and later.

Cooperative Security Fabric upgrade

FortiOS 5.4.1 greatly increases the interoperability between other Fortinet products. This includes:

- FortiClient 5.4.1
- FortiClient EMS 1.0.1
- FortiAP 5.4.1
- FortiSwitch 3.4.2

The upgrade of the firmware for each product must be completed in a precise order so the network connectivity is maintained without the need of manual steps. Customers must read the following two documents prior to upgrading any product in their network:

- *Cooperative Security Framework - Upgrade Guide*
- *FortiOS 5.4.0 to 5.4.1 Upgrade Guide for Managed FortiSwitch Devices*

This document is available in the Customer Support Firmware Images download directory for FortiSwitch 3.4.2.

Product integration and support

FortiSwitch 3.6.7 support

The following table lists 3.6.7 product integration and support information.

Web browser	<ul style="list-style-type: none">• Microsoft Internet Explorer version 11• Mozilla Firefox version 52• Google Chrome version 56 <p>Other web browsers may function correctly, but are not supported by Fortinet.</p>
--------------------	---

**FortiOS
(FortiLink Support)**

- 5.4.1 and later
FortiSwitch must be upgraded first before upgrading FortiOS. Please read the *Upgrade Information > Cooperative Security Fabric Upgrade* section in this document.
- 5.4.0
FortiSwitch models: FSW-108D-POE, FSW-124D, FSW-124D-POE, FSW-224D-POE, FSW-224D-FPOE, FSW-248D-POE, FSW-248D-FPOE, FSW-424D, FSW-424D-POE, FSW-424D-FPOE, FSW-448D, FSW-448D-POE, FSW-448D-FPOE, FSW-524D, FSW-524D-FPOE, FSW-548D, FSW-548D-FPOE, FSW-1024D, FSW-1048D, FSW-3032D, FSR-112D-POE

FortiGate models: FG-60D, FG-60D-POE, FG-90D, FG-90-POE, FG-100D, FG-140D, FG-140D-POE, FG-140D-POE-T1, FG-200D, FG-240D, FG-280D, FG-280D-POE, FG-600C, FG-800C, FG-1000C, FG-1500D, FG-1200D, FG-3700D, FG-3700DX

FortiWiFi models: FWF-60D, FWF-60D-POE, FWF-90D, FWF-90D-POE
- 5.2.3 and later
FortiSwitch models: FSW-108D-POE, FSW-124D, FSW-124D-POE, FSW-224D-POE, FSW-224D-FPOE, FSR-112D-POE

FortiGate models: FG-60D, FG-90D, FG-100D, FG-140D, FG-200D, FG-240D, FG-280D, FG-600C, FG-800C, FG-1000C, FG-60D-POE, FG-90D-POE, FG-140D-POE, FG-140D-POE-T1, FG-280D-POE

FortiWiFi models: FWF-60D, FWF-60D-POE, FWF-90D, FWF-90D-POE
- 5.2.2
FortiSwitch models: FSW-224D-POE

FortiGate models: FG-90D, FG-90D-POE, FG-100D, FG-140D, FG-140D-POE, FG-140D-POE-T1, FG-200D, FG-240D, FG-280D, FG-280D-POE, FG-600C, FG-800C, FG-1000C

FortiWiFi models: FWF-90D, FWF-90D-POE

Resolved issues

The following issues have been fixed in 3.6.7. For inquiries about a particular bug, please contact [Customer Service & Support](#).

Bug ID	Description
456851	Very large VLAN maps cause the CLI to list attributes multiple times or cause a crash.
489451	An obsolete object identifier (OID) appears in the Management Information Base (MIB).
491273	After upgrading from 3.6.0 to 6.0.0 and rebooting the FortiSwitch units, there are multiple error messages.
491786	When image-rotation is enabled, ports are not shut down during the image upgrade.
492154	The <code>set image-rotation enable</code> command sometimes fails to change which partition is used to upgrade the FortiSwitch image.
498639	An "Error adding L3 host entry" is frequently logged.

Known issues

The following known issues have been identified with 3.6.7. For inquiries about a particular bug or to report a bug, please contact [Fortinet Customer Service & Support](#).

Bug ID	Description
380239	IGMP-snooped multicast groups are not immediately flushed out of the snooping table when the querier port is shut down.
391607	Switch does not send gratuitous ARP for IP conflict when the system boots up and adds a new switch virtual interface (SVI).
414972	IGMP snooping might not work correctly when used with the 802.1x dynamic VLAN functionality in the 802.1x MAC-based authentication.
416655	When using DHCP, the IPv6 address cannot be configured. Also, the automatic configuration of the global address does not work.
438441	DHCP snooping and dynamic ARP inspection (DAI) do not work with private VLANs (PVLANS).
460999	When you enable Energy Efficiency Ethernet (EEE) on an Apple Thunderbolt to Gigabit Ethernet Adapter, the FortiSwitch port might flap continuously. Workaround: If you are using MacBook with the Apple Thunderbolt to Gigabit Ethernet Adapter, disable EEE on the Apple Thunderbolt to Gigabit Ethernet Adapter when connecting to the FortiSwitch unit.
489064	When connecting two 224D FortiSwitch units together, the SFP ports RX alarm reports a loss of signal, but traffic is not interrupted.
489769	In a two-tier MCLAG topology, some second tier FortiSwitch MCLAG peer groups have high levels of STP daemon processing.
505911	IGMP snooping does not work on FortiSwitch 2xx and 4xx. Workaround: Upgrade to FortiSwitchOS 6.0.x.
510943	When using the cable diagnostics feature on a port (with the <code>diagnose switch physical-ports cable-diag <physical port name></code> CLI command), ensure that the physical link on its neighbor port is down. You can disable the neighbor ports or physically remove the cables.

Bug ID	Description
535736	<p>If a FortiSwitch firmware image is an even multiple of 1024 bytes, it will not upgrade properly using the default FortiLink upgrade mechanism. The following builds are known to be affected:</p> <p>version 3.x build 0415/FSW_124D_POE</p> <p>version 6.x build 0039/FSW_1048E build 0043/FSW_124E build 0141/FSW_224D_FPOE build 0052/FSW_548D_FPOE</p> <p>Workaround: Change to HTTPS mode using the following commands:</p> <pre>config switch-controller global set https-image-push enable end</pre>
593993	<p>When the switch-controller.global.https-image-upgrade is enabled, the FS-108D-POE/FS-224D-POE might fail to upgrade.</p> <p>Workaround: Disable https-image-upgrade.</p>



High Performance Network Security



Copyright© 2019 Fortinet, Inc. All rights reserved. Fortinet®, FortiGate®, FortiCare® and FortiGuard®, and certain other marks are registered trademarks of Fortinet, Inc., in the U.S. and other jurisdictions, and other Fortinet names herein may also be registered and/or common law trademarks of Fortinet. All other product or company names may be trademarks of their respective owners. Performance and other metrics contained herein were attained in internal lab tests under ideal conditions, and actual performance and other results may vary. Network variables, different network environments and other conditions may affect performance results. Nothing herein represents any binding commitment by Fortinet, and Fortinet disclaims all warranties, whether express or implied, except to the extent Fortinet enters a binding written contract, signed by Fortinet's General Counsel, with a purchaser that expressly warrants that the identified product will perform according to certain expressly-identified performance metrics and, in such event, only the specific performance metrics expressly identified in such binding written contract shall be binding on Fortinet. For absolute clarity, any such warranty will be limited to performance in the same ideal conditions as in Fortinet's internal lab tests. In no event does Fortinet make any commitment related to future deliverables, features or development, and circumstances may change such that any forward-looking statements herein are not accurate. Fortinet disclaims in full any covenants, representations, and guarantees pursuant hereto, whether express or implied. Fortinet reserves the right to change, modify, transfer, or otherwise revise this publication without notice, and the most current version of the publication shall be applicable.