



FortiSwitch - Release Notes

3.6.3

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FortiSwitch 3.6.3 Release Notes

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Change log

Date	Change Description
October 20, 2017	Initial release
October 30, 2017	Added bug 456947 to the “Known Issues” section.
September 18, 2018	Added bug 510943 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 3.6.3 build: 0390.

- Supported models on page 5
- Special notices on page 6
- Upgrade information on page 11
- Product integration and support on page 12
- Resolved issues on page 14
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See the [Fortinet Document Library](#) for FortiSwitch documentation.

Supported models

FortiSwitch 3.6.3 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 3.6.3

Release 3.6.3 provides the following new features:

- Support of the RADIUS accounting server
- Support of RADIUS change of authorization (CoA) and disconnect messages
- 802.1x authentication: EAP-TLS support
- DHCP snooping: CLI commands to monitor the DHCP-snooping server database
- Quality of service (QoS) queue counters available on more FortiSwitch models
- New REST API endpoints

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	N/A			✓	✓	✓
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					✓	
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	N/A	✓	✓	✓	✓	✓
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		✓	✓	✓	✓	✓
802.1x enhancements, including MAB (release 3.5.1)	✓	✓	✓	✓	✓	✓
Multi-stage load balancing (release 3.5.1)					✓	✓
MCLAG (multichassis link aggregation)(release 3.6.0)		N/A	✓ (not on 124D/124D-POE)	✓	✓	✓
Dynamic layer-3 protocols (OSPF, RIP, and VRRP) (release 3.6.0) (See Note 3.)	✓	N/A	✓ (not on 124D/124D-POE)	✓	✓	✓
Dynamic ARP inspection (release 3.6.0)		N/A	✓	✓	✓	✓
Firmware image rotation (dual-firmware image support) (release 3.6.0)		✓ (not on 108D-POE, 224D-POE)	✓	✓	✓	✓
TDR (time-domain reflectometer)/cable diagnostics support (release 3.6.0)	✓	N/A	✓	✓	✓	✓
MAC learning limit (release 3.6.0) (See Note 4.)		N/A	✓	✓		
Sticky MAC on switch interfaces (release 3.6.0)		N/A	✓	✓	✓	✓
PoE modes support: first come, first served or priority based (PoE models) (release 3.6.0)		✓	✓	✓	N/A	✓
ACL: egress mask action support (release 3.6.0)		N/A	✓ (not on 248Ds, 448Ds)	✓	✓	✓

Feature	GUI supported	108D-POE 112D-POE 224D-POE	124D 124D-POE 200 series 400 series	500 series	1024D 1048D	3032D
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)		N/A	✓	✓	✓	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)			✓	✓	✓	✓
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)		✓	✓	✓	✓	✓

Feature	GUI supported	108D-POE 112D-POE 224D-POE	124D 124D-POE 200 series 400 series	500 series	1024D 1048D	3032D
802.1x authentication: EAP-TLS support (release 3.6.3)		✓	✓	✓	✓	✓
DHCP snooping: CLI for DHCP-snooping server database (release 3.6.3)			✓	✓	✓	✓

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 is not supported on dual-chip platforms (248 and 448 series).

Default flow-control state changed to disable

This change allows a port to ignore the pause frame it receives. You can still enable flow control on a port if so desired by using the following CLI commands:

To enable flow control on *both RX and TX*:

```
S548DN4K16000360 # config switch physical-port
S548DN4K16000360 (physical-port) # edit port9
S548DN4K16000360 (port9) # set flow-control both
```

To enable flow control on *RX only*:

```
S548DN4K16000360 # config switch physical-port
S548DN4K16000360 (physical-port) # edit port9
S548DN4K16000360 (port9) # set flow-control rx
```

To enable flow control on *TX only*:

```
S548DN4K16000360 # config switch physical-port
S548DN4K16000360 (physical-port) # edit port9
S548DN4K16000360 (port9) # set flow-control tx
```

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 3.6.3 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 3.6.3 support

The following table lists 3.6.3 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 3.6.3. For inquiries about a particular bug, please contact [Customer Service & Support](#).

Bug ID	Description
423161	You cannot use the VLAN system interface to ping two neighboring FortiSwitches with IPv6 addresses.
443999	When a port with BPDU guard enabled receives BPDUs and the port goes down, the GUI does not show that the port is down.
441901	EAP TLS authentication is not supported.
445355	The FortiSwitch does not route a packet when the destination MAC address was learned through a different interface.
393845	Newly created static MAC address may not get added in MAC address table when 802.1x feature is enabled on same interface.
410200, 393845	802.1x: VLAN programming received from a RADIUS server can be overwritten by CLI configuration. Workaround: Do NOT manually change the VLAN assignment on a port that is in an authentication state.
423161	The system is unable to ping two IPv6 neighbors using the VLAN system interface.
444484	A switched virtual interface that has DHCP mode enabled and DHCP snooping enabled cannot get the IP address from the DHCP server.
441840	When two FortiSwitches have the same IP address and are connected to the same VLAN on a management switch, no log message is generated.
424096	(Access VLAN) A host in the same access VLAN can receive IGMP messages from other hosts.

Known issues

The following known issues have been identified with 3.6.3. For inquiries about a particular bug or to report a bug, please contact [Fortinet Customer Service & Support](#).

Bug ID	Description
456947	After upgrading to FortiSwitchOS 3.6.3, DHCP relay stops working. Workaround: Enable DHCP snooping.
440045	Configuring VLANs that have IGMP snooping enabled is slow. Workaround: Disable IGMP snooping on the trunk interface when configuring VLANs.
434680	Modifying or disabling a split port does not remove entries.
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 802.1x Dynamic VLAN functionality.
416655	IGMP snooping might not work correctly when used with 802.1x Dynamic VLAN functionality.
417024, 438441	DHCP client lease time on PVLAN is inaccurate.
417073, 438441	DHCP MAC address client is learned on Primary VLAN instead of the isolated VLAN.
417099, 438441	The system shows no DAI stats entry on PVLAN ports.
423940	In some cases, the MAC address and VLAN ID are shown (diagnostic command) twice on the same interface after splitting ports.
434680	If you have a sticky-MAC address on an interface which is moved to split-port mode, some entries may remain. Workaround: Clear sticky-MAC address before changing to split-port mode.
380239	IGMP-snooped multicast groups are not immediately flushed out of the snooping table when the querier port is shut down.

Bug ID	Description
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.
593993	When the <code>switch-controller.global.https-image-upgrade</code> is enabled, the FS-108D-POE/FS-224D-POE might fail to upgrade. Workaround: Disable <code>https-image-upgrade</code> .



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