

FortiSwitch - Release Notes

Version 3.5.5

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

May 11, 2017

FortiSwitch 3.5.5 Release Notes

11-355-422270-20170511

TABLE OF CONTENTS

- Change Log** **4**
- Introduction** **5**
 - Supported models 5
 - What’s new in 3.5.5 5
- Special Notices** **6**
 - Supported Features 6
 - FortiSwitch 100 6
 - FortiSwitch 200 8
 - FortiSwitch 400 9
 - FortiSwitch 500 11
 - FortiSwitch 1000 13
 - FortiSwitch 3000 14
 - Default STP edge-port state changed to enabled 15
 - Connecting multiple FSW-R-112D-POE switches 15
- Upgrade Information** **16**
 - Cooperative Security Fabric Upgrade 16
- Product Integration and Support** **17**
 - FortiSwitch 3.5.5 support 17
- Resolved Issues** **19**
- Known Issues** **20**

Change Log

Date	Change Description
2017-05-11	Initial release.

Introduction

This document provides the following information for FortiSwitch 3.5.5 build: 0273.

- [Supported models](#)
- [Special Notices](#)
- [Upgrade Information](#)
- [Product Integration and Support](#)
- [Resolved Issues](#)
- [Known Issues](#)

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

Supported models

FortiSwitch 3.5.5 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 3.5.5

FortiSwitch 3.5.5 is a patch release only. No new feature or and enhancement has been implemented in this release.

Special Notices

Supported Features

Features support by model.

FortiSwitch 100

Feature	FSW-108D- POE	FSR-112D- POE	FSW-124D	FSW-124D- POE	FSR-124D
48 port lag support					
801.1x port mode	✓	✓	✓	✓	✓
802.1x MAC base security mode			✓	✓	✓
ACL			✓	✓	✓
Auto module max speed detection & notification					
CPLD Software Upgrade Support for OS					
DHCP relay feature			✓	✓	✓
DHCP Snooping			✓	✓	✓
HTTP REST APIs	✓	✓	✓	✓	✓
HW based ECMP					

Feature	FSW-108D- POE	FSR-112D- POE	FSW-124D	FSW-124D- POE	FSR-124D
IGMP Snooping			✓	✓	✓
IP conflict detection & notification	✓	✓	✓	✓	✓
LAG min-max-bundle	✓	✓	✓	✓	✓
LLDP transmit	✓	✓	✓	✓	✓
LLDP-MED	✓	✓	✓	✓	✓
Loop-guard	✓	✓	✓	✓	✓
MAC-IP Binding					
POE-pre-standard detection	✓	✓		✓	
QOS: 802.1p support			✓	✓	✓
SFLOW	✓	✓	✓	✓	✓
Software Routing Only	✓	✓			
Static BFD			✓	✓	✓
Static L3/HW based routing			✓	✓	✓
Storm Control	✓	✓	✓	✓	✓
Virtual Wire			✓	✓	✓
vlan tag by ACL			✓	✓	✓
vlan tag by MAC/IP/802.1x	✓	✓	✓	✓	✓

FortiSwitch 200

Feature	FSW-224D- POE	FSW-224D- FPOE	FSW-248D	FSW-248D- POE	FSW-248D- FPOE
48 port lag sup- port			✓	✓	✓
802.1x port mode	✓	✓	✓	✓	✓
802.1x MAC base security mode		✓	✓	✓	✓
ACL		✓	✓	✓	✓
Auto module max speed detection & notification					
CPLD Software Upgrade Sup- port for OS					
DHCP relay fea- ture		✓	✓	✓	✓
DHCP Snoop- ing		✓	✓	✓	✓
HTTPS REST APIs	✓	✓	✓	✓	✓
HW based ECMP					
IGMP Snoop- ing		✓	✓	✓	✓
IP conflict detection & notification	✓	✓	✓	✓	✓
LAG min-max- bundle	✓	✓	✓	✓	✓
LLDP transmit	✓	✓	✓	✓	✓

Feature	FSW-224D- POE	FSW-224D- FPOE	FSW-248D	FSW-248D- POE	FSW-248D- FPOE
LLDP-MED	✓	✓	✓		✓
Loop-guard	✓	✓	✓	✓	✓
MAC-IP Bind- ing					
POE-pre-stand- ard detection	✓	✓		✓	✓
QOS: 802.1p support		✓	✓	✓	✓
SFLOW	✓	✓	✓	✓	✓
Software Rout- ing Only	✓				
Static BFD		✓	✓	✓	✓
Static L3/HW based routing		✓	✓	✓	✓
Storm Control	✓	✓	✓	✓	✓
Virtual Wire		✓	✓	✓	✓
vlan tag by ACL		✓	✓	✓	✓
vlan tag by MAC/IP/802.1x	✓	✓	✓	✓	✓

FortiSwitch 400

Feature	FSW-424D	FSW-424D- POE	FSW-424D- FPOE	FSW-448D	FSW-448D- POE	FSW-448D- FPOE
48 port lag sup- port						
802.1x port mode	✓	✓	✓	✓	✓	✓

Feature	FSW-424D	FSW-424D- POE	FSW-424D- FPOE	FSW-448D	FSW-448D- POE	FSW-448D- FPOE
802.1x MAC base security mode	✓	✓	✓	✓	✓	✓
ACL	✓	✓	✓	✓	✓	✓
Auto module max speed detection & notification	✓	✓	✓	✓	✓	✓
CPLD Software Upgrade Sup- port for OS						
DHCP relay fea- ture	✓	✓	✓	✓	✓	✓
DHCP Snoop- ing	✓	✓	✓	✓	✓	✓
HTTP REST API	✓	✓	✓	✓	✓	✓
HW based ECMP						
IGMP Snoop- ing	✓	✓	✓	✓	✓	✓
IP conflict detection & notification	✓	✓	✓	✓	✓	✓
LAG min-max- bundle	✓	✓	✓	✓	✓	✓
LLDP transmit	✓	✓	✓	✓	✓	✓
LLDP-MED	✓	✓	✓	✓	✓	✓
Loop-guard	✓	✓	✓	✓	✓	✓
MAC-IP Bind- ing						

Feature	FSW-424D	FSW-424D- POE	FSW-424D- FPOE	FSW-448D	FSW-448D- POE	FSW-448D- FPOE
POE-pre-stand- ard detection		✓	✓		✓	✓
QOS: 802.1p support	✓	✓	✓	✓	✓	✓
SFLOW	✓	✓	✓	✓	✓	✓
Software Rout- ing Only						
Static BFD	✓	✓	✓	✓	✓	✓
Static L3/HW based routing	✓	✓	✓	✓	✓	✓
Storm Control	✓	✓	✓	✓	✓	✓
Virtual Wire	✓	✓	✓	✓	✓	✓
vlan tag by ACL	✓	✓	✓	✓	✓	✓
vlan tag by MAC/IP/802.1x	✓	✓	✓	✓	✓	✓

FortiSwitch 500

Feature	FSW-524D	FSW-524D-FPOE	FSW-548D	FSW-548D-FPOE
48 port lag support			✓	✓
802.1x port mode	✓	✓	✓	✓
802.1x MAC base security mode	✓	✓	✓	✓
ACL	✓	✓	✓	✓
Auto module max speed detection & notification	✓	✓	✓	✓
CPLD Software Upgrade Support for OS				

Feature	FSW-524D	FSW-524D-FPOE	FSW-548D	FSW-548D-FPOE
DHCP relay feature	✓	✓	✓	✓
DHCP Snooping	✓	✓	✓	✓
HTTP REST APIs	✓	✓	✓	✓
HW based ECMP	✓	✓	✓	✓
IGMP Snooping	✓	✓	✓	✓
IP conflict detection & notification	✓	✓	✓	✓
LAG min-max-bundle	✓	✓	✓	✓
LLDP transmit	✓	✓	✓	✓
LLDP-MED	✓	✓	✓	✓
Loop-guard	✓	✓	✓	✓
MAC-IP Binding	✓	✓	✓	✓
POE-pre-standard detection		✓		✓
QOS: 802.1p support	✓	✓	✓	✓
SFLOW	✓	✓	✓	✓
Software Routing Only				
Static BFD	✓	✓	✓	✓
Static L3/HW based routing	✓	✓	✓	✓
Storm Control	✓	✓	✓	✓
Virtual Wire	✓	✓	✓	✓
vlan tag by ACL	✓	✓	✓	✓
vlan tag by MAC/IP/802.1x	✓	✓	✓	✓

FortiSwitch 1000

Feature	FSW-1024D	FSW-1048D
48 port lag support		✓
802.1x port mode	✓	✓
802.1x MAC base security mode	✓	✓
ACL	✓	✓
Auto module max speed detection & notification	✓	✓
CPLD Software Upgrade Support for OS	✓	✓
DHCP relay feature	✓	✓
DHCP Snooping	✓	✓
HTTP REST APIs	✓	✓
HW based ECMP	✓	✓
IGMP Snooping	✓	✓
IP conflict detection & notification	✓	✓
LAG min-max-bundle	✓	✓
LLDP transmit	✓	✓
LLDP-MED	✓	✓
Loop-guard	✓	✓
MAC-IP Binding	✓	✓
POE-pre-standard detection		
QOS: 802.1p support	✓	✓
SFLOW	✓	✓
Software Routing Only		
Static BFD	✓	✓
Static L3/HW based routing	✓	✓

Feature	FSW-1024D	FSW-1048D
Storm Control	✓	✓
Virtual Wire	✓	✓
vlan tag by ACL	✓	✓
vlan tag by MAC/IP/802.1x	✓	✓

FortiSwitch 3000

Feature	FSW-3032D
48 port lag support	
802.1x port mode	✓
802.1x MAC base security mode	✓
ACL	✓
Auto module max speed detection & notification	
CPLD Software Upgrade Support for OS	
DHCP relay feature	✓
DHCP Snooping	✓
HTTP REST APIs	✓
HW based ECMP	✓
IGMP Snooping	✓
IP conflict detection & notification	✓
LAG min-max-bundle	✓
LLDP transmit	✓
LLDP-MED	✓
Loop-guard	✓
MAC-IP Binding	✓

Feature	FSW-3032D
POE-pre-standard detection	
QOS: 802.1p support	✓
SFLOW	✓
Software Routing Only	
Static BFD	✓
Static L3/HW based routing	✓
Storm Control	✓
Virtual Wire	✓
vlan tag by ACL	✓
vlan tag by MAC/IP/802.1x	✓

Default STP edge-port state changed to enabled

The default STP edge-port state on all switch interfaces is changed to **enabled**.

This change allows a port to transition directly the forwarding state, and skips the listening and learning stages. When a port is an edge port, it doesn't generate topology changes on link status changes, which results in a more stable network. These are key advantages of RSTP faster convergence and less topology changes. A STP enabled ports still transmits BPDU. When a STP enabled port receives a BPDU, it immediately loses edge port status and becomes a normal spanning tree port. A ports edge-status state can still be disabled if desired by using the following CLI commands:

```
S124DN3W14000095 # config switch interface
S124DN3W14000095 (interface) # edit port9
S124DN3W14000095 (port9) # set edge-port
disabled Disable interface as edge port.
enabled Enable interface as edge port.
```

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 3.5.5 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 3.5.5 support

The following table lists 3.5.5 product integration and support information.

Web browser	• Microsoft Internet Explorer version 11 • Mozilla Firefox version 52 • Google Chrome version 56 Other web browsers may function correctly, but are not supported by Fortinet.
--------------------	---

**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 3.5.5. For inquiries about a particular bug, please contact [Customer Service & Support](#).

Bug ID	Description
415842	DHCP Snoop/DHCP packets may leak to the CPU on the RX path when .1x and DHCP Snoop are enabled.
418220	FortiGate was unable to auto-discover 124DN as the second tier when the port has the "auto-discovered" option enabled on the low or high port number in local mode.
409061	FortiSwitch 3032D may display unnecessary error messages from /bin/ovs-vsctl.
412723	The user is allowed to configure 1000auto speed setting on 3032D split-port which is not supported. The option is hidden until a future release.
403226	Internal firmware certificates need updating.
414743	The GUI vWire page may display the "Internal server error" message when creating a vWire.
416865	On dual-chip platforms, the "I2 learning" option cannot be disabled on higher ordered ports.

Known Issues

The following known issues have been identified with 3.5.5. For inquiries about a particular bug or to report a bug, please contact [Fortinet Customer Service & Support](#).

Bug ID	Description
377609	PoE port does not reboot when you remove and insert the link.
393845	Newly-created static MACs are missing from the MAC address table.
393856	LLDP-MED does not time out quickly-enough on FSR124D.
393622	get switch dhcp-snooping status does not report correctly snoop-enabled-vlans.
393186	FSW does NOT allow timezones 00, 76, 82 and 86.
408113	The local user failed authentication when eap-passthru is enabled by default. Workaround: The user can change eap-passthru to disabled.
414802	IGMP-Snooping: Traffic flooding to newly assigned VLAN source port. Workaround: Create the VLAN and enable IGMP-S/DHCP-S before configuring the port.
414570	802.1 does not clean up completely when adding 802.1x interface to the trunk port. Workaround: Clear the 802.1x configuration before migrating to the trunk.
410200	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.

Copyright© 2016 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.