FortiSwitch - Release Notes

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TABLE OF CONTENTS

Change Log

Date	Change Description
2017-04-07	Initial release.

Introduction

This document provides the following information for FortiSwitch 3.5.4 build: 0272

- 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 3.5.4 supports the following models:

FortiSwitch	FSR-112D-POE, FSR_124D, 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 3.5.4

FortiSwitch 3.5.4 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 Snoop-ing			✓	✓	✓
IP conflict detection & notification	✓	✓	✓	✓	✓
LAG min-max-bundle	✓	✓	✓	✓	✓
LLDP transmit	✓	✓	✓	✓	✓
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 200

Feature	FSW-224D-POE	FSW-224D-FPOE	FSW-248D	FSW-248D-POE	FSW-248D-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					
DHCP relay feature		✓	✓	✓	✓
DHCP Snooping		✓	✓	✓	✓
HTTPS REST APIs	✓	✓	✓	✓	✓
HW based ECMP					
IGMP Snooping		✓	✓	✓	✓
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 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 400

Feature	FSW-424D	FSW-424D-POE	FSW-424D-FPOE	FSW-448D	FSW-448D-POE	FSW-448D-FPOE
48 port lag support						
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 Support for OS						
DHCP relay feature	✓	✓	✓	✓	✓	✓
DHCP Snooping	✓	✓	✓	✓	✓	✓
HTTP REST API	✓	✓	✓	✓	✓	✓
HW based ECMP						
IGMP Snooping	✓	✓	✓	✓	✓	✓
IP conflict detection & notification	✓	✓	✓	✓	✓	✓
LAG min-max-bundle	✓	✓	✓	✓	✓	✓
LLDP transmit	✓	✓	✓	✓	✓	✓
LLDP-MED	✓	✓	✓	✓	✓	✓
Loop-guard	✓	✓	✓	✓	✓	✓
MAC-IP Binding						

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 3.5.4 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 3.5.4 support

The following table lists 3.5.4 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 3.5.4. For inquiries about a particular bug, please contact Customer Service & Support.

Bug ID	Description
415380	When DHCP-Snooping is enabled, DHCP traffic could be inadvertently blocked preventing clients from receiving DHCP-assigned addresses when at least one ingress or ingress port is a trunk (Link Aggregate Group).
414060	When 802.1x is enabled with DHCP Snooping, DHCP Discover could leak to the server.

Known Issues

The following known issues have been identified with 3.5.4. 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.