



FortiSwitch Release Notes

Version 6.0.7

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FortiSwitch Release Notes

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Change log

Date	Change Description
June 24, 2021	Initial release for FortiSwitchOS 6.0.7

Introduction

This document provides the following information for FortiSwitchOS 6.0.7 build: 0080.

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

Supported models

FortiSwitchOS 6.0.7 supports the following models:

FortiSwitch 1xx	FSW-108E, FSW-108E-POE, FSW-108E-FPOE, FSW-124E, FSW-124E-POE, FSW-124E-FPOE, FSW-148E, FSW-148E-POE
FortiSwitch 2xx	FSW-224D-FPOE, FSW-224E, FSW-224E-POE, FSW-248D, FSW-248E-POE, FSW-248E-FPOE
FortiSwitch 4xx	FSW-424D, FSW-424D-FPOE, FSW-424D-POE, FSW-448D, FSW-448D-FPOE, FSW-448D-POE
FortiSwitch 5xx	FSW-524D-FPOE, FSW-524D, FSW-548D, FSW-548D-FPOE
FortiSwitch 1xxx	FSW-1024D, FSW-1048D, FSW-1048E
FortiSwitch 3xxx	FSW-3032D, FSW-3032E
FortiSwitch Rugged	FSR-112D-POE, FSR-124D

What's new in FortiSwitchOS 6.0.7

FortiSwitchOS 6.0.7 is a patch release only. No new features or enhancements have been implemented in this release.

Special notices

Supported features for FortiSwitchOS 6.0

The following table lists the FortiSwitch features in Release 6.0 that are supported on each series of FortiSwitch models. All features are available in Release 6.0.0, unless otherwise stated.

Feature	GUI supported	112D-POE	1xxE	200 Series 400 Series	500 Series	1024D 1048D 1048E	3032D 3032E
Management and Configuration							
CPLD software upgrade support for OS	—	—	—	—	—	1024D 1048D	—
Firmware image rotation (dual-firmware image support) (release 3.6.0)	—	✓	148E 148E- POE	✓	✓	✓	✓
HTTP REST APIs for configuration and monitoring	—	✓	✓	✓	✓	✓	✓
Support for switch SNMP OID	✓	✓	✓	✓	✓	✓	✓
IP conflict detection and notification	✓	✓	✓	✓	✓	✓	✓
Security and Visibility							
802.1x port mode	✓	✓	✓	✓	✓	✓	✓
802.1x MAC-based security mode	✓	✓	✓	✓	✓	✓	✓
User-based (802.1x) VLAN assignment	✓	✓	—	✓	✓	✓	✓

Feature	GUI supported	112D-POE	1xxE	200 Series 400 Series	500 Series	1024D 1048D 1048E	3032D 3032E
802.1x enhancements, including MAB (release 3.5.1)	✓	✓	✓	✓	✓	✓	✓
MAB reauthentication disabled (release 3.6.4)	—	✓	—	✓	✓	✓	✓
open-auth mode (release 6.0.0)	✓	✓	✓	✓	✓	✓	✓
Support of the RADIUS accounting server (release 3.6.3)	Partial	✓	—	✓	✓	✓	✓
Support of RADIUS CoA and disconnect messages (release 3.6.3)	—	✓	—	✓	✓	✓	✓
EAP Pass-Through (release 3.6.3)	✓	✓	—	✓	✓	✓	✓
Network device detection (release 3.6.2)	—	—	—	✓	✓	✓	✓
IP-MAC-Binding	✓	—	—	—	✓	✓	✓
sFlow	✓	✓	—	✓	✓	✓	✓
ACL	—	—	—	✓	✓	✓	✓
Multistage ACL (release 6.0.0)	—	—	—	—	✓	✓	✓
DHCP snooping	✓	✓	✓	✓	✓	✓	✓
DHCP blocking (release 6.0.0)	—	—	—	✓	—	—	—
Dynamic ARP inspection (release 3.6.0)	✓	—	—	✓	✓	✓	✓

Feature	GUI supported	112D-POE	1xxE	200 Series 400 Series	500 Series	1024D 1048D 1048E	3032D 3032E
ARP timeout value (release 6.0.0)	—	✓	✓	✓	✓	✓	✓
Access VLANs (See Note 5.)	—	—	—	✓	✓	✓	✓
VLAN tag by ACL	—	—	—	✓	✓	✓	✓
Layer 2							
Link aggregation group size (maximum number of ports) (See Note 2.)	✓	8	8	8	24/48	24/48	24 (3.5.0) 64 (3.5.1)
LAG min-max-bundle	—	✓	✓	✓	✓	✓	✓
IGMP snooping	✓	—	—	✓	✓	✓	✓
IGMP querier (release 3.6.4)	—	—	—	✓	✓	✓	✓
LLDP transmit	—	✓	—	✓	✓	✓	✓
LLDP-MED	—	✓	✓	✓	✓	✓	✓
Per-port max for learned MACs	—	—	✓	✓	✓	—	—
MAC learning limit (release 3.6.0) (See Note 4.)	—	—	✓	✓	✓	—	—
Learning limit violation log (release 3.6.4) (See Note 4.)	—	—	—	✓	✓	—	—
set mac-violation-timer (release 6.0.0)	—	✓	—	✓	✓	✓	✓
Sticky MAC (releases 3.6.0 and 6.0.0)	✓	✓	✓	✓	✓	✓	✓
Total MAC entries (release 6.0.0)	—	✓	✓	✓	✓	✓	✓

Feature	GUI supported	112D-POE	1xxE	200 Series 400 Series	500 Series	1024D 1048D 1048E	3032D 3032E
MSTP	—	✓	✓	✓	✓	✓	✓
STP root guard (release 3.6.2)	—	✓	✓	✓	✓	✓	✓
STP BPDU guard (release 3.6.2)	—	✓	✓	✓	✓	✓	✓
'forced-untagged' or 'force-tagged' setting on switch interfaces (release 3.6.0)	—	✓	—	✓	✓	✓	✓
Private VLANs	✓	—	—	✓	✓	✓	✓
Multi-stage load balancing (release 3.5.1)	—	—	—	—	—	✓	✓
Priority-based flow control (release 6.0.0)	—	—	—	—	—	✓	✓
Storm control	✓	✓	✓	✓	✓	✓	✓
MAC/IP/protocol- based VLAN assignment	✓	✓	✓	✓	✓	✓	✓
Virtual wire	✓	—	—	✓	✓	✓	✓
Loop guard	✓	✓	✓	✓	✓	✓	✓
Percentage rate control (release 6.0.0)	✓	—	—	✓	✓	✓	✓
Layer 3							
Static L3/hardware- based routing	✓	—	—	✓	✓	✓	✓
Software routing only	✓	✓	✓	—	—	—	—
OSPF (release 3.6.0) (See Note 3.)	✓	—	—	✓	✓	✓	✓

Feature	GUI supported	112D-POE	1xxE	200 Series 400 Series	500 Series	1024D 1048D 1048E	3032D 3032E
RIP (release 3.6.0) (See Note 3.)	✓	—	—	✓	✓	✓	✓
VRRP (release 3.6.0) (See Note 3.)	✓	—	—	✓	✓	✓	✓
BGP (release 6.0.0)	—	—	—	—	✓	✓	✓
IS-IS (release 6.0.0)	—	—	—	—	✓	✓	✓
PIM (release 6.0.0)	—	—	—	—	✓	✓	✓
Hardware-based ECMP	—	—	—	—	✓	✓	✓
Static BFD	—	—	—	—	—	✓	✓
DHCP relay feature	✓	—	✓	✓	✓	✓	✓
High Availability							
MCLAG (multichassis link aggregation) (release 3.6.0)	Partial	—	—	✓	✓	✓	✓
STP supported in MCLAGs (release 3.6.4)	—	—	—	✓	✓	✓	✓
Quality of Service							
802.1p support, including priority queuing trunk and WRED (release 3.5.1)	✓	—	—	✓	✓	✓	✓
QoS queue counters (releases 3.6.2 and 3.6.3)	—	—	—	✓	✓	✓	✓
QoS marking (release 3.6.4)	—	—	—	✓	✓	✓	✓

Feature	GUI supported	112D-POE	1xxE	200 Series 400 Series	500 Series	1024D 1048D 1048E	3032D 3032E
Summary of configured queue mappings (release 6.0.1)	✓	—	✓	✓	✓	✓	✓
Miscellaneous							
PoE-pre-standard detection (See Note 1.)	—	✓	FS-1xxE POE	✓	✓	—	—
PoE modes support: first come, first served or priority based (PoE models) (release 3.6.0)	—	✓	FS-1xxE POE	✓	✓	—	—
Control of temperature alerts (release 3.6.4)	—	✓	—	✓	✓	✓	✓
Split port	Partial	—	—	—	✓	1048E	✓
TDR (time-domain reflectometer)/cable diagnostics support (release 3.6.0)	✓	—	—	✓	✓	—	—
Auto module max speed detection and notification	✓	—	—	—	✓	✓	—
Monitor system temperature (threshold configuration and SNMP trap support) (release 3.6.0)	—	✓	—	✓	✓	✓	✓
Cut-through switching (release 3.6.4)	—	—	—	—	—	✓	✓
Add CLI to show the details of port statistics (release 3.6.0)	—	✓	✓	✓	✓	✓	✓

Feature	GUI supported	112D-POE	1xxE	200 Series 400 Series	500 Series	1024D 1048D 1048E	3032D 3032E
Configuration of the QSFP low-power mode (release 3.6.4)	—	—	—	—	✓	1048D	✓
Energy-efficient Ethernet (release 6.0.1)	—	✓	✓	✓	✓	—	—

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 (448 series).

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

FortiSwitchOS 6.0.7 supports upgrading from FortiSwitchOS 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

FortiSwitchOS 6.0.7 support

The following table lists FortiSwitchOS 6.0.7 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)	FortiLink is supported on all FortiSwitch models when running FortiOS 5.4.0 and later and FortiSwitchOS 3.2.1 and later.

Resolved issues

The following issues have been fixed in FortiSwitchOS 6.0.7. For inquiries about a particular bug, please contact [Customer Service & Support](#).

Bug ID	Description
605451	In FortiOS, the max_poe_budget is always 0 when the managed FortiSwitch unit is online.
605698	MSTP is taking too long to transition from Alternative/Discarding to Designated/Forwarding.
606456	A switch cannot get interface traffic data using SNMP v3 or v2c.
649325	Upgrading to an invalid FortiSwitchOS image might cause a stack overflow.
663466	You cannot use the zero-touch configuration in FortiSwitch Cloud to change the admin password.

Known issues

The following known issues have been identified with FortiSwitchOS 6.0.7. For inquiries about a particular bug or to report a bug, please contact [Fortinet Customer Service & Support](#).

Bug ID	Description
380239	<p>IGMP-snooped multicast groups are not immediately flushed out of the snooping table when the querier port is shut down.</p> <p>Workaround: Upgrade to FortiSwitchOS 6.2.0 or later.</p>
382518, 417024, 417073, 417099, 438441	<p>DHCP snooping and dynamic ARP inspection (DAI) do not work with private VLANs (PVLANS).</p>
391607	<p>Switch does not send gratuitous ARP for IP conflict when the system boots up and adds a new switch virtual interface (SVI).</p> <p>Workaround: Upgrade to FortiSwitchOS 6.2.0 or later.</p>
414972	<p>IGMP snooping might not work correctly when used with 802.1x Dynamic VLAN functionality.</p>
416655	<p>When using DHCP, the IPv6 address cannot be configured. Also, the automatic configuration of the global address does not work.</p> <p>Workaround: Upgrade to FortiSwitchOS 6.2.0 or later.</p>
480605	<p>When DHCP snooping is enabled on the FSR-112D-POE, the switched virtual interface (SVI) cannot get the IP address from the DHCP server.</p> <p>Workarounds:</p> <ul style="list-style-type: none">—Use a static IP address in the SVI when DHCP snooping is enabled on that VLAN.—Temporarily disable dhcp-snooping on vlan, issue the <code>execute interface dhcpclient-renew <interface></code> command to renew the IP address. After the SVI gets the IP address from the DHCP server, you can enable DHCP snooping.
488044	<p>On a Protocol Independent Multicast (PIM) topology using the assert mechanism, when the assert winner lost the route to the source, no multicast route was created, and the multicast traffic stopped.</p> <p>Workaround: Upgrade to FortiSwitchOS 6.2.0 or later.</p>

Bug ID	Description
510943	<p>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.</p> <p>Workaround: 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.</p>
520954	<p>When a “FortiLink mode over a layer-3 network” topology has been configured, the FortiGate GUI does not always display the complete network.</p>
528983	<p>When IGMP snooping is enabled on a VLAN, reserved multicast packets are forwarded twice on the 124D, 224D-FPOE, 248D, 424D, 424D-POE, 424D-FPOE, 448D, 448D-POE, 448D-FPOE, 224E, 224E-POE, 248E-POE, 248E-FPOE models.</p> <p>Workaround: Upgrade to FortiSwitchOS 6.2.1 or later.</p>
572052	<p>Backup files from FortiSwitchOS 3.x that have 16-character-long passwords fail when restored on FortiSwitchOS 6.x. In FortiSwitchOS 6.x, file backups fail with passwords longer than 15 characters.</p> <p>Workaround: Use passwords with a maximum of 15 characters for FortiSwitchOS 3.x and 6.x.</p>



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