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December 12, 2023 FortiSwitchOS 7.2.2 Release Notes 11-722-830761-20231212

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Change log

Date	Change Description
September 2, 2022	Initial release for FortiSwitchOS 7.2.2
October 10, 2022	Updated the "Product integration and support" section.
October 26, 2022	Added the two-step upgrade process to the "Upgrade information" section.
November 15, 2022	Added bug 837168 as a known issue.
November 16, 2022	Updated bug 837168.
November 28, 2022	Added bug 863009 as a known issue.
November 30, 2022	Added bug 861492 as a known issue.
December 14, 2022	Added bug 866231 as a known issue.
December 16, 2022	Updated the description of bug 793145.Added bug 840114.Updated the "Upgrade information" section.
December 12, 2023	Removed bug 673433.

Introduction

This document provides the following information for FortiSwitchOS 7.2.2 build 0419.

- Supported models on page 5
- Special notices on page 7
- Upgrade information on page 9
- Product integration and support on page 10
- Resolved issues on page 11
- Known issues on page 12

See the Fortinet Document Library for FortiSwitchOS documentation.

Supported models

FortiSwitchOS 7.2.2 supports the following models:

FortiSwitch 1xx	FS-108E, FS-108E-POE, FS-108E-FPOE, FS-108F, FS-108F-POE, FS-108F-FPOE, FS-124E, FS-124E-POE, FS-124E-FPOE, FS-124F, FS-124F-POE, FS-124F-FPOE, FS-148E, FS-148E-POE, FS-148F-POE, FS-148F-POE
FortiSwitch 2xx	FS-224D-FPOE, FS-224E, FS-224E-POE, FS-248D, FS-248E-POE, FS-248E-FPOE
FortiSwitch 4xx	FS-424E, FS-424E-POE, FS-424E-FPOE, FS-424E-Fiber, FS-M426E-FPOE, FS-448E, FS-448E-POE, FS-448E-FPOE
FortiSwitch 5xx	FS-524D, FS-524D-FPOE, FS-548D, FS-548D-FPOE
FortiSwitch 1xxx	FS-1024D, FS-1024E, FS-1048E, FS-T1024E
FortiSwitch 3xxx	FS-3032E
FortiSwitch Rugged	FSR-112D-POE, FSR-124D

What's new in FortiSwitchOS 7.2.2

Release 7.2.2 provides the following new features:

- You can now specify static entries for DHCP snooping and DAI by manually associating an IP address with a MAC address in the CLI.
- You can now override the global option-82 setting for DHCP requests by specifying plain text strings for the Circuit ID field and the Remote ID field for a specific VLAN on a port.
- You can now use the GUI to configure MLD snooping on FortiSwitch VLANs.
- You can now use the following wildcard characters in the set value command for the automation trigger used for an automation stitch:
 - Use an asterisk to match any character string of any length, including 0-characters long. For example, use set value "*1567*" to match values of 81567 and 156789.
 - Use square brackets to match one of the multiple characters. For example, use set value "[aA]dmin" to match values of admin and Admin.
- You can now configure multiple fields for the automation trigger used for an automation stitch when the eventtype is event-log and the logid is set. The action is only performed if all conditions are valid (using AND logic).
- You can use a new CLI command to change how a FortiSwitch unit with Power over Ethernet (PoE) disconnects from a powered device:

```
config switch physical-port
  edit <port_name>
    set poe-disconnection-type {AC | DC | DC-delay}
  next
end
```

- VXLAN tunnels are now supported on FS-3032E.
- If an unverified firmware image is uploaded to FortiSwitchOS, the following warning is displayed in the GUI: "WARNING: This firmware failed signature validation."
- You can now display IPv4 and IPv6 routes by VRF instance on the *Router > Monitor > Routing* and *Router > Monitor > IPv6 Routing* pages.
- The default value for the set dhcp-snoop-client-req command (under config system global) is now drop-untrusted, instead of forward-untrusted.
- The new set ebgp-requires-policy command (under config router bgp) is set to enable by default, which prevents the BGP router from learning or advertising prefixes from or to its eBGP peers.
- Under the config router ospf command, set ucast-ttl has been renamed to set ttl. This setting now applies to multicast OSPF packets, as well as unicast OSPF packets.

Refer to the FortiSwitch feature matrix for details about the features supported by each FortiSwitch model.

Special notices

Zero-touch management

When a new FortiSwitch unit is started, by default, it will connect to the available manager, which can be a FortiGate device, FortiLAN Cloud, or FortiSwitch Manager. All ports are enabled for auto discovery. The "internal" interface is the DHCP client in all FortiSwitch models. If you do not want your FortiSwitch unit to be managed, you must disable the features that you do not want active.

By default, auto-network is enabled in FortiSwitchOS 7.2.0 and later

After an execute factoryreset command is executed on a FortiSwitch unit in standalone mode, the auto-network configuration is enabled by default. If you are not using auto-network, you must manually disable it:

config switch auto-network
 set status disable
end

Downgrading FortiSwitchOS 7.0.0 and later to versions earlier than 6.2.6 or 6.4.4 is not supported

Downgrading FortiSwitchOS 7.0.0 and later to FortiSwitchOS 6.2.6 and later 6.2 versions is supported. Downgrading FortiSwitchOS 7.0.0 and later to FortiSwitchOS 6.4.4 and later 6.4 versions is supported. Downgrading FortiSwitchOS 7.0.0 to versions earlier than FortiSwitchOS 6.2.6 or 6.4.4 is not supported.

Downgrading FortiSwitchOS 7.0.0 and later requires converting the admin password first

Because FortiSwitchOS 7.0.0 changed from SHA1 to SHA256 encryption for admin passwords, you need to convert the format of the admin password before downgrading from FortiSwitchOS 7.0.0 and later to an earlier FortiSwitchOS version.



If you do not convert the admin password before downgrading from FortiSwitchOS 7.0.0 and later, the admin password will not work after the switch reboots with the earlier FortiSwitchOS version.

The encrypted admin password in FortiSwitchOS 7.0.0 and higher starts with "SH2", and the encrypted admin password for earlier FortiSwitchOS versions starts with "AK1".

To convert the format of the admin password in FortiSwitchOS 7.0.0 and later before downgrading to an earlier FortiSwitchOS version:

1. Enter the following CLI command to convert the admin password from SHA256 to SHA1 encryption:

```
execute system admin account-convert <admin_name>
```

2. Downgrade your firmware.

Connecting multiple FSR-112D-POE switches

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

Upgrade information

FortiSwitchOS 7.2.2 supports upgrading from FortiSwitchOS 3.5.0 and later.

- For the FS-424E, FS-424E-POE, FS-424E-FPOE, FS-424E-Fiber, and FS-M426-FPOE models, there is a two-step upgrade process if you are upgrading from FortiSwitchOS 6.0.x or 6.2.x to 7.2.x:
 - **a.** Upgrade from FortiSwitchOS 6.0.x or 6.2.x to FortiSwitchOS 6.4.12 or later.
 - **b.** Upgrade from FortiSwitchOS 6.4.12 or later to 7.2.x.



If you do not follow the two-step upgrade process, the FortiSwitch unit will not start after the upgrade, and you will need to use the serial console to conclude the upgrade (BIOS and OS).

• For the FS-124F-POE, FS-124F-FPOE, FS-148F-POE, and FS-148F-FPOE models, when upgrading from FortiSwitchOS 7.2.1 build 4755 or build 4869, auto-network gets disabled after the upgrade. Before the upgrade, enable static ISL on all auto-discovered trunks (ISLs between the FortiSwitch units and the FortiLink trunk between the FortiSwitch unit and the FortiGate device) with the set static-isl enable command.

For FortiSwitch units managed by FortiGate units, refer to the FortiLink Release Notes for upgrade information.

Product integration and support

FortiSwitchOS 7.2.2 support

The following table lists FortiSwitchOS 7.2.2 product integration and support information.

Web browser	 Mozilla Firefox version 52 Google Chrome version 56 Other web browsers may function correctly, but are not supported by Fortinet.
FortiOS (FortiLink Support)	Refer to the FortiLink Compatibility table to find which FortiSwitchOS versions support which FortiOS versions.

Resolved issues

The following issues have been fixed in FortiSwitchOS 7.2.2. For inquiries about a particular bug, please contact Customer Service & Support.

718440	When 802.1X MAC-based authentication, dynamic VLAN assignment, and allow-mac-move are configured, the FortiSwitch unit incorrectly forwards packets with VLAN tags.
795041	The VM debug report (System > Debug Report) is missing information for many CLI commands.
814741	MAC authentication bypass (MAB) authentication sometimes does not work on a managed FS-108E.
818959	The DHCP server does not allow DHCP clients to move from one interface to another.
821808	After using the FortiSwitch Configuration Migration Tool, all VLANS are missing.
824283	The output of the diagnose switch physical-ports qos-stat list command shows the same number of dropped packets for queue 0 for all ports.
825614	The status of the second power supply unit is incorrectly reported as "Not OK."
830533	After upgrading to FortiSwitchOS 7.2.1, the status of the single power supply unit is incorrectly reported as "Not OK," and the status of the fan is incorrectly reported as more than 100 percent.
831495	The TV multicast receivers do not unsubscribe from the multicast stream.
831546	Logging in to a FortiSwitch unit that is managed by FortiSwitch Manager displays a message that incorrectly refers to FortiLink and FortiGate.
840114	When running FortiSwitchOS 7.2.1 build 4755 on the FS-124F-POE, FS-124F-FPOE, FS-148F-POE, and FS-148F-FPOE models, auto-network gets disabled after a reboot or upgrade. After such operations, you need to manually enable auto-network.

Common vulnerabilities and exposures

FortiSwitchOS 7.2.2 is no longer vulnerable to the following vulnerabilities and exposures:

- CVE-2022-31116
- CVE-2022-31117

Visit https://fortiguard.com/psirt for more information.

Known issues

The following known issues have been identified with FortiSwitchOS 7.2.2. For inquiries about a particular bug or to report a bug, please contact Fortinet Customer Service & Support.

Bug ID	Description
382518, 417024, 417073, 417099, 438441	DHCP snooping and dynamic ARP inspection (DAI) do not work with private VLANs (PVLANs).
414972	IGMP snooping might not work correctly when used with 802.1x Dynamic VLAN functionality.
480605	When DHCP snooping is enabled on the FSR-112D-POE, the switched virtual interface (SVI) cannot get the IP address from the DHCP server.
	Workarounds: —Use a static IP address in the SVI when DHCP snooping is enabled on that VLAN. —Temporarily disable dhcp-snooping on vlan, issue the execute interface dhcpclient-renew <interface> command to renew the IP address. After the SVI gets the IP address from the DHCP server, you can enable DHCP snooping.</interface>
510943	The time-domain reflectometer (TDR) function (cable diagnostics feature) reports unexpected values.
	Workaround: When using the cable diagnostics feature on a port (with the diagnose switch physical-ports cable-diag <physical name="" port=""> CLI command), ensure that the physical link on its neighbor port is down. You can disable the neighbor ports or physically remove the cables.</physical>
542031	For the 5xx switches, the diagnose switch physical-ports led-flash command flashes only the SFP port LEDs, instead of all the port LEDs.
548783	Some models support setting the mirror destination to "internal." This is intended only for debugging purposes and might prevent critical protocols from operating on ports being used as mirror sources.
572052	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.
	Workaround: Use passwords with a maximum of 15 characters for FortiSwitchOS 3.x and 6.x.
585550	When packet sampling is enabled on an interface, packets that should be dropped by uRPF will be forwarded.

Bug ID	Description
606044/610149	The results are inaccurate when running cable diagnostics on the FS-108E, FS-124E, FS-108E-POE, FS-108E-FPOE, FS-124E-POE, FS-124E-FPOE, FS-148E, and FS-148E-POE models.
609375	The FortiSwitchOS supports four priority levels (critical, high, medium, and low); however, The SNMP Power Ethernet MIB only supports three levels. To support the MIB, a power priority of medium is returned as low for the PoE MIB.
659487	The FS-108E, FS-108E-POE, FS-108E-FPOE, FS-108F, FS-108F-POE, FS-124E, FS-124E-POE, FS-124E-FPOE, FS-124F-POE, and FS-124F-FPOE, FS-148E, and FS-148E-POE models support ACL packet counters but not byte counters. The get switch acl counters commands always show the number of bytes as 0.
667079	 For the FSR-112D-POE model: If you have enabled IGMP snooping or MLD snooping, the FortiSwitch unit does not support IPv6 functionalities and cannot pass IPv6 protocol packets transparently. If you want to use IGMP snooping or MLD snooping with IPv6 functionalities, you need to enable set flood-unknown-multicast under the config switch global command.
748210	The MAC authentication bypass (MAB) sometimes does not work on the FS-424E when a third-party hub is disconnected and then reconnected.
784585	When a dynamic LACP trunk has formed between switches in an MRP ring, the MRP ring cannot be closed. Deleting the dynamic LACP trunk does not fix this issue. MRP supports only physical ports and static trunks; MRP does not support dynamic LACP trunks. Workaround: Disable MRP and then re-enable MRP.
793145	VXLAN does not work with the following: • log-mac-event • DHCP snooping • LLDP-assigned VLANs • NAC • Block intra-VLAN traffic
829807	eBGP does not advertise routes to its peer by default unless the set <code>ebgp-requires-policy</code> disable command is explicitly configured or inbound/outbound policies are configured.
837168	The following switches make a high fan noise: • FS-224D-FPOE • FS-224E-POE • FS-248D
861492	The mgmt interface MAC address is set to 00:01:02:03:04:05 after a reboot or factory reset.
863009	When running FortiSwitchOS 7.2.2, the RPS LED does not light with the appropriate color when a redundant power supply is inserted.

Bug ID	Description
866231	The set status down command (under config switch physical-port) does not work on the SFP+ ports on the FS-426E-FPOE for certain versions of FortiSwitchOS. If you need to shut down any of the SFP+ ports on the FS-426E-FPOE, do not use FortiSwitchOS 7.0.5, 7.2.0, 7.2.1, or 7.2.2. Workaround: Upgrade to FortiSwitchOS 7.2.3.



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