

S5850-24T16S Switch FSOS

Software Release Notes

Model: S5850-24T16S

Contents

1. Introduction	1
2. Version Information	2
2.1 Basic Information	2
2.2 Release History	2
2.3 Hardware Supported	4
2.4 Version Compatibility	5
2.5 Upgrade Precaution	5
3. New Features Specification	6
3.1 FSOS-V7.2.4.r2	6
3.2 FSOS-V7.2.4	6
3.3 FSOS-V7.2.3.r1	6
3.4 FSOS-V7.2.3	6
3.5 FSOS-V7.2.2	7
3.6 FSOS-V7.2.1	8
3.7 FSOS-V7.1.3.r1	8
3.8 FSOS-V7.1.3	8
4. CLI Changes Specification	10
4.1 FSOS-V7.2.4.r2	10
4.2 FSOS-V7.2.4	10
4.3 FSOS-V7.2.3.r1	10
4.4 FSOS-V7.2.3	10
4.5 FSOS-V7.2.2	11
4.6 FSOS-V7.2.1	11
4.7 FSOS-V7.1.3.r1	12
4.8 FSOS-V7.1.3	13
5. WEB Changes Specification	14
5.1 FSOS-V7.2.4.r2	14
5.2 FSOS-V7.2.4	16
5.3 FSOS-V7.2.3.r1	16

5.4 FSOS-V7.2.3	16
5.5 FSOS-V7.2.2	16
5.6 FSOS-V7.2.1	17
5.7 FSOS-V7.1.3.r1	17
5.8 FSOS-V7.1.3	17
6. New Behaviors Specification	18
6.1 FSOS-V7.2.4.r2	18
6.2 FSOS-V7.2.4	18
6.3 FSOS-V7.2.3.r1	19
6.4 FSOS-V7.2.3	19
6.5 FSOS-V7.2.2	19
6.6 FSOS-V7.2.1	20
6.7 FSOS-V7.1.3.r1	21
6.8 FSOS-V7.1.3	21
7. Fixed Problems	22
7.1 FSOS-V7.2.4.r2	22
7.2 FSOS-V7.2.4	22
7.3 FSOS-V7.2.3.r1	23
7.4 FSOS-V7.2.3	23
7.5 FSOS-V7.2.2	24
7.6 FSOS-V7.2.1	24
7.7 FSOS-V7.1.3.r1	25
7.8 FSOS-V7.1.3	25
8. Version Restrictions and Cautions	26
9. Operating System Upgrade	27

1. Introduction

This document describes the release information about FSOS-V7.2.4.r2, such as new features, command line changes, behavior changes, fixed problems, etc.;

Remind you, before loading FSOS-V7.2.4.r2 firmware, please backup configuration file to avoid potentials risks.

2. Version Information

2.1 Basic Information

Current Release	FSOS-S5850-24T16S-v7.2.4.r2.r
Applicable Product	S5850 Series Switches
Applicable Customer	General
Category	Official release
MD5	85f45cd0d1c8a78f64020cbceb03e965

2.2 Release History

Current Release	Baseline Release	Release Date	Category	Changes Based on Baseline Version
FSOS-V7.1.4.r2	FSOS-V7.1.4	2019-07-24	Official release	N/A
FSOS--V7.2.4	FSOS--V7.2.3	2020-05-27	Official release	<ul style="list-style-type: none"> • Support overlay and port-security on same interface <ul style="list-style-type: none"> • Support DHCPv6 snooping option 37 • Support carrier down hold time <ul style="list-style-type: none"> • PBR resource adjusted • Support vlan translation feature to edit the VLAN tags of APP/PING packets which are sent by the device <ul style="list-style-type: none"> • QOS optimized • Support use selective QinQ ports as the down-link of overlay • IPFIX is controlled in ms (Metro service) license instead of ma (Metro advanced) license <ul style="list-style-type: none"> • SNMP Trap optimized • Smart link optimized <ul style="list-style-type: none"> • CFM optimized • RIP/RIPng optimized • OSPF resource adjusted • SNMP ACL use white list

Current Release	Baseline Release	Release Date	Category	Changes Based on Baseline Version
FSOS--V7.2.3	FSOS--V7.2.2	2020-03-13	Official release	<ul style="list-style-type: none"> Support to configure DHCP option82 per-port <ul style="list-style-type: none"> Upgrade the version of G.8032 Support to specify the path when copy files via FTP/TFTP Support to specify the source port of the switch when copy files via FTP/TFTP Support UP MEP on Basic QinQ and VLAN Translation interfaces Support to display the usage of DHCP address pool <ul style="list-style-type: none"> Support 2 new SNMP OIDs: dot1qTpFdbPort and dot1qTpFdbStatus <ul style="list-style-type: none"> The display of Ildp optimized Support to use aggregation ports as the destination port of rspan <ul style="list-style-type: none"> Support to check the validation of time-range Change the behavior when port-isolate co-work with aggregation ports <ul style="list-style-type: none"> SNMP get port statistics result includes 20B inter frame gap by default <ul style="list-style-type: none"> Support license control for VXLAN/PFC/ECN The parameter “-t” (packet timeout value) of the command “ping” is in seconds <ul style="list-style-type: none"> Support to match TCP packet in control-plane policy(CoPP) Change the Macsec ACL key commands to hidden commands <ul style="list-style-type: none"> Bug fixes for higher stability
FSOS--V7.2.2	FSOS-V7.2.1	2019-12-13	Official release	<ul style="list-style-type: none"> Support option 252 for DHCP Server <ul style="list-style-type: none"> Support Port Cross Connect Support AAA for web UI users Support NTP via out-band port Support BFD co-work with PBR Support to enable/disable overlay split horizon per-VNI <ul style="list-style-type: none"> Support DHCP Relay co-work with Vxlan Support to specify the Errdisable ports for MAC-Flap function <ul style="list-style-type: none"> Support dynamic LACP mode Add notification when VRF changes for the interface

Current Release	Baseline Release	Release Date	Category	Changes Based on Baseline Version
FSOS-V7.2.1	FSOS-V7.1.3.r 1	2019-08-24	Official release	<ul style="list-style-type: none"> • Support to specify the VRF and source IP for SNMP <ul style="list-style-type: none"> • Support new network types for OSPFv3 • Support to configure IPv6 ACL on Line VTY <ul style="list-style-type: none"> • Support vrrp uniform-mac mode <ul style="list-style-type: none"> • Support SCP • IPv6 Ping optimized • Support IPv6 black hole route <ul style="list-style-type: none"> • Support IS-IS v4 & v6 • Support EVPN type 2/3/5 <ul style="list-style-type: none"> • Support MPLS
FSOS-V7.1.3.r 1	FSOS-V7.1.3	2019-04-22	Official release	Solve the SNMP issue <ul style="list-style-type: none"> • Support BFD for VRRP/IS-IS/OSPFv2/BGP <ul style="list-style-type: none"> • Support EFD (elephant flow detect) • Support HwMonitor (Latency Monitor & Buffer Monitor) <ul style="list-style-type: none"> • Support WebUI • Support OVSDB • Support PFC Deadlock detect • System resource management optimized <ul style="list-style-type: none"> • CoPP ACL optimized
FSOS-V7.1.3	FSOS-V7.1.2	2019-02-02	Official release	<ul style="list-style-type: none"> • Support BFD for VRRP/IS-IS/OSPFv2/BGP <ul style="list-style-type: none"> • Support EFD (elephant flow detect) • Support HwMonitor (Latency Monitor & Buffer Monitor) <ul style="list-style-type: none"> • Support WebUI • Support OVSDB • Support PFC Deadlock detect • System resource management optimized <ul style="list-style-type: none"> • CoPP ACL optimized

2.3 Hardware Supported

NOTE: Before upgrade, please double-check the firmware is compatible with Hardware.

Series	Name
Hardware model (F means 1G optical port, T means 1G/10G electrical port, S means 10G optical port, B means 25G optical port, Q means 40G optical port, C means 100G optical port)	<ul style="list-style-type: none"> • S5850-24T16S • S5850-24T16B
BOOTROM version	Switch pre-installed version (To display version by CLI 'show version')
EPLD version	Switch pre-installed version (To display version by CLI 'show version')
Note	N/A

NOTE:

The following example checks the firmware version, hardware model, BootRom and EPLD version. Some earlier switch's BootRom, EPLD version may be different, but will not impact upgrade.

```
Switch# show version
```

```
FSOS Software, S5850, Version 7.2.4.r2
```

```
Copyright (C) 2009-2020 FS.COM Inc. All Rights Reserved.
```

```
The current running image is flash:/boot/ FSOS-S5850-Series-Switches-v7.2.4.r2.r.bin
```

```
Switch uptime is 0 days, 0 hours, 8 minutes
```

```
Hardware Type is 24T16S
```

```
Hardware Version is 1.0
```

```
SDRAM size 2048M
```

```
Flash size 4096M
```

```
EPLD Version is 1.1
```

```
BootRom Version is A.1.7
```

```
System serial number is CG1912264178N0020
```

2.4 Version Compatibility

Current Version	Historical Version	Compatibility
V7.2.4.r2	All previous versions	Yes

2.5 Upgrade Precaution

UBOOT & EPLD do NOT need to upgrade if there is no special illustration.

Please double check MD5 value is identical with the value provided by FS, to prevent file damaged issue.

Please carefully check the firmware version is compatible with hardware model.

Please backup configuration file before upgrade.

Please keep previous firmware until all procedures finished, if need to rollback.

3. New Features Specification

New features added to baseline version

3.1 FSOS-V7.2.4.r2

N/A

3.2 FSOS-V7.2.4

New features	Specification
Support overlay and port-security on same interface	N/A
Support DHCPv6 snooping option 37	N/A
Support carrier down hold time	Support to configure carrier down hold time in a range of 0-500 ms If the interface status changes to down, then recovered before the hold time, system should ignore this issue in order to prevent network flap
Support vlan translation feature to edit the VLAN tags of APP/PING packets which are sent by the device	N/A
QOS optimized	Support VLAN storm control Support to display the resource of VLAN storm control
Support use selective QinQ ports as the down-link of overlay	N/A

3.3 FSOS-V7.2.3.r1

N/A

3.4 FSOS-V7.2.3

New Features	Specification
Support to configure DHCP option82 per-port	N/A
Support to specify the path when copy files via FTP/TFTP	N/A

New Features	Specification
Support to specify the source port of the switch when copy files via FTP/TFTP	N/A
Support UP MEP on Basic QinQ and VLAN Translation interfaces	Support UP MEP on Basic QinQ and VLAN Translation interfaces
Support vlan group and port group for ACL	Support vlan group and port group for ACL
Support to display the usage of DHCP address pool	N/A
Support 2 new SNMP OIDs: dot1qTpFdbPort and dot1qTpFdbStatus	N/A
Support to use aggregation ports as the destination port of rspan	N/A
Support to match TCP packet in control-plane policy(CoPP)	N/A

3.5 FSOS-V7.2.2

New Features	Specification
Support option 252 for DHCP Server	N/A
Support Port Cross Connect	N/A
Support AAA for web UI users	N/A
Support NTP via out-band port	Support to NTP connect to the server and synchronous the time via out-band port
Support BFD co-work with PBR	Support to use BFD to check the connectivity of PBR
Support to enable/disable overlay split horizon per-VNI	Support to enable/disable overlay split horizon per-VNI according to the different network topology
Support DHCP Relay co-work with Vxlan	Support DHCP Relay functions send DHCP packets into the Vxlan tunnel for encapsulation and transmission
Support to specify the Errdisable ports for MAC-Flap function	Support to specify the Errdisable ports and non-Errdisable ports, for MAC-Flap function
Support dynamic LACP mode	Support to use the ports as separated L2 ports before LACP negotiated successfully

3.6 FSOS-V7.2.1

New Features	Specification
Support to specify the VRF and source IP for SNMP	Support to specify the VRF and source IP for SNMP packets
Support new network types for OSPFv3	Support Broadcast/ NMBA/ P2P /P2MP
Support to configure IPv6 ACL on Line VTY	Support to configure IPv6 ACL on Line VTY to enhance the security of user login
Support vrrp uniform-mac mode	Support up to 255 groups
Support SCP	Support to copy files via SCP
IPv6 Ping optimized	Support to specify the source IP address, packet count, packet interval, packet size, timeout, hop limit, etc. Support to specify the QoS options in the packet Support to ping host name
Support IPv6 black hole route	N/A
Support IS-IS v4 & v6	N/A
Support EVPN type 2/3/5	Only support when using "ma" license
Support MPLS	Only support when using "ma" license and "ipran" profile

3.7 FSOS-V7.1.3.r1

N/A

3.8 FSOS-V7.1.3

New Features	Specification
Support BFD for VRRP/IS-IS/OSPFv2/BGP	Support BFD co-work with route protocols (VRRP/IS-IS/OSPFv2/BGP).
Support EFD	Support EFD (elephant flow detect).
Support HwMonitor (Latency Monitor & Buffer Monitor)	N/A
Support WebUI	N/A
Support OVSDB	N/A
Support PFC Deadlock detection	N/A

New Features	Specification
System resource management optimized	Use the command "show stm prefer" to display the system specification. Use the command "show resource" to display the current usage of system resource.
CoPP ACL optimized	Support to match part of the key words in CPU packets.

4. CLI Changes Specification

New CLI changes based on the baseline version

4.1 FSOS-V7.2.4.r2

N/A

4.2 FSOS-V7.2.4

Original Format	New Format	Remark
ethernet cfm domain *DOMAIN_NAME* level *LEVEL*	ethernet cfm domain *DOMAIN_NAME* level *LEVEL* (format (no-md-name string *STRING* dns *DNS_NAME* mac-address *MAC_ADDRESS*))	The format MUST be specified when configure the CFM domain in Y1731 mode

4.3 FSOS-V7.2.3.r1

N/A

4.4 FSOS-V7.2.3

Original Format	New Format	Remark
	(SEQUENCE_NUM) deny permit exception tcp (untag-vlan { vlan VLAN_ID cos COS }) (time-range NAME)	
	(SEQUENCE_NUM) deny permit exception tcp (untag-vlan { vlan VLAN_ID cos COS }) (ipv4 (tcp) (IP_ADDR IP_MASK any host IP_ADDR) (any) (src-port (eq L4_PORT)) (dst-port (eq L4_PORT)) (time-range NAME)	Support to match TCP packet in control-plane policy(CoPP)
	(SEQUENCE_NUM) deny permit exception tcp (untag-vlan { vlan VLAN_ID cos COS }) (ipv6 (tcp) (any) (any) (src-port (eq L4_PORT)) (dst-port (eq L4_PORT)) (time-range NAME)	

4.5 FSOS-V7.2.2

Original format	New format	Remark
-	show route-mac	Use this command to display the route-mac of the system.

4.6 FSOS-V7.2.1

Original Format	New Format	Remark
show radius-server (interface IFPHYSICAL)	show dot1x radius-server status (interface IFPHYSICAL)	This command only shows the dot1x related information, therefore it is changed to the new format.
-	bgp neighbor NEIGHBORID update-source	Add new command to set the source IP of BGP neighbor
efd flow-traffic-class	-	EFD feature changed, command "efd flow-traffic-class" is not supported.
(<1-131071>) (deny permit) exception (any) (untag-vlan {vlan <1-4094> cos <0-7>}) (time-range NAME)	(<1-131071>) (deny permit) exception (any) (time-range NAME)	The parameter of "control-plane access-list exception any" adjusted
(<1-131071>) (deny permit) exception (igmp) (untag-vlan {vlan <1-4094> cos <0-7>}) (mld) (any) (any) (igmp-type <0-255>) (time-range NAME)	(<1-131071>) (deny permit) exception (igmp) (untag-vlan {vlan <1-4094> cos <0-7>}) (mld) (any) (any) (mld-query mld-report mld-done mldv2-report) (time-range NAME)	The parameter of "control-plane access-list exception igmp" adjusted

Original Format	New Format	Remark
<pre>show policy-map statistics interface (IFPHYSICAL IFAGG IFV LAN) ace (class-based ace-based) (class NAME) show policy-map type qos statistics interface (IFPHYSICAL IFAGG IFV LAN) ace (class-based ace-based) (class NAME) show policy-map statistics (interface vlan port-gro up vlan-group ess) ace (class-based ace-based) (class NAME) show policy-map type qos statistics (interface vlan port-gro up vlan-group) ace (class-based ace-based) (class NAME)</pre>	<pre>show policy-map statistics interface (IFPHYSICAL IFAGG IFVLAN) (input output) ace (class-based ace-based) (class NAME) show policy-map type qos statistics interface (IFPHYSICAL IFAGG IFVLAN) input ace (class-based ace-based) (class NAME) show policy-map statistics (interface vlan port-group vlan-group ess) (input output) ace (class-based ace-based) (class NAME) show policy-map type qos statistics (interface vlan port-group vlan-group) (input) ace (class-based ace-based) (class NAME)</pre>	<p>Update the ACL/QoS stats show and clear commands</p>
<pre>service-policy input NAME (VLAN interface mode)</pre>	<pre>service-policy input NAME (VLAN configuration mode)</pre>	<p>VLAN ACL command moved from VLAN interface mode to VLAN configuration mode. The original command is not kept. If your system has the related configuration, please contact our technical supporter to help the configuration transition.</p>

4.7 FSOS-V7.1.3.r1

N/A

4.8 FSOS-V7.1.3

Original Format	New Format	Remark
fec force {baser rs none}	fec {baser rs none}	Port FEC optimized
exception igmp mld any any igmp-type <0-255>	exception igmp mld any any {mld-query mld-report mld-done mldv2-report time-range }	CoPP ACL optimized

5. WEB Changes Specification

5.1 FSOS-V7.2.4.r2

1) Framework Optimization

a. The web network management divided four categories: Monitor, Configuration, Maintenance, Network.

b. Monitor

The Web monitor page appears after login, as shown in figure 1.

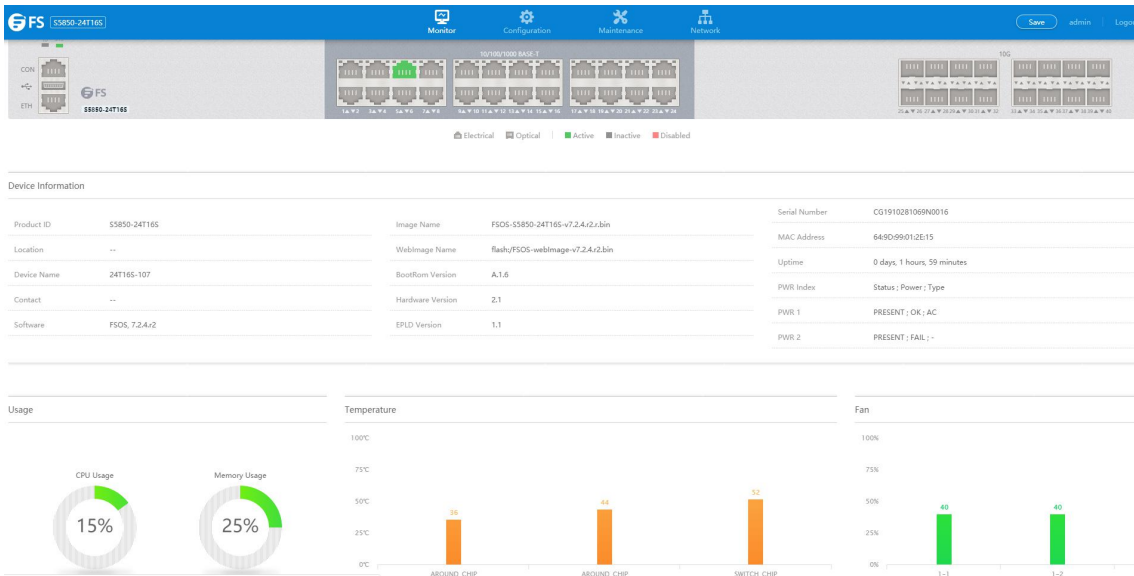


Figure 1 Web monitor page

The whole monitor page consists of the top control bar, the configuration display area and the bottom area.

c. Configuration

If you click "Configuration" in the top control bar, as shown in figure 2.

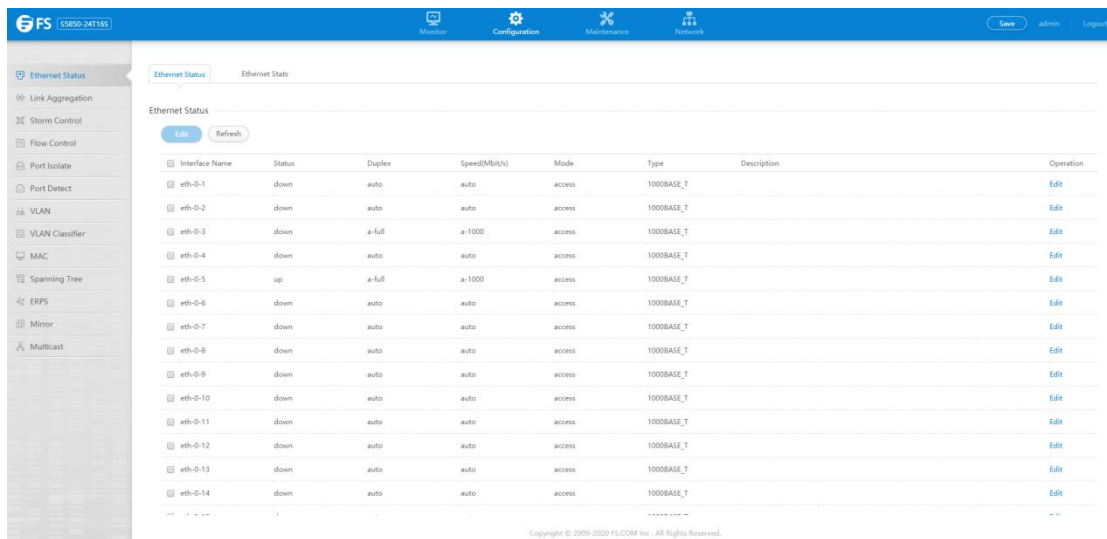


Figure 2 Web configuration page

The whole configuration page consists of the top control bar, the navigation bar, the configuration area and the bottom area.

d. Maintenance

If you click "Maintenance" in the top control bar, as shown in figure 3.

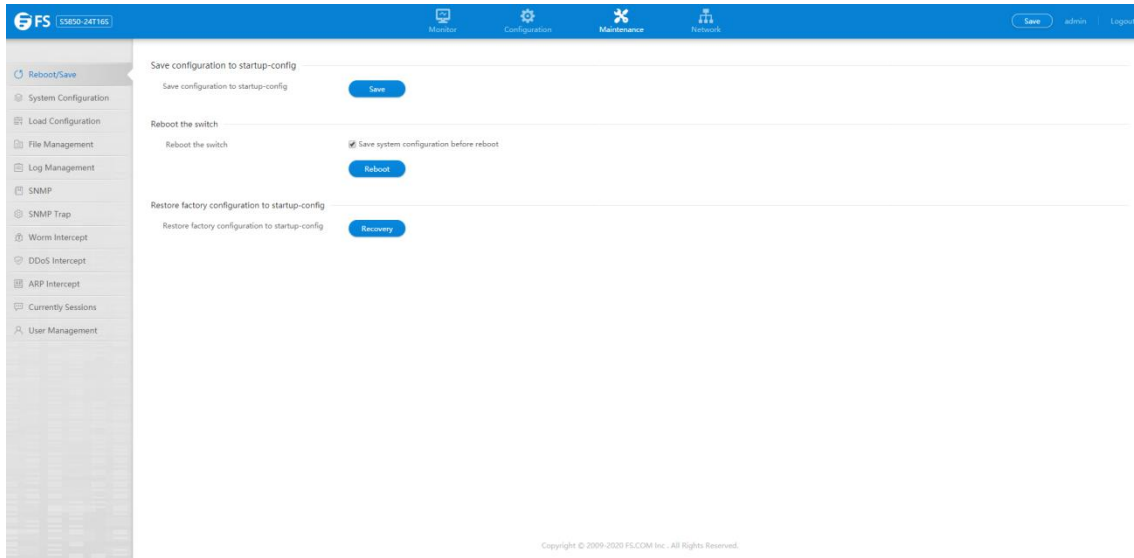


Figure 3 Web maintenance page

The whole maintenance page consists of the top control bar, the navigation bar, the configuration area and the bottom area.

e. Network

If you click "Network" in the top control bar, as shown in figure 4.

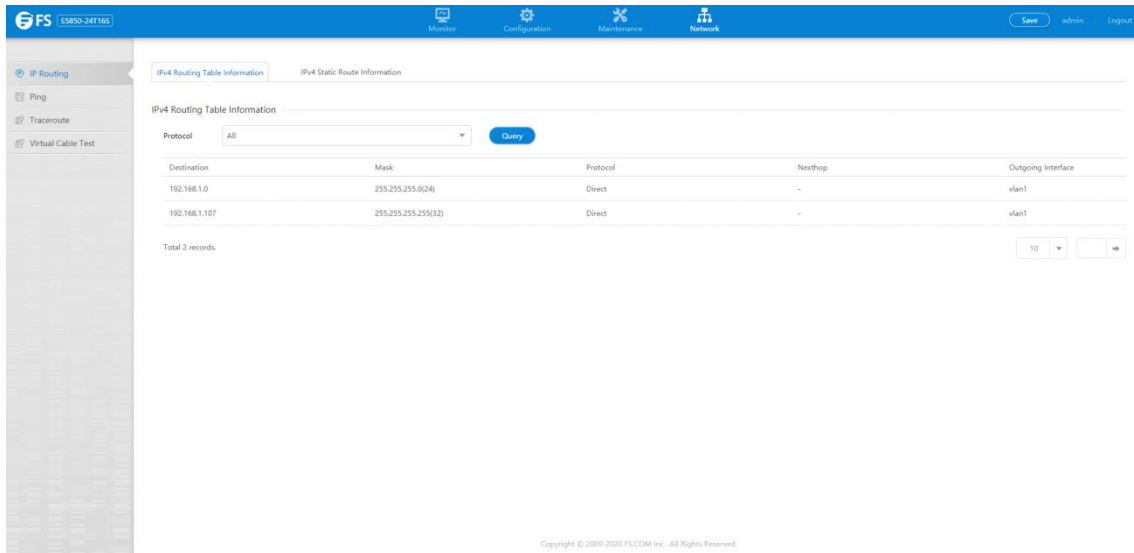


Figure 4 Web network page

The whole network page consists of the top control bar, the navigation bar, the configuration area and the bottom area.

2) Component Optimization

- a. Buttons are divided into primary and secondary styles, the primary button is blue, and the secondary button is filled with light gray, as shown in figure 5.

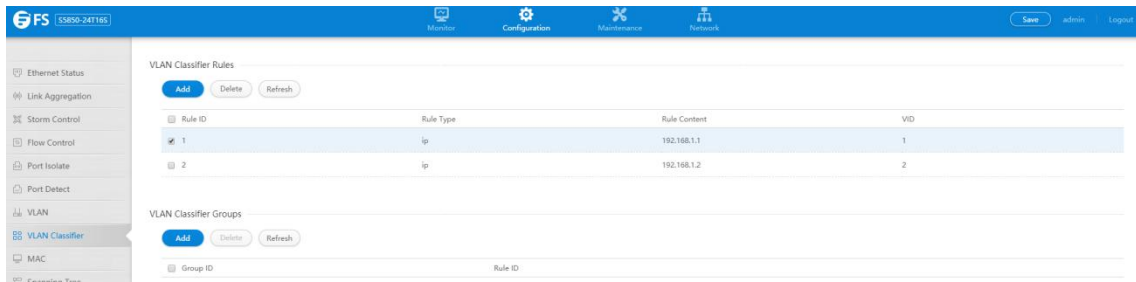


Figure 5 Web button display

- b. Buttons are divided into primary and secondary styles, the primary button is blue, and the secondary button is filled with light gray, as shown in figure 6.



Figure 6 Page turning components display

- c. Optimization of marquee, options, pop-up window and Hover effect, as shown in figure 7.

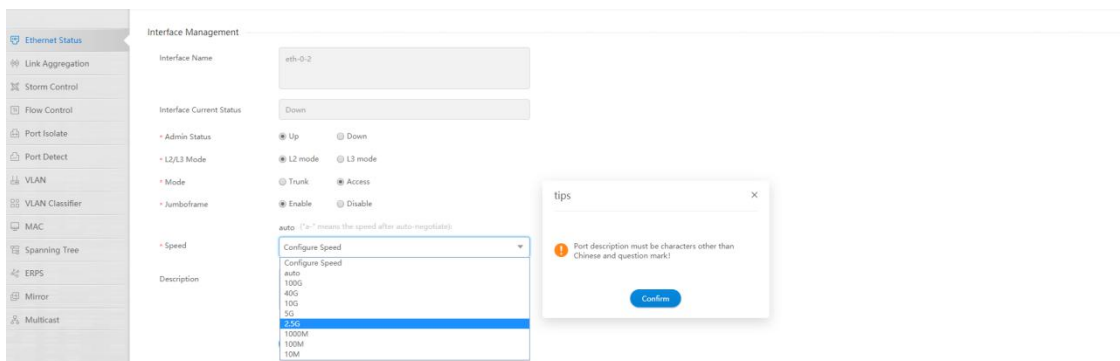


Figure 7 Pop-up and marquee display

5.2 FSOS-V7.2.4

N/A

5.3 FSOS-V7.2.3.r1

N/A

5.4 FSOS-V7.2.3

N/A

5.5 FSOS-V7.2.2

N/A

5.6 FSOS-V7.2.1

N/A

5.7 FSOS-V7.1.3.r1

N/A

5.8 FSOS-V7.1.3

N/A

6. New Behaviors Specification

New behaviors based on the baseline version

6.1 FSOS-V7.2.4.r2

N/A

6.2 FSOS-V7.2.4

Item	Earlier Behavior	New Behavior
PBR resource adjusted	Support 256 entries	Support 256 entries for default and layer3 profile Support 128 entries for IPv6 and IPRAN profile
IPFIX is controlled in ms (Metro service) license instead of ma (Metro advanced) license	IPFIX is controlled in ma (Metro advanced) license	IPFIX is controlled in ms (Metro service) license
SNMP Trap optimized	SNMP v2 timeout is in a range of 1-1800s, retry time is in a range of 0-100; SNMP v3 timeout is in a range of 0-65535s, retry time is in a range of 0-255	SNMP v2/v3 timeout is in a range of 1-1800s, retry time is in a range of 0-100
Smart link optimized	Static FDB can be configured on smart link interfaces but cannot work	System support a validation check to forbidden configure static FDB on smart link interfaces
CFM optimized	CFM domain name can be configured without format MAID can be duplicated	CFM domain name must be configured with format System support validation check that MAID must be globally unique
RIP/RIPng optimized	Increase metric when receive the message of route	Increase metric when send the message of route
OSPF resource adjusted	The maximum count of static neighbor and summary address is limited by the system memory.	The maximum static neighbor is 256 The maximum summary address is 2000
SNMP ACL use white list	SNMP ACL use black list	SNMP ACL use white list

6.3 FSOS-V7.2.3.r1

Problem Description	Occurred Condition
Unicast packets loop in MLAG topology	The unicast FDBs have not synchronized between 2 MLAG devices, the unicast packets are not blocked on the peer link, which will lead the loop circuit

6.4 FSOS-V7.2.3

Item	Earlier Behavior	New Behavior
Support license control for VXLAN/PFC/ECN	VXLAN/PFC/ECN is not controlled by any license	MS or higher privilege license is required for VXLAN/PFC/ECN
Support to check the validation of time-range	System does not check the validation of time-range	Support to check the validation of time-range, the end time must late than the begin time
Upgrade the version of G.8032	Support G.8032-201003	Support G.8032-201708
The display of lldp optimized	The command "show lldp neighbor" does not show the local information	The command "show lldp neighbor" shows the local information and the neighbor count
Change the behavior when port-isolate co-work with aggregation ports	System does not deal with this condition	A physical port with port-isolate enabled is not allowed to join an aggregation port
SNMP get port statistics result includes 20B inter frame gap by default	SNMP get port statistics result does not include 20B inter frame gap by default	SNMP get port statistics result includes 20B inter frame gap by default
The parameter "-t"(packet timeout value) of the command "ping" is in seconds	The parameter "-t"(packet timeout value) of the command "ping" is in milliseconds	The parameter "-t"(packet timeout value) of the command "ping" is in seconds
Change the Macsec ACL key commands to hidden commands	Macsec ACL key commands are normal commands	Macsec ACL key commands are hidden commands

6.5 FSOS-V7.2.2

Item	Earlier Behavior	New Behavior
Configuration check for PBR changed	PBR bind empty route-map is allowed	PBR bind empty route-map is NOT allowed
Configuration check for overlay gateway mac changed	vlan interface should be configured be for set overlay gateway mac	System do not check vlan interface configuration when set overlay gateway mac

Item	Earlier Behavior	New Behavior
Default configuration for 40G/100G duplex changed	40G/100G duplex is "auto" by default	40G/100G duplex is "full" by default. If the 40G/100G is connected with copper, user should change the configuration after upgrade to 7.2.3
Overlay tunnel resource adapt in default profile	Support 4088 overlay tunnels in default profile	Support 8192 overlay tunnels in default profile
Configuration check for bfd interval changed	No check for configuring bfd interval	Do NOT support to change bfd interval on same interface too often, the second configuration should wait at least 3 seconds
Add notification when VRF changes for the interface	There is no notification when VRF changes for the interface	System should notify users "the IP address will be deleted" when VRF changes for the interface

6.6 FSOS-V7.2.1

Item	Earlier Behavior	New Behavior
show stm prefer command changed	"show stm prefer" shows the table size and usage.	"show stm prefer" shows the table size "show resource" shows the usage.
Stm profile changed	Support following profiles: default/ipv6/layer3/layer2/l2vpn	Support following profiles: default/ipv6/layer3/ipran
File name length extended	Support the file name up to 48 characters.	Support the file name up to 64 characters
Static route feature changed	The route is active when nexthop IP is in the destination network.	The route is inactive when nexthop IP is in the destination network.
PBR optimized	There is no check when configuring PBR	Support auto check for PBR configuration, in order to prevent configuration fault.
Part of CoPP parameter optimized	N/A	Part of parameters in CoPP exception igmp/ipda/any command changed. Please reference to CLI changes specification chapter.
EFD feature changed	Support to set the traffic-class of elephant flow.	Do not support to set the traffic-class of elephant flow.
Apply VLAN ACL in VLAN configuration mode instead of VLAN interface mode	Apply VLAN ACL in VLAN interface mode.	Apply VLAN ACL in VLAN configuration mode
Port-security optimized	Port-security is not supported on aggregation ports	Port-security is supported on aggregation ports

6.7 FSOS-V7.1.3.r1

N/A

6.8 FSOS-V7.1.3

Item	Earlier Behavior	New Behavior
System resource management optimized	Use the command "show stm prefer" to display the system specification and the current usage of system resource.	Use the command "show stm prefer" to display the system specification. Use the command "show resource" to display the current usage of system resource.

7. Fixed Problems

Fixed problems based on baseline version

7.1 FSOS-V7.2.4.r2

Problem Description	Occurred Condition
DHCP client cannot get the previous IP address from the server after timeout in some case.	Change the time of the client to let the DHCP client in timeout condition immediately, then the client will get a new IP address which is different from the previous address.
The CFM session cannot UP in overlay environment in some case.	Devices are connected by VXLAN tunnel, the down link port is a vlan translation with an up mep on it, the statues of up mep is always down.
SNMP cannot get information of interface module of the split interfaces	N/A
SSH server cannot work and CPU usage is very high in some case	The client is using the zlib@openssh compress algorithm
Some device has very low probability to match a wrong route to forward the packets.	Device module is S5850-24T16S

7.2 FSOS-V7.2.4

Problem Description	Occurred Condition
Part of the private OID abnormal after use "update oem" command to update private mib OIDs	N/A
PBR configurations on the interfaces lost in some case.	Add a new route-map sequence and bind the Access control list and nexthop, the previous configuration of "ip policy route-map" may lost
The ECN field of udp packets cannot be marked	N/A
When the mlag peers are not established, the initial system ID is wrong, which lead the system send illegal LACP packets	N/A
There is a spelling mistake in the result of "show ip arp" command	N/A
The packets loop on the mlag peer-link and mlag interfaces in some case	The packets are known unicast packets
The system cannot deal with the packets sent to CPU with VLAN tag 0	N/A

Problem Description	Occurred Condition
System failed to match tcp reasons in CoPP System cannot configure to match tcp destination port in CoPP	N/A
Plug in and out the cable of interface eth-0-15 on some device may lead the interface status of interface eth-0-29 changes	N/A

7.3 FSOS-V7.2.3.r1

N/A

7.4 FSOS-V7.2.3

Problem Description	Occurred Condition
Basic ACL in LINE VTY mode failed to limit the users login via SSH	Apply basic ACL in LINE VTY mode and login the device via SSH
Overlay tunnel resource is not correct	The result of command "show resource overlay" is not correct
VxLAN use VRRP virtual MAC as inner MAC, the packets is failed to route after decapsulation	The down link port is VRRP uniform mode, the up link is VxLAN. After VxLAN header decapsulated, the inner MAC destination is the VRRP uniform mac, the packet cannot be routed on the VRRP master.
IP BFD co-work with IP OSPF abnormal when the interface has multiple IP address	Configure multiple IP address on the interface, then enable and disable IP BFD co-work with IP OSPF repeatedly
UDP packets might be discard randomly when forwarding at layer 2	The source and destination port of the UDP packets are random variation, and the packets are forwarding at layer 2
The prompt information is not correct when the file name is too long	The prompt information recommended that the maximum length of file name is 47 in the command "copy". The actual maximum length should be 63
Configure ip access-list entries overload may lead system abnormal	System supports 2048 ip access-list entries at most, configure to many entries may lead system abnormal
Input ifindex of IPFIX is not correct in some case	Enable "interface input" in IPFIX recorder, the cache packet records both input and output information with the input ifindex
Some types of tacacs server always fail in first SSH login	Use "tacacs plus" server and login via SSH always failed first time
ECN cannot mark UDP packets	N/A

7.5 FSOS-V7.2.2

Problem Description	Occurred Condition
PIM-DM may lead memory leak in some case	Enable pim-dm on the interface and send different flows to that interface and enable/disable pim-dm repeatedly at the same time.
System crashed when using SNMP GET for certain OID	Use SNMP to get a MSTP instance which is not existed.
EVPN cannot deal with the routes with same RD which are sent by different neighbors	In EVPN dual-uplink topology, if system receives 2 EVPN routes with same RD from different neighbors, system should select one route and delete another. If the neighbor who sent the selected route is disconnected, the selected route is deleted, but the un-selected route cannot be recovered in this case.
EVPN asymmetric topology may lead system crash in some case	Static DVR and dynamic EVPN route conflicts in EVPN asymmetric topology
EVPN up-link ports cannot match ACL with Vxlan inner header.	N/A
System calculate the MPLS packet length include the MPLS label and does not conform the standard of MTU, may lead some packets discard.	N/A
BFD cannot co-work with HUAWEI new product	BFD cannot co-work with HUAWEI CE6860

7.6 FSOS-V7.2.1

Problem Description	Occurred Condition
The SNMP get returns error value when get the following OIDs: ifHCOctets, ifHCInOctets, ifDescr, ifOperStatus	N/A
System do not reply when send RPC-API via inband ports in some cases.	There are other traffics passing through the inband port, the TCP connection for RPC-API might fail to establish random occurrence.
SSH works abnormal over a long period of time	SSH works abnormal after login and logout via SSH repeatedly more than 700, 0000(approximate number) times.

7.7 FSOS-V7.1.3.r1

Problem Description	Occurred Condition
SNMP get no response	1. Use bulkget (get multi nodes at same time)

7.8 FSOS-V7.1.3

Problem Description	Occurred Condition
System process crashed	1. Receive DHCPv6-request packets on a interface which DHCP Snooping is enabled. 2. Delete an aggregation interface which has an IPv6 address.
Packet lost after MACSec session is established	Random recurrence.
TCP traffic cannot reach the line speed	QoS Policer bucket depth too small will lead this problem.
Interface cannot linkup automatically by default configuration	The interface cannot linkup when insert 10G DAC in 25G port. In this case user should use command line to disable auto-negotiation before interface linkup.

8. Version Restrictions and Cautions

- All features that asserted to support are in product Spec manual, for some features or CLI already exist in switches but not declared in Spec manual, we consider them as testing features, so its functions are not guaranteed. Please do not use these kinds of features in production network.
- After enable hardware FDB learning, the ARP entries are not related to the FDB entries. Delete a FDB entry will not trigger the ARP cleanup.
- After enable hardware FDB learning, errdisable reason fdb-loop will not take effect.
- If you do not require high speed FDB learning, we suggest choosing software FDB learning by default, no need to active hardware learning.
- When mirror destination port is down, the port statistic will still grow, but that do not impact function
- Overlay will remove double vlan tag by default, after packets arrived on remote Vtep end, it will add only one vlan tag. We can also enable keep vlan tag function to keep vlan. After packets arrived on remote Vtep end, it is possible to change outer vlan based on VNI correspondence.
- Before you operate an upgrade from V7.1.X to V7.2.X, if your device has VLAN ACL configurations or your device is using a non default stm profile, please contact our technical supporter.
- Port-security can not work together with MLAG.

9. Operating System Upgrade

Step 1 Copy the image (.bin) to switch flash:/boot

```
FS# copy mgmt-if ftp://admin:admin@10.10.25.33/FSOS-S5850-24T16S-v7.2.4.r2.r.bin
flash:/boot
```

NOTE: Firstly, upload the firmware provided by FS to TFTP/FTP/USB key, and then copy it to switch flash:/boot from TFTP/FTP/USB key.

Step 2 Set the target firmware as next boot firmware.

For example, set FSOS-S5850-24T16S-v7.2.4.r2.r.bin as the target version to upgrade.

```
FS# boot system flash:/boot/FSOS-S5850-24T16S-v7.2.4.r2.r.bin
Then the switch will ask to confirm the setting. You can enter 'y' to continue, or enter 'n' to cancel it.
Are you sure to use flash:/boot/ FSOS-S5850-24T16S-v7.2.4.r2.r.bin as the next boot image? [confirm]
```

Step 3 Verify the next boot version.

Use show boot command to verify if the next boot version is correct

```
FS# show boot
The current boot image version is: FSOS-V7.2.3
The current running image is: flash:/boot/ FSOS-S5850-24T16S-v7.2.3.bin
The next time boot image version is: v7.2.4.r2
The next running image is: flash:/boot/ FSOS-S5850-24T16S-v7.2.4.r2.r.bin
```

Step 4 Restart the switch.

Step 5 Check if the switch has been successfully upgraded.

```
FS# show version
FSOS Software, S5850, Version 7.2.4.r2
Copyright (C) 2009-2020 FS.COM Inc. All Rights Reserved.
The current running image is flash:/boot/ FSOS-S5850-Series-Switches-v7.2.4.r2.bin
FS uptime is 0 days, 0 hours, 12 minutes
Hardware Type is 24T16S
Hardware Version is 1.0
SDRAM size 1024M
Flash size 2048M
EPLD Version is 1.0
BootRom Version is A.1.7
System serial number is CG1912264178N0020
```



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