

# S-Series and SFTOS Release Notes

Version 2.5.2.2    June 2007    101-00253-02



---

## How to Use this Document

This document contains information on open caveats, caveats closed since the previous release, and operational information specific to the Force10 Networks® S-Series™ and SFTOS™ software. Caveats are unexpected or incorrect behavior and are listed in order of Problem Report (PR) number.



**Note:** The software label SFTOS-S50-2.5.2.2.bin supports the S50N, S50V, S50N DC, and S25P DC platforms. The software label SFTOS-SA-2.5.2.2.bin is for the S50 platform only. This release notes is for both software labels.

## Contents

New Software Features	2
Changes in Default Behavior and Syntax	3
Enabling SSH Server	3
Enabling Telnet	4
Caveats	4
Closed Caveats	4
Open Software Caveats—Layer 2/Layer 3	6
Open Software Caveats—Layer 3	10

For more information on hardware and software features, refer to the documents on the S-Series Documentation CD-ROM, or visit Force10 Networks, Inc. at <http://www.force10networks.com>

## New Hardware Features

The S25P-DC, S50N, and S50N-DC switches are introduced.

## New Software Features

SFTOS 2.5.2.2 adds support for the S25P-DC, S50N, and S50N-DC

## Untested and Unsupported Features and Commands

SFTOS 2.5.2.2 contains support for some features that have not yet been sufficiently tested. Force10 Networks does not support those features and recommends against using the associated commands:

### Platform

- Copper SFP (GP-SFP2-1T) are supported on a single S25P platform (un-stacked) only. No other platforms are supported.
- 100M FX SFP (GP-SFP2-1F) are supported on the S25P platform only. No other platforms are supported.
- Priority Queues

- 
- Bandwidth based rate limiting
  - Stacking more than three units
  - SFTOS Web User Interface

### **Layer 2**

- VLAN-Stacking (also called QinQ), including Layer 2 BPDU tunneling
- Frame Extensions (IEEE 802.3ac)
- Protocol Based VLANs
- GVRP
- GARP
- GMRP
- IP subnet-based VLANs
- Layer 2 VLAN support increased from 1K to 3.6K
- MAC-based VLANs I2
- IEEE 802.1x I2

### **Layer 3**

- OSPF multi-area and advanced configuration
- Layer 3 DSCP
- DVMRP
- PIM-DM

## **Changes in Default Behavior and Syntax**

**Routing Protocols.** S-Series switches running routing software images previous to 2.3.1.9 did not conform fully to the Master VRRP router election algorithm specified by RFC 2338. If two routers in a VRRP group had the same highest priority setting, the election of the VRRP Master router was based on whichever router was booted first, rather than which router had the higher IP address. The Master VRRP router election mechanism now conforms to RFC 2338 and selects the router with the highest IP address.

## **Enabling SSH Server**

SFTOS supports SSH v1 and v2 in 2.5.2.2 Previous to SFTOS 2.5.1.x, SSH offline key generation was required. For those earlier SFTOS versions, refer to “Enabling Secure Management with Secure Shell or Secure Sockets Layer” in the Security chapter of the *SFTOS Configuration Guide*. (SSL still requires key generation.)

Enable the SSH server by executing the following command from Global Config mode:

```
(Force10) (Config) #ip ssh server enable
```

---

For additional security, disable the Telnet server by executing the following command:

```
(Force10) (Config) #no ip telnet server enable
```



**Note:** See the SSH subsection of the Layer 2/Layer 3 Open Software Caveats section: [SSH on page 9](#)

## Enabling Telnet

Telnet access to the switch is disabled by default.

To enable access to the switch through Telnet, enter **ip telnet server enable** from Global Config mode.

## Caveats

SFTOS is available as a base Layer 2 image (the “Switching Package”) and as an optional, extra-cost image, augmented with Layer 3 functionality (the “Routing Package”). The caveat sections are:

- [Closed Caveats on page 4](#)
- [Open Software Caveats—Layer 2/Layer 3 on page 6](#)
- [Open Software Caveats—Layer 3 on page 10](#)

## Closed Caveats

The following caveats, listed in ascending order by PR number, are closed in **SFTOS 2.5.2.2**:

- When MAC ACL has a permit rule and an IP ACL has a deny rule for the same packets, packets are not denied. [700032953]
- Creating a loopback address is not possible. [700034140]
- If you use **terminal length 0**, **show tech-support** still paginates. [700038703]  
Workaround: Use **show tech-support non-paged**.
- Broadcast Storm Recovery counters are not incrementing [700039552]
- Traplogs and log files cannot be uploaded to a TFTP server. [700040001]
- The OSPF MD5 key does not support "!". [700043192]
- When logging via SSH into an S50, “User Login Failed for admin” is sometimes displayed in the console capture even before the password prompt appears. [700045894]  
Workaround: Log in via console or Telnet.
- Copying and pasting buffers of more than 1000 lines of commands into the SSH window causes the session to stop. This problem only occurs with SSH putty V2. [700045895]  
Workaround: Use SSH V1. This issue is with SSH putty V2.
- When removing the secondary IP address on a VLAN interface with the **no ip address** command, all IP-related statements are removed. [700049201]

- 
- The **no** form of the options is not found in the **policy-map** command. [700052949]
  - If the user toggles SSH between **ip ssh server enable** and **no ip ssh server enable** several times, ending up with the SSH server enabled, the system is left in a state in which SSH connections are disallowed. [700054575]
  - Election of root port in non-root switch is not correct [700055038]  
Workaround: None. (Issue is seen when bridge priority is configured & port connection is criss-cross)
  - In a scenario in which SSH is terminated during or prior to the key exchange process, a small amount of memory does not get freed properly by the system. [700055273]
  - Enabling SSH without a valid key renders SSH not functional. [700056387]
  - Config for switchport protected under Global Config mode should apply for all the interfaces [700056474]  
Workaround: Configure from Interface Config mode or use **interface range**.
  - Image copy from 2.3.1 -> 2.5.1 -> 2.3.1 & reload boots with 2.5.1 image [700056814]  
Workaround: Not supported in 2.3.1
  - Port is not removed from default VLAN, after configuring the port as tagged native to another VLAN. [700057092]  
Workaround: Run **tagged 1/0/1 native** followed by **tagged 1/0/1**.
  - Tagged native port should not accept untagged frames. [700057095]  
Workaround: Run **tagged 1/0/1 native** followed by **tagged 1/0/1**.
  - RIP v1 config lost after 2.5.1 (F.12.23.2) to 2.5.1.1 upgrade [700057147]
  - When port-channel LACP (Dynamic) is down, traffic is learned in channel-members. [700057312]  
Workaround: Shut down the port channel member ports.
  - Enabling **ip ssh server** before downloading the host keys, and clicking submit, makes the option to enable host keys disappear. [700057371]
  - A VLAN having a LAG (port channel) configured as a tagged member in SFTOS 2.3.x loses this configuration after an upgrade to SFTOS 2.5.1.3. (LAGs configured as untagged members of the VLAN are not lost from the VLAN configuration after this upgrade.) [700057651]  
Workaround: Reconfigure lost LAGs as tagged members of the VLANs.
  - snmpwalk on pethMainPseConsumptionPower returns an incorrect value. [700058149]  
Workaround: Use the CLI **show inlinepower**.
  - snmpwalk on pethMainPseUsageThreshold returns the wrong value. [700058150]  
Workaround: Use the CLI **show inlinepower**.
  - With ECMP on static route, the route is removed even if one of the uplink ports goes down. [700058311]
  - With default MTU setting , a frame of 1518 bytes is not forwarded on a 10G port. [700058312]

- 
- The S50V is not supplying power for stack member Unit 1 when POE is disabled for Unit 2. [700058685]  
Workaround: Enable power on Unit 1.
  - The MD5 authentication key should not be shown in clear text. [700059067]
  - With 500 static routes configured, the memPartAlloc message is displayed, and the switch crashes.[700059098]
  - The **rate-interval** configuration is lost after a save and reload. [700059202]
  - Strange behaviour while issuing show logging <1-128>. [700059321]
  - Packet drop noticed on 10g interface after upgrading to 2.5.1.3. [700059381]
  - SNMP get counters (64 bit support ) gets reset after 32 bits for LAG. [700059400]
  - The **rate-interval value** command is not removed from the configuration after clearing the configuration with the **clear config** command. [700059457]
  - FCS errors on 10Gig port if jumbo frames transmitted at the set MTU size (S50 only). [700059578]  
Workaround: Set the jumbo frame size 4 bytes less than the MTU size. No issue with non-jumbo frames.
  - Rate info Rx Rate counter reports less value than expected with 9000 packet size. [700059711]
  - Rate info counter Line Rate percentage is less than expected with jumbo packet size. [700059713]
  - On the S25P, the **show interface ethernet 1/0/xx** reports incorrect "Total Packets Received Without Errors" value when sending Jumbo packets. [700059829]
  - On the S25P, executing the **show hard** command will crash when the S25P (primary) and S50v are stacked. [700060036]
  - Disabling POE in unit 2 will also disable power to unit 1. [700060475]
  - The **show log** displays SNTP server timer incorrectly. [700060752]
  - On the S25P running SFTOS version 2.5.1.11, "sho vlan name X" issue. [700060755]
  - SSH does not show CLI banner. [700060817]
  - Disconnect CLI doesn't have an option to disconnect session ID 0. [700061009]

## Open Software Caveats—Layer 2/Layer 3

The following caveats are logged against the Switching Package (Layer 2 image) and Routing Package (Layer 3 image) of SFTOS listed in ascending order by PR#.

- TCN count increments in the root switch when the alternate LAG is shut on the non-root switch. [700031045]

- 
- An inappropriate help message appears in response to attempt to remove ipmask/ipaddr from a particular community name. [700031450 / 700031585]  
Workaround: Use correct syntax:  
**no snmp-server community ipaddr public**  
**no snmp-server community ipmask public**
  - The "Local Traffic Frames" counter in the **show interface ethernet** command output does not increment when an interface receives frames with a destination MAC address that already has been learned on the interface. [700031923]
  - The S50 reboots itself when MSTP is configured with 1024 VLANs. [700032812]
  - SNMP trap community configured with versions does not display the version in the running configuration. [700034322]
  - The command **show igmpsnooping mrouter interface** does not display the ports on which multicast routers are detected. The configuration command works correctly, the bug is only in the display. [700040126]
  - Pagination is not always consistent for **show** outputs. [700040825]
  - Remove from the **police-simple** CLI command all the options for nonconforming traffic other than **drop**. [700040842]  
Workaround: The only action that can be accurately done on the non confirming traffic is a "drop". So specifically configure the non-conforming traffic to be dropped.
  - After removing a tagged VLAN configuration for an interface, the output of the **show vlan port interface** command still shows the VLAN as being assigned to the non-default VLAN. [700041258]  
Workaround: Use the **show vlan** command without the **port** keyword to see the correct VLAN assignment.
  - Even if Java mode is enabled, the S50 switch navigation icon might not appear at the top of the Web UI. [700047361]
  - 4-digit code version is not shown for **show switch unit-id**. [700047900]  
Workaround: Use the **show version** command or the **show hardware** command
  - Applied ACLs on loopback interface are not removed when the loopback interface is deleted. [700053592]  
Workaround: Remove loopback ACLs before removing loopback interface
  - ACL logging is not supported when a standard or extended ACL includes the **permit** keyword. [700053889]
  - When port channel is shut down, cannot add channel member. [700054972]  
Workaround: No shut the interface.
  - Layer 2 & Layer 3 mode for physical interface is not set correctly [700055551]  
Workaround: Set either Layer 2-only or Layer 3-only configuration

- 
- The configuration statements for the channel members of a port channel are lost if the port channel is shut down and the switch is reloaded. [700056764]  
Workaround: Shutdown the physical ports that are members of the port-channel instead of the port-channel itself.
  - When a port channel is created, SFTOS assigns an ifIndex value. STP uses this value to calculate which interface should become the root port. In versions of SFTOS with this caveat, the ifIndex is assigned based on the order in which interfaces are created. Thus, if port channel 128 is created first and then port channel 1 is created next, port channel 128 will be assigned the lower ifIndex value and thus win the election for root port. [700056979]  
Workaround: Create port-channels with sequential port id instead of random.
  - Inactive port channel members are not active if all active members are removed (port channel members with different speed). [700056998]  
Workaround: Add channel members running at same speed & duplex.
  - S50 is not accepting IGMPv3 reports. [700057306]  
Workaround: Use IGMPv1 or v2
  - Port channel counters should be sum of channel-members counter. [700057307]  
Workaround: Individual member interface counters can be summed by using **show interface ethernet** on member interfaces.
  - LAG ID should not be configurable as string using SNMP set. CLI works correctly. [700057505]
  - S50 gives MRT: assertion error when sending multicast traffic in IGMP Proxy setup with interface and host configured with different IGMP versions.[700057277]  
Workaround: Configure the same IGMP versions on interface and host group membership reports.
  - Port-channel adds channel-member while the member is tagged in another VLAN interface. The show running config is incorrect but the functionality works as expected. The running config is correctly updated upon re-load. [700058243]  
Workaround: Remove tagged interfaces from VLANs prior to adding to a port-channel configured in another VLAN.
  - In Interface Range mode, the commands to apply a MAC ACL and COS queue are not functional. The commands are accepted, but the config actually does not get applied. [700057363]  
Workaround: Execute these commands in the Interface Config mode.
  - Port on S25P goes down when Copper SFP (GP-SFP2-1T), and 100M FX SFP (GP-SFP2-1F) are swapped. [700058865]
  - If a 10 gig port is root, the traffic flow is not resumed after a switch reload. [700061011]  
Workaround: Create a LAG and add the 10Gig link as a single member LAG port.
  - Traffic counter fields are missing if the unit ID is not 1. [700063700]  
Workaround: Use the default unit ID 1.
  - LACP is flapping after enabling port security on a port channel with 512 configured VLANs. [700064221]



- 
- Port channel counters are resetting to 0 when the port channel interface is disabled. [700064414]  
Workaround: Once the port-channel is enabled, the counter statistics resume from the last count.
  - Copper SFP, GP-SFP-1T, takes 6 to 9 seconds to bring UP the interface for the **no shutdown** command. [700064418]
  - Copper SFP auto-negotiation fails on a stacked S25P. [700065184]
  - Outbound telnet connection from the console is not working as expected. [700065274]  
Workaround: Use telnet session to make outbound telnet connection.

## Hardware Limitations

- Jumbo Broadcast and Multicast frames do not increment the counters in the **show interface ethernet int** command. [700059916]
- Unicast traffic counters not incrementing for jumbo frame traffic. [700063543]  
Workaround: Check jumbo frame size related counters to get the total count of unicast jumbo frames transmitted/received.

## Migration (S50 Only)

- MSTP instance config lost for instance number above 64 or upgrade from 2.3.1 to 2.5.x [700055189]  
Workaround: None. (Only first 64 instances supported in 2.5.x)
- Interface description lost on the ports with non-default MTU setting [700057055]
- Storm control broadcast admin mode CLI is lost during the migration from 2.3.1.10 to 2.5.1 or 2.5.2.2.  
Workaround: Reapply the command.

## SSH

- A quit command issued on the terminal or timeout of an SSH session does not close the SSH connection gracefully. [700065333]  
Workaround: Close an SSH session using the CLOSE or [X] option on the terminal window. Set the timeout value of the SSH session to a higher value to avoid a timeout of the session.

## Stacking

- Disabling administration capabilities, for all units in a stack using the **switch unit-id priority 0** command, will execute the disable without warning. Upon stack reload, all units will come up in a disabled state. [700030354]  
Workaround: Ensure that at least one unit in the stack has the administrative priority of 1 to 15.

- 
- If a management unit running 2.5.1 & member units running 2.3.1 are stacked together, **show bootvar** displays junk characters under the “current-active” and “next-active” fields. [700054753]  
Workaround: Upgrade member unit separately to the same version as management unit & then stack it.
  - Access to the switch is blocked indefinitely if an image is copied from a 2.5.1 management unit to a 2.3.1 member unit [700054756]  
Workaround: Upgrade the member unit separately to the same version as management unit & then stack it.
  - The hardware inventory should show details for the whole stack instead of just the management unit.[700057738]
  - In a topology where two S-Series switches are alternative VRRP Masters and one of the switches is the management unit of a stack with another stack member, after multiple back-to-back VRRP failovers with the MAC address table filled to around 70% of its maximum capacity, the management unit crashes when the port link goes down. [700059088]
  - The software image cannot be copied to a specific stack unit if unit numbers are not using default IDs. [700063783]  
Workaround: Use the contiguous unit ID starting with default ID 1.
  - Rate counters are missing for some management unit ports and are not working for traffic in member unit ports. [700063785]  
Workaround: Use the contiguous unit ID starting with default ID 1.
  - The **show inlinepower** command is not showing the correct values for the second S50V unit in a stack. [700064055]
  - Copper SFP auto-negotiation fails on S25P when stacked. There is no issue with single unit (un-stacked). [700065184]
  - snmpwalk on powerEthernetMIB fails when the MGMT switch is not S50V. [700065355]  
Workaround: Configure S50V as MGMT unit

## Open Software Caveats—Layer 3

The following list applies only to the Routing Package (Layer 3 image). For caveats that apply to both the switching and routing images, see [Open Software Caveats—Layer 2/Layer 3 on page 6](#).

- Performing an SNMPwalk on the RMON MIB gives a response only for statistics and history groups, not all groups. [700032834]
- When a large ARP time-out value, such as 1000, is configured, the ARP cache may not be cleared when the **clear arp-cache** command is executed. If the ARP entry for the next-hop router for an IP destination is not updated, IP forwarding may be impacted. [700034139]  
Workaround: Configure a relatively lower ARP time-out value, such as **arp timeout 60**.

- 
- The switch cannot do a recursive route lookup. (A recursive route is one where the route is not pointed directly to the next hop, but, instead, to a hop for which a route is already present in the routing table.) [700034187]

Workaround: Create specific routes.

- ARP not learned after **shutdown all** and **no shutdown** of specific ports in Layer 3 VLAN [700053563]

Workaround: Don't use **shutdown all** from Global Config mode. Instead shut down specific interfaces in Interface Config mode & do **no shutdown**.

- IP fragmentation is not supported on the S50. [700056785]
- The switch crashes when an OSPF stub area and default route is configured and then removed. [700058950, 700058958]
- OSPF is not initializing after a link flap event when the routing table is full. [700060279]

Workaround: Shut down all IP interfaces, clear the routing table, and then bring them back up.

- OSPF is not reconverging after path down and path up when the ARP table is full. [700060281]

Workaround: Perform a link down/link up.

