Release Notes for 200, 300, 500, and ESW2 Series Switches Software Version 1.2.9

January 2013

These Release Notes describe the recommended practices and known issues that apply to the Version 1.2.9 software for the following products:

Model	Description	Ports
SF200-24	24-Port 10/100 Smart Switch	e1-e24, g1-g2
SF200-24P	24-Port 10/100 PoE Smart Switch	e1-e24, g1-g2
SF200-48	48-Port 10/100 Smart Switch	e1-e48, g1-g2
SF200-48P	48-Port 10/100 PoE Smart Switch	e1-e48, g1-g2
SG200-18	18-port Gigabit Smart Switch	g1-g18
SG200-26	26-port Gigabit Smart Switch	g1-g26
SG200-26P	26-port Gigabit PoE Smart Switch	g1-g26
SG200-50	50-port Gigabit Smart Switch	g1-g50
SG200-50P	50-port Gigabit PoE Smart Switch	g1-g50
SG300-10	10-port Gigabit Managed Switch	g1-g10
SG300-10MP	10-port Gigabit PoE Managed Switch	g1-g10
SG300-10SFP	10-port Gigabit PoE Managed Switch	8 SFP + 2 Combo slots
SG300-10P	10-port Gigabit PoE Managed Switch	g1-g10
SG300-20	20-port Gigabit Managed Switch	g1-g20

Model	Description	Ports
SG300-28	28-port Gigabit Managed Switch	g1-g28
SG300-28P	28-port Gigabit PoE Managed Switch	g1-g28
SG300-28MP	28-port Gigabit Max PoE Managed Switch	g1-g28
SG300-52	52-port Gigabit Managed Switch	g1-g52
SG300-52P	52-port Gigabit PoE Managed Switch	g1-g52
SG300-52MP	52-port Gigabit Max PoE Managed Switch	g1-g52
SF300-08	8-port 10/100 Managed Switch	e1-e8
SF302-08	8-port 10/100 Managed Switch	e1-e8, g1-g2
SF302-08MP	8-port 10/100 PoE Managed Switch	e1-e8, g1-g2
SF302-08P	8-port 10/100 PoE Managed Switch	e1-e8, g1-g2
SF300-24	24-port 10/100 Managed Switch	e1-e24, g1-g4
SF300-24P	24-port 10/100 PoE Managed Switch	e1-e24, g1-g4
SF300-24MP	24-port 10/100 Max PoE Managed Switch	e1-e24, g1-g4
SF300-48	48-port 10/100 Managed Switch	e1-e48, g1-g4
SF300-48P	48-port 10/100 PoE Managed Switch	e1-e48, g1-g4
SF500-24	24-port 10/100 Stackable Managed Switch	e1-e24, g1-g4 4 Gigabit Ethernet (2 combo* Gigabit Ethernet + 2 1GE/5GE SFP)
SF500-24P	24-port 10/100 PoE Stackable Managed Switch	e1-e24, g1-g4 4 Gigabit Ethernet (2 combo* Gigabit Ethernet + 2 1GE/5GE SFP)

Model	Description	Ports
SF500-48	48-port 10/100 Stackable Managed Switch	e1-e48, g1-g4 4 Gigabit Ethernet (2 combo* Gigabit Ethernet + 2 1GE/5GE SFP)
SF500-48P	48-port 10/100 PoE Stackable Managed Switch	e1-e48, g1-g4 4 Gigabit Ethernet (2 combo* Gigabit Ethernet + 2 1GE/5GE SFP)
SG500-28	28-port 10/100/1000 Stackable Managed Switch	g1-g28 4 Gigabit Ethernet (2 combo* Gigabit Ethernet + 2 1GE/5GE SFP)
SG500-28P	28-port 10/100/1000 PoE Stackable Managed Switch	g1-g28 4 Gigabit Ethernet (2 combo* Gigabit Ethernet+ 2 1GE/5GE SFP
SG500-52	52-port 10/100/1000 Stackable Managed Switch	g1-g52 4 Gigabit Ethernet (2 combo* Gigabit Ethernet + 2 1GE/5GE SFP)
SG500-52P	52-port 10/100/1000 PoE Stackable Managed Switch	g1-g52 4 Gigabit Ethernet (2 combo* Gigabit Ethernet+ 2 1GE/5GE SFP)
SG500X-24	24-port 10/100/1000 Stackable Managed Switch	g1-g24, xg1-xg4 4 10 Gigabit Ethernet SFP+ (1/5/10GE SFP+ modules)
SG500X-24P	24-port 10/100/1000 PoE Stackable Managed Switch	g1-g24, xg1-xg4 4 10 Gigabit Ethernet SFP+ (1/5/10GE SFP+ modules)
SG500X-48	48-port 10/100/1000 Stackable Managed Switch	g1-g48, xg1-xg4 4 10 Gigabit Ethernet SFP+ (1/5/10GE SFP+ modules)

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Model	Description	Ports
SG500X-48P	48-port 10/100/1000 PoE Stackable Managed Switch	g1-g48, xg1-xg4 4 10 Gigabit Ethernet SFP+ (1/5/10GE SFP+ modules)
ESW2-350G-52DC	52-port Gigabit Managed Switch	g1-g52
ESW2-350G-52	52-port Gigabit Managed Switch	g1-g52
ESW2-550X-48DC	48-port 10/100/1000 Stackable Managed Switch	g1-g48, xg1-xg4 4 10 Gigabit Ethernet SFP+ (1/5/10GE SFP+ modules)
ESW2-550X-48	48-port 10/100/1000 Stackable Managed Switch	g1-g48, xg1-xg4 4 10 Gigabit Ethernet SFP+ (1/5/10GE SFP+ modules)

NOTE *For the Sx500 Series, each combo mini-GBIC port has one 10/100/1000 copper Ethernet port and one mini-GBIC/SFP Gigabit Ethernet slot, with one port active at a time.

These caveats apply to:

SW version: 1.2.9 (1.2.9.44)

ESW2 Boot version: 1.2.9.01

Sx500 Boot version: 1.2.0.12

Sx300 Boot version HW V01: 1.0.0.4

Sx200 Boot version HW V01: 1.0.0.1

Sx300 Boot version HW V02: 1.1.0.6

Sx200 Boot version HW V02: 1.1.0.6

TIP As with any firmware release, please read these release notes before upgrading the firmware. Cisco also recommends backing up your configuration before any firmware upgrade.

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Hardware Versions

The Release 1.2.9 firmware runs on two different versions of hardware for the 200 Series Smart Switches, and the 300 Series Managed Switches. There is a single version of hardware for the 500and ESW2 series switches. The number of supported MAC Addresses, Active VLANs, and Multicast Groups will be different depending on which version of hardware you are using. Refer to the following table for details:

V1 versus V2 Hardware	Total Number of MAC Addresses	Total Number of Active VLANs	Total Number of Multicast Groups
Sx200 in Firmware 1.0.x HW VID=01	8K	128	128
Sx200 in Firmware 1.1.x and above. HW VID=01	8K	256	256
Sx200 in Firmware 1.1.x and above. HW VID=02	8K	256	256
Sx300 in Firmware 1.0.x HW VID=01	8K	256	256
Sx300 in Firmware 1.1.x and above. HW VID=01	8K	256	256

V1 versus V2 Hardware	Total Number of MAC Addresses	Total Number of Active VLANs	Total Number of Multicast Groups
Sx300 in Firmware 1.1.x and above. HW VID=02	16K	4K	1K
Sx500, SG500X and ESW2 switches have a single version of HW, see the admin guide for details.			

To determine which version of hardware you are using, click **Status > System Summary**. Look at the lower portion of the screen under the graphic representation of the switch for the PID VID. The descriptor will end in the VID number. The version information is also shown on the product label on the back of the switch. The PID VID is located at the bottom of the label.

Major Changes and Defects Corrected

Major Changes

- Added Time Zone Acronym and Time Zone from DHCP fields to Configuring System Time.
- Fan Direction, Alarm Temperature and Temperature fields were added in the Health screens in Monitoring Fan Status.
- Added delayed reboot option in Rebooting the Switch.
- Added time range fields to Configuring LAG Settings.
- Added Power Saving by Disabling Port LEDs.
- Added Time-Range to Settings for Configuring PoE Settings.
- TACACS+ accounting added.
- VLAN Alternate Assignment in Defining 802.1X Port Authentication added.
- Added SYN Protection field to Security Suite Settings.
- Added Ingress Committed Burst Size (CBS) field to Configuring Bandwidth.

Defects Corrected

- Whenever the Short Reach option is checked on a given port, the EEE option is grayed out but EEE LLDP is not. However, when checked and then the apply button is pressed, the correct error message is being displayed. (CQ132049)
- Login fails when using the"+"' character at the end of a Username or Password. (CQ132366)
- The backup switch in the stack continuously reboots after a new master takes over when it is hot inserted into stack. (CQ135359)

Limitations and Restrictions

The following caveats are acknowledged in release 1.2.9:

Problem: Some of the pages in the web-based interface require the Jave Runtime Environment (JRE) to be installed, otherwise they may display incorrectly.

Solution: Install the latest JRE.

Problem: When using DHCP option 6, the DNS server priority is based on the server's IP Address and not on the order of the DNS servers list. (CQ138489)

Solution: There is no workaround.

Problem: Granularity of traffic shaping on the following Uplink ports starts with 2Mbps and not with 64Kbps. When configuring traffic shaping on these ports to rates lower than 2Mbps, the actual traffic shaping rate will be 2Mbps. (CQ 123397, CQ 130715, CQ 133170)

- Sx200/Sx300 HW 1.0
- SF500 ports GE1-GE4
- SG500 ports GE-49 - GE52
- SG500X ports XG1 - XG4

Solution: Use the specified ports when traffic shaping is not required (for example. uplink or stack ports), or when the required traffic shaping rate is at least 2Mbps

Problem: When the link on the SG500X ports XG1 - XG4 uplink ports comes up, the link may go up and down a few times then stabilize on the up state. (CQ 135073)

Solution: There is no workaround.

Problem: After frequent changes of the stack topology from ring to chain and vice versa, one of the stack links might become non-operational (stuck in a state where even if the stack topology is ring, it will function as a chain). If the remaining operational stack link goes down, the stack might become non-operational. (CQ 135108)

Solution: Wait for the stack to stabilize before changing its topology.

Problem: Copper SFP MGBT1 is not supported as stack port due to packet loss and bad CRC. (CQ 135473)

Solution: Use Cisco approved SFPs.

Problem: When a PoE switch is connected to another PoE switch, one of the switches overcomes the internal power supply of the other PoE switch, so the other PoE switch cannot provide PoE power to powered devices. If the connection between these switches is removed, the switch that received power from the other switch will momentarily lose its power and reboot. (CQ135360, CQ138875).

Solution: Disable PoE on the ports connecting the two PoE switches.

Problem: When clicking on the help link while using the web-based interface, then browsing to a different page without closing the help page, clicking on help again may display an error message. (CQ 142539)

Solution: The user can either:

- Check the error message "Do not show this error again" and click "Yes".

  -or

- Close the Help page prior to clicking the Help link again.

Problem: On the 500X series of switches, the Port Speed display is shown as "unknown" on the web-based interface when the uplink ports are enabled with 10 GIG speed. (CQ142146)

Solution: Use the CLI to view the port speed on uplink ports.

Problem: Given a stack configuration with the stack master as unit #2. On the Port Vlan Membership page of the web-based interface, changing the value on the Interface Type drop-down, the drop-down returns to unit #1. The information displayed on the rest of the page belongs to the ports of the unit that was selected using the drop-down. (CQ 141909)

Solution: There is no workaround.

Problem: When a device is in Layer 3 mode and receives an IP address from a DHCP server, if the user changes this IP address to static, it will not be displayed on the configuration file. The device will function correctly. (CQ 140928)

Solution: There is no workaround.

Japanese language files and firmware version compatibility guideline

Users will see a mismatch in the features between the English language and the Japanese language when running certain combinations of firmware and language files. Users will see new features added since version 1.1.1.6 in English instead of Japanese in the GUI when running firmware version 1.1.2.0 and higher subject to the following restriction:

- Japanese language files version 1.1.1.6 and older are forward compatible up to Firmware version 1.1.2.0. For example: loading a version 1.1.1.6 language file onto a device running firmware version 1.2.7.76 and up will fail.
- Japanese language files version 1.1.1.10 and newer are only compatible with firmware version 1.2.7.76 and newer.

The following defects are carried forward for the 200 and 300 series switches:

Problem: In Layer 3 mode, SNTP Broadcast can only be operated from the CLI.

Solution: There is no workaround.

Problem: The EEE operational status should become disabled when Auto Negotiation is disabled. (CQ132106)

Solution: When the speed on a port is 1 Gigabit, auto negotiation has no effect on the EEE functioning state.

Problem: The Voice VLAN should be prevented from being set as Guest VLAN, and the user should receive a warning. This is not happening. (CQ132684)

Solution: Avoid setting the Voice VLAN as guest VLAN and vice-versa.

Problem: Copying configuration information from one port to another doesn't copy all the settings:

- On the **Security > Port Security** page, Trap and Trap Frequency fail to copy when port security settings are copied from one interface to other interfaces. (CQ132724)

Solution: Configure the port settings individually instead of all at once.

Problem: When the Mrouter learning mode is changed between "user defined" to "auto" and vice-versa, the IGMP Querier election process doesn't start. (CQ132805)

Solution: Disable IGMP Snooping and re-enable again, every time the Mrouter learning mode is changed to start the Querier election process.

Problem: Some WEB GUI pages require full version compatibility of JRE, Browser and JRE-Browser applets. For XML compatibility reasons, MSXML DLL Version 6 is required for IE browser users.

Solution: For download and installation please refer the following link:

www.microsoft.com/downloads/details.aspx?FamilyID=993C0BCF-3BCF-4009-BE21-27E85E1857B1&displaylang=en

Problem: Notification Recipients table entry becomes un-editable with an incorrect or missing parameter. (CQ133316)

Solution: There will be an asterisk by any values for a table entry which are incorrect. This can be caused by the deletion of users, views, etc. If any of these values are incorrect, then the entry will be un-editable. First add the missing user, view, etc, in order to edit the entry. The delete button still works regardless of whether the values are correct or not.

Problem: The result of cable length test for 100 meters is incorrect. It will show between 110 to 140 meters. (CQ132941)

Solution: There is no workaround.

Problem: The maximum number of IPv6 ACEs that can be applied on an interface is 244, not 512 as documented. The user receives the message "Cannot apply because of a lack of hardware resources." (CQ130161)

Solution: There is no workaround.

Problem: If changing the active image with the menu CLI, the active image after reboot field is not updated. If you change the image number and reboot, then the image does change, but the display in the menu CLI is incorrect. (CQ132211)

Solution: There is no workaround.

Problem: When using the CLI, any time that DNS is used, the user is blocked from interacting with the CLI until the DNS lookup has completed. (CQ133234)

Solution: The user must wait until the DNS lookup has completed before issuing another command.

Problem: When a DVA authorized port tries to re-authenticate and RADIUS attributes no longer include VLAN attributes, reauthentication should fail and the port should become unauthorized. This is not happening, and the port does not fail. (CQ131469)

Solution: Do not remove VLAN attributes on a RADIUS server or unplug the network cable and plug it back in to force the failure.

Problem: Egress rate shaping does not work as expected. Configuring egress shape on Gigabit ports or on Combo ports between 64k to 5000k, will always result in 2 Million Bits. This is resolved with the new hardware release 1.1.1.8. It still exists on HW V01. It also does not work on SG300-52/52P & SG200-52/52P switches. (CQ123397 and CQ130715)

Solution: There is no workaround.

Problem: SNTP synchronization error messages are not logged when an incorrect MD5 key leads to the loss of synchronization. (CQ132636)

Solution: There is no workaround for broadcast messages. For Unicast servers, in the SNTP server table the status message will either say "In process" or "Down" for those servers that have failed authentication.

Problem: The Cisco phone model 7960 (a legacy powered device) cannot power-up when using a cross-over cable.

Solution: Use straight cable instead.

Problem: The routing resource "Used number of hosts" is not displayed correctly. This is just a display issue, there is no user impact. (CQ 133802)

Solution: There is no workaround.

The following defects are carried forward for the 500 series switches:

The following known limitations are acknowledged in release 1.2.0.97:

Problem: Slave and backup switches are rebooted when changing the topology multiple times. (CQ134655)

Solution: Avoid changing the topology from ring to chain across multiple members of the stack.

Problem: Some strings are not localized on the smartport page. (CQ135604)

Solution: There is no workaround.

Problem: For some of the web-based configuration pages to operate correctly, Java runtime environment needs to be installed. Java applets might not be displayed correctly. (no bug number)

Solution: Install the latest Java runtime environment (JRE).

Problem: When the link on the following uplink port comes up, it might flap a few times: (CQ 135073)

- SG500X ports XG1—XG4.

  The link goes up and down and then stabilizes on the up state.

Solution: There is no workaround.

Problem: The routing resource “Used number of hosts” is not displayed correctly. There is no user impact, this is just a display issue. (CQ 133802)

Solution: There is no workaround.

Where to Find Support

To obtain current support information for Cisco Small Business products, visit the following URLs:

www.cisco.com/cisco/web/solutions/small_business/products/routers_switches/500_series_switches/index.html

www.cisco.com/cisco/web/solutions/small_business/products/routers_switches/300_series_switches/index.html

www.cisco.com/cisco/web/solutions/small_business/products/routers_switches/200_series_switches/index.html

www.cisco.com/go/smallbizsupport

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