



Sun StorEdge™ Network 2 Gb FC Switch-8 and Switch-16 Release Notes

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Sun StorEdge Network 2 Gb FC Switch-8 and Switch-16 Release Notes

This document contains important information about the Sun StorEdge™ Network 2 Gb FC Switch-8 and Switch-16 that was not available at the time the product documentation was published. Review this document so that you are aware of issues or requirements that can impact the installation and operation of the switches.

Note – For detailed information on the Sun StorEdge Network 2 Gb FC Switch-8 and Switch-16, refer to the documents at:

[http://www.sun.com/products-n-solutions/hardware/docs/
Network_Storage_Solutions/Hubs_and_Switches/index.html](http://www.sun.com/products-n-solutions/hardware/docs/Network_Storage_Solutions/Hubs_and_Switches/index.html)

and click Other Documentation.

Quick Installation

This is the first release of the Sun StorEdge Network 2 Gb FC Switch-8 and Switch-16. The supported firmware for this switch is 1.5.0.7 (released in this package) or later and the supported GUI is 1.05.14 (released with package SUNWsmgr2, VERSION=2.1, REV=2003.03.05.14.20) or later.

1. Make sure you are logged in as root.

- If you are doing the install for the first time, go directly to Step 5.
- If you currently have a version of SUNWsmgr2 on your system, proceed to Step 2.

2. Check for any patches related to the previous SUNWsmgr2 package by typing:

```
# showrev -p | grep 112429
Patch: 112429-08 Obsoletes: Requires: Incompatibles: Packages:
SUNWsmgr2
```

3. Remove any previous patch(es) with the patchrm command.

The patch found in the preceding example should be removed by typing:

```
# patchrm 112429-08
```

4. Remove the earlier SUNWsmgr2 package by typing:

```
# pkgrm SUNWsmgr2
```

5. Access the directory where the new SUNWsmgr2 package is to be installed.

6. Add the new package by typing:

```
# pkgadd -d SUNWsmgr2_2.1.2003.03.05.14.20
```

7. Start the SANbox Manager by typing:

```
# /usr/opt/SUNWsmgr2/bin/SANbox_Manager
```

8. Update the firmware.

For a detailed procedure on upgrading the firmware, refer to the *Sun StorEdge Network 2 Gb Switch-16 (SANbox2) Installer's/User's Manual, 875-3263* or *Sun StorEdge Network 2Gb Switch-8/16 (SANbox2) Management Manual, 875-3264*.

The new firmware for Sun StorEdge Network 2 Gb FC Switch-8 and Switch-16 exists in the following directory:

```
/usr/opt/SUNWsmgr2/bin/firmware/SANbox2
```

Note – All the Sun StorEdge Network 2G FC Switches (Switch-8, Switch-16, and Switch-64) share the same firmware (version 1.5.0.7 or later) with this release.

New Features With This Release

This section contains information about the following topics:

- “Switch Firmware Download” on page 3
- “IOStreamGuard” on page 4
- “Alarm Thresholds” on page 4
- “Smart Zoning Activation” on page 5
- “Remove ‘Brocade Mode’” on page 5
- “SNMP 4.0 FA MIB” on page 5
- “Firmware Naming Convention Change” on page 5
- “SNMP Trap Changes” on page 6
- “SANSurfer Fabric View” on page 6

Switch Firmware Download

When downloading firmware using the SANbox Manager, you should do so from a direct SANbox Manager session with the switch. This means you use an Entry Switch Management Session instead of an Inband Switch Management Session. The latter might result in a longer download time.

Using FTP to download and a Telnet session to activate the switch firmware image is also permissible.

IOStreamGuard

IOStreamGuard is disabled on the switch by default. Enabling IOStreamGuard on a port results in Register State Change Notifications (RSCNs) being blocked to the device connected to the port. If this device is a host, the host can not determine when a new target joins or leaves the fabric. Therefore, enabling IOStreamGuard is not recommended for host ports with normal configurations.

Alarm Thresholds

The Alarm Threshold Configuration screen allows for monitoring the switch ports for certain counters, such as logins. If a switch port increments these counters too rapidly, the threshold monitoring sends the port offline.

Note – Once taken offline, the port will *not* return to online status until you take action to return it.

Configure the threshold monitoring set point values to send a port offline as desired. For more information, refer to the *Sun StorEdge Network 2 Gb Switch-8/16 (SANbox2) Management Manual*, 875-3264.

Each counter threshold can be enabled and disabled with the `set config threshold` command. The counter thresholds include:

- CRC errors
- Decode errors
- ISL bounces
- Logins (to the fabric)
- Logouts (from the fabric)
- Loss of synchronization

If the Enable All Alarm Thresholds feature is enabled for decode errors and the decode error threshold is exceeded three times, the sample window (the default sample window of 10 seconds changes to 30 seconds), the user port is disabled, and an alarm is generated. To recover the disabled port, perform one of the following:

- Set the port state online.
- Reset the port.
- Reset the Sun StorEdge Network 2 Gb FC Switch-8 and Switch-16.

Refer to *Sun StorEdge Network 2 Gb Switch-8/16 (SANbox2) Management Manual*, 875-3264, for more information on Configuring Alarms.

Smart Zoning Activation

Activation of a zoneset causes RSCNs to be generated only in the affected zone(s).

Remove 'Brocade Mode'

Only active zone sets are propagated per the FC-SW2 specification.

SNMP 4.0 FA MIB

Support for the SNMP 4.0 FA MIB has been added.

Firmware Naming Convention Change

An extra digit was added to the firmware version of the Sun StorEdge Network 2 Gb FC Switch-8 and Switch-16. The firmware version of the prior release was 1.3.60. For this release it is 1.5.0.7.

SNMP Trap Changes

The connUnitEventTrap is replaced with the following:

- connUnitStatusChange
- connUnitDeletedTrap
- connUnitSensorStatusChange
- connUnitPortStatusChange

SANsurfer Fabric View

I/O traffic errors can now be monitored in real time on a per-port basis.

- Set graph-polling interval—the user can set the update rate for how often to poll.
- Can graph bytes or frames.

For more information, refer to *SANbox2-8/16 Switch Management User's Manual*, 875-3264.

Bugs

Bugs appear late in the test cycle when there is not enough time to correct them for the current release.

- **Bug 4821346:** Using the Storage Automated Diagnostic Environment with a large fabric, you see that some of the switches return an error message similar to the following:

```
ERR: Skipping ip sseqa-31.ebay.sun.com because type(Couldn't
detect a device at IP: 10.4.51.83), class(ERR) or wwn() is blank
```

Workaround: Manually add the switch by using the Storage Automated Diagnostic Environment feature under Admin → General Maintenance → Add Devices.

- **Bug 4822128:** The I/O stream might fail during fault injection, and the host can lose its link to some of the devices.

Workaround: Reset the port that has the apparently missing devices.

- **Bug 4825899:** The switch Nameserver loses login to a TL_Port. This occurs while doing an error injection on the HBA side. The devices goes offline and using SANbox Manager shows that the switch TL_Port is online. There is no entry shown in Nameserver in the SANbox Manager for the switch TL_Port.

Workaround: Reset the port or the switch to recover.

- **Bug 4832041:** If a port is taken offline and then returned to online using the API, sometimes it might not come back online.

Workaround: Reset the port or the switch to recover.

- **Bug 4847259:** During a reset of a Sun StorEdge Network 2 Gb Fibre Channel Switch-8 or Switch-16, the following message might be displayed:

```
[1] [Tue Apr 08 08:47:48.306 2003][A101][Switch
Management:0xdd00c857.361.4][Warning - development logging is
enabled]
```

Workaround: This is an informational message for debugging and should be ignored.

Firmware Fixes for Firmware Versions Between 1.3.60 and 1.5.0.7

The following is a list of bugs that have been resolved.

Switch Fixes

- 4741778
Synopsis: A firmware upload takes too long (~14 minutes).
- 4795696
Synopsis: Login failure on a security enable for a 1 Gb switch occurs when connected to 2 Gb switch.
- 4784871
Synopsis: A switch becomes inaccessible on reset.
- 4787870
Synopsis: The T4 controller does not port login to 2 Gb switch.
- 4747117
Synopsis: Prom mode on an 8-port switch does not blink LED.
- 4784854
Synopsis: Loss of communication occurs between a switch and the GUI.
- 4796944
Synopsis: A 2 Gb 8-port switch becomes unreachable (using firmware 1.3.60).
- 4792847
Synopsis: A 16-port 2 Gb switch hangs after a week of heavy I/O traffic.
- 4784860
Synopsis: High decode error counts occur on the target and host ports.
- 4799158
Synopsis: Received a point-to-point link init while u2ctr is connected to TL_Port.
- 4756368
Synopsis: The new volumes of 2 Gb switches can not be seen by the hosts.
- 4826330
Synopsis: A switch becomes unreachable with SANbox2 after running switch resets.

- 4826621

Synopsis: If the speed is configured as Autospeed and run for 28 days, a device login is not recognized and requires a port reset.

SANBox Manager Fixes

- 4750489

Synopsis: An inaccurate link reset count is displayed on the switch management GUI.

- 4751632

Synopsis: The Monitor Devices lists alerts for nonexistent components on a 2 Gb 8-port switch.

Service Contact Information

If you need help installing or using this product within the U.S., call 1-800-USA-4SUN, or go to:

<http://www.sun.com/service/contacting/index.html>

