



Sun StorEdge™ SAN Foundation Software 4.4.2 Release Notes

Including Sun StorEdge Traffic Manager
for the Solaris Operating System

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Release Notes

The *Sun StorEdge SAN Foundation Software 4.4.2 Release Notes* describe important, late-breaking information about the software. These notes also include information about the Sun StorEdge Traffic Manager software package that is bundled with the software.

These notes describe the following topics:

- “Product Changes” on page 1
- “System and Software Requirements” on page 2
- “Known Issues” on page 12
- “Release Documentation” on page 17
- “Service Contact Information” on page 17

Product Changes

The primary differences between the Sun StorEdge SAN Foundation Software 4.4.1 and 4.4.2 releases are as follows:

- The list of supported HBAs has changed. Refer to the list of supported HBAs in “Sun StorEdge SAN Foundation Software Supported Hardware” on page 3
- There have been numerous bug fixes. Refer to the patch README files for information on bugs fixed in this version.

System and Software Requirements

Sun StorEdge SAN Foundation Software 4.4.2 supports various servers, adapters, and storage devices. This section outlines the requirements for the servers, adapters, and storage devices.

Supported Hardware

This section contains the following topics on supported hardware for Sun StorEdge SAN Foundation Software 4.4.2:

- “Storage Devices” on page 2
- “Server Configurations” on page 5

Storage Devices

The switches and drivers in Sun StorEdge SAN Foundation Software 4.4.2 function with the following fabric-capable storage devices:

- Sun StorEdge T3 and T3+ arrays
- Sun StorEdge 3510 and 3511 arrays
- Sun StorEdge 39x0 series
- Sun StorEdge 6120 and 6320 arrays
- Sun StorEdge 6910 and 6960 series
- Sun StorEdge 6920 series (SG-XPCI1FC-JF2 & SG-XPCI2FC-JF2 HBAs are not supported with this series)
- Sun StorEdge 99x0 series
- Sun StorEdge 9840B Fibre Channel (FC) tape drive for the L180, L700, L5500, and L6000 tape libraries
- Sun StorEdge 9840C Fibre Channel (FC) tape drive for the L180, L700, L5500, and L6000 tape libraries
- SunStorEdge 9940B Fibre Channel (FC) tape drive
- Sun StorEdge LTO GEN II FC tape drive for the L180, L700, L5500, and L6000 tape libraries
- Sun StorEdge FC420 FC-SCSI bridge for the L25 and L100 tape libraries

Hardware components and the part numbers on the Sun price list that the switch supports are listed in TABLE 1. Check with your service representative for updates to this list.

TABLE 1 Sun StorEdge SAN Foundation Software Supported Hardware

Model, Part Number, or System Code	Description
T3AES and T3AWG	Sun StorEdge T3 arrays
T3BES, T3BWG	Sun StorEdge T3+ arrays
3510, 3511	Sun StorEdge 351x arrays
3910, 3960	Sun StorEdge 39x0 storage series
6120, 6320	Sun StorEdge 6x20 arrays
6910, 6920, 6960	Sun StorEdge 69x0 storage series
9910, 9960, 9970, 9980	Sun StorEdge 99x0 storage series
SG-XTAP9840BFC-DRV	9840B tape drive for the Sun StorEdge L180 and L700 tape libraries
SG-XL5500-9840BFC	9840B tape drive for the Sun StorEdge L5500 and L6000 tape libraries
SG-XL5500-9840CFC-DRV	9840C tape drive for the Sun StorEdge L180 and L700 tape libraries
SG-XL5500-9840CFC	9840C tape drive for the Sun StorEdge L8500 tape library
SG-XL5500-9840CFCI	9840C tape drive for the Sun StorEdge L5500 and L6000 tape libraries
SG-XTAP9940BFC-DRV	9940B tape drive for the Sun StorEdge L180 and L700 tape libraries
SG-XL5500-9940BFCI	9940B FC tape drive for the Sun StorEdge L5500 and L6000 tape libraries
SG-XL5500-9940CFCI	9940C FC tape drive for the Sun StorEdge L180, L700, L5500 and L6000 tape libraries
SG-XL8500-9940BFC	9940BFC FC tape drive for the Sun StorEdge L8500 tape library
SG-XTAPLTO2FC-DRV	Sun StorEdge LTO GEN II FC tape drive for the Sun StorEdge L180, L700, and L5500 tape libraries
SG-XT8500-LTO2FC	Sun StorEdge LTO GEN II FC tape drive for the Sun StorEdge L8500 tape library
SG-XL5500-LTO2FC-I	Sun StorEdge LTO GEN II FC tape drive for the Sun StorEdge L5500 tape library
SG-XFC420CARD-MOD	Sun StorEdge FC420 FC-SCSI Bridge for L25 and L100 tape libraries
SG-XLIBFCCARD	Sun StorEdge L180 and L700 FC Robotics Controller
X6746A	Sun StorEdge Network FC 1 Gbit 8-port switch
SG-XSW16-32P	Sun StorEdge Network FC 1 Gbit 16-port switch

TABLE 1 Sun StorEdge SAN Foundation Software Supported Hardware (*Continued*)

Model, Part Number, or System Code	Description
XT8-BR-2402-0013 XT8-BR-2802-0008	Brocade Silkworm 1 Gbit 2400 and 2800 switches
SG-XSWBRO3200	Brocade Silkworm 2 Gbit 3200 switch
SG-XSWBRO3250	Brocade Silkworm 2 Gbit 3250 switch
SG-XSWBRO3800	Brocade Silkworm 2 Gbit 3800 switch
SG-XSWBRO3850	Brocade Silkworm 2 Gbit 3850 switch
SG-XSWBRO3900	Brocade Silkworm 2 Gbit 3900 switch
SG-XSWBRO12000-32P SG-XSWBRO12000-64P	Brocade Silkworm 2 Gbit 12000 switch
SG-XSWBRO24000-32P SG-XSWBRO24000-64P	Brocade Silkworm 2 Gbit 24000 switch
SG-XSWMD4300-12P	Sun StorEdge Network 2 Gbit McData Sphereon 4300 switch
SG-XSWMD4500-8P	Sun StorEdge Network 2 Gbit McData Sphereon 4500 switch
SG-XSWMD6064-32P	Sun StorEdge Network 2 Gbit McData Intrepid 6064 Director switch
SG-XSWM6140-64P	Sun StorEdge Network 2 Gbit McData Intrepid 6140 Director switch
SG-XSW8-2GB	Sun StorEdge Network FC 2 Gbit 8-port switch
SG-XSW16-2GB	Sun StorEdge Network FC 2 Gbit 16-port switch
SG-XSW64-BASE	Sun StorEdge Network FC 2 Gbit 64-port switch
X6799A	Sun StorEdge PCI Single Fibre Channel Network Adapter
X6727A	Sun StorEdge PCI Dual Fibre Channel Network Adapter
SG-XPCI1FC-JF2	2 Gbit PCI Single Port Fibre Channel Host Bus Adapter
SG-XPCI2FC-JF2	2 Gbit PCI Dual Port Fibre Channel Host Bus Adapter
X6748A	Sun StorEdge cPCI Dual Fibre Channel Network Adapter
X6757A	Sun StorEdge sBus Dual Fibre Channel Host Bus Adapter
SG-XPCI1FC-QF2 (formerly X6767A)	Sun StorEdge 2 Gbit FC PCI Single Channel Network Adapter
SG-XPCI2FC-QF2 (formerly X6768A)	Sun StorEdge 2 Gbit FC PCI Dual Channel Network Adapter
XSFP-SW-2Gb	Short-wave Small Form Factor Pluggable Transceiver (SFP)
XSFP-LW-2Gb	Long-wave Small Form Factor Pluggable Transceiver (SFP) (up to 10 km with no modifications to the switch)*
X973A	2-meter fiber-optic cable (SC-SC)

TABLE 1 Sun StorEdge SAN Foundation Software Supported Hardware (*Continued*)

Model, Part Number, or System Code	Description
X9715A	5-meter fiber-optic cable (SC-SC)
X978A	15-meter fiber-optic cable (SC-SC)
X9720A	SC-SC cable coupler
X9721A	0.4-meter fiber cable (LC-SC)
X9722A	2-meter fiber cable (LC-SC)
X9723A	5-meter fiber cable (LC-SC)
X9724A	15-meter fiber cable (LC-SC)
X9732a	2-meter fiber cable (LC-LC)
X9733a	5-meter fiber cable (LC-LC)
X9734a	15-meter fiber cable (LC-LC)

* Use long-wave Small Form Factor Pluggable (SFP) Transceivers and fibre cables to cascade more than 500 meters in 1-Gbit mode or 300 meters in 2-Gbit mode.

Server Configurations

TABLE 2 outlines which servers, bus types, host bus adapters (HBAs), physical connections, and software patches and packages are required for the Sun StorEdge SAN Foundation Software.

TABLE 2 Sun StorEdge SAN Foundation Software Server Compatibility Matrix

Server	Bus Arch.	HBAs	Physical Connection	Required Sun Software Packages and Patches
Sun Enterprise™ 3x00 through 6x00, and 10000 servers	SBus	X6757A	1-Gbit FC	<p>Sun StorEdge SAN Foundation Software 4.4 or later with the following unbundled packages:</p> <p>SUNWsan SUNWcfpl SUNWcfplx SUNWcfclr SUNWcfcl SUNWcfclx SUNWfchbr SUNWfchba SUNWfchbx SUNWfcsml SUNWfcsmx SUNWmdi SUNWjfca SUNWjfcax SUNWjfcau SUNWjfcaux</p> <p>found at the Download Center: http://www.sun.com/storage</p> <p>To find all required patches: http://sunsolve.Sun.com Æ-> Patches -> PatchPro:</p> <ul style="list-style-type: none"> • Æ->Network Storage Products and • ->ÆSolaris Recommended Patch Cluster <p>Describe your system, then click Generate Patch List.</p>
	PCI	X6799A X6727A	1-Gbit FC	
	PCI	SG-XPCI1FC-QF2 SG-XPCI2FC-QF2	2-Gbit FC	
Sun Fire™ 3800 server	cPCI	X6748A	1-Gbit FC	
Sun Fire™ 4800 through 6800 servers	cPCI	X6748A	1-Gbit FC	
	PCI	X6799A X6727A	1-Gbit FC	
		SG-XPCI1FC-QF2 SG-XPCI2FC-QF2	2-Gbit FC	
<ul style="list-style-type: none"> • Sun Blade™ 1000 and 2000 workstations • Sun Enterprise™ 250, 450, 220, and 420 servers • Sun Fire™ V210, V240, V250, 280R, V440, 480, V880, V1280, 12000, 15000, E2900, 4900, 6900, E20K and E25K servers • Sun Netra™ 20, 120, 240, 140X, 1125, 1280 and 440 Servers • Sun Ultra™ 60 and 80 servers 	PCI	X6799A X6727A	1-Gbit FC	
		SG-XPCI1FC-QF2 SG-XPCI2FC-QF2 SG-XPCI1FC-JF2 SG-XPCI2FC-JF2	2-Gbit FC	

Operating Environment and Firmware Guidelines

This section outlines operating environments and host configurations for Sun StorEdge SAN Foundation Software. It contains the following topics:

- “Supported Operating Environments” on page 7

- “Host Bus Adapter FCODE Requirements” on page 8
- “Storage Device Firmware Levels” on page 9
- “Switch Firmware Requirements” on page 11

Supported Operating Environments

TABLE 3 lists the versions of the Sun StorEdge SAN Foundation Software that run on various releases of the Solaris™ Operating System (Solaris OS).

TABLE 3 Sun StorEdge SAN Foundation Software Operating System Compatibility Matrix

Operating System	Software Version	Notes
Sun Solaris 7		Not supported
Sun Solaris 8	Update 04/01 or later	Supported
Sun Solaris 9	All	Supported

All Solaris hosts in a zone must be running the Solaris 8 04/01 (also known as update 4) or later OS with all appropriate patches installed.

You can download the patches from the following web site:

<http://sunsolve.Sun.COM/>

Host Bus Adapter FCODE Requirements

TABLE 4 lists the FCODE versions required for various HBAs and I/O boards. Use the patch IDs below to ensure fabric boot support with a switch port set to F-port.

You can obtain the FCODE revision level by using the following command:

```
# luxadm fcode_download -p
```

TABLE 4 Sun StorEdge SAN Foundation Software HBA FCODE Matrix

Firmware Code Levels for HBAs and I/O Boards	Version	Minimum Patch Revision Level
X6757A, Sun StorEdge SBus Dual Fibre Channel Host Adapter	1.14.05 or later	112244-04 or later
X6799A, Sun StorEdge PCI Single Fibre Channel Network Adapter	1.14.09 or later	111853-03 or later
X6727A, Sun StorEdge PCI Dual Fibre Channel Network Adapter	1.14.09 or later	111853-03 or later
SG-XPCI1FC-QF2, Sun StorEdge 2 Gbit FC PCI Single Channel Network Adapter	1.14.09 or later	114873-02 or later
SG-XPCI2FC-QF2, Sun StorEdge 2 Gbit FC PCI Dual Channel Network Adapter	1.14.09 or later	114874-01 or later
SG-XPCI1FC-JF2, 2 Gbit PCI Single Port Fibre Channel Host Bus Adapter	1.2	116423-02 or later
SG-XPCI2FC-JF2, 2 Gbit PCI Dual Port Fibre Channel Host Bus Adapter	1.2	116423-02 or later
X6748A, Sun StorEdge cPCI Dual Fibre Channel Network Adapter	1.14.09 or later	111853-02 or later

Storage Device Firmware Levels

TABLE 5 lists firmware level requirements for supported storage devices.

TABLE 5 Sun StorEdge SAN Foundation Software Storage Device Firmware Matrix

Storage Devices	Firmware Version	Notes
Sun StorEdge T3 array	1.18.03 or later controller firmware	Requires translated loop (TL) switch mode, not supported with McData switches.
Sun StorEdge T3+ array	3.1.3 or later controller firmware	Requires fabric switch mode.
Sun StorEdge 3510 FC Array	3.27R or later /SAFTE 1159	Requires fabric (F) or fabric loop (FL) mode.
Sun StorEdge 3511 array	3.27R	
Sun StorEdge 39x0 array	3.1.2 or later controller firmware	Requires fabric switch mode and Service Processor software revision level 2.3.2 or higher.
Sun StorEdge 6120 and 6320 arrays	3.1.4 or later	Requires F or FL mode and Sun StorEdge 6320 Service Processor patch revision level 1.1.1 or higher.
Sun StorEdge 6910 and 6960 arrays	Vicom firmware 8.020 or later	Requires fabric switch mode, and Service Processor software revision level 2.3.3 or later.
Sun StorEdge 6920 array	02.00.02	SG-XPCI1FC-JF2 & SG-XPCI2FC-JF2 HBAs are not supported with SE6920
Sun StorEdge 9910 and 9960 arrays	01-19-52-00/00 or later	Requires F or FL mode.
Sun StorEdge 9970 and 9980 arrays	21-08-26-00/00 or later	Requires F or FL mode.
9840B tape drive	1.33.312 or later	Requires Sun StorEdge L180, L700, L5500, or L8500 tape libraries.
9840C tape drive	1.33.512 or later	Requires Sun StorEdge L180, L700, L5500, or L8500 tape libraries.
9940B tape drive	1.32.427 or later	Requires Sun StorEdge L180, L700, L5500, or L8500 tape libraries.
Sun StorEdge LTO GEN II tape drive	38D0 or later	Requires Sun StorEdge L180, L700, L5500, or L8500 tape libraries.

TABLE 5 Sun StorEdge SAN Foundation Software Storage Device Firmware Matrix (*Continued*)

Storage Devices	Firmware Version	Notes
Sun StorEdge L180 and L700 tape libraries	3.06 or later	Supported with TL or FL ports. Support for the 1-Gbit robot interface card is TL or FL; support for the 2 Gbit interface card is F.
Sun StorEdge L5500 tape libraries	LMU=2.5.13 LCU=4.06.01 ACSLs=6.1.1 or later	
Sun StorEdge L6000 tape libraries	LMU=1.9.25 LCU=4.01.02 ACSLs=6.1.1 or later	ACSLs controls robotics via TCP/IP
Sun StorEdge L8500 tape libraries	3.10 or later SCSLs=7.1	ACSLs controls robotics via TCP/IP

Switch Firmware Requirements

TABLE 6 lists the firmware versions required for various switches.

TABLE 6 Sun StorEdge SAN Foundation Software Switch Firmware Matrix

FW-Code Levels for Switches	Switch Management Software	Firmware Version
Sun StorEdge Network 1 Gbit SANbox1 (8 and 16 port switches)	Qlogic SANbox Manager 2.00.16*	4.02.42 or later
Sun StorEdge Network 2 Gbit SANbox2 (8, 16, and 64 port switches)	Qlogic SANbox Manager 2.00.16	2.00.50 or later
Brocade Silkworm 1 Gbit 2400 and 2800	Brocade Fabric Manager 4.1.1	2.6.2a or later
Brocade Silkworm 2 Gbit 3200 and 3800	Brocade Fabric Manager 4.1.1	3.1.2a or later
Brocade Silkworm 2 Gbit 3900, 12000, 3250, 3850, and 24000	Brocade Fabric Manager 4.1.1	4.2.0b or later
McData Sphereon 4300	No EFCM support	6.01 or later
McData Sphereon 4500	McData EFCM 8.01.00	6.01 or later
McData Intrepid 6064 Director	McData EFCM 8.01.00	6.01 or later
McData Intrepid McData Intrepid 6140 Director	McData EFCM 8.01.00	6.01 or later

* A fabric consisting of both 1 Gbit and 2 Gbit Sun StorEdge Network switches should be managed by the SANbox Manager 2.00.16 software (the entry switch for management has to be a 2 Gbit switch). A fabric consisting only of 1 Gbit Sun StorEdge Network switches should be managed by SANbox Manager 1.05.14 software. See the switch documentation for more information.

Sun StorEdge Traffic Manager Software Requirements

The Sun StorEdge Traffic Manager software requires that you use one of the following:

- Sun Solstice DiskSuite™ software and Solaris™ Volume Manager software
- VERITAS Volume Manager Version 3.2 or higher

You must explicitly disable Sun StorEdge Traffic Manager software on a per-port basis with VERITAS Volume Manager versions that do not work with Sun StorEdge Traffic Manager paths.

To run Sun StorEdge Traffic Manager software and alternate pathing (AP) software simultaneously in a Solaris 8 environment, disable Sun StorEdge Traffic Manager on a per-port basis and utilize alternate pathing for control of the disabled devices. You might choose this option for multipathing capabilities for devices that are supported by alternate pathing but not supported by Sun StorEdge Traffic Manager software.

Known Issues

The following topics describe software issues and bugs associated with the Sun StorEdge SAN Foundation Software:

- “Sun Fire 3800 Servers and the Sun StorEdge SAN Foundation Software” on page 12
- “Driver and Utility Bugs” on page 12
- “Array Firmware Bugs” on page 14
- “Known Issues” on page 12
- “Miscellaneous Bugs” on page 17

Sun Fire 3800 Servers and the Sun StorEdge SAN Foundation Software

Sun Fire 3800 servers with Sun StorEdge cPCI Dual Fibre Channel (X6748A) HBAs installed and running the Sun StorEdge SAN Foundation Software can access data in SANs. This platform now also supports booting from a fabric.

Driver and Utility Bugs

■ 4631419

When a LUN (slice) is removed from the Sun StorEdge T3 array without being unconfigured on the host and the same slice number is then added back, a new Sun StorEdge Traffic Manager `mpxio` device is created. The original device node is in the offline state and the new one is in the online state.

Workaround

- a. Unconfigure the associated target device by using the `cfgadm -c unconfigure` command.
- b. Remove the LUN from the target device by using the `volslice remove` command.
- c. Create the new LUN by using the `volslice create` command.
- d. Configure the target from the Solaris host.

■ 4783080

After rebooting the host, if you add a LUN in the worldwide name (WWN) zone of the switch, the Sun StorEdge SAN Foundation Software 4.4.2 stack does not receive a notification, and the LUN is not displayed when you use the `cfgadm` command.

Workaround

Run the `cfgadm configure` command on the controller number after the WWN has been added to the zone set working area, and activate the zone set.

■ 4810591

If you attempt to unconfigure the last available path to a device in a multipathing configuration by using the `cfgadm -c unconfigure` command, I/O operations will fail, resulting in errors. The unconfiguration operation also fails.

Workaround

Do not attempt to unconfigure the last available path to a device in a multipathing configuration.

■ 4932988

During heavy I/O and fault injection when you are using FCIP on supported Sun adapters, the following message may be displayed:

```
NFS server 222.222.222.223 not responding still trying
```

Workaround

Allow the fabric to stabilize by ensuring that no LIPs occur. The system will then recover on its own.

■ 4938249

If you add a Sun StorEdge 3510 array to the fabric-attached boot controller, the host will not see LUN 0 of this device and will fail the `stmsboot disable` procedure.

Workaround

Configure LUN 0 on the 3510 array before running the `stmsboot -d` operation.

- **4956157**

Disconnecting the FC cable from the storage side puts the Sun StorEdge 2 Gbit FC PCI Dual Channel Network Adapter (SGXPCI2FC-QF2) in the `OFFLINE/ONLINE` state, which makes you unable to retrieve HBA information using the `luxadm` command.

Workaround

Execute the `cfgadm -al` command and bring the storage back online.

Array Firmware Bugs

- **4737352**

When you use the Sun StorEdge Traffic Manager software for the Solaris OS, the Sun StorEdge T3 array does not register its Fibre Channel layer-4 mapping layer (FC-4) type on the Sun StorEdge McData 64-port or 32-port switch. As a result, the switch cannot recognize the array as a fabric device. This condition might also affect Sun StorEdge 6000 family systems and arrays.

Workaround

In Solaris environments only, use the `cfgadm(1M)` command to configure the storage device:

```
# cfgadm -c configure -f device-name
```

No workaround exists for the Sun StorEdge Traffic Manager software running on the HP-UX, IBM AIX, Microsoft Windows, or Linux operating system.

Known Issues With Supported Switches

- **4753552**

After a reset or power cycle, several Brocade SilkWorm 2 Gbit 3800 switch ports fail to complete initialization and remain configured as G-type ports. As a result, the host loses access to the storage connected to these ports.

Workaround

Disable, and then re-enable the affected ports.

- **4756368**

When you create new virtual LUNS (vluns) from a host connected to a Sun StorEdge 69xx array through the Sun StorEdge Network 2 Gbit SANBox switches, the host cannot detect the new vluns.

Workaround

Perform one of the following.

- Execute a `luxadm` command to reset the link to the Sun StorEdge 69xx devices:

```
# luxadm -e forcelp device-physical-pathname
```

- Download the firmware revision 1.5.07 available for the switch from the `sunsolve.sun.com` web site, and download it to the switch.

■ 4901550

When you download firmware to a switch by using the SANBox switch management software, the update fails if the switch and host downloading the software are on different subnets.

Workaround

Change to the same subnet as the switch to download the firmware, or use `telnet` to connect to the switch and download the firmware.

■ 4926090

The diagnostic loopback port tests for 2 Gbit switches do not run on ports other than 0 and 1.

Workaround

Use ports 0 and 1 for diagnostic loopback tests. Also, run a port online test (instead of port diagnostics test) that will exercise the switch.

■ 4948150

With a T3B and a 1G QLogic switch, the device cannot be seen from the host. This failure occurs during slice creation, change of permission, and slice removal.

Workaround

Unplug the HBA cable and then plug it back into the switch. If there are multiple HBAs in the zone, do this for all affected HBAs.

■ 4959100

A Brocade SilkWorm 3800 switch with FOS 3.1.1b displays the following message during load and multiple LIP injection:

```
mgWrite: msg threshhold exceeded
```

As a result, the switch cannot see other devices on the fabric because it cannot exchange information with other switches.

Workaround

Reboot the switch. On a non-redundant fabric, an I/O operation stops; on a redundant fabric, I/O continues over the redundant data path.

■ **4959130**

A Brocade Silkworm 3900 switch connected to a 9910 or 9970 switch reported an Out of Memory error and caused a reboot during LIPs.

Workaround

Reboot the switch.

■ **5006714**

Power cycling the Brocade Silkworm 3250, 3850 or 3900 switch with FOS v4.x during a firmware download process that is updating the PROM will corrupt the PROM and prevent the switch from operating.

A Brocade Silkworm 3000 family switch generally requires about 3 to 4 minutes to complete the firmware download. During the download process, there is a 10- to 20-second window when the PROM is updated. The switch console prints, Please avoid powering off the system during the PROM update. However, if the switch loses power during this update, the PROM is corrupted and the switch is not bootable.

No warning is generated when you update the PROM through the graphical user interface (GUI).

Workaround

Connect the switch to an Uninterruptable Power Supply (UPS) to ensure clean and continuous power during the firmware download. Then issue the `firmware download` CLI command to download the switch firmware. Do not power-cycle the switch when the `Do not power cycle` message appears.

■ **5012051**

After you reset a McData switch in the SAN, the system loses access to one path of the HDS system.

Workaround

Execute a `luxadm` command to reset the path to the HDS system.

```
# luxadm -e forcelp device-physical-pathname
```

■ **5042302**

On the McData Sphereon 4300 switch, the host reports an I/O failure, and the following error is displayed:

A SCSI transport failed: reason 'time-out': retrying command
This problem can be caused by low-level Fibre Channel transmission errors.

Workaround

Reboot the switch, or use another port on the switch.

Miscellaneous Bugs

- **4888608**

The `ses` driver fails to attach to LUN 0 on the array as the result of an incorrect response from the RAID array.

Workaround

Create a small LUN 0 device and do not include it as part of LUN filtering.

- **4909641**

VERITAS Volume Manager 3.5 software cannot encapsulate a root device if the device is a fabric boot device as configured through the Sun StorEdge Traffic Manager software.

Workaround

None. With the Sun StorEdge SAN Foundation Software 4.4.2 and Sun StorEdge Traffic Manager software installed, do not use the VERITAS Volume Manager software to encapsulate your root device. You can use the other features of this volume manager software.

Release Documentation

The following documents are available:

- *Sun StorEdge SAN Foundation Software 4.4 Installation Guide*
- *Sun StorEdge SAN Foundation Software 4.4 Configuration Guide*

These documents are available at:

http://www.sun.com/products-n-solutions/hardware/docs/Network_Storage_Solutions/SAN/

Service Contact Information

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

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

