



Sun StorEdge™ Network 2 Gb Brocade SilkWorm 3250, 3850, and 3900 Switches and 12000 and 24000 Directors Release Notes

4.2.0x Firmware

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Sun StorEdge Brocade SilkWorm 3250, 3850, 3900, 12000, and 24000 Switches Release Notes

4.2.0x Firmware

This document contains important information about the Sun StorEdge Network 2 Gb Brocade SilkWorm 3250, 3850, and 3900 switches and 12000 and 24000 directors that was not available at the time the product documentation was published. Read this document so that you are aware of issues or requirements that can impact the installation and operation of the Sun StorEdge Network 2 Gb Brocade SilkWorm 3250, 3850, and 3900 switches and 12000 and 24000 directors.

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- “New Features In This Release” on page 2
- “System Requirements” on page 3
- “Known Issues and Bugs” on page 9
- “Related Documentation” on page 10
- “Service Contact Information” on page 10

New Features In This Release

The following five products are being released with the Brocade Fabric Operating System (FOS) 4.2.0x.

- Sun StorEdge Network 2 Gb Brocade SilkWorm 3250 Core Fabric Switch Valueline and Enterprise
- Sun StorEdge Network 2 Gb Brocade SilkWorm 3850 Core Fabric Switch Valueline and Enterprise
- Sun StorEdge Network 2 Gb Brocade SilkWorm 24000 Director

These new switches are based on a smaller version of the ASIC that is currently used in the 3200, 3800, and 12000 switches.

The 3250 and 3850 switches are available in a full-featured *Enterprise* version, and a *Valueline* version. Valueline switches have limitations on the number of supported features (the Fabric Watch and Performance Monitoring features are excluded) and on the size of the supported fabric. All Valueline switches can be upgraded to Enterprise switches. The 3250 switch is similar to the 3200 switch, but with a lower cost. The 3250 and 3850 switches do not have any field-replaceable units (FRUs); each entire switch is a FRU. The 3850 switch does not replace the 3800.

The 24000 is very similar to the 12000, except its chassis is redesigned and updated. It has the same number of blades as the 12000 with two controller blades and eight I/O blades. The current 24000 firmware release supports only a single domain. Each I/O blade has 16 ports. However, all 24000 blades have a new design and must not be interchanged with the old blades. The 24000 has redundant hot-swappable FRUs.

All of the new Sun StorEdge Network 2 Gb Brocade StorEdge Network 2 Gb switches (3250, 3850, and 24000) and, at the time of product announce, all shipments of the existing 3900 and 12000 switches share the same common firmware (FW), starting with version 4.2.0b. The first version of this common FW is v4.2.0b.

System Requirements

This section covers the following topics:

- “Software Requirements” on page 3
- “Supported Hardware” on page 4
- “Fabric Operating System (Switch Firmware) Requirements” on page 4

Software Requirements

This section lists the latest software requirements.

Basic Software Requirements

- Solaris™ 8 Operating System 04/01 or later with the latest security patches
- Solaris™ 9 Operating System
- Sun StorEdge™ SAN Foundation software packages and patches for the Sun StorEdge SAN 4.4 release

Brocade Management Software Requirements

- Mozilla™ 1.4 (or later)
- Java™ plug-in 1.4.2 (or later)

Note – Refer to the firmware release notes at the Brocade web site for information about the latest revisions to the above software at <http://www.brocade.com> and click Partner Login at the top menu bar. A User ID and password are required. Otherwise contact your Sun service representative.

Supported Hardware

For a list of the supported servers, host bus adapters (HBAs), and storage devices, see *Sun StorEdge SAN Foundation Software 4.4 Release Notes, Including Sun StorEdge Traffic Manager for the Solaris Operating System*, 817-3673-12. Recent additions to this list include the following items:

- JNI 2 Gb PCI Single and Dual Port Fibre Channel HBA
- Sun StorEdge Fibre channel 9840B, 9940B, 9940C, and LTO GEN II FC tape drives
- Sun StorEdge FC420 FC-SCSI Bridge for L25/L100 tape libraries
- Sun Fire™ V210, V240, V250, 280R, V440, 480, V880, V1280, 15000, and 12000

Fabric Operating System (Switch Firmware) Requirements

TABLE 1 summarizes the versions of Brocade fabric operating system (FOS) that are supported in conjunction with this release. Sun recommends using the latest software release versions to optimize the benefits of a SAN.

TABLE 1 Minimum Fabric Operating System (FOS) Requirements

	Sun StorEdge Network 2 Gb Brocade SilkWorm 3200 and 3800	Sun StorEdge Network 2 Gb Brocade SilkWorm 3900 and 12000	Sun StorEdge Network 2 Gb Brocade SilkWorm 3250, 3850, and 24000	Brocade Fabric Manager
General Compatibility	3.0.2j	4.0.2c	4.2.0b	3.0.2c *
With Secure FOS Enabled	3.1.0	4.1.0	4.2.0b	4.1.0 *
Recommended Software Versions	3.1.2a	4.2.0b	4.2.0b	4.1.1

* The Sun StorEdge Network 2 Gb Brocade SilkWorm 3250, 3850, and 24000 switches are only supported by Fabric Manager version 4.1.1 or later.

For Brocade FOS end-of-life information, see:

http://www.brocade.com/support/end_of_life.jsp

Required Packages

You need to install these packages, in the listed order, before you install the patches. If the packages are already on the system from a previous installation, you do not need to install them again. All of the packages can be found at:

<http://www.sun.com/download/> or <http://www.sun.com/storage/san>.

- SUNWsan
- SUNWcpl
- SUNWcplx
- SUNWfchba
- SUNWfcflr
- SUNWfchbr
- SUNWfchbx
- SUNWfcsm
- SUNWfcsmx
- SUNWfcfl
- SUNWfcflx
- SUNWmdiu
- SUNWjfca
- SUNWjfcax
- SUNWjfcaw
- SUNWjfcawx

For instructions on where and how to download Sun StorEdge SAN Foundation software driver packages and patches required to run the switches with supported hardware from Sun, see the *Sun StorEdge SAN Foundation Software Release Notes*, part number 817-0071. You can find this document at:

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

Required Patches

TABLE 2 and TABLE 3 contain a list of the patches necessary to use the new 4.0.2x firmware. The latest patches are always downloaded at <http://sunsolve.sun.com>.

Note – Install the Solaris OS update patches from either TABLE 2 or TABLE 3 in the order shown before installing the Brocade FOS v3.1.2x patch shown in TABLE 4.

TABLE 2 Sun Solaris 8 OS Patches

Patches	Name
111847-xx	SAN Foundation software enhancements
111412-xx	Sun StorEdge Traffic Manager software
111095-xx	fc _{cp} /fc _p /fc _{ctl} drivers
111096-xx	fc _{ip} driver
111097-xx	qlc driver
111413-xx	luxadm and libq_fc/liba5k
111846-xx	cfgadm fc plug-in library
110614-xx	ses driver
114475-xx	FCSM driver
113766-xx	Common Fibre Channel HBA API library
113767-xx	SNIA Sun Fibre Channel HBA library
112244-xx	SBus Dual Fibre Channel Network Adapter Firmware*
114877-xx	JNI driver support
111853-xx	1 Gb PCI Single/Dual FC Network Adapter FCode
114873-xx	Single 2 Gbit FC Network Host Adapter FCode
114874-xx	Dual 2 Gbit FC Network Host Adapter FCode
116423-xx	JNI PCI Single + Dual 2 Gbit FC Network Host Adapter FCode

* Install the optional 112244-02 patch if the HBA FCode revision is 1.13.06 or lower. See the patch README file for details.

TABLE 3 Sun Solaris 9 OS Patches

Patches	Name
111847-xx	SAN Foundation software enhancements
113046-xx	fc _p patch
113049-xx	luxadm and liba5k.so.2 patch
113039-xx	Sun StorEdge Traffic Manager software
113040-xx	fc _p /fc _{fp} /fc _{ctl} drivers
113041-xx	fc _{ip} driver
113042-xx	qlc driver
113043-xx	luxadm and libq_fc/liba5k
113044-xx	cfgadm fc plug-in library
114476-xx	FCSM driver
114477-xx	Common Fibre Channel HBA API library
114478-xx	SNIA Sun Fibre Channel HBA library
112244-xx	SBus Dual Fibre Channel Network Adapter Firmware [*]
114878-xx	JNI driver support
111853-xx	1 Gb PCI Single/Dual FC Network Adapter FCode
114873-xx	Single 2 Gbit FC Network Host Adapter FCode
114874-xx	Dual 2 Gbit FC Network Host Adapter FCode
116423-xx	JNI PCI Single + Dual 2 Gbit FC Network Host Adapter FCode

* Install the optional 112244-02 patch if the HBA FCode revision is 1.13.06 or lower. See the patch README file for details.

TABLE 4 Brocade Fabric Operating System v4.2.0b Patch

Patch	Name
115361-04	Brocade switch 4.2.0b firmware patch

▼ To Download and Install the Patches

The latest patches are available on the SunSolveSM web site with the use of PatchFinder. Use the following procedure to retrieve the patches for your Operating System and the patch for the 4.21.0b firmware.

1. Access the SunSolve web site at:

`http://sunsolve.sun.com.`

2. Under SunSolve Patch Contents, click Patch Portal.

3. Under PatchFinder, type the patch ID (refer to TABLE 2, and TABLE 3) and click Find Patch.

Do not type the *-xx* revision number. PatchFinder automatically finds the latest patch.

4. Verify that you have retrieved the correct patch.

5. Print the page by doing one of the following:

- Print the page.
- Click Printer Friendly Page, and then print the page.

Note – Printing this page also prints the patch README file which contains the installation instructions, special instructions, special guidelines, and notes.

6. Download the patch by clicking on either HTTP or FTP in the following line:

Download Patch (*nm,nnn,nnn* bytes) [HTTP](#) [FTP](#).

7. Click PatchFinder and repeat the process from Step 3 for each patch.

8. When you are finished downloading all the patches, install the patches by following the instructions in each patch README file.

Known Issues and Bugs

The following bugs are listed in order of priority (P) first, and then severity (S).

- **Bug 4959130 (P2/S3):** If a Sun StorEdge 9900 Series generates multiple registered state change notifications (RSCNs) in a short time period, the Sun StorEdge Network 2 Gb Brocade SilkWorm switches can report an “Out of Memory” message and start rebooting.

Workaround: Limit the fault injections to at least five minutes between intervals, or use a storage device in the fabric that does not generate multiple RSCNs in a short time period.

- **Bug 5043766 (P2/S3):** A Sun StorEdge Network 2 Gb Brocade SilkWorm 3900 switch with the 4.1.x Fabric Operating System (FOS) can reboot soon after receiving a simple network management protocol (SNMP) GET-NEXT request from the Halcyon PrimeAlert for Brocade Switch monitoring module.

Workaround: Do not use the 3900 switch’s SNMP monitoring capability. Or use it only with tools that do not issue a GET-NEXT SNMP request.

- **Bug 5006714 (P3/S1):** Power-cycling a switch with the 4.x FOS during a firmware download while a warning message is displayed can corrupt the boot PROM and result in a non-functional switch.

Workaround: Connect the switch to an uninterruptible power supply to ensure a clean and continuous power source during the firmware download. Issue the `firmwaredownload` CLI command to download the switch firmware and do not power-cycle the switch when you see the `Do not power cycle` message.

- **Bug 4993296 (P4/S3):** The `portstatshow port_number` CLI command output values in the `er_enc_out` counter field keep increasing. This continues even without a small form-factor pluggable (SFP) connector in the indicated switch port.

Workaround: Install the SFP in the affected switch port.

- **Bug 4997477 (P4/S3):** A switch or director doesn’t always become ready after a long duration of disable and enable stress testing.

Workaround: Issue the `switchenable` command line interface (CLI) command to enable the switch.

- **Bug 4945574 (P4/S4):** An invalid domain ID error message can be reported when a switch that is in the Interop Mode is connected to a switch that is not in the Interop Mode.

Workaround: None at this time.

- **Bug 4993173 (P4/S4):** Brocade Fabric Manager 4.1.1 reports only the first three characters of a switch model number in the FICON Related column. For example, 325, 385, and 390.

Workaround: None at this time.

- **Bug 4703978 (P4/S5):** Simple network management protocol (SNMP) cannot provide switch zoning information.

Workaround: Use a Brocade application programming interface (API) 2.1 or a Storage Management Initiative Specification (SMI-S) agent to obtain the zoning information.

Related Documentation

The latest *Brocade Fabric OS v4.2.0x Release Notes_x.x* can be found at the Brocade web site:

`http://www.brocade.com` ⇒ partner network ⇒ enter user ID and password (or register) ⇒ Firmware ⇒ select your FOS ⇒ select the FOS version (if required) ⇒ fill out the export compliance form, read text, and submit ⇒ read the terms ⇒ select the appropriate Release Notes

For instructions on where and how to download Sun StorEdge SAN Foundation software driver packages and patches, see “Required Packages” on page 5.

Service Contact Information

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

`http://www.sun.com/service/contacting/index.html`