



Sun StorEdge™ Network 1 Gb FC Switch Release Notes Firmware 4.02.4x Release

Sun Microsystems, Inc.
4150 Network Circle
Santa Clara, CA 95054 U.S.A.
650-960-1300

Part No. 817-3716-10
September 2003, Revision A

Submit comments about this document at: <http://www.sun.com/hwdocs/feedback>

Copyright 2003 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, U.S.A. All rights reserved.

Sun Microsystems, Inc. has intellectual property rights relating to technology that is described in this document. In particular, and without limitation, these intellectual property rights may include one or more of the U.S. patents listed at <http://www.sun.com/patents> and one or more additional patents or pending patent applications in the U.S. and in other countries.

This document and the product to which it pertains are distributed under licenses restricting their use, copying, distribution, and decompilation. No part of the product or of this document may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any.

Third-party software, including font technology, is copyrighted and licensed from Sun suppliers.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and in other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, AnswerBook2, docs.sun.com, Sun StorEdge, and Solaris are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and in other countries.

All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and in other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and Sun™ Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

U.S. Government Rights—Commercial use. Government users are subject to the Sun Microsystems, Inc. standard license agreement and applicable provisions of the FAR and its supplements.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright 2003 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, California 95054, Etats-Unis. Tous droits réservés.

Sun Microsystems, Inc. a les droits de propriété intellectuels relatifs à la technologie qui est décrite dans ce document. En particulier, et sans la limitation, ces droits de propriété intellectuelle peuvent inclure un ou plus des brevets américains énumérés à <http://www.sun.com/patents> et un ou les brevets plus supplémentaires ou les applications de brevet en attente dans les Etats-Unis et dans les autres pays.

Ce produit ou document est protégé par un copyright et distribué avec des licences qui en restreignent l'utilisation, la copie, la distribution, et la décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans l'autorisation préalable et écrite de Sun et de ses bailleurs de licence, s'il y ena.

Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des fournisseurs de Sun.

Des parties de ce produit pourront être dérivées des systèmes Berkeley BSD licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, AnswerBook2, docs.sun.com, Sun StorEdge, et Solaris sont des marques de fabrique ou des marques déposées de Sun Microsystems, Inc. aux Etats-Unis et dans d'autres pays.

Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun™ a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciées de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui en outre se conforment aux licences écrites de Sun.

LA DOCUMENTATION EST FOURNIE "EN L'ÉTAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISÉE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE À LA QUALITÉ MARCHANDE, À L'APTITUDE À UNE UTILISATION PARTICULIÈRE OU À L'ABSENCE DE CONTREFAÇON.



Contents

Version Compatibility 2

Quick Installation 3

 ▼ To Upgrade Switch Firmware in a 1 Gb Fabric 3

 ▼ To Upgrade Switch Firmware in a 1 Gb and 2 Gb Fabric 4

Bugs 6

 Bugs Fixed 6

Service Contact Information 7

Sun StorEdge Network 1 Gb FC Switch Release Notes Firmware 4.02.4x Release

This document contains important information about the Sun StorEdge Network 1 Gb FC Switch-8 and -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 1 Gb FC Switch-8 and -16, refer to the documents at:

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

and click Other Documentation.

Version Compatibility

TABLE 1 describes the firmware and SANbox Manager™ version compatibility for StorEdge Network 1 Gb and 2 Gb FC switches.

TABLE 1 Compatibility of StorEdge Network 1 Gb and 2 Gb FC Switch and SANbox Manager

	SANbox Manager 1.03/1.05	SANbox Manager 2.0
2 Gb FC switch with 1.3/1.5 firmware	Fully Compatible	<ul style="list-style-type: none">• Manageable inband only.• Cannot install firmware• Cannot archive or restore configuration
2 Gb FC switch with 2.0.0.x firmware	Not supported	Fully Compatible
1 Gb FC switch with 4.02.4x firmware	Fully Compatible	<ul style="list-style-type: none">• Manageable inband only.• Cannot install firmware• Cannot archive or restore configuration

Quick Installation

There are two installation procedures: one for switches in a fabric of all 1 Gb switches, and another for switches in a fabric consisting of 1 Gb and 2 Gb switches. Choose one of the following procedures:

- “To Upgrade Switch Firmware in a 1 Gb Fabric” on page 3
- “To Upgrade Switch Firmware in a 1 Gb and 2 Gb Fabric” on page 4

SANbox Manager is compatible with Sun Solaris™ Operating System versions 8 and 9.

▼ To Upgrade Switch Firmware in a 1 Gb Fabric

This procedure upgrades StorEdge Network 1 Gb FC switches from 4.02.xx to 4.02.4x firmware. It also upgrades the SANbox Manager application from version 1.03 to 1.05.

1. **Make sure you are logged in as root.**
2. **Determine what version of SANbox Manager is installed on the workstation.**
Open SANbox Manager, select Help ⇒ About. If the version is 1.05.14, go to step 3. Otherwise, remove the 1.03.xx package if installed, then install the 1.05 package:

To remove the 1.03.xx package, enter the following command:

```
# pkgrm SUNWsmgr2
```

To install the package for SANbox Manager 1.05, enter the following command:

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

You can obtain the SANbox Manager 1.05 package from
<http://sunsolve.sun.com>.

3. Install the patch from the CD.

Move to the directory on the CD containing the patch file, and add patch 112433-03:

```
# cd /cdrom/cdrom0/StorEdgeSAN4.0/Patches  
# patchadd 112433-03
```

After installing the patch, the firmware resides in the following directory (default path):

/usr/opt/SUNWsmgr2/firmware/SANbox1

4. Install firmware on each switch in the fabric.

Use SANbox Manager 1.05 to install the new firmware. For a detailed procedure on installing firmware, refer to *SANbox With E_Ports Switch Management User's Manual*, 816-7596.

▼ To Upgrade Switch Firmware in a 1 Gb and 2 Gb Fabric

This procedure does the following:

- Upgrades Sun StorEdge Network 1 Gb FC switches to 4.02.4x firmware
- Upgrades Sun StorEdge Network 2 Gb FC switches to 2.0.0.x firmware.
- Installs SANbox Manager 1.05.14 (to manage 1 Gb switches) and SANbox Manager version 2.00.xx (to manage 2 Gb switches).

1. Make sure you are logged in as root.

2. Determine what version of SANbox Manager is installed on the workstation.

Open SANbox Manager, select Help ⇒ About. If the version is 1.05.14, go to step 3. Otherwise, remove the 1.03.xx package if installed, then install the 1.05 package:

To remove the 1.03.xx package, enter the following command:

```
# pkgrm SUNWsmgr2
```

To install the package for SANbox Manager 1.05, enter the following command:

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

You can obtain the SANbox Manager 1.05 package from
<http://sunsolve.sun.com>.

3. Install patch 112434-04 from the CD.

Move to the directory on the CD that contains the patch file, and add patch 112434-04::

```
# cd /cdrom/cdrom0/StorEdgeSAN4.0/Patches  
# patchadd 112434-04
```

After installing the patch, the 1 Gb FC switch firmware resides in the following directory (default installation path):

/usr/opt/SUNWsmgr2/firmware/SANbox1

The 2 Gb FC switch firmware resides in the following directory (default installation path):

/usr/opt/SUNWsmgr2/firmware/SANbox2

4. Install firmware on each 1 Gb FC switch in the fabric.

Use SANbox Manager 1.05 to install the new firmware. For a detailed procedure on installing firmware, refer to *SANbox With E_Ports Switch Management User's Manual*, 816-7596.

5. Install firmware on each 2 Gb FC switch in the fabric.

In this release, the Sun StorEdge Network 2 Gb FC-8, -16, and -64 switches use the same firmware. Use SANbox Manager version 1.05, or FTP and the Telnet command-line interface to load the new firmware.

For a detailed procedure on installing firmware, refer to the Switch Management User's Manual that corresponds to your product:

- *SANbox2-8c/16 Switch Management User's Manual, Sun StorEdge Network 2 Gb FC Switch-8/16*, 875-3264.
- *SANbox2-64 Switch Management User's Manual, Sun StorEdge Network 2 Gb FC Switch-64, Switch Management User's Manual*, 875-3409.

6. Locate the SANbox Manager executable.

After installing the patch, SANbox Manager executables can be found in the following directories if the default installation path was used:

- Version 1.05.14: /usr/opt/SUNWsmgr2/bin/SANbox_Manager
 - Version 2.00.xx: /usr/opt/SUNWsmgr2/bin2/SANbox_Manager
-

Bugs

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

- **4846819:** Switch loses Fc-4 type of the connected device as displayed in SANbox Manager. An error may occur when the switch is reset or under lip error injection.
Workaround: Offline the port that is not displaying Fc-4 type, then place it back online.
- **4873507:** HBA did not show up in nameserver after port came online. An error may occur when port offline/online error injection is being preformed.
Workaround: Offline the port that does not show up in nameserver, then place it back online.

Bugs Fixed

The following bugs were fixed between firmware versions 4.02.38 and 4.02.4x:

- **Bug 4822128**
Synopsis: During fault injection (switch resets or luxadm failover) on the StorEdge Network 1 Gb FC switch, the switch sends too many events which causes the host to fail to bring a device online, resulting in I/O failure.
- **Bug 4822541**
Synopsis: Name Server query is timing out after resetting another switch in the fabric.
- **Bug 4827887**
Synopsis: When you unplug one of the ISL cables from a StorEdge Network 1 Gb FC switch, the host may disappear from the fabric and then reappear later.
- **Bug 4827987**
Synopsis: Bad frame from switch with unknown D_ID and S_ID could be seen when turning ports offline.

- **Bug 4830434**

Synopsis: Using telnet CLI to remove WWNs from a zone may cause a switch to reset and potentially corrupt the zone configuration.

- **Bug 4897777**

Synopsis: When zoning is active in fabric, specific configurations with 6910/6960 can cause 1 Gb switch to reset.

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>

