



# Sun StorEdge™ Network 2 Gb McDATA Sphereon 4300 and 4500 Switches and Intrepid 6064 and 6140 Directors Release Notes

---

6.01.XX Firmware

Sun Microsystems, Inc.  
[www.sun.com](http://www.sun.com)

Part No. 817-5650-10  
May 2004, Revision A

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

Copyright 2004 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, SunSolve, 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 2004 Sun Microsystems, Inc., 4150 Network Circle, Santa Clara, Californie 95054, Etats-Unis. Tous droits réservés.

Sun Microsystems, Inc. a les droits de propriété intellectuels relatants à la technologie qui est décrit dans ce document. En particulier, et sans la limitation, ces droits de propriété intellectuels 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 en a.

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, SunSolve, 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 AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFAÇON.



# Sun StorEdge Network 2 Gb McDATA Sphereon 4300 and 4500 Switches and Intrepid 6064 and 6140 Directors Release Notes

## *6.01.XX Firmware*

---

This document contains important information about the Sun StorEdge Network 2 Gb McDATA Sphereon 4300 and 4500 switches and Sun StorEdge Network 2 Gb McDATA Intrepid 6064 and 6140 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 switches.

- “New Features In This Release” on page 2
- “McDATA Enterprise Fabric Connectivity Manager Lite” on page 3
- “System Requirements” on page 3
- “Known Issues” on page 8
- “Bugs” on page 8
- “Service Contact Information” on page 9

---

# New Features In This Release

The 6.01.xx firmware upgrade consists of a software patch that you can download from the SunSolve<sup>SM</sup> web site. The firmware upgrade is for the following switches and directors:

- Sun StorEdge Network 2 Gb McDATA Sphereon 4300 Switch
- Sun StorEdge Network 2 Gb McDATA Sphereon 4500 Switch
- Sun StorEdge Network 2 Gb McDATA Intrepid 6064 Director
- Sun StorEdge Network 2 Gb McDATA Intrepid 6140 Director

The 6.01.xx firmware upgrade provides some bug fixes and several new features:

- Open Trunking—provides automatic, dynamic, statistical traffic load balancing across ISLs in a fabric to minimize traffic congestion.
- Preferred Path—designed to allow a customer to define routes across a fabric and help address user preference regarding exit port assignment.
- Full Volatility—designed to enhance security by clearing frame data from a switch's non-volatile memory when power is turned off.
- McDATA FICON Management Software (FMS). FICON is the Enterprise System Connection (ESCON) storage communication protocol (developed by IBM) encapsulated to operate over Fibre Channel.

---

**Note** – For full functionality with any of the Sun StorEdge Network 2 Gb McDATA Sphereon 4500, 6064, and 6140 switches, the 6.01.xx firmware upgrade requires the use of McDATA Enterprise Fabric Connectivity Manager (EFCM) 8.01.00 Lite or higher. Otherwise, the FICON Management Software (FMS) feature is not supported.

---

---

# McDATA Enterprise Fabric Connectivity Manager Lite

The Sun StorEdge Network 2 Gb McDATA Sphereon 4300 switch is not supported by McDATA Enterprise Fabric Connectivity Manager (EFCM) or EFCM Lite.

---

## System Requirements

The 6.01.xx firmware upgrade requires the use of one of these two software products:

- McDATA EFCM or EFCM Lite, 8.01.00 minimum.
- McDATA SANpilot with the use of one of the following web browsers:
  - Microsoft Internet Explorer, version 4.x or later, except 5.00.3315.1000x.
  - Netscape™ Communicator, versions 4.x or later.

---

**Note –**

- McDATA EFCM and EFCM Lite (8.01.00) can only manage the following switches:
    - Sun StorEdge Network 2 Gb McDATA Sphereon 4500 switch
    - Sun StorEdge Network 2 Gb McDATA Intrepid 6064 Director
    - Sun StorEdge Network 2 Gb McDATA Intrepid 6140 Director
  - McDATA SANpilot can manage all four switches.
-

# Switch Firmware Requirements

The 6.01.xx EOS firmware upgrade can only be done with a minimum level of firmware installed. Any downgrade from 6.01.xx should also be done to a specified level of firmware. Refer to TABLE 1.

**TABLE 1** Switch Upgrade/Downgrade Firmware Requirements

Switch	Required Installed FW Version to Upgrade to 6.01.xx	With FW 6.01.xx Installed, the FW Version to Downgrade to
Sun StorEdge Network 2 Gb McDATA Sphereon 4300	5.05.00 or later	5.05.xx
Sun StorEdge Network 2 Gb McDATA Sphereon 4500, and Intrepid 6064 and 6140	5.01.00 or later	5.01.00 or 5.02.00

## Required Packages

Certain software packages and patches are required for Sun StorEdge SAN Foundation software and the Sun StorEdge Traffic Manager software for the Solaris Operating System (OS) to be supported on your SAN. For instructions to find, download, and install these packages and patches, see *Sun StorEdge SAN Foundation Software 4.4 Installation Guide*, 817-3671-xx.

## Non-Sun Solaris OS Support Packages

For non-Sun Solaris OS support, see the Sun Download Center (SDLC) web site at:

[http://www.sun.com/storage/sun/multiplatform\\_support.html](http://www.sun.com/storage/sun/multiplatform_support.html)

for the required software packages.

## Required Patches

You must download the firmware 6.01.xx patch to upgrade your switches and directors. TABLE 2 gives the patch ID.

**TABLE 2** Upgrade Patch

Upgrade Patch	Description
116003-01	McDATA EOS version 6.01.00 upgrade

You must also download the appropriate Sun Solaris OS patches listed in TABLE 3 or TABLE 4 for proper switch and director operation.

**TABLE 3** Sun Solaris 8 OS Patches

<b>Solaris 8 Patches</b>	<b>Description</b>
111412-xx	Sun StorEdge Traffic Manager
111095-xx	fctl/fp/fcp/usoc driver
111096-xx	fcip driver
111097-xx	qlc driver
111413-xx	luxadm liba5k and libg_fc
111846-xx	cfgadm fp plug-in library patch
111847-xx	Sun StorEdge SAN Foundation software
114877-xx	JNI HBA patch for Solaris 8
114475-xx	FCSM driver
113766-xx	Fibre Channel HBA API library
113767-xx	SNIA Fibre Channel HBA library

**TABLE 4** Sun Solaris 9 OS Patches

<b>Solaris 9 Patches</b>	<b>Description</b>
113039-xx	Sun StorEdge Traffic Manager
113040-xx	fctl/fp/fcp/usoc driver
113041-xx	fcip driver
113042-xx	qlc driver
113043-xx	luxadm liba5k and libg_fc
113044-xx	cfgadm fp plug-in library patch
111847-xx	Sun StorEdge SAN Foundation software
114878-xx	JNI HBA patch for Solaris 9
114476-xx	FCSM driver
114477-xx	Fibre Channel HBA API library
114478-xx	SNIA Fibre Channel HBA library



## ▼ To Download and Install the Patches

The latest patches are available on the SunSolve<sup>SM</sup> web site with the use of PatchFinder. Use the following procedure to retrieve the patches for your Operating System and the patch for the 6.01.xx 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, TABLE 3, and TABLE 4) and click Find Patch.**

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

**4. Verify 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 (nn,nnn,nnn bytes) HTTP FTP.

**7. Return to PatchFinder repeat from Step 3 for the next patch.**

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

---

# Known Issues

## NVRAM Integrity

During a firmware upgrade from 5.0x.00 to 6.01.xx, the Sun StorEdge Network 2 Gb McDATA Intrepid 6064 and 6140 Directors' control processor (CTP—the switch microprocessor unit) card might failover to the redundant CTP card because of an NVRAM error. Refer to section “NVRAM Integrity Errors” in the *McDATA Enterprise Operating System Release Notes, Version 06.01.00*, part number 958-000190-610.

---

## Bugs

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

## New McDATA 6.01.xx Firmware Bugs

- **Bug 4841884 (P3/S2):** During a diagnostic fault injection, a Sun StorEdge McDATA Sphereon 4300 and 4500 switch can lose its custom settings (such as the IP address and Flexport license) and return to the factory default settings.  
**Workaround:** Perform a switch reset or power cycle. Then, reconfigure the IP address, reinstall all optional licenses, and restore the switch configuration.
- **Bug 5011335 (P4/S2):** The McDATA SANpilot suddenly indicates that a Sun StorEdge Network 2 Gb McDATA Sphereon 4300 or 4500 switch port goes offline.  
**Workaround:** Use a web browser to access SANpilot. Select the port, and then select Operation ⇒ Port ⇒ Reset to bring the port back online.
- **Bug 5035526 (P4/S2):** When using the McDATA EFCM and clicking on a switch and then the Node List tab, incorrect information is provided under the Port WWN column.  
**Workaround:** Be aware that this condition exists.
- **Bug 5034642 (P4/S4):** McDATA SANpilot does not report the port WWN of the FL\_Port device.  
**Workaround:** Issue the show loginserver and show nameserver commands to display the port WWN and Node WWN of a device connected to a FL\_Port.

- **Bug 4834286 (P4/S4):** The McDATA EFCM Lite software zone setting and other zone information is not displayed properly (can only happen with the 4500, 6064, and 6140 switches) after the server that is running the EFCM Lite software is replaced.

**Workaround:** Import or restore the zone information on the EFCM Lite server.

- **Bug 5033276 (P4/S5):** With the Sun StorEdge Network 2 Gb McDATA Sphereon 4500 switch, issuing the `show features` command reports a different output than that of the McDATA SANpilot Feature Installation screen.

**Workaround:** Use McDATA SANpilot to check for the installed features.

---

## 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>

