



Brocade FR4-18i Blade Hardware Release Notes

For Installation in a Sun™ Storage Area Network

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Brocade FR4-18i Blade Hardware Release Notes

This document contains important information about the Brocade FR4-18i Blade hardware installed in a Brocade 48000 Director.

Read this document so that you are aware of issues or requirements that can affect the installation and operation of the Brocade FR4-18i Blade in a Sun storage area network (SAN).

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Product Features

The Brocade FR4-18i Blade is a 4 Gbit/second Fibre Channel routing blade designed for the Brocade 48000 Director. The Brocade FR4-18i Blade includes the following features:

- Standard Fibre Channel routing between Brocade SANs
- Hardware-assisted traffic forwarding for FCIP, a license activated feature
- 16 1-Gigabit, 2-Gigabit, or 4-Gigabit capable Fibre Channel ports
- Two 1-Gigabit Ethernet ports

Fabric OS Firmware Requirements

The Brocade FR4-18i Blade requires patch 124898-03 which is available for download at the SunSolve™ web site.

TABLE 1 summarizes the versions of the Brocade Fabric OS that are supported in conjunction with this release. Use the current software release versions to optimize the benefits of a SAN.

TABLE 1 Minimum Brocade Fabric OS Requirements

Description	Silkworm 2000 Series	Silkworm 3200 and 3800	Silkworm 3250, 3850, 3900, 4100 and 24000	Silkworm 4900	Silkworm 200E, and 48000	Brocade 5000	Silkworm 7500	Silkworm 12000	Brocade Fabric Manager
General compatibility	2.6.1	3.2.1a	5.0.1	5.1.0a	5.0.1a	5.2.1b	5.1.0d	5.0.1	5.2.0a
With secure fabric enabled	2.6.1	3.2.1a	5.0.1	5.1.0a	5.0.1a	5.2.1b	5.1.0d	5.0.1	5.2.0a
Recommended software versions	2.6.2d	3.2.1a	5.2.1b	5.2.1b	5.2.1b	5.2.1b	5.2.1b	5.0.5c	5.2.0a

Note – Fabric OS v2.6.x can interoperate with Fabric OS v5.2.x through the FC routing capability of the Brocade AP7420 or SilkWorm 7500, or FR4-18i blade in a Brocade 48000 Director. Customers who want to have Fabric OS v2.6.x and v5.2.x mixed in the same fabric should consult their equipment provider for a detailed list of limitations. New fabric-wide features introduced in Fabric OS v5.2.x will not be compatible with Fabric OS v2.6.x.

Note – SilkWorm 3250, 3850, and 24000 are supported by Fabric OS v4.2.0 or later.
SilkWorm 3250, 3850, and 24000 are supported by Fabric Manager 4.1.1 or later.
SilkWorm 3900 is supported by Fabric OS v4.1.0 or later.
SilkWorm 4100 is supported by Fabric Manager 4.4.0 or later.
SilkWorm 4900 is supported by Fabric OS v5.1.0a or later.
SilkWorm 4900 is supported by Fabric Manager 5.1 or later.
SilkWorm 200E and 48000 are supported by Fabric Manager 5.0 or later.
SilkWorm 7500 is supported by Fabric Manager 5.2.0 or later.

Supported Hardware and Software

The Brocade FR4-18i Blade installs in the Brocade 48000 Director chassis. For installation instructions, see the blade installation procedures for the Brocade 48000 Director at: <http://www.brocade.com/index.jsp>

Supported Switches and Directors

The Inter-Switch Link (ISL) and Fibre Channel Routing (FCR) protocols are supported by the following switches and directors:

- Brocade 5000
- SilkWorm 2000 series
- SilkWorm 3200 and 3800
- SilkWorm 3250, 3850, 3900, and 24000
- SilkWorm 4100
- SilkWorm 200E, 4900, and 48000
- SilkWorm 7500
- SilkWorm 12000

The Fibre Channel over IP (FCIP) protocol is supported between the following switch and director:

- SilkWorm 7500
- Brocade 48000 Director with FR4-18i blades

Supported Storage Platforms

The following storage devices are supported by the SilkWorm switches and directors.

Note – If the device you want to connect is not listed in the following section, check the Release Notes for your HBA or storage device, or contact your Sun account representative to see if support for your device has been added.

- Sun StorEdge 3510 and 3511 FC arrays
- Sun StorEdge 6120 and 6130 arrays
- Sun StorEdge T3 array with full fabric
- Sun StorEdge 6320 system
- Sun StorEdge 39X0 switchless systems
- Sun StorEdge Fibre Channel 9840B, 9840C, 9940B, SDLT 600, LTO-2 and LTO-3 FC tape drives
- Sun StorEdge FC420 FC-SCSI Bridge for L25 and L100 tape libraries with the SG-XFCCARD2-C LVD SCSI to Fibre Channel Card or the SG-XFC420CARDMOD Fibre Channel / LVD Internal Bridge
- C4 tape library with the SG-XFCCARD2-C LVD SCSI to Fibre Channel Card
- FC Robots: L180/L700 1G (FL mode), L180, L700 2G (Full Fabric), L500 2G (Full Fabric), L8500 2G (Full Fabric)

Supported Host Bus Adapters

The following HBAs are supported by the SilkWorm switches and directors.

- SG-XPCI2FC-QF2
- SG-XPCI1FC-QF2
- X6757A
- SG-XPCI1FC-QL2
- SG-XPCI1FC-QLC
- SG-XPCI1FC-EM2
- SG-XPCI2FC-EM2

- SG-XPCI1FC-QF4
- SG-XPCI2FC-QF4
- SG-XPCIE1FC-QF4
- SG-XPCIE2FC-QF4
- SG-XPCIE1FC-EM4
- SG-XPCIE2FC-EM4

Supported Server Platforms

The following servers are supported by the SilkWorm switches and directors.

x64/x86 Systems

- Sun Fire V20z/V40z
- Sun Fire V60x/V65x
- Sun Fire X2100 and X4100/4200

SPARC Servers

- Sun Enterprise 10000
- Sun Enterprise E220R
- Sun Enterprise E250
- Sun Enterprise E3x00/4x00/5x000/6x00
- Sun Enterprise E420R
- Sun Enterprise E450
- Sun Fire 12k/15k/E20k/E25k
- Sun Fire 280R
- Sun Fire X2100/X4100/X4200 servers
- Sun Fire 2900/4900/6900
- Sun Fire 3800/4800/4810/6800
- Sun Fire T1000/T2000
- Sun Fire V1280/Netra 1280
- Sun Fire V210 and V240
- Sun Fire V250
- Sun Fire V440
- Sun Fire V480
- Sun Fire V490
- Sun Fire V880 and V890

Supported Host Software

This section lists the latest supported host software.

Basic Operating System Requirements

Solaris

- Minimum: Solaris 8 Operating System (OS) 04/01 with the latest security patches
- Solaris 9 OS Update 1
- Solaris 10 for SPARC
- Solaris 10 for x64/x86

Linux

- Red Hat Enterprise Linux 3.0 OS (IA32, AMD64)
- Red Hat Enterprise Linux 4.0 OS (IA32, AMD64)
- SuSE Linux Enterprise Server 8 OS (IA32, AMD64)
- SuSE Linux Enterprise Server 9 OS (IA32, AMD64)

Microsoft Windows

- Windows Server 2000 (IA32)
- Windows Server 2003 (IA32, AMD64)

SAN Foundation

- Sun StorEdge SAN Foundation software, minimum 4.4.6 release

Brocade Management Software Requirements

Several options are available for managing the Brocade directors. The following is a list of the available options and any operating requirements:

- Advanced WebTool v.5.0.1 (requires Mozilla 1.6)
- Java Plug-in 1.4.2 (minimum version)
- Fabric Manager 5.0 (minimum version)
- Application programming interface (API)
- Telnet and Simple Network Management Protocol (SNMP) management access

Downloading and Installing Patches

This section provides instructions for downloading and installing the patch 124898-03 which contains the Brocade Fabric OS v5.2.1b.

▼ To Download and Install the Patches

Use the following procedure to retrieve the patch 124898-03 for the Brocade Fabric OS v5.2.1b.

1. **Access the SunSolve web site at:**

<http://sunsolve.sun.com>

2. **Accept the terms and conditions of the License Agreement.**
3. **Click Patches and Updates under the Support category.**
4. **Under PatchFinder, type the patch ID and click Find Patch.**

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

5. **Verify that you have retrieved the correct patch.**
6. **Print the page.**

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

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

Download Patch (nn,nnn,nnn bytes) HTTP FTP

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

Related Documentation

The *Brocade Fabric OS 5.2.1b Release Notes v1.0* are available with the Brocade Fabric OS patch, 124898-03.

Note – The *Brocade Fabric OS v5.2.1b Release Notes v1.0* are also available from Brocade online at: <http://www.brocade.com/index.jsp>

A login is required, but registration is free with a valid Brocade switch World Wide Name (WWN).

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>

