



Brocade 300 Switch Hardware Release Notes

For Installation in a Sun™ Storage Area Network

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Brocade 300 Switch Hardware Release Notes

Read this document so that you are aware of issues or requirements that can affect the installation and operation of the Brocade 300 switch in a Sun storage area network (SAN).

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Product Features

The Brocade 300 switch is an entry-level switch that is suited for small SAN deployments. The Brocade 300 switch can be purchased with or without Expansion port (E_port) capability enabled. All Brocade 300 switches have the following features:

- Supports 1, 2, 4, and 8 Gbps Fibre Channel connectivity depending on the small form-factor pluggable (SFP) installed:
 - 4-Gbps SFPs support 1-, 2-, and 4-Gbps speeds
 - 8-Gbps SFPs support 2-, 4-, and 8-Gbps speeds
 - Only Brocade SFPs are compatible with a Brocade 300 switch
- Provides 8, 16, or 24 auto-sensing ports in a 1U switch
- 8 ports are enabled by default. Additional ports can be enabled in groups of 8 (requires corresponding Ports On Demand (POD) license)
- Single fixed internal power supply and three fixed integrated fans in an N+1 configuration
- Functions as a full-fabric switch or as a NPIV-enabled Access Gateway device (Access Gateway mode only supported in the 24-port configuration)
- Up to 42 Brocade 300 switches can be mounted in one 42U EIA rack for a total of 1,008 Fibre Channel ports, depending on the cable routing environment of the rack

When the Brocade 300 switch is purchased with E_port capability enabled (or with the purchase of a Fabric license), the switch can be installed in a Brocade or McDATA SAN.

- For Brocade SAN information, use this section:
[“Installing the Switch in a Brocade SAN” on page 6](#)
- For McDATA SAN information, use this section:
[“Installing the Switch in a McDATA SAN” on page 8](#)
- A Brocade 300 switch with E_port capability also supports inter-switch link (ISL) Trunking, allowing configuration of up to 8 individual ISL ports to form a single logical Trunk Group. This offers up to 64 Gbps bandwidth for switch-to-switch communication. This feature requires the purchase of a Trunking license.
- Multiple Trunk Groups are supported

Firmware Requirements

The Brocade 300 switch requires Brocade Fabric Operating System (FOS) 6.1.0 (minimum). Brocade FOS 6.1.0c is recommended, which is available as patch ID 138148-xx. The -xx suffix indicates the latest patch revision number. Separate firmware is not required for McDATA interoperability.

For a list of new features introduced in each Brocade FOS release, refer to the Brocade FOS release notes delivered with the patch. For further information, see “[Downloading and Installing Patches](#)” on page 9.

Note – The Brocade FOS release notes are also available from Brocade Connect:
<http://www.brocadeconnect.com/index.jsp>

A login is required, but registration is free with a valid Brocade switch World Wide Name (WWN). Only customers that purchase a service plan from Brocade are able to download firmware from Brocade Connect.

Supported OS Software and Hardware

This section provides OS software and hardware support information for the Brocade 300 switch.

Operating System Requirements

The following operating systems running on hosts in the SAN are compatible with Brocade FOS versions.

Solaris

- Solaris™ 9 U1 (SPARC only) (minimum)
- Solaris 10 (SPARC and x64)

Linux

- Red Hat Enterprise Linux 4 and 5 (IA32/AMD64)
- SuSE Linux Enterprise Server 9 and 10 (IA32/AMD64)

Microsoft Windows

- Windows Server 2003 (IA32/AMD64)

Other

- HP/UX
- IBM AIX
- IBM z/OS

Supported Storage Platforms

The following storage platforms are compatible with the Brocade 300 switch.

- Sun StorageTek™ 2540 array
- Sun StorageTek Flex 380
- Sun StorageTek 3510 and 3511 FC arrays
- Sun StorageTek 6140 and 6540 arrays
- Sun StorageTek Fibre Channel tape drives 9840B, 9840C, 9940B, LTO-2, LTO-3, LTO-4, DLT S4, T10K, SDLT600
- Sun StorageTek FC Libraries: L180, L700, L1400, SL500, C4, SL3000, SL8500
- Sun StorEdge™ 6120, 6130, and 6320 arrays
- Sun StorEdge 9970, 9980, 9985, 9990, 9910/60, 9900V, 9985V systems (all pending completion of testing)

Supported HBAs

The following HBAs are compatible with the Brocade 300 switch.

- SG-XPCI2FC-QF2/SG-XPCI2FC-QF2-Z
- SQLG-XPCI1FC-QL2
- SG-XPCI1FC-EM2
- SG-XPCI2FC-EM2
- SG-XPCI1FC-QF4
- SG-XPCI2FC-QF4
- SG-XPCI1FC-EM4-Z
- SG-XPCI2FC-EM4-Z
- SG-XPCIE2FC-QB4-Z
- SG-XPCIE1FC-QF4
- SG-XPCIE2FC-QF4

- SG-XPCIE1FC-EM4
- SG-XPCIE2FC-EM4

Supported Server Platforms

The following server platforms are compatible with the Brocade 300 switch.

Sun Fire x64 Servers

- Sun Fire™ V40z
- Sun Fire X2100
- Sun Fire X2200 (M2)
- Sun Fire X4140/4240/4440
- Sun Fire X4150/4450
- Sun Fire X4100/4200 (M2)
- Sun Fire X4600 (M2)
- Sun Blade™ 6000 Modular System
- Sun Blade 8000 Modular System

Sun Fire SPARC Servers

- Sun Fire 4900/6900
- Sun Fire V210/240/250
- Sun Fire Netra 240
- Sun Fire V125
- Sun Fire V440
- Sun Fire V445
- Sun Fire V215/245
- Sun Fire V480/490
- Sun Fire V880/890
- Sun Fire V1280
- Sun Fire Netra 1280
- Sun Fire 2900
- Sun Fire 4800/4810
- Sun Fire 6800
- Sun Fire T5120/5520
- Sun Fire T5140/5240
- Sun Fire E20K/E25K

- Sun Fire T1000/T2000
 - Sun SPARC Enterprise M4000/5000/8000/9000 servers
-

Installing the Switch in a Brocade SAN

Brocade FOS 6.1.0 is the minimum version required for installation in a Brocade SAN. For further information, see “[Firmware Requirements](#)” on page 3.

Note – Use of Expansion port (E_port) capability to create a larger fabric requires a Fabric license.

TABLE 1 summarizes the versions of the Brocade FOS that are supported in conjunction with this release. Use the current firmware version to optimize the benefits of a SAN. Brocade FOS releases are available as patches on SunSolve.

TABLE 1 Minimum Brocade FOS Requirements

Description	Silkworm 3250, 3850, 3200 and 3800	Silkworm 3900 and 24000	Brocade 4100	Brocade 4900	Brocade 200E and 48000	Brocade 5000	Brocade 5100 and 5300	Brocade 7500	Brocade 7500E	Silkworm 12000	Brocade DCX Backbone	Brocade Fabric Manager
General compatibility	3.2.1c	5.1	5.1.0	5.2.0	5.1.0	5.2.1	6.1.0c	5.1.0	6.1.0c	5.0.x	6.0.0	5.5.0
Recommended software versions	3.2.1c	5.3.1a	6.1.0c	6.1.0c	6.1.0c	6.1.0c	6.1.0c	6.1.0c	6.1.0c	5.0.5c	6.1.0c	5.5.0

Supported Switches in a Brocade SAN

The following switches are compatible with the Brocade 300 switch when operating in a Brocade SAN.

- Silkworm 3200 and 3800
- Silkworm 3250, 3850, 3900, 24000
- Brocade 4100

- Brocade 4900
- Brocade 5100
- Brocade 5300
- Brocade 200E
- Brocade 48000
- Brocade 5000
- Brocade 7500
- Brocade 7500E
- Silkworm 12000
- Brocade DCX Backbone

Software Used in a Brocade SAN

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

- Brocade Fabric Manager v5.5.0
- Java™ Plug-in 1.6.0 (minimum)
- Web Tools 6.1.0 - requires Mozilla Firefox 2.0

Note – When managing Brocade FOS-based switches with EFCM management software, EFCM 9.7.1 (minimum) should be used.

Supported Protocol

The Brocade 300 switch supports the following protocols:

- Simple Network Management Protocol (SNMP) management access
- Fibre Channel Security Protocol (FC-SP)
- Secure File Transfer Protocol (SFTP)
- Secure Shell (SSH) Protocol
- Telnet

Note – The Brocade 300 switch does not support Fiber Connectivity (FICON).

Installing the Switch in a McDATA SAN

Brocade FOS v6.1.0c enables the Brocade 300 switch to support both McDATA Fabric Mode "interopmode 2" and McDATA Open Fabric Mode "interopmode 3".

- Interopmode 2 allows connectivity to Brocade Enterprise OS (M-EOS) fabrics running in McDATA Fabric Mode. M-EOS fabrics must be operating with M-EOS v9.6.2 (minimum).
- Interopmode 3 allows connectivity to M-EOS fabrics running in Open Fabric Mode. M-EOS fabrics must be operating with M-EOS v9.6.2 (minimum).

Interopmode 1 has been replaced by Interopmode 3 and is no longer supported.

TABLE 2 lists the McDATA switches and McDATA Enterprise OS (E-OS) minimum firmware versions supported by Brocade FOS v6.1.0c. Use the current firmware version to optimize the benefits of a SAN.

TABLE 2 Minimum McDATA E-OS Requirements for Interop Mode

Fabric OS Interoperability with Brocade Switches and Firmware	
Brocade 300 switch	FOS v6.1.0c
Fabric OS Interoperability with McDATA Switches and Firmware	
Intrepid 6140 and 10000	E-OS v9.6.2
Sphereon or M type 4300, 4400, 4500 and 4700	E-OS v9.6.2

Direct E_port attachment is only supported on the Intrepid directors and the Sphereon or M-type switches listed above.

Interoperability with M-type bladed switches is not supported and these switches should not be included in the fabric.

Supported Switches in a McDATA SAN

The following switches and directors are compatible with the Brocade 300 switch when operating in a McDATA SAN. The switches must run M-EOS(c,n) revision 9.6.2 (minimum).

- Intrepid 6140 and 10000
- Sphereon or M type 4300, 4400, 4500 and 4700

Software Used in a McDATA SAN

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

- Brocade EFCM 9.6.1 (minimum) and Brocade FOS v6.1.0c for managing Brocade 300 switches in McDATA environments
- Brocade Fabric Manager v5.5.0

Supported Protocol

The Brocade 300 switch supports the following protocols:

- Simple Network Management Protocol (SNMP) management access
- Fibre Channel Security Protocol (FC-SP)
- Secure File Transfer Protocol (SFTP)
- Secure Shell (SSH) Protocol
- Telnet

Note – The Brocade 300 switch does not support FICON.

Downloading and Installing Patches

The following tasks provide instructions for downloading and installing patches for the Brocade 300 switch. See “[Firmware Requirements](#)” on page 3 for the required or recommended firmware versions and associated patch IDs.

Downloading Patches

1. Access the SunSolveSM web site at:
<http://sunsolve.sun.com>
2. Read and accept the terms and conditions of the License Agreement.
3. From the Support category, select Patches and Updates.

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.

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 as shown in the following line:

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

8. Click PatchFinder and repeat the process from Step 4 for each patch.

Installing Patches

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

Related Documentation

Brocade documentation is available at Brocade Connect:

<http://www.brocadeconnect.com/index.jsp>

A login is required, but registration is free with a valid Brocade switch World Wide Name (WWN). The following Brocade documents are related to the Brocade 300 switch:

- *Brocade 300 QuickStart Guide* (Brocade P/N 53-1000893-xx)
- *Brocade 300 Hardware Reference Manual* (Brocade P/N 53-1000862-xx)
- *Brocade 300 Access Gateway QuickStart Guide* (Brocade P/N 53-1000863-xx)
- *Access Gateway Administrators Guide Supporting Fabric OS v6.1.0* (Brocade P/N 53-1000605-xx)
- *Brocade Fabric OS Administrators Guide Supporting Fabric OS v6.1.0* (Brocade P/N 53-1000598-xx)
- *Brocade Fabric OS Command Reference Manual Supporting Fabric OS v6.1.0* (Brocade P/N 53-1000599-xx)

- *EZSwitch Setup Administrators Guide Supporting Fabric OS v6.1.0* (Brocade P/N 53-1000607-xx)
- *Fabric OS Message Reference Supporting Fabric OS v6.1.0* (Brocade P/N 53-1000600-xx)
- *Fabric Watch Administrators Guide Supporting Fabric OS v6.1.0* (Brocade P/N 53-1000601-xx)
- *WebTools Administrator Guide Supporting Fabric OS v6.1.0* (Brocade P/N 53-1000606-xx)
- *Fabric OS MIB Reference Supporting Fabric OS v6.1.0 (manual)* (Brocade P/N 53-000602-xx)
- *Slide Rack Mount Kit Installation Procedure* (Brocade P/N 53-0001625-xx)
- *Mid-Mount Rack Kit* (Brocade P/N 53-0001607-xx)
- *Fixed Rack Mount Kit Installation Procedure* (Brocade P/N 53-0000244-xx)
- Brocade FOS release notes available with the patch or from Brocade Connect. See “[Firmware Requirements](#)” on page 3 for more information.

Sun documentation, including the *Brocade SilkWorm Switch and SilkWorm Director Sun Rackmounting Guide*, part number 817-0066-18, is available at:

<http://www.sun.com/documentation>

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.xml>

