Brocade Fabric OS v4.2.1a

Release Notes_v1.0

July 30, 2004

Document History

Document Title	Summary of Changes	Publication Date
Brocade Fabric OS v4.2.1a Release Notes_v1.0	First release	July 30, 2004

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Overview

The Brocade® SAN Switch Module for **IBM** *@* **server® BladeCenter™** (Brocade SilkWorm 3016) is an embedded 16-port Fibre Channel switch that simplifies the integration of a standard network environment with a SAN-switched storage solution through its inclusion in the IBM BladeCenter ecosystem of products. The Brocade SilkWorm 3016 switch is supported by the Fabric OS v4.2.1 release.

This release is a patch release that contains fixes to a small number of additional issues found since the release of Fabric OS v4.2.1. Aside from these changes, this release is functionally identical to the Fabric OS v4.2.1 release. Furthermore, Brocade Fabric OS v4.2.1 is functionally identical to Fabric OS v4.2.0, except for the following enhancements and new features required to support the SilkWorm 3016 for use in the **IBM** *@* **server® BladeCenter™**:

- Support for the integrated SilkWorm 3016 switch embedded into **IBM** *@* **server® BladeCenter™,** including chassis management and environmental support

- Support for the default administrative login USERID/PASSW0RD (the "0" is a zero) required for components integrated into **IBM** *@* **server® BladeCenter™**, plus the capability to change the login name

Later sections of these notes provide a more detailed list of updates. Fabric OS v4.2.1 contains no changes to Fabric OS v4.2.0 other than those required to support the SilkWorm 3016.

Limitations

Brocade Fabric OS v4.2.1 is supported only on the SilkWorm 3016. Attempts to load this software release on Brocade switches other than the SilkWorm 3016 will result in file-not-found errors. At the same time, the SilkWorm 3016 is not supported by any previous versions of Brocade Fabric OS, including v4.2.0. Attempts to load any release prior to Brocade Fabric OS v4.2.1 on a SilkWorm 3016 will result in file-not-found errors.

About This Release

This release includes:

- Fixes to defects, as detailed in the section "Defects Closed in Fabric OS v4.2.1a."

Supported Switches

Fabric OS v4.2.1 supports the Brocade SilkWorm 3016 switch, which is designed for use in the **IBM** *@* **server® BladeCenter™.** The SilkWorm 3016 switch is also called the Brocade® SAN Switch Module for **IBM** *@* **server® BladeCenter™**.

Standards Compliance

Brocade Fabric OS v4.2.1 conforms to the following Fibre Channel Standards in a manner consistent with accepted engineering practices and procedures. In certain cases, Brocade may add proprietary supplemental functions to those specified in the standards. Brocade verifies conformance with Fibre Channels Standards by subjecting our switches to SANmark Conformance Tests developed by the Fibre Channel Industry Association. Brocade switches have earned the SANmark logo indicating such conformance. SANmark is a limited testing program and does not test all standards or all aspects of standards.

- FC-AL ANSI X3.272: 1996
- FC-AL-2 NCIT S 332: 1999
- FC-FLA NCIT S TR-20: 1998
- FC-GS-3 NCITS 348-2000 Rev 7.01
- FC-FG ANSI X3.289: 1996
- FC-PH ANSI X3.230: 1994

- FC-PH-2 ANSI X3.297: 1997
- FC-PH-3 ANSI X3.303: 1998
- FC-PLDA NCIT S TR-19: 1998
- FC-SW-2 Rev 5.3
- FC-VI Rev 1.61
- FC-MI, Rev 1.92
- FC-SB-2 Rev 2.1 (FICON Support)
- FC-BB Rev 4.7
- FC-FS Rev 1.7
- FC-BB-2 Rev 5.3
- IPFC RFC 2625
- FCP ANSI X3.269: 1996
- FCP-2 Rev 7

Important Notes

This section lists information you should be aware of when running Fabric OS v4.2.1.

Long-Distance Usage

The two external ports of the SilkWorm 3016 can be configured as long-distance ports, but the user must be aware that these ports (0 and 15) share buffers with the internal ports 9 and 10. Certain long-distance configurations, depending on the length and speed of the links involved, might affect the performance of servers in bays 9 and 10 of the **IBM @server® BladeCenter™** and, in the most extreme cases, can prevent these ports from coming up. See the "Other Notes" section for more information.

Mixed-Fabric Environment with Different SilkWorm Platforms

Fabric OS v2.6.2/v3.1.2/v4.2.0/v4.2.1 introduced a new switch port ID (PID) addressing format: extended-edge PID (Format 2). Extended-edge PID might be useful if you introduce a SilkWorm 3016 (Fabric OS v4.2.1) into a fabric consisting solely of Fabric OS v2.x/v3.x switches using native PID addressing (Format 0).

To determine if Fabric OS v2.x/v3.x switches are in PID Format 0, the user can use the **configshow** command, as follows:

```
2109-F16 Switch: admin> configshow
diag.postDisable: 1
fabric.domain: 3
. . .
fabric.ops.mode.pidFormat:0
```

Before adding a SilkWorm 3016 (Fabric OS v4.2.1) switch to such a fabric, refer to *Brocade Fabric OS Procedures Guide*, v4.2.0 for information on extended-edge PID format. Note that in order to use extended-edge PID format, Fabric OS v2.6.2, v3.1.2, v4.2.0, and v4.2.1 must be deployed together, as applicable, to all switches in the fabric.

Advanced Web Tools Updates

- When using a mixed fabric—that is, a fabric containing v4.x, v3.x, and v2.x switches—Brocade recommends that you use the most advanced switches to control the fabric. For example, use the v4.x switches as the primary FCS with Brocade Secure Fabric OS, the location to perform zoning tasks, and the time server (CLI). Brocade also recommends that you use the most recently released firmware to control the fabric.

- **Issue.** If a dialog box is displayed from the **Switch Admin** window of Advanced Web Tools and the user selects another dialog box from Advanced Web Tools, this causes a window display error.

  Workaround. This is a known defect in Java 1.3, documented at *www.java.sun.com*, bug ID 4763605. To avoid the display error, open only one dialog box at a time or launch another switch admin session in a separate window.

- Two domain/four domain fabric licensing, as defined by the OEM

  If your fabric includes a switch with a license for a limited number of switches in the fabric and the fabric exceeds this switch limit, Advanced Web Tools allows a 45-day "grace period" in which you can still monitor the switch. However, Advanced Web Tools displays warning messages periodically during this time.

  These messages warn that your fabric size exceeds the supported switch configuration limit and tells how long before Advanced Web Tools will be disabled. After the 45-day grace period, you can no longer launch Advanced Web Tools from the switch with the limited switch license if that switch is still exceeding the switch limit.

- Advanced Web Tools browser, operating system, and Java Plug-in support is updated for Fabric OS v4.2.1. The following table identifies the supported browsers, operating systems, and Java Plug-ins for this release.

Operating System	Browser	Java Plug-in
RedHat Linux 9.0	Mozilla 1.4	1.4.2
Solaris 2.8	Mozilla 1.4	1.4.2
Solaris 2.9	Mozilla 1.4	1.4.2
Windows 2000	Internet Explorer 6.0	1.3.1_04 1.4.1_02 (recommended)
Windows 2003	Internet Explorer 6.0	1.3.1_04 1.4.1_02 (recommended)
Windows XP	Internet Explorer 6.0	1.3.1_04 1.4.1_02 (recommended)

- The additionally supported browsers, operating systems, and Java Plug-ins introduce the following limitations when using mixed OS versions in Advanced Web Tools v4.2.1.

Launch Switch Environment	Problems
Firmware: version *prior* to Fabric OS v2.6.2, v3.1.2, or v4.2.0 with secure mode enabled **Operating System:** Solaris **Browser:** Mozilla	**Issue**: If you try to launch the Switch Admin, Zoning, Fabric Watch, or High Availability Admin using firmware versions prior to v2.6.2, v3.1.2, or v4.2.0 on a Solaris operating system with a Mozilla browser, the browser might crash due to a buffer overflow problem with Mozilla. **Workaround**: Although the Netscape browser is not supported by Web Tools for switches running Fabric OS v2.6.2, v3.1.2, or v4.2.0 or later, if you must access the Switch Admin, Zoning, Fabric Watch, or High Availability Admin on a switch running firmware versions prior to v2.6.2, v3.1.2, or v4.2.0, from a Solaris operating system, use the Netscape 4.77 browser.
Firmware: versions *prior* to Fabric OS v2.6.2, v3.1.2, or v4.2.0 **Operating System:** any supported operating system (with supported browser) **Browser:** any supported browser (on supported operating system)	**Issue**: When you are trying to access a switch running firmware versions prior to Fabric OS v2.6.2, v3.1.2, or v4.2.0 from the launch switch, Switch Explorer displays a null pointer exception and the SwitchInfo applet does not display; Switch Explorer does not work properly with switches running the latest firmware. **Workaround**: Use a launch switch running Fabric OS v2.6.2, v3.1.2, v4.2.0 or later to access the switch.
Firmware: versions *prior* to Fabric OS v2.6.2, v3.1.2, or v4.2.0 **Operating System:** any supported operating system (with supported browser) **Browser:** any supported browser (on supported operating system)	**Issue:** The Name Server table does not display properly for a switch running firmware versions prior to Fabric OS v2.6.2, v3.1.2, or v4.2.0. **Workaround:** If secure mode is enabled, select a switch running Fabric OS v2.6.2, v3.1.2, or v4.2.0 or later as the primary FCS switch. If secure mode is not enabled, use a launch switch running Fabric OS v2.6.2, v3.1.2, or v4.2.0 or later to access the Name Server table on the switch.
Firmware: versions *prior* to Fabric OS v2.6.2, 3.1.2, or 4.2.0 **Operating System:** Solaris **Browser:** Netscape	**Issue**: Any switches running Fabric OS v2.6.2, v3.1.2, or v4.2.0 or later are unsupported through Netscape. **Workaround**: The Netscape browser is not supported by Web Tools for switches running Fabric OS v2.6.2, v3.1.2, or v4.2.0 or later. Use the Mozilla browser to manage all of your switches from a Solaris operating system.
Firmware: versions *prior* to Fabric OS v2.6.1, v3.0.x, or v4.0.x **Operating System:** Windows **Browser:** Internet Explorer	**Issue**: When you are trying to run the Fabric View, the browser might crash. **Workaround**: Use a launch switch that runs Fabric OS v2.6.1, v3.0.x, or v4.0.x or later so that you can use Switch Explorer instead of Fabric View.

Changes in Fabric OS v4.2.1 Unique to the SilkWorm 3016

Changes to Advanced Web Tools

Advanced Web Tools has a new graphic to represent the SilkWorm 3016 switch (see Figure 1).
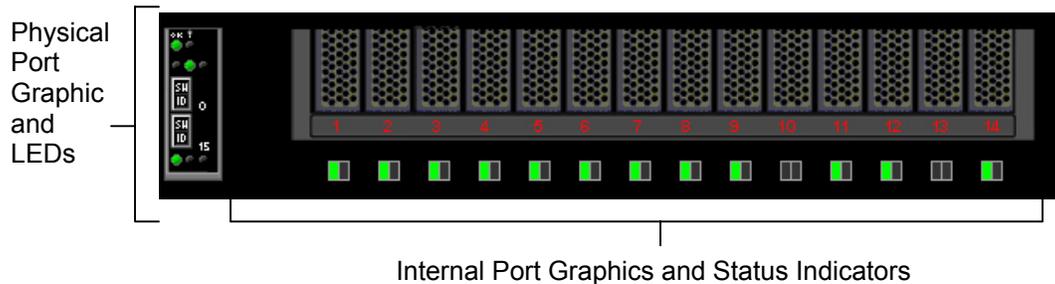
Figure 1: Brocade SilkWorm 3016 Switch Graphic

Note that ports 1 through 14 and the associated status indicators in Figure 1 represent ports internal to the **IBM @ server® BladeCenter™** that connect to the 14 server slots.

The switch graphic for the Brocade SilkWorm 3016 switch consists of the following:

- External ports and status LEDs

- Internal ports and status indicators

- Switch status LEDs

Refer to the SilkWorm 3016 Hardware Reference Manual for detailed information.

The Switch View for the SilkWorm 3016 switch does not have a Fan button or a Power button, as there is no fan or power supply associated with the SilkWorm 3016 (see **Error! Reference source not found.**).
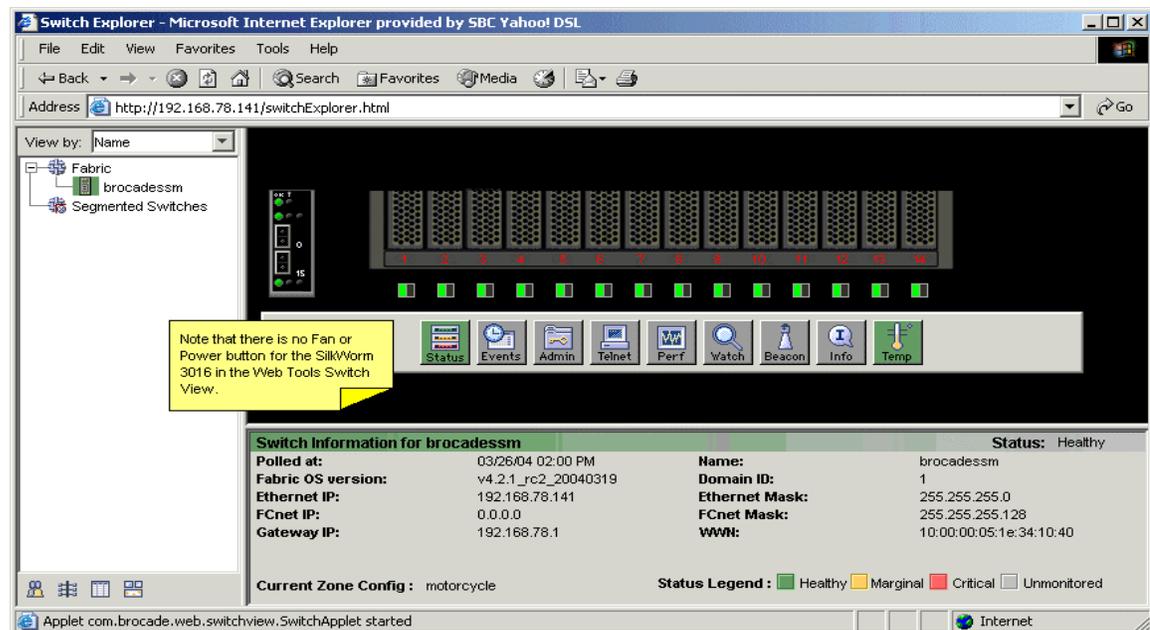
Figure 2: Switch View of the SilkWorm 3016 Switch

Port Info Tab

The **Port Info** tab displays 16 port tabs (0 through 15) for the SilkWorm 3016 switch.

The **SFP** subtab on the **Port Info** dialog displays "NO SFP INFO AVAILABLE" for the 14 internal ports of the Brocade SilkWorm 3016 switch (see **Error! Reference source not found.**).
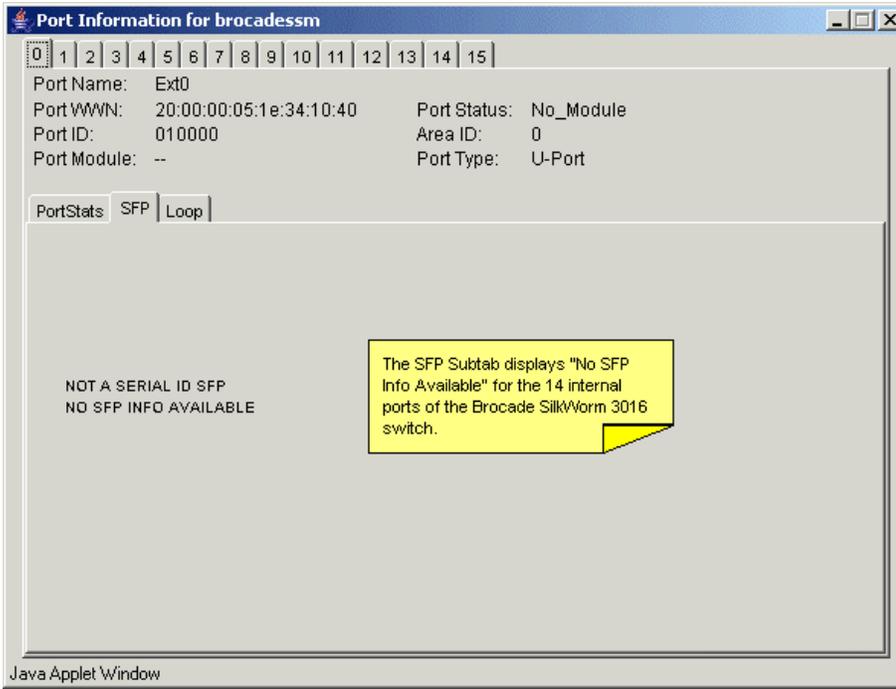
Figure 3: SFP Subtab in the Port Info Dialog for the SilkWorm 3016 Switch

The **Loop** subtab on the **Port Info** dialog displays "NO LOOP INFO AVAILABLE" for the 14 internal ports of the Brocade SilkWorm 3016 switch (see **Error! Reference source not found.**).
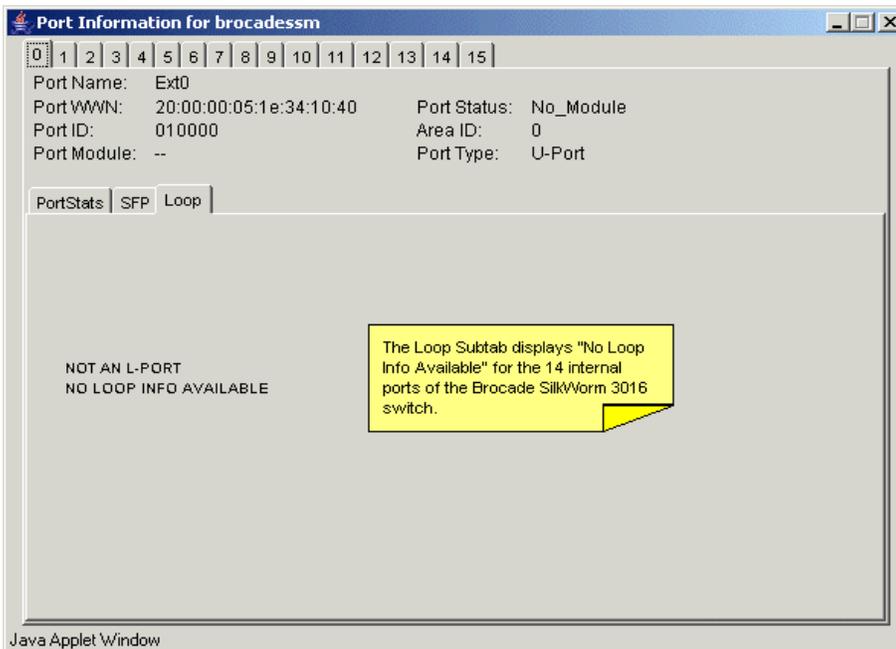
Figure 4: Loop Subtab in the Port Info Dialog for the SilkWorm 3016 Switch

Changes to Fabric Watch

Following are important notes regarding the Fabric Watch feature for Fabric OS v4.2.1 on the SilkWorm 3016 switch (see **Error! Reference source not found.**):

- No fan or power supply information for the Brocade SilkWorm 3016 switch is displayed, as there are no fans or power supplies associated with the switch.

- An additional Fabric Watch element, the F/FL Port Class, has been added to allow the monitoring of the 14 internal copper ports.

- Field replaceable units (FRUs) and related functions are not displayed for the Brocade SilkWorm 3016 switch, as there are no FRUs associated with the switch.
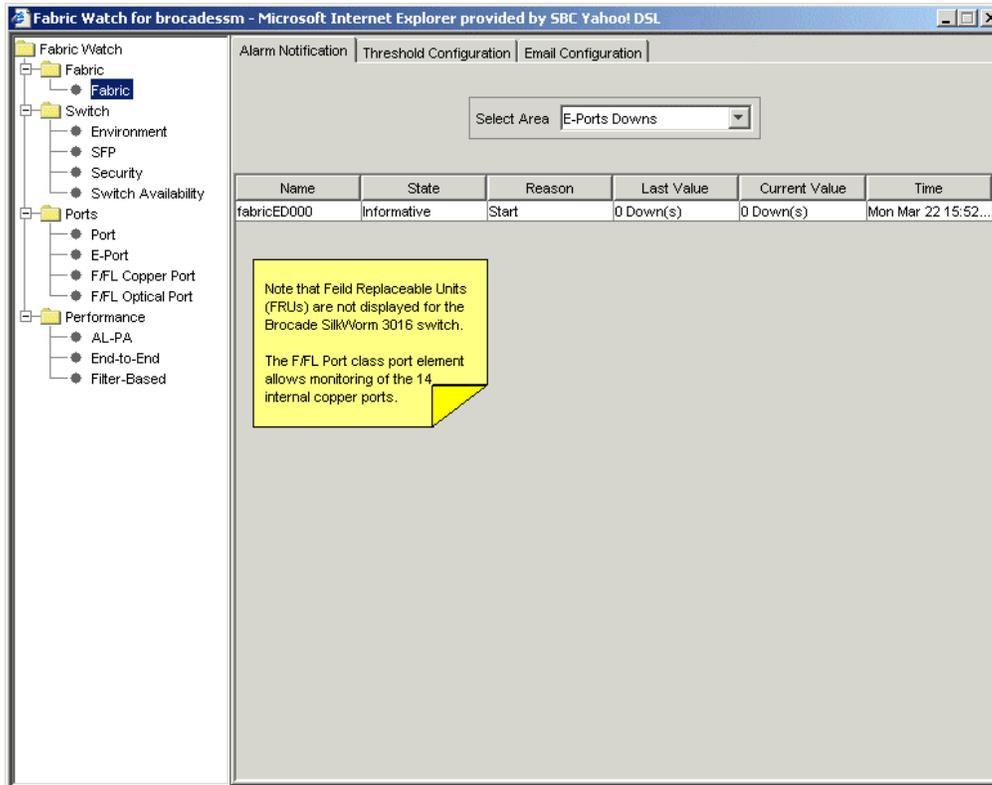
Figure 5: Fabric Watch Dialog for the SilkWorm 3016

Refer to the *Brocade Fabric Watch User's Guide,* v4.2.0 for more detailed information.

Changes to ISL Trunking

If your SilkWorm 3016 switch is licensed for the Brocade ISL Trunking feature, the two external ports can be used as a trunking group. This means that ports 0 and 15 can join a trunking group on another SilkWorm switch that supports ISL Trunking. Refer to the *Brocade Fabric OS Features Guide*, v4.2.0 for more detailed information.

Changes to Performance Monitoring

All setup of performance monitor graphs display port names in addition to the port number for the SilkWorm 3016 switch (see **Error! Reference source not found.**).
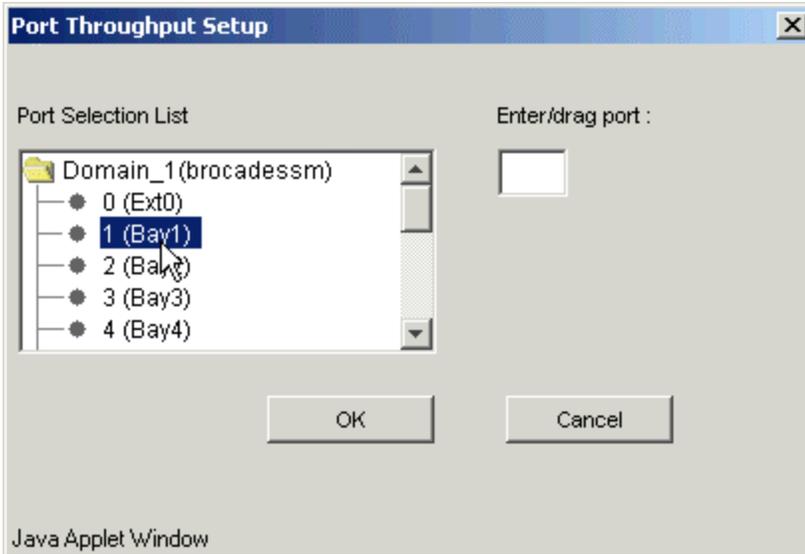
Figure 6: A Performance Monitor Graph Setup Dialog Listing Port Names

Refer to the *Brocade Fabric OS Features Guide*, v4.2.0 for more detailed information.

Changes to Secure Fabric OS

The SilkWorm 3016 switch has a different default user name than all other SilkWorm switch products. As a result, use the new command, **userRename**, to rename the SilkWorm 3016 default "USERID" user account to "admin" before connecting the SilkWorm 3016 to a secure fabric made up of other Brocade SilkWorm switches. This command is documented later in this release note.

Refer to the *Brocade Secure Fabric OS User's Guide*, v2.6.2/3.1.2/4.2.0 and the *Brocade Secure Fabric OS QuickStart Guide*, v2.6.2/3.1.2/4.2.0 for more detailed information.

Changes to Fabric Licensing

The SilkWorm 3016 is shipped in two versions. The first version is called the Brocade® Entry SAN Switch Module for **IBM @server® BladeCenter™**. This switch is shipped with a two-domain fabric limitation. The second version is called the Brocade® Enterprise SAN Switch Module for **IBM @server® BladeCenter™**. This switch is shipped with a full fabric license.

Refer to the *SilkWorm 3016 Hardware Reference Manual* (Publication Number 53-0000453-01) for more information.

Changes to Fabric Manager

The SilkWorm 3016 is supported by Fabric Manager v4.1.1.

Refer to the *Brocade Fabric Manager User's Guide,* v4.1.1 for more information.

Other Notes

This table lists other important information you should be aware of regarding the SilkWorm 3016.

SilkWorm 3016	Description
ifModeSet command unsupported	**Issue:** Use of the **ifModeSet** command is unsupported. Do not use the **ifModeSet** command to change the operating mode of the "eth0" interface to the Brocade SilkWorm 3016 for **IBM** @ **server**®**BladeCenter™**. The internal Ethernet in the **IBM** @ **server**® **BladeCenter™** chassis operates exclusively in fixed 100-Mbit full-duplex mode. Using **ifModeSet** could disconnect your Ethernet connection to the SilkWorm 3016. **Workaround:** The "eth0" interface operating mode is correctly set (to 100-Mbit full-duplex) each time the Silkworm 3016 is rebooted. If Ethernet connectivity is lost due to a mode change, the switch can be reset using the management module's chassis-management application.
Trunking and long-distance mode unsupported	The SilkWorm 3016 switch does not support trunking mode or long-distance mode on internal ports (ports 1 through 14). If you try to enable trunking or long-distance mode on ports 1 through 14, the command line interface and Advanced Web Tools return an error message.

Fabric OS Area	Description
Brocade Secure Fabric OS, enabling	To enable Brocade Secure Fabric OS on the SilkWorm 3016, the IDs for each of the four login levels must be set to the Brocade-specific default IDs of "root", "factory", "admin", and "user". Because the root-level and factory-level IDs cannot be changed, it is only necessary to ensure that the admin-level and user-level IDs are correct. On the SilkWorm 3016, the default admin-level ID is "USERID", so very rarely will you have to use the **userRename** command to change the admin-level ID to the Brocade-specific default of "admin" (for example, **userrename USERID admin)**. Note that the default *user-level* ID is "user", so it only has to be reset if it was previously changed.
Diagnostic commands	The diagnostic commands **fportTest** and **portTest** are not supported on the internal ports 1 through 14.
	The commands **spinSilk** and **spinJitter** must be run with the additional argument *-lb_mode 2* on the SilkWorm 3016 switch's internal ports. If these commands are run without this argument, they fail on all internal ports, because they default to external loopback mode, which requires a loopback plug or cable.

Fabric OS Area	Description
Extended links	The user must be very careful when using the Brocade Extended Fabrics optionally licensed feature with the SilkWorm 3016 switch. The Extended Fabrics feature allows the user to configure external ports (0 and 15) for long-distance performance; however, certain long-distance configurations can disable the other external (and possibly some internal) ports, as well as possibly causing a disruption in traffic. When considering configuring external ports for long distance, both the port speed (1 or 2 Gbit/sec) and distance setting (L0.5, L1, L2, and LD) must be considered. The two internal ports 9 and 10 might be disabled due to long-distance configuration of the external ports. For external ports operating at 2 Gbit/sec, the following restrictions should be observed: • Setting two ports to L2 (60 km) is not allowed. • Setting one external port to L2 (60 km) and the other external port to L0.5 (25 km) will disable two internal ports. • If you set one external port to L2 (60 km) and the other external port is an E_Port, then one internal port will be disabled. • Setting both external ports to L1 (50 km) will disable two internal ports. • Setting one external port to L1 (50 km) and the other external port to L0.5 (25 km) will disable one internal port. • If you set one external port to L1 (50 km) and the other external port is an E_Port, then one internal port will be disabled. • Setting both external ports to L0.5 (25 km) will disable one internal port. Using the LD setting for the external ports will create uncertain results. LD mode autosenses the actual cable lengths and, depending on their distances, might disable internal and/or external ports, as described earlier. For example, if the two external ports are set to LD and the cable lengths are both 50 km, then internal ports 9 and 10 will be disabled. For more information regarding extended fabric setup and usage, refer to *Brocade Distributed Fabrics User's Guide* v3.1.0/4.1.0.
Firmware download	**Issue:** During a firmware download, rebooting or power cycling might corrupt the compact flash. **CAUTION: Do not attempt to power off during firmware download, to avoid high risk of corrupting your flash.**

Fabric OS Area	Description
IP address configuration	The Ethernet IP address, Ethernet subnet mask, and gateway IP address should not be configured using local mechanisms on the switch, such as the **ipAddrSet** CLI command or Advanced Web Tools. The values must be configured using the **IBM @ server® BladeCenter** Management Module's chassis-management GUI, because all IP Ethernet access to the switch module itself is forwarded through the Management Module. If the switch IP address information is changed without changing the Management Module configuration, then telnet access to the switch will very likely be lost. Note that this restriction does not apply to the Fibre Channel IP address and the Fibre Channel subnetmask (also referred to as the "in-band IP address" and "subnetmask"). These can still be configured using any of the standard switch-management mechanisms.
License removal	When a user removes a license from the switch, the feature is not disabled until the switch is rebooted or a switch disable and enable is performed.
Management using IP over FC	To manage the Brocade SilkWorm 3016 switch using IP over FC, both the IP address and subnet need to be set to 0.0.0.0. As a result of an error message from the IBM @ server® BladeCenter Management Module on these changes, the implementation of single Ethernet connection (SEC) on the SilkWorm 3016 can be deployed only as the Ethernet-to-FC router, not as a switch using IP-over-FC addressing only.
switchShow command	The **switchShow** command indicates the CU port state as No_Light when no Fibre Channel signal is received from an internal port on the SilkWorm 3016.
Changing VC encoding settings	**Issue:** Setting PID format to VC-encoded or resetting to another PID format from VC-encoded through Advanced Web Tools or the CLI is not supported. Doing so could result in software watchdog reboot. **Workaround:** Do not use VC-encoded settings.

Command Added in Fabric OS v4.2.1

The **userRename** command, described next, is added in Fabric OS v4.2.1.

userRename

Renames the user ID.

Synopsis	**userrename** *old_userid new_userid*
Availability	admin

Description

When using Brocade Secure Fabric OS, rename the admin-level ID to the Brocade-specific default of "admin" and the user-level ID to the Brocade-specific default of "user" before enabling security; otherwise, the switch will not be allowed in the secure fabric.

Operands

The following operands are required:

old_userid	The current user ID
new_userid	The new user ID

Note: These operand values are case sensitive.

Example

To rename the admin-level ID from "USERID" to "admin":

```
switch:admin> userRename USERID admin
```

Command Modified in Fabric OS v4.2.1

The **secModeEnable** command is modified, as follows, in Fabric OS v4.2.1.

secModeEnable

Use the **userRename** command to change the user-level ID to "user" and the admin-level ID to "admin" on the local switch if the following error message displays after you issue the **secModeEnable** command:

```
Switch does not have all default account names.
```

Use the **userRename** command to change the user IDs on the specified domain if the following error message displays:

```
Error from domain <domain ID>: Switch does not have all default
account names.
```

Refer to the "Commands Added in v4.2.1" section for **userRename** command details.

Defects Closed in Fabric OS v4.2.1a

Defects Closed In Fabric OS v4.2.1a		
Defect ID	**Severity**	**Description**
DEFECT000046988	Critical	Summary: Unsupported version 2/3 Name Server entry object caused switch fail to interop with specific vendor switch. Symptom: Host cannot see targets attached to specific vendor switch, also switch panic after firmwareupgrade Solution: 1. Add support for version 2 and 3 for name server entry object to interop with specific vendor switch. 2. Populate an inq response data with dummy values when size mismatch. Workaround: Remove target from specific vendor switch.
DEFECT000037586	High	Summary: F port stays in IN_SYNC state after cluster node reset with specific application. Symptom: switchshow shows port In_Sync or No_Light. Solution: Relaxing busy_bufs checking during link init state LR3 before sending out IDLEs. Workaround: portdisable and then portenable. Service Request# RQST00000025132
DEFECT000038363	High	Summary: Web Tools and CLI Fan, Power Supply, and temperature status should use fabric watch thresholds. Additionally, the temperature status should use all the sensors (in both halves of a bladed switch) Symptom: Web Tools shows wrong thermal status Solution: Update temperature sensor monitoring to monitor chassis wide sensors; update tempshow, sensorshow to reflect the change. Probability: Low
DEFECT000040820	High	Summary: Data field size mismatch caused frame drop and memory leak. Symptom: Switch panic with out of memory kill of some daemons Solution: Switch uses 2112 byte as default frame size if there is no PLOGIN to switch. Some vendor specific box supports only up to 2048 byte frame size. Frames are dropped if they are larger than 2048. This fix changes default frame size to what is defined in switch config DB. Service Request# RQST00000028379

Defects Closed In Fabric OS v4.2.1a		
Defect ID	**Severity**	**Description**
DEFECT000041154	High	Summary: Blade fault with RX/TX Underflow/Overflow Error Symptom: Observe in errlog: Panic BLOOM-INCONSISTENT_EXT, 0, S7,P-1(56): inconsistent in RX overflow/TX FIFO under/overflow. buf_error=0xa0140000 Solution: Flip port speed to clear the source of the RX Underflow/Overflow interrupts. Service Request# RQST00000028434
DEFECT000041350	High	Summary: During exchange flush on timeout, open sequence iu is not freed properly caused Out Of Memory (OOM) to happened and switch reset. Symptom: In a corner case, such as sequence timeout due to a bad frame in the sequence, switch reset with: Out of Memory: Killed process 594 (zoned). VM size = 7712 KB, Runtime = 393 minutes, CPU time = 32 sec. Solution: Added freeing of seq_iu when exchange flush on timeout. This is done only for open sequences as closed sequences are being delivered to an upper layer. seq_iu is also freed as part of do_abts with seq_queue. Customer Impact: This problem is seen on large fabrics (including those used with a Fibre Channel Router) when all core switches are disabled and enabled while doing large zoning DB propagation with a marginal GBIC. To have the OOM condition to happen, it has to be a large frame sequence and at least one of the frames is corrupted. The window in which a large frame sequence with at least one of the frame corrupted required the test above to be executed continuously for at least 120 iterations or equivalent of 5 hours. The exposure is small, and the fix has been verified. For large fabrics (including those used with a Fibre Channel Router), this fix is strongly recommended to avoid out of memory condition. Probability: Low
DEFECT000041453	High	Summary: Zone daemon asserts caused switch to panic during fabric reconfiguration. Symptom: Switch reboot with: ASSERT - Failed expression: (d >= 0) && (a_p >= 0), file = public.c, line = 1620, user mode Solution: Fix a race condition where a remote switch requests login data at the same time that the local domain becomes invalid.

Defects Closed In Fabric OS v4.2.1a		
Defect ID	**Severity**	**Description**
DEFECT000041846	High	Summary: The internal interfaces are exposed when the switch is on a 10.0.x.x network Symptom: If the IP addresses are set up on a network that is configured with IP address that are 10.0.x.x and a subnet mask of 255.255.0.0, there will be routing between eth0 and eth1. This is not the expected behavior, as eth0 traffic should not be routed to eth1. Based on the v4.2.0 Procedures guide the switch should be preventing routing of packets to and from the internal network. Solution: Drop icmp packets destined for internal network. Service Request# RQST00000028723
DEFECT000042325	High	Summary: msd core dump caused by memory corruption Symptom: kSWD:Detected unexpected termination of: "[5] msd:0'RfP=677,RgP=677,DfP=0,died=1,rt=25856913, dt=42732,to=50000, aJc=25805413,aJp=25788843,abiJc=700419400,abiJp=700402800 ,aSeq=1555,kSeq=0,kJc=0,kJp=0,J=25814181,rs=2' Solution: The function msV2_upload_packet had an error path which copies a string into the payload of an IU of insufficient size. The fix is to make sure the allocated IU is big enough to hold the string to avoid memory corruption. Service Request# RQST00000028859
DEFECT000044132	High	Summary: When accessing the help command it is possible to break into restricted shell and gain full access to switch Symptom: admin user gained root access Solution: less command is rebuild in secure mode. Service Request# RQST00000029450
DEFECT000045617	High	Summary: Termination of nsd and switch reboot during receiving continuous rscn. Symptom: During configuration change on a target, a lots of rscn is generated in a short time frame caused nsd to panic. Solution: In the case when devices send port-detected RSCN in a very frequent rate, it could take a lots of CPU time to process. To reduce the cpu and memory usage, we will check whether the same RSCN is currently being processed. If it is, then simply ignore the incoming RSCN. Service Request# RQST00000030119

Defects Closed In Fabric OS v4.2.1a		
Defect ID	**Severity**	**Description**
DEFECT000046001	High	Summary: switch panic and observed multiple failover with tsd crashed on both CPs. Symptom: Critical uSWD-uSWD_GENERIC_ERR_CRITICAL, 1, uSWD: Application tsd from switch Instance 0 failed to refresh Solution: hwclock locked up with continuous calls to gettimeofday(), the new version of hwclock.c from util-linux oss package solves this problem. Service Request# RQST00000030304
DEFECT000036851	Medium	Summary: Panic BLOOM-LIST_TRIGGER, 0, S2,P-1(24): List D triggered Symptom: Panic BLOOM-LIST_TRIGGER, 0, S2,P-1(24): List D triggered message displayed after sequence of actions as below: switchdisable hafailover hafailover (to failback to CP0) slotoff 1 switchenable or portpersistentdisable portenable The main customer symptom will be that a slot may be marked as faulty. Solution: Setup frame filtering for all ports including persistent disabled port, in case this port is enabled via portenable, which result in a port enabled but without filtering setup correctly and later panic the switch. Probability: Low
DEFECT000041490	Medium	Summary: Memory leaks found in ARR Solution: Fixed memory leaks identified by running memtrace tool in rpcd and arr library.
DEFECT000044777	Medium	Summary: Application 'evmd'(pid 890) got exception 11 and SWD panic on evmd occurred right after coredump Symptom: Switch panic due to evmd got exception 11 caused by access to data structure without protection. Solution: Added mutex protection to data structure in API_rpcd area.

Defects Closed In Fabric OS v4.2.1a		
Defect ID	**Severity**	**Description**
DEFECT000045501	Low	Summary: Switch interopmode issue : "fabricshow" command doesn't show correct IP address and switchname Symptom: Customer scripts are not functioning because of incorrect output from "fabricshow" which contains bogus ip address, switch name etc. Solution: Validate the payload size before interpreting an INQ response frame. Instead of show invalid data. Service Request# RQST00000029837