



Brocade Fabric OS v8.0.1b

Release Notes v2.0

October 14, 2016

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Document History

Version	Summary of Changes	Publication Date
v1.0	Initial Release	August 31, 2016
v2.0	Add Appendix for z Systems (FICON)	October 14, 2016

Preface

Contacting Brocade Technical Support

As a Brocade customer, you can contact Brocade Technical Support 24x7 online, by telephone, or by email. Brocade OEM customers contact their OEM/Solutions provider. To expedite your call, have the following information immediately available:

1. General Information

- Technical Support contract number, if applicable
- Switch model
- Switch operating system version
- Error numbers and messages received
- **supportSave** command output and associated files
- For dual CP platforms running FOS v6.2 and above, the **supportSave** command gathers information from both CPs and any AP blades installed in the chassis
- Detailed description of the problem, including the switch or fabric behavior immediately following the problem, and specific questions
- Description of any troubleshooting steps already performed and the results
- Serial console and Telnet session logs
- Syslog message logs

2. Switch Serial Number

The switch serial number is provided on the serial number label, examples of which are shown here:



The serial number label is located as follows:

- Brocade 6510, 6505, 6520, G620 — On the switch ID pull-out tab located on the bottom of the port side of the switch
- Brocade 7840 — On the pull-out tab on the front left side of the chassis underneath the serial console and Ethernet connection and on the bottom of the switch in a well on the left side underneath (looking from front)
- Brocade DCX 8510-8 — Bottom right of the port side
- Brocade DCX 8510-4 — Back, upper left under the power supply
- Brocade X6-8, X6-4 — Lower portion of the chassis on the nonport side beneath the fan assemblies

3. World Wide Name (WWN)

When the Virtual Fabric feature is enabled on a switch, each logical switch has a unique switch WWN. Use the **wwn** command to display the switch WWN.

If you cannot use the **wwn** command because the switch is inoperable, you can get the primary WWN from the same place as the serial number.

4. License Identifier (License ID)

There is only one License Identifier associated with a physical switch or director/backbone chassis. This License Identifier is required as part of the ordering process for new FOS licenses.

Use the **licenseIdShow** command to display the License Identifier.

Brocade Customers

For product support information and the latest information on contacting the Technical Assistance Center, go to <http://www.brocade.com/services-support/index.html>.

If you have purchased Brocade product support directly from Brocade, use one of the following methods to contact the Brocade Technical Assistance Center 24x7.

Online	Telephone	E-mail
Preferred method of contact for non-urgent issues:	Required for Sev 1-Critical and Sev 2-High issues:	support@brocade.com
• My Cases through MyBrocade • Software downloads and licensing tools • Knowledge Base	• Continental US: 1-800-752-8061 • Europe, Middle East, Africa, and Asia Pacific: +800-AT FIBREE (+800 28 34 27 33) • For areas unable to access toll free number: +1-408-333-6061 • Toll-free numbers are available in many countries.	Please include: • Problem summary • Serial number • Installation details • Environment description

Brocade OEM customers

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- OEM/Solution Providers are trained and certified by Brocade to support Brocade® products.
- Brocade provides backline support for issues that cannot be resolved by the OEM/Solution Provider.
- Brocade Supplemental Support augments your existing OEM support contract, providing direct access to Brocade expertise. For more information, contact Brocade or your OEM.
- For questions regarding service levels and response times, contact your OEM/Solution Provider.

Related Documentation

Visit the Brocade website to locate related documentation for your product and additional Brocade resources such as white papers, online demonstrations, and data sheets.

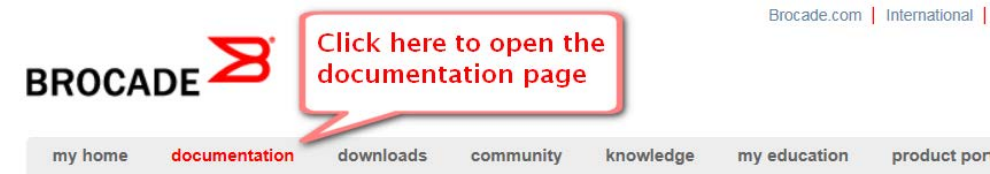
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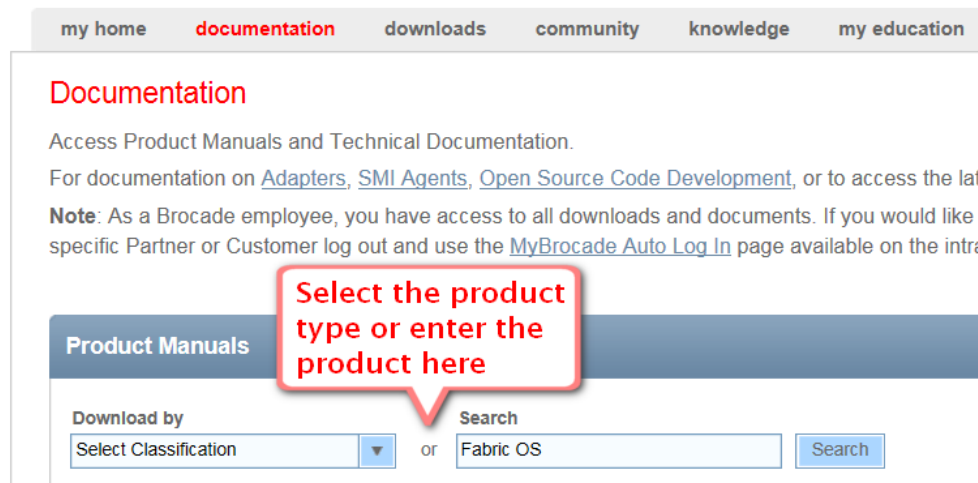
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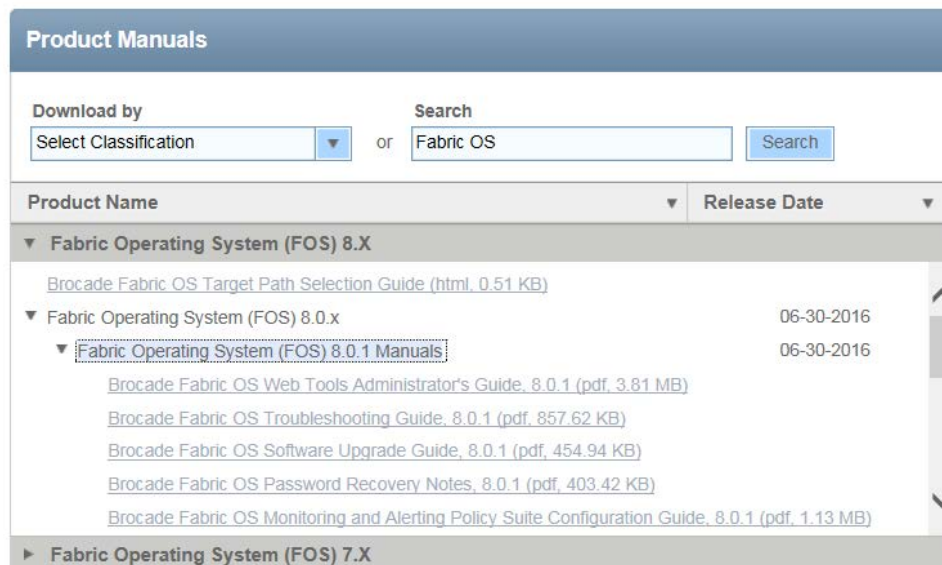
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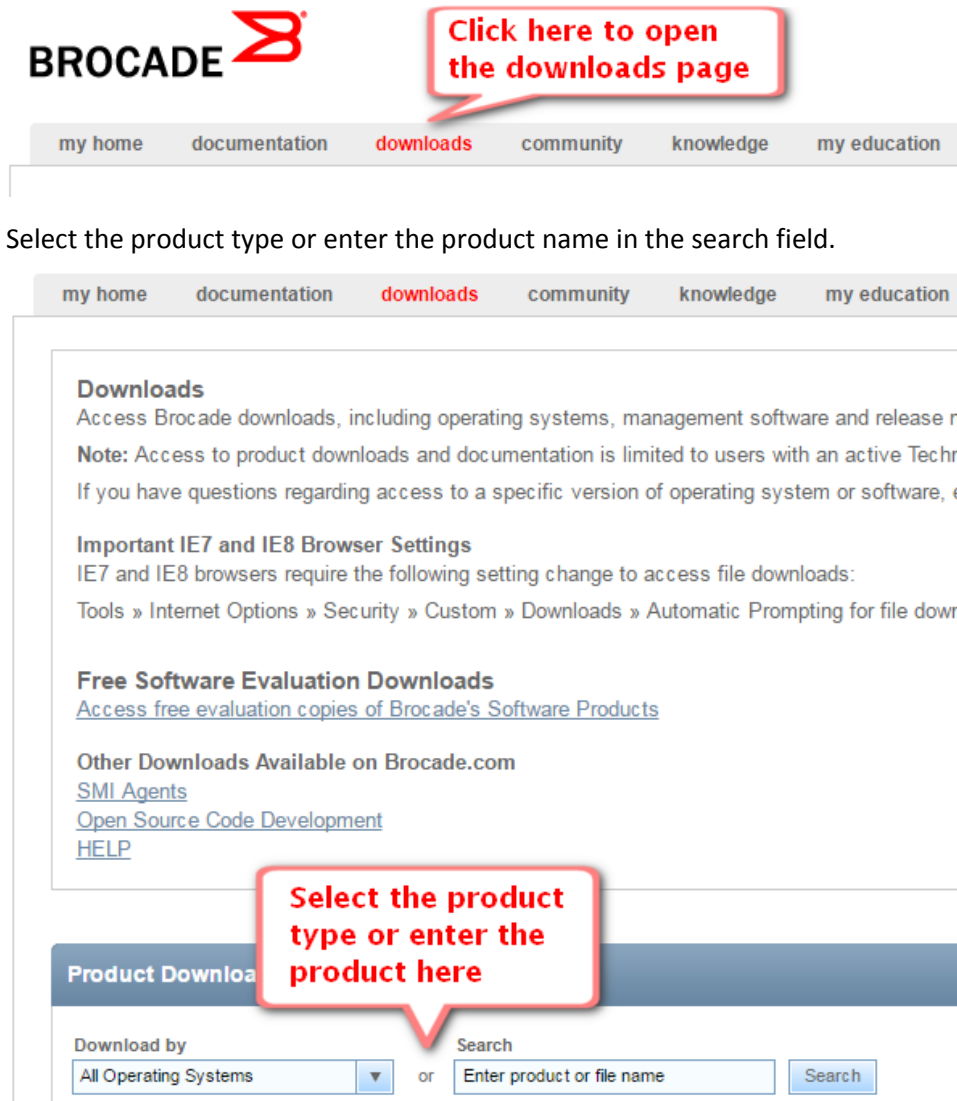


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2. Once you have logged in, the product manuals can be found by clicking **downloads**.



4. Select the Release Notes from the results below the Search box.

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To send feedback and report errors in the documentation you can use the feedback form posted with the document or you can e-mail the documentation team.

Quality is our first concern at Brocade and we have made every effort to ensure the accuracy and completeness of this document. However, if you find an error or an omission, or you think that a topic needs further development, we want to hear from you. You can provide feedback in two ways:

- Through the online feedback form in the HTML documents posted on www.brocade.com.
- By sending your feedback to documentation@brocade.com.

Provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement.

Overview

Fabric OS v8.0.1b is a patch release based on FOS v8.0.1a. All hardware platforms and features supported in FOS v8.0.1a are also supported in FOS v8.0.1b. Besides defect fixes, FOS v8.0.1b includes minor software changes and enhancements.

What is New in This Release

Software features

The following section lists new, modified, and deprecated software features for this release.

Modified software features

The following software features have been modified in this release.

- Web Tools system logs capture Switch Admin and Zone Admin configuration changes.
- Web Tools Ethernet IPsec policies disable IKE policy creation.
- Enhancement to RAS-1007 message to log username when reboot is initiated through SNMP user.
- The ICL port numbers enabled by the ICL POD license on Brocade X6 directors are changed in this release:
 - The 1st ICL POD license on X6-8 enables QSFP port number: 0, 1, 2, 3, 8, 9, 10, 11; the 2nd ICL POD license on X6-8 enables QSFP port number: 4, 5, 6, 7, 12, 13, 14, 15.
 - The 1st ICL POD license on X6-4 enables QSFP port number: 0, 1, 4, 5; the 2nd ICL POD license on X6-4 enables QSFP port number: 2, 3, 6, 7.
 - This change affects X6-8 and X6-4 directors with only the 1st ICL POD license installed in FOS v8.0.1a or earlier. After these directors are upgraded to FOS v8.0.1b or later, a different set of ports as noted above will be enabled by the 1st ICL POD license after a port toggle. To avoid any disruption, users can add the 2nd ICL POD license before firmware upgrade.

What is New in FOS v8.0.1

Hardware

The following section lists new hardware introduced with this release as well as hardware that are no longer supported with this release.

New devices

Product name	Device Name
Brocade X6-8 Director	Gen 6 Fibre Channel 8-slot Director
Product features	Key features • Up to 384 ports at 32 Gbps • 32 UltraScale ICLs equivalent to 128 32-Gbps ports • 16.2 Tbps aggregate chassis bandwidth • 1.5 Tbps bandwidth per slot • Fabric Vision features and IO Insight capability
Brocade X6-4 Director	Gen 6 Fibre Channel 4-slot Director
Product features	Key features • Up to 192 ports at 32 Gbps • 16 UltraScale ICLs equivalent to 64 32-Gbps ports • 8.1 Tbps aggregate chassis bandwidth • 1.5 Tbps bandwidth per slot • Fabric Vision features and IO Insight capability

New blades

Blade	Description	Compatible devices
Brocade SX6 Extension Blade	Gen 6 Fibre Channel and IP Extension Blade with 16 x 32 Gbps Fibre Channel ports, 16 x 1/10 GbE and 2 x 40 GbE ports	Brocade X6 Director
Brocade FC32-48 Port Blade	Gen 6 Fibre Channel port blade with 48 x 32 Gbps ports	Brocade X6 Director
Brocade CPX6 Control Processor Blade	Control processor blade for Brocade X6 Director	Brocade X6 Director
Brocade CR32-4 Core Routing Blade	Core routing blade for Brocade X6-4 Director	Brocade X6-4 Director
Brocade CR32-8 Core Routing Blade	Core routing blade for Brocade X6-8 Director	Brocade X6-8 Director

Deprecated hardware

The following Brocade devices are no longer supported starting with this release.

- 300, 5100, 5300, 7800, VA-40FC, Brocade Encryption Switch, DCX, DCX-4S
- 5410, M5424, 5430, 5431, 5432, 5450, 5460, 5470, 5480, NC-5480

The following blades are no longer supported starting with this release.

- FC8-16, FC8-32, FC8-48, FS8-18, FCOE10-24.

Note: Support for FC8-32E, FC8-48E, and FC8-64 blades in DCX 8510 platforms has not been deprecated. However, FOS v8.0.1 does not support these blades in DCX 8510 platforms. Support for these blades is planned for FOS releases after FOS v8.0.1.

Software features

The following section lists new, modified, and deprecated software features for this release.

New software features

The following software features are new in this release.

- Support for Brocade X6 Director with FC32-48 port blades and SX6 extension blades.
- Support for IO Insight — a built-in device-level IO performance and latency instrumentation capability

Modified software features

The following software features have been modified in this release.

Fabric Performance Impact (FPI) monitoring

FOS v8.0.1 enhances FPI monitoring to include the FPI monitoring rules and thresholds in the MAPS default base policy. Switches running FOS v8.0.1 without a Fabric Vision license are monitored by MAPS for congestion and slow drain device conditions.

Note: FOS v8.0.1 adds Email and SNMP alerts with the MAPS base policy. The available actions with the MAPS base policy are RASLog, Email, and SNMP alerts. Other actions, including Port Fencing, Port Decommissioning, Port Toggle, and Slow Drain Device Quarantine, require a valid Fabric Vision license.

Monitoring and Alerting Policy Suite (MAPS)

FOS v8.0.1 includes following MAPS enhancements:

Monitor 32Gbps Optics

FOS v8.0.1 adds monitoring of supported 32 Gbps SWL SFP, 32 Gbps LWL SFP, and 4x32 Gbps SWL QSFP optics on Gen 6 platforms to the default MAPS policy. These new optics are monitored within their respective new logical groups.

Monitor Security Certificate Expiration

FOS v8.0.1 adds monitoring the validity period of digital security certificates present on Brocade switches. This provides administrators expiry notification before any security certificates actually expire.

Monitor Gigabit Ethernet Ports

FOS v8.0.1 adds the ability to monitor link layer error statistics for Gigabit Ethernet ports on extension platforms, which includes the Brocade 7840, FX8-24 blades, and SX6 blades. This monitoring provides advanced notification of Ethernet link layer problems that could result in performance degradation or disruption to the distance extension traffic. This monitoring does not apply to the management Ethernet interface on Brocade switches.

Monitor FCIP Tunnel and Tunnel QoS

FOS v8.0.1 extends MAPS monitoring of FCIP tunnels and the tunnels at each QoS level to the SX6 blade. Bandwidth utilization and state change are monitored for FCIP tunnels, while utilization and packet loss are monitored for FCIP tunnels for each QoS level. The pre-defined thresholds and rules for SX6 blades are the same as those for the Brocade 7840 platform in FOS v7.4.

Monitor IP Extension Circuit and Tunnel

FOS v8.0.1 adds MAPS monitoring for IP circuits and tunnels on the Brocade 7840 extension platform and SX6 blades. IP Extension monitoring provides advanced notification of WAN performance and latency problems and helps with troubleshooting IP storage traffic that has been extended through WANs.

Monitor System Air Flow

FOS v8.0.1 adds MAPS monitoring for system airflow directions to provide alerts if the air flow directions of the fan or power supply FRUs in the hardware platforms are installed incorrectly. This avoids potential disruptive shutdown of hardware platforms resulting from mismatched air flow directions. MAPS airflow direction monitoring applies to the following hardware platforms that support different airflow direction configurations: Brocade 6505, 6510, 6520, 7840, X6-8, X6-4, and G620.

Monitor Initiator and Target Device Ratio

FOS v8.0.1 adds the ability to monitor the ratio between initiator and target devices zoned together across entire zoning configuration. Initiator-to-target or target-to-initiator ratios higher than best practices have the potential of causing slow IO response time that may impact fabric performance. This monitoring can alert administrators to this condition, enabling them to take corrective action.

Monitor IO Insight Metrics

FOS v8.0.1 adds the support in MAPS to monitor the IO Insight metrics for initiator-target or initiator-target-LUN flow monitors that are created with the Flow Vision feature on Brocade Gen 6 platforms. This monitoring allows administrators to be alerted if application or storage device level IO performance and latency measures drop below predetermined thresholds such as those mandated by service level agreements.

Quiet Time Support for SNMP

FOS v8.0.1 extends the quiet time support to the SNMP alert actions so that users can configure MAPS rules to bypass sending duplicate SNMP trap messages for repeat violations.

MAPS platform dependent default policies

FOS v8.0.1 changes MAPS default policies so that only rules applicable to a specific platform are included in the default policies for that platform. Please refer to the *MAPS rules and groups altered in this release* section of the *Brocade Monitoring and Alerting Policy Suite Configuration Guide* for detailed policy changes.

Miscellaneous

FOS v8.0.1 includes the following miscellaneous MAPS usability enhancements.

- MAPS dashboard displays fenced extension circuits for Brocade 7840, FX8-24, and SX6.
- MAPS dashboard history data value display includes unit symbol to improve readability.
- MAPS RASLog and email alerts for switch ports include switch port names.
- MAPS RASLog and email alerts for back-end port include added peer connection port numbers.
- If MAPS detects an email alert delivery failure, a RASLog message (MAPS-1206) is recorded.
- MAPS email alert message content enhancements to improve readability.
- Removal of SW_MARGINAL and SW_CRITICAL actions from **mapsConfig** command. These actions are now enabled by default and cannot be disabled.

Flow Vision

FOS v8.0.1 provides the following new capabilities and enhancements to Flow Vision.

Flow Monitor support for IO Insight

FOS v8.0.1 extends the Flow Monitor feature to support the IO Insight capability built in to Brocade Gen 6 platforms. Flow Monitor provides administrators the capability to non-disruptively and non-invasively obtain key SCSI IO performance and latency metrics for initiator-target or initiator-target-LUN flows.

Flow Monitor on VE port

FOS v8.0.1 supports Flow Monitor static and learning flow support on VE ports on the Brocade 7840 and the SX6 blade. The Flow Monitor support on VE ports is equivalent to those provided on E_Ports available in FOS v7.4.

SRR Frame Type

FOS v8.0.1 supports a new frame type in Flow Vision, the Sequence Retransmission Request (SRR) frame, which is used in FC-Tape backup for error recovery. This frame type support allows administrators to see that the FC-Tape devices are in error recovery mode, which increases application response time.

Fabric Flow Dashboard Enhancements

FOS v8.0.1 enhances the Flow Dashboard with the following new data:

- MAPS history data for ports and back-end ports
- Identification of ports that have been fenced, decommissioned, or quarantined by MAPS actions

FCIP and IP Extension

FOS v8.0.1 provides additional enhancements to Brocade storage extension products beyond supporting the new SX6 blade in X6-8 and X6-4 directors.

Extension Non-disruptive Firmware Download on X6

FOS v8.0.1 supports non-disruptive firmware download for the FCIP extension traffic on the SX6 blades in an X6-8 or X6-4 director. Non-disruptive firmware download is performed in parallel on the maximum number of SX6 blades supported in a director. SX6 blades in different configuration modes, i.e., 10VE, 20VE, or hybrid, are supported with non-disruptive firmware download. The FOS **firmwaredownloadstatus** includes the firmware download completion status of the extension platform data processor (DP). If a DP has not completed firmware download, additional **firmwaredownload**, **firmwarerestore**, **hafailover** or **hareboot** commands will be blocked.

IP Extension PBR Support for LAN Traffic

FOS v8.0.1 adds policy-based routing (PBR) topology support for LAN connectivity of IPEXT traffic. This allows L3 (routing) connections in addition to the L2 (direct) connections to the extension platform. In PBR configuration, LAN ports are connected to routers and the next-hop gateway is configured in the Data Processor of the distance extension platform. Similarly, PBR is configured in the router to route traffic between host and distance extension platform.

IP LAN Connection History

FOS v8.0.1 enhances the command output of the **portshow lan-stats --hist-stats** command to provide additional information about the TCP connections that have been extended via IPEXT emulation. These enhancements provide the TCP flag used to close the connection, the last five TCP states of the connection, the location/reason why the connection closure occurred, and the creation of a freeze/thaw functionality.

Extension Trunking Spillover Load Balancing Algorithm

FOS v8.0.1 supports a new load balancing algorithm for tunnels named “spillover”. This algorithm allows administrators to define circuits that will only be used under high bandwidth utilization and/or congestion conditions. The default algorithm is failover, which will only use higher metric circuits when lower metric circuits are down.

Automatic WAN Tool

FOS v8.0.1 introduces the automatic WAN Tool (AWT) support to extend the WAN Test Tool. With this support, WAN Tool tests can run automatically in accordance with defined Service Level Agreement (SLA) parameters. An FCIP circuit is enhanced to support a SLA policy. This allows AWT to bring a circuit online/offline based on the SLA of the WAN network.

Miscellaneous

FOS v8.0.1 includes the following miscellaneous extension enhancements

- The **extnctfg** command allows the extension configuration to be reset
- The traffic Control List (TCL) configuration command **portcfg tcl** now supports port ranges and well-known application names.
- The **portshow tcl** command output now supports sorting and priority matching
- Filter options are added to **portshow fcipunnel**, **portshow fcipcircuit**, **portshow tcl**, **portshow ipif**, **portshow lan-stats**, and **portshow iproute** commands to customize output and display only the specific information requested by users.

- Support LAN non-terminated TCP flow to allow control type TCP traffic from IP storage devices across the WAN.
- Generate RASLog message (XTUN-3100 and 3101) when IP-Extension TCP connection count per DP is equal to and greater than 500.
- Increase the maximum number of supported Traffic Control List (TCL) per DP from 128 to 256.

Zoning

FOS v8.0.1 provides the following enhancements to zoning.

Peer Zoning RSCN Enhancement

FOS v8.0.1 generates a Peer Zoning Change RSCN when administrator actions result in the addition or removal of a Target-Driven Peer Zone from the effective zoning configuration or when the Target Driven Zoning mode on a port is enabled or disabled.

Automatic Zone Configuration Creation for Target Driven Zoning

FOS v8.0.1 automatically creates a zone configuration if one does not exist when the fabric receives supported Target Driven Zoning commands.

zoneShow Command Enhancements

FOS v8.0.1 enhances the **zoneshow --alias** command to accept a string pattern to search for zones that match the pattern among zoning configuration database.

Zoning Name Enforcement to Avoid Boot LUN Zone Conflict

FOS v8.0.1 enforces zoning creation rules to disallow a zone to be created with “BFA_” as a zone name prefix or “_BLUN” as a zone name suffix. In addition, any WWN with prefix “00:00:00:..” is rejected to avoid conflicts with boot LUN zones.

Security

FOS v8.0.1 provides the following enhancements to system security.

Stronger Switch Password Hash Algorithm

FOS v8.0.1 adds the support for both SHA-256 and SHA-512 as password hash algorithms to increase the security protection of switch passwords. MD5 password hash continues to be supported for backward compatibility. The default password hash is SHA-512 for a switch with FOS v8.0.1 installed from manufacturing.

Password Policy Enhancements

FOS v8.0.1 enhances switch password policy to add the support of setting a minimum character set in the password policy and disallowing usernames as part of a password.

Restricted Time of Day Access

FOS v8.0.1 adds the ability to specify a time-of-day restriction on user accounts. Once configured, the accounts can only access the switch during the specified time of day. The “time of day” access restriction applies to all interfaces that a FOS switch supports, including Telnet, Console, SSH, and HTTP/HTTPS.

Removal of “factory” Account

FOS v8.0.1 removes the legacy “factory” default account. Removing this account does not have any impact on switch operational or administrative operation.

Factory disabling of “root” Account

The default switch “root” account is disabled on switches that have FOS v8.0.1 installed at the factory. For administrators that want to enable the “root” account, a new command **rootAccess** is provided to control the management interfaces allowed to have root account login. In addition, the **userConfig --show** command is enhanced to display an asterisk (*) character next to the account name for any default switch account that has the default factory password set.

Self-Signed HTTPS Certificate

FOS v8.0.1 supports the switch HTTPS certificate generation with self-signing. With this support, administrators can choose to use a self-signed HTTPS certificate or to import a switch certificate signed by an external Certificate Authority (CA).

secCryptoCfg Enhancement

FOS v8.0.1 extends the **secCryptoCfg** command to accept a cipher configuration template file. A template supports configuration for TLS and SSH ciphers.

RAS

FOS v8.0.1 includes the following enhancements to RAS functionalities.

Reset Ethernet Management Interface Counters

FOS v8.0.1 adds the support to reset management Ethernet interface error counters. Resetting the counters helps to troubleshoot Ethernet management interface connectivity problems. The support is provided through the existing **ethif** command. This is supported on Brocade 7840, G620, and X6 only.

Syslog Server

FOS v8.0.1 supports server host names in syslog server configuration. FOS retains the server configuration, either as a host name or as an IP address, as provided by administrators to the **syslogadmin** command.

RASLog

FOS v8.0.1 increases the number of RASLog messages that are persistently saved to 8192 entries for Brocade G620 and X6 platforms. This allows the system to capture more RASLog messages during SupportSave.

Fibre Channel Routing (FCR)

FOS v8.0.1 supports following FCR-related software license enforcement changes.

- Integrated Routing Ports-on-Demand license on Brocade X6 director — FOS v8.0.1 checks the maximum supported EX_Ports when the EX_Port is configured.
- Enterprise ICL license on DCX 8510 directors — FOS v8.0.1 enforces the Enterprise ICL (EICL) license on Inter-Fabric Link (IFL) connections on Brocade DCX 8510 chassis that are using ICL connections. In earlier firmware only ISL connections were counted for enforcing the EICL rule.

ClearLink Diagnostics (D_Port)

FOS v8.0.1 supports D_Ports on Gen 6 platforms with 32 Gbps SFP and 4x32 Gbps QSFPs.

- For 4x32 Gbps QSFPs, the electrical loopback and optical loopback tests are skipped.
- D_Port tests on Gen 6 platforms support ISLs and device connections to third party HBAs.
- In addition to Gen 6 platform support, D_Port tests have been enhanced to allow administrators to specify long duration optical loopback tests. Long-duration optical loopback tests can be run on only one port at a time, and long-duration electrical loopback tests are not supported.

DHCP for Management Interface

FOS v8.0.1 enhances the DHCP support for the management Ethernet interface to include the following:

- DHCP support on DCX 8510 and X6 directors with redundant control processor (CP) blades
- DHCPv6 support for IPv6 address configuration (RFC3315)
- Stateless DHCPv6 server configuration (RFC3736) support for Brocade G620 and X6 to configure parameters for DNS recursive name servers, DNS search lists, and SIP servers.

Management Server

FOS v8.0.1 adds the support for the FC-GS-4 standard “Get Port Speed Capabilities (GPSC)” command in the Management Server.

SNMP

FOS v8.0.1 includes the following enhancements and changes for SNMP.

- The **snmpConfig** command now supports a non-interactive mode to improve configuration through scripting.
- Support for system resource (memory, CPU, and flash) monitoring in Access Gateway mode in the AG MIB.
- Support for 64-bit TX/RX statistics in the SW MIB under the connUnitPortStatEntry object and removal of 32-bit TX/RX statistics under the swFCPort object.

Miscellaneous Enhancements

islShow Command

FOS v8.0.1 increases the supported **islShow** switch name length to 32 characters, so that switch names longer than 15 characters can be fully displayed.

nodeFind Command

FOS v8.0.1 supports entering a WWN as the device input to the **nodefind** command without the colon “:” character between two nibbles. This simplifies the input when running this command.

Dynamic Portname

FOS v8.0.1 enhances the dynamic portname feature to support user-defined formats for dynamic port names. The supported port name fields include: switch name, port type, port index, slot number/port number, F_Port alias, FDMI host name, and remote switch name.

Switch Name

FOS v8.0.1 supports switch names that begin with a numerical character.

portCfgEportCredit Command

FOS v8.0.1 supports BB credit configuration range values from 5 to 160 for Gen 6 (G620 and X6) platforms. The range is unchanged for Gen 5 (16 Gbps) platforms.

portStatsShow Command

FOS v8.0.1 enhances the **portStatsShow** output to include Forward Error Correction (FEC) counter output. Counters are now displayed regardless of whether FEC is configured or a port is online. For Gen 6 platforms (G620 and X6) the FEC correctable counter is replaced with a new FEC corrected rate counter. In addition, the **portStatsShow** command displays additional TXQ latency counters that are available from Gen 6 platforms.

sfpShow Command

FOS v8.0.1 removes the “Alarm/Warn” thresholds displayed by the **sfpShow** command output. These thresholds are inconsistent with the SFP datasheet. Removing these thresholds does not have any functional impact.

Automatic Non-DFE and portCfgNonDfe Command

FOS v8.0.1 automatically activates non-DFE mode on Gen 5 (16 Gbps) platforms if a port non-DFE configuration is disabled, the port is in 8G or N8 speed, and the port receives a fillword of IDLE's. There is no change to ports with non-DFE configuration enabled. The **portCfgNonDfe** command is also enhanced to display the non-DFE activation state of a port.

Deprecated software features

The following software features are deprecated beginning with this release.

Bottleneck Detection

FOS v8.0.1 deprecates support for the Bottleneck Detection feature. The Bottleneck Detection feature included congestion monitoring and latency monitoring through the Advanced Networking (AN) module. Users configured Bottleneck Detection feature using the **bottleneckMon** command. The Bottleneck Detection feature has been replaced with Fabric Performance Impact (FPI) monitoring. FOS v8.0.1 supports FPI monitoring without requiring a Fabric Vision license. Firmware upgrades to FOS v8.0.1 from FOS v7.4.x or earlier version will automatically disable Bottleneck Detection monitoring.

Port Mirroring

FOS v8.0.1 deprecates the Port Mirror feature. This feature is replaced by Flow Mirror within Flow Vision.

Administrative Domain

FOS v8.0.1 deprecates the support for the Admin Domain feature, but does not remove the Admin Domain functionality. However attempts to create, activate, rename, save, or make any other configuration changes to Admin Domains will cause a warning message to be displayed. Support for this feature will be removed in a future release.

CLI Changes

The following section lists new, modified, and deprecated commands for this release.

New Commands

The following commands are new in this release.

- diagStatus
- openSource
- rootAccess

Modified Commands

Refer to the “Modified commands” section in the *Brocade Fabric OS Command Reference* supporting Fabric OS v8.0.1.

Deprecated commands

Refer to the “Deprecated commands” section in the *Brocade Fabric OS Command Reference* supporting Fabric OS v8.0.1.

Supported standards and RFCs

This software conforms to the Fibre Channel standards in a manner consistent with accepted engineering practices and procedures. In certain cases, Brocade might add proprietary supplemental functions to those specified in the standards. For a list of FC standards conformance, visit the following Brocade Web site: <http://www.brocade.com/sanstandards>.

Software License Support

Optionally Licensed Software

Fabric OS 8.0.1 includes all basic switch and fabric support software, as well as optionally-licensed software enabled using license keys.

Optionally-licensed features include:

Brocade Ports on Demand — Allows customers to instantly scale the fabric by provisioning additional SFP ports via license key upgrade. (Applies to select models of switches).

Brocade Q-Flex Ports on Demand — Allows customers to further scale the fabric and increase flexibility by provisioning additional 4x32G QSFP ports via license key upgrade. Applies to Brocade G620 only.

Brocade Extended Fabrics — Provides greater than 10km of switched fabric connectivity at full bandwidth over long distances (depending on platform this can be up to 3000km).

Brocade ISL Trunking — Provides the ability to aggregate multiple physical links into one logical link for enhanced network performance and fault tolerance. Also includes Access Gateway ISL Trunking on those products that support Access Gateway deployment.

Brocade Fabric Vision — Enables support for MAPS (Monitoring and Alerting Policy Suite), Flow Vision, and ClearLink (D_Port) when connecting to non-Brocade devices. MAPS enables rules-based monitoring and alerting capabilities, provides comprehensive dashboards to quickly troubleshoot problems in Brocade SAN environments. Flow Vision enables host to LUN flow monitoring, application flow mirroring for non-disruptive capture and deeper analysis, and test traffic flow generation function for SAN infrastructure validation. D_Port to non-Brocade devices support allows extensive diagnostic testing of links to devices other than Brocade switches and adapters.

Note: On Brocade G620, Brocade X6-8, and Brocade X6-4 platforms, this license enables the use of IO Insight capability. The license itself will be identified as “Fabric Vision and IO Insight” license on these platforms.

FICON Management Server — Also known as “CUP” (Control Unit Port), this enables host control of switches in mainframe environments.

Integrated Routing — This license allows any Fibre Channel port in a DCX 8510-8, DCX 8510-4, Brocade 6510, Brocade 6520, Brocade 7840, or Brocade G620 to be configured as an EX_Port supporting Fibre Channel Routing. This eliminates the need to add an FR4-18i blade or use a Brocade 7500 for FCR purposes, and also provides either quadruple or octuple the bandwidth for each FCR connection (when connected to another 16Gbs or 32Gbs-capable port).

Integrated Routing Ports on Demand — This license allows any Fibre Channel port in a Brocade X6-8 or Brocade X6-4 to be configured as an EX_Port supporting Fibre Channel Routing. The maximum number of EX_Ports supported per platform is provided in the license. This eliminates the need to add an FR4-18i blade or use a Brocade 7500 for FCR purposes, and also provides octuple the bandwidth for each FCR connection (when connected to another 32Gbs-capable port).

Advanced Extension — This license enables two advanced extension features: FCIP Trunking and Adaptive Rate Limiting. The FCIP Trunking feature allows multiple IP source and destination address pairs (defined as FCIP Circuits) via multiple 1 GbE or 10 GbE interfaces to provide a high bandwidth FCIP tunnel and failover resiliency. In addition, each FCIP circuit supports four QoS classes (Class-F, High, Medium and Low Priority), each as a TCP connection. The Adaptive Rate Limiting feature provides a minimum bandwidth guarantee for each tunnel with full utilization of the available network bandwidth without impacting throughput performance under high traffic load. This license is available on the DCX 8510-8/DCX 8510-4 for the FX8-24 on an individual slot basis.

10GbE FCIP/10G Fibre Channel — This license enables the two 10GbE ports on the FX8-24 and/or the 10G FC capability on FC16-xx blade ports supported on DCX 8510 platforms except for the FC16-64 blade. On the Brocade 6510, Brocade 6520 this license enables 10G FC ports. This license is not applicable to the Brocade 7840, Brocade G620, or Brocade X6 platforms.

On FX8-24:

With this license installed and assigned to a slot with an FX8-24 blade, two additional operating modes (in addition to 10x1GbE ports mode) can be selected:

- 10x1GbE ports and 1x10GbE port, or
- 2x10GbE ports

On FC16-xx:

- Enables 10G FC capability on an FC16-xx blade in a slot that has this license.

On Brocade 6510, Brocade 6520:

- Enables 10G FC capability on Brocade 6510 and Brocade 6520 switches.

This license is available on the DCX 8510-8 and DCX 8510-4 on an individual slot basis.

Advanced FICON Acceleration — This licensed feature uses specialized data management techniques and automated intelligence to accelerate FICON tape read and write and IBM Global Mirror data replication operations over distance, while maintaining the integrity of command and acknowledgement sequences. This license is available on the Brocade 7840 and the DCX 8510-8 and DCX 8510-4 for the FX8-24 on an individual slot basis.

ICL POD License — This license activates ICL ports on DCX 8510 or X6 platform core blades. An ICL license must be installed on the director platforms at both ends of the ICL connection.

On Brocade DCX8510-8 and X6-8:

The 1st ICL POD license enables 16 (half of the total) UltraScale ICL QSFP ports on DCX 8510-8 or X6-8 directors, enabling eight ICL ports on each core blade. These are QSFP port number 0, 1, 2, 3, 4, 5, 6, and 7 on DCX8510-8; while on X6-8, the QSFP port numbers are 0, 1, 2, 3, 8, 9, 10, and 11. The 2nd ICL POD license enables the remaining 16 UltraScale ICL QSFP ports on the directors. These are QSFP port number 8, 9, 10, 11, 12, 13, 14, and 15 on each core blade of DCX8510-8; while on X6-8, these are QSFP port number 4, 5, 6, 7, 12, 13, 14, and 15 on each core blade. Note that the trunk boundaries are different between CR32-8 core blades on X6-8 and CR16-8 core blades on DCX8510-8.

On Brocade DCX8510-4 and X6-4:

ICL POD licenses are different between X6-4 and DCX8510-4 directors. On an X6-4, the 1st ICL POD license enables eight (half of the total) UltraScale ICL QSFP ports on the director, enabling four ICL ports on each core blade, which are QSFP port number 0, 1, 4, and 5. The 2nd ICL POD

license on X6-4 enables the remaining eight UltraScale ICL QSFP ports on the director, which are QSFP port number 2, 3, 6, and 7 on each core blade. On a DCX8510-4, a single ICL POD license enables all 16 UltraScale ICL QSFP ports on the director.

Enterprise ICL (EICL) License — The EICL license is required on a Brocade DCX 8510 chassis when that chassis is connected to four or more Brocade DCX 8510 chassis via ICLs. This license is not applicable to X6 Directors.

This license requirement does not depend upon the total number of DCX 8510 chassis that exist in a fabric, but only on the number of other chassis connected to a DCX 8510 via ICLs. This license is recognized/displayed when operating with FOS v7.0.1 and enforced by FOS v7.1.0 or later.

Note: The EICL license supports a maximum of nine (9) DCX 8510 chassis connected in a full mesh topology or up to twelve (12) DCX 8510 chassis connected in a core-edge topology. Refer to the Brocade SAN Scalability Guidelines document for additional information.

WAN Rate Upgrade 1 License — The WAN Rate Upgrade 1 license provides the additional WAN throughput up to 10 Gbps on a Brocade 7840. The base configuration for a Brocade 7840 without this license provides WAN throughput up to 5 Gbps.

WAN Rate Upgrade 2 License — The WAN Rate Upgrade 2 license provides unlimited WAN throughput (up to the hardware limit) on a Brocade 7840. WAN Rate Upgrade 2 licenses also enable the use of two 40GbE ports on a Brocade 7840. The 40GbE ports cannot be configured without the WAN Rate Upgrade 2 license. A WAN Rate Upgrade 1 license must be installed on a Brocade 7840 before a WAN Rate Upgrade 2 license is installed. A WAN Rate Upgrade 1 license cannot be removed before the WAN Rate Upgrade 2 license has been removed.

Note: The WAN Rate Upgrade 1 and WAN Rate Upgrade 2 licenses apply only to Brocade 7840 platforms. They control the aggregate bandwidth for all tunnels on that Brocade 7840. The entire capacity controlled by the licenses can be assigned to a single tunnel, or a portion of the capacity can be assigned to multiple tunnels. The total bandwidth aggregated for all tunnels should not exceed the limits established by the licenses.

Temporary License Support

The following licenses are available in Fabric OS 8.0.1 as either Universal Temporary or regular temporary licenses:

- Fabric (E_Port) license
- Extended Fabric license
- Trunking license
- High Performance Extension license
- Advanced Performance Monitoring license
- Fabric Watch license
- Integrated Routing license
- Integrated Routing Ports on Demand license
- Advanced Extension license
- Advanced FICON Acceleration license
- 10GbE FCIP/10GFibre Channel license

- FICON Management Server (CUP)
- Enterprise ICL license
- Fabric Vision license
- WAN Rate Upgrade 1 license
- WAN Rate Upgrade 2 license

Note: Temporary Licenses for features available on a per-slot basis enable the feature for any and all slots in the chassis.

Temporary and Universal Temporary licenses have durations and expiration dates established in the licenses themselves. FOS will accept up to two temporary licenses and a single Universal license on a unit. Universal Temporary license keys can only be installed once on a particular switch, but can be applied to as many switches as desired. Temporary use duration (the length of time the feature will be enabled on a switch) is provided with the license key. All Universal Temporary license keys have an expiration date upon which the license can no longer be installed on any unit.

Hardware Support

Supported devices

The following devices are supported in this release:

- G620, X6-8, X6-4
- 6505, 6510, 6520, DCX8510-8, DCX8510-4
- 6543, 6545, 6546, 6547, 6548, M6505, 6558
- 7840

Supported blades

DCX 8510-8/DCX 8510-4 blade support

Fabric OS v8.0.1 software is fully qualified and supports the blades for the DCX8510-8 and DCX8510-4 noted in the table below:

Blades	OS support
FC16-32, FC16-48 16G FC blades	FOS v7.0 or later.
FC16-64 blade ^{1, 2}	FOS v7.3 or later.
FC8-64 64 port 8Gbit port blade ³	Not supported.
FC8-32E, FC8-48E ³	Not supported.
FCIP/FC Router blade (FR4-18i)	Not supported.
Virtualization/Application Blade (FA4-18)	Not supported.
Encryption Blade (FS8-18)	Not supported.
Extension Blade (FX8-24)	Up to a maximum of 4 blades of this type.
FCoE/L2 CEE blade FCOE10-24	Not supported.

X6-8/X6-4 blade support

Fabric OS v8.0.1 software is fully qualified and supports the blades for the X6-8 and X6-4 noted in the table below. None of the legacy blades (16G or lower speed) are supported in the Gen 6 chassis.

Blades	OS support
FC32-48 32G FC blade	FOS v8.0.1 or later.
SX6 Gen 6 Distance Extension Blade	FOS v8.0.1 or later.

¹ 8510 core blade QSFPs, part numbers 57-1000267-01 and 57-0000090-01, are not supported in FC16-64. The QSFPs supported in FC16-64, part number 57-1000294-02, is also supported on 8510 core blades.

² E_port connections on FC16-64 blade have the following restriction: connecting a QSFP port between a FC16-64 blade and an ICL QSFP port on a core blade is not supported.

³ Support for FC8-64, FC8-32E, and FC8-48E blades in DCX8510 chassis is planned in a release after FOS v8.0.1.

Up to maximum of 4 blades of this type.

Note: The QSFPs supported in FC16-64, part number 57-1000294-02, is also supported on X6 core blades with the condition that the port speed must be configured at fixed 16 Gbps. Otherwise, the optics will be faulted.

Supported power supplies

Brocade G620 Power Supplies

The following table lists the power supplies for Brocade G620 supported in this release:

Part number	Description	Compatible devices
XBRG250WPSAC-F	Power supply and fan assembly, nonport-side air exhaust	Brocade G620
XBRG250WPSAC-R	Power supply and fan assembly, nonport-side air intake	Brocade G620

DCX8510-8 Power Supply Requirements

Typical Power Supply Requirements Guidelines for Blades in DCX 8510-8

(For specific calculation of power draw with different blade combinations, please refer to Appendix A: Power Specifications in the *Brocade DCX 8510-8 Backbone Hardware Reference Manual*.)

Configured Number of Ports	Blades	Type of Blade	DCX 8510-8 @110 VAC (Redundant configurations)	DCX 8510-8 @200-240 VAC (Redundant configurations)	Comments
Any combination of 8Gb or 16Gb ports with QSFP ICLs	FC16-32, FC16-64, FC8-32E	Port Blade	4 Power Supplies	2 Power Supplies	200-240 VAC: 1+1 Power Supplies 110 VAC: 2+2 ¹ Power Supplies
256 16Gb ports + QSFP ICLs	FC16-32, FC16-48 (Maximum of fully populated FC16-32 blades), FC16-64	Port Blade	4 Power Supplies	2 Power Supplies	200-240 VAC: 1+1 Power Supplies 110 VAC: 2+2 ¹ Power Supplies Max 8 FC16-32 port blades
256 8Gb ports + QSFP ICLs	FC8-32E, FC8-48E (Maximum of fully populated FC8-32E blades)	Port Blade	4 Power Supplies	2 Power Supplies	200-240 VAC: 1+1 Power Supplies 110 VAC: 2+2 ¹ Power Supplies Max 8 FC8-32E port blades

¹ When 2+2 power supply combination is used, the users are advised to configure the MAPS setting for switch Marginal State to be one Bad Power Supply.

192 16Gb Ports & max 2 intelligent blades (FX8-24) with QSFP ICLs	FC16-32, FC16-48, FC16-64, FX8-24	Port / Intelligent Blade	4 Power Supplies	2 Power Supplies	200-240 VAC: 1+1 Power Supplies 110 VAC: 2+2 ¹ Power Supplies Max four FC16-48 port blades and max 2 Intelligent blades
192 8Gb Ports & max 2 intelligent blades (FX8-24) with QSFP ICLs	FC8-32E, FC8-48E, FX8-24	Port / Intelligent Blade	4 Power Supplies	2 Power Supplies	200-240 VAC: 1+1 Power Supplies 110 VAC: 2+2 ¹ Power Supplies Max four FC8-48E port blades and max 2 Intelligent blades
336 16Gb ports + QSFP ICLs	FC16-48 (Maximum of seven FC16-48 blades, with one empty port blade slot)	Port Blade	4 Power Supplies	2 Power Supplies	200-240 VAC: 1+1 Power Supplies 110 VAC: 2+2 ¹ Power Supplies Max 7 FC16-48 port blades
336 8Gb ports + QSFP ICLs	FC8-48E (Maximum of seven FC8-48E blades, with one empty port blade slot)	Port Blade	4 Power Supplies	2 Power Supplies	200-240 VAC: 1+1 Power Supplies 110 VAC: 2+2 ¹ Power Supplies Max 7 FC8-48E port blades
384 16Gb ports + QSFP ICLs	FC16-48	Port Blade	Not Supported	4 Power Supplies	200-240 VAC: For DCX 8510-8, four (2+2) ¹ 220 VAC Power Supplies are required
384 16Gb ports + QSFP ICLs	FC16-64	Port Blade	4 Power Supplies	2 Power Supplies	200-240 VAC: 1+1 Power Supplies 110 VAC: 2+2 ¹ Power Supplies
384 8Gb ports + QSFP ICLs	FC8-48E	Port Blade	4 Power Supplies	4 Power Supplies	200-240 VAC: For DCX 8510-8, four (2+2) ¹ 220 VAC Power Supplies are required
Any combination of 8Gb or 16Gb ports and intelligent blades with QSFP ICLs	FC16-32, FC16-48, FC8-64, FC8-32E, FC8-48E, FX8-24	Intelligent Blade / Combination	Dependent on configuration. Requires power calculation for specific configuration	2 or 4 Power Supplies, depending on configuration	For DCX 8510-8, four (2+2) ¹ 220 VAC Power Supplies are required when any special purpose blade are installed
512 16Gb ports	FC16-64	Port Blade	4 Power Supplies	2 Power Supplies	200-240 VAC: 1+1 Power Supplies

					110 VAC: 2+2 ¹ Power Supplies
512 16Gb ports + QSFP ICLs	FC16-64	Port Blade	4 Power Supplies	2 Power Supplies	200-240 VAC: 1+1 Power Supplies 110 VAC: 2+2 ¹ Power Supplies

DCX8510-4 Power Supply Requirements

Typical Power Supply Requirements Guidelines for Blades in DCX 8510-4

(For specific calculation of power draw with different blade combinations, please refer to Appendix A: Power Specifications in the *Brocade DCX 8510-4 Backbone Hardware Reference Manual*.)

Configured Number of Ports	Blades	Type of Blade	DCX 8510-4 @110 VAC (Redundant configurations)	DCX 8510-4 @200-240 VAC (Redundant configurations)	Comments
96 ports max with QSFP ICLs	FC16-32, FC8-32E	Port Blade	2 Power Supplies	2 Power Supplies	1+1 redundancy with 110 or 200-240 VAC power supplies
Any combination of 8Gb or 16 Gb ports and intelligent blades with QSFP ICLs	FC16-32, FC16-48, FC16-64, FC8-32E, FC8-48E, FC8-64, FX8-24	Intelligent Blade / Combination	Not Supported	2 Power Supplies	200-240 VAC: 1+1 Power Supplies

X6-8 Power Supply Requirements

Typical Power Supply Requirements Guidelines for Blades in X6-8

(For specific calculation of power draw with different blade combinations, please refer to Power consumption section in the *Brocade X6-8 Director Hardware Installation Guide*.)

Configured Number of Ports	Blades	Type of Blade	X6-8 @100-120 VAC (Redundant configurations) ¹	X6-8 @200-240 VAC (Redundant configurations) ¹
144 32 Gbps ports + QSFP ICLs	FC32-48	Port Blade	3 or 4 Power Supplies (2+1 or 2+2 redundancy)	2 Power Supplies (1+1 redundancy)
384 32 Gbps ports + QSFP ICLs	FC32-48	Port Blade	Not Supported	3 or 4 Power Supplies (2+1 or 2+2 redundancy)

¹ For N+1 or N+N redundancy N PSUs must be available for system to support the load. In other words, failure of up to 1 PSU in N+1 configuration or N in N+N configuration will not impact system's operation.

Any combination of 32 Gbps ports and Extension blades with QSFP ICLs	FC32-48 SX6	Port Blade Extension Blade	Not Supported	3 or 4 Power Supplies (2+1 or 2+2 redundancy)
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X6-4 Power Supply Requirements

Typical Power Supply Requirements Guidelines for Blades in X6-4

(For specific calculation of power draw with different blade combinations, please refer to Power consumption section in the *Brocade X6-4 Director Hardware Installation Guide*.)

Configured Number of Ports	Blades	Type of Blade	X6-4 @100-120 VAC (Redundant configurations) ¹	X6-4 @200-240 VAC (Redundant configurations) ²
Any combination of 32 Gbps ports and Extension blades with QSFP ICLs	FC32-48 SX6	Port Blade Extension Blade	Not Supported	2 Power Supplies (1+1 redundancy)

Supported optics

For a list of supported fiber-optic transceivers that are available from Brocade, refer to the latest version of the Brocade Optics Family Data Sheet available online at www.brocade.com.

¹ For 1+1 redundancy 1 PSU must be available for system to support the load. In other words, failure of up to 1 PSU will not impact system's operation.

Software Upgrades and Downgrades

Image filenames

Download the following images from www.brocade.com.

Image filename	Description
v8.0.1b.zip	Fabric OS v8.0.1b for Windows
v8.0.1b_tar.gz	Fabric OS v8.0.1b for Linux
v8.0.1b.md5	Fabric OS v8.0.1b Checksum
v8.0.1b_all_mibs.tar.gz	Fabric OS v8.0.1b MIBs
v8.0.1b_releasenotes_v1.0.pdf	Fabric OS v8.0.1b Release Notes v1.0

Migration Path

This section contains important details to consider before migrating to or from this FOS release.

Migrating from FOS v8.0.1

Any Brocade G620 or X6 running any FOS v8.0.1 firmware can be non-disruptively upgraded to FOS v8.0.1b.

Migrating from FOS v8.0.0

Any Brocade G620 running any FOS v8.0.0 firmware can be non-disruptively upgraded to FOS v8.0.1b.

Migrating from FOS v7.4

Any Brocade 16G (Gen 5) platform and all blades in the Supported blades table running any FOS v7.4 firmware can be non-disruptively upgraded to FOS v8.0.1b

Migrating from FOS v7.3

Any Brocade 16G (Gen 5) platform and all blades in the Supported blades table operating at any FOS v7.3 firmware must be upgraded to FOS v7.4 firmware before it can be non-disruptively upgraded to FOS v8.0.1b.

Upgrade/downgrade considerations

Any firmware activation on a DCX 8510-8 or DCX 8510-4 with a FX8-24 blade installed will disrupt I/O traffic on the FCIP links.

Disruptive upgrades to Fabric OS v8.0.1b are allowed and supported from FOS v7.3.x (up to a two-level migration) using the optional “-s” parameter with the *firmwaredownload* command.

Limitations and Restrictions

Scalability

All scalability limits are subject to change. Limits may be increased once further testing has been completed, even after the release of this version of the Fabric OS. For current scalability limits for Fabric OS, refer to the Brocade SAN Scalability Guidelines document, available at www.brocade.com.

Compatibility/interoperability

Brocade Network Advisor Compatibility

Brocade Network Advisor is available with flexible packaging and licensing options for a wide range of network deployments and for future network expansion. Brocade Network Advisor 14.0.1 is available in the following editions:

- SAN-only
- IP-only
- SAN+IP

For SAN Management, Network Advisor 14.0.1 is available in three editions:

- **Network Advisor Professional:** a fabric management application that is ideally suited for small-size businesses that need a lightweight management product to manage their smaller fabrics. It manages two FOS fabric at a time and up to 300 switch ports. It provides support for Brocade FC switches, Brocade HBAs / CNAs, and Fibre Channel over Ethernet (FCoE) switches.
- **Network Advisor Professional Plus:** a SAN management application designed for medium-size businesses or departmental SANs for managing up to thirty-six physical or virtual fabrics (FOS) and up to 2,560 switch ports. It supports Brocade director products (X6-4, DCX 8510-4/DCX-4S, 48Ks, etc.), FC switches, Fibre Channel Over IP (FCIP) switches, Fibre Channel Routing (FCR) switches/ Integrated Routing (IR) capabilities, Fibre Channel over Ethernet (FCoE) / DCB switches, and QLogic and Emulex HBAs / CNAs.
- **Network Advisor Enterprise:** a management application designed for enterprise-class SANs for managing up to one hundred physical or virtual fabrics and up to 15,000 switch ports. Network Advisor SAN Enterprise supports all the hardware platforms and features that Network Advisor Professional Plus supports, and adds support for the Brocade directors (X6-8, DCX 8510-8/DCX) and Fiber Connectivity (FICON) capabilities.

More details about Network Advisor's new enhancements can be found in the Network Advisor 14.0.1 Release Notes, Network Advisor 14.0.1 User Guide, and Network Advisor 14.0.1 Installation, Migration, & Transition Guides.

Notes:

- Brocade Network Advisor 14.0.1 or later is required to manage switches running Fabric OS 8.0.1 or later.
- The Brocade Network Advisor seed switch should always have the highest FOS version used in the fabric.

WebTools Compatibility

Fabric OS 8.0.1 is qualified and supported with Oracle Java version 8 update 77. Please refer to the “Other Important Notes and Recommendations” section for more details.

SMI Compatibility

It is important to note that host SMI-S agents cannot be used to manage switches running Fabric OS 8.0.1. If you want to manage a switch running Fabric OS 8.0.1 using the SMI-S interface, you must use Brocade Network Advisor’s integrated SMI agent.

Fabric OS Compatibility

- The following table lists the earliest versions of Brocade software supported in this release, that is, the *earliest* supported software versions that interoperate. Brocade recommends using the *latest* software versions to get the greatest benefit from the SAN.
- To ensure that a configuration is fully supported, always check the appropriate SAN, storage or blade server product support page to verify support of specific code levels on specific switch platforms prior to installing on your switch. Use only Fabric OS versions that are supported by the provider.
- For a list of the effective end-of-life dates for all versions of Fabric OS, visit the following Brocade website: <http://www.brocade.com/en/support/product-end-of-life.html>

Supported Products	Fabric OS Interoperability
4100, 4900, 7500, 7500e, 5000, 200E, 48K Brocade 4012, 4016, 4018, 4020, 4024, 4424	Direct E_Port connections are not supported — must use FCR
Brocade 5410, 5480, 5424, 5430, 5431, 5432, 5450, 5460, 5470, NC-5480, VA-40FC	v7.3.1 or later
Brocade DCX, DCX-4S, 300, 5100, 5300	v7.3.1 or later
Brocade DCX with FS8-18 blade(s), Brocade Encryption Switch	v7.3.1 or later
Brocade 7800, DCX and DCX-4S with FCOE10-24 or FX8-24 blades	v7.3.1 or later
Brocade 8000	v7.1.2 or later ¹
Brocade DCX/DCX-4S with FA4-18 blade(s)	Direct E_Port connections are not supported — must use FCR ²
Brocade DCX 8510-8/DCX 8510-4	FOS v7.3.1 or later
Brocade DCX 8510-8/DCX 8510-4 with FC16-64 blade	FOS v7.3.1 or later
Brocade DCX 8510-8 with FCOE10-24 blade	FOS v7.3.1 or later
Brocade 6510, 6505, 6530, 7840	FOS v7.3.1 or later
6548, 6547, M6505, 6545, 6546	FOS v7.3.1 or later
6543	FOS v7.4.1 or later

¹ Brocade 8000 is not supported with Fabric OS v7.2.x or later.

² FA4-18 is not supported in a DCX/DCX-4S that is running Fabric OS v7.0 or later.

6558	FOS v8.0.1 or later ¹
Brocade G620	FOS v8.0.0 or later
Brocade X6-8/X6-4	FOS v8.0.1 or later
Brocade X6-8/X6-4 with FC32-48 blade or SX6 blade	FOS v8.0.1 or later
48000 with FA4-18 blade(s), Brocade 7600	Not Supported
Mi10k, M6140 (McDATA Fabric Mode and Open Fabric Mode)	Not Supported

Multi-Protocol Router Interoperability	
Brocade 7500, 7500e	Not Supported
McDATA SANRouters 1620 and 2640	Not Supported

SNMP Support

Fabric OS 8.0.1 documents the supported MIBs in the *MIB Reference Guide* supporting Fabric OS 8.0.1. For information about SNMP support in Fabric Operating System (FOS) and how to use MIBs, refer to the *Fabric OS Administrator's Guide* supporting Fabric OS 8.0.1.

Obtaining the MIBs

You can download the MIB files required for this release from the downloads area of the MyBrocade site. To download the Brocade-specific MIBs from the Brocade Technical Support website, you must have a user name and password. Use the following steps to obtain the MIBs you want.

1. On your web browser, go to <http://my.brocade.com>.
2. Login with your user name and password.
3. Click the downloads tab.
4. On the downloads tab, under Product Downloads, select All Operating Systems from the Download by list.
5. Select Fabric Operating System (FOS), and then navigate to the release.
6. Navigate to the link for the MIBs package and either open the file or save it to disk.

NOTE: Distribution of standard MIBs has been stopped. Download the required standard MIBs from the <http://www.oidview.com/> or <http://www.mibdepot.com/> website.

¹ Support merged from embedded FOS releases.

Important Notes

In-flight Encryption and Compression

- Fabric OS 8.0.1 does not support in-flight encryption on Brocade G620 or X6 directors. The CLI command for port configuration for in-flight encryption is blocked in Fabric OS 8.0.1.
- In-flight compression is supported in Fabric OS v8.0.1 on Brocade G620 and X6 directors.
- In-flight encryption and compression are supported on 6510, 6520, and DCX 8510 platforms.

ClearLink Diagnostics (D_Port)

- Fabric OS 8.0.1 supports D_Port tests between two Brocade switches and between Brocade switches and Gen 5 (16 Gbps) and Gen 6 (32 Gbps) Fibre Channel Adapters from QLogic and Emulex. Following are specific adapter models and driver versions tested by Brocade with Fabric OS v8.0.1 for ClearLink.

	Emulex 16G Adapter	Emulex 32G Adapter	QLogic 16G Adapter	QLogic 32G Adapter
Adapter Model	LPe16002B-M6	LPe32000 (LPe31002-M6)	QLE2672	QLE2742
Adapter Firmware	10.6.144.21	11.0.243.11	7.04.01	8.03.03
Adapter Driver	10.6.114.0	11.0.247.0	STOR Miniport 9.1.15.21	STOR Miniport 9.1.17.21

- The D_Port long duration test can only be run on one port at a time.
- Long-duration optical loopback tests can be run on only one port at a time.
- Long-duration electrical loopback tests are not supported.

Forward Error Correction (FEC)

- FEC is mandatory with Gen 6 Fibre Channel operating at 32 Gbps. This means that the **portCfgFec** command only applies to ports running at 16 Gbps or 10 Gbps.
- FEC capability is not supported with all DWDM links. This means that FEC may need to be disabled on 16 Gbps or 10 Gbps ports when using DWDM links with some vendors. This is done using the **portCfgFec** command. Failure to disable FEC on these DWDM links may result in link failure during port bring up. Refer to the *Brocade Fabric OS 8.x Compatibility Matrix* for supported DWDM equipment and restrictions on FEC use.

Access Gateway

- The 32G links with 4x32G QSFP ports (port 48–port 63) do not have default mappings. These ports will be disabled by default when a Brocade G620 is enabled for Access Gateway mode or the configuration set to default.
- The Brocade G620 supports cascaded Access Gateway topology with FOS v8.0.1a and later.

Ingress Rate Limiting

- Fabric OS 8.0.1 does not support ingress rate limiting on Brocade G620 or X6 platforms.

Ethernet Management Interface

- Enabling IPsec on management interface is not supported on Brocade G620 switches. The **IPSecConfig** command is blocked to prevent enabling the configuration.
- The recommended interface speed configuration for a Brocade G620 is 1G auto-negotiate. If a G620 is configured for 10/100M Gbps forced-speed and fails to establish a link, Brocade recommends using a cross-over cable.
- If a Brocade switch management interface is running at 10Mbit/sec, certain FOS operations such as **firmwareDownload** may fail.
- The 10 Gbps management interface on CPX6 blades is not supported.
- The half-duplex mode for the X6 director and Brocade 7840 is not supported and is blocked.

Extension

- IP Extension (IPEXT) between a Brocade 7840 and a SX6 blade is supported only if the 7840 is running FOS v8.0.1 or later. FCIP extension between a Brocade 7840 with FOS v7.4 and a SX6 blade with FOS v8.0.1 is supported. The following table documents the combinations.

Site1 Switch/Blade	Site1 Firmware	Site2 Switch/Blade	Site2 Firmware	Supported
7840	8.0.1	7840	7.4.X	Both FCIP and IPEXT traffic
SX6	8.0.1	7840	7.4.X	FCIP traffic but not IPEXT traffic
SX6	8.0.1	7840	8.0.1	Both FCIP and IPEXT traffic
SX6	8.0.1	SX6	8.0.1	Both FCIP and IPEXT traffic

- It is recommended that administrators not to configure the HA VE pair (VE16, VE26), (VE17, VE27), (VE18, VE28), etc. where each VE in the pair is in a different LS with different traffic policy (port based routing and exchange based routing). The workaround is to configure different HA VE pairs such as (VE16, VE27), (VE17, VE26), etc. when putting each VE pair in different LS with different traffic policy.
- When Non-Terminate TCP (NT-TCP) is enabled on Traffic Control Lists (TCLs) and a firmware downgrade to FOS v7.4.1d is attempted on Brocade 7840, the downgrade will be blocked. Users must remove NT-TCP from the TCLs with NT-TCP enabled in order to downgrade the firmware. After firmware is downgraded to FOS v7.4.1d, users can re-enable the NT-TCP flag.

Brocade Analytics Monitoring Platform

- FOS v8.0.1a and later supports vTap on Brocade Gen 5 and Gen 6 platforms to be monitored by the Brocade Analytics Monitoring Platform. The supported Brocade platforms include: 6510, 6505, 6520, DCX 8510, 6543, 6545, 6546, 6547, 6548, M6505, 6558, G620, X6
- FOS AMPOS 1.5.0 is required on Brocade Analytics Monitoring Platform to monitor fabric switches running FOS v8.0.1a or later. Analytics Switch Links (ASLs) will segment between a fabric switch running FOS v8.0.1a or later and an Analytics Monitoring Platform with FOS_v7.4.0_amp4 or earlier version. It is recommended to upgrade Analytics Monitoring Platform to FOS AMPOS 1.5.0 before upgrading fabric switches to FOS v8.0.1a or later. vTap flows will implicitly de-activate during firmware upgrade to FOS v8.0.1a or later and re-activate after FOS v8.0.1a or later upgrade.

- When a D_Port mode configuration mismatch between a fabric source switch and Analytics Monitoring Platform leads to a segmented analytic switch link, the source switch will display the segmented AE_Port as a segmented E_Port. This is tracked as defect 563489.
- vTap and auto-discovered AF_Port do not support high availability. In the event that an AF_port is re-discovered by a fabric switch after a domain change on the attached Analytics Monitoring Platform and followed by an hafailover or hareboot of the fabric switch, the remote AF_port information would be stale and vTap flows cannot be activated. In this case, use one of the following workarounds:
 - Manually configure the AF_Port after hafailover or hareboot
 - Disable and then enable the AF_Port on the Analytics Monitoring Platform
 - Deactivate vTap flow before firmware download, hafailover, or hareboot and activate vTap flow again.
- vTap and CS_CTL are mutually exclusive on a fabric switch. If CS_CTL is enabled on one port, the entire switch cannot enable vTap. An F_Port trunk supporting CS_CTL must have all ports in the trunk group enabling CS_CTL. Similarly, in order to enable vTap, all ports in an F_Port trunk must have CS_CTL disabled. In addition, the master port of a trunk should remain the same between CS_CTL enable and disable. If this sequence is not followed, vTap may remain active even after CS_CTL is enabled on an F_Port, or the error message “Disable QoS zones error” may be observed when enabling vTap. A suggested method is to use the following sequence:
 - When enabling CS_CTL mode, enable on all slave ports, followed by enabling on the master port, noted as port M.
 - When disabling CS_CTL mode, disable all active ports in the trunk, except the master port M. Disable CS_CTL mode on port M. Enable all ports in the trunk followed by disabling CS_CTL mode on the remaining ports.
 - When CS_CTL is enabled on a port without any connection, after reboot and disabling CS_CTL, vTap cannot be enabled. The workaround is to enable the port as a SIM port after disabling CS_CTL, then toggle the port and remove the SIM port configuration.
- vTap and in-flight encryption or compression compatibility is supported only on the following platforms: Brocade DCX8510, X6, G620, and 6520. On DCX8510 and 6520 platforms, the ports with vTap enabled and ports with in-flight encryption or compression enabled must belong to different ASICs. Please refer to the hardware installation guides of these platforms for port to ASIC mapping boundary. The RAS log message FV-1003 displays the incorrect user port range for which the encryption or compression is not enabled.
- Attempt to activate a vTap flow that is already activated will receive an incorrect error message: “Activated features(s) not currently enforced for this flow because either AF port is not reachable or it is disabled.” This is tracked as defect 603032.
- After a **slotpoweroff** and **slotpoweron** a blade in an X6 director with an AE_port, a vTap mirrored flow may stop but the number of mirrored frames may continue incrementing. To recover from this condition, port disable and enable the AE_port, or de-activate and activate the vTap flow. This is tracked as defect 603698.
- Running **flow --show sys_analytics_vtap** command when vTap and QoS High compatibility mode is enabled but vTap flow is not active may display incorrect the message: “Enable vTap and QoS High Priority Zone Compatibility Mode to active vTap flow. Please use configurechassis command to enable this compatibility mode.” This is tracked as defect 604429

- After a **configuredownload** followed by **switchenable**, or a flow statistics reset on Brocade X6 and G620, MAPS may incorrectly reports VTAP IOPS > 250,000 violation.

Flow Vision

- Flow Vision supports only logical group names that begin with alphabetic characters.
- Frame count statistics of a Flow Monitoring flow may stop incrementing after a **statsclear** command. To work around the problem, users may run the **slotStatsClear** command. To recover from such condition, users should run the following steps:
 1. Disable all flows in the logical switch.
 2. Delete the problem flow.
 3. Create a new flow to replace the problem flow.
 4. Activate the new replacement flow.
 5. Verify the new replacement flow.
 6. Enable all other flows.

FICON

For FICON-qualified releases, please refer to the “Additional Considerations for FICON Environments” section of the Appendix for details and notes on deployment in FICON environments. (This appendix is only included for releases that have completed FICON qualification).

Miscellaneous

- If the ambient temperature is above the recommended operational limit, the power supply units may shut down, in particular when the ambient temperature is above 62C degree for Brocade X6 directors. This will result in the switch being shut down without any warning. Please refer to the *Brocade G620 Hardware Installation Guide* and the *Brocade X6-8/X6-4 Hardware Installation Guides* for the recommended ambient temperature limits for the switches.
- After a Power Supply unit is removed from a Brocade G620, the **historyShow** command may miss the entries for this FRU removal or insertion event. In addition, the RASLog ERROR message EM-1028 may be logged when the Power Supply is removed. This condition can be corrected by a power-cycle of the switch.
- After running offline diagnostics mode 1 on QSFP ports, a Brocade G620 must be rebooted before operational use.
- If DH-CHAP authentication policy is used and a shared secret is configured in FOS v8.0.1, after firmware downgrade to FOS v7.4.1x or earlier, the shared secret can no longer be used, resulting in port authentication failure on the next port online/offline. The workaround is to remove the DH-CHAP shared secrets *before* firmware downgrade from FOS v8.0.1 and to configure the shared secrets again after firmware downgrade. This issue is reported under defect 596527.
- When a Flow Monitor flow is defined and activated to monitor a specific frame type, the flow display output does not provide any frame counter statistics. This issue is reported under defect 596073.
- SmartOptics 16 Gbps optical transceivers are not supported on Brocade X6 director and G620 switch.
- All links in an ICL QSFP connection on an X6 director must be configured to the same speed using the **portCfgSpeed** command from one of the following supported list: 16 Gbps, 32 Gbps, or ASN.

Defects

Some defects listed in the following tables do not apply to the Brocade G620 or X6 platforms but were disclosed in a previous release.

Closed with code changes in Fabric OS 8.0.1b

This section lists software defects with Critical, High, and Medium Technical Severity closed with a code change as of August 31, 2016 in version 8.0.1b.

Defect ID: DEFECT000589602	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology Group: Management
Reported In Release: FOS7.4.0	Technology: Virtual Fabrics
Symptom: Various symptoms after a flooding of Class 2 FICON frame hit switch CPU such as: CP cards cannot initialize FOS or loss of Logical switch configuration.	
Condition: This may occur in FICON setup where device flood switch with class 2 RNID frames at a high rate.	
Workaround: Disable ports that send switch flooding frames.	
Recovery: Recreate missing FID after rebooting switch.	

Defect ID: DEFECT000594896	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology Group: Management
Reported In Release: FOS7.3.1	Technology: Software Installation & Upgrade
Symptom: Director or switch cannot boot up after reboot/hareboot/hafailover. It reports "The system is coming up, please wait..." but does not progress further.	
Condition: This is more likely to happen on switch/director that is configured with NTP service with FOS v7.2.1e, v7.3.1, v7.4.1 or later releases that contains the fix for Defect 501658. Impacted platforms are: DCX, DCX-4S, DCX8510-8, DCX8510-4, Brocade 5300, Brocade 6520, and Brocade Encryption Switch	
Workaround: For director, before any reboot, run <pre>> /sbin/hwclock RTC_RD_TIME: Bad address ioctl() to /dev/rtc to read the time failed.</pre> If it reports above error, perform hafailover and reset CP so recovery is non-directruptive. For switch, please schedule a window for a disruptive POR.	
Recovery: Reseat the impacted / hung CP blade. POR the impacted switch.	

Defect ID: DEFECT000596542	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology Group: Management
Reported In Release: FOS7.4.1	Technology: Fibre Channel Addressing
Symptom: In a FICON environment, timeouts occur between the mainframe and the FICON CUP which causes lots of error messages to appear on the mainframe console.	
Condition: This is more likely to occur when there is an: 1) increase in the number of Brocade Network Advisors (BNAs) monitoring the fabric, and/or 2) increase in the number logical FICON paths between the mainframe and the FICON CUP.	
Workaround: Reduce the number of Brocade Network Advisors (BNA) monitoring the fabric, and/or reduce the number of logical FICON paths.	
Recovery: Same as the workaround.	

Closed with code changes in Fabric OS 8.0.1a

This section lists software defects with Critical, High, and Medium Technical Severity closed with a code change as of June 30, 2016 in version 8.0.1a.

Defect ID: DEFECT000561871	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology Group: Management
Reported In Release: FOS7.3.1	Technology: Fibre Channel Services
Symptom:	If the portEportCredits and portFportBuffers are set on ports using these respective CLI commands, then performing a configdownload that does not include these 'keys' results in the ports being set back to the default setting.
Condition:	This occurs upon configdownload of a configuration file with portEportCredits and portFportBuffers keys absent.
Workaround:	Do not remove port eportcredits and fportbuffers configuration from the configdownload configuration file.
Recovery:	reconfigure the impacted ports by invoking portEportCredits and portFportBuffers CLI commands.

Defect ID: DEFECT000563629	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology Group: Extension
Reported In Release: FOS7.2.1	Technology: FCIP - Fibre Channel over IP
Symptom:	One or more IPSec enabled FCIP circuits may continuously bounce or go down and not recover. The affected DP will report Authentication Tag Mismatch errors continually.
Condition:	This may be encountered when IPSec is enabled on an FCIP tunnel between a pair of FX8-24 blades.
Recovery:	Reboot the affected FX8-24 blade.

Defect ID:	DEFECT000576596		
Technical Severity:	High	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Monitoring
Reported In Release:	FOS8.0.0	Technology:	RAS - Reliability, Availability, and Serviceability
Symptom:	When configremoveall is issued, FFDC SNMP-1004 error is seen.		
Condition:	The FFDC SNMP-1004 error occasionally can be seen during a configremoveall.		

Defect ID:	DEFECT000587033		
Technical Severity:	High	Probability:	Low
Product:	Brocade Fabric OS	Technology Group:	Management
Reported In Release:	FOS8.0.1	Technology:	Configuration Fundamentals
Symptom:	A switch panic may be seen when spinfab is disrupted while in progress.		
Condition:	The panic is seen only when all ports or the switch are manually disabled while D-Port or spinfab (online tests) are running. Note that such manual disabling of ports/switch is not recommended while these tests are in progress.		

Defect ID:	DEFECT000587533		
Technical Severity:	High	Probability:	Low
Product:	Brocade Fabric OS	Technology Group:	Monitoring
Reported In Release:	FOS8.0.1	Technology:	D-Port - Diagnostic Port
Symptom:	When the D-Port test is run on a range of ports containing more than 30 ports, the D-Port test may occasionally fail on one port.		
Condition:	The issue occurs only when the D-Port test is run simultaneously on more than the recommended number (8) of ports.		
Workaround:	Rerun the D-Port test on the failed ports.		

Defect ID:	DEFECT000590472		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Monitoring
Reported In Release:	FOS8.0.1	Technology:	Flow Vision
Symptom:	Sort by option for flow show in sys_mon_all_fports does not take the SID column into consideration.		
Condition:	When 'flow --show sys_mon_all_fports -sortby column2' CLI is executed, it takes the DID column to sort the output instead of the SID column.		

Defect ID:	DEFECT000590689		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Security
Reported In Release:	FOS7.3.2	Technology:	Security Policies
Symptom:	When "seccertutil genscr" is executed to generate CSR file, unneeded integer number is displayed between "Generating CSR, file name is:" and "Done." messages.		
Condition:	This issue is seen on all platforms running FOSv7.3.2 but there is no functional impact.		

Defect ID:	DEFECT000590890		
Technical Severity:	High	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Monitoring
Reported In Release:	FOS8.0.1	Technology:	MAPS - Monitoring and Alerting Policy Suite
Symptom:	Maps CIR_UTIL violation may display large % value in configurations having 8 logical switches.		
Condition:	Extension Service Module may run out of resources when an IPEX tunnel in the base switch is shared by multiple logical switches		

Defect ID:	DEFECT000590931		
Technical Severity:	Medium	Probability:	Low
Product:	Brocade Fabric OS	Technology Group:	Management
Reported In Release:	FOS8.0.1	Technology:	Software Installation & Upgrade
Symptom:	System checks during firmware install can add several minutes delay when downgrading a GEN5 platform to FOS v7.3.x or v7.4.x from FOS v8.0.1.		
Condition:	On Gen5 platforms during firmware downgrade to FOS v7.3.x or v7.4.x from FOS v8.0.1.		

Defect ID:	DEFECT000591754		
Technical Severity:	High	Probability:	High
Product:	Brocade Fabric OS	Technology Group:	Management
Reported In Release:	FOS7.4.0	Technology:	Configuration Fundamentals
Symptom:	Attempts to change IP address on embedded switch fails intermittently.		
Condition:	This may be seen with Brocade M5424 switch, when IP address change is performed through CMC management module.		
Workaround:	Log into serial console and use "ipaddrset" to change IP address.		

Defect ID:	DEFECT000591792		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Management
Reported In Release:	FOS8.0.1	Technology:	Configuration Fundamentals
Symptom:	Executing the ethif CLI command displays error message "Error: ifModeSet - Permission denied"		
Condition:	The ifModeset CLI is deprecated. There is no loss of functionality.		

Defect ID:	DEFECT000591922		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Extension
Reported In Release:	FOS8.0.1	Technology:	FCIP - Fibre Channel over IP
Symptom:	Unable to modify an enabled TCL when max TCLs are active.		
Condition:	Maximum number of TCLs configured and enabled on the system.		
Workaround:	Use portcfg tcl <name> modify --admin-status disable to disable the TCL first and then can modify the required parameter and re-enable the TCL.		

Defect ID:	DEFECT000592802		
Technical Severity:	Medium	Probability:	High
Product:	Brocade Fabric OS	Technology Group:	Monitoring
Reported In Release:	FOS8.0.1	Technology:	D-Port - Diagnostic Port
Symptom:	Porttest command fails on ports in a logical switch or base switch that are configured as D-port.		
Condition:	Porttest command failure is seen when executed on ports in a logical switch or base switch that are configured as D-port.		
Workaround:	Use D-port for running link diagnostics		

Defect ID:	DEFECT000593302		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Extension
Reported In Release:	FOS8.0.1	Technology:	Extended Fabrics
Symptom:	Small data transfers fail on TCP connections running through IP Extension.		
Condition:	A very short lived TCP connection that sends a small amount of data immediately after it is established and is followed by an immediate close, may close without transferring any data. The TCP connection must be terminated through IP Extension.		

Defect ID:	DEFECT000593472		
Technical Severity:	High	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Security
Reported In Release:	FOS8.0.1	Technology:	HTTP/HTTPS
Symptom:	The security certificate DAYS_TO_EXPIRE rule violation will not be highlighted in Summary Report's Todays section instead, it will be highlighted in Last 7 days section even when the rule was violated today.		
Condition:	The issue is observed due to dashboard backup is after the rule violation.		
Workaround:	For security certificate DAYS_TO_EXPIRE rule violation, please refer RASLOG message.		

Defect ID:	DEFECT000593549		
Technical Severity:	High	Probability:	High
Product:	Brocade Fabric OS	Technology Group:	Extension
Reported In Release:	FOS8.0.1	Technology:	FCIP - Fibre Channel over IP
Symptom:	SFP on GE port comes up as Laser_Flt		
Condition:	This is seen on 10G tunable SFP.		

Defect ID:	DEFECT000593653		
Technical Severity:	High	Probability:	Low
Product:	Brocade Fabric OS	Technology Group:	Management
Reported In Release:	FOS7.2.0	Technology:	CLI - Command Line Interface
Symptom:	The portcfgportcredits CLI command does not appear to set the credits specified in the command input.		
Condition:	This issue may be observed with various platforms running FOS7.2.1f, 7.3.1c, 7.4.1 or later releases.		
Recovery:	Bounce the affected port after running portcfgportcredits.		

Defect ID:	DEFECT000595452		
Technical Severity:	Medium	Probability:	Low
Product:	Brocade Fabric OS	Technology Group:	Extension
Reported In Release:	FOS8.0.1	Technology:	FCIP - Fibre Channel over IP
Symptom:	FICON interface timeout detected messages/IOS005I messages during FCIP HCL		
Condition:	Problem occurs after retry-able HCL Feature Disable errors occur, with active FICON traffic on an FCIP tunnel that has FICON emulation features enabled.		

Defect ID:	DEFECT000595474		
Technical Severity:	Medium	Probability:	Low
Product:	Brocade Fabric OS	Technology Group:	Management
Reported In Release:	FOS8.0.1	Technology:	Software Installation & Upgrade
Symptom:	The power usage of CPX6 blade or SX6 extension blade might display higher in the chassisshow output than the actual power usage.		
Condition:	FOS erroneously calculates the power usage of the CPX6 blades.		

Defect ID:	DEFECT000595586		
Technical Severity:	High	Probability:	Low
Product:	Brocade Fabric OS	Technology Group:	Management
Reported In Release:	FOS8.0.1	Technology:	Management GUI
Symptom:	Memory, equal to the size of the hash configured, lost during each authentication. Over a long period of time, system may become unstable and report memory leak issue.		
Condition:	On switches having WebTools and BNA management sessions.		

Defect ID:	DEFECT000595599		
Technical Severity:	High	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Traffic Management
Reported In Release:	FOS8.0.1	Technology:	Fibre Channel Routing
Symptom:	When the port that is online at 32G goes offline because of link failure and comes back online, the port can form a separate trunk because of the FEC state mismatch with master port. This problem applies for 32G trunking ports.		
Condition:	This problem applies for 32G trunking ports and occurs when the port goes offline because of Link failure and then comes online and tries to join master port.		

Defect ID:	DEFECT000595761		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Management
Reported In Release:	FOS8.0.1	Technology:	Software Installation & Upgrade
Symptom:	Fan speed continuously oscillate between two speed levels every 30 minutes. Customers will see HIL-1516 raslog every time the fan speed increases as part of this oscillation.		
Condition:	The fan oscillation happens on X6-4 and X6-8 chassis.		

Defect ID:	DEFECT000595768		
Technical Severity:	High	Probability:	High
Product:	Brocade Fabric OS	Technology Group:	Extension
Reported In Release:	FOS7.4.1	Technology:	Fastwrite
Symptom:	Repetitive XTUN-1001 and associated XTUN-1997 or XTUN-1999 RASLOGs reported from active FCIP DP Complex.		
Condition:	Problem can occur when a particular Disk controller to controller mirroring application is active over the FCIP Tunnel, and uses an FC ELS-PRLI sequence as a heartbeat mechanism.		

Defect ID:	DEFECT000595881		
Technical Severity:	Medium	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Extension
Reported In Release:	FOS8.0.1	Technology:	WAN Performance Analysis Tools
Symptom:	FCIP Circuit is in an Online Warning state after applying an SLA, due to SLA misconfiguration.		
Condition:	Configuring an FCIP Circuit with an SLA when the circuit is in a Down state.		
Workaround:	Apply SLA configuration as part of the FCIP circuit create command, or after the circuit state reaches In Progress or Online.		

Defect ID:	DEFECT000596027		
Technical Severity:	High	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Extension
Reported In Release:	FOS7.4.1	Technology:	FCIP - Fibre Channel over IP
Symptom:	FCIP FCP and FICON I/O Errors during FCIP HCL Failover or Failback processing on FCP or FICON Emulation enabled tunnels		
Condition:	When running active FICON and FCP traffic over a FICON emulation and FCP emulation enabled FCIP tunnel (or different tunnels) and performing an FCIP HCL firmware upgrade or downgrade.		

Defect ID:	DEFECT000596220		
Technical Severity:	High	Probability:	Medium
Product:	Brocade Fabric OS	Technology Group:	Extension
Reported In Release:	FOS8.0.1	Technology:	FCIP - Fibre Channel over IP
Symptom:	Upon GE port disable or switchdisable, connections are not cleared, as a result buffers are not freed up.		
Condition:	This occurs following GE port disable or switchdisable with IPSec configured tunnels		

Defect ID:	DEFECT000596527		
Technical Severity:	Medium	Probability:	Low
Product:	Brocade Fabric OS	Technology Group:	Security
Reported In Release:	FOS8.0.1	Technology:	Fabric Authentication
Symptom:	Port may become disabled after a firmware download from FOS v8.0.1 to FOS v7.4.x with port authentication set to DHCHAP		
Condition:	Firmwaredownload from FOS v8.0.1 to FOS v7.4.x		
Workaround:	Remove the DHCHAP keys using "secauthsecret --remove --all" and add the keys back after downgrade to FOS v7.4.x		

Defect ID:	DEFECT000596539		
Technical Severity:	Medium	Probability:	High
Product:	Brocade Fabric OS	Technology Group:	Monitoring
Reported In Release:	FOS8.0.1	Technology:	MAPS - Monitoring and Alerting Policy Suite
Symptom:	Brocade 6505 model switch when shipped with single FAN/PS FRU which is the default ship configuration for this model will show WARNING message and MARGINAL switch state.		
Condition:	Brocade 6505 model that is shipped with single FAN/PS FRU.		

Defect ID:	DEFECT000597572		
Technical Severity:	High	Probability:	Low
Product:	Brocade Fabric OS	Technology Group:	Extension
Reported In Release:	FOS7.1.0	Technology:	FCIP - Fibre Channel over IP
Symptom:	Channel Detected Error message on z/OS console and extended tape read job failure		
Condition:	This is seen when FCIP FICON Tape Read Pipelining is active and the tape controller returns an immediate command retry status (0x4E status) to the active read command.		

Defect ID:	DEFECT000599105		
Technical Severity:	High	Probability:	High
Product:	Brocade Fabric OS	Technology Group:	Management
Reported In Release:	FOS7.0.2	Technology:	Software Installation & Upgrade
Symptom:	DCX Power Supply may encounter "unknown header" after performing a reboot via firmwaredownload or hafailover that may result in a faulty power supply unit, where Chassisshow command shows PS as follows: POWER SUPPLY Unit: <n> Unknown		
Condition:	This is a very rare occurrence that may lead to FRU header corruption in the power supply internal EEPROM.		

Defect ID:	DEFECT000600653		
Technical Severity:	Medium	Probability:	High
Product:	Brocade Fabric OS	Technology Group:	Extension
Reported In Release:	FOS7.3.1	Technology:	FCIP - Fibre Channel over IP
Symptom:	FCIP Tunnel down errors and accompanying BLZ-5024 RASLOG		
Condition:	This is seen with FCIP FICON Emulation configured tunnel and channel path error recovery occurring between channel(s) and control unit(s) or between control unit(s) and channel(s) causing OXID registration errors on the DP (only visible via FTRACE).		

Defect ID:	DEFECT000603905		
Technical Severity:	Medium	Probability:	High
Product:	Brocade Fabric OS	Technology Group:	Management
Reported In Release:	FOS7.4.1	Technology:	Software Installation & Upgrade
Symptom:	FOS may attempt a CP firmware autosync even when the standby CP is at FOS levels below v6.4.0		
Condition:	This may be seen only when Active CP is at v6.4.0 or higher FOS version and a standby CP with FOS version lower than v6.4.0 is inserted		
Workaround:	manually invoke firmwaredownload to bring the standby CP in sync with the same FOS version as that on the active CP.		

Closed with code changes in Fabric OS 8.0.1

This section lists software defects with Critical, High, and Medium Technical Severity closed with a code change as of April 22, 2016 in version 8.0.1.

Defect ID: DEFECT000471762	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.2.0	Technology Area: Flow Vision
Symptom: Two bi-directional flows monitoring a common subset of traffic do not monitor the frame and byte parameters for one of the flows.	
Condition: Two bi-directional (- bidir option) flows on the same chip monitoring a common subset of traffic and with one of the device parameters (srcdev or dstdev) not specified.	

Defect ID: DEFECT000507871	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.0	Technology Area: RAS - Reliability, Availability, and Serviceability
Symptom: If framelog is disabled before HAFailover, then after HAFailover framelog will be enabled	
Condition: The defect will be hit only if the following sequence happens: 1. Install new firmware 2. Change framelog config using framelog --disable 3. HAFailover After HAFailover completes, framelog will show enabled and disabling or changing framelog configuration will not be effective	
Recovery: Recovery is to do a HAFailover again and restore framelog configuration to default (enabled)	

Defect ID: DEFECT000523247	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.0	Technology Area: Flow Vision
Symptom: Flow command functions inconsistently after creating multiple flows with Egress E_Ports	
Condition: The issue will happen under stress test where one creates more than ten flows with same sid/did pair.	
Recovery: configdownload the previous working configuration on the switch.	

Defect ID: DEFECT000524199	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.0	Technology Area: Flow Vision
Symptom: There are no Tx counts on ingress F_Port for frame size and there are no Rx frame counts on the Egress on the same flow being monitored on the E_Port, when Flows are configured on the same ASIC chip.	
Condition: If Rx/Tx frame size counts are zero on ingress/egress ports for flows created on same chip, i.e. ASIC chip duplicate flows.	

Defect ID: DEFECT000524532	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.2.1	Technology Area: Bottleneck Detection (legacy)
Symptom: Unwarranted Bottleneck Detection alerts may be encountered on a switch.	
Condition: This issue stems from a failing API leading to incorrect computations. When applying consistent latency into the switch, the AN-1003 messages for the specific F_Port show very low affected percentages with a slowdown value of 0.	

Defect ID: DEFECT000526904	
Technical Severity: Low	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.2.1	Technology Area: SNMP - Simple Network Management Protocol
Symptom: Desired severity of swEventTrap and swFabricWatchTrap are set to none after configdownload (SNMP config replication from one switch to another using BNA)	
Condition: happens when the swEventTrap and swFabricWatchTrap configuration in switch and configuration file are different, but their desired severity levels are same.	

Defect ID: DEFECT000532799	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.0	Technology Area: Management GUI
Symptom: WebTools fails to launch from browser if HTTPS and fully qualified domain name (FQDN) are used.	
Condition: FQDN names may not work after upgrading to FOS 7.2.x and above.	
Workaround: Use switch IP address instead of fully qualified domain name.	

Defect ID: DEFECT000533422	
Technical Severity: Low	Probability: Low
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.2.1	Technology Area: Fibre Channel Routing
Symptom: Fabric router switch may observe panic upon receiving invalid frame from edge switch.	
Condition: This happens when fabric router running FOS7.2.x or earlier receives unknown Fibre Channel Common Transport (FC_CT) request from edge switch with zero sized payload. This does not apply to FOS v7.3.x or later.	
Recovery: Disable edge switch port and upgrade.	

Defect ID: DEFECT000537498	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Management GUI
Symptom: Switch hardware view shows the blade status LED as black instead of amber, if the FC16-64 port blade is in faulty state.	
Condition: Switch hardware view shows the blade status LED as black when the FC16-64 port blade goes to faulty state.	

Defect ID: DEFECT000537571	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.2.0	Technology Area: Hardware Monitoring
Symptom: CRC errors with good EOF at 4G speed may be encountered when with some SFPs.	
Condition: This may be seen when using 4G LW SFP part number 57-1000027-02.	

Defect ID: DEFECT000541364	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Configuration Fundamentals
Symptom: Customer may notice few links get stuck at "Hard_Flt" state and may notice "C3-1002" RAS events	
Condition: F port trunk disable/enable may cause this	
Recovery: Toggle the port. If problem persists, reboot the switch.	

Defect ID: DEFECT000544678	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.0	Technology Area: Configuration Fundamentals
Symptom: The warning message for supportInfoClear CLI command needs more clarity and explicitness to better assist the user of this command.	
Condition: This is a suggested enhancement to the warning message of supportInfoClear CLI command only.	

Defect ID: DEFECT000546719	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.4.0	Technology Area: Fibre Channel Routing
Symptom: Proxy creation failure may be observed along with RASLog message WARNING FCR-1021 00 0x0004 Local LSAN device entries exhausted while updating LSAN zone %s device entries.	
Condition: In a large Meta SAN, if 10,000 proxy devices already exist and there is an attempt to add more proxy devices, the proxy device creation will be failed.	
Recovery: Run fcrproxyconfig CLI command to determine the total number of proxy devices in the switch. If the total count shows 10,000 proxy devices, use " fcrproxyconfig -r " to remove some proxy devices.	

Defect ID: DEFECT000547722	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Other
Reported In Release: FOS7.1.2	Technology Area: Other
Symptom: Configuration keys corresponds to credit recovery feature may not be consistently reflected in configshow.	
Condition: This issue is seen when user changes credit recovery feature configuration.	
Recovery: Only display issue, the feature works as expected.	

Defect ID: DEFECT000547833	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: Following the user invocation of the slotstatsclear CLI command, MAPS may report large latency percentages for IO_PERF_IMPACT.	
Condition: This may be seen only after the execution of the CLI command slotstatsclear . This stems from incorrect data values for the CRED_ZERO counter returned by the ASIC driver to MAPS.	
Workaround: No workaround.	
Recovery: The latency messages related to the IO_PERF_IMPACT should be ignored if there is big latency reported few minutes after slotstatsclear command is issued. The problem if it happens does with 2 minutes after the command.	

Defect ID: DEFECT000547835	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: FOS does not generate MAPS-1010 RASLOG message if BNA fences the F_Port.	
Condition: It is applicable if the switch or fabric is monitored by BNA and port decommission is configured and enabled. If BNA is unable to decommission an F_Port it then fences the port as a fall back action and in this case MAPS-1010 RASLOG message is not generated. Note, port decommission action always fences associated port so, if BNA fails to decommission F_Port then it fences the port.	

Defect ID: DEFECT000548700	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0	Technology Area: Flow Vision
Symptom: A learning flow created on an egress port shows frame size as "--" after multiple monitoring resets or the total frame size is sometimes off by 8 bytes.	
Condition: User has a learned monitoring flow created on the egress port.	
Recovery: Deactivate and reactivate the flow.	

Defect ID: DEFECT000550089	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0	Technology Area: Flow Vision
Symptom: Predefined learn flow statistics does not increment in a Backbone-to-Edge setup after monitoring traffic for some time.	
Condition: Predefined monitor learn flow is active with continuous traffic.	
Recovery: Deactivate and reactivate the predefined learn flow.	

Defect ID: DEFECT000550520	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Distance
Reported In Release: FOS7.4.0	Technology Area: FCIP - Fibre Channel over IP
Symptom: Switchshow displays LAN port as online when no Ethernet cable is attached in 7840	
Condition: Switchshow is run on 7840 where once present Ethernet cable has been removed for a LAN port	
Recovery: Disable and enable the affected port	

Defect ID: DEFECT000550554	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.4.0	Technology Area: FICON
Symptom: With CUP Diagnostics and zOS HealthChecker, a port that reports a SlowDrain or Bottleneck Detected event, may persist in reporting this state, even though the condition has cleared.	
Condition: The CUP may persist in reporting this port performance problem, when actually, the problem has been cleared.	
Recovery: Vary the port offline and online or for E_Ports, disable and enable the port.	

Defect ID: DEFECT000550634	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Software Installation & Upgrade
Symptom: <code>firmwarecleaninstall</code> with sftp option fails	
Condition: sftp protocol is not supported for this CLI however, the CLI usage help indicates that it is supported.	
Workaround: Use scp or ftp option to run <code>firmwarecleaninstall</code>	

Defect ID: DEFECT000550681	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Distance
Reported In Release: FOS7.4.0	Technology Area: FCIP - Fibre Channel over IP
Symptom: 7840 becomes non-operational (faulty).	
Condition: A 7840 becomes non-operational (faulty) as a result of another <code>firmwaredownload</code> being run while a previous non-disruptive <code>firmwaredownload</code> is in progress.	
Workaround: Do not initiate another <code>firmwaredownload</code> while a previous non-disruptive <code>firmwaredownload</code> is already in progress.	
Recovery: Reboot the 7840.	

Defect ID: DEFECT000553134	
Technical Severity: Low	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: CLI - Command Line Interface
Symptom: Diagnostic run may fail with RASLog "[BLZ-5040], 0, CHASSIS, ERROR, Brocade 7840, S0,P8(105) [OID 0x43028829]: Sending ipp port fault for reason 1".	
Condition: When running diagnostics on BR7840.	

Defect ID: DEFECT000553454	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring

Reported In Release: FOS7.2.1	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: DCX/DCX-4S WWN status may show unknown status	
Condition: In rare occurrences where the i2cReset may fail to properly reset the WWN card	
Recovery: Re-seat the WWN card in question	

Defect ID: DEFECT000553786	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.2.0	Technology Area: Fibre Channel Services
Symptom: HA State Synchronization failed when switch detected there is duplicated WWN.	
Condition: HA Sync is stopped when the delete operation on AG duplicated device entry on standby fails.	
Recovery: Reboot standby CP to recover.	

Defect ID: DEFECT000554393	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Distance
Reported In Release: FOS7.4.0	Technology Area: FCIP - Fibre Channel over IP
Symptom: Data Processor (DP) panicked on FCIP tunnel modify or FCIP circuit bounce causing an interruption in traffic.	
Condition: The FCIP tunnel and/or circuit is bouncing and it has IPSec enabled on it.	
Workaround: Disable IPSec on the FCIP tunnel.	

Defect ID: DEFECT000555826	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.0_CNG	Technology Area: Management GUI
Symptom: Error will be shown for user description field while creating new user from switch admin.	
Condition: Error will be shown if user description text length is provided between 33 to 40 characters.	

Defect ID: DEFECT000556479	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS7.1.1	Technology Area: Zoning
Symptom: Zoned terminated and caused switch to panic.	
Condition: Zone contains alias name as member and zone is renamed such that both zone and member contains same name and user executes zone --validate <zone_name> .	

Defect ID: DEFECT000557644	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.4.0	Technology Area: FICON
Symptom: CUP fails to correctly establish new Reporting Logical Path after receiving Sel Reset	
Condition: It failed under following conditions during test: 1. FMS enabled. 2. Switch online to MVS 3. Health Checker running, with IOS_FABRIC_MONITOR. 4. FMS action is enabled in MAPS config 5. MAPS rules having the FMS action are triggered.	

Defect ID: DEFECT000558610	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.2.0	Technology Area: SNMP - Simple Network Management Protocol
Symptom: User does not see the swFCPortDisableReason as part of the SNMP trap.	
Condition: This issue is seen in all platforms, when the user receives swFCPortScn SNMP trap for port disable event.	

Defect ID: DEFECT000559352	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.2.0	Technology Area: SNMP - Simple Network Management Protocol
Symptom: Unlike the display for other SNMP test traps, swDeviceStatus test Trap displays only varbind "swTestString".	
Condition: This behavior is seen on all platforms for swDeviceStatus test trap.	

Defect ID: DEFECT000559929	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Other
Reported In Release: FOS7.3.0_CNG	Technology Area: Other
Symptom: Ports get segmented when switch with long distance ports is moved to Access Gateway mode.	
Condition: 1) Setup long distance (LD) ports on SW6558 and SAN switch using command "portcfglongdistance" 2) Make sure the LD ports came up as ISL E_Ports 3) Now change the switch mode from native to AG mode 4) Notice errors on the LD ports	
Workaround: Disable long distance mode on ports in native mode before converting switch to access gateway mode.	

Defect ID: DEFECT000560593	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.1	Technology Area: Fibre Channel Services
Symptom: The parameter "switch.login.perSwitchMax" is not shown in configshow output.	
Condition: By design, when a key is not defined (that is, not yet configured by the user), system will display the default value for it. But this key is different in that it does not have a fixed default value. The default value is computed dynamically as a function of the platform. As such this behavior anomaly is per design.	

Defect ID: DEFECT000560645	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.1	Technology Area: Configuration Fundamentals
Symptom: Management access (via assigned IP address of logical switch) is lost and changing IP addresses is not possible.	
Condition: This may happen when multiple logical switches have been created and assigned individual IP addresses for management purpose.	
Workaround: Create an extra logical switch, then make the appropriate IP address changes.	

Defect ID: DEFECT000560771	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Configuration Fundamentals
Symptom: CLI fcippathtest failures are seen on FX8-24 blade when diagnostics are verified for a longer period.	
Condition: Stress testing may result in this issue on some of the boards. Should not occur under normal conditions.	

Defect ID: DEFECT000560880	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.1	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: SNMP traps are received even when the action for the maps rule is "none".	
Condition: This behavior is seen in all platforms with MAPS enabled, when the action specified for maps rule is "NONE".	

Defect ID: DEFECT000561049	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS7.2.1	Technology Area: Security Vulnerability
Symptom: Configuration key corresponds to crypto key length may have invalid value 40 or 56.	
Condition: Crypto key length 40 and 56 are invalid and the same has been removed in v7.2.1. This issue is observed when switch is running firmware lower to v7.2.1, user sets the crypto key length to invalid value 40 or 56 and upgrades the switch to firmware version v7.2.1 or above.	
Workaround: Set the crypto key length to valid value 128 prior to upgrade to firmware version v7.2.1 or above.	

Defect ID: DEFECT000563497	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Distance
Reported In Release: FOS7.3.0	Technology Area: FCIP - Fibre Channel over IP
Symptom: Degraded FCIP Tunnel throughput, potentially causing I/O errors and or slow application response times.	
Condition: After many internal hardware errors have occurred the path between the FCIP FPGA and the FCIP data processing complexes.	

Defect ID: DEFECT000564261	
Technical Severity: Low	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Configuration Fundamentals
Symptom: The board revision in switchshow changes from 77.3 to 77.0 following an upgrade of DCX-4S to v7.4.x	
Condition: This is a switchshow display issue with board revision only for DCX-4S in v7.4.x	

Defect ID: DEFECT000565123	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Distance
Reported In Release: FOS7.4.0	Technology Area: FCIP - Fibre Channel over IP
Symptom: Following RAS Logs would be observed, the values could be different. It could be DP0 or DP1. VE tunnel no. could be 24-33 on DP0 and 34-43 on DP1. [ESM-1010], 3475, FID 128, INFO, DS_7840_i2052142, DP0 is OFFLINE. [ESM-2105], 3476, FID 128, INFO, DS_7840_i2052142, VE tunnel 25 is DEGRADED. [RAS-1001], 3477, CHASSIS, INFO, Brocade7840, First failure data capture (FFDC) event occurred.	
Condition: Traffic running on a VE tunnel configured with compression level as aggr-deflate.	
Workaround: Change the VE tunnel compression level from aggr-deflate to deflate.	

Defect ID: DEFECT000565355	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0	Technology Area: Flow Vision
Symptom: The vtap flow would not mirror the frames to the AMP when the AE ports between the switch and AMP is toggled.	
Condition: AE port toggle would result in the scenario.	

Defect ID: DEFECT000565623	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.1	Technology Area: Management GUI
Symptom: Entries in name server tab in Web Tool won't be removed on switchdisable .	
Condition: This issue is seen when user runs switchdisable/chassisdisable on a switch.	

Defect ID: DEFECT000566341	
Technical Severity: Low	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.1	Technology Area: SNMP - Simple Network Management Protocol
Symptom: When attempting to get the operational status of the VE tunnel port using SNMP, a value of 4 is returned (which indicates unknown) instead of the actual status.	
Condition: This behavior is specific to BR7840 switches.	

Defect ID: DEFECT000566666	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: Extended Fabrics
Symptom: Error log will report warnings, with code XTUN-1997, stating DP ftrace triggers. DP ftrace will show errors stating: "iapi0762 should have been tcpCbRxQueueHandler()". FCIP and/or IPEX tunnels may go into Degraded or Down state and will not recover. FCIP and/or IPEX I/O may fail and will not recover.	
Condition: Connecting the BR7840 to a network device transmitting multicast Ethernet 802.2 LLC frames, such as Spanning Tree Protocol BPDU (Bridge Protocol Data Units).	
Recovery: Reboot of the BR7840.	

Defect ID: DEFECT000566840	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.0	Technology Area: APM - Advanced Performance Monitoring
Symptom: Ports marked as slow drain device and quarantined are removed from slow drain quarantine list after a switch reboot	
Condition: When rebooting the switch, slow drained devices are removed the quarantine list	
Recovery: Devices in the slow drain device condition will automatically be added back to the quarantine list.	

Defect ID: DEFECT000567099	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Fibre Channel Services
Symptom: Software VERIFYS with pattern "lgdb->port[port_dst] == NULL" may be seen during HA failover.	
Condition: This issue does not occur under normal HA conditions. This may happen under rare error conditions during HA recovery and it does not affect the regular functionality of the switch.	

Defect ID: DEFECT000567324	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: WAN Performance Analysis Tools
Symptom: The WAN Tool session reports higher than expected round trip times.	
Condition: This occurs when the WAN Tool session is configured with jumbo frames and has a committed rate equal to the physical interface speed.	
Workaround: Reconfigure the WAN Tool session's committed rate to be less than the physical interface speed.	

Defect ID: DEFECT000567513	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS7.3.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: Tape backup job receives a "Position error" when trying to append data to a partially written tape volume.	
Condition: When Fast Write and Open Systems Tape Pipelining are enabled on a 7800/FX8-24 or 7840 Tunnel.	

Defect ID: DEFECT000567540	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Configuration Fundamentals
Symptom: System may encounter RASLog ERCP-1000, RAS-1000 during firmwaredownload. For example: "[ERCP-1000], 7, FFDC CHASSIS, CRITICAL, Skybolt214, Multiple DDR ECC errors are detected and the system will reload automatically". followed by "[RAS-1001], 8, CHASSIS, INFO, Skybolt214, First failure data capture (FFDC) event occurred".	
Condition: This is seen only on Brocade 7840 switch following firmwaredownload.	

Defect ID: DEFECT000567733	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: After an upgrade to Fabric OS v7.4.x, MAPS may stop working and HA Sync may be lose on a director switch.	
Condition: This is seen only after an upgrade to FOS version v7.4.x from FOS versions v7.3.x or lower under the following conditions: 1. Time base values in Fabric Watch are set to any value other than "none" for the FABRIC class. 2. And these Fabric Watch thresholds are converted to MAPS rules using " mapsconfig -fwconvert " command before the FOS upgrade occurs.	

Defect ID: DEFECT000567817	
Technical Severity: Critical	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.1.0	Technology Area: Configuration Fundamentals
Symptom: Firmware upgrade fails on a director with the standby CP remaining in a constant powering up state.	
Condition: This can occur when an Ethernet cable is plugged into the console port, instead of a serial console cable.	

Defect ID: DEFECT000568003	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS7.2.1	Technology Area: TACACS & TACACS+
Symptom: Software 'verify' error detected messages in RASLOG RAS-1004 and RAS-1012 - comp:weblinker.	
Condition: This is applicable for all the platforms and it happens every time when bulk number of user login requests are being processed very frequently by weblinker using TACACS authentication module.	
Workaround: Avoid bulk number of user authentications via TACACS simultaneously.	
Recovery: HAreboot	

Defect ID: DEFECT000568377	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Software Installation & Upgrade
Symptom: Firmwaresync fails due to timeout when standby CP is running FOS 7.2 or older and active CP is running FOS 7.4.	
Condition: Occurs when active CP is running FOS 7.4 and standby CP is running FOS 7.2 or older, and when switch CPU is busy with SNMP, BNA polling.	
Workaround: Perform firmwaresync again after 10 minutes.	
Recovery: Times out after 10 minutes, then firmware sync should pass	

Defect ID: DEFECT000568423	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Distance
Reported In Release: FOS7.2.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: Intermittent I/O Failures through an 7800/FX8024 or 7840 FCIP Tunnel due to processing an Extended Link Services PDISC (Discover N_Port Service Parameters) Request.	
Condition: When processing a received ELS-PDISC on a FCIP non-emulating Tunnel.	

Defect ID: DEFECT000568850	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS7.3.1	Technology Area: AD - Admin Domains
Symptom: Default users are unable to delete local users who have access to VF "0".	
Condition: This behavior is seen in all platforms in FOS version greater than FOS v6.x, when a default user try to delete a local user which was created in FOS v6.x with Vf "0".	

Defect ID: DEFECT000569237	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS7.4.0	Technology Area: FCIP - Fibre Channel over IP
Symptom: Second circuit not coming up (GE12) after configuring duplicate IP addresses and mis-cabled.	
Condition: The issue happens due to user mistake to configure the same WAN IP address on multiple ports. Due to the underline defect, 7840 stuck in the state that are not allowed new TCP connection to be established.	

Defect ID: DEFECT000569309	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: MAPS mdd process terminates when running supportsave .	
Condition: This occurs from a race condition that sometimes may cause a NULL pointer access during MAPS data collection performed as part of supportsave .	

Defect ID: DEFECT000569665	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.1	Technology Area: Software Installation & Upgrade
Symptom: Termination of NPD detected on new Active CP during firmware upgrade. Firmwaredownload completes successfully but system fails to regain HA sync.	
Condition: This may be observed due to a very high CPU usage condition, during which time IPC messages may time out and lead to NPD termination by software watchdog.	
Recovery: schedule a maintenance window and reboot the active CP to regain HA sync.	

Defect ID: DEFECT000569674	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.0	Technology Area: Fibre Channel Services
Symptom: HA out of sync due to invalid zone configuration.	
Condition: This issue is observed when a user tries to add a zone member with more than 64 characters to a zone configuration and then does cfgsave or cfgenable in a chassis.	

Defect ID: DEFECT000570356	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: FCIP DP FFDC after multiple DRAM2 memory pool warnings via XTUN-1008 messages	
Condition: After running WAN tool to test an FCIP Circuit, DP events caused complete depletion of the DRAM2 pool on a DP.	
Workaround: Insure that all WAN tool tests are deleted after running tests.	

Defect ID: DEFECT000570535	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.3.0	Technology Area: Rate Limiting and Shaping
Symptom: Though -ap option in aptpolicy command is removed from 7.3, user is still allowed to execute the command.	
Condition: This behavior is seen with all the platforms where aptpolicy command is supported.	

Defect ID: DEFECT000570606	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS7.4.0	Technology Area: FCIP - Fibre Channel over IP
Symptom: Small frames may be delayed up to one millisecond through the extension tunnel.	
Condition: On a 7840 during periods of low throughput on a compression enabled extension tunnel, small frames may be delayed up to 1ms.	

Defect ID: DEFECT000571927	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: Disruptive reboot of the FCIP DPs on BR7840 during Hot Code Load (HCL).	
Condition: When HCL is attempted after one or more tunnel bounces, the FC Flush logic can examine an internal credit counter and assume that FC flush failed.	

Defect ID: DEFECT000572790	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Inband Management
Symptom: VPD version 2.05 and EHCM-L3 Capability bits are not set for Brocade 6547 switch and consequently not shown in vpd_show command.	
Condition: This is seen only on Brocade 6547.	

Defect ID: DEFECT000572880	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Management GUI
Symptom: During a firmware migration, Web Tools displays an incorrect information message about Peer Zoning treated as a regular zone displays	
Condition: Performing firmware download within the FOS v8.0.0 release using different build ids	

Defect ID: DEFECT000573081	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS8.0.0	Technology Area: Port Bring-up
Symptom: ITW and er_enc_out counters may increment in the thousands when port transitions from offline to online. This is expected behavior for the new GEN 6 ports. After port is online, these counters should behave just like GEN 5 ports. MAPS monitoring function will not be affected since MAPS starts monitoring these counters only after port comes online.	
Condition: This happens only when port is transitioning from offline to online. An example would be if a port is disabled and re-enabled or during switchdisable/switchenable operation.	

Defect ID: DEFECT000573629	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.1	Technology Area: Configuration Fundamentals
Symptom: IP configuration from Chassis Management Module (SVP) will fail the first time after power-cycle.	
Condition: Issue may be seen on embedded platforms.	
Recovery: Re-do the IP configuration from SVP. It will succeed after the first failure.	

Defect ID: DEFECT000573691	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Software Installation & Upgrade
Symptom: The firmwarecommit started and completed messages will be shown during the firmwarecommit execution. But the firmware is not committed. The messages shown during the commit operation is misleading.	
Condition: The firmwarecommit copies an updated firmware image to the secondary partition. Executing firmwarecommit on already committed secondary partition leads to misleading commit messages.	
Workaround: The firmwarecommit command should be used only to update the new firmware to the secondary partition. Avoid using firmwarecommit on already committed firmware	

Defect ID: DEFECT000574013	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.1	Technology Area: Software Installation & Upgrade
Symptom: The command 'firmwarecommit -f' may need to be run manually on the standby CP to recover from a firmwaredownload failure after a firmwaredownload timeout.	
Condition: In a rare situation, following a dual CP firmwaredownload timeout, the expected recovery of the standby CP may fail due to ping failure triggered by race condition.	
Workaround: Manually invoke firmwarecommit on the standby CP where firmwaredownload timed out.	
Recovery: Manually invoke firmwarecommit on the standby CP where firmwaredownload timed out.	

Defect ID: DEFECT000574253	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.0.1	Technology Area: SNMP - Simple Network Management Protocol
Symptom: Inconsistent enc_out stats between portstatsshow and SNMP may be encountered.	
Condition: This may occur under rare circumstance where top 32 bits of internal error counter is incremented.	
Workaround: Portstatsshow readings are accurate. Ignore the discrepancy seen in SNMP.	

Defect ID: DEFECT000574717	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS6.4.3	Technology Area: Fibre Channel Services
Symptom: Software panic occurs due to Out of Memory condition.	
Condition: This could happen only when Admin Domain (AD) is activated and the device in the fabric send GAPNL query about another device (either remote or local) which is not part of same AD.	
Recovery: Perform proactive hareboot/hafailover when free memory is low.	

Defect ID: DEFECT000574862	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.2.1	Technology Area: RAS - Reliability, Availability, and Serviceability
Symptom: Raslog message severity is not synced between active and standby.	
Condition: This issue is seen when user changes the severity of RASLog message using rasadmin command.	

Defect ID: DEFECT000574865	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Access Gateway
Symptom: Unable to delete the WWN Static Mapping in Access Gateway mode after issuing the ag – delwwnpgamapping command	
Condition: Observed when WWN Static Mappings are configured and user has deleted the port group where the WWN is mapped.	

Defect ID: DEFECT000574877	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Software Installation & Upgrade
Symptom: Diagnostics command turboramtest will accept invalid values for passcnt argument	
Condition: Issue is seen only when turboramtest command is executed from command line	
Workaround: Provide valid input as argument for passcnt option when executing turboramtest command	

Defect ID: DEFECT000574943	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS7.2.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: Host Discovery issues after FOS upgrade in an FCR backbone to edge configuration. Edge to edge configurations are not impacted.	
Condition: Problem can occur in a multiple VEX port configuration after FOS upgrade from pre-FOS 7.2.0 to newer FOS level. There needs to be more than 1 VEX port in the configuration.	

Defect ID: DEFECT000575101	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS8.0.0	Technology Area: FICON
Symptom: Encountered unexpected cold reboot of the system triggered by kernel panic.	
Condition: This is seen in FICON environment during device power on and off stress test.	

Defect ID: DEFECT000575740	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.1	Technology Area: SNMP - Simple Network Management Protocol
Symptom: The traps sent for Link up/Link down events of management fc interfaces that starts with fc0 contain incorrect ifindex as varbind.	
Condition: This happens on all the platforms and all the versions of FOS.	

Defect ID: DEFECT000576018	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.0	Technology Area: Hardware Monitoring
Symptom: Spinfab test reports failure on F_Ports connected to non-Brocade HBAs. Spinfab should not have been run on non-Brocade HBAs.	
Condition: Issue will be seen when spinfab is run on some F_Ports connected to non-Brocade HBAs	
Workaround: Do not run spinfab on F_Ports connected to non-Brocade HBAs	

Defect ID: DEFECT000576355	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.1	Technology Area: CLI - Command Line Interface
Symptom: After answer "n" to "reboot" CLI, switch is left in disabled state.	
Condition: It happens on BR5481, "reboot" CLI cannot be cancelled.	
Recovery: Use switchenable to enable switch ports back.	

Defect ID: DEFECT000576404	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS7.4.0	Technology Area: Security Policies
Symptom: passwddefault CLI command should be for use by root users only. It is currently permitted for admin user.	
Condition: This is encountered with passwddefault CLI command.	

Defect ID: DEFECT000576721	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.1	Technology Area: Fibre Channel Services
Symptom: Kernel panic with zoned termination after zoned exceeds max thread.	
Condition: It happens where scripting with CLI commands such as portzoneshow without much delay in between or excessive queries for admin domain list from external management application.	
Workaround: Reduce excessive polling for any zone command through external application or scripting. Adding proper delays between CLIs can also avoid this issue.	

Defect ID: DEFECT000576933	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS8.0.0	Technology Area: Port Bring-up
Symptom: Switch reset may occur when there is FICON traffic with two or more RNID aborts. The switch reset is rare and unlikely to occur	
Condition: FICON abort traffic was flowing.	

Defect ID: DEFECT000576960	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Configuration Fundamentals
Symptom: The Restore Factory Defaults command may fail midway and certain features like zoning config may not be set to default values.	
Condition: This may be encountered when attempting to restore factory default configuration.	

Defect ID: DEFECT000577166	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.4.1	Technology Area: Port Bring-up
Symptom: F_Ports change into In_sync state or route error triggered on E_Port trunk causing frame drop during a firmware upgrade.	
Condition: This may be seen if media validation check failed on ports during HA. SFP media validation failure may be triggered by an insertion of a SFP while the port was disabled the switch had been upgraded to FOS v7.4.1, 7.4.1a or 7.4.1b from FOS v7.0.x or earlier through non-disruptive firmware upgrade path.	
Workaround: Run sfpshow -f before upgrading from FOS v7.0.x releases to FOS v7.4.1,7.4.1a, and 7.4.1b; or directly upgrade to FOS v7.4.1c with the fix.	
Recovery: For F_Port, bounce the port to recover. For trunk ports, disable ports in the trunk one at a time and then enable all ports.	

Defect ID: DEFECT000577183	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.0	Technology Area: Software Installation & Upgrade
Symptom: BR5432-24 fails firmware upgrade from FOS7.3.0c to FOS7.4.1 leading to a Kernel panic from - Oops: kernel bad area, sig: 11	
Condition: This issue is specific to BR5432-24 when upgrading from FOS7.3.0c to FOS7.4.1	

Defect ID: DEFECT000577245	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Software Installation & Upgrade
Symptom: After firmware upgrade, the ip address of management interface may be not set up correctly.	
Condition: Enabled dhcp for management interface before firmware upgrade. The problem only happens on firmware upgrade to FOS v7.4.x.	
Recovery: Reboot switch after firmwaredownload.	

Defect ID: DEFECT000577604	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.0	Technology Area: Hardware Monitoring
Symptom: ITW and er_enc_out counters may increment in the thousands when port transitions from offline to online. This is expected behavior for the new Condor4 chip. After port is online, these counters should behave just like Condor3 ports. MAPS monitoring function will not be affected since MAPS starts monitoring these counters only after port comes online.	
Condition: This happens only when port is transitioning from offline to online. An example would be if a port is disabled and re-enabled or during switchdisable/switchenable operation.	

Defect ID: DEFECT000577646	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.0	Technology Area: Flow Vision
Symptom: Frames are monitored for an ingress flow with frametype specified and srcdev/dstdev not specified even though the frames ingressing at the specified port do not match the frametype.	
Condition: This issue happens only when ingress frames are monitored and the monitor flow has frametype specified with srcdev/dstdev not specified.	

Defect ID: DEFECT000577864	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0_CBN	Technology Area: NPIV – N_Port ID Virtualization
Symptom: Multiple N_Port failovers on AG switch cause LUNs to disappear.	
Condition: It happens when F_Ports come online while there is no N_Port online in the Port Group/switch, AG disables the port due to no N_Ports, and later, when an N_Port comes on line, N_Port failback brings F_Ports back online. If F_Ports send ABTS at this time to abort the previous login, login entries are cleared from the switch DB.	

Defect ID: DEFECT000578229	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.4.0	Technology Area: QoS - Quality of Service
Symptom: Frame prioritization may not be effective in device applications even though CSCTL configuration is enabled for the switch and ports.	
Condition: This is a rare occurrence that may be encountered on a switch or chassis in a FICON environment.	

Defect ID: DEFECT000578360	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS7.4.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: IPSec enabled extension tunnels on Brocade 7840 will not establish when utilizing VLAN tagged IP interfaces.	
Condition: This is encountered when the Brocade 7840 pair has an IPSec enabled extension tunnel utilizing a VLAN tagged IP interface.	
Workaround: Disable IPSec on the extension tunnel, or utilize an untagged IP interface.	

Defect ID: DEFECT000578576	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0_GFT	Technology Area: Licensing
Symptom: Using webtools and network advisor to removed new DPOD feature on 6558 Embedded Switch, Webtools and network advisor fail to remove a DPOD license. Webtools sometimes closes itself or it refreshes and the DPOD license is still present.	
Condition: Issue was introduced with new support for capacity based POD licenses on platforms. Web tools error message is not correctly decoded when attempting to remove POD license.	
Workaround: Workaround is available - use the FOS CLI to remove the license instead, or remove the POD assignments before attempting to remove the POD license.	

Defect ID: DEFECT000578927	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: BR7840 encountering [C3-1012], 5/3, CHASSIS, WARNING,, S0,P-1(8): Link Timeout on internal port with lost credits.	
Condition: When running FCIP traffic over the FCIP Tunnel - appears to be related to bursty nature of the I/O over the tunnel.	

Defect ID: DEFECT000579769	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS8.0.0	Technology Area: Port Bring-up
Symptom: Symptom: portcfgshow -i <index> does not show same references to FEC as portcfgshow <port> and portcfgfec --show. It is still showing: FEC: ON FEC: via TTS Instead of: 10G/16G FEC: ON 16G FEC via TTS: OFF	
Condition: When user issues "portcfgshow -i <index>"	

Defect ID: DEFECT000580006	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.0	Technology Area: Hardware Monitoring
Symptom: The following RASLog error might be seen whenever a Power Supply FRU is plugged out of the system. "EM-1028 00 0x000c HIL Error: failed to access history log for FRU" In addition, the FRU plugged-out and plugged-in entries might also be missing from historyshow output.	
Condition: Programming the systemairflow will introduce the issue. The CLI to program the systemairflow is a factory-only command and not available for general users.	
Workaround: Power on reset of the system will recover the issue.	

Defect ID: DEFECT000580096	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Configuration Fundamentals
Symptom: 16G director has kernel panic while gather flow statistics.	
Condition: It happens after a hafailover on a 16G director with network patroller flow configured.	

Defect ID: DEFECT000580719	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.4.0 AMP	Technology Area: Fibre Channel Routing
Symptom: Adding AMP to fabric caused device to lose connectivity.	
Condition: After upgrade from FOS v7.3.x to v7.4.0x and FOSv7.4.1, with existing F/E_Port on an ASIC chip, enabling an AE_Port on the same chip may cause routing problems in the switch.	
Recovery: Reboot switch to recover.	

Defect ID: DEFECT000580863	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.3.1	Technology Area: ISL - Inter-Switch Linking
Symptom: After hafailover , hosts may lose paths to storage devices in the fabric.	
Condition: For this issue to occur, the following conditions must exist: 1. Hosts are connected to a logical switch that has enabled XISL. 2. Storage devices are reachable across a logical ISL -- i.e. the ISLs are in the base switch. 3. The trunk master of a base switch ISL trunk (with two or more trunked ports) bounces. 4. hafailover or hareboot occurs -- either manually or as part of non-disruptive firmwaredownload.	
Recovery: There are two possible recovery scenarios: 1. Bounce all trunk ports -- i.e. Bring all ports in the trunk offline and then bring them all back online. ...or... 2. hafailover.	

Defect ID: DEFECT000581598	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS7.4.0	Technology Area: FCIP - Fibre Channel over IP
Symptom: IOS000I - CHANNEL PROTOCOL ERROR on FICON emulated tape device displayed on device console.	
Condition: FCIP Tunnel with FICON Tape Pipelining enabled when a 3590 (or tape device) replies to a generated No-Op command with Command Retry Status.	
Workaround: Disable FICON Tape Pipelining on the tunnel or insure that there are more devices online between the LPAR and the controller than there are active tape jobs. If there is an idle tape device, the controller will present the attention on that device instead of an active device and will avoid the issue.	

Defect ID: DEFECT000581627	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.2.1	Technology Area: Hardware Monitoring
Symptom: Switch may encounter false alarms for failed blowers and high temperatures, leading to an attempt to initiate switch shutdown.	
Condition: This may occur if ports with No_Modules (vacant ports) are periodically polled using sfps show <port#> -f via external script or CLI. This external polling may clash with the periodic internal EM polls and result in misreadings from the blowers.	
Workaround: If possible avoid periodic external polling that uses CLI command sfps show <port #> -f . Otherwise insert good SFPs in vacant ports.	
Recovery: Insert good SFPs in vacant ports and/or stop any external SFP polling script (that uses sfps show <port#> -f) and then re-seat the failed blowers or reboot the switch.	

Defect ID: DEFECT000581775	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.4.0	Technology Area: FICON
Symptom: Identical Node descriptors observed for two different physical ports.	
Condition: This may occur in a FICON environment, where duplicates node descriptors may be generated in a director with large port-counts.	

Defect ID: DEFECT000582900	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.2.1_HIL	Technology Area: Access Gateway
Symptom: The user may encounter mismatch in AG Port Group configuration, where N_Ports remain part of a user defined Port Group instead of being associated with the default Port Group.	
Condition: This may occur when Load Balancing Policy is enabled for the Port Group and all N_Ports are part of the same user defined Port Group.	
Workaround: User can Manually delete N_Ports from the user defined Port Group using "ag --pgdel" CLI.	

Defect ID: DEFECT000584234	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.1	Technology Area: Analytics Monitoring
Symptom: Switch may report raslog MAPS-1003 alert, indicating greater than expected IOPs per second even though the IOP rate is below threshold.	
Condition: This condition may occur if the single ASIC is overloaded with traffic and AE port is on the same ASIC.	

Defect ID: DEFECT000584796	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS7.3.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: Extension tunnels on the 7840 may go down and stay in an "in-progress" state.	
Condition: This condition can occur on an extension tunnel whose IP addresses receive an extremely large amount of ICMP messages other than Echo Request(type 8), Echo Reply(type 0), or Time Exceeded(type 11).	
Recovery: A reboot is necessary to clear this condition.	

Defect ID: DEFECT000585430	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.1	Technology Area: High Availability
Symptom: Switch may report HA not in sync, along with raslog FSS-1009 2016/01/22-10:05:25, [FSS-1009], , FFDC , ERROR, , FSS Error: fcsW3-swc: sync-failure: -6	
Condition: This may happen during device offline event on a busy system.	
Recovery: Reboot standby CP.	

Defect ID: DEFECT000585776	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: FCIP Tunnel Management
Symptom: ESM-1101 error message seen with 'Unable to allocate memory' condition. Can also sometimes result in a esmd panic.	
Condition: Issuing ' portcfgshow ipif iproute fcipunnel fcipcircuit ' or other extension related ' portcfgshow ' commands can cause the error.	

Defect ID: DEFECT000586412	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: Extended Fabrics
Symptom: DPs on BR7840 switch panic and recovery while disabling compression.	
Condition: After modifying the FCIP Tunnel to not have software compression enabled (when disabling "Deflate" or "Aggr-Deflate" on an active FCIP Tunnel).	

Defect ID: DEFECT000586788	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.1	Technology Area: RAS - Reliability, Availability, and Serviceability
Symptom: Switch may encounter "Software Fault"/"Kernel Panic" triggered by too many memory parity interrupts from the 16G ASIC encryption block.	
Condition: Memory parity errors are rare. This panic may occur on a 16G switch, if memory parity errors are encountered when ASIC encryption is not enabled.	
Recovery: Usually recovers after a panic. If it persists, please replace blade.	

Defect ID: DEFECT000588368	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.4.0	Technology Area: Port Bring-up
Symptom: Third party tape devices may have problems coming online.	
Condition: Port will experience error when connecting certain types of 3rd party tape devices with Brocade 16G platforms.	
Workaround: Use portcfgnondfe CLI to enable optimal mode 3rd party tapes.	

Defect ID: DEFECT000588485	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.2.1	Technology Area: Port Bring-up
Symptom: Switch in AG mode reboots.	
Condition: This may occur when host is rebooted and switch did not discard the ABTS frame for the FLOGI while N_Port is undefined.	

Defect ID: DEFECT000588834	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS7.4.0	Technology Area: Extended Fabrics
Symptom: Continuous DP panics on BR7840 and loss of ip interface configurations.	
Condition: When there is Ethernet jumbo frames (non-IP) coming on the LAN/WAN ingress paths.	

Defect ID: DEFECT000589265	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: FCIP Tunnel Management
Symptom: DP panic during Hot Code Load (HCL) failover/failback with non-emulated FC traffic and HCL failures.	
Condition: Multiple LS with FCIP tunnels whose VE share the same VC and use different routing policies during FCIP HCL processing.	

Defect ID: DEFECT000589472	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS7.4.0	Technology Area: Security Policies
Symptom: CLI ipfilter disallows configuring a port value greater than 1024.	
Condition: This occurs when creating an ipfilter policy rule with port value greater than 1024. This is not permitted and results in an error message: "Invalid port number(range) for IP filter policy rule."	

Defect ID: DEFECT000590415	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.2.1	Technology Area: Access Gateway
Symptom: Discrepancy is seen between the outputs of CLI commands "ag --show" and "ag --mapshow" on AG switch.	
Condition: This may occur on AG switches in no policy mode. When the F_port comes online, the mapped N_Port is not updated as the current N_Port for the F_Ports.	

Defect ID: DEFECT000590745	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: Flow Vision
Symptom: Flow Vision daemon (npd) may crash on a switch during firmwaredownload.	
Condition: User may encounter this behavior only on an Analytics Monitoring Platform enabled fabric during a switch disable/enable or reboot or hfailover operations.	
Recovery: Deactivate sys_analytics_vtap flow and restart npd daemon.	

Defect ID: DEFECT000591136	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.1	Technology Area: High Availability
Symptom: Customer may encounter a CP panic during a rare PCI access errors	
Condition: This may be encountered as a result of a faulty blade that triggered CP to process a bad PCI read data.	
Recovery: Replace the faulty blade	

Defect ID: DEFECT000592702	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS7.4.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: Limited tunnel performance after completing Extension HCL – Tunnel(s) is/are in flow control.	
Condition: After completing a firmware download to a new FOS release with Extension HCL enabled.	
Workaround: Perform disruptive firmware download.	
Recovery: Disable and re-enable the VE ports/FCIP Tunnels.	

Closed without code changes in Fabric OS 8.0.1

This section lists software defects with Critical, High, and Medium Technical Severity closed without a code change as of April 22, 2016 in version 8.0.1.

Defect ID: DEFECT000495229	Technical Severity: High
Reason Code: Not Reproducible	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.2.1_HIL	Technology Area: Software Installation & Upgrade
Symptom: After a non-disruptive firmware download, portstatshow may display increased instances of fec_uncor_detected errors on front end port.	
Condition: This may be encountered only on embedded platforms.	

Defect ID: DEFECT000535836	Technical Severity: High
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Configuration Fundamentals
Symptom: Link issues are observed on port blade when post tests are run after a reboot.	
Condition: Setup specific issue wherein the blade turns faulty 51 after reboot with diags enabled.	
Workaround: Currently, there is no workaround for this issue as both the port blade and core blade goes faulty 21 with diags disabled. This is being looked at by driver team now.	

Defect ID: DEFECT000540198	Technical Severity: High
Reason Code: Will Not Fix	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.1.2	Technology Area: Fabric Watch
Symptom: FW RAS message encountered, indicating switch status state change while LOS (Loss of signal) area of fop_Port class is paused. This is not the case when LF(Link failure) area of fop_Port class is paused,	
Condition: This is encountered when LOS area systemmonitor is configured as pause, and switch status policy is configured as based on port class.	

Defect ID: DEFECT000540971	Technical Severity: Low
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.2.1	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: In extreme conditions MAPS generates false alert for port errors such as LR etc.	
Condition: This false alert could be generated during state change of port and this happen in extreme conditions.	

Defect ID: DEFECT000543441	Technical Severity: Medium
Reason Code: Feature/Function Not Supported	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: SNMP - Simple Network Management Protocol
Symptom: Customer would not be able to use SCP and SFTP Protocols for Firmwaredownload and Supportsave in SNMP Interface. The support is only provided for FTP.	
Condition: The error will be returned when SET operation is tried out using SCP/SFTP Protocols.	

Defect ID: DEFECT000547173	Technical Severity: Medium
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0	Technology Area: RAS - Reliability, Availability, and Serviceability
Symptom: On chassis based systems, when syslog is configured, configured server details are not reflected on the standby CP.	
Condition: Applicable only on chassis based systems when syslog server is configured only on active CP.	
Workaround: Configure the syslog server details on both active and standby CPs.	
Recovery: Configure the server details after HA to ensure that the logs are updated.	

Defect ID: DEFECT000559178	Technical Severity: Medium
Reason Code: Feature/Function Not Supported	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.1	Technology Area: Fabric Watch
Symptom: Message corresponding to an unsupported feature shows as: Only "root" can turn ON certain zoning features.	
Condition: This is observed when user tries to change zoning operation parameters "Disable NodeName Zone Checking" through configure command.	

Defect ID: DEFECT000560401	Technical Severity: Medium
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Fabric OS	Technology: Other
Reported In Release: FOS7.3.0_CNG	Technology Area: Other
Symptom: After moving switch to another slot (Movement Detection triggers) and switch reseal, first ipaddrset to set static IPv4 address takes up to 5 minutes to work.	
Condition: Static IP address configuration is required after the SW6558 is moved from one bay to another or one chassis to another.	

Defect ID: DEFECT000561694	Technical Severity: High
Reason Code: Already Fixed in Release	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0	Technology Area: Flow Vision
Symptom: The active CP gets rebooted due to software panic and stack frame is displayed on the console.	
Condition: Poweroff of the port blade consisting AE_Ports.	

Defect ID: DEFECT000563299	Technical Severity: Medium
Reason Code: Feature/Function Not Supported	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.2.1	Technology Area: Fibre Channel Services
Symptom: Switch performs hareboot due to OOM condition.	
Condition: This issue occurs rarely when collecting supportsave from BNA.	

Defect ID: DEFECT000565946	Technical Severity: Medium
Reason Code: Not Reproducible	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.1	Technology Area: Management GUI
Symptom: The "Enable DPOD" feature option continues to be shown in Web Tools after POD license is installed on switches with POD capability.	
Condition: This is an issue encountered only in Web Tools on switches with POD capability.	

Defect ID: DEFECT000567618	Technical Severity: High
Reason Code: Will Not Fix	Probability: High
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS8.0.0	Technology Area: Fibre Channel Routing
Symptom: User may encounter device discovery issue in a FCR Edge to Edge setup with TI zones.	
Condition: When an Edge fabric is connected to both local FCR switch and remote FCR switch, and the FCR TI zone is configured on the remote FCR switch EX_Port.	
Workaround: If an Edge fabric is connected to both local FCR switch and remote FCR switch, user can configure TI zone only on the local FCR switch EX_Port.	
Recovery: Disable the local FCR EX_Port that is connected to the Edge fabric and restart the discovery.	

Defect ID: DEFECT000567900	Technical Severity: Medium
Reason Code: Not Reproducible	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Management GUI
Symptom: The Hash type for authentication does not display correctly when fcap auth util is set.	
Condition: When fcap authentication is set, the Web Tools user interface does not display to correct Hash type.	
Workaround: Use the FOS CLI command ' authutil --show ' to see the correct Hash type	

Defect ID: DEFECT000568564	Technical Severity: Medium
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.2.1	Technology Area: Access Gateway
Symptom: 3rd party devices connected to an Access Gateway see errors due to switch not responding to Name Server queries GID_PN or GPN_ID.	
Condition: The issue is seen when: -16G based Access Gateway. - Device connected to the Access Gateway initiates an NS query. - As the NS response returns through the Access Gateway, it sometimes gets stuck in an internal queue due to the queue not being promptly serviced.	

Defect ID: DEFECT000571336	Technical Severity: High
Reason Code: Will Not Fix	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Virtual Fabrics
Symptom: Weblinker module termination error might be seen after deleting a logical switch.	
Condition: When there is a pending weblinker request and the logical switch is deleted	

Defect ID: DEFECT000571567	Technical Severity: High
Reason Code: Not Reproducible	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.0	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: MAPS dashboard may show incorrect UTIL value in the current day or in the last column in the history data table.	
Condition: In rare conditions the MAPS dashboard may display incorrect UTIL value.	

Defect ID: DEFECT000572227	Technical Severity: High
Reason Code: Already Fixed in Release	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.2.1_HIL	Technology Area: Access Gateway
Symptom: When a host and target are connected to the same AG switch and mapped to same N_Port, host may not see target.	
Condition: Host may not see targets only when host and targets are connected to same AG and mapped to same N_Port.	

Defect ID: DEFECT000572616	Technical Severity: High
Reason Code: Not Reproducible	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Software Installation & Upgrade
Symptom: Some CLI commands such as ipaddrshow , ssh , telnet etc. may depict slow execution times and impact the user's ability to enter a follow-up CLI command particularly if it follows a previous command and user doesn't wait for the CLI prompt.	
Condition: This may be encountered when IPv6 is enabled in the switch and in the presence of an IPv6 router in the network.	

Defect ID: DEFECT000574586	Technical Severity: High
Reason Code: Not Reproducible	Probability: High
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS8.0.0	Technology Area: Port Bring-up
Symptom: In stress test, sometimes the port might be stuck in "in_sync" or "no_sync" state (this state can be observed in switchshow command). Should not occur under normal maintenance operation.	
Condition: As part of speed negotiation sequence, a 4G setting is done which is causing this issue.	
Workaround: This issue can be observed in stress test. So, for the ports with 10G SFP's (with and without DWDM), the stress test can be avoided.	
Recovery: If the port is stuck in "in_sync" or "no_sync" state, toggle the port using portdisable and portenable.	

Defect ID: DEFECT000577380	Technical Severity: High
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS8.0.0	Technology Area: Fibre Channel Routing
Symptom: User might see FCR routing issue which might cause frame drop, host or target can't be discovered.	
Condition: All the following conditions must be met to trigger this issue. 1. EX_Port are trunk ports 2. One of EX_Ports is bouncing very frequently. 3. Master port changes due to port bouncing. 4. The area of master port also changes. 5. The changes in condition 3 and condition 4 happen too quickly that FCR could not update the routing event in time resulting the route update is out of order.	

Defect ID: DEFECT000577628	Technical Severity: Medium
Reason Code: Not Reproducible	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Software Installation & Upgrade
Symptom: Firmwaredownload command on the G620 with Ethernet management port at 10Mbps full duplex using sftp times out and fails.	
Condition: Firmwaredownload command tried with sftp protocol on the G620 fails when the Ethernet interface is configure with 10Mbps FD mode on the switch.	
Workaround: Firmwaredownload with sftp protocol should not be issued on the G620 when ethernet interface is configured with 10Mbps and FD	

Defect ID: DEFECT000579654	Technical Severity: Medium
Reason Code: Not Reproducible	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.0	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: Dashboard shows port utilization value less than the actual value in history table.	
Condition: This is harmless and does not happen often	
Workaround: In this case user should use RX, TX values.	

Defect ID: DEFECT000581283	Technical Severity: Medium
Reason Code: Already Fixed in Release	Probability: Low
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.3.1	Technology Area: FICON
Symptom: The switch may encounter a ficon cup daemon (ficud) panic after observing IDC Timeout messages.	
Condition: This is seen in FICON environment when response messages come in at the same time as an outgoing directory diagnostics message.	

Defect ID: DEFECT000582539	Technical Severity: High
Reason Code: Already Fixed in Release	Probability: Low
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.3.1	Technology Area: Fibre Channel Routing
Symptom: After a link reset on an inter fabric link (IFL) or the trunk master of an IFL trunk on a Fibre Channel Router (FCR) switch, traffic through the IFL or IFL trunk is halted.	
Condition: An hareboot or hafailover on a 8G FCR switch, followed by a link reset on an IFL or an IFL trunk master, then traffic can no longer flow through the IFL. If a fabric only has devices with proxy IDs that have Domain ID of 3 or every fourth ID after that (Ex: 3, 7, 11, 15, etc.), then the fabric is not impacted. 16G FCR switches are not impacted.	
Recovery: portdisable/portenable IFL or the full IFL trunk.	

Defect ID: DEFECT000583695	Technical Severity: High
Reason Code: Will Not Fix	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.2	Technology Area: D_Port - Diagnostic Port
Symptom: If a blade or switch is disabled while the D_Port test is running, the switch/blade might move to disabled state permanently which requires a reboot of the blade/switch to recover.	
Condition: It could happen with all platforms	
Workaround: Avoid disabling blade/switch when D_Port test is running.	
Recovery: Reboot the blade/switch.	

Open Defects in Fabric OS 8.0.1

This section lists open software defects with Critical, High, and Medium Technical Severity as of April 22, 2016 in version 8.0.1.

Defect ID: DEFECT000463170	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.2.0	Technology Area: Configuration Fundamentals
Symptom: ipsecconfig command may hang the command line	
Condition: ipsecconfig --disable command may hang and not work properly. Subsequent disable/re-enables may fail.	

Defect ID: DEFECT000470634	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.2.0	Technology Area: Flow Vision
Symptom: A static and a learning flow cannot monitor the same traffic at two ports on the same chip.	
Condition: A static and a learning flow created on same chip where the traffic on the static flow is a subflow for the learning flow.	

Defect ID: DEFECT000498330	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.0	Technology Area: D_Port - Diagnostic Port
Symptom: Increase in er_unroutable and er_other_discard counts in port statistics on the local D_Port when the switch at the remote end of the link is rebooted or HA rebooted.	
Condition: When a link which has static D_Port configured between two switches and the switch at one end of the link is rebooted or HA fail over is done.	

Defect ID: DEFECT000509850	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.0	Technology Area: Management GUI
Symptom: Unable to view the current updated FCIP details after clicking Refresh Now Option.	
Condition: Changes to the FCIP tunnels in the 7840 platform are not updated in the WebTools views.	
Workaround: Navigate to another tab and return to see the updated values of FCIP Tunnel.	

Defect ID: DEFECT000512746	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.0	Technology Area: Flow Vision
Symptom: A WWN-based flow will not be deactivated automatically, when the WWN of the generator port is changed using the command fapwwn .	
Condition: WWN of the generator port is changed using the command fapwwn .	
Recovery: Deactivate and activate the flow manually.	

Defect ID: DEFECT000537487	
Technical Severity: Low	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Management GUI
Symptom: When the IP address is provided for specific logical switch context, the default switch context will be launched.	
Condition: Launching WebTools for logical switch context which has IPFC and subnet mask address configured.	
Workaround: Launch WebTools for the default switch context and navigate to specific logical switch context.	

Defect ID: DEFECT000540101	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.2.1	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: SNMP query reports a fan speed of 0.	
Condition: Erroneous fan speed report occurs only when switch hits transient I2C failure and it will be recovered automatically.	

Defect ID: DEFECT000548803	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS7.1.1	Technology Area: Zoning
Symptom: After an offline/online event of storage ports in a session based zone, hosts are no longer able to connect to the storage ports.	
Condition: This may be seen in largely over-subscribed storage ports	
Workaround: portdisable/portenable storage ports.	

Defect ID: DEFECT000549417	
Technical Severity: Low	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Configuration Fundamentals
Symptom: If dynamic port name is configured on the switch, any change in port name will not be handled by MAPS dynamic group for which "feature" is specified as port name. After change in port name, the group membership may not reflect correct members.	
Condition: Using MAPS and dynamic port naming	

Defect ID: DEFECT000549628	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.1	Technology Area: Hardware Monitoring
Symptom: Panic may be seen if POST tests are interrupted by a supportsave operation.	
Condition: Issue happens when supportsave is triggered in the middle of POST tests or vice versa.	
Workaround: Supportsave to be executed at the end of post tests.	

Defect ID: DEFECT000549856	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Other
Reported In Release: FOS7.4.0	Technology Area: Other
Symptom: When a Quarantined port is moved out of the current Logical Switch, the port is listed as -1/-1 in the output of ' sddquarantine --show ' executed in the current Logical Switch.	
Condition: Moving a quarantined port in disabled state to a different Logical Switch in a chassis-based switch	
Workaround: Remove the port from quarantined state using sddquarantine --clear <slot/port> before moving the port to a different logical switch	

Defect ID: DEFECT000554685	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.1	Technology Area: RAS - Reliability, Availability, and Serviceability
Symptom: swSsn varbind is missed in the swEventTrap trap if swExtTrap is set to "No" .	
Condition: This behavior is seen on all platforms when the user sets swExtTrap to "No".	

Defect ID: DEFECT000555276	
Technical Severity: Low	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Fibre Channel Services
Symptom: CLI command " portcfgshow " options (-s/-i) for slot/index does not display the fillword field.	
Condition: CLI command " portcfgshow " does not display the fillword if input parameters are used. This is due to chip type conditions taken into consideration while options like -s/-i provided.	
Workaround: Use the CLI command " portcfgshow " without any input parameters.	

Defect ID: DEFECT000558941	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0_AMP	Technology Area: Flow Vision
Symptom: Due to ISLs enabled by error or unintentional configuration between two unique fabrics, vTap flow may be mirrored to a wrong Analytics Monitoring Platform (AMP) or to a wrong AF_Port on AMP when the inadvertently merged fabric is connected to the same logical switch on the AMP.	
Condition: The customer may face this issue if the same logical switch on AMP is connected to two unique fabrics which inadvertently merged.	
Workaround: Avoid inadvertent fabric merge or if merge is intentional, deactivate vTap flow, configure the correct AF port, activate vTap flow.	
Recovery: Remove ISL causing the inadvertent merge, deactivate vTap flow, configure the correct AF port, and activate vTap flow.	

Defect ID: DEFECT000559528	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.1	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: MAPS traps are not sent as part of snmpTraps -send (test traps) command.	
Condition: All FOS platforms with MAPS enabled are affected. FOS 7.4 and above there is no support for Fabric Watch or MAPS traps in snmptraps command.	

Defect ID: DEFECT000561914	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS7.3.0	Technology Area: User Accounts & Passwords
Symptom: The description of userconfig -d is specified in the man pages and documentation to be 40 characters, but is actually only 32 characters.	
Condition: This is specific to the CLI command userconfig -d	

Defect ID: DEFECT000563298	
Technical Severity: Low	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0_AMP	Technology Area: Flow Vision
Symptom: The output of " flow --show sys_mon_analytics -srcdev <SID> -dstdev <DID> " CLI does not display the metrics table for the specified single flow between the pair of source and destination devices.	
Condition: The condition is observed when there is no traffic between the specified source and destination devices.	
Recovery: Re-issue " flow --show sys_mon_analytics -srcdev <SID> -dstdev <DID> " command after traffic restarts between source and destination	

Defect ID: DEFECT000563629	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS7.2.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: One or more IPSec enabled FCIP circuits may continuously bounce or go down and not recover. The affected DP will report Authentication Tag Mismatch errors continually.	
Condition: When IPSec enabled on an FCIP tunnel between a pair of FX8-24 blades.	
Recovery: Reboot the affected FX8-24 blade.	

Defect ID: DEFECT000564187	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS6.4.2	Technology Area: RAS - Reliability, Availability, and Serviceability
Symptom: User can still configure FA-TRAP/ISCSI-TRAP on FOS v6.4.x, though FA-MIB/ISCSI-MIB was set to 'NO' prior to code upgrade via CLI snmpconfig -set.	
Condition: When upgrade from FOS v6.3.x to FOS v6.4.x with FA-MIB/ISCSI-MIB set to 'NO'	

Defect ID: DEFECT000564241	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0_AMP	Technology Area: Flow Vision
Symptom: Fabric latency metrics for 10 sec / 5 min intervals are displayed in the brief metrics output even after the traffic is stopped.	
Condition: This is observed when a user has enabled vTap from host ports and target ports to monitor fabric latency.	
Recovery: Data will adjust when the traffic resumes.	

Defect ID: DEFECT000564334	
Technical Severity: Low	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: MAPS indicates the switch state is marginal if only one power supply unit is present on Brocade 6505.	
Condition: This is only applicable to Brocade 6505 switch.	
Workaround: This erroneous message may be ignored.	

Defect ID: DEFECT000564909	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.1	Technology Area: CLI - Command Line Interface
Symptom: Switches upgraded to FOSv7.x firmware from FOSv6.4.x with long distance ISLs configured would see "Desired Buffers = 0" in portshow output instead of the configured distance.	
Condition: This issue will be seen on all the platforms upgraded from FOSv6.4.x with Long distance ISLs configured via CLI portshow. But the ISL itself is correct and functional	
Workaround: Use portbuffershow CLI for the correct distance/buffer as configured.	

Defect ID: DEFECT000566393	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.0	Technology Area: Flow Vision
Symptom: Unable to configure a SIM port when QOS is enabled.	
Condition: When a port has QOS enabled, the SIM port enablement will fail	
Workaround: Disable QOS on the port, then enable SIM port, followed by re-enable QOS.	

Defect ID: DEFECT000566919	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.0	Technology Area: RAS - Reliability, Availability, and Serviceability
Symptom: The audit log message "SULB-1001" will not be shown after firmware upgraded to new version.	
Condition: Configure and enable audit filter for firmware class. Then Upgrade firmware from one version to another. After the firmware download is complete, the audit log SULB-1001 message will not be shown.	
Workaround: Use errdump to see the "SULB-1001" message as a RAS log message.	

Defect ID: DEFECT000567870	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Management GUI
Symptom: "IP filter operation is not allowed in this switch instance" error message when configuring an IP filter	
Condition: When an IP Filter configuration is performed on logical switch context	

Defect ID: DEFECT000569827	
Technical Severity: Low	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Fibre Channel Services
Symptom: Port beaconing stops after spinfab is ran.	
Condition: When port beaconing is enabled on a port, LED blink pattern stops after spinfab is ran.	
Recovery: Disable and then re-enable port beaconing on the port.	

Defect ID: DEFECT000569927	
Technical Severity: Low	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Management GUI
Symptom: The speed display in the WebTools Switch Throughput Graph is not display the X-axis correctly for the G620 switch.	
Condition: The X-axis display problem occurs for all GEN6 platforms	
Workaround: Maximize the Web Tools Switch Throughput Graph for proper display	

Defect ID: DEFECT000570383	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.3.1	Technology Area: FICON
Symptom: Soon after a CFG-POR (mainframe reboot) operation, channels in a Logical Switch lost connectivity with Control Units in its neighbor Logical Switch. At the point of lost connectivity, all Logical Fabrics lost connectivity through the Base Fabric to their common-zoned targets in the remote Logical Fabric.	
Condition: A two chassis topology having three Logical Partitions in each chassis and there a Base Fabric with ISL links.	
Workaround: Hfailover to prevent the issue.	
Recovery: Set the non-base logical switches offline and then online.	

Defect ID: DEFECT000570541	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Management GUI
Symptom: Web Tools Switch Throughput Graph closes after error message "null Switch throughput graph will be closed" displays.	
Condition: The WebTools Switch Throughput Graph closes if kept open for more than 2 days	
Workaround: Close and re-open the Web Tools Switch Throughput Graph every 2 days.	

Defect ID: DEFECT000570830	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0_AMP	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: State Changes notifications on trunked AE port are not generated.	
Condition: AMP needs to be connected to fabric switch via a multi_Port trunk.	

Defect ID: DEFECT000570976	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: SNMP - Simple Network Management Protocol
Symptom: In some cases the SNMP data does not display in a tabular format.	
Condition: The SNMP packets are not properly processed to support data display in tabular format.	

Defect ID: DEFECT000572497	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.3.0	Technology Area: Port Bring-up
Symptom: Switch cold boot due to "Software Fault:ASSERT"	
Condition: The following conditions may cause this timing issue: - multiple switch ports bouncing repeatedly over the course of several minutes. - port bounces are initiated by the devices rebooting which causes the offline and online to occur very close together.	

Defect ID: DEFECT000573218	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.0	Technology Area: D_Port - Diagnostic Port
Symptom: At the end of D_Port test, user may observe the message "no matched registered entry" on the console.	
Condition: When user is running D_Port test on multiple ports between a switch and a QLogic HBA.	

Defect ID: DEFECT000573229	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS7.2.1	Technology Area: TIZ - Traffic Isolation Zoning
Symptom: Invalid TI zones constraints may affect traffic on other ports.	
Condition: This occurred when user created invalid TI zone configuration which did not include all member of the trunk group in the TI zone.	
Recovery: Delete the invalid TI Zone and toggle effected ports	

Defect ID: DEFECT000574429	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.0 AMP	Technology Area: Flow Vision
Symptom: When total flow count reaches the maximum but IT and ITL counts are less than their respective maximum limits and there are idle flows, flow aging may not happen.	
Condition: Aging is done based on IT and ITL usage counts. It can so happen both IT and ITL counts are well under the limits but total flow count in the system can exceed the aging threshold. In this case, aging will not happen and no new IT and ITL can get created.	
Recovery: Use a flow reset to clear the flows and restart the monitoring.	

Defect ID: DEFECT000575105	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.0	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: Switch could go out of memory if user creates thousands of MAPS rules.	
Condition: This is rare condition and should not happen in normal situation.	

Defect ID: DEFECT000576048	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.3.1	Technology Area: CLI - Command Line Interface
Symptom: Switch panic after an invalid input parameter to a CLI.	
Condition: User inputed invalid blade port number to " creditrecovmode --check " CLI.	
Workaround: Avoid to use invalid input.	

Defect ID: DEFECT000576240	
Technical Severity: Low	Probability: Low
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS8.0.1	Technology Area: FIPS - Federal Information Processing Standards
Symptom: CVE-2015-7575 TLS 1.2 Transcript Collision attacks against MD5 in key exchange protocol (SLOTH)	
Condition: Only cryptographic software using TLS 1.2 is affected. This man-in-the-middle attacker able to force a TLS connection to use the MD5 hash function could use this flaw to conduct collision attacks to impersonate a TLS server or an authenticated TLS client	
Recovery: Due to these attacks, most cryptographic software was patched to stop accepting MD5 certificates	

Defect ID: DEFECT000576361	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS7.2.1	Technology Area: ACLs - Access Control Lists
Symptom: FCS- and SCC Policy's in fabric disappears when changes made to DCC policy	
Condition: This behavior is seen in all platforms when setting the fabric data distribution configuration to SCC,DCC, and FCS	

Defect ID: DEFECT000576382	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: Management GUI
Symptom: User is not able to disable QoS configuration of ports when multiple Auto Enabled QoS Ports are selected in Webtools	
Condition: When multiple Auto Enabled QoS Ports are selected	
Workaround: Disable one port at a time	

Defect ID: DEFECT000577686	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS7.0.2	Technology Area: Encryption
Symptom: Certain 3rd party HBA hosts connected to a regular FC switch, talking to Virtual Targets connected to BES FC switch can see a traffic issue.	
Condition: This issue could occur only with a specific 3rd party HBA that does not handle all the RSCNs sent by FC switch properly.	
Workaround: Connect host directly to BES switch.	

Defect ID: DEFECT000577772	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: Flow Vision
Symptom: History data for the F_Port trunk master does not display in the Fabric Flow Dashboard.	
Condition: When the F_Port index is different than trunk mater user port number, information will be displayed based on user port number which is equal to trunk port index. In this case slave port information may display instead of trunk master.	

Defect ID: DEFECT000577989	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.0	Technology Area: SNMP - Simple Network Management Protocol
Symptom: SNMP "entPhysicalClass" objects does not display correct values for one of the PhysicalClass named as "other" and its associate "entPhysicalSerialNum"	
Condition: When doing SNMP walk on "entPhysicalClass" objects	

Defect ID: DEFECT000578031	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.0	Technology Area: D_Port - Diagnostic Port
Symptom: The user may observe a difference in estimated buffers required between the output of command " portDportTest --show " and " portBufferShow ".	
Condition: With a long distance link connected through a DWDM box, the user may observe a difference in required buffers between the output of command " portDportTest --show " and " portBufferShow ".	

Defect ID: DEFECT000580882	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS7.3.1	Technology Area: Security Vulnerability
Symptom: CVE-2015-3194: OpenSSL Certificate verify crash with missing PSS parameter.	
Condition: Vulnerability scan reports possible presence of CVE-2015-3193, CVE-2015-3194, CVE-2015-3195, CVE-2015-3196, CVE-2015-1794, although FOS is exposed to CVF-2015-3194 only.	

Defect ID: DEFECT000581120	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Configuration Fundamentals
Symptom: Zoned ports might change zone enforcement to Session Based HARD Zoning [ZONE-1004] or [Zone-1004]	
Condition: During the handling of zone enforcement change	

Defect ID: DEFECT000581219	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: SNMP - Simple Network Management Protocol
Symptom: SNMP get/getnext walk fails.	
Condition: When the SNMP access control list is configured with an invalid IP address	
Workaround: Remove the invalid IPaddress entry in the SNMP access control list.	
Recovery: Remove the invalid IPaddress entry in the SNMP access control list.	

Defect ID: DEFECT000581753	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.3.1	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: The following error message occurs when the customer tries to create MAPS rules. "The feature is not supported on standby CP"	
Condition: This issue happens when the firmware version in the standby CP is less than the Active CP (FOSv7.3)	
Workaround: hafailover.	

Defect ID: DEFECT000582386	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: Extended Fabrics
Symptom: The GE ports of the SX6 extension blade displays the port state as "No_Light" rather than "Mod_Inv" when a 32G SFP+ is inserted	
Condition: When a 32G SFP+ is inserted into the GE port of a SX6 extension blade.	

Defect ID: DEFECT000583693	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: FCIP circuit spillover feature may not meet expectations	
Condition: When the tunnel's bandwidth is not fully saturated or utilized. As in the case a tunnel's throughput is below the configured bandwidth and the bandwidth is modified, the actual throughput may move in the opposite direction from the bandwidth value modified. The bandwidth of a tunnel can change based on the circuit's bandwidth changing, tunnel's load-level algorithm changing, and/or the metric of a circuit changing.	
Workaround: There is no predictable configuration since the host application's configured block sizes and outstanding I/Os can vary.	

Defect ID: DEFECT000585585	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: D_Port - Diagnostic Port
Symptom: Spinfab test may fail to run successfully on ports configured as D_Ports when attached to a Qlogic HBA. Functionality of the switch is not affected.	
Condition: Spinfab failure maybe observed when running on a port configured as D_Port attached to a Qlogic HBA with "-F_Ports 1" option	

Defect ID: DEFECT000585875	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: Flow Vision
Symptom: System-defined flow does not collect flow monitor stats for F_Port trunks.	
Condition: When a system defined flow "sys_mon_all_F_Port" is activated on a switch which has F_Port trunk. After a few portdisable/portenable of the slave ports, it has been observed that stats are not displayed for master F_Port.	

Defect ID: DEFECT000586502	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Configuration Fundamentals
Symptom: The customer may see timeout messages from support save due to disruptive operation like pulling blades out.	
Condition: It is not recommended to pull blades during a support save.	

Defect ID: DEFECT000586624	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: Hardware Monitoring
Symptom: "State Transitions" in the sfpshow output may not match the "State Transitions" in the portshow output, which may exceed the physical state transition when SFP is inserted and removed multiple times.	
Condition: A specific F_Port is pulled and inserted multiple times resulting in various software state transitions for both media state as well as software port state.	

Defect ID: DEFECT000587033	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Configuration Fundamentals
Symptom: A switch panic may be seen when spinfab is disrupted while in progress.	
Condition: Although not recommended, the panic is seen when all ports or the switch are manually disabled while D_Port or spinfab is running, which is an online test.	

Defect ID: DEFECT000587533	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: D_Port - Diagnostic Port
Symptom: When the D_Port test is run on a range of ports containing more than 30 ports, the D_Port test may occasionally fail on one port.	
Condition: The issue occurs only when the D_Port test is run simultaneously on more than the recommended number (8) of ports.	
Workaround: Rerun the D_Port test on the failed ports.	

Defect ID: DEFECT000588840	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: D_Port - Diagnostic Port
Symptom: D_Port fails when DWDM is applied to it	
Condition: When DWDM is enabled on a port configured as D_Port.	
Workaround: Disable the D_Port configuration using " portcfgdport --disable <port #> " and then execute the command " portcfgdport --enable -dwdm <port #> "	

Defect ID: DEFECT000589666	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: Loss of device connectivity during non-disruptive firmware migration on Brocade 7840	
Condition: Occasional during a non-disruptive firmware migration on an extension platform, when DP upgrade is happening, frames are dropped when the routes change to support DP fail over and DP fallback process	

Defect ID: DEFECT000590383	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS7.3.1	Technology Area: Fabric Authentication
Symptom: Certain devices are denied access to login to the switch when they have a DCC policy configured with proper WWNs.	
Condition: This may occur when either of the WWN words have the most significant bit set. For example WWNs like c0:xx:xx:xx:xx:xx:xx:xx or xx:xx:xx:xx:c0:xx:xx:xx might see this problem when DCC is configured.	

Defect ID: DEFECT000590472	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: Flow Vision
Symptom: Sort by option for flow --show in sys_mon_all_F_Ports does not take the sid column into consideration.	
Condition: When “ flow --show sys_mon_all_F_Ports -sortby column2 ” CLI is executed, it takes the DID column to sort the output instead of the SID column.	

Defect ID: DEFECT000590653	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS8.0.1	Technology Area: QoS - Quality of Service
Symptom: After enabling QoS in a fabric, frame timeout may be observed under heavy congestion condition.	
Condition: While implementing QoS in an existing fabric, IO was stopped, QoS High was enabled and IO was started again. When the IO started running, latency was reported and C3 discards were observed.	
Workaround: Remove the slow-drain devices in the fabric.	
Recovery: Disabled the QoS zones and reverted back to standard zoning.	

Defect ID: DEFECT000590780	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: During a reboot operation, there are rare instances of internal blade port bring up failures resulting in the switch becoming faulty.	
Condition: During a reboot operation, in rare instances the switch becomes faulty.	

Defect ID: DEFECT000590890	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: Maps CIR_UTIL violation may display large % value in configurations having 8 logical switches.	
Condition: Extension Service Module may run out of resources when an IPEX tunnel in the base switch is shared by multiple logical switches	

Defect ID: DEFECT000590931	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Software Installation & Upgrade
Symptom: System checks during firmware install can add several minutes delay when downgrading a GEN5 platform to FOS v7.3.x or v7.4.x from FOS v8.0.1.	
Condition: On Gen5 platforms during firmware downgrade to FOS v7.3.x or v7.4.x from FOS v8.0.1.	

Defect ID: DEFECT000591695	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: Hardware Monitoring
Symptom: Portstatsshow counters er_single_credit_loss and er_multi_credit_loss do not increment for credit loss on an IFL connections	
Condition: The error credit count in portStatsShow do not increment when the ASIC detects the following errors: 1. Software based link time out logic (RASLOG Cx-1012 BE port) 2. ASIC based credit leak (RASLOG Cx-1011) Only RASLOG is triggered to notify these errors.	

Defect ID: DEFECT000591754	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Configuration Fundamentals
Symptom: Attempts to change IP address on embedded switch fails intermittently.	
Condition: This may be seen with Brocade M5424 switch, when an IP address change is performed through CMC management module.	
Workaround: Log into serial console and use "ipaddrset" to change the IP address.	

Defect ID: DEFECT000591792	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Configuration Fundamentals
Symptom: Executing the ethif CLI command displays error message "Error: ifModeSet - Permission denied"	
Condition: The ifModeset CLI is deprecated. There is no loss of functionality.	

Defect ID: DEFECT000591922	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: Unable to modify an enabled TCL when max TCLs are active.	
Condition: Maximum number of TCLs configured and enabled on the system.	
Workaround: Use portcfg tcl <name> modify --admin-status disable to disable the TCL first and then can modify the required parameter and re-enable the TCL.	

Defect ID: DEFECT000592012	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Layer 3 Routing/Network Layer
Reported In Release: FOS8.0.1	Technology Area: IP Addressing
Symptom: Unable to telnet to switch when IP over FC is configured.	
Condition: When the switch's management port is configured with a static IP address having the same subnet mask of IP over FC address.	
Workaround: Reconfigure the IP over FC address after the management IP is configured.	

Defect ID: DEFECT000592079	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.2.0	Technology Area: High Availability
Symptom: HA synchronization issues may be encountered, or portnames may be lost in switch configuration database on both primary and secondary partitions following an hafailover.	
Condition: This may be encountered if a carriage return is inserted into a portname. The configuration database is not properly synced in such situations.	
Workaround: Reconfigure all ports (that have a carriage return in the portname) to remove the carriage returns from the portnames.	
Recovery: Reconfigure missing portnames, taking proper caution not to insert any carriage return in the portnames.	

Defect ID: DEFECT000592535	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Configuration Fundamentals
Symptom: Missing blocking message when performing a configdownload of a file from a different platform type.	
Condition: When issuing a configdownload using a file from platform of different type.	
Workaround: Only perform a configdownload using files from the same platform type	

Defect ID: DEFECT000592537	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Fibre Channel Services
Symptom: Termination of Weblinker process when the standby Brocade CPX blade is removed.	
Condition: Although not recommended, when removing the standby Brocade CPX blade and the Weblinker polling is running.	
Recovery: The Weblinker is a restartable process.	

Defect ID: DEFECT000592567	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: Some of the slow drain ports may not be enforced with a quarantine action. This can be verified from sddquarantine ---show CLI.	
Condition: When the device takes unusually long duration to come online and the switch port is already quarantined.	

Defect ID: DEFECT000592609	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: CLI - Command Line Interface
Symptom: When using the CLI command " portcfg lag LAG1 --delete -f " the user may see the warning message: WARNING: While making configuration changes the modified LAN GE ports will be disabled. Please run "portenable" command to manually enable the modified LAN GE ports after completing all the configuration changes. Operation timed out.	
Condition: When deleting Lags	
Workaround: This is cosmetic error with a timeout and there should not be any functionality loss.	

Defect ID: DEFECT000592802	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: D_Port - Diagnostic Port
Symptom: <code>porttest</code> command fails on ports in a logical switch or base switch that are configured as D_Port.	
Condition: <code>porttest</code> command failure is seen when executed on ports in a logical switch or base switch that are configured as D_Port.	
Workaround: Use D_Port for running link diagnostics	

Defect ID: DEFECT000593194	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Software Installation & Upgrade
Symptom: During a disruptive firmwaredownload, the RASlogs do not show the firmware download for the SX6 extension blade.	
Condition: During a disruptive firmware download on the SX6 extension blade	
Workaround: There is no loss of functionality.	

Defect ID: DEFECT000593302	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: Extended Fabrics
Symptom: Small data transfers fail on TCP connections running through IP Extension.	
Condition: A very short lived TCP connection that sends a small amount of data immediately after it is established and is followed by an immediate close, may close without transferring any data. The TCP connection must be terminated through IP Extension.	

Defect ID: DEFECT000593461	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Fibre Channel Services
Symptom: CLI " <code>agshow</code> " may not display all F_Ports.	
Condition: After a disruptive operation, CLI " <code>agshow</code> " may not display all F_Ports	
Workaround: F_Port information can be found in output of CLI ' <code>switchshow</code> ' display on the attached switch and in Access Gateway.	

Defect ID: DEFECT000593472	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS8.0.1	Technology Area: HTTP/HTTPS

Symptom: The security certificate DAYS_TO_EXPIRE rule violation will not be highlighted in Summary Report's Todays section instead, it will be highlighted in Last 7 days section even when the rule was violated today.

Condition: The issue is observed due to dashboard backup is after the rule violation.

Workaround: For security certificate DAYS_TO_EXPIRE rule violation, please refer RASLOG message.

Defect ID: DEFECT000593734	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: D_Port - Diagnostic Port
Symptom: While running DPORT tests on a port connected to QLogic 16G HBA, observed test fail with reason "Device does not support DPORT functionality"	
Condition: Continuously configuring the port as DPORT and toggling to run the DPORT tests can occasionally cause this.	
Recovery: Re-running the test will make it pass.	

Defect ID: DEFECT000593757	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Software Installation & Upgrade
Symptom: F_Ports will remain disabled in AG and user need to manually enable the ports to bring up the F_Ports.	
Condition: switchdisable/enable without any delay on Wedge platform alone will make the F_Ports stay in the disabled state	
Workaround: Toggling the port will recover it.	

Defect ID: DEFECT000594002	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: Operational status displays as 'degraded' when using the --qos or --ha flag with the ' portshow fciptunnel ' command when SLA is running. Should show as 'Testing' instead.	
Condition: When SLA test is running on a circuit and the " portshow fciptunnel " command is issued with either the --qos or --ha option specified (but not both).	

Defect ID: DEFECT000594100	
Technical Severity: High	Probability: High
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: CLI - Command Line Interface
Symptom: Unable to clear ASIC stats.	
Condition: When issuing CLI command " statsclear " on GEN6 platforms.	

Defect ID: DEFECT000595186	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS7.4.1	Technology Area: Flow Vision
Symptom: With MAPS logical group as ingress port for vTap flow, portdisable/enable of a F_Port belonging to a MAPS group may result in halting of vTap-mirroring .	
Condition: 1. Maps logical group as ingress port for vTAP flow. 2. Repetitive portdisable/enable of F_Ports belonging to MAPS group.	
Workaround: hailure.	
Recovery: hailure.	

Defect ID: DEFECT000595368	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.4.0	Technology Area: Management GUI
Symptom: In zone configuration tab, two zone nodes will be displayed instead of one zone node	
Condition: This may be encountered when launching zone admin in FOS 7.4 version and later	

Defect ID: DEFECT000595452	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: FICON interface timeout detected messages/IOS005I messages during FCIP HCL	
Condition: Problem occurs after retryable HCL Feature Disable errors occur, with active FICON traffic on an FCIP tunnel that has FICON emulation features enabled.	

Defect ID: DEFECT000595474	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Software Installation & Upgrade
Symptom: The power usage of CPX6 blade, displayed in chassisshow output, might be higher than what the actual power usage is.	
Condition: FOS erroneously calculates the power usage of the CPX6 blades.	

Defect ID: DEFECT000595586	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Management GUI
Symptom: Memory, equal to the size of the hash configured, lost during each authentication. Over a long period of time, system may become unstable and report memory leak issue.	
Condition: On switches having WebTools and BNA management sessions.	

Defect ID: DEFECT000595599	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Traffic Management
Reported In Release: FOS8.0.1	Technology Area: Fibre Channel Routing
Symptom: When the port that is online at 32G goes offline because of link failure and comes back online, the port can form a separate trunk because of the FEC state mismatch with master port. This problem applies for 32G trunking ports.	
Condition: This problem applies for 32G trunking ports and occurs when the port goes offline because of Link failure and then comes online and tries to join master port.	

Defect ID: DEFECT000595761	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Software Installation & Upgrade
Symptom: Fan speed continuously oscillate between two speed levels every 30 minutes. Customers will see HIL-1516 raslog every time the fan speed increases as part of this oscillation.	
Condition: The fan oscillation happens on X6-4 and X6-8 chassis.	

Defect ID: DEFECT000595881	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS8.0.1	Technology Area: WAN Performance Analysis Tools
Symptom: FCIP Circuit is in a Online Warning state after applying an SLA, due to SLA misconfiguration.	
Condition: Configuring an FCIP Circuit with an SLA when the circuit is in a Down state.	
Workaround: Apply SLA configuration as part of the FCIP circuit create command, or after the circuit state reaches In Progress or Online.	

Defect ID: DEFECT000596027	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Extension
Reported In Release: FOS7.4.1	Technology Area: FCIP - Fibre Channel over IP
Symptom: FCIP FCP and FICON I/O Errors during FCIP HCL Failover or Failback processing on FCP or FICON Emulation enabled tunnels	
Condition: When running active FICON and FCP traffic over a FICON emulation and FCP emulation enabled FCIP tunnel (or different tunnels) and performing an FCIP HCL firmware upgrade or downgrade.	

Defect ID: DEFECT000596073	
Technical Severity: High	Probability: Low
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: Flow Vision
Symptom: Flow Monitor with option -frametype doesn't count frames	
Condition: Flow created with option -frametype	

Defect ID: DEFECT000596200	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: RAS - Reliability, Availability, and Serviceability
Symptom: Brocade 6520 platform missing raslog event "[SULB-1044], 4, CHASSIS, INFO, Brocade_6505C3, Firmwaredownload to secondary partition has completed successfully."	
Condition: During firmwaredownload on the Brocade 6520 platform	
Workaround: Use firmwaredownloadstatus to see the status.	

Defect ID: DEFECT000596524	
Technical Severity: Medium	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS8.0.1	Technology Area: Virtual Fabrics
Symptom: SNMP fruclass object returning switch blade as application blade and in chassisshow it shows as a SW blade instead of an AP blade.	
Condition: Fruclass is incorrect for application blade	

Defect ID: DEFECT000596527	
Technical Severity: Medium	Probability: Low
Product: Brocade Fabric OS	Technology: Security
Reported In Release: FOS8.0.1	Technology Area: Fabric Authentication
Symptom: Port may become disabled after a firmware download from FOS v8.0.1 to FOS v7.4.x with port authentication set to DHCHAP	
Condition: Firmwaredownload from FOS v8.0.1 to FOS v7.4.x	
Workaround: Remove the DHCHAP keys using " secauthsecret --remove --all " and add the keys back after downgrade to FOS v7.4.x	

Defect ID: DEFECT000596539	
Technical Severity: Medium	Probability: High
Product: Brocade Fabric OS	Technology: Monitoring
Reported In Release: FOS8.0.1	Technology Area: MAPS - Monitoring and Alerting Policy Suite
Symptom: Brocade 6505 model switch when shipped with single FAN/PS FRU which is the default ship configuration for this model will show WARNING message and MARGINAL switch state.	
Condition: Brocade 6505 model that is shipped with single FAN/PS FRU.	

Defect ID: DEFECT000596616	
Technical Severity: High	Probability: Medium
Product: Brocade Fabric OS	Technology: Management
Reported In Release: FOS7.0.2	Technology Area: High Availability
Symptom: Termination of weblinker is observed	
Condition: This issue is seen rarely during configupload operation from management application.	

Appendix: Additional Considerations for FICON in IBM z Systems Environments

New Features Support

Not all possible combinations of features and hardware configurations are included in the FICON qualification process. Features and hardware configurations not supported for FICON may be supported for open systems environments. This appendix articulates those features and configurations tested for FICON environments and include supplemental information for users deploying FOS-based platforms in FICON environments.

The new supported hardware in this release are:

- 2KM 16G QSFP for ICLs
- X6-8 and x6-4 chassis
- G620 Switch
- FC32-48 blade
- SX6 Blade
- 32G SFPs
- 32G QSFP for ICLs
- 32G 2km QSFP for ICLs
- SmartOptics support for Gen5 Directors (8510-8, 8510-4)

The new supported features and functions in this release are:

- Security Hardening – Root access disabled by default and added the ability to restrict access to physically attached devices only.
- MAPS monitoring of GbE ports.

Notes on New Features Supported

SmartOptics support for Gen5 Directors (Brocade DCX 8510-8, 8510-4)

As part of the FOS 8.0.1b IBM z Systems qualification, the SmartOptics 16G DWDM optic (16G-ER-Dxxx-BR2) was qualified and tested with IBM z Systems. IBM, Brocade and SmartOptics support this optic with the Brocade DCX 8510-8, and the Brocade DCX 8510-4 director products used in an IBM z Systems environment. This optic is suitable for use as a single channel connections, and also for ELWL connections of up to 40km. Due to the differences in physical operating characteristics of the SmartOptics optic, if you are using MAPS to monitor the z Systems SAN environment, some additional steps/tasks must be accomplished for your MAPS policies when using Smart Optics. These are discussed below.

Creating User-Defined MAPS Policy – New Logical group for Monitoring “Smart Optics”

Using the Command Line Interface:

- (1) Issue “mapsPolicy show <active policy name>”. This is just to identify the current policy deployed.

Cloning a New MAPS Policy:

- (2) Issue “mapsPolicy --clone dflt_aggressive_policy -name user_aggressive-policy”
- (3) Issue “mapsPolicy --enable user_aggressive-policy”
- (4) Issue “mapsPolicy --show -summary”

Note the number of rules match: original policy and cloned policy

Cloning a Logical Group for SMART OPTICS:

- (5) Issue “logicalgroup --clone ALL_OTHER_SFP -name SMART_OPTICS_SFP”
- (6) Issue “logicalgroup --show”

Note that new Logical Group “SMART_OPTICS_SFP” has copied ALL_OTHER_SFP members.

(Optional) If member ports need to be added or deleted from SMART_OPTICS_SFP:

Issue “logicalgroup --addmember SMART_OPTICS_SFP -members “port,port”

Issue “logicalgroup --delmember SMART_OPTICS_SFP -members “port,port”

Cloning Rules into the new Logical Group: SMART OPTICS:

- (7) Issue “mapsPolicy --show user_aggressive_policy |grep ALL_OTHER_SFP

Note: Above step is to list all rules from original group ALL_OTHER_SFP

Cloning a Rule and Changing the Thresholds:

```
(8) Issue “mapsRule --clone defALL_OTHER_SFPCURRENT_50
-rulename SMART_OPTICS_SFPCURRENT_120
-group SMART_OPTICS_SFP
-monitor current
-value 120
-policy user_aggressive_policy
```

Note: Rule for SMART_OPTICS_SFP Current changed to 120

Cloning a Rule(s) but Leaving Existing Thresholds:

```
(9) Issue “mapsRule --clone defALL_OTHER_SFPVOLTAGE_3630
-rulename SMART_OPTICS_SFPVOLTAGE_3630
-group SMART_OPTICS_SFP
-policy user_aggressive_policy
```

(10)Issue “mapsRule --clone defALL_OTHER_SFPRXP_5000
-rulename SMART_OPTICS_SFPRXP_5000
-group SMART_OPTICS_SFP
-policy user_aggressive_policy

(11)Issue “mapsRule --clone defALL_OTHER_SFPTXP_5000
-rulename SMART_OPTICS_SFPTXP_5000
-group SMART_OPTICS_SFP
-policy user_aggressive_policy

(12)Issue “mapsRule --clone defALL_OTHER_SFPSFP_TEMP_85
-rulename SMART_OPTICS_SFPSFP_TEMP_85
-group SMART_OPTICS_SFP
-policy user_aggressive_policy

(13)Issue “mapsRule --clone defALL_OTHER_SFPVOLTAGE_2960
-rulename SMART_OPTICS_SFPVOLTAGE_2960
-group SMART_OPTICS_SFP
-policy user_aggressive_policy

(14)Issue “mapsRule --clone defALL_OTHER_SFPSFP_TEMP_n13
-rulename SMART_OPTICS_SFPSFP_TEMP_n13
-group SMART_OPTICS_SFP
-policy user_aggressive_policy