Brocade Fabric OS v6.1.2c
Release Notes v1.0

October 14, 2009

Document History

Document Title	Summary of Changes	Publication Date
Brocade Fabric OS v6.1.2c Release Notes v1.0	Initial release	October 14, 2009

Contents

Overview

If you are already using the most recent version of the Fabric OS v6.1.2c Release Notes, here are the changes between that version and this version.

- The table at the end of these notes contains a list of the Fabric OS v6.1.2c closed defects, as well as those listed as closed in the Fabric OS v6.1.1a through 6.1.2a release notes.
- Multi-Protocol router interop is now supported with McDATA SAN Routers M1620 and M2640. See the Fabric OS Compatibility section (below) for more information, including restrictions for this interop.

Optionally Licensed Software

Optionally licensed features include:

- Brocade Ports on Demand — Allows customers to instantly scale the fabric by provisioning additional ports via license key upgrade (applies to select models of switches).
- 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 Advanced Performance Monitoring — Enables performance monitoring of networked storage resources. This license includes the TopTalkers feature.
- High Performance Extension over FCIP/FC (formerly known as "FC-IP Services") (For the FR4-18i blade and Brocade 7500) — This license key also includes the FC-Fastwrite feature and IPSec capabilities.
- Brocade Fabric Watch — Monitors mission-critical switch operations. Fabric Watch now includes new Port Fencing capabilities.
- FICON Management Server — Also known as "CUP" (Control Unit Port), enables host-control of switches in Mainframe environments.
- ICLs, or Inter Chassis Links — Provide dedicated high-bandwidth links between two Brocade DCX chassis, without consuming valuable front-end 8G ports. Each DCX must have the ICL license installed in order to enable the ICL connections. (Available on the DCX only)
- Enhanced Group Management — This license, available only on the DCX and new 8G platforms, enables full management of the device in a datacenter fabric with deeper element management functionality and greater management task aggregation throughout the environment. This license is used in conjunction with Brocade's Data Center Fabric Manager (DCFM) application software.
- Adaptive Networking — Adaptive Networking provides a rich framework of capability allowing a user to ensure high priority connections obtain the bandwidth necessary for optimum performance, even in congested environments. The QoS SID/DID Prioritization and Ingress rate limiting features are the first components of this license option, and are fully available on all 8G platforms.

- Integrated Routing — This licensed capability, introduced in Fabric OS v6.1, allows ports in a DCX, 5300, or 5100 to be configured as EX_ports supporting Fibre Channel Routing. This eliminates the need to add an FR4-18i blade or use the 7500 for FCR purposes, and also provides double the bandwidth for each FCR connection (when connected to another 8G-capable port).
- 7500E Upgrade (For the Brocade 7500E only) — This license allows customers to upgrade a 4-port (2 FC ports and 2 GE ports) 7500E base to a full 18-port (16 FC ports and 2 GE ports) 7500 configuration and feature capability. The upgraded 7500E includes the complete High Performance Extension license feature set.
- Brocade Accelerator for FICON – This license enables unique FICON emulation support for IBM's Global Mirror (formerly XRC) application (including Hitachi Data Systems HXRC and EMC's XRC) as well as Tape Pipelining for all FICON tape and virtual tape systems to significantly improve XRC and tape backup/recovery performance over virtually unlimited distance for 7500, upgraded 7500E and FR4-18i.

Previously Licensed Software Now Part of Base FOS

The following capabilities are included as part of the base FOS capability and no additional purchase or licensing is necessary:

- Advanced Zoning and WebTools licenses are no longer necessary beginning with FOS v6.1. These features are automatically enabled on all products running FOS v6.1 or later.

Supported Switches

Fabric OS v6.1.2c supports the Brocade 200E, 300, 4012/4016/4018/4020/4024/4424, 4100, 4900, 5000, 5100, 5300, 7500, 7500E, 7600, 48000, and DCX. All supported products are qualified for Native Connectivity in interopmodes 2 and 3 for deployment in M-EOS fabrics with the exception of the Brocade 4100.

Access Gateway is also supported by Fabric OS v6.1.2, and is supported on the following switches: the Brocade 200E, 300, 4012, 4016, 4018, 4020, 4024 and 4424.

Standards Compliance

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 standards conformance, visit the following Brocade Web site: *http://www.brocade.com/sanstandards*

Technical Support

Contact your switch supplier for hardware, firmware, and software support, including product repairs and part ordering. To expedite your call, have the following information immediately available:

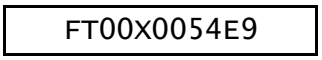
1. **General Information**

- Technical Support contract number, if applicable
- Switch model

- Switch operating system version
- Error numbers and messages received
- **supportSave** command output
- 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, as shown here.



The serial number label is located as follows:

- Brocade 200E—On the nonport side of the chassis
- Brocade 4100, 4900, and 7500/7500E—On the switch ID pull-out tab located inside the chassis on the port side on the left
- Brocade 300, 5000, 5100, and 5300—On the switch ID pull-out tab located on the bottom of the port side of the switch
- Brocade 7600—On the bottom of the chassis
- Brocade 48000 —Inside the chassis next to the power supply bays
- Brocade DCX—Bottom right of the port side.

3. World Wide Name (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 WWN from the same place as the serial number, except for the Brocade DCX. For the Brocade DCX, access the numbers on the WWN cards by removing the Brocade logo plate at the top of the non-port side. The WWN is printed on the LED side of both cards.

Important Notes

This section contains information that you should consider before you use this firmware release.

DCFM Compatibility

FOS v6.1.2c is fully compatible with Brocade's Data Center Fabric Manager (DCFM) management software. DCFM is a comprehensive network management application that enables end-to-end management of Brocade Data Center Fabrics. It is the next-generation product that is

the successor to existing Brocade management products, namely Brocade Fabric Manager (FM) and Brocade Enterprise Fabric Connectivity Manager (EFCM).

DCFM is available in two versions: *DCFM Professional*, a complimentary application that is ideally suited for small and medium size businesses that need a light-weight management product to manage their smaller fabrics (one physical fabric at a time, up to 1,000 ports); and *DCFM Enterprise*, that is designed for enterprise-class customers and showcases unparalleled performance and scalability (24 physical fabrics, up to 9,000 switch ports). DCFM Enterprise configures and manages Brocade DCX Backbones, along with Brocade directors, routers, switches, and HBAs. It also supports Brocade fabric-based encryption capabilities for data-at-rest. Existing EFCM and FM customers that have active Maintenance and Support contracts are provided a seamless migration path to DCFM Enterprise.

EFCM Compatibility

When managing Brocade FOS-based switches with EFCM management software, EFCM 9.7.1 or later should be used. For more information on migrating from previous versions of EFCM to EFCM 9.7.1, refer to the EFCM 9.7.1 Release Notes documentation.

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.

When using any of Brocade's encryption platforms in a fabric, it is required that all other FOS products be operating with specific revisions of FOS. For 2G/4G platforms, a minimum level of FOS v5.3.1b is required, and for all 8G platforms a minimum of FOS v6.1.2c is required.

When using M-EOS products in the fabric, it is required to use M-EOS v9.8.0 or later. Frame redirection is not supported in mixed FOS and M-EOS fabrics operating in Open Fabric Mode (interopmode 3). Only the ES-4400, ES-4700, M6140, and Mi10k may have devices directly attached that are having data encrypted or unencrypted.

For a list of the effective end-of-life dates for all versions of Fabric OS, visit the following Brocade Web site:

http://www.brocade.com/support/end_of_life.jsp

Supported Products and FOS Interoperability	
Brocade 2000-series switches	Not supported, end of support (December 2007)
Brocade 3000, 3200, 3800	v3.2.1c [1]
Silkworm 3014, 3016, 3250, 3850 and Brocade 3900, 4100, 24000, 7500, 7500E, 4012, 200E, 48000	v5.1 and higher
Silkworm 12000	v5.0.x
Brocade 4900	v5.2.0 and higher
Brocade 4012, 4016, 4018, 4020, 4024	v5.2.1 and higher
Brocade 5000	v5.2.1 and higher
Brocade 4424	v5.3.0_emb and higher
Brocade 7600	v5.3.0 and higher
Brocade DCX	v6.0.0 and higher
Brocade DCX with FS8-18 blade(s), Brocade Encryption Switch	v6.1.1_enc
Secure Fabric OS (on any model)	Not Supported
Mi10k, M6140, ED-6064, ES-3232, ES-4300, ES-4400, ES-4500, ES-4700 (McDATA Fabric Mode and Open Fabric Mode[5]) [2] [4]	M-EOS v9.8.0 [3]
McDATA ED-5000 32-port FC director	Not Supported
Multi-Protocol Router interop	
Brocade 7420	XPath v7.4.1
Brocade 7500 and FR4-18i blade	v5.1.0 and higher

McDATA SAN Routers M1620 and M2640 (Interopmode 0, 2 and 3) [6]	M-EOSi 5.3 tested with: FOS 5.3.0/IM0/IM2 (IM3 not supported with EOSi in FOS 5.x) FOS 6.0.0, IM0/IM2/IM3 FOS 6.1.0J IM0/IM2/IM3 FOS 6.1.2/IM0/IM2/IM3 FOS 6.1.1d, IM0/IM2/IM3 M-EOSi 5.1.2 tested with: FOS 6.1.1b, IM2/IM3

Notes:

[1] All zoning and fabric operations performed in a fabric with products running older versions of FOS should be done via interfaces to products running the latest version of FOS. This is particularly important for Brocade 3XXX series switches that do not support zoning configuration for newer products.

[2]Other M-EOS models may participate in a fabric with FOS v6.1.2, but may not be directly attached via E_port to any products running FOS v6.1.2. The McDATA ED-5000 director may not participate in a mixed M-EOS/FOS fabric.

[3]It is highly recommended that M-EOS products operate with the most recent version of M-EOS released and supported for interoperability. M-EOS 9.8.0 is the minimum version of firmware that is qualified to interoperate with FOS 6.1.2c or later.

[4]When routing to an M-EOS edge fabric using frame redirection, the M-EOS fabric must have a FOS-based product in order to configure the frame redirection zone information in the edge fabric.

[5]Frame redirection is only supported in M-EOS fabrics running in McDATA Fabric Mode (interopmode 2 on FOS-based platforms). McDATA Open Fabric Mode is not supported.

[6] For Multi-Protocol router interop, FOS-based switches deployed in M-EOS fabrics should not be directly connected (via ISLs) to the M1620 / M2640 products, but rather attached to other M-EOSc/n switches and directors (M6140s, 4700s, Mi10ks, etc) running in McDATA Fabric Mode / Interopmode 2. McDATA Open Fabric Mode / Interopmode 3 is not supported.

Fabric OS v6.1.2c software is fully qualified and supports the blades for the 48000 platform noted in the table below.

48000 Blade Support Matrix

Port blade 16, 32 and 48-port 4Gbit blades (FC4-16, FC4-32, FC4-48), 16, 32 and 48-port 8Gbit blade (FC8-16, FC8-32, FC8-48), and the 6-port 10G FC blade (FC10-6)	Supported with any mix and up to 8 of each. No restrictions around intermix. The 48000 must run Fabric OS v6.0 or later to support the FC8-16 port blade and Fabric OS v6.1 or later to support the FC8-32 and FC8-48 port blades.
Intelligent blade	Up to a total of 4 Intelligent blades (includes iSCSI, FCIP/FCR and Application blade), FC4-16IP, FR4-18i, and FA4-18 respectively. See below for intermix limitations, exceptions, and a max of each blade.
iSCSI blade (FC4-16IP)	Up to a maximum of 4 blades of this type
FC-IP/FC Router blade (FR4-18i)	Up to a maximum of 2 blades of this type. This can be extended under special circumstances but must be approved by Brocade's Product Team. Up to 8 FR4-18i blades can be installed if they are used only for FC Fastwrite or FCIP without routing.
Virtualization/Application Blade (FA4-18)	Up to a maximum of 2 blades of this type.

Fabric OS v6.1.2c software is fully qualified and supports the blades for the DCX noted in the table below.

DCX Blade Support Matrix	
16-, 32- and 48-port 8Gbit port blades (FC8-16, FC8-32, FC8-48) and the 6-port 10G FC blade (FC10-6)	Supported with FOS v6.0 and above with any mix and up to 8 of each. No restrictions around intermix.
Intelligent blade	Up to a total of 8 Intelligent blades. See below for maximum supported limits of each blade.
FC-IP/FC Router blade (FR4-18i)	Up to a maximum of 4 blades of this type. This can be extended under special circumstances, but must be approved by Brocade's Product Team. Up to 8 FR4-18i blades can be installed if they are used only for FC Fastwrite or FCIP without routing.
Virtualization/Application Blade (FA4-18)	Up to a maximum of 4 blades of this type.

Note: the iSCSI FC4-16IP blade is not qualified for the DCX.

Power Supply Requirements for Blades in 48k and DCX Chassis				
Blades	**Type of blade**	**48K**	**DCX**	**Comments**
FC 4-16, FC 4-32, FC 4-48, FC 8-16, FC 8-32	Port Blade	2 Power Supplies*	2 Power Supplies	• Distribute the Power Supplies evenly to 2 different AC connections for redundancy • Power Supplies must be 220V • Blades must meet minimum FOS levels to operate in 48K/DCX chassis (e.g. FC8-32 is not supported in 48K with FOS 6.0.x)
FC10-6, FC 8-48	Port Blade	4 Power Supplies	2 Power Supplies	
FR4-18i, FC4-16IP, FA4-18	Intelligent Blade	4 Power Supplies	2 Power Supplies	

Note: the iSCSI FC4-16IP blade is not qualified for the DCX.

* For full redundancy, the 48000 should have four power supplies when operating fully populated with FC8-32 8G blades. Only seven blades will be enabled in a 48k chassis fully populated with FC8-32 blades that only has a single active power supply.

Secure Fabric OS

Secure Fabric OS (SFOS) is not compatible with FOS v6.1.2. Customers that wish to use the security features available in SFOS should upgrade to FOS v5.3 or later version, which includes all SFOS features

as part of the base FOS. For environments with SFOS installed on switches that cannot be upgraded to FOS v5.3 or later version, FC routing can be used to interoperate with FOS v6.1.2.

Zoning and Fabric Operations

When configuring zoning or other fabric-wide settings in a fabric that has products operating with different versions of FOS, it is recommended that the configuration be performed via an interface (such as WebTools) to a product with the most recent version of FOS. Some older versions of FOS do not fully support newer hardware models, and problems may arise when configuring settings through these older products. Zoning configuration in particular should never be performed through a switch operating with FOS v3.x in a fabric that also has products operating with newer releases of FOS firmware.

FOS Feature Compatibility in Native Connectivity Modes

Some FOS features are not fully supported when operating in the native connectivity modes for deployment with M-EOS based products. All Brocade models that are supported by Fabric OS v6.1.2c support both interopmode 2 and 3 with the exception of the Brocade 4100.

The following table specifies the support of various FOS features when operating in either interopmode 2 (McDATA Fabric Mode) or interopmode 3 (Open Fabric Mode) with Fabric OS v6.1.2.

FOS Features (supported in interopmode 0)	**FOS v6.1.2**	
IM = Interopmode	**IM 2**	**IM 3**
L2 FOS Hot Code Load	Yes	Yes
FOS Hot Code Load with FCR	Yes	Yes
Zone Activation Support	Yes	No
Traffic Isolation Zones[1]	Yes	No
Frame Redirection (devices attached to FOS)[1]	Yes	No
Frame Redirection (devices attached to M-EOS)	Yes	No
FCR Fabric Binding (route to M-EOS fabric with Fabric binding)	Yes	Yes
L2 Fabric Binding	Yes	No*
DCC policies	No	No
SCC policies	Yes[4]	No*
E/Ex_Port Authentication	Yes	Yes
ISL Trunking (frame-level)	Yes[2]	Yes[2]
Dynamic Path Selection (DPS, exchange based routing)	Yes[3]	Yes[3]
Dynamic Load Sharing (DLS, port based routing)	Yes	Yes
Virtual Channels (VC RDY)	Yes[2]	Yes[2]
FICON Management Server (Cascading)	Yes	No*
FICON MIHPTO	Yes	No*
Full Scalability (to maximum M-EOS fabric limits)	Yes	Yes
Adaptive Networking: QoS	No	No
Adaptive Networking: Ingress Rate Limiting	No*	No*
Advanced Performance Monitoring (APM)	No*	No*

FOS Features (supported in interopmode 0)	**FOS v6.1.2**	
IM = Interopmode	**IM 2**	**IM 3**
APM: TopTalkers	No*	No*
Admin Domains/Virtual Fabrics	No	No
Secure Fabric OS[6]	N/A	N/A
Fabric Watch	Yes	Yes
Ports on Demand (POD)	Yes	Yes
NPIV	Yes	Yes
Timer Server function (NTP)	No	No
Open E_Port[7]	N/A	N/A
Broadcast Zoning	No	No
FDMI	No	No
Remote Switch	No	No
Port Mirroring (8G port mirroring supported in FOS v6.1+)	Yes	Yes
Extended Fabrics	Yes	Yes[8]
Alias Server	No	No
Platform Service	No	No
FCIP (VE_Ports)	Yes	Yes
IPFC (IP over FC)	Yes[9]	Yes[9]
M-EOS ALPA 0x13 configuration	Yes	Yes
VE to VEX Port	Yes	Yes
Integrated Routing	Yes	Yes
Domain Offset Support	No	No
239 Domain Support (available on Mi10k only)	N/A	No
Masterless F_PORT Trunking (AG connect to FOS switches only)	Yes	Yes
FC10-6-to-FC10-6 ISL	Yes	Yes
RASLOG Events on duplicate WWNs	Yes	Yes

* indicates the feature is available but not officially tested or supported

1. Feature requires M-EOS 9.7 or later.
2. Only allowed between FOS-based switches
3. DPS is supported outbound from FOS-based switches. (M-EOS can provide reciprocal load balancing using OpenTrunking).
4. SCC policies only supported in conjunction with L2 Fabric Binding support
5. Fabric restriction (refer to FOS v5.2.1_NI release notes)
6. Not supported in FOS 6.0 or later
7. Mode 3 only qualified with M-EOS switches
8. Not on FCR
9. Only supported locally within the FOS switch

Note: FICON Cascaded CUP qualified only on select platforms.

Firmware Upgrades and Downgrades

Upgrading to Fabric OS v6.1.2c is only allowed from Fabric OS v6.0.0 or later. This policy to support only one-level migration, which began with FOS v6.0.0, provides more reliable and robust migrations for customers. By having fewer major changes in internal databases, configurations, and subsystems, the

system is able to perform the upgrade more efficiently, taking less time and ensuring a truly seamless and non-disruptive process for the fabric. The new one-release migration policy also reduces the large number of upgrade/downgrade permutations that must be tested, allowing Brocade to spend more effort ensuring the supported migration paths are thoroughly and completely verified.

Only products based on 4G and 8G capable ASICs are supported by Fabric OS v6.1.2. Older products utilizing previous generation 2G ASICs will remain on the FOS v5.x code stream. FOS v5.x is fully compatible in fabrics with FOS v6.1.2, as well as for routing. The Brocade 12000 is not supported with FOS v5.3.0; it remains supported only on FOS v5.0.x releases.

All products supported by Fabric OS v6.0 can be upgraded to Fabric OS v6.1.2.

Products that can be upgraded to Fabric OS v6.1.2:

- 4012/4016/4018/4020/4024/4424, 4100, 4900, 5000, 7500, 7500E, 7600, 200E, 48000, and DCX.

For routed SANs with M-EOS switches in an edge fabric, upgrades to Fabric OS v6.1.2c will be non-disruptive if all EX_Ports to M-EOS edge fabrics are attached to Brocade 48000 directors with an FR4-18i blade.

For each switch in your fabric, complete all firmware download changes on the current switch before issuing the firmwareDownload command on the next switch. This process ensures no disruption of traffic between switches in your fabric.

To verify the firmwareDownload process is complete, enter the firmwareDownloadStatus command on the switch, verify the process is complete, and then move on to the next switch.

SAS Version Requirements for FA4-18 and 7600:

SAS v3.2.0 is the supported SAS version for FOS v6.1.2. This is the same level of SAS supported by FOS v6.1.0.

- When upgrading from FOS v6.0 to v6.1.2c and SAS 3.1.0 to SAS 3.2.0, first upgrade FOS v6.0 to v6.1.2c and then upgrade SAS from 3.1.0 to 3.2.0.
- When downgrading from FOS v6.1.2c to v6.0 and SAS 3.2.0 to SAS 3.1.0, first downgrade SAS from 3.2.0 to 3.1.0 and then downgrade FOS from v6.1.2c to v6.0.

Firmware Migration for the Brocade 7500E

Upgrades to FOS v6.1.2

The FOS v6.1.2c release will limit the configurations of a 7500E to the defined functionality for the 7500E shown in the following table.

Feature	7500	7500E Base Unit	7500E Upgraded with 7500E Upgrade License

Feature	7500	7500E Base Unit	7500E Upgraded with 7500E Upgrade License
Redundant power supplies and fans	Yes	Yes	Yes
Fibre channel ports 1-, 2-, or 4 gbps	1,2,4 Gig	1,2,4 Gig	1,2,4 Gig
Number of fibre channel ports	16	2	16
Number of Gigabit Ethernet (GbE) ports	2	2	2
Fibre channel routing between remote fabrics for fault isolation	Yes	Yes	Yes
Fast Write over FC port	Yes*	No	Yes
Tape Pipelining over FC port	Yes*	No	Yes
FCIP tunnel over GE port	Yes*	Yes	Yes
Max Committed Rate (throughput throttle) per FCIP tunnel	Up to 1Gbps	Up to 50 Mbps	Up to 1 Gbps
Number of connections or tunnel (remote sites) per port	8	1	8
IPSec	Yes*	No	Yes
IP Compression	Yes*	Yes	Yes
Storage optimized TCP	Yes*	Yes	Yes
Fast Write over FCIP tunnel	Yes*	Yes	Yes
Tape Pipelining over FCIP tunnel	Yes*	No	Yes
FICON XRC emulation and Tape Pipelining over FCIP	Yes**	No	Yes**
Call home	Yes	No	Yes

* Requires High Performance Extension license

** Requires Brocade Accelerator for FICON license

For customers running an earlier FOS release than v6.1.2c on a 7500E, it is possible that the configuration may exceed the feature limitations defined in the table above. A 7500E cannot be upgraded to FOS v6.1.2c if it had been inadvertently configured outside of the feature limitations.

The pre-installation script of v6.1.2c will check the system configuration to ensure that it is valid for a 7500E. If the configuration is not valid, the installation will be aborted, and the configuration will need to be modified with the pre-6.1.2c release. If the pre-installation script identifies any violation, the script will output an error message indicating the reason(s) the upgrade has been blocked.

Downgrades from FOS v6.1.2

If a 7500E is downgraded from v6.1.2c to v6.1.0x release, the 7500E, with or without the 7500E Upgrade license, will operate as a standard 7500 and abide by honor based feature enforcement. Without the 7500E Upgrade license, there will be no technical support for a configuration that is outside the defined functionality of 7500E base shown in the above feature matrix table.

Scalability

All scalability limits are subject to change. Limits may be increased once further testing has been completed, even after the release of Fabric OS. For the most current scalability limits for Fabric OS, refer to the *Brocade Scalability Guidelines* document available at http://www.brocade.com/products/SAN_interop_and_compatibility.jsp.

Scalability limits for Fabric OS v6.1.2c are essentially the same as those limits supported by FOS v6.0. Fabrics of up to 6000 virtual or physical connections (WWNs logged into a single fabric) and 56 domains (domain support is the same as on previous FOS releases) can be supported on DCX and 5300. Other products running FOS v6.1.2c will retain similar fabric limits as prior FOS releases for non-routed fabrics (i.e., L2 only, 56 domains and 2560 logged in devices).

When operating in Native Connectivity modes (interopmode 2 or 3), different scalability limits are supported. For both interopmode 2 and 3, fabrics of up to 2048 virtual or physical connections (WWNs logged into a single fabric) and 31 domains are supported. This is the same level of support as FOS v6.1.0.

Routed scalability limits are noted in the table below.

Fibre Channel Routing Scalability (Tested/Supported Limits)	
Max # edge fabrics per metaSAN	48/48
Max # edge fabrics per chassis	16/16 (7500 & FR4-18i in 48k or DCX) 24/32 (5100 & 5300) 24/48 (DCX)
Max # switches per edge fabric (FOS)	26/26
Max # switches per edge fabric (M-EOS fabric) [1]	16/ 16
Max # WWNs per edge fabric (M-EOS fabric) [1]	800/1500
Max # imported devices per fabric (M-EOS fabric) [1]	300/1000
Max # L2 switches per backbone fabric	12/12
Max # FCR's per backbone fabric	12/12
Max # WWNs per edge fabric (FOS)	1200/1500
Max # WWNs per backbone fabric	512/1024
Max # imported devices per fabric	1000/1000

Fibre Channel Routing Scalability (Tested/Supported Limits)	
Max # LSAN device per metaSAN	10000/10000
Max # LSAN zones per metaSAN	3000/3000[2]
Max # devices per LSAN zone	64/64
Max # hops between edge switches	12/12
EX_Ports per FCR (48K/DCX with FR4-18i)	32/32
EX_Ports per chassis with Integrated Routing	DCX: 128/128 5300/5100: Max port count

Table Notes:

[1]M-EOS fabrics must be running M-EOS 9.6.2 firmware or later.

[2]All BB FCRs with Fabric OS v6.0.0 and above. For M-EOS edge fabrics prior to v9.6 the limit is 1024 zones. For M-EOS edge fabrics operating with 9.6.x or later, the limit is 2048 zones.

Other Notes:

1) IPFC over FCR is only supported for edge to edge.

2) FC Fast Write is only supported for edge to edge.

3) The backbone cannot run in interopmode 2 (McDATA Native Interop) or 3 (Open mode). It must be in FOS native mode.

4) All limits apply to Integrated Routing as well as FCR on 7500/FR4-18i unless otherwise noted.

Other Important Notes and Recommendations

Licensing Behavior:

- When operating a switch with Fabric OS v6.1.2, some licenses may display as "Unknown." This is due to changes in licensing requirements for some features that no longer require a license key.
- When upgrading a Brocade 48000 that has the FCIP license installed, the *licenseshow* output may falsely indicate that Integrated Routing is available.

Adaptive Networking/Flow-Based QoS Prioritization:

- When using QoS in a fabric with 4G ports or switches, FOS v6.0 or later must be installed on all products in order to pass QoS info. E_Ports from the DCX to other switches must come up AFTER 6.0 is running on those switches.
- Flow based QoS is NOT supported on FC8 blades in the Brocade 48000.

- Any products that are not capable of operating with FOS 6.0 may NOT exist in a fabric with Flow based QoS. Major problems will occur if previous generation 2G products exist in the fabric.

FCR Backbone Fabric ID changes:

- With FC8 blades, the switch must be disabled to change the backbone fabric ID
- With routing and dual backbone fabrics, the backbone fabric ID must be changed to keep the IDs unique.

Integrated Routing

- To allow Hot Code Load on a Brocade 5100 when using Integrated Routing, the edge switch connected to the 5100 must be running Fabric OS v6.1 or later code.
- The Brocade 5100 does not support Hot Code Load from FOS 6.1.0 to 6.1.2c in a dual backbone configuration with a routed connection to an M-EOS product.

FCS Automatic Distribution

- When using the FCS Automatic Distribution feature in Fabric OS v6.0 or later, all switches in the fabric must be running FOS v6.0 or later. If any switches are running FOS v5.x or earlier, only manual distribution can be used.
- FOS v6.0 or later will only allow FCS automatic distribution when in strict mode, requiring only switches with FOS v6.0 or later.

Access Gateway

- When in Access Gateway mode, the Automatic Port Configuration policy may not work when attached to M-EOS switches. M-EOS ports should be set to G_port to prevent problems with port type discovery.

10G Interoperability

- 10G interop between FC10-6 and McDATA blades is not supported due to a HW limitation, however the FC10-6 is supported in a chassis running in Interopmode 2 or 3 (FC10-6 to FC10-6 connections only). An FC10-6 blade will not synchronize with a McDATA 10G blade but will not negatively impact the system.

Traffic Isolation over FCR

- All switches and Fibre Channel Routers both in edge and backbone fabrics must be running FOS v6.1.0 or later in order to support this feature.
- It is essential to have “fail-over” policy ENABLED in all edge fabrics that are part of the traffic isolation zones, in order for the proper functioning of Traffic Isolation over FCR.

Port Fencing

- Port Fencing is only supported on E_Port and F_Port classes. Port Fencing is available with the optional Fabric Watch license.
- When the port fencing feature is enabled for ITW or CRC errors, the first set of errors detected on an active link that meet the custom high threshold level set by the user (or the default threshold level) is always ignored to account for expected link transition errors. The port is only disabled upon detection of a second set of errors, i.e. the next time the user-set

threshold level (or default threshold level) is reached. This prevents a port from being disabled due to normal link transition behaviors.

QOS

The fix for the defect 250438 included in this release changes the default behavior of the Adaptive Networking QoS feature as follows upon firmware upgrade:

- The default QoS behavior is changed to be "disabled" on 4G platforms.
- The default QoS behavior is changed to be "disabled" on the "Extended Fabrics E-ports" on both 4G and 8G platforms.

This fix solves the following unexpected behaviors that occurred when Adaptive Networking QoS feature was enabled by default in the previous FOS releases:

- Splitting of a single trunk group into multiple trunk groups upon port toggle, since the toggled ports come online with QoS enabled while the remaining ports in the trunk group have QoS disabled.
- Fewer buffer credits being made available to normal E-ports after a port toggle even when QoS is not being utilized.
- Unexpected change to fill word configuration on an Extended Fabrics E-port after a port toggle.
    - If an Extended Fabrics E-port is originally using IDLE primitives as fill words, and if that port toggles, the fill word configuration will be changed to use ARB primitives.

Note:

After upgrading to this firmware release, if users want to enable Adaptive Networking QoS feature on 4G platforms, and on Extended Fabrics E-ports on both 4G and 8G platforms, they must do so explicitly through the available user interfaces.

Extended Fabrics and R_RDY Flow Control

- Beginning with Fabric OS v5.1, Brocade supported the Extended Fabrics feature in conjunction with R_RDY flow control (R_RDY flow control mode can be enabled via portCfgISLMode command). R_RDY flow control mode that uses IDLE primitives does not support Brocade frame-based Trunking for devices such as Time Division Multiplexor (TDM.) In order to overcome this limitation and provide support for frame-based Trunking with Extended Fabrics, Fabric OS v6.1.2c has been enhanced to support interoperability with these distance extension devices.

  Fabric OS v6.1.2c allows Extended Fabrics E_ports to operate in VC_RDY mode using either ARB or IDLE primitives as fill words. This allows frame-based Trunking to be supported on Extended Fabrics E-ports even when IDLE primitives are configured for these ports when operating in native VC_RDY mode. Prior to this change, frame-based Trunking was supported only when ARB primitives were used in VC_RDY mode. With Fabric OS v6.1.2, frame-based Trunking is supported on Extended Fabrics E_ports regardless of whether IDLE or ARB primitives are used when operating in native VC_RDY mode.

  Implementation

The portcfglongdistance CLI parameter "VC Translation Link Init" is now overloaded to specify if the long distance link should use IDLE or ARB primitives. By default vc_init is enabled. If vc_init is enabled, the long distance link will use ARB primitives. If vc_init is disabled, the link will use IDLE primitives.

Note:

Buffer to Buffer Credit Recovery feature is not supported on Extended Fabrics E_port when it is configured to use IDLE primitives. The user must disable buffer to buffer credit recovery feature using the command portcfgcreditrecovery and specifying the disable option; otherwise, the link will continuously reset.

The Adaptive Networking SID/DID Traffic Prioritization QoS feature is not supported on Extended Fabrics E_ports when IDLE primitives are configured on these ports. This is because in this mode only data Virtual Channels are available while QoS related virtual channels are not available.

When connecting to an extension device that does not support ARB primitives (such as some TDM products), the following configuration must be used:

portcfgqos -disable <port>
portcfgcreditrecovery –disable <port>
portCfgLongDistance <port> <LD|LD> 0 <distance>

The fabric parameter "fabric.ops.mode.longdistance" is now deprecated and should not be used.

Documentation Updates

This section provides information on last-minute additions and corrections to the documentation. The most recent Fabric OS v6.1.2c documentation manuals are available on the Brocade Partner Network: *http://partner.brocade.com/*

Brocade Fabric OS Administrator's Guide (Publication Number 53-1000598-04)

In chapter 1, Getting Started, under the heading "Licensed features" there is a table "License requirements" on page 16, where the following items in the table should be changed to reflect the following:

- EX_Ports licensing should only be on the local switch.
- Ingress rate limiting licensing should only be on the local switch.

On page 422, in chapter "Administering Extended Fabrics", below Example: Consider Brocade 300, which has 24 ports and total buffers of 676, change the following note:

- The 10 Gbps FC10-6 blade has two port groups of three ports each. For extended ISLs, all buffers available to a group are used to support one port at up to 120 km.
- Change: 120 km to 100 km.

In chapter 11, "Implementing an Interoperable Fabric," in the section "McDATA Open Fabric mode configuration restrictions," some of the scalability limits are incorrect. For the most current scalability limits for Fabric OS, refer to the Brocade Scalability Guidelines document available at http://www.brocade.com/products/SAN_interop_and_compatibility.jsp

Brocade 5100 Hardware Reference Manual (Publication Number 53-1000854-02)

- On page 19, in the section "LED Patterns," change the following item:

LED Name	LED Color	Status of Hardware	Recommended Action
Power Supply Status (right)	No light	Primary power cord is disconnected or is not actively powered, or power supply has failed.	Verify the power supply is on and seated and the power cord is connected to a functioning power source.

To the following:

LED Name	LED Color	Status of Hardware	Recommended Action
Power Supply Status (right)	Flashing green	Primary power cord is disconnected or is not actively powered, or power supply has failed.	Verify the power supply is on and seated and the power cord is connected to a functioning power source.

Web Tools Functionality Moved to DCFM

The functionality that was moved from Web Tools into DCFM is applicable to both DCFM Professional and DCFM Enterprise. The following table details these changes.

Function	Web Tools 6.1.0	DCFM	Comments
Add Un-Zoned Devices	Zone Admin	Configure > Zoning Reverse Find in the Zoning dialog provides the view of the zoned and unzoned devices in the fabric if all zone members are selected for Find.	
Analyze Zone Config	Zone Admin	Configure > Zoning: Reverse Find in the Zoning dialog provides the view of the zoned and unzoned devices in the fabric if all zone members are selected for Find. Device Tree and Topology: Connected End Devices - Custom Display from the top level in the main frame provides the device tree and topology view for all the zoned devices if all zones are selected in the active zone configuration.	

Function	Web Tools 6.1.0	DCFM	Comments
Define Device Alias	Zone Admin	Configure > Zoning	
Device Accessibility Matrix	Zone Admin	Configure > Zoning the Compare dialog provides the Storage-Host and Host-Storage view in a tree representation that is comparable to the Device Accessibility Matrix when all devices are selected.	
Fabric Events	Monitor > Fabric Events	Monitor > Logs > Events	
Fabric Summary	Reports > Fabric Summary	Monitor > Reports > Fabric Summary Report	
FCIP Tunnel Configuration	Port Admin Module > GigE tab	Configure > FCIP Tunnel	Viewing FCIP tunnels is still supported in Web Tools 6.1.2, but New, Edit Config, and delete are only available in DCFM.
GigE Ports Interface	Port Admin Module > GigE tab	Configure > FCIP Tunnel	
GigE Ports Route	Port Admin Module > GigE tab	Configure > FCIP Tunnel	
Non-local switch ports display in zoning tree	Zone Admin Admin Domain Switch Admin > DCC policies Performance Monitoring	Configure > Zoning	In Web Tools, non-local switch port id/WWN can be added using text box.
Remove Offline or Inaccessible Devices	Zone Admin	Configure > Zoning Replace/Replace All zone members by selecting the offline devices from the zone tree. Offline devices have an unknown overlay badge with good visibility.	
Zone database summary print	Zone Admin	Configure > Zoning Zoning report for both online and offline database.	
Zoning			

Brocade 7500 SAN Routers Hardware Reference Manual (Publication Number 53-100026-03)

On the Title page, change the title to *Brocade 7500 Extension Switches Hardware Reference Manual*.

Throughout publication, change the product name “SAN Routers” to “Extension Switches.”

On page viii, replace “7500 SAN Routers” section with the following:

7500 Series Extension Switches

- *7500 Extension Switches QuickStart Guide*
- *Mid Size Switch Fan Assembly Replacement Procedure*
- *Mid Size Switch Power Supply Replacement Procedure*

On page 2, replace the sentence "2 GbE ports supporting the FCIP and Fibre Channel Routing Services features with link speeds up to 45 Mbps," with the following:

- Two 1 GbE ports supporting the FCIP and Fibre Channel Routing Services features with link speeds up to 50 Mbps each.

On page 2, replace the note about operational virtual ports with the following:

Note: For the base 7500E, you can only configure one virtual port per GbE port as an FCIP tunnel connection (any virtual port can be used). With the 7500E upgrade license, you can configure up to eight virtual ports per GbE port as tunnel connections

On page 3, replace Table 1 with the following table:

Feature	7500	7500E Base Unit	7500E Upgrade License
Call Home	Yes	No	Yes
Fastwrite over FC port	Yes[1]	No	Yes
Fastwrite over FCIP tunnel	Yes[1]	Yes	Yes
FCIP tunnel over GE port	Yes[1]	Yes	Yes
Fibre Channel port speed 1, 2, or 4 Gbps	1,2, or 4 Gbps	1,2, or 4 Gbps	1,2, or 4 Gbps
Fibre Channel routing between remote fabrics for fault isolation	Yes	Yes	Yes
FICON XRC emulation and tape pipelining over FCIP	Yes[2]	No	Yes[2]
FIPS 140-2 Level 2 ready	Yes	Yes[2]	Yes[2]
IPSec	Yes[1]	No	Yes
IP compression	Yes[1]	Yes	Yes
Number of connections or tunnels (remote sites) per port	8	1	8
Maximum committed rate (throughput throttling) per FCIP tunnel	Up to 1 Gbps	Up to 50 Mbps	Up to 1 Gbps
Number of Fibre Channel ports	16	2	16
Number of Gigabit Ethernet (GbE) ports	2	2	2
Redundant power supplies and fans	Yes	Yes	Yes
Storage Optimized TCP	Yes[1]	Yes	Yes
Tape pipelining over FCIP tunnel	Yes[1]	No	Yes
Tape pipelining over FC port	Yes[1]	No	Yes

[1] Requires High Performance Extension license.

[2] Requires Brocade Accelerator for FICON license.

On page 4, under "Upgrading the 7500E," add the following note:

An upgrade license is required to enable additional ports on the 7500E base unit and to enable additional features listed in Table 1 on page 3. If you attempt to enable features or configurations for features beyond those described for the 7500E Base Unit, an error occurs.

On page 38, add a section titled, "Federal Information and Processing Standards (FIPS)." This section should contain the following information:

Full FIPS compliancy requires the following:

- Software compliancy.

  The switch must be in enabled to operate in FIPS mode. For instructions, refer to the FIPS mode configuration procedures in the *Fabric OS Administrator's Guide*.

- Application of FIPS security seals.

  Refer to the *Brocade FIPS Security Seal Procedure for Switches* publication that pertains to the 7500 Extension Switches.

Brocade 7500 SAN Routers QuickStart Guide (Publication Number 53-100028-05)

On the Title page, change the title to *Brocade 7500 Extension Switches QuickStart Guide*.

Throughout publication, change the product name "SAN Routers" to "Extension Switches."

On page 3, replace Table 1 with the following table:

Feature	7500	7500E Base Unit	7500E Upgrade License
Call Home	Yes	No	Yes
Fastwrite over FC port	Yes[1]	No	Yes
Fastwrite over FCIP tunnel	Yes[1]	Yes	Yes
FCIP tunnel over GE port	Yes[1]	Yes	Yes
Fibre Channel port speed 1, 2, or 4 Gbps	1,2, or 4 Gbps	1,2, or 4 Gbps	1,2, or 4 Gbps
Fibre Channel routing between remote fabrics for fault isolation	Yes	Yes	Yes
FICON XRC emulation and tape pipelining over FCIP	Yes[2]	No	Yes[2]
FIPS 140-2 Level 2 ready	Yes	Yes[2]	Yes[2]
IPSec	Yes[1]	No	Yes
IP compression	Yes[1]	Yes	Yes
Number of connections or tunnels (remote sites) per port	8	1	8
Maximum committed rate (throughput throttling) per FCIP tunnel	Up to 1 Gbps	Up to 50 Mbps	Up to 1 Gbps

Feature	7500	7500E Base Unit	7500E Upgrade License
Number of Fibre Channel ports	16	2	16
Number of Gigabit Ethernet (GbE) ports	2	2	2
Redundant power supplies and fans	Yes	Yes	Yes
Storage Optimized TCP	Yes[1]	Yes	Yes
Tape pipelining over FCIP tunnel	Yes[1]	No	Yes
Tape pipelining over FC port	Yes[1]	No	Yes

[1] Requires High Performance Extension license.

[2] Requires Brocade Accelerator for FICON license.

Address change for all product documentation

On the copyright page of all of the product documentation, the address for Asia-Pacific Headquarters is incorrect. The correct address is as follows:

Asia-Pacific Headquarters
Brocade Communications Singapore Pte. Ltd.
30 Cecil Street
#19-01 Prudential Tower
Singapore 049712
Singapore
Tel: +65 6538 4700
Fax: +65 6538 0302
Email: apac-info@brocade.com

Closed Defects in Fabric OS v6.1.2c

This section lists defects closed in Fabric OS v6.1.2c. When available, the listing contains a workaround solution for the listed issue.

Defect ID: DEFECT000263579	**Technical Severity**: Critical
Summary: Switch panic occurred when management application performed repeat FCP LUN emulation queries through SMI interface or application polling a switch that had password changed multiple times.	
Symptom: Switch panic is experienced. Switch console logs Out of Memory kill.	
Workaround: Disable SMI agents.	
Feature: Field Escalation	**Function**: Panic / OOM
Probability: High	**Risk of Fix**: Low
Found in Release: FOS6.2.1	**Service Request ID**: 399773
Where Else Fixed: FOS5.3.2c, FOS6.2.1b, FOS6.3.0a	

Defect ID: DEFECT000216463	**Technical Severity**: High
Summary: Brocade 48000 with FC8-16, FC8-32 or FC8-48 port blades reports "not enough power" error message on one or more slots with only one active power supply.	
Symptom: Brocade 48000 populated with FC8-16, FC8-32, or FC8-48 blades with only a single active AC power supply will only power on three blades. Other blades will report "not enough power" indication.	
Workaround: FOS v6.1.2c will allow up to eight FC8-16 port blades, seven FC8-32 port blades, and six FC8-48 port blades in a Brocade 48000 with only a single active power supply. In order to operate with a fully populated chassis with 32 or 48-port 8G blades, it is highly recommended that four power supplies be installed to prevent disruption in the event of a power supply failure. Eight FC8-32 or FC8-48 blades can be powered up with only two power supplies in the chassis, but this does not provide adequate redundancy in the event of a failure.	
Feature: DCX Platform Services	**Function**: Sys-Control/Environment Monitor
Probability: High	**Risk of Fix**: Low
Found in Release: FOS6.1.0	**Service Request ID**: 312809

Defect ID: DEFECT000245512	**Technical Severity**: High
Summary: Brocade 7500 and FR4-18i VE port doesn't recover after WAN issues.	
Symptom: Device connectivity across the FCIP link will be lost. The credit information in the portshow of the FCIP tunnel will show a negative credit number (a very large number of credits queued.)	
Feature: Field Escalation	**Function**: FCIP
Probability: Low	**Risk of Fix**: Medium
Found in Release: FOS6.1.0	**Service Request ID**: 372699
Where Else Fixed: FOS6.3.0, FOS6.2.1a	

Defect ID: DEFECT000246020	**Technical Severity**: High
Summary: Nameserver database counts do not match for FOS and M-EOSc switches in same fabric	
Symptom: In Interopmode 2, mixed fabric with over 500 devices, nameserver counts do not match for FOS and M-EOSc switches in the same fabric. M-EOSn count matches FOS nameserver count.	
Feature: FC Services	**Function**: FDMI
Probability: Medium	**Risk of Fix**: Low
Found in Release: FOS6.2.0	
Where Else Fixed: FOS6.3.0	

Closed Defects in Fabric OS v6.1.2b

This section lists defects closed in Fabric OS v6.1.2b. When available, the listing contains a workaround solution for the listed issue.

Defect ID: DEFECT000243882	**Technical Severity**: High
Summary: High CPU load occurs and no commands can be run after Common Area Loader daemon (CALD) allocated shared memory is not released.	
Symptom: Switch runs out of shared memory and many of the CLI commands do not run and return with message: shmInit: shmget failed: No space left on device.	
Workaround: Run hafailover.	
Feature: Field Escalation	**Function**: OS: Infrastructure
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.0b	**Service Request ID**: 369837

Defect ID: DEFECT000251752	**Technical Severity**: High
Summary: SNMPd panic/restart due to segmentation fault.	
Symptom: SNMPd restart occurred due to Out Of Memory (OOM) condition and this was disruptive due to FSPF timeout with neighbor switch during OOM recovery.	
Feature: Field Escalation	**Function**: Management Services
Probability: High	**Risk of Fix**: Low
Found in Release: FOS6.1.2	

Defect ID: DEFECT000254779	**Technical Severity**: High
Summary: Common Area Loader daemon (CALD) memory leak led to switch panic / fabric disruption.	
Symptom: While running management applications using SMI interface, switch experienced Out Of Memory condition resulting in switch panic and restart.	
Feature: Field Escalation	**Function**: Panic / OOM
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.0	**Service Request ID**: 376973

Defect ID: DEFECT000257346	**Technical Severity**: Medium
Summary: Class 2 ACK is not forwarded from F_Port to N_Port in Access Gateway.	
Symptom: When the host transmits a PLOGI to the Name Server (NS), the NS responds with an ACK and then an ACC. The AG forwards the ACC to the host which then responds with an ACK. The ACK is never forwarded back to the NS which causes the NS to ABTS the exchange.	
Feature: Field Escalation	**Function**: Access Gateway
Probability: High	**Risk of Fix**: Medium
Found in Release: FOS6.1.2	**Service Request ID**: 385037

Defect ID: DEFECT000260383	**Technical Severity**: Medium
Summary: HIL-1610 WARNING appeared on Brocade 5120 units after power cycle.	
Symptom: Running power cycles several times and confirmed the error message below. The error message is as follows: [HIL-1610], 27,, WARNING, Brocade5100, Fan/PS unit 1 not supplying power, fan speeds not available. Please ensure that the unit has power and the sw	
Workaround: Ignore the warning - it is innocuous when seen right at boot up time. It results from a solitary spurious sensor reading that is below minimum.	
Feature: Field Escalation	**Function**: EM / Hil / Sysctrl
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.1	**Service Request ID**: 390231

Closed Defects in Fabric OS v6.1.2a

This section lists defects closed in Fabric OS v6.1.2a. When available, the listing contains a workaround solution for the listed issue. Note that all FOS v6.1.2a and lower release defects have been merged into this release.

Defect ID: DEFECT000246343	**Technical Severity**: High
Summary: Name Server daemon (nsd) panic occurs after enabling frame redirection.	
Symptom: With Redirection (RD) zone present in the fabric, a cfgsave will cause zoning to push the effective zone database to nsd, and a cfgenable will cause the push to happen again. If cfgenable follows a cfgsave too close, it's possible the two database pushes "step on each other" and may trigger an nsd panic.	
Workaround: Delay executing a cfgenable after a cfgsave when there is frame RD zone.	
Feature: FC Services	**Function**: Name Server
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.0	**Service Request ID**: 373073

Defect ID: DEFECT000248707	**Technical Severity**: High
Summary: Host with Fibrechannel Fastwrite (FCFW) enabled has problems with port disable/enable of HBA ports.	
Symptom: Server hangs after Brocade 7500 reboot.	
Feature: 4G ASIC Driver	**Function**: Zoning
Probability: Medium	**Risk of Fix**: Medium
Found in Release: FOS6.2.0	

Defect ID: DEFECT000249407	**Technical Severity**: High
Summary: Event manager daemon (evmd) standby CP segmentation fault occurs on Brocade DCX after upgrade to FOS v6.1.2	
Symptom: When CP7 is active CP, Brocade DCX standby CP log evmd corefiles whenever there is a new listener register connection to evmd. This problems has been seen to occur from fabric manager.	
Workaround: Disable fabric manager, use DCFM to manage fabric.	
Feature: FC Services	**Function**: ESS
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.2	**Service Request ID**: 377737

Defect ID: DEFECT000212737	**Technical Severity**: Medium
Summary: Brocade FR4-18i blade failed to do blade firmwaredownload.	
Symptom: A DCX system with 4 - FR4-18i blades installed failed to load firmware to all 4 blades.1 or 2 of the blades indicated a firmwaredownload failure.	
Workaround: Perform slot power off / slot power on the blade that timed out.	
Feature: Infrastructure	**Function**: Firmware Download
Probability: High	**Risk of Fix**: Low
Found in Release: FOS6.1.0	

Defect ID: DEFECT000220464	**Technical Severity**: Medium
Summary: Fast Write configuration not properly installed after repeated, back-to-back cable pull and re-inserts.	
Symptom: Fastwrite related configuration will not be installed. This can cause servers to recieve responses for an OXID before it has granted transfer sequence inititive (TSI.)	
Feature: FC Services	**Function**: Name Server
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.0	

Defect ID: DEFECT000236136	**Technical Severity**: Medium
Summary: FC Fastwrite corrupts buffer pool upon Turbo Write Block (TWB) allocation failure on Proxy Initiator.	
Symptom: The corrupt buffer pool is hard to identify as the Brocade 7500 and FR4-18 blade would not give any explicate signs of distress. Running into this bug would indicate some other unreleated problem in the network. I/O operations will fail to complete.	
Feature: Field Escalation	**Function**: FCIP
Probability: Low	**Risk of Fix**: Medium
Found in Release: FOS6.1.1	

Defect ID: DEFECT000241770	**Technical Severity**: Medium
Summary: Sfpshow displays incorrect values for current, RX power, and TX power.	
Symptom: SFP polling can hang when attempting to poll a disabled port during an hafailover. RX and TX power and other values will no longer update for any port within the switch.	
Workaround: Toggle (enable / disable) all disabled ports in order to restart SFP polling.	
Feature: Platform Services	**Function**: FOS Kernel Drivers
Probability: High	**Risk of Fix**: Low
Found in Release: FOS5.3.1	**Service Request ID**: 362431

Defect ID: DEFECT000247054	**Technical Severity**: Medium
Summary: Supportsave may show parity errors on disabled ports.	
Symptom: Supportsave starting with FOS v6.1.2a has been updated to collect more data. As data is read from disabled ports, a parity error may be logged from those disabled and unused ports. A switch that has been upgraded from a lower code level and never cold booted may show this problem. No errors will be caused on enabled ports or after a disabled port is enabled.	
Feature: Field Escalation	**Function**: ASIC Driver
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.0	

Defect ID: DEFECT000250438	**Technical Severity**: Medium
Summary: When Quality of Service (QoS) is enabled by default / not utilized, performance of the SAN drops. Disable QoS by default on 4G platforms, 8G long-distance and make portcfg values such as fill words, trunk information persistent across upgrade/downgrades.	
Symptom: QoS may automatically activate on an ISL after a bounce of the link. This may cause an ISL link to be removed from a trunk-group, or it may cause a Long Distance link to fail. Fillwords and porttrunk configuration are reset after upgrade to or download from FOS v6.2.	
Feature: Field Escalation	**Function**: ASIC Driver
Probability: Medium	**Risk of Fix**: Low
Found in Release: FOS6.1.2	

Closed Defects in Fabric OS v6.1.2

This section lists defects closed in Fabric OS v6.1.2. When available, the listing contains a workaround solution for the listed issue. Note that all FOS v6.1.0j and lower release defects have been merged into this release.

Defect ID: DEFECT000235545	**Technical Severity**: Critical
Summary: Host channel unable to access the CUP. Receives Link Reject indicating "No Logical Path" even though the path had just been established.	
Symptom: Unable to vary online 6 CUP logical paths on 6 different chpids on 4 different directors.	
Feature: Field Escalation	**Function**: FICON
Probability: High	**Risk of Fix**: Low
Found in Release: FOS6.1.0	**Service Request ID**: 352321

Defect ID: DEFECT000233726	**Technical Severity**: High
Summary: Unlicensed ports are not recovered properly during reset.	
Symptom: Switch verify/panic occurs during switch disable / enable.	
Feature: 8G ASIC Driver	**Function**: GE2 ASIC ports
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000226438	**Technical Severity**: High
Summary: Traffic over 2 ISLs is not running at line rate on 2G switches due to QOS programming error.	
Symptom: The full bandwidth of the ISL is not utilized - traffic rate is degraded .	
Feature: 8G ASIC Driver	**Function**: C2 ASIC driver
Probability: Medium	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000227676	**Technical Severity**: High
Summary: Switch panic due to out of memory while testing distributing ACL Database.	
Symptom: Security daemon running out of memory and triggers switch panic.	
Feature: Fabric Infrastructure	**Function**: Security-other
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000227682	**Technical Severity**: High
Summary: Frames rejected were observed on trunked Nports after failback operation on Brocade 300 switch.	
Symptom: Frames rejected were observed on trunked Nports after failback operation on Brocade 300 switch. This is observed in Brocade Native Mode 0.	
Feature: Access Gateway Services	**Function**: Daemon
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000225684	**Technical Severity**: High
Summary: Zoned panic due to buffer overrun and memory leak.	
Symptom: Switch panic is likley to occur when switch is in interopmode 2 with zone changes through webtool interface.	
Feature: FC Services	**Function**: Zoning
Probability: High	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000225240	**Technical Severity**: High
Summary: Ficud panic after repeated switchdisable and switchenable and after logical path activtion.	
Symptom: Switch panic in FICON enviorment.	
Feature: FICON	**Function**: Ficud
Probability: Medium	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000225252	**Technical Severity**: High
Summary: Default fmsmode enabled mihpto set to 15 seconds versus 180 seconds.	
Symptom: Cup commands will timeout sooner than expected.	
Feature: FICON	**Function**: Ficud
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000226942	**Technical Severity**: High
Summary: Observed a nsd got terminated while doing 'hafailover" all chassis.	
Symptom: Observed a nsd termination while doing 'hafailover" all chassis.	
Feature: FC Services	**Function**: Name Server
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000228244	**Technical Severity**: High
Summary: During stress test on the F-Port Trunking in bladedisable-hafailover-bladeenable-hafailover loop, observed frame loss.	
Symptom: During portdisable/hafailover/portenable sequence, frame loss and traffic does not recover after blade is reenabled.	
Feature: 8G ASIC Driver	**Function**: C2 ASIC driver
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000241101	**Technical Severity**: High
Summary: In FCR fabric, switch transmitting Eport traffic to F_Port with EOFni when there is no ISL placed lower than a Fport	
Symptom: Fport run out of credit and got reset due to interswitch RSCN desingated to translate domain from backbone switch is routed to lowest F ports by mistake.	
Workaround: Add an ISL on the user port lower than the lowest Fport on switch.	
Feature: Field Escalation	**Function**: ASIC Driver
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.0	**Service Request ID**: 366207

Defect ID: DEFECT000235613	**Technical Severity**: High
Summary: Memory leak found during E-port processing.	
Symptom: An E_port constantly going on and off due to other conditions can lead to an out-of-memory condition.	
Feature: Field Escalation	**Function**: Panic / OOM
Probability: Medium	**Risk of Fix**: Low
Found in Release: FOS6.1.0	**Service Request ID**: 346457

Defect ID: DEFECT000235482	**Technical Severity**: High
Summary: Switch panic with "Detected termination of process iswitchd"	
Symptom: Switch panic with: Detected termination of process iswitchd0: when PLOGI/PDISC have in proper payload size	
Feature: Legacy FCR (7500/FR4-18i)	**Function**: Other
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000236109	**Technical Severity**: High
Summary: Unexpected switch reboot in Ficon setup due to memory corruption.	
Symptom: Active CP faulted: *** glibc detected *** free(): invalid next size (fast), it happened during plug/unplug a ficon node.	
Feature: FICON	**Function**: MS-FICON
Probability: Medium	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000236702	**Technical Severity**: High
Summary: Traffic isolations devices are not able to see others via name server. Frames are F_RJTed.	
Symptom: Host cannot establish connectivity to traffic isolation zone devices.	
Workaround: Reboot the switch.	
Feature: FC Services	**Function**: Name Server
Probability: Medium	**Risk of Fix**: Medium
Found in Release: FOS6.2.0	

Defect ID: DEFECT000208945	**Technical Severity**: High
Summary: Cald panic due to race condition when multiple requests are being issued throughout the fabric.	
Symptom: Cald panic and restart, with no impact to host/target traffic.	
Feature: Mgmt Embedded - CAL	**Function**: Other
Probability: Medium	**Risk of Fix**: Low
Found in Release: FOS6.1.0	

Defect ID: DEFECT000209780	**Technical Severity**: Medium
Summary: Need enhancements to supportsave to provide additional troubleshooting information.	
Symptom: Need to enhance supportsave.	
Feature: Platform Services	**Function**: ASIC Driver
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.0	

Defect ID: DEFECT000207402	**Technical Severity**: Medium
Summary: Zoning operations performed while the fabric is building result in changes not propagating into backbone.	
Symptom: Zoning will not propagate to backbone router from edge fabric.	
Feature: Field Escalation	**Function**: FCR
Probability: High	**Risk of Fix**: Low
Found in Release: FOS5.2.2	**Service Request ID**: 130391

Defect ID: DEFECT000230515	**Technical Severity**: Medium
Summary: Buffer limited ports were not persistent across reboots	
Symptom: Buffer limited do not stay buffer limited, other ports become buffer limited	
Feature: 8G ASIC Driver	**Function**: C2 ASIC driver
Probability: Medium	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000229999	**Technical Severity**: Medium
Summary: Credit recovery does not appear to be (re)allocating credits properly when QoS ON, and Qos E port does not recover credit via LR	
Symptom: Credit allocation is incorrect, traffic may not run properly through fabric.	
Workaround: Portdisable, portenable affected port when situation occurs	
Feature: 8G ASIC Driver	**Function**: C2 ASIC driver
Probability: Medium	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000234583	**Technical Severity**: Medium
Summary: Minimize soft fault entry per SN failure when connected to misbehaving 3rd party devices.	
Symptom: 3rd party device cannot come up/come up slow	
Feature: 4G ASIC Driver	**Function**: PORT
Probability: Low	**Risk of Fix**: Medium
Found in Release: FOS6.2.0	

Defect ID: DEFECT000235099	**Technical Severity**: Medium
Summary: ABTS is being sent to the wrong NPortID.	
Symptom: Some NPIV capable HBAs have problems talking to switch due to FDISC ocurring after a successful ACC of NPIV establishment was not supported.	
Feature: Field Escalation	**Function**: FC Layer 2 Routing
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.1	

Defect ID: DEFECT000224681	**Technical Severity**: Medium
Summary: VERIFY occurred after portenable on port configured from Long Distance EX to only Long Distance	
Symptom: After removing an EX Port configurations, and enabling some ports, a FCR-1063 message is displayed, after that message if ports are enabled the VERIFY is displayed on the console.	
Feature: 8G ASIC Driver	**Function**: C2 ASIC driver
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000226090	**Technical Severity**: Medium
Summary: Attempt to register LIRR with Registration Function "Always Receive" is rejected with invalid reason	
Symptom: Channel receives bad LS_RJT reason code of 0x0B00 instead of expected 0x092c	
Feature: FICON	**Function**: MS-FICON
Probability: High	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000230767	**Technical Severity**: Medium
Summary: Oops: Kernel access of bad area panic from nsd task	
Symptom: Oops: Kernel access of bad area panic from nsd task due to device went away in a timing window when switch is process its PLOGI. Both CP could hit the same panic in this small window.	
Feature: Field Escalation	**Function**: Fabric Services
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.0.0	**Service Request ID**: 341297

Defect ID: DEFECT000230959	**Technical Severity**: Medium
Summary: Detected termination of ficud due to access uninitialized data.	
Symptom: Unexpected switch panic	
Feature: FICON	**Function**: Ficud
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000224024	**Technical Severity**: Medium
Summary: MSd datastructures corruption due to getDomain API failure and msd panic during hafailvoer/hareboot	
Symptom: Switch panic occurs due to management server daemon panic.	
Feature: Fabric Infrastructure	**Function**: Mgmt Server
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000234409	**Technical Severity**: Medium
Summary: After Hafailover, switch encounters frame drop on EX port	
Symptom: Traffic does not flow properly in backbone fabric after this sequence of test: disable FCR before hafailover, hafailover, enable FCR after hafailover.	
Feature: 4G Platform Services	**Function**: FOS Kernel Drivers
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000235429	**Technical Severity**: Medium
Summary: Switch doesn't commit after firmwareDownload fail as 0x23 (time out).	
Symptom: Firmwareupgrade fails in a very small window when active CP did not wait for standby CP to timeout before recover it.	
Workaround: Perform repair of the partition manually (firmwarecommit -f) and then rerun firmwaredownload.	
Feature: Field Escalation	**Function**: Firmware Download
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.1	**Service Request ID**: 351295

Defect ID: DEFECT000235795	**Technical Severity**: Medium
Summary: Performance monitor filter block are processed in wrong block size and caused memory corruption.	
Symptom: Observe various verifying in route and asic module, and fill up trace buffer. Could result in switch panic when corrupted memory is used.	
Feature: 8G ASIC Driver	**Function**: C2 ASIC driver
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000236299	**Technical Severity**: Medium
Summary: Port state mismatch on internal copper ports on Embedded platforms between switchshow and portcfgshow's PersistentDisable flag	
Symptom: portcfgshow disable "persistent disable"state while port is enabled.	
Feature: Field Escalation	**Function**: ASIC Driver
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS5.3.0	**Service Request ID**: 346445

Defect ID: DEFECT000238430	**Technical Severity**: Medium
Summary: Switch panic when supportsave read invalid data on GE ports without FC Fastwrite enabled.	
Symptom: Unexpected switch panic. This is a very rare case that happened once and was unable to recreate with many rounds of supportsave.	
Feature: Field Escalation	**Function**: FCIP Flipper/ASIC
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.0	**Service Request ID**: 361287

Defect ID: DEFECT000226593	**Technical Severity**: High
Summary: Evmd panic occurs when upgrading from FOS v5.1.x to FOS v5.3.x.	
Symptom: After upgrading 1 CP, if the other CP hasn't being upgraded and there happens to be another evmd listening events occur, there is a possibility for the switch to panic.	
Workaround: Make sure both the CPs are upgraded together	
Feature: Field Escalation	**Function**: Management Services
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS5.3.0	

Defect ID: DEFECT000229622	**Technical Severity**: High
Summary: F_RJT is not being returned for class 2 RNID when source and destination are excluded by hard zoning	
Symptom: IFCC's for class 2 ELS timeouts	
Feature: 8G ASIC Driver	**Function**: C2 ASIC driver
Probability: High	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000235444	**Technical Severity**: High
Summary: In large fabric testing of core blade removal and insertion during IO runs resulted in reduced IO	
Symptom: During IO test runs, observing the reduced IO.	
Feature: 8G ASIC Driver	**Function**: C2 ASIC driver
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.2.0	

Defect ID: DEFECT000221271	**Technical Severity**: Medium
Summary: Fastwrite will attempt to configure, even on a Brocade FR4-18i blade that has failed to initialize successfully.	
Symptom: A bad blade installed into a good system could cause the system to assert and reboot.	
Feature: Field Escalation	**Function**: FC Layer 2 Routing
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS5.3.0	

Defect ID: DEFECT000237765	**Technical Severity**: Medium
Summary: Switch panic in kernel while access an iu that has already timedout and freed.	
Symptom: Switch panic during a rare occurrence of a timed out exchange being accessed.	
Feature: Field Escalation	**Function**: Panic / OOM
Probability: Low	**Risk of Fix**: Medium
Found in Release: FOS5.3.1	**Service Request ID**: 359009

Defect ID: DEFECT000235448	**Technical Severity**: Medium
Summary: With default zoning set to All Access, ACK frame with FC_type Extended Link can be dropped.	
Symptom: Race condition may cause frame drop.	
Feature: Field Escalation	**Function**: ASIC Driver
Probability: High	**Risk of Fix**: Low
Found in Release: FOS6.1.1	

Defect ID: DEFECT000240056	**Technical Severity**: High
Summary: Channel receiving RSCN with missing ports in payload after HPF key on or off.	
Symptom: RSCN transmitted by the switch does not transmit all the port IDs in the payload.	
Feature: FC Services	**Function**: Name Server
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.1	

Defect ID: DEFECT000234098	**Technical Severity**: Medium
Summary: Enhancement request per FC-PI-4, 8G FC port shall use ARB(FF).	
Symptom: To be fully compliant with the latest standard, a new ARB(FF) protocol is required.	
Feature: 8G ASIC Driver	**Function**: C2 ASIC driver
Probability: High	**Risk of Fix**: Low

Found in Release: FOS6.2.0	

Defect ID: DEFECT000235878	**Technical Severity**: Medium
Summary: Ax mode for speed negotiation reports as being invalid.	
Symptom: When running the portcfgspeed command with the ax option on a switch running FOS v6.1.x, "Error: Invalid speed level." is returned.	
Feature: Field Escalation	**Function**: ASIC Driver
Probability: Low	**Risk of Fix**: Low
Found in Release: FOS6.1.0	

Defect ID: DEFECT000226808	**Technical Severity**: High
Summary: Occasionally during the firmware upgrade process, the 1250 processor is still rebooting when the FCR routes are being processed, resulting in missing FCR routes and an inability to route traffic across VEX ports.	
Symptom: I/O running through VEX ports or devices imported/exported via VEX ports will be dropped after firmware upgrade.	
Feature: Field Escalation	**Function**: FCIP
Probability: Medium	**Risk of Fix**: Low
Found in Release: FOS6.0.0	

Defect ID: DEFECT000237552	**Technical Severity**: High
Summary: IPC message from module CALD to Management Server is dropped by Management server. This causes CALD module to wait indefinitely	
Symptom: User may experience problem with management application while traffic still passes without any problem. Console will log cald queue full message.	
Feature: Field Escalation	**Function**: Management Services
Probability: Low	**Risk of Fix**: Medium
Found in Release: FOS6.1.0	**Service Request ID**: 355965

Defect ID: DEFECT000234760	**Technical Severity**: Medium
Summary: Fabstateshow log wrapping overwrites useful fabstate data on Brocade switch when interoping with McData switches.	
Symptom: In interop mode, the fabstateshow log wraps in a very short time where without interop this log contains weeks and sometimes months of data.	
Feature: Field Escalation	**Function**: Fabric Services
Probability: High	**Risk of Fix**: Low
Found in Release: FOS6.1.0	

Defect ID: DEFECT000235157	**Technical Severity**: Medium
Summary: Public / Private keys are not copied during HA failover	
Symptom: When failover happens password-less SCP cannot be used from the switch. However SCP with passwords can be used.	
Workaround: Use SCP with passwords or if password-less SCP is to be used, generate a key pair for SSH outgoing authentication from the switch.	
Feature: Fabric Infrastructure	**Function**: Security-other
Probability: Medium	**Risk of Fix**: Medium
Found in Release: FOS6.2.0	

Defect ID: DEFECT000232767	**Technical Severity**: Medium
Summary: SNMP changes needed to better support snmp mib.	
Symptom: Default snmpv3 sets different default values between FOS releases, mibcapability option of snmpconfig cannot control of ficon mib.	
Feature: Field Escalation	**Function**: SNMP
Probability: Low	**Risk of Fix**: Medium
Found in Release: FOS6.1.1	

Defect ID: DEFECT000237549	**Technical Severity**: Medium
Summary: Access Gateways connected to EOSc in a mixed fabric (FOS and EOS) are not shown in DCFM	
Symptom: Access Gateways connected to EOSc in a mixed fabric (FOS and EOS) are not shown in DCFM.	
Feature: Fabric Infrastructure	**Function**: Mgmt Server
Probability: Medium	**Risk of Fix**: Low
Found in Release: FOS6.1.1	

Closed Defects in Fabric OS v6.1.1d

This section lists defects closed in Fabric OS v6.1.1d. When available, the listing contains a workaround solution for the listed issue.

Defect ID:	DEFECT000230294	**Technical Severity:**	High
Summary:	Out of Memory condition on switch occurred, due to memory leak in nsd process.		
Symptom:	Mixed fabric running in Interopmode2, switch hafailover/hareboot occurs due to out of memory occurrence.		
Feature:	FC Services	Function:	Name Server
Risk of Fix:	Low		
Reported In Release:	FOS6.2.0		

Defect ID:	DEFECT000231458	**Technical Severity:**	High
Summary:	After multiple controller reboots, PLOGI Accept is dropped due to missing CAM entry.		
Symptom:	PLOGI Accept is not getting passed back up to the Initiator.		
Workaround:	Portdisable/portenable on device port to re-gain host/device connection.		
Feature:	FCIP	**Function:**	FCIP I/O
Risk of Fix:	High	**Probability:**	Medium
Reported In Release:	FOS6.1.0	**Service Request ID:**	336791

Defect ID:	DEFECT000232995	**Technical Severity:**	High
Summary:	VI to PT routes are deleted following portdisable/enable on Brocade FC4-48 blade.		
Symptom:	VI is not able to login to Target following creation of FR zone and portdisable/enable for the host port.		
Feature:	FOS Software	**Function:**	FC Layer 2 Routing
Risk of Fix:	Medium	**Probability:**	Medium
Reported In Release:	FOS6.0.1		

Defect ID:	DEFECT000236041	**Technical Severity:**	High
Summary:	Switch may experience timeouts and traffic interruption during HCL operation of neighboring switch with FOS v6.2.0.		
Feature:	High Availability	**Function:**	Switch hareboot/HCL
Risk of Fix:	Low		
Reported In Release:	FOS6.2.0		

Defect ID:	DEFECT000237701	**Technical Severity:**	High
Summary:	Observed kernel panic on a Brocade DCX, in RTE module.		
Feature:	FOS Software	**Function:**	FC Layer 2 Routing
Risk of Fix:	Low		
Reported In Release:	FOS6.1.1		

Defect ID:	DEFECT000237868	**Technical Severity:**	High
Summary:	Fabric Watch failed to initialize on fully populated Brocade DCX.		
Symptom:	During HA recovery, management application reports switch health status as Marginal/Down. Traffic is not impacted, but DCFM call home will not be initiated.		
Feature:	FOS Software	**Function:**	Management Services
Risk of Fix:	Medium	**Probability:**	Low
Reported In Release:	FOS6.1.0		

Defect ID:	DEFECT000238250	**Technical Severity:**	High
Summary:	License problem observed after configdownload and QoS license was checked for 4G platforms at CLI.		
Symptom:	License database can be corrupted after configdownload and can not be added back. 4G platform can disable QoS but cannot enable QoS without license.		
Feature:	FOS Software	**Function:**	OS: Infrastructure
Risk of Fix:	Low	**Probability:**	Medium
Reported In Release:	FOS6.1.0		

Defect ID:	DEFECT000239126	**Technical Severity:**	High
Summary:	ASIC Interrupt handling fix – single defect to address issues found while attempting to respond to ASIC generated interrupts.		
Symptom:	Customer may experience high CPU load and unexpected blade errors.		
Feature:	FOS Software	**Function:**	ASIC Driver
Risk of Fix:	Low	**Probability:**	Low
Reported In Release:	FOS6.1.0		

Defect ID:	DEFECT000225796	**Technical Severity:**	Medium
Summary:	Brocade switch is sending RSCN event Qualifier as 0x20 for FOS 6.1.x and 0x08 for FOS v6.1.0g and FOS v6.2.0		
Symptom:	Some OS/HBA combination takes down FC link when N_port generated RSCN are delivered by switch with 0x08 or 0x20 as event qualifier. Revert back to FOS v6.0 way of sending as 0x0.		
Feature:	FOS Software	**Function:**	Fabric Services
Risk of Fix:	Low	**Probability:**	High
Reported In Release:	FOS 6.1.0_8e	**Service Request ID:**	332317

Defect ID:	DEFECT000229323	**Technical Severity:**	Medium
Summary:	Webtools GUI has performance problem.		
Symptom:	Webtools freezes a few seconds about every 15 seconds, webtools light stop blinking, and cannot scroll any windows.		
Feature:	FOS Software	**Function:**	Web Management
Risk of Fix:	Low	**Probability:**	Low
Reported In Release:	FOS6.1.0	**Service Request ID:**	337039

Closed Defects in Fabric OS v6.1.1c

This section lists defects closed in Fabric OS v6.1.1c. When available, the listing contains a workaround solution for the listed issue.

Defect ID:	DEFECT000208449	**Technical Severity:**	High
Summary:	If the contents of the /etc/inetd.conf file are modified, the file may be deleted the next time the switch software is upgraded.		
Symptom:	User cannot access switch through network.		
Feature:	FOS Software	**Function:**	OS: Infrastructure
Risk of Fix:	Low	**Probability:**	Low
Reported In Release:	FOS5.3.0	**Service Request ID:**	225131

Defect ID:	DEFECT000232290	**Technical Severity:**	High
Summary:	Switch in Access Gateway Mode, panic occurs when N-Port to F-Port trunking is enabled.		
Feature:	FC Services	**Function:**	F Port Trunking
Risk of Fix:	Low		
Reported In Release:	FOS6.1.1		

Defect ID:	DEFECT000234873	**Technical Severity:**	High
Summary:	Unexpected return code from Fast Write and Tape Pipelining causes GE port traffic interrupt.		
Feature:	FOS Software	**Function:**	FCIP
Risk of Fix:	Low		
Reported In Release:	FOS6.1.1		

Defect ID:	DEFECT000235711	**Technical Severity:**	High
Summary:	When first upgrading a newly installed FOS v6.0.x director to FOS v6.1.x, there is a very small window that 8G blades may fault.		
Feature:	FOS Software	**Function:**	ASIC Driver
Risk of Fix:	Low		
Reported In Release:	FOS6.1.1		

Closed Defects in Fabric OS v6.1.1b

This section lists defects closed in Fabric OS v6.1.1b. When available, the listing contains a workaround solution for the listed issue.

Defect ID	Technical Severity	Description of Defects Closed in Fabric OS v6.1.1b
DEFECT000208189	**Medium**	**Summary**: Auditcfg not persistent through hareboot. **Symptom:** Audit log stops after hareboot. **Feature:** RAS **Function:** RAS Audit Risk of Fix: Low **Probability:** Low **Reported in Release:** FOS6.1.0
DEFECT000226603	**Medium**	**Summary:** Brocade 5000 switch experienced out-of-memory condition operating in a fabric with an M-Series 2640 switch. **Symptom:** Switch panics due to out-of-memory condition. **Feature:** FOS Software **Function:** Fabric Services **Risk of Fix:** Medium **Probability:** Medium **Service Request # :** 336081 **Reported in Release:** FOS6.1.0
DEFECT000228681	**Medium**	**Summary:** CRC error observed between BROCADE 5100 and Brocade 5300 with a particular SFP type. **Symptom:** When connected Brocade 5300 and 5100, CRC errors on trunk ports were observed. **Feature:** FOS Software **Function:** ASIC Driver **Risk of Fix:** Low **Probability:** Low **Reported in Release:** FOS6.1.0

DEFECT000231168	**Medium**	**Summary:** GNN_ID query for self NWWN from Target results in failure due to Frame Redirection logic and causes Target Port Link down. **Symptom:** Device discovery from host fails. **Feature:** FC Services **Function:** Name Server **Risk of Fix:** Low **Probability:** Low **Reported in Release:** FOS6.1.1
DEFECT000231283	**Medium**	**Summary:** Java out of memory condition occurs after Webtools session expired. **Symptom:** Java out of memory condition occurs after Webtools session expired. **Feature:** WebMgmt **Function:** Other **Risk of Fix:** Medium **Probability:** High **Reported in Release:** FOS6.1.1
DEFECT000231420	**Medium**	**Summary:** PORT RSCNs are sent to DPC (VIs & VTs) every time when the configuration changes, which is unrelated to VT/VI. This affects any application that uses frame redirect zoning. **Symptom:** Unexpected disruption on VI or VT when cfgenable unrelated devices zone change. **Feature:** FOS Software **Function:** Fabric Services **Risk of Fix:** Low **Probability:** High **Reported in Release:** FOS6.1.1
DEFECT000231661	**High**	**Summary:** With both RD zone and TI zone configured, a connectivity issue can occur after hafailover or hareboot. **Symptom:** With both TI zone and RD zone configured, after a hafailover or hareboot, host can no longer see target until a cfgdisable and cfgenable. Workaround: Run cfgdisable and cfgenable commands. **Feature:** FOS Software **Function:** Fabric Services **Risk of Fix:** Low **Probability:** Medium **Service Request # :** 343603 **Reported in Release:** FOS6.1.0

DEFECT000231681	**High**	**Summary:** Frame drop is observed on 4G and 8G switches due to a time window when a port in a trunk goes offline and route is not properly recalculated. **Symptom:** Host cannot see storage due to route mismatch. **Feature:** FOS Software **Function:** ASIC Driver **Risk of Fix:** Low **Probability:** Low **Service Request # :** 342469 **Reported in Release:** FOS5.3.0
DEFECT000231909	**Medium**	**Summary:** Incorrect status when power cord was unplugged. **Symptom:** Switch health status is incorrectly changed to marginal when power cord is unplugged. **Feature:** FOS Software **Function:** EM / Hil / Sysctrl **Risk of Fix:** Low **Reported in Release:** FOS6.1.1
DEFECT000231952	**High**	**Summary:** Various tape creation or restore process issues found with FICON tape. **Symptom:** Unexpected errors encountered during Tape Cancel and Selective Reset processing. **Feature:** FCIP **Function:** FCIP I/O **Risk of Fix:** Low **Probability:** High **Reported in Release:** FOS6.1.1

Closed Defects in Fabric OS v6.1.1a

This section lists defects closed in Fabric OS v6.1.1a. When available, the listing contains a workaround solution for the listed issue.

Defect ID	Technical Severity	Description of Defects Closed in Fabric OS v6.1.1a
DEFECT000221532	**Medium**	**Summary:** The tag field of the node identifier command returned contains the port number on which the command was received, instead of the tag field of the device on the other end of the link. **Symptom:** The port number of the port on which the command was received will be returned. **Feature:** FC Services **Function:** FICON **Risk of Fix:** Low **Probability:** Low **Reported in Release:** FOS v6.1.0
DEFECT000226652	**High**	**Summary:** After "systemverification -short" is completed on the Brocade 5300, route is affected. This applies to platforms with BI ports. **Symptom:** Neighboring switches cannot route traffic through the Brocade 5300 after systemverification -short is run on the Brocade 5300. **Feature:** 8G Platform Services **Function:** FOS Kernel Drivers **Risk of Fix**: Low **Probability:** Low **Reported in Release**: FOS v6.2.0
DEFECT000227322	**High**	**Summary:** 3rd party application paths fail with FC fast write enabled with bi-directional traffic. **Symptom:** 3rd party application path failed and needed to disable fast write to recover. Observed out of order frames or dropped frames with FC FW. **Feature:** FC Services **Function:** Other **Risk of Fix:** Low **Probability:** Medium **Reported in Release:** FOS v6.1.1

DEFECT000221532	**Medium**	**Summary:** Speed Negotiation fails on some 4G Quad-Rate, Long-Wave 4Km SFPs. **Symptom:** Ports are failing Speed Negotiation with certain SFPs. **Workaround:** Reset SFPs to avoid quad-rate mode. **Feature:** Platform Services **Function:** ASIC Driver **Risk of Fix:** Low **Probability:** Medium **Reported in Release:** FOS v5.3.0
DEFECT000227978	**Medium**	**Summary:** Java running out of memory in Webtools **Symptom:** Webtools application gets very sluggish. **Feature:** WebMgmt **Function:** Other **Risk of Fix:** Low **Probability:** High **Reported in Release:** FOS v6.1.1
DEFECT000228681	**Medium**	**Summary:** CRC error observed with the Brocade 5300 with a particular SFP type **Symptom:** Observing CRC errors on trunk ports with certain SFPs on Brocade 5300 and 5100. **Feature:** FOS Software **Function:** ASIC Driver **Risk of Fix:** Low **Probability:** Low **Reported in Release:** FOS v6.1.0
DEFECT000229468	**High**	**Summary:** On a backbone switch with both EX and VE port or VEX port, after hafailover/hareboot, device on backbone has no access to remote device. **Symptom:** Devices are unable to access their targets. **Feature:** FOS Software **Function:** FCR **Risk of Fix:** Low **Service Request # :** 339745 **Reported in Release:** FOS v6.1.0

DEFECT000229732	**Medium**	**Summary:** Need better response message from CAL when setting SCC policy fails **Symptom:** When a switch has different members in SCC policy and when it is merged in to another fabric having some other SCC policy members (the fabric is merging because FWCP is set as Tolerant), set SCC policy from either Web tools or DCFM the operation is failing without giving proper reason. **Feature:** Fabric Infrastructure **Function:** Security-ACL **Risk of Fix:** Low **Probability:** Low **Reported in Release:** FOS v6.2.0
DEFECT000229849	**High**	**Summary:** SCSI timeouts /errors **Symptom:** Extremely rare corner case involving a transient failure at the same time as a hot-plug core blade insertion could lead to dropped frames inside the switch. **Feature:** FOS Software **Function:** ASIC Driver **Risk of Fix:** Low **Service Request # :** 341141 **Reported in Release:** FOS v6.0.0

Closed Defects in Fabric OS v6.1.1

This section lists defects closed in Fabric OS v6.1.1. When available, the listing contains a workaround solution for the listed issue.

Defect ID	Technical Severity	Description of Defects Closed in Fabric OS v6.1.1
DEFECT000206188	**High**	**Summary**: During storage failover/failback test, traffic stops and fails to recover in single and dual backbone configurations. **Symptom**: Certain devices could not resume the FC-VI traffic across FCR after the devices failover. **Feature**: FCR **Function**: FCR Daemon **Probability**: Low **Risk of Fix**: Low **Found in Release**: FOS6.0.0
DEFECT000209324	**High**	**Summary**: Detecting failure in FR4-18i blade due to a dead heartbeat **Symptom**: FR4-18i blade faulted during operation with internal FCIP-5031 raslog and external EM-1034 raslog. **Feature**: Field Escalation **Function**: FCIP **Probability**: Low **Risk of Fix**: Low **Found in Release**: FOS5.2.1

Defect ID	Technical Severity	Description of Defects Closed in Fabric OS v6.1.1
DEFECT000210908	**High**	**Summary**: Link drops when FLOGI is received before the port comes online on FL port **Symptom**: Only 1 FL port FLOGI is successful and second FL port FLOGI is disabled in a time interval and customer observes as link drop on FL port. Even though FL port will be re-enabled after the short time interval, 3rd party failover application may fail in this condition. **Feature**: Field Escalation **Function**: FC Layer 2 Routing **Probability**: Low **Risk of Fix**: Low **Found in Release**: FOS5.3.0 **Service Request ID**: 302653
DEFECT000211529	**High**	**Summary**: Internal server ports on embedded platform: traffic may stop due to loss of buffer credit. **Symptom**: May see traffic stop on embedded platform when running in AG mode. **Feature**: Embedded Platform Services **Function**: ASIC Driver **Probability**: Medium **Risk of Fix**: Low **Found in Release**: FOS6.1.0
DEFECT000214853	**High**	**Summary**: Mixed fabric of McDATA and Brocade switches cannot be managed if only IPv6 addressing is supported. **Symptom**: In interopmode3, Fabric OS is not fetching the IPv6 address from the M-model switches. **Feature**: FC Services **Function**: Fabric **Probability**: High **Risk of Fix**: Medium **Found in Release**: FOS6.1.0
DEFECT000215233	**High**	**Summary**: HBA not following fibre channel protocol standards could cause a switch to reboot. **Symptom**: Switch rebooted after powering on misbehaving HBA. **Feature**: Fabric Infrastructure **Function**: Security **Probability**: Low **Risk of Fix**: Low **Found in Release**: FOS6.1.0

Defect ID	Technical Severity	Description of Defects Closed in Fabric OS v6.1.1
DEFECT000217910	**High**	**Summary**: Problems within an IP network could cause a switch running FOS v5.3.x to panic. **Symptom**: An application attempting to establish an IP connection with the environment daemon (evmd) blocked other connections, causing the switch to panic. **Feature**: Field Escalation **Function**: Management Services **Probability**: Medium **Risk of Fix**: Low **Found in Release**: FOS5.3.0
DEFECT000220686	**High**	**Summary**: Device with slow initialization sequence may cause the switch to mistakenly establish virtual channels on an F_Port. **Symptom**: An incorrect credit model on an F_Port will cause link resets. **Feature**: Field Escalation **Function**: ASIC Driver **Probability**: Low **Risk of Fix**: Low **Found in Release**: FOS6.0.0 **Service Request ID**: 322675
DEFECT000224572	**High**	**Summary**: Web Tools zoning breaks when 3rd party storage virtualization appliance changed to standby mode **Symptom**: Customer will see Web Tools hangs at the "initialization done" when trying to launch zoning from the web interface. It will stay like that forever and you won't be able to launch zoning from any switch in your fabric. Once the 3rd party storage virtualization appliance was placed back in ssi cf mode the problem goes away. **Feature**: WebMgmt **Function**: Zone Admin **Probability**: High **Risk of Fix**: Low **Found in Release**: FOS6.1.1
DEFECT000226061	**High**	**Summary**: FICON Tape Write Pipelining Selective Resets after CmdRetry to No Op Sequence or LBY **Symptom**: FICON Tape job failures with IOS000 missing device end messages on MVS console. **Feature**: FCIP **Function**: FCIP I/O **Probability**: High **Risk of Fix**: Low **Found in Release**: FOS6.1.0

Defect ID	Technical Severity	Description of Defects Closed in Fabric OS v6.1.1
DEFECT000203144	**Medium**	**Summary**: F_Port Link initialization failure exposed by new third party device behavior **Symptom**: A trace shows the HBA issuing NOS (host is performing a boot loop test) and the switch is not responding to NOS. It should issue OLS in response but continues to send idles (appearing to stay in Active state) for the remainder of the trace. **Feature**: Field Escalation **Function**: ASIC Driver **Probability**: High **Risk of Fix**: Medium **Found in Release**: FOS5.2.1 **Service Request ID**: RQST00000064340
DEFECT000204158	**Medium**	**Summary**: supportSave captured using DCFM does not contain information from the standby CP. **Symptom**: When capturing support information (supportSave), only the active CP details are captured. **Feature**: Mgmt Embedded - CAL **Function**: Other **Probability**: High **Risk of Fix**: Medium **Found in Release**: FOS6.0.0
DEFECT000209121	**Medium**	**Summary**: Brocade 7500 sends the wrong Sense code during tape backup with pipelining enabled. **Symptom**: With tape pipeline enabled, the sense byte (key=80) sent to the Tape device is wrong. This causes a tape backup problem. This error does not occur if tape pipelining is turned off. **Feature**: Field Escalation **Function**: FCIP **Probability**: Medium **Risk of Fix**: Low **Found in Release**: FOS5.3.0 **Service Request ID**: 244793
DEFECT000210684	**Medium**	**Summary**: Web Tools: DCX Blade attention LEDs on the switch view GUI window do not turn amber when blade needs attention. **Symptom**: The Web Tools GUI LED for switchview on a DCX may not reflect the correct color state for a failed blade . The attention LED is illuminated appropriately on the blade view but not in the Web Tools switchview. **Feature**: WebMgmt **Function**: Switch Explorer/Switch View **Probability**: High **Risk of Fix**: Low **Found in Release**: FOS6.1.0

Defect ID	Technical Severity	Description of Defects Closed in Fabric OS v6.1.1
DEFECT000211115	**Medium**	**Summary**: FICON PTP VTS Selective Resets and Aborted sequences caused by incorrect entry into FICON tape read pipelining. **Symptom**: IFCCs or Interface Timeouts reported at the FICON Channel interface. **Feature**: FCIP **Function**: FCIP I/O **Probability**: Low **Risk of Fix**: Low **Found in Release**: FOS6.0.0
DEFECT000211720	**Medium**	**Summary**: After renaming a port group name to blank from Web Tools, the port group is deleted. **Symptom**: If a port group is renamed to blank from Web Tools, the port group is deleted. **Feature**: WebMgmt **Function**: AG Support **Probability**: High **Risk of Fix**: Low **Found in Release**: FOS6.1.0
DEFECT000212286	**Medium**	**Summary**: If EE monitors are restored from flash on a switch that has Top Talker monitors, there is no warning or error and the filters will not function properly. **Symptom**: After rebooting the switch, the Top Talker monitors are gone, replaced by EE monitors. A reboot of the switch will cause any EE monitors to be restored from flash (if they exist). So, if the user saves EE monitors to flash, then deletes the EE monitors to setup Top Talker monitors, but leaves the EE monitors in flash, a reboot of the switch will cause EE monitors to be restored from flash. The existence of EE monitors will cause the Top Talker monitor installation recovery to fail. However, there is no warning or other message. **Feature**: Fabric Infrastructure **Function**: Advanced Performance Monitor **Probability**: Low **Risk of Fix**: Low **Found in Release**: FOS6.1.0
DEFECT000212304	**Medium**	**Summary**: Extra CAM entries could exist on Brocade 300 when Frame Redirection is used and VI/VT offline/online **Symptom**: This behavior is seen only when features from a future release are activated. CAM table entries would prevent communication from host-to-target after the 7600 switch goes offline. **Feature**: FC Services **Function**: Other **Probability**: High **Risk of Fix**: Low **Found in Release**: FOS6.1.0

Defect ID	Technical Severity	Description of Defects Closed in Fabric OS v6.1.1
DEFECT000212522	**Medium**	**Summary**: References to dual-domain systems (SilkWorm 12000) need to be removed from man pages. **Symptom**: Reference to a dual-domain system could be confusing to a DCX user. **Feature**: Man Pages **Function**: Edit/Correct **Probability**: High **Risk of Fix**: Low **Found in Release**: FOS6.1.0
DEFECT000212529	**Medium**	**Summary**: The aaaconfig command help text needs to be corrected for LDAP mode. **Symptom**: LDAP cannot be configured while FIPS in enabled, but online help text does not clearly state this. **Feature**: Man Pages **Function**: Edit/Correct **Probability**: High **Risk of Fix**: High **Found in Release**: FOS6.1.0
DEFECT000212536	**Medium**	**Summary**: FR4-18i faulted after overnight stress testing. **Symptom**: If the customer forces a failover while the port blades are being powered on, an FR4-18i blade may be faulted. **Feature**: FR4-18i Platform Services **Function**: FR4-18i Blade FOS SW **Probability**: Low **Risk of Fix**: Low **Found in Release**: FOS6.1.0
DEFECT000213410	**Medium**	**Summary**: Brocade 7500E restrictions bypassed via configupload/edit/configdownload/reboot **Symptom**: Configuration limitation checks could be bypassed by uploading a config, editing the files, then downloading the configurations back to the system. **Feature**: FCIP **Function**: FCIP CLI **Probability**: Medium **Risk of Fix**: Low **Found in Release**: FOS6.1.0
DEFECT000213619	**Medium**	**Summary**: Brocade 7500E restrictions fails to allow creation of FCIP TUNNEL numbers greater than zero **Symptom**: An error is reported if the user attempts to assign a tunnel numbers that is greater than zero. **Feature**: FCIP **Function**: FCIP CLI **Probability**: Medium **Risk of Fix**: Low **Found in Release**: FOS6.1.0

Defect ID	Technical Severity	Description of Defects Closed in Fabric OS v6.1.1
DEFECT000214113	**Medium**	**Summary**: FCIP FICON feature can be enabled on restricted Brocade 7500E via configdownload **Symptom**: FICON acceleration license checking could be defeated with a procedure of uploading configurations, editing files, then downloading the files **Feature**: FCIP **Function**: FCIP CLI **Probability**: Medium **Risk of Fix**: Low **Found in Release**: FOS6.1.0
DEFECT000216626	**Medium**	**Summary**: A TI zone with an invalid(too high) port number can cause a kernel panic. **Symptom**: Switches that contain an empty zone database (both defined & effective) will panic when merged with a switch holding many (~50-60) Defined TI Zones. **Feature**: FC Services **Function**: Zoning **Probability**: High **Risk of Fix**: Low **Found in Release**: FOS6.1.0
DEFECT000216757	**Medium**	**Summary**: ARRd Daemon had multiple restarts that ultimately led to a KSWD event **Symptom**: An invalid frame being received at the Ethernet port is causing the switch to panic. **Feature**: Field Escalation **Function**: Management Services **Probability**: Low **Risk of Fix**: Medium **Found in Release**: FOS5.2.0 **Service Request ID**: 312919
DEFECT000218388	**Medium**	**Summary**: Fast Write could obtain incorrect FCP command data length if the optional additional CDB length is selected. **Symptom**: Incorrect command data length may be computed. **Feature**: FCIP **Function**: FCIP I/O **Probability**: Low **Risk of Fix**: Low **Found in Release**: FOS6.0.0

Defect ID	Technical Severity	Description of Defects Closed in Fabric OS v6.1.1
DEFECT000219513	**Medium**	**Summary**: Synchronization time-of-day clock messages filling error log. **Symptom**: A Brocade 4020 that is in interopmode 1 is constantly reporting "2008/05/08-17:12:11, [TS-1006], 179513,, INFO, MLWSAN53, Synchronizing time of day clock" every 5m20s. **Feature**: FC Services **Function**: Other **Probability**: Medium **Risk of Fix**: Low **Found in Release**: FOS5.3.0 **Service Request ID**: 317877
DEFECT000220682	**Medium**	**Summary**: Environmental specification (of Temp) issue for BR 5300 . **Symptom**: Hardware LED shows error status (flashing amber/green) even though all FRUs are OK. All environmental readings, including temperature, are OK. **Feature**: Platform Services **Function**: Sys-Control/Environment Monitor **Probability**: Medium **Risk of Fix**: Low **Found in Release**: FOS6.0.0 **Service Request ID**: 322617
DEFECT000221092	**Medium**	**Summary**: Invalid Tx/Rx rate can be computed if a polling cycle takes place when a domain name has not been assigned. **Symptom**: Port Peak Data Rate read from the SMI interface shows incorrect values that exceed the speed of the switch. **Feature**: Field Escalation **Function**: Management Services **Probability**: Low **Risk of Fix**: Low **Found in Release**: FOS5.2.1 **Service Request ID**: 314691
DEFECT000221377	**Medium**	**Summary**: EZ Switch Manager validation error on existing zones. **Symptom**: Devices of type Initiator+Target or Unknown are treated like Storage and shown as Storage within EZswitch. This can lead to an invalid zone definition, as zones with only “storage” devices are flagged as invalid. **Feature**: WebMgmt **Function**: Web Tools EZ **Probability**: High **Risk of Fix**: Low **Found in Release**: FOS6.1.0 **Service Request ID**: 324839

Defect ID	Technical Severity	Description of Defects Closed in Fabric OS v6.1.1
DEFECT000221738	**Medium**	**Summary**: The Accept CT_IU to GA_NXT Request frame is being rejected by a 3rd-party storage device because the frame is 680 bytes in size. **Symptom**: This particular storage device has a function that automatically sets the access limitation between the servers and the storage device by security reason. The function does not work because the frame is rejected. **Feature**: FC Services **Function**: Name Server **Probability**: Low **Risk of Fix**: Low **Found in Release**: FOS6.1.0 **Service Request ID**: 325337
DEFECT000221907	**Medium**	**Summary**: Brocade 5100: FRU faulty status is not recovered correctly. **Symptom**: client experienced that FRU faulty status is not recovered even after connect to the correct power source when once it operated with single power source. **Feature**: Brocade 5100 Platform Servies **Function**: Sys-Control/Environment Monitor **Probability**: Medium **Risk of Fix**: Low **Found in Release**: FOS6.1.0 **Service Request ID**: 326227
DEFECT000222317	**Medium**	**Summary**: Tape Selective Reset error due to incorrect handling of Early End Synchronization status. **Symptom**: Job is failing due to a selective reset after read pipelining incorrectly processed a status frame as a chain breaking status event during a GVRESTOR job. **Feature**: FCIP **Function**: FCIP I/O **Probability**: Medium **Risk of Fix**: Low **Found in Release**: FOS6.0.0
DEFECT000222441	**Medium**	**Summary**: FICON Device Level Ack Emulation Processing error. **Symptom**: DvcAck emulation processing in FICON XRC and FICON Tape emulation logic can incorrectly generate a DvcAck when not appropriate. **Feature**: FCIP **Function**: FCIP I/O **Probability**: Medium **Risk of Fix**: Low **Found in Release**: FOS6.1.0

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