Brocade Fabric OS v3.2.0

Brocade Release Notes_v1.0

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Document History

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Brocade Fabric OS v3.2.0 Release Notes v1.0	First release.	October 22, 2004

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Overview

Brocade Fabric OS v3.2.0 contains significant enhancements in the areas of Fibre Channel long-distance support, scalability, and manageability, to name a few. In addition, several improvements since the release of Fabric OS v3.1.3 have been incorporated in this release. Major new features include:

- Additional support for the SilkWorm Multiprotocol Router Model AP7420
- Updated security enhancements:
    - RADIUS
    - DH-CHAP authentication
- Brocade Fabric Watch and Advanced Web Tools usability enhancements

Brocade software release policy is to carry forward all fixes in patches to subsequent maintenance and feature releases of Fabric OS.

Supported Switches

Fabric OS v3.2.0 supports SilkWorm 3200 and 3800 switches.

Technical Support

Contact your switch support supplier for hardware, firmware, and software support, including product repairs and part ordering. To assist your support representative and expedite your call, have the following three sets of information immediately available when you call:

1. **General Information**
    - Technical Support contract number, if applicable
    - Switch model
    - Switch operating system version
    - Error numbers and messages received
    - **supportShow** command output
    - Detailed description of the problem and specific questions
    - Description of any troubleshooting steps already performed and results
2. **Switch Serial Number**

    The switch serial number and corresponding bar code are provided on the serial number label, as shown here.

    

    The serial number label is located as follows:
    - SilkWorm 3200 and 3800: Back of chassis
3. **World Wide Name (WWN)**
    - SilkWorm 3016, 3250, 3850, 3900, and 4100 switches, and SilkWorm 12000 and 24000 directors: Provide the license ID. Use the **licenseIdShow** command to display the license ID.
    - SilkWorm Multiprotocol Router Model AP7420: Provide the switch WWN. Use the **switchShow** command to display the switch WWN.
    - All other SilkWorm switches: Provides the switch WWN. Use the wwn command to display the switch WWN.

Standards Compliance

Brocade Fabric OS v3.2.0 conforms to the following 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. Brocade verifies conformance with Fibre Channels Standards by subjecting its switches to SANmark Conformance Tests developed by the Fibre Channel Industry Association. Brocade switches have earned the SANmark logo, indicating such conformance. SANmark is a limited testing program and does not test all standards or all aspects of standards.

- FC-AL ANSI X3.272: 1996
- FC-AL-2 NCIT S 332: 1999
- FC-FLA NCIT S TR-20: 1998
- FC-GS-4 ANSI INCITS 387-2004 (Includes FC-GS-2 and FC-GS-3)
- FC-PH ANSI X3.230: 1994 (Included in FC-FS)
- FC-PH-2 ANSI X3.297: 1997 (Included in FC-FS)
- FC-PH-3 ANSI X3.303: 1998 (Included in FC-FS)
- FC-PLDA NCIT S TR-19: 1998
- FC-SW-3 INCITS 384:2004 (Includes FC-SW and FC-SW-2)
- FC-VI INCITS 357:2002
- FC-DA Rev 3.1 (Under Development)
- FC-SP Rev 1.6 (Under Development)
- FC-MI INCITS/TR-30:2002
- FC-MI-2 Rev 2.5 (Under Development)
- FC-PI INCITS 352:2002
- FC-FS INCITS 373:2003
- FC-BB-2 INCITS 372:2003 (Includes FC-BB)
- FC-SB-3 1.6 (Includes FC-SB-2)
- RFC 2625 IP and ARP Over FC
- RFC 2837 Fabric Element MIB
- RFC 3643 FC Frame Encapsulation
- FCP ANSI X3.269: 1996
- FCP-2 INCITS 350:2003
- SNIA Storage Management Initiative Specification Version 1.02

Important Notes

This section lists information you should be aware of when running Fabric OS v3.2.0.

OS Requirements

The following table summarizes the versions of Brocade software that are supported in conjunction with this release. These are the *earliest* software versions that interoperate. Brocade recommends using the *latest* software release versions to get the most benefit out of the SAN.

Fabric OS v2.4.x or earlier, v3.0.0x or earlier, and v4.0.0 or earlier have reached their end-of-life and are no longer supported starting February 2004.

Effective September 2004, Fabric OS v2.6.0x and earlier, v3.0.2x and earlier, and v4.0.2x and earlier reached their end-of-life and are no longer supported.

	SilkWorm 2000 Series	**SilkWorm 3200 & 3800**	**SilkWorm 3016, 3250, 3850, 3900, 12000, & 24000** [1]	**SilkWorm 4100** [2]	**Fabric Manager**
General compatibility	v2.6.1 or later	v3.1.0 or later	v4.1.0 or later	v4.4.0 or later	3.0.2c or later
With Secure Fabric OS enabled	v2.6.1 or later	v3.1.2 or later	v4.2.0 or later	v4.4.0	3.0.2c or later
Recommended software versions	v2.6.2	v3.2.0	v4.4.0	v4.4.0	4.1.1 or later

1 SilkWorm 3016 is supported by Fabric OS v4.2.1x and v4.4.0 or later.
SilkWorm 3250, 3850, and 24000 are supported by Fabric OS v4.2.0 or later.
SilkWorm 3250, 3850, and 24000 are supported by Fabric Manager 4.1.1 or later.
SilkWorm 3900 is supported by Fabric OS v4.1.0 or later.

2 SilkWorm 4100 is supported by Fabric Manager 4.4.0 or later.

General

The major features incorporated in Fabric OS v3.2.0 are summarized in the following table.

Category	Feature	Release
Manageability	Advanced Performance Monitoring - ISL monitoring (CLI only) Fabric Watch enhancements Export performance data	v3.2.0, v4.4.0 v3.2.0, v4.4.0 v3.2.0, v4.4.0
Security-Related	RADIUS support Multiple user accounts SSL/HTTPS support SNMPv3 support DH-CHAP authentication (switch-switch) SAN Gateway security	v3.2.0, v4.4.0 v3.2.0, v4.4.0 v4.4.0 v4.4.0 v3.2.0, v4.4.0 v3.2.0, v4.4.0
Long-Distance Enhancements	Trunking over extended fabrics (SilkWorm 3200, 3250, 3850, 3800, 3900, 12000, 24000 (all Bloom-ASIC-based platforms) is only supported at 2 Gbit/sec speed, as follows: ▪ four links at 10 km @ 2 Gbit/sec per trunk group ▪ three links at 25 km @ 2 Gbit/sec per trunk group ▪ two links at 50 km @ 2 Gbit/sec per trunk group When configuring an Extended Fabrics trunk, make sure that the *vc_translation_link_init* option is set to 1 (enabled). This option can be set using the **portCfgLongDistance** command. If this option is disabled on a port, the port will not participate in a trunk; instead, it will come up as an individual Lx_Port.	v3.2.0, v4.4.0
MPRS Enhancements	Max Hop Count (FC Router) – CLI only WAN_TOV (FC Router) – CLI only	v3.2.0, v4.4.0 v3.2.0, v4.4.0
Scalability	Support for 1280 total ports and 34 domains with security enabled	v3.2.0, v4.4.0
Usability Improvements + RFEs	Security Management – enable/merge secure fabrics (Fabric Manager only) Web Tools and Fabric Manager usability improvements Enhanced Fabric Watch support	v3.2.0, v4.4.0 v3.2.0, v4.4.0 v3.2.0, v4.4.0

Advanced Web Tools Updates

- For instructions on installing Mozilla 1.6 on Solaris 2.8 and Solaris 2.9, refer to the following Web site:

  http://ftp27f.newaol.com/pub/mozilla.org/mozilla/releases/mozilla1.6/README

- **Issue:** The Mozilla browser does not support the Switch Admin module properly in Fabric OS v2.6.x. In Fabric OS v2.6.2, a warning message is displayed. For other 2.6.x versions, no warning message is displayed.

  Workaround: The Netscape browser is not supported by Web Tools. However, if you must access the Switch Admin module from a Solaris operating system on a Fabric OS v2.6.x switch, use the Netscape v4.7.7 or later browser.

- Two Domain/Four Domain Fabric Licensing

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

  These messages warn you that your fabric size exceeds the supported switch configuration limit and tells you how long you have before Web Tools will be disabled. After the 45-day grace period, you will no longer be able to launch Web Tools from the switch with the limited switch license if that switch is still exceeding the switch limit. Two domain/four domain fabric licensing is applicable only to 2 Gbit/sec switches.

- Advanced Web Tools browser, operating system, and Java Plug-in support is updated for Fabric OS v4.4.0. The following table identifies the supported browsers, operating systems, and Java Plug-ins for this release.

Priority	OS	Browser	Plug-in
1	Windows 2000	IE 6.0	1.4.2_03
2	Windows XP	IE 6.0	1.4.2_03
3	Windows 2003	IE 6.0	1.4.2_03
4	Solaris 2.9	Mozilla 1.6	1.4.2_03
5	Red Hat Linux 9.0	Mozilla 1.6	1.4.2_03
6	Solaris 2.8	Mozilla 1.6	1.4.2_03

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

Launch Switch Environment	Problems
Firmware: Fabric OS v3.1+ or v4.1+ **Operating System**: any supported operating system (with supported browser) **Browser**: any supported browser (on supported operating system	**Issue**: When viewing the topology from WebTools, if your initial login was a v3.1+ or v4.1+ switch and you view the topology from a switch with a previous version of the Fabric OS, there is no print function available in the Fabric Topology window. Web Tools v3.1.0+ and v4.1.0+ includes a Print button in the Fabric Topology window. Earlier versions do not. **Workaround**: If the Fabric Topology window does not display a Print button, you can right-click anywhere inside the window and select Print from the popup menu.

Launch Switch Environment	Problems
Firmware: Fabric OS v2.6.x **Operating System:** Solaris **Browser:** Mozilla	**Issue**: The Switch Admin does not launch correctly. **Workaround:** The Netscape browser is not supported by Web Tools. However, if you must access the Switch Admin on a switch running Fabric OS v2.6.x from a Solaris operating system, use the Netscape browser.
Firmware: version *prior* to Fabric OS v2.6.2, v3.1.2, or v4.2.0 with secure mode enabled **Operating System:** Solaris **Browser:** Mozilla	**Issue**: When accessing the Switch Admin, Zoning, Fabric Watch, or High Availability Admin, the browser might crash. **Workaround**: The Netscape browser is not supported by Web Tools. However, if you must access the Switch Admin, Zoning, Fabric Watch, or High Availability Admin from a Solaris operating system, use the Netscape browser.
Firmware: version *prior* to Fabric OS v2.6.2, v3.1.2, or v4.2.0 **Operating System:** any supported operating system (with supported browser) **Browser:** any supported browser (on supported operating system)	**Issue**: When trying to access a switch running Fabric OS v2.6.2, v3.1.2, or v4.2.0 from the launch switch, Switch Explorer will display a null pointer exception, and the SwitchInfo applet will not display; Switch Explorer does not work properly with switches running the latest firmware. **Workaround**: Use a launch switch running Fabric OS v2.6.2, v3.1.2, or v4.2.0 or later to access the switch.
	Issue: When trying to perform end-to-end monitoring (Brocade Advanced Performance Monitoring) on a SilkWorm 24000 or SilkWorm 3250, the SilkWorm 24000 or SilkWorm 3250 will be displayed as a 16-port switch. **Workaround:** For a SilkWorm 3250, ignore the extra ports. For a SilkWorm 24000, use a launch switch running Fabric OS v4.2.0 or later to perform end-to-end monitoring on the switch.
	Issue: When trying to perform zoning on a SilkWorm 24000 or SilkWorm 3250, the SilkWorm 24000 or SilkWorm 3250 will be displayed as a 16-port switch. **Workaround:** If you are running Secure Fabric OS, select a switch running Fabric OS v2.6.2, v3.1.2, or v4.2.0 or later as the primary FCS switch. If you are not running Secure Fabric OS, use a launch switch running Fabric OS v2.6.2, v3.1.2, or v4.2.0 or later to perform zoning on the switch.
Firmware: Fabric OS v 2.6.2, v3.1.2, or v4.2.0 **Operating System:** any supported operating system (with supported browser) **Browser:** any supported browser (on supported operating system)	**Issue:** The Name Server table will not display properly for a switch running firmware versions prior to Fabric OS v2.6.2, v3.1.2, or v4.2.0. **Workaround:** If secure mode is enabled, select a switch running Fabric OS v2.6.2, v3.1.2, or v4.2.0 or later as the primary FCS switch. If secure mode is not enabled, use a launch switch running Fabric OS v2.6.2, v3.1.2, or v4.2.0 or later to access the Name Server table on the switch.
Firmware: version *prior* to Fabric OS v2.6.2,v3.1.2, or v4.2.0 **Operating System:** Solaris **Browser:** Netscape	**Issue**: Any switches running Fabric OS v2.6.2, v3.1.2, or v4.2.0 or later are unsupported through Netscape. **Workaround**: Netscape is not a supported browser for switches running Fabric OS v2.6.2, v3.1.2, or v4.2.0 or later. Use Mozilla browser to manage all of your switches from a Solaris operating

Launch Switch Environment	Problems
	system.
Firmware: version *prior* to Fabric OS v2.6.1, v3.0.x, or v4.0.x **Operating System:** Windows **Browser:** Internet Explorer	**Issue**: When you are trying to run the Fabric View, the browser might crash. **Workaround**: Use a launch switch that runs Fabric OS versions v2.6.1, v3.0.x, or v4.0.x or later, so that you can use Switch Explorer (not Fabric View).

Documentation Updates

This section provides information on last-minute additions and corrections to the documentation supporting the Fabric OS v3.2.0 release.

The Fabric OS v3.1.0 documentation set supports Fabric OS v3.2.0, supplemented with the *Brocade Fabric OS Documentation Addendum*, publication number 53-0000605-01. With the exception of the following three documents, you should use the Fabric OS v3.1.0 document set and the *Brocade Fabric OS Documentation Addendum* for Fabric OS v3.2.0 documentation support:

- *Brocade Fabric OS MIB Reference Manual* (53-0000521-08)
- *Brocade Secure Fabric OS Quick Start Guide* (53-0000352-04)
- *Brocade Secure Fabric OS User's Guide* (53-0000526-04)

The following Brocade Fabric OS v3.1.0 publications are represented in the *Brocade Fabric OS Documentation Addendum*.

Document Title	Publication Number
Brocade Advanced Performance Monitor User's Guide v3.1.0/4.1.0	53-0000514-02
Brocade Advanced Web Tools User's Guide v3.1.0	53-0000503-02
Brocade Advanced Zoning User's Guide v3.1.0/4.1.0	53-0000523-02
Brocade Diagnostic and System Error Reference User's Guide v3.1.0	53-0000511-04
Brocade Distributed Fabrics User's Guide v3.1.0/4.1.0	53-0000516-02
Brocade Fabric OS Procedures Guide v3.1.0	53-0000501-02
Brocade Fabric OS Reference v3.1.0	53-0000500-02
Brocade Fabric Watch User's Guide v3.1.0	53-0000504-02
Brocade ISL Trunking User's Guide v3.1.0/4.1.0	53-0000520-02

SilkWorm 3200 Hardware Reference Manual

(Publication number 53-0001619-06)

The *Temperature* condition in Table A-3 on page A-3 of Appendix A refers to the ambient air temperature at the air intake vents on the nonport side of the switch. You should change the *Temperature* condition within the "Condition" heading in the table to *Ambient Temperature* and also add the following note to the table:

NOTE: The temperature inside the switch can be up to 75 degrees Celsius (167 degrees F) during switch operation.

SilkWorm 3800 Hardware Reference Manual

(Publication number 53-0001576-06)

The *Temperature* condition in Table A-3 on page A-3 of Appendix A refers to the ambient air temperature at the air intake vents on the nonport side of the switch. You should change the *Temperature* condition within the "Condition" heading in the table to *Ambient Temperature* and also add the following note to the table:

NOTE: The temperature inside the switch can be up to 75 degrees Celsius (167 degrees F) during switch operation.

The following statement should be added to the Port Status LED information for when the port status is "offline" in Table 3-1, "Port Side LED Patterns During Normal Operation," on page 3-2:

> "When a Port Status LED indicator light is off, another possible hardware status is offline."

Open Defects for Fabric OS v3.2.0

The following table of newly open defects lists those defects that while still formally "open," are unlikely to impede Brocade customers in their deployment of Fabric OS v3.2.0.

The presence of a defect in this list can be prompted by several different circumstances. For example, several of the defects were not detected in the months of testing on Fabric OS v3.2.0 but were initially reported against an earlier Fabric OS version in the field. Brocade's standard process in such cases is to open defects against the current release that *might* experience the same issues, and close them only when a fix is implemented or if it is determined that the problem does not exist with the current release.

In other cases, a fix has been developed but has not been implemented in this release because it requires particularly extensive code changes or regression testing to ensure that the fix does not create new problems. Such fixes will appear in future releases.

None of these defects have the requisite combination of probability and severity to cause significant concern to Brocade customers.

This table lists defects that have been deferred to a release after Fabric OS v3.2.0.

Open Defects		
Defect ID	**Severity**	**Description**
DEFECT000039673	High	Summary: firmware does not verify the PLOGI sent to a device (host to target) is using the same WWN as was used during the original FLOGI (host to switch). Customer Impact: The solution for this vulnerability is to modify the Session Level zoning mechanisms to verify that the WWN being used in the PLOGI is the same as that used in the (authenticated) original FLOGI (verified by looking up the WWN associated with the S_ID in the request frame). This change is too significant to incorporate. The vulnerability is not substantial since it requires the unauthorized user to make changes to HBA firmware in order to gain access. Service Request# RQST00000028033 Reported in Release: V3.1.0

Open Defects		
Defect ID	**Severity**	**Description**
DEFECT000046989	High	Summary: Silkworm 3200 panic on new LSAN zone creation when wwn list is too long on command line Symptom: Switch panics when running a set of zoning commands. (zonecreate, zoneadd, cfgenable, zonedelete, cfgremove, cfgenable in this sequence) Workaround: On the command line, pass the arguments that are smaller than 128 bytes in length. This implies that wwn list on zoning commands cannot be longer than 128 bytes. To add additional wwns in the zoning configuration use zoneadd command. Customer Impact: When creating zoning configuration with zonecreate and adding wwns with zoneadd, list of wwn must be smaller than 128 bytes. To add additional wwns, use zoneadd command repeatedly. Service Request# RQST00000030846 Reported in Release: V3.1.2
DEFECT000048161	High	Summary: During overnight 'Fastboot' script. the two SW2800 switches in the fabric did not come back online (switch stayed in 'initializing' state'. Symptom: Very rarely in a large SAN fabric with more than 500 devices under test environment using test scripts, "fastboot" all switches in the fabric repeatedly will cause some of the sw3xxx switches not coming up as active and join the fabric. Customer Impact: Very rarely in a large SAN fabric with SilkWorm2800 in the fabric and with more than 500 devices under test environment using test scripts, "fastboot" all switches in the fabric repeatedly will cause some of the sw3xxx switches not coming up as active and join the fabric When device count is reduced to less than 500, switch joins fabric fine. Reported in Release: V3.2.0

Open Defects		
Defect ID	**Severity**	**Description**
DEFECT000048432	High	Summary: login dialog has warning message about load certificate failed when access through Web Tool. Symptom: When logging to the switch via WEBTOOLS , the login window becomes "Secure Login" although there is NO security license. Solution: The code needs to remove the port part from URL composition. Workaround: Don't not use proxy server Customer Impact: Web Tools queries a URL page to know if the switch is secure mode enabled or disabled. When customer uses the proxy server, this URL will return the invalid page causes Web Tools runs into exceptions. Inside Web Tools, when checking security mode catched exception, it will by default believe that switch is secure mode enabled. So login process is popped up a secure login dialog. Different user environment may set up proxy server differently. It happens that this proxy server setting causes the URL page not to go through. Workaround exists for this issue. Service Request# RQST00000031210 Reported in Release: V3.1.1
DEFECT000018467	Medium	Summary: JNI6410 host doesn't see any target that connected on the partner switch Symptom: JNI6410 on Solaris host in a QuickLoop environment may not see target devices. Customer Impact: The problem has been found to be in the JNI driver. Waiting for fix from vendor. Probability: Low Reported in Release: V3.1.0
DEFECT000023675	Medium	Summary: Unable to ID private HBAs (HBA rejects fcp probe) in DCC policy Symptom: Private HBAs or HBAs in QL mode rejects FCP probe from the switch. As a result, these HBAs have no registration to the name server (NS). Customer Impact: Some older private HBA does not respond to PLOGI from the switch. These HBA are not enforced by the DCC policy. This is a normal behavior of some HBAs. Probability: Low Reported in Release: V3.1.0

Open Defects		
Defect ID	**Severity**	**Description**
DEFECT000034400	Medium	Summary: Using API, After merging 2 secured fabric (2 sessions) with security transaction on, session object for both sessions show TRANSACTION_LOCK_SECURITY Symptom: Establish individual session for two secured fabrics and enable event, turn on security transaction for each fabric, merge two secured fabric into one secure fabric, call FabAPI_SyncSession for both sessions, call GetObjectByType on session object for both sessions ==> Both session display TRANSACTION_LOCK_SECURITY commit the security transaction for both sessions ==> only one session returns success, the other session returns -55 Solution: Don't logout local users if "--currentpwd" or "--quickmode" is used during secModeEnable. Workaround: The application using the API can reestablish session to work around the problem Customer Impact: The defect occurs when the API is used to merge two secure fabrics. This is not considered a common event. FOS 3.2 has the problem fixed, pending on API library fix to verify and close the Defect. Reported in Release: V3.1.1
DEFECT000036804	Medium	Summary: Port Alert : SubType UP and DOWN. Inconsistencies between firmwares and frequency of events. Symptom: 1. No UP or DOWN Port Alert is rec'd from a FOS 3.x E, F, or FL port of a proxy or non-proxy switch when the port is disabled and enabled. 2. No UP or DOWN Port Alert is rec'd from a FOS 4.x E, F, or FL port of a Non-proxy switch when the port is disabled and enabled. 3. When Proxy is v2.6.1 or 3.1, and ISL of E-port being disabled is between a v2.6.1(v2.6.0 also) and a v3.1 switch, UP and DOWN events are rec'd 2 or 3 times, instead of the expected 1 time for each portdisable/enable. Customer Impact: The event source behaves differently among different FABOS. A common event layer or event filters in order to fix this problem. The event architecture is deferred into a future release. Reported in Release: V3.1.1

Open Defects		
Defect ID	**Severity**	**Description**
DEFECT000037090	Medium	Summary: Temporary internet files may allow user to bypass Web Tools login to perform administrative functions on a switch. Symptom: If an administrator leaves his/her terminal unlocked, someone else can use the temporary internet files on the system to bypass Web Tools login and perform administrative functions on a switch. Solution: No known solution yet Workaround: Do not leave the terminal unlocked or purge temporary internet files before leaving the terminal unlocked. Customer Impact: This situation happens only if an admin leaves his/her terminal unlocked and the user looks into the temporary internet files. There is a 2 hour window in which this can happen. The defect is under investigation and a fix is targeted for a future release. Reported in Release: V3.1.2
DEFECT000041772	Medium	Summary: Port out of range error is not generated on certain switches when configuration is enabled. Symptom: SW3200 has domain 11, port 0 to 7, create a zone with domain,port (11,1;11,8), enable the zone and no error message reported. Customer Impact: The zone enforcement is driven by devices that are online. So the port out of range member will not be even attempted to be programmed since it does not belong to a valid device. This approach is designed to improve zoning efficiency. Invalid data will just be ignored without impact switch functionality. Reported in Release: V3.2.0
DEFECT000042182	Medium	Summary: Switch responds to FC-GS-3 command with incomplete information during switch bootup. Symptom: FC-GS-3 based application issue commands to the switch. Before the switch has finished booting, it returns incomplete information regarding the configuration instead reject the queries. Solution: Queries should be rejected before the switch is completely ready instead of responding with incomplete information. Customer Impact: The incomplete information caused 3rd party application need to be rerun again once switch is fully booted up. It causes temporary inconsistencies to be mapped on management console without switch functionality impact. Service Request# RQST00000028873 Reported in Release: V3.1.1

Open Defects		
Defect ID	**Severity**	**Description**
DEFECT000043810	Medium	Summary: Times displayed by Web Tools are not consistent: some are client local times and some are switch times. Symptom: Web Tools displays certain times as client local time and certain others as switch time. Workaround: The user has to remember the following: - Fabric Watch and HA display local time - Zone Admin and Switch Admin display switch time - Fabric Events/Switch Events polling time is local time Customer Impact: The only impact is that the user has to remember to interpret the time as indicated in Workaround. Reported in Release: V3.2.0
DEFECT000043963	Medium	Summary: ipaddrset should NOT allow user to set FC IP and FC Netmask to same addresses as Ethernet IP and Ethernet Netmask Symptom: FCIP or FC NM may not work if both are configured to take the same IP address. Solution: This is a procedure error on the user side, user should never configure the same IP address for FCIP and FC NM. Workaround: Have the user follow the document closely, this problem can be avoided. Customer Impact: FCIp and FC NM will not work if both are configured to take the same IP address. Reported in Release: V3.2.0
DEFECT000047943	Medium	Summary: switchenable after switchcfgpersistentdisable turns the switchstate as online. Symptom: switchenable command after making the switch persistent disable (using switchcfgpersistentdisable) turns the switchstate as "Online" instead of "Online (Temporary)" Customer Impact: Customer will notice that this particular message of "Online" on v3.2.x switch does not match what is shown on a v4.4.x switch of "Online (Temporary}". Reported in Release: V3.2.0

Open Defects		
Defect ID	**Severity**	**Description**
DEFECT000048466	Medium	Summary: The Edit window for canvas in Performance Monitor appears to be blank and displays in the expected manner only when it is resized. Symptom: When the user clicks on the Edit button in the Canvas Configuration list window, a blank edit window with Banner text " Performance monitor Canvas:<canvas name>" gets displayed. Workaround: Resize the window. Customer Impact: The defect is intermittent, there is no impact on the switch, and there is an easy workaround. Reported in Release: V3.2.0
DEFECT000048476	Medium	Summary: On clicking the Search button in Performance Monitor, the resulting Search dialog is sometimes blank. The expected Search dialog comes up only when it is resized. Symptom: In the Performance Monitoring "SID / DID Performance Setup" window, when user clicks on the "Search" button, a "Search dialog" window comes up that is BLANK sometimes. Workaround: Resize the search dialog. Customer Impact: The defect is intermittent, there is no impact on the switch, and there is an easy workaround. Reported in Release: V3.2.0
DEFECT000048741	Medium	Summary: Actual Link Distance of long distance LD suddenly change to "<2km" from 11km after reboot of switches in 4 switches ring. Portbuffershow showing "<2km" and portshow showing 0km, instead of 11km. Symptom: Actual Link Distance shown is not the correct distance after switch reboot. To verify the actual distance measured by FOS, check link distance from portbuffershow output. Workaround: To recover, do portdisable and then portenable. Customer Impact: Actual buffer allocated by the link is correct and will support the link at full bandwidth. As a workaround to verify the actual distance measured by FOS, check link distance from portbuffershow output. Reported in Release: V3.2.0

Open Defects		
Defect ID	**Severity**	**Description**
DEFECT000048946	Medium	Summary: GPNL to a Silkworm3800 with an empty MS database is accepted instead of getting rejected. Symptom: GPNL to a Silkworm 3800 with an empty MS database is accepted instead of getting rejected, which would be the same behavior as FOS 4.4 Customer Impact: On a Silkworm 3800 with empty MS database, the accept frame to GPNL contains no information. The empty accept frame has no known switch functionality side effect. Reported in Release: V3.2.0
DEFECT000049243	Medium	Summary: Two of Silkworm 3200 switches segmented from secure fabric after power cycling all switches concurrently Symptom: Port is disabled with "Security violation" reason. Workaround: Enable the port with portenable command to clear security violation. Customer Impact: If all the switches in a large fabric are rebooted at the same time, switch may be segmented in the secure fabric. Customer has to clear the condition by enabling the ports. This problem is intermittent and only observed in large fabric under stress test. Reported in Release: V3.2.0

Closed Defects in Fabric OS v3.2.0

This table lists the defects that have been closed since the last Fabric OS GA release, version 3.1.3.

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000046912	Critical	Summary: Switch did not forward PLOGI ACCs from host to device during multiple hosts and devices reboot stress test. Symptom: On a non-multi-path system, host port lost connectivity with device after multiple reboot operation. Solution: When port offline RSCN is processed late, such as it□s processed after the port is back online and FLOGI is accepted, PID of the "offline" port will be removed from the SID cam of all related Host ports by mistake during the port offline RSCN process. The fix is to simply stop further process of the port offline RSCN if tRTZone() task is already in the process of setting up the cams. Workaround: None Customer Impact: In a stress test environment of the customer site, a lot of fast HBAs connected to the switch ports will notice that one of the host will lost connection to the target after several rounds of port online and offline activities. Service Request# RQST00000030755 Reported in Release: V3.1.2
DEFECT000024216	High	Summary: Switch not sending enough LIPs to transition from AL-PA sequence to Old_Port Symptom: Switch is not sending enough LIPs to transition from AL-PA sequence to Old_Port Workaround: Setting the port as a G-Port by using portCfgGPort causes the issue to be avoided. Customer Impact: This issue affects a particular FC LTO tape drive. The workaround has been agreed upon between switch vendor and the manufacturer of the LTO 2 tape drives without code change. Probability: Low Reported in Release: V3.1.0

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000024454	High	Summary: configdefault failed to over-write the parameters except Domain ID Symptom: The configdownload may not update the local copy of the config parameters. Workaround: Customer must perform a fastboot or switch reboot in order to see changes made in the local copy (RAM). Customer Impact: This behavior is consistent with our Fabric OS v2.6.x and v3.x releases. Close as will not change. Probability: Low Reported in Release: V3.1.0
DEFECT000024675	High	Summary: LIPPING loop: get CRITICAL SYS-NOMEM. Panic: MALLOC -malloc failed Symptom: Switch may panic due to a bad loop device that keeps on sending LIPs. In normal environment with good loop devices, this is not a problem even if the switch was brought up with large number of loop devices. Solution: Port will be faulted when it reaches monitored interrupt threshold. Problem can no longer be recreated with FOS3.2. Workaround: None. Customer Impact: Switch may panic due to malloc failure after message queues are not freed for a while. Probability: Low Reported in Release: V3.1.0

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000025032	High	Summary: Committing a zoning database greater than 98232 bytes causes the Fabric OS v2.x, v3.x to clearout the defined database. Symptom: Merging with a SilkWorm 12000 switch and having a large zoning database (greater than 98232 bytes) causes the 2.x/3.x Fabric OS to clear out the defined database. Solution: The max size enforcement is done before committing the received database. 1) In RCS mode the commit is reject in SFC stage 2) In NON-RCS mode, commit will be rejected Workaround: None. Customer Impact: The problem only happens when the zone size used is higher than the maximum allowed size. Probability: Low Reported in Release: V3.1.0
DEFECT000026161	High	Summary: Command password doesn't propagate during reconfiguration Symptom: Change the Command password while the fabric is not stable (fabric reconfiguration), the new password will be stored locally on the primary switch only but not on other switches in the fabric. The result is an inconsistent view. Solution: Passwords will not be saved locally until the passwords are successfully distributed to the fabric. Workaround: Wait until the fabric is stable before changing any password. Customer Impact: The attempt to change password while the fabric is reconfiguring, will result in the password being saved in the local switch only. Service Request# RQST00000023583 Reported in Release: V3.1.0

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000026263	High	Summary: Secure Fabric OS does not handle all SAN gateways properly Symptom: When a switch running Secure Fabric OS attached to gateway, port does not come on line due to no security authentication. Solution: Move SLAP after Link Reset so security authentication happens with gateway. Workaround: None. Customer Impact: When a switch running Secure Fabric OS attached to gateway, port does not come on line due to no security authentication. Reported in Release: V3.1.0
DEFECT000035166	High	Summary: CRITICAL MQ-WRITE for ps_q and queue threshold exceed for secq after doing switchdisable/enable one 3800 primary FCS Switch. Symptom: Disable and Enable a FOS 3.x primary FCS switch might cause some queue overflow issues on the switch. The switch will eventually recover. Solution: FOS3.2 scalability enhancement reduced rscn traffic. Workaround: Use FOS4.x switch as primary FCS. Customer Impact: This is a specific condition with a workaround and is considered a low impact. The system will recover. Only occurs with the following: 1. condition happens in large fabric 2. switch recovers automatically as the queue entries are processed, with no fabric reconfiguration. 3. condition does not happen if a FOS 4.x switch is used as primary FCS Probability: Low Reported in Release: V3.1.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000036443	High	Summary: "ISL_RDY_Mode" used in conjunction with "Extended Fabric Modes" causes Eport failure followed by a segmented fabric. Symptom: When "ISL_RDY_Mode" and "Extended Fabric Modes" each used separately, it functions fine. When both are set, fabric segments. Solution: Updated code to make the portCfgISLMode and portCfgLongDistance commands mutually exclusive. Workaround: None. Customer Impact: If "ISL_RDY_Mode" and "Extended Fabric Modes" are used together or set, the fabric segments. Service Request# RQST00000026172 Reported in Release: V3.1.1
DEFECT000037236	High	Summary: GID_FT request fails with certain HBA. Symptom: When HBA issues a GID_FT request and the accept response from switch has the wrong TYPE and no Subtype. Solution: Corrected the function ctRealloc, which messed up the iu_ahdr and iu_data pointers of the iu in a corner case. Workaround: None. Customer Impact: GID_FT request fails with certain HBA. Service Request# RQST00000026594 Reported in Release: V3.1.1

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000037701	High	Summary: Switch fails to send swFabricWatchTrap Symptom: Remove and insert the ISL several times, observe that switch fails to send swFabricWatchTrap for events in the following areas: - eportSync - eportSignal - eportState - fopportLink - fopportSync - fopportSignal - fopportState Solution: Change the interface called to get thresholds on errors for a port, as the port may be offline by the time we decide to send a trap. Customer Impact: Remove and insert the ISL several times, observe that switch fails to send swFabricWatchTrap for events. This is fixed now. Service Request# RQST00000026464 Reported in Release: V3.1.1
DEFECT000039807	High	Summary: Switch not allowing enough time for LISM Symptom: Some vendor devices run into a problem where the switch does not wait the required 2 seconds for the LISM portion of loop initialization to complete. The switch only waits 150ms, which isn't enough. Solution: Send multiple LISMs on each bloomPoll call. Workaround: None. Customer Impact: The customer impact is low, the user loop port will receive multiple LISM frames every 16.6 milliseconds. Service Request# RQST00000027882 Reported in Release: V3.0.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000041705	High	Summary: Cannot telnet in to switches, although access through serial and rsh is still possible Symptom: Telnet session hangs. No further telnet sessions are possible, although rsh and serial sessions are. Solution: 1) Telnet will no longer hang when internal queues overflow. 2) Telnet will no longer hang when shell flow control is enabled. 3) If there is Telnet data to be sent to the host that cannot be sent for more than thirty seconds, the host will be assumed to be disconnected and the telnet session will terminate, allowing a new session to be started. 4)All the above and previous improvements to telnet have been ported to RSH/Rlogin Workaround: These hangs may be reduced in occurrence by -- 1) never enable the shell flow control during telnet, or leaving it enabled from the serial session and starting telnet. 2) Never allow the host side to drop its telnet connection by disconnecting the transport. Only an orderly termination should be done through telnet protocol. 3) Never write a script to talk through telnet that terminates without first ensuring that all requested output has been received. [That is, cutting off telnet when its outbound buffers might be full]. 4) Scripts must only send to the switch after seeing a command prompt. Sending to the switch while, say, a long output like a supportshow, may overflow the input buffers. 5) Avoid using RSH/Rlogin Customer Impact: Telnet or Rsh may become inaccessible. This can occur when 1) A lot of input comes in quickly from the host side during a period when the switch is outputting a lot of information (say during a supportshow) 2) The host side loses transport connectivity. Telnet or RSH will continue to try to talk to that host for hours, so no new login is possible. 3) shell flow control has been left enabled during a Telnet or Rsh session and a control-Y character is delivered to the switch along the Telnet/Rsh connection. Service Request# RQST00000028674 Reported in Release: V3.1.1

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000042050	High	Summary: Switch panic during zoneTypeClear Symptom: Observed following stackbacktrace due to switch panic when a zoning change was attempted from the attached third party switch in the fabric: Address: _excStub + 0x4c (0x10872a5c) Address: _bfill + 0x50 (0x1087a630) Address: _bzero + 0xc (0x1087a22c) Address: _zoneTypeClear + 0x88 (0x10484438) Solution: When port goes off line, an internal data structure will be cleared. If at the same time, a user is doing zoning configuration change, the data structure is not protected from simultaneous access and caused a race condition, and resulted in switch panic. Grab zone_sem around use of variable zoneType to avoid the race condition. Customer Impact: In a rare race condition, the switch will panic over a zoning resource. This is now fixed by semaphore protection. Service Request# RQST00000028793 Reported in Release: V3.1.1
DEFECT000042572	High	Summary: Use switch status LED to warn unhealthy conditions of a switch. Symptom: The Switch Status/Power LED stays steady green when the Fan or power supply unit was removed. Solution: Flash front and back LEDs when 1) port fails diags, 2) fan failure, or 3) power supply failure. Workaround: None. Customer Impact: The customer impact of this change is low, this is simply a code change to flash LED if there is a failure condition. Service Request# RQST00000028987 Reported in Release: V3.1.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000044413	High	Summary: When using API to access license data base, an inconsistency in data structure caused memory corruption resulting in watchdog reset. Symptom: Switch reboot with reason: watchdog Solution: Change the code the API uses to access the license data base to ensure consistency of access at all times.. Customer Impact: In a rare situation, an API function will access license database when the control structures are in an inconsistent state and cause memory corruption leading to a system watchdog reset. Service Request# RQST00000029381 Reported in Release: V3.1.2
DEFECT000046957	High	Summary: After several switchdisable/switchenable cycles, fabric segmented due to zone conflicts Symptom: Fabric contains different active zoning database. Solution: Improved slow algorithm in processing zone merge. Workaround: In early FOS 3.x and non-RCS in the fabric, manually verify the fabric in consistent mode before zoning propagations (and before reboot the switch). Customer Impact: In a rare testing setup, fabric segmented due to zone conflicts after several rounds of switchdisable and then switchenable. Reported in Release: V3.1.0

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000012926	Medium	Summary: the cfgTransAbort command is hard to discover Symptom: It may be inconvenient to look up "cfgtransabort" command through other cfg related commands. Solution: Reference to the command "cfgTransAbort" has been added to the 'see also' section of the following help pages: zoneRemove, zoneDelete, zoneCreate, zoneAdd, qloopRemove, qloopDelete, qloopCreate, qloopAdd, fazoneRemove, fazoneDelete, fazoneCreate, fazoneAdd, cfgRemove, cfgDelete, cfgCreate, cfgClear, cfgAdd, aliasPurge, aliasJoin, aliasDelete, aliRemove, aliDelete, aliCreate, aliAdd. Workaround: Simply specifically lookup this "cfgtransabort" from help page. Customer Impact: This is a low impact change that only involves help page references to cfgtransabort command. Service Request# RQST00000016116 Reported in Release: V3.0.2
DEFECT000012928	Medium	Summary: portCfgShow help text is incomplete and incorrectly formatted Symptom: The help text for the portCfgShow command's "see also" command is missing references to the "portCfgDefault" command etc Solution: Help page has been corrected to have the right text format. Customer Impact: This is simply a help page change in the "help portcfgshow". Service Request# RQST00000015974 Reported in Release: V3.0.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000012929	Medium	Summary: The "switchShow" help page does not reference any "portCfgxxx" commands, nor either portEnable or portDisable commands. Symptom: The help text for the switchShow command's "see also" portion is missing references to the "portCfgXXXXX" related commands. Solution: Modify "see also" lists to include port commands that affect the output of the switchShow command. In this way, the reference command list is complete and consistent. Workaround: none. Customer Impact: This is simply a help page change in the "help switchshow". Service Request# RQST00000015972 Reported in Release: V3.0.2
DEFECT000018017	Medium	Summary: Fabric OS v3.1.0 and v4.1.0 interactive help prompts need to be consistent Symptom: Fabric OS v3.1.0 and v4.1.0 interactive help prompts are not consistent. Solution: This defect will not be fixed, the difference is caused by the way the more() functions work under Linux and VxWorks. Workaround: Use <CR> only on 2.x/3.x based system. Customer Impact: This behavior is consistent with Fabric OS v2.x and v3.x releases. Probability: Low Reported in Release: V3.1.0
DEFECT000020078	Medium	Summary: HBA may issue PLOGI to the switch continuously. Symptom: The HBA port is set in a mode where it must PLOGI to the switch and PLOGI into the device after each LUN. This is the reason we see so many PLOGI's to the switch. Customer Impact: The problem has been root cause to be the HBA is configured to send plogin to switch for each lun. Dismissed as not a defect on switch side. Probability: Low Reported in Release: V3.1.0

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000020284	Medium	Summary: Functionality problems w/ Topology Commands(GATIN), switch responds only to "target" port WWN rather than switch port WWN. Symptom: Functionality problems w/Topology Commands (GATIN) Solution: Corrected F Ports and FL Port type intermix problem while returning to host as a part of GATIN command response payload. Workaround: None. Customer Impact: GATIN command responds only to "target" port WWN rather than switch port WWN. This may impact some management software but has no switch functioanlity impact. Probability: Medium Reported in Release: V3.1.0
DEFECT000022380	Medium	Summary: aliaspurge displays some error messages but purges successfully. Symptom: While executing alias server commands (aliasshow) the user may intermittently see some incorrect error messages. Workaround: None Customer Impact: No impact to operation of the switch, still functions properly. Probability: Low Reported in Release: V3.1.0
DEFECT000023789	Medium	Summary: agtcfgset saves the community strings locally before propagating to the secure fabric. Symptom: agtcfgset saves the community strings locally before propagating to the secure fabric. Solution: SNMP strings should get distributed over secure fabric and then be updated locally. Modified the code to save the community strings on primary switch only after successful distribution over secure fabric. Workaround: None Customer Impact: If the propagation fails, the new community strings are saved locally in the Primary, but not the rest of the fabric. Probability: Low Reported in Release: V3.1.0

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000023891	Medium	Summary: A port with LD mode should not initialize and come up while the other side of port is set at L1 mode. Symptom: The user will notice that an Eport can come up as active when one side of an E port set at LD mode with the other side set at L1 mode. Solution: Changes in code so that long distance settings on both sides of the link has to match for the long distance port to come up as active. Customer Impact: The user will notice that an E port will still come up even both sides of the link have different long distance settings. Probability: Low Reported in Release: V3.1.0
DEFECT000024020	Medium	Summary: E-Port down messages are sent when the E-Port goes up or down. Symptom: E-port down message shows up even when E-port comes up. E-port up message will follow. Workaround: None. Customer Impact: Switch functionality is not impacted. This problem can no longer be recreated with FOS3.2. Probability: Medium Reported in Release: V3.1.0

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000024639	Medium	Summary: java.lang.NullPointerException when select different switch admin tabs after WT license is removed Symptom: java.lang.NullPointerException may happen while selecting a different switch admin tab after WebTools license is removed. Solution: When the Web license is removed after Web Tools application windows are opened, Web Tools will display web license missing dialog. Please follow the instruction to either recovery the Web license or close all the Web Tools application windows. The behavior will be undefined if users continue with other operations after Web license is missing. Workaround: The user can manually close all the WebTools windows after the Web license is removed. Customer Impact: The problem only happens if the Web Tools license had been removed which is not a common action. Probability: Low Reported in Release: V3.1.0
DEFECT000024741	Medium	Summary: Extended fabric tab can not be refreshed after long distance configuration changes cause port speed setting to become "auto" Symptom: Extended fabric tab cannot be refreshed to the current settings values after long distance configuration changes cause port speed to become "auto." Solution: The fix is to interpret the new speed value correctly as automatically negotiated (auto). Workaround: Disable the faulty port from Port Setting Panel. If port speed is "Auto" while the port state is not "Port_Flt", enable the port whose speed is "Auto" and apply, then continue with other operations. Customer Impact: WebTools Extended fabric tab will not be refreshed to reflect the current settings after long distance configuration has been changed. Probability: Low Reported in Release: V3.1.0

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000024814	Medium	Summary: Vulnerability Note VU#192995 - Integer overflow in xdr_array() function when deserializing the XDR stream Symptom: CERT Advisory CAN-2002-0391 - Integer overflow in xdr_array() function when deserializing the XDR Solution: There is an integer overflow present in the xdr_array() function distributed as part of the Sun Microsystems XDR library. This overflow has been shown to lead to remotely exploitable buffer overflows in multiple applications, leading to the execution of arbitrary code. Workaround: None. Customer Impact: Third party source code needed. For more information, please refer to the CERT advisory: http://www.kb.cert.org/vuls/id/192995 Probability: Low Reported in Release: V3.1.0
DEFECT000024901	Medium	Summary: get "fail to commit on all switches" when doing secpolicysave because one switch get fail to verify signed data when committing DB Symptom: "fail to commit on all switches" message comes up when doing secpolicysave. Solution: When trying to save a security or zoning configuration shortly after a fabric reconfigures, there's still a change that the non-Primary switches do not have the Primary's certificate. This means it's still possible to see a signature verification failure on non-Primary switches if the switch has a zero version stamp. If the non-Primary switch is running 3.1 firmware, then that switch will request a new download from the Primary after the save operation completes. "secFabricShow" on the Primary switch will show ERROR state for 3.1 switches requesting a download until the download is complete. Workaround: None Customer Impact: There's still some corner case race condition with zoning/security interaction that causes switches in the fabric to segment. The defect is fixed in a future release. Probability: Low Reported in Release: V3.1.0

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000024976	Medium	Summary: When configdownload completed successfully on zoneDB but failed on security policy, primary switch fails to propagate zoneDB to fabric. Symptom: Configdownload command fails with security enabled if there are errors in the security database. Solution: Now when the configdownload fails, the zone database will not change. It will still keep the old zone database. Workaround: Resolve security database errors separately and reissue the "configdownload" command after that. Customer Impact: During configdownload operation, it is possible that zoning db gets downloaded successfully but security policy fails to download. Under this circumstances, after enabling the primary FCS, the zone DB does not get propagated since security thinks the configdownload operation failed as a whole. Probability: Low Reported in Release: V3.1.0
DEFECT000025304	Medium	Summary: Relocating switch port cable would lose dynamic EE monitors residing on the port Symptom: Relocating switch port cable would lose dynamic end-to-end monitors residing on the port Solution: - Changed the PerfMon logic to allow EE monitors with SID and DID on the same port - Fixed problems in the dynamic EE monitor logic Customer Impact: Whenever the port cable is relocated, the performance monitors will have to be deleted and the new ones created. This only impacts performance monitor data without effect switch functionality. Probability: Medium Reported in Release: V3.1.0

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000025381	Medium	Summary: Warning messages displayed when Trunked Ports being disabled/enabled continuously and E-port are configured as one L2, one normal L0 and one 2-interswitch links (ISL) trunk in a quad. Symptom: Warning messages are continuously displayed in a stress test where trunked ports are continuously enabled/disabled. Solution: Added a counter to stop the ping pong effect when a port goes online/offline due to lack of buffer. Customer Impact: The problem only happens in a stress test where trunked ports are continuously enabled/disabled. Probability: Low Reported in Release: V3.1.0
DEFECT000025505	Medium	Summary: Enable large zoning database through API caused the switch stays in BUSY state. Symptom: Enabling an approx 98K cfg with API that contains real and invalid wwn targets, the switch may become BUSY for over 1 hour, during which no other zoning changes could be saved in the entire fabric. Solution: This problem is resolved by the scalability and zoning enhancement made in FOS3.2 code which can handle up to 256K cfg database now. Customer Impact: The problem happens when a large single zoning configuration is created. Probability: Medium Reported in Release: V3.1.0
DEFECT000025553	Medium	Summary: From a 3.1 proxy, while there is an active cfg, trying to Commit after clearing Full Zone Data Base would return -1000. Symptom: From a 3.1 proxy, while there is an active cfg, trying to Commit after clearing Full Zone Data Base would return -1000 Solution: zoned task has added new error code to handle this case. Customer Impact: The problem has only been seen with API testing. Probability: Low Reported in Release: V3.1.0

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000025596	Medium	Summary: Able to reset version time stamp when login as "user" Symptom: API allows reset version time stamp when login as "user". Solution: code changes to add access level check before performing requested changes. Workaround: None. Customer Impact: User is able to reset version stamp using code version prior to FOS 3.1.2. Probability: Low Reported in Release: V3.1.0
DEFECT000025699	Medium	Summary: WebTools display of segmented trunk ports Symptom: In a segmented fabric due to a domain ID conflict, a "switchshow" shows you "domain overlap" as the reason for the segmentation. The GUI only displays 'segmented' when you click on the port for status. It does not list domain overlap as the reason. Solution: WebTool will now display the same segmented code "domain overlap" as CLI. Workaround: None other than use CLI instead. Customer Impact: GUI -- In a segmented fabric due to a domain ID conflict, a "switchshow" shows you "domain overlap" as the reason for the segmentation. The GUI display currently does not list domain overlap as the reason. Probability: Low Service Request# RQST00000022076 Reported in Release: V3.1.0

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000025714	Medium	Summary: SRDF link port not registering in NS after disabling switch, removing zoning, and enabling the switch Symptom: After SRDF port is logged in and NS registration contains symbolic name, disable the SilkWorm3800, remove the zoning and then re-enable the switch. The SRDF port logs in ok, but the NS does not contain the symbolic name and SRDF links will not sync after a switch is introduced into the fabric with no zoning. Solution: The problem is caused by zoning taking too long, it's now resolved by the optimized zone merge in FOS3.2. Workaround: To work around this problem, issue portDisable/portEnable commands to recover: disable zoning on the fabric the switch is going to join; after fabric is stable, enable the zoning. Probability: Low Reported in Release: V3.1.1
DEFECT000025835	Medium	Summary: If wrong path to firmware is entered in WebTools for FirmwareDownload operation, WebTools incorrectly displays status as "Changes to switch done" Symptom: WebTools incorrectly reports status of firmwaredownload operation as ‘done’ when wrong path to firmware is entered. Solution: Change the message that is displayed to indicate that the status is actually displayed in the switch admin message window. Workaround: Look at webtool logs in switchadmin window for change status. Customer Impact: The message asks users to check the status from the log: "changes to switch done, please check the log for changes status". The status of the download is displayed in the switch admin message window. The fix is merely to change the displayed text. This is fixed in a future release. Reported in Release: V3.1.1

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000025931	Medium	Summary: root cannot change admin/user passwords Symptom: log in as the root account in FOS 3.1.0, any admin/user account information changes made will not be applied to the switch. Solution: When changing user/admin password in root account, no input of old password is needed. Workaround: log in as an admin level account. Customer Impact: Even if the user login as root, the user cannot change the admin/user passwords unless he knows what the old passwords are. This is fixed now. Probability: Low Service Request# RQST00000023305 Reported in Release: V3.1.0
DEFECT000033354	Medium	Summary: When established multiple sessions to different switches in the same fabric, committing zoning changes from a second Session does not always propagate zoning info to the entire fabric. Symptom: Zone update is not propagated to the entire fabric if done via multiple API sessions to the fabric. Solution: Don't allow zoning transaction to be started unless it can be transmitted to other switches in fabric Workaround: Perform only one zoning change at a time. Do not start the second one until the first one has finished propagating to the entire fabric. Customer Impact: The 2nd zoning operation needs to wait until the first zoning operation is done. This is considered a corner case. Reported in Release: V3.1.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000033595	Medium	Summary: FirmwareDownloadDirect has telnet errors of "..error: download already in progress." when run. Symptom: The telnet window shows "..error: download already in progress." when FirmwareDownloadDirect is called in BLOCKING(wait = TRUE) mode. The download still completes successfully; Solution: Removed misleading error message when API downloads firmware. Workaround: Perform FirmwareDownloadDirect in NONBLOCKING(wait = TRUE) mode, or FirmwareDownloadSelf. Customer Impact: The telnet window shows "..error: download already in progress." when FirmwareDownloadDirect is called in BLOCKING(wait = TRUE) mode, even though the download will be completed successfully. Reported in Release: V3.1.1
DEFECT000034588	Medium	Summary: On removing, and later adding Web Tools license, an incorrect message is displayed. Symptom: The message displayed when Web Tools license is removed, and later added, is inaccurate. Solution: Add license handling with new design Add port health status for offline Clean up debug message. Workaround: None. Customer Impact: This is a corner case. It is not expected that the user will remove a license once it is installed. This is fixed in a future release. Reported in Release: V3.1.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000034663	Medium	Summary: Font used to print the name server table is too small to read Symptom: When the user hits the print button under the name server display, the printout that is generated uses very small font. Solution: While in the Name Server window, click the print button. The page orientation default to Portrait. The user need to change to Landscape Orientation to make the font larger Workaround: User can use the "Landscape" mode to make the font larger. Customer Impact: No functionality impact. Reported in Release: V3.1.2
DEFECT000035923	Medium	Summary: When Platform Database is not activated on Fabric, CreatFabricObject for creating Platform Object returns incorrect error code. Symptom: Turn off Platform Databasse, use API CreatFabricObject for Platform Object, error returns code is -56 (ERR_ACCESS_ERROR) instead of -1507 (ERR_PLATFORM_SERVICE_INACTIVATED) Solution: Added a new CT explanation code MSRJT_EXPL_PLATFORM_NOT_ENABLED (0x70) when Platform Database is deactivated; Since this value is reserved value, it can only be used for out-of-band case. For inbound case, the standard doesn't require nor provide any specific explanation code when PLDB is disabled Workaround: None. Customer Impact: This is a negative test, the customer impact is low. Probability: Medium Reported in Release: V3.1.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000035930	Medium	Summary: SilkWorm 3220 reports no license when ISL'ed in Interop mode. Symptom: The user will see the following error log message " WARNING FABRIC-SEGMENTED, 3, port 0, no WAN license" when one side of the link is interop mode. Solution: Both WebTool, error log and CLI will display consistent "incompatible: no license" message when the two side setting of the link does not match. Workaround: Make sure both sides of the link have the same mode setting. Customer Impact: The user will see the link segmented with reason as "incompatible" when one side of link is set to interopmode while the other side is normal mode. This is an user configuration error, code has been changed to be more robust in handling such configuration mistake. Service Request# RQST00000025771 Reported in Release: V3.1.1

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000035959	Medium	Summary: Reboot of the switch after redefining the effective zone and before doing cfgEnable will cause segmentation of the fabric. Symptom: If effective zone element in defined zoning configuration is changed and not made effective immediately and one of the switches is rebooted, the fabric can have different effective configurations within the same fabric. The "rebooted" switches will be running the "new" defined config as effective while the non-rebooted switches will still be using the "old" effective config. Workaround: The work around need to be done on the v2.x & v3.x switches that got rebooted and segmented: switchdisable cfgdisable /* will clear the new Effective configuration from the switch */ switchenable. /* will get the Effective configuration from the other switches in the fabric */ Customer Impact: This only happens when a user changed the effective zoning element portion of a defined zoning data base and did not enable the new effective zoning data base before reboot of the switch. It can be avoided by enabling the new effective portion of the configuration before a switch reboot. This will propagate the new definition on the fabric so that no segmentation will occur. Service Request# RQST00000025760 Reported in Release: V3.1.1
DEFECT000036618	Medium	Summary: The cfgsize command output is different across FabOS releases. Symptom: In interopMode, cfgsize command reports "Interop mode calculation not done yet!" Solution: Correct minor problems causing the cfgSize in interopmode to be misreported. cfgSize now reports the correct size in interop mode too. Workaround: None. Customer Impact: This is a display inconsistency issue and has no impact to switch functionality. Reported in Release: V3.1.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000036983	Medium	Summary: SCALABILITY (memory fragmentation): message "error: no memory" when running a zone propagation script. Symptom: message "error: no memory" shows up in errlog; however, when use memshow to look at memory usage, free memory is still very high. Customer Impact: This is memory fragmentation issue caused by running cfgenable script continuously for days. The problem can only be fixed completely by using a new memory allocator. This is NOT the same as memory leak which is most often the root cause of out of memory filed issues. Memory leak will continue to be addressed, memory fragmentation is very unlikely to happen and will not be addressed. Reported in Release: V3.1.2
DEFECT000037623	Medium	Summary: When SilkWorm 3800 switch segmented out because of Zoning DB conflict, still it shows other switches in that fabric during "fabricShow" and "switchShow". Symptom: Running zoning stress tests with 34 switch fabric, a switch can segment, yet still see other switches in fabric using fabricshow. Solution: No code change was made on FOS3.2 for this issue. The problem is resolved by changes made to FOS on remote switch. Customer Impact: It would be very rarely that the user will be able to see this problem, since this only happens when interact with an internal development code base on a remote switch. Test with latest release code on remote switch and FOS 3.1/FOS3.2 can no longer recreate the problem. Probability: Low Reported in Release: V3.1.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000037674	Medium	Summary: Switch sends out a LIRP frame that does not contain all the devices on the loop. The bad LIRP precipitates a loop re-initialization. Symptom: It takes over 10 seconds to initialize the loop in quick loop mode. Solution: Fix unprotected access to pltmap. Workaround: None. Customer Impact: Switch sends out a LIRP frame that does not contain all the devices on the loop. This will result in the loop taking a long time to come up. Service Request# RQST00000026295 Reported in Release: V3.1.1
DEFECT000037917	Medium	Summary: PortPairToRouteOID returns - 3(ERR_INVALID_PARAMETER) and fails to create route object with NL ports on separate switches Symptom: API call: PortPairToRouteOID(SrcPortOID, DestPortOID, RouteOID) If the source port is NOT a proxy switch port, the call would fail. Solution: ms_fxpname2id was returning remote domain and remote port number for a given port wwn. The Port Number on the remote switch was 0 hence route lookup from port 0 (since it is not possible to determine physical port on a remote switch from given port wwn) on the remote switch to local domain was failing. To determine the remote port number, we now issue a GPPN to the remote swtich and use that port number in determining the route. Workaround: None. Customer Impact: Customer impact is low. Reported in Release: V3.1.2
DEFECT000038126	Medium	Summary: Help page for 'configure' command needs updating across all platforms Symptom: Configure help page does not accurately offer customer the necessary information to configure the switch. Solution: Modified configure help page to reflect latest code Probability: High Reported in Release: V3.1.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000038220	Medium	Summary: switch ASSERT in ps_svr because of pid==0 in rscn frame. Symptom: When plugged in a fibre cable running from the storage port running in FC-AL mode to the switch that was meant for FC-SW mode it caused the switch to panic. Solution: It's possible rscn with 0 number of pids is generated for a port with phantom device. Task PS no longer ASSERTs when received a RSCN with 0 PIDs Customer Impact: The Performance Server task may panic if there are phantom devices on a port. Service Request# RQST00000027345 Reported in Release: V3.1.1
DEFECT000038256	Medium	Summary: portflagsshow on an active embedded Port do not always show G-port Symptom: Issue portflagsshow on the embedded port, G_PORT flag is not displayed sometimes: 8: Online UNKNOWN PRESENT ACTIVE U_PORT Solution: For an active embedded port, we should always be G-port, U-port. Workaround: none. Customer Impact: The impact to customer is low, and the user will rarely see the problem with the Gport flag set. Service Request# RQST00000027351 Reported in Release: V3.1.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000038866	Medium	Summary: Webtools allows adding a device by WWPN when port zoning is selected. Symptom: When port zoning is selected, one can see the WWNN and WWPN, one can also add a device into a zone by the WWPN. Solution: In port zoning mode, disallow WWN to be added as zoning member. In Alias, Zone & FA zone panels, disable "Add Member" button when a WWN is selected from the port tree (member selection tree). Workaround: None. Customer Impact: The customer impact is low, user will be able to add a device into a zone by the WWPN, which should not be allowed. Service Request# RQST00000027669 Reported in Release: V3.1.2
DEFECT000039853	Medium	Summary: missing help page for nsstatshow Symptom: No help page for nsstatshow Solution: Add nsStatShow help page Workaround: None. Customer Impact: nsStatShow is going to be a command and will be available with help page. Probability: High Reported in Release: V3.1.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000040543	Medium	Summary: Switch Panic with INVALID_DOMAIN - WARNING Symptom: Device at a port FLOGIed into switch, switch accepted, then PLOGIed into switch, switch accepted, then device attempted a PLOGI to the device on another port. Since the switch is using WWN zoning, the PLOGI was trapped. The source ID for the device on the orginal port was indicated as 0xFFFFFF, which is not a legal ID. To call attention to this device misdeed, the switch was PANICed. Solution: Changed panic to log_err, return appropriate error return upon receive invalid domain id. Workaround: None. Customer Impact: If the switch is using WWN zoning and the PLOGI was trapped. In the PLOGI frame, the source ID for the device on the original port was indicated as 0xFFFFFF, which is not a legal ID, but the switch was PANICed. Service Request# RQST00000028290 Reported in Release: V3.1.0
DEFECT000040704	Medium	Summary: Including domain name in e-mail header Symptom: domain name is not include in e-mail header Solution: This has been tested on our internal configuration and the domain name is now being passed properly. Workaround: None Customer Impact: The customer impact is very low, the email header will now include the domain name. Service Request# RQST00000028240 Reported in Release: V3.1.1

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000040845	Medium	Summary: Zoning transaction aborted logged at Error level causes Call Home. Symptom: End user uses API to intentionally abort zone transaction and saw following in errlog: Error ZONE-TRANS_ABORT, 2, Zone transaction aborted - Solution: Change the 'zoning transaction aborted' error message to log info. Workaround: None. Customer Impact: There is no functional impact on this problem. If the end user uses API to intentionally abort zone transaction, the user will see the following message in errlog: "Error ZONE-TRANS_ABORT, 2, Zone transaction aborted". Service Request# RQST00000028262 Reported in Release: V3.1.2
DEFECT000042237	Medium	Summary: telnet hang Symptom: Once in a while, Telnet session hangs if you switch between serial port and telnet port on logins. Solution: Fixed hangs when pipes are blocked both ways on telnet. Also drops telnet connections after thirty seconds when pipes are not moving. Workaround: Never leave the serial port suppressed for a long period. If telnet disconnects while in a Ctrl-S state the only way to reconnect is to first go in to the serial port, login, run shellFlowControlDisable, and then come in through telnet while disabled. After that you may use shellFlowControlEnable to turn it back on. Customer Impact: Once in a while, Telnet session hangs if you switch between serial port and telnet port on logins. Service Request# RQST00000028894 Reported in Release: V3.0.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000045668	Medium	Summary: Switch Reject PRLI frame after pulling link during I/O with certain vendor application and device due to zoning is not properly setup. Symptom: Bi-directional copy between two device ports could not be re-established after forcing one of the port to relogin to the fabric after running I/Os. Solution: FOS 3.2 will set up the CAM tables for both WWN and domain/port devices with the online switch to switch RSCN for both the remote and local devices. FOS 3.2 no longer solely rely on plogin to set up CAM entry. So Zoning will be setup correctly with devices does not do plogin before initiating traffic. Service Request# RQST00000029853 Reported in Release: V3.1.1
DEFECT000045724	Medium	Summary: Switch panic with "free failed" message in fdmi Symptom: Panic trace shows panic from: fdmi_freeHba Solution: Reject unsupported command with reject and correct reason, do not free port entry when rejecting a RPA command and fixed memory leaks associated with command rejection. Workaround: None. However, for host based, by recompiling the driver such that FDMI is not enabled by default. Alternatively, an older version of the driver may be used that does not have FDMI enabled by default. Customer Impact: This is only observed with Qlogic HBA on a Linux based system and a driver version of v7.0 and greater with REG_FDMI_ENABLED variable enabled in the qla_settings.h file. Service Request# RQST00000030111 Reported in Release: V3.1.2
DEFECT000045986	Medium	Summary: XML RemoveSetMember of last switch port in Security DCC_Policy causes bogus port '0' to be added Symptom: The problem is that once a member is removed from a DCC policy, a duplicate member appears. Solution: Remove the extra comma after the last port. Service Request# RQST00000029741 Reported in Release: V3.1.1

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000047059	Medium	Summary: Factory default setting for RSCN.end-device.TransmissionMode comes back with Multi PID rather than Single PID Symptom: After running configremoveall command on a SilkWorm 3800, and rebooting the switch to set the factory defaults, the RSCN.end-device.TransmissionMode is now set to a 1. Solution: RSCN.end-device.TransmissionMode is changed to use Multi PID (1) as default to reduce rscn traffic. Single PID (0) mode is allowed but no longer the default. When use configRemoveAll, it also removed the key in database, so it's expected behavior that switch boots up with default MultiPid (1). To revert back to SinglePID, one must reset the configuration database after configureRemoveAll. However, there was a bug that Single PID was not allowed when change through CLI which is now fixed. Customer Impact: Awaiting customer verification before closing. Service Request# RQST00000030891 Reported in Release: V3.1.1
DEFECT000047173	Medium	Summary: Fabric watch behavior type does not respond when set to trigger. Symptom: Fabric watch behavior type does not respond when set to trigger. Solution: Removed a mistaken buffer check that prevented trigger code from execution. Workaround: In fwconfig, change buffer to a nonzero value. In addition, in order to "trigger" the threshold, the state of the threshold (from running traffic) must change from a "non-above" state to the "above" state during testing. Customer Impact: This will be seen if the customer has their buffer value for the particular threshold set to 0. The customer can potentially miss FW messages due to the threshold state machine not working properly with a 0 buffer size. Service Request# RQST00000030773 Reported in Release: V3.1.2

Defects Closed Since Last GA Release		
Defect ID	**Severity**	**Description**
DEFECT000047354	Medium	Summary: SYNC IO in configure man page and release notes description is confusing. Symptom: SYNC IO description in configure help page is vague. Solution: SYNC IO explanation is rephrased in FOS 3.2 Workaround: None Customer Impact: There is no functional impact to switch. It's a help page clarity issue. SYNC IO is being used in remote switch environment to assist link failure detecting. It's disabled under normal operation for performance. Service Request# RQST00000031088 Reported in Release: V3.1.2
DEFECT000047599	Medium	Summary: Zoning print out misleading error message of out of CAM entries with ioctl ZONEGROUPADD fails Symptom: Observed following message in errlog: 0x11f68540 (tRTZone): Jul 27 08:29:12 WARNING ZONE-ZONEGROUPADDFAIL, 3, WARNING - port 13 Out of CAM entries Solution: Display correct message based on error code returned from ZONE_GROUP_ADD ioctl. Workaround: None. Customer Impact: This is a misleading error message, which will be corrected in a future release. Service Request# RQST00000031146 Reported in Release: V3.1.1