

=====  
Brocade Communications Systems, Inc.  
January 14, 2003  
=====

Fabric OS  
V3.0.2n Patch Release Notes

Patch Release Notes contain descriptions of bug fixes from release v3.0.2 to v3.0.2n

=====  
BUGS FIXED IN FABRIC OS 3.0.2a  
=====

Defect ID: 10109  
Priority: 1  
Problem Area: Zoning  
Found in Release: v3.0.2

Problem description: SID/DID CAMs are not setup properly when a HBA issues a PDISC instead of PLOGI LOGO frames do not arrive at PDISC source port

Description of Fix: Zoning task rebuilds the SID/DID CAMs when a PDISC is detected.

=====  
BUGS FIXED IN FABRIC OS 3.0.2c  
=====

Defect ID: 10504  
Priority: 1  
Problem Area: QuickLoop  
Found in Release: v3.0.1b

Problem description: In a configuration with two hosts attached in 2Gbit/sec QuickLoop mode, when hba sends an OPN, it does not get forwarded to the storage device, it instead is sent back to the hba, resulting in the hba being unable to access storage.

Description of Fix: Save bitmap of looplets that failed to initialize during first pass and use it to reinitialize them at the end of pass2, if timing deems this necessary.

Defect ID: 10577  
Priority: 3  
Problem Area: SNMP  
Found in Release: v3.0.1b

Problem description: E-port display in FA-MIB and trunking only shows Master Trunk Port.

Description of Fix: swNbTable displayed the entries for master ports only. It now displays the entries for slave ports also.

Defect ID: 10743  
Priority: 1  
Problem Area: QL  
Found in Release: v3.0.2

Problem description: Port becomes In\_Sync when switch is rebooted with JNI FCE2-6410. This issue will only occur with the dual port HBA FCE2-6410.

Description of Fix: Under certain loop environment, firmware handles the OFFLINE scn twice by calling qlLoopletDown. It is now handle propetly.

Defect ID: 11077  
Priority: 3  
Problem Area: Web Tools  
Found in Release: v2.4.1c

Problem description: Hyphen in the switch node name in DNS disables access to Zone admin & Name server windows in WebTools.

Description of Fix: Modified the HTTPd task to accept hyphen in the switch node name.

Defect ID: 11295  
Priority: 2  
Problem Area: Command  
Found in Release: v3.0.2b

Description of Fix: The command nsAliasShow has been added to this patch release. This command is a duplicate of the command nsShow with the added feature of displaying the defined configuration aliases that the device belongs to.

Defect ID: 11638  
Priority: 1  
Problem Area: Name Server  
Found in Release: v3.0.2b

Problem Area: NS was requiring another probing to be completed before sending RSCN.

Description of Fix: If probing has failed with NOT\_SUPPORTED as the reason code, probing will discontinue and the NS will send an RSCN once the device has been registered.

=====  
BUGS FIXED IN FABRIC OS 3.0.2d  
=====

Defect ID: 12129

Priority: 1

Problem Area: Frame Filtering

Found in Release: v3.0.2c

Problem description: In a 20 switch fabric VMS hosts loses path to storage targets after the storage has been rebooted.

Description of Fix: Change to process Port login of Open VMS hosts can now maintain path to storage targets after storage has been rebooted.

Defect ID: 12136

Priority: 3

Problem Area: SNMP

Found in Release:

Problem Description: CERT test suite case #1421 causes memory leak in switch. Patch by WindRiver.

Description of Fix: Issue found by WindRiver when running CERT test #1421. WindRiver fixed the issue and provided a patch to Brocade.

Defect ID: 12198

Priority: 1

Problem Area: Compatibility

Found in Release: 3.0.2

Problem Description: Frames discarded during remote copy.

Description of Fix: The root cause of this is the loop deadlock. In order to fix this problem, the switch will periodically checks the port for a loop idle condition where frames are not tx'd and rx'd for at least 16ms. At which point, the loop tenancy is broken by generating the CLS

Defect ID: 12018

Priority: 1

Problem Area: QL

Problem Description: Switch hangs when receiving unexpected LISM storms from device.

Description of Fix: Fixed tReceive task to handle unexpected LISM storms correctly.

Defect ID: 12027

Priority: 1

Problem Area: Zoning

Problem Description: Port zoning all 4 ports on a VMS host does not see all ports from storage device.

Description of Fix: Clear the appropriate CAMs at the same time the CAMs in the host is cleared.

=====  
BUGS FIXED IN FABRIC OS 3.0.2f  
=====

Defect ID: 12215  
Priority: 1  
Problem Area:

Problem Description: Requesting bloomDataShow on an invalid port causes inconsistent behavior.

Description of Fix: An error message 'Invalid Port' will be displayed if the port requested for bloomDataShow is out of range.

Defect ID:: 12228  
Priority: 2  
Problem Area: Auto Negotiation

Problem Description: Changing switch speed from AU to 1GB causes an HBA to go into loopback state

Description of Fix: Changed timing between portenable and portdisable to prevent an HBA from going into loopback state when switch speed is changed from AU to 1GB.

Defect ID: 12324  
Priority: 2  
Problem Area: Frame Filtering

Problem Description: BA\_ACC frame to an ABTS is being dropped.

Description of Fix: BA\_ACC frame is now handled properly when an ABTS is received.

Defect ID: 12367  
Priority: 1  
Problem Area: Interop

Problem Description: GA\_NXT request times out from McData to Brocade.

Description of Fix: Brocade switch returns next device in local name server.

Defect ID: 12477

Priority:  
Problem Area: Quick Loop

Description: LILP Frame did not contain all phantom ALPAs in the ports zone. This resulted in ports not seeing all devices in its zone.

Description of Fix: Phantom map now includes all phantom ALPAs in ports zone.

Defect ID: 12575  
Priority: 1  
Problem Area: Port Initialization

Problem Description: Host does not recognize storage after reboot.

Description of Fix: F\_port setup has changed.

Defect ID: 12879, 12739  
Priority: 1  
Problem Area: Zoning.  
Problem Description: When zoning is enabled, a cluster node cannot see it's storage device after reboot.

Description of Fix: Cluster node can now see storage devices after reboot when zoning is enabled.

Defect ID: 12588  
Priority: 2  
Problem Area: Fabric Watch

Problem Description: tThad disable configure option is only available to root user

Description of Fix: tThad disable configure option now is available at the Admin level.

Defect ID: 13023  
Priority: 2  
Problem Area: Web Tools

Problem Description: Buttons at the bottom of screen are not visible at 800x600 resolution, slider bar is unusable.

Description of Fix: Buttons are now visible at 800x600 resolution and slider bar is fully accessible.

=====  
BUGS FIXED IN FABRIC OS 3.0.2g  
=====

Defect ID: 12330  
Priority: 1  
Problem Area: Zoning

Problem Description: HDS MSCS linkup problem

Description of Fix: Set TFR\_SEARCH to force another timeout search to clear the timeout flag

Defect ID: 12350  
Priority: 1  
Problem Area: Extended Fabric

Problem Description: Switch reboot after adding extended fabric license causes problem with spinsilk

Description of Fix: Spinsilk does not have problem anymore with this version

Defect ID: 13043  
Priority: 1  
Problem Area: Fabric Watch

Problem Description: Fabric Watch Warning is returning (NULL) when the timebase is modified from default

Description of Fix: Correction was made to return the unit string to display the value "Error(s)"

Defect ID: 13044  
Priority: 2  
Problem Area: Port configuration

Problem Description: More than one port in a quad may be designated as a long distance port.

Description of Fix: Once a port is set as long distance port, trying to designate another port in the same quad to long distance will generate error message

Defect ID: 13045  
Priority: 2  
Problem Area: Zoning

Problem Description: Zoning interface allows duplicate entries to be added to an alias

Description of Fix: Duplicate entries will be detected and not added to the list

Defect ID: 13303  
Priority: 2  
Problem Area: Diagnostics

Problem Description: LOGO frame was dropped at the switch

Description of Fix: Trap the LOGO frame also in PLOGI trap and forward it

Defect ID: 13304  
Priority: 2  
Problem Area: QuickLoop

Problem Description: Switch is dropping SCSI command frames when a Mylex controller does a failover

Description of Fix: Continue creation of additional phantoms regardless of the error. During the LISA phase, detect the error and resolve the error condition

Defect ID: 13326  
Priority: 1  
Problem Area: Fabric Watch

Problem Description: fwConfigReload not working properly

Description of Fix: Added ALPA, end-to-end and filter class configreload

Defect ID: 13519  
Priority: 0  
Problem Area: Backward/Forward Compatibility

Problem Description: During core PID upgrade in a redundant fabric, if the host mistakenly sends a PLOGI with bad D\_ID, and if hardware zoning is configured, filtering logic will use the wrong port derived from the bad D\_ID

Description of Fix: Check the port attached before using it

=====  
BUGS FIXED IN FABRIC OS 3.0.2h  
=====

Defect ID: 11606  
Priority 2  
Problem Area: Web Tools

Problem Description: v3.0.2x warning message is not consistent with 2.6.0x when enabling zoning configurations.

Description of Fix:  
The following warning message in FOS 2.6.0x now exists in 3.0.2g as a reminder that when enabling it is only for the defined configuration:

"You are about to save Zoning Configuration changes. This action will only save the defined configurations. If you have changed the Currently Enabled Config, the changes will not be in until you re-enable it. Do you want to save zoning changes only?"

If changes have been made to the effective configuration it will need to be re-enabled for those changes to be effective.

Defect ID: 14220  
Priority: 2  
Problem Area: Zoning

Problem Area: AL\_PA's are being returned in the LILP that belong to Ports that are in different zone. When two switches are QL partnered together and have two zones, the AL\_PA's from the first zone are being reported in the LILP in the second zone.

Fix: QuickLoop code was functioning as designed. Zoning code was not enforcing zoning configurations as defined. Zone configurations are now enforced.

Defect ID: 13558  
Priority: 2  
Problem Area: Kernal

Problem Description: Switch is not discarding invalid frames at destination at hardware speed.

Description of Fix: Created function so invalid frames can be dropped at hardware speed.

Defect ID: 15719  
Priority: 1  
Problem Area: QuickLoop

Problem Description: Frame hold time was changed in 3.0.2d from 500ms to 200ms. As a result compatibility issues with certain storage devices have occurred.

Description of Fix: Frame hold time was increased back to 500ms to ensure compatibility with storage devices.

Defect ID: 15463,15677  
Priority: 2  
Problem Area: Kernel

Problem Description: Additional changes to watchdog instrumentation in 3.0.2x code base.

Description of Fix: Instrumentation added to capture task activity on the switch at time of reboot and setTaskLogMode to capture second level instrumentation can now be run by admin to capture further watchdog data capture. When 2nd level instrumentation is enabled switch reboot is no longer required.

Defect ID: 13820  
Priority: 1  
Problem Area: Name Server

Problem Description: While trying to replicate a virtual disk the storage device does not respond to the other similar storage devices which causes a time out and aborts the operation.

Fix: Now allow RNID to be accepted.

=====  
BUGS FIXED IN FABRIC OS 3.0.2j  
=====

Defect ID: 12895  
Please note this fix was incorporated in 3.0.2g and due to clerical errors did not appear in the README file.  
Priority: High

Problem Description:  
The problem occurs when getting the active zone configuration name and the active zone database contents. Each time the switch is polled for this information, the length of the active configuration name bytes on the switch is no longer visible. So if the active configuration is "myzone1", 8 bytes are lost (7 characters plus NULL terminator) each call.

Description of Fix:  
Free the the bytes allocated for the Active Configuration name.

Defect ID: 14517  
Priority: High

Problem Description:  
With FCP device probing turned off on the switch, Fabric controller does not send an RSCN after a target device registers with the name server with a RFT\_ID

Description of Fix:  
Using a new bitmap to indicate NS to send RSCNs.

Defect ID: 14993  
Priority: High

**Problem Description:**

Switch not sending enough LIPs to transition from AL-PA sequence to Old\_Port

**Description of Fix:**

After sending out LIP for LIP\_RETRY by tFcpH, the device responded by sending out LIP followed by IDLE in the same micro second, then LIP and LLI interrupt was raised at almost the same time. Software always processes LLI interrupt before LPSM interrupt, handling IDLE with a LIP interrupt pending. In this case the IDLE was just sent out to flush the LIP as required by FCPH, not really a protocol to try old port. Ignore the IDLEs and go to loop init directly.

Defect ID: 15061 (secondary of 14827)

Priority: Critical

**Problem Description:**

Switch lockup due to shell task running indefinitely in the case of telnet/shell out of sync.

**Description of Fix:**

Add taskdelays so that shelltask doesn't run indefinitely.

Defect ID: 15422

Priority: High

**Problem Description:**

Switch does not prompt for a Reboot after configuration change.

**Description of Fix:**

Remove the reboot requirement of the configuration parameter "Enable Close on Open". Setting takes effect as soon as switchEnable.

Defect ID: 15577

Priority: Medium

**Problem Description:**

PRLI being dropped

**Description of Fix:**

Always reset the port before excluding zoning in it.

Defect ID: 15757

Priority: Medium

**Problem Description:**

If user specifies telnet session timeout value at say 5 minutes and then telnets to a switch BUT does not login, the session will NOT timeout. Additional users will see that the switch is "IN USE...."

**Description of Fix:**

Add the timeout mechanism in the portion of code prior to telnet login. Then telnet will also timeout before login.

Defect ID: 15799

Priority: Medium

Problem Description:  
lbit was cleared in ALPAmap incorrectly

Description of Fix:  
Setting the lbit in the ALPAmap in LIFA phase

Defect ID: 16113  
Priority: Low  
Problem Description:  
Need to add Fabric Watch E-mail notification

Description of Fix:  
Added E-mail notification.

Defect ID: 16154  
Priority: High

Problem Description:  
Device sent LINIT(CD,00), but the switch sends a LIP(F7,F7) when it should have sent a LIP(CD,00)

Description of Fix:  
Pass the arg2 as the third parameter and value of 1 as 4th parameter when calling bloomStartLoop() in bloom\_ioctl.c. 4th parameter allows F8 in byte3. Add a condition to check if the reason of calling bloomStartLoop is caused by LINIT. If it is, uses passed value of byte3 and byte4 to do the lip.

Defect ID: 16850  
Priority: High  
Problem Description:  
RJT was being used to setup CAMS which caused RJTs to be dropped.  
Description of Fix:  
Not using RJT for setting up CAMs

Defect ID: 16865  
Priority: High

Problem Description:  
Auto-negotiation failure with CPQ switch.

Description of Fix:  
After auto-negotiate complete, FC\_AL\_RESET was done twice. Both FC\_AL\_RESET are not necessary. Will do FC\_AL\_RESET in the following three situations: 1. Gain SYnc 2. Change Speed 3. FIFO hits some problem During auto-nego, after entering NEGOTIATE\_COMPLETE, we have already been in sync for more than 271 ms in NEGOTIATE\_FOLLOW state.

Defect ID: 16903  
Priority: High

Problem Description:

Fabric Manager accesses the page FabricInfo2.html while the fabric is being re-configured.

Description of Fix:

Serialize accesses to the domain database to prevent intermittent values while information in the database is being computed.

Defect ID: 17313

Priority: High

Problem Description:

The ls\_port\_name field in the ADISC accept payload was not consistent with the values returned in the PLOGI and PDISC accept payloads when the ADISC was sent to a well-known address (e.g., Management Server). Brocade switch returns a different WWN in the ADISC Accept than the one it returns in the PLOGI Accept for the Management Server. The PLOGI and PDISC handlers take into account whether the ELS is addressed to a well-known address (e.g., Management Server) or to some other port address. The ADISC handler did not.

Description of fix:

Changing the ADISC ELS handler:

Get the d\_id field from the inbound ADISC ELS:

Make the port name field in the ADISC accept response consistent with the PLOGI and PDISC responses (i.e., pick the appropriate port name based on the d\_id field in the ADISC ELS).

=====  
BUGS FIXED IN FABRIC OS 3.0.2k  
=====

Defect ID: 18058

Priority: Critical

Problem Description: If a host is rebooted with an Emulex LP952 HBA and the topology setting is (2) auto-sensing then the HBA will be logged in as G-port.

Description of Fix: Changed loop initialization process back to previous specification.

=====  
BUGS FIXED IN FABRIC OS 3.0.2m  
=====

Defect ID: 18058

Priority: Critical

Problem Description: Emulex LP952 logged in as G-port

Description of Fix: Back out the change for defect 14993.

Defect ID: 18066

Priority: Low

Problem Description: X-axis out of scale in measuring port perf

Description of Fix: Cosmetic change to add a note in the graph with explanation.

Defect ID: 17759

Priority: High

Problem Description: Echo frames are not returned from the switch

Description of Fix: Setup hard loop-back zone group when FLOGI arrives without the knowledge of zoning/filtering logic. This background zone group will be removed when the port goes offline. This is done only for F-ports.

Defect ID: 18731 (Secondary of 18044)

Priority: Critical

Problem Description: Port faults causing large number of unknown interrupts because INT\_NO\_LOOPINIT mask is enabled but never cleared due to an incorrect state at time of processing. Port shows in-sync.

Description of fix: Clear the INT\_NO\_LOOPINIT interrupt mask in loomStartLoop().

Defect ID: 19253 (Secondary of 16664)

Priority: Medium

Problem Description: When a ping storm is in progress, the fabricShow command displays the message: "Fspf is calculating route, please do it later.."

Description of Fix: Added receive frame rate throttling code to ethernet driver. The ethernet driver now does a 1 tick delay on every 10th received frame so th during high rates of received ethernet frames, tNettask will not completely monopolize the CPU.

Defect ID: 19254 (Secondary of 16668)

Priority: Medium

Problem Description: When a ping storm is initiated on a switch, the FSPF queue is exceeded and the switch displays CRITICAL MQ-QWRITE errors.

Description of Fix: Added receive frame rate throttling code to ethernet driver. The ethernet driver now does a 1 tick delay on every 10th received frame so th during high rates of received ethernet frames, tNettask will not completely monopolize the CPU.

Defect ID: 19915

Priority: High

Problem Description: Continuous RSCNs recieved from switch when multiple target ports are brought online configured into the same zone.

Description of Fix: Do not overwrite the registered COS in the FLOGI database when handling UPD\_AREA message.

=====  
BUGS FIXED IN FABRIC OS 3.0.2n  
=====

Defect ID: 13571 (Secondary of 12507)

Priority: Medium

Problem Description: Port status display inconsistent between different versions of FOS.

Description of Fix: Changed port status display to be consistent versions of FOS.

Defect ID: 19557

Priority: High

Problem Description: During LISM state, the loop port does not listen to LIP for 2s resulting in a long time for a storage port to come up and lost target.

Description of Fix: Change the timeout for LISM to 100ms. If LISM times out after 100ms retry LIP.

Defect ID: 19607

Priority: High

Problem Description: In a QL environment, the switch passed a LIP FF or F8 as F7.

Description of Fix: Allow correct LIPs to pass through from switch to switch.