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	QLogic ® InfiniBand Ethernet Bridge	
	Module for IBM BladeCenter	

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Table of Contents

INTRODUCTION	4
Purpose	
SUMMARY	4
New Features	
Notes	4
INSTALLATION	5
Installation Requirements	5
Software and Firmware Requirements	5
Installation Instructions	
Upgrade Instructions	
Post-Installation Tasks	5
QLOGIC INFINIBAND ETHERNET BRIDGE PRODUCT-SPECIFIC INFORMATION	V 6
FUNCTION AND OPERATION CHANGES	6
Enhancements and Fixes	6
Fixes Since 4.0.0.3.5	
Known Product Limitations	6



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Introduction

Purpose

The purpose of this document is to provide a description of Release 4.0 of the QLogic InfiniBand Ethernet Bridge Module for IBM BladeCenter.

Summary

The Ethernet/IB bridge enables InfiniBand within the BladeCenter chassis while seamlessly connecting the chassis to an external Ethernet fabric via six, 1 Gb Ethernet connections.

New Features

None. This is the initial release.

Notes

Hardware and Firmware in this Release

- QLogic InfiniBand Ethernet Bridge Module for IBM BladeCenter
 - QLogic Part #: BCH-6x1GE-Bridge-O
 - IBM Part #: 39Y9204
- QLogic firmware Version 4.0.0.3.7
- QLogic bootROM Version 4.0.0.3.7

Link Aggregation Failover

In the context of aggregation failover, a given virtual NIC fails over from the current path if (a) the Ethernet port associated with the IOC on the current path of the virtual nic has gone down, and (b) there are less than X links in the aggregation where X is defined by the num_ports parameter in the aggregation failover definition for the Ethernet port associated with the IOC on the current path.

Therefore, if there are less than X number of links in the aggregation, but the Ethernet Port associated the with the IOC on the current path has not gone down, then an aggregation failover will not occur.



Installation

Installation Requirements

Software and Firmware Requirements

QLogic firmware Version 4.0.0.3.7 QLogic bootROM Version 4.0.0.3.7

- Software and Firmware Versions Tested for IBM BladeCenter
 - o Blade Center H Management Module version BPET23A, Revision 35
 - o Cisco HCA firmware version 4.06.0000
 - o Cisco Switch Module version BRHIBSM, Revision 0260

Installation Instructions

For installation instructions, please see the IBM BladeCenter Installation Guide.

Upgrade Instructions

None.

Post-Installation Tasks

None.



QLogic InfiniBand Ethernet Bridge Product-Specific Information

Function and Operation Changes

This release has a number of functional differences including the following:

None.

Enhancements and Fixes

This section describes the enhancements and fixes since the last release.

Fixes Since 4.0.0.3.5

• Bridge module serial numbers are not IBM 11S card serial numbers.

Fix: Code modified to support 11S serial number format.

Verification Method: Verified with new code.

Known Product Limitations

This section describes the known product limitations for this release.

• After clicking Apply, Link Aggregation GUI changes are not changed immediately

Description: Occasionally, after making Link Aggregation changes via the GUI, the changes are not visible after clicking on the Apply button.

Impact/Workaround: The operation of bridge module is unaffected. Use the browser Refresh button on the screen to display the new values.

• Large amount of errors are reported after rebooting the Ethernet bridge module

Description: After rebooting the Ethernet bridge module, the Chassis Viewer port statistics screen may display inaccurate values for the Collisions, CRCAlignErrors, UndersizePkts, and OversizePkts counters

Impact/Workaround: The operation of the bridge module was unaffected. Use the CLI ethExtStatsGet command to view the actual values of these counters.



• Ethernet bridge module GUI buttons missing after a certain sequence

Description: After a user successfully loads new Ethernet bridge firmware via Maintenance->Firmware Update, then exits and logs back into the card (without rebooting), buttons from the main Chassis Viewer window are not displayed.

Impact/Workaround: Reboot the card via the CLI 'reboot' command or via the MM Admin/Power/Restart link.

• Select Boot Image button does not work properly between a firmware download and a reboot

Description: The Maintenance – Select Boot Image button does not work properly if it is used between the time when a new firmware version has been downloaded and the Bridge Module is rebooted.

Impact/Workaround: After downloading a new version, reboot the Bridge Module. Once the reboot has completed, if you wish to run the original image, then use the Select Boot Image button to select the image and reboot the Bridge Module.

• CLI output not formatted properly when using an ssh session

Description: When using some terminal emulators, the CLI output is not formatted properly when using an ssh session, making it difficult to interpret the CLI output.

Impact/Workaround: Configure the terminal emulator to use a hard carriage return (CR) in every line feed (LF).

• The Concurrent Diagnostics button will not work properly if a value of greater than 1000 is entered for the number of packets.

Description: The Concurrent Diagnostics button on the home page of the Ethernet Bridge Module does not work properly if the number of packets used is greater than 1000 (1000 is the default value.

Impact/Workaround: The window displayed shows only 1 test, no result, and not buttons. The user should close and reopen the concurrent diagnostics window.

• Ethernet Bridge Module GUI: Stale pages sometimes appear after a firmware update when using Internet Explorer

Description: After a firmware upgrade, stale pages are sometimes displayed when using Internet Explorer.

Impact/Workaround: Clearing the Internet Explorer browser cache files will allow the correct pages to be displayed.



• The VLAN Egress Rules for a PortType of Host can not be enabled using the GUI.

Description: The VLAN Egress Rules for a PortType of Host can not be enabled using the GUI

Impact/Workaround: The CLI command vlanEgressRuleGet can be used to enable the Egress Rules

• In spite of the displayed system output, the CLI commands setModuleIpAddr and setDefaultRoute do not work.

Description: Although command output is displayed, the CLI commands setModuleIpAddr and setDefaultRoute do not work. This is also the case for the Chassis Viewer buttons 'Set OOB LAN IP' and 'Set Default Gateway IP'.

Impact/Workaround: Use the MM to change the IP address or Gateway address of any Bridge Module.

• SNMP Target Address entries can not be added or deleted using the Chassis Viewer

Description: The SNMP Target Address entries can not be added or deleted using the Chassis Viewer

Impact/Workaround: The workaround is to use the CLI command snmpTargetAddr to add or delete rows to the SNMP Target Address Table

• After a management module failover, can not access the bridge module via GUI or Telnet

Description: After a management module (MM) failed over to a different MM, the bridge modules could be pinged. However, the bridge modules could not be accessed via Telnet or the GUI.

Impact/Workaround: Following a MM failover condition, the user must remove and reinsert the bridge module(s), or make the original primary MM the primary MM once again.

• Newly inserted Bridge Module can not be pinged from the MM

Workaround: If this occurs, the user should restart the MM

Description: If a new Bridge Module is inserted into a BladeCenter chassis, the Bridge Module might not be able to be pinged from the MM.

• Can not modify SNMPv3 users via Chassis Viewer

Workaround: (1) Delete the user, then (2) add the user(s) with the desired settings.

• Can not add a SNMPv3 userid with PRIV=DES

Impact: This type of user can not be added.



• Changing MTU Size for Jumbo Frame Support

Description: When using jumbo frames, all devices in the network must be configured to support jumbo frames. In this release the recommended order in which to do this is:

- 1) for each host: /etc/init.d/ics inic stop
- 2) for each host ifcfg-eioc file: change MTU size accordingly
- 3) for each bridge module: change MTU size accordingly
- 4) for each bridge module: reboot
- 5) for each ethernet switch: change its MTU size (and reboot if it necessary)
- 6) for each host: /etc/init.d/ics_inic start

• Unable to configure an internal InfiniBand port for 1X speeds

Workaround: To connect bridge modules to the high-speed switch module and pass traffic via at 1X speeds, the user should lower the internal port speed settings (port 15 or 16 to the bridge module) on the high-speed switch module from 4X to 1X. The bridge module speed setting auto-negotiates to match the settings on the switch module.