OpenFabrics Alliance
Interoperability Logo Group (OFILG)
May 2012 Logo Event Report

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Date:	13 August 2012
Report Revision:	1.0
OFED Version on Compute Nodes:	1.5.4
Operating System on Compute Nodes:	SL 6.1

Enclosed are the results from OFA Logo testing performed on the following devices under test (DUTs):
NetApp XBB2 (7091)

The test suite referenced in this report is available at the IOL website. Release 1.42 (2012-Apr-03) was used.

http://www.iol.unh.edu/services/testing/ofa/testsuites/OFA-IWG_Interoperability_Test_Plan-v1.42.pdf

The Following Table highlights the Mandatory test results required for the OpenFabrics Interoperability Logo for the DUT per the Test Plan referenced above and the current OpenFabrics Interoperability Logo Program (OFILP).

Additional beta testing than reflected in this report was performed using the DUT. A separate report will outline those results.

Test Procedures	IWG Test Status	Result/Notes
10.1: Link Initialization	**Mandatory**	**PASS with Comments**
10.2: Fabric Initialization	**Mandatory**	**PASS**
10.5: SM Failover and Handover	**Mandatory**	**PASS**
10.6: SRP	**Mandatory**	**PASS**

Summary of all results follows on the second page of this report.
For Specific details regarding issues, please see the corresponding test result.

Testing Completed 05 June 2012

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Review Completed 03 July 2012

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Result Summary

The Following table summarizes all results from the event pertinent to this IB device class.

Test Procedures	IWG Test Status	Result/Notes
10.1: Link Initialization	Mandatory	PASS with Comments
10.2: Fabric Initialization	Mandatory	PASS
10.5: SM Failover and Handover	Mandatory	PASS
10.6: SRP	Mandatory	PASS

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Report Revision History

- v1.0 Initial working copy
- v2.0 Revised Link Initialization results based on Arbitration Committee decision

Configuration Files

Description	Attachment
Scientific Linux 6.2 Configuration File	📎
OFED 1.5.4.1 Configuration File	📎

Result Key

The following table contains possible results and their meanings:

Result:	Description:
PASS	The Device Under Test (DUT) was observed to exhibit conformant behavior.
PASS with Comments	The DUT was observed to exhibit conformant behavior however an additional explination of the situation is included.
FAIL	The DUT was observed to exhibit non-conformant behavior.
Warning	The DUT was observed to exhibit behavior that is not recommended.
Informative	Results are for informative purposes only and are not judged on a pass or fail basis.
Refer to Comments	From the observations, a valid pass or fail could not be determined. An additional explanation of the situation is included.
Not Applicable	The DUT does not support the technology required to perform this test.
Not Available	Due to testing station limitations or time limitations, the tests could not be performed.
Borderline	The observed values of the specific parameters are valid at one extreme and invalid at the other.
Not Tested	Not tested due to the time constraints of the test period.

DUT and Test Setup Information

Figure 1: The IB fabric configuration utilized for any tests requiring a multi-switch configuration is shown below.
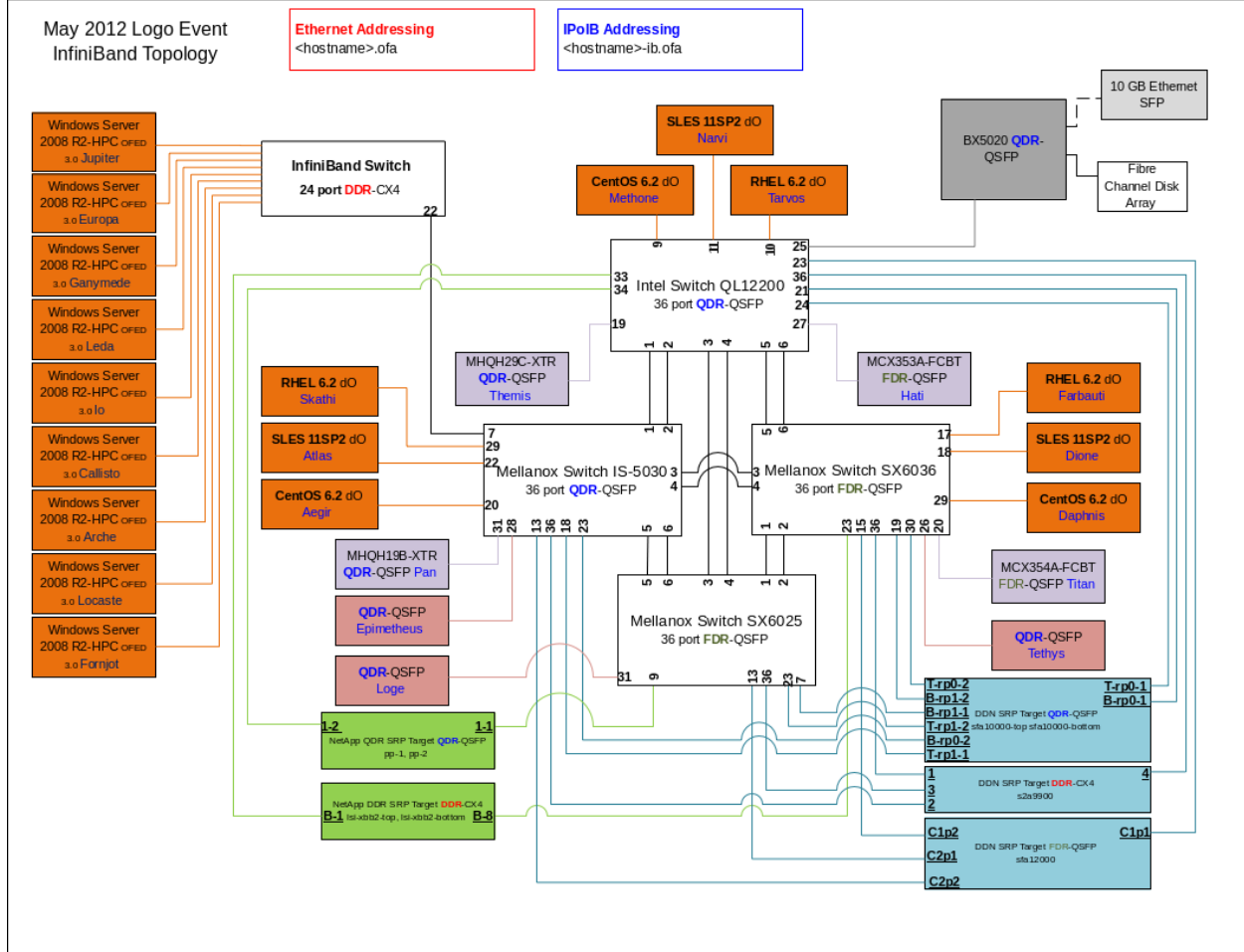
DUT #1 Details			
Manufacturer:	NetApp	Firmware Revision:	07.62.52.00
Model:	XBB2 (7091)	Hardware Revision:	2.0
Speed:	DDR	Located in Host:	NA
Firmware MD5sum:	c3f02935d54be6bef9cd6d931e29ca1f		
Additional Comments / Notes:			

Mandatory Tests – IB Device Test Results:

10.1: Link Initialization

Results	
Part #1:	**PASS with Comments**
Discussion:	

The NetApp XBB2 (7091) DDR SRP target was unable to properly link with the Intel/QLogic XXXX HCAs using the firmware provided to the UNH-IOL by Intel. A link was established, but only at 4X SDR. This is due to a known issue with Intel HCAs and certain early Mellanox-based DDR solutions such as the NetApp XBB2 (7091).

Note: Per past agreements, the Intel XXXX HCA should be updated to be compatible with the legacy Mellanox DDR Autonegotiation specification. As this has not occurred, the inability of the NetApp XBB2 (7091) to link at the proper speed is waived from the OFA Logo requirements; however, the link speed issue still remains. To draw attention to this compatibility issue with a device that is not on the OFA Logo list, this result is being marked as a Pass with Comments.

Link Partner		XBB2
QLogic 12200 (Switch) – QDR		**PASS**
Mellanox SX6025 (Switch) – FDR		**PASS**
Mellanox SX6036 (Switch) – FDR		**PASS**
Mellanox IS-5030 (Switch) – QDR		**PASS**
DataDirect Networks SFA12000 (SRP Target) – FDR		**PASS**
DataDirect Networks SFA10000 (SRP Target) – QDR		**PASS**
DataDirect Networks S2A9900 (SRP Target) – DDR		**PASS**
NetApp Pikes Peak (SRP Target) – QDR		**PASS**
NetApp XBB2 (SRP Target) – DDR		**NA**
Mellanox BX5020 (Gateway) - QDR		**PASS**
Host: Themis	HCA: MHQH29C-XTR (QDR)	**PASS**
Host: Pan	HCA: MHQH19B-XTR (QDR)	**PASS**
Host: Hati	HCA: MCX353A-FCBT (FDR)	**PASS**
Host: Titan	HCA: MCX354A-FCBT (FDR)	**PASS**

10.2: Fabric Initialization

Subnet Manager				
OpenSM	**IS-5030 SM**	**SX-6036 SM**	**12200 SM**	**WinOF SM**
PASS	**PASS**	**PASS**	**PASS**	**PASS**
Result Discussion:				

All subnet managers used while testing with OFED 1.5.4.1 were able to correctly configure the selected topology.

10.5: SM Failover and Handover

SM Pairings		Result
OpenSM OFED 1.5.4.1	OpenSM OFED 1.5.4.1	**PASS**
Result Discussion:		
OpenSM was able to properly handle SM priority and state rules.		

10.6: SRP

Subnet Manager				
OpenSM	**IS-5030 SM**	**SX-6036 SM**	**12200 SM**	**WinOF SM**
PASS	**PASS**	**PASS**	**PASS**	**PASS**
Result Discussion:				
SRP communications between all HCAs and all SRP targets succeeded while the above mentioned SMs were in control of the fabric.				