



OpenFabrics Alliance

Interoperability Logo Group (OFILG)

Dec 2011 Logo Event Report

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Date: 20 Mar 2012
Report Revision: 1.3
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 Pikes Peak (5468) *NetApp XBB2 (7091)*

The test suite referenced in this report is available at the IOL website. Release 1.4 (2011-Oct-25) was used.
http://www.iol.unh.edu/services/testing/ofa/testsuites/OFA-IWG_Interoperability_Test_Plan-v1.40.pdf

The logo document referenced in this report is available at the IOL website. Release 1.14 (2011-Mar-01) was used.
http://www.iol.unh.edu/services/testing/ofa/logoprogram/OFA-UNH-IOL_Logo_Program-v1.14.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).

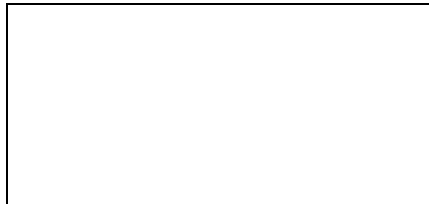
Additional beta testing was performed using the DUT than is reflected in this report. A separate report will outline those results.

Test Procedures	IWG Test Status	Result/Notes
<u>10.1: Link Initialization</u>	Mandatory	PASS with Comments
<u>10.2: IB Fabric Initialization</u>	Mandatory	PASS
<u>10.5: SM Failover and Handover</u>	Mandatory	PASS
<u>10.6: SRP</u>	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 January 2012

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Review Completed 20 March 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: IB 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
- v1.1 Revised working copy
- v1.2 Post arbitration resolution update
- v1.3 Vendor requested modifications

Configuration Files

Description	Attachment
Scientific Linux 6.1 Configuration File	
OFED 1.5.4 Configuration File	

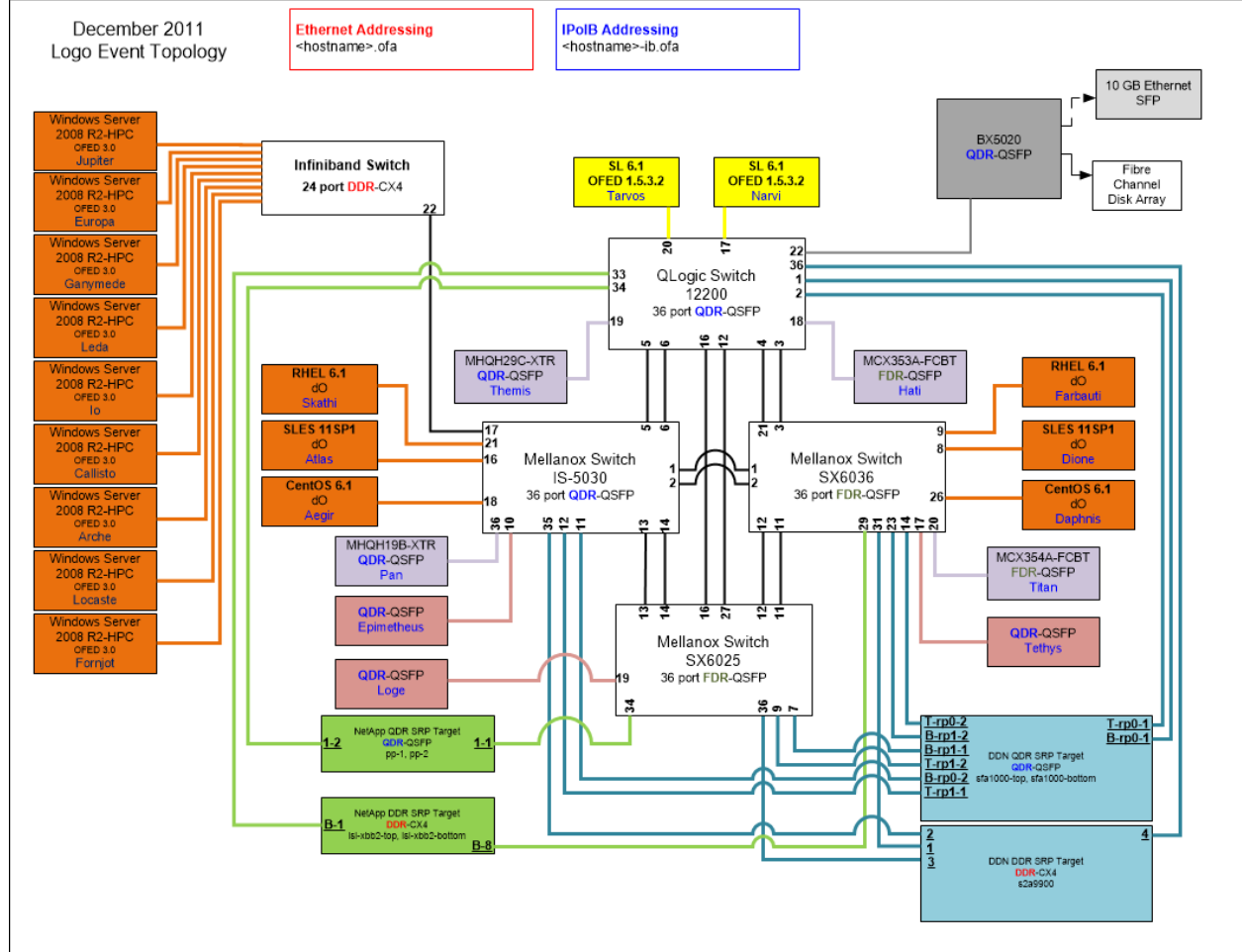
Result Key

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 explanation 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 (5468)	Hardware Revision:	2
Speed:	DDR	Located in Host:	NA
Firmware MD5sum:	c3f02935d54be6bef9cd6d931e29ca1f		
Additional Comments / Notes:			

DUT #2 Details			
Manufacturer:	NetApp	Firmware Revision:	07.80.80.00
Model:	Pikes Peak (7091)	Hardware Revision:	NA
Speed:	QDR	Located in Host:	NA
Firmware MD5sum:	bf75cdc40453b62a203452a64eb1ced3		
Additional Comments / Notes:			

Mandatory Tests – IB Device Test Results:

10.1: Link Initialization

Results	
Part #1:	PASS with Comments
Discussion:	
<p>The NetApp XBB2 DDR SRP target was unable to properly link with the Mellanox FDR HCAs using the firmware initially provided to the UNH IOL by Mellanox. A subsequent firmware was provided by Mellanox that fixed the problem however said new firmware was provided after all testing was completed. Only a link initialization spot check was performed with the new firmware.</p> <p>Note: FDR devices are considered Beta in this Logo event, hence this result is considered a PASS with Comments.</p>	

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

10.2: Fabric Initialization

Subnet Manager				
OpenSM	IS-5030 SM	SX-6036 SM	QL12200 SM	WinOF SM
PASS	PASS	PASS	PASS	PASS
Result Discussion:				
<p>All subnet managers used while testing with OFED 1.5.4 were able to correctly configure the selected topology.</p>				

10.5: SM Failover and Handover

SM Pairings		Result
OpenSM OFED 1.5.4	OpenSM OFED 1.5.4	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	QL12200 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.				