



# OpenFabrics Alliance

## Interoperability Logo Group (OFILG)

### Dec 2011 Logo Event Report

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Date: 16 Mar 2012  
Report Revision: 1.2  
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):  
*DataDirect Networks SFA10000*                      *DataDirect Networks S2A9900*

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](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](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><a href="#">10.1: Link Initialization</a></u>	<b>Mandatory</b>	<b>PASS with Comments</b>
<u><a href="#">10.2: IB Fabric Initialization</a></u>	<b>Mandatory</b>	<b>PASS</b>
<u><a href="#">10.5: SM Failover and Handover</a></u>	<b>Mandatory</b>	<b>PASS</b>
<u><a href="#">10.6: SRP</a></u>	<b>Mandatory</b>	<b>PASS</b>

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 16 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
<a href="#">10.1: Link Initialization</a>	Mandatory	PASS with Comments
<a href="#">10.2: IB Fabric Initialization</a>	Mandatory	PASS
<a href="#">10.5: SM Failover and Handover</a>	Mandatory	PASS
<a href="#">10.6: SRP</a>	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

## Configuration Files

Description	Attachment
Scientific Linux 6.1 Configuration File	
OFED 1.5.4 Configuration File	

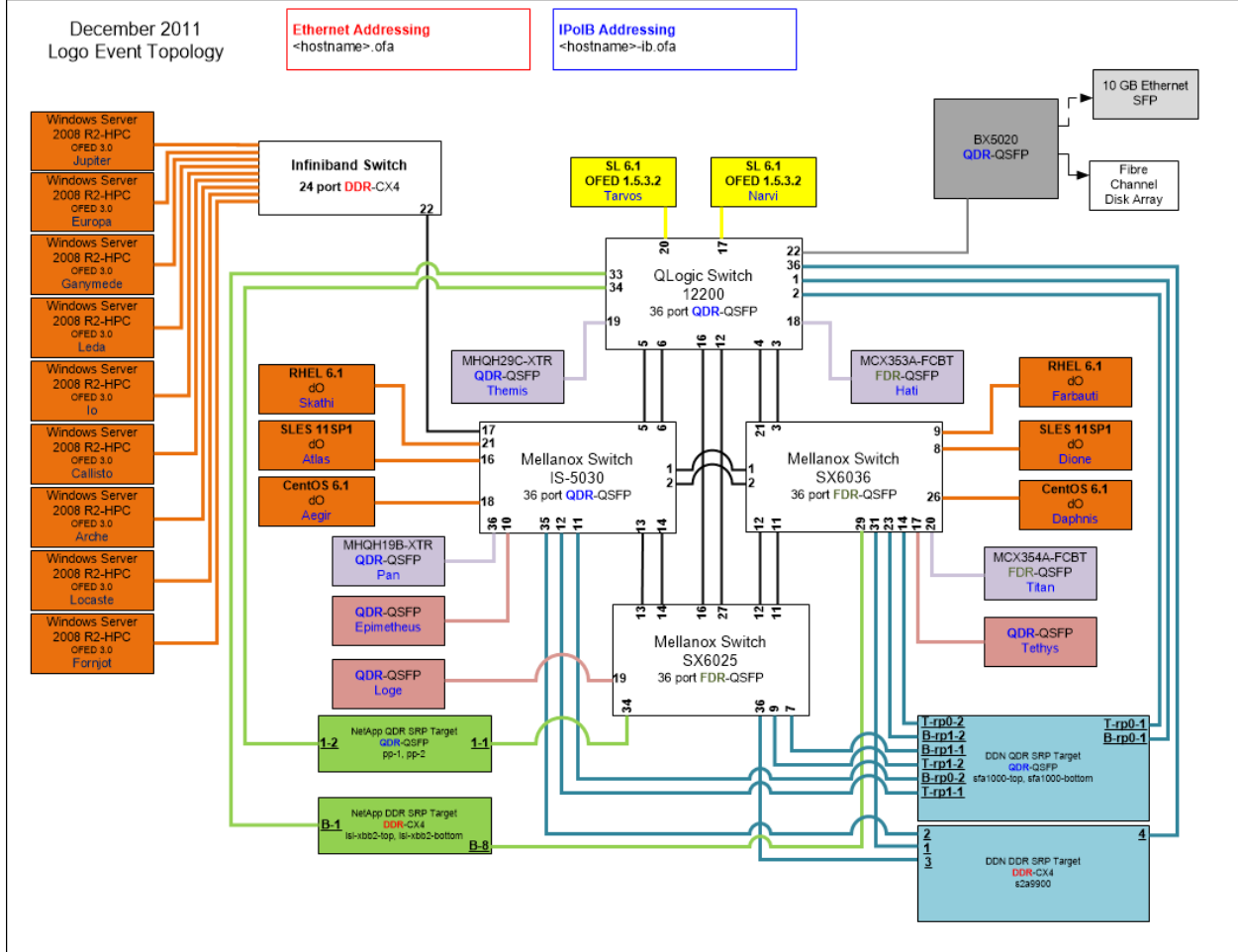
## Result Key

The following table contains possible results and their meanings:

Result:	Description:
<b>PASS</b>	The Device Under Test (DUT) was observed to exhibit conformant behavior.
<b>PASS with Comments</b>	The DUT was observed to exhibit conformant behavior however an additional explanation of the situation is included.
<b>FAIL</b>	The DUT was observed to exhibit non-conformant behavior.
<b>Warning</b>	The DUT was observed to exhibit behavior that is not recommended.
<b>Informative</b>	Results are for informative purposes only and are not judged on a pass or fail basis.
<b>Refer to Comments</b>	From the observations, a valid pass or fail could not be determined. An additional explanation of the situation is included.
<b>Not Applicable</b>	The DUT does not support the technology required to perform this test.
<b>Not Available</b>	Due to testing station limitations or time limitations, the tests could not be performed.
<b>Borderline</b>	The observed values of the specific parameters are valid at one extreme and invalid at the other.
<b>Not Tested</b>	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:	DataDirect Networks	Firmware Revision:	6.12
Model:	S2A9900	Hardware Revision:	NA
Speed:	DDR	Located in Host:	NA
Firmware MD5sum:	3e4e4fb5e9cce8979c44989775168314		
Additional Comments / Notes:			

DUT #2 Details			
Manufacturer:	DataDirect Networks	Firmware Revision:	1.4.2-8732
Model:	SFA10000	Hardware Revision:	NA
Speed:	QDR	Located in Host:	NA
Firmware MD5sum:	defafa46514fadf9031d00a518932a4d		
Additional Comments / Notes:			

# Mandatory Tests – IB Device Test Results:

## 10.1: Link Initialization

Results	
Part #1:	<b>PASS with Comments</b>
Discussion:	
<p>The DDN 9900 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 <b>PASS with Comments</b>.</p>	

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

## 10.2: Fabric Initialization

Subnet Manager				
OpenSM	IS-5030 SM	SX-6036 SM	QL12200 SM	WinOF SM
<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>	<b>PASS</b>
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
<b>Result Discussion:</b>		
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
<b>Result Discussion:</b>				
SRP communications between all HCAs and all SRP targets succeeded while the above mentioned SMs were in control of the fabric.				