



OpenFabrics Alliance

Interoperability Logo Group (OFILG)

January 2014 Logo Event Report

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Date: March 10, 2014
 Report Revision: 1.4
 OFED Version: 3.5-2
 OS Version: Scientific Linux 6.4

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

Emulex OCe14102
Emulex OCe14401

The test suite referenced in this report is available at the IOL website. Release 1.49 (2013-Nov-5) was used.

<https://www.iol.unh.edu/ofatestplan>

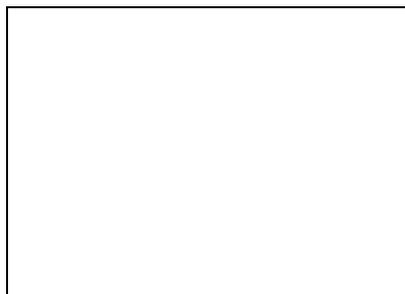
The following table reflects the results of tests performed during the January 2014 Logo Event.

Test Procedures	IWG Test Status	Result/Notes
12.2: RoCE Link Initialization	Mandatory	PASS
13.2: TI NFS over RDMA	Beta	PASS with Comments
13.4: TI uDAPL	Mandatory	PASS
13.5: TI RDMA Basic Interop	Mandatory	PASS with Comments
13.7: TI Rsockets	Beta	PASS
13.8: TI MPI – Open MPI	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 February 6, 2014

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Review Completed March 10, 2014

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Result Summary

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

Test Procedures	IWG Test Status	Result/Notes
12.2: RoCE Link Initialization	Mandatory	PASS
13.1: TI iSER	Beta	Not Tested
13.2: TI NFS over RDMA	Beta	PASS with Comments
13.4: TI uDAPL	Mandatory	PASS
13.5: TI RDMA Basic Interop	Mandatory	PASS with Comments
13.6: TI RDMA Stress	Beta	Not Tested
13.7: TI RSocket	Beta	PASS
13.8: TI MPI – Open MPI	Mandatory	PASS

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Report Revision History

- v1.0 Initial Release
- v1.1 Modified tests 13.2 and 13.5 to more accurately reflect the performance of the DUTs; removed the RDS test; updated topology file
- v1.2 Modified topology file to include model numbers
- v1.3 Modified comment of test 13.2
- v1.4 Modified topology file to include partner switch

Configuration Files

Description	Attachment
Scientific Linux 6.4 Configuration File	
OFED 3.5-2 Configuration File	

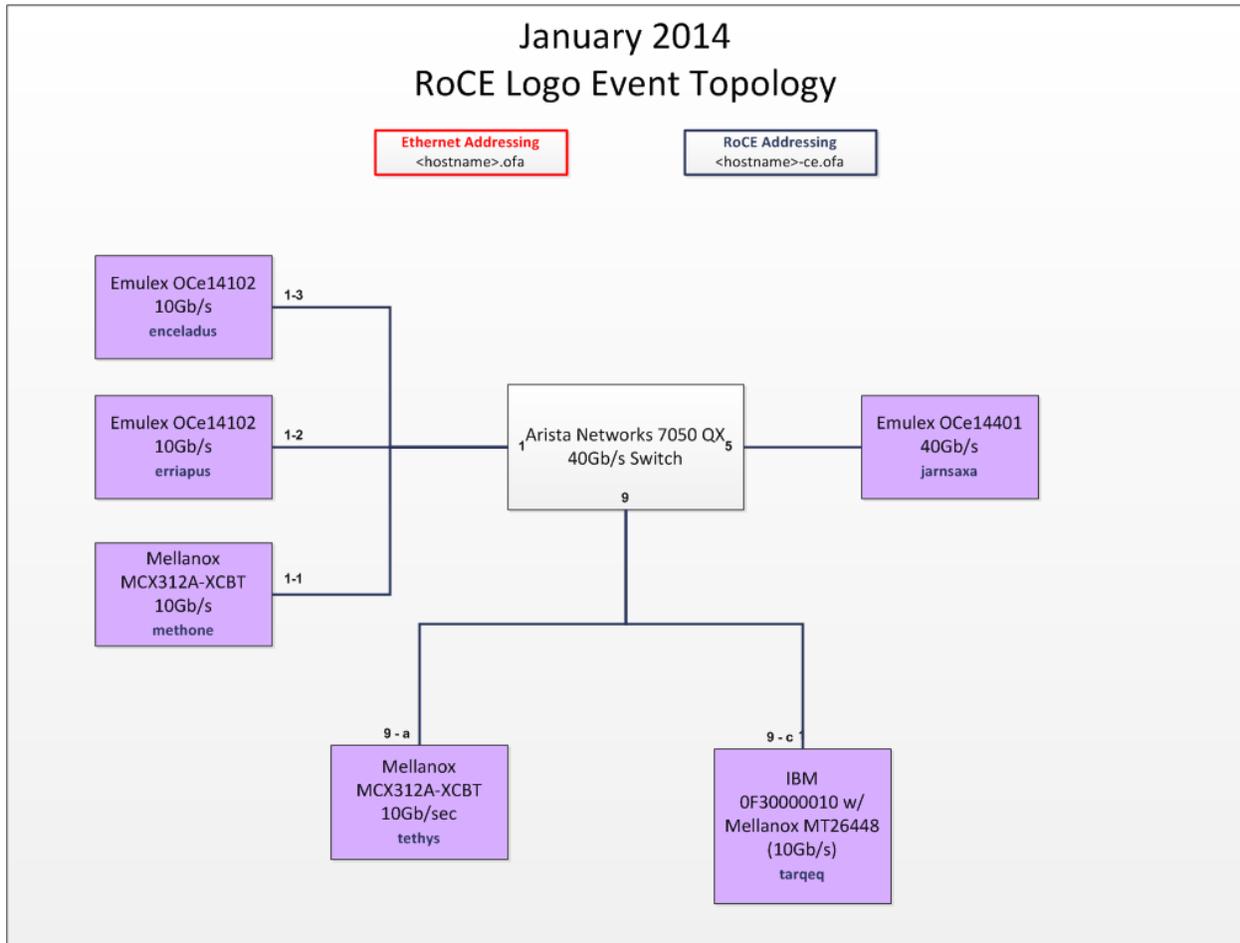
Result Key

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.
Qualified PASS	The DUT was observed to exhibit conformant behavior, with the exception of fault(s) or defect(s) which were previously known.
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 RoCE fabric configuration utilized for all testing is shown below.



DUT# 1 Details			
Manufacturer:	Emulex	Firmware Revision:	10.0.685.9
Model:	OCe14102	Hardware Revision:	B0
Speed:	10Gb/s	Located in Host:	enceladus, erriapus
Firmware MD5sum:	bf81c8077b75150ce15be9c000905be2		
Additional Comments / Notes:			

DUT# 2 Details			
Manufacturer:	Emulex	Firmware Revision:	10.0.685.9
Model:	OCe14401	Hardware Revision:	B0
Speed:	40Gb/s	Located in Host:	jarnsaxa
Firmware MD5sum:	bf81c8077b75150ce15be9c000905be2		
Additional Comments / Notes:			

Beta Tests – RoCE Device Test Results:

12.2: RoCE Link Initialization

Test Result	PASS
Result Discussion:	
All RoCE Channel Adapters were observed to link at the expected speed.	

Link Partner	OCe14102	OCe14401
RCA: Emulex OCe14102 in host encelasus	PASS	PASS
RCA: Emulex OCe14102 in host erriapus	PASS	PASS
RCA: Emulex OCe14401 in host jansaxa	PASS	N/A
RCA: IBMMT26448 in host tarqeq	PASS	PASS
RCA: Mellanox10Gb Technology	PASS	PASS

13.1: TI iSER

Test Result	Not Tested
Result Discussion:	
There were no iSER targets available in the cluster; therefore this test could not be performed.	

13.2: TI NFS over RDMA

Test Result	PASS with Comments
Result Discussion:	
Due to an issue discovered in OFED 3.5-2 that occurs between big and little endian architectures, this test was unable to be completed between all RCAs in the topology. See bug 2449 for additional information.	

13.4: TI uDAPL

Test Result	PASS
Discussion:	
All of the Group 1: Point-to-Point and Group 2: Switched Topology tests were performed using OFED 3.5-2. Group 3: Switched Topology with Multiple Switches tests were performed using OFED 3.5-2-rc2 due to time and equipment constraints.	

13.5: TI RDMA Basic Interoperability

Test Result	PASS with Comments
Discussion:	
RDMA read and write operations were observed to perform successfully between all RCAs in the cluster. RDMA sends smaller than size 240 were observed to fail due to OFED bug 2457 .	

13.6: TI RDMA Stress

Test Result	Not Tested
Discussion:	
RDMA Stress test was not performed as per the pre-event agreement.	

13.7 TI RSockets

Test Result	PASS
Discussion:	
All RCAs were able to successfully perform all Asynchronous, Blocking, and Non-blocking procedures.	

13.8: TI MPI – Open MPI

Test Result	PASS
Discussion:	
Intel MPI Benchmarks performed between all Emulex RCAs. The RCA in the PPC system was excluded due to Open MPI's limitations in regards to heterogeneous rings.	