



OpenFabrics Alliance

Interoperability Logo Group (OFILG)

January 2014 Logo Event Report

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Date: February 24, 2014
Report Revision: 1.1
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):

Chelsio Communications T420-CR RNIC
Chelsio Communications T420-CX RNIC

The test suite referenced in this report is available at the IOL website. Release 1.49 (2013-Nov-05) was used.

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

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).

Test Procedures	IWG Test Status	Result/Notes
12.1: Ethernet Link Initialization	Mandatory	PASS
13.1: TI iSER	Beta	Not Available
13.2: TI NFS over RDMA	Beta	Not Available
13.4: TI uDAPL	Mandatory	PASS
13.5: TI RDMA Basic Interoperability	Mandatory	PASS with Comments
13.6: TI RDMA Stress	Mandatory	PASS
13.7: TI MPI – Open	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 January 28, 2014


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Review Completed February 24, 2014


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Result Summary

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

Test Procedures	IWG Test Status	Result/Notes
12.1: Ethernet Link Initialization	Mandatory	PASS
13.1: TI iSER	Beta	Not Available
13.2: TI NFS over RDMA	Beta	Not Available
13.4: TI uDAPL	Mandatory	PASS
13.5: TI RDMA Basic Interoperability	Mandatory	PASS with Comments
13.6 TI RDMA Stress	Mandatory	PASS
13.7: TI MPI – Open	Mandatory	PASS

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Report Revision History

- v1.0 Initial Release
- v1.1 Modified test 13.6 to more accurately reflect the behavior of the DUT

Configuration Files

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

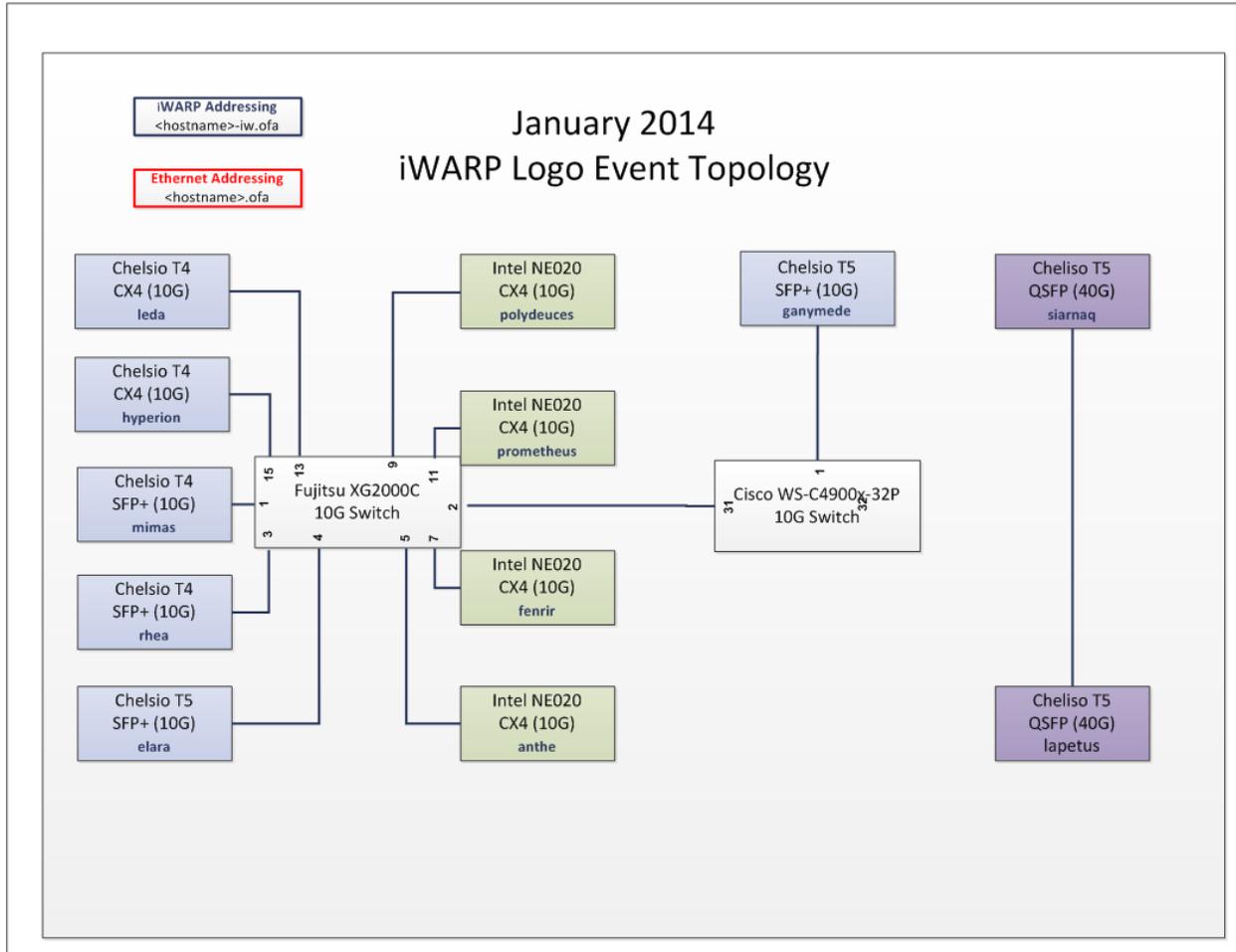
Result Key

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

The IW fabric configuration utilized for all testing is shown below.



DUT #1 Details			
Manufacturer:	Chelsio	Firmware Revision:	0.262.512 (SFP+)
Model:	T420-CR	Hardware Revision:	Rev 01
Speed:	10Gb/s	Located in Host:	mimas, rhea
Additional Comments / Notes:			
SFP+ card			

DUT #2 Details			
Manufacturer:	Chelsio	Firmware Revision:	0.262.512 (CX4)
Model:	T420-CX	Hardware Revision:	Rev A
Speed:	10Gb/s	Located in Host:	hyperion, calypso
Additional Comments / Notes:			
CX4 card			

Mandatory Tests – IW Device Test Results:

12.1: Ethernet Link Initialization

Test Result	PASS
Result Discussion:	
All devices were shown to link and pass traffic to all other devices in a back-to-back configuration under nominal (unstressed) conditions.	

Link Partner	Chelsio T4	Intel NE020
RNIC: Chelsio T4	PASS	PASS
RNIC: Intel NE020	PASS	PASS

13.1: TI iSER

Test Result	Not Tested
Result Discussion:	
There were no iSER targets available in the cluster, therefore this was not tested.	

13.2: TI NFS over RDMA

Test Result	Not Tested
Result Discussion:	
This test is not required for logo certification due to its beta status.	

13.4: TI uDAPL

Test Result	PASS
Discussion:	
All devices were shown to communicate correctly using DAPL, by use of the Linux daplttest tool.	

13.5: TI RDMA Basic Interoperability

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

13.6: TI RDMA Stress

	Switch Load	Switch Fan In
Test Result	PASS	PASS
Discussion:		
All switches were seen to properly handle a large load as indicated by the successful completion of control communications between two RNICs while other RNICs in the fabric were used to generate traffic in order to put a high load on the switch.		

13.7: TI MPI – Open MPI

Test Result	PASS
Discussion:	
Complete heterogeneity; 1 process per system as described in the cluster topology.	