



The OpenFabrics Interoperability Logo Group at the UNH-IOL

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The UNH-IOL

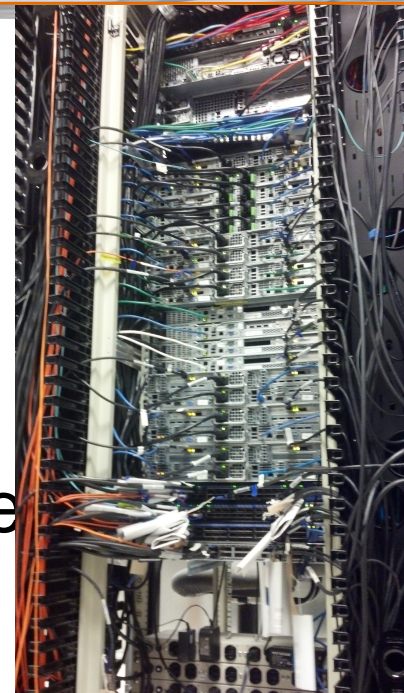
Improving Networks Worldwide



- World renowned neutral, third-party testing lab
 - Celebrating 25 years of interoperability
- Performs interoperability and conformance testing for 150+ member companies in a number of different technology spaces
- Host to the OFILG testing cluster

OFILG Testing Cluster

- 50+ nodes
 - Completely heterogeneous
- iWARP, IB, and now RoCE hardware from all major players
- Verifies interoperability of RDMA capable devices between member companies
- Identifies bugs in latest version of OFED



UNH-IOL + OFILG

- Ability to draw from combined knowledge and experience of industry thought leaders
 - Resident RDMA Verbs expert – Dr. Bob Russell
 - Technical Sherpa – Bob Noseworthy
 - DCB Expert – Mike Hagen
 - NSF Graduate Fellowship Recipient – Patrick MacArthur
- Student technicians
 - Led by experienced staff members
- Neutral execution of the OFILG Test Plan
 - Celebrating six years of interoperability

Test Plan: iol.unh.edu/ofatestplan



- Defines tests that validate interoperability of a number of Upper Layer Protocols that member companies are interested in
 - IPoIB, NFSoRDMA, SRP, uDAPL, MPI, RDMA Interop and Stress tests
 - Additionally: Link Initialization, Fabric Initialization, OpenSM Failover and Handover
- Scope of testing is defined by member companies
 - The Test Plan is evolutionary and defined by input from any and all OFA members
 - Current iteration: 1.47 (Apr. 16, 2013)

Test Event Structure

- Two major test event pairs annually
 - April Debug/Logo Event
 - October Debug/Logo Event
- Debug Event
 - Attended
- Logo Event
 - Unattended
 - Interoperable devices granted OFILG Logo

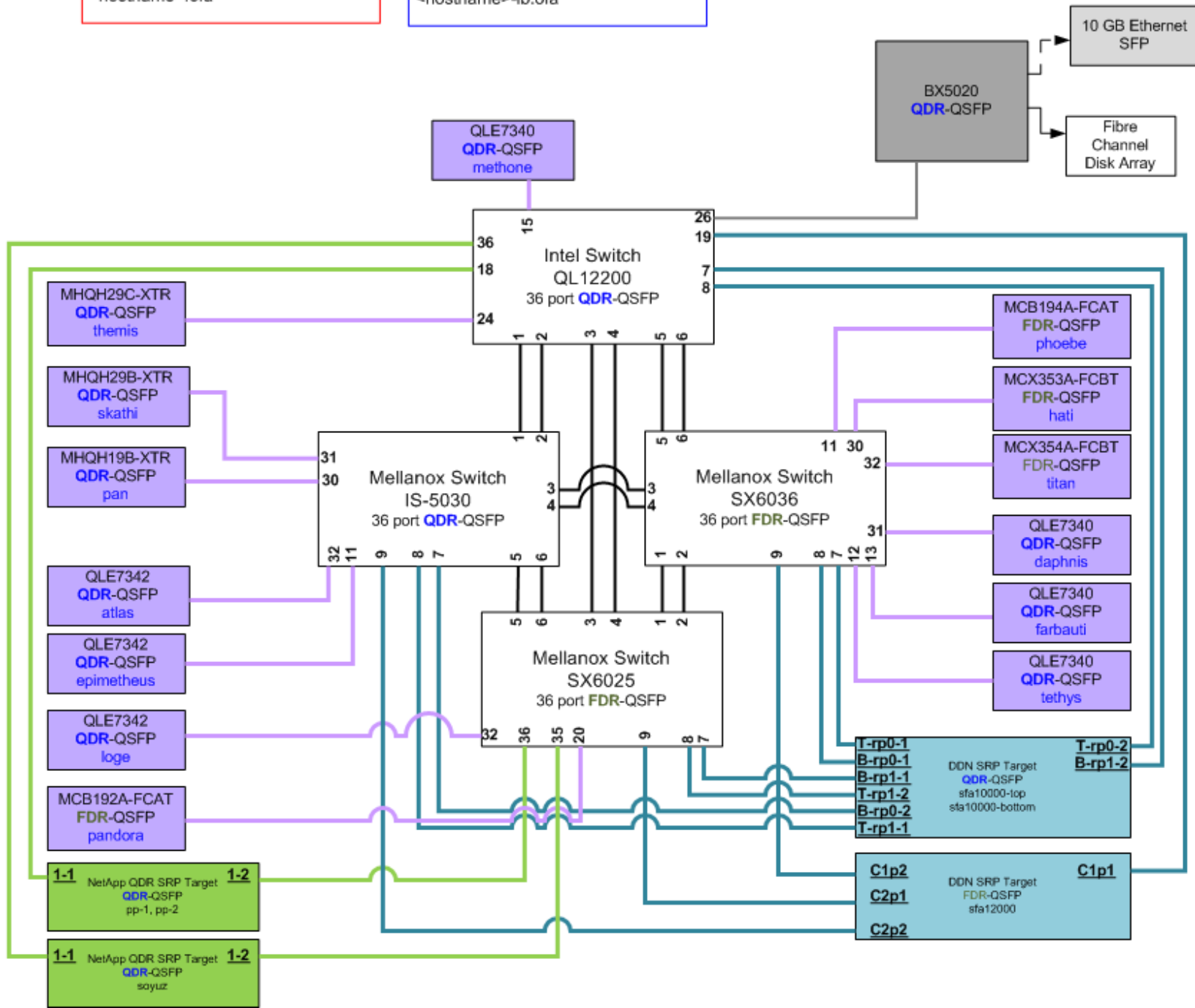


OFILG Logo List

- Published after completion of Logo Event
- UNH-IOL reports are publically available
 - iol.unh.edu/ofilglist

Ethernet Addressing
<hostname>.ofa

IPoB Addressing
<hostname>-ib.ofa



April 2013 Debug Event

- Tested OFED 3.5 GA on Scientific Linux 6.3
- First Event to successfully demonstrate interoperability of Emulex and IBM RoCE devices at 10Gb/s and 40Gb/s
- Tested the latest FDR solutions
- Retested issues uncovered during October 2012

Bugs discovered in October 2012



- OFED Bug 2410 – Updated perfest package was found to fail some RDMA Read operations
- OFED Bug 2393 – Kernel panic when unloading `ib_srp` module

Wrapping Up

- The OFILG seeks to promote RDMA interoperability among vendor companies by granting compliant devices the OpenFabrics Interoperability Logo
- Our Logo gives customers the confidence they need when making critical purchasing decisions.
- The next time you purchase an RDMA solution, ask, “Is your product on the OFA Logo List?”

Links

- emossman@iol.unh.edu
 - ofalab@iol.unh.edu
- iol.unh.edu/ofa
 - iol.unh.edu/ofatestplan
 - iol.unh.edu/ofilglist
- <https://www.openfabrics.org/resources/training/training-offerings.html>
- http://www.infinibandta.org/content/pages.php?pg=integrators_list_overview



Thank You!



OPENFABRICS
ALLIANCE