OFILG Membership Update

• New Members
  – Emulex
  – IBM

• Current Members
OpenFabrics Interoperability Logo Group (OFILG) Updates

• Updated funding model
  – Subscription plus per product test fees

• Focus on member needs
  – Concentrate the testing on the hardware and software supported by OFLIG members

• Deprecate non-crucial tests
  – iSER
  – MVAPICH
  – NFSoRDMA
  – RDS
  – Vendor SM Testing
OpenFabrics Interoperability Logo Program (OFILP) Updates

• Qualified Pass
  – Allow a product on the Logo List as long as all issues and defects are very clearly outlined.

• Arbitration Committee
  – Allow additional OFA members to participate in Arbitration process.

• Determining components to test
  – Allow more feedback from OFILG members regarding qualified products to be included in Interop Logo testing

• More Transparency and Openness
  – Make Interop issues more broadly known to the OFA community and the end users without breaking NDA guidelines
Interoperability Program Summary

• Complete heterogeneous cluster environment
  – Complete selection of IB, iWARP & RoCE hardware available
  – Setup your cluster requirements in less than 30 minutes

• Cluster Availability
  – VPN access is granted to all OFILG Members.
  – Week long testing slots are available

• Automated Test Suites
  – OFILP test scripts can be run over VPN

• Distro testing as well as OFED testing available

• Superb resources available at the UNH-IOL
  – IB, iWARP and RoCE RDMA Testing
  – 10/40/100 Ethernet, DCB and IPv6 Testing
  – Home for the OFA Training Program
  – Resident RDMA Verbs expert – Dr Robert Russell
OFILP Program Details

• OFA Logo Program
  – [http://iol.unh.edu/ofilp](http://iol.unh.edu/ofilp)

• OFA Test Plan
  – [http://www.iol.unh.edu/services/testing/ofa/testsuites/](http://www.iol.unh.edu/services/testing/ofa/testsuites/)

• OFA Logo Grants
  – [http://iol.unh.edu/ofilglist](http://iol.unh.edu/ofilglist)

• OFA Training Programs
  – Programming with Verbs
  – IB Fabric Admin
  – [https://www.openfabrics.org/resources/training/training-offerings.html](https://www.openfabrics.org/resources/training/training-offerings.html)

• UNH-IOL
  – [http://www.iol.unh.edu/services/testing/ofa/](http://www.iol.unh.edu/services/testing/ofa/)
UNH-IOL Group Test Period area
InfiniBand Testing

- Mandatory
  - Link Initialization
  - Fabric Initialization
  - IPoIB CM Mode
  - IPoIB Datagram Mode
  - Open MPI
  - RDMA Interop
  - SM Failover/Handover
  - SRP
  - uDAPL

- Optional
  - Ethernet Gateway
  - iSER
  - NFSoRDMA
  - RDS
  - RSockets
Ethernet Testing

**iWARP**
- Mandatory
  - Link Initialization
  - Open MPI
  - RDMA Interop
  - RDMA Stress
  - uDAPL
- Optional
  - iSER
  - NFSoRDMA

**RoCE**
- Beta
  - Link Initialization
  - Open MPI
  - RDMA Interop
  - RDMA Stress
  - uDAPL
- Future tests
  - Bonding
  - IPv6
  - RSockets
OFA Interop Event Overview

• Most Recent Event
  – April 2013 – Interop Debug Event - OFED 3.5

• Vendor participation
  – Chelsio, DataDirect Networks, Emulex, IBM, Intel, Mellanox, NetApp

• Major Accomplishments
  – RoCE Interoperability testing between Emulex and IBM

• Upcoming OFA IWG Interop Events
  – May 2013 – Logo GA Validation Event - OFED 3.5
  – October 2013 – Interop Debug Event
  – This will be the 14th OFA-IWG Interop event

• Hosted by University of NH Interoperability Lab (UNH-IOL)
IBTA C&I complements OFA Interop

• Devices
  – Volume 1 Protocol Layer testing
  – Volume 2 Physical Layer testing
  – System Interoperability testing

• Cables
  – Eye Opening testing
  – Memory Map testing
  – TDR and VNA Testing
  – Active Time Domain testing for Active Cables
  – System Interop
Active Cable Time Domain testing
IBTA April 2013 Testing

• Devices
  – New FDR Receiver testing
  – Updated FDR Transmitter testing

• Cables
  – Updated Active Time Domain Testing
  – EDR cable testing

• System Interop - new heterogeneous testing
  – Mellanox to Intel
  – FDR to QDR
Test Equipment Vendors
Agilent, Anritsu, Molex, Tektronix, Wilder

86100D_DCA-X_with_86108B_module
BERT - Signal Quality Analyzer (SQA)
20 GHZ ENA Series Network Analyzer
OFA & IBTA Test Results

• Let us try before you buy
• OFA Interoperability Logo List
  – https://www.iol.unh.edu/services/testing/ofa/interoplist/
• IBTA Integrators' List
  – http://www.infinibandta.org/content/pages.php?pg=integrators_listOverview
Thank You
Backup
Useful references

• InfiniBand Architecture

• Introduction to InfiniBand™ for End Users

• iWARP RFCs – [www.ietf.org/rfc.html](http://www.ietf.org/rfc.html)
  – [RFC 5041](http://www.ietf.org/rfc.html) – Direct Data Placement over Reliable Transports (DDP)
  – others

• Mellanox User’s Manual

• The Linux Cross Reference for OFED