

# Interoperability Working Group

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#OFADevWorkshop

# Overview

- OFA-IWG and OFILG
- OFS Cluster
- Test Events
- Future Work

- Interoperability Testing
- Partnership with UNH-IOL
- Defines Tests:
  - [OFA-IWG Interoperability Test Plan](#)
- Defines Logo Program:
  - [OFA Interoperability Logo Program \(OFALP\)](#)
- Open to All OFA Members

- OpenFabrics Interoperability Logo Group (OFILG)
- Validate OFED functionality, test ULPs and verify interoperability in a heterogeneous environment
- IB, iWARP, RoCE
- ULPs: Fabric Init, IPoIB, Link Init, NFSoRDMA, Open MPI, RDMA Utilities, RSocket, SM failover, SRP, uDAPL, iSER and RDS
- Members may receive Logo

# Interoperability Logo List

- [OFILG Interoperability Logo List - May 2014](#)

OpenFabrics Alliance Interoperability Working Group (OFA-IWG)

OFED Version Tested: 3.12

## Introduction

This Logo List contains products which were found to pass all Mandatory testing required for the OFILG Logo. The reports listed on this page have been approved for publication by their respective member company.



## Contents

- InfiniBand Host Channel Adapters
- Ethernet RNICs
- RoCE Channel Adapters
- InfiniBand Switches With Managers
- InfiniBand Switches Without Managers
- SRP Targets
- OFILG Cluster Contributors

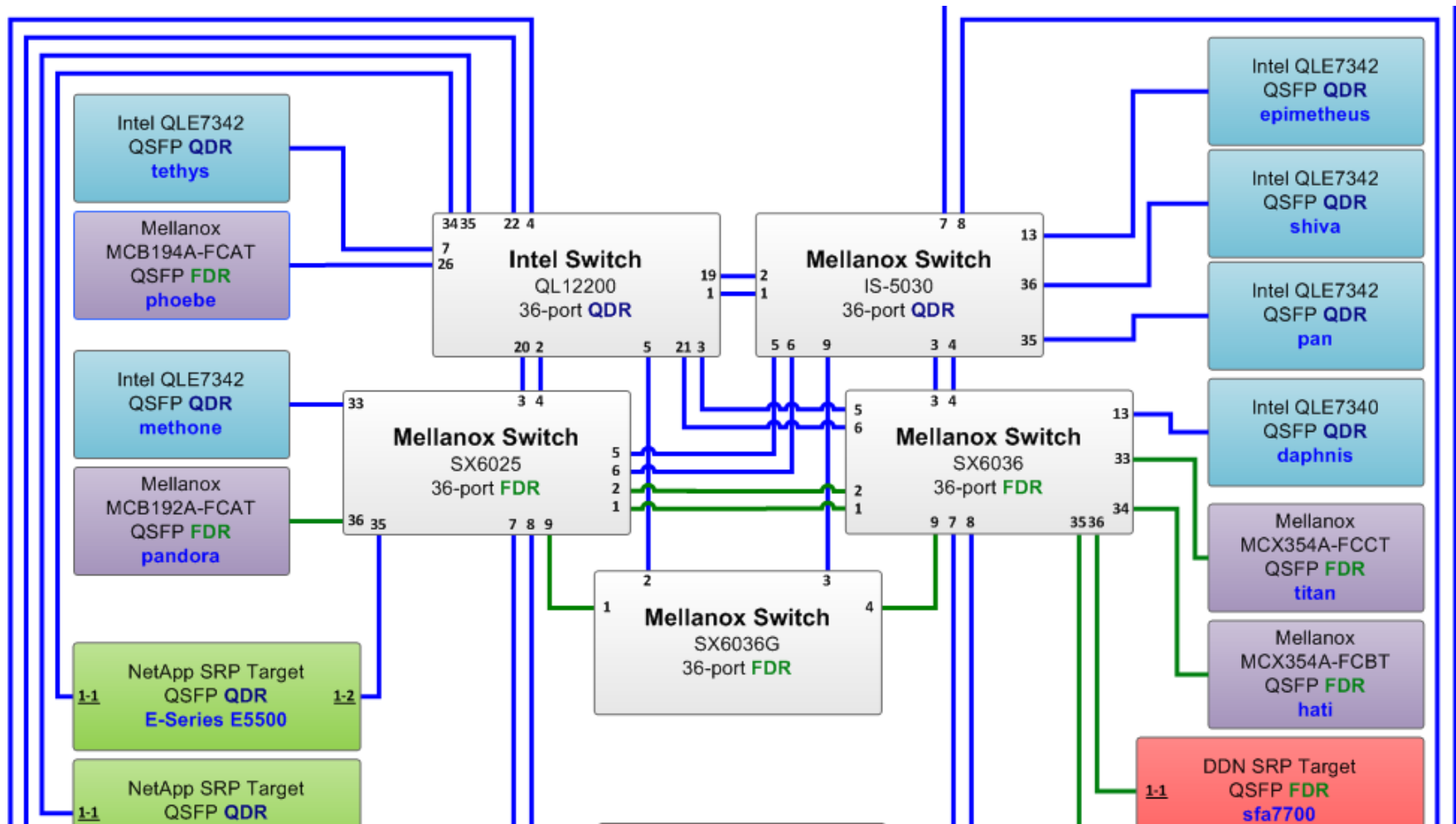
# OFILG Cluster

- OpenFabrics Cluster hosted at IOL – Durham, NH
  - 7 racks of equipment hosted at UNH-IOL
  - 56 heterogeneous nodes
  - 11 Switches
  - 5 SRP Targets

# OFILG Cluster (cont.)

- Servers: AMD Opteron, IBM PPC64, Intel x86\_64
- InfiniBand: Intel, Mellanox
- iWARP: Intel, Chelsio
- RoCE: Emulex, IBM, Mellanox
- SRP Targets: DataDirect Networks, NetApp
- OFED: 1.5.x, 3.5.x, 3.12, 3.12-1, 3.18
- PXE Boot: CentOS, RHEL, SLES, Ubuntu
- Scripted and Automated
- Remote VPN Access

# Test Topology - InfiniBand



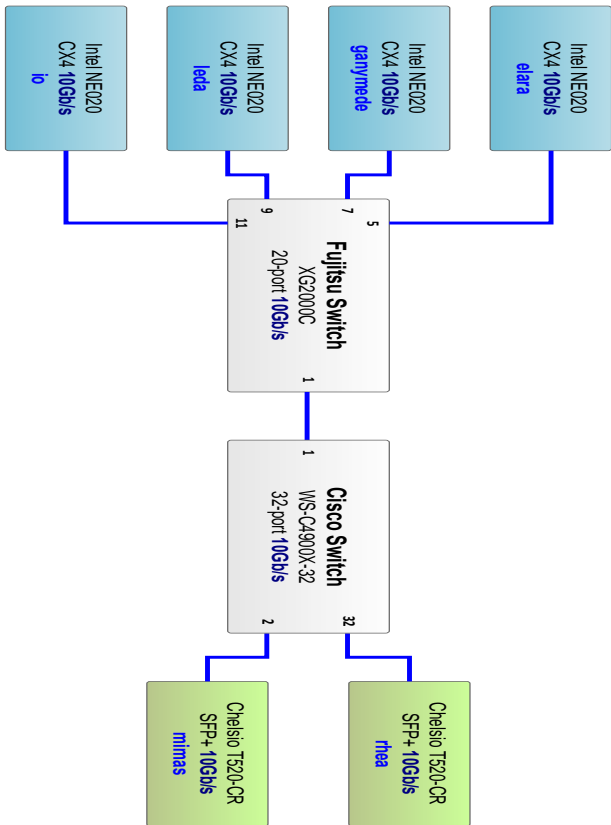


# Topology - iWARP

October 2014  
iWARP Topology

Ethernet Addressing  
<hostname>-d/a

iWarp Addressing  
<hostname>-iW/d/a





# October 2014 Debug Event



- Attended by: DataDirect Networks, IBM, Intel, Mellanox, Software-Forge
- Vendors work together to debug
  - OFED 3.12-1-RC, OFED 3.18 daily builds
  - Scientific Linux 7.0
  - Intel x86\_64, AMD Opteron, PPC64
  - InfiniBand, iWARP, and RoCE

# January 2015 Logo Event



- InfiniBand
  - OFED 3.12-1 GA
- iWARP
  - OFED 3.12-1 GA
- RoCE
  - OFED 3.18-RC1

# Required Tests - InfiniBand

InfiniBand Transport - Test Status for April 2015 Interop Event	
Test Procedures	Linux
IB Link Initialize	Mandatory
IB Fabric Initialization	Mandatory
IB IPoIB Connected Mode	Mandatory
IB IPoIB Datagram Mode	Mandatory
IB SM Failover/Handover - OpenSM	Mandatory
IB SM Failover/Handover - Vendor SM	Optional
IB SRP	Mandatory
IB Ethernet Gateway	Beta
IB Fibre Channel Gateway	Beta
Transport Independent Tests	Linux
TI iSER	Beta
TI NFS over RDMA	Mandatory
TI RSocket	Mandatory
TI uDAPL	Mandatory
TI RDMA Basic Interop	Mandatory
TI RDMA Stress Test	Mandatory
TI MPI - Open MPI	Mandatory

# Required Tests - iWARP

iWARP Transport - Test Status for April 2015 Interop Event	
Test Procedures	Linux
iWARP Link Initialize	Mandatory
Transport Independent Tests	Linux
TI iSER	Beta
TI NFS over RDMA	Beta
TI uDAPL	Mandatory
TI RDMA Basic Interop	Mandatory
TI RDMA Stress Test	Mandatory
TI MPI - Open MPI	Mandatory

# Required Tests - RoCE

RoCE Transport - Test Status for April 2015 Interop Event	
Test Procedures	Linux
RoCE Link Initialize	Mandatory
RoCE Fabric Initialization	TBD
RoCE IPoCE	Mandatory
RoCE InfiniBand Gateway	TBD
RoCE Fibre Channel Gateway	TBD
Transport Independent Tests	Linux
TI RSocket	Mandatory
TI iSER	Beta
TI NFS over RDMA	Beta
TI uDAPL	Mandatory
TI RDMA Basic Interop	Mandatory
TI RDMA Stress Test	Beta
TI MPI - Open MPI	Mandatory

# Upcoming Events

- Dates
  - IBTA PF 27
    - 13-April => 24-April
  - OFA Interop Debug Event (Followed by Logo)
    - 20-April => 24-April
- April OFA Debug
  - OFED 3.18 or 3.20
  - ULP - iSER, NFSoRDMA
- October 2015
  - IBTA PF 27
    - 12-October => 23-Oct
  - OFA Interop Debug Event (Followed by Logo)
    - 19-October => 23-Oct



# Looking Ahead

- RoCE Bridge
- RoCEv2
- EDR
- Virtualization
- OS Involvement
- Speed/Performance
- NVMe
- IPv6 – IPoIB, IPoCE, iWARPoIPv6
- OFA Interfaces WG Collaboration
- Conformance



Thank You



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