

## OFA IWG Meeting – 7/15/2014

First	Last	Company	06/03/14	06/17/14	07/01/14	07/15/14
Bob	Dugan	Chelsio		X	X	X
Martin	Schlining	DataDirect Networks	X	X	X	X
Allen	Andrews	Emulex	X			X
Dean	Cimoli	Emulex				X
Pradeep	Satyanarayana	IBM	X	X	X	X
Harry	Cropper	Intel	X	X	X	X
Jess	Robel	Intel	X	X	X	
Rupert	Dance	Software Forge	X			X
Glenn	Martin	UNH-IOL	X	X	X	X
Edward	Mossman	UNH-IOL		X	X	X
Chuck	Valenza	UNH-IOL	X	X	X	
Dave	Wyman	UNH-IOL	X	X	X	X

## Agenda

- **Meeting Minutes from 7/1/2014**
  - <https://ofa.causewaynow.com/wg/OFLIG/document/253>
- **Interop and Plugfest Events**
  - **October 2014**
    - IBTA PF26 10/20 → 10/31/2014
    - OFA Interop Debug Event 10/27 → 10/31/2014
  - **April 2015**
    - IBTA PF27 04/13 → 04/24/2015
    - OFA Interop Debug Event 04/20 → 04/24/2015
- **OFA EWG Status**
  - OFED 3.12 GA – released 5/27/2014
    - <https://www.openfabrics.org/downloads/OFED/ofed-3.12/OFED-3.12.tgz>
  - OFED 3.12-1 Daily Build
    - <https://www.openfabrics.org/downloads/OFED/ofed-3.12-1-daily/OFED-3.12-1-20140630-0736.tgz>
  - OFED 3.12-1 – planned updates
    - Chelsio Updates
    - Intel Xeon Phi – MIC
    - NFSoRDMA updates
    - Perftest updates
    - RHEL 7
  - OFED 3.17
- **Bug Status**
  - NFSoRDMA Bug [2449](#) resolved
  - NFSoRDMA Bug [2494](#) – new issue
- **May 2014 Interop GA Event**
  - Testing Status update from UNH-IOL
- **October 2014 - OFA Interop Debug Event**
  - Test status updates – see attached list from April 2014
  - Open MPI updates
  - iSER
- **Opens**

## Bug Status

Bug [2494](#) NFSoRDMA – new issue - Unable to complete Connectathon test 5 between x86\_64 <--> PPC64

### Pradeep

- 1) Test5 of Connectathon has failed – it is probably an endian issue. One test failed. The PPC client lost its mount point. The server had crashed so losing mount point makes sense.
- 2) The test passes when you run the test just using NFS without RDMA.. So it is a RDMA issue.

### Edward

- 1) The next step is getting Dean and team at Emulex to review this. We should add Jeff Becker, Chuck Lever and Shirley Ma. Devesh is in Bangalore. Server is one with an Emulex card. Edward will test with Mellanox.

## Test Status for the October 2014 Interop Debug event

### iWARP

iWARP Transport - Test Status for October 2014 Interop Event	
Test Procedures	Linux
iWARP Link Initialize	<b>Mandatory</b>
Transport Independent Tests	<b>Linux</b>
TI iSER	<b>Deprecated</b>
TI NFS over RDMA	<b>Beta</b>
TI uDAPL	<b>Mandatory</b>
TI RDMA Basic Interop	<b>Mandatory</b>
TI RDMA Stress Test	<b>Mandatory</b>
TI MPI - Open MPI	<b>Mandatory</b>
TI MPI - OSU - MVAPICH 2	<b>Deprecated</b>

- 1) Intel – Harry
  - a) NFSoRDMA – he wants to keep things static because they do not support this.
  - b) He will check on iSER
- 2) Chelsio – Bob Dugan
  - a) Wait and let IB take the lead on NFSoRDMA
  - b) He will check with team on iSER

RoCE Transport - Test Status for October 2014 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 Rsockets	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

### RSockets – Dave Wyman

- 1) He saw no problems with RSockets over RoCE during the April 2014 event

### NFSoverRDMA

- 1) Pradeep feels it is premature and we need to get the issues resolved. We need runs of 100%. So we decided to leave it as a Beta test

### iSER

- 1) **Dean:** Suggests that we make this a Beta tests
- 2) **Allen:** they are looking at it but only with ocrdma driver. On RHEL if you provide verbs driver for RoCE, then iSER in RHEL should just work. They have 1 or 2 people trying to get it to work. Client talks to server. Discovery is somewhat working but there are issues with login. More compatibility issues with upper iSER and not driver. He is OK to move forward. He has only seen kernel issues. The RoCE driver advertises its limits (QP and resources) and iSER tried to create CQ and ask for CQ with too many entries. iSER has formula to ask for CQ entries but did not check to see if devices support that limit. Once they get it working, they will document what changes are needed – this will be in a few weeks.
- 3) Pradeep has not seen a big update but supports moving this to Beta

### RDMA Stress Test requires two switches

- 1) Edward: They did not have the IBM switch when we had GA.
- 2) **AR:** Ask Mellanox to provide a 40 GbE RoCE switch.

InfiniBand Transport - Test Status for October 2014 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 RDS	Optional
TI Rsockets	Mandatory
TI uDAPL	Mandatory
TI RDMA Basic Interop	Mandatory
TI RDMA Stress Test	Mandatory
TI MPI - Open MPI	Mandatory
TI MPI - OSU - MVAPICH 1 & 2	Deprecated

### NFSoverRDMA

- 1) There was one failure that we had seen previously. A final decision has not been reached whether this was a protocol failure (i.e. OFED), test suite or product failure but the general consensus is that it is a product failure.
- 2) **AR:** Pradeep asks that we see if there is any connection between Bug 2494 and this failure.

### Rsockets

- 1) The testing went very well – there were no failures
- 2) Group recommends to move to Mandatory

### iSER

- 1) We decided to move this back to Beta since we have NetApp asking that we test it.
- 2) Edward thinks we should move forward. UNH-IOL will work on expanding the test plan and they can leverage the iSCSI group at IOL.
- 3) **AR for Rupert:** Add the iSER test back in.
- 4) **AR:** UNH-IOL Research want needs to be done to enhance the iSER test suite

### Open MPI

- 1) **AR:** UNH-IOL will review Open MPI for accuracy in the Test Plan and make sure it is in synch with the current testing being done.

## May 2014 Interop GA Event – status update

**InfiniBand** - They are working on reports now. IB and RoCE reports were delayed because the firmware was older than what was registered and supplied. So UNH-IOL has since executed some additional IB and RoCE tests with the new FW.

- 1) **Rupert:** Reminds all members that it is the vendor's responsibility to make sure that all products have the updated FW before the start of the event.
- 2) **Glen** has executed a lot of the testing. IB retesting has been completed and reports are in final review. Reports will go out in next couple of tests

**iWARP** - Reports have been reviewed and will check with Chuck. Reports by tomorrow,

**RoCE** - there are still two tests that need to be run. Don't anticipate any failures. Should be completed in less than a week.

**Reminder:** when you receive reports, Arbitration starts and you have 2 weeks to contest

### Action Requests (ARs)

#### Chelsio

11/5/2013

- 1) Send UNH-IOL transceivers and cables that will work with the T5 adapter and the IBM switch

#### IBM – Pradeep

5/06/2014

- 1) See if you can get IBM to ship us an addition PPC64 machine with HMC so we can setup a serial console for debugging.

#### Intel - Jess

5/06/2014

- 1) Check out the “-R” option of the perfest utilities – 5/13/2014 partial feedback – still some research needed.

#### Software Forge – Rupert Dance

7/15/2014

- 1) Add Devesh, Jeff Becker, Chuck Lever and Shirley Ma to Bug 2494 – done 7/22/2014
- 2) Ask Mellanox to provide a 40 GbE RoCE switch
- 3) Add the iSER test back in – done 7/24/2014 – it is still in Test Plan 1.50-v2

#### Older

- 1) Update Logo Program to include OFA Policy regarding OFILG Membership and granting of the Logo
- 2) Create Logo with version or change Logo Guidelines – see 4/3/2012 minutes

#### UNH-IOL

7/15/2014

- 1) See if there is any connection between the IB NFSoRDMA failure and bug 2494
- 2) Research what needs to be done to enhance the iSER test suite and then test iSER in OFED 3.12-1
- 3) UNH-IOL to review Open MPI in the test plan and to provide updates to Rupert

5/06/2014

- 1) Check out the “-z” option of the perfest utilities