OFA IWG Meeting – 3/10/2015

First	Last	Company	01/27/15	02/10/15	02/24/15	03/10/15
Martin	Schlining	DataDirect Networks	X	X		X
Dean	Cimoli	Emulex	X	X	X	X
Pradeep	Satyanarayana	IBM	X	X	X	X
Harry	Cropper	Intel	X	X		X
Jess	Robel	Intel	X	X		X
Jim	Ryan	Intel	X	X	X	X
Tatyana	Nikolova	Intel			X	
Rupert	Dance	Software Forge	X		X	X
Bill	Boas	System Fabric Works			X	
Tim	Carlin	UNH-IOL		X	X	X
Bob	Noseworthy	UNH-IOL		X	X	
Chuck	Valenza	UNH-IOL		X	X	
Dave	Wyman	UNH-IOL	X	X	X	X

Agenda

- **Meeting Minutes from 2/24/2015:** https://ofa.causewaynow.com/wg/OFLIG/document/303
- **Interop and Plugfest Events**
    - **April 2015**
        - OFA Interop Debug Event   04/20 ➜ 04/24/2015
    - **October 2015**
        - OFA Interop Debug Event   10/19 ➜ 10/23/2015

- **OFA EWG Status**
    - OFED 3.12-1 – **GA** released on 1/22/2015
        - https://www.openfabrics.org/downloads/OFED/ofed-3.12-1/OFED-3.12-1.tgz
    - OFED 3.18 Daily Build – latest is 3/10/2015
        - https://www.openfabrics.org/downloads/OFED/ofed-3.18-daily/OFED-3.18-20150310-0622.tgz
    - OFED 3.18 RC and GA status
        - RC1 – scheduled for 3/12/2015
    - OFED 4.0 – **note** change in #
        - Includes support for routable RoCE v2
        - Daily build ETA – end of March

- **OFED Bug Status as of 3/1/2015**
    - https://ofa.causewaynow.com/wg/OFLIG/documentRevision/download/434

- **OFED Packages for both 3.12-1 and 3.18 – as of 3/1/2015**
    - https://ofa.causewaynow.com/wg/OFLIG/documentRevision/download/435

- **OFA Interop Logo GA Event** – testing update – UNH-IOL leading
    - IB using OFED 3.12-1 GA
    - iWARP using OFED 3.12-1 GA
    - RoCE using OFED 3.18

- **April OFA Interop Debug Event Planning -** 04/20 ➔ 04/24/2015
    - o Mandatory versus Beta status for all transports.
        - ▪ See attached
    - o Any changes to the test plan?
    - o ULP testing
        - ▪ iSER
        - ▪ libfabric testing
    - o OFED version
        - ▪ 3.18 for mainstream testing
        - ▪ 4.0 for development and debug
- **Opens**

<mark>**Start of Meeting**</mark>
OFED 3.12-1 Status
1) **GA** released on 1/22/2015 and is being used in Logo GA testing for IB and iWARP

OFED 3.18
1) OFED 3.18 RC and GA status
    a) The EWG expects to be able to deliver OFED 3.18 RC1 in the week of March 9th. We are currently waiting for final updates on Intel qib.
    b) The EWG intends to include libfabric RC2. This will be added like any other user package that is included in OFED – for example RSockets, uDAPL etc.
2) Supported OSs expected for OFED 3.18 GA
    a) RHEL 7.1 – this will be included if Red Hat has this in time.
    b) RHEL 7.0 – supported for all hardware
    c) RHEL 6.5 and 6.6 – supported for all hardware
    d) SLES 12 - supported for all hardware
    e) SLES 11 SP3 - supported for all hardware
3) Backport Status – SLES 11 SP3
    a) **Emulex**: he will provide an update status
    b) **Intel**: needs to add support for QIB and Xeon Phi
4) OFED 3.20 ➔ 4.0
    a) The EWG is currently working on producing OFED 3.20 daily build. This is significant because it will include support for routable RoCE v2 which is important for IBM and Emulex and Mellanox RoCE products
    b) Daily build ETA – end of March

Vendor Status
1. Emulex - Mitesh Ahuja
    a. SLES 11 SP3 backport patches for be2net - Done on 3/10/2015
2. Intel –DAPL
    a. Woody reports that Arlin will have an update for OFED 3.18 RC2
3. Intel iWARP
    a. No known issues
4. Intel – True Scale - Mike Marciniszyn
    a. RHEL 7.1 Updates - Done on 3/10/2015
    b. Backports for RHEL6.x and RHEL7.0 – Mike says they are already there

c. Backports for SLES11 SP3 – status is unknown
5. Intel – Xeon Phi
a. Woody confirms Xeon Phi is working in OFED 3.18 – 3/9/2015
6. libfabric
a. Woody reports a minor issue that can be resolved in OFED 3.18 RC2
7. NFSRDMA
a. Devesh needs to validate see Bugs 2489 and 2507
b. Jeff still needs to do backports for SLES11 SP3 – may not be ready until RC2

OFA Interop Logo GA Event – testing update – UNH-IOL leading
1) Testing started Monday 1/26/2015
2) **IB using OFED 3.12-1 GA**
   a) 90% completed. NFSRDMA and RSockets testing is not complete because of issues discovered during testing.
3) **IB Link Init** Status
   a) Dave and the UNH-IOL team worked on this all weekend (March 7-8) and Monday night. This is a long time consuming procedure but a very important one.
   b) **IB Link Init** Procedure
      i) Take all IB cables out, sort by size and get a nice clean rack.
      ii) UNH-IOL has a script that prompts the user to connect each individual HCA to the switches. The procedure tests all targets, hosts and switches.
      iii) The script tests for right speed and the highest rate attained.
      iv) Sometimes have to test many times. Was it the cable, was it devices: takes 3-4 tires. Sometimes have to reboot.
      v) After all the testing is complete, you need to re-connect the cluster.
   c) Hardware Issue
      i) UNH-IOL needs more cables and replacement cables for those that are getting old and worn out. Barely have enough to do the work we are doing especially at FDR. It is critical that we have cables that are compliant to the latest IBTA Spec.
      ii) **AR**: Jim Ryan – bring up topic at OFA Dev Con.
4) **iWARP using OFED 3.12-1 GA**
   a) Testing complete and ready to report.
5) **RoCE using OFED 3.18** – Dave Wyman
   a) Waiting for RC1 – this was released on 3/11/2015
6) **Next Steps**:
   a) Get reports out for iWARP and IB when it is completed
   b) Get testing completed for RoCE once OFED 3.18 RC1 is released.
7) Vendors follow up comments.
   a) **Pradeep**: – he was not aware of the complexity of the Link Init procedures and understands the value and importance of this test.
   b) **Dean**: all set
   c) **Marty**: nothing today – he feels Link Init is a critical test and would not want the OFA to drop this test.
   d) **Harry**: he is happy with the progress we have made and feels we do a great job.

April OFA Interop Debug Event Planning - 04/20 ➔ 04/24/2015

1) Mandatory versus Beta status for all transports.
   a) See below
2) Any changes to the test plan?
   a) Waiting for feedback from UNH-IOL after GA testing is complete
3) ULP testing
   a) iSER
   b) libfabric testing
4) OFED version
   a) 3.18 for mainstream testing
   b) 4.0 for development and debug

April 2015 Interop Debug Test Status

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**

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 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**

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 RSockets	**Mandatory**
TI uDAPL	**Mandatory**
TI RDMA Basic Interop	**Mandatory**
TI RDMA Stress Test	**Mandatory**
TI MPI - Open MPI	**Mandatory**

Tests that are no longer being performed

1) RDS – this is no longer included in OFED because Oracle needs to update the kernel components.
2) OSU MPI – MVAPICH
   a) This is another fine MPI test suite but we already have the Open MPI test suite we perform and we feel there is no need to run two sets of tests.
   b) The test is still in the plan although it has not been reviewed and updated in some time.
3) RDMA Stress Test for RoCE – Rupert would like to see this moved to mandatory and so we should be sure to test this in the Debug Event
4) iSER
   a) Tim – he looked into it and is trying to evaluate preparedness. He thinks it is good and might be ready for April.
5) Rupert: we had very good participation and good results from the October 2014 debug event because we had engineers from DDN, IBM, Intel, Mellanox. We would like to see this happen in April 2015.

Action Requests (ARs)

Emulex – Dean
2/24/2015
1) Find out if Emulex provided backports and support for all of the supported Distros in 3.18 – completed 3/9/2015

IBM – Pradeep
1/13/2015
1) Please push NFSRDMA to get a solution in the OFED 3.18 code and then ask UNH-IOL to verify – 3/17/2015 - Rupert has verified with maintainers and submitters that the issue has been resolved. Waiting for final verification from UNH-IOL

10/7/2014
1) Rupert asked Pradeep to review the status of Bug on 2507 which involves NFSRDMA - Kernel Panic while parallel mount/unmount test – Rupert followed up with maintainers on 3/1/2015 – submitter verifies that it has been fixed on 3/17/2015. OFED-3.18-rc1 on RH7.0 the test passes with success.

Intel
3/10/2015
1) **Jess – iWARP -** No Open Items
2) **Jim Ryan**
   a) The OFA Cluster at UNH-IOL needs more cables. Please bring up this topic at the OFA Dev Con.

Software Forge – Rupert Dance
2/24/2015
1) Follow up with the maintainer on Bug 2507 – completed on 3/1/2015
2) Follow up with NFSoRDMA team regarding the problems UNH-IOL is having with the NFSoRDMA Connectathon test suite – completed on 3/2/2015 and many other follow up emails

UNH-IOL
3/10/215
1) UNH-IOL to provide a list of changes needed for the Test Plan after GA testing is complete
2) Be sure to run RDMA Stress Test for RoCE in the Debug event so we can make it mandatory for the May OFED 3.18 GA event.

12/2/2014
1) Test OFED 3.18 and see if it has resolved the NFSRDMA issues – waiting for NFSoRDMA fixes in 3.18

9/23/2014
1) Test –R option to perfest and submit suggested updates for test plan – Glenn will do –R and -z
2) Provide color key for Test Results Key – trivial may wait until after Plugfest

8/26/2014
1) iSER updates due by next meeting – no progress as of 10/7/2014 – Bob will follow up and Dr Russell will help out. Need to emulate a link partner. Bob asks vendors to get active that have target interest.