## **OFA EWG Meeting – 8/17/2015**

#### **Attendees**

| First    | Last        | Company             | 07/06/15 | 07/20/15 | 08/03/15 | 08/17/15 |
|----------|-------------|---------------------|----------|----------|----------|----------|
| Pradeep  | Kankipati   | Avago               | Χ        | Χ        | Χ        | Χ        |
| Eddie    | Wai         | Broadcom            | Χ        |          |          |          |
| Steve    | Wise        | Chelsio             | Χ        | Χ        | Χ        |          |
| Dwip     | Banerjee    | IBM                 |          |          | Χ        | Χ        |
| David    | Dai         | IBM                 |          |          | Χ        | Χ        |
| Arlin    | Davis       | Intel               | Χ        |          |          |          |
| Tom      | Elken       | Intel               |          | Χ        | Χ        | Χ        |
| Mike     | Marciniszyn | Intel               | Χ        |          |          |          |
| Tatyana  | Nikolova    | Intel               | Χ        | Χ        | Χ        | Χ        |
| Jim      | Ryan        | Intel               |          | Χ        | Χ        | Χ        |
| Robert   | Woodruff    | Intel               |          | Χ        | Χ        | Χ        |
| Vladimir | Sokolovsky  | Mellanox            | Χ        | Χ        | Χ        |          |
| Jeff     | Becker      | NASA                |          | Χ        |          |          |
| Rupert   | Dance       | Software Forge      | Χ        | Χ        | Χ        | Χ        |
| Bill     | Boas        | System Fabric Works |          |          |          | Χ        |
| Keith    | Hoodlet     | UNH-IOL             | Χ        |          |          | Χ        |
| Stefan   | Oesterreich | UNH-IOL             |          | Χ        | Χ        |          |
| Chuck    | Valenza     | UNH-IOL             |          | Χ        |          |          |
| Dave     | Wyman       | UNH-IOL             |          | Χ        | Χ        |          |

## **Agenda**

# **Meeting Minutes 8/3/2015:**

 https://www.openfabrics.org/downloads/WorkGroups/ewg/EWG\_Minutes/2015-08-03-EWG-Meeting-Minutes.pdf

### OFED 3.18-1 status

- Latest daily Build
  - https://www.openfabrics.org/downloads/OFED/ofed-3.18-daily/OFED-3.18-1-20150809-0136.tgz
- OFED User Package Status as of 8/17/2015 updates since 8/3
  - o dapl-2.1.6
  - o infinipath-psm-3.3-6
  - o libfabrics-1.1.0
  - o fabtests-1.1.0
  - https://www.openfabrics.org/downloads/WorkGroups/ewg/OFED\_User\_Package\_Status/OFED\_ User-Package-Status-2015-08-17.pdf
- OFED 3.18-1 Bug Status as of 8/17/2015
  - o <a href="https://www.openfabrics.org/downloads/WorkGroups/ewg/OFED\_Bugs/OFED-3.xx-Bug-Status-2015-08-17.pdf">https://www.openfabrics.org/downloads/WorkGroups/ewg/OFED\_Bugs/OFED-3.xx-Bug-Status-2015-08-17.pdf</a>
- OFED 3.18-1 open issues
  - o <u>2492</u> perftest tools enhancement opened 6/17/2014
  - o 2544 infinipath-psm won't install with libfabric
    - Both packages have been updated. Can we mark this fixed?
  - 2545 ipath compilation fails on SLES11 SP4 and RHEL6.7
    - Should I close this out or will someone from Intel?
  - o <u>2547</u> libibscif and Xeon-phi issues
    - Woody: invalid transport issues close this bug as a known issue and will not be fixed
    - Should I close this out or will someone from Intel?

- o 2553 Unable to run UD traffic using qperf
  - Bug filer has responded to query and waiting for response from Maintainer.
  - Need to assign to someone other than Dean
- o 2555 ib\_send\_bw -run\_infinitely fails to terminate on the server after client disconnects
  - Maintainer may not have this ready for 3.18-1
- o <u>2559</u> unexpected CM event 8 error seen on running iwarp traffic after the restart of iwpmd service
  - Waiting for new iwpmd from Tatyana
- o <u>2560</u> OFED\_tips.txt section 4 needs updating
- o <u>2561</u> IPoIB failure after arp cache flush
  - Assigned to <u>erezsh@mellanox.com</u> no action in last month
- o <u>2562</u> ib write bw doesn't support events
- o 2565 compat-rdma can't be built on PPC64 RHEL 7.1 LE environment
  - Do we want to support RHEL 7.1 LE
- **OFED 3.18-1 -** Plans for the next build
  - o RHEL 6.7 done
  - SLES SP4 done
  - o Bug fixes
  - o Other?

# Start of the meeting

## OFED 3.18-1 status

- Latest daily Build
  - https://www.openfabrics.org/downloads/OFED/ofed-3.18-daily/OFED-3.18-1-20150809-0136.tgz
- OFED User Package Status as of 8/17/2015 updates since 8/3
  - o dapl-2.1.6 **Woody** summarized
    - Mostly related to Xeon Phi Stuff and a few new capabilities for proxy and True Scale.
    - New Option for dapl with IB card and a few other tweaks from PMI and scalability.
    - Detailed list of changes are available here: https://www.openfabrics.org/downloads/dapl/
  - o infinipath-psm-3.3-6
    - Woody: solving issues with the new distros supported in 3.18-1
  - o libfabrics-1.1.0 **Woody** 
    - The GA has been released and his guys have been doing regression testing and no new bugs
    - David Dai says it is good. ppc64 Bug 2551 has been fixed
  - o fabtests-1.1.0
    - This is a new release to match the libfabric 1.10 release. Fabtest will always be updated to match the new functionality in a libfabric release.
  - o <a href="https://www.openfabrics.org/downloads/WorkGroups/ewg/OFED\_User\_Package\_Status/OFED-User-Package-Status-2015-08-17.pdf">https://www.openfabrics.org/downloads/WorkGroups/ewg/OFED\_User\_Package\_Status/OFED-User-Package\_Status/OFED-User-Package\_Status-2015-08-17.pdf</a>
- OFED 3.18-1 Bug Status as of 8/17/2015
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- OFED 3.18-1 open issues
  - o 2492 perftest tools enhancement opened 6/17/2014
  - o 2544 infinipath-psm won't install with libfabric
    - Both packages have been updated. Can we mark this fixed?
    - No: The infinipath-psm spec has not changed and all-- it still tries to rename itself based on features.
  - o 2545 ipath compilation fails on SLES11 SP4 and RHEL6.7

- Woody and Tom: talk it over with the team. If nobody cares then we can say with will not work on SLES11 SP4 and RHEL6.7. So the decision is not to build ipath on those two distros.
- Should I close this out or will someone from Intel? Rupert can close done 8/25/2015
- o 2547 libibscif and Xeon-phi issues
  - Woody: invalid transport issues close this bug as a known issue and will not be fixed
  - Should I close this out or will someone from Intel? Rupert can close done 8/25/2015
- o <u>2553</u> Unable to run UD traffic using qperf
  - Mitesh Ahuja (Avago) has responded to query and said that to reproduce the problem only requires that you run ud\_bw test on a back to back setup.
  - We are currently waiting for response from Maintainer but Tom feels we may need to assign to someone other than Dean Luick. Tom does not have setup to test it. He may send patch to Mitesh. Vinit from Intel is working on it,
  - Pradeep will follow up and Rupert to follow with Tom
- o <u>2555</u> ib\_send\_bw -run\_infinitely fails to terminate on the server after client disconnects
  - Maintainer may not have this ready for 3.18-1
  - 8/17/2015 Maintainer marked it won't fix due to the complexity of the solution.
- o <u>2559</u> unexpected CM event 8 error seen on running iwarp traffic after the restart of iwpmd service
  - Waiting for new iwpmd from Tatyana. Tatyana is working on an RC1 fix and released it on 8/18/2015. It is available in OFED-3.18-1-20150823-0741
- o <u>2560</u> OFED\_tips.txt section 4 needs updating
- o 2561 IPoIB failure after arp cache flush
  - Assigned to erezsh@mellanox.com no action in last month
  - Keith Stephan is working on it. Packet captures shows 15 bytes missing.
  - Could be a Linux kernel issues because previous version do not do it.
- o <u>2562</u> ib write bw doesn't support events
  - Enhancement no action on this bug yet
- o 2565 compat-rdma can't be built on PPC64 RHEL 7.1 LE environment
  - Do we want to support RHEL 7.1 LE?
  - David Dai took 318-1 and built it on pp64 le. RHEL 7.1 LE. It breaks during installation.
  - Static file config.guess used with latest file it works. He repackages compat
  - AR: RHEL 7.1 LE just config.guess and pp64 pc64LE just during the build

# **OFED 3.18-1 - Testing Status**

- RHEL 6.7 done
- SLES 11 SP4 done
- Woody looks good in regression testing
- Pradeep no known problems
- UNH-IOL Interop is almost done. Next event is October 26-30<sup>th</sup>
- We decided to shoot for RC-1 for the next meeting.

#### **Open Items**

- UNH-IOL when will there be support for EDR products?
- From Vlad:
  - o OFED 3.18 does not support ConnectX-4 HCA.
  - o Only the next OFED-4.x will support.

## **OFED Licensing Issue brought up by Bill Boas**

**Bill Boas**: There is an active discussion going on between OFA XWG members and Senior NetApp Engineering Management and NetApp Corporate counsel about how the EWG is building OFED releases using upstream modules that are extracted from upstream and included in OFED RCs. The issue is under what license is the being done – GPL only? Dual GPL and BSD, or BSD only.

NetApp and BSD Foundation both believe the EWG is creating a situation where OFED has modules in it that are now not dual licensable but GPL only.

### **EWG** discussion

- 1) **Bill Boas**: NetApp, BSD Foundation and others that use BSD version of OFED are concerned. Jeff Heller from NetApp brought up the issue on Friday and Woody had responded to what we thought was his issue.
  - a) Woody has not reviewed last email.
- 2) **Bill Boas**: What is the issue and why can't we do Dual Licenses.
  - a) Go to Kernel.org OFA software and look at license language. Here is a link to the file that Bill used as an example:
    - i) <a href="https://git.kernel.org/cgit/linux/kernel/git/torvalds/linux.git/tree/drivers/infiniband/core/addr.c?id=30">https://git.kernel.org/cgit/linux/kernel/git/torvalds/linux.git/tree/drivers/infiniband/core/addr.c?id=30</a> dc5e63d6a5ad24894b5512d10b228d73645a44
    - ii) This software is available to you under a choice of one of two licenses. You may choose to be licensed under the terms of the GNU General Public License (GPL) Version 2, available from the file COPYING in the main directory of this source tree, or the OpenIB.org BSD license below:
- 3) What are the issues
  - a) Bill Boas: OpenIB does not exits and should say Open Fabrics
  - b) **Woody**: when module was submitted OpenIB did exist and you can't change something that was previously released..
  - c) **Bill**: we should change with anything we submit.
  - d) **Bill**: when you take module from upstream, you must choose a license. Jeff Heller says because it comes from Kernel.org, everyone assume it was taken under GPL
  - e) **Woody**: code came from Kernel.org and says it can be licensed under either. If we take the code, we can take it under wither BSD or GPL. When we release it back we can relicense it under both or GPL.
  - f) **Bill**: is OFA making that statement
  - g) **Woody**: Vlad pulls code and if he has choice of one or both. If he pulls it as BSD, then he releases it back as dual.
  - h) **Bill**: Jeff Heller wants to have us document that outlines our policy.
  - i) **Rupert**: can you explain the pros and cons of taking it our as BSD?
    - i) **Woody**: Once something is GPL only, you can't give it back as both BSD and GPL. BSD is much more liberal and allows us to go back as dual. Whereas if you take it out as GPL then you can only release it as GPL.
  - j) Woody: NetApp will have to look at every license header. Some files are not dual license and only GPL. For example
    - i) Backports for various distros are GPL only
    - ii) He believes that usNIC is GPL only. Woody has had a conversation with Jeff Squyres and Woody believes that Cisco does not care about including it in OFED. Vlad told us earlier that the usNIC driver it is not build by default in compat-rdma.

- iii) Emulex committed some code as GPL inly but they have gone back and got permission from everyone to include BSD. The new kernels will include the dual license.
- k) **Bill**: Doug Ledford is trying to get RedHat as a member and wants to be involved with the EWG. Woody and Rupert are both very supportive of including Doug in the EWG meetings and process.
- l) **Woody**: We make OFED release so you can build code for Linux Kernel. Once you compile and include Kernel .org files, it all becomes GPL. So NetApp should take contributions form the submission to Linux-rdma and build it from there.
- m) **Bill Boas** why?
  - i) **Woody** something in the build process brings in a header that says the end product is now GPL. Doug Ledford might be able to answer. Once you compile with kernel, it is a GPL entity.
  - ii) **Bill** if it is a GPL then it is incompatible with OFA Bylaws.
  - iii) Woody: we distribute source code and it is dual. But once you build it, it becomes a GPL binary.
- n) **Woody**: reason OFA was formed was to generate code for the Linux Kernel. Bill says it was formed so it could be both BSD and GPL and not be contaminated by GPL.
- o) **Bill**: initially OFED was created because there was no Linux Distro that had OFA software in it. Jeffrey Heller is concerned about the status of the code.
- p) **Woody**: purpose was so it could be compiled with Linux and not about licenses. This does not violate the Bylaws.
- q) Woody: there are some files that are GPL only. OFED

#### **Final Comments**

- 1) **Rupert**: would Bill Boas consider making a draft of the process document he feels is needed?
- 2) **Jim Ryan** this is a very dense email thread. Very complicated. He suggests that we start with Bill and NetApp to come to a good understanding. So they have a pretty good document.
- 3) Bill: he will be part of a small group: Vlad, Woody, Doug, Bill
- 4) **Woody**: we need to document the certificate of origin of the code. Bill mentioned Providence. Intel has a document that explains all of where the code came from and how it was contributed.
- 5) **Jim**: read his stuff first. He will add latest.

### **Conclusion**:

- 1) We should form a small group to create and review a license process document, then review it with the EWG and finally the OFA group at large. All OFED releases should have this document. We want all users to understand what OFED is and so this document must go to all members of the OFA.
- 2) Woody: first thing we need to do is to verify that we can take as BSD and then contribute back as dual.

**Next Meeting:** August 31<sup>st</sup> 2015

#### **ARs**

# Chelsio - Steve Wise

9/15/2014

1) Send patch for Bug 2492 upstream to the perftest maintainer – in process

### 8/3/2015

- 1) Reassign bug 2559 and work with QA to get it resolved.
- 2) Tatyana has released a new version: libiwpm-1.0.3rc1.tar.gz. This is included in OFED-3.18-1-20150823-0741 can you test and see if the problem has been resolved.

### Avago - Pradeep

8/17/2015

1) Bug 2553 - Unable to run UD traffic using qperf. - Please follow up with Mitesh

### Intel-IB

7/6/2015

1) 2553 - Unable to run UD traffic using qperf - Tom to follow up

### Intel iWARP - Tatyana

8/18/2015

1) Tatyana has released a new version: libiwpm-1.0.3rc1.tar.gz. This is included in OFED-3.18-1-20150823-0741.

#### Mellanox - Vlad

8/3/2015

- 1) Resolve bug 2560 and update OFED Tips
- 2) Talk to Eli and others about Bug 2561 IPoIB
- 3) Work with Gill to resolve perftest bugs
  - a) 2555 ib\_send\_bw -run\_infinitely fails to terminate on the server after client disconnects
    - i) Maintainer marked it won't fix due to the complexity of the solution.
  - b) <u>2562</u> ib\_write\_bw doesn't support events
    - i) no progress on this bug
- 4) Bug 2565 compat-rdma can't be built on PPC64 RHEL 7.1 LE
  - a) See notes above use different config.guess

## System Fabric Works – Bill Boas

8/17/2015

- 1) Form a small group to create and review a license process document
- 2) Verify that we can take as BSD and then contribute back as dual.

## SFI – Rupert

8/4/2015

- 1) We need to add a note in add note in 3.18-1 that ipath will be deprecated in OFED 4.3.
- 2) Update bug 2545 and say ipath will not be supported -done 8/25/2015
- 3) Update bug 2547 as a known issue and will not be fixed done 8/25/2015