

## OFA EWG Meeting – 12/9/2013

### Attendees

First	Last	Company	10/28/13	11/11/13	11/25/13	12/09/13
Steve	Wise	Chelsio				
Pradeep	Kankipati	Emulex	X	X	X	X
Pradeep	Satyanarayana	IBM	X	X	X	
Tom	Elken	Intel	X	X	X	X
Tatyana	Nikolova	Intel	X	X	X	X
Jim	Ryan	Intel				X
Robert	Woodruff	Intel	X	X	X	X
Vladimir	Sokolovsky	Mellanox	X	X	X	X
Jeff	Becker	NASA				X
Bill	Snapko	SGI	X	X	X	
Rupert	Dance	Software Forge	X	X	X	X
John	Jolly	SUSE				X

### OFED status

- 1) [OFED 3.5-1GA](#) released
- 2) [OFED 3.5-2 RC2](#) released
- 3) OFED 3.12 with RHEL 6.5 – **Vlad** leading
  - a) No news - there is still an issue with Emulex
  - b) Pradeep – looks like the developer added Ctrl M characters. He should be upload 1.0.2 version. The library had an issue but not kernel.
- 4) OFED 3.13
  - a) He will provide updates for this after we have 3.12 stable

### Bug Status review

#### Bug [2449](#)

- 1) Jeff Becker – Tom Tucker provided a patch and which Pradeep applied but it still caused a crash on the OFA Cluster. Jeff said it took a while to get VPN access configured but he has access now and will continue to work on this issue.
- 2) We decided to release OFED 3.5-2 GA with this bug outstanding and leave and add it as a known issue.

#### Bug [2452](#)

- 1) **Vlad** has pushed fix into git tree and done another build.
- 2) **Woody** asked that Vlad send a patch to Tom Elken so this fix is included in OFED MIC. Arlin will have MPI team to test this.
- 3) **Vlad** wants to test daily build and then we can build RC3. Once we have RC3, we will have the UNH-IOL group test the build.

### OFED 3.12

- 1) **Jeff Becker** – he has looked at upstream stuff when he first started looking at 3.5. He thinks things have been pretty quiet
  - a) He will test with x86 and CentOS
- 2) **Tom Elken** – he will do qib – he has noted that we had given Mike Marciniszyn the info for the repos. He will get estimate from Mike.

- 3) **Tom:** In the last EWG meeting, Intel was asked when ports of the qib driver to the 3.12 kernel and the included Distros (RHEL 6.5, 6.4 and SLES 11.3) would be finished, to help enable an RC1 for OFED 3.12. Our target is 1/08/2014 for completing that work.
- 4) **Tatyana** confirmed that she will complete the work for the “nes” iWARP driver by mid-January 2014
- 5) **John Jolly** – they are using 3.12 for next release and want OFED 3.12 in it. He has looked at daily build. Goal is mid-January for the **feature** deadline. Then it will be 2 months after that before all the work is completed.
- 6) **Chelsio** - the cxgb4 bug fixes will be submitted upstream and then we’ll pull them into OFED-3.12 once these fixes are accepted by the upstream maintainers.
- 7) **Pradeep** Emulex – the compilation bug has been resolved and new package uploaded.
  - a) They have discovered some fixes that may be required for the Emulex drivers in the kernel. They have already submitted some of these patches.
  - b) **Vlad** – there is a Linux-Next that you can use for patches that have not been accepted. This is in the compat-rdma.
  - c) Woody – if you want the patch to go into OFED 3.12 – then submit to linux-next.
- 8) **Vlad** – it looks like mid-January should be a good target for the first RC
  - a) RHEL 6.4 and SLES 11 SP3
  - b) SLES 12 is based on 3.12 kernel. This is good news because it aligns kernel base with SLES. Then it is just the user space packages that are needed to make it equivalent to OFED.
  - c) John we will take OFED 3.12 user space packages and integrate them. They will do integration and come to us if needed.
  - d) Woody – SLES 12 – won’t need to install OFED 3.12 because we will be aligned.

**OFED splintering** - We received the following comment from a SC13 participant and we discussed the problem of OpenFabrics software starting to splinter much as IB software was splintered prior to the founding of the OpenIB Alliance in 2004.

*In general I see there is more fragmentation than I realized from my last SC in 2010. I knew there were some Interop issue between MLNX and QLogic, but did not realize that they had each essentially forked from OFED to produce their own small message performance optimizations. Now I'll have to figure out which implementation to use: Intel, Mellanox, or open+MVAPICH-ud.*

### **Rupert**

It seems like our commitment to driving everything upstream first has had unintended consequences. Now there are a new of vendors who are distributing their own version of OFED and confusing the market. So we now have OFED from Distros, OFED from OFA, OFED from Intel, Mellanox and Oracle etc.

### **Woody**

- 1) He agrees that there is a problem. It is understandable that vendors with new products need to get them to market. Open Source goes at their own pace and does not care.
- 2) We changed policy so that we agreed only to put in the OFED kernel what is in kernel.org. The old way cause problems because sometimes

### **Tatyana**

- 1) Perhaps we need another branch for new features and then do backport
- 2) **Jeff and Woody:** Then we are back to where we were before.

- 3) We do allow a preview – for example there is a branch for MIC. But this was a branch for features not upstream.
- 4) **Tatyana** – could make it so features are not enabled by default. Develop process with new and experimental features but not enabled.
- 5) **Woody**: we would need process to identify experimental. This might affect the core software.
- 6) **Tatyana**: they could be patches which are only applied when enabled.
- 7) **Vlad**: we can use Linux-Next to do this. It is not currently done because we only accept patches that have been accepted upstream. This will allow us to change ibcore and others. The user would need to maintain backports.
- 8) **Woody**: this would allow changes to the core pieces that are open source. There will always be some proprietary pieces that will not be included. This will converge base stuff. This sounds possible. The question is will vendors be willing to do this.
- 9) **Woody**: the negative is that people may not work to get it upstream. The counter is that the Distros only take what is upstream.
- 10) **John Jolly**: don't want to pull in latest and greatest. They want stable things that are upstream. Maybe we have OFED Stable and OFED Development. This way user could uninstall the Developer Distro and select the stable.
- 11) **Tom and Woody**: the names are not always in synch – for example the Distros use the name RDMA. John feels he could work with the config,
- 12) **Woody** OFA OFED is the upstream for user packages. This really only affects the kernel side.
- 13) **John Jolly** – process (partner developer) to bring in new features. They work with individual vendors and get features added. This will work for new drivers for process but not for changes to the kernel. John says they still accept kernel changes by make kernel module package.
- 14) **Conclusion**:
  - a) **Woody**: discuss within the organization and see if they will support. Intel likes the idea with Xeon Phi. Same thing iWARP. Woody would like to merge OFED MIC into OFED Devel. This is less work and don't have as many OFEDs

#### **Next Meeting:**

**Monday, January 06, 2014, 09:00 AM US Pacific Time**

916-356-2663, 8-356-2663, Bridge: 2, Passcode: 3502854

## ARs

### Emulex – Pradeep Kankipati

11/11/2013

- 1) Resolve the compilation issue in Bug [2454](#) – Resolved 12/9/2013

### Rupert

11/25/2013

- 1) Contact maintainers to provide updates for the following packages to support OFED 3.12
  - a) Chelsio – [send email to Chelsio engineers on 12/8/2013](#)
  - b) NFSoRDMA - [send email to Jeff Becker \(NASA\) on 12/8/2013](#)

11/11/2013

- 1) Follow up with Ira and see if there are other alternatives to ibdiagnet and ibutils2 – [done 12/30/2013](#)

10/28/2013

- 1) Update release notes to explain the uninstall procedure and the problem with packages installed by Distros – see Bug [2403](#) - [done 12/30/2013for OFED 3.5-2 GA](#)

10/14/2013

- 1) Add a note indicating a known limitation in the ibutils package that it does not support FDR, FDR 10 or EDR speeds when using ibdiagnet - [done 12/30/2013for OFED 3.5-2 GA](#)

8/19/2013

- 1) Update the Bugzilla list of Maintainers using OFA Maintainers list because it is more accurate

### Tatyana

11/25/2013

- 1) Work on backport of Intel NES drivers for 3.12
- 2) Tatyana has responded that she will be striving to provide the backports by the middle of January

### Tom Elken

11/25/2013

- 1) Work on backport of Intel “qib” drivers for 3.12 and will provide an estimate for the date of completion.
  - a) 12/13/2013 - Intel was asked when ports of the qib driver to the 3.12 kernel and the included Distros (RHEL 6.5, 6.4 and SLES 11.3) would be finished, to help enable an RC1 for OFED 3.12. Our target is 1/08/2014 for completing that work.