**OFI WG Data Storage / Data Access Subteam Weekly telecom – 01/6/2015**

**OFIWG Download Site:** [www.openfabrics.org](http://www.openfabrics.org) 🡪OFED/OFA Resources 🡪 OpenFabrics Interfaces WG

**Agenda**

* role call, agenda bashing
* Requirements gathering? finished?

**Storage Use Cases**

Need to add object storage to the set of use cases

 - object storage doesn’t necessarily mean HTTP

 - means get/put/delete type of operations that would be seen from a REST style API.

 - gets with offsets…

Reese sent an email just before the break that listed a few areas resulting from a quick look at SRP. The list included:

- interrupt management (generally CQ related)

 enable/disable

 acknowledge/consume interrupts

 set coalescing value

 set name

- device management

 callback on device/provider appear/disappear (e.g. user kmod loads before device kmod, need callback when new providers become available)

- memory registration

 possibly different registration modes needed, kverb facilities are a good guide.

**Kernel Support**

Currently, support for kernel operations (e.g. memory registration, etc), is defined by IB kernel framework which tends to be IB specific (obviously). Would like to have a framework that more easily allows interactions with existing kernel-based storage stacks.

This suggests that ultimately we may need to re-do ibcore because we want a different model for plug-ins. This is much more difficult in kernel land than in user land. kOFI = kernel OpenFabics Interface.

Need to start out by co-existing with existing kernel verbs. We need to figure out e.g. how to map devices to drivers.

AR: Stan to put together a simple block diagram in two weeks (1/20/15) describing the modules (provider, consumer) and how they relate to each other. This will only be a stake in the ground for review and discussion in this group.

Does the provider module need to talk to both ibcore (kernel verbs) and kOFI, at least in the shortrun?

Use RDMACM to setup connections? Some think this is neither required nor desirable. Some providers may use RDMACM, others may not.

In the getinfo call, the top level should be able to request that the provider create the connections under the covers using whatever method it prefers (e.g. RDMACM), or to allow the top level to retain the capability to establish its own connections. This is modelled exactly as the user level stuff works today.

**Are we closed out on the requirements?**

Not yet, apparently. The discussion of a ‘parallel’ API for kernel access is an additional requirement. We will need kernel access to set things up, then get the kernel out of the way for user level access to e.g. byte addressable memory.

AI: Bernard / Paul to summarize existing requirements into a single table, similar to what was done by OFI WG.

**Agenda for next meeting**

Summary of Requirements gathered to date

**Next regular telecom**

Next meeting: Tuesday, 1/13/15.

8am-9am Pacific daylight time

**NOTE:** We have switched over to using Webex (courtesy of Cisco). The URL for joining meetings is:

<https://cisco.webex.com/cisco/j.php?J=200935598&PW=67935ad6df07030d5f05044a5b0f>