**OFI Data Storage / Data Access Subteam Weekly telecom – 10/27/2015**

**DS/DA Shared Documents:** <http://downloads.openfabrics.org/WorkGroups/ofiwg/>

**Agenda**

* roll call, agenda bashing
* Summarizing NVM Use Cases

**Summarizing NVM Use Cases – Paul’s slide deck NVM\_usage\_2015\_1026.ppt**

- main objective of the slide deck is to level set on a set of NVM use cases of interest.

- all agreed that the scope is local persistent memory, local storage, remote byte addressable memory and remote storage (file and block).

- slide 6 is intended to illustrate both local persistent byte-addressable memory and local block storage. Chet points out that slide 6 needs to include the case of an NVDIMM supporting block storage, but not necessarily connected to the I/O bus. This is an important observation.

- slide 7 implies that NVMef is a wire protocol, which it is not. Roughly, NVMef is a protocol for packetizing NVMe operations for transmission across a network. NVMe is intended to be the native block level protocol for e.g. SSDs. Most likely would be to use NVMef to access remote SSDs, and a classical SCSI protocol of some type (SRP, iSCSI) to access rotating media across the network as is done today.

- slide 7 – Scott points out that ideally the CPU is not required to access the SSD on the block server side assuming appropriate h/w support in the NIC.

- slide 8 – Does the existence of persistent memory within the storage server imply a need for changes to the Lustre RPC protocol that can be used to force data to be made durable? We don’t think so.

- slide 9 will eventually illustrate the concept of a ‘persistent memory server’, which hosts a bunch of byte-addressable NVM and is accessible across the network.

- slide 10 (doesn’t yet exist) is intended to illustrate the HA failover use case presented by NetApp a while ago.

- We are in general agreement that these represent the use cases of interest, and that most of use cases are either combinations of these, or degenerate cases of these.

- Next step is to understand what is required from the API to support these use cases.

**Agenda for next meeting:**

- revise and update the summary use cases as needed

- discuss how these map onto API requirements

- first draft BoF slides

**Webex Recording:** [**Play recording**](https://cisco.webex.com/cisco/ldr.php?RCID=048c39e6ed56234b223d00623acaf285) (56 min)

**Next regular telecom:**

Next meeting: Tuesday, 11/3/15

8am-9am Pacific daylight time

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

[Join WebEx meeting](https://cisco.webex.com/ciscosales/j.php?MTID=m221d8a20185d84b30daa0096aca0f182)

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