**Agenda**

* Agenda bashing
* OFA Workshop f-2-f agenda items
* Rename the group
* Complete sockets discussion (Sean, Bob R, Patrick M (UNH))

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

**Bin list for OFA Workshop f-2-f**

Begin discussing details of the APIs versus requirements

Structure of the Library – relation to existing stack, which functionality goes where (in the API, or in the provider) – Liran Liss

**Renaming the OFWG**

There has been a robust discussion of this online, the trend today is toward renaming the group “OpenFabrics Interface Working Group” (OFI WG). To refer to the body of software being created by the OFI WG, one idea is to use the expression libfabric since this is readily google-able, however libfabric carries implications of user mode only. Hence the suggestion to use “OFI” to refer to the group’s work product.

Assuming we change the name, we need to look into updates to the mailing list, etc. Changing the group’s name is completely unimportant from a bylaws perspective.

**Continuing the Rsockets discussion– see slide deck 2014-03-04-ofwg-sockets.pptx**

Data streaming

* Split data into two receive buffers (header and payload)
  + Today we can achieve this (sort of) w/ a RCV with two scatter-gather elements. The request is to view this as two slabs that can be tightly packed. A single receive would be fine, as long as it can be used to receive multiple messages in order to pack data tightly.
* Pack tightly but use multiple buffers
* Partial completion event – e.g. notification of partial transfers for large requests
* Nonblocking support (non-blocking sockets, not referring to asynchronous ops)
* Keepalive support – a minor optimization, similar to TCP keepalive. Today uses RDMA write, prefer to use a smaller header. Objective is to improve wire efficiency, thus this implies a change to the wire protocol (at least in the context of IB). Only useful if keepalives occur frequently.
* User selectable transport address – QPn. Allow the application to request a specific QPn, compared to today where the remote QPn is completely arbitrary.

Datagram

* Fast address resolution. Don’t store a path record (64 byes) for each destination.
* Multicast support

General requests

* Increase the size of immediate data – a common theme. Probably at least 64 bits (addresses are 64 bits, work request IDs are 64 bits). Might be nice to allow the user to request a given size.
* Eliminate posting of ‘dummy’ receive for immediate data. Allow immed to create a completion, but without requiring a receive WQE. However, eliminating the receive means that there would be no way to avoid overflow of the receive buffer. Perhaps “RNR for completions” (instead of RNR for receive WQEs). WRT/immed is used frequently to tell the receiver when the transfer is completed.
* Add timeout parameters for all CM operations.
* Timeout parameters for reading events (‘get CM event’).
* Ability to cancel a pending I/O (including CM requests).
* Error handling is not currently consistent throughout
  + This should not be left to the provider. For example, POSIX defines a specific set of errors. Including documenting every error code every call can return.
  + Use a single error return convention
  + Don’t mix transport and errno values. (errno is the existing Linux system). Desire is to always map a transport error onto a UNIX errno.

Suspending at this point (out of time) – resume next week

**Agenda items for Montere**y

User mode TCP. (Liran)

Approaches for APIs for storage (Liran)

Preliminary discussion on Structured Data applications (Oracle)

Begin mapping the APIs onto the requirements that have been collected

Structure of the Library (what goes in the API, what goes in the provider layer)

**Next meeting**

Complete sockets requirements

Bin list:

* Steps forward beyond requirements gathering.

Logistics

Tuesday, 3/18/14

9am-10am Pacific time

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