**OFI WG Bi-Weekly telecom – 02/23/2016**

**Agenda:**

* Roll call, agenda bashing
* Agenda for F-2-F meeting in April
* Wait objects
* Sean’s slide on shared memory support
* Details on the utility provider library implementation

**Agenda for F-2-F in Monterey**

* DS/DA may want to talk about requirements for user mode access to NVM
* DS/DA is planning a half day – joint meeting in the afternoon?
* Sean has started work on what it would take to move the ABI forward; this could be addressed at the f-2-f. Issues include things like when apps call a getinfo, they don’t get information on completions. This may result in changes to the data structures in the libraries; wouldn’t impact the application, but would make life easier for users and providers. Opening the ABI means the option to address changes in the data structures.

**Wait Objects – Sean. See pull request 1765, issue 1645 and email thread** [https://www.mail-archive.com/ofiwg@lists.openfabrics.org/msg00150.html](https://www.mail-archive.com/ofiwg%40lists.openfabrics.org/msg00150.html)

* The pull request deals with how to deal with applications that want to wait on a wait object such as a file descriptor.
* An application would need to first call a new function called ‘triwait’, which needs to be called before the application blocks, to prevent a hang.
* People should review the pull request.
* Getwait is disabled from the providers, at least temporarily.

**Shared Memory Support – Sean. See email discussion** [https://www.mail-archive.com/ofiwg@lists.openfabrics.org/msg00171.html](https://www.mail-archive.com/ofiwg%40lists.openfabrics.org/msg00171.html)

* Integrating shared memory support in libfabric.
* Two different support options (no implementation yet) – probably want to support both (not either/or):
	+ SHM provider – acts like a normal provider, gives faster communication between processes.
	+ Integrated SHM support as part of an existing provider. Native provider using SHM primitives.
* For integrated SHM support:
	+ Use it automatically? Or allow it to be explicitly disabled?
	+ Selectable per operation?
	+ Leaning toward consensus that this should be transparent and the provider needs to figure out what to do with it.
* Proposed Architecture
	+ A provider has access to a set of SHM primitives, as well as a set of SHM Utilities (which are layered on top of the primitives.
	+ Primitives would include four basic data structures:
		- Control block (communication setup), Rx Command Queue, Rx Control Queue (small, fixed size entries, used to controls ACKs), Tx Inject Buffers (pool of small buffers for msg data)
	+ Completion handling
		- For small/medium messages, Tx may complete after updating Rx queue
		- For large messages, need some sort of ‘delivery complete’ semantic to notify the sender that the ‘CMA buffer’ has been freed.

**Next Agenda:**

**Webex link:** <https://cisco.webex.com/ciscosales/j.php?MTID=m9389b0513c9ae643d57e2381e254dcf5>
Webex password: ofi

**OFIWG Download Site:** [www.openfabrics.org/downloads/OFIWG](http://www.openfabrics.org/downloads/OFIWG)

**Github:** <https://github.com/ofiwg/libfabric>

**OFI Software Download Site:** [www.openfabrics.org/downloads/OFI](http://www.openfabrics.org/downloads/OFIWG)

**Link to WebEx Recording** - [**Play recording**](https://cisco.webex.com/ciscosales/lsr.php?RCID=fdca7df3866c4b47a201f518ddefb9dc)

**Next regular telecon**

Next meeting: Tuesday, 3/8/16

9am-10am Pacific daylight time