**OFI WG Weekly telecom – 05/26/2015**

**Agenda:**

* Roll call, agenda bashing
* Directed Receives – no open github issue (yet)
* Open Issues – topology (253), domain events (244), environment variable(177)

**Directed Receives – Sean**

- no updates, no use cases identified as of yet.

**Open Issues**

\* Support more efficient formats for iovec's (32)

What formats should be targeted?

How are the new formats used with the existing APIs?

Are new APIs required to use the new formats?

- Proposal is to create a ‘strided’ iovector

- May require some kind of a flag for the provider to indicate if it supports this or not.

- Can a stride be negative, i.e. stride backwards through a data segment?

AR – Sean – create a specific patch to be discussed.

\* Multicast support (1001)

How are multicast groups joined?

How are multicast addresses specified to the provider?

Does multicast introduce a new set of APIs, or reuse/extend existing ones?

- Multicast existed originally in the API, but was taken out because of some confusion as to whether a given transaction is unicast or multicast.

- Original proposal assumed that a given endpoint would join only a handful of multicast groups.

- Are multicast groups defined as part of the address vector, or through some other mechanism?

- Do we need a new set of multicast functions, or can we re-use existing functions?

- What about establishing multicast capability as a property of the EP?

AR – Dave Goodell – bone up on IP/Enet multicasting

- Could define endpoints to be unicast only, multicast only, or both. This would eliminate the branch, except for the case where an EP is configured for both. This assumes that the address space is partitioned into a multicast space and a unicast space (assign a bit to indicate mcast).

- Are there use cases that require an EP to support both simultaneously? Christoph may have such a use case.

\* Topology (253)

What does the topology data look like?

How do providers discover and report topology information?

- an overview and some ideas may have been presented at the f-2-f, a proposal can be discussed next week.

- semblance of a proposal taking shape, but not ready for next week.

\* AV support for exchanging provider specific data (298)

Providers may be able to take advantage of apps that exchange

data out of band. What would such an interface look like?

- This comes from a USnic discussion, originally raised by Reese.

- Example: an app using an IP address, puts the IP address into the AV, which gets resolved into a MAC ID. Rather than have each node do its own resolution, there may be mechanisms for doing the resolution once and exchanging that information out of band to help avoid e.g. ARP storms.

- Take this one offline for a while, then bring it back here. (Goodell, Squyres, Hefty)

\* Domain events (244)

What event types and data should be reported?

- may be related to topology,

- What events does it make sense to reflect upward and are of interest to the application?

- mechanism exists, but the specific events haven’t been defined.

- closed for purposes of the telecons…close this online in github.

\* Environment variables (177)

There was a discussion for registering environment variables with the

framework, so that all active variables could be exported by the

framework and documented.

- Objective is to avoid a large number of env variables (especially undocumented ones!).

- The idea is to allow registration of a set of common environment variables which would be accessible for use by others. The basic idea is to limit the number of env vars.

- Seems like a really good idea, but needs more thought and/or a specific proposal.

- Turns out there is a proposal, which is simple, but sufficient.

- Reduce this to a single function.

- a simple registration so all env vars are advertised. No need for an ‘fi\_get\_envvar’ because a user can simply call ‘get\_envar’ himself.

- Jeff volunteers to put together a pull request for this.

- Closed for purposes of the telecons.

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

**Future Agenda Topics:**

**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=6ef2a4031cb440c0a94772164f762a75)

**Next regular telecon**

Next meeting: Tuesday, 6/7/15

9am-10am Pacific daylight time