Expanding the OFA
A users’ guide to this year’s workshop

#OFADevWorkshop
Administrivia

- Wi-Fi password is “ofa”
- John Lee still needs speaker presentations
- Sarah controls the meeting room – see her for scheduling and for the key
- Any questions?
Welcome to the 2015 workshop

Some trends to look for in the workshop. Look for:

1. Discussion on recent efforts in the OFA to develop new I/O technology
   - OFI WG, OFV WG

2. Sessions driven by providers of, or advocates for, key technologies that will help drive our direction
   - Non-volatile memory (in all its forms)
   - SoCs

3. Look for examples of efforts to (re-)engage with key stakeholders
   - MPI community
   - National Labs Forum

Direction check on Wednesday as part of plotting the course of the organization for the next year
Objective: accelerate adoption of IB and related technologies. The OFA was mainly an enabling body.
An interesting development
An interesting development

For the 1st time, the OFA is developing new technology, *without* an underlying industry standard specification.

Pure, requirements-driven, technology development
An interesting development

We recently added the OFW WG as a new technical working group.
An interesting development

The OFA has really become a technology development organization.

Technical Advisory Council
- OFA’s technology incubator
- observe trends in technology
- clearing house for new ideas
- spawn new development efforts
OFx WG? Multiple APIs?

• Why?
  – the consumer community demanded them, and
  – a group of members put up the resources
  – the OFA doesn’t per se ‘adjudicate’

• Different? Definitely!
  – one is chartered to extend verbs; the other is not
    constrained to verbs
  – one is based on IB-style RDMA networks, the other is
    transport agnostic

• Learn more!
  – many sessions on both OFI and OFV
Multiple APIs?

- Consider participating in either or both
  - subscribe to mailing lists for either group from the OFA website

- OFI WG
  - OFI WG – meets weekly
  - Data Storage/Data Access WG – meets weekly

- OFV WG – meets weekly

- All are welcome to attend
  - both are open source
  - does not require OFA membership to attend
    - even though we think you should join anyway

March 15 – 18, 2015

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A key principle of the OFA

What are the central requirements of consumers of a network API?

“Application-centric I/O” is the art and science of defining an I/O architecture to maximize application effectiveness

Consumer orientation has emerged as a key watchword for the OFA
Key technologies

• Multiple sessions on non-volatile memory and memory hierarchy
  – NVMe, NVMe over fabrics,
  – NVM programming model

• SoCs
  – as a consumer of OFA APIs,
  – as a platform supporting RDMA enabled applications

• National Labs
  – National Labs Forum (today)
  – sessions from Oakridge and Lawrence Livermore
• Re-convene on Wednesday for a direction check and to plot the OFA’s course for the next year

• Meanwhile, enjoy the sessions. There’s something here for everyone.
Thank You