



### 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



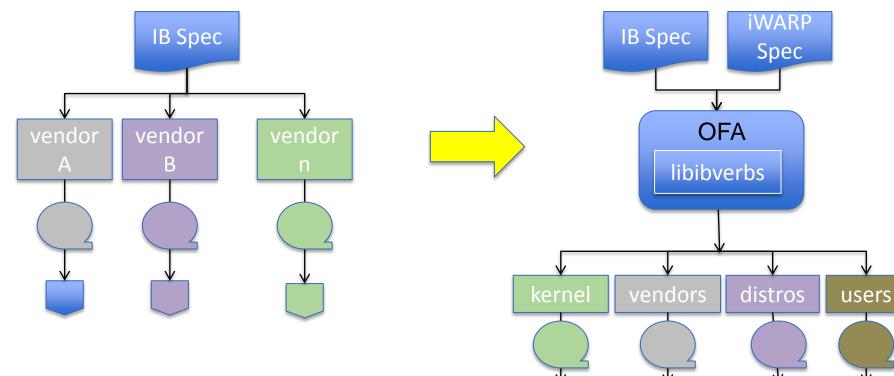
Some trends to look for in the workshop. Look for:

- 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



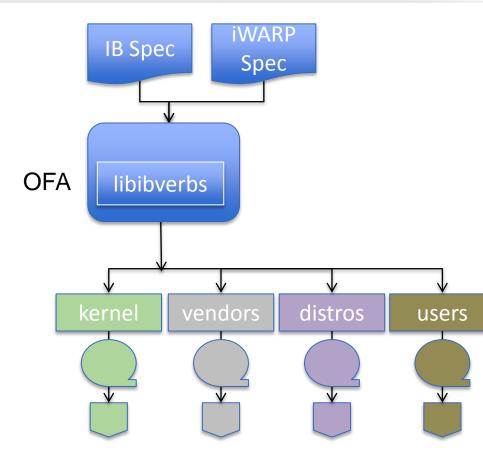




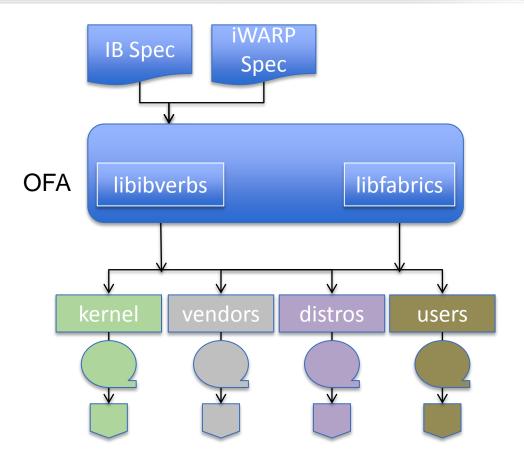
Objective: accelerate adoption of IB and related technologies.

The OFA was mainly an enabling body.





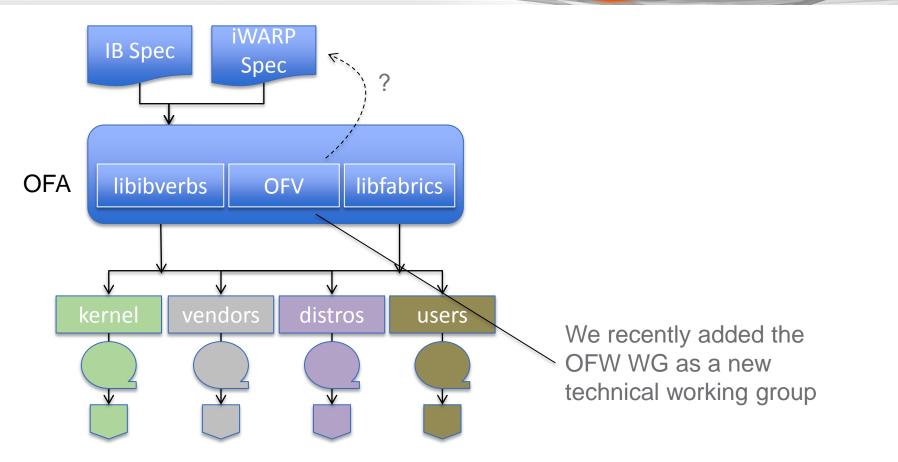




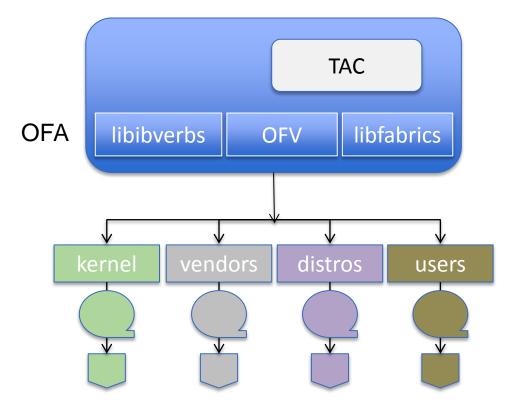
For the 1<sup>st</sup> time, the OFA is developing new technology, *without* an underlying industry standard specification

Pure, requirementsdriven, technology development









**Technical Advisory Council** 

- OFA's technology incubator
- observe trends in technology
- clearing house for new ideas
- spawn new development efforts

The OFA has really become a technology development organization

## 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

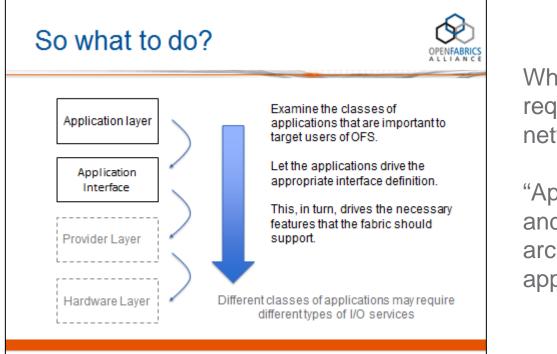
## Multiple APIs?



- 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

# 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**



