

OpenFabrics@HP

Bob Souza
Distinguished Technologist



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OFED

InfiniBand

OFED forms the core of HP's InfiniBand offerings

- Nearly all in high-performance computing clusters
 - Both a messaging and file system interconnect
- Sprinkling in other places, e.g. FSI
- Driven by performance

iWARP

- Limited experience to date
- Watching 10 GbE hardware and stacks mature
- Ubiquitous 10GbE RDMA may change things

HP Software using OFED

HP MPI

- Tested with 1.3
- More details later from CQ Tang

HP SHMEM

- Run-time systems use OFED verbs layer over InfiniBand

Deploying OFED

- We deploy OFED on multiple existing kernels and distributions with hardware from multiple InfiniBand vendors
- We need
 - Stability
 - Rapid evolution
 - Support
- We want it to just work.

Our Current Approach

Our hardware vendors provide

- Hardware
- Software based on OFED
 - Often differentiated in some way
- Support
 - But not for all OFED components

Our Current Approach

Not Linux distributions

- They move slowly
- Some make structural changes to the OFED bits
- Support problematic

Not kernel.org

- Stability
- Support problematic (again)

One Stack To Rule Them All?

www.hp.com



i n v e n t