



Server OEM Panel

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April, 2011

Where HP Uses OFED



- High-Performance Clusters
 - Mostly InfiniBand
 - 10 GbE emerging
 - Mostly Linux: multiple kernels, distributions
 - Multiple interconnect vendors
- Financial Services: InfiniBand and 10 GbE
 - Low latency
- Storage: DDN/Lustre, IBRIX
- Database applications

HP Interconnect Highlights: 2010/11

- InfiniBand Products
 - LOM (Mellanox CX2: IB/10GbE) integrated in servers
 - SL390sG7: includes NVIDIA GPUs
 - BL2x220cG7
 - Deployed large (1000+ nodes) clusters

What HP Needs from OFED: Drivers



- Incorporate OFED drivers into the Linux distros
 - Current with the latest OFED releases
- Synchronize OFED drivers with the kernel releases
 - Available when latest kernel is released
- Interoperability
 - Need to work in multi-vendor environments
 - New OFED releases need to work with the old
- Bug fixes
 - QP # re-use, UAR limit, exceed QP limit error

What HP Needs from OFED: SM

- Needs to work in multi-vendor environment
- Core diagnostic/monitoring tools that work in multi-vendor environments
 - User-friendly interface to display fabric errors
 - Needed to develop own tools
 - Standardized tools to monitor fabric congestion
 - Should work in vendor-specific environment

What HP Needs from OFED: Scaling



- General scalability to support large (1000+ nodes) clusters and next-generation Peta-scale systems
 - Performance: including message rates (short messages)
 - Low memory footprint
 - Support for adaptive routing
 - Rapid fabric reconfiguration
 - Support for alternate topologies