Server OEM Requirements
Sun Microsystems

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Agenda

➢ What Sun is doing with InfiniBand

➢ How we use OpenFabrics

➢ How OFA is doing from our perspective

➢ What we want

  ▪ Continued OFED releases

  ▪ SW support for InfiniBand over Converged Enhanced Ethernet (IBoE/RoEE)

  ▪ Minor source code changes to simplify adaptation of user level code to Solaris

What Sun is doing with InfiniBand

- Delivering large IB-based HPC clusters
- IB switches – 72 and 3456 port using 24 port chips – more on the way using 36 port chips
- HCAs in various form factors and speeds
- Innovative cabling
- IB support in Solaris 10 and Open Solaris
  - same user functionality, different implementation
- OFED for Linux and WinOF for Windows
- Cool stuff I can't talk about yet

How we use OpenFabrics

➢ OFED and WinOF are our IB SW solutions on Linux and Windows

➢ We have adapted the OpenFabrics User Verbs and uMAD libraries to Solaris

  ▪ with help from System Fabric Works.

➢ We are porting OpenSM and diagnostic tools to Solaris

How OFA is doing

➢ GREAT!

- Solid IB SW support for Linux and Windows
- Regular OFED releases
- Open source base
- Leading edge technology
- Keep up the good work!

We want OFED releases

➢ We want tested, internally consistent OFED releases

  ▪ not just mix-and-match collections from distros

➢ When we have to support it, we want to know exactly what the customer is running on

➢ We don't want to field calls resulting from a distro's mistake in putting together different versions of OFA components

We want IB over Ethernet SW

➤ IB transport over Converged Enhanced Ethernet as link layer

  ▪ Take advantage of Ethernet enhancements for FCoE (Data Center Bridging in IEEE)

  ▪ Expand the market for IB HW and SW

  ▪ Based on IBTA standardization

➤ OFA support for both HW HCAs and a SW pseudo-HCA for standard NICs

  ▪ HW HCA not required at both ends

We want some help

➢ The OpenFabrics User Verbs library was written for Linux

➢ We have adapted it to Solaris

➢ We would like to integrate some changes that will make it easier for us to maintain

➢ User code only - no changes in code that goes to kernel.org

➢ Thanks!