SGI Update

Sever OEM Panel
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How do we use OFED?

- All SGI Altix® products support IB and iWARP
  - Altix ® 4700/450 – Itanium based, IB HCAs, iWARP
  - Altix ® XE clusters – x86_64, IB HCAs, integrated HCA, iWARP
  - Altix ® ICE clusters (x86_64) with integrated IB backplane and IB switches
- SGI Value added ProPack™ Software
  - ProPack5 SP2 ships with OFED 1.2 GA (July 07)
  - ProPack5 SP3 ships with OFED 1.3 GA (April 08)
- Use Distro OFED distribution when it supports OFED features that we need
- Altix ® ICE
  - Fat-tree and Hypercube topologies, diskless blades, scalable

What is important to SGI?

➢ Need stable enterprise quality OFED releases
➢ Timeliness of release is important
➢ OpenSM compatible and supported by all IB switch and gateway vendors
➢ Scaling to large clusters (1000s of nodes)
➢ Don't break binary and API compatibility with older OFED releases
➢ Resiliency support
➢ QoS support in both hardware and software
➢ Better debugging support in drivers, ULPs

Challenges

- Scaling – 1000s of blades and 10,000s of cores
- Cabling
  - Altix ® ICE integrated IB backplane solves this to a large degree
  - Making sure a large cluster is cabled correctly
- Hypercube support in OpenSM (dor)
- New hardware/driver support in OFED to match product introduction from SGI