
Amendment to 802.1Q: Congestion Management

Background
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Supporting Companies (Alphabetical)

- Broadcom
- Cisco
- Ericsson
- Force10
- Fujitsu
- Fulcrum
- HP
- IBM
- Intel
- Marvell
- Motorola
- Nokia
- Xsigo

Broad support: Server, Telco, Merchant Silicon and Switch System Vendors

Ethernet as interconnect

■ Strengths

- The fastest standards-based interconnect in the industry
- Price/performance/ubiquity of Ethernet
- Can match the latency of any known popular interconnects
 - Very important for latency-sensitive applications
 - Switches at 450ns latency available today and going to < 300ns soon
- Proven interoperability
- Low-cost standardized Phy-layer technology suitable for backplanes

■ Weakness

- No delivery guarantees
- Not jitter free
- Lacks Carrier grade QOS capability
 - High grade of QOS is now being requested by Data Center, Telecom (ATCA, MicroTCA) and HPC applications
 - 802.1p can provide some help but needs more capability for converged traffic
 - Congestion management is a key

■ Threats

- Serial Rapid-IO
- Infiniband
- PICMG-3.6 Cell Switching specifications
- ASI

■ **To broaden and sustain the Ethernet Market, Congestion Management is a must !**

Onto the PAR Proposal.....
