
Amendment to 802.1Q: Congestion Management

DRAFT PAR
November 2005

Asif Hazarika (Fujitsu)
Gopi Sirineni (Marvell)

Contributors and Supporters

- Hugh Barrass (Cisco)
- Davide Bergamasco (Cisco)
- Ed Bowen (IBM)
- Robert Brunner (Ericsson)
- Uri Cummings (Fulcrum)
- Uri Elzur (Broadcom)
- Norm Finn (Cisco)
- Asif Hazarika (Fujitsu)
- Gopal Hegde (Intel)
- David Koenen (HP)
- Raghu Kondapalli (Marvell)
- S. Krishnamurthy (Force10)
- Aniruddha Kundu (Intel)
- Jeffrey Lynch (IBM)
- Shashank Merchant (Nokia)
- Don Pannell (Marvell)
- Shreyas Shah (Xsigo)
- Gopi Sirineni (Marvell)
- Manoj Wadekar (Intel)
- Jeff Wise (Motorola)

Title (4)

- Draft: Local and Metropolitan Area Networks: Amendment 7 to IEEE Std. 802.1Q: Congestion management.

PAR Scope (13)

- This standard specifies protocols, procedures, and managed objects for the transport of frames across a VLAN-bridged network of limited size, with controlled frame loss and latency due to congestion for selected service classes.

PAR Scope (13)

- Is the completion of this document contingent upon the completion of another document? No
- Users of this standard can also be expected to use “Priority Groups”. However, this standard does not have a strict dependency on Priority Groups. The two projects may be done in parallel.

PAR Purpose (14)

- Data center networks and Telco systems employ applications that depend on the delivery of data packets with a lower latency and much lower probability of packet loss than is typical of IEEE 802 VLAN bridged networks. The ability to control frame loss and latency due to congestion for selected service classes would enable the use of IEEE 802 networks in the data center and Telco systems for these applications.

PAR Reason (15)

- There is significant customer interest and market opportunity for Ethernet as a consolidated Layer 2 solution in high-speed short-range networks such as data centers, backplane fabrics, single and multi-chassis interconnects, computing clusters, and storage networks. These applications currently use Layer 2 networks that offer very low latency and controlled frame loss due to congestion. Expanding the capability of IEEE 802 networks to control frame loss and latency due to congestion enables their use in such networks.