P802.1Qca

Submitter Email: tony@jeffree.co.uk
Type of Project: Amendment to IEEE Standard 802.1Q-2011
PAR Request Date: 20-Sep-2012
PAR Approval Date:
PAR Expiration Date:
Status: Unapproved PAR, PAR for an Amendment to an existing IEEE Standard

1.1 Project Number: P802.1Qca
1.2 Type of Document: Standard
1.3 Life Cycle: Full Use

2.1 Title: Standard for Local and metropolitan area networks--Media Access Control (MAC) Bridges and Virtual Bridged Local Area Networks Amendment: Path Control and Reservation

3.1 Working Group: Higher Layer LAN Protocols Working Group (C/LM/WG802.1)
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3.2 Sponsoring Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee (C/LM)
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4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 11/2014
4.3 Projected Completion Date for Submittal to RevCom: 10/2015

5.1 Approximate number of people expected to be actively involved in the development of this project: 40
5.2.a. Scope of the complete standard: This standard specifies Media Access Control (MAC) Bridges that interconnect individual Local Area Networks (LANs), each supporting the IEEE 802 MAC service using a different or identical media access control method, to provide Bridged Local Area Networks and Virtual LANs (VLANs).

5.2.b. Scope of the project: This project extends the application of Intermediate System to Intermediate System (IS-IS) to control bridged networks (beyond the capabilities of Shortest Path Bridging) and specifies additional protocols, procedures and managed objects. The new standard will provide explicit path control, bandwidth and stream reservation, redundancy (protection or restoration) for data flows and distribution of control parameters for time synchronization and scheduling.

5.3 Is the completion of this standard dependent upon the completion of another standard: No
5.4 Purpose: MAC Bridges, as specified by this standard, allow the compatible interconnection of information technology equipment attached to separate individual LANs.

5.5 Need for the Project: There is no control protocol that integrates the required control features. The new control protocol will provide explicit forwarding path control thus enabling the use of non-shortest paths. It will also integrate a tool for bandwidth and stream reservation along the forwarding path. Resiliency control mechanisms will be also provided for the data traffic. In addition, the new standard will support carrying control information using IS-IS for time synchronization and scheduling.

5.6 Stakeholders for the Standard: Users, Vendors, IC developers, administrators, designers, customers, and owners of Provider Backbone Bridged Networks, Carrier Ethernet Networks, Data Center networks, Automotive networks, Industrial networks, Audio/Video and Residential systems requiring optimized bandwidth usage and/or redundancy.

Intellectual Property
6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No
6.1.b. Is the Sponsor aware of possible registration activity related to this project?: No

7.1 Are there other standards or projects with a similar scope?: No
7.2 Joint Development
  Is it the intent to develop this document jointly with another organization?: No

8.1 Additional Explanatory Notes (Item Number and Explanation):