P802.1Qcj

Submitter Email: nfinn@cisco.com
Type of Project: Amendment to IEEE Standard 802.1Q-2014
PAR Request Date: 13-Jan-2015
PAR Approval Date:
PAR Expiration Date:
Status: Unapproved PAR, PAR for an Amendment to an existing IEEE Standard

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

2.1 Title: Standard for Local and metropolitan area networks--Bridges and Bridged Networks
Amendment: Stream Gates

3.1 Working Group: Higher Layer LAN Protocols Working Group (C/LM/WG802.1)
Contact Information for Working Group Chair
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3.2 Sponsoring Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee (C/LM)
Contact Information for Sponsor Chair
Name: Paul Nikolich
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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: 03/2017
4.3 Projected Completion Date for Submittal to RevCom: 10/2017

5.1 Approximate number of people expected to be actively involved in the development of this project: 30
5.2.a. Scope of the complete standard: This standard specifies Bridges that interconnect individual LANs, each supporting the IEEE 802 MAC
Service using a different or identical media access control method, to provide Bridged Networks and
VLANs.

5.2.b. Scope of the project: This standard specifies procedures and managed objects for an Bridge to perform frame counting, policing, and service class selection based on the particular Time Sensitive Networking data stream to which the frame belongs and a synchronized cyclic time schedule. This standardizes controls for commonly-available bridge features, and enables the bridge to detect and mitigate misbehavior by other systems in a network, improving the robustness of that network.

5.3 Is the completion of this standard dependent upon the completion of another standard: No
5.4 Purpose: 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: The development of standards for Time-Sensitive Networking (TSN) have shown that there exist no interoperable standards that enable a bridge to detect whether or not some systems in a TSN network are misbehaving. In particular, devices that exceed their allocated per-stream bandwidth can prevent the network from achieving the benefits of TSN for any and all streams, not just the misbehaving

stream.

5.6 Stakeholders for the Standard: Developers, providers, and users of networking services and equipment for IoT (including Industrial Automation, Transportation networking, Smart Grid) and of operating systems, hypervisors and orchestration systems for virtual machines. This includes software developers, networking IC developers, bridge and NIC vendors, and users.

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

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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

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8.1 Additional Explanatory Notes (Item Number and Explanation):