

P802.1Qcw

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Type of Project: Amendment to IEEE Standard 802.1Q-2014

PAR Request Date: 18-May-2017

PAR Approval Date:

PAR Expiration Date:

Status: Unapproved PAR, PAR for an Amendment to an existing IEEE Standard

1.1 Project Number: P802.1Qcw

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: YANG Data Models for Scheduled Traffic, Frame Preemption, and Per-Stream Filtering and Policing

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)

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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: 11/2020

4.3 Projected Completion Date for Submittal to RevCom

Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 10/2021

5.1 Approximate number of people expected to be actively involved in the development of this project: 20

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 amendment specifies a Unified Modeling Language (UML)-based information model and YANG data models that allow configuration and status reporting for bridges and bridge components (as specified by this standard) with the capabilities currently specified in clauses 12.29 (scheduled traffic), 12.30 (frame preemption) and 12.31 (per-stream filtering and policing) of this standard. It further defines the relationship between the information and data model and models for the other management capabilities specified in this standard. Additionally, this amendment will address errors or omissions to existing features related to the aforementioned clauses.

5.3 Is the completion of this standard dependent upon the completion of another standard: Yes

If yes please explain: P802.1Qcw builds upon the YANG Data Model being specified by IEEE P802.1Qcp, which cannot be approved until the maintenance revision of IEEE P802.1Q is approved.

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: YANG (RFC 7950) is a formalized data modeling language that is widely accepted and can be used to simplify network configuration. The ability to manage Scheduled Traffic, Frame Preemption, and Per-Stream Filtering and Policing via YANG models is needed for compatibility with modern network management systems.

5.6 Stakeholders for the Standard: Developers, providers, and users of networking services and equipment.

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?: Yes

If yes please explain: The YANG Data Model will be assigned a URN based on the RA URN tutorial and IEEE Std 802d.

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: #2.1 While 'YANG' (developed by the Internet Engineering Task Force) appears to be an acronym its expansion 'Yet Another Next Generation' is not meaningful. It is vital that 'YANG' appear in the project title to inform potential participants and the target readership of the amendment.

#5.3 IEEE P802.1Q-Rev IEEE Standard for Local and Metropolitan Area Networks: Bridges and Bridged Networks

IEEE P802.1Qcp Bridges and Bridged Networks - Amendment: YANG Data Model

#5.5 RFC 7950 The YANG 1.1 Data Modeling Language

#6.1.b IEEE Std 802d IEEE Standard for Local and Metropolitan Area Networks: Overview and Architecture Amendment 1: Allocation of Uniform Resource Name (URN) Values in IEEE 802 Standards

RA URN tutorial: <http://standards.ieee.org/develop/regauth/tut/ieeearn.pdf>

RA - Registration Authority

URN - Uniform Resource Name