P802.1Qcp

Submitter Email: janos.farkas@ericsson.com
Type of Project: Modify Existing Approved PAR
PAR Request Date: 12-Jul-2017
PAR Approval Date:
PAR Expiration Date:
Status: Unapproved PAR, Modification to a Previously Approved PAR for an Amendment
Root PAR: P802.1Qcp **Approved on:** 03-Sep-2015

1.1 Project Number: P802.1Qcp
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 Model

Changes in title: Standard for Local and ~~Metropolitan~~metropolitan ~~Area~~area ~~Networks~~ networks--Bridges and Bridged Networks
Amendment: YANG Data Model

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)
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: 11/2017
4.3 Projected Completion Date for Submittal to RevCom
Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 08/2018

5.1 Approximate number of people expected to be actively involved in the development of this project:
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 a Unified Modeling Language (UML) based information model and a YANG data model that allows configuration and status reporting for bridges and bridge components including Media Access Control (MAC) Bridges, Two-Port MAC Relays (TPMRs), Customer Virtual Local Area Network (VLAN) Bridges, and Provider Bridges (as specified by this standard) with the capabilities currently specified in clauses 12.4-12.7, 12.10, 12.12.1, 12.12.2, 12.13, and 12.19 of this standard. It further defines the relationship between the information and data

Changes in scope of the project: This amendment specifies a a Unified Modeling Language (UML) based information model and a YANG data model that allows configuration and status reporting for bridges and bridge components including Media Access Control (MAC) Bridges, Two-Port MAC Relays (TPMRs), Customer Virtual Local Area Network (VLAN) Bridges, and Provider Bridges (as specified by this standard) with the capabilities currently specified in clauses 12.4-12.~~8~~7, 12.10, 12.12.1, 12.12.2, 12.13, and 12.19 of this standard. It further defines the relationship between the information

model and models for the other management capabilities specified in this standard and for IEEE Std 802.1AX and IEEE Std 802.1X.

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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: YANG (Request For Comment (RFC) 7950) is a formalized data modeling language that can be used by NETCONF, a widely accepted protocol that is being used to simplify network configuration. Other standards development organizations (e.g. Internet Engineering Task Force (IETF) and the Metro Ethernet Forum) have adopted YANG, and are developing a broad range of data models. Development of a YANG data model for manageable entities specified in IEEE Std 802.1Q will support this industry wide effort.

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?: 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: #2.1 While 'YANG' (developed by the IETF) 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.

#5.2B IEEE Std 802.1X includes:
IEEE Std 802.1X(TM)-2010 - Local and metropolitan area networks - Port-Based Network Access Control
IEEE Std 802.1Xbx(TM)-2014 - Local and metropolitan area networks - Amendment 1: MAC Security Key Agreement Protocol (MKA) extensions

IEEE Std 802.1Q includes:
IEEE Std 802.1Q(TM)-2014 - IEEE Standard for Local and metropolitan area networks -- Bridges and Bridged Networks
IEEE 802.1Qcd-2015 - IEEE Standard for Local and metropolitan area networks-- Bridges and Bridged Networks - Amendment 23: Application Virtual Local Area Network (VLAN) Type, Length, Value (TLV)

IEEE Std 802.1AX - IEEE Standard for Local and metropolitan area networks -- Link Aggregation

#5.5
RFC 7950 - The YANG 1.1 Data Modeling Language.

#7.3A The base standard, IEEE Std 802.1Q, has already been adopted by ISO/IEC JTC1 under the PSDO Agreement and it is expected that this amendment will also be adopted via communication with JTC1 through existing channels.

PAR modification changes:
12.12.1 and 12.12.2 added; 12.8 removed from 5.2.b Scope.
RFC 6020 replaced with RFC 7950.