P802.1Qdd

This PAR is valid until 31-Dec-2022.

PAR Extension Request Date:
PAR Extension Approval Date:
Number of Previous Extensions Requested: 0

1. Number of years that the extension is being requested: 3

2. Why an Extension is Required (include actions to complete): The first Task Group ballot was started one year after the PAR was approved due to the complexity of the project and the time needed for the editor (as a new editor) to learn the tools and skills required.
The most recent IEEE P802.1Qdd Task Group ballot completed on [Note: insert correct date before submission in July, as the next TG ballot for D0.6 is expected to be completed before July Plenary] , 2022.
Actions to complete include initiating a new IEEE P802.1Qdd Task Group Ballot in mid-2022, followed by subsequent Task Group Ballot to reach technical completeness and satisfactory quality prior the end of 2022 followed by Working Group / Standards Association Balloting.

3.1. What date did you begin writing the first draft: 14 Jul 2019

3.2. How many people are actively working on the project: 25

3.3. How many times a year does the working group meet?
   In person: 6
   Via teleconference: 40

3.4. How many times a year is a draft circulated to the working group: 2

3.5. What percentage of the Draft is stable: 75%

3.6. How many significant work revisions has the Draft been through: 7

4. When will/did initial Standards Association Balloting begin: Dec 2023

When do you expect to submit the proposed standard to RevCom: Jul 2024

Has this document already been adopted by another source? (if so please identify) No

For an extension request, the information on the original PAR below is not open to modification.

Type of Project: Amendment to IEEE Standard 802.1Q-2018
Project Request Type: Initiation / Amendment
PAR Request Date: 18 Jul 2018
PAR Approval Date: 27 Sep 2018
PAR Expiration Date: 31 Dec 2022
PAR Status: Active
Root Project: 802.1Q-2018

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

2.1 Project Title: Standard for Local and Metropolitan Area Networks--Bridges and Bridged Networks Amendment: Resource Allocation Protocol

3.1 Working Group: Higher Layer LAN Protocols Working Group(C/LM/802.1 WG)
   3.1.1 Contact Information for Working Group Chair:
   Name: Glenn Parsons
   Email Address: glenn.parsons@ericsson.com
   3.1.2 Contact Information for Working Group Vice Chair:
   Name: Jessy Rouyer
   Email Address: jessy.rouyer@nokia.com
3.2 Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee(C/LM)
   3.2.1 Contact Information for Standards Committee Chair:
   Name: Paul Nikolich
   Email Address: p.nikolich@ieee.org
   3.2.2 Contact Information for Standards Committee Vice Chair:
   Name: James Gilb

Email Address: gilb@ieee.org
3.2.3 Contact Information for Standards Representative:
   Name: James Gilb
   Email Address: gilb@ieee.org

4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot:
Dec 2021
4.3 Projected Completion Date for Submittal to RevCom: Oct 2022

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 amendment specifies protocols, procedures, and managed objects for a Resource Allocation Protocol (RAP) that uses the Link-local Registration Protocol (LRP) and supports and provides backwards compatibility with the stream reservation and quality of service capabilities, controls and protocols specified in IEEE Std 802.1Q. RAP provides support for accurate latency calculation and reporting, can use redundant paths established by other protocols, and is not limited to bridged networks.

5.3 Is the completion of this standard contingent upon the completion of another standard? Yes
Explanation: This standard will make normative references to IEEE P802.1CS.
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: A signaling protocol that performs distributed and dynamic resource management and admission control is an essential component for automatic configuration in bridged LANs requiring latency and bandwidth guarantees. Current IEEE 802.1Q Multiple Stream Reservation Protocol (MSRP) is constrained by the capability of its underlying IEEE 802.1Q Multiple Registration Protocol (MRP) and does not efficiently support a large reservation database.
For use in distributed stream reservation, IEEE 802.1Q MSRP does not make use of all available Quality of Service provisions and does not support reservation for the streams in need of high availability by use of the technologies specified in IEEE Std 802.1CB.
The proposed amendment will address these issues.
5.6 Stakeholders for the Standard: Developers, providers, and users of networking services and equipment for industrial, professional audio-video, automotive, consumer electronics and other systems requiring distributed stream reservation services for streaming of time-sensitive data.

6.1 Intellectual Property
   6.1.1 Is the Standards Committee aware of any copyright permissions needed for this project?
   No
   6.1.2 Is the Standards Committee aware of possible registration activity related to this project?
   Yes
   Explanation: The Simple Network Management Protocol (SNMP) MIB will be assigned an Object Identifier (OID) based on the Registration Authority (RA) OID tutorial and IEEE Std 802.
   The YANG Data Model will be assigned a Uniform Resource Name (URN) based on the RA URN tutorial and IEEE Std 802d.
   The amendment will use the IEEE 802.1 Organizationally Unique Identifier (OUI) to create a globally unique application identifier as required by the Link-local Registration Protocol (LRP).
   The amendment may allow an OUI or Company Identifier (CID) to be used to create code points used in managed objects and protocol fields.

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

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8.1 Additional Explanatory Notes: #5.2.b IEEE Std 802.1Q IEEE Standard for Local and Metropolitan Area Networks - Bridges and Bridged Networks
The Link-local Registration Protocol (LRP) is being specified in IEEE P802.1CS Draft Standard for Local and Metropolitan Area Networks: Link-local Registration Protocol
#5.3 IEEE P802.1CS Draft Standard for Local and Metropolitan Area Networks: Link-local Registration Protocol
#5.5 IEEE Std 802.1CB IEEE Standard for Local and metropolitan area networks -- Frame Replication and Elimination for Reliability
#6.1.b While 'YANG' (developed by the Internet Engineering Task Force) appears to be an acronym its expansion 'Yet Another Next Generation' is not meaningful. YANG is a widely-used standard that is relevant to the Registration Authority.
IEEE Std 802 IEEE Standard for Local and Metropolitan Area Networks: Overview and Architecture

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/ieeeurn.pdf

RA OID tutorial: http://standards.ieee.org/develop/regauth/tut/oid.pdf

#7.3 for adoption under the exisiting PSDO agreement (refer to Jodi Haasz, IEEE staff)