

## P802.1Qdj

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This PAR is valid until 31-Dec-2023.

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

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- 1. Number of years that the extension is being requested:** 2
- 2. Why an Extension is Required (include actions to complete):** The draft has generated high interest from other projects like the IEC/IEEE 60802 TSN Profile for Industrial Automation. This resulted in a number of proposals that took time to discuss to determine their potential incorporation in the draft. The draft has reached technical maturity. Additional time is required to conclude Working Group balloting, as well as conduct Standards Association balloting.
- 3.1. What date did you begin writing the first draft:** 05 Nov 2020
- 3.2. How many people are actively working on the project:**30
- 3.3. How many times a year does the working group meet?**  
**In person:** 6  
**Via teleconference:** 20
- 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:** 85%
- 3.6. How many significant work revisions has the Draft been through:** 5
- 4. When will/did initial Standards Association Balloting begin:** Nov 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

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

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**Type of Project:** Amendment to IEEE Standard 802.1Q-2018  
**Project Request Type:** Initiation / Amendment  
**PAR Request Date:** 27 Jul 2019  
**PAR Approval Date:** 05 Sep 2019  
**PAR Expiration Date:** 31 Dec 2023  
**PAR Status:** Active  
**Root Project:** 802.1Q-2018

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

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**2.1 Project Title:** Standard for Local and Metropolitan Area Networks--Bridges and Bridged Networks  
Amendment: Configuration Enhancements for Time-Sensitive Networking

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- 3.1 Working Group:** Higher Layer LAN Protocols Working Group(C/LAN/MAN/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/LAN/MAN)
    - 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  
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**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

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**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 procedures, interfaces, and managed objects to enhance the three models of 'Time-Sensitive Networking (TSN) configuration'. It specifies enhancements to the User/Network Interface (UNI) to include new capabilities to support bridges and end stations in order to extend the configuration capability. This amendment preserves the existing separation between configuration models and protocol specifications. This amendment also addresses errors and omissions in the description of existing functionality.

**5.3 Is the completion of this standard contingent 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 management models and User/Network Interface (UNI) already described in Clause 46: Time-Sensitive Networking (TSN) configuration of IEEE Std 802.1Q include only the concepts (e.g. in form of a YANG types module) for managing bridged LANs using Time-Sensitive Networking (TSN) features. In order to be able to fully manage such bridged LANs with TSN features, comprehensive interfaces and management modules are required that are currently not available. Enhancements are especially needed for the 'fully centralized' and 'centralized network/distributed user' configuration models. 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.

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## **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.

The amendment may allow an OUI or Company Identifier (CID) to be used to create code points used in managed objects and protocol fields.

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**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 'Time-Sensitive Networking (TSN) configuration' is the title of clause 46 of IEEE Std 802.1Qcc-2018. The three existing TSN configuration models are described in subclause 46.1.3 TSN Configuration Models of IEEE Std 802.1Qcc-2018.

#5.5 Clause 46 'Time-Sensitive Networking (TSN) configuration' of IEEE Std 802.1Q can be found in IEEE Std 802.1Qcc-2018.

#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/ieeearn.pdf> RA OID tutorial: [http://](http://standards.ieee.org/develop/regauth/tut/oid.pdf)

[standards.ieee.org/develop/regauth/tut/oid.pdf](http://standards.ieee.org/develop/regauth/tut/oid.pdf)