P802.1Qdy

Type of Project: Amendment to IEEE Standard 802.1Q-2022
Project Request Type: Initiation / Amendment
PAR Request Date:
PAR Approval Date:
PAR Expiration Date:
PAR Status: Draft
Root Project: 802.1Q-2022

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

2.1 Project Title: IEEE Standard for Local and Metropolitan Area Networks--Bridges and Bridged Networks   Amendment: YANG for the Multiple Spanning Tree Protocol

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
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    Name: Jessy Rouyer
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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
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    3.2.2 Contact Information for Standards Committee Vice Chair:
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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: Mar 2025
4.3 Projected Completion Date for Submittal to RevCom: Dec 2025

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 YANG modules that enable configuration and status reporting for bridges and bridge components for the Multiple Spanning Tree Protocol (MSTP). This amendment addresses MSTP requirements arising from industrial automation networks, updating existing managed objects and updating the existing Management Information Base (MIB) to match the capabilities of the YANG modules.

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: 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 MSTP via YANG modules is needed for compatibility with modern network management systems. Industrial automation networks require parameter value ranges that can differ from those currently supported.
5.6 Stakeholders for the Standard: Manufacturers, distributors, vendors, and users of Virtual LAN bridging equipment and components thereof.

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 YANG modules will be assigned a Uniform Resource Name (URN) based on the IEEE Registration Authority (RA) URN tutorial and IEEE Std 802d.

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: 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. YANG is a data modeling language.

5.5: IETF Request For Comments (RFC) 7950 The YANG 1.1 Data Modeling Language

6.1.2: 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

IEEE RA URN tutorial: http://standards.ieee.org/develop/regauth/tut/ieeeurn.pdf