



P802.1DD

Type of Project: New IEEE Standard
Project Request Type: Initiation / New

PAR Request Date: PAR Approval Date: PAR Expiration Date: PAR Status: Draft

1.1 Project Number: P802.1DD **1.2 Type of Document:** Standard

1.3 Life Cycle: Full Use

2.1 Project Title: Resource Allocation 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

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: James Gilb

Email Address: qilb ieee@tuta.com

3.2.2 Contact Information for Standards Committee Vice Chair:

Name: David Halasz

Email Address: dave.halasz@ieee.org

3.2.3 Contact Information for Standards Representative:

Name: George Zimmerman

Email Address: george@cmephyconsulting.com

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE SA for Initial Standards Committee Ballot:

Jul 2025

4.3 Projected Completion Date for Submittal to RevCom: Mar 2026

5.1 Approximate number of people expected to be actively involved in the development of this project: 30

5.2 Scope of proposed standard: This standard specifies protocols, procedures, and managed objects for resource allocation in IEEE 802.1 Bridges for dynamic creation and maintenance of data streams. This standard supports both control signaling through data paths, and through separate control and data paths in support of centralized control.

5.3 Is the completion of this standard contingent upon the completion of another standard? No

5.4 Purpose: RAP is designed to provide resource allocation through a network for time-sensitive streams.

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 protocol specifications do not support the scaling required for new network applications and reservation allocation on simultaneously available redundant paths.

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

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 Data Model will be assigned a Uniform Resource Name (URN) based on the IEEE 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

8.1 Additional Explanatory Notes: #5.2:

The scaling and improvement provided by this standard may require existing end station and Bridges implementations that currently use SRP to implement additional or replacement protocols. To be determined during the development of this standard.

IEEE Std 802.1Q, IEEE Standard for Local and metropolitan area networks - Bridges and Bridged Networks IEEE Std 802.1CB, IEEE Standard for Local and metropolitan area networks - Frame Replication and Elimination for Reliability

#6.1.2:

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