
P802.1CBxy

Type of Project: Amendment to IEEE Standard 802.1CB-2017

Project Request Type: Initiation / Amendment

PAR Request Date:

PAR Approval Date:

PAR Expiration Date:

PAR Status: Draft

Root Project: 802.1CB-2017

1.1 Project Number: P802.1CBxy

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Project Title: IEEE Standard for Local and metropolitan area networks--Frame Replication and Elimination for Reliability Amendment: Sequence Recovery Function Parameter Configuration

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:

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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:

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3.2.2 Contact Information for Standards Committee Vice Chair:

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3.2.3 Contact Information for Standards Representative:

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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:

Jul 2027

4.3 Projected Completion Date for Submittal to RevCom: Jul 2028

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 procedures, managed objects, and protocols for bridges and end systems that provide identification and replication of packets for redundant transmission, identification of duplicate packets, and elimination of duplicate packets. It is not concerned with the creation of the multiple paths over which the duplicates are transmitted.

5.2.b Scope of the project: This amendment adds an informative annex describing recommended values for the existing sequence recovery function parameters and providing guidance useful for determining requirements for frame buffering (in relay and end systems), to assist in the proper usage of Frame Replication and Elimination for Reliability.

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

5.4 Purpose: This document will not include a purpose clause.

5.5 Need for the Project: To achieve fault tolerance introduced by IEEE Std 802.1CB, it is necessary to identify and eliminate duplicate frames and store and forward non-duplicate frames. Currently, there exists no guidance on the configuration of the sequence recovery function parameters and on buffering for proper elimination. This can lead to duplicates being passed and valid frames being discarded entirely. This informative annex provides a guidance on parameter values and buffering for the proper behavior of IEEE Std 802.1CB.

5.6 Stakeholders for the Standard: Developers, providers, and users of IEEE Std 802.1CB for networking services and equipment. This includes industrial automation, in-vehicle networking, aerospace onboard

networking, professional audio-video, and other systems requiring communication with the increased reliability of duplicate frame transmission.

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?

No

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: