

P802.1CBdb

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

PAR Request Date: 20-Mar-2018

PAR Approval Date: 14-May-2018

PAR Expiration Date: 31-Dec-2022

Status: PAR for an Amendment to an existing IEEE Standard

Root Project: 802.1CB-2017

1.1 Project Number: P802.1CBdb

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Draft Standard for Local and metropolitan area networks -- Frame Replication and Elimination for Reliability
Amendment: Extended Stream Identification Functions

3.1 Working Group: Higher Layer LAN Protocols Working Group (C/LM/WG802.1)

Contact Information for Working Group Chair

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3.2 Sponsoring Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee (C/LM)

Contact Information for Sponsor 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 Sponsor Ballot: 12/2020

4.3 Projected Completion Date for Submittal to RevCom

Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 08/2021

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 stations that provide:

- Identification and replication of frames, for redundant transmission.
- Identification of duplicate frames.
- Elimination of duplicate frames.

Changes in scope: This standard specifies procedures, managed objects, and protocols for bridges and end systems stations that provide: ~~identification-~~ **Identification** and replication of ~~packets~~ **frames**, for redundant transmission. ~~identification-~~ **Identification** duplicate packets, and elimination of duplicate ~~packets~~ **frames**. It is **Elimination** not concerned with the creation of the ~~duplicate~~ **multiple paths over** which the ~~duplicates~~ **frames** are transmitted.

5.2.b. Scope of the project: This amendment specifies procedures and managed objects that add new stream identification functions. Additionally this amendment addresses errors and clarifications.

5.3 Is the completion of this standard dependent upon the completion of another standard: Yes

If yes please explain: This project will base its Management Information Base (MIB) and YANG models on those that will be defined in 802.1CBcv.

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

5.5 Need for the Project: Stream identification is required by an increasing number of traffic management mechanisms implemented in Layer 2: ingress policing, traffic scheduling, congestion management, mapping to traffic classes, that make Ethernet networks suitable for a growing number of applications. Current stream identification methods defined in IEEE Std 802.1CB are insufficient for some of these applications.

5.6 Stakeholders for the Standard: Developers, providers, and users of networking services and equipment for Industrial Automation, In-vehicle networking, Professional Audio-Video (AV), Data Center and other systems requiring application-based traffic classification, including networking integrated circuit (IC) developers, bridge and Network Interface Card (NIC) vendors.

Intellectual Property

6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: No

6.1.b. Is the Sponsor aware of possible registration activity related to this project?: Yes

If yes please explain: The project will extend the YANG data model specified in 802.1CBcv identified by a Uniform Resource Name (URN). The project will also extend the Simple Network Management Protocol (SNMP) MIB module specified in 802.1CBcv identified by an Object Identifier (OID). The stream identification functions will use MAC addresses as input parameters.

7.1 Are there other standards or projects with a similar scope?: No

7.2 Joint Development

Is it the intent to develop this document jointly with another organization?: No

8.1 Additional Explanatory Notes: #5.3 While 'YANG' (developed by the Internet Engineering Task Force) appears to be an acronym its expansion 'Yet Another Next Generation' is not meaningful.

#5.3 802.1CBcv: Frame Replication and Elimination for Reliability Amendment: Information Model, YANG Data Model and Management Information Base Module.