

P802.1AX

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Type of Project: Revision to IEEE Standard 802.1AX-2014

PAR Request Date: 16-Mar-2016

PAR Approval Date:

PAR Expiration Date:

Status: Unapproved PAR, PAR for a Revision to an existing IEEE Standard

1.1 Project Number: P802.1AX

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Standard for Local and metropolitan area networks -- Link Aggregation

Changes in title: ~~IEEE~~ Standard for Local and metropolitan area networks -- Link Aggregation

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

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

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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: 07/2017

4.3 Projected Completion Date for Submittal to RevCom: 02/2018

5.1 Approximate number of people expected to be actively involved in the development of this project: 15

5.2 Scope: Link Aggregation provides protocols, procedures, and managed objects that allow the following: One or more parallel instances of full-duplex point-to-point links to be aggregated together to form a Link Aggregation Group (LAG), such that a MAC Client can treat the LAG as if it were a single link.; A resilient interconnect using multiple full-duplex point-to-point links among one to three nodes in a network and one to three nodes in another, separately administered, network, along with a means to ensure that frames belonging to any given service will use the same physical path in both directions between the two networks. This standard defines the MAC-independent Link Aggregation capability and general information relevant to specific MAC types that support Link Aggregation. The capabilities defined are compatible with previous versions of this standard.

5.3 Is the completion of this standard dependent upon the completion of another standard: No

5.4 Purpose: Link Aggregation allows the establishment of full-duplex point-to-point links that have a higher aggregate bandwidth than the individual links that form the aggregation, and the use of multiple systems at each end of the aggregation. This allows improved utilization of available links in bridged local area network (LAN) environments, along with improved resilience in the face of failure of individual links or systems. In applications connecting separately administered networks, the networks are isolated from each other's fault recovery events.

5.5 Need for the Project: There is a need to correct and clarify Link Aggregation specifications and in particular the Distributed Resilient Network Interface specifications, in the light of implementation experience to ensure interoperability and ensure proper operation. Furthermore there is a need to correct some known problems identified in the maintenance process.

The scope of these changes is most appropriately handled as a revision.

5.6 Stakeholders for the Standard: The stakeholders for this standard are the semiconductor manufacturers, system product manufacturers (e.g., switch and Network Interface Controllers), network providers (e.g. installers, support, enterprises), bandwidth providers (e.g., carriers), and users of Link Aggregation as currently defined in IEEE Std 802.1AX-2014.

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?: No

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 (Item Number and Explanation):