P802.1AB

Submitter Email: gparsons@ieee.org
Type of Project: Revision to IEEE Standard 802.1AB-2009
PAR Request Date: 09-Sep-2014
PAR Approval Date: 10-Dec-2014
PAR Expiration Date: 31-Dec-2018
Status: PAR for a Revision to an existing IEEE Standard
Root Project: 802.1AB-2009

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

2.1 Title: Standard for Local and Metropolitan Area Networks - Station and Media Access Control Connectivity Discovery

Changes in title: ~~IEEE~~ Standard for Local and Metropolitan Area Networks~~-~~ - Station and Media Access Control Connectivity Discovery

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)
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: 01/2016
4.3 Projected Completion Date for Submittal to RevCom: 10/2016

5.1 Approximate number of people expected to be actively involved in the development of this project: 40

5.2 Scope: The scope of this standard is to define a protocol and management elements, suitable for advertising information to stations attached to the same IEEE 802 LAN, for the purpose of populating physical topology and device discovery management information databases. The protocol facilitates the identification of stations connected by IEEE 802 LANs/MANs, their points of interconnection, and access points for management protocols.

This standard defines a protocol that

a) Advertises connectivity and management information about the local station to adjacent stations on the same IEEE 802 LAN.

b) Receives network management information from adjacent stations on the same IEEE 802 LAN.

Changes in scope: The scope of this standard is to define a protocol and management elements, suitable for advertising information to stations attached to the same IEEE 802 LAN, for the purpose of populating physical topology and device discovery management information databases. The protocol facilitates the identification ~~ofstations~~of stations connected by IEEE 802 LANs/MANs, their points of interconnection, and access points for management protocols. This standard defines a protocol that a) Advertises connectivity and management information about the local station to adjacent stations on the same IEEE 802 LAN. b) Receives network management information from adjacent stations on the same IEEE 802 LAN. c) Operates with all IEEE 802 access protocols and network media. d) Establishes a network management information schema and object definitions that are suitable for storing connection information about adjacent stations. e) Provides compatibility with the IETF ~~PTOPO MIB (IETF~~ RFC 2922~~[B14])~~.

c) Operates with all IEEE 802 access protocols and network media.

d) Establishes a network management information schema and object definitions that are suitable for storing connection information about adjacent stations.

e) Provides compatibility with the IETF RFC 2922.

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

5.4 Purpose: IETF RFC 2922, as well as a number of vendor specific MIBs, have been created to describe a network's physical topology and associated systems within that topology.
This standard specifies the necessary protocol and management elements to a) Facilitate multi-vendor inter-operability and the use of standard management tools to discover and make available physical topology information for network management.

b) Make it possible for network management to discover certain configuration inconsistencies or malfunctions that can result in impaired communication at higher layers.

c) Provide information to assist network management in making resource changes and/or reconfigurations that correct configuration inconsistencies or malfunctions identified in b) above.

Changes in purpose: ~~An~~ IETF ~~MIB (IETF~~ RFC 2922~~[B14])~~, as well as a number of vendor specific MIBs, have been created to describe a network's physical topology and associated systems within that topology. This standard specifies the necessary protocol and management elements to a) Facilitate multi-vendor inter-operability and the use of standard management tools to discover and make available physical topology information for network management. b) Make it possible for network management to discover certain configuration inconsistencies or malfunctions that can result in impaired communication at higher layers. c) Provide information to assist network management in making resource changes and/or reconfigurations that correct configuration inconsistencies or malfunctions identified in b) above.

5.5 Need for the Project: There is one published corrigendum to the standard, and a second is under development; it is desirable to revise the standard to incorporate both corrigenda. This revision is being performed solely in order to merge the two corrigenda with the base document; the project will not include any new functionality in the revised standard.

5.6 Stakeholders for the Standard: This standard will be of interest to all current 802 LAN users as well as new use cases such as consumer electronics, telecom and data center networking

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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

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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

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8.1 Additional Explanatory Notes (Item Number and Explanation): 5.2 and 5.4: IETF RFC 2922 is "Physical Topology MIB (Management Information Base)"