P802.1ABcu

This PAR is valid until 31-Dec-2021.

PAR Extension Request Date:
PAR Extension Approval Date:
Extension Request Submitter Email:
Number of Previous Extensions Requested: 0

1. Number of years that the extension is being requested: 1
2. Why an Extension is Required (include actions to complete): While the plan is to submit to RevCom before PAR expiration; an extension is required in case there are any delays in the completion of SA balloting.
3.1. What date did you begin writing the first draft: 25 Feb 2018
3.2. How many people are actively working on the project:35
3.3. How many times a year does the working group meet?
In person: 6
Via teleconference: 40
3.4. How many times a year is a draft circulated to the working group: 2
3.5. What percentage of the Draft is stable: 99%
3.6. How many significant work revisions has the Draft been through: 5
4. When will/did initial Standards Association Balloting begin: Jun 2021

When do you expect to submit the proposed standard to RevCom: Nov 2021
Has this document already been adopted by another source? (if so please identify) No

For an extension request, the information on the original PAR below is not open to modification.

Submitter Email: glenn.parsons@ericsson.com
Type of Project: Amendment to IEEE Standard 802.1AB-2016
Project Request Type: Initiation / Amendment
PAR Request Date: 18 Jul 2017
PAR Approval Date: 28 Sep 2017
PAR Expiration Date: 31 Dec 2021
PAR Status: Active
Root Project: 802.1AB-2016

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

2.1 Project Title: Standard for Local and Metropolitan Area Networks - Station and Media Access Control Connectivity Discovery Amendment: YANG Data Model

3.1 Working Group: Higher Layer LAN Protocols Working Group(C/LM/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/LM)
3.2.1 Contact Information for Standards Committee Chair:
Name: Paul Nikolich
Email Address: p.nikolich@ieee.org
3.2.2 Contact Information for Standards Committee Vice Chair:
Name: James Gilb
Email Address: gilb@ieee.org
3.2.3 Contact Information for Standards Representative:
Name: James Gilb
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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 2019
4.3 Projected Completion Date for Submittal to RevCom: May 2020

5.1 Approximate number of people expected to be actively involved in the development of this project: 20
5.2.a Scope of the complete standard: 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. 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 [B9]).
5.2.b Scope of the project: This amendment specifies a Unified Modeling Language (UML)-based information model and a YANG data model that allows configuration and status reporting for bridges and bridge components with regards to topology discovery (as specified by this standard) with the capabilities currently specified in clauses 10 (LLDP management) and 11 (LLDP MIB definitions). Additionally, this amendment will address errors or omissions to existing features.

5.3 Is the completion of this standard contingent upon the completion of another standard? No
5.4 Purpose: 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 re-configurations that correct configuration inconsistencies or malfunctions identified in b) above.
Change to Purpose: ~~An IETF MIB (IETF RFC 2922 [B9]) and 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 re-configurations that correct configuration inconsistencies or malfunctions identified in b) above.
5.5 Need for the Project: YANG (RFC 7950) is a formalized data modeling language that is widely accepted and can be used to simplify network configuration. The ability to manage the Link Layer Discovery Protocol (LLDP) via YANG model is needed for compatibility with modern network management systems.
5.6 Stakeholders for the Standard: Developers, providers, and users of networking services and equipment.

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 URN based on the 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

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8.1 Additional Explanatory Notes: #2.1 While 'YANG' (developed by the Internet Engineering Task Force) appears to be an acronym its expansion 'Yet Another Next Generation' is not meaningful. It is vital that 'YANG' appear in the project title to inform potential participants and the target readership of the amendment.
#5.4 The first sentence of the original purpose has been deleted because it is obsolete.
#5.5 RFC 7950 The YANG 1.1 Data Modeling Language
#6.1b IEEE Std 802d IEEE Standard for Local and Metropolitan Area Networks: Overview and Architecture Amendment 1: Allocation of Uniform Resource Name (URN) Values in IEEE 802 Standards
RA URN tutorial: http://standards.ieee.org/develop/regauth/tut/ieeeurn.pdf
RA - Registration Authority

URN - Uniform Resource Name