P802f

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Type of Project: Amendment to IEEE Standard 802-2014

PAR Request Date: 11-Sep-2019

PAR Approval Date: PAR Expiration Date:

Status: Unapproved PAR, PAR for an Amendment to an existing IEEE Standard

1.1 Project Number: P802f1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Standard for Local and Metropolitan Area Networks: Overview and Architecture

Amendment: YANG Data Model for EtherTypes

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: 07/2021

4.3 Projected Completion Date for Submittal to RevCom

Note: Usual minimum time between initial sponsor ballot and submission to Revcom is 6 months.: 02/2022

5.1 Approximate number of people expected to be actively involved in the development of this project: 10

5.2.a. Scope of the complete standard: This standard contains descriptions of the IEEE 802(R) standards published by the IEEE for frame-based data networks as well as a reference model (RM) for protocol standards. The IEEE 802 architecture is defined, and a specification for the identification of public, private, and standard protocols is included.

5.2.b. Scope of the project: This amendment specifies YANG modules that contain the EtherType information, including a compact human-readable name and description. The name and description for an initial set of EtherTypes are defined for inclusion in the IEEE Registration Authority EtherType public listing. This amendment also addresses errors and omissions in IEEE Std 802 description of existing functionality.

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

5.4 Purpose: This standard serves as the foundation for the family of IEEE 802 standards published by IEEE for local area networks (LANs), metropolitan area networks (MANs), personal area networks (PANs), and regional area networks (RANs).

5.5 Need for the Project: The IEEE Registration Authority EtherTypes public listing may be misleading because assignees, whose contact information is often unreliable, have not updated the information provided on their application for the EtherType. This project is the most efficient way to create an accurate listing of the common names and descriptions used within the industry for the protocols identified by a

particular EtherType. YANG (Request for Comment (RFC) 7950) is a formalized data modeling language that is widely accepted and can be used to simplify network configuration. A YANG module with an authoritative list of EtherTypes enhances compatibility of modern networks and aids in the efficiency of managing them.

5.6 Stakeholders for the Standard: Developers, providers, and users of networking services and equipment.

Intellectual Property

6.1.a. Is the Sponsor aware of any copyright permissions needed for this project?: Yes

If yes please explain: The project will be based on and possibly include content from RFC 8519. The project is being done at the encouragement of IETF, so copyright permission is not expected to be a problem.

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

If yes please explain: The YANG Data Model will be assigned a Uniform Resource Name (URN) based on the IEEE Registration Authority URN tutorial and IEEE Std 802d. The project will require coordination with the IEEE Registration Authority Committee and the IEEE Registration Authority to update the EtherType tutorial, the EtherType Public Listing, the application for EtherType assignments, and perhaps other registry documents and processes.

7.1 Are there other standards or projects with a similar scope?: Yes

If Yes please explain: The Internet Engineering Task Force (IETF) has requested that the IEEE create an EtherTypes YANG module, since the IEEE owns the EtherTypes registry. The IETF will use the IEEE YANG module once completed and deprecate the EtherTypes Module they have written which is found in RFC 8519 "YANG Data Model for Network Access Control Lists (ACLs)" https://tools.ietf.org/html/rfc8519.

and answer the following

Sponsor Organization: Internet Engineering Task Force

Project/Standard Number: RFC 8519 Project/Standard Date: 01-Mar-2019

Project/Standard Title: YANG Data Model for Network Access Control Lists (ACLs)

7.2 Joint Development

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

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 participant and the target readership of the amendment.

#7.1 Drafts can be reviewed by IETF YANG experts.

#6.1.b The IEEE Registration Authority URN tutorial can be found at https:

//standards.ieee.org/content/dam/ieee-standards/standards/web/documents/tutorials/ieeeurn.pdf

#6.1.b IEEE 802d-2017 - IEEE Standard for Local and Metropolitan Area Networks: Overview and Architecture Amendment 1: Allocation of Uniform Resource Name (URN) Values in IEEE 802(R) Standards"

#6.1.b The EtherType tutorial can be found at https://standards.ieee.org

/content/dam/ieee-standards/standards/web/documents/tutorials/ethertype.pdf

#6.1.b The EtherType Public Listing can be found at http://standards-oui.ieee.org/ethertype/eth.txt