Proposed P802c PAR Text

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Re: 802.1 Local Address Study Group

Venue:
    IEEE 802.1 Working Group, 13 January 2015
Purpose:
    To propose draft P802c PAR text.

    Note that text is shown as a markup with respect to the P802c PAR
proposal of the 802.1 Working Group of November 2014.

P802c

Type of Project: Amendment to IEEE Standard 802-2014

Status: Unapproved PAR, PAR for an Amendment to an existing IEEE Standard
1.1 Project Number: P802c
1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Standard for Local and Metropolitan Area Networks: Overview and Architecture Amendment: Local Media Access Control (MAC) Addressing

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

3.2 Sponsoring Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee (C/LM)
4.1 Type of Ballot: Individual
4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 03/2016

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

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: The amendment will provide nonexclusive recommendations for using local addresses. It will designate a range of addresses for protocols using a Company ID assigned by the IEEE Registration Authority. Another range of local addresses will be designated for assignment by local administrators. The amendment will recommend a range of local addresses for use by IEEE 802 switching protocols.

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: Currently, global addresses are assigned to most IEEE 802 end stations and bridge ports. Increasing use of virtual machines and Internet of Things (IoT) devices could exhaust the global address space if global addresses are assigned. This project will enable protocols that automatically configure addresses in a range of local address space. Such protocols will allow virtual machines and IoT devices to obtain a local address without local administration.

5.6 Stakeholders for the Standard: Developers, providers, and users of networking services and equipment for IoT (including Industrial Automation, Transportation networking, Smart Grid) and of operating systems, hypervisors and orchestration systems for virtual machines. This includes software developers, networking IC developers, bridge and NIC vendors, and users.

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:** This will designate a portion of the address space for protocols using an IEEE Registration Authority assigned Company ID and one or more blocks of CID space to be agreed with the IEEE Registration Authority.

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):