

Once you approve and submit the following information, changes may only be made through the NesCom Administrator.

<b>Draft PAR Confirmation Number</b> xxxxxx
<b>Submittal Email:</b> tony@jeffree.co.uk
<b>Type of Project:</b> Modify Existing Approved PAR
<b>1.1 Project Number:</b> P802.1AB
<b>1.2 Type of Document:</b> Standard for
<b>1.3 Life Cycle:</b> Full
<b>1.4 Is this project in ballot now?</b> No
<b>1.5 Is the balloting group aware of the PAR modification?</b> No Balloting group has yet to be formed.
<b>2.1 Title of Standard:</b> Standard for Local and metropolitan area networks -- Station and Media Access Control Connectivity Discovery
<b>3.1 Name of Working Group:</b> Higher Layer LAN Protocols Working Group(C/LM/WG802.1)  <b>Contact information for Working Group Chair</b> Anthony Jeffree 11a Poplar Grove Sale, Cheshire M33 3AX GB tony@jeffree.co.uk <b>Working Group Vice Chair:</b> Paul Congdon 9489 Treelake Road Granite Bay, CA 95746 US, <b>Email:</b> paul.congdon@hp.com
<b>3.2 Sponsoring Society and Committee:</b> IEEE Computer Society/Local and Metropolitan Area Networks(C/LM) <b>Contact information for Sponsor Chair:</b> Paul Nikolich 18 Bishops Lane Lynnfield, MA 01940 US p.nikolich@ieee.org <b>Contact information for Standards Representative:</b>
<b>4.1 Type of Ballot:</b> Individual
<b>4.2 Expected Date of Submission for Initial Sponsor Ballot:</b> 2008-11
<b>4.3 Projected Completion Date for Submittal to RevCom:</b> 2009-07
<b>5.1 Approximate number of people expected to work on this project:</b> 50
<b>5.2 Scope of Proposed Standard:</b> 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 [B15])

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

**If yes, please explain:**

**5.4 Purpose of Proposed Standard:** An IETF Standard MIB (IETF RFC 2922 [B15]), 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.

**Old Purpose:** An IETF Standard MIB (IETF RFC 2922 [B15]), 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. However, there is no standard protocol for populating these MIBs or communicating this information among stations on the IEEE 802 LAN. 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:** New destination addresses and explicit forwarding rules for LLDP frames are needed to accurately determine the topology over transparent forwarding devices such as those defined by 802.1ad and 802.1aj. Additionally, new and developing 802 standards, such as 802.3at, 802.1at and 802.1au, have the need to rapidly discover the boundary in the topology for which particular capabilities are operating. New information elements and a more rapid exchange of LLDP frames is necessary to support the timely discovery of this boundary. Users of this standard will be able to accurately exchange information on a greater set of 802.1 topologies and will experience a more rapid convergence of information.

**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

#### Intellectual Property

**6.1.a.** Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting this PAR prior to the PAR submittal to the IEEE-SA Standards Board?

Yes

If yes, state date: 2008-07-16

If no, please explain:

**6.1.b.** Is the Sponsor aware of any copyright permissions needed for this project? No

If yes, please explain:

**6.1.c.** Is the Sponsor aware of possible registration activity related to this project? No

If yes, please explain:

**7.1 Are there other standards or projects with a similar scope? No**

Explanation:

Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

**7.2 International Standards Activities****a. Adoptions**

Is there potential for this standard to be adopted by another organization? No

Organization:

Technical Committee Name:

Technical Committee Number:

Contact person Name:

Contact Phone:

Contact Email:

**b. Joint Development**

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

Organization:

Technical Committee Name:

Technical Committee Number:

Contact person Name:

Contact Phone:

Contact Email:

**c. Harmonization**

Are you aware of another organization that may be interested in portions of this document in their standardization development efforts? No

Organization:

Technical Committee Name:

Technical Committee Number:

Contact person Name:

Contact Phone:

Contact Email:

**8.1 Additional Explanatory Notes: (Item Number and Explanation)**

The Purpose has been changed to remove the second sentence; this was removed as it was not necessary to include it in the Purpose in the final standard.

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Contact the [NesCom Administrator](#)