

Draft PAR Confirmation Number: 187221288.19777
Submittal Email: tony@jeffree.co.uk <input type="button" value="Change Submitter Email"/>
Type of Project: Amendment to an Existing Standard 802.1Q-2005
1.1 Project Number: P802.1Qaw
1.2 Type of Document: Standard for
1.3 Life Cycle: Full
1.4 Is this project in ballot now? No
2.1 Title of Standard: IEEE Standard for Local and Metropolitan Area Networks---Virtual Bridged Local Area Networks - Amendment: Management of data driven and data dependent connectivity faults
3.1 Name of Working Group: Higher Layer LAN Protocols Working Group <input type="button" value="Add/Change Working Group"/>
Contact information for Working Group Chair Tony A Jeffree Email: tony@jeffree.co.uk Phone: +44-161-973-4278
Contact Information for Working Group Vice Chair Paul Congdon Email: paul.congdon@hp.com Phone: 916-785-5753
3.2 Sponsoring Society and Committee: IEEE Computer Society/Local and Metropolitan Area Networks (C/LM) Contact information for Sponsor Chair: Paul Nikolich Email: p.nikolich@ieee.org Phone: 857-205-0050 Contact information for Standards Representative: Email: Phone:
3.3 Joint Sponsor: / () Contact information for Sponsor Chair: Email: Phone: Contact information for Standards Representative: Email: Phone:
4.1 Type of Ballot: Individual
4.2 Expected Date of Submission for Initial Sponsor Ballot: 2010-07
4.3 Projected Completion Date for Submittal to RevCom: 2010-12
5.1 Approximate number of people expected to work on this project: 50

5.2 Scope of Proposed Standard: This standard specifies connectivity fault management protocols, procedures, and managed objects that provide confirmation of successful transmission of frames conveying specified data. This capability supports diagnosis of faults sensitive to, or caused by, particular data patterns, and their isolation to part of the data path. Connectivity verification can be carried out from any single point with bridged connectivity to maintenance points on the data path, can isolate failures to communicate in a specific direction, and can be carried out while service is being provided to other users of the data path. Security considerations are addressed by the use of the mechanisms defined in IEEE Stds 802.1X, 802.1AE, and P802.1af.

Old Scope:

5.3 Is the completion of this standard is dependent upon the completion of another standard: Yes

If yes, please explain: This standard defines extensions to the connectivity fault management mechanisms that are being defined in P802.1ag, which should be approved by mid-2007.

5.4 Purpose of Proposed Standard: While bridged networks are notionally transparent to the users' data, they are often deployed as part of a service offering that selectively filters data frames (e.g. firewall functionality), automatically configures some aspect of service in response to data frames (e.g. IGMP snooping), or is supported by transmission in a data-sensitive way (e.g. IEEE Std 802.3ad Link Aggregation). This standard defines the protocols (including CFM OpCodes) and managed objects required for data-sensitive connectivity verification that is multi-vendor, interoperable, and uses the framework provided by IEEE P802.1ag Connectivity Fault Management.

Old Purpose:

5.5 Need for the Project: There is considerable demand, from the service providers that currently use or plan to use IEEE 802.1 bridging standards, for diagnostic functionality equivalent to that provided by reflecting all data frames (as used by other network technologies) and operates in a broadly similar way. A straight forward application of reflection to IEEE 802.1Q networks is known to cause problems that can be hard to diagnose while not addressing complex fault scenarios, but is likely to be widely implemented in the absence of a better standard solution. The proposed amendment offers that solution, and includes additional capabilities required in bridged networks.

5.6 Stakeholders for the Standard: Developers and users of networking equipment for Bridged LAN environments, including networking IC developers, switch and NIC developers, networking equipment and services vendors, and LAN users.

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: 2006-09-26

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

If yes, please explain:

and answer the following: Sponsor Organization:

Project/Standard Number:

Project/Standard Date: 0000-00-00

Project/Standard Title:

7.2 Future Adoptions

Is there potential for this standard (in part or in whole) to be adopted by another national, regional, or international organization? No

If Yes, the following questions must be answered:

Technical Committee Name and Number:

Other Organization Contact Information:

Contact person:

Contact Email address:

7.3 Will this project result in any health, safety, security, or environmental guidance that affects or applies to human health or safety? No

If yes, please explain:

7.4 Additional Explanatory Notes: (Item Number and Explanation)

8.1 Sponsor Information:

Is the scope of this project within the approved scope/definition of the Sponsor's Charter? Yes

If no, please explain:

Contact the [NesCom Administrator](#)