

P802.1Qbg

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Type of Project: Amendment to IEEE Standard 802.1Q-2005

PAR Request Date: 14-Sep-2009

PAR Approval Date:

PAR Expiration Date:

Status: Unapproved PAR, PAR for an Amendment to an existing IEEE Standard 802.1Q-2005

1.1 Project Number: P802.1Qbg

1.2 Type of Document: Standard

1.3 Life Cycle: Full Use

2.1 Title: Standard for Local and Metropolitan Area Networks---Virtual Bridged Local Area NetworksAmendment: Edge Virtual Bridging

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/Local and Metropolitan Area Networks (C/LM)

Contact Information for Sponsor Chair

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Contact Information for Standards Representative

None

4.1 Type of Ballot: Individual

4.2 Expected Date of submission of draft to the IEEE-SA for Initial Sponsor Ballot: 12/2011

4.3 Projected Completion Date for Submittal to RevCom: 06/2012

5.1 Approximate number of people expected to be actively involved in the development of this project: 30

5.2 Scope: This standard specifies protocols, procedures, and managed objects that:

- Provide for the discovery, configuration, and control of a pair of direct-attached limited-function Service VLAN (S-VLAN) components to extend the services of a customer bridge to remote ports and enable coexistence of multiple services on station-resident ports. (e.g. port aggregation services, embedded bridging)
- Provide for discovery, configuration, and control of a Reflective Relay Service for a bridge port when it is connected to a Port Aggregation Service.
- Define the requirements for, and operation of, a Port Aggregation Service required to allow the loop free operation of the Reflective Relay Service.
- Provide for discovery of, and coordinated configuration of, station-embedded Port Aggregators and station embedded Customer VLAN (C-VLAN) Components.

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

If yes please explain: A limited-function S-VLAN component is being defined by 802.1Qbc (Provider Bridging Remote Customer Service Interface). There are expected to be common elements between these S-VLAN components.

5.4 Purpose: The purpose of this standard is to allow multiple virtual stations to share a common bridge port to obtain the services of bridge relay. The standard enables coordinated configuration and management of bridge services for virtual stations.

5.5 Need for the Project: Station (desktop and server) virtualization is introducing a proliferation of virtual stations that share access to a network through an embedded bridge. The embedded bridge in a virtual station host and bridges in the adjacent network may be under different management domains. Network administrators may desire an extension of the adjacent bridge capabilities to the virtual station ports. A reflective relay service is needed so that inter-virtual-station traffic can be exposed to the relay in the adjacent bridge as well as its associated services (e.g., security, statistics, etc.).

A pairing of limited-functionality S-VLAN Components is needed to allow for multiple virtual links between an adjacent bridge and a virtual station host so that the host can support multiple services (port aggregation, embedded bridging, dedicated bridge link).

5.6 Stakeholders for the Standard: Developers, providers, and users of networking services and equipment for data center environments including 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?: No

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

7.2 International Activities

a. Adoption

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

b. Joint Development

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

c. Harmonization

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

8.1 Additional Explanatory Notes (Item Number and Explanation):

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