



P802.1Qdq

Submitter Email:

Type of Project: Amendment to IEEE Standard 802.1Q-2018

Project Request Type: Initiation / Amendment

PAR Request Date:
PAR Approval Date:
PAR Expiration Date:
PAR Status: Draft

Root Project: 802.1Q-2018

1.1 Project Number: P802.1Qdq **1.2 Type of Document:** Standard

1.3 Life Cycle: Full Use

2.1 Project Title: IEEE Standard for Local and Metropolitan Area Networks--Bridges and Bridged

Networks

Amendment: Traffic Specification for Bursty Traffic with Bounded Latency

3.1 Working Group: Higher Layer LAN Protocols Working Group(C/LM/802.1 WG)

3.1.1 Contact Information for Working Group Chair:

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3.2 Society and Committee: IEEE Computer Society/LAN/MAN Standards Committee(C/LM)

3.2.1 Contact Information for Standards Committee 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 Standards Committee Ballot:

Mar 2022

4.3 Projected Completion Date for Submittal to RevCom: Nov 2022

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

5.2.a Scope of the complete standard:This standard specifies Bridges that interconnect individual LANs, each supporting the IEEE 802 MAC Service using a different or identical media access control method, to provide Bridged Networks and VLANs.

5.2.b Scope of the project: This amendment adds an informative annex that describes Traffic Specification (TSpec) settings for bursty traffic with bounded latency. It recommends TSpec settings for use in stream reservation by time-sensitive applications.

5.3 Is the completion of this standard contingent upon the completion of another standard? No

5.4 Purpose: Bridges, as specified by this standard, allow the compatible interconnection of information technology equipment attached to separate individual LANs.

5.5 Need for the Project: Many networks serve traffic with a variety of characteristics including bursty traffic, such as the one generated from IoT devices, which requires to be conveyed between end-stations with bounded latency. Shaping is needed in order to mitigate the impact of a temporarily high network load caused by this bursty traffic when it shares the same port with other traffic, and avoiding over-provisioning of bandwidth reservation, while ensuring its delivery within its delivery time tolerance. It is therefore necessary to clarify the definition and use of Traffic Specification for this specific characteristic of traffic and to give recommendation for its setting in the applicable shaper.

5.6 Stakeholders for the Standard: Developers, providers, and users of networking services and equipment for systems requiring bursty traffic to be delivered with bounded latency.

6.1 Intellectual Property

- **6.1.1** Is the Standards Committee aware of any copyright permissions needed for this project?
- **6.1.2** Is the Standards Committee 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 Is it the intent to develop this document jointly with another organization? No
- **8.1 Additional Explanatory Notes:** None