RSS

802.1Qbv - Enhancements for Scheduled Traffic

The full title of this PAR is "Standard for Local and Metropolitan Area Networks-Media Access Control (MAC) Bridges and Virtual Bridged Local Area Networks Amendment: Enhancements for Scheduled Traffic".

This amendment specifies time-aware queue-draining procedures, managed objects and extensions to existing protocols that enable bridges and end stations to schedule the transmission of frames based on timing derived from IEEE Std 802.1AS. Virtual Local Area Network (VLAN) tag encoded priority values are allocated allowing simultaneous support of scheduled traffic, credit-based shaper traffic and other bridged traffic over Local Area Networks (LANs).

Bridges are increasingly used to interconnect devices that support scheduled applications (e.g., industrial automation, process control and vehicle control). This amendment will provide performance assurances of latency and delivery variation to enable these applications in an engineered LAN while maintaining the existing guarantees for the credit-based shaper and best-effort traffic.

The credit-based shaper works well in arbitrary networks (i.e., non-engineered). Networks employing scheduled transmissions are able to control real-time processes. This amendment enables those two kinds of networks to be consolidated into a single network, with a significant cost reduction to the user.

Current Status

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Archive

Date	Document
08 Jun 2012	802.1Qbv, Draft 0.0
09 Nov	802.1Qbv, Draft 0.1

2012	
10 Jan 2013	802.1Qbv, Draft 0.2
02 Dec 2013	802.1Qbv, Draft 1.0
19 Jan 2014	802.1Qbv, Draft 1.0 proposed comment dispositions
03 Feb 2014	802.1Qbv, Draft 1.0 comment dispositions
07 Mar 2014	802.1Qbv, Draft 1.1
21 Apr 2014	802.1Qbv, Draft 1.2
11 May 2014	802.1Qbv, Draft 1.2 proposed comment dispositions
12 May 2014	802.1Qbv, Draft 1.2 proposed comment dispositions
26 Jun 2014	802.1Qbv, Draft 1.2 comment dispositions
26 Jun 2014	802.1Qbv, Draft 1.3
30 Jun 2014	802.1Qbv, Draft 1.2 comment dispositions
16 Jul 2014	802.1Qbv, Draft 1.3 proposed comment dispositions
29 Jul 2014	802.1Qbv, Draft 1.3 comment dispositions
04 Sep 2014	802.1Qbv, Draft 2.0
24 Oct 2014	802.1Qbv, Draft 2.1
13 Jan 2015	802.1Qbv, Draft 2.1 proposed comment dispositions
22 Jan 2015	802.1Qbv, Draft 2.1 comment dispositions
18 Feb 2015	802.1Qbv, Draft 2.2
10 Mar 2015	802.1Qbv, Draft 2.2 proposed comment dispositions
12 Mar 2015	802.1Qbv, Draft 2.2 comment dispositions
03 Apr 2015	802.1Qbv, Draft 2.3
07 May 2015	802.1Qbv, Draft 2.3 proposed comment dispositions
17 May 2015	802.1Qbv, Draft 2.3 proposed comment dispositions
21 May 2015	802.1Qbv, Draft 2.3 comment dispositions

Date	Document
02 Jun 2015	802.1Qbv, Draft 2.4
10 Jul 2015	802.1Qbv, Draft 2.4 proposed comment dispositions
15 Jul 2015	802.1Qbv, Draft 2.4 comment dispositions
27 Jul 2015	802.1Qbv, Draft 2.5
12 Aug 2015	802.1Qbv, Draft 2.5 comment dispositions
12 Aug 2015	802.1Qbv, Draft 3.0
07 Sep 2015	802.1Qbv, Draft 3.0 proposed comment dispositions
22 Sep 2015	802.1Qbv, Draft 3.1
25 Sep 2015	802.1Qbv, Draft 3.0 comment dispositions
07 Oct 2015	802.1Qbv, Draft 3.1 comment dispositions

Presentations

Date	Document
16 May 2012	Presentation bv-boiger-transmission-windows-0512-v01.pdf
16 May 2012	Presentation bv-boiger-transmission-windows-0512-v02.pdf
10 Sep 2012	Presentation bv-boiger-time-aware-shaper-0912-v02.pdf
16 Jan 2013	Presentation bv-boiger-gates-vs-windows-scheduled-traffic-0113.pdf
16 Jan 2013	Presentation bv-boiger-gates-vs-windows-scheduled-traffic-0113.pptx
20 Mar 2013	Presentation bv-boiger-TAS-flush-queue-0313.pdf
16 May 2013	Presentation bv-kiessling-Some-sources-of-Latency-and-Jitter-0513-v01.pdf
17 Jul 2013	Presentation bv-goetz-TSN-RobustControlDataTraffic-0717-v1.pdf
05 Sep 2013	Presentation bv-goetz-TSN-GuaranteedLatency4CDT-20130904-v1.pdf
07 Nov 2013	Presentation bv-kerschbaum-TSN-Latency4CDT-112013-v4.pdf
08 Nov 2013	Presentation bv-kerschbaum-TSN-Latency4CDT-112013-v5.pdf
15 May 2014	Presentation bv-nfinn-specifying-gate-schedules-0514-v01.pdf
04 Nov 2014	Presentation bv-p802-1Qbv-par-modification-1114.pdf

05 Nov 2014	Presentation bv-nfinn-time-gated-shapers-1114-v01.pdf
11 Dec 2014	Presentation bv-admin-parameters-tony-jeffree-1214.pdf

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