

5. Conformance

Change subclause 5.2 to read as follows:

5.2 Conformant components and equipment

This subclause specifies requirements and options for the following core components:

- a) VLAN-aware Bridge component (5.4);
- b) VLAN-unaware Bridge component (5.14);

for the following components that use that core functionality:

- c) C-VLAN component (5.5);
- d) S-component (5.6);
- e) I-component (5.7);
- f) B-component (5.8);
- g) TPMR component (5.15);
- h) T-component (5.17);
- i) [C-VLAN aware edge relay component \(5.20.1\)](#);

and for the following systems that include instances of the above components:

- j) VLAN Bridge (5.9);
- k) S-VLAN Bridge (5.11.1);
- l) Provider Edge Bridge (5.11.2);
- m) Backbone Edge Bridge (5.12);
- n) TPMR (5.16);
- o) [Edge Virtual Bridging Bridge \(5.19\)](#);
- p) [Edge Virtual Bridging Server \(5.20\)](#).

NOTE—A VLAN Bridge can also be referred to as a Customer Bridge or a C-VLAN Bridge. Both S-VLAN Bridges and Provider Edge Bridges are examples of Provider Bridges.

Insert new subclauses 5.19 through 5.20, renumbering existing subclauses as necessary, as shown:

5.19 Edge Virtual Bridging Bridge (EVBB) requirements

An EVB Bridge shall comprise a single conformant C-VLAN (5.5) component and one or more Port-mapping S-VLAN components (5.6).

Each externally accessible port shall be capable of being configured as one of, and may be capable of being configured as any of

- a) A C-VLAN aware Bridge Port (CBP);
- b) A Uplink Access Port (UAP).

as specified in Clause 40. Each externally accessible Port configured as a C-VLAN aware Bridge Port shall be capable of attaching the C-VLAN component of the EVB Bridge directly to an IEEE 802 LAN. Each externally accessible Port configured as a Uplink Access Port shall be capable of attaching a Port-mapping S-VLAN component (5.6) within the EVB Bridge directly to an IEEE 802 LAN.

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A conformant EVBB implementation shall:

- a) Support the functionality of a C-VLAN component (5.5);
- b) Support a Port-mapping S-VLAN component (22.6.4) on each external port configured as a UAP (40);
- c) Support a default S-Channel on each Port-mapping S-VLAN component (43.1.2.1);
- d) Support an internal LAN for each default S-Channel attaching the CAP of the Port-mapping S-VLAN component supporting the S-Channel with an internal Bridge Port (CBP) of the C-VLAN component (43.1.2.1);
- e) Support reflective relay on each internal Port of the C-VLAN component (8.6.1);
- f) Support LLDP with the EVB TLV on each internal Port of the C-VLAN component(41);
- g) Support ECP on each internal Port of the C-VLAN component (44);
- h) Support VDP Bridge on each internal Port of the C-VLAN component (42).

A conformant EVB Bridge implementation may:

- i) Support additional S-Channels to the default S-Channel per UAP (43.1.2.1);
- j) Support the CDCP protocol (43.1.3.2);
- k) Support management for the EVB components (12.4-12.12,12.24);
- l) Support an SNMP management MIB (17.7.15).

5.20 Edge Virtual Bridging Server (EVBS) requirements

An EVB Server shall comprise one or more conformant Edge Relay components (5.20.1) and one or more Port-mapping S-VLAN components (5.6).

Each externally accessible port shall or an EVB Server shall be an Uplink Access Port (UAP) capable of attaching a Port-mapping S-VLAN component (15.6) within the EVB Server directly to an IEEE 802 LAN as specified in Clause 40.

All C-VLAN aware edge relay component port are internal and shall be capable of being one of two types, and may be capable of being configured as any of:

- a) A C-VLAN aware relay port (CRP);
- b) An Uplink relay port (URP).

Each CRP of each C-VLAN aware edge relay component shall be capable of attaching the C-VLAN aware edge relay component to an internal point-to-point LAN (also called a Virtual Station Interface(VSI)) connecting the CRP (5.2) to the MAC (6.2) of a virtual network interface controller.

Each URP of each C-VLAN aware edge relay component shall be capable of attaching the C-VLAN aware edge relay component to an internal point-to-point LAN connecting the C-VLAN aware edge relay component's URP to an internal S-Channel Access Port (42.2, CAP) of a Port-mapping S-VLAN component.

A conformant EVB Server implementation shall:

- a) Support at least one C-VLAN aware edge relay component(40.1);
- b) Support a Port-mapping S-VLAN component (22.6.4) on each external port configured as a UAP (40);
- c) Support a default S-Channel on each Port-mapping S-VLAN component (43.1.2.1);
- d) Support an internal LAN for each default S-Channel attaching the CAP of the Port-mapping S-VLAN component of the default S-Channel with an internal Uplink Relay Port (URP) of the edge relay component (43.1.2.1);
- e) Support LLDP (Std 802.1AB) with the EVB TLV on each internal URP of the edge relay component(41);

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- f) Support ECP on each URP of the edge relay component (44);
- g) Support VDP Station on each URP of the edge relay component (42).

A conformant EVB Server implementation may:

- h) Support multiple C-VLAN aware edge relays components(40.1);
- i) Support additional S-Channels to the default S-Channel per UAP (43.1.2.1);
- j) Support the CDCP protocol (43.1.3.2);
- k) Support management for the EVB components (12.24);
- l) Support an EVB Server SNMP management MIB (17.7.15).

5.20.1 C-VLAN aware edge relay component requirements

An implementation of an edge relay component shall:

- a) Support of the MAC ISS, as specified in 6.6 and 6.7 over internal LANs attaching to the C-VLAN aware edge relay component;
- b) Support the MAC Enhanced Internal Sublayer Service at each port, as specified in 6.8 and 6.9;
- c) Implement an IEEE 802.2 conformant LLC class with Type 1 operation as required by 8.2;
- d) Relay and filter frames as described in 8.1 and specified in 8.5, 8.6, and 8.8;
- e) On each port, support at least one of the permissible values for the Acceptable Frame Types parameter, as defined in 6.9;
- f) Support the following on each Port that supports untagged and priority-tagged frames:
 - 1) A Port VLAN Identifier (PVID) value (6.9);
 - 2) Configuration of at least one VID whose untagged set includes that Port (8.8.2);
 - 3) Configuration of the PVID value via management operations (12.10);
 - 4) Configuration of Static Filtering Entries via management operations (12.7).
- g) Allow tag headers to be inserted, modified, and removed from relayed frames, as specified in 8.1 and Clause 9, as required by the value(s) of the Acceptable Frame Types parameter supported on each Port, and by the ability of each Port to transmit VLAN-tagged and/or untagged frames;
- h) Allow static configuration information for at least one VID, by means of Static VLAN Registration Entries in the Filtering Database (8.11);
- i) If the C-VLAN aware edge relay makes use of reflective relay, then the implementation shall meet the requirements stated in 41.1;
- j) Recognize and use C-TAGs;
- k) Filter the Reserved MAC Addresses specified in Table 8-1; and

should not:

- l) Use a VID Translation Table (6.9) on any Port;
- m) Use Service VLAN tags (S-TAG) except in support of the functionality specified in 6.13;
- n) Use Spanning Tree, Rapid Spanning Tree, or Multiple Spanning Tree protocols as specified in clauses 13 and 14;
- o) Use the MRP, MMRP or MVRP protocols as specified in clauses 10 and 11.

5.20.2 C-VLAN aware edge relay component options

An implementation of a C-VLAN aware edge relay component may

- a) On each Port, support all of the permissible values for the Acceptable Frame Types parameter, as defined in 8.3, and support configuration of the parameter value via management;
- b) Support enabling and disabling of Ingress Filtering (6.9);
- c) Allow configuration of more than one VID whose untagged set includes that Port (8.8.2);
- d) Support at least one Filtering Identifier (FID) (6.6, 8.8.3, 8.8.8, and 8.8.9);

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- e) Allow allocation of at least one VID to each FID that is supported (6.6, 8.8.3, 8.8.8, and 8.8.9);
- f) Support the management functionality defined in Clause 12.4, 12.24.2, 12.6, 12.7, 12.12.