

5. Conformance

Change subclause 5.2 as shown:

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-VLAN component (5.6);
- e) I-component (5.7);
- f) B-component (5.8);
- g) TPMR component (5.15);
- h) T-component (5.17);
- i) [Edge relay \(5.20.1\)](#);

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 Station \(5.20\)](#).

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 and 5.20, renumbering existing subclauses as necessary, as shown:

5.19 Edge Virtual Bridging Bridge requirements

An EVB Bridge shall comprise a single conformant C-VLAN component (5.5) and zero 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,
- b) A Station-facing Bridge Port (SBP),
- c) An Uplink Access Port (UAP),

as specified in Clause 40.

A conformant EVB Bridge implementation shall:

- d) Support the functionality of a C-VLAN component (5.5);
- e) Support at least one SBP on the C-VLAN component (40);
- f) Support the reflective relay status parameters on each SBP (6.6.5);
- g) Support an LLDP nearest Customer database including the EVB TLV on each SBP (D.2.13);
- h) Support ECP on each SBP (Clause 43);
- i) Support the Bridge role of VDP on each SBP (Clause 42);
- j) Filter frames destined for SBPs until reflective relay configuration is valid (8.6.1.1);

In addition to the requirements of an EVB Bridge a conformant EVB Bridge with S-channel support shall:

- k) Support at least one Port-mapping S-VLAN component (22.6.4) and associated UAP (42.1.1);
- l) Support an LLDP nearest Non-TPMR database including the CDCP TLV on each port configured as an UAP (Clause 42);
- m) Support the CDCP protocol on each port configured as an UAP (Clause 42);
- n) Support an untagged default S-channel and at least one tagged S-channel on each port configured as an UAP (42.1.1);
- o) Support a LAN for each S-channel that attaches the associated CAP on the Port-mapping S-VLAN component to a SBP of the C-VLAN component (42.1.1);

A conformant EVB Bridge implementation may:

- p) Support configuration of reflective relay on each SBP of the C-VLAN component (8.6.1);
- q) Support management for the EVB components (12.4-12.12,12.24);
- r) Support the MIB module defined in 17.7.15.

Editor's Note: The LAN between the EVB Bridge and EVB station is a demarcation point between administrative domains. For this reason it is undesirable to allow the EVB Bridge to automatically adapt Port types without network manager intervention. The operation of such demarcations is unlike typical Enterprise LAN interfaces in that data should only be allowed to flow after successful association (i.e. no traffic at startup). At present the SBP of the EVB Bridge does not have specific enforcement requirements listed in the conformance statements above, however probably should include some. Also the control of STP and MRP should be provided so the DCN administrator can guarantee the EVB station can't affect the DCN topology. Further constraints are probably warranted including discarding any frames at the SBP until successfully reaching ASSOCIATED state. Also once ASSOCIATED state is reached the frames allowed to pass through the SBP to the DCN should be limited to those which are in-profile for the ASSOCIATION.

Editor's Note: The requirement for C-Tagging all VSI traffic between the SBP and URP is helpful in allowing the URP to filter out random frames injected by the EVB Bridge, therefore an additional requirement which may be desirable on the SBP is to send all VSI traffic explicitly C-tagged.

5.20 Edge Virtual Bridging station requirements

An EVB station shall comprise one or more conformant edge relays (5.20.1.2) and zero 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) An Uplink Access Port (UAP),
- b) An Uplink Relay Port (URP).

as specified in Clause 40.

Each ERP shall be capable of attaching its edge relay to one or more VSIs.

1 Each URP shall be capable of attaching its edge relay to a point-to-point LAN connecting the URP to a CAP,
2 or to the LAN connecting to an EVB Bridge in the case where no Port-mapping S-VLAN component is
3 present.

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5 A conformant EVB station implementation shall:

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- 7 c) Support at least one edge relay (40);
- 8 d) Support at least one accessible URP (40);
- 9 e) Support the reflective relay status parameters on each URP (6.6.5);
- 10 f) Support an LLDP nearest Customer database including the EVB TLV on each URP of each edge
11 relay (D.2.13);
- 12 g) Enable ingress filtering on each ERP of each edge relay (8.6.2.1);
- 13 h) Support ECP on each URP of each edge relay (Clause 43);
- 14 i) Support the station role of VDP for each ERP of each edge relay (Clause 42);
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16 In addition to the requirements of an EVB station a conformant EVB station implementation with S-channel
17 support shall:

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- 19 j) Support a Port-mapping S-VLAN component (22.6.4) on each port configured as an UAP (Clause
20 42);
- 21 k) Support an LLDP nearest non-TPMR database including the CDCP TLV on each port configured as
22 an UAP (Clause 42);
- 23 l) Support the CDCP protocol on each port configured as an UAP (Clause 42);
- 24 m) Support a default S-channel on each port configured as an UAP (42.1.1);
- 25 n) Support a LAN for each S-channel that attaches the associated CAP on the Port-mapping S-VLAN
26 component to a URP of the (42.1.1);
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28 A conformant EVB station implementation may:

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- 30 o) Support multiple edge relays (40);
- 31 p) Support management for the EVB components (12.4-12.12,12.24);
- 32 q) Support the MIB module defined in 17.7.15.
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34 **5.20.1 Edge relay requirements**

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36 An edge relay comprises a single C-VLAN component. A conformant implementation of an edge relay
37 shall:

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- 40 a) Support exactly one URP (40) supporting the parameters of subclause 6.6.5;
- 41 b) Support one or more ERPs each supporting access to VSIs (40);
- 42 c) Filter the Reserved MAC Addresses specified in Table 8-1;
- 43 d) Support setting the Enable Ingress Filtering parameter (8.6.2) on each ERP;
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45 A conformant implementation of an edge relay may:

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- 47 e) Support setting the Acceptable Frame Types parameter (6.9) to *Admit Only VLAN Tagged Frames*
48 on the URP;
- 49 f) Support disabling of learning on each ERP (8.6.1);
- 50 g) Support discarding frames with unregistered source addresses at each ERP (8.8.1);
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52 **5.20.1.1 VEB edge relay requirements**

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54 In addition to the requirements of an edge relay a conformant VEB edge relay implementation shall:

1 *Editor's Note: This heading is a place holder incase we have VEB specific requirements. One possiblity is that*
2 *a VEB shall indicate that is wants C-VLAN Bridge forwarding and does not want Reflective Relay forwarding.*
3 *The EVB Bridge subclause 6.6.5 currently requires an EVB Bridge with RR support to initialize with RR off*
4 *and to only set RR when requested.*

5 **5.20.1.2 VEPA edge relay requirements**

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7 In addition to the requirements of an edge relay a conformant VEPA edge relay implementation shall:

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- 10 h) Disable learning on the URP (8.6.1);
 - 11 i) Filter frames received at each URP that are destine to an ERP that originated the frame (8.6.1.1);
 - 12 j) Request reflective relay forwarding by setting **adminUrpReflectiveRelay** to **ForceTrue** (6.6.5);
 - 13 k) Filter frames received at each ERP that are destine to the URP until reflective relay is on (8.6.1.1);
 - 14 l) Forward frames as specified in subclause 8.6.3.1.
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