

IEEE P802.1Qay/D5.0 Provider Backbone Bridges - Traffic Engineering comments

Cl 00 SC 0 P L # 1
 Morales, Jose Individual

Comment Type GR Comment Status R General

I strongly disagree with transforming Ethernet into a circuit switching network.

SuggestedRemedy

Response Response Status C

REJECT.

This comment is interpreted to be an indication that the submitter is opposed to the concept of Traffic Engineering in 802.1 networks. The comment submitter has not supplied a suggested remedy. It is believed that the only remedy that would satisfy the submitter would be to terminate the project, this is something that we do not intend to do.

Cl 03 SC 3 P 11 L # 38
 Vissers, Maarten Individual

Comment Type ER Comment Status A Definitions

the term "component ESP" is used in the document, but there is no definition of such "component ESP"

SuggestedRemedy

Add a definition of Component ESP

Response Response Status C

ACCEPT IN PRINCIPLE.

There is no special meaning attached to the term "component ESP" as it appears in P802.1Qay/D5.0. In order to avoid any confusion the term "component ESP" will be replaced by "ESP".

Cl 03 SC 3 P 11 L # 39
 Vissers, Maarten Individual

Comment Type ER Comment Status R ccl68

the terms ESP-DA and ESP-SA are used in the document without a definition of the underlying ESP-MAC Address.

SuggestedRemedy

Add a definition of ESP-MAC Address like there is a definition of Backbone MAC Address in 802.1ah. E.g. ESP MAC address (ESP-MAC): An individual MAC address associated with a Customer Backbone Port and used in creating the ESP identifier.

Response Response Status C

REJECT.

The ESP-DA and ESP-SA are described within the definition of Ethernet Switched Path (3.4). The introduction of an ESP MAC address definition is not considered to be useful in this standard as it would introduce new terminology unnecessarily. See also response to comment #40

Cl 26 SC 26.4 P 119 L # 40
 Vissers, Maarten Individual

Comment Type TR Comment Status R

The document does not describe the difference between B-MAC and ESP-MAC, nor the difference between B-DA/B-SA and ESP-DA/ESP-SA.

The B-DA/B-SA identify input/output ports on a BSI located in PIPs as well as input/output ports for CFM PDUs in BSI MEP and MIP functions. The B-DA value is a function of the C-DA value. The B-DA/B-SA do not identify a service instance; the service instance associated with the B-DA/B-SA is identified by the I-SID.

The ESP-DA/ESP-SA together with the ESP-VID identify the ESP instance; as stated the ESP-DA/ESP-SA are part of the ESP-Service instance Identifier. The ESP-DA/ESP-SA do not identify the input/output ports for CFM PDUs in TESI MEP and MIP functions. The ESP-DA value is independent of the C-DA value.

SuggestedRemedy

Add a subclause in which the differences between B-MAC and ESP-MAC and the differences between B-DA/B-SA and ESP-DA/ESP-SA are described.

Response Response Status C

REJECT.

P802.1Qay uses the generic backbone MAC addressing scheme presented in 26.4. As made clear through the current definition of ESP (3.4) and discussed in 25.10, ESP-DA/ESP-SA correspond to specific values of the B-DA/B-SA fields and are used as part of the ESP identifier. The use of ESP-DA/ESP-SA as the B-MACs used in conjunction with TE service instances would make any further discussion on the differences between the B-MACs and ESP-MACs unnecessary and potentially confusing.

IEEE P802.1Qay/D5.0 Provider Backbone Bridges - Traffic Engineering comments

Cl 25 SC 25.10.1 P 116 L 42 # 41
 Vissers, Maarten Individual

Comment Type ER Comment Status R Editorial

The ESP-SA is stated to be the PIP address. This is not consistent with the description that the ESP-MAC is the CBP MAC address.

SuggestedRemedy

Replace the text with: "The ESP-SA is the address of the customer Backbone Port (CBP) to which the Provider Instance Port (PIP) encapsulating the customer service instance is connected."

Response Response Status C

REJECT.

The current description in P802.1Qay/D5.0 is consistent with previous statements that "The source backbone MAC address is the PIP MAC address that is configured to take the same value as the CBP MAC address of the internally connected CBP on the B-component.". The referenced text provides an accurate description of the actual behavior and does not need to be modified.

Cl 20 SC 20.1 P 85 L 34 # 42
 Vissers, Maarten Individual

Comment Type TR Comment Status A MAID

In absence of globally unique MAIDs it will not be possible to detect misconfiguration of CBP MAC addresses. When the MAC address of a CBP is a duplicate of the MAC address of another CBP, then two ESPs merge without capability to detect this. The ESP-SA is part of the ESP-SID (i.e. part of the service instance identifier), not longer the address that identifies a port on such service instance.

SuggestedRemedy

Either remove the note or add "Misconfiguration of CBP MAC addresses may result in merging of ESPs. Use of globally unique MAIDs will detect such merging."

Response Response Status C

ACCEPT IN PRINCIPLE.

This comment has been discussed before and the current text is the result of such discussion. The use of the source_address as an identifier of the service helps in avoiding the type of cross-connect error described in the paragraph just above the referenced NOTE in the base IEEE Std 802.1ag-2007 document. It is true though that only the use of a globally unique MAID will provide guaranties for full coverage on all possible misconfiguration errors. As a result it has been decided in previous meetings to keep this type of check in TESIs but only as optional (see 20.17.1:b). The current text in the NOTE was aimed to reflect this optional behavior but it can be confusing as it stands. The last sentence in the note "Correspondingly the assignment of globally unique MAIDs is not that important for PBB-TE MAs as it is for other types of MAs." will be modified to state "Correspondingly the assignment of globally unique MAIDs is not as important for PBB-TE MAs as it is for other types of MAs but in general a globally unique MAID will provide guaranties for full coverage on all possible misconfiguration errors."

Cl 20 SC 20.1.3 P 86 L 33 # 43
 Vissers, Maarten Individual

Comment Type TR Comment Status A MAID

Refer to comment on page 85, clause 20.1, line 34.

SuggestedRemedy

Add a note to this paragraph stating that use of the MAID check enables the detection of ESP merging as a result of CBP MAC address misconfiguration.

Response Response Status C

ACCEPT IN PRINCIPLE.

See response to comment #42. Adding any additional NOTE here is not necessary as this is already covered by previous text.

IEEE P802.1Qay/D5.0 Provider Backbone Bridges - Traffic Engineering comments

Cl 21 SC 21 P L # 44
 Vissers, Maarten Individual

Comment Type TR Comment Status R New version

According to clause 21.4.2/802.1ag the version number of a CCM, LBM, LBR and LTM PDUs is fixed to 0.
 According to 20.46.5/802.1ag it is necessary to increase the version number when we add an additional field or additional TLV, otherwise this field/TLV will be ignored by a receiving MP.
 802.1Qay is adding the Traffic field as per 21.6.1.2 and 21.6.1.4 to the CCM PDU and the PBB-TE MIP TLV to the LBM, LTR and LTM PDUs.
 Without defining an additional "Version 1 CCM PDU" and specifying an additional MEP which recognizes both Version_0_CCM, Version_0_LBM, Version_0_LBR, Version_0_LTM, Version_1_CCM, Version_1_LBM, Version_1_LBR and Version_1_LTM PDUs the new Traffic field/PBB-TE MIP TLV will not be processed.
 802.1Qay violates in its current form the version rules specified in 802.1ag.

SuggestedRemedy

The PBB-TE specific CCM, LBM/LBR and LTM frames must be using Version_1 to comply with the version rules in clause 20.46.
 Alternatively, the PBB-TE specific CCM, LBM/LBR and LTM frames can be identified by means of a new TESI CFM EtherType value and be processed in TESI MEP and MIP functions, which are different from the VLAN/BSI MEP and MIP functions. In this case those TESI CFM frames can be identified as Version_0 frames.
 There are essentially two sets of CFM PDUs:
 1) VLAN/BSI CFM PDUs
 2) TESI CFM PDUs.
 And there are two sets of MEP/MIP functions:
 1) VLAN/BSI MEP and MIP functions
 2) TESI MEP and MIP functions.
 It would help if the existence of those two sets is explicitly described in clause 19 (MEP/MIP functions) and in clause 21 (CFM PDU encoding).

Response Response Status C

REJECT.

P802.1Qay is introducing new TE service instances in addition to the usual VLAN services defined in IEEE802.1Q-2005. The use of the additional field and TLV introduced by P802.1Qay is restricted to the MAs associated only with these TE service instances in a PBB-TE region and is not applicable to MAs monitoring the usual VLAN services specified in IEEE Std 802.1ag-2007.
 In the VLAN based MAs (described in IEEE Std 802.1ag-2007) or BSI based MAs (described in IEEE Std 802.1ah-2008) the PBB-TE related fields and TLVs shall not be processed. A new CFM version would have been required if the new fields were applicable to the same services as the ones described in IEEE Std 802.1ag-2007 something that is not the case here. P802.1Qay completes the description of IEEE Std 802.1ag-2007 of version 0 CFM PDUs in order to address all types of defined services.