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| IEEE 802.1 REVISION REQUEST 0025 |
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DATE: 2012-02-06
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REQUESTED REVISION:
STANDARD: 802.1Q-2011
CLAUSE NUMBER: 6.10
CLAUSE TITLE: Support of the ISS/EISS by Provider Instance Ports

RATIONALE FOR REVISION:

Clause 6.10.2 contains the following paragraph:

"If enableConnectionIdentifier is TRUE, the connection_identifier is not null, and the

connection_identifier references an address retained by the Provider Instance Port, then the value for the

destination_address is the address referenced by the connection_identifier. Otherwise, the value for the

destination_address is the contents of the Default Backbone Destination parameter of the Virtual Instance

Port."

This text refers to a list of addresses hold by the PIP. In other words, the PIP seems to contain a table

holding a set of learned B-MAC addresses and their associated connection_identifier values. Such table

however is not described, and neither is described how the content of this table is maintened (e.g.

aging).

PROPOSED REVISION TEXT:

Specify in the clause 6.10 that the PIP function contains a Table with one or more entries in which each

entry contains a B-MAC value and its connection_identifier value.

Specify in clause 6.10.1 that there is a learning process which stores the received B-SA values in the B-

MAC fields of the Table and associates a connection_identifier value with each unique B-SA; describe that

there is an aging process that will delete an entry after some time.

Specify in clause 6.10.2 that this table is queried to determine the

destination_address (B-DA) value.

Relace the following text in 6.10:

"Each Provider Instance Port shall have an individual Backbone MAC address referred to as the PIP MAC

address (26.4) for use by the functions specified in this subclause."

by:

"The Provider Instancee Port shall support the following parameters for use by these functions:

a) An individual Backbone MAC address referred to as the PIP MAC address (26.4) for use by the

functions specified in this subclause;
b) A Connection Identifier table.

The Connection Identifier table is configurable by learning and has one entry for each individual backbone

MAC address which is active in a Backbone Service Instance.

The Connection Identifier table is used to hold each of the learned Individual Backbone MAC Address values

and their associated connection_identifier value.

The Connection Identifier table shall contain the following fields for each entry:

a) A Connection Identifier. This contains the identifier used in the EISS and ISS SAPs in a

Provider Instance Port to represent an Individual Backbone MAC Address.
b) Individual Backbone MAC Address.

The Learning Process receives the source backbone MAC addresses of received frames.

The Learning Process is not invoked for a backbone service instance for which the case the

operPointToPointMAC parameter has a value of TRUE.

When invoked, the Learning Process shall create or update a Dynamic Connection Identifier Entry that

specifies the connection_identifier associated with the frame’s source backbone address, if and only if

the resulting number of entries would not exceed the capacity of the Table. If the Table is already filled

to capacity, but a new entry would otherwise be made, then an existing entry may be removed to make room

for the new entry.

Dynamic Connection Identifier Entries are created and updated by the Learning Process. They shall be

automatically removed after a specified time, the Ageing Time, has elapsed since the

entry was created or

last updated.

No more than one Dynamic Connection Identifier Entry shall be created in the Table for a given combination

of Backbone Source Address and Connection Identifier.

Dynamic Connection Identifier Entries cannot be created or updated by management.

The ageing out of Dynamic Connection Identifier Entries ensures that source backbone address will not

unnecessary occupy entries in the Table after a change in a backbone service instance.

The Ageing Time may be set by management. A range of applicable values and a recommended default is

specified in Table 8-6; this is suggested to remove the need for explicit configuration in most cases. If

the value of Ageing Time can be set by management, the Bridge shall have the capability to use values in

the range specified, with a granularity of 1 s."

Relace the following text in 6.10.2:

"If enableConnectionIdentifier is TRUE, the connection_identifier is not null, and the

connection_identifier references an address retained by the Provider Instance Port, then the value for the

destination_address is the address referenced by the connection_identifier. Otherwise, the value for the

destination_address is the contents of the Default Backbone Destination parameter of the Virtual Instance

Port."

by

"If enableConnectionIdentifier is TRUE, the connection_identifier is not null, and the

connection_identifier associates with an entry in the Dynamic Connection Idenfier Entry, then the value

for the destination_address is the backbone MAC address in the Dynamic Connection Identifier Entry

associated by the connection_identifier value. Otherwise, the value for the destination_address is the

contents of the Default Backbone Destination parameter of the Virtual Instance Port"

IMPACT ON EXISTING NETWORKS:

The revision text should not have an impact on existing networks.

Please attach supporting material, if any
Submit to:- Tony Jeffree, Chair IEEE 802.1
and copy:- Paul Congdon, Vice-Chair IEEE 802.1
E-Mail: stds-802-1-maint-req@ieee.org

For official 802.1 use
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