

<< This document illustrates the changes that would be necessary to support VID assignment by the bridge communicated to the server on a VDP Response. >>

#### 42.2.2 7MAC/VLAN format

The MAC/VLAN information format determines the format of the MAC/VLANs field (42.2.2.8). The formats defined by this standard are shown in Table 42-2.

**Table 42-2—MAC/VLAN format values**

MAC/VLAN format	Value
Basic MAC/VLAN format ()	0x00
Partial MAC/VLAN format ()	0x01
VLAN-only MAC/VLAN format ()	0x02
GroupID format	0x03
GroupID/VID format	0x04
MAC/GroupID format	0x05
MAC/GroupID/VID format	0x06
Reserved for future standardization	0x07 through 0xFF

<< Editor's note: an alternative set of MAC/VLAN formats could be used as shown below. Here, the MAC/

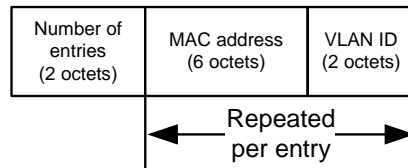
MAC/VLAN format	Value
Basic MAC/VLAN format ()	0x00
Partial MAC/VLAN format ()	0x01
VLAN-only MAC/VLAN format ()	0x02
GroupID/VID format	0x03
MAC/GroupID/VID format	0x04
Reserved for future standardization	0x05 through 0xFF

GroupID/VID is used in both the VDP Req and Rsp when the Bridge does VID assignment and MAC/VID is used and GroupID/VID is used in both the VDP Req and Rsp when the Bridge does VID assignment and VID-only is used. >>

<<Another alternative is to eliminate the ‘formats’ and have all VDP messages carry MAC/GroupID/VID with the possibility that a field not used would carry a zero value. >>

#### 42.2.2.8 MAC/VLANs field - Basic MAC/VLAN format

The MAC/VLANs field contains one or more MAC address/VID pairs to be associated with the VSI Instance (42.2.2.6).



**Figure 42-2—MAC/VLANs field structure for basic and partial formats**

NOTE—The bridge uses MAC address/VID pairs to identify traffic from a VSI and to filter frames.

Figure 42-2 illustrates the format of the MAC/VLANs field for the basic MAC/VLAN format.

##### 42.2.2.8.1 Number of entries

This 2-octet field defines the number of MAC address/VLAN ID pairs contained in the repeated portion of the MAC/VLANs field.

##### 42.2.2.8.2 Per MAC address/VLAN ID pair

**MAC address:** A 48 bits MAC address.

**VID:** A 12 bit VID value. A VID value of 0 indicates that the VID is unknown to the station; this is used as a signal to the EVBCB that the station is expecting to receive the MAC/VLAN ID pair assignment from it. The EVBCB assigns the VLAN ID based on the VSI type ID or VSI instance ID from the relevant database and replies to the station with the corresponding MAC/VLAN ID(s) in a VDP TLV with a reason code of Success.

**GroupID:** A 32-octet (for example) string specifying the name by which a Service Instance is known throughout the scope of the data center. The GroupID is required in cases where different VID values represent the same Service Instance in different regions of the data center as would generally be the case when a backbone is deployed. .

<< Editor’s Note: The variables described above apply to *all* of the MAC/VLAN field formats, not just the ‘basic format’. These should be pulled into a subclause at a higher level than those describing the individual formats. >>

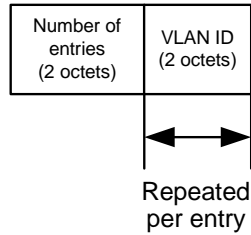
#### 42.2.2.9 MAC/VLANs field - Partial MAC/VLAN format

The interpretation of the MAC/VLANs field for the partial MAC/VLAN format is identical to the basic MAC/VLAN format, except that the station does not know all of the MAC address/VID pairs that are associated with the VSI, and therefore the set of MAC address/VID pairs can be incomplete.

#### 42.2.2.10 MAC/VLANs field - VLAN-only MAC/VLAN format

The MAC/VLANs field contains one or more VIDs to be associated with the VSI Instance (42.2.2.6).

Figure 42-3 illustrates the format of the MAC/VLANs field for the VLAN-only MAC/VLAN format. The field definitions are as specified in 42.2.2.8.1 and 42.2.2.8.2.



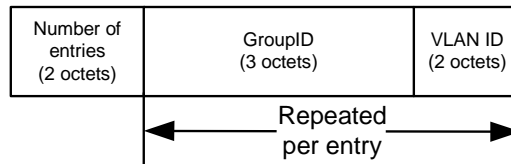
**Figure 26-3—MAC/VLANs field structure for VLAN-only format**

The VLAN ID field is permitted to contain a “wildcard” VID, indicated by the value 0xFFFF. If this VID is present in the VLAN ID field, its meaning is interpreted as “All VLANs”.

#### 42.2.2.11 MAC/VLANs field - GroupID format

The MAC/VLANs field contains one or more GroupIDs to be associated with the VSI Instance (42.2.2.6).

Figure 42-3 illustrates the GroupID format. The field definitions are as specified in 42.2.2.8.1 and 42.2.2.8.2.. This format is used in a VDP Associate Request when VID values are assigned by the Bridge based on GroupID values supplied by the Server.



**Figure 26-4—GroupID format**

#### 42.2.2.12 MAC/VLANs field - GroupID/VID format

The MAC/VLANs field contains one or more GroupID/VID pairs to be associated with the VSI Instance (42.2.2.6).

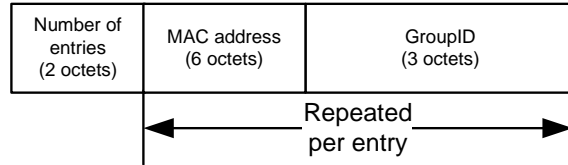
**Figure 26-5—GroupID/VID format**

Figure 42-3 illustrates the GroupID/VID format. The field definitions are as specified in 42.2.2.8.1 and 42.2.2.8.2. This format is used in a VDP Associate Response when the VIDs values are assigned by the Bridge based on GroupID values supplied by the Server in the VDP Associate Request.

**42.2.2.13 MAC/VLANs field - MAC/GroupID format**

The MAC/VLANs field contains one or more MAC/GroupID pairs to be associated with the VSI Instance (42.2.2.6).

Figure 42-3 illustrates the MAC/GroupID format. The field definitions are as specified in 42.2.2.8.1 and 42.2.2.8.2. This format is used in a VDP Associate Request when VIDs values are assigned by the Bridge based on GroupID values supplied by the Server.



**Figure 26-6—MAC/GroupID format**

**42.2.2.14 MAC/VLANs field - MAC/GroupID/VID format**

The MAC/VLAN field contains one or more MAC/GroupID/VID triples to be associated with the VSI Instance (42.2.2.6).

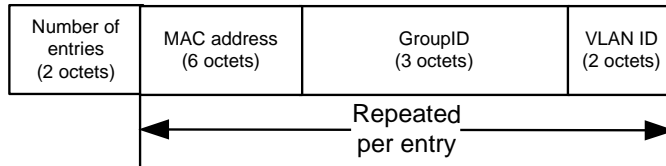


Figure 42-3 illustrates the MAC/GroupID/VID format. The field definitions are as specified in 42.2.2.8.1 and 42.2.2.8.2. This format is used in a VDP Associate Response when the VIDs values are assigned by the Bridge based on GroupID values supplied by the Server in the VDP Associate Request.