

<< Editor’s Note: This text describes changes to Clause 41 required to add the VDP notification TLV discussed in the May 2011 Interim meeting. A Status octet of the VDP notification TLV contains a bit indicating whether the VM associated with the VSI is started or stopped. The notification is sent by the EVB Station to the EVB Bridge when the status changes. The changes made to the clause for this purposes are:

1) A third VDP TLV has been added to the lettered list of VDP TLVs specified in Clause 41.
2) A Notification TLV Type has been added to Table 41-1.
3) Subclause 41.3 has been added to describe the VDP notification TLV.

Some headings and references have been adjusted. This text is based on 802.1Qbg D1.5 before disposition of comments associated with that version of the draft (i.e., errors in the draft have not been corrected). Change bars have been provided to identify changes. This version contains only the changed sections identified in the list above.

>>

Insert the following text, tables, and figures as new Clause 41:

41. VSI discovery and configuration protocol (VDP)

The VSI discovery and configuration protocol (VDP) associates (registers) a VSI instance with an SBP of an EVB Bridge. VDP simplifies and automates virtual station configuration by enabling the movement of a VSI instance (and its related VSI Type information) from one virtual station to another or from one EVB Bridge to another. VDP supports VSI discovery and configuration across a channel interconnecting an EVB station and an EVB Bridge. VDP TLVs are exchanged between the station and the Bridge in support of this protocol.

This subclause defines the VDP TLV structure and state machines. VDP uses the Edge Control Protocol (ECP, Clause 43) as a transport protocol for VDP TLV exchanges. Two VDP TLVs are defined:

a) The VDP manager ID TLV (41.1). This TLV appears as the first TLV in any ECPDU.
b) The VDPP association TLV (41.2). One or more of these TLVs can appear in any ECPDU, following the VDP manager ID TLV.
c) The VDP notification TLV (41.3). One or more of these TLVs can appear in any ECPDU.

<< Editor’s Note: Would it be useful to specify that the VDP notification TLV does not share an ECPDU with other types of VDP TLVs? >>

<table>
<thead>
<tr>
<th>TLV type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Associate</td>
<td>0x01</td>
</tr>
<tr>
<td>Pre-Associate with resource reservation</td>
<td>0x02</td>
</tr>
<tr>
<td>Associate</td>
<td>0x03</td>
</tr>
<tr>
<td>De-associate</td>
<td>0x04</td>
</tr>
<tr>
<td>VSI manager ID</td>
<td>0x05</td>
</tr>
<tr>
<td>Notification</td>
<td>0x06</td>
</tr>
<tr>
<td>Reserved for future standardization</td>
<td>0x00, 0x07-0x7F</td>
</tr>
</tbody>
</table>
41.3 VDP notification TLV definition

Figure 41-1 illustrates the format of the VDP notification TLV. The VDP notification TLV field definitions are specified within subclauses 41.3.1 through 41.3.4. A VDP notification TLV is sent by the EVB Station when one of the following conditions is met:

1) the user of a VSI Instance becomes active (e.g., the associated VM has started) and the user of that VSI Instance has previously been active when the VSI Instance was associated with a different SBP (e.g., the associated VM has migrated).

2) the user of a VSI Instance becomes inactive (e.g., the associated VM has stopped) and the user of that VSI Instance will become active again after VSI Instance is associated with a different SBP (e.g., the associated VM is being migrated);

41.3.1 TLV type

The TLV type field takes the value shown in Table 41-1 for VSI notification.

41.3.2 TLV information string length

This field contains the length of the TLV information string, which is 17 octets.

41.3.3 VSI Instance Identifier

Identifies the VSI Instance with which the notification is associated.

41.3.4 VSI Activity indication

Indicates whether the user of the VSI Instance (e.g., a Virtual Machine) is active (e.g. started; ‘1’b) or inactive (e.g. stopped; ‘0’b).