Page: 810 #wg-4-1 Type: E TF: WG Clause: 4C.2.17 Line: - Commenter: Glen Kramer / Broadcom

Comment Status: Resolved Response Status: Accept Commenter Satisfaction: No Category: -

Many empty rows in PICS table after the item CU-ME56b

Remove empty rows

#wg-4-2 Type: E TF: WG Clause: 14.4.2 Page: 560 Line: 19 Commenter: Glen Kramer / Broadcom Comment Status: Resolved Response Status: Accept Commenter Satisfaction: No Category:

Erroneos page break inserted at the end of page 560.

Remove page break

TF: WG Clause: 14.4.2 Line: 1 Commenter: Glen Kramer / Broadcom #wg-4-3 Type: T Page: 561 Comment Status: Resolved Response Status: Accept Commenter Satisfaction: No Category:

The extended attribute 0xD7/0x01-05 is intended to replace basic attributes related to auto-negotiation. But the basic attributes are still listed in the Table 14-132.

1) Delete auto-negotiation attributes 0xD7/0x00-4E -- 0xD7/0x00-57 from Table 14-132.

2) Delete corresponding empty sub-section 14.4.2.4

#wg-4-4 Type: TR TF: WG Clause: 14.4.4 Line: 13 Commenter: Glen Kramer / Broadcom Page: 685 Comment Status: Resolved Response Status: Accept Commenter Satisfaction: No Category: -

Table 14-321 lists three basic actions as mandatory, however, no description of the actions, or the TLV formats are provided. Without this information, it is not possible to have interoperable implementation for basic actions.

Add descriptions for the basic actions and associated PICS per rmtf\_1606\_kramer\_1a.pdf

Page: 610 Line: 16 Commenter: Glen Kramer / Broadcom #wg-4-5 Type: TR TF: WG Clause: 14.4.3.2.13

Commenter Satisfaction: No Comment Status: Resolved Response Status: Revised Category: -

The sizes of upstream and downstream queues are set using the aOnuLlidQueueConfig (0xD7/0x01-0D) attribute. This attribute defines 8-bit fields for a queue size with a unit of 4kB. Therefore, the maximum allowed queue size is 1MB, even if more memory is available in the ONU.

The queue size of 1MB is not enough for 10G-EPON operation. At 10Gb/s data rate, such queue can store only about 840 us worth of traffic, even though the granting cycle is generally much longer.

A relevant attribute aOnuInfoPacketBuffer (OxD7/OxO0-OA) that reports the available ONU memory size uses 16-bit fields with a 1KB unit.

Align field sizes and units in both attributes as follows:

- 1) Make buffer fields 32-bit wide
- 2) Make buffer unit 1KB
- Split the aOnuLlidQueueConfig attribute in two, to keep the size under 128 bytes and to make queue configuration more efficient.

The exact changes are shown in rmtf\_1606\_kramer\_2a.pdf

Changes per comment.

Also, page 431, line 1, change "DPoE-SP-OAMv2.0-I08" to "DPoE-SP-OAMv2.0-I09"

page 4, line 16, change "DPoE-SP-OAMv2.0-108-151210" to "DPoE-SP-OAMv2.0-109-160602" + update all other DPoEv2 references to the latest versions published by CL at this time.

Update caption in Table 14-214 to match new TLV name.

#wg-4-6 Type: TR TF: WG Clause: 14.4.5.1.1 Line: 10 Commenter: Glen Kramer / Broadcom Page: 686 Comment Status: Resolved Response Status: Accept Commenter Satisfaction: No Category: -

The description of eOAM\_SetRequest eOAMPDU only allows Variable Containers and Object Context TLVs in the payload of the message (see 13.4.2.4). However, in Cl. 14.4, all the extended actions that take no parameters use Variable Desriptior, instead of Variable Container with zero-length value field. All extended actions with parameters use variable Containers.

Mixing Variable Containers and Variable Descriptors in eOAM\_SetRequest eOAMPDU requires ONU parser to know in advance what kind of TLV to expect for each attribute/action. This makes the parser more complicated. In addition, if the parser encounters an unknown branch or leaf, it won't be able to process any subsequent TLVs in this message

For all extended actions in 14.4.5, convert Variable Descriptions to Variable Containers, as shown in  $\mathsf{rmtf}\_1606$ \_kramer $\_3a.\mathsf{pdf}$ 

Line: 17 Commenter: Glen Kramer / Broadcom Page: 597 #wg-4-7 Type: E TF: WG Clause: 14.4.3.1.15 Commenter Satisfaction: No

Comment Status: Resolved Response Status: Accept

The text "Storage: Non-Volatile" should be on a separate line, after "Remote access: Read/Write". The same in 14.4.3.1.21

Move "Storage: Non-Volatile" to a new line in two locations

#wg-4-8 Type: TR TF: WG Clause: 14.4.3.2.15 Page: 613 Line: 25 Commenter: Glen Kramer / Broadcom Comment Status: Resolved Response Status: Accept Commenter Satisfaction: No Category: -

Incorrect index for the last LLID value in the array

In the last row in Table 14-216, change "[M]" to "[M-1]" in two places.

#wg-4-9 Type: TR TF: WG Clause: 14.4.3.2.16 Page: 614 Line: 1 Commenter: Glen Kramer / Broadcom Commenter Satisfaction: No Comment Status: Resolved Response Status: Accept

The description of eOAM\_GetRequest eOAMPDU only allows Variable Descriptors and Object Context TLVs in the payload of the message (see 13.4.2.2). However, the attribute aUniMacLearned (0xD7/0x01-11) is an exception. The eOAM\_GetRequest must use a Variable Container for this attribute since it carries a MAC address as a parameter.

Mixing Variable Containers and Variable Descriptors in eOAM\_GetRequest eOAMPDU requires ONU parser to know in advance what kind of TLV to expect for each attribute. If the parser encounters an unknown branch or leaf, it won't be able to process any subsequent TLVs in this message.

Change the aUniMacLearned (0xD7/0x01-11) extended attribute into acGetUniMacLearned (0xD9/0x01-08) extended action. All extended actions are carried in eOAM\_Set\_Request eOAMPDUs and require Variable Containers.

The changes are shown in rmtf\_1606\_kramer\_4.pdf