

14 Management entities

14.1 Introduction

14.2 Management entities for non-SNMP-optimized eOAM profile

14.3 Management entities for SNMP-optimized eOAM profile

14.4 Management entities for DPoE eOAM profile

14.4.1 Branch 0xD6 “identification”

14.4.2 Branch 0x07 “basic attributes”

14.4.3 Branch 0xD7 “extended attributes”

14.4.4 Branch 0x09 “basic actions”

This subclause lists basic management actions, which are part of the definitions in IEEE Std 802.3, Clause 30. The basic management actions shown in Table 14-321 shall be supported.

Table 14-321—Basic actions defined in branch 0x09

| Leaf | Actions | Definition Defined in IEEE Std 802.3 |
|---------|----------------------------|---|
| 0x00-05 | acPhyAdminControl | 30.3.2.2.1 14.4.4.1 |
| 0x00-0B | acAutoNegRestartAutoConfig | 30.6.1.2.1 14.4.4.2 |
| 0x00-0C | acAutoNegAdminControl | 30.6.1.2.2 14.4.4.3 |

All other Leaf values are reserved and ignored on reception.

14.4.4.1 Action *acPhyAdminControl* (0x09/0x00-05)

This action provides a means to enable or disable a UNI port PHY.

Action *acPhyAdminControl*:

Syntax: Boolean

Remote access: Write-Only

Description: The behavior of this action is defined in IEEE Std 802.3, 30.3.2.2.1. The following values are defined:

enable: enable PHY.

disable: disable PHY.

The *acPhyAdminControl* action is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *acPhyAdminControl* action shall be as specified in Table 14-153.

Table 14-153—PHY Admin Control TLV (0x09/0x00-05)

| Size (octets) | Field (name) | Value | Notes |
|------------------|-----------------|----------------|--------------------------|
| <u>1</u> | <u>Branch</u> | <u>0x09</u> | <u>Branch identifier</u> |
| <u>2</u> | <u>Leaf</u> | <u>0x00-05</u> | <u>Leaf identifier</u> |

| <u>Size (octets)</u> | <u>Field (name)</u> | <u>Value</u> | <u>Notes</u> |
|--------------------------|-------------------------|---------------|---|
| <u>1</u> | <u>Length</u> | <u>0x01</u> | <u>The size of TLV fields following the Length field</u> |
| <u>1</u> | <u>PhyAdminControl</u> | <u>Varies</u> | <u>Value of <i>acPhyAdminControl</i> action, defined as follows:</u> <u>enable: 0x02</u> <u>disable: 0x01</u> |

14.4.4.2 Action *acAutoNegRestartAutoConfig* (0x09/0x00-0B)

This action forces a UNI port to renegotiate the Auto-Negotiation parameters. This action has no effect if Auto-Negotiation signaling is disabled. The behavior of this action is defined in IEEE Std 802.3, 30.6.1.2.1.

The *acAutoNegRestartAutoConfig* action is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *acAutoNegRestartAutoConfig* action shall be as specified in [Table 14-206](#).

Table 14-206—UNI Auto-Negotiation Restart TLV (0xD9/0x00-0B)

| <u>Size (octets)</u> | <u>Field (name)</u> | <u>Value</u> | <u>Notes</u> |
|--------------------------|-------------------------|----------------|---|
| <u>1</u> | <u>Branch</u> | <u>0x09</u> | <u>Branch identifier.</u> |
| <u>2</u> | <u>Leaf</u> | <u>0x00-0B</u> | <u>Leaf identifier.</u> |
| <u>1</u> | <u>Length</u> | <u>0x80</u> | <u>The length of the TLV value field is zero.</u> |

14.4.4.3 Action *acAutoNegAdminControl* (0x09/0x00-0C)

This action provides a means to turn Auto-Negotiation signaling on or off.

Action *acAutoNegAdminControl*:

Syntax: Boolean

Remote access: Write-Only

Description: The behavior of this action is defined in IEEE Std 802.3, 30.6.1.2.2. The following values are defined:

enable: enable Auto-Negotiation signaling.

disable: disable Auto-Negotiation signaling.

The *acAutoNegAdminControl* action is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *acAutoNegAdminControl* action shall be as specified in [Table 14-206](#).

Table 14-206—UNI Auto-Negotiation Admin Control TLV (0x09/0x00-0C)

| <u>Size (octets)</u> | <u>Field (name)</u> | <u>Value</u> | <u>Notes</u> |
|--------------------------|----------------------------|----------------|---|
| <u>1</u> | <u>Branch</u> | <u>0x09</u> | <u>Branch identifier.</u> |
| <u>2</u> | <u>Leaf</u> | <u>0x00-0C</u> | <u>Leaf identifier.</u> |
| <u>1</u> | <u>Length</u> | <u>0x01</u> | <u>The size of TLV fields following the Length field.</u> |
| <u>1</u> | <u>AutoNegAdminControl</u> | <u>Varies</u> | <u>Value of <i>acAutoNegAdminControl</i> action, defined as follows:</u> <u>enable: 0x02</u> <u>disable: 0x01</u> |

- 1 **Annex 4A**
- 2 (normative)
- 3 **Protocol implementation conformance statement (PICS) for Package A**
- 4 **4A.1 Introduction**
- 5 | -

1 4A.2 ONU-specific PICS

2 4A.2.1 Management entities

| Item | Description | Subclause | Value/Comment | Status | Support |
|---------------------------|---|--------------------------|--|-------------------|-------------------------|
| ... | ... | ... | ... | ... | ... |
| AU-ME109 | Supported basic actions | 14.4.4 | Per Table 14-321 | M | [] Yes |
| AU-ME109a | PHY Admin Control TLV (0x09/0x00-05) | 14.4.4.1 | Meets the requirements of Table 14-nnn . | M | [] Yes |
| AU-ME109b | UNI Auto-Negotiation Restart TLV (0x09/0x00-0B) | 14.4.4.2 | Meets the requirements of Table 14-nnn . | M | [] Yes |
| AU-ME109c | UNI Auto-Negotiation Admin Control TLV (0x09/0x00-0C) | 14.4.4.3 | Meets the requirements of Table 14-nnn . | M | [] Yes |
| AU-ME110 | Supported extended actions | 14.4.5 | Per Table 14-322 | M | [] Yes |
| ... | ... | ... | ... | ... | ... |

3 4A.3 OLT-specific PICS

4 4A.3.1 Management entities

| Item | Description | Subclause | Value/Comment | Status | Support |
|---------------------------|---|--------------------------|--|-------------------|-------------------------|
| ... | ... | ... | ... | ... | ... |
| AT-ME109 | Supported standard -basic actions | 14.4.4 | Per Table 14-321 | M | [] Yes |
| AT-ME109a | PHY Admin Control TLV (0x09/0x00-05) | 14.4.4.1 | Meets the requirements of Table 14-nnn . | M | [] Yes |
| AT-ME109b | UNI Auto-Negotiation Restart TLV (0x09/0x00-0B) | 14.4.4.2 | Meets the requirements of Table 14-nnn . | M | [] Yes |
| AT-ME109c | UNI Auto-Negotiation Admin Control TLV (0x09/0x00-0C) | 14.4.4.3 | Meets the requirements of Table 14-nnn . | M | [] Yes |
| AT-ME110 | Supported extended actions | 14.4.5 | Per Table 14-322 | M | [] Yes |
| ... | ... | ... | ... | ... | ... |

