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14.4.2.1 ONU management

14.4.2.1.1 Attribute *aFramesTransmittedOK* (0x07/0x00-02)

This attribute represents the number of successfully transmitted frames.

Attribute *aFramesTransmittedOK*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.2.

The *aFramesTransmittedOK* attribute is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aFramesTransmittedOK* attribute shall be as specified in Table 14-135.

Table 14-135— *Frames Transmitted OK* TLV (0x07/0x00-02)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-02	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	FramesTransmittedOK	Varies	Value of *aFramesTransmittedOK* attribute

14.4.2.1.2 Attribute *aSingleCollisionFrames* (0x07/0x00-03)

This attribute represents the number of frames that are involved in a single collision, and are subsequently transmitted successfully.

Attribute *aSingleCollisionFrames*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.3.

The *aSingleCollisionFrames* attribute is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *aSingleCollisionFrames* attribute shall be as specified in Table 14-135.

Table 14-135— *Single Collision Frames* TLV (0x07/0x00-03)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-03	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	SingleCollisionFrames	Varies	Value of *aSingleCollisionFrames* attribute

14.4.2.1.3 Attribute *aMultipleCollisionFrames* (0x07/0x00-04)

This attribute represents the number of frames that are involved in more than one collision and are subsequently transmitted successfully.

Attribute *aMultipleCollisionFrames*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.4.

The *aMultipleCollisionFrame* attribute is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *aMultipleCollisionFrame* attribute shall be as specified in Table 14-135.

Table 14-135— *Multiple Collision Frame* TLV (0x07/0x00-04)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-04	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MultipleCollisionFrame	Varies	Value of *aMultipleCollisionFrame* attribute

14.4.2.1.4 Attribute *aFramesReceivedOK* (0x07/0x00-05)

This attribute represents the number of frames successfully received.

Attribute *aFramesReceivedOK*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.5.

The *aFramesReceivedOK* attribute is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aFramesReceivedOK* attribute shall be as specified in Table 14-135.

Table 14-135— *Frames Received OK* TLV (0x07/0x00-05)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-05	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	FramesReceivedOK	Varies	Value of *aFramesReceivedOK* attribute

14.4.2.1.5 Attribute *aFrameCheckSequenceErrors* (0x07/0x00-06)

This attribute represents the number of frames received with non-matching frame check sequence.

Attribute *aFrameCheckSequenceErrors*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.6.

The *aFrameCheckSequenceErrors* attribute is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aFrameCheckSequenceErrors* attribute shall be as specified in Table 14-135.

Table 14-135— *Frame Check Sequence Errors* TLV (0x07/0x00-06)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-06	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	FrameCheckSequenceErrors	Varies	Value of *aFrameCheckSequenceErrors* attribute

14.4.2.1.6 Attribute *aAlignmentErrors* (0x07/0x00-07)

This attribute represents the number of alignment error.

Attribute *aAlignmentErrors*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.7.

The *aAlignmentErrors* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aAlignmentErrors* attribute shall be as specified in Table 14-135.

Table 14-135— *Alignment Errors* TLV (0x07/0x00-07)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-07	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	AlignmentErrors	Varies	Value of *aAlignmentErrors* attribute

14.4.2.1.7 Attribute *aOctetsTransmittedOK* (0x07/0x00-08)

This attribute represents the number of successfully transmitted octets.

Attribute *aOctetsTransmittedOK*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.8.

The *aOctetsTransmittedOK* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aOctetsTransmittedOK* attribute shall be as specified in Table 14-135.

Table 14-135— *Octets Transmitted OK* TLV (0x07/0x00-08)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-08	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	OctetsTransmittedOK	Varies	Value of *aOctetsTransmittedOK* attribute

14.4.2.1.8 Attribute *aFramesWithDeferredXmissions* (0x07/0x00-09)

This attribute represents the number of frames whose transmission was delayed on its first attempt because the medium was busy.

Attribute *aFramesWithDeferredXmissions*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.9.

The *aFramesWithDeferredXmissions* is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *aFramesWithDeferredXmissions* attribute shall be as specified in Table 14-135.

Table 14-135— *Frames With Deferred Transmissions* TLV (0x07/0x00-09)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-09	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	FramesWithDeferredXmissions	Varies	Value of *aFramesWithDeferredXmissions* attribute

14.4.2.1.9 Attribute *aLateCollisions* (0x07/0x00-0A)

This attribute represents the number of the times that a collision has been detected later than one slot time from the start of the packet transmission.

Attribute *aLateCollisions*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.10.

The *aLateCollisions* is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *aLateCollisions* attribute shall be as specified in Table 14-135.

Table 14-135— *Late Collisions* TLV (0x07/0x00-0A)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier

Size (octets)	Field (name)	Value	Notes
2	Leaf	0x00-0A	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	LateCollisions	Varies	Value of *aLateCollisions* attribute

14.4.2.1.10 Attribute *aFramesAbortedDueToXSColls* (0x07/0x00-0B)

This attribute represents the number of frames that were not transmitted successfully due to excessive collisions.

Attribute *aFramesAbortedDueToXSColls*:

Syntax: Unsigned integer
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.11.

The *aFramesAbortedDueToXSColls* is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *aFramesAbortedDueToXSColls* attribute shall be as specified in Table 14-135.

Table 14-135— *Frames Aborted Collisions* TLV (0x07/0x00-0B)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-0B	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	FramesAbortedDueToXSColls	Varies	Value of *aFramesAbortedDueToXSColls* attribute

14.4.2.1.11 Attribute *aFramesLostDueToIntMACXmitError* (0x07/0x00-0C)

This attribute represents the number of frames that would otherwise be transmitted by the station, but could not be sent due to an internal MAC sublayer transmit error.

Attribute *aFramesLostDueToIntMACXmitError*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.12.

The *aFramesLostDueToIntMACXmitError* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aFramesLostDueToIntMACXmitError* attribute shall be as specified in Table 14-135.

Table 14-135— *Frames Lost Internal Tx Error* TLV (0x07/0x00-0C)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-0C	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	FramesAbortedDueToXSColls	Varies	Value of *aFramesAbortedDueToXSColls* attribute

14.4.2.1.12 Attribute *aOctetsReceivedOK* (0x07/0x00-0E)

This attribute represents the number of data and padding octets in frames that are successfully received.

Attribute *aOctetsReceivedOK*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.14.

The *aOctetsReceivedOK* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aOctetsReceivedOK* attribute shall be as specified in Table 14-135.

Table 14-135— *Octets Received OK* TLV (0x07/0x00-0E)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-0E	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	OctetsReceivedOK	Varies	Value of *aOctetsReceivedOK* attribute

14.4.2.1.13 Attribute *aFramesLostDueToIntMACRcvError* (0x07/0x00-0F)

This attribute represents the number of frames that would otherwise be received by the station, but could not be accepted due to an internal MAC sublayer receive error.

Attribute *aFramesLostDueToIntMACRcvError*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.15.

The *aFramesLostDueToIntMACRcvError* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aFramesLostDueToIntMACRcvError* attribute shall be as specified in Table 14-135.

Table 14-135— *Frames Lost Internal Rx Error* TLV (0x07/0x00-0F)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-0F	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	FramesLostDueToIntMACRcvError	Varies	Value of *aFramesLostDueToIntMACRcvError* attribute

14.4.2.1.14 Attribute *aMulticastFramesXmittedOK* (0x07/0x00-12)

This attribute represents the number of frames that are successfully transmitted to a group destination address other than broadcast.

Attribute *aMulticastFramesXmittedOK*:

Syntax: Counter, Nonresettable, Wrap-around

Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.18.

The *aMulticastFramesXmittedOK* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMulticastFramesXmittedOK* attribute shall be as specified in Table 14-135.

Table 14-135— *Multicast Frames Transmitted OK* TLV (0x07/0x00-12)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-12	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MulticastFramesXmittedOK	Varies	Value of *aMulticastFramesXmittedOK* attribute

14.4.2.1.15 Attribute *aBroadcastFramesXmittedOK* (0x07/0x00-13)

This attribute represents the number of frames that were successfully transmitted to the broadcast address.

Attribute *aBroadcastFramesXmittedOK*:
Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.19.

The *aBroadcastFramesXmittedOK* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aBroadcastFramesXmittedOK* attribute shall be as specified in Table 14-135.

Table 14-135— *Broadcast Frames Transmitted OK* TLV (0x07/0x00-13)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-13	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	BroadcastFramesXmittedOK	Varies	Value of *aBroadcastFramesXmittedOK* attribute

14.4.2.1.16 Attribute *aFramesWithExcessiveDeferral* (0x07/0x00-14)

This attribute represents the number of frames that deferred for an excessive period of time.

Attribute *aFramesWithExcessiveDeferral*:
Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.20.

The *aFramesWithExcessiveDeferral* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aFramesWithExcessiveDeferral* attribute shall be as specified in Table 14-135.

Table 14-135— *Frames With Excessive Deferral* TLV (0x07/0x00-14)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-14	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	FramesWithExcessiveDeferral	Varies	Value of *aFramesWithExcessiveDeferral* attribute

14.4.2.1.17 Attribute *aMulticastFramesReceivedOK* (0x07/0x00-15)

This attribute represents the number of frames that are successfully received and are directed to an active non-broadcast group address.

Attribute *aMulticastFramesReceivedOK*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.21.

The *aMulticastFramesReceivedOK* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMulticastFramesReceivedOK* attribute shall be as specified in Table 14-135.

Table 14-135— *Multicast Frames Received OK* TLV (0x07/0x00-15)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-15	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MulticastFramesReceivedOK	Varies	Value of *aMulticastFramesReceivedOK* attribute

14.4.2.1.18 Attribute *aBroadcastFramesReceivedOK* (0x07/0x00-16)

This attribute represents the number of frames that are successfully received and are directed to the broadcast group address.

Attribute *aBroadcastFramesReceivedOK*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.22.

The *aBroadcastFramesReceivedOK* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aBroadcastFramesReceivedOK* attribute shall be as specified in Table 14-135.

Table 14-135— *Broadcast Frames Received OK* TLV (0x07/0x00-16)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-16	Leaf identifier

Size (octets)	Field (name)	Value	Notes
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	BroadcastFramesReceivedOK	Varies	Value of *aBroadcastFramesReceivedOK* attribute

14.4.2.1.19 Attribute *aInRangeLengthErrors* (0x07/0x00-17)

This attribute represents the number of MAC frames received with a Length/Type field value between the minimum MAC client data size and *maxBasicDataSize* (see IEEE Std 802.3, 4.2.7.1) inclusive, and that does not match the number of data octets received.

Attribute *aInRangeLengthErrors*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.23.

The *aInRangeLengthErrors* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aInRangeLengthErrors* attribute shall be as specified in Table 14-135.

Table 14-135— *In Range Length Errors* TLV (0x07/0x00-17)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-17	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	InRangeLengthErrors	Varies	Value of *aInRangeLengthErrors* attribute

14.4.2.1.20 Attribute *aOutOfRangeLengthField* (0x07/0x00-18)

This attribute represents the number of MAC frames received with a Length/Type field value that is greater than *maxBasicDataSize* (see IEEE Std 802.3, 4.2.7.1).

Attribute *aOutOfRangeLengthField*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.24.

The *aOutOfRangeLengthField* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aOutOfRangeLengthField* attribute shall be as specified in Table 14-135.

Table 14-135— *Out Of Range Length* TLV (0x07/0x00-18)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-18	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	OutOfRangeLengthField	Varies	Value of *aOutOfRangeLengthField* attribute

14.4.2.1.21 Attribute *aFrameTooLongErrors* (0x07/0x00-19)

This attribute represents the number of received MAC frames that exceed *maxFrameSizeLimit* (see IEEE Std 802.3, 4.2.7.1).

Attribute *aFrameTooLongErrors*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.25.

The *aFrameTooLongErrors* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aFrameTooLongErrors* attribute shall be as specified in Table 14-135.

Table 14-135— *Frame Too Long Errors* TLV (0x07/0x00-19)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-19	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	FrameTooLongErrors	Varies	Value of *aFrameTooLongErrors* attribute

14.4.2.1.22 Attribute *aMACEnableStatus* (0x07/0x00-1A)

This attribute represents the status of the MAC.

Attribute *aMACEnableStatus*:

Syntax: Boolean
Remote access: Read/Write
Default value: `enabled`
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.26. Upon writing of this attribute, the following actions take place:

`enabled`: MAC sublayer enters the normal operational state at idle.
`disabled`: MAC sublayer ceases all transmit and receive operations and enters a disabled state.

The *aMACEnableStatus* is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *aMACEnableStatus* attribute shall be as specified in Table 14-135.

Table 14-135— *MAC Enable Status* TLV (0x07/0x00-1A)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-1A	Leaf identifier
1	Length	0x01	The size of TLV fields following the `Length` field
1	MACEnableStatus	Varies	Value of *aMACEnableStatus* attribute, attribute, defined as follows: `enabled`: 0x01 `disabled`: 0x00

14.4.2.1.23 Attribute *aReadWriteMACAddress* (0x07/0x00-1D)

This attribute represents the MAC address assigned to a UNI Port.

Attribute *aReadWriteMACAddress*:

Syntax: MAC address
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.29.

The *aReadWriteMACAddress* is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *aReadWriteMACAddress* attribute shall be as specified in Table 14-135.

Table 14-135— *Read-Write MAC Address* TLV (0x07/0x00-1D)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-1D	Leaf identifier
1	Length	0x06	The size of TLV fields following the `Length` field
6	ReadWriteMACAddress	Varies	Value of *aReadWriteMACAddress* attribute

14.4.2.2 PHY management

14.4.2.2.1 Attribute *aPhyType* (0x07/0x00-20)

This attribute represents a PHY type.

Attribute *aPhyType*:

Syntax: Enumeration
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.2.1.2. The following values are defined:

`other:`	Undefined
`unknown:`	Initializing, true state or type not yet known
`none:`	MII present and nothing connected
`10Mbps:`	IEEE Std 802.3, Clause 7 10Mb/s Manchester
`100BASE-T4:`	IEEE Std 802.3,Clause23 100Mb/s 8B/6T
`100BASE-X:`	IEEE Std 802.3,Clause24 or subclause 66.1 100Mb/s 4B/5B
`100BASE-T2:`	IEEE Std 802.3,Clause32 100Mb/s PAM5X5
`1000BASE-X:`	IEEE Std 802.3,Clause36 or subclause 66.2 1000Mb/s 8B/10B
`1000BASE-T:`	IEEE Std 802.3,Clause40 1000 Mb/s 4D-PAM5
`10GBASE-X:`	IEEE Std 802.3,Clause48 10Gb/s 4 lane 8B/10B
`10GBASE-R:`	IEEE Std 802.3,Clause49 10Gb/s 64B/66B
`10GBASE-W:`	IEEE Std 802.3,Clause49 10Gb/s 64B/66B and Clause50 WIS
`10GBASE-T:`	IEEE Std 802.3,Clause55 10Gb/s DSQ128

The *aPhyType* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aPhyType* attribute shall be as specified in Table 14-135.

Table 14-135— *PHY Type* TLV (0x07/0x00-20)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-20	Leaf identifier

Size (octets)	Field (name)	Value	Notes
1	Length	0x01	The size of TLV fields following the `Length` field
1	PhyType	Varies	Value of *aPhyType* attribute, defined as follows: `other:` 0x01 `unknown:` 0x02 `none:` 0x03 `10Mbps:` 0x07 `100BASE-T4:` 0x17 `100BASE-X:` 0x18 `100BASE-T2:` 0x20 `1000BASE-X:` 0x24 `1000BASE-T:` 0x28 `10GBASE-X:` 0x30 `10GBASE-R:` 0x31 `10GBASE-W:` 0x32 `10GBASE-T:` 0x37

14.4.2.2.2 Attribute *aSymbolErrorDuringCarrier* (0x07/0x00-23)

This attribute represents the number of carrier events (media being non-idle) that had PHY reception errors.

Attribute *aSymbolErrorDuringCarrier*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.2.1.5.

The *aSymbolErrorDuringCarrier* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aSymbolErrorDuringCarrier* attribute shall be as specified in Table 14-135.

Table 14-135— *Symbol Error During Carrier* TLV (0x07/0x00-23)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-23	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	SymbolErrorDuringCarrier	Varies	Value of *aSymbolErrorDuringCarrier* attribute

14.4.2.2.3 Attribute *aPhyAdminState* (0x07/0x00-25)

This attribute represents the PHY administrative state.

Attribute *aPhyAdminState*:

Syntax: Boolean
Default value: `enabled`
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.2.1.7. The following values are defined:

`enabled`: PHY is enabled.
`disabled`: PHY is disabled.

The *aPhyAdminState* is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *aPhyAdminState* attribute shall be as specified in Table 14-135.

Table 14-135— *PHY Admin State* TLV (0x07/0x00-25)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-25	Leaf identifier
1	Length	0x04	The size of TLV fields following the `Length` field
4	PhyAdminState	Varies	Value of *aPhyAdminState* attribute, defined as follows: `enabled`: 0x01 `disabled`: 0x00

14.4.2.3 MAU management

14.4.2.3.1 Attribute *aMediaAvailable* (0x07/0x00-47)

This attribute represents the status of the media.

Attribute *aMediaAvailable*:

Syntax: Enumeration
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.5.1.1.4. The following values are defined:
`available:` link or light normal, loopback normal
`not_available:` link loss or low light, no loopback

The *aMediaAvailable* is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *aMediaAvailable* attribute shall be as specified in Table 14-135.

Table 14-135—*Media Available* TLV (0x07/0x00-47)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-47	Leaf identifier
1	Length	0x01	The size of TLV fields following the `Length` field
1	MediaAvailable	Varies	Value of *aMediaAvailable* attribute, defined as follows: `available:` 0x03 `not_available:` 0x04

14.4.2.4 Auto-Negotiation management

14.4.2.4.1 Attribute *aAutoNegID* (0x07/0x00-4E)

14.4.2.4.2 Attribute *aAutoNegAdminState* (0x07/0x00-4F)

14.4.2.4.3 Attribute *aAutoNegRemoteSignaling* (0x07/0x00-50)

14.4.2.4.4 Attribute *aAutoNegAutoConfig* (0x07/0x00-51)

14.4.2.4.5 Attribute *aAutoNegLocalTechnologyAbility* (0x07/0x00-52)

14.4.2.4.6 Attribute *aAutoNegAdvertisedTechnologyAbility* (0x07/0x00-53)

14.4.2.4.7 Attribute *aAutoNegReceivedTechnologyAbility* (0x07/0x00-54)

14.4.2.4.8 Attribute *aAutoNegLocalSelectorAbility* (0x07/0x00-55)

14.4.2.4.9 Attribute *aAutoNegAdvertisedSelectorAbility* (0x07/0x00-56)

14.4.2.4.10 Attribute *aAutoNegReceivedSelectorAbility* (0x07/0x00-57)

14.4.2.5 MAC management

14.4.2.5.1 Attribute *aDuplexStatus* (0x07/0x00-5A)

This attribute represents the current mode of operation of the MAC entity.

Attribute *aDuplexStatus*:

Syntax: Enumeration
Remote access: Read/Write
Default value: `full_duplex`
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.1.1.32. The following values are defined:

`half_duplex`:	Half-duplex mode.
`full_duplex`:	Full-duplex mode.
`unknown`:	Duplex status unknown

The *aDuplexStatus* is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *aDuplexStatus* attribute shall be as specified in Table 14-135.

Table 14-135— *aDuplexStatus* TLV (0x07/0x00-5A)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-5A	Leaf identifier
1	Length	0x01	The size of TLV fields following the `Length` field
1	DuplexStatus	Varies	Value of *aDuplexStatus* attribute, defined as follows: `half_duplex`: 0x01 `full_duplex`: 0x02 `unknown`: 0x03

14.4.2.6 MAC Control management

14.4.2.6.1 Attribute *aMACControlFunctionsSupported* (0x07/0x00-5D)

14.4.2.6.2 Attribute *aMACControlFramesTransmitted* (0x07/0x00-5E)

This attribute represents the number of MAC Control frames passed to the MAC sublayer for transmission.

Attribute *aMACControlFramesTransmitted*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.3.3.

The *aMACControlFramesTransmitted* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMACControlFramesTransmitted* attribute shall be as specified in Table 14-135.

Table 14-135— *MAC Control Frames Transmitted* TLV (0x07/0x00-5E)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-5E	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MACControlFramesTransmitted	Varies	Value of *aMACControlFramesTransmitted* attribute

14.4.2.6.3 Attribute *aMACControlFramesReceived* (0x07/0x00-5F)

This attribute represents the number of MAC Control frames passed by the MAC sublayer to the MAC Control sublayer.

Attribute *aMACControlFramesReceived*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only

Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.3.4.

The *aMACControlFramesReceived* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMACControlFramesTransmitted* attribute shall be as specified in Table 14-135.

Table 14-135— *MAC Control Frames Received* TLV (0x07/0x00-5F)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-5F	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MACControlFramesReceived	Varies	Value of *aMACControlFramesReceived* attribute

14.4.2.6.4 Attribute *aUnsupportedOpcodesReceived* (0x07/0x00-60)

This attribute represents the number of received MAC Control frames that contain an opcode not supported by the ONU.

Attribute *aUnsupportedOpcodesReceived*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.3.5.

The *aUnsupportedOpcodesReceived* is associated with the UNI Port or the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aUnsupportedOpcodesReceived* attribute shall be as specified in Table 14-135.

Table 14-135— *Unsupported Opcodes Received* TLV (0x07/0x00-60)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-60	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	UnsupportedOpcodesReceived	Varies	Value of *aUnsupportedOpcodesReceived* attribute

14.4.2.6.5 Attribute *aPAUSEMACCtrlFramesTransmitted* (0x07/0x00-62)

This attribute represents the number of *PAUSE* frames passed to the MAC sublayer for transmission

Attribute *aPAUSEMACCtrlFramesTransmitted*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.4.2.

The *aPAUSEMACCtrlFramesTransmitted* is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *aPAUSEMACCtrlFramesTransmitted* attribute shall be as specified in Table 14-135.

Table 14-135— *PAUSE Frames Transmitted* TLV (0x07/0x00-62)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-62	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	PAUSEMACCtrlFramesTransmitted	Varies	Value of *aPAUSEMACCtrlFramesTransmitted* attribute

14.4.2.6.6 Attribute *aPAUSEMACCtrlFramesReceived* (0x07/0x00-63)

This attribute represents the number of *PAUSE* frames passed by the MAC sublayer to the MAC Control sublayer.

Attribute *aPAUSEMACCtrlFramesReceived*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.4.3.

The *aPAUSEMACCtrlFramesReceived* is associated with the UNI Port object (see 14.4.1.1). The Variable Container TLV for the *aPAUSEMACCtrlFramesReceived* attribute shall be as specified in Table 14-135.

Table 14-135— *PAUSE Frames Received* TLV (0x07/0x00-63)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x00-63	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	PAUSEMACCtrlFramesReceived	Varies	Value of *aPAUSEMACCtrlFramesReceived* attribute

14.4.2.7 OMP emulation management

14.4.2.7.1 Attribute *aMPCPMACCtrlFramesTransmitted* (0x07/0x01-18)

This attribute represents the number of MPCP frames passed to the MAC sublayer for transmission

Attribute *aMPCPMACCtrlFramesTransmitted*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.5.1.7.

The *aMPCPMACCtrlFramesTransmitted* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMPCPMACCtrlFramesTransmitted* attribute shall be as specified in Table 14-135.

Table 14-135— *MPCP Frames Transmitted* TLV (0x07/0x01-18)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-18	Leaf identifier

Size (octets)	Field (name)	Value	Notes
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MPCPMACCtrlFramesTransmitted	Varies	Value of *aMPCPMACCtrlFramesTransmitted* attribute

14.4.2.7.2 Attribute *aMPCPMACCtrlFramesReceived* (0x07/0x01-19)

This attribute represents the number of MPCP frames passed by the MAC sublayer to the MAC Control sublayer.

Attribute *aMPCPMACCtrlFramesReceived*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.5.1.8.

The *aMPCPMACCtrlFramesReceived* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMPCPMACCtrlFramesTransmitted* attribute shall be as specified in Table 14-135.

Table 14-135— *MPCP Frames Received* TLV (0x07/0x01-19)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-19	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MPCPMACCtrlFramesReceived	Varies	Value of *aMPCPMACCtrlFramesReceived* attribute

14.4.2.7.3 Attribute *aMPCPDiscoveryWindowsSent* (0x07/0x01-20)

This attribute represents the number of discovery windows generated.

Attribute *aMPCPDiscoveryWindowsSent*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.5.1.22.

The *aMPCPDiscoveryWindowsSent* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMPCPDiscoveryWindowsSent* attribute shall be as specified in Table 14-135.

Table 14-135— *MPCP Discovery Windows Sent* TLV (0x07/0x01-20)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-20	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MPCPDiscoveryWindowsSent	Varies	Value of *aMPCPDiscoveryWindowsSent* attribute

14.4.2.7.4 Attribute *aMPCPDiscoveryTimeout* (0x07/0x01-22)

This attribute represents the number of times a discovery time-out occurred.

Attribute *aMPCPDiscoveryTimeout*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.5.1.23.

The *aMPCPDiscoveryTimeout* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMPCPDiscoveryTimeout* attribute shall be as specified in Table 14-135.

Table 14-135— *MPCP Discovery Timeout* TLV (0x07/0x01-22)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-22	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MPCPDiscoveryTimeout	Varies	Value of *aMPCPDiscoveryTimeout* attribute

14.4.2.7.5 Attribute *aMPCPTxRegAck* (0x07/0x01-3C)

This attribute represents the number of times a *REGISTER_ACK* MPCPDU transmission occurred.

Attribute *aMPCPTxRegAck*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.5.1.10.

The *aMPCPTxRegAck* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMPCPTxRegAck* attribute shall be as specified in Table 14-135.

Table 14-135— *REGISTER_ACK MPCPDUs Transmitted* TLV (0x07/0x01-3C)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-3C	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MPCPTxRegAck	Varies	Value of *aMPCPTxRegAck* attribute

14.4.2.7.6 Attribute *aMPCPTxRegRequest* (0x07/0x01-3E)

This attribute represents the number of times a *REGISTER_REQ* MPCPDU transmission occurred.

Attribute *aMPCPTxRegRequest*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.5.1.12.

The *aMPCPTxRegRequest* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMPCPTxRegRequest* attribute shall be as specified in Table 14-135.

Table 14-135— *REGISTER_REQ MPCPDUs Transmitted* TLV (0x07/0x01-3E)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-3E	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MPCPTxRegRequest	Varies	Value of *aMPCPTxRegRequest* attribute

14.4.2.7.7 Attribute *aMPCPTxReport* (0x07/0x01-3F)

This attribute represents the number of times a *REPORT* MPCPDU transmission occurred.

Attribute *aMPCPTxReport*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.5.1.13.

The *aMPCPTxReport* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMPCPTxReport* attribute shall be as specified in Table 14-135.

Table 14-135— *REPORT MPCPDUs Transmitted* TLV (0x07/0x01-3F)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-3F	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MPCPTxReport	Varies	Value of *aMPCPTxReport* attribute

14.4.2.7.8 Attribute *aMPCPRxGate* (0x07/0x01-40)

This attribute represents the number of times a *GATE* MPCPDU reception occurred.

Attribute *aMPCPRxGate*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.5.1.14.

The *aMPCPRxGate* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMPCPRxGate* attribute shall be as specified in Table 14-135.

Table 14-135— *GATE MPCPDUs Received* TLV (0x07/0x01-40)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-40	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field

Size (octets)	Field (name)	Value	Notes
1..8	MPCPRxGate	Varies	Value of *aMPCPRxGate* attribute

14.4.2.7.9 Attribute *aMPCPRxRegister* (0x07/0x01-42)

This attribute represents the number of times a *REGISTER* MPCPDU reception occurred.

Attribute *aMPCPRxRegister*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.3.5.1.16.

The *aMPCPRxRegister* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aMPCPRxRegister* attribute shall be as specified in Table 14-135.

Table 14-135— *REGISTER MPCPDUs Received* TLV (0x07/0x01-42)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-42	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	MPCPRxRegister	Varies	Value of *aMPCPRxRegister* attribute

14.4.2.8 FEC management

14.4.2.8.1 Attribute *aFECCorrectedBlocks* (0x07/0x01-24)

This attribute represents the number corrected FEC blocks

Attribute *aFECCorrectedBlocks*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.5.1.1.17.

The *aFECCorrectedBlocks* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aFECCorrectedBlocks* attribute shall be as specified in Table 14-135.

Table 14-135— *FEC Corrected Blocks* TLV (0x07/0x01-24)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-24	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	FECCorrectedBlocks	Varies	Value of *aFECCorrectedBlocks* attribute

14.4.2.8.2 Attribute *aFECUncorrectableBlocks* (0x07/0x01-25)

This attribute represents the number of uncorrectable FEC blocks.

Attribute *aFECUncorrectableBlocks*:

Syntax: Counter, Nonresettable, Wrap-around
Range: 0x00 to 0xFF-FF-FF-FF-FF-FF-FF-FF
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.5.1.1.18.

The *aFECUncorrectableBlocks* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aFECUncorrectableBlocks* attribute shall be as specified in Table 14-135.

Table 14-135— *FEC Uncorrectable Blocks* TLV (0x07/0x01-25)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-25	Leaf identifier
1	Length	0x01 to 0x08	The size of TLV fields following the `Length` field
1..8	FECUncorrectableBlocks	Varies	Value of *aFECUncorrectableBlocks* attribute

14.4.2.8.3 Attribute *aFECAbility* (0x07/0x01-39)

This attribute represents the FEC capability of the PON Port.

Attribute *aFECAbility*:

Syntax: Enumeration
Remote access: Read-Only
Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.5.1.1.15. The following values are defined:

`unknown`: Device is initializing, true FEC capability is unknown.
`supported`: FEC is supported.
`not_supported`: FEC is not supported

The *aFECAbility* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aFECAbility* attribute shall be as specified in Table 14-135.

Table 14-135— *FEC Ability* TLV (0x07/0x01-39)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-39	Leaf identifier
1	Length	0x04	The size of TLV fields following the `Length` field
4	FECAbility	Varies	Value of *aFECAbility* attribute, defined as follows: `unknown`: 0x00-00-00-00 `supported`: 0x00-00-00-01 `not_supported`: 0x00-00-00-02

14.4.2.8.4 Attribute *aFECmode* (0x07/0x01-3A)

This attribute represents the FEC operation mode of the PON Port.

Attribute *aFECmode*:

Syntax: Enumeration
Remote access: Read-Write

Description: The behavior of this attribute is defined in IEEE Std 802.3, 30.5.1.1.16. The following values are defined:

`unknown`: Device is initializing, true FEC capability is unknown.
`enabled`: FEC is enabled.
`disabled:` FEC is disabled.

The *aFECmode* is associated with the PON Port object (see 14.4.1.1). The Variable Container TLV for the *aFECmode* attribute shall be as specified in Table 14-135.

Table 14-135— *FEC Mode* TLV (0x07/0x01-3A)

Size (octets)	Field (name)	Value	Notes
1	Branch	0x07	Branch identifier
2	Leaf	0x01-3A	Leaf identifier
1	Length	0x04	The size of TLV fields following the `Length` field
4	FECmode	Varies	Value of *aFECmode* attribute, defined as follows: `unknown`: 0x00-00-00-00 `enabled`: 0x00-00-00-01 `disabled:` 0x00-00-00-02 The value `unknown` may only be present in *eOAM_Get_Response* message.