

14.4.8 Power saving

14.4.8.1 Attribute *aOnuPwrSavingConfig* (0xDB/0x0A-00)

Clause 10 defines the power saving mode that is always enabled under the normal operating conditions. The power-saving mode includes several mechanisms that all operate concurrently: Reduction of power consumption between the upstream bursts (10.3.1), Suppression of certain upstream bursts (10.3.2), and Upstream burst aggregation (10.3.4). This attribute allows any or all of these mechanisms to be disabled.

NOTE— This attribute is intended primarily for testing and troubleshooting. Under the normal operating conditions, this attribute is expected to retain its default value.

This attribute consists of the following sub-attributes: *sInterBurstSleep*, *sBurstSuppression*, and *sBurstAggregation*.

Sub-attribute *aOnuPwrSavingConfig.sInterBurstSleep*:

Syntax: Boolean
Remote access: Read/Write
Default Value: enabled
Description: This sub-attribute represents the state of the mechanism for the reduction of power consumption between the upstream bursts. The following values are defined:
disabled: ONU does not place the upstream data path into a low power state between the upstream bursts.
enabled: ONU places the upstream data path into a low power state between the upstream bursts.

Sub-attribute *aOnuPwrSavingConfig.sBurstSuppression*:

Syntax: Boolean
Remote access: Read/Write
Default Value: enabled
Description: This sub-attribute represents the state of the mechanism for the suppression of certain upstream bursts. The following values are defined:
disabled: ONU does not suppress REPORT MPCPDUs or any upstream bursts.
enabled: ONU suppresses the REPORT MPCPDUs or upstream bursts when conditions specified in 8.4.4.1 and 8.4.4.2 are met.

Sub-attribute *aOnuPwrSavingConfig.sBurstAggregation*:

Syntax: Boolean
Remote access: Read/Write
Default Value: enabled
Description: This sub-attribute represents the state of the mechanism for the aggregation of upstream bursts. The following values are defined:
disabled: ONU generates REPORT MPCPDUs and transmits frames at the first opportunity even if that results in a large number of small upstream bursts.
enabled: ONU delays the reporting and transmission of some frames in order to aggregate more frames into a single burst.

The *aOnuPwrSavingConfig* attribute is associated with the ONU object (see 14.2.1). The Variable Container TLV for the *aOnuPwrSavingConfig* attribute shall be as specified in Table 14-191.

Table 14-191—ONU Power Saving Configuration TLV (0xDB/0x0A-00)

Size (octets)	Field (name)	Value	Notes
1	Branch	0xDB	Branch identifier
2	Leaf	0x0A-00	Leaf identifier
1	Length	3	The size of TLV fields following the Length field
1	InterBurstSleep	Varies	Value of <i>sInterBurstSleep</i> sub-attribute, defined as follows: disabled: 0x00 enabled: 0x01
1	BurstSuppression	Varies	Value of <i>sBurstSuppression</i> sub-attribute, defined as follows: disabled: 0x00 enabled: 0x01
1	BurstAggregation	Varies	Value of <i>sBurstAggregation</i> sub-attribute, defined as follows: disabled: 0x00 enabled: 0x01