Content

[2 Classes 1](#_Toc12990091)

[2.1 CurrentPerformance 1](#_Toc12990092)

[2.2 CurrentProblem 3](#_Toc12990093)

[2.3 HistoricalPerformance 4](#_Toc12990094)

[2.4 PureEthernetStructureCapability 6](#_Toc12990095)

[2.5 PureEthernetStructureConfiguration 7](#_Toc12990096)

[2.6 PureEthernetStructureCurrentPerformance 8](#_Toc12990097)

[2.7 PureEthernetStructureCurrentProblems 9](#_Toc12990098)

[2.8 PureEthernetStructureHistoricalPerformances 10](#_Toc12990099)

[2.9 PureEthernetStructureLpSpec 10](#_Toc12990100)

[2.10 PureEthernetStructureStatus 11](#_Toc12990101)

[2.11 PureEthernetStructure\_Pac 12](#_Toc12990102)

[3 Data Types 14](#_Toc12990103)

[3.1 G826ThresholdCrossAlarmType 14](#_Toc12990104)

[3.2 ProblemKindSeverityType 15](#_Toc12990105)

[3.3 SegmentStatusType 15](#_Toc12990106)

[3.4 StructureCurrentPerformanceType 16](#_Toc12990107)

[3.5 StructureCurrentProblemType 17](#_Toc12990108)

[3.6 StructureHistoricalPerformanceType 17](#_Toc12990109)

[3.7 StructurePerformanceType 18](#_Toc12990110)

[4 Enumeration Types 19](#_Toc12990111)

[4.1 AdministrativeStateType 19](#_Toc12990112)

[4.2 G826Type 20](#_Toc12990113)

[4.3 GranularityPeriodType 20](#_Toc12990114)

[4.4 OperationalStateType 20](#_Toc12990115)

[4.5 SeverityType 21](#_Toc12990116)

[5 Primitive Types 21](#_Toc12990117)

# Classes

## CurrentPerformance

Applied stereotypes:

* OpenInterfaceModelClass
* objectCreationNotification: NO
* objectDeletionNotification: NO
* OpenModelClass
* support: MANDATORY

Attributes for CurrentPerformance

Table 1: Attributes for CurrentPerformance

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| timestamp | DateTime  2010-11-20T14:00:00+01:00 | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | The timestamp associated with when the current data was collected. |
| suspectIntervalFlag | Boolean  false | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | This attribute is used to indicate that the performance data for the current period may not be reliable. Some reasons for this to occur are: – Suspect data were detected by the actual resource doing data collection. – Transition of the administrativeState attribute to/from the 'lock' state. – Transition of the operationalState to/from the 'disabled' state. – Scheduler setting that inhibits the collection function. – The performance counters were reset during the interval. – The currentData (or subclass) object instance was created during the monitoring period. |
| elapsedTime | Integer  -1 | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: s  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_64\_BIT | Number of seconds that elapsed since the last reset of the counter. |
| scannerId | String  Scanner ID not defined. | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |
| operationalState | OperationalStateType  NOT\_YET\_DEFINED | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |
| granularityPeriod | GranularityPeriodType  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 1  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | Time period between reset of the underlying counter. |
| administrativeState | AdministrativeStateType  NOT\_YET\_DEFINED | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |
| objectClass | ObjectIdentifier  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | ObjectClass ::= CHOICE{ globalForm [0] OBJECT IDENTIFIER, localForm [1] INTEGER} |
| nameBinding | ObjectIdentifier  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |
| packages | ObjectIdentifier  ./. | 0..\* | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |
| allomorphs | ObjectIdentifier  ./. | 0..\* | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |

## CurrentProblem

Applied stereotypes:

* OpenInterfaceModelClass
* objectCreationNotification: NO
* objectDeletionNotification: NO
* OpenModelClass
* support: MANDATORY

Attributes for CurrentProblem

Table 1: Attributes for CurrentProblem

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| sequenceNumber | Integer  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 1  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_16\_BIT | Unique sequence number of the current problem object. |
| timeStamp | DateTime  2010-11-20T14:00:00+01:00 | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |
| problemSeverity | SeverityType  NOT\_YET\_DEFINED | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | Severity of the alarm. |

## HistoricalPerformance

Applied stereotypes:

* OpenInterfaceModelClass
* objectCreationNotification: NO
* objectDeletionNotification: NO
* OpenModelClass
* support: MANDATORY

Attributes for HistoricalPerformance

Table 1: Attributes for HistoricalPerformance

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| suspectIntervalFlag | Boolean  false | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | This attribute indicates that the data collected during the interval is suspect. |
| historyDataId | String  History Data ID not defined. | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |
| periodEndTime | DateTime  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 1  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | Time when the counter values have been recorded and the counter reset. |
| granularityPeriod | GranularityPeriodType  NOT\_YET\_DEFINED | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | Time period between reset of the underlying counter. |
| objectClass | ObjectIdentifier  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | ObjectClass ::= CHOICE{ globalForm [0] OBJECT IDENTIFIER, localForm [1] INTEGER} |
| nameBinding | ObjectIdentifier  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |
| packages | ObjectIdentifier  ./. | 0..\* | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |
| allomorphs | ObjectIdentifier  ./. | 0..\* | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |

## PureEthernetStructureCapability

Describes the logical structuring of the physical capacity provided by a pure Ethernet microwave device. Segmentation is not available. No fixed segment size. No TDM transport.

Applied stereotypes:

* OpenInterfaceModelClass
* objectCreationNotification: NO
* objectDeletionNotification: NO
* OpenModelClass
* support: MANDATORY

Attributes for PureEthernetStructureCapability

Table 1: Attributes for PureEthernetStructureCapability

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| supportedAlarmList | String  Supported alarms not yet defined. | 0..\* | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | Available alarms to be listed. Mandatory:none. Names are to be separated by commas. Further alarms might be added by the vendor. |
| performanceMonitoringIsAvail | Boolean  false | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | 1 = Collection and aggregation of performance values is available. |

## PureEthernetStructureConfiguration

Applied stereotypes:

* OpenInterfaceModelClass
* objectCreationNotification: NO
* objectDeletionNotification: NO
* OpenModelClass
* support: MANDATORY

Attributes for PureEthernetStructureConfiguration

Table 1: Attributes for PureEthernetStructureConfiguration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| g826ThresholdCrossAlarmList | G826ThresholdCrossAlarmType  ./. | 0..6 | RW | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA | List of G826 related threshold cross alarms to be configured. |
| clearingThresholdCrossAlarmsIsOn | Boolean  false | 1 | RW | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA | Setting this bit is clearing all the currently active threshold cross alarms. |
| performanceMonitoringCollectionIsOn | Boolean  false | 1 | RW | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA | Enables measurement, collection, storage and access to performance data. |
| problemKindSeverityList | ProblemKindSeverityType  ./. | 0..\* | RW | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA | Severity of the type of problem to be configured. |

## PureEthernetStructureCurrentPerformance

Aggregated performance information of the structure of an pure Ethernet microwave at a particular moment.

Applied stereotypes:

* OpenInterfaceModelClass
* objectCreationNotification: NO
* objectDeletionNotification: NO
* OpenModelClass
* support: MANDATORY

Attributes for PureEthernetStructureCurrentPerformance

Table 1: Attributes for PureEthernetStructureCurrentPerformance

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| currentPerformanceDataList | StructureCurrentPerformanceType  ./. | 0..2 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | At least values of the counters, which are reset every 15 minutes, are to be provided. If available, the current values of the counters, which are reset every 24 hour, can be provided, too. |

## PureEthernetStructureCurrentProblems

Applied stereotypes:

* OpenInterfaceModelClass
* objectCreationNotification: NO
* objectDeletionNotification: NO
* OpenModelClass
* support: MANDATORY

Attributes for PureEthernetStructureCurrentProblems

Table 1: Attributes for PureEthernetStructureCurrentProblems

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| currentProblemList | StructureCurrentProblemType  ./. | 0..\* | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |

## PureEthernetStructureHistoricalPerformances

Aggregated performance information of the structure of an pure Ethernet microwave for a pre-defined measurement interval.

Applied stereotypes:

* OpenInterfaceModelClass
* objectCreationNotification: NO
* objectDeletionNotification: NO
* OpenModelClass
* support: MANDATORY

Attributes for PureEthernetStructureHistoricalPerformances

Table 1: Attributes for PureEthernetStructureHistoricalPerformances

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| historicalPerformanceDataList | StructureHistoricalPerformanceType  ./. | 0..\* | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA |  |

## PureEthernetStructureLpSpec

The PureEthernetStructureLpSpec and its attached classes MUST be provided on management interfaces of routers, switches and microwave devices, which are transporting exclusively Ethernet traffic.

Applied stereotypes:

* OpenInterfaceModelClass
* objectCreationNotification: YES
* objectDeletionNotification: YES
* OpenModelClass
* support: MANDATORY

Attributes for PureEthernetStructureLpSpec

Table 1: Attributes for PureEthernetStructureLpSpec

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| \_pureEthernetStructure\_Pac | PureEthernetStructure\_Pac  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | See referenced class |

## PureEthernetStructureStatus

Applied stereotypes:

* OpenInterfaceModelClass
* objectCreationNotification: NO
* objectDeletionNotification: NO
* OpenModelClass
* support: MANDATORY

Attributes for PureEthernetStructureStatus

Table 1: Attributes for PureEthernetStructureStatus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| segmentStatusList | SegmentStatusType  ./. | 0..\* | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA | Status of the Ethernet transport segment. Always just one segment. |

## PureEthernetStructure\_Pac

The pureEthernetStructure\_Pac and its attached classes MUST be provided on management interfaces of microwave devices, which are transporting Ethernet traffic only.

Applied stereotypes:

* OpenInterfaceModelClass
* objectCreationNotification: YES
* objectDeletionNotification: YES
* OpenModelClass
* support: CONDITIONAL\_MANDATORY
* condition: pure-ethernet

Attributes for PureEthernetStructure\_Pac

Table 1: Attributes for PureEthernetStructure\_Pac

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| \_pureEthernetStructureCapability | PureEthernetStructureCapability  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | See referenced class |
| \_pureEthernetStructureConfiguration | PureEthernetStructureConfiguration  ./. | 1 | RW | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | See referenced class |
| \_pureEthernetStructureStatus | PureEthernetStructureStatus  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | See referenced class |
| \_pureEthernetStructureCurrentProblems | PureEthernetStructureCurrentProblems  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | See referenced class |
| \_pureEthernetStructureCurrentPerformance | PureEthernetStructureCurrentPerformance  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | See referenced class |
| \_pureEthernetStructureHistoricalPerformances | PureEthernetStructureHistoricalPerformances  ./. | 1 | R | OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA | See referenced class |

# Data Types

## G826ThresholdCrossAlarmType

Allows defining a threshold cross alarm.

Applied Stereotypes:

Attributes for G826ThresholdCrossAlarmType

Table 1: Attributes for G826ThresholdCrossAlarmType

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| g826ValueKind | G826Type  ./. | 1 | RW | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: false * valueRange: no range constraint * unit: no unit defined * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: YES * bitLength: NA | Kind of performance value that shall be equipped with a threshold alarm. |
| alarmRaisingThreshold | Integer  -1 | 1 | RW | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: false * valueRange: no range constraint * unit: s * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: YES * bitLength: LENGTH\_32\_BIT | Number of events required for raising the threshold cross alarm. |
| alarmClearingThreshold | Integer  -1 | 1 | RW | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: false * valueRange: no range constraint * unit: s * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: YES * bitLength: LENGTH\_32\_BIT | Number of events required for clearing the threshold cross alarm. |
| granularityPeriod | GranularityPeriodType  NOT\_YET\_DEFINED | 1 | RW | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: false * valueRange: no range constraint * unit: no unit defined * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: YES * bitLength: NA | Period of the performance data collection. |

## ProblemKindSeverityType

Applied Stereotypes:

Attributes for ProblemKindSeverityType

Table 1: Attributes for ProblemKindSeverityType

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| problemKindName | String  ./. | 1 | RW | OpenModelAttribute   * partOfObjectKey: 1 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: NA | Name of the alarm according to supportedAlarmList |
| problemKindSeverity | SeverityType  NOT\_YET\_DEFINED | 1 | RW | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: false * valueRange: no range constraint * unit: no unit defined * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: YES * bitLength: NA | Severity of this type of alarm. |

## SegmentStatusType

Applied Stereotypes:

Attributes for SegmentStatusType

Table 1: Attributes for SegmentStatusType

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| segmentStatusTypeId | Integer  ./. | 1 | R | OpenModelAttribute   * partOfObjectKey: 1 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_16\_BIT |  |
| operationalStatus | OperationalStateType  NOT\_YET\_DEFINED | 1 | R | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: false * valueRange: no range constraint * unit: no unit defined * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: YES * bitLength: NA | Current operational status of each segment. |

## StructureCurrentPerformanceType

Turns performance information into current performance information by inheriting from OTN\_CurrentData.

Applied Stereotypes:

Attributes for StructureCurrentPerformanceType

Table 1: Attributes for StructureCurrentPerformanceType

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| performanceData | StructurePerformanceType  ./. | 1 | R | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: NA |  |

## StructureCurrentProblemType

Applied Stereotypes:

Attributes for StructureCurrentProblemType

Table 1: Attributes for StructureCurrentProblemType

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| problemName | String  Problem name not specified. | 1 | R | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: NA | Name of the alarm according to Structure::StructureCapability::supportedAlarms |

## StructureHistoricalPerformanceType

Turns performance information into historical performance information by inheriting from OTN\_HistoryData.

Applied Stereotypes:

Attributes for StructureHistoricalPerformanceType

Table 1: Attributes for StructureHistoricalPerformanceType

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| performanceData | StructurePerformanceType  ./. | 1 | R | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: NA |  |

## StructurePerformanceType

Consolidated performance information of the Structure.

Applied Stereotypes:

Attributes for StructurePerformanceType

Table 1: Attributes for StructurePerformanceType

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| timePeriod | Integer  -1 | 1 | R | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: s * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT | Total length of the measurement period in seconds. |
| es | Integer  -1 | 1 | R | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: s * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT | Number of errored seconds. 1+0: Same value as for single air interface. 1+1 and Diversity: Value representing the combined signals. |
| ses | Integer  -1 | 1 | R | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: s * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT | Number of severely errored seconds. 1+0: Same value as for single air interface. 1+1 and Diversity: Value representing the combined signals. |
| cses | Integer  -1 | 1 | R | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: s * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT | Number of consecutive severely errored seconds. 1+0: Same value as for single air interface. 1+1 and Diversity: Value representing the combined signals. |
| unavailability | Integer  -1 | 1 | R | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: s * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT | Total time of unavailability in seconds. 1+0: Same value as for single air interface. 1+1 and Diversity: Value representing the combined signals. |
| rxLevelMin | Integer  99 | 1 | R | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: dBm * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_8\_BIT | Minimum receive level. 1+0: Same value as for single air interface. 1+1: Value representing the combined signals. Diversity: To be left on default value. |
| rxLevelMax | Integer  99 | 1 | R | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: dBm * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_8\_BIT | Maximum receive level. 1+0: Same value as for single air interface. 1+1: Value representing the combined signals. Diversity: To be left on default value. |
| rxLevelAvg | Integer  99 | 1 | R | OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: dBm * support: MANDATORY   OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_8\_BIT | Averaged receive level. 1+0: Same value as for single air interface. 1+1: Value representing the combined signals. Diversity: To be left on default value. |

# Enumeration Types

## AdministrativeStateType

For more information on Administrative State, See ITU-T Recs. X.731 and M.3100.

Contains Enumeration Literals:

* UNLOCKED:
* LOCKED:
* SHUTTING\_DOWN:
* NOT\_YET\_DEFINED:

## G826Type

Contains Enumeration Literals:

* ES:
  + Errored Seconds. Threshold cross alarm will relate to TypeDefinitions::AirInterfacePerformanceType::es .
* SES:
  + Severely Errored Seconds. Threshold cross alarm will relate to TypeDefinitions::AirInterfacePerformanceType::ses .
* CSES:
  + Consecutive Severely Errored Seconds. Threshold cross alarm will relate to TypeDefinitions::AirInterfacePerformanceType::cses .
* UAS:
  + Unavailable Seconds. Threshold cross alarm will relate to TypeDefinitions::AirInterfacePerformanceType::unavailability.
* NOT\_SPECIFIED:

## GranularityPeriodType

The enumeration with the options for granularity period of the performance data.

Contains Enumeration Literals:

* UNKNOWN:
* PERIOD-15-MIN:
* PERIOD-24-HOURS:
* NOT\_YET\_DEFINED:

## OperationalStateType

The list of valid operational states for the connection.

Contains Enumeration Literals:

* ENABLED:
* DISABLED:
* NOT\_YET\_DEFINED:

## SeverityType

According to ITU-T M.3160

Contains Enumeration Literals:

* NON\_ALARMED:
* WARNING:
* MINOR:
* MAJOR:
* CRITICAL:
* NOT\_YET\_DEFINED:

# Primitive Types