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# Classes

## CurrentPerformance

Applied stereotypes:

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

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 | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | The timestamp associated with when the current data was collected. |
| suspectIntervalFlag | Boolean  false | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | 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 | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_64\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: s  • support: MANDATORY | Number of seconds that elapsed since the last reset of the counter. |
| scannerId | String  Scanner ID not defined. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| operationalState | OperationalStateType  NOT\_YET\_DEFINED | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| granularityPeriod | GranularityPeriodType  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 1  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Time period between reset of the underlying counter. |
| administrativeState | AdministrativeStateType  NOT\_YET\_DEFINED | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| objectClass | ObjectIdentifier  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | ObjectClass ::= CHOICE{ globalForm [0] OBJECT IDENTIFIER, localForm [1] INTEGER} |
| nameBinding | ObjectIdentifier  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| packages | ObjectIdentifier  ./. | 0..\* | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| allomorphs | ObjectIdentifier  ./. | 0..\* | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |

## CurrentProblem

Applied stereotypes:

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

Attributes for CurrentProblem

Table 1: Attributes for CurrentProblem

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

## HistoricalPerformance

Applied stereotypes:

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

Attributes for HistoricalPerformance

Table 1: Attributes for HistoricalPerformance

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| suspectIntervalFlag | Boolean  false | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | This attribute indicates that the data collected during the interval is suspect. |
| historyDataId | String  History Data ID not defined. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| periodEndTime | DateTime  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 2  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Time when the counter values have been recorded and the counter reset. |
| granularityPeriod | GranularityPeriodType  NOT\_YET\_DEFINED | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 1  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Time period between reset of the underlying counter. |
| objectClass | ObjectIdentifier  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | ObjectClass ::= CHOICE{ globalForm [0] OBJECT IDENTIFIER, localForm [1] INTEGER} |
| nameBinding | ObjectIdentifier  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| packages | ObjectIdentifier  ./. | 0..\* | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| allomorphs | ObjectIdentifier  ./. | 0..\* | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |

## 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:

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

Attributes for PureEthernetStructureCapability

Table 1: Attributes for PureEthernetStructureCapability

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| supportedAlarmList | String  Supported alarms not yet defined. | 0..\* | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | 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 | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | 1 = Collection and aggregation of performance values is available. |

## PureEthernetStructureConfiguration

Applied stereotypes:

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

Attributes for PureEthernetStructureConfiguration

Table 1: Attributes for PureEthernetStructureConfiguration

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

## PureEthernetStructureCurrentPerformance

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

Applied stereotypes:

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

Attributes for PureEthernetStructureCurrentPerformance

Table 1: Attributes for PureEthernetStructureCurrentPerformance

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| currentPerformanceDataList | StructureCurrentPerformanceType  ./. | 1..2 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | 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:

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

Attributes for PureEthernetStructureCurrentProblems

Table 1: Attributes for PureEthernetStructureCurrentProblems

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

## PureEthernetStructureHistoricalPerformances

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

Applied stereotypes:

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

Attributes for PureEthernetStructureHistoricalPerformances

Table 1: Attributes for PureEthernetStructureHistoricalPerformances

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

## 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:

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

Attributes for PureEthernetStructureLpSpec

Table 1: Attributes for PureEthernetStructureLpSpec

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

## PureEthernetStructureStatus

Applied stereotypes:

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

Attributes for PureEthernetStructureStatus

Table 1: Attributes for PureEthernetStructureStatus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| segmentStatusList | SegmentStatusType  ./. | 1..\* | R | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Status of the Ethernet transport segment. Always just one segment. |
| performanceMonitoringIsUp | Boolean  false | 1 | R | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | 1 = Performance values are currently collected and aggregated. |

## 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:

* OpenModelClass
* support: CONDITIONAL\_MANDATORY
* condition: pure-ethernet
* OpenInterfaceModelClass
* objectCreationNotification: NO
* objectDeletionNotification: NO

Attributes for PureEthernetStructure\_Pac

Table 1: Attributes for PureEthernetStructure\_Pac

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| \_pureEthernetStructureCapability | PureEthernetStructureCapability  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | See referenced class |
| \_pureEthernetStructureConfiguration | PureEthernetStructureConfiguration  ./. | 1 | RW | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | See referenced class |
| \_pureEthernetStructureStatus | PureEthernetStructureStatus  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | See referenced class |
| \_pureEthernetStructureCurrentProblems | PureEthernetStructureCurrentProblems  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | See referenced class |
| \_pureEthernetStructureCurrentPerformance | PureEthernetStructureCurrentPerformance  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | See referenced class |
| \_pureEthernetStructureHistoricalPerformances | PureEthernetStructureHistoricalPerformances  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: NA   OpenModelAttribute   * partOfObjectKey: 1 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY | Kind of performance value that shall be equipped with a threshold alarm. |
| alarmRaisingThreshold | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute   * AVC: YES * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: false * valueRange: no range constraint * unit: s * support: MANDATORY | Number of events required for raising the threshold cross alarm. |
| alarmClearingThreshold | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute   * AVC: YES * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: false * valueRange: no range constraint * unit: s * support: MANDATORY | Number of events required for clearing the threshold cross alarm. |
| granularityPeriod | GranularityPeriodType  NOT\_YET\_DEFINED | 1 | RW | OpenInterfaceModelAttribute   * AVC: YES * bitLength: NA   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: false * valueRange: no range constraint * unit: no unit defined * support: MANDATORY | 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: NA   OpenModelAttribute   * partOfObjectKey: 1 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY | Name of the alarm according to supportedAlarmList |
| problemKindSeverity | SeverityType  NOT\_YET\_DEFINED | 1 | RW | OpenInterfaceModelAttribute   * AVC: YES * bitLength: NA   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: false * valueRange: no range constraint * unit: no unit defined * support: MANDATORY | 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_16\_BIT   OpenModelAttribute   * partOfObjectKey: 1 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY |  |
| operationalStatus | OperationalStateType  NOT\_YET\_DEFINED | 1 | R | OpenInterfaceModelAttribute   * AVC: YES * bitLength: NA   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: false * valueRange: no range constraint * unit: no unit defined * support: MANDATORY | 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: NA   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY |  |

## 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: NA   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY | 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: NA   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY |  |

## 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: s * support: MANDATORY | Total length of the measurement period in seconds. |
| es | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: s * support: MANDATORY | 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: s * support: MANDATORY | 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: s * support: MANDATORY | 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: s * support: MANDATORY | 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_8\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: dBm * support: MANDATORY | 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_8\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: dBm * support: MANDATORY | 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 | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_8\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: dBm * support: MANDATORY | 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:

## LayerProtocolNameType

A controlled list of LayerProtocol names.

Contains Enumeration Literals:

* LAYER\_PROTOCOL\_NAME\_TYPE\_PURE\_ETHERNET\_STRUCTURE\_LAYER:

## 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