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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: false  • 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: false  • 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: false  • 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: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| operationalState | OperationalState  NOT\_YET\_DEFINED | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| 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. |
| administrativeState | AdministrativeState  NOT\_YET\_DEFINED | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| objectClass | ObjectIdentifier  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • 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: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| packages | ObjectIdentifier  ./. | 0..\* | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| allomorphs | ObjectIdentifier  ./. | 0..\* | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • 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 2: 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 |  |
| 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 3: 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  2010-11-20T14:00:00+01:00 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 1  • 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: 0  • 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 |  |

## LayerProtocol

Applied stereotypes:

* OpenModelClass
* support: MANDATORY
* Obsolete
* OpenInterfaceModelClass
* objectCreationNotification: NA
* objectDeletionNotification: NA

## MacInterfaceCapability

Applied stereotypes:

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

Attributes for MacInterfaceCapability

Table 4: Attributes for MacInterfaceCapability

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| hardwareMacAddress | MacAddress  00:00:00:00:00:00 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Hardware MAC address of the interface. |
| macAddressConfigurationIsAvail | 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 = Device supports overwriting the hardware MAC address. |
| maximumFrameSizeMin | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_16\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: s  • support: MANDATORY | Minimum configurable value of the maximum Ethernet frame size in Byte. |
| maximumFrameSizeMax | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_16\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: s  • support: MANDATORY | Maximum configurable value of the maximum Ethernet frame size in Byte. |
| supportedFrameFormatList | FrameFormatType  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 | List of supported Ethernet frame formats |
| supportedFlowControlModeList | FlowControlModeType  NOT\_YET\_DEFINED | 1..5 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | List of potential configurations of the Flow Control. |
| linkLossForwardingIsAvail | Boolean  false | 1 | R | OpenInterfaceModelAttribute  • AVC: NA  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | 1 = Sending a Link Loss message in case of link failure is supported by the device. |
| broadcastFrameSuppressionIsAvail | 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 = Interface is supporting limiting the maximum share of broadcast frames. |
| ingressShapingIsAvail | 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 = Shaping on the ingress is available at this interface. |
| egressShapingIsAvail | 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 = Shaping on the egress is available at this interface. |
| loopPortShutDownIsAvail | 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 = Device is supporting automated shut down of ports, which are affected by an Ethernet loop. |
| loopDetectionIsAvail | 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 = Device is supporting a feature for detecting Ethernet loops on this interface. |
| statisticsIsAvail | 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 = Continuous statistics counters are available. |
| 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. |
| supportedLoopBackKindList | LoopBackType  NOT\_YET\_DEFINED | 1..3 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | List of supported kinds of looping back. |
| maintenanceTimerRange | String  Range of the maintenance timer 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 | Available time periods for maintenance configurations to be described. Concrete values shall be separated by commas (e.g. '10, 60, 360'). Ranges shall be expressed as two values separated by a minus (e.g. '10-360'). |
| supportedAlarmList | String  Supported Alarms Not Yet Defined | 2..\* | 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: 'MacInterfaceDown' and 'FrameSizeMissmatch'. Further alarms might be added by the device vendors. |

## MacInterfaceConfiguration

Applied stereotypes:

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

Attributes for MacInterfaceConfiguration

Table 5: Attributes for MacInterfaceConfiguration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| interfaceName | String  Interface name 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 | Description of the interface, could be a name, could be a number. Free text field to be filled by the operator. |
| interfaceIsOn | Boolean  false | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Only relevant if (adminShutDownIsAvail==1). 1 = Activation of the interface. 0 = De-activation of the interface without deleting it (underlying OSI network layers are not affected). |
| macAddressConfigurationIsOn | Boolean  false | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Only relevant if (macAddressConfigurationIsAvail==1). 1 = Activates overwriting the hardware MAC address by MacInterfaceConfiguration::configuredMacAddress. |
| configuredMacAddress | MacAddress  00:00:00:00:00:00 | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Only relevant if (macAddressConfigurationIsAvail==1 AND macAddressConfigurationIsOn==1). Overwriting the hardware MAC address with the configured value. |
| maximumFrameSize | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: LENGTH\_16\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: Byte  • support: MANDATORY | This value describes the maximum size of the Ethernet frame (in Byte) before sending. |
| fragmentationAllowed | FragmentationType  NOT\_YET\_DEFINED | 1 | RW | OpenInterfaceModelAttribute  • AVC: NA  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| transmittedFrameFormat | FrameFormatType  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 | Configuration of the format of the transmitted Ethernet frames. |
| flowControlMode | FlowControlModeType  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 | Configures the mode of operation of Flow Control according to IEEE 802.3x on this interface. |
| linkLossForwardingIsOn | Boolean  false | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | 1 = Sending a Link Loss message in case of link failure is activated. |
| linkLossForwardingDelay | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: LENGTH\_8\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: 100ms  • support: MANDATORY | Delay (in 100ms steps) between a detected link failure and sending of a Link Loss message. In case of 1+1 hot stand by protection of a microwave, make sure configured value is higher than 5 (500ms). |
| broadcastFrameSuppressionIsOn | Boolean  false | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | 1 = Limiting the share of broadcast frames is activated. |
| maximumShareOfBroadcastFrames | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: LENGTH\_8\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: %  • support: MANDATORY | Threshold for Broadcast frames becoming discarded in %. Value range from 0 to 100. |
| loopPortShutDownIsOn | Boolean  false | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | 1 = Feature for automated shut down in case of an Ethernet loop is activated on this interface. |
| loopDetectionIsOn | Boolean  false | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Maintenance Feature. 1 = Checking for Ethernet loops on this interface is currently switched on. |
| statisticsIsOn | Boolean  false | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Only relevant if (statisticsIsAvail==1). 1 = Continuous statistics counters are switched on. |
| performanceMonitoringCollectionIsOn | Boolean  false | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Only relevant if (performanceMonitoringIsAvail==1). 1 = Collection and aggregation of performance values is switched on. |
| loopBackKindOn | LoopBackType  NOT\_YET\_DEFINED | 1 | RW | OpenInterfaceModelAttribute  • AVC: NA  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Maintenance Feature. Configuration of a loop back of Ethernet frames on this interface. |
| maintenanceTimer | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Time of existence of any maintenance configuration. 0 = maintenance timer is switched off. Valid values are defined in \*Capability::maintenanceTimerRange. |
| problemKindSeverityList | ProblemKindSeverityType  ./. | 2..\* | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Severity of each entry of the SupportedAlarmList to be configured. |

## MacInterfaceCurrentPerformance

Applied stereotypes:

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

Attributes for MacInterfaceCurrentPerformance

Table 6: Attributes for MacInterfaceCurrentPerformance

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

## MacInterfaceCurrentProblem

Applied stereotypes:

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

Attributes for MacInterfaceCurrentProblem

Table 7: Attributes for MacInterfaceCurrentProblem

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

## MacInterfaceHistoricalPeformance

Applied stereotypes:

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

Attributes for MacInterfaceHistoricalPeformance

Table 8: Attributes for MacInterfaceHistoricalPeformance

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

## MacInterfaceStatus

Applied stereotypes:

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

Attributes for MacInterfaceStatus

Table 9: Attributes for MacInterfaceStatus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| interfaceStatus | InterfaceStatusType  ./. | 1 | R | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Operational status of the interface. |
| macAddressCur | MacAddress  00:00:00:00:00:00 | 1 | R | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | If (macAddressConfigurationIsAvail==0), maxAddressCur = MacInterfaceCapability::hardwareMacAddress. If (macAddressConfigurationIsAvail==1 AND macAddressConfigurationIsOn==1), maxAddressCur = MacInterfaceConfiguration::configuredMacAddress. |
| receivedEthernetFrameFormatCur | FrameFormatType  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 | Ethernet frame format of the currently received frames. |
| flowControlModeCur | FlowControlModeType  NOT\_YET\_DEFINED | 1 | R | OpenInterfaceModelAttribute  • AVC: NA  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Currently operative mode (none, send, receive, both) of operation of the Flow Control according to IEEE 802.3x on this interface. |
| loopDetectionResult | loopDetectionResultType  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 | Result of the Ethernet loop detection feature. |
| loopBackKindUp | LoopBackType  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 | The currently active (not just configured) type of looping back of the air interface header shall be expressed here. The received header is returned to the remote site. |
| last10SecFrameInputRate | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame/s  • support: MANDATORY | Frame receive rate over the last 10 second interval. |
| last10SecFrameOutputRate | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame/s  • support: MANDATORY | Frame transmit rate over the last 10 second interval. |
| totalFamesInput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_64\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | The total number of Ethernet frames received for the specified VLAN ID(s), including those received in error |
| totalFramesOutput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_64\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | The total number of Ethernet frames for the specified VLAN ID(s) that the device supplied to the lower layers for transmission. This includes frames generated locally and those forwarded by the device. |
| forwardedFramesInput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_64\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | Number of input frames, for which the device was not their final destination and for which the device attempted to find a route to forward them to that final destination. |
| forwardedFramesOutput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_64\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | Number of frames, for which the device was not their final destination and for which it was successful in finding a path to their final destination. |
| unicastFramesInput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_64\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | Total number of received unicast frames. |
| unicastFramesOutput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_64\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | Total number of sent unicast frames. |
| multicastFramesInput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | Total number of received multicast frames. |
| multicastFramesOutput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | Total number of sent multicast frames. |
| broadcastFramesInput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | Total number of received broadcast frames. |
| broadcastFramesOutput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | Total number of sent broadcast frames. |
| fragmentedFramesInput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | Total number of received fragmented frames. |
| erroredFramesInput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | Total number of received errored frames. |
| erroredFramesOutput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | Number of Ethernet frames for the specified VLAN ID(s) locally generated and discarded due to errors, including no route found to the destination. |
| droppedFramesInput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | Total number of Ethernet frames dropped at the receiver. The number of input Ethernet frames for the specified VLAN ID(s), for which no problems were encountered to prevent their continued processing, but were discarded (e.g., for lack of buffer space). |
| droppedFramesOutput | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: frame  • support: MANDATORY | The number of output Ethernet frames for the specified VLAN ID(s) for which no problem was encountered to prevent their transmission to their destination, but were discarded (e.g., for lack of buffer space). |

## MacInterface\_Pac

Applied stereotypes:

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

Attributes for MacInterface\_Pac

Table 10: Attributes for MacInterface\_Pac

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| \_macinterfacecapability | MacInterfaceCapability  ./. | 1 | RW | OpenInterfaceModelAttribute  • AVC: NA  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | See referenced class |
| \_macinterfaceconfiguration | MacInterfaceConfiguration  ./. | 1 | RW | OpenInterfaceModelAttribute  • AVC: NA  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | See referenced class |
| \_macinterfacestatus | MacInterfaceStatus  ./. | 1 | RW | OpenInterfaceModelAttribute  • AVC: NA  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | See referenced class |
| \_macinterfacecurrentproblem | MacInterfaceCurrentProblem  ./. | 1 | RW | OpenInterfaceModelAttribute  • AVC: NA  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | See referenced class |
| \_macinterfacecurrentperformance | MacInterfaceCurrentPerformance  ./. | 1 | RW | OpenInterfaceModelAttribute  • AVC: NA  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | See referenced class |
| \_macinterfacehistoricalpeformance | MacInterfaceHistoricalPeformance  ./. | 1 | RW | OpenInterfaceModelAttribute  • AVC: NA  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | See referenced class |

# Data Types

## MacInterfaceCurrentPerformanceType

Applied Stereotypes:

Attributes for MacInterfaceCurrentPerformanceType

Table 11: Attributes for MacInterfaceCurrentPerformanceType

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

## MacInterfaceCurrentProblemType

Applied Stereotypes:

Attributes for MacInterfaceCurrentProblemType

Table 12: Attributes for MacInterfaceCurrentProblemType

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| problemName | String  ./. | 1 | RW | 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 SupportedAlarmList |

## MacInterfaceHistoricalPerformanceType

Applied Stereotypes:

Attributes for MacInterfaceHistoricalPerformanceType

Table 13: Attributes for MacInterfaceHistoricalPerformanceType

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

## MacInterfacePerformanceType

Applied Stereotypes:

Attributes for MacInterfacePerformanceType

Table 14: Attributes for MacInterfacePerformanceType

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| macControlFramesIngress | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | MAC layer control frames received on the interface. |
| macPauseFramesIngress | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | MAC layer Pause frames received on the interface. |
| oversizedFramesIngress | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | The total number of frames received that were longer than 1518 octets (excluding framing bits, but including FCS octets) and were otherwise well formed. |
| undersizedFramesIngress | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | The total number of frames received that were less than 64 octets long (excluding framing bits, but including FCS octets) and were otherwise well formed. |
| jabberFramesIngres | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | Number of jabber frames received on the interface. Jabber frames are typically defined as oversize frames which also have a bad CRC. Implementations may use slightly different definitions of what constitutes a jabber frame. Often indicative of a NIC hardware problem. |
| fragmentedFramesIngress | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_64\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | The total number of frames received that were less than 64 octets in length (excluding framing bits but including FCS octets) and had either a bad Frame Check Sequence (FCS) with an integral number of octets (FCS Error) or a bad FCS with a non-integral number of octets (Alignment Error). |
| taggedFramesIngress | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_64\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | Number of 802.1q tagged frames received on the interface. |
| macControlFramesEgress | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | MAC layer control frames sent on the interface. |
| macPauseFramesEgress | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_32\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | MAC layer Pause frames sent on the interface. |
| taggedFramesEgress | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_64\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | Number of 802.1q tagged frames sent on the interface. |
| framesOf64Byte | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_64\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | Number of packets (including bad packets) received that were 64 bytes in length (excluding framing bits but including FCS bytes). |
| framesOf65To127Byte | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_64\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | Number of good and bad packets received that were between 65 and 127 bytes in length (excluding framing bits but including FCS bytes). |
| framesOf128To255Byte | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_64\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | Number of good and bad packets received that were between 128 and 255 bytes in length inclusive (excluding framing bits but including FCS bytes). |
| framesOf256To511Byte | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_64\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | Number of good and bad packets received that were between 256 and 511 bytes in length inclusive (excluding framing bits but including FCS bytes). |
| framesOf512To1023Byte | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_64\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | Number of good and bad packets received that were between 512 and 1023 bytes in length inclusive (excluding framing bits but including FCS bytes). |
| framesOf1024To1518Byte | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_64\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: frame * support: MANDATORY | Number of good and bad packets received that were between 1024 and 1518 bytes in length inclusive (excluding framing bits but including FCS bytes). |

## ProblemKindSeverityType

Applied Stereotypes:

Attributes for ProblemKindSeverityType

Table 15: 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. |

# Enumeration Types

## AdministrativeState

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:

## FlowControlModeType

Contains Enumeration Literals:

* NONE:
  + Flow Control is switched off.
* SEND\_ONLY:
  + Only sending of pause frames according to IEEE 802.3x (Ethernet Flow Control).
* RECEIVE\_ONLY:
  + Only listening for incoming pause frames according to IEEE 802.3x (Ethernet Flow Control).
* SEND\_AND\_RECEIVE:
  + Sending and listening for pause frames according to IEEE 802.3x (Ethernet Flow Control).
* AUTO\_NEGOTIATION:
* NOT\_YET\_DEFINED:

## FragmentationType

Contains Enumeration Literals:

* DISABLE:
* ENABLE\_256\_BYTE:
* ENABLE\_512\_BYTE:
* NOT\_YET\_DEFINED:

## FrameFormatType

Contains Enumeration Literals:

* ETHERNET\_2:
* 802.2\_SNAP:
* 802.2\_LLC:
* 802.3:
* NOT\_YET\_DEFINED:

## 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:

## InterfaceStatusType

Current Interface Status

Contains Enumeration Literals:

* UP:
  + Ready to pass packets.
* DOWN:
  + The interface does not pass any packets.
* SHUT\_DUE\_LOOP:
  + Only relevant if (loopPortShutDownIsAvail==1) AND (loopPortShutDownIsOn==1). 1 = port has been automatically shut down, because an Ethernet loop has been detected on this interface.
* TESTING:
  + In some test mode. No operational packets can be passed.
* UNKNOWN:
  + Status cannot be determined for some reason.
* DORMANT:
  + Waiting for some external event.
* NOT\_PRESENT:
  + Some component (typically hardware) is missing.
* LOWER\_LAYER\_DOWN:
  + Down due to state of lower-layer interface(s).
* ADMIN\_DOWN:
  + Down due to configuration.
* NOT\_YET\_DEFINED:

## LoopBackType

Contains Enumeration Literals:

* NONE:
* BACK\_TO\_LOCAL:
  + Returning Ethernet frames of the local site on the Ethernet MAC interface back to the local site.
* BACK\_TO\_REMOTE:
  + Returning Ethernet frames of the remote site on the Ethernet MAC interface back to the remote site.
* NOT\_YET\_DEFINED:

## OperationalState

The list of valid operational states for the connection.

Contains Enumeration Literals:

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

## SeverityType

Contains Enumeration Literals:

* NON-ALARMED:
* WARNING:
* MAJOR:
* MINOR:
* CRITICAL:
* NOT\_YET\_DEFINED:

## loopDetectionResultType

Contains Enumeration Literals:

* LOOP\_DETECTED:
* NO\_LOOP\_DETECTED:
* DETECTION\_SWITCHED\_OFF:
* NOT\_YET\_DEFINED:

# Primitive Types