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# Classes

## PolicingProfileCapability

Applied stereotypes:

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

Attributes for PolicingProfileCapability

Table 1: Attributes for PolicingProfileCapability

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| profileNamingIsAvail | Boolean  false | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | true = There is a free text field available for naming the profile. |
| supportedMarkerModeList | markerModeType  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 | Defines, whether potentially existing colloring shall be regarded, or not. |
| supportedPolicerKindList | policerKindType  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 | Defines the characteristics, which are used for determining the coloring of the packet. |
| informationRateMin | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: kbit/s  • support: MANDATORY | Minimum configurable throughput in kbit/s. |
| informationRateMax | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: kbit/s  • support: MANDATORY | Maximum configurable throughput in kbit/s. |
| burstSizeMin | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_16\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: kByte  • support: MANDATORY | Minimum configurable value for the number of kBytes, which could be sent in a single burst. |
| burstSizeMax | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_16\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: kByte  • support: MANDATORY | Maximum configurable value for the number of kBytes, which could be sent in a single burst. |

## PolicingProfileConfiguration

Applied stereotypes:

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

Attributes for PolicingProfileConfiguration

Table 1: Attributes for PolicingProfileConfiguration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| profileName | String  Name of profile not yet defined. | 1 | RW | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Identifier of the profile. Could be a name, could be a number. Free text field to be filled by the operator. |
| markerMode | markerModeType  NOT\_YET\_DEFINED | 1 | RW | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Defines, whether potentially existing colloring shall be regarded, or not. |
| policerKind | policerKindType  NOT\_YET\_DEFINED | 1 | RW | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Defines the characteristics, which are used for determining the coloring of the packet. |
| committedInformationRate | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: kbit/s  • support: MANDATORY | Committed Information Rate (CIR) in unit of kbit/s including IP but not Ethernet header information. |
| committedBurstSize | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_16\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: kByte  • support: MANDATORY | Committed Burst Size (CBS) in unit of kByte. |
| excessBurstSize | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_16\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: kByte  • support: MANDATORY | Only relevant if (policerKind==SINGLE\_RATE\_THREE\_COLOR). Excess Burst Size (EBS) in unit of kByte. |
| peakInformationRate | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: kbit/s  • support: MANDATORY | Only relevant if (policerKind==TWO\_RATE\_THREE\_COLOR). Peak Information Rate (PIR) in unit of kbit/s. |
| peakBurstSize | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_16\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: kByte  • support: MANDATORY | Only relevant if (policerKind==TWO\_RATE\_THREE\_COLOR). Peak Burst Size (PBS) in unit of kByte. |

## PolicingProfileSpec

Applied stereotypes:

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

Attributes for PolicingProfileSpec

Table 1: Attributes for PolicingProfileSpec

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| \_policingProfile\_Pac | PolicingProfile\_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 |

## PolicingProfile\_Pac

Applied stereotypes:

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

Attributes for PolicingProfile\_Pac

Table 1: Attributes for PolicingProfile\_Pac

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| \_policingProfileCapability | PolicingProfileCapability  ./. | 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 |
| \_policingProfileConfiguration | PolicingProfileConfiguration  ./. | 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 |

# Data Types

# Enumeration Types

## ProfileNameType

A controlled list of LayerProtocol names.

Contains Enumeration Literals:

* PROFILE\_NAME\_TYPE\_POLICING\_PROFILE:

## markerModeType

Contains Enumeration Literals:

* COLOR\_BLIND:
  + In the Color-Blind mode, the meter assumes that the packet stream is uncolored.
* COLOR\_AWARE:
  + In the Color-Aware mode, the Meter assumes that some preceding entity has pre-colored the incoming packet stream so that each packet is either green, yellow, or red. Only green and yellow packets are metered and potentially re-collored.
* NOT\_YET\_DEFINED:

## policerKindType

Contains Enumeration Literals:

* SINGLE\_RATE\_THREE\_COLOR:
  + RFC2697. Coloring is done based on Committed Information Rate (CIR), Committed Burst Size (CBS) and Excess Burst Size (EBS). A packet is marked green if it doesn't exceed the CBS, yellow if it does exceed the CBS, but not the EBS, and red otherwise.
* TWO\_RATE\_THREE\_COLOR:
  + RFC2698. Coloring is done based on Peak Information Rate (PIR) and Committed Information Rate (CIR), and their associated burst sizes to be either green, yellow, or red. A packet is marked red if it exceeds the PIR. Otherwise, it is marked either yellow or green depending on whether it exceeds or doesn't exceed the CIR.
* NOT\_YET\_DEFINED:

# Primitive Types