# Classes

## 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 |  |
| 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. |

## VlanFcCapability

Applied stereotypes:

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

Attributes for VlanFcCapability

Table 1: Attributes for VlanFcCapability

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| supportedSubLayerProtocolNameList | SubLayerProtocolNameType  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 | Lists the supported kinds of Components (implicitly defines the Ethertypes of the VLAN headers, which can be forwarded). |
| adminShutDownIsAvail | 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 = Manual switching on and off of the forwarding construct without deleting it (underlying OSI network layers are also not affected) is available. |
| 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. |

## VlanFcConfiguration

Applied stereotypes:

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

Attributes for VlanFcConfiguration

Table 1: Attributes for VlanFcConfiguration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| fcName | String  Interface name not yet defined. | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: NA  Reference  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | name. Description of the VLAN, could be a name, could be a number. Free text of up to 32 letters to be filled by the operator. Name in ieee802-dot1q-bridge.yang: name. |
| fcIsOn | 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 forwarding of frames with this VLAN ID. 0 = De-activation of the ForwardingConstruct without deleting it (underlying OSI network layers are not affected). |
| subLayerProtocolName | SubLayerProtocolNameType  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 | Type of VLAN (e.g. C-VLAN, S-VLAN), respectively Ethertype, which is forwarded. |
| vlanId | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_64\_BIT  Reference  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | vid. The VLAN ID, which identifies the frames to be forwarded. Range '1..4094 | 4096..4294967295'. Name in ieee802-dot1q-bridge.yang: vid. |
| 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 problem to be configured. |

## VlanFcCurrentProblems

Applied stereotypes:

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

Attributes for VlanFcCurrentProblems

Table 1: Attributes for VlanFcCurrentProblems

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| currentProblemList | VlanFcCurrentProblemType  ./. | 0..\* | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: NA  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY |  |
| numberOfCurrentProblems | Integer  -1 | 1 | R | OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_8\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: no unit defined  • support: MANDATORY | Number of alarms, which are currently active on this interface. |
| timeOfLatestChange | 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 | Date and time when the list of alarms has been changed for the last time. |

## VlanFcSpec

vlan. Represents the VLAN, which is configured on the C-VLAN or S-VLAN Component. Name in ieee802-dot1q-bridge.yang: vlan. Reference: 12.10.2 of IEEE Std 802.1Q-2018.

Applied stereotypes:

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

Attributes for VlanFcSpec

Table 1: Attributes for VlanFcSpec

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| \_vlanFc\_Pac | VlanFc\_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 |

## VlanFc\_Pac

Applied stereotypes:

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

Attributes for VlanFc\_Pac

Table 1: Attributes for VlanFc\_Pac

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| \_vlanFcCapability | VlanFcCapability  ./. | 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 |
| \_vlanFcConfiguration | VlanFcConfiguration  ./. | 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 |
| \_vlanFcCurrentProblems | VlanFcCurrentProblems  ./. | 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

## 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. |

## VlanFcCurrentProblemType

Applied Stereotypes:

Attributes for VlanFcCurrentProblemType

Table 1: Attributes for VlanFcCurrentProblemType

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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 VlanFc::VlanFcCapability::supportedAlarmList. |

# Enumeration Types

## LayerProtocolNameType

A controlled list of LayerProtocol names.

Contains Enumeration Literals:

* LAYER\_PROTOCOL\_NAME\_TYPE\_VLAN\_LAYER:

## SeverityType

According to ITU-T M.3160

Contains Enumeration Literals:

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

## SubLayerProtocolNameType

type-of-component. Represents the type of Component. Name in ieee802-dot1q-bridge.yang: type-of-component.

Contains Enumeration Literals:

* C\_VLAN\_COMPONENT:
  + c-vlan-component. Base identity for a C-VLAN component. Name in ieee802-dot1q-bridge.yang: c-vlan-component.
* S\_VLAN\_COMPONENT:
  + s-vlan-component. Base identity for a S-VLAN component. Name in ieee802-dot1q-bridge.yang: s-vlan-component.
* D\_BRIDGE\_COMPONENT:
  + d-bridge-component. Base identity for a VLAN unaware component. Name in ieee802-dot1q-bridge.yang: d-bridge-component.
* EDGE\_RELAY\_COMPONENT:
  + edge-relay-component. Base identity for an EVB station ER component. Name in ieee802-dot1q-bridge.yang: edge-relay-component.
* NOT\_YET\_DEFINED:

# Primitive Types