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# Classes

## MacFdCapability

Applied stereotypes:

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

Attributes for MacFdCapability

Table 1: Attributes for MacFdCapability

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| supportedMaximumNumberOfEntries | Integer  -1 | 1 | R | Reference  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: true  • valueRange: no range constraint  • unit: entry  • support: MANDATORY | The maximum number of entries that can be held in the FDB. Name in ieee802-dot1q-bridge.yang: size. |

## MacFdConfiguration

Applied stereotypes:

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

Attributes for MacFdConfiguration

Table 1: Attributes for MacFdConfiguration

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| fdName | String  Forwarding Domain 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 | Name of the ForwardingDomain. Free text field to be filled by the operator. |
| macAddress | 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 | MAC address, which is configured at this Layer 2 Switch. Default value (00:00:00:00:00:00) indicates that the MAC address is not configurable at this switch. |
| agingTime | Integer  -1 | 1 | RW | Reference  OpenInterfaceModelAttribute  • AVC: YES  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: s  • support: MANDATORY | The timeout period (10..10,000,000) in seconds for aging out dynamically-learned forwarding information. Name in ieee802-dot1q-bridge.yang: aging-time. |
| maximumNumberOfEntries | Integer  -1 | 1 | RW | OpenInterfaceModelAttribute  • AVC: YES  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: entry  • support: MANDATORY | Number of entries in the forwarding table shall be limited to this value. |

## MacFdSpec

The database that holds static and learned entries describing the MAC forwarding. Name in ieee802-dot1q-bridge.yang: filtering-database.

Applied stereotypes:

* OpenInterfaceModelClass
* objectCreationNotification: YES
* objectDeletionNotification: YES
* Reference
* reference: invalid
* OpenModelClass
* support: MANDATORY

Attributes for MacFdSpec

Table 1: Attributes for MacFdSpec

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| \_macFd\_Pac | MacFd\_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 |

## MacFdStatus

Applied stereotypes:

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

Attributes for MacFdStatus

Table 1: Attributes for MacFdStatus

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| 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 | MAC address, which is currently active on this switch (either configured or imprinted). |
| numberOfStaticEntriesCur | Integer  -1 | 1 | R | Reference  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: entry  • support: MANDATORY | The number of Static Filtering entries currently in the FDB. Name in ieee802-dot1q-bridge.yang: static-entries. |
| numberOfDynamicEntriesCur | Integer  -1 | 1 | R | Reference  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: entry  • support: MANDATORY | The number of Dynamic Filtering entries currently in the FDB. Name in ieee802-dot1q-bridge.yang: dynamic-entries. |
| numberOfMacRegistrationsCur | Integer  -1 | 1 | R | Reference  OpenInterfaceModelAttribute  • AVC: NO  • bitLength: LENGTH\_32\_BIT  OpenModelAttribute  • partOfObjectKey: 0  • isInvariant: false  • valueRange: no range constraint  • unit: registration  • support: MANDATORY | The number of MAC Address Registration entries currently in the FDB. Name in ieee802-dot1q-bridge.yang: mac-address-registration-entries. |
| fdStatus | FdStatusType  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 | Operational status of the forwarding domain. |

## MacFd\_Pac

Applied stereotypes:

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

Attributes for MacFd\_Pac

Table 1: Attributes for MacFd\_Pac

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| \_macFdCapability | MacFdCapability  ./. | 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 |
| \_macFdConfiguration | MacFdConfiguration  ./. | 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 |
| \_macFdStatus | MacFdStatus  ./. | 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

## MacTableEntryType

Applied Stereotypes:

Attributes for MacTableEntryType

Table 1: Attributes for MacTableEntryType

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Name** | **Type** | **Multiplicity** | **Access** | **Stereotypes** | **Description** |
| \_affectedMacFd | ForwardingDomain  ./. | 0..1 | R | PassedByReference  OpenInterfaceModelAttribute   * AVC: NO * bitLength: NA   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY | Reference to the MAC switch, which is holding the MAC address table that is containing this entry. |
| macAddress | 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 | MAC address that can be reached on the referenced interface. |
| vlanId | Integer  -1 | 1 | R | OpenInterfaceModelAttribute   * AVC: NO * bitLength: LENGTH\_64\_BIT   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY | VLAN, in which the MAC address can be reached at the referenced interface. If VLAN bridging would be deactivated, this value should be 0. |
| \_egressLtp | LogicalTerminationPoint  ./. | 0..1 | R | PassedByReference  OpenInterfaceModelAttribute   * AVC: NO * bitLength: NA   OpenModelAttribute   * partOfObjectKey: 0 * isInvariant: true * valueRange: no range constraint * unit: no unit defined * support: MANDATORY | MAC interface that connects the MAC address. |

# Enumeration Types

## FdStatusType

Current Status of the Forwarding Domain

Contains Enumeration Literals:

* UP:
  + Ready to pass packets. It is expected that the LogicalTerminationPoint::operationalState attribute is expressing this logical layer being available for use (means: ENABLED), while this value occurs.
* DOWN:
  + The interface does not pass any packets. It is expected that the LogicalTerminationPoint::operationalState attribute is expressing this logical layer being NOT available for use (means: DISABLED), while this value occurs.
* TESTING:
  + In some test mode. No operational packets can be passed. It is expected that the LogicalTerminationPoint::operationalState attribute is expressing this logical layer being NOT available for use (means: DISABLED), while this value occurs.
* UNKNOWN:
  + Status cannot be determined for some reason. While this value occurs, the LogicalTerminationPoint::operationalState attribute, which is expressing the availability of the logical layer for being used, might have either ENABLED or DISABLED as value.
* DORMANT:
  + Waiting for some external event. It is expected that the LogicalTerminationPoint::operationalState attribute is expressing this logical layer being available for use (means: ENABLED), while this value occurs.
* NOT\_PRESENT:
  + Some component (typically hardware) is missing. It is expected that the LogicalTerminationPoint::operationalState attribute is expressing this logical layer being NOT available for use (means: DISABLED), while this value occurs.
* NOT\_YET\_DEFINED:
  + While this value occurs, the LogicalTerminationPoint::operationalState attribute, which is expressing the availability of the logical layer for being used, might have either ENABLED or DISABLED as value.