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Part 1Q: Bridges and bridged networks

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Technologies de l'information — Télécommunications et échange d'information entre systèmes — Réseaux locaux et métropolitains — Exigences spécifiques —

Partie 1Q: Ponts et réseaux pontés
RECTIFICATIF TECHNIQUE 2: Corrections techniques et rédactionnelles

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IEEE Std 802.1Q™-2014/Cor 1-2015
(Corrigendum to
IEEE Std 802.1Q-2014)

IEEE Standard for
Local and metropolitan area networks—

Bridges and Bridged Networks—

Corrigendum 1: Technical and editorial corrections

Sponsor

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of the
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Approved 5 December 2015

IEEE-SA Standards Board

Abstract: Correction of technical and editorial errors identified by the IEEE 802.1 maintenance activity are presented in this document.

Keywords: corrigendum, Bridged Local Area Networks, ECMP, Equal Cost Multiple Paths, IEEE 802.1Q™, LANs, local area networks, MAC Bridges, MANs, metropolitan area networks, Shortest Path Bridging, Virtual Bridged Local Area Networks

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Introduction

This introduction is not part of IEEE Std 802.1Q-2014/Cor 1-2015, IEEE Standard for Local and metropolitan area networks—Bridges and Bridged Networks—Corrigendum 1: Technical and editorial corrections.

This corrigendum to IEEE Std 802.1Q-2014 corrects the small number of errors to the base text identified by the IEEE 802.1 maintenance activity. These changes are needed in order to correct technical and/or editorial errors in the existing text.

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IEEE Standard for
Local and metropolitan area networks—

Bridges and Bridged Networks—

Corrigendum 1: Technical and editorial corrections

(This corrigendum is based on IEEE Std 802.1Q™-2014.)

NOTE—The editing instructions contained in this amendment define how to merge the material contained here into the base document and its other amendments to form the new comprehensive standard.

Editing instructions are shown in ***bold italic***. Four editing instructions are used: change, delete, insert, and replace. ***Change*** is used to make corrections in existing text or tables. The editing instruction specifies the location of the change and describes what is being changed either by using ~~strikethrough~~ (to remove old material) and underscore (to add new material). ***Delete*** removes existing material. ***Insert*** adds new material without disturbing the existing material. Insertions may require renumbering. If so, renumbering instructions are given in the editing instruction. ***Replace*** is used to make changes in figures or equations by removing the existing figure or equation and replacing it with a new one. Editing instructions, change markings, and this NOTE will not be carried over into future editions because the changes will be incorporated into the base standard.

[1]Notes in text, tables, and figures are given for information only, and do not contain requirements needed to implement the standard.

12. Bridge management

12.22 Stream Reservation Protocol (SRP) entities

12.22.5 SRP Reservations Table

Change row 5 of Table 12-17 as follows:

Table 12-17—SRP Reservations Table row elements

Name	Data type	Operations supported	Conformance	References
Failed ~~Bridge ID~~ system ID	BridgeId	R	BE	35.2.2.8.7(a)

17. Management Information Base (MIB)

17.2 Structure of the MIB

17.2.14 Structure of the IEEE8021-SRP-MIB

Change row 31 and row 32 of Table 17-20 as follows:

Table 17-20—SRP MIB structure and object cross reference

MIB table	MIB object	References
	ieee8021SrpReservationFailure~~BridgeId~~SystemId	~~Bridge~~ system ID of ~~Bridge~~ system that changed Talker Advertise to Talker Failed, 12.22.5, 35.2.2.8.7a.
	ieee8021SrpReservationFailureCode	Failure Code associated with ~~Bridge~~ system that changed Talker Advertise to Talker Failed, 12.22.5, 35.2.2.8.7b.

17.7 MIB modules

17.7.12 Definitions for the IEEE8021-FQTSS-MIB module

Replace the text of 17.7.12 with the following:

```
IEEE8021-FQTSS-MIB DEFINITIONS ::= BEGIN

-- ================================================================
-- MIB for support of the Forwarding & Queuing Enhancements
-- for Time Sensitive Streams (FQTSS) in 802.1Q Bridges.
-- ================================================================

IMPORTS
    MODULE-IDENTITY,
    OBJECT-TYPE,
    Unsigned32
        FROM SNMPv2-SMI
    TEXTUAL-CONVENTION,
    TruthValue,
    RowStatus
        FROM SNMPv2-TC
    MODULE-COMPLIANCE,
    OBJECT-GROUP
        FROM SNMPv2-CONF
    ieee802dot1mibs,
    IEEE8021PriorityValue
        FROM IEEE8021-TC-MIB
    ieee8021BridgeBaseComponentId,
    ieee8021BridgeBasePort
        FROM IEEE8021-BRIDGE-MIB
    ;

ieee8021FqtssMib MODULE-IDENTITY
    LAST-UPDATED "201512020000Z" -- December 2, 2015
    ORGANIZATION "IEEE 802.1 Working Group"
    CONTACT-INFO
        "  WG-URL: http://ieee802.org/1/
         WG-EMail: STDS-802-1-L@LISTSERV.IEEE.ORG

           Contact: IEEE 802.1 Working Group Chair
            Postal: C/O IEEE 802.1 Working Group
                    IEEE Standards Association
                    445 Hoes Lane
                    Piscataway
                    NJ 08854
                    USA
            E-mail: STDS-802-1-L@LISTSERV.IEEE.ORG"
    DESCRIPTION
        "The Bridge MIB module for managing devices that support
        the Forwarding and Queuing Enhancements
        for Time Sensitive Streams.

        Unless otherwise indicated, the references in this MIB
        module are to IEEE Std 802.1Q-2014.

        Copyright (C) IEEE (2015).
        This version of this MIB module is part of IEEE802.1Q;
        see the draft itself for full legal notices."
```

```
    REVISION "201512020000Z" -- December 2, 2015
    DESCRIPTION
            "Published as part of IEEE Std 802.1Q 2014 Cor-1.
            ETS code point added to the textual convention
            IEEE8021FqtssTxSelectionAlgorithmIDValue "

    REVISION "201412150000Z" -- December 15, 2014
    DESCRIPTION
            "Published as part of IEEE Std 802.1Q 2014 revision.
            Cross references updated and corrected."

    REVISION     "201102270000Z" -- February 27, 2011
    DESCRIPTION
         "Minor edits to contact information etc. as part of
          2011 revision of IEEE Std 802.1Q."

    REVISION     "200910010000Z" -- October 1, 2009
    DESCRIPTION
         "Initial revision, included in IEEE 802.1Qav."
    ::= { ieee802dot1mibs 16 }

-- ================================================================
-- Textual Conventions
-- ================================================================

IEEE8021FqtssTrafficClassValue ::= TEXTUAL-CONVENTION
    DISPLAY-HINT "d"
    STATUS      current
    DESCRIPTION
        "An 802.1 FQTSS traffic class value.
        This is the numerical value associated with a traffic
        class in a Bridge. Larger values are associated with
        higher priority traffic classes."
    REFERENCE   "12.20.1"
    SYNTAX      Unsigned32 (0..7)

IEEE8021FqtssDeltaBandwidthValue ::= TEXTUAL-CONVENTION
    DISPLAY-HINT "d"
    STATUS      current
    DESCRIPTION
        "An 802.1 FQTSS delta bandwidth percentage,
        represented as a fixed point number scaled by
        1,000,000."
    REFERENCE   "12.20.1, 34.4"
    SYNTAX      Unsigned32 (0..100000000)

IEEE8021FqtssTxSelectionAlgorithmIDValue ::= TEXTUAL-CONVENTION
    DISPLAY-HINT "d"
    STATUS      current
    DESCRIPTION
        "An 802.1 transmission selection algorithm identifier
         value. This is an integer, with the following
         interpretation placed on the value:

         0: Strict priority algorithm,
         1: Credit-based shaper algorithm,
         2: Enhanced Transmission Selection algorithm,
         3-255: Reserved for future standardization,
         256-4294967295: Vendor-specific transmission selection
```

```
                        algorithm identifiers, consisting of a
                        four-octet integer, where the most
                        significant 3 octets hold an OUI or CID value,
                        and the least significant octet holds
                        an integer value in the range 0-255
                        assigned by the owner of the OUI or CID."
    REFERENCE   "8.6.8, 12.20.2"
    SYNTAX  Unsigned32

-- ============================================================
-- subtrees in the FQTSS MIB
-- ============================================================

ieee8021FqtssNotifications
    OBJECT IDENTIFIER ::= { ieee8021FqtssMib 0 }

ieee8021FqtssObjects
    OBJECT IDENTIFIER ::= { ieee8021FqtssMib 1 }

ieee8021FqtssConformance
    OBJECT IDENTIFIER ::= { ieee8021FqtssMib 2 }

ieee8021FqtssBap
    OBJECT IDENTIFIER ::= { ieee8021FqtssObjects 1 }

ieee8021FqtssMappings
    OBJECT IDENTIFIER ::= { ieee8021FqtssObjects 2 }

-- ============================================================
-- The ieee8021FqtssBap subtree
-- This subtree defines the objects necessary for the management
-- of bandwidth allocation for queues that support FQTSS.
-- ============================================================

-- ============================================================
-- the ieee8021FqtssBapTable
-- ============================================================

ieee8021FqtssBapTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF Ieee8021FqtssBapEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table containing a set of bandwidth availability
        parameters for each traffic class that supports the
        credit-based shaper algorithm.
        All writable objects in this table must be
        persistent over power up restart/reboot."
    REFERENCE   "12.20.1"
    ::= { ieee8021FqtssBap 1 }

ieee8021FqtssBapEntry OBJECT-TYPE
    SYNTAX      Ieee8021FqtssBapEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A list of objects containing bandwidth allocation
        information for each traffic class that supports the
        credit-based shaper algorithm. Rows in the table are
```

```
        automatically created and deleted as a result of the
        operation of the algorithm described in 34.5. "
    INDEX  { ieee8021BridgeBaseComponentId,
             ieee8021BridgeBasePort,
             ieee8021FqtssBAPTrafficClass  }
    ::= { ieee8021FqtssBapTable 1 }

Ieee8021FqtssBapEntry ::=
    SEQUENCE {
        ieee8021FqtssBAPTrafficClass
            IEEE8021FqtssTrafficClassValue,
        ieee8021FqtssDeltaBandwidth
            IEEE8021FqtssDeltaBandwidthValue,
        ieee8021FqtssOperIdleSlopeMs
            Unsigned32,
        ieee8021FqtssOperIdleSlopeLs
            Unsigned32,
        ieee8021FqtssAdminIdleSlopeMs
            Unsigned32,
        ieee8021FqtssAdminIdleSlopeLs
            Unsigned32,
        ieee8021FqtssBapRowStatus
            RowStatus
        }

ieee8021FqtssBAPTrafficClass OBJECT-TYPE
    SYNTAX      IEEE8021FqtssTrafficClassValue
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The traffic class number associated with the row of
        the table.

        A row in this table is created for each traffic class
        that supports the credit-based shaper algrithm. The
        recommended mappings of priorities to traffic classes
        for support of the credit-based shaper algorithm are
        described in 34.5"
    REFERENCE   "12.20.2, 34.3, 34.5"
    ::= { ieee8021FqtssBapEntry 1 }


ieee8021FqtssDeltaBandwidth OBJECT-TYPE
    SYNTAX      IEEE8021FqtssDeltaBandwidthValue
    UNITS       "percent"
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The value of the deltaBandwidth parameter
        for the traffic class.
        This value is represented as a fixed point number
        scaled by a factor of 1,000,000; i.e., 100,000,000
        (the maximum value) represents 100%.

        The default value of the deltaBandwidth parameter
        for the highest numbered traffic class that supports
        the credit-based shaper algorithm is 75%; for all
        lower numbered traffic classes that support the
        credit-based shaper algorithm the default value is 0%.
```

```
            The value of this object MUST be retained across
            reinitializations of the management system."
        REFERENCE   "12.20.1, 34.3"
        ::= { ieee8021FqtssBapEntry 2}

    ieee8021FqtssOperIdleSlopeMs OBJECT-TYPE
        SYNTAX      Unsigned32
        UNITS       "bits per second"
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The most significant 32 bits of the bandwidth,
            in bits per second, that is currently allocated to the
            traffic class (idleSlope(N)). This object MUST be read
            at the same time as ieee8021FqtssOperIdleSlopeLs,
            which represents the LS 32 bits of the value, in order
            for the read operation to succeed.

            If SRP is supported and in operation, then the reserved
            bandwidth is determined by the operation of SRP; otherwise,
            the value of ieee8021FqtssOperIdleSlopeMs is equal to
            the value of ieee8021FqtssAdminIdleSlopeMs.

            The value of this object MUST be retained across
            reinitializations of the management system."
        REFERENCE   "12.20.1, 34.3"
        ::= { ieee8021FqtssBapEntry 3 }

    ieee8021FqtssOperIdleSlopeLs OBJECT-TYPE
        SYNTAX      Unsigned32
        UNITS       "bits per second"
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The least significant 32 bits of the bandwidth,
            in bits per second, that is currently allocated to the
            traffic class (idleSlope(N)). This object MUST be read
            at the same time as ieee8021FqtssOperIdleSlopeMs,
            which represents the LS 32 bits of the value, in order
            for the read operation to succeed.

            If SRP is supported and in operation, then the reserved
            bandwidth is determined by the operation of SRP; otherwise,
            the value of ieee8021FqtssOperIdleSlopeLs is equal to
            the value of ieee8021FqtssAdminIdleSlopeMs.

            The value of this object MUST be retained across
            reinitializations of the management system."
        REFERENCE   "12.20.1, 34.3"
        ::= { ieee8021FqtssBapEntry 4 }

    ieee8021FqtssAdminIdleSlopeMs OBJECT-TYPE
        SYNTAX      Unsigned32
        UNITS       "bits per second"
        MAX-ACCESS  read-write
        STATUS      current
        DESCRIPTION
            "The most significant 32 bits of the bandwidth,
```

```
            in bits per second, that the manager desires to allocate
            to the traffic class as  idleSlope(N). This object MUST be
            read or written at the same time as
            ieee8021FqtssAdminIdleSlopeLs,
            which represents the LS 32 bits of the value, in order
            for the read or write operation to succeed.

            If SRP is supported and in operation, then the reserved
            bandwidth is determined by the operation of SRP, and any
            changes to the value of this object have no effect on the
            operational value of idleSlope(N).

            The value of this object MUST be retained across
            reinitializations of the management system."
        REFERENCE   "12.20.1, 34.3"
        DEFVAL { 0 }
        ::= { ieee8021FqtssBapEntry 5 }

    ieee8021FqtssAdminIdleSlopeLs OBJECT-TYPE
        SYNTAX      Unsigned32
        UNITS       "bits per second"
        MAX-ACCESS  read-write
        STATUS      current
        DESCRIPTION
            "The least significant 32 bits of the bandwidth,
            in bits per second, that the manager desires to allocate
            to the traffic class as  idleSlope(N). This object MUST be
            read or written at the same time as
            ieee8021FqtssAdminIdleSlopeMs,
            which represents the LS 32 bits of the value, in order
            for the read or write operation to succeed.

            If SRP is supported and in operation, then the reserved
            bandwidth is determined by the operation of SRP, and any
            changes to the value of this object have no effect on the
            operational value of idleSlope(N).

            The value of this object MUST be retained across
            reinitializations of the management system."
        REFERENCE   "12.20.1, 34.3"
        DEFVAL { 0 }
        ::= { ieee8021FqtssBapEntry 6 }

    ieee8021FqtssBapRowStatus OBJECT-TYPE
        SYNTAX RowStatus
        MAX-ACCESS read-create
        STATUS current
        DESCRIPTION
            "Indicates the status of an entry (row) in this table, and is
            used to create/delete entries.

            The corresponding instances of the following objects
            must be set before this object can be made active(1):
               ieee8021FqtssBAPTrafficClass
               ieee8021FqtssDeltaBandwidth
               ieee8021FqtssOperIdleSlopeMs
               ieee8021FqtssOperIdleSlopeLs
               ieee8021FqtssAdminIdleSlopeMs
               ieee8021FqtssAdminIdleSlopeLs
```

```
        The corresponding instances of the following objects
        may not be changed while this object is active(1):
           ieee8021FqtssBAPTrafficClass"
::= { ieee8021FqtssBapEntry 7 }

-- ================================================================
-- The ieee8021FqtssMappings subtree
-- This subtree defines the objects necessary for the assignment
-- of transmission selection algorithms to traffic classes,
-- and definition of regeneration table override values.
-- ================================================================

-- ================================================================
-- the ieee8021FqtssTxSelectionAlgorithmTable
-- ================================================================

ieee8021FqtssTxSelectionAlgorithmTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF Ieee8021FqtssTxSelectionAlgorithmEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table containing the assignment of transmission
        selection algorithms to traffic classes for the Port.
        This table provides management of the Transmission
        Selection Algorithm Table defined in 8.6.8.

        For a given Port, a row in the table exists for each
        traffic class that is supported by the Port.

        The default assignments of transmission selection
        algorithms to traffic classes in the table are made
        on instantiation of the table, in accordance
        with the defaults defined in 8.6.8 and 34.5.

        All writable objects in this table must be
        persistent over power up restart/reboot."
    REFERENCE   "8.6.8, 12.20.2, 34.5"
    ::= { ieee8021FqtssMappings 1 }

ieee8021FqtssTxSelectionAlgorithmEntry OBJECT-TYPE
    SYNTAX      Ieee8021FqtssTxSelectionAlgorithmEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A list of objects that contain the mapping of a
        traffic class value to a transmission selection algorithm
        value."
    INDEX  { ieee8021BridgeBaseComponentId,
             ieee8021BridgeBasePort,
             ieee8021FqtssTrafficClass  }
    ::= { ieee8021FqtssTxSelectionAlgorithmTable 1 }

Ieee8021FqtssTxSelectionAlgorithmEntry ::=
    SEQUENCE {
        ieee8021FqtssTrafficClass
            IEEE8021FqtssTrafficClassValue,
        ieee8021FqtssTxSelectionAlgorithmID
            IEEE8021FqtssTxSelectionAlgorithmIDValue
```

```
        }

ieee8021FqtssTrafficClass OBJECT-TYPE
    SYNTAX      IEEE8021FqtssTrafficClassValue
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The traffic class to which the transmission selection
         algorithm is assigned.

        The value of this object MUST be retained across
        reinitializations of the management system."
    REFERENCE   "8.6.8, 12.20.2, 34.5"
    ::= { ieee8021FqtssTxSelectionAlgorithmEntry 1 }

ieee8021FqtssTxSelectionAlgorithmID OBJECT-TYPE
    SYNTAX      IEEE8021FqtssTxSelectionAlgorithmIDValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The identifier of the transmission selection algorithm
        assigned to the traffic class.

        The value of this object MUST be retained across
        reinitializations of the management system."
    REFERENCE   "8.6.8, 12.20.2, 34.5"
    ::= { ieee8021FqtssTxSelectionAlgorithmEntry 2 }


-- ================================================================
-- the ieee8021FqtssSrpRegenOverrideTable
-- ================================================================

ieee8021FqtssSrpRegenOverrideTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF Ieee8021FqtssSrpRegenOverrideEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table containing the set of priority regeneration
        table override values for the Port.

        The recommended default values of priorities
        associated with SR classes, and the corresponding
        override values, are defined in 6.9.4.

        All writable objects in this table must be
        persistent over power up restart/reboot."
    REFERENCE   "35.1.4, 6.9.4, 12.20.3"
    ::= { ieee8021FqtssMappings 2 }

ieee8021FqtssSrpRegenOverrideEntry OBJECT-TYPE
    SYNTAX      Ieee8021FqtssSrpRegenOverrideEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A list of objects that contain the mapping of a
        priority value to a priority regeneration override
        value, and a boundary port indication.
        Rows in the table exist for all priorities that are
```

```
        associated with SR classes."
    INDEX  { ieee8021BridgeBaseComponentId,
             ieee8021BridgeBasePort,
             ieee8021FqtssSrClassPriority  }
    ::= { ieee8021FqtssSrpRegenOverrideTable 1 }

Ieee8021FqtssSrpRegenOverrideEntry ::=
    SEQUENCE {
        ieee8021FqtssSrClassPriority
            IEEE8021PriorityValue,
        ieee8021FqtssPriorityRegenOverride
            IEEE8021PriorityValue,
        ieee8021FqtssSrpBoundaryPort
            TruthValue
        }

ieee8021FqtssSrClassPriority OBJECT-TYPE
    SYNTAX      IEEE8021PriorityValue
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The priority value that is overridden at the
        SRP domain boundary. "
    REFERENCE   "35.1.4, 6.9.4, 12.20.3"
    ::= { ieee8021FqtssSrpRegenOverrideEntry 1 }

ieee8021FqtssPriorityRegenOverride OBJECT-TYPE
    SYNTAX      IEEE8021PriorityValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
        "The priority value that is used to override the
         priority regeneration table entry at the SRP
         domain boundary.

        The value of this object MUST be retained across
        reinitializations of the management system."
    REFERENCE   "35.1.4, 6.9.4, 12.20.3"
    ::= { ieee8021FqtssSrpRegenOverrideEntry 2 }

ieee8021FqtssSrpBoundaryPort OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The value of the SRPdomainBoundaryPort parameter
        (35.1.4) for the priority. "
    REFERENCE   "35.1.4, 6.9.4, 12.20.3"
    ::= { ieee8021FqtssSrpRegenOverrideEntry 3 }


-- ================================================================
-- IEEE8021 FQTSS MIB - Conformance Information
-- ================================================================

ieee8021FqtssCompliances
    OBJECT IDENTIFIER ::= { ieee8021FqtssConformance 1 }
ieee8021FqtssGroups
    OBJECT IDENTIFIER ::= { ieee8021FqtssConformance 2 }
```

```
-- ============================================================
-- units of conformance
-- ============================================================

-- ============================================================
-- the ieee8021FqtssBap group
-- ============================================================

ieee8021FqtssBapGroup OBJECT-GROUP
    OBJECTS {
        ieee8021FqtssDeltaBandwidth,
        ieee8021FqtssOperIdleSlopeMs,
        ieee8021FqtssOperIdleSlopeLs,
        ieee8021FqtssAdminIdleSlopeMs,
        ieee8021FqtssAdminIdleSlopeLs,
        ieee8021FqtssBapRowStatus
    }
    STATUS      current
    DESCRIPTION
        "Objects that define bandwidth allocation for FQTSS."
    ::= { ieee8021FqtssGroups 1 }

-- ============================================================
-- the ieee8021FqtssTxSelectionAlgorithm group
-- ============================================================

ieee8021FqtssTxSelectionAlgorithmGroup OBJECT-GROUP
    OBJECTS {
        ieee8021FqtssTxSelectionAlgorithmID
    }
    STATUS      current
    DESCRIPTION
        "Objects that define transmission selection
        mappings for FQTSS."
    ::= { ieee8021FqtssGroups 2 }

-- ============================================================
-- the ieee8021FqtssBoundaryPort group
-- ============================================================

ieee8021FqtssBoundaryPortGroup OBJECT-GROUP
    OBJECTS {
        ieee8021FqtssPriorityRegenOverride,
        ieee8021FqtssSrpBoundaryPort
    }
    STATUS      current
    DESCRIPTION
        "Objects that define boundary port priority override
        mappings for FQTSS."
    ::= { ieee8021FqtssGroups 3 }

-- ============================================================
-- compliance statements
-- ============================================================

ieee8021FqtssCompliance MODULE-COMPLIANCE
    STATUS      current
    DESCRIPTION
```

```
            "The compliance statement for devices supporting
            forwarding and queuing for time sensitive streams.

            Support of the objects defined in the IEEE8021-FQTSS MIB
            also requires support of the IEEE8021-BRIDGE-MIB; the
            provisions of 17.3.2 apply to implementations claiming
            support of the IEEE8021-FQTSS MIB. "

        MODULE -- this module
            MANDATORY-GROUPS {
                ieee8021FqtssBapGroup,
                ieee8021FqtssTxSelectionAlgorithmGroup,
                ieee8021FqtssBoundaryPortGroup
            }

        ::= { ieee8021FqtssCompliances 1 }

END
```

17.7.14 Definitions for the IEEE8021-SRP-MIB module

Replace the text of 17.7.14 with the following:

```
IEEE8021-SRP-MIB DEFINITIONS ::= BEGIN

-- ================================================================
-- MIB for support of 802.1Qat Stream Reservation Protocol
-- (SRP) in 802.1Q Bridges.
-- ================================================================

IMPORTS
    MODULE-IDENTITY,
    OBJECT-TYPE,
    Counter64,
    Unsigned32
        FROM SNMPv2-SMI
    MacAddress,
    TEXTUAL-CONVENTION,
    TruthValue
        FROM SNMPv2-TC
    MODULE-COMPLIANCE,
    OBJECT-GROUP
        FROM SNMPv2-CONF
    ieee802dot1mibs,
    IEEE8021PriorityCodePoint,
    IEEE8021VlanIndex
        FROM IEEE8021-TC-MIB
    IEEE8021FqtssTrafficClassValue
        FROM IEEE8021-FQTSS-MIB
    ieee8021BridgeBaseComponentId,
    ieee8021BridgeBaseEntry,
    ieee8021BridgeBasePort,
    ieee8021BridgeBasePortEntry
        FROM IEEE8021-BRIDGE-MIB

    ;

ieee8021SrpMib MODULE-IDENTITY
    LAST-UPDATED "201512020000Z" -- December 2, 2015
    ORGANIZATION "IEEE 802.1 Working Group"
    CONTACT-INFO
        "WG-URL: http://ieee802.org/1/
         WG-EMail: STDS-802-1-L@LISTSERV.IEEE.ORG

          Contact: IEEE 802.1 Working Group Chair
           Postal: C/O IEEE 802.1 Working Group
                   IEEE Standards Association
                   445 Hoes Lane
                   Piscataway
                   NJ 08854
                   USA
           E-mail: STDS-802-1-L@LISTSERV.IEEE.ORG"
    DESCRIPTION
        "The Bridge MIB module for managing devices that support
        the IEEE Std 802.1Q Stream Reservation Protocol.

        Unless otherwise indicated, the references in this MIB
```

```
        module are to IEEE Std 802.1Q-2014.

        Copyright (C) IEEE (2015).
        This version of this MIB module is part of IEEE802.1Q;
        see the draft itself for full legal notices."

    REVISION "201512020000Z" -- December 2, 2015
    DESCRIPTION
            "Published as part of IEEE Std 802.1Q-2014 Cor-1.
            ieee8021SrpReservationFailureBridgeId changed to
            ieee8021SrpReservationFailureSystemId."

    REVISION "201412150000Z" -- December 15, 2014
    DESCRIPTION
            "Published as part of IEEE Std 802.1Q 2014 revision.
            Cross references updated and corrected."

    REVISION     "201102270000Z" -- February 27, 2011
    DESCRIPTION
         "Minor edits to contact information etc. as part of
          2011 revision of Std 802.1Q."

    REVISION     "201004190000Z" -- April 19, 2010
    DESCRIPTION
         "Initial revision, included in IEEE 802.1Qat"
    ::= { ieee802dot1mibs 19 }

-- ================================================================
-- Textual Conventions
-- ================================================================

IEEE8021SrpStreamRankValue ::= TEXTUAL-CONVENTION
    STATUS       current
    DESCRIPTION
        "An 802.1 SRP Stream Rank value. This is an integer,
         with the following interpretation placed on the value:

         0: Emergency, high-rank stream,
         1: Non-emergency stream."
    REFERENCE    "35.2.2.8.5b"
    SYNTAX       INTEGER {
                     emergency(0),
                     nonEmergency(1)
                 }


IEEE8021SrpStreamIdValue ::= TEXTUAL-CONVENTION
    DISPLAY-HINT "1x:1x:1x:1x:1x:1x.1x:1x"
    STATUS       current
    DESCRIPTION
            "Represents an SRP Stream ID, which is often defined
            as a MAC Address followed by a unique 16-bit ID."
    SYNTAX       OCTET STRING (SIZE (8))

IEEE8021SrpReservationDirectionValue ::= TEXTUAL-CONVENTION
    STATUS       current
    DESCRIPTION
        "An 802.1 SRP Stream Reservation Direction value. This is
         an integer, with the following interpretation placed on
```

```
        the value:

        0: Talker registrations,
        1: Listener registrations."
    REFERENCE    "35.2.1.2"
    SYNTAX       INTEGER {
                     talkerRegistrations(0),
                     listenerRegistrations(1)
                 }


IEEE8021SrpReservationDeclarationTypeValue ::= TEXTUAL-CONVENTION
    STATUS       current
    DESCRIPTION
        "An 802.1 SRP Stream Reservation Declaration Type value.
         This is an integer, with the following interpretation
         placed on the value:

         0: Talker Advertise,
         1: Talker Failed,
         2: Listener Asking Failed,
         3: Listener Ready,
         4: Listener Ready Failed."
    REFERENCE    "35.2.1.3"
    SYNTAX       INTEGER {
                     talkerAdvertise(0),
                     talkerFailed(1),
                     listenerAskingFailed(2),
                     listenerReady(3),
                     listenerReadyFailed(4)
                 }


IEEE8021SrpReservationFailureCodeValue ::= TEXTUAL-CONVENTION
    STATUS       current
    DESCRIPTION
        "An 802.1 SRP Stream Reservation Failure Code value.
         This is an integer, with the following interpretation
         placed on the value:

         0: No failure,
         1: Insufficient bandwidth,
         2: Insufficient Bridge resources,
         3: Insufficient bandwidth for Traffic Class,
         4: StreamID in use by another Talker,
         5: Stream destination address already in use,
         6: Stream pre-empted by higher rank,
         7: Reported latency has changed,
         8: Egress port is not AVBCapable,
         9: Use a different destination_address,
         10: Out of MSRP resources,
         11: Out of MMRP resources,
         12: Cannot store destination_address,
         13: Requested priority is not an SR Class priority,
         14: MaxFrameSize is too large for media,
         15: maxFanInPorts limit has been reached,
         16: Changes in FirstValue for a registered StreamID,
         17: VLAN is blocked on this egress port (Registration Forbidden),
```

```
            18: VLAN tagging is disabled on this egress port (untagged set),
            19: SR class priority mismatch."
        REFERENCE     "35.2.2.8.7"
        SYNTAX        INTEGER {
                         noFailure(0),
                         insufficientBandwidth(1),
                         insufficientResources(2),
                         insufficientTrafficClassBandwidth(3),
                         streamIDInUse(4),
                         streamDestinationAddressInUse(5),
                         streamPreemptedByHigherRank(6),
                         latencyHasChanged(7),
                         egressPortNotAVBCapable(8),
                         useDifferentDestinationAddress(9),
                         outOfMSRPResources(10),
                         outOfMMRPResources(11),
                         cannotStoreDestinationAddress(12),
                         priorityIsNoAnSRCLass(13),
                         maxFrameSizeTooLarge(14),
                         maxFanInPortsLimitReached(15),
                         firstValueChangedForStreamID(16),
                         vlanBlockedOnEgress(17),
                         vlanTaggingDisabledOnEgress(18),
                         srClassPriorityMismatch(19)
                      }


-- ================================================================
-- subtrees in the SRP MIB
-- ================================================================

ieee8021SrpNotifications
    OBJECT IDENTIFIER ::= { ieee8021SrpMib 0 }

ieee8021SrpObjects
    OBJECT IDENTIFIER ::= { ieee8021SrpMib 1 }

ieee8021SrpConformance
    OBJECT IDENTIFIER ::= { ieee8021SrpMib 2 }

ieee8021SrpConfiguration
    OBJECT IDENTIFIER ::= { ieee8021SrpObjects 1 }

ieee8021SrpLatency
    OBJECT IDENTIFIER ::= { ieee8021SrpObjects 2 }

ieee8021SrpStreams
    OBJECT IDENTIFIER ::= { ieee8021SrpObjects 3 }

ieee8021SrpReservations
    OBJECT IDENTIFIER ::= { ieee8021SrpObjects 4 }


-- ================================================================
-- The ieee8021SrpConfiguration subtree
-- This subtree defines the objects necessary for the
-- operational management of SRP.
-- ================================================================
```

```
ieee8021SrpBridgeBaseTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF Ieee8021SrpBridgeBaseEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table for SRP main control and status information.
        All writeable objects in this table must be persistent
        over power up restart/reboot.  These objects augment
        the ieee8021BridgeBasePortTable."
    ::= { ieee8021SrpConfiguration 1 }

ieee8021SrpBridgeBaseEntry OBJECT-TYPE
    SYNTAX      Ieee8021SrpBridgeBaseEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "SRP control and status information for a Bridge."
    AUGMENTS { ieee8021BridgeBaseEntry }
    ::= { ieee8021SrpBridgeBaseTable 1 }

Ieee8021SrpBridgeBaseEntry ::=
    SEQUENCE {
         ieee8021SrpBridgeBaseMsrpEnabledStatus
            TruthValue,
         ieee8021SrpBridgeBaseMsrpTalkerPruning
            TruthValue,
         ieee8021SrpBridgeBaseMsrpMaxFanInPorts
            Unsigned32,
         ieee8021SrpBridgeBaseMsrpLatencyMaxFrameSize
            Unsigned32
    }

ieee8021SrpBridgeBaseMsrpEnabledStatus OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The administrative status requested by management for
        MSRP.  The value true(1) indicates that MSRP should
        be enabled on this device, in all VLANs, on all ports
        for which it has not been specifically disabled.  When
        false(2), MSRP is disabled, in all VLANs and on all
        ports, and all MSRP frames will be forwarded
        transparently.  This objects affects both Applicant and
        Registrar state machines.  A transition from false(2)
        to true(1) will cause a reset of all MSRP state
        machines on all ports.

        This object may be modified while the corresponding
        instance of ieee8021BridgeBaseRowStatus is active(1).

        The value of this object MUST be retained across
        reinitializations of the management system."
    REFERENCE   "35.2.1.4d"
    DEFVAL      { true }
    ::= { ieee8021SrpBridgeBaseEntry 1 }

ieee8021SrpBridgeBaseMsrpTalkerPruning OBJECT-TYPE
```

```
        SYNTAX      TruthValue
        MAX-ACCESS  read-create
        STATUS      current
        DESCRIPTION
            "The value of the talkerPruning parameter which
            controls the propagation of Talker declarations.
            The value true(1) indicates that Talker attributes
            are only declared on ports that have the Stream
            destination_address registered in the MMRP MAC
            Address Registration Entries.  When false(2),
            Talker attribute are declared on all egress ports
            in the active topology.

            The value of this object MUST be retained across
            reinitializations of the management system."
        REFERENCE   "12.22.1, 35.2.1.4b, 35.2.4.3.1"
        DEFVAL      { false }
        ::= { ieee8021SrpBridgeBaseEntry 2 }

    ieee8021SrpBridgeBaseMsrpMaxFanInPorts OBJECT-TYPE
        SYNTAX      Unsigned32
        MAX-ACCESS  read-create
        STATUS      current
        DESCRIPTION
            "The value of the msrpMaxFanInPorts parameter which
            limits the total number of ports on a Bridge that
            are allowed to establish reservations for inbound
            Streams.  A value of zero (0) indicates no fan-in
            limit is being specified and calculations involving
            fan-in will only be limited by the number of MSRP
            enabled ports.

            The value of this object MUST be retained across
            reinitializations of the management system."
        REFERENCE   "12.22.1, 35.2.1.4f"
        DEFVAL      { 0 }
        ::= { ieee8021SrpBridgeBaseEntry 3 }

    ieee8021SrpBridgeBaseMsrpLatencyMaxFrameSize OBJECT-TYPE
        SYNTAX      Unsigned32
        MAX-ACCESS  read-create
        STATUS      current
        DESCRIPTION
            "The value of msrpLatencyMaxFrameSize parameter
            which is used in the calculation of the maximum
            latency through a Bridge.  The maximum size is
            defined to be 2000 octets by default, but may be
            set to a smaller or larger value dependent on the
            particular Bridge configuration. This parameter
            does not imply any type of policing of frame size,
            it is only used in the latency calculations.

            The value of this object MUST be retained across
            reinitializations of the management system."
        REFERENCE   "12.22.1, 35.2.1.4g"
        DEFVAL      { 2000 }
        ::= { ieee8021SrpBridgeBaseEntry 4 }
```

```
ieee8021SrpBridgePortTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF Ieee8021SrpBridgePortEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table for SRP control and status information about
        every Bridge Port.  Augments the ieee8021BridgeBasePortTable."
    ::= { ieee8021SrpConfiguration 2 }

ieee8021SrpBridgePortEntry OBJECT-TYPE
    SYNTAX      Ieee8021SrpBridgePortEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "SRP control and status information for a Bridge Port."
    AUGMENTS { ieee8021BridgeBasePortEntry }
    ::= { ieee8021SrpBridgePortTable 1 }

Ieee8021SrpBridgePortEntry ::=
    SEQUENCE {
        ieee8021SrpBridgePortMsrpEnabledStatus
            TruthValue,
        ieee8021SrpBridgePortMsrpFailedRegistrations
            Counter64,
        ieee8021SrpBridgePortMsrpLastPduOrigin
            MacAddress,
        ieee8021SrpBridgePortSrPvid
            IEEE8021VlanIndex
    }

ieee8021SrpBridgePortMsrpEnabledStatus OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-create
    STATUS      current
    DESCRIPTION
        "The administrative state of MSRP operation on this port.  The
        value true(1) indicates that MSRP is enabled on this port
        in all VLANs as long as ieee8021BridgeMsrpEnabledStatus is
        also true(1). A value of false(2) indicates that MSRP is
        disabled on this port in all VLANs: any MSRP frames received
        will be silently discarded, and no MSRP registrations will be
        propagated from other ports.  Setting this to a value of
        true(1) will be stored by the agent but will only take
        effect on the MSRP protocol operation if
        ieee8021BridgeMsrpEnabledStatus
        also indicates the value true(1).  This object affects
        all MSRP Applicant and Registrar state machines on this
        port.  A transition from false(2) to true(1) will
        cause a reset of all MSRP state machines on this port.

        The value of this object MUST be retained across
        reinitializations of the management system."
    REFERENCE   "35.2.1.4e"
    DEFVAL      { true }
    ::= { ieee8021SrpBridgePortEntry 1 }

ieee8021SrpBridgePortMsrpFailedRegistrations OBJECT-TYPE
    SYNTAX      Counter64
```

```
        UNITS       "failed MSRP registrations"
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The total number of failed MSRP registrations, for any
            reason, in all VLANs, on this port.

            Discontinuities in the value of the counter can occur at
            re-initialization of the management system, and at other
            times as indicated by the value of ifCounterDiscontinuityTime
            object of the associated interface (if any)."
        REFERENCE   "10.7.12.1"
        ::= { ieee8021SrpBridgePortEntry 2 }

    ieee8021SrpBridgePortMsrpLastPduOrigin OBJECT-TYPE
        SYNTAX      MacAddress
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The Source MAC Address of the last MSRP message
            received on this port."
        REFERENCE   "10.7.12.2"
        ::= { ieee8021SrpBridgePortEntry 3 }

    ieee8021SrpBridgePortSrPvid OBJECT-TYPE
        SYNTAX      IEEE8021VlanIndex
        MAX-ACCESS  read-create
        STATUS      current
        DESCRIPTION
            "The default VLAN ID that Streams are assigned to.
            Talkers learn this VID from the SRP Domain attribute
            and tag Streams accordingly.

            The value of this object MUST be retained across
            reinitializations of the management system."
        REFERENCE   "35.2.2.8.3b"
        DEFVAL      { 2 }
        ::= { ieee8021SrpBridgePortEntry 4}


    -- ================================================================
    -- The ieee8021SrpLatency subtree
    -- This subtree defines the objects necessary for retrieving
    -- the latency of the various traffic classes on a port.
    -- ================================================================

    -- ================================================================
    -- the ieee8021SrpLatencyTable
    -- ================================================================
    ieee8021SrpLatencyTable OBJECT-TYPE
        SYNTAX      SEQUENCE OF Ieee8021SrpLatencyEntry
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "A table containing a set of latency measurement
            parameters for each traffic class."
        REFERENCE   "35.2.2.8.6"
        ::= { ieee8021SrpLatency 1 }
```

```
ieee8021SrpLatencyEntry OBJECT-TYPE
    SYNTAX      Ieee8021SrpLatencyEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A list of objects containing latency information
        for each traffic class. Rows in the table are
        automatically created for ports that are not an
        SRP domain boundary port (i.e. SRPdomainBoundaryPort
        is FALSE). See 35.1.4, 8.8.2, 12.22.3."
    INDEX  { ieee8021BridgeBaseComponentId,
             ieee8021BridgeBasePort,
             ieee8021SrpTrafficClass  }
    ::= { ieee8021SrpLatencyTable 1 }

Ieee8021SrpLatencyEntry ::=
    SEQUENCE {
        ieee8021SrpTrafficClass
            IEEE8021FqtssTrafficClassValue,
        ieee8021SrpPortTcLatency
            Unsigned32
        }

ieee8021SrpTrafficClass OBJECT-TYPE
    SYNTAX      IEEE8021FqtssTrafficClassValue
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The traffic class number associated with the
        row of the table.

        Rows in the table are automatically created for
        ports that are not an SRP domain boundary port
        (i.e. SRPdomainBoundaryPort is FALSE)."
    REFERENCE   "35.1.4, 8.8.2, 12.22.3"
    ::= { ieee8021SrpLatencyEntry 1 }


ieee8021SrpPortTcLatency OBJECT-TYPE
    SYNTAX      Unsigned32
    UNITS       "nano-seconds"
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
        "The value of the portTcMaxLatency parameter for the
        traffic class.  This value is expressed in
        nano-seconds."
    REFERENCE   "35.2.1.4, 35.2.2.8.6"
    ::= { ieee8021SrpLatencyEntry 2 }


-- ================================================================
-- The ieee8021SrpStreams subtree
-- This subtree defines the objects necessary for retrieving
-- the characteristics of the various Streams currently registered.
-- ================================================================

-- ================================================================
```

```
-- the ieee8021SrpStreamTable
-- ==========================================================
ieee8021SrpStreamTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF Ieee8021SrpStreamEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table containing a set of characteristics
        for each registered Stream."
    REFERENCE   "35.2.2.8"
    ::= { ieee8021SrpStreams 1 }

ieee8021SrpStreamEntry OBJECT-TYPE
    SYNTAX      Ieee8021SrpStreamEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A list of objects containing characteristics
        for each registered Stream. Rows in the table are
        automatically created for Streams registered on any
        port of a Bridge."
    INDEX  { ieee8021SrpStreamId }
    ::= { ieee8021SrpStreamTable 1 }

Ieee8021SrpStreamEntry ::=
    SEQUENCE {
        ieee8021SrpStreamId
            IEEE8021SrpStreamIdValue,
        ieee8021SrpStreamDestinationAddress
            MacAddress,
        ieee8021SrpStreamVlanId
            IEEE8021VlanIndex,
        ieee8021SrpStreamTspecMaxFrameSize
            Unsigned32,
        ieee8021SrpStreamTspecMaxIntervalFrames
            Unsigned32,
        ieee8021SrpStreamDataFramePriority
            IEEE8021PriorityCodePoint,
        ieee8021SrpStreamRank
            IEEE8021SrpStreamRankValue
        }

ieee8021SrpStreamId OBJECT-TYPE
    SYNTAX      IEEE8021SrpStreamIdValue
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "The Stream ID associated with the row of the table.

        Rows in the table are automatically created when
        Streams are registered via MSRP."
    REFERENCE   "35.2.2.8.2"
    ::= { ieee8021SrpStreamEntry 1 }

ieee8021SrpStreamDestinationAddress OBJECT-TYPE
    SYNTAX      MacAddress
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
```

```
            "The MAC destination address for the Stream described
            by this reservation."
        REFERENCE   "35.2.2.8.3a"
        ::= { ieee8021SrpStreamEntry 2}

    ieee8021SrpStreamVlanId OBJECT-TYPE
        SYNTAX      IEEE8021VlanIndex
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The VLAN ID associated with the MSRP registration
            for this Stream."
        REFERENCE   "35.2.2.8.3b"
        ::= { ieee8021SrpStreamEntry 3}

    ieee8021SrpStreamTspecMaxFrameSize OBJECT-TYPE
        SYNTAX      Unsigned32 (0..65535)
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The maximum size frame that will be sent by
            a Talker for this Stream. This value is part
            of the Traffic Specification for the Stream."
        REFERENCE   "35.2.2.8.4a"
        ::= { ieee8021SrpStreamEntry 4}

    ieee8021SrpStreamTspecMaxIntervalFrames OBJECT-TYPE
        SYNTAX      Unsigned32 (0..65535)
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The maximum number of frame that will be sent
            during a class measurement interval (L.2).  This
            value is part of the Traffic Specification for
            the Stream."
        REFERENCE   "35.2.2.8.4b, L.2"
        ::= { ieee8021SrpStreamEntry 5}

    ieee8021SrpStreamDataFramePriority OBJECT-TYPE
        SYNTAX      IEEE8021PriorityCodePoint
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The Priority Code Point (PCP) value that the
            referenced Stream will be tagged with. This value
            is used to distinguish Class A and Class B traffic."
        REFERENCE   "35.2.2.8.5a"
        ::= { ieee8021SrpStreamEntry 6}

    ieee8021SrpStreamRank OBJECT-TYPE
        SYNTAX      IEEE8021SrpStreamRankValue
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "SRP supports emergency and non-emergency.
            Emergency traffic will interrupt non-emergency
            traffic if there is insufficient bandwidth or
            resources available for the emergency traffic."
```

```
    REFERENCE   "35.2.2.8.5b"
    ::= { ieee8021SrpStreamEntry 7}


-- ============================================================
-- The ieee8021SrpReservations subtree
-- This subtree defines the objects necessary for retrieving
-- the Stream attribute registrations on each port of a Bridge.
-- ============================================================

-- ============================================================
-- the ieee8021SrpReservationsTable
-- ============================================================
ieee8021SrpReservationsTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF Ieee8021SrpReservationsEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A table containing Stream attribute
        registrations per port."
    REFERENCE   "35.2.4"
    ::= { ieee8021SrpReservations 1 }

ieee8021SrpReservationsEntry OBJECT-TYPE
    SYNTAX      Ieee8021SrpReservationsEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
        "A list of objects containing Stream attribute
        registrations per port. Rows in the table are
        automatically created for Streams registered on any
        port of a Bridge."
    INDEX  { ieee8021SrpReservationStreamId,
             ieee8021SrpReservationDirection,
             ieee8021BridgeBaseComponentId,
             ieee8021BridgeBasePort }
    ::= { ieee8021SrpReservationsTable 1 }

Ieee8021SrpReservationsEntry ::=
    SEQUENCE {
        ieee8021SrpReservationStreamId
            IEEE8021SrpStreamIdValue,
        ieee8021SrpReservationDirection
            IEEE8021SrpReservationDirectionValue,
        ieee8021SrpReservationDeclarationType
            IEEE8021SrpReservationDeclarationTypeValue,
        ieee8021SrpReservationAccumulatedLatency
            Unsigned32,
        ieee8021SrpReservationFailureSystemId
            OCTET STRING,
        ieee8021SrpReservationFailureCode
            IEEE8021SrpReservationFailureCodeValue,
        ieee8021SrpReservationDroppedStreamFrames
            Counter64,
        ieee8021SrpReservationStreamAge
            Unsigned32
        }

ieee8021SrpReservationStreamId OBJECT-TYPE
```

```
        SYNTAX      IEEE8021SrpStreamIdValue
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The Stream ID associated with the row of the table.

            Rows in the table are automatically created when
            Streams are registered via MSRP."
        REFERENCE   "35.2.2.8.2"
        ::= { ieee8021SrpReservationsEntry 1 }

    ieee8021SrpReservationDirection OBJECT-TYPE
        SYNTAX      IEEE8021SrpReservationDirectionValue
        MAX-ACCESS  not-accessible
        STATUS      current
        DESCRIPTION
            "The source of this Stream registration, either
            Talker or Listener."
        REFERENCE   "35.2.1.2"
        ::= { ieee8021SrpReservationsEntry 2 }

    ieee8021SrpReservationDeclarationType OBJECT-TYPE
        SYNTAX      IEEE8021SrpReservationDeclarationTypeValue
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The type of Talker or Listener registration."
        REFERENCE   "35.2.1.3"
        ::= { ieee8021SrpReservationsEntry 3 }

    ieee8021SrpReservationAccumulatedLatency OBJECT-TYPE
        SYNTAX      Unsigned32
        UNITS       "nano-seconds"
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The Accumulated Latency associated with the current
            registration.

            For Talker registrations this represents the accumulated
            latency from the Talker to the ingress port of this
            Bridge.

            For Listener registrations this represents the accumulated
            latency to the ingress port of the neighbor Bridge or
            end stations. This include the latency of the media
            attached to this egress port."
        REFERENCE   "35.2.2.8.6"
        ::= { ieee8021SrpReservationsEntry 4 }

    ieee8021SrpReservationFailureSystemId OBJECT-TYPE
        SYNTAX      OCTET STRING(SIZE(8))
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The first system that changes a Talker Advertise to a
            Talker Failed registration will report its System
            Identification in this field. That single System
```

```
            Identification is then propagated from system to system."
        REFERENCE   "35.2.2.8.7a"
        ::= { ieee8021SrpReservationsEntry 5 }

    ieee8021SrpReservationFailureCode OBJECT-TYPE
        SYNTAX      IEEE8021SrpReservationFailureCodeValue
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The first Bridge that changes a Talker Advertise to a
            Talker Failed registration will report the Failure Code
            in this field. That single Failure Code is then propagated
            from Bridge to Bridge."
        REFERENCE   "35.2.2.8.7b"
        ::= { ieee8021SrpReservationsEntry 6 }

    ieee8021SrpReservationDroppedStreamFrames OBJECT-TYPE
        SYNTAX      Counter64
        UNITS       "frames"
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "A count of the number of data stream frames that have
            been dropped for whatever reason.  These are not MSRP
            frames, but the stream data frames that are carried by
            the MSRP Reservation.

            Discontinuities in the value of the counter can occur at
            re-initialization of the management system, and at other
            times as indicated by the value of ifCounterDiscontinuityTime
            object of the associated interface (if any)."
         REFERENCE   "35.2.5.1"
        ::= { ieee8021SrpReservationsEntry 7 }

    ieee8021SrpReservationStreamAge OBJECT-TYPE
        SYNTAX      Unsigned32
        UNITS       "seconds"
        MAX-ACCESS  read-only
        STATUS      current
        DESCRIPTION
            "The number of seconds since the reservation was established
            on this port."
        REFERENCE   "35.2.1.4c"
        ::= { ieee8021SrpReservationsEntry 8 }


    -- ============================================================
    -- IEEE8021 SRP MIB - Conformance Information
    -- ============================================================

    ieee8021SrpCompliances
        OBJECT IDENTIFIER ::= { ieee8021SrpConformance 1 }
    ieee8021SrpGroups
        OBJECT IDENTIFIER ::= { ieee8021SrpConformance 2 }

    -- ============================================================
    -- units of conformance
    -- ============================================================
```

```
-- ============================================================
-- the ieee8021SrpConfiguration group
-- ============================================================

ieee8021SrpConfigurationGroup OBJECT-GROUP
    OBJECTS {
        ieee8021SrpBridgeBaseMsrpEnabledStatus,
        ieee8021SrpBridgeBaseMsrpTalkerPruning,
        ieee8021SrpBridgeBaseMsrpMaxFanInPorts,
        ieee8021SrpBridgeBaseMsrpLatencyMaxFrameSize,
        ieee8021SrpBridgePortMsrpEnabledStatus,
        ieee8021SrpBridgePortMsrpFailedRegistrations,
        ieee8021SrpBridgePortMsrpLastPduOrigin,
        ieee8021SrpBridgePortSrPvid
    }
    STATUS      current
    DESCRIPTION
        "Objects that define configuration of SRP."
    ::= { ieee8021SrpGroups 1 }

-- ============================================================
-- the ieee8021SrpLatency group
-- ============================================================

ieee8021SrpLatencyGroup OBJECT-GROUP
    OBJECTS {
        ieee8021SrpPortTcLatency
    }
    STATUS      current
    DESCRIPTION
        "Objects that define latency for SRP."
    ::= { ieee8021SrpGroups 2 }

-- ============================================================
-- the ieee8021SrpStreams group
-- ============================================================

ieee8021SrpStreamsGroup OBJECT-GROUP
    OBJECTS {
        -- ieee8021SrpStreamId,
        ieee8021SrpStreamDestinationAddress,
        ieee8021SrpStreamVlanId,
        ieee8021SrpStreamTspecMaxFrameSize,
        ieee8021SrpStreamTspecMaxIntervalFrames,
        ieee8021SrpStreamDataFramePriority,
        ieee8021SrpStreamRank
    }
    STATUS      current
    DESCRIPTION
        "Objects that define Streams for SRP."
    ::= { ieee8021SrpGroups 3 }

-- ============================================================
-- the ieee8021SrpReservations group
-- ============================================================

ieee8021SrpReservationsGroup OBJECT-GROUP
    OBJECTS {
```

```
        -- ieee8021SrpReservationStreamId,
        -- ieee8021SrpReservationDirection,
        ieee8021SrpReservationDeclarationType,
        ieee8021SrpReservationAccumulatedLatency,
        ieee8021SrpReservationFailureSystemId,
        ieee8021SrpReservationFailureCode,
        ieee8021SrpReservationDroppedStreamFrames,
        ieee8021SrpReservationStreamAge
    }
    STATUS      current
    DESCRIPTION
        "Objects that define Stream Reservations for SRP."
    ::= { ieee8021SrpGroups 4 }


-- ================================================================
-- compliance statements
-- ================================================================

ieee8021SrpCompliance MODULE-COMPLIANCE
    STATUS      current
    DESCRIPTION
        "The compliance statement for devices supporting
        Stream Reservation Protocol.

        Support of the objects defined in the IEEE8021-SRP MIB
        also requires support of the IEEE8021-BRIDGE-MIB; the
        provisions of 17.3.2 apply to implementations claiming
        support of the IEEE8021-SRP MIB."

    MODULE -- this module
        MANDATORY-GROUPS {
            ieee8021SrpConfigurationGroup,
            ieee8021SrpLatencyGroup,
            ieee8021SrpStreamsGroup,
            ieee8021SrpReservationsGroup
        }

    ::= { ieee8021SrpCompliances 1 }

END
```

25. Support of the MAC Service by PBBNs

25.2 Customer service interface

Change the paragraph immediately before the NOTE as follows:

In all cases, segregation of different service instances is achieved at an interface wholly under the control of the backbone provider, and by verification of customer provided parameters that provide service instance selection. Stronger authentication and authorization of the attached customer systems ~~may~~can be achieved by use of IEEE Std 802.1X.

32. Congestion notification protocol

32.14 RP procedures

32.14.4 ReceiveCnm

Change list item e) as follows:

e) If the selected RP rate control state machine's rpEnabled variable is FALSE and is not held FALSE because rpgEnable (32.11.1) has the value FALSE, and the CNM's cnmQOffset field (33.4.5) is ~~negative~~ positive, then rpEnabled is reset to TRUE, the variable rpppCreatedRps (32.10.2) is incremented.

33. Encoding of congestion notification PDUs

33.4 Congestion Notification Message PDU format

33.4.5 cnmQOffset

Change the first line as follows:

The twos-complement signed integer value of ~~the transmitting CP's~~ (–1 × cpQOffset) (32.8.7) of the transmitting CP in units of 64 octets.

35. Stream Reservation Protocol (SRP)

35.1 Multiple Stream Registration Protocol (MSRP)

35.1.2 Behavior of end stations

35.1.2.1 Talkers

Insert the following paragraph immediately following list item b):

A Talker Advertise shall not be declared if there are not sufficient bandwidth and resources available. If a Talker Advertise is being declared and the required bandwidth or resources become unavailable the Talker Advertise shall be withdrawn and a Talker Failed may be declared. A Talker is allowed to transition directly from a Talker Advertise to a Talker Failed without waiting for the Talker Advertise to be deregistered from the network (see 35.2.6).

35.2 Definition of the MSRP application

35.2.2 Definition of MRP elements

35.2.2.8 MSRP FirstValue definitions (stream reservations)

35.2.2.8.1 Structure definition

Change Figure 35-2 as follows:

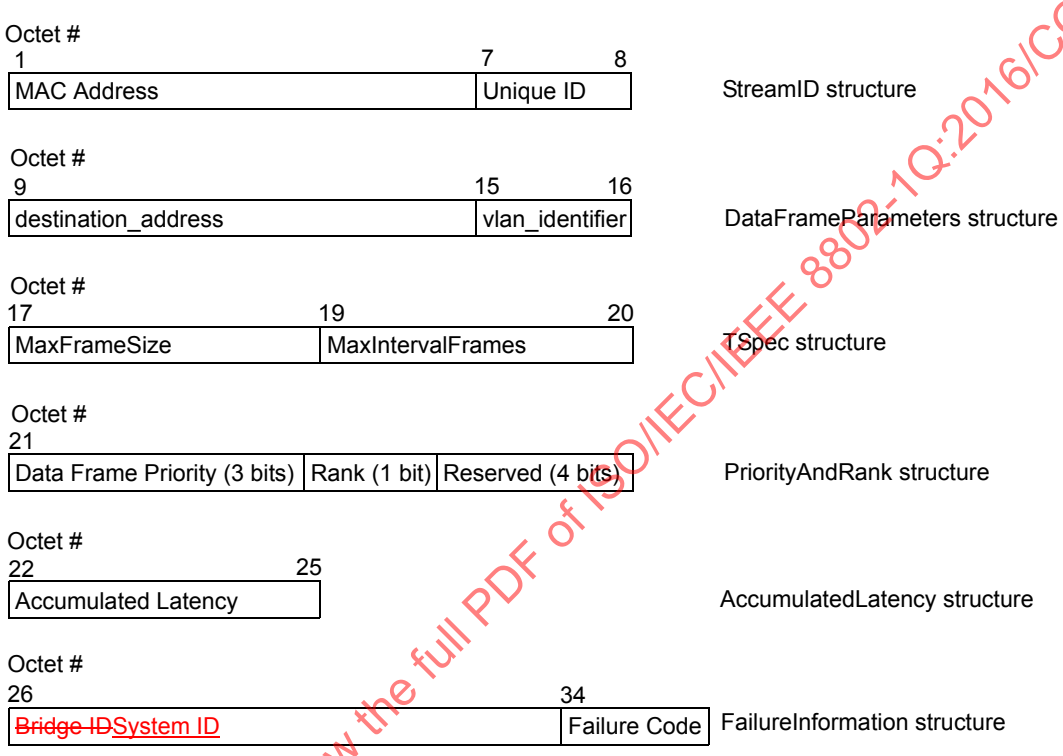

Figure 35-2—Format of the components of the reservation FirstValue fields

35.2.2.8.7 FailureInformation

Change the text of 35.2.2.8.7 and Table 35-6, and insert a NOTE, as follows:

At the point when a Talker Advertise Declaration is transformed into a Talker Failed Declaration, the ~~Bridge~~ system making the transformation adds information that indicates, to the Listeners registering the Talker Failed Declaration, the cause of the failure~~,~~ and the identity of the ~~Bridge~~ system at which the failure occurred. The subcomponents of the FailureInformation include

a) The system identifier, which is the~~The~~ Bridge ~~ID~~ Identifier (13.26.2) of the Bridge, or the 48-bit MAC Address of the end station's port extended to 64-bits by prepending 16 bits of zero, that changed the Declaration Type from Advertise to Failed.

b) The Reservation Failure Code, which is represented by a single octet containing the value shown in Table 35-6.

NOTE—Bridge Identifiers are normally constructed from MAC Addresses that are unique in the bridged LAN but are not required to be constructed in that manner; therefore, there is a possibility of an end station MAC Address colliding with the Bridge ID.

Table 35-6—Reservation Failure Codes

Failure Code	Description of cause
1	Insufficient bandwidth
2	Insufficient ~~Bridge~~system resources
3	Insufficient bandwidth for traffic class.
4	StreamID in use by another Talker
5	Stream destination_address already in use
6	Stream preempted by higher rank
7	Reported latency has changed
8	Egress port is not AVB capable[a]
9	Use a different destination_address (i.e., MAC DA hash table full)
10	Out of MSRP resources
11	Out of MMRP resources
12	Cannot store destination_address (i.e., ~~Bridge~~system is out of MAC DA resources)
13	Requested priority is not an SR Class (3.231) priority
14	MaxFrameSize (35.2.2.8.4(a)) is too large for media
15	msrpMaxFanInPorts (35.2.1.4(f)) limit has been reached
16	Changes in FirstValue for a registered StreamID.
17	VLAN is blocked on this egress port (Registration Forbidden)[b]
18	VLAN tagging is disabled on this egress port (untagged set)
19	SR class priority mismatch

[a]A device could choose to use the asCapable variable from IEEE Std 802.1AS™-2011 [B7], 10.2.4.1, to help determine if its neighboring device is AVB capable. If the asCapable variable is FALSE for a particular port, then the neighboring device is not a time-aware system and therefore not AVB capable.

[b]This Failure Code is never declared in a Talker Failed message since Talker attributes are not propagated on egress ports that have the associated VLAN blocked. The ~~Bridge~~system can still be queried by other means to learn why the Talker attribute was not declared.

Annex A

(normative)

PICS proforma—Bridge implementations[2]

A.37 Shortest Path Bridging (SPB)

Change row SPB-2 as follows:

SPB-2	Encode, decode, and validate IS-IS Hello PDUs or SPT BPDUs for the Agreement Protocol (AP) and support ~~Agreement Protocol~~ AP logic in IS-IS?	SPB:M	5.4.5, 28	Yes [ ] No [ ]

[2]*Copyright release for PICS proformas:* Users of this standard may freely reproduce the PICS proforma in this annex so that it can be used for its intended purpose and may further publish the completed PICS.

Annex B

(normative)

PICS proforma—End station implementations

B.10 Stream Reservation Protocol (SRP)

Change rows SRP-11 snd SRP-12 as follows:

SRP-11	Does the implementation update the Failure Information ~~Bridge ID~~end station MAC address and Code ~~in the event of insufficient bandwidth or resources through a Bridge~~when a Talker Failed is declared?	M	35.2.2.8.7	Yes [ ]	
SRP-12	Does the implementation create a Talker Failed in the event of insufficient bandwidth or resources ~~through a Bridge~~?	~~M~~ O	~~35.2.4.3, 35.10~~ 35.1.2.1	Yes [ ]	No [ ]

Annex D

(normative)

IEEE 802.1 Organizationally Specific TLVs

D.1 Requirements of the IEEE 802.1 Organizationally Specific TLV sets

Change row 07 of Table D-1 as follows:

Table D-1— IEEE 802.1 Organizationally Specific TLVs ~~specified in this standard~~

IEEE 802.1 subtype	TLV name	TLV set name	TLV reference	Feature clause reference
07	Link Aggregation	basicSet	~~D.2.7~~Annex F of IEEE Std 802.1AX-2014	~~D.2.7,~~ Annex F of IEEE Std 802.1AX-~~2008~~2014

D.2 Organizationally Specific TLV definitions

D.2.7 Link Aggregation TLV

Delete D2.7, D2.7.1, D2.7.2, D2.7.3, and Table D-3, re-numbering subsequent tables and sub-clauses accordingly.

D.3 IEEE 802.1 Organizationally Specific TLV management

D.3.2 IEEE 802.1 managed objects—TLV variables

D.3.2.7 Link Aggregation TLV managed objects

Change the text as follows:

a) **aggregation status:** The capability and current aggregation status of the link (see ~~D.2.7.1~~Annex F of IEEE Std 802.1AX-2014).

b) **aggregated port ID:** The aggregated port identifier (see ~~D.2.7.2~~Annex F of IEEE Std 802.1AX-2014).

D.4 PICS proforma for IEEE 802.1 Organizationally Specific TLV extensions

D.4.3 Major capabilities and options

Change the following rows of the table, as follows:

dot1basictlv	Is each TLV in the IEEE 802.1 Organizationally Specific TLV basicSet implemented? Port VLAN ID TLV Port And Protocol VLAN ID TLV VLAN Name TLV Protocol Identity TLV VID Usage Digest TLV Management VID TLV Link Aggregation TLV	 dot1basicSet:M dot1basicSet:M dot1basicSet:M dot1basicSet:M dot1basicSet:M dot1basicSet:M dot1basicSet:M	 D.2.1 D.2.2 D.2.3 D.2.4 D.2.5 D.2.6 ~~D.2.7~~Annex F of IEEE Std 802.1AX-2014	 Yes [ ] Yes [ ] Yes [ ] Yes [ ] Yes [ ] Yes [ ] Yes [ ]
dot1cntlv	Is each TLV in the IEEE 802.1 Organizationally Specific TLV lagSet implemented? Link Aggregation TLV	 dot1cnSet:M	 ~~D.2.7~~Annex F of IEEE Std 802.1AX-2014	 Yes [ ]
equivstor	If the SNMP is not supported, is the provided storage and retrieval capability functionally equivalent with the indicated specifications of this clause for the operating mode being implemented?	M	D.2.1. D.2.2, D.2.3, D.2.4, and ~~D.2.7~~Annex F of IEEE Std 802.1AX-2014	Yes [ ]

D.5 IEEE 802.1/LLDP extension MIB

D.5.2 Structure of the IEEE 802.1/LLDP extension MIB

Change the following rows of Table D-12 (previously Table D-13)as follows:

Table D-12—IEEE 802.1/LLDP extension MIB object cross reference

MIB table	MIB object	LLDP reference
lldpV2Xdot1LocLinkAggTable		~~D.2.7~~Annex F of IEEE Std 802.1AX-2014
	lldpV2LocPortIfIndex	(Table index)
	lldpV2Xdot1LocLinkAggStatus	aggregation status, ~~D.2.7.1~~Annex F of IEEE Std 802.1AX-2014
	lldpV2Xdot1LocLinkAggPortId	aggregation port ID, ~~D.2.7.2~~Annex F of IEEE Std 802.1AX-2014
lldpV2Xdot1RemLinkAggTable		~~D.2.7~~Annex F of IEEE Std 802.1AX-2014
	lldpV2RemTimeMark	(Table index)
	lldpV2RemLocalIfIndex	(Table index)
	lldpV2RemLocalDestMACAddress	(Table index)
	lldpV2RemIndex	(Table index)
	lldpV2Xdot1RemLinkAggStatus	aggregation status, ~~D.2.7.1~~Annex F of IEEE Std 802.1AX-2014
	lldpV2Xdot1RemLinkAggPortId	aggregation port ID, ~~D.2.7.2~~Annex F of IEEE Std 802.1AX-2014

D.5.5 IEEE 802.1 LLDP extension MIB module—version 2

Replace the text of D.5.5 with the following:

In the following MIB definition, should any discrepancy between the DESCRIPTION text and the corresponding definition in D.2.1 through D.5 occur, the definition in D.2.1 through D.5 shall take precedence.

```
LLDP-EXT-DOT1-V2-MIB DEFINITIONS ::= BEGIN

IMPORTS
    MODULE-IDENTITY,
    OBJECT-TYPE,
    Unsigned32
        FROM SNMPv2-SMI
    TruthValue,
    TEXTUAL-CONVENTION
        FROM SNMPv2-TC
    SnmpAdminString
        FROM SNMP-FRAMEWORK-MIB
    MODULE-COMPLIANCE,
    OBJECT-GROUP
        FROM SNMPv2-CONF
    ifGeneralInformationGroup
        FROM IF-MIB
    lldpV2Extensions,
    lldpV2LocPortIfIndex,
    lldpV2RemTimeMark,
    lldpV2RemLocalIfIndex,
    lldpV2RemLocalDestMACAddress,
    lldpV2RemIndex,
    lldpV2PortConfigEntry
        FROM LLDP-V2-MIB
    VlanId
        FROM Q-BRIDGE-MIB
    IEEE8021PriorityValue
        FROM IEEE8021-TC-MIB;

lldpV2Xdot1MIB MODULE-IDENTITY
    LAST-UPDATED "201512020000Z" -- December 2, 2015
    ORGANIZATION "IEEE 802.1 Working Group"
    CONTACT-INFO
           "WG-URL: http://grouper.ieee.org/groups/802/1/index.html
           WG-EMail: STDS-802-1-L@LISTSERV.IEEE.ORG

         Contact: IEEE 802.1 Working Group Chair
          Postal: C/O IEEE 802.1 Working Group
                  IEEE Standards Association
                  445 Hoes Lane
                  Piscataway
                  NJ 08854
                  USA
          E-mail: STDS-802-1-L@LISTSERV.IEEE.ORG"
    DESCRIPTION
            "The LLDP Management Information Base extension module for
            IEEE 802.1 organizationally defined discovery information.

            In order to ensure the uniqueness of the LLDP-V2-MIB,
```

```
            lldpV2Xdot1MIB is branched from lldpV2Extensions using an
            Organizationally Unique Identifier (OUI) value as the node.
            An OUI is a 24 bit globally unique number assigned by the
            IEEE Registration Authority - see:

            http://standards.ieee.org/develop/regauth/oui/index.html

            Unless otherwise indicated, the references in this
            MIB module are to IEEE Std 802.1Q-2014.

            Copyright (C) IEEE (2014).  This version of this MIB module
            is published as D.5.5 of IEEE Std 802.1Q;
            see the standard itself for full legal notices."

        REVISION "201512020000Z" -- December 2, 2015

        DESCRIPTION
                "Published as part of IEEE Std 802.1Q 2014 Cor-1.
                Updated as a result of maintenance items #0132 and #0152"

        REVISION "201412150000Z" -- December 15, 2014

        DESCRIPTION
                "Published as part of IEEE Std 802.1Q 2014 revision.
                Cross references updated and corrected.
                New tables lldpV2Xdot1RemVidUsageDigestV2Table
                and lldpV2Xdot1RemManVidV2Table inserted; old
                versions deprecated. New versions add an index for
                lldpV2RemIndex. "

        REVISION "201103250000Z" -- March 25, 2011

        DESCRIPTION
                "Published as part of IEEE Std 802.1Qaz-2011. Adds the DCBX
                objects to the MIB module"

        REVISION "201103230000Z" -- March 23, 2011

        DESCRIPTION
                "Published as part of IEEE Std 802.1Q-2011 revision.
                This revision contains changes associated with
                relocating the extension MIB from IEEE Std 802.1AB to
                IEEE Std 802.1Q, minor tweaks to the text of the
                DESCRIPTION statement above to fix references to
                IEEE Std 802.1Q, updating of references to refer to
                Annex D, and addition of object definitions for
                Congestion Notification TLVs and corresponding
                compliance statements."

        REVISION "200906080000Z" -- June 08, 2009

        DESCRIPTION
                "Published as part of IEEE Std 802.1AB-2009 revision.
                This revision incorporated changes to the MIB to
                support the use of LLDP with multiple destination MAC
                addresses, and to import the Link Aggregation TLV
                from the 802.3 extension MIB"

    -- OUI for IEEE 802.1 is 32962 (00-80-C2)
```

```
   ::= { lldpV2Extensions 32962 }

-------------------------------------------------------------------------
-------------------------------------------------------------------------
--
-- Organizationally Defined Information Extension - IEEE 802.1
-- Definitions to support the basicSet TLV set (Table D-1)
--
-------------------------------------------------------------------------
-------------------------------------------------------------------------

lldpV2Xdot1Objects    OBJECT IDENTIFIER ::= { lldpV2Xdot1MIB 1 }

-- LLDP IEEE 802.1 extension MIB groups
lldpV2Xdot1Config     OBJECT IDENTIFIER ::= { lldpV2Xdot1Objects 1 }
lldpV2Xdot1LocalData  OBJECT IDENTIFIER ::= { lldpV2Xdot1Objects 2 }
lldpV2Xdot1RemoteData OBJECT IDENTIFIER ::= { lldpV2Xdot1Objects 3 }

-------------------------------------------------------------------------
-- Textual Convention definitions
-------------------------------------------------------------------------

LldpV2XLinkAggStatusMap ::= TEXTUAL-CONVENTION
    STATUS      current
    DESCRIPTION
            "This TC describes the link aggregation status.

            The bit 'aggCapable(0)' indicates the link is capable of being
            aggregated if 1, not capable if 0.

            The bit 'aggEnabled(1)' indicates the link is currently in
            an aggregation if 1, not in an aggregation if 0.

            The bits 'portTypeLS(1)' and portTypeMS(2)' form the LS
            and MS bits of a Port Type value respectively:
            00 = no port type specified
            01 = transmitted from Aggregation Port
            10 = transmitted from Aggregator
            11 = transmitted from an Aggregator with a single
                 Aggregation Port.

            The remaining bits are reserved for future standardization."
    SYNTAX  BITS {
            aggCapable(0),
            aggEnabled(1),
            portTypeLS(2),
            portTypeMS(3)
            }

-------------------------------------------------------------------------
-- IEEE 802.1 - Configuration for the basicSet TLV set
-------------------------------------------------------------------------

--
-- lldpV2Xdot1ConfigPortVlanTable : configure the transmission of the
--                                  Port VLAN-ID TLVs on set of ports.
--

lldpV2Xdot1ConfigPortVlanTable OBJECT-TYPE
```

```
    SYNTAX      SEQUENCE OF LldpV2Xdot1ConfigPortVlanEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "A table that controls selection of LLDP Port VLAN-ID TLVs
            to be transmitted on individual ports."
    ::= { lldpV2Xdot1Config 1 }

lldpV2Xdot1ConfigPortVlanEntry  OBJECT-TYPE
    SYNTAX      LldpV2Xdot1ConfigPortVlanEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "LLDP configuration information that controls the
            transmission of IEEE 802.1 organizationally defined Port
            VLAN-ID TLV on LLDP transmission capable ports.

            This configuration object augments the
            lldpV2PortConfigEntry of the LLDP-MIB, therefore it is only
            present along with the port configuration defined by the
            associated lldpV2PortConfigEntry entry.

            Each active lldpConfigEntry is restored from non-volatile
            storage (along with the corresponding
            lldpV2PortConfigEntry) after a re-initialization of the
            management system."
    AUGMENTS { lldpV2PortConfigEntry }
    ::= { lldpV2Xdot1ConfigPortVlanTable 1 }

LldpV2Xdot1ConfigPortVlanEntry ::= SEQUENCE {
      lldpV2Xdot1ConfigPortVlanTxEnable  TruthValue
}

lldpV2Xdot1ConfigPortVlanTxEnable OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-write
    STATUS      current
    DESCRIPTION
            "The lldpV2Xdot1ConfigPortVlanTxEnable, which is defined
            as a truth value and configured by the network management,
            determines whether the IEEE 802.1 organizationally defined
            port VLAN TLV transmission is allowed on a given LLDP
            transmission capable port.

            The value of this object is restored from non-volatile
            storage after a re-initialization of the management system."
    REFERENCE
            "9.1.2.1 of IEEE Std 802.1AB"
    DEFVAL  { false }
    ::= { lldpV2Xdot1ConfigPortVlanEntry 1 }


--
-- lldpV2Xdot1ConfigVlanNameTable : configure the transmission of the
--                                  VLAN name instances on set of ports.
--

lldpV2Xdot1ConfigVlanNameTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1ConfigVlanNameEntry
```

```
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The table that controls selection of LLDP VLAN name TLV
            instances to be transmitted on individual ports."
    ::= { lldpV2Xdot1Config 2 }

lldpV2Xdot1ConfigVlanNameEntry  OBJECT-TYPE
    SYNTAX      LldpV2Xdot1ConfigVlanNameEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "LLDP configuration information that specifies the set of
            ports (represented as a PortList) on which the Local System
            VLAN name instance is transmitted.

            This configuration object augments the lldpV2LocVlanEntry;
            therefore it is only present along with the VLAN Name
            instance contained in the associated lldpV2LocVlanNameEntry
            entry.

            Each active lldpV2Xdot1ConfigVlanNameEntry is restored
            from non-volatile storage (along with the corresponding
            lldpV2Xdot1LocVlanNameEntry) after a re-initialization of
            the management system."
    AUGMENTS { lldpV2Xdot1LocVlanNameEntry }
    ::= { lldpV2Xdot1ConfigVlanNameTable 1 }



LldpV2Xdot1ConfigVlanNameEntry ::= SEQUENCE {
      lldpV2Xdot1ConfigVlanNameTxEnable  TruthValue
}

lldpV2Xdot1ConfigVlanNameTxEnable  OBJECT-TYPE
    SYNTAX        TruthValue
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
            "The boolean value that indicates whether the corresponding
            Local System VLAN name instance is transmitted on the
            port defined by the given lldpV2Xdot1LocVlanNameEntry.

            The value of this object is restored from non-volatile
            storage after a re-initialization of the management
            system."
    REFERENCE
            "9.1.2.1 of IEEE Std 802.1AB"
    DEFVAL  { false }
    ::= { lldpV2Xdot1ConfigVlanNameEntry 1 }


--
-- lldpV2Xdot1ConfigProtoVlanTable : configure the transmission of the
--                                   protocol VLAN instances on set
--                                   of ports.
--

lldpV2Xdot1ConfigProtoVlanTable OBJECT-TYPE
```

```
    SYNTAX      SEQUENCE OF LldpV2Xdot1ConfigProtoVlanEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The table that controls selection of LLDP Port And
            Protocol VLAN ID TLV instances to be transmitted on
            individual ports."
    ::= { lldpV2Xdot1Config 3 }

lldpV2Xdot1ConfigProtoVlanEntry  OBJECT-TYPE
    SYNTAX      LldpV2Xdot1ConfigProtoVlanEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "LLDP configuration information that specifies the set of
            ports (represented as a PortList) on which the Local System
            Protocol VLAN instance is transmitted.

            This configuration object augments the
            lldpV2Xdot1LocVlanEntry, therefore it is only present along
            with the Port and Protocol VLAN ID instance contained in
            the associated lldpV2Xdot1LocVlanEntry entry.

            Each active lldpV2Xdot1ConfigProtoVlanEntry is restored
            from non-volatile storage (along with the corresponding
            lldpV2Xdot1LocProtoVlanEntry) after a re-initialization of
            the management system."

    AUGMENTS { lldpV2Xdot1LocProtoVlanEntry }
    ::= { lldpV2Xdot1ConfigProtoVlanTable 1 }


LldpV2Xdot1ConfigProtoVlanEntry ::= SEQUENCE {
      lldpV2Xdot1ConfigProtoVlanTxEnable   TruthValue
}

lldpV2Xdot1ConfigProtoVlanTxEnable OBJECT-TYPE
    SYNTAX        TruthValue
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
            "The boolean value that indicates whether the corresponding
            Local System Port and Protocol VLAN instance is
            transmitted on the port defined by the given
            lldpV2Xdot1LocProtoVlanEntry.

            The value of this object is restored from non-volatile
            storage after a re-initialization of the management system."
    REFERENCE
            "9.1.2.1 of IEEE Std 802.1AB"
    DEFVAL  { false }
    ::= { lldpV2Xdot1ConfigProtoVlanEntry 1 }


--
-- lldpV2Xdot1ConfigProtocolTable : configure the transmission of the
--                                  protocol instances on set
--                                  of ports.
--
```

```
lldpV2Xdot1ConfigProtocolTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1ConfigProtocolEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The table that controls selection of LLDP Protocol
            TLV instances to be transmitted on individual ports."
    ::= { lldpV2Xdot1Config 4 }

lldpV2Xdot1ConfigProtocolEntry  OBJECT-TYPE
    SYNTAX      LldpV2Xdot1ConfigProtocolEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "LLDP configuration information that specifies the set of
            ports (represented as a PortList) on which the Local System
            Protocol instance is transmitted.

            This configuration object augments the
            lldpV2Xdot1LocProtoEntry, therefore it is only present
            along with the Protocol instance contained in the
            associated lldpV2Xdot1LocProtoEntry entry.

            Each active lldpV2Xdot1ConfigProtocolEntry is restored
            from non-volatile storage (along with the corresponding
            lldpV2Xdot1LocProtocolEntry) after a re-initialization of
            the management system."
    AUGMENTS { lldpV2Xdot1LocProtocolEntry }
    ::= { lldpV2Xdot1ConfigProtocolTable 1 }


LldpV2Xdot1ConfigProtocolEntry ::= SEQUENCE {
      lldpV2Xdot1ConfigProtocolTxEnable   TruthValue
}

lldpV2Xdot1ConfigProtocolTxEnable  OBJECT-TYPE
    SYNTAX        TruthValue
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
            "The boolean value that indicates whether the corresponding
            Local System Protocol Identity instance is transmitted
            on the port defined by the given
            lldpV2Xdot1LocProtocolEntry.

            The value of this object is restored from non-volatile
            storage after a re-initialization of the management
            system."
    REFERENCE
            "9.1.2.1 of IEEE Std 802.1AB"
    DEFVAL  { false }
    ::= { lldpV2Xdot1ConfigProtocolEntry 1 }

--
-- lldpV2Xdot1ConfigVidUsageDigestTable: configure the transmission
-- of the VID Usage Digest TLVs on set of ports.
--
lldpV2Xdot1ConfigVidUsageDigestTable OBJECT-TYPE
```

```
     SYNTAX SEQUENCE OF LldpV2Xdot1ConfigVidUsageDigestEntry
     MAX-ACCESS not-accessible
     STATUS current
     DESCRIPTION
          "A table that controls selection of LLDP VID Usage Digest
          TLVs to be transmitted on individual ports."
::= { lldpV2Xdot1Config 5 }

lldpV2Xdot1ConfigVidUsageDigestEntry OBJECT-TYPE
     SYNTAX LldpV2Xdot1ConfigVidUsageDigestEntry
     MAX-ACCESS not-accessible
     STATUS current
     DESCRIPTION
          "LLDP configuration information that specifies the set of
          ports (represented as a PortList) on which the local
          system VID Usage Digest instance will be transmitted.
          This configuration object augments the
          lldpLocVidUsageDigestEntry, therefore it is only present
          along with the VID Usage Digest instance
          contained in the associated lldpV2Xdot1LocVidUsageDigestEntry
          entry. Each active lldpConfigVidUsageDigestEntry must be
          restored from non-volatile storage and re-created (along with
          the corresponding lldpV2Xdot1LocVidUsageDigestEntry) after
          a re-initialization of the management system."
     AUGMENTS { lldpV2Xdot1LocVidUsageDigestEntry }
::= { lldpV2Xdot1ConfigVidUsageDigestTable 1 }

LldpV2Xdot1ConfigVidUsageDigestEntry ::= SEQUENCE {
     lldpV2Xdot1ConfigVidUsageDigestTxEnable TruthValue
     }

lldpV2Xdot1ConfigVidUsageDigestTxEnable OBJECT-TYPE
     SYNTAX TruthValue
     MAX-ACCESS read-write
     STATUS current
     DESCRIPTION
          "The boolean value that indicates whether the corresponding
          Local System VID Usage Digest instance will be transmitted
          on the port defined by the given
          lldpV2Xdot1LocVidUsageDigestEntry. The value of this object
          must be restored from non-volatile storage after a
          reinitialization of the management system."
     REFERENCE
          "9.1.2.1 of IEEE Std 802.1AB"
     DEFVAL { false }
::= { lldpV2Xdot1ConfigVidUsageDigestEntry 1 }


--
-- lldpV2Xdot1ConfigManVidTable : configure the transmission of the
-- Management VID TLVs on set of ports.
--
lldpV2Xdot1ConfigManVidTable OBJECT-TYPE
     SYNTAX SEQUENCE OF LldpV2Xdot1ConfigManVidEntry
     MAX-ACCESS not-accessible
     STATUS current
     DESCRIPTION
          "A table that controls selection of LLDP Management VID
          TLVs to be transmitted on individual ports."
```

```
::= { lldpV2Xdot1Config 6 }

lldpV2Xdot1ConfigManVidEntry OBJECT-TYPE
     SYNTAX LldpV2Xdot1ConfigManVidEntry
     MAX-ACCESS not-accessible
     STATUS current
     DESCRIPTION
          "LLDP configuration information that specifies the set of
          port/destination address pairs on which the Local
          System Management VID will be transmitted.
          This configuration object augments the
          lldpV2Xdot1LocManVidEntry, therefore it is
          only present along with the Management VID contained
          in the associated lldpV2Xdot1LocManVidEntry entry.
          Each active lldpV2Xdot1ConfigManVidEntry must be
          restored from non-volatile storage (along with the
          corresponding lldpV2Xdot1LocManVidEntry) after a
          re-initialization of the management system."
     AUGMENTS { lldpV2Xdot1LocManVidEntry }
::= { lldpV2Xdot1ConfigManVidTable 1 }

LldpV2Xdot1ConfigManVidEntry ::= SEQUENCE {
     lldpV2Xdot1ConfigManVidTxEnable TruthValue
     }

lldpV2Xdot1ConfigManVidTxEnable OBJECT-TYPE
     SYNTAX TruthValue
     MAX-ACCESS read-write
     STATUS current
     DESCRIPTION
          "The lldpV2Xdot1ConfigManVidTxEnable, which is defined as a
          truth value and configured by the network management,
          determines whether the IEEE 802.1 organizationally
          defined Management VID TLV transmission is allowed on a given
          LLDP transmission capable port.
          The value of this object must be restored from
          non-volatile storage after a re-initialization of the
          management system."
     REFERENCE
          "9.1.2.1 of IEEE Std 802.1AB"
     DEFVAL { false }
::= { lldpV2Xdot1ConfigManVidEntry 1 }


-- ----------------------------------------------------------------------
-- IEEE 802.1 - Local System Information
-- ----------------------------------------------------------------------

--
-- lldpV2Xdot1LocTable - indexed by ifIndex.
--

lldpV2Xdot1LocTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1LocEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains one row per port for IEEE 802.1
            organizationally defined LLDP extension on the local system
```

```
            known to this agent."
    ::= { lldpV2Xdot1LocalData 1 }

lldpV2Xdot1LocEntry  OBJECT-TYPE
    SYNTAX      LldpV2Xdot1LocEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Information about IEEE 802.1 organizationally defined
            LLDP extension."
    INDEX   { lldpV2LocPortIfIndex }
    ::= { lldpV2Xdot1LocTable 1 }

LldpV2Xdot1LocEntry ::= SEQUENCE {
         lldpV2Xdot1LocPortVlanId       Unsigned32
}

lldpV2Xdot1LocPortVlanId OBJECT-TYPE
    SYNTAX      Unsigned32(0|1..4094)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The integer value used to identify the port's VLAN
            identifier associated with the local system.   A value
            of zero shall be used if the system either does not know
            the PVID or does
            not support Port-based VLAN operation."
    REFERENCE
            "D.2.1.1"
    ::= { lldpV2Xdot1LocEntry 1 }



--
-- lldpV2Xdot1LocProtoVlanTable: Port and Protocol VLAN information
-- re-indexed by ifIndex.
--

lldpV2Xdot1LocProtoVlanTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1LocProtoVlanEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains one or more rows per Port and Protocol
            VLAN information about the local system."
    ::= { lldpV2Xdot1LocalData 2 }

lldpV2Xdot1LocProtoVlanEntry OBJECT-TYPE
    SYNTAX      LldpV2Xdot1LocProtoVlanEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Port and protocol VLAN ID Information about a particular
            port component.  There may be multiple port and protocol
            VLANs, identified by a particular
            lldpV2Xdot1LocProtoVlanId, configured on the given port."
    INDEX   { lldpV2LocPortIfIndex,
              lldpV2Xdot1LocProtoVlanId }
    ::= { lldpV2Xdot1LocProtoVlanTable 1 }
```

```
LldpV2Xdot1LocProtoVlanEntry ::= SEQUENCE {
      lldpV2Xdot1LocProtoVlanId        Unsigned32,
      lldpV2Xdot1LocProtoVlanSupported TruthValue,
      lldpV2Xdot1LocProtoVlanEnabled   TruthValue
}

lldpV2Xdot1LocProtoVlanId  OBJECT-TYPE
    SYNTAX      Unsigned32(0|1..4094)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The integer value used to identify the port and protocol
            VLANs associated with the given port associated with the
            local system.  A value of zero shall be used if the system
            either does not know the protocol VLAN ID (PPVID) or does
            not support port and protocol VLAN operation."
    REFERENCE
            "D.2.2.2"
    ::= { lldpV2Xdot1LocProtoVlanEntry 1 }

lldpV2Xdot1LocProtoVlanSupported  OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The truth value used to indicate whether the given port
            (associated with the local system) supports port and
            protocol VLANs."
    REFERENCE
            "D.2.2.1"
    ::= { lldpV2Xdot1LocProtoVlanEntry 2 }

lldpV2Xdot1LocProtoVlanEnabled  OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The truth value used to indicate whether the port and
            protocol VLANs are enabled on the given port associated
            with the local system."
    REFERENCE
            "D.2.2.1"
    ::= { lldpV2Xdot1LocProtoVlanEntry 3 }



--
-- lldpV2Xdot1LocVlanNameTable : VLAN name information about the local
-- system indexed by ifIndex.
--

lldpV2Xdot1LocVlanNameTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1LocVlanNameEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains one or more rows per IEEE 802.1Q VLAN
            name information on the local system known to this agent."
```

```
    ::= { lldpV2Xdot1LocalData 3 }

lldpV2Xdot1LocVlanNameEntry OBJECT-TYPE
    SYNTAX      LldpV2Xdot1LocVlanNameEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "VLAN name Information about a particular port component.
            There may be multiple VLANs, identified by a particular
            lldpV2Xdot1LocVlanId, configured on the given port."
    INDEX   { lldpV2LocPortIfIndex,
              lldpV2Xdot1LocVlanId }
    ::= { lldpV2Xdot1LocVlanNameTable 1 }

LldpV2Xdot1LocVlanNameEntry ::= SEQUENCE {
      lldpV2Xdot1LocVlanId             VlanId,
      lldpV2Xdot1LocVlanName           SnmpAdminString
}

lldpV2Xdot1LocVlanId  OBJECT-TYPE
    SYNTAX      VlanId
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The integer value used to identify the IEEE 802.1Q
            VLAN IDs with which the given port is compatible."
    REFERENCE
            "D.2.3.2"
    ::= { lldpV2Xdot1LocVlanNameEntry 1 }

lldpV2Xdot1LocVlanName  OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(1..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The string value used to identify VLAN name identified
            by the Vlan Id associated with the given port on the
            local system.

            This object should contain the value of the
            dot1QVLANStaticName object (defined in IETF RFC 4363)
            identified with the given lldpV2Xdot1LocVlanId."
    REFERENCE
            "D.2.3.4"
    ::= { lldpV2Xdot1LocVlanNameEntry 2 }



--
-- lldpV2Xdot1LocProtocolTable : Protocol Identity information
-- re-indexed by ifIndex and destination address
--

lldpV2Xdot1LocProtocolTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1LocProtocolEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains one or more rows per protocol identity
```

```
            information on the local system known to this agent."
    REFERENCE
            "D.2.4"
    ::= { lldpV2Xdot1LocalData 4 }

lldpV2Xdot1LocProtocolEntry  OBJECT-TYPE
    SYNTAX      LldpV2Xdot1LocProtocolEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Information about particular protocols that are accessible
            through the given port component.

            There may be multiple protocols, identified by particular
            lldpV2Xdot1ProtocolIndex, lldpV2LocPortIfIndex"
    REFERENCE
            "D.2.4"
    INDEX   { lldpV2LocPortIfIndex,
              lldpV2Xdot1LocProtocolIndex }
    ::= { lldpV2Xdot1LocProtocolTable 1 }

LldpV2Xdot1LocProtocolEntry ::= SEQUENCE {
      lldpV2Xdot1LocProtocolIndex Unsigned32,
      lldpV2Xdot1LocProtocolId    OCTET STRING
}


lldpV2Xdot1LocProtocolIndex  OBJECT-TYPE
    SYNTAX      Unsigned32(1..2147483647)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This object represents an arbitrary local integer value
            used by this agent to identify a particular protocol
            identity."
    ::= { lldpV2Xdot1LocProtocolEntry 1 }

lldpV2Xdot1LocProtocolId  OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE (1..255))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The octet string value used to identify the protocols
            associated with the given port of the local system."
    REFERENCE
            "D.2.4.3"
    ::= { lldpV2Xdot1LocProtocolEntry 2 }

--
-- lldpV2Xdot1LocVidUsageDigestTable: Table of hash values of
-- system VID Usage Table transmitted
-- via VID Usage Digest TLV.
--


lldpV2Xdot1LocVidUsageDigestTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1LocVidUsageDigestEntry
    MAX-ACCESS  not-accessible
    STATUS      current
```

```
    DESCRIPTION
            "This table contains one row per ifIndex/
            destination MAC address pair for usage digest
            information on the local system known to this agent."
    REFERENCE
            "D.2.5"
    ::= { lldpV2Xdot1LocalData 5 }

lldpV2Xdot1LocVidUsageDigestEntry  OBJECT-TYPE
    SYNTAX      LldpV2Xdot1LocVidUsageDigestEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Usage digest information to be transmitted
            through the given port."
    REFERENCE
            "D.2.5"
    INDEX   { lldpV2LocPortIfIndex }
    ::= { lldpV2Xdot1LocVidUsageDigestTable 1 }

LldpV2Xdot1LocVidUsageDigestEntry ::= SEQUENCE {
      lldpV2Xdot1LocVidUsageDigest Unsigned32
}


lldpV2Xdot1LocVidUsageDigest OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The integer value obtained by applying the CRC32 function
        to the 128-octet VID Usage Table. A bit of the VID Usage
        Table contains the value PBB-TE-USAGE (binary 1) if the
        corresponding element of the MST Configuration Table
        (IEEE Std 802.1Q 8.9.1) contains the value PBB-TE MSTID
        (hex FFE) and otherwise contains the value NON-PBB-TE-USAGE
        (binary 0)."
    REFERENCE
        "D.2.5.1"
::= { lldpV2Xdot1LocVidUsageDigestEntry 1 }

--
-- lldpV2Xdot1LocManVidTable: Table of values configured on the Local
-- system for the Management VID, or the value 0 if a Management VID
-- has not been provisioned.
--

lldpV2Xdot1LocManVidTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1LocManVidEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains one row per ifIndex/
            destination MAC address pair for usage digest
            information on the local system known to this agent."
    REFERENCE
            "D.2.6"
    ::= { lldpV2Xdot1LocalData 6 }
```

```
lldpV2Xdot1LocManVidEntry  OBJECT-TYPE
    SYNTAX      LldpV2Xdot1LocManVidEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Usage digest information to be transmitted
            through the given port."
    REFERENCE
            "D.2.6"
    INDEX   { lldpV2LocPortIfIndex }
    ::= { lldpV2Xdot1LocManVidTable 1 }

LldpV2Xdot1LocManVidEntry ::= SEQUENCE {
      lldpV2Xdot1LocManVid Unsigned32
}

lldpV2Xdot1LocManVid OBJECT-TYPE
    SYNTAX Unsigned32 (0|1..4094)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The integer value configured on the Local system for
        the Management VID, or
        the value 0 if a Management VID has not been provisioned."
    REFERENCE
        "D.2.6.1"
::= { lldpV2Xdot1LocManVidEntry 1 }


-----------------------------------------------------------------------
-- IEEE 802.1 - Local System Information - Link Aggregation
-----------------------------------------------------------------------

---
---
--- lldpV2Xdot1LocLinkAggTable: Link Aggregation Information Table
---
---
lldpV2Xdot1LocLinkAggTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1LocLinkAggEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains one row per port of link aggregation
            information (as a part of the LLDP 802.1 organizational
            extension) on the local system known to this agent."
    ::= { lldpV2Xdot1LocalData 7 }

lldpV2Xdot1LocLinkAggEntry OBJECT-TYPE
    SYNTAX      LldpV2Xdot1LocLinkAggEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Link Aggregation information about a particular port
            component."
    INDEX   { lldpV2LocPortIfIndex }
    ::= { lldpV2Xdot1LocLinkAggTable 1 }

LldpV2Xdot1LocLinkAggEntry ::= SEQUENCE {
```

```
      lldpV2Xdot1LocLinkAggStatus       LldpV2XLinkAggStatusMap,
      lldpV2Xdot1LocLinkAggPortId       Unsigned32
}

lldpV2Xdot1LocLinkAggStatus OBJECT-TYPE
    SYNTAX      LldpV2XLinkAggStatusMap
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The bitmap value contains the link aggregation
            capabilities and the current aggregation status of the
            link."
    REFERENCE
            "Annex F of IEEE Std 802.1AX-2014"
    ::= { lldpV2Xdot1LocLinkAggEntry 1 }

lldpV2Xdot1LocLinkAggPortId OBJECT-TYPE
    SYNTAX      Unsigned32(0|1..2147483647)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "This object contains the IEEE 802.1 aggregated port
            identifier, aAggPortID (IEEE Std 802.1AX, 6.3.2.1.1),
            derived from the ifNumber of the  ifIndex for the port
            component in link aggregation.

            If the port is not in link aggregation state and/or it
            does not support link aggregation, this value should be set
            to zero."
    REFERENCE
            "Annex F of IEEE Std 802.1AX-2014"
    ::= { lldpV2Xdot1LocLinkAggEntry 2 }



--------------------------------------------------------------------
-- IEEE 802.1 - Remote System Information
--------------------------------------------------------------------

--
-- lldpV2Xdot1RemTable - re-indexed for ifIndex and destination MAC
-- address

lldpV2Xdot1RemTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1RemEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains one or more rows per physical network
            connection known to this agent.  The agent may wish to
            ensure that only one lldpV2Xdot1RemEntry is present for
            each local port, or it may choose to maintain multiple
            lldpV2Xdot1RemEntries for the same local port."
    ::= { lldpV2Xdot1RemoteData 1 }

lldpV2Xdot1RemEntry OBJECT-TYPE
    SYNTAX      LldpV2Xdot1RemEntry
    MAX-ACCESS  not-accessible
    STATUS      current
```

```
    DESCRIPTION
            "Information about a particular port component."
    INDEX   { lldpV2RemTimeMark,
              lldpV2RemLocalIfIndex,
              lldpV2RemLocalDestMACAddress,
              lldpV2RemIndex }
    ::= { lldpV2Xdot1RemTable 1 }

LldpV2Xdot1RemEntry ::= SEQUENCE {
            lldpV2Xdot1RemPortVlanId           Unsigned32
}

lldpV2Xdot1RemPortVlanId OBJECT-TYPE
    SYNTAX      Unsigned32(0|1..4094)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The integer value used to identify the port's VLAN
            identifier associated with the remote system.  if the
            remote system either does not know the PVID or does not
            support Port-based VLAN operation, the value of
            lldpV2Xdot1RemPortVlanId should be zero."
    REFERENCE
            "D.2.1.1"
    ::= { lldpV2Xdot1RemEntry 1 }



--
-- lldpV2Xdot1RemProtoVlanTable - re-indexed by ifIndex and
-- destination MAC address
--

lldpV2Xdot1RemProtoVlanTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1RemProtoVlanEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains one or more rows per Port and Protocol
            VLAN information about the remote system, received on the
            given port."
    ::= { lldpV2Xdot1RemoteData 2 }

lldpV2Xdot1RemProtoVlanEntry OBJECT-TYPE
    SYNTAX      LldpV2Xdot1RemProtoVlanEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Port and protocol VLAN name Information about a particular
            port component.  There may be multiple protocol VLANs,
            identified by a particular lldpV2Xdot1RemProtoVlanId,
            configured on the remote system."
    INDEX   { lldpV2RemTimeMark,
              lldpV2RemLocalIfIndex,
              lldpV2RemLocalDestMACAddress,
              lldpV2RemIndex,
              lldpV2Xdot1RemProtoVlanId }
    ::= { lldpV2Xdot1RemProtoVlanTable 1 }
```

```
LldpV2Xdot1RemProtoVlanEntry ::= SEQUENCE {
            lldpV2Xdot1RemProtoVlanId          Unsigned32,
            lldpV2Xdot1RemProtoVlanSupported   TruthValue,
            lldpV2Xdot1RemProtoVlanEnabled     TruthValue
}

lldpV2Xdot1RemProtoVlanId  OBJECT-TYPE
    SYNTAX      Unsigned32(0|1..4094)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The integer value used to identify the port and protocol
            VLANs associated with the given port associated with the
            remote system.

            If port and protocol VLANs are not supported on the given
            port associated with the remote system, or if the port is
            not enabled with any port and protocol VLAN, the value of
            lldpV2Xdot1RemProtoVlanId should be zero."
    REFERENCE
            "D.2.2.2"
    ::= { lldpV2Xdot1RemProtoVlanEntry 1 }

lldpV2Xdot1RemProtoVlanSupported  OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The truth value used to indicate whether the given port
            (associated with the remote system) is capable of
            supporting port and protocol VLANs."
    REFERENCE
            "D.2.2.1"
    ::= { lldpV2Xdot1RemProtoVlanEntry 2 }

lldpV2Xdot1RemProtoVlanEnabled  OBJECT-TYPE
    SYNTAX      TruthValue
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The truth value used to indicate whether the port and
            protocol VLANs are enabled on the given port associated
            with
            the remote system."
    REFERENCE
            "D.2.2.1"
    ::= { lldpV2Xdot1RemProtoVlanEntry 3 }



--
-- lldpV2Xdot1RemVlanNameTable : VLAN name information of the remote
--                               systems
-- Re-indexed by ifIndex and destination MAC address
--

lldpV2Xdot1RemVlanNameTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1RemVlanNameEntry
    MAX-ACCESS  not-accessible
```

```
    STATUS      current
    DESCRIPTION
            "This table contains one or more rows per IEEE 802.1Q VLAN
            name information about the remote system, received on the
            given port."
    REFERENCE
            "D.2.3"
    ::= { lldpV2Xdot1RemoteData 3 }

lldpV2Xdot1RemVlanNameEntry OBJECT-TYPE
    SYNTAX      LldpV2Xdot1RemVlanNameEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "VLAN name Information about a particular port component.
            There may be multiple VLANs, identified by a particular
            lldpV2Xdot1RemVlanId, received on the given port."
    INDEX   { lldpV2RemTimeMark,
              lldpV2RemLocalIfIndex,
              lldpV2RemLocalDestMACAddress,
              lldpV2RemIndex,
              lldpV2Xdot1RemVlanId }
    ::= { lldpV2Xdot1RemVlanNameTable 1 }

LldpV2Xdot1RemVlanNameEntry ::= SEQUENCE {
            lldpV2Xdot1RemVlanId       VlanId,
            lldpV2Xdot1RemVlanName     SnmpAdminString
}


lldpV2Xdot1RemVlanId  OBJECT-TYPE
    SYNTAX      VlanId
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "The integer value used to identify the IEEE 802.1Q
            VLAN IDs with which the given port of the remote system
            is compatible."
    REFERENCE
            "D.2.3.2"
    ::= { lldpV2Xdot1RemVlanNameEntry 1 }

lldpV2Xdot1RemVlanName  OBJECT-TYPE
    SYNTAX      SnmpAdminString (SIZE(1..32))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The string value used to identify VLAN name identified
            by the VLAN Id associated with the remote system."
    REFERENCE
            "D.2.3.4"
    ::= { lldpV2Xdot1RemVlanNameEntry 2 }



--
-- lldpV2Xdot1RemProtocolTable : Protocol information of the remote
-- systems Re-indexed by ifIndex and destination MAC address
--
```

```
lldpV2Xdot1RemProtocolTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1RemProtocolEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains one or more rows per protocol
            information about the remote system, received on
            the given port."
    ::= { lldpV2Xdot1RemoteData 4 }

lldpV2Xdot1RemProtocolEntry  OBJECT-TYPE
    SYNTAX      LldpV2Xdot1RemProtocolEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Protocol information about a particular port component.
            There may be multiple protocols, identified by a particular
            lldpV2Xdot1ProtocolIndex, received on the given port."
    INDEX   { lldpV2RemTimeMark,
              lldpV2RemLocalIfIndex,
              lldpV2RemLocalDestMACAddress,
              lldpV2RemIndex,
              lldpV2Xdot1RemProtocolIndex }
    ::= { lldpV2Xdot1RemProtocolTable 1 }

LldpV2Xdot1RemProtocolEntry ::= SEQUENCE {
            lldpV2Xdot1RemProtocolIndex     Unsigned32,
            lldpV2Xdot1RemProtocolId        OCTET STRING
}

lldpV2Xdot1RemProtocolIndex  OBJECT-TYPE
    SYNTAX      Unsigned32(1..2147483647)
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This object represents an arbitrary local integer value
            used by this agent to identify a particular protocol
            identity."
    ::= { lldpV2Xdot1RemProtocolEntry 1 }

lldpV2Xdot1RemProtocolId  OBJECT-TYPE
    SYNTAX      OCTET STRING (SIZE (1..255))
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The octet string value used to identify the protocols
            associated with the given port of remote system."
    REFERENCE
            "D.2.4.3"
    ::= { lldpV2Xdot1RemProtocolEntry 2 }



--
-- lldpV2Xdot1RemVidUsageDigestTable: Table of hash values of
-- system VID Usage Table received
-- via VID Usage Digest TLV.
-- This version replaced by a reindexed version (V2).
```

```
--


lldpV2Xdot1RemVidUsageDigestTable  OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1RemVidUsageDigestEntry
    MAX-ACCESS  not-accessible
    STATUS      deprecated
    DESCRIPTION
            "This table contains one row per ifIndex/
            destination MAC address pair for usage digest
            information received by the local system."
    REFERENCE
            "D.2.5"
    ::= { lldpV2Xdot1RemoteData 5 }

lldpV2Xdot1RemVidUsageDigestEntry  OBJECT-TYPE
    SYNTAX      LldpV2Xdot1RemVidUsageDigestEntry
    MAX-ACCESS  not-accessible
    STATUS      deprecated
    DESCRIPTION
            "Usage digest information received on
            the given port/destination address pair."
    REFERENCE
            "D.2.5"
    INDEX   { lldpV2RemTimeMark,
              lldpV2RemLocalIfIndex,
              lldpV2RemLocalDestMACAddress }
    ::= { lldpV2Xdot1RemVidUsageDigestTable 1 }

LldpV2Xdot1RemVidUsageDigestEntry ::= SEQUENCE {
      lldpV2Xdot1RemVidUsageDigest  Unsigned32
}


lldpV2Xdot1RemVidUsageDigest OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-only
    STATUS deprecated
    DESCRIPTION
        "The integer value obtained by applying the CRC32 function
        to the 128-octet VID Usage Table. A bit of the VID Usage
        Table contains the value PBB-TE-USAGE (binary 1) if the
        corresponding element of the MST Configuration Table
        (IEEE Std 802.1Q 8.9.1) contains the value PBB-TE MSTID
        (hex FFE)and otherwise contains the value NON-PBB-TE-USAGE
        (binary 0)."
    REFERENCE
        "D.2.5.1"
::= { lldpV2Xdot1RemVidUsageDigestEntry 1 }

--
-- lldpV2Xdot1RemManVidTable: Table of values configured on remote
-- systems for the Management VID, or the value 0 if a Management
-- VID has not been provisioned.
-- This version replaced by a reindexed version (V2).
--


lldpV2Xdot1RemManVidTable  OBJECT-TYPE
```

```
    SYNTAX      SEQUENCE OF LldpV2Xdot1RemManVidEntry
    MAX-ACCESS  not-accessible
    STATUS      deprecated
    DESCRIPTION
            "This table contains one row per ifIndex/
            destination MAC address pair for management VID
            information received from remote systems."
    REFERENCE
            "D.2.6"
    ::= { lldpV2Xdot1RemoteData 6 }

lldpV2Xdot1RemManVidEntry  OBJECT-TYPE
    SYNTAX      LldpV2Xdot1RemManVidEntry
    MAX-ACCESS  not-accessible
    STATUS      deprecated
    DESCRIPTION
            "Management VID information received
            through the given port/destination address pair."
    REFERENCE
            "D.2.6"
    INDEX   { lldpV2RemTimeMark,
              lldpV2RemLocalIfIndex,
              lldpV2RemLocalDestMACAddress }
    ::= { lldpV2Xdot1RemManVidTable 1 }

LldpV2Xdot1RemManVidEntry ::= SEQUENCE {
      lldpV2Xdot1RemManVid            Unsigned32
}

lldpV2Xdot1RemManVid OBJECT-TYPE
    SYNTAX Unsigned32 (0|1..4094)
    MAX-ACCESS read-only
    STATUS deprecated
    DESCRIPTION
        "The integer value configured on a system for
        the Management VID, or
        the value 0 if a Management VID has not been provisioned."
    REFERENCE
        "D.2.6.1"
::= { lldpV2Xdot1RemManVidEntry 1 }



--
-- lldpV2Xdot1RemVidUsageDigestV2Table: Table of hash values of
-- system VID Usage Table received
-- via VID Usage Digest TLV.
--


lldpV2Xdot1RemVidUsageDigestV2Table  OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1RemVidUsageDigestV2Entry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains one row per ifIndex/
            destination MAC address pair for usage digest
            information received by the local system."
    REFERENCE
```

```
            "D.2.5"
    ::= { lldpV2Xdot1RemoteData 8 }

lldpV2Xdot1RemVidUsageDigestV2Entry  OBJECT-TYPE
    SYNTAX      LldpV2Xdot1RemVidUsageDigestV2Entry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Usage digest information received on
            the given port/destination address pair."
    REFERENCE
            "D.2.5"
    INDEX   { lldpV2RemTimeMark,
              lldpV2RemLocalIfIndex,
              lldpV2RemLocalDestMACAddress,
              lldpV2RemIndex }
    ::= { lldpV2Xdot1RemVidUsageDigestV2Table 1 }

LldpV2Xdot1RemVidUsageDigestV2Entry ::= SEQUENCE {
      lldpV2Xdot1RemVidUsageDigestV2  Unsigned32
}


lldpV2Xdot1RemVidUsageDigestV2 OBJECT-TYPE
    SYNTAX Unsigned32
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The integer value obtained by applying the CRC32 function
        to the 128-octet VID Usage Table. A bit of the VID Usage
        Table contains the value PBB-TE-USAGE (binary 1) if the
        corresponding element of the MST Configuration Table
        (IEEE Std 802.1Q 8.9.1) contains the value PBB-TE MSTID
        (hex FFE)and otherwise contains the value NON-PBB-TE-USAGE
        (binary 0)."
    REFERENCE
        "D.2.5.1"
::= { lldpV2Xdot1RemVidUsageDigestV2Entry 1 }


--
-- lldpV2Xdot1RemManVidV2Table: Table of values configured on remote
-- systems for the Management VID, or the value 0 if a Management
-- VID has not been provisioned.
--

lldpV2Xdot1RemManVidV2Table  OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1RemManVidV2Entry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains one row per ifIndex/
            destination MAC address pair for management VID
            information received from remote systems."
    REFERENCE
            "D.2.6"
    ::= { lldpV2Xdot1RemoteData 9 }

lldpV2Xdot1RemManVidV2Entry  OBJECT-TYPE
```

```
    SYNTAX      LldpV2Xdot1RemManVidV2Entry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Management VID information received
            through the given port/destination address pair."
    REFERENCE
            "D.2.6"
    INDEX   { lldpV2RemTimeMark,
              lldpV2RemLocalIfIndex,
              lldpV2RemLocalDestMACAddress,
              lldpV2RemIndex }
    ::= { lldpV2Xdot1RemManVidV2Table 1 }

LldpV2Xdot1RemManVidV2Entry ::= SEQUENCE {
      lldpV2Xdot1RemManVidV2            Unsigned32
}

lldpV2Xdot1RemManVidV2 OBJECT-TYPE
    SYNTAX Unsigned32 (0|1..4094)
    MAX-ACCESS read-only
    STATUS current
    DESCRIPTION
        "The integer value configured on a system for
        the Management VID, or
        the value 0 if a Management VID has not been provisioned."
    REFERENCE
        "D.2.6.1"
::= { lldpV2Xdot1RemManVidV2Entry 1 }



-- ------------------------------------------------------------------------
-- Remote System Information - Link Aggregation
-- ------------------------------------------------------------------------

---
---
--- lldpV2Xdot1RemLinkAggTable: Link Aggregation Information Table
---
---
lldpV2Xdot1RemLinkAggTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1RemLinkAggEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains port link aggregation information
            (as a part of the LLDP IEEE 802.1 organizational extension)
            of the remote system."
    ::= { lldpV2Xdot1RemoteData 7 }

lldpV2Xdot1RemLinkAggEntry OBJECT-TYPE
    SYNTAX      LldpV2Xdot1RemLinkAggEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Link Aggregation information about remote system's port
            component."
    INDEX   { lldpV2RemTimeMark,
```

```
                lldpV2RemLocalIfIndex,
                lldpV2RemLocalDestMACAddress,
                lldpV2RemIndex }
    ::= { lldpV2Xdot1RemLinkAggTable 1 }

LldpV2Xdot1RemLinkAggEntry ::= SEQUENCE {
            lldpV2Xdot1RemLinkAggStatus        LldpV2XLinkAggStatusMap,
            lldpV2Xdot1RemLinkAggPortId        Unsigned32
}

lldpV2Xdot1RemLinkAggStatus OBJECT-TYPE
    SYNTAX      LldpV2XLinkAggStatusMap
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "The bitmap value contains the link aggregation capabilities
            and the current aggregation status of the link."
    REFERENCE
            "Annex F of IEEE Std 802.1AX-2014"
    ::= { lldpV2Xdot1RemLinkAggEntry 1 }

lldpV2Xdot1RemLinkAggPortId OBJECT-TYPE
    SYNTAX      Unsigned32(0|1..2147483647)
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "This object contains the IEEE 802.1 aggregated port
            identifier, aAggPortID (IEEE Std 802.1AX, 6.3.2.1.1),
            derived from the ifNumber of the ifIndex for the port
            component associated with the remote system.

            If the remote port is not in link aggregation state and/or
            it does not support link aggregation, this value should be
            zero."
    REFERENCE
            "Annex F of IEEE Std 802.1AX-2014"
    ::= { lldpV2Xdot1RemLinkAggEntry 2 }


--------------------------------------------------------------------
-- Conformance Information for the basicSet TLV set
--------------------------------------------------------------------

lldpV2Xdot1Conformance
    OBJECT IDENTIFIER ::= { lldpV2Xdot1MIB 2 }
lldpV2Xdot1Compliances
    OBJECT IDENTIFIER ::= { lldpV2Xdot1Conformance 1 }
lldpV2Xdot1Groups
    OBJECT IDENTIFIER ::= { lldpV2Xdot1Conformance 2 }

-- compliance statements


lldpV2Xdot1TxRxCompliance MODULE-COMPLIANCE
    STATUS  current
    DESCRIPTION
            "A compliance statement for SNMP entities that implement
            the IEEE 802.1 organizationally defined LLDP extension MIB.
```

```
            This group is mandatory for all agents that implement the
            LLDP 802.1 organizational extension in TX and/or RX mode
            for the basicSet TLV set.

            This version defines compliance requirements for
            V2 of the LLDP MIB."
    MODULE  -- this module
        MANDATORY-GROUPS { lldpV2Xdot1ConfigGroup,
                           ifGeneralInformationGroup
        }
    ::= { lldpV2Xdot1Compliances 1 }


lldpV2Xdot1TxCompliance MODULE-COMPLIANCE
    STATUS  current
    DESCRIPTION
            "A compliance statement for SNMP entities that implement
            the IEEE 802.1 organizationally defined LLDP extension MIB.

            This group is mandatory for agents that implement the
            LLDP 802.1 organizational extension in the RX mode
            for the basicSet TLV set.

            This version defines compliance requirements for
            V2 of the LLDP MIB."
    MODULE  -- this module
        MANDATORY-GROUPS { lldpV2Xdot1LocSysGroup }

    ::= { lldpV2Xdot1Compliances 2 }

lldpV2Xdot1RxCompliance MODULE-COMPLIANCE
    STATUS  deprecated
    DESCRIPTION
            "A compliance statement for SNMP entities that implement
            the IEEE 802.1 organizationally defined LLDP extension MIB.

            This group is mandatory for agents that implement the
            LLDP 802.1 organizational extension in the RX mode
            for the basicSet TLV set.

            This version defines compliance requirements for
            V2 of the LLDP MIB."
    MODULE  -- this module
        MANDATORY-GROUPS { lldpV2Xdot1RemSysGroup }

    ::= { lldpV2Xdot1Compliances 3 }

lldpV2Xdot1RxComplianceV2 MODULE-COMPLIANCE
    STATUS    current
    DESCRIPTION
            "A compliance statement for SNMP entities that implement
            the IEEE 802.1 organizationally defined LLDP extension MIB.

            This group is mandatory for agents that implement the
            LLDP 802.1 organizational extension in the RX mode
            for the basicSet TLV set.

            This version defines compliance requirements for
            V2 of the LLDP MIB."
```

```
    MODULE  -- this module
        MANDATORY-GROUPS { lldpV2Xdot1RemSysV2Group }

    ::= { lldpV2Xdot1Compliances 4 }


-- MIB groupings for the basicSet TLV set

lldpV2Xdot1ConfigGroup    OBJECT-GROUP
    OBJECTS {
        lldpV2Xdot1ConfigPortVlanTxEnable,
        lldpV2Xdot1ConfigVlanNameTxEnable,
        lldpV2Xdot1ConfigProtoVlanTxEnable,
        lldpV2Xdot1ConfigProtocolTxEnable,
        lldpV2Xdot1ConfigVidUsageDigestTxEnable,
        lldpV2Xdot1ConfigManVidTxEnable
    }
    STATUS  current
    DESCRIPTION
            "The collection of objects which are used to configure the
            IEEE 802.1 organizationally defined LLDP extension
            implementation behavior for the basicSet TLV set."
    ::= { lldpV2Xdot1Groups 1 }

lldpV2Xdot1LocSysGroup  OBJECT-GROUP
    OBJECTS {
        lldpV2Xdot1LocPortVlanId,
        lldpV2Xdot1LocProtoVlanSupported,
        lldpV2Xdot1LocProtoVlanEnabled,
        lldpV2Xdot1LocVlanName,
        lldpV2Xdot1LocProtocolId,
        lldpV2Xdot1LocVidUsageDigest,
        lldpV2Xdot1LocManVid,
        lldpV2Xdot1LocLinkAggStatus,
        lldpV2Xdot1LocLinkAggPortId
    }
    STATUS  current
    DESCRIPTION
            "The collection of objects which are used to represent
            IEEE 802.1 organizationally defined LLDP extension
            associated with the Local Device Information for the
            basicSet TLV set."
    ::= { lldpV2Xdot1Groups 2 }

lldpV2Xdot1RemSysGroup  OBJECT-GROUP
    OBJECTS {
        lldpV2Xdot1RemPortVlanId,
        lldpV2Xdot1RemProtoVlanSupported,
        lldpV2Xdot1RemProtoVlanEnabled,
        lldpV2Xdot1RemVlanName,
        lldpV2Xdot1RemProtocolId,
        lldpV2Xdot1RemVidUsageDigest,
        lldpV2Xdot1RemManVid,
        lldpV2Xdot1RemLinkAggStatus,
        lldpV2Xdot1RemLinkAggPortId
    }
    STATUS  deprecated
    DESCRIPTION
            "The collection of objects which are used to represent LLDP
```

```
            802.1 organizational extension Remote Device Information
            for the basicSet TLV set."
    ::= { lldpV2Xdot1Groups 3 }

lldpV2Xdot1RemSysV2Group  OBJECT-GROUP
    OBJECTS {
        lldpV2Xdot1RemPortVlanId,
        lldpV2Xdot1RemProtoVlanSupported,
        lldpV2Xdot1RemProtoVlanEnabled,
        lldpV2Xdot1RemVlanName,
        lldpV2Xdot1RemProtocolId,
        lldpV2Xdot1RemVidUsageDigestV2,
        lldpV2Xdot1RemManVidV2,
        lldpV2Xdot1RemLinkAggStatus,
        lldpV2Xdot1RemLinkAggPortId
    }
    STATUS  current
    DESCRIPTION
            "The collection of objects which are used to represent LLDP
            802.1 organizational extension Remote Device Information
            for the basicSet TLV set."
    ::= { lldpV2Xdot1Groups 4 }

-----------------------------------------------------------------------
-----------------------------------------------------------------------
--
-- Organizationally Defined Information Extension - IEEE 802.1
-- Definitions to support the cnSet TLV set (Table D-1)
-- for Congestion Notification
--
-----------------------------------------------------------------------
-----------------------------------------------------------------------

lldpXdot1CnMIB OBJECT IDENTIFIER ::= { lldpV2Xdot1MIB 3 }
lldpXdot1CnObjects OBJECT IDENTIFIER ::= { lldpXdot1CnMIB 1 }

-- CN 802.1 MIB Extension groups

lldpXdot1CnConfig OBJECT IDENTIFIER ::= { lldpXdot1CnObjects 1 }
lldpXdot1CnLocalData OBJECT IDENTIFIER ::= { lldpXdot1CnObjects 2 }
lldpXdot1CnRemoteData OBJECT IDENTIFIER ::= { lldpXdot1CnObjects 3 }

-----------------------------------------------------------------------
-- Textual conventions for Congestion Notification
-----------------------------------------------------------------------

LldpV2CnBitVector ::= TEXTUAL-CONVENTION
    STATUS      current
    DESCRIPTION
            "This TC describes a bit vector used in the Congestion
            Notification objects. Each bit represents a Boolean status
            associated with a priority code point. A bit value of 0
            represents FALSE, 1 represents TRUE.

            The bit 'pri0status(0)' indicates the status for priority 0
            The bit 'pri1status(1)' indicates the status for priority 1
            The bit 'pri2status(2)' indicates the status for priority 2
            The bit 'pri3status(3)' indicates the status for priority 3
            The bit 'pri4status(4)' indicates the status for priority 4
```

```
            The bit 'pri5status(5)' indicates the status for priority 5
            The bit 'pri6status(6)' indicates the status for priority 6
            The bit 'pri7status(7)' indicates the status for priority 7"

    SYNTAX  BITS {
            pri0status(0),
            pri1status(1),
            pri2status(2),
            pri3status(3),
            pri4status(4),
            pri5status(5),
            pri6status(6),
            pri7status(7)
    }

-- ------------------------------------------------------------------
-- IEEE 802.1 - Congestion Notification Configuration
-- ------------------------------------------------------------------

--
--  lldpXdot1CnConfigCnTable : configure the
--  transmission of the Congestion Notification TLV on a set of ports
--

lldpXdot1CnConfigCnTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF LldpXdot1CnConfigCnEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "A table that controls selection of Congestion Notification
         TLVs to be transmitted on individual ports."
    ::= { lldpXdot1CnConfig 1 }

lldpXdot1CnConfigCnEntry OBJECT-TYPE
    SYNTAX        LldpXdot1CnConfigCnEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "LLDP configuration information that controls the
        transmission of IEEE 802.1 organizationally defined
        Congestion Notification TLV on LLDP transmission capable ports.

        This configuration object augments the lldpV2PortConfigEntry of
        the LLDP-MIB, therefore it is only present along with the port
        configuration defined by the associated lldpV2PortConfigEntry
        entry.

        Each active lldpConfigEntry is restored from non-volatile
        storage (along with the corresponding lldpV2PortConfigEntry)
        after a re-initialization of the management system."
    AUGMENTS      { lldpV2PortConfigEntry }
    ::= { lldpXdot1CnConfigCnTable 1 }

LldpXdot1CnConfigCnEntry ::= SEQUENCE {
    lldpXdot1CnConfigCnTxEnable TruthValue
}

lldpXdot1CnConfigCnTxEnable OBJECT-TYPE
    SYNTAX        TruthValue
```

```
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "The lldpXdot1CnConfigCnTxEnable, which is
        defined as a truth value and configured by the network
        management, determines whether the IEEE 802.1 organizationally
        defined Congestion Notification TLV transmission is allowed
        on a given LLDP transmission capable port.

        The value of this object is restored from non-volatile
        storage after a re-initialization of the management system."
    REFERENCE
        "D.2.8"
    DEFVAL         { false }
    ::= { lldpXdot1CnConfigCnEntry 1 }

-- ------------------------------------------------------------------------
-- IEEE 802.1 - Congestion Notification Local System Information
-- ------------------------------------------------------------------------

---
---
--- lldpV2Xdot1LocCnTable: Port Extension Information Table
---
---
lldpV2Xdot1LocCnTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1LocCnEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains one row per port of Congestion
            Notification information (as a part of the LLDP
            802.1 organizational extension) on the local system
            known to this agent."
    ::= { lldpXdot1CnLocalData 1 }

lldpV2Xdot1LocCnEntry OBJECT-TYPE
    SYNTAX      LldpV2Xdot1LocCnEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Congestion Notification information about a
            particular port component."
    INDEX   { lldpV2LocPortIfIndex }
    ::= { lldpV2Xdot1LocCnTable 1 }

LldpV2Xdot1LocCnEntry ::= SEQUENCE {
    lldpV2Xdot1LocCNPVIndicators    LldpV2CnBitVector,
     lldpV2Xdot1LocReadyIndicators   LldpV2CnBitVector
  }

lldpV2Xdot1LocCNPVIndicators OBJECT-TYPE
    SYNTAX      LldpV2CnBitVector
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "This object contains the CNPV indicators
            for the Port."
    REFERENCE
```

```
            "D.2.8.3"
    ::= { lldpV2Xdot1LocCnEntry 1 }

lldpV2Xdot1LocReadyIndicators OBJECT-TYPE
    SYNTAX      LldpV2CnBitVector
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "This object contains the Ready indicators
            for the Port."
    REFERENCE
            "D.2.8.4"
    ::= { lldpV2Xdot1LocCnEntry 2 }

--------------------------------------------------------------------------
-- IEEE 802.1 - Congestion Notification Remote System Information
--------------------------------------------------------------------------

---
---
--- lldpV2Xdot1RemCnTable: Port Extension Information Table
---
---
lldpV2Xdot1RemCnTable OBJECT-TYPE
    SYNTAX      SEQUENCE OF LldpV2Xdot1RemCnEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "This table contains Congestion Notification information
            (as a part of the LLDP IEEE 802.1 organizational extension)
            of the remote system."
    ::= { lldpXdot1CnRemoteData 1 }

lldpV2Xdot1RemCnEntry OBJECT-TYPE
    SYNTAX      LldpV2Xdot1RemCnEntry
    MAX-ACCESS  not-accessible
    STATUS      current
    DESCRIPTION
            "Port Extension information about remote systems port
            component."
    INDEX   { lldpV2RemTimeMark,
              lldpV2RemLocalIfIndex,
              lldpV2RemLocalDestMACAddress,
              lldpV2RemIndex }
    ::= { lldpV2Xdot1RemCnTable 1 }

LldpV2Xdot1RemCnEntry ::= SEQUENCE {
    lldpV2Xdot1RemCNPVIndicators    LldpV2CnBitVector,
     lldpV2Xdot1RemReadyIndicators   LldpV2CnBitVector
  }

lldpV2Xdot1RemCNPVIndicators OBJECT-TYPE
    SYNTAX      LldpV2CnBitVector
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "This object contains the CNPV indicators
            for the Port."
    REFERENCE
```

```
            "D.2.8.3"
    ::= { lldpV2Xdot1RemCnEntry 1 }

lldpV2Xdot1RemReadyIndicators OBJECT-TYPE
    SYNTAX      LldpV2CnBitVector
    MAX-ACCESS  read-only
    STATUS      current
    DESCRIPTION
            "This object contains the Ready indicators
            for the Port."
    REFERENCE
            "D.2.8.4"
    ::= { lldpV2Xdot1RemCnEntry 2 }

-- ------------------------------------------------------------------------
-- IEEE 802.1 - Congestion Notification Conformance Information
-- ------------------------------------------------------------------------

lldpXdot1CnConformance OBJECT IDENTIFIER ::= { lldpV2Xdot1MIB 4 }

lldpXdot1CnCompliances
    OBJECT IDENTIFIER ::= { lldpXdot1CnConformance 1 }
lldpXdot1CnGroups OBJECT IDENTIFIER ::= { lldpXdot1CnConformance 2 }

--
-- Congestion Notification - Compliance Statements
--

lldpXdot1CnCompliance MODULE-COMPLIANCE
    STATUS        current
    DESCRIPTION
         "A compliance statement for SNMP entities that implement
         the IEEE 802.1 organizationally defined Congestion
         Notification LLDP extension MIB.

         This group is mandatory for agents that implement the
         Congestion Notification cnSet TLV set."
    MODULE        -- this module
        MANDATORY-GROUPS  { lldpXdot1CnGroup,
                            ifGeneralInformationGroup }
    ::= { lldpXdot1CnCompliances 1 }


--
-- Congestion Notification - MIB groupings
--

lldpXdot1CnGroup  OBJECT-GROUP
    OBJECTS {
         lldpXdot1CnConfigCnTxEnable,
         lldpV2Xdot1LocCNPVIndicators,
         lldpV2Xdot1LocReadyIndicators,
         lldpV2Xdot1RemCNPVIndicators,
         lldpV2Xdot1RemReadyIndicators
    }
    STATUS  current
    DESCRIPTION
        "The collection of objects that support the
        Congestion Notification cnSet TLV set."
```

```
    ::= { lldpXdot1CnGroups 1 }

-------------------------------------------------------------------------
-------------------------------------------------------------------------
--
-- Organizationally Defined Information Extension - IEEE 802.1
-- Definitions to support the Data Center eXchange Protocol
-- (DCBX) TLV set (Table D-1)
--
-------------------------------------------------------------------------
-------------------------------------------------------------------------
lldpXdot1dcbxMIB OBJECT IDENTIFIER ::= { lldpV2Xdot1MIB 5 }
lldpXdot1dcbxObjects       OBJECT IDENTIFIER ::= { lldpXdot1dcbxMIB 1 }

-- DCBX 802.1 MIB Extension groups

lldpXdot1dcbxConfig     OBJECT IDENTIFIER ::= { lldpXdot1dcbxObjects 1 }
lldpXdot1dcbxLocalData  OBJECT IDENTIFIER ::= { lldpXdot1dcbxObjects 2 }
lldpXdot1dcbxRemoteData OBJECT IDENTIFIER ::= { lldpXdot1dcbxObjects 3 }
lldpXdot1dcbxAdminData  OBJECT IDENTIFIER ::= { lldpXdot1dcbxObjects 4 }

-------------------------------------------------------------------
-- IEEE 802.1 - DCBX Textual Conventions
-------------------------------------------------------------------

LldpXdot1dcbxTrafficClassValue ::= TEXTUAL-CONVENTION
    DISPLAY-HINT "d"
    STATUS    current
    DESCRIPTION
        "Indicates a traffic class.  Values 0-7 correspond to
        traffic classes."
    SYNTAX    Unsigned32 (0..7)

LldpXdot1dcbxTrafficClassBandwidthValue ::= TEXTUAL-CONVENTION
    DISPLAY-HINT "d"
    STATUS    current
    DESCRIPTION
        "Indicates the bandwidth in percent assigned to a
        traffic class."
    SYNTAX    Unsigned32 (0..100)

LldpXdot1dcbxAppSelector ::= TEXTUAL-CONVENTION
    STATUS    current
    DESCRIPTION
        "Indicates the contents of a protocol object
        1: Ethertype
        2: Well Known Port number over TCP, or SCTP
        3: Well Known Port number over UDP, or DCCP
        4: Well Known Port number over TCP, SCTP, UDP, and DCCP"
    SYNTAX INTEGER {
        asEthertype(1),
        asTCPPortNumber(2),
        asUDPPortNumber(3),
        asTCPUDPPortNumber(4)
    }

 LldpXdot1dcbxAppProtocol ::= TEXTUAL-CONVENTION
     DISPLAY-HINT "d"
     STATUS        current
```

```
     DESCRIPTION
         "Contains the application protocol indicator the
         type of which is specified by an object with
         the syntax of
         LldpXdot1dcbxAppSelector"
     SYNTAX Unsigned32 (0..65535)

LldpXdot1dcbxSupportedCapacity ::= TEXTUAL-CONVENTION
    DISPLAY-HINT "d"
    STATUS    current
    DESCRIPTION
        "Indicates the supported capacity of a given feature,
        for example, the number of traffic classes supported.
        This TC is used for features that have a maximum
        capacity of eight and a minimum of one."
    SYNTAX Unsigned32 (1..8)

LldpXdot1dcbxTrafficSelectionAlgorithm ::= TEXTUAL-CONVENTION
    STATUS    current
    DESCRIPTION
        "Indicates the Traffic Selection Algorithm
        0: Strict Priority
        1: Credit-based shaper
        2: Enhanced transmission selection
        3-254: Reserved for furture standardization
        255: Vendor specific"
    SYNTAX INTEGER {
        tsaStrictPriority(0),
        tsaCreditBasedShaper(1),
        tsaEnhancedTransmission(2),
        tsaVendorSpecific(255)
    }

-----------------------------------------------------------------
-- IEEE 802.1 - DCBX Configuration
-----------------------------------------------------------------

--
--  lldpXdot1dcbxConfigETSConfigurationTable : configure the
--  transmission of the ETS Configuration TLV on a set of ports
--

lldpXdot1dcbxConfigETSConfigurationTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF LldpXdot1dcbxConfigETSConfigurationEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "A table that controls selection of ETS Configuration
         TLVs to be transmitted on individual ports."
    ::= { lldpXdot1dcbxConfig 1 }

lldpXdot1dcbxConfigETSConfigurationEntry OBJECT-TYPE
    SYNTAX        LldpXdot1dcbxConfigETSConfigurationEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "LLDP configuration information that controls the
        transmission of IEEE 802.1 organizationally defined
        ETS Configuration TLV on LLDP transmission capable ports.
```

```
        This configuration object augments the lldpV2PortConfigEntry of
        the LLDP-MIB, therefore it is only present along with the port
        configuration defined by the associated lldpV2PortConfigEntry
        entry.

        Each active lldpConfigEntry is restored from non-volatile
        storage (along with the corresponding lldpV2PortConfigEntry)
        after a re-initialization of the management system."
    AUGMENTS      { lldpV2PortConfigEntry }
    ::= { lldpXdot1dcbxConfigETSConfigurationTable 1 }

LldpXdot1dcbxConfigETSConfigurationEntry ::= SEQUENCE {
    lldpXdot1dcbxConfigETSConfigurationTxEnable TruthValue
}

lldpXdot1dcbxConfigETSConfigurationTxEnable OBJECT-TYPE
    SYNTAX        TruthValue
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "The lldpXdot1dcbxConfigETSConfigurationTxEnable, which is
        defined as a truth value and configured by the network
        management, determines whether the IEEE 802.1 organizationally
        defined ETS Configuration TLV transmission is allowed on a
        given LLDP transmission capable port.

        The value of this object is restored from non-volatile
        storage after a re-initialization of the management system."
    REFERENCE
        "D.2.9"
    DEFVAL         { false }
    ::= { lldpXdot1dcbxConfigETSConfigurationEntry 1 }

--
--  lldpXdot1dcbxConfigETSRecommendationTable : configure the
--  transmission of the ETS Recommendation TLV on a set of ports
--

lldpXdot1dcbxConfigETSRecommendationTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF LldpXdot1dcbxConfigETSRecommendationEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "A table that controls selection of ETS Recommendation
        TLVs to be transmitted on individual ports."
    ::= { lldpXdot1dcbxConfig 2 }

lldpXdot1dcbxConfigETSRecommendationEntry OBJECT-TYPE
    SYNTAX        LldpXdot1dcbxConfigETSRecommendationEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "LLDP configuration information that controls the
        transmission of IEEE 802.1 organizationally defined
        ETS Recommendation TLV on LLDP transmission capable ports.

        This configuration object augments the lldpV2PortConfigEntry of
        the LLDP-MIB, therefore it is only present along with the port
```

```
            configuration defined by the associated lldpV2PortConfigEntry
            entry.

            Each active lldpConfigEntry is restored from non-volatile
            storage (along with the corresponding lldpV2PortConfigEntry)
            after a re-initialization of the management system."
        AUGMENTS     { lldpV2PortConfigEntry }
        ::= { lldpXdot1dcbxConfigETSRecommendationTable 1 }

    LldpXdot1dcbxConfigETSRecommendationEntry ::= SEQUENCE {
        lldpXdot1dcbxConfigETSRecommendationTxEnable TruthValue
    }

    lldpXdot1dcbxConfigETSRecommendationTxEnable OBJECT-TYPE
        SYNTAX        TruthValue
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "The lldpXdot1dcbxConfigETSRecommendationTxEnable, which is
            defined as a truth value and configured by the network
            management, determines whether the IEEE 802.1 organizationally
            defined ETS Recommendation TLV transmission is allowed on a
            given LLDP transmission capable port.

            The value of this object is restored from non-volatile
            storage after a re-initialization of the management system."
        REFERENCE
            "D.2.10"
        DEFVAL         { false }
        ::= { lldpXdot1dcbxConfigETSRecommendationEntry 1 }
    --
    --  lldpXdot1dcbxConfigPFCTable : configure the transmission of the
    --  Priority-based Flow Control Configuration TLV on a set of ports
    --

    lldpXdot1dcbxConfigPFCTable OBJECT-TYPE
        SYNTAX        SEQUENCE OF LldpXdot1dcbxConfigPFCEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "A table that controls selection of Priority-based
            Flow Control Configuration TLVs to be transmitted on individual ports."
        ::= { lldpXdot1dcbxConfig 3 }

    lldpXdot1dcbxConfigPFCEntry OBJECT-TYPE
        SYNTAX        LldpXdot1dcbxConfigPFCEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "LLDP configuration information that controls the
            transmission of IEEE 802.1 organizationally defined
            Priority-based Flow Control Configuration TLV on LLDP transmission
            capable ports.

            This configuration object augments the lldpV2PortConfigEntry of
            the LLDP-MIB, therefore it is only present along with the port
            configuration defined by the associated lldpV2PortConfigEntry
            entry.
```

```
        Each active lldpConfigEntry is restored from non-volatile
        storage (along with the corresponding lldpV2PortConfigEntry)
        after a re-initialization of the management system."
    AUGMENTS     { lldpV2PortConfigEntry }
    ::= { lldpXdot1dcbxConfigPFCTable 1 }

LldpXdot1dcbxConfigPFCEntry ::= SEQUENCE {
    lldpXdot1dcbxConfigPFCTxEnable TruthValue
}

lldpXdot1dcbxConfigPFCTxEnable OBJECT-TYPE
    SYNTAX        TruthValue
    MAX-ACCESS    read-write
    STATUS        current
    DESCRIPTION
        "The lldpXdot1dcbxConfigPFCTxEnable, which is defined
        as a truth value and configured by the network management,
        determines whether the IEEE 802.1 organizationally defined
        Priority-based Flow Control Configuration TLV transmission is allowed on
        a given LLDP transmission capable port.

        The value of this object is restored from non-volatile
        storage after a re-initialization of the management system."
    REFERENCE
        "D.2.11"
    DEFVAL         { false }
    ::= { lldpXdot1dcbxConfigPFCEntry 1 }

--
--  lldpXdot1dcbxConfigApplicationPriorityTable : configure the
--  transmission of the Application Priority TLV on a set of ports
--

lldpXdot1dcbxConfigApplicationPriorityTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF
        LldpXdot1dcbxConfigApplicationPriorityEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "A table that controls selection of Priority-based
        Flow Control Configuration TLVs to be transmitted on individual ports."
    ::= { lldpXdot1dcbxConfig 4 }

lldpXdot1dcbxConfigApplicationPriorityEntry OBJECT-TYPE
    SYNTAX        LldpXdot1dcbxConfigApplicationPriorityEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "LLDP configuration information that controls the
        transmission of IEEE 802.1 organizationally defined
        Application Priority TLV on LLDP transmission capable ports.

        This configuration object augments the lldpV2PortConfigEntry of
        the LLDP-MIB, therefore it is only present along with the port
        configuration defined by the associated lldpV2PortConfigEntry
        entry.

        Each active lldpConfigEntry is restored from non-volatile
        storage (along with the corresponding lldpV2PortConfigEntry)
```

```
            after a re-initialization of the management system."
        AUGMENTS     { lldpV2PortConfigEntry }
        ::= { lldpXdot1dcbxConfigApplicationPriorityTable 1 }

    LldpXdot1dcbxConfigApplicationPriorityEntry ::= SEQUENCE {
        lldpXdot1dcbxConfigApplicationPriorityTxEnable TruthValue
    }

    lldpXdot1dcbxConfigApplicationPriorityTxEnable OBJECT-TYPE
        SYNTAX        TruthValue
        MAX-ACCESS    read-write
        STATUS        current
        DESCRIPTION
            "The lldpXdot1dcbxConfigApplicationPriorityTxEnable, which
            is defined as a truth value and configured by the network
            management, determines whether the IEEE 802.1 organizationally
            defined Application Priority TLV transmission is allowed on
            a given LLDP transmission capable port.

            The value of this object is restored from non-volatile
            storage after a re-initialization of the management system."
        REFERENCE
            "D.2.12"
        DEFVAL         { false }
        ::= { lldpXdot1dcbxConfigApplicationPriorityEntry 1 }

    -----------------------------------------------------------------------
    -- IEEE 802.1 - DCBX Local System Information
    -----------------------------------------------------------------------

    --
    -- lldpXdot1dcbxLocETSConfigurationTable - Contains the information
    -- for the ETS Configuration TLV.
    --
    lldpXdot1dcbxLocETSConfiguration OBJECT IDENTIFIER
        ::= { lldpXdot1dcbxLocalData 1 }

    lldpXdot1dcbxLocETSBasicConfigurationTable OBJECT-TYPE
        SYNTAX        SEQUENCE OF LldpXdot1dcbxLocETSBasicConfigurationEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "This table contains one row per port for the IEEE 802.1
            organizationally defined LLDP ETS Configuration TLV on
            the local system known to this agent"
        ::= { lldpXdot1dcbxLocETSConfiguration 1 }

    lldpXdot1dcbxLocETSBasicConfigurationEntry OBJECT-TYPE
        SYNTAX        LldpXdot1dcbxLocETSBasicConfigurationEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "Information about the IEEE 802.1 organizational defined
            ETS Configuration TLV LLDP extension."
        INDEX         { lldpV2LocPortIfIndex }
        ::= { lldpXdot1dcbxLocETSBasicConfigurationTable 1 }

    LldpXdot1dcbxLocETSBasicConfigurationEntry ::= SEQUENCE {
        lldpXdot1dcbxLocETSConCreditBasedShaperSupport TruthValue,
```

```
    lldpXdot1dcbxLocETSConTrafficClassesSupported
        LldpXdot1dcbxSupportedCapacity,
    lldpXdot1dcbxLocETSConWilling    TruthValue
}

lldpXdot1dcbxLocETSConCreditBasedShaperSupport OBJECT-TYPE
    SYNTAX        TruthValue
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Indicates if the credit-based shaper Traffic Selection
        Algorithm is supported on the local system."
    REFERENCE
        "D.2.9.4"
    ::= { lldpXdot1dcbxLocETSBasicConfigurationEntry 1 }

lldpXdot1dcbxLocETSConTrafficClassesSupported OBJECT-TYPE
    SYNTAX        LldpXdot1dcbxSupportedCapacity
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Indicates the number of traffic classes supported."
    REFERENCE
        "D.2.9.5"
    ::= { lldpXdot1dcbxLocETSBasicConfigurationEntry 2 }

lldpXdot1dcbxLocETSConWilling OBJECT-TYPE
    SYNTAX        TruthValue
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Indicates if the local system is willing to accept the
        ETS configuration recommended by the remote system."
    REFERENCE
        "D.2.9.3"
    ::= { lldpXdot1dcbxLocETSBasicConfigurationEntry 3 }

lldpXdot1dcbxLocETSConPriorityAssignmentTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF
        LldpXdot1dcbxLocETSConPriorityAssignmentEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table contains one row per priority.  The entry in each
        row indicates the traffic class to which the priority is
        assigned."
    ::= { lldpXdot1dcbxLocETSConfiguration 2 }

lldpXdot1dcbxLocETSConPriorityAssignmentEntry OBJECT-TYPE
    SYNTAX        LldpXdot1dcbxLocETSConPriorityAssignmentEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "Indicates a priority to traffic class assignment."
    INDEX        {
                 lldpV2LocPortIfIndex,
                 lldpXdot1dcbxLocETSConPriority
    }
    ::= { lldpXdot1dcbxLocETSConPriorityAssignmentTable 1 }
```

```
LldpXdot1dcbxLocETSConPriorityAssignmentEntry ::= SEQUENCE {
    lldpXdot1dcbxLocETSConPriority      IEEE8021PriorityValue,
    lldpXdot1dcbxLocETSConPriTrafficClass
        LldpXdot1dcbxTrafficClassValue
}

lldpXdot1dcbxLocETSConPriority OBJECT-TYPE
    SYNTAX        IEEE8021PriorityValue
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "Indicates the priority that is assigned to a traffic
        class."
    REFERENCE
        "D.2.9.6"
    ::= { lldpXdot1dcbxLocETSConPriorityAssignmentEntry 1 }

lldpXdot1dcbxLocETSConPriTrafficClass OBJECT-TYPE
    SYNTAX        LldpXdot1dcbxTrafficClassValue
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Indicates the traffic class to which this priority is
        to be assigned."
    REFERENCE
        "D.2.9.6"
    ::= { lldpXdot1dcbxLocETSConPriorityAssignmentEntry 2 }

lldpXdot1dcbxLocETSConTrafficClassBandwidthTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF
        LldpXdot1dcbxLocETSConTrafficClassBandwidthEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table contains one row per traffic class.  The
        entry in each row indicates the traffic class to
        which the bandwidth is assigned."
    ::= { lldpXdot1dcbxLocETSConfiguration 3 }

lldpXdot1dcbxLocETSConTrafficClassBandwidthEntry OBJECT-TYPE
    SYNTAX        LldpXdot1dcbxLocETSConTrafficClassBandwidthEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "Indicates a traffic class to Bandwidth assignment."
    INDEX         {
                  lldpV2LocPortIfIndex,
                  lldpXdot1dcbxLocETSConTrafficClass
    }
    ::= { lldpXdot1dcbxLocETSConTrafficClassBandwidthTable 1 }

LldpXdot1dcbxLocETSConTrafficClassBandwidthEntry ::= SEQUENCE {
    lldpXdot1dcbxLocETSConTrafficClass
        LldpXdot1dcbxTrafficClassValue,
    lldpXdot1dcbxLocETSConTrafficClassBandwidth
        LldpXdot1dcbxTrafficClassBandwidthValue
}
```

```
lldpXdot1dcbxLocETSConTrafficClass OBJECT-TYPE
    SYNTAX        LldpXdot1dcbxTrafficClassValue
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "Indicates the traffic class to
        which this bandwidth applies"
    REFERENCE
        "D.2.9.7"
    ::= { lldpXdot1dcbxLocETSConTrafficClassBandwidthEntry 1 }

lldpXdot1dcbxLocETSConTrafficClassBandwidth OBJECT-TYPE
    SYNTAX        LldpXdot1dcbxTrafficClassBandwidthValue
    MAX-ACCESS    read-only
    STATUS        current
    DESCRIPTION
        "Indicates the bandwidth assigned to this traffic class."
    REFERENCE
        "D.2.9.7"
    ::= { lldpXdot1dcbxLocETSConTrafficClassBandwidthEntry 2 }


lldpXdot1dcbxLocETSConTrafficSelectionAlgorithmTable OBJECT-TYPE
    SYNTAX        SEQUENCE OF
        LldpXdot1dcbxLocETSConTrafficSelectionAlgorithmEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "This table contains one row per traffic class.  The entry
        in each row indicates the traffic selction algorithm to be
        used by the traffic class."
    ::= { lldpXdot1dcbxLocETSConfiguration 4 }

lldpXdot1dcbxLocETSConTrafficSelectionAlgorithmEntry OBJECT-TYPE
    SYNTAX        LldpXdot1dcbxLocETSConTrafficSelectionAlgorithmEntry
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "Indicates a traffic class to traffic selection algorithm
         assignment."
    INDEX         {
                  lldpV2LocPortIfIndex,
                  lldpXdot1dcbxLocETSConTSATrafficClass
    }
    ::= { lldpXdot1dcbxLocETSConTrafficSelectionAlgorithmTable 1 }

LldpXdot1dcbxLocETSConTrafficSelectionAlgorithmEntry ::= SEQUENCE {
    lldpXdot1dcbxLocETSConTSATrafficClass
        LldpXdot1dcbxTrafficClassValue,
    lldpXdot1dcbxLocETSConTrafficSelectionAlgorithm
        LldpXdot1dcbxTrafficSelectionAlgorithm
}

lldpXdot1dcbxLocETSConTSATrafficClass OBJECT-TYPE
    SYNTAX        LldpXdot1dcbxTrafficClassValue
    MAX-ACCESS    not-accessible
    STATUS        current
    DESCRIPTION
        "Indicates the traffic class that is assigned to a traffic
```

```
            selection algorithm."
        REFERENCE
            "D.2.9.8"
        ::= { lldpXdot1dcbxLocETSConTrafficSelectionAlgorithmEntry 1 }

    lldpXdot1dcbxLocETSConTrafficSelectionAlgorithm OBJECT-TYPE
        SYNTAX        LldpXdot1dcbxTrafficSelectionAlgorithm
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Indicates the Traffic Selection Algorithm to which this
            traffic class is to be assigned."
        REFERENCE
            "D.2.9.8"
        ::= { lldpXdot1dcbxLocETSConTrafficSelectionAlgorithmEntry 2 }

    --
    -- lldpXdot1dcbxLocETSRecommendationTable - Contains the information for
    -- the ETS Recommendation TLV.
    --
    lldpXdot1dcbxLocETSReco OBJECT IDENTIFIER ::=
      { lldpXdot1dcbxLocalData 2 }

    lldpXdot1dcbxLocETSRecoTrafficClassBandwidthTable OBJECT-TYPE
        SYNTAX        SEQUENCE OF
            LldpXdot1dcbxLocETSRecoTrafficClassBandwidthEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "This table contains one row per traffic class.  The
            entry in each row indicates the traffic class to
            which the bandwidth is assigned."
        ::= { lldpXdot1dcbxLocETSReco 1 }

    lldpXdot1dcbxLocETSRecoTrafficClassBandwidthEntry OBJECT-TYPE
        SYNTAX        LldpXdot1dcbxLocETSRecoTrafficClassBandwidthEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "Indicates a traffic class to Bandwidth assignment."
        INDEX         {
                          lldpV2LocPortIfIndex,
                          lldpXdot1dcbxLocETSRecoTrafficClass
        }
        ::= { lldpXdot1dcbxLocETSRecoTrafficClassBandwidthTable 1 }

    LldpXdot1dcbxLocETSRecoTrafficClassBandwidthEntry ::= SEQUENCE {
        lldpXdot1dcbxLocETSRecoTrafficClass
            LldpXdot1dcbxTrafficClassValue,
        lldpXdot1dcbxLocETSRecoTrafficClassBandwidth
            LldpXdot1dcbxTrafficClassBandwidthValue
    }

    lldpXdot1dcbxLocETSRecoTrafficClass OBJECT-TYPE
        SYNTAX        LldpXdot1dcbxTrafficClassValue
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "Indicates the traffic class to
```

```
            which this bandwidth applies"
        REFERENCE
            "D.2.10.3"
        ::= { lldpXdot1dcbxLocETSRecoTrafficClassBandwidthEntry 1 }

    lldpXdot1dcbxLocETSRecoTrafficClassBandwidth OBJECT-TYPE
        SYNTAX        LldpXdot1dcbxTrafficClassBandwidthValue
        MAX-ACCESS    read-only
        STATUS        current
        DESCRIPTION
            "Indicates the bandwidth assigned to this traffic class."
        REFERENCE
            "D.2.10.4"
        ::= { lldpXdot1dcbxLocETSRecoTrafficClassBandwidthEntry 2 }

    lldpXdot1dcbxLocETSRecoTrafficSelectionAlgorithmTable OBJECT-TYPE
        SYNTAX        SEQUENCE OF
            LldpXdot1dcbxLocETSRecoTrafficSelectionAlgorithmEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "This table contains one row per priority.  The entry in each
            row indicates the traffic selction algorithm to be used
            by the traffic class."
        ::= { lldpXdot1dcbxLocETSReco 2 }

    lldpXdot1dcbxLocETSRecoTrafficSelectionAlgorithmEntry OBJECT-TYPE
        SYNTAX        LldpXdot1dcbxLocETSRecoTrafficSelectionAlgorithmEntry
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "Indicates a priority to traffic selection algorithm
             assignment."
        INDEX        {
                    lldpV2LocPortIfIndex,
                    lldpXdot1dcbxLocETSRecoTSATrafficClass
        }
        ::= { lldpXdot1dcbxLocETSRecoTrafficSelectionAlgorithmTable 1 }

    LldpXdot1dcbxLocETSRecoTrafficSelectionAlgorithmEntry ::= SEQUENCE {
        lldpXdot1dcbxLocETSRecoTSATrafficClass
            LldpXdot1dcbxTrafficClassValue,
        lldpXdot1dcbxLocETSRecoTrafficSelectionAlgorithm
            LldpXdot1dcbxTrafficSelectionAlgorithm
    }

    lldpXdot1dcbxLocETSRecoTSATrafficClass OBJECT-TYPE
        SYNTAX        LldpXdot1dcbxTrafficClassValue
        MAX-ACCESS    not-accessible
        STATUS        current
        DESCRIPTION
            "Indicates the traffic class that is assigned to a traffic
            selection algorithm."
        REFERENCE
            "D.2.10.5"
        ::= { lldpXdot1dcbxLocETSRecoTrafficSelectionAlgorithmEntry 1 }

    lldpXdot1dcbxLocETSRecoTrafficSelectionAlgorithm OBJECT-TYPE
        SYNTAX        LldpXdot1dcbxTrafficSelectionAlgorithm
```