```
module: ieee802-dot1ab-lldp
  +--rw lldp
     +--rw bridge?                                         bridge-ref
     +--rw message-fast-tx?                                uint32
     +--rw message-tx-hold-multiplier?                     uint32
     +--rw message-tx-interval?                            uint32
     +--rw reinit-delay?                                   uint32
     +--rw tx-credit-max?                                  uint32
     +--rw tx-fast-init?                                   uint32
     +--rw notification-interval?                          uint32
     +--ro remote-statistics
     |  +--ro last-change-time?    yang:timestamp
     |  +--ro remote-inserts?      yang:zero-based-counter32
     |  +--ro remote-deletes?      yang:zero-based-counter32
     |  +--ro remote-drops?        yang:zero-based-counter32
     |  +--ro remote-ageouts?      yang:zero-based-counter32
     +--ro local-system-data
     |  +--ro chassis-id-subtype?             lldp-types:chassis-id-subtype-type
     |  +--ro chassis-id?                     lldp-types:chassis-id-type
     |  +--ro system-name?                    string
     |  +--ro system-description?             string
     |  +--ro system-capabilities-supported?  lldp:system-capabilities-map
     |  +--ro system-capabilities-enabled?    lldp:system-capabilities-map
     +--rw port* [name dest-mac-address]
     |  +--rw name                                         if:interface-ref
     |  +--rw dest-mac-address                             ieee:mac-address
     |  +--rw admin-status?                                enumeration
     |  +--rw notification-enable?                         boolean
     |  +--rw tlvs-tx-enable?                              bits
     |  +--rw message-fast-tx?                             uint32
     |  +--rw message-tx-hold-multiplier?                  uint32
     |  +--rw message-tx-interval?                         uint32
     |  +--rw reinit-delay?                                uint32
     |  +--rw tx-credit-max?                               uint32
     |  +--rw tx-fast-init?                                uint32
     |  +--rw notification-interval?                       uint32
     |  +--rw management-address-tx-port* [address-subtype man-address]
     |  |  +--rw address-subtype    identityref
     |  |  +--rw man-address        man-addr-type
     |  |  +--rw tx-enable?         boolean
     |  |  +--ro addr-len?          uint32
     |  |  +--ro if-subtype?        lldp:man-addr-if-subtype
     |  |  +--ro if-id?             uint32
     |  +--ro port-id-subtype?                             lldp-types:port-id-subtype-type
     |  +--ro port-id?                                     lldp-types:port-id-type
     |  +--ro port-desc?                                   string
     |  +--ro tx-statistics
     |  |  +--ro total-frames?          yang:counter32
     |  |  +--ro total-length-errors?   yang:counter32
     |  +--ro rx-statistics
     |  |  +--ro total-ageouts?            yang:zero-based-counter32
     |  |  +--ro total-discarded-frames?   yang:counter32
     |  |  +--ro error-frames?             yang:counter32
     |  |  +--ro total-frames?             yang:counter32
     |  |  +--ro total-discarded-tlvs?     yang:counter32
     |  |  +--ro total-unrecognized-tlvs?  yang:counter32
     |  +--ro remote-systems-data* [time-mark remote-index]
     |  |  +--ro time-mark                                 yang:timeticks
     |  |  +--ro remote-index                              uint32
     |  |  +--ro chassis-id-subtype?                       lldp-types:chassis-id-subtype-type
     |  |  +--ro chassis-id?                               lldp-types:chassis-id-type
     |  |  +--ro port-id-subtype?                          lldp-types:port-id-subtype-type
     |  |  +--ro port-id?                                  lldp-types:port-id-type
     |  |  +--ro port-desc?                                string
     |  |  +--ro system-name?                              string
```

```
      │   │  +--ro system-description?                              string
      │   │  +--ro system-capabilities-supported?                   lldp:system-capabilities-map
      │   │  +--ro system-capabilities-enabled?                     lldp:system-capabilities-map
      │   │  +--ro management-address* [address-subtype address]
      │   │  │  +--ro address-subtype    identityref
      │   │  │  +--ro address           lldp:man-addr-type
      │   │  │  +--ro if-subtype?       lldp:man-addr-if-subtype
      │   │  │  +--ro if-id?            uint32
      │   │  +--ro remote-unknown-tlv* [tlv-type]
      │   │  │  +--ro tlv-type    uint32
      │   │  │  +--ro tlv-info?   binary
      │   │  +--ro remote-org-defined-info* [info-identifier info-subtype info-index]
      │   │  │  +--ro info-identifier    binary
      │   │  │  +--ro info-subtype       uint32
      │   │  │  +--ro info-index         uint32
      │   │  │  +--ro remote-info?       binary
      │   │  +--ro lldp-ci-tlv:congestion-isolation-tlv-extension
      │   │  │  +--ro lldp-ci-tlv:queue-map* [priority]
      │   │  │  │  +--ro lldp-ci-tlv:priority       dot1q-types:priority-type
      │   │  │  │  +--ro lldp-ci-tlv:queue-config?   dot1q-ci:abs-traffic-class-plus-one-type
      │   │  │  +--ro lldp-ci-tlv:cim-encap-length?   uint16
      │   │  │  +--ro lldp-ci-tlv:mac-address?        ieee:mac-address
      │   │  │  +--ro lldp-ci-tlv:udp-port-number?    inet:port-number
      │   │  │  +--ro lldp-ci-tlv:ip-address?         inet:ip-address
      │   │  +--ro lldp-basic-tlv:port-vlan-id-tlv-extension
      │   │  │  +--ro lldp-basic-tlv:port-vlan-id?    dot1qtypes:vlanid
      │   │  +--ro lldp-basic-tlv:port-and-protocol-vlan-id-extension
      │   │  │  +--ro lldp-basic-tlv:port-vlan-id?    dot1qtypes:vlanid
      │   │  │  +--ro lldp-basic-tlv:flags?           bits
      │   │  +--ro lldp-basic-tlv:port-vlan-name-tlv-extension
      │   │  │  +--ro lldp-basic-tlv:vlan-id?         dot1qtypes:vlanid
      │   │  │  +--ro lldp-basic-tlv:port-vlan-name?    string
      │   │  +--ro lldp-basic-tlv:protocol-identity-tlv-extension
      │   │  │  +--ro lldp-basic-tlv:protocol-identity?    string
      │   │  +--ro lldp-basic-tlv:link-aggregation-tlv-extension
      │   │  │  +--ro lldp-basic-tlv:aggregation-status?    bits
      │   │  │  +--ro lldp-basic-tlv:aggregated-port-id?    uint32
      │   │  +--ro lldp-basic-tlv:vid-usage-digest-tlv-extension
      │   │  │  +--ro lldp-basic-tlv:vid-usage-digest?    uint32
      │   │  +--ro lldp-basic-tlv:management-vid-tlv-extension
      │   │  │  +--ro lldp-basic-tlv:management-vid?    dot1qtypes:vlanid
      │   │  +--ro lldp-cn-tlv:congestion-notification-tlv-extension
      │   │  │  +--ro lldp-cn-tlv:per-priority-xmit-cnpv-capable?    congestion-notification-bit-vector
      │   │  │  +--ro lldp-cn-tlv:per-priority-xmit-ready?           congestion-notification-bit-vector
      │   │  +--ro lldp-evb-tlv:evb-tlv-extension
      │   │  │  +--ro lldp-evb-tlv:evb-tlv-info-string?    binary
      │   │  +--ro lldp-evb-tlv:cdcp-tlv-extension
      │   │  │  +--ro lldp-evb-tlv:cdcp-tlv-info-string?    binary
      │   │  +--ro lldp-tr-tlv:congestion-isolation-tlv-extension
      │   │  │  +--ro lldp-tr-tlv:device-type?       enumeration
      │   │  │  +--ro lldp-tr-tlv:topology-level?    uint8
      │   │  │  +--ro lldp-tr-tlv:port-orientation?    enumeration
      │   │  +--ro lldp-dcbx-tlv:ets-configuration-tlv-extension
      │   │  │  +--ro lldp-dcbx-tlv:willing?                    boolean
      │   │  │  +--ro lldp-dcbx-tlv:credit-based-shaper?        boolean
      │   │  │  +--ro lldp-dcbx-tlv:traffic-classes-supported?    dot1q-types:num-traffic-class-type
      │   │  │  +--ro lldp-dcbx-tlv:priority-assignment-table* [priority]
      │   │  │  │  +--ro lldp-dcbx-tlv:priority                      dot1q-types:priority-type
      │   │  │  │  +--ro lldp-dcbx-tlv:priority-traffic-class?       dot1q-types:traffic-class-type
      │   │  │  │  +--ro lldp-dcbx-tlv:transmission-selection-algorithm?    identityref
      │   │  │  +--ro lldp-dcbx-tlv:tc-bandwidth-table* [traffic-class]
      │   │  │  │  +--ro lldp-dcbx-tlv:traffic-class         dot1q-types:traffic-class-type
      │   │  │  │  +--ro lldp-dcbx-tlv:percentage-bandwidth?    uint8
      │   │  │  +--ro lldp-dcbx-tlv:tsa-assignment-table* [tsa-traffic-class]
      │   │  │     +--ro lldp-dcbx-tlv:tsa-traffic-class                dot1q-types:traffic-class-type
```

```
   |  |  |     +--ro lldp-dcbx-tlv:transmission-selection-algorithm?   identityref
   |  |  +--ro lldp-dcbx-tlv:ets-recommendation-tlv-extension
   |  |  |  +--ro lldp-dcbx-tlv:priority-assignment-table* [priority]
   |  |  |  |  +--ro lldp-dcbx-tlv:priority                    dot1q-types:priority-type
   |  |  |  |  +--ro lldp-dcbx-tlv:priority-traffic-class?   dot1q-types:traffic-class-type
   |  |  |  +--ro lldp-dcbx-tlv:tc-bandwidth-table* [traffic-class]
   |  |  |  |  +--ro lldp-dcbx-tlv:traffic-class            dot1q-types:traffic-class-type
   |  |  |  |  +--ro lldp-dcbx-tlv:percentage-bandwidth?   uint8
   |  |  |  +--ro lldp-dcbx-tlv:tsa-assignment-table* [tsa-traffic-class]
   |  |  |     +--ro lldp-dcbx-tlv:tsa-traffic-class                      dot1q-types:traffic-class-type
   |  |  |     +--ro lldp-dcbx-tlv:transmission-selection-algorithm?   identityref
   |  |  +--ro lldp-dcbx-tlv:pfc-tlv-extension
   |  |  |  +--ro lldp-dcbx-tlv:willing?                   boolean
   |  |  |  +--ro lldp-dcbx-tlv:macsec-bypass-capable?    boolean
   |  |  |  +--ro lldp-dcbx-tlv:number-tc-capable?         dot1q-types:num-traffic-class-type
   |  |  |  +--ro lldp-dcbx-tlv:enable?                    bits
   |  |  +--ro lldp-dcbx-tlv:application-priority-tlv-extension
   |  |  |  +--ro lldp-dcbx-tlv:application-priority-table* [application-priority]
   |  |  |     +--ro lldp-dcbx-tlv:application-priority                 dot1q-types:priority-type
   |  |  |     +--ro lldp-dcbx-tlv:application-priority-selector?   identityref
   |  |  |     +--ro lldp-dcbx-tlv:application-priority-protocol?   uint16
   |  |  +--ro lldp-dcbx-tlv:application-vlan-tlv-extension
   |  |     +--ro lldp-dcbx-tlv:application-vlan-table* [application-vlan]
   |  |        +--ro lldp-dcbx-tlv:application-vlan            dot1q-types:vlanid
   |  |        +--ro lldp-dcbx-tlv:application-vlan-selector?   identityref
   |  |        +--ro lldp-dcbx-tlv:application-vlan-protocol?   uint16
   +--rw lldp-ci-tlv:tlvs-tx-org-ci-enable?                            bits
   +--rw lldp-ci-tlv:congestion-isolation-tlv-extension
   |  +--rw lldp-ci-tlv:queue-map* [priority]
   |  |  +--rw lldp-ci-tlv:priority         dot1q-types:priority-type
   |  |  +--rw lldp-ci-tlv:queue-config?    dot1q-ci:abs-traffic-class-plus-one-type
   |  +--rw lldp-ci-tlv:cim-encap-length?    uint16
   |  +--ro lldp-ci-tlv:mac-address?         ieee:mac-address
   |  +--ro lldp-ci-tlv:udp-port-number?     inet:port-number
   |  +--ro lldp-ci-tlv:ip-address?          inet:ip-address
   +--rw lldp-basic-tlv:tlvs-tx-org-basic-enable?                      bits
   +--rw lldp-basic-tlv:port-vlan-id-tlv-extension
   |  +--rw lldp-basic-tlv:port-vlan-id?    dot1qtypes:vlanid
   +--rw lldp-basic-tlv:port-and-protocol-vlan-id-extension
   |  +--rw lldp-basic-tlv:port-vlan-id?    dot1qtypes:vlanid
   |  +--rw lldp-basic-tlv:flags?           bits
   +--rw lldp-basic-tlv:port-vlan-name-tlv-extension
   |  +--rw lldp-basic-tlv:vlan-id?             dot1qtypes:vlanid
   |  +--rw lldp-basic-tlv:port-vlan-name?    string
   +--rw lldp-basic-tlv:protocol-identity-tlv-extension
   |  +--rw lldp-basic-tlv:protocol-identity?    string
   +--rw lldp-basic-tlv:link-aggregation-tlv-extension
   |  +--rw lldp-basic-tlv:aggregation-status?    bits
   |  +--rw lldp-basic-tlv:aggregated-port-id?    uint32
   +--rw lldp-cn-tlv:tlvs-tx-org-congestion-notification-enable?    boolean
   +--rw lldp-cn-tlv:congestion-notification-tlv-extension
   |  +--rw lldp-cn-tlv:per-priority-xmit-cnpv-capable?    congestion-notification-bit-vector
   |  +--rw lldp-cn-tlv:per-priority-xmit-ready?           congestion-notification-bit-vector
   +--rw lldp-evb-tlv:tlvs-tx-org-evb-enable?                         bits
   +--rw lldp-evb-tlv:evb-tlv-extension
   |  +--ro lldp-evb-tlv:evb-tlv-info-string?    binary
   +--rw lldp-evb-tlv:cdcp-tlv-extension
   |  +--ro lldp-evb-tlv:cdcp-tlv-info-string?    binary
   +--rw lldp-tr-tlv:tlvs-tx-org-tr-enable?                           bits
   +--rw lldp-tr-tlv:topology-recognition-tlv-extension
   |  +--rw lldp-tr-tlv:port-orientation?    enumeration
   +--rw lldp-dcbx-tlv:tlvs-tx-org-dcbx-enable?                       bits
   +--rw lldp-dcbx-tlv:ets-configuration-tlv-extension
   |  +--rw lldp-dcbx-tlv:willing?                   boolean
   |  +--rw lldp-dcbx-tlv:credit-based-shaper?       boolean
```

```
│ │   +--rw lldp-dcbx-tlv:traffic-classes-supported?   dot1q-types:num-traffic-class-type
│ │   +--rw lldp-dcbx-tlv:priority-assignment-table* [priority]
│ │   │   +--rw lldp-dcbx-tlv:priority                          dot1q-types:priority-type
│ │   │   +--rw lldp-dcbx-tlv:priority-traffic-class?           dot1q-types:traffic-class-type
│ │   │   +--rw lldp-dcbx-tlv:transmission-selection-algorithm?   identityref
│ │   +--rw lldp-dcbx-tlv:tc-bandwidth-table* [traffic-class]
│ │   │   +--rw lldp-dcbx-tlv:traffic-class          dot1q-types:traffic-class-type
│ │   │   +--rw lldp-dcbx-tlv:percentage-bandwidth?   uint8
│ │   +--rw lldp-dcbx-tlv:tsa-assignment-table* [tsa-traffic-class]
│ │       +--rw lldp-dcbx-tlv:tsa-traffic-class                  dot1q-types:traffic-class-type
│ │       +--rw lldp-dcbx-tlv:transmission-selection-algorithm?   identityref
│ +--rw lldp-dcbx-tlv:ets-recommendation-tlv-extension
│ │   +--rw lldp-dcbx-tlv:priority-assignment-table* [priority]
│ │   │   +--rw lldp-dcbx-tlv:priority                  dot1q-types:priority-type
│ │   │   +--rw lldp-dcbx-tlv:priority-traffic-class?   dot1q-types:traffic-class-type
│ │   +--rw lldp-dcbx-tlv:tc-bandwidth-table* [traffic-class]
│ │   │   +--rw lldp-dcbx-tlv:traffic-class          dot1q-types:traffic-class-type
│ │   │   +--rw lldp-dcbx-tlv:percentage-bandwidth?   uint8
│ │   +--rw lldp-dcbx-tlv:tsa-assignment-table* [tsa-traffic-class]
│ │       +--rw lldp-dcbx-tlv:tsa-traffic-class                  dot1q-types:traffic-class-type
│ │       +--rw lldp-dcbx-tlv:transmission-selection-algorithm?   identityref
│ +--rw lldp-dcbx-tlv:pfc-tlv-extension
│ │   +--rw lldp-dcbx-tlv:willing?               boolean
│ │   +--rw lldp-dcbx-tlv:macsec-bypass-capable?   boolean
│ │   +--rw lldp-dcbx-tlv:number-tc-capable?       dot1q-types:num-traffic-class-type
│ │   +--rw lldp-dcbx-tlv:enable?                bits
│ +--rw lldp-dcbx-tlv:application-priority-tlv-extension
│ │   +--rw lldp-dcbx-tlv:application-priority-table* [application-priority]
│ │       +--rw lldp-dcbx-tlv:application-priority            dot1q-types:priority-type
│ │       +--rw lldp-dcbx-tlv:application-priority-selector?   identityref
│ │       +--rw lldp-dcbx-tlv:application-priority-protocol?   uint16
│ +--rw lldp-dcbx-tlv:application-vlan-tlv-extension
│     +--rw lldp-dcbx-tlv:application-vlan-table* [application-vlan]
│         +--rw lldp-dcbx-tlv:application-vlan            dot1q-types:vlanid
│         +--rw lldp-dcbx-tlv:application-vlan-selector?   identityref
│         +--rw lldp-dcbx-tlv:application-vlan-protocol?   uint16
+--rw lldp-basic-tlv:vid-usage-digest-tlv-extension
│   +--ro lldp-basic-tlv:vid-usage-digest?   uint32
+--rw lldp-basic-tlv:management-vid-tlv-extension
│   +--rw lldp-basic-tlv:management-vid?   dot1qtypes:vlanid
+--rw lldp-tr-tlv:topology-recognition-tlv-extension
    +--ro lldp-tr-tlv:device-type?      enumeration
    +--rw lldp-tr-tlv:topology-level?   uint8

notifications:
  +---n remote-table-change
     +--ro remote-insert?    -> /lldp/remote-statistics/remote-inserts
     +--ro remote-delete?    -> /lldp/remote-statistics/remote-deletes
     +--ro remote-drops?     -> /lldp/remote-statistics/remote-drops
     +--ro remote-ageouts?   -> /lldp/remote-statistics/remote-ageouts

grouping lldp-cfg
  +-- message-fast-tx?             uint32
  +-- message-tx-hold-multiplier?   uint32
  +-- message-tx-interval?         uint32
  +-- reinit-delay?                uint32
  +-- tx-credit-max?               uint32
  +-- tx-fast-init?                uint32
  +-- notification-interval?       uint32

module: ieee802-dot1q-ats
  +--rw stream-gates
  │   +--rw stream-gate-instance-table* [stream-gate-instance-id]
  │   │   +--rw stream-gate-instance-id   uint32
  │   │   +--rw gate-enable?              boolean
```

```
 │  │  +--rw admin-gate-states?          gate-state-value-type
 │  │  +--rw admin-ipv?                  ipv-spec-type
 │  +--ro max-stream-gate-instances?     uint32
 +--rw stream-filters
    +--rw stream-filter-instance-table* [stream-filter-instance-id]
    │  +--rw stream-filter-instance-id                           uint32
    │  +--rw (stream-handle-spec)?
    │  │  +--:(wildcard)
    │  │  │  +--rw wildcard?                                     empty
    │  │  +--:(stream-handle)
    │  │     +--rw stream-handle                                uint32
    │  +--rw priority-spec                                      priority-spec-type
    │  +--rw max-sdu-size                                       uint32
    │  +--rw stream-blocked-due-to-oversize-frame-enabled?      boolean
    │  +--rw stream-blocked-due-to-oversize-frame?              boolean
    │  +--rw stream-gate-ref                                    -> ../../../stream-gates/stream-gate-instance-table/stream-gate-instance-id
    │  +--rw schedulers
    │  │  +--rw scheduler-instance-table* [scheduler-instance-id]
    │  │  │  +--rw scheduler-instance-id         uint32
    │  │  │  +--rw committed-information-rate     uint64
    │  │  │  +--rw committed-burst-size           uint32
    │  │  │  +--rw scheduler-group-ref            -> ../../../scheduler-groups/scheduler-group-instance-table/scheduler-group-instance-id
    │  │  +--ro max-scheduler-instances?    uint32
    │  +--rw scheduler-groups
    │  │  +--rw scheduler-group-instance-table* [scheduler-group-instance-id]
    │  │  │  +--rw scheduler-group-instance-id    uint32
    │  │  │  +--rw max-residence-time             uint32
    │  │  +--ro max-scheduler-group-instances?       uint32
    │  │  +--rw scheduler-timing-characteristics
    │  │     +--ro scheduler-timing-characteristics-table* [reception-port transmission-port]
    │  │        +--ro reception-port                dot1qtypes:port-number-type
    │  │        +--ro transmission-port             dot1qtypes:port-number-type
    │  │        +--ro clock-offset-variation-max    uint32
    │  │        +--ro clock-rate-deviation-max      uint32
    │  │        +--ro arrival-recognition-delay-max uint32
    │  │        +--ro processing-delay-min          uint32
    │  │        +--ro processing-delay-max          uint32
    │  +--rw scheduler
    │     +--rw scheduler-ref?      -> ../../schedulers/scheduler-instance-table/scheduler-instance-id
    │     +--rw scheduler-enable?   boolean
    +--ro max-stream-filter-instances?    uint32

grouping ats-port-parameters
   +--ro discarded-frames-count?    yang:counter64
grouping ats-parameters
   +-- schedulers
   │  +-- scheduler-instance-table* [scheduler-instance-id]
   │  │  +-- scheduler-instance-id         uint32
   │  │  +-- committed-information-rate     uint64
   │  │  +-- committed-burst-size           uint32
   │  │  +-- scheduler-group-ref            -> ../../../scheduler-groups/scheduler-group-instance-table/scheduler-group-instance-id
   │  +--ro max-scheduler-instances?    uint32
   +-- scheduler-groups
      +-- scheduler-group-instance-table* [scheduler-group-instance-id]
      │  +-- scheduler-group-instance-id?   uint32
      │  +-- max-residence-time             uint32
      +--ro max-scheduler-group-instances?       uint32
      +-- scheduler-timing-characteristics
         +--ro scheduler-timing-characteristics-table* [reception-port transmission-port]
            +--ro reception-port                dot1qtypes:port-number-type
            +--ro transmission-port             dot1qtypes:port-number-type
            +--ro clock-offset-variation-max    uint32
            +--ro clock-rate-deviation-max      uint32
            +--ro arrival-recognition-delay-max uint32
            +--ro processing-delay-min          uint32
```

```
            +--ro processing-delay-max         uint32

module: ieee802-dot1q-bridge
  +--rw bridges
     +--rw bridge* [name]
        +--rw name             dot1qtypes:name-type
        +--rw address          ieee:mac-address
        +--rw bridge-type      identityref
        +--ro ports?           uint16
        +--ro up-time?         yang:zero-based-counter32
        +--ro components?      uint32
        +--rw component* [name]
           +--rw name                          string
           +--rw id?                           uint32
           +--rw type                          identityref
           +--rw address?                      ieee:mac-address
           +--rw traffic-class-enabled?        boolean
           +--ro ports?                        uint16
           +--ro bridge-port*                  if:interface-ref
           +--ro capabilities
           |  +--ro extended-filtering?           boolean
           |  +--ro traffic-classes?              boolean
           |  +--ro static-entry-individual-port? boolean
           |  +--ro ivl-capable?                  boolean
           |  +--ro svl-capable?                  boolean
           |  +--ro hybrid-capable?               boolean
           |  +--ro configurable-pvid-tagging?    boolean
           |  +--ro local-vlan-capable?           boolean
           +--rw filtering-database
           |  +--rw aging-time?                         uint32
           |  +--ro size?                               yang:gauge32
           |  +--ro static-entries?                     yang:gauge32
           |  +--ro dynamic-entries?                    yang:gauge32
           |  +--ro static-vlan-registration-entries?   yang:gauge32
           |  +--ro dynamic-vlan-registration-entries?  yang:gauge32
           |  +--ro mac-address-registration-entries?   yang:gauge32 {extended-filtering-services}?
           |  +--rw filtering-entry* [database-id vids address]
           |  |  +--rw database-id    uint32
           |  |  +--rw address        ieee:mac-address
           |  |  +--rw vids           dot1qtypes:vid-range-type
           |  |  +--rw entry-type?    enumeration
           |  |  +--rw port-map* [port-ref]
           |  |  |  +--rw port-ref                          port-number-type
           |  |  |  +--rw (map-type)?
           |  |  |     +--:(static-filtering-entries)
           |  |  |     |  +--rw static-filtering-entries
           |  |  |     |     +--rw control-element?         enumeration
           |  |  |     |     +--rw connection-identifier?   port-number-type
           |  |  |     +--:(static-vlan-registration-entries)
           |  |  |     |  +--rw static-vlan-registration-entries
           |  |  |     |     +--rw registrar-admin-control?   enumeration
           |  |  |     |     +--rw vlan-transmitted?          enumeration
           |  |  |     +--:(mac-address-registration-entries)
           |  |  |     |  +--rw mac-address-registration-entries
           |  |  |     |     +--rw control-element?   enumeration
           |  |  |     +--:(dynamic-vlan-registration-entries)
           |  |  |     |  +--rw dynamic-vlan-registration-entries
           |  |  |     |     +--rw control-element?   enumeration
           |  |  |     +--:(dynamic-reservation-entries)
           |  |  |     |  +--rw dynamic-reservation-entries
           |  |  |     |     +--rw control-element?   enumeration
           |  |  |     +--:(dynamic-filtering-entries)
           |  |  |        +--rw dynamic-filtering-entries
           |  |  |           +--rw control-element?   enumeration
           |  |  +--ro status?          enumeration
```

```
   |  +--rw vlan-registration-entry* [database-id vids]
   |     +--rw database-id    uint32
   |     +--rw vids           dot1qtypes:vid-range-type
   |     +--rw entry-type?    enumeration
   |     +--rw port-map* [port-ref]
   |        +--rw port-ref                              port-number-type
   |        +--rw (map-type)?
   |           +--:(static-filtering-entries)
   |           |  +--rw static-filtering-entries
   |           |     +--rw control-element?          enumeration
   |           |     +--rw connection-identifier?    port-number-type
   |           +--:(static-vlan-registration-entries)
   |           |  +--rw static-vlan-registration-entries
   |           |     +--rw registrar-admin-control?    enumeration
   |           |     +--rw vlan-transmitted?           enumeration
   |           +--:(mac-address-registration-entries)
   |           |  +--rw mac-address-registration-entries
   |           |     +--rw control-element?    enumeration
   |           +--:(dynamic-vlan-registration-entries)
   |           |  +--rw dynamic-vlan-registration-entries
   |           |     +--rw control-element?    enumeration
   |           +--:(dynamic-reservation-entries)
   |           |  +--rw dynamic-reservation-entries
   |           |     +--rw control-element?    enumeration
   |           +--:(dynamic-filtering-entries)
   |              +--rw dynamic-filtering-entries
   |                 +--rw control-element?    enumeration
+--rw permanent-database
   |  +--ro size?                              yang:gauge32
   |  +--ro static-entries?                    yang:gauge32
   |  +--ro static-vlan-registration-entries?  yang:gauge32
   |  +--rw filtering-entry* [database-id vids address]
   |     +--rw database-id    uint32
   |     +--rw address        ieee:mac-address
   |     +--rw vids           dot1qtypes:vid-range-type
   |     +--ro status?        enumeration
   |     +--rw port-map* [port-ref]
   |        +--rw port-ref                              port-number-type
   |        +--rw (map-type)?
   |           +--:(static-filtering-entries)
   |           |  +--rw static-filtering-entries
   |           |     +--rw control-element?          enumeration
   |           |     +--rw connection-identifier?    port-number-type
   |           +--:(static-vlan-registration-entries)
   |           |  +--rw static-vlan-registration-entries
   |           |     +--rw registrar-admin-control?    enumeration
   |           |     +--rw vlan-transmitted?           enumeration
   |           +--:(mac-address-registration-entries)
   |           |  +--rw mac-address-registration-entries
   |           |     +--rw control-element?    enumeration
   |           +--:(dynamic-vlan-registration-entries)
   |           |  +--rw dynamic-vlan-registration-entries
   |           |     +--rw control-element?    enumeration
   |           +--:(dynamic-reservation-entries)
   |           |  +--rw dynamic-reservation-entries
   |           |     +--rw control-element?    enumeration
   |           +--:(dynamic-filtering-entries)
   |              +--rw dynamic-filtering-entries
   |                 +--rw control-element?    enumeration
+--rw bridge-vlan
   |  +--ro version?                uint16
   |  +--ro max-vids?               uint16
   |  +--ro override-default-pvid?  boolean
   |  +--ro protocol-template?      dot1qtypes:protocol-frame-format-type {port-and-protocol-based-vlan}?
   |  +--ro max-msti?               uint16
```

```
  │   +--rw vlan* [vid]
  │   │   +--rw vid                dot1qtypes:vlan-index-type
  │   │   +--rw name?              dot1qtypes:name-type
  │   │   +--ro untagged-ports*    if:interface-ref
  │   │   +--ro egress-ports*      if:interface-ref
  │   +--rw protocol-group-database* [db-index] {port-and-protocol-based-vlan}?
  │   │   +--rw db-index               uint16
  │   │   +--rw frame-format-type?      dot1qtypes:protocol-frame-format-type
  │   │   +--rw (frame-format)?
  │   │   │   +--:(ethernet-rfc1042-snap8021H)
  │   │   │   │   +--rw ethertype?          dot1qtypes:ethertype-type
  │   │   │   +--:(snap-other)
  │   │   │   │   +--rw protocol-id?        string
  │   │   │   +--:(llc-other)
  │   │   │       +--rw dsap-ssap-pairs
  │   │   │           +--rw llc-address?    string
  │   │   +--rw group-id?               uint32
  │   +--rw vid-to-fid-allocation* [vids]
  │   │   +--rw vids               dot1qtypes:vid-range-type
  │   │   +--ro fid?               uint32
  │   │   +--ro allocation-type?   enumeration
  │   +--rw fid-to-vid-allocation* [fid]
  │   │   +--rw fid                uint32
  │   │   +--ro allocation-type?   enumeration
  │   │   +--ro vid*               dot1qtypes:vlan-index-type
  │   +--rw vid-to-fid* [vid]
  │       +--rw vid    dot1qtypes:vlan-index-type
  │       +--rw fid?   uint32
+--rw bridge-mst
  │   +--rw mstid*                      dot1qtypes:mstid-type
  │   +--rw fid-to-mstid* [fid]
  │   │   +--rw fid       uint32
  │   │   +--rw mstid?    dot1qtypes:mstid-type
  │   +--rw fid-to-mstid-allocation* [fids]
  │       +--rw fids     dot1qtypes:vid-range-type
  │       +--rw mstid?   dot1qtypes:mstid-type
+--rw bridge-sfsg:stream-gates
  │   +--rw bridge-sfsg:stream-gate-instance-table* [stream-gate-instance-id]
  │   │   +--rw bridge-sfsg:stream-gate-instance-id    uint32
  │   │   +--rw bridge-sfsg:gate-enable?               boolean
  │   │   +--rw bridge-sfsg:admin-gate-states?         gate-state-value-type
  │   │   +--rw bridge-sfsg:admin-ipv?                 ipv-spec-type
  │   +--ro bridge-sfsg:max-stream-gate-instances?   uint32
+--rw bridge-sfsg:stream-filters
  │   +--rw bridge-sfsg:stream-filter-instance-table* [stream-filter-instance-id]
  │   │   +--rw bridge-sfsg:stream-filter-instance-id                  uint32
  │   │   +--rw (bridge-sfsg:stream-handle-spec)?
  │   │   │   +--:(bridge-sfsg:wildcard)
  │   │   │   │   +--rw bridge-sfsg:wildcard?                          empty
  │   │   │   +--:(bridge-sfsg:stream-handle)
  │   │   │       +--rw bridge-sfsg:stream-handle                     uint32
  │   │   +--rw bridge-sfsg:priority-spec                             priority-spec-type
  │   │   +--rw bridge-sfsg:max-sdu-size                              uint32
  │   │   +--rw bridge-sfsg:stream-blocked-due-to-oversize-frame-enabled?  boolean
  │   │   +--rw bridge-sfsg:stream-blocked-due-to-oversize-frame?     boolean
  │   │   +--rw bridge-sfsg:stream-gate-ref                           -> ../../../stream-gates/stream-gate-instance-table/stream-gate-instance-id
  │   +--ro bridge-sfsg:max-stream-filter-instances?    uint32
+--rw bridge-ci:ci-master-enable?        boolean {bridge-congestion-isolation}?
+--ro bridge-ci:ci-cim-tx-priority?      dot1q-types:priority-type {bridge-congestion-isolation}?
+--ro bridge-ci:ci-max-flow-life?        uint32 {bridge-congestion-isolation}?
+--rw bridge-ci:ci-peers {bridge-congestion-isolation}?
  │   +--rw bridge-ci:ci-peer-table* [reception-port]
  │   │   +--rw bridge-ci:reception-port         dot1q-types:port-number-type
  │   │   +--rw bridge-ci:cim-type?              enumeration
  │   │   +--rw bridge-ci:peer-mac-address?      ieee:mac-address
```

```
│   │      +--rw bridge-ci:peer-ipv4-address?    inet:ipv4-address
│   │      +--rw bridge-ci:peer-ipv6-address?    inet:ipv6-address
│   │      +--rw bridge-ci:peer-udp-port?        inet:port-number
│   │      +--rw bridge-ci:peer-cim-encap-len?   uint16
│   +--ro bridge-ci:max-ci-peer-entries?   uint32
+--rw bridge-ci:ci-streams {bridge-congestion-isolation}?
│   +--rw bridge-ci:ci-stream-table* [stream-handle-id]
│   │   +--ro bridge-ci:stream-handle-id    uint32
│   │   +--ro bridge-ci:cim-count?          uint16
│   │   +--ro bridge-ci:create-time?        yang:timeticks
│   │   +--ro bridge-ci:create-mask?        bits
│   +--ro bridge-ci:queue-key?          uint16
│   +--ro bridge-ci:dest-mac-address?   ieee:mac-address
│   +--ro bridge-ci:source-mac-address? ieee:mac-address
│   +--ro bridge-ci:vid?                dot1q-types:vlan-index-type
│   +--ro bridge-ci:msdu?               yang:hex-string
+--ro bridge-ci:max-ci-stream-entries?    uint32 {bridge-congestion-isolation}?
+--rw bridge-ci:stream-gates {bridge-congestion-isolation}?
│   +--rw bridge-ci:stream-gate-instance-table* [stream-gate-instance-id]
│   │   +--rw bridge-ci:stream-gate-instance-id    uint32
│   │   +--rw bridge-ci:gate-enable?               boolean
│   │   +--rw bridge-ci:admin-gate-states?         gate-state-value-type
│   │   +--rw bridge-ci:admin-ipv?                 ipv-spec-type
│   +--ro bridge-ci:max-stream-gate-instances?    uint32
+--rw bridge-ci:stream-filters {bridge-congestion-isolation}?
│   +--rw bridge-ci:stream-filter-instance-table* [stream-filter-instance-id]
│   │   +--rw bridge-ci:stream-filter-instance-id                         uint32
│   │   +--rw (bridge-ci:stream-handle-spec)?
│   │   │  +--:(bridge-ci:wildcard)
│   │   │  │  +--rw bridge-ci:wildcard?                                   empty
│   │   │  +--:(bridge-ci:stream-handle)
│   │   │  │  +--rw bridge-ci:stream-handle                              uint32
│   │   │  +--:(bridge-ci:null-handle) {bridge-congestion-isolation}?
│   │   │     +--rw bridge-ci:null-handle?                                empty
│   │   +--rw bridge-ci:priority-spec                                     priority-spec-type
│   │   +--rw bridge-ci:max-sdu-size                                      uint32
│   │   +--rw bridge-ci:stream-blocked-due-to-oversize-frame-enabled?     boolean
│   │   +--rw bridge-ci:stream-blocked-due-to-oversize-frame?             boolean
│   │   +--rw bridge-ci:stream-gate-ref                                   -> ../../../stream-gates/stream-gate-instance-table/stream-gate-instance-id
│   +--ro bridge-ci:max-stream-filter-instances?    uint32
+--rw bridge-ats:stream-gates
│   +--rw bridge-ats:stream-gate-instance-table* [stream-gate-instance-id]
│   │   +--rw bridge-ats:stream-gate-instance-id    uint32
│   │   +--rw bridge-ats:gate-enable?               boolean
│   │   +--rw bridge-ats:admin-gate-states?         gate-state-value-type
│   │   +--rw bridge-ats:admin-ipv?                 ipv-spec-type
│   +--ro bridge-ats:max-stream-gate-instances?    uint32
+--rw bridge-ats:stream-filters
    +--rw bridge-ats:stream-filter-instance-table* [stream-filter-instance-id]
        +--rw bridge-ats:stream-filter-instance-id                         uint32
        +--rw (bridge-ats:stream-handle-spec)?
        │  +--:(bridge-ats:wildcard)
        │  │  +--rw bridge-ats:wildcard?                                   empty
        │  +--:(bridge-ats:stream-handle)
        │     +--rw bridge-ats:stream-handle                              uint32
        +--rw bridge-ats:priority-spec                                     priority-spec-type
        +--rw bridge-ats:max-sdu-size                                      uint32
        +--rw bridge-ats:stream-blocked-due-to-oversize-frame-enabled?     boolean
        +--rw bridge-ats:stream-blocked-due-to-oversize-frame?             boolean
        +--rw bridge-ats:stream-gate-ref                                   -> ../../../stream-gates/stream-gate-instance-table/stream-gate-instance-id
        +--rw bridge-ats:schedulers
           +--rw bridge-ats:scheduler-instance-table* [scheduler-instance-id]
               +--rw bridge-ats:scheduler-instance-id         uint32
               +--rw bridge-ats:committed-information-rate     uint64
               +--rw bridge-ats:committed-burst-size          uint32
```

```
                    |   |   |   +--rw bridge-ats:scheduler-group-ref                     -> ../../../scheduler-groups/scheduler-group-instance-table/scheduler-group-instance-id
                    |   |   +--ro bridge-ats:max-scheduler-instances?      uint32
                    |   +--rw bridge-ats:scheduler-groups
                    |   |   +--rw bridge-ats:scheduler-group-instance-table* [scheduler-group-instance-id]
                    |   |   |   +--rw bridge-ats:scheduler-group-instance-id    uint32
                    |   |   |   +--rw bridge-ats:max-residence-time             uint32
                    |   |   +--ro bridge-ats:max-scheduler-group-instances?      uint32
                    |   |   +--rw bridge-ats:scheduler-timing-characteristics
                    |   |       +--ro bridge-ats:scheduler-timing-characteristics-table* [reception-port transmission-port]
                    |   |           +--ro bridge-ats:reception-port                     dot1qtypes:port-number-type
                    |   |           +--ro bridge-ats:transmission-port                  dot1qtypes:port-number-type
                    |   |           +--ro bridge-ats:clock-offset-variation-max         uint32
                    |   |           +--ro bridge-ats:clock-rate-deviation-max           uint32
                    |   |           +--ro bridge-ats:arrival-recognition-delay-max      uint32
                    |   |           +--ro bridge-ats:processing-delay-min               uint32
                    |   |           +--ro bridge-ats:processing-delay-max               uint32
                    |   +--rw bridge-ats:scheduler
                    |       +--rw bridge-ats:scheduler-ref?       -> ../../schedulers/scheduler-instance-table/scheduler-instance-id
                    |       +--rw bridge-ats:scheduler-enable?    boolean
                    +--ro bridge-ats:max-stream-filter-instances?      uint32

module: ieee802-dot1q-congestion-isolation
  +--rw stream-gates
  |  +--rw stream-gate-instance-table* [stream-gate-instance-id]
  |  |  +--rw stream-gate-instance-id    uint32
  |  |  +--rw gate-enable?               boolean
  |  |  +--rw admin-gate-states?         gate-state-value-type
  |  |  +--rw admin-ipv?                 ipv-spec-type
  |  +--ro max-stream-gate-instances?    uint32
  +--rw stream-filters
     +--rw stream-filter-instance-table* [stream-filter-instance-id]
     |  +--rw stream-filter-instance-id                     uint32
     |  +--rw (stream-handle-spec)?
     |  |  +--:(wildcard)
     |  |  |  +--rw wildcard?                                empty
     |  |  +--:(stream-handle)
     |  |  |  +--rw stream-handle                           uint32
     |  |  +--:(null-handle) {congestion-isolation}?
     |  |     +--rw null-handle?                            empty
     |  +--rw priority-spec                                 priority-spec-type
     |  +--rw max-sdu-size                                  uint32
     |  +--rw stream-blocked-due-to-oversize-frame-enabled?   boolean
     |  +--rw stream-blocked-due-to-oversize-frame?         boolean
     |  +--rw stream-gate-ref                               -> ../../../stream-gates/stream-gate-instance-table/stream-gate-instance-id
     +--ro max-stream-filter-instances?      uint32

  grouping cip-port-parameters
    +--ro cip-mac-address?      ieee:mac-address
    +--ro cip-ipv4-address?     inet:ipv4-address
    +--ro cip-ipv6-address?     inet:ipv6-address
    +--ro cip-cim-port?         inet:port-number
    +-- queue-map* [priority]
    |  +-- priority?                      dot1q-types:priority-type
    |  +-- abs-traffic-class-plus-one?    abs-traffic-class-plus-one-type
    +-- min-header-octets?    uint16
    +-- max-cim-tx?           uint16
  grouping cip-parameters
    +-- ci-master-enable?         boolean
    +--ro ci-cim-tx-priority?     dot1q-types:priority-type
    +--ro ci-max-flow-life?       uint32
    +-- ci-peers
    |  +-- ci-peer-table* [reception-port]
    |  |  +-- reception-port?        dot1q-types:port-number-type
    |  |  +-- cim-type?              enumeration
    |  |  +-- peer-mac-address?      ieee:mac-address
```

```
       │   │  +-- peer-ipv4-address?      inet:ipv4-address
       │   │  +-- peer-ipv6-address?      inet:ipv6-address
       │   │  +-- peer-udp-port?          inet:port-number
       │   │  +-- peer-cim-encap-len?     uint16
       │   +--ro max-ci-peer-entries?    uint32
       +-- ci-streams
       │   +--ro ci-stream-table* [stream-handle-id]
       │   │  +--ro stream-handle-id?    uint32
       │   │  +--ro cim-count?           uint16
       │   │  +--ro create-time?         yang:timeticks
       │   │  +--ro create-mask?         bits
       │   +--ro queue-key?              uint16
       │   +--ro dest-mac-address?       ieee:mac-address
       │   +--ro source-mac-address?     ieee:mac-address
       │   +--ro vid?                    dot1q-types:vlan-index-type
       │   +--ro msdu?                   yang:hex-string
       +--ro max-ci-stream-entries?    uint32

module: ieee802-dot1q-lldp-basic-tlv

  grouping port-vlan-id-tlv
    +-- port-vlan-id?    dot1qtypes:vlanid
  grouping port-and-protocol-vlan-id-tlv
    +-- port-vlan-id?    dot1qtypes:vlanid
    +-- flags?           bits
  grouping port-vlan-name-tlv
    +-- vlan-id?           dot1qtypes:vlanid
    +-- port-vlan-name?    string
  grouping protocol-identity-tlv
    +-- protocol-identity?    string
  grouping vid-usage-digest-tlv
    +--ro vid-usage-digest?    uint32
  grouping management-vid-tlv
    +-- management-vid?    dot1qtypes:vlanid
  grouping link-aggregation-tlv
    +-- aggregation-status?    bits
    +-- aggregated-port-id?    uint32

module: ieee802-dot1q-lldp-ci-tlv

  grouping congestion-isolation-tlv
    +-- queue-map* [priority]
    │   +-- priority?        dot1q-types:priority-type
    │   +-- queue-config?    dot1q-ci:abs-traffic-class-plus-one-type
    +-- cim-encap-length?    uint16
    +--ro mac-address?       ieee:mac-address
    +--ro udp-port-number?   inet:port-number
    +--ro ip-address?        inet:ip-address

module: ieee802-dot1q-lldp-cn-tlv

  grouping congestion-notification-tlv
    +-- per-priority-xmit-cnpv-capable?    congestion-notification-bit-vector
    +-- per-priority-xmit-ready?           congestion-notification-bit-vector

module: ieee802-dot1q-lldp-dcbx-tlv

  grouping ets-configuration-tlv
    +-- willing?                      boolean
    +-- credit-based-shaper?          boolean
    +-- traffic-classes-supported?    dot1q-types:num-traffic-class-type
    +-- priority-assignment-table* [priority]
    │   +-- priority?                         dot1q-types:priority-type
    │   +-- priority-traffic-class?           dot1q-types:traffic-class-type
    │   +-- transmission-selection-algorithm?    identityref
```

```
        +-- tc-bandwidth-table* [traffic-class]
        |  +-- traffic-class?          dot1q-types:traffic-class-type
        |  +-- percentage-bandwidth?    uint8
      +-- tsa-assignment-table* [tsa-traffic-class]
         +-- tsa-traffic-class?                    dot1q-types:traffic-class-type
         +-- transmission-selection-algorithm?    identityref
   grouping ets-recommendation-tlv
      +-- priority-assignment-table* [priority]
      |  +-- priority?                dot1q-types:priority-type
      |  +-- priority-traffic-class?    dot1q-types:traffic-class-type
      +-- tc-bandwidth-table* [traffic-class]
      |  +-- traffic-class?          dot1q-types:traffic-class-type
      |  +-- percentage-bandwidth?    uint8
      +-- tsa-assignment-table* [tsa-traffic-class]
         +-- tsa-traffic-class?                    dot1q-types:traffic-class-type
         +-- transmission-selection-algorithm?    identityref
   grouping pfc-tlv
      +-- willing?               boolean
      +-- macsec-bypass-capable?    boolean
      +-- number-tc-capable?        dot1q-types:num-traffic-class-type
      +-- enable?                bits
   grouping application-priority-tlv
      +-- application-priority-table* [application-priority]
         +-- application-priority?            dot1q-types:priority-type
         +-- application-priority-selector?    identityref
         +-- application-priority-protocol?    uint16
   grouping application-vlan-tlv
      +-- application-vlan-table* [application-vlan]
         +-- application-vlan?          dot1q-types:vlanid
         +-- application-vlan-selector?    identityref
         +-- application-vlan-protocol?    uint16

module: ieee802-dot1q-lldp-evb-tlv

   grouping evb-tlv
      +--ro evb-tlv-info-string?    binary
   grouping cdcp-tlv
      +--ro cdcp-tlv-info-string?    binary

module: ieee802-dot1q-lldp-tr-tlv

   grouping topology-recognition-tlv-lldp
      +--ro device-type?        enumeration
      +-- topology-level?    uint8
   grouping topology-recognition-tlv-port
      +-- port-orientation?    enumeration

module: ieee802-dot1q-stream-filters-gates

   grouping sfsg-parameters
      +-- stream-gates
      |  +-- stream-gate-instance-table* [stream-gate-instance-id]
      |  |  +-- stream-gate-instance-id?    uint32
      |  |  +-- gate-enable?              boolean
      |  |  +-- admin-gate-states?        gate-state-value-type
      |  |  +-- admin-ipv?                ipv-spec-type
      |  +--ro max-stream-gate-instances?    uint32
      +-- stream-filters
         +-- stream-filter-instance-table* [stream-filter-instance-id]
            |  +-- stream-filter-instance-id                    uint32
            |  +-- (stream-handle-spec)?
            |  |  +--:(wildcard)
            |  |  |  +-- wildcard?                          empty
            |  |  +--:(stream-handle)
            |  |     +-- stream-handle                      uint32
```

```
    |   +-- priority-spec                                    priority-spec-type
    |   +-- max-sdu-size                                     uint32
    |   +-- stream-blocked-due-to-oversize-frame-enabled?    boolean
    |   +-- stream-blocked-due-to-oversize-frame?            boolean
    |   +-- stream-gate-ref                                  -> ../../../stream-gates/stream-gate-instance-table/stream-gate-instance-id
    +--ro max-stream-filter-instances?    uint32

module: ieee802-dot1q-types

  grouping dot1q-tag-classifier-grouping
    +-- tag-type    dot1q-tag-type
    +-- vlan-id     vlanid
  grouping dot1q-tag-or-any-classifier-grouping
    +-- tag-type    dot1q-tag-type
    +-- vlan-id     union
  grouping dot1q-tag-ranges-classifier-grouping
    +-- tag-type    dot1q-tag-type
    +-- vlan-ids    vid-range-type
  grouping dot1q-tag-ranges-or-any-classifier-grouping
    +-- tag-type    dot1q-tag-type
    +-- vlan-id     union
  grouping priority-regeneration-table-grouping
    +-- priority0?    priority-type
    +-- priority1?    priority-type
    +-- priority2?    priority-type
    +-- priority3?    priority-type
    +-- priority4?    priority-type
    +-- priority5?    priority-type
    +-- priority6?    priority-type
    +-- priority7?    priority-type
  grouping pcp-decoding-table-grouping
    +-- pcp-decoding-map* [pcp]
       +-- pcp?                 pcp-selection-type
       +-- priority-map* [priority-code-point]
          +-- priority-code-point?    priority-type
          +-- priority?               priority-type
          +-- drop-eligible?          boolean
  grouping pcp-encoding-table-grouping
    +-- pcp-encoding-map* [pcp]
       +-- pcp?                 pcp-selection-type
       +-- priority-map* [priority dei]
          +-- priority?               priority-type
          +-- dei?                    boolean
          +-- priority-code-point?    priority-type
  grouping service-access-priority-table-grouping
    +-- priority0?    priority-type
    +-- priority1?    priority-type
    +-- priority2?    priority-type
    +-- priority3?    priority-type
    +-- priority4?    priority-type
    +-- priority5?    priority-type
    +-- priority6?    priority-type
    +-- priority7?    priority-type
  grouping traffic-class-table-grouping
    +-- traffic-class-map* [priority]
       +-- priority?                 priority-type
       +-- available-traffic-class* [num-traffic-class]
          +-- num-traffic-class?    uint8
          +-- traffic-class?        traffic-class-type
  grouping port-map-grouping
    +-- port-map* [port-ref]
       +-- port-ref?                            port-number-type
       +-- (map-type)?
          +--:(static-filtering-entries)
          |  +-- static-filtering-entries
```

```
                 |      +-- control-element?          enumeration
                 |      +-- connection-identifier?    port-number-type
              +--:(static-vlan-registration-entries)
              |   +-- static-vlan-registration-entries
              |      +-- registrar-admin-control?    enumeration
              |      +-- vlan-transmitted?            enumeration
              +--:(mac-address-registration-entries)
              |   +-- mac-address-registration-entries
              |      +-- control-element?    enumeration
              +--:(dynamic-vlan-registration-entries)
              |   +-- dynamic-vlan-registration-entries
              |      +-- control-element?    enumeration
              +--:(dynamic-reservation-entries)
              |   +-- dynamic-reservation-entries
              |      +-- control-element?    enumeration
              +--:(dynamic-filtering-entries)
                  +-- dynamic-filtering-entries
                     +-- control-element?    enumeration
  grouping bridge-port-statistics-grouping
    +-- delay-exceeded-discards?           yang:counter64
    +-- mtu-exceeded-discards?             yang:counter64
    +-- frame-rx?                          yang:counter64
    +-- octets-rx?                         yang:counter64
    +-- frame-tx?                          yang:counter64
    +-- octets-tx?                         yang:counter64
    +-- discard-inbound?                   yang:counter64
    +-- forward-outbound?                  yang:counter64
    +-- discard-lack-of-buffers?           yang:counter64
    +-- discard-transit-delay-exceeded?    yang:counter64
    +-- discard-on-error?                  yang:counter64

module: ietf-interfaces
  +--rw interfaces
  |  +--rw interface* [name]
  |     +--rw name                         string
  |     +--rw description?                 string
  |     +--rw type                         identityref
  |     +--rw enabled?                     boolean
  |     +--rw link-up-down-trap-enable?    enumeration {if-mib}?
  |     +--ro admin-status                 enumeration {if-mib}?
  |     +--ro oper-status                  enumeration
  |     +--ro last-change?                 yang:date-and-time
  |     +--ro if-index                     int32 {if-mib}?
  |     +--ro phys-address?                yang:phys-address
  |     +--ro higher-layer-if*             interface-ref
  |     +--ro lower-layer-if*              interface-ref
  |     +--ro speed?                       yang:gauge64
  |     +--ro statistics
  |     |  +--ro discontinuity-time     yang:date-and-time
  |     |  +--ro in-octets?             yang:counter64
  |     |  +--ro in-unicast-pkts?       yang:counter64
  |     |  +--ro in-broadcast-pkts?     yang:counter64
  |     |  +--ro in-multicast-pkts?     yang:counter64
  |     |  +--ro in-discards?           yang:counter32
  |     |  +--ro in-errors?             yang:counter32
  |     |  +--ro in-unknown-protos?     yang:counter32
  |     |  +--ro out-octets?            yang:counter64
  |     |  +--ro out-unicast-pkts?      yang:counter64
  |     |  +--ro out-broadcast-pkts?    yang:counter64
  |     |  +--ro out-multicast-pkts?    yang:counter64
  |     |  +--ro out-discards?          yang:counter32
  |     |  +--ro out-errors?            yang:counter32
  |     +--rw dot1q:bridge-port
  |        +--rw dot1q:component-name?                       string
  |        +--rw dot1q:port-type?                            identityref
```

```
  │   +--rw dot1q:pvid?                                    dot1qtypes:vlan-index-type
  │   +--rw dot1q:default-priority?                        dot1qtypes:priority-type
  │   +--rw dot1q:priority-regeneration
  │   │   +--rw dot1q:priority0?    priority-type
  │   │   +--rw dot1q:priority1?    priority-type
  │   │   +--rw dot1q:priority2?    priority-type
  │   │   +--rw dot1q:priority3?    priority-type
  │   │   +--rw dot1q:priority4?    priority-type
  │   │   +--rw dot1q:priority5?    priority-type
  │   │   +--rw dot1q:priority6?    priority-type
  │   │   +--rw dot1q:priority7?    priority-type
  │   +--rw dot1q:pcp-selection?                           dot1qtypes:pcp-selection-type
  │   +--rw dot1q:pcp-decoding-table
  │   │   +--rw dot1q:pcp-decoding-map* [pcp]
  │   │      +--rw dot1q:pcp                 pcp-selection-type
  │   │      +--rw dot1q:priority-map* [priority-code-point]
  │   │         +--rw dot1q:priority-code-point    priority-type
  │   │         +--rw dot1q:priority?             priority-type
  │   │         +--rw dot1q:drop-eligible?        boolean
  │   +--rw dot1q:pcp-encoding-table
  │   │   +--rw dot1q:pcp-encoding-map* [pcp]
  │   │      +--rw dot1q:pcp                 pcp-selection-type
  │   │      +--rw dot1q:priority-map* [priority dei]
  │   │         +--rw dot1q:priority                priority-type
  │   │         +--rw dot1q:dei                     boolean
  │   │         +--rw dot1q:priority-code-point?    priority-type
  │   +--rw dot1q:use-dei?                                 boolean
  │   +--rw dot1q:drop-encoding?                           boolean
  │   +--rw dot1q:service-access-priority-selection?       boolean
  │   +--rw dot1q:service-access-priority
  │   │   +--rw dot1q:priority0?    priority-type
  │   │   +--rw dot1q:priority1?    priority-type
  │   │   +--rw dot1q:priority2?    priority-type
  │   │   +--rw dot1q:priority3?    priority-type
  │   │   +--rw dot1q:priority4?    priority-type
  │   │   +--rw dot1q:priority5?    priority-type
  │   │   +--rw dot1q:priority6?    priority-type
  │   │   +--rw dot1q:priority7?    priority-type
  │   +--rw dot1q:traffic-class
  │   │   +--rw dot1q:traffic-class-map* [priority]
  │   │      +--rw dot1q:priority                      priority-type
  │   │      +--rw dot1q:available-traffic-class* [num-traffic-class]
  │   │         +--rw dot1q:num-traffic-class    uint8
  │   │         +--rw dot1q:traffic-class?       traffic-class-type
  │   +--rw dot1q:acceptable-frame?                        enumeration
  │   +--rw dot1q:enable-ingress-filtering?               boolean
  │   +--rw dot1q:enable-restricted-vlan-registration?    boolean
  │   +--rw dot1q:enable-vid-translation-table?           boolean
  │   +--rw dot1q:enable-egress-vid-translation-table?    boolean
  │   +--rw dot1q:protocol-group-vid-set* [group-id] {port-and-protocol-based-vlan}?
  │   │   +--rw dot1q:group-id    uint32
  │   │   +--rw dot1q:vid*        dot1qtypes:vlanid
  │   +--rw dot1q:admin-point-to-point?                    enumeration
  │   +--ro dot1q:protocol-based-vlan-classification?      boolean {port-and-protocol-based-vlan}?
  │   +--ro dot1q:max-vid-set-entries?                     uint16 {port-and-protocol-based-vlan}?
  │   +--ro dot1q:port-number?                             dot1qtypes:port-number-type
  │   +--ro dot1q:address?                                 ieee:mac-address
  │   +--ro dot1q:capabilities?                            bits
  │   +--ro dot1q:type-capabilties?                        bits
  │   +--ro dot1q:external?                                boolean
  │   +--ro dot1q:oper-point-to-point?                     boolean
  │   +--ro dot1q:media-dependent-overhead?               uint8
  │   +--ro dot1q:statistics
  │   │   +--ro dot1q:delay-exceeded-discards?            yang:counter64
  │   │   +--ro dot1q:mtu-exceeded-discards?              yang:counter64
```

```
|          |    +--ro dot1q:frame-rx?                             yang:counter64
|          |    +--ro dot1q:octets-rx?                            yang:counter64
|          |    +--ro dot1q:frame-tx?                             yang:counter64
|          |    +--ro dot1q:octets-tx?                            yang:counter64
|          |    +--ro dot1q:discard-inbound?                      yang:counter64
|          |    +--ro dot1q:forward-outbound?                     yang:counter64
|          |    +--ro dot1q:discard-lack-of-buffers?              yang:counter64
|          |    +--ro dot1q:discard-transit-delay-exceeded?       yang:counter64
|          |    +--ro dot1q:discard-on-error?                     yang:counter64
|          |    +--ro dot1q:discard-on-ingress-filtering?         yang:counter64 {ingress-filtering}?
|          +--rw dot1q:vid-translations* [local-vid]
|          |    +--rw dot1q:local-vid    dot1qtypes:vlanid
|          |    +--rw dot1q:relay-vid?   dot1qtypes:vlanid
|          +--rw dot1q:egress-vid-translations* [relay-vid]
|          |    +--rw dot1q:relay-vid    dot1qtypes:vlanid
|          |    +--rw dot1q:local-vid?   dot1qtypes:vlanid
|          +--ro bridge-ci:cip-mac-address?                    ieee:mac-address {bridge-congestion-isolation}?
|          +--ro bridge-ci:cip-ipv4-address?                   inet:ipv4-address {bridge-congestion-isolation}?
|          +--ro bridge-ci:cip-ipv6-address?                   inet:ipv6-address {bridge-congestion-isolation}?
|          +--ro bridge-ci:cip-cim-port?                       inet:port-number {bridge-congestion-isolation}?
|          +--rw bridge-ci:queue-map* [priority] {bridge-congestion-isolation}?
|          |    +--rw bridge-ci:priority                       dot1q-types:priority-type
|          |    +--rw bridge-ci:abs-traffic-class-plus-one?    abs-traffic-class-plus-one-type
|          +--rw bridge-ci:min-header-octets?                  uint16 {bridge-congestion-isolation}?
|          +--rw bridge-ci:max-cim-tx?                         uint16 {bridge-congestion-isolation}?
|          +--ro bridge-ats:discarded-frames-count?            yang:counter64
x--ro interfaces-state
    x--ro interface* [name]
        x--ro name               string
        x--ro type               identityref
        x--ro admin-status       enumeration {if-mib}?
        x--ro oper-status        enumeration
        x--ro last-change?       yang:date-and-time
        x--ro if-index           int32 {if-mib}?
        x--ro phys-address?      yang:phys-address
        x--ro higher-layer-if*   interface-state-ref
        x--ro lower-layer-if*    interface-state-ref
        x--ro speed?             yang:gauge64
        x--ro statistics
            x--ro discontinuity-time    yang:date-and-time
            x--ro in-octets?            yang:counter64
            x--ro in-unicast-pkts?      yang:counter64
            x--ro in-broadcast-pkts?    yang:counter64
            x--ro in-multicast-pkts?    yang:counter64
            x--ro in-discards?          yang:counter32
            x--ro in-errors?            yang:counter32
            x--ro in-unknown-protos?    yang:counter32
            x--ro out-octets?           yang:counter64
            x--ro out-unicast-pkts?     yang:counter64
            x--ro out-broadcast-pkts?   yang:counter64
            x--ro out-multicast-pkts?   yang:counter64
            x--ro out-discards?         yang:counter32
            x--ro out-errors?           yang:counter32


module: ietf-routing
  +--rw routing
  |  +--rw router-id?                 yang:dotted-quad {router-id}?
  |  +--ro interfaces
  |  |  +--ro interface*    if:interface-ref
  |  +--rw control-plane-protocols
  |  |  +--rw control-plane-protocol* [type name]
  |  |     +--rw type               identityref
  |  |     +--rw name               string
  |  |     +--rw description?       string
  |  |     +--rw static-routes
```

```
  |  +--rw ribs
  |     +--rw rib* [name]
  |        +--rw name              string
  |        +--rw address-family    identityref
  |        +--ro default-rib?      boolean {multiple-ribs}?
  |        +--ro routes
  |        |  +--ro route* []
  |        |     +--ro route-preference?   route-preference
  |        |     +--ro next-hop
  |        |     |  +--ro (next-hop-options)
  |        |     |     +--:(simple-next-hop)
  |        |     |     |  +--ro outgoing-interface?   if:interface-ref
  |        |     |     +--:(special-next-hop)
  |        |     |     |  +--ro special-next-hop?     enumeration
  |        |     |     +--:(next-hop-list)
  |        |     |        +--ro next-hop-list
  |        |     |           +--ro next-hop* []
  |        |     |              +--ro outgoing-interface?   if:interface-ref
  |        |     +--ro source-protocol    identityref
  |        |     +--ro active?            empty
  |        |     +--ro last-updated?      yang:date-and-time
  |        +---x active-route
  |        |  +--ro output
  |        |     +--ro route
  |        |        +--ro next-hop
  |        |        |  +--ro (next-hop-options)
  |        |        |     +--:(simple-next-hop)
  |        |        |     |  +--ro outgoing-interface?   if:interface-ref
  |        |        |     +--:(special-next-hop)
  |        |        |     |  +--ro special-next-hop?     enumeration
  |        |        |     +--:(next-hop-list)
  |        |        |        +--ro next-hop-list
  |        |        |           +--ro next-hop* []
  |        |        |              +--ro outgoing-interface?   if:interface-ref
  |        |        +--ro source-protocol    identityref
  |        |        +--ro active?            empty
  |        |        +--ro last-updated?      yang:date-and-time
  |        +--rw description?      string
  o--ro routing-state
     +--ro router-id?                 yang:dotted-quad
     o--ro interfaces
     |  o--ro interface*   if:interface-state-ref
     o--ro control-plane-protocols
     |  o--ro control-plane-protocol* [type name]
     |     o--ro type    identityref
     |     o--ro name    string
     o--ro ribs
        o--ro rib* [name]
           o--ro name              string
           +--ro address-family    identityref
           o--ro default-rib?      boolean {multiple-ribs}?
           o--ro routes
           |  o--ro route* []
           |     o--ro route-preference?   route-preference
           |     o--ro next-hop
           |     |  +--ro (next-hop-options)
           |     |     +--:(simple-next-hop)
           |     |     |  +--ro outgoing-interface?   if:interface-ref
           |     |     +--:(special-next-hop)
           |     |     |  +--ro special-next-hop?     enumeration
           |     |     +--:(next-hop-list)
           |     |        +--ro next-hop-list
           |     |           +--ro next-hop* []
           |     |              +--ro outgoing-interface?   if:interface-ref
           |     +--ro source-protocol    identityref
```

```
        |       +--ro active?              empty
        |       +--ro last-updated?        yang:date-and-time
        o---x active-route
           +--ro output
              o--ro route
                 o--ro next-hop
                 |  +--ro (next-hop-options)
                 |     +--:(simple-next-hop)
                 |     |  +--ro outgoing-interface?   if:interface-ref
                 |     +--:(special-next-hop)
                 |     |  +--ro special-next-hop?      enumeration
                 |     +--:(next-hop-list)
                 |        +--ro next-hop-list
                 |           +--ro next-hop* []
                 |              +--ro outgoing-interface?   if:interface-ref
                 +--ro source-protocol    identityref
                 +--ro active?            empty
                 +--ro last-updated?      yang:date-and-time

grouping address-family
  +-- address-family    identityref
grouping router-id
  +-- router-id?    yang:dotted-quad
grouping special-next-hop
  +-- special-next-hop?    enumeration
grouping next-hop-content
  +-- (next-hop-options)
     +--:(simple-next-hop)
     |  +-- outgoing-interface?   if:interface-ref
     +--:(special-next-hop)
     |  +-- special-next-hop?      enumeration
     +--:(next-hop-list)
        +-- next-hop-list
           +-- next-hop* [index]
              +-- index?                  string
              +-- outgoing-interface?   if:interface-ref
grouping next-hop-state-content
  +-- (next-hop-options)
     +--:(simple-next-hop)
     |  +-- outgoing-interface?   if:interface-ref
     +--:(special-next-hop)
     |  +-- special-next-hop?      enumeration
     +--:(next-hop-list)
        +-- next-hop-list
           +-- next-hop* []
              +-- outgoing-interface?   if:interface-ref
grouping route-metadata
  +-- source-protocol    identityref
  +-- active?            empty
  +-- last-updated?      yang:date-and-time
```