

802.3 YANG Effort in the Industry

A comparison of IEEE and
OpenConfig Models

Comparison

- IEEE

```
module: ethernet
augment /if:interfaces/if:interface:
  +--rw ethernet
    +--rw (transmission-mode)?
      +--:(auto-negotiation)
        | +--rw auto-negotiation
        | +--rw status?          enumeration
        | +--rw duplex?          enumeration
        | +--rw speed?           identityref
        | +--rw advertised-flow-control? enumeration
        | +--rw forced-flow-control? flow-control-settings
      +--:(manual)
        +--rw manual
          +--rw duplex?          enumeration
          +--rw speed?           identityref
          +--rw flow-control?    flow-control-settings
    augment /if:interfaces-state/if:interface:
      +--ro ethernet
        +--ro auto-negotiation!
        | +--ro status?          enumeration
        +--ro duplex?            enumeration
        +--ro speed?             uint64
        +--ro flow-control?      flow-control-settings
```

- OpenConfig

```
module: openconfig-if-ethernet
augment /oc-if:interfaces/oc-if:interface:
  +--rw ethernet
    +--rw config
      | +--rw mac-address?      yang:mac-address
      | +--rw auto-negotiate?   boolean
      | +--rw duplex-mode?      enumeration
      | +--rw port-speed?       identityref
      | +--rw enable-flow-control? boolean
    +--ro state
      +--ro mac-address?        yang:mac-address
      +--ro auto-negotiate?     boolean
      +--ro duplex-mode?        enumeration
      +--ro port-speed?         identityref
      +--ro enable-flow-control? boolean
      +--ro hw-mac-address?     yang:mac-address
      +--ro effective-speed?    uint32
    +--ro counters
      +--ro in-mac-control-frames? yang:counter64
      +--ro in-mac-pause-frames?   yang:counter64
      +--ro in-oversize-frames?    yang:counter64
      +--ro in-jabber-frames?      yang:counter64
      +--ro in-fragment-frames?    yang:counter64
      +--ro in-8021q-frames?       yang:counter64
      +--ro in-crc-errors?         yang:counter64
      +--ro out-mac-control-frames? yang:counter64
      +--ro out-mac-pause-frames?  yang:counter64
      +--ro out-8021q-frames?      yang:counter64
```