

# NMDA structure transition

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# Progress in IETF & IEEE 802.1

- The NMDA Revised data store
  - WG Last Call
- Rfc6087bis:Guidelines for Authors and Reviewers of YANG Data Model Documents
  - [WG document-14](#) (Obsoletes: [6087](#) (if approved))
- Revised ietf-interface module: rfc7223bis
  - [Adopted by WG.](#)
- P802.1Qcp D1.3 has transit to NMDA style.

# NMDA transition in P802.3.2

- Updated modules into NMDA style:
  - Merge config tree and operational state tree into a single tree.
    - Augment ietf-interface module (which now only has a configuration tree)
    - Merge data nodes in both operation state tree and configuration tree.
    - Un-touch state-only-nodes and statistics nodes
  - Draft nmda modules can be found at:  
<https://github.com/yanzhuang/8023EthernetYANG/tree/nmda/standard/ieee/802.3/draft>.
- Update related mapping tables.
  - Proposed updated mapping tables in “revised mapping tables.pdf”

# Example: Ethernet interface module

```
module: ieee802-ethernet-interface
augment /if:interfaces/if:interface:
  +--rw ethernet
    +--rw auto-negotiation
      | +--rw enable? boolean
    +--rw duplex? duplex-type
    +--rw speed? eth-if-speed-type
    +--rw flow-control
      +--rw pause
      | +--rw direction? pause-fc-direction-type
      +--rw pfc {ethernet-pfc}?
      | +--rw enable? boolean
      +--rw force-flow-control? boolean
  augment /if:interfaces-state/if:interface:
    +--ro ethernet
      +--ro auto-negotiation
      | +--ro enable? boolean
      | +--ro negotiation-status? enumeration
      +--ro duplex? duplex-type
      +--ro speed? eth-if-speed-type
      +--ro flow-control
      | +--ro pause
      | | +--ro direction? pause-fc-direction-type
      | | +--ro statistics
      | | | +--ro in-pkts-pause? yang:counter64
      | | | +--ro out-pkts-pause? yang:counter64
      | | +--ro pfc {ethernet-pfc}?
      | | | +--ro enable? boolean
      | | | +--ro statistics
      | | | | +--ro in-pkts-pfc? yang:counter64
      | | | | +--ro out-pkts-pfc? yang:counter64
      | | +--ro force-flow-control? boolean
      +--ro max-frame-length? uint16
      +--ro macc-extension-control? boolean
      +--ro frame-limit-slow-protocol? uint32
      +--ro capabilities
      | +--ro auto-negotiation? boolean
      +--ro statistics
      +--ro frame
      | +--ro in-total-pkts? yang:counter64
      | +--ro in-total-octets? yang:counter64
      | +--ro in-pkts? yang:counter64
      | +--ro in-multicast-pkts? yang:counter64
      | +--ro in-broadcast-pkts? yang:counter64
      | +--ro in-error-fcs-pkts? yang:counter64
      | +--ro in-error-undersize-pkts? yang:counter64
      | +--ro in-error-oversize-pkts? yang:counter64
```

```
module: ieee802-ethernet-interface
augment /if:interfaces/if:interface:
  +--rw ethernet
    +--rw auto-negotiation
      | +--rw enable? boolean
      | +--ro negotiation-status? enumeration
    +--rw duplex? duplex-type
    +--rw speed? eth-if-speed-type
    +--rw flow-control
      | +--rw pause
      | | +--rw direction? pause-fc-direction-type
    +--ro statistics
    | | +--ro in-pkts-pause? yang:counter64
    | | +--ro out-pkts-pause? yang:counter64
    | | +--rw pfc {ethernet-pfc}?
    | | | +--rw enable? boolean
    | | | +--ro statistics
    | | | | +--ro in-pkts-pfc? yang:counter64
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```

Thank you!