YANG Data Model for IEEE 1588v2

draft-ietf-tictoc-1588v2-yang-05

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module: ietf-PTP-dataset
  +--rw instance-list* [instance-number]
    |   +--rw instance-number uint16
    |     +------
    |     +--rw default-ds
    |     |     +------
    |     +--rw current-ds
    |     |     +------
    |     +--rw parent-ds
    |     |     +------
    +--rw time-properties-ds
      |     +------
      +--rw port-list* [port-number]
        |     +--rw port-state? port-state-enum
        |           +--rw underlying-interface? if:interface-ref
        +--rw transparent-clock-default-ds
          |     +------
          +--rw transparent-clock-port-list* [port-number]
            +------
            Newly added!
Summary of Changes in V.05

- **Updates in draft-ietf-tictoc-1588v2-yang-05**
  - ✔ the support to reference the underlying interface used by a PTP port, so that it is easier to trace the physical topology of an IEEE 1588 time synchronization network
  - ✔ A new section 2.2 is added, which discusses why a single-tree hierarch is used
Why a single YANG Module tree?

- IEEE 1588v2 is widely implemented, but its dataset members cannot be simply classified into configuration and states

- According to IEEE 1588v2 info model, each member is categorized into 3 classes:
  - Configurable
  - Dynamic
  - Static

- The class for a member can be changed, e.g., port-state in port-ds may be configurable or dynamic (i.e., read-only) depending on the implementations and applications, a combined tree is a good representation of this behavior

- Actually, consistent with the up to date "Network Management Datastore Architecture" (NMDA) combined tree, according to one of the NMDA co-authors
Status in the industry

- The newest 1588v2 YANG module is available on the github site:
  
  https://github.com/YangModels/yang/tree/master/standard/ietf/DRAFT

- Quite a few vendors have shown their interests in implementing this YANG module, publication will further add its momentum

- In June 2017, ITU-T SG15 approved a new WG item on "Sync Management", targeted at developing sync management info models for transport equipments, thus, consistency with the 1588 YANG is necessary to avoid any duplicate work
Next Step

▪ The last version is stable for some time, more feedback?
▪ Ready for WG Last Call?
Thank You