A YANG Data Model for Network Inventory

IVY WG, IETF118

draft-y3bp-ivy-network-inventory-yang-00

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Proposals of Our Draft

- Proposal #1: Base inventory model focus mostly on physical NEs HW components (based on draft-ietf-ccamp-network-inventory-yang)
  - Generalize the list of NEs to support also virtual NEs to be defined elsewhere
  - Generalize the list of components to support also SW components to be defined elsewhere
- Proposal #2: Define a hardware extension model which includes power supply unit’s specific extension etc. (draft-li-ivy-power)
- Proposal #3: Define a separated SW inventory model augmentation for HW+SW Ucs (draft-wzwb-ivy-network-inventory-software)
  - Define attributes and identities needed for SW inventory and virtual NEs
- Proposal #4: Define a separated licenses inventory augmentation (draft-wzwb-ivy-network-inventory-entitlement)
- Proposal #5: The navigation between inventory and topology should be based on network model and could be in a single draft (draft-wzwb-ivy-network-inventory-topology)
Initial proposal for the Inventory Base Model

module: ietf-network-inventory
     +--ro network-inventory
     +--ro network-elements
         +--ro network-element* [uuid]
             +--ro uuid            yang:uuid
             ...................... // see draft-ietf-ccamp
         +--ro components
             +--ro component* [uuid]
                 +--ro uuid        yang:uuid
                 ...................... // see draft-ietf-ccamp
             +--ro class?        union     // see draft-wzwb-opsawg
                 +--ro (component-class)?
                     +--:(chassis)
                         | +--ro chassis-specific-info
                         ...................... // see draft-ietf-ccamp
Next step

- Detailed review of all the NE attributes to identify
  - which attributes apply only to physical NEs
  - which attributes apply only to virtual NEs
  - which attributes apply to both physical and virtual NEs

- Detailed review of all the component attributes to identify
  - which attributes apply only to HW components
  - which attributes apply only to SW components
  - which attributes apply to both HW and SW components

- Review the issues we recognized when working on CCAMP hardware draft
  - MPO port modeling
  - Modeling of fiber & cable, transceiver, etc.
  - Configuration capabilities of inventory

- Ask for working group adoption
Thank You