A YANG Data Model for Network Inventory

IVY WG, IETF118

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

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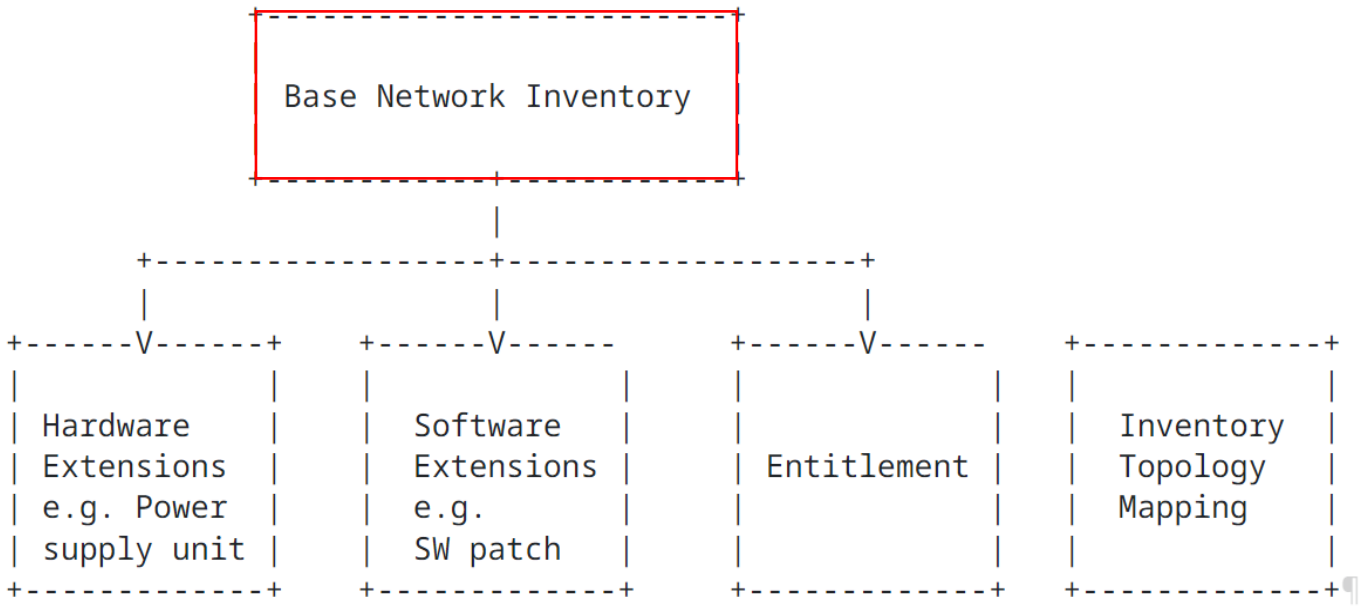
Proposals of Our Draft



- 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
  - Generalie the list of components to support also SW components to be defined elsewhere
- Proposal #2: Define a hardware extension model which includes power supply uinit'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