A YANG Data Model for Network Inventory

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Updates Since Last IETF Meeting

- **Draft Updates (PR #34)**
  - Moving the section of Efficiency Issue to the appendix
  - Clarify RFC8348 container terminology

- **YANG Model Updates (PR #34)**
  - Add a new root prior to NE: to support inventory of fiber & cable
  - Change the configuration capabilities of attributes (still open discussion)
  - Update the description of part-number of component
  - Remove part-number attribute from NE
  - Re-introduce component-specific structure into the data model

- Discussed terminology of inventory and UCs
- Discussed the modeling of fiber and cable
- Discussed the modeling of software patch
Discussion of Component-Specific Attributes’ Structure

The comment was raised by Robert Wilton on the IETF 118 meeting.

- Option 1 provides duplicated information according to NETMOD's discussion;
- Option 3 cannot provide filtering capability;
Discussion of Configuration Capabilities of Inventory YANG

- Some possible UCs were discussed:
  - UC1: Configuring User-Defined Information for Inventory Objects
  - UC2: Configuring Maintenance Status of NEs
  - UC3: Configuring of ASON Switch
  - UC4: Configuration/creation of virtual NEs
  - UC5: Configuration of power parameters
  - UC6: Management of intended/planned NE configuration

- What have been agreed:
  - It is suggested to start with a data model mostly with read only attributes;
  - For some user-defined information, it should be able to configure through NBI;
  - There is a need to support the configuration of expected/intended inventory elements;

- For the other UCs, more investigation is still needed.
Discussion of Modeling of Fiber and Cable

What have been agreed:
- A new root container for inventory model;
- There is no need to report MW connectivity and it should be reported in the topology model;
- It is optional element because it is not under controlled of network controller;
- The scope of fiber & cable is not limited to fibers/cables between NEs but also in a same NE;

What have been discussed but not finalized:
- Align with TAPI model’s terminology;
- Define a augmentation model or define in the base model directly;
Some Other Discussions

- **Modeling of software patch**: agreement was reached to add a software-patch-rev list attribute for the components.
- **Part-number**: Remove part-number from NE and update the description of component’s part-number to be “The vendor-specific part number of the component type. It is expected that vendors assign unique part numbers to different component types within the scope of the vendor.”
Next Step

➢ Continue the discussion of terminology and UCs;
➢ Continue the discussion of modeling of fiber & cable;
➢ Start the discussion of MPO port modeling;
➢ Try to close more issues on GitHub;