A YANG Data Model for Network Inventory Location

draft-wbbpb-ivy-network-inventory-location

Authors:
Bo Wu (lana.wubo@huawei.com)
Sergio Belotti (sergio.belotti@nokia.com)
Jean-Francois Bouquier (jeff.bouquier@vodafone.com)
Fabio Peruzzini (fabio.peruzzini@telecomitalia.it)
Phil Bedard (phbedard@cisco.com)

Contributors:
Italo Busi (Italo.Busi@huawei.com)
Chaode Yu (yuchaode@huawei.com)
Aihua Guo (aihuaguo.ietf@gmail.com)
Oscar Gonzalez de Dios (oscar.gonzalezdedios@telefonica.com)
Victor Lopez (victor.lopez@nokia.com)
Chenfang Zhang (zhangcf80@chinaunicom.com)
Nigel Davis (ndavis@ciena.com)
Inventory Location Model Background

Location information is not defined in the base Network Inventory model, since these info can not be obtained or verified from NEs - Usually configured manually in SDN controllers or managed in OSS

The location type:
- Specific: room, rack, building
- Abstract: site
Locations can be nested to form a hierarchy:
- Buildings within a site
- Rooms in a building
Current YANG Model

```yang
module: ietf-ni-location
  +--rw locations
    +--rw location* [id]
      |  +--rw id       yang:uri
      |  +--rw name?    string
      |  +--rw description? string
      |  +--rw alias?   string
      |  +--rw location-type? identityref
      |  +--rw parent?  -> ../../location/id
      |  +--rw child*   -> ../../location/id
      |  +--rw physical-address
      |  |  ...
      |  +--rw geo-location
      |  |  ...
      |  +--rw racks
      |  |  +--rw rack* [id]
      |  |  ...
```

1. The "location" list is generalized to support abstract locations, such as sites, as well as concrete type of location, such as room, building.

2. A site is defined as a location type that represents an abstract geographical location. Buildings, equipment rooms, and racks can be further grouped in a site.

3. "racks" represent physical equipment racks in which Network Elements (NEs) can be installed, which facilitate device maintenance.

4. The base network inventory model can be extended to add location references.

Discussion Points:
“racks” defines a separate list instead of inside “location” list. 1) Some scenarios do not require rack management; 2) Buildings or rooms models may be extended in the future. But there are comments of a different preference.
Next Step

- Solicit WG review and feedbacks
- Solicit WG adoption