A Yang Data Model for WSON Optical Networks

draft-ietf-ccamp-wson-yang-07.txt

Y. LEE, D. DHODY, X. ZHANG, A. GUO (HUAWEI)

V. LOPEZ (TELEFONICA)

D. KING (U. OF LANCASTER)

B. YOON (ETRI)

R. VILALTA (CTTC)

Updates for this version (07)

- NMDA Compliant Model
- Fixed the augmentation references for node and link per TE-topology module changes:

```
augment "/nd:networks/nd:network/nd:node/tet:te"
        + "/tet:te-node-attributes" {
        when "/nd:networks/nd:network/nd:network-types"
            +"/wson-topology" {
            description
                "This augment is only valid for WSON.";
        }
        description "WSON Node augmentation.";
        uses wson-node-attributes;
        uses resource-pool-attributes;
    }
```

```
augment "/nd:networks/nd:network/lnk:link/tet:te"
        + "/tet:te-link-attributes"  {
        when "/nd:networks/nd:network/nd:network-types"
            +"/wson-topology" {
            description
                "This augment is only valid for WSON.";
        }
        description "WSON Link augmentation.";
        uses wson-link-attributes;
        uses available-wavelength;
    }
```

IETF-WSON-TOPOLOGY Module

```
module: ietf-wson-topology
  augment /nd:networks/nd:network/nd:network-types:
    +--rw wson-topology!
  augment /nd:networks/nd:network/nd:node/tet:te/tet:te-node-
attributes/tet:connectivity-matrices/tet:connectivity-matrix:
    +--rw matrix-interface* [in-port-id]
       +--rw in-port-id     wson-interface-ref
       +--rw out-port-id?   wson-interface-ref
  augment /nd:networks/nd:network/lnk:link/tet:te/tet:te-link-attributes:
    +--rw channel-max?                   int32
    +--rw default-frequency?             decimal64
    +--rw channel-spacing?               decimal64
    +--rw wavelength-available-bitmap*   binary
  augment /nd:networks/nd:network/nd:node/tet:te/tet:te-node-attributes:
    +--rw wson-node
    |  +--rw device-type?   devicetype
    |  +--rw dir?           directionality
    |  +--rw interfaces* [name]
    |     +--rw name          string
    |     +--rw port-number?  uint32
    |     +--rw input-port?   boolean
    |     +--rw output-port?  boolean
    |     +--rw description?  string
    +--rw resource-pool* [resource-pool-id]
       +--rw resource-pool-id   uint32
       +--rw pool-state?        boolean
       +--rw matrix-interface* [in-port-id]
          +--rw in-port-id     wson-interface-ref
          +--rw out-port-id?   wson-interface-ref
```

Current Status & Next Steps

- Need to align with the latest updates from [TE-Topo] draft if any.

- Any comments?

A Yang Data Model for WSON Tunnel

draft-lee-ccamp-wson-tunnel-model-01

Y. LEE, D. DHODY, (HUAWEI)

V. LOPEZ (TELEFONICA)

D. KING (U. OF LANCASTER)

B. YOON (ETRI)

R. VILALTA (CTTC)

Overview

- WSON TE Tunnel Model (ietf-te-wson)
- It augments TE-Tunnel Model
- NMDA Compliant Model

IETF-TE-WSON Module

```
module: ietf-te-wson
    augment /te:te/te:tunnels/te:tunnel/te:config:
      +--rw wavelength-assignment?    identityref
      +--rw selected-frequency?       decimal64
      +--rw channel-spacing?          decimal64
    augment /te:te/te:tunnels/te:tunnel/te:state:
      +--ro wavelength-assignment?    identityref
      +--ro selected-frequency?       decimal64
      +--ro channel-spacing?          decimal64
    augment /te:te/te:lsps-state/te:lsp:
      +--ro wavelength-assignment?    identityref
      +--ro selected-frequency?       decimal64
      +--ro channel-spacing?          decimal64
    augment /te:te/te-dev:interfaces/te-dev:interface:
      +--rw selected-frequency?    decimal64
      +--rw channel-spacing?       decimal64
```

Current Status & Next Steps

- Need to align with the latest updates from [TE-Tunnel] draft if any.

- Any comments?

- Ask for WG adoption!