YANG data model for Flexi-Grid Optical Networks

draft-vergara-ccamp-flexigrid-yang-03

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Motivation

- Existing YANG models are either technology-agnostic or technology-specific not covering Flexi-grid
  - draft-ietf-i2rs-yang-network-topo and draft-ietf-teas-yang-te-topo are generic: they have to be extended for each specific technology
  - draft-ietf-ccamp-wson-yang is specific for WSON technology, extending draft-ietf-teas-yang-te-topo
- We propose a YANG model related to a describe the Traffic Engineering Database of a Flexi-Grid network.
  - Based on the ideas presented at RFC 7698: “Framework and Requirements for GMPLS-Based Control of Flexi-Grid Dense Wavelength Division Multiplexing (DWDM) Networks”
  - It also extends from existing generic YANG models

Main changes from prior version

- Still two sub-models
  - Flexi-grid-TED
    - Now it extends from draft-ietf-teas-yang-te-topo for flexi-grid-nodes. It keeps extending from draft-ietf-i2rs-yang-network-topo for flexi-grid-transponders
    - Now it also defines configuration and state attributes separately for each node.
      - Now the model can be used both to configure nodes and to gather their status, differentiating each case
  - Media-channel
    - It keeps almost the same as previous versions, as it takes the information from the Flexi-grid-TED, which is the one that mostly changes
  - The model changes have been validated with the on-line YANG validator

Next Steps

- Receive feedack
- Move necessary part to optical TE tunnel model (when done)
- Decide where to place optical signal parameters?
- WG adoption

Comments
Thanks!