A YANG DATA MODEL FOR MICROWAVE TOPOLOGY

draft-ietf-ccamp-mw-topo-yang-02


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STATUS

• Main changes compared to that previous version
  • Modeling of both radio-links and carriers as separate link entities
  • Introduction of two additional modules, possibly also usable/applicable for other technologies
    • ietf-bandwidth-availability-topology
    • ietf-tp-interface-reference-topology
  • A recommendation to leverage "YANG Data Model for Traffic Engineering (TE) Topologies" for a microwave topology – A microwave profile
  • Addition of an example of a simple microwave link with representation of carriers as a separate links

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NEW GENERIC MODULES

**ietf-bandwidth-availability-topology**

- Bandwidth availability for links with variable/adaptive link bandwidth
- Example use cases include:
  - Defining bandwidth availability matrix for a microwave link
  - Defining bandwidth availability matrix for a LAG link comprising of two or more member links

**ietf-tp-interface-reference-topology**

- Defining a reference from a termination point in a te topology to a list element in interfaces as defined in RFC 8343
APPLICATION OF TE-TOPOLOGY

- Based on the recommendation from IETF – TEAS to use te-topology as a basis for technology specific extensions
- Complexity was an initial issue
- RFC 8795 (te-topology) was designed to be technology agnostic and support augmentation
- Augmentations created
  - mw-topology (te-topology)
  - mw-tp-choice (termination-point)
  - mw-link-choice (te-link-attributes)
Addition of Example

A Simple Microwave Link with Representation of Carriers as a Separate Links

- Diagram of the JSON example included in the internet-draft in section A.2
Way Forward

• Moving over to the github for the continued discussion/evolution
  • https://github.com/ietf-ccamp-wg/draft-ietf-ccamp-mw-topo-yang
• Creating Instance data to aid validation and semantic checking in the YANG model
  • Using yanglint (libyang)
• Considering including more data nodes in the next version
• More JSON examples
• Asking for feedback on all modules, especially the two new generic modules
• Work continues on conference calls that are announced on the ccamp mailing list

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