YANG Data Models for requesting Path Computation in Optical Networks

CCAMP WG, IETF112

draft-gbb-ccamp-optical-path-computation-yang-00

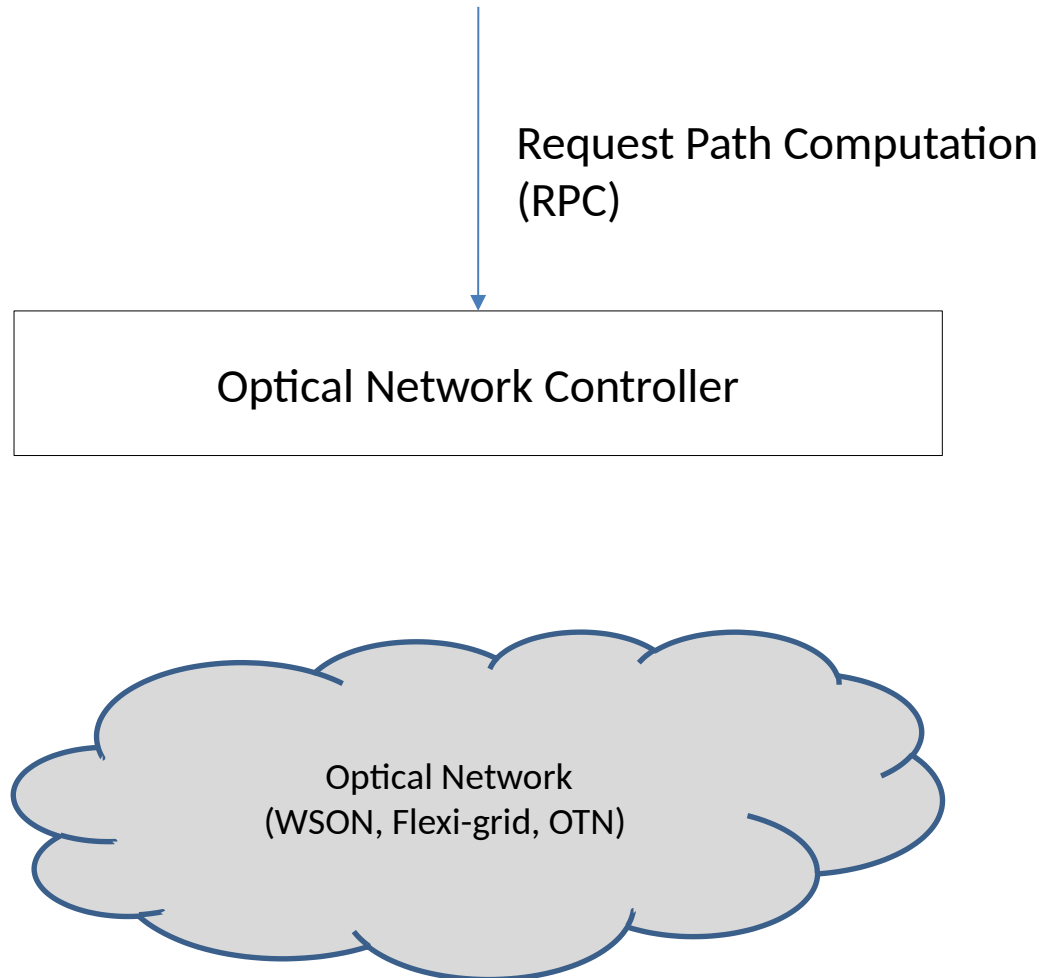**Authors:**

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Problem Statement

Request Path Computation (RPC)

Optical Network Controller

Optical Network
(WSON, Flexi-grid, OTN)

- draft-ietf-teas-yang-path-computation
  - Describes generic requirements and use case
    - Optical networks mentioned as examples
  - Define a generic (technology-agnostic) YANG model
    - Alignment with TE tunnel model in draft-ietf-teas-yang-te
- Missing technology-specific attributes for optical networks (WSON, Flexi-grid and OTN)
  - Augment generic (technology-agnostic) YANG model
  - Re-use common definitions in L0-Types (RFC9093), L0-Types-Ext and L1-Types
    - Alignment with optical tunnel models (WSON, Flexi-grid and OTN)
- Gap identified during the ACTN POI analysis

Open Issues

- Define the attributes in the l0-tunnel-attributes and l0-path-constraints groupings defined in layer0-types-extension

  – See issues #15 and #16 in flexi-grid-tunnel github

  – Common issue for layer0-types-extension, wson-tunnel and flexi-grid-tunnel models: to be addressed jointly

- Should we spit this document in three documents (like the tunnel models)?

  – WSON Path Computation

  – Flexi-grid Path Computation

  – OTN Path Computation

Next Steps

- Address any feedbacks/comments from CCAMP WG
- Finalize the document structure (1, 2 or 3 documents)
- Request WG adoption
  - Just complementing the toolset of CCAMP WG technology-specific models augmenting generic TE models for optical networks
  - Quite straighforward work re-using common defintions in L0-Types (RFC9093), L0-Types-Ext and L1-Types