

Yang model for requesting Path Computation

draft-busibel-teas-yang-path-computation-03
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Summary of changes from IETF 98

- Added considerations for stateless and stateful solutions
 - Addressing Dhruv comment at IETF 98
- Close cooperation with TE Tunnel model authors to resolve common issues
 - Groupings in yang-te-types updated accordingly
- YANG RPC updated
 - Re-defined as an augmentation of TE Tunnel RPCs
 - Aligned with the groupings in yang-te-types
 - Added support of multiple path computation requests (synchronization list)

GitHub Support

- GitHub Repository
 - <https://github.com/rvilalta/ietf-te-path-computation>
- GitHub support used for
 - Developing and tracking YANG model for stateless RPC
 - Tracking Open Issues, discussions and resolutions linked to YANG model
 - 7 solved since IETF 98
 - 9 remained open and 1 added since IETF 98
 - 5 are being discussed jointly with TE Tunnel

Open Issues - 1

- How to know the layer (MPLS, OTN, ...) of the path being requested [#18]
 - Encoding and switching type in tunnel-params_config grouping in te-tunnel
- Use a subset of tunnel-params_config grouping for a Path Computation RPC [#31]
- Topology-id in path constraints [#27]
 - The avoidTopology allows constraining which topologies shall be avoided by path computation, includeTopology list to constraints which topologies shall be considered by path computation.
 - Need to discuss if needed

Open Issues - 2

- Residual BW [#30]
 - New metric for the minimum unreserved bandwidth over all the links traversed by the computed path
 - Based on draft-lazzeri-pce-residual-bw
- Relaxable constrains [#19]
 - As in PCEP, specify whether path computation must fail if a constraint is not met or whether the constraint could be relaxed
- Missing local protection [#24]
 - Use of L flag in the SESSION/ATTRIBUTE object (RFC3209, RFC 5440)
- Class Type [#25]
 - For path computation, it may need to be defined in some MPLS-TE augmentation of the path computation RPC
 - In which document?

Next Steps

- Resolve current open issues
 - Continue cooperation with TE Tunnel model authors
- Seeking further comments and feedbacks from WGs
 - How to reduce the number of path computation requests in networks with many domains
 - Implementation issue rather than a standardization issue: just needs to provide a complete toolset encompassing TE Topology, TE Tunnel and a Path Computation RPC
- Ready to become WG document