

PCEP Extensions for Temporary Reservation of Computed Path Resources and Support for Limited Context State in PCE

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draft-gonzalezdedios-pce-reservation-state-01

Oscar Gonzalez de Dios (ogondio@tid.es)

Ramon Casellas (ramon.casellas@cttc.es)

Cyril Margaria (cyril.margaria@nsn.com)

Young Lee (leeyoung@huawei.com)

Fatai Zhang (zhangfatai@huawei.com)

Changes from 00

- Welcome Cyril, Fatai and Young to the draft and thanks for their comments and suggestions
- Aim of the draft: allow the PCC to indicate to the PCE to block the resources computed in a path request of a TE LSP for subsequent requests for a certain time
- Helps to reduce the number of crankbacks.
- Aim of the changes:
 - After 00 was presented, comments were received regarding cases where, after receiving an update of information to the TED, it was not possible to hold the reservation.
 - This version aims at clarifying the scope of the temporary reservation of resources
 - Clarifying the terminology
 - Refine the document

Changes from 00

- Changes in the introduction
- Reservation/booking mechanisms can be applied by policy
- However... the PCE cannot infer the intention of the PCC with the computed TE-LSP path.
- Identified two main cases applying reservations:
 - 1) Resource is uniquely identified in the topology update -> Reservation can hold after the update (no uncertainty) E.G. receiving a OSPF-TE TE LSA with a bitmap encoded wavelength availability.
 - 2) Resource is NOT uniquely identified in the topology update. In this case, to maintain coherence, the topology update prevails.
- Minor changes through all the sections of the draft.

Changes from 00

- Added the 2 possible cases when topology updates arrive to the PCE in the protocol procedures section.
- Use case Multiple LSP restoration -> Multiple LSP restoration in a WSON network
 - Use case has been extended.

Open Points

- Need to send PCC_ID.
 - Remove the need to send it?
- Re-use RESERVATION object for the response
- Scope the reservation per PCEP session?
 - If PCEP session stops, reservations do not apply longer.

Next Steps

- Do we want this functionality on the PCE?
- Refine it based on the feedback from the meeting or mailing list:
 - Use of absolute timestamps vs relative timestamps in reservations
 - Recommended value for reservation time
 - Multi-domain reservations
 - Synchronization of reservations with multiple PCEs
- More use cases?

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