

# Amendments to Stateful PCE Communication Protocol (PCEP)

draft-many-pce-stateful-amendment  
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# draft-many-pce-stateful-amendment

Presented in IETF 123, content goes back many, many years - forked from operational-clarification

Updates PCEP RFC stateful related content

1. Introduces stateful LSP bring-up mechanism
2. Discourages SR-RRO/SRv6-RR0

# -03 Changes

- **3. \*\* New section – Orphaned LSPs without delegation**

- Issue originally raised by Marina Fizgeer in draft-fizgeer-pce-redundancy-extensions
- Gap in RFC8281. On failure of delegated PCE:

(a) PCC can give delegation to a backup PCE

OR

(b) backup PCE(s) can request delegation from the PCC for orphaned LSP

- **But:**

- Backup PCE does not know *when* it becomes orphaned or that it *should* take action
- Proprietary workarounds exist involving timers
- Open for non-deterministic backup behavior when PCEs > 2

# -03 Proposal

- Not solving the problem right now in this document
- Updates RFC8231 to discouraging its use and require PCC to attempt redelegation

OLD

"**The PCC MAY attempt to redelegate** an orphaned LSP by following the procedures of [RFC8231]. Alternatively, if the orphaned LSP was PCE-initiated, then a PCE MAY obtain control over it, as follows"

NEW

"PCC **MUST attempt to redelegate** an orphaned LSP to a connected PCE by following the procedures of [RFC8231] and in accordance with local policy."

# Next steps

- Seeking working group adoption
- Manageability/Security sections to fill out
  - *Any suggestions welcome*