Ability for a stateful PCE to request and obtain control of a LSP

draft-raghu-pce-lsp-control-request-01

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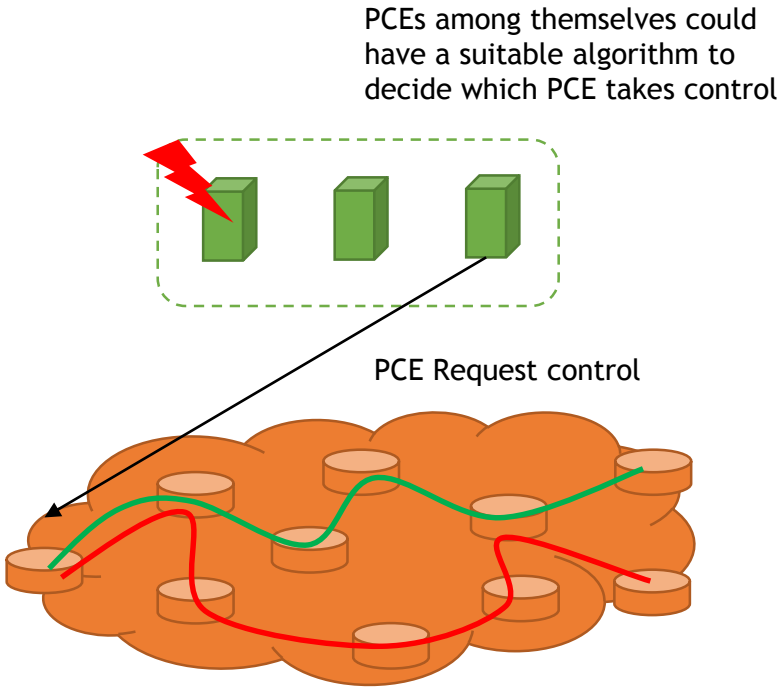
Motivation

Redundant Stateful PCE – On primary PCE failure, it is up to the PCC to re-delegate to a standby PCE.

- But in some cases it would be better if there is an option for
  - “a stateful PCE to request control of one or more LSPs from a PCC”



Also applicable when vPCE (virtual PCE) as VNFs would load balance the LSPs among themselves for scalability

Motivation

The operator could wish to keep the control of the LSPs with the PCC at most times.

And in some case like global optimization the stateful PCE may request to get control temporarily.

PCEP Extension

A simple extension using which a PCE can request control of one or more LSPs from any PCC.

The procedures for granting and relinquishing control of the LSPs remains same.

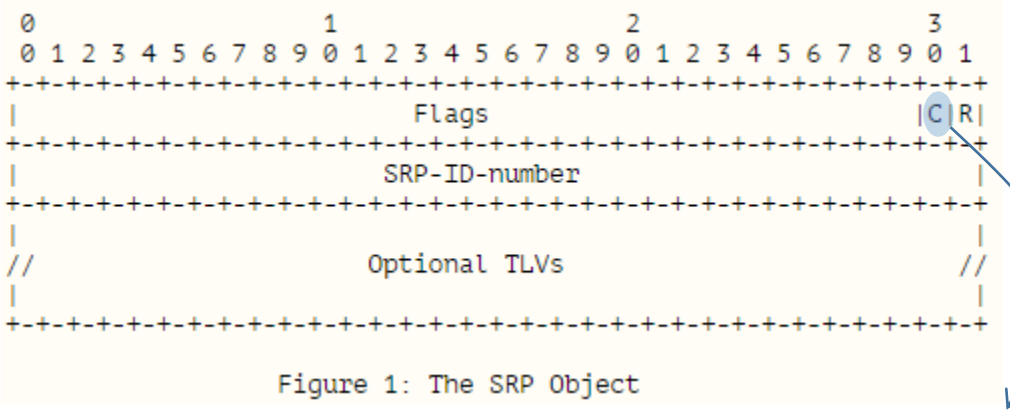


Figure 1: The SRP Object

- "LSP Control Request Flag" (C) in SRP: On a PCUpd message, a PCE sets the C Flag to 1 to indicate that it wishes to gain control of LSP (s). The LSP is identified by the LSP object.
- The flag has no meaning in the PCRpt and PCInitiate message and MUST be set to 0 on transmission and MUST be ignored on receipt.

Next Step

- Is this useful?
  - We think so…
  - Plan to be implemented
- Any comments?
- Candidate for WG adoption?

Thank You!