IETF 114 – Online
PCE Working Group

PCEP extensions for Circuit Style Policies

draft-sidor-pce-circuit-style-pcep-extensions

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Motivation

- Circuit Style Segment-Routing Policy
  - Designed to satisfy requirements for connection-oriented transport services
  - Details described in draft-schmutzer-pce-cs-sr-policy

  Requirements covered in this draft:
  - path persistency
  - hop-by-hop behavior (strict path)

Path persistency

- Blocking path re-computation on PCE
- “RECOMPUTATION-TRIGGERS TLV” renamed to “PATH-RECOMPUTATION TLV”
- TLV moved from LSP to LSPA object
- New flags:
  - P (Permanent) – Is path re-computation allowed if original path was invalidated?
  - F (Force) – Is explicit request to re-compute path by operator allowed?
- It is allowed to modify path if it will not change adjacencies used by the traffic of that LSP
- Removed flags:
  - T (Topology-change) – Is path re-computation allowed as a result of received updated topology information
  - P (Periodic-timer) – Is periodic path computation enabled?

Strict path

- Modified definition of strict hop for SR to make it future proof:
  - PCE MUST use only SIDs, which will explicitly specify adjacencies for packet forwarding
  - Prefix SIDs are not allowed even if there is just one path
- Relaxed encoding of “Strict path” flag in PCUpd/PCInitiate messages

Next steps

- Comments and discussion are welcome