PCEP extensions for Circuit Style Policies
draft-sidor-pce-circuit-style-pcep-extensions
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