Carrying Binding Label/SID in PCE-based Networks.

draft-sivabalan-pce-binding-label-sid-05
Introduction & Motivation

• SR [RFC8402] defined Binding Segment (BSID)
  • Bound to a SID list (SR policy)
• BSID provides greater
  • Scalability
  • Network Opacity
  • Service Independence
• Decrease the number of segments imposed by the source.
• Act as a stable anchor point and isolate one domain from another.
• BSID remains stable and hide internal details.
Role of PCEP

- PCC could report the BSID allocated for the LSP
  - PCRpt message
- PCE could request the PCC to allocate *specific* BSID for the LSP
  - PCUdp / PCInitiate message
- PCE could use the BSID while computing SID list (SR-ERO) for some other SR Path as per [I-D. ietf-pce-segment-routing]

- Path Binding TLV is defined for LSP object!
Binding TLV

- TE-PATH-BINDING TLV in the LSP object
- BT=0 for MPLS Label value
  - 20 bit label value
- BT=1 for MPLS Label stack entry (TC, S, TTL)
  - 32 bit label stack entry
Question to WG & Next Steps

• The feature is very useful and already implemented, ideal for WG Adoption?

• Some things to work out –
  • Do we link to PCEP SR capability?
    • Currently can be used for RSVP-TE as well.
  • Is WG happy with TLV Format?
  • Is there a use case for binding value as “index” in SRGB/SRLB?
  • Move the appendix section on PCECC to PCECC-SR draft
    • *PCECC could also assign the BSID to the LSP.*
Thanks!