Carrying Binding Label/SID in PCE-based Networks.

draft-sivabalan-pce-binding-label-sid-05

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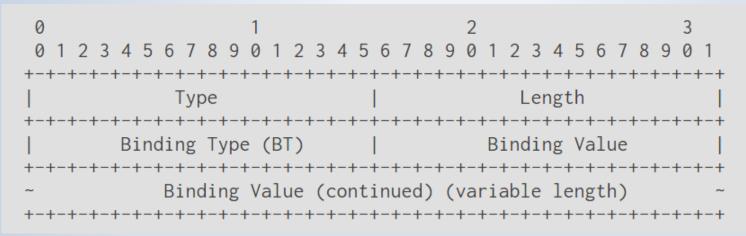
Introduction & Motivation

- 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
 - PCUpd / 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.

