IETF 109 – Online
PCE Working Group

Carrying Binding Label/Segment-ID in PCE-based Networks

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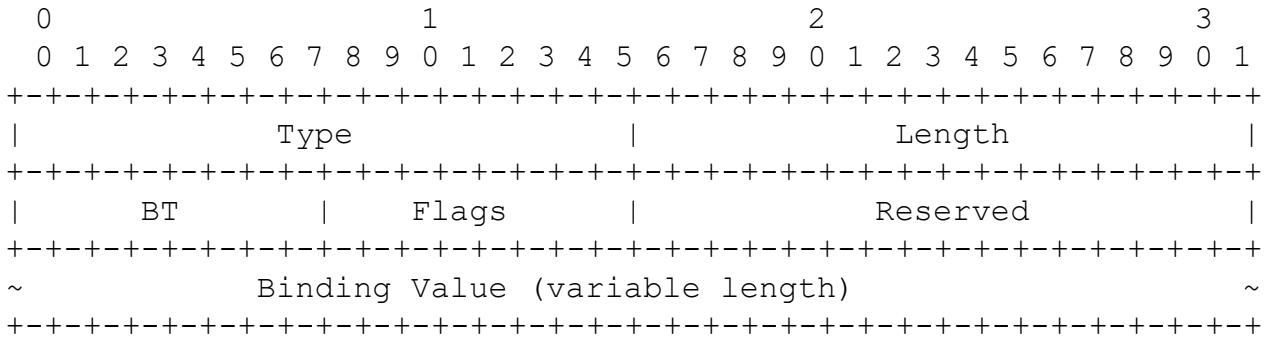
TE-PATH-BINDING TLV

Carries the Binding SID of a Policy/Tunnel:



Binding Type (BT) is a numeric field that controls the format of the Binding Value.

For BT=0 and BT=1, the Binding Value is an MPLS label.

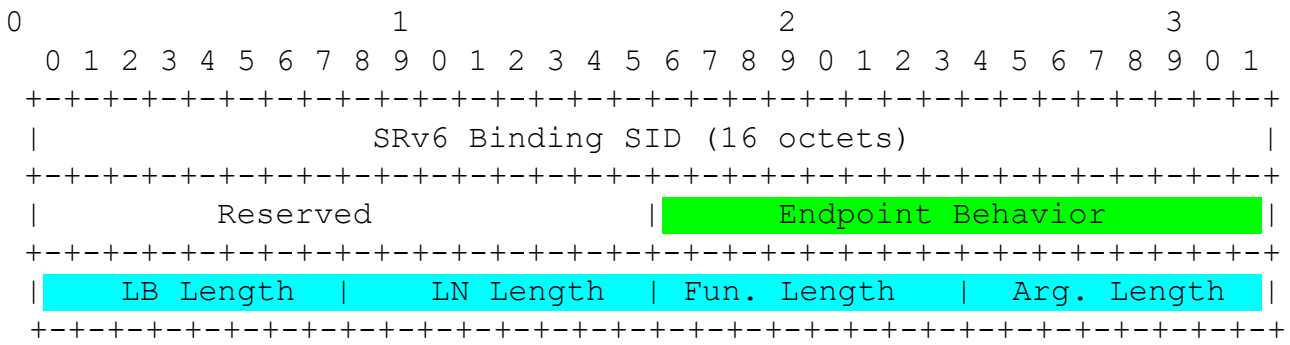
For BT=2, the Binding Value is an SRv6 SID.

For BT=3, the Binding Value is an SRv6 SID + some extra information.

Behavior and Structure

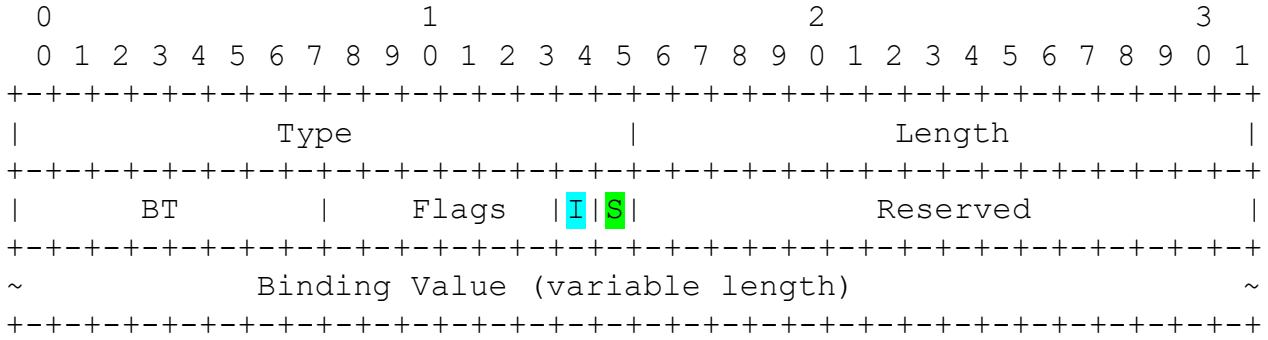
Extend TE-PATH-BINDING TLV to carry an SRv6 BSID, as well as its Endpoint Behavior and SID Structure, as specified in [draft-ietf-spring-srv6-network-programming].

For this, we define a new “Binding Type” BT=3, with a Binding Value that has room for Endpoint Behavior and SID Structure:



S-flag and I-flag

Extend TE-PATH-BINDING TLV to carry S-flag “Specified-BSID-only” and I-flag “Drop Upon Invalid”:



“Specified-BSID-only”: if the specified BSID cannot be provisioned, then the given Policy/Tunnel MUST not carry traffic.

“Drop Upon Invalid”: if there is no path for the Policy/Tunnel, the traffic that would normally be steered there is dropped.

Next steps

- Discuss