Encapsulation of BFD for SRv6 Policy

draft-liu-spring-bfd-srv6-policy-encap-03

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Recap of this draft

• This document describes the encapsulation of BFD for SRv6 Policy.
• The BFD packets can be encapsulated in Insert-mode or Encaps-mode.
  - Insert-mode packet format:

```
+-------------------+--------------------------+-------------------+-------------------+
| IPv6 header       | SRH                     | UDP Header        | BFD Packet        |
+-------------------+--------------------------+-------------------+-------------------+
```

  - Encaps-mode packet format:

```
+-------------------+--------------------------+-------------------+-------------------+
| IPv6 header       | SRH                     | IPv6 header       | UDP Header        |
|                   |                          |                   | BFD Packet        |
+-------------------+--------------------------+-------------------+-------------------+
Update since last IETF

• This draft was presented at IETF 118
• Greg Mirsky made some good comments on this draft, a 03 revision was posted to address Greg’s comments. Thanks to Greg!
Update since last IETF (Cont.1)

• New text in Introduction:
  – As specified in [I-D.draft-ietf-spring-bfd], the basic element monitored by the BFD is a segment list that is a constituent of the candidate path of the particular SR Policy.

• draft-ietf-spring-bfd says:
  – Concluding from the definition of BFD in [RFC5880], in an SR domain, BFD, in its modes and functions, monitors not the SR Policy, as defined in [RFC9256], but a segment list that is a constituent of the candidate path of the particular SR Policy.

• It’s aligned now!
Update since last IETF (Cont.2)

• Encapsulations of BFD Echo packet were removed from this draft.
  − Section 2.2 BFD Echo Packet in Transport Mode
  − Section 2.4 BFD Echo Packet in Tunnel Mode

• The current draft contains only encapsulations of BFD Control packet:
  − Section 2.1 BFD Control Packet in Insert-Mode
  − Section 2.2 BFD Control Packet in Encaps-Mode
  − Transport Mode is renamed to Insert-Mode
  − Tunnel Mode is renamed to Encaps-Mode
Update since last IETF (Cont.3)

• In Section 3 “Choice of Headend and Tail-end IPv6 Addresses”:
  
  - OLD TEXT
    
    For the BFD control packet, the headend IPv6 address in the Source Address of IPv6 header may use the source address associated with the SRv6 Policy……
    
    For the BFD control packet, the headend may choose endpoint of the SRv6 Policy to be the tail-end IPv6 address which appears in the first segment of SRH or DA of inner IPv6 header……

  - NEW TEXT
    
    For the BFD control packet, it is RECOMMENDED to use the headend IPv6 address associated with the SRv6 Policy as the Source Address of (outer) IPv6 header……
    
    For the BFD control packet, the headend is RECOMMENDED to choose the endpoint of the SRv6 Policy to be the tail-end IPv6 address which appears in Segment List[0] of SRH or DA of inner IPv6 header……
Next steps

• Ask for more reviews and comments
• Revise this draft to improve it
• Ask for WG adoption

Thank you!