draft-ali-spring-bfd-sr-policy-00

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Monitoring Mechanism Requirements

• SR Policies do not require any signaling.
  • Monitoring mechanism cannot rely on boot strapping during signalling phase.
• SR Policies result in the state being instantiated only at the head-end node and no other node in the network.
  • Monitoring mechanism should not create states at any other node, except the headend of the SR policy.
• In many deployments, SR Policies are instantiated dynamically and on-demand.
  • Need to validate the path before using it
  • Faster session activation for the monitoring mechanism is desired.
• SR Policies can be instantiated for MPLS and IPv6 data-planes
  • Monitoring mechanism should work for both MPLS and IPv6 data-planes.
Applicability of Classic BFD to SR Polices

• Slow start
  • Classic BFD session bootstrapping procedure takes time.
  • SR Policy creation is fast, only head-end needs to be programmed.

• BFD=Bi-directional Forwarding Detection
  • both sides maintain BFD state, even if we are only interested in the unidirectional path validity.
  • SR Policy is uni-directional, no need to maintain BFD state on the remote end.
Applicability of Seamless BFD to SR Polices

- Faster session activation
  - No tail-end BFD session bootstrapping delay
- BFD state and Client Context at head-end only
  - Tail-end only validates BFD packet and respond, no need for BFD session at the tail-end.
- SBFD is more suitable to the SR Policies than Classical BFD.
Next Steps ...

• Solicit WG review and comments/inputs/feedback.