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SPRING Working Group

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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 Policies

- 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 Policies

- 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.