OAM in SR-MPLS over IP

draft-mirsky-mpls-oam-mpls-sr-ip

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What is in the scope

• Fault Management:
  – On-demand fault detection, localization, and characterization
  – Proactively monitor path continuity

• Performance Monitoring:
  – Delay measurement
  – Packet Loss measurement
Fault Management

- RFC 8287 details application of LSP Ping [RFC8029] in SR-MPLS environment. SR-MPLS over IP doesn’t introduce any issues to the use of LSP Ping as defined in RFC 8287.
- draft-mirsky-spring-bfd describes the applicability of BFD over MPLS LSP [RFC5884] in SR-MPLS domain. Again, no obstacles using BFD in SR-MPLS over IP.
- The use of IP/UDP encapsulation for LSP Ping and BFD is straightforward.
- LSP Ping is still required to bootstrap a BFD session.
- The use of GAL and G-ACh encapsulation of LSP Ping requires that the IP address of the sender be included. Option to use IP Address TLV defined in draft-mirsky-mpls-p2mp-bfd.
Performance Monitoring

• RFC 6374 Packet Loss and Delay Measurement for MPLS Networks is applicable in SR-MPLS and SR-MPLS over IP environments in its entirety
Next steps

- Much appreciate comments, questions, and suggestions
- The way forward – merge with draft-ietf-mpls-sr-over-ip or develop as the separate document
- Update with extensions