Inter-AS OAM for SR Networks
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Agenda

- Updates from Last version
  - Changes to Reverse Path sub TLV
  - Dynamically building Reverse Path
- Ask & Next step
Updates from previous version

- New Segment sub-TLV to generalize the segment to Label or IPV4/IPV6 address and SID
- Referring to SR Policy List Sub-TLVs" defined in [I-D.ietf-idr-segment-routing-te-policy]
Updates from previous version

- Segment Sub TLV

```plaintext
0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+-----------------------------------------------+
| Type  | Length | Flags | RESERVED |
+-----------------------------------------------+
| Label |       | TC    | S | TTL |
+-----------------------------------------------+

Figure 3: Type 1 Segment sub-TLV

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1
+-----------------------------------------------+
| Type  | Length | Flags | SR Algorithm |
+-----------------------------------------------+
| IPv4 Node Address (4 octets) |
+-----------------------------------------------+
| SID (optional, 4 octets) |
+-----------------------------------------------+

Figure 4: Type 3 Segment sub-TLV
```
Updates from previous version

- Segment Sub TLV

SRv6 has been moved out of the scope of this document. This draft will be renamed and submitted to MPLS WG
Dynamically Building Reverse Path

- **Notation**
  - Node SIDs: N-R1 etc.
  - Adjacency SIDs: Adj-R1-R2 etc.
  - EPE SIDs: EPE-ASBR1-ASBR3 etc.

- **When ASBR3 receives an MPLS OAM packet from ASBR1**
  - It knows the packet has been received from its trusted inter-AS peer
  - Builds Reverse Path by stacking
    - Its own Node-SID (N-ASBR3)
    - EPE SID (EPE-ASBR3-ASBR1)
    - Sends Reverse Path Segment TLV in “Downstream Detailed Mapping TLV”
Summary & Next steps

- Proposal provides simple solution for Inter-AS SR OAM
- Request MPLS WG accept it as WG document
Thank you