Agenda

- Introduction
- Proposed Solution
  - SR-MPLS
  - SRm6
  - SRv6
ANYCAST EGRESS PROTECTION

- Egress Node failures
- Need to provide fast failover to multi-homed services
- Based on RFC 8679 Egress protection Framework
- Simplified solution for
  - SR-MPLS ipv4/ipv6
  - SRV6
  - SRm6
ANYCAST EGRESS PROTECTION - SR-MPLS NETWORKS

- E & P associated with Anycast loopback and SID
- E & P should have same SRLB space
- Allocate same VPN label for the multi-homed customer
- BGP service prefix carries anycast address as protocol-nexthop
- Ingress has a tunnel with last SID being anycast SID
- PLR builds backup path to anycast SID
ANYCAST EGRESS PROTECTION-SR-MPLS NETWORKS

- Anycast SID for each pair of primary/protector egress node

Tunnel
To: 2.2.2.2
Label stack:
1030
1020---Anycast SID
E & P associated with Anycast locator
- Allocate same END.DT4 SID for the multi-homed customer
- BGP service prefix carries anycast address as protocol-nexthop
- Ingress has a tunnel with last SID being END.DT4 SID
- PLR builds backup path based on anycast locator address
SRm6 is similar to SR-MPLS solution
- It uses IPv6 dataplane instead of MPLS dataplane.
Next steps

- Request review and comments
Thank you