

Multicast VPN Using MPLS P2MP and BIER

draft-xie-bier-mvpn-mpls-p2mp-02

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Change log

2017.10 //IETF100

- mLDP build P2MP BIER
- RSVP-TE build P2MP BIER
- P2MP BIER forwarding
- Live-Live Protection

2018.03 //IETF101

- mLDP build P2MP BIER
- RSVP-TE build P2MP BIER
- PIM build P2MP BIER(+)
- P2MP BIER forwarding(e)
- Live-Live Protection
- Bypass non-BIER nodes(+)

2018.07 //IETF102

- mLDP build P2MP BIER
- RSVP-TE build P2MP BIER
- P2MP BIER forwarding
- Bypass non-BIER nodes

Target & Benefits

- Existing MVPN using mLDP/RSVP-TE P2MP may suffer from:
 - Overloading states ----by using SPMSI per-flow.
 - Bad Join latency ----because of hop-by-hop SPMSI tree building.
- Benefits from the Standard RFC8296 BIER-encapsulation:
 - Use the existing mLDP/RSVP-TE protocols.
 - Based on the widely supported P2MP forwarding capability.
 - Seamlessly bypass Non-BIER node(s) using P2MP.

Target & Benefits (cont)

- P2MP BIER fwd = P2MP fwd + BitString filtering/pruning.
 - Based on the widely supported P2MP fwd capability.
 - Bypass if BitString filtering/pruning is not supported.
 - **Simple & Seamless.**

Thank you !