MVPN / EVPN Composite Tunnel

draft-zzhang-bess-mvpn-evpn-composite-tunnel-00

Jeffrey Zhang (Juniper)
Jorge Rabadan (Nokia)
Ali Sajassi (Cisco)

IETF104, Mar 2019
Prague
Generalizing the concept of the RFC8317 Composite Tunnels Used in EVPN E-Tree

**RFC8317 Composite Tunnel**
Tunnel Type advertised by the Root PE in the EVPN IMET routes, that indicates P2MP in Tx and IR in Rx

**Goal of this draft**
Extend composite tunnels to:
- MVPN I-PMSI A-D routes
- MP2MP
- EVPN Assisted Replication
- Advertising PEs can also use IR in Tx

Describe Composite Tunnel Use-cases
Composite Tunnel Use-Cases
BIER introduction in EVPN networks

Use-case 1 – Composite BIER-IR Tunnels
Used along with [EVPN-BIER] and [BIER-PHP] to introduce BIER in EVPN networks with non-capable BIER PEs
R1 and R2 use BIER
Leafs use IR
Use-case 2 – Composite BIER-IR Tunnels with AR

Used along with [EVPN-AR], [EVPN-BIER] and [BIER-PHP] to introduce BIER in EVPN networks with non-capable BIER PEs, with a single copy from Leafs

R1 and R2 use BIER
Leafs use AR to AR-R, fall back to IR if no AR-Rs are left
Next steps

The Authors would like to request Feedback
Thank you