# Selective Multicast in EVPN

## draft-zhang-l2vpn-evpn-selective-mcast

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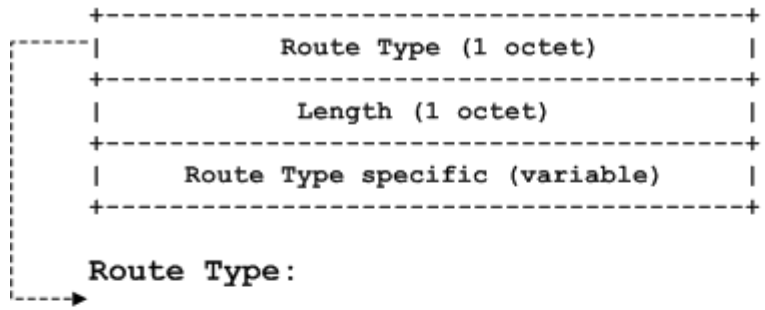
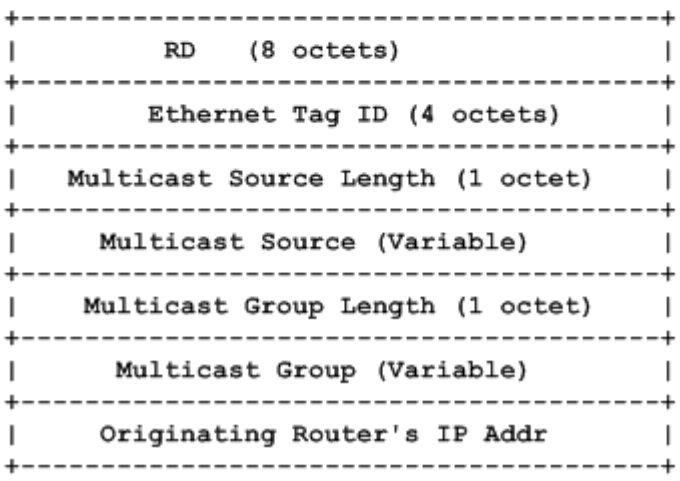
# About This Draft

- Provides protocols and procedures by which an selective tree can be used to carry traffic belonging only to a specified set of IP multicast streams from one or more EVPN instances.
  - Current EVPN does not provide the usage of selective trees for carrying multicast traffic.
  - If a particular stream has a large amount of traffic, it may result in highly non-optimal bandwidth utilization in the provider network.

# BGP EVPN NLRI Extensions

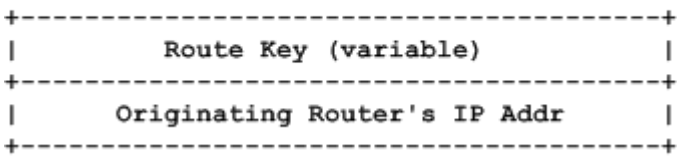



Selective Multicast A-D Route Specific Content




- Selective Multicast A-D Route:
  - Used to bind (C-S, C-G) to an Selective Tree
- Leaf A-D Route:
  - Used to explicit tracking of the IP multicast stream

Leaf A-D Route Specific Content



# Binding (C-S, C-G) to an Selective Tree

- Originating Selective Multicast A-D Routes by a PE(P2MP)
  - Construction of Selective Multicast A-D Route and P-Tunnel Identification(as same as the construction of Inclusive Multicast Ethernet Tag Route except the setting of C-S and C-G )
  - Multicast Source field MUST contain the C-multicast stream source address, if the source address is a wildcard the source address is set to 0
  - Multicast Group field MUST contain the C-multicast stream group address, if the group address is a wildcard the group address is set to 0
- Receiving Selective Multicast A-D Routes by a PE(P2MP)
  - Determine the C-multicast state snooped on the PE-CE interfaces.(will be described in future version)
  - If the snooped C-multicast state match the Selective Multicast A-D route, the PE SHOULD join the P-Multicast tree whose identity is carried in the PMSI Tunnel attribute.
  - The conditions of the snooped state matching the Selective Multicast A-D route are the same as specified in [VPLS-MCAST].

# Next Step

- Solicit comments and feedbacks
- Revise the draft