

MPLS-TP

Next-Hop Ethernet Addressing

`draft-fbb-mpls-tp-ethernet-addressing-00`

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The Ethernet Addressing Problem

In an MPLS-TP network without IP, how do you determine the Ethernet MAC address of the next hop?

- No standard answer to this basic question
- Some implementations using broadcast address or relying on static MAC configuration; both have problems
- Considerations differ for point-to-point vs. multipoint Ethernet links

Solution

- This draft mainly consists of text that was originally part of the MPLS-TP Data Plane Architecture (RFC 5960) and accepted by the WG, but which was taken out for scope reasons
- A reserved Ethernet multicast address is allocated and dedicated for MPLS-TP point-to-point links
- Use of static addressing and broadcast address still allowed, but multicast address SHOULD be used instead and MUST be supported by default in the receive path
- Draft also defines an Ethernet data-set for the G-ACh Advertisement Protocol that enables unicast MAC discovery even without IP

Next Steps

- Recommend WG adoption to resolve this open issue and get an early multicast address allocation as MPLS-TP implementations near completion