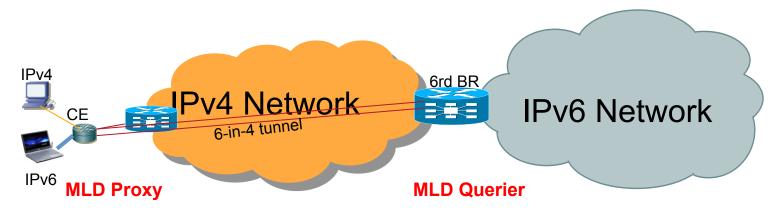
## Multicast Support for 6rd

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#### **6rd Multicast**



- 6rd CPE MUST support MLD Proxy
- 6rd BR MUST support MLD Querier
- ASM/SSM transparently supported
- For SSM MLDv2 must be supported

### **6rd Multicast Operation**

- 6rd customer edge device (CE) is MLD Proxy
- 6rd CE establishes tunnel interface with 6rd BR
- MLD messages and v6 multicast data are carried in v6 in v4 tunnel between CE and BR
- The protocol is analogous to DS-Lite multicast but instead of IGMP, MLD is supported
- PROS: Encapsulation based no translation
- PROS: Does not require native multicast in access

#### Layer 2 Support

- Assumption: 6rd network supports IPv6 multicast in Layer 2
- Switches maintain a list of multicast routers and the ports using multicast router discovery protocol (RFC 4286)
- MLD join/leave messages add/remove filter entries
- Multicast data packets are forwarded downstream based on the filter entries
- IPv6 snooping switches IPv4 protocol field values in IPv6-in-IPv4 tunnel

# Next steps

• WG draft?