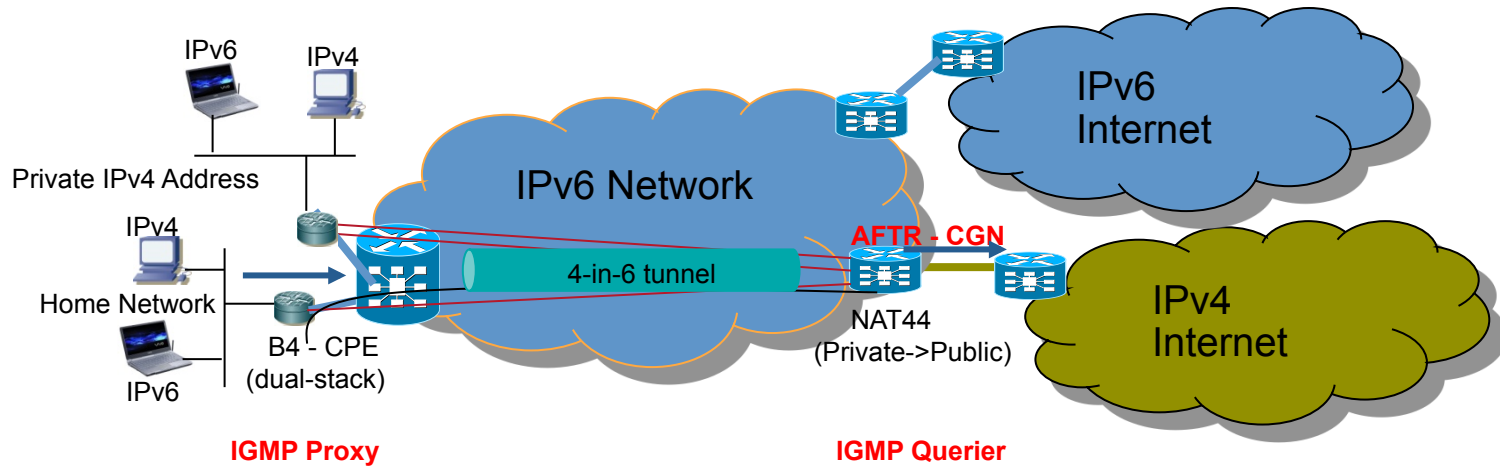


# Multicast Support for Dual Stack Lite and 6RD

Behcet Sarikaya

**draft-sarikaya-software-dslite6rdmulticast-00.txt**

# DS-Lite Multicast

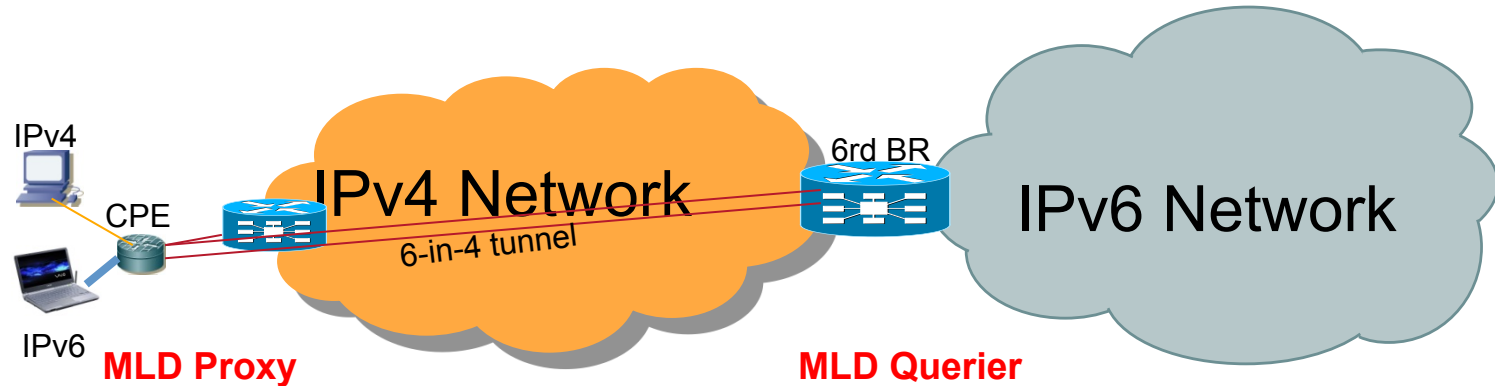


- **DS-Lite B4 MUST support IGMP Proxy**
- **DS-Lite AFTR MUST support IGMP Querier**
- **ASM/SSM transparently supported**

# DS-Lite Multicast Operation

- B4 establishes a tunnel interface with AFTR
- IGMP messages and v4 multicast data are carried in v4 in v6 tunnel between B4 and AFTR
- B4 sends aggregated IGMP report messages to AFTR
- B4 receives v4 multicast data, decapsulates it and then delivers it to the hosts
- Due to the shared link no duplication is needed
- AFTR acts as the default multicast querier for all B4s
- AFTR receives v4 multicast data, first replicates and then forwards in IPv4-in-IPv6 tunnel to B4s
- PROS: Encapsulation based no translation
- PROS: Does not require native multicast in access

# 6rd Multicast



- 6rd CPE MUST support MLD Proxy
- 6rd BR MUST support MLD Querier
- ASM/SSM transparently supported

# 6rd Multicast Operation

- 6rd customer edge device (CPE) is MLD Proxy
- 6rd CPE establishes tunnel interface with 6rd BR
- MLD messages and v6 multicast data are carried in v6 in v4 tunnel between CPE 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