

# IPv6 over MPLS deployment

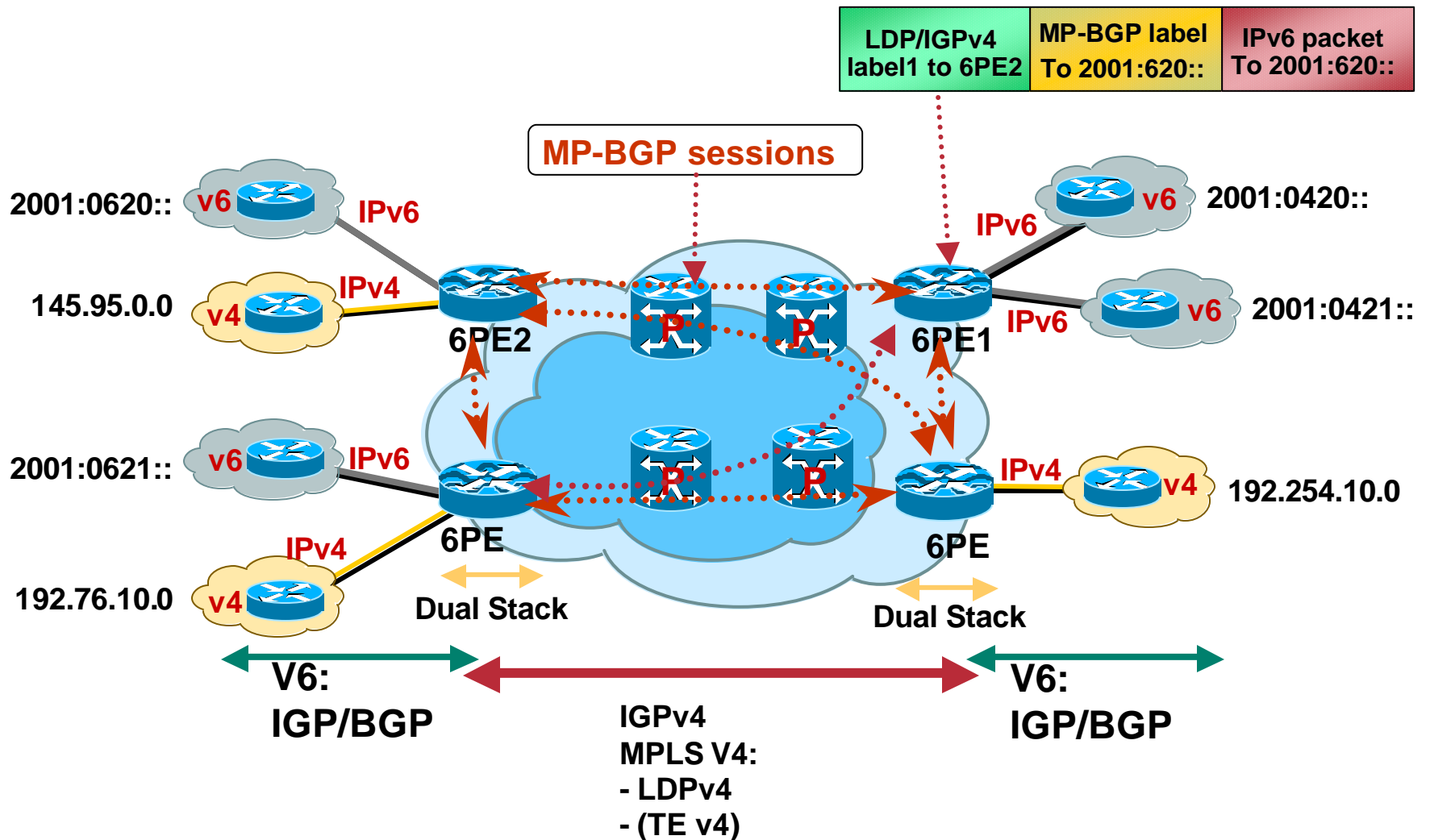
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# IPv6 over MPLS Deployment Scenarios

- **Many ways to deliver IPv6 services to End Users**  
Most important is End to End IPv6 traffic forwarding
- **Many Service Providers have already deployed MPLS in their IPv4 backbone for various reasons**  
MPLS/VPN, MPLS/QoS, MPLS/TE, ATM + IP switching
- **MPLS can be used to facilitate IPv6 integration**
- **Multiple approaches for IPv6 over MPLS:**
  - IPv6 CE-to-CE IPv6 over IPv4 Tunnels
  - IPv6 over “Circuit\_over\_MPLS”
  - Native IPv6 MPLS
  - IPv6 Provider Edge Router (6PE) over MPLS



# 6PE Overview



# Conclusions

- **IPv6 migration does not “need” MPLS ... but, where MPLS is deployed, it enables attractive approaches for IPv6 migration**
- **6PE is Cisco IOS implementation of “BGP Tunnelling” over MPLS : co-authored by Cisco : <draft-ietf-ngtrans-bgp-tunnel-04>**
- **Support of IPv6 VPN over MPLS will be added in a natural manner**

# Questions ?

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