

Framework of Supporting Applications Specific Multicast in NVO3

draft-ghanwani-nvo3-app-mcast-framework-00

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What is “Application Specific Multicast”

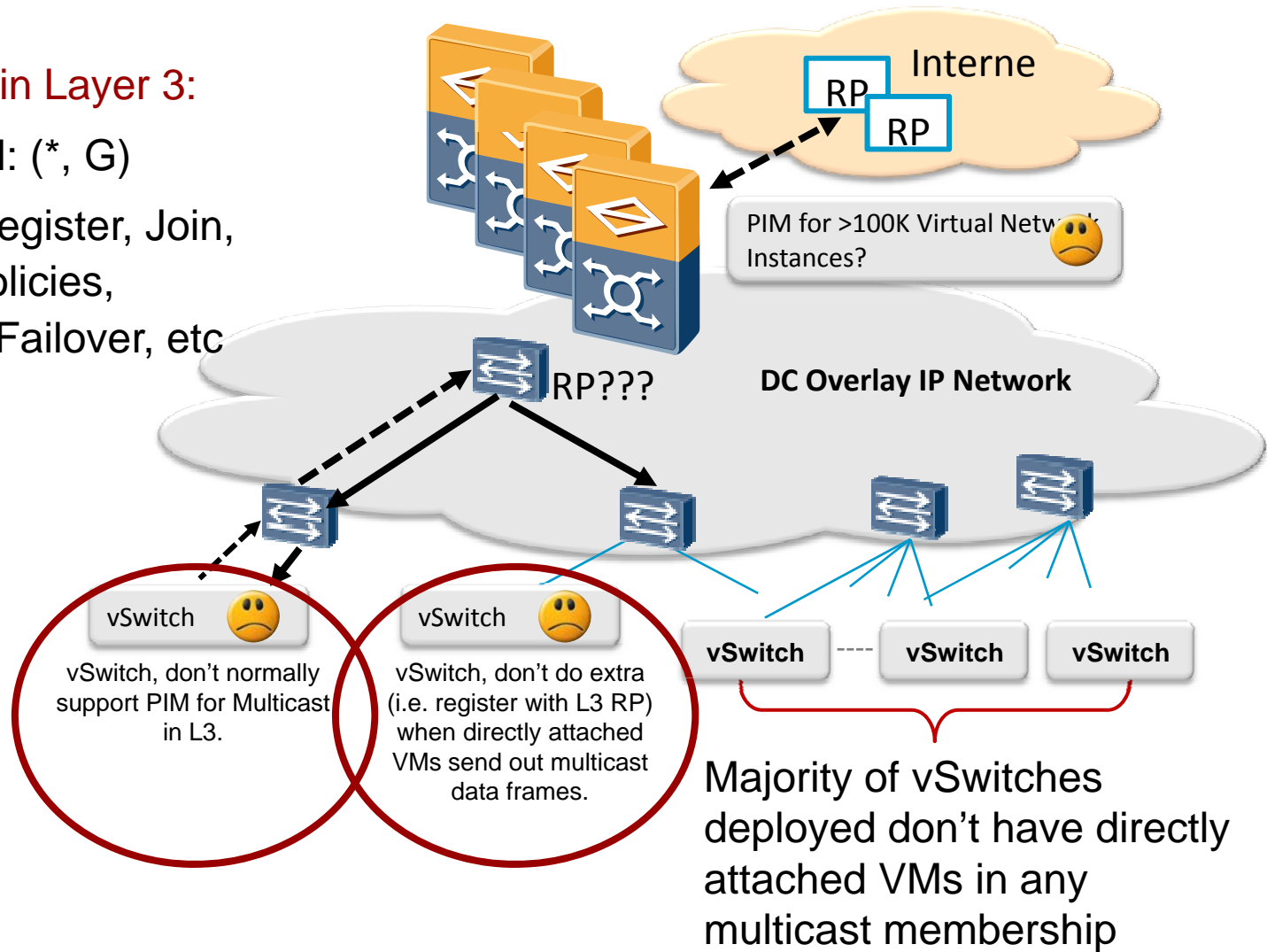
- Source-Specific Multicast (SSM),
- Any-Source Multicast (ASM), or
- other multicast traffic that are not derived from ARP/ND protocols

Challenges of Multicast with L3 Overlay in DC

Multicast in Layer 3:

PIM – SM: (*, G)

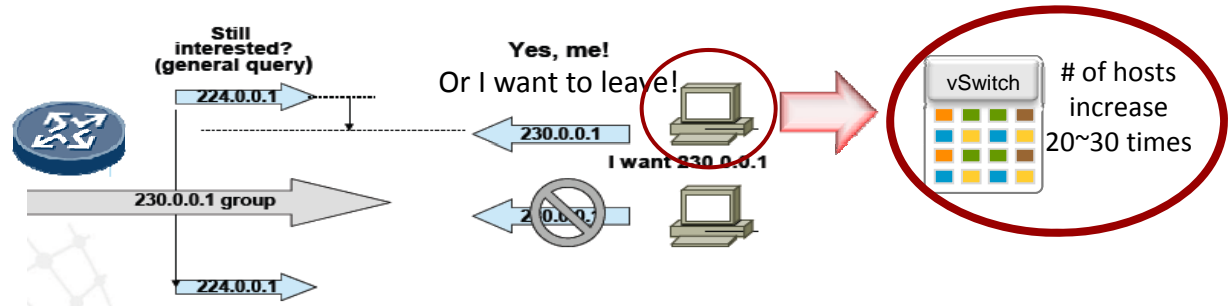
Source Register, Join, Prune, Policies, Reroute, Failover, etc



Challenges of Multicast in Cloud Data Center

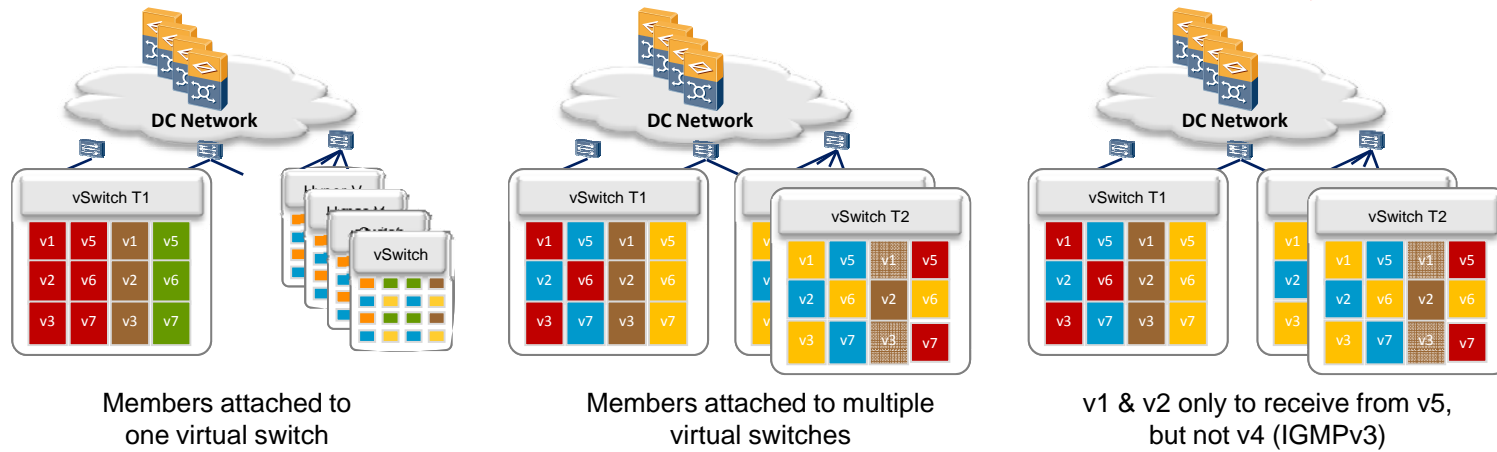
Multicast in the Layer 2:

- IPv4 IGMP (Internet Group Management Protocol)
- IPv6 MLD



Hosts respond to query to indicate (new or continued) interests in groups; or send leave messages to indicate the groups they are leaving

more dynamic multicast memberships



Mechanisms for Multicast in NVO3

1. No multicast support
2. Replication at the source NVE
 - IGMP/MLD snooping
3. Replication at a multicast service node
 - IGMP/MLD snooping
 - Tunnel to multicast service node
4. IP multicast in the underlay
 - IGMP/MLD snooping,
 - PIM interworking
5. Other schemes

Summary

- We believe the content of this draft doesn't fit to NVO3 arch draft. The content is substantial enough to be an independent draft.
- Next steps
 - Need WG comments/review

THANK YOU