

# **Multicastv6 Updates**

## **TN-NGN Meeting**

### **10th -11th May, Amsterdam**

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**DANTE**

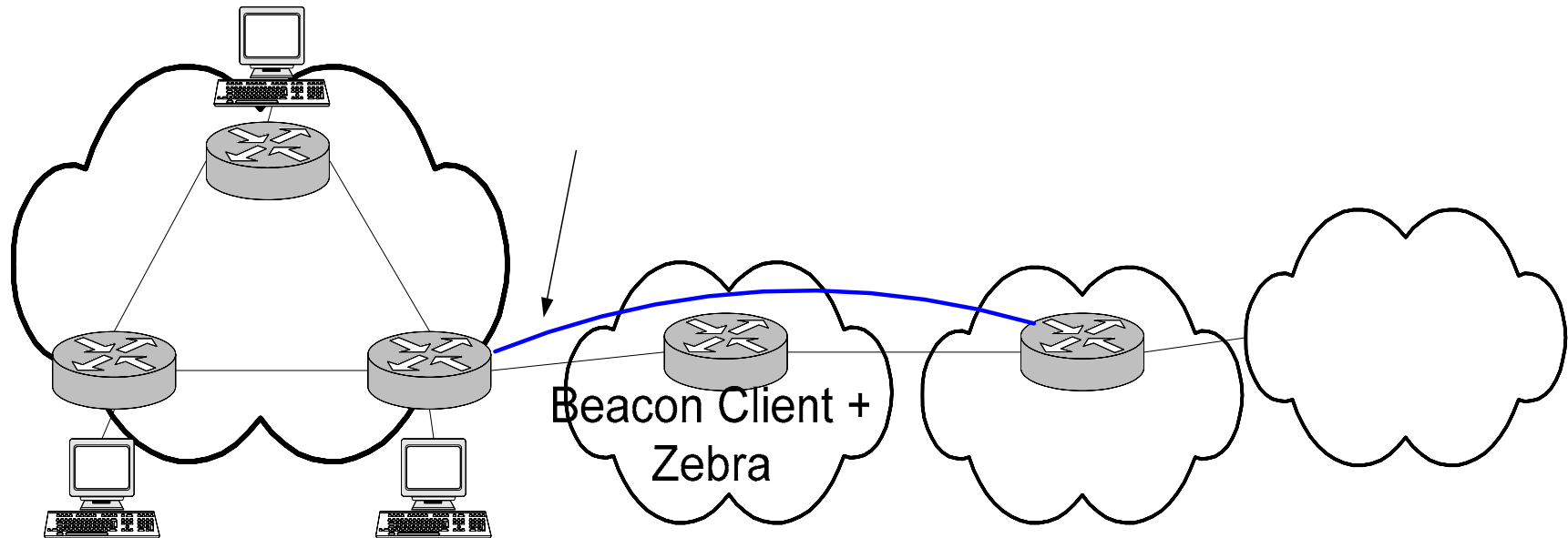
# Multicast IPv6 - Tests

- Objective: Pilot service for the end of year 2004
- First tests with JUNOS in GEANT testbed facility
  - using Junipers M20
- Multicast v6 TF created with NRENs
  - Renater, UNINETT, FCCN, SWITCH

# Multicast IPv6 - Tests

- Tests with JUNOS 6.1 - current version in GÉANT
- Testbed running topology simulating GÉANT
  - Connected to M6bone via tunnel
  - Beacon client in testbed sourcing and receiving

# Multicast IPv6 - First Tests



eBGP

tb1.it  
M20

eBGP Mcast Peering between  
and Renater M5 [multicast route  
two static unicast routes - RP  
beacon server]

# Multicast IPv6 - Tests

- Set up in testbed with congruent unicast and multicast topologies - PIM RPF done in inet6.0
  - ISIS rib groups for IPv6 feature not yet available in JUNOS software
  - more specific routes => affect unicast routing table
- ISIS feature requested to Juniper - PIM RPF using inet6.2 routing table

# Multicast IPv6 - Test

PR # 41857 in 6.1: PIM register packet generation

- Checksum calculation: different implementation than Cisco
- Incompatible with Cisco RP
- Fixed in 6.2

# Multicast IPv6 - Seen so far

- With JUNOS 6.1:
  - PIM forwarding
  - RP provided by other party
  - Receiving monitoring: beacon - no sourcing
  - NREN sending /32 - /35 multicast + unicast routes=> Connection with M6bone?
  - no other services affected - unicast v6

# Multicast IPv6 - Next

- Test features added with JUNOS 6.2 version
  - Source monitoring
  - RP available - able to do internal monitoring
- Expected features in future versions: ISIS rib groups for v6 and embedded RP