Bench Marking of EVPN draft-kishjac-bmwg-evpntest-00.pdf

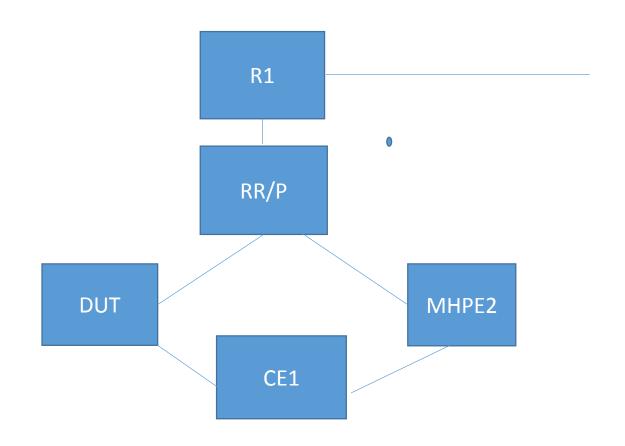
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Agenda

Defines the methodologies for benchmarking performance of EVPN.

Topology



draft-kishjac-bmwg-evpntest-00, IETF 95
Buenos Aires April 2016

Benchmarking Parameters of EVPN

- Mac learning
- Mac Flush
- Mac ageing
- RE Failover
- DF election during the MH PE reboot.
- Scale
- Convergence
- Soak

Measurement – Mac learning

- Measure time taken to learn local mac.
- Measure the time taken to advertise to remote peer.
- Measure the time taken to learn mac routes from remote peer.
- Measure the time taken to learn both local and remote in bidirectional traffic flow.

Measurement – Mac Ageing

- Measure the time taken to age out the mac once traffic stop locally.
- Measure the time taken to age out mac learned from remote peer once the traffic stops at remote end.

Measurement – Mac flush

- Measure the time taken to flush the local mac entries during local link failure.
- Measure the time taken to flush remote mac entries in DUT during remote PE-CE link failure.
- Measure the time taken to flush remote mac entries in DUT during core link failure.

Measurement – Routing Engine Failover

 Measure the traffic loss during the HA mode routing engine failover, ideally there should be 0 packet loss.

Measurement- Designated Forwarder election

• Measure the DF election is taking place properly and there should not any loss more than 3 sec.

Measurement-Scale

• Measuring the scale of 16K to 32 EVI with mac scale of 10,00,000. Learning of all 10,00,000 mac, measure the time taken to learn this 5,00,000 mac locally and 5,00,000 remotely.

Measurement Convergence

Measuring the scale of 16K to 32 EVI with mac scale of 10,00,000.
Learning of all 10,00,000 mac, after that simulate core failure or bgp flap. measure the time taken to learn 5,00,000 from remote peer by DUT measure the time period of flood in core towards DUT from remote peer.

Measurement SOAK

Measuring the scale of 16K to 32 EVI with mac scale of 10,00,000.
 Run this for 24 hr. The DUT should not have any cores or memory leak.

Thank you