

Bench Marking of EVPN

draft-kishjac-bmwg-evpntest-01.txt

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Agenda

- Defines the methodologies for benchmarking performance of EVPN.

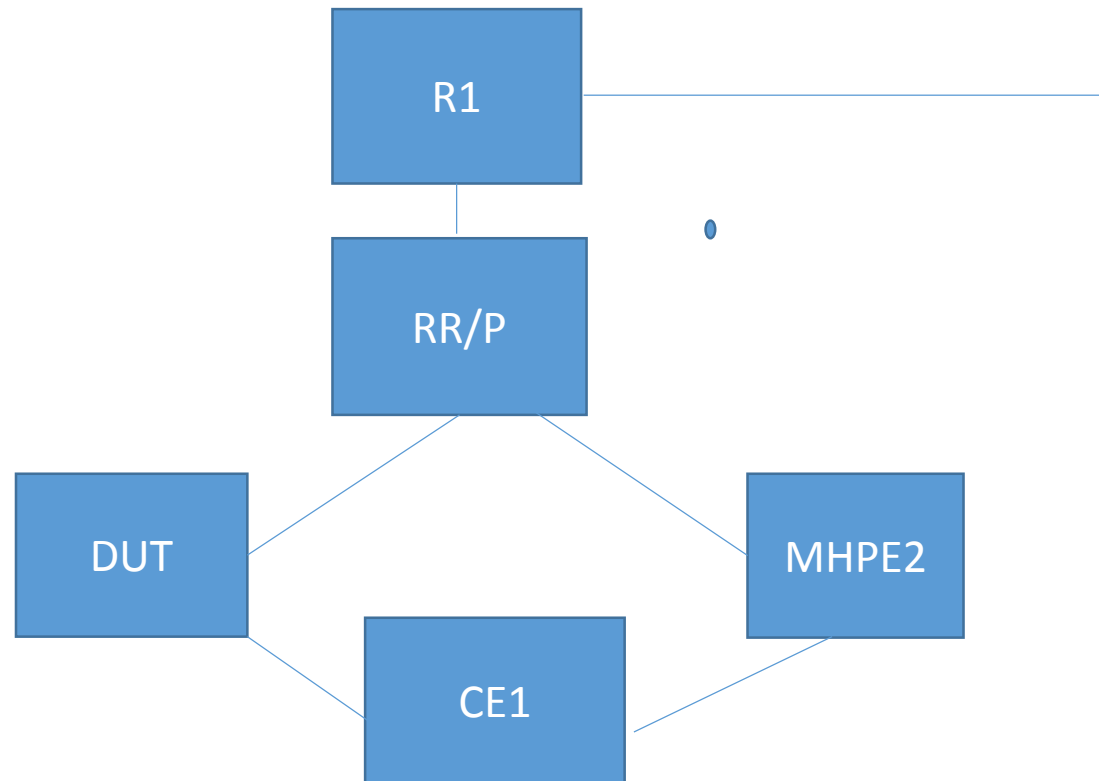
What is EVPN

- EVPN is defined in RFC 7432.
- The dual home PE's simultaneously forward traffic compared to VPLS.
- Has load balancing capability.

Comments from IETF-95

- Better Terminology
- Leverage on previous works

Topology



Benchmarking Parameters of EVPN

- Mac learning
- Mac Flush
- Mac ageing
- HA
- Reliability
- 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 bi directional 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.

Measurement HA– Routing Engine Failover

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

Measurement Reliability

- Measure the DF election is taking place properly and there should not any loss more than 3 sec when one the MH PE I rebooted.

Measurement- Scale

- 8k EVI with mac scale of 1,000,000. Learning of all 1,000,000 mac , measure the time taken to learn this 500,000 mac locally and 500,000 remotely.

Measurement Convergence

- Measuring the scale of 8K EVI with mac scale of 1,000,000. Learning of all 1,000,000 mac , after that simulate core failure or bgp flap. measure the time taken to learn 500,000 from remote peer by DUT measure the time period of flood in core towards DUT from remote peer.

Measurement SOAK

- Measuring the scale of 8K EVI with mac scale of 1,000,000. Run this for 24 hr. The DUT should not have any cores or memory leak.

Next Steps

- Draft Must be reviewed.
- Requesting the chair for adoption.

Thank you