BGP Data-Plane Benchmarking

Rajiv Papneja

Bhavani Parise

Sue Hares

Dean Lee

Ilya Varlashkin

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Where We Are

- draft-ietf-bmwg-bgp-basic-convergence-00
    - Author team: Rajiv Papneja, Bhavani Parise, Sue Hares, Dean Lee, Ilya Varlashkin
    - Presented and solicited feedback from IDR at IETF-83
    - Published as a workgroup item
- Reviewed by Verizon, AT&T, Cisco & Compass
- Performed Benchmarking tests based on the proposed methodology at Ixia labs. Presented the findings to BMWG group and also at MPLS Ethernet World Congress 2013, Paris
    - Positive feedback from EMEA carriers
- Responded to the number of iteration needed per test
    - The number of iteration is already taken into consideration in the test cases

Latest Update

- A NEM dev test team has adopted:
    - 5.1.1 RIB-IN Convergence
    - 5.2.2 Physical Link Failure on Remote/Emulator End
    - 5.6 BGP Route Withdrawal Convergence Time
    - 5.7 BGP Path Attribute Change Convergence Time
    - Automation with regression test bed in progress

Feedback

- Consistent test results
    - Tested 100K to 4M routes
    - Validated with live BGP routes
    - Ran 5 iterations with consistent results
    - Needed to wait longer than 3 KeepAlive plus additional time needed for specific DUT – already addressed in the draft
    - Needed to validate DUT with no packet loss before executing convergence test

Next Step

- Clarify packet loss validation in section 5
- The draft is ready to move on