Benchmarking Methodology for Segment Routing
draft-ietf-bmwg-sr-bench-meth-01

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Draft Status

• Scope: To define a standard method to benchmark the SR packet forwarding capabilities of network devices.
  – The draft extends RFC1242, RFC2544, RFC5180 and RFC5695 to SR network.
• Status: Adopted by BMWG after IETF 119.
  – Standalone document incorporating the previous drafts specific to SR-MPLS and SRv6.
  – Thanks to all who provided support and feedback.
• Version -00 uploaded in June.
• Version -01 (the current one) uploaded in July to deal with some remaining comments.
Latest Changes and Open Issues 1/2

- Compressed SID (comment from Minh Ngoc Tran)
  - Co-Authors aware that test cases have to be expanded
  - Not a complex task to add the relevant test description but needs to be repeated for each and every test
  - Sort of third data plane in addition to SR-MPLS and SRv6
  - Will be subject of the next release.

- Security considerations (point raised by Luis)
  - Explore implications of draft-bdmgct-spring-srv6-security-01
    - Not yet in call for adoption but could be soon after IETF 120
  - Co-Authors’ opinion is that this represents a distinct set of problems (maybe for a new document?) but more feedback is appreciated.
• Fragmentation (point raised by Luis and Bruno)
  – Reworded text to better clarify that fragmentation is not an option for Transit Segment Endpoint tests
  – Prohibited in transit by [RFC8200] section 4.5: unlike IPv4, fragmentation in IPv6 is performed only by source nodes, not by routers along a packet's delivery path
  – Fragmentation of customers IPv4 packet is not considered for Source Edge Node as this is not possible (not done for MPLS service so likely not implemented for SRv6 services).
• Editorial review and language refinement.
Next Steps

• Address the C-SID test cases in the next revision.

• Benchmarking tests using the draft are on-going, but in general they are not public.
  – Let us know if a test activity can be referenced.

• Possibly cross-post and discuss the draft in SPRING and SRV6OPS as well to get comments from the SR experts there.

Thank you