

Traffic Management Benchmarking Framework

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Traffic Management Benchmarking Overview

- Could be an extension of RFC 2544 benchmarking into traffic management functionality
 - Classification / Prioritization
 - Policing
 - Buffering
 - Queuing / Scheduling
 - Shaping
- In addition to packet based testing, would utilize “application test patterns” in order to fully characterize the performance of the device under bursty traffic conditions

Status of Personal Submission

- Received extensive comments from three (3) reviewers
 - Overall comments were very supportive of this work
- Summary of comments:
 - Test the DUT with multiple flows during each of the test types; for example, queue tests need each type of queue exercised in parallel
 - In addition to observed packet performance (i.e. drops), verify that the DUT counters are accurate
 - Need to address multiple port test cases
 - Add TCP layer testing to the Policer benchmarking (in addition to stateless traffic tests)
 - Remove the misused “QoS” term throughout document

Discussion of Benchmark vs. Functional Test

- Al Morton made some comments (as chair) concerning the nature of a functional test versus black-box benchmark
 - “Inherently, that testing includes the "functional" test that you are seeking now (If I configure 64kbps CBR, does the DUT enforce/achieve that limit)”
- Language in the draft will be augmented to align with the BMWG charter
 - Clearly state that performance metrics will be measured to compare vendor performance

Next Steps for the Traffic Management Draft

- We seek the BMWG to formally adopt this personal submission as a chartered draft work
- Work intensely on the next revision(s) to incorporate the excellent comments that we received