



APPOSITE  
TECHNOLOGIES

# RFC 2544



**Specifically  
Designed  
to Perform  
the Subtests  
of the RFC  
2544 Test  
Methodology**

## Traffic Generation Re-Imagined

### OVERVIEW

Apposite's RFC 2544 test module allows users to quickly evaluate the packet forwarding performance of a broad range of networking devices. The test solution executes industry standard throughput, latency, frame loss, and back-to-back tests to validate performance characteristics and benchmark devices for easy comparison.

The RFC 2544 test solution helps achieve defined, unambiguous results to determine which devices perform best for your specific needs.

Evaluate the effects of changes in firmware, system architectures, security patches, and new applications to identify bottlenecks and avoid performance degradation.

### RFC 2544 SUBTESTS



THROUGHPUT



LATENCY



FRAME LOSS



BACK TO BACK

## TEST CAPABILITIES

**Throughput:** The throughput test determines the maximum throughput that you can achieve without any packet loss.

In an automated fashion, RFC 2544 will find the maximum throughput for a multitude of frame sizes from small to large packets. This value seeking test then gradually reduces throughput until zero packet loss is observed.

**Latency:** Latency is the time it takes a packet to travel from a source to a destination i.e. client to server, or test equipment to DUT.

RFC 2544 measures latency by time stamping a test frame, transmitting it through the network and then checking the time stamp when the frame is received.

**Frame loss:** Frame loss is the percentage of frames that were successfully transmitted from the source but were never received at the destination.

RFC 2544 starts with a selected frame size and runs at 100% line rate for a specified duration. It steps down by 10% increments and records the results then repeats the tests with different frame sizes.

**Back-to-Back Frames:** The back-to-back test characterizes the ability for the device under test to process back-to-back frames - AKA buffering.

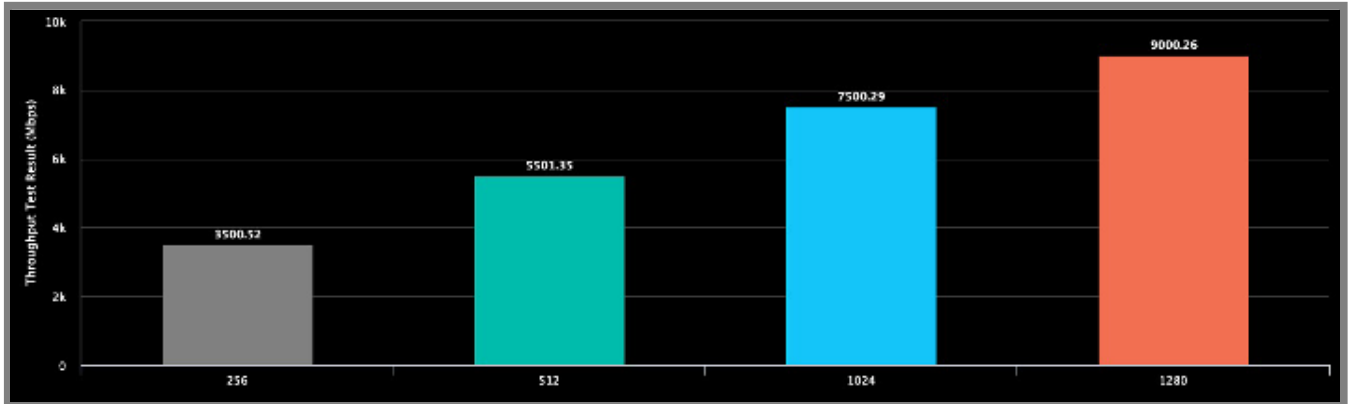
RFC 2544 measures the number of frames in the largest burst of frames that the DUT can handle without any packet loss.

## FEATURES

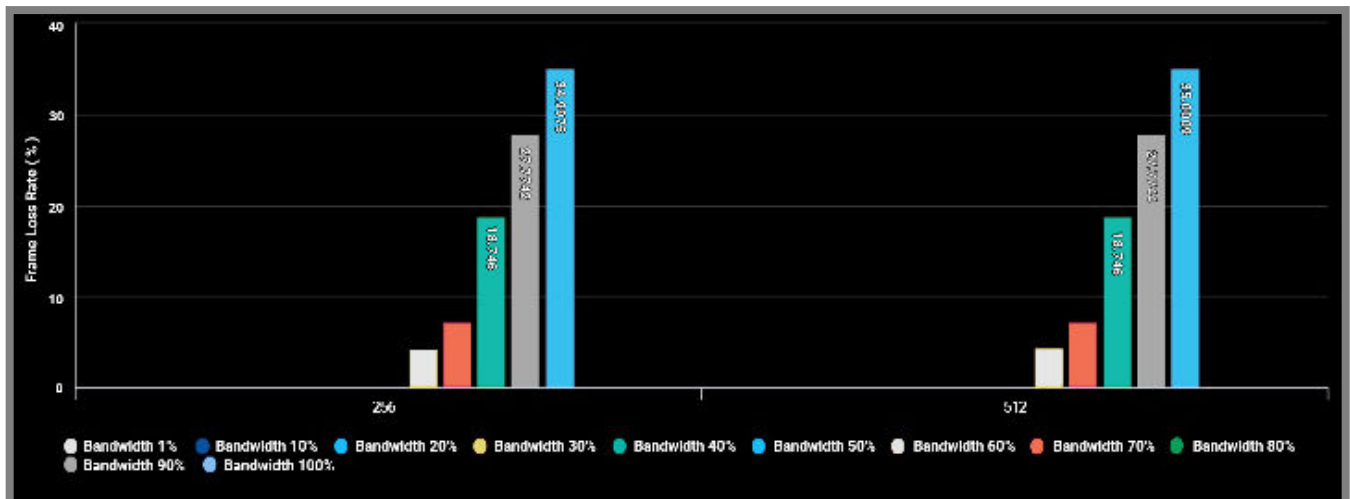
- Emulate up to a million clients
- Specify a range of MAC or IP addresses
- Choose packet sizes from 64 - 1518 Bytes, selecting one, multiple, or all
- Configure step duration for each test
- Run tests from East to West or West to East, or both
- Measure latency at different frame rates and packet sizes
- Select from IPv4 and IPv6
- Select one subtest to run or all 4 at once
- Watch packets per seconds graph in real time
- Automate testing with a RESTful API
- 24 hour log and offline analyzer
- Comprehensive, customizable reporting
- Easy to use , intuitive web-based user interface
- Wizard-driven test set up
- Up to 8 ports per test bi-directionally

## GRAPHS AND REPORTING

### THROUGHPUT TEST



### FRAME LOSS TEST



RFC 2544 is available on high performance appliances and virtual machines. Configure tests with ease on the feature-rich, browser-based GUI or with our comprehensive RESTful API for increased automation. Run multiple tests at once and keep them running in the background, collaborate with your team, and easily connect and perform tests from anywhere.

### Apposite Technologies

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