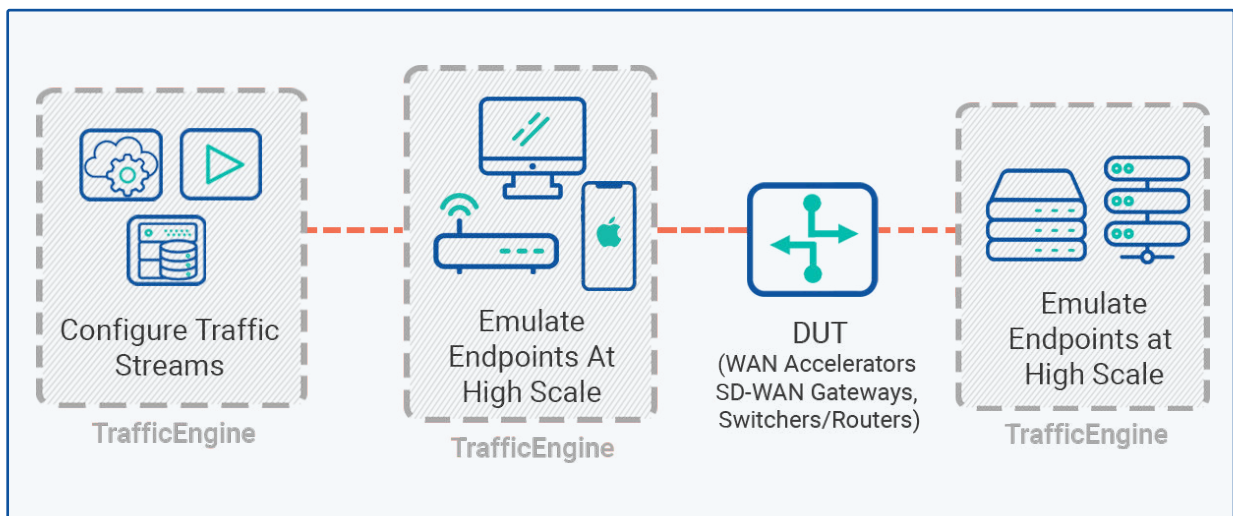# APPOSITE
TECHNOLOGIES

TrafficEngine

Traffic Generation Re-Imagined

Benchmark the Raw Packet Level Performance of Networks and Devices with Classical Performance Measuremants

OVERVIEW

Ensuring network performance and resiliency at scale has become increasingly challenging as networks grow more and more complex. With its modern, wizard-driven test approach, TrafficEngine allows users to benchmark the raw packet level performance of networks and devices with classical performance measurements.

Quickly and easily assess complex network topologies by generating line rate stateless traffic and emulating up to a million traffic flows. Ensure network performance, QoS policies, and resiliency at scale by stress testing under the most challenging scenarios. Identify and eliminate performance bottlenecks in the lab, before you go live.

Configure Traffic Streams
TrafficEngine

Emulate Endpoints At High Scale
TrafficEngine

DUT
(WAN Accelerators SD-WAN Gateways, Switchers/Routers)

Emulate Endpoints at High Scale
TrafficEngine

BENEFITS

Load Profile and Traffic Scheduling

Using the Load Profile and Traffic Scheduling Wizard the user can specify the ramp up, ramp down, total duration, number of Iterations and also specify the Traffic Stream Distribution. This is helpful in simulating real-world network traffic patterns like:

Daily Peak Period, Weekdays versus Weekend, Fixed Daily Measurement Interval (FDMI), and other peak events.

Traffic Distribution

Traffic Distribution Wizard lets you configure the utilization of bandwidth per stream

Real Time Statistics

TrafficEngine provides real time aggregate statistics on per port and per stream basis

Latency and Jitter Calculation

Real-Time aggregate and per stream of min, max, and average latency and jitter calculation

Stream Based Traffic Generation

Create custom streams using the Stream configuration wizard. Mac address, VLAN, IP Address and other parameters can be randomized or incremented in a set pattern

Scale

Create up to 512 unique streams per port where each stream can have 1 million flows

Scripting and Automation

Comprehensive RESTful API's for test automation

Packet Editing

Edit packet header fields and payloads on the fly with increment, decrement, repeat, fixed, or user defined criteria

Real-Time Flow Filtering and Detection

Filter and single out the best or worst performing flows based on tracking settings with user defined criteria
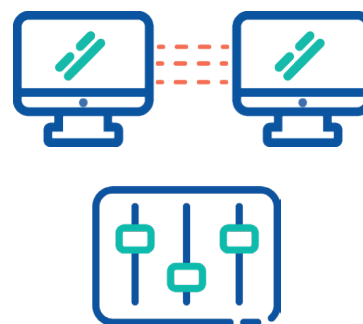
FEATURES

- Easily bench-mark device performance for throughput, packet loss, min, max, and avg latency, jitter and much more.
- Supports over 130 pre-defined and customizable layer 2-7 header templates including IPv4, IPv6, TCP, UDP, HTTP, SIP, RTP, and many more
- Modern test wizard takes the user step by step through the test setup in minutes
- Offline analyzer to visualize long duration tests graphically
- Various payload patterns – Random, Custom, PRBS31
- Various packet patterns – Fixed, Random, Incrementing, Decrementing and Butterfly
- Ability to configure Inter Frame Gap (IFG)

- Ability to configure Inter Burst Gap (IBG)
- Ability to specify bandwidth utilization at port level
- Stream, Load and Traffic distribution wizards
- Intuitive web-based GUI
- Aggregate and per stream latency and jitter calculation
- Real-time aggregate per port statistics
- Capture utility and filter support
- Offline analyzer to visualize long duration test graphically
- Ability to customize test report
- Automation support – RESTful API

USER INTERFACE
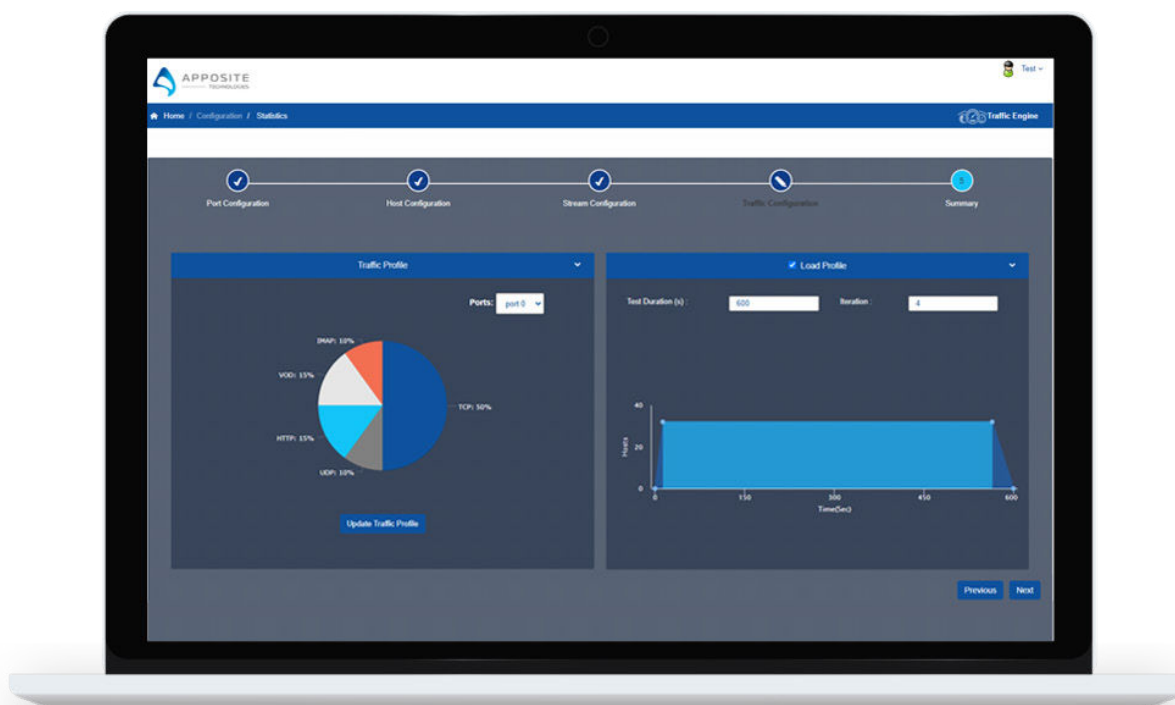
STREAM BASED TRAFFIC GENERATION

✓ Create up to 512 unique streams per port

✓ Each stream can have 1 million flows

✓ Mac address, VLAN, IP Address can be randomized or incremented in a set pattern

✓ Support over 130 pre-defined layer 2-7 header templates including IPv4, IPv6, TCP, UDP, HTTP, SIP, RTP, and many more.

✓ Create custom streams using the stream configuration wizard

TrafficEngine 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.