APPOSITE TECHNOLOGIES

NETROPY BROADBAND ACCESS TESTER

To provide the best possible experience to their customers service providers must ensure their networks can handle increasing traffic loads and QoS requirements while maintaining consistent quality and network up-times.

The Netropy Broadband Access Tester empowers providers to validate network performance, optimize infrastructure, and troubleshoot issues across cable and fiber networks within a controlled, repeatable test environment. With powerful traffic generation and network emulation capabilities, the Netropy Broadband Access Tester provides an end-to-end testing platform that helps engineers evaluate device interoperability and ensure SLA compliance.

All-in-One Solution for Testing the Performance of DOCSIS & PON Networks

- ☑ Generate realistic subscriber traffic at high scale
- ☑ Emulate dynamic, real-world network conditions
- ☑ Replicate customer issues
- ☑ Test in a controlled, repeatable lab environment
- ☑ Validate quality of service

Benchmark Device Performance: Evaluate broadband home routers (BHRs), modems (CMs), cable modem terminal systems (CMTS), optical line terminals (OLTs), and optical network terminals (ONTs) to validate performance against SLAs and regulatory standards before deployment.

Assess Interoperability: Send realistic application traffic through the entire ecosystem of devices to ensure they are working together seamlessly to maintain network stability.

Reduce Service Disruptions: Recreate network impairments like latency, packet loss, jitter, and congestion to ensure customers experience consistent speeds, low buffering, and smooth application delivery.

Accelerate High-Speed Roll Outs: Optimize configurations, and troubleshoot issues in a controlled environment before deployment to reduce risks, and deliver reliable high-speed broadband to customers faster.

Benchmarking Network Performance

Generate authentic subscriber traffic and recreate complex network scenarios to test performance under real-world conditions and identify potential bottlenecks prior to deployment.

Measure Classic Network Metrics

Measure throughput, packet loss, latency, and jitter under realistic traffic scenarios. Emulate millions of broadband subscribers to uncover performance issues and optimize network resilience.

Capture and Amplify Subscriber Traffic

Record live broadband subscriber traffic and convert it into dynamic traffic patterns. Scale a single capture into millions of flows to assess devices and systems under peak load conditions.

Optimize Application Performance

Validate the performance of broadband network components using Netropy's extensive library of pre-defined application flows for streaming, gaming, video conferencing, business applications and more.

Ensure Quality of Service

Generate application-level traffic to verify the correct priorities are set for different application types. Ensure critical traffic receives priority even when resources are limited.

Ensuring SLA Compliance

Simulate real-world broadband traffic to validate network performance against SLA commitments. Meet guaranteed performance metrics for speed, latency, uptime, and reliability.

Meet or Exceed SLA Targets

Validate that the network is delivering the required level of performance for critical benchmarks in a controlled lab environment. Fine-tune performance to ensure consistent, high-quality service delivery.

Stress Test Under Peak Demand

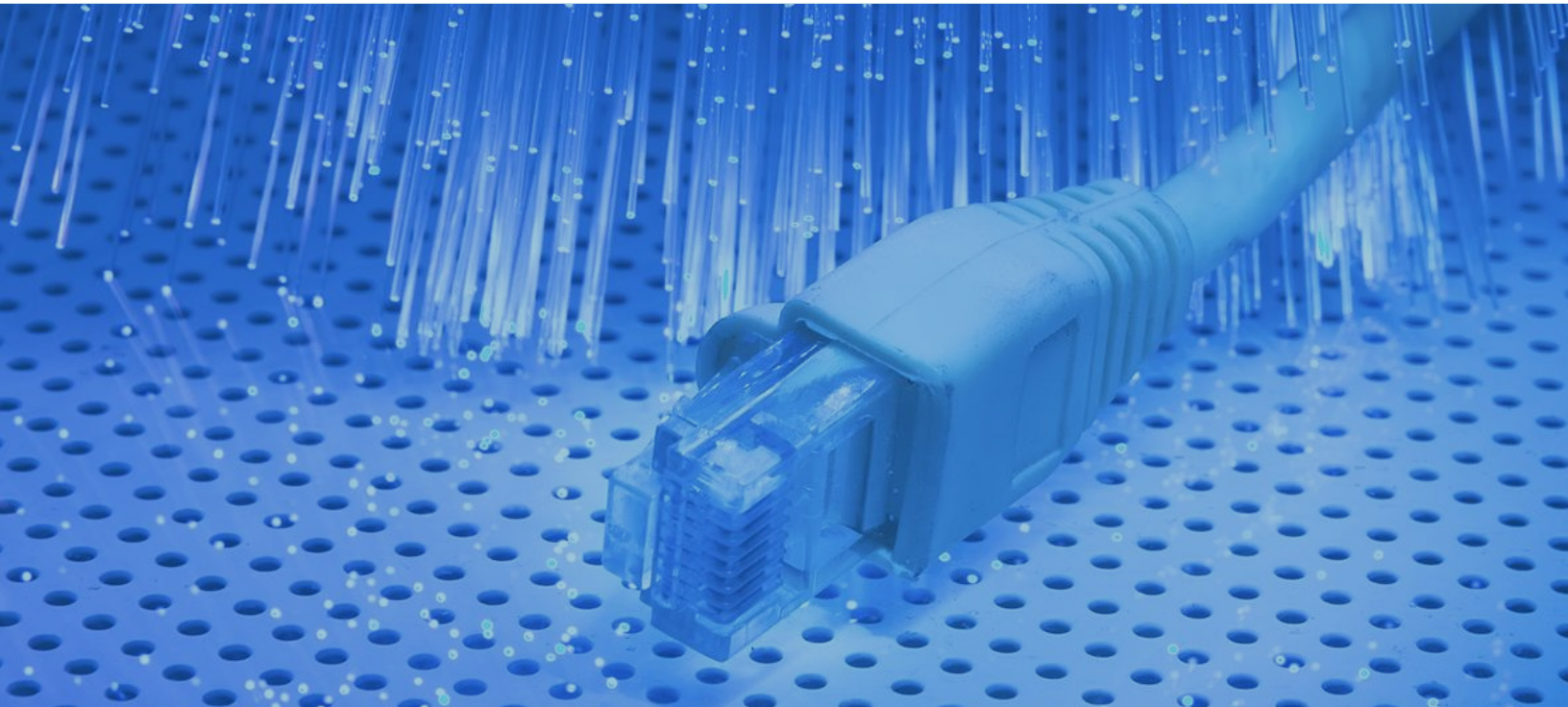
Simulate network congestion and high-traffic scenarios to ensure services maintain promised performance levels, even during peak usage.

Proactively Identify and Resolve Issues

Detect performance degradations before they impact customers. Recreate real-world service disruptions to accelerate troubleshooting and improve network reliability

Demonstrate Compliance for Gov Funding

Validate that broadband networks meet federal and state grant requirements by testing actual network performance against funding criteria for speed, reliability, and accessibility.

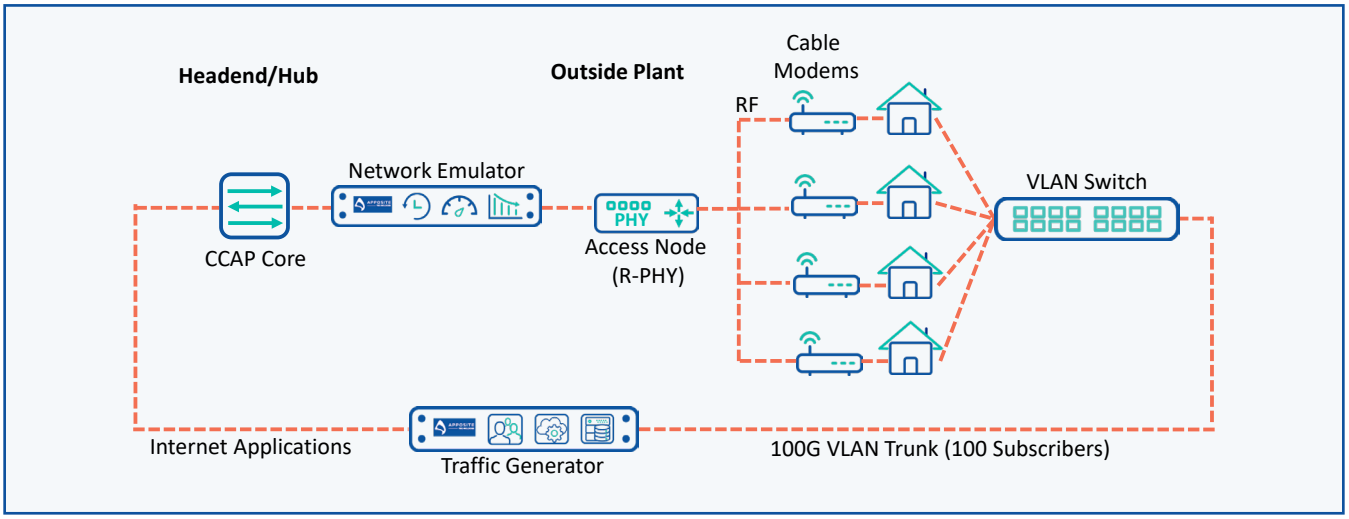


REDUCE YOUR LAB FOOTPRINT

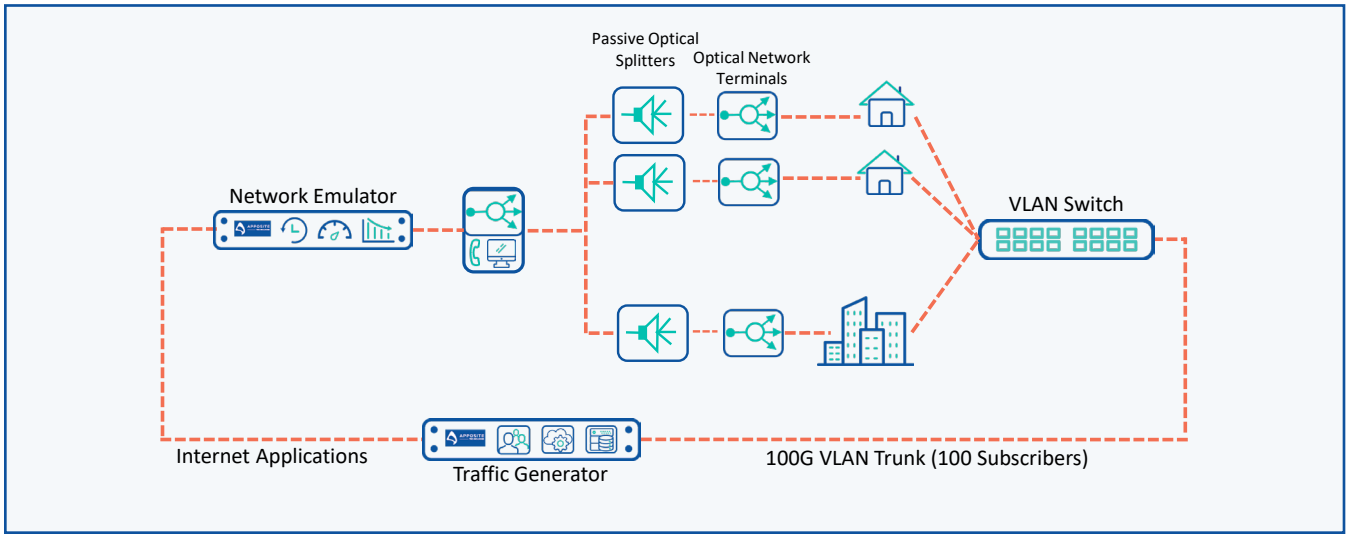
With a 100G Netropy Broadband Access Tester, engineers can use a VLAN switch to direct traffic to multiple devices under test simultaneously and measure their performance individually on a per VLAN basis. This approach enables them to test hundreds of cable modems or optical network terminals with a single Netropy unit.

- Save on valuable lab space
- Reduce test equipment costs
- Run multiple test at once
- View test results on a single pain of glass

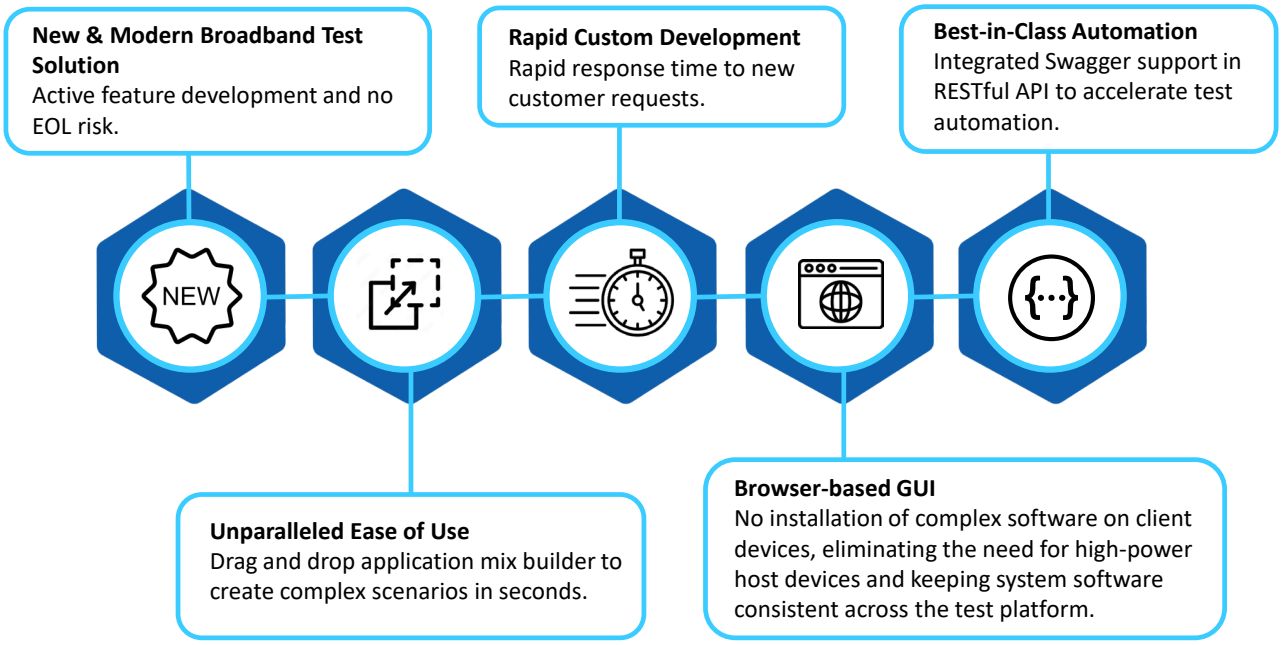
DOCSIS Test Diagram



PON Test Diagram



Advantages of Netropy Broadband Access Tester



Available Appliances for Netropy Broadband Access Tester

Model	Speed and Ports
Netropy Broadband Access Tester N61	2x 1Gbps ports RJ45
Netropy Broadband Access Tester 10G2	4x 10Gbps ports SFP+
Netropy Broadband Access Tester 10G4	8x 10Gbps ports SFP+
Netropy Broadband Access Tester 100G	2x 100Gbps ports QSFP28
Netropy Broadband Access Tester 100G2	4x 100Gbps ports QSFP28
Netropy Broadband Access Tester VE	Virtual Edition
Netropy Broadband Access Tester CE	Cloud Edition

ABOUT APPOSITE

Apposite has been in business for over 20 years and has helped customers around the globe from telecoms to system integrators, technology vendors and large enterprises. Our modern, easy-to-use test solutions enable teams to set up performance tests quickly and easily and trust the results.

Apposite Technologies

4223 Glencoe Ave B121, Marina Del Rey, CA 90292 USA