SD-WAN Optimization

Application Performance and Security Validation

Keysight's CyPerf is the world's first agent-based test solution that recreates every aspect of a realistic workload across a variety of physical and cloud environments to deliver insights into end user quality of experience (QoE), security posture, and performance bottlenecks of distributed networks. With CyPerf, organizations validate software-defined wide area network (SD-WAN) solutions and the bandwidth performance and QoE of various SD-WAN topologies, along with security efficacy of SD-WAN security offerings.
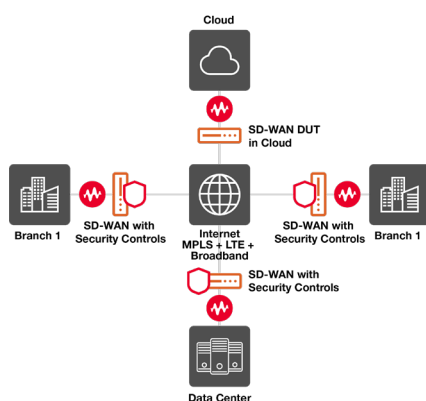
Challenges of Creating Resilient, High-Performing, and Secure SD-WANs

- Ensuring smooth deployment of SD-WAN infrastructure over complex topologies like physically distributed branches, clouds, and datacenters

- Validating SD-WAN performance in highly dynamic conditions that include cloud and hardware variables

- Measuring key performance indicators, latencies, and quality of experience of the SD-WAN tunnels as they spread across wide area networks

- Maintaining resiliency of SD-WAN tunnels to debug and remediate tunnel disappearance, flapping and other inconsistencies rampant in this environment

- Understanding the efficacy of SD-WAN security offerings and striking a right balance of performance and security features

CyPerf—Your Solution to Ensuring High-Performing SD-WANs

Cloud

SD-WAN DUT in Cloud

Branch 1 — SD-WAN with Security Controls — Internet MPLS + LTE + Broadband — SD-WAN with Security Controls — Branch 1

SD-WAN with Security Controls

Data Center

- Generate both application and attack traffic to accurately evaluate the performance cost of security features strike a right balance with QoE

- Conduct relevant demos and proof of concepts and verify service-level agreements

- Optimize SD-WAN deployments using distributed CyPerf test agents deployed in physical and cloud exchanging application traffic between them

- Evaluate key performance indicators of SD-WAN tunnels and understand maximum and average latencies, concurrency, and throughput

- Validate security features like application profiling and blocking, malware mitigation, exploit detection and block, URL filtering, file inspection

KEYSIGHT TECHNOLOGIES