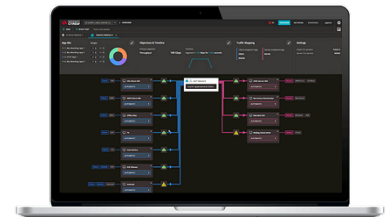


Zero Trust Validation

Elastic Application and Security Testing

Keysight's CyPerf is the world's first instantly scalable and elastic agent-based test solution for zero trust in hybrid, distributed cloud networks. It recreates every aspect of a realistic workload across a variety of physical and cloud environments to deliver insights into end user experience, cybersecurity posture, and performance bottlenecks of distributed networks.

Test agents send application and attack traffic simultaneously through hybrid networks, security devices and zero trust implementations to validate scalability, performance, and security efficacy.



Challenges to Testing Scalability and Performance of Zero Trust Implementations

- Characterizing the security efficacy of zero trust strategies especially with lateral network movement and/or inside sourced attacks
- Accessing quantifiable data and key performance indicators like throughput, concurrent users, latencies, and quality of experience before and after implementing zero trust controls
- Assessing the functionality, performance, and scale of the zero trust authentication engines on a continuous basis to monitor for any undesirable deviations
- Demonstrating to customers and stakeholders the immediate value of zero trust implementations through live-traffic, and custom proof of concepts (POCs)

CyPerf—Your Solution to Ensuring a Scalable and Secure Zero Trust Framework

- Generate authenticated and unauthenticated application traffic and security attacks to validate zero trust authentication policies
- Characterize the performance, scale and responsiveness of zero trust implementations by generating thousands of authentication requests and concurrent sessions in a repeatable manner
- Simulate lateral movement attacks where un-authenticated attacks attempt to propagate throughout the network
- Support is built-in for HTTP Redirect and authentication/session cookie to create custom application flows and scenarios for unparalleled flexibility
- Support for millions of connections per second and tens of millions of concurrent users



Validate Zero Trust

Generate authenticated and unauthenticated application traffic and security attacks to validate zero trust authentication policies. Characterize the performance, scale, and responsiveness of the zero trust implementations by generating thousands of authentication requests for up to 60 million concurrent users.



Introducing Keysight CyPerf 2.0

High realism

- Emulates real user / application behavior
- Editable apps and attacks
- Proxy support



Highly scalable

- Millions of concurrent users and connections per second
- Elastically auto-scales
- Resiliency / chaos testing
- Portable



CyPerf
Management
dashboard
(cloud-native UI)

Containerized traffic agents

- Deploy lightweight agents as containerized pods
- Supports on-prem or managed Kubernetes deployments. Can also deploy as VMs or in public cloud (Amazon Web Services [AWS], Google Cloud Platform [GCP], and Azure)



Pre-deployment & live tests

- Creates digital twin of users, applications, and threats
- Scales vertically / horizontally
- Performance via proprietary goal seeking algorithm



Figure 1. CyPerf is the industry's first instantly scalable test solution for validating zero trust in distributed environments

To explore CyPerf or to take a free test drive, visit:

www.keysight.com/us/en/products/network-test/cloud-test/cyperf.html

Learn more at: www.keysight.com

For more information on Keysight Technologies' products, applications, or services, please contact your local Keysight office. The complete list is available at: www.keysight.com/find/contactus

