netrounds

Automated and On-Demand Service Quality Testing Platform for Business Service Providers

Enabling Engineering and Service Delivery Teams to gain visibility and control over customer experience.

Upon ordering a new service, customers expect it to work immediately. Therefore, service providers need to speed up service delivery and make sure that services will be delivered right the first time and meeting customer expectations.

Research show that many services are delivered without proper service activation testing, or even tested at a primitive level. A main reason is that activation testing has required expensive field efforts, which service providers have been reluctant to undertake due to capital and resourcing requirements. As a result, problems are often discovered by customers at a later time, with costly field work and customer frustration as consequences.

With Netrounds, engineering teams are able to validate that services have been turned up properly and can also be reassured that configuration changes in the network have not affected the customer experience.

SERVICE ACTIVATION TESTING

QUALITY MONITORING

TROUBLESHOOTING

BUSINESS SERVICES ORGANIZATION'S GOALS

- Win high-valued customers by offering tailored services
- Deliver the service levels that were contracted with each customer
- Achieve service agility while ensuring Quality of Experience (QoE)
- Retain existing customers and avoid paying penalties for breaching service level agreements (SLAs)
- Accelerate the launch of innovative SD-WAN and uCPE services
- Improve margins by automating each step of the network service lifecycle

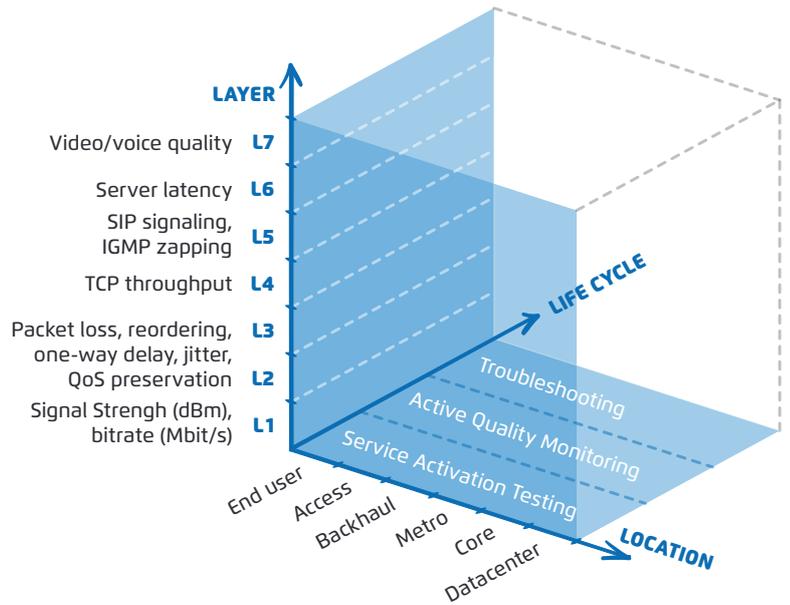## SERVICE ACTIVATION AND TESTING CHALLENGES

- Inadequate validation of services before handing over to customers create frustration for operations teams
- Service delivery teams lack solutions to automatically validate service levels prior to handing over to customers.
- Service updates and configuration changes often degrade service performance without anyone noticing it internally.
- Customers are the first to experience service quality degradations as existing monitoring systems only focuses on the health of the infrastructure.
- When customers report problems, it is difficult to efficiently isolate issues along the end to end connection.

About 90% of customers will not complain before defecting – they will simply leave once they become unsatisfied.

THE SOLUTION

Leverage a proven, zero-touch, active testing platform to equip Engineering and Service Delivery teams with L1–L7 service quality metrics, in real time and on demand.

- Allow engineering teams to conduct multi-layer, end-to-end activation testing using active traffic generation that mimics the actions of real customers.

- Allow service delivery managers and engineering teams to share activation test certificates that confirm proper turn up and modifications of SD-WAN, uCPE or IP-VPN services.

- Enable engineering and operation teams to collaborate and understand customer experience over complex, multi-layered networks, involving service chains.

- Offer customers the ability to troubleshoot their service levels themselves and pinpoint problems in own networks or applications, instead of escalating to the service provider.

- Accelerate investigations of performance degradations, ultimately lowering mean time to restore (MTTR) the service.

- Pave the way to full service assurance automation, ultimately lowering operational expenditures (OPEX).

LAYER

Video/voice quality	**L7**
Server latency	**L6**
SIP signaling, IGMP zapping	**L5**
TCP throughput	**L4**
Packet loss, reordering, one-way delay, jitter, QoS preservation	**L3**
	L2
Signal Strengh (dBm), bitrate (Mbit/s)	**L1**

LIFE CYCLE

Troubleshooting
Active Quality Monitoring
Service Activation Testing

End user · Access · Backhaul · Metro · Core · Datacenter

LOCATION

For more details on Netrounds platform, please click here: **www.netrounds.com/product-overview**

WHY NETROUNDS?

Trusted by Market Leaders
Netrounds' proven and modern platform is used by over 250 organizations worldwide and supports a variety of use cases for business service providers, broadband providers, IPTV operators, mobile providers, global enterprises and federal governments.

L1–L7 Testing in One Easy-to-Deploy Platform
Netrounds software-based Test Agents actively generate traffic on the data plane and analyze detailed, real-time measurements across multiple applications, services and technology domains. Agents are remotely programmable and offer a wide range of domain-specific tests from Layer 1 to Layer 7.

Active Testing Platform at Scale
Netrounds Control Center offers centralized management of all agents and test templates. Remote teams in various locations can use an intuitive web-based portal to build test automation scenarios and initiate them automatically or on demand over large multi-domain, multi-layered network infrastructures.

Fully Automated and Orchestrated
All features of Netrounds Control Center are exposed over a cloud-based API, which is used by external systems such as service orchestrators to dynamically initiate activation tests and quality monitoring scenarios as part of the service delivery workflows.

Lightweight and Software-Only
Netrounds software-only approach to flexible and automatable assurance makes the solution suitable for physical, hybrid and virtual environments – either on-premises or in the public clouds. This provides a next-gen assurance solution that is suitable for any network topology and use case today, as well as for dynamic, software-driven networks of the future.

CISCO · openstack · KVM · amazon web services

x86 bare metal

Netrounds Active Test Agent

Google Cloud

vmware · redhat · docker · Azure

Zero-Touch Deployment on Any Compute Platform