NETSCOUT Smart Edge Monitoring Provides a “Best Of Both Worlds” Approach for Assuring End-User Experience

The open-ended global pandemic’s impact on how enterprise businesses and government agencies maintain business continuity has challenged information technology (IT) conventions regarding how best to assure that employees and customers can reliably access critical services, regardless of platform or location.

“Businesses are planning for a hybrid workforce 65% of tech decision makers expect the maintenance of a hybrid workforce to be either long lasting or permanent.”
- Source: CIO Pandemic Business Impact Survey, June 2021

With the pandemic’s continued transformation of our traditional understanding of the global workplace, IT Operations teams are challenged like never before by user populations segmented between work-from-home (WFH), remote offices, and headquarters locations. The visibility gaps that have expanded across today’s WFH and remote “client edges,” with employees now accessing multiple application infrastructures (e.g., UCaaS, CCaaS, SaaS, Cloud, Data Center, edge compute) directly over the internet, have added complexity for IT Operations attempting to assure and monitor end-to-end quality of user experience.

In many cases, remote users connect to Zoom, Cisco Webex, Microsoft Office 365 and Teams, or ServiceNow — as well as hybrid cloud, virtual, and Co-located (Co-lo) environments — directly via the internet, bypassing the traditional enterprise data center vantage points. As a result, for commercial businesses and government agencies, delivering always-available financial, retail, telemedicine, and agency services now depends on supporting exponential increases in digital transactions from a myriad of devices, platforms, and locations, over an infinite variety of paths through the ecosystem.

Our Approach

Historically, NETSCOUT® has offered our nGeniusONE® Service Assurance solution based on generating smart data in real-time from network packets in traditional network, cloud, and virtual environments. Our nGeniusPULSE complemented that solution, using a synthetic test approach well-suited to remote user bases and application services that were more finite in terms of size and business scope.

With the ongoing IT Operations churn associated with how best to support the user population — including employees, customers, or patients — NETSCOUT re-imagined the solution in a way that integrates the respective benefits offered by both technology approaches. An approach that integrates packet-based and synthetic testing in a single solution offers the “best of both worlds,” delivering enhanced visualization across all service edges to better support how today’s user access any application service, anywhere.

Our Solution

NETSCOUT Smart Edge Monitoring Solution

- Performs synthetic transaction testing to measure end-user experience and smart data from any remote location – home, office, wherever.
- Detects user-experience problems in nGeniusPULSE, with contextual drill down into nGeniusONE service monitors for precise troubleshooting.
-ASI-generated smart data generated end-through-end by ISNG, vSTREAM®, and nPoint sensors for advanced nGeniusONE network, application, and UC&C analytics.
NETSCOUT Smart Edge Monitoring is a first-of-its kind, integrated approach to harmonizing smart data analytics with synthetic transaction testing metrics to deliver visibility and support necessary to assure high-quality end-user experience for any application, from any location, over any platform.

The NETSCOUT Smart Edge Monitoring comprises nGeniusPULSE nPoint sensors (virtual or hardware) deployed at any client edge location (home or remote offices) and InfiStreamNG® (ISNG) software or hardware appliances with NETSCOUT Cloud Adaptors instrumented at strategic network, data centers, and cloud edge locations providing packet-based analysis that incorporates nGeniusPULSE synthetic testing results into user experience for nGeniusONE analysis. Our vSTREAM® virtual appliance deployed with the Cloud Adaptor extends NETSCOUT’s Smart Edge Monitoring visibility into today’s private / public cloud and virtual environments.

These NETSCOUT data sources leverage NETSCOUT’s patented Adaptive Service Intelligence® (ASI) technology to provide smart data for smarter analytics in the nGeniusONE platform.

In this fashion, NETSCOUT Smart Edge Monitoring addresses IT Operations’ requirements regarding hybrid workforce operations, including:

- Monitoring end-user experience in real-time, from any location, across any application or platform, in a sustainable manner.
- Providing root cause analysis that identifies whether a user experience issue relates to their WFH environment (e.g., device, ISP, VPN, VDI), service provider (e.g., SaaS or UCaaS), or cloud service.
- Reducing the days and hours currently spent in gathering diagnostic data on remote user experience.
- Cutting user-experience issues lingering for days and, in some cases, weeks by using a top-down NETSCOUT troubleshooting process that offers intuitive workflows.
- Returning business units operations to reliable performance.
- Identifying whether their “as-a-service” and hybrid cloud vendors are delivering in compliance with established SLAs, with forensic-quality analytics and reporting to provide as evidentiary support.

Our Value

The NETSCOUT Smart Edge Monitoring solution delivers enhanced value to our global customer base by providing the following capabilities:

- **Avoid Disruptions** – Early warning of emerging problems accelerates mean-time-to-knowledge (MTTK) and resolution, and may avoid broader outages.
- **Protect Productivity** – Delivers employee digital experience assurance that protects productivity, customer service, and revenue.
- **Lower MTTR** – Borderless visibility across domain edges, including hybrid cloud, WAN and SD-WAN, and SaaS/UCaaS, reduces vendor finger-pointing and overall mean-time-to-repair (MTTR).
- **Improve Performance** – Complete visibility from anywhere, for any service improves application performance.
- **Reduce Complexity and Costs** – Single vendor for end-user experience and performance assurance through transaction ecosystem reduces costs and complexity.

Figure 1: NETSCOUT Smart Edge Monitoring combines passive, packet-based monitoring and active, synthetic testing to provide network, application, service, and end-user experience manageability across all service edges.