nGeniusONE Extends Visibility and Enables Real-time Remote Site Service Triage

**Customer Profile**
This government agency operates across numerous locations nationwide and has an extensive network infrastructures and VoIP/Video system. They utilize SIP signaling for 90% of their calls using the G.729 codec. They also have an electronic data system to maintain documents and provide public access.

**Business Challenge**
Serving the public effectively is a key mandate for this government agency. To meet the needs of rapidly growing network traffic, IT was under increasing pressure to modernize its monitoring infrastructure. As usage of public-facing applications has quickly expanded, and reliance on voice and video communications has dramatically increased, the agency’s IT team needed a new monitoring strategy to support their growing Unified Communications (UC) environment.

Without sufficient instrumentation, there was a lack of visibility into audio/video quality from remote sites, leaving IT unable to effectively troubleshoot UC issues. They faced considerable challenges in determining if the issues were due to signaling or IP-Bearer voice/video quality. Though the agency was using nGeniusONE for data center visibility, they were not instrumented for remote site monitoring. As a result, IT lacked critical network intelligence that would allow them to correctly triage the source of UC problems from core to edge.
NETSCOUT Solution

The agency wanted to extend IT’s visibility and real-time triage capabilities to remote sites using the nGeniusONE Service Assurance platform with Adaptive Service Intelligence™ (ASI) technology and nGenius UC Server solution.

NETSCOUT updated all of the agency’s InfiniStream appliances to ASI 2.0, maximized licensing on all nGeniusONE servers, adding both the nGenius UC Server solution and G.729 CODEC server for VOIP/Video monitoring and troubleshooting, which increased data center monitoring of all applications. This provided IT with visibility into the audio/video quality metrics needed to quickly triage, isolate and determine the source of problems. It also enabled IT to determine how other applications were impacting VOIP/Video performance, and gave them the ability to call search, thus eliminating the need to perform live data captures using IP addresses and exhaustive packet analysis. In addition, by using the media monitor, they often eliminated the need to perform time-consuming packet analysis and greatly reduced mean-time-to-repair (MTTR) of voice/video issues impacting the user experience.

Business Value

The NETSCOUT solution’s value was immediately evident three days after implementation, as 62 quality-of-services (QoS) mismatch errors were detected across numerous remote sites. The NETSCOUT solution provided:

- Remote site visibility and triage capabilities at all locations
- Quicker MTTR of applications, network problems and VOIP/Video issues
- Proactive and preventative problem solving capabilities
- 4TB-12TB of ASI 2.0 data retention at remote sites for back-in-time data analysis
- Powerful features of nGenius UC Server that minimized the need for deep-dive into packets to identify the source of problems