

# Successful, Timely Migration to Google Cloud With NETSCOUT

## Visibility Without Borders Reduces MTTR in Multi-Cloud Environments

### OVERVIEW

#### The Challenge

- Moving their private network into Google Cloud
- Lacked visibility needed for performance assurance and troubleshooting in the new cloud environment

#### The Solution

- nGeniusONE® Service Assurance platform
- InfiniStreamNG® and vSTREAM® virtual appliances
- nGenius® Packet Flow Switches
- NETSCOUT® Premium Services Engineer

#### The Results

- Visibility to Google Cloud reduces MTTR, identifies latency sources, and trends information for fact-based planning
- NETSCOUT PSE ensures quick time to value for additional equipment, extends value of overall nGeniusONE investment



#### Customer Profile

This multi-billion dollar, publicly traded company has been supplying devices and services to its customers for more than a century. Their growth has been shaped by the Internet revolution, enabling both the business and their customers to take advantage of modernizations that have improved the flexibility and automation of their services through the use of Internet of Things (IoT) devices in consumer homes and businesses.

Via a network of sales and service offices across the U.S., customers purchase devices and subscribe to services that enable remote configuration, automation, and home monitoring. The success of the business depends heavily on the efficiencies, reliability, and scalability of the company's digital infrastructure, which is currently delivered from several private data centers.

#### The Challenge

This company, committed to assuring high-quality performance and consistent availability of their services to customers, had first deployed NETSCOUT nGeniusONE Service Assurance visibility more than a decade ago in a principal data center. Over the years, the IT team implemented additional InfiniStreamNG (ISNG) appliances and nGenius Packet Flow Switches in several of their other private data centers as required to meet network visibility needs. The benefits associated with early warning of emerging problems before disruptions occurred, quick analysis to pinpoint source of degradations that led to reduced downtime, and trended data which supported evidence-based network and capacity planning all helped IT show the value of their NETSCOUT investments.

The company constantly evaluates and implements breakthrough technologies that can offer competitive advantages in supporting existing services, growing market share and revenue opportunities, and/or optimizing their underlying cost basis. So, as a strategic initiative for building out their private network and data centers into Google Cloud Platform (GCP) was being planned, IT knew there would be a gap in service assurance visibility. This could present issues down the road with customer satisfaction and user experience that needed to be avoided before putting the new network into production. The IT goal was to incorporate network and application performance analysis and visibility for this new environment that would equal what they had in the current infrastructure.

### Solution in Action

The company worked with their trusted, local NETSCOUT team to map out a plan to gain visibility into the data center they were building out in GCP. They decided to add a virtual instance of the nGeniusONE software that would work with their other existing nGeniusONE servers via the nGeniusONE Global Manager. This virtual instance collects smart data from several dozen strategically deployed vSTREAM virtual applications. Functioning as the equivalent of ISNG appliances implemented in the physical network to monitor north-south packet traffic, the vSTREAM virtual appliances are deployed in virtualized and cloud environments to monitor east-west traffic flows for troubleshooting and analysis with nGeniusONE.

To ensure a quick time to value for the nGeniusONE and vSTREAM additions in GCP, the IT team contracted for a NETSCOUT Premium Services Engineer (PSE) who would be instrumental in deploying, configuring, and jump-starting the monitoring and troubleshooting of the new cloud-based data center with the nGeniusONE solution.

In the early phases of this project, several applications were being migrated to the cloud, including some core network services, Citrix virtual desktop infrastructure (VDI), and a couple of customer-facing application services. IT's service assurance strategy focused on first ensuring employee quality of experience with the core services and secure VDI were met by monitoring in front of and behind the firewalls, and connections into GCP.

Customer service representatives and field technicians are essential to the success of their business, and as they connect from remote offices, the road, or even home offices, IT needed to maintain constant availability and superior performance for these resources – otherwise, disruptions to these employees ultimately are felt by the customer community. The NETSCOUT PSE used nGeniusONE with vSTREAM to help identify areas experiencing latency and determined what was causing it. They also use nGeniusONE to monitor and trend traffic utilization at the network edge to ensure there was appropriate capacity coming into GCP from the sales and service offices.

### The Results

NETSCOUT's Visibility without Borders philosophy is helping this company not only protect technology assets, but also increase the value of existing investments. The overall nGeniusONE solution is able to coalesce information from all the distributed nGeniusONE servers to evaluate network and application health, utilization, and troubleshooting enterprise-wide. The metrics and analysis are consistent across private, public, and hybrid cloud environments, making it a seamless transition for the network operators at the company to understand all the information available in the solution. One solution to monitor all applications across any infrastructure, before, during, and after migrations, minimizes tool clutter and reduces the complexity and cost to assure quality services.

The company also realized a quick time to value in the nGeniusONE deployment in the Google Cloud environment with the help of the NETSCOUT PSE. The coordinated efforts between experts at the company, NETSCOUT, and Google Cloud have already led to pinpointing potential latency and capacity issues with the company's new data center deployment. Ultimately, the collaboration between the PSE, the IT team, and their recently added partners from Google Cloud is delivering benefits by having everyone leverage the same data to triage and troubleshoot issues and degradations, as well as take advantage of trended data to make informed decisions on expansion plans.

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### LEARN MORE

For more information about NETSCOUT nGeniusONE solutions provide visibility for cloud migrations and with Google Cloud specifically, please see:

[www.netscout.com/solutions/cloud-migration](http://www.netscout.com/solutions/cloud-migration)

and/or

[www.netscout.com/marketplace-gcp](http://www.netscout.com/marketplace-gcp)

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