

# Improving Reliability and Availability of Business-Critical Applications With Enhanced NETSCOUT Visibility

## Leading Insurer Assures High-Quality End-User Experience on VMware and Citrix Virtual Environments

### OVERVIEW

#### The Challenge

- Visibility lacking into critical applications running on VMware and Citrix VDI
- IT unable to troubleshoot service outages or brownouts

#### The Solution

- nGeniusONE® Service Assurance platform
- InfiniStreamNG® hardware appliances
- vSTREAM™ virtual appliances

#### The Results

- Reliable business service delivery to customers and employees using virtual and Web-based applications
- NETSCOUT® included in standard build for IT infrastructure transformation projects



#### Customer Profile

This major insurance company provides more than health-related claims assistance to customers across the United States. Backed by the services provided by more than 1,500 employees, the company is committed to individual member's wellness by offering their subscribers access to customer care and critical care nursing teams, benefits coordinators, and treatment centers.

The company's available benefits services include Medical PPO, Health & Wellness, Dental, and Vision plans designed for government employees and their families.

#### The Challenge

The company had already deployed the NETSCOUT nGeniusONE Service Assurance platform and InfiniStreamNG and vSTREAM data sources, with this existing production system helping their information technology (IT) team to:

- Address visibility and application performance issues in their Microsoft Azure cloud environment
- Improve end-user experience with a public-facing Web portal supporting patient and subscriber transactions
- Close other network visibility gaps across the business

*"NETSCOUT has to be a part of any infrastructure project we undertake. It should be part of standard build process."*

**Director of Applications & Infrastructure**

New priorities subsequently emerged that shifted attention across this dynamic IT environment. They faced rolling digital transformation projects and the sudden remote workforce transition. They quickly realized virtual environment visibility gaps were impacting applications relying on VMware ESX and Citrix virtual desktop infrastructure (VDI) technologies for high-quality business service delivery. These issues meant IT could not visualize:

- **Web-based applications** used for claims edit system, contract modeling, automated claims pricing, and automated bundled payments processing. This Web-based application environment additionally included a HIPAA gateway for automated processing of electronic transactions in compliance with the Health Insurance Portability and Accountability Act, also requiring secure processing of personal health information (PHI).
- **Applications running on Citrix VDI:** Visibility into Citrix had been a long-time issue, even prior to COVID-19. As a result, the IT team had no means to identify which internal systems the Citrix users were accessing the most. After making multiple requests for this data over 18 months, the Applications and Infrastructure IT Director had given up on his team's ability to deliver this information. More remote users meant increased Citrix VDI use, making this problem even more acute.
- **Infrastructure outage root causes:** Beyond these issues, the company had experienced business-impacting infrastructure outages that eluded quick discovery. Even when services may have been restored, there were times that it was difficult to know which applied "fix" had truly resolved the problem. Since one of these outages impacted a Web-based application employed by both customers and end-users, this downtime brought unwanted external attention to brand reputation and internal scrutiny of IT.

The IT team began examining a variety of application performance tools that might help solve some of the more recent problems, and NETSCOUT solutions were again part of that evaluation and ultimately selected as the right solution for the challenges in the new parts of the infrastructure.

### Solution in Action

In helping bring added visibility into the company's virtual environment, as well as addressing application performance and service outage challenges, NETSCOUT worked closely with the Applications & Infrastructure and Network Engineers teams to instrument vSTREAM virtual appliances on VMware ESX blades operating at two company data center locations. With these vSTREAM data sources generating metadata for consumption by nGeniusONE's performance analytics, NETSCOUT was able to quickly troubleshoot several business service issues, including:

- **Web-based application outage:** Using nGeniusONE contextual drill-downs, NETSCOUT provided irrefutable proof that an authentication server issue was causing the outage. With this information, IT was prompted to add CPU memory resources to the VMware environment.
- **Citrix VDI visibility and performance:** The real-time analysis delivered by nGeniusONE on the traffic in the virtualized environment provided the smart data necessary for meaningful service dashboard views and metrics on the key business applications running over Citrix VDI, enabling IT to quickly ascertain the health of all elements involved in delivering the service. This helped cut troubleshooting time when issues emerged. Additionally, nGeniusONE provided ongoing performance tracking and reporting on the most-used applications running throughout the virtual desktop environment to address the needs at the executive levels of the organization. IT needed this type of Citrix VDI analytics to improve remote end-user experience and virtual application performance.

NETSCOUT also established nGeniusONE HL7 Monitor views for monitoring the HIPAA Gateway application, which offers the IT teams a means of effectively transitioning to organizational use of the Health Layer 7 (HL7) standard. This will provide the IT team with evidentiary compliance with HIPAA standards.

### The Results

By adding vSTREAMs to extend east-west network traffic monitoring in their virtual environments, IT's abilities to quickly resolve service outage and business application performance issues came at a critical time for the business. The IT team has reduced the time for problem resolution of their employee- and subscriber-impacting issues, which in turn has improved their experience doing their jobs and interacting with on-line portals.

With these successes in mind and more virtual business service projects involving Hyper-converged infrastructure (HCI) and Cisco Application Centric Infrastructure (ACI) software-defined networking (SDN) technology scheduled for near-term rollout, IT leadership was convinced that operationalizing on the NETSCOUT platform would help assure success of future infrastructure projects.

This project approach also extends NETSCOUT's value to the organization by removing both the capital and operating expenses that would have been otherwise associated by deploying additional application performance tools in their IT environment that were made unnecessary by nGeniusONE's single-pane views into converged application, network, and virtual business service platforms in operation across the business.

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### LEARN MORE

For more information about Ensuring Performance of Network and Business Services solutions with NETSCOUT, visit:

<https://www.netscout.com/business-continuity/ensure-performance>

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