NETSCOUT

Healthcare Reduced MTTR in Remote Medical Offices to Minutes

With NETSCOUT's nGenius Edge Adaptors for Observability
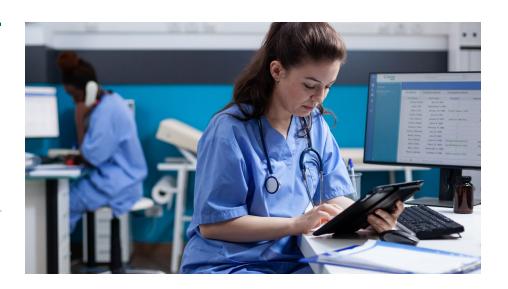
OVERVIEW

The Challenge

- Corporate IT needed to support newly acquired medical offices that often had different vendor technologies and applications.
- Troubleshooting problems impacting medical staff in the remote offices was challenging due to lack of local IT staff.

The Solution

- nGenius® solutions
- InfiniStreamNG® and vSTREAM® appliances
- nGenius Edge Sensors and Remote InfiniStreamNG appliances

The Results

- Reduced time to troubleshoot issues impacting the healthcare's patient records application.
- Improved medical staff and IT productivity with observability and troubleshooting capabilities in remote medical facilities.

Customer Profile

This large, distributed healthcare / insurance provider has been operating in the United States for 50 years. Their increases in membership and facilities have been due to a combination of organic growth in the territories they operate in as well as through the acquisition of other strategic medical groups.

Today, this healthcare provider has over 100,000 employees in 2,000 medical facilities, delivering patient care in millions of individual appointments a year. Their members benefit from the flexibility to receive patient care throughout their multi-state network of medical offices, clinics, and other outpatient facilities. A key to the success of this company is the healthcare technology they have standardized on for all their locations which includes patient records applications, imaging technology, telehealth services, high-speed infrastructure, internet of medical things (IoMT) devices, and other innovative digital services. This "always-on" business demands quality performance and availability for all these services every day.

The Challenge

The IT organization for this healthcare was facing two major challenges.

- With every acquisition, IT was tasked with supporting the new remote locations where different technology vendors and application services were often in use.
- Troubleshooting problems reported by medical staff in these remote locations was challenging due to distance and lack of local IT professionals.

Ensuring the patient records application was performing optimally everywhere was the priority, in both newly acquired offices as well as in existing clinics and medical buildings. Some commonly reported problems have included:

- Slow performance logging into, accessing, and using electronic medical records (EMR) for patient care information.
- Staff log-in to the VPN and Zscaler environment from the remote offices to use corporate data center resources.
- Poor voice quality issues from remote medical offices to UCaaS tools or access SaaS applications over the internet.
- Intermittent performance issues with other services such as DNS.
- Availability and usability issues related to wifi service within the medical offices.

Corporate IT was concerned with the observability gap at the remote offices and clinics which made triaging those issues difficult and time consuming, particularly with the lack of IT staff locally. Prior to visibility in the remote offices, problems could persist for days or weeks while vendors and staff worked in war rooms to uncover the root cause.

The healthcare's executives were frustrated hearing about recurring IT-related complaints, particularly from employees in the newly acquired remote locations. Strategically, the executives knew that the poor performance was impacting patient experience, revenue, employee productivity, while increasing reputational risk. This organization has one chance to make a good first impression with their new employees and patients in the acquired medical facilities. Leadership was determined to avoid patient attrition and employee turnover due to poor IT performance. The IT team needed to find an innovative solution to address these critical issues.

Solution in Action

This healthcare organization was a long-standing NETSCOUT® customer and had been using the nGenius solutions for observability throughout their private data center and major facilities for several years.

As performance issues developed in the remote medical facilities, the IT staff engaged their local NETSCOUT sales team and their NETSCOUT Visibility as a Service (VaaS) support organization to help find the best approach. While they considered other alternatives, their existing nGeniusONE solution had the most comprehensive, and complete end-through-end visibility to meet all their needs. Further, one of the strengths of the nGenius observability solution is its scalability to support large, distributed environments, which was essential for this healthcare.

NETSCOUT's recently introduced, cost-effective, remote business edge monitoring alternatives include deep packet inspection (DPI) and synthetic testing of both wired and Wi-Fi environments. The remote medical office implementations are as follows:

- In the medical offices, they are deploying nGenius Edge Sensors, model 290s, to perform configurable, synthetic business transaction testing (BTT) over the wired and Wi-Fi connections to ensure quality performance for staff regardless of whether communications are over a network connected workstation or from one of the internet of medical things (IoMT) devices over Wi-Fi in the clinic.
- At the office WAN edges, they are deploying either the 490 series nGenius Edge Sensors or the 690 series Remote InfiniStreamNG, depending on connectivity requirements. This provides both synthetic testing and DPI to evaluate, trend, alert, and troubleshoot performance of all services in and out of the remote medical facilities over the WAN network to private data centers, public cloud, and the internet.

The solution fits right into their operational environment and processes. The NETSCOUT VaaS group has collaborated with the healthcare's IT team to configure Situational Awareness Dashboards in nGeniusONE that are populated for each remote location. Alerts are configured to be sent to ServiceNow for ticketing purposes. This deployment of new remote business edge monitoring has already shown value, pinpointing a number of issues:

- Process conflict issues between the VPN and Zscaler which were causing significant access delays for remote staff. Once identified, the healthcare's IT team was able to rework the login process to remove the conflicts and provide swift access to applications and services.
- Legacy VPN equipment that needed to be upgraded to eliminate sporadic delay issues.
- Isolated several issues to improve EHR login times and performance for medical staff remotely.
- Intermittent DNS queries were being misrouted, delaying VPN access which were corrected and now avoid excessive delays for the medical teams.
- Identification of Wi-fi issues in the local office as well as authentication issues with their patient records application based on configured BTT tests.

With nGenius Edge Adaptors in the remote medical facilities, this healthcare reduced troubleshooting time from more than 24 hours per incident to just minutes.

The Results

Swift, quality patient care is the charter for this healthcare organization. When users in the remote medical facilities were reporting significant delays in gaining access to VPN and EHR applications, the IT team closed the visibility gap with a single solution for synthetic testing and DPI that leveraged their existing nGenius solution for observability.

The executive team and IT staff at this healthcare have shared the value they have gained from the new solution.

- Dramatic reduction in mean time to knowledge (MTTK) for performance issues in the remote medical facilities from more than 24 hours on average per incident to just minutes.
- Improvements in VPN and EHR access has accelerated access to patient records. This saves valuable time, improves patient care, and increases the number of patients that can be seen in a given day, thus improving revenue opportunities.

- The resolution of Wi-Fi problems combined with the fixes to VPN and EHR access has also had the effect of improving productivity and efficiency of the entire medical team at the remote medical facilities. They can spend more time with the patients as a result.
- Increased protection of the healthcare's public reputation to ensure patient confidence. Also improves work life experience for employees from recently acquired organizations.
- IT productivity is optimized as the team avoids needing to learn and maintain another tool.
- Financially this is a more cost-effective solution based on reduced tool clutter and vendor sprawl, by using the same nGenius solution for observability throughout their environment.

These steps are strategic in helping this healthcare organization meet their objectives for quality EHR performance and speedy patient treatment with NETSCOUT's new business edge observability in their remote medical facilities.

LEARN MORE

For more information about NETSCOUT solutions for the Healthcare industry, please visit:

www.netscout.com/solutions/healthcare

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