Canadian Public Healthcare Agency Supports Critical Patient-care Services through Actionable Intelligence

nGeniusONE®, InfiniStream®, and nGenius Packet Flow Switches Offer Insights for Rapid Resolution of Problems

OVERVIEW

Business Challenge
- Lacked comprehensive visibility across geographically dispersed, mission critical data centers and both physical and virtual infrastructures
- Pre-existing tools offered limited capability for monitoring network and application performance
- IT triage and troubleshooting took hours or days to complete
- Vast amount of healthcare data and complex, multi-tiered applications made it arduous to pinpoint the root cause of application slowness

NETSCOUT Solution
- nGeniusONE®, InfiniStream® appliances, and vSTREAM™ delivers pervasive visibility across remote data centers, extracting application and network performance metrics
- Effective troubleshooting of crucial patient care services that traverse the infrastructure and data centers to ensure optimal performance
- Superior diagnostic solution and the precise monitoring ability to deliver comprehensive intelligence for service assurance
- nGenius® Packet Flow Systems (PFS) and Taps family enables IT groups to aggregate, replicate and manage the flows of traffic throughout the network

Business Value
- Provides preemptive insight into network traffic and critical infrastructure to assist application triage, enabling IT to rapidly resolve problems
- Improves patient-care by automatically identifying anomalous issues with performance and providing the deep, actionable intelligence to quickly troubleshoot probable root causes
- Reduces MTTR by using dashboards to identify issues such as the client, server, application protocol, error code, and component service container that may negatively impacts service
- Simplifies traffic acquisition for diverse healthcare network traffic operations with nGenius PFS, including performance management and service delivery management to improve healthcare efficacy

Customer Profile
This Canadian public healthcare agency is responsible for building and maintaining an electronic health record system and the data center(s) and networks the applications operate in. This comprises hundreds of sites to connect health organizations and sole practitioners nationwide. The system ties together repositories that securely store billions of healthcare records for fast and efficient patient care.

Business Challenge
For this healthcare agency, ensuring that health organizations and providers have “always on” access to networks and applications is vitally important to the quality of care. Critical services, such as lab results and digital imaging require service assurance. The IT team was under tremendous pressure to ensure its new electronic health record system and data centers offered flawless network connectivity with hundreds of patient care providers.

The challenge IT faced was a lack of comprehensive visibility across its geographically dispersed, mission-critical data centers and both physical and virtual infrastructures. Network Operations had very limited tools for monitoring network and application performance. IT triage and troubleshooting would take hours, if not days to complete. This meant IT was spending upwards of 50 percent of its time on service issues, and in some cases the problems went unresolved far longer than acceptable. Due to the vast amounts of healthcare data and the complex, multi-tiered applications that were in use, it proved extremely arduous to pinpoint the root cause of application slowness – potentially impacting patient care.
NETSCOUT Solution
The IT team quickly realized they needed a better solution for monitoring their service delivery infrastructure, which would require data collection from two distinct environments – a VMware environment and a physical server environment. Recognizing they needed to avoid the inherent problems of multiple point tools for these two environments, they turned to NETSCOUT® to achieve this complex task of comprehensive, vendor independent, enterprise-wide visibility for service assurance.

The nGeniusONE Service Assurance Platform, with Adaptive Service Intelligence™ (ASI) technology, was used to deliver pervasive visibility across remote data centers, effectively extracting application and network performance metrics. nGenius Packet Flow Systems (PFS) and Taps solution family enabled IT to aggregate, replicate and manage the flows of traffic throughout the network for application performance monitoring. NETSCOUT architected a solution based on a vSTREAM virtual probe to capture full packet streams in the virtual environment and the nGenius PFS and InfiniStreamNG™ appliances for the physical environment and WAN.

NETSCOUT Solution in Action
The NETSCOUT solution has enabled IT to effectively troubleshoot crucial patient care services that traverse the infrastructure and data centers to ensure optimal performance. The nGeniusONE platform, InfiniStream appliances, vSTREAM and nGenius Packet Flow Switches and Taps allow IT to monitor the health agency’s network and applications in order to conduct root cause analyses to determine where issues reside. NETSCOUT’s superior diagnostic capabilities, allowing them to use dashboards for identifying issues such as the client, server, application protocol, error code, and component service container that negatively impacts service. The precise monitoring abilities deliver comprehensive intelligence for service assurance for the agency’s EMR and other data center services.

Business Value
The NETSCOUT solution has delivered tangible benefits for this public healthcare agency. By providing preemptive insight into network traffic and critical infrastructure, IT is now able to conduct effective application triage and rapidly resolve problems. IT has gained pervasive visibility that extends from the data centers and out to the cloud, thus reducing both time lost in vendor finger pointing and Mean-Time-To-Resolve (MTTR) patient-impacting issues.

nGenius PFS simplifies traffic acquisition and distribution for diverse healthcare network traffic operations, including performance management and service delivery management to improve healthcare efficacy. As a result of NETSCOUT visibility, providers can access lab results and digital imaging applications when needed. IT is now able to automatically identify anomalous issues with performance, and utilize deep, actionable intelligence to quickly troubleshoot probable root causes, which is critically important to improve treatment and patient-care experience. By providing architecture flexibility to support mission-critical data centers and both physical and virtual infrastructures, this solution provides invaluable future proofing.