Multi-Specialty Healthcare Provider Leverages NETSCOUT for Service Assurance Across Critical Patient Care Services

nGeniusONE Service Assurance Platform Allows IT to Optimize System Performance

OVERVIEW

Business Challenge
- Service triage capability needed for migrating EMR - Citrix Server environment to Cisco UCS platform
- A lack of real-time views of the network and applications resulted in ineffective service triage efforts
- Network issues, such as slow logins, application freezes, and system bottlenecks, left caregivers wasting time and put patient health at risk
- Data center traffic potentially increased, raising the need to validate and monitor EMR Citrix-related traffic

NETSCOUT Solution
- Offers proactive alarms that notify IT when specific applications, such as Citrix (EMR)/PACS Imaging/Oracle/HTTP/NFS servers, experience response time issues
- Monitors HL7-based environment, providing service assurance of complex interoperating services
- Assists in troubleshooting critical patient care services that traverse the infrastructure to ensure optimal performance

Business Value
- NETSCOUT® improves patient-care experience by automatically identifying anomalous issues with performance and providing deep information necessary to troubleshoot probable root causes
- Dashboards reduce MTTR by identifying issues such as the client, server, application protocol, error code, and component service container that negatively impacts service
- Provides insight into network traffic and critical infrastructure to assist application triage, enabling IT to rapidly solve problems

Customer Profile
This nearly 100-year-old U.S.-based multispecialty academic hospital is recognized as one of the top medical centers in the country and the world. The use of cutting-edge technology and management systems has made this healthcare provider a true innovator and leader in the industry. Recognized as an organization that leads the industry in digital transformation, this healthcare has a broad, complex environment of dozens of medical buildings including hospitals, healthcare centers, ambulatory surgical centers, and offices. Network and application service demands for safe, efficient treatment of more than 5 million out patients and 500,000 ER patients makes service assurance a priority.

Business Challenge
For this major healthcare provider, maintaining always-on access to electronic medical records (EMR), medical imaging and other care-related services is critical to vital operations, and ultimately impacts the quality of patient care throughout the organization. As the IT team migrated their EMR Citrix Server environment from a legacy IBM infrastructure to a new Cisco UCS platform, concerns over slow logins, application freezes, and system bottlenecks arose. Staff was experiencing limited availability during peak times which was seen as hampering caregivers’ ability to improve patient care and negatively affecting the patient experience.

IT recognized the need to quickly and accurately triage its network and applications whenever problems arose. However, the lack of visibility into “virtualized” environments created significant challenges when it came to troubleshooting vitally important services. As the data center traffic has evolved, IT needed a solution that could validate and monitor EMR Citrix-related traffic to ensure service performance.
NETSCOUT Solution

To effectively monitor and assess the healthcare provider's network and application traffic, IT turned to NETSCOUT. The nGeniusONE® Service Assurance platform with Unified Communication and Collaboration (UC&C) capabilities, along with InfiniStream® appliances and nGenius® packet flow switches allow IT to proactively assist in troubleshooting critical patient care services that traverse the infrastructure to ensure optimal system performance.

NETSCOUT Solution in Action

The NETSCOUT solution delivers a single view into the performance and health of servers, services, applications, and networks, empowering IT to quickly pinpoint and resolve problems. This powerful solution offers proactive alarms that notify IT when specific applications, such as Citrix (EMR)/ PACS Imaging/ Oracle/ HTTP/ NFS servers, experience response time issues. The nGeniusONE platform also effectively monitors the healthcare provider's HL7-based environment, providing service assurance of the hospital's complex interoperating services. The Packet Flow Switch collapses multiple streams of UCS application traffic into a single switch, allowing IT to determine hop-to-hop latency.

Business Value

The NETSCOUT solution has been an invaluable addition to the IT team's service assurance arsenal. NETSCOUT automatically identifies anomalous performance issues and provides the deep insights needed to properly troubleshoot the root causes. The dashboard and workflow methodology reduces mean-time-to-repair (MTTR) by identifying service impacting problems with the client, server, application protocol, error code, or component service container.

By providing insights into network traffic and critical infrastructure, IT is able to ensure optimal service delivery of the hospital's complex application services such as their EMR that have multiple dependencies including Citrix, DNS, LDAP, HL7 and network infrastructure. As a result of the NETSCOUT solution, the IT team saves time and money, improved cross-team collaboration, enhanced the end-user experience, reduced War Room "finger pointing," increased uptime, and improved ability to meet critical SLAs.