Major Healthcare Provider Successfully Rolls Out Cloud-based EMR with NETSCOUT

nGeniusONE Platform, InfiniStreamNG Appliances, and Packet Flow Switches Allow IT to Optimize Application Performance

OVERVIEW

Business Challenges

• Replace outdated legacy applications with new, cloud-based EMR service
• New infrastructure required to delineate performance responsibilities between the healthcare organization and cloud vendor
• Visibility needed to help ensure performance of application
• Difficulty overcoming issues in pre-production testing of new EMR cloud service that threatened delay of launch

NETSCOUT Solution

• nGeniusONE® Service Assurance platform
• Multiple InfiniStreamNG™ appliances including 9800 supporting 40GB ACI infrastructure
• nGenius® 3900 Packet Flow Switches
• Remote Site Engineer for expert support of the nGenius implementation

Business Value

• Successful, timely rollout of new EMR service due to RSE’s workflows and reports that reduced MTTI and MTTR in pre-deployment testing
• Improved doctor, clinician, patient and staff experience with new EMR app by finding and resolving problems ahead of introduction
• IT team now has tremendous confidence in its ability to flawlessly rollout new services in the future

Customer Profile

One of the largest U.S. non-profit healthcare organizations, this large Midwestern healthcare organization serves the needs of urban, suburban and rural communities and includes 15 hospitals and multiple community health locations. Services include inpatient and outpatient care, primary care, community health and wellness, home health, community mental health, rehab, long-term care and hospice, attaining revenues in excess of $4 billion a year. With nearly 4,000 physicians, this healthcare organization supports 600,000 patients a year with hospital admissions, home health visits and emergency department visits.

Business Challenge

To say this healthcare team depends on their Electronic Medical Records (EMR) for prompt, safe patient care would be a major understatement. In order to improve services provided by and access to EMRs, IT was tasked with replacing its legacy applications and implementing a new cloud-based service. This cloud-based EMR application presented several challenges to the healthcare provider’s IT team. It was required to deploy a new infrastructure between the healthcare organization and the cloud vendor so as to optimize performance of the new service and precisely delineate the responsibility for capacity, speed and performance goals, as well as any potential performance degradations. Much needed visibility was essential to determining who would be responsible for problems and how to pinpoint and resolve them quickly – after all, swift, safe patient care was in the balance.

The plan was to incorporate service assurance visibility as an integral part of the overall deployment of the infrastructure and cloud-based EMR service from the very start of the project. Pre-deployment application testing was a step in the project plan to ensure when the time came for go-live, the transition would be flawless.
NETSCOUT Solution

To ensure high-quality performance of the healthcare organization's new cloud-based EMR application, IT turned to NETSCOUT®.

The nGeniusONE Service Assurance platform with Adaptive Service Intelligence™ (ASI) technology along with InfiniStreamNG appliances were selected. In order to support the bandwidth intensive imaging services the healthcare provider depends on, they were implementing a 40GB ACI backbone in the new hub infrastructure. Critical to the success of this implementation was the selection of an InfiniStreamNG 9800 appliance that would monitor the new 40GB backbone. In addition, nGenius 3900 Packet Flow Switches that also supports the 40GB network was selected for packet distribution to the InfiniStreamNG appliances and other tools as necessary.

NETSCOUT Solution in Action

A Remote Site Engineer (RSE) was tasked with providing expert support throughout the implementation process. During implementation, the RSE configured the nGeniusONE Service Assurance platform to monitor and track applications and services, creating dashboards and reports in advance for the services IT would be monitoring.

The efforts of the RSE proved fortuitous when IT discovered requests and inputs to the new cloud-based EMR service were not getting through the new hub during pre-production testing. This meant doctors, nurses, clinicians, etc. could not get on to or use the application. Compounding the problem, IT was hard-pressed to resolve the issue, as these issues meant a delay in the rollout of the new service to the healthcare organization, further compromising patient care. These preconfigured dashboards, service dependency maps and reports were used by the healthcare provider's IT team and the RSE to quickly identify that the rules configured on the new firewalls were not permitting the new EMR application traffic to advance through the new hub. Once modified firewall rules were instituted, the EMR application performed flawlessly.

Business Value

The NETSCOUT solution has been a game-changer for the healthcare organization's IT team. The RSE's reports and proactive monitoring has reduced Mean-Time-to-Information (MTTI) and Mean-Time-to-Resolution (MTTR), enabling the successful rollout of the new EMR service. By finding and solving problems in pre-production, IT has implemented the new EMR application service and achieved performance assurance, which has dramatically increased the organization's satisfaction rating with doctor, clinicians, patients and healthcare staff.

In addition, the NETSCOUT solution has given the IT team tremendous confidence in its ability to successfully rollout new services in the future.