NETSCOUT®

U.S. State Agency Reduces Network Operations MTTR with NETSCOUT Solution

NETSCOUT solution assures expanded network and UC Center performance needed to support successful government program delivery

OVERVIEW

Business Challenge

- New data center with enhanced network connection speeds, additional visibility points, and new UC Center/VoIP deployment created an opportunity for new service assurance analysis

- IT teams faced service outage and MTTR resolution issues impacting important government services

- Multi-tier application performance issues could not be visualized for diagnosis

NETSCOUT Solution

- nGeniusONE® platform upgrade, with extended UC performance management support

- InfiniStreamNG™, with NETSCOUT® ASI Plus (ASI+) technology, supplementing InfiniStream® 4500 series appliances

- nGeniusONE Standby Server configuration

Business Value

- NETSCOUT solution reduces outages that were costing one program thousands of dollars per minute in lost revenue opportunity

- Improves application service delivery to all agency users and reduces downtime impacting delivery of critical services

- Increased uptime safeguards future program budgets and reduces adverse agency perceptions

Customer Profile

This dedicated State Information Technology (IT) agency manages the network, applications, and Unified Communications (UC) environment for a diverse group of public entities. A staff of more than 500 IT resources delivers support for shared infrastructure, technology, and network-wide services to groups throughout the state; from emergency services, dispatchers, and first-responders, to public education, family services, department of motor vehicles (DMV), and technology entities.

Business Challenge

In providing IT support to assure timely delivery for these crucial government program services to education, first-responders, DMV, and other recipients, the agency's IT team operates two data centers, a UC Contact Center, and several additional government locations.

The agency's respective Network Operations Center (NOC) and Network Engineering teams recognized the opportunity to update its IT technology with the deployment of a new data center. Lack of visibility for service assurance can impede IT teams' ability to deploy identified solutions to readily address known network, application, and UC performance issues and reduce associated issues – such was the case with this agency.

The need for current-day IT technology solutions for service assurance was perpetuating general quality of service issues, including the following concerns:

- Network issues were generating 450 related incident tickets per month.
- Overall mean-time-to-repair (MTTR) rates associated with corresponding network issues were higher than desired.
- Delays in resolving downtime issues in revenue–generating departments were exposing them to thousands of dollars in lost opportunity.

Other government service delivery platforms supported by the agency's IT team were experiencing similar downtime instances, which adversely impacted service delivery to end users and citizens.

In exacerbating such issues, for some government service providers, annual network/application outage calculations are factored in the program budgeting process for the next fiscal year, with high service delivery incidents potentially leading to reduced funding and, as a result, diminished ability to service program recipients.

Given the high profile of the overall program range supported by the State agency's IT teams, these collective service issues tended to receive public scrutiny reflected in regional media coverage.

Customer Profile

The State agency is a long-standing NETSCOUT customer and already recognized the benefits of the InfiniStream appliance for visibility and service assurance capabilities. Since its original deployment, the agency introduced the following IT elements:

- Higher-speed network environment that surpassed earlier 1G-to-10G connection speeds.
- Voice over IP (VoIP) solution supporting a new UC Contact Center.
- Additional IT service locations configured at four regional government facilities.

With these changes, the agency recognized the opportunity to extend this visibility and analysis in support of the agency's higher-speed network, their UC Contact Center, and critical regional locations now requiring visibility.

In response to the agency's NOC and Network Engineering teams recognizing the need for additional Service Assurance solution elements, the agency's Chief Technology Officer (CTO) and IT teams collaborated with NETSCOUT in a procurement culminating in the following nGenius solution enhancements:

- nGeniusONE Service Assurance license upgrade to the extended nGeniusONE for UC solution, with standby nGeniusONE Server configuration support.
- InfiniStreamNG 4795 appliances with Adaptive Service Intelligence™ (ASI) Plus, supporting 4-port 10G/1Gb and presenting real-time views of end-to-end call trace data and network-wide key performance indicator (KPI) visibility to protect the reliability and availability of networks and services.
- OptiView® XG Network Analysis Tablet, which serves as a wireless companion to nGeniusONE in providing WLAN lifecycle management and troubleshooting network infrastructure capabilities.

NETSCOUT Solution in Action

Deployed in early-2017, the agency quickly put the enhanced NETSCOUT solution to work in diagnosing ongoing performance issues in a multi-tier application. The agency's IT team customized the real-time nGeniusONE Service Dashboard to proactively monitor the multi-tier applications involving a Web front-end, database service, and application service layers. The Service Dashboard provides at-a-glance metrics and holistic status visibility of business services, network, and application components, so the IT organization can focus triage efforts where needed most.

By contextually drilling down from a Dashboard view to nGeniusONE Service Dependency mapping, the NETSCOUT solution provided "exactly" what the agency needed in terms of enabling the NOC team to visualize the current state of the service and application environment and automatically discover and map client-server relationships.

With nGeniusONE for UC, the agency NOC and voice teams now have a solution for monitoring VoIP service delivery in its UC Center and proactively assuring the quality of first-responder communications services.

Business Value

With the NETSCOUT solution update, the agency sees reduced overall MTTR rates across the NOC and voice teams.

With the expanded InfiniStreamNG environment, the agency is equipped to proactively monitor the primary data center, second data center, UC environment, and additional government locations.

The agency's customers and citizens are receiving related services benefit, as well:

- Those in need of first-responder service support will receive more timely delivery, due to improved connection rates.
- Regional government customers receive higher-quality network, application, and UC services that better serve the needs of the public conducting every-day business.
- Improved MTTR will reduce risk to lost state revenue opportunities.
- As higher program funding approvals are predicated on system uptime associated with the ongoing delivery of that particular service, increased uptimes lead to more fully funded budgets, which help promote expanded, improved service opportunities to the public.

The agency recognizes the NETSCOUT solution will enhance long-term IT efficiencies and, as a result, improve overall constituent services, revenue opportunities, and IT productivity.

The NETSCOUT team and the agency are working to expand nGeniusONE use to the organization's Applications, Wi-Fi, Engineering, and Security IT teams. In addition, the Wi-Fi team will employ the OptiView XG tablet as a portable troubleshooting tool to pinpoint network issues earlier identified by nGeniusONE at offices throughout the state.

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