

Military Branch Optimizes Availability and Security of Application Services

Ensure Quality End-User Experience – From the Data Center to AWS Cloud to Remote Locations

OVERVIEW

The Challenge

- Major, global data center transformation initiative required visibility for performance and security
- Needed east-west monitoring capabilities to ensure end-user experience for services migrating to the cloud

The Solution

- nGeniusONE® Service Assurance platform
- InfiniStreamNG™ software and vSTREAM™ virtual appliances
- nGenius®PULSE with 3000 series nPoint sensors
- Software-based nGenius 5000 series Packet Flow Switches
- NETSCOUT® On-Site Engineers

The Results

- Visibility anywhere, for any service for secure, flawless service delivery and performance to end-users
 - Improved team collaboration and reduced MTTR
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Customer Profile

The IT and Security operations teams for this branch of the United States Military has a difficult mission – to ensure the security, performance, and availability of their application services around the world. For this branch of the military, hundreds of thousands of active-duty personnel and ready reservists, along with many thousands more civilian employees deployed in global locations that are often difficult to reach, all depend on this IT and SecOps team for seamless, secure communications. The criticality of swift, unencumbered communications to and from these service people and locations cannot be overstated, particularly considering that the safety and protection of US citizens may be in the balance.

Personnel of the military branch depend on their networked applications for all sorts of purposes from simple email, voice services, and video conferencing (unified communications & collaboration – UC&C), to enterprise resource planning (ERP) for ordering and delivering all their equipment, uniforms, food, and other supplies, just to highlight a few important services.

The Challenge

To take advantage of more innovative services, faster deployment of applications in the field, as well as cost-effective, secure and high-speed service delivery, the branch was engaged in a major, multi-year data center and digital transformation initiative that touched many aspects of their infrastructure design. With multiple major data centers, 100 remote facilities, migration of key services to Amazon AWS GovCloud, as well as thousands of remote users, providing consistent high-quality availability to critical application services was no small task.

Broad, comprehensive, end-to-end application visibility was needed to identify and troubleshoot disruptions, track performance before, during, and after migrations to new data center technologies and /or to the cloud, map service dependencies, and trend end-user experience from all their global locations to the data centers and cloud services to ensure uniformity in security and quality service delivery.

Solution in Action

With security and performance paramount to their mission, the lead technical advisor and other IT staff undertook a rigorous search and analysis process for an end-to-end visibility solution that would help them achieve their innovation goals, while maintaining delivery of a capable and cost-wise enterprise network and information technology for application services and support.

They selected the following components for a comprehensive solution to focus on key capabilities and functions:

- With nGeniusONE Service Assurance platform and NETSCOUT Certified InfiniStreamNG 9000 series Software Appliances monitoring the north-south traffic flows throughout the high-speed data center, they troubleshoot performance-related issues to avoid disruptions for personnel across the globe. Leveraging monitored packets for smart data, they are viewing trended traffic and application information, as well as mapping service dependencies to use in migrating targeted services to the AWS GovCloud (US).
- vSTREAM virtual appliances are being deployed in the AWS GovCloud. NETSCOUT's strategic relationship with AWS GovCloud (US) is giving branches of the U.S. government insights into their migrations, which will help them to become more agile with visibility and analysis into the east-west traffic of the virtualized environment to assure application reliability, availability and responsiveness of critical application services, like their SAP ERP application, hosted in the cloud. NETSCOUT offers both an agent-based deployment inside the workload and a separate Amazon Virtual Private Cloud (VPC) deployment leveraging AWS's Traffic Mirroring feature. vSTREAM will be able to help them gain visibility into applications and their dependencies across the hybrid cloud environment by turning traffic mirrored workloads into smart data that delivers in-depth analysis into application performance and security.

- Software-based nGenius 5000 Packet Flow Switches are forwarding and distributing networked packet-based traffic to downstream tools, including security tools and the NETSCOUT InfiniStreamNG appliances, for performance management and service assurance activities.
- Last, but certainly not least, the IT and SecOps teams are deploying nGeniusPULSE with 2000 and 3000 nPoint sensors to their nearly 100 remote locations to measure, evaluate, troubleshoot, and understand issues impacting end-user experience. At each remote location, a series of custom-configured, scheduled, synthetic tests to the data center and cloud-based applications are trending data on bandwidth utilization, service dependencies, and application service quality. Specific tests include Internet connectivity, print services, Web and DNS performance, among others. As changes to the network and applications occur, these tests will measure and validate changes to the end-users' and overall network / application health across ethernet, as well as WiFi.

On-site engineers (OSEs), that are part of NETSCOUT's premium services program, have been contracted to assist in deployment, operation, and ongoing analysis of NETSCOUT solutions. With highly detailed expertise on the NETSCOUT solutions, and a dedicated resource to this branch of the military, these OSEs will engage in establishing processes to get out in front of performance and security issues that may affect users from the data center to remote locations, wherever they may be.

The Results

As an organization, the IT and SecOps teams are chartered with executing tactical-level activities to direct, operate, maintain, and secure this branch of the military's communications and network systems, which are both massive in size and scope and undergoing a significant transformation. With NETSCOUT, they are benefiting from having broad, scalable visibility from data center to

cloud, to remote locations, that is generic enough to operate in any environment, for any application service, to ensure fast, secure end-user experience. They can now quickly resolve application and service performance issues, as well as security threats with speed and efficiency, collaboration, and a baseline of data and information for the entire IT organization to utilize.

The military branch is also benefiting from NETSCOUT's strategic relationship with Amazon AWS for critical visibility into AWS GovCloud for complete analysis in the cloud. This level of detail is providing unprecedented performance and security capabilities that are necessary for successful migration to the cloud, particularly as you consider the regulatory and compliance demands placed on military branches.

Bottom line, for an organization with personnel and operations around the world, demanding a secure, flawless service experience, real-time, consistent visibility into risks that can impact application and digital services is an operational necessity! And NETSCOUT delivers!

LEARN MORE

For more information about NETSCOUT Government solutions, please visit:

<https://www.netscout.com/solutions/federal-department-defense-agencies>



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