# NETSCOUT

# Airport IT Quickly Identifies Performance Issues Impacting Travelers

## NETSCOUT Helps Pinpoint Source of Month-long Latency Issue Within Two Hours

## OVERVIEW

### The Challenge

- Reports of poor performance in several airport services including payment processing in the parking garage application
- IT lacked visibility throughout its campus to perform their troubleshooting efforts

### The Solution

- nGeniusONE® solution
- InfiniStreamNG® appliances
- nGenius® Packet Flow Switches

### The Results

- Reduced time to troubleshoot issues impacting passenger services
- Proactive monitoring to protect performance and availability of airport applications
- Ongoing reports for airport and IT leadership for evidence-based, planning

## Customer Profile

This U.S.-based airport supports 400,000 flights per year, carrying 40 million passengers to and from both domestic and international destinations. The airport is also critical to cargo and freight delivery services, transporting millions of tons within the U.S. and around the globe. Combined, passenger and freight travel through this location makes it one of the busiest airports in the world with a significant annual economic impact to its host city, including millions in revenue and thousands of jobs for the local economy.

Flawless performance, availability, and user experience from their network and applications is critical to continuous, on-time services for this airport. Even minor hiccups can result in long lines at different areas in the airport—ticketing, screening, parking, and baggage pickup—just to name a few.

## The Challenge

Like most airports, passenger, cargo, and freight air travel drive services and revenue and require many network and application touch points throughout their journey. The IT organization at this airport had experienced a rise in poor performance for several important services that were impacting passenger user experience, revenue to the airport, and employee productivity. Their lack of visibility into application performance and user experience throughout the airport's network was hindering their ability to troubleshoot issues effectively, plan network additions and changes intelligently, and support necessary updates, introductions, and migrations seamlessly.

Some of the specific issues the IT team were facing included:

- Troubleshooting poor customer and employee experiences with the airport's public parking application.
- Inability to understand what components (network, server, application, etc.) contributed to problems and which did not.
- Network teams having to prove that performance issues were not caused by the network.
- Overcoming many blind spots in the network, preventing proactive performance management and causing time-consuming, reactive firefighting and troubleshooting.
- Need for proactive alerting and reporting capabilities on their critical applications' latency, traffic volumes, and outages.
- Difficulty evaluating performance of and user experience with new applications added to the network.
- Challenges identifying service dependencies of critical applications such as DHCP and DNS protocols and certificates in use.
- Need for high level dashboard for performance information on essential applications.
- Sharing of key information, metrics, and packet data with other network teams and third-party vendors to troubleshoot faster, plan better, and build collaboration.

In describing the issues the IT team had been experiencing, the Director of IT shared that they had spent countless hours troubleshooting problems with some of the airport's revenue impacting applications. In some cases, they physically had to go to the locations where the problems were occurring. Despite attempting to work with the application vendors, they insisted "it must be the network" that was causing additional delay. Because of this, the IT team needed to prove it was not the network.

## Solution in Action

Following a rigorous evaluation, the IT team selected NETSCOUT's nGenius® Enterprise Performance Management solution to ensure availability and quality operation of their network and applications throughout the airport campus and their overall infrastructure from private data center to cloud, SaaS, and UCaaS environments.

The IT team deployed NETSCOUT® technology as follows:

- Implemented **nGeniusONE** for real-time analysis of smart data from ISNG appliances to deliver insights into network and application performance, intelligent, contextual workflows for troubleshooting, and utilization details and trends for reporting and capacity planning.
- Deployed **InfiniStreamNG** COTs appliances with support for up to 40 GB for real-time, Deep Packet Inspection (DPI) at scale monitoring of network segments in their data centers.
- Installed **nGenius Packet Flow Switches** to collect, distribute, and aggregate network traffic from various links throughout the campus to the ISNG appliances.

Smart data from the ISNG appliances in the airport's data centers are being analyzed by the nGeniusONE solution and are already helping the IT team troubleshoot and resolve the challenges they have been facing. Despite only being in operation for a short time at the airport, the IT team is already resolving several issues, including:

- Pinpointing the source of the latency and retransmissions in the parking garage payment app to timeouts in the credit card gateway. The IP address for the gateway was in Asia, rather than locally to the airport. IT worked with the credit card authorization agency to rectify the situation and performance has significantly improved.
- Uncovering outdated protocols with security vulnerabilities still operating in the airport network-SMBV1 (server message block version 1) and TLS1.0 (Transport Layer Security 1.0 protocol)-for example, as well as expired Certificates. IT worked together to rectify this situation.
- Creating custom dashboards and reports for essential business applications, including the credit card gateway and SMBv1, to speed troubleshooting and to track and trend response times and other metrics that would help prioritize IT support.

## The Results

A problem that had persisted for more than a month, with multiple, unsuccessful, time-consuming IT staff trips to the parking garages to try to troubleshoot the problem, was identified in under a couple of hours of implementing the nGenius Enterprise Performance Management solution. With DPI at scale from NETSCOUT, the airport IT staff significantly improved its ability to manage its complex, mission critical campus environment. End-through-end visibility enabled the IT team to swiftly identify and resolve issues experienced by customers and employees, reducing downtime and avoiding potential disruptions that could impact passenger deadlines. By quickly diagnosing and addressing problems with the credit card gateway, the IT team helped protect critical revenue streams and efficiency in the parking garages.

The IT team is more proactive now using the nGenius solution. Identifying the security vulnerabilities of some protocols, long thought removed from the network, proactively avoiding potential disruptions in their network. The network managers concluded that with the new NETSCOUT solution in place, they will significantly reduce the time to resolve (MTTR) problems and ensure quality performance and user experience throughout the campus. Further, they have established a process of regular reporting for senior management and their IT leadership team. The trended data in the reports will be used to make evidence-based enhancements to the network, adjust for the cyclical nature of the airport's business, and support future digital transformations.

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