

Large School District Slashes Troubleshooting Time to 5 Minutes with VaaS

NETSCOUT VaaS Experts Deliver 95% Operational Efficiency With Fewer IT Resources

OVERVIEW

The Challenge

- Improve troubleshooting efficiency and operational costs throughout IT environment
- Add observability to all critical points in the network

The Solution

- Visibility as a Service (VaaS)
- nGeniusONE®
- InfiniStreamNG® (ISNG) appliances
- vStream® virtual appliances
- nGenius® Packet Flow Switches

The Results

- Significantly enhanced troubleshooting processes, leading to lower operational expenses throughout the IT infrastructure
- Broadened visibility into critical network areas, benefiting both educators and students



Customer Profile

The speed and innovation of technology is turning classrooms into interconnected learning hubs and spawning new educational capabilities—in the most unexpected ways.

A large public school district, comprised of several geographically distributed schools, serves tens of thousands of students and employs thousands of teachers and staff. Its innovative approach to technology ensures that the district's IT team maintains a robust network infrastructure and critical applications for learning success and district administration.

As the state-funded learning environment expanded both on-campus and online, and IT teams and budgets were reduced, the complexity of the district's troubleshooting cycles, observability posture, and tech stack became big concerns for IT leaders.

The Challenge

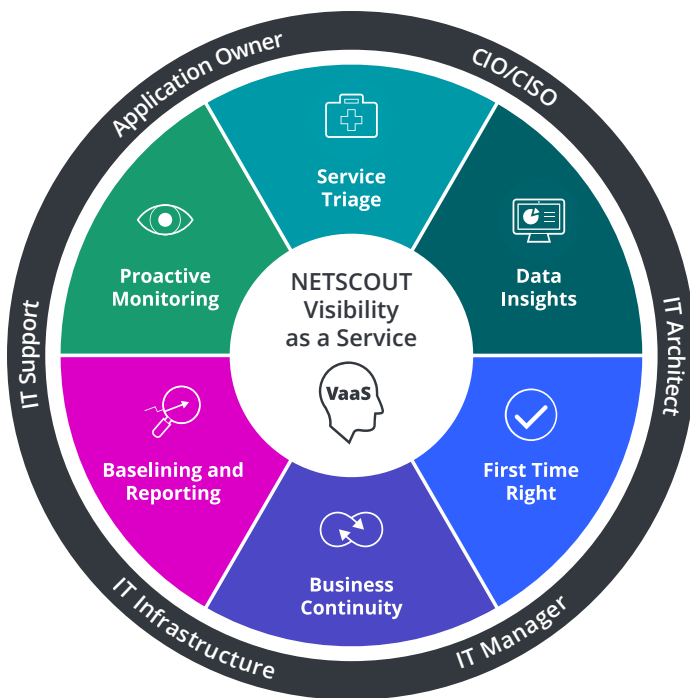
Network access delays can severely impact education, preventing students and teachers from connecting and engaging in critical learning interactions. In this school district, with most applications hosted online and delivered to devices at the network edge, managing performance with a smaller team became a Tier 1 logistical challenge.

The school district was in desperate need of a solution to reduce their troubleshooting times.

The Director of NetOps knew the value of NETSCOUT® packet-based observability and wanted that same high-level granularity to maximize troubleshooting and application performance at critical network traffic points.

"We needed a solution that drastically cut down our troubleshooting."

– Director of NetOps



“With NETSCOUT VaaS, we were able to improve our troubleshooting dramatically from several hours to 5 minutes.”

– Director of NetOps

Due to the staffing cuts, he faced new operational and digital resilience challenges, along with familiar infrastructure challenges, including:

- **Firewalls:** Detecting unauthorized access and cyber threats, content filtering, and monitoring for data protection.
- **DNS:** Resolving domain names into IP addresses and enhancing security by detecting suspicious domain activity.
- **Data Centers:** Monitoring traffic coming in and going out of the data center, including internet-bound traffic.
- **WAN Ingress and Egress Points:** Monitoring traffic flow and feeds at schools and administration buildings.
- **F5 Load Balancers (manual and automatic configurations):** Monitoring application authentication and server performance.
- **Active Directory:** Authentication with Network Access Control (NAC) solutions to verify endpoints, users, and device access to network resources within a Zero Trust architecture.
- **Laptops and Tablets:** Monitoring app performance for assignments, coursework, grades, and ensuring timely software updates.
- **Azure:** Monitoring server activity as cloud usage increases.

In addition, the district needed a cost-efficient way to monitor its numerous school and administration buildings. Speaking about this and the district's future, the NetOps director said, “It was critical for us to get a solution that works today and fits into our future digital transformations.”

Solution in Action

As a long-term NETSCOUT customer, the district has maintained and used the most current releases of nGenius Enterprise Performance Management solutions for observability across their IT environment. For instance, nGeniusONE monitors ISNG devices in their data center infrastructure while vSTREAM supports their cloud deployments. Leveraging these packet-based monitoring solutions, they achieve granular observability into network traffic and performance metrics, allowing for proactive issue detection and resolution across their hybrid IT landscape.

But, with their staffing shortages, they needed to adopt a more efficient troubleshooting strategy. The NetOps director and other IT leaders decided they needed to augment their existing solutions with a managed IT services solution. They decided that NETSCOUT's Visibility as a Service (VaaS) solution fit the bill perfectly.

VaaS has significantly enhanced their IT ecosystem's observability posture by providing expert monitoring with NETSCOUT augmenting their own IT resources and providing built and customizable dashboards tailored to their specific needs. This integration seamlessly incorporates with their existing infrastructure, encompassing tools like nGeniusONE for their data centers and vSTREAM for cloud environments, for pervasive observability. Specialized monitoring experts continuously analyze network traffic and performance metrics, enabling proactive detection and resolution of issues before they impact operations. Real-time insights from these customized dashboards not only streamline troubleshooting but also optimize the district's operational and digital resilience and its security posture. This adaptability supports scalability in both network capacity and operational scope, ensuring smooth organizational growth and uninterrupted workflows across diverse network architectures.

NETSCOUT VaaS Benefits for School District's IT Team

The district's IT team identified several key goals it wanted to achieve through its collaboration with the NETSCOUT VaaS team, highlighting specific benefits such as:

- **Follow-the-Sun Proactive Monitoring:** School IT departments are notoriously understaffed, making the true 24x7x365 monitoring and managed IT services from multiple global locations enormously beneficial to this school district. Not only does it ensure continuous oversight, but it also provides strategic coverage overnight, on weekends, during holidays, and even throughout school vacation weeks.
- **Accelerated Time to Value for nGenius Solutions:** Expert advice and best practice recommendations from NETSCOUT VaaS subject matter experts—regarding dashboards, alerts, and workflows—to facilitate rapid implementation and configuration, deliver quick identification of issues, and provide actionable insights tailored to specific district needs.
- **Reduced Burden on IT Staff:** NETSCOUT VaaS experts augmented the district's existing IT resources, focusing on network and application performance management. Given the limited size of this team, VaaS has been instrumental in freeing up their internal IT resources for more strategic initiatives.
- **IT Turnover-Proof:** NETSCOUT VaaS engineers analyze, configure, test, and report on the district's network and application services, ensuring continuity and operational stability of students' education despite staff turnover.

The Results

NETSCOUT VaaS has revolutionized the district's IT management by providing proactive monitoring and expert oversight, reducing troubleshooting times from several hours to just a few minutes. The automated dashboards offer structured insights into system performance, enabling faster issue resolution and freeing up IT resources for more strategic initiatives. This has not only improved operational efficiency but also contributed to smoother project progression and greater peace of mind for the district.

The IT team no longer had to worry about manually monitoring the infrastructure, as the dashboards built by NETSCOUT provided structured insights into system performance, allowing for faster problem resolution and enhanced proactive management. This saved valuable IT resources and contributed to the overall peace of mind of both the district and its Director of NetOps.

LEARN MORE

For more information about NETSCOUT's Visibility as a Service (VaaS) solution, visit:

www.netscout.com/solutions/netscout-visibility



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