NETSCOUT

Leading Utility Company Improves Service Edge Visibility With NETSCOUT

Multi-Hop Analysis Improves Service Delivery by Closing Gaps in IT Visibility and Ownership

OVERVIEW

The Challenge

- Visibility gaps in third-party IT environment created issues in assuring utility company's corporate network operations
- Separate energy grid & network operations IT teams, with different service edge data source deployments

The Solution

- nGeniusONE® Service Assurance platform
- NETSCOUT® Certified InfiniStreamNG® software appliances

The Results

- Borderless visibility across service and remote edges improved service monitoring and IT troubleshooting
- Improved IT collaboration reduced vendor and technology silos, enhanced utility service delivery to customers and employees

Customer Profile

This leading U.S. utility company powers one of the country's most populated regions. Their power grid also supports first responders and hospitals tasked with ensuring the safety of the regional population, as well as local universities, hotels, and other commercial destinations. Delivering these high-quality utility services requires the collective expertise of 13,000 employees.

For years, the company's internal information technology (IT) team has used the NETSCOUT nGeniusONE Service Assurance platform to help manage high-quality service delivery for its grid network, including smart grid technology, Automated Metering Infrastructure (AMI), and Generic Object Oriented Substation Events (GOOSE) protocol, as well as their business applications, substations, test labs, and other areas

The Challenge

Given the expanse of the company's technology footprint – as well as wanting to realize business goals focused on reducing operating expenses (OpEx) and improving service quality – executive leadership had outsourced select IT operations to industry third parties, including corporate network oversight. In providing these corporate network oversight services, the third-party provider hosted business service platforms at two data center locations.

Having distinct IT teams managing corporate network and grid services was designed by company leadership to reduce potential "blind spots" and service overlap, as well as preclude IT operations silos and finger-pointing. While the two teams independently monitored grid and network operations and separately rolled up under IT management, there were cooperative IT operations efforts between these two groups that promoted corporate leadership's goals for reducing service overlap and improving efficiency.

Over time, however, there were disparities in the quality of performance analytics and troubleshooting provided by the two IT teams, which surfaced most visibly in joint War Rooms convened to troubleshoot issues potentially involving both the grid and corporate networks. In these instances, the grid IT team arrived at the War Room with nGeniusONE-generated analytics that provided IT leadership with actionable information to pinpoint root cause and remediate the issue. But when an issue traversed to the corporate network, the third-party IT team experienced challenges and lengthy delays trying to identify root cause. As a result, they were not providing comparable intelligence in the joint War Room sessions, which led to the grid IT team being called in to help resolve issues within the corporate network.

Solution in Action

Both the grid and corporate network IT teams collaborated with NETSCOUT to visualize how network operations and real-time monitoring could be improved. Based on these communications, they decided to deploy software-based ISNG appliance data sources in the third-party's data center locations.

Using NETSCOUT-recommended practices, the third-party IT team deployed ISNG data sources to provide visibility into the following domains:

- **Service edge:** including on-premises data center edges, including core and distribution layers (i.e., down from the service edge); capturing at firewalls (i.e., close to the service edge); and three internet service providers (including QSatellite services specific to the energy industry).
- **Client edge:** Traffic from hundreds of remote business offices routed through dozens of hub sites.

With these ISNG smart data sources used to fuel nGeniusONE real-time monitoring and analytics, the third-party IT team was equipped to address the following performance issues in the corporate network environment:

- Differentiating services issues occurring on-premises from those in cloud services.
- Generating multi-hop business transaction analysis, comparing network latency from different network environment handoff points.
- Identifying cloud application issues, including slowness and disconnects.
- Reporting on cloud application bandwidth consumption and URL classification.
- Providing IT performance analytics to inform the company's business decisions.
- Assuring high-quality user experience for at-home company workers depending on virtual private network and Microsoft Office 365 services.

The Results

With added visibility from the ISNGs in the corporate network environment, the utility company benefitted from improved service delivery and end-user experience in a particularly challenging business environment for energy companies everywhere. The company also realized improved IT collaboration and quicker joint problem resolution, with the outsourced provider offering enhanced corporate network operations performance more closely aligned to their service level agreements.

LEARN MORE

For more information about NETSCOUT solutions for Enabling Digital Transformation in the Utilities Industry, visit:

https://www.netscout.com/solutions/utilities

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