

Large Northern U.S. Power Company Relies on NETSCOUT Solutions to Assure Services and Compliance

The NETSCOUT Solution Constantly Monitors Performance, Errors, and Security, Enabling IT to Quickly Resolve Issues and Maintain Compliance

OVERVIEW

Business Challenge

- Difficulties in meeting NERC-CIP requirements to provide audit trails into and out of any cyber assets within the electronic security perimeter
- DMZ redesign required a “data historian” in every transmission and generation facility
- Failure to track and address non-compliance could result in fines of up to a million dollars a day
- Need to assure performance of the SCADA system and business services across the infrastructure

NETSCOUT Solution

- InfiniStream® appliances gather and store all traffic into and out of each critical facility DMZ as required for NERC-CIP compliance
- nGeniusONE® provides dashboard views of SCADA and other applications allowing indication of performance and security issues that can be immediately drilled into for additional information
- nGeniusONE dashboard shows protocol activity indicating either a security breach or performance issue and delivers detailed insights to better understand sources and targets

Business Value

- Avoid costly penalties and embarrassment by consistently passing NERC-CIP compliance audits
- Reduce risk of disruptions in power delivery by proactively detecting suspicious traffic and performance issues
- Extend the value of investments by using one tool to support energy specific and business services, including SCADA and UC&C
- Reduce MTTR with proactive notification and detailed analysis



Customer Profile

This company provides electrical power and natural gas to millions of customers across multiple states in the Northern part of the U.S. Delivering reliable energy and superior customer service to their customers are their core objectives, with the added goals of achieving sustainability milestones and green energy initiatives. In order to maintain performance, security and NERC-CIP compliance, they rely on the ability to understand warning signs and gather forensics information in their critical networks, not only for the Supervisory Control and Data Acquisition (SCADA) application, but any other applications running on the company’s vitally important networks.

Business Challenge

As a public utility, this energy provider must meet regulatory compliance mandates around service performance and security. The North American Electric Reliability Corporation (NERC), an institution that oversees and regulates the reliability of the North American electrical grid, requires that providers must be able to offer audit trails into and out of any cyber assets within the electronic security perimeter where critical assets reside. With the redesigned distributed network, each of this Company’s transmission and generation facilities had to be equipped with its own DMZ, secured with firewalls, routers, and other security equipment. Key to this redesign was the inclusion of a data historian to track all traffic into, out of, and within the facility in order to maintain NERC-CIP compliance. Failure to track and address any non-compliance could result in fines of up to a million dollars a day per incident – which had the potential to severely damage or even destroy the business.

IT faced the significant challenge of assuring the performance and security of its SCADA system across the company's infrastructure. Any disruption to power generation and transmission could have serious safety and reliability consequences. In addition, IT needed to monitor and assure unified communications and collaboration (UC&C) services which are relied upon to make the business more efficient and provide better customer service/experience.

NETSCOUT Solution

In order to address the energy provider's network and application security and performance assurance needs, they turned to NETSCOUT®. The nGeniusONE Service Assurance platform was selected, along with a variety of InfiniStream appliances, to gather and store all traffic into and out of each critical facility DMZ required for NERC-CIP compliance. The InfiniStream appliances provide the data historian functionality needed to conduct forensics on specific incidents when discovered.

NETSCOUT Solution in Action

The nGeniusONE solution provides dashboard views of SCADA and other applications, delivering indications of performance and security issues that can be immediately drilled into for additional insights. The dashboard shows protocol activity revealing any service degradation and/or security breach, allowing IT to proactively drill into session- and packet-level data details to understand sources and targets to identify if this is a performance issue or nefarious activity and where throughout the environment an intruder may have traversed.

SCADA service monitors on the dashboard constantly monitor response time/performance, as well as errors, enabling IT to quickly resolve performance issues.

Business Value

The NETSCOUT solution has been a game-changer for this large energy provider. The nGeniusONE platform and InfiniStream appliances have enabled IT to avoid the risk of network breaches, costly penalties and the embarrassment of failed NERC-CIP compliance audits. By proactively detecting suspicious network traffic and determining if it is performance or security related, IT has reduced the chance of disruptions in power delivery, ensuring reliable service and protecting customer satisfaction.

Using in depth troubleshooting analysis and proactive notification from nGeniusONE to monitor services and applications, IT has effectively reduced mean-time-to-repair (MTTR). The NETSCOUT solution has extended the value of the company's investment by using one tool to support all energy specific and business services, including SCADA and UC&C.



Corporate Headquarters

NETSCOUT Systems, Inc.
Westford, MA 01886-4105
Phone: +1 978-614-4000
www.netscout.com

Sales Information

Toll Free US: 800-309-4804
(International numbers below)

Product Support

Toll Free US: 888-357-7667
(International numbers below)

NETSCOUT offers sales, support, and services in over 32 countries. Global addresses, and international numbers are listed on the NETSCOUT website at: www.netscout.com/company/contact-us-2/