

Visibility into Warehouse App Improves Delivery Time to Customers

Keep Conveyor Belts Moving with nGeniusONE

OVERVIEW

The Challenge

- Custom-built warehouse management application causing shipment slowdowns.
- Need for end-to-end visibility in remote store and distribution center locations.

The Solution

- nGeniusONE® Service Assurance platform
- InfiniStreamNG™ appliance

The Results

- Improved uptime and availability
 - Mitigate business risk
-



Customer Profile

This North American hardware chain has thousands of retail locations across the US, Canada, and Mexico. More than 300,000 employees take care of millions of customers a year, generating billions of dollars in revenue. Hundreds of thousands of products are available online or in stores. As such, the business depends on IT to ensure that services are running well, to ensure that stores are stocked, distribution centers are running, and the website maintains up to date inventory and stocking information. Both off the shelf and custom applications are used to support the business.

The Challenge

The main challenge for this customer was resolving performance issues related to a proprietary application used in their regional distribution center locations. These centers were responsible for shipping products both to the retail store locations as well as delivering orders placed online directly to customers. The application wasn't scanning inventory being compiled on conveyor belts in the centers properly, causing containers to be loaded more slowly and delaying shipments from going out in a timely fashion.

The risk to the business was considerable. Slowdowns of this nature can be crippling for a retail business, delaying shipping times and causing stores to suffer inventory challenges. Customers won't wait when a product isn't in stock, they will just go buy it somewhere else. Revenue loss and bottom line impact is a direct effect of these technical challenges with shifts in customer loyalty as they find faster service when they explore other retailer options.

Initially, NetOps was concerned that there might be a network issue causing the slowdown. They needed end-to-end visibility in remote store and distribution center locations to uncover the true root cause.

Solution in Action

To address this challenge, this long-time customer turned to NETSCOUT. The NetOps team deployed an InfiniStreamNG appliance in the distribution center to provide end-to-end visibility into application performance.

The smart data generated by the InfiniStreamNG appliance is converted into smarter analytics by the nGeniusONE service Assurance platform. Extracted from rich wire data, these analytics are displayed in custom service dashboards showing at-a-glance views into critical business applications and services. Service Dependency Maps are used to graphically illustrate client-server communications paths and help NetOps understand what servers an application is trying to talk to.

With the help of the NETSCOUT solution, NetOps was able to map out the service dependencies and identify the traffic paths the application was taking and which upstream servers it was communicating with. Using this view, they uncovered several issues they weren't expecting, which helped them identify and resolve the disruptions they were facing. Although the application was supposedly running locally, NetOps discovered that it had a WAN component. An MTU misconfiguration on the WAN link was discovered to be causing delays and retransmission in this supposedly local application, as was the asymmetric routing of some legacy tunneling protocols.

With some service performance issues, solving them is like peeling an onion. Once you resolve one issue, the next set of problems can be seen. In addition to the MTU misconfiguration, NetOps also identified further issues:

- Unused static IP addresses hard coded in the application caused application timeouts
- DNS errors caused errors and delays as the application couldn't resolve the hostname of upstream servers it was trying to communicate with
- A faulty cable causing retransmissions caused more slowness

Each of these problems was found and identified from within nGeniusONE, using seamless drilldowns and contextual workflows. At the end of the day, the core issue was found to be an issue in the application code, and with the information provided by NETSCOUT, NetOps was able to work with the vendor on a resolution.

The Results

nGeniusONE has proven invaluable to the store's IT team. With the nGeniusONE solution in place, NetOps has been able to find and resolve many lingering issues causing business impacting problems with this very important application. Moreover, the smart data provided by nGeniusONE has better enabled NetOps to communicate with their vendor and get bugs in the application fixed.

For this distribution center and store, the NETSCOUT story was all about uptime and availability. Time is money in a distribution center, if anything happens to slow shipments from going out, the business loses. Before nGeniusONE was deployed NetOps struggled to prove that the issues with the application were not caused by the network, which prevented them from finding and resolving the true underlying issues. With nGeniusONE, NetOps can now find and resolve service degradations rapidly, ultimately improving uptime and availability and mitigating business risk.

LEARN MORE

For more information about NETSCOUT Retail solutions visit:

<https://www.netscout.com/solutions/service-assurance-solutions-retailers>



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