Manufacturer Achieves Quality IT Performance at Plants with NETSCOUT

Reduces MTTR and Improves Confidence in IIoT and Application Services Worldwide

Customer Profile

This large North American manufacturer builds and sells household appliances, electric motors, lighting products, and many other electrical products for household, commercial, and industrial applications. From small to large appliances for the kitchen and laundry room to commercial HVAC systems, this manufacturer has become a staple in homes and businesses around the world. Their other products range from state-of-the-art light bulbs and specialized lighting solutions, to household and industrial motors and generators. With dozens of factories and R&D facilities worldwide, as well as, point-of-sale ordering capabilities throughout stores in multiple large retail chains, IT service performance is critical.

The Challenge

The company's distributed, worldwide factories are critical to achieving overall production quotas, and they must perform as well as the main manufacturing facilities. Not surprisingly, the distributed plants rely heavily on IT technology, such as automated assembly lines that communicate instructions and status between equipment on the lines.

In addition, not all the company's remote facilities use centralized IT services; rather, they use locally hosted applications. These remote facilities are run on a “network in a box,” where VMware ESX servers are used to host manufacturing / production applications that are responsible for bar code scanning, printing, and communications as well as underlying network protocols like DNS, file services, and LDAP. These applications are critical to operating the production line and business processes at the plants.

OVERVIEW

The Challenge
- Distributed plants with heavy reliance on non-centralized IT technology
- Lacked visibility when slowdowns and outages occurred at the plants

The Solution
- nGeniusONE® Service Assurance platform
- InfiniStreamNG™ appliances
- vSTREAM™ virtual appliances

The Results
- Reduced MTTR to resolve issues impacting their factories and assembly lines
- Improved collaboration between NetOps and Manufacturing leadership
- More cost-effective, evidence-based IT budgeting and spending
When communication between machines slows or stops, the symptoms may not be quickly apparent locally and can persist for a few hours, leading to delays on the lines, halting the lines completely, or creating issues requiring rework. Any impact to a manufacturing line has a direct financial impact on the company and, depending on which line it is, can have a rippling effect throughout the entire company. Delays or outages on a line can impact delivery schedules and sales for the product being produced and if that line is manufacturing parts for other products within the company, those other products will also experience delays. The manufacturer had deployed NETSCOUT’s nGeniusONE Service Assurance platform with InfiniStreamNG appliances for monitoring, but only in the data center, leaving no visibility at most remote facilities.

**Solution in Action**

Because the company’s network operations team was already using nGeniusONE in their centralized data centers, they already understood the value and benefits of real-time, continuous wire traffic monitoring. nGeniusONE with NETSCOUT’s patented Adaptive Service Intelligence (ASI) technology leverages the high-value wire traffic to generate “smart data” for smarter analytics to assure performance, manage risk, and facilitate superior decision making regarding their application and network services. When deciding how to best support the needs of the manufacturing executives driving factory IT availability, network operations recommended consulting with NETSCOUT® for a solution.

The networking staff selected the vSTREAM virtual appliance that complements existing ASI-based InfiniStreamNG hardware instrumentation to provide the same level of visibility at each of the factories and directly on the applications supporting the production lines. With vSTREAM, they were able to implement local monitoring directly on the “network in a box” on the ESX servers already deployed at each remote facility, providing proactive network and application monitoring.

At very small sites, vSTREAMs are implemented on server blades where “network in a router” configurations are deployed. The network operations team now has visibility to services in action at the plants, ranging from the bar code application for inventory management to the assembly line, to maintain efficient production services.

**The Results**

Reducing the Mean-Time-to-Resolve (MTTR) issues impacting their factories and assembly lines has been the biggest benefit to the network staff and the manufacturing leadership teams. When it comes to this manufacturer’s factories, precision timing is everything. There is a direct financial impact to the business if the manufacturing line at a plant slows or comes to a halt - product is not built and can’t be placed in circulation for revenue. With nGeniusONE and vSTREAM virtual appliances now at all their global factories, the networking team can proactively detect and address issues as they arise to minimize or even avoid disruption.

Collaboration between networking and manufacturing teams has increased, with NetOps now able to share metrics, trends, and application information with local factory operations that aid in day-to-day operations, as well as long-term planning. This helps to develop better relationships between the teams, as well as more effective IT budgeting based on evidence that didn’t exist previously. As the factories lack on-site IT staff, this has also improved productivity for the company’s centralized IT employees who now have remote visibility into performance of the plants’ network and application services.

In addition, the decision to deploy vSTREAM has extended the value in the investment made by IT in the nGeniusONE solution. Data collected in the factories is being analyzed and coalesced along with existing data center metrics for global reporting and trending, which will make long-range planning more complete and accurate. NETSCOUT’s unwavering commitment to providing technology solutions to meet the needs of this manufacturer, combined with exceptional on-site customer support have been key factors in creating a trusted partner relationship and has proven NETSCOUT to be a key, reliable vendor.

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