

# National retailer leverages GDT wireless NaaS to save time & amplify productivity in distribution centers

## Customer challenges

Our customer operates large distribution centers that service their retail stores nationwide. They rely on mission-critical wireless access to keep up with the demands of receiving, storing, and shipping inventory across the country.

Our customer was operating outdated and poorly architected WiFi networks in their expansive distribution centers totaling millions of square feet. Connectivity and bandwidth issues caused delays and impacted productivity. Furthermore, networking staff faced intense manual fine-tuning whenever infrastructure changes were made, with adjustments often required for months following the changes. This caused unpredictability and instability in these critical logistic centers, leading to increased IT staff workloads, lost productivity, and poor user experiences.

## Customer requirements

Our customer needed a streamlined, secure, and modern networking solution they could rely on across their distribution centers, as well as professional design and migration support.

Specific project requirements included:

- Full wireless coverage in all areas.
- Complex picking areas that required specific wireless designs.
- Simplified device and user management.
- Secure network access for IT staff and employees.
- Future support for wireless location services and application-aware services.
- Minimal downtime during cutover.
- Self-healing capabilities.
- Real-time troubleshooting support to reduce time to repair.
- Tuning support, ensuring a successful migration.

## About the customer

Our customer is a major retail chain with over 1,500 locations across the US, Mexico, and Puerto Rico.



## **Solution: GDT NaaS - Powered by Juniper**

The GDT team assessed our customer's full network configurations and RF usage requirements and determined that the existing WLAN system had been poorly architected based on the customer's functional requirements. Specifically, the wireless AP and antenna types were not aligned with the customer's use case. Based on this assessment, GDT designed and implemented a full remediation plan using Juniper Mist access points supporting WiFi6 capabilities. GDT worked closely with our customer to develop, coordinate, and execute a step-by-step migration process to keep the existing system online while the new system was being installed. As part of this effort, GDT RF engineers built full RF reports and instructions for the installation teams. The implementation included new CAT 6 cabling and access points. GDT installation teams carefully mounted antennas and aligned them to design requirements at each distribution center.

Features of the wireless network included:

- Juniper Mist access points with virtual Bluetooth Low Energy (BLE) capabilities to enable future growth with location tracking and Bluetooth capabilities.
- RF patterns using specialized directional antennas to push signals down for coverage in well-defined footprints on the ground while limiting signal interference in other areas.
- Architecture built for roaming and mission-critical access.

As part of our coordinated deployment services, GDT RF engineers met the installation teams onsite to answer questions and perform fine-tuning. To minimize downtime and business impact, GDT executed the planned cutovers in single-night sessions with zero outages or productivity impacts. GDT tested the RF signal following the cutovers to identify and address any additional tuning needs. To enable proactive troubleshooting, GDT worked with our customer to set up Juniper Mist Service Level Expectations (SLEs) to track the system when the customer's self-determined health thresholds were not met. GDT also provided customer training on the new system and demonstrated how the system can perform automatic tuning without the need for manual configuration.

## **Benefits**

Through GDT's efforts, our customer has gained confidence, predictability, and increased productivity with their new wireless system and has engaged GDT to perform additional distribution center projects supporting their wireless needs. With the Mist Cloud configured to our customer's success thresholds, they can easily see their success parameters and quickly identify issues through Juniper Mist's detailed insights.

Additionally, Juniper Mist leverages client and access point analytics to make real-time tuning decisions to avoid critical interference issues. Juniper Mist also uses signal analytics to make global decisions automatically at times when the system is not in use by client devices.



Overall, the domino effect of customer benefits include:

- Increased reliability and uptime of wireless equipment and reduced application latency.
- Improved productivity and user experience.
- Expanded coverage area.
- Time and cost savings due to reduced need for manual tuning and configuration.
- Proactive troubleshooting and increased visibility into system health.
- Increased security for IT staff and employees.

## **Learn more about GDT network services**

GDT NaaS offerings are backed by a team of industry experts who provide hands-on, collaborative consultation, design, deployment, implementation, and ongoing lifecycle management. Enjoy enhanced business functions through improved agility, responsiveness, and scalability. We help your business stay ahead through our proven methodologies, localized presence, and unmatched expertise.

To learn more, visit [GDT networking solutions](#) or [contact us](#).