



Delta: Scaling Visibility Across One of the World's Largest Operations

From High-Performance Tracking to Near-Perfect Visibility

In large-scale logistics operations, knowing where your assets are at all times is critical. Whether those assets are baggage in airports, pallets in warehouses, or containers moving through supply chains, the challenge remains the same: ensuring real-time visibility, accuracy, and operational reliability.

For Delta Air Lines, this means handling upwards of 130 million bag tags every year across a global network of airports. When relying on barcode-based tracking, Delta faced limitations in data capture and visibility. Achieving this level of visibility requires more than technology — it requires a trusted partner with a proven end-to-end solution.

Key Results Include:

- 16% improvement in mishandled baggage rate
- Increase in tracking events per bag from 4 to 16
- Over 2 billion RFID scan events annually
- 99.9% scan accuracy across the network



Operational Results and Impact

Looking back on more than a decade of collaboration, Delta has achieved significant operational improvements through RFID and its partnership with Lyngsoe Systems.

This enables:

- Better operational decision-making
- Improved reliability and on-time performance
- Higher customer satisfaction

In addition, the belt loader solution has contributed to a 16% reduction in employee injuries, improving workplace safety and reducing physical strain on employees.

Building End-to-End Visibility

Delta's RFID program now delivers end-to-end tracking across the airline's operations, including:

- Fixed RFID infrastructure across baggage handling environments
- RFID-enabled belt loaders at aircraft operations
- Mobile RFID solutions for recovery and irregular operations

Together, Delta and Lyngsoe Systems have built one of the aviation industry's largest RFID asset tracking systems.

Ensuring Reliability 24/7

At Delta's scale, system reliability and IT security are essential to maintaining a high performing logistics operation.

As Brandon T. Woodruff, Manager, ACS Tools, Infrastructure and Technology at Delta Air Lines, explains:

"Reliability is paramount for Delta. With more than 1,000 RFID read points across 90 stations, any downtime results in lost tracking events and reduced confidence in operational decisions."

To support this, Delta relies on Lyngsoe Systems' service capabilities, including continuous monitoring and rapid issue resolution.

Delta's RFID Journey

Delta has been on this journey since 2014. They started with the belt loader solution, which includes 1,600 belt loaders that enable hands-free loading and unloading. Then transitioned into fixed RFID infrastructure to eliminate the need for manual barcode scanning and replace those tracking events with passive RFID technology.

During the initial deployment, they installed 550 read points, primarily utilizing Zebra hardware, which has been an excellent addition to their technology portfolio. Since then, they have grown with Lyngsoe Systems to over 1,000 fixed read points, mostly domestically, but we are now beginning to expand internationally.

"We also benefit from the Lyngsoe LIVE Service Desk, available 24/7, ensuring minimal downtime and rapid recovery when issues occur. This allows us to maintain the reliability we require."

In parallel, the partnership supports Delta's transition to cloud-based infrastructure, ensuring scalability, stability, and compliance with strict IT security requirements.

From Reactive to Proactive Operations

As the RFID platform has scaled across Delta's domestic network, the operation has transitioned to a fully proactive, data-driven operating model.

With 24/7 monitoring, real-time dashboards, and proactive alerts, potential issues are identified and resolved before they impact operations — ensuring consistent, high-performance tracking across the entire network.

A Long-Term Partnership Built on Trust

Woodruff explains:

"We have now been in partnership with Lyngsoe Systems since 2014. What began as a vendor-client relationship has evolved into a true partnership."



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