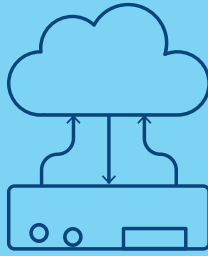


Bridging The Blind Spots:

How Monterrey Airport And AirportLabs Built A Unified Digital Airfield With RealTime Airport



Client:

OMA Airports, Part Of VINCI Airports



Location:

Monterrey Airport (MTY), Mexico



Scale:

**15M+ Passengers Annually
300+ Daily Movements**



The Solution:

RealTime Airport

The Partnership:

Turning Data Gaps Into Digital Clarity



MTY struggled with a lack of real-time visibility into aircraft and ground movements a gap left by restricted access to ATC radar data alongside physical blind spots that remained out of reach for traditional CCTV. To solve this, OMA Airports, part of the VINCI Airports network, selected AirportLabs and deployed RealTime Airport to build a robust, independent data ecosystem that would provide the Operations Control Centre (CCO) with total situational awareness.

While this case study focuses on airfield visibility and data-driven blind spot elimination, **RealTime Airport is a comprehensive airport operations platform.** Beyond surface movement tracking, it covers flight information management, turnaround monitoring, resource allocation, and passenger flow, giving operations teams a single, unified picture of everything happening across the airport.

The Foundation:

Hardware And Data Processing

We worked alongside the Monterrey team to implement a custom hardware layer that serves as the eyes and ears of the airfield.



Independent ADS-B Infrastructure

Because MTY needed a reliable source of aircraft data independent of third-party providers, AirportLabs deployed dedicated ADS-B antennas for Aircraft Tracking across the site. This provided a live, radar-style view of all aircraft on the ground and in the air around the airport, including inbound, outbound, and overflying traffic.



GPS Vehicle Integration

Airfields are a complex dance of planes and service vehicles. AirportLabs equipped MTY's emergency and service fleet with GPS trackers, feeding data into the RealTime Airport platform to create a unified map where every asset is visible.

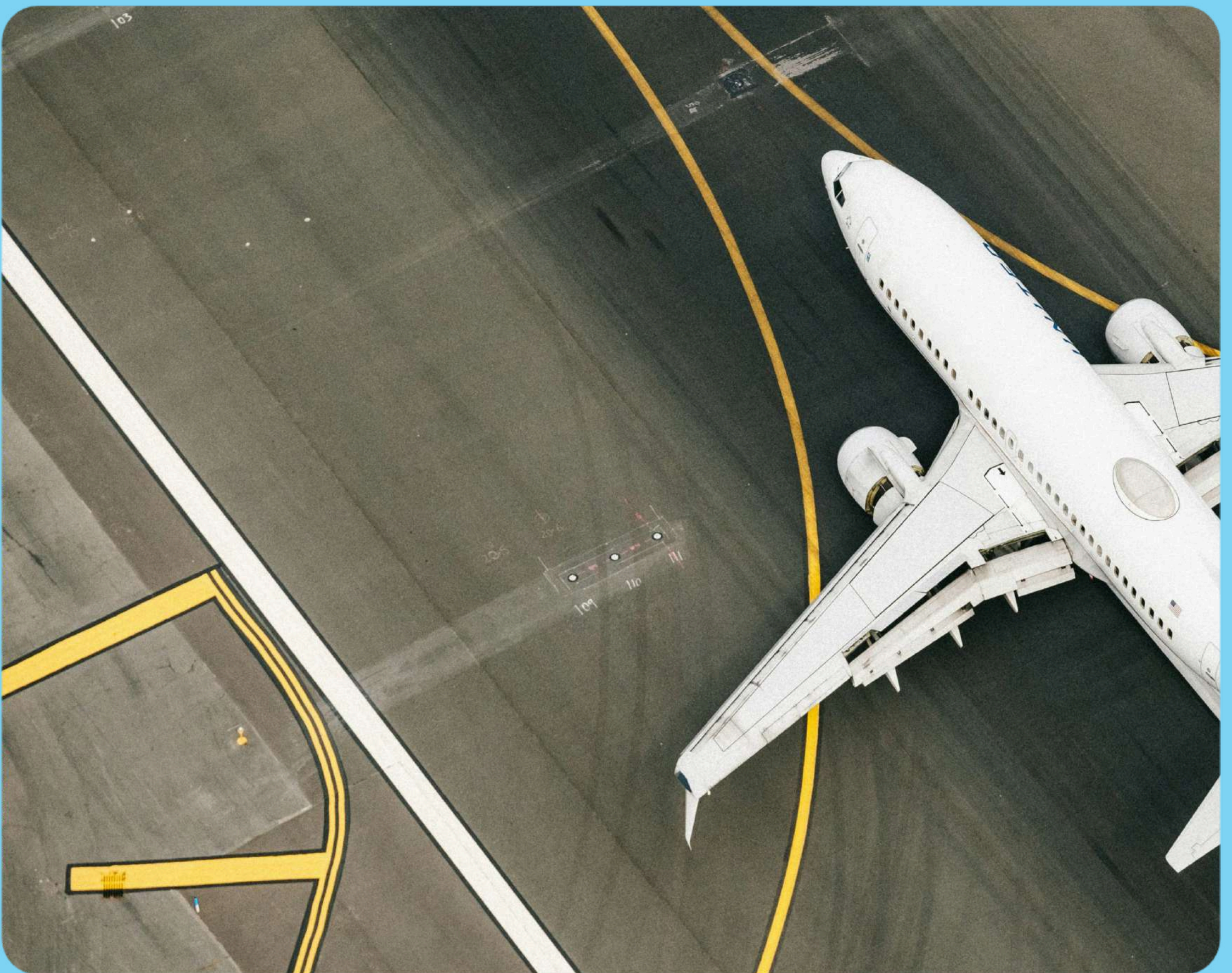


Real-Time Processing and Alerts

The platform goes beyond simple visualization. It processes location data to actively assist the CCO. The system is configured to send immediate alerts to users if a vehicle enters a restricted or unauthorized zone or a vehicle exceeds the specific speed limit assigned to the section where it is driving.

Mastering Time With Map Replay

With The Hardware Capturing Every Movement, The Collaboration Also Unlocked The Map Replay Capability.



What is Map Replay? A capability within RealTime Airport that allows teams to review the airfield map at any moment in the past to see how an event unfolded. The system provides a data-rich environment where users can check the precise speed, trajectory, and identity of every aircraft and vehicle.

The Incident:

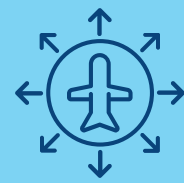
A Real-World Test

The power of this unified system was put to the test during a critical emergency diversion. An aircraft was forced to land at Monterrey due to a passenger disruption.



The Challenge

The incident occurred at night, and the aircraft was positioned behind a satellite building that physically blocked the CCO's line of sight. Standard CCTV struggled to provide the necessary detail in the low-light conditions.



The RealTime Solution

Through the collaboration of ADS-B data and GPS tracking, the invisible became visible. Even though the aircraft and police vehicles were behind a physical building, they were perfectly tracked on the RealTime map.



Using Map Replay, The Team Reconstructed The Event After The Fact To Verify The Response:



Trajectory Analysis

They could see the aircraft's full trajectory, including the exact route the police took while escorting it.



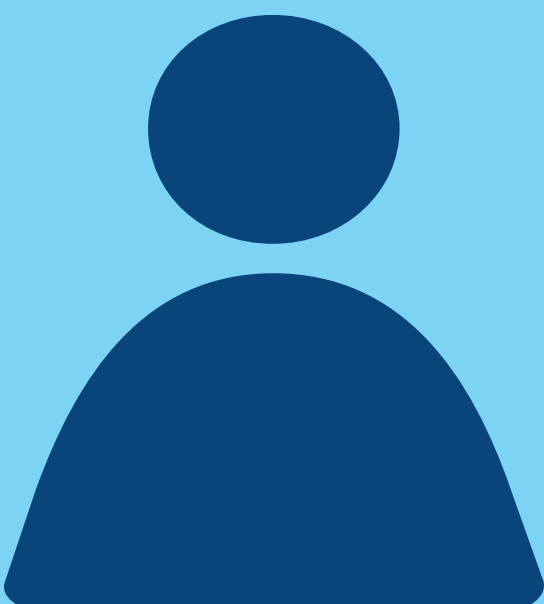
Speed Verification

The system confirmed that all vehicles maintained safe and appropriate speeds during the high-stakes turnaround.



CCTV Synchronisation

By pinpointing the exact time in the replay, the team could identify which CCTV camera to jump to for visual evidence, effectively using the data to guide the cameras.



“Map Replay provides the vital additional context we need. We can instantly find the right CCTV camera that was looking at that specific incident exactly when it happened. By seeing the precise trajectory on the map, you truly understand what’s going on across the entire airfield.”

Javier Morales de la Barrera, Project Manager, OMA Airports

The Result:

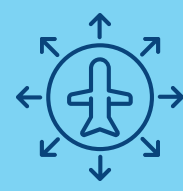
A New Standard For Operational Excellence

The collaboration has moved MTY from a reactive posture to a proactive, data-driven culture, providing significant benefits across their **15-million-passenger** operation:



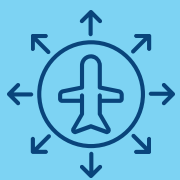
Total Situational Awareness

The combination of ADS-B and GPS tracking has eliminated "blind spots," providing a 100% accurate, real-time view of the entire airfield.



Data-Driven Accountability

The ability to verify vehicle speeds and trajectories ensures all ground operations adhere to strict safety standards.



Clear Vehicle Identification

With all vehicle IDs visible in the real-time system, controllers can immediately distinguish which vehicle is which, improving coordination with handling teams and reducing ambiguity during busy or abnormal operations.



Enhanced Emergency Response

MTY uses the system to audit actual response times through historical data, ensuring they meet mandatory regulatory requirements.



Seamless Reporting and Learning

High-detail reports are generated in minutes, allowing the airport to continuously analyse and optimise procedures.



Take Control Of Your Airfield

Don't let blind spots or fragmented data compromise your operations.

Monterrey Airport proved that total airfield visibility is within reach with the right airport operations solution.



Ready To See It In Action?

Discover how RealTime Airport can transform your operations.

[Request Your Live Demo Today](#)