Airport Hive®

# Embrace the New Wave of AODB

**Empower your airport with Airport Hive**, a leading Airport Operating System that optimises operations for maximum efficiency, safety, and passenger satisfaction. Built around microservices, real time data streaming and REST APIs, Airport Hive ensures seamless collaboration, enabling other systems to connect and share data effortlessly.

Designed for flexibility and future readiness, Airport Hive offers rich AODB functionality, adapts to new technologies, and meets high cybersecurity standards. It supports cloud, on-premise, or hybrid hosting, giving your airport full control over operations.

## Moving Beyond Legacy Monoliths to Microservices

**As a dynamic AODB replacement**, Airport Hive adapts to your unique needs, enhancing decision-making and passenger experience via an intuitive interface accessible on any web browser or mobile device. Powered by microservices, it allows individual updates with zero downtime, ensuring smooth integration and scalability.

Airport Hive's "loosely coupled" system architecture allows for easy integration with other vendor systems through REST APIs, event streams, and data wrappers, encouraging rapid innovation and seamless adaptation to new technologies.

## Airport Hive Delivers:

Full AODB functionality with real-time data and modular applications.

Easy accessibility via Web Browser or Mobile both on and off airport.

Event driven microservices architecture for agility and constant innovation.

Full API catalogue for easy system integration.

Real-time data streaming pipelines reliably process and move data.

Modular SaaS approach.

Effortless upgrades with minimal downtime.

Customisable business rules engine for data prioritisation.

Advanced auditing on data changes.

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# Transform Airport Operations with Data Streaming

**Airport Hive is a powerful solution built on data streaming architecture**, transforming how airports manage operations. Unlike traditional batch processing, which collects and analyses data at set intervals, data streaming allows for real-time processing. This means that as soon as changes occur, whether it's a flight delay, gate assignment, or passenger volume adjustment, Airport Hive instantly processes the data and triggers necessary actions.

## How Data Streaming Works

**Data streaming continuously collects, processes, and distributes data** from multiple sources, such as flight info, security checkpoints, baggage handling, passenger movements, and weather updates. With Airport Hive's event-driven architecture, the system reacts instantly as conditions change. All components of Airport Hive publish and subscribe to a central data streaming platform, enabling seamless collaboration across internal and external systems. For instance, if a flight delay occurs, updates are immediately synchronised, notifying staff, passengers, and retail partners.

## Benefits for Your Airport

**Operational Efficiency**: Real-time data enables airport staff to make faster, informed decisions, reducing delays and optimising resources like gates, runways, and baggage systems.

**Enhanced Passenger Experience**: Prompt updates keep passengers informed about flight status changes, reducing frustration.

**Improved Collaboration**: Airlines, ground handlers, and retail partners access the same live data, supporting smooth operations.

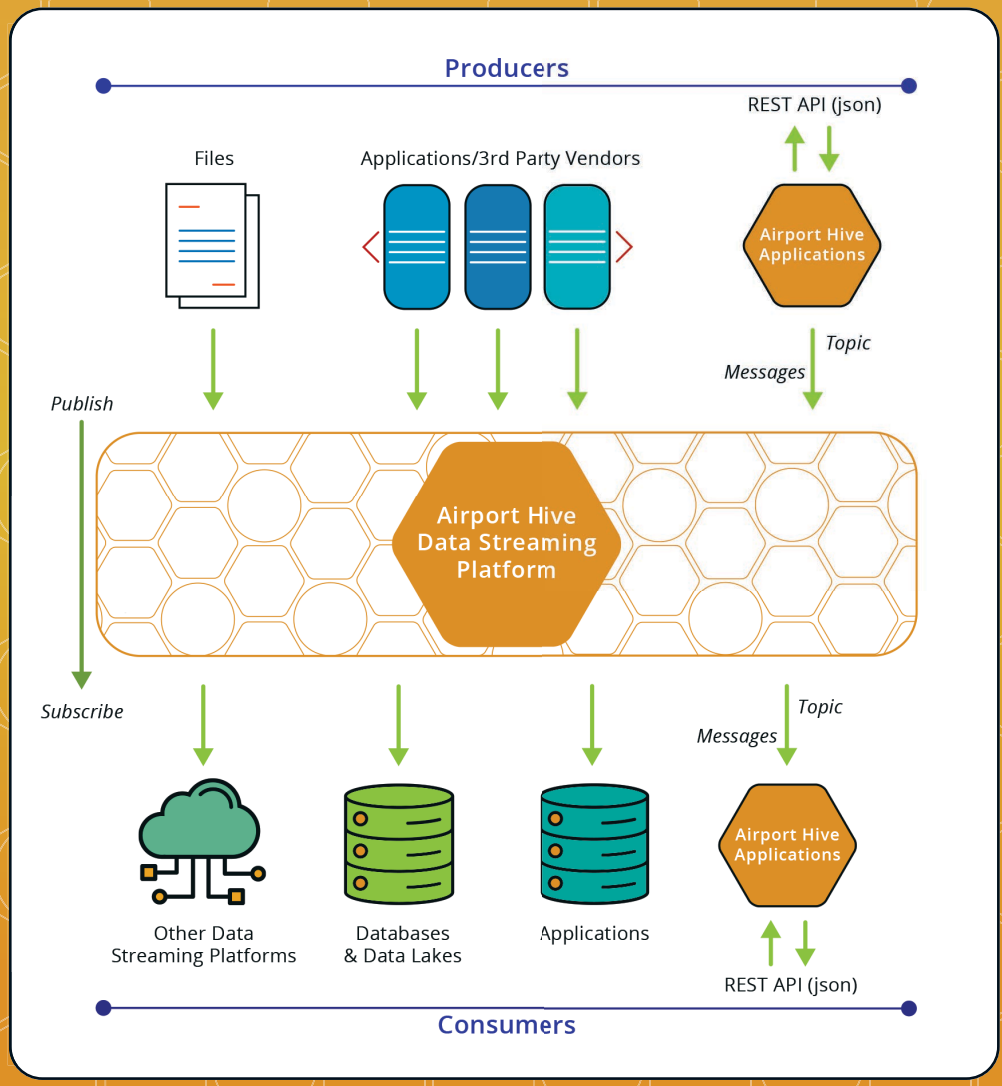
**Scalability**: As airports grow, Airport Hive can handle increased data without performance loss, supporting future expansion.

In short, Airport Hive's data streaming architecture offers airports a transformative way to enhance efficiency, respond rapidly to real-time events, and elevate experiences for passengers and partners.

## Airport Hive Data Streaming Platform

Airport Hive delivers a real-time data streaming message system and protocol built around a publish-subscribe system. Producers publish data to feeds (topics) that consumers subscribe to and receive messages from. Messages are stored in topics in many partitions which supports redundancy.

We also provide full access to all Airport Hive data with REST APIs. Data wrappers can be provided for legacy protocols.



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# Modular, Powerful and Easy to Use

**Modular by design, Airport Hive gives you the functionality you need, making it affordable, versatile and tailored to your needs.**

## Flight Management

Data-rich tools for seamless flight operations. Tailored critical flight information ensures situational awareness and rapid response.

## Flight Schedule Processor

Modernise your flight schedule processing, (supports formats like SSIM and AIDX).

## Flight Information Display System (FIDS)

Bring your customer experience into the 21st century with integrated real-time data for smart and versatile signage, including advertising, way-finding, and line management.

## Resource Management

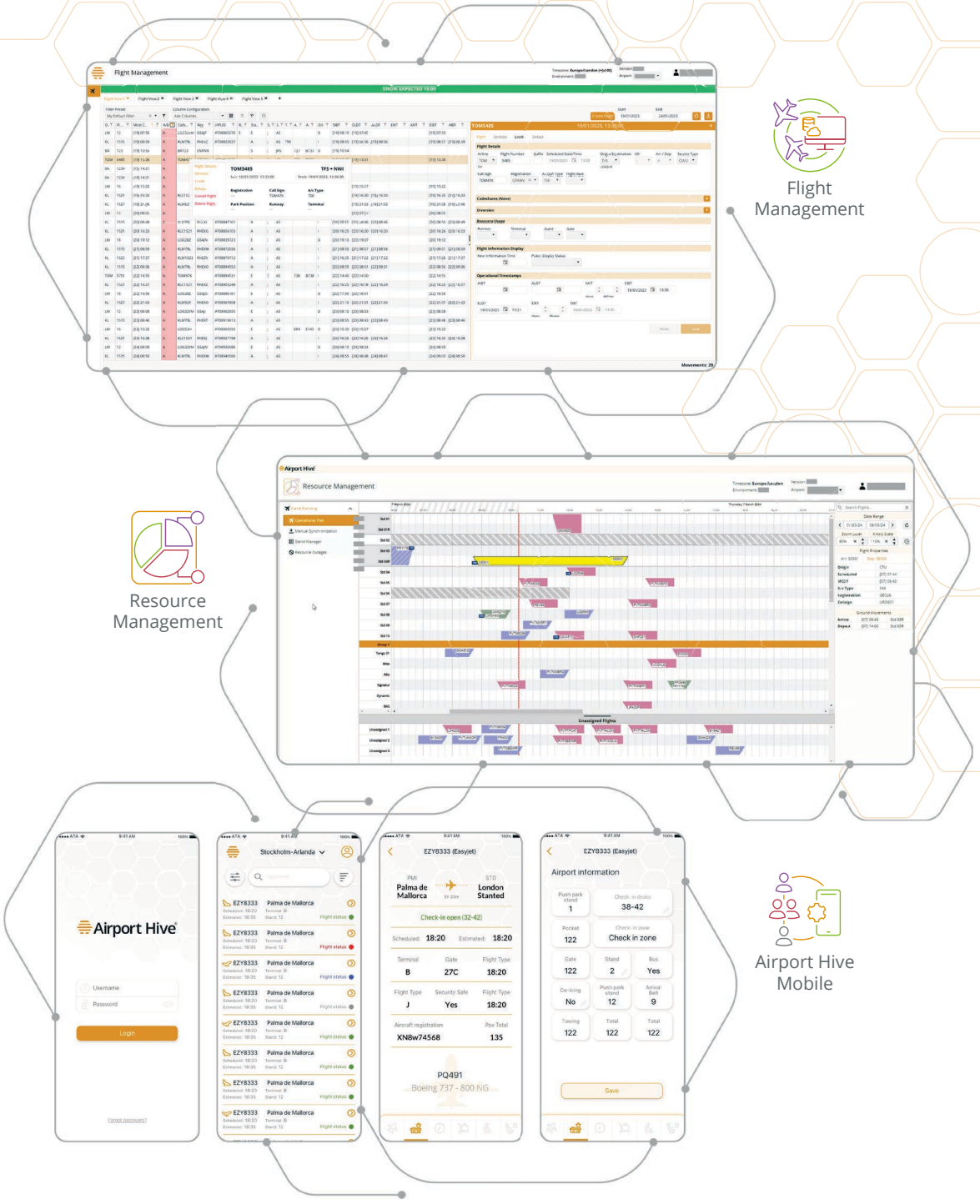
Conflict-free planning to allocate resources efficiently and maximise airport capacity and minimise delays.

## Billing

Take the hard work out of finance. Improve your cash flow by ensuring accurate and timely invoicing for airlines and service providers.

## Mobile

Airport Hive Mobile provides real time access to your operational flight information with the full capability of editing and maintaining flight records. This delivers a mobile collaboration platform for all your airport business stakeholders. Especially useful for handling agents.



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# Modular, Powerful and Easy to Use

## Master Data Management

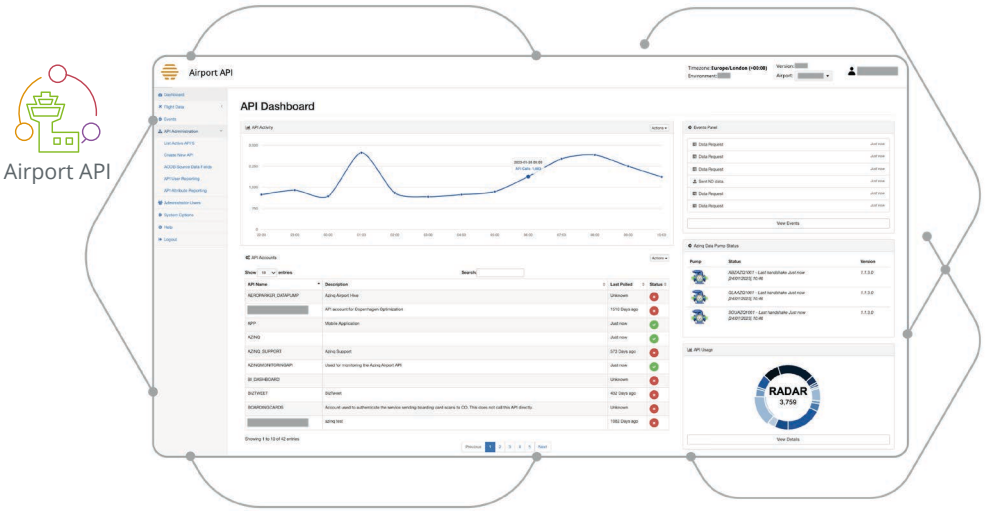
It ensures one version of the truth across the whole stakeholder landscape when it comes to industry data such as IATA and ICAO codes. Also ensures all the airport resources such as stand, gates, desks, belt are uniform across all the applications that are planning and executing operations in relation to them. Fully accessible to other systems.

## Advanced Auditing

The Auditing tool empowers the airport to carry out rapid investigations into critical data changes. A quick search can reveal who, what, when and why the data was amended. This is especially useful when the data change has caused operational issues.

## Airport API

Unlock the true power of real-time data through our modern, cloud-based Airport API. Configure real-time flight data access within minutes to enable rapid sharing of key operational information to any stakeholder.

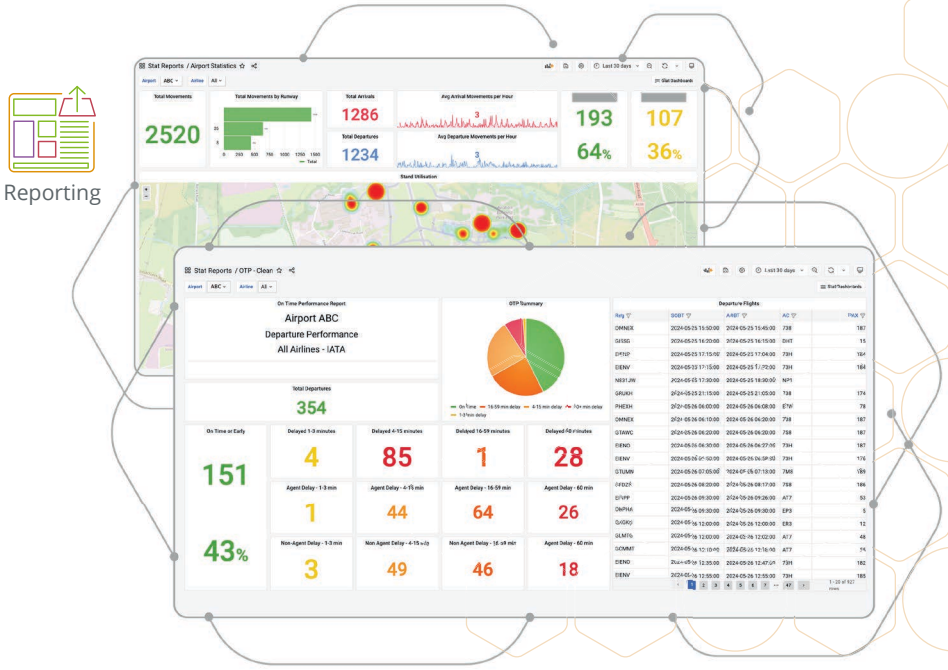



## Reporting

Reveal unparalleled insights with our dedicated reporting database.

- Pre-defined Reports: Ready-to-use insights at your fingertips.
- Data Extracts: Effortlessly extract and analyse your data.
- Custom Reporting: Seamlessly share data with other reporting systems via REST API and/or SQL Access.

Transform your data into a strategic asset to empower your airport's data-driven decision making.




## REST APIs & Integration Services

A seamless system that allows you to build the right system for your airport's needs, giving you the tools you need now, with flexibility for the future.

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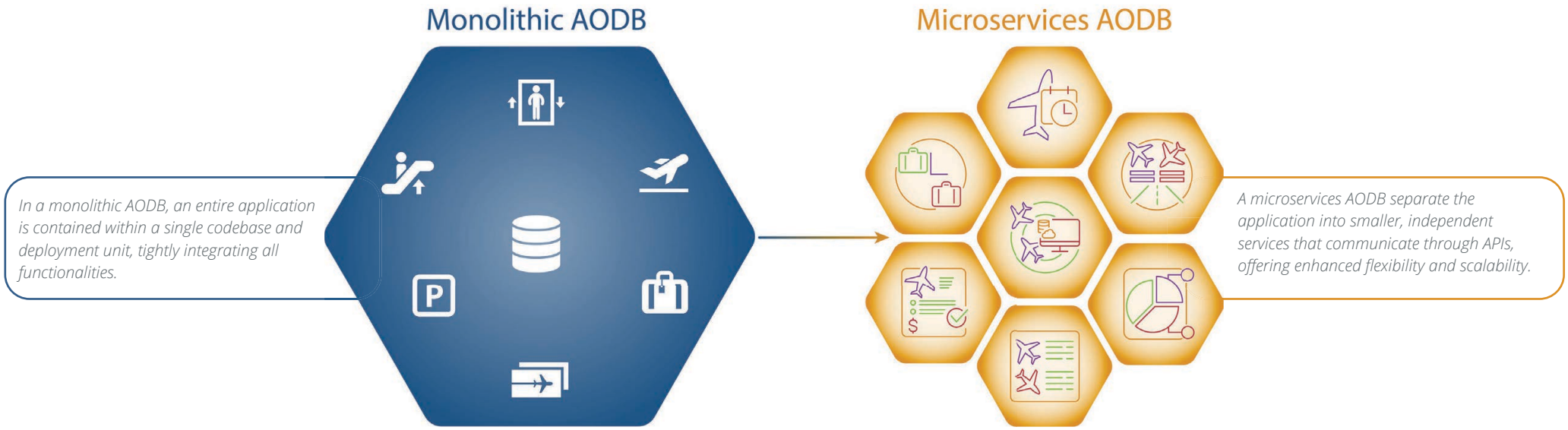
# Delivered Through Modern Architecture




## Core Advantages

- **Cost Efficiency:** Microservices reduce costs by enabling independent scaling and updates, avoiding expensive system overhauls.
- **Increased Reliability:** Event-driven systems quickly detect and resolve issues, minimising costly downtime.
- **Scalable Growth:** API-led design allows for easy scaling, supporting future growth without major infrastructure changes.
- **Faster Service Rollouts**: Microservices speed up the delivery of new features, reducing development time and costs.
- **Full Data Change Auditing:** Full audit trail of data modifications for complete visibility and accountability.
- **Intuitive Investigations:** Quickly identify who made changes, what was modified, and when, enabling rapid investigations into operational issues.
- **Detailed Change Logs:** All flight and reference data changes, along with incoming messages, are fully logged for comprehensive tracking.
- **Flexible Data Handling:** A fully configurable business rule engine adapts and processes data from various incoming sources to meet changing operational needs.
- **Automated Actions:** Customisable business rules trigger automatic system responses, improving operational efficiency and reducing manual intervention.
- **Dynamic Flight Information:** Flight data and grids are conditionally formatted based on available information, ensuring clarity and accuracy.
- **Data Prioritisation:** The system prioritises data from multiple sources, capturing the most accurate and up-to-date flight and operational information.

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# Future-Proof your Airport Operations

## Enabling Aviation Industry Integration

- **Empowerment:** All data is accessible through REST APIs and Event Streams enables you to securely create integrations rapidly and easily share data between internal and external systems.
- **Real-time Data Communication:** Pre-integrated with common industry interfaces (e.g., VDGS, SITA) for fast, seamless exchange of information.
- **Scalability and Performance:** High scalability and fast processing enable the integration of all essential airport systems without delays.
- **Third-party System Compatibility:** Seamless integration with third-party systems enhancing overall operational coordination.

## Smooth, Dynamic Transformation

- **Seamless Implementation:** Modular design allows for incremental updates, minimising disruption and maximising operational benefits.
- **Experienced Support:** With over 130 years of collective experience, the Airport Hive team ensures smooth implementation, training, and ongoing support.
- **User-Friendly Interfaces:** Ground-breaking applications with intuitive, familiar interfaces ensure an easy transition with minimal training required.
- **Thorough Testing:** Rigorous testing alongside your current AODB guarantees optimal performance and accurate data validation for a seamless transition.

## Robust Cybersecurity Built-In

- **Continuous Protection:** Strong security with ongoing testing, authentication safeguards, and best programming practices.
- **Single Sign-On Integration:** Enhanced identity management through pre-integrated Single Sign-On for seamless, secure access.
- **Customisable Security Controls:** Manage user and service interactions with role-based access, authentication, and the ability to define and control data entities for custom applications.

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