



CORTEX AODB

Operational Efficiency & Passenger Satisfaction

This cutting-edge product uses AI and machine learning to enhance operational efficiency and resource utilization for airport operators. The Airport Operational Database (AODB) centralizes real-time data on flights, passengers, baggage, and gates, acting as the single source of truth. Accessed via a web interface, it ensures stakeholders have up-to-date information on key operations.

CORTEX AODB tracks aircraft status and turnaround processes in real time, ensuring accurate data is always available. With mobile support, users can access vital information anywhere in the airport, improving decision-making and efficiency.

With a modular design and AI support, CORTEX AODB offers scalability to meet evolving airport needs. It enables informed decisions that reduce delays, minimize waste, and address challenges like suboptimal configurations, ensuring operational transparency and enhanced passenger flow. This solution keeps airports at the forefront of innovation.

HOW DOES CORTEX AODB WORK?

The screenshot displays a 'Timetable entry details' form with the following fields and values:

- Schedule:**
 - First date: 5/1/2024
 - Last date: 10/26/2024
 - Season: Summer 2023
 - Frequency: 1 week
 - Operational days: Mon, Tue, Wed, Thu, Fri, Sat, Sun (all checked)
- Flight:**
 - Flight ID: BA012
 - Time: 05:50
 - Midnight flag: Midnight flag
 - V11: SIN
 - AC: 772
 - Capacity: 301
 - Flight type: J
 - Term: 5
 - Sector: International
- Linked flight:**
 - Linked flight ID: [empty]
 - Link days: [empty]

At the bottom, there are 'CANCEL' and 'SAVE' buttons, and a note: 'FIELDS WITH ASTERISK ARE REQUIRED'.

1

Flight operations business logic for creating and managing operational schedules.

Validates data entry against tables and logic for accuracy.

2

3

Prioritizes operational times from multiple sources.

Use of AI for accurate resource allocation and operational planning for optimized performance.

4

5

Dynamic alerts and alarms ensuring smooth and efficient airport operations and proactive decision-making.

MODULES

Flight Grids

Customizable grids to suit user roles and operational needs

Seasonal Schedule

Manual or automatic creation of seasonal schedules with daily rollout.

Message Centre

View Type B and other messages in a centralized location, in a standard format

Reference Data

Unifies all information for dissemination across other CORTEX modules as well as 3rd parties

Alarms

Configure rules to trigger alarms to mitigate risks and delays

Flight Id	Sched	Latest time	Origin/D	Status	Se...	Reg	AC	Te...	SL	Gate
BA113	BA114 18/02 08:30	08:29 E	JFK	ON TIME	I	FGJGL	318	1	A01	-
AJ1943	AJ1944 18/02 08:30	08:30 S	ALG	SCHEDULED	I	TCAPG	738	1	A02	-
QF139	QF138 18/02 08:35	08:35 S	MEL	SCHEDULED	I	FGHRH	319	3	C06	-
BA233	BA236 18/02 08:40	08:40 S	DOH	SCHEDULED	I	FGZCD	332	1	A03	-
WQ238	WQ239 18/02 08:40	08:40 S	OTP	SCHEDULED	I	HALMA	329	1	A04	-
BA1302	BA1301 18/02 08:40	08:40 S	ABZ	SCHEDULED	D	GOATM	329	4	D07	-
V5496	V5495 18/02 08:40	08:40 S	LOS	SCHEDULED	I	GVGBR	333	4	DS3R	-
RO786	RO783 18/02 08:40	08:40 S	OTP	SCHEDULED	I	YRASC	318	3	C07	-
PC094	- 18/02 08:40	08:40 S	SAW	SCHEDULED	I	TCAPV	738	4	D05	-
W6337	W6336 18/02 08:40	08:40 S	TIN	SCHEDULED	I	9HWAG	320	3	C08	-

Improved planning

- Enabling smooth schedule processing with smarter assessment and activation.
- Automated data updates reduce manual errors, improving accuracy and traceability.
- Scheduling comparisons determine quality and reliability for better decision-making.
- Single source of truth for future schedules improves cross-team communication.
- 'What-if' simulations improve control and management efficiency for airport operations.

Accurate, real-time data in your hand

- The mobile-optimized interface provides real-time situational awareness, enabling users to quickly address operational issues from any location.
- Information is tailored to user roles, ensuring secure access for airport operators, ground crew, airlines, and agencies.
- Efficient business logic manages the flight schedule, validating and prioritizing data from multiple sources.
- Full audit trails track flight updates, with options to present and export data in various formats.

KEY FEATURES AND BENEFITS:

Proactive monitoring: Benefit from ADB SAFEGATE's comprehensive security monitoring covering all aspects from cloud posture configuration to detecting unexpected system behavior and other security-related issues.

Flexible deployment: Quickly and easily deploy and configure our web-based, cloud-hosted solution, ideal for airports of all sizes. Choose from a range of hosted and managed service options that suit your specific needs.

Greater visibility: Obtain comprehensive operational visibility with CORTEX AODB to more accurately predict costs and revenues for each future flight cycle. Use data with BI analysis to lead to data monetization.

Historical data sync: Sync old flight data from active records to separate historical tables as it expires from the current flight window post a configured period. Retrieve and recover on-line historical data for reports and billing.

Centralized alert module: Manage irregular operations proactively with centralized alerts for planning and daily operations management, increasing efficiency.

High-level security measures: Experience top-notch security with ADB SAFEGATE's consistently updated and hardened OS templates, ISO27001 certified and NIST compliant.

CORTEX AODB is part of ADB SAFEGATE's Airside 4.0® strategy and suite of software solutions bringing digitalization and intelligence to airport operations.

www.adbsafegate.com