



Service Provider - Turning Data Into Solutions

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About FlightAware - Overview

- Flight tracking service and data provider to airlines, business aviation, cargo, airline service providers, military
- 15,000 commercial customers, >10,000,000 consumer users
- Customers include ARINC, United Airlines, SITA, Singapore Airlines
- Largest aviation site in the world (>300MM page views/mo)
- 50 employees at offices in Houston and New York City
- Data centers in Houston, Washington, San Francisco, New York, Dallas, London, Amsterdam, Singapore, and Hong Kong

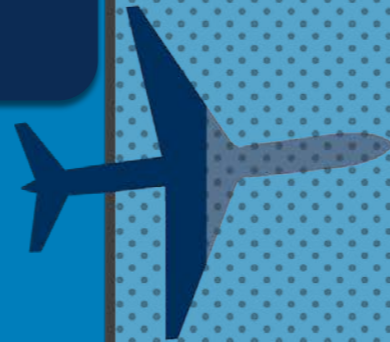
FlightAware Data Fusing

ANSPs

- United States
- Central America
- Canada
- Europe
- Australia
- New Zealand

ADS-B

- >3,500 sites
- >100 countries



 Web

 Email

 Data Feeds

 Integrated Apps

 FlightXML API

 Mobile Apps

- iPhone & iPad
- Android
- Windows Phone

Airline FLIFO

ACARS
VHF/Satcom

About FlightAware - Fusing Data

- Parsing over 50 disparate data feeds from government and private sector
- Accepting data out of order
- Determining the most accurate source
- Finding and eliminating or reducing errors
- Outputting comprehensive flight tracking data

Next-Generation Flight Tracking

dbaker
English (USA) 05:18PM

My FBO ToolBox My FlightAware My Alerts My ADS-B My TV Maps My Data Admin

FlightAware

Track
[FORGOT THE FLIGHT NUMBER?](#)

LIVE FLIGHT TRACKING COMMERCIAL ADS-B PHOTOS SQUAWKS DISCUSSIONS ABOUT CONTACT

Delta 469 *

(Track inbound flight)

DAL469 / N864DA · "Delta" (all flights)

[delta.com](#) ([analysis](#))

+ MyBase
+ MyFA

Ben Gurion Int'l (LLBG / TLV)	John F Kennedy Intl (KJFK)
Gate C6	Gate B30
12:21AM	04:14AM
Scheduled: 12:10AM	Scheduled: 04:09AM
7-day average: 12:03AM	7-day average: 03:33AM

[Other flights between these airports](#)

57 min 9 hr 55 min

Duration: 10 hours 53 minutes

Wednesday, April 29, 2015

Status	En Route / On Time (334 nm down; 4,638 nm to go)
Aircraft	Boeing 777-200 (twin-jet) (H/B772/L - photos)
Speed	456 kts (planned: 489 kts) (graph)
Altitude	32,000 feet (planned: 38,000 feet) (graph)
Fuel Burn	30,000 gal / 200,000 lbs
Distance	Direct: 4,928 nm Planned: 5,119 nm
Route	DEENA BOAZZ PURLA GITLA VELOX DESPO ALSUS VESAR EVKIT MUT OKLAM KFK HANKO YASEN MAKOL SITNO WRN BALIK ARGES ASNEL BUKEL PELUR MOBRA REBLA KARIL KENIN LENOV ORTEB GOSAK KOTEK NEGUV OVBOR LUBEN NUBLI IRBOS VIDEV GIPOS POLON ADOXO PENEX NASOK BIBKA GRUDA IRLUN KARTI PIVET GORPI ROE ELVIX MAXUM INRER SVD KULUD ROKAM MADAG NORTI LAPMA AAL LAGUM AMSEV TUKMU PEVEB ZOL GUNPA RIKAL TOPPS
FlightAware	N864DA DAL469-1430169088-airline-0095 Row: 295992860 dds2ao wide (F)
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[Report inaccurate information](#)

John F Kennedy Intl ([KJFK](#)) is currently experiencing inbound flights delayed at their origin an average of 50 minutes due to runway in use.

How is everybody else affected? [View the MiseryMap](#)

Gateway to Industry & The World

- FlightAware aggregates over 50 real-time data feeds from government sources including FAA, Eurocontrol, NOAA, Airways New Zealand
- Data is fused with private industry data like flight plan data, ACARS, ADS-B
- It is not practical for each end-user (e.g., an airline) to aggregate so many sources
- FlightAware then integrates into over a dozen products

Gateway to Industry & The World - Examples

- Web-based, graphical flight tracking system used by over 10,000 business aviation aircraft operators
- Fused data feed provided to SITA for use in operational flight tracking system used by airline operations
- In-flight tool providing connecting gate and delay information to Southwest Airlines passengers via Row44
- “MiseryMap” delay map and forecast used by NBC’s “Today” show
- Downlinking pre-departure route amendments and delay programs to cockpit (pilot EFBs)

Value of Data

- Aircraft operators are facing data overload and “portal” overload
- FlightAware breaks through this and creates efficiencies by:
 - Aggregating data sources
 - Creating tools that answer questions
 - Leveraging historical data to predict the future

Availability of Aviation Data

Format over Content

SWIM registries place great emphasis on the format of data with less information about the content and sources.

Availability of Aviation Data

Service Level Agreements

Industry customers (aircraft and airport operators) expect data providers like FlightAware to guarantee SLAs but we are at the mercy of upstream data feeds, many of which can't guarantee availability, so we need to work together to set expectations.

Availability of Aviation Data

Prioritize API over Portal

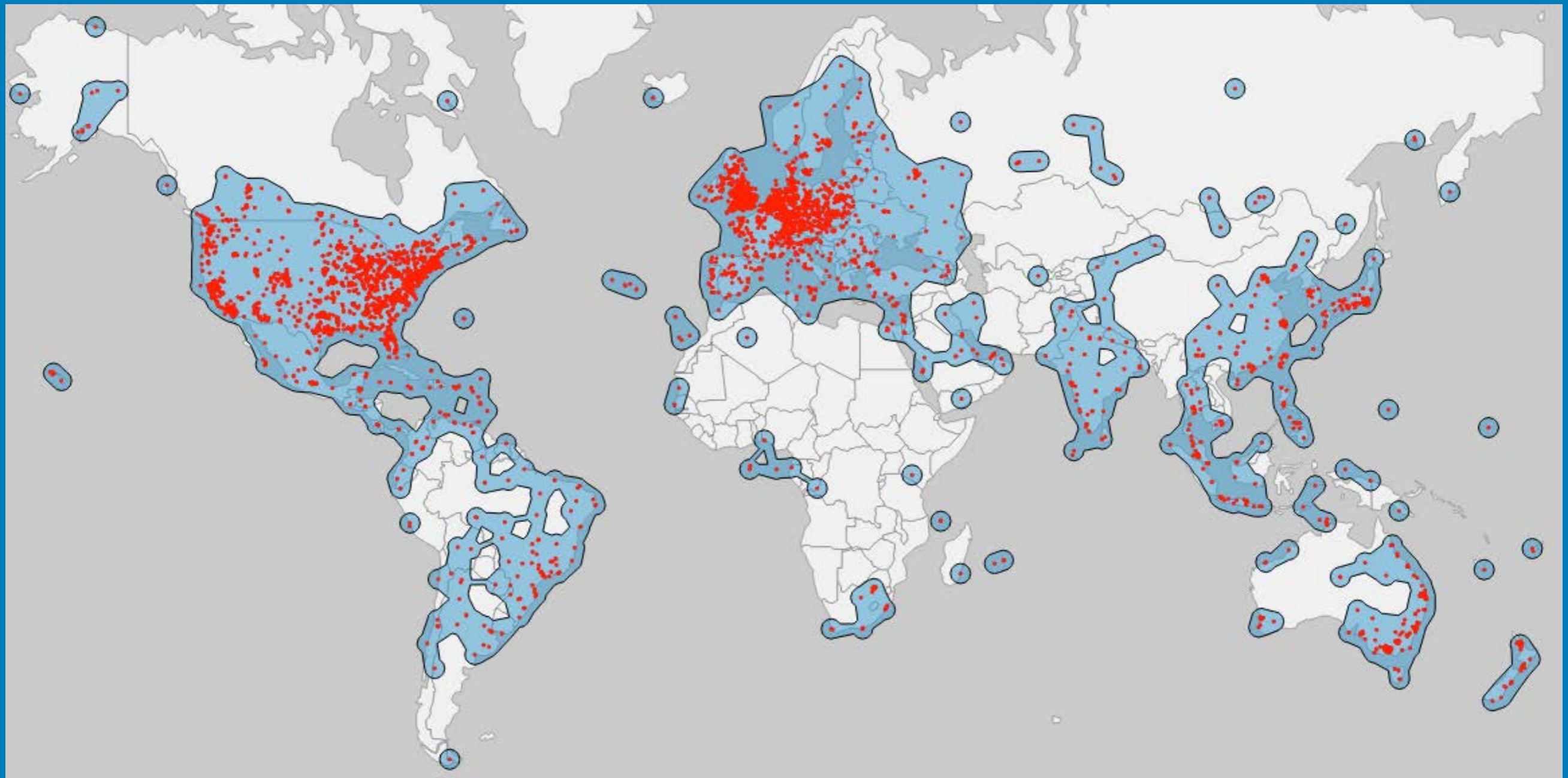
CDM is the future, but even with standards, it will require an industry solution to aggregate every ANSP and airport CDM solution.

Availability of Aviation Data

Data exchange can be bidirectional!

Industry is happy to share back to ANSPs

FlightAware ADS-B Network



Available in Eurocontrol SWIM Registry

FlightAware CSD Program

Operators that use call sign similarity (CSS) tools to operate flights as a call sign rather than a flight number can send their ident/flight # mappings to FlightAware. We create a global mapping database.

<https://flightaware.com/about/improve/>

Public/Private Partnership



These government organizations, this group and this industry demonstrates what's possible.

How can we expand that around the world?

Let's improve aviation with more open
data

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