



Safety and Operations

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Deloitte.





Welcome

Nancy Rockbrune

Head, Safety Management

IATA



Deloitte.



Opening Remarks & Objectives

Al Madar

Managing Director Corporate Safety
American Airlines



Deloitte.



Data and Information Challenges and Triumphs – The Airlines Experience

Moderator

➤ **Rob Hills**, Principal, Strategy & Operations Practice, Deloitte

Panelists

➤ **Jimmy James**, Managing Director, Procurement and Supply, American Airlines

➤ **Elhan Orhon**, VP, Internal Audit, United Airlines

➤ **David Mawdsley**, Aviation Safety Advisor, Rolls Royce Digital





Data Tools and Services – Helping Airlines Make Informed Decisions

Daniel Baker

CEO

FlightAware



Deloitte.

Flight Tracking and the Future of Aviation Data

- › Who am I?
- › Is “Big Data” the Key?
- › Future of Aviation Operations Software
- › Innovations & Impact on Aviation Data
- › Industry Challenges
- › Q&A

The screenshot shows the FlightAware website interface for tracking Singapore Airlines flight 25* (SQ25). The flight is currently en route and on time, with an arrival in Singapore at 06:26AM SGT on Wednesday, February 22, 2017. The flight details table shows a departure from Frankfurt at 11:02PM CET and an arrival in Singapore at 06:26AM SGT (+1). The aircraft is an Airbus A350-900.

DEPARTURE TIMES			
Actual	Gate Departure	Taxiing	Takeoff
Scheduled	11:02AM CET	23 minutes	12:02PM CET
Average Delay	Less than 10 minutes		11:40AM CET

ARRIVAL TIMES			
Estimated	Landing	Taxiing	Gate Arrival
Scheduled	06:26AM SGT (+1)	21 minutes	06:48AM SGT (+1)
Average Delay	Less than 10 minutes		06:30AM SGT (+1)

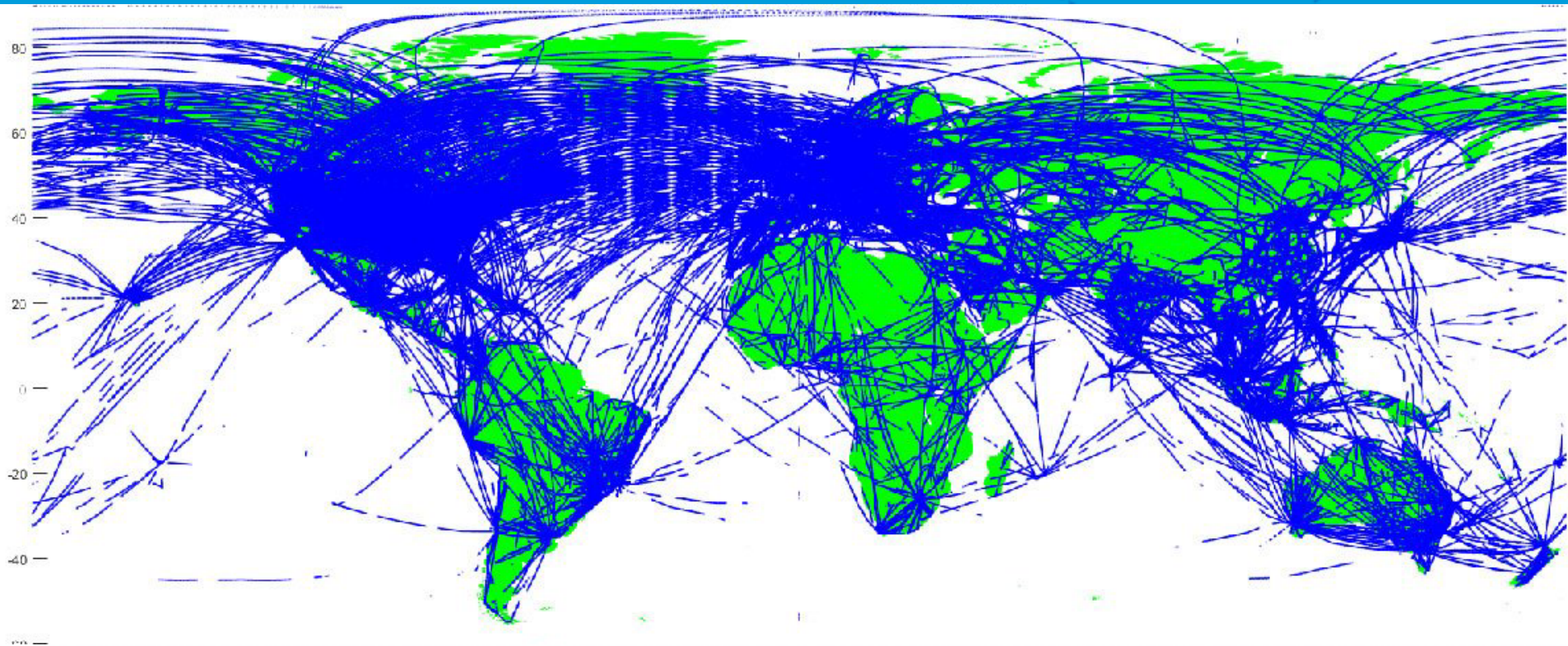
AIRLINE INFORMATION	
Airline	Singapore Airlines "Singapore"
Cabin	First / Business / Economy / Meal

FLIGHT DATA	
Speed	409 kts (Planned: 470 kts)
Altitude	36,000 ft
Distance	Planned: 6,710 nm (Direct: 6,567 nm)
Fuel Burn	68,000 gal / 449,000 lbs

Introduction

- › Daniel Baker, CEO, FlightAware
 - › Commercial Pilot, Software Developer
- › Founded FlightAware in 2005
 - › Aviation data and flight tracking company
 - › Initially a flight tracking hobby project
 - › Started with just the FAA data feed, now in over 170 countries
 - › Now have 80 employees in US (Houston, NYC), UK, and Singapore

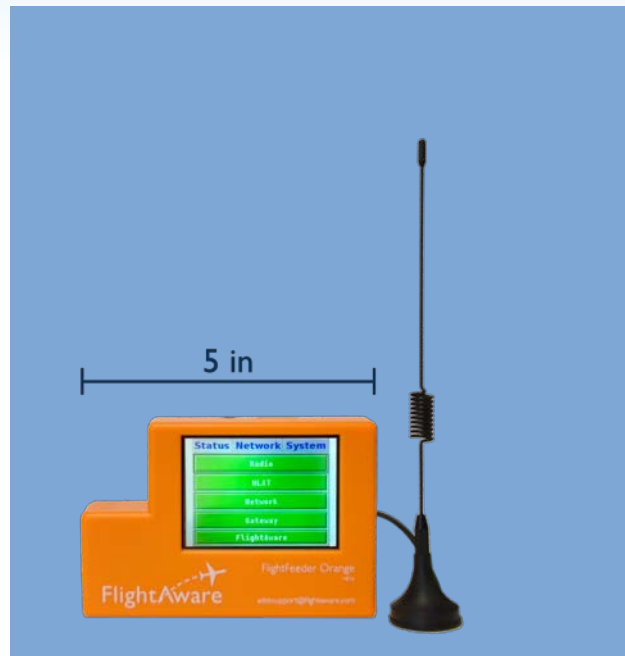
Is “Big Data” the Key?



Is "Big Data" the Key?



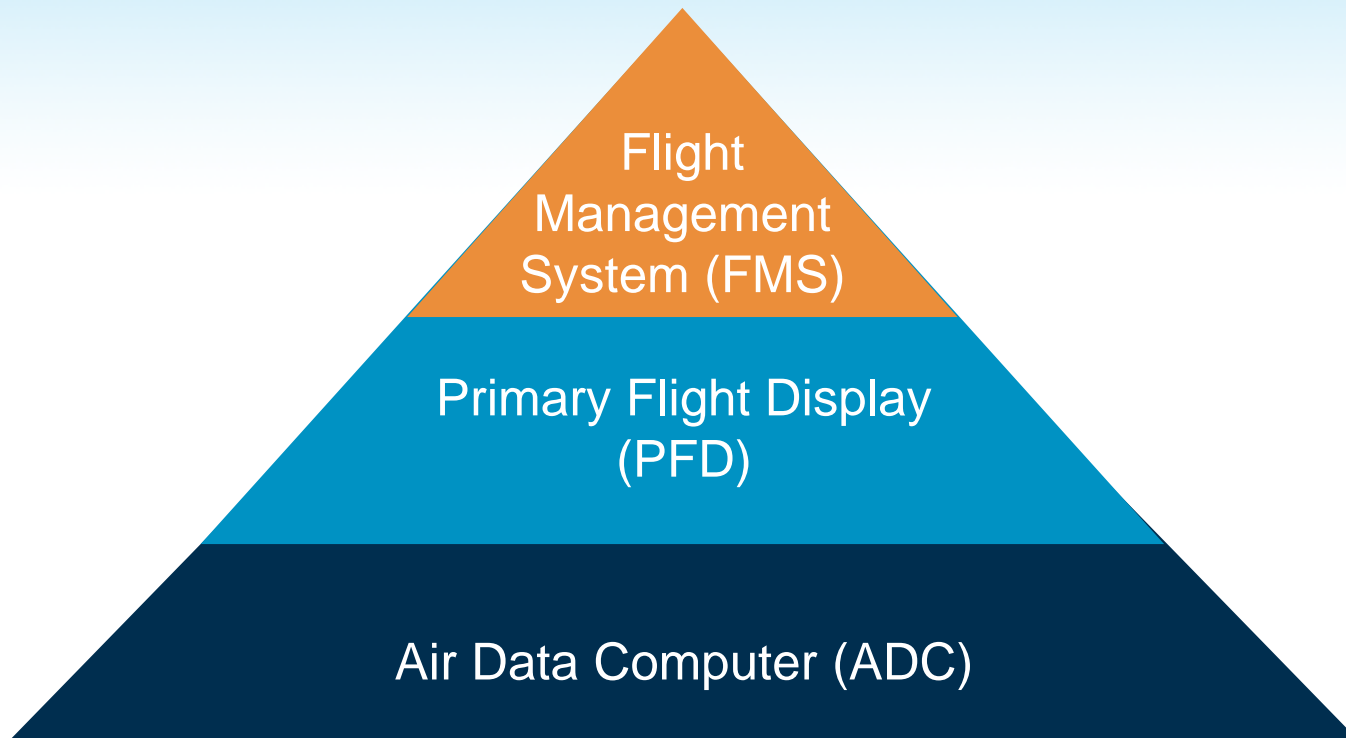
Aviation Data in the Non-Certified Space



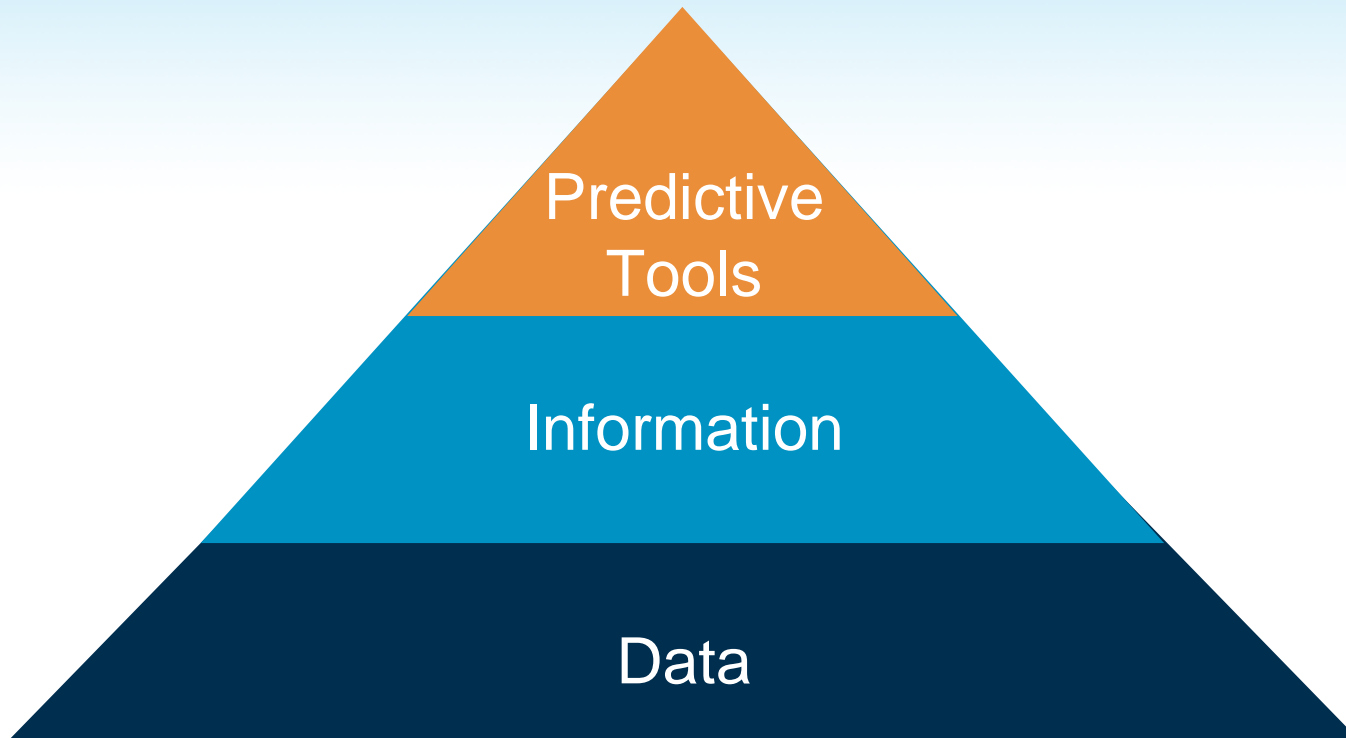
Future of Aviation Operations Software



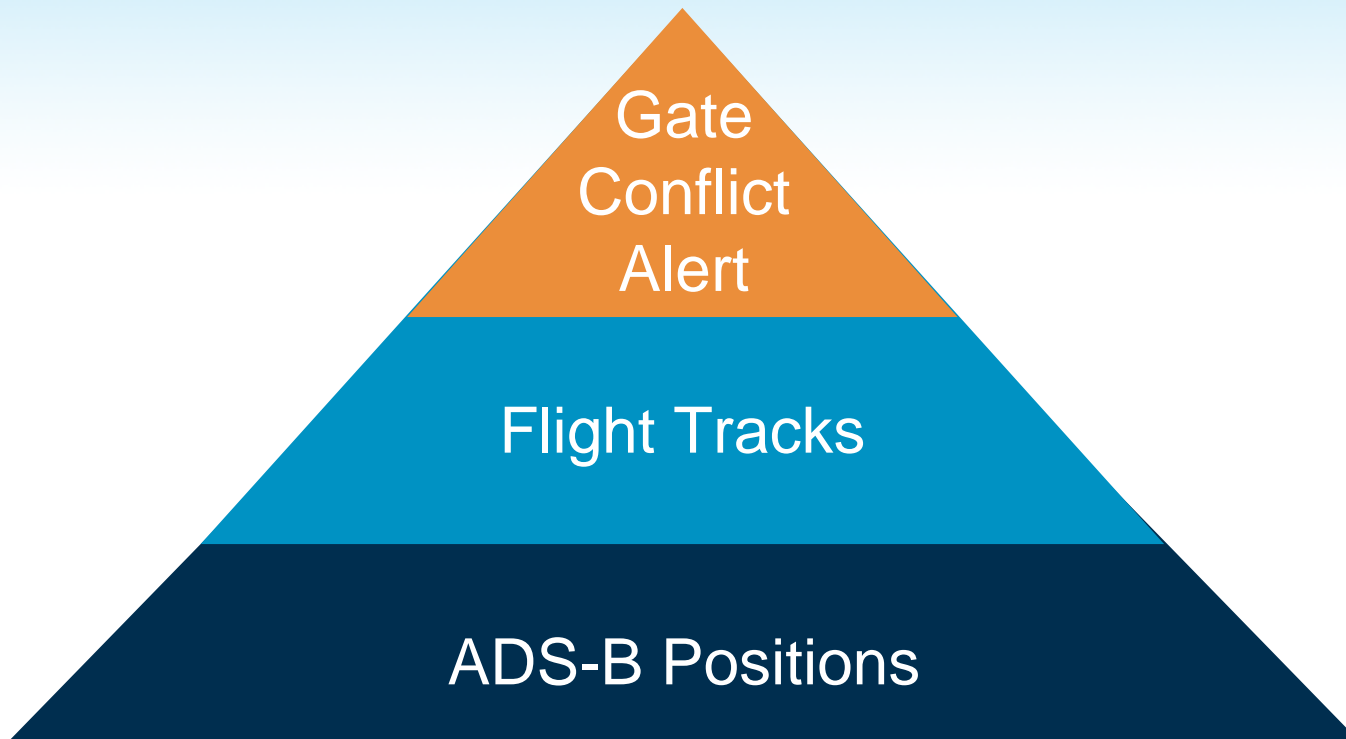
Future of Aviation Operations Software



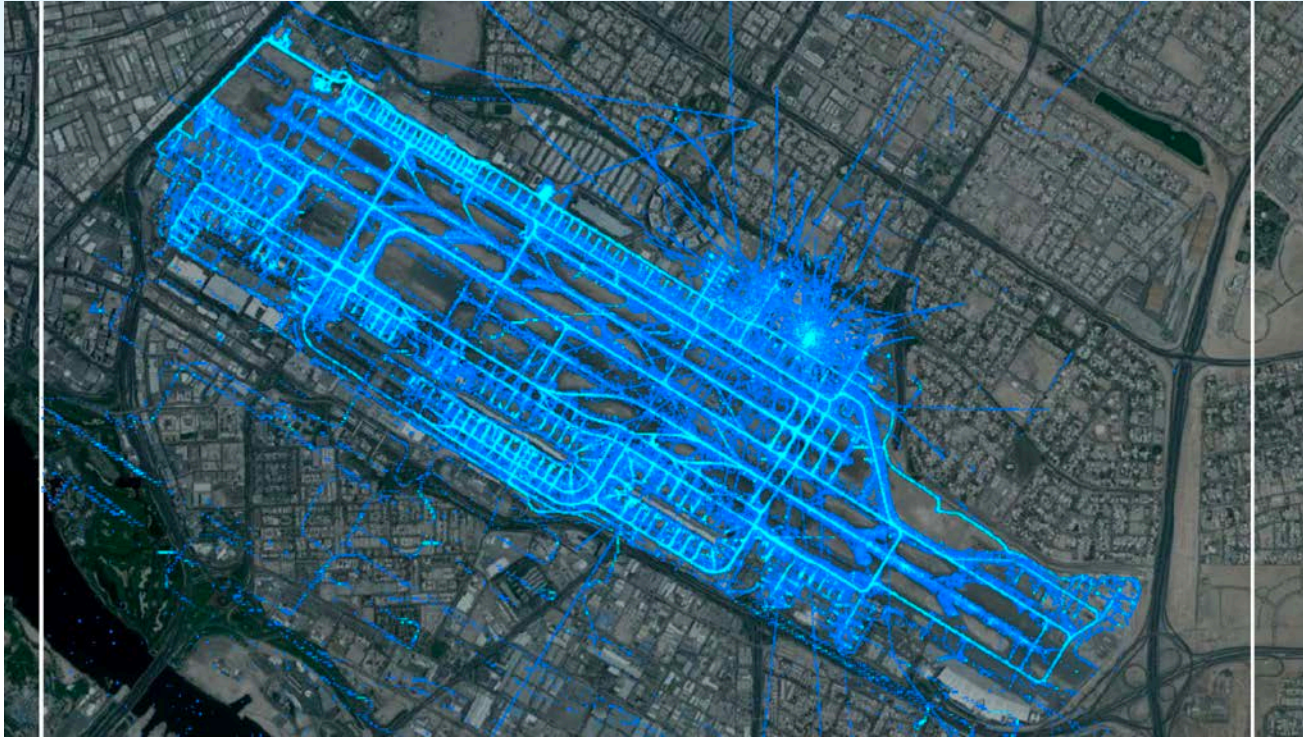
Future of Aviation Operations Software



Future of Aviation Operations Software



Technical Innovations and the Impact on Aviation Data



Industry Challenges



Questions?

Daniel Baker
CEO, FlightAware

dbaker@flightaware.com



Networking Coffee Break

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Extracting the Value from your Data - Technological Solutions in Safety and Operation Systems

Moderator

➤ **Lisa Sullivan**, Strategic Portfolio Manager, Harris Corporation

Panelists

➤ **Nadine Alameh**, CEO, Snowflake

➤ **Jim Hetzel**, VP, Aviation and Distribution, FlightStats

➤ **Abhijit Patil**, Senior Director, Customer Analytics and Loyalty Data Management, Air Canada





System Reliability – The Operational Fall-Out When Things Fail

Mick Huynh

Manager, IT Operations
Air Canada



Deloitte.



Aviation Data Symposium 2018

Resiliency and Continuity:

Best designs

Better preparations

An Air Canada aircraft is shown in flight against a dark blue sky with light clouds. The aircraft is white with a red maple leaf logo on the tail and a red maple leaf logo on the fuselage. The text 'AIR CANADA' is overlaid on the left side of the image.

AIR CANADA

- Canada's main airline carrier
- Over 200 destinations on six continents
- +45 Million passengers
- Among world's 20 largest airlines
- +30,000 employees

Digital Airline Transformation


- More connectivity
- More mobility & online services
- Global networks and integration services
- New emerging technologies



“Given our increased reliance on technology, how can we assure operational continuity when things fail?”

“As an Industry, are we prepared?”

“Do we understand to the full extent our dependency?”



“Given our increased reliance on technology, how can we assure operational continuity when things fail?”

- Resiliency in Design
- Business Continuity and Disaster Recovery Plans
- Crisis Management Exercises



“As an industry, are we prepared?”

- Resiliency Investments

- Technology
- Facilities
- People

- Challenges

- Legacy systems
- Complex Interdependence
- Human factor

- FOCUS:

- minimize impacts and facilitate recovery.
- Communications

“Do we understand to the full extent our dependency?”

Vous devez être prêt à travailler le soir et tôt le matin,

- Continuous Risks Assessment and Management
- Business Impact Analysis
- Invest in a robust knowledge repository.

A group of people, mostly men, are silhouetted against a bright, hazy sky at sunset or sunrise. They are walking from left to right, carrying large backpacks and some holding briefcases. The scene is dark, with the light source behind them, creating a strong contrast. The overall mood is one of journey and preparation.

~~Hope~~ Design for the best.
Prepare for the worse.



Thank you



Interview:

The Future of Biometrics in Aviation – Enabling a Seamless and Secure Journey for Air Travel

- Sean Conlin, Principal, Strategy & Operations Practice, Deloitte
- Arun Vemury, Director, Apex Air Entry Exit Re-Engineering, US Dept. Homeland Security





Wrap-up and Closing

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Networking Dinner

Join us tonight!

19:45 – 23:00

Ocean Garden

In this room!



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