# ObjectStore

# Case Study DELTA AIR LINES "CACHES IN" ON THE BENEFITS OF IGNITETECH'S OBJECTSTORE

**Company** Delta Airlines

**Industry** Transportation

IgniteTech Product ObjectStore

Customer Website www.delta.com

# **GIANT IN THE SKIES**

What started as a humble aerial crop-dusting operation called Huff Daland Dusters in 1924 has now grown into one of the world's largest global airlines, helping more than 170 million travelers get to the places they want to go to each year.

Top-ranked for business travel and one of FORTUNE Magazine's top 50 Most Admired Companies, the airline offers service to 326 destinations in 59 countries and employs nearly 80,000 employees worldwide. Delta has invested billions of dollars in airport facilities, global products, services and technology to enhance the customer experience in the air and on the ground, and they are constantly looking for ways to advance further.

# Summary

**Problem:** To build their new Crew ReRoute system (CRR), Delta needed a software solution that could handle incredible loads of data while quickly responding to inquiries.

**Solution:** Delta chose IgniteTech's ObjectStore Cache-Forward Architecture, which reduces load and query times and leads to a much faster turnaround on analytics.

# **Results:**

- Reduces load and query times for fast turnaround analytics
- Provides faster response for users through cache data, leading to increased customer satisfaction
- Offers cost savings from efficient rerouting, such as reduced fuel burn and flight times
- Scales as Delta expands, offering a solution that will grow with the airline for another 15 years and beyond



"With ObjectStore at the core of our mission-critical reroute application for more than a decade, Delta is leading the skies in efficient rerouting and all of the benefits that come from it."

**Darrell Haskin** Director, Information Technolog Delta Airlines

### **REROUTING IN REAL TIME**

More than a decade ago, Delta uncovered a major opportunity for mission-critical operational improvement. Primarily in the case of severe weather, but in any irregular operation, the task of rerouting crew members is daunting and requires significant amounts of data to be analyzed and acted upon. Delta realized that if they had a software solution that could handle an incredible load of data while also offering the ability to respond quickly to inquiries, they could make significant improvements, practically rerouting crew members in real time. They needed a database that would behave more like a cache and allow them to save objects and retrieve them quickly.

#### THE CREW REROUTE SOLUTION

After researching a number of software options, Delta quickly saw there was only one right answer. They needed many databases to work together, with quick caching and analysis across the board. ObjectStore was breaking new ground with solutions that allowed clients to store C++ objects in a persistent manner across databases and retrieve them like regular objects. To build their new Crew ReRoute system, Delta chose IgniteTech's ObjectStore Cache-Forward Architecture, which reduces load and query times and leads to a much faster turnaround on analytics. IgniteTech's ObjectStore dynamic database met Delta's needs when they embarked on the project in 1999, with the ability to scale considerably in the future.

#### **HIGH FLYING BENEFITS, TODAY AND BEYOND**

Delta has used IgniteTech's ObjectStore solution for 15+ years to more quickly reroute crew members due to unforeseen weather, mechanical and other challenges.

Using IgniteTech's ObjectStore cache forward architecture at its core, Delta's Crew ReRoute system:

- Improves Delta's Completion Factor a top industry metric where Delta is the leader
- Reduces load and query times for fast turnaround analytics, leading to competitive advantage against other airlines during unforeseen setbacks
- Provides faster response for users through cached data, leading to increased customer satisfaction
- Offers cost savings from efficient rerouting, such as reduced fuel burn and flight times
- **Scales as Delta scales,** offering a solution that will grow with the growing, successful airline for another 15 years and beyond

### **LEARN MORE**

To learn more about how IgniteTech's ObjectStore solution can help you build distributed and cross-platform solutions visit ignitetech.com/objectstore.

