

## **DATA INTEGRATION**

# **AIRBUS**

Qlik Data Integration supports drive to optimize aircraft production



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Cédric Brignol, Project Manager, Airbus

## Consistent, secure and traceable production

Airbus designs, manufactures and delivers industry-leading commercial aircraft, helicopters, military transport planes, satellites and launch vehicles. It is a €70 billion business.

It is now the world's largest airliner manufacturer and has more than 7,000 commercial aircraft on order and yet to be delivered. Each aircraft comprises multiple components, designed and manufactured worldwide. The coordination and optimization of this global production is incredibly complex.

As demand for its airliners increased, the challenge for Airbus has been to accelerate its production in a manner that is consistent, secure and traceable. The faster it can deliver orders, the faster it can realize revenues.

Gathering and making sense of product data management (PDM) is critical. "Many of our processes are unique to Airbus," says Cédric Brignol, Project Manager, Airbus. "You cannot find tools to support these processes on the market. We have to create them ourselves."

#### **Solution Overview**

#### **Customer Name**

Airbus

#### Industry

Manufacturing

#### Geography

Toulouse, France

#### **Function**

Supply Chain Management

#### **Business Value Driver**

**Reimagined Processes** 

#### Challenges

- Use insights gleaned from data to inform improvements to design and production
- Accelerate the ingestion of data from multiple sources
- Move critical data securely and efficiently across a global business

#### Solution

More than ten Qlik Replicate production servers replicating aircraft production data from France, Germany and Spain.

#### Results

- Consolidates data from multiple sources into a single platform
- Allows near real-time data access to different business users
- Runs more than 150 Airbus replication tasks on Qlik Replicate production servers

# Collecting production data from multiple sources

Airbus had developed an application to gather data from several PDM sources. The application was used across several aircraft production programs, often collating more than 15 different sources of data. However, Cédric says, the application was not without its constraints; the rapid acceleration of single-aisle Airbus production, to meet the growth of orders, prompted a rethink.

"The single-aisle program is designed thanks to a PDM application deployed on an IBM mainframe and this was not compatible with the former tool in charge of data replication," says Cédric. "It was at this point that we started looking at Qlik Data Integration."

Qlik Replicate, part of the data integration platform, enables Airbus to quickly and easily set up data replication with an intuitive graphical user interface (GUI), eliminating the need for manual coding. It synchronizes, distributes, consolidates and ingests data across all major databases, data warehouses and Hadoop, on-premise and in the cloud.

"We needed to consolidate data in one place, from heterogenous sources, and update it in almost realtime," says Cédric. "And that's what Qlik Replicate enables for us."

## **Delivering transfer and replication performance**

The constraints which limited the previous application were overcome by Qlik, Cédric explains: "We checked all the constraints. We tested transfer performance and filtering. Qlik performed where our previous solution couldn't."

While the testing was conducted inhouse, Qlik Professional Services supported the implementation. Cédric says the critical nature of the project meant that drawing on this expertise made sense.

"The architecture between change data capture (CDC) and our Oracle database, and the mainframe is very complicated, in particular when connecting IMS to the Oracle database. This task was made more straightforward with the help of Qlik Professional Services. It was exactly the type of reliable partnership we were looking for."

## More than 150 replication tasks in production

Since adoption on the single-aisle Airbus line in 2016, the engagement has expanded rapidly. Other Airbus aircraft programs have been added, along with a variety of new data sources, including Oracle, PostgreSQL and Microsoft SQL Server. The toolset is currently deployed in Airbus' data center but the use of cloud is growing.

Today, more than 150 Airbus replication tasks run on Qlik Replicate production servers filling two critical data warehouses, APS and ACMM, with the data propagated to a variety of different business users.

"The data is needed by the design teams, by customer service teams and by production teams. And no two aircraft are identical," says Brignol. "This allows us to track every part, every process, every design drawing, in every plane."

The outcome is more efficient analysis of data, informing better decision-making. "We can replicate data from the mainframe and have it examined with more modern data analysis tools," concludes Cédric. "This is the level of analysis we need to match the complexity of our production processes."

The keys to success



150+
replication tasks
in production



"The data is needed by the design teams, by customer service teams and by production teams. Qlik Replicate allows us to gather in the same place thousands of business objects representing parts, processes or design drawings as you can find them in the aircraft produced or to be delivered."

Cédric Brignol, Project Manager, Airbus



### **About Olik**

Qlik transforms complex data landscapes into actionable insights, driving strategic business outcomes. Serving over 40,000 global customers, our portfolio leverages advanced, enterprise-grade Al/ML and pervasive data quality. We excel in data integration and governance, offering comprehensive solutions that work with diverse data sources. Intuitive and real-time analytics from Qlik uncover hidden patterns, empowering teams to address complex challenges and seize new opportunities. Our Al/ML tools, both practical and scalable, lead to better decisions, faster. As strategic partners, our platform-agnostic technology and expertise make our customers more competitive.

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