

DATA INTEGRATION

CUSTOMER STORY

Airbus consolidates data sources

Qlik Data Integration supports drive to optimize aircraft production



CUSTOMER STORY



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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.”

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.

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

“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 heterogeneous sources, and update it in almost real-time,” 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



95% of the data stored in APS is hosted on premise

“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 Qlik

Qlik's vision is a data-literate world, where everyone can use data and analytics to improve decision-making and solve their most challenging problems. A private company, Qlik offers real-time data integration and analytics solutions, powered by Qlik Cloud, to close the gaps between data, insights and action. By transforming data into Active Intelligence, businesses can drive better decisions, improve revenue and profitability, and optimize customer relationships. Qlik serves more than 38,000 active customers in over 100 countries.

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