

AVIANCA STREAMLINES APPLICATION INTEGRATION



A STAR ALLIANCE MEMBER

SOFTWARE AND SERVICES

- Red Hat JBoss Fuse
- Red Hat JBoss Enterprise Application Platform
- Red Hat Enterprise Linux®
- Red Hat Satellite
- Red Hat Consulting

HARDWARE

- 14 servers with 4 cores each

As Avianca, the oldest operating airline in the Americas, grew its portfolio of companies, it needed a standardized way to integrate new airlines into the group. With each new airline came new legacy applications and systems, making it difficult for Avianca to keep pace with business demands.

Avianca worked with Red Hat Consulting to architect, build, and deploy a faster, more robust enterprise infrastructure, selecting Red Hat® JBoss® Middleware to integrate applications for the entire organization. JBoss Middleware now supports all of the airline's business-critical applications and helps deliver a consistent experience for all Avianca customers around the world.



TRAVEL AND TRANSPORTATION

19,000 EMPLOYEES

“We ran a pilot test where Red Hat JBoss Fuse was 10 times faster than any of its competitors that we evaluated, and we only needed a laptop to run it on.”

JULIANA CEBALLOS
ARCHITECTURE AND DEVELOPMENT DIRECTOR,
AVIANCA

BENEFITS

- Increased agility
- Faster integration of new companies and services
- Consistent integration architecture across all datacenters
- TCO reduced by 50%



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“We share a similar technical outlook with Red Hat and embrace a similar set of values and principles toward honoring commitments. We have a very good rapport with the Red Hat team.”

FERNANDO LARA
VICE PRESIDENT OF INFORMATION
TECHNOLOGY, AVIANCA

SEAMLESS INTEGRATION OF NEW COMPANIES AND SERVICES

With a growing portfolio of companies, including more than 10 airlines, Avianca was faced with more than 1,000 applications that had evolved over the years. Many were developed on different technologies and integrated with point-to-point architectures.

“The previous environment was constructed in this way to meet short-term business objectives, but its administration has made everything more complicated,” said Juliana Ceballos, architecture and development director for Avianca. “We were looking for a long-term solution. To do that, we needed to implement a service-oriented architecture and a master data management scheme, integrating and connecting all applications and services.”

This proved to be a difficult task. The integration platform would need to provide standard enterprise service bus (ESB) capabilities such as transformation, routing, connection, and mediation. But with different operational points and datacenters scattered around the world, the integration platform would also need to be distributed in different geographical locations. If one location failed, one of the others would need to automatically pick up the slack.

In addition, Avianca wanted to provide fully standardized service to all of its customers, whether they were flying with Avianca, TACA, Aerogal, or any of the other airlines in its portfolio. “In order to bring consistency to our processes and offer our customers a repeatable experience at all points of contact, all applications across all airlines must work in a standardized manner,” said Ceballos.

FAST, EFFICIENT INTEGRATION PLATFORM WITH JBOSS MIDDLEWARE

Red Hat Consulting and Avianca worked together to identify a new solution and its requirements. During the selection process, analysts worked with the Red Hat team at Avianca’s facilities to build a proof of concept, substantiating the robustness and flexibility of the JBoss Middleware portfolio of products as an integrated solution.

“Red Hat JBoss Fuse was astonishing when it was first presented to us. But it was during the pilot test when we truly realized the capacity of the technology,” said Ceballos. “JBoss Fuse was 10 times faster than any of its competitors that we evaluated, and we only needed a laptop to run it on.” Once the speed and integration capabilities of JBoss Fuse were established, no further evaluation was needed.

In the end, Avianca selected JBoss Middleware as the primary integration platform for its entire organization. The integration platform now supports applications for business-critical functions such as sales, ticketing, back office, and maintenance.

The applications were deployed in three different datacenters and were balanced using Citrix NetScaler, an application delivery controller that maximizes the performance and availability of all applications and data. They were integrated using an Apache Camel based integration framework included in JBoss Fuse.

“We are currently migrating most of our transaction systems so they interface through JBoss, and the results have been really astounding,” said Fernando Lara, vice president of information technology for Avianca.

THE POWER OF RED HAT SOLUTIONS

ENTERPRISE SERVICE BUS THAT HELPS DRIVE DOWN COSTS

“When our competitors have better technological skills or capabilities than us, we become concerned. We chose Red Hat solutions because we wanted the best enterprise service bus in our business sector,” said Lara.

Having a robust, scalable ESB-based integration platform was essential for Avianca. “Without the effective operation of the bus, we cannot sell tickets through the Amadeus system; we cannot load all the operations files for making decisions about how to program the aircraft; we cannot receive payment methods through the dot-com or any other scheme that is needed to pay with credit cards,” said Ceballos. Built upon JBoss Middleware, the new ESB solution meets Avianca’s needs throughout its entire geographic diversity.

Once the JBoss Middleware based integration platform is fully implemented, Avianca will be designing what it calls “IT in a Box,” a package of processes, procedures, and technologies that will be documented and prevalidated for when a new airline needs to be incorporated into the company. “The ESB is tremendously important for Avianca and is expected to reduce the time and effort required to integrate and standardize a new company into the group by 50%,” said Lara.

TECHNOLOGICAL CAPABILITIES IN ANY ENVIRONMENT

When it comes to the implementation of JBoss Middleware at Avianca, Red Hat provides technological capabilities over and above Avianca’s competitors not just for what it can do now, but for what it can do in the future.

“Take any new technology and the Red Hat product is able to work with it,” said Ceballos. “From now on we can place any technology on top of or beneath this product without restrictions.” This was very important to Avianca because in a changing technological environment, committing to a permanent solution brings inherent risks.

“When these products all work together, the platforms and infrastructures are more efficient,” said Ceballos. “It allows us to have fewer servers and a more standardized technological environment. In short, it allows us to spend less and save more.”

BETTER BUSINESS, BETTER SERVICE

The new solution changes the entire backbone of how Avianca integrates applications. “This enables us to provide uniform business services to our clients and also make things easier when including other airlines or companies, bringing them into Avianca’s technological context in a more simple and agile manner than in previous situations,” said Ceballos.

Inside Avianca’s organization, the architecture and development teams are increasing the effectiveness of their work, using a standardized integration approach.

Millions of Avianca’s customers will benefit from the new solution as well because the integration platform provides the services that support the core sales, operations, and reservation processes for the airline.



CUSTOMER CASE STUDY Avianca streamlines application integration



ABOUT AVIANCA

Avianca is the oldest airline in Latin America, with 95 years of continuous operation, serving more than 100 destinations in 25 countries throughout the Americas and Europe, with a modern fleet of 152 short-, medium-, and long-haul aircraft. Through its membership in Star Alliance, Avianca offers the ability to connect to more than 1,200 destinations in 195 countries worldwide.



ABOUT RED HAT

Red Hat is the world's leading provider of open source solutions, using a community-powered approach to provide reliable and high-performing cloud, virtualization, storage, Linux, and middleware technologies. Red Hat also offers award-winning support, training, and consulting services. Red Hat is an S&P company with more than 80 offices spanning the globe, empowering its customers' businesses.



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