

High performance. Delivered.

KLM Royal Dutch Airlines: Accenture helps KLM streamline IT costs and drive efficiency using open-source software solutions

Consulting • Technology • Outsourcing



Since merging with Air France in 2004, KLM Royal Dutch Airlines (KLM) has worked closely with Air France to streamline joint operations, to ensure that the Air France-KLM holding company benefits from cost-related and operational synergies. As the world's largest airline partnership, Air France-KLM produced operating revenues of €23.97bn (\$33.8 billion) in the fiscal year ending March 31, 2009. In 2009, Air France-KLM was ranked second among airlines in the FORTUNE® **Global Most Admired Companies** survey. The two companies continue to operate as separate airlines, each with their own identity and brand.

With more than 36,000 employees worldwide, KLM carried more than 23 million passengers and 657,022 tons of cargo on its fleet of 200plus modern aircraft, in addition to providing more than 100 other airlines with engineering and maintenance services. Throughout its history, KLM has developed and maintained an excellent reputation by making continuous innovation for improved service and reduced expenditure paramount. Over the years, it has been one of the most successful airlines at leveraging technology-based strategies to streamline operations amid financial and competitive turmoil in the global airline industry.

Business challenge

The airline business has changed dramatically in the last decade. Reduced customer demand, increased competition from low cost carriers, as well as high gas prices has led airlines to review costs as part of a corporate viability strategy. KLM's existing technology prowess helped it master this challenging environment. Leveraging its understanding of the impact technology can have on gaining competitive advantages, KLM's management identified opportunities in the technology area to reduce operating costs. With more than 1,200 professionals working to support a thousand-plus applications running on a dozen different platforms which serve millions of customers annually, KLM identified opportunities in the IT infrastructure area to reduce complexity and costs. With open source software (OSS) becoming more robust, and more accepted among major organizations, the team decided to rationalize platforms, servers, and applications on OSS to both reduce costs and improve how technology solutions and customer-focused services were delivered.

How Accenture helped

Accenture and KLM teamed together to define and realize a new OSS-based version of the existing KLM WebFarm platform, to ensure continuity for businesscritical web applications, and to be able meet new business requirements in a flexible manner. KLM and Accenture are taking advantage of open source software to reduce costs for hardware, operating systems and middleware. The new platform, aligned with the group strategy to leverage LINUXbased platforms on cost-effective commodity hardware, leverages more open source software technologies on both the operating system level (LINUX) and the application server level (JBOSS).

To allow KLM to gradually adopt the open source components for its WebFarm platform, stacks using proprietary application servers middleware were positioned next to the fully-open-source application servers stack. Also where appropriate, mixed stacks were created of new open source components and proprietary application servers. This enabled the airline to continue to derive value from investments that were made in the past, while also reaping the benefits of the costeffective commodity platforms running open source software. Moreover, as part of a multiyear program, Accenture has helped the airline implement business solutions that leverage open source technologies in other areas. For document management, KLM had been using disparate proprietary solutions and asked Accenture to identify and evaluate document management systems based on open source technologies. Based on the assessment results and a successfully-conducted pilot implementation, KLM decided to implement Alfresco as its

open source enterprise content management system. KLM and Accenture teamed to implement Alfresco on RedHat Linux and RedHat JBoss, and to integrate the solution with IBM Tivoli Access Manager for authorization and role management. Additionally, the Alfresco solution was integrated with IBM WebSphere Portal Server, to allow KLM employees to access and manage their documents via the IBM software-based employee portal on a 24/7 basis. Accenture and KLM also teamed to keep more than 36,000 staff trained and up-to-date on the latest changes and processes through proprietary electronic learning product Saba. Together, Accenture and KLM implemented a new version of Saba, running on RedHat Linux and JBoss, to reduce licensing costs. The new electronic system integrates with KLM's human resource systems and enterprisewide messaging system which is based on the IBM MQSeries. Finally, Accenture has been leading significant parts of the effort to migrate the KLM web applications to the new WebFarm.

High performance delivered

The new OSS-based WebFarm platform now hosts businesscritical web applications for KLM which facilitates infrastructure capacity growth through costeffective commodity hardware. Large groups of KLM employees are using the new Saba electronic platform to conduct training and to extend their certifications. Every KLM employee can use Alfresco for document management purposes, either directly or via the KLM employee portal.

The KLM WebFarm platform is used to run more than 350 webbased applications, including the airline's electronic booking tool which handles more than a million bookings per year. Additionally, KLM uses the WebFarm to provision the applications in the passenger self-service domain, which includes the various checkin channels that enable more than 22 million check-ins annually. The traffic continues to grow and is now more than 50 million hits per day (more than 1.9 billion per month).

Accenture and KLM have successfully partnered in this multi-year program to meet business-continuity objectives, increase flexibility and continue to meet more demanding business requirements, while also reducing the costs to provision the infrastructure and architecture that underpins these businesscritical web applications.

"A transformation this extensive requires combining Accenture's technical and IT businessprocess leadership with our own internal expertise," says Ronald Bosch, Director KLM Websystems. "Using open source software to reduce hardware and licensing as well as maintenance fee costs is paying off for our airline. As we move critical systems to an OSS-based foundation, OSS allows us to adapt to change faster, support a broader array of applications and realize better operational performance."

About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 204,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$21.6 billion for the fiscal year ended Aug. 31, 2010. Its home page is www.accenture.com

Copyright © 2010 Accenture All rights reserved.

Accenture, its logo, and High Performance Delivered are trademarks of Accenture.

Contact information

To find out more about Accenture and open source services, contact:

Tomas Nyström Tomas.Nystrom@accenture.com +358 205725608

Geert Batterink Geert.Batterink@accenture.com +31 20-4938801