

Case Study



Application Integration Program Management by Infosys for a leading aircraft manufacturer

Abstract

The client is a leading global aircraft manufacturer and defense contractor in the world. With a focus on Improving the quality, accuracy and consistency of support data being delivered to various Airline Customers, Infosys delivered to the client a new set of robust and scalable services/infrastructure for electronic support data delivery.

Client Description

Client is the world's leading aerospace company and manufacturer of commercial jetliners and military aircraft. Client has customer base in more than 90 countries around the world.

Problem Statement

Situation

Delivery of maintenance support data to customer is a key requirement in airplane delivery for any aircraft manufacturer. The current process at client for creating and customizing the support data to customer is manual by collating data from various authoring systems. Also, in the current context support data delivery to airline customers happens through physical delivery of CD-ROMs. Client is planning to launch a new commercial aircraft wherein client wants to automate the support data creation and customization process for different customers and deliver support data online to the customers.

Solution

Client is implementing a new integrated framework which involves data integration between various authoring systems that generate the data and presentation layer systems from which end user can access the documentation online.

Challenges

- Huge volumes of data integration requirements under secured mode.
- Scalable component design to accommodate future requirements
- Requirement to transfer data over the network in encrypted format for all interfaces.
- Convincing stakeholders to adopt the middleware based integration strategy over the existing batch/night feed mode of data transfer

Key Requirements of the EAI Framework

Functional Requirements

- Objective of the EAI Framework is to deliver authored content from the authoring systems to the end user
- Transforming content from the authoring systems format to the viewing systems format

Non-Functional Requirements

- Data Encryption - Data needs to be encrypted when it leaves the authoring system and decrypted after it reaches the Integration Environment
- Data Security – Access to the data is available based on roles and privileges.
- Huge volumes of data integration.
- Scalable component design to accommodate future requirements.

Infosys Approach

- Infosys met with respective application owners to understand the application interfaces through series of workshops with stake holders
- Infosys was involved in requirements analysis, design and development of adapters and transformation components for all the applications to enable them to communicate with each other
- Infosys approached the integration solution rollout in a phased manner that could help client derive early business benefits
- Infosys proposed a WebSphere MQ based architecture for the EAI Integration

Solution

- Implementation of MQ, JMS, Web Services and FTP Frameworks to integrate disparate applications.
- IBM WebSphere MQ infrastructure setup from scratch for LSIE
- MQ Framework was used for low volume interfaces and FTP Framework for high volume interfaces
- Horizontal scalable design to accommodate new applications interfaces with minimum change in frameworks
- SSL based authentication to address security requirements

Benefits to Client

Client Business Benefits

- High level of data flow automation at a low-cost leveraging the Global Delivery Model (GDM).
- Robust and scalable electronic data delivery to the airline customer.
- Improved quality, accuracy and consistency by enhancing the process of releasing data to the customer.
- On-time delivery of high-quality deliverables in spite of stringent timelines.
- Significant cost savings in implementing new interfaces through design of reusable component framework

Words of encouragement

“We all know how important this release was to us and first flight due in August. In spite of numerous challenges, you have showed the way for other teams to follow; you have progressed well through each defined phase of the lifecycle from requirements through testing to implementation; Your success was very important for the entire release. Congratulations on the successful release”

Client Manager

“I want to take a moment to relay the same message I told the On-shore team this morning. That without your efforts, talents, and determination we would not have succeeded. We excelled while other teams around us struggled. Not only did we implement our system components on-time, we led the most of our interfacing systems to the same end as well! We are creating a standard which the other teams are now measuring themselves against. Your shared ability to work together to solve problems rapidly really enabled our happy ending”

Client Senior Manager



For more information, contact askus@infosys.com

About Infosys

Many of the world's most successful organizations rely on Infosys to deliver measurable business value. Infosys provides business consulting, technology, engineering and outsourcing services to help clients in over 30 countries build tomorrow's enterprise.

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