



## Case study Thales

**THALES, AN AEROSPACE AND DEFENSE LEADER HAD A KNOWLEDGE MANAGEMENT PORTAL. IT WAS DESIGNED TO HELP EMPLOYEES SHARE EXPERIENCE ACROSS ORGANIZATIONAL AND GEOGRAPHIC BOUNDARIES. THE PORTAL WAS SUCCESSFUL FROM A BUSINESS PERSPECTIVE BUT COULD NOT HANDLE CURRENT AND FUTURE SCALABILITY REQUIREMENTS. THALES' R&D TEAM WANTED TO REDUCE THE CHARGE ON THE DATABASE TO SPEED UP RESPONSE TIMES AND RECEIVE MORE SIMULTANEOUS CONNECTIONS. XCALIA PROVIDED THAT CAPABILITY. NOW THE PLATFORM CAN HANDLE FIVE TIMES MORE SIMULTANEOUS CONNECTIONS AND RESPONSE TIME IS 4 TIMES FASTER. AS A BONUS UNSCHEDULED DOWNTIME WAS ELIMINATED.**

“We needed a new framework for database access and Xcalia (with JDO) promised fully transparent persistence that would ensure high performance of our Knowledge Management Portal. This approach would allow our development teams to focus on the business object model so that business concerns could be fully taken into account. We believed that this would also help us to reduce the development effort and improve the quality of the final application.”

**Daniel Anglade**  
**Knowledge Management**  
**Portal Project Member -**  
**Thales**

### **KNOWLEDGE HELPS MAKE THALES A GLOBAL LEADER IN AEROSPACE AND DEFENSE.**

Thales is the European Leader in Aerospace and Defense. They occupy either first or second position within virtually every sector in which they are present and they are the only Aerospace and Defense actor that has complete vertical integration. The company employs over 65 000 people the world over and over 60% of their workforce can be described as “knowledge workers”.

In a company that is as large, as geographically diverse, and above all, as knowledge intensive as Thales, knowledge sharing is extremely important for the overall success of the company. New solution: Intermediation

### **A KNOWLEDGE PORTAL THAT PROVED ITS WORTH**

In 2002 Thales decided to create a knowledge management portal to facilitate information and experience sharing. The initial portal was based on the leading technologies of the day and confirmed that there was a tremendous utility in sharing information company-wide over a secured Intranet. However, there were end user problems due to an overload on the database. This created frequent, unexpected shutdowns that produced a lot of extra work for deployment teams. Another regrettable characteristic of this first solution was that end users had to wait an average of 8 seconds for each screen to display. In 2003 Thales R&T decided to upgrade the entire knowledge management portal to improve performance which was now possible due to technological advances. Thales chose a new application server, IBM WebSphere, and the WebSphere Portal Server and decided to use a UML-based programming approach. This choice committed the team to object oriented programming. Once this direction became clear, Thales started looking for a solution that could provide a framework for heterogenous data access.

Daniel Anglade, who headed up the project for Thales, was attracted to the JDO standard because it promised fully transparent persistence and would allow development teams to focus on the

## ABOUT XCALIA

Xcalia's dynamic integration software makes it easier for enterprises to build composite applications in SOAs while reusing valuable information resources, optimizing IT investments and reducing operating costs. Through Intermediation, a layer between the business model and the data/services resources, applications can be created or updated quickly to meet changing business demands. Xcalia is ideal for high-performance transactional applications that also need to reuse legacy and mainframe resources with maximum interoperability in any environment. Xcalia, headquartered in Paris, France, has offices in the US and Germany, and counts 20 large enterprises among its customers. The company is privately held. **For more on Xcalia, visit [www.xcalia.com](http://www.xcalia.com).**

business object model (or domain model) so business requirements could be easily integrated into the portal functionality. He also believed that this would reduce the development effort and improve the quality of the final product.

## XCALIA PROVIDED SPECIFIC SOLUTIONS TO THALES'S CHALLENGES

Thales researched a variety of solutions, but very quickly Xcalia's Intermediation Core (XIC) emerged as one of the strong contenders. Xcalia enabled real-time access to heterogenous databases (and other services as needed). It was adaptive and configurable so changes to the portal could be made quickly and cost effectively without impacting the underlying systems or infrastructure. In addition, Thales quickly recognized the value of automated mapping of databases to the business objects, and transaction caching as it reduced the database load and boosted performance. One of the most important requirements for Thales is that the portal was secure. With Xcalia, Thales was able to build role-based access rights directly into the portal to ensure that users had been authorized to access certain documents or internal resources.

## WITH XIC BENEFITS WERE FELT IMMEDIATELY!

Development teams noticed that their job was much simpler with XIC's dynamic mapping feature. They were able to concentrate on developing business functionality without having to worry about manual resource mapping. This allowed them to work more quickly and more effectively. Furthermore, they knew that they were building a solution that would scale over time and allow them to change the underlying databases and infrastructure without impacting the portal at all.

The benefits of XIC did not stop with development. Runtime teams noticed significant performance improvements. To begin with the application was more reliable and available. They no longer had to contend with unscheduled shutdowns due to over solicited databases. Now the web portal can run a week without interruption, and shut downs for maintenance purposes are always scheduled.

The speed at which end users access web pages has significantly improved as well. The new application can handle 25 simultaneous connections with less than 2 seconds to post each page. Down from 8 seconds, which was the average before the XIC implementation.

Finally, more efficient use of the databases means that it can support other tasks. Thales found that Xcalia has enabled them to extract more value from their IT infrastructure than was previously imagined.

