

SWEDISH RAILWAYS IMPLEMENTS JBoss ENTERPRISE SOA PLATFORM FOR IMPROVED PERFORMANCE AND CUSTOMER SERVICE

FAST FACTS

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| Industry | Transportation |
| Geography | Sweden |
| Opportunity | Build a new development platform to rapidly deliver integrated IT projects across the business |
| Software | Red Hat Enterprise Linux 5, JBoss Enterprise SOA Platform (JBoss AS 4.2, ESB 4.2, JBoss Messaging 1.4), EnterpriseDB |
| Hardware | 2 IBM xSeries 346 servers |
| Benefits | Increased time-to-market of services for customers, increased ROI and interest in rail travel, eliminated licensing costs for the platform, integrated IT systems, and avoided vendor lock-in |

BACKGROUND

Swedish Railways (SJ AB), the national railway operator in Sweden, travels between 350 stations and carries 100,000 passengers per day. The company maintains approximately 3,500 employees and boasts a yearly revenue of 1.3 billion dollars.

OPPORTUNITY

In May 2006, SJ AB recognized the need to upgrade its internal software delivery system in order to provide a shared platform for all of its IT systems. The integration of the IT systems is essential for SJ AB as it uses a diverse range of applications relevant to human resources, sales, and other departments. Each applications needs to be accessed across a range of interfaces from PCs to PDAs. A new department called the Integration Competence Centre (ICC) was established within SJ AB with assistance from Redpill. The ICC is responsible of establishing the Integration platform and deliver service based integration solutions and new service according to SJ AB requirements.

SOLUTION

SJ AB first explored and implemented JBoss solutions in 2005 after lack of satisfaction with its existing application server. When deploying a new intranet application, the existing solution caused performance problems for the railway, so SJ AB turned to JBoss for a trial of JBoss Application Server. The JBoss Application Server trial delivered a dramatic performance improvement in comparison to the railway's current application server, and SJ AB decided to migrate to JBoss solutions. With integration and training services from Red Hat-authorized partner Redpill, SJ AB migrated all of its systems to JBoss Enterprise Middleware, today amounting to over 120 CPUs.

In searching for an upgrade to its internal software delivery system, SJ AB explored solutions from IBM, BEA, and Redpill, together with JBoss. The full solution incorporates IBM Intel servers running Red Hat Enterprise Linux 5 on the SJ AB Integration platform, built using the JBoss Enterprise SOA Platform. SJ AB also uses JBoss ON to monitor and manage updates.



“With our new Integration Platform built on JBoss Enterprise SOA Platform components, new Integration project can be delivered faster than ever. With JBoss ESB, our previously disconnected IT systems can now gradually be integrated in a loosely coupled architecture, and as a result, our IT department can react much more dynamically to the demands of the business.”

- Anders Nilsson, IT-Architect at Swedish Railways

The Integration Platform, utilizing Red Hat and JBoss solutions, was launched in October 2007. The first major project for the ICC was the creation of a ticket-auction system to sell unsold tickets on Tradera.com, the Swedish auction website owned by eBay Inc. Using JBoss ESB, any tickets which have not been sold by SJ within two days of departure are automatically transferred to the eBay-owned Tradera system, where they are available for auction until six hours before departure.

Now, with a successful Integration Platform, the ICC plans to deliver a new project every two months. The upcoming projects come from both internal and external demand and include consolidating existing systems and creating new products.

BENEFITS

With Red Hat and JBoss solutions, the SJ AB Integration Platform has delivered increased ROI for the railway. Through its Tradera.com ticket-auction project, which took just four months to complete, SJ is now able to sell an extra 1,500 tickets per week. Previously, these tickets went unsold. “We saw the return on our investment very quickly, best measured in weeks rather than in months,” said Anders Nilsson, IT-Architect at Swedish Railways.

With the creation of the SJ AB Integration Platform, the ICC is now able to rapidly deliver cost-effective, integrated IT projects across the entire business. As an indirect benefit, the collaboration with Tradera.com has also given SJ enhanced recognition an innovator in online consumer sales, attracting new interest in train travel in Sweden.

