


# DAIWA SECURITIES AMERICA BANKS ITS BUSINESS ON JBOSS

## FAST FACTS

Industry	Financial Services	
Geography	New York	
Opportunity	Build an utterly reliable, high-performance portal using open source to speed application development while reducing costs	
Migration Path	Proprietary application server and portal solutions to JBoss Enterprise Application and Portal Platforms	
Software	JBoss Enterprise Portal Platform, JBoss Enterprise Application Platform and JBoss Rules Framework. Databases: Sybase SQL (transactional), Sybase IQ (data warehousing for production environment), Microsoft SQL (training data), Alfresco Software for enterprise content management (ECM)	
Operating System	Windows 2000	
Hardware	Intel dual-core Intel Xeon HP servers	
Benefits	Established a reliable platform with no unplanned downtime, sped time-to-market by cutting application development time in half, dramatically improved application performance, and saved \$300,000 in licensing and hardware costs	

## BACKGROUND

Daiwa Securities America Inc. is a privately held, wholly owned subsidiary of Daiwa America Corporation, owned by Daiwa Securities Group Inc., one of Japan's big three securities brokerages. The subsidiary focuses on sales and trading of Japanese and U.S. equities and fixed-income instruments, financial futures, and investment banking. For the year ending March 31, 2008, Daiwa Securities America posted net operating revenues of \$2 billion.

## OPPORTUNITY

In 2006, Daiwa Securities America was having trouble keeping its internal portal up and running. The portal was the lifeblood of the firm's operations. Because Daiwa's 250 employees depended on it to access the applications they needed to do their jobs, the frequent crashes created serious business and technical problems.

"It got to the point where we couldn't keep the server up for more than a week at a time," said Tom Cordova, senior vice president, Information Technology, Daiwa Securities America Inc. The portal, called DSAweb, supported 120 applications ranging from a "Compliance Dashboard" to back office integration systems. "When it crashed, we'd be down for as long as 90 minutes at a stretch. Our users wouldn't be able to do what they needed to keep our business running. You can't get more mission-critical than that," said Cordova.

The problem resided in the popular industry-standard application server that Daiwa had used to build the portal. The company prides itself on being at the bleeding edge of technology, and had pushed the platform to its limits. But when the maker of the application server released a new version with much-needed functionality, it was loaded with bugs, frustrating Daiwa application developers and delaying application time to market. Even more significantly, Daiwa couldn't get adequate support.



“The vendor suggested we needed to purchase additional hardware and software licenses to solve the problems we were having,” said Cordova. “We thought that was outrageous. That’s what pushed us to find another solution.”

## SOLUTION

Daiwa already had some experience with JBoss products in other in-house development projects. Cordova was impressed with what he saw and downloaded the free version of the JBoss.org Portal project. It took only a short trial before he decided to build the new portal using JBoss. Because of the mission-critical nature of DSAweb, Cordova purchased a subscription to the JBoss Enterprise Portal Platform to benefit from the stability and reliability of an enterprise class platform that included support, patches, and updates as well as a multi-year maintenance policy.

First, Daiwa successfully migrated the 120 DSAweb applications – most of them database-driven – from the previous application server to JBoss. This monumental task was accomplished within just 12 months by developing a template using Velocity, an open source templating tool, that described how each application “mined” the database and which then regenerated the applications on JBoss Portal. In the same timeframe, Daiwa also developed and brought online 80 new applications – something that would not have been possible using the old platform.

“With JBoss, we’re a much more agile company,” said Steve Dunstan, enterprise systems architect and senior vice president, Information Technology, Daiwa Securities America Inc. “Today, if the business needs a new application, we can deliver it immediately. That makes everyone happy.”

Daiwa depends on the breadth and depth of the JBoss Enterprise Middleware portfolio to meet its business objectives. In addition to the JBoss Enterprise Portal Platform, the JBoss Rules Framework allows Daiwa to embed alerts into portal applications that notify employees of unfinished trade allocations, unusually large trades, or customers nearing their credit thresholds. Daiwa also leverages the caching functionality in the JBoss Enterprise Application Platform to seamlessly and securely share information across applications, and with Alfresco's open source content management system, provides employees with single sign-on access to all the applications they need. In addition, Daiwa uses the message queuing functionality in the JBoss Enterprise Application Platform with Informatica PowerCenter to asynchronously send messages to all distributed applications in its service oriented architecture (SOA).

## BENEFITS

With JBoss, Daiwa’s IT team now focuses on helping users to be more productive. Additionally, organization can be more competitive rather than simply being in technical “fire fighting” mode.

Reliability is the bottom line. “If our portal were to go down today, it would be catastrophic,” said Dunstan. “The JBoss platform has been extremely reliable and stable. We have had no unscheduled downtime.”

Reduced cost and improved performance have also been big wins. Daiwa saved \$300,000 by avoiding software licensing and hardware expenses that would have been incurred by sticking with the previous solution. “That’s a huge savings for us,” said Cordova. Applications are also easier and less costly to maintain, and when



bugs are found, Daiwa can quickly propagate the fixes. Application performance has dramatically improved too. Developers can compile and roll out new applications in seconds, rather than the 15 minutes required by the previous platform.

Employees are more productive because the portal applications load faster – in just one second compared to the 10 seconds required with the old solution. Applications are also easier to use and require less employee training because the interfaces and functionality are consistent across all applications.

---

### Daiwa Trusts JBoss:

**“If our portal were to go down today, it would be catastrophic. JBoss Enterprise Application and Portal platforms have been extremely reliable and stable. JBoss is a worry-free solution that helps us sleep better at night.”**

**–Steve Dunstan,  
Enterprise Systems Architect and Vice President,  
Information Technology,  
Daiwa Securities America Inc.**

---

Developer productivity has also increased dramatically. The ability to develop applications using open source code allows developers to create new applications in half the time. “And shorter development cycles translate into a faster time-to-market,” said Dunstan. “We wouldn’t have been able to grow these services and capabilities for the business without accelerating our development cycle.”

The transparency of open source code and Red Hat’s conformance to open standards simplify developers’ work as well. “When we have problems, we like to work them out quickly in-house,” said Dunstan. “We can troubleshoot issues more easily with open source code.”

When Daiwa does need outside help, Red Hat’s JBoss support has been outstanding. “When you contact JBoss technical support, you get to the right person immediately – sometimes even the person who wrote the code you’re using,” said Dunstan. He constantly marvels at the fact that he has achieved 100 percent resolution on all support issues with Red Hat. “With other enterprise vendors, I feel lucky if I get 40 percent of my issues resolved,” he said.

Daiwa is starting a new project to develop Web 2.0 applications and will use a clustered server environment, which it plans to monitor using JBoss Operations Network.

In moving to JBoss, Daiwa has decreased its risk while getting very big returns. “JBoss is a worry-free solution that helps us sleep better at night,” said Dunstan.





## **JBOSS SALES AND INQUIRIES NORTH AMERICA**

---

1-888-REDHAT1  
[www.jboss.com](http://www.jboss.com)

