



Borland® StarTeam® has strengthened communication between

BORLAND ACCELERATES SUCCESS

production and development teams for BNP Paribas Securities Services



BNP Paribas Securities Services brings together 430 developers located all over the world. By structuring the work of its developers and analysts with the Borland® StarTeam® automatic change and configuration management system for the last three years, this merchant bank has increased the quality of its software as well as its development team's productivity.

Background: BNP Paribas Securities Services

BNP Paribas Securities Services is a 100% subsidiary of French nationwide bank BNP Paribas. It supplies security certificate services to financial institutions worldwide. With offices in 17 countries, Securities Services employs 3,200 staff members, serving 600 enterprise customers, and had 1,800 billion euros in reserve at the end of 2002.

This impressive level of business is supported by roughly 400 IT workers, 180 of them Java™ developers, who are permanently at work on some 60 applications. StarTeam, at the core of project lifecycles, coordinates collaborative development and greatly increases project reliability.

It all began in 2000 with the ACETP project for partial redefinition of the information system. Says Chief Architect Pascal Jarry: "The impact of this project on our business was of such extreme importance that we decided we needed to pool the code. Our intention was to standardize, though without wanting to make this a group-wide standard. We were thus led to conduct a comparative study between the different software configuration management systems already in place (Harvest, Visual SourceSafe, StarTeam). The StarTeam client just couldn't be beat from the point of view of user-friendliness: one look at the user interface and you're ready to go! This really pleased us, and what's more, it saved us 50 days of training."

Challenge: Industrializing the development process

Borland StarTeam was a natural choice for automating the application lifecycle. Using Borland® JBuilder®, Securities Services is undertaking a growing number of Java development projects, which generate a multitude of files, currently half a million sources for 60 projects and a managed volume of 17 GB. And the management of different source code versions – for development, test, production, etc., as well as the need to have several people working on these files – causes a significant increase in project complexity. Says Jarry: "StarTeam has helped us pool developments within a common framework for all J2EE™ projects. Beyond being a simple configuration manager, this tool gives us a smooth way of introducing more thoroughness and method. We have thus improved the productivity of our staff teams while

FAST FACTS

BACKGROUND

BNP Paribas Securities Services supplies security certificate services to financial institutions worldwide.

CHALLENGE

With 400 IT workers, including 180 Java developers at work on some 60 applications, with a managed volume of 17 GB, Securities Services sought a solution for organizing its growing number of Java development projects.

SOLUTION

Borland StarTeam was a natural choice for automating the application lifecycle at Securities Services. StarTeam helped manage the increasing complexity of different source code versions being worked on by several teams.

“This tool has given us a smooth way of introducing more thoroughness and method. We have thus improved the productivity of our staff teams while improving code quality”.

Pascal Jarry, Chief Architect, BNP Paribas Securities Services

improving code quality. StarTeam has enabled us to strengthen communication between the production and development teams reducing project risk (deployment of wrong version, etc.) and greater security.”

Solution: From Java classes to stored procedures

Today, the software configuration manager is used to coordinate the work of the development and production teams. Each new project is added to the database. “To do this, we defined a hierarchical structure for the commissioning and production phases in which directories store shell scripts, SQL queries, and the like for creating indexes, triggers, etc. The whole system is versioned so as to preserve a historical record of exactly what we have deployed for production,” Jarry says. “The tool gives very fine control over objects. For example, it enables locks to be placed on PowerBuilder function libraries (PBL) and their underlying classes.”

A high-availability server

After being implemented by the architectural cell, the management of StarTeam servers was eventually delegated by Securities Services to the company’s production cell. “When loads started becoming heavy, we sought a way of ensuring complete server reliability,” Jarry explains. “Our production cell implemented a redundancy mechanism with two synchronized StarTeam servers (one production server and one backup) and an Oracle cluster. It’s a crucial point, since the StarTeam server must never go down. A service stoppage can indeed prove very costly. But, says database administrator Hugo Heitz: “We have no worries on this side, as the StarTeam servers are very stable.”

Ideal for offshore project management

Several months after launching offshore development, Securities Services has been able to verify StarTeam capabilities “beyond the firewall”. StarTeam supports TCP/IP for all server accesses, whichever type of client is used – thin, fat, integrated, with EDI, etc. – and wherever in the world it is located.

Indian developers need access to the company’s development sources, so it has implemented an architecture based on demilitarized zones. Because the Web client was deemed unsuitable, all offshore and near-shore developers use a fat client. A VPN transports the TCP/IP dialog from the fat client to the StarTeam server placed in another demilitarized zone.

Whether in Paris or India, all developers work with exactly the same tools and have the same features available: real-time check-in and checkout, access to builds compiled several times a day, etc. Internally, everyone has privileges to access everything. By contrast, Jarry notes, “it’s out of the question that our near-shore and offshore subcontractors access the whole of our projects. One advantage of StarTeam is its ability to provide finely tuned management of user rights and permissions. The permissions management module enables perfect compliance with the defined access policy. There are no limits.”

A tool they don’t want to do without

Today, Securities Services can’t imagine life without the StarTeam configuration manager. “StarTeam is an essential tool for organizing J2EE development projects and integrates well with JBuilder to increase productivity. It is therefore important to industrialize the processes and ensure their reliability, notably between architects and developers,” Jarry concludes. “Even though it’s hard to put a figure on it – since we’re closely related to the field of quality assurance – there is definitely a good ROI. But the main benefit comes from the work teams’ smooth adoption of a more industrial approach, without undergoing the restrictions of a fixed methodology.”

TECHNICAL ENVIRONMENT

Borland solution:	StarTeam,® JBuilder® X
Additional technologies:	Apache® Maven CCC/Harvest
Number of users:	Approximately 500 developers, 180 of them using Java™
Number of projects:	Approximately 60
Number of sources managed:	500,000
Size of the “vault” on the disk:	17 GB

Borland®
Excellence Endures™

100 Enterprise Way
Scotts Valley, California 95066-3249
Tel. 831-431-1000 www.borland.com

Made in Borland® Copyright © 2004 Borland Software Corporation. All rights reserved. All Borland brand and product names are trademarks or registered trademarks of Borland Software Corporation in the United States and other countries. Java and all Java-based marks are trademarks or registered trademarks of Sun Microsystems, Inc. in the U.S. and other countries. All other marks are the property of their respective owners. Corporate Headquarters: 100 Enterprise Way, Scotts Valley, CA 95066-3249 • 831-431-1000 • www.borland.com • Offices in: Australia, Brazil, Canada, China, Czech Republic, Finland, France, Germany, Hong Kong, Hungary, India, Ireland, Italy, Japan, Korea, Mexico, the Netherlands, New Zealand, Russia, Singapore, Spain, Sweden, Taiwan, the United Kingdom, and the United States. • 21906