With Zend Solutions, Marilan Accelerates Snack Business Growth

CUSTOMER:

Since 1987, Marilan has seen great success as a premier manufacturer of quality biscuits. Marilan is now ranked in the top five biscuit companies in Brazil. Marilan enjoys a large domestic customer base in Brazil as well premium product sales in more than 70 countries on all continents.

CHALLENGE:

Automate the administrative systems of the company. This would mean replacing parallel controls — business-critical software that automates the spreadsheets, forms and manual controls that make up the company's core processes — with reliable, highly available, internally-developed PHP applications.

SOLUTION:

Marilan built an Administrative System of Internal Controls (SACI) that serves to support the enterprise resource program platform (ERP) that would integrate custom applications for departments across the company. The company implemented Zend Studio Integrated Development Environment to create applications in production. In addition, Marilan uses Zend Server in both development and production, where the company manages, monitors and realizes scales applications.

BENEFITS:

The SACI platform was a huge success within Marilan, and continues to grow. Many existing parallel controls have been replaced with custom applications, which consolidated the system and its applications. Gains in performance, increased system reliability and reduced application development time have indirectly reduced IT costs.

Automating Enterprise Administration with PHP

Marilan's headquarters boast a modern industrial complex with a big production capacity and a high level of technology and automation. The production and logistics operations are integrated ensuring a simplified flow between Marilan's headquarters and its distribution centers and regional management branches. For Marilan, the next logical step was to extend automation to the company's administrative organization.

"We developed an Administrative System of Internal Controls (SACI) to help support the ERP to automate and centralize the internal administration of our entire company," said Rogério Machado Mendonça, System Analyst at Marilan. "Our first SACI launch involved automating our core processes related to human resources and employee performance evaluation. The project was so successful that several other company departments requested that their processes also be automated and centralized as part of SACI."

With demand for automation increasing across the organization, "we needed to develop a reliable, highly-available system that would encompass all of our company's departments, and we wanted to create this in-house," said Mendonça. "We needed our data to allow concurrent access to multiple users at a time. In order to facilitate that, we wanted to do away with the company's parallel controls, which were duplicative systems that didn't allow concurrent access, such as spreadsheets, forms and manual controls processes. We didn't want to buy additional external software or applications to accomplish the automation we wanted."

Cost was a factor. "Due to the high costs surrounding the customization we required for SACI, we decided to add additional features through a custom-designed internal system with low development cost. We chose PHP after evaluating a number of programming languages, including Java. It was easier to find PHP workers in our region, and because we wanted to obtain reliable support for our systems, we chose Zend, since they wrote much of today's PHP language and hold deep knowledge as a result."

Zend Handles Rapid Enterprise System Growth

Today, the ever-popular SACI continues to grow daily. "Our PHP system runs on Zend Server," Mendonça stated. "It is divided into modules. Each module corresponds to a business-critical parallel control that has been automated."

"More than 100 different modules are accessed daily through SACI's automated control systems. These applications and the requests to access them are always evolving quickly,

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Rogério Machado Mendonça, System Analyst at Marilan

and Zend helps us deal with them. The SACI runs 1,300 PHP scripts and over 800,000 lines of code. And the requests do not stop!"

After being approved by the corporate organization, each new SACI application is created in the Zend Studio IDE programming environment, enabling faster speed of development.

"Today we use Zend Studio in its entirety in production. We take advantage of all of its great resources, including the debugger, remote access and integration with Zend Server," said Mendonça. "We use Zend Server in both development and production environments, which are independent and operate on their own virtual servers. In each environment, Zend Server manages and integrates Zend Studio on the Ubuntu Server OS. One of our most popular production applications, which runs on the Zend Server platform, has over 300 users and averages 20 concurrent accesses. 90 percent of the system accesses an Oracle database (10g), while some modules use SQL Server and other databases."

Increasing ROI in More Ways than One

SACI is an ongoing success. "We exceeded our project goals, eliminating many existing parallel controls while improving our relationship with the users of our system as a result," said Mendonça. "By developing our business-critical automated controls in-house, Marilan has benefited directly from reduced IT costs and indirectly with the gains in performance and reliability of automated processes across the company."

"Zend has considerably reduced our development time, so that end users can see their applications go into production much more quickly than before," said Mendonça. "Our server management has become much more transparent with Zend Server, and changes to settings now happen when systems are available. We didn't even have to hold an initial training because Zend's tools were so easy to use."

In addition to making Marilan's coding process more agile, the Zend solution helped the IT team correct a number of errors. In 2008, before adopting Zend Server, Marilan's server had to be rebooted 56 times, about once a week. In 2011, after Zend Server had been fully installed, Marilan had only one server reboot, for a planned update.

"The most impactful and visible benefit for end users is that our environment is now highly available," said Mendonça. "We were able to solve the problem of lack of administrative automation with existing internal resources and at almost no cost, developing apps based on open source software. With each new application we add that enables more automation, we increase our return on investment. The payoff has already surpassed the investment used in this project for this year."

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