

Carlo Gavazzi Automation relies on PHP & Zend Solutions to modernize enterprise applications



www.gavazzi-automation.com

Customer: Carlo Gavazzi Automation

Geography: Italy

Industry: Industrial automation

Challenges:

- Respond faster to growing business requirements that demand a Web infrastructure
- Modernize existing 5250 applications by implementing Web-capabilities while continuing to enjoy the existing application's code as the backbone of business methodology.
- Find reliable and readily-available PHP tools to integrate seamlessly with the many i applications that support operations.

Solution: PHP, Zend Solutions for IBM i, Zend Framework and Zend Training

By integrating PHP and Zend Solutions for IBM i, Gavazzi Automation is able to leverage existing i application business methodologies, while reducing application development time and offering a user-friendly modernized Web interface.

Introduction

Carlo Gavazzi Automation ("Gavazzi") is a global electronics group focused on the design, manufacture and marketing of electronic equipment for industrial automation and information processing. Gavazzi components are installed all over the world in a huge variety of state-of-the-art, hi-tech products and processes.

Gavazzi employs over 1100 people over multiple sites in Europe, North America and Asia where by effective business unit integration plays an important role in day-to-day operations. Accordingly, Gavazzi Automation relies on a centralized IT department, the heart of which is based on IBM Power Systems running the i operating environment. To meet customer demands, Gavazzi must continuously adapt processes to market needs so they can provide technologically innovative, high quality, competitive solutions.

Leveraging enterprise i applications on the Web

Web-based applications offer more functionality and more user-friendly interfaces than the traditional 5250 green screen. This is particularly true with Web 2.0-style applications (AJAX). Taking into consideration that PHP powers over 45% of AJAX applications¹, Gavazzi decided to expand their development capabilities to include PHP. This allows them to respond faster to growing business requirements that demand a Web infrastructure. They are currently adopting Web-procedures that will co-exist with their commercial procedural languages, such as COBOL and RPG.

Gavazzi's IT department are using PHP to modernize their legacy 5250 applications. Implementing PHP to Web-enable their existing i applications improves both their response time and information consistency.

"We chose PHP because we can achieve full integration with our existing server system via Zend Core for i. We previously developed in ASP, however ASP required an external server to integrate the application with i. Removing this external server has significantly improved integration and performance."

Ivano Mangiarotti - IT Manager
Carlo Gavazzi Automation

1. http://www.surveymonkey.com/sr.aspx?sm=fXLiKcnKID6cO5bRe961aBB6NCCWytRyY3rParAYmwa_3d and http://www.regdeveloper.co.uk/2008/01/02/ajax_tools_survey/

"For our programmers who come from languages such as RPG or Visual Basic; PHP is easy to learn. With Zend's professional Training Program, our programmers were able to quickly and easily improve their expertise and gain new skills. Although we are still learning PHP, I have already observed an expert programmer developing something in 10 days using PHP that previously would have taken two months – this is obviously a major advantage for us."

Ivano Mangiarotti - IT Manager
Carlo Gavazzi Automation

"For users, the initial impact is enhanced application usability and a better user experience as a result of the extensive use of AJAX and SOA components for an improved interface."

Ivano Mangiarotti - IT Manager
Carlo Gavazzi Automation

One such application is their i (DB2) database-backed Intranet which provides a global analysis of company sales. Additionally, Gavazzi is in the process of implementing Web-capabilities in their CRM which contains crucial document-management features and is mission-critical for their sales force automation processes. Future planned developments include: Web interfaces for additional applications, extending the existing ERP system with new features and developing a Business Intelligence application.

For these transitions, Gavazzi searched for reliable and readily-available PHP tools to integrate seamlessly with the many i applications that underpin their business operations. Their goal was to facilitate a swift conversion to the Web-model while at the same time continuing to enjoy the existing application's code as the backbone of their business methodology. The IT team at Gavazzi chose Zend Solutions as their tool-kit.

The Zend Solution

"We chose PHP because we can achieve full integration with our existing server system via **Zend Core for i**. We previously developed in ASP, however ASP required an external server to integrate the application with i. Removing the external ASP server has significantly improved integration and performance." said Ivano Mangiarotti - IT Manager – Carlo Gavazzi Automation

"For users, the initial impact is enhanced application usability and a better user experience as a result of extensive use of AJAX and SOA components for an improved interface." added Mangiarotti.

"For our programmers who come from languages such as RPG or Visual Basic; PHP is easy to learn. With **Zend's professional Training Program**, our programmers were able to quickly and easily improve their expertise and gain new skills. Although we are still learning PHP, I have already observed an expert programmer developing something in 10 days using PHP that previously would have taken two months – this is obviously a major advantage for us."

Another fundamental reason Gavazzi chose PHP is the close Zend-IBM partnership, which is oriented towards improving and innovating development tools for the i operating environment. "Our entire business is based on IBM hardware and we feel safe in the knowledge that we are running applications supported by two well known and professional companies who provide tools which have been extensively tested for interoperability and performance. This gave us the confidence we needed in our decision to migrate our applications," said Ivano Mangiarotti.

Gavazzi have standardized on **Zend Framework** as the basis for Web application development. One of the major benefits experienced from using this tool is shortened development time when writing fixes and new features. They have implemented Zend Framework's MVC pattern in their applications so that the projects are organized dividing business logic from presentation logic. This structure leads to quick and easy problem identification and correction. Zend Framework also offers Gavazzi's developers the advantages of learning PHP from well written code and the opportunity to write complex features without extensive PHP experience.

Zend Studio for i has been essential for Gavazzi during their migration process. Zend Studio operates perfectly with Gavazzi Automation hardware systems that are based almost exclusively on the i operating environment. In fact, typical functions of these systems, such as database calls, can be launched directly from Zend Studio due to the built-in integration between i and Zend Studio.

"This is extremely practical and saves time" says Ivano Mangiarotti, Gavazzi Automation IT manager.

The code-completion feature of the Zend Studio is also very beneficial as it helps us complete the PHP code correctly, even for those programmers who don't have extensive experience. We also appreciate the fact that we can launch SQL commands [within Zend Studio] to extract data from the DB2 database." In addition we utilize the ftp connection to i and PHP Manual integration

"We chose PHP because of the close Zend-IBM partnership. Our entire business is based on IBM hardware and we feel safe in the knowledge that we are running applications supported by Zend and IBM who provide professional tools which have been extensively tested for interoperability and performance. This gave us the confidence we needed in our decision to migrate our applications,"

Ivano Mangiarotti - IT Manager
Carlo Gavazzi Automation

Looking forward

Gavazzi plans to develop additional applications using PHP. Therefore they have allocated resources to train their developers in PHP, and rely on Zend's professional training curriculum to educate the team.

"Gavazzi Automation is just the first Italian company to adopt Zend Solutions for i. PHP and Zend Solutions of i are a natural choice for companies looking to modernize their legacy 5250 applications" Mauro Pugliese, General Manager of Zend Italy. In fact, it is frequently highlighted that the system integration is almost immediate, with a significant decrease in time-to-market as a result of reduced time required to reach full operational status."



The PHP Company

Corporate Headquarters: Zend Technologies, Inc. 19200 Stevens Creek Blvd. Cupertino, CA 95014, USA · **Tel** 1-888-PHP-ZEND, 1-888-747-9363 · **Fax** 1-408-253-8801
Central Europe: (Germany, Austria, Switzerland) Zend Technologies GmbH Bayerstrasse 83, 80335 Munich, Germany · **Tel** +49-89-516199-0 · **Fax** +49-89-516199-20
International: Zend Technologies Ltd. 12 Abba Hillel Street, Ramat Gan, Israel 52506 · **Tel** 972-3-753-9500 · **Fax** 972-3-753-9501
France: Zend Technologies SARL, 5 Rue de Rome, ZAC de Nanteuil, 93110 Rosny-sous-Bois, France · **Tel** +33 1 4855 0200 · **Fax** +33 1 4812 3132
Italy: Zend Technologies, Largo Richini 6, 20122 Milano, Italy · **Tel** +39 02 5821 5832 · **Fax** +39 02 5821 5400

© 2007 Zend Corporation. Zend and Zend Core are registered trademarks of Zend Technologies Ltd.
All other trademarks are the property of their respective owners.

0220 -M-CS-0508-R1-EN