



## CASE STUDY: Swift Transportation

Writing higher-quality, more maintainable applications

### INDUSTRY

Transportation

### APPLICATION

PHP development

### WEBSITE

[www.swifttrans.com](http://www.swifttrans.com)

### CHALLENGES

- Develop web applications on the IBM i platform
- Improve productivity
- Improve application quality

### SOLUTION

[Zend Server](#)

[Zend Framework](#)

[Zend Professional Services](#)

### RESULTS

- Higher-quality applications
- More maintainable applications
- Increased productivity

“The Zend portfolio makes life so much easier.”

JOSHUA PACHECO, SOFTWARE DEVELOPER AND ANALYST AT SWIFT TRANSPORTATION

Swift Transportation is the largest full-truckload motor carrier in North America. Based in Phoenix, Arizona, the Swift terminal network includes over 40 full service facilities in the United States and Mexico. Swift provides a full line of service solutions, including intermodal, refrigerated, and logistics management.

### Tackling web-based development on the IBM i

This story begins about seven years ago when Swift turned to Zend Server to tackle web-based development on the IBM i platform in an effort to modernize their applications. The Zend Professional Services team provided Zend Server onboarding training, where Swift learned about the advanced features and functions of Zend Server — such as monitoring and Z-Ray’s application insight — and how to apply these in their development workflow. The Zend Server onboarding training was then followed up with PHP training. These training sessions gave Swift the foundation they could build on for better software practices.

Swift Transportation is currently leveraging an array of features from across the Zend portfolio to elevate productivity and application quality.

### Swift takes advantage of powerful Zend Server features

The Zend Debugger in Zend Server is one of their most-used features, allowing developers to test applications and detect errors in the code. Monitoring helps Swift identify problems in both production and QA testing.

“In many cases, we can spot the problem right there without diving into the log file or even replaying what the user experienced,” says Guido Faecke, IT project manager.

The Zend team introduced Swift to Zend Server Data Cache during the onboarding training, providing a typical use case for this feature — caching of database query results — which Swift is now using to drive performance and productivity.

The results of an SQL query are cached into the server’s memory and hence improves response time by avoiding the need to make a database connection, build the query, execute it, and retrieve the results.

The Zend Server Job Queue is also helping with the performance of their applications. Some screens in their HR apps require the execution of resource-intensive database queries, the results of which cannot be cached because they need to be up to date. However, DB2's SQL Query Plan Cache is very important to the execution of those queries, regardless of when they might be run. By periodically running similar queries, Swift keeps the Plan Cache current, so that queries are faster.

### **Zend Framework is “like owning your own library”**

Zend Framework is also an integral part of the development team's toolkit, providing many loosely coupled components that can be used independently.

“It's like owning your own library,” says Joshua Pacheco, software developer and analyst. “If I have to build a car, I don't have to go down and forge the bolts and nuts. I have engines built for me. I have radios built for me. I can put it together the way the customer wants.”

For Pacheco, one of the highlights of Zend Framework is that his team doesn't have to build the Model-View-Controller (MVC) architectural pattern from scratch. Zend Framework provides an advanced MVC implementation that can be used to establish a basic structure for Zend Framework applications.

Another highlight of Zend Framework is that its decoupled nature makes it easy to use with third-party tools like PHPOffice — a collection of free open source PHP libraries for reading and writing files with different formats. “I don't have to build that using the old ways. That benefits the business. We're talking saving months of development,” says Pacheco.

Elevated productivity has been one of the primary benefits of using the broad toolset offered through the Zend portfolio. “We all agree on the time savings,” says Faecke.

### **Long-term PHP support gives Swift security, flexibility, and freedom**

Swift Transportation is leveraging an older version of Zend Server in production, as they are using PHP 5.6. Swift is relying on long-term support and ongoing maintenance for PHP 5.6, services which are distributed as part of Zend Server. Zend provides commercial support and security fixes for PHP 5.6 until the end of 2020 at minimum. These services give Swift the flexibility to continue running their applications safely while also giving them the freedom to upgrade their environment when it suits their business.

“I hope by next year at some point that we upgrade all of our production to the latest and greatest version of Zend Server to take advantage of the latest and greatest in PHP,” says Faecke.

### **Advice for developers everywhere: “Don't be afraid of the unknown”**

Pacheco has some advice for his colleagues in the development community who are still relying on antiquated PHP technology and practices: “Don't be afraid of the unknown.”

“The Zend portfolio makes life so much easier,” he says. “There are some businesses that are doing things their own way without the help of these frameworks or servers. They become so entrenched in it that when problems arise, they work on trying to perpetuate the old system, when it might be better to stop and consider using something like the Zend portfolio.”