

# HRsmart and Zend Deliver Technology for Talent Management



Customer: HRsmart, Inc.

Geography: Based in Richardson, Texas with operations in Argentina, Brazil, Canada, the Middle East, South Africa, and the European Union.

Business: Modern Human Resources Management Solutions

- Challenge:
- Improve page loads and other performance metrics for large customers
  - Offload burden of maintaining legacy Perl code
  - Migrate to professional-grade object-oriented language (PHP 5)
  - Support global business growth with localization
  - Boost application availability through proactive monitoring and diagnostics

Solution: Zend Studio PHP IDE and Zend Server Web Application Server

*"Between the performance optimizations we've achieved with Zend web application server and the implementation of session clustering in our data centers, we have saved over \$85,000 in hardware costs. On top of that, we have saved hundreds of man hours..."*

**Shane Allen**  
VP of Systems Administration  
HRsmart

HRsmart provides software technology, expertise and support services to help companies recruit, manage and retain top performers. The Company's award-winning Talent Management Application Suite offers applicant tracking, performance management, learning management, career development and succession planning in a single unified platform. HRsmart solutions are used by more than 1 million HR professionals at 600 organizations ranging from 50 to 200,000 people. Industry giants like Monster, Profiles International and Administaff rely on HRsmart as the technology platform of choice for their global talent management suites.

## PHP in the People Business

HR managers face the challenges of competition for skilled labor amidst pressure to streamline operations and reduce costs. For more than a decade, HRsmart has advocated for development of a comprehensive workforce planning and management strategy, facilitated by technology. Today, HRsmart is the leading provider of this technology — which enables customers to recruit, manage and retain employees more effectively — and the technology runs on PHP.

HRsmart's Talent Management software is delivered as a service (SaaS), and hosted by HRsmart with convenient Web access for customers. The Company's applications combine applicant tracking, performance management, learning management, career development and succession planning in a single unified platform running PHP.

"We developed our Talent Management suite to meet exacting requirements," said Shane Allen, VP of Systems Administration at HRsmart. "Our top priorities are performance, scalability, reliability and localization support. Developing for these requirements led us to adopt PHP."

Up until a few years ago, HRsmart was using Perl to develop its Talent Management solution. As the business grew, developers found the scope of Web application development had outpaced Perl's capabilities to meet their needs. They looked at PHP, and decided to go with Zend because of the many application development and management advantages offered by its solutions.

"Seeing the capabilities of Zend's integrated monitoring, debugging and performance optimization tools convinced us to make the full migration from Perl to PHP," said Allen. "We began using the Zend Studio integrated development environment (IDE) and soon afterward, we adopted Zend web application server technology to manage and scale our PHP applications in the production



The PHP Company

environment. Virtually right out of the box, Zend not only exposed problematic issues in our existing code that we weren't aware of before, but it also revealed opportunities to improve performance and reliability."

Allen's team also liked Zend's broad commitment to the evolution of PHP through open source projects and commercially with new products, training and consulting. Looking ahead, HRsmart considered it a strategic advantage that they could tap into the growing community of professional PHP engineers and an abundance of tested, reusable PHP code.

## HRsmart and Zend: A Win-Win for Customers

Among HRsmart's customers is a \$6 billion beverage company employing about 20,000 workers in North America. In an average month, the organization handles an average of 30,000 to 40,000 job applications from which they process new hires. To handle this workload, the beverage company relies on HRsmart applications running Zend PHP.

Using Zend Studio, Allen's team was able to take a phased approach to performance management. Zend Studio's built-in Profiler allowed the team to profile their code in operation, including custom code designed to meet the beverage company's specific application requirements, and identify which components could be optimized. Performance improvements were made in PHP code, database connectivity requests and database queries. After identifying excessive calls to helper functions within the application, they were able to increase the efficiency of those function calls by more than an order of magnitude.

"If we had any initial concerns about migrating from Perl to PHP, they were alleviated by our use of Zend's complete and tested PHP stack," said Allen. "The functionality of the profiler and Zend Studio integration resulted in savings of an estimated 80 hours of developer time in profiling our applications."

## Easier Troubleshooting, Better Performance

Allen's team also wanted the ability to proactively monitor high-volume activity across the HRsmart applications in the beverage company's production environment. Zend provided a new level of visibility and integration needed to help the team quickly identify, analyze and resolve potential bottlenecks or errors before they could impact the beverage company's operations.

"The advanced error logging that exists in the Zend Administrator Console, the tie-in to Studio and the ability to view the state of the application at the time an error condition or anomaly happens has also provided us dramatic time savings."

The HRsmart development team now makes it a regular practice to review the Console output to monitor and continually improve upon these optimizations.

"Using Zend's web application server profiler, we were able to quickly

optimize slow page loads caused by a MySQL database access issue. With Zend Server's op-code caching, we increased performance with no application changes, and saw a 385% increase in page load capacity (loading 385 pages in the time it previously took to load 100 pages). As a result, we kept online recruitment processes running smoothly and met strict service level agreements."

## Real Scalability

"Session clustering with Zend was also a big benefit, allowing us to synchronize session data across a cluster of PHP servers with real scalability. If a particular client's activity was creating a load imbalance, Zend would trigger alert notification emails to our inboxes so we could either move to another server or add a new server to the cluster."

"The quality of service we provided to this beverage industry leader represents the quality we need to deliver for all our customers," said Allen. "HRsmart is currently hosted on two of the beverage company's front-end servers and one database back-end. We store and process about 40 gigabytes of data for their hiring needs, and then there are other applications supported. Zend's Administrator Console provides a consolidated interface that facilitates troubleshooting and makes high availability and reliability across a cluster easier to sustain."

Today, HRsmart serves more than 500 customers from multiple data centers with over 100 servers. Its home base is North America and global operations include South America, the Middle East and South

Africa. In-house developers have worked closely with global teams to leverage Zend's UTF character set for multi-language localizations in order to address cultural sensitivities and maintain product and service quality in those markets.

## Smart Application Development, Satisfied Customers

"Between the performance optimizations we've achieved with Zend web application server and the implementation of session clustering in our data centers, we have saved over \$85,000 in hardware costs. On top of that, we have saved hundreds of man hours because we simplified configuration, tuning and scale up activities, and we didn't have to invest the time to develop a session clustering solution in-house. This increased productivity resulted in even higher dollar savings than what we achieved on the hardware side."

According to Allen, "This freed up our team to focus more on application customization. This is the work that helps us meet individual customers' requirements for talent management technology — which vary widely across companies, industries and geographies. We've seen increased customer satisfaction with HRsmart applications and we attribute a lot of that to our adoption of PHP and Zend solutions for the full application life cycle."

*"We've seen increased customer satisfaction with HRsmart applications and we attribute a lot of that to our adoption of PHP and Zend solutions for the full application life cycle."*

**Shane Allen**  
VP of Systems Administration  
HRsmart