

Connecting Students and Schools in the Cloud



CUSTOMER:

Mediaspike is a leading provider of high quality education leads to online colleges and universities offering accredited degree programs.

CHALLENGE:

- Managing web workloads on a single dedicated server
- Lack of real-time visibility into the health of business-critical web apps and meaningful analytics on campaign performance
- Traffic spikes resulting in sluggish response times
- Increasing need to add and launch new services more quickly

SOLUTION:

Mediaspike chose the RightScale Zend PHP HA Solution Pack to help simplify and speed deployment, automate scaling and achieve high availability of reliable, high-performing applications in the cloud.

BENEFITS:

- Improved response times by 30% and more, across thousands of processes per minute
- Introduced auto-scaling with HA
- Reduced capex by thousands per month
- Achieved continuous integration and faster app delivery

Mediaspike websites connect prospective students with schools, and its multi-channel lead generation campaigns deliver qualified rather than generic leads. With online and campus colleges and universities vying to attract today's best and brightest students, the competition begins with students' online investigation of schools and degree programs. The ability of Mediaspike to quickly adapt and scale its web-based services to the changing needs of both students and schools is tantamount to its success.

Business Growth Shifts Focus to Cloud

"When we launched Mediaspike we saw an opportunity to deliver superior lead generation services and outperform entrenched competitors," said Michael Speicher, CEO of Mediaspike. "To succeed, we had to be forward-looking about application life cycle management and the underlying technology. Our early move to the cloud was motivated by our desire to sustain business growth in an intelligent way, and it paid off."

Before moving to the cloud, Mediaspike relied on a single, dedicated server at a hosting provider. With a growing client list and successful marketing initiatives driving more traffic to its sites, and 25-30% growth projected per quarter, it became clear that business requirements would soon exceed the capabilities of the existing hardware.

According to Mediaspike's Technology Director Mark Moline, "We were caught in a cycle of increasing our server footprint, which meant delaying campaigns while we bundled up our web assets for syncing to a new server. We also wanted to better manage traffic fluctuations, and gauge campaign effectiveness, but the effort and cost to take apps offline for updates or analytics discouraged us from doing so with any frequency. Our hosting costs were going up, and we weren't gaining in terms of agility or productivity."

Researching its options, Mediaspike found the pricing model and significant flexibility and elasticity offered by the cloud was the right choice at the right time. According to Moline, "We considered several commercial offerings, and chose the RightScale Zend PHP HA Solution Pack for its completeness as well as its integrated and supported Zend Server Cluster Manager."

"With RightScale and Zend we had a solid application deployment and management platform for the cloud, right from the start."

Michael Speicher, CEO, Mediaspike

Leveraging Zend PHP and RightScale Platform

Mediaspike deployed the RightScale Zend PHP HA Solution Pack on a LAMP stack with Red Hat Enterprise Linux, Apache, MySQL and Zend PHP. "We've been using PHP since v3, so you could say PHP is in our DNA," said Moline. "Having a complete, tested PHP stack supported by Zend is a great advantage." Mediaspike's clustered server environment includes multiple load balancers bouncing to Apache / PHP App Servers, and two MySQL master-slave databases that span availability zones, with one dedicated to data warehousing.

Moline's team was able to ramp up quickly with RightScale and Zend and leverage the benefits of a solid application deployment and management platform including pre-built and easily customized server templates to help simplify and accelerate installation and configuration steps.

"Using RightScale and Zend, it's easy to hone the deployment environment, create duplicates for dev and test, make modifications, configure new servers, and prototype quickly," said Moline.

The Solution Pack also handles details of syncing sessions and settings between the server nodes, auto-scales on demand, and eases configuration of load balancers and the set up of MySQL master-slave replication. In Moline's words, "session clustering keeps everything in sync and ensures application HA if any server in a cluster goes down. There's no tinkering, no need to bog down our database or worry about which server node a request lands on. It all works flawlessly."

Mediaspike met deadlines for its one-month cut-over plan with time to spare. "We took advantage of RightScale and Zend professional services during onboarding," says Moline, "and we found that virtual on-site sessions and 'ask-any-question attitude' of RightScale and Zend were outstanding. We probably saved two weeks just by using these services."

The Solution Pack also provides Mediaspike with visibility and control of the application environment. According to Moline, "I sleep better at night because of the proactive monitoring, alert notifications and code tracing across our clustered environment. Dashboard graphs reveal the health and performance of the entire deployment at a glance. If an error or bottleneck is detected our team is automatically alerted. Code tracing provides a full execution history, pinpointing root cause issues for quick resolution, so our customers are assured of a highly productive online experience."

Mediaspike gets high scores on app acceleration, scalability and customer satisfaction.

Moline's team moved from a single hosted server solution to a new system that spans more than a dozen servers across dev and production, at a significantly lower cost per server. As Moline describes it, the project is more manageable than if they had done it with their own hardware and a 'colo', which would have required a full-time system administrator.

Having adopted a continuous integration model for application development, Mediaspike is now managing up to a dozen or more integrations per day. Using the RightScale Zend PHP HA Solution Pack, deployment cycles are shorter because the build-deploy process is more stable. Automation helps reduce human error and sustain repeatable and reliable deployments. "When we need a new server, we just create it, and send it away when we're done. The bottom line: we've reduced capex to the tune of thousands per month."

"Everything about our application environment is easier to build, test, deploy and maintain than it was before. With the automation that the RightScale Zend PHP HA Solution Pack brings, it's point and click now. We've gained the confidence to push new ideas into production quickly and frequently, knowing that our architecture will handle it. And we can roll back to an earlier version if we ever need to. We are able to adapt and scale to meet business demands, run real-time analytics without taking apps offline, and achieve cost savings through better resource utilization."

"As for ROI, our measures are the ability to scale with business growth, improve operational efficiency across the application life cycle, and most importantly, accelerate delivery of high quality and reliable apps. We are achieving ROI by all of these measures, and doing so without adding capex or headcount. We are supporting more clients and launching more new campaigns as a result. Our customers are happy because the sites load faster, and prospective students are happy because we're providing a more productive experience. It's safe to say we'll be using RightScale and Zend for the long-term."

Improving App Performance & High Availability

- improved response times of 30% and more, multiplied across thousands of processes per minute
- increased number and frequency of lead generation campaigns, with more robust logging and analysis of data, paving the way for new and improved client services.
- auto-scaling delivered additional capacity on demand
- added ability to mine back-end campaign data and generate ad hoc reports without disrupting customer-facing processes

Creating a Continuous Integration Environment

- push-button simplicity eases management of continual campaign-driven business changes involving hundreds of offers
- reduced database replication time from hours to just 10 minutes for testing in any environment
- robust architecture supports rapid development and roll out of new features