Cisco Uses Zend PHP Solution to Improve WebEx Products Free-Trial Experience and Win Online Conferencing Customers

CUSTOMER:

Millions of people rely on Cisco WebEx for conferencing and collaboration solutions that combine real-time sharing with phone conferencing and video. Cisco WebEx is part of Cisco Systems, Inc., based in San Jose, CA with global operations in the Americas, EMEA and Africa.

CHALLENGE:

Cisco wanted to drive more WebEx business through its partners using free trial offers as a catalyst of lead generation. The legacy free-trial system had been developed over a long period, with short-term solution updates that made it hard to maintain. Cisco WebEx needed an automated trial platform with a high degree of efficiency, reliability, and scalability to fully support its growing partner community and increasing demand for online conferencing.

SOLUTION:

Cisco deployed Zend Studio IDE, Zend Server and Zend Framework. Using the Zend PHP stack, Cisco built a new trial-offer platform, a mobile website, and an internal project management application, and it redeveloped its webinar marketing platform. Zend's monitoring, code tracing, job queuing, and optimization capabilities helped the organization improve end-user experience of trial offers by 68% (based on best time to complete trial signup), and achieve 20-30% code reuse to save development effort and accelerate time to market by an average of 1.5 months for each project.

Borderless Business Collaboration

WebEx is a conference and collaboration solutions product family of the Collaboration Software Group at Cisco Systems. Every month, more than one billion minutes are clocked while people are utilizing WebEx services in order to communicate and collaborate. For growing numbers of organizations around the globe, it's hard to imagine doing business effectively without the benefit of the borderless technology that Cisco provides.

To support growing demand for WebEx solutions, the company's Web Marketing Team wanted to drive more business through its partners. They focused on one of their most effective online tools for lead generation and conversion — the free 14-day trial offer for online conferencing. According to Phillip Shipley, Manager of Web Development for WebEx, "Our Web Marketing Team needed a reliable and scalable online trial-offer platform that could fully support WebEx solution partners."

"We wanted an automated trial-offer platform with easy self-service options for our partners, but the code in our existing application was inefficient, it lacked flexibility, and the application was hard to maintain or scale. The fact that it might take 2-3 days to set up a trial on a co-branded promotion was just unacceptable. We needed a platform that would streamline the sign-up experience with a Web-based wizard, collect the prospect's qualifying information, deliver that to our CRM system, and create a host account for the trial offer. And we wanted the process to be completed in minutes, not hours or days."

Productive Application Development with Zend PHP

"Our experience was that the LAMP stack could provide us with the kind of quality technology we needed to revitalize our Web marketing platform. For the PHP component of LAMP, we turned to Zend Technologies."

"We started with Zend Studio in order to have a consistent IDE for our team to use and work with collaboratively. We chose Zend Framework because it was clearly the PHP framework most focused on the enterprise, with a mature, open-source development lifecycle, and highly flexible implementation options. Based on its reputation in the developer community as the leading PHP application framework, its open-source nature, and the proliferation of reusable PHP code, we felt Zend Framework would serve us well as a building block for our ongoing application development. We chose Zend Server for its monitoring, optimization, and scalability features."

"The fact that Zend tools are integrated and provide the extensions and drivers for immediate functionality within the LAMP stack was a big plus. Our PHP application servers are running on Red Hat Enterprise Linux and Apache with the Zend Server Web application server on all instances, as well as a MySQL Enterprise database at the back end."

"With the release of our new free-trial platform powered by PHP and Zend, our end user experience has improved by 68% (based on best time to complete trial signup). We've also been able to leverage its code base for the other projects to gain a 20-30% code reuse benefit, which saved us weeks to months of development effort on each of the subsequent projects."

Phillip Shipley, Manager of Web Development, WebEx Cisco Systems

"In our business, we are constantly innovating our service, and our online conferencing platform never sleeps. Because our products offer five-nines availability, so must our marketing websites and free trials. For our marketing application development/QA/staging and production environments, we use 100% virtualized servers from VMware. For staging and production, we use clusters of servers. Should one of our data centers go offline, or all the servers crash, we need a complete failover solution whereby another data center will automatically take over and continue serving our site. Zend provides vital support for shared sessions and session clustering in a load balanced environment. With the convenience of a virtualized environment from VMware and flexible licensing from Zend, we can be creative about how we structure our applications and use Zend Server Session Clustering to share sessions across applications on different virtual clusters."

"Zend Server's centralized event monitoring, code tracing, and notifications help us understand what is happening in our production environment. With the heightened awareness, we can resolve issues faster and proactively implement additional monitors to track improvement. Taking advantage of the modular nature of Zend Framework, we used Zend_Log for a standardized logging interface and used the Zend Server Monitor writer to easily create our own custom events. Debugging with Zend Studio, which is tightly integrated with Zend Server, is by far the fastest way to resolve an issue. Zend Server's ability to capture an exception in a way that allows us to launch a line-by-line debugger fully emulating the request/server environment at the time of the error is remarkable."

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"With Zend Server's Job Queue, we have improved trial account provisioning by decoupling the user's session from the provisioning process. This allows us to complete provisioning even when a temporary problem occurs during account creation. Now we can use the same interface to schedule tasks like deactivation of dropped accounts, or collection of usage metrics, to take place during non-peak hours. In essence, Zend has helped us improve our trial-provisioning success as well as the overall user experience of trial offers for WebEx products. The best part is that, since the provisioning process is now asynchronous with signup, users aren't kept waiting."

"Using Zend as our PHP application development solution, we built our new free-trial platform, our mobile website (m.webex.com), an internal project management tool, and improved our webinar marketing platform.

With our WebEx marketing application teams working collaboratively, we have been able to develop a central repository of custom libraries for use with Zend Framework internally. We've also developed a Zend Framework + Doctrine + WebEx application template and used it to kick-start several new projects recently, which is saving us weeks to months of work each time because we don't have to start from scratch."

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"We built an internal project management application – our very own rapid resource management tool – to increase agility and code sharing across our teams. Here again, our use of the Zend PHP stack has led to a major productivity gain."

"Using the code-tracing feature of Zend Server, we have been able to improve page-load time by an additional 30% to further improve the user experience. The event monitoring features of Zend Server have also allowed us to proactively monitor for performance issues and then use the Code Tracing feature to further dig into our code to find the root cause. As an example, we encountered a certain page that loaded slower than expected, but using a combination of Code Tracing and MySQL Enterprise Monitor, we uncovered a bug in our ORM that was causing a few queries to execute many more times than necessary. One query, in particular, was running 192 times when it should have only run once. Performance optimization is always an ideal. Now we can make it a reality, with every iteration, by running a few traces and spending just a little time working on the longest running path to make incremental improvements with every release."

Shipley's team also used Zend Framework and PHP to build a new mobile site with interfaces to the WebEx mobile application running on major mobile platforms. They completed the site in a matter of days, in time for a major international conference where they announced support for mobile access to WebEx online meetings.

"PHP updates are automatically provided by Zend, and greatly simplified because with Zend Server we don't have to recompile", says Shipley. "Using standard OS packaging like yum makes it very easy for our system administrators to install and update Zend Server without special knowledge of Zend Server itself. Adding servers to our clusters is quick and easy by cloning a VM and adding it to Zend Server Cluster Manager."

Cisco Wins Top Honors for Value and Reliability

It is the drive for technology and service excellence that helped WebEx earn the #1 ranking in value and reliability in the CIO Insight 2010 Vendor Value Survey, conducted by Ziff-Davis Enterprise Research. Cisco earned this distinction by outperforming the top 40 vendors, including well-known technology industry giants. More than 35,000 customers use WebEx as their trusted resource for online meetings in which people can connect and collaborate to get business done.