Wrecking Ball Media Group

Tough act to follow

Wrecking Ball Media Group
Fort Lauderdale, Florida
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Results

- Completed sophisticated updates of web video and education portals with only two developers for each project
- Optimized 11,000 Flash® videos for viewing on desktops and mobile devices in less than three months
- Migrated to cloud hosting saving tens of thousands per year
- Helped reduce video portal user responses from 7 seconds to 70 milliseconds

Leading interactive agency continues to choose Adobe ColdFusion for large-scale web and application development projects

Developers at Wrecking Ball Media Group still talk about the detailed requirements document they were given in 2009, when Adobe hired them to create a next-generation version of Adobe TV. Similarly, staffers at Adobe still talk about the amazing job Wrecking Ball did meeting those requirements when the agency rebuilt the customized portal from the ground up.

When Adobe determined it was time to update the portal again, Wrecking Ball got the call. And just like a few years earlier, Wrecking Ball built an improved version of Adobe TV with Adobe ColdFusion and Adobe ColdFusion Builder™.

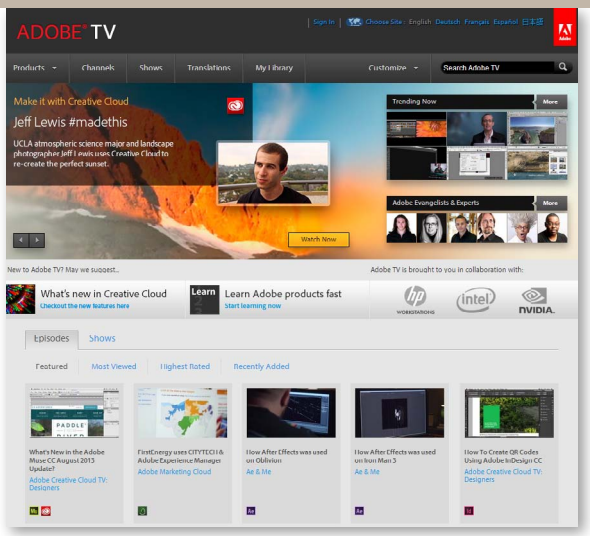
"A main priority for the relaunch was to make Adobe TV more accessible on tablets and mobile devices," says Aaron Greenlee, director of development at Wrecking Ball. "Mobile technology has changed dramatically since we last rebuilt the portal and we wanted to offer an improved mobile experience for people visiting Adobe TV to learn more about Adobe products and services."

Creating new features with minimal staff

Within three months, Wrecking Ball transformed a library of more than 11,000 individual Flash videos to formats and bitrates that would play on desktops and a wide range of mobile devices, at high or low resolutions, and be compatible with HTML5 and Adobe Flash Professional.

Additionally, Wrecking Ball has added numerous other features to Adobe TV. For example, featured marketing areas, calls to action, and featured playlists have been added to the Channels, Categories, Shows, and Products pages; Adobe evangelist and community experts now can have profiles; and the platform is able to recommend videos to users in real time. As impressive as all the outstanding enhancements to the Adobe TV experience is the fact that Wrecking Ball accomplished all the updates with only two dedicated developers.

By not requiring developers to compile pages to view changes and being able to rapidly prototype custom APIs, Adobe ColdFusion helped Wrecking Ball developers save time in extending Adobe TV to tablets and mobile devices.



Challenge

- Keeping costs low while adding numerous new features, including mobile optimization and multilingual video translation
- Migrating entire video portal to a new technology platform without disruption to service or quality
- Improving site performance by reducing response times

Solution

- Develop video and education web portals using Adobe ColdFusion and Adobe ColdFusion Builder
- Migrate Adobe TV to Amazon Web Services (AWS) Elastic Beanstalk using Adobe ColdFusion built-in application server, Apache Tomcat

Systems at a glance

Adobe ColdFusion

Adobe ColdFusion Builder

Adobe Marketing Cloud, including Adobe Analytics solution. Capabilities used include:

- Marketing reports and analytics

One developer focused on the Adobe TV back end, using Adobe ColdFusion to architect a common service layer and to build an externally accessible application programming interface (API) on the service layer. The other developer implemented the HTML/ColdFusion markup language (CFML) pages and the related cascading style sheets (CSS) and JavaScript.

"The dynamic language in Adobe ColdFusion allowed us to do less up-front planning and gave us the flexibility to easily adapt to change orders," says Greenlee. "Plus, ColdFusion saved us a lot of time by not requiring us to compile pages to view changes. Saving time all throughout the process really adds up to big savings."

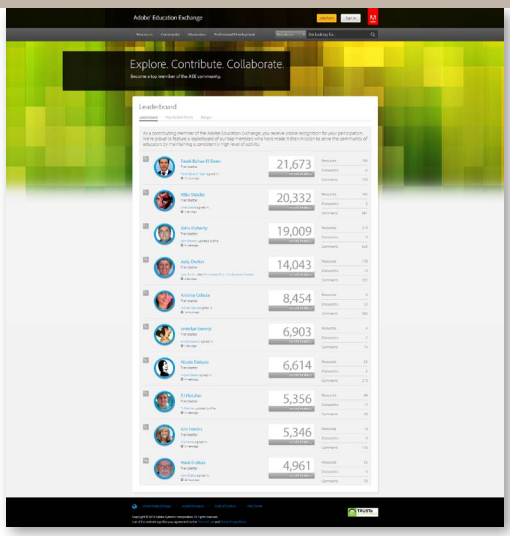
Many features in Adobe ColdFusion helped save Wrecking Ball time and money, such as native support of representational state transfer (REST) architecture, object relational mapping (ORM) integration, and app development with HTML5 WebSockets. REST support and ORM features helped Wrecking Ball rapidly prototype custom APIs. It will continue to be used to add new features that will extend the Adobe TV platform. On the back end, Wrecking Ball used WebSockets to improve content management. For example, WebSockets help enable bi-directional communication between users, thus allowing them to know when another user has changed the content they are viewing or editing.

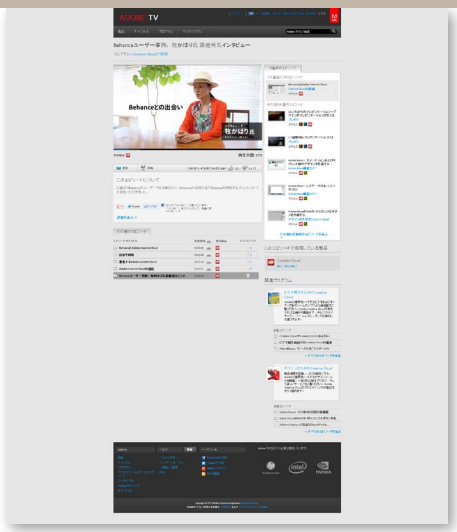
Wrecking Ball also helped migrate Adobe TV from a traditional server environment to the Elastic Beanstalk platform from Amazon Web Services, which will save Adobe considerably in annually in web hosting costs. Elastic Beanstalk supports six languages and application stacks for Java™ applications, including Apache Tomcat which happens to be the built-in application server in the latest version of ColdFusion.

"If ColdFusion wasn't running on Tomcat, we would have had a much more difficult time finding resources to make the transition to AWS," says Greenlee. "Many of the challenges were already solved and documented online by other Tomcat users."

Since the Adobe TV relaunch just over a year ago, more than two million unique visitors come to the site each month. The site averages about 10,000 requests per second and has gone as high as 25,000 requests per second. Despite the heavy traffic, there have been no performance problems with Adobe ColdFusion. In fact, response times to requests for content originally dropped from an average of 7 seconds to 300 milliseconds. After the migration to AWS, the Adobe TV homepage response times fell to 70 milliseconds.

For the rebuild of Adobe Education Exchange, Wrecking Ball again chose Adobe ColdFusion for features such as tag-based syntax that helped minimize the need for specialized resources. As the ambitions for the project grew, Wrecking Ball added new features and functionality while maintaining consistent technology for interacting with data sources, manipulating data, and displaying output.





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Other improvements to Adobe TV include the ability to track and report which videos are trending on the English, German, French, Japanese, and Spanish language versions of the site. Wrecking Ball also used the Adobe Open Source Media Framework (OSMS) for the Flash Video Player. Adobe ColdFusion also powered the Adobe Community Translation project—a collaborative endeavor in which volunteers may translate Adobe TV episodes into the language of their choice. The entire platform was created using Adobe ColdFusion and ColdFusion Builder.

Rebuilding Adobe Education Exchange

Since the last update of Adobe TV, Wrecking Ball has been busy working on other projects for Adobe, such as developing invitation-only websites for product launches and conducting tests on web experiences. One of the biggest projects is the recent update of Adobe Education Exchange. The online hub provides instructional resources, professional development, and peer-to-peer collaboration for educators.

Like the Adobe TV project, the rebuild of Adobe Education Exchange required only two dedicated developers, thanks to Adobe ColdFusion and Adobe ColdFusion Builder. Features in ColdFusion such as tag-based syntax helped minimize the need for specialized resources.

"The CFML tag syntax made sense quickly to new team members brought into the project. Developers who never saw ColdFusion or CFML before were able to be productive on the same day we introduced them to these technologies," says Todd Rafferty, senior developer at Wrecking Ball. "Logic could be added directly to a view to iterate a result set, hide or show items based on permissions, and so much more—without leaving the HTML context. Developers did not need to worry about opening or closing output streams, passing arguments into templates, or a host of other possible concerns. They could just edit a view, refresh the browser, and instantly see their changes. This is one of ColdFusion's oldest features—and it still pays dividends."

Seeing changes instantly was extremely helpful for making on-the-fly modifications. As the ambitions for the project grew, Wrecking Ball was able to add features and functionality while maintaining consistent technology for interacting with data sources, manipulating data, and displaying output.

Since the launch of Adobe Education Exchange just a few months ago, the community has acquired over 100,000 members. Wrecking Ball also continues to add features including a professional development section. The new section offers self-paced training courses from an expanding list of subjects. Educators can search for topics that interest them, and each course features instructional materials and content curated from the web. The flexibility of Adobe ColdFusion lets Wrecking Ball creatively solve problems and continually enhance these growing, organic platforms.

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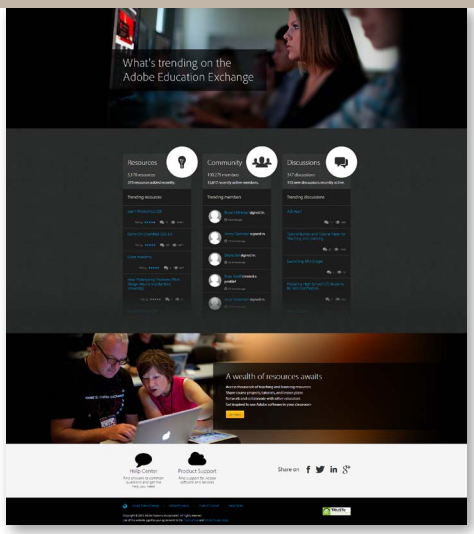

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"The flexibility to use Java in ColdFusion opens a vast ecosystem of libraries and utilities when we need them while allowing us to be agile," says Rafferty. "For example, we can use memory-cached libraries and AWS libraries in Java, wrap proxies around the services, and then manage them to our specific workflow demands. It lets us work the way we need to get the job done."

The newest Adobe project for Wrecking Ball involves creating a master location for uploading and publishing videos. By building video publishing features using Adobe Coldfusion, Wrecking Ball envisions building a portal through which users would be able to upload a video once and make it available to multiple locations, such as Adobe TV, YouTube, and Vimeo. Centralization would also make it much easier for publishers to collect and analyze data about their videos.

"This is a very exciting project," says Greenlee. "Uploading once and publishing to a variety of destinations could be extremely valuable to content producers. We're working hard to complete an internal version first and a public version soon after that."

For more information
www.adobe.com/products/coldfusion-family.html

Adobe

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