

Zaplive.tv
www.zaplive.tv



Zaplive Media GmbH was founded in November 2007 and runs the live-streaming-portal www.zaplive.tv, which allows users to easily create their own Web-TV-Station, giving them more than just the usual five minutes of fame. Zaplive Media GmbH also offers high class streaming solutions and cooperation models.

CHALLENGE

The Zaplive Media team wanted to empower anyone with a camcorder, webcam or simply a mobile phone, to build a live media presence on the web. "We think that the everyday person can easily produce more interesting programs than just another run-of-the-mill cooking show or cookie-cutter talk show," said Christian Steiger, Zaplive's executive. In practical terms, this meant creating a web-based tool that would act as a personal Web-Live-TV-Station.

The challenge was creating a technology powerful enough to create quality live streaming video that would be easy enough for anyone to use. Steiger and his team at Zaplive Media GmbH outlined some key criteria:

- **Compelling look & feel:** In order to attract the desired interest and activity, the site had to be visually compelling and easy to set up.
- **Standards compliance:** Given the innovative and interactive nature of the project, the team needed a platform that would easily integrate many other technologies and provide fluid connections to the world.
- **Collaboration:** The team envisioned the site as a virtual community of sorts and knew that they wanted to include Web 2.0 collaboration tools (wikis, blogs, message boards, chat, etc.) to facilitate communication and activity.
- **Scalability and long-term viability:** zaplive.tv was looking for a scalable solution that

would be maintainable in the long run on Microsoft Office SharePoint Server 2007 (MOSS 7) interface or the ACM Collaboration Portal, a full-featured portal platform tailored for case management and powered by EMC Documentum and Liferay Portal that taps into Liferay's built-in collaborative offerings.

RESOLUTION

A range of portal options were evaluated to host the site (Zope, PHP, .Net-Frameworks) before Liferay Portal was selected for its stability, developer-friendliness and performance. The openness of Liferay's platform allowed for easy customization and development of new tools. Ready integration with leading UI technologies like ICEfaces and jQuery also provided a basis for creating a dynamic and attractive product. Moreover, Liferay's adherence to industry standards (JSR-268, Hibernate, WSRP) and use of web services provided the easy integration and fluid connection to the "world" that zaplive.tv required. "The architecture is state of the art and we think it will fit our needs for the future," said Steiger.

The end product is zaplive.tv, a portal that allows any user to stream his or her own live broadcasts via the internet. All they need is a camcorder or a webcam, web access or simply a cellphone. zaplive.tv is not only live but also interactive with collaboration tools including live chat, and message boards and blogs that allow for ratings and comments on single broadcasts.

TECHNOLOGY

The zaplive.tv application is based on a clustered Tomcat 5.5 environment with a MySQL 5 database server, an "Openfire" chat server, and a "Wowza Media Server". Load balancing is managed by Apache 2 and mod_jk.

In addition to Liferay's database schema, which is used to store the portal information like journal content, user and addresses, etc., an additional schema was created to store the broadcast information. The Liferay schema data is accessed by Liferay services. To access the data of the additional schema, JPA/Hibernate is used.

Community portlets are based on the standard Liferay portlets. Portlets displaying and handling broadcast are implemented with JSF / MyFaces, Shale remoting and jQuery. The interaction between the Flash movies, streaming server and portal server is done by Webservice calls (Apache Axis).

The "zaplive.tv broadcaster" mobile client is a Symbian Application, programmed in C++. The mobile streams are fully integrated into the portal application, using Webservice calls and portal components.