There has been an explosion of mobile devices uploading to and browsing Flickr over the last year, with camera phones becoming one of the most popular ways of sharing the immediate world with others. The Yahoo! Video Platform enables Flickr to offer its users the ability to view videos on their mobile phones, as well as the web and TV.

"We needed a transcoding solution that could handle any format coming in and deliver any format out, and do it quickly, while retaining the highest possible quality. Rhozet Carbon Coder's any-to-any format capability helped us meet that objective. Its XML-based API made it possible to create and control the large transcoding farm needed to handle the increasing volume of video uploads on Flickr."

Arjun Saksena
Senior Product Manager
Yahoo! Video Platform
Yahoo! Inc.

Yahoo!'s new Video Platform with Rhozet™ Carbon Coder transcoding capabilities powers video experiences across all of Yahoo! — including Flickr — serving content to various device types, screen sizes and codecs for mobile, web and TV playback.

Rhozet Transcoding Technology Helps Bring 3-Screen Experience to the Yahoo! Video Platform

Overview

The Yahoo! Video Platform group was tasked with finding an efficient way for Flickr, a Yahoo! Inc. company and one of the world's leading online photo and video sharing communities, to support the broadest set of input formats for their users to upload videos, as well as the output formats to enable playback on a wide variety of devices.

The Challenge: High Volume of Content and New, Higher Quality Formats Require Massive Transcoding Power

With the increase of online user-generated video, the continued adoption of newer, higher quality codecs such as H.264, and the increase use, as well as the improving capabilities of mobile phones for creating, accessing and sharing content, Flickr found that its transcoding requirements had become more complex.

The Solution: A Fast, Reliable Transcoding Farm and a Flexible API

To meet the growing volume of content and maximize format compatibility at Flickr, especially in the mobile arena, the Video Platform group at Yahoo! deployed a sizable Rhozet Carbon Coder transcoding farm with dozens of nodes. Key to making this deployment successful was Carbon Coder's XML-based API.

Rhozet Carbon Coder's comprehensive API allowed the Yahoo! Video Platform group to easily integrate the Carbon Coder farm into their platform and customize the interface and management tools for better control of the entire process — from video uploading and transcoding to the posting of final transcoded content — resulting in more video content processed at any given time.

The experience for Flickr subscribers is straightforward. Since Carbon Coder abides by the "any-to-any" format rule (currently supporting more than 140 input and output formats and Carbon Coder is continually being updated to accommodate emerging formats), subscribers can upload content in any format using the Flickr web-based interface or other desktop upload mechanisms. The uploaded content is automatically sent to the Yahoo! Video

continued...

Platform and rapidly converted to H.264. The transcoding farm exploits the extra computational resources of multi-core CPUs and distributed computing networks to expand transcoding capacity and accelerate the workflow by distributing rendering across all available CPUs. The transcoded videos are then made immediately available on Flickr for playout to various device types and screen sizes for web, mobile and TV playback.

With Flickr's move into mobile video, transcoded video content is immediately viewable through Flickr's new mobile site.

Flickr's mobile video features are available first on iPhone and Android phones, as well as the iPod Touch.

Results

The Rhozet Carbon Coder farm has drastically reduced the time it takes for subscribers' videos to become available in multiple formats for desktop, TV and now mobile devices. In addition, the Rhozet Carbon Coder farm configuration built using Carbon Coder's XML-based API was made to scale to millions of uploads per month when needed. The Yahoo! Video Platform group can quickly expand the transcoding power by simply adding more nodes to the farm. They have found this to be an important capability; given that the volume of video content is increasing significantly across the various Yahoo! properties.

For more information contact Rhozet at info@rhozet.com or visit the Rhozet web site at www.rhozet.com.