

RHOZET™ CARBON CODER™ HELPS CINEMANOW DELIVER MOVIES TO TV, DESKTOP AND MOBILE DEVICES

Challenges

- Enable CinemaNow to quickly make content available to customers in multiple formats

Solution

- Rhozet Carbon Coder transcoding farm creates streamlined, fully automated transcoding workflow

Benefits

- Greatly reduced rendering wait times
- Transcoding farm easily increases in power with additional nodes
- Content is transcoded simultaneously into multiple formats for maximum efficiency

OVERVIEW

CinemaNow (www.cinemanow.com, now part of Best Buy), an innovator in digital entertainment technology that delivers high-quality Hollywood movies, TV shows and music videos, has been at the technological forefront of digital video distribution since its launch in 1999. The company offers more than 10,000 titles for delivery to TV, desktop and mobile devices.

THE CHALLENGE: STREAMLINE WORKFLOW FOR HIGH-VOLUME, MULTI-FORMAT TRANSCODING

More than 200 new titles arrive weekly to CinemaNow from major movie studios including 20th Century Fox, Disney, EMI, HDNet, IFC, Lionsgate, MGM, Miramax, NBC Universal, Paramount Pictures, Sony, Sundance Channel, Vivendi Entertainment and Warner Bros. These titles arrive in traditional tape and Digital Betacam formats, and need to quickly be made available to CinemaNow customers in multiple formats (Windows Media, VC-1 and H.264) for delivery to TV, desktop and mobile devices. To make this happen, CinemaNow has deployed a multi-node, fully automated Rhozet™ Carbon Coder™ transcoding farm.

THE SOLUTION: A HANDS-OFF, AUTOMATED TRANSCODING FARM

Transcoding such a massive volume of new titles each week could cause a bottleneck in any workflow, but, with a Rhozet Carbon Coder transcoding farm at its heart, CinemaNow has a streamlined, hands-off production process in place. To facilitate the highest performance, Rhozet Carbon Coder has been deployed in a farm configuration with dozens of nodes controlled by Carbon Server software. This distributed enterprise transcoding approach provides CinemaNow with maximum flexibility, scalability and cross-vendor interoperability.

The Rhozet Carbon Coder transcoding farm exploits the extra computational resources of multiple-CPU machines, multi-core CPUs and distributed computing networks — engaging however many CPUs are available, to greatly reduce rendering wait times. Carbon Server software also allows CinemaNow staff to optimize load balance points across multiple CPUs.



CinemaNow operators use automated capabilities such as presets and watch folders to quickly queue jobs and then let Carbon Coder perform the work. Watch folders allow CinemaNow staff to monitor the automated workflow, by automatically tracking files as they are sent to the system. As new files are received, transcoding begins. And since Carbon Coder allows different bitrates to be processed at one time, the operators can preset job instructions to create a much more efficient workflow. For example, CinemaNow operators routinely process feature films into multiple target formats – simultaneously and automatically.

The operators are able to monitor the entire process through the Carbon Coder UI. When transcoding is complete, operators receive a job notification automatically so they can perform a visual quality control check prior to the packaging stage.

THE RESULTS

The Rhozet Carbon Coder farm has drastically reduced the time it takes for the production staff at CinemaNow to transcode new Hollywood movies into multiple formats for delivery to TV, mobile devices and PCs. In addition, the Rhozet Carbon Coder farm configuration has made it possible for CinemaNow to quickly expand its transcoding power by simply adding more nodes to the farm. The team at CinemaNow has found this to be an important capability, given that the number of new titles to be transcoded each week is increasing.

“We’ve been able to make our workflow more efficient by exploiting Carbon Coder’s automated features and the ability to process multiple bit-rates in a single transcoding session. Carbon Coder has really worked for us and made the operator’s life a heck of a lot easier.”

—Wil Cohen, Director of
Encoding CinemaNow

“Carbon Coder gives us much-needed scalability and support for a wide range of streaming formats.”

—Wil Cohen, Director of
Encoding CinemaNow

ABOUT HARMONIC

Harmonic Inc. is redefining video delivery with the industry’s most powerful solutions for delivering live and on-demand video to TVs, PCs and mobile devices. Harmonic’s technical innovation and market leadership enable the company to offer a unique and comprehensive solution portfolio—including encoding, transcoding, content preparation, stream processing, asset management, edge processing, and delivery. Broadcast, cable, Internet, mobile, satellite and telecom service providers around the world choose Harmonic’s IP-based digital video, software, and broadband edge and access solutions. Using these award-winning and industry-leading solutions, operators can reduce costs and differentiate their services by offering consumers a higher quality, personalized multi-screen experience.

Harmonic (NASDAQ: HLIT) is headquartered in San Jose, California with R&D, sales and system integration centers worldwide. The company’s customers, including many of the world’s largest communications providers, deliver services in virtually every country. Visit www.harmonicinc.com for more information.