



Everybody's watching



Customer Case Study

Digital terrestrial broadcaster saves time and resources on ingest process

AmberFin iCR gives media company an all-in-one system with customized interfaces for ingest to Omneon and Blue Order

Executive Summary

Customer: State-owned digital terrestrial broadcaster

Sector: Digital television broadcast

Location: Asia-Pacific

Business opportunity

- Streamlining workflows through the use of a single interface for a variety of ingest and quality control (QC) tasks.
- Workflow enabler allowing streamlined Media Asset Management integration and for work to be performed immediately on proxy copies

Solution

- AmberFin iCR - Mastering Application

Results

- Massive operational cost savings through automation
- Reduced training requirements through single user interface
- Increased flexibility in play out as a result of close integration between ingest and play-out servers, and Media Asset Management system

Marketplace

The owner of this digital terrestrial broadcast channel is a major state broadcaster in the Asia-Pacific region, operating more than 30 radio stations and four national television channels. The broadcaster, which traces its history back to the 1920s, faces strong competition in its home territory, trailing behind two commercial operators in terms of television market share.

Business challenge

In 2006 the broadcaster started looking into launching a pilot digital terrestrial television broadcasting service, which ultimately went live in the autumn of the same year, covering 2,000 households. The launch gave the broadcaster the opportunity to create a 'green-field site' service free from the encumbrances of legacy equipment.

At the same time the company was keen to ensure that any technology purchases would guarantee the most efficient workflows possible, to keep operational overheads to a minimum and be capable of meeting the needs for future services and technologies.

It envisaged a range of programming for the channel, including scheduled live recordings, 'crash' recording of breaking news and sports events, and taped events.

The company's ingest system would have to be flexible enough to handle all of these with ease, and at the same time provide enabling features that would allow downstream tasks such as live captioning of events.

A further requirement, not for launch but as part of the channel's planned evolution, was for the ability to handle high definition (HD) recordings.

Solution

The broadcaster ultimately settled on a Blue Order media asset management system and Omneon Spectrum play-out servers. However these platforms did not offer facilities to meet the essential requirement for HD or to provide the level of intelligent human interfacing and flexible adaptation needed for the broadcaster's varied ingest workflow.

"Thanks to iCR's superior integration capabilities, the deployment of the 16 systems in the customer's operations center was completed within a week."

To overcome these issues the broadcaster chose 16 AmberFin iCR systems for its ingest tasks, splitting them equally between live and VTR recordings.

Before deployment, AmberFin created a customized graphical user interface (GUI)—part of its powerful plug-in API—to allow operators to schedule automated ingest tasks ahead of time. With iCR's superior integration capabilities, the deployment of the 16 systems in the customer's operations center was completed within a week.

Results

The iCR systems form the hub of the material ingest workflow. The AmberFin iCR's not only generate high-quality MPEG-2 30Mbps IMX (D10) MXF Op1a master files from the various input sources, which are transferred to the Omneon video servers, but also create Blue Order compatible MPEG-1 System Stream low-resolution proxy files.

These proxy files are created live, during the ingest process and accompanied by a comprehensive real-time QC. When an ingest operator begins an ingest workflow, iCR also sends extensible markup language (XML) files to the Blue Order media asset management system that automatically populates metadata, disk location, timecode and duration information into the asset record. All these automated processes result in massive flexibility gains and overhead savings for the broadcaster.

For example, operators can start adding metadata to files and start working off low-resolution proxies, while the ingest process is still taking place, rather than having to wait until the whole video has been ingested. Similarly, the fact that the master files are transferred directly to the play-out servers means that program play-out can begin almost immediately on receipt of the master file, a major advantage in a busy broadcasting center.

"All operations can be carried out through a single iCR user interface, which reduces training requirements and errors."

Other automated functions include the real-time QC and the ability to playback and review recordings directly from the Omneon servers, all of which helps save operator time and effort.

Finally, all operations, including entering metadata hosted on the Blue Order system, can be carried out and restricted through a single iCR user interface, which reduces training requirements and errors.



Everybody's watching

Want to know more?

To find out now why your business absolutely cannot afford to be without iCR, contact AmberFin: info@amberfin.com

Read other case studies

Visit the dedicated section on the AmberFin website at: www.amberfin.com/case-studies

www.amberfin.com

AmberFin and iCR are trademarks of AmberFin Limited. All other trademarks mentioned herein are duly acknowledged.

© 2008 AmberFin Limited. All Rights Reserved.

asiadtb/v1/0908

Technical blueprint

Crash and scheduled live off-air recordings use a longitudinal time code (LTC)-to-RS422 converter that delivers time-of-day time codes to the iCR systems from the station's master clock. VTR recordings use an RS422 interface which allows transport control of the VTR and provides the ingest iCRs with LTC time codes over RS422.

The eight iCR systems assigned for VTR recordings have a QC option which combines award-winning content verification and powerful technical video and audio checking alongside monitoring of the attached VTR. This means all aspects of the content can be verified by the operator, including video and audio issues such as clipping, ancillary data such as closed captions and content advisory and mechanical VTR errors. After the ingest process has finished a QC report is created and made available to the Blue Order media archive for processing. This XML file contains all QC information together with the time-code at which the error occurred, and even shows a thumbnail of the video frame at which the error began.

During the ingest process, an operator can use the iCR GUI to enter metadata using a custom metadata plug-in. Fixed metadata such as aspect ratio, start of material, time code or duration is automatically generated by iCR, leaving a small amount, such as program title and language information, to be entered by the operator. Fields are restricted by a number of selectable options in order to minimize input errors.

Each iCR system has internal storage to store high-resolution files during ingest. These are automatically sent to an Omneon Spectrum MediaStore, or alternatively can be captured directly into any generic storage system.