



Managing Transcoding and Workflows at SuperSport

Supersport is a leading pay TV broadcaster in Africa, part of the cross-media Naspers Group. With other brands in the group, it broadcasts a wide range of programming. The general entertainment division sources much of its content from the major production companies in Europe and the USA. Led by Twentieth Century Fox, these suppliers were increasingly keen to deliver content as files, rather than as physical tape.

The Challenge

The first challenge was that there is relatively little data bandwidth available to South Africa. Whereas Europe has trunk capacity measured in thousands of gigabits a second, there are just a couple of hundred gigabits a second in Africa, for all internet traffic. SuperSport was determined to maintain maximum quality throughout the process to meet its subscribers' expectations. "We want the content to come in at the highest quality mezzanine format, so we do not suffer through concatenation of compression," said Darren Munro, systems architecture engineer at SuperSport. "We want to end up with good quality video in both HD and SD."

To maintain quality within the bandwidth constraints, SuperSport works with all the popular UDP accelerated services, including Aspera, Signiant and Smartjog. This allows them to pull large files as efficiently as possible. The downside is that there is a requirement for additional processing once the files arrive at SuperSport.

The Solution:

To manage this workflow, as well as transcoding into the house formats, the company installed a Telestream Vantage video transcoding and workflow platform.

Vantage is designed for just this sort of application. It allows users to build multi-vendor, multi-format workflows – using external equipment as well as



Vantage Case Study



Darren Munro, SuperSport systems architecture engineer

Telestream transcoding – to ensure that content moves from ingest to transmission in a coherent and timely way. Because the various elements of a workflow are likely to be interdependent, Vantage needs to make decisions based on successful completion of one process before the next can be completed. The advantage of this sort of workflow management is that it allows these decisions to be made automatically, even if some of the processes are manual.

Improving Content Flow at SuperSport:

At SuperSport, for example, while there is some automated quality control built in to the system, the final QC is manually executed by a trained operator to check all file attributes. The Vantage workflow requires the operator to electronically certify each programme before it can be released to the media asset management system.

The Vantage workflows encompass third-party equipment, as SuperSport has specific internal requirements. As an example, one workflow determines if the audio was delivered as discreet Dolby files or as embedded stereo PCM. The content then passes through a Dolby DP600 processor for loudness correction and, if necessary, creation of the Dolby Digital transmission file. "Our requirement is to have a steady stream of content run through the system like a factory...we have retrained our librarians from moving tapes to controlling this flow of content."

Similarly, Vantage tracks subtitle files. If required, a low resolution proxy is made and sent to the subtitling facility. When it returns the .stl file, it is checked for consistency before being married to the full resolution content. A Screen Subtitling MediaMate license runs on the Vantage network. SuperSport has a six-node Vantage network, incorporating within it a mirrored SQL database. Vantage provides its own load balancing, ensuring that priority transcoding tasks are delivered promptly while maintaining the flow of processes around its own and external processors. The intention is to move shortly to version 4 of Vantage, which enables control and interaction from a web portal. This will allow compliance editors, for example, working on Final Cut Pro to have access to Vantage.

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The Result:

"The result has been that we can now offer premium content to our subscribers on a day to day basis, minimizing the risk of losses through piracy," he added. "For the recent series Game of Thrones, we were able to call for the file on Monday morning and transmit it on Friday night, having processed it through every possible manipulation, without a problem."

"The transition to this new way of working was a culture change for the businesss, but Telestream worked closely with us to determine what our workflows are and implemented them in Vantage," Munro concluded. "We see this relationship continuing as the system is iteratively changing – it has a natural longevity."

