



Vantage Enables the Evolution of MultiChoice's Entertainment Operations

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— **Sumeshan Gengan,**
Broadcast Engineering
Manager

The Customer

MultiChoice, based in South Africa, is Africa's leading entertainment company. It creates and secures the rights to amazing content from all over the world, delivered through Direct To Home (DTH), Digital Terrestrial Television (DTT), and online SVOD entertainment services. Its entertainment platforms – DStv, GOtv, and Showmax – are watched by approximately 14 million people across 50 countries.

Since a large amount of MultiChoice's content originates from outside South Africa, the primary need of the broadcast engineering team is for a robust and efficient content ingest workflow system, allowing them to reduce the time it takes to ingest, prepare, and deliver content for their various channels and services, as well as providing content security.

They also need to enable rapid distribution of content to their internal and external clients, a process which can include some complex localization and preparation tasks. Plus, the ingest and content preparation system has to integrate seamlessly with their MAM system and their editing platforms.

Another important requirement is to have a system that can be managed and supported locally between in-house teams and a local expert partner. Energy-efficient solutions are also key to allow them to expand their content capacity while enhancing content quality for their viewers – for example, by delivering UHD and HDR content - without increasing their carbon footprint.

MultiChoice's infrastructure was initially built around the Telestream Vantage

system in 2011 and has been supported since 2013 by Concilium Technologies, a leading provider of broadcast equipment in South Africa. Having proved its effectiveness, this early system has grown to become the core of content processing and enables a highly automated workflow orchestration for content ingest, QC, and content preparation for all the MultiChoice linear and VOD platforms.

“Our Vantage system has evolved over time and we literally built everything around it, it’s the essence of our pipeline,” says Leon van Wyk, SM Media Asset Management, MultiChoice. “When you start with a great product, you stick with a great product.”

Sumeshan Gengan, Broadcast Engineering Manager, MultiChoice, concurs: “We used the Vantage system to migrate our content value chain from the use of traditional tape to file-based workflows. This approach accelerated our journey from standard definition to high definition, and now it is evolving again to enable us to support HDR and UHD.”

Having been early adopters of Vantage and the earlier Lightspeed GPU accelerated servers, MultiChoice and Concilium looked carefully at the latest Vantage developments to provide even more processing efficiency to support UHD content processing capability.

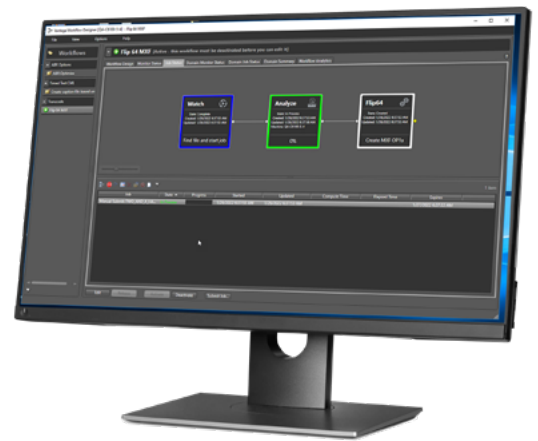
“Of particular interest to us was the new NVENC GPU accelerated H.264 and HEVC encoding that the G8 and G10 Telestream Lightspeed hardware leveraged in the MultiChoice content processing platform,” says Chris Vermaak, Application Support Engineer, Concilium Technologies. “It enables increased throughput of content and accelerated encoding speed, coupled with a much lower power usage demand by the encoding hardware. In a country where we are faced with an energy deficient power grid, every opportunity to reduce power consumption - whilst maintaining and possibly increasing available computing resources - is an achievement.”

The Solution

The recently upgraded solution is based around a Telestream Vantage system running on Telestream Lightspeed G8 and G10 Servers, along with several other Telestream and third-party products, including:

- Vantage Transcode Pro, Transcode MultiScreen, Vantage Analysis, Vantage Array, and PostProducer.
- CaptionMaker and Timed Text Flip to provide subtitles and closed captions preparation and conversion tools for multi-language services

Vantage Media Processing and Workflow Automation



- Vidchecker, used for automated QC of file-based content, while Switch Pro player is used for any manual verification and checks
- The Vantage system also manages several third-party products through workflow connectors and API control, including Alchemist, Avid, Audiotools, and Aspera

File-based content comes to MultiChoice from local and international studios. Vantage is the landing point where all content is first verified, then transcoded to the house format and logged into the MAM storage. Once ingested, content is provided to internal clients within the MultiChoice group in their preferred format for editing, distribution or sales.

Efficiency and Flexibility

With these improvements in processing efficiency, MultiChoice has massively expanded the scope of the original Vantage system, which now includes sites in Kenya and Nigeria, and has significantly increased workflow efficiencies while reducing costs in several areas.

“We are now able to process on average 48 000 hours of content per month using the platform,” says Gengan. “We need to deliver for both satellite and OTT, adding another layer of complexity. We have automated many manual tasks using over 500 customised Vantage workflows, which has streamlined our processes by reducing human resources and allowing operators to focus on core responsibilities. On average we have reduced the overall processing time of content from three days to just one day, which means that our customers have access to content more quickly.”

Typical automated workflows include:

- Ingest of content
- File framerate conversion
- Conformance to house format
- Subtitle insertion and extraction
- QC analysis
- Automated editing
- File transfers
- Audio channel mapping
- Proxy creation
- System integration points

The Vantage connectors have also reduced integration costs and the need for custom developments, which can be time-consuming. This has transformed MultiChoice's environment by breaking down perceived silos and providing a seamless interface to the operations team. In addition, MultiChoice has saved a considerable amount of time and budget each month by converting in-house around 300 files of various framerates to the house framerate of 50fps, instead of outsourcing the task to external production facilities.

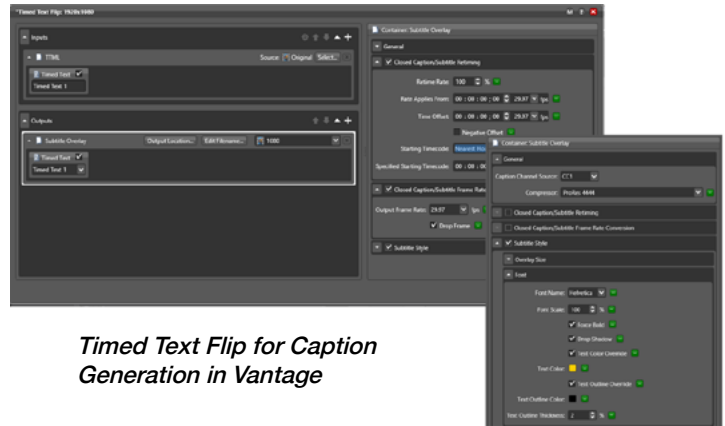
The wide variety of formats supported has also enabled the business to be flexible in terms of how it processes and creates content for consumption, as well as significantly reducing the number of ingest failures due to non-conformance.

System Evolution

The system is far from static, with approximately 30 new workflows being added or amended each month.

"We started on a journey of evolution and now we are in a state of constant revolution," says Gengan. "Operations staff come to us almost daily asking for new workflows or to change existing modules. The platform is so malleable, and with our team's skill set and the support from the Concilium team, it makes it very quick and easy to respond as our needs evolve."

The system has helped MultiChoice to enhance the viewing experience for customers, with support for HDR and UHD within the system, as well as new features which make it easy to provide subtitling in multiple languages. The Vantage system is also set up to provide high availability which has assisted MultiChoice to achieve



Timed Text Flip for Caption Generation in Vantage

and maintain on-air availability targets, ensuring a quality experience.

"Vantage has been at the heart of our operation for over ten years. It has given us the ability to expand our operations to their current size in a very short period of time and will continue to support us as we grow. It doesn't matter where the industry goes or what changes in technology happen - we can keep up with them," says van Wyk. "And the journey is easy if you have long-term, trusted partners as we have in Telestream and Concilium."

So, what is next for MultiChoice? As a content aggregator, the multiple platforms under MultiChoice are ever-growing and expanding, as does the requirement to process and deliver media. The team is already exploring the possibilities and benefits of Cloud computing from a Vantage perspective, as well as some undisclosed plans for the future. For now, the Vantage system gives the company the flexibility and speed to adapt and improve its services in a matter of hours, the ability to expand easily, plus considerable budget savings thanks to automation and custom workflows.