KM PRODUCTION

SECURING, ARCHIVING AND INDEXING OF TELEVISION PRODUCTIONS

The set of the Grand Journal Daily show produced by KM

« KM needed a solution uniting archiving, security, indexing and viewing. The productivity gain is considerable. »

Benoît Bonardot,
Post-production Manager

KM, the television program producer

KM is a major producer in the French media landscape. Among its flagship programs are «Grand Journal» on Canal+ and «Before du Grand Journal». KM also produces broadcasts of major events like the opening and closing ceremonies of the Cannes Film Festival, the «César» (French Oscars) and the «Folle Journée de Nantes». This year, KM is also branching out into documentary production.

Continuous flow daily productions and news reporting

A distinctive feature of the daily broadcasts is the just-in-time production mode, which mixes live action on the set, external reporting and news clips provided by INA, Reuters or AFP. Everything takes place during the day and culminates with the live broadcast in the evening. Every minute counts! For documentaries, the pre-production teams have more time, but they need to handle a large quantity of rushes from the shooting.

Storage volume: Terabytes per week!

Video files require lots of space, so not everything is kept. KM keeps all footage used in post-production; the broadcast-ready video and the clean feeds. The file volume to store reaches about 100 gigabytes for a daily and several terabytes for a documentary. All productions combined, KM needs to store and secure terabytes of files each week; original digital data which can be used for re-broadcasting, reruns, off-shoots on other channels or formats, and more.

The existing storage could not absorb the increasing volume

The resources of several of KMs production sites were brought in under one roof in 2012, and this facilitated an evaluation of the storage needs and predicting how it would grow. The existing solution was comprised of a NAS storage bay and a single LTO tape drive for archiving. This did the job, but it would not be able to handle an increase in the data volumes. The retrieval mechanism for LTO took too long and slowed down the pre- and post-production stages. Furthermore, the content was not backed up immediately, and therefore vulnerable to disk crashes.

The customers transition to file mode

At the same time, the broadcasters demanded that the broadcast-ready video be delivered in file format. Until then, the delivery had been made on HDCAM videotape, even though the work was carried out in file mode. The timing was therefore good for reviewing the way media files were managed and stored.

Three goals: secure the productions, manage the content, and archiving

KM called upon its service provider Cap'Ciné to provide a suitable solution that would deal with the entire problem at hand. During the review workshops organized by Cap'Ciné, the KM teams were able to define the project framework: storage type, securing the productions, indexing and previewing the archives using proxies. Cap'Ciné proposed a turnkey solution from Active Circle which was adapted to the needs of KM while taking maximum advantage of the existing hardware.
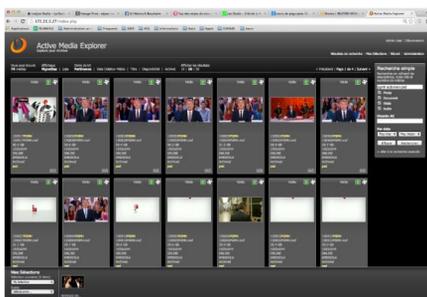
Active Media Explorer is the tool used by the researchers and editors

The solution takes up a quarter of a rack, 30 times less space than the video cassettes

« The *Active Circle solution is perfectly suited to a TV producer like KM. We examined the needs and offered the best solution. We integrated the hardware and the software in our lab, and transferred it all to KM. In less than 4 days including training, the solution was operational and being put to use by the teams!* »

Vincent Hautefort – Videlio Cap'Ciné
Solution Integrator

*View of a broadcast
of Grand Journal on Canal+*

A complete solution for nearline storage, archiving and content management

The storage consists of a disk level with 20 terabytes which reuses the existing Qnap NAS, plus an LTO tape library with 24 slots and 2 LTO-6 tape drives from Overland Storage. The Active Circle software virtualizes the storage by providing a file view to the users and applying storage policies to the logical space on disks and tape. Active Circle provides access both through a file view interface and a web application used for indexing and previewing: Active Media Explorer (AME).

Nearline space and integration with AVID workflow

The Active Circle disk space is at the core of the storage workflow. «This disk space of about 2 terabytes is being heavily used», says Post-production Manager Benoît Bonardot. The rushes arrive from shooting and are written directly to this space. The Avid workstations access the Active Circle disk space directly for ingest purposes and for exporting in the MXF OP1a format.

Archiving on tape and data preservation

All the content which is placed on the disk space managed by Active Circle is automatically copied to tape to protect the data. For example, to increase security, the archiving policies specific to broadcast-ready video ensure that this content is copied to two LTO cartridges which are subsequently kept in two separate locations. The users continue to see the content in file mode or in the AME interface, even when the files are no longer on disk. If a file which is located on tape is requested, the tape is loaded in a drive and read. If the tape is not physically present in the library, a request for inserting it will be automatically sent. The file is then made available through the disk cache.

Indexing and preview with the Active Media Explorer

For the research teams and the editors, access in file mode is not sufficient. Active Circle offers the AME (Active Media Explorer), a media tool which provides indexing, annotations and content management. The AME automatically creates low-resolution versions (proxies) for the file types defined by the administrator. Thanks to the proxies created by the AME, the media can be viewed through a web page even if the files are not located on disk or loaded tapes, from any connected workstation.

More efficient pre-production

The researchers and journalists can search among all the archived content and view the media in a matter of seconds. They can also send files directly to the AVID production servers. «Before, when a director or a producer needed to view a broadcast, we had to make a videotape or a DVD. Then the file had to be extracted, transcoded and inserted into the workflow. The productivity gain is considerable», emphasizes Benoît Bonardot.

Return on investment in less than a year

The implementation of a centralized solution in file mode makes it possible to eliminate the processes based on videotape. If we count only the costs tied to recorders and HDCAM supplies, and the space used by the tapes (a whole room with thousands of videotapes from ten seasons of broadcasts), the investment has paid for itself in less than a year!
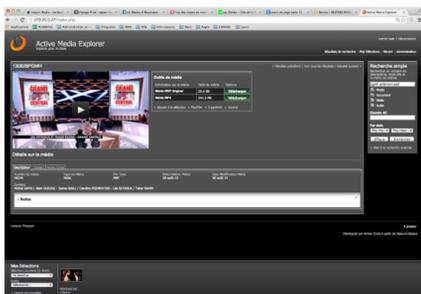
«The productivity gain is considerable»

«With Active Circle, the media content is secure and better indexed, making it more usable and valuable. The various teams have suitable tools at their disposal, the workflow is dematerialized, more fluid and faster. The productivity gain is considerable», concludes Benoît Bonardot.