Customer Profile

With five TV channels and six radio stations, RTBF (Radio-Télévision Belge Francophone) is one of the leading audio-visual media companies in Belgium.

Through these media outlets, RTBF promotes the cultural development of the Belgian and International French-speaking community. Content creation is a significant part of the work done at RTBF, because most of the programming at RTBF is based on the company’s own original productions.

Challenges of Numprod Project

RTBF was determined to adapt to the technological and structural changes that are affecting every level of the media world, and thus launched a major programme of production method reforms: the NUMPROD project.

The aim of this project was to digitise the entire RTBF production chain and move towards a 100% tapeless, multi-site system with seamless access, exchange and control from any production site located in Brussels, Namur, Charleroi and Liège.

RTBF worked closely with technology consultants and vendors to evaluate ways to re-organize workflows and re-allocate resources to improve overall operations under a fully tapeless, integrated production environment. The rationalization sessions identified a number of objectives this new tapeless system would need to address in order to improve productions.

The most important consideration for RTBF was that the move to tapeless would require open technologies capable of streamlining multimedia and editorial production workflows. It would also require a strong change in the management process to expertly design and deploy an enterprise-wide solution that could masterfully facilitate multiple, concurrent workflows.

RTBF needed a tapeless solution that could address the production needs of many different types of resources across multiple workflows. The logging, newsroom, post-production, and archiving departments each had specific requirements.

The right mix of production tools would need to be integrated into a highly interoperable framework. User workspaces would be set up according to job profile, enabling the users to log in and be presented with only the production tools specific to their job. Repetitive tasks and media tasks had to be as automated wherever possible.

Because the digital system would facilitate production for a number of resources across several platforms, production tools, servers, databases, and archives would all need to be integrated into a single source tracking entity in order to properly maintain and protect metadata throughout the lifecycle of the content.
Solution: Integration of Multiple Technologies Through a Service-Oriented Framework

RTBF chose a combined production solution that includes EVS instant tapeless production technologies and Dalet media management systems.

Central Media Control and Referencing

At the centre of the digital production workflow is the Intranet de Production, a full in-house media asset management system, acting as the true backbone of the system. Intranet de Production was developed using new exchange technologies, such as API Web Services and the SOAP protocol, XML file exchanges, an ESB and an Oracle database. All media ingested and created on EVS or Dalet production tools are automatically referenced on the Intranet for monitoring and control.

One of the major challenges with the Intranet de Production, which was developed in-house at RTBF, was to organise these different systems and make them interoperable.

Olivier Waty
NUMPROD Engineer

Media Ingest

Rushes recorded on Panasonic P2 camcorders are encoded and made available in the system. Media items, satellite transmissions, and news reports are recorded on the EVS XT[2] servers under the control of the IPDirector Ingest Scheduler.
Central Media Server

All material is encoded in SD 50 Mb/s (MXF OP1a) and instantly transferred to EVS XStore[2] SAN Media Server. EVS’ Media Server offers reliable and instant availability of media recorded through the entire production and post-production workflow. Optimized for 500 hours of media exchange and 800 hours of reviewing, EVS’ Media Server is based on a fully-scalable, non-single point of failure architecture and maximum control flexibility (standard gigE and Fiber Channel connections).

This means that at any given moment, all RTBF production teams have instant access to hi-res content.

Story Cutting Management Based on Proxy Media

In parallel, content is made available in proxy resolution for improved accessibility on all Dalet production platforms. As soon as the material is recorded, metadata (descriptive information of rushes, IDs) are assigned to all audio-visual content. These metadata remain attached to the content throughout the production process, right through to the archiving stage. With these metadata, content can easily be found and identified at any time. After a certain period, the media content is transferred from the media server to the DIVArchive long-term archiving system, where it can be recovered at any time.

All individuals working on a new televised broadcast are able to control the collection of media content, edit production books, process and integrate Orad graphics, such as subtitles, manage the rundowns and broadcast content from a single interface.

The main advantage of the system for journalists is that they can access material without having to leave their workstation. They can remain seated at their desk and, using a single tool, Dalet, they have access to news reports, the texts that they are writing, the news broadcast production book, and images that they can view, edit and send to the editor. They can use a single programme to access all the materials and tools that they need without ever leaving their desk.

Benoît Ballon-Perrin
News and Sports Operations Director, RTBF

Post Production Integration

During the editing phase, the Avid editors can instantly access the selection of hi-res images on the EVS Exchange Media Server.

After the content has been through the sound editing phase via the Fairlight audio systems, the final edit is sent back to the EVS Exchange Media Server.

Review and Playout

The publisher can view the edit directly on the server, and approve it or send comments to the journalist via the Dalet workstations.

Once an item is approved, it is ready to be broadcast. It can be played directly from the media server, which is controlled by the EVS IPDirector application.
As well as TV broadcasting, the system is also used to broadcast audio content over the radio, to supply images to new media content, such as the Internet and mobile phones, and to create content in different formats. It’s genuinely an enterprise-wide project.

Cécile Gonfroid
General Manager of Technologies and Operations