

# Workflow in an integrated environment

At KPN's Broadcast Centre in the Netherlands, the philosophy is all about integration and interoperability – enabled by a Vivesta MediaFlow system for multiple output services

## Enterprise MAM

KPN is the largest telecoms provider in the Netherlands, providing voice and wired broadband access, and is the largest Dutch mobile operator. KPN also operates the E Plus Germany and Base Belgium mobile systems. It manages and operates large-scale networks across Europe, sea cables, and a network ring in North America.

KPN Broadcast Services offers broadcast management, network, production, archive and playout facilities for a range of clients, including RTL, SBS Broadcasting, the Dutch national and regional public broadcasters, Canal Satellite Digital, Sky Radio Group, Jetix Disney, MTV Networks, IDTV, Eyeworks and Endemol. Being part of a telecoms-focused company means that the broadcast operation is naturally part of a wider communications whole, with the capability to offer output in a wide range of formats and services, from television to mobile TV.

As well as offering contribution and distribution links, both network and satellite, KPN is in a

position to leverage its telecoms business to easily provide internet services, streaming and digital storage for its broadcast clients.

The key to the operations at KPN Broadcast Services is the digital workflow strategy that has been implemented. At its heart is a commitment to an end-to-end digital tapeless workflow, designed from the beginning to be interoperable with external systems and networks, and also with a view towards potential outlets such as on-demand, IPTV and mobile.

A typical example of this is the growth and change in the management of the Jetix (now Disney) channels that are played out of the

core system. The system had to be both fully integrated, but also designed with future network and web-based based outlets in mind.

KPN BroadCast Services had looked at working with other broadcast management systems, media management systems and automation systems — but although effective and sophisticated in their own sphere, extensive integration was needed to eliminate manual duplication of metadata and files between these systems and create an automated workflow. They also realised that most systems were extremely broadcast television-focused, and application-based, and could not be easily

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centre. In 2006, a Vivesta MediaFlow system was installed, as KPN BroadCast Services wished to offer a truly integrated system for managing scheduling and planning, and also ingest, archive and playout, from the same

adapted to cover management of content for different media services.

Vivesta MediaFlow offered KPN BroadCast Services a web-based and centralised content library, media management, planning and playout automation



Content is ingested locally, but largely comes in as files, and is then transferred from standard RAID storage to the playout facility as needed



**PLAYBOX TECHNOLOGY**

## PlayBox DS Wall

PlayBox Technology's next-generation digital signage platform called PlayBox Digital Signage Wall (PlayBox DS Wall) uses an entirely new approach to building and driving video walls compared to its rivals. The video output standard of the PlayBox Technology's platform is universal.

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system, which is accessible to all users from planners to transmission operatives. KPN BroadCast Services was able to build a system that was ready for multiple output services, and which included integrated rights and licensing data in the whole workflow process.

### Low staff operation

In addition, transmission output to the broadcast channels became vastly more sophisticated with full frame-accurate scheduling of all events in the transmission, including graphics, audio and subtitling, becoming possible at the schedule creation level. Most importantly, the scheduling could be accurately used by the playout automation module. This led to a decrease in 'last minute panics' in transmission, with the result that KPN BroadCast Services could offer very high levels of service to their clients with full confidence.

The accuracy and completeness of the playlists enabled KPN to run a low-staff operation in transmission, and those operators could be fully aware of the production and ingest chain leading up to the transmission process. The Vivesta web-based architecture enables users to log in and see



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what is going on from any position, and the need for individual PC workstation updates simply went away, reducing support and allowing modifications and upgrades to take place with minimal disruption.

At the automation control level, eVTRs, Omneon servers, Screen subtitlers, Inscribe CGs and Telestream Flip Factories are under control of the system, with connections in place to external storage. At this level, specific API and control protocols are used to ensure best performance, but wherever possible, the system uses open interfaces and data exchange via .xml or similar.

Content is ingested locally, but largely comes in as files, with much of the content ingested externally, and then transferred from standard RAID storage to the playout facility as needed, under intelligent control by Vivesta. Any transcoding operations that are needed are also automated by Vivesta.

In late 2009, the system was successfully upgraded, and additional channel capacity added. The new system was needed very urgently as a new channel had to be on-air within two months. Vivesta's engineers worked closely with KPN and Disney to make sure that the system would be built and

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configured to give the best possible service, and yet also be potentially interoperable with KPN's other planned services.

The new Vivesta MediaFlow 3.0 system followed the same philosophy of interoperable and integrated workflow principles,

and added the capacity to integrate VoD publishing into the system. The original system had always been designed to give users (with appropriate permissions) full library access to see what content was available, with access to the whole archive and associated rights data. Content might be simply available as a planning 'placeholder' with no actual content

attached, or the same content might be available in many formats, from IMX 50 through to .wmv with full metadata attached. Being part of a centralised system meant that all content could be accurately managed and transcoded from a central point, to many outlets, and an MXF based workflow could not only be implemented, but used to its full capacity.

**itfc and AmberFin boost user assets**

By Fergal Ringrose

itfc, the London-based provider of content management services to broadcasters and content owners, has chosen image-processing technology provider AmberFin to supply iCR 5000 workstations to the facility. The new workstations will improve itfc's digital services, allowing them to ingest, manage and deliver their clients digital assets more efficiently. The flexibility of the iCR 5000 ensures that the same equipment can now be used for multiple processes across itfc's workflow.

"One of the main reasons we chose AmberFin workstations was that they have the flexibility to link with third-party kit so they fit well with our existing TMD Mediaflex system," said David Willis, director of video operations, itfc. "You can work with user programmable tools within AmberFin kit which is great for us as we distribute media on multi-revenue generating platforms."

AmberFin's integrated automatic quality control system will also help itfc achieve results in a quicker timescale. "We're committed to providing our clients with the highest quality digital services. Investing in the right kit is a big part of this," said Chris Higgs, managing director, itfc. "We're impressed with the quality of the Amberfin workstations and the benefits they'll bring to our clients."

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