



NDR
Television Production

NDR®

DIGITAL END-TO-END WORKFLOW FOR NDR FOREIGN STUDIOS

The background

Norddeutscher Rundfunk (NDR), headquartered in Hamburg, is part of ARD, a joint organisation of public service broadcasters in Germany. NDR produces for and broadcasts on TV, radio and online platforms. Within the ARD group, NDR is a leading producer of TV news programming including Tagesschau and Tagesthemen, both highly-respected news shows. In addition, NDR specialises in in-depth news reports, documentary films, political magazines and sports coverage. Finally, NDR produces a number of talk shows and cultural programmes.

The requirement

To support production of up-to-the-minute news reports

across the globe, NDR has a network of overseas studios in Beijing, Tokyo, Singapore, Stockholm and London.

ENG teams, correspondents, cutters, technicians and the corresponding editing workstations are stationed at each site. In late 2015, NDR decided to upgrade these studios and bring them up to a consistent technical standard. The catalyst for this decision was a switch to Adobe Premiere Pro – an editing system that was already being used extensively at NDR's broadcasting centre.

In addition to creating an automated, digital end-to-end workflow, a key objective was to establish a digital archive in each studio. A top priority was to create stable, reliable media backups, while it was also important to ensure that broadcast items could be easily retrieved in a format suitable for further editing.



About MoovIT

MoovIT provides video and IT solutions for broadcasters and organisations of all shapes and sizes.

The company, headquartered in the Schanzenviertel district of Cologne, specialises in the development and support of workflows for all aspects of post-production, news and archiving at the interface between video and IT. MoovIT leverages particular expertise in the field of technical solutions for sports reporting. In addition, the company develops web-to-video solutions, localisations, remote editing systems and video hosting products used by organisations across a highly diverse range of industries.

MoovIT's customers include broadcasters, production companies, sport event organizers, agencies, and enterprises from a wide range of backgrounds.

In short, MoovIT is the perfect partner for worldwide support, managed services, software, hardware and integration solutions that accelerate and streamline processes – what we call **WORKFLOW IN THE FLOW**.

“Our overseas studio teams in Europe and Asia deliver high-quality, up-to-the-minute reports, and rely on flawless technical support to do so. Against this background, we opted for a standardized, highly automated end-to-end workflow with a digital archive.

Thanks to close collaboration between the project partners – EditShare, Adobe, Sony and MoovIT – the solution intelligently combines the benefits of diverse standard products. As a result, we now enjoy a customised, automated workflow. For our studio teams across the globe, this has significantly enhanced their day-to-day work processes.”

Christian Bruder, head of foreign studios production

The system components

NDR checked various products and systems based on the most important features that NDR required. Ultimately, the broadcaster opted for the EditShare Ingest and Storage system and Flow as production media asset management system, Sony ODA hardware based on optical disc with long-term guarantee (100 years) for the archive solution, and Adobe Premiere Pro as mentioned above.

Having chosen products and systems from diverse vendors, the next challenge was to integrate these into a workflow that effectively supported the processes in place at the overseas studios. The solution needed to safeguard NDR's high quality standards while complying with budget requirements. MoovIT is a systems partner of EditShare, Adobe and Sony and provides the necessary qualifications. Furthermore MoovIT's team of software experts has developed HelmutFX, a modular tool that aims to provide the 'missing link' between these components while also performing other tasks.

HelmutFX was developed as a 'virtual coordinator for search and administrative tasks'. It is modular by design, and was conceived to allow a single piece of software to handle all post-production management tasks. It is scalable, and can be adapted to any production environment. As a result, small and mid-sized production units can work in a way that was previously only possible with a large-scale, complex and expensive workflow.

The solution

The first step of NDR's end-to-end workflow encompasses automated ingest of all data formats in use, with simultaneous synchronisation for further processing in Premiere Pro and EditShare Flow.

This is made possible thanks to a Premiere panel controlled by HelmutFX which uses presets to manage metadata, target locations on the central storage system and target codecs. HelmutFX users receive presets that correspond to their specific user profiles and the categories that have been assigned to them.

In the background, HelmutFX manages projects, categories, user profiles and preferences (Premiere user settings) for the entire process.

HelmutFX creates all Premiere and Flow projects, and synchronises these automatically. As part of this process, the API is triggered by Flow; consequently, the user does not need to perform any administrative maintenance tasks on the MAM system.

After cutting, files are automatically formatted, transcoded and exported via the panel described above. If required, files can be exported to NDR's in-house formats – and at the same time, files are automatically assigned to the corresponding projects in Flow.

To save resources and avoid bottlenecks at the editing workstations, media files are imported and exported using the central Adobe Media Encoder (AME), rather than locally. Users can communicate with

AME using watch folders, and can perform administrative tasks via a web-based interface.

By way of the metadata field, the MAM client can launch archive, backup and restore processes. Files are selected in Flow, and the store/restore process is initialised using the web-based NDR-SaR interface developed by MoovIT.

Metadata and proxies continue to be stored within the MAM system during archiving. High-resolution files are transferred to the ODA drive for long-term storage. The original files are tested using checksums before being deleted. If required for use, media can be retrieved and activated at any time using unique IDs.

HelmutFX and ODA are administered using a single server. System availability is guaranteed at all times, thanks to a redundant server that will automatically take over if an incident or outage occurs.

The benefits

NDR modernizes its overseas studios with fully automated end-to-end workflows with automated ingest and export in all formats, including in-house formats. The workflow includes metadata-based MAM file management and long-term digital archiving. The Adobe Premiere Pro and EditShare flow systems communicate and synchronise with each other automatically.

During ingest, cutters can already start their work, parallel translations can be started, and voiceovers can be edited. Moreover, expanding file sizes are no longer an issue.

HelmutFX automates file allocation and management processes, increasing efficiency and minimising the risk of errors.

Since all of NDR's overseas studios now have a near-identical workflow, employees can move flexibly between sites without requiring re-training each time they relocate.

The innovative and intelligent solution frees up time for employees at the studios, allowing them to focus on their core task – the production of reports. ■