Enhanced production workflow at WDR Cologne

Currently, public and commercial broadcasters in Germany discuss IT and network techniques included into production processes and the implementation in running installations. Although there is no out-of the box system available, some broadcasters started to design a working solution for their particular needs.

At WDR in Cologne, a working group (founded October 2000) was brainstorming for almost three years to design a workflow concept for editorial and production needs. This working group with members from almost each department set marks where the restrictions of workflow enhancements might reach its boundaries when using third-party hardware and software from different manufacturers and programmers. The venture has been commissioned for the production of Morgenmagazin (MoMa). WDR is to use the MoMa solution as a pilot scheme to introduce a new digital workflow across its entire organisation. The main target of the pilot scheme was to have a system that allows long-term, practical program planning with resulting data transfer into an active daily scheduler. "We needed an enhanced workflow tool because reporters, cutters and operators add metadata to each item in the workflow list", explains Heinz Deiters, who signs for the editorial side of the design. "This metadata is always tied to the original file. Once the daily schedule is created it will be converted to a rundown where the file information (metadata) is only referenced to." In phase 1 of the VPSM project (Vernetzte Produktions- und Speicherumgebung im ARD-MoMa) at WDR OpenMedia from Dalet a.n.n. was selected (March 2003) for workflow management within MoMa (Morgenmagazin), a 3.5 hour live magazine programme for the German ARD network broadcasted early morning on weekdays. The carefully placed decision for OpenMedia is based on the fact, that it can talk to third-party programs and exchange data without restrictions. Wolfgang Piron, who covers the technical part of the planning, adds: "OpenMedia is still running in a test phase where reporters and editors - together with Dalet a.n.n. - 'fine tune' the system. We expect to go into live operation at the end of April 2004."

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Phase two, which started in December 2003, covers the integration of Omnibus G^3 together with five Quantel sQServers (262 hours storage), three Qedit Pro stations, several QView Lite applications and one QCut - located in Studio C - for MoMa. "None of the other companies we evaluated could prove they had an established product offering that suited our needs in our timescale", comments Deiters, WDR. "With its studio automation, ingest and workflow management, OmniBus provides a sophisticated, 'building blocks' approach that allows the use and integration of existing technologies."

"One of the main features of the new system will be flexibility. It is scalable, provides a maximum of bandwidth and enables operators to random access material on the sQServer system", explains Piron (Betriebsausrüstung WDR). The system architecture of the sQServer holds all clip metadata in a single My-SQL database (ISA-DB runs on its own platform). All servers are networked via Gigabit Ethernet, providing bandwidth and scalability. The result is a single 'virtual server' (representing five single sQServers at WDR and an ISA-DB with two mirrored servers) that can be addressed as a single entity.

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The G^3 desktop tools are completely transparent to the user. G3 tools run in the background, manage the individual applications and present media status reports to the journalists, ingest operators and transmission personnel, giving them a clear view of all possible tasks and processes which have been defined in the OmniBus system. As soon as material is ingested into the system a Qview Lite window can be used on the OpenMedia system to access and preview material directly on the sQServer. The server offers industry standard compression schemes and holds both broadcast-quality and browse images on the same storage. Editorial staff can control material brought in by reporters from outside WDR or internally as soon as it arrives. Although the OpenMedia newsroom system provides status reporting, the G3 tool set manages the database and scheduler, controls and indicates status flags and reports into the newsroom system. This provides maximum security to the 'Planer' of the daily MoMa program, because of knowing which material is present and ready to go or not.

Between the Omnibus G^3 and the ISA-DB runs CORBA (common object request broker architecture) which offers standard IF's and automation control of the sQServer system by Omnibus. OmniBus G^3 talks via MOS Protocol to the Open Media newsroom system. "The OpenMedia GUI is self-explanatory and offers speed and flexibility. Features the operators - coming from radio, TV and freelancers - very much appreciate", adds Piron. "We have selected Omnibus because of the ease of control and interconnection to Quantel's sQServer." Additional key features that met WDR's requirements were OmniBus' compatibility with IMX, the format used at WDR for acquisition and editing. The ready-made infrastructure and support for a future file-based digital archive. This digital archive will mark phase three of the VPSM project at WDR. Quantel won the contract because of their

sQServer system which shows just a single server to the user although it represents a total of five media servers and a mirrored database server.

The new system is scheduled to go into operational test phase in October 2004. Phase two will then be concluded, when the 'integrated journalist and production desktop tools, media management and ingest/playout automation solutions' (OmniBus Systems) of the digital workflow project at WDR (Studio C installation) will go on-air: It is expected by mid November 2004.

Any future expansion of the VPSM (OpenMedia newsroom system in conjunction with Omnibus G^3 workflow tools and Quantel equipment) with additional seats at 'Aktuelle Stunde' or 'Hier und Heute' will be a ‚MoMa minus X' solution, offering a wide range of possibilities and enhancements. "We have had always in mind that there might be a manufacturer who discontinues a software or even hardware solution. Being aware of this we designed and selected a solution which is open and provides standard protocol interfaces. This makes us independent from one manufacturer", concludes Piron. "The project started as a CMS solution at WDR. Today, we talk about VPSM (networked production and storage environment for ARD Morgenmagazin)", states Heinz Deiters, IT coordinator TV directorate WDR.