

One Stop Shop at CBC

By REINHARD WAGNER

Launched in 1994, the Cologne Broadcasting Center (CBC) GmbH with 100 permanent employees and more than 100 freelancers offers all aspects of technical and creative solutions. CBC is a subsidiary of RTL-Group Deutschland (RTL owns a 100 percent share) and is one of the largest broadcasting and production companies in Germany. CBC gives customers a comprehensive range of TV services, from studio production to post-production, on-air promotions, broadcast operations, consulting and maintenance services. Outside Broadcast and ENG operations are provided as a service on request.

RTL Group was born of the merger between CLT-UFA and Pearson TV (UK) in April 2000. CLT-UFA itself was created in 1997 when Bertelsmann and Audiofina merged their TV, radio and production businesses. In mid 2001, Bertelsmann became majority shareholder of RTL Group followed by an agreement with Pearson plc to acquire its 22 percent stake in RTL Group. Bertelsmann's interest in RTL Group is now 89.8 percent. The remaining 10.2 percent of RTL Group is publicly traded on the Brussels and Luxembourg stock exchanges.

Services on Offer

CBC offers playout/teleport and production facilities in Cologne

(VOX, Super RTL, n-tv, tv.gusto, VIVA and VIVA plus) and Munich (RTL II). Solutions provided are mostly packages that are specifically designed for their customers needs. Its 'one-stop-shop' approach enables its key clients to meet their markets and commercial requirements efficiently and cost-effectively. While transmission times in Austria and Switzerland are usually identical to those in Germany, there are occasions when programme events for Austria and Switzerland are different or play out at different times. In addition, recording live events across multiple channels had become a labour-intensive process involving constant checks so creating a way to automate the process would deliver further efficiencies; eg. localised advertising for Switzerland and Austria gets inserted into its broadcast signals for VOX, Super RTL and RTL II with a carefully re-edited rundown within automation.

Three studios are co-marketed and co-operated with the Magic Media Company (MMC), a production company. CBC takes care of maintenance and consulting services for their two galleries, studio equipment and technology. The studios are connected via SDI signal over a central router and integrated into the playout infrastructure for live playout or pre-recording (server or tape based).

As CBC's business needs constantly evolve, the facility keeps its automation updated to control the necessary processes such as ad insertion, time-shift playout, etc – with no superfluous extras. A bit automation is a long-standing key component in achieving this. "When we need something extra from Abit – a new feature for example, they transfer our needs into working systems and are always open to our ideas to develop and integrate new services", says Arnold Jonas, Vice Head of Broadcast & Engineering, CBC.

Production and Playout

The CBC-Portfolio offers standard definition production and post-production of client material. In Cologne and Munich CBC operates and supports a total of 42 linear and non-linear video editing, graphics and audio editing suites. 100BaseT/1GigE networked NLE suites (e.g. Apple Final Cut Pro hooked to an eight client Xsan and Avid Adrenaline connected to Avid Unity), stand-alone AVID Media Composers, graphic stations (Quantel Clipbox, Paintbox, etc.) and packshot studios are located close to the

playout control rooms. The Xsan installation serves currently eight FCP suites and is actually used by VOX for the popular series "A Perfect Dinner" (a Granada Production). "HD format production and HD playout will be offered inline on demand", explains Jonas.

The majority of material is delivered by tape (Digital Betacam, Betacam SP and IMX) and ingested into the program stream from a Sony LMS system.

At the CBC Cologne facilities seven Grass Valley Profile XP servers are cross-linked. One of the servers takes the role as an archive server (buffer) for advertising clips. Tapeless operation is used for advertising material, in-house productions and retrieved material from the archive. All playout control is fully redundant. Even if a tape is played from LMS there is always a backup paralleled. "To provide high redundancy a centralized media server should always be backed up with an additional playout server" comments Jonas. "[However] tapeless operation is much more reliable than tape based playout, confirmed by our error log reports."

The RTL II operations at the CBC facilities in Munich are more advanced and enhanced



CBC VP of Broadcast & Engineering, Arnold Jonas

The control room at the CBC facilities in Munich

The master control suite at CBC



because the facility was built in 2004, and the latest technology was integrated. In Munich, two Omneon Media Servers, each with 120 hours of storage at 50Mbps, serve as the central server, connected to a Front Porch Digital archive system with a PetaSite library from Sony. Either in Cologne or Munich the playout is automated by an Abit system (Version 7.0.4 and 7.0.7) together with Abit 'Present IT' controller and master control switchers such as Grass Valley's Saturn and others.

As CBC already uses Abit automation solutions to create bespoke playout schedules for its multinational broadcasts, it was a challenge for Abit to add a customised interoperable solution at CBC for seamless transmission across multiple channels. Abit also created the facility to allow automatic recording requests to be linked to an event to record selected live programmes to tape and video server. The innovative automatic recording facility allows operators to manage media by event, not just start and stop times. Abit's rapid installation of its automation solutions provides the server-based operations with drag-and-drop playlists for high reliability. The flexible software allows further developments as CBC requires, and continues to save it time and money. "The robust automation systems enable us to deliver enhanced services to advertisers, broadcasters and viewers", says CBC's Jonas.

"Our facilities will be moved to a new playout and production centre which is currently under construction and will go on-air at the end of 2008", he explains. "Technical meetings for format findings/commitments and basic requirements are held on a monthly basis."

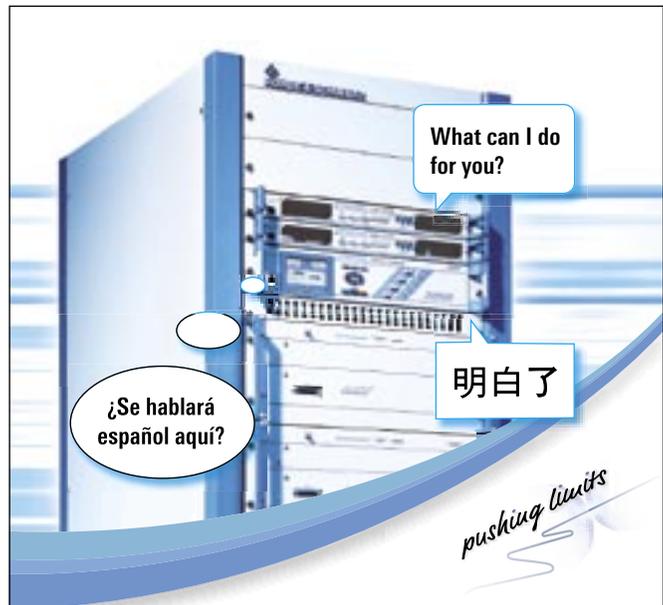
The master control room provides all necessary infrastructures for connecting to clients, customers and subscribers. Besides digital ATM service lines, two large satellite dishes (3.7m and 2.4m) for satellite up- and downlinks together with several smaller ones for reception and permanent SDI lines, CBC interconnects with Deutsche Telekom, ARD/ZDF and other commercial broadcasters worldwide. Munich and Cologne air their channels and provide redundancy in case of bad weather conditions. If needed playlists can be shared between both facilities and performed out of the automation system. For such an occasional event, dial-in ATM lines would be operated between the two facilities.

Additional services provided by CBC include facility management and media services such as recording off-air, copying, encoding, streaming, and CD/DVD duplication.

Outlook

RTL Cologne and its affiliates will move its facilities, operations and services to a new location with more production and office space and new technology at the end of 2008. This new facility is being built from scratch in the remaining outside walls of an historic building and will be state-of-the-art when finished. Momentarily, RTL Shop is based in Cologne but will go online from its new facilities in Hanover in October this year. Currently they are setting up the infrastructure together with studio, production, post-production, playout and office resources. 📺

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