Etere Automation In a Unique Playout System

ediaset is the leading commercial television group in Italy and one of the largest media organizations in Europe. Twenty Mediaset studios in various locations in Italy deliver 7,500 hours of TV annually to three networks in Italy international clients.

To improve workflow and decrease production costs, Mediaset has begun to upgrade its internal Ethernet and fibre main and backup video file servers and a low res MPEG-1 server; video/audio routing; automatic and manual ingest areas; live video reception areas; incoming material with immediate server ingest; QC; playlist 'assembly' area; master control and logo insertion chains; and playout desks with emergency management.

The system architecture allows the three channels' program, promo and publicity via passive splitter to two identical 96x96 routers (main and backup), which, under ETERE control, feed the respective server inputs. Remote XY control panels offering access to both these routers are strategically located throughout the facility: at the four playout desks, in the equipment room, the four quality control posts, the three manual ingest suites and the three live material ingest suites, enabling manual control in emergency situations or for operations for which automationfree control is required. Two routers (main and backup) are used for timecode management.

The main router on the other hand, feeds the master control A/B inputs by means of software, which also controls insertion of the appropriate logos, clock and titles. In the event of live transmissions such as newscasts, operators can disable the automation and intervene manually on the controls.

Everything is controlled by an ETERE main and clone backup automation controller system. If an operator isn't satisfied with what's happening on the main chain, he can switch everything over to backup, running the same scheduling frame synchronized. An operator can also go on-air via router, ensuring flexible continuity even in the event of a block of both master controllers.

Each of the facility's four quality control suites uses a workstation with automation software analysing the material in the servers according to Mediaset's quality criteria. The

main challenge for ETERE was the size of the system. The largest investment by ETERE for this project - resulting in what is now a product called Etere Version 12 - was in 'Glue Software' that connects playlist assembly, automation, and as-run logs with existing Mediaset structures. A playlist editor already existed, but not all the current characteristics.

Although the material used in preparing Mediaset playlists can be divided into four macro groups (programs, publicity, special initiatives and promos), in fact it comprises 900 different types of 'objects', so numerous different methods for calculating publicity traffic are involved, based on national legislation and Mediaset's own regulations - which limit items such as promos to a certain percentage. ETERE also keeps this aspect under control.

Mediaset is the first broadcaster to implement IP control of SeaChange equipment, so there's no more RS 422 - all the commands arrive via IP, which gives the great advantage of offering a fault-tolerant set-up that eliminates approximately 250 ports and relative cable runs.

In the ingest zone, the PCs controlling three Flexicart units for long events have software that ensures items are uploaded in the order in which they're needed, streamlining Flexicarts' feeds to the servers.

Playout operators have main and backup at their disposal, but ETERE has virtualised this aspect, and the two systems are in fact physically just one, from which it's possible to control both. As main and backup are interconnected, it's possible to work with just back-up controller or just the main controller. It's a unique system.

The goal was a system with 90 percent of its functions software-based, but without a single point of failure.

optics network and streamline all the processes associated with production, news, external locations and transmission.

The company has recently changed to a unique serverbased playout facility, for use by Mediaset's three terrestrial networks. The plan is to build a system with 90 percent of its functions software-based, but without a single point of failure. The result is a fault-resilient infrastructure that guarantees continuous operation. The facility even has a fourth auxiliary playout channel identical to the three for normal use.

The Mediaset project is one the television first installations using SeaChange's recently available 72GB disk drives, and the facility has been an excellent test-bed for Italian automation company ETERE's software, too.

The set-up — all controlled by ETERE software - includes

material to be ingested at least six days before going on-air. It also enables 'live' management of the programs, according to network requirements.

The video stored in the two 7-node SeaChange Broadcast MediaClusters (BMCs) is the equivalent of approximately nine days for each of the four channels, and the BMCs are used as main and backup storage of everything including the live material, which can be recorded on the servers as required. The same material in low-resolution for browsing is fed on to a 3-node Broadcast Media Server.

Ingest procedure involves the simultaneously automated loading of the main and lo-res browser servers, so all three have exactly the same material.

Each of the three 'live' ingest suites has a workstation running software that controls manual automatic operations. Incoming signals are distributed

CONTACTS

+39 033 9654 info@etere.com