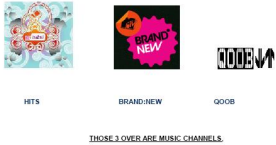


## MTV ITALY FROM 2002 TO 2006

### MTV choose again Etere to organize its facility in Milano



MTV logos

After March 2002 the Italian MTV channel again chose Etere to organize its facility in Milano, and develop its master control room and archive. When Etere met MTV on 2002 they put out a challenge to the software Italian company, the young music TV station was completely renewing its broadcasting system using a single company and its unique and innovative software.

Etere reached the target at that time and the cooperation between Etere and MTV went through up to nowadays, thanks to Etere reliable software and, where necessary, to its 24 hours a day support. To understand the features of 2006 we have to consider that with the first installation for MTV on 2002, Etere provided all the following to reorganize the channel broadcasting.

The following key features were necessary to perform Etere system with success:

1. An asset archive able to organize the entire MTV library, more than 5"000 hours of music.
2. The archive must be Music oriented instead of „film oriented“ so some attributes are requested as artist/version/VJ and so on.
3. A server based ingestion with large memory to contain all the music necessary for the daily programming.
4. A connection between all MTV infrastructures, which use other software and archives to store metadata and the MTV music programming office.
5. A flexible subtitling to create „on the fly“ automatically the asset graphics based on the capability to change templates easily.
6. Not a single point of failure in the system.
7. A large library to connect all editing stations for full tape less operation.
8. Integrated traffic and billing features.
9. Integrated scheduling features for an easy, advanced programming.
10. A disaster recovery system capable to operate automatically

To obtain all those features for one single vendor, the perfect choice is Etere Automation and the Italian company set the system in Milan providing the music channel all necessary to perform with success. During those 4 years MTV channel has grown and grown and on 2006 has been necessary to modify part of the installation to update it to the new needs of the channel that meantime has added other channels on different locations. When Etere started its collaboration with the Italian music channel it only built up MTV broadcasting system, after 4 years Etere is managing the broadcasting of all those channels related with MTV:

HITS  
BRAND:NEW  
QOOB  
PARAMOUNTCOMMEDY  
NICKELODEON  
FILMS AND SIT-COM  
KIDS CHANNEL  
MULTI PROGRAM CHANNEL

LA7 is the most recent channel to have joined to the company that manages MTV and it is a traditional TV channel with news, films, shows, music, cartoons and all else. Said this lets go inside Etere software and features to see how it manages all this.

## Etere solutions for MTV requestes

We must take into consideration that MTV during all its activity has never cancelled a video.

It is possible to imagine that they have hundreds of videos to go on air daily, million of dates saved and more in the future to be stored, and in any case all of them, anytime can be used to go on air.

After having used only a disk library during those year, they have a DISK ARRAY of 30TB, MTV added to the archive system also a library STORAGETECK/SUN SL500 with 60TB.

To manage the disk and the library archiving system, the 3 music channels are using Etere HSM.

They have 4 levels of archives:

- Videoservers (with access time =0)
- Disk archive (with access time few seconds)
- Tape libraries (with access time few minutes)
- Videotape library (with access time 15 minutes)

With HSM Etere is able to manage all those archive in a single integrated environment, where all the video is moved to be on time on the correct place. With Etere HSM your media cockpit can show all the info you need in a single screen.

The software is able to manage the archive of all the huge amount of videos the station is using transferring them from videosever to disk, to library or backwards accordingly to the frequent, or not frequent, usage of the video itself. MTV adopted an innovative approach to the library. The library is a long-term archive to store all that is not necessary for the „next week“ and keep copy of all video; everything needed to be accessed is already on the server. This is necessary to decrease the disk access storage and to lower the bit rates, which allow the compression of mpegs.

In this case, the library is really a deep archive that holds all the assets of a complete tape less TV station. This allows choosing a library with a bigger capacity of storing than speed, and keeping the tape on its long-term role of high capacity device. The necessary speed is the same speed as when you have to take a videotape form the archive, move to a Vtr, cue it and play, that is 10 minutes!

Import to add that by means of Etere HSM it is possible also that the library makes copies of the databes.

Two tapes are left free, no video are recorded on them, in order to be used to make copy of the database.

The library makes two copies and cancel one anytime we need to copy again the dates; in this way we do not need any other feature to copy the database and we can manage it as well with only one software. The whole migration policy is the key point of success of Etere Media Manager.

There are less than 5 transactions per a day between the library and the server!

The remaining bandwidth will be used to browse the library for the



studio's post-production.

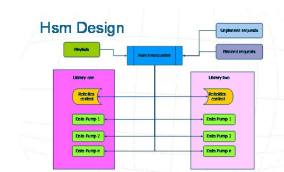
To be pointed out that HSM is able to track the videos and the tape, even if those were sent outside the studios. Through the software it is possible to find where a video is, in the pc, different colors and icons will show if the video has been sent to another building, if it is in the studio if it is going to be used and when this will happen.

This function is extremely important for TV stations which have, as MTV, various playout buildings located in different parts of the city and in MTV case even in another city.

Etere Asset Archive is based on SQL and it can accommodate any number of video assets. SQL 2005 technology by Microsoft allows a safe, fast and inexpensive archive for any connection to the external world.

Etere Archive Manager is the perfect solution to proficiently manage digital archive. Archive Manager expands the video server capacity deploying innovative hi-speed technologies at competitive prices. The software can remote control both digital and tape libraries (i.e. deep archives). Videos are moved from the video server to the digital library and vice versa accordingly to their respective metadata.

Etere Archive Manager is a must-have when broadcasters adopt disk-based libraries. It integrates with all other Etere automation solutions providing all the Etere MAM features adding browsing and preview capability to the archived video materials.





### A server based ingestion

MTV at first had only one SeaChange server BMC™ 1230 series with 4 inputs (2 for the low quality and 2 for the high quality) and 4 outputs (2 for the preview and 2 for the playout), which is able to store about 326h @10Mb/sec. Nowadays they were forced to add a second SeaChange server. So the unique SeaChange architecture allows having a complete fault tolerant system.

Etere is installed in its main/clone option with 2 parallel independent outputs with automatic rollover in case the main one fails. All the RS422 controls are embedded in a fault tolerant/fault resilient Ethernet infrastructure.

Also the central router control is managed by Etere in its unique "assisted router option" which allows to cache in the server from any device to any input of any workstation. This flexibility provided by Etere unique distributed architecture allows a completely configurable system without a single point of failure but with natural fault resilience.

### Etere asset has been musical oriented

Etere asset is fully configurable and allows storing any number of attributes for every object. All the attributes are in a full relation with the asset so any query is determined and can be performed in a very short time.

Also the artist connection allows multiple artists and roles (producer/singer/director) without repeating or duplicating any artist. This helps to keep the data organized and to make any search much easier and this is extremely important for those channels having to deal with million of files, artists, titles, albums and many other important dates that must be stored in order to be found in the easiest way and mainly as quickly as possible without mistake.

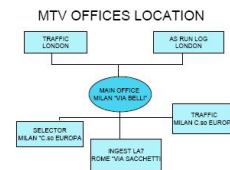
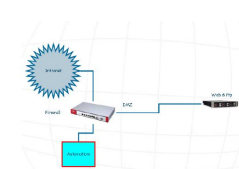
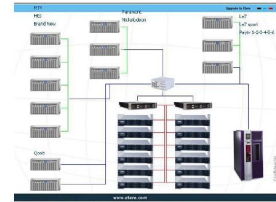
### A server based ingestion

MTV at first had only one SeaChange server BMC™ 1230 series with 4 inputs (2 for the low quality and 2 for the high quality) and 4 outputs (2 for the preview and 2 for the playout), which is able to store about 326h @10Mb/sec. Nowadays they were forced to add a second SeaChange server. So the unique SeaChange architecture allows having a complete fault tolerant system.

Etere is installed in its main/clone option with 2 parallel independent outputs with automatic rollover in case the main one fails. All the RS422 controls are embedded in a fault tolerant/fault resilient Ethernet infrastructure. Also the central router control is managed by Etere in its unique "assisted router option" which allows to cache in the server from any device to any input of any workstation. This flexibility provided by Etere unique distributed architecture allows a completely configurable system without a single point of failure but with natural fault resilience

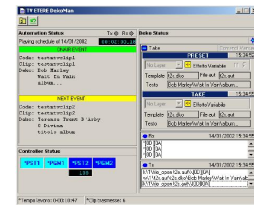


11 MTV General Scheme at 2006



### A connection with MTV infrastructure

When Etere met MTV in 2002 the Italian channel had 3 offices in Milan, plus another one in London. Nowadays they have added also LA7 broadcasting which is not in Milan but in Rome. All those people are on line by using the same system.



### A flexible subtitling

MTV chose Pinnacle Write Deko 2000 to create titles on the fly. Deko is a good system, but it needs to be interfaced with the large MTV archive.

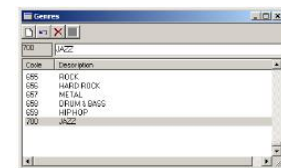
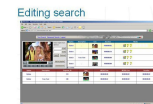


Etere created a dynamic connection between the archive and the Deko.

In the MTV graphics you are able to see artist, title, and album at the beginning of the clip, and only artist and title at the end. This has been accomplished without retyping any data when connecting the Deko with Etere database, which is created on the fly by the automation to contain correct data and their format.

### Not a single point of failure

The SeaChange server technology has not a single point of failure. The Etere SQL database for MTV is based on a SQL2000 server cluster; this system hasn't got a single point of failure. Also the Intel network switches are fully redundant and all the „sensitive“ PCs have 2 NIC connected to both switches, for a full fault tolerant, fault resilient architecture (See MTV general scheme at last page).



### A library to connect all editing stations

At MTV has been scheduled a large library able to connect all editing stations for full tape less operation

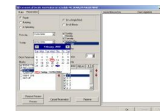
### Editing integration

Some Adobe premiere editing systems are integrated.

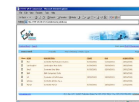
At MTV it is possible to search video only by using Etere Web interface and upload the new version. As the editing are behind a firewall there is a great enhanced security

### Integrated Traffic & Billing

MTV also choose Etere to have its traffic system connected with the onair & catching



Etere Traffic is on the top of the world's management tool for commercials and it suits local commercial rules, so Etere is able to schedule accordingly to the local traffic limits.



Also, ETERE Traffic has an integrated billing features and an integrated web based access for customers/agencies



## A Disaster recovery

MTV Italy is so important that they simply cannot let the program crash even if the entire system crashes. This would be like if there had been an earthquake or a storm... so MTV chose Etere Disaster Recovery function. Etere DR keeps the Sync as a second site, with another server, even if the latter is of a different size.

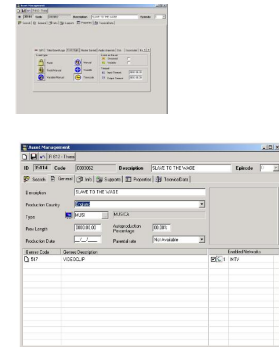


The DS site operates completely unmanaged, and is connected by using an Ethernet connection. Only this way it can be placed in a different city, state or country.

## Integrated scheduling

Etere's advanced scheduling is used to create the "grids" inside schedule canvas.

It allows the scheduling supervisor to choose the TV strategy, not only a "fixing" one (for example "Every Wednesday, at 3pm, will be broadcasted a live show") but also an object alike the grid to fill in.



This grid allows the scheduling operator to work without making errors because each sequence has been already selected, and it also keeps the TV format stable.

A typical grid can be as the one below:

- Station promo
- Future programming promo
- Commercial break
- Station promo
- Live announcement
- Program 1st part
- Station promo
- Commercial break
- Future programming promo
- Program 2nd part