Europe's Largest Communications Provider Orchestrates Multichannel Playout Center with Vector MultiPlay

VECTOR 3 MULTICHANNEL SOLUTION HELPS TSA TO SUCCEED IN THE INTERNATIONAL
CHANNEL PLAYOUT HOUSING BUSINESS

OVERVIEW

Telefónica Servicios Audiovisuales (TSA) is a division of Telefónica, one of the largest telecommunications companies in the world, operating in 25 countries with a customer base of more than 264 million. TSA offers a wide range of communication solutions from television system consultation and integration to satellite transmission via their fully equipped playout center based in Madrid. The TSA transmission hub provides all of the infrastructure to uplink to any satellite; making it an ideal location for housing channels (i.e. renting transmission space and playout services to channel operators).

CHALLENGE

The breadth and depth of the TSA playout center makes it a fundamental hub in the world network of transmission links for live events. Because it is a large-scale operator,
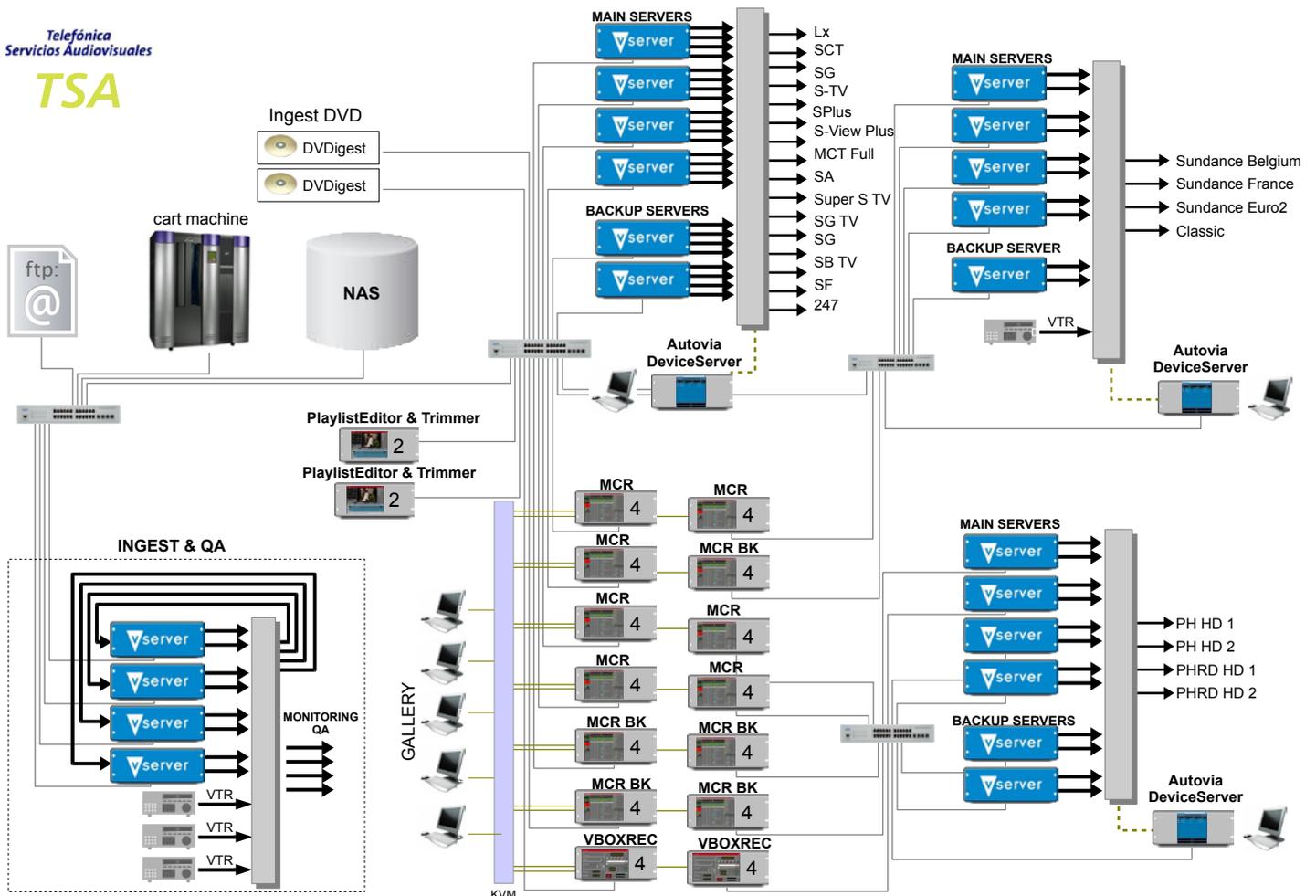
TSA

"Thanks to Vector MultiPlay's flexibility and adaptability, the TSA playout center can support any client profile and workflow. Content can come in any format, and channel operators can keep their broadcast model without incurring playout constraints or a disproportionate economic burden."

Sindo Quintano, General Manager ,TSA

TSA can offer channel producers a more affordable package for renting satellite bandwidth and playout services than if they were to manage on their own. The attractively priced channel housing options draw in a dynamic mix of channel operators with very varied playout support needs. One of the latest additions is the award winning Sundance Channel, whose programs are offered in HD. Depending on the rental package, clients can send their material to be digitized, have subtitles added, be QA, and stored or simply sent via FTP ready-to-air files containing the video with the associated audio and the closed captioning intact.

As a forward-thinking communications company, TSA wanted to utilize the latest technologies to build a broadcast infrastructure capable of supporting any client workflow request. In order to preserve image quality and keep costs to a minimum the new

Telefónica
Servicios Audiovisuales
TSA

Ingest DVD

DVDigest
DVDigest

cart machine

ftp:@

NAS

MAIN SERVERS

server
server
server
server

Lx
SCT
SG
S-TV
SPlus
S-View Plus
MCT Full
SA
Super S TV
SG TV
SG
SB TV
SF
247

BACKUP SERVERS

server
server

MAIN SERVERS

server
server
server
server

Sundance Belgium
Sundance France
Sundance Euro2
Classic

BACKUP SERVER

server

VTR

**Autovia
DeviceServer**

**Autovia
DeviceServer**

PlaylistEditor & Trimmer
2

PlaylistEditor & Trimmer
2

INGEST & QA

server
server
server
server

**MONITORING
QA**

VTR
VTR
VTR

GALLERY

MCR 4   MCR 4
MCR 4   MCR BK 4
MCR 4   MCR 4
MCR 4   MCR 4
MCR BK 4   MCR BK 4
MCR BK 4   MCR BK 4
VBOXREC 4   VBOXREC 4

KVM

MAIN SERVERS

server
server
server
server

PH HD 1
PH HD 2
PHRD HD 1
PHRD HD 2

BACKUP SERVERS

server
server

**Autovia
DeviceServer**

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platform would need to be able to receive material in any format, wrapper or compression scheme and play it out with minimal handling and conversion. The broadcast platform would also need to be fault-tolerant as transmission contracts included severe penalty clauses for blank transmissions and broadcast errors.

SOLUTION

TSA selected Vector MultiPlay to streamline the transmission process and establish a reliable broadcast infrastructure for multichannel playout with smart redundancy management. Vector MultiPlay consolidates each aspect of the broadcast workflow for TSA, including ingest, pre-production, playlist creation, CGs, device control, and on air playout, into one highly scalable software solution that leverages IT-based hardware. While Vector MultiPlay provides complete control over each aspect of ingest, playlist creation, and on-air broadcast; the technology is fully in-

tegrated with the TSA legacy equipment, including switchers, routers, VTRs, mixers and close-caption systems. It also offers a flexible redundancy management approach that lets TSA dynamically prioritize channel back-up, thus reducing the equipment overhead by substituting state-of-the-art "n+m backup" and eliminating 1 to 1 server mirroring.

"TSA is one of the biggest communications players on the broadcast market. Their massive playout center easily facilitates signal transmission and can compete for rental business with any other playout hub in the world," comments Roman Ceano, General Manager of Vector 3. "Thanks to Vector MultiPlay's flexibility and adaptability, the TSA playout center can support any client profile and workflow. Content can come in any format, including HDs, tapes, DVD, FTP and even old style videotapes. Channel operators can keep their broadcast model without incurring playout constraints or a disproportionate economic burden."

When the TSA customer needs it, Vector MultiPlay will expertly control manual ingest with mark-in mark-out from satellite. It will also facilate massive, nearly automatic DVD feeds, which are very common with lower budget channel operators. "The Vector MultiPlay DVD ingest tool lets me queue a large number of DVDs and review the material even while the copy is in process. And because this is done in the background, it does not disrupt the other aspects of the operations. I can continue working – building playlists, monitoring the back-ups or ingesting new material from servers," comments Pedro Meco, Playout Supervisor TSA. "From the same system, I can manage the whole process, including all the file-based workflow and playout. Even with sudden changes, downloading from an FTP or satellite, queueing up for QA, adding to the playlist and flushing the servers for playout works very smoothly."

The Vector MultiPlay master control room offers state-of-the-art automation

with extensive playout control capabilities, including: early checking of events with configurable horizons, time-stamped "takes," offsets to compensate for any type of latency or communication delay, live and time delay events, automatic filling with emergency material, clip categorization, interactive real-time cataloguing and more. The playlist's flexible user interface not only allows the user to configure column width and order, but also adds clip metadata as new columns, enabling it to be checked by the operator (e.g. in a pop music channel the artist name can be used to check the overlaying).

Vector MultiPlay video server not only plays out video but also overlays graphics, bugs and tickers and allows a wide range of transitions between clips, such as fades, wipes, and fade-to-black without the need for additional equipment.

For TSA, this integrated branding feature helps to personalize the customer's channels by using dynamic CG templates for news tickers, titling, clocks, quizzes, "What's up next" and weather graphics in any graphic file format or alphabet. These can be used in combination with graphic effects, such as shading or transparencies, and video effects, such as zooms or squeeze backs, to enable the TSA customer to present their channel however they like. The sophisticated XML management allows for automatic graphics creation by receiving metadata in real time if necessary (e.g. SMS) or by storing it with the clip or whatever the customer requests.

BENEFITS

Vector MultiPlay's flexible architecture lets TSA fully consolidate 24 different channels into 3 straightforward, file-based workflows. The streamlined process reduces management and resource overhead and better manages the dynamic multi-language programming schedules. Thanks to its IT-based infrastructure, the Vector MultiPlay platform can easily scale to meet TSA's growing broadcast business.

TSA
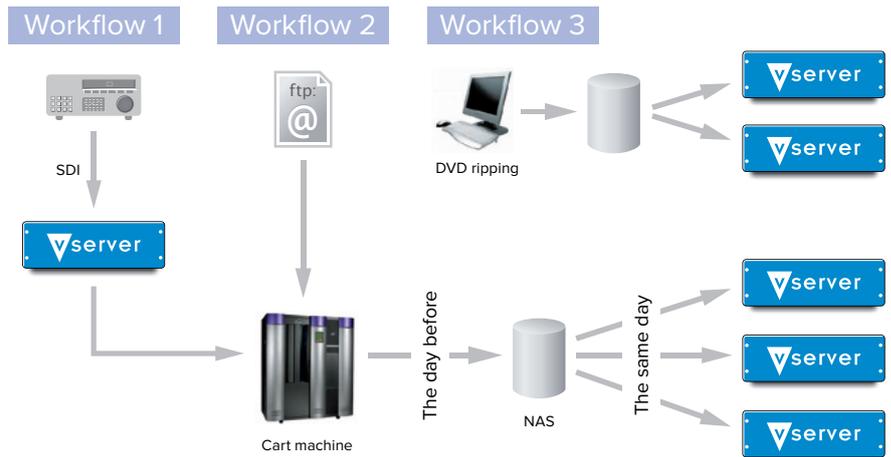
The Vector MultiPlay broadcast platform supports three different playout workflows at TSA.

WORKFLOW 1

STEP 1

For the classic channels that work in the old-fashioned way, program material is delivered to TSA via videotape which is digitized from a VTR in SDI or HDSDI format. Vector MultiPlay manages the ingest process, and if necessary allows the operator to put offsets and to change the SOM to fit with subtitles, metadata and subline structure.

STEP 2

With a longer horizon for event playout, customer playlists are created early. Once it has been digitized and QA, Vector MultiPlay automation moves program content well in advance to the Storagetek cart machine (this is necessary as videotape based workflows call for careful planning and early preparations). Vector MultiPlay continuously checks events, ensuring content is where it needs to be and that playout takes place.

STEP 3

Which is common to the other workflows, Vector MultiPlay automation transfers material to the NAS 1 to 2 days prior to transmission. On the day of transmission, the material is transferred to local disks for playout.

WORKFLOW 2

STEP 1

Channels using more modern workflows digitize their own materials and upload the files containing all the tracks (video, many audios, close caption) to a TSA FTP site. Vector MultiPlay manages ingest from the FTP, catalogs the content and copies to the Storagetek library cart machine. The process is mainly automatic but operator can check status and files at any moment.

STEP 2

Vector MultiPlay compares the playlists sent by the customer with the content and alerts the TSA operator to any differences. QA is performed according to the modality established in the customer contract. This can range from minimum to total QA of content.

STEP 3

The integrated Vector MultiPlay format player supports just about every video format. Customer files that are transferred first to the NAS and then to the local playout servers can be broadcast without intervention or manipulation. After playout, material is erased from the NAS and a final emissions log is sent to the client as proof of playout.

WORKFLOW 3

STEP 1

Addresses the low budget channels that send the material on formats such as DVDs. The integrated Vector MultiPlay DVD ingest tool automates the majority of the copy by queuing multiple discs and automatically copying content onto the NAS. In some instances, Vector MultiPlay transcodes the material into standard broadcast format. TSA operators are able to QA content as it is being copied onto the servers. The background copy process lets users continue with managing other aspects of the playout workflow.

STEP 2

The material of these channels is not stored in the cart-machine because the content life cycle is more often much shorter and the typical compression means files are small enough to be managed directly on the NAS.

STEP 3

Sixteen of the low budget channels are currently played out in TSA with redundancy. They are SDI and grouped in chassis of 4 channels each.