



VECTOR3



Photo: Marc van der Chijs

NOS TV Turns to VectorBox for File-based Broadcast Automation

UNIQUE SHARED REDUNDANCY ARCHITECTURE PROVIDES INTEGRATED BROADCAST FOR MULTIPLE CHANNELS

OVERVIEW

The Nederlandse Omroep Stichting (NOS) is a public broadcaster for The Netherlands. With over 700 journalists, NOS offers several news and sports programs for the three Dutch public television channels and the Dutch public radio services; NOS Journaal (on radio and television), the NOS Jeugd Journaal, NOS Studio Sport, NOS Den Haag Today, NOS Along the line, NOS With Eye on Tomorrow, The NOS Radio 1 Journaal, NOS Headlines and various news and sports events.

CHALLENGE

NOS Journaal, the most important news program in the Netherlands needed to upgrade their infrastructure to support a tapeless broadcast workflow. The highly rated thematic program is broadcasted 24/7 with special editions of the show aired at 18.00 hrs, 22.00 hrs, as well as 8 to 10 minutes of every hour. The demanding schedule has a constant feed

of fresh content and requires a broadcast infrastructure that facilitates media transfers from one step in to the next without human intervention to better meet the demanding program schedule.

Complicating the situation was the broadcast infrastructure upgrade NOS staff wanted to simultaneously make for another important show – Politiek 24.

The new upgrade design called for a broadcast system that would facilitate a mix of live and continuity playout for a wide range of programs and schedules. The playlist manager would need to be dynamic and flexible enough to manage last minute changes, not easy in a large scale operation that is planned to the second. The system would also need to be adaptable to various workflows – requiring integration with production systems, archives, and other servers. Most important, because NOS was the preeminent news channel, a failsafe system was the only option. NOS TV could never go off air.

NOS turned to the team of Burst Video B.V. for strategy and infrastructure design assistance.

SOLUTION

The VectorBox was selected to provide NOS with a broadcast automation and unique shared, multi-channel redundancy solution. VectorBox consolidates each aspect of the broadcast workflow for NOS, including: ingest, playlist creation, CGs, device control and on air playout into one simple to use solution. While VectorBox provides complete control over each aspect of ingest, playlist creation, and on air broadcast; the technology is fully integrated with the NOS broadcast equipments including switchers, routers, production and archive systems.

“VectorBox provides smart flexible redundancy management capabilities along with in-depth broadcast automation controls necessary to manage large-scale operations like NOS,” comments Marijn Bulten, Burst Video. “It was the only system we viewed as reliable enough to broadcast 24/7 NOS’ most important programs.”

The VectorBox ingest expertly controls media recording from video servers, VTRs, satellite feeds and any other type of routing systems found in the broadcast operation. The comprehensive feature set ensures broadcasters can manually initiate spur-of-

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the-moment recording as well as automatically schedule daily jobs.

The built-in VectorBox master control room component offers state-of-the-art automation with extensive capabilities controlling playout, including: early checking of events with configurable horizons, time-stamped “takes”, offsets to compensate for any kind of latencies and communication delays, live & time delay events, automatic filling with emergency material, clips categorization, interactive real-time cataloguing, and more. The flexible playlist’s user interface not only allows the user to configure columns width and order, but adds the metadata of the clips as new columns.

The VectorBox video server also allows operators to add - on the fly - a wide range of transitions between clips, such as fades, wipes, and fade-to-black, all with corresponding audio control. Deeper feature capabilities include the ability to crop, rotate, adjust color and more. The integrated channel branding feature set makes it easy to create dynamic CG templates for news tickers, titling, clocks, quizzes, “What’s up next,” and weather graphics using any graphic file format and alphabet. These can be used in combination with effects such as shading, transparencies, and video effects such as zooms and squeeze backs to brilliantly present a creative idea, provide for audience interaction and increase profits through SMS chat or advertising and sponsorships.

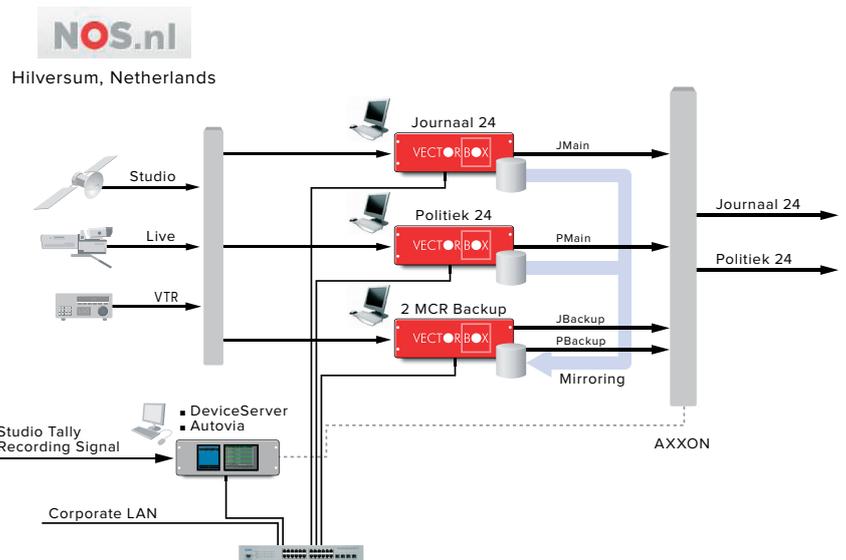
BENEFITS

VectorBox provides NOS with a failsafe playout system that incorporates smart redundancy techniques such as shared back up. With the capabilities of a full master control room integrated into one solution, NOS was able to deploy a number of broadcast workflows – live and continuity playout 24/7 using the same system. Fully scalable, VectorBox can scale to meet multiple channels and formats using a single playout server.

SPECIFICATIONS

NOS Facility

- 3 VectorBox 6000



STEP 1

Transmission from the studio ingested by VectorBox

STEP 2

Content is indexed and stored on an internal VectorBox storage

STEP 3

Graphic overlays, tickers and other visuals are added

STEP 4

VectorBox executes seconds after studio signal with appropriate graphics

FOR CONTINUITY

STEP 1

Operator or VIA MOS protocol defines playlist for program playout

STEP 2

VectorBox executes playout directions and orchestrates commercial integration through local traffic system

Autovia provides 24/7 health monitoring, scanning the VectorBox systems and reporting on performance. In the event of a failure, VectorBox will automatically revert to the back up VectorBox server.

WORKFLOW

For both channels, live news programs studio transmissions are fed to the VectorBox, which automatically ingests and simultaneously plays out the signal with graphics overlays. Operators use VectorBox templates to define titling, tickers and overlays for the broadcast. The VectorBox playlist manages the insertion of commercial breaks, and pre-recorded news packages to the second. Late breaking news can be easily updated by manual reconfiguring the playlist to break for a new event. The entire broadcast is then migrated to the NOS archive with full metadata intact.

For program playout, VectorBox provides the full continuity playout capabilities by integrating with a multitude of systems to orchestrate program playout. The VectorBox play-

list can be created manually or fed via MOS protocol by a traffic system to organize program schedule. Media migrations are completely automated. With full metadata tracking, VectorBox automates program playout without human intervention.

Ensuring the health of the system is the Autovia application. Continually monitoring the state of the servers, any sign of a server failure and VectorBox automatically triggers a backup server into play. The automated processes ensures broadcasts run without interruption.

VectorBox flexible architecture enabled NOS to have one server that supplied dual redundancy for both channels optimizing the costs of maintaining the new tapeless infrastructure.