

# MCR SOLUTIONS

FLEXIBLE PLAYOUT AND CUSTOMIZABLE WORKING MODELS

wtvision.com



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Adaptable to fit on your existing structure or to rely exclusively on wTVision's suite of applications.

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### ChannelMaker-in-the-Box

A ready-to-ship unit system that does the job of a traditional automation system.

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Flexible real-time 3D graphics engine to boost any broadcast.

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## A FLEXIBLE MASTER CONTROL ROOM

wTVision's Integrated Broadcasting Solutions



wTVision develops integrated solutions for any Master Control Room, offering scalable, flexible and customizable channel demands, designed to ease your operation and boost your playout automation. This is done thanks to our powerful **software**, modern **playout centers** and **specialized operators**.

Our playout automation setups, also **available in the cloud**, have **ChannelMaker** at heart and are extremely flexible, offering a wide range of possibilities. **ChannelMaker**'s plug-in based architecture is totally adaptable to fit on your existing structure or to rely on wTVision's suite of applications.

Our solutions also include an **Ingest and Trimming** tool, a **Media Asset Manager**, that keeps track of all available media across the network, and a powerful **3D graphics render engine**, that is the preferable choice of thousands of producers worldwide.

Besides all the customized solutions, we have a turn-key system, **ChannelMaker-in-the-box**, that combines hardware and software (playout automation, video server and graphic engine), providing a ready-to-use playout solution.





Flexible, Intuitive, Effective



**ChannelMaker** allows to easily create, optimize or expand a TV channel.

It can be delivered either as a channel-in-a-box, a multi-system solution or an advertising insertion tool and can be fully customizable to each broadcaster's needs.

## PREPARING YOUR RUNDOWN

wTVision offers a scalable, flexible and extremely customizable channel automation solution, designed to ease channel management operations.



With **ChannelMaker** you are able to:

- Control and manage all your channels in a single web interface
- Control live events and pre-recorded videos
- Catalog media to generate automatic content on graphics
- Create multiple playlists
- Create playlists off-air and add them to the main timeline
- Import playlists from traffic systems, via file or web based mechanisms
- Export playlists
- Manage the entire channel autonomously with intelligent tracker panel
- Get comprehensive timecode support
- Reschedule in real time: the operator can instantly reschedule the remain rundown (e.g.: unhold the playout or take next clip)
- Orchestrate all your peripheral devices to produce amazing outputs
- Create new channels with few and easy steps

## **CONTENT VALIDATION & MONITORING**

A single failure in your workflow might mean a costly break in your broadcast. To help you assure a flawless broadcast, we developed several tools to bring security and comfort to your TV channel.

### Media Check



Makes sure videos are in place before their air time. Checks for corruption problems or duration inconsistencies in source media, before they can cause havoc on-air



### Alert Manager

Alerts regarding potential problems (e.g. a device is approaching limit of storage capacity) and possible ways to solve it



### Multi Viewer

Allows users to monitor several channels simultaneously



#### Reporting Tool

Analyzes if the playout went according to plan, identifying which clips were actually scheduled and broadcasted



### **Logging Tools**

Keeps a record of all the actions performed by the operators and the internal system



### Rundown Inconsistency Checks

Automatically checks for gaps or overlaps in the video rundown, adding reliability to your broadcast



## **GRAPHICS & VIDEO PLAYOUT**

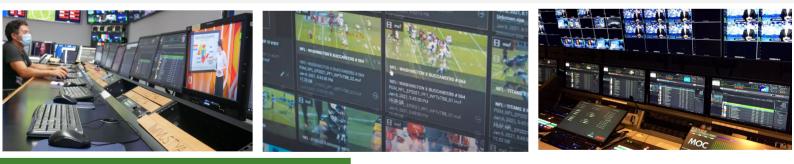
ChannelMaker's main task is to control the videos playout.

To do this, you can choose to have wTVision Media Playout Server, which offers a flexible storage capacity to meet your TV channel's needs or we can plug our system into the most relevant industry video servers.

**wTVision Media Server**, besides handling commonly used broadcast formats, like XDCAM HD50, also embeds some key functionalities of normalisation and automation. It supports STCE-35/STCE-104 for breaks and transitions or live events.

**wTVision Media Server - Streaming Edition** is a perfect fit for channels who need to broadcast multiple signals in multiple locations or are looking for streaming solutions.

With ChannelMaker your **media** and **graphics** are completely managed by an integrated Playout Engine. ChannelMaker can generate automatic Program Guides and Now/Next graphics effortlessly eliminating countless hours of manual post-processing workflows. This has the added advantage to eliminate all GPI triggers and dual workflows to sync Video and Graphics.



## **KEY BENEFITS**

- Supports all the major graphic engines
- Supports multiple video server technologies
- Automatic EPG and Now/Next graphics
- Easy integration with the client's existing graphics
- Effective cataloging capacity for a better video library management
- Allows Squeeze Back / Picture-In-Picture / DVE / L-Shape



## **THIRD-PARTY INTEGRATIONS**

Our multi-vendor integration philosophy empowers us to advise and offer our customers many different options.

With an open architecture, **ChannelMaker** can be integrated with a wide range of third-party broadcast devices and solutions.



### **VIDEO MIXERS**

Blackmagic Design, Grass Valley, Imagine Communications and others

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### **VIDEO SERVERS**

Grass Valley, Harmonic, Imagine Communications, Caspar CG and others



## **MEDIA ASSET MANAGEMENT**

Vizrt



### **VIDEO ROUTERS**

Blackmagic Design, Grass Valley, Imagine Communications, Nevion, SAM and others



### **GRAPHIC PLATFORMS**

Brainstorm, ChyronHego, Avid, Ross Video, Vizrt, Wasp3D, Caspar CG and others



### GPIO Controllers, Cue tone/VBI/VANC/ DPI, Closed Captioning, Subtitling – Readers/Inserters

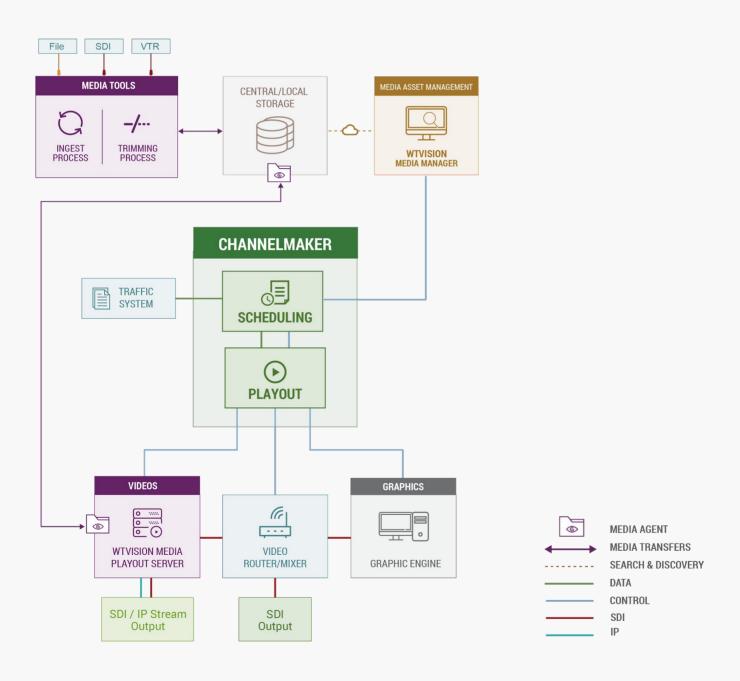


### **TRAFFIC SYSTEMS** Broadway, Broadview, GSoft, MSA Focus, Phoenix7, WideOrbit, BXF format and others



## MCR TECHNICAL ARCHITECTURE

**ChannelMaker**'s plug-in based architecture is totally adaptable to fit on your existing structure or to rely on wTVision's suite of applications.





## CHANNELMAKER-IN-A-BOX

Everything your channel needs inside a single system

**ChannelMaker-in-a-Box** is a robust single-rack unit system that does the job of a traditional automation system. Our proven playout automation software is combined with wTVision Media Playout Server (video server), a real-time graphic engine and other add-ons, delivering a **complete and ready-to-use playout solution**.

wTVision simplified its playout solution to fit everything needed to manage a TV channel inside a single box.

The advantages include easy installation, easy operation, high reliability and easy maintenance and a ready-to-ship configuration for simplified deployment.



## **Turn-key Solution**

It was designed to meet the demands of a **wide variety of applications**:

- Single-channel playout if you're just starting out
- **Channel expansion** add a channel to your existing portfolio
- Data center playout if you're running a playout data center
- **Disaster recovery/backup** simple solution to create redundancy for your main channel

More on ChannelMaker-in-a-Box here.

## WTVISION'S GRAPHICS ENGINE R<sup>3</sup> SPACE ENGINE

Real-time 3D render engine with live video inputs and fill & key outputs



## **MAIN FEATURES**

- Real-time rendering
- SD, HD and UHD
- Fill & Key output
- 2D and 3D Graphics
- Live video input
- Internal keyer
- Unlimited layers

## **MAIN BENEFITS**

- Scalable to client needs
- Cost effective solution
- Built with Microsoft DirectX®
- Easy deployment



## WTVISION'S GRAPHICS DESIGNER R<sup>3</sup> SPACE DESIGNER

Easy and intuitive 3D graphics designer with real-time VGA, SDI and NDI output.



## **MAIN FEATURES**

- Real-time 3D authoring tool
- 2D and 3D graphics
- Fill & key output
- 3D textured/animated model import
- Live video input
- 2D & 3D DVE
- Multi 32-bit video textures
- Interactive Web page/browser as texture
- Keyframable animations, triggers and interactions
- 2D & 3D scrolls
- Touch sensitive primitives and objects

## **MAIN BENEFITS**

- Easy-to-use
- DirectX® 11 based
- Unlimited Layers
- Open PC Architecture
- Fully automatable scenes through a complete API
- Easy deployment



## **INGEST AND TRIMMING**

**Media Tools** is a powerful ingest and trimming solution to enrich your video workflow.



#### INGESTER

The Ingester supports IP and SDI inputs, transforming video and compressed IP sources into file-based media

### TRIMMER

wTVision Media Trimmer allows to cut videos into segments (virtual or real), enabling you to extract clips from the most used video files formats



## INGEST AND TRIMMING KEY FEATURES

## **INGEST PROCESS**

- Supports IP and SDI inputs
- Simultaneous multi-input recording
- Configurable encoder profiles
- Supports automated workflows as well as manual operation
- Ingest previews with audio bars
- Supports GPI/O triggers
- Encodes your videos in the most popular formats (DV25, DV50, DV100, XDCAM HD 50, h264, among others)
- Supports Sony BVW-75 protocol as well as XDCam device discovery and file import using SONY FTP
- Unifies media formats through an integrated workflow with a capable and solid transcoding chain
- Ingests to the network based storage directly

## **TRIMMING PROCESS**

- Thumbnail preview
- Video structure detection
- Export clips while working on a different job
- Clip export list
- Work in multiples files at the same time
- Configurable export profiles
- Join and trim multiple clips into a single media file
- Multi-segment export
- Possibility to send SOM and EOM identifiers allowing the tool to do a frame-accurate trimming

## **MEDIA ASSET MANAGEMENT**

Add power to your production by keeping track of all available media across the network and making sure it reaches its intended destination.



**Media Asset Manager** comes with a set of Media Agents to monitor all media across your organization, providing you with a fully automated and streamlined operation.

wTVision Media Manager makes it easy for users to find, catalog, preview, transfer, and manage media through a web interface that can be accessed from any desktop or mobile device.

## MEDIA ASSET MANAGEMENT KEY FEATURES



- Continuously discovers new assets in the network and catalogues
- Creates filmstrips and low resolution proxies for videos
- Supports SD/HD/UHD videos
- Allows trimming of clips or creation of virtual clips
- Automatic and Manual content transfer between locations
- Quality control features
- Allows content categorization
- Web interface to allow remote interaction
- High availability with Cluster based service

## **MEDIA ASSET MANAGEMENT** A FULLY AUTOMATED WORKFLOW

**wTVision Media Manager** was designed to work with wTVision's applications such as ChannelMaker and Studio CG with no user intervention, allowing media to be discoverable and sequenced as soon as it shows up on the network. Through the work of several Media Agents, it will then show up at the intended destination on time. These **Media Agents** monitor transfer requests and look for new media continuously.

#### **AUTOMATIC TRANSFERS**

- Manages transfer requests
- Automates transfer requests from Studio CG and ChannelMaker
- Supports File System, FTP, Amazon S3 and Samba based transfers
- Fast copy mechanism
- Monitors your transfers in real time
- Network location health monitoring
- Macro based workflow transfers (e.g. on New Media transfer to other locations)

#### **AUTOMATIC MEDIA DETECTION**

• Distributed Media Agents continuously monitor media folders for new and changed media and report all technical details including filmstrip view to wTVision Media Manager in real time.

#### **AUTOMATIC CATALOGER**

Media Agent automatically catalogs media:

- File properties file name, file size and creation date
- File hash for file integrity checks
- Media properties video and audio formats and codecs, bitrates and media duration
- Filmstrips and low-resolution proxies





Turn-key solution for channel recording and review



RECALL is a robust turnkey system for **legal recording** and **on-air content review**.

wTVision developed a simple solution to fit everything necessary to perform the **legal recording** and **ad placement validation** of your TV channels inside a **single box**, with easy maintenance and a ready-to-ship configuration

Designed to meet the demands of a **wide variety of use cases**:

- Hardware configuration from 1 to 8 channels
- Combination of SDI and HDMI input sources (including a breakout box option to record up to 4 HDMI channels)
- Customizable recording resolutions (up to Full HD)
- NTP Client for accurate time synchronization
- Remote access through its web front-end

More on RECALL here.





Time delayer solution for time-shifting broadcast video

**Time Delay** is a video delayer solution that simply records and continuously plays out high quality broadcast video.

Usable for up to four media channels (input and output), this intuitive solution allows you to scrub video while recording to find the perfect In-Point, decide time zones for your broadcast and select the perfect time for your "false" live.

Perfect for channels that operate on different time zones / countries or that have different advertisement arrangements according to locations.

## **Main Features:**

- Able to use with SDI (BlackMagic) or 2110 (nVidia Mellanox)
- Delay 1 input to 3 different time zones
- Delay from 5 frames to multiple hours

## **Key Functionalities:**

- Remote Operation
- Web Browser Control
- Works as an standalone app
- Video In / Video Out
- Jog Support

- Use your playout's secondary event to set time interval for a specific content/live
- ChannelMaker may "Take Live" when going to a false live
- Remote API for 3rd party apps



## **WORKING MODELS**

Customizable MCR solutions: local, in the cloud and hybrid

We develop local, cloud-based and hybrid playout solutions. Our hybrid models combine the reliability of traditional automation with the remote accessibility and scalability of the cloud.

We work with 4 basic models: On-Premises, Public Cloud, wTVision Private Cloud and Hybrid.



**On-Premises** is a fully hosted solution with no cloud infrastructure (basic technical architecture on p.9).

**Public Cloud** is a fully hosted AWS (Amazon Web Services) solution with no external dependencies (except IP Decoder).

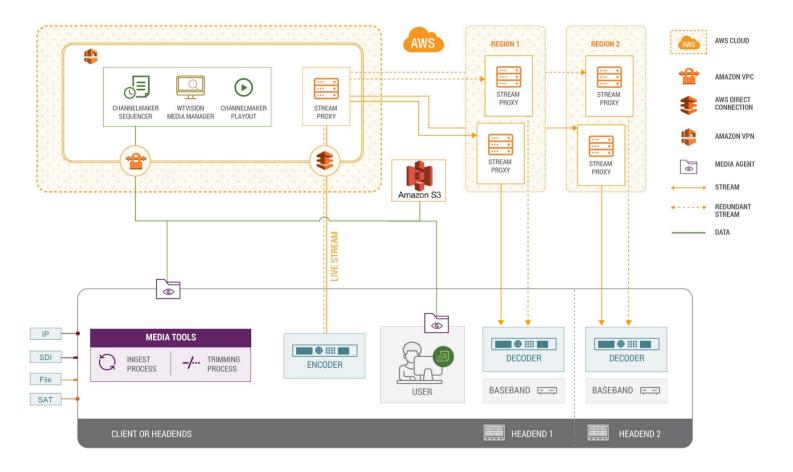
**wTVision Private Cloud** uses wTVision Data and Playout Centers, monitored 24/7, and has a remote sequencing option. wTVision Private Cloud offers the possibility of a remote operation while maintaining the guarantees of a local playout, backed by the expertise of wTVision's specialized staff.

**Hybrid** is a cloud-based solution managed on AWS infrastructure, whereas the playout takes place in one or more specific land locations. It also combines the guarantees of a traditional model with remote operation, but instead of wTVision's Playout Centers, the playout takes place in the client's premises or other infrastructure of choice.



## **PUBLIC CLOUD MODEL**

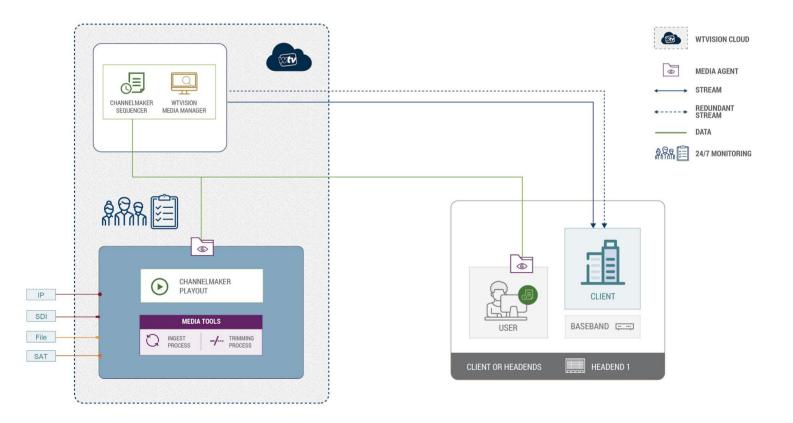
Our **Public Cloud** model is a fully hosted AWS (Amazon Web Services) solution with no external dependencies (except an IP Decoder).



## WTVISION PRIVATE CLOUD MODEL

**wTVision Private Cloud** uses wTVision Data and Playout Centers which are monitored 24/7.

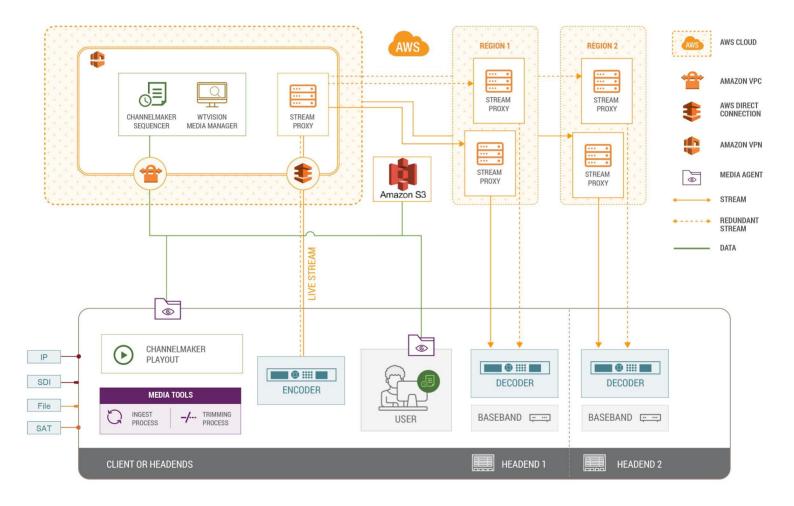
wTVision's Private Cloud offers the benefits of a remote operation while maintaining the guarantees of playing out at a fully manned and supported playout facility, backed by the expertise of wTVision's specialized broadcast professionals.





## **HYBRID MODEL**

Our **Hybrid** model is a cloud-based solution fully managed in AWS (Amazon Web Services) infrastructure in which the playout takes place in one or more specific land locations. It also combines the guarantees of a traditional model with remote operation, but instead of wTVision's Playout Centers, the playout takes place in the client's premises or other infrastructure of choice.



Start building your channel right away! CONTACT US NOW



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