



LYSIS BROADCAST VIDEO SERVER

FAST, FLEXIBLE AND HIGHLY SCALABLE DTV VIDEO SERVER PLATFORM FOR FAULT TOLERANT HIGH PERFORMANCE CONTENT ACQUISITION, STORAGE AND DISTRIBUTION

Coupled with the Lysis CMS Content Management System, the Lysis Broadcast Video Servers allow the successful deployment of Pay-TV, PPV, VOD, Push-VOD or VOD services,

For content acquisition and storage: DTV Provisioning Servers are what you are looking for to handle the acquisition, concatenation and storage of all digital content planned for broadcast.

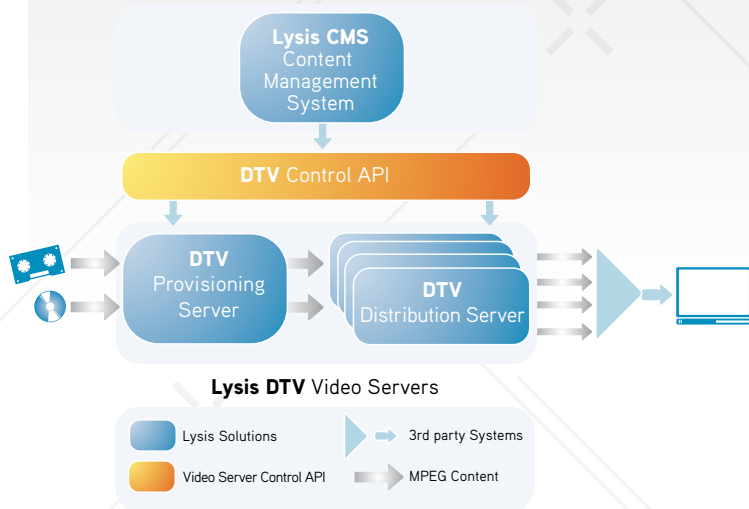
For broadcast services: DTV Distribution Servers mix and match movies, live programs, previews, clips, advertisements and other data into seamless digital TV streams, using DVB or IP interfaces. Our systems broadcast today's digital TV programs to viewers all around the world.

All Lysis DTV equipment run on standard IT components, so that they constantly benefit from improvements to servers and storage solutions. The Broadcast Video Servers are highly scalable, from a few to thousands of video streams. So you can start small and grow – simply by adding servers and storage !

PRODUCT HIGHLIGHTS

- ✕ End-to-end DVB or IP broadcasting solution
- ✕ Fully integrated with Lysis CMS Content Management
- ✕ High-performance server architecture
- ✕ Support of industry video compression standards (MPEG2, MPEG-4 AVC)
- ✕ Capable of controlling third party VTRs and real-time encoders
- ✕ Built-in broadcast scheduler running autonomously
- ✕ Scalable hardware to increase number of channels and storage
- ✕ Broadcast of high quality content
- ✕ Real-time recording capabilities
- ✕ Real-time monitoring of ongoing record
- ✕ Powerful management of asset inventory, program scheduling, video recording and delivery
- ✕ High level of availability for robust on-air solutions
- ✕ N+1 and 1+1 server redundancy options
- ✕ Redundant CPUs and data paths, RAID-5 storage
- ✕ Runs on standard high performance IT components

LYSIS DTV VIDEO SERVER



CONTENT ACQUISITION AND STORAGE

DTV Provisioning Servers allow you to face the operational challenge of preparing and managing digital assets efficiently. DTV Provisioning services ensure that all encoded material is acquired, stored, retrieved and distributed with no alteration to the original signal's quality.

Our DTV Provisioning Servers can handle MPEG-1, MPEG-2 encoding and compression format. Audio/video content acquisition is done with real-time encoders using DVB ASI input ports or via a file copy operation. Large amounts of on-line disk storage capability allow you to have several thousand hours of content available in MPEG-2 format.

BROADCAST SERVICES

DTV Distribution Servers are based on key industry standards such as MPEG-2 and MPEG-4 compression. Typical features include video delay (from a few seconds to several hours), PPV and NVOD streaming and Push-VOD. The internal playlist scheduler is compatible with most existing automation systems, such as Louth VDCP, and is capable of running autonomously in the case of automation failure.

Our DTV Distribution Servers for broadcast are highly scalable, from one to several hundred output streams, from a few to several thousand hours of storage. The servers incorporate unmatched CPU and I/O bandwidth technology and their reliability is proven by more than six years of continuous operation. Redundant power supplies and so-called RAID technology (Redundant Array of Independent Disks) provide highly fault-tolerant systems.

The Broadcast Video Server platform allows for flexible architecture design depending of the requested level of performances, fault tolerance and cost of ownership. Different scenarios are possible, from basic ones where both provisioning and playout software are installed on one single machine to redundant architectures with separate redundant hardware. Nagravision can suggest alternative redundancy scenarios on demand.

PRODUCT FEATURES

Performance

- ✗ High-performance server architecture based on 64-bit microprocessors
- ✗ High-speed CPU-memory and storage interconnects
- ✗ High bandwidth data access using Ultra320 SCSI

Reliability and Availability

- ✗ Built-in broadcast scheduler running autonomously
- ✗ N+1 and 1+1 server redundancy options
- ✗ High level of availability through redundant CPUs, storage (RAID-5), and data paths
- ✗ Hot-plug power supplies, disks and PCI options

Scalability

- ✗ Designed to maximize memory potential and storage capacity
- ✗ Flexible storage configuration with capacities of up to several terabytes of compressed MPEG-2 or MPEG-4 AVC video
- ✗ Hardware can be added incrementally to increase number of broadcast channels

System Control

- ✗ Fully integrated with Lysis CMS Content Management System
- ✗ Open API to manage asset inventory, video recording and program scheduling
- ✗ Support of Louth VDCP (Video Disk Control Protocol) commands
- ✗ Allows to specify a default movie which will be automatically assigned to the gaps of the video service schedule
- ✗ Allow to automatically download (autoload) movies from an archiving server

Broadcast Capabilities

- ✗ Playout of MPEG transport streams (SPTS/MPTS) to DVB-ASI outputs
- ✗ Video broadcast based on IP (Point to Point, Multicast or Broadcast mode over TCP, UDP or RTP/ UDP transport protocol
- ✗ Data broadcast for cyclic output of content
- ✗ Software multiplexing on ASI outputs
- ✗ MPEG-2 and MPEG-4 AVC splicing during playback
- ✗ Supports the High Definition MPEG-2 Main Profile High Level and MPEG-4 AVC standard
- ✗ Supports the AC3 Dolby Digital audio encoding format for DVB and ATSC

Recording Capabilities

- ✗ Frame accurate recording of MPEG-2 STPS received on DVB-ASI inputs
- ✗ Control of third-party encoders and VTRs
- ✗ Real-time monitoring of ongoing record (play while record)