CloudNine™



CHANNEL(S) IN A BOX

Versatile Control of Video From Anywhere at Anytime

 $NVerzion^{\textcircled{R}}$ CloudNineTM provides all the functionality found in a traditional video server plus the features found in a standard "Channel in a Box," and expands this to include a cost effective, powerful, and reliable, network-based solution.

With a simple and efficient file-based workflow, CloudNine supports all major codecs and wrappers without any expensive or time delay transcoding, flipping, or re-muxing.

Provided sufficient bandwidth, CloudNine channels can play files stored in multiple sub-directories on any number of storage or file systems. Add an unlimited number of channels without having to relocate material.

CloudNine can be controlled locally, remotely, or with its fully functional VDCP interface (both serial and network), and can be controlled by all major automation systems.

CloudNine is a node on the net, a Cloud Box. It offers file transfer directly from all major commercial and program delivery systems and play-to-air without any conversion. Likewise, move directly from your edit stations to CloudNine where it will automatically sense new material and notify automation.

FX, Branding, and Advertising

CloudNine provides simple easy-to-use effects. Schedule either manually or via automation. Bugs, banners, bulletin boards, crawls, text, and simple animation. Roll commercials or generate revenue through secondary events.



CloudNine provides an elementary on-board play list for manual or emergency control with add, delete, cue, and play - including an optional loop mode.

CloudNine makes a fantastic back-up device for your existing server. Coupled with NVerzion's XPansionTM software, media can be automatically moved from your existing server to the backup without conversion and simul-rolled manually or via automation.

CloudNine is delivered to you in an industrial, 2RU computer with redundant power and cooling. The standard computer comes with three 3TB drives in a Raid 5 configuration, and optionally, up to three 950 GB Solid State Drives (SSD). SSD is the suggested solution for mobile CloudNine boxes.

CloudNine is available in both 2 and 4 ports. Optional RS-422 or RS 232 serial cards and opto-isolated I/O boards.

Features:

- Up to 4 HD playout channels per box
- 2 simultaneous record channels per box
- HD/SD SDI US and international
- AVC / AAC encoding MPEG4 wrapper
- Bugs, banners, bulletin boards, crawls, text, and animation.
- Closed caption play out EIA608/708
- Closed caption record EIA608/708
- Up to 8 channels of audio SAP and multi-language
- Multiple directories and file systems
- Frame accurate recording
- Transfer and play material from existing server or archive
- Responsive and accurate jog, shuttle, and jumping
- Low cost of ownership
- On-board playlist
- Local and automation control
- Redundant power and cooling
- Optional up to 3 TB SSD storage
- Standard 6 TB Raid 5 storage
- Over 1600 hours at 8 Mbps
- Full feature GUI per channel
- File-based work flow
- Network and serial VDCP control
- Unlimited expandability

CloudNine™



VIDEO SERVER SPECIFICATIONS

VIDEO

- # Video Channels per Card
 - 2 and 4 10 bit SD/HD bi-directional, independently switchable
- Max # Video Channels per Server
 - 1 input x 3 output, 2 input x 2 output, or 4 output configuration
- Max # Video Channels per Server
 - 1 input x 3 output, or 4 output configuration
- Inputs/Outputs
 - 75 Ω SD-SDI (SMPTE 259M) and HD-SDI (SMPTE 292M)
- SD Format Support
 - 625/25 PAL, 525/29.97 NTSC
- HD Format Support
 - 720p 50, 720p 59.94, 720p 60, 1080PsF 23.98, 1080p 23.98, 1080PsF 24, 1080p 24, 1080PsF 25, 1080p 25, 1080PsF 29.97, 1080p 29.97, 1080PsF 30, 1080p 30, 1080i 50, 1080i 59.94, and 1080i 60
- Codecs
 - SD-MPEG2 and HD-MPEG2, SD-MPEG4 and HD-MPEG4, H.264, DV-NTSC and DV-PAL
- SD/HD Scaling
 - Up and down conversion to selected output
- Cross Conversion
 - 720p to 1080i (including full screen and pillar box), 1080i to 720p, and configurable cropping on video capture or video playback

AUDIO

- Embedded Audio Channels
 - 8 channels per input and output, embedded in SD and HD, expandable up to 16 channels
- Audio Sampling
 - Television standard sample rate of 48Hz at 24 bit
- Codecs
 - Uncompressed PCM Audio, Advanced Audio Coding (AAC), MPEG Audio

BRANDING

- Branding & Graphics
 - Up to 2 independent layers
- Graphics Formats
 - PNG, JPG, TIFF, GIF, BMP, ICO, and others
- Simple animation
 - Supports elementary animation such as crawls, bugs, text, and banners
- Dynamic end-to-end playout
 - Overlay graphics and commercial insertion

REFERENCE

- Sync Input
 - Blackburst in SD, 720p 50, 720p 59.94, 1080i 50, and 1080i 59.94 formats or Tri-Sync in HD format

ANCILLARY DATA

- VANC
 - VANC triggers, capture and playback in the AFD standard using up to 3 lines of video in file — HD RP188
- Network triggers
 - DTMF and SCTE-35
- Closed Captioning
 - EIA-608 and CEA-708

STORAGE

- Local Storage
 - 6TB usable storage @ RAID5 standard, expandable to 24TB
- Network (Cloud) Storage
 - 35-113TB @ RAID6, with unlimited expandability

AUTOMATION SUPPORT

- Server Serial Control
 - Universal VDCP via SMPTE RS-422 or RS 232
- Server Ethernet Control
 - Universal VDCP over IP
- Graphics Serial Control
 - Universal VDCP via SMPTE RS-422 or RS 232
- Graphics Ethernet Control
 - Universal VDCP over IP

MISCELLANEOUS

- EAS
 - Emergency alert system support
- Optional GPI control
 - Provides 8-GPI/8-GPO functions for triggering downstream devices and/or external playlist interactions (Play, Stop, Cue etc.)
- Multi-format playout
 - Supports all popular video and audio formats
- CPU
 - Intel® i7-3770 Quad Core
- Power
 - Dual low profi¬le 825W quiet redundant power supplies
- Cooling
 - Redundant fans
- Network
 - Dual GigE NICs
- RAN
 - 16GB DDR4 1600MHz Un-Buffered DIMM
- Internal Operating System Drive
 - 240GB SATA SSD drive
- Operating System
 - Microsoft Windows® 7
- Dimensions
 - 3.5" H x 17.5" W x 27.5" D
- Weight
 - 70 lbs (default con¬figuration)

World-class support, 24 hours a day, 7 days a week, 365 days a year