



a product of VIDEO TECHNICS, INC.



apella™ HDS media server...a closer look

Apella HDS is a multi-channel and multi-format media server that supports a mixed database of DV and MPEG-2 files. Specifically engineered to perform reliably in a wide variety of applications, this feature-packed Apella media server provides up to four ingest channels and four playout channels that can be configured as four video or two video + key.

The compact 3RU chassis features front-loading hot-swappable drive bays that comes standard with 8TB raw internal storage with several RAID protection configurations. Virtually unlimited channel I/O can be implemented simply by networking Apella servers together. Extensive native codec technology, DVCPRO HD, and MPEG-2 up to 300Mb/s, and support for mixed AVI, MOV, and MXF file types, allows media files in the VT database – regardless of SD/HD standard, compression format, or file type – to be played back-to-back from a single output channel.

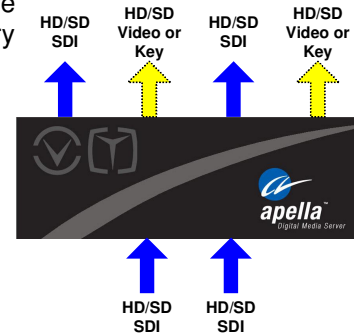
- 1 IN / 2 OUT or 2 IN / 4 OUT or 4 IN / 4 OUT per Chassis
- NTSC, PAL, and High Definition Video Standards
- Supports up to Eight Simultaneous HD Streams per Chassis
- Playout Channels Configured as Video Only or Video + Key
- Apella SDS option - SD NOW & HD READY - Software Codec Upgrade to HD
- Switchable Formats Including 1080i, 720p, 525/625 Line
- Mixed HD and SD playback from a single playlist – auto up/down conversion
- 4 AES/EBU Pairs and 16 SDI Embedded Audio Tracks per Video Channel
- Full Uncompressed VBI Capture and Playback
- Native Support for AVI, QuickTime, and MXF File Types
- Extensive Native Codec Support in HD and SD:
 - Uncompressed, MPEG-2 I-frame (up to 300Mb/s), DVCPRO HD, MPEG HD, 720p (JVC ProHD), IMX, DVCPRO50, DV, DVCPRO, DVCAM
- 8TB Internal Raw Storage Standard (optional RAID 5, 6, or 10)
- VT Director and VT Proxy Editor Plus! Software Included (Remote Client Seats Available)
 - Multi-Channel PlayList Control with Auto Ripple
 - PlayList Synchronized in Real-Time with NRCS via MOS Protocol
 - Easy Media Management – Search, Archive, Import, Export
 - Low Resolution Timeline Editing Ready for Immediate Playout
- Batch Media Import and Acquisition with RS-422 VTR Machine Control
- VT Craft Edit Plug-In Available for Lossless File-Based Transfers from Most NLEs
- MOS, VDCP, & VT Ethernet API Automation Support
- Powerful SQL Database Engine for Centralized and Comprehensive Asset Management
- Unique Global Asset ID and User Profiles with User-Defined Security Settings
- Fibre Channel SAN and Dual GigE NAS Compatible
- PathFire DMG File-Based Interface for News and/or Syndication
- Highly Scalable and Redundant Architecture

ingest · networked storage · collaborative editing · playout · archive

Apella – Proven IT-Centric Technology

For over a decade, professional broadcasters have relied on cutting edge technology from Video Technics to ingest, edit, and manage media in a cost-effective workflow, designed with open architecture and non-proprietary file formats.

The Apella is a highly scalable, feature-packed media server built on an IT-centric foundation. VT's innovative software and solutions are future-proofed for the distinct needs of the broadcasting industry. Apella is the ideal solution for live broadcast production, master control, transmission, corporate, government, and education environments.



Apella HDS Technical Specifications

Application Software

- VT Database Engine
 - local SQL database service
- Apella Media Engines
 - local processing for video and audio
- VT Director & VT Record (local seat included)
 - multi-channel playlist and record control
- VT Proxy Editor Plus ((local seat included)
 - asset management and low res proxy editing
- VT Scheduler (optional)
 - scripted ingest and playout automation
- VT TimeDelay (optional)
 - automated ingest and playout with delay

Timecode I/O

- RS-422 serial ports
- NTP Server option

Automation Protocols

- VDCP
- Media Object Server (MOS)
- GPI
- VT Ethernet API

Control and Storage I/O

- 2 10/100/1000 Mbit Ethernet - RJ45 connector)
- 4 2.0 USB ports
- 2 RS-232 serial ports - DB9 connectors
- 8 GPI In and 2 GPI Out - DB9 connectors
- RS-422 serial ports
 - 8 ports with DB9 connectors

Optional SAN or NAS Port Kit

- Fibre Channel or Ethernet (optical or copper)

Database Structure

- MS SQL relational database engine
- 20 metadata fields auto-created for each asset
- 12 user-defined field labels and drop-down choices
- 2 unlimited ASCII text fields per event

Import Formats

- OpenDML AVI, QuickTime DV, MXF
- Raw MPEG-2 (.MPG) and Raw DV (.DV)

Optional PathFire DMG interface – file transfer for either news or syndication

Export Formats

- OpenDML AVI, QuickTime, Raw DV
- Export to Folder (metadata + media)

Signal I/O

- 1 to 4 multi-rate HD/SD SDI video inputs
- 2 to 4 multi-rate HD/SD SDI video outputs

Serial digital component 4:2:2 video at 270 Mbps in accordance with SMPTE 259M (SD)

- 480i (NTSC) at 29.97 fps
- 576i (PAL) at 25 fps

Serial digital component 4:2:2 video at 1.48 Gbps in accordance with SMPTE 292M (HD)

- 1080i at 25, 29.97, and 30 fps
- 720p at 50, 59.94, and 60 fps

Up to 16-in/32-out unbalanced AES/EBU audio channels
16 SDI embedded audio I/O channels per video stream

Full VBI extraction, preservation and re-insertion

Analog black burst reference input

- horizontal and vertical phase adjustment

Genlock to incoming SDI signal
Internal reference clock

Compression

- SD codecs
 - DV, DVCAM, DVCPRO, and DVCPRO 50
 - MPEG-2 I-frame (up to 300Mb/s)
 - 4:2:2 and 4:2:2:4 (Video + Key)
 - MPEG-2 IBP
 - Uncompressed 4:2:2 and 4:2:2:4
- HD codecs
 - DVCPRO HD
 - MPEG-2 I-frame (up to 300Mb/s)
 - 4:2:2 and 4:2:2:4 (Video + Key)
 - MPEG-2 IBP
 - Uncompressed 4:2:2 and 4:2:2:4

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