

MediaHawk VX™

Concurrent's Media Hawk VX is the world's first unified video delivery solution designed expressly for commercial video applications. MediaHawk VX, Concurrent's sixth generation video solution, enables a wide variety of revenue producing video applications that can be delivered to any device, over any network. It combines the strength of Concurrent's Emmy® Award-winning Video to TV solution with new features that extend Concurrent's tradition of high performance video and unparalleled quality of service to PC's, Mobile Devices, and other Consumer Electronics Devices. Over 2 million streams have been deployed worldwide using Concurrent MediaHawk Video Solutions. With the introduction of MediaHawk VX, Concurrent builds on our leadership position by offering unprecedented platform flexibility, scalability, reliability, density, and power efficiency.

Platform Flexibility

MediaHawk VX supports video delivery over managed or unmanaged networks to a wide variety of consumer electronic devices, including televisions, PCs, and mobile devices. It is designed around independently scalable software components that can be applied in concert to support a broad array of deployment scenarios and commercial video applications.

- Delivery to Any Device From One Common Server
 - Support for TV, PC's, Mobile Devices, and other Consumer Electronics Devices
 - Integrated RTSP Streaming, HTTP Progressive Download, Microsoft® Smooth Streaming, Adobe® Flash, and Apple® HTTP Adaptive Bit Rate Streaming
 - Integrated On Demand Transcoding
- Support for Multi-Screen Commercial Video Applications
 - Video On Demand (SD, HD, 3-D)
 - Time Shifted TV & Network DVR
 - Broadcast Video
 - Advanced Advertising
- Software Solution – Hardware Agnostic
 - 100% Commercial Off the Shelf Hardware
 - 100% Solid State Storage or High Capacity HDD Options
- Support for Open Standards
 - Next Generation On Demand (NGOD)
 - Interactive Services Architecture (ISA)
 - Integrated with Concurrent, Ericsson, Alcatel-Lucent, and Seachange Business Management Solutions, as well as a variety of others
- Support for Video Delivery Over Managed and Unmanaged Networks
- Designed for CDN, Hybrid Library, Centralized, and Distributed Architectures
 - 100% Solid State Edge Server Configuration Options

Scalability

MediaHawk VX features independently scalability software modules for various video related functions. Each software module scales linearly without any performance impact to other software modules. This modular structure enables the MediaHawk architecture to more precisely align and adapt to the requirements of the specific application.

- Independent Scaling of Ingest, Storage, Transcoding, and Streaming Capacities
 - Multiple Storage Options Enable Terabytes to Multi-Petabyte Capacities
 - Available in Large and Small Market System Configurations
- *3.75 Mbps standard definition video*

Reliability

MediaHawk VX offers true end-to-end resiliency. Features such as Concurrent's Gatling Resilient Streaming prevent session or stream interruptions from occurring as a result of a server, network link, or power failure by automatically routing active sessions to healthy components to ensure a seamless subscriber experience.

- End-to-End Resiliency
- Gatling Resilient Streaming™ Featuring Automated Stream Recovery
- Ingest Resiliency featuring Automated Recovery
- RAID Protected Storage Featuring Fast-Write Technology in Support of Time Shifted Video
- Resilient Interconnects with Multi-Path Support
- Support for Any-Stream Anywhere Configuration





Density

The MediaHawk VX solution is paired with commercially available hardware in order to offer industry leading performance density. Performance of the MediaHawk VX solution is up to four times that of prior server generations on a per rack unit basis.

- Up to 20 Gbps (4800 SD Streams) of Output Per Rack Unit
- Up to 20,000 Simultaneous Connections Per Rack Unit
- Industry Leading Raw Ingest Capacity with Support for Thousands of Simultaneous Network DVR Recording Sessions per Rack Unit
- Industry Leading Storage Density Up to 1 PB per Standard Rack

Power Efficiency

Concurrent's ultra-high stream density leads to eco-friendly power efficiency figures. In addition, since MediaHawk VX is a software solution, it can take advantage of periodic green-technology advances in the commercial hardware market in order to provide continuous improvement over time.

- Less than .07 watts per stream
- Software Leverages COTS Hardware Power Efficiency Improvements.

MediaHawk video streaming server

MediaHawk VX Solution

Performance (Reference Platform)

- Up to 40 Gbps (9,600 SD Streams at @3.75 Mbps)
- Up to 40,000 Simultaneous Connections
- Raw Ingest Capacities Exceeding 900 Mbps with Further Amplification for NDVR Via Recording Session Generation Software
- TB to PB Shared Storage Capacities (SSD, SATA, SAS, or Fibre Channel Storage Options)

Supported Delivery Methods

- RTSP (Gatling Stream Resiliency™ or Single-Barrel)
- HTTP – Download
- HTTP – Progressive Download
- HTTP Adaptive Bit Rate Streaming (Microsoft® Smooth Streaming, Adobe® Flash, Apple® Adaptive Bit Rate Streaming)

Open Standards Support

- NGOD
- Interactive Services Architecture (ISA) / OpenStream
- LSC
- DMSCC
- Concurrent Management Protocols

Supported Delivery Formats

- MPEG-1 (transport encoded)
- MPEG-1 AC-3 Audio
- MPEG-2
- MPEG-4
- H.264
- VC-1
- Any file type (PDL)

Bit Rates Supported

- <500Kbps to 18 Mbps

System Monitoring

- Concurrent Media Data Solution
- Health Monitor
- SNMP

Trick Mode Support

- On-The-Fly Trick Mode Generation
- Multi-Speed Trick Modes

MediaHawk VX Server Hardware (Reference Platform)

General Features

- 2 RU Server
- 10 GbE or 1 GbE Outputs
- Up to 144 GB DRAM (Shared)
- Support for Integrated SSDs (Up to 3.2 TB)
- Fibre Channel or Gbe Connectivity to Shared Storage

Environmental

- Operating Environment: 10° to 35° C (50° to 95° F)
- Storage Environment: -40° to 65° C (-40° to 149° F)
- Relative Humidity: 20% to 80%

Power Requirements

- Hot Plug Redundant Power Supplies
- 417 Watts
- Input Voltage Range: 90-264 VAC, N36-N72V DC
- Line Frequency: 47-63 Hz
- Input Current: 12.0 Amps Max(@115 VAC)
- Heat Dissipation: 1197 BTUs per hour

Physical

- Dimensions: 3.4" (8.64 cm) (2 RU) height x 17.44" (44.31 cm) width x 26.8" (68.07 cm) depth
- Fits in 30" (76.2 cm) or 36" (91.4 cm) deep racks
- Optional telco rack installation kits
- Weight: 55 lbs (24.95 kg)