

# SeaChange® MediaServer MDS 200

QuickSpec

## Scalable, High Density Library Storage for Video on Demand and RS-DVR Streaming

Combining the advantages of standards-based hardware with SeaChange's patented MediaCluster® technology, the SeaChange MediaServer MDS 200 is a streamer and scalable library storage solution that enables a new level of cost performance for advanced video services. With high density storage, scalable ingest and streaming, the MDS 200 is designed to meet the ever increasing requirements for video-on-demand long tail content and emerging RS-DVR applications.

### BENEFITS

**Highly reliable** – SeaChange's patented and widely deployed MediaCluster® technology provides the foundation for the new MDS 200. MediaCluster interconnects video server "nodes" with a high performance, low-latency InfiniBand network to provide scalable streaming bandwidth and storage as a single system. Patented RAID<sup>2</sup>® (raid squared) technology stripes each video asset across all MediaCluster nodes, thereby ensuring stream resiliency in spite of hardware component failures, including complete node failure. Nodes can be added to a live MediaCluster and content will automatically be distributed to the new servers.

**Scalable, high density storage** – Employing 1TB SATA drives, the MDS 200 provides the highest storage density (Up to 5,000 hours of MPEG-2 SD content per 2RU) and scalability (35,000 hours of MPEG-2 SD content per 8-node cluster) in the industry. The MDS 200 also supports SAS (Serial Attached SCSI)/SATA (Serial ATA) storage expansion options, scaling storage independently of streams. The combination of RAID<sup>2</sup> and enterprise-class 1TB SATA disk drives provides the most reliable, compact, and scalable library storage with the fewest spinning disks. The storage capacity of the MDS 200 can be further scaled with 2RU storage expansion arrays (5,000 hours of MPEG-2 SD content per 2RU) or DDS 7200 (30,000 hours of MPEG-2 SD content per 5RU) drawer of drives, which is among the highest density storage in the world.

**Clustered memory ingest** – The MDS 200 caches pre-pitched and time-delayed content in memory before storing on disks, thereby reducing the ingest-to-plaintext latency and maximizing ingest performance. Compared to other DRAM caching implementations, SeaChange's clustered memory technology provides N+1 fault resiliency and guarantees the uniqueness of the rated streams.

**Integrated solution** – The MDS 200 is fully compatible with SeaChange's other widely-deployed video servers. The MDS 200 can be deployed as a standalone system, or as a storage library for existing systems. When deployed in conjunction with SeaChange's FMS 200 (Flash Memory Streamer) to scale streams, the MDS 200 provides the ideal storage platform for FMS 200's solid state streaming, thereby completely separating storage from streaming.



# Product Specifications

## BASIC STREAMING NODE CONFIGURATION

- 2U rack-mountable PCI Express streaming server
- Requires Vstrm 6.0 (or later)
- 250 or 500 SD MPEG-2 streams
- 6 or 12 1TB SATA drives
- 2,500 or 5,000 hours of SD MPEG-2 content w/ trick speeds
- Connects to additional storage expansion arrays (maximum 2 x 12 drive arrays)
- Power supplies:
  - Redundant 750W maximum for server
  - 110 or 220 VAC
- Operating temperature: 10°C to 30°C (50°F to 86°F)

## STORAGE EXPANSION ARRAY

- 2U rack-mountable chassis
- SAS connection to the basic streaming node
- 12 1TB SATA disk drives
- 5,000 hours of SD MPEG-2 content with trick speeds
- Power supplies:
  - Redundant 460W maximum
  - 110 or 220 VAC
- Operating temperature: 10°C to 35°C (50°F to 95°F)

## DDS 7200 (DRAWER OF DRIVES)

- 5U rack-mountable chassis
- Provides SAS connections for up to six basic streaming nodes
- 72 1TB SATA disk drives
- 30,000 hours of SD MPEG-2 content with trick speeds

## CLUSTER SPECIFICATION

- Single node or clusters of 3 to 8 nodes
- 250 to 4,000 SD MPEG-2 streams
- 2,500 to 105,000 hours of SD MPEG-2 content with trick speeds
- RAID<sup>2</sup> fault resiliency, automatic load balancing, and online expansion
- Redundant InfiniBand cluster interconnect
- Regulatory certifications: FCC class A, CE, CB, UL 60950

## SOFTWARE

- Supports SeaChange® Axiom® v3.5 (or later) and RTSP
- MPEG-2 SD and HD; H.264 SD and HD
- Support for SeaChange's patented smooth splicing technology for dynamic ad insertion
- Clear and pre-encrypted content
- Cluster Management GUI and command line interface
- System snapshot for upgrades, server replacements, and cluster expansions
- SNMP and alarms package



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