

## SeaChange® MediaServer MDS 1000

High Density Streaming, Clustered Memory Ingest and Scalable Storage for Video on Demand, Time-Shifted TV, and RS-DVR

Combining the advantages of standards-based hardware with SeaChange's patented MediaCluster® technology, the SeaChange MediaServer MDS 1000 enables a new level of cost performance for advanced video services. With high-density streaming, clustered memory ingest, and scalable storage, the MDS 1000 is designed to meet the varying demands of video-on-demand usage patterns, as well as emerging applications such as time-shifted TV and RS-DVR.

### **BENEFITS**

**Highly reliable** – SeaChange's patented and widely deployed MediaCluster technology provides the foundation for the MDS 1000. 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.

**High density streaming** – Combining the latest generation Intel® technology and SAS disk streaming, the MDS 1000 delivers the industry's highest density streaming of up to 3.72 Gbps (1000 SD MPEG streams) per server node.

**Clustered memory ingest** – The MDS 1000 caches pre-pitched and time-delayed content in clustered memory before storing on disks, thereby reducing the ingest-to-plaintext latency and maximizing ingest performance.



**Scalable storage** – The MDS 1000 comes with internal SAS (Serial Attached SCSI) storage. The combination of RAID<sup>2</sup> and enterprise-class, high-performance SAS disk drives provides far greater performance and streaming density than alternative SATA (Serial ATA) solutions. These MDS options address the ever increasing storage requirements of VOD and RS-DVR and provide disk streaming bandwidth for the "long tail" content.

**Integrated solution** – The MediaServer MDS 1000 complements SeaChange's widely-deployed disk-based video servers. With independently scalable streaming, memory and storage, the MDS 1000 can be deployed as a standalone system, or a streaming booster for existing systems. When deployed in conjunction with SeaChange Axiom® On Demand v3.5.3 and Axiom 5.6 (and later) software releases, the MDS 1000 provides the ideal platform for comprehensive on-demand services.

## Product Specification

### STREAMING NODE CONFIGURATION

- 2U rack-mountable chassis server
- 1,000 SD MPEG-2 streams (four (4) GigE streaming ports)
- 24 x 1TB disk drives per server
- Up to 9,000 hours of SD MPEG-2 content with trick speeds
- PCI Express streaming server
- 24GB memory in streaming server
- Power:
  - Redundant 720W supplies for server
  - 100 to 240 VAC or -48v DC
  - Startup power draw = 240W
  - Operating power draw = 560W
- Operating temperature: 10°C (50°F) to 35°C (95°F)
- Dimensions:
  - Server: 3.5"H x 17"W x 26.5"D
- Regulatory Approval:
  - UL 60950 - CSA 60950.
  - CE - Low Voltage Directive 73/23/EEE.
  - FCC (Class A Verification) - Radiated & Conducted Emissions.
  - CE - EMC Directive 89/336/EEC

### CLUSTER SPECIFICATION

- Single node or clusters of 3 to 6 nodes
- MCA stream control & content propagation
- Up to 45,000 hours of cluster SD MPEG-2 content storage
- N+1 fault resiliency, automatic load balancing, and online expansion
- Redundant InfiniBand cluster interconnect

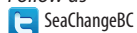
### SOFTWARE

- Supports SeaChange Axiom v5.6 or later software releases
- MPEG-2 SD and HD; H.264 SD and HD
- Smooth splicing for MPEG-2 content to support VOD 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

## Ordering Configuration

Video Server Description	Part Number
MediaServer MDS 1000_1000 (2RU - 3.72Gbps - 1000 Streams - 24x1TB SAS drives) - AC Copper SFP	FGA-0587-00
MediaServer MDS 1000_1000 (2RU - 3.72Gbps - 1000 Streams - 24x1TB SAS drives) - DC Copper SFP	FGA-0587-10
MediaServer MDS 1000_500 (2RU - 1.86Gbps - 500 Streams - 12x1TB SAS drives) - AC Copper SFP	FGA-0589-00
MediaServer MDS 1000_500 (2RU - 1.86Gbps - 500 Streams - 12x1TB SAS drives) - DC Copper SFP	FGA-0589-10
MediaServer MDS 1000_250 (2RU - 0.93Gbps - 250 Streams - 6x1TB SAS drives) - AC Copper SFP	FGA-0591-00
MediaServer MDS 1000_250 (2RU - 0.93Gbps - 250 Streams - 6x1TB SAS drives) - DC Copper SFP	FGA-0591-10
<b>850nm Laser SFP (Fiber option: one required for every 250 streams)</b> 850NM Laser, Small Form Factor Pluggable SFP	MDS1000-850NM-SFP
<b>1310nm Laser SFP (Fiber option: one required for every 250 streams)</b> 1310NM Laser, Small Form Factor Pluggable SFP	DS1000-1310NM-SFP

Follow us



Like us



SeaChange International, Inc.  
50 Nagog Park, Acton, MA 01720 USA  
T 1.978.897.0100 F 1.978.897.0132  
www.schange.com  
8.24\_2011

©2011 SeaChange International, Inc. SeaChange is a registered trademark of SeaChange International, Inc. All other marks are the property of their respective owners. While every effort is made to ensure the information given is accurate, SeaChange does not accept liability for any errors or mistakes which may arise. All features, specifications, system requirements and/or compatibility with third party products described herein are subject to change at any time without notice.