



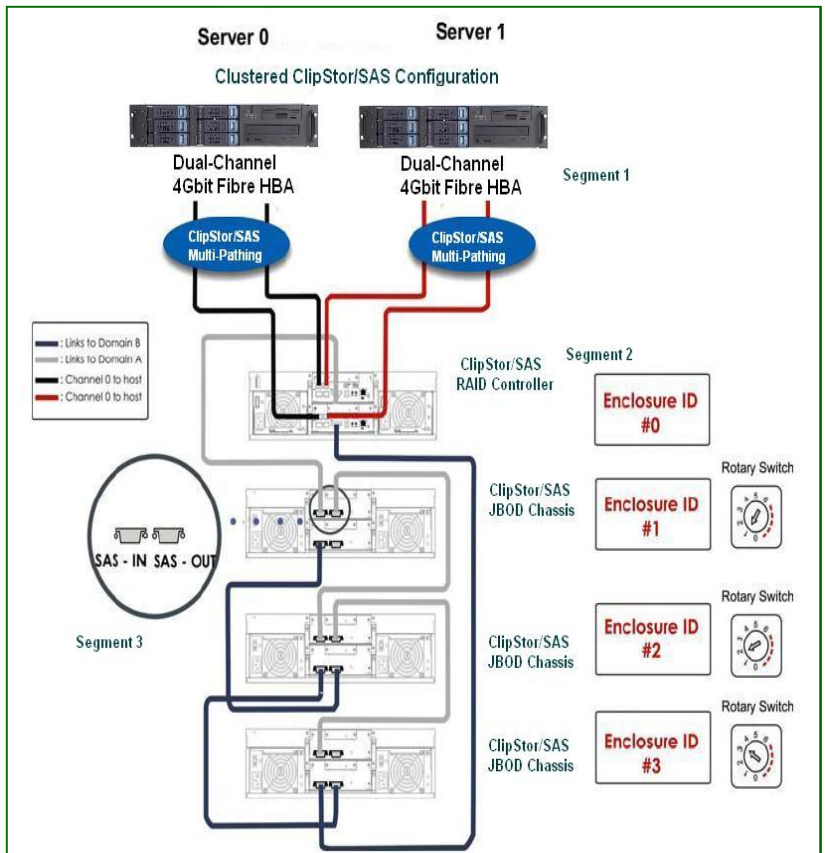
High-Availability Redundant SAS Storage Solution For Broadcast Video and Entertainment

The *ClipStor/SAS* storage subsystem is for Broadcast professionals who are searching for a cost-effective, scalable storage infrastructure that can centrally manage and provision shared data storage devices. *ClipStor/SAS* was designed to exceed high-bandwidth and high-capacity data storage requirements for the widest range 2nd tier storage application environments while maintaining the reliability and support features expected of an Enterprise-class storage platform.

The *ClipStor/SAS* consists of three basic segments along with associated switches and cables to enable intra and inter-system communication. The first segment is the 2U NAS "head" server which enables communication to the video servers and MAM. This small server running Red Hat Linux or Windows connects to video servers via Gigabit Ethernet. This is the bridge for the storage subsystem to the outside world whether it is on air servers or editing workstations or asset management.

The RAID controller from Fast Stream is the next segment. This redundant RAID controller allows multiple disk chassis to operate as one logical unit. One or more chassis with 16 disks apiece are attached via FC channel to the RAID controller and then to the NAS head. The Fast Stream RAID controller allows for multiple chassis to be configured as one logical storage unit such that parity drives and spare drives for a RAID apply globally to all chassis.

The third major components or segments are the individual drive chassis. Each 3U unit contains sixteen (16) 1TB drives. One or up to (8) units may be connected to the RAID controller, or 120TB. In video terms, this translates to well over 10,000 hours of 25 megabit video. The RAID configuration is customer selectable but, for example, in a RAID 6 configuration there would be one global parity drive and one global spare housed. This means that every storage unit added to a system uses the full 16TB of storage rather than having to allocate one drive for parity and one for a spare.



Configured as a Single or Dual Controller SAN RAID, *ClipStor/SAS* supports rich media content creation, multiple broadcast uncompressed HD Streams, with the ability to seamlessly increase future storage capacity in 16TB chunks via a daisy-chain JBOD configuration.

Additionally, the *ClipStor/SAS* shared storage subsystem enhances peak network performance by providing load balancing, the automatic distribution of traffic among multiple network connections. Contact your CUC Sales rep today for more information or a free on-line webinar, or visit us on the web at www.broadcast-storage.net



ClipStor™



KEY FEATURES

- Single or multi-server configurations available
- Single SAN-based File System Storage Pool View
- Minimizes complexity of managing 'Islands of NAS storage silos'
- Centralized storage management via web-based GUI
- Continuous data availability via chassis-aware RAID Groups
- Automatic Content storage failover with hot-swappable N+1 power and cooling fans
- Dual-network connections eliminates single point of failure
- Multi-Path I/O (MPIO) option ensures constant data availability
- Easily expandable, scalable shared storage from 6TB to over 120TB+ in a single 44U rack, all under single or multiple CIFS/NFS mount point, UNC pathname or shared drive letter(s).



ClipStor/SAS Storage Server

- 2U rack-mount chassis, 450watt power, redundant cooling, optional redundant power
- Intel Dual/Quad-Core Xeon 2.7Ghz processor options, 2-8GB DDR2 SDRAM
- Dual 250GB SATA-2 mirrored O/S drives (Windows 2003/08 or Redhat Linux)
- Single, Dual or Quad port 4Gbit Fiber-Channel HBA's
- Dual GigE 10/100/1000 Ethernet, optional up to 8 GigE ports, Four (4) USB ports, integral CDR/DVD drive
- Optional 6TB Internal SATA-2 RAID Storage, Optional Blu-ray, LTO4 automated library storage subsystems
- Supports Microsoft VDS, VSS and MPIO or Linux Redhat MPIO
- 2-Year Server Warranty, Return To Factory. Optional Silver (9x5xNBD) and Gold (9x5x24), On-Site Hardware Support Available



ClipStor/SAS RAID Storage Controller

- 1U rack-mount chassis
- Quad-channel 4Gbit Fibre-Channel Host ports
- PLDA, public loop login (NL-ports) and fabric connect (N-port)
- Eight 3-Gigabit wide SAS/SATA device lanes via (2) x4 connectors
- JBOD, DVRAID, 0, 1, 4, 5, 6, 10, 40, 50 and 60 plus N-way mirroring
- Supports up to 128 SAS and/or SATA drives
- Enclosure-aware RAID group creation
- Hot-swap with auto-rebuild, Multi-path support, Dedicated and Global hot spares
- Web-browser remote management
- Local CLI, Telnet, FTP diagnostic capability



ClipStor/SAS Storage Array

- 3U Redundant 16-drive RAID chassis
- Fault-tolerant enclosure modules
 - 4 or 2 SAS 4x wide host ports
 - Supports SAS or SATA-II (3Gbps) disk drives
 - 5th generation ASIC400 RAID engine
 - RAID6 to withstand simultaneous drive failures
 - SAS SFF-8470 or SFF-8088, SAS connectors
 - Max. 80 drives (1 RAID + 4 JBODs)
 - S.M.A.R.T. and NCQ support
 - Path redundancy & load-balancing software
- Expansion: RAID & corresponding JBOD



For additional *ClipStor/SAS* product information, quotations or evaluation units, please contact your CUC Sales Representative or Authorized CUC Reseller, or visit us online today at <http://www.broadcast-storage.net>

