



Welcome to mRAID16+: All-in-one high performance massively scalable 4K/8K video storage with integrated shared SAN file system

Active Storage's mRAID16+ is specifically designed to meet the evolving challenges of modern broadcast and post-production storage infrastructures. It is an all-in-one, easy to use high performance and massively scalable 4K/8K video storage with integrated shared SAN file system for the most demanding media workflows. The shared SAN file system resides within the mRAID16+ hypervisor. There is no need for separate hardware servers as metadata controllers in a traditional media SAN configuration. This provides built-in high availability, eliminates the complex configuration, tedious cabling and high-cost for additional hardware servers. The mRAID16+ has performance, scalability and configuration flexibility to meet nearly every broadcast and post-production facility's needs from ingest to archive.

mRAID16+ is a continuation of the Active Storage award winning mRAID storage system. It is designed for the smoothest workflow, highest ease of use, and ultimate user collaboration and creativity. Combining superior performance and massive capacity in one system, mRAID16+ is the product to address all customers' media storage needs in house.

Storage Architecture for 4K/8K Workflow

With a deep understanding of media workflow, mRAID16+ is architected to support 4K/8K uncompressed video streams. It comes with dual-controller in standard configuration providing over 6GB/s data throughput. The system can easily scale-out to multiple controllers with over 20GB/s bandwidth. mRAID16+ is an ideal primary storage for 4K/8K media workflow.

Innovative System Software

mRAID16+ comes with a hyper-converged architecture. Its virtualized RAID kernel design separates physical hard drives from logical volumes. It divides disk space into small data blocks, and uses the blocks to create RAID groups for fine-grained resource management. This technology realizes automatic load balancing, higher storage performance, better storage space utilization, and faster disk reconstruction.

Integrated Shared File System

mRAID16+ is a fully integrated shared file system solution that features a straightforward design for easy installation and serviceability. It is specially designed for video editing in post workgroups, on-set capture with instant dailies logging and editing, and shared storage for rich media education facilities.

mRAID16+ offers high availability for mission-critical workflows, unlimited performance potential, and massive scalability for the most demanding rich media and enterprise applications. Add optional project management and data life-cycle tools to create a complete media-centric workflow system.

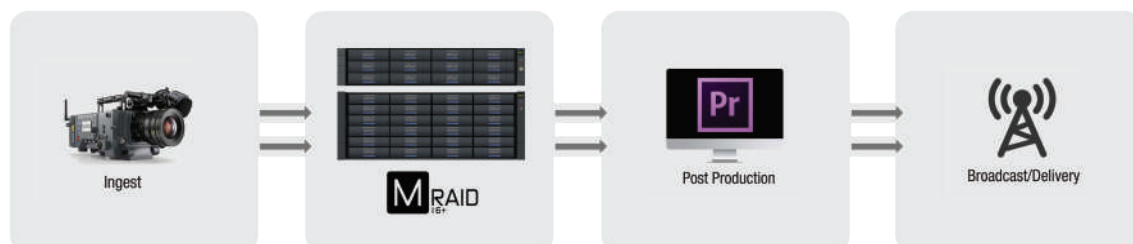
Business benefits

- All-in-one SAN appliance for Mac, Windows and Linux workstations
- No separate hardware servers required for metadata controllers
- Enterprise performance and reliability without enterprise complexity
- High availability architecture against any component failure
- Linear scale-out performance and capacity

Key features

- Enterprise class appliance with integrated shared file system
- Massively scalable shared storage for performance and capacity
- 4K/8K media workflow optimized video storage
- True all-active controller design
- FC16 and 10GE interfaces deliver over 6GB/s data throughput
- Fastest disk rebuild time down to minutes from days
- Supports all SSD and multi-tier SSD/HDD configurations

Post Production Workflow



mRAID16+ is an enterprise class appliance that supports all your creative applications running on Mac, Windows and Linux OS. mRAID16+ provides automatic defragmentation and file sequence optimization for maximum performance, productivity, uptime and superior return on investment. Active Directory offers convenient permissions management and increased file security. The optional vProject module makes multi-user collaborative workflows easy. It provides Avid file system emulation and advanced permissions control. The optional Replication & Tiering module handles data life-cycle management. mRAID16+ makes it easy to set up shared storage workflows that let you focus on your business, not on system maintenance.

Storage system features

- Hyper-converged architecture with enterprise performance and reliability
- Block virtualized RAID kernel design provides an unmatched level of fine-tuning and fastest disk rebuild time
- Redundant path, multiple FC ports and large cache guarantee maximum performance
- Controllers automatically load balance to provide highest throughput
- Fully redundant components with seamless fail-over and fail-back
- Dynamic online capacity expansion and drive roaming
- Battery-backed cache to hard disks guarantees no data loss
- Low noise and high energy-efficient power and cooling system
- Automated ID assignment and one stroke power on/off for all enclosures

Shared file system features

- Automatic defragmentation
- Automatic file sequence optimization
- Active directory support for the file security
- Storage pooling & scaling
- Unlimited capacity and client licensing
- Event notification
- Unlimited connections support
- Optional vProject multi user project management with Avid file system emulation
- Optional Replication & Tiering for data life cycle management and backup

Technical specifications

- Dual Intel Xeon 6-core processors
- System cache: 96GB expandable to 128GB
- Front-end (standard): 8x FC16 or 8x10GE
- Front-end (optional): 16x FC16 or 16x10GE
- Front-end interface: Mix FC or Ethernet ports
- Back-end interface: 4x 12Gb/s SAS ports
- Expansion uplink/downlink: 8x12Gb/s SAS
- System capacity: 48TB expandable to 6PB
- RAID level support: 0, 1, 3, 5, 6, 10 and 50
- Disk support: SSD, SAS and NL-SAS
- Power: 100V to 240V AC
- Controller enclosure: 2U, 3.4"x17.6"x29.5", 122 lbs.
- Expansion enclosure: 4U, 6.9"x17.6"x19.3", 124 lbs.
- Operating temperature: 5 °C to 40 °C
- Operating humidity: 10% to 90%

Dual-Controller System



Front view



Rear View

Expansion



Front View



Rear View

Active Storage is the innovative leader for broadcast, post-production, online and archive solutions. Many of the most recognizable media and creative brands in the world choose Active Storage because we understand their needs and deliver solutions they can rely on. Fast, reliable, and easy to deploy, Active Storage delivers a best-of-breed user experience, award-winning industrial design and customer service. Ease of use and robust performance make Active Storage the first choice for complex storage deployments.