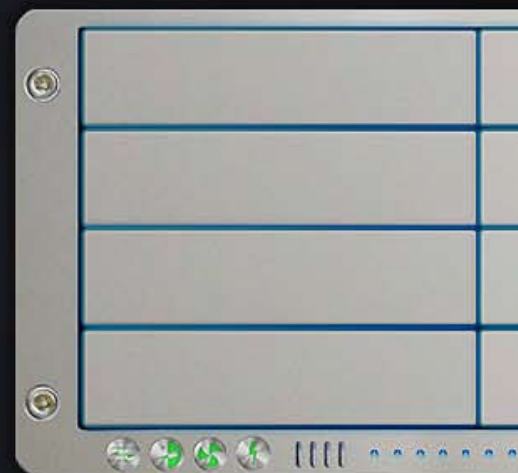


active
XRAID™

RAID Storage Evolved



Welcome to RAID Storage Evolved

Introducing the Active Storage XRAID™ – High-performance, High-availability, Massive Capacity, and the first Native Mac OS X® storage management suite.

The Active Storage XRAID represents an evolution in storage for Apple® users. Developed with one goal in mind—deliver the best overall experience for Apple users—performance, reliability, capacity, and out of the box ease of use.

From the highly redundant architecture to the artfully designed enclosure, the Active Storage XRAID is a truly differentiated RAID system with the styling and performance that Apple users demand. Whether deployed in a direct-attach server environment or a complex Xsan® configuration, the Active Storage XRAID is the ideal solution for your storage needs.

The system is fully configured and ready to use out of the box. Simply install it into your equipment rack, attach power, Ethernet, and Fibre channel cables. Power it on and walk to your Mac. Insert the Active Admin CD and discover the newly installed RAID through Bonjour® on your network. Select your environment, name the system, and you are ready to go.†

† Additional information is not required but recommended in order to get optimum performance from your Active Storage XRAID system

Key Features

Optimized RAID performance in Apple Xsan networks

Modern Linux RAID kernel and RAID controller design

Proprietary self-optimizing architecture

Native Mac OS X management suite

Dashboard Widget monitoring

Enterprise performance and reliability without Enterprise complexity

No long QuickStart guides to memorize

Performance profiling and statistical planning tools

Configurations

| | 8 TB SATA II | 16 TB SATA II | 16 TB SATA II Expansion |
|--------------------------|--|--|--|
| Overall Capacity †† | 8TB expands to 16TB in enclosure, add secondary enclosure for 32TB | 16TB expands to 32TB by adding secondary enclosure | 16TB secondary enclosure used for expansion |
| Hard Drive Modules | Hot swap 1TB 32 MB Cache | Hot swap 1TB 32 MB Cache | Hot swap 1TB 32 MB Cache |
| Controller Type and Spec | Active Storage Design, Redundant Operation Dual 4Gb/s FC 2GB Cache | Active Storage Design, Redundant Operation Dual 4Gb/s FC 2GB Cache | Active Storage Design, I/O Module 12Gb/s SAS |
| Power and Cooling | Redundant hot swap power and cooling modules | Redundant hot swap power and cooling modules | Redundant hot swap power and cooling modules |
| Battery Back Up | Optional - 72hr Support | Optional - 72hr Support | Optional - 72hr Support |
| Rack Mounting Kit | Included | Included | Included |
| Suggested US Retail | \$11,999 | \$14,999 | \$12,999 |

†† Usable capacity will vary depending on drive configuration and RAID level

Unmatched Application Performance

- RAID kernel and open controller design provide an unmatched level of fine-grain tuning and minimum overhead
- Designed specifically for modern OS systems (Mac OS X)
- Redundant pathing, multiple Fibre Channel ports and large caches guarantee maximum bandwidth
- Controllers automatically balance load to provide highest throughput as user needs grow

Modern, High Availability

- All components are redundant—controllers, drives, and power supplies
- Failover and failback are truly seamless
- Native support for Mac OS X Multi-pathing
- Complete support for all popular UPS systems
- SNMP and CLI support for Enterprise environments
- Automatic parity rebuild and data integrity check
- Battery-backed cache – guaranteed 72 hour support

Management for Today and Tomorrow

- Apple-friendly native Mac OS X management suite
- Dashboard monitoring widget
- iPhone monitoring App^{††}
- Email and SMS calendar-savvy notification engine
- Bonjour discoverable out of the box
- Set up one or one hundred systems with no scripting
- Non-disruptive software and firmware updates

Technical Specifications

RAID Support

- **RAID Levels** – JBOD, 0, 1, 5, 6 10, 50, 51, 60
- **LUN Support** – Auto-configuring for performance up to 512 LUNs
- **Drive Roaming** – Full support between primary and secondary Expansion Systems
- **Redundant** – True active/active operation with seamless failover and failback
- On-Line data scrubbing with on-line parity regeneration
- Bad Array recognition and repair
- **Sparing** – Global Hot Sparing
- Full SMART reporting

Configurations

- 16 Drive SATA II or SAS 3GB per primary or expansion system
- Multi-IO design RAID controller, 2GB cache per controller mirrored across bi-directional 3GB/s path
- **Primary System Features;** active/active dual channel 4Gb Fibre to SAS RAID controllers 4x 4Gb/s ports, dual SAS IO, independent management/ enclosure monitoring

Statistics

- Full per port statistics package with graphs and charts
- Controller CPU load (percentage of idle time free)
- Fibre Channel activity reporting
- Fibre Bit error rate
- Fibre average throughput (MB/s)
- Fibre IOPS
- Cache hit ratio statistics per LUN (Volumes)
- Average throughput per LUN (Volumes)
- IOPS per LUN (Volumes)

- Average throughput per LUN (MB/s)
- Number of stripes remapped by the controller per disk

Management and Monitoring

- Out-of-the-box support on Mac OS X v10.5.x
- Guided Setup assistance can be used to optimize configuration of a single system in a single location, or multiple systems in single or multiple locations
- 128 Bit SSL security on Active Admin[™] management tool[†]
- Support for all popular Enterprise-class SNMP Applications[†]
- Support for all popular UPS systems and controls
- Automated software update service
- On-line portal support for analysis of event log transactions
- Calendar-savvy email and SMS Message Support for up to 24 accounts per system[†]
- Non-disruptive firmware upgrades
- Remote diagnostics and service center monitoring and analysis tool
- Drag-and-drop Configuration Tool for sophisticated and complex environments
- Proprietary Performance Profiling for determining future requirements

System Based Monitoring

Front Panel – Fibre Channel activity and link per controller, drive activity and system status—RAID controller, cooling modules, system temperature, power supplies

Rear Panel – All modules have health and status indicators

[†] Available January 2009

^{††} Available January 2009