Ultimate Performance and Scale

RAID's Xanadu 510ES solution, optimized for Spectrum Scale, is designed to handle the diverse and dynamic demands of organizations looking to solve their big data challenges. The flexibility of the Xanadu 510ES allows organizations to build a solution to fit their budget without getting forced into a rigid configuration.

Our high-performance file-system solutions help you manage your data at scale with the distinctive ability to perform IO with faster speeds while being reliable along with options like archiving and analytics in place.

The Xanadu 510ES provides flexible choices for enterprise-grade data protection, availability features, and the performance of a parallel file system coupled with RAID Inc.'s deep expertise and history of supporting highly efficient, large-scale deployments.

Extreme Scalability

The 510ES is designed to scale performance for extreme throughput and low-latency access thereby mitigating traditional NAS bottlenecks.

Hybrid Architecture Improves Total Cost of Ownership

Start with a small system and grow performance and/or capacity for a data storage infrastructure that has fewer systems to manage, lower power, heating and cooling requirements and much a smaller data center footprint.

Grow with all-SSD, SSD-accelerated or all HDD options. Mix and match the right storage media for your workloads and independently scale out or up to create the right sized building blocks for your environment with complete cost control.

Common Use Cases

The flexibility and capabilities of the X510ES lends itself to a wide variety of applications:

- Artificial Intelligence
- Academic Research
- Life Sciences
- TV & Live Streaming
- Defense & Intelligence
- Financial Services
- Federal Government
- Energy
- Geospatial
- National Labs

Benefits

- Embedded/Converged: Lower TCO with converged storage and network and improve latency with converged file system.
- Installation/Configuration Tools: Simplify the move to Spectrum Scale with data migration, installation, and configuration tools.
- Enterprise Features: High availability, security, strong authentication, multi-tenancy, quotas.
- Directory Level Quotas: Flexibility in project level quotas.

- Data on Metadata: Improved small file performance.
- Single Name Space: Single application and end user view of data regardless of whether it resides on flash, or HDD – in file or object storage, local or remote.
- Improved Client Performance: Improved client performance for both small and large I/O.
- Spectrum Scale Monitoring: Fine-grained file system monitoring.

Technical Specifications

Protocols	NFS v3, CIFS SMB 1.0, 2.0 and 2.1, Linux and Windows Parallel FS Clients
Metadata	All Xanadu 510ES appliances feature distributed metadata
File Servers per Base Enclosure	4 NSDs
Supported RAID Levels	RAID 1/5/6
Data Protection	Up to 256 Snapshots per Volume – policy driven, Snapshot Rollback, DirectProtect & DirectProtect+, Online and Automatic Storage Rebalancing, High Speed Defragmentation
Replication	Synchronous Data and Metadata, Asynchronous using Object Storage
Capacity Optimization	Policy-Driven Background File Compression
Data and System Management	Quotas (users, groups, file sets), Optional centralized configuration and monitoring solution, Optimized backup, Multi-site data sharing and disaster recovery, Hybrid cloud storage capability
Custom Configurations	Custom configurations are available, including configurations with external NSDs

For physical and environmental attributes, see associated Xanadu 510 data sheet

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