



Spectra BlackPearl + Mediaflux

High-Performance Scale-Out NAS with Archive Economics

High-performance NFS and SMB at scale

Automatic tiering with complete data lifecycle management

Enterprise-grade data protection

High availability

Easy administration

Massive cost savings

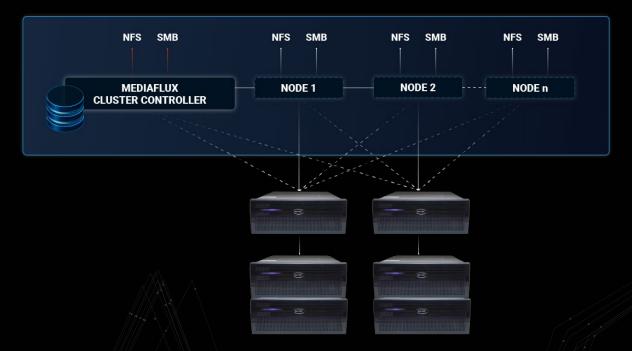
High-Performance NFS and SMB at Scale

Unlike other solutions that source off-the-shelf open-source protocols, BlackPearl Mediaflux NFS and SMB protocols were developed in-house. The solution is designed to provide exceptional performance, scale, security, and efficiency, enabling data to be processed quickly by any application. BlackPearl Mediaflux Scale-Out NAS can support hundreds of billions of files in a single, easily managed global namespace. Multiple storage nodes work in parallel, allowing the system to handle enormous amounts of I/O requests – increasing throughput and reducing latency. Load balancing distributes data and requests across multiple nodes, preventing any one node from becoming a bottleneck and improving overall performance.

Automatic Tiering with Complete Data Lifecycle Management

The solution provides a global view of all data, no matter what storage it's on, with identity and policy-based access controls. extensive metadata harvesting, annotation, cataloging, and recording of all data provenance. Intelligent data placement and movement ensure data is always in the right place at the right time and at the right cost – including support for sovereign data regulations. Self-service data management tools enable end users to leverage metadata search to quickly find and restore data and free IT from routine data recovery tasks.





High Performance Multiprotocol Scale-Out NAS with BlackPearl

Enterprise-Grade Data Protection

Ransomware resiliency and security protect against ransomware attacks by including multiple layers of protection such as intrusion detection and prevention, and real-time monitoring and response capabilities to detect and prevent unauthorized access or activity. Additionally, self-encrypting drives ensure that data is protected at rest, making it inaccessible to attackers, even if they manage to infiltrate the system. The solution also supports multi-factor authentication, including approval workflows for administrative actions.

Easy Administration

A centralized management interface allows administrators to manage and monitor all aspects of the system. This makes it easy to keep track of all data and storage resources and to quickly identify and address any issues. Automated workflows streamline common tasks such as data migration, and data archiving. The solution establishes and enforces data governance policies, including data retention, security, and access control, which reduce the risk of data breaches.

High Availability

Multiple storage nodes provide high availability through redundancy – if one node fails, others can take over and continue providing data access. A distributed file system, with data stored across multiple nodes, allows data to be accessed from any node in the cluster, increasing data availability. Replication of data across multiple nodes provides the ability for data to be restored from a replica.

Massive Cost Savings

The solution reduces cost by storing data on different types of media based on the data's value and how frequently it is accessed. Infrequently accessed data can be stored on lower-cost media such as tape or object storage – while leaving active data on more expensive, high-performance flash storage. Automated data placement optimizes existing storage infrastructure by moving data to the most appropriate storage medium, which can improve storage utilization and reduce costs. Storing infrequently accessed data (the great majority of an organization's data) on immutable, secondary storage reduces backup costs by removing the data from the backups.