Spectra BlackPearl + Mediaflux

On Premises S3 Object Storage

- **Infinite scalability**

- **More affordable than AWS Glacier**

- **Automatic tiering with complete data lifecycle management**

- **Easy search and access control**

- **Complete administrative control**

- **High availability**

- **Enhanced security**

Infinite Scalability

BlackPearl S3 + Mediaflux on premises object storage can support hundreds of billions of objects in a single, easily managed global namespace. By storing data on-premises, the solution reduces the latency associated with accessing data stored in the cloud. BlackPearl S3 + Mediaflux is designed to provide exceptional levels of performance, scale, security, and efficiency, enabling data to be processed quickly by any S3 application. 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.

More Affordable than AWS Glacier

BlackPearl S3 + Mediaflux reduces costs 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 disk or tape 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.
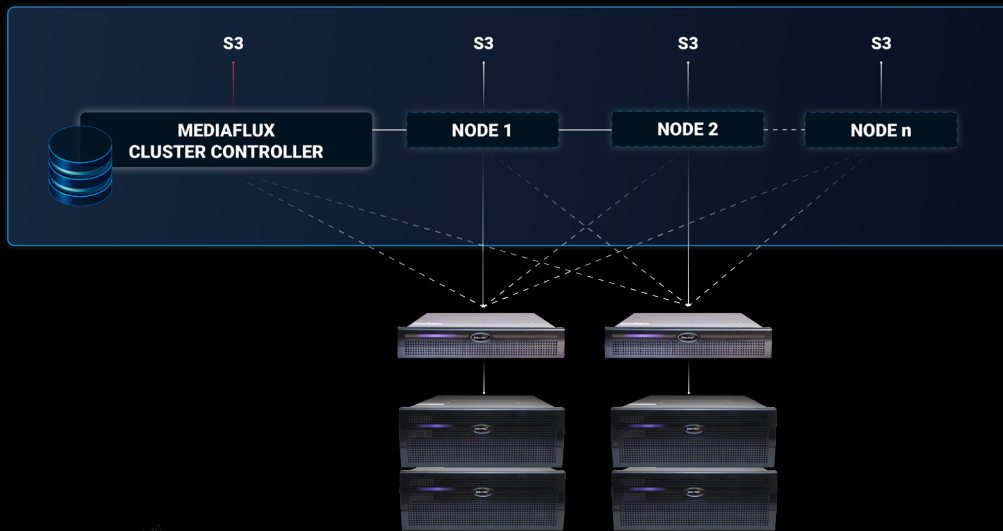
Infinitely Scalable, More Affordable, On Premises S3 Object Storage

---

Automatic Tiering with Complete Data Lifecycle Management

BlackPearl S3 + Mediaflux 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.

Easy Search and Access Control

BlackPearl S3 + Mediaflux tags data for easy searching and management. The user interface is intuitive and easy to use, with a range of search and filtering capabilities that allow users to quickly find the data they need. Mediaflux also offers a range of tools for managing access to data, including user and group-based access controls, automated data retention policies, and auditing capabilities. The solution also supports multi-factor authentication, including approval workflows for administrative actions. These features make it easy for administrators to manage data access and ensure that sensitive data is protected.

High Availability

Multiple storage nodes provide high availability through redundancy – if one node fails, others can take over and continue providing data access. Replication of data across multiple nodes provides the ability for data to be restored from a replica.

Complete Administrative Control

With BlackPearl S3 + Mediaflux object storage, organizations have complete control over how their data is stored and managed, which can be particularly important for organizations with specific requirements for data management and compliance. 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.

Enhanced Security

BlackPearl S3 + Mediaflux includes 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. Administrators can set granular access controls that ensures that only authorized personnel have access to sensitive data, reducing the risk of data breaches. Detailed audit trails are maintained that track every interaction with the system, including who accessed what data and when.
This provides accountability and transparency, making it easier to detect and investigate any security incidents. BlackPearl S3 + Mediaflux supports encryption of data both in transit and at rest. Additionally, self-encrypting drives ensure that data is protected at rest, making it inaccessible to attackers, even if they manage to infiltrate the system.