

# Scale-out ZFS with Mediaflux®

## A Powerful Alternative to Expensive Enterprise Scale-out NAS

**Scale-Out Global Namespace Across Numerous ZFS Servers**

**Extreme Cost Effectiveness**

**Leadership Performance**

**Superior Data Protection**

**Intelligent Data Placement (Tiering and Migration)**

**Easy Administration**

**Extensive Metadata Harvesting, Annotation, and Cataloging**

### ZFS Fully Realised

ZFS is a powerful and flexible file system well-suited to handling large amounts of data and providing data protection and management capabilities that are difficult to find in other file systems. Despite its advantages, ZFS has a significant limitation - it can only scale up and not scale out. In response to this, Arcitecta has developed a solution that combines the power of ZFS with the scalability of Mediaflux to create a breakthrough scale-out ZFS solution.

### Scale-out ZFS Advantages

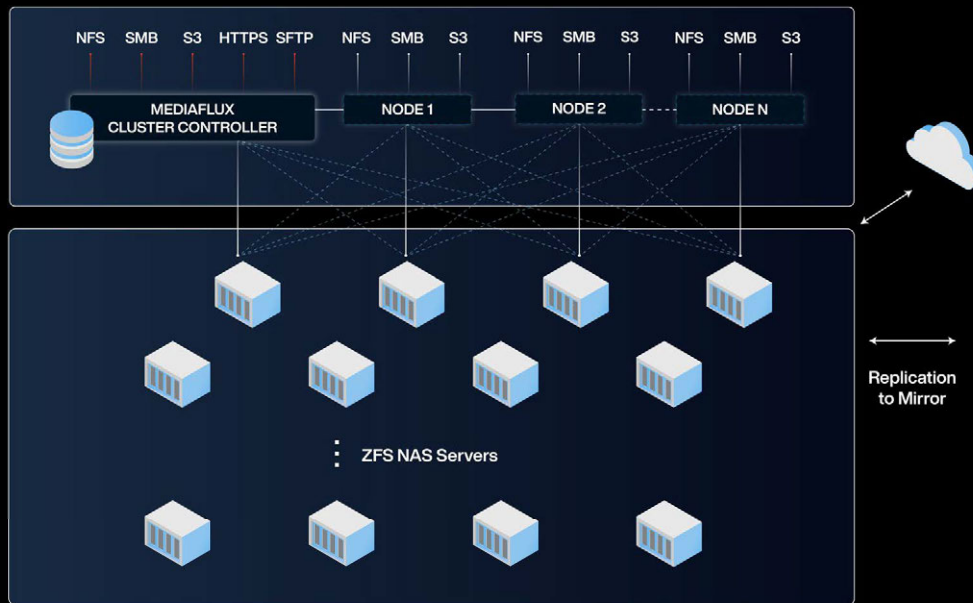
Mediaflux provides a single view of all data stored across numerous ZFS servers. As the demand for storage capacity and performance grows, the Mediaflux scale-out ZFS NAS system can easily scale up by adding more servers to the cluster. This allows organisations to meet their storage needs without having to invest in expensive enterprise-scale storage solutions.

### Extreme Cost Effectiveness

Compared to traditional enterprise-scale storage solutions, a scale-out ZFS NAS system with Mediaflux is a significantly more cost-effective option. Organisations can save on hardware and software licensing costs by using commodity hardware and open-source software while still achieving high-performance and reliable storage. Mediaflux offers a comprehensive licensing model that encompasses all features and capabilities without any added costs. Moreover, we do not impose any fees based on capacity (\$/GB) on our products.

### Leadership Performance

The use of multiple servers in a scale-out ZFS NAS system improves performance by distributing the load across the cluster. This results in faster data access and reduces the risk of bottlenecks that can occur with traditional single-server storage systems. Moreover, Mediaflux acts as a load-balanced cache for data in the ZFS servers, accelerating performance. Arcitecta developed its own NFS, SMB, and S3 protocols in-house, resulting in exceptional performance, scale, security, and efficiency.



SCALE-OUT ZFS WITH MEDIAFLUX

## Superior Data Protection

ZFS is designed with data integrity and protection in mind, and a scale-out ZFS NAS system can further enhance data protection by replicating data across multiple servers. Included with Mediaflux is the ability to replicate data to a DR site to failover applications, reducing the risk of data loss and downtime in the event of an outage. This ensures that data remains available in the event of a server failure, and also provides a backup copy of data for disaster recovery purposes.

## Intelligent Data Placement (Tiering and Migration)

Scale-Out ZFS with Mediaflux automatically moves data between different storage tiers based on its usage and access patterns so organisations can ensure that data is stored in the most appropriate storage technology for its specific requirements, whether that be high performance flash storage or cost-effective object storage, either on-premises or the cloud. This approach reduces costs by minimising the amount of data stored on high-cost storage technologies, while still ensuring that data is easily accessible when needed.

Mediaflux scale-out ZFS provides organisations with a powerful, scalable, and flexible platform for managing and sharing data. With its advanced features and capabilities, the solution can help organisations improve collaboration, streamline workflows, and improve productivity, all while ensuring the integrity and availability of their data.

## Easy Administration

A centralised 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. Mediaflux establishes and enforces data governance policies, including data retention, security, and access

## Mediaflux Metadata Mastery

Mediaflux metadata can identify data origin, ownership, usage, and compliance requirements. This helps organisations to better understand their data assets, enabling them to make more informed decisions about how to manage and use their data and ensure that data is properly classified, tagged, and labeled, helping to improve compliance with data privacy and security regulations.

Mediaflux's ability to capture and store detailed metadata about data objects facilitates faster and more accurate search and retrieval of data. This ensures that data is easily accessible to users across the organisation, enabling them to quickly find and use data for their specific needs.

