Mediaflux® for Higher Education: Comprehensive Data Management and Preservation Solution

Overview

Mediaflux is an advanced data management platform specifically designed for higher education and research institutions. It offers a suite of tools that help institutions organise, search, share, and preserve their research and administrative data over the long term. With Mediaflux, universities can maximise the value of their data while making compliance with data management requirements simpler and more efficient. It enables institutions to do the things they want with their data, and it makes it easier to accomplish the things they must do.

Key Features

Comprehensive Data Management

Mediaflux enables universities and research institutions to efficiently organise, tag, and describe research materials through rich metadata capabilities. Whether managing research datasets or administrative records, Mediaflux provides a centralised, cohesive system to ensure that all data is stored in a way that facilitates easy search, retrieval, and reuse.

Access and Collaboration

Researchers can ingest, access, and share data securely across institutional boundaries, supporting cross-disciplinary and cross-institutional collaboration. Data can be accessed using standard protocols such as NFS, SMB, sFTP, and S3, ensuring compatibility with a wide range of storage environments and platforms, including Mac, Linux, and Windows. Mediaflux makes it easy for researchers to securely share data with external collaborators while ensuring compliance which facilitates greater transparency and collaboration between institutions, which is critical in today's research landscape.

Support for FAIR Data Principles:

Mediaflux is designed with the FAIR (Findable, Accessible, Interoperable, and Reusable) data principles in mind. The system ensures that data is easily findable through powerful metadata and search capabilities. Interoperability is supported across different storage types and platforms, and reuse is made possible by enabling easy retrieval and sharing of datasets across the institution and beyond.

Long-Term Data Preservation and Sustainability

Mediaflux provides robust support for long-term data preservation by ensuring that data is stored in a way that minimises the risk of loss. With the ability to create multiple copies of datasets across different systems and sites, Mediaflux offers resiliency against hardware failures, natural disasters, or other threats to data integrity. This ensures that research data and administrative records are preserved in perpetuity, safeguarding institutional knowledge and enabling future generations to build upon it.

NAS-Like Functionality

Mediaflux delivers the experience of a traditional NAS system, providing a simple, familiar interface for both end users and administrators. Each data share is designed to be completely atomic, meaning there are no shared resources or settings between different shares. This encapsulation ensures that any changes made to a specific share will not affect others, enhancing stability and reducing the likelihood of unintended consequences when data is archived, modified, or deleted by administrators.

Scalable, Tiered Storage

Mediaflux integrates with a variety of scalable storage architectures, allowing institutions to seamlessly move data between different storage tiers based on accessibility, performance needs, and long-term preservation goals. From high-performance storage for active research to cost-efficient archival storage for preservation, Mediaflux adapts to meet the institution's growing and changing storage demands.

Secure Data Management

Security is paramount in research data management, and Mediaflux offers fine-grained control over data access. With integration into institutional authentication systems like LDAP and Active Directory, Mediaflux ensures that access permissions are maintained, and data is only available to authorised users. This not only helps institutions meet regulatory and compliance requirements but also protects sensitive and proprietary research.

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Why Mediaflux?

- **Built to Fit Your Needs**
  Whether your institution manages a hundred terabytes or several hundred petabytes and beyond, Mediaflux is designed to scale to your specific data management requirements. This flexibility allows institutions to handle growing data volumes without the need to overhaul their existing infrastructure. Mediaflux's architecture ensures that as your institution evolves, your data management systems can keep pace, providing long-term value and sustainability.
- **Trusted by Leading Research Institutions**
  Mediaflux has been successfully deployed in universities around the world, supporting complex research environments with ease. Its proven track record in data-intensive research environments ensures that your institution will have a reliable platform to manage and leverage its data effectively. Extensive workflow capabilities can be explored and implemented over time to further optimise data management and processing.
- **Audit Trails and Data Traceability**
  In today's data-driven world, ensuring the traceability and ownership of data is critical. Mediaflux provides detailed audit trails, enabling administrators to track every action performed on a dataset. This transparency helps institutions maintain compliance with funding agencies, legal regulations, and internal policies, while also providing researchers with the assurance that their data is being managed securely and transparently.

How Mediaflux Supports Your Mission

At its core, Mediaflux is about enabling universities and research institutions to make the most of their data. By simplifying data management, enhancing collaboration, and ensuring long-term preservation, Mediaflux helps institutions harness the full potential of their research and administrative data. Mediaflux facilitates the reuse of data and code, fostering an ecosystem of innovation and knowledge sharing. Whether your institution is looking to streamline research data workflows or ensure the preservation of critical administrative records, Mediaflux provides the tools to achieve those goals effectively.