# UNIVERSITY OF CAMBRIDGE

# CASE STUDY

## Hutchison/MRC Research Centre at the University of Cambridge reduces storage infrastructure costs by up to 60%

" Addressing the needs of customers with reliable data storage lies at the heart of the Spectra and Arcitecta relationship. The joint solution enables customers to better manage their data and metadata by optimizing multiple storage targets, retrieving data efficiently and tracking content and resources."

Matt Starr,
Chief Technology Officer,
Spectra Logic

## AT A GLANCE

### Challenges

- High-frequency data access
- Secure data sharing and control
- Aging storage capacity
- Need for efficient tape search

### Solution

- Implement tiered data mgt.
- Use Mediaflux for scalability
- Leverage BlackPearl for storage
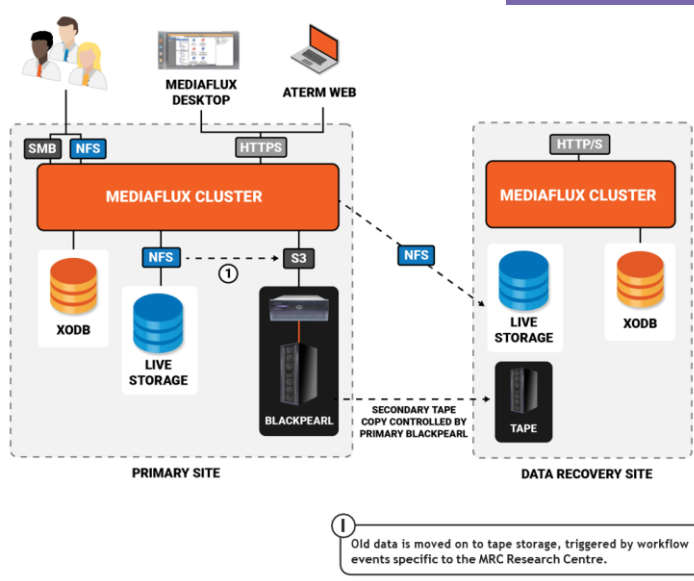- Reduce storage costs by 60%

## CHALLENGE

The Hutchison/MRC Research Centre had developed a complex set of needs. This would include: run applications whose databases are accessing files multiple times per second, potentially opening and closing those files every time; be able to securely share research data with collaborators; and limit access to particular pieces of data in particular locations within the folder hierarchies. Data storage was reaching its limits, and the equipment was reaching its end of life, requiring additional storage to be purchased on an ad-hoc basis to meet the growing demand. As the volume of data continued to expand, and the storage environment continued to expand, users would need the ability to easily and precisely search and access content on tape to continue to extract its value into the future.

## SOLUTION

Arcitecta®, in partnership with Spectra Logic, proposed a new tiered data management system using its Mediaflux® platform, backed by Spectra Logic's BlackPearl Hybrid Storage Platform. Simultaneously, the scalable storage of BlackPearl, together with Mediaflux, unlocked the most efficient storage targets including online disk, nearline disk, deep storage tape, and even public cloud. Mediaflux and BlackPearl have provided the Hutchison/MRC Research Centre with a storage capacity up to 60% less expensive by leveraging Mediaflux's scalability and agility across distributed storage resources while keeping data readily available to researchers. To the user, data is easier to find and data-intensive workflows are smarter and more flexible, which has significantly reduced the time researchers and administrators spend wrangling their data.

SPECTRA

Hutchison MRC Research Centre storage workflow

Old data is moved on to tape storage, triggered by workflow events specific to the MRC Research Centre.

# HUTCHISON MRC RESEARCH CENTRE ENVIRONMENT

## PARTNER PROFILE

**ARCITECTA**
OPERATING SYSTEMS FOR META+DATA

Arcitecta specializes in data management systems for large-scale distributed data. Its core product, Mediaflux™, is a flexible data + metadata management solution that virtualizes otherwise incompatible data stovepipes into a secure distributed collaboration environment.

Mediaflux contains powerful multi-site data federation and replication capabili- ties to optimize storage utilization and rapidly adapt to changing use cases, applications, and security requirements.

## ENVIRONMENT

- Two Spectra® Stack Tape Libraries with
- LTO-8 Half-Height tape drives
- Spectra BlackPearl Multi-Purpose
- Hybrid Storage Platform
- Arcitecta Mediaflux platform

## ABOUT HUTCHISON MRC

The Hutchison/MRC Research Centre at the University of Cambridge is a cancer research facility. Built in 2001, it is now the leading site for basic and translational cancer research in Cambridge. Located on the Cambridge Biomedical Campus, the Hutchison/MRC Research Centre houses active clinicians as well as basic scientists, enabling the rapid translation of discoveries made at the research bench into clinically viable applications at the patient's bedside.

**SPECTRA**