

A PERPETUAL EDGE ON INNOVATION

How Tectrade is enabling a specialised biological research institute ensure data protection in the face of rapid growth and increased demand for availability and resilience

Our client: is developing high performance, novel DNA/RNA sequencing technology that is accessible and easy to use. The same solutions also provide real-time analysis for agriculture, food and water surveillance.

BIO-RESEARCH MARKET DASHBOARD

20%

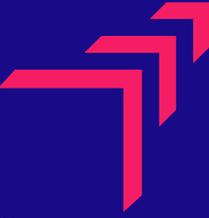
Siteless digital clinical trials show 20% reduction in time required by collected patient data through wearable IoT devices.

13 years

Sequencing the first human genome took 13 years and cost about \$1 billion; today it costs about \$5,000 and takes just one to two days.

90GB

Assuming a 3 billion letter human genome length and an average depth of coverage of 30x, storing one genome requires 90 GB of disk space.



CONTEXT

In today's complex environment, biotech companies are facing increasing pressure to comply with evolving regulations and keep costs in check, while improving patient outcomes.

Master data management offers life sciences organisations a range of benefits from a single source of the truth and data that is validated, accessible and secure.

GOAL

To bring backup costs under control and assure the performance of data recovery, backup was required across two data centres, deliver a fully managed service and integrate with existing on-premise storage to control costs.

CHALLENGE

The existing EMC VNX unified storage system was performing well but was only deployed in one site had been superseded by a later model in the vendor portfolio. The refresh cycle introduced an opportunity to modernise with technology from a proven partner and to upgrade to a high-availability environment across the two sites.

The third party backup service limited restore performance - the client wanted to bring the backup infrastructure under greater control while still benefitting from a managed service.

SOLUTION

Tectrade presented the customer with options from vendors other than the incumbent, which subsequently further highlighted the strengths in pursuing a Dell EMC solution. The solitary VNX was replaced with a pair of Dell EMC Unity storage systems, replicating VMware virtual machines between sites, instantly elevating the business' disaster recovery capability.

A pair of Dell EMC Data Domain appliances were implemented at the two sites, deduplicating, compressing and replicating backup data managed by Dell EMC Avamar.

The Cloud Tier function is used to automatically migrate historical backup copies onto the ECS object storage for cost-efficient long-term retention deduplicated on disk. Data protection is fully managed by our Helix Protect Enterprise service.

OUTCOMES

Disaster recovery no longer relies solely on the backup solution, with data immediately available from mirrored virtual machines at either site. Where recovery from backup is required, data is now swiftly recoverable from locally deployed backup appliances rather than via the WAN.

The Helix Protect backup service, which includes daily reports and quarterly service reviews, assures the customer that data is being protected and that the infrastructure can scale to the ongoing data growth.

The use of existing on-premise object storage for long-term retention further brings costs under control.

“OUR INDEPENDENT APPROACH GAVE THE CLIENT CONFIDENCE TO INVEST FURTHER IN DELL EMC TECHNOLOGY. UNITY STORAGE OFFERS THE BEST TRANSITION AND DATA DOMAIN PROVIDES THE BEST OPPORTUNITY TO INTEGRATE WITH ECS VIA THE CLOUD TIER FUNCTION.”

Daniel Banche
Technical Architect
Tectrade



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