CASE STUDY

The National Computational Infrastructure selects Spectra tape libraries as a central component of their storage cloud environment

> “The incorporation of Spectra Logic’s active archive solution provides a platform for storage growth. It allows us to keep our primary data online and accessible to users, while also increasing the reliability of our stored data across physical sites.”

Allan Williams, Associate Director (Services and Technologies), NCI

NCI

About NCI

The National Computational Infrastructure (NCI) is Australia’s national research computing facility, providing world-class, high-end services to Australian researchers, and to industry and government.

The primary objectives of NCI are to raise the ambition, impact, and outcomes of Australian research through access to advanced computational and data-intensive methods, support, and high-performance infrastructure.

NCI Supercomputer

NCI is home to the Southern Hemisphere’s fastest supercomputer and file systems, Australia’s highest performance research cloud, and one of the nation’s largest data catalogues. NCI is located on the Australian National University campus in Canberra.

NCI is supported by the Australian Government’s National Collaborative Research Infrastructure Strategy (NCRIS). NCI operates as a formal collaboration of the Australian National University (ANU)—the national research university; the Commonwealth Scientific and Industrial Research Organization (CSIRO)—the national research agency; the Australian Bureau of Meteorology (BoM)—the national meteorological agency; Geoscience Australia (GA)— the national geosciences agency; together with partnerships with a number of research-intensive universities, supported by the Australian Research Council.

What truly distinguishes NCI is the depth of its engagement with research communities and research organizations, and the collaborative development of research environments/digital laboratories to enhance research ambition and outcomes in areas of international significance and national benefit—all of which is built around an expert team acknowledged for its innovation and well-run services.

Fast Facts

- Two 8-frame Spectra® T950 tape libraries
- Two 4-frame Spectra® T950 tape libraries
- LTO-5 tape technology
- IBM TS1150 Tape Technology
- Fujitsu cluster solution
- SGI DMF and Commvault software
- SGI rackable servers
- Media Lifecyle Management

CASE STUDY: National Computational Infrastructure

The Challenge:

NCI's supercomputer supports more than 29PB of data that must be backed up and archived. NCI was faced with significant forecasted growth and wanted to implement an updated, single archive to replace aging equipment in the data center.

The Solution:

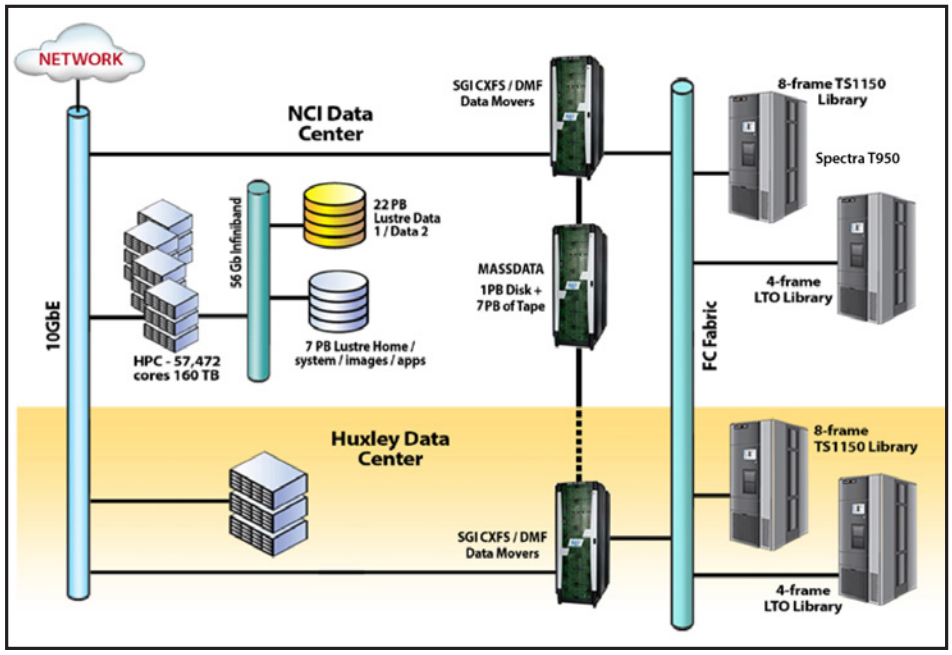
Cloud Data Active Archive Environment

NCI evaluated the best solution for their needs and, after careful evaluation, chose Spectra's T950s, combined with SGI software and servers, because of its high data reliability, scalability and extreme cost efficiencies in terms of space, energy use and total cost per terabyte.

NCI chose to configure their new equipment as an active archive environment. Active archive solutions turn offline archives into visible, accessible extensions of online storage systems – enabling fast, easy access to archived data. NCI's active archive provides a dense, high capacity storage solution for its cloud installation with significant economies of scale and data integrity safeguards. NCI's four Spectra T950 tape libraries conduct backup and archive. With more than 48 LTO tape drives and 16 IBM TS1150 Tape Technology enterprise drives in use, the university already manages a large data repository. As data sets continue to grow over time, NCI can easily scale to meet future requirements by adding frames to its T950 libraries and upgrading their tape and enterprise drive technologies to increase capacity. In addition, Spectra's Media Lifecycle Management (MLM) feature helps ensure NCI's data is accessible when needed by providing complete media health reporting.

> "Spectra Logic's archive and backup solutions provide our customers with the latest innovations and storage technologies to handle cloud, big data, backup and data protection and preservation, compliance, and general data center storage needs."

Nick Gorga, SGI General Manager
Australia and New Zealand



Why Spectra?

- Extreme scalability
- High data reliability
- Portable data storage solution
- Lowest cost per terabyte in the industry
- Reduction in energy costs and space
- High level of performance and maximum uptime

Solution Recap

The Spectra® T950 library is designed and built to meet the stringent requirements of the enterprise for data integrity, data security and high reliability. The T950 library reduces staff involvement significantly, affordably scales in throughput and capacity, and supports multiple generations of current and future tape formats.

For data archive, backup and recovery, this elite library leads the field in innovation—from the greatest storage density to proactive media management always protecting your data. This library has done it all first.

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