COMMVAULT®

University of Canberra Saves A$135,000 by Eliminating Tapes with AWS and Commvault

AUSTRALIAN UNIVERSITY IMPROVES STUDENT SERVICES AND SUSTAINS ITS REPUTATION BY USING A HOLISTIC DISASTER RECOVERY APPROACH.

UNIVERSITY OF CANBERRA

Industry
Higher education

Corporate Headquarters
Canberra, Australia

www.canberra.edu.au

THE CHALLENGE

- Adopt a robust data protection solution to enable frequent and more efficient backups for offsite disaster recovery copies
- Support long-term data retention requirements by moving from tape libraries to cloud-based storage service
- Minimize the risk of losing critical data, including student records, HR files, and finance data, and safeguard the university's reputation
- Ensure availability and reliability of IT services

THE SOLUTION

- Commvault Complete™ Backup & Recovery backs up data from multiple platforms and automatically uploads disaster recovery copies to Amazon S3 on a daily basis.
- Uses Amazon S3 Glacier to store data for long-term retention
- Disaster recovery solution deployed in less than four weeks; the long-term retention migration took just two days

THE BENEFITS

- AUD$135,000 saved on tape overheads and storage costs
- 6x faster streaming of disaster recovery backup copies to AWS cloud library compared to tapes
- Enables daily off-site disaster recovery backups, instead of just the quarterly backups used previously
- Frees-up IT resources to focus on digital strategy instead of ongoing administration and maintenance of tape libraries
- Increases agility to support long-term data retention
- 38% improvement in backup window
- Enhance student experience by improving the reliability and availability of digital services.

"We evaluated Veeam, Rubrik, and HYCU, but only Commvault provided the end-to-end functionalities that we required, and supported the cloud service providers we wanted to use. It also did not require other products or vendors to fill any gaps"

JUSTIN MASON
Associate Director, Vendor and Operations, University of Canberra

SAVES SIGNIFICANT STORAGE AND BACKUP OVERHEADS

University of Canberra (UC) is ranked as one of the top 100 young universities by the prestigious Times Higher Education in 2018. It offers a range of courses to over 14,000 students in Australia, Hong Kong, China, Vietnam and Bhutan. UC also received well-above standard ratings from the Excellence in Research for Australia (ERA) for its research in multiple fields, including genetics, clinical sciences, and public health and health services.

In the past, UC used tape libraries and a third-party records company to store offsite disaster recovery backups. However, the process was time-consuming, costly, and risky to the university. To support its vision to become a global leader in higher education and achieve research excellence, UC needed a more robust and cost-effective disaster recovery option to ensure the security of its critical data and eliminate disruption to the university's operations.

"We evaluated Veeam, Rubrik, and HYCU, but only Commvault provided the end-to-end functionalities that we required, and supported the cloud service providers we wanted to use. It also did not require other products or vendors to fill any gaps," says Justin Mason, Associate Director, Vendor and Operations at UC. "The choice for Amazon Web Services (AWS) was easy. It offers such good value in terms of cost, performance, reliability, and security."

"By integrating Commvault Complete™ Backup & Recovery with Amazon S3 and Glacier, we have reduced overheads to maintain tape libraries, LTO tapes, and physical storage by A$135,000. The automation also empowers our IT team to focus on digital strategy rather than backups and storage administration," Mason adds.

Ensures security and availability of digital services and supports long-term retention

In today's hyper-competitive global education market, the reliability and availability of digital services, such as online learning tools and chatbot assistants, are vital in attracting domestic and overseas students. "Student experience is a major pillar of our digital strategy. We wanted to ensure that we are staying abreast of new ways to protect IT services and infrastructure and safeguard our reputation," says Mason.

By moving away from the legacy manual process to cloud-based storage service, Commvault enabled UC to automatically stream disaster recovery backup copies to Amazon S3 Infrequent Access (IA) storage, and archive data that hasn't been touched for 365 days to Amazon S3 Glacier storage, all without manual intervention. In addition, off-site disaster recovery backups with Commvault now occur daily instead of once per quarter, helping to ensure data integrity and enabling the university to provide students with more innovative services.

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38%
improvement in backup window

"Thanks to Commvault's native integration with AWS, we gained the agility to support our long-term retention requirements and enhance student services. Having the data stored and managed by AWS in a location separate from our main data centers also gives us confidence that our data is always readily available," comments Mason.

Takes full disaster recovery copies to the cloud in minutes rather than days

With Commvault, UC can perform backups more quickly and with greater frequency. A full off-site disaster recovery backup used to take more than six days to complete, but now auxiliary copy schedules automatically check for new backup data every 30 minutes. New data is then copied to AWS typically in a matter of minutes, or at a maximum of one day.

"Previously, backups had to be paused while errors were fixed or additional tapes loaded," explains Mason. "With Commvault, no intervention is required and the backup is automatically scaled as necessary. The Commvault Command Center™ makes administration and setup really easy."

Using Commvault to back-up deduplicated auxiliary copies to the AWS cloud library has significantly improved performance. With Commvault's native integration to AWS and built-in deduplication, the backup window is greatly improved with an average throughput of 415 GB per hour (sometimes exceeding 3,000 GB per hour) compared to 300 GB per hour when the university was copying to tapes without deduplication.

"We have seen a decrease in downtime for hardware maintenance since migrating backup data to AWS. This allows us to quickly and reliably recover services when required," he says.

Finally, UC also leverages the Commvault integration to back-up a wide variety of assets, including Nutanix AHV and ESX hypervisors, Interface, Oracle Real Application Clusters, and Microsoft SQL databases.

"One of the primary reasons that UC has been a long-term Commvault customer is because of its capability to support diverse hardware requirements. Features such as Commvault encryption both "at rest" and "in flight" help ensure data security while transferring backup data to AWS, an important consideration for the university," Mason says.

▶ AT-A-GLANCE

UNIVERSITY OF CANBERRA IN NUMBERS

- 14,000+ students
- 1,000+ staff members
- 90+ terabytes of data

THE BACKUP ENVIRONMENT

- Commvault Complete™ Backup & Recovery
- Amazon S3-IA storage class for disaster recovery
- Amazon S3 Glacier for long-term data retention
- Servers for nearline storage, media agents and tape backups

KEY ASSETS PROTECTED

- Six Nutanix clusters, including AHV and ESX hypervisors and 200+ virtual machines
- Microsoft SQL Server databases
- Oracle Database and Real Application Clusters
- Student Management System
- Staff payroll system
- Financial management system
- Business Intelligence
- Content management system (university website and portals)
- Identity Management, End User Computing Configuration Manager, Active Directory and domain controllers

Keeping pace with change

With support from Commvault, UC deployed the disaster recovery solution in less than four weeks and the long-term retention migration took just two days.

"Commvault helped guide us with the design, cost calculations and so on. Commvault helps ensure we use the best-value AWS storage tiers," says Mason. "Commvault support is also excellent. The team are always professional and knowledgeable."

"Commvault is quick to add functionality to support new cloud services and technologies and keeps up with the rapid pace of change. We expect to unlock even more cost savings through our partnership with Commvault and AWS," he adds.

▶ To learn more visit commvault.com/complete-backup.

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