University Reduces Risk and Gains Flexibility With Tape-to-Cloud Backup Infrastructure Modernization

The client: A public university on the East Coast

A member of a public university system on the East Coast, the client provides comprehensive educational opportunities to state residents and attracts students from around the globe to explore the region's vast natural diversity. The institution was founded in 1889 as a teaching college and now serves more than 10,000 students in undergraduate and graduate programs.

The challenge: Architect and perform an upgrade for backup and disaster recovery infrastructure

Like many other organizations, the client had been using tape for backup for years. Though reliable, tape file transfers are much slower, and the technology does not offer the kind of rapid scalability sought by modern business leaders. Their physical HP® server master media architecture was also increasingly inefficient. The university was ready for a change.

The client lacked backup image replication off-site for disaster recovery, which put them at risk of data loss and corruption, as well as downtime. In an era where more and more educators and students depend on IT systems, unplanned outages pose significant risks. Without a cloud backup archiving tier, the client was also missing out on potential cost savings and flexibility.

Industry:
Colleges and universities

Insight provided:
- Data protection systems evaluation
- Comprehensive design and implementation services
- Decommissioning of existing servers, storage target, and tape library, and data migration
- Phased, disruption-free shift from legacy tape infrastructure to Azure® cloud storage targets
- Deployment of new Veritas™ NetBackup-based production and disaster recovery domains
- Ongoing technical support services

Insight services:
- Cloud Envisioning Workshop
- Veritas Data Protection Assessment
- Architecture, design, and deployment services
- Insight OneCall™ Support Services

The solution: Implement a modern and manageable data protection architecture

When performing an upgrade of critical IT infrastructure, it's important to begin with a thorough assessment of the environment. For the client, this meant gathering and analyzing data to determine current processes and performance. Insight consultants delivered a Veritas Data Protection Assessment and leveraged Mitrend® IT infrastructure analysis to ensure all bases were covered.

With a clear picture of the current state, we were ready to begin defining an optimal state. In our Cloud Envisioning Workshop, the client and Insight consultants reviewed possible cloud solutions, operational and governance models, business and IT requirements, deployment options, and financial implications. The outcome of these preliminary exercises was invaluable clarity and a roadmap ready to be successfully executed.

We also confirmed that at the time of the assessment, the client had 5,440 tape media and was writing an average of 155TB (non-deduped) per month to tape. This data footprint was the scope of opportunity to redirect from tape to Azure® cloud storage. To do so, we used NetBackup™ Cloud Catalyst, which enabled us to send deduped data to cloud storage targets and naturally phase out legacy tape infrastructure based on defined retention periods.

Insight decommissioned six HP® servers, one Quantum® storage target, and one Quantum tape library. We then deployed a NetBackup 5240 4TB master server appliance, two NetBackup 5240 152TB media server appliances, a NetBackup 5240 14TB Cloud Catalyst appliance, and a NetBackup 8.1.2 master running on a virtual machine. This gave the client new Veritas NetBackup production and disaster recovery domains with modern, agile data protection capabilities.

The benefits: Increased scalability and cost savings, with decreased risks to business continuity

As a public institution, the client has immense responsibility. They must be affordable yet provide high-quality education, innovative yet focused, and strategic with IT investments. Our solution enabled them to deliver on all counts.

By performing due diligence, thoroughly investigating their current IT environment and requirements, the client was able to reduce unnecessary spending and conserve resources. The Cloud Envisioning Workshop they received offered a proof of concept trial run of their new backup infrastructure, allowing them to expedite design, testing, and validation.

The solution architecture maximizes the benefits of cloud while maintaining cost efficiency. With Insight OneCall™ Support Services, the client can trust that incidents will be expediently resolved by a certified U.S. team of engineers who are familiar with their existing and new infrastructure. Reliable, secure, and scalable, the new environment is prepared to deliver for administrators, educators, and students alike.

Benefits:

- Increased backup efficiency
- Reduced costs associated with data protection
- Less risk of unplanned outages, data loss, and corruption
- Transition from legacy tape to modern and cloud-based infrastructure

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Enabled backup image replication off-site and backup cloud archiving

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70 Front End TBs
(FETBs) of source data protected

~400
clients worth of data protected

Gradual transition of **5,440 tape media** to cloud storage targets

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