CASE STUDY

University of Georgia preserves world-renowned library collections through Spectra disaster recovery solution

> "One of the great challenges of our experiments is the management and processing of the vast amounts of data generated. Our Spectra TFinity tape systems help us to address this unprecedented multi-petabyte data-processing challenge by ensuring data is preserved and accessible in the long term. This system is anticipated to be able to withstand the data production rates foreseen for the next LHC restart (Run 3) and beyond."

Nathan Thompson, CEO,
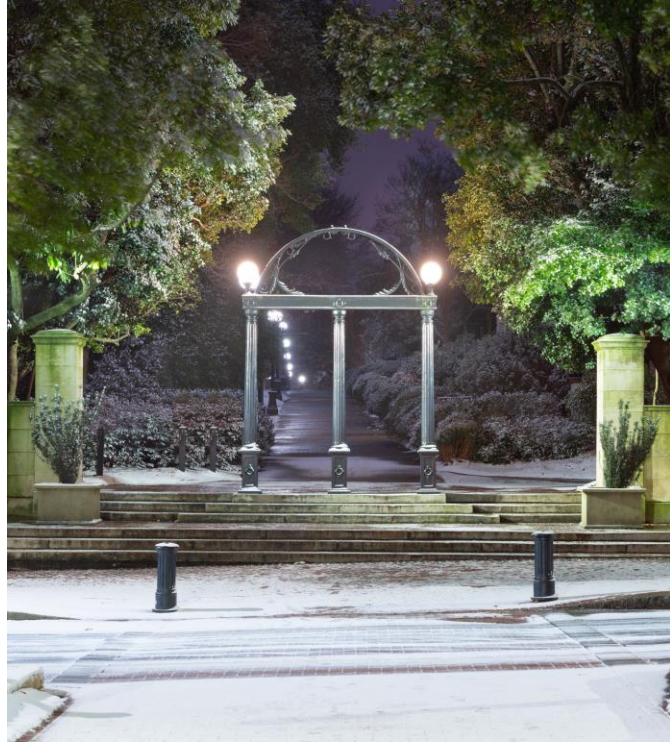Spectra Logic Corporation

AT A GLANCE

Challenges

- Need for digital preservation
- Outdated backup systems
- Growing media volume
- Permanent file retention

Solution

- Disaster recovery strategy
- Custom storage API created
- Multi-location data storage
- Efficient daily backups

CHALLENGE

The University of Georgia ranks among the nation's top research libraries, housing over 5.2 million volumes and a leading U.S. map collection. Its libraries include the 115,000-square-foot Richard B. Russell Special Collections Libraries, which houses the Hargrett Rare Book and Manuscript Library, the Russell Library for Political Research and Studies, the Walter J. Brown Media Archives, and the Peabody Awards Collection.
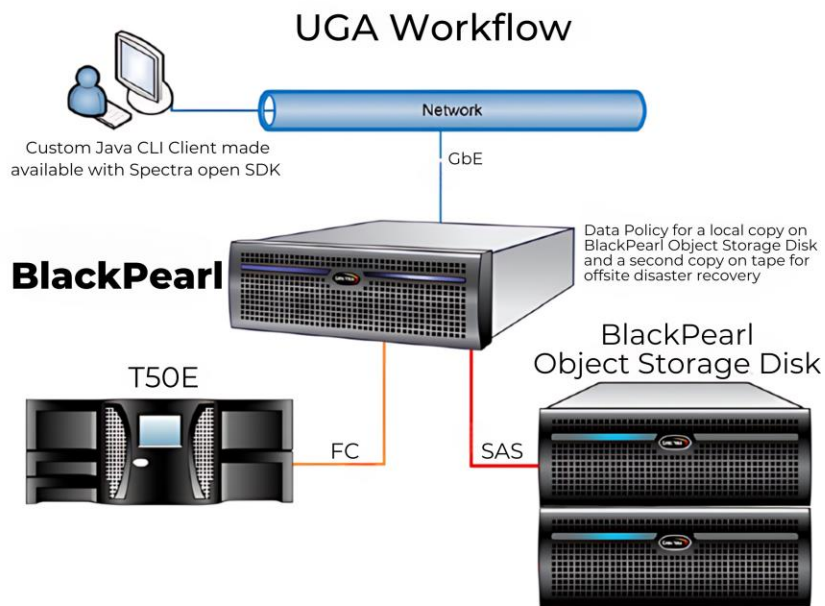
These libraries hold nearly 80 years of digital content in formats like radio, audio, video, oral histories, books, and documents. UGA continues accumulating media, requiring indefinite retention. UGA needed a certified archival solution for permanent preservation and a new backup system to replace its outdated Quantum SuperLoader and perform regular administrative data backups.

SOLUTION

The University of Georgia partnered with Spectra Logic for disaster recovery, ensuring library content is protected forever. They installed two Spectra tape libraries and Spectra's BlackPearl® Hybrid Storage Platform with object storage disk. Using Spectra's S3 client tools, the University created a custom BlackPearl API to issue commands. BlackPearl's Advanced Bucket Management (ABM) policy writes content to three storage targets, diversifying data. It stores one recovery copy to offsite tape and one to BlackPearl Object Storage Disk, offering fast recall and cost-effective storage through spin-down technology.

By using multiple storage types across locations, the University protects data from disaster while balancing speed and cost. Fast-access data is stored on BlackPearl Object Storage Disk, while less frequently accessed data is stored on tape. The University also uses Spectra for administrative backups, performing incremental backups daily and full backups of 40TB weekly to the onsite Spectra tape library.

UGA Workflow

Network

Custom Java CLI Client made available with Spectra open SDK

GbE

BlackPearl

Data Policy for a local copy on BlackPearl Object Storage Disk and a second copy on tape for offsite disaster recovery

T50E

BlackPearl Object Storage Disk

FC

SAS

The University of Georgia's Workflow

UNIVERSITY OF GEORGIA'S ENVIRONMENT

SOLUTION INFORMATION

Spectra BlackPearl – BlackPearl provides a modern, simple portal to a multi-tier storage architecture that breaks away from legacy solutions that are based on capacity licensing models that drive greater cost when scaling. It allows content to move seamlessly into online/ nearline disk, tape, and private and public cloud storage.

Spectra Tape Libraries – From the greatest storage density to proactive media management, Spectra's elite family of libraries leads the field in innovation for data archive, backup and recovery.

Why UGA Chose Spectra
- Disaster recovery and genetic diversity
- Long-term archive
- Industry-leading density and scalability
- Total cost of ownership (TCO)
- Fully-integrated workflow
- Easy and efficient backups

ENVIRONMENT

- BlackPearl Hybrid Storage Platform with Object Storage Disk
- 8TB Disk Drives
- Two Spectra Tape Libraries – one onsite, one offsite
- LTO-7 Half-Height Tape Drives
- Spectra® Certified Tape Media
- BlackPearl® Eon Browser
- HP Data Protector Software
- GigE Connectivity

ABOUT UGA

The University of Georgia (UGA), founded in 1785 as the first state-chartered university in the U.S., is located in Athens, Georgia. With over 36,000 students and 305,000 alumni globally, UGA includes 17 schools and colleges offering 140+ degree programs. It has three campuses and is ranked as one of America's "Public Ivies" and a top 10 best value in public education. UGA addresses global challenges like combating infectious diseases, securing food, advancing economic growth, and environmental analysis.

SPECTRA