Georgia State uses Google Cloud Platform to improve disaster recovery

By shifting their backup data storage into Google's cloud, Georgia State improves operations and ensures seamless data recovery. Working with Commault and Google eased their transition while keeping data recovery.

As a large teaching and research institution, Georgia State University faces significant challenges in designing a disaster recovery plan. Its seven campuses and more than 50,000 students are spread out across 71 acres in metropolitan Allanta. The university manages an enormous (and ever-growing) amount of data for an extended community who need reliable access, even when working remotely. Kelly Robinson, Director of Enterprise Infrastructure, explains that "we need an anytime, anywhere approach to services to support a digital university. We want to develop resources so that you don't always have to physically come to campus to leverage available services." And, of course, all this data must be kept private, secure, and accessible, even in the event of unplanned emergencies. With storms fires, computer hacking, and other threats to digital systems in the news every day, how could Georgia State's instructional innovation and Technology department plan for its data backup and recovery systems to survive natural disasters and any other new potential challenges around the corner?

Their solution: migrating their backup data to Google Cloud Platform (GCP) as a key component of their disaster recovery process. Google Cloud Storage within CCP is a web service for storing and accessing data on Google's infrastructure. The service combines the performance and scalability of Google's cloud with advanced security and sharing capabilities. Georgia State already had a working relationship with Commyault, a leading provider of data management services, so when Commyault and Google established a strategic partnership, Georgia State leveraged the resources of both to ease their migration to the cloud.



"It can take minutes to begin restoring data now with GCP and Commvault where it used to take hours to get access to offsite backups."

Kelly Robinson, Director of Enterprise Infrastructure, Instructional Innovation and Technology, Georgia State University

Using cloud technology to improve operations

Until recently, Georgia State stored all their data on tapes in off-site data centers, like most large enterprises. These were expensive and inconvenient to maintain. Backing up their many terabytes of data on a weekly basis meant dedicated employees manually changing the tapes and being on call until the backup process completed, often during weekends and after hours. Restoring data involved a complicated chain of events that included calling the service provider to manually deliver tapes to campus, locating the correct files from multiple backup tapes, and staying onsite until the full backup process was complete. It was a time, and energy, consuming process.

Together Georgia State, GCP, and Commvault created a customized hybrid solution to streamline this process. According to Robinson, with GCP, data is accessible, protected, and automated to backup continuously. She notes that "it can take minutes to begin restoring data now with GCP and Commvault where it used to take hours to get access to offsite backups. It's an easy online process to start data recovery." Georgia State's hybrid solution consists of keeping daily data at several on-premise sites that backup to GCP regularly. Travis Remington, who directs Enterprise Computing and led the collaboration with GCP and Commvault, says, "in the event of a system failure we can restore quickly now using this cloud solution."

The new system was tested in September 2017 when Hurricane Irma threatened the Atlanta area. With power outlages expected across the state—and across Georgia State's multiple campuses, it was critics to ensure there was no loss of data and minimize any interruption in service. After all, even offsite data centers might be within the range of a natural disaster like this, but GCP would not be impacted. Their cloud solution helped them feel confident they were prepared, and it worked. When prolonged power outages resulted in certain systems needing to be restored, they were able to quickly bring the systems back online. Robinson says, "While we were able to protect our data before, GCP has made it much easier to perform data recovery after an event like this one."

Why Google Cloud and Commvault?

Robinson explains that Georgia State chose to shift their disaster recovery to Google Cloud Platform because its backup is cost-effective, secure, and convenient, and its data recovery is fast and efficient. Robinson attributes the ease and efficiency of the transition to the partnership with Google and Commvault. Georgia State's Instructional Innovation and Technology team was able to work through challenges together and both companies offered great support and resources. Her advice to other IT administrators looking to improve operations by transferring systems to the cloud? "Find someone you can truly partner with and road map what you are trying to accomplish. Look for the low-hanging fruit, like data recovery, which is also high value."

This migration to the cloud is just one step in a larger enterprise transformation toward a digitally-enabled university. Robinson and her team assess how new initiatives can leverage cloud resources a they are designed from the start to take advantage of these new capabilities and efficiencies. GCP is part of Georgia State's overall cloud strategy and planning for the digital future.

About Commvault

Commvault is a leading provider of data protection, cloud and information management solutions, helping companies worldwide activate and drive more value and business insight out of their data. With solutions and services delivered directly and through a worldwide network of partners and service providers, Commvault comprises one of the industry's leading portfolios in data protection and disaster recovery, cloud, virtualization, archive, file sync and share. To learn more about Commvault—and how it can help make your data work for you—visit www.commvault.com.



"I'm just back from an industry conference and it surprised me how many people are continuing to use tapes. It's time to look at the cloud. It can save you money and save you worry."

Travis Remington, Enterprise Computing, Instructional Innovation and Technology, Georgia State University

ORGANIZATION PROFILE

Founded in 1913 in downtown Atlanta, Georgia State University is one of four public research universities in the state. With over 50,000 students, it is ranked in the top ten for best undergraduate teaching by U.S. News and World Report, and is known as a diverse and

PRODUCTS JISED

Google Cloud Platform, Cloud Storage