



## CASE STUDY

# University Solves VM Backup Problems with Catalogic and Quantum

Southern Utah University's legacy data protection system stumbled badly when the school's infrastructure became heavily virtualized. The new system, built around Catalogic software, made VM backup and restore fast and easy, and it saved space in the data center as well.

Southern Utah University is one of the premier institutions of higher learning in the West, offering its 10,000-plus students more than 160 undergraduate, graduate and certificate programs across 6 academic colleges. The University has been recognized by many for its unique combination of attributes—for years it has been included in the Princeton Review's lists of "Best Colleges" and "Best Value Colleges," the only institution in the state to receive that honor.

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Featured Productse

DXi®-Series Backup Appliances and Catalogic products



“We followed Pivotal Data Solutions' advice, decided to go with Catalogic and Quantum and we couldn't be happier—the new system has solved all of our backup problems and has done exactly what the teams promised it would.”

Josh Foremaster  
Assistant Director of IT Operations, Southern Utah University



## SOLUTION OVERVIEW

- Catalogic DPX backup and recovery software for VMs and physical servers

## KEY BENEFITS

- Both physical and VM server backup are managed using a single pane of glass, streamlining scheduling and reducing IT team overhead.
- Direct restore of individual files without having to rebuild the entire VM saves time and reduces network traffic.
- Direct, end-user file restoration accelerates file access and reduces admin involvement—file restores happen in minutes instead of hours.
- Robust data deduplication dramatically shrinks the amount of disk needed to store backup files, reducing data center space, power and cooling requirements.
- Rapid tech support response from Pivotal Data Solutions, Catalogic, and Quantum maximize performance and minimize downtime.

## ABOUT SOUTHERN UTAH UNIVERSITY

Southern Utah University is a caring campus community where students come to explore their interests and prepare for meaningful careers and life experiences. With more than 145 undergraduate programs and 18 graduate and certificate programs across six academic colleges, SUU proudly offers world-class, project-based learning opportunities where students gain professional experience before entering the job market.

## ABOUT CATALOGIC SOFTWARE

Catalogic helps clients backup, recover, manage, and protect their data across their enterprise and cloud environments. Our solutions support enterprise data protection and management including backup and recovery, disaster recovery, ransomware protection, Kubernetes and cloud database backup, and business analytics.

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## CHANGING BACKUP NEEDS OUTGROW LEGACY SYSTEMS

One of the areas in which the IT department has made dramatic changes has been in the area of protecting the data that is central to the University’s mission. “Years ago, when I first came to SUU, we used all physical servers and we used one of leading file-based backup software apps,” Foremaster remembers. “It worked incredibly well for years—until we began to increase the number of virtual machines.”

As the percentage of VMs approached 90%, backups became more and more complicated. “We had to schedule jobs by individual time slots, and if any of them ran over, it threw everything downstream out of whack, and we often had to start major parts of the backup over again,” Foremaster said. “Software changes to improve VM support never seemed well integrated, and the interface became way too complex—we were looking at up to five separate screens to manage the process.”

The system also required too much storage. The team had been backing up to disk for years, and they expected efficiency in how files were stored. Instead, the amount of RAID arrays needed kept growing, eventually reaching a full 50 TB. “Our data center was stuffed with backup disk,” Foremaster said. Restores were another problem. “To recover a single file, we had to rebuild the whole VM first, something that always needed somebody on the IT team to manage. It often took hours to get it done, becoming a real burden both for the sys admins and the people who were waiting for files.”

## INTEGRATOR PIVOTAL DATA SOLUTIONS PUTS THE PIECES TOGETHER

The IT team decided that they needed to move to backup software specifically designed for better VM support and to hardware that could deliver better data compression. Before the team found the right answer, they had false starts with other solution providers, but eventually called in Pivotal Data Solutions, an experienced integrator, and asked for advice. “Pivotal was absolutely wonderful,” Foremaster explains.

“They knew the problems we were facing and gave us an incredibly complete summary of different options, including plusses and minuses for each. It really gave us confidence.” Pivotal recommended a combination of data protection software from Catalogic Software and a Quantum DXi deduplication appliance. “The team from Pivotal said they knew that the combination would work because they had seen it do the same for many of their other clients. We followed Pivotal’s advice, decided to go with Catalogic and Quantum, and we couldn’t be happier—the new system has solved all of our backup problems and has done exactly what the teams promised it would. It was a real relief to find products that live up to their marketing.”

## CATALOGIC DPX AND QUANTUM DXI MAKE PROTECTION SIMPLE AND FAST

The team configured the system so that its Catalogic DPX application backs up all of the VMs and the physical servers to a single, 19-TB DXi4800. “The configuration was simple, the support team quickly helped us tthe usual startup glitches, and it works just as we had hoped. Scheduling backups has become a snap, and everything just works. We don’t need to watch over it or restart jobs anymore.” The restore problems have also been resolved. “We can restore any single file from within a VM easily and quickly, and it is designed to let many of our end users, including our web development team, restore single files themselves without needed any help from IT. They get files in minutes instead of hours, and our IT team can spend their time working on other issues—it really is a win-win.”

## PRODUCTS THAT PERFORM AS PROMISED — WITH PREMIER SUPPORT

Technical support has also been a highlight, a welcome change from the team’s experience with other vendors. “We know we are not the largest institution in the university system and don’t have the largest budget, but you’d never know that from the response we got. Everybody involved—Pivotal Data Solutions, Quantum, Catalogic—responded quickly when issues came up and went the extra mile to make sure everything worked. We can’t recommend this solution highly enough.”