

RESULTS

- Near-zero RTO and instant file search (RTO=minutes vs. an hour)
- Multi-purpose use case support (test/dev)
- Data center footprint reduction (11U vs. 2U)
- Seamless cloud-integrated data protection with AWS S3

CHALLENGE

- Lengthy RTOs required re-hydration on primary storage
- Expensive capacity overhead required by backup software
- Additional software licenses needed to support other use cases beyond recovery

SOLUTION

- VM and file-level recovery for virtualized environment
- Re-purpose backup data for staging & test/dev
- AWS S3 for pay-as-you-go, long-term, secure data retention

Founded in 1907, Castilleja is a Palo Alto independent school dedicated to educating young women from grades six to twelve. Penny Pritzker (US Secretary of Commerce and highly successful entrepreneur businesswoman), Emily White (former Snapchat COO), and Laura Arrillaga Andreesen (founder and chair of Silicon Valley Social Venture fund) are among the notable alumnae. Castilleja currently enrolls 438 students with an average class size of 15 and 6:1 student to faculty ratio.

LONG RECOVERY TIMES WITH PREVIOUS BACKUP SOFTWARE SOLUTION

When Terry Young joined Castilleja starting as a network administrator two years ago, he began creating a framework for revamping the IT infrastructure based on environment needs. "In resource-strapped academic institutions, a common challenge is using infrastructure built in a hodgepodge fashion. Things are tacked on over time, resulting in a fragmented architecture vs. a holistic one that can address evolving needs," explains Young.

Avoiding downtime is just as important in academia. "Every minute counts. The success of our faculty depends on IT's ability to support instructional time," says Young. Castilleja experienced two service outages as upgrades were applied to live systems. After dealing with lengthy recovery times (up to an hour), Young started investigating alternative backup and recovery solutions.

IMPLEMENTING A COST-EFFECTIVE, MULTI-PURPOSE CONVERGED BACKUP SOLUTION

"Before Rubrik, our backup and recovery infrastructure was comprised of a repurposed storage array, single server hosting the backup software, and tape library. My prerequisites for a new backup solution were to simplify the number of components needed, physically separate from production and ability to run recovery directly from it with no performance loss. This in turn alleviates the lengthy time it would take to re-hydrate data back to production because of performance issues. The ability to utilize capacity efficiently, support multiple use cases beyond recovery and be cost-effective were equally important." In Rubrik, Young fulfilled his requirements for a new backup solution. "With Rubrik, I know it just runs."

- **Near-zero RTO on the same solution stack:** "The biggest relief is the time to recover. If faced with another application outage, I have the confidence to get the VM up and running in a matter of minutes without re-hydrating on a separate stack because of performance worries."
- Efficient capacity utilization for lower TCO: "Our previous backup software solution was fairly easy to use but was saddled with hidden costs driven by performance constraints due to its incremental, reverse incremental approach. This necessitates the need to have twice as much storage capacity as necessary. In comparison, Rubrik offers a forward incremental forever approach. Compared to our previous solution if I continued with it, Rubrik was 10% less in overall capex spend."
- **Multiple use case support:** "The ability to instantly mount backups on Rubrik allows us to stage upgrades before we roll out to production. The sandboxing capabilities are intuitive and easy-to-use."
- Reduced datacenter footprint: "We have reduced our datacenter footprint from 11U (8U for storage, 2U for tape, 1U for backup software) to 2U for a converged backup solution, resulting in substantial power, cooling, and space savings."

MAPPING BUSINESS OBJECTIVES TO CLOUD SERVICES

"We were interested in moving to the cloud and it was exciting to hear that Rubrik was specifically designed to work with AWS S3," says Young.

Rubrik and AWS S3 helped Castilleja ease into cloud services at a cost curve they were comfortable with. Castilleja is now storing 44TB in the cloud and the cost is significantly less than expected. "Additionally, we're saving on the amount of time to manage tape and providing an insurance policy by having our data reside in another part of the country in case of disaster," says Young. Overall, Castilleja has achieved 3-4x in savings from discontinuing traditional tape management in favor of data archival to cloud via Rubrik and AWS S3.

Rubrik's predictive search engine has also generated significant time savings from easy recoveries. "In one instance, a user was looking to recover a file that was never saved on the server to begin with. Rather than spend hours to locate the file's whereabouts, I was able to quickly resolve the issue by instantly searching through the data stored within our Brik and AWS S3," says Young. Since adopting Rubrik and AWS S3, Castilleja has completed multiple VM and file-level restores, including Apache log files.

With Rubrik and AWS S3, Young was able to start defining data retention policies—everything is kept on-premises for 3 days and anything beyond 3-5 days is archived to the cloud. "We were able to think through how far back we want to retrieve data, since we were no longer burdened with additional overhead in managing physical tapes."

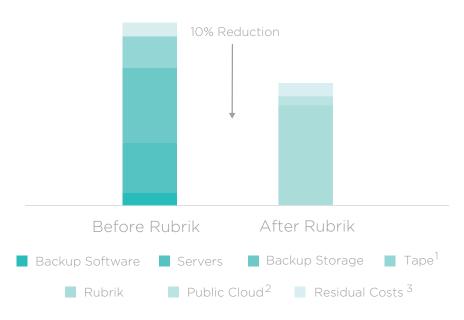
GOING FORWARD ON A MODERN INFRASTRUCTURE

Young says he's excited to explore further possibilities with Rubrik and AWS S3, including test/dev. "For example, if I'm doing testing in the future and it requires a sequestered environment, I can take advantage of the ease in which I can create a test environment with AWS S3. I can easily decommission it afterwards."

Young is investigating a greater deployment of virtual desktop infrastructure (VDI) on top of his modern infrastructure, which includes all-flash arrays within the primary environment. "If we host desktops in the data center, we need to have a backup solution that can recover instantly, more frequently, and more granularly. The combination of Rubrik and our all-flash arrays helps us deliver high application performance, while providing granular, reliable recovery."

TOTAL HARD SAVINGS BEFORE AND AFTER RUBRIK & AWS





Notes:

- Media, maintenance, off-site handling
- 2. Long-term data retention storage and transfer costs
- 3. Includes contractual maintenance
- 4. All costs include initial capital outlay and annual recurring spend



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Rubrik delivers instant application availability to hybrid cloud enterprises for recovery, search, cloud, and development. By using the market-leading Cloud Data Management platform to provide instant access with self-service, customers mobilize applications, automate protection policies, recover from Ransomware, search and analyze application data at scale on one platform. From days to seconds.

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