Cranfield University Chooses Rubrik for Disaster Recovery to the Cloud and Simplified Data Management

INDUSTRY
Education

RESULTS
- Cost savings with Rubrik and Microsoft Azure
- Lower RTOs for VMware, SQL, and Oracle RMAN workloads (from hours to minutes)
- Accelerated security and compliance with end-to-end encryption

THE CHALLENGE
- Rising costs and slow recovery with off-site archival to a third-party provider
- Unable to establish a strong disaster recovery strategy to the cloud
- Lack of granular point-in-time recovery for Oracle RMAN and SQL workloads

THE SOLUTION
- Cost-effective data archival and fast recovery via Rubrik's integration with Microsoft Azure
- Rubrik's cloud instantiation (CloudOn) to enable rapid disaster recovery to the cloud
- Incremental forever backups for fast point-in-time recovery for Oracle RMAN and SQL

Cranfield University, a British postgraduate university, is a global leader for education and transformational research in technology and management. Every year, Cranfield University delivers academic courses in 50 countries outside of the UK and executive development to over 15,000 people. Cranfield is one of the UK's top five commercial research-intensive universities.

Edward Poll, Head of IT Infrastructure, is responsible for aligning the IT infrastructure strategy with business objectives. Poll oversees a team of 13 that supports the university's 1,600 staff and 4,000 postgraduate students. "As a leading global research institution, demand for agile services from our users is continuously increasing. We need forward-thinking technology within our infrastructure," said Poll. "Since Rubrik is software converged and built on an API-first architecture, we receive hands-free management and automated orchestration, providing DevOps-like functionality while minimizing downtime."

FAST TRACK TO CLOUD MODERNIZATION WITH RUBRIK

Cloud is top of mind for IT at Cranfield University, especially for disaster recovery. "Our goal is to leverage the agility and cost savings of cloud infrastructure. Previously, we were replicating to a third-party host. A weakness of this approach was that if our two on-site resilient datacentres were completely down, we had no easy way to fully restore services from our third-party provider," said Poll. "We are making a push to cloud backup because it's cheaper than our current third-party provider, replaces costly hardware and software on-prem, and provides greater resilience. Rubrik's easy integration with cloud helps us achieve cloud savings today, all whilst building future cloud infrastructure for disaster recovery."

The Challenge: "With our previous vendor, migrating to the cloud required building an entirely different infrastructure. That would have taken weeks to configure. Additionally, it meant an entirely siloed architecture to manage our cloud workloads, which would result in greater costs, complex management, and slower recovery."

The Solution: "Rubrik delivered an all-in-one solution for data archival and disaster recovery to cloud. It easily integrated with Azure for simpler, faster, and cheaper backup, recovery, and cloud archival."

- **Avoid cloud vendor lock-in:** "A huge advantage with Rubrik is that it's built to be vendor-agnostic from the get-go. As we grow, we can choose from any public and private cloud provider and easily move workloads from cloud to cloud."

- **Fast recovery in the cloud:** "With Rubrik, we can restore in the cloud. Using their Google-like search, we can quickly find our data in the cloud and recover in a matter of minutes."

- **Cost savings:** "Rubrik seamlessly integrated with Azure for data archival. By replicating off-site to Azure, we cut our costs. Our strategy moving forward is to reduce our on-prem footprint."

- **Rubrik CloudOn for disaster recovery to the cloud:** "Disaster recovery is increasingly top of mind. Rubrik has pioneered CloudOn, an innovative feature for cloud instantiation. We plan on using Rubrik CloudOn in Azure to enable stronger disaster recovery. Our strategy is to build an infrastructure where we can replicate directly to the cloud and then use Rubrik CloudOn to instantly spin up workloads in the cloud. This will allow for business continuity in the event of a disaster. If our on-prem site is down, we can quickly convert our archived VMs into cloud instances, and launch those apps on-demand in Azure."

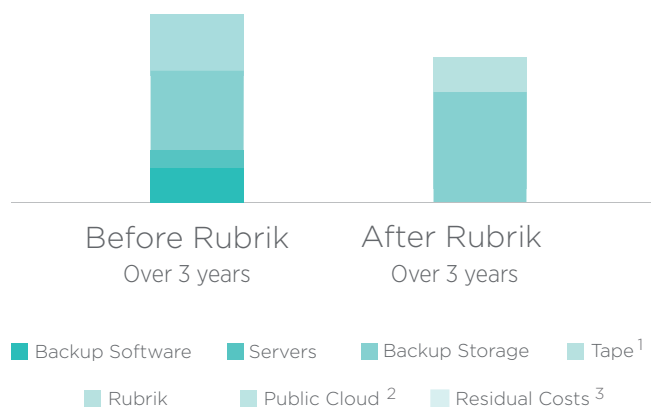## MANAGEMENT SIMPLICITY AND FAST POINT-IN-TIME RECOVERY FOR ORACLE RMAN

A key reason Cranfield University chose Rubrik was for its Oracle RMAN integration. "One of the biggest advantages with Rubrik over legacy solutions is its policy-based management for Oracle RMAN workloads. Rubrik delivers the same simple user experience across our legacy, virtual, and cloud workloads."

- **83% management time savings with SLA policy automation:** "The legacy approach required time-consuming, manual day-to-day management. With Rubrik, we eliminate tedious backup job scheduling. The same SLA policies apply to Oracle workloads as for our other datasets. Rubrik handles backup retention, replication, and archival from one policy engine. As a result, we spend 83% less time on managing our backups."

- **Incremental-forever backups fast point-in-time recovery:** "Previously, we would take snapshots of entire VMs and then export daily Oracle backups every night. Point-in-time recovery was only available for a day, and then we had to revert back to daily snapshots. With incremental-forever backups and log management, we can apply transaction logs to restore back from the desired point. As a result, we have greatly reduced our RTOs while also increasing capacity savings."

- **Immutable backups for secure data management:** "Rubrik always stores data in an immutable format, ensuring that we are secure from potential malware threats."

ACCELERATING SECURITY, COMPLIANCE, AND AUTOMATION WITH RUBRIK

With Rubrik, Cranfield University is managing its on-prem and cloud workloads, including its Microsoft SQL, Oracle RMAN, and VMware workloads. Benefits include:

- **Breakthrough simplicity from setup to management:** "Within hours, we had Rubrik up-and-running and protecting our workloads. Also, we love Rubrik's clean and easy-to-use UI. We now spend only a few minutes per day managing backups."

- **75% reduced data center footprint:** "Since Rubrik eliminates unnecessary hardware and software components, we have reduced our data center footprint from 16U to 4U while saving nearly 80% on power and cooling."

- **Faster backup performance:** "Our previous solution was leading to a rising number of failed backup jobs, thereby required more babysitting. Rubrik's rapid flash-speed ingest and distributed workflow management guarantees that all our SLAs are met within our defined objectives. Also, by replicating our data offsite to Azure, we are now protecting our data in minutes instead of hours."

- **Lower RTOs for VMs and SQL databases (from hours to minutes):** "Rubrik delivers faster recoveries for all our workloads, on-prem and in the cloud. Recovery times for a single VM went down from hours to minutes. For example, we restored a system with multiple terabytes of data back into production in minutes using Rubrik's Live Mount. Previously, that would have taken nearly nine hours. Rubrik's Live Mount for SQL also allows us to recover SQL databases in minutes."

- **Accelerated compliance:** "Backup is a part of GDPR compliance. Rubrik's end-to-end encryption helps us meet our compliance requirements with ease. Rubrik encrypts our data everywhere, at-rest, in-flight, and from and to the cloud."

- **Immutable backups for ransomware recovery:** "As an educational institution, protecting our employees and students' data is highly important. Rubrik adds an additional layer of defense to malware attacks by providing immutable backups. This bolsters our data security, ensuring that a malware like Ransomware can't access and encrypt our backup data."

- **API-driven automation:** "We love that Rubrik is automation-centric and built entirely on an API-first architecture. We leverage Rubrik's RESTful APIs to automate system changes and provide more detailed reporting, especially for our SQL databases and Oracle RMAN managed volumes. The true power of Rubrik's APIs is that it allows us to integrate with a variety of systems and provide easy management at speed and scale while removing potential for user error."

Before Rubrik
Over 3 years

After Rubrik
Over 3 years

- Backup Software
- Servers
- Backup Storage
- Tape [1]
- Rubrik
- Public Cloud [2]
- Residual Costs [3]

TOTAL HARD SAVINGS BEFORE AND AFTER RUBRIK

Rubrik has helped Cranfield University reduce its TCO by 26%. "By switching over to Rubrik, we achieved significant cost savings in licensing fees and eliminated renewal fees for software licenses. Additionally, replicating off-site to Azure was 55% cheaper than our previous approach," said Poll.

Notes:

1. Media, maintenance, off-site handling
2. Long-term data retention storage and transfer costs
3. Includes contractual maintenance, support for legacy infrastructure
4. Spend includes initial capital outlay and annual recurring spend