TECHNICAL NOTE

Rubrik Cloud Vault

Isolated, off-site cloud archival of your data
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Rubrik Cloud Vault is a fully-managed cloud service built on Azure storage, enabling organizations to have completely isolated, immutable copies of their protected data in the cloud to support recovery from cyber-attacks and natural disasters. Organizations can now have a logically air-gapped copy of their data stored in the cloud to be accessed quickly for recovery.

Once the customer configures Rubrik Cloud Vault, adds it to an SLA, and then protects data with the same SLA, Rubrik automatically manages the process of taking the backup data from the on-premises Rubrik’s CDM primary storage location to the secondary Rubrik Cloud Vault Storage location managed by Rubrik. This tight integration extends Rubrik Zero Trust architecture to the cloud, provides a predictable cost that includes all storage and egress charges, and provides managed redundant backup and archived data. The backup data resides in a Rubrik-managed tenant, where data is immutable and easily accessible when needed.

Let’s dive deeper into Rubrik Cloud Vault with an architectural overview.
RUBRIK CLOUD VAULT ARCHITECTURE

Below is a high-level architecture of the different components involved in Rubrik Cloud Vault.

RUBRIK CDM

- Rubrik is a Data Security platform providing data protection and point-in-time inspection of critical applications for Cyber resilience and Disaster recovery.
- Many Rubrik customers strategically deploy CDM to ensure their ability to recover data and meet their application recovery point and recovery time objectives (RPO/RTO).
- The CDM appliance has many physical and virtual deployment options and can be deployed in data centers, remote offices, and the cloud.

RUBRIK SAAS PLATFORM

- The Rubrik SaaS platform acts as a control plane for managing multiple distributed Rubrik CDM deployments along with providing Cloud-Native Data Protection capabilities and advanced security analytics.
- It also automates the creation and management of the Rubrik Cloud Vault location.

MICROSOFT AZURE BLOB STORAGE

- Azure Blob Storage helps you create data lakes for your analytics needs and provides storage to build powerful cloud-native and mobile apps.
- Azure Blob Storage optimizes costs with tiered storage for your long-term data and flexibly scales up for high-performance computing and machine learning workloads.

Now that we know more about all the components, let’s see how it all comes together in a few steps to create a Rubrik Cloud Vault location.
1. Once you purchase the Rubrik Cloud Value, it is available through your Rubrik SaaS Platform. Login to the Rubrik SaaS Platform, navigate to **Cloud Settings** and click the **RUBRIK CLOUD VAULT** tab. Click **ADD ARCHIVAL LOCATION** for kickstarting the setup wizard.

![Rubrik Cloud Vault Page](image)

2. Add a name for the Archival Location, select Backup or archival tier, add Immutability Period in terms of days, select the Region from the available ones in your city, add the private RSA keys and lastly, select the Rubrik CDM cluster which you would like to add the Rubrik Cloud Vault location to.
3. Confirm the changes and click CREATE.

4. Rubrik now automatically creates and provisions a fully-managed Azure Blob Storage account for the Rubrik CDM.

5. The new Archival Location will be available on the Rubrik Cloud Vault dashboard.
6. Customers can now access their Rubrik CDM cluster and create a single-use SLA to use the Rubrik Cloud Vault as the archive location. Customers must ensure to toggle the Archive button after entering the frequency of the snapshots. They can select the location from the drop-down menu.
Review all the changes and click create.
This SLA can now protect the objects.

All this goodness does not limit customers to only one tier of storage. In fact, Rubrik Cloud vault offers two storage tiers: A backup tier and an Archive tier.

- A backup tier is generally used for daily backups. This storage is easily accessible, and downloads to CDM can begin quickly.
- For ransomware recovery, the backup tier is most useful and effective.
- The Archival tier is for long-term archival, and getting the data ready for download may take up to 20 hours.
- The Archival tier is cheaper than the backup tier and, in turn, more cost-effective.
- For longer retention with slower recoveries, the archive tier is most beneficial.
- The following table compares these storage tiers.

<table>
<thead>
<tr>
<th></th>
<th>Backup Tier</th>
<th>Archive Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Use Case</strong></td>
<td>Daily backups</td>
<td>Long-term archival</td>
</tr>
<tr>
<td><strong>Restore Availability</strong></td>
<td>Immediate</td>
<td>Up to 20 hours</td>
</tr>
<tr>
<td><strong>Minimum Retention</strong></td>
<td>30 days</td>
<td>180 days</td>
</tr>
<tr>
<td><strong>Immutability Offered</strong></td>
<td>Yes, for up to 100 days</td>
<td>No</td>
</tr>
<tr>
<td><strong>Redundancy</strong></td>
<td>Locally-redundant storage</td>
<td>Locally-redundant storage</td>
</tr>
</tbody>
</table>

Microsoft has listed and compared the features of the Microsoft storage tier. The table summarizes the features of the Hot, Cool, and Archive access tiers.
Rubrik Cloud Vault is a safe, simple, and predictably priced way to replicate and archive backups in the cloud, leaving customers with a secure and isolated copy of their data to recover from in the event of malicious attacks or natural disasters. Rubrik Cloud Vault is a fully-managed service built using Microsoft Azure Blob Storage, offering the following features:

**ZERO TRUST DATA SECURITY**

- Zero Trust Architecture assures data is available, immutable, and logically air-gapped, so it cannot be modified, encrypted, or deleted by ransomware.
- Fine-Grained Role-Based Control allows for least privilege permissions, giving users access to only what they require, thereby decreasing the risk of bad actors or compromised accounts accessing things they shouldn’t.
- Retention lock prohibits a single person from clearing or shortening retention policies governing archiving.

**GLOBAL CONTROL PLANE**

- Unifies the management of on-premises and cloud data.

**DECLARATIVE SLA-DRIVEN AUTOMATION**

- Rubrik allows administrators to abstract away much of the low-end fuss required to build and maintain data protection to focus on adding value at a more strategic level across the organization.
- Rubrik’s policy engine is robust but simple to interact with because many of the imperative details are handled by internal best practices.
- Additionally, the SLA can be configured while creating the initial data protection SLA simply by adding the replication and archive details, i.e., they are not separate tasks that must be configured.

**READILY AVAILABLE DATA**

- Point in time snapshots is available only from Rubrik Cloud Vault that can easily be downloaded to Rubrik CDM, where all the recovery options are available.

**CUSTOMER-OWNED ARCHIVES VS. RUBRIK CLOUD VAULT**

Organizations recognize the benefits of cloud-based storage services. However, they have concerns regarding data security and exposure risks, cloud administration, security misconfiguration, and cloud costs. Rubrik Cloud Vault offers organizations the ability to have pristine data protected off-site with little administration, predictable costs, and restricted access to support recovery from cyber-attacks and natural disasters.

Rubrik Cloud Vault provides customers a core set of benefits that set Rubrik apart from the self-service model.

**SECURE ACCESS FOR LOGICALLY AIR-GAPPED STORAGE**

- Many enterprises require authentication and authorization to be centralized to make it easy for users and IT to manage and enforce. Rubrik utilizes SAML 2.0, which means it integrates with identity providers such as Azure Active Directory (Azure AD), meeting customer’s requirements for centralization and providing robust MFA for data protection operations across their entire enterprise.
• Additionally, Rubrik offers a native Multi-Factor Authentication (MFA) solution using Time-based One Time Passwords (TOTP) that is not dependent on any external systems.

• Each of the storage accounts in Rubrik Cloud Vault is not connected to the customer’s existing Azure accounts or enterprise authentication and authorization solutions. This removes the chances of data in Rubrik Cloud Vault being compromised when the customer’s authentication or authorization solution is compromised.

• Rubrik ensures that a copy of the customer’s protected data exists outside of the customer’s environment, ensuring that recovery can occur in a ransomware attack or other event.

• Above all Rubrik SaaS platform is SOC-2 compliant.

FULLY-MANAGED SERVICE

• Being a fully managed service means that with few steps, customers can put their protected data in a cloud bunker, i.e., there is no need to select a vendor, procure their storage (with the help of legal and purchasing), design your config, get it vetted by infosec, build it and provide on-going management.

• Rubrik Cloud Vault reduces operational complexities, time to deliver, and requirements for staff to have cloud expertise

• Consumed from and managed by Rubrik

PREDICTABLE COST

• A single bill, covering all costs: storage, API interactions, and egress charges that help organizations stay within budget.

• Customers can forecast usage growth and predict this cost with more reliability than other cloud storage offerings.

CONCLUSION

The volume and sophistication of ransomware attacks are growing and have become a cross-sector existential threat that all organizations must be prepared to address. At the same time, natural disasters can strike anytime. As your data protection strategy evolves, having recoverable copies of organizations’ data in a secure and isolated off-site location is essential for a comprehensive strategy. Rubrik Cloud Vault provides all this, plus being a fully managed service in the cloud, reduces the operations and capital costs versus customers building it themselves.

Rubrik Cloud Vault offers customers the benefits of Rubrik Zero Trust Security, logical air-gap, and a predictable TCO.

For more information, please visit https://www.rubrik.com/products/rubrik-cloud-vault