# rubrik

# Rubrik for Microsoft 365

Tech Brief: Cyber Resilience and Rapid Recovery at Scale

The modern IT Architect understands the array of technical factors at play when designing for a solution to protect their Microsoft 365 data. In addition to reducing operational costs, enabling employees, and leveraging the agility of cloud; they also must appropriately evaluate solutions that can secure company data and accelerate recovery from operational mishaps or security incidents. Without diving in the details of shared responsibility in cloud, it is ultimately the customer's responsibility to protect their applications and data running in a public cloud, regardless of the provider.

#### **RUBRIK FOR MICROSOFT 365**

Rubrik provides policy-based protection of Microsoft 365 via its Rubrik SaaS platform. Built on a zero-trust architecture, assuming all users, devices and applications are untrustworthy and can be compromised, the solution offers robust security, simplicity and performance for search and restore operations across Exchange Online, OneDrive, SharePoint, and Teams.



Secure data with a Rubrik hosted Azure environment and introduce a logical air gap for your protected Microsoft 365 data.

Optimize data backup and recovery operations with elastic resources such as Azure Kubernetes and zoneredundant storage, managed by Rubrik.

Reduce operational overhead and IT risk with a simplified data security solution for Microsoft 365.

## **CYBER RESILIENCE FOR MICROSOFT 365**

From the initial deployment, Microsoft customers inherit key security benefits to protect their environment. From world-class perimeter defenses to strict access controls to keep attackers out, customers can safely rely upon Microsoft to provide layers of security. However, when it comes to cyber disasters, the Microsoft 365 documentation states the first step is to verify your backups<sup>1</sup>. This is where Rubrik is a *critical component* of your security strategy.

If a threat actor or rogue admin intentionally deletes data in your production environment, or data is simply lost through accidental deletion, it carries the simple risk of data loss. By keeping your protected Microsoft 365 data in a separate, secured account managed by Rubrik, you can establish clear separation of duty, and minimize the risk of not being able to recover.

## THE RUBRIK SOLUTION AT SCALE

Providing scale to optimize backup and recovery operations in SaaS is a continually moving target that requires a solution to have a strong foundation using cloud-centric architectures. At the center of these architectures is the ability to leverage the elasticity of cloud, reducing or eliminating bottlenecks, and providing redundancy. To accomplish this, the Rubrik Microsoft 365 solution utilizes a

<sup>1</sup> https://docs.microsoft.com/en-us/microsoft-365/security/office-365-security/recover-from-ransomware?view=o365-worldwide

combination of Azure Kubernetes Service (AKS), Azure blob storage, and various other Azure components. This allows the solution to effectively scale up on-demand as needed for large operations, such as recovery.

Even though the compute scaling capabilities are critical to a performant architecture, it is not the only potential bottleneck. In order to interface with the Microsoft environment, Rubrik communicates with Microsoft 365, via AKS, through multiple Microsoft APIs. The recommended 365 API is known as Microsoft Graph, which provides a single endpoint that allows Rubrik to connect to each of the underlying Microsoft 365 apps.



Additionally, there is also a traditional API specific to each Microsoft 365 product; some which carry advantages over the Microsoft Graph counterpart in the Rubrik solution. In order to provide both performance and reliability, Rubrik takes a "hybrid" API approach with the goal of creating the most reliable and performant experience possible. For example, if Microsoft Graph fails during an operation, Rubrik can switch to the Exchange Web Services API to complete the task with minimal interruptions in the data protection process.

#### UNDER THE HOOD OF RAPID RECOVERY

Although mitigating the risk of data loss is paramount, providing the ability to recover quickly is of near equal importance. For data recovery in SaaS, it means scaling up infrastructure resources to meet demand and efficiently leveraging APIs.

Microsoft provides globally available resources with their cloud infrastructure; as such, they work to ensure each API is consistently available to each of their customers. One way to ensure this is through throttling, and after a certain number of concurrent calls, Microsoft will return an HTTP 429 status code (too many requests) and fail the request. In the context of Microsoft 365, this could potentially result in application wait times if too many requests are made.

To design for this, and optimize each round trip, Rubrik will batch multiple queries into a single API request to the Microsoft APIs. Additionally, Rubrik will also dynamically load-balance API calls through multiple Microsoft 365 service principles (also known as Enterprise Applications). Each of these Enterprise Applications is specific to individual Microsoft 365 products (Exchange Mailbox, OneDrive, SharePoint, Teams, etc.) and automatically provisioned as needed for optimal performance.

#### CONCLUSION

When Rubrik designed a solution for Microsoft 365 protection, it was designed in the context of the current threat landscape, and by taking into account the native integrations provided by Microsoft. Combined with a cloud-centric architecture, and seamless integration into their Microsoft 365 environment, Rubrik gives customers the ability to reduce their data security risks and ensure the ability for fast recovery.



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1-844-4RUBRIK inquiries@rubrik.com www.rubrik.com Rubrik, the Zero Trust Data Security Company<sup>™</sup>, delivers data security and operational resilience for enterprises. Rubrik's big idea is to provide data security and data protection on a single platform, including: Zero Trust Data Protection, ransomware investigation, incident containment, sensitive data discovery, and orchestrated application recovery. This means data is ready at all times so you can recover the data you need, and avoid paying a ransom. Because when you secure your data, you secure your applications, and you secure your business. For more information please visit www.rubrik.com and follow @rubrikInc on Twitter and Rubrik, Inc. on LinkedIn. Rubrik is a registered trademark of Rubrik, Inc. Other marks may be trademarks of their respective owners.