

Veeam vs. Rubrik

Quick Feature Comparison

Veeam® Backup & Replication is the engine that drives Veeam Cloud Data Management Platform and provides centralized management for cloud, virtual and physical workloads. Veeam's core capabilities, backup and recovery along with replication and failover, combine to form the cornerstone of Veeam's flagship products, Veeam Backup & Replication and Veeam Availability Suite™.

The following document highlights Veeam Backup & Replication's capabilities for virtual machine data protection vs. Rubrik 5.2.

Feature	Veeam	Rubrik	Details
Recovery			
Full VM, VM file, virtual disk and guest OS file restore	✓	⚠	<p>Veeam: Recover an entire VM, individual virtual machine (VM) files (such as VMX), virtual disks and guest OS files from a single backup.</p> <p>Rubrik: Can perform a full VM recovery (known as an Export) but cannot recover individual virtual disks or VM configuration files. Rubrik can recover files and folders from VMware, Hyper-V and Nutanix AHV VM backups.</p>
Multi-VM, cross-platform Instant recovery of any workload	✓	⚠	<p>Veeam: Instantly recover any workload, including physical servers, cloud-based instances and multiple VMs to vSphere by running them directly from the backup.</p> <p>Rubrik: Can instantly recover multiple VMs at once by running them directly from the backup. Two different features, Instant Recovery and Live Mount effectively do the same thing, but Instant Recovery is for recovery of a failed or missing VM and Live Mount is a clone operation. Rubrik cannot perform instant cross-platform recovery.</p>
Agentless application item recovery	✓	✗	<p>Veeam: Recover individual items from backups of applications such as Microsoft Exchange, SharePoint, SQL, Active Directory, Oracle and more.</p> <p>Rubrik: Has no native capabilities to recover application items from Microsoft Exchange, SharePoint or Active Directory. Application item recovery for SQL and Oracle requires agents.</p>
Native recovery for Oracle RMAN and SAP HANA	✓	✓	<p>Veeam: Leverage native SAP HANA and Oracle RMAN functionality for granular backup and recovery.</p> <p>Rubrik: Can act as a target for SAP HANA and Oracle RMAN backups. Administrators can use native tools for backup and recovery.</p>
Recovery from storage snapshots	✓	✗	<p>Veeam: Recover individual VMs, guest files and application items from storage snapshots.</p> <p>Rubrik: Can leverage Pure Storage snapshots for backup but has no ability to recover data from those storage snapshots.</p>
Restore to public cloud and object storage	✓	✓	<p>Veeam: Recover data directly to public clouds such as AWS, Microsoft Azure and Azure Stack.</p> <p>Rubrik: Can recover VMs to AWS and Microsoft Azure. Functionality is included in Premium edition subscription but requires an add-on for Foundation edition and perpetual licensing models.</p>
Backup			
Agentless, application-aware, image-based backups	✓	⚠	<p>Veeam: Create application-consistent, image-level VM backups with application-aware processing without an agent.</p> <p>Rubrik: Can create application-consistent, image-level VM backups of VSS aware applications with the exception of Microsoft SQL Server which requires the Rubrik agent to be installed.</p>

Feature	Veeam	Rubrik	Details
Backup I/O control and network optimizations	✓	✓	<p>Veeam: Set parameters on the amount of resources the backup process uses in order to minimize the impact on production environments.</p> <p>Rubrik: Can adaptively throttle backup process to limit impact to production environments. Rubrik does check CPU utilization of the VM being protected but it does not granularly apply the throttling policy to specific datastores.</p>
Backup copy	✓	✓	<p>Veeam: Copy existing backup data to another disk system for secondary backup copy. Send backup data to an offsite location that uses dissimilar hardware.</p> <p>Rubrik: Can replicate backup data along with protection policy metadata. A source can have multiple replication targets. If the replication target is another physical Rubrik cluster, another backup copy (to tape or cloud) may be necessary to satisfy the 3-2-1 rule. The only extended retention policy is the number of replicas to keep.</p>
Guest file system indexing and search	✓	✓	<p>Veeam: Create a catalog of guest files enabling granular search of individual files for recovery.</p> <p>Rubrik: Can index guest file data on Windows and Linux VMs and physical servers. Search can be performed to find individual files for recovery.</p>
Backup from storage snapshots	✓	⚠	<p>Veeam: Create image-based backups from storage snapshots as often as necessary with minimal impact on production environments.</p> <p>Rubrik: Can back up from Pure Storage only. Rubrik's Pure Storage integration only reduces the time that a VM snapshot is open. It does not significantly reduce recovery point objectives (RPO).</p>
Backup recoverability verification	✓	✗	<p>Veeam: Schedule and automatically test and verify protected VMs for recoverability by running the VM directly from the backup file in an isolated environment. Including built-in scripts for application verification.</p> <p>Rubrik: Requires scripting, third-party testing frameworks and APIs to test application recoverability. These capabilities are not available out-of-the-box and only leverage Rubrik's instant recovery feature.</p>
Archive to cloud and object storage for long-term retention	✓	✓	<p>Veeam: Leverage native object storage integration with AWS, Microsoft Azure, IBM Cloud and on-premises S3-compatible object storage.</p> <p>Rubrik: Can archive backup data to AWS, Microsoft Azure, on-premises S3-compatible object storage and others. Cloud archival is included with subscription licensing but requires an additional add-on for perpetual licensing models.</p>
Copy backups to cloud and object storage	✓	✗	<p>Veeam: Immediately duplicate newly created backups to object storage with policy-based copy management.</p> <p>Rubrik: Cannot copy backup data directly to cloud and object storage. Cloud archival removes data from the on-premises appliance before storing data in the cloud. Backup data can be replicated to a Rubrik cloud instance, but this requires substantial cloud resources.</p>
Scalable, storage agnostic NAS backup and recovery	✓	✓	<p>Veeam: Modernize NAS protection and restore to anywhere with extensive support for SMB, NFS, Microsoft Windows and Linux file and shares without requiring vendor-specific APIs or NDMP. Including a native changed file tracking mechanism for improved RPOs.</p> <p>Rubrik: Can back up from NAS devices. As data is stored in its native format, files can be recovered to a different NAS or location. To store NAS backup data on third-party hardware, an additional add-on license is required.</p>
Immutability for ransomware protection	✓	✓	<p>Veeam: Create immutable backup copies by leveraging advanced object storage functionality on Amazon S3 and supported S3-compatible on-premises object storage.</p> <p>Rubrik: Can leverage their proprietary file system to provide immutability for backups. Ransomware detection and remediation requires an additional add-on subscription license.</p>

Feature	Veeam	Rubrik	Details
Replication			
Image-based VM replication with backup seeding	✓	✗	<p>Veeam: Replicate VMs on site or off site for disaster recovery (DR). Seed replica VMs from existing backups.</p> <p>Rubrik: Has no native VM replication mechanism. Rubrik's replication feature copies backup data and metadata to a secondary Rubrik cluster. For VM replication, Rubrik recommends a third-party solution. Rubrik's CDP offering is not a mechanism for native VM disaster recovery, rather it utilizes VMware APIs for lower RPO backups.</p>
Assisted failover and failback	✓	⚠	<p>Veeam: Facilitate data center migrations, planned failovers and failover testing with zero data loss.</p> <p>Rubrik: Has no native VM replication mechanism. Rubrik's replication feature does not allow for automated failover and failback and Rubrik's CloudOn failover feature is not equivalent to native VM replication. Rubrik's AppFlows feature does allow for basic, integrated orchestration of failover/failback but only to AWS.</p>
Replica recoverability verification	✓	✗	<p>Veeam: Schedule, test and verify replica VMs for recoverability by running the VM directly in an isolated environment. Including built-in scripts for application verification.</p> <p>Rubrik: Has no native VM replication mechanism and no recoverability verification mechanism, therefore no ability to verify the recoverability of replicas.</p>
Advanced capabilities			
Built-in data reduction	✓	✓	<p>Veeam: Decrease backup storage requirements and network traffic with built-in deduplication, multiple compression options and swap exclusion.</p> <p>Rubrik: Can provide both global deduplication and compression.</p>
Deduplicating storage integrations	✓	✗	<p>Veeam: Store backups and utilize advanced backup and recovery integrations on supported deduplicating storage appliances.</p> <p>Rubrik: Acts as the backup target itself. Therefore, there is no integration with leading deduplicating storage appliances. A deduplicating storage appliance can be used as an archival location but Rubrik provides no vendor-specific integrations.</p>
End-to-end encryption with lost password recovery	✓	⚠	<p>Veeam: Secure backup and replica data and network transfers with AES 256-bit encryption at-source, in-flight and at-rest. Recover data when passwords are lost.</p> <p>Rubrik: Can provide AES 256-bit encryption at-source, in-flight and at-rest. Rubrik uses keys for some encryption processes and passphrases for some processes, such as archival. If keys or passphrases are lost, data is unrecoverable.</p>
Native tape support	✓	✗	<p>Veeam: Back up and archive files and VM backups to standalone tapes, tape libraries and virtual tape libraries. Including support for NDMP v4 and WORM.</p> <p>Rubrik: Does not provide native tape support. A third-party solution from QStar can be purchased to provide tape archival of Rubrik backups. QStar ASM does support WORM but does not support NDMP v4.</p>
Scale-out backup repository	✓	✓	<p>Veeam: Create a single virtual pool of backup storage from more than one device with unlimited scalability.</p> <p>Rubrik: Can scale out by adding additional nodes and appliances to a cluster. This adds storage as well as compute, even when additional compute is not required.</p>
Leverage data			
Integrated test/dev sandbox	✓	✗	<p>Veeam: Run one or more VMs from a backup in an isolated environment to troubleshoot, test and train on a working copy of the production environment, without impacting business operations.</p> <p>Rubrik: Can run a VM from a backup for test/dev purposes but there is no network isolation or external access to the VMs inside of a sandbox. An administrator must manually perform all steps needed to access the VM data.</p>

Feature	Veeam	Rubrik	Details
Advanced Data Integration API	✓	⚠	<p>Veeam: Connect entire data management ecosystem by enabling third-party applications and scripts to instantly access the content of any Veeam backup inside a secure on-demand sandbox.</p> <p>Rubrik: Can provide APIs and provides pre-built integrations with some third parties. Rubrik's use cases do not appear to provide a pre-built API to allow third-party access to backup data.</p>
Staged restore	✓	✗	<p>Veeam: Inject custom scripts into VMs within an isolated sandbox during recovery to production, helping to manage compliance, ensuring that sensitive data is removed or masking data for DevOps.</p> <p>Rubrik: Has no ability to inject custom scripts into a staging area before the VM is restored to production. Rubrik has no automated sandboxing capability to even do this manually.</p>
Secure restore	✓	✗	<p>Veeam: Utilize existing antivirus and antimalware tools to perform scans on VMs from backup files before restoring to production.</p> <p>Rubrik: Has no ability to scan a VM for malware before restoring it to production. Rubrik's Radar product has some ransomware detection and remediation capabilities but this is not the same as secure scanning of data before restoring to production.</p>

Self-service and service provider

Role-based access control (RBAC) and recovery delegation	✓	⚠	<p>Veeam: Delegate roles and privileges to users to create, restore and monitor backups.</p> <p>Rubrik: Includes two default roles: Administrator (full access) and End User (some access for assigned objects). Roles can be mapped to local Rubrik users or Active Directory users. There is no recovery delegation capability.</p>
Self-service file and application-item restore portal for application owners and help desk operators	✓	✗	<p>Veeam: Enable self-service for all recovery features by delegating recoveries to specific users such as local IT staff and application owners.</p> <p>Rubrik: Relies on vCloud Director or external ITSM applications for self-service. Rubrik has no natively integrated application-item restore and no dedicated self-service portal for application owners.</p>
Native integrations with remote monitoring and management solutions	✓	⚠	<p>Veeam: Enable seamless integration with ConnectWise through the Veeam Service Provider Console, included with Veeam Backup & Replication or develop plug-ins for other RMM solutions using Veeam's RESTful API.</p> <p>Rubrik: Does not provide native integration with any RMM solutions but does provide a RESTful API for third-party integration development.</p>
vCloud Director support	✓	✓	<p>Veeam: Back up vApps, VM metadata and restore vApps and VMs directly to vCloud Director with full support for fast-provisioned VMs. Utilize the Veeam Community Plugin for vCD to provide access to the self-service portal for vCD without leaving the vCD web UI.</p> <p>Rubrik: Provides an extension for vCloud Director that leverages Rubrik's RESTful APIs. vOrgs, vDCs, vApps and VMs can be protected and vApps and VMs can be recovered.</p>
Simplified multi-tenancy	✓	⚠	<p>Veeam: Onboard customers and remotely manage, monitor and bill for your services with out-of-the-box multi-tenancy support in the Veeam Service Provider Console.</p> <p>Rubrik: Can provide multi-tenancy through a solution deployed to a service provider's cloud. Rubrik allows tenants to manage SLA policies and self-service recovery but does not provide advanced functionality such as billing and customer onboarding.</p>

Legend



Complete capability



Limited capability



Non-practical capability



No capability