



Veeam vs. Commvault

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. Commvault v11.21 (November 2020).

Feature	Veeam	Commvault	Details
Recovery			
Full VM, VM file, virtual disk and guest OS file restore	✓	✓	Veeam: Recover an entire VM, individual virtual machine (VM) files (such as VMX), virtual disks and guest OS files from a single backup. Commvault: Recover an entire VM, individual virtual machine (VM) files, virtual disks, and guest OS files from a single backup.
Multi-VM, cross-platform Instant recovery of any workload	✓	 VMware  Hyper-V	Veeam: Instantly recover any workload, including physical servers, cloud-based instances and multiple VMs to vSphere by running them directly from the backup. Commvault: Instantly recover data by running it directly from the backup with Live Recovery (VMware). Live Recovery is not available for Hyper-V (no Live Recovery in Hyper-V restore options). Hyper-V not supported for Live Recovery in the VSA compatibility matrix . In June 2020, Commvault added Live Mount to Hyper-V . Commvault cannot instantly recover physical servers or cloud-based instances to (it can virtualize servers, not instantly restore them – i.e. Windows servers).
Agentless application item recovery	✓	✗	Veeam: Recover individual items from backups of applications such as Microsoft Exchange, SharePoint, SQL, Active Directory, Oracle and more. Commvault: In-guest application plug-ins must be installed during first backup for granular application item recoverability. Commvault needs a restore agent to recover Exchange items , SQL tables , and SharePoint items . Restoring Active Directory and SharePoint items is not as straightforward as with Veeam.
Native recovery for Oracle RMAN and SAP HANA	✓	✓	Veeam: Leverage native SAP HANA and Oracle RMAN functionality for granular backup and recovery. Commvault: Leverage native SAP HANA and Oracle RMAN functionality for granular backup and recovery.
Recovery from storage snapshots	✓	✓	Veeam: Recover individual VMs, guest files and application items from storage snapshots. Commvault: Recover individual VMs, guest files and application items from storage snapshots. Commvault requires agents to recover application items from storage snapshots .
Restore to public cloud and object storage	✓	✓	Veeam: Recover data directly to public clouds such as AWS, Microsoft Azure and Azure Stack. Commvault: Recover data directly to public clouds such as AWS and Azure .

Feature	Veeam	Commvault	Details
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>Commvault: In-guest application plug-ins must be installed during first backup for granular application item recoverability. Agentless backup offers application consistency thanks to VMware tools but does not offer granular application item recovery.</p>
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>Commvault: Control the amount of network bandwidth used for data protection (Commvault can also control the number of concurrent backup jobs per client). No I/O control enabling Administrators to define primary storage latency limits to ensure backups do not impact production workloads.</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>Commvault: Copy backup files to a secondary repository (auxiliary copy).</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>Commvault: Create a catalog of guest files enabling granular search of 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>Commvault: Create image-based backups from storage snapshots as often as necessary with minimal impact on production environments.</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>Commvault: Backup verification only reads backup files to ensure that data chunks are readable/accessible (CRC). It does not ensure that recovered data is usable, lacking a series of advanced verification tests in an isolated lab. Commvault offers a workaround with Virtual Lab, but it remains manual, without advanced tests, and offers limited sandbox configuration options.</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>Commvault: Tier backup files to object storage for long-term retention. <i>*The process is a bit more cumbersome: copy backups to the cloud and set the retention rule of the secondary backup copy for longer than the retention rule of the primary backup copy (tiered storage for extended retention) or use a grandfather-father-son policy to tier full backups to the cloud.</i></p> <p>Commvault's backup files depend on deduplication databases, so they are less mobile and autonomous than Veeam's backup files (that autonomy can save the day in case the backup infrastructure is lost).</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>Commvault: Copy backup to cloud object storage with policy-based copy management.</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>Commvault: Backup and recover NAS data with a storage-agnostic solution (extensive support for NAS devices). <i>*How long does Commvault take to backup and recover NAS data? How much backup proxy resources does Commvault require to fit your backup window?</i></p>

Feature	Veeam	Commvault	Details
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>Commvault: Create immutable backup copies by leveraging advanced object storage functionality. Commvault is less secure, as they enable Administrators to reduce the immutability period (Veeam uses the compliance mode, so no one may alter immutability).</p>
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>Commvault: Replicate VMs on site or off site for disaster recovery (DR).</p>
Assisted failover and failback	✓	✓	<p>Veeam: Facilitate data center migrations, planned failovers and failover testing with zero data loss.</p> <p>Commvault: Automatically failover to VM replicas, failback to source VMs, and reverse replication.</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>Commvault: Test failover and Test boot only recover the VM replicas on the DR site. Commvault lacks automation (Administrators manually start the test), a series of advanced verification tests, and isolation.</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>Commvault: Decrease backup storage requirements and network traffic with built-in deduplication and compression options. Sizing and scaling Commvault's deduplication MediaAgents, pools, and backup jobs may be cumbersome and costly (lots of CPU, RAM, SSD). Commvault's deduplication databases form a single point of failure (consistency and sealing).</p>
Deduplicating storage integrations	✓	✓	<p>Veeam: Store backups and utilize advanced backup and recovery integrations on supported deduplicating storage appliances.</p> <p>Commvault: Store backups and utilize advanced backup and recovery integrations on supported deduplicating storage appliances.</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>Commvault: Secure backup and replica data and network transfers with AES 256-bit encryption at-source, in-flight and at-rest. <i>Can Commvault recover data when passwords are lost?</i></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>Commvault: Backup and archive files and VM backups to standalone tapes, tape libraries and virtual tape libraries. Including support for NDMP and WORM.</p>

Feature	Veeam	Commvault	Details
Scale-out backup repository	✓	⚠	<p>Veeam: Create a single virtual pool of backup storage from more than one device with unlimited scalability.</p> <p>Commvault: Network storage pools offer limited options, lacking backup file placement policy options, like data locality or performance. No ability to put storage devices in maintenance mode to perform service actions on them. No ability to evacuate backups from storage devices to exclude the devices from the storage pool. Commvault offers HyperScale for scale-out backup storage (using Hedvig). HyperScale software requires extra licenses charged per backend TB.</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>Commvault: Virtual Labs offer limited options; basic isolation, fewer network configuration settings, fewer application group settings.</p>
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>Commvault: No ability to enable third-party applications to access backups inside a secure on-demand sandbox (Virtual Labs).</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>Commvault: No ability in the full VM restore process to automatically boot VMs in an isolated sandbox and run scripts before restoring them to production.</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>Commvault: No ability to perform scans on VMs from backup files before restoring to production (no malware scan option in full VM restore process. Recovery from ransomware).</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>Commvault: Delegate roles and privileges to users to create, restore and monitor backups.</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>Commvault: Enable self-service for all recovery features by delegating recoveries to specific users such as local IT staff and 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>Commvault: Enable seamless integration with ServiceNow or develop plug-ins for other RMM solutions using Commvault's RESTful API.</p>

Feature	Veeam	Commvault	Details
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>Commvault: Backup vApps, VM metadata and restore vApps and VMs directly to vCloud Director. Utilize the plugin for vCD to provide access to the self-service portal for vCD without leaving the vCD web UI.</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>Commvault: Remotely manage and monitor your Service Provider offering with out-of-the-box multi-tenancy support.</p> <p>* <i>No information on how to easily manage customers onboarding and billing.</i></p>

Legend



Complete capability



Limited capability



Non-practical capability



No capability