Veeam vs SMB vendors for VM backup
Quick Feature Comparison

The following document highlights Veeam's® unique capabilities for virtual machine data protection vs the general competition of SMB-specialized backup vendors.

Although SMB-specialized backup vendors may provide benefits such as very low prices and upfront simplicity, they do not offer the functionality, flexibility, and customization necessary to tailor data protection to your business needs. Nor do they offer the scalability that your business will need as your IT grows.

The following document highlights Veeam's capabilities for virtual machine data protection vs SMB-specialized backup vendors.

Feature	Veeam	Competition	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. Competition: Almost all vendors can recover an entire VM, VM files, virtual disks, and guest OS files.
Multi-VM, cross-platform Instant recovery of any workload	✓	✗ to ⚠	Veeam: Instantly recover any workload, including physical servers, cloud-based instances and multiple VMs to VMware vSphere or Microsoft Hyper-V by running them directly from the backup. Competition: Most vendors can instantly recover a VM. Yet, only a few vendors can instantly recover workloads beyond VMware or Hyper-V VM. Those who do, can typically instantly recover only physical servers (they cannot instantly recover other workloads, such as workstations or cloud instances).
Agentless application item recovery	✓	✗ to ⚠	Veeam: Recover individual items from backups of applications such as Microsoft Exchange, SharePoint, SQL, Active Directory, Oracle and more. Competition: Half the vendors cannot granularly recover application items. Those who do, typically require agents to recover application items and offer limited recovery options (i.e. only download items to the backup server).
Instant database recovery	✓	✗	Veeam: Eliminate downtime by instantly recovering Microsoft SQL and Oracle databases into production environments, regardless of their size. Advanced switchover options ensure a smooth transition back to production after recovery. Competition: Almost no vendor can instantly recovery databases by running them directly from the backup location and provide seamless switchover to production.
Native recovery for Oracle RMAN and SAP HANA	✓	✗ to ⚠	Veeam: Leverage native SAP HANA and Oracle RMAN functionality for granular backup and recovery. Competition: Half the vendors cannot restore Oracle RMAN or SAP HANA items. Those who do, typically need agents to restore such data and offer limited restore options.
Recovery from storage snapshots	✓	✗	Veeam: Recover individual VMs, guest files and application items from storage snapshots. Competition: Almost no vendor can recover data from storage snapshots. The rare vendors who can recover data from storage snapshots typically support few arrays and offer limited recovery options (i.e. no granular application item recovery).
Restore to public cloud and object storage	✓	✗ to ⚠	Veeam: Recover data directly to public clouds such as AWS, Microsoft Azure and Azure Stack. Competition: Over half the vendors cannot recover data to public clouds. Those who do, typically take more manual steps than Veeam or support only one cloud platform.

Feature	Veeam	Competition	Details
Backup			
Agentless, application-aware, image-based backups	✓	⚠	Veeam: Create application-consistent, image-level VM backups with application-aware processing without an agent. Competition: Most vendors create application-consistent VM backups without agents, but they never support all the applications that Veeam supports. Several vendors require agents for log processing or to achieve application awareness, which is needed to granularly recover application items.
Backup I/O control and network optimizations	✓	⚠	Veeam: Set parameters on the amount of resources the backup process uses to minimize the impact on production environments. Competition: No vendor can set a maximum I/O latency level for production datastores to ensure that backup does not impact users. Almost all vendors can throttle network consumption, but it is typically set up at a global level, not granularly.
Backup copy	✓	✓	Veeam: Copy existing backup data to another disk system for a secondary backup copy. Send backup data to an offsite location that uses dissimilar hardware. Competition: All vendors can copy existing backup data to another repository.
Guest file system indexing and search	✓	✗ or ✓	Veeam: Create a catalog of guest files enabling granular search of individual files for recovery. Competition: Only half the vendors can index file systems during or after a backup to enable granular search of individual files for recovery.
Backup from storage snapshots	✓	✗	Veeam: Create image-based backups from storage snapshots as often as necessary with minimal impact on production environments. Competition: Almost no vendor can create a backup from storage snapshots. The rare vendors who can create a backup from storage snapshots typically support few arrays.
Backup recoverability verification	✓	✗ to ⚠	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. Competition: Half the vendors cannot verify protected VMs for recoverability. The vendors who do, typically offer basic test recovery isolation, do not perform advanced verification tests, or lack automated or flexible verification scheduling.
Archive to cloud and object storage for long-term retention	✓	✗	Veeam: Leverage native hot object storage integration with AWS, Microsoft Azure, IBM Cloud and on-premises S3-compatible object storage to tier backups to the cloud for cost-effective long-term retention. Reduce the costs of long-term retention by tiering backups to cold object storage. Competition: Almost no vendor can tier backup to cloud object storage for long-term retention. The rare vendors who do, typically lock customers into their cloud, lack flexible backup tiering, or have limited restore options for backups stored in the cloud.
Copy backups to cloud and object storage	✓	⚠ to ✓	Veeam: Leverage native object storage integration with AWS, Microsoft Azure, IBM Cloud and on-premises S3-compatible object storage to copy backups to object storage with policy-based copy management. Competition: Most vendors can copy backup to cloud object storage, but they regularly support only a limited set of cloud platforms, lack advanced backup copy settings, or have limited data recovery options from backups stored in the cloud.
Scalable, storage agnostic NAS backup and recovery	✓	✗ to ⚠	Veeam: Modernize NAS protection and restore files and shares to anywhere without requiring vendor-specific APIs or NDMP. Including a native changed file tracking mechanism for improved RPOs. Instant NAS publish ensures access to key data during downtime associated with hardware failure, replacement and migration, regardless of the data size. Competition: Some vendors cannot protect NAS data. Those who do, typically protect only a few specific types of NAS devices, because they use NDMP, or suffer from inefficiencies, as they lack capabilities such as changed block tracking.
Immutability for ransomware protection	✓	✗ or ✓	Veeam: Create immutable backup copies on-premises with a hardware agnostic hardened Linux repository or in the cloud with AWS Object Lock. Object Lock is also supported on other S3-compatible object storage solutions. Competition: Half the vendors can create immutable backup copies.

Feature	Veeam	Competition	Details
Replication			
VM replication built in core product	✓	⚠	Veeam: Simplify data management by protecting important VMs with the same product used to protect the rest of the environment, as Veeam Backup & Replication includes both VM replication and backup. Competition: Most vendors integrate VM replication into their core backup product, but they typically have limitations, such as extra costs, support for VMware only, or VM replication from backups only (not from production VM).
Continuous data protection for VM replication	✓	✗	Veeam: Provide RPO of seconds to business critical VMs by replicating them with VAIO-based continuous data protection (CDP). Customize the replication frequency to achieve any RPO. Recover data to any point in time, thanks to a set of unlimited restore points that can be only seconds apart. Competition: Almost no vendor integrates with VAIO to provide RPOs of seconds. Almost all vendors rely on VM-based snapshots for replication.
Assisted failover and failback	✓	✗ to ⚠	Veeam: Facilitate data center migrations, planned failovers, and failover testing with zero data loss. Competition: Only some vendors offer assisted failover and failback capabilities, and their capabilities remain basic. Most vendors require manual steps to complete failover and failback operations.
Replica recoverability verification	✓	✗	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. Competition: Almost no vendor can verify replicas for recoverability. The rare vendors who do, offer weak test recovery isolation, do not perform advanced verification tests, or lack automated or flexible verification scheduling.
Advanced capabilities			
Built-in data reduction	✓	✓	Veeam: Decrease backup storage requirements and network traffic with built-in deduplication, multiple compression options, and swap exclusion. Competition: All vendors decrease backup storage requirements and network traffic, thanks to some form of deduplication and compression. Only a few vendors can exclude swap files and deleted files.
Deduplicating storage integrations	✓	⚠	Veeam: Store backups and utilize advanced backup and recovery integrations on supported deduplicating storage appliances. Competition: Only half the vendors integrate with deduplication appliances, and typically integrate with fewer deduplication appliances than Veeam.
End-to-end encryption with lost password recovery	✓	✓	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. Competition: All vendors can encrypt data in flight and at rest. Some vendors can also recover data when passwords are lost.
Native tape support	✓	⚠	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. Competition: Most vendors can store backups on tape, but they regularly have limitations, such as limited tape management capabilities, limited recovery options from tape (i.e. no direct restore from tape), or requiring a separate product.
Scale-out backup repository	✓	✗	Veeam: Create a single virtual pool of backup storage from more than one device with unlimited scalability. Competition: No vendor can create a single virtual pool of backup storage from more than one device with unlimited scalability.

Feature	Veeam	Competition	Details
Leverage data			
Integrated test/dev sandbox	✓	✗	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. Competition: No vendor can run VMs in an isolated environment to troubleshoot, test and train on a working copy of the production environment.
Advanced Data Integration API	✓	✗	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. Competition: No vendor offers an API that allows third-party applications to access the content of backups inside a secure on-demand sandbox.
Staged restore	✓	✗	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 data is masked for DevOps. Competition: No vendor can inject custom scripts into VMs within an isolated sandbox during recovery to production to modify the data before recovery.
Secure restore	✓	✗	Veeam: Utilize existing antivirus and antimalware tools to perform scans on VMs from backup files before restoring to production. Competition: No vendor can use antivirus and antimalware tools to perform scans on VMs from backup files before restoring to production.

Legend

✓	Complete capability	⚠	Limited capability	⚠	Non-practical capability	✗	No capability