

# Veeam Data Platform

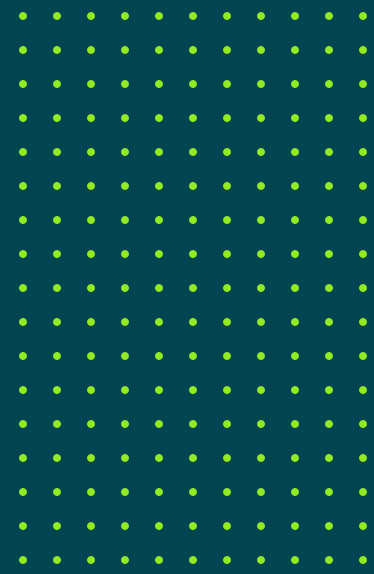
Veeam® Backup & Replication™

Veeam ONE™

Veeam Recovery Orchestrator

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## Feature comparison



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Veeam® Data Platform offers several options packaged to deliver relentless security, plus fast, reliable recovery and complete data freedom. Whether you're just getting started or you're managing an enterprise operation, Veeam has a flexible option for you. [Veeam Universal License \(VUL\)](#) is a game-changing portable license that allows you the flexibility to protect cloud, virtual and physical workloads interchangeably no matter where you are on your hybrid journey. The extremely capable backup, monitoring and recovery features of Veeam Data Platform are ready to keep your business running.

## Licensing details

The fully featured, portable VUL license is the best option for any environment, whether it be on-premises or in hybrid- or multi-cloud deployments, including full-feature capabilities for all workload types. These workload types include VMware, AWS, Azure, Google Cloud, Windows and much more. This document will outline the features available by license type, including previously offered socket based licensing.

VUL is required for many features, so it is always recommended that you migrate your licenses to VUL for full capability. A VUL is always required for NAS, all physical agents, Nutanix AHV virtual machines (VMs), cloud-native workloads and more.

Workloads	VUL	Per-socket
Environments	On-premises, cloud and hybrid	On-premises only
VMs: VMware, Microsoft Hyper-V, Nutanix AHV and Red Hat Virtualization	✓	VMware and Hyper-V only
<b>ENHANCED</b> physical servers, workstations and endpoints: Windows, Linux, MacOS, Oracle Solaris and IBM AIX	✓	—
<b>ENHANCED</b> Enterprise applications for Microsoft, Oracle, SAP HANA and more	✓	—
<b>ENHANCED</b> Cloud-native backup and recovery for AWS, Microsoft Azure and Google Cloud	✓	—
<b>ENHANCED</b> NAS File Shares	✓	—
More to come!		

## Licensing considerations

### VUL with a socket-based license

If you still use a socket-based license, we strongly recommend you talk to your sales representative about migrating to VUL for the ultimate capability and flexibility. In 2023, migrations are at the lowest price point ever and are available at the price of your socket renewal, even with all the additional features and workload support that's included with VUL. Now is the time to migrate, and the process is easier than ever. If you must continue using sockets, please be aware of the following limitations, which have been in place since 2019:

- When combining VUL with a socket-based license in a merged and centrally managed environment, the socket edition and support level always takes precedence and dictates the feature edition level for the entire environment.
  - **Example:** Combining a Standard legacy socket license with VUL will restrict certain platform capabilities like Scale-out Backup Repository™ (SOBR).
- If a feature isn't available with a socket license — like cloud backups — will it be available when a VUL is merged with socket licenses?
  - In the presence of a socket license, all VMware and Microsoft Hyper-V VMs must consume a socket license. You cannot use VULs to protect some of your VMware and Hyper-V VMs and sockets to protect others.
  - Nutanix AHV and Red Hat Virtualization (RHV) always requires VUL. Migrating socket licenses to VUL gives you the freedom to protect all your workloads regardless of hypervisor, OS, workload or environment.
- VMs on hypervisor hosts that are licensed with a socket license can now be protected with any Veeam product without needing an additional VUL license as long the protection is managed by the same backup server. For example, protecting a Windows failover cluster based on VMware VMs with Veeam Agent *for Microsoft Windows* does not consume an additional VUL license for the agent.

## Licenses for Veeam Cloud & Managed Service Providers (VCSPs)

VCSP Rental licenses function in a similar way to subscription licenses, but uses a point-based system with point consumption that depends on capability levels. For more information, please refer to your [VCSP licensing documentation](#) or speak with your service provider.

Service Providers can access the [VCSP Feature Comparison guide](#) on **ProPartner** Portal.

## Backup and Recovery

Backup and Recovery <i>Powered by Veeam Backup &amp; Replication</i>	Veeam Data Platform Veeam Universal License (VUL)				Veeam Socket License Options VMware and Hyper-V only			Description
	Community	Foundation	Advanced	Premium	Standard Socket	Enterprise Socket	Enterprise Plus Socket	
	<b>Backup</b>							
Support for VMware and Microsoft Hyper-V hypervisors	✓	✓	✓	✓	✓	✓	✓	Protect virtual machines (VMs), data, applications and more through the ability to instantly recover complete VMs and perform granular recovery for key application items.
Support for Nutanix AHV hypervisors	✓	✓	✓	✓				Protect VMs, data, applications and more with the ability to instantly recover complete VMs and perform granular recovery for key application items.
Support for Red Hat Virtualization hypervisors	✓	✓	✓	✓				Data protection and granular recovery for Red Hat Virtualization hypervisor VMs, data and applications.
Application-aware, image-based backups	✓	✓	✓	✓	✓	✓	✓	Create application-consistent backups through advanced, application-aware processing for granular recovery. (Transaction log backups for Oracle, PostgreSQL Server require editions at the Enterprise level or higher).
<b>ENHANCED</b> AWS-native backup and recovery	✓	✓	✓	✓				Create native snapshots for Amazon EC2, Amazon RDS and Amazon EFS, including Amazon VPC backup. Automatically tier backups to Amazon S3, S3 Glacier and S3 Glacier Deep Archive, including immutability through Amazon S3 Object Lock. Full- and file-level recovery options include cross-account, cross-region and cross-platform recoveries (e.g., on-premises or to another cloud). Functionality in Veeam Backup & Replication <i>Community Edition</i> is only available with a plug-in for Veeam Backup for AWS.
<b>ENHANCED</b> Microsoft Azure-native backup and recovery	✓	✓	✓	✓				Create native snapshots of Azure VMs and backups for Azure SQL and Azure Files. Automatically tier backups to Azure Blob and Azure Archive Storage, including immutability via Immutable Storage for Azure Blob tiers and Azure Archive Storage. Full- and file-level recovery options include cross-subscription, cross-region and cross-platform recoveries (e.g., on-premises or another cloud). Functionality in Veeam Backup & Replication <i>Community Edition</i> is only available with a plug-in for Veeam Backup for Microsoft Azure.
<b>ENHANCED</b> Google-native backup and recovery	✓	✓	✓	✓				Create native snapshots of Compute Engine VMs and backups for Cloud SQL for MySQL and PostgreSQL. Automatically tier backups to Google Cloud Storage, including Archive Storage. Full- and file-level recovery options include cross-project, cross-region and cross-platform recoveries (e.g., on-premises or another cloud). Functionality in Veeam Backup & Replication <i>Community Edition</i> is only available with a plug-in for Veeam Backup for Microsoft Azure.
<b>ENHANCED</b> NAS Backup	✓	✓	✓	✓				Protect and recover NAS file shares (i.e., SMB and NFS) effectively and at-scale. Back up directly to Veeam repositories for short- and long-term storage objectives. The first 500GB in each share comes free with additional capacity licensed via Veeam Universal License (VUL) at 500GB per license. Write NAS backups to disk, tape or object storage targets. Long-term file version archival support for NAS data is not available in Community Edition.

Fully supported

Partially supported

Backup and Recovery <i>Powered by Veeam Backup &amp; Replication</i>	Veeam Data Platform Veeam Universal License (VUL)				Veeam Socket License Options VMware and Hyper-V only			Description
	Community	Foundation	Advanced	Premium	Standard Socket	Enterprise Socket	Enterprise Plus Socket	
	<b>ENHANCED</b> Agents for Microsoft Windows, Linux and MacOS	✓	✓	✓	✓			
<b>NEW</b> Cloud-integrated agents	✓	✓	✓	✓				Create application-aware backups of workloads that are hosted on Infrastructure as a Service (IaaS) VMs via cloud-optimized Veeam Agents. Optimizations include writing backups directly to object storage, AWS utilization, Microsoft Azure and Google Cloud services for workload discovery and inclusion/exclusion, and independent operation without direct network connectivity.
Agents for AIX and Solaris		✓	✓	✓				Agent-based backup for AIX and Solaris servers and workstations to Veeam backup repositories.
Backup copy jobs	✓	✓	✓	✓	✓	✓	✓	Copy any backups to your disaster recovery (DR) storage location of choice automatically, including validation and remediation to ensure your copies are available and reliable.
End-to-end encryption	✓	✓	✓	✓	✓	✓	✓	Secure backup data and network transfers with end-to-end AES 256-bit encryption that has no negative impact on built-in compression and WAN Acceleration data reduction ratios. All editions include encryption at-source, in-flight and at-rest. VUL, Enterprise and Enterprise Plus editions include lost password protection.
Primary snapshot orchestration	✓	✓	✓	✓	✓	✓	✓	Additional storage snapshots, including options for Oracle and SQL Server transaction log backups, can be created on primary storage arrays for a wide range of storage systems. Orchestration for secondary storage snapshots are included for several storage vendors in VUL and Enterprise Plus editions.
ROBO guest interaction proxy		✓	✓	✓		✓	✓	Reduce the load on central backup servers, improve scalability and simplify networking for environments that have a large number of remote office/branch offices (ROBOs) when performing application-aware processing and guest file system indexing.
Proxy affinity		✓	✓	✓		✓	✓	Avoid cross-node network traffic across multiple all-in-one Veeam appliances by grouping backup proxies and backup repositories that were located on the same appliance together.
Storage latency control		✓	✓	✓		✓	✓	Set the maximum acceptable I/O latency level for production datastores to ensure that backup and replication activities do not impact storage availability to production workloads. Enterprise edition includes a global latency setting. VUL and Enterprise Plus editions enable setting customizations on a per-datastore basis.
Built-in WAN Acceleration		✓	✓	✓		✓	✓	Get replicas and backup copy jobs offsite up to 50x faster and save bandwidth. Enterprise edition supports built-in WAN Acceleration to Veeam Cloud Connect targets only. VUL and Enterprise Plus editions support built-in WAN Acceleration to any target.

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	Community	Foundation	Advanced	Premium	Standard Socket	Enterprise Socket		Enterprise Plus Socket
Backup from Storage Snapshots		✓	✓	✓			✓	Create image-based backups and replicas as often as necessary with little to no impact on production, all from the world's leading backup storage providers from primary and secondary storage snapshots. This includes a growing list of storage alliance and ecosystem partners you can view <a href="#">here</a> .
<b>Enterprise application backup plugins</b>								
Veeam Plug-in for Oracle RMAN, for SAP HANA and for SAP on Oracle		✓	✓	✓			✓	Stream Oracle RMAN, SAP HANA and SAP on Oracle backups into Veeam repositories and recover with ease by leveraging native backup and restore capabilities. Enterprise plug-ins can be deployed to Linux, AIX, Solaris and Microsoft Windows OSES. This includes central management on both Windows and Linux.
<b>NEW</b> Veeam Plug-in for Microsoft SQL		✓	✓	✓			✓	Enable native Microsoft SQL Server backups directly to Veeam storage repositories. Integration with Microsoft SQL Server Management Studio simplifies backup and recovery administration tasks.
<b>Storing backups</b>								
<b>ENHANCED</b> Object storage	✓	✓	✓	✓	✓	✓	✓	Directly back up to any object storage on-premises or in the public cloud with ransomware protection immutability that's provided by storage vendors. Community Edition and Standard Socket supports recovery only from object storage.
Linux Hardened Repository	✓	✓	✓	✓	✓	✓	✓	Keep your backups safe in hardened, malware- and hacker-proof Linux repositories with immutable backups that prevent encryption and deletion by ransomware and other malicious actors.
Veeam Cloud Connect Backup		✓	✓	✓	✓	✓	✓	Get your backups offsite with fully integrated, fast and secure backup and restore to the cloud with one of our Veeam-powered service providers. This built-in capability makes it easy to establish a connection with a cloud repository, target that repository for backup jobs and even back up directly to the cloud.
VMware Cloud Director Backup	✓	✓	✓	✓	✓	✓	✓	Back up vApp and VM metadata and attributes and restore them directly to vCloud with full support for fast-provisioned VMs. All editions include integrated visibility over the vCloud Director infrastructure, backup via VeeamZIP (including backup of vApp and VM metadata and attributes) and direct restore to vCloud. Enterprise edition supports scheduled incremental backup jobs for vCloud VMs and customer portal integrations via RESTful API. VUL and Enterprise <i>Plus</i> editions support self-service, tenant-managed backup and restores through Enterprise Manager, including native vCloud Director authentication.

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	Community	Foundation	Advanced	Premium	Standard Socket	Enterprise Socket		Enterprise Plus Socket
	Scale-out Backup Repository™ (SOBR)	✓	✓	✓		✓		✓
SOBR Capacity Tier		✓	✓	✓		✓	✓	Leverage native object storage integration with AWS, Microsoft Azure, IBM Cloud, Google Cloud Storage and most S3-compatible object storage offerings for on-premises or cloud-based repositories. Protect your backups against malicious actors with S3 Object Lock-based immutability. Other capabilities include the ability to move inactive backup chains to the capacity extent, copy new backup files, move data from capacity extents back to performance extents and restore data from the Capacity Tier without having to create a new SOBR.
SOBR Archive Tier		✓	✓	✓			✓	Reduce the cost of long-term data archival and retention by up to 20 times and replace manual tape management with new, native support for Amazon S3 Glacier (including Glacier Deep Archive) and Microsoft Azure Archive Storage via end-to-end backup life cycle management.
Per-VM backup files	✓	✓	✓	✓	✓	✓	✓	Store each VM in a separate backup file to enhance backup performance when backing up to enterprise-grade storage and deduplicating storage appliances.
Move and copy backup files		✓	✓	✓	✓	✓	✓	Move or copy backup files across multiple jobs or repositories to easily achieve your desired recovery point objectives (RPOs), rebalance backup storage or manage migration scenarios.
Deduplicating storage appliance integrations		✓	✓	✓		✓	✓	Attain faster backup performance by backing up to deduplicating storage integrations like Dell Data Domain Boost, HPE StoreOnce Catalyst, Quantum DXi and ExaGrid Accelerated Data Mover.
Native tape support	✓	✓	✓	✓	✓	✓	✓	Back up files to any LTO-compatible tape devices. Enterprise and higher editions add Backup-to-Tape jobs for tighter integrations with primary backup jobs, dedicated media pool types to simplify GFS retention and global media pools to simplify the usage of multiple tape devices. VUL and Enterprise <i>Plus</i> editions also provide NDMP support for NAS device protection. VUL or Capacity Packs are required for File-to-Tape jobs.
Veeam External Repository		✓	✓	✓				Connect to object storage repositories that are managed by cloud-native Veeam backups, which offer restores from those backups or copy them out of the cloud to achieve 3-2-1 Rule compliance.
File version archiving		✓	✓	✓				Archive all or specific file versions for longer periods of time with file share backup jobs.



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	Community	Foundation	Advanced	Premium	Standard Socket	Enterprise Socket		Enterprise Plus Socket
<b>Replication</b>								
<b>ENHANCED</b> Veeam Continuous Data Protection (CDP)		✓	✓	✓			✓	Eliminate downtime and minimize data loss for Tier-1 VMware and Cloud Director workloads with built-in CDP and achieve immediate recovery to the most recent state or another point in time, helping to provide the RPOs.
Image-based VM replication	✓	✓	✓	✓	✓	✓	✓	Replicate VMs periodically onsite for high availability or offsite for DR.
Assisted failover and failback	✓	✓	✓	✓	✓	✓	✓	Replica rollback and assisted failover and failback.
Replication from a backup	✓	✓	✓	✓	✓	✓	✓	Create replicas directly from backup files without impact to production.
Planned failover	✓	✓	✓	✓	✓	✓	✓	Facilitate data-center migrations with zero data loss.
Veeam Cloud Connect Replication		✓	✓	✓	✓	✓	✓	Ensure the availability of your mission-critical applications with fully integrated, fast and secure cloud-based DR via a Veeam-powered DRaaS provider. In the event of disaster or other use cases, replicas stored in the repository can be used for partial- or full-site failovers.
One-click failover orchestration		✓	✓	✓		✓	✓	Built-in failover plan orchestration that enables easy, one-click site failovers to minimize unplanned downtime.
VMware Cloud Director Replication		✓	✓	✓			✓	Dedicated replication job types enable service providers to perform vApp replications within and across vCloud Director instances. The replication job processes vApp VMs and metadata (like networking or VM start orders) to create a ready-to-use replica vApp in the target vCloud Director that can be leveraged instantly in case of a disaster.
<b>Restore</b>								
Entire VM restore	✓	✓	✓	✓	✓	✓	✓	Restore selected VMs to the original or a different location.
VM disk and file restores	✓	✓	✓	✓	✓	✓	✓	Restore individual virtual disks and other VM files (like VMX) from both backups and storage snapshots.
Direct Restore to AWS, to Microsoft Azure, and to Google Cloud	✓	✓	✓	✓	✓	✓	✓	Restore or migrate on-premises or on Windows-based or Linux-based VMs, physical servers and endpoints directly to AWS, Microsoft Azure and Google Cloud.
<b>Instant recovery</b>								
Instant VM Recovery	✓	✓	✓	✓	✓	✓	✓	Accelerate DR and lower recovery time objectives (RTOs) with Veeam's patented Instant Recovery engine. Restore ANY backup instantly to a VMware, Microsoft Hyper-V or Nutanix AHV VM by running it directly from backup.
Instant disk recovery	✓	✓	✓	✓	✓	✓	✓	Reduce your Instant Recovery footprint by instantly restoring just the required disks from large VMware VMs rather than restoring entire VMs (e.g., only OS disks or data disks).

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	Community	Foundation	Advanced	Premium	Standard Socket	Enterprise Socket	Enterprise Plus Socket	
	Instant database recovery		✓	✓	✓		✓	
Instant file share recovery	✓	✓	✓	✓	✓	✓	✓	Instantly restore SMB file shares directly from backups to allow users to continue day-to-day operations quickly and easily migrate all the changes made from SMB shares to production. For NFS file shares, leverage the publishing functionality to provide read-only access to data stored in the backup.
<b>File- and item-level recovery</b>								
File-level recovery	✓	✓	✓	✓	✓	✓	✓	Directly recover files from Windows, Linux, BSD, Mac OS, Novell, Solaris and AIX.
Compare with production	✓	✓	✓	✓	✓	✓	✓	Easily compare files from backups in the production file system to view and recover only the changed files. This is available for image-level backups only. Community Edition and Standard editions can only compare and view this information. VUL, Enterprise and Enterprise <i>Plus</i> editions can compare, view and restore to production.
Permissions recovery		✓	✓	✓		✓	✓	Restore lost or modified permissions to an existing file. This is available for image-level Windows backups.
Veeam Explorer for Storage Snapshots	✓	✓	✓	✓	✓	✓	✓	Restore individual VMs, guest files and application items from storage snapshots.
<b>NEW</b> Veeam Explorer for PostgreSQL	✓	✓	✓	✓	✓	✓	✓	Restore and publish PostgreSQL instances to original or different servers with ease, without having to have an extensive PostgreSQL administration background. Recovery of PostgreSQL instances is available at Enterprise edition or higher.
Veeam Explorer for Microsoft Active Directory	✓	✓	✓	✓	✓	✓	✓	Search and restore for all Active Directory object types like users, groups, computer accounts and contacts, including user and computer password recovery. All editions support single user and computer account restore (including password restoration) as well as export into LDIFDE format. Enterprise and higher editions include multi-select restore and container restores, Group Policy Objects (GPO) restores, Active Directory-integrated DNS record restores and Configuration Partition object restores.
Veeam Explorer for Microsoft Exchange	✓	✓	✓	✓	✓	✓	✓	Get instant visibility into Microsoft Exchange backups for item recovery for individual Exchange items (i.e., emails, appointments, notes, contacts, etc.), online archive mailboxes and hard-deleted items. Leverage comprehensive eDiscovery functionalities, including query result size estimations and detailed export reports. All editions, including Community Edition, support Exchange mailbox item restores via save, send and PST exports. VUL, Enterprise <i>Plus</i> and Enterprise editions support restoring back to the original mailbox as well.

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	Community	Foundation	Advanced	Premium	Standard Socket	Enterprise Socket	Enterprise Plus Socket	
Veeam Explorer for Microsoft SQL Server	✓	✓	✓	✓	✓	✓	✓	Restore individual SQL databases with ease, without the need for an extensive SQL background or having to search for database and transaction-log files. All editions support local, point-in-time SQL database file restores. VUL, Enterprise <i>Plus</i> and Enterprise editions include agentless transaction log backup and replays, transaction-level recoveries of databases and SQL objects (i.e., tables, stored procedures, views, etc.) back to the original or a different SQL server.
Veeam Explorer for Microsoft SharePoint	✓	✓	✓	✓	✓	✓	✓	Get instant visibility into SharePoint backups with advanced search-and-browse capabilities for quick recovery of individual SharePoint items or entire sites. All editions support SharePoint item restores via save, send and export. VUL, Enterprise <i>Plus</i> and Enterprise editions also support entire site restores, as well as restores to original locations.
Guest file system indexing	✓	✓	✓	✓	✓	✓	✓	A catalog of guest files that enable effortless searches of individual files to help find and restore files without having to know its precise location or the time it was deleted. All editions provide a catalog of guest files in backups that are currently on-disk. VUL, Enterprise <i>Plus</i> and Enterprise editions also provide a catalog of archived backup files and integrate in one-click to enable restores directly from search results.
Veeam Explorer for Oracle		✓	✓	✓		✓	✓	Restore individual Oracle databases with ease without needing to have an extensive Oracle background or having to search for database and transaction log files. This includes agentless transaction-log backups, archived log management and transaction-level recovery of databases back to the original or a different Oracle Server, as well as the ability to publish and export Oracle databases. VUL and Enterprise <i>Plus</i> edition also provides a simple user interface for database restores in emergency situations from native RMAN backups.
<b>DataLabs</b>								
Secure Restore	✓	✓	✓	✓	✓	✓	✓	Increase security and reduce interruptions caused by viruses and recover back to a safe, uncompromised restore point through an optional antivirus scan performed directly in backup files prior to recovery. This feature has agnostic support for Windows Defender, ESET, Kaspersky and Symantec Protection Engine, as well as the ability to extend to other third-party antivirus tools.
SureBackup		✓	✓	✓		✓	✓	Automatically test and verify the recoverability of each backup by running the VM directly from a backup file in a fenced-off copy of your production environment, including support for custom application test scripts.
SureReplica <sup>1</sup>		✓	✓	✓		✓	✓	Automatically test and verify the recoverability of each replica by performing a failover to a fenced-off copy of your production environment, including support for custom application test scripts.

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	Community	Foundation	Advanced	Premium	Standard Socket	Enterprise Socket		Enterprise Plus Socket
	Staged Restore	✓	✓	✓		✓		✓
On-Demand Sandbox	✓	✓	✓		✓	✓	Run one or more VMs directly from a backup or a fenced-off copy of your production environment to troubleshoot issues, test upgrades and train staff on a working copy of the production environment without impacting business operations.	
On-Demand Sandbox for Storage Snapshots <sup>1</sup>	✓	✓	✓				✓	Use storage snapshots to quickly create fenced-off copies of your production environment that operate at full I/O performance.
Data integration API	✓	✓	✓		✓	✓		Mount your backups instantly at any location. Put your backups to work and reuse your data by enabling third-party applications and scripts to instantly access the content of any Veeam backup for data mining, security analysis, compliance checks and other data reuse scenarios.
<b>Self-service</b>								
One-click file and VM recovery portal for help desk operators	✓	✓	✓		✓	✓		Restore files, VMs or an entire vApp in a single click from a web UI.
Microsoft Exchange item recovery portal for help desk operators	✓	✓	✓		✓	✓		Restore missing mailbox items back to the original mailbox in a single click from a web UI.
Microsoft SQL Server database recovery portal for SQL databases	✓	✓	✓		✓	✓		Restore individual databases back to the original server or a different SQL server in a single click from a web UI.
Oracle database recovery portal for Oracle databases	✓	✓	✓		✓	✓		Restore Oracle databases to the original server, to a different Oracle server or to PostgreSQL in a single click from a web UI.
Self-service file restore portal	✓	✓	✓				✓	A file-restore portal that has automatic VM detection and automatic delegation based on local administrator group membership.
Recovery delegation	✓	✓	✓				✓	Enable full self-service for all web UI recovery features by delegating recoveries for individual VMs and groups of VMs to specific users or groups, including local IT staff, application owners, department members, etc.
Native VMware Cloud Director plug-in	✓	✓	✓				✓	This capability allows service providers to extend the vCloud Director tenant UI to include Veeam Backup & Replication functionality, which enables tenants to manage their own backups and restores without leaving the convenience of the vCloud Director web console. This integration is based on Veeam's existing vCloud Director self-service backup and restore portal.
Role-Based Access Control (RBAC) <sup>1</sup>	✓	✓	✓				✓	Allow users to securely manage and monitor backups and restores of their own VMs through the self-service backup and restore portal for VMware with access delegation rules based on VMware role, VM privilege or VM tags.

Backup and Recovery <i>Powered by Veeam Backup &amp; Replication</i>	Veeam Data Platform Veeam Universal License (VUL)			Veeam Socket License Options VMware and Hyper-V only			Description	
	Community	Foundation	Advanced	Premium	Standard Socket	Enterprise Socket		Enterprise Plus Socket
	<b>Management</b>							
Veeam Backup Enterprise Manager: Centralized management web UI	✓	✓	✓	✓	✓	✓	Access a web-based, consolidated view of your distributed deployment from a single pane of glass, including centralized monitoring, reporting and consolidated alerting across multiple backup servers, plus the ability to start and stop jobs. VUL, Enterprise and Enterprise Plus editions include full job management functionalities and the ability to perform restores, including Instant Restore for VMware, Hyper-V and NAS backups as well as migration to production.	
PowerShell module	✓	✓	✓	✓	✓	✓	Use PowerShell Cmdlets to create custom workflows and automate Veeam tasks.	
RESTful API		✓	✓	✓			Integrate into existing systems and execute and automate Veeam tasks through the RESTful API framework. Service providers that use rental licenses have API access across all editions.	
Built-in management for Veeam Agents	✓	✓	✓	✓			The ability to organize, automate and deploy Windows, Linux, macOS, AIX and Solaris agents with protection groups based on Active Directory containers, CSV files or public cloud tags in order to configure custom automatic updates and deployment schedules. Community Edition is limited to only 10 instances.	
Built-in management for Veeam plug-ins		✓	✓	✓			Simplify operations with centralized management capabilities that help organize, automate and deploy Oracle RMAN, SAP HANA and SAP on Oracle database plug-ins, including the creation of application backup policies.	
<b>Security</b>								
<b>ENHANCED</b> Immutability	✓	✓	✓	✓	✓	✓	Immutability is provided via hardened repositories for all editions. For object storage immutability, the Enterprise edition or higher is required.	
<b>NEW</b> Multi-factor authentication (MFA)		✓	✓	✓	✓	✓	Enhance Veeam Backup & Replication access control by enabling MFA for backup console users.	
<b>NEW</b> Deployment in Kerberos-only environments	✓	✓	✓	✓	✓	✓	Move security to a new level with the possibility to run all Veeam components in Kerberos-only environments.	
Veeam Best Practices Analyzer	✓	✓	✓	✓	✓	✓	Perform an automated backup server configuration check against best practice guidelines to understand how backup infrastructures can be improved to address potential security concerns.	
Deployment in IPv6 environments	✓	✓	✓	✓	✓	✓	Veeam backup infrastructures are fully prepared to operate in modern data centers that are configured with IPv6 networking.	
FIPS compliance	✓	✓	✓	✓	✓	✓	Veeam backup infrastructure components use FIPS-compliant cryptographic APIs and modules.	
Audit capabilities	✓	✓	✓	✓	✓	✓	Track user actions and backup activities with Windows events and gain complete transparency over file-level restore operations through specifically designed audit files.	

## Monitoring and analytics

Monitoring and analytics <i>Powered by Veeam ONE</i>	Veeam Data Platform Veeam Universal License (VUL)				Veeam ONE Socket	Description
	Community	Foundation	Advanced	Premium		
<b>Monitoring and reporting</b>						
Performance monitoring and alerting for backup activity	✓		✓	✓	✓	Performance monitoring and alerting for backup activity displays Veeam Backup & Replication jobs, including latest state and performance statistics. Note that Veeam ONE <i>Community Edition</i> is limited to one server.
Email notification and reports			✓	✓	✓	You can receive alarm notifications through customizable emails. Email customizations are not available in Veeam ONE <i>Community Edition</i> , and emails will not include all alarm details, like time and affected objects.
Veeam backup general reporting	✓		✓	✓	✓	Veeam ONE features several reports, including overviews of Veeam Backup & Replication configurations, backup infrastructure audits, compliance reporting, protected VMs, capacity planning, tape reports and more.
Veeam Backup for Nutanix AHV	✓		✓	✓	✓	Backup status reporting: Predefined protected VM reports now include VMs that are hosted on Nutanix AHV. This helps users verify the data protection status for each discovered VM based on relevant SLAs.
Veeam Agent monitoring and reporting	✓		✓	✓	✓	Support for Veeam backup agents include several alarms and reports that help you analyze trends and determine how your policies and backup jobs evolved. This includes the backup status of agents, including which agents have no backup copies and how many are protected or unprotected.
Veeam Cloud Connect reporting	✓		✓	✓	✓	Reports include information about the Veeam Cloud Connect infrastructure, including user quota usage, capacity planning for cloud repositories and configuration data for cloud gateways and repositories.
Performance monitoring and alerting for Veeam Cloud Connect	✓		✓	✓	✓	Performance monitoring and alerting for Veeam Cloud Connect displays jobs for Veeam Cloud Connect backup servers only, including latest state and performance statistics. Note: To monitor and report on managed clients, Veeam ONE needs to be deployed at the tenant's site. Veeam ONE <i>Community Edition</i> is limited to one week of performance.
Heatmaps	✓		✓	✓	✓	Heatmaps help plan resource usage and easily optimize backup activities with real-time visibility into backup repositories and proxies. Veeam ONE <i>Community Edition</i> is limited to three proxy servers and three repositories.
<b>Monitoring and alerting for the hybrid cloud</b>						
Veeam Backup for AWS, Veeam Backup for Microsoft Azure, and Veeam Backup for Google Cloud-native data protection support	✓		✓	✓	✓	<b>Monitoring and alerting:</b> Veeam ONE users can monitor the backup and snapshot job statuses of cloud-based workloads through predefined alarms and notifications.  <b>Backup status reporting:</b> A predefined protected VM report now includes VMs hosted in AWS, Microsoft Azure and Google Cloud public clouds. This helps users verify the data protection status of each discovered VM based on relevant SLAs.
Reporting	✓		✓	✓	✓	Get detailed visibility of protected and unprotected services from your public cloud. This feature supports AWS (i.e., EC2, RDS, EFS, VPC), Microsoft Azure (i.e., VMs, SQL Databases, Azure Files) and Google Cloud (i.e., Compute Engine, Cloud SQL).

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	Community	Foundation	Advanced	Premium		
Alarms for real-time data protection visibility	✓		✓	✓	✓	This feature is for Veeam ONE Client-protected cloud workloads, VMs, databases, VPC and File Shares. In addition to last backup status and date, last backup copy and archives have also been introduced for full data retention visibility.
<b>Monitoring and alerting for virtual infrastructures</b>						
Performance monitoring and alerting for virtual infrastructures	✓		✓	✓	✓	Display virtual infrastructure hosts, datastores and statistics. In Veeam ONE <i>Community Edition</i> , performance graphs only show one week of performance and emails, including limited alarm details.
Application-level monitoring and management	✓		✓	✓	✓	Ensure the availability of mission-critical applications, monitor select groups of applications and create additional alarms to monitor VM service states. With Veeam ONE <i>Community Edition</i> , you can monitor an unlimited number of applications on up to three VMs.
VMware and Microsoft Hyper-V reporting	✓		✓	✓	✓	Individual report packs for VMware and Hyper-V provide general configuration overviews for vCenter servers, datastores, cluster hosts and VMs as well as SCVMMs, volumes, clusters, hosts and VMs. This includes information on the most common alarms raised for virtual infrastructure objects. Optimization report packs also allow users to evaluate the efficiency of resource usage and optimize VM resource provisioning to help achieve improved output and increased ROI for virtualized environments. With Veeam ONE <i>Community Edition</i> , optimization reports are limited to only show three VMs and historical performance reports are limited only to the previous 24 hours.
Multi-tenant reporting and monitoring	✓		✓	✓	✓	Delegate reporting to system administrators for a limited scope of assigned VMs (only with VMware).
Infrastructure assessment: Veeam Backup & Replication	✓		✓	✓	✓	Assessment reporting is designed to verify that your Veeam Backup & Replication installation meets all known best practices.
Virtual infrastructure assessment	✓		✓	✓	✓	Assessment reporting is designed to verify that your VMware and/or Microsoft Hyper-V infrastructure meets all known best practices.
VMware Cloud Director monitoring and alerting	✓		✓	✓	✓	Veeam provides capabilities to help service provider monitoring teams track the availability and configuration of their virtual data centers, including organizations and vApps.
VMware Cloud Director reporting	✓		✓	✓	✓	Ensure the use of ideal configurations and optimized resources to get the most out of virtual infrastructure when building and maintaining virtual data centers to provide a reliable service to customers
<b>Report and alarm customization and automation</b>						
Raw data analysis			✓	✓	✓	Create custom Microsoft Excel reports with templates you define.
Customizable, predefined report templates	✓		✓	✓	✓	Customize and save predefined templates to create reports that fit your specific information and formatting needs. Veeam ONE <i>Community Edition</i> is limited to saving only one customized report template.
Automated report generation and delivery			✓	✓	✓	Schedule reports to be automatically generated and delivered to your inbox, dashboards, web portals or archives.

Monitoring and analytics <i>Powered by Veeam ONE</i>	Veeam Data Platform Veeam Universal License (VUL)				Veeam ONE Socket	Description
	Community	Foundation	Advanced	Premium		
Alarm customization and modeling	✓		✓	✓	✓	Ensure complete monitoring coverage by creating custom alarms for events that are unique to your virtual environment. Model alarms against past performance data to understand potential alarm frequency and avoid inadvertent alert storms and missed events.
<b>Governance and compliance</b>						
Business View	✓		✓	✓	✓	Categorize and group clusters, hosts, VMs and datastores by criteria like business unit, department, purpose and SLA. Leverage vSphere Tags to assist with RBAC and eliminate human error, including tagging sensitive data by location to meet compliance. Easily monitor applications, regardless of geographic location and categorize Business View objects based on multiple parameters to gather insight on how infrastructure investments are being leveraged. You also can assign administrators to manage specific parameters.
<b>Intelligent automation</b>						
Veeam Intelligent Diagnostics	✓		✓	✓	✓	Proactive identification and alerting of known issues within your Veeam environment provides self-support resolutions via hotfixes or reconfigurations. For Veeam ONE <i>Community Edition</i> , all of the alarms will continue to work, but the details for each alarm will not be shown.
Remediation actions	✓		✓	✓	✓	Predefined and automated resolutions of common backup and virtual infrastructure-related issues with self-healing remediation actions help reduce IT management costs. With Veeam ONE <i>Community Edition</i> , remediation actions are available, but require manual approval.
<b>Dashboards</b>						
Predefined performance dashboards for backup and virtual infrastructures	✓		✓	✓	✓	Get at-a-glance views of backup jobs and the backup infrastructure, as well as the VMs, hosts and clusters that are the highest consumers of CPU, memory, network and datastore resources. Also, view datastore utilization metrics, including those related to VM snapshots and guest disk space usage.
Customized reporting dashboards	✓		✓	✓	✓	Create your own at-a-glance views of your virtual environment. Veeam ONE <i>Community Edition</i> allows for only one customized report dashboard to be created.
<b>Capacity planning</b>						
Capacity planning: VMware and Microsoft Hyper-V			✓	✓	✓	Individual report packs for VMware and Microsoft Hyper-V are designed to forecast when available virtual infrastructure resources will reach their minimum levels. The packs provide recommendations on resource allocation and load balancing to optimize performance and resource utilization in your virtual environment and avoid possible performance bottlenecks.
Deployment project reports			✓	✓	✓	Leverage fully automated "what if" modeling scenarios to safely add or remove VMs or hosts from your infrastructure and accurately calculate the resources required for each project.
<b>Chargeback and billing</b>						
Chargeback analysis reports			✓	✓	✓	Chargeback reports help you understand the costs associated with individual virtual infrastructure users and help you perform chargeback by analyzing VM configuration and resource usage, including CPU, memory and storage. Four reports are included: Host configuration chargeback, Host resource usage chargeback, VM configuration chargeback and VM performance chargeback.



Monitoring and analytics <i>Powered by Veeam ONE</i>	Veeam Data Platform Veeam Universal License (VUL)				Veeam ONE Socket	Description
	Community	Foundation	Advanced	Premium		
Veeam backup: Billing	✓		✓	✓	✓	This report provides chargeback capabilities for Veeam Backup & Replication and helps assess storage management costs for backup and replication operations, providing data that can be used in financial and billing reports.

## Recovery Orchestration

Recovery Orchestration <i>Powered by Veeam Recovery Orchestrator</i>	Veeam Data Platform Veeam Universal License (VUL)				Veeam Recovery Orchestrator Standalone	Description
	Community	Foundation	Advanced	Premium		
<b>Recovery orchestration and automation</b>						
One-click mass recovery				✓	✓	Enable application owners to securely recover single applications or entire sites in a single click. Execute DR plans to achieve automated recovery at-scale.
Recovery to Cloud				✓	✓	Orchestrated Direct Restore to Azure gives your business additional resiliency with DR to the cloud. Orchestrate recovery of any backup as a VM in Azure, featuring automated mapping of VM resources and cloud networking.
Clean recovery				✓	✓	During recovery, use automated virus scans through multiple restore points until the most recent clean one is found. Regularly scan restore points during DataLabs testing. Results are shown in dashboards and reports for improved visibility.
DataLabs management				✓	✓	DataLabs tests simulate DR outcomes with fully automated DR testing in an isolated network without impacting production systems, including detailed reporting. Create and schedule DataLabs to allow application teams to safely and securely test upgrades, patches and more.
RBAC and scopes				✓	✓	Granular RBAC combined with customizable scopes allow administrators full control over who can access recovery resources, which allows for secure delegation of DR planning and testing to specialist teams and the offloading of backup administrators.

## Dashboards and reporting

Dynamic documentation				✓	✓	Autogenerated reports for DR Plan definitions, checks, tests and executions remove the burden of documentation production from front-line staff. Documentation is produced in two formats and contain full details for deep-dive analysis and an executive summary.
Compliance monitoring for RTOs and RPOs				✓	✓	Meet business needs with an RTO and RPO monitoring and reporting dashboard. Display achieved RTOs and RPOs against desired targets for each DR Plan, providing an at-a-glance view of SLA compliance.
Scheduled readiness checks				✓	✓	Pre-recovery, detailed readiness checks ensure you are prepared for any disaster by checking available restore points, critical infrastructures and required credentials.
DR Plan auditing				✓	✓	Continuous tracking of DR Plan changes that are logged with timestamp and usernames, and allow for detailed analyses of plan history.