

#1 Kubernetes Data Protection and Mobility


Veeam Kasten for Kubernetes v8.5

Continued Innovation and Leadership

Veeam Kasten for Kubernetes v8.5 leads the way with Kubernetes data resilience innovations that enable enterprises to operate both traditional virtual machines (VMs) and modern cloud-native applications on one unified infrastructure; all securely, effortlessly, and with maximum freedom of choice. This release represents a key milestone in advancing modern virtualization by removing significant operational barriers and streamlining operations for migrating from VMware while also delivering the benefits of native file-level recovery for both cloud native applications and KubeVirt VMs.

Kubernetes has emerged as the leading container orchestration platform, with 66% of organizations currently using it in production. In a blog post titled, "[The 2024 Trends on Cloud Computing](#)" by Kelsey Hightower and Alex Saroyan from the Cloud Native Computing Foundation, they identify "effective workload management across hosting locations" as being a key focus of cloud strategy. Another key need for IT leaders is the ability to combine containerized and virtualized infrastructures to increase flexibility, scalability, and performance. The journey toward modern compute platforms and unified infrastructure may help these leaders achieve this.

According to a January 2025 CNCF blog, "In 2025, Kubernetes will further cement its position as a critical technology in enterprise software development. Its role in enabling scalable, portable, and efficient container and microservices orchestration across various environments will ensure its place as an indispensable tool for modern application deployment and management. As the ecosystem continues to evolve, we can expect to see improvements in ease of use, security, and support for emerging use cases like AI/ML and edge computing."

Setting the Record Straight on Kubernetes Data Protection 

- Backing up Kubernetes applications and data — whether on-premises, at the edge, or in the cloud — is an enterprise imperative.
- Traditional backup solutions are ill-equipped to handle the dynamic nature of Kubernetes.
- Volume backup does not fully protect cloud-native applications and data.
- Kubernetes enhances application availability through features like self-healing, but this does not guarantee data protection.
- Kubernetes is as susceptible to ransomware attacks as legacy platforms and therefore requires purpose-built protection to be fully secure.

Achieve Unified Data Resilience with Veeam Kasten

 <p>Backup and Restore</p> <p>Confidently and efficiently protect your Kubernetes applications, VMs, and their business-critical data.</p>	 <p>Disaster Recovery</p> <p>Easily manage how backups are replicated offsite to meet business and regulatory requirements.</p>	 <p>Application Mobility</p> <p>Effectively move and protect data where it is needed, without vendor lock-in.</p>	 <p>Ransomware Protection</p> <p>Secure your data against risks with proactive threat detection, encryption, and immutability.</p>	 <p>Modern Virtualization</p> <p>Seamlessly protect VMs and containers together on Kubernetes.</p>
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Spotlight: New in Veeam Kasten for Kubernetes v8.5

Veeam Kasten v8.5 sets the standard for Kubernetes data resilience with powerful innovations, including advanced VM policy and restore control, enterprise scale automation, secure, seamless operations, AI workload protection, and unmatched customer freedom of choice.

Advanced VM Policy and Restore Control

VM-Centric Protection Policies

Easily configure protection for individual or groups of KubeVirt VMs via automated detection of dependent resources.

VM-Centric Restores

Simplify restore operations by selecting one or more VM resources without needing to manually identify complex KubeVirt resource dependencies.

Partial VM Restores

Enable restores of individual VM disks in OpenShift Virtualization environments.

Optional VM MAC Restore

Ensure continuous system connectivity by retaining the original address of KubeVirt VM network adapters upon restore.

Enterprise Scale and Automation

Native File-Level Recovery

Select and remotely mount individual PersistentVolumeClaims from a specified Veeam Kasten restore point without needing to copy all volume data back to the cluster.

Restore Point Validation

Validate the integrity and availability of backup data prior to restore operations.

Secure, Seamless Operations

Federated Identities for Location Profile

Streamline and secure infrastructure and location profile connections to Azure Blob storage.

Support for Azure KeyVault

Provide additional third-party secret and encryption integrations, now with support for Azure Key Vault.

AI Workload Protection

Safeguard AI Infrastructure

Leverage blueprint models to quickly and accurately protect critical vector data associated with hosting AI models.

Freedom of Choice

Export to SMB Location

Seamlessly support the broadest array of storage integrations, now with support for export and import backups with Microsoft-compatible SMB storage.

VSphere CSI Integration Improvements

Eliminate vCenter connectivity requirements with alternate integration paths for clusters using vSphere CSI-based storage.

Support for Azure File Storage

Protect and restore workloads deployed on Azure Files SMB storage by leveraging volume snapshot capabilities.

Why Veeam Kasten?

Veeam Kasten delivers secure, Kubernetes-native data protection and application mobility at scale and across a wide range of distributions and platforms. Proven to recover entire applications simply, quickly, and reliably, Veeam Kasten gives operations and application teams the confidence to withstand the unexpected.

Key Capabilities

Policy Automation

Efficiently manage entire application protection — including data inside and outside the cluster — at enterprise scale.

Granular Restore

Maintain total control over what artifacts and data to restore, including data-only restores for running applications.

Automated DR

Recreate entire application stacks into the same namespace, or into a new one automatically.

Immutable and Encrypted

Safeguard data against ransomware and other threats by placing backups in an encrypted and WORM state.

Least Privilege Access

Granularly assign permissions to data protection operations and resources on a per-application level.

SIEM Integrations

Ingest and aggregate SIEM data for governance and real-time threat detection, investigation, and analysis.

Cross-Cloud Portability

Mobilize applications across namespaces, clusters, and clouds for disaster recovery (DR), test/dev, and performance testing.

Transforms Across Distributions

Easily modify the specific contents of Kubernetes resources when restoring or migrating across environments.

Enhanced Environment Isolation

Seamlessly migrate between federated and non-federated clusters.

Unified Resilience for VMs on Kubernetes

Automate policy-driven backup and lifecycle management for KubeVirt VMs.

Migration at Your Own Pace

Start with VM protection and add cloud native applications as your business requirements evolve.

Investment Optimization

Manage the protection of all VM applications on a single platform. Pay only for what you need with a streamlined solution.

Intuitive GUI

Get critical insights into data protection operations via a simple, state-of-the-art management interface.

DevOps Agility

Confidently deploy, update, and safeguard critical workloads, accelerating innovation while minimizing risk and operational overhead.

Effortless Operations

Provide simple and efficient operational control with the smoothest experience for new and experienced administrators.

How Veeam Kasten Works

Discover

Automated discovery of your Kubernetes applications.

Protect

Secure your Kubernetes applications and data.

Restore

Quickly and effectively restore your Kubernetes applications and data.

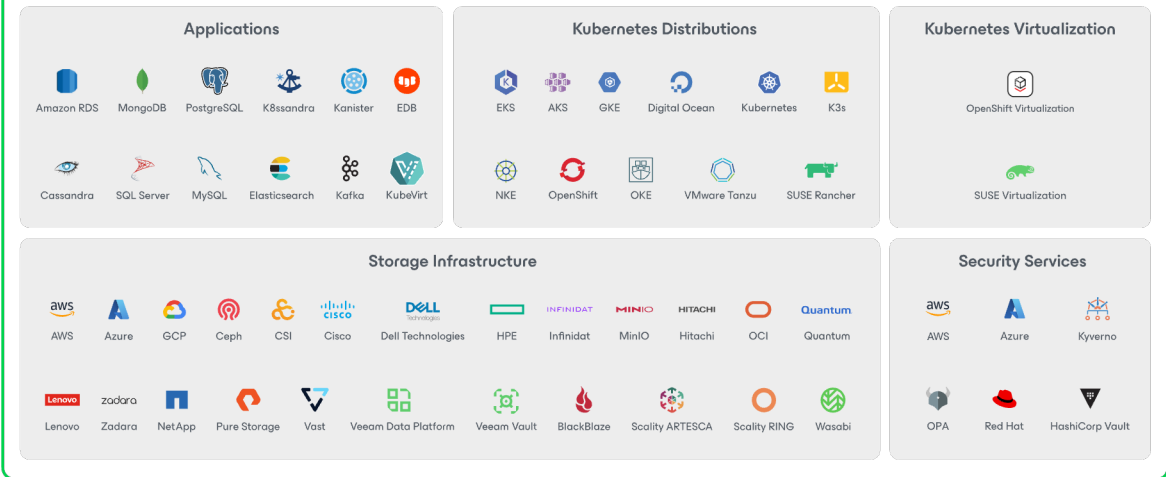
Kubernetes applications, just like their traditional predecessors, demand resilience from day 0 to protect against data loss and outage events like failure, deletion, and ransomware — Veeam Kasten *for Kubernetes* fills this critical need.

[Learn more](#)



Veeam Kasten

Kubernetes Data Protection Ecosystem



Veeam Kasten: Continuous Innovation



Veeam Kasten Vision

Pioneering Kubernetes data protection and application mobility at enterprise scale to keep your business running securely.

Quick to deploy and easy to use via a state-of-the-art management interface or a cloud native API. Veeam Kasten enables DevOps teams with the agility to identify and protect system applications.

Learn more



vee.am/k8s

Recognized by GigaOm as 6x leader, innovator and outperformer

Veeam Kasten is

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Kubernetes Data Protection

[GigaOm Radar for Kubernetes Data Protection 2025](#)

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