

Kasten K10 #1 Backup for Kubernetes

Kasten by Veeam deeply understands Kubernetes and the unique challenges in backup/restore, disaster recovery and application mobility in this environment. Kasten K10 helps enterprises confidently and successfully run applications on Kubernetes.

Applications using microservice architectures and containers have quickly gained traction in the enterprise. Kubernetes has emerged as the mainstream container orchestration platform.

Kubernetes provides high availability and scalability of application services, but these benefits do not extend to customer data. Enterprises must protect data from the Kubernetes environment and store it securely while addressing "Day 2" production challenges.

Kasten K10 Unique Value



Built for Kubernetes

Purpose-built for Kubernetes using cloud native architectural principles and APIs



Ease of Use

State-of-the-art multi-cluster management interface; cloud native API, easy install, extensible



Security Everywhere

Support for Kubernetes-native RBAC, Auth N/Z, encryption with KMS, and data immutability to defeat ransomware attacks



Rich Ecosystem

Extensive support across the entire application stack. Select the best tools or infrastructure.

Kasten K10 Use Cases



Backup & Restore

Multi-tenancy, RBAC, Scale, Performance



Disaster Recovery

Cross-AZ and Region, Multi & Hybrid Cloud, Application and Infrastructure Transformations



Application Mobility

Cluster Upgrades, Application Transformations, Test/Dev Clusters

Customers seek an alternative to current solutions

DevOps teams seeking an efficient solution to address the above needs are faced with key shortcomings in current solutions:

Legacy architectures lack the requisite elasticity and do not employ modern, declarative approaches resulting in a weak fit with container-based environments.

Operational Complexity: Relying on multiple tools and scripts results in a highly complex and difficult to maintain architecture.

Enterprise Data at Risk: Inability to automatically discover and securely protect Kubernetes applications leaves data exposed and failing to meet compliance requirements.

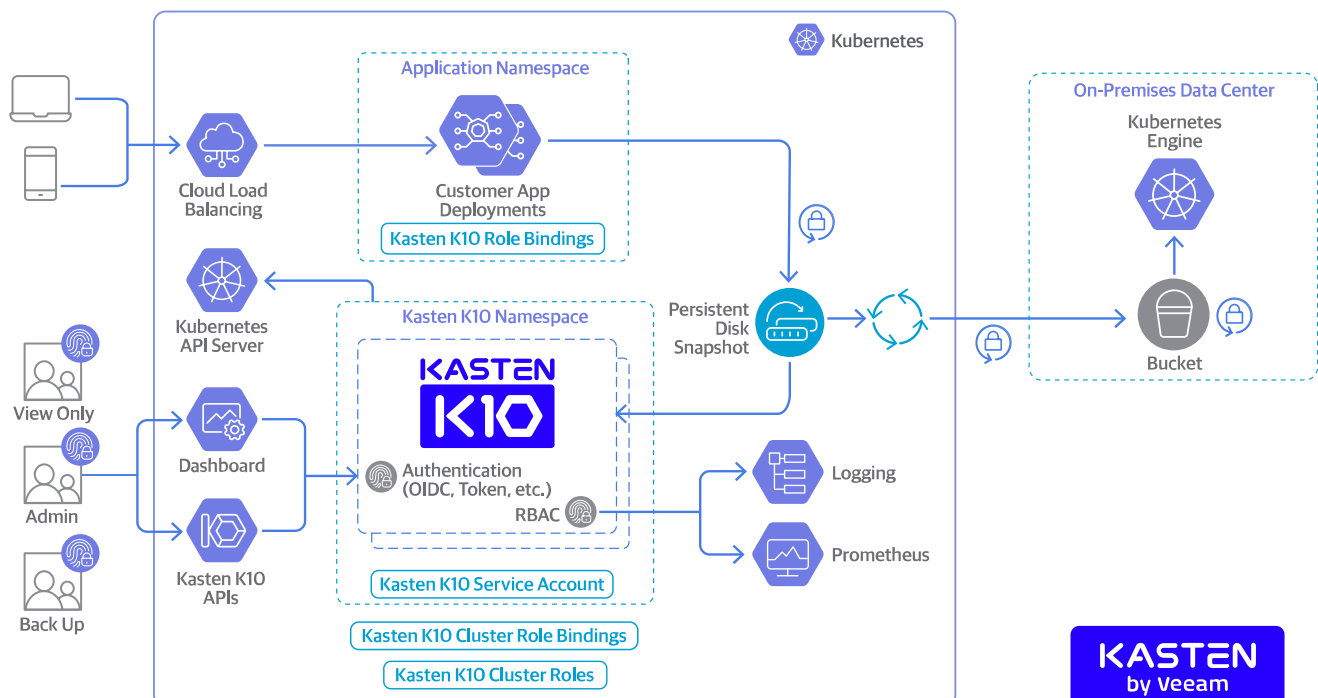
Limited Kubernetes ecosystem support: Limited Kubernetes ecosystem support can tie enterprises to legacy products that require cumbersome scripting efforts.

Why Kasten K10: The Leader in Kubernetes native data management

The Kubernetes platform is fundamentally different from all earlier compute infrastructures, using its own placement policy to distribute application components. Containers can be dynamically rescheduled or scaled. New application components can be added or removed at any time.

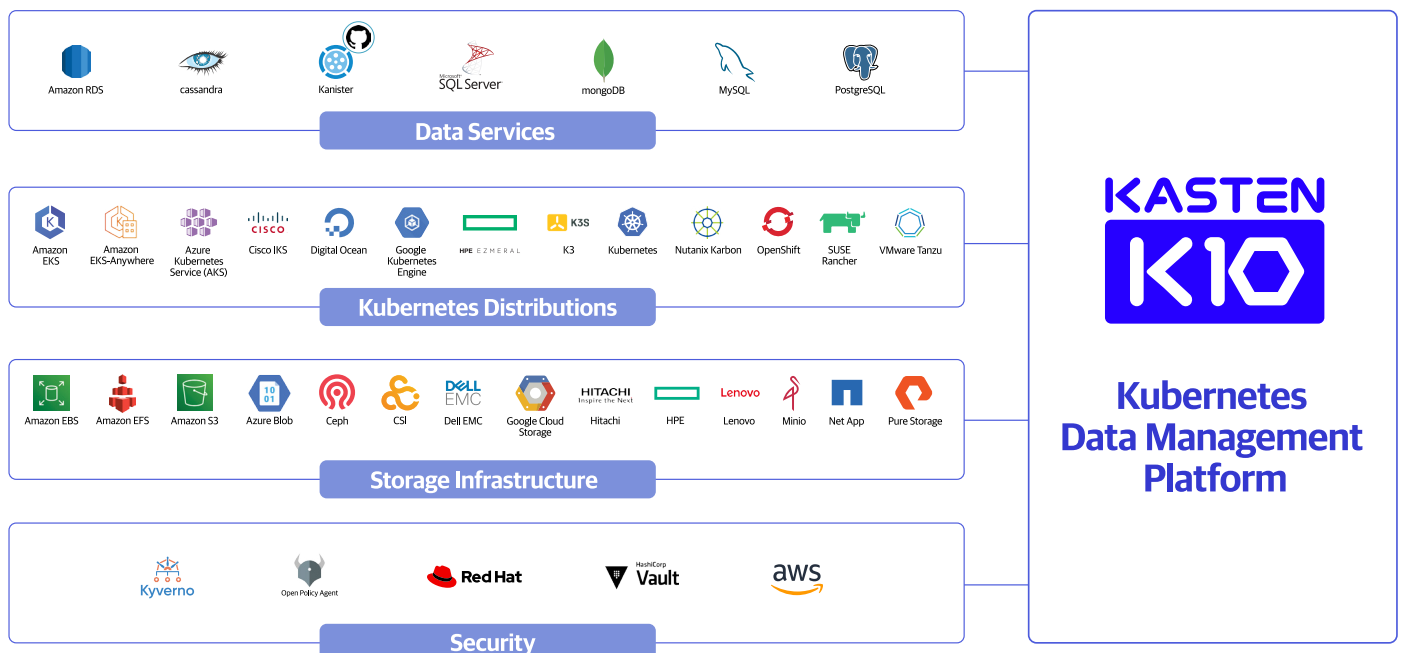
A data management solution needs to understand this cloud native architectural pattern, be able to work with a lack of IP address stability and deal with continuous change.

Kasten K10 was purpose-built for Kubernetes and provides enterprise operations teams an easy-to-use, scalable and secure system for backup/restore, disaster recovery and mobility of Kubernetes applications.



Spotlight: New for Release of Kasten K10 V5.0

Security Everywhere	Shift Left	Ecosystem Advancements
<p>Platform Hardening & Ease of Use</p> <ul style="list-style-type: none"> • KMS integration with AWS and Vault • Kubernetes native RBAC objects exposed in UI dashboard <p>Ransomware Attack Detection</p> <ul style="list-style-type: none"> • Early detection of potential or impending attack • AWS S3 or S3-compatible storage supporting S3 Object Lock <p>Data Protection Policy Guardrails</p> <ul style="list-style-type: none"> • Plugging vulnerabilities by identifying (and fixing) misconfigurations • Enforceable Policy standards (e.g., RPO, retention, immutability) <p>Veeam Hardened Linux Repository with Immutability</p> <ul style="list-style-type: none"> • Comprehensive, end-to-end ransomware protection, from Performance Tier to Cloud Tier 	<p>AWS EKS Blueprints</p> <ul style="list-style-type: none"> • Fully integrated add-on for EKS blueprints <p>Data Services Blueprints</p> <ul style="list-style-type: none"> • Built-in blueprint for Microsoft SQL Server • Built-in blueprint for PostgreSQL Operator (PGO) <p>Enhanced Red Hat OpenShift Operator</p> <ul style="list-style-type: none"> • Level-III certified Operator on the Red Hat OpenShift OperatorHub with Full Lifecycle capabilities. <p>Simplified UX for Operations</p> <ul style="list-style-type: none"> • Blueprint Editor for intuitive and streamlined workflow for implementing blueprints • Reports Generator for important metrics 	<p>Red Hat Marketplace</p> <ul style="list-style-type: none"> • With transactability (licensing and sell-through) <p>SUSE Rancher Marketplace</p> <ul style="list-style-type: none"> • SUSE Longhorn and Harvester <p>VMware vSphere with Tanzu</p> <ul style="list-style-type: none"> • K10 now supports VMware vSphere with Tanzu



Kasten K10 Top Features and Benefits

Category	Features	Benefits
<p>Built for Kubernetes Kasten K10 is purpose-built for Kubernetes and is constructed using cloud-native architectural principles.</p>	<p>Coordinated operations</p> <p>Application-centric</p> <p>State-of-the-art dedup</p>	<p>Understands complex Cloud Native application design patterns to intra-stack dependencies by quiescing/shutting down and restarting services in appropriate order.</p> <p>Captures the entire application stack with a consistent application-to-infrastructure view</p> <p>Source-side deduplication tailored for cloud-native application data access</p>
<p>Security Everywhere Kasten K10 provides comprehensive end-to-end security via enterprise-grade features.</p>	<p>Kubernetes-native RBAC</p> <p>Encryption</p> <p>Ransomware protection</p>	<p>Ensures appropriate permissions for level of access needed (e.g. admin vs. user)</p> <p>End-to-end encryption of application/ configuration/ data and associated metadata artifacts in flight and at rest</p> <p>Backup data immutability to keep recovery path tamper-proof and open to thwart ransomware</p>
<p>Ease of use Kasten K10 is quick to deploy and easy to use via a state-of-the-art management interface or a cloud-native API. It has the versatility to accommodate complex applications easily.</p>	<p>Auto-discovery</p> <p>Policy-driven</p> <p>Extensibility</p>	<p>Automatically scans the environment upon deployment and identifies all applications requiring protection</p> <p>Supports automated enforcement of protection policies to support SLAs and compliance needs</p> <p>Uses blueprints from the open-source Kanister framework to add support for new or custom applications</p>
<p>Rich Ecosystem Kasten K10, with extensive support for ecosystem components across the entire application stack, supports user choice to pick the best tools or infrastructure for the job.</p>	<p>Data Services</p> <p>Distributions</p> <p>Storage</p> <p>Security</p>	<p>Supports all leading applications and data sources (e.g., Cassandra, MongoDB, Kafka etc.)</p> <p>Supports many Kubernetes distros (e.g., OpenShift, Rancher, etc.) and cloud vendors (Google, Azure, etc.)</p> <p>Supports Cloud Storage (e.g., AWS, Google, Azure) and on-prem: e.g., EMC, NetApp, etc.)</p> <p>Supports a wide range of partnerships aimed at hardening the platform (AWS, Red Hat, HashiCorp, Kyverno, OPA, etc.)</p>

Kasten by Veeam® is the leader in Kubernetes backup and disaster recovery. Its solution helps enterprises overcome Day 2 data management challenges to confidently run applications on Kubernetes. Kasten K10, its data management platform purpose-built for Kubernetes, provides enterprise operations teams an easy-to-use, scalable, and secure system for backup/restore, disaster recovery, and application mobility with unparalleled operational simplicity. Kasten is an independent Kubernetes Business Unit within Veeam. For more information, visit www.kasten.io or follow [@kastenhq](https://twitter.com/kastenhq) on Twitter.

Resources

