



Veeam Kasten

#1 Data Protection and Mobility for OpenShift and Kubernetes

Roberto Dellavedova Enterprise System Engineer, Veeam Software

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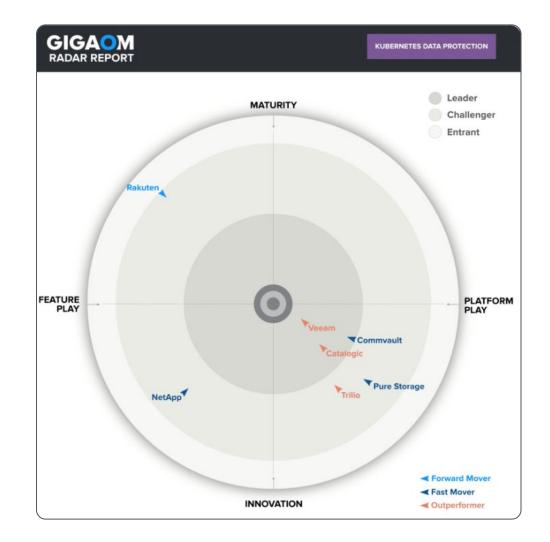
Veeam's mission is: "To tackle Day 2 data protection challenges on behalf of enterprises so that they can confidently run their applications on Kubernetes"

Veeam Kasten





Recognized by GigaOm as 4x Time Leader and Outperformer Kubernetes Data Protection



GigaOm Radar for Kubernetes Data Protection 2024, [https://www.veeam.com/blog/k8s-data-protection-gigaom.html]

How Veeam Kasten Works



Discover

Automated discovery of your Kubernetes application



Protect

Secure your Kubernetes application and data



Restore Anywhere

Quickly and effectively **restore** your Kubernetes application and data anywhere



Oiscover

Capture your entire Kubernetes application stack

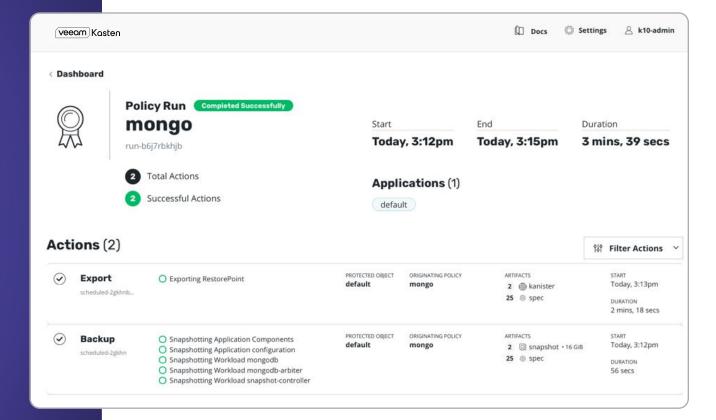
- Automatically discovers your Kubernetes applications and inventory all dependencies
- Includes resource definitions,
 configuration and underlying data
- Integrates with relational and NoSQL databases, all major
 Kubernetes distributions

<pre>shboard >_ Terminal veecom Kosten</pre>				🗓 Docs 🔘 S	ettings 🖉 k10-admin 🗸 📮 🚺
Discovered in this system		Policies Managing resources		ooo Usage & Rep. Total Backup Data 8.0 GiB	orts
1 Compliant 0 Non-Compliant 2 Unmanaged		1 Backup Policy 0 Import Policies		Snapshots (1) 8 GiB 100%	Diject Storage
Activity 11 Mic - 10 Mic - 0 Mic - Action Durations • - running • total actions completed action		skipped actions O	avg duration 14 sec	live artifacts 18	Actors retired artifacts 0
L		۱۶۴ Filter	×	10	Page 1 🔇 🚫
COMPLETED POLICY Policy Run © mysql-backup policy-run-cT/vb	ACTIONS				START Today, 3:11pm DURATION 19 secs

Protect

Complete application protection

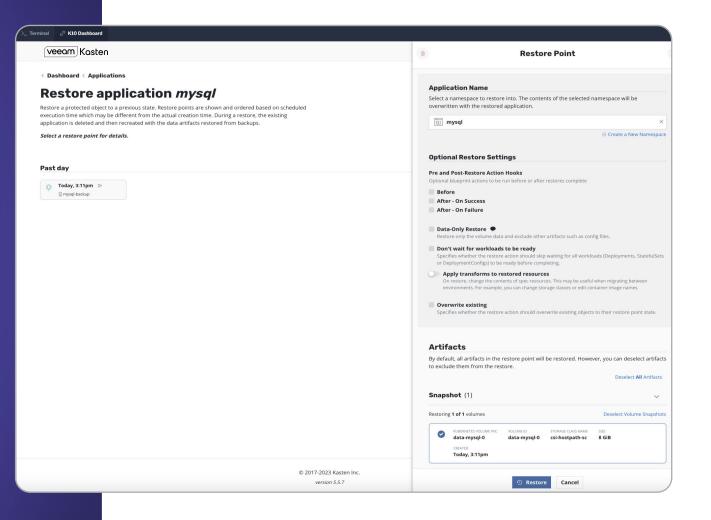
- Creates a copy of containers and specified data, and automatically updates the backup at a rate you decide
- Ensures comprehensive protection across multiple clusters and clouds
- Automated policies enable you to meet your backup SLAs



Restore Anywhere

Coordinated application recovery

- Restores the entire application and data across clusters, regions, and clouds
- Recover from user errors, infrastructure failure, disasters or malicious attacks
- Leverage blueprints to properly orchestrate the restore of your application and data



We keep your business running





Ransomware Protection

Backup immutability & always-on encryption keeps your data safe

Why Veeam Kasten Security Everywhere

Don't be a victim -- treat data protection as a Day 0 operation



Kubernetes-Native

Deliver secure self-service across teams & personas



Security Ecosystem

Integrate with industry-leading SIEM, Policy-as-Code, & KMS tools



Why Veeam Kasten

Reliable Backup and Fast Recovery

100% Kubernetes-native solution for protecting your cloud native apps



Simple Recovery

Recover working applications in-place, cloning, or recovering to other clusters

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Intelligent Policies

Support enterprise-scale operations with built-in automation



Application Consistency

Customizable application integration for every Kubernetes workload



Why Veeam Kasten

Gain Application Freedom

They are your applications, run them where you want



Application Mobility

Enable hybrid/multi-cloud across different distributions, clouds, & infrastructure

VMs on K8s & Databases

Accelerate application transformation by supporting diverse workloads



Freedom of Choice

Agnostic with broadest ecosystem of supported distributions, infrastructure & apps

Better Together: Kasten by Veeam + Red Hat



OpenShift Back Up & Disaster Recovery



OpenShift Mobility, Migration, Upgrades

OpenShift on AWS (ROSA), Azure (ARO), Hybrid-Cloud

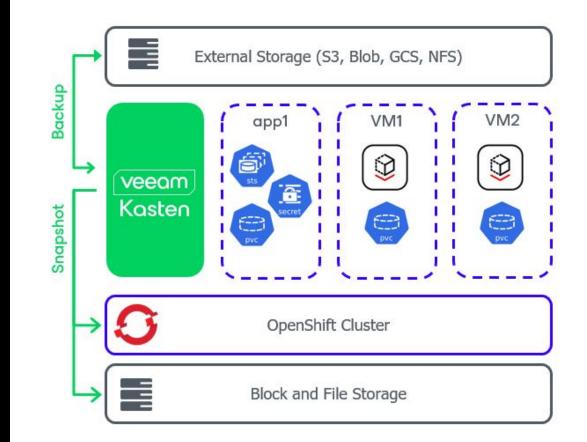


OpenShift Virtualization Integration



Application-Specific Data Management Kasten Blueprints for Data Services





Reference Architecture

For Veeam Kasten and OpenShift Virtualization

Veeam 🐣 Red Hat

Veeam Kasten and Red Hat OpenShift Virtualization Reference Architecture





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Useful Resources

https://veeamkasten.dev



Red Hat OpenShift			
📽 Administrator	•	Project: kasten-io 🔻	
Home	`	Installed Operators >> Operator details	
Operators	~	KASTEN KIO 6.0.1 provided by Kasten by Veeam	
OperatorHub			
Installed Operators		Details YAML Subscription	
Workloads	>	Provided APIs	

Veeam Kasten on OpenShift Interactive Demo (LINK)



Migrating vSphere VMs to Openshift Virtualization (LINK)



Protecting OpenShift VMs with Veeam Kasten (<u>LINK</u>)



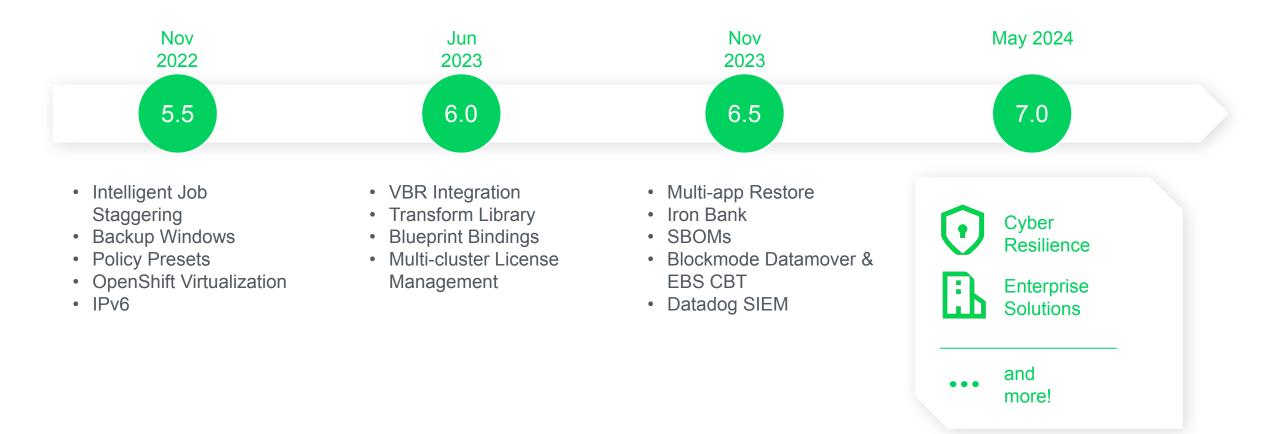
Using OpenShift Monitoring for Veeam Kasten (<u>LINK</u>)

Veeam Kasten v7.0



Introducing Veeam Kasten V7.0

Continuous, fast paced innovation



Kasten V7.0

What's New



Cyber Resilience Public Sector

• FIPS 140-3 Compliance

Ransomware Protection

- Azure Blob
- Block-mode backups

SIEM Integrations

Azure Sentinel

Deployment

- Secure authentication
- Helm chart signing



Enterprise Solutions

Cloud Native and VMs

- OpenShift Advanced Cluster
 Management integration
- OpenShift container image
 protection
- Efficient K8s VM backups

Cloud Transactability

• Azure Marketplace

Recovery Focused

- Kasten-DR
- VBR Instant Recovery
- In-place volume cloning

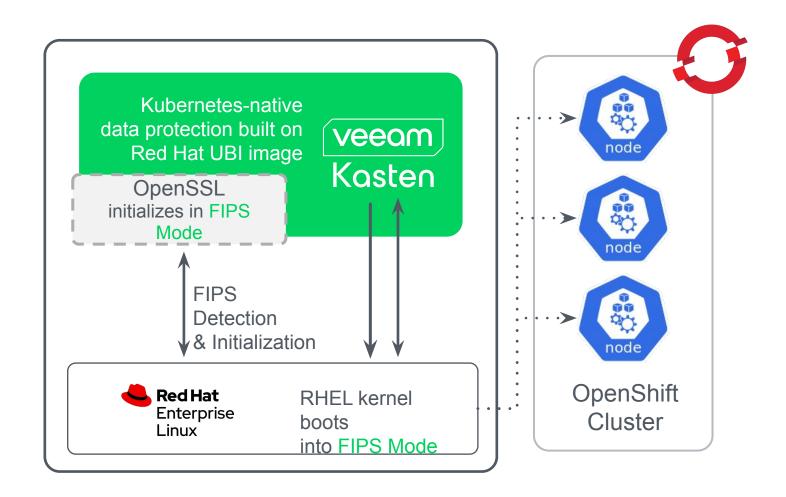


Kasten with FIPS 140-3

FIPS Compliant with OpenShift



Industry's first Kubernetes-native data protection supporting FIPS-enabled clusters



As of March 2024: this slide contains forward looking statements.

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Dashboard Auth via OpenShift

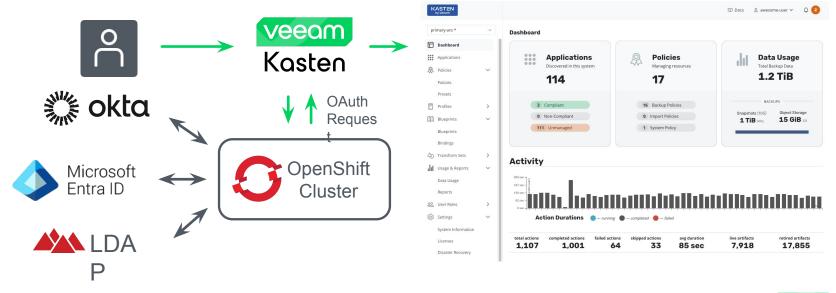
Simplified OAuth configuration

What is it?

- Provides multi-user authentication to Kasten Dashboard for secure self-service
- Supports multiple backend IDPs
- User ID consistency simplifies RBAC enforcement

What's new? Better living through automation!

- Automatic service account & token creation
- Automatic cert bundle creation
- GitOps-friendly secrets for advanced configurations



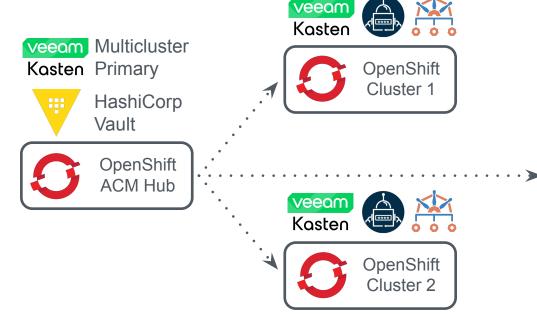
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Advanced Cluster Manager Solution Guide

Scalability via OpenShift Platform Plus tools

What's new?

- Quick start guide for configuring scalable deployment & data protection guardrail management
- Leverages full value of OpenShift stack by using Advanced Cluster Manager to automatically deploy and configure Kasten across large environments
- Example ACM integration with Kyverno to audit and enforce immutable backups
- Example secure configuration of Kasten auth and multicluster via External Secrets Operator and Vault



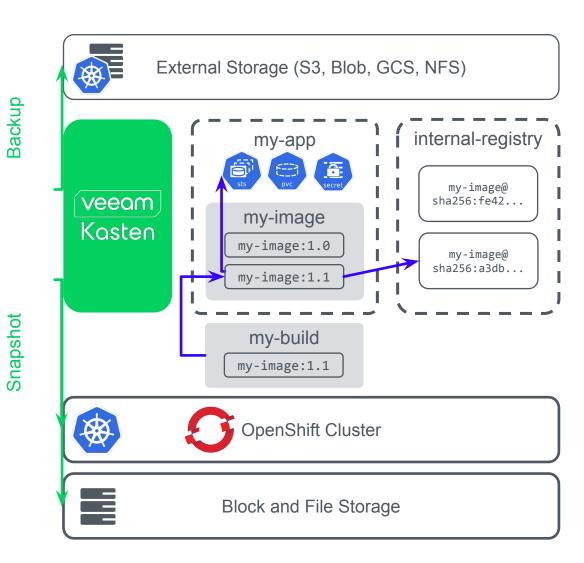


ImageStream Protection

Immutable container image backup

What is it?

- Native support for protecting & restoring container images managed by ImageStreams using OpenShift internal registry
- Uses standard Kasten Location Profiles – no dependency on separate registry
- Restores exact container builds to local registry in event of cluster loss





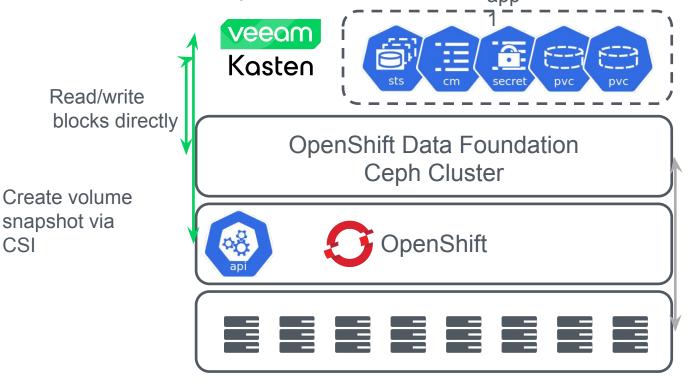
CephRBD Integration

OpenShift Enhancements Direct API integration between Kasten and CephRBD volume manager for blockmode exports & restores

Why does it matter?

CSI

- Reduces in-cluster attack surface for datamover operations
- Improves export and restore performance
- Provides incremental backups vs full export useful for OpenShift Virtualization backup! app



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Additional Recovery Enhancements

New in 7.0



In-place Volume Cloning



Restores timestampappended PVC "copies" from backup

- Non-disruptive to running workload
- Preserves namespace
 boundaries
- Useful for extracting individual files

Protects local Kasten configuration/catalog

- Incremental backups with improved export performance
- Adds Restore workflow via Dashboard UI
- Protects additional Kasten resources

VBR Instant Recovery

Manage Instant Recovery within Kasten Dashboard

- Automatic migration of PVCs to primary storage
- On-going migration status
- Automatic clean up in VBR console following migration

Veeam Kasten v7.5

Sneak peek



Preview

Veeam Kasten v7.5

What's coming?

Performance improvements

Management of large scale applications with millions of files / items

ISO/IEC 21007 Compliance

FIPS 140-3 with Veeam Kasten Multi-Cluster

Azure Managed Identity for OpenShift ARO

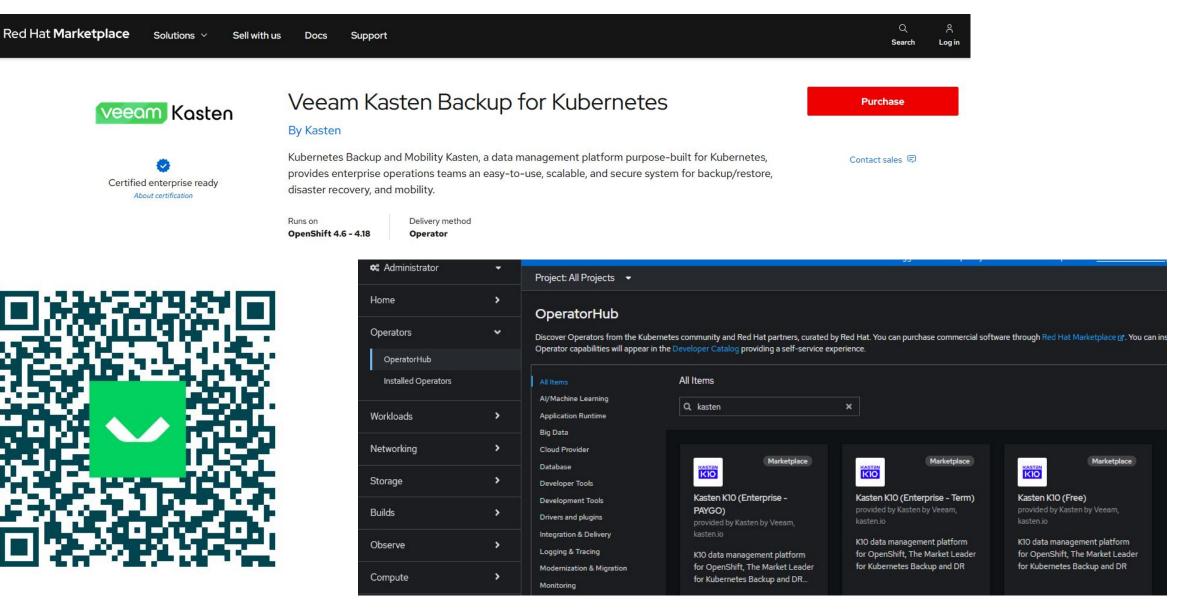
OpenShift Security Enhancements

Integration with new annotation-based controls in OpenShift Security Context Constraints cannot (intentionally or not) be applied to other workloads

Google Cloud Storage Immutability

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Where to find more information









Join the community hub:

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