

# Data Management for Kubernetes

Organizations are changing the way they deliver applications, with many leveraging containers technologies to ensure agility, portability, and scalability regardless of applications' deployment or form factors. Kubernetes has become the de facto standard for container orchestrations.

Just like any other environment, Kubernetes environments need an enterprise-grade secure solution for data and application protection in order to achieve data resilience and ensure business continuity in an event of a failure or disaster.

Because of the distributed and dynamic nature of Kubernetes, backup and recovery is not trivial. Different applications require different SLAs and manual CLI or job-centric approaches leads to more complexity. Containers are ephemeral, yet the persistent entities and data need to be stored longer. Recovery, aside from being fast and full-fidelity, also needs to be flexible – some applications have to be resorted to net new location.

## RUBRIK FOR KUBERNETES

Rubrik empowers DevOps teams by delivering a policy-driven approach to Kubernetes protection. With Rubrik, you can backup and recover the persistent volumes and Kubernetes objects associated with an application, so it is protected, can be restored from any point in time, or migrated to a new cluster. Moreover, you get to protect, organize, and manage your Kubernetes environment via Polaris, a SaaS based management console, that also gives you visibility into your distributed Rubrik deployments, infrastructure health, workload performance, and SLA compliance.

## KEY BENEFITS



### POLICY DRIVEN PROTECTION

Streamline and automate protection of application and data in dynamic, highly distributed environment



### RAPID AND FULL-FIDELITY RECOVERY

Recover applications, volumes, and files with flexibility and speed in place, to a new namespace, or to a new cluster



### UNIFIED MANAGEMENT AND VISIBILITY

Eliminate management complexity of scheduling and maintaining backups and get insights across your distributed deployments

## HOW IT WORKS

Rubrik for Kubernetes provides protection management of the Kubernetes applications and their persistent data. Simply connect Kubernetes cluster to Rubrik Polaris to enable protection management.

Once Rubrik backup service is deployed, you may assign an SLA policy of your choice to automate backup frequency, retention, replication and archival of namespace, label or controller level backups.

## Kubernetes

CLUSTERS | NAMESPACE | LABELS

...
TAKE ON DEMAND SNAPSHOT
MANAGE PROTECTION

Rubrik Clusters	# of Namespaces	Labels	Rubrik Cluster	SLA Domain	Region	Assignment	Distribution	K8s Version
<input type="checkbox"/> Olive	<input type="checkbox"/> 8	app.kubernetes.io/name	Olive	SLA-8hours-By...	estasia   Azure	Direct	Openshift 3.5	V 1.17
<input type="checkbox"/> B-0765	<input type="checkbox"/> 54	app.kubernetes.io/instance	Olive	Gold	esia-east2-a   GCP	Direct	AKS 4.5	V 1.16
<input type="checkbox"/> Neptune	<input type="checkbox"/> 16	app.kubernetes.io/compon	B-0765	Silver	US West 1 (n.california)   AWS	Direct	Rancher 1.4	V 1.12
<a href="#">Show 12 more</a>	<input type="checkbox"/> 62	app.kubernetes.io/part-of	B-0765	Gold	Las Vegas   Openstack	Direct	Openshift 4	V 1.17

## FEATURES

Rubrik for Kubernetes automates protection of Kubernetes workloads in your enterprise environment:

- **Application Protection**
  - Protect Stateless data – Kubernetes metadata describing the component and its resources.
  - Protect Stateful data – Volume data on Persistent Volumes linked to a resource via a Persistent Volume Claim.
  - Persistent Entities – Kubernetes objects which uniquely represent the state of a cluster.
- **Fine Grained Recovery:** Leverage granular backups (Namespaces, Files or Volumes) to recover point-in-time state.
- **Global Control Plane:** Centralized view of Kubernetes environment data protection scheme.
- **Data Migration:** Migrate Data across clusters to enable quick experimentation.
- **SLA Policy Engine:** Streamline the protection of Kubernetes workloads by assigning SLA policies that configure backup frequency, retention, archival, and replication.
- **Cyber Resiliency:** All applications and data protected by Rubrik are stored in an immutable manner. Snapshot chains guarantee almost instantaneous restore.
- **Supported Kubernetes Distributions:** Conforming Kubernetes clusters such as RedHat OpenShift, VMware Tanzu, etc.

## ABOUT RUBRIK

Rubrik, the Multi-Cloud Data Control™ Company, enables enterprises to maximize value from data that is increasingly fragmented across data centers and clouds. Rubrik delivers a single, policy-driven platform for data recovery, governance, compliance, and cloud mobility. For more information, visit [www.rubrik.com](http://www.rubrik.com) and follow [@rubrikinc](https://twitter.com/rubrikinc) on Twitter. © 2021 Rubrik. Rubrik is a registered trademark of Rubrik, Inc. Other marks may be trademarks of their respective owners.



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