

# ROBIN Storage: Advanced Data Management for Google Kubernetes Engine (GKE)

Use the preferred storage for GKE to run mission-critical stateful applications on your Kubernetes. Bring advanced data management to Kubernetes-native frameworks including HELM and Operators.

## Highlights

- » **Get high performance** enterprise-grade storage trusted and validated by Google
- » **Quickly and easily deploy** enterprise workloads on any Kubernetes distribution
- » **Protect app+data** with replication, snapshots, backup & recovery, and enterprise-grade security
- » **Bring automated management** of app+data (not just storage) to kubectl, HELM, and Operators
- » **Guarantee QoS** for high priority applications by setting IOPS limits per application
- » **Collaborate and share** across geos and teams by cloning app+data in minutes
- » **Easily move app+data**, between on-prem and cloud(s)

## Advanced Data Management for Google Kubernetes Engine

Kubernetes is gaining rapid enterprise adoption and customers are demanding the ability to run broader sets of workloads including stateful applications. Powered by ROBIN Storage, Google Kubernetes Engine offers support for running stateful applications such as PostgreSQL, MySQL, MongoDB, Elastic Stack, Kafka, and MariaDB which require advanced data management capabilities in order to:

- » Release products on schedule with automated lifecycle management for app+data (not just the storage)
- » Collaborate across multiple teams (Dev/Test/Ops) without procedural delays
- » Recover from system failures and user errors with app+data protection capabilities
- » Avoid infrastructure lock-in with the ability to migrate from on-prem to cloud and vice versa
- » Deliver predictable performance with QoS guarantee for high priority applications
- » Ensure your data is safe with authentication and encryption.

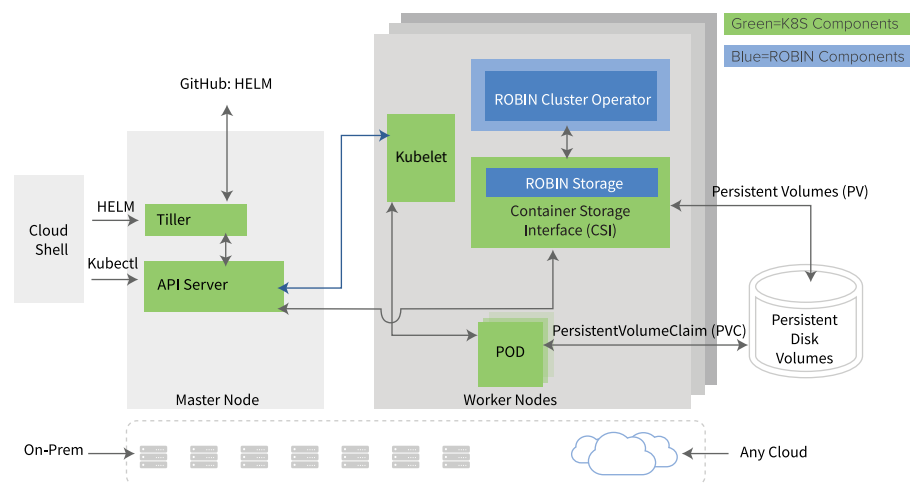
## Google and Robin.io Collaborate to Create a Solution

Google and Robin.io have collaborated to develop standardized APIs for data management capabilities needed for running data-centric workloads on Google Kubernetes Engine (GKE). Robin.io has provided deep feedback on the design of application-level snapshotting, backup and cloud portability. These sophisticated data management services represent an evolution of the current “state of the art” for running stateful workloads in GKE. They elevate the experience from performing data management at the storage volume level into true application-centric data management for Helm charts and Operators.

## ROBIN Storage: Advanced Data Management for GKE

ROBIN Storage is a purpose-built container-native storage solution that brings advanced data management capabilities to Kubernetes. It provides automated provisioning, point-in-time snapshots, backup and recovery, application cloning, QoS guarantee, and multi-cloud migration for stateful applications on Kubernetes.

## ROBIN Storage for GKE Architecture



## ROBIN Storage - Benefits and Business Impact

### DELIVER PRODUCTS FASTER

#### Automate application management

ROBIN Storage is application-aware. All lifecycle operations are performed in the context of the app+data, not just the storage volumes. For example, when you snapshot or backup a stateful application, ROBIN Storage includes data as well as the application configuration and metadata. Automating the apps+data management saves valuable time at each lifecycle operation.

#### Collaborate faster across teams

With ROBIN Storage, you can clone entire application environments, and share them across teams. While developing new features, your Dev team can use a clone of the production environment as the starting point to minimize errors. Upon finishing the implementation, the Dev team can create a clone of their environment and handover to QA for testing.

#### Use Kubernetes-native frameworks

You can provision and manage stateful applications using Kubectl, HELM, and Operator frameworks with ROBIN Storage. Using standard frameworks helps developers be productive.

### RUN MISSION-CRITICAL APPS CONFIDENTLY

#### Data protection for always-on applications

ROBIN provides built-in data replication to ensure High Availability. Point-in-time snapshots for apps+data enable time-travel and recovering from user mistakes, and apps+data Backup and Restore functionality enables you to recover from application crashes and/or data center downtime (Disaster Recovery).

#### Experience bare-metal performance

ROBIN Storage delivers near bare-metal performance with the flexibility of software defined storage. The superior performance enables you to run mission-critical applications that require high performance storage.

#### Never miss application SLAs

High priority applications need predictable performance. You can guarantee QoS for high priority applications by setting maximum IOPS limits per application. This enables you to consolidate applications on shared infrastructure and reduce hardware cost, without worrying about the noisy neighbors issue.

#### Rest assured your data is secure

ROBIN Storage authenticates user's Kubernetes-native mechanism. Your data is encrypted at rest and in transit to ensure it is protected against unauthorized intruders. ROBIN storage also comes equipped with check-sum algorithms to make your data tamper-proof.

### FUTURE-PROOF YOUR ENTERPRISE

#### Cloud-native data management

Kubernetes is rapidly becoming the de-facto platform to manage applications. Cloud-native architecture powered by Kubernetes, containers, and ROBIN Storage enables you to modernize your application and data infrastructure and move towards the future.

#### Get Hybrid and Multi-Cloud flexibility

You can easily move apps+data, between on-prem and multiple clouds. Enjoy cost-efficiencies by choosing the most economic infrastructure at any given point. Avoid infrastructure lock-in with the flexibility to run your applications where you want.

#### Avoid vendor lock-in

Kubernetes-based architecture gives you complete control of your infrastructure. With the freedom to move your workloads across private and public clouds, you avoid vendor lock-in.

To learn more and to try ROBIN visit: [robin.io](https://robin.io)