



CLOUD-NATIVE DATA PROTECTION WITH HPE EZMERAL CONTAINER PLATFORM AND TRILIOVAULT

Kubernetes development is increasingly attracting DevOps teams. According to the CNCF, the worldwide number of cloud-native developers jumped almost 38% from 4.7 million to 6.5 million in 2020.1 However. some of these DevOps teams have delayed rolling their applications out to production because of concerns related to resiliency and data protection. Traditional data protection and backup software for VM and bare-metal environments are not optimized for containers. DevOps teams are looking for a cloud-native data protection solution that can provide backup integrity in highly dynamic container environments that can span over hybrid clouds.

Hewlett Packard Enterprise has partnered with Trilio to provide HPE Ezmeral Container Platform users with a unified container software platform built on Kubernetes, enabling organizations to run and manage Kubernetes applications at scale on any infrastructure from edge to cloud.

Not every backup solution can keep up with a platform with that kind of reach. To keep their data safe, HPE Ezmeral Container Platform users need a backup and recovery solution that can follow them wherever the HPE Ezmeral portfolio goes—and TrilioVault for Kubernetes (TVK) is that platform.

HPE Ezmeral Container Platform and TVK are ideal for IT Ops or DevOps engineers looking to manage multicluster Kubernetes environments across multicloud infrastructure. HPE Ezmeral Container Platform makes it easy to deploy, manage, and monitor Kubernetes multicluster environments and uses automation to accelerate the process. TVK provides a wide variety of capabilities to keep those clusters safe and secure while promoting flexibility and ease of use. TVK also enables users to migrate to a new Kubernetes cluster or specify role-based access for secured zones within the cloud.

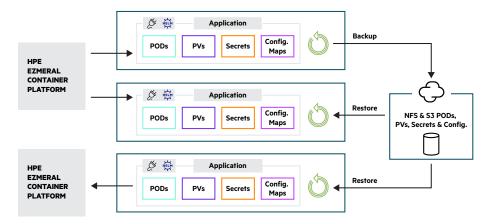


FIGURE 1. How HPE Ezmeral Container Platform and TrilioVault for Kubernetes work together

KEY CAPABILITIES OF TVK

TVK is a Kubernetes-native, application-centric data protection platform. It was designed from the ground up to support the scale, performance, and mobility requirements of Kubernetes container environments across any public, private, or hybrid cloud environment.

TVK offers backup and recovery of the entire application, including data, metadata, and any other Kubernetes objects associated with the application, so that it is protected and can be restored from any point in time. IT managers, backup administrators, and DevOps engineers leverage TrilioVault for backup and recovery, migrations, disaster recovery, and mobility. The TVK platform offers the following characteristics:

Native to Kubernetes: Packaged as an operator, deployed as a custom resource definition (CRD), and API with all facilities such as container storage interface (CSI)

Application-centric: Protects application metadata (Pod, persistent volumes, Secret, ConfigMap, and more) and data

Infrastructure agnostic: Compatible with any storage on-premises or on public cloud

Application deployment and tooling:

Application support—Namespaces, Helm, Operators, and Labels; integrations include Prometheus and Grafana

Management console: Intuitive and simple click-driven workflows, application discovery, and monitoring

Open backup format: Non-proprietary open universal schema (QCOW2 and YAML)

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Non-disruptive: Lightweight Kubernetes API and CSI snapshots to backup/capture the entire application

Robust restoration and recovery: To any HPE Ezmeral Container Platform or Kubernetes Cluster running in public, private, or hybrid cloud

KEY CAPABILITIES OF HPE EZMERAL CONTAINER PLATFORM

HPE Ezmeral Container Platform is the industry's first enterprise-grade Kubernetes-based container platform designed for both cloud-native and distributed non-cloud-native applications, enabling true hybrid cloud operations across any location—on-premises, public clouds, and edge.

- Bring the speed and efficiency of containers to both cloud-native microservices apps and non-cloud-native monolithic apps
- Deliver new code releases faster with one-click container deployment
- Build once and run anyplace (on-premises, public clouds, and edge), providing hybrid cloud portability

Multi-tenancy and enterprise-grade security model: Integrates with enterprise LDAP and Active Directory authentication systems. Administrators can create groupings of users and resources that restrict access to jobs, data, or clusters based on department membership and/or roles. The result is an integrated, secure, multi-tenant infrastructure.

Increases utilization while lowering

costs: Delivers hardware and operational cost savings while simultaneously helping eliminate the complexity of managing multiple physical clusters. Also, it allows clusters to be paused/unpaused at will—you only use the resources that you need when you need them.

High availability: Supports three levels of high availability to provide redundancy and protection.

WHY TVK ON HPE EZMERAL CONTAINER PLATFORM?

TVK and HPE Ezmeral Container Platform are both strong supporters of DevOps best practices. The HPE Ezmeral Container Platform provides DevOps professionals with an enterprise-grade solution to accelerate application modernization. TVK also provides features to expand the capabilities of DevOps. TVK's point-in-time management capabilities make it easier to run tests before going into production. It also offers DevOps professionals other capabilities that they need, such as the ability to leverage backups from a single target location to build multiple test/dev environments and accelerate continuous integration/continuous delivery (CI/CD).

Customers use HPE Ezmeral Container Platform with TVK for:

- Backup and recovery of HPE Ezmeral-based applications: TVK fulfills the need for backup and recovery across a multicloud environment
- Migration and mobility: TVK supports migration and mobility of cloud-native workloads to HPE Ezmeral Container Platform and across hybrid cloud infrastructure.
- Disaster recovery: TVK enables the user to recover entire applications from a point in time.

TrilioVault Management Console allows users to manage migrations from a single pane of glass and manage backup, restore, and migration operations across Kubernetes distributions and clouds.

Using HPE Ezmeral Container Platform and TVK makes workload management as easy as possible by providing complete user interfaces, offering deep insight into everything from what's running on a cluster to the entire backup and restore process.

LEARN MORE AT

hpe.com/us/en/solutions/ container-platform.html trilio.io/triliovault-for-kubernetes/

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