

SOLUTION BRIEF

Complete Protection and Fast Recovery for Kubernetes Apps

Protect both cloud-native and traditional apps with Portworx® by Pure Storage®.

A full 75% of IT professionals [wrongly believe](#) that you can back up containers in the same way as applications. The risk of this misunderstanding is dire. According to GigaOm Research, “without container-granular backup options for Kubernetes, enterprises are exposed to data loss, downtime and lost customer loyalty.” These risks are especially true for applications on Kubernetes where traditional and VM-optimized storage and data protection solutions don’t work. Protecting stateful applications like databases in highly dynamic environments calls for a solution built to address the unique nature of Kubernetes: Portworx by Pure Storage.

Protection Designed for Kubernetes

All enterprise applications require backup. Portworx Enterprise delivers enterprise-grade backup and recovery protection for all cloud-native and enterprise applications running on Kubernetes. Built exclusively for containerized applications, Portworx protects your applications—including their data, configurations, and Kubernetes objects—with a single click at the Kubernetes Pod, Namespace, or Cluster level. Portworx delivers true multicloud availability with application-aware, zero data loss backup, and fast recovery for even complex distributed applications. Portworx offers a point-and-click backup and recovery solution for stateless and stateful Kubernetes clusters and provides native integration with major cloud block storage systems, as well the rest of the Pure portfolio.

Market-leading Kubernetes Data Protection

Portworx Enterprise is a Kubernetes data services platform that provides a fully integrated solution for persistent storage, data protection, disaster recovery, data security, cross-cloud and data migrations, and automated capacity management for applications running on Kubernetes. As a result, Portworx is the Kubernetes data services



Native Protection

Portworx was built from the ground-up to protect Kubernetes apps.



Fast Recovery

With the performance of all flash, Portworx on top of FlashBlade® reduces recovery time.



Cloud Backup

Achieve additional levels of protection with cloud backups.



Market Leader

Leverage Portworx, GigaOm Radar Kubernetes Data Protection leader, for your cloud-native apps.

the platform most used by Global 2000 companies, including Carrefour, Comcast, GE Digital, Kroger, Lufthansa, and T-Mobile. Portworx was also named a Leader in the 2020 GigaOm Radar for Kubernetes Data Protection report due in part to the strength of our data protection options.

Kubernetes-native Protection with the Power of FlashBlade

Using a Kubernetes backup is the first step toward recovering your applications if needed. But your backup location matters when it comes to recovery speed. Pure Storage engineered FlashBlade for the unstructured data found in Kubernetes backups. With elastic performance that grows with data up to 17GB/s, petabytes of capacity, and the simplicity of Evergreen™ subscription, FlashBlade allows you to protect mission-critical Kubernetes apps knowing that recovery will happen quickly.

Add Cloud Backups to your Arsenal of Protection

Even if your production apps are on-premises, you might want to back up to the cloud for additional levels of protection or to enable DR to the cloud. With PX-Backup, you can keep one copy of your Kubernetes apps on FlashBlade for fast recovery and another in the cloud if you need to recover from a complete data center outage. PX-Backup integrates with any S3-compatible object store, no matter where it runs.

“Our developers don’t ever need to know what storage we’re using or how we’re tying it all together, they interact with Kubernetes, and it all just works. So at the end of the day, the combination of Pure and Portworx really just lets us sleep at night.”

Joe Searcy, T-Mobile

Use Cases

Fast Performance and Fast Recovery for Production Kubernetes Apps: Combining Portworx with FlashBlade to quickly recover from outages is not the only way that Pure can speed up your cloud-native applications. Running Portworx Enterprise on top of FlashArray enables your production Kubernetes applications to achieve high performance without endless tuning. You get top performance for your production and fast recovery applications when things don’t go according to plan.

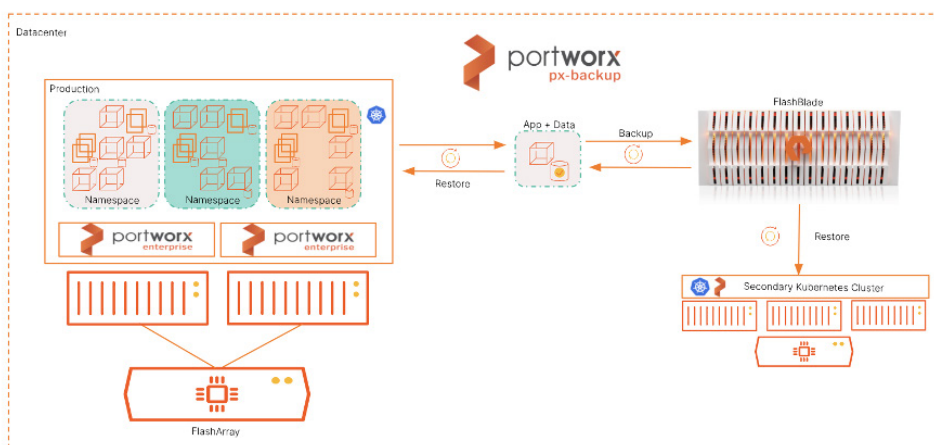


Figure 1. Combining Portworx with FlashBlade for fast performance and recovery.

Cloud Backups for Additional Protection: PX-Backup enables you to protect your entire data center and store applications in the cloud for test/dev. PX-Backup can send a copy of your Kubernetes applications to both a FlashBlade on-premises as well as an AWS S3-compatible object store in the cloud. You get both fast recovery of on-prem production applications and a backup copy in the cloud should you need it.

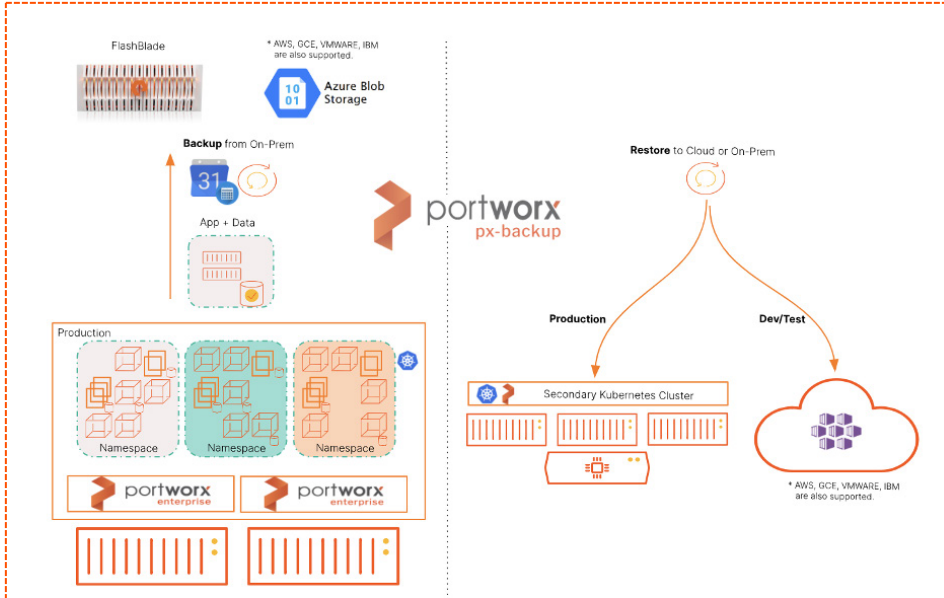


Figure 2. Using Portworx for cloud protection.

Disaster Recovery Across Data Centers: Every second after a disaster counts. If you wait until a disaster strikes to start rebuilding your Kubernetes apps, you may not meet their RTO goals. PX-DR continually backs up your Kubernetes data and objects to a secondary cluster powered by FlashBlade and FlashArray, where they are staged in a secondary cluster that is ready to go the moment disaster strikes. This approach enables two layers of protection: the most recent disaster-recovery copy ready for instant failover and a library of local backups in case you need to rewind to earlier instances of the application.

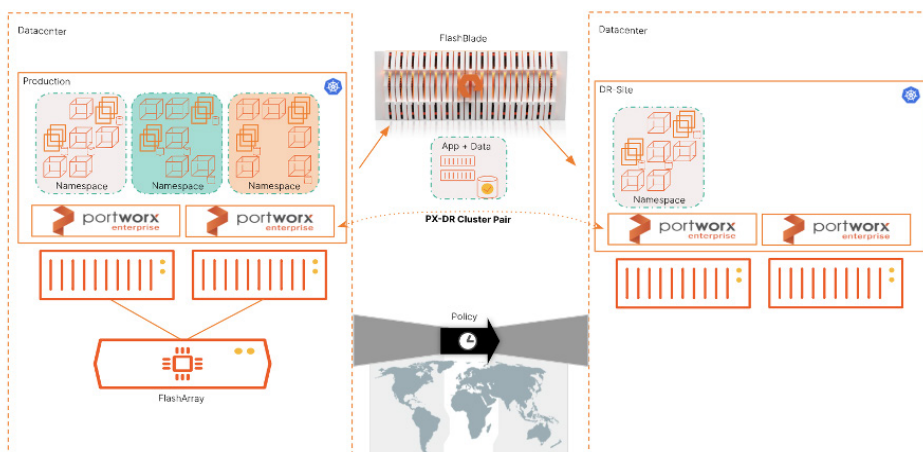


Figure 3. Portworx PX-DR across data centers.