SOLUTION BRIEF

Kubernetes Backup for Service Providers

Quickly and easily back up and recover your Kubernetes applications with Portworx® PX-Backup.

Service providers use Kubernetes to drive next-generation advanced services. Containerized network functions (CNFs), continuous integration–continuous delivery (CI-CD), and extending IT automation are top of mind for service providers. What if vital containerized applications were lost? A scalable backup and recovery solution is essential for rapid recovery in the event of data or system loss. Portworx PX-Backup delivers out-of-the-box backup and recovery protection for cloud-native and data center-based applications running on Kubernetes. Spend less time worrying about protecting your containers and more time deploying revenue-adding services.

Comprehensive Data Protection

PX-Backup enables Kubernetes native backup and fast recovery for entire applications, including their data and configurations. By delivering the same reliability and data-protection capabilities that service providers have come to expect from traditional backup solutions, PX-Backup achieves the agility benefits of Kubernetes without sacrificing data protection and control. PX-Backup delivers:

- Point and click recovery for both stateless and stateful Kubernetes applications
- Pod and Namespace granularity for application-centric protection
- Application-aware protection for complex distributed applications that are often dynamically moved
- Role-Based Access Control (RBAC) for secure service provider user access
- Backup and recovery of cloud volumes from Amazon, Microsoft, Google, and any CSI-compatible enterprise storage array directly, even if you are not using PX-Store

PX-Backup delivers more than just a point-in-time copy of your applications. It gives you application-aware automation for data integrity, RBAC and audit log for policy compliance, and Pod and Namespace granularity. It includes out-of-the-box integration with many popular services such as Kafka, Elasticsearch, Cassandra, MongoDB, PostgreSQL, MySQL, and many more.

Container-Aware

Protect container-based applications with a single click though native Kubernetes integration.

Application-Centric

Integrates with service provider applications like Kafka, Elasticsearch, Cassandra, MongoDB, PostgreSQL, MySQL and more.

Complete

Use PX-Backup as a standalone solution or part of the Portworx container native storage solution.
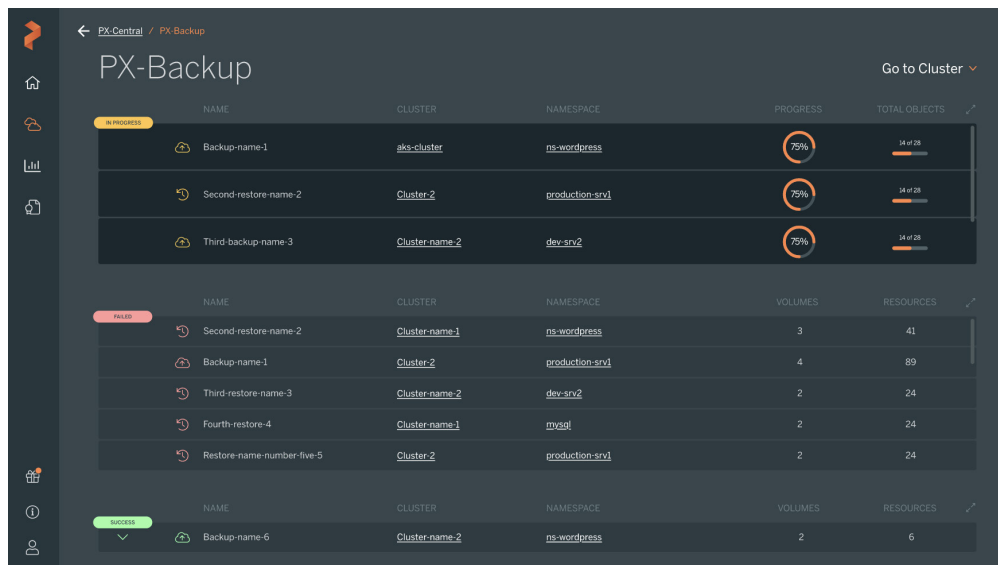
Figure 1. PX-Backup provides an easy-to-use interface for your Kubernetes environment.

Traditional backup solutions do not work with Kubernetes and containerized applications. These applications exist across many Pods and multiple machines and are often dynamically moved. A backup solution must capture both the data and the application configuration at the container level to ensure fast recovery and avoid data loss. PX-Backup integrates natively with Kubernetes to determine the configuration and placement of containerized applications, so these applications and Kubernetes configurations are completely protected.

Portworx for Service Providers

Portworx is the most widely used container-native storage solution by Global 2000 organizations. These industry leaders choose Portworx because it dramatically increases developer productivity, simplifies the deployment of advanced services, and improves operational efficiency. Portworx helps eliminate downtime and data loss while reducing storage and infrastructure costs. With Portworx, you can:

- Accelerate time to market for container projects delivering advanced services to grow revenue.

- Reduce infrastructure costs by 30% to 60% while increasing flexibility.

- Enable and protect databases and popular data services on Kubernetes.

By enabling data availability, data security, backup, and disaster recovery for Kubernetes-based applications running on-prem or across clouds, Portworx has helped dozens of Global 2000 companies such as T-Mobile, Comcast, Carrefour, GE Digital, Lufthansa, and SAIC run containerized data services in production.

Additional Resources

- Try out PX-Backup for free.

- Learn more about data protection on Kubernetes.