

SOLUTION BRIEF

Easily Deploy, Manage, Protect and Control Jenkins on Your Terms

Accelerate app deployment with Portworx[®] by Pure Storage.

As enterprises embrace managed Kubernetes solutions like Amazon Elastic Kubernetes Service (Amazon EKS), maintaining an effective build process and CI/CD pipeline is an essential ingredient for success. Jenkins is an industry standard tool that allows enterprises to streamline their CI/CD process. Using Jenkins with Kubernetes is a perfect fit. Together developers can automate build, test, quality checks, and continuous deployments, helping enterprises achieve the “time to value” promise of modern applications. However, running Jenkins in the cloud can be challenging due to memory and IO requirements. Successful deployment of Jenkins in a Kubernetes environment requires two crucial components: High Availability and High Performance.

Amazon Elastic Block Store (Amazon EBS) is an ideal option for developers to deliver the performance requirements demanded by Jenkins. However, Amazon EBS limitations around data movement across Availability Zones (AZ), can make it difficult for enterprises to achieve the required HA for applications like Jenkins.

Enter Portworx by Pure Storage. The Portworx Kubernetes Data Services platform makes it easy for developers to achieve both the High Availability and High Performance they require when running Jenkins on Amazon EBS.

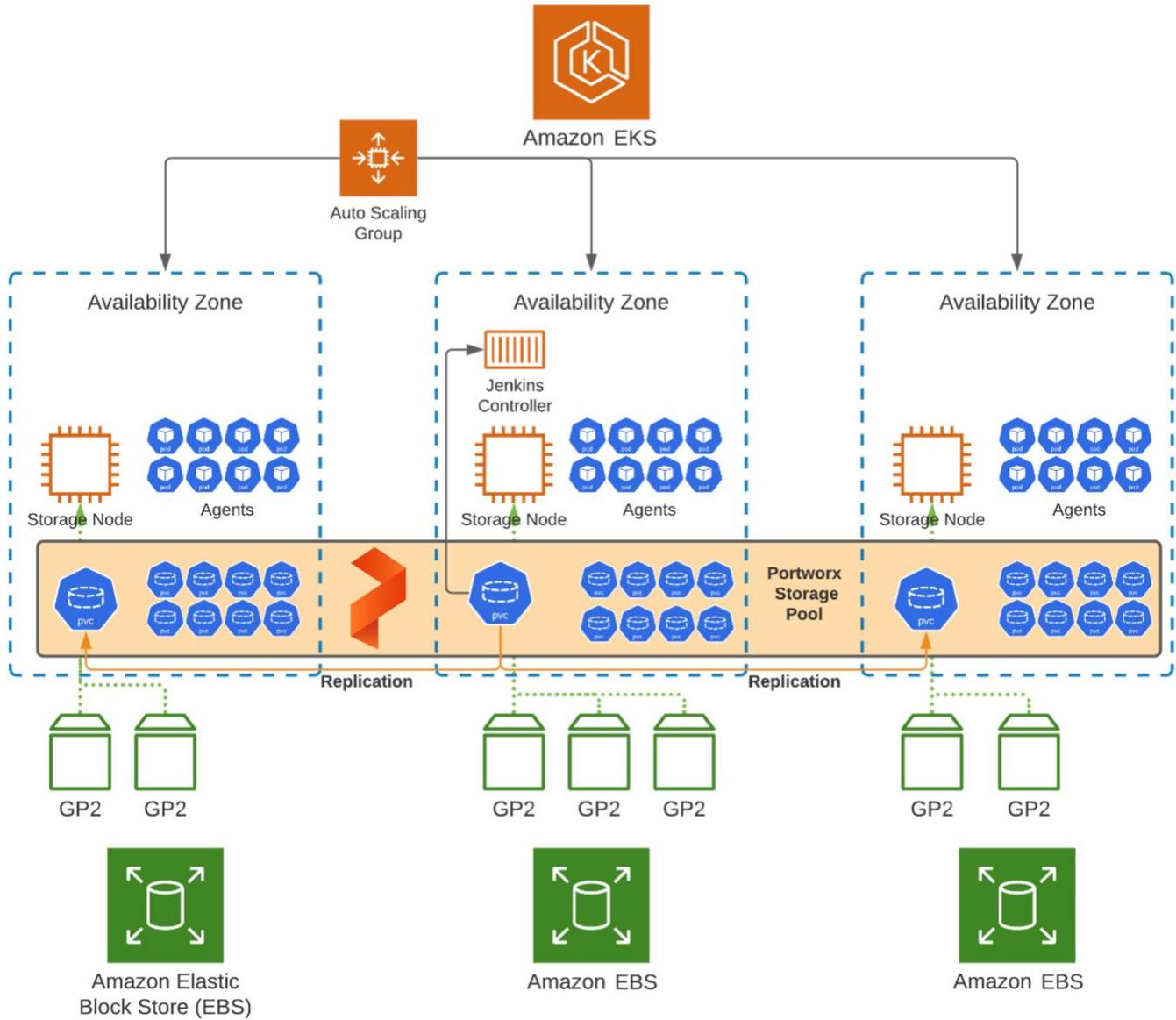
Optimize DevOps workflows

Portworx abstracts the Amazon EBS layer into a single Portworx Storage Pool that spans multiple Availability Zones, providing developers with highly available, container-granular storage on top of Amazon EBS. This approach allows developers to create specific Portworx storage classes to support their Jenkins deployments and automate key tasks around data protection, performance, availability, and security, eliminating manual overhead and accelerating the entire CI/CD process. Portworx ensures that one or more replicas of the Jenkins data is maintained on another Amazon Elastic Compute Cloud (Amazon EC2) instance in a different Availability Zone so that in the event of a failure, Jenkins can be restarted with a replica of the data in another AZ in a matter of seconds.

As this process scales, it's also important that developers minimize errors in each test run and reduce overall time to market. Portworx is able to accelerate the Jenkins incremental build process by taking a



snapshot of the entire Jenkins application and original configurations, creating an all-important golden image of the application before it goes through any test runs. This allows enterprises to scale test runs to an unlimited number of Jenkins agents around the globe, reducing overall test times and optimizing AWS infrastructure resources.



Replication across AZs with Portworx.

“Portworx enabled T-Mobile to reduce application deployment time from six months to only hours.”

-James Webb, Platform Architect, T-Mobile

Highly available, protected data

Portworx takes DevOps a step further with zero recovery point objectives (RPOs) for data centers in an AWS Region and continuous backup across Regions. Portworx also provides seamless backup and recovery of the data and applications in a Jenkins deployment, enabling developers to back up their Jenkins pipelines to any Amazon Simple Storage Service (Amazon S3) bucket with a click of a button. Together this allows Portworx to ensure that data is protected, performant, fault tolerant, and maintains high availability across AWS Regions or Availability Zones throughout the entire CI/CD workflow.



Learn more about Portworx

Additional resources

- [Run Jenkins and CI/CD pipelines in Containers](#)
- [How to Speed Up Jenkins Builds](#)

Visit Portworx in AWS Marketplace



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