

Accelerate Banking Transformation with Portworx

Build a platform to automate, protect, and unify Kubernetes data management at scale

Financial services firms face an incredibly challenging dual mandate of needing to transform and innovate while meeting stringent compliance and regulatory requirements. To transform and innovate quickly, banks, credit issuers, payment processors, and investment managers must move quickly in a market disrupted by digital-first fintechs, peer-to-peer payments, buy-now-pay-later (BNPL), mobile-first services, and more. In addition, financial services firms must address evolving cybersecurity threats, new fraud attacks, and ever-changing compliance and regulatory requirements.

Successfully navigating this dual mandate is crucial for survival and growth. For virtually every firm, innovating with software development, data, and AI has led them to modern, cloud-native application development processes and technologies such as Kubernetes.

CSI Data Management Challenges

Kubernetes provides a state-of-the-art foundation for managing containerized applications at scale. The container storage interface (CSI) was launched in Kubernetes in 2018 and storage vendors quickly wrote plug-ins to expose their storage arrays to Kubernetes clusters. While these CSI plug-ins connect external storage to Kubernetes, they create a host of challenges to financial firms including slowed application development times, fragmented, manual operations, performance impacts and vendor lock-in.

Reduced Application Development Velocity and Innovation

Financial firms today need to accelerate innovation by harnessing the power of data and AI. Developers working with containers and Kubernetes are the engine that drive these innovations; however, CSI plug-ins cannot keep up with the dynamic nature of cloud native applications. As firms incorporate Kubernetes into their transformation journey, they often experience initial success in early deployments, but their stateful workloads soon run into performance and scalability issues as more applications and workloads are deployed on Kubernetes. Firms building internal developer platforms are challenged to provide easy and efficient, self-service access for 100s or 1000s of developers to those rapidly evolving data services, contributing to slowed or stalled modernization initiatives.



Accelerate Banking Transformation

Automate storage and data management processes and accelerate the software development lifecycle



Architect Data Resiliency

Deliver enterprise business continuity, performance, and scale for cloud-native applications



Achieve Data Agility

Manage, migrate, backup, and restore data across any on-premises, hybrid, or cloud Kubernetes environment

Application Performance, Outages, and Data Loss

Financial firms require a range of reliability SLAs including RPO=0 in the event of an outage, but traditional Business Continuity/Disaster Recovery (BCDR) approaches are challenged to support mission-critical Kubernetes applications at scale. CSI plug-in based approaches can create multiple, siloed solutions for providing data resiliency, BCDR, and data protection which can lead to increased application downtime. Traditional VM-based data protection solutions were not designed for Kubernetes and are not application-aware (or container-aware), leading to inconsistent implementation of security policies and increased risk of data loss.

Complexity and Vendor Lock-in

As every large financial firm becomes hybrid/multi-cloud, the complexity of each environment (public, private, or hybrid) adds additional learning curves, compatibility issues and storage management challenges. To accelerate transformation and control infrastructure costs, firms need the flexibility to build, deploy or migrate their applications across any part of their multi-cloud/ hybrid environments. However, today's data and storage architectures lock in applications and prevent enterprises from making these choices easily and quickly, contributing to slowed or stalled cloud adoption initiatives.

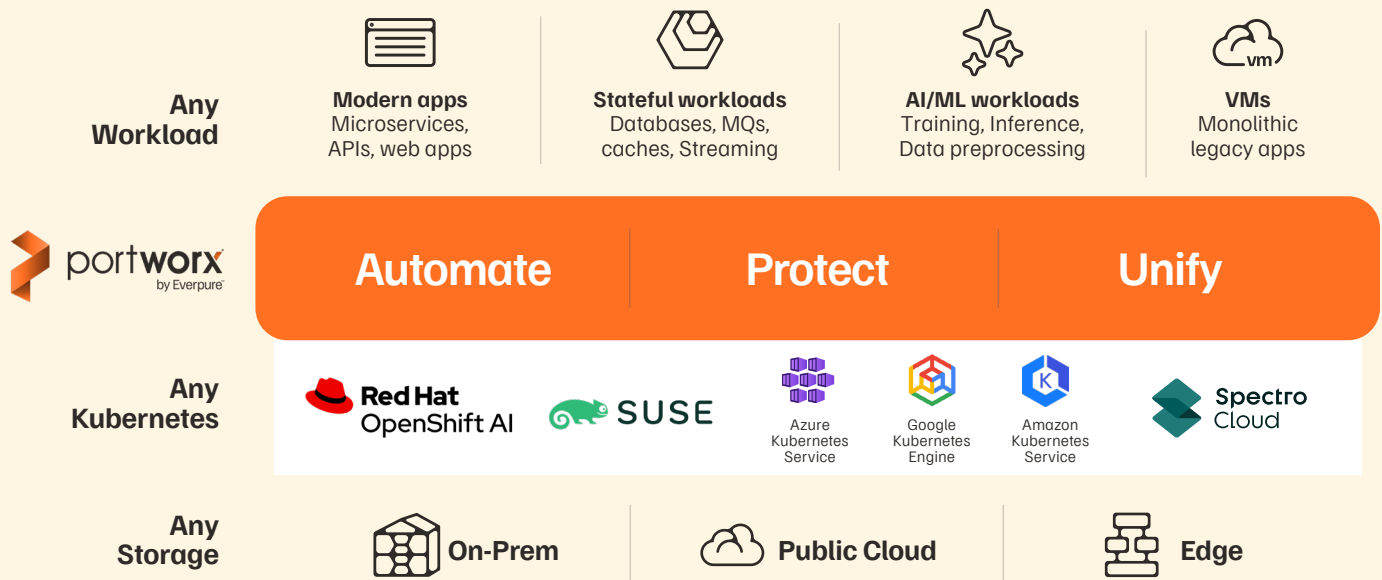


FIGURE 1 The Portworx Kubernetes Data Management Platform

Portworx: A Leader in Kubernetes Data Management for Financial Firms

Portworx® by Everpure™ is a fully-integrated data management platform that includes container-native storage, backup, business continuity, disaster recovery, and database services in a single, unified solution. It includes the following components to accelerate banking transformation:

Portworx Enterprise

PX-Enterprise® delivers elastic scalability, industry-leading availability, and self-service access to any storage infrastructure for nearly any Kubernetes distribution. It includes automated capacity management and flexibility across hybrid, multi-cloud, and on-premises deployments. PX-Enterprise enables firms to:

- Maximize application performance by quickly provisioning storage, optimizing Kubernetes storage for performance and resiliency, accelerating IO paths, and ensuring high availability
- Automate storage management and optimize your infrastructure with thin provisioning, intelligent volume placement, dynamic balancing and scaling, and application migration between clusters
- Increase development velocity by empowering developers with self-service to storage, integrating with existing developer tooling and CI/CD pipelines

Portworx Backup & Portworx Disaster Recovery

Portworx Backup & Disaster Recovery (DR) protects your data with container-granular and application-aware backup and disaster recovery. It secures persistent data for nearly any Kubernetes environment and ensures comprehensive protection and easy recovery for Kubernetes applications. Portworx Backup & Portworx Disaster Recovery protect enable firms to:

- Recover applications and data in one-click, with awareness of Kubernetes application data, configurations, objects, ensuring more complete and faster restores over traditional backup solutions
- Migrate or recover applications anywhere within minutes across on-premises and cloud infrastructure
- Secure and defend data with enterprise-grade RBAC, ransomware protection, 3-2-1 rule support, and support for air-gapped environments
- Maintain compliance with any resilience requirements or application tier SLAs with configurable synchronous and asynchronous disaster recovery

Enterprise Security and Control

Portworx includes enterprise-grade security and granular controls financial firms require throughout the entire platform, including single sign-on (SSO), role-based access control (RBAC), while enabling data encryption at-rest and in-transit.

Integrations and Ecosystem

The Portworx platform integrates broadly within the cloud-native ecosystem, including on-premises storage providers like Pure Storage, Dell, and NetApp, as well as cloud storage from Azure, AWS, Google Cloud, IBM Cloud and more. Portworx also integrates with open-source Kubernetes installations, hybrid cloud distributions like Red Hat OpenShift and SUSE Rancher, and managed Kubernetes services from AWS, Azure, Google Cloud, and more.

Customer Use Cases

Portworx provides a software defined data management layer that meets the stringent regulatory and performance requirements of global financial institutions. By abstracting the underlying infrastructure, Portworx enables a cloud-like operating model in on-prem and hybrid cloud environments for critical financial data.

High-Velocity Internal Developer Platforms (IDP):

Enable quantitative analysts and developers to provision production-grade, encrypted volumes for trading algorithms and retail banking microservices instantly via Kubernetes APIs. By providing standardized “Storage-as-Code,” Portworx eliminates the weeks-long lead times associated with traditional SAN/NAS provisioning, accelerating the CI/CD pipeline while maintaining strict Role-Based Access Control (RBAC) and compliance guardrails.

Modern Virtualization:

Consolidate legacy monolithic applications and modern microservices onto a single control plane using Kubernetes virtualization (KubeVirt). Portworx provides the high-performance block storage required for mission-critical VMs - such as legacy ledger systems or risk engines - allowing firms to retire expensive, siloed proprietary hypervisors. This unified data plane enables consistent snapshotting, backup, and DR policies across both containerized and VM-based workloads.

Accelerated AI/ML & Quantitative Modeling:

Power data-intensive AI/ML pipelines - from fraud detection models to real-time sentiment analysis - by ensuring data locality. Portworx intelligently schedules data volumes close to compute nodes to minimize latency and maximize throughput for GPU-accelerated workloads. By automating data movement across hybrid-cloud environments, firms can localize datasets to specific regions for processing, reducing costs and ensuring compliance with data sovereignty laws (e.g., GDPR, CCPA).

- Visit our [website](#) where you can request a [demo of Portworx](#)
- Read [what customers have to say](#) about using Portworx
- [Try Portworx](#) for free



Analyst Validation

Industry analysts have recognized Portworx as a leader in Kubernetes data management. The following quotes reflect the position Portworx has attained in the market:

“Organizations that are running or looking to run mission-critical applications, databases, CI/CD tools, or AI/ML workloads in containers will want to consider Portworx by Pure Storage.” – **IDC**

“Portworx remains the gold standard in cloud-native Kubernetes storage for the enterprise. Portworx is a complete enterprise-grade solution with outstanding data management capabilities, unmatched deployment possibilities, and superior management features.” — **GIGAOM**



What Our Customers Say

We're helping many of the world's largest financial firms build Kubernetes data platforms to accelerate their transformation journeys.

“The impacts of the business are clearly reliable software deployments, where we're deploying more features...this allows developers to get towards multiple deployments perhaps per month, per week.”

—**John Durko, Director of IT, Product Architect, Container Services, Fiserv**

“We needed a (storage) platform that could retain data integrity. That's what brought us to Portworx. It's a valuable platform where we can build at scale.”

—**Steve Lewis, Global Head of Engineering - Container Platforms, HSBC**

Visit Our Website

800.379.PURE

