Accelerate your journey to the cloud

IBM Storage for Red Hat OpenShift unifies traditional and container storage, and provides cloud-native agility with the reliability, availability and security to manage enterprise containers in production.

IBM

Most organizations will operate in a cloud-native environment soon. Container technology will help drive the rapid evolution from applications and data anchored on-premises in siloed systems to apps and data easily moving when and where needed to gain the most insight and advantage.

IBM Storage for Red Hat OpenShift Container Platform is a comprehensive container-ready solution that includes all the elements and expertise needed for implementing the technologies that will drive business in the 21st century.

IBM Storage unifies traditional and container-ready storage, and provides cloud-native agility with the reliability, availability and security to manage enterprise containers in production. As enterprises scale containerized applications beyond experimental or departmental use, IBM's award-winning storage solutions enable mission-critical infrastructure that delivers shared-storage operational efficiency, price-performance leadership and container data protection.

This isn't dreaming in the clouds – this is two industry giants taking giant steps into the future.
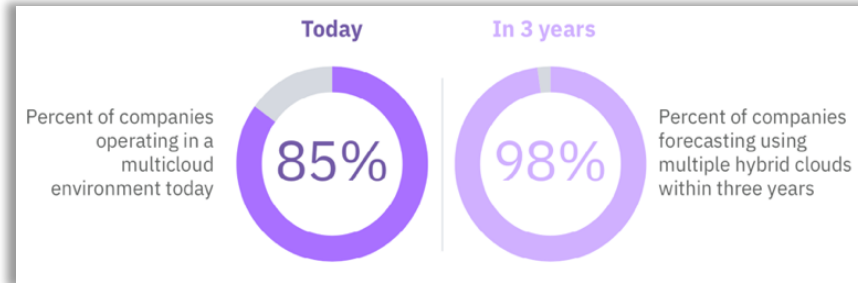
Multicloud drives modern business

Today, 85% of enterprises around the world are operating in a multicloud environment, and in the next few years nearly all will move to this architecture. In the same time frame, the number of installed container instances will surpass four billion.

These are not unrelated trends. In today's deeply interwoven technology and business worlds, implementing container technology is a key to accelerating agility and competitiveness by unlocking the power and potential of private and public cloud environments.

Though multicloud architectures have quickly grown common, and container adoption is accelerating, many challenges still lie ahead for these interwoven technologies. Data has replaced oil as the most valuable resource on the planet, but effectively managing and moving the gushers of it now streaming from dozens of sources remains problematic.

And though multicloud environments are proliferating, 80% of business-critical application workloads have yet to make the transition to the cloud.

Today

Percent of companies operating in a multicloud environment today

85%

In 3 years

98%

Percent of companies forecasting using multiple hybrid clouds within three years

Technologies of the cloud

IBM Storage for Red Hat OpenShift Container Platform is designed specifically to help 21st century enterprises address these data challenges, and many others.

Through integration with the automation capabilities of Kubernetes and IBM Cloud Pak solutions, IBM enables IT Infrastructure & Operations to improve developer speed and productivity, while delivering data reduction, disaster recovery and data availability guarantees.

IBM Storage for Red Hat OpenShift provides a comprehensive, validated set of tools, integrated systems, and flexible architectures that enable your enterprise to implement a modern container-driven hybrid multicloud environment that can reduce IT costs and enhance business agility while continuing to derive value from existing systems. This is how business will work in the 21st century.

IBM Storage for Red Hat OpenShift is designed specifically to help 21st century enterprises address the challenges posed by container technologies and hybrid multicloud environments.

IBM Storage is leveraging open source technologies such as Container Storage Interface (CSI) with Kubernetes to develop a container framework that enables its award-winning storage solutions to be the leading infrastructure and data management layer for Red Hat OpenShift Container Platform.

Containers made simple

Red Hat is the market leader in providing enterprise container platform software. The Red Hat OpenShift Container Platform is an enterprise-ready Kubernetes container platform with full-stack automated operations to manage hybrid cloud deployments. Red Hat OpenShift Container Platform is optimized to improve developer productivity and promote innovation. OpenShift Container Platform provides a security-focused, consistent foundation to deliver applications anywhere, with streamlined developer workflows to get to market faster.

With Red Hat OpenShift, innovators can focus on what matters most: staying competitive and continually exceeding customer expectations.

Red Hat OpenShift Container Platform has everything needed for hybrid cloud, enterprise container, and Kubernetes development and deployments. It includes an enterprise-grade Linux operating system, plus container runtime, networking, monitoring, container registry, authentication, and authorization solutions. These components are tested together for unified operations on a complete Kubernetes platform spanning virtually any cloud.
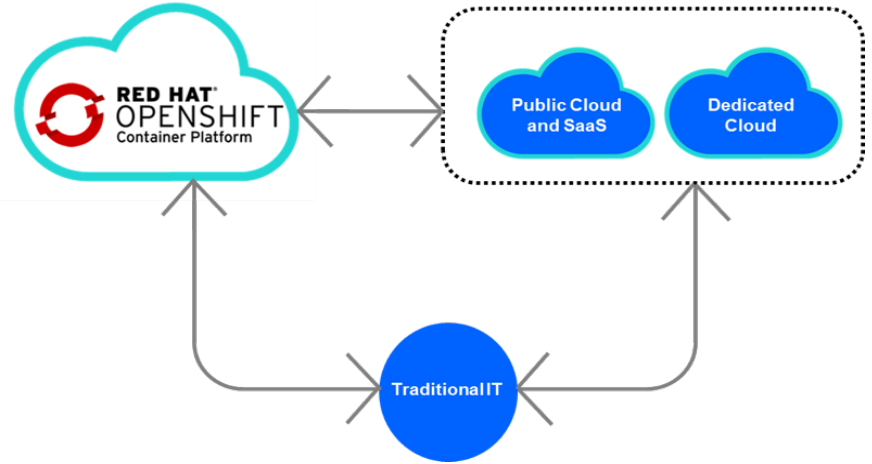
Red Hat OpenShift Container Platform can be used across on-premises and public cloud infrastructures, enabling a hybrid approach to how applications can be deployed as a self-managed solution.

All OpenShift Container Platform variants are available to help accelerate developer productivity and deliver application portability on a consistent foundation across hybrid cloud environments.

Modern, Agile & Secure to the Core

Building cloud-native environments that utilize containers to accelerate application development and deployment requires underlying IT infrastructure elements designed to facilitate modernization, work closely and simply together, and provide a wide range of data management and efficiency features.

IBM Storage for Red Hat OpenShift is designed with the automation capabilities of Kubernetes, supporting IBM Cloud Pak solutions and stand-alone applications for DevOps, database, HPC, analytics and AI.

This solution provides a pre-tested, validated deployment and configuration blueprint designed to facilitate implementation and reduce deployment risks and costs. Everything from best-practice designs to detailed configuration documentation is available to make IBM Storage for Red Hat OpenShift easier and faster to deploy.

IBM Storage for Red Hat OpenShift includes:

- IBM Storage Suite for IBM Cloud Paks for flexible data services
- IBM FlashSystem arrays for hybrid cloud primary storage
- IBM DS8900F for mission-critical container-based applications
- IBM Cloud Object Storage for active archive or cloud native applications
- IIBM Spectrum Scale for high performance file and unstructured data
- IBM Spectrum Discover for metadata management

IBM Storage for Red Hat OpenShift abstracts the complexity of provisioning persistent storage into a simplified model that makes it easy to manage and incorporate into automated processes.

Flexible, high performance storage systems

For organizations operating in Linux environments, IBM Storage for Red Hat OpenShift Container Platform is an ideal choice for orchestrating modernized IT infrastructure and accelerating application development, deployment, and movement. Within Linux frameworks, the solutions can be deployed using many different IBM Storage architectures and elements.

IBM Storage Suite for IBM Cloud Paks is a comprehensive set of software-defined storage solutions that includes data resources for file, object, and block. It includes the open source and enterprise software components necessary to setup and/or expand an IBM Cloud™ Pak and Red Hat OpenShift environment.

IBM FlashSystem family offers the data manageability and protection of IBM Spectrum Virtualize software, the performance and reliability of IBM FlashCore Modules, and the automated data mobility across flash, disk and cloud that lowers CapEx and OpEx for thousands of organizations across the globe. IBM systems deliver flexible storage solutions that enable organizations of all types and sizes to meet the challenges of rapid data growth and constrained IT budgets efficiently and affordably.

IBM DS8900F unifies traditional and cloud native storage, providing the reliability, availability and security to manage mission-critical containers. Additionally, it provides next-level performance, security and resiliency across your hybrid cloud solutions through ultra-low latency, better than seven 9s availability, transparent cloud tiering and advanced data protection against malware and ransomware.

IBM Cloud Object Storage provides cost-effective, highly scalable cloud storage which can be deployed as small as 72TB, or scale to exabytes with data protection and consistent performance not available in open source alternatives.

IBM Spectrum Scale is the high-performance, scalable file system leader supporting the fastest AI, big data and modern analytics installations. Multi-site, multi-cluster solutions for collaboration or availability are readily deployed with IBM ESS or as software-defined storage on private or public clouds such as AWS.

IBM Spectrum Discover is metadata management software, designed to be portable and more flexible across clouds and in any environment supported by OpenShift.

Benefits multiplied

Scalable performance.

IBM Storage provides highly scalable storage systems designed to start small and grow as business needs grow. The powerful data reduction, non-disruptive upgradeability, and high capacity technology provided by these solutions are ideal for cloud native workloads.

Developer speed and productivity.

This solution leverages software-defined tools that help consolidate storage provisioning and configuration to speed cloud-based application deployments. DevOps teams can self-provision pre-defined storage classes that comply with business and application service level agreements.

Container security.

IBM Storage for Red Hat OpenShift Container Platform include tools for deploying highly secure containers with automatic encryption and no code-at-rest, in-flight, host, or operating system interaction. Solution architectures enable selective storage volume mapping to containerized applications to reduce the vulnerability footprint, plus key management with support for FIPS 140-2.

Data Availability.

IBM Storage offers industry-leading capabilities including automated, policy-driven data movement, synchronous and asynchronous copy services, high availability configurations, and intelligent storage tiering. You can benefit from six 9s data assurance and resiliency, as well as 100% data availability guarantee with multi-site options.

Infrastructure agility.

IBM Storage facilitates container-based solutions such as Red Hat OpenShift Container Platform that transforms on-premises storage with cloud efficiency, flexibility, and the ability to consume in an opex-based pricing model. You can automate storage provisioning, data protection and reuse data copies for DevOps, analytics, and reporting.

Learn more

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