



4 nodes enable Fusion Storage to maintain 3 data copies and tolerate one node failure, ensuring continuous VM operation.

Getting the Most from Your Virtual Machine Infrastructure

Virtual Machines (VMs) remain essential for running critical enterprise applications. Ensuring these VMs are deployed efficiently, managed effectively, and supported by resilient, high-performance infrastructure is vital for business operations. As demands evolve, enhancing your VM infrastructure with modern capabilities presents significant opportunities.

Key Considerations for Successful VM Infrastructure:

- **Streamline Deployment:** Accelerate the deployment and updating of VM-based applications.
- **Enhance Operational Efficiency:** Simplify infrastructure management and reduce operational costs.
- **Increase Agility:** Easily support multiple VM environments.
- **Ensure Resilience & Performance:** Provide robust data protection and scalable performance.

Business Value and Benefits

Red Hat OpenShift Virtualization, combined with IBM Fusion Software Storage, offers a modern, integrated platform designed to run and manage your essential VM workloads effectively within the Red Hat OpenShift environment. This powerful combination delivers significant business value:

Key Business Values Delivered:

- **Accelerate VM Deployment and Management:** Leverage automation capabilities and streamlined storage provisioning to define VMs as code for repeatable, faster deployments. Simplify migration planning with integrated tools.
- **Optimize Operational Economics:** Reduce operational overhead by managing VM compute and storage through the unified OpenShift interface. Minimize the need for disparate toolsets and skills.
- **Enable Agile VM Environments:** Quickly provision new VMs and associated storage on demand. Respond faster to changing needs by dynamically adjusting resources, supported by a flexible storage foundation.

Key Benefits Summarized:

- **Accessibility:** Manage both OpenShift Virtualization and IBM Fusion Software Storage from a single GUI.
- **Speed:** Achieve faster VM deployment and update cycles.
- **Efficiency:** Lower operational costs through unified management.
- **Agility:** Easily create and manage multiple VM environments.
- **Resilience:** Protect vital VM data with enterprise-grade storage features.
- **Scalability:** Grow compute and storage resources smoothly as needed.
- **Modernization:** Align your VM management with cloud-native practices for future readiness.

IBM Fusion Software Storage & Red Hat OpenShift Virtualization: The Advantage

Platform Components:

- **Red Hat OpenShift Virtualization:** This utilizes KubeVirt technology to integrate VM management directly into the core Red Hat OpenShift environment. It allows you to run and manage essential Linux and Windows VMs efficiently today. Choosing OpenShift for virtualization provides a powerful platform designed for modern applications, with the built-in capacity to adopt and manage container workloads alongside VMs, ensuring a unified and future-ready infrastructure.
- **IBM Fusion Software Storage:** An enterprise-grade, software-defined storage (SDS) solution specifically engineered and optimized for Red Hat OpenShift environments. It provides a unified storage experience, leveraging proven IBM technologies for high-performance file/object access and scalable block, file, and object storage. It delivers rich data services tightly integrated with OpenShift, including scalable performance, robust data resilience options like replication, and advanced features such as snapshots and cloning. It simplifies storage management within the OpenShift context, providing a reliable foundation for demanding VM workloads.

Advantages:

- **Automation via Infrastructure as Code (IaC):** Define entire VM configurations—including storage volumes provided by Fusion—declaratively for consistent, automated deployments. This accelerates deployment and management.
- **Leveraging Platform Services:** VMs gain access to integrated OpenShift services like robust networking, monitoring, and logging for a consistent operational experience across virtualized and containerized applications.
- **Enhanced Resilience & Performance:** IBM Fusion provides robust data protection through features like replication and efficient data management with snapshots and cloning, ensuring business continuity and performance for critical VM workloads.

Take the Next Step:

Ready to enhance your VM infrastructure with modern management and robust, integrated storage capabilities? Contact IBM, Red Hat, or an authorized partner like Li9 Technology Solutions to explore how OpenShift Virtualization with IBM Fusion Software Storage can optimize your environment.