

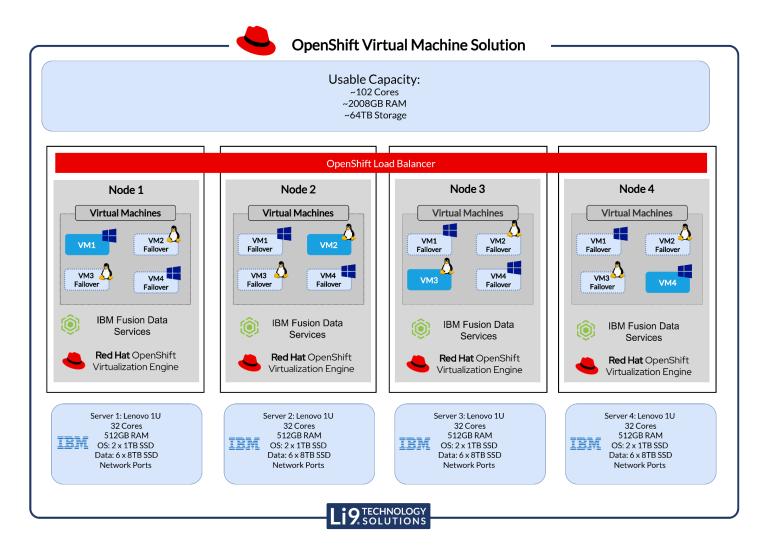


Executive Summary

This solution integrates the **Red Hat OpenShift** with **IBM Fusion Data Services** to deliver a robust, scalable, and highly available infrastructure for managing virtual machines.

Red Hat OpenShift is the industry-leading Kubernetes platform for automating the deployment, management, and scaling of applications across hybrid and multi-cloud environments. Our Pilot solution takes it a step further by integrating IBM Fusion to enhance storage and data protection capabilities. This approach enables you to fully harness the power of OpenShift while streamlining your infrastructure and optimizing costs.

Timeline: 2-4 Weeks



Why Choose OpenShift as Your Core Platform?

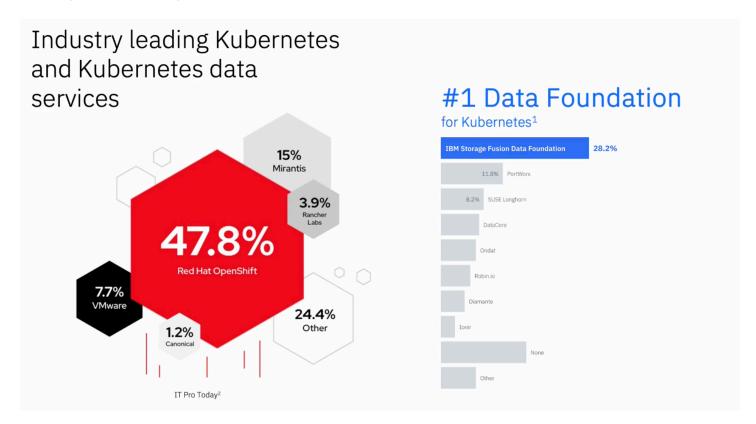
OpenShift provides a comprehensive Kubernetes-based solution that empowers developers and IT teams to rapidly deliver modern applications on a single, consistent platform. It offers built-in security, scalability, and cloud-native automation tools.





Enhancing OpenShift with IBM Fusion Data Services

Recognized as the **#1 top data service for Kubernetes** by The Evaluator Group¹, IBM Fusion adds value by delivering integrated storage and data protection capabilities. By consolidating storage, backup, recovery, and management in one simple-to-use platform, this combination allows you to unify your infrastructure and replace traditional storage and backup solutions like Veeam, Data Domain, etc.



IBM Fusion

Delivering a multi-dimensional consistent experience

	Infrastructure supported	Provisioning modes		Persistence		Raw	File	Block	Object	Multicloud
		Dynamic	Static	Zone	Multi- zone	block RBD	RWX	RWO	S3	gateway
Fusion	Any	√	√	✓	✓	√	√	√	√	✓
NFS	Any	X	✓	X	X	X	√	X	X	X
EBS	AWS only	√	√	✓	X	X	✓	√	X	X
vSphere Volume	VMware only	√	√	X	X	X	✓	~	√ (3rd party)	X





Key Value Propositions:

Accelerate Application Modernization with OpenShift

- **Streamlined Development**: Leverage OpenShift's tools and automation to speed up cloud-native application delivery.
- **Unified Management**: Seamlessly manage workloads across on-premises, public, and multi-cloud environments.
- **Built-In Security**: Ensure robust protection with OpenShift's RBAC, network policies, and compliance features.

IBM Fusion Enhances OpenShift's Core Capabilities

- Persistent Storage: Add resilient storage for stateful applications with Fusion's integrated data services.
- Automated Data Protection: Benefit from built-in backup and disaster recovery, enhancing resilience.

Reduce Costs and Simplify Infrastructure

- Lower TCO: Eliminate the need for separate storage and backup solutions, reducing overall costs.
- **Efficient Resource Use**: Simplify management with a unified platform for storage and data protection.

Deliverables

- 1. **Architecture Design:** High-level design of customers' overall OpenShift environment.
- 2. **OpenShift Cluster:** A fully functional cluster adhering to best practices.
- 3. **Persistent Volumes:** CSI compliant file, block, and object storage.
- 4. **Manage backup policies as code:** Store policies in source code repositories, manage with toolchains.
- 5. **Security & Identity Setup:** Basic security policies and identity management.
- 6. **Sample Application Deployment:** Demonstration of OpenShift functionality.
- 7. **Documentation & Knowledge Transfer:** Overview of architecture, configuration, and operational guidance.





Platform and Subscription Pricing

Li9 can work closely with customers to make platform recommendations based on the solution requirements and can provide any necessary Red Hat Software through traditional subscriptions or Private Offers on Cloud Platforms.

Additional Services for a Full Production Enterprise Solution

Li9 can provide additional services to expand this solution into a full production OpenShift environment, including:

- 1. **Advanced Security Features:** Implementation of role-based access control (RBAC), network policies, and security integration with your existing systems.
- 2. **Monitoring and Logging:** Centralized monitoring and logging solutions for all workloads, ensuring visibility and control.
- 3. **Disaster Recovery:** Design and implementation of disaster recovery strategies with built-in backup and replication features provided by IBM Fusion.
- 4. **CI/CD Pipelines:** Configuration of continuous integration/continuous deployment pipelines to streamline application delivery.
- 5. **Managed Services:** Ongoing management of your OpenShift and IBM Fusion environments, ensuring continuous operation and efficiency.

Next Steps: Start Your OpenShift and Fusion Journey

Contact Li9 Technology Solutions today! We invite you to schedule a consultation with Li9 to discuss your goals and explore how OpenShift can transform your IT operations.





OpenShift with Fusion Data Services Quick Start



References:

- 1. https://community.ibm.com/community/user/storage/blogs/pete-brey/2023/02/24/ibm-and-red-hat-lead-the-industry-for-kubernetes-d
- 2. https://www.itprotoday.com/containerization/who-s-winning-in-the-container-softw are-market