Red Hat Consulting reduces major downtime with Red Hat OpenShift

What does Red Hat OpenShift at scale mean?

It describes a unique architecture that deploys Red Hat OpenShift on top of Red Hat OpenShift, building redundancy that creates fault tolerance for critical workloads.

Overcome modern IT challenges with modern IT infrastructure

Across industries, enterprises grapple with common IT infrastructure challenges that traditional systems cannot address. These challenges include:

Reliability and resiliency assurance

Enterprises cannot afford downtime for their critical workloads. Even short outages can disrupt operations, IT productivity, and end-user experiences. A reliable, highly available, and fault-tolerant infrastructure is integral to revenue generation and customer satisfaction.

Rapid growth and cost management

To keep pace with market demands, organizations must be able to rapidly develop new applications while maintaining existing ones, and ensure high availability for all. They need a robust platform that is capable of hosting workloads on various infrastructures in order to minimize variable costs, especially amidst fluctuating scaling operations.

Fragmentation and friction

IT departments are tasked with establishing an enterprise framework that can facilitate IT automation at scale, spanning hybrid cloud and edge deployments. But without a unified platform, they cannot efficiently create, share, and manage automation processes. Fragmented processes hinder collaboration between cross-functional teams, leading to inefficiencies and delays.

Successfully implement Red Hat OpenShift at scale with Red Hat Consulting

To help solve these IT challenges, enterprises are engaging Red Hat Consulting to implement Red Hat® OpenShift® as the basis of a fault-tolerant and resilient hybrid cloud solution for managing their IT infrastructure.

Red Hat OpenShift is a unified application platform suitable for all types of workloads, including traditional applications, containers and microservices, and virtual machines (VMs). When implemented at scale, Red Hat OpenShift deploys a triplet of purpose-built clusters to host the infrastructure and services required for an additional layer of virtualized clusters. This approach creates a highly available, highly resilient infrastructure.

Paired with the proven expertise of Red Hat Consulting, Red Hat OpenShift goes beyond conventional limits to provide scalability, flexibility, and reliability for enterprises that need to manage large hybrid cloud deployments and host critical applications.

Why work with Red Hat Consulting to implement Red Hat OpenShift?

▸ Customized implementation plans

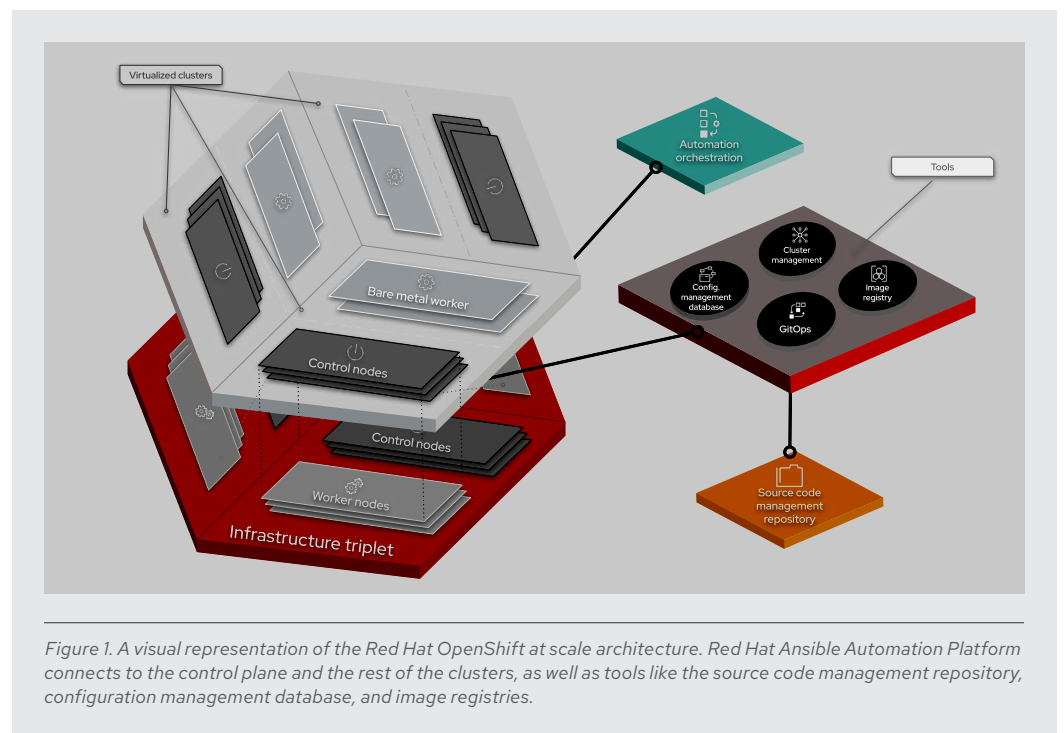▸ Risk mitigation

▸ Comprehensive training

▸ Ongoing support

Red Hat Consulting can help organizations implement this Red Hat OpenShift solution as a strategic asset to address IT challenges and realize the following benefits:

Operational efficiency

Red Hat OpenShift integrates with Red Hat Ansible® Automation Platform and Red Hat Advanced Cluster Management for Kubernetes to support rapid fault recovery, and to automate and simplify everyday workloads, including upgrades, scaling, and life cycle maintenance.

In addition, Red Hat OpenShift can be managed through a single interface, providing centralized control that allows teams to decisively follow an automation path. Portability between on-premise and public cloud environments allows for flexible and consistent operations.

Working with Red Hat Consulting to implement this solution can help organizations reduce reliance on manual health checks, automate deployment tasks (such as complex upgrades and coordination requirements), and streamline operations so that site reliability engineers (SREs) can focus instead on the ongoing observability and reliability of the platform.

Figure 1. A visual representation of the Red Hat OpenShift at scale architecture. Red Hat Ansible Automation Platform connects to the control plane and the rest of the clusters, as well as tools like the source code management repository, configuration management database, and image registries.

Increased resilience

Red Hat OpenShift is a highly resilient platform that provides self-healing and scaling capabilities to minimize the impact of partial application failures. Red Hat Consulting can work with application teams to ensure that resilience is built into their applications, and develop customized Red Hat OpenShift implementation plans that address migration complexities and mitigate risk.

Consistent deployments and simplified upgrades

System upgrades with critical workloads can often feel volatile, with configuration drifts being a potential concern. Red Hat Consulting can collaborate with organizations to simplify upgrades and enhance their focus on compliance and agility in application deployments—all while using automation to reduce the complexity of maintaining a scaling application platform.

Address enterprise IT challenges with custom solutions from Red Hat

Red Hat consultants collaborate with enterprises to address business challenges using Red Hat technologies. Red Hat Consulting blends subject-matter expertise, planning, comprehensive training, and direct collaboration with Red Hat engineering, support, and product teams. Together, Red Hat Consulting and enterprise customers can develop customized, cost-effective solutions that implement Red Hat OpenShift at scale to simplify IT, reduce risk, and meet virtualization goals.

1. **Comprehensive needs assessment**
   Red Hat Consulting starts with a thorough assessment of an organization's needs and objectives. Red Hat consultants collaborate closely with key stakeholders to analyze existing infrastructure and gather requirements for a platform solution. They will also assess Day 2 operations to understand current processes, identify VM workloads and define necessary integrations, and build virtualization use cases.

2. **Customized implementation plans**
   After completing the needs assessment, Red Hat consultants then work alongside an organization's stakeholders to cocreate a customized solution design for Red Hat OpenShift implementation. This collaborative approach ensures that the proposed solution closely aligns with the organization's requirements for a robust and efficient virtualization environment.

3. **Ongoing support**
   Post-implementation, Red Hat Consulting provides ongoing support and collects feedback, creating a cycle of continuous improvement. Through a strategic and collaborative approach, Red Hat Consulting aims to not only solve immediate IT challenges but also contribute to the long-term efficiency and success of an organization.

Connect with Red Hat Consulting to help solve your IT challenges

Combined with the expertise of Red Hat Consulting, Red Hat OpenShift goes beyond a platform to become a reliable, customized foundation for navigating the complexities of modern IT challenges. Explore the architecture to learn more about this unique solution.

For a customized solution that simplifies day-to-day maintenance and helps safeguard your critical workloads, connect with a Red Hat consultant and begin a transformative journey towards operational excellence and resilience.

About Red Hat

Red Hat helps customers standardize across environments, develop cloud-native applications, and integrate, automate, secure, and manage complex environments with award-winning support, training, and consulting services.