Simplify Red Hat OCP Deployments with Cisco and Hitachi Adaptive Solutions for Converged Infrastructure

Simplify container adoption with a high-performance, reliable, validated solution

IT is a vital asset for modern digital organizations. Consequently, IT teams must deliver infrastructure and applications swiftly and consistently across complex hybrid environments to support rapid development and deployment. They also need to modernize applications and workloads to better engage customers, partners, and employees, thereby achieving business objectives.

Over 60 percent of enterprises have adopted Kubernetes, and this number is projected to surge past 90 percent by 2027.[1] Hybrid and multicloud environments, cloud-native applications, and containers are essential elements in the path to successful digital operations.

Red Hat OpenShift Container Platform (Red Hat OCP) can help organizations modernize and transform efficiently and effectively by consolidating required components—including

application executables, microservices, libraries, and configuration files—on shared infrastructure. Speed and precision are crucial, so selecting a solution that offers performance, consistency, flexibility, and security is important.

However, researching, testing, and integrating all the associated components can be challenging and time-consuming. As industry leaders, Cisco and Hitachi offer innovative, tested, and integrated joint solutions, saving organizations time and money. The Cisco and Hitachi Adaptive Solution for Converged Infrastructure with Red Hat OpenShift Container Platform combines compute, networking, storage, containers, and management to support application modernization in hybrid-cloud environments. This solution follows design best-practices to streamline deployment, ensure component compatibility, and automate operations.

Benefits

- **Accelerate the deployment of infrastructure and containers** with a validated solution designed to support application modernization

- **Increase efficiency and infrastructure utilization** with a container-based solution that delivers performance, flexibility, and security

- **Take advantage of gold-standard leadership** and operate with confidence using solutions backed by three decades of proven experience from Cisco and Hitachi

[1] https://datahubanalytics.com/kubernetes-adoption-and-market-trends/#:~:text=Over%2060%25%20of%20enterprises%20have,significance%20%5BKubernetes%20Adoption%20Statistics%5D

Solution components

The Cisco and Hitachi Adaptive Solutions for Converged Infrastructure with Red Hat OpenShift Container Platform solution provides a complete architecture that includes:

- **Cisco Unified Computing System™ (Cisco UCS) X-Series** modular blade servers

- **Cisco Nexus 9000 Series** and **Cisco MDS** switches

- **Cisco UCS 6536 Fabric Interconnects**

- **Cisco Intersight** IT operations platform

- **Hitachi Vantara VSP 5600**

- **Hitachi Ops Center**

- **VMware ESXi 8.0**

- **Red Hat OpenShift Container Platform**

This solution integrates, validates, and automates key components to enable quick deployment while mitigating risks associated with in-house development. Cisco UCS servers, switches, and interconnects provide efficient data-center infrastructure with high-density compute, storage, and networking. Cisco Intersight enhances infrastructure configuration and visibility across clouds. Hitachi Vantara VSP 5600 storage arrays ensure superior performance and reliability for critical data management and

protection, while Hitachi Ops Center simplifies data management. Red Hat OpenShift offers a unified, enterprise-ready application platform with full-stack automated operations for managing multicloud and hybrid-cloud deployments. Utilizing containers, it supports rapid building, deploying, running, and managing applications at scale with security. Red Hat OpenShift enables staff to modernize and innovate, supporting business initiatives consistently across hybrid and multicloud environments. Integration with Cisco® and Hitachi components ensures a high-performance, scalable, and secure solution for current and future needs.
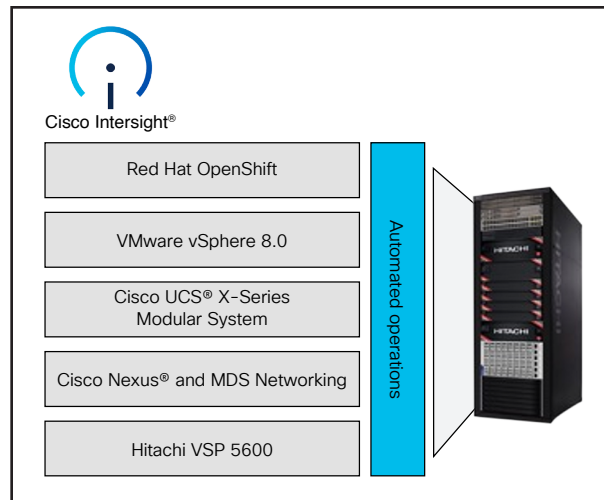

Figure 1.   Cisco and Hitachi Converged Infrastructure for Red Hat OpenShift Container Platform Solution Stack

Learn more

For information on Cisco and Hitachi Adaptive Solutions for Converged Infrastructure, visit the following sites:

- **Cisco and Hitachi Adaptive Solutions for Converged Infrastructure**

- **Cisco Validated Designs with Hitachi**