kyndryl

Boost cost-efficiency, visibility and responsiveness with migration services to Red Hat® OpenShift® Virtualization

Many organizations are adopting cloud-native technologies such as containerization to drive agility, scalability and innovation. However, those same organizations typically continue to run critical applications on virtual machines (VMs) on conventional hypervisor platforms.

Following a change in ownership of one of the largest hypervisor platforms and the resulting uncertainty around future terms, many customers are reconsidering their strategies and exploring alternative technologies. Even if the long-term direction is to replace VMs with containers, many organizations currently want or need to run both in the same environment.

Customer challenges

Organizations are reassessing their virtualization platforms and strategies to ensure consistency, efficiency and support for their future operations and cloud-based applications. Some of their challenges include:

- **Migration complexity:** VM administrators need a solution that enables effortless migration of existing virtual machines to a new platform with minimal risk of disrupting current workloads and services.
- **IT modernization barriers:** Existing solutions may limit an organization's ability to modernize, hindering the capacity for innovation.
- **Management complexity:** Organizations that run both container and virtual machine infrastructures are experiencing increasing complexity. Administrators often have to adopt separate platforms, tools and processes to manage them effectively.
- **Delivery speed:** Managing separate platforms for VMs and containers slows down workload deployment between them.
- **Training and resource investment:** Organizations will need to increase their investment to balance multiple platforms and train resources on these platforms.

Solution highlights

Red Hat® OpenShift® Virtualization includes Red Hat OpenShift and is based on Kernel-based Virtual Machine (KVM) and the Kubevirt open-source projects. This solution enables organizations to create, migrate and manage virtual machines on a consistent, comprehensive and trusted platform that supports application modernization and cloud-native innovation.

Powered by containers, Kubernetes and DevSecOps capabilities, Red Hat OpenShift serves as a foundation for swiftly building, deploying and running both traditional and cloud-native applications at scale, while ensuring security across hybrid, multi-cloud and edge environments. OpenShift Virtualization simplifies the migration process for both Linux® and Microsoft Windows virtual machines, providing comprehensive tools and automation features.

Red Hat OpenShift Virtualization is the modern option for general-purpose virtualization and allows customers to migrate to a virtualization platform for the future:

- Unified platform virtual machines and containers
- Consistent management tools, interfaces and APIs including ACM and AAP integrations
- Performance and stability of Linux, KVM and qemu
- Open community KubeVirt project is a top 10 CNCF active project, with 200+ contributing companies[1]
- Diverse ecosystem of Red Hat and partner operators
- Included feature of all OpenShift subscriptions (OpenShift Kubernetes Engine/OpenShift Container Platform/OpenShift Platform Plus)
- Includes Red Hat Enterprise Linux guest entitlements*
- Support for Microsoft Windows guests through Microsoft SVVP
- Inbound guest migration using Ansible Automation Platform plus Migration Toolkit for virtualization, training and consulting

*This is not included in OVE (is included in all other versions).

Modernize for efficiency and growth

- Kyndryl's migration and modernization solution provides a viable long-term alternative to traditional hypervisor platforms with comparable features and pricing.
- Kyndryl helps customers migrate critical enterprise workloads from a traditional hypervisor platform to Red Hat OpenShift Virtualization.
- Customers can use Red Hat OpenShift to run their containerized workloads alongside migrated VMs on Red Hat OpenShift Virtualization.

By working with Kyndryl to consolidate, migrate and modernize their most critical VM workloads, customers can achieve:

- A single governance structure from top to bottom for both VMs and containerized workloads
- Improved visibility of workloads
- More responsive systems
- Enhanced automation and tooling
- A future-ready business model

Kyndryl's detailed discovery, wave-plan execution and scale-out of modernization patterns help customers to automate their migration to the Red Hat OpenShift Virtualization platform.

In addition, customers can tap into Kyndryl's deep expertise in containerization to help move their containerized workloads to Red Hat OpenShift, creating a single, easy-to-manage hybrid platform for all critical systems.

As the leading provider of managed Red Hat solutions, Kyndryl has a wealth of experience, best-practice frameworks and intellectual property in this domain.

Our integrated portfolio of services around Red Hat helps customers maximize the value of their past investments while innovating for a more cost-effective and agile future.

For more information go to the Kyndryl and Red Hat alliance page. Or visit kyndryl.com

kyndryl

1 *Reaching escape velocity for OpenShift Virtualization*, Red Hat Blog, August 2024