

5 reasons to migrate VMs using solutions from Red Hat and AWS

Recent disruptions in virtualization have left many IT leaders looking for alternative solutions, but some are hesitant to make the move due to migration complexity. This checklist outlines why IT leaders should consider [Red Hat® OpenShift® Virtualization on Red Hat OpenShift Service on AWS](#) as their new virtualization environment, and how [Red Hat Ansible® Automation Platform Service on AWS](#) helps organizations streamline migration and ongoing management.

1 Migrate to a cloud-native platform

[OpenShift Virtualization](#)—a standard feature of Red Hat OpenShift—provides a cloud-native platform that:

- ▶ Maximizes existing virtualization investments, while also offering cloud-native architectures, streamlined management, and new development approaches. This is made possible with support for both traditional virtual machines (VMs)—including both Microsoft Windows and Red Hat Enterprise Linux® VMs—and containerized applications.
- ▶ Delivers a consistent management experience on premise and in cloud environments.
- ▶ Offers self-service capabilities for deploying preapproved, security-compliant VMs.

2 Rely on managed support

Red Hat OpenShift Service on AWS and Ansible Automation Platform Service on AWS are both fully managed offerings available in the AWS Console and/or AWS Marketplace (and eligible to be [purchased with existing committed spend](#)), which helps organizations:

- ▶ Get started sooner with platform configuration handled by Red Hat and AWS.
- ▶ Free up administrators and operations teams from routine platform management tasks with Red Hat and AWS site reliability engineers (SRE) teams jointly handling those responsibilities.
- ▶ Operate confidently with 24x7 support services, the assistance of SREs from Red Hat and AWS, and a defined service level agreement (SLA).

3 Streamline migration with tools from Red Hat and AWS

Moving VMs to [OpenShift Virtualization on Red Hat OpenShift Service on AWS](#) with automation capabilities from Ansible Automation Platform Service on AWS helps streamline VM migration by:

- ▶ Facilitating migration at scale by automating the migration of large numbers of VMs at the same time and enforcing all pre- and post-migration checks.
- ▶ Automatically connecting to supporting infrastructure and tooling in the current estate.
- ▶ Orchestrating migration and provisioning of VMs with the broader IT ecosystem to check that networking, storage, and other AWS services are properly coordinated with the VM deployments.
- ▶ Providing automation content for other virtualization platforms that helps make sure everything on the source platform has been properly shut down and that all necessary backups have been completed before the migration is complete.

OpenShift Virtualization supports live migration, which minimizes downtime during VM migration by allowing workloads to be moved without having to be shut down.

Organizations using OpenShift Virtualization also have access to the [Migration Toolkit for Virtualization](#) to further guide them through key migration steps and help them save time and minimize potential errors.

4 Automate Day 2 operations for consistency

Following a VM migration, there are many Day 2 operations that can be automated with Ansible Automation Platform Service on AWS, including:

- ▶ Operating system (OS)-level and application-level compliance, patching, upgrading, and configuration management in migrated workloads.
- ▶ Network, database, and virtual private cloud (VPC) configuration.
- ▶ Management of the complete VM lifecycle, including virtualization redeployment and the deployment and removal of new fleets of VMs.
- ▶ Removing any existing automation agents from previously used automation platforms.
- ▶ Installing applications on new deployments.
- ▶ Ongoing compliance management, including monitoring virtualized environments to identify compliance drift and remediate any issues.
- ▶ Creating automated service tickets through an integrated IT Service Management (ITSM) platform, such as ServiceNow.

While Red Hat OpenShift Service on AWS and Ansible Automation Platform Service on AWS are both fully managed, the OpenShift Virtualization controller is self-managed, which makes these capabilities even more valuable.

5 Support the complete modernization journey

A platform migration can often be the initial step in a larger modernization effort. OpenShift Virtualization on Red Hat OpenShift Service on AWS supports the complete modernization journey by:

- ▶ Providing a fully cloud-native application platform with all the necessary capabilities to modernize VM-based applications, including support for cloud-native technologies and artificial intelligence and machine learning (AI/ML) workloads.
- ▶ Offering common processes and integrated tools from both AWS and OpenShift for virtualized and containerized workloads—while also allowing for the use of modern application development processes and tools—so that organizations can continue to run their traditional VMs and modernize applications and approaches at their own pace.
- ▶ Allowing developers to build, create, and modify application infrastructure in a controlled environment with a focus on security.
- ▶ Offering access to Red Hat’s partner ecosystem, which includes a range of services to meet any modernization needs, as well as solutions for backup and recovery, networking, and storage, all certified for Red Hat OpenShift Virtualization.

Learn how

[Try this walkthrough](#) to learn how to migrate to OpenShift Virtualization with Ansible Automation Platform.

Contact us

[Speak to a Red Hatter](#) to discuss your organization’s virtualization platform and VM migration needs.



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