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# With OpenShift Virtualization, Red Hat offers an array of 'Alt-V' paths

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The "VMware alternative" lobby is getting noisier across all of the domains where virtual machines, virtualization and VMware are present. As part of its recent Summit: Connect 2024 Europe, Middle East and Africa, Red Hat foregrounded several Alt-V options for organizations seeking to migrate VMs off of VMware.



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### Introduction

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#### THE TAKE

Vendors are aiming to capitalize not only on a perceived opportunity created by VMware's sale to Broadcom Inc. and the ensuing swath of changes around licensing, pricing partnerships and distribution that are impacting enterprise IT decision-making, but also more broadly on the replatforming to modern cloud-native approaches to IT estates. The ubiquity of virtualization and the incumbency of VMware means that most vendors are both suppliers of virtualization and partners to VMware. However, many see sufficient opportunity to foreground alternative approaches in hopes of attracting customers leaning in to the notion of swapping out either or both — or at least complementing deployments with cloud-native architecture.

## Details

Red Hat has a raft of recommendations and a smaller number of "golden paths" to help customers migrate VMs off of VMware. For organizations shifting from VMware's standard Virtual Datacenter deployments, Red Hat positions OpenShift Virtualization (which is a set of tools rather than a product) as the golden path. OpenShift is a platform for both containers and VMs.

KubeVirt is included in OpenShift for Kubernetes teams that also have existing VM-based workloads that cannot be easily containerized. It is a unified development platform for developers to build and deploy applications in containers and VMs in a common, shared environment. Additionally, KubeVirt supports the transition to OpenShift Virtualization adminstration for operations personnel. In OpenShift Virtualization, the compute nodes hosting VMs need to be bare metal — the control plane, other infrastructure nodes and other compute nodes can be virtual.

OpenShift Virtualization is offered as an operator (the standard method for packaging, deploying and managing a Kubernetes application) that is included with OpenShift subscriptions. It enables infrastructure architects to create and add virtualized applications to projects from OperatorHub (from which operators can be installed) in the same way they would for a containerized application.

Red Hat says existing virtual machines can be migrated from other platforms onto the OpenShift application platform using free migration tools. The resulting VMs will run alongside containers on the same OpenShift nodes. OpenShift Virtualization adds new objects to a Red Hat OpenShift cluster via custom resources to enable virtualization tasks such as creating and managing Linux and Windows VMs; connecting to VMs via user interface and command-line interface tools; importing and cloning existing VMs, including VMware, vSphere and Red Hat Virtualization VMs; managing network interface controllers and storage disks attached to VMs; and live migrating VMs between nodes.

For customers invested in VMware Cloud Foundation or complex NSX use cases, Red Hat says there are numerous alternatives. The company recommends working consultatively through its global systems integrator partners or others such as Dell Technologies Inc., AWS and Nutanix Inc. (for example, migrating and modernizing to OpenShift on the AHV Nutanix Acropolis Hypervisor).

Red Hat suggests that clients migrating from VxRail or another hyperconverged infrastructure/application should use OpenShift Virtualization on Dell APEX (a golden path) or Nutanix via an SI partner. For customers moving from VMware Cloud on AWS, it proposes OpenShift Virtualization on ROSA (Red Hat OpenShift on AWS, another golden path) or AWS EC2 VMs. Finally, for clients shifting more specialized niche workloads or those that have unusual requirements, it recommends OpenStack.

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