

Tech Day the Netherlands

Workshop

OpenShift Virtualization Advanced

Operations and Automation with OpenShift Virtualization

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What we'll cover



Enabling Basic Day to Day Operations

Security and compliance, configuring network policies, and automated VM management.



Real World Scaling Scenario

Assess and triage a high-use scenario and mediate it through various scaling operations.



Scaling to the Moon with Ansible

Interactive Scenario



Enabling Basic Day to Day Operations

- ▶ Creating a Dynamic Inventory for OpenShift Virtual Machines
- ▶ Security and Compliance Using the OpenShift Compliance Operator
- ▶ Configure Network Policies to Manage VM Traffic
- ▶ Enable and Explore Alerts, Graphs, and Logs
- ▶ Automated VM Management



Real World Scaling Scenario

- ▶ Examining Resource Utilization on Virtual Machines
- ▶ Horizontally Scaling VM Resources
- ▶ Vertically Scaling VM Resources
- ▶ Discussing Swap/Memory Overcommit
- ▶ Scaling a Cluster By Adding a Node



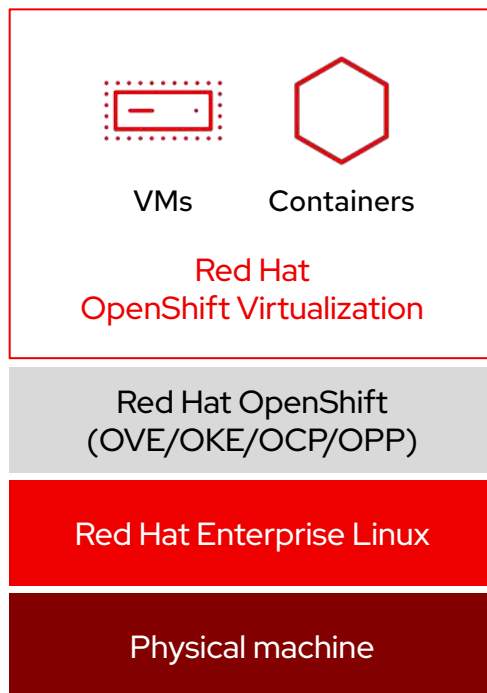
Scale to the Moon

- ▶ Example Scenarios Created by the Lab Team



Red Hat OpenShift Virtualization

The modern option for general purpose virtualization



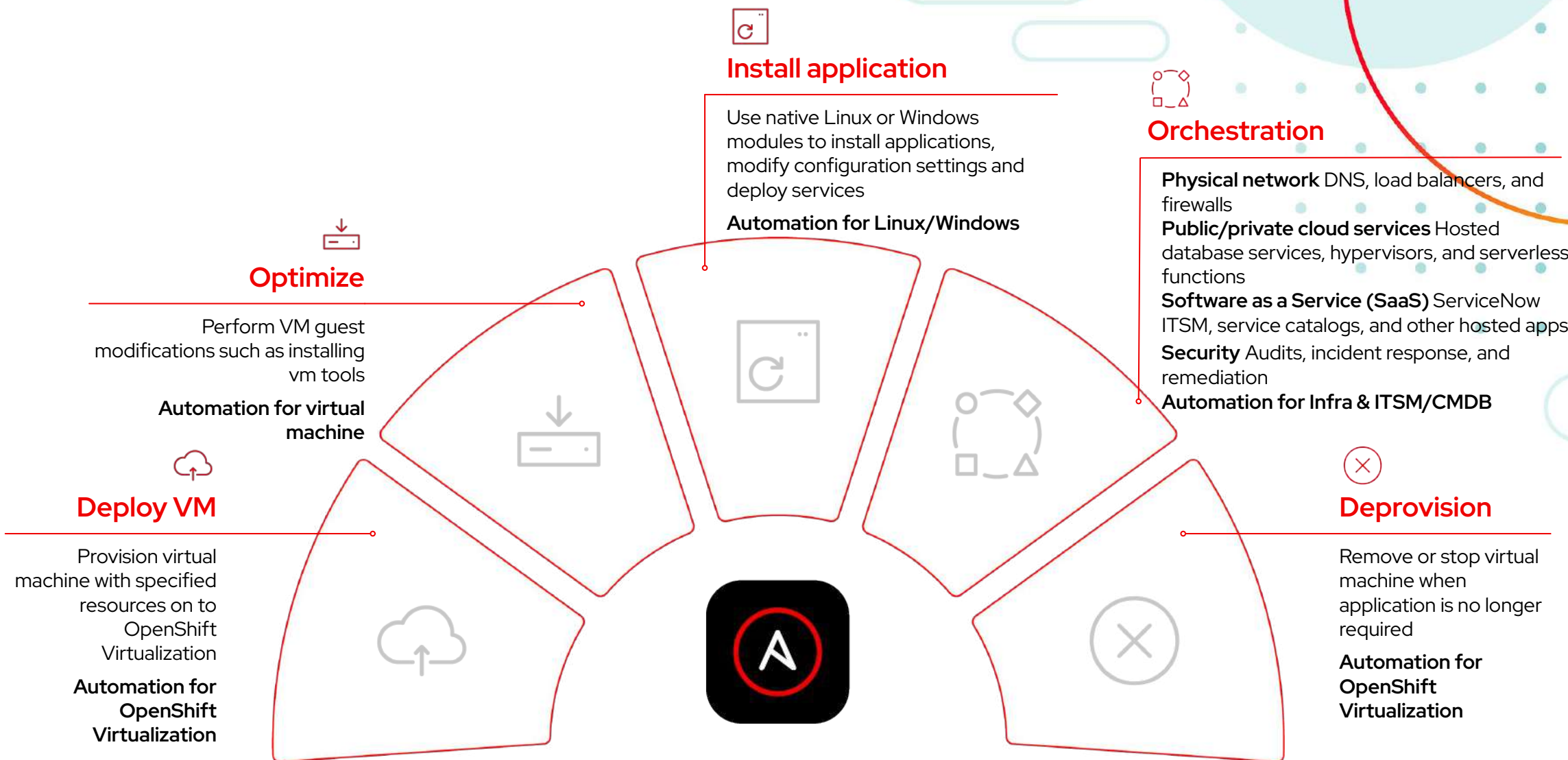
- ▶ **Unified platform**
for virtual machines and containers*
- ▶ **Consistent management**
tools, interfaces, and APIs incl. ACM and AAP integrations
- ▶ **Performance and stability**
of Linux, KVM, and qemu
- ▶ **Healthy open source community**
the KubeVirt project is a top 10 CNCF active project, with 200+ contributing companies
- ▶ **Diverse ecosystem**
of Red Hat & partner operators
- ▶ **Included feature**
of all OpenShift subscriptions (OVE/OKE/OCPP/OPP)
- ▶ **Includes Red Hat Enterprise Linux**
guest entitlements*
- ▶ **Supports Microsoft Windows**
guests through Microsoft SVVP
- ▶ **Inbound guest migration**
using Ansible Automation Platform + Migration Toolkit for Virtualization, Training and Consulting
- ▶ **Virt admin focused training**
[DO316](#), [EX316](#)

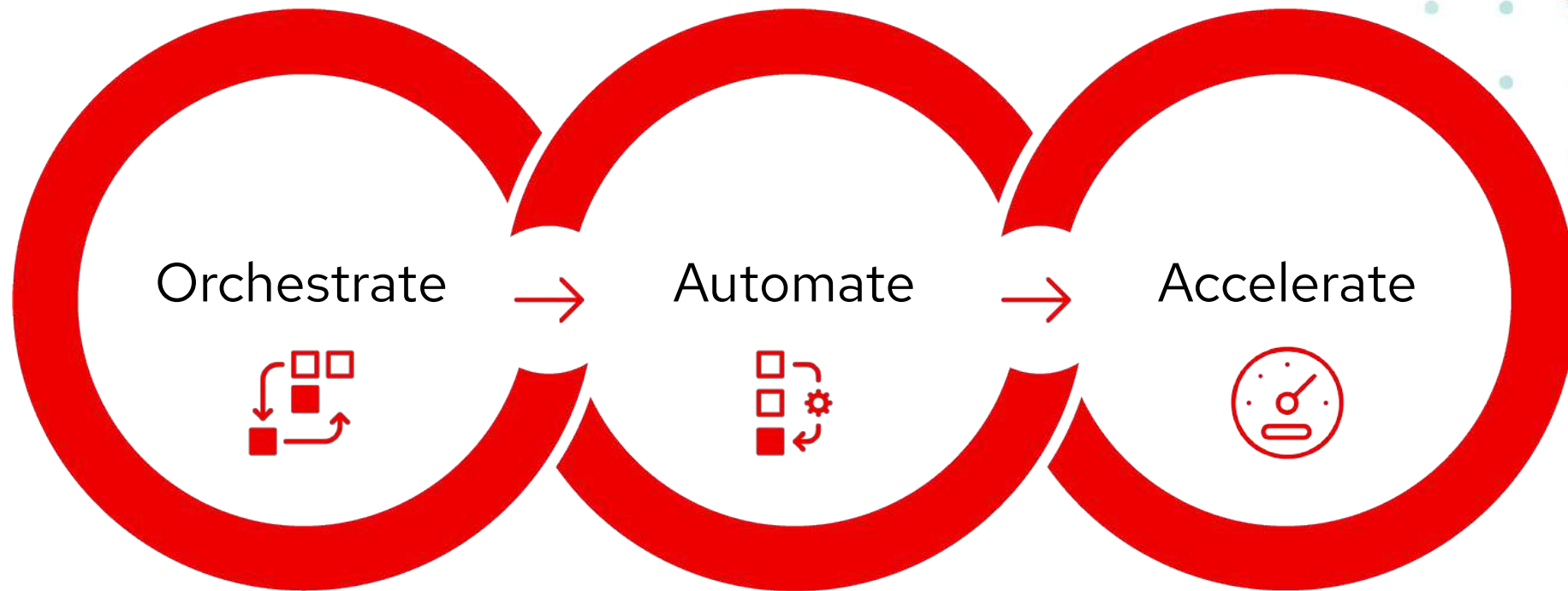
*excluding OVE which is virtual machines only and includes no RHEL guest entitlements



Red Hat Ansible Automation Platform & OpenShift Virtualization

Automating the virtualized application lifecycle







The Workshop

► Let's get busy...



The screenshot shows a web browser displaying the workshop guide. The page has a dark header with the Red Hat Summit logo, AnsibleFest branding, and the title 'lb1969: Day 2 Operations and Automation with OpenShift Virtualization'. A sidebar on the left lists the table of contents, including 'Introduction', 'Enabling Basic Day to Day Operations', 'Creating a Dynamic Inventory for OpenShift Virtual Machines', 'Security and Compliance Using the OpenShift Compliance Operator', 'Configure Network Policies to Manage VM Traffic', 'Enable and Explore Alerts, Graphs, and Logs', 'Automated VM Management', 'Real World Scaling Scenario', 'Scale to the Moon', and 'Conclusion'. The main content area features a large heading 'Welcome to Day 2 Operations and Automation with OpenShift Virtualization!' followed by an 'Introduction' section. The introduction text states that OpenShift Virtualization enables bringing virtual machines onto a modern, Kubernetes-based infrastructure, and Ansible Automation Platform allows platform engineering and DevOps teams to create, manage, and scale automation across physical, cloud, virtual, and edge environments. A 'Contents' sidebar on the right lists: Introduction, Who Will Benefit Most from attending this Lab?, What Content is Covered in this Lab?, Requirements for the Lab Environment, Credentials for the OpenShift Console and Ansible Automation Platform, and Version Information. The page also includes a section titled 'Who Will Benefit Most from attending this Lab?' and a definition for 'Virtual Machine Administrators'.

Day 2 Operations and Automation with OpenShift Virtualization / Introduction

Welcome to Day 2 Operations and Automation with OpenShift Virtualization!

Introduction

OpenShift Virtualization enables you to bring virtual machines onto a modern, Kubernetes-based infrastructure. It enables the development and delivery of new applications as well as the modernization of existing ones and can create applications that consist of virtual machines, containers, and serverless functions – all managed together using Kubernetes-native tools and paradigms.

Ansible Automation Platform allows platform engineering and DevOps teams to create, manage, and scale automation across physical, cloud, virtual, and edge environments. With Ansible Automation Platform, you can drive consistency and manage compliance with automated workflows that span infrastructure, network components, applications, storage, security, ITSM, and more.

Together these tools can be leveraged to provide an excellent solution to host, and to ease management of all of the workloads in your data center, whether they be physical or virtual.

In this lab, which is a follow-up to our very popular **Experience OpenShift Virtualization Roadshow**, we intend to equip you with the knowledge and tools to manage your environment and perform critical operational tasks often required of virtual machine administrators from day-2 onward. This ensures that your virtualized workloads are efficiently managed and maintained long after the initial deployment.

Who Will Benefit Most from attending this Lab?

Virtual Machine Administrators – Those responsible for day to day management of virtual guests in

Contents

- Introduction
- Who Will Benefit Most from attending this Lab?
- What Content is Covered in this Lab?
- Requirements for the Lab Environment
 - Credentials for the OpenShift Console and Ansible Automation Platform
- Version Information

Guide

1. Follow the guide
2. Read carefully
3. Questions?? Just ask...



Takeaways

- ▶ Day to day operations on OpenShift Virtualization
- ▶ Automate with Ansible Automation Platform
- ▶ Quick feel for Microsegmentation and Compliance
- ▶ Observe, troubleshoot and manage Virtual Machines
- ▶ Real world scaling scenarios on OpenShift Virtualization

Please provide feedback

- ▶ <https://red.ht/day2feedback>



red.ht/day2feedback



Invitation to our next In-house event

Modernize your infrastructure with Red Hat OpenShift Virtualization

Wednesday 2 July 2025
Red Hat Office | Amsterdam



redhat.com/events



Next steps

Learn more

Sign up for
"Experience OpenShift Virtualization Roadshow"
in a city near you



red.ht/3F7jRLo

Get started with
"Red Hat OpenShift Virtualization"
E-book



red.ht/3GZphZI



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