

VMware vRealize Automation: Install, Configure, Manage [V7.0]

Overview: During this five-day course, you will focus on installing, configuring, and managing VMware vRealize® Automation™. You will learn about the configuration and use of the vRealize Automation platform, including self-service provisioning and the creation of catalog services that include predefined virtual machines, software components, and on-demand VMware NSX® networks. This course also covers interfacing vRealize Automation with other systems, using VMware vRealize® Orchestrator™ to leverage workflows, and creating approval cycles and managing machine lifecycles to conserve resources. In addition, you will better understand and know how to achieve the benefits of automation as a component of the software-defined data center.

Objectives: By the end of the course, you should be able to meet the following objectives:

- Describe the vRealize Automation architecture and use cases
- Install and configure vRealize Automation
- Manage vRealize Automation entities on VMware and third-party virtual, cloud, and physical infrastructures
- Configure and manage catalogs and blueprints
- Configure and manage business groups and reservations for compute resources on VMware, Microsoft, Amazon, and other platforms
- Use the self-service portal to request and manage machines in accordance with vRealize Automation approval and governance policies
- Explain vRealize Automation extensibility and workflows
- Manage and monitor machines and resource reclamation

Intended Audience: Experienced system administrators and system integrators responsible for designing and implementing VMware Horizon® solutions

Prerequisites: This class requires completion of one of the following:

- [VMware vSphere 6.x: Install, Configure, Manage](#)
- [VMware vSphere 6.x: Fast Track](#)
- Equivalent knowledge and administration experience with VMware ESX®/VMware ESXi™ and VMware vCenter Server™ Experience with working at the command line is helpful.

The course material presumes that a student can perform the following tasks with no assistance or guidance before enrolling in this course:

- Install and configure ESX/ESXi
- Install vCenter Server
- Create vCenter Server objects, such as data centers and folders
- Create and manage vCenter Server roles and permissions
- Create and modify a standard switch
- Create and modify a distributed switch
- Connect an ESX/ESXi host to NAS, iSCSI, or Fibre Channel storage
- Create a VMware vSphere® VMFS datastore
- Enable VMware vSphere® vMotion® on an ESX/ESXi host
- Use a wizard or a template to create a virtual machine
- Modify a virtual machine's hardware

- Configure and manage a VMware vSphere® Distributed Resource Scheduler™ cluster with resource pools
- Configure and manage a VMware vSphere® High Availability cluster

If you are unable to complete all of these tasks, VMware recommends that you complete one of the prerequisite courses before enrolling in VMware vRealize Automation: Install, Configure, Manage.

Outline:

1 Course Introduction

- Introductions and course logistics
- Course objectives

2 vRealize Automation Overview and Architecture

- Describe the software-defined data center
- Explain the purpose of vRealize Automation
- Explain the concepts of vRealize Automation administration and self-service provisioning
- Describe where vRealize Automation fits in the VMware product line
- Discuss use cases for vRealize Automation
- Identify the components of a vRealize Automation simple deployment
- Identify the components of a vRealize Automation enterprise deployment
- Identify the component design options for vRealize Automation
- Identify how vRealize Automation integrates with other VMware products

3 Authentication, Fabric, and Tenants

- Describe identity management in vRealize Automation
- Identify the authentication methods available in vRealize Automation
- Identify the appropriate roles for specific tasks in vRealize Automation
- Create tenants
- Explain multitenant leading practices
- Define relationships between vRealize Automation entities
- Identify and configure vRealize Automation endpoints
- Identify how vRealize Automation discovers compute resources
- Identify fabric groups, business groups, and reservations
- Create and manage reservations for compute resources

4 Converged Blueprints and Catalog Management

- Define blueprints
- Identify the process and options for configuring a blueprint
- Create a blueprint with a single virtual machine
- Create a blueprint with multiple virtual machines
- Identify the role of the service catalog
- Define catalog items
- Use entitlements to manage catalog items

5 Consuming Catalog Services

- Request a single-machine service
- Monitor the service provisioning status
- Reconfigure a provisioned machine
- Manage snapshots
- Identify roles involved in creating approval policies

- Identify approval phases
- Create and apply approval policies for catalog items
- Use custom properties to modify the provisioning process
- Use property groups to group sets of custom properties
- Use the property dictionary to modify the provisioning process

6 Integrating VMware NSX

- Understand VMware NSX capabilities
- Describe the VMware NSX components that vRealize Automation uses
- Describe the benefits of VMware NSX integration with vRealize Automation
- Integrate vRealize Automation and VMware NSX
- Use VMware NSX elements in vRealize Automation blueprints

7 Application Authoring

- Understand the lifecycle of a vRealize Automation Application deployment
- Author an application blueprint
- Deploy an application blueprint from the service catalog

8 Monitoring and Reclamation

- Identify how to monitor resource use
- Demonstrate how to reclaim resources
- Demonstrate how to manage machine leases
- Monitor system events

9 vRealize Automation Extensibility

- Identify the vRealize Automation extensibility tools
- Identify the vRealize Automation extensibility use cases
- Use vRealize CloudClient to export a blueprint
- Use vRealize Orchestrator
- Use vRealize Orchestrator plug-ins for external integration
- Describe anything-as-a-service (XaaS) components
- Create an XaaS blueprint
- Describe how the event broker service enhances extensibility
- Identify the appropriate subscription types and options for a subscription
- Describe the two event broker event types
- Identify the three event broker phases
- Illustrate the master workflow
- Describe the necessary requirements for passing custom properties to workflows
- Explain how the event broker helps with day 2 operations

10 vRealize Automation Installation

- Explain the vRealize Automation installation prerequisites
- Describe the vRealize Automation installation procedure
- Perform a vRealize Automation appliance deployment
- Configure the vRealize Automation appliance