### COURSE OVERVIEW - VMWARE VREALIZE AUTOMATION: ICM 8.0

During this five-day course, you will focus on installing, configuring, and managing VMware vRealize<sup>®</sup> AutomationTM. You will gain an understanding on how to use vRealize Automation to automate the delivery of virtual machines, applications, and personalized IT services across different data centers and hybrid cloud environments.

The course covers how to manage both on-premise systems and cloud services and how vRealize Automation Service Broker can aggregate content in native formats from multiple clouds and platforms into a common catalog. You will learn how to interface vRealize Automation with other systems using VMware vRealize® OrchestratorTM and how to use vRealize Automation to manage Kubernetes systems and leverage other systems.

This course makes heavy use of hands-on labs. Students can run 39 labs during the 5-day course.

#### **COURSE OBJECTIVES**

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

- Describe the vRealize Automation architecture and use cases in cloud environments
- o Manage vRealize Automation entities on VMware and third-party virtual and cloud infrastructures
- Configure and manage Cloud Accounts, Projects, Flavor Mappings, Image Mappings, Network Profiles, Storage Profiles, Volumes, Tags, and Services
- o Create, modify, manage, and deploy Blueprints
- Connect to a Kubernetes Cluster and manage images and deployments
- o Customize services and virtual machines with cloudConfig
- o Configure and manage the Service Broker
- Configure and manage ABX actions, custom properties, event broker subscriptions, and VMware vRealize® OrchestratorTM workflows
- Integrate with vRealize Orchestrator
- Install vRealize Automation with VMware vRealize® Suite Lifecycle ManagerTM
- o Describe Cloud Automation Services (Cloud Assembly and Code Stream).
- Use logs and CLI commands to monitor and troubleshoot vRealize Automation

## TARGET AUDIENCE

Experienced system administrators and system integrators responsible for designing and implementing vRealize Automation

## **PREREQUISITES**

This course requires completion of one of the following courses:

- VMware vSphere: Install, Configure, Manage [V6.x]
- VMware vSphere: Fast Track [V6.x]

Experience working at the command line is helpful.

This course requires that a student be able to perform the following tasks with no assistance or guidance before enrolling in this course:

- Create VMware vCenter Server® objects, such as data centers and folders
- Create a virtual machine using a wizard or a template
- Modify a virtual machine's hardware
- Migrate a virtual machine with VMware vSphere<sup>®</sup> vMotion<sup>®</sup>
- Migrate a virtual machine with VMware vSphere<sup>®</sup> Storage vMotion<sup>®</sup>
- Configure and manage a vSphere DRS cluster with resource pools.
- Configure and manage a VMware vSphere<sup>®</sup> High Availability cluster.

If you cannot perform all of these tasks, VMware recommends that you complete one of the prerequisite courses before enrolling in VMware vRealize Automation: Install, Configure, Manage.

### **COURSE DELIVERY OPTIONS**

- Classroom
- Live Online
- Onsite

### **PRODUCT ALIGNMENT**

- VMware vSphere 6.7 U2
- VMware vRealize Automation 8.0
- VMware vRealize Orchestrator 8.0
- VMware vRealize® Suite Lifecycle Manager™ 8.0
- VMware NSX-T™ Data Center 2.4

# **Course Modules**

#### 1 Course Introduction

- · Introductions and course logistics
- Course objectives

### 2 vRealize Automation Overview and Architecture

- Describe the purpose and functionality of vRealize Automation
- $\bullet$  Describe the vRealize Automation architecture  $\bullet$  Describe the use of VMware Workspace  $\mathsf{ONE}^{\circledR}$  Access  $\mathsf{TM}$
- Describe the relationship between Kubernetes clusters, containers, and vRealize Automation services
- Describe CLI commands for vRealize Automation 8 cluster management
- Describe Cloud Assembly
- Describe Service Broker
- Describe Code Stream

#### 3 vRealize Automation Installation

- List the different vRealize Automation deployment types
- Explain the purpose of vRealize easy installer
- Recognize the vRealize Automation installation process

### 4 Authentication and Authorization

- Identity the steps involved in integrating Workspace One with Active Directory
- Recognize features of Workspace One
- Recognize the user roles available in vRealize Automation
- · Identify the key tasks performed by each user role

### 5 Basic Initial Configuration

• Quickly create a basic configuration with a cloud account, cloud zone, project, flavor mapping, and image mapping

#### 6 Creating and Deploying a Basic Blueprint

- · Configure a basic blueprint
- · Deploy a basic blueprint

# 7 Tags and Storage Configuration

- Configure tags
- Configure storage profiles
- Describe volumes
- Use tags and storage profiles in a blueprint

### 8 Advanced Blueprints

- · Use YAML coding in blueprints, including user inputs, text formatting, and conditional expressions
- Create a blueprint for multiple clouds
- · Use iterative design and version control in blueprints

### 9 Integrating NSX-T Data Center

- List the capabilities and use cases of NSX-T Data Center
- Describe the NSX-T Data Center architecture and components
- Integrate NSX-T Data Center with vRealize Automation
- List the supported network profiles in vRealize Automation
- Use NSX-T Data Center components to design a multitier application blueprint
- · Identify the network and security options available in design canvas

#### 10 Cloud Accounts

- Configure and use an AWS cloud account
- Configure and use an Azure cloud account
- Configure and use a Google Cloud Platform cloud account

#### 11 Service Broker

- Describe the use case of Service Broker
- Define content source and content sharing
- Define Service Broker policy enforcement
- · Use custom forms for catalog items

# 12 Customization of Blueprints

- · Describe cloudConfig and Cloud-Init
- · Create vSphere virtual machine templates that can be used with Cloud-Init
- Use cloudConfig to customize the hostname
- · Use cloudConfig to create users
- Use cloudConfig to install software
- Use cloudConfig to manage the power state
- Use cloudConfig to format disks and mount volumes

### 13 vRealize Automation Extensibility

- · Describe ABX actions
- · Set custom properties
- Create event topics
- · Create subscriptions
- · Create and use workflows
- Integrate vRealize Automation with vRealize Orchestrator

#### 14 vRealize Automation and Kubernetes

- Describe Kubernetes
- Integrate vRealize Automation with Kubernetes clusters

## 15 vRealize Automation Monitoring, Logs, and Troubleshooting

- Describe different vRealize Automation log files
- Troubleshoot vRealize Automation
- Replace a vRealize Automation service pod
- Snapshot the vRealize Automation appliance

Contact If you have questions or need help registering for this course, click here