VMware vRealize Automation: Orchestration and Extensibility [V7.x]

Duration: **5 Days**

Overview:

In this five-day course, you explore the use of VMware vRealize® Orchestrator™ 7.4 and VMware vRealize® Automation™ 7.4 for the automation of VMware cloud infrastructure and IT processes. This course focuses on extensibility and advanced administration, using vRealize Orchestrator workflows in vRealize Automation. You gain practical experience through the completion of hands-on labs.

Pre-requisites:

This course requires the following prerequisites:

- Knowledge of VMware vSphere
- VMware vRealize Automation: Install, Configure, Manage [V7.3] course or equivalent knowledge
- Working knowledge of scripting or programming using JavaScript, Windows PowerShell, Perl, Java, Python, or similar languages

Audience:

Experienced VMware administrators, automation and orchestrations specialists, systems integrators, and private cloud and public cloud administrators

Module 1: Course Introduction

Lessons:

- Introductions and course Logistics
- Course Objectives

Module 2: Enterprise Cloud Architecture and Components

Lessons:

- Extending Enterprise Systems
- Unified Self-service Portal Components
- Converged Blueprint concepts
- vRealize Orchestrator Overview

Module 3: vRealize Orchestrator Workflow Basics

Lessons:

- vRealize Orchestrator Workflows
- Logs in Workflows
- Workflow Variables
- Parameter Binding

Module 4: vRealize Orchestrator Workflow Design Considerations

Lessons:

- Configuration and Resources Elements
- Scriptable Tasks and Actions
- User Interactions
- Input Presentation

Module 5: Developing vRealize Orchestrator Workflows

Lessons:

- Decision Elements and Switch Elements
- Debugging vRealize Orchestrator Workflows
- Creating Loops in Workflows
- Calling vRealize Orchestrator Workflows
- Handling Exceptions

Module 6: Introduction to vRealize Orchestrator Extensibility

Lessons:

- Introduction to Extensibility
- vRealize Automation Components and Functionality
- NSX On-Demand Components

Course Completion:

After completing this course, students will be able to:

- Describe the features, benefits, components, and integration of vRealize Orchestrator and vRealize Automation
- Describe the role of vRealize Orchestrator workflows and content elements in automation
- Use the vRealize Orchestrator client to access and navigate the vRealize Orchestrator platform and to import and run library vRealize Orchestrator workflows
- Design, develop, and run custom reusable vRealize Orchestrator workflows
- Use VMware APIs in vRealize Orchestrator workflow scripts
- Integrate vRealize Automation with vRealize Orchestrator instances to extend infrastructure-as-a-server (IaaS) machine lifecycle processes and enhance and deliver custom IT services
- Use XaaS to extend vRealize Automation into other enterprise systems
- Use the vRealize Automation Event Broker to trigger specific vRealize Orchestrator workflows

Module 7: Extending vRealize Automation with Event Broker

Lessons:

- Event Broker Overview
- Event Broker Functionality
- Event-based processes
- Information Exchange Between Event Broker and vRealize Orchestrator

Module 8: Unified Services in vRealize Automation

Lessons:

- XaaS Blueprints and Actions
- vRealize Automation Form Designer

Module 9: API Tools

Lessons:

- API Interfaces Overview
- vRealize Orchestrator REST API Plug-In
- vRealize CloudClient