



# VMware vRealize Automation Orchestration and Extensibility

vmware EDUCATION SERVICES

## VMware vRealize Automation Orchestration and Extensibility

### Course Overview

During this five-day course, you focus on using VMware vRealize® Orchestrator™ to extend the functionality of VMware vRealize® Automation™. You learn how to provide XaaS (Anything as a Service) and implement Machine Lifecycle Extensibility using the vRealize Automation Event Broker. You also learn how to create vRealize Orchestrator workflows. Features include basic scripting implementation along with logic processing to implement a variety of functions to use in your environment. This course teaches implementing debugging, loops, conditions, and user interactions in vRealize Orchestrator.

The course introduces the new vRealize Orchestrator HTML 5 interface, along with API calls and REST functions, to give the groundwork to implement a variety of plugins and scripts. This course was designed to give you the tools to craft custom solutions in the product.

### Course Objectives

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

- Describe the features and benefits of integrating 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
- Use the vRealize Orchestrator client to import and run vRealize Orchestrator library workflows
- Design, develop, and run custom reusable vRealize Orchestrator workflows
- Integrate vRealize Automation with vRealize Orchestrator to deliver custom IT services
- Use the vRealize Automation event broker service to trigger specific vRealize Orchestrator workflows
- Leverage the event broker to extend IaaS (Infrastructure-as-a-service) machine life cycle processes
- Use XaaS (Anything as a Service) to extend vRealize Automation into other enterprise systems
- Use VMware APIs to run vRealize Orchestrator workflows

### Target Audience

Experienced VMware administrators, automation and orchestration specialists, system integrators, and private cloud and public cloud administrators

### Prerequisites

This course requires the following prerequisites:

- Knowledge of VMware vSphere®
- [VMware vRealize Automation: Install, Configure, Manage \[V7.x\]](#) course or equivalent knowledge
- Working knowledge of scripting or programming using JavaScript, Windows PowerShell, Perl, Java, Python, or similar languages. All code is provided during class.

### Course Delivery Options

- Classroom
- Live Online
- [Onsite](#)

### Product Alignment

- VMware vSphere 6.7 U2
- vRealize Automation 7.6
- vRealize Orchestrator 7.6
- vRealize Cloud Client 4.7.0
- NSX for vSphere 6.4.4



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- vRealize Orchestrator 7.6
- vRealize Cloud Client 4.7.0
- NSX for vSphere 6.4.4

## Course Modules

### 1 Course Introduction

- Introductions and course logistics
- Course objectives

### 2 Enterprise Cloud Architecture and Components

- Describe how to extend enterprise systems
- Define the purpose of vRealize Automation
- Outline the purpose of vRealize Orchestrator

### 3 vRealize Orchestrator Workflow Basics

- Create vRealize Orchestrator workflows
- Use logs in vRealize Orchestrator workflows
- Use variables in vRealize Orchestrator workflows
- Use parameter bindings in vRealize Orchestrator workflows

### 4 vRealize Orchestrator Workflow Design Considerations

- Apply configuration elements in vRealize Orchestrator workflows
- Use resource elements in vRealize Orchestrator workflows
- Construct scriptable tasks in vRealize Orchestrator workflows
- Create vRealize Orchestrator actions
- Implement user interactions in vRealize Orchestrator
- Change user interaction with input presentation

### 5 Developing vRealize Orchestrator Workflows

- Implement decision elements and switch elements in vRealize Orchestrator workflows
- Use switch elements in vRealize Orchestrator workflows
- Employ debugging in vRealize Orchestrator workflows
- Use loops in vRealize Orchestrator workflows
- Explain exception handling in vRealize Orchestrator workflows

### 6 Introduction to vRealize Automation Extensibility

- Outline vRealize Automation components and functionality
- Implement extensibility in vRealize Automation
- Use NSX on-demand components in blueprints

### 7 Extending vRealize Automation with Event Broker

- Describe how the event broker enhances extensibility
- Explain event broker functionality
- Discuss event-based processes
- Illustrate the master workflow
- Demonstrate how information exchange occurs between event broker and vRealize Orchestrator

### 8 Unified Services in vRealize Automation

- Create and request XaaS blueprints
- Use XaaS actions to provide day 2 operations
- Use form designer to enhance user interaction
- Use custom forms to enhance user interaction

### 9 API Tools

- Describe the API interfaces available in vRealize Orchestrator
- Use vRealize Orchestration Rest API
- Use vRealize Cloud Client

## Contact

If you have questions or need help registering for this course, click [here](#).



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 [www.vmware.com](http://www.vmware.com)

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