

# VMware Aria Automation Orchestration and Extensibility

## [v8.13]

**Course Duration: 40 Hours**

**Course code: VM-VRAOE13**

## 1. Course Overview

During this five-day course, you focus on using VMware Aria Automation Orchestrator™ to extend the functionality of VMware Aria Automation™.

You learn how to provide XaaS (Anything as a Service) and implement machine lifecycle extensibility using the VMware Aria Automation Event Broker. You also learn how to create VMware Aria Automation Orchestrator workflows and VMware Aria Automation ABX actions.

## 2. What you'll learn?

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

- Describe the features, benefits, components, and integration of VMware Aria Automation Orchestrator and VMware Aria Automation
- Describe the role of VMware Aria Automation Orchestrator workflows and content elements in automation
- Use the VMware Aria Automation Orchestrator client to access and navigate the VMware Aria Automation Orchestrator platform, and to import and run VMware Aria Automation Orchestrator library workflows
- Design, develop, and run custom reusable VMware Aria Automation Orchestrator workflows
- Use VMware APIs in the VMware Aria Automation Orchestrator workflow
- Integrate VMware Aria Automation with VMware Aria Automation Orchestrator instances to extend infrastructure as a service (IaaS) system life-cycle processes and to enhance and deliver custom IT services

- Use anything as a service (XaaS) to extend VMware Aria Automation to other enterprise systems
- Use the VMware Aria Automation Event Broker service to trigger specific VMware Aria Automation Orchestrator workflows

### 3. Target Audience

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

### 4. Pre-Requisites

**Before taking this course, you should have completed the following course:**

- VMware Aria Automation: Install, Configure, Manage [V8.17] course or equivalent knowledge

**You should also have the following understanding or knowledge:**

- Knowledge of VMware vSphere®
- Working knowledge of scripting or programming using JavaScript, Windows PowerShell, Perl, Java, Python, or similar languages. All code is provided during class.

### 5. Course content

#### Module 1 Course Introduction

- Introduction and course logistics
- Course objectives

## Module 2 Overview of VMware Aria Automation and VMware Aria Automation Orchestrator

- Define the purpose of VMware Aria Automation
- Outline the purpose of VMware Aria Automation Orchestrator
- Describe the main components of VMware Aria Automation
- Describe the main components of VMware Aria Automation Orchestrator

## Module 3 Using Schema Elements

- Describe a scriptable task
- Run a Polyglot script from a VMware Aria Automation Orchestrator workflow
- Invoke JavaScript from a VMware Aria Automation Orchestrator workflow
- Invoke a VMware Aria Automation Orchestrator workflow from a VMware Aria Automation Orchestrator workflow
- Invoke an action from a VMware Aria Automation Orchestrator workflow
- Use VMware Aria Automation Orchestrator workflows synchronously and asynchronously

## Module 4 Working with Variables

- Define inputs, outputs, and variables in VMware Aria Automation Orchestrator workflows
- Bind variables in VMware Aria Automation Orchestrator workflows
- Explain the purpose of binding in VMware Aria Automation Orchestrator workflows
- Use Wrapping in VMware Aria Automation Orchestrator workflows
- Use APIs and the API Explorer
- Create actions in VMware Aria Automation Orchestrator
- Use VMware Aria Automation Orchestrator input forms
- Manage user interactions in VMware Aria Automation Orchestrator

## Module 5 Handling Exceptions, Logging, and Debugging

- Identify the function of exception handling
- Handle exceptions in VMware Aria Automation Orchestrator workflows
- Use logs in VMware Aria Automation Orchestrator workflows
- Debug VMware Aria Automation Orchestrator workflows
- Monitor variable values

## Module 6 Branching and Looping

- Use decision schema element for branching in VMware Aria Automation Orchestrator workflows
- Use switch schema element for branching in VMware Aria Automation Orchestrator workflows
- Use loops in VMware Aria Automation Orchestrator workflows

## Module 7 Working with Assets

- Create and use configuration elements in VMware Aria Automation Orchestrator
- Use resource elements in VMware Aria Automation Orchestrator
- Create and use packages in VMware Aria Automation Orchestrator

## Module 8 Working with Plug-Ins

- Explain the functionality of VMware Aria Automation Orchestrator plug-ins
- Download and install plug-ins
- Use the SSH plug-in in VMware Aria Automation Orchestrator
- Use the REST plug-in in VMware Aria Automation Orchestrator
- Use the VMware Aria Automation plug-in in VMware Aria Automation Orchestrator
- Use the PowerShell plug-in in VMware Aria Automation Orchestrator
- Use dynamic types in VMware Aria Automation Orchestrator

## **Module 9 Working with Versioning and Git**

- Manage versioning in VMware Aria Automation Orchestrator
- Use Git in VMware Aria Automation Orchestrator

## **Module 10 Working with Time-Related Schema Elements**

- Use scheduling in VMware Aria Automation Orchestrator
- Use sleeping in VMware Aria Automation Orchestrator
- Use waiting in VMware Aria Automation Orchestrator

## **Module 11 Introduction to Extensibility**

- Introduction to VMware Aria Automation extensibility
- Explain Event Broker Service
- Explain life cycle integration

## **Module 12 Using the Event Broker**

- Explain the functionality of the Event Broker Service
- Overview of VMware Aria Automation Event Broker
- Create VMware Aria Automation subscriptions
- Data exchange between VMware Aria Automation and VMware Aria Automation Orchestrator

## **Module 13 Using ABX Actions**

- Overview of Action Based Extensibility (ABX)
- Describe Function as a Service (FaaS)
- Differentiate between VMware Aria Automation Orchestrator and ABX
- Create an ABX action that is called by a VMware Aria Automation subscription

## **Module 14 Working with Services, Resource Actions, and Custom Resources**

- Describe the service broker service

- Use VMware Aria Automation Orchestrator as a content source in VMware Aria Automation
- Create resource actions in VMware Aria Automation
- Create custom resources in VMware Aria Automation

### **Module 15 Capturing the vSphere Client Code**

- Use the vSphere Client code capture to capture code in VMware Aria Automation Orchestrator workflow, JavaScript, PowerCLI or other languages
- Use the captured code in VMware Aria Automation Orchestrator workflows or actions

