Course Overview
This five-day course teaches experienced VMware vSphere® administrators how to use the powerful automation tools that all vSphere customers have access to. Using real-world use cases and examples, you will learn how to automate day-to-day administration tasks with VMware vSphere® PowerCLI™ and VMware vRealize® Orchestrator™. During class, you will use these tools to automate tasks in a realistic lab environment.

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

- Describe the features and benefits of automation in a vSphere environment
- Understand the role of the vSphere Web Services API in automation
- Use the Managed Object Browser (MOB) to view the structure of VMware vSphere® API and VMware vCenter Server® inventory
- Use vSphere PowerCLI to deploy and manage virtual machines and virtual infrastructure
- Run and manage library vRealize Orchestrator workflows
- Design, develop, and run custom reusable vRealize Orchestrator workflows
- Incorporate JavaScript into vRealize Orchestrator workflows
- Select the appropriate tool for automating day-to-day tasks in vCenter Server

Target Audience
Experienced vSphere administrators who want to use available tools to automate day-to-day tasks

Prerequisites
Completion of the following course or equivalent experience with vSphere deployments:

- VMware vSphere: Install, Configure, Manage [V6.0]

Certifications
No certifications are tied to this course.

Course Delivery Options
- Classroom
- Live Online
- Onsite

Product Alignment
- vSphere PowerCLI 6.0
- vRealize Orchestrator 7.0
Course Modules

1 Course Introduction
   - Introductions and course logistics
   - Course objectives

2 Automation in vSphere
   - Identify the tools available to vSphere administrators for automation
   - Understand the benefits of automation
   - Understand the function of black boxes in programming

3 vSphere API
   - Identify the function of an API
   - Recognize the components of the vSphere Web Services API
   - Understand how the vSphere Web Services API is used by automation tools
   - Understand object-oriented terminology relevant to the vSphere Web Services API
   - Use the MOB to explore the vSphere object model and invoke methods

4 vSphere PowerCLI Basics
   - Describe features of vSphere PowerCLI
   - List common tasks to perform with vSphere PowerCLI
   - Connect vSphere PowerCLI to vCenter Server and VMware ESXi™ hosts
   - Define variables to use in vSphere PowerCLI
   - Use basic vSphere PowerCLI cmdlets
   - Describe features of the command pipeline
   - Examine vSphere PowerCLI objects
   - View vSphere PowerCLI object properties
   - Invoke vSphere PowerCLI object methods

5 vSphere PowerCLI Use Cases
   - Perform day-to-day management tasks with vSphere PowerCLI

6 Advanced vSphere PowerCLI concepts
   - Examine View objects with the Get-View cmdlet
   - Convert View objects to VIObjects
   - Invoke vSphere Web Services API methods
   - Use the Onyx tool to capture vSphere PowerCLI code

7 vRealize Orchestrator Basics
   - Identify vRealize Orchestrator components
   - Understand the function of plug-ins

8 Developing vRealize Orchestrator Workflows
   - Identify and use common vRealize Orchestrator workflow elements
   - Implement vRealize Orchestrator workflow nesting
   - List methods for calling other workflows in vRealize Orchestrator workflows
   - Identify the information required to develop a workflow
   - Use the vRealize Orchestrator workflow scripting debugger

9 vRealize Orchestrator Advanced
   - Create basic decision loops in workflows
   - Use a for-each loop in a workflow
   - Understand how exceptions are handled in vRealize Orchestrator
   - Use action elements in workflows
   - Capture JavaScript with Onyx and use it in a workflow

10 vRealize Orchestrator Use Case
    - Create a workflow that deploys multiple virtual machines according to a customer specification

11 vRealize Orchestrator PowerShell Plug-In
    - Add Windows PowerShell hosts to the vCenter Server inventory
    - Invoke scripts on Windows PowerShell hosts
    - Create Windows PowerShell workflows

12 Guest Operations with vRealize Orchestrator and vSphere PowerCLI
    - Understand the architecture of virtual machine guest operations
Data Center Automation with vRealize Orchestrator and vSphere PowerCLI

- Identify the requirements for using guest operations
- Perform guest operations with vRealize Orchestrator and vSphere PowerCLI

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