Enterprise Computing Solutions - Education Services

TRAINING OFFERING

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VMware Data Center Automation with vRealize Orchestrator and vSphere PowerCLI

CODE:	LENGTH:	PRICE:
VM-DCAVROP-OE	40 Hours (5 days)	$4,250.00

Description

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.

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

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]

Programme

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
• Add a vCenter Server instance to the vCenter Server plug-in
• List the components of a workflow
• Create a vCenter Server object with a library workflow
• Distinguish between workflow variable types
• Create a simple workflow
• Create workflow input and output parameters
• Set a workflow input parameter as an attribute
• Understand the role of binding in workflows
• Use a library workflow in a new workflow
• Use the setup wizard to perform parameter binding
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
• Identify the requirements for using guest operations
• Perform guest operations with vRealize Orchestrator and vSphere PowerCLI

Session Dates

On request. Please Contact Us

Additional Information

This training is also available as onsite training. Please contact us to find out more.