

VMware vSphere: Automation with vSphere PowerCLI

Overview

This hands-on training course introduces the use of VMware vSphere™ PowerCLI to automate VMware vSphere 4. This course demonstrates ways to automate tasks that can reduce your IT costs while improving efficiency, availability, flexibility, and manageability.

Course Objectives

By the end of the course, you should understand how to use vSphere PowerCLI to perform the following tasks:

- Automate VMware® ESX™ configuration
- Automate the provisioning of virtual machines
- Automate changes to virtual machine configuration
- Automate cluster operations
- Automate reporting

Target Audience

This course is designed for technical persons responsible for managing ESX, VMware ESXi, and VMware vCenter™ Server, including IT managers, system architects, and system administrators.

Prerequisites

System administration experience on Microsoft Windows or Linux operating systems and completion of either the VMware vSphere: Install, Configure, Manage or the VMware vSphere: Fast Track course. Also scripting experience in one of the following languages: Windows PowerShell, Windows PowerShell, VBScript, Perl, UNIX shell scripts, Python, or other languages with variables and control structures.

Pricing and Scope

- Two (2) days of instructor-led classroom training
- 40% lecture, 60% hands-on lab
- Individual enrollment available at convenient locations worldwide: <http://www.vmware.com/education>
- Contact your VMware representative for pricing information.
- Onsite training available for companies that want the benefits of an instructor-led classes without travel
- Contact VMware Education to discuss facility requirements for onsite training at education@vmware.com.

Course Outline

Module 1: Course Introduction

Module 2: Introduction to vSphere PowerCLI

- Define the main vSphere PowerCLI object
- Define the main commandlets in vSphere PowerCLI
- Connect to a vSphere infrastructure
- Get help for commandlets

Module 3: Automating ESX Host Configuration

- Automate configuration of virtual switches on ESX hosts
- Automate configuration of datastores on ESX hosts

Module 4: Virtual Machine Provisioning, Configuration, and Protection

- Automate creation of virtual machines
- Change virtual machine settings programmatically
- Run vSphere PowerCLI scripts in virtual machines
- Automate virtual machine protection

Module 5: Automating Cluster Operations

- Automate virtual machine storage migration
- Automate VMware vMotion™
- Create a VMware Distributed Resource Scheduler/VMware High Availability cluster
- Automate cluster configuration
- Automate resource pool creation and configuration

Module 6: Automating Reporting

- Automate reporting about virtual machines
- Automate reporting about ESX hosts
- Automate reporting about clusters



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