

VMware PowerCLI for vSAN Workshop

Course Overview

In this three-day class, you learn to use VMware PowerCLI™ to automate major VMware vSAN™ tasks. You learn the basics of the vSphere Web Services API, which is the central interface through which all VMware automation tasks can be performed. You gain hands-on knowledge about installing and configuring PowerCLI and learn the basic and advanced syntax. You also learn how to automate various tasks, such as reporting, health checks, configuration, maintenance, and troubleshooting of a vSAN cluster by using PowerCLI cmdlets.

Course Objectives

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

- Identify the function of an API and the Managed Object Browser (MOB)
- Explain the basics of PowerCLI
- Describe the structure of PowerCLI objects
- Describe how to use PowerCLI cmdlets
- Describe how to write a script
- Explain the concept of loops in PowerCLI
- Perform advanced PowerCLI operations like Get-View
- Describe the fundamentals of vSAN
- Use cmdlets to run a report on vSAN
- Use cmdlets to configure the settings in vSAN
- Use cmdlets to troubleshoot vSAN and describe the syntax
- Describe advanced concepts with the vSAN management API

Target Audience

VMware vSAN administrators who want to automate their tasks like reporting, health checking, configuration, maintenance, and troubleshooting a vSAN cluster by using PowerCLI cmdlets

Prerequisites

Knowledge of VMware vSphere® and vSAN is required. Programming or scripting experience would be helpful.

Course Delivery Options

- Classroom
- [Onsite](#)

Product Alignment

- vSAN 6.7
- VMware ESXi™ 6.7
- VMware vCenter Server® 6.7
- PowerCLI 10.x/11

Course Modules

1 Course Introduction

- Introductions and course logistics
- Course objectives

2 vSphere Web Services API

- Identify the function of an API
- Recognize the components of the vSphere Web Services API
- Explain how the vSphere Web Services API is used by automations tools
- Define object-oriented terminology relevant to the vSphere Web Services API
- Use the MOB to explore the vSphere object model
- Invoke methods through the MOB

3 PowerCLI Basics

- Describe features of PowerCLI
- Describe the installation of PowerCLI on different platforms
- Connect PowerCLI to vCenter Server and ESXi hosts
- List common tasks to perform with PowerCLI
- Explain the basics of PowerCLI objects like cmdlets, variables, pipeline, and so on
- Describe the structure of PowerCLI objects like properties, methods, and nested properties
- Describe how to use PowerCLI cmdlets to manipulate the constructs in a vSphere environment
- Describe how to write a script
- Explain the concept of loops to automate repetitive procedures in a script
- Describe the loops with syntax examples including foreach, if-else, while loop, and the switch statement

4 Advanced PowerCLI Concepts

- Use Get-View to return view objects
- Convert view objects to VIOjects
- Invoke vSphere Web Services API methods

5 PowerCLI for vSAN

- Explain the cmdlets to run a report on vSAN and describe the syntax
- Explain the cmdlets to configure the settings in vSAN and describe the syntax
- Explain the cmdlets to troubleshoot vSAN and describe the syntax
- Explain the cmdlets to configure iSCSI LUNs on vSAN and describe the syntax
- Describe how to use Get-Vsanview to access the vSAN management API

Contact

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



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