# TRAINING OFFERING

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Kronborgsgränd 7, 164 46 Kista

Email: edu.ecs.se@arrow.com
Phone: +46 8 555 188 00

# VMware Data Center Automation with vRealize Orchestrator and vSphere PowerCLI

| CODE: | LENGTH: | PRICE: |
|---|---|---|
| VMW_DCAVROP | 40 Hours (5 days) | kr43,000.00 |

## 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® PowerCLIâ„¢ and VMware vRealize® Orchestratorâ„¢. During class, you will use these tools to automate tasks in a realistic lab environment.

Product Alignment

- vSphere PowerCLI 6.0
- vRealize Orchestrator 7.0

## 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

### Module 1 Course Introduction

- Introductions and course logistics
- Course objectives

### Module 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

**Module 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

**Module 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

**Module 5 vSphere PowerCLI Use Cases**

- Perform day-to-day management tasks with vSphere PowerCLI

**Module 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

**Module 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

**Module 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

**Module 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

**Module 10 vRealize Orchestrator Use Case**

- Create a workflow that deploys multiple virtual machines according to a customer specification

**Module 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

**Moodule 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

På begäran, kontakta oss

## Ytterligare information

Denna utbildning finns också som utbildning på plats. Kontakta oss för mer information.