

# VMware vSphere: Skills for Operators [V6]

# **Course Details**

## **Course Outline**

#### 1. Course Introduction

- Introductions and course logistics
- Course goals and objectives
- Online vSphere resources
- Location of online vSphere documentation

#### 2. VMware Virtualization Overview

- Compare the components and concepts of traditional architecture and virtual architecture
- Identify the benefits of virtual architecture
- Describe the VMware virtualization infrastructure
- Describe vSphere products and features
- Describe inventory objects managed by vSphere
- Describe the main features of vCenter Server

## 3. vSphere Client and vSphere Web Client

- Identify the differences between the VMware vSphere Client and VMware vSphere Web Client interfaces
- Access, navigate, and customize vSphere Web Client
- Use vSphere Web Client to monitor and manage vSphere objects
- Perform searches in vSphere Web Client
- Explain how roles and permissions can be assigned to users and user groups using vSphere Web Client

## 4. Creating and Managing Virtual Machines

- Create and manage virtual machines
- Install a guest operating system and VMware Tools
- Explain how to use clones and templates to manage virtual machines
- Explain the importance of content libraries
- Configure virtual machines
- Manage virtual machines using snapshots
- Explain how raw device mapping (RDM) allows a virtual machine to directly access and use a storage device



#### 5. Monitor Virtual Machine Resources

- Explain virtual machine resource monitoring concepts
- Monitor virtual machine resource usage using vCenter Server performance graphs and alarms
- Describe and monitor tasks
- Describe, monitor, and manage events
- Describe, monitor, manage, and acknowledge alarms

## 6. Using vSphere vApp(s)

- Describe a vApp
- Create a vApp
- Add objects to a vApp
- Edit vApp settings
- Clone a vApp
- Manage power operations for a vApp

# 7. Migrating Virtual Machines

- Describe the types of vSphere migration
- Explain the importance of vSphere vMotion
- Identify and verify vSphere vMotion requirements
- Perform a vSphere Storage vMotion migration
- Perform a shared-nothing vSphere vMotion migration
- Explain how to migrate virtual machines across virtual switches, vCenter Server systems, and long distances

# 8. Using vSphere for Scalability and Business Continuity

- Explain how vSphere DRS can be used to optimize the performance of the hosts and virtual machines in a cluster
- Explain how vSphere HA can be used to increase the availability of your virtual machines
- Explain how vSphere Fault Tolerance can be used for continuous availability of a virtual machine
- Explain how vSphere Data Protection and vSphere Replication can be used to replicate backup and restore data in your virtual environment.