vmware EDUCATION SERVICES

VMware vSphere: Skills for Operators

Overview

This hands-on training course explores configuration and management of VMware vSphere™ virtual machines. Upon completion of this course, you should have the skills necessary to work effectively with VMware® virtual machines. The course is based on VMware ESX™ 4.0 and VMware vCenter™ Server 4.0.

Students who complete this course may enroll in any of several more-advanced vSphere courses. See http://www.vmware.com/education for options.

Course Objectives

At the end of the course, you should have an understanding of vSphere 4 capabilities and be able to:

- Create, deploy, and manage virtual machines
- Use vCenter Server to monitor virtual machine resource usage
- Use VMware vCenter Update Manager to apply patches to virtual machines
- Use VMware vMotion™ and Storage vMotion to migrate virtual machines
- Troubleshoot problems with virtual machine configuration

Lab exercises are interspersed throughout the course.

Target Audience

System administrators and operators responsible for ESXi, ESX, or vCenter Server

Prerequisites

System administration experience on Microsoft Windows or Linux operating systems

Pricing and Scope

- Approximately 16 hours of instructor-led classroom training
- 50% lecture and 50% hands-on lab
- Individual enrollment available at convenient locations worldwide at http://www.vmware.com/education
- Contact your VMware representative for pricing information.
- Onsite training available for companies that want the benefits of 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 VMware Virtualization

- Discussion of virtualization and vSphere components

Module 3: Virtual Machine Creation and Management

- Create a virtual machine
- Install a guest operating system in a virtual machine
- Install VMware Tools into a Windows guest operating system
- Enable time synchronization between a virtual machine and the host
- Create a template
- Create a template and deploy a virtual machine from it
- Clone a virtual machine that is powered on
- Take snapshots of a virtual machine and revert to a snapshot
- Modify a virtual machine's disk, memory, and name
- Manipulate virtual machines in the vCenter Server inventory
- Delete a virtual machine from disk
- Add a raw LUN to an existing virtual machine

Module 4: Virtual Machine Resource Monitoring

- Use vCenter Server to monitor CPU utilization

Module 5: Using Update Manager to Update Virtual Machines

- List all patches installed on both your virtual machine and template
- Create a patch baseline
- Scan for updates
- Remediate the virtual machine and template

Module 6: Migrating Virtual Machines

- Verify that your virtual machines' settings meet vMotion requirements
- Verify that your ESX host meets vMotion requirements
- Perform a vMotion migration a virtual machine
- Perform a Storage vMotion migration a virtual machine

Module 7: Troubleshooting Virtual Machines

- Identify and correct common configuration issues with virtual machines

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