VMware vSphere: Troubleshooting

Overview

This lab-intensive course focuses on providing system administrators with the advanced knowledge, skills, and abilities to achieve competence in troubleshooting the VMware vSphere™ virtual infrastructure. In this course, you will spend most of the time diagnosing and rectifying configuration problems created on VMware® ESX™/ESXi hosts and VMware vCenter™ Server systems. Upon completion of this course, you can take the examination to become a VMware Certified Professional.

Course Objectives

At the end of the course, you should be able to:

- Use the VMware vSphere Client and service console commands to configure or diagnose and rectify problems on ESX
- Use the vSphere Client and the VMware vSphere Management Assistant (vMA) appliance to configure or diagnose and rectify problems on ESX and ESXi hosts
- Use ESXi technical support mode to diagnose and rectify problems on ESXi
- Create and use a network sniffer to capture and display virtual switch network traffic
- Use the vSphere Client and command-line tools to troubleshoot VMware VMotion™, VMware Storage VMotion, VMware High Availability, VMware Distributed Resource Scheduler, and virtual machine power-on problems

Target Audience

System administrators, systems engineers, and help desk personnel who need the knowledge, skills, and abilities to perform advanced troubleshooting of their vSphere deployments

Prerequisites

This is an advanced course. Required prerequisites include the completion of one of the following:

- Completion of the following three courses:
    - VMware vSphere: Install, Configure, Manage
    - VMware vSphere: Manage Availability
    - VMware vSphere: Manage Scalability
- Completion of VMware vSphere: Fast Track.
- Equivalent knowledge and administration experience with ESX/ESXi and vCenter Server

Pricing and Scope

- Four (4) days of instructor-led, classroom training
- 30% lecture and 70% 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 is 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: ESXi Command-Line Troubleshooting Methods

- Install and use the vMA
- Learn common vSphere Command-Line Interface commands and syntax
- Configure ESXi technical support mode and SSH access

Module 3: ESX, ESXi, and vCenter Server Log Files

- View ESX, ESXi, and vCenter Server log files
- Configure a centralized ESX/ESXi log host

Module 4: Network Troubleshooting

- Identify and configure vNetwork components
- Configure and use a network traffic sniffer

Module 5: Management Troubleshooting

- Troubleshoot vSphere management components

Module 6: Storage Troubleshooting

- View, configure, and diagnose storage access problems
- Configure iSCSI authentication and digests

Module 7: vMotion Troubleshooting

- Troubleshoot VMotion and Storage VMotion errors

Module 8: VMware Infrastructure Troubleshooting

- Troubleshoot DRS Cluster errors with shares, pools, and limits
- Troubleshoot HA Cluster errors with slot calculations, admission control, and host monitoring
- Review virtual machine power on requirements
- Troubleshoot virtual machine power on failures

Module 9: vSphere 4 DRS Cluster Troubleshooting

- Complete a final multihour, multiproblem troubleshooting exercise

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