VMware vSphere: Optimize and Scale plus Troubleshooting Fast Track

Duration: 5 Days   Course Code: VMOSTFT   Version: 7.0   Delivery Method: Virtual Learning

Overview:

This five-day, accelerated, hands-on training VMware vSphere course is a blend of the VMware vSphere: Optimize and Scale and VMware vSphere: Troubleshooting courses. This Fast Track course includes topics from each of these advanced courses to equip experienced VMware administrators with the knowledge and skills to effectively optimize and troubleshoot vSphere at an expert level.

Product Alignment:ESXi 7vCenter Server 7

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

Experienced system administratorsSystem engineersSystem integrators

Objectives:

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

- Introduce troubleshooting principles and procedures

- Practice Linux commands that aid in the troubleshooting process

- Use command-line interfaces, log files, and the vSphere Client to diagnose and resolve problems in the

- vSphere environment

- Explain the purpose of key vSphere log files

- Monitor and optimize compute, network, and storage performance on ESXi hosts

- Monitor and optimize vCenter Server performance

- Identify networking problems based on reported symptoms, validate and troubleshoot the reported

- problem, identify the root cause and implement the appropriate resolution

- Analyze storage failure scenarios using a logical troubleshooting methodology, identify the root cause, and

- apply the appropriate resolution to resolve the problem

- Troubleshoot vSphere cluster failure scenarios and analyze possible causes

- Diagnose common VMware vSphere® High Availability problems and provide solutions

- Identify and validate VMware ESXi™ host and VMware vCenter Server® problems, analyze failure

- scenarios, and select the correct resolution

- Troubleshoot virtual machine problems, including migration problems, snapshot problems, and connection

- problems

- Troubleshoot performance problems with vSphere components

Prerequisites:

This course requires completion of one of the following prerequisites:

- VMware vSphere: Install, Configure, Manage [V7] - (VSICM)
- Equivalent knowledge and administration experience with ESXi

Testing and Certification

Attendance of this course meets the training requirement to achieve the following certification:

VMware Certified Professional – Data Center Virtualization (VCP-DCV)

and vCenter Server
Experience in working at the command prompt is highly
recommended.

Content:

1 Course Introduction

• Introductions and course logistics

• Course objectives

2 Introduction to Troubleshooting

• Define the scope of troubleshooting

• Use a structured approach to solve configuration and operational problems

• Apply a troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency

3 Troubleshooting Tools

• Use command-line tools (such as Linux commands, vSphere CLI, ESXCLI) to identify and troubleshoot

vSphere problems

• Identify important vSphere log files and interpret the log file contents

4 Network Optimization

• Explain performance features of network adapters

• Explain the performance features of vSphere networking

• Use esxtop to monitor key network performance metrics

5 Troubleshooting Virtual Networking

• Analyze and resolve standard switch and distributed switch problems

• Analyze virtual machine connectivity problems and fix them

• Examine common management network connectivity problems and restore configurations

6 Storage Optimization

• Describe storage queue types and other factors that affect storage performance

• Use esxtop to monitor key storage performance metrics

7 Troubleshooting Storage

• Troubleshoot and resolve storage (iSCSI, NFS, and VMware vSphere® VMFS) connectivity and

configuration problems

• Analyze and resolve common VM snapshot problems

• Identify multipathing-related problems, including common causes of permanent device loss (PDL) and all

paths down (APD) events and resolve these problems

8 CPU Optimization

• Explain the CPU scheduler operation and other features that affect CPU performance

• Explain NUMA and vNUMA support

• Use esxtop to monitor key CPU performance metrics

9 Memory Optimization

• Explain ballooning, memory compression, and host-swapping techniques for memory

memory is overcommitted

• Use esxtop to monitor key memory performance metrics

10 Troubleshooting vSphere Clusters

• Identify and recover from problems related to vSphere HA

• Analyze and resolve VMware vSphere® vMotion® configuration and operational problems

• Analyze and resolve common VMware vSphere® Distributed Resource Scheduler™ problems

11 Troubleshooting Virtual Machines

• Identify possible causes and resolve virtual machine power-on problems

• Troubleshoot virtual machine connection state problems

• Resolve problems seen during VMware Tools™ installations

12 vCenter Server Performance Optimization

• Describe the factors that influence vCenter Server performance

• Use VMware vCenter® Server Appliance™ tools to monitor resource use

13 Troubleshooting vCenter Server and ESXi

• Analyze and fix problems with vCenter Server services

• Analyze and fix vCenter Server database problems

• Examine ESXi host and vCenter Server failure scenarios and resolve the problems

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Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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