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TRAINING OFFERING

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VMware vSphere: Optimize and Scale plus Troubleshooting Fast Track [V6.5]

CODE:

VM-VS-OS_TFT-V6.5   **LENGTH:**

PRICE:

$6,475.00

Description

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

Objectives

By the end of the course, you should be able to meet the following objectives:
• Configure and manage vSphere networking and storage for a large and sophisticated enterprise
• Manage changes to the vSphere environment
• Optimize the performance of all vSphere components
• Use VMware vSphere® ESXi™ Shell and VMware vSphere® Management Assistant to manage vSphere
• Use VMware vSphere® Auto Deploy™ to provision ESXi hosts
• Harden the vSphere environment against security threats
• Use VMware vSphere® Web Client, the command-line interface, and log files to diagnose and correct problems in vSphere
• Troubleshoot networking, storage, VMware vCenter Server®, ESXi host, vSphere cluster, VMware vSphere® vMotion®, and virtual machine problems

Audience

Experienced system administrators
system engineers
system integrators

Prerequisites

This course requires completion of one of the following prerequisites:
• Understanding of concepts presented in the VMware vSphere: Install, Configure, Manage [V6.5] course
• Equivalent knowledge and administration experience with ESXi and vCenter Server
 Experience with working at the command prompt is highly recommended.

Programme

Introduction to Troubleshooting
• Identify the effects of a system problem
• Define the scope of troubleshooting
• Use a structured approach
Course Introduction
• Understand the principles of troubleshooting
• Introductions and course logistics
• Follow a logical troubleshooting procedure
• Course objectives
• Examine examples of troubleshooting
Troubleshooting Tools
• Use command-line tools to identify and troubleshoot problems
• Use VMware vSphere® Management Assistant
• Find and interpret important log files
• Use VMware vRealize® Log Insight™ for log aggregation, efficient log search, and problem analysis

vSphere Security
• Configure ESXi host access and authorization
• Secure ESXi, vCenter Server, and virtual machines
• Use VMware Certificate Authority to configure vSphere certificate management
• Configure vSphere to encrypt virtual machines, core dumps, and vSphere vMotion migrations

Network Scalability
• Configure and manage vSphere distributed switches
• Explain distributed switch features such as port mirroring, LACP, QoS tagging, and NetFlow

Network Optimization
• Explain the performance features of network adapters
• Explain the performance features of vSphere networking
• Use esxtop to monitor key network performance metrics

Networking Troubleshooting
• Identify the symptoms of network-related problems
• 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
• Identify and prevent potential problems

Storage Scalability
• Explain VMware vSphere® Storage APIs - Array Integration and VMware vSphere® API for Storage Awareness™
• Configure and assign virtual machine storage policies
• Configure VMware vSphere® Storage DRS™ and VMware vSphere® Storage I/O Control
• Create and use virtual volumes in vSphere

Storage Optimization
• Describe storage queue types and other factors that affect storage performance
• Use esxtop to monitor key storage performance metrics

Storage Troubleshooting
• Troubleshoot storage (iSCSI, NFS, VMware vSphere® VMFS, VMware vSAN™, and VMware vSphere® Virtual Volumes™) connectivity problems
• Analyze storage-related logs
• Analyze hardware malfunction and software misconfiguration scenarios
• Identify multipathing-related problems, including permanent device loss (PDL) and all paths down (APD)
• Analyze possible causes, recover from the faulty conditions, and restore storage visibility

CPU Optimization
• Explain the CPU scheduler operation, NUMA support, and other features that affect CPU performance
• Use esxtop to monitor key CPU performance metrics

Memory Optimization
• Explain ballooning, memory compression, and host-swapping techniques for memory reclamation when memory is overcommitted
• Use esxtop to monitor key memory performance metrics

Analyzing vSphere
• Explain how Proactive DRS enhances virtual machine availability
• Use vRealize Log Insight to identify and troubleshoot problems

vSphere Clusters
• Identify and recover from problems related to VMware vSphere® High Availability
• Analyze and troubleshoot vSphere vMotion problems related to virtual machine migrations
• Discuss and recover from VMware vSphere® Distributed Resource Scheduler™problems to achieve proper function and balanced resource use
• Examine vSphere cluster failure scenarios and possible solutions

Virtual Machines
• Analyze and resolve common virtual machine snapshot problems
• Identify possible causes and resolve virtual machine power-on problems
• Troubleshoot virtual machine connection state problems
• Resolve problems seen during VMware Tools™ installations
• Examine failure scenarios and provide solutions

Host and Management Scalability
• Explain the uses of VMware vCenter® Converter™
• Define and use content libraries
• Describe and use host profiles
• Describe and use VMware vSphere® ESXi™ Image Builder CLI and vSphere Auto Deploy

vCenter Server and ESXi
• Understand the vCenter Server and VMware Platform Services Controller™ architecture in vSphere 6.x
• Identify and resolve authentication problems
• Troubleshoot VMware CA and certificate problems
• Analyze and fix problems with vCenter Server services
• Analyze and fix vCenter Server database problems
• Identify VMware vCenter Server® High Availability problems
• Examine ESXi host and vCenter Server failure scenarios and resolve the problems

Session Dates

On request. Please Contact Us

Additional Information

This training is also available as onsite training. Please contact us to find out more.