VMware vSphere: Troubleshooting [V8] (VSTS8)

ID VSTS8 **Price** CHF 4,400.—(excl. VAT) **Duration** 5 days

Who should attend

System architects and system administrators

This course is part of the following Certifications

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

Prerequisites

This course requires completion of one the following courses:

- VCP-DCV certification
- VMware vSphere: Install, Configure, Manage
- VMware vSphere: Operate, Scale and Secure

The course material presumes that you can perform the following tasks with no assistance or guidance before enrolling in this course:

- Install and configure ESXi
- Install vCenter Server
- Create vCenter Server objects, such as data centers and folders
- Create and modify a standard switch
- Create and modify a distributed switch
- Connect an ESXi host to NAS, iSCSI, or Fibre Channel storage
- Create a VMware vSphere VMFS datastore
- Modify a virtual machine's hardware
- Migrate a virtual machine with VMware vSphere® vMotion® and VMware vSphere® Storage vMotion®
- Configure and manage a VMware vSphere® Distributed Resource SchedulerTM cluster
- Configure and manage a VMware vSphere HA cluster
- Basic knowledge of command line tools like ESXCLI, DCLI, and PowerCLI

Course Objectives

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

- Introduce troubleshooting principles and procedures
- Use command-line interfaces, log files, and the vSphere Client to diagnose and resolve problems in the vSphere environment
- Explain the purpose of common vSphere log files
- Identify networking issues based on reported symptoms
- Validate and troubleshoot the reported networking issue
- Identify the root cause of networking issue
- Implement the appropriate resolution to recover from networking problems
- Analyze storage failure scenarios using a logical troubleshooting methodology
- Identify the root cause of storage failure
- Apply the appropriate resolution to resolve storage failure problems
- Troubleshoot vSphere cluster failure scenarios
- Analyze possible vSphere cluster failure causes
- Diagnose common VMware vSphere® High Availability problems and provide solutions
- Identify and validate VMware ESXiTM host and VMware vCenter® problems
- Analyze failure scenarios of ESXi host and vCenter problems
- Select the correct resolution for the failure of ESXi host and vCenter problems
- Troubleshoot virtual machine problems, including migration problems, snapshot problems, and connection problems
- Troubleshoot performance problems with vSphere components

Course Content

Course Introduction

- Introductions and course logistics
- Course objectives

Introduction to Troubleshooting

- Define the scope of troubleshooting
- Use a structured approach to solve configuration and operational problems
- Apply troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency

Troubleshooting Tools

- Discuss the various methods to run commands
- Discuss the various ways to access ESXi Shell
- Use commands to view, configure, and manage your vSphere components
- Use the vSphere CLI
- Use ESXCLI commands from the vSphere CLI
- Use Data Center CLI commands
- Identify the best tool for command-line interface troubleshooting
- Identify important log files for troubleshooting vCenter Server and ESXi
- Describe the benefits and capabilities of VMware SkylineTM
- Explain how VMware Skyline works
- Describe VMware SkylineTM Health
- Describe VMware Skyline AdvisorTM

Troubleshooting Virtual Networking

- Analyze and troubleshoot standard switch problems
- Analyze and troubleshoot virtual machine connectivity problems
- Analyze and troubleshoot management network problems
- Analyze and troubleshoot distributed switch problems

Troubleshooting Storage

- Discuss the vSphere storage architecture
- Identify the possible causes of problems in the various types of datastores
- Analyze the common storage connectivity and configuration problems
- Discuss the possible storage problems causes
- Solve the storage connectivity problems, correct misconfigurations, and restore LUN visibility
- Review vSphere storage architecture and functionality necessary to troubleshoot storage problems
- Use ESXi and Linux commands to troubleshoot storage problems
- Analyze log file entries to identify the root cause of storage problems
- Investigate ESXi storage issues
- Troubleshoot VM snapshots
- Troubleshoot storage performance problems
- Review multipathing
- Identify the common causes of missing paths, including PDL and APD conditions
- Solve the missing path problems between hosts and storage devices

Troubleshooting vSphere Clusters

- Identify and troubleshoot vSphere HA problems
- Analyze and solve vSphere vMotion problems
- Diagnose and troubleshoot common vSphere DRS problems

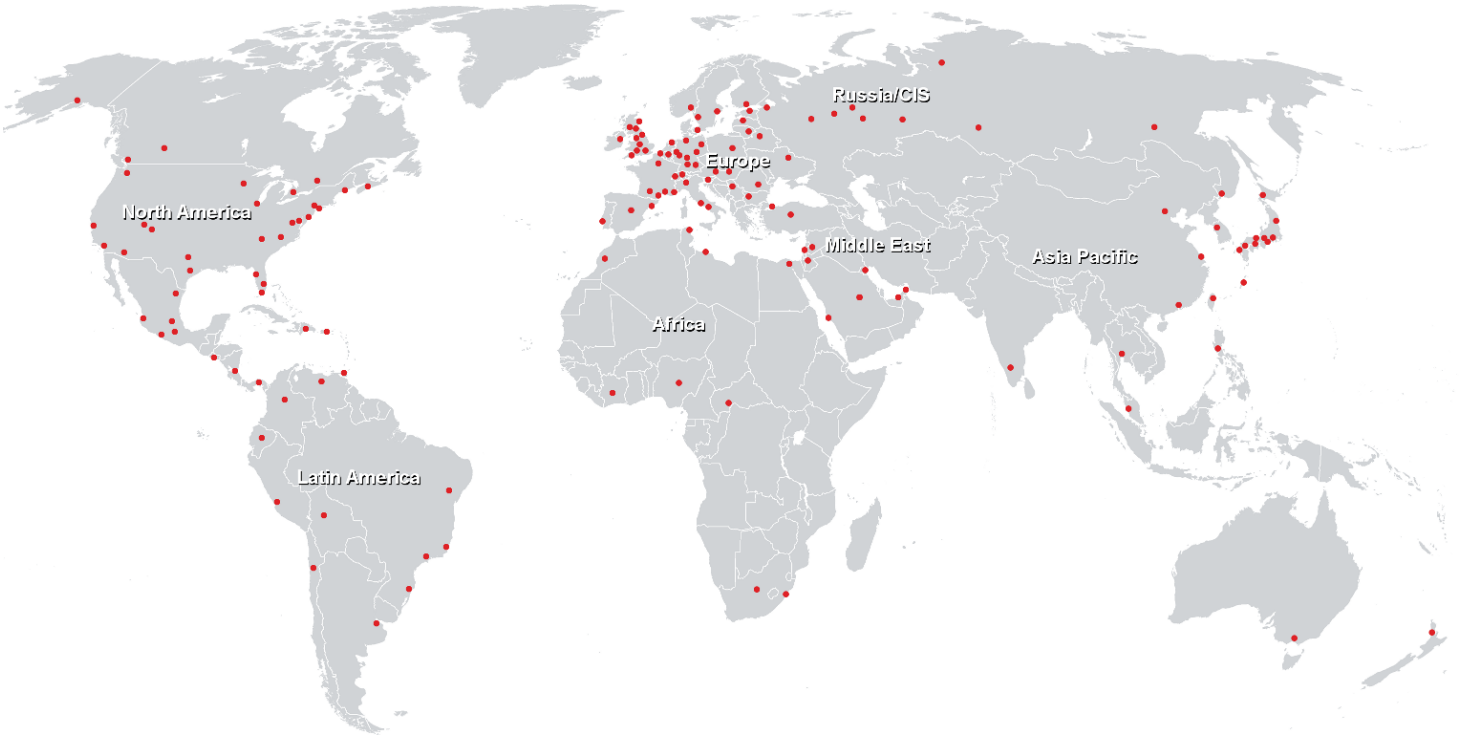
Troubleshooting Virtual Machines

- Discuss virtual machine files and disk content IDs
- Identify, analyze, and solve virtual machine snapshot problems
- Troubleshoot virtual machine power-on problems
- Identify possible causes and troubleshoot virtual machine connection state problems
- Diagnose and recover from VMware Tools installation failures

Troubleshooting vCenter Server and ESXi

- Analyze and solve vCenter Server service problems
- Diagnose and troubleshoot vCenter Server database problems
- Use vCenter Server Appliance shell and the Bash shell to identify and solve problems
- Identify and troubleshoot ESXi host problems

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