

VMware vSphere: Troubleshooting Workshop

Delivery Methods

- Classroom
- Live Online
- [Onsite](#)

Course Duration

- Five days of instructor-led training
- 30% lecture, 70% hands-on lab

Target Audience

- System administrators
- System integrators

Course Suitability

- | | |
|--|--|
| <input type="checkbox"/> Administrator | <input type="checkbox"/> Expert |
| <input checked="" type="checkbox"/> Engineer | <input checked="" type="checkbox"/> Advanced |
| <input type="checkbox"/> Architect | <input type="checkbox"/> Professional |
| | <input type="checkbox"/> Fundamentals |

Prerequisites

Required prerequisites include completion of one of the following:

- VMware Certified Professional 6 – Data Center Virtualization ([VCP6-DCV](#))
- VMware vSphere: Fast Track [V6]
- VMware vSphere: Optimize and Scale [V6]
- Equivalent knowledge and administration experience with ESXi and vCenter Server

Experience in working with a command-line interface is highly recommended.

Certifications

Although this course is not required for VMware certification, the content of this course is a subset of the knowledge tested in the VCIX6-DCV certification.

For more information, go to [VMware Certification](#).

Pricing

Contact your VMware representative or a VMware Authorized Training Center™ for pricing information.

More Information

Courses are conveniently scheduled around the world. Go to [VMware Education](#) to find the class that is right for you.

Course Overview

This hands-on training workshop provides you with the advanced knowledge, skills, and abilities to achieve competence in troubleshooting the VMware vSphere® 6 environment. This workshop increases your skill and competence in using the command-line interface, VMware vSphere® Web Client, VMware vRealize® Log Insight™, and other tools to analyze and solve problems.

This workshop is based on VMware ESXi™ 6 and VMware vCenter Server™ 6.

For students who want more in-depth vSphere training, VMware Education offers a variety of other courses. For advanced course options, go to <http://www.vmware.com/education>.

Course Objectives

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

- Use vSphere Web Client, the command-line interface, and logs to diagnose and resolve problems in the vSphere environment
- Introduce troubleshooting principles and procedures
- Troubleshoot networking issues and recover from these issues
- Analyze storage failure scenarios and resolve the issues
- Troubleshoot vSphere cluster failure scenarios and analyze possible causes
- Diagnose common VMware vSphere® High Availability issues and provide solutions
- Troubleshoot problems related to virtual machine migration (VMware vSphere® vMotion®) and improve resource use (VMware vSphere® Distributed Resource Scheduler™)
- Troubleshoot vCenter Server issues
- Identify ESXi host issues, analyze failure scenarios, and correct them
- Troubleshoot faulty virtual machines, including installation issues, snapshot issues, connection issues, and more

Course Modules

<p>1 Course Introduction</p> <ul style="list-style-type: none"> • Understand the course objectives • Understand the scope and topics covered by the course • Become familiar with online technical resources • Become familiar with the VMware education system and certification tracks 	<p>5 Storage</p> <ul style="list-style-type: none"> • Troubleshoot storage (iSCSI, NFS, VMware vSphere® VMFS, and VMware Virtual SAN™) connectivity problems • Analyze hardware malfunction and software misconfiguration scenarios • Identify multipathing-related issues, including PDL and APD • Analyze possible causes, recover from the faulty conditions, and restore storage visibility
<p>2 Introduction to Troubleshooting</p> <ul style="list-style-type: none"> • Identify the effects of a system problem • Define the troubleshooting scope • Use a structured approach • Understand the troubleshooting principles • Follow a logical troubleshooting procedure • Troubleshooting examples 	<p>6 vSphere Clusters</p> <ul style="list-style-type: none"> • Identify and recover from issues related to vSphere HA • Analyze and troubleshoot various types of vSphere vMotion issues related to virtual machine migrations • Discuss and recover from vSphere DRS problems to achieve proper function and balanced resource use • Examine vSphere cluster failure scenarios and possible solutions
<p>3 Troubleshooting Tools</p> <ul style="list-style-type: none"> • Use command-line tools to identify and troubleshoot problems • Use VMware vSphere® Management Assistant • Find and interpret important log files • Export relevant log files for technical support • Use vRealize Log Insight for log aggregation and problem analysis • Use vRealize Log Insight for efficient log search 	<p>7 vCenter Server and ESXi</p> <ul style="list-style-type: none"> • Understand the vCenter Server and VMware Platform Services Controller™ architecture in vSphere 6 • Identify and resolve authentication issues • Troubleshoot VMware Certificate Authority and certificate store issues • Analyze and fix vCenter Server services issues • Examine ESXi host and vCenter Server failure scenarios and resolve the issues
<p>4 Networking</p> <ul style="list-style-type: none"> • Identify the symptoms of network-related problems • Analyze and resolve standard and distributed switch issues • Analyze virtual machine connectivity issues and restore them • Examine common management network connectivity issues and restore configurations • Identify and prevent potential problems 	<p>8 Virtual Machines</p> <ul style="list-style-type: none"> • Analyze and resolve common virtual machine snapshot issues • Identify possible causes and resolve virtual machine power-on issues • Troubleshoot virtual machine connection state issues • Resolve problems seen during VMware Tools™ installations • Examine failure scenarios and provide solutions



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