5 Days

VMware vSphere: Bootcamp [V6]

This VMware vSphere: Bootcamp [V6] course is a combination of best-selling and intensive vSphere course. This is a hands-on training program in which you get the training delivered in two parts across five days of extended hours.

Part I – The prime focus is on making you learn about installing, configuring and managing vSphere 6 that includes VMware vCenter Server™ 6.0 and VMware ESXi™ 6.0 concepts.

Part II – This part mainly focuses on building advanced skills into Configuring and maintaining scalable and highly available infrastructure.

Course Details

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Course Outline

Introductions and course logistics

- Course objectives
- Software-Defined Data Center
- Introduce components of the software-defined data center
- Describe where vSphere fits into the cloud architecture
- Install and use vSphere
- Client Overview of ESXi
- Creating Virtual Machines
- Introduce virtual machines, virtual machine hardware, and virtual machine files
- Create and work with virtual machines vCenter
- Server Introduce the vCenter
- Server architecture Deploy and configure vCenter Server Appliance
- Install and use vSphere Web Client
- Manage vCenter Server inventory objects and licenses
- Configuring and Managing Virtual Networks
- Describe, create, and manage standard switches
- Describe and modify standard switch properties
- Configure virtual switch load-balancing algorithms
- Create, configure, and manage vSphere distributed switches, network connections, and port groups
- Configuring and Managing Virtual Storage
- Introduce storage protocols and storage device names
- Discuss ESXi with iSCSI, NFS, and Fibre Channel storage
- Create and manage VMware vSphere® VMFS datastores
- Introduce VMware Virtual SAN™ Virtual Machine Management
- Use templates and cloning to deploy virtual machines
- Modify and manage virtual machines
- Perform vSphere vMotion and vSphere
- Storage vMotion migrations
- Create and manage virtual machine snapshots
- Create a vApp
- Introduce the various types of content libraries and how to deploy and use them
- Resource Management and Monitoring
- Introduce virtual CPU and memory concepts
- Configure and manage resource pools
- Describe methods for optimizing CPU and memory usage

- Use vCenter Server performance graphs and alarms to monitor resource usage
- Create and use alarms to report certain conditions or events vSphere HA and vSphere Fault Tolerance
- Explain the vSphere HA architecture
- Configure and manage a vSphere HA cluster
- Use vSphere HA advanced parameters
- Introduce vSphere Fault Tolerance
- Enable vSphere Fault Tolerance on virtual machines Host Scalability
- Describe the functions of a vSphere DRS cluster
- Configure and manage a vSphere DRS cluster
- Work with affinity and anti-affinity rules
- Use vSphere HA and vSphere DRS together vSphere
- Update Manager and Host Maintenance Use vSphere
- Update Manager to manage ESXi patching Install vSphere
- Update Manager and the vSphere Update Manager plug-in
- Create patch baselines
- Use host profiles to manage ESXi configuration compliance
- Scan and remediate hosts VMware Management Resources
- Understand the purpose of VMware vSphere® Command-Line Interface commands
- Discuss options for running vSphere CLI commands
- Deploy and configure vSphere Management Assistant
- Use vmware-cmd for virtual machine operations vSphere Security
- Configure ESXi host access and authentication Secure ESXi, vCenter Server, and virtual machines
- Performance in a Virtualized Environment
- Review the vSphere performance troubleshooting methodology
- Explain software and hardware virtualization techniques and their effects on performance
- Use vSphere performance monitoring tools Network Scalability
- Explain distributed switch features such as port mirroring, LACP, QoS tagging, and NetFlow Network Performance Troubleshooting
- Explain the performance features of network adapters
- Explain the performance features of vSphere networking
- Monitor key network performance metrics
- Use vSphere Management Assistant to manage virtual network configurations
- Troubleshoot common network performance problems Storage Scalability
- Explain VMware vSphere® Storage APIs - Array Integration and VMware vSphere® API for Storage AwarenessTM
- Configure and assign virtual machine storage policies
- Configure VMware vSphere® Storage DRS™ and VMware vSphere® Storage I/O
- Control Storage Optimization
- Diagnose storage access problems
- Configure VMware vSphere® Flash Read Cache™
- Monitor key storage performance metrics
- Troubleshoot common storage performance problems CPU Performance
- Explain the CPU scheduler operation, NUMA support, and other features that affect CPU performance
- Monitor key CPU performance metrics
- Troubleshoot common CPU performance problems Memory Performance
- Monitor key memory performance metrics
- Troubleshoot common memory performance problems Virtual Machine and Cluster Optimization
- Describe guidelines for optimizing virtual machine configuration
- Discuss how vGPU usage affects virtual machine performance
- Troubleshoot common vSphere cluster problems Host and Management Scalability
- Describe and use host profiles
- Use VMware vSphere® PowerCLI™
- Use Virtual Machine Converter
- Use VMware vSphere® ESXi™ Image Builder CLI and vSphere Auto Deploy

Who Should Attend

- Experienced system administrators
- Systems engineers
- System integrators

Pre Requisite

System administration experience on Microsoft Windows or Linux operating systems • Understanding of concepts presented in the VMware Data Center Virtualization Fundamentals course for VCA-DCV certification

Exams

VMware Certified Professional (VCP) [VCP6-DCV]

VMware Certified Associate (VCA) [VCA]

Date - Apr 23, 2024