APPLIED TECHNOLOGY ACADEMY

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VMware vSphere: Optimize and Scale Training

VMware Authorized Training · Applied Technology Academy

The VMware vSphere: Optimize and Scale [V7.0] course is designed for experienced VMware administrators who want to deepen their understanding of vSphere infrastructure management and optimization. Participants will learn advanced skills in configuring and maintaining a highly available and scalable virtual infrastructure, performance monitoring, and troubleshooting. The course prepares learners to optimize vSphere environments for efficiency, reliability, and performance.

LEVEL	DURATION	EXPERIENCE	AVERAGE SALARY	LABS
Advanced	**3 Days**	**VMware Sphere**	**$145,000**	**Yes**

Course Overview

- Configure and optimize vSphere clusters for scalability, performance, and availability
- Tune virtual machines, ESXi hosts, and vCenter Server for optimal performance
- Implement advanced storage and network configurations
- Use vSphere tools to monitor and troubleshoot infrastructure performance
- Manage resource allocation and balance workloads efficiently
- Secure and automate administrative tasks using best practices
- Prepare for the VMware Certified Professional – Data Center Virtualization (VCP-DCV) exam

Course Outline

- **Module 1: Course Introduction and Overview**
  - Course goals and structure
  - Overview of VMware vSphere 7 architecture
  - Review of new features in vSphere 7
- **Module 2: vSphere Security and Compliance**
  - Securing ESXi hosts and vCenter Server
  - Configuring role-based access control
  - Using certificates and encryption
  - Implementing host lockdown and secure boot
- **Module 3: Network Optimization and Configuration**
  - Advanced vSphere networking concepts
  - vSphere Distributed Switch (vDS) configuration and management
  - Network I/O control and traffic shaping
  - Monitoring and troubleshooting network performance
- **Module 4: Storage Optimization and Management**

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  - Configuring and optimizing VMFS and NFS datastores
  - Storage multipathing and failover
  - Using Storage I/O Control and Storage DRS
  - Troubleshooting storage performance issues
- **Module 5: Resource Management and Monitoring**
  - Resource pools and allocation strategies
  - Performance monitoring using vCenter performance charts
  - Managing CPU, memory, and storage resources
  - Using VMware tools for capacity planning
- **Module 6: vSphere Clusters and High Availability**
  - Configuring and tuning DRS and HA clusters
  - Resource scheduling and admission control policies
  - Managing host and VM affinity rules
  - Troubleshooting cluster operations
- **Module 7: Performance Monitoring and Optimization Tools**
  - Using vRealize Operations Manager (vROps)
  - Collecting and analyzing performance metrics
  - Identifying and resolving performance bottlenecks
  - Automating optimization through policies
- **Module 8: Maintenance and Troubleshooting**
  - Troubleshooting ESXi hosts and vCenter components
  - Using logs and command-line tools for diagnostics
  - Performing proactive maintenance tasks
  - Best practices for patching and upgrades
- **Module 9: Advanced vSphere Features and Automation**
  - Introduction to VMware vSphere Lifecycle Manager
  - Using Host Profiles and Auto Deploy
  - Scripting with PowerCLI
  - Automating configuration management
- **Module 10: Course Review and Exam Preparation**
  - Review of key vSphere 7 optimization concepts
  - Scenario-based practice and knowledge checks
  - Exam preparation strategies

Intended Audience

- Experienced System Administrators and System Engineers
- Virtualization Administrators seeking VCP-DCV certification
- Storage and Network Administrators
- Cloud Administrators and Consultants

Prerequisites

- Completion of VMware vSphere: Install, Configure, Manage [V7.0] or equivalent experience
- Familiarity with concepts of system administration and virtualization technologies

Ready to enroll? Call 800.674.3550 or email Info@AppliedTechAc.com — private team cohorts, GSA MAS purchasing, military credentialing funding, VA GI Bill and VR&E and student financing available.