

# Course name: VMware vSphere: What's New [V5.5 to V6] (EDU-VSWN6) (VCP6-DCV)

Course code: VT-SP-WN6-EN

## Introduction

VMware vSphere: What's New is a hands-on training course that explores the newest features and enhancements in VMware vCenter Server™ 6 and VMware ESXi™ 6

## Participant profile

This class is recommended for customers who want to deploy vSphere 6 into their existing vSphere environment.

## Goal description

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

- Discuss key enhancements made to vSphere in version 6
- Discuss new feature and maximum configuration allowances in vCenter Server 6
- Discuss and configure new ESXi security and account management features
- Discuss the deployment process of vSphere 6 release products
- Discuss Platform Services Controller use case scenarios and apply these in vSphere 6 environments
- Discuss the differences between VMware vSphere® Client™ and VMware vSphere® Web Client in the vSphere 6 release
- Describe and configure enhancements made to virtual machines in the vSphere 6 release
- Apply the uses and benefits of VMware vRealize™ Operations Manager™
- Discuss and apply storage security and policies
- Discuss and configure storage fault domains
- Discuss the benefits of and configure virtual volumes
- Discuss and apply network performance enhancements
- Describe enhancements to VMware vSphere® Distributed Resource Scheduler™ and VMware vSphere® Storage DRS™ in the vSphere 6 release
- Discuss and configure cross-vCenter Server systems migration
- Discuss and apply multiprocessor fault tolerance and VMware vSphere® App HA enhancements

Students who complete this course will be prepared for more advanced vSphere 6 courses, available at [www.vmware.com/education](http://www.vmware.com/education).

## Course duration and form

- 14 hours (2 days x 7 hours), including lectures and exercises.

## Course plan

1. Course Introduction
  - a. Introductions and course logistics
  - b. Course goals and objectives
  - c. Online vSphere resources
  - d. Location of online vSphere documentation
2. Introduction to vSphere 6
  - a. Discuss vSphere 6 feature enhancements
  - b. Discuss vSphere 6 installation and upgrade differences
  - c. Describe and apply ESXi lockdown mode
  - d. Discuss and apply ESXi account management
  - e. Discuss the integration and benefits of VMware vCloud® Air™
3. vCenter Server 6
  - a. Discuss the new features and benefits of vCenter Server 6
  - b. Use the new installation process to deploy vCenter Server
  - c. Apply vCenter Server configuration maximums
  - d. Use Platform Services Controller to manage system services
  - e. Use VMware Certificate Authority and VMware Endpoint Certificate Services to manage certificate lifecycles
  - f. Use the vSphere Web Client to apply enhanced performance configurations
4. Virtual Machine Enhancements
  - a. Use virtual hardware version 11 enhancements to virtual machines in the vSphere 6 release
5. Management Enhancements
  - a. Discuss VMware vSphere® Network I/O Control features
  - b. Describe changes between Network I/O Control version 2 and Network I/O Control version 3
  - c. Apply virtual machine and distributed switch bandwidth configuration changes to increase performance
  - d. Describe IPv6 use cases in the vSphere environment
6. Storage Enhancements
  - a. Define key storage security enhancements made to the storage stack supported by vSphere 6
  - b. Discuss changes in lease management, share reservation, and authentication Remote Procedure Call authentication brought by the vSphere NFS 4.1 client for datastores
  - c. Describe and apply disk and storage bandwidth configuration to improve performance
  - d. Describe the differences between VMware Virtual SAN™ version 1 and Virtual SAN version 2
  - e. Create virtual machine storage policies
  - f. Create fault domains
  - g. Describe the ways that Virtual Volumes changes how virtual machine storage is presented and managed
  - h. Create, discover, and connect to storage containers
7. Network Enhancements
  - a. Discuss Network I/O Control features
  - b. Describe changes between Network I/O Control version 2 and version 3
  - c. Discuss virtual machine and distributed switch bandwidth configuration changes to increase performance
  - d. Discuss IPv6 use cases in the vSphere environment
8. Scalability Enhancements
  - a. Discuss and apply vSphere DRS enhancements
  - b. Discuss and apply vSphere Storage DRS enhancements
9. Availability Enhancements
  - a. Configure cross-vCenter Server system migration
  - b. Discuss multiprocessor fault tolerance features in vSphere 6
  - c. Discuss enhancements to App HA in vSphere 6