



Course Title: VMware® vSphere 7.0: Install, Configure & Manage	Course Duration: 5.0 Days
Exam: Not Included	Exam Type: No Exam
Qualification: No Certificate	

Course Syllabus

Our VMware® vSphere: Install, Configure & Manage training course will cover the following topics:

Course Introduction

- Introductions and course logistics
- Course objectives

Introduction To vSphere & The Software-Defined Data Center

- Explain basic virtualisation concepts
- Describe how vSphere fits into the software-defined data center and the cloud infrastructure
- Explain how vSphere interacts with CPUs, memory, networks, and storage
- Recognise the user interfaces for accessing the vCenter Server system and ESXi hosts
- Use VMware Host Client™ to access and manage ESXi host

Virtual Machines

- Create and remove a virtual machine
- Provision a virtual machine with virtual devices
- Identify the files that make up a virtual machine
- Explain the importance of VMware Tools™

vCenter Server

- Describe the vCenter Server architecture
- Discuss how ESXi hosts communicate with vCenter Server
- Deploy and configure vCenter Server Appliance
- Use the vSphere Client to manage the vCenter Server inventory
- Add data center, organisational objects, and hosts to vCenter Server
- Use roles and permissions to enable users to access objects in the vCenter Server inventory
- Back up vCenter Server Appliance
- Monitor vCenter Server tasks, events, and appliance health
- Use vCenter Server High Availability to protect a vCenter Server Appliance

Configuring & Managing Virtual Networks

- Create and manage standard switches
- Describe the virtual switch connection types



- Configure virtual switch security, traffic-shaping and load-balancing policies
- Compare vSphere distributed switches and standard switches

Configuring & Managing Virtual Storage

- Identify storage protocols and storage device types
- Discuss ESXi hosts using iSCSI, NFS, and Fibre Channel storage
- Create and manage VMFS and NFS datastores
- Explain how multipathing works with iSCSI, NFS, and Fibre Channel storage
- Deploy virtual machines on a VMware vSAN™ datastore

Virtual Machine Management

- Use templates and cloning to deploy new virtual machines
- Modify and manage virtual machines
- Create a content library and deploy virtual machines from templates in the library
- Dynamically increase the size of a virtual disk
- Use customisation specification files to customise a new virtual machine
- Perform vSphere vMotion and vSphere Storage vMotion migrations
- Create and manage virtual machine snapshots
- Examine the features and functions of VMware vSphere® Replication™

Resource Management & Monitoring

- Discuss CPU and memory concepts in a virtualized environment
- Describe what overcommitment of a resource means
- Describe methods for optimizing CPU and memory usage
- Use various tools to monitor resource use
- Create and use alarms to report certain conditions or events

vSphere Cluster

- Describe options for making a vSphere environment highly available
- Explain the vSphere HA architecture
- Configure and manage a vSphere HA cluster
- Examine the features and functions of VMware vSphere® Fault Tolerance
- Configure a vSphere cluster using ESXi Cluster Quickstart
- Describe the functions of a vSphere DRS cluster
- Create a vSphere DRS cluster

vSphere Lifecycle

- Describe how VMware vSphere® Lifecycle Manager™ works
- Use vSphere Lifecycle Manager to update ESXi hosts in a cluster

Course Overview

Our five-day VMware® vSphere: Install, Configure & Manage training course features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere® 7, which includes VMware ESXi™ 7 and VMware vCenter Server® 7.

Please Note: Our VMware® vSphere: Install, Configure & Manage training course is also suitable for anyone who wants to be trained on vSphere v6.5 or v6.7.



Course Learning Outcomes

Our VMware® vSphere: Install, Configure & Manage training course is also suitable for anyone who wants to be trained on vSphere v6.5 or v6.7.

After completing our VMware® vSphere: Install, Configure & Manage training course, you should be able to:

- Describe the software-defined data center (SDDC)
- Explain the vSphere components and their function in the infrastructure
- Install and configure VMware ESXi™ hosts
- Deploy and configure VMware vCenter® Server Appliance™
- Use VMware vSphere® Client™ to manage the vCenter Server inventory and the vCenter Server configuration
- Manage, monitor, back up, and protect vCenter Server Appliance
- Create virtual networks with vSphere standard switches
- Describe the storage technologies supported by vSphere
- Configure virtual storage using iSCSI and NFS storage
- Create and manage VMware vSphere® VMFS datastores
- Use the vSphere Client to create virtual machines, templates, clones, and snapshots
- Create a content library and deploy virtual machines from templates in the library
- Manage virtual machine resource use
- Migrate virtual machines with VMware vSphere® vMotion® and VMware vSphere® Storage vMotion®
- Create and manage a vSphere cluster that is enabled with VMware vSphere® High Availability and VMware vSphere® Distributed Resource Scheduler™
- Discuss solutions for managing the vSphere life cycle
- Use VMware vSphere® Update Manager™ to apply patches and perform upgrades to ESXi hosts and virtual machines

Audience

Our VMware® vSphere: Install, Configure & Manage training course is suitable for System Administrators and engineers responsible for deploying the VMware Virtual Desktop Infrastructure.

Entry-Level Requirements

You must have system administration experience on Microsoft Windows or Linux operating systems.

Recommended Reading

There is no recommended reading associated with our VMware® vSphere: Install, Configure & Manage training course.

What's Included

Our VMware® vSphere: Install, Configure & Manage training course includes the following:

- Full Materials
- Comprehensive Course Workbook



Exam Information

There is no formal examination or certification included in the cost of our VMware® vSphere: Install, Configure & Manage training course.

What's Next

Our two-day [BCS DevOps Foundation](#) training course is a great starting point for an individual or organisation wishing to embark upon the DevOps journey.

A core understanding of fundamental DevOps values, practices and techniques is essential learning, as you move towards improved workflows and faster deployments.

Our [BCS DevOps Foundation](#) training course promotes framework-agnostic learning, and core DevOps values will be at the heart of all discussions, citing specific textbook examples to support these values.

Additional Information

Our VMware® vSphere: Install, Configure & Manage training course will prepare you to administer a vSphere infrastructure for an organisation of any size.

You will learn how to comprehend data centers which are software-defined, the art of deploying a host or virtual machine and understand how vCenter Servers are made up and how to deploy one.