

VCP-DCV: VMware vSphere: Install, Configure, Manage

Install, configure and manage VMware vSphere environments with the skills data centre teams rely on.

DURATION

5 days · 40 hours

LEVEL

Intermediate

CURRICULUM

17 modules · 10 labs

DELIVERY

Live online, Onsite,
Corporate

Course overview

VMware vSphere still runs a large share of enterprise data centres, and teams need administrators who can build and operate it reliably. This five-day course takes you through a complete vSphere environment, from installing hosts to keeping workloads available and patched.

Day one covers virtualisation concepts, vSphere architecture and installing and configuring ESXi hosts. Day two deploys vCenter, organises the inventory, configures access control and creates and manages virtual machines, templates and content libraries.

Day three is about networking and storage: standard and distributed switches, port groups and VLANs, VMkernel adapters, iSCSI and NFS datastores, VMFS and an introduction to vSAN and storage policies. Day four focuses on resource management and availability — vMotion and Storage vMotion, resource pools, DRS, vSphere HA and Fault Tolerance — along with monitoring and alarms.

Day five covers lifecycle management with vSphere Lifecycle Manager, backup and certificate basics, security hardening, troubleshooting and an exam readiness session.

This course is aligned to the VMware Certified Professional – Data Center Virtualization (VCP-DCV) certification. Following Broadcom's acquisition of VMware, certification tracks, exam codes and training requirements have changed. Please confirm the current exam and any training requirement with Broadcom before booking. Ace Skills is not a Broadcom partner and does not use official courseware.

Highlights

- 40 hours of live, trainer-led sessions
- Nested vSphere lab for every learner
- ESXi, vCenter, networking and storage end to end
- vMotion, HA, DRS and lifecycle management
- Practice questions with review

What's included

- Nested vSphere lab environment
- ESXi install and vCenter deployment
- Distributed switching and shared storage labs
- HA, DRS and vMotion configuration
- Lifecycle Manager patching practice
- Course completion certificate from Ace Skills Consulting
- Post-training doubt support

Who this course is for

Who should attend

- System administrators managing virtualised servers
- Data centre and infrastructure engineers
- Support engineers moving into virtualisation roles
- Cloud engineers working with hybrid environments

Prerequisites

- System administration experience on Windows or Linux
- Networking and storage basics
- No prior vSphere experience required

Detailed curriculum — 5 days, 40 hours, 17 modules, 10 hands-on labs

Day 1 Virtualisation and ESXi

8 hours

1.1 Virtualisation concepts

- Hypervisors and virtual machines
- Software-defined data centre overview
- vSphere architecture

1.2 ESXi hosts

- Installation requirements
- DCUI and host client
- Installing ESXi
- Host networking and time settings

LAB Install and configure ESXi hosts · 50 min

1.3 Virtual machines on a host

- VM hardware and files
- Creating a VM
- VMware Tools

LAB Create a VM on a standalone host · 35 min

Day 2 vCenter and Virtual Machine Management

8 hours

2.1 vCenter

- vCenter architecture
- Single sign-on and identity sources
- Deploying the vCenter appliance
- Inventory: data centres, clusters and folders

LAB Deploy vCenter and add hosts · 55 min

2.2 Access control

- Roles and permissions
- Global and object permissions

2.3 Managing VMs

- Templates and cloning
- Content libraries
- Hot-add and resizing
- Customisation specifications
- Snapshots

LAB Deploy VMs from a template with customisation · 40 min

Day 3 Networking and Storage

8 hours

3.1 Virtual networking

- Standard switches and port groups
- Distributed switches
- VLANs and NIC teaming
- VMkernel adapters

LAB Build a distributed switch with VLAN port groups · 50 min

3.2 Storage

- Storage protocols
- iSCSI configuration
- Thin and thick provisioning
- VMFS and NFS datastores
- Multipathing

LAB Connect iSCSI and NFS datastores · 45 min

3.3 Storage services

- vSAN overview
- Storage I/O control overview
- Storage policies

Day 4 Resource Management and Availability

8 hours

4.1 Migration

- vMotion requirements
- Enhanced vMotion Compatibility
- Storage vMotion

LAB Migrate running VMs between hosts and datastores · 35 min

4.2 Resource management

- Shares, reservations and limits
- DRS and affinity rules
- Resource pools

4.3 Availability

- vSphere HA
- Fault Tolerance overview
- Admission control

LAB Configure HA and DRS and simulate a host failure · 50 min

4.4 Monitoring

- Performance charts
- Events and tasks
- Alarms

Day 5 Lifecycle, Security, Troubleshooting and Exam Readiness

8 hours

5.1 Lifecycle management

- vSphere Lifecycle Manager
- Upgrading hosts and vCenter
- Images and baselines

LAB Remediate a cluster with Lifecycle Manager · 40 min

5.2 Protection and security

- vCenter backup and restore
- Host and VM hardening
- Certificates overview
- VM encryption overview

5.3 Troubleshooting

- Logs and log bundles
- Network and storage troubleshooting
- Common host and VM issues

LAB Troubleshoot connectivity and datastore issues · 40 min

5.4 Exam readiness

- Skill area review
- Practice questions with review

Skills and tools

Skills you will build

VMware vSphere

ESXi

vCenter

Virtual machine management

Distributed switches

Shared storage

vSAN basics

vMotion

DRS

vSphere HA

Lifecycle Manager

vSphere security

Troubleshooting

Tools used in class

VMware ESXi

VMware vCenter

vSphere Client

vSphere Lifecycle Manager

PowerCLI

Certification exam

This course is aligned to the exam below and prepares you for it. The exam itself is booked and taken with the vendor.

Exam	VMware Certified Professional – Data Center Virtualization (VCP-DCV)
Exam code	VCP-DCV
Official page	https://www.broadcom.com/support/education/vmware/certification

Exam skill areas covered

Exam details are pending verification. Confirm the current exam code, format and fee on the official vendor page before booking.

Frequently asked questions

Has VCP-DCV changed under Broadcom?

Yes. Certification tracks, exam codes and training requirements have changed since the acquisition, so we confirm the current exam and any prerequisites with you before you book.

Does this course meet the official training requirement?

It is an independent Ace Skills course and is not official Broadcom training. If your chosen certification requires authorised training, we will tell you before enrolment.

Which vSphere version is used?

Labs use a current vSphere release; we note differences from older versions you may manage at work.

Do I need my own hardware?

No. Each learner gets a nested vSphere lab hosted in the cloud.

Book a batch or talk to an advisor

Course page: aceskillsconsulting.com/course/vcp-dcv-vmware-vsphere-install-configure-manage · Email: info@aceskillsconsulting.com

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