

## **Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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Postboks 6562 ETTERSTAD, 0606 Oslo, Norge

Email: kurs.ecs.no@arrow.com Phone: +47 22 02 81 00



# VMware Data Center Virtualization: Core Technical Skills

CODE: LENGTH: PRICE:

VMW DCVCTS 32 Hours (4 days) kr36,000.00

#### **Description**

This four-day, hands-on training course is an introduction to VMware vSphere®. In this course, you acquire the skills needed to perform Day 2 operational tasks that are typically assigned to the roles of operator or junior administrator in a vSphere environment.

#### **Objectives**

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

- · Describe virtualization and virtual machines
- Describe vSphere components and the software-defined data center (SDDC)
- Explain the concepts of server, network, and storage virtualization
- Monitor network and datastore configurations in VMware vSphere® Client™
- · Deploy, configure, and clone virtual machines
- · Migrate, monitor, and manage virtual machines
- Monitor tasks and events in VMware vSphere® Client™
- Recognize how vSphere DRS and VMware vSphere® High Availability improve performance and availability of a vSphere cluster

#### **Audience**

Technical professionals with basic system administration skills and operators responsible for managing virtual machines using VMware ESXi™ and VMware vCenter Server®

#### **Prerequisites**

- Working knowledge of operating systems
- Understanding of basic network, storage, and computer hardware concepts

#### **Programme**

#### 1 Course Introduction

- · Introductions and course logistics
- · Course objectives

#### 2 Virtualization and vSphere Concepts

- Describe how virtual machines (VMs) work
- Recognize the purpose of a hypervisor
- Describe how VMs share resources in a virtualized environment
- Recognize the components of an SDDC
- Describe the relationship between vSphere, the SDDC, and cloud computing
- Recognize the functions of the components in a vSphere environment
- Access and view vSphere graphical user interfaces
- Identify VMware solutions that integrate with vSphere in the SDDC

#### 3 Navigating the vSphere Client

- View and organize the inventory objects managed by vCenter Server
- Add and assign vSphere licenses
- · Change the log level of vCenter Server
- · Edit the startup policy of ESXi services

- Describe how vCenter Server roles and permissions work
- · Add permissions to virtual machines

#### 4 Lifecycle of Virtual Machines

- · Add and remove VM virtual hardware components
- · Identify the purpose of different VM files
- Configure VM settings
- · Create and delete virtual machines
- Recognize the benefits of installing VMware Tools™
- Install VMware Tools into a guest operating system
- Upgrade VMware Tools and VM hardware compatibility

#### 5 vSphere Networking

- · Describe virtual networking
- · Recognize ways that virtual switches connect VMs and ESXi hosts to the network
- View components and properties of a vSphere standard switch configuration
- · View a vSphere distributed switch configuration in vSphere Client
- Recognize when and how to use the settings for the security networking policy
- Recognize when and how to use the settings for the traffic shaping networking policy
- Describe how the NIC teaming and failover policy helps maintain network connectivity
- Perform basic checks to diagnose VM connectivity issues

#### 6 vSphere Storage

- Describe the function of a datastore
- Recognize types of vSphere datastores
- View datastore information in vSphere Client
- · Monitor datastore usage in vSphere Client

#### 7 Virtual Machine Management

- · Recognize the benefits of using VM templates
- · Create and update a VM template
- Deploy a VM from an existing template
- · Clone a virtual machine
- Recognize how to use guest OS customization specifications
- Deploy VMs from a content library
- · Deploy a virtual appliance from an OVF template
- Perform a hot and cold migrations of VMs
- Identify requirements for using VMware vSphere® Storage vMotion®
- Perform a vSphere Storage vMotion migration
- · Identify use cases for VM snapshots
- Create and manage snapshots of a virtual machine

#### **8 Resource Monitoring**

- Recognize the purpose of each type of VM resource control
- · Configure the resource allocation settings of a VM
- Observe the behavior of virtual machines with different share values
- · Manage and acknowledge vSphere alarms
- Use performance charts to monitor VM CPU and memory usage
- Monitor tasks and events in vSphere Client

#### 9 vSphere Clusters

- · View information about the services that a vSphere cluster offers
- Recognize how vSphere HA responds to different types of failures
- Monitor vSphere HA during a host failure
- · Describe how vSphere DRS works
- Interpret DRS scores given to VMs
- · Recognize how to apply the appropriate vSphere DRS automation and migration threshold levels
- Describe how vSphere Fault Tolerance works
- Recognize how Enhanced vMotion Compatibility works

#### **Test and Certification**

Attending this course is recommended to achieve the following certification:

• VMware Certified Technical Associate - Data Center Virtualization (VCTA-DCV)

#### **Session Dates**

### Tilleggsinformasjon

Denne treningen er også tilgjengelig som trening på stedet. Kontakt oss for å finne ut mer.