Enterprise Computing Solutions - Education Services

TRAINING OFFERING

You can reach us at:

Arrow ECS, Nidderdale House, Beckwith Knowle, Harrogate, HG3 1SA

Email: educationteam.ecs.uk@arrow.com
Phone: 0870 251 1000

VMware vSphere: Install, Configure, Manage [V7]

CODE:	LENGTH:	PRICE:
VMW_VSICM7	40 Hours (5 days)	£3,230.00

Description

This five-day 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. This course prepares you to administer a vSphere infrastructure for an organization of any size.
This course is the foundation for most of the other VMware technologies in the software-defined data center.

Objectives

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

- System administrators
- System engineers

Prerequisites

This course has the following prerequisites: • System administration experience on Microsoft Windows or Linux operating systems

Programme

1 Course Introduction • Introductions and course logistics • Course objectives
2 Introduction to vSphere and the Software-Defined Data Center • Explain basic virtualization 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
• Recognize the user interfaces for accessing the vCenter Server system and ESXi hosts
• Use VMware Host Client™ to access and manage ESXi host 3 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™ 4 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, organizational 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 5 Configuring and 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 6 Configuring and 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 7 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 customization specification files to customize 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™ 8 Resource Management and 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 9 vSphere Clusters
• 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 10 vSphere Lifecycle Management • Describe how VMware vSphere® Lifecycle Manager™ works
• Use vSphere Lifecycle Manager to update ESXi hosts in a cluster

Session Dates

On request. Please Contact Us

Additional Information

This training is also available as onsite training. Please contact us to find out more.