

# **Enterprise Computing Solutions - Education Services**

# **TRAINING OFFERING**

You can reach us at:

9201 Dry Creek Rd. Centennial, CO 80112, United States

Email: arrow\_learning@arrow.com

Phone: 303 790 2330



# VMware vSphere: Install, Configure, Manage [V6]

CODE: LENGTH: PRICE:

VM-VS-ICM-V6 40 Hours (5 days) \$4,250.00

## **Description**

VMware vSphere: Install, Configure, Manage is our best-selling course. It features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere® 6, which includes VMware ESXi™ 6 and VMware vCenter Server™ 6. This course will give you a solid understanding of how to administer a vSphere infrastructure for an organization of any size. This course meets the prerequisite for advanced vSphere courses, which can be found at www.vmware.com/education.

## **Objectives**

• Describe the software-defined data center • Deploy an ESXi host and create virtual machines • Describe vCenter Server architecture • Deploy a vCenter Server instance or VMware vCenter Server™ Appliance™ • Use vCenter Server to manage an ESXi host • Configure and manage vSphere infrastructure with VMware vSphere® Client™ and VMware vSphere® Web Client • Configure virtual networks with vSphere standard switches • Use vCenter Server to manage various types of host storage • Manage virtual machines, templates, clones, and snapshots • Create a vApp • Describe and use the content library • Migrate virtual machines with VMware vSphere® vMotion® • Use VMware vSphere® Storage vMotion® to migrate virtual machine storage • Monitor resource usage and manage resource pools • Use VMware vRealize™ Operations Manager™ to identify and solve issues through analytics and alerts • Manage VMware vSphere® High Availability and VMware vSphere® Fault Tolerance • Use VMware vSphere® Replication™ and VMware vSphere® Data Protection™ to replicate virtual machines and perform data recovery • Use VMware vSphere® Distributed Resource Scheduler™ clusters to improve host scalability • Use vSphere distributed switches to improve network scalability • Use VMware vSphere® Update Manager™ to apply patches • Perform basic troubleshooting of ESXi hosts, virtual machines, and vCenter Server operations

#### **Audience**

· System administrators · Systems engineers

#### **Prerequisites**

• System administration experience on Microsoft Windows or Linux operating systems • Understanding of concepts presented in the VMware Data Center Virtualization Fundamentals course for VCA-DCV certification

## **Programme**

- $1. Course\ Introduction\ \circ Introductions\ and\ course\ logistics\ \circ Course\ objectives\ 2. Software-Defined\ Data\ Center$
- •Introduce components of the software-defined data center •Describe where vSphere fits into the cloud architecture •Install and use vSphere Client •Overview of ESXi
- 3. Creating Virtual Machines
- •Introduce virtual machines, virtual machine hardware, and virtual machine files •Create and work with virtual machines 4.vCenter Server
- ∘Introduce the vCenter Server architecture ∘Deploy and configure vCenter Server Appliance ∘Install and use vSphere Web Client ∘Manage vCenter Server inventory objects and licenses ∘Explain the benefits of Enhanced vMotion Compatibility 5.Configuring and Managing Virtual Networks
- ∘Describe, create, and manage standard switches ∘Describe and modify standard switch properties ∘Configure virtual switch load-balancing algorithms ∘Create, configure, and manage vSphere distributed switches, network connections, and port groups 6.Configuring and Managing Virtual Storage
- ∘Introduce storage protocols and storage device names ∘Discuss ESXi with iSCSI, NFS, and Fibre Channel storage ∘Create and manage VMware vSphere® VMFS datastores ∘Introduce VMware Virtual SAN™ 7.Virtual Machine Management

- ∘Use templates and cloning to deploy virtual machines ∘Modify and manage virtual machines ∘Perform vSphere vMotion and vSphere Storage vMotion migrations ∘Create and manage virtual machine snapshots ∘Create a vApp ∘Introduce the various types of content libraries and how to deploy and use them
- 8. Resource Management and Monitoring
- •Introduce virtual CPU and memory concepts •Configure and manage resource pools •Describe methods for optimizing CPU and memory usage •Use vCenter Server performance graphs and alarms to monitor resource usage •Create and use alarms to report certain conditions or events •Introduce vRealize Operations Manager for data center monitoring and management 9.vSphere HA and vSphere Fault Tolerance
- ∘Explain the vSphere HA architecture ∘Configure and manage a vSphere HA cluster ∘Use vSphere HA advanced parameters ∘Introduce vSphere Fault Tolerance ∘Enable vSphere Fault Tolerance on virtual machines ∘Introduce vSphere Replication ∘Use vSphere Data Protection to back up and restore data 10.Host Scalability
- ∘Describe the functions of a vSphere DRS cluster ∘Configure and manage a vSphere DRS cluster ∘Work with affinity and antiaffinity rules ∘Use vSphere HA and vSphere DRS together
- 11.vSphere Update Manager and Host Maintenance
- ∘Use vSphere Update Manager to manage ESXi patching ∘Install vSphere Update Manager and the vSphere Update Manager plug-in ∘Create patch baselines ∘Use host profiles to manage ESXi configuration compliance ∘Scan and remediate hosts 12.Installing VMware Components
- ∘Introduce ESXi installation ∘Describe boot-from-SAN requirements ∘Introduce vCenter Server deployment options ∘Describe vCenter Server hardware, software, and database requirements ∘Discuss installation of vCenter Server Appliance and a vCenter Server instance

#### **Test and Certification**

• Describe the software-defined data center • Deploy an ESXi host and create virtual machines • Describe vCenter Server architecture • Deploy a vCenter Server instance or VMware vCenter Server™ Appliance™ • Use vCenter Server to manage an ESXi host • Configure and manage vSphere infrastructure with VMware vSphere® Client™ and VMware vSphere® Web Client • Configure virtual networks with vSphere standard switches • Use vCenter Server to manage various types of host storage • Manage virtual machines, templates, clones, and snapshots • Create a vApp • Describe and use the content library • Migrate virtual machines with VMware vSphere® vMotion® • Use VMware vSphere® Storage vMotion® to migrate virtual machine storage • Monitor resource usage and manage resource pools • Use VMware vRealize™ Operations Manager™ to identify and solve issues through analytics and alerts • Manage VMware vSphere® High Availability and VMware vSphere® Fault Tolerance • Use VMware vSphere® Replication™ and VMware vSphere® Data Protection™ to replicate virtual machines and perform data recovery • Use VMware vSphere® Distributed Resource Scheduler™ clusters to improve host scalability • Use vSphere distributed switches to improve network scalability • Use VMware vSphere® Update Manager™ to apply patches • Perform basic troubleshooting of ESXi hosts, virtual machines, and vCenter Server operations

#### **Session Dates**

On request. Please Contact Us

# **Additional Information**

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