VSICM - VMware vSphere - Install, Configure, Manage [V7.0]

This training program prepares you to administer a vSphere infrastructure for an organization of any size.

5 Days

How You Will Benefit

VMware vSphere: Install, Configure, Manage [V7.0] is a 5-day course which 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.

Attendance of this course meets the training requirement to achieve the following certification:

- VMware Certified Professional – Data Center Virtualization (VCP-DCV)

Workshop Description

Module 1: Course Introduction
- Introductions and course logistics
- Course objectives

Module 2: Introduction to vSphere and the Software-Defined Data Center
- Explain basic virtualization concepts
- Describe how vSphere fits into the software-defineddata center and the cloud infrastructure
- Explain how vSphere interacts with CPUs, memory,networks, and storage
- Recognize the user interfaces for accessing thevCenter Server system and ESXi hosts
- Use VMware Host Client™ to access and manage ESXihost

Module 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™

Module 4: vCenter Server
- Describe the vCenter Server architecture
- Discuss how ESXi hosts communicate with vCenterServer
- Deploy and configure vCenter Server Appliance
- Use the vSphere Client to manage the vCenter Serverinventory
- Add data center, organizational objects, and hosts tovCenter Server

For more information, contact us at **(613) 727-7729** or visit **algonquincollege.com/corporate**

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- Use roles and permissions to enable users to accessobjects in the vCenter Server inventory
- Back up vCenter Server Appliance
- Monitor vCenter Server tasks, events, and appliancehealth
- Use vCenter Server High Availability to protect avCenter Server Appliance

Module 5: Configuring and Managing Virtual Networks
- Create and manage standard switches
- Describe the virtual switch connection types
- Configure virtual switch security, traffic-shaping andload-balancing policies
- Compare vSphere distributed switches and standardswitches

Module 6: Configuring and Managing Virtual Storage
- Identify storage protocols and storage device types
- Discuss ESXi hosts using iSCSI, NFS, and FibreChannel storage
- Create and manage VMFS and NFS datastores
- Explain how multipathing works with iSCSI, NFS, andFibre Channel storage
- Deploy virtual machines on a VMware vSAN™datastore

Module 7: Virtual Machine Management
- Use templates and cloning to deploy new

virtualmachines
- Modify and manage virtual machines
- Create a content library and deploy virtual machinesfrom templates in the library
- Dynamically increase the size of a virtual disk
- Use customization specification files to customize anew virtual machine
- Perform vSphere vMotion and vSphere StoragevMotion migrations
- Create and manage virtual machine snapshots
- Examine the features and functions of VMwarevSphere® Replication™

Module 8: Resource Management and Monitoring
- Discuss CPU and memory concepts in a virtualizedenvironment
- Describe what overcommitment of a resource means
- Describe methods for optimizing CPU and memoryusage
- Use various tools to monitor resource use
- Create and use alarms to report certain conditions orevents

Module 9: vSphere Clusters
- Describe options for making a vSphere environmenthighly available

Prerequisites:

The knowledge and skills that the learner should have before attending this course are as follows:

- System administration experience on Microsoft Windows or Linux operating systems

Attend This Workshop If You Are a

- System administrator
- System engineer

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By the end of this workshop, you will 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

How to Register

- Call (613) 727-7729
- Email training@algonquincollege.com
- Register online:
  www.algonquincollege.com/corporate
- Location for Open Enrolment Courses:
  - o Algonquin College Learning Centre
  - o 700 Sussex Drive, Ottawa, Ontario K1N 1K4
  - o Time: 8:30 a.m. to 4:00 p.m.
  - o Check-in, coffee and muffins start at 7:45 a.m. Afternoon refreshment provided.
  - o Group size is limited to 20.

- Dedicated sessions are available at our site or at your location.

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