

Collin College - Continuing Education

COURSE SYLLABUS

COURSE INFORMATION

Course Number: VIRT 7060

Course Title: VMware vSphere: Install, Configure, Manage

Course Description: Hands-on training for installation, configuration, and management of VMware vSphere, comprising ESX/ESXi and vCenter Server.

VMware training is only available to individuals who may be a student in full or part time education, unemployed, career changers or trying to improve their knowledge and are paying for the training themselves. It is not for companies or corporate entities to obtain training for their employees – those individuals must go to a commercial VMware training offering through a VMware authorized training center.

Suggested Course Prerequisite(s): System administration experience with Microsoft Windows or Linux

Course Resources: (provided)

Student Learning Outcomes: Demonstrate ability to:

- Install and configure ESX or ESXi
- Install and configure vCenter Server components
- Configure and manage ESX/ESXi networking and storage using vCenter Server
- Deploy, manage, and migrate virtual machines
- Manage user access to the VMware infrastructure
- Use vCenter Server to monitor resource usage
- Use vCenter Server to increase scalability
- Use VMware vCenter Update Manager to apply ESX/ESXi patches
- Use vCenter Server to manage higher availability and data protection

Certification Notes: Preparation for VCP certification exam

Next course recommendation: VMware vSphere: Optimize & Scale

Lesson Plan – by week or session:

Session 1:

Course Introduction, Introduction to VMware Virtualization

Lecture, Configuring VMware ESX and ESXi

Lecture: Overview of ESX/ESXi, Configuring ESX/ESXi

Lab 1: Configuring ESXi - Installing and Using VMware vCenter Server

Lecture: Installing vCenter Server

Lab 2: Installing vCenter Server - Using vCenter Server

Lab 3: Using vCenter Server Network Standard Switches

Session 2:

Lab 4: Standard Switches

Modifying Virtual Switch Properties

Lab 5: Network Design Storage Concepts IP Storage: iSCSI and NFS

Lab 6: Accessing IP Storage Fibre Channel SAN Storage VMFS Datastores

Session 3:

Lab 7: VMFS Datastores Virtual Machine Concepts Creating a Virtual Machine

Lab 8: Creating a Virtual Machine Creating Templates and Clones

Lab 9: Creating Templates and Clones

Session 4:

VMware vCenter Converter

Lab 10: VMware vCenter Converter Modifying Virtual Machines

Lab 11: Modifying a Virtual Machine Managing Virtual Machines

Lab 12: Managing Virtual Machines Access Control

Session 5:

Lab 13: Access Control Resource Monitoring

Lecture: Resource Controls and Resource Pools

Session 6:

Lab 14: Resource Pools Virtual CPU and Memory Concepts Monitoring Resource Usage

Lab 15: Monitoring Performance Using Alarms

Session 7:

Lab 16: Using Alarms Data Protection

Lab 17: VDR Scalability

Lecture: vCenter Linked Mode Host Profiles

Session 8:

Lab 18: Host Profiles vNetwork Distributed Switches

Lab 19: Create vNetwork Distributed Switch vMotion Migration

Lab 20: vMotion Migration VMware DRS Clusters

Session 9:

Lab 21: DRS Clusters VMware DPM

Lab 22: DPM High Availability

Lab 23: VMware HA Managing High Availability

Session 10:

Lab 24: VMware HA Network Redundancy Fault Tolerance

Lab 25: Configuring FT Patch Management

Lab 26: Using Update Manager Installing VMware ESX and ESXi

Course Sessions:

Listed are guidelines to indicate all topics that will be covered during your course. Do not plan your personal calendar based on these sessions. Your instructor will give you a calendar for your class that will indicate specific topics, assignments, and days.

Method of Evaluation:

Unless otherwise stated, course completion is evaluated on the basis of attendance. Students must be in attendance 90% of the class time in order to be considered a successful completer of the course.

Students must be in attendance 90% of each course in a certificate series for successful completion and to earn a certificate as specified.

Students must complete all courses (core and no. of elective courses needed) to complete a certificate series within two years from start date of the first course taken.

Refund Policy:

Please refer to www.collin.edu/ce/inforegistrar.html for our refund policy. No refunds after the start time of the first class.

Americans with Disabilities Act:

Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal opportunity. It is the student's responsibility to contact the ACCESS office, SCC-D140 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current Collin Student Handbook for additional information.