

An Introduction to VMware: Exploring Virtualization

Length: 4 Days

Pre-requisites: Previous experience in an administration role

Summary: This CTES-SETC certified course provides participants with a comprehensive introduction to the various features of VMware virtualization technologies.

Target Audience: IT Professional who needs to implement VMware virtualization technologies.

Course Content

Module 1: Introduction to VMware Virtualization

Topic 1: The Need for Virtualization
Topic 2: The Rapid Growth of Virtualization
Topic 3: A Brief History of VMware
Topic 4: VMware Products and Technologies
Topic 5: The Rise of the Hypervisor
Topic 6: Virtualization and vSphere Components

Module 2: VMware Workstation

Topic 1: Features and Functionalities
Topic 2: Technology and Architecture
Topic 3: Installation
Topic 4: Configuration
Topic 5: Virtual Networking
Topic 6: Migrating and Cloning

Module 3: VMware Workstation Administration

Topic 1: Understanding the File System
Topic 2: Maintenance
Topic 3: Administration
Topic 4: Isolation and Encapsulation
Topic 5: Best Practices

Module 4: VMware ESXi Server

Topic 1: Features and Functionalities
Topic 2: Technology and Architecture
Topic 3: Hardware Virtualization
Topic 4: Interface to Hardware
Topic 5: Service Console

Topic 6: Linux Dependencies

Module 5: VMware ESXi Installation

Topic 1: System Requirements
Topic 2: Planning your Virtualized Environment
Topic 3: Deployment Methods
Topic 4: Nested Virtualization
Topic 5: ESXi Server Installation

Module 6: VMware ESXi Configuration

Topic 1: Configuring Local Storage
Topic 2: Introduction to VMFS Datastores
Topic 3: Introduction to VMFS Volumes
Topic 4: Understanding SAN Storage
Topic 5: Physical vs. Virtual NICs
Topic 6: Physical vs. Virtual Switches
Topic 7: Configuring Networking and VLANs
Topic 8: Configuring iSCSI Targets
Topic 9: Resource Pools and Allocations

Module 7: VMware ESXi Virtual Machines

Topic 1: What is a Guest Environment?
Topic 2: Designing the Environment
Topic 3: Guest Operating Systems
Topic 4: ISO Images and Virtual Media
Topic 5: Guest Machine Networking
Topic 6: Guest Resource Usage
Topic 7: Introduction to VMDK Files
Topic 8: VMware Guest Tools
Topic 9: Creating a Guest Virtual Machine

Module 8: Introduction to VMware vCenter

Topic 1: The Benefits of vCenter
Topic 2: vCenter Product Family

Topic 3: Centralized Control and Management

Topic 4: vCenter Deployment

Topic 5: System Requirements

Topic 6: Best Practices

Module 9: Deploying VMware vCenter

Topic 1: Virtualizing vCenter

Topic 2: vCenter Installation

Topic 3: Creating a Virtual Datacenter

Topic 4: Managing ESXi vSphere Hosts

Topic 5: Introduction to High Availability

Topic 6: Introduction to vNetwork Distributed Switches

Topic 7: Introduction to vDS Policies

Topic 8: Performing Basic Monitoring

Topic 9: Performing Basic Troubleshooting