

VMware Professional

This hands-on training course explores VMware Infrastructure 3, which consists of VMware ESX Server and VMware VirtualCenter. Upon completion of this course, you can take the examination to become a VMware Certified Professional. This course is a prerequisite for a course entitled VMware Infrastructure 3: Deploy, Secure, and Analyze.

Group rates available – Inquire for more details

Duration: 30 hours

Prerequisites

- Basic knowledge of server/network operating system like Windows Server or Linux, or have basic networking such as TCP/IP skills it would be beneficial, but is not required.

Summary of Course

- New features of VMware Infrastructure 3.5
- Foundational terms and concepts concerning virtualization
- How to install, configure and support ESX server 3.5 and VirtualCenter 2.5
- How to configure Virtual Machines, templates, and clones
- How to configure Virtual Networking and how to support VMotion
- P2V , V2V, V2P, and P2P Methods and Techniques
- Navigating and configuring VMware ESX Server
- Installing & Using VMware Virtual Center (VC0)
- Creating & Modifying Virtual Guest Machines
- Installing and Configuring VMware Tools
- VMware ESX Disk Storage
- VMware ESX - Tasks, Events, Alarms, and Maps
- VMware ESX Server Virtual Networking
- Using Templates, Cloning, and Migrating with VMware
- Server Consolidation Procedures and reasoning
- Tools to support a virtual infrastructure - VMware, Platespin, Vizioncore, Veeam, and more
- Configuring VMotion, Resource Pools, DRS, & VMHA with VMware ESX Consolidation, Clustering –DRS/HA,etc.
- Best Practices within a Virtual Enterprise
- How to use the Command Line Interface for supporting ESX Servers - ESX commands
- How to install, configure, and troubleshoot ESX licensing server.

Course Content

Virtual Infrastructure Overview

- Introduction to VMware
- VM Use Cases
- Closer Look: ESX Server
- VMware Products

VMware Installation

- Core Components
- Pre-installation considerations
- Installation
- Demo

Networking Components

- Networking VMware
- Virtual Switches
- Virtual NIC Addressing
- Connection Types
- Demo

Managing Storage

- Connectivity to Storage Devices
- WWN, LUNs, Vmkernel
- iSCSI -- Discovery, iQN,
- Initiators
- VMFS
- Failover Policies
- Paths
- Manually Configuring Server
- Demo

Virtual Center

- Introduction to VC
- VC License Server
- VC Database Server
- Management Server
- Data Center Grouping
- VC Inventory
- Clusters
- VC Services
- Demo

Virtual Machines

- Introduction To VMs
- Configuration
- Disks
- Snapshots
- Creating VMs
- Templates
- Cold Migrations
- Examples
- Demo

Managing System Resources

- Security
- Roles
- Web Access
- Demo

Controlling Access to Resources

- Resources - Reservations, Shares, Limits
- Vmotion
- Recommendations
- Clusters
- Resource Pools
- Demo

Monitoring The Virtual Environment

- Monitoring Resources -- CPU, RAM, Disk, Network
- VM Configuration -- Hyperthreading, Page Sharing, Balloon drivers
- VMKernel Swap files
- Configuring Server systems
- Alarms
- Demo

Maintaining High Availability

- Backup
- Restore
- Clusters
- Demo

Troubleshooting Techniques

- Basics
- VM
- Login
- VI Client
- Virtual Center
- Diagnostic Info
- Troubleshooting Techniques
- Demo

Introduction to Server Provisioning

- Scripted Installation of VMware ESX Server
- Installation script
- Command-line utilities
- VMFS Volumes
- /etc directory
- NTP
- Demo

Security in a VMware Virtualization Environment

- Storage
- Firewall
- Network
- User
- Demo

CPU and Memory Resource Allocation

- VMs
- Resource Pools -- Shares, Limits, Reservations
- Clusters
- Demo