Desktop Virtualization Technician

12 weeks, $2,200

Introduction to Virtualization
Here, you learn the Virtualization Essentials including how the different types of virtualization could be compared. I'll talk about OS licensing, the future of virtualization, and how to test virtualization in your own office or home.

- What is Virtualization?
- Virtualization Statistics
- Uses for Server Virtualization
- What is the VMKernel?
- Virtualization Products Available
- VMware ESX Server vs. VMware Server
- VMware ESXi vs. VMware ESX
- VMware ESXi Server vs. Windows 2007 Server Hyper-V
- What is the Future of Virtualization?
- Windows OS Licensing and Virtualization
- VMware ESX Virtual Machine Specifications
- What is the VMTN?
- Other Virtualization Resources
- How Can I Test and Demo ESX at Work or Home?
- How is VMware ESX Server Supported and Licensed?

Planning and Installing VMware ESX Server

Watch the step-by-step installation process for VMware ESX Server, as well as how to plan and license ESX Server.

- Steps to select the right hardware for virtualization
- ESX Server Installation Requirements, Recommendations, and Maximums
- What should or shouldn't be virtualized?
- How do I consolidate servers? And, importance of SAN storage
- Licensing options for ESX Server - host based vs server based
- Partitioning options for ESX Server
- How to install VMware ESX Server
Navigating and configuring VMware ESX Server

Find out how to configure and manage VMware Server using VMware Management Interface and VMware Server Console.

- VMware ESX Management options
- Service Console - SSH & telnet
- Web - HTTP & HTTPS
- VI Client
- Installing the Virtual Infrastructure (VI) Client
- Using the VI Client
- Navigation
- Remote Control of Virtual Servers
- Hot Keys

Installing & Using VMware Virtual Center (VC)

Learn what VMware Virtual Center centralized management can do for you, how to install it, and how to navigate it, step by step

- Once installed, what does VC look like?
- Introduction to VMware Virtual Center
- Product Description
- Use Cases
- Features
- Architecture
- VC Minimums / Requirements
- VC Maximums
- Installing Virtual Center
- Navigating VC

Creating & Modifying Virtual Guest Machines

VMware Tools are necessary for proper management of guest machines - find out how to load them and how they work. Learn how to create VMware Guest virtual machines. Install, configure, import and export, and downloading virtual machines from the Internet.

- What does a running Virtual Guest machine look like?
- Virtual Guest - Machine Specifications
- Changing BIOS settings
- How to create ISO Images of CD & DVD Installation media
- How to create a new virtual machine & install a guest OS
- Adding or removing virtual hardware
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- What is an "appliance"?
- Downloading Virtual Machines from the VMTN Virtual Appliance Marketplace
- What and where are VMX configuration files?
- Importing VMs to ESX and Exporting VMs
- Transferring files to your server with SCP

VMware ESX Disk Storage

VMware storage management can be complex - learn all the terminology you need to know in our virtualization storage video. Learn about SAN, NAS, Fibre Channel, and iSCSI. Plus, understand what Virtual Machine Snapshots are and how to use them.

- Storage Terminology
- How does a Datastore help you?
- VMware ESX Storage Options
- What is a VMFS Virtual Disk?
- Advantages of Virtual Disks
- Understanding local disk storage
- Understanding Fibre Channel (FC) SAN Storage
- Understanding iSCSI SAN Storage
- Understanding NAS NFS Storage
- Local vs. iSCSI vs. FC compared

VMware ESX Server Virtual Networking

- Virtual Networking Overview
- Virtual Networking Terms - vmnic, vswitch, vswif, & port group
- Virtual Network Diagrams Explained
- Virtual Networking Must Knows
- Virtual Networking Configuration Scenarios
- Private/Host-only
- Single NIC - most common
- Redundant & Load Balanced
- DMZ with router / firewall
- Using VLANs with ESX
- Configuring Virtual Switches
- Adapter teaming, fault tolerance, and load balancing
- Service Console Command line Networking Tools
VMware Update Manager
New in ESX/VI 3.5 - Update Manager can update ESX hosts and Windows/Linux Guest machines - learn how it used!

- What is Update Manager?
- How Can Update Manager Help You?
- What Can Update Manager Update for You?
- How Does Update Manager Work?
- How to Install VMware Update Manager
- Components of VMware Update Manager
- Verifying Install of the Update Manager Service
- Installing the Update Manager Plug-In
- Configuring and Using Update Manager

Backing up Virtual Machines / VMware Consolidated Backup (VCB)
Learn the different types of backups available for VMware, as well as third party companies.

- Backup & Disaster Recovery for Virtual Machines
- Backing up the VM within the Guest OS (file level)
- Backing up the VM within the Host OS (image level)
- VMware Consolidated Backup
- What is VCB?
- How does VCB work?
- VCB Requirements
- What is the process of using VCB?
- Installing VCB
- Using VCB CLI Commands
- Scenario: Creating VCB Backup Scripts