



VMware View 4.6

INTRODUCTION

V4.6

This exciting, hands-on, lab intensive course covers new items added to VMware's newest version of VMware View. Students will be covering the many features of VMware View. This course has students install, administer (looking closely at the new installs), build VM's and new VM features, as well as learn more advanced features with cloning and command line options. Our "VMware View 4.6" course is intended for students with significant production experience in the Infrastructure 3/vSphere product suite. It is our intention to take your existing knowledge base and expand upon that.

CLASSROOM SETUP

Each student will have an ESX Server and a Windows Server 2003 or XP workstation and thin clients to work with. Our classroom lab will share a cluster of ESX Servers, a variety of different Storage solutions (SAN, NAS, ISCSI, local, etc.) as needed, a vCenter Server, a variety of 3rd party tools and access to many pre-configured VM's (Microsoft, Novell, Red Hat, Ubuntu ...etc).

PRE-REQUISITES

- ESX Server familiarity
- VirtualCenter/vCenter usage
- VirtualCenter/vCenter administration
- Excellent familiarity with Windows
- Some familiarity with Linux

MAJOR AREAS COVERED

ESX Server 4.1	Resource statistics
vCenter 4.1	Storage VMotion
VMware View 4.6	VM Hardware v7
Linked Clones	Fault tolerance – VM shadow cloning
Host Profiles	VMware Tools
vSphere Command line interface	Automated Desktop Pools
VMware View Connection Server	VMware Paravirtualized SCSI
VMXNET – generation 3	VMware View Composer
vCenter install requirements	Virtual Networking
Typical VM Build	Custom VM Build
Distributed Virtual Switch	Hot add Hardware
Resource Views	PCoIP
View Client with Local Mode	Virtual Printing
floating desktops	Local-mode desktops
vdmadmin utility	Backing up Restoring the View databases
USB redirection and multimedia redirection	



COURSE OUTLINE

This course covers items from the following VMware courses. VMware View 4.6

Virtualization Basics

- History of virtualization
- What is virtualization?
- Why do we virtualize?
- VMware vSphere

Configure Shared Storage

- ISCSI, SAN and NAS storage
- Join ESX Servers to a SAN
- Creating a shared VMFS Volume

Install vCenter Server

- vCenter Architecture
- Components of vCenter
- The vCenter Databases and support
- The vCenter install

What is VMware View

- VMware View Architecture
- ESX Server
- vCenter Server
- VMware View Connection Server
- VMware View Security Server
- VMware View Composer
- VMware View terms and concepts
- Support /Requirements for VMware View
- View Client with Local Mode

Installing ESX Server

- Pre-installation tasks
- Installing the ESX Server
- Post Installation tasks
- Configure and securing SSH
- The VMFS file system

Clones and Templates

- Deploy virtual machines efficiently
- Creating Templates
- Deploying from Templates

Configure vCenter

- Adding the ESX host
- Setup Customization Specification
- Rolls, Privileges and Permissions
- Alarms, Events, and Tasks
- Task Automation
- Virtual Machine Resource Management
- Resource Pool Resource Management
- Testing resource management

VMware View Connection Server

- Connection Server Types:
 - Standard, Replica, Security
- Install Connection Server
- Configure Connection Server

VMware View Security Server

- Firewall considerations for Security Server
- DNS considerations for Security Server
- Installing Security Server

VMware View Composer

- View Composer Role
- The Composer Database
- Installing Composer
- Linking Composer to vCenter

Virtual Machine Concepts

- Virtual Machine Remote Console
- VM Encapsulation
- Working with the Remote Console
- Using remote devices CD & Floppy
- Using datastore ISO's

Prepare VM for production

- VMware Tools
- Graphics considerations
- Time Considerations
- Convert to template

Building a VM

- Necessary drivers
- Install recommended Operating System
- Critical VM files
- The VM Folder Structure

Automated Desktop Pools

- Create a customization specification for Automated Desktop Pool
- Deploy a VM from template
- Prepare VM as Automated Desktop Pool Parent
- Configure Automated Desktop Pool
- Establish client connection to View Composer
- Automatically deploy new Virtual Desktop



Individual Virtual Desktops

- Requirements and considerations
- Deploy VM's from a template
- Prepare VM's for the Virtual Desktop Environment
- Establish client connection to Individual desktop

Virtual Networking

- Virtual Networking concepts
- Virtual Switches and isolation
- Port Groups – 3 types
- VMnics - Physical NIC's
- VLAN's

VMware View Security

- SSH
- ESX Firewall

Linked Clones

- Using templates for Deployment
- Using a Linked Clone Parent for VM's
- Configure Linked Clone Desktop Pools
- Configuring linked Clones to propagate
- Establish client connection to Linked Clones
- Desktop recomposition and refresh
- Reviewing Storage efficiency for Linked Clones

Backing up VMware View

- ESX Server Backup
- Virtual Machine backup
- VMware Consolidated Backup
- Configure VCB with integration packages
- File-level restore w/o an agent
- Backing up the View databases
- Restoring the View databases

DMZ

- Port Group types
- Layer 7 firewalls
- Securing Layer 2
- Port Sniffers

Security Server

- Move Security Server into DMZ
- Configuring networking on Security Server
- Testing your configuration thru SSL to the Virtual Desktops

Thin Clients

- PCoIP
- RDP and Other protocols – RGS, TCX...etc
- Hardware thin clients
- Software thin clients

Essential 3rd Party Tools for VMware View

- File Transfer tools – Veeam FastSCP and WinSCP
- SSH tools
- Re SIDing tools

Administration

- vdadmin utility
- Disk Tools
- Performance monitoring tools – VFOglight Pro
- ISO's, FLP's create and extract
- Using your smart phone or PDA for support