VMware View 4.5

INTRODUCTION   V4.5

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 4.5" 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 4.5	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	

COURSE OUTLINE

This course covers items from the following VMware courses.   VMware View 4.5

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

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

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
- The RDP protocol
- 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
- Disk Tools
- Performance monitoring tools – VFoglight Pro
- ISO's, FLP's create and extract
- Using your smart phone or PDA for support