

## VSphere 5.1

**Length:** 5 Days

### COURSE CONTENT

#### CHAPTER 1: COURSE INTRODUCTION AND METHODOLOGY (HOL)

#### CHAPTER 2: VIRTUALIZATION OVERVIEW AND WHAT'S NEW IN VSPHERE 5.1

#### CHAPTER 3: PLANNING AND INSTALLING ESXi 5.1 (VMWARE VSPHERE HYPERVISOR)

- Planning ESXi 5.1 Server Deployment
- Deployment Guidelines
- ESXi 5.1 Image Builder
- ESXi 5.1 Server Install (HOL)
- Configuring Hostname Resolution and NTP (HOL)
- Troubleshooting ESXi 5.1 Server

#### CHAPTER 4: USING TOOLS TO ADMINISTER A VMWARE ENVIRONMENT

- Overview of 3rd Party Tools
- ESXi Management (vSphere Client, NEW V5 esxcli, vCLI, vMA, Putty, PowerCLI, Web) (HOL)
- Troubleshooting the vSphere Client (VIC)

#### CHAPTER 5: VCENTER SERVER 5.1 AND LICENSING

- Demystifying vSphere 5.1 Licensing
- vCenter Server 5.1 Installation (HOL)
- vCenter Server 5.1 Virtual Appliance
- vCenter Server 5.1 Inventory (HOL)
- Managing vCenter Server 5.1 (HOL)

- vCenter Solutions Manager
- Planning vCenter Server 5.1 Deployment
- Troubleshooting vCenter Server 5.1 Deployment

#### CHAPTER 6: CONFIGURING NETWORKING

- Create & Modify Virtual Networks (HOL)
- Create & Modify Virtual Networks using CLI (HOL)
- vNetwork Distributed Virtual Switches & NIOC (HOL)
- Network Monitoring and Troubleshooting (NetFlow, Port Mirror, LLDP, 802.1p Tagging)

#### CHAPTER 7: CONFIGURING STORAGE

- Storage Concepts, Storage Awareness & Profile Driven Storage
- iSCSI Storage (GUI & Command Line) (HOL)
- Fibre Channel Storage & Software FCoE (GUI & Command Line)
- VMFS 5 Datastores and SSD (GUI & Command Line) (HOL)
- NAS Storage and NFS Datastores (GUI & Command Line) (HOL)
- vSphere Storage Appliance (VSA)
- Raw Device Mapping (RDM) (HOL)

## CHAPTER 8: VM CREATION AND CONFIGURATION & SNAPSHOTS

- Create a VM (HOL)
- Create Multiple VMs, Templates & Clones(HOL)
- Virtual Appliances (HOL)
- VMware vCenter Standalone Converter (P2V, V2V) (HOL)
- Manage VMs (HOL)
- Virtual Machine Startup/Shutdown (HOL)
- Virtual Machine Snapshots (HOL)
- vSphere 5.1 Web Client (HOL)
- Troubleshooting Virtual Machines

## CHAPTER 9: SECURITY AND PERMISSIONS

- Controlling User Access and passwords (HOL)
- ESXi 5.1 AD Integration (HOL)
- Managing ESXi 5.1 Firewall (GUI & Command Line)(HOL)
- VMSafe and vShield Zones

## CHAPTER 10: SERVER AND VM MONITORING

- Configuring Alarms (HOL)
- VM Optimization for vSphere 5.1 Licensing (HOL)
- Optimizing Resources
- Monitor VM Performance (HOL)
- Using NetFlow Tool (HOL)
- ESXi, vCenter Logs and syslog (HOL)

## CHAPTER 11: ADVANCED ESXI AND VCENTER MANAGEMENT

- Storage Views & Topology Maps
- Storage VMotion and SvMotion Snapshots (HOL)
- Configuring VMotion (HOL)
- Distributed Resource Scheduler (DRS) (HOL)
- Resource Pools and Monitoring (HOL)
- Storage DRS (SDRS) (HOL)
- Host Profiles (HOL)

- vSphere 5.1 Auto Deploy (GUI & Command Line)
- Linked Mode Group of vCenter Servers

## CHAPTER 12: PATCHING AND UPGRADING VCENTER/ESX/ESXI

- Patching ESXi 5.1 (HOL)
- Patching with Update Manager (HOL)
- Upgrades and Migrations (ESX to ESXi)
- Upgrading from ESXi 4.x to ESXi 5.x

## CHAPTER 13: DISASTER RECOVERY, BACKUP AND DEPLOYMENT

- Site Recovery Manager 5 (SRM5)
  - High Availability (HA) & Fault Domain Manager (FDM) (HOL)
  - VM Fault Tolerance
  - Microsoft Clustering
  - Backup Strategies
  - VMware Data Recovery (HOL)
  - Third Party Backups (HOL)
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