# **VMWARE ADMINISTRATION**

This course explores the installation, configuration and management of VMware vSphere 5 which include VMware ESXi(vSphere Hypervisor) and VMware vCenter Server (vSphere Server).

### **Introduction to VMware Virtualization**

Introduce virtualization, virtual machines, and vSphere components Explain the concepts of server, network, and storage virtualization Describe where vSphere fits into the cloud architecture Install and use vSphere user interfaces

#### **Installing VMware Components**

Introduce ESXi installation
Describe boot-from-SAN requirements
Introduce vCenter Server deployment options
Describe vCenter Server hardware, software, and database requirements
Install vCenter Server (Windows-based)

### **Creating Virtual Machines**

Introduce virtual machines, virtual machine hardware, and virtual machine files Deploy a single virtual machine

#### **VMware vCenter Server**

Introduce the vCenter Server architecture
Introduce VMware® vCenter™ Server Appliance™
Configure and manage vCenter Server Appliance
Manage vCenter Server inventory objects and licenses

### **Configuring and Managing Virtual Networks**

Describe, create, and manage a standard virtual switch Describe and modify standard virtual switch properties Configure virtual switch load-balancing algorithms

### **Configuring and Managing Virtual Storage**

Introduce storage protocols and device names
Configure ESXi with iSCSI, NFS, and Fibre Channel storage
Create and manage vSphere datastores
Deploy and manage VMware vSphere® Storage Appliance

#### **Virtual Machine Management**

Use templates and cloning to deploy virtual machines

Modify and manage virtual machines

Create and manage virtual machine snapshots

Perform VMware vSphere® vMotion® and VMware vSphere® Storage vMotion® migrations

## MasterSys Tech Pvt Ltd.

Bristol IT Park, 4th Floor, Plot No. 10, South Phase, Thiru Vi Ka Industrial Estate, Guindy, Chennai 600032.

Call us in **044 39167019** Mobile: 9884947402 E-mail <u>Training@msys-tech.com</u>

Create a VMware vSphere® vApp™

#### **Data Protection**

Discuss a strategy for backing up ESXi hosts and vCenter Server
Discuss solutions for backing up virtual machines efficiently
Access and Authentication Control
Control user access through roles and permissions
Configure and manage the ESXi firewall
Configure ESXi lockdown mode
Integrate ESXi with Active Directory
Explain VMware® vShield Endpoint™ integration in VSphere

### **Resource Management and Monitoring**

Introduce virtual CPU and memory concepts
Describe methods for optimizing CPU and memory usage
Configure and manage resource pools
Monitor resource usage using vCenter Server performance graphs and alarms

#### **High Availability and Fault Tolerance**

Introduce the new VMware vSphere® High Availability architecture Configure and manage a vSphere HA cluster Introduce VMware vSphere® Fault Tolerance Describe VMware vSphere® Replication

#### **Scalability**

Configure and manage a VMware vSphere® Distributed Resource Scheduler™ (DRS) cluster Configure Enhanced vMotion Compatibility Use vSphere HA and DRS together

#### **Patch Management**

Use Update Manager to manage ESXi patching Install Update Manager and the Update Manager plug-in Create patch baselines Scan and remediate hosts