

# VMware vSphere 5.5, 6.0 and 6.5 Syllabus

## General Information

### Description

- VMware vSphere is an enterprise-level computer virtualization suit offered by VMware, Inc.
- vSphere includes the ESXi hypervisor, a type 1 hypervisor that functions as the virtualization server.
- vCenter Server, which manages vSphere environments.
- vSphere Client, which is used to install and manage virtual machines through the hypervisor.

## Course Deliverables

### Classroom Training

Instructor led classroom training will be given. All classes are demonstration based. We don't teach just theory. We teach every concept using real-time case studies. All our classrooms are digital classrooms.

### Hands-on Lab

Students can practice all the concepts taught in classrooms at our Lab facility. Each student will be given individual setup to practice the lab. They need not combine and do labs. Our lab coordinators will help you when you are doing the labs

### Books and Workbooks

Softcopy of text books will be provided.

## Course Topics

### TOPICS

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#### Introduction to CLOUD

- What is virtualization and why it becomes popular
  - What is Datacenter and how it looks
  - A real time Demo on Cloud
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#### Hardware Virtualization

- What is Hypervisor
  - Difference between Bare metal and Host based installation
  - Hypervisors from other vendors
  - What is nested hypervisor setup
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#### VMware vSphere Components and Features

- ESXi
  - vSphere Client
  - vCenter
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#### vSphere and vCenter Server installation and management

- ESXi installation
  - VM deployment
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Single host management with vSphere client and web client

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Multiple host management with vCenter Server.

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Lab setup and Home Lab requirements

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vCenter Server installations- VCS and VCSA

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Migration

- P2V and V2V Migration
  - Cold Migration
  - Hot/Live Migration
  - Pre requirements for migration
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vSphere Storage

- iSCSI
- SAN
- NFS

Storage server installation and configuration

LUN creation

NAS mounting

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High-Availability, Fault tolerance

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vSphere Networking

- Real time Network scenario in Data Centers by an Architect.
  - vSSS (Standard Switch)
  - vdSS (Distributed Switch)
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Configuring and managing Host profiles

vSphere Resource management

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vSphere Security

Lock Down Mode

User management

Users and Roles

Microsoft AD integration

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Virtual machine Administration

Using Templates

Using OVF

Managing Templates

VMWare converter

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ESXi Commands

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Update Manager for patching and upgradation

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VROPS introduction

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Trouble Shooting

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