#### Day 1 - 2

- Why virtualization?
- How can you attain virtualization?
- DO's and DONT's of virtualized world
- What is VMware vSphere?
- Comparison between various Vmware Editions and versions

# Day 3 - 4

- An introduction to vCenter Server and ESXi
- Architecture and the types of Hypervisors
- Installation and configuration of VMware vSphere Client, VCenter Server, and Vmware vSphere Client
- Configure VCenter Server and ESXi
- Connect ESXi host to VSphere Client
- Explore the options in VSphere Client (configuration, NTP client, DNS and Routing information etc)

# Day 5 - 6

- Creating your first Virtual Machine
- Installing a guest OS in Virtual machine
- Discuss VMFS file system
- Discuss files that makes a virtual machine
- Configure vCenter Server Appliance and communicate with Web Client
- Working with the command line

#### **Day 7-8**

- vMotion Deep Dive
- Storage vMotion Deep Dive
- What is DRS and DPM?
- Discuss the concepts of HA and FT
- Configure DRS, HA and FT in lab environment.
- Migrate virtual machine using vMotion and Storage vMotion

# **Day 9-10**

- Learn about the datacenters, clusters, and resources
- Discuss about the types of migration
- Cold vs Hot migration
- Template or Clone? Discuss the differences
- Deploy a virtual machine from a template
- Clone a virtual machine

#### **Day 11-12**

- What is a resource pool?
- What are vApp?
- Discuss the concepts of memory reservation and CPU reservation
- Learn the difference between a resource pool and vApp
- Create a resource pool and a vApp in test environment

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## **Day 13-14**

- Discuss the types of Switches in Vmware
- Configuring a Standard Switch
- Configuring port groups
- Discuss the types of port groups
- Discuss NIC teaming, Traffic Shaping and failover concepts

## **Day 15-16**

- What is SAN, NAS, and DAS
- Discuss the VMFS filesystem and datastore
- Create a VMFS datastore
- Expand/ Add/ Remove a VMFS datastore
- Discuss LUN and RDM

# Day 17-18

- Discuss the disk formats
- Difference between thin provisioning and thick provisioning
- Difference between Lazy Zero and Eager Zero
- Adjust memory and CPU allocation in a Virtual Machine
- Rename a virtual machine in vCenter Server inventory
- Register and unregister a virtual machine
- Connect and disconnect an ESXi host from the cluster

## **Day 19-20**

- Discuss the concept of Snapshot
- Take a snapshot and delete a snapshot
- Learn P2V and V2V conversion with the help of Vmware Convertor
- Learn affinity and anti-affinity rules
- Security policies in Vmware
- Install and Configure VMware Tools
- Discuss the services and drivers in Vmware tools
- What is memory ballooning and swapping?
- Alarms, tasks and events
- Performance chart in VSphere Client

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