# VMware syllabus

## Introduction to Virtualization Technologies

- VMware workstation
- VMware player
- Virtual box

## Introduction to VMware Virtualization

- Introduce Virtualization
- Introduce Virtual machines
- Introduce vSphere components

## VMware ESX and ESXi ( ESX/ESXi 4.1)

- Introduce the architecture of ESX and ESXi
- Manually configure ESX/ESXi

## VMware vCenter Server

- Install and configure vCenter Server components
- Manage vCenter Server inventory objects

## Networking

- Create, configure, and manage vNetwork standard switches
- Create, configure, and manage network connections
- Create, configure, and manage port groups

## Storage

- Configure ESX/ESXi with iSCSI, NFS,.
- Create and manage vSphere datastores

## Virtual Machines

• Deploy virtual machines using the Create New Virtual Machine wizard, templates, cloning, and VMware vCenter Converter

• Modify and manage virtual machines

• Perform Storage vMotion migrations

## Access Control

• Control user access through roles and permissions

## Resource Monitoring

• Control virtual machine access to CPU, memory, and I/O resources

• Introduce VMkernel methods for optimizing CPU and memory usage

• Monitor resource usage using vCenter Server performance graphs and alarms

## Data Protection

• Back up and recover virtual machines using VMware Data Recovery

## Scalability

• Manage multiple vCenter Server inventories using VMware vCenter Linked Mode

• Manage ESX/ESXi configuration compliance using Host Profiles

• Create, configure, and manage vNetwork distributed switches, network connections, and port groups

• Perform VMware vMotion migrations

• Configure and manage a VMware Distributed Resource Scheduler cluster

## High Availability

- Configure and manage a VMware High Availability cluster
- Configure fault-tolerant virtual machines using VMware Fault Tolerance

## Patch Management

- Manage patching and patch compliance using vCenter Update Manager