



## VMware vSphere

Virtualization has become ubiquitous in data centers. More and more organizations are moving towards virtualization because of the enormous cost savings as well as the scalability that it offers. This course will cover all the aspects required to design, configure and manage a Virtual Data Center environment using VMware vSphere Virtualization Technology. The course will provide hands-on Virtual Data Center Infrastructure administration, as no Data Center/Cloud is complete without virtualization today.

The training will be given by Senior System/Network Engineers with several years of field experience in Virtualization.

**ZOOM**  
TECHNOLOGIES

# VMware vSphere: Install, Configure, Manage (2V0-620)

## Course Outline

### 1. Course Introduction

- Introductions and course logistics
- Course objectives
- References and resources

### 2. Software-Defined Data Center

- Introduce components of the software-defined data center
- Describe where vSphere fits into the cloud architecture
- Install and use vSphere Client
- Overview of ESXi

### 3. Creating Virtual Machines

- Introduce virtual machines, virtual machine hardware, and virtual machine files
- Create and work with virtual machines and templates

### 4. vCenter Server

- Introduce the vCenter Server architecture
- Deploy and configure vCenter Server
- Use vSphere Web Client
- Manage vCenter Server inventory objects and licenses

### 5. Configuring and Managing Virtual Networks

- Describe, create, and manage standard switches
- Configure virtual switch security and load-balancing policies
- Create, configure, and manage vSphere distributed switches, network connections, and port groups

### 6. Configuring and Managing Virtual Storage

- Introduce storage protocols and storage device types
- Discuss ESXi hosts using iSCSI and NFS storage
- Create and manage VMFS and NFS datastores
- Introduce VMware Virtual SAN™
- Introduce Virtual Volumes

### 7. Virtual Machine Management

- Use templates and cloning to deploy new virtual machines
- Modify and manage virtual machines
- Perform vSphere vMotion and vSphere Storage vMotion
- Migrations Create and manage virtual machine snapshots
- Create vApps

- Introduce the types of content libraries and how to deploy and use them

## **8. Resource Management and Monitoring**

- Introduce virtual CPU and memory concepts
- Configure and manage resource pools
- Describe methods for optimizing CPU and memory usage
- Use various tools to monitor resource usage
- Create and use alarms to report certain conditions or events
- Identify and troubleshoot virtual machine resource issues

## **9. vSphere HA and vSphere Fault Tolerance**

- Explain the vSphere HA architecture
- Configure and manage a vSphere HA cluster
- Use vSphere HA advanced parameters
- Introduce vSphere Fault Tolerance
- Enable vSphere Fault Tolerance on virtual machines
- Introduce vSphere Replication
- Use vSphere Data Protection to back up and restore data

## **10. Host Scalability**

- Describe the functions and benefits of a vSphere DRS cluster
- Configure and manage a vSphere DRS cluster
- Work with affinity and anti-affinity rules
- Use vSphere HA and vSphere DRS together for business continuity

## **11. vSphere Update Manager and Host Maintenance**

- Use vSphere Update Manager to manage ESXi patching
- Install vSphere Update Manager and the vSphere Update Manager plug-in
- Create patch baselines
- Use host profiles to manage host configuration compliance
- Scan and remediate hosts

## **12. Installing vSphere Components**

- Install ESXi
- Introduce vCenter Server deployment options
- Describe vCenter Server hardware, software, and database requirements
- Discuss installation of vCenter Server Appliance and a vCenter Server instance
- Demonstrate vCenter Server installation

## **13. vShield End Point**

- Introduction to vShield Family Products
- Deploying vShield Manager
- Installing vShield End Point