

# VMware



IT EDUCATION  
CENTRE

- 1.0 Introduction
- 2.0 Software Define Data Center
- 3.0 Introduction to Virtual Machines
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- 6.0 Configuring and Managing Virtual Storage
- 7.0 Virtual Machine Management
- 8.0 Resource Management and Monitoring
- 9.0 vSphere HA and vSphere Fault Tolerance
- 10.0 Host Scalability
- 11.0 vSphere Update Manager and Host Maintenance

## 1. Introduction

- 1.1. Introduction to VMware
- 1.2. Introduction to Virtualization
- 1.3. Role of virtualization in Cloud
- 1.4. Introduction to different types of Hypervisors

## 2. Software Define Data Center

- 2.1. What is ESX and ESXi
- 2.2. Installing, Configuring & Managing ESXi
- 2.3. Installing vSphere

## 3. Introduction to Virtual Machines

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

## 4. vCenter Server

- 4.1. Introduce the vCenter Server architecture
- 4.2. Deploy and configure vCenter Server
- 4.3. Use vSphere Web Client
- 4.4. Manage vCenter Server inventory objects and licenses



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## 5. Configuring and Managing Virtual Networks

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

## 6. Configuring and Managing Virtual Storage

- 6.1. Introduce storage protocols and storage device types
- 6.2. Discuss ESXi hosts using iSCSI and NFS storage
- 6.3. Create and manage VMFS and NFS datastores
- 6.4. Introduce VMware Virtual SAN™
- 6.5. Introduce Virtual Volumes

## 7. Virtual Machine Management

- 7.1. Use templates and cloning to deploy new virtual machines
- 7.2. Modify and manage virtual machines
- 7.3. Perform vSphere vMotion and vSphere Storage
- 7.4. vMotion migrations
- 7.5. Create and manage virtual machine snapshots
- 7.6. Create vApps
- 7.7. Introduce the types of content libraries and how to
- 7.8. deploy and use them

## 8. Resource Management and Monitoring

- 8.1. Introduce virtual CPU and memory concepts
- 8.2. Configure and manage resource pools
- 8.3. Describe methods for optimizing CPU and memory usage
- 8.4. Use various tools to monitor resource usage
- 8.5. Create and use alarms to report certain conditions or events
- 8.6. Identify and troubleshoot virtual machine resource issues
- 8.7. Introduce vRealize Operations Manager for data center
- 8.8. monitoring and management



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## 9. vSphere HA and vSphere Fault Tolerance

- 9.1. Explain the vSphere HA architecture
- 9.2. Configure and manage a vSphere HA cluster
- 9.3. Use vSphere HA advanced parameters
- 9.4. Introduce vSphere Fault Tolerance
- 9.5. Enable vSphere Fault Tolerance on virtual machines
- 9.6. Introduce vSphere Replication
- 9.7. Use vSphere Data Protection to back up and restore
- 9.8. data

## 10. Host Scalability

- 10.1. Describe the functions and benefits of a vSphere DRS
- 10.2. cluster
- 10.3. Configure and manage a vSphere DRS cluster
- 10.4. Work with affinity and anti-affinity rules
- 10.5. Use vSphere HA and vSphere DRS together for business
- 10.6. continuity

## 11. vSphere Update Manager and Host Maintenance

- 11.1. Use vSphere Update Manager to manage ESXi patching
- 11.2. Install vSphere Update Manager and the vSphere
- 11.3. Update Manager plug-in
- 11.4. Create patch baselines
- 11.5. Use host profiles to manage host configuration compliance
- 11.6. Scan and remediate hosts



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