

همراه با حمایت فنی رایگان از طریق ایمیل
همراه با اعطاء مدرک معتبر



VMware

مالتی مدیای VCP-510

VMware Certified Professional Volume-1

به زبان فارسی (۱ DVD – ۲۳ ساعت)

Volume-1 شامل:



۴ بخش آموزشی با بیش از ۱۳۸ درس به زبان انگلیسی و تشریح فارسی



۸۵ لابراتوار کاربردی و تشریح سناریوهای امتحان VCP-510



Utilities شامل:



امتحان بین المللی , VMware 5.x Documentation , EBooks



Openfiler , شبیه ساز VMware Workstation 15



System Requirements

- Windows XP with SP 2
- 256 MB RAM
- CD-ROM or DVD
- 1024 x 768 High Resolution Video Card & Monitor

VCP-510 Volume-1

Chapter 1 Planning, Installing, Configuring, and Upgrading vCenter Server and VMware ESXi

1.0 Virtualization, Datacenters and Cloud Computing

- Virtualization I
- Virtualization II
- Datacenters
- Cloud Computing

1.1 Installing and Configuring vCenter Server

Lab

- Identifying Available vSphere and vCenter Server Editions
 - Deploying the vCenter Appliance
 - Installing vCenter Server into a Virtual Machine
 - Sizing the vCenter Server Database
- Installing Additional vCenter Server Components

1.2 Installing/Removing vSphere Client Plug-Ins

Lab

- Enabling/Disabling vSphere Client Plug-Ins
 - Licensing vCenter Server
 - Determining Availability Requirements for vCenter Server in a Given vSphere Implementation
- Determining Use Cases for vSphere Client and Web Client

1.3 Installing and Configuring VMware ESXi

Lab

- Performing an Interactive Installation of ESXi
 - Deploying an ESXi Host Using Auto Deploy
 - Configuring NTP on an ESXi Host
 - Configuring DNS and Routing on an ESXi Host
 - Enabling/Configuring/Disabling Hyperthreading
 - Enabling/Sizing/Disabling Memory Compression Cache
- Licensing an ESXi Host

1.4 Planning and Performing Upgrades of vCenter Server and VMware ESXi

- **Identifying Upgrade Requirements for ESXi Hosts**
 - Identifying Steps Required to Upgrade a vSphere Implementation
 - Upgrading a vSphere Distributed Switch
 - Upgrading from VMFS3 to VMFS5
- **Appropriate in a Given Upgrade Scenario**

1.5 Securing vCenter Server and ESXi

Lab

- **Identifying Common vCenter Server Privileges and Roles**
 - System Roles
 - Sample Roles
 - Custom Roles
- **Describing How Permissions are Applied and Inherited in vCenter Server**
 - Example 1: Permissions That Apply Directly to an Object Supersede Those That Are Inherited
 - Example 2: If a User Is a Member of More Multiple Groups, the User Is Assigned the Union of the Privileges for Each Group
 - Example 3: User/Role Pairings Applied Directly to an Object Supersede User/ Role Pairings That Are Inherited
 - Example 4: Permissions That Are Applied Directly to a User Supersede Permissions That Are Inherited Through Group Membership
- **Configuring and Administering the ESXi Firewall**
- **Enabling Lockdown Mode**
- **Configuring Network Security Policies**
 - Promiscuous Mode
 - MAC Address Changes
 - Forged Transmits
- **Viewing/Sorting/Exporting User and Group Lists**
- **Adding/Modifying/Removing Permissions for Users and Groups on vCenter Inventory Objects**
- **Creating/Cloning/Editing vCenter Server Roles**
 - Creating Roles
 - Cloning Roles
 - Editing Roles
- **Adding an ESXi Host to a Directory Service**
- **Applying Permissions to ESXi Hosts Using Host Profiles**
- **Determining the Appropriate Set of Privileges for Common Tasks in vCenter Server**

1.6 Identifying vSphere Architecture and Solutions

- Identifying Available vSphere Editions and Features
 - Explaining ESXi and vCenter Server Architectures
 - Explaining Private/Public/Hybrid Cloud Concepts
- Determining the Appropriate vSphere Edition Based on Customer Requirements

1.7 Exam Scenarios

Chapter 2 Planning and Configuring vSphere Networking

2.1 Configuring vSphere Standard Switches

Lab

- Identifying vSphere Standard Switch (vSS) Capabilities
 - Creating / Deleting a vSphere Standard Switch
 - Deleting a vSphere Standard Switch
 - Adding / Configuring / Removing vmnics on a vSphere Standard Switch
 - Configuring VMkernel Ports for Network Services
 - Adding / Editing / Removing Port Groups on a vSphere Standard Switch
- Determining Use Cases for a vSphere Standard Switch

2.2 Configuring vSphere Distributed Switches

Lab

- Identifying vSphere Distributed Switch Capabilities
 - Creating/Deleting a vSphere Distributed Switch
 - Deleting a vDS
 - Adding/Removing ESXi Hosts from a vSphere Distributed Switch
 - Adding/Configuring/Removing dvPort Groups
 - Adding/Removing Uplink Adapters to dvUplink Groups
 - Creating/Configuring/Removing Virtual Adapters
 - Migrating Virtual Adapters to/from a vSphere Standard Switch
 - Migrating Virtual Machines to/from a vSphere Distributed Switch
- Determining Use Cases for a vSphere Distributed Switch

2.3 Configuring vSS and vDS Policies

Lab

- Identifying Common vSS and vDS policies
- Configuring dvPort Group Blocking Policies
- Configuring Load Balancing and Failover Policies
 - Load Balancing
 - Network Failover Detection

- **Notify Switches**
- **Failback**
- **Configuring VLAN Settings**
 - **Configuring VLAN Policy Settings on a VDS**
 - **Configuring VLAN Trunking Policies on a VDS**
 - **Configuring Private VLAN Policy Settings on a vDS**
- **Configuring Traffic Shaping Policies**
 - **Traffic Shaping Policies for vSphere Standard Switches**
 - **Traffic Shaping Policies for vSphere Distributed Switches**
 - **Enabling TCP Segmentation Offload support for a Virtual Machine**
 - **Enabling Jumbo Frames Support on Appropriate Components**
 - **Enabling Jumbo Frames for VMkernel Interface on a vSS**
 - **Enabling Jumbo Frames on a vDS**
 - **Enabling Jumbo Frame Support on Virtual Machines**
- **Determining Appropriate VLAN Configuration for a vSphere Implementation**

2.4 Exam Scenarios

Chapter 3 Planning and Configuring vSphere Storage

3.1 Configuring Shared Storage for vSphere

Lab

- **Identifying Storage Adapters and Devices**
 - **Fibre Channel**
 - **FCOE**
 - **iSCSI**
 - **NAS**
- **Identifying Storage Naming Conventions**
- **Storage Naming Conventions for Local and SAN**
- **Identifying Hardware/Dependent Hardware/Software iSCSI Initiator Requirements**
- **Comparing and Contrasting Array Thin Provisioning and Virtual Disk Thin Provisioning**
- **Array Thin Provisioning**
- **Virtual Disk Thin Provisioning**
- **Describing Zoning and LUN Masking Practices**
 - **Zoning**
 - **Masking**
- **Scanning/Rescanning Storage**
- **Identifying Use Cases for FCOE**
- **Creating an NFS Share for Use with vSphere**
- **Connecting to a NAS Device**
- **Enabling/Configuring/Disabling vCenter Server Storage Filters**

- **Configuring/Editing Hardware/Dependent Hardware Adapters**
- **Enabling/Disabling Software iSCSI Initiator Settings**
- **Configuring iSCSI Port Binding**
- **Enabling/Configuring/Disabling iSCSI CHAP**
- **Determining Use Cases for Hardware/Dependent Hardware/Software iSCSI Initiator**
- **Determining Use Cases for and Configuring Array Thin Provisioning**

3.2 Configuring the Storage Virtual Appliance for vSphere

Lab

- **Defining the VSA Architecture**
- **Configuring ESXi Hosts as VSA Hosts**
- **Configuring the Storage Network for the VSA**
- **Deploying/Configuring the VSA Manager**
 - **Administering VSA Storage Resources**
 - **Administering VSA Clusters**
 - **Administering VSA Datastores**
- **Administering VSA Cluster Membership**
- **Determining Use Case for Deploying the VSA**
- **Determining Appropriate ESXi Host Resources for the VSA**

3.3 Creating and Configuring VMFS and NFS Datastores

Lab

- **Identifying VMFS and NFS Datastore Properties**
- **Identifying VMFS-5 Capabilities**
- **Creating/Renaming/Deleting/Unmounting a VMFS Datastore**
- **Mounting/Unmounting an NFS Datastore**
- **Extending/Expanding VMFS Datastores**
 - **Extending VMFS Datastores**
 - **Expanding VMFS Datastores**
 - **Upgrading a VMFS-3 Datastore to VMFS-5**
 - **Placing a VMFS Datastore in Maintenance Mode**
 - **Selecting the Preferred Path for a VMFS Datastore**
 - **Disabling a Path to a VMFS Datastore**
- **Determining Use Cases for Multiple VMFS and NFS Datastores**
- **Determining Appropriate Path Selection Policy for a VMFS Datastore**

3.4 Exam Scenarios

Chapter 4 Deploying and Administering Virtual Machine and vApps

4.1 Creating and Deploying Virtual Machines I

Lab

- Identifying Capabilities for Virtual Machine Hardware Versions
- Identifying VMware Tools Device Drivers
- Identifying Methods to Access and Use Virtual Machine Console
- Identifying Virtual Machine Storage Resources
 - Placing Virtual Machines in Selected ESXi Hosts/Clusters/Resource Pools
 - Configuring and Deploying a Guest OS Into a New Virtual Machine
 - Creating/Converting Thin/Thick Provisioned Virtual Disks
 - Configuring Disk Shares
 - Installing/Upgrading/Updating VMware Tools
 - Configuring Virtual Machine Time Synchronization

4.2 Creating and Deploying Virtual Machines II

Lab

- Converting a Physical Machine Using VMware Converter
- Importing a Supported Virtual Machine Source Using VMware Converter
- Modifying Virtual Hardware Settings Using VMware Standalone Converter
 - Configuring/Modifying Virtual CPU and Memory Resources According to OS and Application Requirements
 - Configuring and Modifying Virtual Machine CPU
 - Configuring and Modifying Virtual Machine Memory
 - Configuring/Modifying Virtual NIC Adapter and Connecting Virtual Machines to Appropriate Network Resources
- Determining Appropriate Datastore Locations for Virtual Machines Based on Application Workloads

4.3 Creating and Deploying vApps

Lab

- Identifying vApp Settings
 - Options
 - Start Order
 - vServices
- Creating/Cloning/Exporting a vApp
 - Adding Objects to an Existing vApp
 - Editing vApp Settings
 - Configuring IP Pools
 - Suspending/Resuming a vApp
- Determining When a Tiered Application Should Be Deployed as a vApp

4.4 Managing Virtual Machine Clones and Templates

Lab

- Identifying the vCenter Server, Managed ESXi Hosts, and Virtual Machine Maximums
- Identifying Cloning and Template Options
 - Cloning an Existing Virtual Machine
 - Creating a Template from an Existing Virtual Machine
 - Deploying a Virtual Machine from a Template
 - Updating Existing Virtual Machine Templates
 - Deploying Virtual Appliances and/or vApps from an OVF Template
 - Importing and /or Exporting an OVF Template
- Determining the Appropriate Development Methodology for a Given Virtual Machine Application

4.5 Administering Virtual Machines and vApps

Lab

- Identifying Files Used by Virtual Machines
- Identifying Locations for Virtual Machine Configuration Files and Virtual Disks
- Identifying Common Practices for Securing Virtual Machines
- Hot Extending a Virtual Disk
- Configuring Virtual Machine Options
 - General Options
 - vApp Options
- VMware Tools
- Power Management
- Advanced
 - Configuring Virtual Machine Power Settings
 - Configuring Virtual Machine Boot Options
 - Configuring Virtual Machine Troubleshooting Options
 - Assigning a Storage Policy to a VM
 - Verifying Storage Policy Compliance for Virtual Machines
- Determining When an Advanced Virtual Machine Parameter is Required
- Adjusting Virtual Machine Resources (shares, limits and reservations) Based on Virtual Machine Workloads

4.6 Exam Scenarios

Bonus Material

- **Installing and Configuring openfiler**
- **vSphere 5.1 vs. 5.5 Features**