همراه با حمایت فنی رایگان از طریق ایمیل

همراه با اعطاء مدرک معتبر

VMware

Edition 2015

مالتی مدیای VCP-510

VMware Certified Professional
Volume-1

به زبان فارسی (۱DVD – ۲۳ ساعت)

- Volume-1 شامل:
- ۴ بخش آموزشی با بیش از ۱۳۸ درس به زبان انگلیسی وتشریح فارسی
- ۸۵ لابراتوار کاربردی و تشریح سناریوهای امتحان VCP-510
- Utilities شامل :
- امتحان بین المللی , EBooks, VMware 5.x Documenation
- Openfiler , شبیه ساز VMware Workstation 10

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 L a b

- 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