

# MCSA (Microsoft Certified Solutions Associate)

## Deploying and Managing Windows Server 2012

- Overview of Windows Server 2012 R2
- Windows Server 2012 R2 Installation
- Post-Installation Configuration of Windows Server 2012 R2
- Windows Server 2012 R2 Management Overview
- Introduction to Windows PowerShell

## Introduction to Active Directory Domain Services

- Overview of AD DS
- Overview of Domain Controllers
- Installing a Domain Controller

## Managing Active Directory Domain Services Objects

- Managing User Accounts
- Managing Groups
- Managing Computer Account
- Delegating Administration

## Automation of Active Directory Domain Services Administration

- Using Command-line Tools for AD DS Administration
- Using Windows PowerShell for AD DS Administration
- Performing Bulk Operations with Windows PowerShell

## Implementation of IPv4

- Overview of TCP/IP
- Understanding IPv4 Addressing

- Subnetting and Supernetting

#### Implementation of Dynamic Host Configuration Protocol

- Installation of a DHCP Server Role
- Configuring DHCP Scopes
- Managing a DHCP Database
- Securing and Monitoring DHCP

#### Implementation of DNS

- Name Resolution for Windows Clients and Servers
- Installing a DNS Server
- Managing DNS Zones

#### Implementation of IPv6

- Overview of IPv6
- IPv6 Addressing
- Coexistence with IPv4
- IPv6 Transition Technologies

#### Implementation of Local Storage

- Overview of Storage
- Managing Disks and Volumes
- Implementing Storage Spaces

#### Implementation of File and Print Services

- Securing Files and Folders
- Protecting Shared Files and Folders by Using Shadow Copies
- Configuring Work Folders
- Configuring Network Printing

#### Implementation of Group Policy

- Overview of Group Policy
- Group Policy Processing
- Implementing a Central Store for Administrative Templates

#### Implementation of Server Virtualization with Hyper-V

- Overview of Virtualization Technologies

- Implementing Hyper-V
- Managing Virtual Machine Storage
- Managing Virtual Networks

#### Configuration and Troubleshooting of Domain Name System

- Configuring the DNS Server Role
- Configuring DNS Zones
- Configuring DNS Zone Transfers
- Managing and Troubleshooting DNS

#### Maintaining Active Directory Domain Services

- Overview of AD DS
- Implementing Virtualized Domain Controllers
- Implementing RODCs
- Administering AD DS
- Managing the AD DS Database

#### Managing User and Service Accounts

- Configuring Password Policy and User Account Lockout Settings
- Configuring Managed Service Accounts

#### Implementation of a Group Policy Infrastructure

- Introduction of Group Policy
- Implementing and Administering GPOs
- Group Policy Scope and Group Policy Processing
- Troubleshooting the Application of GPOs

#### Managing User Desktops with Group Policy

- Implementation of Administrative Templates
- Configuring Folder Redirection and Scripts
- Configuring Group Policy Preferences
- Managing Software with Group Policy

#### Implementing Remote Access

- Overview of Remote Access
- Implementing DirectAccess by Using the Getting Started Wizard

- Implementing and Managing an Advanced DirectAccess Infrastructure
- Implementing VPN
- Implementing Web Application Proxy

#### Installing, Configuring, and Troubleshooting the Network Policy Server Role

- Installing and Configuring a Network Policy Server
- Configuring RADIUS Clients and Servers
- NPS Authentication Methods
- Monitoring and Troubleshooting a Network Policy Server

#### Implementation of Network Access Protection

- Overview of Network Access Protection
- Overview of NAP Enforcement Processes
- Configuring NAP
- Configuring IPsec Enforcement for NAP
- Monitoring and Troubleshooting NAP

#### Optimization of File Services

- Overview of FSRM
- Using FSRM to Manage Quotas, File Screens, and Storage Reports
- Implementing Classification and File Management Tasks
- Overview of DFS
- Configuring DFS Namespaces
- Configuring and Troubleshooting DFS Replication

#### Configuring Encryption and Advanced Auditing

- Encrypting Drives by Using BitLocker
- Encrypting Files by Using EFS
- Configuring Advanced Auditing

#### Deploying and Maintaining Server Images

- Overview of Windows Deployment Services
- Managing Images
- Implementing Deployment with Windows Deployment Services
- Administering Windows Deployment Services

## Implementation of Update Management

- Overview of WSUS
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## Monitoring Windows Server 2012

- Monitoring Tools
- Using Performance Monitor
- Monitoring Event Logs

## Implementation of Advanced Network Services

- Configuring Advanced DHCP Features
- Configuring Advanced DNS Settings
- Implementing IPAM
- Managing IP Address Spaces with IPAM

## Implementation of Advanced File Services

- Configuring iSCSI Storage
- Configuring BranchCache
- Optimizing Storage Usage

## Implementation of Dynamic Access Control

- Overview of DAC
- Implementation of DAC Components
- Implementation of DAC for Access Control
- Implementing Access Denied Assistance
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## Implementation Distributed AD DS Deployments

- Overview of Distributed AD DS Deployments
- Deploying a Distributed AD DS Environment
- Configuration of AD DS Trusts

## Implementation of AD DS Sites and Replication

- Overview of AD DS Replication
- Configuring AD DS Sites
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## Implementation of Active Directory Certificate Services

- Using Certificates in a Business Environment
- PKI Overview
- Deploying CAs
- Deploying and Managing Certificate Templates
- Implementing Certificate Distribution and Revocation
- Managing Certificate Recovery

## Implementation of Active Directory Rights Management Services

- Overview of AD RMS
- Deploying and Managing an AD RMS Infrastructure
- Configuration of AD RMS Content Protection
- Configuring External Access to AD RMS

## Implementation of Active Directory Federation Services

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- Deploying AD FS
- Implementing AD FS for a Single Organization
- Deploying AD FS in a Business-to-Business Federation Scenario
- Extending AD FS to External Clients

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- Overview of NLB
- Configuring an NLB Cluster
- Planning an NLB Implementation

## Implementation of Failover Clustering

- Overview of Failover Clustering
- Implementation of a Failover Cluster
- Configuring Highly Available Applications and Services on a Failover Cluster
- Maintaining a Failover Cluster
- Implementation of a Multi-Site Failover Cluster

## Implementation of Failover Clustering with Hyper-V

- Overview of Integrating Hyper-V with Failover Clustering

- Implementing Hyper-V Virtual Machines on Failover Clusters
- Implementing Hyper-V Virtual Machine Movement
- Managing Hyper-V Virtual Environments by Using VMM

#### Implementation of Business Continuity and Disaster Recovery

- Overview of Data Protection
- Implementation of Windows Server Backup
- Implementation of Server and Data Recovery