# MCSE 2012R2 SYLLABUS

#### SERVER UPGRADTION AND MIGRATION

- Considerations for Upgrades and Migrations
- Creating a Server Upgrade and Migration Plan
- Migration of 2008R2 DC to 201R2 DC
- Upgrade from 2008R2 SP1 to 2012R2
- Planning for Virtualization

### WDS & MDT INTEGRATION

- Selecting an Appropriate Server Deployment Strategy
- Implementing an Automated Deployment Strategy
- Installing and configuring ADK Tools
- Configuring and creating unattended answer file for Automated installation
- Installing and configuring MDT tools
- Creating deployment share for MDT
- Creating and configuring Task sequence For OS installation
- Update deployment share
- Integration of WDS with MDT
- Designing DHCP Servers
- Planning DHCP Scopes
- Designing an IPAM Provisioning Strategy
- Managing Servers and Address Spaces by Using IPAM

# **DNS DESIGN and SECURITY**

- Designing a DNS Server Implementation Strategy
- Designing the DNS Namespace
- Designing DNS Zones
- Designing DNS Zone Replication and Delegation Optimizing DNS Servers
- Designing DNS for High Availability and Security
- Design and configure DNS zone replication and delegation.
- Optimize the DNS server configuration.
- Design DNS for high availability and security.
- Designing an Active Directory Forest
- Designing and Implementing Active Directory Forest Trusts
- Designing Active Directory Integration with Windows Azure Active Directory
- Designing and Implementing Active Directory Domains
- Designing DNS Namespaces in Active Directory Environments
- Designing Active Directory Domain Trusts
- Designing an Active Directory Domain Infrastructure
- Implementing an Active Directory Domain Infrastructure

### DELEGATION MODEL

- Planning the Active Directory Administrative Tasks Delegation Model
- Designing an OU Structure
- Designing and Implementing an AD DS Group Strategy
- Designing and Implementing Active Directory Sites
- Designing Active Directory Replication
- Designing the Placement of Domain Controllers
- Virtualization Considerations for Domain Controllers
- Designing Highly Available Domain Controllers

### ISCSI TARGET AND INITIATOR

- Storage overview
- Explanation of DAS,NAS,SAN,ISCSI storage
- Planning and Implementing storage pool
- Attachment of virtual hard disk and configuring storage pool
- Configuring Virtual hard disk
- Installing and configuring ISCSI target server Role
- Configuring ISCSI target and access server
- Connecting ISCSI target via ISCSI initiator

### NETWORK ACCESS PROTECTION

- Overview of Network Security Design
- Designing and Implementing a Windows Firewall Strategy
- Designing and Implementing a NAP Infrastructure
- Designing a Windows Firewall Solution
- Implementing a Windows Firewall Solution
- Designing a NAP Solution
- Implementing NAP with DHCP Enforcement

# **STORAGE SPACE & NLB (network load balancing)**

- Planning and Implementing Storage Space
- Planning and Implementing a DFS(distributed file system)
- Installing and configuring High available DFS file share
- Network load balancing Overview
- Installing and configuring NLB for web servers
- Installing and configuring NLB cluster
- Planning and Implementing NLBImplementing a High Availability Solution Using NLB

#### **HYPER-V**

- Hyper-V overview
- Installing and configuring Netsed VMs for Failover cluster
- Enabling nested VM in vmware workstation
- Virtual machine movement (import and export)
- Moving virtual machines inside Failover cluster
- Virtual machine Live migration and Quick migration

## **FAILOVER CLUSTERING**

- Failover clustering Overview
- Planning an Infrastructure for Failover Clustering
- Implementing Failover Clustering
- Run and Test failover validation
- Monitoring and viewing Failover reports
- Creating and configuring Two node file over cluster
- Configuring CSV(clustered shared volume for high availability)
- Configuring Quorum for Disk witness
- Installing and configuring High available file share
- Installing and configuring High available VM in failover cluster
- Installing and configuring Hyper-V broker
- Planning and Implementing Updates for Failover Clusters

### **ADCS**

- ADCS over view
- Planning and Implementing Deployment of a Certification Authority
- Planning and Implementing Certificate Templates
- Creation of Duplicate template for web server
- Configuring group policy for Certificate auto enrollment
- Install and configure secure web server using ADCS
- Planning and Implementing Certificate Distribution and Revocation

### **ADFS**

- ADFS Overview
- Installing and configuring ADFS role
- Planning and Implementing an AD FS Server Infrastructure
- Planning and Implementing AD FS Claim Providers and Relying Parties
- Installing and configuring ADFS with Azure
- Configuration ADFS certificate from ADCS
- Installing and configuring secondary ADFS server

## **ADRMS**

- AD RMS Overview
- Planning and Implementing an AD RMS Cluster
- Planning and Implementing AD RMS Templates and Policies
- Installing and configuring users for ADRMS using UPN format
- Testing and validation of ADRMS functionality
- Real time examples for ADRMS validation using Hotmail accounts

# **ONLINE BACKUP**

- Creation of recovery service vault for online backup
- Prerequisite for online backup running windows updates
- Install and configure Microsoft azure backup server
- Download valut credentials for online backup from azure