

Microsoft Certified Solutions Expert [MCSE] Server Infrastructure Microsoft Certified Solutions Associate [MCSA]

This course is developed for IT professionals who need to design, plan, implement, manage and support Microsoft Windows 2008 and 2012 networks or who plan to take the related MCSE and MCSA exams. The training will be given by Senior System/Network engineers with several years of field experience.

Course Outline

- ☞ Network & Operating System Essentials
- ☞ Installing and Configuring Windows Server 2012
- ☞ Administering Windows Server 2012
- ☞ Designing and Implementing Server Infrastructure
- ☞ Configuring Windows Server 2012 Services
 - Active Directory Domain Services
 - DNS, DHCP, IIS 8.0, VPN
- ☞ Configuring File Server
 - File Server Resource Manager
 - Configuring Shared Resources
- ☞ Implementing Microsoft Virtualization Technologies
 - Server Virtualization using Hyper-V
- ☞ Configuring Advanced Storage Solutions
 - iSCSI Target and Initiator
 - Storage Spaces and Storage Pools and RAID
- ☞ Implementing Security Restrictions
 - Group Policies
 - Group Policy Preferences



MCSE
Windows Server 2012
Server Infrastructure

Course Curriculum

Networking Essentials

- Networking concepts, History of Server OS
- Introduction to Windows Server 2008 & 2012
- Features of Windows Server 2012
- Installation of Windows Server 2012
- Introduction and Creation of Users Accounts
- Conversion of GUI to Server Core
- Conversion of Server Core to GUI

Active Directory - Domain Services

- IP Addressing
- Logical Topologies, Peer to Peer & Domain Models
- Introduction to Directory Services
- Evolution of Directory Services – LDAP Protocol
- Features of Active Directory
- Installing Active Directory – Domain Controller

Member Servers, Clients, User Configuration

- Configuring Member Servers and Clients.
- Creating Users in AD-DS
- User Logon policies
- Password policies
- Account Lockout policies
- User properties

Permissions/Access Control Lists

- File Systems
- Security and Sharing Permissions - Folders & Files
- Access Based Enumeration

Profiles and File Server Resource Manager [FSRM]

- Types of Profiles – Local & Roaming
- Home Folder
- Configuring Quotas using FSRM
- Implementing File Screening using FSRM
- Configuring Storage Reports Management.

Distributed File System

- Creating Organisational Unit
- Delegating Control to a User
- DFS Namespace
- DFS Folder
- Overview of DFS Replica

Logical Structure of AD - DS

- Configuring ADC
- Tree Structure - Child Domain
- Forest Structure

FSMO Roles of AD - DS

- Roles of AD - DS
- Transferring of Roles
- Seizing of Roles

Group Policy / System Policies

- User and Computer Policies
- Scope of Policies – OU, Domain, Sites
- Group Policy Modeling (RSOP)
- Software Deployment
- Scripts, Folder Redirection
- Group Policy Preferences
- Auditing

Active Directory Trusts

- Introduction to Trust Relationship
- Categories, Directions & Types of Trusts
- Functional Levels
- Authentication Protocols
- Configuring Forest Trusts between 2012 Forests
- Active Directory Recyclebin

RODC and Physical Structure of AD-DS

- Introduction and Configuration of Read Only Domain Controller
- Sites and Global Catalog
- Replication between the Domain Controllers
- AD-DS Partitions
- Configuring R.O.D.C using Install From Media [IFM]

Dynamic Host Configuration Protocol (DHCP)

- Introduction and Configuration of DHCP Server
- DHCP Client Configuration
- Reservations
- DHCP Backup
- Configuring DHCP Failover

Domain Name System (DNS)

- Internet Basics, Host Files
- DNS Naming Hierarchy
- Lookup Zones – Forward and Reverse Lookup Zones
- Types of Zones – Primary, Secondary and Stub Zone
- Resource Records, Integration with AD-DS, SRV Records
- Forwarders, Dynamic Updates

Internet Information Services (IIS)

- IIS 8.0 Configuration
- Hosting Websites, Virtual Directories
- Redirecting Web Sites
- Backup and Restoring Sites
- FTP sites

Windows Deployment Services

- Introduction and Configuration of WDS Server
- Attended and Unattended Installation

Microsoft Hyper-V

- Installation of Hyper-V
- Configuring Virtual Machine
- Configuring Virtual Networks
- Configuring Virtual Hard disks
- Configuring Hyper-V Replica

Routing and Remote Access

- Routing Configuration – Static Routes
- NAT, DHCP Relay Agent
- Remote Access Server Configuration
- VPN – PPTP

Remote Desktop Services

- Remote Administration Mode

Storage Technologies

- Configuring iSCSI Target and Initiator
- Introduction to Storage spaces and Storage Pools
- Configuring Simple Volume (RAID – 0)
- Configuring Mirror Volume (RAID – 1)
- Configuring Parity Volume (RAID – 5)

Failover Clustering

- Configuring Failover on
- Hyper-V Virtual Machines

Advanced Topics

- Windows Server Backup
- Overview of AD-FS, LDS, RMS, CS
- Upgrading Windows Server 2008 to 2012
- Configuring NLB cluster
- Overview of NAP