

VOISIP TELECOMMUNICATIONS LIMITED

MCSA 70-741 COURSE OUTLINE

Course overview:

The Microsoft certified solutions associate (MCSA) is designed to prove mastery of skills required to administer Windows server 2016.

The MCSA Server 2016 training course is an intermediate level certificate that enables candidates to install, configure and manage windows server 2016 operating system for client server structure, virtualization, hyper-v, network services (DNS, DHCP, etc), domain management and security implementation, among others.

The MCSA consist of 3 different modules or exams you need to write before becoming and Microsoft Certified Solutions Associate. They are

70-740: Installation, storage, and compute with windows server 2016

70-741: Networking with Windows Server 2016

70-742: Identity with windows server 2016

Lesson 1: Implement Ipv4 & IPV6 Addressing

This module also explains how to use fundamental networking tools and techniques to configure and troubleshoot IPv4-based networks.

Lessons

- • Configuring IPv4 & IPv6 options
- • Configuring an IPv4 host
- Troubleshooting IPv4 network connectivity
- Ipv4 subnetting considerations
- Planning an IPV4 addressing
- Troubleshooting IPV4 networks
- Configure IPV4 & IPV6 routing

Lesson 2: Implementing Domain Name System (DNS)

This module teaches us how to install configure and troubleshoot DNS in windows server 2016

Lessons:

- Why do you need DNS?
- Other systems that can provide DNS
- DNS server role installation requirements. DNS integration with Active directory (A.D)
- Configure DNS Server settings using PowerShell.
- DNS root hints
- Troubleshooting DNS
- Verifying DNS records
- Creating DNS resource records,RR, AA, AAAA, PTR, SOA, NS, SRV, CNAME & MX records.
- DNS zones overview
- Understanding reverse & forward lookup zones
- DNS Scavenging
- DNS Delegation
- DNS stub zones & DNS recursion
- DNS policy load balancing
- DNS policy time-based requests
- DNS logging & tuning
- Use DNS auditing events for analytical events for auditing & troubleshooting

Lesson 3: Installing, Configuring, Managing & Maintaining DHCP

- DHCP server overview
- Planning & Initial installation requirements for DHCP
- DHCP Server role Installation
- Authorizing a DHCP Server
- DHCP scope creation
- DHCP reservations & options
- DHCP relay configuration & troubleshooting
- PXE boot support configuration
- DHCP policies
- DHCP failover

- DHCP backup, restore, import & export
- DHCP mac filtering
- DHCP troubleshooting

Module 4: Managing, Installing & Configuring IPAM

This module describes how to install, manage and configure the IPAM feature in Windows Server 2016, using it to centrally manage services like DNS and DHCP.

- Introduction to IP address Management feature
- Installing & configuring IPAM feature
- Provisioning IPAM manually or by using group policy
- Configure Server Discovery;
- Manage IP address spaces using IPAM.
- Manage DHCP & DNS services using IPAM.
- Delegate administration for DNS & DHCP using role-based access control (RBAC)

Lesson 5: Implement Network Connectivity and Remote Access Solutions

This module teaches how to implement virtual private networks, configure routing and Direct access solutions

- Configuring Dynamic NAT
- Configuring port Address translation
- Understanding & configuring Remote access VPNs
- Implementing Site to site VPNs.
- Verifying VPN connectivity
- Troubleshooting VPN connectivity
- Overview of DirectAccess solution
- Configuring Direct Access
- Implement server requirements for Direct Access
- Implement client configuration
- Troubleshooting direct Access
- Implementing Network policy Server
- Configure Radius server using radius proxy
- Configuring radius clients

- Configuring Connection request policies
- Configuring network policies for VPN and wired & wireless clients
- Importing & exporting NPS policies.

Lesson 6: Implement Distributed Network Solutions

Network considerations for branch offices

Overview of Distributed File System (DFS)

Installation & configuration of DFS

Implementing branch Cache for branch offices

Implementing distributed and hosted cache modes

Implementing branch for Web, file & application servers

DFS scheduling, Staging, Compression & optimization

Troubleshooting branch cache

Lesson 7: Implementing an Advanced Network Infrastructure

Examining & configuring NIC teaming Scenarios

Examining and configuring Switch embedded teaming (SET)

Configuring advanced Hyper-V networking features.