

Microsoft Windows Server 2008 Boot Camp Courses

**Bootcamp Title – MCSE: Enterprise Devices and Apps (1 Cert)**
Number of Days – 9
Number of Exams – 3
Number of Certifications – 1
Cost - $6,995

Certifications:

MCSA: Windows Server 2008

Exams:

**70-640:** Windows Server 2008 Active Directory Configuring

**70-642:** Windows Server 2008 Network Infrastructure, Configuring

**70-646:**Windows Server 2008, Server Administrator

Course Description:

The MCSA Windows Server 2008 R2 certification boot camp is a 9 day comprehensive deep dive into Windows Server 2008 covering topics such as managing groups, configuring and implementing. This instructor led face to face training camp will teach you the skills needed to support a Windows Server 2008 environment.

Class Objectives (*Following information customized from Microsoft Learning Test Objectives)*

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| **Module 1: Implementing Active Directory Domain Services**This module explains how to install and configure Active Directory Domain Services and install and configure a read-only domain controller.**Lessons*** Installing Active Directory Domain Services
* Deploying Read-Only Domain Controllers
* Configuring AD DS Domain Controller Roles

**Lab : Implementing Read-Only Domain Controllers**After completing this module, students will be able to:* Install Active Directory Domain Services.
* Deploy Read-Only Domain Controllers.
* Configure AD DS Domain Controller Roles.

**Module 2: Configuring Domain Name Service for Active Directory Domain Services**This module explains how to configure Domain Name Services (DNS) for Active Directory Domain Services.**Lessons*** Overview of Active Directory Domain Services and DNS Integration
* Configuring Active Directory Integrated Zones
* Configuring Read Only DNS Zones

**Lab : Configuring AD DS and DNS Integration**After completing this module, students will be able to:* Describe Active Directory Domain Services and DNS integration.
* Configure Active Directory Integrated Zones.
* Configure read only DNS zones.

**Module 3: Configuring Active Directory Objects and Trusts**This module explains how to configure Active Directory Objects and Trusts.**Lessons*** Configuring Active Directory Objects
* Strategies for Using Groups
* Automating AD DS Object Management
* Delegating Administrative Access to AD DS Objects
* Configuring AD DS Trusts

**Lab : Configuring Active Directory Objects****Lab : Configuring Active Directory Objects and Trusts**After completing this module, students will be able to:* Configure Active Directory Objects.
* Describe strategies for using groups.
* Automate AD DS object management.
* Delegate Administrative access to AD DS objects.
* Configure AD DS trusts.

**Module 4: Configuring Active Directory Sites and Replication**This module explains how to configure Active Directory sites and replication.**Lessons*** Overview of AD DS Replication
* Overview of AD DS Sites and Replication
* Configuring and Monitoring AD DS Replication

**Lab : Configuring Active Directory Sites and Replication**After completing this module, students will be able to:* Describe AD DS replication.
* Configure Active Directory Domain Services sites.
* Configure and monitor AD DS replication.

**Module 5: Creating and Configuring Group Policy**This module explains how to create and configure Group Policy.**Lessons*** Overview of Group Policy
* Configuring the Scope of Group Policy Objects
* Evaluating the Application of Group Policy Objects
* Managing Group Policy Objects
* Delegating Administrative Control of Group Policy

**Lab : Creating and Configuring GPOs**After completing this module, students will be able to:* Describe Group Policy.
* Configure the scope of Group Policy objects.
* Evaluate the application of Group Policy objects.
* Manage Group Policy objects.
* Delegate administrative control of Group Policies.

**Module 6: Configuring User Environments Using Group Policy**This module explains how to configure user environments using Group Policy.**Lessons*** Configuring Group Policy Settings
* Configuring Scripts and Folder Redirection Using Group Policies
* Configuring Administrative Templates
* Group Policy Preferences
* Deploying Software Using Group Policy

**Lab : Lab Configuring User Environments Using Group Policies**After completing this module, students will be able to:* Configure Group Policy settings.
* Configure scripts and folder redirection using Group Policy.
* Configure administrative templates.
* Describe Group Policy preferences.
* Deploy software using Group Policy.

**Module 7: Implementing Security Using Group Policy**This module explains how to implement security using Group Policy.**Lessons*** Configuring Security Policies
* Implementing Fine-Grained Password Policies
* Restricting Group Membership and Access to Software
* Managing Security Using Security Templates

**Lab : Implementing Security Using Group Policies**After completing this module, students will be able to:* Configure security settings.
* Implement fine-grained password policies.
* Restrict group membership and access to software.
* Manage security using security templates.

**Module 8: Implementing an Active Directory Domain Services Monitoring Plan**This module explains how to implement Active Directory Domain Services monitoring plan.**Lessons*** Monitoring AD DS Using Event Viewer
* Monitoring Active Directory Domain Servers Using Reliability and Performance Monitor
* Configuring AD DS Auditing

**Lab : Monitoring Active Directory Domain Services**After completing this module, students will be able to:* Monitor Active Directory Domain Services using Event Viewer.
* Monitor Active Directory Domain servers using reliability and performance monitor.
* Configure Active Directory Domain Services Auditing.

**Module 9: Implementing an Active Directory Domain Services Maintenance Plan**This module explains how to implement an Active Directory Domain Services maintenance plan.**Lessons*** Maintaining the AD DS Domain Controllers
* Backing Up Active Directory Domain Services
* Restoring Active Directory Domain Services

**Lab : Implementing an Active Directory Domain Services Maintenance Plan**After completing this module, students will be able to:* Maintain the AD DS Domain Controllers.
* Back up the Active Directory Domain Services.
* Restore the Active Directory Domain Services.

**Module 10: Troubleshooting Active Directory, DNS, and Replication Issues**This module explains how to troubleshoot Active Directory Domain Services, Domain Name Service, and Active Directory replication.**Lessons*** Troubleshooting Active Directory Domain Services
* Troubleshooting DNS Integration with AD DS
* Troubleshooting AD DS Replication

**Lab : Troubleshooting Active Directory, DNS, and Replication Issues**After completing this module, students will be able to:* Troubleshoot Active Directory Domain Services.
* Troubleshoot DNS integration with AD DS.
* Troubleshoot AD DS replication.

**Module 11: Troubleshooting Group Policy Issues**This module explains how to troubleshoot the application of Group Policy objects.**Lessons*** Introduction to Group Policy Troubleshooting
* Troubleshooting Group Policy Application
* Troubleshooting Group Policy Settings

**Lab : Troubleshooting Group Policy Issues**After completing this module, students will be able to:* Describe Group Policy troubleshooting.
* Troubleshoot Group Policy application.
* Troubleshoot Group Policy Settings.

**Module 12: Implementing an Active Directory Domain Services Infrastructure**This module explains how to implement an Active Directory Domain Services Infrastructure.**Lessons*** Overview of the AD DS Deployment
* Planning a Group Policy Strategy

**Lab : Deploying Active Directory Domain Services****Lab : Configuring Forest Trust Relationships****Lab : Planning a Group Policy Strategy**After completing this module, students will be able to:* Implement an Active Directory Domain Services infrastructure.

**Module 1: Planning and Configuring IPv4**This module explains how to deploy and configure networking services in your organization. This module explains how to implement an IPv4 addressing scheme, determine which name services to deploy, and troubleshoot network-related problems.Lessons* Implementing an IPv4 Network Infrastructure
* Overview of Name Resolution Services in an IPv4 Network Infrastructure
* Configuring and Troubleshooting IPv4

**Lab : Planning and Configuring IPv4**After completing this module, students will be able to:* Plan an IPv4 addressing scheme.
* Determine which name services you must deploy.
* Configure and troubleshoot an IPv4 network.

**Module 2: Configuring and Troubleshooting DHCP**This module introduces you to Dynamic Host Configuration Protocol (DHCP), which plays an important role in the Windows Server 2008 R2 infrastructure. It is the primary means of distributing important network configuration information to network clients, and it provides configuration information to other network-enabled services, including Windows Deployment Services (WDS) and Network Access Protection (NAP). To support and troubleshoot a Windows Server-based network infrastructure, it is important that you understand how to deploy, configure, and troubleshoot the DHCP Server Role.Lessons* Overview of the DHCP Server Role
* Configuring DHCP Scopes
* Configuring DHCP Options
* Managing a DHCP Database
* Monitoring and Troubleshooting DHCP
* Configuring DHCP Security

**Lab : Configuring and Troubleshooting the DHCP Server Role**After completing this module, students will be able to:* Describe the function of the DHCP Server Role.
* Configure DHCP scopes.
* Configure DHCP options.
* Manage a DHCP database.
* Monitor and troubleshoot the DHCP Server Role.
* Configure security the DHCP Server Role.

**Module 3: Configuring and Troubleshooting DNS**This module introduces you to Domain Name System (DNS), which is the foundation name service in Windows Server 2008 R2. It is vital that you understand how to deploy, configure, manage, and troubleshoot this critical service.Lessons* Installing the DNS Server Role
* Configuring the DNS Server Role
* Configuring DNS Zones
* Configuring DNS Zone Transfers
* Managing and Troubleshooting DNS

**Lab : Configuring and Troubleshooting DNS**After completing this module, students will be able to:* Install the DNS server role.
* Configure the DNS server role.
* Create and configure DNS zones.
* Configure zone transfers.
* Manage and troubleshoot DNS.

**Module 4: Configuring and Troubleshooting IPv6 TCP/IP**This module introduces you to IPv6, a technology that will help ensure that the Internet can support a growing user base and the increasingly large number of IP-enabled devices. The current Internet Protocol Version 4 (IPv4) has served as the underlying Internet protocol for almost thirty years. Its robustness, scalability, and limited feature set is now challenged by the growing need for new IP addresses, due in large part to the rapid growth of new network-aware devices.Lessons* Overview of IPv6
* IPv6 Addressing
* Coexistence with IPv6
* IPv6 Transition Technologies
* Transitioning from IPv4 to IPv6

**Lab : Configuring an ISATAP Router****Lab : Converting the Network to Native IPv6**After completing this module, students will be able to:* Describe the features and benefits of IPv6.
* Implement IPv6 addressing.
* Implement an IPv6 coexistence strategy.
* Describe and select a suitable IPv6 transition solution.
* Transition from IPv4 to IPv6.
* Troubleshoot an IPv6-based network.

**Module 5: Configuring and Troubleshooting Routing and Remote Access**To support your organization’s distributed workforce, you must become familiar with technologies that enable remote users to connect to your organization’s network infrastructure. These technologies include virtual private networks (VPNs) and DirectAccess. It is important that you understand how to configure and secure your remote access clients by using network policies. This module explores these remote access technologies.Lessons* Configuring Network Access
* Configuring VPN Access
* Overview of Network Policies
* Overview of the Connection Manager Administration Kit
* Troubleshooting Routing and Remote Access
* Configuring DirectAccess

**Lab : Configuring and Managing Network Access****Lab : Configuring and Managing DirectAccess**After completing this module, students will be able to:* Configure network access.
* Create and configure a VPN solution.
* Describe the role of network policies.
* Use the Connection Manager Administration Kit to create and configure client connection profiles.
* Troubleshoot routing and remote access.
* Implement DirectAccess.

**Module 6: Installing, Configuring, and Troubleshooting the Network Policy Server Role Service**NPS provides support for the Remote Authentication Dial-In User Service (RADIUS) protocol, and can be configured as a RADIUS server or proxy. Additionally, NPS provides functionality that is essential for the implementation of Network Access Protection (NAP). This module explains how to install, configure, and troubleshoot NPS.Lessons* Installing and Configuring a Network Policy Server
* Configuring RADIUS Clients and Servers
* NPS Authentication Methods
* Monitoring and Troubleshooting a Network Policy Server

**Lab : Configuring and Managing Network Policy Server**After completing this module, students will be able to:* Install and configure NPS.
* Configure RADIUS clients and servers.
* Describe NPS authentication methods.
* Monitor and troubleshoot NPS.

**Module 7: Implementing Network Access Protection**In this module, you will learn about Network Access Protection (NAP). NAP enables you to create customized health-requirement policies to validate computer health before allowing access or communication. NAP also automatically updates compliant computers to ensure on-going compliance and can limit the access of noncompliant computers to a restricted network until they become compliant.Lessons* Overview of Network Access Protection
* How NAP Works
* Configuring NAP
* Monitoring and Troubleshooting NAP

**Lab : Implementing NAP into a VPN Remote Access Solution**After completing this module, students will be able to:* Describe how NAP can help protect your network.
* Describe the various NAP enforcement processes.
* Configure NAP.
* Monitor and troubleshoot NAP.

**Module 8: Increasing Security for Windows Servers**Security is an essential consideration for networking with Windows Server 2008. In this module, you will learn how to implement various methods to increase security. Windows Firewall with Advanced Security is one of the features in Windows Server 2008 that is used to increase security. You can also use Windows Server Update Services to ensure that approved security updates are applied to servers in a timely way.Lessons* Windows Security Overview
* Configuring Windows Firewall with Advanced Security
* Deploying Updates with Windows Server Update Services

**Lab : Increasing Security for Windows Servers**After completing this module, students will be able to:* Describe a process for increasing the security of Windows Server 2008.
* Configure Windows Firewall with Advanced Security.
* Describe Windows Server Update Services and how to use it.

**Module 9: Increasing Security for Network Communication**Internet Protocol security (IPsec) is a framework of open standards for protecting communications over IP networks through cryptographic security services. IPsec supports network-level peer authentication, data-origin authentication, data integrity, data confidentiality (encryption), and replay protection. The Microsoft IPsec implementation is based on standards that the Internet Engineering Task Force (IETF) IPsec working group developed. In this module, you will learn how to implement, configure, and troubleshoot IPsec.Lessons* Overview of IPsec
* Configuring Connection Security Rules
* Configuring NAP with IPsec Enforcement
* Monitoring and Troubleshooting IPsec

**Lab : Increasing Security for Network Communication**After completing this module, students will be able to:* Describe when and how to use IPsec.
* Configure Connection Security rules.
* Configure IPsec with NAP Enforcement.
* Describe how to monitor and troubleshoot IPsec.

**Module 10: Configuring and Troubleshooting Network File and Print Services**File and print services are some of the most commonly implemented network services for end users. Unlike infrastructure services like DNS, file and print services are highly visible to the end users. In this module, you will learn how to configure and troubleshoot file and print services to provide high quality service to end users. In addition, you will see how both EFS and BitLocker can be used to increase the security of files that are located in file shares.Lessons* Configuring and Troubleshooting File Shares
* Encrypting Network Files with EFS
* Encrypting Partitions with BitLocker
* Configuring and Troubleshooting Network Printing

**Lab : Configuring and Troubleshooting Network File and Print Services**After completing this module, students will be able to:* Describe how to manage file share security.
* Explain how to encrypt network files with EFS.
* Describe how to encrypt partitions with BitLocker.
* Discuss how to configure and troubleshoot network printing.

**Module 11: Optimizing Data Access for Branch Offices**Many organizations maintain a large number of file resources that need to be organized and made highly available to users. These file resources are often stored on servers and provided to users who are distributed geographically in widespread locations. In this module, you will learn how to provide efficient access to network resources with minimal traffic over a WAN link.Lessons* Branch Office Data Access
* DFS Overview
* Overview of DFS Namespaces
* Configuring DFS Replication
* Configuring BranchCache

**Lab : Implementing DFS****Lab : Implementing BranchCache**After completing this module, students will be able to:* Describe the challenges experienced when providing data access to branch offices.
* Identify the basic components of DFS.
* Describe DFS namespaces.
* Explain how to configure DFS replication.
* Discuss how to configure BranchCache.

**Module 12: Controlling and Monitoring Network Storage**Network storage for users is a finite resource that must be managed appropriately to ensure that it remains available for all users. If network storage is not monitored and managed, it can become filled with irrelevant data, such as personal music or movies. Irrelevant data increases network storage costs and in some cases can prevent useful data from placement on the network storage. In this module, you will learn how to monitor and manage network storage.Lessons* Monitoring Network Storage
* Controlling Network Storage Utilization
* Managing File Types on Network Storage

**Lab : Controlling and Monitoring Network Storage**After completing this module, students will be able to:* Describe how to monitor network storage by using FSRM.
* Explain how to manage quotas by using FSRM.
* Describe how to implement file screening, classification management, and file management tasks by using FSRM.

**Module 13: Recovering Network Data and Servers**This module explains how to recover network data and servers. There are a variety of scenarios where a network data or a server that provides networks services can be lost. Volume shadow copies can be used to restore previous versions of files when a file is accidentally deleted or modified on a computer that is running Windows Server 2008. Windows Server Backup can be used to back up and restore data files or an entire server.Lessons* Recovering Network Data with Volume Shadow Copies
* Recovering Network Data and Servers with Windows Server Backup

**Lab : Recovering Network Data and Servers**After completing this module, students will be able to:* Describe how to configure and use volume shadow copies.
* Describe how to configure and use Windows Server Backup.

**Module 14: Monitoring Windows Server 2008 Network Infrastructure Servers**When a system failure or an event that affects system performance occurs, you need to be able to repair the problem or resolve the issue quickly and efficiently. With so many variables and possibilities in the modern network environment, the ability to determine the root cause quickly often depends on having an effective performance monitoring methodology and toolset. In this module, you will learn to use performance-monitoring tools to identify components that require additional tuning and troubleshooting. By identifying components that require additional tuning, you can improve the efficiency of your servers.Lessons* Monitoring Tools
* Using Performance Monitor
* Monitoring Event Logs

**Lab : Monitoring Windows Server 2008 Network Infrastructure Servers**After completing this module, students will be able to:* Describe monitoring tools for Windows Server 2008 R2.
* Describe how to use performance monitor.
* Describe how to monitor event logs.

**Module 1: Planning Server Deployment and Upgrade**This module explains how to plan Windows Server 2008 and Windows Server 2008 R2 deployments and upgrades.Lessons* Developing a Deployment Strategy
* Virtualization Considerations
* Selecting an Automation Strategy
* Implementing an Automation Strategy

**Lab : Planning and Implementing Server Deployment**After completing this module, students will be able to:* Develop a deployment strategy.
* Determine factors that affect the implementation of virtualization within your organization.
* Select a strategy for deployment automation.
* Implement the selected automation strategy.

**Module 2: Planning Server Management and Delegated Administration**This module explains how to plan for server management and delegated administration on Windows Server 2008 and Windows Server 2008 R2 environmentsLessons* Remote Server Management Tools
* Decentralizing Systems Administration

**Lab : Implementing Role-Based Systems Administration**After completing this module, students will be able to:* Plan for the implementation and use of Windows Server 2008 and Windows Server 2008 R2 remote management tools.
* Plan and Implement decentralized systems administration.

**Module 3: Planning Network Addressing and Name Resolution**This module explains how to plan for IPv4 and IPv6 addressing in your network and to plan and implement DNS and DHCP in a Windows Server 2008 and Windows Server 2008 R2 environmentLessons* Provisioning IPv4 Addresses on Enterprise Networks
* Provisioning IPv6 Addresses on Enterprise Networks
* Transitioning to IPv6
* Provisioning DNS Services on Enterprise Networks

**Lab : Planning and Implementing DHCP and DNS**After completing this module, students will be able to:* Provision an IPv4 addressing scheme within your organization.
* Provision an IPv6 addressing scheme within your organization.
* Plan the transition to IPv6.
* Plan and implement DNS name resolution services within your organization’s network.

**Module 4: Planning and Provisioning Active Directory Domain Services**This module explains how to plan and provision Active Directory Domain Services in Windows Server 2008 and Windows Server 2008 R2 environments.Lessons* Deploying Domain Controllers in Multi-Site Organizations
* Planning Administrative and Management Structures for AD DS
* Planning a Maintenance Strategy for AD DS
* Planning a Backup and Restore Strategy for AD DS

**Lab : Planning for Active Directory Domain Services**After completing this module, students will be able to:* Identify considerations for deploying domain controllers in multi-site organizations.
* Plan administrative and management structures for AD DS
* Plan a maintenance strategy for AD DS
* Plan a backup and recovery strategy for AD DS.

**Module 5: Planning Group Policy Strategy**This module explains how to plan and implement Group Policy strategy n Windows Server 2008 and Windows Server 2008 R2 environmentsLessons* Planning Group Policy Settings
* Planning the Assignment of Group Policies
* Planning the Management of Group Policy Objects

**Lab : Planning and Implementing Group Policy**After completing this module, students will be able to:* Plan GPO settings.
* Plan the assignment of group policy objects to AD DS containers.
* Plan how to manage GPOs within your organization.

**Module 6: Planning Active Directory Certificate Services**This module explains how to plan Active Directory Certificate Services in Windows Server 2008 and Window Server 2008 R2 environments.Lessons* Enterprise PKI Deployment and Administration
* Managing Certificate Templates
* Planning Certificate Enrollment and Revocation

**Lab : Configuring Certificate Services**After completing this module, students will be able to:* Plan enterprise PKI deployment and administration
* Manage Certificate templates
* Plan certificate enrollment and revocation

**Module 7: Planning and Provisioning Application Servers**This module explains how to plan and provision application servers in Windows Server 2008 and Windows Server 2008 R2 environments.Lessons* Planning and Provisioning Web Services
* Planning and Provisioning Presentation Virtualization
* Planning and Provisioning Application Virtualization

**Lab : Planning and Provisioning Application Servers**After completing this module, students will be able to:* Plan and provision web application servers.
* Plan and provision remote desktop services
* Plan and provision application virtualization servers.

**Module 8: Planning File and Print Services**This module explains how to plan and implement File and Print services in your Windows Server 2008 and Windows Server 2008 R2 environment.Lessons* Provisioning File Services
* Provisioning and Managing Storage
* Provisioning and Managing Network Print Services
* Migrating File and Print Services

**Lab : Planning and Implementing File and Print Services**After completing this module, students will be able to:* Plan and implement the file service role.
* Plan and manage storage.
* Plan and manage shared printers.
* Plan the migration of file and print services to Windows Server 2008 R2

 **Module 9: Planning Network Access**This module explains how to plan and implement your network infrastructure components in your Windows Server 2008 and Windows server 2008 R2 environment.Lessons* Planning Network Security
* Planning Virtual Private Networks
* Planning Network Access Protection
* Planning DirectAccess

**Lab : Planning and Implementing Network Access**After completing this module, students will be able to:* Plan network infrastructure components to improve network security
* Plan and implement VPNs
* Plan and implement NAP
* Plan DirectAccess

**Module 10: Provisioning Data and Storage**This module explains how to provision data and storage in your Windows Server 2008 and Windows server 2008 R2 environment.Lessons* Planning and Implementing Distributed File System
* Planning and Implementing BranchCache
* Provisioning Storage

**Lab : Planning and Implementing Data Access**After completing this module, students will be able to:* Plan and implement the Distributed File System.
* Plan and implement BranchCache.
* Provision an appropriate storage solution.

**Module 11: Planning Update Deployment**This module explains how to plan and implement a Windows Server Update Service topology and how to deploy and manage updates in your Windows Server 2008 and Windows Server 2008 R2 environment.Lessons* WSUS Topologies
* Update Management

**Lab : Multi-Site WSUS Deployment**After completing this module, students will be able to:* Plan an appropriate Windows Server Update Services (WSUS) topology
* Deploy and manage updates

**Module 12: Planning High Availability**This module explains how to plan and implement High Availability in your Windows Server 2008 and Windows Server 2008 R2 environment.Lessons* Planning Network Load Balancing
* Planning Failover Clustering
* Planning for Service Availability

**Lab : Planning and Implementing High Availability**After completing this module, students will be able to:* Plan and deploy network load balancing.
* Plan and deploy failover clustering.
* Plan for high service availability.

**Module 13: Planning Performance and Event Monitoring**This module explains how to plan for performance and event monitoring in your Windows Server 2008 and Windows Server 2008 R2 environment.Lessons* Monitoring and Analyzing Server Performance
* Managing Events

**Lab : Planning and Implementing Event Log Management**After completing this module, students will be able to:* Monitor and analyze server performance.
* Manage events.

**Module 14: Enterprise Backup and Recovery**This module explains how to plan for back ups and disaster recovery in your Windows Server 2008 and Windows Server 2008 R2 environmentLessons* Disaster Recovery Concepts
* Planning Windows Server Backup
* Planning Recovery of Data and servers

**Lab : Backing Up and Restoring from VHD**After completing this module, students will be able to:* Understand Disaster Recovery Concepts
* Plan Windows Server Backup
* Plan recovery of data and servers
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