



Price: \$2,195
Length: 35 Hours (5 days)

Introduction: This 5-day instructor-led course provides you with the skills and knowledge needed to plan, design, and deploy a physical and logical Windows Server 2012 with Active Directory Domain Services (AD DS) infrastructure. The course also provides the skills to perform name resolution, application integration, optimization of automate remediation, and maintenance of network services.

Target Audience: Candidates for this course have good Windows client and server operating system knowledge and basic AD DS and networking experience in an enterprise/small business (SMB) environment together with application configuration experience. This course is intended for IT professionals who are responsible for planning, designing, and deploying a physical and a logical Windows Server 2012 enterprise AD DS infrastructure including the network services necessary. Students have experience of previous Windows Server operating systems and possess Windows Server 2012 Microsoft Certified Solutions Associate (MCSA) certification or equivalent skills.

Prerequisites:

- A good understanding of Transmission Control Protocol/Internet Protocol (TCP/IP) fundamentals and networking concepts.
- A good working knowledge of both Windows Server 2012 and AD DS. For example, domain user accounts, domain vs. local user accounts, user profiles, and group membership.
- A good understanding of both scripts and batch files.
- A solid understanding of security concepts, such as authentication and authorization.
- Ability to work in a team or a virtual team.
- Knowledge equivalent to Windows 2012 MCSA.

Course Objectives: After completing this course, students will be able to:

- Plan a server upgrade and migration.
- Plan and implement a server deployment infrastructure.
- Design and maintain an IP configuration and address management solution.
- Design and implement name resolution.
- Design and implement an AD DS forest and domain infrastructure.
- Design and implement an Active Directory organizational unit infrastructure.
- Design and implement a Group Policy Object (GPO) strategy.
- Design and implement an AD DS topology.
- Plan and implement storage.
- Plan and implement file services.
- Design and implement network access services.
- Design and implement network protection.



Course Outline

I. Planning a Server Upgrade and Migration

- A. Upgrade and Migration Considerations
- B. Creating a Server Upgrade and Migration Plan
- C. Planning for Virtualization

II. Planning and Implementing a Server Deployment Infrastructure

- A. Selecting an Appropriate Server Imaging Strategy
- B. Selecting a Deployment Automation Strategy
- C. Implementing an Automated Deployment Strategy

III. Designing and Maintaining an IP Configuration and Address Management Solution

- A. Designing and Implementing DHCP
- B. Planning and Implementing DHCP Scopes
- C. Planning and Implementing an IPAM Provisioning Strategy

IV. Designing and Implementing Name Resolution

- A. Designing a Domain Name System (DNS) Server Implementation Strategy
- B. Designing the DNS Namespace
- C. Designing and Implementing DNS Zones
- D. Designing and Configuring DNS Zone Replication and Delegation
- E. Optimizing DNS Servers
- F. Designing DNS for High Availability and Security

V. Designing and Implementing an Active Directory Domain Services Forest and Domain Infrastructure

- A. Designing an AD DS Forest
- B. Designing and Implementing AD DS Forest Trusts
- C. Designing and Implementing AD DS Domains
- D. Designing DNS Namespaces in AD DS Environments
- E. Designing AD DS Domain Trusts

VI. Designing and Implementing an Active Directory Organizational Unit Infrastructure

- A. Planning the Active Directory Administrative Tasks Delegation Model
- B. Designing the OU Structure
- C. Designing and Implementing an Active Directory Group Strategy

VII. Designing and Implementing a Group Policy Object Strategy

- A. Gathering the Information Required for a GPO Design
- B. Designing and Implementing GPOs
- C. Designing GPO Processing
- D. Planning Group Policy Management

VIII. Designing and Implementing an Active Directory Domain Services Topology

- A. Designing and Implementing AD DS Sites
- B. Designing AD DS Replication
- C. Designing the Placement of Domain Controllers
- D. Virtualization Considerations for Domain Controllers
- E. Designing Highly Available Domain Controllers

IX. Planning and Implementing Storage

- A. Storage Considerations
- B. Planning and Implementing iSCSI SANs
- C. Storage Spaces in Windows Server 2012

X. Planning and Implementing File Services

- A. Planning and Implementing DFS
- B. Planning and Implementing BranchCache
- C. Planning and Implementing Dynamic Access Control

XI. Designing and Implementing Network Access Services

- A. Designing and Implementing Remote Access Services
- B. Designing RADIUS Authentication by Using NPS
- C. Designing a Perimeter Network
- D. Planning and Implementing DirectAccess

XII. Designing and Implementing Network Protection

- A. Overview of Network Security Design
- B. Identifying and Mitigating Common Network Security Threats
- C. Designing and Implementing a Windows Firewall Strategy
- D. Designing and Implementing a NAP Infrastructure