20410: Installing and Configuring Windows Server® 2012

Duration: 5 Days
Method: Instructor-Led Training (ILT) | Live Online Training

Course Description

This course focuses on the initial implementation and configuration of core services, such as Networking, Storage, Active Directory® Domain Services (AD DS), Group Policy, File and Print Services, and Hyper-V®.

*NOTE: This course is part **one** in a series of three courses that provides the skills and knowledge necessary to implement a core Windows Server 2012 infrastructure in an existing enterprise environment.*

Target Audience

This course is intended for:

- Windows Server administrators who are relatively new to Windows Server administration and related technologies who are looking to learn more about both Windows Server 2012 and 2012 R2.
- IT Professionals who are experienced in other non-Microsoft technologies, who meet the course prerequisites and are looking to cross-train on both Windows Server 2012 and 2012 R2.

Prerequisites

To attend this course, candidates must have completed the *10967: Fundamentals of a Windows Server Infrastructure* course or have the following knowledge and experience:

- An understanding of networking fundamentals.
- An understanding of basic AD DS concepts.
- An awareness and understanding of security best practices.
- Basic knowledge of server hardware.
- Experience working with, and configuring, Windows® client operating systems, such as Windows 7 or Windows 8.
- Previous Windows Server operating system experience.

Course Objectives

Upon successful completion of this course, attendees will be able to:

- Install and configure Windows Server 2012.
- Describe AD DS.
- Manage Active Directory objects.
- Automate Active Directory administration.
- Implement IPv4.
- Implement Dynamic Host Configuration Protocol (DHCP).
- Implement Domain Name System (DNS).
- Implement IPv6.
- Implement local storage.
- Implement file and print services.
- Implement Group Policy.
- Secure Windows servers by using Group Policy Objects (GPOs).
- Implement server virtualization by using Hyper-V.

Course Topics

Module 1: Deploying and Managing Windows Server 2012

- Windows Server 2012 Overview
- Installing Windows Server 2012
- Post-Installation Configuration of Windows Server 2012
- Overview of Windows Server 2012 Management
- Introduction to Windows PowerShell

Module 2: Introduction to Active Directory Domain Services

- Overview of AD DS
- Overview of Domain Controllers
- Installing a Domain Controller

Module 3: Managing Active Directory Domain Services Objects

- Managing User Accounts
- Managing Groups
- Managing Computer Accounts
- Delegating Administration

Module 4: Automating Active Directory Domain Services Administration

- Using Command-line Tools for AD DS Administration
- Using Windows PowerShell for AD DS Administration
- Performing Bulk Operations with Windows PowerShell

Module 5: Implementing IPv4

- Overview of TCP/IP
- Understanding IPv4 Addressing
- Subnetting and Supernetting
- Configuring and Troubleshooting IPv4

Course Topics *Continued*

Module 6: Implementing Dynamic Host Configuration Protocol
- Overview of the DHCP Server Role
- Configuring DHCP Scopes
- Managing a DHCP Database
- Securing and Monitoring DHCP

Module 7: Implementing DNS
- Name Resolution for Windows Clients and Servers
- Installing a DNS Server
- Managing DNS Zones

Module 8: Implementing IPv6
- Overview of IPv6
- IPv6 Addressing
- Coexistence with IPv4
- IPv6 Transition Technologies

Module 9: Implementing Local Storage
- Overview of Storage
- Managing Disks and Volumes
- Implementing Storage Spaces

Module 10: Implementing File and Print Services
- Securing Files and Folders
- Protecting Shared Files and Folders by Using Shadow Copies
- Configuring Work Folders
- Configuring Network Printing

Module 11: Implementing Group Policy
- Overview of Group Policy
- Group Policy Processing
- Implementing a Central Store for Administrative Templates

Module 12: Securing Windows Servers Using Group Policy Objects
- Security Overview for Windows Operating Systems
- Configuring Security Settings
- Restricting Software
- Configuring Windows Firewall with Advanced Security

Module 13: Implementing Server Virtualization with Hyper-V
- Overview of Virtualization Technologies
- Implementing Hyper-V
- Managing Virtual Machine Storage
- Managing Virtual Networks

LABS INCLUDED