

# 20410: Installing and Configuring Windows Server® 2012

Duration: 5 Days

Method: Instructor-Led

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*Certificate: Microsoft® Certified Solutions Associate (MCSA): Installing Windows Server® 2012 Exam: 70-410*

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## Course Description

MS 20410 is part one of the three courses, as well as the exams, required to achieve the MCSA: Windows Server® 2012 credential. This series of three courses provides the skills and knowledge necessary to implement a core Windows Server® 2012 infrastructure in an existing enterprise environment. They cover implementing, managing, maintaining and provisioning services and infrastructure in a Windows Server® 2012 environment. With all three courses you will get hands-on instructions and practice installing and configuring Windows Server® 2012, including Windows Server® 2012 R2. Although there is some cross-over of skills and tasks across these courses, this course focuses primarily 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
- Hyper-V

## 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 Windows Server® 2012 and Windows Server® 2012 R2
- IT professionals who are experienced in other non-Microsoft® technologies, who meet the course prerequisites and are looking to cross-train on Windows Server® 2012 and Windows Server® 2012 R2
- IT professionals who want to take the Microsoft® Certified Solutions Expert (MCSE) exams in DataCenter, Desktop Infrastructure, Messaging, Collaboration and Communications will also be interested in taking this course as they prepare for the Microsoft® Certified Solutions Associate (MCSA) exams. These are a prerequisite for their individual specialties

## Prerequisite

Before attending this course, candidates must have:

- 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 would be beneficial
- Knowledge equivalent to, or by attending, course [10967A: Fundamentals of a Windows Server® Infrastructure](#) because this course builds upon knowledge and skills covered in that course

## Course Objectives

After completing this course, students 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 Content

### 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®

### Lab: Deploying and Managing Windows Server® 2012

### Module 2: Introduction to Active Directory Domain Services

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

### Lab: Installing Domain Controllers

### Module 3: Managing Active Directory Domain Services Objects

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

#### Lab: Managing Active Directory Domain Services Objects

### 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®

#### Lab: Automating AD DS Administration by Using Windows PowerShell®

### Module 5: Implementing IPv4

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

#### Lab: Implementing IPv4

### Module 6: Implementing Dynamic Host Configuration Protocol

- Overview of the DHCP Server Role
- Configuring DHCP Scopes
- Managing a DHCP Database
- Securing and Monitoring DHCP

#### Lab: Implementing DHCP

### Module 7: Implementing DNS

- Name Resolution for Windows® Clients and Server
- Installing a DNS Server
- Managing DNS Zones

#### Lab: Implementing DNS

### Module 8: Implementing IPv6

- Overview of IPv6
- IPv6 Addressing
- Coexistence with IPv4
- IPv6 Transition Technologies

#### Lab: Implementing IPv6

### Module 9: Implementing Local Storage

- Overview of Storage
- Managing Disks and Volumes
- Implementing Storage Spaces

#### Lab: Implementing Local Storage

## 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

### Lab: Implementing File and Print Services

## Module 11: Implementing Group Policy

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

### Lab: Implementing Group Policy

## 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

### Lab: Increasing Security for Server Resources

### Lab: Configuring AppLocker and Windows® Firewall

## Module 13: Implementing Server Virtualization with Hyper-V

- Overview of Virtualization Technologies
- Implementing Hyper-V
- Managing Virtual Machine Storage
- Managing Virtual Networks

### Lab: Implementing Server Virtualization with Hyper-V