

Installing and Configuring Windows Server 2012

Κωδικός Σεμιναρίου / Code

MS-20410

Αντικείμενο Εκπαιδευτικού Προγράμματος / Description

This course is part one of a three-part series that provides the skills and knowledge necessary to implement a core Windows Server 2012 infrastructure in an existing enterprise environment. The three courses collectively cover implementing, managing, maintaining, and provisioning services and infrastructure in a Windows Server 2012 environment. While there is some cross-over in skills and tasks across the courses, this course primarily covers the initial implementation and configuration of core services including Active Directory Domain Services (AD DS), networking services, and Microsoft Hyper-V Server 2012 configuration.

Σκοπός Εκπαιδευτικού Προγράμματος / Objectives

This course is intended for Information Technology (IT) Professionals who have good Windows operating system knowledge and experience and want to acquire the skills and knowledge necessary to implement the core infrastructure services in an existing Windows Server 2012 environment.

The secondary audience consists of those seeking certification in the 70-410, Installing and Configuring Windows Server 2012 exam.

Που Απευθύνεται / Audience

- IT Professionals

Προϋποθέσεις Συμμετοχής / Prerequisites

Before attending this course, students must have:

- A good understanding of networking fundamentals.
 - An understanding of and experience with configuring security and administration tasks in an enterprise environment.
 - Experience supporting or configuring Windows operating system clients.
 - Good hands-on Windows client operating system experience with Windows Vista, Windows 7, or Windows 8.
 - An understanding of basic Active Directory Domain Services (AD DS) concepts, such as the purpose of user accounts and computer accounts.
- Students would also benefit from having some previous Windows Server operating system experience.

Θεματικές Ενότητες / Topics

Module 1: Deploying and Managing Windows Server 2012

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

Lab: Deploying and Managing Windows Server 2012

- Deploying Windows Server 2012
- Configuring Windows Server 2012 Server Core
- Managing Servers
- Using Windows PowerShell to Manage Servers

After completing this module, students will be able to:

- Describe Windows Server 2012.
- Describe the management tools available in Windows Server 2012.
- Install Windows Server 2012.
- Perform post-installation configuration of Windows Server 2012.
- Perform basic administrative tasks using Windows PowerShell.

Module 2: Introduction to Active Directory Domain Services

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

Lab: Installing Domain Controllers

- Installing a Domain Controller
- Installing a Domain Controller by Using IFM

After completing this module, students will be able to:

- Describe the structure of AD DS.
- Describe the purpose of domain controllers.
- Explain how to install a domain controller.

Module 3: Managing Active Directory Domain Services Objects

- Managing User Accounts
- Managing Group Accounts
- Managing Computer Accounts
- Delegating Administration

Lab: Managing Active Directory Domain Services Objects

- Delegating Administration for a Branch Office
- Creating and Configuring User Accounts in AD DS
- Managing Computer Objects in AD DS

After completing this module, students will be able to:

- Manage user accounts with graphical tools.
- Manage group accounts with graphical tools.
- Manage computer accounts.
- Delegate permissions to perform AD DS administration.

Module 4: Automating Active Directory Domain Services

- 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

- Creating User Accounts and Groups by Using Windows PowerShell
- Using Windows PowerShell to Create User Accounts in Bulk
- Using Windows PowerShell to Modify User Accounts in Bulk

After completing this module, students will be able to:

- Use command-line tools for AD DS administration.
- Use Windows PowerShell cmdlets for AD DS administration.
- Perform bulk operations by using Windows PowerShell.

Module 5: Implementing

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

Lab: Implementing IPv4

- Identifying Appropriate Subnets
- Troubleshooting IPv4

After completing this module, students will be able to:

- Describe the TCP/IP protocol suite.
- Describe IPv4 addressing.
- Determine a subnet mask necessary for subnetting or supernetting.
- Configure IPv4 and troubleshoot IPv4 communication.

Module 6: Implementing Dynamic Host Configuration Protocol

- Installing a DHCP Server Role
- Configuring DHCP Scopes
- Managing a DHCP Database
- Securing and Monitoring DHCP

Lab: Implementing DHCP

- Implementing DHCP
- Implementing a DHCP Relay Agent (Optional Exercise)

After completing this module, students will be able to:

- Install the DHCP server role.
- Configure DHCP scopes.
- Manage a DHCP database.
- Secure and monitor the DHCP server role.

Module 7: Implementing Domain Name System

- Name Resolution for Windows Client and Servers
- Installing and Managing a DNS Server
- Managing DNS Zones

Lab: Implementing DNS

- Installing and Configuring DNS
- Creating Host Records in DNS
- Managing the DNS Server Cache

After completing this module, students will be able to:

- Describe name resolution for Windows operating system clients and Windows Server servers.
- Install and manage DNS Server service.
- Manage DNS zones.

Module 8: Implementing IPv6

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

Lab: Implementing IPv6

- Configuring an IPv6 Network
- Configuring an ISATAP Router

After completing this module, students will be able to:

- Describe the features and benefits of IPv6.
- Describe IPv6 addressing.
- Describe IPv6 coexistence with IPv4.

- Describe IPv6 transition technologies.

Module 9: Implementing Local Storage

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

Lab: Implementing Local Storage

- Installing and Configuring a New Disk
- Resizing Volumes
- Configuring a Redundant Storage Space

After completing this module, students will be able to:

- Describe the various storage technologies.
- Explain how to manage disks and volumes.
- Explain how to implement Storage Spaces.-

Module 10: Implementing File and Print Services

- Securing Files and Folders
- Protecting Shared Files and Folders by Using Shadow Copies
- Configuring Network Printing

Lab: Implementing File and Print Services

- Creating and Configuring a File Share
- Configuring Shadow Copies
- Creating and Configure a Printer Pool

After completing this module, students will be able to:

- Secure shared files and folders.
- Protect shared files and folders by using shadow copies.
- Configure network printing.

Module 11: Implementing Group Policy

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

Lab: Implementing Group Policy

- Configuring a Central Store
- Creating GPOs

After completing this module, students will be able to:

- Create and manage Group Policy Objects.
- Describe Group Policy processing.
- Implement a central store for administrative templates.

Module 12: Securing Windows Servers Using Group Policy Objects

- Windows Operating Systems Security Overview
- Configuring Security Settings
- Restricting Software
- Configuring Windows Firewall with Advanced Security

Lab: Lab A: Increasing Security for Server Resources

- Using Group Policy to Secure Member Servers
- Auditing File System Access
- Auditing Domain Logons

Lab: Lab B: Configuring AppLocker and Windows Firewall

- Configuring AppLocker Policies
- Configuring Windows Firewall

After completing this module, students will be able to:

- Describe Windows Server operating system Security.
- Configure security settings by using Group Policy.
- Restrict unauthorized software from running on servers and clients.
- Configure 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

Lab: Implementing Server Virtualization with Hyper-V

- Installing the Hyper V Role onto a Server
- Configuring Virtual Networking
- Creating and Configuring a Virtual Machine
- Using Virtual Machine Snapshots

After completing this module, students will be able to:

- Describe virtualization technologies.
- Implement Hyper V.
- Manage virtual machine storage.
- Manage virtual networks.

Διάρκεια Προγράμματος / Duration

5 days

Χρήσιμες Πληροφορίες για τους Συμμετέχοντες / Useful Information

MCSA Certifications: MCSA on Windows Server 2003

The enduring strength of Windows Server 2003 in the market suggests that demand for related IT expertise will continue for many years. Earn the MCSA on Windows Server 2003 to help demonstrate your expertise to customers and employers. Prove your skills in Windows administration, including system environment management and troubleshooting.

To earn the MCSA on Windows Server 2003 certification, you must pass four exams (in any order):

- Two exams on networking systems
- One exam on client operating systems
- One elective exam