

Course 20410A: Installing and Configuring Windows Server 2012

Exam Code: 70-410

Duration: 40 Hrs

Course Outline

Module 1: Deploying and Managing Windows Server 2012

This module introduces the new Windows Server 2012 administrative interface. This module covers the different roles and features that are available with the Windows Server 2012 operating system. It also discusses the various installation and configuration options you can use when deploying and configuring Windows Server 2012.

Lessons

- 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

Module 2: Introduction to Active Directory Domain Services

This module introduces Active Directory Domain Services (AD DS) in Windows Server 2012. It covers General AD DS infrastructure including forests, trees, schema, Global Catalog, Operations Masters. It also covers installing and configuring domain controllers.

Lessons

- 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

Module 3: Managing Active Directory Domain Services Objects

This module covers configuring Active Directory Objects such as users, groups and computers. The functionality of AD DS Administrative Tools is addressed, in addition to the configuration of user profiles and the process of delegating permissions to perform AD DS administration.

Lessons

- 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

Module 4: Automating Active Directory Domain Services Administration

This module covers using command-line tools to configure and administer AD DS. It introduces using Windows PowerShell cmdlets for AD DS administration, and using Windows PowerShell to perform bulk AD DS administrative operations.

Lessons

- Using Command-line Tools for Administration
- Using Windows PowerShell for 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

Module 5: Implementing IPv4

This module covers Internet Protocol Version 4 (IPv4) addressing. It details the various IPv4 components, covers subnetting and supernetting, and discusses configuring and general troubleshooting of IPv4 addresses.

Lessons

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

Lab: Implementing IPv4

- Identifying Appropriate Subnets
- Troubleshooting IPv4

Module 6: Implementing DHCP

This module covers the installation and configuration of DHCP as well as managing a DHCP database. It also covers security and monitoring of DHCP, including auditing and logging.

Lessons

- 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 (Optional Exercise)

Module 7: Implementing DNS

This module covers name resolution for Windows Server and clients. It details the installation of a DNS server and configuring Active Directory Integrated DNS zones.

Lessons

- 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

Module 8: Implementing IPv6

This module covers understanding and implementing IPv6 addressing. It covers configuration and troubleshooting as well as co-existence with IPv4 using transition technologies.

Lessons

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

Lab: Implementing IPv6

- Configuring an IPv6 Network
- Configuring an ISATAP Router

Module 9: Implementing Local Storage

This module covers the storage configuration options for Windows Server 2012, including managing disks and volumes and implementing file systems. It also covers creating and managing storage pools.

Lessons

- 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

Module 10: Implementing File and Print Services

This module covers securing files, folders and network file shares, in addition to using shadow copies to protect network file shares. It also covers configuring network printing and creating a printer pool.

Lessons

- Securing Files and Folders
- Protecting Shared Files and Folders 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

Module 11: Implementing Group Policy

This module covers using Group Policy to centrally manage and apply configuration settings.

Lessons

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

Lab: Implementing Group Policy

- Configuring a Central Store
- Creating GPOs

Module 12: Securing Windows Servers Using Group Policy Objects

Increase security in a Windows Server 2012 infrastructure by using Group Policy Objects, AppLocker, and Windows Firewall.

Lessons

- Windows 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

Module 13: Implementing Server Virtualization with Hyper-V

This module describes Microsoft Virtualization technologies. It covers installing and configuring Hyper-V virtual machines, configuring virtual storage, and configuring virtual networks.

Lessons

- 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 Server Role
- Configuring Virtual Networking
- Creating and Configuring a Virtual Machine
- Using Virtual Machine Snapshots