

MOC 20411 D Administering Windows Server 2012

Course Summary

Description

Get hands-on instruction and practice administering Windows Server 2012, including Windows Server 2012 R2, in this five-day Microsoft Official Course. This course is part two 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.

The three courses collectively cover implementing, managing, maintaining and provisioning services and infrastructure in a Windows Server 2012 environment. Although there is some cross-over of skills and tasks across these courses, this course focuses on the administration tasks necessary to maintain a Windows Server 2012 infrastructure such as configuring and troubleshooting name resolution, user and group management with Active Directory Domain Services (AD DS) and Group Policy, implementing Remote Access solutions such as DirectAccess, VPNs and Web Application Proxy, implementing Network Policies and Network Access Protection, Data Security, deployment and maintenance of server images, as well as update management and monitoring of Windows Server 2012 environments.

This course maps directly to and is the preferred choice for hands-on preparation for Microsoft Certified Solutions Associate (MCSA): Exam 411: *Administering Windows Server 2012*, which is the second of three exams required for MCSA: *Windows Server 2012* credential.

Note: Labs in this course are based on the General Availability release of Windows Server 2012 R2 and Windows 8.1.

Objectives

At the end of this course, students will be able to:

- Configure and Troubleshoot Domain Name System
- Maintain Active Directory Domain Services
- Manage User and Service Accounts
- Implement Group Policy Infrastructure
- Manage User Desktops using Group Policy
- Configure and Troubleshoot Remote Access
- Install, Configure and Troubleshoot Network Policy Server
- Implement Network Access Protection
- Optimize File Services
- Configure Encryption and Advanced Auditing
- Deploy and Maintain Server Images
- Implement Update Managements
- Monitor Windows Server 2012

Topics

- Deploying and Maintaining Server Images
- Configuring and Troubleshooting Domain Name System
- Maintaining Active Directory Domain Services
- Managing User and Service Accounts
- Implementing a Group Policy Infrastructure
- Managing User Desktops with Group Policy
- Configuring and Troubleshooting Remote Access
- Installing, Configuring, and Troubleshooting the Network Policy Server Role
- Implementing Network Access Protection
- Optimizing File Services
- Configuring Encryption and Advanced Auditing
- Implementing Update Management

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Course Summary (cont'd)

Audience

This course is intended for Information Technology (IT) Professionals with hands on experience working in a Windows server 2008 or Windows Server 2012 environment who wish to acquire the skills and knowledge necessary to be able to manage and maintain the core infrastructure required for a Windows Server 2012 and Windows Server 2012 R2 environment. The key focus for students is to broaden the initial deployment of Windows Server 2012 services and infrastructure and provide the skills necessary to Manage and Maintain a domain based Windows Server 2012 environment, providing skills in areas such as User and Group management, Network Access and Data Security. Candidates typically interested in attending this course would be

- Windows Server Administrators experienced in working with Windows Server 2008 or Windows Server 2012 who wish to gain skills necessary to perform daily management and maintenance tasks in a Windows Server 2012 or Windows Server 2012 R2 environment.
- IT Professionals who are looking to take the 411, *Administering Windows Server 2012* exam
- IT professional wishing 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, which are a pre-requisite for their individual specialties.

Prerequisites

Before attending this course, students must have:

- Knowledge and skills concerning the initial implementation and configuration of core Windows Server services including Active Directory Domain Services (AD DS), Networking Services and Microsoft Hyper-V.

Duration

Five days

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Course Outline

I. Configuring and Troubleshooting Domain Name System

This module explains how to configure and troubleshoot DNS, including DNS replication and caching.

- A. Configuring the DNS Server Role
- B. Configuring DNS Zones
- C. Configuring DNS Zone Transfers
- D. Managing and Troubleshooting DNS

Lab : Configuring and Troubleshooting DNS

- Configuring DNS Resource Records
- Configuring DNS Conditional Forwarding
- Installing and Configuring DNS Zones
- Troubleshooting DNS

II. Maintaining Active Directory Domain Services

This module explains how to implement virtualized domain controllers and read-only domain controller (RODCs). It also explains how to perform common AD DS administrative tasks and manage the AD DS Database.

- A. Overview of AD DS
- B. Implementing Virtualized Domain Controllers
- C. Implementing RODCs
- D. Administering AD DS
- E. Managing the AD DS Database

Lab : Maintaining AD DS

- Installing and Configuring a RODC
- Configuring AD DS Snapshots
- Configuring the Active Directory Recycle Bin
- Cloning a domain controller

III. Managing User and Service Accounts

This module explains how to create, configure and automate the creation of user accounts. It also explains how to configure account-related properties of user objects. It further explains how to create and administer Managed Service Accounts.

- A. Configuring Password Policy and User Account Lockout Settings
- B. Configuring Managed Service Accounts

Lab : Managing User and Service Accounts

- Configuring Password Policy and Account Lockout Settings

- Creating and Associating a Managed Service Account

IV. Implementing a Group Policy Infrastructure

This module explains how to implement a GPO infrastructure. This also teaches how to perform common GPO management tasks, and manage GPOs by using Windows PowerShell. It also focuses on troubleshooting the application of GPOs.

- A. Introducing Group Policy
- B. Implementing and Administering GPOs
- C. Group Policy Scope and Group Policy Processing
- D. Troubleshooting the Application of GPOs

Lab : Implementing a Group Policy Infrastructure

- Creating and Configuring Group Policy Objects
- Managing GPO Scope
- Verify GPO Application
- Managing GPOs

V. Managing User Desktops with Group Policy

This module explains how you can use Group Policy Objects (GPOs) to implement desktop environments across your organization by using Administrative Templates, Folder Redirection, Group Policy preferences, and where applicable, use software deployment to install and update application programs. It is important to know how to use these various GPO features so that you can configure your users' computer settings properly.

- A. Implementing Administrative Templates
- B. Configuring Folder Redirection and Scripts
- C. Configuring Group Policy Preferences
- D. Managing Software with Group Policy

Lab : Managing User Desktops with Group Policy

- Implement Settings by Using Group Policy Preferences
- Managing Office 2013 by using Administrative Templates
- Deploying Software by using Group Policy
- Configuring Folder Redirection

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Course Outline (cont'd)

VI. Implementing Remote Access

In this module, you will learn how to implement and manage remote access in Windows Server 2012. You will also learn how to implement DirectAccess by using the Getting Started wizard, implement and manage an advanced DirectAccess infrastructure, and implement VPN.

- A. Overview of Remote Access
- B. Implementing DirectAccess by Using the Getting Started Wizard
- C. Implementing and Managing an Advanced DirectAccess Infrastructure
- D. Implementing VPN
- E. Implementing Web Application Proxy

Lab : Implementing DirectAccess by Using the Getting Started Wizard

- Verifying Readiness for a DirectAccess Deployment
- Configuring DirectAccess
- Validating the DirectAccess Deployment

Lab : Deploying an Advanced DirectAccess Solution

- Preparing the Environment for DirectAccess
- Implementing the Advanced DirectAccess Infrastructure
- Validating the DirectAccess Deployment

Lab : Implementing VPN

- Implementing VPN
- Validating the VPN Deployment

Lab : Implementing Web Application Proxy

- Implementing Web Application Proxy
- Validating the Web Application Proxy Deployment

VII. Installing, Configuring, and Troubleshooting the Network Policy Server Role

This module explains how to install and configure NPS, RADIUS Clients and servers. It also describes NPS authentication methods. It describe NPS authentication methods and how to monitor and troubleshoot NPS.

- A. Installing and Configuring a Network Policy Server
- B. Configuring RADIUS Clients and Servers
- C. NPS Authentication Methods
- D. Monitoring and Troubleshooting a Network Policy Server

Lab : Installing and Configuring a Network Policy Server

- Installing and Configuring NPS to Support RADIUS
- Configuring and Testing a RADIUS Client

VIII. Implementing Network Access Protection

This module explains how to configure, monitor, and troubleshoot NAP. It also explains how NAP can help to protect your network and the various NAP enforcement processes.

- A. Overview of Network Access Protection
- B. Overview of NAP Enforcement Processes
- C. Configuring NAP
- D. Configuring IPSec Enforcement for NAP
- E. Monitoring and Troubleshooting NAP

Lab : Implementing Network Access Protection

- Configuring NAP Components
- Configuring Virtual Private Network Access
- Configuring the Client Settings to Support NAP

IX. Optimizing File Services

This module describes FSRM, configure quotas, file screening, and storage reports and implement classification management and file management tasks. It describes the components of the DFS. I also explains how to configure DFS namespaces and DFS replication.

- A. Overview of FSRM
- B. Using FSRM to Manage Quotas, File Screens, and Storage Reports
- C. Implementing Classification and File Management Tasks
- D. Overview of DFS
- E. Configuring DFS Namespaces
- F. Configuring and Troubleshooting DFS Replication

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Course Outline (cont'd)

Lab: Configuring Quotas and File Screening Using File Server Resource Manager

- Configuring File Server Resource Manager Quotas
- Configuring File Screening and Storage Reports

Lab: Implementing Distributed File System

- Installing the DFS role service
- Configuring a DFS Namespace
- Configuring DFS Replication

X. Configuring Encryption and Advanced Auditing

This module explains how to encrypt files using EFS and configure advanced auditing features.

- A. Encrypting Drives by Using BitLocker
- B. Encrypting Files by Using EFS
- C. Configuring Advanced Auditing

Lab: Configuring Encryption and Advanced Auditing

- Encrypting and Recovering Files
- Configuring Advanced Auditing
- Using Windows BitLocker Drive Encryption to Secure Data Drives

XI. Deploying and Maintaining Server Images

This module explains how to create and manage server images by using Windows Deployment Services

- A. Overview of Windows Deployment Services
- B. Managing Images
- C. Implementing Deployment with Windows Deployment Services
- D. Administering Windows Deployment Services

Lab: Using Windows Deployment Services to Deploy Windows Server 2012

- Installing and Configuring Windows Deployment Services
- Creating Operating System Images with Windows Deployment Services
- Configuring Custom Computer Naming
- Deploying Images with Windows Deployment Services

XII. Implementing Update Management

This module explains how to use Windows Server Update Services (WSUS) to deploy updates to Windows servers and clients.

- A. Overview of WSUS
- B. Deploying Updates with WSUS

Lab: Implementing Update Management

- Implementing the WSUS Server Role
- Configuring Update Settings
- Approving and Deploying an Update by using WSUS

XIII. Monitoring Windows Server 2012

This module explains the monitoring tools available in Windows Server 2012. It also explains how to use Performance Monitor and monitor events.

- A. Monitoring Tools
- B. Using Performance Monitor
- C. Monitoring Event Logs

Lab: Monitoring Windows Server 2012

- Establishing a Performance Baseline
- Identifying the Source of a Performance Problem
- Viewing and Configuring Centralized Event Logs

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