



Course 20411C

Administering Windows Server 2012

Course Length: 5 days

Overview

Get hands-on instruction and practice administering Windows Server 2012, including Windows Server 2012 R2, in this 5-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 primarily covers 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 (ADDS) 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 certification.

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

Target Student

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

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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.

Objectives

After completing 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

Course Content

Module 1: Configuring and Troubleshooting Domain Name System

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

Lessons

Configuring the DNS Server Role

Configuring DNS Zones

Configuring DNS Zone Transfers

Managing and Troubleshooting DNS

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Lab: Configuring and Troubleshooting DNS

Configuring DNS Resource Records

Configuring DNS Conditional Forwarding

Installing and Configuring DNS Zones

Troubleshooting DNS

After completing this module, students will be able to:

Configure the DNS Server Role

Explain how to configure DNS Zones and Zone transfers

Manage and Troubleshoot DNS

Module 2: 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.

Lessons

Overview of AD DS

Implementing Virtualized Domain Controllers

Implementing Read-Only Domain Controllers

Administering AD DS

Managing the AD DS Database

Lab: Maintaining AD DS

Installing and Configuring a RODC

Create and administer AD DS Snapshots

Configuring the Active Directory Recycle Bin

Deploy a domain controller by using domain controller cloning

After completing this module, students will be able to:

Describe how to implement virtualized domain controllers

Describe how to implement read-only domain controller (RODCs)

Perform common AD DS administrative tasks

Manage the AD DS Database

Module 3: 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.

Lessons

Configuring Password Policy and User Account

Configuring Managed Service Accounts

Lab: Managing User and Service Accounts

Configuring Password Policy and Account Lockout Settings

Creating and Associating a Group Managed Service Account

After completing this module, students will be able to:

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Describe how to configure Password Policy and Account Lockout settings
Create and associate a Group Managed Service Account

Module 4: 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.

Lessons

Introducing Group Policy

Implementing and Administering GPOs

Group Policy Scope and Group Policy Processing

Troubleshooting the Application of GPOs

Lab: Implementing a Group Policy Infrastructure

Creating and Configuring GPOs

Managing GPO Scope

Verify GPO Application

Managing GPOs

After completing this module, students will be able to:

Explain what Group Policy is

Implement and administer Group Policy Objects (GPOs)

Manage Group Policy scope

Process Group Policy

Troubleshoot the application of GPOs

Module 5: 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.

Lessons

Implementing Administrative Templates

Configuring Folder Redirection and Scripts

Configuring Group Policy Preferences

Managing Software with Group Policy

Lab: Managing User Desktops with Group Policy

Implement Settings Using Group Policy Preferences

Managing Office 2013 by using Administrative Templates

Deploying Software by using Group Policy

Configuring Folder Redirection

After completing this module, students will be able to:

Describe and implement Administrative Templates

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Configure folder redirection and scripts by using GPOs
Configure GPO preferences
Deploy software by using GPOs

Module 6: Configuring and Troubleshooting 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.

Lessons

Remote Access Overview

Implementing DirectAccess by Using the Getting Started Wizard

Implementing and Managing an Advanced DirectAccess Infrastructure

Implementing VPN

Implementing Web Application Proxy

Lab: Implementing DirectAccess by Using the Getting Started Wizard

Verifying Readiness for a DirectAccess Deployment

Running the Getting Started Wizard

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

After completing this module, students will be able to:

Install and manage the Remote Access role in Windows Server 2012

Implement DirectAccess by using the Getting Started Wizard

Implement and manage an advanced DirectAccess Infrastructure

Implement VPN access

Implement Web Application Proxy

Module 7: 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.

Lessons

Installing and Configuring a Network Policy Server

Configuring RADIUS Clients and Servers

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NPS Authentication Methods

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

After completing this module, students will be able to:

Install and configure NPS

Configure both RADIUS clients and servers

Describe NPS authentication methods

Monitor and troubleshoot NPS

Module 8: 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.

Lessons

Network Access Protection Overview

Configuring NAP

Configuring IPsec Enforcement for NAP

Monitoring and Troubleshooting NAP

Lab: Implementing NAP with VPN Enforcement

Configuring NAP with VPN Enforcement

Validating the Deployment

Lab: Implementing IPsec Enforcement for NAP

Configuring IPsec Enforcement

Validating the Deployment

After completing this module, students will be able to:

Describe how NAP can help to protect your network

Describe the various NAP enforcement processes

Configure NAP

Monitor and troubleshoot NAP

Module 9: 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.

Lessons

Overview of FSRM

Using FSRM to Manage Quotas, File Screens, and Storage Reports

Implementing Classification Management and File Management Tasks

DFS Overview

Configuring DFS Namespaces

Configuring and Troubleshooting DFS-R

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Lab: Configuring Quotas and File Screening Using FSRM

Configuring FSRM Quotas

Configuring File Screening

Lab: Implementing DFS

Installing the DFS role service

Configuring a DFS Namespace

Configuring DFS-R

After completing this module, students will be able to:

Describe FSRM

Configure quotas, file screening, and storage reports

Implement classification management and file management tasks

Describe the components of the DFS

Describe and configure DFS namespaces

Explain how to configure DFS replication

Module 10: Configuring Encryption and Advanced Auditing

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

Lessons

Encrypting Drives by Using BitLocker

Encrypting Files by Using Encrypting File System

Configuring Advanced Auditing

Lab: Configuring Encryption and Advanced Auditing

Securing Data Drives by Using BitLocker

Encrypting and Recovering Files

Configuring Advanced Audit Policy Configuration

After completing this module, students will be able to:

Explain how to encrypt files using EFS

Configure advanced auditing features

Module 11: Deploying and Maintaining Server Images

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

Lessons

Overview of Windows Deployment Services

Managing Windows Deployment Images

Implementing Deployment with Windows Deployment Services

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

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After completing this module, students will be able to:
Install and configure Windows Deployment Services
Manage Windows Deployment Images
Configure custom computer naming
Administer Windows Deployment Services

Module 12: Implementing Update Management

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

Lessons

Overview of WSUS

Deploying Updates with WSUS

Lab: Implementing Update Management

Implementing the WSUS Server Role

Configuring Update Settings

Approving and Deploying an Update by using WSUS

After completing this module, students will be able to:

Describe WSUS

Deploy update by using WSUS

Module 13: 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.

Lessons

Monitoring Tools

Using Performance Monitor

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

After completing this module, students will be able to:

Describe the monitoring tools available in Windows Server 2012

Describe how to use Performance Monitor

Describe how to monitor events

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