

# Course 20411D:

## Administering Windows Server 2012

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### Course Details

#### Course Outline

#### 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

#### 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:

- Install and configure the DNS server role.
- Create and configure DNS zones.
- Configure DNS 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 RODCs
- Administering AD DS
- Managing the AD DS Database

#### Lab : Maintaining AD DS

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

After completing this module, students will be able to:

- Implement virtualized domain controllers.
- Implement RODCs.
- Administer AD DS.
- 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 Lockout Settings
- Configuring Managed Service Accounts

#### Lab : Managing User and Service Accounts

- Configuring Password Policy and Account Lockout Settings
- Creating and Associating a Managed Service Account

After completing this module, students will be able to:

- Configure password policy and user account lockout settings.
- Configure managed service accounts.

#### 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 Group Policy Objects
- 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 and Group Policy processing.
- 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 by 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:

- Configure folder redirection and scripts by using GPOs.
- Describe and implement Administrative Templates.
- Configure GPO preferences.
- Deploy software by using GPOs.

## Module 6: 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
- 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 a Network Policy Server (NPS).
- Configure clients and servers with the Remote Authentication Dial-In User Service (RADIUS) protocol.
- Explain NPS authentication methods.
- Monitor and troubleshoot NPS.

## Module 7: 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

- Overview of Network Access Protection
- Overview of NAP Enforcement Processes

- Configuring NAP
- Configuring IPSec Enforcement for NAP
- Monitoring and Troubleshooting NAP

#### Lab : Implementing Network Access Protection

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

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 8: 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.

#### Lessons

- Overview of Remote Access
- 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
- 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

After completing this module, students will be able to:

- Install and manage the Remote Access role in Windows Server 2012 operating system.
- Implement DirectAccess by using the Getting Started Wizard.
- Implement and manage an advanced DirectAccess Infrastructure.
- Implement VPN access.
- Implement Web Application Proxy.

#### 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. It 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 and File Management Tasks
- Overview of DFS
- Configuring DFS Namespaces
- Configuring and Troubleshooting DFS Replication

#### 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

After completing this module, students will be able to:

- Describe the File Server Resource Manager (FSRM) in the Windows Server 2012 operating system.
- Use FSRM to manage quotas, file screens, and storage reports.
- Implement classification and file management tasks.
- Describe Distributed File System (DFS).
- Configure DFS namespaces.
- Configure and troubleshoot 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 EFS
- Configuring Advanced Auditing

### Lab : Configuring Encryption and Advanced Auditing

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

After completing this module, students will be able to:

- Secure data by using BitLocker Drive Encryption.
- Encrypt files by using Encrypting File System (EFS).
- Configure advanced auditing.

## 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 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

After completing this module, students will be able to:

- Describe the important features and functionality of Windows Deployment Services (Windows DS).
- Manage images by using Windows Assessment and Deployment Kit (Windows ADK) Tools.
- Configure Windows Deployment Services in Windows Server 2012.
- Perform deployments with 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 the role of WSUS.
- Describe the WSUS update management process.
- Deploy updates with 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 for the Windows Server 2012 operating system.
  - Use Performance Monitor to view and analyze performance statistics of programs that are running on their servers.
  - Monitor event logs to view and interpret the recorded events.
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