40211 Administering Windows Server 2012

Exam 70-411

Course Description:

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.

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 for a Windows Server 2012 environment. The key focus for students in this course 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, such as user and group management, network access and data security.

Prerequisites:

Candidates would typically be System Administrators or aspiring to be System Administrators and 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.

Course 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
- Install, Configure and Troubleshoot Network Policy Server
- Implement Network Access Protection
- Implement Remote Access
- Optimize File Services
- Configure Encryption and Advanced Auditing
- Deploy and Maintain Server Images
- Implement Update Managements
- Monitor Windows Server 2012

Delivery Method:

Instructor led, group-paced, classroom-delivery learning model with structured hands-on activities.

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
  Lab: Configuring and Troubleshooting 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

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

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

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

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 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

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

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

Lab: Deploying an Advanced DirectAccess Solution

Lab: Implementing VPN

Lab: Implementing 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. 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 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

Lab: Implementing Distributed File System

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

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

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

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