MOC6431 Managing and Maintaining Windows Server 2008 Network Infrastructure Servers

Course Summary

Description

This course provides students with the knowledge and skills to manage and maintain Windows Server 2008 network infrastructure servers. The course focuses on creating a plan for managing the server lifecycle, developing and evaluating baselines for monitoring and managing server roles, and analyzing the implementation and configuration of several different server roles for Windows Server 2008. The course will also focus on analyzing and maintaining network server security.

Objectives

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

- Create a plan for managing the addition, removal, and migration of Windows Server 2008 Network Infrastructure Server roles.
- Develop baselines for monitoring and managing Windows Server 2008 Network Infrastructure Server roles.
- Evaluate performance baselines and establish monitoring rules, and design acceptable thresholds and alarms when problems occur.
- Analyze the implementation and configuration of a network environment running several network policy and access server roles.
- Plan for the implementation and configuration of a RAS.
- Evaluate and plan for the deployment of DNS and DHCP Server roles.
- Maintain security for network infrastructure servers.

Topics

- Managing a Windows Server 2008 Network Infrastructure Server Lifecycle
- Monitoring Windows Server 2008 Infrastructure Roles
- Managing Network Access Protection
- Managing Remote Access
- Managing and Maintaining DNS and DHCP Server Roles
- Maintaining Security for Network Servers

Audience

This course is intended for Server Administrators who are familiar with Windows Server 2008 and who are, or will be, responsible for the overall lifecycle management of Windows Server 2008 Network Infrastructure Server roles. It is also intended for IT professionals who could benefit from acquiring the skills required by a Windows Server 2008 Network Infrastructure Server Administrator, such as a Server Administrator who is responsible for network servers that will work closely with Enterprise Administrators and who want to understand the operational lifecycle of Windows Server 2008 Network Infrastructure Server roles.

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MOC6431 Managing and Maintaining Windows Server 2008 Network Infrastructure Servers

Course Summary (cont'd)

Prerequisites

Students should have several years of experience deploying and maintaining Microsoft Window Server 2003 networks. A good understanding of core networking services including DHCP, DNS, and Terminal Services is also required.

In addition to their professional experience, students who attend this training should have technical knowledge equivalent to the following courses:

- 6420 Fundamentals of Windows Server 2008 Network Infrastructure and Application Platform
- 6421 Configuring and Troubleshooting a Windows Server 2008 Network Infrastructure
- 6430 Planning and Administering Windows Server 2008 Servers

Duration

Two days

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Course Outline

I. Managing a Windows Server 2008 Network Infrastructure Server Lifecycle

This module explains how to create an effective plan for managing the addition, removal, and migration of Windows Server 2008 Network Infrastructure Server roles.

A. Key Features of Windows Server 2008
B. Managing Implementation Plans of Server Roles
C. Managing Server Roles with the SCW

Lab: Managing a Windows Server Infrastructure

- Planning for Additional Server Roles
- Evaluating the Addition of the Windows Server 2008 File Services Roles for Branch Office Requirements
- Managing Network Roles by Using the SCW
- Automating Server Roles With Command-Line Tools
- Evaluating the Documentation, Backup, and Rollback Plans

After completing this module, students will be able to:

- Describe the server roles and features of Windows Server 2008.
- Create plans for the addition of infrastructure roles within a Windows Server 2008 environment.
- Manage the server roles by using the Server Manager console.
- Automate administrative tasks.

II. Monitoring Windows Server 2008 Infrastructure Roles

This module explains how to develop effective baselines for monitoring and managing Windows Server 2008 Network Infrastructure Server roles. It also explains how to evaluate performance baselines, establish effective monitoring rules, and design acceptable thresholds and alarms when problems occur.

A. Monitoring Reliability and Performance in Windows Server 2008
B. Using the Performance Monitor for Analysis
C. Using the Reliability Monitor for Analysis

Lab: Monitoring Windows Server 2008 Infrastructure Roles

- Evaluating Server Baselines
- Monitoring Network Performance by Using the Reliability and Performance Console
- Monitoring Server Stability by Using the Reliability Monitor
- Evaluating the Performance Baseline Recommendations

After completing this module, students will be able to:

- Define the criteria for monitoring key server roles for performance issues.
- Create a performance baseline for monitoring server performance.
- Monitor specific system activity by using the Performance Monitor as well as establish monitoring rules and thresholds.
- Enable Data Collector Sets.

Managing Network Access Protection

This module explains how to plan for the implementation of Network Access Protection (NAP), create solutions by using NAP, and implement NAP.

A. Planning NAP
B. Creating Solutions by Using NAP
C. Implementing NAP

Lab: Managing the Network Policy and NAP Roles

- Implementing Network Access Protection
- Discussing How NAP Can Help Protect Woodgrove Bank's Network From Security Problems
- Configuring NAP by Using DHCP Enforcement

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Course Outline (cont'd)

After completing this module, students will be able to:

- Describe the security solutions that are available when implementing and configuring specific roles services within the network policy and access server roles.
- Describe the considerations for implementing NAP.
- Plan for implementing the key components of NAP, which include policy validation and NAP enforcement.

III. Managing Remote Access

This module explains how to plan for the implementation of a server environment that is running the Routing and Remote Access Services (RRAS) role.

A. Planning RAS Server Roles
B. Managing RAS Authentication
C. Evaluating Network Policies

Lab: Planning for the Implementation and Configuration of a RAS Role

- Evaluating a VPN/NPS Implementation
- Implementing a VPN SSTP Connection
- Creating a Network Policy

After completing this module, students will be able to:

- Plan and manage RAS roles.
- Evaluate RAS policies.

IV. Managing and Maintaining DNS and DHCP Server Roles

This module explains how to evaluate and plan for the deployment of DNS and DHCP infrastructure Windows Server 2008 roles throughout an enterprise environment.

A. Managing DNS and DHCP Server Roles
B. Maintaining DNS and DHCP Server Roles

Lab: Managing DNS and DHCP Server Roles

- Evaluating the DNS and DHCP Server Roles
- Adding Scavenging to the DNS Server Roles
- Monitoring the DNS and DHCP Server Roles

After completing this module, students will be able to:

- Plan the implementation of the DNS and DHCP Server roles.
- Maintain DNS and DHCP Server roles for optimal operation.

V. Maintaining Security for Network Servers

This module explains how to analyze network server security and enable the host firewall with advanced security.

A. Network Server Role Security
B. Configuring Windows Firewall With Advanced Security

Lab: Maintaining Security for Network Servers

- Evaluating and Configuring Network Server Hardening
- Configuring Security by Using Windows Firewall With Advanced Security

After completing this module, students will be able to:

- Analyze network server security by using the appropriate security tools and methods.
- Enable the host firewall for additional security.
- Use the Security Configuration Wizard (SCW) to apply security changes.

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