

## Course Specifications

### Managing and Maintaining Windows Server 2008 Network Infrastructure Servers

**Course number:** 6431A

**Course length:** 2 days

## Registration:

**CAD & Facilities Services, Inc.**  
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## Managing and Maintaining Windows Server 2008 Network Infrastructure Servers

### Introduction

Elements of this syllabus are subject to change.

This two-day instructor-led 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.

### Audience

This course is intended for Server Administrators who are familiar with Microsoft Windows Server 2008 and who are, or will be, responsible for the overall lifecycle management of Server 2008 Network Server Roles. It is also intended for IT professionals who could benefit from acquiring the skills required by a 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 Server 2008 Network Infrastructure Server roles.

### At Course Completion

After completing this course, students will be able to:

- Create a plan for managing the addition, removal, or migration of Windows Server 2008 network infrastructure roles.
- Develop baselines for monitoring and managing Windows Server 2008 infrastructure roles.
- Evaluate performance baselines and establish monitoring rules, 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 remote access server.
- Evaluate and plan for the deployment of DNS and DHCP server roles.
- Maintain security for network infrastructure servers.

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## Prerequisites

Students should have several years of experience deploying and maintaining Microsoft Windows 2003 servers and 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 and Applications Infrastructure
- 6421 Configuring and Troubleshooting a Windows Server 2008 Network Infrastructure
- 6425 Configuring Windows Server 2008 Active Directory Domain Services
- 6426 Configuring Identity and Access Solutions with Windows Server 2008 Active Directory
- 6430 Managing and Maintaining Windows Server 2008 Servers

## Course Outline

### Module 1: Managing a Windows Server 2008 Network Infrastructure Server Lifecycle

This module explains how to create an effective plan for managing the addition, removal, or migration of Windows Server 2008 network infrastructure roles.

#### Lessons

- Overview of Server 2008 Roles and Solutions
- Managing Implementation Plans of Server Roles
- Managing Server Roles with the Security Configuration Wizard

#### Lab 1: Managing Server Roles

- Planning and Deploying Additional Server Roles
- Reviewing and Managing the Network Roles
- Automating Server Roles Using Command-Line Tools

After completing this module, students will be able to:

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

### Module 2: Monitoring Windows Server 2008 Infrastructure Roles

This module explains how to develop effective baselines for monitoring and managing Windows Server 2008 infrastructure roles. It also explains how to evaluate performance baselines, establish effective monitoring rules, and design

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acceptable thresholds and alarms when problems occur.

#### Lessons

- Monitoring Performance and Reliability in Server 2008
- Using the Performance Monitor for Analysis
- Using the Reliability Monitor for Analysis

#### Lab 2: Monitoring Network Server Roles

- Analyzing and Creating Server Baselines
- Monitoring Network Reliability
- Monitoring Server Performance

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.
- Analyze system reports using the Reliability and Performance Monitor.
- Enable data collection sets.

## Module 3: Managing Network Access Protection Roles

This module explains how to plan for the implementation of NAP, create solutions by using NAP, and implement NAP.

#### Lessons

- Planning for the Implementation of Network Access Protection Roles
- Creating Solutions Using Network Access Protection Roles
- Implementing Network Access Protection Roles

#### Lab 3: Managing the Network Policy and Network Access Protection Roles

- Evaluating Network Policy Implementation
- Using NAP for DHCP Quarantine Enforcement

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 Network Access Protection.
- Plan for implementing the key components of NAP, which include policy validation and NAP enforcement.

## Module 4: Managing Remote Access

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

#### Lessons

- Planning Remote Access Server Roles
- Managing Remote Access Server Roles

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- Evaluating Remote Access Policies

#### **Lab 4: Planning for the Implementation and Configuration of a Remote Access Server**

- Evaluating a VPN/Network Policy Server Implementation
- Implementing VPN/Network Policy Server
- Creating a Remote Access Server Policy for Additional VPN Security

After completing this module, students will be able to:

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

### Module 5: Managing and Maintaining DNS and Dynamic Host Configuration Protocol Server Roles

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

#### **Lessons**

- Managing DNS and Dynamic Host Configuration Protocol Server Roles
- Maintaining DNS and Dynamic Host Configuration Protocol Server Roles

#### **Lab 5: Managing DNS/Dynamic Host Configuration Protocol**

- Evaluating the Implementation of the Dynamic Host Configuration Protocol Server Role
- Adding Scavenging to the DNS Server Role
- Monitoring the DNS and Dynamic Host Configuration Protocol 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.

### Module 6: Maintaining Security for Network Servers

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

#### **Lessons**

- Network Server Security Tools and Methods
- Configuring Advanced Security with Windows Firewall

#### **Lab 6: Maintaining Security for Network Security**

- Identifying Appropriate Network Server Hardening Techniques
- Configuring Security on a Server Using Windows Firewall

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 to apply security changes.