Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure

- **Course Number:** 70-291
- **Length:**

Certification Exam
This course will help you prepare for the MCSA credential and also for the following Microsoft Certified Professional exam:

Exam 70-291: Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure

Course Overview

This course provides students with the knowledge and skills to implement, manage, and maintain a Microsoft Windows Server 2003 network infrastructure.

Prerequisites

An MCSA candidate should have 6 to 12 months of experience administering client and network operating systems in environments that have the following characteristics:

- Three or more physical locations
- Three or more domain controllers
- Network services and resources such as messaging, database, file and print, proxy server, firewall, Internet, intranet, remote access, and client computer management
- 250 to 5,000 or more users
- Connectivity requirements such as connecting branch offices and individual users in remote locations to the corporate network and connecting corporate networks to the Internet

Audience

The Microsoft Certified Systems Administrator (MCSA) on Windows Server 2003 credential is intended for IT professionals who work in the typically complex computing environment of medium to large companies.

Course Outline

- Level 1
- Configuring IP Addresses
- 1.1 Manual Configuration
- 1.2 Dynamic Configuration
- 1.3 Troubleshooting
- Lab - Assign IP Address
- Lab - Create an Alternate IP Address

- Configuring DHCP
- 2.1 DHCP Server Installation
- 2.2 Creating Scopes
- 2.3 Client Reservations
- 2.4 DHCP Relay Agent
- Lab - Install DHCP
- Lab - Create a DHCP Superscope
- Lab - DHCP Backup
- Managing DHCP
- 3.1 DHCP Process
- 3.2 Monitoring DHCP
- 3.3 Database Management
- 3.4 Troubleshooting
- Level 2
- Name Resolution
- 1.1 Name Resolution Process
- 1.2 NetBIOS Resolution
- 1.3 Host Name Resolution
- DNS Overview
- 2.1 DNS Structure
- 2.2 Zones and Records
- 2.3 Dynamic Updates
- Configuring DNS
- 3.1 Installing DNS
- 3.2 Forward Lookup Zones
- 3.3 Reverse Lookup Zones
- 3.4 Active Directory Integrated Zones
- 3.5 Server Configuration
- 3.6 Client Configuration
- Lab - Add a DNS Zone
- Lab - Add a Host Resource Record
- Lab - Add a Sub Zone
- Lab - Add a Sub-Domain
- Lab - Install DNS
- Level 3
- Monitoring DNS
- 1.1 DNS Logs
- 1.2 Replication Monitor
- 1.3 System Monitor
- 1.4 Command Line Tools
- Lab - Create a DNS Log
- Security Configuration
- 2.1 Security Settings
- 2.2 Analyzing Security
- 2.3 Configuring Security
- 2.4 Least Privilege

- Lab - Modify Security Template
- Lab - Monitor Security Compliance
- Monitoring Security
- 3.1 Security Concepts
- 3.2 IP Security Monitor
- 3.3 Kerberos Tools
- 3.4 Network
- Lab - Network Monitor
- Lab - Creating an IP Security Policy
- Level 4
- Routing
- 1.1 Routing Principles
- 1.2 Installing a Router
- 1.3 Packet Filtering
- Lab - Setup Router RIP2
- Remote Access
- 2.1 Remote Access Installation
- 2.2 Remote Access Permissions
- 2.3 Remote Access Policies
- 2.4 Client Configuration
- Lab - Grant User TAS Access
- Virtual Private Networks
- 3.1 VPN Principals
- 3.2 Server Configuration
- 3.3 Client Configuration
- 3.4 Site to Site VPN's
- Lab - Setup VPN Client
- Lab - Add VPN
- Lab - Create VPN L2TP
- Level 5
- Monitoring Traffic
- 1.1 System Monitor
- 1.2 Network Monitor
- Lab - Using Network Monitor
- Remote Access Topics
- 2.1 Authentication
- 2.2 Route Tables
- Lab - Install Radius Server
- Managing Services
- 3.1 What is a Service?
- 3.2 Service Dependencies
- 3.3 Service Recovery
- Lab - Install Radius Client
- Lab - Configure Service Recovery
- Lab - Configure Service Dependencies
- Internet Connectivity

- 4.1 Connectivity Requirements
- 4.2 Troubleshooting