

# Configuring, Managing and Troubleshooting Microsoft Exchange Server 2010

Course 10135: 4 days; Instructor-Led

#### Introduction

This four-day instructor-led course will provide you with the knowledge and skills to configure and manage a Microsoft Exchange Server 2010 messaging environment. This course does not require previous Exchange Server experience, but does require that students have significant experience in managing Windows Server and Active Directory directory services or Active Directory Domain Services (AD DS). This course will teach you how to configure Exchange Server 2010, as well as provide guidelines, best practices, and considerations that will help you optimize your Exchange server deployment.

#### **Audience Profile**

This course is intended for people aspiring to be enterprise-level messaging administrators. Others who may take this course include IT generalists and help desk professionals who want to learn about Exchange Server 2010. People coming into the course are expected to have at least three years experience working in the IT field, typically in the areas of network administration, help desk, or system administration. They are not expected to have experience with previous Exchange Server versions.

#### **At Course Completion**

After completing this course, students will be able to:

- Install and deploy Exchange Server 2010.
- Configure Mailbox servers and Mailbox server components.
- Manage recipient objects.
- Configure the Client Access server role.
- Manage message transport.
- Configure the secure flow of messages between the Exchange Server organization and the Internet.
- Implement a high availability solution for Mailbox servers and other server roles.
- Plan and implement backup and restore for the server roles.
- Plan and configure messaging policy and compliance.
- Configure Exchange Server permissions and security for internal and external access.
- Monitor and maintain the messaging system.
- Transition an Exchange Server 2003 or Exchange Server 2007 organization to Exchange Server 2010.
- Configure the Unified Messaging server role and Unified Messaging components.
- Implement High Availability across multiple sites and implement Federated Sharing.

#### **Prerequisites**

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

• Fundamental knowledge of network technologies including Domain Name System (DNS) and firewall technologies.

- Experience with the Windows Server 2003 and Microsoft Windows Server 2008 operating systems.
- Experience with Active Directory directory services in Windows Server 2003 or AD DS Windows Server 2008.
- Experience managing backup and restore on Windows Servers.
- Experience using Windows management and monitoring tools such as Microsoft Management Console, Active Directory Users and Computers, Performance Monitor, Event Viewer, and Internet Information Services (IIS) Administrator.
- Experience using Windows networking and troubleshooting tools such as Network Monitor, Telnet, and NSLookup.
- Fundamental knowledge of certificates and Public Key Infrastructure (PKI).
- Basic experience with Windows Mobile.

#### Course Outline

# Module 1: Deploying Microsoft Exchange Server 2010

This module describes how to prepare for, and perform, an Exchange Server 2010 installation. It also provides details on the Exchange Server 2010 deployment.

#### Lessons

- Overview of Exchange Server 2010 Requirements
- Installing Exchange Server 2010 Server Roles
- Completing an Exchange Server 2010 Installation

#### Lab: Installing Exchange Server 2010

- Evaluating Requirements for an Exchange Server Installation
- Preparing for an Exchange Server 2010 Installation
- Installing Exchange Server 2010

#### Lab: Verifying an Exchange Server 2010 Installation

- Verifying an Exchange Server 2010 Installation
  After completing this module, students will be able to:
- Describe Exchange Server 2010 requirements.
- Install the Exchange Server 2010 server roles.

#### Module 2: Configuring Mailbox Servers

This module describes the management tools that you can use to manage Exchange Server 2010. It also describes the Mailbox server role, some of the new Exchange Server 2010 features, the most common Mailbox server role post-installation tasks, and public folders.

#### Lessons

- Overview of Exchange Server 2010 Administrative Tools
- Configuring Mailbox Server Roles
- Configuring Public Folders

# Lab: Configuring Mailbox Servers

- Configuring Mailbox Databases
- Configuring Public Folders

After completing this module, students will be able to:

- Use the Exchange Management Console and the Exchange Management Shell.
- Configure Mailbox server roles and databases.
- Create and configure public folders.

# Module 3: Managing Recipient Objects

This module describes how you can manage recipient objects, address policies, and address lists in Exchange Server 2010. It also describes procedures for performing bulk management tasks in Exchange Management Shell.

#### Lessons

- Managing Mailboxes
- Managing Other Recipients
- Configuring E-Mail Address Policies
- Configuring Address Lists
- Performing Bulk Recipient Management Tasks

# Lab: Managing Recipient Objects

- Managing Recipients
- Configuring E-mail Address Policies
- Configuring Address Lists
- Performing Bulk Recipient Management Tasks

After completing this module, students will be able to:

- Manage mailboxes in Exchange Server 2010.
- Manage other recipients in Exchange Server 2010.
- Configure e-mail address policies.
- Configure address lists.
- Perform bulk recipient management tasks.

# **Module 4: Managing Client Access**

This module provides details on how to implement the Client Access server role in Exchange Server 2010.

#### Lessons

- Configuring the Client Access Server Role
- Configuring Client Access Services for Outlook Clients
- Configuring Outlook Web Access
- Configuring Mobile Messaging

# Lab: Configuring Client Access Servers for Outlook Anywhere Access

- Configuring Client Access Servers
- Configuring Outlook Anywhere

# Lab: Configuring Client Access Servers for Outlook Web Access and Exchange ActiveSync

- Configuring Outlook Web Access
- Configuring Exchange ActiveSync

After completing this module, students will be able to:

- Configure the Client Access server role.
- Configure Client Access services for Outlook Clients.
- Configure Outlook Web Access.
- Configure mobile messaging.

# **Module 5: Managing Message Transport**

This module details how to manage message transport in Exchange Server 2010. It also describes how to deploy and configure the Hub Transport server.

#### Lessons

- Overview of Message Transport
- Configuring Message Transport

# Lab: Managing Message Transport

- Configuring Internet Message Transport
- Troubleshooting Message Transport
- Troubleshooting Internet Message Delivery

After completing this module, students will be able to:

- Describe Internet message transport in Exchange Server 2010.
- Deploy and configure the Hub Transport server.

# Module 6: Implementing Messaging Security

This module describes how to plan for and deploy the Edge Transport server role and the security issues related to the deployment. It also describes how to configure secure SMTP messaging as well as Domain Security.

#### Lessons

- Deploying Edge Transport Servers
- Deploying an Antivirus Solution
- Configuring an Anti-Spam Solution
- Configuring Secure SMTP Messaging

# Lab: Configuring Edge Transport Servers and Forefront Security

- Configuring Edge Transport Servers
- Configuring ForeFront Security for Exchange Servers

# Lab: Implementing Anti-Spam Solutions

- Configuring an Anti-Spam Solution on Edge Transport Servers

  After completing this module, students will be able to:
- Deploy Edge Transport servers.
- Deploy an antivirus solution.
- Configure an anti-spam solution.
- Configure secure SMTP messaging.

# Module 7: Implementing High Availability

This module describes the high-availability technology built into Exchange Server 2010 and some of the outside factors that affect highly available solutions.

# Lessons

- Overview of High Availability Options
- Configuring Highly Available Mailbox Databases
- Deploying Highly Available Non-Mailbox Servers

# Lab: Implementing High Availability

- Deploying a DAG
- Deploying Highly Available Hub Transport and Client Access Servers
- Testing the High Availability Configuration
   After completing this module, students will be able to:
- Identify high-availability components.

- Understand Mailbox server high-availability configurations.
- Understand non-Mailbox server high-availability configurations.

# Module 8: Implementing Backup and Recovery

This modules describes the backup and restore features built into Exchange Server 2010 and considerations for creating a suitable backup plan.

#### Lessons

- Planning Backup and Recovery
- Backing Up Exchange Server 2010
- Restoring Exchange Server 2010

# Lab: Implementing Backup and Recovery

- Backing Up Exchange Server 2010
- Restoring Exchange Server Data
- Restoring Exchange Servers (optional)

After completing this module, students will be able to:

- Plan backup and recovery.
- Backup Exchange Server 2010.
- Restore Exchange Server 2010.

# Module 9: Configuring Messaging Policy and Compliance

This module describes how to configure the Exchange Server 2010 messaging policy and compliance features.

#### Lessons

- Introducing Messaging Policy and Compliance
- Configuring Transport Rules
- Configuring Journaling and Discovery
- Configuring Messaging Records Management
- Configuring Mailbox Archiving

# Lab: Configuring Transport Rules and Journal Rules and Discovery

- Configuring Transport Rules
- Configuring Journal Rules and Discovery

# Lab: Configuring Messaging Records Management and Mailbox Archiving

Configuring Messaging Records Management

Configuring Mailbox Archiving

After completing this module, students will be able to:

- Describe messaging policy and compliance.
- Configure transport rules.
- Configure journaling and discovery.
- Configure Messaging Records Management.
- Configure mailbox archiving.

#### Module 10: Securing Microsoft Exchange Server 2010

This module describes how to configure administrative permissions with Role-Based Access Control and how to secure the Exchange Server configuration.

#### Lessons

- Configuring Role Based Access Control (RBAC)
- Configuring Security for Server Roles in Exchange Server 2010
- Configuring Secure Internet Access

# Lab: Securing Exchange Server 2010

- Configuring Exchange Server Permissions
- Configuring a Reverse Proxy for Exchange Server Access
   After completing this module, students will be able to:
- Configure RBAC permissions.
- Configure security for Exchange Server 2010 server roles.
- Configure secure Internet access.

#### Module 11: Maintaining Microsoft Exchange Server 2010

This module describes how to monitor and maintain Exchange Server 2010. It also describes how to troubleshoot Exchange Server when problems arise.

#### Lessons

- Monitoring Exchange Server 2010
- Maintaining Exchange Server 2010
- Troubleshooting Exchange Server 2010

# Lab: Maintaining Exchange Server 2010

- Monitoring Exchange Server 2010
- Troubleshooting Database Availability

• Troubleshooting Client Access Servers

After completing this module, students will be able to:

- Identify key Exchange Server performance metrics.
- Describe how change management applies to an Exchange Server messaging environment.
- Describe basic Exchange Server troubleshooting techniques.

# Module 12: Transitioning from Exchange Server 2003 or Exchange Server 2007 to Exchange Server 2010

This module describes how to transition an existing Exchange Server 2003 or Exchange Server 2007 organization to an Exchange Server 2010 organization. It also describes the various considerations for implementing coexistence between the two messaging systems after an Exchange Server 2010 deployment.

#### Lessons

- Transitioning to Exchange Server 2010 Overview
- Transitioning from Exchange Server 2003 to Exchange Server 2010
- Transitioning from Exchange Server 2007 to Exchange Server 2010

#### Lab:

After completing this module, students will be able to:

- Describe the various options, scenarios, and strategies for transitioning to Exchange Server 2010.
- Describe how to transition from Exchange Server 2003 to Exchange Server 2010.
- Describe how to transition from Exchange Server 2007 to Exchange Server 2010.

#### Module 13: Implementing Unified Messaging

This appendix describes how Unified Messaging integrates Exchange Server with telephony networks. It also describes how to configure Unified Messaging.

#### Lessons

- Overview of Telephony
- Introducing Unified Messaging
- Configuring Unified Messaging

# Lab: Implementing Unified Messaging

- Installing and Configuring Unified Messaging Components
   After completing this module, students will be able to:
- Describe telephony systems.

- Describe Unified Messaging features and integration with Exchange Server 2010.
- Configure Unified Messaging.

# Module 14: Advanced Topics in Exchange Server 2010

This appendix provides an overview of how to implement a highly available Exchange Server 2010 deployment across multiple data centers. It also describes how to deploy Federated Sharing.

#### Lessons

- Deploying Highly Available Solutions for Multiple Sites
- Implementing Federated Sharing

# Lab:

After completing this module, students will be able to:

- Describe how implement a highly available Exchange 2010 deployment across multiple sites.
- Describe how to deploy Federated Sharing.