



## Course Outline

### Course 2400C: Implementing and Managing Microsoft Exchange Server 2003

#### About this Course

Elements of this syllabus are subject to change.

This five-day, instructor-led course provides students with the knowledge and skills that are needed to update and support a reliable, secure messaging infrastructure. This infrastructure is used for creating, storing, and sharing information by using Microsoft Exchange Server 2003 in a medium-sized to large-sized (250 to 5,000 users) messaging environment. This course offers a significant number of hands-on practices, discussions, and assessments that assist students in becoming proficient in the skills that are needed to update and support Exchange Server 2003.

#### Prerequisite

Before attending this course, students must have:

- Working knowledge of Microsoft Windows Server 2003.
  - Working knowledge of networking, including Transmission Control Protocol/Internet Protocol (TCP/IP), Domain Name System (DNS), and Internet Information Services (IIS).
  - Working knowledge of Internet protocols, including Post Office Protocol 3 (POP3) or Internet Message Access Protocol 4 (IMAP4), Simple Mail Transfer Protocol (SMTP), Hypertext Transfer Protocol (HTTP), and Network News Transfer Protocols (NNTP).
  - In addition, it is recommended, but not required, that students have completed:
  - Course 2274, Managing a Microsoft Windows Server 2003 Environment.
  - Course 2275, Maintaining a Microsoft Windows Server 2003 Environment.
  - Course 2276, Implementing a Microsoft Windows Server 2003 Network Infrastructure: Network Hosts.
- Knowledge of Exchange Server 5.5 or Exchange 2000 Server is beneficial but not necessary.

#### At Course Completion

After completing this course, students will be able to:

- Perform a installation of Exchange Server 2003 and verify that the installation was successful.
- Configure and manage Exchange Server 2003.
- Secure Exchange Server 2003.
- Manage recipients.
- Manage public folders.
- Manage address lists.
- Implement and manage access to Exchange Server mailboxes for Internet protocol clients.
- Manage client configuration and connectivity.
- Manage routing.
- Manage mobile devices with Exchange Server 2003.
- Manage data storage and hardware resources.
- Plan for disaster and disaster recovery.
- Back up and restore Exchange Server.
- Perform preventive maintenance.
- Migrate users from Exchange Server 5.5 to a separate Exchange Server 2003 organization.



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#### ***Module 1: Introduction to Exchange Server 2003***

This module provides an overview of how Exchange Server components interact to provide a stable, reliable messaging environment. This module provides an introduction to many of the topics covered in detail in later modules in the course.

##### **Lessons**

- Introduction to the Exchange Server 2003 Architecture
- Exchange Clients Overview
- Discussion: Introduction to Exchange Server 2003

After completing this module, students will be able to:

- Describe the various technologies that are involved in implementing and maintaining an Exchange Server messaging environment.
- Identify the client applications that are used to connect to Exchange Server and describe the improvements introduced with Microsoft Office Outlook 2003.

#### ***Module 2: Installing Exchange Server 2003***

This module explains how to plan for an installation of Exchange Server 2003, and how to install Exchange Server 2003. The module also explains how to install and use Exchange Server management utilities.

##### **Lessons**

- Preparing to Install Exchange Server 2003
- Exchange Server 2003 Installation Tasks
- Exploring the Exchange Management Tools

#### **Lab : Installing the Exchange System Manager on Windows XP SP2**

Installing the Exchange System Management Tools

#### **Lab : Optional Lab: Installing the Exchange Server 2003 Messaging and Collaboration Services**

- Preparing the Environment
- Installing Exchange Server 2003

After completing this module, students will be able to:

- Prepare for an installation of Exchange Server 2003.
- Install Exchange Server 2003 on new hardware.
- Install and use the Exchange Server management tools to perform administrative tasks.



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### ***Module 3: Securing Exchange Server 2003***

This module explains how to secure the server running Exchange Server 2003. This involves reducing the attack surface on the Exchange servers by using Security templates and the Security Configuration Wizard, protecting against unsolicited commercial e-mail (spam), and setting appropriate administrative permissions.

#### **Lessons**

- Reducing the Server Attack Surface
- Maintaining Message Hygiene
- Configuring Administrative Permissions

#### **Lab : Securing Exchange Server 2003**

- Applying a Security Configuration Wizard Security Policy
- Delegating Administrative Rights Using the Exchange Delegation Wizard
- Applying and Testing Intelligent Message Filtering

After completing this module, students will be able to:

- Reduce the attack surface on Exchange servers.
- Configure Exchange Server 2003 to reduce the amount of unsolicited commercial e-mail (spam).
- Configure an administrative group structure.

### ***Module 4: Managing Recipients***

- This module describes Exchange Server recipients and explains the messaging capabilities of various Active Directory directory service groups. It then teaches how to manage mailboxes and mail-enabled groups and how to create, delete, and modify users and contacts.

#### **Lessons**

- Managing Exchange Recipients
- Managing Mailboxes
- Managing Mail-Enabled Groups

#### **Lab : Managing Recipients**

- Create Mailboxes with CSVDE
- Use VBScript to Mailbox-Enable User Accounts
- Modify Existing Mailboxes by Using LDIFDE

After completing this module, students will be able to:

- Describe Exchange Server recipients and explain the messaging capability of various Active Directory groups.
- Manage mailboxes.
- Manage mail-enabled groups.



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### ***Module 5: Managing Active Directory Integration***

This module explains the relationship between Active Directory and an Exchange Server 2003 organization. Topics discussed include how Exchange servers communicate with and depend on Active Directory information. The module also explains how to perform Active Directory tasks that directly influence Exchange Server configuration.

#### **Lessons**

- Understanding the Integration of Exchange and Active Directory
- Configuring Exchange Server Communications with Active Directory
- Configuring Recipient Policies and the Recipient Update Service
- Managing Address Lists

#### **Lab : Managing Active Directory Integration**

- Troubleshooting Exchange Server Requirements for Active Directory Information

After completing this module, students will be able to:

- Explain where and how Active Directory stores Exchange Server-related information.
- Manage the communication mechanisms that exist between Exchange servers and Active Directory domain controllers.
- Create and manage recipient policies and the recipient update process.
- Create and manage Address Lists.

### ***Module 6: Managing Public Folders***

This module explains how to manage public folders. Managing public folders involves managing public folder data and network access to public folders.

#### **Lessons**

- Managing Public Folder Data
- Managing Access to Public Folders
- Managing Public Folder Replication
- Configuring Full-Text Indexing

#### **Lab : Managing Public Folders**

- Create a Public Folder by Using Microsoft Outlook 2003
- Replicate Public Folders with the Public Folder Migration Tool

After completing this module, students will be able to:

- Manage public folder data.
- Manage network and user access to public folders.
- Manage public folder replication.
- Configure full-text indexing.



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### ***Module 7: Implementing Outlook Web Access***

The module describes how to successfully implement Outlook Web Access. Topics discussed include best practices for configuring Outlook Web Access and guidelines for properly securing a remote Web access infrastructure.

#### **Lessons**

- Introducing Outlook Web Access
- Securing Outlook Web Access

#### **Lab : Implementing Outlook Web Access**

- Enable Forms-Based Authentication
- Securing OWA with the Outlook Web Access Web Administration Tool

After completing this module, students will be able to:

- Describe the features of Outlook Web Access (OWA) in Exchange Server 2003.
- Secure an Outlook Web Access deployment.

### ***Module 8: Implementing a Front-End/Back-End Exchange Server Topology***

This module introduces the Internet protocols that you can use to access Exchange Server. It explains the concepts and tasks that are involved in implementing and managing remote user access to Exchange Server by using Internet protocols. It also explains how to implement and secure front-end and back-end Exchange servers that can be used to access user data from remote locations through secure connections.

#### **Lessons**

- Introducing Front-End and Back-End Servers
- Implementing a Front-End and Back-End Server Topology
- Securing a Front-End and Back-End Server Topology
- Discussion: Implementing a Front-End/Back-End Exchange Server Topology

After completing this module, students will be able to:

- Explain the purpose of front-end and back-end servers and describe their supporting technologies.
- Implement a front-end and back-end server topology.
- Secure a front-end and back-end server topology.

### ***Module 9: Managing Client Connections to Exchange Server 2003***

This module introduces client configuration and connectivity concepts. It also demonstrates the common tasks that are associated with configuring and customizing Outlook 2003, configuring connectivity for Exchange server clients, and understanding the mobility features of Exchange Server 2003.

#### **Lessons**

- Selecting an Exchange Server 2003 Client
- Connecting to Exchange Server 2003
- Using S/MIME to Secure E-Mail Content



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- Managing Mobile Services

### **Lab : Managing Client Connections to Exchange Server 2003**

- Configuring Outlook 2003 for RPC over HTTPS
- Sending Secure E-Mail by Using S/MIME

After completing this module, students will be able to:

- Select the appropriate Exchange Server client for a messaging environment.
- Connect Outlook 2003 to an Exchange server securely from the Internet.
- Secure Exchange Server e-mail content by using Secure/Multipurpose Internet Mail Extensions (S/MIME).
- Implement and manage remote mobile access to Exchange Server 2003.

### ***Module 10: Managing Message Routing***

This module explains the concepts and tasks that are involved in configuring routing in an Exchange Server organization and managing connectivity to the Internet. The module focuses on how to configure the SMTP virtual servers and SMTP connectors.

#### **Lessons**

- Understanding Exchange Server Message Flow
- Configuring SMTP Virtual Servers
- Understanding Message Routing in Exchange Server
- Configuring Routing in an Exchange Server Organization
- Exploring Link State Information

### **Lab : Managing Message Routing**

- Creating an SMTP Connector to the Internet
- Configuring Secure Communications Between Routing Groups

After completing this module, students will be able to:

- Explain message flow in Exchange Server 2003.
- Configure SMTP virtual server settings by using the Exchange System Manager.
- Explain how message routing works in an Exchange Server organization.
- Configure routing in an Exchange Server organization.
- Explain how Exchange Server maintains routing information.

### ***Module 11: Managing Data Storage and Hardware Resources***

This module explains how Exchange Server 2003 stores data and what storage technologies it uses. The module also explains how to manage data storage, disk space, and hardware upgrades.

#### **Lessons**

- Managing Stores and Storage Groups
- Understanding Exchange Server Data Storage
- Managing Disk Space
- Optimizing Hardware Resources



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### **Lab : Managing Data Storage and Hardware Resources**

- Managing Circular Logging and Database File Location
- Verifying Disk Performance Using Jetstress

After completing this module, students will be able to:

- Create, delete, and manage stores and storage groups.
- Manipulate all files used in the data storage process.
- Manage disk space used by Exchange Server databases.
- Optimize the use of hardware resources on Exchange servers.

### ***Module 12: Planning for and Recovering from Disasters***

This module discusses how to create a disaster recovery plan and how to perform a backup and a restore for Exchange Server 2003.

#### **Lessons**

- Planning for Disaster Recovery
- Backing Up Exchange Server 2003
- Restoring Exchange Server 2003 Data
- Restoring Exchange Server 2003 Servers
- Discussion: Planning for and Recovering from Disasters

After completing this module, students will be able to:

- Create a plan for disaster recovery in an Exchange Server environment.
- Back up servers running Exchange Server 2003.
- Restore Exchange Server 2003 data.
- Restore Exchange Server 2003 servers.

### ***Module 13: Performing Preventive Maintenance***

This module teaches how to conduct daily, scheduled, and on-demand Exchange Server maintenance tasks.

#### **Lessons**

- Performing Daily Exchange Server 2003 Maintenance
- Performing Scheduled Exchange Server 2003 Maintenance
- Performing On-Demand Exchange Server 2003 Maintenance
- Discussion: Performing Preventive Maintenance

After completing this module, students will be able to:

- Perform daily Exchange Server maintenance.
- Perform scheduled Exchange Server maintenance.
- Perform on-demand Exchange Server maintenance.



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### ***Module 14: Migrating Users from Exchange Server 5.5 to Exchange Server 2003***

This module describes how to migrate the Exchange Server 5.5 messaging system of a company running a Microsoft Windows NT 4.0 domain into the Exchange Server 2003 messaging system of another company running Windows Server 2003 and Active Directory.

#### **Lessons**

- Identifying a Migration Strategy
- Performing Pre-Migration Steps
- Migrating Exchange Server Data

#### **Lab : Lab A: Performing an Inter-Organization Migration**

- Preparing a Network Environment for a Migration
- Migrating Accounts with the ADMT
- Implementing the Active Directory Connector
- Moving Mailboxes from Exchange Server 5.5 to Exchange Server 2003

#### **Lab : Lab B: Performing an Intra-Organization Migration**

- Identify a Migration Strategy

After completing this module, students will be able to:

- Select the appropriate migration strategy.
- Perform all necessary pre-migration steps.
- Migrate mailboxes and public folders to Exchange Server 2003.