

# Course 1572C: Implementing and Managing Microsoft Exchange 2000

## Course Outline

### Module 1: Introduction to Microsoft Exchange 2000

Take a closer look: [Download Sample Module 1](#) (Portable Document Format, 1.62 MB).

#### Topics:

Exchange 2000 Product Offerings

Integration with Windows 2000

Administrative Capabilities

Message Routing Capabilities

User Capabilities

Developer Capabilities

#### Skills:

After completing this module, students will be able to:

- Define and describe the basic features, components, products and functions of Exchange 2000 and messaging platforms in general.
- Describe the Exchange 2000 features.
- Describe how Exchange 2000 is integrated with Windows 2000.

### Module 2: Installing Microsoft Exchange 2000

#### Topics:

Exchange and Windows 2000

Preparing to Install Exchange 2000

Installing Exchange 2000

Default File Locations and Share-Point Permissions

Troubleshooting Installation Options

#### Labs:

Lab A: Installing Microsoft Exchange 2000

#### Skills:

After completing this module, students will be able to:

- Describe the prerequisite steps for an Exchange 2000 installation.
- Prepare for installing Exchange 2000.
- Install Exchange 2000.
- Perform special Exchange 2000 installations.
- Identify post-installation issues.

### Module 3: Administering Microsoft Exchange 2000

#### Topics:

Introduction to Administrative Utilities

Introduction to Exchange System Manager

Managing Administrative Security

Creating and Configuring Administrative Groups

Using Exchange 2000 System Policies

Administering Exchange 2000 Address Lists

#### Labs:

Lab A: Creating a Mail-enabled User Account

Lab B: Setting Security on Administrative Groups

Lab C: Managing an Address List in Exchange 2000

**Skills:**

After completing this module, students will be able to:

- List and describe the main components of Exchange System Manager that are used for administering Exchange 2000.
- Manage administrative security for Exchange 2000.
- Create and configure administrative groups.
- Use Exchange 2000 system policies to administer Exchange 2000.
- Administer Exchange 2000 address lists.

**Module 4: Creating and Managing Storage Groups and Stores**

**Topics:**

Storage Groups

ESE Features of Exchange 2000

Creating Storage Groups

Creating Stores

Managing Storage Groups and Stores

**Labs:**

Lab A: Creating Storage Groups and Multiple Exchange 2000 Databases

Lab B: Building a Full-Text Index

**Skills:**

After completing this module, students will be able to:

- Create and manage storage groups and stores.
- Describe the ESE features in Exchange 2000.
- Commit data to a database.
- Index contents of databases.
- Describe search architecture.
- Administer full-text indexing.
- Troubleshoot full-text indexing.

**Module 5: Creating and Managing Recipient Objects**

**Topics:**

Creating Recipient Objects

Configuring Recipient Objects

Managing Recipient Objects

Making Bulk Changes to the Directory

Configuring Policies

**Labs:**

Lab A: Managing Exchange 2000 Recipient Objects

Lab B: Creating a Recipient Policy

Lab C: Creating and Applying a Mailbox Store Policy

**Skills:**

After completing this module, students will be able to:

- Create recipient objects, including mailbox-enabled users, and mail-enabled users, contacts, and groups.
- Configure users, groups, and contacts.
- Manage recipient objects by creating additional e-mail addresses, by applying rights and permissions, and by moving mailboxes between databases or servers.
- Make bulk changes to the directory by importing and exporting Active Directory information.
- Configure recipient policies and mailbox store policies.

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

Take a closer look: [Download Sample Module 6](#) (Portable Document Format, 1.05 MB).

### **Topics:**

Introduction to Public Folders

Configuring Public Folder Permissions

Managing Public Folder Replication

Replicating Public Folders

Setting Public Store Policies

### **Labs:**

Lab A: Creating and Configuring Public Folders

Lab B: Replicating Public Folder Data

Lab C: Creating and Using Public Folder Trees

### **Skills:**

After completing this module, students will be able to:

- Configure public folder permissions for the parent folder and describe how permissions are propagated to subfolders.
- Create and monitor a public folder replica, and enable a public folder referral.
- Use message state information to determine whether a public folder is synchronized, to identify information stores maintaining replicas, and to resolve content conflicts.
- Apply public store policies to the information store and explain conditions under which multiple policies can be applied.

## **Module 7: SMTP in Microsoft Exchange 2000**

### **Topics:**

Introduction to SMTP

Configuring multiple SMTP Domain Names

Configuring an SMTP virtual server

Configuring an SMTP connector

Troubleshooting SMTP connectivity

### **Labs:**

Lab A: Securing an SMTP Virtual Server

Lab B: Creating SMTP Connectors

### **Skills:**

After completing this module, students will be able to:

- Describe the role of SMTP, Extension to SMTP (ESMTP), and DNS in Exchange 2000.
- Configure multiple SMTP domain names.
- Configure an SMTP virtual server.
- Configure an SMTP connector.

- Choose the tools for troubleshooting SMTP connectivity.

## **Module 8: Message Routing in Microsoft Exchange 2000**

### **Topics:**

Message Routing and Routing Groups  
Connecting Routing Groups  
Determining Link Status  
Routing Messages

### **Labs:**

Lab A: Creating Routing Groups and Routing Group Connectors

### **Skills:**

After completing this module, students will be able to:

- Define message routing and routing groups, create routing groups, explain how message transfer works between servers running Exchange 2000 installed in the same routing group and installed in different routing groups, and compare how routing groups work in mixed and native mode.
- Describe each of the connectors you can use to connect routing groups, including the routing group connector, SMTP connector, and the X.400 connector.
- Describe how Exchange uses the link state table and the link state algorithm to determine link status.
- Outline how Exchange 2000 selects a message route, how Exchange routes messages between multiple routing groups, and how Exchange routes messages outside of an Exchange 2000 organization.

## **Module 9: Message Flow in Microsoft Exchange 2000**

### **Topics:**

Message Flow Architecture  
Working with Failed Links  
Message Tracking

### **Labs:**

Lab A: Analyzing Message Flow in Exchange 2000

### **Skills:**

After completing this module, students will be able to:

- Describe the message flow architecture in Exchange 2000.
- Describe how Exchange 2000 handles failed links, including recovering a link and rerouting messages.
- Enable message tracking as well as subject logging, and explain how to use tracking to troubleshoot message delivery.

## **Module 10: Configuring Internet Protocols**

### **Topics:**

IIS Integration with Exchange 2000  
Examining Client Connectivity and Security  
Kerberos Authentication  
Front-End/Back-End Server Configuration and Security  
Configuring NNTP Services  
Troubleshooting Client Connectivity by Using Telnet

### **Labs:**

Lab A: Creating and Configuring an IMAP4 Virtual Server

**Skills:**

After completing this module, students will be able to:

- Describe the functionality that is provided by the integration of IIS with Exchange 2000.
- Describe the message transfer process and the security options for Internet clients using IMAP4 and POP3. In addition, describe how Lightweight Directory Access Protocol (LDAP) is used in the message transfer process.
- Describe the Kerberos protocol version 5 authentication process.
- Explain the authentication process and the different firewall configuration options when using front-end/back-end servers.
- Configure a NNTP virtual server, create and store newsgroups, and create newsfeeds.
- Troubleshoot client connectivity using by Telnet.

**Module 11: Accessing Microsoft Exchange 2000 with Outlook Web Access****Topics:**

Examining Outlook Web Access Components and Process

Configuring an HTTP Virtual Server

Securing Outlook Web Access Communication

**Labs:**

Lab A: Sending E-mail Messages by Using Outlook Web Access

Lab B: Configuring an HTTP Front-end Server

**Skills:**

After completing this module, students will be able to:

- Describe the benefits of Outlook Web access, the capabilities that Web Distributed Authoring and Versioning (WebDAV) provide to Outlook Web Access users, and the clients that are supported by Outlook Web Access.
- Explain the function of each component used by Outlook Web Access to process a client request in a single server environment and front-end/back-end environment.
- Create and configure an HTTP virtual server.
- Describe the authentication and encryption methods available when using Outlook Web Access with a single server configuration and a back-end/front-end server configuration.

**Module 12: Configuring Instant Messaging****Topics:**

Introduction to Instant Messaging

Basics of Instant Messaging

Instant Messaging Terminology

Instant Messaging Components

Installing and Configuring Instant Messaging

Instant Messaging Operations and Considerations

Best Practices

**Labs:**

Lab A: Configuring and Using Exchange 2000 Instant Messaging

**Skills:**

After completing this module, students will be able to:

- Describe how Instant Messaging works and how it is configured.

- Identify and describe the components of Instant Messaging.
- Install and configure Instant Messaging server components and Instant Messaging clients.
- Describe the Instant Messaging process and identify security considerations.
- Identify best practices for working with Instant Messaging.

### **Module 13: Implementing Microsoft Exchange 2000 Conferencing Server**

#### **Topics:**

Capabilities of Exchange 2000 Conferencing Server  
 Architecture of Exchange 2000 Conferencing Server  
 Components and Technologies of Exchange 2000 Conferencing Server  
 Windows 2000 Dependencies  
 Configuring Exchange 2000 Conferencing Server

#### **Labs:**

Lab A: Installing, Configuring, and Using Exchange 2000 Conferencing Server (optional)

#### **Skills:**

After completing this module, students will be able to:

- Describe the capabilities of Exchange 2000 Conferencing Server.
- Outline the server-side components and services that work together to provide conferencing functionality.
- Explain the components and technologies that Exchange 2000 Conferencing Server provides.
- Outline the Windows 2000 components and services on which Exchange 2000 Conferencing Server depends.
- Describe how to configure and use Exchange 2000 Conferencing Server.

### **Module 14: Monitoring Microsoft Exchange 2000**

#### **Topics:**

Tools for Monitoring Exchange 2000  
 Monitoring Exchange 2000 by Using The Performance Console  
 Monitoring Exchange 2000 by Using Monitoring And Status  
 Logging and Viewing Diagnostic Data

#### **Labs:**

Lab A: Monitoring Exchange 2000

#### **Skills:**

After completing this module, students will be able to:

- Describe the tools that you use to monitor the performance of a computer running Exchange 2000.
- Identify resource bottlenecks by monitoring Exchange 2000 and Windows 2000 performance objects and counters using Performance Logs and Alerts and System Monitor.
- Monitor services and resources, create notifications, and view server and connector status by using Monitoring and Status.
- Assess system efficiency by configuring diagnostic logging on components and using Event Viewer to view the log files.

### **Module 15: Disaster Recovery in Microsoft Exchange 2000**

#### **Topics:**

Introduction to Disaster Recovery in Exchange 2000  
 Backing Up Exchange 2000 by Using the Windows 2000 Backup Utility

Restoring Exchange 2000

Creating a Disaster Recovery Plan

**Labs:**

Lab A: Backing up and Restoring Exchange 2000 Stores

Lab B: Recovering Exchange 2000 Mailboxes and Messages

**Skills:**

After completing this module, students will be able to:

- Describe the dependencies between Active Directory and Exchange 2000, and explain the database technology that Exchange 2000 uses.
- Back up Exchange 2000 by using the Microsoft Windows 2000 Backup utility.
- Restore Exchange 2000.
- Create a disaster recovery plan.

**Module 16: The Microsoft Exchange 2000 Challenge**

**Topics:**

The Exchange 2000 Challenge is an activity used to review the entire course and inspire classroom discussions.