



## Course 10233A:

# Designing and Deploying Messaging Solutions with Microsoft Exchange Server 2010

Length:	5 Days
Audience(s):	IT Professionals
Level:	200
Technology:	Microsoft Exchange Server 2010
Type:	Course
Delivery Method:	Instructor-led (classroom)

### About this Course

This five-day instructor-led course provides you with the knowledge and skills to design and deploy messaging solutions with Microsoft Exchange Server 2010.

This course describes how to gather requirements for a messaging solution and then design the integration of Exchange Server 2010 with the current infrastructure. The course then covers how to plan and deploy the various server roles in Exchange Server 2010.

You will explore the various options for implementing messaging security, policies, and compliance. The course also examines the high availability and disaster recovery options and how to develop a troubleshooting plan.

Finally, the course describes how to plan the upgrade from earlier versions of Exchange Server to Exchange Server 2010 and the integration of Exchange Server 2010 with other messaging systems.

### Audience Profile

This course is intended for IT professionals who are responsible for the Exchange Server messaging environment in an enterprise. This IT professional is the senior administrator, or "engineer" who acts as a technical lead over a team of administrators.

This person is a third level of support in addition to the Exchange Recipient Administrator, which is the first level and the Exchange Server Administrator, which is the second level.

In an effort to ensure that end users have the best possible messaging experience, this person also evaluates new technologies and tools.

The candidate is responsible for the planning and deployment of the Exchange Servers in an enterprise environment. He or she should have a minimum of two years of experience administering, deploying, managing, monitoring, upgrading, migrating, and designing Exchange Server.



## At Course Completion

**After completing this course, students will be able to:**

- Gather the information required to design a messaging system.
- Design the integration of Exchange Server with the current infrastructure.
- Design the deployment of the Mailbox server services in Exchange Server 2010.
- Design the Client Access server deployment.
- Design the Hub Transport server and Edge Transport server deployments.
- Plan and deploy messaging security.
- Plan and deploy a messaging policy and compliance solution.
- Plan a highly available Exchange Server 2010 deployment.
- Plan a disaster recovery solution in Exchange Server 2010.
- Develop a plan for monitoring and troubleshooting the Exchange Server environment.
- Plan and implement a transition from Exchange Server 2003 or Exchange Server 2007 to Exchange Server 2010.
- Integrate Exchange Server 2010 with other messaging systems and with federated partners.

## Pre-Requisites

**Before attending this course, students must have:**

- At least two years of experience working with Microsoft Exchange Server.
- At least six months of experience working with Exchange Server 2010 or Exchange Server 2007.
- At least two years of experience administering Windows Server, including Windows Server 2008.
- At least two years of experience working with Active Directory Domain Services (AD DS).
- At least two years of experience working with name resolution, including Domain Name Service (DNS).
- Experience working with certificates, including Public Key Infrastructure (PKI) certificates.
- Experience working with Microsoft Windows PowerShell.



## Course Outline

### Module 1: Introduction to Designing a Microsoft Exchange Server 2010 Deployment

This module explains how to gather business and technical requirements, and information about the current messaging system, to prepare for designing a messaging system. It also provides an overview of Service Level Management and how it can impact the design of the messaging system.

#### Lessons

- Gathering Business Requirements
- Identifying Additional Requirements
- Introduction to Service Level Management
- Analyzing the Current Messaging Environment

#### Lab : Introduction to Designing an Exchange Server 2010 Deployment

- Evaluating the Existing Messaging Environment
- Creating a Requirements Document
- Discussion: Real-World Best Practices for Setting Budget Expectations
- Discussion: Refining the Scope of SLA Requirements

#### After completing this module, students will be able to:

- Gather business requirements for an organization.
- Identify additional requirements.
- Describe service level management.
- Analyze the current messaging environment.

### Module 2: Designing Microsoft Exchange Server 2010 Integration with the Current Infrastructure

This module explains how to design the integration of Exchange Server with the current infrastructure. It describes how to design the network infrastructure, the Active Directory infrastructure, and the DNS infrastructure. Additionally, this module explains how to plan the administration of Exchange Server 2010.

#### Lessons

- Designing the Network Infrastructure
- Designing the Active Directory Infrastructure
- Designing the DNS Infrastructure
- Planning Exchange Server Administration



### **Lab : Designing Exchange Server Integration with the Current Infrastructure**

- Evaluating the Existing Network Infrastructure
- Determining Suitability for Exchange Server 2010
- Preparing the AD DS Forest for Exchange Server 2010
- Configuring Exchange Server Delegation

#### **After completing this module, students will be able to:**

- Design the network infrastructure.
- Design the Active Directory infrastructure.
- Design the DNS infrastructure.
- Plan Exchange Server Administration.

## **Module 3: Planning and Deploying Mailbox Services**

This module explains how to design the deployment of the Mailbox server services in Exchange Server 2010. It provides an overview of the Mailbox services in Exchange Server 2010. The module then describes how to design Mailbox server, recipient management, and a public folder architecture.

#### **Lessons**

- Overview of Mailbox Services in Exchange Server 2010
- Designing Mailbox Servers
- Designing Recipient Management
- Designing Public Folder Architecture

#### **Lab : Planning and Deploying Mailbox Services**

- Designing the Mailbox Server Deployment
- Designing Recipient Management
- Designing a Public Folder Deployment
- Implementing Mailbox Services

#### **After completing this module, students will be able to:**

- Describe mailbox services in Exchange Server 2010.
- Design Mailbox servers.
- Design recipient management.
- Design public folder architecture.



## Module 4: Planning and Deploying Client Access Services in Exchange Server 2010

This module explains how to plan and deploy client access services in Exchange Server 2010. It provides an overview of the Client Access server role and then describes how to design the Client Access server deployment, client access, and client access policies.

### Lessons

- Overview of the Client Access Server Role
- Designing the Client Access Server Deployment
- Designing Client Access
- Designing Client Access Policies

### Lab : Planning and Deploying Client Access Services in Exchange Server 2010

- Designing the Client Access Server Deployment
- Designing Client Access
- Implementing Client Access

### After completing this module, students will be able to:

- Describe how the Client Access server role works.
- Design the Client Access server deployment.
- Design access for messaging clients.
- Design policies for managing client access.

## Module 5: Planning and Deploying Message Transport in Exchange Server 2010

This module explains how to design the Hub Transport server and Edge Transport Server deployments. It also describes how to design message routing in Exchange Server 2010. The module then explains how to design the Hub Transport servers and the Edge Transport servers.

### Lessons

- Designing Message Routing for Exchange Server 2010
- Designing Hub Transport Servers
- Designing the Message Routing Perimeter

### Lab : Planning and Deploying Message Transport in Exchange Server 2010

- Designing a Message Routing Topology
- Designing a Messaging Perimeter
- Discussion: Improving an Active Directory and Message Routing Design
- Modifying the Routing Topology



**After completing this module, students will be able to:**

- Design message routing for Exchange Server 2010.
- Design Hub Transport servers.
- Design the message routing perimeter.

## **Module 6: Planning and Deploying Messaging Security**

This module explains how to plan and deploy messaging security. It describes how to design message security restrictions, SMTP connector security, and explains how to secure message routing between partner organizations. The module then describes how to design antivirus and anti-spam solutions.

### **Lessons**

- Designing Message Security
- Designing Antivirus and Anti-Spam Solutions

### **Lab : Planning and Deploying Messaging Security**

- Designing Message Security
- Designing Antivirus and Anti-Spam Solutions
- Implementing Message Security

**After completing this module, students will be able to:**

- Design message security.
- Design antivirus and anti-spam solutions.

## **Module 7: Planning and Deploying Messaging Compliance**

This module explains how to plan and deploy a messaging policy and compliance solution. It describes how to design transport rules, message classifications, and message moderation. Then the module describes how to design the AD RMS integration with Exchange Server 2010. Finally, the module explains how to design message journaling, archiving, and messaging records management.

### **Lessons**

- Designing Transport Compliance
- Designing AD RMS Integration with Exchange Server 2010
- Designing Message Journaling and Archiving
- Designing Messaging Records Management

### **Lab : Planning and Deploying Messaging Compliance**

Planning a Message Transport Implementation  
Planning a Messaging Journaling and Archiving Solution  
Planning a Messaging Records Management Implementation  
Implementing a Messaging Compliance Solution



**After completing this module, students will be able to:**

- Design transport compliance.
- Design Active Directory Rights Management Services (AD RMS) integration with Exchange Server 2010.
- Design message journaling and archiving.
- Design messaging records management.

## **Module 8: Planning and Deploying High Availability**

This module explains how to plan a highly available Exchange Server 2010 deployment. It provides an introduction to high availability in Exchange Server 2010. It also describes how to design high availability for mailbox databases and the other Exchange Server 2010 server roles.

Finally, the module explains how to design site resilience.

### **Lessons**

- Introduction to High Availability Planning in Exchange Server 2010
- Designing High Availability for Mailbox Databases
- Designing High Availability for Other Server Roles
- Designing Site Resilience

### **Lab : Planning and Deploying High Availability**

- Designing High Availability for Exchange Server
- Implementing High Availability for Exchange Servers

**After completing this module, students will be able to:**

- Describe high availability planning in Exchange Server 2010.
- Design high availability for mailbox databases.
- Design high availability for non-Mailbox server roles.
- Design site resilience.



## Module 9: Planning a Disaster Recovery Solution

This module explains how to plan a disaster recovery solution for Exchange Server 2010. It describes how to plan for disaster mitigation and then explains how to design Exchange Server backup and recovery.

### Lessons

- Planning for Disaster Mitigation
- Planning Exchange Server Backup
- Planning Exchange Server Recovery

### Lab : Planning a Disaster Recovery Solution

- Planning Disaster Recovery for Vancouver
- Planning Disaster Recovery for San Diego
- Implementing Single-Item Recovery

### After completing this module, students will be able to:

- Plan for disaster mitigation.
- Plan Exchange Server backup.
- Plan Exchange Server recovery.

## Module 10: Planning Microsoft Exchange Server 2010 Monitoring and Troubleshooting

This module explains how to develop a plan for monitoring and troubleshooting the Exchange Server environment. It first describes the various options for monitoring the different server roles in Exchange Server 2010. The module then describes the available troubleshooting tools and explains how to plan for troubleshooting issues in message delivery, client access, and databases.

### Lessons

- Planning Exchange Server Monitoring
- Planning Exchange Server Troubleshooting

### Lab : Planning Exchange Server 2010 Monitoring and Troubleshooting

- Establishing a Baseline for Performance
- Measuring the Production System Performance under Additional Load

### After completing this module, students will be able to:

- Plan Exchange Server monitoring.
- Plan Exchange Server troubleshooting.

## Module 11: Upgrading to Microsoft Exchange Server 2010



This module explains how to plan and implement an upgrade from Exchange Server 2003 or Exchange Server 2007 to Exchange Server 2010. It first provides an overview of the various upgrading scenarios. The module then describes how to plan the upgrade from Exchange Server 2003 to Exchange Server 2010 and from Exchange Server 2007 to Exchange Server 2010.

### Lessons

- Overview of Upgrading to Exchange Server 2010
- Planning the Upgrade from Exchange Server 2003 to Exchange Server 2010
- Planning the Upgrade from Exchange Server 2007 to Exchange Server 2010

### Lab : Upgrading to Exchange Server 2010

- Reviewing the Exchange Server 2010 Design
- Designing an Exchange Server 2010 Upgrade Strategy

### After completing module, students will be able to:

- Describe the general Exchange Server 2010 upgrade scenarios and strategies.
- Plan the upgrade from Exchange Server 2003 to Exchange Server 2010.
- Plan the upgrade from Exchange Server 2007 to Exchange Server 2010.

## Module 12: Integrating Microsoft Exchange Server 2010 with Other Messaging Systems

This module explains how to integrate Exchange Server 2010 with other messaging systems and with federated partners. It first describes the various coexistence scenarios and then explains how to design Exchange Server 2010 integration with other messaging systems. The module also describes how to design the integration of Exchange Server 2010 with federated partners and with Exchange Online.

### Lessons

- Designing Exchange Server 2010 Integration with Other Messaging Systems
- Designing Exchange Server 2010 Integration with Federated Partners
- Designing Exchange Server 2010 Integration with Exchange Online

### Lab : Integrating Exchange Server 2010 with Other Messaging Systems

Designing Exchange Server 2010 Coexistence with Another Messaging System

### After completing this module, students will be able to:

- Design Exchange Server 2010 integration with other messaging systems.
- Design Exchange Server 2010 integration with federated partners.
- Design Exchange Server 2010 integration with Microsoft Exchange Online.

### Additional Reading

To help you prepare for this class, review the following resources:  
Course 10135A