

# 10233 – Designing and Deployment Messaging Solutions with Microsoft® Exchange Server 2010

**Vendor Course Code:** 10233

**Course Length:** 5 days

## Overview:

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.

## Skills Gained:

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.

## Key Topics:

### **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

Analysing 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 organisation.
- Identify additional requirements.
- Describe service level management.
- Analyse 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 organisations. 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 modules 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.

### **Target Audience:**

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.

### **Prerequisites:**

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.