

# 70-662: Deploying Microsoft Exchange Server 2010

## Course Outline

### Course Introduction

3m

Course Introduction

### Chapter 01 - Active Directory and Supporting Infrastructure

2hr 2m

Active Directory and Supporting Infrastructure

Network Infrastructure

Active Directory

Active Directory Infrastructure

Active Directory Topology

Trust Relationships

Active Directory Components

Active Directory Components - Domains and Domain Tree

Active Directory Components - Forests

Active Directory Components - Trusts

Active Directory Components - Domain Controller

Active Directory Components - Global Catalog

Active Directory Components - Sites

Active Directory Components - Replication

Active Directory Partition - Domain

Active Directory Partition - Configuration

Active Directory Partitions - Schema

Active Directory Partitions - Application

Active Directory Hierarchy

Demo - Prepare Active Directory

Network Based Services

DNS

Types of DNS Zones

DHCP

Time Servers

DNS Requirements for Exchange Server 2010

Preparing Active Directory for Exchange Server 2010

Exchange Server 2010 Editions & Licensing

Server Roles in Exchange Server 2010

Server Roles - Expanded

Simple Organizations

Standard Organization Deployments  
Complex Organization Deployment  
Hardware Recommendations for Combining Server Roles  
Integration with Exchange Online Services  
Infrastructure Requirements for Exchange Server 2010  
Hardware Requirements for Install  
Installation Software Requirements  
Process for Installing Exchange Server 2010  
Demo - Install Exchange Server  
Demo - Install a Second Exchange Server  
Unattended Installation Options  
Demo - Install Exchange Server Updates  
Chapter 01 Review

## **Chapter 02 - Mailbox Servers and Recipients**

2hr 51m

Mailbox Servers and Recipients  
Exchange Management Console  
Demo - Exchange Management Console  
Exchange Management Shell & PowerShell  
Remote Windows PowerShell  
Exchange Management Shell Cmdlets  
Using Cmdlets Together  
Demo - Exchange Management Shell  
EMS Examples  
Exchange Control Panel (ECP)  
Demo - Exchange Control Panel  
Initial Mailbox Configuration Tasks  
Demo - Configure Mailbox Management Options  
Secure the Server  
Create and Configure Database  
Demo - Create Mailbox and Public Folders  
Configure Public Folders  
Demo - Public Folders  
Demo - Public Folder Toolbox  
Configure Recipients  
Configure the Offline Address Book  
Database Key - Points  
Database File Types  
Mailbox Database Update Process  
Storage Improvements  
Options for Database Storage

Data Storage Options - Direct Attached Storage  
Data Storage Options: Storage Area Networks  
Public Folder Replication  
How Clients Access Public Folders  
Sharepoint Vs. Public Folders  
Demo - Configuring Public Folder Replication  
Public Folder Process for MAPI Clients  
Exchange Recipients - User Mailboxes  
Exchange Recipients - Resource Mailbox  
Exchange Recipients - Mail Users  
Exchange Recipients - Mail Contact  
Exchange Recipients - Mail-Enabled Security and Distribution Groups  
Types of Distribution Groups  
Distribution Group Features  
Some Options for Configuring Distribution Groups  
Exchange Recipients - Linked Mailboxes  
Moving Mailboxes  
Resource Mailboxes  
Booking Attendants  
Designing Resource Booking Policies  
Demo - Resource Mailbox  
E-Mail Address Policies  
Creating an E-mail Policy for Distribution Groups  
Demo - E-mail Address Policies  
Address Lists  
Demo - Configuring Address Lists  
Configuring Offline Address Books  
Options for Deploying Offline Address Books  
Distribution Options - Address Book  
Chapter 02 Review

### **Chapter 03 - Managing Client Access**

1hr 47m

Managing Client Access  
Client Access Servers  
Client Access Server Deployment Options  
Deploy Client Access Servers  
Demo - Configuring a Client Access Server  
Securing a Client Access Server  
Using Application Layer Firewall  
Best Practices: Implementing Client Access Server Certificates  
Demo - Configuring Certificates for Client Access Servers

POP3 and IMAP4 Options  
Configuring the Client Access Server for Internet Access  
Client Access Server Services for Outlook Clients  
Autodiscover  
Configuring Autodiscover  
Availability Service  
MailTips  
Demo - Configuring MailTips  
Outlook Anywhere  
Demo - Enable Outlook Anywhere  
Outlook Client Connectivity Troubleshooting  
Outlook Web App  
Configuration Options for Outlook Web App  
File and Data Access for Outlook Web App  
File and Data Access Configuration  
Demo - Configure Outlook Web App  
Exchange ActiveSync  
Exchange ActiveSync Security Options  
Chapter 03 Review

## **Chapter 04 - Managing Message Transports**

2hr 23m

Managing Message Transports  
SMTP  
One-way SMTP Connections  
Demo - SMTP Connectors  
Changing Default Message Flow  
Troubleshooting SMTP Message Delivery  
SMTP E-Mail Security Options  
Demo - Configuring SMTP Security  
Domain Security  
Domain Security Process  
Domain Security Configuration  
Demo - Configuring Domain Security  
How S/MIME Works  
Message Transport Components  
Routing Messages Within an Exchange Organization: Message Sent  
Routing Messages Within an Exchange Organization: Microsoft Exchange Mail Submission Service  
Routing Messages Within an Exchange Organization: Store Driver  
Routing Messages Within an Exchange Organization: Mail Delivery Within AD  
Routing Messages Within an Exchange Organization: Mail Delivery to Internet  
Shadow Redundancy - Transport Dumpster

Configuring Shadow Redundancy  
Process for Configuring Hub Transport Servers  
Options for Configuring Message Transport  
Remote Domains  
Demo - Configuring Accepted and Remote Domains  
Back Pressure - System Monitoring  
Back Pressure  
Edge Transport Server Role  
Edge Transport Role  
Edge Transport Server Role Infrastructure Requirements  
AD LDS  
Edge Synchronization  
Cloned Configuration  
Edge Transport Server Security  
Antivirus Features  
Forefront Protection 2010 for Exchange Server  
Forefront Protection 2010 Options  
Defense in Depth  
Overview of Spam-Filtering Features  
How Exchange Server 2010 Applies Spam Filters  
Sender ID Filtering  
Sender Reputation Filtering  
Content Filtering  
Demo - Configuring Anti-Spam Options  
Chapter 04 Review

## **Chapter 05 - Exchange Security**

2hr 58m

Exchange Security  
Role Based Access Control (RBAC)  
Role Based Access Control Options  
Management Role Groups  
Built-In Management Role Groups  
Demo - Managing Permissions  
Process for Configuring Custom Role Groups  
Demo - Configuring Custom Role Groups  
Management Role Assignment Policies  
Working with Management Role Assignment Policies  
Managing Permissions on Edge Transport Servers  
Exchange Server Security Risks  
Exchange Server Security Guidelines  
Secure Internet Access Components

Designing Security - Client to Internet  
Designing Security - Internal Network  
Common Port Assignments for Firewall  
Securing Client Access Traffic from the Internet  
SMTP Connections  
Reverse Proxy  
Messaging Policy and Compliance  
Governing Compliance  
Compliance Examples  
Exchange Messaging Policy and Compliance  
Transport Rules - Hub Transport Server  
Transport Rules - Edge Transport Server  
Transport Rule Components - Conditions  
Transport Rule Components - Actions  
Transport Rule Components - Exceptions  
Transport Rule Component - Predicates  
Demo - Configuring Transport Users  
Message Classifications  
AD RMS  
How AD RMS Works  
Exchange Server 2010 Integration  
Moderated Transport  
Message Journaling - Messaging Records Management  
Demo - Configuring Message Journaling  
Considerations for Managing the Message Journal Mailbox  
Multi-Mailbox Search  
Demo - Configuring Multi-Mailbox Search  
What Are Retention Tags and Retention Policies?  
AutoTagging  
Demo - Configuring Retention Tags and Policies  
Managed Folders  
Process for Deploying Managed Folders  
Demo - Implementing Custom Folders  
Considerations for Implementing Messaging Records Management  
Personal Archives in Exchange Server 2010  
Demo - Configuring Personal Archives  
Best Practices: Personal Archives  
Chapter 05 Review

## **Chapter 06 - Implementing High Availability**

2hr 28m

Implementing High Availability

High Availability

Types of Downtime

High Availability - Mailbox Servers

High Availability - Non-Mailbox Servers

Database Availability Group

Active Manager

Continuous Replication Process

DAG Database Protection

Exchange Server 2007 and 2010 Mailbox Availability Options

Create and Configure DAG

DAG Network

Demo - Creating and Configuring a DAG

Demo - DAG LAG

Transport Dumpster

Understanding the Failover Process

Client Access Servers - High Availability

Shadow Redundancy for Hub Transport Servers

Shadow Redundancy Manager (SRM)

Edge Transport Servers - High Availability

Disaster Mitigations Options (1/4)

Disaster Mitigations Options (2/4)

Disaster Mitigations Options (3/4)

Disaster Mitigations Options (4/4)

Disaster Recovery: Mailbox Servers

Backup and Restore Scenarios

Backup in Exchange Server 2010 - Differences from Previous Versions

Backup Requirements for Exchange Server 2010

Backup Strategies

Volume Shadow Copy Service (VSS)

VSS Component Definitions

How to Pick a Backup Solution

Restore Strategies

Process for Recovering Data Using the Recovery Database

Dial-Tone Recovery

Process for Implementing Dial-Tone Recovery

Database Mobility

Recovering Exchange Servers

Performance Monitoring

Monitoring Exchange Server

Performance Counters for Exchange Server  
Performance Counters for Mailbox Servers  
Performance Counters for Hub and Edge Transport Servers  
Performance Counters for Client Access Servers  
Network and Performance Guidelines  
Change Management  
Software Updates vs. Hotfixes  
Deploying Software Updates  
Determining the Need for Hardware Upgrades  
Process for Implementing Hardware Upgrades  
Developing a Troubleshooting Methodology  
Troubleshooting Tools  
Chapter 06 Review  
Course Closure

**Total Duration: 14h 30m**