



3938: Updating Your Skills from Microsoft Exchange 2000 Server or Exchange Server 2003 to Exchange Server 2007 SP1

Course Specifications

Course length: 3 days, 8:30 am – 4:30 pm with an hour break for lunch

Standard rate: \$1500/student, call (406) 256-5700 for group discounts and Entré Partner pricing

Introduction

Elements of this syllabus are subject to change. This three-day, instructor-led course offers Microsoft Exchange 2000 Server or Microsoft Exchange Server 2003 administrators with the skills they need to manage a Microsoft Exchange Server 2007 infrastructure. This course focuses on the new features and administrative tasks in Exchange Server 2007. The student will learn skills that enable them to deploy and manage an Exchange Server 2007 environment. This course's aim is not to provide detailed design skills, but will cover planning skills at a level sufficient to enable decision making during the implementation process.

Audience

This course is for people who operate in medium to very large computing environments, using Exchange 2000 Server or Exchange Server 2003. The typical environments in which they work have the following characteristics:

- Supported users range from 200 to over 100,000.
- Multiple physical locations.
- Typical products and technologies include Microsoft Windows 2000 or Windows 2003, Exchange 2000 Server or Exchange Server 2003, and network security products and technologies.

At Course Completion

After completing this course, students will be able to:

- Describe the new features and the deployment architecture in Exchange Server 2007.
- Plan and implement an Exchange Server 2007 deployment.
- Administer Exchange Server 2007.
- Implement client access services in Exchange Server 2007.
- Manage message routing in an Exchange Server 2007 organization.
- Configure messaging security with Exchange Server 2007.
- Implement messaging policies in Exchange Server 2007.
- Implement high availability and disaster recovery solutions in Exchange Server 2007.
- Implement Unified Messaging in Exchange Server 2007.

Prerequisites

Before attending this course, students must have:

- Working experience with Exchange 2000 Server or Exchange Server 2003.
- Working experience with Windows Server 2003.
- Working experience with Active Directory directory services in Windows Server 2003.
- Familiarity and experience with Windows scripting or command-line scripting.

Course Outline

Module 1: Introducing Exchange Server 2007

This module provides an overview of the new Exchange Server 2007 features, focusing on changes from previous Exchange Server versions. This module also introduces terminology and concepts that subsequent modules in this course will cover in greater detail.

Lessons

- New Features in Exchange Server 2007
- Introducing the Exchange Server 2007 Deployment Architecture
- Discontinued and De-Emphasized Features

After completing this module, students will be able to describe the following:

- New Exchange Server 2007 features.
- The Exchange Server 2007 deployment architecture.
- Features from previous Exchange versions that are discontinued or de-emphasized in Exchange Server 2007.

Module 2: Deploying Exchange Server 2007

The module describes the Exchange Server 2007 Server Roles, and the planning and implementation of an Exchange Server 2007 deployment. Additionally, this module describes how to upgrade an Exchange 2000 Server or Exchange Server 2003 deployment to Exchange Server 2007.

Lessons

- Introduction to the Exchange Server 2007 Server Roles
- Installing Exchange Server 2007
- Upgrading to Exchange Server 2007
- Optional Lab: Deploying Exchange Server 2007
- Preparing for the Exchange Server 2007 Installation
- Installing Exchange Server 2007
- Verifying the Exchange Server 2007 Installation

After completing this module, students will be able to:

- Describe the Exchange Server 2007 server roles.
- Plan and complete an Exchange Server 2007 installation.
- Describe the supported upgrade scenarios.

Module 3: Administering Exchange Server 2007

Administering Exchange Server 2007 is quite different from administering previous Exchange versions. Exchange Server 2007 provides new management tools and new tasks that you will need to perform. This module details how to administer Exchange Server 2007.

Lessons

- Overview of Exchange Server 2007 Administration Tools
- Administering Exchange Server 2007 Mailbox Servers
- Managing Recipients in Exchange Server 2007
- Lab: Administering Exchange Server 2007
- Configuring the Mailbox Servers
- Configuring Recipients
- Performing Bulk Recipient Management Tasks

After completing this module, students will be able to:

- Describe the new tools for administering Exchange Server 2007.
- Administer Exchange Server 2007 mailbox servers.
- Manage recipients in Exchange Server 2007.

Module 4: Implementing Client Access Services in Exchange Server 2007

Exchange Server 2007 provides access to user mailboxes for many different clients. In some cases, the client configuration has not changed significantly from previous Exchange versions. However, Exchange Server 2007 does provide some significant new features and administrative tasks related to managing client access. This module describes how to provide access to Exchange Server 2007 mailboxes.

Lessons

- Implementing the Client Access Server Role
- Implementing New Client Features in Exchange Server 2007
- Implementing Outlook Web Access
- Implementing Mobile Messaging

Lab: Implementing Client Access Services in Exchange Server 2007

- Configuring Outlook Web Access Settings
- Configuring Exchange ActiveSync Policies

After completing this module, students will be able to:

- Implement Exchange servers running the Client Access server role.
- Implement new client features in Exchange Server 2007.
- Implement Microsoft Office Outlook Web Access (OWA) in Exchange Server 2007.
- Implement and manage mobile messaging in Exchange Server 2007.

Module 5: Managing Message Routing in an Exchange Server 2007 Organization

Message flow through an Exchange Server 2007 organization is significantly different from previous Exchange versions. Rather than using routing groups, message routing in Exchange Server 2007 is based on the Active Directory directory services site configuration. This module describes how messages are routed through the organization, and describes and how to manage message routing.

Lessons

- Understanding Message Routing in Exchange Server 2007
- Managing Message Routing

Lab: Managing Message Routing in an Exchange Server 2007 Organization

- Configuring Message Routing for a Branch Office
- Troubleshooting Message Routing Between Sites

After completing this module, students will be able to:

- Describe how message routing occurs in an Exchange Server 2007 organization.
- Manage message routing in Exchange Server 2007.

Module 6: Securing Messages with Exchange Server 2007

A critical factor in deploying any messaging system is securing Internet e-mail. Securing Internet e-mail includes ensuring that the messaging system remains secure from spam and viruses, and securing messages sent across the Internet. This module details how to configure the Exchange Server 2007 features that increase Internet e-mail security.

Lessons

- Implementing the Edge Transport Server Role
- Implementing Antivirus and Anti-Spam Features
- Configuring Security for Internet E-Mail

Lab: Securing Messages with Exchange Server 2007

- Reviewing the Current Spam-Filtering Results
- Discussion: Modifying the Spam-Filtering Settings
- Modifying the Spam-Filtering Settings

After completing this module, students will be able to:

- Implement the Edge Transport server role.

- Filter Internet e-mail messages by implementing anti-spam and antivirus solutions.
- Configure security for Internet e-mail.

Module 7: Implementing Messaging Policies in Exchange Server 2007

Many organizations must set restrictions on sending or receiving e-mail, or for e-mail retention, to comply with external or internal security policies. Exchange Server 2007 provides messaging policies as a powerful means to manage message flow and e-mail retention. This module details how to implement these messaging policies.

Lessons

- Introducing Messaging Policies
- Implementing Transport Rules
- Implementing Messaging Records Management

Lab: Implementing Messaging Policies in Exchange Server 2007

- Implementing Transport and Journaling Rules
- Implementing Messaging Records Management

After completing this module, students will be able to:

- Describe messaging policies and how you can use them.
- Apply messaging policies to messages in transit.
- Implement messaging records management.

Module 8: High Availability and Disaster Recovery in Exchange Server 2007

Exchange Server 2007 provides several new features that enable high availability and disaster recovery. This module describes how to implement these features.

Lessons

- Overview of High Availability in Exchange Server 2007
- Implementing High Availability in Exchange Server 2007
- Implementing Disaster Recovery in Exchange Server 2007

Lab: High Availability and Disaster Recovery in Exchange Server 2007

- Configuring Windows Server 2003 Cluster Services
- Installing and Configuring Exchange Server 2007 Active and Passive Nodes
- Moving Exchange Server 2007 Clustered Mailbox Servers Between Cluster Nodes

After completing this module, students will be able to:

- Describe the high availability options available in Exchange Server 2007.
- Implement high availability in Exchange Server 2007.
- Implement disaster recovery in Exchange Server 2007.

Module 9: Implementing Unified Messaging in Exchange Server 2007

Unified Messaging is the integration into one Inbox of a recipient's voice, fax, and e-mail messages. Exchange Server 2007 Unified Messaging integrates Exchange Server with an existing telephony network infrastructure. This module details how to implement Unified Messaging in Exchange Server 2007.

Lessons

- Telephony Overview
- Introducing Unified Messaging
- Installing and Configuring Unified Messaging
- Practice: Installing and Configuring Unified Messaging
- Install the Unified Messaging server role
- Create and configure a dial plan
- Create an IP Gateway

- Create a hunt group
- Create a Unified Messaging mailbox policy
- Enable a mailbox for Unified Messaging
- Create an Automated Attendant

After completing this module, students will be able to:

- Describe telephony concepts.
- Describe Unified Messaging.
- Install and configure Unified Messaging.



5051A: Monitoring and Troubleshooting Microsoft Exchange Server 2007

Course Specifications

Course length: 2 days, 8:30 am – 4:30 pm with an hour break for lunch

Standard rate: \$1000/student, call (406) 256-5700 for group discounts and Entré Partner pricing

Introduction

Elements of this syllabus are subject to change. This two-day workshop teaches messaging specialists to monitor and troubleshoot an Exchange Server 2007 messaging system. Students will learn how to correlate client and server issues and resolve those issues. They will also learn how to monitor systems and create reports from the monitoring data.

Audience

The audience for this course includes people with experience with Exchange Server 2007 or previous versions of Exchange Server. These people will have experience installing and configuring Exchange Server, configuring recipients and mailboxes, and supporting Exchange Server clients. People coming into the course are expected to have at least three years experience working in the Information Technology field—typically in the areas of network administration or Windows Server administration—and one year of Exchange Server administration experience.

At Course Completion

After completing this workshop, students will be able to:

- Use the Microsoft Exchange Server 2007 Management Pack for Microsoft Operations Manager (MOM) 2005 to monitor Exchange servers.
- Monitor and troubleshoot client performance and connectivity.
- Identify and resolve issues related to access of resources and messages.
- Monitor and troubleshoot mail flow.
- Monitor and troubleshoot Mailbox servers.
- Monitor and troubleshoot external and additional services.
- Identify trends in a messaging system.

Prerequisites

This workshop requires that students meet the following prerequisites:

- Fundamental knowledge of network technologies including DNS and firewall technologies.
- Experience administering Exchange Server 2007.
- Experience with the Windows Server 2003 operating system.
- Experience with Active Directory directory service in Windows Server 2003.
- Experience with managing backup and restore on Windows Servers.
- Experience using Windows management and monitoring tools such as Microsoft Management Console, Active Directory Users and Computers, Performance Monitor, Event Viewer, and IIS Administrator.
- Experience using Windows networking and troubleshooting tools such as Network Monitor, Telnet, and NSLookup.

Microsoft Certified Professional Exams

This course will help the student prepare for the following Microsoft Certified Professional exam:

- Exam Exam 70-236: Implementing: Troubleshooting
- Exam and Maintaining a MS Exchange Server 2007 Infrastructure.:

Course Outline

Unit 1: Introduction to Exchange Server Monitoring and Troubleshooting

After completing this unit, students will be able to explain how to monitor Exchange servers using Microsoft Operations Manager (MOM) and explain an Exchange troubleshooting model.

Lessons

- Overview
- Introduction to Microsoft Operations Manager
- Introduction to Troubleshooting Exchange Server 2007
- Demonstration: Using MOM to Monitor Exchange Servers

Lab: Introduction to Exchange Server Monitoring and Troubleshooting

- Developing a Monitoring and Troubleshooting Process

After completing this unit, students will be able to:

- Describe how this unit provides the basis for the information to be presented in the other units in the workshop
- Describe what MOM is.
- Provide an example of efficient troubleshooting logic for Exchange Server 2007.
- Explain how to monitor Exchange Servers using MOM.

Unit 2: Monitoring and Troubleshooting Client Performance and Connectivity

After completing this unit, students will be able monitor and troubleshoot mail flow.

Lessons

- Overview
- Tools for Monitoring Client Performance and Connectivity
- Process for Troubleshooting MAPI Clients
- Process for Troubleshooting Client Access Server Clients

Lab: Monitoring and Troubleshooting Client Performance and Connectivity

- Monitoring Client Connectivity
- Troubleshooting AutoDiscover Issues
- Troubleshooting a Client Access Server Issue

After completing this unit, students will be able to:

- Identify tools for monitoring client performance and connectivity.
- Describe the process for troubleshooting MAPI clients.
- Describe the process for troubleshooting Client Access server clients.
- Configure Microsoft Operations Manager (MOM) to monitor client connectivity issues.
- Identify the cause for an Autodiscover issue and resolve the issue.
- Identify the cause for a remote client connectivity issue and resolve the issue.

Unit 3: Troubleshooting Access to Resources and Messages

After completing this unit, students will be able to troubleshoot access to resources and messages.

Lessons

- Overview
- How Public Folder Access Works
- How Calendaring Works

- Process for Troubleshooting Client Access Server Issues

Lab: Troubleshooting Access to Messaging Contents

- Troubleshooting a Public Folder Access Issue
- Troubleshooting a Calendaring Issue
- Troubleshooting an Outlook Web Access Issue

After completing this unit, students will be able to:

- Describe how public folder access works.
- Describe how calendaring works.
- Explain the process for troubleshooting client access server issues.

Unit 4: Monitoring and Troubleshooting Mail Flow

After completing this unit, students will be able to monitor and troubleshoot mail flow.

Lessons

- Overview
- Discussion: Tools for Monitoring Mail Flow
- Demonstration: Troubleshooting Message Transport Using Exchange Server 2007 Tools
- Process for Troubleshooting Internal Mail Flow
- Process for Troubleshooting External Mail Flow

Lab: Monitoring and Troubleshooting Mail Flow

- Configuring MOM to Monitor Message Flow
- Troubleshooting Internet E-Mail Delivery
- Troubleshooting Spam Filtering
- Troubleshooting Outbound Internet E-mail Delivery

After completing this unit, students will be able to:

- Identify tools for monitoring mail flow.
- Describe how to troubleshoot message transport using Exchange Server 2007 tools.
- Describe the process for troubleshooting internal mail flow.
- Describe the process for troubleshooting external mail flow.
- Configure Microsoft Operations Manager (MOM) to monitor message flow.
- Identify and resolve the reason that messages are not being delivered to and from the Internet.
- Identify and resolve the cause for spam filters blocking messages.

Unit 5: Monitoring and Troubleshooting Mailbox Servers

After completing this unit, students will be able to monitor and troubleshoot mailbox servers.

Lessons

- Overview
- Tools for Monitoring and Troubleshooting Mailbox Servers
- Process for Troubleshooting Mailbox Servers
- Demonstration: Troubleshooting Mailbox Server Performance Issues

Lab: Monitoring and Troubleshooting Mailbox Servers

- Configuring the monitoring of Mailbox servers
- Troubleshooting a Mailbox Logon Issue
- Troubleshooting a Hard Disk Failure
- Troubleshooting a Mailbox Database Mounting Issue

After completing this unit, students will be able to:

- Identify the tools for monitoring Exchange Mailbox servers.
- Implement a process for troubleshooting Exchange Mailbox servers.
- Describe the guidelines for resolving performance issues for Exchange Server roles.

- Configure Microsoft Operations Manager (MOM) to monitor Mailbox servers.
- Identify the cause for users not being able to log on to their mailboxes and resolve the issue.
- Identify the reasons why a mailbox store cannot be mounted and resolve the issue.
- Identify the reasons why a user cannot access a message and resolve the issue.

Unit 6: Monitoring and Troubleshooting External and Additional Services

After completing this unit, students will be able to monitor and troubleshoot external and additional services.

Lessons

- Overview
- Discussion: External and Additional Services Required by Exchange Server 2007
- External Services Required for Unified Messaging in Exchange Server 2007
- Monitoring External Services with MOM 2005

Lab: Monitoring and Troubleshooting External and Additional Services

- Configuring the Monitoring of External Services
- Troubleshooting an External Services Dependency for Exchange Server 2007
- Discussion: Impact of External and Additional Services on Exchange Environments

After completing this unit, students will be able to:

- Identify external and additional services that Exchange Server 2007 requires.
- Identify external services required for Unified Messaging in Exchange Server 2007.
- Identify the MOM 2005 tools for monitoring external services.
- Configure monitoring for external services required for Exchange Server 2007.
- Identify why Exchange Server 2007 services failed to start and resolve the issue.
- Troubleshoot scenarios in which the failure of external services results in Exchange Server 2007 failures.

Unit 7: Identifying Trends in a Messaging System

After completing this unit, students will be able to identify and address trends in a messaging system.

Lessons

- Overview
- Tools for Identifying Trends in a Messaging System
- Exchange Server 2007 Management Pack MOM Reports
- Discussion: Information Required to Identify and Resolve Trends

Lab: Identifying Trends in a Messaging System

- Evaluating Messaging Reports
- Recommending Configuration Changes

After completing this unit, students will be able to:

- Describe tools for identifying trends in a messaging system.
- Describe the monitoring reports available with the Exchange Server 2007 Management Pack.
- Apply considerations for identifying and addressing trends.
- Analyze monitoring reports to identify trends.
- Create proposals for addressing identified trends.