



Course Outline

Workshop 5051A: Monitoring and Troubleshooting Microsoft Exchange Server 2007

About This Workshop

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 Profile

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.

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

At Workshop 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.



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- Identify trends in a messaging system.

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Session 1: 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.

Session 2: 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.



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- Identify the cause for a remote client connectivity issue and resolve the issue.

Session 3: 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.

Session 4: 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.



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- Identify and resolve the cause for spam filters blocking messages.

Session 5: 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.

Session 6: 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.



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- 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.

Session 7: 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.