



## COMPLETE COMPUTING, INC.

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### **5050/50162 – Managing & Recovering Messaging Databases using Microsoft Exchange Server 2007 and PowerShell Introduction**

*Two days*

This course is a Complete Computing special combination of two existing Microsoft classes: Course 5050 and 50162.

*Course 5050: Recovering Messaging Servers and Databases using Microsoft Exchange Server 2007*

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Elements of this syllabus are subject to change.

This course teaches messaging specialists to recover Exchange mailboxes and servers in a variety of disaster scenarios. Students will learn how to perform full and dial-tone recoveries of a mailbox server, as well as repair a mailbox database. They will also learn how to perform a full recovery of Client Access servers, Hub Transport servers, Unified Messaging servers, and Edge Transport servers.

#### **Audience**

The audience for this course includes people who have experience with Exchange Server 2007 or previous Exchange Server versions. These people will have experience installing and configuring Exchange Server, configuring recipients and mailboxes, and supporting Exchange Server clients. People beginning this 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 course, students will be able to:

- Recover messaging databases.
- Prepare for and recover from Mailbox server failures.
- Prepare for and recover from non-Mailbox server failures.



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## Prerequisites

This course requires that students meet the following prerequisites:

- Attend **5047/5049: Installing, Managing, & Securing Microsoft Exchange Server 2007** or have the following equivalent knowledge.
- Fundamental knowledge of network technologies including DNS and firewall technologies.
- Experience with the Windows Server 2003 operating system.
- Experience with Active 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.
- Working knowledge of Exchange Server 2007. For example, what the different server roles are, how the different server roles interact, what protocols the server roles use to communicate, what roles the clients connect to, and how to configure messaging recipients and Exchange Server 2007 computers.

## 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

### Module 1: Recovering Messaging Databases

After completing this module, students will be able to recover messaging databases.



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## Lessons

- Overview of Database Recovery Scenarios
- Recovering a Messaging Database Using Dial-Tone Recovery

### **Lab: Recovering Messaging Databases in Exchange Server 2007**

- Performing a Storage Group Backup
- Performing a Dial-Tone Recovery
- Repairing a Damaged Database

After completing this module, students will be able to:

- Describe messaging database recovery scenarios.
- Recover a messaging database using dial-tone recovery.

## **Module 2: Preparing for and Recovering from Mailbox Server Failures**

After completing this module, students will be able to prepare for and recover from Mailbox server failures.

### Lessons

- Preparing for a Mailbox Server Recovery
- Recovering Mailbox Servers Overview

### **Lab: Preparing for and Recovering from Mailbox Server Failures**

- Performing a Mailbox Server Backup
- Recovering a Mailbox Server
- Recovering Mailbox Server Data

After completing this module, students will be able to:

- Prepare for a Mailbox server recovery.
- Recover Mailbox servers.

## **Module 3: Preparing for and Recovering from Non-Mailbox Server Failures**

After completing this module, students will be able to prepare for and recover from non-Mailbox server failures.



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## Lessons

- Preparing for a Non-Mailbox Server Recovery
- Recovering Non-Mailbox Servers

## Lab: Preparing for and Recovering from Non-Mailbox Server Failures

- Performing a Non-Mailbox Server Backup
- Restoring a Client Access Server Certificate
- Restoring a Hub Transport Server
- Restoring an Edge Transport Server

After completing this module, students will be able to:

- Prepare for a non-Mailbox server recovery.
- Recover non-Mailbox servers.

## *Course 50162: Microsoft Exchange Administrator's Guide to Scripting Using the Exchange Management Shell*

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## Introduction

Elements of this syllabus are subject to change

The launching of Microsoft Windows PowerShell marks a significant event in the world of Windows scripting. No longer must e-mail administrators contend with the legacy of "click happy" graphical interfaces – rather, they can leverage the power of a true object-oriented scriptable shell.

This class seeks to unravel the mysteries of and misconceptions about the Exchange Management Shell (EMS). This course will equip students with the tools to automate the deployment and management of Microsoft Exchange 2007. In addition, it provides students with an understanding of *commandlets* (cmdlets). This course will lead the student into an awareness of the full potential of the EMS and how to use its features to enhance productivity.

## Audience

This course is aimed at the Exchange Server 2007 administrator. The mission of this course is to help provide automation tips and techniques that would allow an Exchange messaging administrator to be more productive and to have more satisfying and less stressful career.



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## At Course Completion

After completing this course, students will understand how to:

- Explain the purpose of the EMS and the underlying Windows PowerShell technology.
- Explain the concepts of cmdlets.
- Master the essentials of the PowerShell syntax.
- Understand proper debugging and error handling techniques.
- Use PowerShell to interact with Windows systems.
- Develop techniques to interact with Exchange 2007.
- Develop scripts that perform common administrative tasks.

## Prerequisites

Before attending this course, students must have:

- Understanding of core Windows Server technologies (navigating the user interface, working with the file and print subsystem, Windows security, and user authentication). *These topics are taught in Microsoft course 6419.*
- Knowledge of Microsoft Exchange Server 2007 and related messaging topics.
- Tenacity – the ability to work through script logic and run-time issues without getting too frustrated.
- Awareness of the potential uses of scripts.

## Course Outline

### Module 1 – Introduction to EMS Scripting

- Introduction to Exchange Management Shell environment
- Running and working with object-oriented scripts
- Configuring the system to support EMS-based scripts

### Module 2 – Leveraging the EMS Environment

- Cmdlet Terminology
- Use Get-Command to retrieve a listing of cmdlets
- Configure EMS “discovery” options
- Learn how to maintain function libraries



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## **Module 3 – Administering Microsoft Exchange Server 2007**

- Understand the role of the Exchange providers in Windows PowerShell
- Configure Exchange 2007 storage settings
- Configure Exchange 2007 recipient settings

## **Module 4 – Creating Exchange Administrative Scripts**

- Understand how to run EMS scripts
- Understand how to break lines
- Understand the use of variables and constants
- Understand the best practices for securing EMS scripts

## **Your Next Step**

After completing this course, consider the following as your next step in your technical learning journey:

- PowerShell Fundamentals for Windows Network Administrators