

Microsoft

MCTS EXAM

70-662

Configuring Microsoft® Exchange Server 2010



Orin Thomas
Ian McLean

SELF-PACED

Training Kit

Exam 70-622: Configuring Microsoft Exchange Server 2010

OBJECTIVE	CHAPTER	LESSON
1. INSTALLING AND CONFIGURING EXCHANGE SERVERS		
1.1 Prepare the infrastructure for Exchange.	1	1
1.2 Install Exchange prerequisites.	1	2
1.3 Install Exchange roles.	1	3
1.4 Create and configure databases.	2	1
1.5 Create and configure address lists.	2	2
2. CONFIGURING EXCHANGE RECIPIENTS AND PUBLIC FOLDERS		
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2.2 Configure RBAC.	6	1
2.3 Create and configure resource mailboxes and shared mailboxes.	3	2
2.4 Create and configure recipients and distribution groups.	4	1
2.5 Create and configure public folders.	4	2
3. CONFIGURING CLIENT ACCESS		
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3.2 Configure Outlook Anywhere and RPC Client Access.	5	2
3.3 Configure federated sharing.	6	2
3.4 Configure Outlook Web App (OWA).	5	3
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4.2 Configure hub transport.	8	1
4.3 Configure Edge transport.	8	2
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5.2 Monitor mail flow.	9	2
5.3 Monitor connectivity.	9	3
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6. IMPLEMENTING HIGH AVAILABILITY AND RECOVERY		
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7. CONFIGURING MESSAGE COMPLIANCE AND SECURITY		
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7.2 Configure compliance.	11	2
7.3 Configure message integrity.	12	1
7.4 Configure anti-virus and anti-spam.	12	2

Exam Objectives The exam objectives listed here are current as of this book's publication date. Exam objectives are subject to change at any time without prior notice and at Microsoft's sole discretion. Please visit the Microsoft Learning Web site for the most current listing of exam objectives: <http://www.microsoft.com/learning/en/us/Exam.aspx?ID=70-662>.

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For my grandmother, Joanie Thomas (1927–2010), who passed away during the writing of this book.

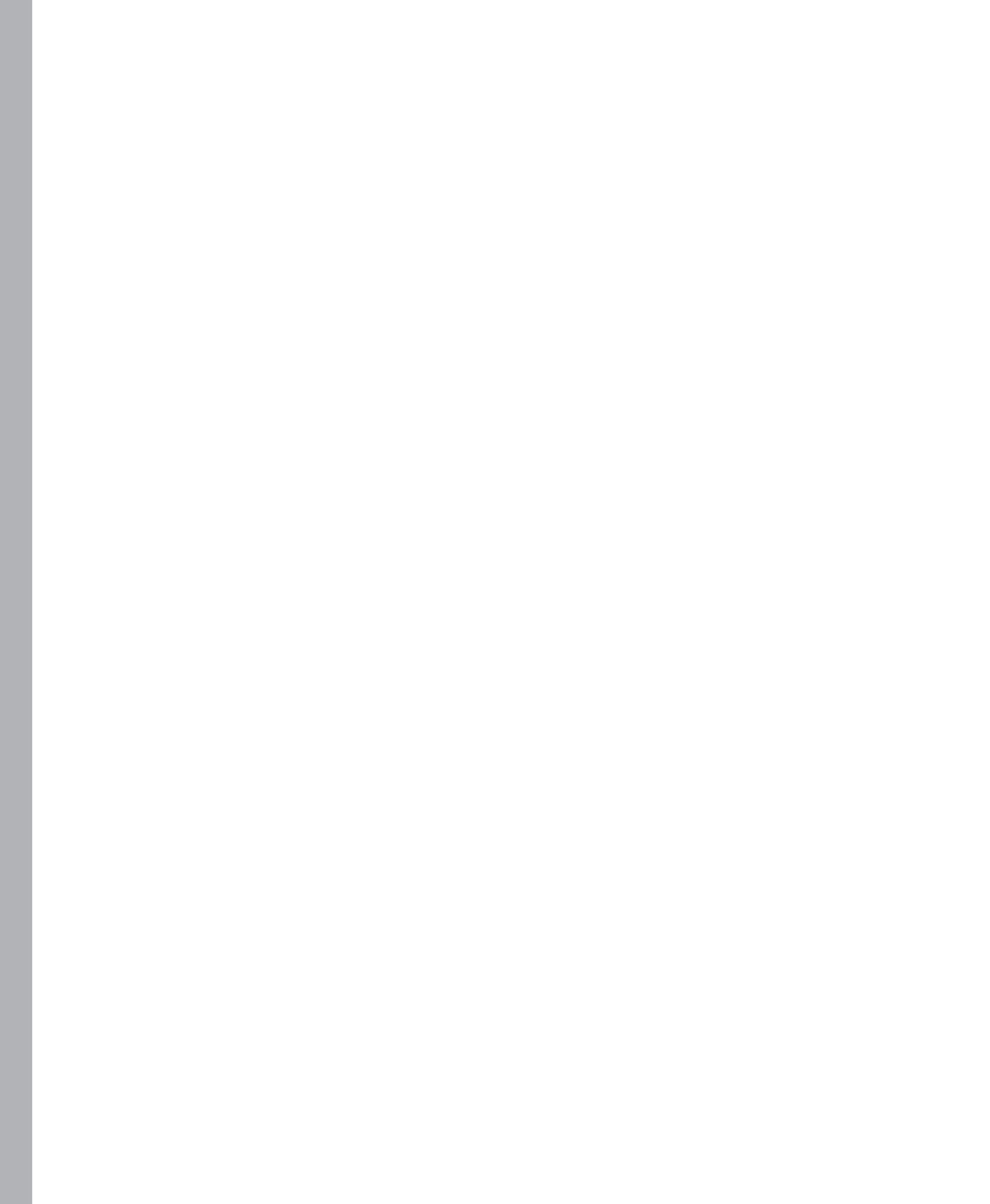
—ORIN THOMAS

This book is dedicated to my parents, Robert and Isabella McLean, on their sixty-fifth wedding anniversary.

—IAN MCLEAN

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Adherence to standards of layout and literacy is vital to the quality of a book and to the reader experience. We are grateful for the considerable contribution made by our copy editor, Bruce Owens.

Few creatures are as antisocial as an author in midbook, and we are both lucky to have understanding and supportive wives. This book must have been particularly stressful to Oksana, who had to cope both with moving house and with a young child, and to Anne, who had problems with her health. Nevertheless, neither wavered in their support. So, many thanks Oksana and Anne, you are an essential and valued part of the team.

Introduction

This training kit is designed for IT professionals who are responsible for managing the Exchange Server 2010 messaging system in enterprise environments. To make best use of this training kit, you should have at least one year of experience configuring and managing Exchange Server 2010 in an organizational environment.

By using this training kit, you will learn how to do the following:

- Install and configure Exchange Server 2010
- Configure Exchange Recipients and Public Folders
- Configure Client Access
- Configure Message Transport
- Monitor and troubleshoot Exchange Server 2010
- Implement High Availability and Recovery
- Configure Message Compliance and Security

Lab Setup Instructions

The exercises in this training kit require a minimum of four servers or virtual machines running Windows Server 2008 R2 Enterprise edition. Instructions for configuring all computers used for the practice labs are provided in the appendix. You need access to either the full or an evaluation version of Exchange Server 2010 to be able to perform the practice exercises in this book.

All computers must be connected to the same network. We recommend that you use an isolated network that is not part of your production network to do the practice exercises. To minimize the time and expense of configuring physical computers, we recommend you use virtual machines. Your virtual machine software must support 64-bit guests.

Hardware Requirements

You can complete almost all practice exercises in this book using virtual machines rather than real hardware. The minimum and recommended hardware requirements for Exchange Server 2010 are listed in Table I-1.

TABLE I-1 Exchange Server 2010 Minimum Hardware Requirements

HARDWARE COMPONENT	REQUIREMENTS
Processor	X64 architecture–based computer with either Intel 64 architecture or AMD processor that supports AMD64 platform
RAM	4 GB (though possible to perform labs on virtual machines with 2 GB RAM)
Disk Space	1.2 GB on the volume where Exchange is installed
Graphics Adapter	800 x 600 pixels or higher

If you intend to implement all virtual machines on the same computer (recommended), a higher specification will enhance your user experience. In particular a computer with 8 GB RAM and 100 GB available disk space can host all the virtual machines specified for all the practice exercises in this book if each virtual machine is configured with 2 GB of RAM. No single lab exercise in this book requires more than three computers to be active at any one time.

Using the CD

The companion CD included with this training kit contains the following:

- **Practice tests** You can reinforce your understanding of how to configure and manage Exchange Server 2010 by using electronic practice tests you customize to meet your needs from the pool of Lesson Review questions in this book. Or you can practice for the 70-662 certification exam by using tests created from a pool of 200 realistic exam questions, which give you many practice exams to ensure that you are prepared.
- **An eBook** An electronic version of this book is included for when you do not want to carry the printed book with you. The eBook can be viewed as a Portable Document Format (PDF) in Adobe Acrobat or Adobe Reader or in XMS Paper Specification (XPS).

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How to Install the Practice Tests

To install the practice test software from the companion CD to your hard disk, do the following:

1. Insert the companion CD into your CD drive and accept the license agreement. A CD menu appears.

NOTE IF THE CD MENU DOES NOT APPEAR

If the CD menu or the license agreement does not appear, AutoRun might be disabled on your computer. Refer to the Readme.txt file on the CD-ROM for alternate installation instructions.

2. Click Practice Tests and follow the instructions on the screen.

How to Use the Practice Tests

To start the practice test software, follow these steps:

1. Click Start, click All Programs, and then select Microsoft Press Training Kit Exam Prep. A window appears that shows all the Microsoft Press training kit exam prep suites installed on your computer.
2. Double-click the lesson review or practice test you want to use.

NOTE LESSON REVIEWS VERSUS PRACTICE TESTS

Select the (70-662) Microsoft Exchange Server 2010, Configuring *lesson review*, to use the questions from the “Lesson Review” sections of this book. Select (70-662) Microsoft Exchange Server 2010, Configuring *practice test*, to use a pool of 200 questions similar to those that appear on the 70-662 certification exam.

Lesson Review Options

When you start a lesson review, the Custom Mode dialog box appears so that you can configure your test. You can click OK to accept the defaults, or you can customize the number of questions you want, how the practice test software works, which exam objectives you want the questions to relate to, and whether you want your lesson review to be timed. If you are retaking a test, you can select whether you want to see all the questions again or only the questions you missed or did not answer.

After you click OK, your lesson review starts.

- To take the test, answer the questions and use the Next and Previous buttons to move from question to question.
- After you answer an individual question, if you want to see which answers are correct—along with an explanation of each correct answer—click Explanation.
- If you prefer to wait until the end of the test to see how you did, answer all the questions and then click Score Test. You will see a summary of the exam objectives you chose and the percentage of questions you got right overall and per objective. You can print a copy of your test, review your answers, or retake the test.

Practice Test Options

When you start a practice test, you choose whether to take the test in Certification Mode, Study Mode, or Custom Mode:

- **Certification Mode** Closely resembles the experience of taking a certification exam. The test has a set number of questions. It is timed, and you cannot pause and restart the timer.
- **Study Mode** Creates an untimed test during which you can review the correct answers and the explanations after you answer each question.
- **Custom Mode** Gives you full control over the test options so that you can customize them as you like.

In all modes, the user interface when you are taking the test is basically the same but with different options enabled or disabled, depending on the mode. The main options are discussed in the previous section, “Lesson Review Options.”

When you review your answer to an individual practice test question, a “References” section is provided that lists where in the training kit you can find the information that relates to that question and provides links to other sources of information. After you click Test Results to score your entire practice test, you can click the Learning Plan tab to see a list of references for every objective.

How to Uninstall the Practice Tests

To uninstall the practice test software for a training kit, use the Program And Features option in Windows Control Panel.

Microsoft Certified Professional Program

The Microsoft certifications provide the best method to prove your command of current Microsoft products and technologies. The exams and corresponding certifications are developed to validate your mastery of critical competencies as you design and develop—or implement and support—solutions with Microsoft products and technologies. Computer professionals who become Microsoft certified are recognized as experts and are sought after industry-wide. Certification brings a variety of benefits to the individual and to employers and organizations.

MORE INFO ALL THE MICROSOFT CERTIFICATIONS

For a full list of Microsoft certifications, go to <http://www.microsoft.com/learning/mcp/default.asp>.

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Exchange Mailboxes

In this chapter, you will learn how to configure new and existing users with mailboxes, modify the quotas applied to those mailboxes, move mailboxes between new servers or existing, and configure mailboxes so that other users are able to send messages on the original mailbox owner's behalf and other users are granted access to the content of those mailboxes. You will also learn about the creation of resource mailboxes, linked mailboxes, and shared mailboxes. This includes the configuration of automatic resource mailbox booking policies, which allows the resource represented by the mailbox to be automatically reserved on a first-come, first-serve basis or subject to the approval of an authorized user.

Exam objectives in this chapter:

- Create and configure mailboxes.
- Create and configure resource mailboxes and shared mailboxes.

Lessons in this chapter:

- Lesson 1: Mailbox Configuration **95**
- Lesson 2: Resources and Shared Mailboxes **118**

Before You Begin

In order to complete the exercises in the practice sessions in this chapter, you need to have done the following:

- Installed and configured an Exchange Server 2010 organization as outlined in the Appendix.



REAL WORLD

Orin Thomas

One of the most common complaints that I hear from Exchange administrators is about something that is only indirectly related to Exchange: the PST file. The first gripe is that the files are difficult to back up yet easily become corrupted. The next is an increasing awareness of the legal ramifications of allowing sensitive messages to be stored in a place that is not easily searchable. Extensive use of PST files greatly complicates the process of legal discovery. Not only must Exchange Mailboxes be checked for content that might be subject to the discovery request, but PST files must be separately scanned for similar content. In some cases, it can take longer to scan the PST files of a small number of users than it takes to scan every mailbox in the entire Exchange organization! This is why archive mailboxes are a popular feature of Exchange 2010. Archive mailboxes are additional mailboxes that allow users to store messages for historical purposes. Rather than store data that impacts on their quota in their mailbox, they can move important data that they want to keep to their archive mailbox. These messages can be stored and backed up within the Exchange organization, and when archive mailboxes are deployed correctly, there is no longer a need for PST files. They are not subject to corruption and require no special steps to back up. That they are searchable and stored on mailbox servers makes them much simpler targets for searching when complying with legal requests. Although archive mailboxes do require Enterprise Edition CALs, once decision makers in an organization understand the benefits of archive mailboxes, the days of having to deal with PST files in your organization are numbered.

Lesson 1: Mailbox Configuration

In this lesson, you will learn how to configure user mailboxes and linked mailboxes. User mailboxes are message storage containers associated with user accounts in the forest in which you have deployed Exchange Server 2010. Linked mailboxes are mailboxes that are connected to accounts hosted in forests other than the one in which you have deployed Exchange Server 2010. You will learn how to create mailboxes, apply quotas to them, move them to different mailbox servers without disrupting user access, delegate Full Control and Send As permissions, and enable or disable specific Client Access protocols.

After this lesson, you will be able to:

- Create mailboxes.
- Configure mailbox properties, including setting quotas, Client Access protocols, and permissions.
- Move mailboxes between mailbox servers.
- Delete and disable mailboxes.

Estimated lesson time: 40 minutes

Creating Mailboxes

You can create new mailboxes in two ways. You can use the New Mailbox Wizard from Exchange Management Console (EMC) or use the *New-Mailbox* cmdlet from Exchange Management Shell (EMS). To run the New-Mailbox Wizard, perform the following general steps:

1. Open the EMC and navigate to the Mailbox node, which is located under the Recipients node.
2. In the Actions pane, click on the New Mailbox item. This will bring up the first page of the New Mailbox Wizard, shown in Figure 3-1. Choose the User Mailbox option and then click Next.
3. On the next page, you choose between creating a new user account and assigning that account a mailbox or creating a mailbox and assigning that mailbox to an existing user. If you choose to create a mailbox for an existing user, a query will be performed to locate user accounts that are not currently connected to mailboxes. You can select multiple Active Directory users using this dialog box as long as those users do not have Exchange mailboxes.

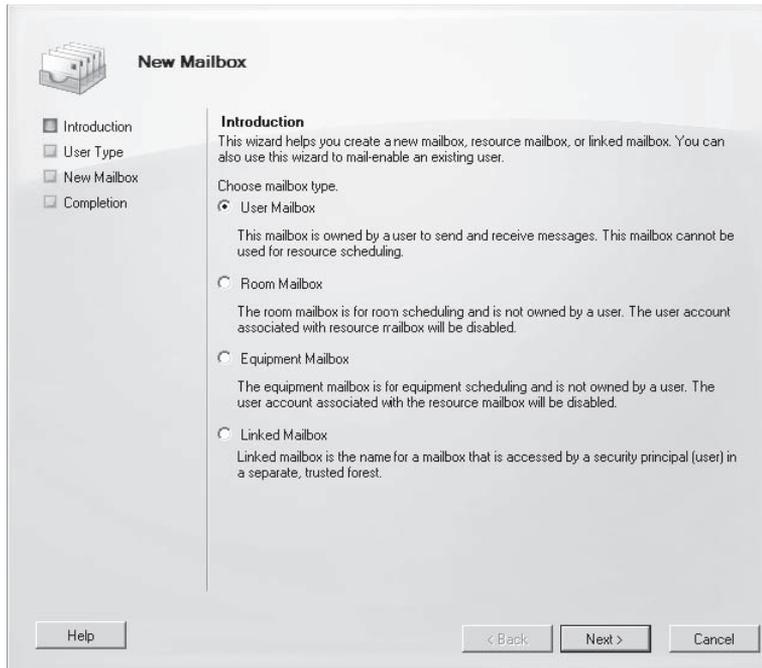


FIGURE 3-1 New mailbox dialog box

4. If you have chosen to create new Exchange mailboxes for existing Active Directory accounts, the next page allows you to have Exchange automatically select a mailbox database to host the mailbox, a managed folder mailbox policy, and an ActiveSync mailbox policy. It is also possible to specify these options should the automatically selected options not be appropriate. In general, you should place a user mailbox in a mailbox database hosted on a mailbox server in the site that the user most commonly accesses Exchange.
5. Once you have either accepted the default mailbox database and policies or specified alternates, the next page of the New Mailbox Wizard allows you to click New, which creates the mailbox. Once this step has completed, you can click Finish to close the wizard, as shown in Figure 3-2.

If you choose to create a new user account during mailbox creation, the wizard will prompt you for information similar to that required when you create a user account using the Active Directory Users and Computers console, including the ability to force users to change passwords when they initially log on with this newly created account. As Figure 3-3 shows, you can choose which OU to place the account in or have the account placed in the default Users container. Once this information has been provided, the New Mailbox Wizard functions similar to the way it functions when you are creating a mailbox for an existing user account. You will create a new user and mailbox as well as a mailbox for an existing user in the practice exercise at the end of this lesson.

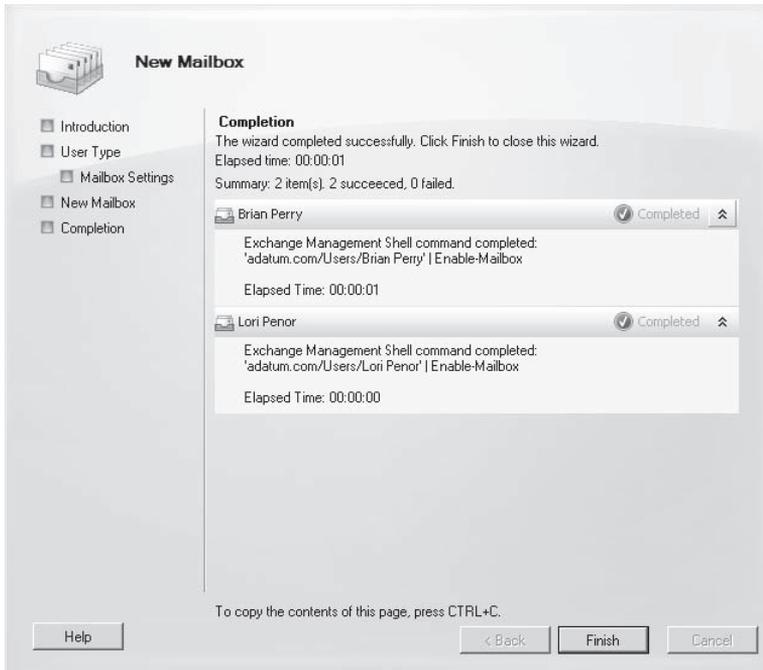


FIGURE 3-2 Complete the New Mailbox Wizard

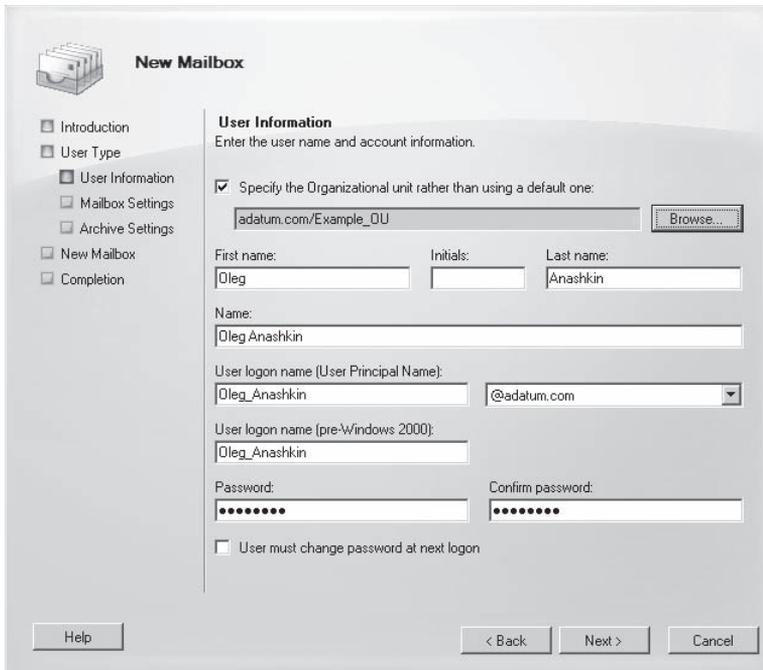


FIGURE 3-3 Provide information for new user account

To create a new mailbox and user account from the EMS, use the *New-Mailbox* cmdlet. For example, to create a new user account and mailbox for a user named Erik Andersen, issue the following command:

```
New-Mailbox -Name 'Erik Andersen' -Alias 'Erik_Andersen' -UserPrincipalName 'Erik_Andersen@adatum.com' -SamAccountName 'Erik_Andersen' -FirstName 'Erik' -LastName 'Andersen'
```

When you run this command, you will be prompted to enter a password for the user account.

MORE INFO CREATING NEW MAILBOXES AND USERS

For more information on creating new user mailboxes using the EMC or EMS, consult the following article on TechNet: <http://technet.microsoft.com/en-us/library/bb123809.aspx>.

To add an Exchange mailbox to an existing user account from EMS, use the *Enable-Mailbox* cmdlet. For example, to add a new Exchange mailbox to a user named Toni Poe whose existing user account resides in the Users container of the adatum.com domain, issue the following command:

```
Enable-Mailbox 'Adatum.com/Users/Toni Poe'
```

MORE INFO CREATE MAILBOXES FOR EXISTING USERS

For more information on creating Exchange mailboxes for existing users, consult the following article on TechNet: <http://technet.microsoft.com/en-us/library/aa998319.aspx>.

MORE INFO RECIPIENT PROVISIONING PERMISSIONS

To learn more about the permissions required to perform specific recipient management tasks, consult the Recipient Provisioning Permissions section of the following TechNet website: <http://technet.microsoft.com/en-us/library/dd638132.aspx>.

Linked Mailboxes

A linked mailbox is one that is associated with an external account, such as one located in a different Active Directory forest from the one in which you deployed Exchange. As mailboxes must be associated with accounts that are in the same forest as Exchange and linked mailboxes involve accounts in different forests, when you create a linked mailbox, Exchange creates a disabled user account in the local forest that is used as a stand-in for the foreign account.

To create a linked mailbox using the EMC, perform the following general steps:

1. Open the EMC and navigate to the Mailbox node, which is located under the Recipients node.
2. In the Actions pane, click on the New Mailbox item. This will bring up the first page of the New Mailbox Wizard. Choose the Linked Mailbox.

3. On the User Type page, click New User. This will allow you to create the stand-in disabled user account in the local forest.
4. On the User Information page, specify appropriate user information and a password that complies with your organization's password policies. This password, rather than the password of the user account in the account's native forest, allows user access to the mailbox.
5. On the Master Account page, click Browse to select the trusted forest or domain that hosts the account that the mailbox will be linked to. You can also specify a domain controller in the trusted forest or domain to query. Finally, click Browse to select the specific account with which the linked mailbox will be associated. Figure 3-4 shows a new linked mailbox being associated with the Dan_Hough account in the Fabrikam domain.

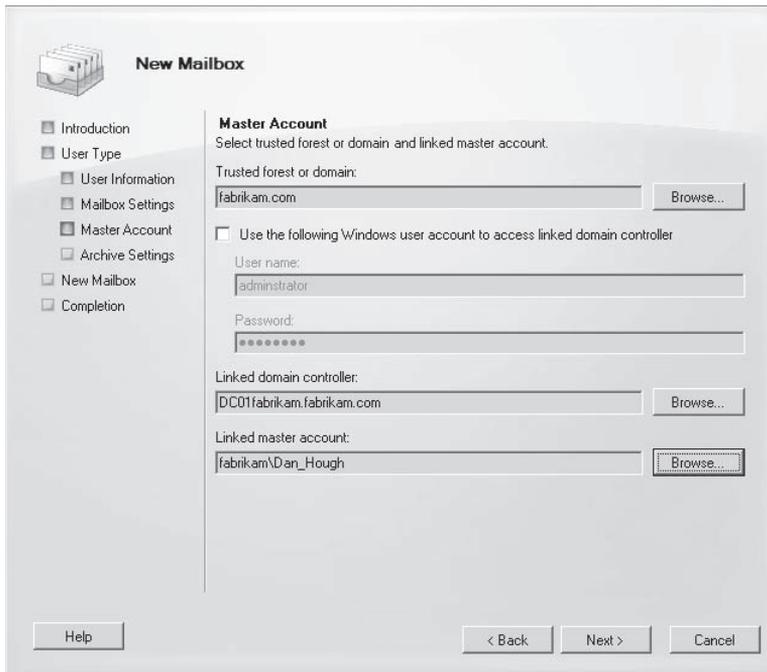


FIGURE 3-4 Configure master account for linked mailbox

6. If an Exchange Enterprise CAL is available, you will be able to associate an archive mailbox to the linked mailbox. On the final page, you create the mailbox.

You create linked mailboxes in the EMS using the *New-Mailbox* cmdlet. For example, you could use the following command to create a linked mailbox on database MBX-DB-1 for Josh Pollock in the adatum.com domain when his actual account resides in the trusted Fabrikam forest:

```
New-Mailbox -Database "MBX-DB-1" -Name "Josh Pollock" -LinkedDomainController
"DC01fabrikam.fabrikam.com" -LinkedMasterAccount Fabrikam\josh_pollock
-OrganizationalUnit Users -UserPrincipalName josh_pollock@adatum.com
```

MORE INFO LINKED MAILBOXES

For more information about creating linked mailboxes, consult the following TechNet article: <http://technet.microsoft.com/en-us/library/bb123524.aspx>.

Configuring Mailbox Properties

When you create a user mailbox using the EMC, it is not possible to specify settings such as mailbox quotas and proxy addresses that will be applied to or associated with the mailbox. You can configure these options after mailbox creation by editing mailbox properties using the EMC or by setting them through the *Set-Mailbox* cmdlet in the EMS.

The main difficulty that most administrators encounter when modifying mailbox properties through the EMC is determining which tab of the properties dialog box, shown in Figure 3-5, holds the setting that they wish to modify. In the following pages, you will learn how to configure specific mailbox properties, such as quota, message size, and mailbox delegation, through both the EMC and the EMS.

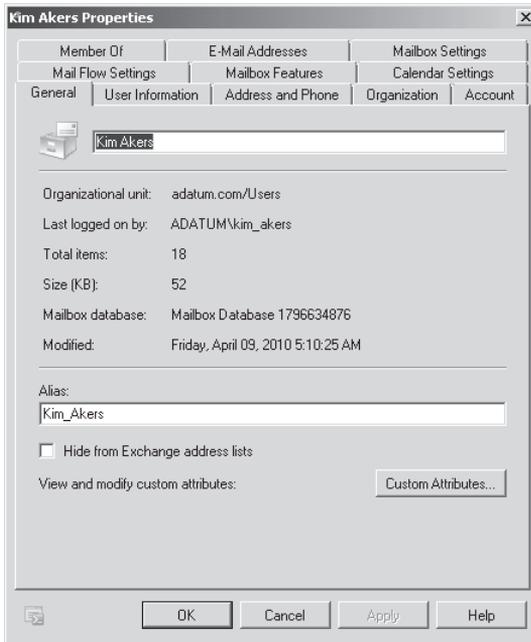


FIGURE 3-5 General tab of Mailbox properties

MORE INFO CONFIGURE MAILBOX PROPERTIES

To learn more about configuring mailbox properties, consult the following TechNet link: <http://technet.microsoft.com/en-us/library/bb124255.aspx>.

Configuring Mailbox Quotas and Deleted Item Retention

Although mailboxes inherit quota and deleted item retention settings from the mailbox database that hosts them, it is possible, using the EMS and EMC, to configure quota and deleted item retention settings on a per-mailbox basis. Settings applied at the mailbox level override settings applied at the mailbox database level. This allows you, as an Exchange administrator, to make exceptions for individual users should their needs reasonably diverge from everyone else in the organization without having to create a new mailbox database to cater to these specific needs.

The settings that you can configure for quota and deleted item retention are as follows:

- **Issue Warning At (KB)** This quota value determines the threshold at which a warning will be automatically be emailed to the user.
- **Prohibit Send At (KB)** This quota value determines the threshold at which a user will be prohibited from sending new messages. Outlook and Outlook Web App (OWA) users will be presented with a message explaining why they have been blocked when this threshold is reached.
- **Prohibit Send And Receive At (KB)** This quota value determines when a user will be prohibited from sending and receiving messages. Any messages that are sent to a mailbox that has exceeded this threshold will be returned to the sender with an error message informing them that the destination mailbox has exceeded its storage quota.
- **Keep Deleted Items For (Days)** This value determines the period where it is possible to recover a deleted mailbox item without performing a restore from backup. The default value is 14 days.
- **Do Not Permanently Delete Items Until You Back Up The Database** When this option is set, deleted items are not removed until a database backup occurs, even if the deleted item retention period has expired.

You should note that while it is possible to configure mailbox item retention on a per-mailbox level, it is not possible to configure disconnected mailbox retention settings at this level. You will learn more about disconnected mailbox retention later in this lesson. To configure individual mailbox quotas using the EMC, perform the following general steps:

1. From the Recipients Configuration\Mailbox node, edit mailbox properties and navigate to the Mailbox Settings tab.
2. Click Storage Quotas and then click the Properties button.
3. Remove the check box next to Use Mailbox Database Defaults in the Storage Quotas and Deleted item retention areas shown in Figure 3-6. If you want to use the database defaults for one of these settings but not the other, do not remove the check box for the setting you want inherited from database properties. If you remove the Use Mailbox Database Defaults check box but do not configure a setting for each of the quota entries, Exchange assigns the user an unlimited quota for that entry.

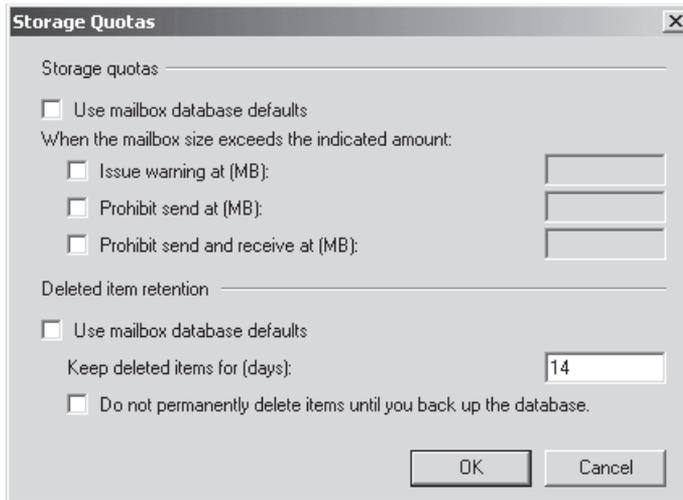


FIGURE 3-6 Configure storage quotas

To configure storage quota settings on a per-mailbox level from the EMS, use the *Set-Mailbox* command. For example, to configure Rich Haddock's mailbox so that it had a warning quota of 200 MB, a prohibit send quota of 250 MB, and a prohibit send and receive quota of 280 MB, issue the following command:

```
Set-mailbox rich_haddock -IssueWarningQuota 209715200 -ProhibitSendQuota 262144000  
-ProhibitSendReceiveQuota 293601280 -RetainDeletedItemsFor 21.00:00:00  
-UseDatabaseQuotaDefaults $false -UseDatabaseRetentionDefaults $false
```

MORE INFO CONFIGURE MAILBOX QUOTAS

For more information on configuring mailbox quotas, consult the following TechNet article: <http://technet.microsoft.com/en-us/library/aa998353.aspx>.

Message Size Restrictions

You can configure message size restrictions to limit the size of messages that a user associated with a mailbox can send and/or receive. For example, you could configure message size restrictions so that a user mailbox is able to accept only messages under 10 MB in size but the same user is able to send messages over 20 MB in size. Exchange calculates message size on the basis of the sum of the message body and attachments, though in general attachment size is significantly greater than message body size. To configure message size restrictions from the EMC, perform the following general steps:

1. From mailbox properties, select the Mail Flow Settings tab.
2. Click on Message Size Restrictions in the list and then click on the Properties button.
3. Configure the maximum sending and receiving message size in KB and then click OK.

To configure message size restrictions from the EMS, use the *Set-Mailbox* cmdlet with the *MaxSendSize* and *MaxReceiveSize* parameters. For example, to configure Kim Akers's mailbox so that she can send messages that are a maximum of 20 MB in size and receive messages that are a maximum of 15 MB in size, use the following command:

```
Set-Mailbox -Identity "Kim_Akers" -MaxSendSize 20mb -MaxReceiveSize 15mb
```

MORE INFO CONFIGURING MESSAGE SIZE

For more information about configuring message size, consult the following TechNet link:
<http://technet.microsoft.com/en-us/library/bb124708.aspx>.

Additional Email Addresses

You can configure Exchange mailboxes to accept incoming messages on a variety of email addresses. For example, you might want to assign the *information@adatum.com* address to Kim Akers's mailbox, which is already addressable with the *kim_akers@adatum.com* email address. Additional email addresses assigned to Exchange mailboxes are sometimes known as proxy addresses.

To assign a proxy address to a mailbox using the EMC, perform the following general steps:

1. From mailbox properties, select the E-Mail Addresses tab.
2. Click Add. In the address dialog box, enter the new email address and click OK.
The new email address will be shown in the list of email addresses, as Figure 3-7 shows.

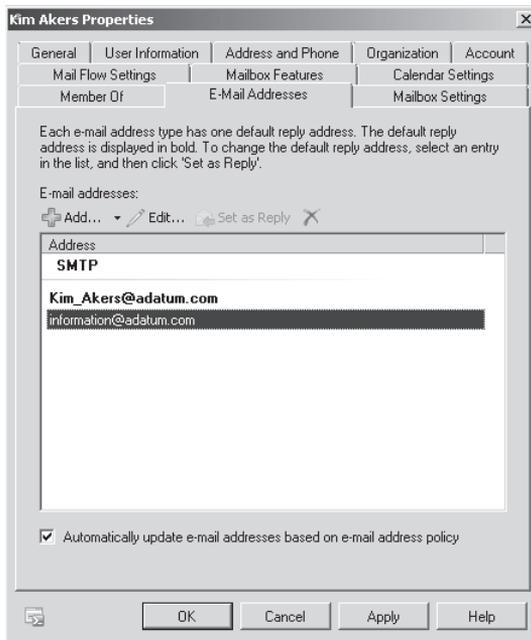


FIGURE 3-7 Add proxy address

Use the *Set-Mailbox* cmdlet to add proxy addresses to an existing mailbox using the EMS. When you use the *Set-Mailbox* command to add an address, the existing address will be removed unless an email address policy is in place. You can add additional email addresses using multivalued properties. For example, to add the sales@adatum.com proxy address to Brian Perry's mailbox, use the following command:

```
$Temp = Get-Mailbox -Identity "Brian Perry"  
$Temp.EmailAddresses += ("smtp:sales@adatum.com")  
Set-Mailbox -Identity "Brian Perry" -EmailAddresses $Temp.EmailAddresses
```

MORE INFO ADDING EMAIL ADDRESSES TO MAILBOXES

For more information about adding email addresses to existing user mailboxes, consult the following link: <http://technet.microsoft.com/en-us/library/bb123794.aspx>.

Configuring Mailbox Client Access Protocols

Mailbox features, such as Outlook Web App, Exchange ActiveSync, POP3, IMAP4, and MAPI Access, can be enabled or disabled on the Mailbox Features tab of a mailbox's properties, as shown in Figure 3-8. To enable or disable a feature, select the feature and then click Enable or Disable as appropriate.

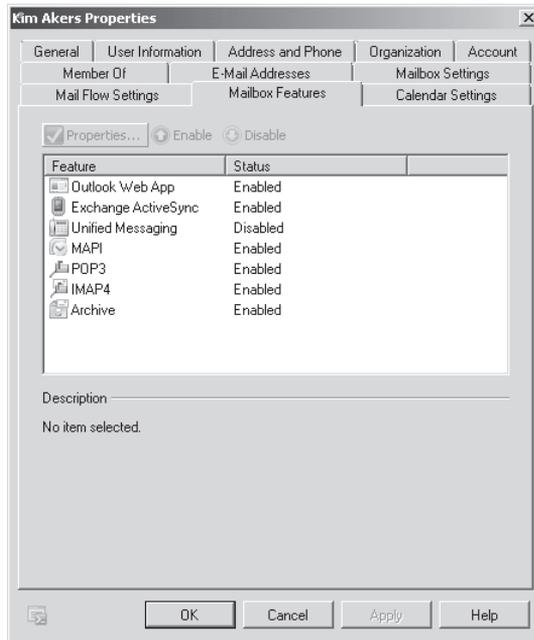


FIGURE 3-8 Mailbox features

You can configure which features are enabled or disabled using the *Set-CASMailbox* cmdlet and the *ImapEnabled*, *MAPIEnabled*, *OWAEnabled*, and *POPEEnabled* parameters. For example, to disable POP3, IMAP4, and OWA access to the Don Hall mailbox, issue the following command:

```
Set-CASMailbox "Don Hall" -POPEEnabled $false -ImapEnabled $false -OWAEnabled $false
```

MORE INFO ENABLING AND DISABLING CLIENT ACCESS FOR MAILBOXES

To learn more about how to enable or disable certain client access features on a per-mailbox basis, consult the following link on TechNet: <http://technet.microsoft.com/en-us/library/bb125264.aspx>.

Mailbox Anti-Spam Functionality

Spam confidence level (SCL) is a figure calculated by Exchange that assigns a numeric value to the likelihood that a message contains unsolicited commercial email, also known as spam. A message assigned a value of 0 has a low probability of being spam, and a message assigned an SCL of 9 has a high probability of being spam. To configure anti-spam functionality for mailboxes using the EMS, use the *Set-Mailbox* cmdlet with the following parameters:

- **AntiSpamBypassEnabled** This parameter specifies whether the mailbox skips anti-spam checks. Can be set to \$true or \$false.
- **RequireSenderAuthenticationEnabled** Determines whether sender authentication is required. Can be set to \$true or \$false.
- **SCLDeleteEnabled** Determines whether messages that meet the configured *SCLDeleteThreshold* are deleted. Can be set to \$true, \$false, or \$null.
- **SCLDeleteThreshold** A value between 0 and 9 at which a message is deleted if the *SCLDeleteEnabled* parameter is set to \$true.
- **SCLJunkEnabled** Determines whether messages that meet the configured *SCLJunkThreshold* are moved to the Junk E-Mail folder. Can be set to \$true, \$false, or \$null.
- **SCLJunkThreshold** Determines the SCL threshold value, between 0 and 9, at which messages will be moved into the Junk E-Mail folder if the *SCLJunkEnabled* parameter is set to \$true.
- **SCLQuarantineEnabled** Determines whether messages that meet the configured *SCLQuarantineThreshold* are placed in quarantine for later review. Can be set to \$true, \$false, or \$null.
- **SCLQuarantineThreshold** Determines the SCL threshold value, between 0 and 9, at which messages will be quarantined if the *SCLQuarantineEnabled* parameter is set to \$true.
- **SCLRejectEnabled** Determines whether messages that meet the configured *SCLRejectThreshold* are rejected. Can be set to \$true, \$false, or \$null.
- **SCLRejectThreshold** Determines the SCL threshold value, between 0 and 9, at which messages will be rejected if the *SCLRejectEnabled* parameter is set to \$true.

You will learn how configuring anti-spam functionality at the mailbox level impacts anti-spam functionality at other levels of Exchange and learn how Reject, Quarantine, and Junk thresholds work in Chapter 12, "Message Integrity, Antivirus, and Anti-Spam."

MORE INFO MAILBOX ANTI-SPAM FEATURES

For more information on configuring Exchange 2010 anti-spam features at the mailbox level, consult the following TechNet link: <http://technet.microsoft.com/en-us/library/bb123559.aspx>.

Mailbox Delegation

You can configure permissions so that it is possible for one user to send email messages on behalf of another user. You can also configure permissions so that one user has the ability to view the contents of another user's mailbox. This may be necessary for a variety of reasons, such as an administrative assistant needing to view the contents of a manager's mailbox or allowing that assistant to send messages on that manager's behalf. It is possible to configure the following permissions on Exchange mailboxes:

- **Send-As Permission** When a user has been granted the Send As permission for another mailbox, the user is able to send mail as that user but is not able to receive mail as that user. The user is also unable to view that user's mailbox. For example, if Rich Haddock is granted the Send As permission on Kim Akers's mailbox, he is able to send messages to other recipients with Kim Akers's identity.
- **Full Access Permission** When a user has been granted the Full Access permission for another mailbox, the user is able to view the contents of that mailbox but is not able to send messages as that user.

To configure Send As permission from the EMC, perform the following steps:

1. In Mailbox\Recipient Configuration node, select the mailbox that you want to delegate the Send As permission on.
2. In the Actions pane, click on the Manage Send As Permission item. This will open the Manage Send As permission dialog box, shown in Figure 3-9. Click Add and then specify the user to which you wish to assign this permission.

To configure the Send As permission from the EMS, use the *Add-ADPermission cmdlet* with the *ExtendedRights* parameter. For example, to configure Don Hall's mailbox so that Kim Akers has the Send As permission on the mailbox, use the following command:

```
Add-ADPermission "Don Hall" -User "adatum\kim_akers" -Extendedrights "Send As"
```

To configure the Full Access permission from the EMC, perform the following steps:

1. In the Mailbox\Recipient Configuration node, select the mailbox on which you want to delegate the Full Access permission.
2. In the Actions pane, click on the Manage Full Access Permission item.
3. In the Manage Full Access Permission dialog box, shown in Figure 3-10, click Add. Select the user that you wish to delegate the Full Access permission to, click OK, and then click Manage to close the dialog box.

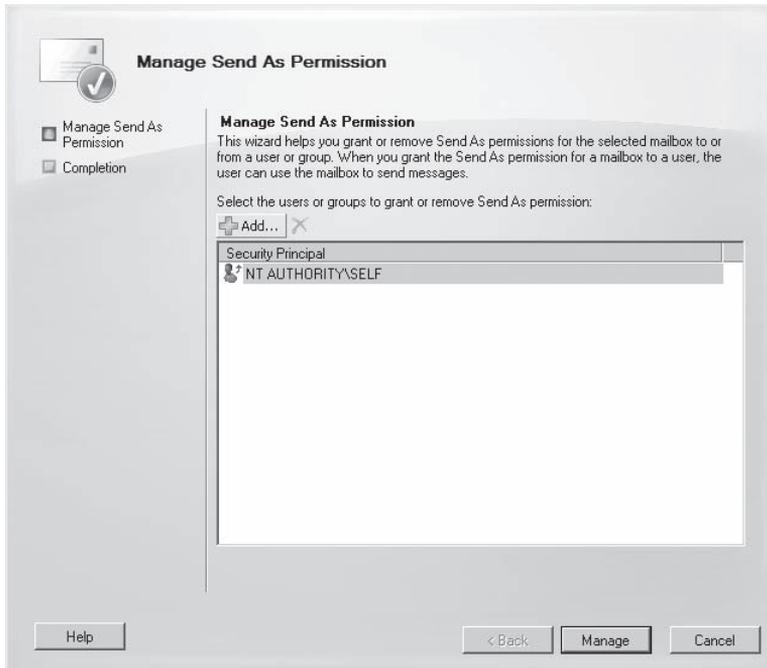


FIGURE 3-9 Manage Send As Permission

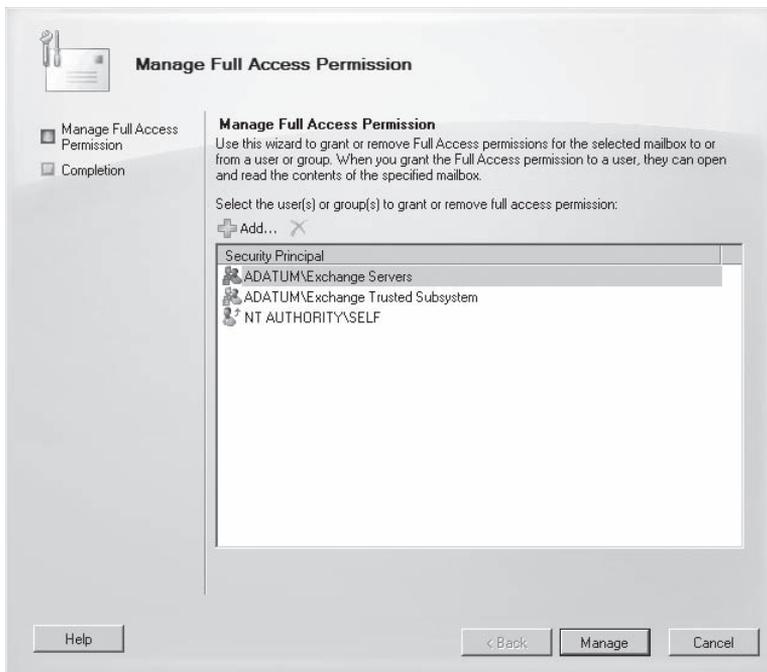


FIGURE 3-10 Manage Full Access Permission

To delegate the Full Access permission on a mailbox using the EMS, use the *Add-MailboxPermission* cmdlet with the *AccessRights* parameter. For example, to grant Kim Akers the Full Access permission on Oleg Anashkin's mailbox, issue the following command:

```
Add-MailboxPermission -Identity "Oleg Anashkin" -User "adatum\Kim_Akers" -AccessRights FullAccess -InheritanceType all
```

MORE INFO FULL ACCESS AND SEND AS PERMISSIONS

To learn more about Full Access and Send As permissions for mailboxes, consult the following TechNet article: <http://technet.microsoft.com/en-us/library/aa997244.aspx>.

Forwarding and Out-of-Office Replies

Forwarding allows all messages that are sent to one Exchange mailbox to be forwarded to another address. This address can be another mailbox or contact within the Exchange organization. When you configure forwarding, you can choose to forward messages and not have them delivered to the original mailbox or to have messages both delivered to the original destination mailbox as well as forwarded to the configured address.

To configure a forwarding address using the EMC, perform the following general steps:

1. Select the mailbox in the list on the Recipient Configuration\Mailbox node and then click Properties in the Action pane.
2. On the Mail Flow Settings tab, select Delivery Options and then click Properties. This will bring up the Delivery Options dialog box.
3. In the Delivery Options dialog box, enable the Forward To: check box and then click Browse. Select the destination address and then click OK. Select the Deliver Message To Both Forwarding Address And Mailbox option if required, as shown in Figure 3-11.

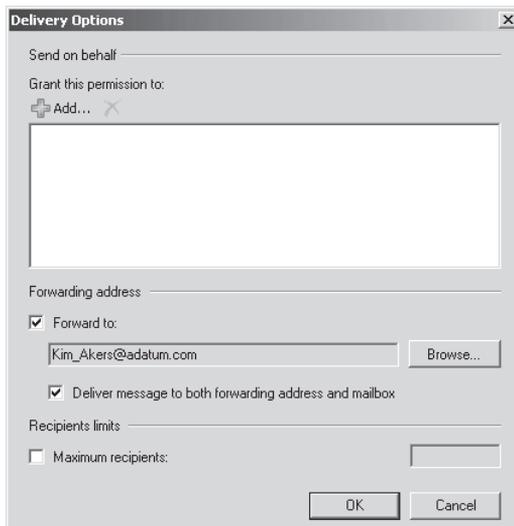


FIGURE 3-11 Forwarding address

To configure forwarding from the EMS, use the *Set-Mailbox* cmdlet with the *ForwardingAddress* and *DeliverToMailboxAndForward* parameters. For example, to configure Don Hall's mailbox so that all messages sent to it are both forwarded to Kim Akers's mailbox and delivered to Don Hall's mailbox, issue the following command:

```
Set-Mailbox -Identity "Don Hall" -ForwardingAddress "kim_akers@adatum.com"  
-DeliverToMailboxAndForward $true
```

MORE INFO MAIL FORWARDING

For more information about configuring mail forwarding for a mailbox, consult the following TechNet article: <http://technet.microsoft.com/en-us/library/dd351134.aspx>.

You can use the *Set-Mailbox* cmdlet with the *ExternalOofOptions* parameter to specify what type of out-of-office reply can be set by a particular user mailbox. The values that you can set for the *ExternalOofOptions* parameter are *External* and *InternalOnly*. When you set the *External* option, the mailbox user is able to set an out-of-office message that will be forwarded to both *Internal* and *External* recipients. When you set the *InternalOnly* option, out-of-office messages will be sent only to internal recipients and will not be sent to external recipients. To configure Kim Akers's mailbox so that out-of-office messages are limited to *Internal* recipients only, use the following EMS command:

```
Set-Mailbox "Kim Akers" -ExternalOofOptions InternalOnly
```



Quick Check

- You want to allow a manager's administrative assistant the ability to review the content of that manager's mailbox but not the ability to send messages as the manager. What type of permission should you grant?

Quick Check Answer

- You should grant the *Full Access* permission. This permission allows full access to the mailbox on which the permission has been granted but does not grant the right to send mail as the mailbox on which the permission has been granted.

Moving Mailboxes

Exchange Server 2010 makes moving mailboxes between mailbox databases easier, as it is now possible to allow users to retain access to their mailbox during a move, meaning that Exchange Administrators do not have to schedule mailbox moves during periods where users would not require access to their mailboxes. As fond as administrators are of scheduling maintenance tasks to occur at 3:00 AM, such tasks are much easier to monitor when they occur during office hours.

Using the EMS *New-MoveRequest* cmdlet and the EMC move mailbox functionality, you can perform an online mailbox move to a different mailbox database on the same server, a mailbox database on a different server, a host mailbox server in a different domain or site, and even a host mailbox server in another forest. The cmdlet used to move mailboxes was deliberately given a different name for Exchange 2010, and Exchange 2010 does not support the *Move-Mailbox* cmdlet, which was present in Exchange 2007.

Take into account the following when preparing to move mailboxes:

- You cannot use Exchange System Manager to move mailboxes from Exchange Server 2003 hosts to Exchange Server 2010 mailbox servers.
- You cannot use Active Directory Users and Computers to move mailboxes from Exchange Server 2003 to Exchange Server 2010 mailbox servers.
- When a mailbox is moved, users are unable to access message tracking information.
- You cannot use the *Move-Mailbox* cmdlet on a server running Exchange Server 2007 to move a mailbox to Exchange Server 2010. You must use *New-MoveRequest* on the server running Exchange 2010.
- Online moves are possible between Exchange 2010 databases and between Exchange 2007 Service Pack2 and Exchange 2010 databases.
- Items in the recoverable items folder are preserved during mailbox moves.
- You can perform online mailbox moves across forests. You can perform online mailbox moves between servers in the same forest or mailbox databases hosted on the same server.
- During an online move, a user is locked out for only a short period at the end of the process, when final synchronization occurs.
- It is possible to move mailboxes from Exchange Server 2010 to Exchange 2007 Service Pack 1 and RTM as well as Exchange Server 2003, but these moves will occur offline and must be managed using EMS cmdlets on a server running Exchange Server 2010.
- It is not possible to perform a mailbox move from Exchange 2007 Service Pack 1 to Exchange 2010. The Exchange 2007 server must be upgraded to Service Pack 2 before a move is possible.
- Offline moves from Exchange 2003 SP2 to Exchange Server 2010 are supported but require the use of the EMS on Exchange Server 2010. It is not possible to move mailboxes from servers running Exchange 2003 Service Pack 1 or earlier.
- If you perform a move request using the *New-MoveRequest* cmdlet, you should run the *Remove-MoveRequest* cmdlet once the move successfully completes. It is not possible to move the mailbox again until the *Remove-MoveRequest* cmdlet is executed against a moved mailbox. When you perform a move through the EMC, this process occurs automatically.
- When performing a cross-forest move, the target Exchange 2010 forest must contain a valid mail-enabled user account that has been prepared for the move.

MORE INFO PREPARE FOR CROSS-FOREST MOVES

To learn more about the preparation steps required to perform a cross-forest mailbox move, consult the following TechNet document: <http://technet.microsoft.com/en-us/library/ee633491.aspx>.

MORE INFO UNDERSTANDING MOVE REQUESTS

For more information about understanding move requests, consult the following TechNet link: <http://technet.microsoft.com/en-us/library/dd298174.aspx>.



Quick Check

- Under what conditions can you perform an online mailbox move?

Quick Check Answer

- You can perform an online mailbox move only between two mailbox servers that are running Exchange Server 2010 or a server running Exchange Server 2007 Service Pack 2 and Exchange Server 2010.

Disabling, Removing, and Reconnecting Mailboxes

The difference between removing a mailbox and disabling a mailbox is as follows:

- Disabling a mailbox disconnects the mailbox from the user account, but the user account remains in Active Directory. You can disable a mailbox by selecting the mailbox in the Recipient Configuration\Mailbox node of EMC and then clicking on Disable in the Actions pane. You can use the *Disable-Mailbox* cmdlet to disable a mailbox.
- Removing a mailbox disconnects that mailbox from the user account that it is associated with and removes this user account from Active Directory. You can remove a mailbox by selecting the mailbox in the Recipient Configuration\Mailbox node of the EMC and then clicking Remove in the Actions pane. You can use the *Remove-Mailbox* cmdlet to remove a mailbox.

When you disable or remove a mailbox, Exchange retains the mailbox in a disconnected state for the number of days specified in the mailbox retention policy. By default, Exchange retains disconnected mailboxes for 30 days. During this deleted mailbox retention duration, it is possible to connect the disconnected mailbox to an existing Active Directory user account as long as that account has no current mailbox connected.

To reconnect a mailbox, perform the following steps:

1. Open the EMC and navigate to the Disconnected Mailbox node located under the Recipient Configuration node.
2. In the Actions pane, click Connect To Server. In the Connect To Server dialog box, click Browse. In the Select Exchange Server dialog box, select the Exchange Mailbox Server that hosted the original mailbox that you wish to recover.

- From the list of disconnected mailboxes, shown in Figure 3-12, select the mailbox you wish to recover and then click Connect in the Actions pane. This will start the Connect Mailbox Wizard.

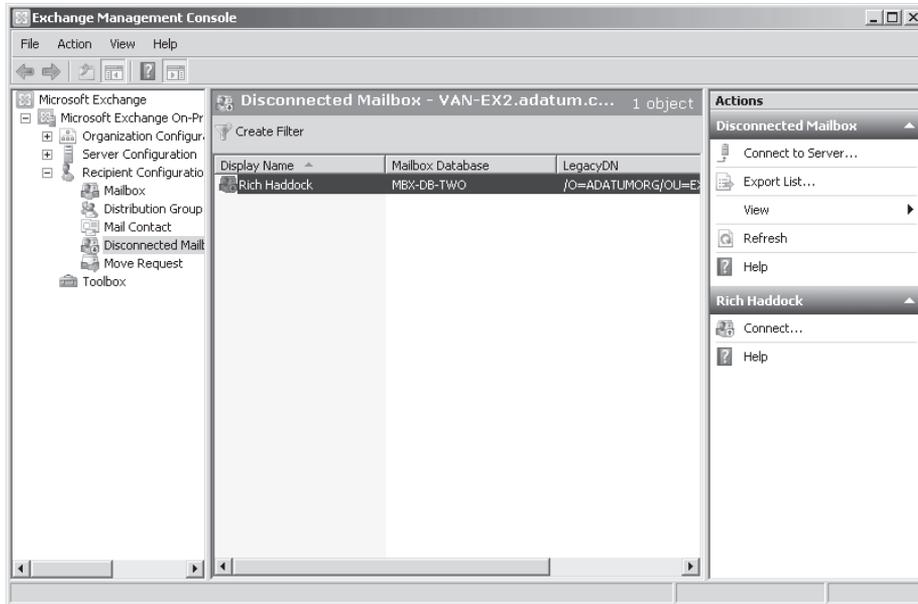


FIGURE 3-12 Disconnected mailbox

- On the first page of the wizard, select the type of disconnected mailbox that you wish to reconnect. You can use this wizard to reconnect all mailbox types: User, Room, Equipment, and Linked.
- You then select which user account to which you will connect the disconnected mailbox by either browsing for a matching user or selecting an existing user, as shown in Figure 3-13. The user account must exist prior to attempting to connect the disconnected mailbox. You must also provide an alias for the mailbox and specify a managed folder and Exchange ActiveSync policy if you do not want to use the default policies. Once you select the existing user account and alias, you will be able to reconnect the mailbox and close the wizard.

Occasionally, a mailbox that has been disconnected or removed does not appear in the list of disconnected mailboxes in the EMC even though the mailbox retention period has not expired. This may be because the Exchange store has not updated the status of the mailboxes yet. You can resolve this problem by running the *Clean-MailboxDatabase* cmdlet against the mailbox database that originally hosted the mailbox. When you do this, a scan is performed for disconnected mailboxes, and their status is updated in the Exchange store.

MORE INFO LOCATING MISSING DISCONNECTED MAILBOXES

To learn more about locating missing disconnected mailboxes and the *Clean-MailboxDatabase* cmdlet, consult the following link on TechNet: <http://technet.microsoft.com/en-us/library/bb124076.aspx>.

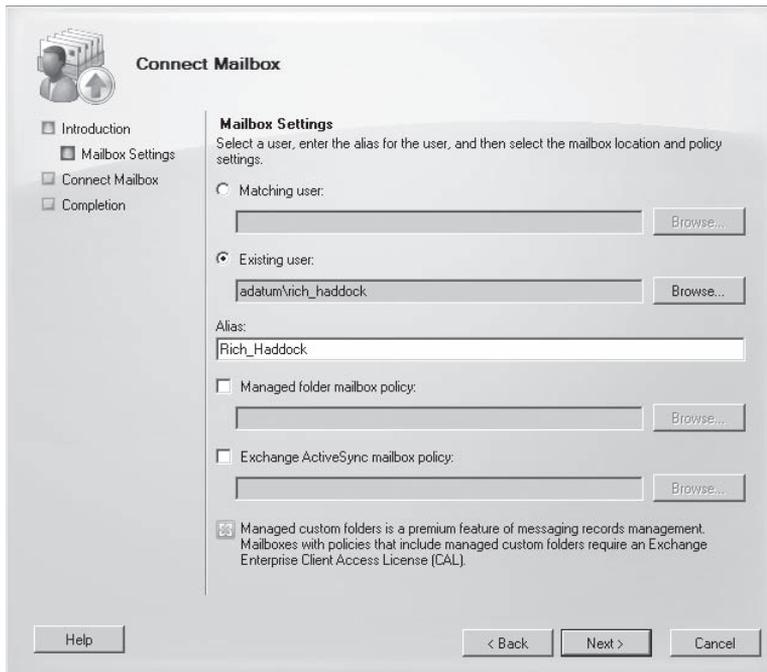


FIGURE 3-13 Reconnect mailbox

You can use the *Connect-Mailbox* EMS cmdlet to connect a disconnected mailbox to an existing Active Directory account. For example, to connect the disconnected mailbox named *Jesper_Herp*, which was originally located in mailbox database *MBX-DB-ONE*, to the *Jesper_Herp* user account, issue the following command:

```
Connect-Mailbox -Identity "Jesper Herp" -Database "MBX-DB-ONE" -User "Jesper Herp"
```

MORE INFO CONNECTING MAILBOXES

For more information on connecting disconnected mailboxes to Active Directory user objects, consult the following TechNet article: <http://technet.microsoft.com/en-us/library/bb123490.aspx>.

Quick Check

- You want to delete an Exchange mailbox but retain the Active Directory user account associated with it. Should you use the *Disable-Mailbox* or the *Remove-Mailbox* cmdlet to accomplish this goal?

Quick Check Answer

- You should use the *Disable-Mailbox* cmdlet, as this deletes the mailbox, leaving it in a disconnected state, without removing the associated Active Directory user account.

Import and Export Mailboxes

You can import and export mailbox data to or from other Exchange mailboxes or PST files. There may be circumstances where you want to import data stored in existing PST files into Exchange mailboxes, such as if you are migrating users from using PST files to using Exchange 2010 archive mailboxes. Exporting mailbox data also allows you to perform the following tasks:

- **Create a point-in-time snapshot of a mailbox** You may need to create regular snapshots of specific mailboxes without needing to retain an extended backup set of all mailboxes on a mailbox databases.
- **Meeting compliance requirements** You may need to export the contents of specific mailboxes when meeting legal discovery requests.
- **Remove specific messages from multiple mailboxes** You can use the export mailbox process to remove sensitive messages that were inadvertently sent to multiple mailboxes.

A default import or export targets all folders, including empty folders, special folders, and subfolders. To restrict which folders are imported or exported, use the `IncludeFolders` or `ExcludeFolders` parameters when using *Import-Mailbox* or *Export-Mailbox*.

Mailbox import and export have the following limitations:

- It is possible to export only one mailbox at a time, though mailboxes can be exported sequentially.
- When you use *Export-Mailbox*, both the source mailbox and the destination mailbox are in the same Active Directory forest.
- Importing and exporting data requires a 64-bit computer that has both Exchange Server 2010 management tools installed and the 64-bit Microsoft Outlook 2010 client installed.
- *Import-Mailbox* cannot be used to import data to a mailbox hosted on previous versions of Exchange Server.
- It is not possible to import mailbox or PST data to a public folder or a public folder database.

You can perform a selective export using the `RecipientKeywords`, `SenderKeywords`, `SubjectKeywords`, `StartDate`, and `EndDate` parameters. When you use the *Export-Mailbox* cmdlet with the `DeleteContent` parameter but do not specify a target mailbox, you are able to delete specific messages in targeted mailboxes. This allows you to selectively delete messages across a number of targeted mailboxes. For example, if you wanted to remove a message that was sent to a large number of users who had mailboxes hosted on mailbox database MBX-DB-ONE called "Christmas Party Photos," which was sent by Kim Akers, you could use the following command:

```
Get-Mailbox -Database MBX-DB-ONE | Export-Mailbox -SubjectKeyWords "Christmas Party Photos" -SenderKeyWords "Kim Akers" -DeleteContent
```

MORE INFO IMPORT AND EXPORT MAILBOXES

For more information on importing and exporting mailbox data, consult the following TechNet link: <http://technet.microsoft.com/en-us/library/ee633455.aspx>.

Archive Mailboxes

Archive mailboxes are a feature new to Exchange Server 2010. Personal archives eliminate the need for PST files for Outlook 2010 by allowing users to store messages in an archive mailbox that is accessible to Outlook 2010 and OWA. This simplifies the process of legal discovery and the enforcement of message retention policies, which can be difficult to apply when messages are stored locally on users' workstations rather than on Exchange mailbox servers. Archive mailboxes are available only with Exchange Enterprise edition CALs.

You can create an archive mailbox when you create a primary user mailbox. It is also possible to create or remove an archive mailbox when a user has an existing mailbox. Archive mailboxes are stored in the same mailbox database as the user's mailbox. When you move a user's mailbox to another server, the archive mailbox is automatically moved to the destination mailbox database as well.

You can enable an archive on an existing mailbox by selecting the mailbox in the Recipient Configuration\Mailbox node of EMC and then clicking on the Enable Archive item in the Actions pane. You can use the *Enable-Mailbox* command with the Archive parameter to enable an archive mailbox for an existing mailbox. For example, to enable an archive mailbox for Rich Haddock's mailbox, issue the following EMS command:

```
Enable-Mailbox "Rich Haddock" -Archive
```

To disable an archive mailbox, select the mailbox under the Recipient Configuration\Mailbox node and then click Disable Archive in the Actions pane. You can also use the *Disable-Mailbox* cmdlet to disable an archive mailbox. For example, to disable the archive mailbox associated with Rich Haddock's mailbox, issue the following EMS command:

```
Disable-Mailbox "Rich Haddock" -Archive
```

In the event that you accidentally disable the archive mailbox for a user and you want to reconnect it and the disabled archive mailboxes is still retained in the mailbox database because of retention policies, you can reconnect it using the EMC by viewing the Disconnected Mailbox node under Recipient Configuration in EMC.

MORE INFO ARCHIVE MAILBOXES

For more information on configuring archive mailboxes, consult the following TechNet article: <http://technet.microsoft.com/en-us/library/dd979795.aspx>.



EXAM TIP

Remember which cmdlet you use to move mailboxes in Exchange Server 2010.

Lesson Summary

- Deleted items settings are inherited from the mailbox database. It is possible to override these settings on a per-mailbox basis so that deleted items are available for a longer or shorter period.
- It is possible to configure message size limits on individual mailboxes that restrict the size of messages that a user can send and receive.
- Linked mailboxes use a disabled user account in the local forest to function as a substitute for a user account in a remote forest.
- The *New-MoveRequest* cmdlet is used to perform online mailbox moves in Exchange Server 2010.
- Delegating Full Access allows a mailbox to be read. Delegating Send As allows a user to send a message with that identity.

Lesson Review

You can use the following questions to test your knowledge of the information in Lesson 1, "Mailbox Configuration." The questions are also available on the companion CD if you prefer to review them in electronic form.

NOTE ANSWERS

Answers to these questions and explanations of why each answer choice is correct or incorrect are located in the "Answers" section at the end of the book.

1. Which of the following cmdlets would you use to move a mailbox from an Exchange Server 2010 mailbox server in one site to an Exchange Server 2010 mailbox server in another Active Directory site while minimizing the disruption to the mailbox user?
 - A. *Set-Mailbox*
 - B. *Move-Mailbox*
 - C. *New-MoveRequest*
 - D. *Get-Mailbox*
2. Which of the following commands configures the Send As permission for Kim Akers on Don Hall's mailbox?
 - A. *Add-MailboxPermission -Identity "Kim Akers" -User "adatum\Don_Hall" -AccessRights FullAccess -InheritanceType all*
 - B. *Add-MailboxPermission -Identity "Don Hall" -User "adatum\Kim_Akers" -AccessRights FullAccess -InheritanceType all*
 - C. *Add-ADPermission "Don Hall" -User "adatum\Kim_Akers" -Extendedrights "Send As"*
 - D. *Add-ADPermission "Kim Akers" -User "adatum\Don_Hall" -Extendedrights "Send As"*

3. Which of the following cmdlets allows you to connect a disconnected mailbox to a newly created Active Directory user account?
- A. *New-Mailbox*
 - B. *Set-Mailbox*
 - C. *Enable-Mailbox*
 - D. *Connect-Mailbox*
4. You want to limit the messages that Kim Akers can send and receive to 2 MB in size. Which of the following commands could you use to accomplish this goal?
- A. *Set-Mailbox "Kim Akers" -MaxReceiveSize 2097152 -MaxSendSize 2097152*
 - B. *Set-Mailbox "Kim Akers" -ProhibitSendQuota 2097152 -MaxSendSize 2097152*
 - C. *Set-Mailbox "Kim Akers" -MaxReceiveSize 2097152 -ProhibitSendQuota 2097152*
 - D. *Set-Mailbox "Kim Akers" -IssueWarningQuota 2097152 -ProhibitSendQuota 2097152*
5. Which of the following parameters would you use with the *Set-Mailbox* cmdlet to ensure that email that had an SCL greater than 5 was sent to the junk email folder?
- A. *SCLQuarantineEnabled* and *SCLQuarantineThreshold*
 - B. *SCLJunkEnabled* and *SCLJunkThreshold*
 - C. *SCLDeleteEnabled* and *SCLDeleteThreshold*
 - D. *SCLRejectEnabled* and *SCLRejectThreshold*

Lesson 2: Resources and Shared Mailboxes

Resource mailboxes allow people in your organization to use the calendaring function of Exchange to reserve equipment such as projectors or to book conference rooms for meetings. Acceptance policies allow these bookings to be processed automatically or moderated by an individual or individuals whose responsibilities include facilities and equipment management. Shared mailboxes are mailboxes that are accessible to multiple users but that are not associated with one specific user account.

After this lesson, you will be able to:

- Create resource mailboxes.
- Configure shared mailboxes.
- Modify resource mailbox properties.

Estimated lesson time: 40 minutes

Creating and Configuring Resource Mailboxes

Resource mailboxes allow users in your organization to book resources, such as conference rooms or equipment, using Exchange's calendaring functionality. For example, if a user wants to book use of a specific conference room, a meeting request is set up, including all relevant attendees, and then the address of the room in which the meeting will be held in that request is included. Depending on how the resource mailbox has been configured, the room will automatically be booked for that meeting. The integration with Exchange calendaring means that other users will be able to check the availability of the room, with current room bookings being visible through the calendar. Exchange Server 2010 supports two types of resource mailbox:

- **Room mailboxes** Room mailboxes represent meeting locations such as conference rooms or lecture theaters.
- **Equipment mailboxes** Equipment mailboxes represent specific items, such as overhead projectors, scanners, or company hovercraft.

To create room or equipment mailbox, perform the following steps:

1. In the EMC, select the Mailbox node under the Recipient Configuration node.
2. In the Actions pane, click on the New Mailbox item. This will open the New Mailbox Wizard. Select Room (or Equipment) Mailbox and then click Next.
3. On the User Type page, select New User. The room mailbox needs to be associated with an Active Directory user account, even though that user account will be disabled. Click Next.
4. On the User Information page, enter the name of the room in the Name field, repeat this in the User Logon Name fields, and then enter a password if required. There is no

need to select the User Must Change Password At Next Logon option, and it is not necessary to specify values in the First Name, Initials, and Last Name fields. If necessary, you can specify an OU to host the disabled resource mailbox account. Click Next.

5. On the Mailbox Settings page, enter an alias for the mailbox. This can be the same name that you specified as the user logon name in step 4. You can specify a mailbox database to host the mailbox or accept the default allocation.
6. Click Next on the Archive Settings page. Click New and then click Finish.

Except for the step where you choose a Room or Equipment mailbox, the basic setup process is the same. You create Room and Equipment mailboxes using the *New-Mailbox* cmdlet. For example, to create a new room mailbox named Conference-Beta that is hosted on mailbox database MBX-DB-ONE, issue the following command:

```
New-Mailbox -UserPrincipalName conference-beta@adatum.com -Alias conference-beta -Name Conference-Beta -Database MBX-DB-ONE -OrganizationalUnit Users -Room
```

The command for creating an equipment mailbox is the same except instead of using the Room parameter with the *New-Mailbox* cmdlet, you use the Equipment parameter. For example, to create a new equipment mailbox named Video-Camera that is hosted on mailbox database MBX-DB-ONE, issue the following command:

```
New-Mailbox -UserPrincipalName video-camera@adatum.com -Alias video-camera -Name video-camera -Database MBX-DB-ONE -OrganizationalUnit Users -Equipment
```

Once you have created a resource mailbox, it is necessary to configure the resource mailbox. Some properties, such as Resource Capacity, which is configured on the Resource General page of the resource mailbox properties, can also be configured with the *Set-Mailbox* cmdlet. For example, to set the resource capacity of room mailbox Conference-Alpha to 40, issue the following command:

```
Set-Mailbox Conference-Alpha -ResourceCapacity 40
```

MORE INFO CUSTOM RESOURCE PROPERTIES FOR RESOURCE MAILBOXES

Exchange allows administrators to add custom resource properties to room or equipment mailboxes. For example, you could create a custom property for equipment mailboxes called Vehicle to represent company vehicles. Doing this requires modifying the resource configuration of the Exchange organization. To learn more about this process, consult the following TechNet article: <http://technet.microsoft.com/en-us/library/bb201697.aspx>.

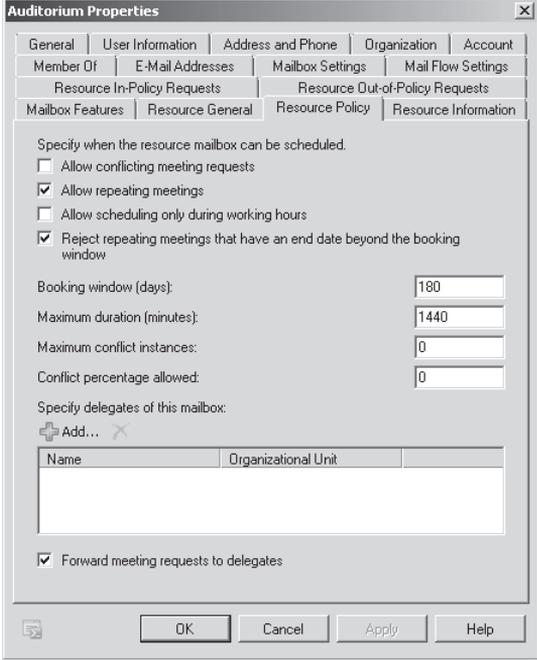
The majority of other resource mailbox configuration tasks are performed from the EMS using the *Set-CalendarProcessing* cmdlet. You will learn about configuring additional resource mailbox properties throughout the rest of this lesson.

MORE INFO MANAGING RESOURCE MAILBOXES AND SCHEDULING

For more information on managing resource mailboxes and scheduling, consult the following TechNet article: <http://technet.microsoft.com/en-us/library/bb124374.aspx>.

Configuring Resource Policies

Resource policies determine how a resource mailbox can be booked. You can use resource policies to determine how far in advance a resource can be booked, the maximum amount of time the resource can be booked for, and which users are configured as delegates for the resource. You configure resource policies in the Resource Policy tab of the resource mailbox's properties, shown in Figure 3-14.



The screenshot shows the 'Auditorium Properties' dialog box with the 'Resource Policy' tab selected. The dialog has a tabbed interface with the following tabs: General, User Information, Address and Phone, Organization, Account, Member Of, E-Mail Addresses, Mailbox Settings, Mail Flow Settings, Resource In-Policy Requests, Resource Out-of-Policy Requests, Mailbox Features, Resource General, Resource Policy (selected), and Resource Information. The 'Resource Policy' tab contains the following settings:

- Specify when the resource mailbox can be scheduled:
 - Allow conflicting meeting requests
 - Allow repeating meetings
 - Allow scheduling only during working hours
 - Reject repeating meetings that have an end date beyond the booking window
- Booking window (days): 180
- Maximum duration (minutes): 1440
- Maximum conflict instances: 0
- Conflict percentage allowed: 0
- Specify delegates of this mailbox:
 - + Add... -
 - Table with columns: Name, Organizational Unit
- Forward meeting requests to delegates

Buttons at the bottom: OK, Cancel, Apply, Help.

FIGURE 3-14 Configure resource policy

The settings on the Resource Policy tab have the following properties:

- **Allow Conflicting Meeting Requests** Allows meeting requests that conflict with one another to be scheduled.
- **Allow Repeating Meetings** Allows recurring meetings to be scheduled, such as if a user wants to use a particular resource every Wednesday morning at 11:00 AM.
- **Allow Scheduling Only During Working Hours** Allows the resource to be booked only during working hours. Administrators configure working hours using the *Set-MailboxCaldenarConfiguration* cmdlet.
- **Reject Meetings That Have An End Date Beyond The Booking Window** Enabling this option means that bookings that exceed the booking window are rejected.
- **Booking Window (Days)** This figure specifies how far in advance the resource can be booked.
- **Maximum Duration (Minutes)** The maximum amount of time the resource can be booked for.

- **Maximum Conflict Instances** How many conflicts with other bookings can exist prior to a meeting request being automatically denied.
- **Conflict Percentage Allowed** If a booking is configured to be recurring and a certain percentage of those recurrences conflict with existing bookings, the booking is denied.
- **Specify Delegates Of This Mailbox** Allows you to specify users who control scheduling options for the resource mailbox.
- **Forward Meeting Requests To Delegates** Specifies whether meeting requests are forwarded to specified delegates.

You can configure the Resource Properties of a resource mailbox using the `Set-CalendarProcessing` cmdlet. For example, to set a maximum booking window of 50 days and a maximum booking duration of 2 hours for the Auditorium resource mailbox, issue the following command:

```
Set-CalendarProcessing Auditorium -BookingWindowsInDays 50 -MaximumDurationInMinutes 120
```

Managing In-Policy and Out-of-Policy Requests

Exchange processes requests to use resources against the resource policy. In-policy request settings apply when a request that meets the resource policy is made. The in-policy request settings determine which users have their requests automatically approved and which in-policy requests for the resource will be subject to approval by the resource delegate. For example, if the in-policy request settings were configured as shown in Figure 3-15, where no users are set to have their in-policy requests automatically approved, all requests for the resource would be forwarded to the configured delegates for approval.

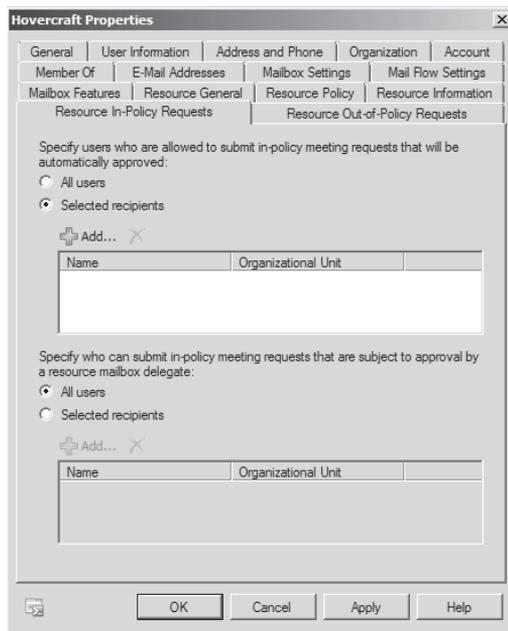


FIGURE 3-15 Configure resource in-policy requests

Out-of-policy request settings determine which users are able to submit out-of-policy requests that are subject to approval by a resource mailbox delegate. If a user is not on the list of users who can submit out-of-policy requests, the request will be automatically denied. In the case of the Resource Out-of-Policy Requests tab shown in Figure 3-16, Oleg Anashkin is able to submit out-of-policy requests, though these requests will still require approval from a delegate. You will learn about configuring resource mailbox delegates in the next section of this lesson.

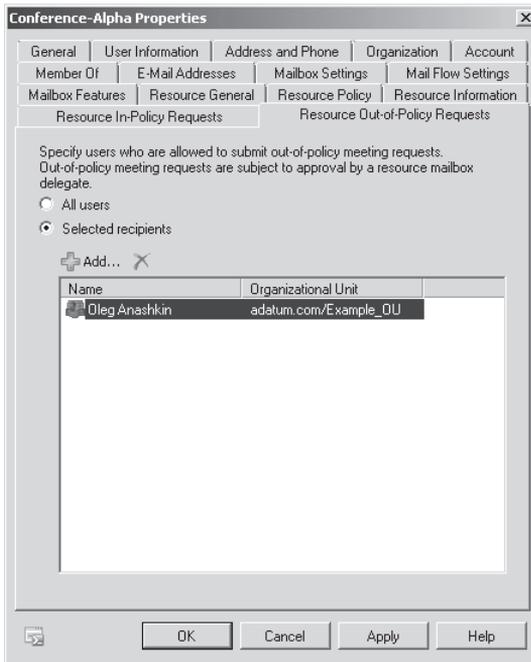


FIGURE 3-16 Out-of-policy request settings

You can configure the Resource-In-Policy Requests and Resource Out-of-Policy Request settings using the *Set-CalendarProcessing* cmdlet with the *AllBookInPolicy*, *AllRequestInPolicy*, *AllRequestOutOfPolicy*, *BookInPolicy*, *RequestInPolicy*, and *RequestOutOfPolicy* parameters.

MORE INFO CONFIGURING AUTOMATIC BOOKING POLICIES

To learn more about configuring automatic booking policies, consult the following link on TechNet: <http://technet.microsoft.com/en-us/library/bb124542.aspx>.

Configure Delegates on Resource Mailboxes

Delegates are able to control the scheduling options for resource mailboxes. You can configure a resource mailbox so that all requests for the resource that the mailbox represents are forwarded to the delegate. As you learned earlier, you can configure a delegate for a resource mailbox through the EMC on the Resource Policy tab by specifying their mailboxes and enabling the Forward Meeting Requests To Delegates option.

You can configure these properties through the EMS using the *Set-CalendarProcessing* cmdlet. For example, to configure Kim Akers as a resource delegate for the Auditorium resource mailbox and to ensure that all booking requests for the resource are forwarded to her, issue the following command:

```
Set-CalendarProcessing Auditorium -ResourceDelegates "Kim_Akers@adatum.com"  
-ForwardRequestsToDelegates $true
```

MORE INFO CONFIGURE DELEGATE ON A RESOURCE MAILBOX

For more information on configuring a delegate on a resource mailbox, consult the following link on TechNet: <http://technet.microsoft.com/en-us/library/bb124973.aspx>.

Configuring Automatic Booking

Once you have configured resource booking policies, you need to enable the Resource Booking Attendant. The Resource Booking Attendant enables automatic booking of resources functionality on a resource mailbox. If the Resource Booking Attendant is not enabled, the configured resource mailbox delegate must approve or decline all booking requests. The Resource Booking Attendant is enabled by selecting the Enable The Resource Booking Attendant check box on the Resource General tab of the Conference-Alpha Properties, as shown in Figure 3-17.

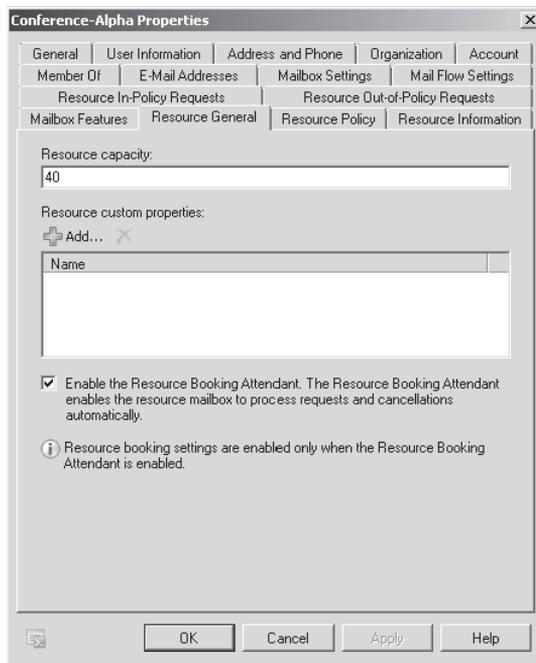


FIGURE 3-17 Enable Resource Booking Attendant

To enable the resource booking attendant from the EMS, use the *Set-CalendarProcessing* cmdlet with the *AutomateProcessing* parameter. For example, to enable automatic booking on the Conference-Alpha room mailbox, issue the following command:

```
Set-CalendarProcessing Conference-Alpha -AutomateProcessing AutoAccept
```

MORE INFO ENABLE AUTOMATIC BOOKING ON A RESOURCE MAILBOX

To learn more about enabling automatic booking on a resource mailbox, consult the following TechNet article: <http://technet.microsoft.com/en-us/library/bb123495.aspx>.



Quick Check

- Which cmdlet do you use to configure resource booking policies on a room mailbox?

Quick Check Answer

- You use the *Set-CalendarProcessing* cmdlet to configure resource booking policies on a resource mailbox.

Shared Mailboxes

A shared mailbox is a mailbox accessed by multiple users that is not associated with an enabled Active Directory user account. Although it is possible to share access to normal user mailboxes through delegation, Exchange provides shared mailboxes specifically for the shared role. This special type of mailbox appears in the recipients list with an icon different from that of other mailbox types. The Active Directory account associated with a shared mailbox is always disabled. All users that need access to the shared mailbox are delegated Full Access and Send As permissions after mailbox creation.

It is possible to create shared mailboxes only from the EMS. You create shared mailboxes using the *New-Mailbox* cmdlet with the *Shared* parameter. The following EMS command creates a shared mailbox named Shared-MBX on the MBX-DB-ONE mailbox database:

```
New-Mailbox -UserPrincipalName Shared-MBX@adatum.com -Alias Shared-MBX -Name Shared-MBX -Database MBX-DB-ONE -OrganizationalUnit Users -Shared
```

Once the mailbox has been created, you can delegate Full Access and Send As permissions through either the EMS or EMC. You learned how to delegate Full Access and Send As permissions in Lesson 1, "Mailbox Configuration."

Converting Mailboxes

You can use the *Set-Mailbox* command to convert one type of mailbox to another type. One reason that you might want to convert mailboxes is when transitioning from an Exchange 2003 environment to an Exchange 2010 environment. In Exchange 2003, you can use shared

mailboxes to represent resources. If you migrate these mailboxes to Exchange 2010, you will want to convert them to resource mailboxes. Although it is not possible to perform a mailbox conversion using the EMC, you can perform the following types of mailbox conversion using the *Set-Mailbox* command in the EMS:

- User mailbox to shared mailbox
- User mailbox to resource mailbox
- Shared mailbox to user mailbox
- Shared mailbox to resource mailbox
- Resource mailbox to user mailbox
- Resource mailbox to shared mailbox

For example, to convert the mailbox named Hovercraft from an Equipment mailbox to a Room mailbox, issue the following command:

```
Set-Mailbox Hovercraft -Type Room
```

MORE INFO CONVERTING MAILBOXES

For more information about converting mailboxes, consult the following page on TechNet: <http://technet.microsoft.com/en-us/library/bb201749.aspx>.



EXAM TIP

Understand the difference between a user mailbox, a shared mailbox, a resource mailbox, and a linked mailbox.

Lesson Summary

- There are two different types of resource mailbox: equipment mailboxes and room mailboxes. Equipment mailboxes represent physical items, and room mailboxes represent locations.
- You can configure resource mailbox booking policies using the *Set-CalendarProcessing* cmdlet.
- New requests for resources are processed according to the booking policy. You can configure all or some requests to be sent to a delegate who approves or disapproves booking requests.
- A shared mailbox is a mailbox associated with a disabled user account that is accessible to multiple users.

Lesson Review

You can use the following questions to test your knowledge of the information in Lesson 2, "Resources and Shared Mailboxes." The questions are also available on the companion CD if you prefer to review them in electronic form.

NOTE ANSWERS

Answers to these questions and explanations of why each answer choice is correct or incorrect are located in the “Answers” section at the end of the book.

1. A recent renovation has increased the number of seats that are available in a conference room in your company building from 10 to 15. Which cmdlet would you use to modify the room mailbox associated with this room?
 - A. *New-Mailbox*
 - B. *Set-Mailbox*
 - C. *Get-Mailbox*
 - D. *Enable-Mailbox*
2. You have been reviewing the setup of Exchange mailboxes at one of your organization’s interstate offices. You have determined that the contractor who created several mailboxes at the office incorrectly created room mailboxes when he should have created shared mailboxes. The room mailboxes currently store content that you want to retain, so you have decided to convert these mailboxes from room mailboxes to shared mailboxes. Which of the following commands would you use to reconfigure a room mailbox named SalesInfo so that it functions as a shared mailbox?
 - A. *Set-Mailbox SalesInfo –Type Room*
 - B. *Set-Mailbox SalesInfo –Type Shared*
 - C. *Set-Mailbox SalesInfo –Type Equipment*
 - D. *Set-Mailbox SalesInfo –Type Regular*
3. Which of the following cmdlets would you use to delegate control of a room mailbox to a specific user so that all requests for the room would be forwarded to that specific user for approval?
 - A. *Set-Mailbox*
 - B. *Set-CalendarNotification*
 - C. *Set-CalendarProcessing*
 - D. *Get-Mailbox*
4. Which of the following EMS cmdlets allows you to specify delegates and booking windows for resource mailboxes?
 - A. *Set-Mailbox*
 - B. *Set-CalendarProcessing*
 - C. *Set-LinkedUser*
 - D. *Set-Group*

PRACTICE Creating and Configuring Mailboxes

In this set of practices, you will create and configure and manage user and resource mailboxes. This practice requires that you have VAN-DC, VAN-EX1, and VAN-EX2 available and configured as described in the Appendix.

EXERCISE 1 Creating a Mailbox

In this exercise, you will create several mailboxes and then configure quota settings.

1. Ensure that the folders `c:\mydatabasefiles` and `C:\mylogfolder` have been created on computers VAN-EX1 and VAN-EX2.
2. Log on to server VAN-EX1 with the Kim_Akers user account that was created in the practice exercise at the end of Chapter 1.
3. Open the EMS and issue the following commands:

```
New-MailboxDatabase -Name MBX-DB-ONE -Server VAN-EX1 -EdbFilePath  
c:\MyDatabaseFiles\mbx-db-one.edb -LogFolderPath c:\mylogfolder
```

```
New-MailboxDatabase -Name MBX-DB-TWO -Server VAN-EX2 -EdbFilePath  
c:\MyDatabaseFiles\mbx-db-two.edb -LogFolderPath c:\MyLogFolder
```

```
Mount-Database MBX-DB-ONE
```

```
Mount-Database MBX-DB-TWO
```

4. In the Server Configuration\Mailbox node, verify that these two mailbox databases have been created and mounted.
5. Expand the Recipient Configuration node and then click on Mailbox. In the Actions pane, click on the New Mailbox item. This will launch the New Mailbox Wizard. Select the User Mailbox option, shown in Figure 3-18, and click Next.

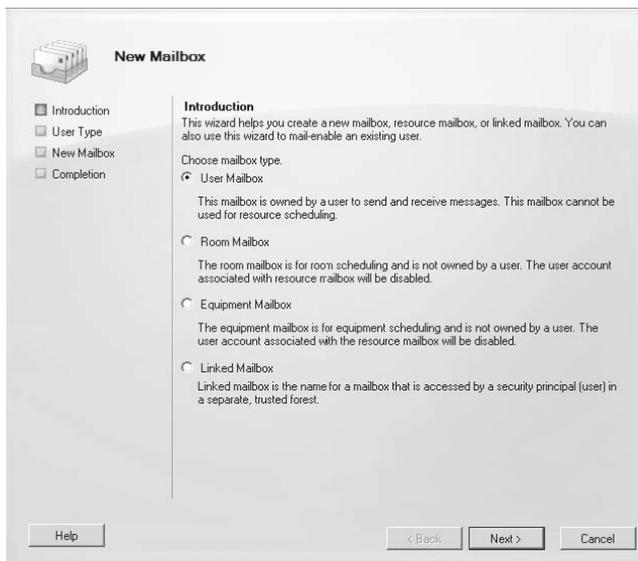


FIGURE 3-18 New mailbox choice

6. On the User Type page, select New User and then click Next.
7. Fill out the New Mailbox User Information page, as shown in Figure 3-19. Use the password *Pa\$\$w0rd*. Click Next.

New Mailbox

Introduction
User Type
User Information
Mailbox Settings
Archive Settings
New Mailbox
Completion

User Information
Enter the user name and account information.

Specify the Organizational unit rather than using a default one:
[] [Browse...]

First name: [Rich] Initials: [] Last name: [Haddock]

Name: [Rich Haddock]

User logon name (User Principal Name): [rich_haddock] [@adatum.com]

User logon name (pre-Windows 2000): [rich_haddock]

Password: [] Confirm password: []

User must change password at next logon

[Help] [< Back] [Next >] [Cancel]

FIGURE 3-19 New user information

8. On the Mailbox Settings page, enter the alias **Rich_Haddock**. Then click the Browse button next to Specify The Mailbox Database Rather Than Using A Database Automatically Selected. In the Select Mailbox Database dialog box, select MBX-DB-ONE and click OK. Click Next.
9. On the Archive Settings page, check the Create An Archive Mailbox For This Account check box and then click Next. On the Configuration Summary page, click New. When the mailbox has been successfully created, click Finish.
10. Open the EMS and issue the following command:


```
Set-Mailbox rich_haddock -MaxReceiveSize 2097152 -MaxSendSize 2097152 -IssueWarningQuota 209715200 -ProhibitSendQuota 262144000 -ProhibitSendReceiveQuota 293601280 -UseDatabaseQuotaDefaults $false
```
11. In the EMC, select the Mailbox Node under Recipient Configuration. Right-click on the Rich Haddock mailbox and click on Properties.
12. Click on the Mail Flow Settings tab and then click on the Message Size Restrictions item. Click Properties. Verify that the maximum message that can be sent and received equals 2048 KB (2,097,152 bytes). Click Cancel to close the Message Size Restrictions dialog box.

13. On the Mailbox Settings tab, click on the Storage Quotas item and then click Properties. Verify that the figures match those in Figure 3-20 and then click Cancel.

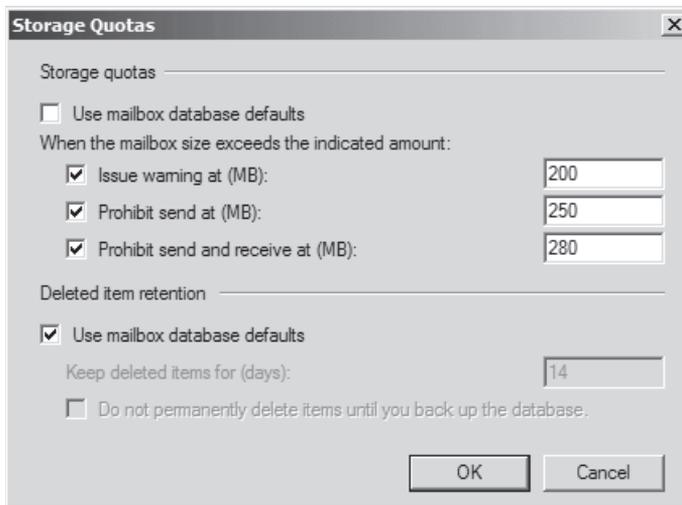


FIGURE 3-20 Storage quotas

14. Click Cancel to close the properties of Rich Haddock's mailbox.
15. Right-click on the Recipient Configuration\Mailbox node and then click New Mailbox.
16. On the Introduction page of the New Mailbox Wizard, ensure that User Mailbox is selected and then click Next.
17. On the User Type page, click Existing Users and then click Add. In the Select User dialog box, select Kim Akers and then click OK. Click Next.
18. On the Mailbox Settings page, enter **Kim_Akers** as the Alias and then click Next. Click New and then click Finish.
19. Open the EMC and issue the command:

```
New-Mailbox -Name 'Jeff Hay' -Alias 'Jeff_Hay' -UserPrincipalName 'Jeff_Hay@adatum.com' -SamAccountName 'Jeff_Hay' -FirstName 'Jeff' -LastName 'Hay'
```
20. When prompted, enter the password **Pa\$\$w0rd**.

EXERCISE 2 Move and modify a mailbox

In this exercise, you will move the mailbox that you created in the first exercise to a different mailbox database. You will then configure the Send As permission on this mailbox.

1. Ensure that you are logged on to VAN-EX1 with the Kim Akers user account. If you have not done so already, use the Server Manager console to disable Internet Explorer Enhanced Security Configuration (IE ESC) for Administrators.
2. Open Internet Explorer and navigate to <https://van-ex1/owa>. Click Continue To This Website (Not Recommended) when warned about the website security certificate.

3. Log on to Outlook Web App using the ADATUM\Rich_haddock credentials. Specify that you are using a private computer and do not use the light version of Outlook Web App.
4. When presented with the Language and Time Zone page, click OK.
5. Click New. Create a new message addressed to Kim Akers with the subject Test Message. Save the message and close the new message window. Verify that the message is present in the Drafts folder of Outlook Web App.
6. Without closing Internet Explorer, open the EMC and navigate to the Recipient Configuration\Mailbox node. Right-click on the Rich Haddock mailbox and then click on New Local Move Request.
7. In the New Local Move Request dialog box, click on Browse and then click on MBX-DB-TWO, which you created on server VAN-EX2 in Exercise 1. Click OK and then verify that the settings on the Introduction page match those shown in Figure 3-21. Click Next.

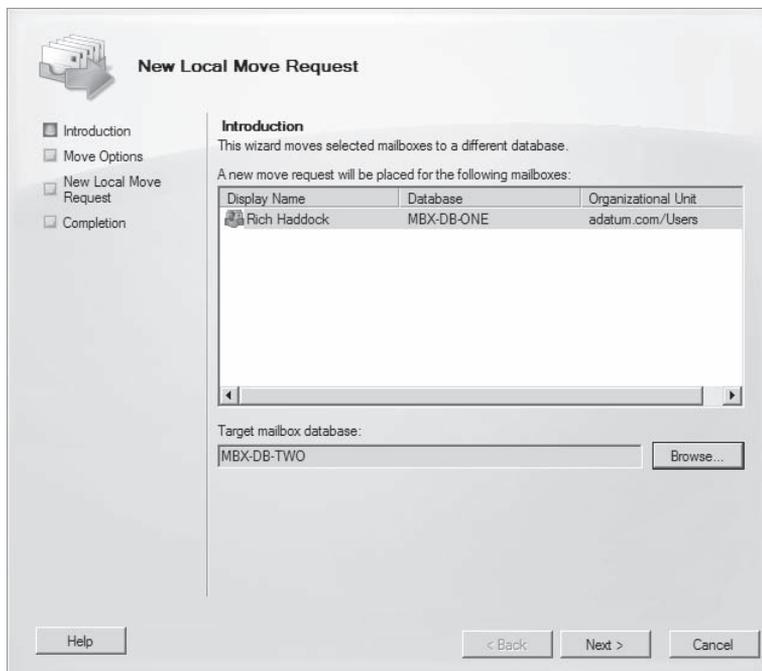


FIGURE 3-21 New local move request

8. On the Move Options page, select Skip The Mailbox and then click Next. Click New. When the move completes, click Finish.

9. Switch back to Internet Explorer and then click Reload until Outlook Web App appears again. Click on the Drafts folder and verify that the message that you were in the process of creating for Kim_Akers is still present. Close Internet Explorer.
10. In the EMC, right-click on the Rich Haddock mailbox under Recipient Configuration\ Mailbox and then click Manage Send As Permission.
11. On the Manage Send As Permission page, click Add. In the Select User Or Group dialog box, click Kim Akers and then click OK. Verify that the Manage Send As Permission dialog box is the same as that shown in Figure 3-22 and then click Manage. Click Finish to close the Manage Send As Permission dialog box.

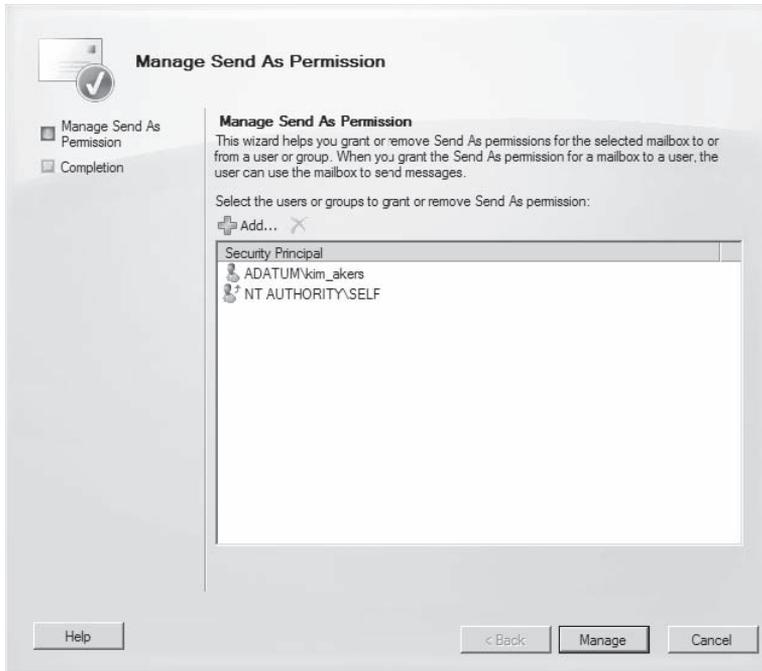


FIGURE 3-22 Manage Send As Permission

12. Open Internet Explorer and navigate to <https://van-ex1/owa>. Click Continue To This Website (Not Recommended) when warned about the website security certificate.
13. Log on to Outlook Web App using the ADATUM\Kim_Akers credentials. Specify that you are using a private computer and do not use the light version of Outlook Web App.
14. When presented with the Language and Time Zone page, click OK.

15. Click Options and then click Settings. With Mail selected, scroll down and select the Always Show From option, as shown in Figure 3-23, and then click Save.

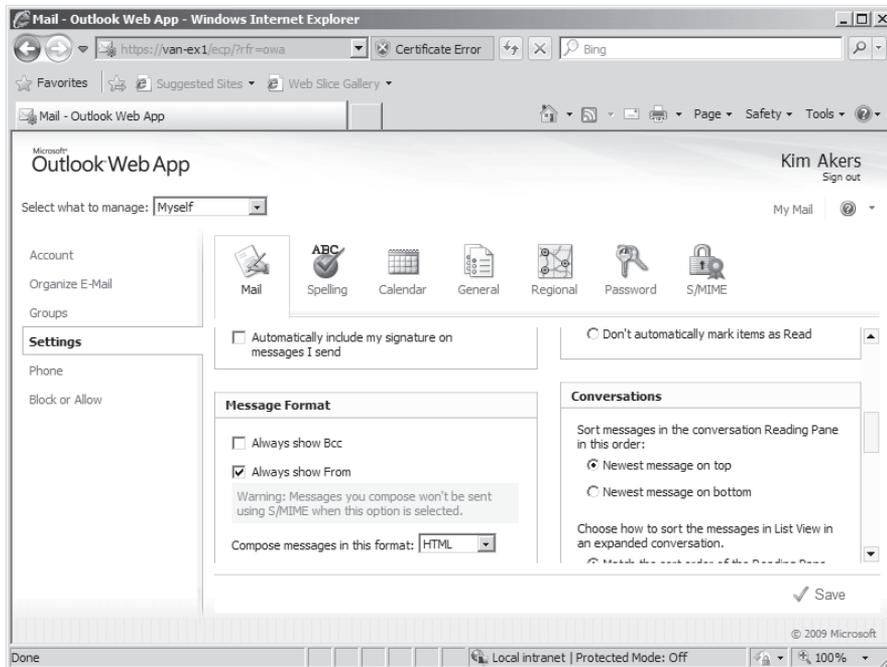


FIGURE 3-23 Configure OWA to always show From field

16. Click My Mail. Click New. If presented with a certificate warning, click Continue To This Website (Not Recommended).
17. Click on the From drop-down list and select Other E-mail Address. In the list click on Rich Haddock, click From and then click OK. In the To: Field, enter **Kim Akers**, and in the Subject and message body field, enter **Test**. Click Send.
18. Verify that a message that appears to be from Rich Haddock appears in the Kim Akers Inbox folder. Close Internet Explorer.

EXERCISE 3 Create and modify a resource mailbox

In this practice exercise, you will create and configure a room mailbox named auditorium. You will set the size of the room and configure the accept setting for this mailbox. You will also create and configure an equipment mailbox named Hovercraft and configure the accept setting for this equipment.

1. If you have not done so already, log on to server VAN-EX1 with the Kim Akers account and open the EMC.
2. Right-click on the Recipient Configuration\Mailbox node and then click New Mailbox.
3. On the Introduction page of the New Mailbox Wizard, select Room Mailbox and then click Next.
4. On the User Type page select New User and then click Next.
5. On the User Information page, set the Name and User Logon Name to Auditorium and the password to *Pa\$\$w0rd* and then click Next.
6. On the Mailbox Settings page, set the alias to Auditorium and then click Next.
7. On the Archive Settings page, click Next. On the New Mailbox page, click New and then, when the mailbox is created, click Finish.
8. In the list that is shown when the Recipient Configuration\Mailboxes node is selected, right-click on Auditorium and then click Properties.
9. On the Resource General tab, enter **50** in the Resource Capacity textbox. Enable the Enable The Resource Booking Attendant option and then click OK.
10. Right-click on the Recipient Configuration\Mailbox node and click New Mailbox.
11. On the Introduction page of the New Mailbox Wizard, select Equipment Mailbox and then click Next.
12. On the User Type page, select New User and then click Next.
13. On the User Information page, set the Name and User Logon Name to Hovercraft and the password to *Pa\$\$w0rd* and then click Next.
14. On the Mailbox Settings page, set the alias to Hovercraft and then click Next.
15. On the Archive Settings page, click Next. On the New Mailbox page, click New and then, when the mailbox is created, click Finish.
16. When the Recipient Configuration\Mailbox node is selected, locate and right-click on the Hovercraft mailbox and then click on Properties.
17. On the Resource Policy tab, click Add under Specify Delegates Of This Mailbox. In the Select Recipient dialog box, click on Kim Akers and then click OK.
18. On the Resource In-Policy Requests tab, under the Specify Users Who Are Allowed To Submit In-Policy Meeting Requests That Will Be Automatically Approved, select Selected Recipients.
19. Under Specify Who Can Submit In-Policy Meeting Requests That Are Subject To Approval By A Resource Mailbox Delegate, select All Users. Verify that the settings match those shown in Figure 3-24 and then click OK.



FIGURE 3-24 Resource in-policy settings

20. Open Internet Explorer and navigate to <https://van-ex1/owa>. Click Continue To This Website (Not Recommended) when warned about the website security certificate.
21. Log on to Outlook Web App using the ADATUM\Rich_haddock credentials. Specify that you are using a private computer and do not use the light version of Outlook Web App.
22. When presented with the Language and Time Zone page, click OK.
23. Click Calendar, click New, and then click Meeting Request. If presented with a certificate warning, click Continue To This Website (Not Recommended)
24. In the To field, type **Auditorium**. In the Subject field, type **Project** Update. Set the date to two days from the current date displayed, click Send, and then click OK to dismiss the warning.
25. Verify that the meeting request was accepted by viewing the acceptance e-mail in the Inbox.
26. Click Calendar. Click New and then click Meeting Request. In the To field, type **Hovercraft**. In the Resources field, type **Hovercraft**. In the Subject field, type **Research Mission**. Set the date to three days from today. Click Send and then click OK to dismiss the warning. Note that no automatic approval appears in Rich Haddock's Inbox, as Kim Akers has been configured as a delegate and must approve use of the Hovercraft resource.

Chapter Review

To further practice and reinforce the skills you learned in this chapter, you can perform the following tasks:

- Review the chapter summary.
- Review the list of key terms introduced in this chapter.
- Complete the case scenarios. These scenarios set up real-world situations involving the topics of this chapter and ask you to create a solution.
- Complete the suggested practices.
- Take a practice test.

Chapter Summary

- User mailboxes must be associated with Active Directory user accounts. It is possible to create a new Active Directory user account when creating a new mailbox.
- Exchange Server 2010 allows online mailbox moves to be performed with the *New-MoveRequest* cmdlet. You cannot use the *Move-Mailbox* cmdlet with Exchange Server 2010 mailboxes.
- Delegating the Send As permission allows a user to send a message with another user's identity. Delegating the Full Access permission grants users the ability to access the contents of the mailbox that has been delegated.
- Equipment and Room mailboxes can be configured with an automatic calendaring policy that allows automatic booking. It is also possible to configure bookings so that a delegate must manually approve.

Key Terms

Do you know what these key terms mean?

- Delegate
- Linked mailbox
- Resource mailbox

Case Scenarios

In the following case scenarios, you will apply what you've learned about subjects of this chapter. You can find answers to these questions in the "Answers" section at the end of this book.

Case Scenario 1: Provision Mailboxes at Alpine Ski House

Alpine Ski House is a small ski resort located near Jindabyne in southern New South Wales, Australia. The resort is managed by Carol Phillips. The resort is in the process of migrating to Exchange Server 2010 from an open-source mail solution, and it is necessary to create a large

number of new mailboxes that are associated with existing Active Directory accounts in the alpineskihouse.local domain. One of the goals in moving to Exchange 2010 is to reduce the amount of unsolicited commercial email that appears in the mailboxes of resort staff. Only one user, Don Hall, should have an unfiltered mail feed, as he is responsible for processing resort bookings and assessing commercial opportunities, and an unsolicited commercial email filter may inadvertently block important messages. As Carol Phillips spends a lot of time out on the grounds of the resort and away from her desk, it is necessary for her administrative assistant, Dan Park, to send email messages on her behalf.

With these facts in mind, answer the following questions:

1. What steps can you take to ensure that users cannot send or receive attachments that are greater than 10 MB in size?
2. What steps can you take to stop everyone at the resort receiving messages that are rated with an SCL above 5 while allowing Don Hall, who is responsible for bookings, to receive all messages, including those rated with an SCL above 5?
3. What steps should you take to allow Dan Park to send messages on behalf of Carol Phillips?

Case Scenario 2: Fabrikam Resource Mailboxes

Fabrikam Inc. is responsible for running a chain of tropical island corporate retreats. When guests arrive, they are issued with a mailbox on the Fabrikam guest domain, a separate forest from the Fabrikam internal domain that is used by management and employees of the organization. Each guest's room has a tablet computer configured in kiosk mode that allows guests to view conference schedules and reserve conference facilities and equipment. Guests need to be able to reserve conference rooms automatically but should be able to reserve the lecture theater only after consultation with Fabrikam staff. There are 15 sailboats that are available for use by guests of the retreat. Guests should be able to book use of a sailboat from the tablet computer in their room for a two-hour period but should not be able to book the sailboat for multiple consecutive two-hour periods.

With these facts in mind, answer the following questions:

1. What steps would you take to allow guests to book conference rooms based on the size of the meeting which they wish to hold?
2. What steps should you take to allow guests to book a sailboat for a two-hour period but not book the sailboat for multiple consecutive two-hour periods?
3. How can you ensure that guest requests to reserve the lecture theater are approved by Fabrikam management?

Suggested Practices

To help you successfully master the exam objectives presented in this chapter, complete the following tasks.

Create and Configure Mailboxes

You should complete these additional practice exercises only once you have completed practice exercise three.

- **Practice 1** Create a new mailbox and associated user named Keith Harris and have it hosted in the MBX-DB-ONE mailbox database. Configure the Keith Harris mailbox from the EMS so that it can be accessed using the POP3 protocol but cannot be accessed through Outlook Web App, Exchange ActiveSync, MAPI, or the IMAP4 protocol.
- **Practice 2** Use the EMC to perform an online mailbox move of the Keith Harris mailbox to mailbox database MBX-DB-TWO.

Create and Configure Resource Mailboxes and Shared Mailboxes

You should complete these additional practice exercises only once you have completed Exercise 3, where you configure the properties of the Hovercraft resource mailbox.

- **Practice 1** Log on to OWA as Kim Akers, open the Hovercraft shared calendar, and approve the equipment resource request made by Rich Haddock.
- **Practice 2** Create a room mailbox named Conference_Room. Configure the Conference_Room mailbox so that all bookings must be approved by Rich Haddock and that the capacity of the room is set to 15 people.

Take a Practice Test

The practice tests on this book's companion CD offer many options. For example, you can test yourself on just one exam objective, or you can test yourself on all the 70-662 certification exam content. You can set up the test so that it closely simulates the experience of taking a certification exam, or you can set it up in study mode so that you can look at the correct answers and explanations after you answer each question.

MORE INFO PRACTICE TESTS

For details about all the practice test options available, see the "How to Use the Practice Tests" section in this book's Introduction.

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