Managing Recipients in Exchange 2007

Solutions in this chapter:

- Managing Recipients Using the Exchange 2007 Management Console
- Managing Recipients in a Coexistence Environment
- Granting Access and/or SendAs Permissions to a Mailbox
- Creating a Custom Recipient Management Console
- Recipient Filtering in Exchange 2007

☑ Summary
☑ Solutions Fast Track
☑ Frequently Asked Questions
Introduction

One of the things that have changed drastically in Exchange Server 2007 is the way in which you manage recipients. As most of us are aware, recipients were managed via Active Directory Users and Computers (ADUC) MMC snap-in in the Exchange 2000 and 2003 environments, but with Exchange 2007, the recipient management tasks have been integrated back into the Exchange Management Console and removed from ADUC, as was the case in Exchange versions prior to Exchange Server 2000. In addition to performing the recipient tasks using the Exchange Management Console, you also have the option of using the Exchange Management Shell, which is perfectly suited for performing bulk user changes using one-liners (single-line commands).

So, why did the Exchange Product group choose to move away from extending and using the ADUC MMC snap-in to manage recipients in Exchange 2007? There are several reasons. For one, the team wanted to attack the cost of managing recipient users by introducing automation. This automation has been introduced via PowerShell CMDlets, which, as mentioned, really shine when it comes to bulk user changes. For another, they wanted to truly support the split-permissions model, making it possible for an Exchange Administrator to do any relevant Exchange tasks from within a single console: the Exchange Management Console (EMC). Another goal was to simplify the management of the Global Address List (GAL) and recipient types from within the EMC. This goal was accomplished because only the objects and attributes that pertain to Exchange are shown in this console. Finally, the Exchange Product group wanted to have explicit recipient types instead of implicit ones. Exchange 2007 has a total of 14 different explicit recipient types, each with its own individual icon and recipient type details, lowering the overall administrative burden.

We’ll be honest and say that there’s been a lot of hype on the Internet about whether moving the management of recipients to the EMC was a good idea or not. During the Exchange 2007 Technology Adoption Program (TAP) and the Rapid Deployment Program (RDP), many Exchange Administrators, as well as independent consultants, expressed their opinion about this move. The majority of them think it’s a bad decision, primarily because it leads to huge retraining costs (for help desk staff and others), and it means you suddenly have to administer users using two different consoles, the ADUC and the EMC. We think that the overall concern is valid, but at the same time we understand the Exchange Product group’s decision to make the move. Since the group has no intention of changing this post-RTM, we’ll have to live with it.

After reading this chapter, you will have a good understanding of what has changed since Exchange Server 2003. You will also be provided with step-by-step instructions on how you perform recipient management tasks using primarily the EMC but also some CMDlets in the Exchange Management Shell (EMS). In addition, we’ll talk about how you should manage recipients when your systems are coexisting with an Exchange 2000 environment (where Exchange 2007 coexists with Exchange 2000 and/or 2003), how you create a custom recipient management console, and how to use recipient filters.

Managing Recipients Using the Exchange 2007 Management Console

As mentioned in the introduction to this chapter, the management of recipients in Exchange Server 2007 as well as their Exchange-related properties has been moved back into the EMC in addition to the EMS, both of which are based on Windows PowerShell. This means that all management
Managing Recipients in Exchange 2007 • Chapter 3

of Exchange recipient objects should be modified from within the EMC or EMS, not using the ADUC snap-in.

In this first section of the chapter, we’ll take a look at how you manage recipients using the EMC. Recipient management for all types of recipients, such as user mailboxes, mail-enabled contacts, and users and distribution groups, is done under the Recipient Configuration work center node, shown as selected in Figure 3.1. As you can see, we have four recipient type subnodes beneath this work center. In order, we have a Mailbox, Distribution Group, Mail Contact, and a Disconnected Mailbox node.

Figure 3.1 Recipient Work Center Node in the Exchange Management Console

Also notice that when the Recipient Configuration work center node is selected, all types of recipient objects are listed in the Results pane, with the exception of disconnected mailboxes, since these aren’t physically located in the Active Directory. If you take a closer look at the screenshot in Figure 3.1, you can also see that each type of recipient object has its own individual icon as well as recipient type description, due to the fact that they now are explicit and not implicit, as was the case in Exchange Server 2003. This is a nice addition because it makes it so much easier to differentiate the recipient types in Exchange 2007.

If you take a look at the tasks provided in the Action pane, you can see that it’s possible to create any recipient type without having to specifically select the corresponding recipient type subnode beneath the Recipient Configuration work center node. If you select a recipient type subnode instead, you’ll only see a list of the recipient types specific for that subnode. Furthermore, the available tasks in the Action pane are specific only to that particular recipient type.
Managing Mailboxes

All right, let’s start by taking a look at the Mailboxes subnode, shown in Figure 3.2, which displays all mailbox user objects. *Mailbox user objects* are objects that have been mailbox enabled. Note that not only mail user objects created in Exchange 2007 are displayed, but also legacy (Exchange 2000 and 2003) mailbox user objects. You cannot see it in Figure 3.2, but there’s also a *Server and Organizational Unit* column, which, as implied by the names, tells us the name of the mailbox server on which the mailbox is located and in which Active Directory OU the user object resides.

**NOTE**

Although legacy mailboxes are exposed via the Exchange Management Console, not all Exchange 2007-specific features apply to these types of mailboxes.

When we look at mailbox user objects, we see that five explicit mailbox recipient types exist in Exchange 2007. Four of these are listed in Figure 3.3, which is a screenshot of the first page you’re presented with when you launch the **New Mailbox** Wizard.
We have **user mailboxes**, which are the type of mailbox you create when mailbox-enabling an ordinary end user. We have **room mailboxes** (a.k.a. resource mailboxes), which are used for room scheduling. Note that this type of mailbox isn’t owned by a user and that the associated user account is in a disabled state after creation. We also have **equipment mailboxes**, which are similar to room mailboxes except that they are used for equipment-scheduling purposes, such as booking an overhead projector. Then we have **linked mailboxes**, which are a special type of mailbox that can be used to link to a user account in a separate trusted forest. Finally, we have **shared mailboxes**, which aren’t included in the EMC but instead need to be managed via the EMS using the New-Mailbox CMDlet (you need to use the `-Shared` parameter). A shared mailbox is a type of mailbox that
multiple users can log onto. It’s not associated with a user account that can be used to log onto the Active Directory but is instead associated with a disabled user account, as in the case of room and equipment mailboxes.

**SOME INDEPENDENT ADVICE**

Because Exchange 2007 uses explicit mailbox recipient types, it’s possible to create a search filter that lists all room mailboxes, for example, or perhaps all legacy mailboxes, for that matter. Listing all resource mailboxes in the ADUC snap-in back in Exchange 2000 or 2003 using a search filter was not a trivial process; it required you to use custom attributes because there was no other way to differentiate resource mailboxes from ordinary mailbox-enabled user accounts.

Creating a User Mailbox

Let’s go through the steps necessary to create a user mailbox using the EMC. With either the **Recipient Configuration** work center node or the **Mailbox** subnode selected, click **New Mailbox** in the **Action** pane. This will bring up the New Mailbox Wizard, and you will be presented with the page shown back in Figure 3.3. Select **User Mailbox** and click **Next**. On the **User Type** page, you have the option of choosing whether you want to create a new mailbox-enabled user account in Active Directory or whether you want to mailbox-enable an existing Active Directory user account. Choosing the latter will bring up a GUI picker containing a list of all Active Directory user accounts that do not have an associated mailbox. In this example we will select **New User** and click **Next** (see Figure 3.4).

**NOTE**

To be able to create a new mailbox (also known as creating a new mailbox-enabled user), the account you’re logged on with must have the appropriate permissions in Active Directory, in addition to having the Exchange Recipient Administrator permission. Membership in the Account Operators group should be sufficient. If you want to create a new mailbox for an existing user (also known as mailbox-enabling an existing user), you only need Exchange Recipient Administrator permissions.
On the User Information page, select the Organizational unit in which you want the user object to be created by clicking the **Browse** button. Enter the name and account information and click **Next** (see Figure 3.5).

As you can see in Figure 3.5, you can specify that the user must change his password at the next logon, just as you could when provisioning Exchange 2000/2003 users in ADUC.
On the Mailbox Settings page, you can specify the Exchange 2007 Mailbox Server Storage group as well as the Mailbox database in which the mailbox for the user should be created (see Figure 3.6). On this page you also have the option of applying any required managed folder mailbox and Exchange ActiveSync mailbox policies. (These are discussed in more detail in Chapter 5.) When you're ready, click **Next** once again.

As you can see in the bottom of the Mail Settings page, you need an Exchange Enterprise Client Access License (CAL) to take advantage of the messaging records management features of Exchange 2007. (Exchange licensing and client CALS were discussed earlier in Chapter 2.)
On the New Mailbox page, you can see a configuration summary of the mailbox-enabled user account that will be created. Click **New**, and then click **Finish** on the **Completion** page (see Figure 3.7).

**Figure 3.6 Choosing the Server, Storage Group, and Mailbox Database for the Mailbox**

![New Mailbox page](image)

Some Independent Advice

As is the case with all wizards in the Exchange 2007 Management Console, the Completion page shown in Figure 3.7 will provide you with the CMDlet and any parameters that will be used to create the mailbox-enabled user
These are all the steps required to create a mailbox-enabled user. This process wasn’t harmful at all, was it?

If you want to create a user mailbox using the EMS, you need to use the `New-Mailbox` or `Set-Mailbox` CMDlets, depending on whether you want to create a new mailbox-enabled user or
mailbox-enable an existing user account. To get a list of all the available parameters for these two CMDlets, you can open the EMS and type Get-Help New-Mailbox and Get-Help Set-Mailbox, respectively.

**Manipulating Mailboxes in Exchange 2007**

Once we have created a user mailbox, we can manipulate it in several ways by highlighting it in the Results pane and then choose the action we want to perform in the Action pane.

As you can see in Figure 3.8, we can disable the mailbox, meaning all of the Exchange attributes are removed from the respective Active Directory user account.

**Figure 3.8 Set of Actions for a User Mailbox in the Actions Pane**

Although the account will no longer be mailbox enabled, the mailbox can still be found under the Disconnected Mailbox subnode. From there, it can be reconnected to the same or any other nonmailbox-enabled user account, until the default 30-day deleted mailbox retention policy for Exchange 2007 databases kicks in and purges the mailbox. (We'll take a closer look at reconnecting mailboxes later in this chapter.) When you try to disable a mailbox, you’ll first receive the warning message shown in Figure 3.9.

**Figure 3.9 The Warning Received When You’re Disabling a Mailbox**
Another option is to remove the mailbox, which not only removes the mailbox but also deletes the associated user account in Active Directory—so think twice before you click Yes to the warning message shown in Figure 3.10. Exchange 2007 beta 2 builds and earlier didn’t even include a warning message about this action, which led to a few frustrated Exchange consultants who participated in the Exchange 2007 Rapid Deployment Program (RDP), a program where selected customers deployed Exchange 2007 beta 2 in a production environment.

**Figure 3.10** Warning Received When You’re Removing a Mailbox

![Warning Message](image)

**Note**

Unless you have delivered mail to a mail-enabled user object, selecting either the Disable or the Remove Action pane action will not place that mailbox in the Disconnected Mailbox subnode. The reason behind this is simply that the mailbox is created only when it receives its first piece of mail, so there is no mailbox to disconnect.

To disable or remove a user mailbox using the EMS, you need to use the `Disable-Mailbox` and `Remove-Mailbox` CMDlets, respectively. So if, for example, you wanted to disable the mailbox for a user named Michella Kruse Walther with a UPN of MWK, you would need to run the following command:

```
Disable-Mailbox -Identity MWK
```

followed by pressing **Enter**. This will bring you a command-line warning message similar to the one shown in Figure 3.9. Click **Y** for Yes.

Likewise, removing the user mailbox for the same user would be done by running the following command:

```
Remove-Mailbox -Identity MWK
```

followed by pressing **Enter**. This will bring you a command-line warning message similar to the one shown in Figure 3.10. Click **Y** for Yes.
Moving a Mailbox

We can also move a mailbox to another server, storage group, and mailbox database; we do this by clicking the Move Mailbox link in the Action pane, bringing up the Move Mailbox Wizard Introduction page, shown in Figure 3.11. Here we specify the server, storage group, and mailbox database the respective mailbox should be moved to. When you have done so, click Next.

Figure 3.11 The Move Mailbox Wizard Introduction Page
On the Move Options page, we can specify how the mailboxes that contain corrupted messages should be managed. We can configure the Move Mailbox Wizard to skip any mailboxes containing one or more corrupted messages or simply let it skip corrupted messages (Figure 3.12). If we select the latter, we have even more granular control and can specify the maximum number of messages to skip before the mailbox move should be cancelled. In this example, we choose **Skip** the mailbox and click **Next**.

**Figure 3.12 Move Mailbox Wizard Options**

We’re now taken to the Move Schedule page shown in Figure 3.13, where we can specify when the mailbox move should occur as well as the maximum length of time the move should run before
it should be cancelled. The idea behind the Move Mailbox Schedule option is to allow you to schedule the mailbox moves to occur during nonworking hours. In this example, we select **Immediately** and click **Next**.

**Figure 3.13** The Move Mailbox Wizard Schedule Page

![Move Mailbox Wizard Schedule Page](image)

Next we are taken to the Move Mailbox page (see Figure 3.14), where we can verify that the parameters for the mailbox move are correct before the actual move takes place. When you're ready, click **Move**.
Depending on the size of the mailbox, you will need to have a little patience while the move takes place. The Move Mailbox Wizard needs to first open the source mailbox and then create a destination mailbox on the target database. Only then does it start to move the contents of the mailbox, completing its task by finally deleting the source mailbox and closing its connection. When the mailbox has been moved successfully, you’ll be taken to the Completion page, where you can see the CMDlet as well as the parameters used to move the mailbox (see Figure 3.15). Click Finish to exit the Move Mailbox Wizard.
The Exchange 2007 Move Mailbox Wizard is the tool you should use for moving legacy mailboxes from Exchange 2000 or 2003 Server to an Exchange 2007 Mailbox Server.

To move a mailbox using the EMS, you can use the `Move-Mailbox` CMDlet. To get a list of available parameters for this CMDlet, type `Get-Help Move-Mailbox` in the EMS.
Enabling Unified Messaging for a Mailbox

If you have installed the Unified Messaging Server role on an Exchange 2007 server in your Exchange organization, you also have the option of enabling Unified Messaging for a user mailbox. When you click the **Enable Unified Messaging** link in the Action pane, you will be faced with the Enable Unified Messaging Wizard shown in Figure 3.16. In addition to enabling Unified Messaging for a user mailbox, this is where you apply any required Unified Messaging Mailbox Policies, a mandatory setting, as well as creating a mailbox extension and personal identification number (PIN), used to access Outlook Voice Access (OVA). When you have enabled Unified Messaging for a user mailbox, an e-mail message will be sent to the respective mailbox, notifying that user that they have been enabled for unified messaging. The e-mail message will include information about the PIN as

---

**Figure 3.16 Enabling Unified Messaging for a User Mailbox**

![Enable Unified Messaging](image-url)
well as the number and extension the user needs to dial to gain access to the mailbox. When you’re ready, click **Enable** and then click **Finish** on the Completion page.

We will talk much more about the Unified Messaging functionality in Chapter 10.

Let’s now take a look at the Property page for a mailbox user object, which allows us complete control over all Exchange-related settings from within the EMC. We gain this control by selecting a user mailbox, either beneath the Recipient Configuration work center node or the Mailbox subnode, followed by clicking **Properties** in the Action pane. (Alternatively, you can right-click the user mailbox object and select **Properties** in the context menu.) The tab that will be selected by default is the General tab (see Figure 3.17).

**Figure 3.17** The General Tab on the User Mailbox Property Page
Here we have the option of changing the display name as well as the alias of the user mailbox. In addition, we can see information about which Active Directory OU the user mailbox object is located in, the last user that logged onto the mailbox, the total items and size of the mailbox, and the mailbox server, storage group and mailbox database on which the user mailbox resides. From this tab we also have the option of hiding the user mailbox from any Exchange address list. Finally, we can click the **Custom Attributes** button to specify any custom attributes that should apply to this user mailbox. Like Exchange 2000 and 2003, Exchange 2007 gives you the option of specifying up to 15 different custom attributes.

---

**SOME INDEPENDENT ADVICE**

Some of you might be wondering what custom attributes can be used for in the first place. Well, custom attributes can be used for many different purposes. For example, they can be used for personal information about your users that does not easily fit into any existing field. Examples of custom attribute fields include employee numbers, cost center, health insurance data, and Social Security information.

Bear in mind that custom attributes can also be used to create recipient conditions for dynamic distribution groups, e-mail address policies, and address lists. Exchange hosting providers especially can take advantage of custom attributes in segmenting dissimilar customer environments.

---

Let’s move on to the User Information tab. As you will see, this is where you can find and, if required, modify user information such as first name, initials, last name, name (also known as display name), and Web page, in addition to adding special notes about the particular user account (see Figure 3.18). Any changes made here are of course also reflected in Active Directory and visible from the Property page of an Active Directory user account using the ADUC snap-in.

---

**WARNING**

Be careful about what you type in the Notes field, since any information entered here can be seen by someone looking at the properties of the respective user mailbox object on the Phone/Notes tab in the Global Address List (GAL) in Outlook.
Figure 3.18 The User Information Tab on the User Mailbox Property Page

Under the Address and Phone tab, as shown in Figure 3.19, we can find and, if required, modify user information such as street address, city, state/province, ZIP/postal code, country/region, and phone and pager numbers (for the few people who still use a pager).
Under the Organization tab (see Figure 3.20), we have the option of entering user information such as title, company, department, and office as well as specifying the user’s manager.
By specifying the manager for each of the recipients in your organization, you can create a virtual organization chart, accessed by looking at the Property page of the user mailbox object in the GAL in Outlook 2007, shown in Figure 3.21.

The Direct Reports field lists mailbox user’s accounts and/or contacts that are managed by the respective recipient. Note that the user account Direct Report field is populated automatically when a recipient is designated as a manager for another recipient.
Let's move on to the Mailbox Settings tab shown in Figure 3.22. From here we can apply Managed folder mailbox policies (used for messaging records management purposes) and configure per-user level storage quotas. In addition, we can set deleted items’ retention time, which by default uses the mailbox database defaults of 14 days.

We’ll cover how you create and apply managed folder mailbox policies in Chapter 4.
**Figure 3.22 Storage Quotas for a User Mailbox**

![Storage Quotas for a User Mailbox](image)

**NOTE**

The Messaging Records Management feature in Exchange 2007 is considered a premium feature and requires an Exchange Enterprise Client Access License (CAL).

Under the Mail Flow Settings tab, we can choose to manage delivery options, message size restrictions, and message delivery restrictions, as shown in Figure 3.23.
Let’s take a look at the Properties for Delivery Options (see Figure 3.24). Highlight **Delivery Options** and then click **Properties**. Here we can grant send-on-behalf permissions to other user mailbox objects in the organization. We can also enable forwarding so that all mail received by the respective mailbox is forwarded to another specified user mailbox. We can even configure the forwarding feature so that the message is delivered to both the originally destined mailbox as well as the configured forwarder user mailbox. Finally, we have the option of setting a recipient limit, used to set the maximum number of recipients the user mailbox is allowed to send in a given e-mail message.
Click **OK** and then click the **Properties** button for **Message Size Restrictions** (see Figure 3.25). Here we can set the maximum receive and send message size (in KB) for the user mailbox.

**Figure 3.24 Delivery Options for a User Mailbox**

**Figure 3.25 Setting Message Size Restrictions for a User Mailbox**
Click **OK** and then click the **Properties** for **Message Delivery Restrictions** (see Figure 3.26). Here we can specify who may send messages to the respective user mailbox, require that all senders are authenticated (preventing anonymous users from sending to the user mailbox), and finally, create a list of senders that should be rejected from sending to this user.

**Figure 3.26 Message Delivery Settings for a User Mailbox**

![Message Delivery Restrictions dialog box](image)

Click **OK** to get back to the property page, then click the **Mailbox Features** tab, shown in Figure 3.27.

This tab allows you to control client access to Outlook Web Access (OWA), Exchange ActiveSync (EAS), Unified Messaging (UM), and Outlook MAPI. In addition to being able to enable or disable access from all these client access methods, you also have the ability to apply an Exchange ActiveSync policy to the user mailbox account by clicking the **Properties** of **Exchange ActiveSync**.

In Chapter 5 we’ll show how you create Exchange ActiveSync policies as well as how to apply them to user mailbox accounts throughout your Exchange organization.
If you have enabled Unified Messaging for the user mailbox object, you can also configure UM features by clicking Properties of Unified Messaging. However, that topic is covered in Chapter 10 and so won’t be covered here.

**Figure 3.27 The Mailbox Features Tab for a User Mailbox**

The next tab is the Account tab (see Figure 3.28). There’s not much to say about the options available here, since most of you should recognize them from the ADUC snap-in. This is where you can find and modify the user principal name (UPN), the UPN domain, and the user logon name (pre-Windows 2000). Finally, you have the option of specifying that the user must change his or her password at next logon.
The Member Of tab should not need any explanation, so let’s quickly move on to the E-Mail Addresses tab (see Figure 3.29). This is where you can see which e-mail addresses are currently stamped on the user mailbox object. You can change as well as add e-mail addresses from here. Just bear in mind that you’ll need to untick **Automatically update e-mail addresses based on e-mail address policy** if you want to manually control which addresses applied as e-mail address policies have the ability to overwrite changes applied here.

We’ll talk a lot more about e-mail address policies in Chapter 6.
All right, we have just been through all the tabs available for a user mailbox object. Was it as boring as you had thought it would be?

Creating a Room or Equipment Mailbox

Creating a room or equipment mailbox is a very similar process to creating an ordinary user mailbox, so we’ll not go through each page in the New Mailbox Wizard again. Instead, let’s look at the **User Information** page, where you enter the information about the resource mailbox (see Figure 3.30). As you can see, we have a specific OU called Meeting Rooms set up specifically for housing room mailboxes.
**NOTE**

You cannot create OUs from within the EMC; instead, you need to do so using the ADUC snap-in.

**Figure 3.30 Creating a New Room Mailbox**

![New Mailbox Interface](image-url)
When the meeting room or equipment mailbox has been created, you can manipulate and modify it the exact same way you can with a user mailbox because it is nothing more than a user mailbox with a disabled account association. Again, there’s no reason to take you through all the tabs on the property page again.

Some of you might be wondering how a room or equipment mailbox is differentiated from an ordinary user mailbox. The only difference (other than the disabled account object association) is that a room mailbox is created with a –Room parameter, and an equipment mailbox is created with an –Equipment parameter. These mailboxes are also explicit, using their own icon and recipient type details.

**Note**

Room and equipment mailboxes can be included in meeting requests and be configured to automatically process incoming requests.

### Creating a Linked Mailbox

A linked mailbox is a mailbox that needs to be associated with a user account belonging to another trusted forest. Linked mailboxes are typically used when we choose to use the Exchange resource forest model, where Exchange 2007 is deployed in its own separate Active Directory forest (done to centralize Exchange in a single forest).

Although Figure 3.31 implies that you link the mailbox directly to a user account in another trusted forest, this isn’t the case. You still need to create a user account in the Exchange resource forest, because an Exchange 2007 mailbox requires that you have an associated account in the same Active Directory forest in which Exchange 2007 is deployed. This was no different than Associated External Accounts in Exchange 2000 and 2003.

**Note**

The Exchange 2007 resource forest model is considered a complex design and should only be used by large organizations that really need to deploy Exchange 2007 in its own Active Directory forest.
Managing Distribution Groups

As is the case with Exchange 2000 and 2003, Exchange 2007 has two types of distribution groups: *mail-enabled distribution groups*, which are used strictly for distributing messages, and *mail-enabled security groups*, which are used to assign permissions to users as well as to distribute messages. In addition, the query-based distribution group introduced in Exchange 2003 has made its way into Exchange 2007, albeit with a new name and a few changes. These groups are now called *dynamic distribution groups* and, as the name implies, are still dynamic in nature and based on a set of configured criteria. More about them later.

Distribution groups can contain other distribution groups, user mailboxes (mailbox-enabled users), and mail contacts (mail-enabled contacts). You can get a list of the mail-enabled distribution groups in your organization by selecting the **Distribution Group** subnode beneath the Recipient Configuration work center node, as shown in Figure 3.32. This is also the place where you create new groups as well as modify any existing ones.
Just like user mailbox objects, distribution groups are explicit in Exchange 2007, meaning that each type of group is differentiated using an individual icon as well as a recipient type details description, as you can see in Figure 3.32. As you can also see in this figure, we have four different explicit group types:

- Mail Universal Distribution groups
- Mail Universal Security groups
- Dynamic Distribution groups
- Mail Non-Universal groups
  - Domain Local groups
  - Global groups

**WARNING**

Although pre-existing Mail Non-Universal groups are shown under the Distribution Group subnode in the figure, you should be aware that the administration of these group types is limited. Actually, it’s recommended that you do not use these types of groups for distributing messages in Exchange 2007.

Another word of warning when you are creating groups in ADU&C snap-in console: Any group created as a Distribution Global group will not be available when you’re trying to mail-enable that group via the EMC. Groups created in the ADUC MMC snap-in must be Universal Distribution groups if they are later to be mail-enabled using the EMC.

**Figure 3.32** Listing Distribution Group Types Under the Distribution Group Subnode
When highlighting a group under the Distribution Group subnode, you get a set of actions that can be performed on it in the Action pane. When highlighting a Mail Universal Security group, for example, we get the set of actions shown in Figure 3.33. We can disable the group, removing all Exchange-related properties from the group; remove it (which physically removes the group object from Active Directory!); or access the Properties page for the group by choosing the Properties action.

If we had highlighted a Dynamic Distribution group, we would not have had the option to disable it, but only to remove it.

**Figure 3.33 Actions for a Mail Universal Security Group in the Actions Pane**
Highlighting a Mail Non-Universal group will also give us the option of converting it to a Universal group, as shown in Figure 3.34. We highly recommend you do this.

**Figure 3.34 Actions for a Mail Non-Universal Group in the Actions Pane**

Let’s access the Properties page for a Mail Universal Distribution group. The first tab we’re presented with is the General tab (see Figure 3.35), where we can change the name and alias of the group as well as view or modify any specified custom attributes.

We also have the option of changing the group name under the Group Information tab. We can also specify the person (AD user account) that manages the respective group by selecting the **Managed By** option, clicking **Browse**, and choosing an account in AD. The person specified here will also be shown as the Owner when users use the GAL to open the Properties page of the group from within Outlook. On a side note, this person has the option of receiving delivery reports when messages are sent to the group, which is configurable on the Advanced tab. Finally, we have a Notes field, where we can enter administrative notes about the group. Again, as with user notes, bear in mind that end users will be able to see these notes from their Outlook clients when accessing them in the GAL.

The Members tab should not need any further explanation; it is simply the place where you add and/or remove members from the group. The Member Of tab lists any distribution groups that include this group on its member list. Note that you cannot use this tab to add the selected group to other distribution groups! The E-Mail Addresses tab is the place where you can see all the e-mail addresses for the group as well as modify or add new e-mail addresses. By default, the e-mail addresses are stamped on the distribution group by the e-mail address policy in the Exchange organization; however, you have the option of disabling this behavior and instead administering these lists manually by deseleting the option **Automatically update e-mail addresses based on recipient policy.**
On the Advanced tab, shown in Figure 3.36, we can specify a simple display name, used if the original display name of the group contains Unicode characters and you have third-party applications that don’t support Unicode. In addition, you can define an expansion server, used to expand group membership. When a message is sent to a distribution group, Exchange must access the membership list to deliver the message to each member of the group. When dealing with large distribution groups, this can be a very resource-intensive task, thus giving a reason to define a particular hub transport server role as your expansion server.
If you specify an expansion server for a particular distribution group, you should always make sure it's well documented because the group will then depend on this specified server to deliver messages. This means that if you someday find out you want to replace your existing hub transport server with a new one, and that particular hub transport server has been explicitly assigned as an expansion server for one or more distribution groups, those groups will no longer be able to deliver messages to the respective members.
Under the Advanced tab, you also have the option of hiding the group from the Exchange Global Address Lists (GAL) and specify that any out-of-office messages should be sent to the originator (the sender of the message) instead of the group. Lastly, you have the option of specifying whether delivery reports should be sent or not. If you choose to have them sent, you can select whether they should be sent to the message originator or the group manager specified under the Group Information tab. Note that if you decide to send delivery reports to the group manager, a group manager must be selected under the Group Information Managed By field or you will receive a warning message telling you to do so.

The last tab is Mail Flow Settings, where you can configure the maximum group receiving size in KB as well as defining who should be allowed to send messages to the group.

**SOME INDEPENDENT ADVICE**

Larger “All User” based distribution groups should always have a limited number of allowed senders defined because these groups tend to encompass your entire organization and can get you in trouble if everyday messages can be delivered to everyone in your company.

**NOTE**

When accessed via the Exchange Management Console, the property pages are identical for Mail Universal Distribution groups and Mail Universal Security groups, so there’s no reason to go through the tabs under the Properties page of a Mail Universal Security group.

Creating a New Distribution Group

To create a new distribution group, click the **New Distribution Group** link in the Action pane, bringing up the New Distribution Group Wizard shown in Figure 3.37. The first page is the Introduction page, where you need to specify whether you want to create a new distribution group or mail-enable an existing security group. If you choose to mail-enable an existing group, click the **Browse** button and you will be presented with a GUI picker, where all security groups that haven’t been mail-enabled will be listed. For the purposes of this example, we’ll select **New group**, then click **Next**.
Figure 3.37 The Introduction Page in the New Distribution Group Wizard

On the Group Information page shown in Figure 3.38, we'll have to specify whether we want to create a new mail-enabled distribution group or a mail-enabled security group. We'll then need to specify the OU in which the group should be created in Active Directory and finally give it an appropriate name and alias. The alias is automatically filled in and duplicated with whatever you used for a name; however, it can still be changed without altering the name.
As already mentioned, the only difference between mail-enabled distribution groups and mail-enabled security groups is the ability for security groups to be used to assign permissions to user objects in Active Directory.

Figure 3.38 Selecting the Type of Distribution Group That Should Be Created
Let’s click **Next**, which will bring us to the New Distribution Group page, where you should verify the information in the Configuration Summary pane. Once it’s verified, click **New** and finally click **Finish**.

To create or modify existing distribution groups via the EMS, use the `New-DistributionGroup` and `Set-DistributionGroup` CMDlets. An example of creating a distribution group might look like the following:

```
New-DistributionGroup -Name “New Group” -OrganizationalUnit syngress.local/users -SamAccountName “New-Group” -Type security
```

### Creating a New Dynamic Distribution Group

Dynamic distribution groups, which were known as query-based distribution groups in Exchange 2003, provide the same type of functionality as ordinary distribution groups, but instead of manually adding members to the group’s membership list, you can use a set of filters and conditions that you predefine when creating the group to derive its membership. When a message is set to a dynamic distribution group, Exchange queries the Active Directory for recipients matching the specified filters and conditions. The primary advantage of using dynamic distribution groups over ordinary distribution groups is that dynamic groups lower the administrative burden, since you don’t have to maintain any distribution group membership lists. If we should mention any disadvantage of using dynamic distribution groups, it is that this type of group puts more load on the Global Catalog servers in your Active Directory forest. This is based on the fact that each time a message is sent to a dynamic distribution group, Exchange will have to query them based on the criteria defined in the group.

You create a new dynamic distribution group by clicking **New Dynamic Distribution Group** in the Action pane under the **Distribution Group** subnode of the Recipient Configuration work center node.

This will bring up the **New Dynamic Distribution Group Wizard** shown in Figure 3.39. Here you specify the OU in which the group should be created and give the group a meaningful name. When you have done so, click **Next**.
The next page is the Filter Settings page (see Figure 3.40) where you will need to specify the recipient container the filter should be applied to. Clicking the **Browse** button will bring up a GUI picker where you can choose an individual OU or even the whole Active Directory domain, for that matter. On this page you also have the option of specifying the type of recipients that should be included in your filter. For example, this could be **All recipient types** or just **Users with Exchange mailboxes**. When you have made your choices, click **Next**.
We have now reached the most interesting of all pages in the wizard, where we actually select and define the conditions that should be used by the group. As you can see in Figure 3.41, we can select conditions such as **Recipient is in a State or Province**, **Recipient is in a Department**, or **Recipient is in a company** as well as any of the 15 custom attributes that you might have defined on your mailbox-enabled user objects, so there should be plenty of possibilities. For the purposes of our example, we have selected **Recipient is in a Company** and edited the condition so that all recipients in a company called Exchange Dogfood will receive the messages sent to the respective dynamic distribution group. When you have selected the required conditions, you can click the **Preview** button in the lower-right corner to display all recipients who meet your criteria and whether they are the correct recipients you intended for the group. When you’re ready, click **Next**, **New**, and finally **Finish**.
Since most of the Properties pages for a dynamic distribution group are more or less identical to that of an ordinary distribution group, we will not cover them here, with the exception of two tabs, which we want to quickly show you. The Filter and Conditions tabs are where you change the filter and condition behavior for a dynamic distribution group. As you can see in Figure 3.42, the Filter tab is where you can change the recipient container and the recipient types used by the group.
Under the Conditions tab, shown in Figure 3.43, you can change the conditions that should be used to define your group, as well as use the **Preview** button to list all users meeting your conditions.

To create or modify existing dynamic distribution groups via the EMS, use the *New-DynamicDistributionGroup* and *Set-DynamicDistributionGroup* CMDlets.
So, what do you do if you want to use conditions other than those available in the New Dynamic Distribution Group Wizard? Is this even possible? As a matter of fact, it is, but only by using the `New-DynamicDistributionGroup` CMDlet in the EMS. You should also bear in mind that any conditions and filters other than those provided in the GUI must be managed using the EMS. If, for example, you wanted to create a custom recipient
filter that included all recipients in an OU called EDFUsers, with a mailbox located on a server called EDFS03, you would need to run the following command:

```
New-DynamicDistributionGroup -Name "EDFS03 - Mailbox Users" -OrganizationalUnit EDFSUsers -RecipientFilter "((RecipientType -eq 'UserMailbox' -and ServerName -eq 'EDFS03') -and -not(Name -like 'SystemMailbox*'))"
```

When viewing the Filter tab on the Properties page of a dynamic distribution group, created using a custom filter, you will see something similar to the display in Figure 3.44, showing the complete recipient filter.

Managing Mail Contacts and Mail Users

We manage mail contacts (mail-enabled contacts) and mail users (mail-enabled users) under the Mailbox Contact subnode beneath the Recipient Configuration work center node. So, what is a mail contact? Most of you should know what it is, since this type of object has existed since Exchange 2000 was released to manufacturing. For those of you who would like a refresher, a mail contact is an AD object without security principals as well as a mailbox. Because this object doesn't have any security principals, it cannot be used to log onto the network and/or be used in an ACL to assign access to a resource. The purpose of this object is simply to represent an external recipient (using a name and an external SMTP address) in the Exchange address lists. This could be customer or a consultant, for example.

A mail user (mail-enabled user) is an object that does have an account in Active Directory as well as an external e-mail address associated with it, but this type of recipient does not have an Exchange mailbox in the organization. A mail user is also listed in the Exchange address lists. The only difference between a mail contact and a mail user is that a mail user can log onto the Active Directory and can be used in an ACL to gain access to domain resources. Mail users are typically used for contract employees who are on site for a period of time and require access to the network but want to use their own mailbox (for example, a mailbox in another Exchange organization that they access using OWA or Outlook Anywhere) or simply use a messaging system other than Exchange.
As you can see in Figure 3.45, these recipient types are also explicit and therefore differentiated, using their own icon and recipient type details.
When highlighting an existing mail contact or mail user, we can either disable or remove the Mail object and/or access its Properties page. As is also the case with a user mailbox, disabling a mail contact or a mail user will remove the Exchange properties from the object, whereas removing a mail contact or mail user will instead delete the object entirely in Active Directory, so be careful when using the Remove action.

Creating a Mail Contact

To create mail contacts, you need to click the **New Mail Contact** link in the Action pane under the **Mail Contact** subnode. This will bring up the **New Mail Contact Wizard** shown in Figure 3.46. Here we need to select whether we want to create a new mail contact or want to mail-enable an existing contact. If you select **Existing contact** you can click the **Browse** button, bringing up a GUI picker and listing all contacts that haven’t been mail-enabled. In this example, we’ll select **New Contact** and click **Next**.
Figure 3.46 Choosing Whether to Create a New Mail-Enabled Contact or Mail-Enabling an Existing Contact

On the Contact Information page shown in Figure 3.47, we’ll need to enter the account information that is required to either create a mail contact or mail-enable a contact. We’ll need to provide things such as name and alias as well as add the external e-mail address we want to associate with the Mail Contact object. When you have done so, click Next, and then click New on the Summary page, and finally click Finish.
The process of creating a mail user is almost identical to creating a mail contact, the only exception being the need to specify the user account information during creation.

To create a new mail-enabled contact via the EMS, use the `New-MailContact` CMDlet. To modify this type of recipient, use the `Set-MailContact` CMDlet. To create a new mail-enabled user via the EMS, use the `New-MailUser` CMDlet. To modify this type of recipient, use the `Set-MailUser` CMDlet.

**Managing Disconnected Mailboxes**

When you either disable or remove a mailbox, that mailbox will be marked for deletion but will not be automatically deleted. Instead, it will be kept in the respective Mailbox database for the number of days
specified on the Mailbox database Properties page (under the Limits tab), called **Keep deleted mailboxes for**, more commonly referred to as **mailbox retention**. Like Exchange 2000 and 2003, Exchange 2007 will, by default, keep deleted mailboxes for 30 days before they are purged (permanently deleted).

After you disable or remove a mailbox, you can then find it under the Disconnected Mailbox subnode, as shown in Figure 3.48. If the mailboxes you have disabled or removed are within the last 30-day retention period and do not show up under this node, chances are that the EMC is connected to another mailbox server other than the one hosting the Mailbox database on which the mailboxes originally resided. As you can see in the top of the Results pane, the EMC informs us which mailbox server the Disconnected Mailbox subnode is connected to. As you also can see in Figure 3.48, you can connect to another mailbox server by clicking the **Connect to Server** link in the Action pane, then clicking the **Browse** button to bring up a GUI picker where all mailbox servers in your Exchange 2007 organization will be listed.

**Figure 3.48 Connecting to a Specific Mailbox Server**
When you’re connected to the correct mailbox server, you can reconnect a disconnected mailbox by highlighting the Mailbox object and clicking the Connect link in the Action pane. This brings up the Connect Mailbox Wizard Introduction page, shown in Figure 3.49. Here you can specify the type of mailbox the disconnected mailbox should be reconnected to. When you have selected a mailbox type, click Next.

**Figure 3.49 Selecting the Mailbox Type to Which the Mailbox Will Be Connected**

On the Mailbox Settings page, we select a user, enter the alias for the user, and, if required, select any Managed folder or Exchange ActiveSync mailbox policy settings.

As you can see in Figure 3.50, we can either connect the mailbox to a user using the Matching user or Existing user option. If we select the Matching user option, Exchange will search and try
to locate a user matching that of the disconnected mailbox within the Active Directory forest. If you would rather pick an existing user manually, you should select **Existing user**. When you have made your choices, click **Next**, then **Connect**, and finally **Finish**.

**Figure 3.50 Connecting a Disconnected Mailbox**

Okay, so what if you don’t want the mailbox to be disconnected but would rather permanently delete a user mailbox right away? Well, in this particular scenario, you need to switch to the EMS because there’s no way to do so via the GUI. More specifically, you need to run the `Remove-Mailbox` command with the `Permanent` parameter. So, for example, if you were to delete the AD user account
and the mailbox for a user with a UPN named LIK in an Active Directory domain called exchangedogfood.dk, you would need to run the following command:

```powershell
Remove-Mailbox -Identity exchangedogfood\lik -Permanent $true
```

You will then get the warning message shown in Figure 3.51. Type Y to confirm you want to do it, and then press Enter.

**Figure 3.51 Permanently Removing a User Mailbox**

![Figure 3.51 Permanently Removing a User Mailbox](image)

Notice that the warning message says *Will remove the Windows user object and will remove the mailbox from the database*, unlike the warning message back in Figure 3.10, which says *Will remove the Windows user object and mark the mailbox in the database for removal.*

---

**Some Independent Advice**

So how do you delete a mailbox that has already been disconnected? This is a little trickier! To do so, you first need to retrieve the mailbox GUID of the disconnected mailbox using the Get-MailboxStatistics CMDlet. However, it’s not enough to simply run this CMDlet, since it won’t list disconnected mailboxes. To delete the disconnected mailbox for a user with a display name of Line Kruse, you instead need to type

```powershell
$Temp = Get-MailboxStatistics | Where {$_._.DisplayName -eq 'Line Kruse'}
```

followed by pressing Enter. Then you need to run a command similar to the following: `Remove-Mailbox -Database “edfs03mailbox database 2” -StoreMailboxIdentity $Temp.MailboxGuid` followed by pressing Enter. You will then get the warning message shown in Figure 3.52. Click Y for Yes, and press Enter.

The disconnected mailbox has now been deleted from the specified mailbox database.
Managing Recipients in an Exchange Coexistence Environment

During a transition from Exchange 2000/2003 to Exchange 2007, deploying Exchange 2007 Server into your existing Exchange organization can take a long time, depending on the size of your existing setup and organizational layout.


Which tool (the ADUC snap-in or EMC) should you use to manage mailbox-enabled user objects within a coexistence environment? The choice is actually pretty straightforward; just follow the set of guidelines laid out in Table 3.1.

Table 3.1 Tools to Manage Exchange 2000/2003 and 2007 Mailboxes in a Coexistence Environment

<table>
<thead>
<tr>
<th>Administrative Task</th>
<th>ADUC Snap-in</th>
<th>EMC/EMS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create Exchange 2007 Mailbox-enabled users</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Create Exchange 2000/2003 Mailbox-enabled users</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Manage Exchange 2007 Mailbox-enabled users</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Manage Exchange 2000/2003 Mailbox-enabled users</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Remove Exchange 2007 Mailbox-enabled users</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Remove Exchange 2000/2003 Mailbox-enabled users</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Move Exchange 2007 Mailbox-enabled users</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Move Exchange 2000/2003 Mailbox-enabled users</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

Unlike mailbox-enabled user objects, you can administer mail-enabled objects (contacts, distribution groups, and the like) using your tool of choice, since these types of objects aren’t tied to a specific server version. Best practice, however, is to manage these objects from either the Exchange 2007 EMC or EMS. There’s only one mail-enabled object that you must manage from the EMC or EMS at all times, and that is dynamic distribution groups. This is based on the fact that this type of object uses the new Exchange 2007 OPATH format for its recipient filter and cannot be managed under the older Exchange tools.

The Recipient Update Service in a Coexistence Environment

The infamous Recipient Update Service (RUS), which most of us know from Exchange 2000 and 2003, is no longer part of the Exchange 2007 product. RUS was responsible for stamping e-mail addresses, in addition to address list membership along with a few other things, but it didn’t always work as expected and was very difficult to troubleshoot when it acted up. With Exchange 2007, the RUS (and thereby the asynchronous behavior used to provision objects) has been replaced by a new synchronous process, the EmailAddressPolicy CMDlet, used to stamp the e-mail address onto objects immediately! Yes, you no longer have to wait for several minutes to see e-mail addresses on your objects, as was often the case with the antiquated RUS. We’ll talk more about this new task in Chapter 6.

There’s one important detail to keep in mind about the RUS when you’re working in a coexistence environment. You will need to continue using the Exchange 2003 System Manager to provision a RUS for each domain that contains Exchange Recipients; note that this is also the case even when you’re provisioning domains with pure Exchange 2007 recipients in them!

Granting Access and/or SendAs Permissions to a Mailbox

In some situations, one or more users might need to be granted permissions to access another user’s mailbox. This could be a temporary access—for example, during vacations, maternity leave, or for
other reasons—where one or more users need to take over the work of the user who will be absent. It could also be a more permanent access, where, for example, a secretary needs to access her boss’s mailbox. Another reason could be that all users in a particular department (such as a helpdesk) need a shared mailbox.

You cannot grant permissions to a mailbox using the EMC. Instead, you need to use the EMS for this task—more specifically, the `Add-MailboxPermission` CMDlet, which has been created for granting permissions to a mailbox. To, for example, grant full access permissions to a mailbox, you would need to use the following command:

```
Add-MailboxPermission "respective mailbox" -User "user to have permissions" -AccessRights: FullAccess
```

To learn more about the `Add-MailboxPermission` CMDlet and any available parameters and syntaxes, you can type `Get-Help Add-MailboxPermission` in the EMS.

There might also be times where you need to grant `SendAs` permission to a mailbox for another user. To do this you can use the `Add-ADPermission` CMDlet or the ADUC MMC snap-in. To do so using the `Add-ADPermission` CMDlet, you should run the following command:

```
Add-ADPermission -Identity "respective mailbox" -User "user to have permissions" -ExtendedRights: SendAs
```

To grant `SendAs` permissions to a user via the ADUC MMC snap-in, perform the following steps:

1. On a domain controller in the Active Directory, click **Start** | **Run**, type `dsa.msc` and then press **Enter**.
2. In the menu, click **View**, then **Advanced Features**.
3. Drill down to and open the Properties page for the AD user object to which you want to grant another user `SendAs` permissions.
4. Now click the **Security** tab.
5. Click **Add** and select the AD user object that should be granted `SendAs` permission, then click **OK**.
6. Now select the added user in the **Group or user names** box, then check **Allow** for the `SendAs` permission in the permissions list, as shown in Figure 3.53.
Figure 3.53 The Security Tab on the AD User Object Properties Page

7. Click **OK** and close the ADUC MMC snap-in.

**WARNING**

Be aware that granting a user *SendAs* permissions to a mailbox will allow the user to send messages using the respective mailbox.
Creating a Custom Recipient Management Console

Depending on the organization, there could be times when you want to create an Exchange 2007 EMC that shows only the Recipient Configuration work center node. This is especially true in situations where you have a helpdesk that is used to having a customized ADUC console snap-in that provided the respective organizational units (OUs) holding the Exchange user objects they were to administer. After the transition to Exchange 2007, it would be a little too drastic to let the helpdesk staff have the full-blown EMC at their disposal, right? To create a custom EMC exposing only the Recipient Configuration work center node, you will first need to click Start, then type MMC.exe, followed by pressing Enter. This will bring up an empty MMC console, as shown in Figure 3.54. Click File in the menu, then click Add/Remove Snap-in.

Figure 3.54 An Empty MMC Console
In the Add/Remove Snap-in window, click Add, then scroll down and select the Exchange Server 2007 snap-in, as shown in Figure 3.55. Click Add again, then click Close and finally OK.

Expand the Microsoft Exchange tree and right-click the Recipient Configuration work center node, selecting New Window from Here in the context menu, as shown in Figure 3.56.
We now have a basic Exchange 2007 Recipient Management snap-in, as you can see in Figure 3.57, but honestly, we can’t keep it this simple, right? We need to make it more functional.
The first thing you want to do is to enable the Action pane in addition to removing the Standard menus and Standard toolbar, since these aren’t required by Exchange 2007. To do so, click View | Customize and deselect Standard menus (Action and View) and Standard toolbar. Lastly, select Action pane, and click OK (see Figure 3.58).
Figure 3.58 Customizing the View for the Exchange 2007 Recipient Management Console

Let’s spiff up the console a little more before we save it. To do so, click File | Options; in the Options window, replace Console1 with the text Exchange 2007 Recipient Management. Now click the Change Icon button and navigate to the Bin directory under the C:Program FilesMicrosoftExchange Server folder. Here you can select the ExSetupUI.exe file, click Open, and you have the option of choosing the Exchange 2007 icon shown in Figure 3.59. Do so and click Apply.

Now select User mode – limited access, single window in the Console mode drop-down menu, as shown in Figure 3.60. Finally, deselect the Allow the user to customize views option, and click OK.
Figure 3.59 Choosing the Exchange 2007 Icon for the Console

Figure 3.60 Custom Exchange 2007 Recipient Management Console Options
You can now save the console by clicking **File | Save As**. Save the console as **Exchange 2007 Recipient Management Console.msc** and answer **Yes** to the message shown in Figure 3.61.

**Figure 3.61 The Single-Window Interface MMC Message**

![Figure 3.61 The Single-Window Interface MMC Message](image)

Now close the console and reopen it from where it was saved. It should now look similar to the one shown in Figure 3.62.

**Figure 3.62 The Custom Recipient Management Console**

![Figure 3.62 The Custom Recipient Management Console](image)
Now that looks much better.

You can also create isolated Management Consoles for the Organization Configuration, Server Configuration, and Toolbox work center nodes. You can do this by following the same steps but opening a new console window by right-clicking the respective work center node. If you have both the Exchange 2007 Tools and the Windows AdminPak installed on a server or workstation, you can even create a single console with access to both the ADUC snap-in and the Exchange 2007 Management Console, as shown in Figure 3.63.

**Figure 3.63 A Custom User Management Console**

---

**Recipient Filtering in Exchange 2007**

If you have already deployed and/or are planning to deploy Exchange 2007 in an organization consisting of several thousand recipients, you can quickly lose the administrative overview. This is where recipient filtering comes into the picture. By creating a filter using either the EMC or the EMS, you will be able to find the recipient or set of recipients you’re looking for in a matter of seconds.

Creating a recipient filter is done by selecting the Recipient Configuration work center node or the particular recipient subnode. Let’s, for example, select the Mailbox subnode. Here we will create a filter by clicking the **Create Filter** button located in the top-left corner of the **Result** pane, as shown in Figure 3.64.
After we have clicked Create Filter, we need to specify the type of property we want to filter on, selecting from among 35 available property types such as Alias, Company, Custom Attributes, E-mail Addresses, Recipient Type Details, Server, and Unified Messaging Mailbox Policy. Let’s try to create a filter based on the Recipient Type Details property, setting it to the Equals comparison operator and finally choosing a value it should filter on. In this example we’ll choose Legacy Mailbox and click Apply Filter. We could have also selected User Mailbox, Linked Mailbox, Shared Mailbox, Room Mailbox, or Equipment Mailbox, depending on our preference.

NOTE

A total of six different comparison operators are available: Contains, Does Not Contain, Does Not Equal, Ends With, Equals, and Starts With.

As you can see in Figure 3.65, any legacy mailboxes (mailboxes on an Exchange 2000 or 2003 server) are listed in the Result pane.

Figure 3.65 Displaying Legacy Mailbox Filtered View
Note that you can add expressions by clicking the **Add Expression** button. You can even remove separate expressions by clicking the red cross icon to the right of the particular filter. You can also remove the complete filter by clicking **Remove Filter**.

**SOME INDEPENDENT ADVICE**

The work center node or subnode you select has a direct impact on the operators that will be available in the filter you create. In addition, depending on the properties and the type of comparison operators you choose, you will have a different set of values to choose from. Some combinations even allow you to type the value yourself instead of having to choose from a drop-down box.

If you would rather perform recipient filtering using the EMS, you can do so with the `Get-Mailbox -filter` command.
Summary

In this chapter we focused on how recipients are managed in Exchange 2007. First we had a look at how the different recipient type objects are managed using the Exchange Management Console (EMC), then we went through how we should deal with recipients in a coexistence environment. We also examined, step by step, how to create a custom MMC that contains the Exchange 2007 Recipients work center, which can be used, for example, by the helpdesk staff in your organization. Finally, we took a look at the options available when we use the new recipient filtering features in Exchange 2007.

Solutions Fast Track

Managing Recipients Using the Exchange 2007 Management Console

- Management of recipients in Exchange Server 2007, as well as their Exchange-related properties, has been moved back into the Exchange Management Console (EMC) in addition to the Exchange Management Shell (EMS), both of which are based on Windows PowerShell. This means that all management of Exchange recipient objects should be modified from within the EMC or EMS, not using the ADUC snap-in.

- We have four recipient type subnodes beneath the Recipient Configuration work center. In order, we have a Mailbox, a Distribution Group, a Mail Contact, and a Disconnected Mailbox node.

- Each type of recipient object has its own individual icon as well as recipient type description due to the fact that they now are explicit and not implicit, as was the case in Exchange Server 2003. This is a nice addition because it makes it so much easier to differentiate the recipient types in Exchange 2007.

- Although legacy mailboxes are exposed via the EMC, not all Exchange 2007-specific features apply to these types of mailboxes.

- Because Exchange 2007 uses explicit mailbox recipient types, it’s possible to create a search filter that lists all room mailboxes, for example, or perhaps all legacy mailboxes, for that matter. Listing all resource mailboxes in the ADUC snap-in back in Exchange 2000 or 2003 using a search filter was not a trivial process; it required you to use custom attributes because there was no other way to differentiate resource mailboxes from ordinary mailbox-enabled user accounts.

- The Exchange 2007 Move Mailbox Wizard is the tool you should use to move legacy mailboxes from Exchange 2000 or 2003 Server to an Exchange 2007 Mailbox Server.

- As is the case with Exchange 2000 and 2003, there are two types of Distribution Groups in Exchange 2007: mail-enabled distribution groups, which are used strictly for distributing messages, and mail-enabled security groups, which are used both to assign permissions to users as well as to distribute messages. In addition, the query-based distribution group

www.syngress.com
introduced in Exchange 2003 has also made its way into Exchange 2007, albeit with a new name and a few changes.

- Dynamic distribution groups, which were known as query-based distribution groups in Exchange 2003, provide the same type of functionality as ordinary distribution groups, but instead of manually adding members to the group's membership list, you can use a set of filters and conditions that you predefine when creating the group to derive its membership.

- We manage mail contacts (mail-enabled contacts) and mail users (mail-enabled users) under the Mailbox Contact subnode beneath the Recipient Configuration work center node.

- When you either disable or remove a mailbox, that mailbox will be marked for deletion but will not be automatically deleted. Instead, it will be kept in the respective mailbox database for the number of days specified on the mailbox database Properties page (under the Limits tab), called “Keep deleted mailboxes for,” more commonly referred to as mailbox retention. Like Exchange 2000 and 2003, Exchange 2007 will, by default, keep deleted mailboxes for 30 days before they are purged (permanently deleted).

Managing Recipients in a Coexistence Environment

- During a transition from Exchange 2000/2003 to Exchange 2007, deploying Exchange 2007 server into your existing Exchange organization can take a long time, depending on the size of your existing setup and organizational layout. This means that you might have to manage mail-enabled users from both the EMC and the ADUC MMC snap-in for a period of time.

- Although you have the option of managing Exchange 2007 mailbox and mail-enabled users using the ADUC snap-in, it isn’t supported and will result in Exchange 2007 mailboxes that might not be fully functional. In addition, you should opt to use the Exchange 2007 tools for moving Exchange 2000/2003 user mailboxes.

- The infamous Recipient Update Service (RUS), which most of us know from Exchange 2000 and 2003, is no longer part of the Exchange 2007 product. RUS was responsible for stamping e-mail addresses, in addition to address list membership along with a few other things, but didn’t always work as expected and was very difficult to troubleshoot when it acted up. With Exchange 2007, the RUS (and thereby the asynchronous behavior used to provision objects) has been replaced by a new synchronous process, the EmailAddressPolicy CMDlet, used to stamp the e-mail address onto objects immediately.

Granting Access and/or SendAs Permissions to a Mailbox

- In some situations, one or more users might need to be granted permissions to access another user’s mailbox. This could be a more temporary access during vacations, maternity leave, or other reasons, where one or more users need to take over the work of the user who will be absent. It could also be a more permanent access, where a secretary needs to access her boss’s mailbox, for example. Another reason could be that all users in a particular department (such as a helpdesk) need a shared mailbox.
Creating a Custom Recipient Management Console

- Depending on the organization, at times you might want to create an Exchange 2007 Management Console that shows only the Recipient Configuration work center node. This is especially true in situations where you have a helpdesk that is used to having a customized ADUC console snap-in that provides the respective OUs holding the Exchange user objects they were to administer.

- You can create isolated Management Consoles for the Organization Configuration, Server Configuration, and Toolbox work center nodes. You can do this by following the same steps but opening a new console window by right-clicking the respective work center node. If you have both the Exchange 2007 Tools and the Windows AdminPak installed on a server or workstation, you can even create a single console with access to both the ADUC snap-in and the Exchange 2007 Management Console.

Recipient Filtering in Exchange 2007

- If you have already deployed and/or are planning to deploy Exchange 2007 in an organization consisting of several thousand recipients, you can quickly lose the administrative overview. This is where recipient filtering comes into the picture. By creating a filter using either the EMC or the EMS, you will be able to find the recipient or set of recipients you’re looking for in a matter of seconds.

- Creating a recipient filter is done by selecting the Recipient Configuration work center node or the particular recipient subnode.
Frequently Asked Questions

Q: Can I manage legacy mailboxes (Exchange 2000/2003 mailboxes) using the Exchange Management Console or the Exchange Management Shell?
A: Yes, this is supported, but bear in mind that although legacy mailboxes are exposed via the EMC and the EMS, not all Exchange 2007-specific features apply to these types of mailboxes. However, as soon as a legacy mailbox has been moved to an Exchange 2007 Mailbox Server, the mailbox will have the same feature set as a mailbox created directly on an Exchange 2007 Mailbox Server. Note that managing Exchange 2007 mailboxes using the ADUC MMC snap-in is not supported.

Q: Is it necessary to create the Active Directory user object in the ADUC MMC snap-in before I can create a mailbox using the Exchange 2007 Management Console?
A: No, this is not necessary. When you create a new mailbox in the EMC using the New Mailbox Wizard, you’ll have the option of creating an Active Directory user object as well. You can even specify in which OU it should be created.

Q: I’ve heard that Exchange 2007 has several different recipient type objects. What’s that all about?
A: You heard true. Exchange 2007 has a total of 14 different explicit recipient types, all having their own individual icon and recipient type details, which lowers the overall administrative burden. For example, you can create a recipient filter that, say, lists all room mailboxes much more easily than was true back in Exchange 2000/2003 without using a custom attribute field or the like.

Q: Do the new room and equipment mailboxes require an Active Directory User object in the Active Directory, as was the case with a resource/group mailbox in Exchange 2000/2003?
A: Yes. Even though Exchange 2007 includes dedicated room and equipment mailboxes, which aren’t logged on to, an Active Directory User object in Active Directory is still required. But keep in mind that the User object that gets created when you create either a room or equipment mailbox will be disabled by default.

Q: What’s the difference between disabling and removing a mailbox in Exchange 2007?
A: Disabling a mailbox removes all Exchange attributes from the Active Directory user account, which means that the user account no longer will be mailbox-enabled. The User object will remain in Active Directory, though. Although disabling a mailbox will remove the mailbox from the respective account, the mailbox won’t be permanently deleted. By default, it can be found under the Disconnected Mailbox subnode for 30 up to 30 days after the mailbox was disabled. The mailbox can, at any time during this period, be reconnected to another User object from here. Removing a mailbox will not only mark the Exchange data for deletion, but the associated user object will also be deleted from the Active Directory. However, because of the default deleted mailbox retention settings, the mailbox can be reconnected to another user object within 30 days.
Q: Once I’ve moved a legacy mailbox (Exchange 2000/2003 mailbox) to an Exchange 2007 server, can I then moved it back to an Exchange 2000/2007 server if I need to, for some reason?

A: Yes, this is supported. Mailboxes can be moved both ways. But bear in mind that you’ll lose any Exchange 2007-specific features, such as Unified Messaging, once you do so.

Q: How many mailboxes can I move at a time when I’m using the Exchange 2007 Move Mailbox Wizard? I remember that the Exchange 2003 version of the Move Mailbox Wizard could process four mailboxes at the same time.

A: It’s correct that the Exchange 2003 Move Mailbox Wizard was limited to processing four mailboxes at the same time, but actually it was possible to run four threads at a time, meaning that you (of course, depending on your hardware) could move 16 mailboxes at the same time. This hasn’t changed with Exchange 2007, so the same limitations apply to the Exchange 2007 Move Mailbox Wizard.