



# Creating Accounts for the Installation and Setting Rights and Permissions

In this chapter, you do the following tasks in the order listed:



**Note**

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*Failover:* If you are installing the secondary Cisco Unity server now, skip Task 1.

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1. Familiarize yourself with the domain accounts you will create in Task 2. See the [“About the Accounts Required for the Cisco Unity Installation”](#) section on page 7-2.



**Note**

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*Failover:* If you are installing the secondary Cisco Unity server now, skip Task 2.

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2. Create the applicable domain accounts that are needed to install Cisco Unity. See the [“Creating the Accounts Required for the Cisco Unity Installation”](#) section on page 7-3.
3. *If you created a Cisco Unity administration account in Task 2.:* Add the account either to the local Administrators group—when the Cisco Unity server is a member server—or to the Domain Admins group—when the Cisco Unity server is a domain controller. Note that if the system is using failover, you add the account to the local Administrators group on the primary and secondary servers. See the [“Adding the Cisco Unity Administration Account to an Admins Group”](#) section on page 7-6.
4. Set rights and permissions for the accounts that you created in Task 2. See the [“Setting Rights and Permissions with the Cisco Unity Permissions Wizard”](#) section on page 7-7.



**Note**

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*Failover:* If you are installing the secondary Cisco Unity server now, skip Task 5.

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5. Set Exchange permissions. See the [“Setting Exchange Permissions”](#) section on page 7-13.

When you are finished with this chapter, return to [Chapter 1, “Overview of Mandatory Tasks for Installing Cisco Unity”](#) to continue installing the Cisco Unity system.



**Note**

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The tasks in the list reference detailed instructions in the *Cisco Unity Installation Guide* and in other Cisco Unity documentation. Follow the documentation for a successful installation.

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# About the Accounts Required for the Cisco Unity Installation

This section describes the following domain accounts that are needed for the Cisco Unity installation:

- [The Account Used to Install Cisco Unity, page 7-2](#)
- [The Account Used to Access the Cisco Unity Administrator, page 7-2](#)
- [The Accounts That Cisco Unity Services Log On As, page 7-2](#)

**Note**

The same accounts are required for installing a new Cisco Unity 4.0(x) system and for upgrading from previous versions of Cisco Unity.

## The Account Used to Install Cisco Unity

During installation, Cisco Unity creates a number of Cisco Unity objects in Active Directory and in Exchange, so the account with which you log on to Windows to install Cisco Unity must have proper user rights and permissions to perform the necessary operations.

If you are installing more than one Cisco Unity server in a site (including setting up failover), you can use the same account to install Cisco Unity software on all of the servers.

## The Account Used to Access the Cisco Unity Administrator

When you install Cisco Unity, you are prompted to choose the Windows domain account that you want to use to access the Cisco Unity Administrator (the website used to perform most administration tasks). During installation, the domain account is automatically associated with a Cisco Unity subscriber whose class of service allows Cisco Unity Administrator access. (Later you can create additional Cisco Unity subscribers who also can access the Cisco Unity Administrator.)

By default, the Cisco Unity administration account is the installation account. If you prefer to use an account other than the installation account to be the first Cisco Unity administration account, create an additional domain account for that purpose.

When the Cisco Unity server is a domain controller, the Cisco Unity administration account must be a member of the Domain Admins group. When the Cisco Unity server is a member server, the Cisco Unity administration account must be a member of the Local Admins group. Procedures later in this chapter explain how to add the account to the applicable group.

## The Accounts That Cisco Unity Services Log On As

During Cisco Unity installation, you are prompted to choose two or three domain accounts that Cisco Unity services log on as, depending on which version(s) of Exchange the Cisco Unity subscribers will be homed in:

- For Exchange 2003 and/or Exchange 2000, the account that Cisco Unity directory services log on as. These services keep subscriber data in the directory synchronized with subscriber data in the Cisco Unity SQL Server database.
- For Exchange 2003 and/or Exchange 2000, the account that Cisco Unity message store services log on as. These services allow subscribers to send and receive voice messages by using the telephone user interface.

- For Exchange 5.5, the account that both directory services and message store services log on as.
- For all versions of Exchange, the account that local services log on as. By default, local Cisco Unity services log on as the Local System account. We recommend that you not change this.

For Exchange 2003 and/or Exchange 2000, the permissions required by the directory services account conflict with the permissions required by the message store services account, so you must create separate accounts for the two types of services.

## Creating the Accounts Required for the Cisco Unity Installation

To create the accounts that are needed for the Cisco Unity installation, do the applicable procedure, depending on the version(s) of Exchange in which Cisco Unity subscribers will be homed:

<b>Subscribers will be homed only in Exchange 2003, Exchange 2000, or Exchange 5.5.</b>	See the <a href="#">“Creating the Accounts: Method A” section on page 7-3.</a>
<b>Subscribers will be homed in Exchange 2003 and Exchange 2000.</b>	See the <a href="#">“Creating the Accounts: Method A” section on page 7-3.</a>
<b>Subscribers will be homed in Exchange 2003 and/or Exchange 2000, and also will be homed in Exchange 5.5. The Active Directory Connector uses a two-way connection agreement to replicate data between Exchange 5.5 and Active Directory.</b>	See the <a href="#">“Creating the Accounts: Method A” section on page 7-3.</a>
<b>Subscribers will be homed in Exchange 2003 and/or Exchange 2000, and also will be homed in Exchange 5.5. The Active Directory Connector uses a one-way connection agreement to replicate data from Exchange 5.5 to Active Directory.</b>	See the <a href="#">“Creating the Accounts: Method B” section on page 7-4.</a>

The Method A and Method B procedures for creating accounts assume that you have access to Active Directory Users and Computers because you installed Exchange 2003, Exchange 2000, or the corresponding Exchange administration software on the Cisco Unity server, or because the Cisco Unity server is a domain controller.

To create the accounts and set their permissions when Active Directory Users and Computers is not installed on the Cisco Unity server, do one of the following:

- Install Active Directory Users and Computers on the Cisco Unity server. For information, refer to Windows 2000 Server Help.
- In the domain that includes the Cisco Unity server, go to a computer (for example, the domain controller) on which Active Directory Users and Computers is already installed.

### Creating the Accounts: Method A

Do the procedure in this section if one of the following conditions is true:

- Cisco Unity subscribers will be homed only in Exchange 2003, in Exchange 2000, or in Exchange 5.5.
- Cisco Unity subscribers will be homed in both Exchange 2003 and Exchange 2000.

- Cisco Unity subscribers will be homed in Exchange 2003 and/or Exchange 2000; subscribers will also be homed in Exchange 5.5; and the Active Directory Connector uses a two-way connection agreement to replicate data from Exchange 5.5 to Active Directory.

Otherwise, do the [“Creating the Accounts: Method B” section on page 7-4](#).

### To Create Domain Accounts for Cisco Unity Installation, Administration, and Services: Method A

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- Step 1** On the Cisco Unity server, log on to Windows by using an account that is a member of the Domain Admins group.
- Step 2** On the Windows Start menu, click **Programs > Microsoft Exchange > Active Directory Users and Computers** or click **Programs > Administrative Tools > Active Directory Users and Computers**.
- Step 3** In the left pane, expand the domain, right-click **Users** or the organizational unit where you want to create the installation account, and click **New > User**.
- Step 4** Follow the on-screen prompts. Creating an Exchange mailbox is optional.

We suggest that you use the following names for the accounts:

<b>Installation</b>	UnityInstall
<b>Administration</b>	UnityAdmin
<b>Exchange 2003 and/or Exchange 2000: Account that Cisco Unity directory services log on as</b>	UnityDirSvc
<b>Exchange 2003 and/or Exchange 2000: Account that Cisco Unity message store services log on as</b>	UnityMsgStoreSvc
<b>Exchange 5.5: Account that Cisco Unity directory and message store services log on as</b>	UnitySvc

- Step 5** Repeat [Step 3](#) and [Step 4](#) to create the Cisco Unity administration account and, depending on the version of Exchange in which the Cisco Unity subscribers will be homed, the one or two accounts that Cisco Unity services log on as.
- If Cisco Unity subscribers will be homed in Exchange 2003 and/or Exchange 2000 and will also be homed in Exchange 5.5, create separate accounts for directory services and message store services.
- Ensure that for the accounts that Cisco Unity services log on as, the password will never expire. If the password expires, Cisco Unity will stop working the next time the server is restarted.
- Step 6** Close Active Directory Users and Computers.
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## Creating the Accounts: Method B

Do the procedure in this section if both of the following conditions are true:

- Cisco Unity subscribers will be homed in Exchange 2003 and/or Exchange 2000 and will also be homed in Exchange 5.5.
- The Active Directory Connector uses a one-way connection agreement to replicate data from Exchange 5.5 to Active Directory.

If either condition is not true, do the [“Creating the Accounts: Method A” section on page 7-3](#).

**To Create Domain Accounts for Cisco Unity Installation, Administration, and Services: Method B**

**Step 1** Using Exchange 5.5 Administrator, create a mailbox in the Exchange 5.5 directory for the message store services account. You do not need to associate the mailbox with a Windows NT account or an Active Directory account.

For the account name, we suggest that you use UnityMsgStoreSvc.

**Caution**

Do not use Unity\_<servername> for the account name.

For the display name, we suggest that you use Unity Messaging System - <servername>. This is the name that will appear on the From line for voice messages from outside callers.

If there is more than one Cisco Unity server in the Exchange site, create one Exchange 5.5 mailbox for each Cisco Unity server. If you are setting up one or more failover systems, create one mailbox for each pair of failover servers.

The Active Directory Connector replicates the mailbox to Active Directory as a disabled account. This account will also be used as the Cisco Unity system account, which is the account that originates voice messages from outside callers. For other Exchange configurations, the system account is a separate account and is created automatically when Cisco Unity is installed.

**Step 2** After the mailbox replicates to Active Directory, enable the account in Active Directory Users and Computers, change the password, and move it to the partner Exchange 2003 or Exchange 2000 server. Ensure that the password for the account will never expire. If the password expires, Cisco Unity will stop working the next time the server is restarted.

**Step 3** On the Cisco Unity server, double-click the **Cisco Unity Tools Depot** icon on the desktop.

**Step 4** In the left pane of Cisco Unity Tools Depot, expand **Administration Tools**.

**Step 5** Double-click **Advanced Settings Tool**.

**Step 6** In the Unity Settings list, click **Exchange 2000/Exchange 5.5 Mixed Messaging Display Name**.

**Step 7** Change **New Value** to the display name of the mailbox that you created in [Step 1](#).

**Step 8** Click **Set**.

**Step 9** In the Unity Settings list, click **Exchange 2000/Exchange 5.5 Mixed Messaging Distinguished Name**.

**Step 10** Change **New Value** to the legacyExchangeDn (Exchange 5.5-style distinguished name) of the mailbox that you created in [Step 1](#) (for example, /O=<Org>/OU=<Site>/CN=Recipients/CN=<Alias>).

**Step 11** Click **Set**.

**Step 12** If the system is using failover, repeat [Step 6](#) through [Step 11](#) on the secondary server.

**Step 13** Exit the Advanced Settings Tool, and exit Tools Depot.

**Step 14** To create the installation, administration, and directory services accounts, on the Windows Start menu, click **Programs > Microsoft Exchange > Active Directory Users and Computers** or click **Programs > Administrative Tools > Active Directory Users and Computers**.

**Step 15** In the left pane, expand the domain, right-click **Users** or the organizational unit where you want to create the installation account, and click **New > User**.

**Step 16** Follow the on-screen prompts to create the installation account.

We suggest that you use the following names:

<b>Installation</b>	UnityInstall
<b>Administration</b>	UnityAdmin
<b>Account that Cisco Unity directory services log on as</b>	UnityDirSvc

Creating an Exchange mailbox is optional.

**Step 17** Repeat [Step 15](#) and [Step 16](#) to create the Cisco Unity administration account and the account that Cisco Unity directory services log on as.

Ensure that for the account that Cisco Unity directory services log on as, the password will never expire. If the password expires, Cisco Unity will stop working the next time the server is restarted.

**Step 18** Close Active Directory Users and Computers.

**Step 19** Restart the server.

## Adding the Cisco Unity Administration Account to an Admins Group



### Note

If you did not create a Cisco Unity administration account in the [“Creating the Accounts Required for the Cisco Unity Installation”](#) section on page 7-3, skip this section.

You must add the Cisco Unity administration account either to the local Administrators group—when the Cisco Unity server is a member server—or to the Domain Admins group—when the Cisco Unity server is a domain controller.

This section contains two procedures. Do the one that applies to your installation.

If the system is using failover, you add the account to the local Administrators group on the primary and secondary servers.

### To Add the Cisco Unity Administration Account to the Local Administrators Group (Only When the Cisco Unity Server Is a Member Server)

- Step 1** On the Cisco Unity server, on the Windows Start menu, click **Programs > Administrative Tools > Computer Management**.
- Step 2** In the left pane of the Computer Management MMC, expand **System Tools > Local Users and Groups**.
- Step 3** In the left pane, click **Groups**.
- Step 4** In the right pane, double-click **Administrators**.
- Step 5** In the Administrators Properties dialog box, click **Add**.
- Step 6** In the Select Users or Groups dialog box, in the Look In list, click the name of the domain to which the Cisco Unity server belongs.

- Step 7** In the top list, double-click the name of the Cisco Unity administration account. The name appears in the bottom list.
- Step 8** Click **OK** to close the Select Users or Groups dialog box.
- Step 9** Click **OK** to close the Administrators Properties dialog box.
- Step 10** Close the Computer Management MMC.
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#### To Add the Cisco Unity Administration Account to the Domain Admins Group (Only When the Cisco Unity Server Is a Domain Controller)

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- Step 1** On the Cisco Unity server, log on to Windows by using an account that is a member of the Domain Admins group.
- Step 2** On the Windows Start menu, click **Programs > Microsoft Exchange > Active Directory Users and Computers** or click **Programs > Administrative Tools > Active Directory Users and Computers**.
- Step 3** In the left pane, expand the domain, and click **Users**.
- Step 4** In the right pane, double-click the name of the Cisco Unity administration account.
- Step 5** Click the **Member Of** tab.
- Step 6** Click **Add**.
- Step 7** In the Select Groups dialog box, in the top list, double-click **Domain Admins**. The name appears in the bottom list.
- Step 8** Click **OK** to close the Select Groups dialog box.
- Step 9** Click **OK** to close the Properties dialog box.
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## Setting Rights and Permissions with the Cisco Unity Permissions Wizard

This section contains procedures for setting many of the permissions that Cisco Unity requires for:

- The account that you will use to install Cisco Unity.
- If subscribers will be homed in Exchange 2003 and/or Exchange 2000 (regardless of whether they are also homed in Exchange 5.5), the two accounts that Cisco Unity directory and message store services will log on as.
- If subscribers will be homed only in Exchange 5.5, the account that both directory and message store services will log on as.

To set rights and permissions, do the applicable procedure, depending on the version(s) of Exchange in which Cisco Unity subscribers will be homed:

- [Running the Cisco Unity Permissions Wizard When Subscribers Will Be Homed in Exchange 2003 and/or Exchange 2000 \(With or Without Exchange 5.5\), page 7-8.](#)
- [Running the Cisco Unity Permissions Wizard When Subscribers Are Homed Only in Exchange 5.5, page 7-12.](#)

In addition, you must set Exchange-specific permissions, as described in the “[Setting Exchange Permissions](#)” section on page 7-13.

If the system is using failover, you run the Permissions wizard on both the primary and secondary servers.

## Running the Cisco Unity Permissions Wizard When Subscribers Will Be Homed in Exchange 2003 and/or Exchange 2000 (With or Without Exchange 5.5)

Before you can run the Permissions wizard, the Active Directory schema must have been extended for Cisco Unity, which you should have done when you set up the message store (in the “[Extending the Active Directory Schema for Cisco Unity \(Exchange 2003 and Exchange 2000 Only\)](#)” section on page 6-11).



### Caution

Cisco Unity needs to be able to change properties of Active Directory users. The Permissions wizard grants the directory services account the right to change user accounts in the containers that you specify. Cisco Unity can change user accounts in those containers only if inheritance is enabled for the containers and for the users themselves. If you disable inheritance for any containers or groups that include Cisco Unity subscribers, or for any users who are subscribers, Cisco Unity (using the directory services account) will not be able to change properties for the affected users. In that case, you will need to either grant permissions to those users explicitly or re-enable inheritance by checking the Allow Inheritable Permissions from Parent to Propagate to This Object check box on the Security tab in the applicable Properties dialog box.

The following procedure grants the installation and services accounts the rights to act as a part of the operating system, to log on as a service, and to log on as a batch job, and does so in the local security policy.

### To Run the Cisco Unity Permissions Wizard for Exchange 2003 and/or Exchange 2000

**Step 1** If a domain security policy is in effect, confirm that the domain security policy does not deny the installation and services accounts the rights to act as a part of the operating system, to log on as a service, and to log on as a batch job.

**Step 2** Log on to the Cisco Unity server by using an account that:

- Is a member of the Domain Admins group in the domain in which the Cisco Unity server is being installed.
- Is either an Exchange Full Administrator or a member of the Domain Admins group in the domain that contains all of the domains from which you want to import Cisco Unity subscribers.



### Caution

If you try to run the Permissions wizard by using an account that has less than the default permissions for a Domain Admin, the wizard may not be able to set all of the permissions required by the installation account and the services accounts. If the Permissions wizard cannot set all of the required permissions, either the Cisco Unity installation will fail or Cisco Unity will not run properly after it has been installed.

**Step 3** On Cisco Unity DVD 1 or CD 1, or from the location to which you saved the downloaded Cisco Unity CD 1 image files, browse to the **Utilities\PermissionsWizard** directory, and run **PermissionsWizard.exe**.

- Step 4** On the Welcome to the Cisco Unity Permissions Wizard page, click **Microsoft Exchange 2000** or **Microsoft Exchange 2003**, depending on the version of Exchange installed on the partner Exchange server.
- If Windows Server 2003 is installed on the Cisco Unity server, **Microsoft Exchange 2003** is the only option available.
- Step 5** Click **Next**.
- Step 6** On the Installation Account page, click **Change**, and choose the account that you want to use to install Cisco Unity.
- Step 7** Click **Next**.
- Step 8** On the Directory Services Account page, click **Change**, and choose the account that you want Cisco Unity directory services to log on as.
- Step 9** Click **Next**.
- Step 10** On the Message Store Services Account page, click **Change**, and choose the account that you want Cisco Unity message store services to log on as.
- Step 11** Click **Next**.
- Step 12** Cisco Unity needs access to one or more Active Directory organizational units to create users (Cisco Unity subscribers) and groups (Cisco Unity distribution lists). On the Set Active Directory Containers for New Objects page, choose the following:
- The domain in which you want new users and groups to be created.
  - The organizational unit in which you want users to be created. This is where Cisco Unity Example Administrator will be created during Cisco Unity installation.
  - The organizational unit in which you want groups to be created.
- Step 13** Click **Next**.
- Step 14** On the Objects the Cisco Unity Administrator Can Create page, check the check boxes for the objects you want to be able to create by using the Cisco Unity Administrator.
- If you do not want to use the Cisco Unity Administrator to create new Active Directory users, contacts, and groups, you may choose not to grant the Cisco Unity directory services account the necessary rights to create each type of Active Directory object.
- If you uncheck a check box next to an Active Directory object type, you will not be able to create the associated type of Cisco Unity object by using the Cisco Unity Administrator. You may only import existing objects into Cisco Unity. (For example, if you uncheck the Users check box, you will not be able to create new Cisco Unity subscribers by using the Cisco Unity Administrator. You will only be able to import existing Active Directory users to make them Cisco Unity subscribers.)
- Step 15** Click **Next**.
- Step 16** On the Set Active Directory Container for Location Objects page, choose the organizational unit in which you want Cisco Unity location objects to be created.
- Step 17** Click **Next**.

**Step 18** On the Set Active Directory Containers for Import page, choose the Active Directory containers from which you want to import users, contacts, and groups to make them Cisco Unity subscribers and public distribution lists. Note the following considerations:

- You must choose a container for the domain that includes the Cisco Unity server.
- Choose only one container for each domain. If you will want to import users and groups from more than one container in a domain, choose a common parent container that includes all of the containers from which you want to import. If the common parent is the domain itself, choose the domain.

Alternatively, if you want to choose multiple containers without choosing the common parent container, you can run the Permissions wizard more than once. Every time you run the Permissions wizard, choose the same options except on this page, where you choose a different container each time.

- If you are using Digital Networking to connect multiple Cisco Unity servers and if you will be importing users from the same container for every Cisco Unity server, choose that container. (For example, if CiscoUnityServer1 and CiscoUnityServer2 will both be importing users only from Container1, choose Container1.)

If you are using Digital Networking and if, for all of the Cisco Unity servers combined, you will be importing users from two or more containers, the Cisco Unity message store services account on each Cisco Unity server must be granted SendAs permission on every container from which users will be imported on every Cisco Unity server in the forest. (For example, if CiscoUnityServer1 will import users from Container1 and Container2, and if CiscoUnityServer2 will import users from Container3 and Container4, the Cisco Unity message store services account on each Cisco Unity server must have SendAs permission for all four containers.) On each Cisco Unity server, do one of the following, or identified subscriber messaging may not work between Cisco Unity servers:

- Choose all of the containers from which users will be imported by choosing a common parent container.
- Choose all of the containers from which users will be imported by running the Permissions wizard more than once.
- Use the same Active Directory account for the Cisco Unity message store services account as on every other Cisco Unity server in the forest.
- If you are using identified subscriber messaging for AMIS, the Cisco Unity Bridge, or VPIM, and if you will be importing contacts from the same container for every Cisco Unity server, choose that container. (For example, if CiscoUnityServer1 and CiscoUnityServer2 will both be importing contacts only from Container1, choose Container1.)

If you are using identified subscriber messaging for AMIS, the Bridge, or VPIM, and if, for all of the Cisco Unity servers combined, you will be importing contacts from two or more containers, the Cisco Unity message store services account on each Cisco Unity server must be granted SendAs permission on every container from which contacts will be imported on every Cisco Unity server in the forest. (For example, if CiscoUnityServer1 will import contacts from Container1 and Container2, and if CiscoUnityServer2 will import contacts from Container3 and Container4, the Cisco Unity message store services account on each Cisco Unity server must have SendAs permission for all four containers.) On each Cisco Unity server, do one of the following, or identified subscriber messaging may not work between Cisco Unity servers:

- Choose all of the containers from which contacts will be imported by choosing a common parent container.
- Choose all of the containers from which contacts will be imported by running the Permissions wizard more than once.
- Use the same Active Directory account for the Cisco Unity message store services account as on every other Cisco Unity server in the forest.

- Step 19** Click **Next**.
- Step 20** If you want to home Cisco Unity subscribers in all of the available Exchange 2003 and/or Exchange 2000 mailstores, skip to [Step 22](#).
- If you want to home Cisco Unity subscribers only in some Exchange 2003 and/or Exchange 2000 mailstores, on the Choose Mailstores page, click **Choose Mailstores** to choose the mailstores to which you want Cisco Unity to have access.
- Step 21** On the Select Mailstores page, check the check boxes for the mailstores to which you want Cisco Unity to have access, and click **OK**.
- Step 22** Click **Next**.
- Step 23** The Verify Permission Assignments page appears, listing the permissions that will be granted to each account. The information listed includes user rights, Active Directory rights, and membership in groups. Click **Next** to grant the listed permissions.
- The Permissions wizard may take a few minutes to grant permissions.
- Step 24** If the Permissions wizard failed to grant one or more permissions, an error message appears that lists the number of permissions it was not able to grant. Click **OK**.
- Step 25** To display a report listing the operations that succeeded and those that failed, if any, click **View Detailed Results**.
- Note that in some cases, individual rights may be combined into a single entry. For example, the rights to read properties, write properties, list contents, read permissions, and modify permissions applied on Group objects are all included in the single entry “SUCCEEDED granting Group read/modify rights.”
- Step 26** If one or more permissions could not be granted, fix the problems, and run the Permissions wizard again.

**Caution**

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If the Permissions wizard failed to set any permissions, either the Cisco Unity installation will fail or Cisco Unity will not run properly after it has been installed. You must successfully run the Permissions wizard before you can continue installing Cisco Unity.

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**Caution**

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An Active Directory right being granted by the Permissions wizard may conflict with an existing right on an Active Directory container. (For example, an account may be denied the right to create user objects in one of the containers selected during the Permissions wizard.) The log file will explain that a conflict has been found, but the Permissions wizard will not resolve the conflict. You must resolve the conflict and then rerun the Permissions wizard.

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- Step 27** Click **Finish**.
- Step 28** If the account that you logged on with in [Step 2](#) is also the account that you want to use to install Cisco Unity (the account that you selected in [Step 6](#)), log off of Windows so the permissions set by the Permissions wizard will take effect.

## Running the Cisco Unity Permissions Wizard When Subscribers Are Homed Only in Exchange 5.5

The following procedure grants the installation and services accounts the rights to act as a part of the operating system, to log on as a service, and to log on as a batch job, and does so in the local security policy.

### To Run the Cisco Unity Permissions Wizard for Exchange 5.5

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- Step 1** If a domain security policy is in effect, confirm that the domain security policy does not deny the installation and services accounts the rights to act as a part of the operating system, to log on as a service, and to log on as a batch job.
- Step 2** Log on to the Cisco Unity server by using an account that is a member of the Domain Admins group.



#### Caution

If you try to run the Permissions wizard by using an account that has less than the default permissions for a Domain Admin, the wizard may not be able to set all of the permissions required by the installation account and the services accounts. If the Permissions wizard cannot set all of the required permissions, either the Cisco Unity installation will fail or Cisco Unity will not run properly after it has been installed.

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- Step 3** On Cisco Unity DVD 1 or CD 1, or from the location to which you saved the downloaded Cisco Unity CD 1 image files, browse to the **Utilities\PermissionsWizard** directory, and run **PermissionsWizard.exe**.
- Step 4** On the Welcome to the Cisco Unity Permissions Wizard page, click **Microsoft Exchange 5.5**.
- Step 5** Click **Next**.
- Step 6** On the Installation Account page, click **Change**, and choose the account that you want to use to install Cisco Unity.
- Step 7** Click **Next**.
- Step 8** On the Directory and Message Store Services Account page, click **Change**, and choose the account that you want Cisco Unity directory and message store services to log on as.
- Step 9** Click **Next**.
- Step 10** The Verify Permission Assignments page appears, listing the permissions that will be granted to each account. The information listed includes user rights and membership in groups. Click **Next** to grant the listed permissions.
- The Permissions wizard may take a few minutes to grant permissions.
- Step 11** If the Permissions wizard failed to grant one or more permissions, an error message appears that lists the number of permissions it was not able to grant. Click **OK**.
- Step 12** To display a report listing the operations that succeeded and those that failed, if any, click **View Detailed Results**.
- Step 13** If one or more permissions could not be granted, fix the problems, and run the Permissions wizard again.



#### Caution

If the Permissions wizard failed to set any permissions, either the Cisco Unity installation will fail or Cisco Unity will not run properly after it has been installed. You must successfully run the Permissions wizard before you can continue installing Cisco Unity.

**Step 14** Click **Finish**.

**Step 15** If the account that you logged on with in [Step 2](#) is also the account that you want to use to install Cisco Unity (the account that you selected in [Step 6](#)), log off of Windows so the permissions set by the Permissions wizard will take effect.

## Setting Exchange Permissions

In general, the Cisco Unity Permissions wizard does not set Exchange permissions, so they must be set manually. (If subscribers will be homed in Exchange 2003 and/or Exchange 2000, with or without Exchange 5.5, the Permissions wizard does grant Send-As, Receive-As, and Administer Information Store permissions on the Exchange 2003 and/or Exchange 2000 mailstores that are selected in the wizard.)

The Exchange permissions that you set for the Cisco Unity installation and services accounts depend on the version(s) of Exchange in which the Cisco Unity subscribers will be homed. [Table 7-1](#) lists the permissions that must be set for each configuration.

Do the procedures in the applicable section:

- [Setting the Required Exchange Permissions When Subscribers Are Homed Only in Exchange 2003 and/or Exchange 2000, page 7-14](#)
- [Setting Required Exchange Permissions When Subscribers Are Homed Only in Exchange 5.5, page 7-15](#)
- [Setting Required Exchange Permissions When Subscribers Are Homed in Exchange 2003 and/or Exchange 2000 and Also in Exchange 5.5, page 7-16](#)

If the system is using failover, set Exchange permissions only on the primary server.

**Table 7-1** Required Exchange Permissions

Where Cisco Unity Subscribers Are Homed	Permissions
Exchange 2003 and/or Exchange 2000 only	<p><b>Installation account:</b> Exchange Administrator.</p> <p><b>Cisco Unity directory services account:</b> Exchange Administrator if you want to create Cisco Unity subscribers by using the Cisco Unity Administrator. Exchange View Only Administrator if you want to create Cisco Unity subscribers only by importing accounts from Active Directory.</p> <p><b>Cisco Unity message store services account:</b> Send-As, Receive-As, and Administer Information Store permissions on the Exchange 2003 and/or Exchange 2000 mailstores that are selected in the Permissions wizard (set by the Permissions wizard).</p>
Exchange 5.5 only	<p><b>Installation account:</b> Services Account Administration.</p> <p><b>Cisco Unity directory and message store services account:</b> Services Account Administration.</p>

Table 7-1 Required Exchange Permissions (continued)

Where Cisco Unity Subscribers Are Homed	Permissions
Exchange 2003 and/or Exchange 2000 and also Exchange 5.5	<p><b>Installation account:</b> Exchange Administrator.</p> <p><b>Cisco Unity directory services account:</b></p> <ul style="list-style-type: none"> <li>• Exchange Administrator if you want to create Cisco Unity subscribers by using the Cisco Unity Administrator. Exchange View Only Administrator if you want to create Cisco Unity subscribers only by importing accounts from Active Directory.</li> <li>• Services Account Administration.</li> </ul> <p><b>Cisco Unity message store services account:</b></p> <ul style="list-style-type: none"> <li>• Send-As, Receive-As, and Administer Information Store permissions on the Exchange 2003 and/or Exchange 2000 mailstores that are selected in the Permissions wizard (set by the Permissions wizard).</li> <li>• Services Account Administration.</li> </ul>

## Setting the Required Exchange Permissions When Subscribers Are Homed Only in Exchange 2003 and/or Exchange 2000

Do the following procedure for the installation account first, then for the directory services account.

### To Grant Exchange Permissions to the Installation and Directory Services Accounts

- Step 1** Log on to the Cisco Unity server by using an account that is an Exchange Full Administrator.
- Step 2** On the Windows Start menu, click **Programs > Microsoft Exchange > System Manager**.
- Step 3** In the left pane of the Exchange System Manager MMC, right-click the organization name at the top of the tree control, and click **Delegate Control**.
- Step 4** On the Welcome to the Exchange Administration Delegation Wizard page, click **Next**.
- Step 5** In the Users or Groups dialog box, click **Add**.
- Step 6** In the Delegate Control dialog box, click **Browse**.
- Step 7** In the Select Users, Computers, or Groups dialog box, in the Look In list, click the name of the domain to which the Cisco Unity server belongs.
- Step 8** When you are granting permissions for the installation account, in the list of users, computers, and groups, double-click the name of the account.

When you are granting permissions for the Cisco Unity directory services account, in the list of users, computers, and groups, double-click the name of the account.

The Delegate Control dialog box reappears. The account you selected appears in the Group (Recommended) or User box.

**Step 9** When you are setting permissions for the installation account, in the Role list, click **Exchange Administrator**.

When you are setting permissions for the Cisco Unity directory services account, in the Role list, click the applicable option:

<b>Exchange Administrator</b>	If you want to create Cisco Unity subscribers by using the Cisco Unity Administrator.
<b>Exchange View Only Administrator</b>	If you do not want to create Cisco Unity subscribers by using the Cisco Unity Administrator (meaning that you will create Cisco Unity subscribers only by importing accounts from Active Directory).

**Step 10** Click **OK** to close the Delegate Control dialog box.

**Step 11** Repeat [Step 5](#) through [Step 10](#) for the Cisco Unity directory services account.

**Step 12** Click **Next**.

**Step 13** Click **Finish**.

**Step 14** Close the Exchange System Manager MMC.

## Setting Required Exchange Permissions When Subscribers Are Homed Only in Exchange 5.5

Do the following procedure for the installation account first, then for the directory and message store services account.

### To Grant Services Account Administration Permissions to the Installation and Cisco Unity Directory and Message Store Services Accounts

**Step 1** Log on to an Exchange server in the site that the Cisco Unity server will be joining by using an Exchange Services Account Administration account.

**Step 2** On the Windows Start menu, click **Programs > Microsoft Exchange > Microsoft Exchange Administrator**.

**Step 3** In the tree, click the site name.

**Step 4** On the File menu, click **Properties**.

**Step 5** Click the **Permissions** tab.

**Step 6** Click **Add**.

**Step 7** Under List Names From, click the Cisco Unity server domain.

**Step 8** When you are granting permissions for the installation account, in the list of names, select the account. When you are granting permissions for the directory and message store services account, in the list of names, select the account that Cisco Unity directory and message store services log on as.

**Step 9** Click **Add**.

**Step 10** Click **OK** to close the Add Users and Groups dialog box.

- Step 11** Under Roles, click **Service Account Admin**.
  - Step 12** Click **OK** to close the Properties dialog box.
  - Step 13** In the left pane, under the name of the site, click **Configuration**.
  - Step 14** On the File menu, click **Properties**.
  - Step 15** Click the **Permissions** tab.
  - Step 16** Click **Add**.
  - Step 17** Under List Names From, click the Cisco Unity server domain.
  - Step 18** When you are granting permissions for the installation account, in the list of names, select the account.  
When you are granting permissions for the directory and message store services account, in the list of names, select the account that Cisco Unity directory and message store services log on as.
  - Step 19** Click **Add**.
  - Step 20** Click **OK** to close the Add Users and Groups dialog box.
  - Step 21** Under Roles, click **Service Account Admin**.
  - Step 22** Click **OK** to close the Properties dialog box.
  - Step 23** Repeat [Step 3](#) through [Step 22](#) for the account that Cisco Unity directory and message store services log on as.
  - Step 24** Restart the Exchange server so the changes take effect.
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## Setting Required Exchange Permissions When Subscribers Are Homed in Exchange 2003 and/or Exchange 2000 and Also in Exchange 5.5

When Cisco Unity subscribers will be homed in Exchange 2003 and/or Exchange 2000 and will also be homed in Exchange 5.5, do the two procedures in this section in the order listed.



### Caution

If you want to home Cisco Unity subscribers in Exchange 2003 and/or Exchange 2000 and also in Exchange 5.5, the Active Directory Connector must be installed, and there must be either a two-way connection agreement, or a one-way connection agreement that replicates data from Exchange 5.5 to Active Directory.

Do the following procedure for the installation account first, then for the directory services account.

### To Grant Exchange Permissions to the Installation and Cisco Unity Directory Services Accounts

- Step 1** Log on to the Cisco Unity server by using an account that is an Exchange Full Administrator.
- Step 2** On the Windows Start menu, click **Programs > Microsoft Exchange > System Manager**.
- Step 3** In the left pane of the Exchange System Manager MMC, right-click the organization name at the top of the tree control, and click **Delegate Control**.
- Step 4** On the Welcome to the Exchange Administration Delegation Wizard page, click **Next**.
- Step 5** In the Users or Groups dialog box, click **Add**.
- Step 6** In the Delegate Control dialog box, click **Browse**.

- Step 7** In the Select Users, Computers, or Groups dialog box, in the Look In list, click the name of the domain to which the Cisco Unity server belongs.
- Step 8** When you are granting permissions for the installation account, in the list of users, computers, and groups, double-click the name of the account.
- When you are granting permissions for the Cisco Unity directory services account, in the list of users, computers, and groups, double-click the name of the account.
- The Delegate Control dialog box reappears. The account you selected appears in the Group (Recommended) or User box.
- Step 9** When you are granting permissions for the installation account, in the Role list, click **Exchange Administrator**.
- When you are granting permissions for the Cisco Unity directory services account, in the Role list, click the applicable option:

<b>Exchange Administrator</b>	If you want to create Cisco Unity subscribers by using the Cisco Unity Administrator.
<b>Exchange View Only Administrator</b>	If you do not want to create Cisco Unity subscribers by using the Cisco Unity Administrator (meaning that you will create Cisco Unity subscribers only by importing accounts from Active Directory).

- Step 10** Click **OK** to close the Delegate Control dialog box.
- Step 11** Click **Next**.
- Step 12** Click **Finish**.
- Step 13** Repeat [Step 3](#) through [Step 12](#) for the Cisco Unity directory services account.
- Step 14** Close the Exchange System Manager MMC.

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Do the following procedure for the Cisco Unity directory services account first, then for the message store services account.

#### **To Grant Services Account Administration Permissions to the Directory Services Account and the Message Store Services Account**

- Step 1** Log on to an Exchange 5.5 server in the site in which Cisco Unity subscribers will be homed by using an Exchange Services Account Administration account.
- Step 2** On the Windows Start menu, click **Programs > Microsoft Exchange > Microsoft Exchange Administrator**.
- Step 3** In the left pane, click the name of the site.
- Step 4** On the Exchange Administrator File menu, click **Properties**.
- Step 5** Click the **Permissions** tab.
- Step 6** Click **Add**.
- Step 7** In the Add Users and Groups dialog box, in the List Names From list, click the name of the domain that the directory services and message store services accounts are in.

- Step 8** When you are granting permissions for the Cisco Unity directory services account, in the top list, double-click the name of the account. The name appears in the bottom list.
- When you are granting permissions for the message store services account, in the top list, double-click the name of the account. The name appears in the bottom list.
- Step 9** Click **OK** to close the Add Users and Groups dialog box.
- Step 10** When you are granting permissions for the Cisco Unity directory services account, in the Properties dialog box, click the name of the account.
- When you are granting permissions for the message store services account, in the Properties dialog box, click the name of the account.
- Step 11** In the Roles list, click **Service Account Admin**.
- Step 12** Repeat [Step 6](#) through [Step 11](#) for the message store services account.
- Step 13** Click **OK** to close the Properties dialog box.
- Step 14** In the left pane, under the name of the site, click **Configuration**.
- Step 15** On the Exchange Administrator File menu, click **Properties**.
- Step 16** Click the **Permissions** tab.
- Step 17** Click **Add**.
- Step 18** In the Add Users and Groups dialog box, in the List Names From list, click the name of the domain that the directory and message store services accounts are in.
- Step 19** The first time you do this step, in the top list, double-click the name of the directory services account, and the name appears in the bottom list.
- The second time you do this step, in the top list, double-click the name of the message store services account, and the name appears in the bottom list.
- Step 20** Click **OK** to close the Add Users and Groups dialog box.
- Step 21** The first time you do this step, in the Properties dialog box, click the name of the directory services account.
- The second time you do this step, in the Properties dialog box, click the name of the message store services account.
- Step 22** In the Roles list, click **Service Account Admin**.
- Step 23** Repeat [Steps 17](#) through [Step 22](#) for the message store services account.
- Step 24** Click **OK** to close the Properties dialog box.
- Step 25** Close Microsoft Exchange Administrator.
- Step 26** Restart the Exchange server so the changes take effect.
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