



Active Roles 8.0.1 LTS

Console User Guide

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For the most recent documents and product information, see [Online product documentation](#).

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Introduction

Active Roles is an administrative platform that facilitates administration and provisioning for Active Directory and Microsoft Exchange. Active Roles enables the organization to develop a flexible administrative structure that suits their needs, while ensuring secure delegation of tasks, reduced workloads, and lower costs.

Active Roles increases the productivity of system administrators and helpdesk operators by automating provisioning tasks on directory objects in compliance with corporate administrative policies in corporate Active Directory and Exchange environments. The policy enforcement featured in the product guarantees that every administrative action taken is consistent with corporate security standards, which is a top priority for most organizations.

The Active Roles Console User Guide is designed for individuals responsible for performing administrative tasks using the Active Roles Console (MMC Interface). This document provides information about the Active Roles Console user interface, and includes instructions to help delegated administrators and helpdesk operators perform day-to-day administrative activities.

The Active Roles Console User Guide is supplemented with the Active Roles Administration Guide that provides conceptual information about the product, and includes systematic instructions on how to deploy the Active Roles administrative structure.

Getting started

This section provides an overview on how to start using the Active Roles Console for day-to-day administration operations by describing:

- How to start the Active Roles Console.
- The main parts of the Active Roles Console user interface.
- The main use cases of administering resources in Active Roles, such as using Managed Units, configuring filters, finding objects, and looking for policy-related information.

Starting the Active Roles Console

The Active Roles Console, also referred to as MMC Interface, is a comprehensive administrative tool for managing Active Directory and Microsoft Exchange. With the Active Roles Console, you can easily find directory objects and perform administrative tasks.

To start the Active Roles Console

1. Log in to the system where Active Roles Console is installed.
2. Depending on the version of your operating system:
 - In the **Apps** page, click **Active Roles 8.0.1 LTSCConsole**.
 - From the **Start** menu, select **All Programs > One Identity Active Roles 8.0.1 LTS > Active Roles 8.0.1 LTS Console**.

NOTE: By default, the Active Roles Console automatically chooses the Administration Service and establishes a connection. If the Console cannot connect to the Administration Service or you want to manually select the Administration Service, see *Connecting to the Administration Service* in the *Active Roles Administration Guide*.

Console access management

By default, after installing Active Roles, every user can log in to the Active Roles Console. To restrict user access to the Console, use the **MMC Interface Access** option of the Configuration Center.

To manage the Console access

1. On the Configuration Center **Dashboard** page, in the **MMC Interface Access** area, click **Manage Settings**.
2. On the **MMC Interface Access** page that opens, in the **Settings** area, click **Component**, then click **Modify** or double-click the **Component** item.
3. On the **MMC Interface Access** wizard that appears, select one of the following options:
 - **Allow Console (MMC Interface) access for all users:** Enables the user to log in to Active Roles Console.
 - **Restrict Console (MMC Interface) access for all users:** Selecting this option restricts all non-Active Roles Admin users from using the Console. This affects all delegated users, but does not apply to Active Roles Admin users.
4. Click **OK**.

The Active Roles Console settings get configured successfully. A message is displayed prompting you to restart the Administration Service to disconnect the current Console user sessions and for the updated settings to be reflected on the Console.

NOTE: Consider the following when managing Console access:

- You can also give Active Roles Console access to users with the **User Interface Management - MMC Full control** Access Template (AT) of the Active Roles Console. This AT gives access permission to the **Server Configuration > User Interfaces > MMC Interface** object.
- For information on delegating Console access to specified users, see [Delegating control to users for accessing Active Roles Console](#).

Getting and using help

Active Roles Help explains concepts and includes instructions for performing tasks with the product.

You can use the following guidelines to get assistance while you work:

- To access the Active Roles Help, click **Help** on the **Action** menu or **Help Topics** on the **Help** menu.
- To view the description of a dialog, click **Help** in the dialog or press **F1**.

- To view a brief description of a menu command or a toolbar button, point to the command or button. The description is displayed in the status bar at the bottom of the window.

You can print a single Help topic or all Help topics under a selected heading.

To print a single Help topic

1. On the menu bar, click **Help**, then click **Help Topics**.
2. In the left pane of the **Help viewer**, expand the heading that contains the topic you want to print, and then click the topic.
3. On the **Help viewer** toolbar, click **Options**, click **Print**, and then click **OK**.

To print all Help topics under a heading

1. On the menu bar, click **Help**, then click **Help Topics**.
2. In the left pane of the **Help viewer**, click the heading that contains the topics you want to print.
3. On the **Help viewer** toolbar, click **Options**, and then click **Print**.
4. In the **Print Topics** dialog, click **Print the selected heading and all subtopics**, and then click **OK**.

User interface overview

The Active Roles Console window is divided into two panes. The left pane contains the **Console tree**, showing the items that are available in the Console. The right pane, known as the details pane, displays information about items you select in the **Console tree**. You can perform most management tasks from this pane using commands on the **Action** menu.

Additional information is displayed in the lower sub-pane of the details pane when you check the **Advanced Details Pane** command on the **View** menu. You can perform management tasks from the lower sub-pane using commands on the **Action** menu.

NOTE: On the title bar of the Active Roles Web Interface, click **Feedback** to provide a product feedback. You are redirected to a new browser that allows you to provide the feedback.

- For the Admin site, by default, the feedback option is available.
- For the Helpdesk site, navigate to **Customization > Global Settings** and check the **Enable user feedback link** check-box to enable the feedback option.
- The feedback option is not available for the Self-Service site.

Console tree

The left pane of the Active Roles Console contains the Console tree.

The Console tree root is labeled **Active Roles**. The name of the Administration Service is shown in square brackets. If you have **Advanced view mode** selected for Active Roles Console display (**View > Mode**), the following folders are shown under the Console tree root:

- **Configuration:** Contains all Active Roles proprietary objects held in containers with appropriate names.
- **Active Directory:** Contains a list of domains registered with Active Roles. In this folder, you can browse domains for directory objects (users, group, computers), and perform management tasks on those objects.
- **AD LDS (ADAM):** Contains a list of AD LDS directory partitions registered with Active Roles. In this folder, you can browse partitions for directory objects (users, group, containers), and perform management tasks on those objects.
- **Applications:** Contains a list of applications integrated with Active Roles, such as Reporting, and allows for quick access to those applications.

The Console display mode determines which folders are displayed in the Console tree. For more information, see [View mode](#).

Details pane

When you select an item in the Console tree, the details pane changes accordingly. To perform administrative tasks, click items in the details pane and use commands on the **Action** menu. The **Action** menu commands also appear on the shortcut menu that you can access by right-clicking items in the **Console tree** or the details pane.

By default, the objects listed in the details pane are sorted in ascending order by object name. You can change the sorting order by clicking a column heading. You can add and remove columns in the details pane using the **Choose Columns** command on the **View** menu.

In the Active Roles Console you can apply filters to the details pane in order to search for directory objects. To configure a filter, select a domain and then click **Filter Options** on the **View** menu. It is also possible to find an object in the details pane by typing a few characters. This will select the first item in the sorted column that matches what you typed.

Advanced pane

The advanced pane appears at the bottom of the details pane if you check **Advanced Details Pane** on the **View** menu. You can use the advanced pane to administer an object

selected in the **Console tree** or the **Details pane**: right-click an existing entry in the list to administer it, or right-click a blank area of the advanced pane to add a new entry.

The **Advanced details pane** is composed of a number of tabbed pages. The selected object determines which tabs are displayed. The possible tabs in the **Advanced details pane** and their descriptions are as follows:




- **Active Roles Security**: Lists the Active Roles Access Templates applied to the selected object.
- **Links**: Lists the objects to which the selected Access Template is applied.
- **Active Roles Policy**: Lists the Active Roles Policy Objects applied to the selected object.
- **Native Security**: Lists the Active Directory permission entries specified for the selected object.
- **Member Of**: Lists the groups to which the selected object belongs.
- **Members**: Lists the members of the selected group.

NOTE: The Console displays the **Active Roles Security**, **Active Roles Policy**, and **Native Security** tabs for a selected object only if your user account has the **Read Control** right to the selected object.

Depending on the tab you have selected in the **Advanced details pane**, the toolbar displays the following buttons to help you work with the entries on the tab.



Active Roles Security and Links

Table 1: Active Roles Security and Links

	Apply additional Access Templates to the selected object.
	Display Access Templates that affect the selected object owing to inheritance.
	Synchronize from Active Roles security to Active Directory security.



Active Roles Policy

Table 2: Active Roles Policy

	Apply additional Policy Objects to the selected object.
	Display Policy Objects that affect the selected object owing to inheritance.



Native Security

Table 3: Native Security

	Display permission entries that are inherited from parent objects.
	Display default permission entries specified by the AD schema.

Member of, Members

Table 4: Member Of and Members

	Add the selected object to groups.
	Set the group as the primary group for the selected object.

View mode

In the Active Roles Console you can choose from 3 view modes: Basic, Advanced, or Raw. Changing the view mode makes it possible to filter out advanced objects and containers from the display.

Basic mode displays Active Directory objects and Managed Units, and filters out objects and containers related to the Active Roles configuration. Basic mode should normally be used by delegated administrators and help-desk operators.

Advanced mode displays all objects and containers except those reserved for Active Roles internal use. Advanced mode is designed for administrators who are responsible for configuring the system and managing Active Roles proprietary objects.


Raw mode displays all objects and containers defined in the Active Roles namespace. This mode is primarily designed for troubleshooting.

With Raw mode, the Console displays all data it receives from the Administration Service. With Basic or Advanced mode, some data is filtered out. For example, the **Configuration** folder is not shown in the Console tree with Basic mode. Another example is the **Configuration Container** folder used to display the Active Directory configuration naming context, which is displayed with Raw mode only. In addition, there are some commands and property pages that are only displayed when the console is in Raw mode.

In short, when you choose Raw mode, the snap-in displays everything it is able to display. Otherwise, some items are hidden. Note that changing view mode does not modify any items. Rather, this only shows or hides particular items from the display.

To change view mode, click **Mode** on the **View** menu. In the **View Mode** dialog, click **Basic Mode**, **Advanced Mode**, or **Raw Mode**.

Controlled objects

The Active Roles Console provides for visual indication of the objects to which Access Templates or Policy Objects are linked. The Console marks those objects by adding an arrow icon at the lower-left corner of the icon that represents the object in the Console tree or details pane. As a result, the icon looks similar to the following image: .

To enable this feature, click **Mark Controlled Objects** on the **View** menu, and select check boxes to specify the category of object to be marked.

Using Managed Units

Active Roles offers the following key security and administration elements:

- **Trustees:** Users or groups that have permissions to administer users, groups, computers, or other directory objects.
- **Permissions and Roles:** Permissions are grouped in Access Templates (roles) to define how a Trustee can manage directory objects.
- **Managed Units:** Collections of directory objects delegated to Trustees for administration.


The directory administrator defines which users or groups are designated as Trustees, which roles and permissions are assigned to Trustees, and what objects are included in Managed Units.

Managed Units are used to determine the directory objects that a Trustee can administer. As a Trustee, you can administer Managed Units for which you have assigned permissions. Managed Units containing objects you are authorized to administer are displayed under **Managed Units** in the **Console tree**.

When you select a Managed Unit in the **Console tree**, the details pane displays a list of objects included in that Managed Unit. To administer objects, select them from the list and use the commands on the **Action** menu.

If a Managed Unit includes a container, such as an Organizational Unit, the container is displayed under the Managed Unit in the **Console tree**. When you select a container in the **Console tree**, the details pane lists all child objects and sub-containers held in that container.

Setting up filters

The Active Roles Console makes it possible to apply a filter to display only the objects that match the filtering criteria. To apply a filter, select an Active Directory object or container and click **Filter** on the toolbar: . This displays the **Filter Options** dialog where you can set up a filter. After you set up a filter, the filtering criteria immediately take effect on all lists of Active Directory objects in the Active Roles Console.

Sorting and filtering lists in the details pane

You can sort and filter lists of Active Directory objects in the details pane.

To sort objects in the details pane

1. Click a column heading to sort by the contents of that column.
2. Click the column heading again to switch between ascending and descending sort order.

To add or remove columns in the details pane

1. On the **View** menu, click **Choose Columns** or **Add/Remove Columns**.
2. Do the following, then click **OK**:
 - To add a column, in **Available columns**, click the column you want to display, then click **Add**.
 - To remove a column, in **Displayed columns**, click the column you want to hide, then click **Remove**.
 - To re-order columns, click a column name in **Displayed columns**, then click **Move Up** or **Move Down** to change the position of the column.

NOTE: In the **Advanced Details Pane**, you can add or remove columns from a list in the upper sub-pane or in the lower sub-pane. To do so, click the list in the sub-pane you want to modify, then follow the steps above.

Filter options help you search for particular objects in the details pane. You can view all objects or only objects of selected type, configure the number of items that can be displayed for each folder, or create custom filters using object attributes and LDAP queries.

To select view filter options

1. On the **View** menu, click **Filter Options**.
2. Do one of the following, then click **OK**:
 - To view all objects, click **Show all types of objects**. With this option, the filter is turned off.
 - To view objects of certain types, click **Show only the following types of objects**, and select check boxes next to the types of objects you want to view.
 - To view objects that match custom filtering criteria, click **Create custom filter**. Then click **Customize**, and configure your filtering criteria by using the instructions outlined in [Building a custom search](#).
3. (Optional) In **Maximum number of items displayed per folder**, modify the maximum number of objects that can be displayed in the Console. The default maximum number of objects displayed in the Console is 2,000.

Finding objects

In the Active Roles Console you can search for objects of different types using the **Find** window. To access the **Find** window, right-click a container and click **Find**.

From the **In** list, you can select the container or Managed Unit you want to search. The list includes the container that you selected before activating the **Find** window. To add containers to the list, click **Browse**. From the **Find** list, you can select the type of the objects you want to find.

When you select an object type, the **Find** window changes accordingly. For example, **Users, Contacts, and Groups** searches for users, contacts, or groups using criteria such as user name, a note describing a contact, or the name of a group. In the **Find** list, Active Roles splits the **Users, Contacts, and Groups** category into three, providing the option for a more streamlined search.

By selecting **Custom Search** from the **Find** list, you can build custom search queries using advanced search options.

Using the **Find** window, you can search for any directory objects, such as users, groups, computers, Organizational Units, printers or shared folders. It is also possible to search for Active Roles configuration objects such as Access Templates, Managed Units, and Policy Objects. When you search for Access Templates, Policy Objects or Managed Units and select an appropriate object type from the **Find** list, the relevant container appears in the **In** list.

Once the search has completed, the objects matching the search criteria (search results) are listed at the bottom of the **Find** window. You can quickly find an object in the search results list by typing a few characters. This will select the first name that matches what you typed.

Once you have found the object, you can manage it by right-clicking the entry in the search results list, and clicking the applicable commands on the shortcut menu.

Searching for a user, contact, or group

You can search for Active Directory user accounts, contacts or groups with the Active Roles Console.

To search for a user, contact, or group

1. On the **Action** menu, click **Find** to display the **Find** window.
2. In the **Find** box, click one of the following:
 - **Users, Contacts, and Groups**: Use this option to find users, groups, and contacts that match your search criteria.
 - **Users**: Use this option to find only users that match your search criteria.
 - **Groups**: Use this option to find only groups that match your search criteria.
 - **Contacts**: Use this option to find only contacts that match your search criteria.
3. In the **In** box, select the domain, container or Managed Unit you want to search, or click **Browse** to locate a domain, container or Managed Unit.
4. Type in a name, a description, or both:

- In the **Name** box, type the name of the object you want to find.
- In the **Description** box, type the description of the object you want to find.

TIP: You can search using partial search criteria. For example, **B** in the **Name** box will return all objects whose name begins with the letter **B**, such as **Backup Operators**.

5. To start your search, click **Find Now**.

NOTE: Consider the following when searching for a user, contact, or group:

- You can use the **Advanced** tab for more powerful search options. For details, see [Using advanced search options](#).
- The found objects are displayed at the bottom of the **Find** window.
- You can manage the found objects directly from the list in the **Find** window by right-clicking a list item, then using commands on the shortcut menu to perform management tasks.

Searching for a computer

To search for a computer

1. On the **Action** menu, click **Find** to display the **Find** window.
2. In the **Find** box, click **Computers**.
3. In the **In** box, select the domain, container or Managed Unit you want to search, or click **Browse** to locate a domain, container or Managed Unit.
4. In the **Name** box, type the name of the computer you want to find.

TIP: You can search using partial search criteria. For example, **B** in the **Name** box will return all computers whose name begins with the letter **B**.

5. (Optional) In the **Role** box, click one of the following:
 - **Domain Controller:** Use this option to find only domain controllers.
 - **Workstations and Servers:** Use this option to find only workstations and servers (not domain controllers).
6. To start your search, click **Find Now**.

NOTE: Consider the following when searching for a computer:

- You can use the **Advanced** tab for more powerful search options. For details, see [Using advanced search options](#).
- The found objects are displayed at the bottom of the **Find** window.
- You can manage the found objects directly from the list in the **Find** window by right-clicking a list item, then using commands on the shortcut menu to perform management tasks.

Searching for an Organizational Unit

You can search for Organizational Units (OUs) with the Active Roles Console.

To search for an Organizational Unit

1. On the **Action** menu, click **Find** to display the **Find** window.
2. In the **Find** box, click **Organizational Units**.
3. In the **In** box, select the domain, container or Managed Unit you want to search, or click **Browse** to locate a domain, container or Managed Unit.
4. In the **Name** box, type the name (or a part of the name) of the OU you want to find.
5. To start your search, click **Find Now**.

NOTE: Consider the following when searching for an OU:

- You can use the **Advanced** tab for more powerful search options. For details, see [Using advanced search options](#).
- The found objects are displayed at the bottom of the **Find** window.
- You can manage the found objects directly from the list in the **Find** window by right-clicking a list item, then using commands on the shortcut menu to perform management tasks.

Using advanced search options

To fine-tune search results, the Active Roles Console allows you to perform advanced search on the Active Directory resources available in your organization.

To use advanced search options

1. On the **Action** menu, click **Find** to display the **Find** window.
2. In the **Find** box, click the kind of object for which you want to search.
3. Click the **Advanced** tab.
4. Click **Field**, and select the object property you want to query.
5. In **Condition**, to find the objects that have the object property matching the condition-value pair you have specified, click the condition for your search, then, in **Value**, type a property value.
6. To add this search condition to your search, click **Add**.
7. Repeat the steps from selecting the object property you want to query until you have added all of the desired search conditions.
8. Click one of the following:

- If you want to find the objects that meet all of the conditions specified, click **AND**.
 - If you want to find the objects that meet any of the conditions specified, click **OR**.
9. To start your search, click **Find Now**. The found objects are displayed at the bottom of the window.

Building a custom search

You can configure custom search queries in the Active Roles Console.

To build a custom search

1. On the **Action** menu, click **Find** to display the **Find** window.
2. In the **Find** box, click **Custom Search**.
3. In the **In** box, select the domain, container or Managed Unit you want to search, or click **Browse** to locate a domain, container or Managed Unit.
4. Do one of the following:
 - On the **Custom Search** tab, follow the steps from selecting the object property you want to query of the procedure outlined in [Using advanced search options](#).
 - On the **Advanced** tab, specify a search filter using LDAP syntax, as described in [LDAP Syntax](#).
5. To start your search, click **Find Now**.

LDAP Syntax

Search filters enable you to define search criteria and provide more efficient and effective searches. The search filters are represented by Unicode strings.

The Active Roles Console supports the standard LDAP search filters as defined in [RFC 2254](#).

The following table lists some examples of standard LDAP search filters.

Table 5: LDAP search filters

Search filter	Description
(objectClass=*)	All objects
(&(objectCategory=person)(objectClass=user)(!cn=andy))	All user objects but andy
(sn=sm*)	All objects with a surname that

Search filter	Description
	starts with sm
<code>(&(objectCategory=person)(objectClass=contact)((sn=Smith)(sn=Johnson)))</code>	All contacts with a surname equal to Smith or Johnson

Search filter format

Search filters use one of the following formats:

- `<filter>=(<attribute><operator><value>)`
- `(<operator><filter1><filter2>)`

In this example, `<attribute>` stands for the LDAP display name of the attribute by which you want to search.

Operators

The following table lists some frequently used search filter operators.

Table 6: Operators

Logical Operator	Description
=	Equal to
~=	Approximately equal to
<=	Lexicographically less than or equal to
>=	Lexicographically greater than or equal to
&	AND
	OR
!	NOT

Wildcards

You can add wildcards and conditions to a search filter. The following examples show substrings that can be used to search the directory.

Substring	Description
<code>(objectClass=*)</code>	Get all entries
<code>(cn=*bob*)</code>	Get entries containing bob somewhere in the common name
<code>(cn>='bob')</code>	Get entries with a common name greater than or equal to bob
<code>(&(objectClass=user)(mail=*))</code>	Get all users with an email attribute
<code>(&(sn=smith)(objectClass=user)(mail=*))</code>	Get all user entries with an email attribute and a surname equal to smith
<code>(&(objectClass=user) (cn=andy*)(cn=steve)(cn=margaret))</code>	Get all user entries with a common name that starts with andy, steve, or margaret
<code>(!(mail=*))</code>	Get all entries without an email attribute

Special characters

If any of the following special characters must appear in the search filter as literals, they must be replaced with the listed escape sequence.

Table 7: Special characters

ASCII Character	Escape Sequence Substitute
*	\2a
(\28
)	\29
\	\5c
NUL	\00

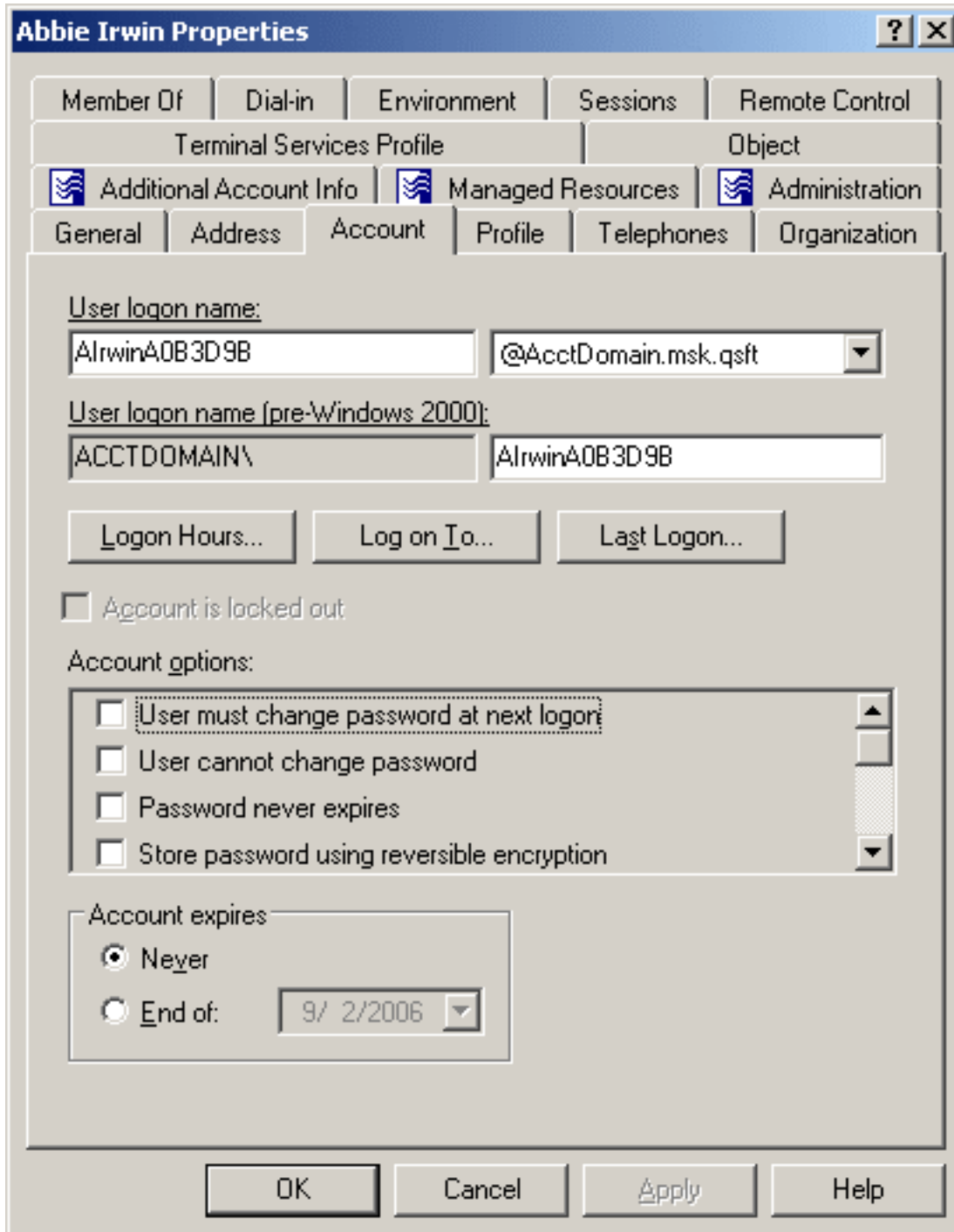
In addition, arbitrary binary data may be represented using the escape sequence syntax by encoding each byte of binary data with the backslash (\) followed by two hexadecimal digits. For example, the four-byte value `0x00000004` is encoded as `\00\00\00\04` in a filter string.

Getting policy-related information

In object creation wizards and properties dialogs, some property labels may be displayed as hyperlinks. This indicates that Active Roles enforces policy restrictions on the property.

In the following figure, the **User logon name** and **User logon name (pre-Windows 2000)** labels are underlined, which means that these properties are under the control of a certain policy defined with Active Roles.

Figure 1: Getting policy-related information



To examine the policy in detail, click the label. For example, if you click **User logon name (pre-Windows 2000)**, the Active Roles Console presents you with a window similar to the following figure.

Figure 2: Policy description



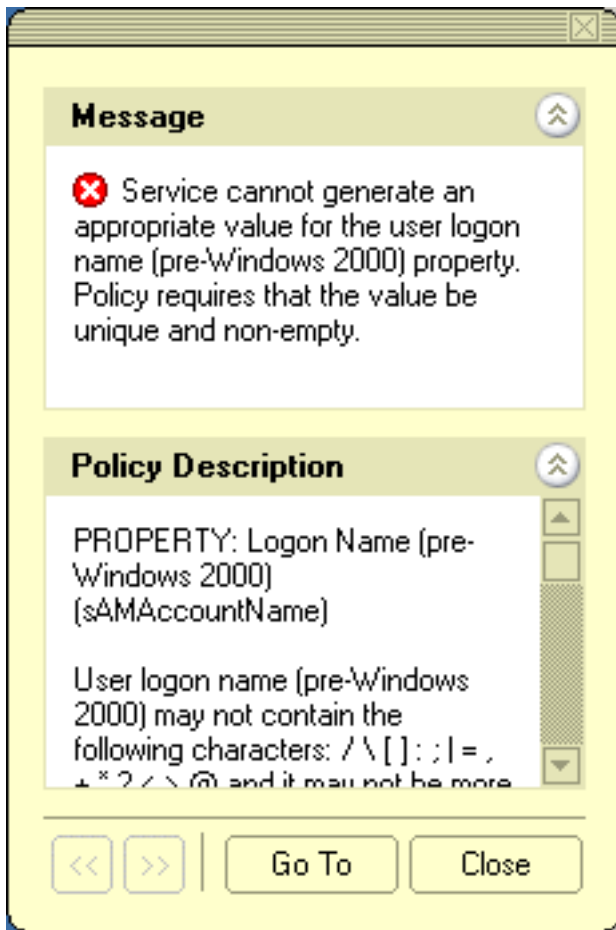
The window may display the following information:

- **Policy Description:** Provides a brief description of the policy.
- **Message:** Details the problem if the supplied property value violates the policy.

You can click arrows in the lower-left corner to display description of other policies enforced on the given property.

The **Message** section is displayed whenever the specified property value violates the policy. The following figure illustrates the situation where a value has not been supplied for a mandatory property.

Figure 3: Policy violation message



When you click **Go To** in this window, the Console moves the pointer to the field that needs to be corrected. You can type or select an appropriate value to correct your input.

User or service account management

Active Roles allows you to perform administrative tasks such as create, copy, rename, modify, and delete user accounts in Active Directory. You can also use this tool to unlock accounts, add and remove accounts from groups, and reset user passwords. Active Roles also supports Exchange tasks, such as create, delete, and move user mailboxes.

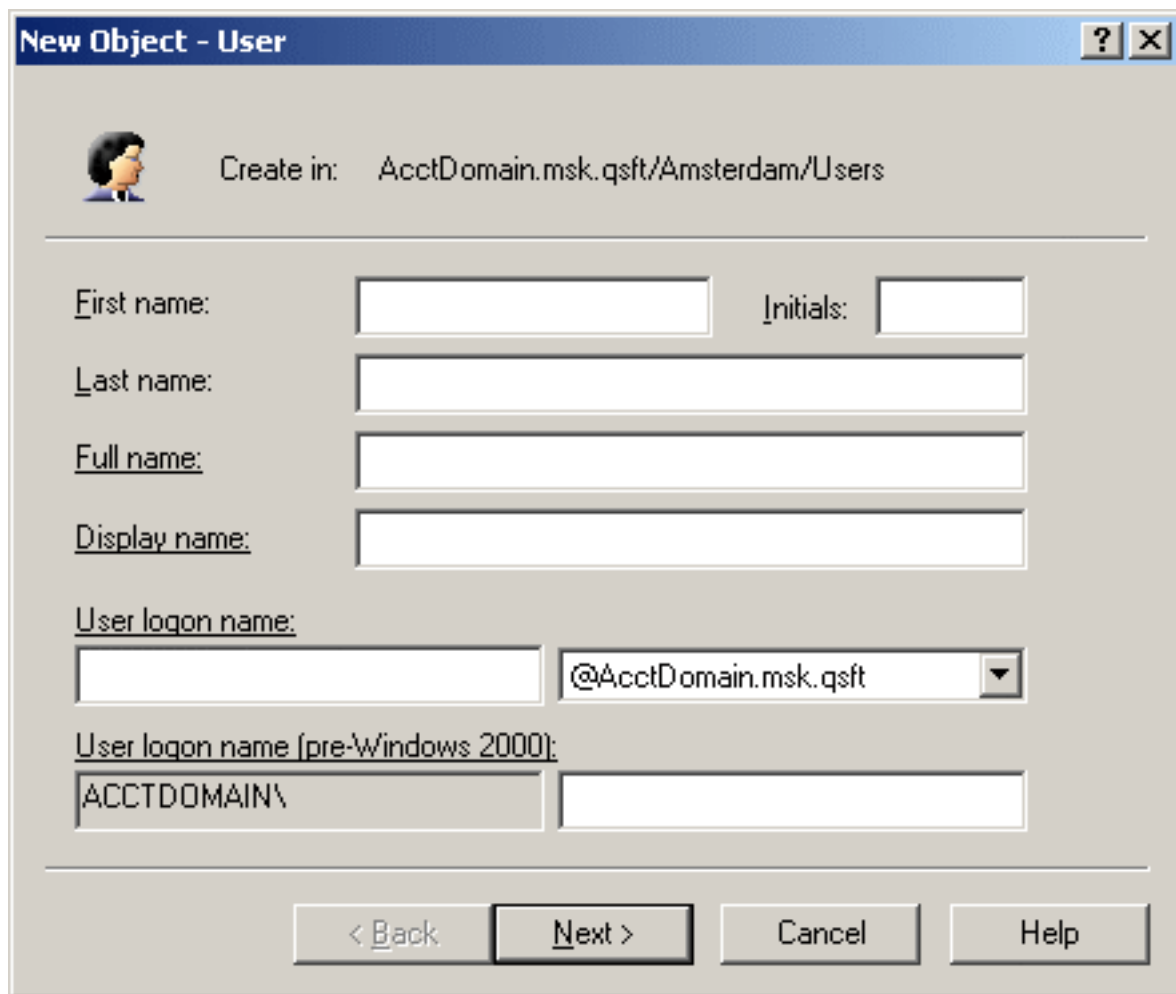
The following section guides you through the Active Roles Console to manage user accounts. You can also perform these tasks using the Active Roles Web Interface.

Creating a user account

To create a user account, in the **Console tree**, right-click the container where you want to add the user account, select **New > User**, then follow the instructions in the wizard.

In the wizard, some property labels may be displayed as hyperlinks. The hyperlink indicates that Active Roles enforces certain policy restrictions on the property. To examine policy details, click the hyperlink: the policy information is displayed. For more information, see [Getting policy-related information](#).

Figure 4: Creating a user account



The screenshot shows the 'New Object - User' wizard window. The title bar reads 'New Object - User'. Below the title bar, there is a small icon of a person and the text 'Create in: AcctDomain.msk.qsft/Amsterdam/Users'. The main area contains several input fields: 'First name:' with an empty text box and 'Initials:' with an empty text box; 'Last name:' with an empty text box; 'Full name:' with an empty text box; 'Display name:' with an empty text box; 'User logon name:' with an empty text box and a dropdown menu showing '@AcctDomain.msk.qsft'; and 'User logon name (pre-Windows 2000):' with a text box containing 'ACCTDOMAIN\' and an empty text box. At the bottom, there are four buttons: '< Back', 'Next >', 'Cancel', and 'Help'.

The policy information is also displayed whenever you supply a property value that violates a policy restriction. The wizard cannot proceed until you enter an acceptable value.

How to create a user account


You can create new Active Directory user accounts with the Active Roles Console.

To create a user account

1. In the **Console tree**, locate and select the folder in which you want to add the user account.
2. Right-click the folder, point to **New** and click **User** to start the **New Object - User** wizard.

3. Follow the wizard pages to specify properties of the new user account, such as the user first name, last name, full name, display name, logon name, pre-Windows 2000 logon name, password, and Exchange mailbox settings.
4. If you want to set values for additional properties (those for which the wizard pages do not provide data entries), click **Edit Attributes** on the completion page of the wizard.
5. After setting any additional properties, click **Finish** on the completion page of the wizard.

NOTE: Consider the following when creating a user account:

- The behavior of the wizard pages may vary depending on the configuration of Active Roles policies. To determine whether a given item on a page is under the control of a certain policy, observe the text label next to the item: the underlined text label indicates that some policy restrictions are in effect. Click underlined text labels to examine the policies that govern the behavior of the wizard pages.
- You can start the **New Object - User** wizard by clicking  on the toolbar.
- To create a user account, you can also copy a previously created user account. For more information, see [Copying a user account](#).
- A new user account with the same name as a previously deleted user account does not automatically assume the permissions and group memberships of the previously deleted account because the security ID (SID) for each account is unique. To duplicate a deleted user account, you must manually reconfigure all of its permissions and memberships.

Finding a user account

To find a user account, right-click the container you want to search and click **Find**. In the **Find** window, select **Users** from the **Find** list, specify your search criteria, and start the search. In the search results list, you can right-click user accounts and use commands on the shortcut menu to perform management tasks.

For step-by-step instructions on how to search for user accounts, see [Searching for a user, contact, or group](#).

Copying a user account

To create a copy of a user account, right-click the account, click **Copy**, and then follow the instructions in the wizard. The first step of the wizard looks as shown in the following figure.

Figure 5: Copying a user account

Copy Object - User

Create in: AcctDomain.msk.qsft/Amsterdam/Users

First name: Initials:

Last name:

Full name:

Display name:

User logon name: @AcctDomain.msk.qsft

User logon name (pre-Windows 2000): ACCTDOMAIN\

< Back Next > Cancel Help

The copy of the user account will remain in the same group(s) as the original user account.

How to copy a user account

You can copy Active Directory user accounts with the Active Roles Console.

To copy a user account

1. In the **Console tree**, locate and select the folder that contains the user account you want to copy.
2. In the details pane, right-click the user account you want to copy, then click **Copy** to start the **Copy Object - User** wizard.
3. Follow the wizard pages to specify properties for the copy of the user account, such as the user first name, last name, full name, display name, logon name, pre-

Windows 2000 login name, password, and Exchange mailbox settings.

4. If you want to set values for additional properties (those for which the wizard pages do not provide data entries), click **Edit Attributes** on the completion page of the wizard.
5. After setting any additional properties, click **Finish** on the completion page of the wizard.

NOTE: Consider the following when copying a user account:

- The behavior of the wizard pages may vary depending on the configuration of Active Roles policies. To determine whether a given item on a page is under the control of a certain policy, observe the text label next to the item: the underlined text label indicates that some policy restrictions are in effect. Click underlined text labels to examine the policies that govern the behavior of the wizard pages.
- By default, some common properties are carried over to the copied user account from the original user account. This includes the group membership settings as well, so if the original user account is a member of a specific group (or groups), the **Copy Object - User** wizard will automatically add the copied user account to the same group(s).

Modifying user account properties

To modify user account properties, right-click the account and click **Properties**. You can make changes to user account properties in the **Properties** dialog, shown in the following figure.

Figure 6: User account properties

The screenshot shows a Windows-style dialog box titled "Adrie Fortuyn Properties". At the top, there are several tabs: "Member Of", "Dial-in", "Environment", "Sessions", "Remote Control", "Terminal Services Profile", and "Object". Below these are three icons with labels: "Additional Account Info", "Managed Resources", and "Administration". The "General" tab is selected, showing fields for "First name" (Adrie), "Initials" (empty), "Last name" (Fortuyn), "Display name" (Adrie Fortuyn), "Description" (Demo user account for Quick Connect 3.1 Basic Ev), "Office" (empty), "Telephone number" (+31 20 172-023-39), "E-mail" (empty), and "Web page" (empty). There are "Other..." buttons next to the telephone and web page fields. At the bottom are "OK", "Cancel", "Apply", and "Help" buttons.

In the wizard, some property labels may be displayed as hyperlinks. The hyperlink indicates that Active Roles enforces certain policy restrictions on the property. To examine policy details, click the hyperlink: the policy information is displayed. For more information, see [Getting policy-related information](#).

The policy information is also displayed whenever you supply a property value that violates a policy restriction. The wizard cannot proceed until you enter an acceptable value.

You can use the **Properties** dialog to view or modify any property of the object by navigating to the **Object** tab and clicking **Advanced Properties**. In the **Advanced Properties** window you can manage all properties, including those that cannot be accessed via the **Properties** dialog itself.

You can also display the **Advanced Properties** window by right-clicking the object and selecting **All Tasks > Advanced Properties**.

How to modify user account properties

You can modify the properties of Active Directory user accounts with the Active Roles Console.

To modify user account properties

1. In the **Console tree**, locate and select the folder that contains the user account you want to modify.
2. In the details pane, right-click the user account you want to modify, then click **Properties**.
3. Use the tabs in the **Properties** dialog to view or modify properties of the user account.
4. If you want to view or modify additional properties (those for which the tabs in the **Properties** dialog do not provide data entries), navigate to the **Object** tab and click **Advanced Properties**.
5. After setting all the properties you want, click **OK**.

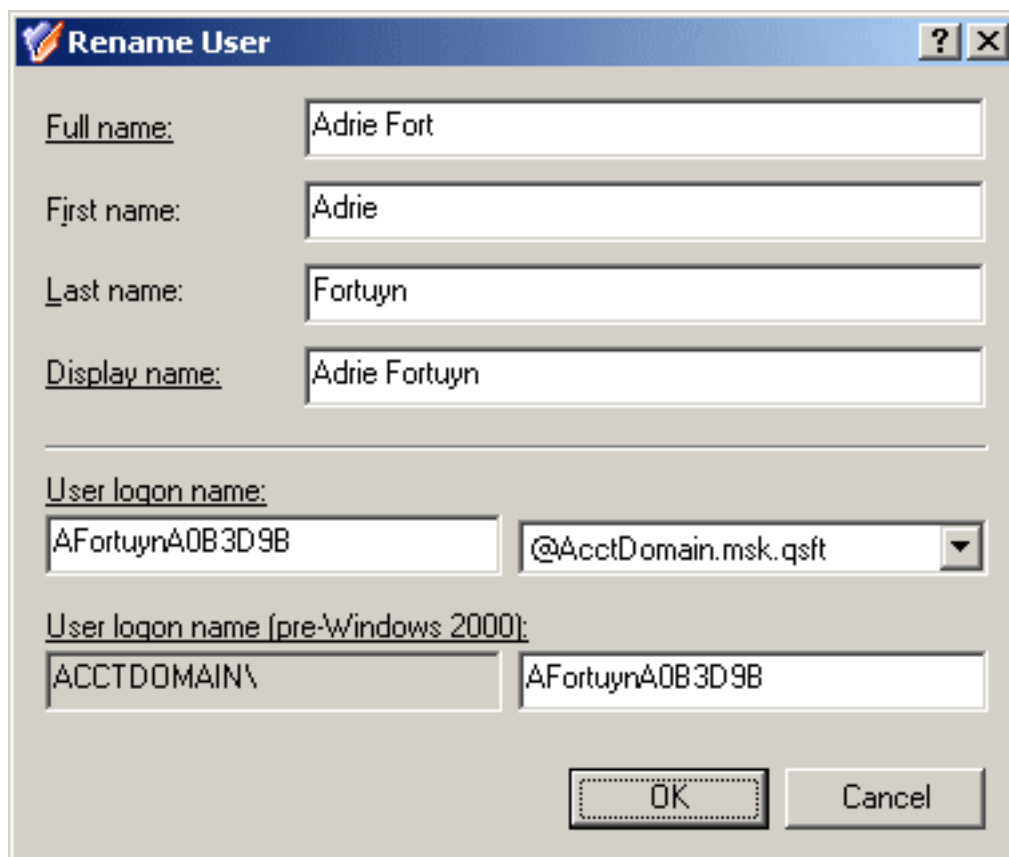
NOTE: Consider the following when modifying a user account:

- The behavior of the user interface elements in the **Properties** dialog may vary depending on the configuration of Active Roles policies. To determine whether a given item on a tab is under the control of a certain policy, observe the text label next to the item: the underlined text label indicates that some policy restrictions are in effect. Click the underlined text labels to examine the policies that govern the behavior of the user interface elements.
- To modify properties for multiple objects, press and hold **CTRL**, then click each object. Right-click the selection, then click **Properties**.
- You can also access the **Advanced Properties** dialog for an object by right-clicking the account and selecting **All Tasks > Advanced Properties**.
- To locate the object that you want to modify, use the **Find** function of Active Roles. Once you found the object, open the **Properties** page by right-clicking the object, and clicking **Properties**.

Renaming a user account

To rename a user account, right-click the account and click **Rename**. Type a new name and press **ENTER**. This displays the **Rename User** dialog, shown in the following figure. In the **Rename User** dialog, you can change the user's first name, last name, display name, and logon name.

Figure 7: Rename User



The screenshot shows the 'Rename User' dialog box. It has a title bar with a question mark and a close button. The dialog contains several input fields: 'Full name:' with 'Adrie Fort', 'First name:' with 'Adrie', 'Last name:' with 'Fortuyn', and 'Display name:' with 'Adrie Fortuyn'. Below these is a section for 'User logon name:' with a text box containing 'AFortuynA0B3D9B' and a dropdown menu showing '@AcctDomain.msk.qsft'. Underneath is a section for 'User logon name (pre-Windows 2000):' with a text box containing 'ACCTDOMAIN\' and another text box containing 'AFortuynA0B3D9B'. At the bottom are 'OK' and 'Cancel' buttons.

In the **Rename User** dialog, hyperlinks are used to indicate the properties controlled by Active Roles policies. For more information, see [Getting policy-related information](#).

How to rename a user account

You can rename Active Directory user accounts with the Active Roles Console.

To rename a user account


1. In the **Console tree**, locate and select the folder that contains the user account you want to rename.
2. In the details pane, right-click the user account and click **Rename**.
3. Type a new name (or clear the existing name), then press **ENTER** to display the **Rename User** dialog.
4. Use the **Rename User** dialog to modify (if needed) the naming properties of the user account such as the user full name, first name, last name, display name, and login name.
5. When finished, click **OK**.

NOTE: Consider the following when renaming a user account:

- The behavior of the **Rename User** dialog may vary depending on the configuration of Active Roles policies. To determine whether a given item in the dialog is under the control of a certain policy, observe the text label next to the item: the underlined text label indicates that some policy restrictions are in effect. Click underlined text labels to examine the policies that govern the behavior of the dialog.
- To locate the user account you want to rename, use the **Find** function of Active Roles. Once you found the user account, rename it by selecting it in the list of search results, right-clicking it, clicking **Rename**, then specifying the new name. To apply the new name, press **Enter**.

Blocking and unblocking a user account

To prevent a particular user from logging on, you can block the user account as a security measure instead of deleting it.

To block a user account, right-click the account and click **Disable Account**. To unblock a user account, right-click a deactivated user account and click **Enable Account**. The **Enable Account** command only appears for deactivated accounts, marked with the  icon.

How to block a user account

You can block Active Directory user accounts with the Active Roles Console.

To block a user account

1. In the Console tree, locate and select the folder that contains the user account you want to block.
2. In the details pane, right-click the user account and click **Disable Account**.

NOTE: Consider the following when blocking a user account:

- To prevent particular users from logging on for security reasons, the administrator can block user accounts instead of deleting user accounts.
- The **Disable Account** command is displayed if the account is enabled and thus can be used for logon; otherwise, the **Enable Account** command is displayed on the menu. By using the **Enable Account** command the administrator can change the status of the disabled account so as to allow the user to log on with that account.
- To locate user accounts for blocking, use the **Find** function of Active Roles. Once you found the users, block them by selecting the accounts in the list of search results, right-clicking the selection, and clicking **Disable**.
- Since the **Copy** function ensures that the copy of a user account belongs to the same groups as the original user account, the administrator can create a blocked user account that belongs to certain groups, and then make copies of that account in order to simplify the creation of user accounts with common group memberships.

How to unblock a user account

You can unblock a blocked user account with the Active Roles Console.

To unblock a blocked user account

1. In the **Console tree**, locate and select the folder that contains the user account you want to unblock.
2. In the details pane, right-click the user account and click **Enable Account**.

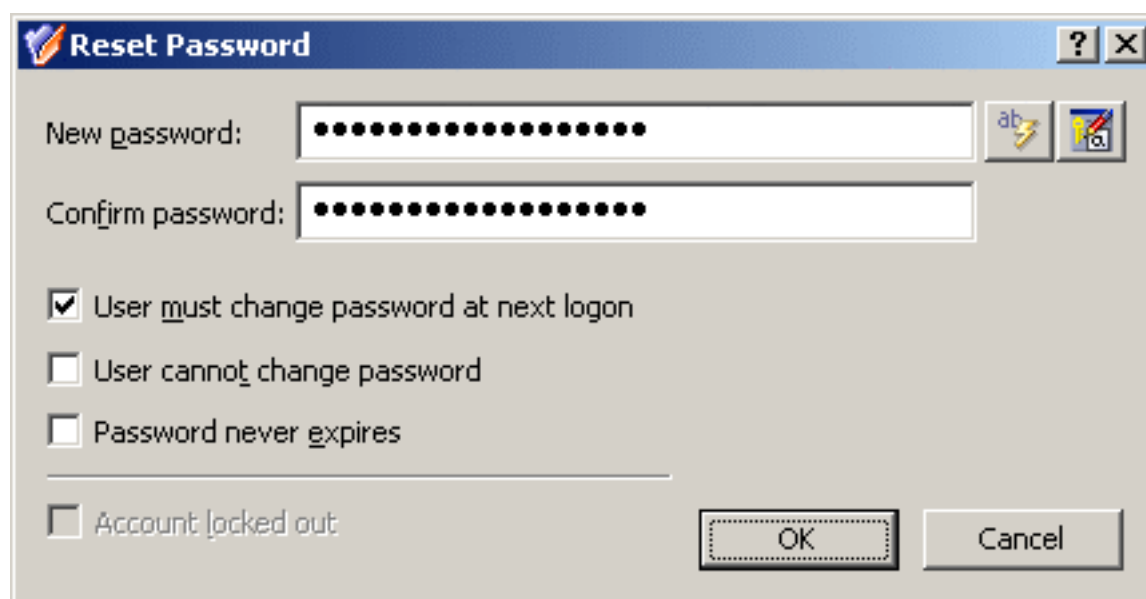
NOTE: Consider the following when unblocking a user account:

- The **Enable Account** command is displayed if the account is blocked and cannot be used for login; otherwise, the **Disable Account** command appears in the menu. To prevent particular users from logging in for security reasons, administrators can block user accounts by using the **Disable Account** command.
- To locate user accounts for unblocking, use the **Find** function of Active Roles. Once you found the users, unblock them by selecting the accounts in the list of search results, right-clicking the selection, and clicking **Enable Account**.

Resetting a user password

To reset the password for a user account, right-click the account and click **Reset Password**. This displays the **Reset Password** dialog, shown in the following figure. In the **Reset Password** dialog, it is possible to generate passwords, set password options, and unlock the account if it is locked out. To generate a password, click the button next to the **New Password** box.

Figure 8: Reset Password



How to reset a user password

You can reset the password of a Active Directory user account with the Active Roles Console.

To reset a user password

1. In the **Console tree**, locate and select the folder that contains the user account whose password you want to reset.
2. In the details pane, right-click the user account whose password you want to reset, then click **Reset Password** to display the **Reset Password** dialog.
3. Type and confirm the password, or click the button next to the **New password** box to have Active Roles generate a password.
4. Configure the available password options with the appropriate check boxes. For example, if your organization requires users to change the reset password during their next login, select **User must change password at next logon**.
5. When finished, click **OK**.

NOTE: Consider the following when resetting a user password:

- To spell out the specified or auto-generated password, click the **Spell out password** button.
- Services that are authenticated with a user account must be reset if the password for the service's user account is changed.

- To locate the user account whose password you want to reset, use the **Find** function of Active Roles. Once you found the user account, reset its password by selecting it in the list of search results, right-clicking it, and clicking **Reset Password**.

Adding a user account to a group

To add user accounts to groups, select the accounts, right-click the selection, and click **Add to a group**. This displays the **Select Objects** dialog where you can select the groups to which you want to add the accounts.

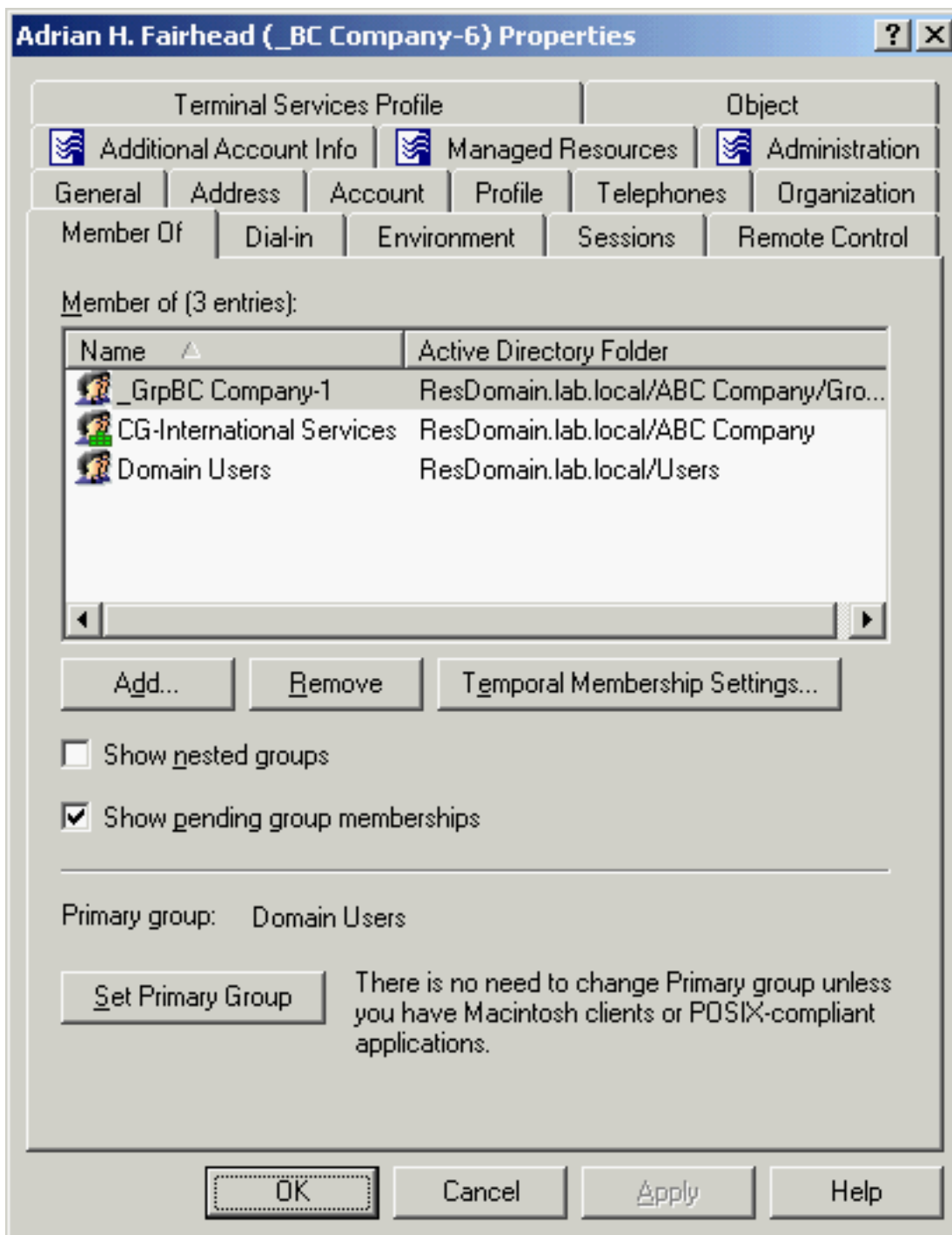
In the **Select Objects** dialog, you can select groups from the list or type group names, separating them with semicolons. Click **Check Names** to verify the names you type. If Active Roles cannot find a group, it prompts you to correct the name.

You can also add a user account to groups by modifying the group membership list on the **Member Of** tab in the **Properties** dialog. To display the **Properties** dialog, right-click the user account and click **Properties**.

The **Member Of** tab lists the groups to which the account belongs, as shown in the following figure. If the **Show nested groups** check box is selected, the list also includes the groups to which the account belongs owing to group nesting.

The **Temporal Membership Settings** button can be used to specify the date and time when the user should be added or removed from the selected groups. For more information about this feature, see [Using temporal group memberships](#).

Figure 9: Adding user accounts to groups



On the **Member Of** tab, you can manage groups directly from the list of groups. To manage a group, right-click it, and use commands on the shortcut menu.

You can add the user account to groups by clicking **Add** on the **Member Of** tab. This displays the **Select Objects** dialog, allowing you to select the groups to which you want to add the user account.

NOTE: When you select multiple user accounts, the **Member Of** tab lists the groups to which all the selected accounts belong. If one of the accounts does not belong to a given group, that group does not appear in the list.

How to add a user account to a group

You can add user accounts to a group with the Active Roles Console.

To add a user account to a group

1. In the **Console tree**, locate and select the folder that contains the user account you want to add to a group.
2. In the details pane, right-click the user account, then click **Add to a Group**.
3. Use the **Select Objects** dialog to locate and select the group to which you want to add the user account (you can select more than one group).

NOTE: Consider the following when adding a user account to a group:

- You can add multiple user accounts to a group at a time: Select the accounts, right-click the selection, and click **Add to a Group**. To select multiple accounts, press and hold down **CTRL**, then click each account.
- You can also add or remove user accounts from groups by using the **Properties** dialog: Select one or more accounts, right-click the selection, click **Properties**, and go to the **Member Of** tab in the **Properties** dialog.
- To locate user accounts you want to add to a certain group, use the **Find** function of Active Roles. Once you found the user accounts, select the accounts in the list of search results, right-click the selection, and click **Add to a Group**.
- By adding a user to a group, you can assign permissions to all of the user accounts in that group and filter Group Policy settings on all accounts in that group.

Removing a user account from a group

To remove a user account from groups, right-click the user account, click **Properties**, and go to the **Member Of** tab. On the **Member Of** tab, select groups from the list and click **Remove**.

How to remove a user account from a group

You can remove user accounts from Active Directory groups with the Active Roles Console.

To remove a user account from a group

1. In the **Console tree**, locate and select the folder that contains the user account you want to remove from a group.
2. In the details pane, right-click the user account, then click **Properties**.
3. On the **Member Of** tab in the **Properties** dialog, clear the **Show nested groups** check box, select the group from which you want to remove the user account, and click **Remove**.

NOTE: Consider the following when removing a user account from a group:

- If you have not cleared the **Show nested groups** check box, the list on the **Member Of** tab also includes the groups to which the user account belongs indirectly, that is, because of group nesting. If you select such a group from the list, the **Remove** button is unavailable. A user account can be removed from only those groups of which the account is a direct member.
- The user account cannot be removed from its primary group (Domain Users by default). You first need to change the user's primary group. For more information, see [How to change the primary group of a user](#).

Changing the primary group of a user

NOTE: The primary user group applies only to users who log in to the network through Services for Macintosh, or to users who run POSIX-compliant applications. If the user you configure does not use any of these services, do not change the primary group from the default Domain Users setting.

To change the primary group of a user, right-click the account, click **Properties**, and go to the **Member Of** tab. On the **Member Of** tab, select a group from the list and click **Set Primary Group**.

NOTE: You can only set a global or universal security group as the primary group of the user. If you select a group with the group scope set to **Domain local**, or you select a distribution group, then the **Set Primary Group** button not be available.

How to change the primary group of a user

You can change the primary group of a user with the Active Roles Console.

To change the primary group of a user

1. In the **Console tree**, locate and select the folder that contains the user account whose primary group you want to change.
2. In the details pane, right-click the user account, then click **Properties**.

3. On the **Member Of** tab in the **Properties** dialog, click the group that you want to set as the primary group of the user, then click **Set Primary Group**.

NOTE: Consider the following when changing a user's primary group:

- Primary groups are used exclusively by Macintosh clients and POSIX-compliant applications. Unless you are using these services, there is no need to change the primary group from Domain Users, which is the default value.
- A user's primary group must be in the same domain as the user's account and the primary group must be either a global or universal security group.
- Setting the user's primary group membership to a value other than Domain Users may adversely affect performance as all users in the domain are members of Domain Users. If the user's primary group is set to another group, it may cause the group membership to exceed the supported maximum number of members.

Performing Exchange tasks on a user account

To perform Exchange tasks on a user account, right-click the account, click **Exchange Tasks**, and follow the instructions in the Exchange Task Wizard. The Exchange Task Wizard helps you manage Exchange recipients by providing a set of tasks that apply to the selected account.

How to perform Exchange tasks on a user account

You can perform Exchange-related tasks (for example, creating or deleting email addresses) on Active Directory (AD) user accounts with the Active Roles Console.

To perform Exchange tasks on a user account

1. In the **Console tree**, locate and select the folder that contains the user account you want to perform Exchange tasks on.
2. In the details pane, right-click the user account and click **Exchange Tasks** to start the Exchange Task Wizard.
3. On the **Available Tasks** page of the wizard, select the task you want to perform.

The following tasks are available, depending on the selected group:

- **Create User Mailbox, Establish E-mail Addresses:** The account is enabled, and does not have a mailbox or external email address.

- **Create User Mailbox, Create Room Mailbox, Create Equipment Mailbox, Create Linked Mailbox, Create Shared Mailbox, Establish E-mail Addresses:** The account is disabled, and does not have a mailbox or external email address.
 - **Move Mailbox, Disable Mailbox:** The account has a mailbox.
 - **Delete E-mail Addresses:** The account has an external email address.
 - **Enable Archive:** The account has a user mailbox without an archive.
 - **Disable Archive:** The account has a user mailbox with an archive.
4. On the next page of the wizard, do one of the following, depending on the selected task:
- **Mailbox Settings:** Specify the alias and mailbox database. You can select a retention policy, Exchange ActiveSync mailbox policy, or address book policy for the mailbox.
 - **Enable Archive:** Optionally, specify the mailbox database for the archive.
 - **Resource Information:** Configure the resource capacity and custom properties for the room or equipment mailbox.
 - **Master Account:** Select the master account for the linked mailbox.
 - **Mailbox Sharing:** Specify the users who you want to have access to the mailbox.
 - **Establish E-mail Addresses:** Specify the user alias and external email address.
 - **Move Mailbox:** Select the database to which you want to move the mailbox. If the mailbox has an archive enabled, specify whether to move only the mailbox, only the archive, or both the mailbox and the archive.
 - **Disable Mailbox, Disable Archive, Delete E-mail Addresses:** Confirm the operation.
5. On the completion page of the wizard, review the results of the task. To view the progress report, click **Back**. To close the wizard, click **Finish**.

NOTE: Consider the following when performing Exchange tasks:

- You can perform Exchange tasks on multiple objects at a time. To do so, start the Exchange Task Wizard by selecting the objects, right-clicking the selection, and clicking **Exchange Tasks**.
- To locate the objects on which you want to perform Exchange tasks, use the **Find** function of Active Roles. Once you found the objects, start the Exchange Task Wizard by selecting the objects in the list of search results, right-clicking the selection, and clicking **Exchange Tasks**.

Moving a user account

To move user accounts to another container, select the accounts, right-click the selection, then click **Move**. In the **Move** dialog, select the container to which you want to move the accounts.

NOTE: The Console provides the drag-and-drop function for moving objects. To move objects, you can drag the selection from the details pane to a destination container in the **Console tree**.

How to move a user account

You can move Active Directory (AD) user accounts from one AD container to another with the Active Roles Console.

To move a user account

1. In the **Console tree**, locate and select the folder that contains the user account you want to move.
2. In the details pane, right-click the user account and click **Move** to display the **Move** dialog.
3. In the **Move** dialog, select the folder to which you want to move the account, then click **OK**.

NOTE: Consider the following when moving a user account:

- With Active Roles, user accounts, as well as other directory objects, can only be moved within the same domain. This means that the folder to which you want to move the account must belong to the same domain as the account.
- You can move multiple objects at a time with the **Move** dialog. To open the dialog, select the objects, right-click the selection, and click **Move**. To select multiple objects, press and hold **CTRL**, then click each object.
- The Console provides the drag-and-drop function for moving objects. To move objects, you can drag the selection from the details pane to a destination container in the **Console tree**.
- To locate the object that you want to move, use the **Find** function of Active Roles. Once you found the accounts, open the **Move** dialog by right-clicking the object, and clicking **Move**.

Exporting and importing user accounts

With the Active Roles Console, you can export user accounts to an XML file and then import them from that file to populate a container in a different domain. The export and import

operations provide a way to relocate user accounts between domains.

To export user accounts, select them, right-click the selection, and select **All Tasks > Export**. In the **Export Objects** dialog, specify the file where you want to save the data, and click **Save**.

To import user accounts, right-click the container where you want to place the accounts, and then click **Import**. In the **Import Directory Objects** dialog, select the file to which the user accounts were exported, and click **Open**.

Deleting a user account

To delete user accounts, select them, right-click the selection, and click **Delete**. Then, click **Yes** to confirm the deletion. If you select multiple user accounts, clicking **Delete** displays the **Delete Objects** dialog. To delete all the selected accounts, select the **Apply to all items** check box, and then click **Yes**.

NOTE: Deleting a user is a destructive operation that cannot be undone. If you re-create the deleted user account later, the new user will not receive automatically the same permissions and memberships that the deleted user had. Instead, you must assign the previous memberships manually. For this reason, One Identity recommends disabling users rather than deleting them.

How to delete a user account

You can delete Active Directory user accounts with the Active Roles Console.

To delete a user account

1. In the **Console tree**, locate and select the folder that contains the user account you want to delete.
2. In the details pane, right-click the user account, then click **Delete**.

NOTE: Consider the following when deleting a user account:

- You can delete multiple user accounts at the same time by selecting the accounts, right-clicking the selection, and clicking **Delete**. To select multiple accounts, press and hold **CTRL**, then click each account.
- Once a user account is deleted, the permissions and memberships associated with that user account are also permanently deleted. Because the security ID (SID) for each account is unique, a new user account with the same name as the previously deleted user account does not automatically receive the permissions and memberships that the previously deleted account had. To duplicate a deleted user account, you must re-create all permissions and memberships manually.

- Instead of deleting user accounts, you can also deprovision them by selecting the accounts, right-clicking the selection, then clicking **Deprovision**.
- To locate user accounts for deletion or deprovisioning, use the **Find** function of Active Roles. Once you found the users, delete or deprovision them by selecting the accounts in the list of search results, right-clicking the selection, and clicking **Delete** or **Deprovision**.
- When attempting to delete a user account, you may receive an error message that access is denied to the user. This can typically occur if the user is protected from deletion. To remove this protection, navigate to the **Properties > Object** tab of the user you want to delete, then clear the **Protect object from accidental deletion** check box. After that, try deleting the user again.

Deprovisioning a user account

Active Roles provides the ability to deprovision rather than delete or only deactivate user accounts. Deprovisioning a user refers to a set of actions that are performed by Active Roles in order to prevent the user from logging on to the network and accessing network resources such as the user's mailbox or home folder.

The **Deprovision** command on a user account updates the account according to the deprovisioning policies. Active Roles comes with a default policy to automate some commonly-used deprovisioning tasks, and allows the administrator to configure and apply additional policies.

How to deprovision a user account

You can deprovision Active Directory user accounts with the Active Roles Console.

To deprovision a user account

1. In the **Console tree**, locate and select the folder that contains the user account you want to deprovision.
2. In the details pane, right-click the user account, then click **Deprovision**.
3. Wait while Active Roles updates the user account.

NOTE: Consider the following when deprovisioning a user account:

- You can deprovision multiple accounts at a time. Select two or more user accounts, right-click the selection, then click **Deprovision**.
- The **Deprovision** command is also available in the Active Roles Web Interface. When you click the **Deprovision** command, the operation progress and results are displayed. When the operation is completed, Active Roles displays the operation summary, and allows you to examine operation results in detail.

- On a deprovisioned user account, you can use the **Deprovisioning Results** command to view a report that lists the actions taken during the deprovisioning of the account. For each action, the report informs about success or failure of the action. In the event of a failure, the report provides a description of the error situation.
- If a deprovisioned user account needs to be restored (for example, if a user account has been deprovisioned by mistake), the account can be reset to the state it was in before the deprovisioning occurred. This can be accomplished by using the **Undo Deprovisioning** command on the deprovisioned account.

Restoring a deprovisioned user account

Active Roles provides the ability to restore deprovisioned user accounts. The purpose of this operation, referred to as the Undo Deprovisioning operation, is to roll back the changes that were made to a user account by the Deprovision operation. When a deprovisioned user account needs to be restored (for example, if a user account has been deprovisioned by mistake), the Undo Deprovisioning operation allows the account to be restored to the state it was in before the changes were made.

How to restore a deprovisioned user account

You can restore previously deprovisioned Active Directory user accounts with the Active Roles Console.

To restore a deprovisioned user account

1. In the **Console tree**, locate and select the folder that contains the user account you want to restore.
2. In the details pane, right-click the user account, then click **Undo Deprovisioning**.
3. In the **Password Options** dialog, choose the options to apply to the password of the restored account, then click **OK**.

For information about each option, open the **Password Options** dialog, then press **F1**.

4. Wait while Active Roles restores the user account.

When you click the **Undo Deprovisioning** command, the operation progress and results are displayed. When the operation is completed, Active Roles displays the operation summary, and allows you to examine the operation results in detail. You can view a report that lists the actions taken during the restore operation. For each action, the report informs about success or failure of the action. In the event of a failure, the report provides a description of the error situation.

Managing user certificates

You can use Active Roles to add or remove digital (X.509) certificates from user accounts in Active Directory. By adding a certificate to a user account you make the certificate (including the public key associated with the certificate) available to other Active Directory users and to Active Directory-aware applications and services.

The certificates added to Active Directory user accounts are referred to as published certificates. Published authentication certificates are used by Active Directory domain controllers during certificate-based authentication. Published encryption certificates can be used to enable access to encrypted contents. For instance, in the case of e-mail encryption, the sender retrieves the recipient's certificate from the Active Directory user account and uses that certificate to encrypt the email message so that the recipient could decrypt the message by using the private key associated with the certificate. A similar process occurs when you want to allow a given user to read an encrypted file. The certificate retrieved from the user account is used to encrypt the file encryption key so that the file encryption key could be obtained by using the private portion of the user's certificate to decrypt the encrypted key material.

To view or change the list of digital certificates for a particular user account, open the **Properties** page for that user account in the Active Roles console or Web Interface and go to the **Published Certificates** tab. From the **Published Certificates** tab, you can perform the following tasks:

- View the list of the certificates published for the user account in Active Directory.
- Examine each of the published certificates in detail.
- Add a certificate from the local certificate store (available in the Console only).
- Add a certificate that is saved in a certificate file.
- Remove a certificate from the user account.
- Copy a published certificate to a certificate file.

For each of the certificates that are listed on the **Published Certificates** tab, you can view the following information:

- The purposes that the certificate is intended for (available in the Console only).
- The name of the person or company to which the certificate was issued.
- The name of the certification authority that issued the certificate.
- The time period for which the certificate is valid.
- Additional information about the certification authority that issued the certificate, if available.
- The list of all X.509 fields, extensions, and associated properties found in the certificate.
- The hierarchy of certification authorities for the certificate (available in the Console only).

How to manage user certificates

In the Active Roles Console or Web Interface you can use the **Published Certificates** page to view or change the list of digital certificates that are assigned to a given user account in Active Directory. Digital certificates are used for authentication and secure exchanges of information. A certificate securely binds a public encryption key to the entity that holds the corresponding private key. The **Published Certificates** page allows you to add or remove digital certificates from the user account.

To add or remove a certificate for a user account using the Active Roles Console

1. Open the **Properties** dialog for the user account and click the **Published Certificates** tab.
2. Do the following:
 - Click **Add from Store** to add a certificate from the local certificate store.
 - Click **Add from File** to add a certificate that is saved in a certificate file.
 - Select a certificate from the list on the tab and click **Remove** to remove the certificate.

From the **Published Certificates** page in the Active Roles Console, you can also view or export any of the certificates listed on that page. Select a certificate from the list, then click **View Certificate** to examine the certificate in detail or click **Copy to File** to save a copy of the certificate to a file.

To access the **Published Certificates** page in the Web Interface, open the **General Properties** page for the user account and click the **Published Certificates** tab. From the **Published Certificates** page in the Web Interface you can:

- View any of the certificates listed on that page. Click **View Certificate** to examine the certificate in detail.
- Add a certificate to the user account from a certificate file. Click **Add from File** and select the desired certificate file.
- Remove a certificate from the user account. Select the certificate from the list on the page and click **Remove**.
- Save any of the user's certificates to a file. Select the desired certificate from the list on the page and click **Copy to File**.

Management of group Management Service Accounts

You can administer group Managed Service Accounts (gMSAs) with Active Roles. gMSA is a domain security principal whose password is managed by Domain Controllers (DCs) and can be retrieved by multiple systems running supported Windows Server operating systems. Having Windows services use gMSA as their login account minimizes the

administrative overhead by enabling Windows to handle password management for service accounts. gMSAs provide the same functionality as Managed Service Accounts (MSAs), but extend that functionality over multiple servers.

As you can use a single gMSA on multiple servers, gMSA provides a single identity solution for services running on a server farm. With a service hosted on a server farm, gMSA enables all service instances to use the same logon account (which is a requirement for mutual authentication between the service and the client), while letting Windows change the account password periodically instead of relying on the administrator to perform that task.

For more information about group Managed Service Accounts, see [Group Managed Service Accounts Overview](#).

gMSA management tasks

The Active Directory domain in which you are going to create and administer group Managed Service Accounts must meet the following requirements:

- The domain has at least one Domain Controller (DC) that runs Windows Server 2016 or newer.
- The domain has the KDS Root Key created.

You can create a KDS Root Key by running the `Add-KDSRootKey` PowerShell command on the DC. For more information, see [Create the Key Distribution Services KDS Root Key](#) for further details.

NOTE: You cannot perform Exchange-related operations on the on-premises Exchange Server environment with the gMSA account. For example, you cannot manage remote mailboxes, user mailboxes, or contacts.

Creating a gMSA

Perform the following steps in the Active Roles Console to create a group Service Managed Account (gMSA).

To create a gMSA

1. Right-click the OU or container in which you want to create a gMSA and select **New > Group Managed Service Account**.
2. In the wizard that opens, complete following fields:
 - **Name:** Specifies the name of the gMSA in Active Directory.
 - **Description:** Specifies a description of the gMSA.
 - **DNS host name:** Specifies the DNS hostname. Typically, this is the fully qualified domain name of the server on which you will use the gMSA, for

example `your-organization.domain.com`.

- **Account name (pre-Windows 2000):** Specifies the legacy login name of the gMSA (`sAMAccountName`). Typically, the value of this setting is the same as the name of the gMSA.
- **Password change interval (days):** Specifies the number of days before the managed password is automatically changed for the gMSA.

NOTE: You can configure this setting only when creating the gMSA. After creating the gMSA, this setting will be read-only.

- **Computers or groups:** Specifies the computers on which the gMSA can be used to run services. You can add individual computers to this field, or you can add computers to a security group, then add the group to this field.

Managing the properties of a gMSA

For an existing group Managed Service Account (gMSA), perform the following steps in the Active Roles Console to view or change the properties of the gMSA.

To view or change the properties of the gMSA, right-click the gMSA you want to administer and click **Properties**.

This opens the **Properties** dialog containing the same fields as the gMSA creation wizard (see [Creating a gMSA](#)) with the only difference that the **Password change interval** field is read-only. In addition, the **Account is disabled** check box on the **Account** page shows whether the gMSA is disabled for login, and allows you to disable and re-enable the gMSA.

Searching for gMSA in the directory

The Active Roles Console allows you to find group Managed Service Accounts that meet your search conditions.

To search for gMSA in the directory

1. Right-click the OU, domain or container in which you want to search for gMSA and click **Find**.
2. In the **Find** window that opens, configure and start your search:
 - a. In the **Find** list, click **Custom Search**.
 - b. Click **Field**, and select the **msDS-GroupManagedServiceAccount** object type and the object property to search for.
 - c. Configure and add the desired search condition for the object property you have selected.
 - d. If needed, add more search conditions by repeating Steps b and c.
 - e. Click **Find Now**.

In the list of search results, right-click a gMSA and use the shortcut menu to perform management tasks. For example, you can right-click a gMSA and then click **Properties** to view or change the properties of the gMSA.

Disabling and enabling a gMSA

The Active Roles Console allows you to disable a gMSA so that the gMSA cannot be used for login. For a disabled gMSA, you can use the Console to re-enable that gMSA.

To disable or re-enable a gMSA

1. Right-click the gMSA you want to administer and click **Properties**.
2. In the **Properties** dialog, click the **Account** tab, and examine the **Account is disabled** check box:
 - If the check box is not selected, then the gMSA is enabled for logon. You can disable the gMSA by selecting the **Account is disabled** check box.
 - If the check box is selected, then the gMSA is disabled. You can re-enable the gMSA by clearing the **Account is disabled** check box.

Alternatively, you can use the **Disable Account** or **Enable Account** command on the gMSA object to disable or re-enable the gMSA.

Group management

Groups are Active Directory objects used to collect users, contacts, computers, and other groups into manageable units. There are three kinds of groups:

- **Security groups:** Used to manage user and computer access to shared network resources. When assigning permissions to access resources, administrators assign permissions to security groups rather than to individual users.
- **Distribution groups:** Used as email distribution lists. Distribution groups have no security function.
- **Query-Based Distribution groups:** Used also as email distribution lists but the difference is that members of such a group are not specified statically. Membership of these groups is built in dynamic manner using LDAP queries.

In this document, security and distribution groups are collectively referred to as groups. As for Query-based distribution groups, these are considered a separate category of groups.

Each group has a scope: universal, global, or domain local.

- **Universal:** These groups can include groups and accounts from any domain in the domain tree or forest, and can be granted permissions in any domain in the domain tree or forest.
- **Global:** These groups can only include groups and accounts from the domain in which the group is defined. Global groups can be granted permissions in any domain in the forest.
- **Domain local:** These groups can include groups and accounts from other domains. These groups can only be granted permissions within the domain in which the group is defined.

A group can be a member of another group. This is referred to as group nesting. Group nesting increases the number of affected member accounts and thus consolidates group management. Accounts that reside in a group nested within another group are indirect members of the nesting group.

Active Roles provides the facility to perform administrative tasks such as create copy, rename, modify, and delete groups. It can also be used to add and remove members from groups and perform Exchange tasks on groups.

The following section describes how to use the Active Roles Console to manage groups. You can also use the Active Roles Web Interface to perform the group management tasks.

Creating a group

To create a group, in the **Console tree**, right-click the container where you want to add the group, select **New > Group**, then follow the instructions in the wizard.

In the wizard, some property labels may be displayed as hyperlinks. The hyperlink indicates that Active Roles enforces certain policy restrictions on the property. To examine policy details, click the hyperlink: the policy information is displayed. For more information, see [Getting policy-related information](#).

Figure 10: Creating a group

The screenshot shows a Windows-style dialog box titled "New Object - Group". At the top right are help and close buttons. Below the title bar is a small icon of two people and the text "Create in: ResDomain.msk.qsft/ABC Company/Groups". The main area contains three text input fields: "Group name:", "Group name (pre-Windows 2000):", and "Description:". Below these are two sections of radio buttons. The "Group scope" section has three options: "Domain local", "Global" (which is selected), and "Universal". The "Group type" section has two options: "Security" (which is selected) and "Distribution". At the bottom of the dialog are four buttons: "< Back", "Next >", "Cancel", and "Help".

The policy information is also displayed whenever you supply a property value that violates a policy restriction. The wizard cannot proceed until you enter an acceptable value.


How to create a group

You can create new Active Directory groups with the Active Roles Console.

To create a group

1. In the **Console tree**, locate and select the folder in which you want to add the group.
2. Right-click the folder, point to **New** and click **Group** to start the **New Object - Group** wizard.
3. Follow the wizard pages to specify properties of the new group, such as the group name, pre-Windows 2000 group name, description, scope, type, membership list, and Exchange address settings.
4. If you want to set values for additional properties (those for which the wizard pages do not provide data entries), click **Edit Attributes** on the completion page of the wizard.
5. After setting any additional properties, click **Finish** on the completion page of the wizard.

NOTE: Consider the following when creating a group:

- The behavior of the wizard pages may vary depending on the configuration of Active Roles policies. To determine whether a given item on a page is under the control of a certain policy, observe the text label next to the item: the underlined text label indicates that some policy restrictions are in effect. Click underlined text labels to examine the policies that govern the behavior of the wizard pages.
- You can also start the **New Object - Group** wizard by clicking  on the toolbar.
- To create a group, you can also copy a previously created group. For more information, see [Copying a group](#).
- A new user account with the same name as a previously deleted user account does not automatically assume the permissions and group memberships of the previously deleted account because the security ID (SID) for each account is unique. To duplicate a deleted user account, all permissions and memberships must be manually recreated.

Finding a group

To find a group, right-click the container you want to search, and click **Find**. In the **Find** window, select **Groups** from the **Find** list, specify your search criteria, and start the search. In the search results list, you can right-click groups and use commands on the shortcut menu to perform management tasks.

For step-by-step instructions on how to search for groups, see [Searching for a user, contact, or group](#).

Finding groups in which a user is a member

You can list the Active Directory (AD) groups in which an AD user is a member with the Active Roles Console.

To find groups in which a user is a member

1. In the **Console tree**, locate and select the folder that contains the user account.
2. In the details pane, right-click the user account, then click **Properties**.
3. Click the **Member Of** tab.

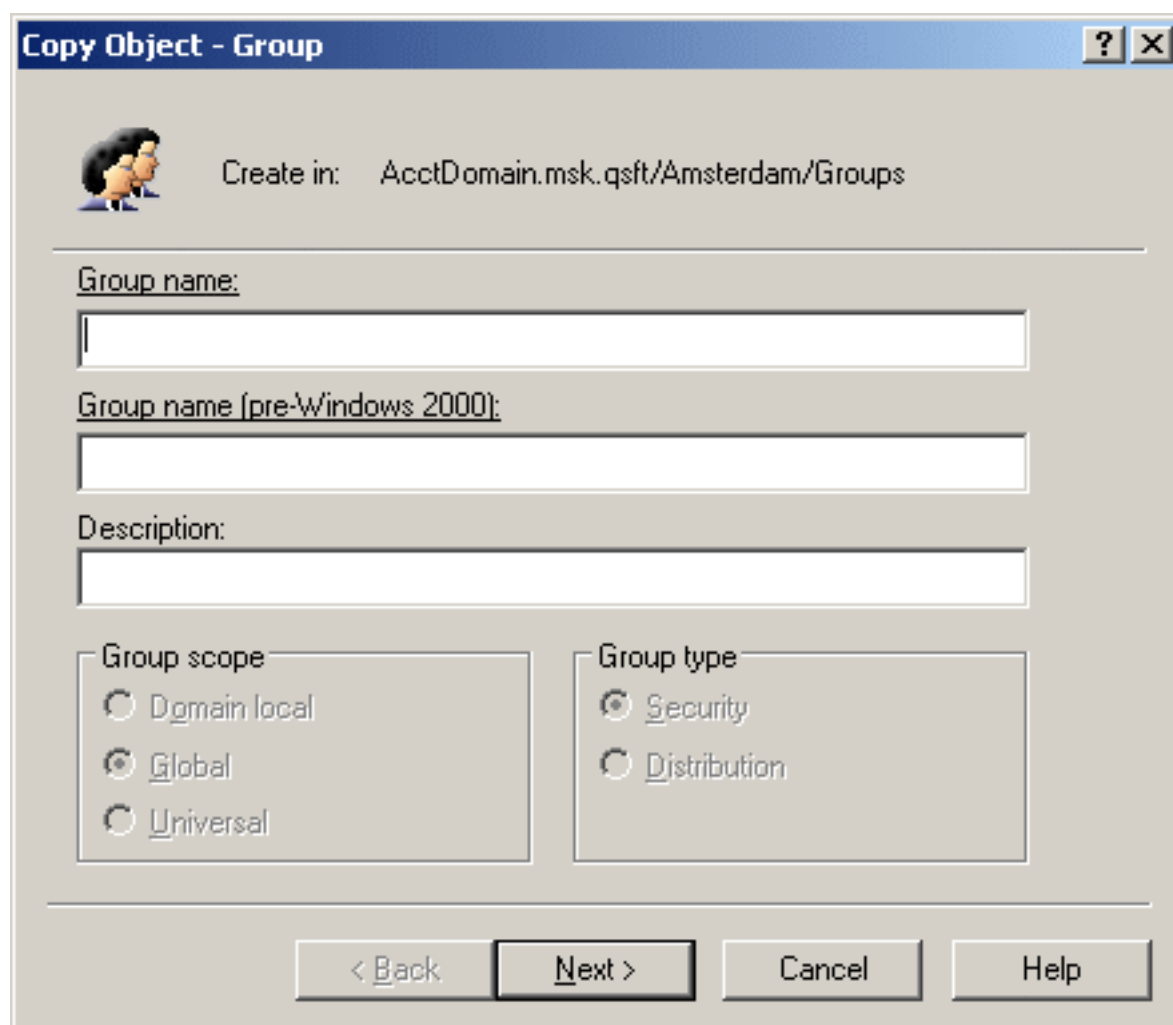
NOTE: Consider the following when finding groups in which a user is a member:

- The **Member Of** tab for a user displays a list of groups in the domain where the user's account is located. Active Roles does not display groups that reside in trusted domains.
- On the **Member Of** tab, you can select the **Show nested groups** check box in order for the list to also include the groups to which the user belongs because of group nesting.

Copying a group

To create a copy of a group, right-click the group, click **Copy**, and follow the instructions in the wizard. The first step of the wizard looks as shown in the following figure.

Figure 11: Copying a group



The copy contains the same permission settings as the original group. The **Copy Object - Group** wizard allows you to modify the membership list of the new group.

How to copy a group

You can copy Active Directory groups with the Active Roles Console.

To copy a group

1. In the **Console tree**, locate and select the folder that contains the group that you want to copy.
2. In the details pane, right-click the group you want to copy, then click **Copy** to start the **Copy Object - Group** wizard.

3. Follow the wizard pages to specify properties of the new group, such as the group name, pre-Windows 2000 name, description, membership list, and Exchange address settings.
4. (Optional) If you want to set values for additional properties (those for which the wizard pages do not provide data entries), click **Edit Attributes** on the completion page of the wizard.
5. After setting any additional properties for the copy of the group, click **Finish** on the completion page of the wizard.

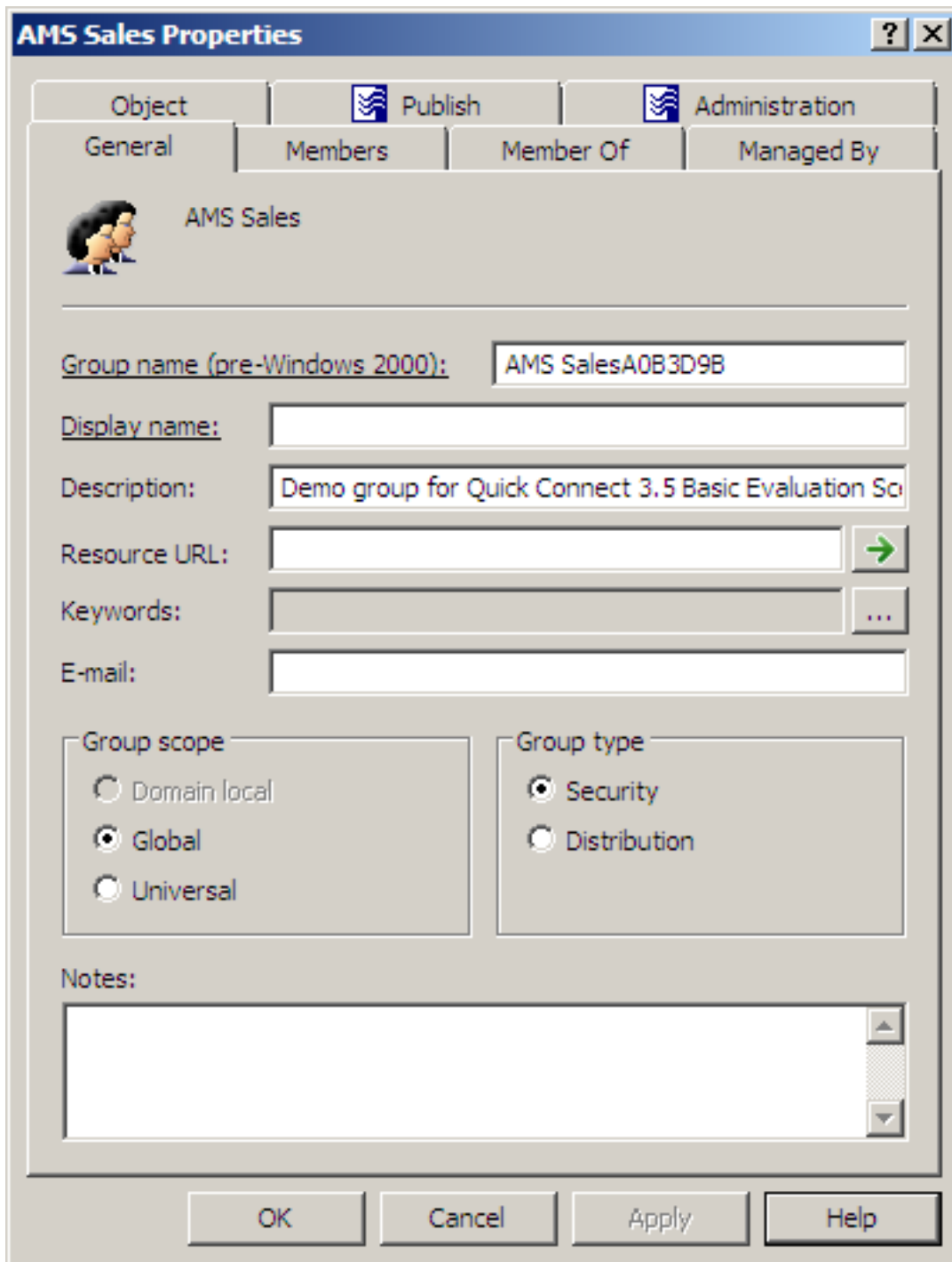
NOTE: Consider the following when copying a group:

- The behavior of the wizard pages may vary depending on the configuration of Active Roles policies. To determine whether a given item on a page is under the control of a certain policy, check the text label next to the item: the underlined text label indicates that some policy restrictions are in effect. Click the underlined text labels to examine the policies that govern the behavior of the wizard pages.
- By default, some common properties are carried over to the copied group from the original group. Thus, the group membership list is copied from the original group, and can be modified in the **Copy Object - Group** wizard.
- The group scope and group type are also copied from the original group, but these properties cannot be modified in the **Copy Object - Group** wizard. You can change these properties after the copy of the group is created. For instructions, see [How to change group type](#) and [How to change group scope](#).
- To locate the group that you want to copy, use the **Find** feature of Active Roles. Once you found the group, you can start the **Copy Object - Group** wizard from the **Find** dialog by right-clicking the group in the list of search results and clicking **Copy**.

Modifying group properties

To modify group properties, right-click the group and click **Properties**. You can make changes to group properties using the **Properties** dialog, shown in the following figure.

Figure 12: Modifying group properties



In the wizard, some property labels may be displayed as hyperlinks. The hyperlink indicates that Active Roles enforces certain policy restrictions on the property. To examine policy details, click the hyperlink: the policy information is displayed. For more information, see [Getting policy-related information](#).

The policy information is also displayed whenever you supply a property value that violates a policy restriction. The wizard cannot proceed until you enter an acceptable value.

You can use the **Properties** dialog to view or modify any property of the object by navigating to the **Object** tab and clicking **Advanced Properties**. In the **Advanced Properties** window you can manage all properties, including those that cannot be accessed via the **Properties** dialog itself.

You can also display the **Advanced Properties** window by right-clicking the object and selecting **All Tasks > Advanced Properties**.

How to modify group properties

You can modify the properties of Active Directory groups with the Active Roles Console.

To modify group properties

1. In the **Console tree**, locate and select the folder that contains the group you want to modify.
2. In the details pane, right-click the group you want to modify, then click **Properties**.
3. Use the tabs in the **Properties** dialog to view or modify properties of the group.
4. If you want to view or modify additional properties (those for which the tabs in the **Properties** dialog do not provide data entries), navigate to the **Object** tab and click **Advanced Properties**.
5. After setting all the properties you want, click **OK**.

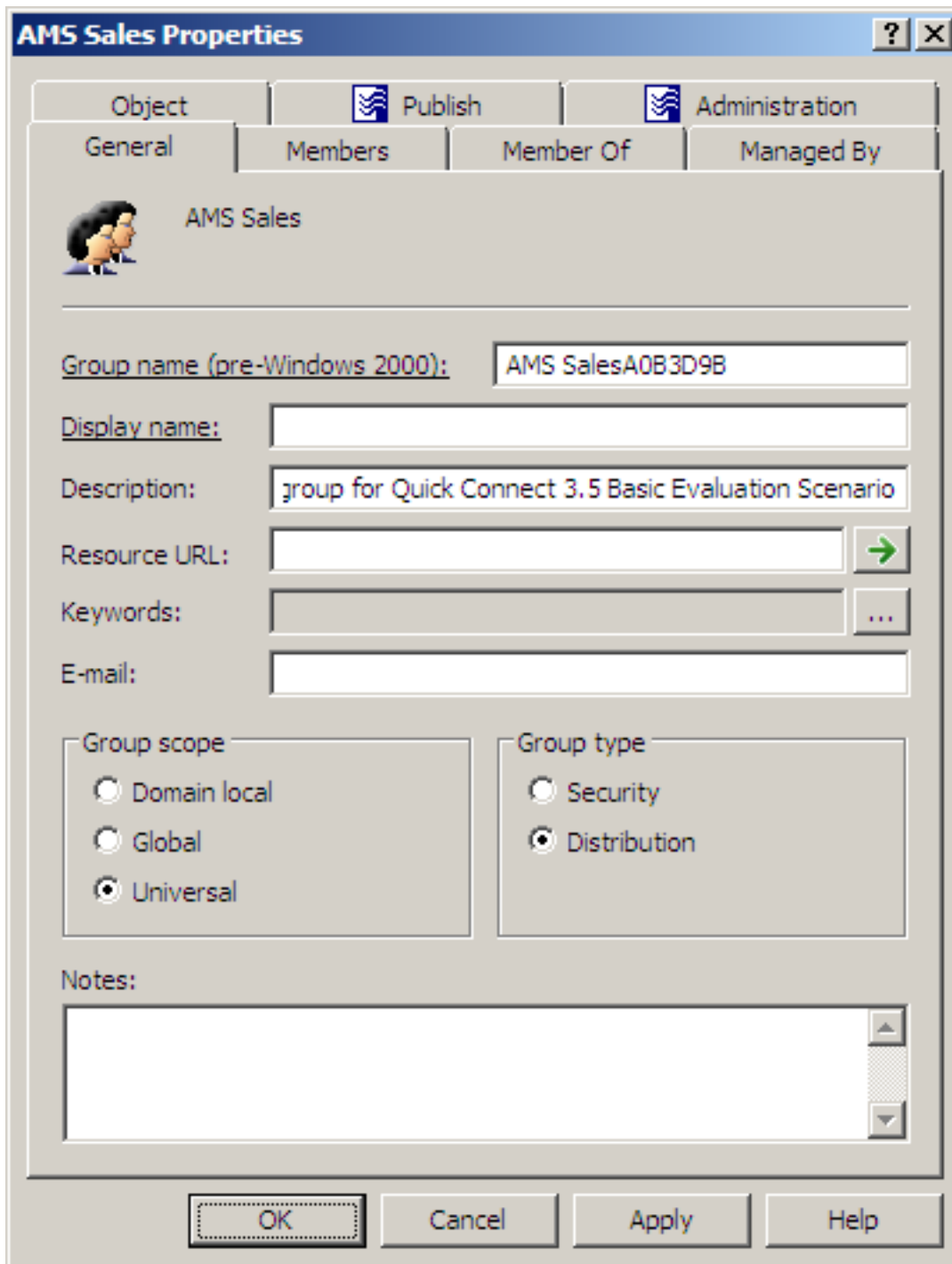
NOTE: Consider the following when modifying group properties:

- The behavior of the user interface elements in the **Properties** dialog may vary depending on the configuration of Active Roles policies. To determine whether a given item on a tab is under the control of a certain policy, observe the text label next to the item: the underlined text label indicates that some policy restrictions are in effect. Click the underlined text labels to examine the policies that govern the behavior of the user interface elements.
- To modify properties for multiple objects, press and hold **CTRL**, then click each object. Right-click the selection, then click **Properties**.
- You can also access the **Advanced Properties** dialog for an object by right-clicking the account and selecting **All Tasks > Advanced Properties**.
- To locate the object that you want to modify, use the **Find** function of Active Roles. Once you found the object, open the **Properties** page by right-clicking the object, and clicking **Properties**.

Changing group type and group scope

To change group scope or group type, right-click the group, click **Properties**, and go to the **General** tab in the **Properties** dialog, shown in the following figure. On the **General** tab, click the group type in the **Group type** area or click the group scope under **Group scope**.

Figure 13: Changing group type and group scope



How to change group type

You can change the group type (security or distribution) of existing groups with the Active Roles Console.

To convert a group to another group type

1. In the **Console tree**, locate and select the folder that contains the group you want to modify.
2. In the details pane, right-click the group you want to modify, then click **Properties**.
3. On the **General** tab in the **Properties** dialog, under **Group type**, select the group type (**Security** or **Distribution**) you want to specify for the group.

How to change group scope

You can change the scope (domain local, global, universal) of a group with the Active Roles Console.

To change the group scope

1. In the **Console tree**, locate and select the folder that contains the group you want to modify.
2. In the details pane, right-click the group you want to modify, then click **Properties**.
3. On the **General** tab in the **Properties** dialog, under **Group scope**, click the group scope you want for this group.

For information about possible scope settings, see [Group management](#).

NOTE: Active Roles supports the following group scope changes:

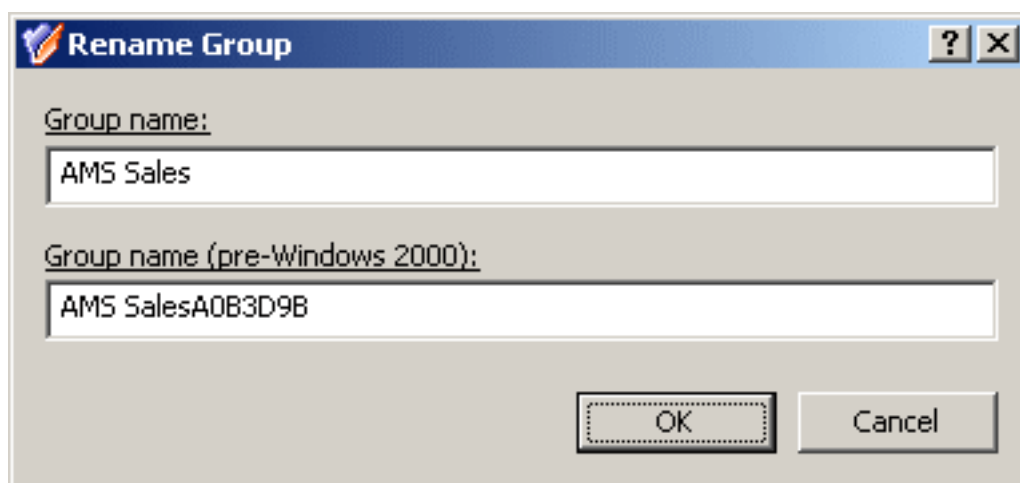
- **Global to universal:** You can perform this scope change only if the modified group is not a member of another global group.
- **Domain local to universal:** You can perform this scope change only if the modified group does not have another domain local group as a member.
- **Universal to global:** You can perform this scope change only if the modified group does not have another universal group as a member.
- **Universal to domain local:** You can perform this scope change without any restrictions.

Renaming a group

To rename a group, right-click the group, then click **Rename**. Type a new name and press **ENTER**. This displays the **Rename Group** dialog, shown in the following figure. In the

Rename Group dialog, you can change the group name and group name (pre-Windows 2000).

Figure 14: Rename Group



In the **Rename Group** dialog, hyperlinks are used to indicate the properties controlled by Active Roles policies. For more information, see [Getting policy-related information](#).

How to rename a group

You can rename Active Directory groups with the Active Roles Console.

To rename a group

1. In the **Console tree**, locate and select the folder that contains the group you want to rename.
2. In the details pane, right-click the group and click **Rename**.
3. Type a new name (or clear the existing name), then press **ENTER** to display the **Rename Group** dialog.
4. Use the **Rename Group** dialog to modify (if needed) the group name and the group name (pre-Windows 2000).
5. When finished, click **OK**.

NOTE: Consider the following when renaming a group:

- The behavior of the **Rename Group** dialog may vary depending on the configuration of Active Roles policies. To determine whether a given item in the dialog is under the control of a certain policy, observe the text label next to the item: the underlined text label indicates that some policy restrictions are in effect. Click underlined text labels to examine the policies that govern the behavior of the dialog.

- To locate the group you want to rename, use the **Find** function of Active Roles. Once you found the group, rename it by selecting it in the list of search results, right-clicking it, clicking **Rename**, then specifying the new name. To apply the new name, press **Enter**.

Assigning a manager to a group

To assign a manager to a group, right-click the group, click **Properties**, and go to the **Managed By** tab in the **Properties** dialog, shown in the following figure. On the **Managed By** tab, click **Change** and select the user or contact to designate as the manager.

Figure 15: Assigning a manager to a group

The screenshot shows the 'AMS Sales Properties' dialog box with the 'Managed By' tab selected. The 'Name' field contains 'AcctDomain.msk.qsft/Amsterdam/Users/Betje Koch'. Below it are 'Change...', 'Properties', and 'Clear' buttons. A checked checkbox is labeled 'Manager can update membership list'. The 'Office', 'Street', 'City' (containing 'Amsterdam'), 'State/province', and 'Country/region' fields are empty. The 'Telephone number' field contains '+31 20 319-576-39'. The 'Fax number' field is empty. The 'Secondary owners' field contains 'Johan Nipius;Marc Beerda' and has a button with three dots. A unchecked checkbox is labeled 'Secondary owners can update membership list'. At the bottom are 'OK', 'Cancel', 'Apply', and 'Help' buttons.

If you select **Manager can update membership list**, the manager can use Active Roles to add and remove members from the group.

It is possible to assign multiple group owners, to load balance the management of the group. To assign additional owners to the group, click the button next to the **Secondary owners** box. Group owners can be given the same rights over the group as the manager.

For example, selecting the check box beneath the **Secondary owners** box gives the secondary owners the authority to add or remove members from the group.

It is possible to assign management of the group to another group: you can select a group in the **Select Objects** dialog that you use to specify the manager or a secondary owner. This enables every member of the group to act as the manager or secondary owner.

How to assign a manager to a group

You can assign a manager to a group with the Active Roles Console.

To assign a manager to a group

1. In the **Console tree**, locate and select the folder that contains the group you want to assign a manager to.
2. In the details pane, right-click the group, then click **Properties**.
3. On the **Managed By** tab in the **Properties** dialog, click **Change** under the **Name** box.
4. Use the **Select Objects** dialog to locate and select the user or contact you want to be responsible for the group - the manager of the group.
5. (Optional) To authorize the assigned manager to add or remove members from the group, select the **Manager can update membership list** check box.

NOTE: Consider the following when assigning a manager to a group:

- To assign additional managers to the group, click the button next to the **Secondary owners** box. Secondary owners can be given the same rights over the group as the manager. For example, selecting the check box beneath the **Secondary owners** box gives the secondary owners the authority to add or remove members from the group.
- You can select a group for the role of the manager or secondary owner. This enables every member of the group to act as the manager or secondary owner.
- To locate the group you want to modify, use the **Find** function of Active Roles. Once you found the group, open its **Properties** dialog by right-clicking the group in the list of search results, then clicking **Properties**.

Adding members to a group

Depending on its scope, a group may contain members (users, groups, computers, contacts) from anywhere in the forest, or only members from its own domain.

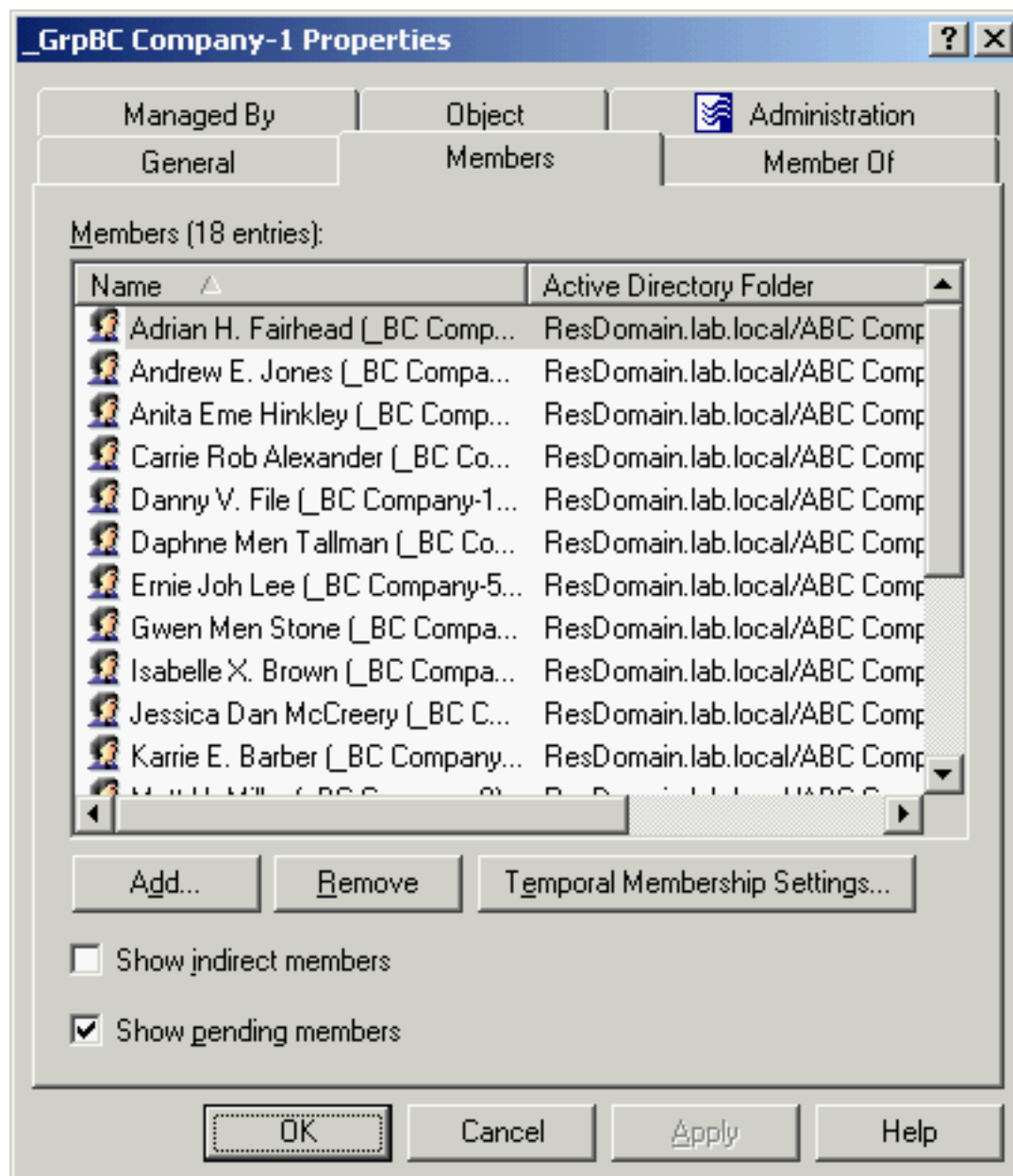
To add members to a group, right-click the group, click **Properties**, and go to the **Members** tab in the **Properties** dialog. On the **Members** tab, click **Add**. This displays the **Select Objects** dialog where you can select the objects you want to add to the group.

In the **Select Objects** dialog, you can select objects from the list or type object names. Click **Check Names** to verify the names you type. If Active Roles cannot find an object, it prompts you to correct the name.

The **Members** tab lists objects that belong to the group. If the **Show indirect members** check box is selected, the list also includes the objects that belong to the group because of group nesting.

The **Temporal Membership Settings** button can be used to specify the date and time when the selected members should be added or removed from the group. For more information about this feature, see [Using temporal group memberships](#).

Figure 16: Adding members to a group



On the **Members** tab, you can manage user accounts and other objects directly from the list of members. To manage a group member, right-click the member and use commands on the shortcut menu.

NOTE: When you select multiple groups, the **Members** tab lists the objects that belong to each of the selected groups. If a given object does not belong to one of the selected groups, then that object does not appear in the list.

How to add members to a group

To add a member to a group

1. In the **Console tree**, locate and select the folder that contains the group to which you want to add a member.
2. In the details pane, right-click the group, then click **Properties**.
3. On the **Members** tab in the **Properties** dialog, click **Add**.
4. In the **Select Objects** dialog, type the name of the directory object, such as a user or computer, that you want to add to the group, or select and add the object from the list, then click **OK**.

NOTE: Consider the following when adding members to a group:

- In addition to users and computers, you can also add contacts and other groups to a group.
- The **Members** tab displays a list of objects that belong to the group. You can select the **Show indirect members** check box for the **Members** list to also display the objects that belong to the group indirectly (because of group nesting). If that check box is cleared, the **Members** list displays only those objects that were added to the group directly.
- The **Add** button appears on the **Members** tab only if the group is a basic group. For a dynamic group, use the **Membership Rules** tab to populate the group. For details, see [Administering dynamic \(rule-based\) groups](#).
- Depending on the scope of a group, the group can hold members from anywhere in the forest or only from its own domain. For more information, see [Group management](#).

Removing members from a group

To remove members from a group, right-click the group, click **Properties**, and go to the **Members** tab in the **Properties** dialog. On the **Members** tab, select members from the list and click **Remove**.

How to remove members from a group

You can remove members from Active Directory groups with the Active Roles Console.

To remove a member from a group

1. In the **Console tree**, locate and select the folder that contains the group from which you want to remove a member.
2. In the details pane, right-click the group, then click **Properties**.
3. On the **Members** tab in the **Properties** dialog, click the member you want to remove, then click **Remove**.

NOTE: Consider the following when removing members from a group:

- The **Members** tab displays a list of objects that belong to the group. You can select the **Show indirect members** check box for the **Members** list to also display the objects that belong to the group indirectly (because of group nesting). If that check box is cleared, the **Members** list displays only those objects that were added to the group directly.
- With the **Show indirect members** check box selected, the **Members** list also includes the objects that belong to the group indirectly. If you select such an object from the list, the **Remove** button is unavailable. An object can be removed from only those groups of which the object is a direct member.
- The **Remove** button appears on the **Members** tab only if the group is a static group. For a dynamic group, use the **Membership Rules** tab to add or remove members from the group. For more information, see [Administering dynamic \(rule-based\) groups](#).

Performing Exchange tasks on a group

To perform Exchange tasks on a group, right-click the group, click **Exchange Tasks**, and follow the instructions in the Exchange Task Wizard. The Exchange Task Wizard helps you manage Exchange recipients by providing a set of tasks that apply to the selected group.

How to perform Exchange tasks on a group

You can perform Exchange-related tasks (for example, creating or deleting email addresses) on Active Directory (AD) groups with the Active Roles Console.

To perform Exchange tasks on a group

1. In the **Console tree**, locate and select the folder that contains the group you want to perform Exchange tasks on.
2. In the details pane, right-click the group, then click **Exchange Tasks** to start the Exchange Task Wizard.
3. On the **Available Tasks** page of the wizard, select the task you want to perform. The following tasks are available, depending on the selected group:
 - **Establish E-mail Address:** The group has no email address established.
 - **Delete E-mail Addresses:** The group has an email address established.
4. On the next page of the wizard, do one of the following, depending on the selected task:
 - **Establish E-mail Addresses:** Modify the alias of the group, if needed. By default, the alias is the same as the name of the group.
 - **Delete E-mail Addresses:** Confirm the deletion of the email addresses.
5. On the completion page of the wizard, review the results of the task. To view the progress report, click **Back**. To close the wizard, click **Finish**.

NOTE: Consider the following when performing Exchange tasks on a group:

- You can perform Exchange tasks on multiple objects at a time. To do so, start the Exchange Task Wizard by selecting the objects, right-clicking the selection, and clicking **Exchange Tasks**.
- To locate the objects on which you want to perform Exchange tasks, use the **Find** function of Active Roles. Once you found the objects, start the Exchange Task Wizard by selecting the objects in the list of search results, right-clicking the selection, and clicking **Exchange Tasks**.

Moving a group

To move groups to another container, select the groups, right-click the selection, and click **Move**. In the **Move** dialog, select the container to which you want to move the groups.

NOTE: The Console provides the drag-and-drop function for moving objects. To move objects, you can drag the selection from the details pane to a destination container in the **Console tree**.

How to move a group

You can move Active Directory (AD) groups from one AD container to another with the Active Roles Console.

To move a group

1. In the Console tree, locate and select the folder that contains the group you want to move.
2. In the details pane, right-click the group and click **Move** to display the **Move** dialog.
3. In the **Move** dialog, select the folder to which you want to move the group, then click **OK**.

NOTE: Consider the following when moving groups:

- With Active Roles, groups can only be moved within the same domain. This means that the group and the folder to which you want to move the group must belong to the same domain.
- You can move multiple objects at a time with the **Move** dialog. To open the dialog, select the objects, right-click the selection, and click **Move**. To select multiple objects, press and hold **CTRL**, then click each object.
- The Console provides the drag-and-drop function for moving objects. To move objects, you can drag the selection from the details pane to a destination container in the **Console tree**.
- To locate the object that you want to move, use the **Find** function of Active Roles. Once you found the accounts, open the **Move** dialog by right-clicking the object, and clicking **Move**.

Exporting and importing groups

With the Active Roles Console, you can export groups to an XML file and then import them from that file to populate a container in a different domain. The export and import operations provide a way to relocate groups between domains.

To export groups, select them, right-click the selection, and select **All Tasks > Export**. In the **Export Objects** dialog, specify the file where you want to save the data, and click **Save**.

To import groups, right-click the container where you want to place the groups, and then click **Import**. In the **Import Directory Objects** dialog, select the file to which the groups were exported, and click **Open**.

Deleting a group

To delete groups, select them, right-click the selection, and click **Delete**. Then, click **Yes** to confirm the deletion. If you select multiple groups, clicking **Delete** displays the **Delete Objects** dialog. To delete all the selected groups, select the **Apply to all items** check box, then click **Yes**.

NOTE: Deleting a group is a destructive operation that cannot be undone. Also, if you re-create the group with the same name later, the group will not receive automatically the same permissions and memberships that the deleted contact had. Instead, you must assign the previous permissions and memberships manually.

How to delete a group

You can delete Active Directory groups with the Active Roles Console.

To delete a group

1. In the **Console tree**, locate and select the folder that contains the group you want to delete.
2. In the details pane, right-click the group, then click **Delete**.

NOTE: Consider the following when deleting a group:

- Deleting a group is a destructive operation that cannot be undone. Once a group is deleted, all permissions and memberships associated with that group are lost. Creating a new group with the same name as the deleted group does not automatically assign the permissions and memberships of the previously deleted group. Instead, you must manually re-create all permissions and memberships.
- The confirmation message box displayed by the **Delete** command prompts you that you can deprovision rather than delete groups. The deprovision operation refers to a set of actions performed by Active Roles in order to prevent the use of there group. Active Roles comes with a default policy to automate some commonly-used deprovisioning tasks, and allows the deprovision policies to be adjusted as needed.
- To deprovision a group, right-click the group in the details pane, and click **Deprovision**.
- To locate groups for deletion or deprovisioning, use the **Find** function of Active Roles. Once you found the groups, delete or deprovision them by selecting the accounts in the list of search results, right-clicking the selection, and clicking **Delete** or **Deprovision**.
- When attempting to delete a group, you may receive an error message that access is denied to the group. This can typically occur if the group is protected from deletion. To remove this protection, navigate to the **Properties > Object** tab of the group you want to delete, then clear the **Protect object from accidental deletion** check box. After that, try deleting the group again.

Deprovisioning a group

Active Roles provides the ability to deprovision rather than delete groups. Deprovisioning a groups refers to a set of actions that are performed by Active Roles in order to prevent the

use of the group.

The **Deprovision** command on a group updates the group object in Active Directory as prescribed by the deprovisioning policies. Active Roles comes with a default policy to automate some commonly-used deprovisioning tasks, and allows the administrator to configure and apply additional policies.

How to deprovision a group

You can deprovision Active Directory groups with the Active Roles Console.

To deprovision a group

1. In the **Console tree**, locate and select the folder that contains the group you want to deprovision.
2. In the details pane, right-click the group, then click **Deprovision**.
3. Wait while Active Roles updates the group.

NOTE: Consider the following when deprovisioning a group:

- You can deprovision multiple groups at a time. Select two or more groups, right-click the selection, then click **Deprovision**.
- The **Deprovision** command is also available in the Active Roles Web Interface.
- When you click the **Deprovision** command, the operation progress and results are displayed. When the operation is completed, Active Roles displays the operation summary, and allows you to examine operation results in detail.
- On a deprovisioned group, you can use the **Deprovisioning Results** command to view a report that lists the actions taken during the deprovisioning operation. For each action, the report informs about success or failure of the action. In the event of a failure, the report provides a description of the error situation.
- If a deprovisioned group needs to be restored (for example, if a group has been deprovisioned by mistake), the group can be reset to the state it was in before the deprovisioning occurred. This can be accomplished by using the **Undo Deprovisioning** command on the deprovisioned group.

Restoring a deprovisioned group

Active Roles provides the ability to restore deprovisioned groups. The purpose of this operation, referred to as the Undo Deprovisioning operation, is to roll back the changes that were made to a group by the Deprovision operation. When a deprovisioned group needs to be restored (for example, if a group has been deprovisioned by mistake), the Undo Deprovisioning operation allows the group to be restored to the state it was in before the changes were made.

How to restore a deprovisioned group

You can restore previously deprovisioned Active Directory groups with the Active Roles Console.

To restore a deprovisioned group

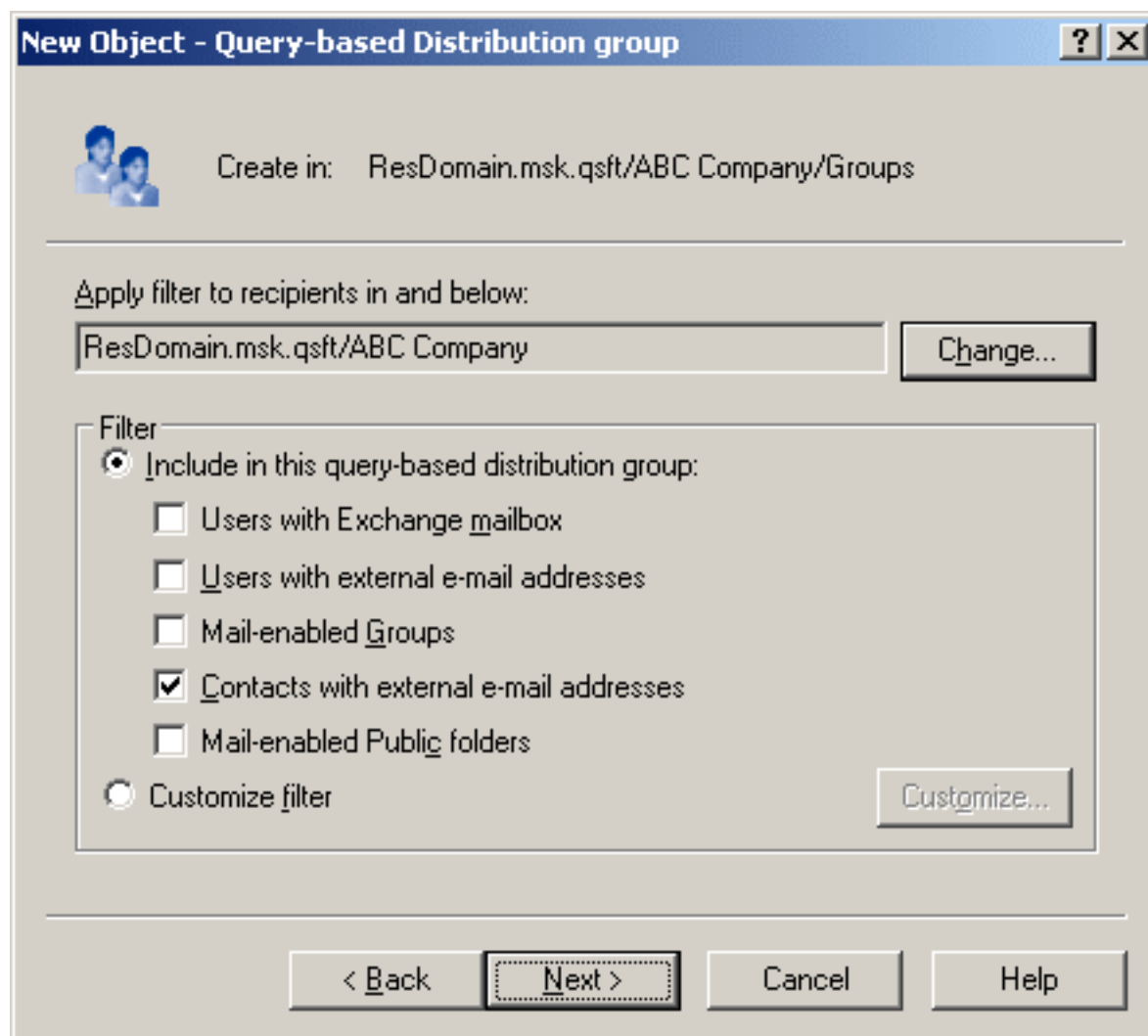
1. In the **Console tree**, locate and select the folder that contains the group you want to restore.
2. In the details pane, right-click the group, then click **Undo Deprovisioning**.
3. Wait while Active Roles restores the group.
4. When you click the **Undo Deprovisioning** command, the operation progress and results are displayed. When the operation is completed, Active Roles displays the operation summary, and allows you to examine the operation results in detail. You can view a report that lists the actions taken during the restore operation. For each action, the report informs about success or failure of the action. In the event of a failure, the report provides a description of the error situation.

Administering a query-based distribution group

A query-based distribution group is a type of distribution group introduced in Exchange Server. The difference from the usual distribution group is that members of a query-based group are not statically placed into it. Email is propagated among the members of the group, but only among those of them who is currently in the state to comply with the specified LDAP query of this distribution group.

You can create a query-based distribution group in the **Console tree** by right-clicking the container where you want to add the group, selecting **New > Query-based Distribution Group**, then following the instructions of the wizard that appears. The following figure shows the step of the wizard where you can set up a query.

Figure 17: Administering query-based distribution groups



On this page, you can choose between predefined filters and custom filter. If select **Custom filter**, click **Customize** to configure the filter. This displays the **Custom Search** window where you can specify your search criteria.

You can manage a query-based distribution group in much the same way as you do with regular distribution groups: right-click the group, then select a command on the shortcut menu.

How to administer a query-based distribution group

You can create new query-based distribution groups with the Active Roles Console.

To create a query-based distribution group

1. In the **Console tree**, right-click the folder in which you want to add the group, and select **New > Query-based Distribution Group**.
2. In **Query-based Distribution Group name**, type a name for the group, then click **Next**.
3. The box under **Apply filter to recipients in and below** displays the container to search for recipients. Click **Change** to select the container that contains the recipients you want the group to include.
TIP: The query returns only recipients in the selected container and its sub-containers. To get the results you want, you may have to select a parent container or create multiple queries.
4. Under **Filter**, do one of the following:
 - Click **Include in this query-based distribution group**, then click each item you want to include in the criteria for membership in the query-based distribution group. The following criteria are pre-defined:
 - **Users with Exchange mailbox**
 - **Users with external e-mail addresses**
 - **Groups that are mail-enabled**
 - **Contacts with external e-mail addresses**
 - **Public folders that are mail-enabled**
 - To create your own criteria for the query, click **Customize filter > Customize**.
5. Click **Next** to see a summary of the query-based distribution group you are about to create.
6. Click **Finish** to create the query-based distribution group. The new query-based distribution group is displayed in the details pane.
7. Right-click the query-based distribution group you just created and click **Properties**.
8. On the **Preview** tab, click **Start** to view the query results and verify that the correct recipients are included in the group.

NOTE: Consider the following when administering a query-based distribution group:

- A query-based distribution group provides the same functionality as a standard distribution group. However, instead of adding or removing members to or from the group manually, it is populated dynamically via an LDAP query. For example, you can configure a query-based distribution group to include all full-time employees of your organization.
- When creating a query-based distribution group, One Identity recommends using the **Preview** button to:

- Verify the validity and the expected results of the query before applying it.
- Determining how long it takes for the query to run, allowing you to fine-tune the query or rework it into smaller queries to improve performance.

Specifying an LDAP filter string with bad formatting or an incorrect LDAP syntax will result in the query-based distribution group not working correctly. Also, if users send an email to an incorrectly configured query-based distribution group, they will receive a non-delivery report.

Administering dynamic (rule-based) groups

Active Roles can automatically keep group membership lists up to date, so that you do not need to add and remove members manually. To automate the maintenance of group membership lists, Active Roles uses the following features:


- A rule-based mechanism that automatically adds and removes objects to groups whenever object attributes change in Active Directory.
- Flexible membership criteria that enable both query-based and static group population.

In Active Roles, rules-based groups are referred to as dynamic groups. The groups that have no membership rules specified are referred to as basic groups. Any security or distribution group can be converted to a dynamic group by adding membership rules.

You can create a dynamic group by managing a basic group as follows: right-click the group, click **Convert to Dynamic Group**, select a rule type, and then configure a rule. For details, see *Adding a membership rule to a dynamic group* in the *Active Roles Administration Guide*.

When you convert a basic group to a dynamic group, the group loses all members that were added to the group when it was basic. This is because the membership list of a dynamic group is entirely under the control of membership rules.

Once membership rules are added to a group, the group only includes the objects that comply with the membership rules. Active Roles overrides any changes made directly to the membership list by any administrative tool.

NOTE: In the Active Roles Console, dynamic groups are marked with this icon: . Also, a special note on the **General** tab makes it possible to distinguish between dynamic groups and basic groups when using administrative tools other than Active Roles.

For dynamic groups, the **Properties** dialog includes the **Membership Rules** tab. The **Members** tab for a dynamic group cannot be used to manage the membership list. It is only used to display a list of group members.

You can return a dynamic group to basic state as follows: right-click the group and click **Convert to Basic Group**. Then, click **Yes** to confirm the conversion. This operation removes all membership rules from the group. The group membership list remains intact as of the time of the conversion.

For more information about dynamic groups, refer to *Dynamic Groups* in the *Active Roles Administration Guide*.

Using temporal group memberships

By using temporal group memberships, you can manage group memberships of objects such as user or computer accounts that need to be members of particular groups for only a certain time period. This feature of Active Roles gives you flexibility in deciding and tracking what objects need group memberships and for how long.

This section guides you through the tasks of managing temporal group memberships in the Active Roles Console. If you are authorized to view and modify group membership lists, then you can add, view and remove temporal group members as well as view and modify temporal membership settings on group members.

Adding temporal members

A temporal member of a group is an object, such as a user, computer or group, scheduled to be added or removed from the group. You can add and configure temporal members using the Active Roles Console.

To add temporal members to a group

1. In the Active Roles Console, right-click the group, then click **Properties**.
2. On the **Members** tab in the **Properties** dialog, click **Add**.
3. In the **Select Objects** dialog, click **Temporal Membership Settings**.
4. In the **Temporal Membership Settings** dialog, choose the appropriate options, then click **OK**:
 - To have the temporal members added to the group on a certain date in the future, select **On this date** under **Add to the group**, and choose the date and time you want.
 - To have the temporal members added to the group at once, select **Now** under **Add to the group**.
 - To have the temporal members removed from the group on a certain date, select **On this date** under **Remove from the group**, and choose the date and time you want.
 - To retain the temporal members in the group for indefinite time, select **Never** under **Remove from the group**.
5. In the **Select Objects** dialog, type or select the names of the objects you want to make temporal members of the group, and click **OK**.
6. Click **Apply** in the **Properties** dialog for the group.

NOTE: Consider the following when adding temporal members:

- To add temporal members of a group, you must be delegated the authority to add or remove members from the group. The appropriate authority can be delegated by applying the **Groups - Add/Remove Members** Access Template.
- You can also make an object a temporal member of a particular group (or groups) by modifying the properties of the object rather than the group(s). To do so, open the **Properties** dialog of the object, then click **Member Of > Add**. Finally, in the **Select Objects** dialog, specify the temporal membership settings and the name(s) of the group(s) in which you want to configure the temporal membership.

Viewing temporal members

The list of group members displayed by the Active Roles Console makes it possible to distinguish between regular group members and temporal group members. It is also possible to hide or display so-called pending members, the temporal members that are scheduled to be added to the group in the future but are not actual members of the group so far.

To view temporal members of a group

1. In the Active Roles Console, right-click the group, then click **Properties**.
2. Examine the list on the **Members** tab in the **Properties** dialog:
 - An icon of a small clock overlays the icon for the temporal members.
 - If the **Show pending members** check box is selected, the list also includes the temporal members that are not yet added to the group. The icons identifying such members are shown in orange.

The list of group memberships for a particular object makes it possible to distinguish between the groups in which the object is a regular member and the groups in which the object is a temporal member. It is also possible to hide or display so-called pending group memberships, the groups to which the object is scheduled to be added in the future.

To view groups in which an object is a temporal member

1. In the Active Roles Console, right-click the group, then click **Properties**.
2. Examine the list on the **Member Of** tab in the **Properties** dialog:
 - An icon of a small clock overlays the icon for the groups in which the object is a temporal member.
 - If the **Show pending group memberships** check box is selected, the list also includes the groups to which the object is scheduled to be added in the future. The icons identifying such groups are shown in orange.

Rescheduling temporal group memberships

The temporal membership settings on a group member include the start time and end time settings.

The start time setting specifies when the object is to be actually added to the group. This can be specific date and time or an indication that the object should be added to the group right away.

The end time setting specifies when the object is to be removed from the group. This can be specific date and time or an indication that the object should not be removed from the group.

You can view or modify both the start time and end time settings using the Active Roles Console.

To view or modify the start or end time setting for a member of a group

1. In the Active Roles Console, right-click the group, then click **Properties**.
2. In the list on the **Members** tab in the **Properties** dialog, click the member and then click **Temporal Membership Settings**.
3. Use the **Temporal Membership Settings** dialog to view or modify the start or end time settings.

The **Temporal Membership Settings** dialog provides the following options:

- **Add to the group > Now:** Indicates that the object should be added to the group at once.
- **Add to the group > On this date:** Indicates the date and time when the object should be added to the group.
- **Remove from the group > Never:** Indicates that the object should not be removed from the group.
- **Remove from the group > On this date:** Indicates the date and time when the object should be removed from the group.

Regular members have the **Add to group** and **Remove from group** options set to **Already added** and **Never**, respectively. You can set a particular date for any of these options in order to convert a regular member to a temporal member.

NOTE: Consider the following when rescheduling temporal group memberships:

- You can view or modify the start time and end time settings by managing an object rather than groups in which the object has memberships. Open the **Properties** dialog for that object, and on the **Member Of** tab, select the group for which you want to manage the object's start or end time setting and click **Temporal Membership Settings**.
- On the **Members** or **Member Of** tab, you can change the start or end time setting for multiple members or groups at a time. From the list on the tab, select two or more items and click **Temporal Membership Settings**. Then, in the **Temporal**

Membership Settings dialog, select check boxes to indicate the settings to change and make the changes you want.

Removing temporal members

You can remove temporal group members in the same way as regular group members. Removing a temporal member of a group deletes the temporal membership settings for that object with respect to that group. As a result, the object will not be added to the group. If the object already belongs to the group at the time of removal, then it is removed from the group.

To remove a temporal member of a group

1. In the Active Roles Console, right-click the group, then click **Properties**.
2. On the **Members** tab in the **Properties** dialog, click the member, click **Remove**, then click **Apply**.

NOTE: You can remove an object that is a temporal member of a group by managing the object rather than the group. Open the **Properties** dialog for that object, and on the **Member Of** tab, select the group from the list and click **Remove**.

Computer account management

Computer accounts are Active Directory objects used to represent physical computers. Computer accounts allow computers to join the domain, and control their access to resources on the network. The operating system uses computer account information to determine access permissions for a computer.

Active Roles provides the facility to perform administrative tasks such as create, modify, and delete computer accounts. Active Roles can also be used to disable and enable accounts, add and remove accounts from groups, and reset accounts.

The following section describes how to use the Active Roles Console to manage computer accounts. You can also use the Active Roles Web Interface to perform management tasks on computer accounts.

Creating a computer account

To create a new computer account, in the **Console tree**, right-click the container where you want to add the computer account, select **New > Computer**, then follow the instructions in the wizard.

In the wizard, some property labels may be displayed as hyperlinks. The hyperlink indicates that Active Roles enforces certain policy restrictions on the property. To examine policy details, click the hyperlink: the policy information is displayed. For more information, see [Getting policy-related information](#).

Figure 18: Creating a computer account

New Object - Computer

Create in: ResDomain.msk.qst/Computers

Computer name:

Computer name [pre-Windows 2000]:

The following user or group can join this computer to a domain.

User or group: RESDOMAIN\Administrator Change...

Allow pre-Windows 2000 computers to use this account

< Back Next > Cancel Help

The policy information is also displayed whenever you supply a property value that violates a policy restriction. The wizard cannot proceed until you enter an acceptable value.

How to create a computer account

You can create new computer accounts with the Active Roles Console.

To create a computer account

1. In the **Console tree**, locate and select the folder in which you want to add the computer account.
2. Right-click the folder, point to **New** and click **Computer** to start the **New Object - Computer** wizard.

3. Follow the wizard pages to specify properties of the new computer account, such as the computer name and pre-Windows 2000 computer name.
4. If you want to set values for additional properties (those for which the wizard pages do not provide data entries), click **Edit Attributes** on the completion page of the wizard.
5. After setting any additional properties, click **Finish** on the completion page of the wizard.

NOTE: Consider the following when creating a computer account:

- Normally, the rights of a domain administrator are required to join a computer to the domain through the use of an existing, newly created computer account. If you want to authorize a certain user or group to perform this task, you can do so when creating the computer account: Under **The following user or group can join this computer to a domain**, click **Change**, then select the user or group you want.
- If the computer to be associated with the computer account you are creating is running a pre-Windows 2000 operating system, select the **Allow pre-Windows 2000 computers to use this account** check box.

Finding a computer account

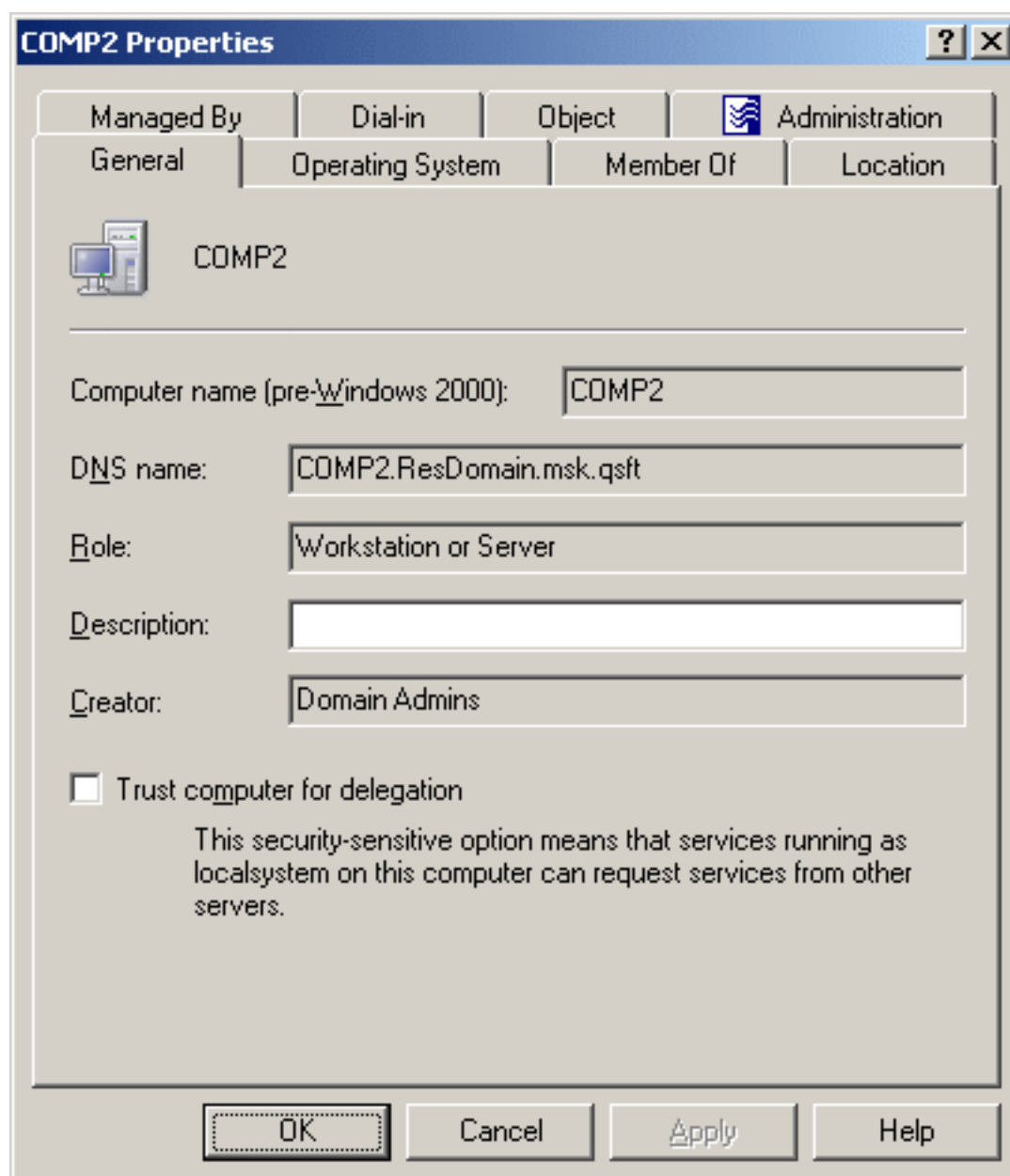
To find a computer account, right-click the container you want to search and click **Find**. In the **Find** window, select **Computers** from the **Find** list, specify your search criteria, and start the search. In the search results list, you can right-click computer accounts and use commands on the shortcut menu to perform management tasks.

For step-by-step instructions on how to search for computer accounts, see [Searching for a computer](#).

Modifying computer account properties

To modify computer account properties, right-click the account, then click **Properties**. You can make changes to computer account properties in the **Properties** dialog, shown in the following figure.

Figure 19: Properties



In the wizard, some property labels may be displayed as hyperlinks. The hyperlink indicates that Active Roles enforces certain policy restrictions on the property. To examine policy details, click the hyperlink: the policy information is displayed. For more information, see [Getting policy-related information](#).

The policy information is also displayed whenever you supply a property value that violates a policy restriction. The wizard cannot proceed until you enter an acceptable value.

You can use the **Properties** dialog to view or modify any property of the object by navigating to the **Object** tab and clicking **Advanced Properties**. In the **Advanced Properties** window you can manage all properties, including those that cannot be accessed via the **Properties** dialog itself.

You can also display the **Advanced Properties** window by right-clicking the object and selecting **All Tasks > Advanced Properties**.

How to modify computer account properties

You can modify the properties of computer accounts with the Active Roles Console.

To modify computer account properties


1. In the **Console tree**, locate and select the folder that contains the computer account that you want to modify.
2. In the details pane, right-click the computer account you want to modify, then click **Properties**.
3. Use the tabs in the **Properties** dialog to view or modify properties of the computer account.
4. If you want to view or modify additional properties (those for which the tabs in the **Properties** dialog do not provide data entries), navigate to the **Object** tab and click **Advanced Properties**.
5. After setting all the properties you want, click **OK**.

NOTE: Consider the following when modifying computer account properties:

- The behavior of the user interface elements in the **Properties** dialog may vary depending on the configuration of Active Roles policies. To determine whether a given item on a tab is under the control of a certain policy, observe the text label next to the item: the underlined text label indicates that some policy restrictions are in effect. Click the underlined text labels to examine the policies that govern the behavior of the user interface elements.
- To modify properties for multiple objects, press and hold **CTRL**, then click each object. Right-click the selection, then click **Properties**.
- You can also access the **Advanced Properties** dialog for an object by right-clicking the account and selecting **All Tasks > Advanced Properties**.
- To locate the object that you want to modify, use the **Find** function of Active Roles. Once you found the object, open the **Properties** page by right-clicking the object, and clicking **Properties**.

Disabling and enabling a computer account

A computer account can be disabled as a security measure to prevent users from logging on to the computer, instead of deleting the computer account.

To disable a computer account, right-click the account and click **Disable Account**. To enable a computer account, right-click the account and click **Enable Account**. The **Enable Account** option appears only for disabled computer accounts. Disabled computer accounts are marked with the  icon.

How to disable a computer account

You can disable computer accounts with the Active Roles Console.

To disable a computer account

1. In the **Console tree**, locate and select the folder that contains the computer account you want to disable.
2. In the details pane, right-click the computer account and click **Disable Account**.

NOTE: Consider the following when disabling a computer account:

- When you disable a computer account, the computer cannot authenticate to the domain until the account has been enabled.
- The **Disable Account** command is displayed if the account is enabled; otherwise, the **Enable Account** command is displayed on the menu. By using the **Enable Account** command you can change the status of the disabled account.

How to enable a disabled computer account

You can enable a disabled computer account with the Active Roles Console.

To enable a disabled computer account

1. In the **Console tree**, locate and select the folder that contains the computer account you want to enable.
2. In the details pane, right-click the computer account and click **Enable Account**.

NOTE: The **Enable Account** command is displayed if the account is disabled; otherwise, the **Disable Account** command is displayed on the menu.

Resetting a computer account

A computer account is normally reset if the computer has been taken offline and completely reinstalled. Resetting the account allows the (rebuilt) computer to rejoin the domain using the same name. If the computer account is reset whenever the computer has not been reinstalled, the computer cannot authenticate in the domain.

To reset a computer account, right-click the account, and click **Reset Account**. This command resets the computer account password.

NOTE: You cannot reset the password of Domain Controllers (DCs) with the **Reset Account** command.

Adding a computer account to a group

Adding a computer account to a group enables you to assign permissions to all computer accounts in the group, and to filter Group Policy settings on all accounts in the group.

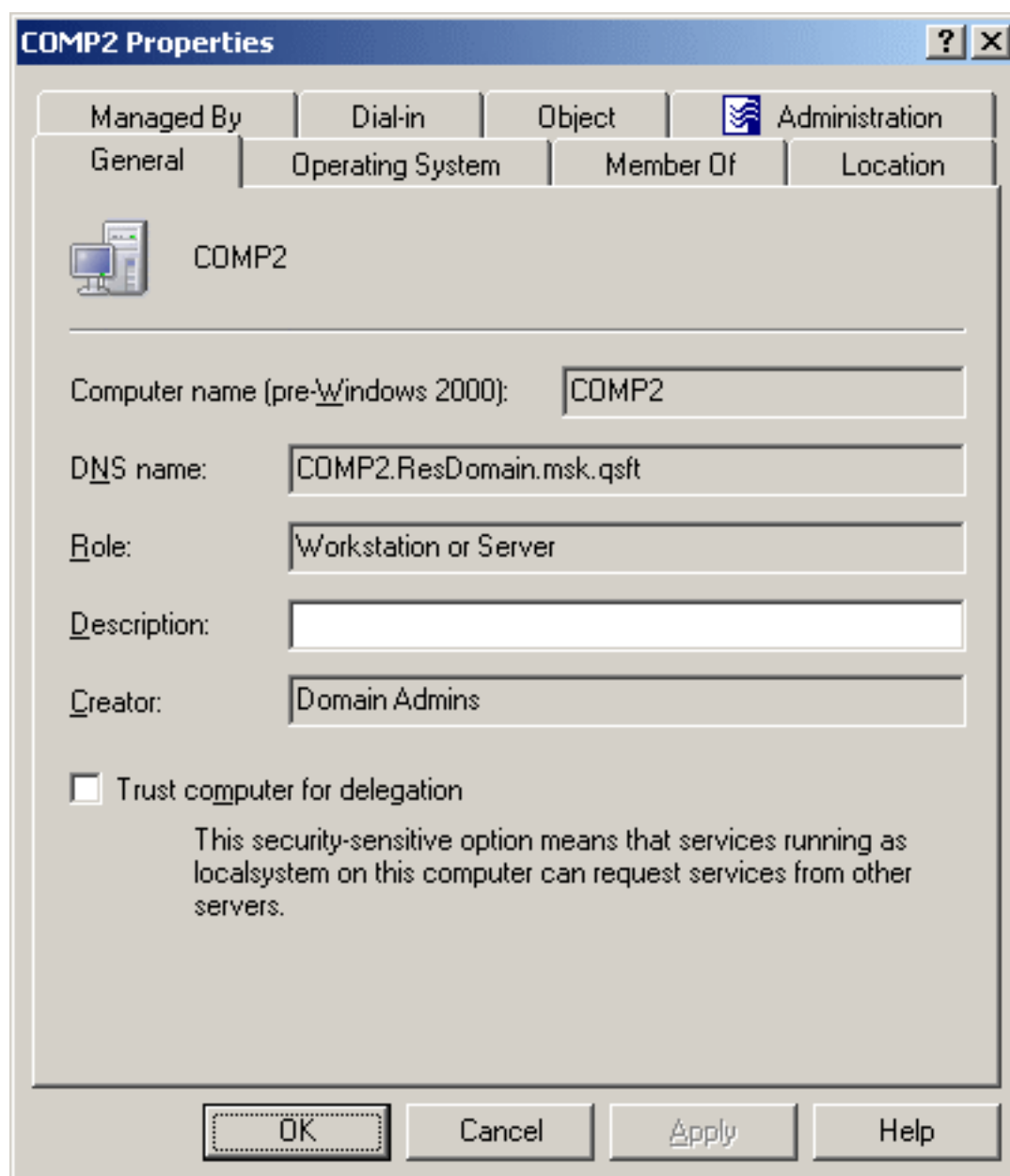
To add computer accounts to groups, select the accounts, right-click the selection, and click **Add to a Group**. This displays the **Select Objects** dialog where you can select the groups to which you want to add the accounts. For more information, see [Adding a user account to a group](#).

You can also add a computer account to groups by modifying the group membership list on the **Member Of** tab in the **Properties** dialog. To display the **Properties** dialog, right-click the computer account and click **Properties**.

The **Member Of** tab lists the groups to which the computer account belongs, as shown in the following figure. If the **Show nested groups** check box is selected, the list also includes the groups to which the computer account belongs because of group nesting.

The **Temporal Membership Settings** button can be used to specify the date and time when the computer should be added or removed from the selected groups. For more information, see [Using temporal group memberships](#).

Figure 20: Adding computer accounts to groups



On the **Member Of** tab, you can manage groups directly from the list of groups. To manage a group, right-click it, and use commands on the shortcut menu.

You can add the computer account to groups by clicking **Add** on the **Member Of** tab. This displays the **Select Objects** dialog, allowing you to select the groups to which you want to add the computer account.

NOTE: When you select multiple computer accounts, the **Member Of** tab lists the groups to which all the selected accounts belong. If one of the accounts does not belong to a given group, that group does not appear in the list.

How to add a computer account to a group

To add a computer account to a group

1. In the **Console tree**, locate and select the folder that contains the computer account you want to add to a group.
2. In the details pane, right-click the computer account, then click **Add to a Group**.
3. Use the **Select Objects** dialog to locate and select the group to which you want to add the computer account (you can select more than one group).

NOTE: Consider the following when adding a computer account to a group:

- You can add multiple computer accounts to a group at a time: Select the accounts, right-click the selection, and click **Add to a Group**. To select multiple accounts, press and hold down **CTRL**, then click each account.
- You can also add or remove computer accounts from groups by using the **Properties** dialog: Select one or more accounts, right-click the selection, click **Properties**, and go to the **Member Of** tab in the **Properties** dialog.
- By adding a computer to a group, you can assign permissions to all of the computer accounts in that group and filter Group Policy settings on all accounts in that group.
- To locate computer accounts you want to add to a certain group, use the **Find** function of Active Roles. Once you found the computer accounts, select the accounts in the list of search results, right-click the selection, and click **Add to a Group**.

Removing a computer account from a group

To remove a computer account from groups, right-click the account, click **Properties**, and go to the **Member Of** tab. On the **Member Of** tab, select groups from the list and click **Remove**.

How to remove a computer account from a group

You can remove computer accounts from Active Directory groups with the Active Roles Console.

To remove a computer account from a group

1. In the **Console tree**, locate and select the folder that contains the computer account you want to remove from a group.
2. In the details pane, right-click the computer account, then click **Properties**.
3. On the **Member Of** tab in the **Properties** dialog, clear the **Show nested groups** check box, select the group from which you want to remove the computer account, and click **Remove**.

NOTE: Consider the following when removing a computer account from a group:

- If you have not cleared the **Show nested groups** check box, the list on the **Member Of** tab also includes the groups to which the computer account belongs indirectly, that is, because of group nesting. If you select such a group from the list, the **Remove** button is unavailable. A computer account can be removed from only those groups of which the account is a direct member.
- The computer account cannot be removed from its primary group (Domain Computers by default). You first need to change the computer's primary group: On the **Member Of** tab, select a different group from the list, then click **Set Primary Group**.

Moving a computer account

To move computer accounts to another container, select the accounts, right-click the selection, then click **Move**. In the **Move** dialog, select the container to which you want to move the accounts.

NOTE: The Console provides the drag-and-drop function for moving objects. To move objects, you can drag the selection from the details pane to a destination container in the **Console tree**.

How to move a computer account

You can move computer accounts from one Active Directory container to another with the Active Roles Console.

To move a computer account

1. In the **Console tree**, locate and select the folder that contains the computer account you want to move.
2. In the details pane, right-click the computer account and click **Move** to display the **Move** dialog.
3. In the **Move** dialog, select the folder to which you want to move the computer account, then click **OK**.

NOTE: Consider the following when moving a computer account:

- With Active Roles, computer accounts, as well as other directory objects, can only be moved within the same domain. This means that the folder to which you want to move the account must belong to the same domain as the account.
- You can move multiple objects at a time with the **Move** dialog. To open the dialog, select the objects, right-click the selection, and click **Move**. To select multiple objects, press and hold **CTRL**, then click each object.
- To locate the object that you want to move, use the **Find** function of Active Roles. Once you found the accounts, open the **Move** dialog by right-clicking the object, and clicking **Move**.
- The Console provides the drag-and-drop function for moving objects. To move objects, you can drag the selection from the details pane to a destination container in the **Console tree**.

Exporting and importing a computer account

With the Active Roles Console, you can export computer accounts to an XML file and then import them from that file to populate a container in a different domain. The export and import operations provide a way to relocate computer accounts between domains.

To export computer accounts, select them, right-click the selection, and select **All Tasks > Export**. In the **Export Objects** dialog, specify the file where you want to save the data, and click **Save**.

To import computer accounts, right-click the container where you want to place the accounts, and then click **Import**. In the **Import Directory Objects** dialog, select the file to which the computer accounts were exported, and click **Open**.

Deleting a computer account

To delete computer accounts, select them, right-click the selection, and click **Delete**. Then, click **Yes** to confirm the deletion. If you select multiple accounts, clicking **Delete** displays the **Delete Objects** dialog. To delete all the selected accounts, select the **Apply to all items** check box, then click **Yes**.

NOTE: Deleting a computer account is a destructive operation that cannot be undone. If you re-create the deleted computer account later, the new account will not be able to authenticate in the domain until you rejoin the computer account to the domain. For this reason, One Identity recommends disabling computer accounts rather than deleting them.

How to delete a computer account

You can delete Active Directory computer accounts with the Active Roles Console.

To delete a computer account

1. In the **Console tree**, locate and select the folder that contains the computer account you want to delete.
2. In the details pane, right-click the computer account, then click **Delete**.

NOTE: Consider the following when deleting a computer account:

- To delete multiple computer accounts at the same time, select the accounts, right-click the selection, and click **Delete**. To select multiple accounts, press and hold **CTRL**, then click each account.
- Once a computer account has been deleted, all permissions and memberships associated with that computer account are permanently deleted. Because the security ID (SID) for each account is unique, a new computer account with the same name as a previously deleted computer account does not automatically assume the permissions and memberships of the previously deleted account. To duplicate a deleted computer account, you must manually recreate all of its permissions and memberships.
- To locate the computer accounts for deletion, use the **Find** function of Active Roles. Once you found the computer accounts, delete them by selecting the accounts in the list of search results, right-clicking the selection, and clicking **Delete**.
- When attempting to delete a computer account, you may receive an error message that access is denied to the account. This can typically occur if the computer account is protected from deletion. To remove this protection, navigate to the **Properties > Object** tab of the computer account you want to delete, then clear the **Protect object from accidental deletion** check box. After that, try deleting the computer object again.

Managing a remote computer

The Active Roles Console allows you to open the Computer Management console from which you can administer a remote computer. Computer Management combines several administration utilities into a single console, providing easy access to the computer's administrative properties and tools. You must have administrative rights on the computer to view certain information or to modify computer properties using Computer Management.

To manage a remote computer

1. In the **Console tree**, locate and select the folder that contains the computer account of the computer you want to manage.

2. In the details pane, right-click the computer account, then click **Manage** to open the Computer Management console.

NOTE: To locate the computer account of the computer you want to manage, use the **Find** function of Active Roles. Once you found the computer account, right-click the computer account in the list of search results, then click **Manage**.

Using a remote desktop connection

From the Active Roles Console, you can access a computer through Remote Desktop Connection. The **Connect via RDP** command on a computer object allows you to establish a Remote Desktop Connection session to the computer represented by that computer object in Active Directory.

By supporting Remote Desktop Connection, Active Roles enables you to access a remote computer from your computer running the Active Roles Console. However, the object representing the remote computer must be available in the Console. This requires that the remote computer be a member of one of the domains managed by Active Roles. Additionally, the commonly-known requirements must be met that apply to Remote Desktop Connection: The remote computer must have Remote Desktop enabled, it must be available on the network, and it must be configured so that the user has permission to connect.

To access a computer through Remote Desktop Connection

1. In the Active Roles Console, locate the desired computer object.
2. Right-click the computer object and click **Connect via RDP**.

Viewing BitLocker recovery passwords

Active Roles allows you to locate and view BitLocker recovery passwords that are stored in Active Directory. This tool helps to recover data on a drive that has been encrypted by using BitLocker. You can examine a computer object's property pages to view the corresponding BitLocker recovery passwords. Additionally, you can perform a domain-wide search for a BitLocker recovery password.

Administrators can configure BitLocker Drive Encryption to back up recovery information for BitLocker-protected drives to Active Directory. Recovery information includes the recovery password for each BitLocker-protected drive, and the information required to identify which computers and drives the recovery information applies to. Backing up recovery passwords for BitLocker-protected drives allows administrators to recover the drive if it is locked, thereby ensuring that authorized persons can always access encrypted data belonging to the enterprise.

To view BitLocker recovery passwords, you must have been granted the appropriate permissions in Active Roles. The following Access Template provides sufficient permissions to view BitLocker recovery passwords:

- Computer Objects - View BitLocker Recovery Keys
- In addition, viewing BitLocker recovery passwords in a given Active Directory domain requires the following:
 - The domain must be configured to store BitLocker recovery information. For more information, see [Backing Up BitLocker and TPM Recovery Information to AD DS](#).
 - The computers protected by BitLocker must be joined to the domain.
 - BitLocker Drive Encryption must have been enabled on the computers.

How to view BitLocker recovery passwords

The following procedures describe the most common tasks that apply to locating and viewing BitLocker recovery passwords.

To view the BitLocker recovery passwords for a computer

1. In the Active Roles Console, locate the desired computer object.
2. Right-click the computer object, and then click **Properties**.
3. In the **Properties** dialog, click the **BitLocker Recovery** tab to view the BitLocker recovery passwords that are associated with the computer you've selected.

To copy the BitLocker recovery password for a computer

1. Follow the steps in the previous procedure to view the BitLocker recovery passwords.
2. On the **BitLocker Recovery** tab of the **Properties** dialog, perform the following steps:
 - a. In the **BitLocker Recovery Passwords** list, click the desired password ID.
 - b. Right-click in the **Details** box, click **Select All**, then click **Copy**.
3. Press CTRL+V to paste the copied text to a destination location, such as a text file or spreadsheet.

You can use the Active Roles Web Interface to view the BitLocker recovery passwords for a computer. To do so, select the computer object, then choose the **BitLocker Recovery** command.

To locate a BitLocker recovery password

1. In the Active Roles Console or Web Interface, select the domain object, then choose the **Find BitLocker Recovery Password** command.

2. On the **Find BitLocker Recovery Password** page, type the first eight characters of the BitLocker recovery key identification in the **Password ID (first 8 characters)** box, then click **Search**.

You can also search for a BitLocker recovery password in all managed domains by choosing the **Find BitLocker Recovery Password** command on the **Active Directory** node in the Active Roles Console or Web Interface.

Organizational Unit management

Organizational Units (OUs) are containers in Active Directory. OUs can contain user accounts, groups, computer accounts, and other OUs. An object can be included in only one OU.

When you expand the **Active Directory** node in the Active Roles Console, the Console tree displays icons representing domains. You can double-click a domain icon to see containers that are defined in the domain. OUs are marked with the following icon: 🗑️

When you select an OU in the **Console tree**, the details pane lists objects included in the OU, and the **Action** menu provides commands to create new objects in the OU, search for objects in the OU, and manage OU properties.

The following section guides you through the Active Roles Console to manage Organizational Units. You can also use the Active Roles Web Interface to perform management tasks on Organizational Units.

Creating an Organizational Unit

To create a new OU, in the **Console tree**, right-click the domain or another OU, select **New > Organizational Unit**, then follow the instructions in the wizard.

On the first page of the wizard, type the name for the new OU in the **Name** box. If necessary, select or clear the **Protect container from accidental deletion** check box. Click **Next** and then click **Finish** to complete the operation.


By selecting the **Protect container from accidental deletion** check box you ensure that the newly created OU cannot be deleted, whether using Active Roles or other tools for Active Directory administration. When somebody attempts to delete an OU for which this check box is selected, the operation returns an error indicating that access is denied. For an existing OU, you can view or change this setting on the **Object** tab in the **Properties** dialog.

How to create an Organizational Unit

You can create new Active Directory Organizational Units (OUs) with the Active Roles Console.

To create an Organizational Unit

1. In the **Console tree**, locate and select the folder in which you want to add the OU.
2. Right-click the folder, point to **New** and click **Organizational Unit** to start the **New Object - Organizational Unit** wizard.
3. Follow the wizard pages to specify properties of the new OU, such as the name of the OU.
4. If you want to set values for additional properties (those for which the wizard pages do not provide data entries), click **Edit Attributes** on the completion page of the wizard.
5. After setting any additional properties, click **Finish** on the completion page of the wizard.

NOTE: To create an OU, you can also click the domain node or folder in which you want to add the OU, then click  on the toolbar.

Finding an Organizational Unit

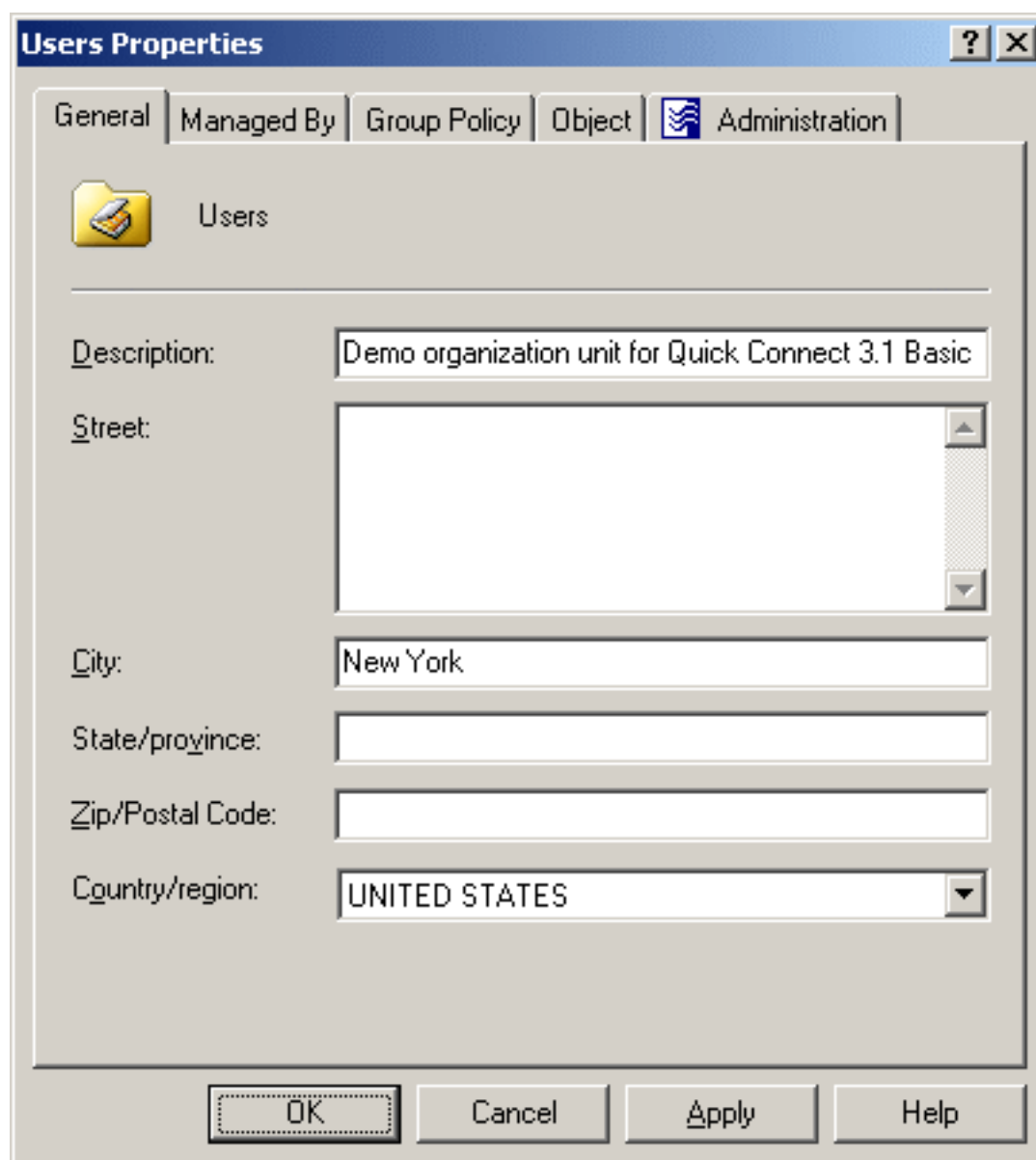
To find an Organizational Unit, select the domain you want to search, and click **Find**. In the **Find** window, select **Organizational Units** from the **Find** list, specify your search criteria, and start the search. In the search results list, you can right-click Organizational Units and use commands on the shortcut menu to perform management tasks.

For step-by-step instructions on how to search for Organizational Units, see [Searching for an Organizational Unit](#).

Modifying Organizational Unit properties

To modify properties of an Organizational Unit (OU), right-click the OU, then click **Properties**. You can make changes to OU properties in the **Properties** dialog, shown in the following figure.

Figure 21: Modifying Organizational Unit properties



In the wizard, some property labels may be displayed as hyperlinks. The hyperlink indicates that Active Roles enforces certain policy restrictions on the property. To examine policy details, click the hyperlink: the policy information is displayed. For more information, see [Getting policy-related information](#).

The policy information is also displayed whenever you supply a property value that violates a policy restriction. The wizard cannot proceed until you enter an acceptable value.

You can use the **Properties** dialog to view or modify any property of the object by navigating to the **Object** tab and clicking **Advanced Properties**. In the **Advanced Properties** window you can manage all properties, including those that cannot be accessed via the **Properties** dialog itself.

You can also display the **Advanced Properties** window by right-clicking the object and selecting **All Tasks > Advanced Properties**.

How to modify Organizational Unit properties

You can modify the properties of Active Directory Organizational Units (OUs) with the Active Roles Console.

To modify Organizational Unit properties

1. In the **Console tree**, locate the OU you want to modify.
2. Right-click the OU, then click **Properties**.
3. Use the tabs in the **Properties** dialog to view or modify properties of the OU.
4. If you want to view or modify additional properties (those for which the tabs in the **Properties** dialog do not provide data entries), navigate to the **Object** tab and click **Advanced Properties**.
5. After setting all the properties you want, click **OK**.

NOTE: Consider the following when modifying OU properties:

- You can also access the **Advanced Properties** dialog for an object by right-clicking the account and selecting **All Tasks > Advanced Properties**.
- To locate the object that you want to modify, use the **Find** function of Active Roles. Once you found the object, open the **Properties** page by right-clicking the object, and clicking **Properties**.

Renaming an Organizational Unit

To rename an OU, right-click the OU, and click **Rename**. Type the new name and press **ENTER**.

How to rename an Organizational Unit

You can rename Active Directory Organizational Units (OUs) with the Active Roles Console.

To rename an Organizational Unit

1. In the **Console tree**, locate the OU you want to rename.
2. Right-click the OU, then click **Rename**.

3. Type a new name, then press **ENTER**.

To locate the OU you want to rename, use the **Find** function of Active Roles. Once you found the OU, rename it by selecting it in the list of search results, right-clicking it, clicking **Rename**, then specifying the new name.

Moving an Organizational Unit

To move an Organizational Unit (OU), right-click the OU, and click **Move**. In the **Move** dialog, select the container to which you want to move the OU.

NOTE: The Console provides the drag-and-drop function for moving objects. To move objects, you can drag the selection from the details pane to a destination container in the **Console tree**.

How to move an Organizational Unit

You can move Active Directory (AD) Organizational Units (OUs) from one AD container to another with the Active Roles Console.

To move an Organizational Unit

1. In the **Console tree**, locate the Organizational Unit you want to move.
2. Right-click the OU, then click **Move**.
3. In the **Move** dialog, select the folder to which you want to move the OU, then click **OK**.

NOTE: Consider the following when moving an OU:

- With Active Roles, Organizational Units, as well as other directory objects, can only be moved within the same domain. This means that the destination folder must belong to the same domain as the OU you want to move.
- The Console provides the drag-and-drop function for moving objects. To move objects, you can drag the selection from the details pane to a destination container in the **Console tree**.

Deleting an Organizational Unit

To delete an OU, right-click the OU, and click **Delete**. If the OU contains any objects, the **Delete Objects** dialog appears. You can delete the OU and all objects it contains: select the **Apply to all items** check box, and click **Yes**.

How to delete an Organizational Unit

You can delete Active Directory Organizational Units (OUs) with the Active Roles Console.

To delete an Organizational Unit

1. In the **Console tree**, locate the OU you want to delete.
2. Right-click the Organizational Unit, and click **Delete**.

NOTE: Consider the following when deleting an Organizational Unit:

- If the selected OU contains any objects, the Active Roles Console will prompt you to confirm the deletion of those objects. You can either cancel or confirm the deletion of the OU along with every object it contains.
- When attempting to delete an OU, you may receive an error message that access is denied to the OU. This can typically occur if the OU is protected from deletion. To remove this protection, navigate to the **Properties > Object** tab of the OU you want to delete, then clear the **Protect object from accidental deletion** check box. After that, try deleting the OU again.

Contact management

A contact is an Active Directory object that holds email and telephone information about an individual, without giving that person a security account on the network.

Contacts do not have a security identifier, unlike user accounts and groups. Contacts are used to add members to distribution lists or groups without granting them access to network resources.

You can use Active Roles to create, modify, and delete contacts. You can also perform Exchange-related tasks such as establishing email addresses for contacts.

The following section describes how to use the Active Roles Console to manage contacts. You can also use the Active Roles Web Interface to perform contact management tasks.

Creating a contact

To create a new contact, in the **Console tree**, right-click the container where you want to add the contact, select **New > Contact**, then follow the instructions in the wizard.

In the wizard, some property labels may be displayed as hyperlinks. The hyperlink indicates that Active Roles enforces certain policy restrictions on the property. To examine policy details, click the hyperlink: the policy information is displayed. For more information, see [Getting policy-related information](#).

Figure 22: Creating a contact

The screenshot shows a Windows-style dialog box titled "New Object - Contact". The title bar includes a question mark icon and a close button (X). Below the title bar, there is a small icon of a document with a list and the text "Create in: ResDomain.msk.qsft/ABC Company/Contacts". The main area of the dialog contains four text input fields: "First name:" (with a small "I"nitials:" field to its right), "Last name:", "Full name:", and "Display name:". At the bottom of the dialog, there are four buttons: "< Back", "Next >", "Cancel", and "Help".

The policy information is also displayed whenever you supply a property value that violates a policy restriction. The wizard cannot proceed until you enter an acceptable value.

How to create a contact

You can create new Active Directory contacts with the Active Roles Console.

To create a contact

1. In the **Console tree**, locate and select the folder in which you want to add the contact.
2. Right-click the folder, point to **New** and click **Contact** to start the **New Object - Contact** wizard.

3. Follow the wizard pages to specify properties of the new contact, such as the contact's first name, last name, full name, display name, and Exchange email address settings.
4. If you want to set values for additional properties (those for which the wizard pages do not provide data entries), click **Edit Attributes** on the completion page of the wizard.
5. After setting any additional properties, click **Finish** on the completion page of the wizard.

Finding a contact

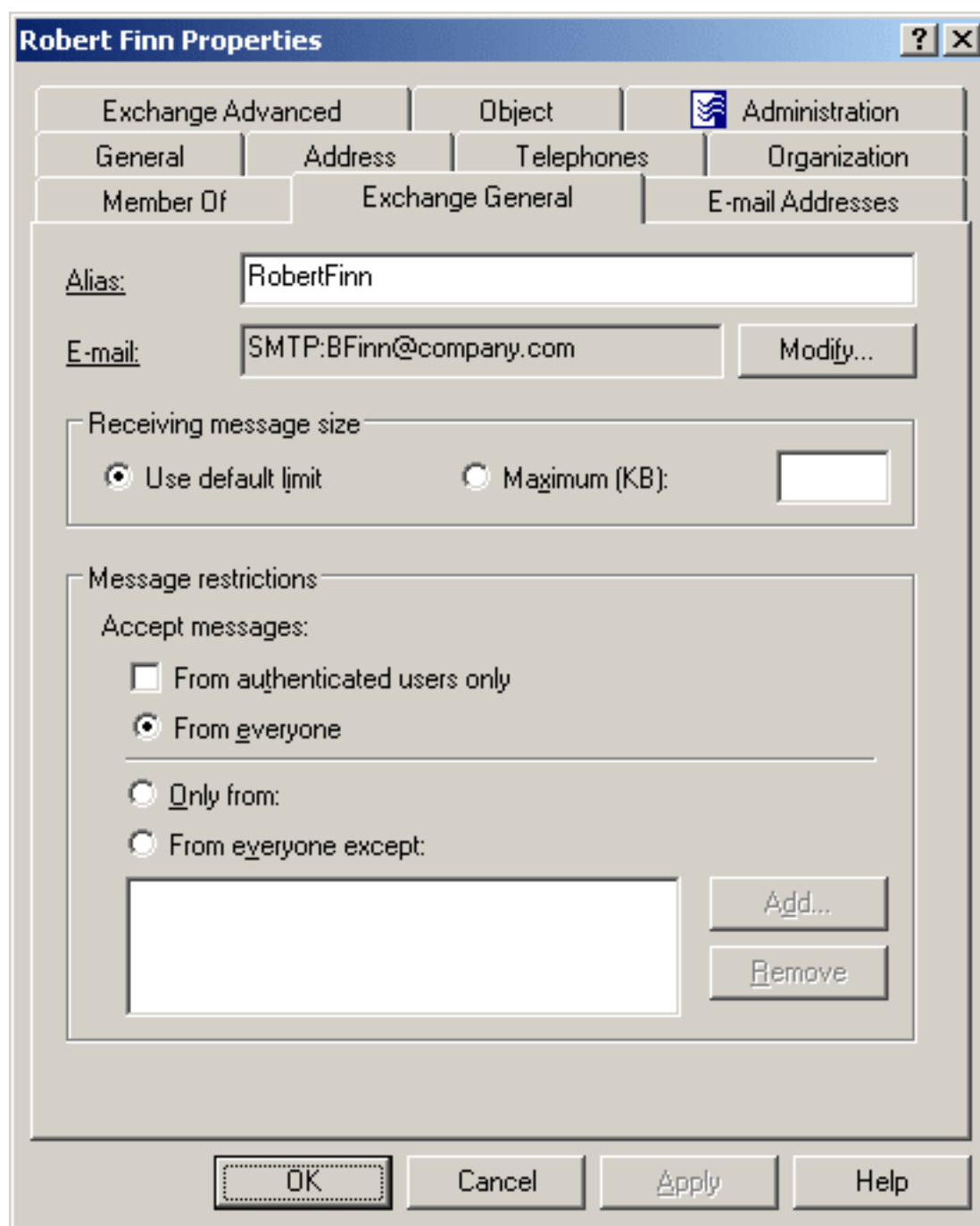
To find a contact, right-click the container you want to search and click **Find**. In the **Find** window, select **Contacts** from the **Find** list, specify your search criteria, and start the search. In the search results list, you can right-click contacts and use commands on the shortcut menu to perform management activities.

For step-by-step instructions on how to search for contacts, see [Searching for a user, contact, or group](#).

Modifying contact properties

To modify contact properties, right-click the contact, then click **Properties**. You can make changes to contact properties in the **Properties** dialog, shown in the following figure.

Figure 23: Modifying contact properties



In the wizard, some property labels may be displayed as hyperlinks. The hyperlink indicates that Active Roles enforces certain policy restrictions on the property. To examine policy details, click the hyperlink: the policy information is displayed. For more information, see [Getting policy-related information](#).

The policy information is also displayed whenever you supply a property value that violates a policy restriction. The wizard cannot proceed until you enter an acceptable value.

You can use the **Properties** dialog to view or modify any property of the object by navigating to the **Object** tab and clicking **Advanced Properties**. In the **Advanced Properties** window you can manage all properties, including those that cannot be accessed via the **Properties** dialog itself.

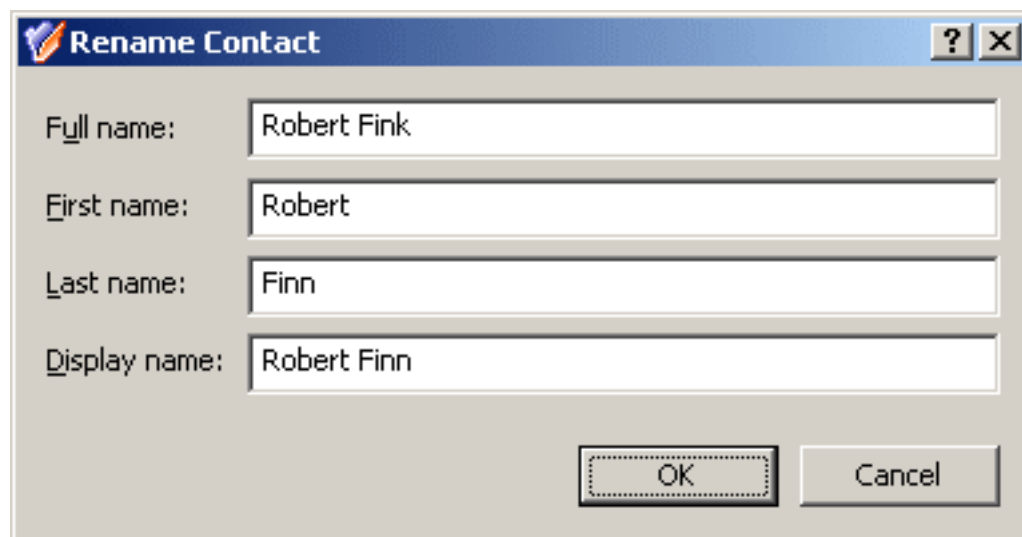
You can also display the **Advanced Properties** window by right-clicking the object and selecting **All Tasks > Advanced Properties**.

The instructions on how to manage contact properties are similar to those for user accounts, see [How to modify user account properties](#).

Renaming a contact

To rename a contact, right-click the contact and click **Rename**. Type a new name and press **ENTER**. This displays the **Rename Contact** dialog where you can change the first name, last name, and display name of the contact.

Figure 24: Rename Contact



The screenshot shows a dialog box titled "Rename Contact" with a blue header bar containing a question mark and a close button. The dialog has a light gray background and contains four text input fields stacked vertically. The first field is labeled "Full name:" and contains the text "Robert Fink". The second field is labeled "First name:" and contains "Robert". The third field is labeled "Last name:" and contains "Finn". The fourth field is labeled "Display name:" and contains "Robert Finn". At the bottom of the dialog, there are two buttons: "OK" and "Cancel". The "OK" button is highlighted with a dashed border.

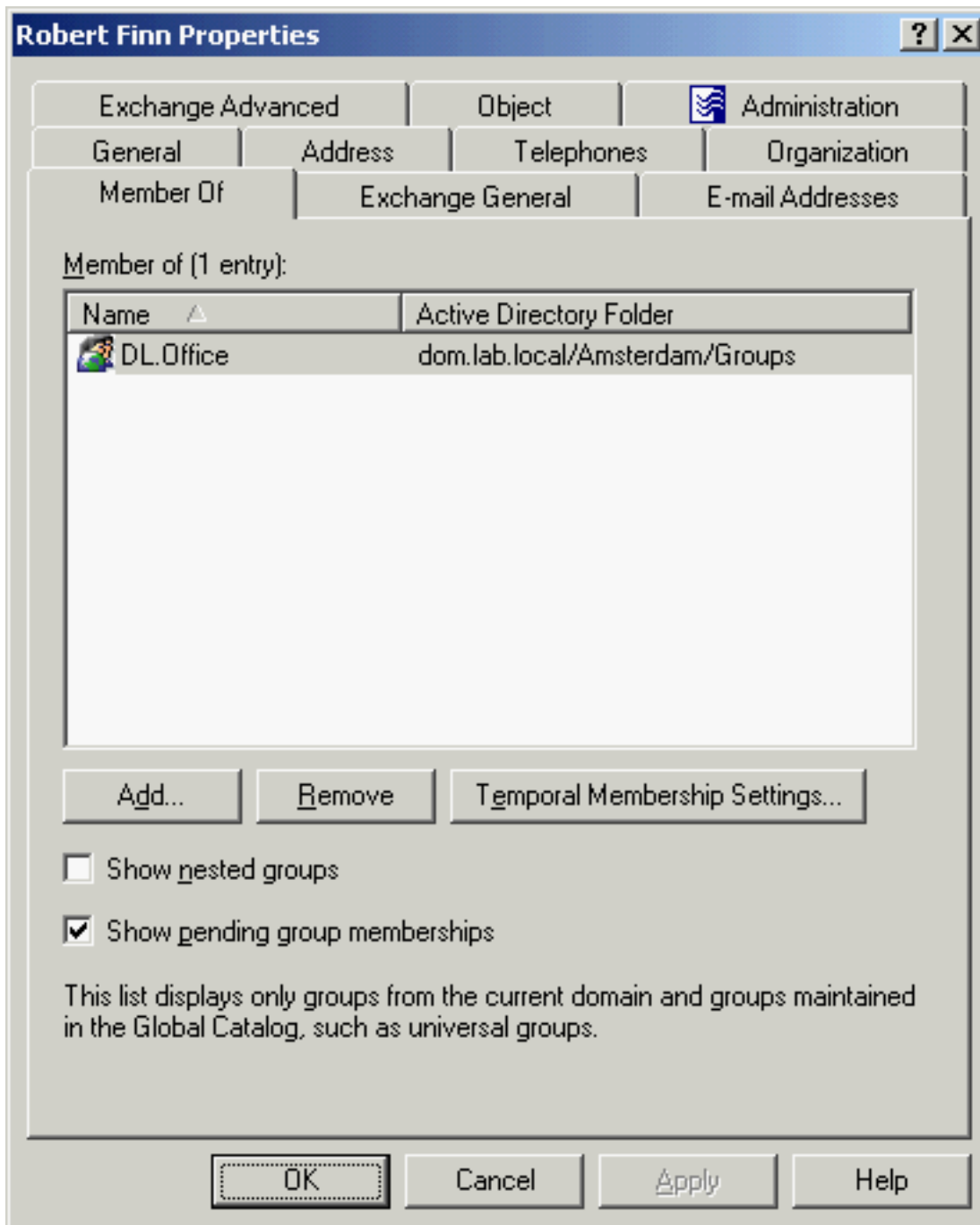
Adding and removing a contact from a group

To add contacts to groups, select the contacts, right-click the selection, and click **Add to a Group**. This displays the **Select Objects** dialog where you can select the groups to which you want to add the contacts. For more information, see [Adding a user account to a group](#).

You can also add or remove a contact from groups by modifying the group membership list on the **Member Of** tab in the **Properties** dialog. To display the **Properties** dialog, right-

click the contact and click **Properties**. The **Member Of** tab looks as shown in the following figure.

Figure 25: Adding and removing contacts from groups



The **Member Of** tab lists the groups to which the contact belongs. If the **Show nested groups** check box is selected, the list also includes the groups to which the contact belongs due to group nesting.

The **Temporal Membership Settings** button can be used to specify the date and time when the contact should be added or removed from the selected groups. For more information about this feature, see [Using temporal group memberships](#).

You can modify the list on the **Member Of** tab using the **Add** and **Remove** buttons. Clicking **Add** displays the **Select Objects** dialog where you can type or select the names of the groups you want to add to the list. Clicking **Remove** deletes the selection from the list.

Performing Exchange tasks on a contact

To perform Exchange tasks on a contact, right-click the contact, click **Exchange Tasks**, and follow the instructions in the Exchange Task Wizard. The Exchange Task Wizard helps you manage Exchange recipients by providing a set of tasks that apply to the selected contact.

How to perform Exchange tasks on a contact

You can perform Exchange-related tasks (for example, creating or deleting email addresses) on Active Directory contacts with the Active Roles Console.

To perform Exchange tasks on a contact

1. In the **Console tree**, locate and select the folder that contains the contact you want to perform Exchange tasks on.
2. In the details pane, right-click the contact, then click **Exchange Tasks** to start the Exchange Task Wizard.
3. On the **Available Tasks** page of the wizard, select the task you want to perform.

The following tasks are available, depending on the selected group:

- **Establish E-mail Addresses:** The contact has no email address established. Establishes an external email address for the selected contact to include the address in the Exchange address list.
 - **Delete E-mail Addresses:** Contact has an email address established
4. On the next page of the wizard, do one of the following, depending on the selected task:
 - **Establish E-mail Addresses:** Specify the contact's alias and external email address.
 - **Delete E-mail Addresses:** Confirm the operation.
 5. On the completion page of the wizard, review the results of the task. To view the progress report, click **Back**. To close the wizard, click **Finish**.

NOTE: Consider the following when performing Exchange tasks on a contact:

- You can perform Exchange tasks on multiple objects at a time. To do so, start the Exchange Task Wizard by selecting the objects, right-clicking the selection, and clicking **Exchange Tasks**.
- To locate the objects on which you want to perform Exchange tasks, use the **Find** function of Active Roles. Once you found the objects, start the Exchange Task Wizard by selecting the objects in the list of search results, right-clicking the selection, and clicking **Exchange Tasks**.

Moving a contact

To move contacts to another container, select the contacts, right-click the selection, then click **Move**. In the **Move** dialog, select the container to which you want to move the contacts.

NOTE: The Console provides the drag-and-drop function for moving objects. To move objects, you can drag the selection from the details pane to a destination container in the **Console tree**.

Exporting and importing a contact

With the Active Roles Console, you can export contacts to an XML file and then import them from that file to populate a container in a different domain. The export and import operations provide a way to relocate contacts between domains.

To export contacts, select them, right-click the selection, and select **All Tasks > Export**. In the **Export Objects** dialog, specify the file where you want to save the data, and click **Save**.

To import contacts, right-click the container where you want to place the contacts, and then click **Import**. In the **Import Directory Objects** dialog, select the file to which the contacts were exported, and click **Open**.

Deleting a contact

To delete contacts, select them, right-click the selection, and click **Delete**. Then, click **Yes** to confirm the deletion. If you select multiple contacts, clicking **Delete** displays the **Delete Objects** dialog. To delete all the selected contacts, select the **Apply to all items** check box, then click **Yes**.

NOTE: Consider the following when deleting a contact:

- Deleting a contact is a destructive operation that cannot be undone. Also, if you re-create the contact with the same name later, the contact will not receive automatically the same distribution group and security group memberships that the deleted contact had. Instead, you must assign the previous memberships manually.
- By default, you cannot delete contacts that are protected from deletion. To delete a protected contact, first navigate to the **Properties > Object** tab of the contact, and clear the **Protect object from accidental deletion** check box. After that, you can delete the contact.

Exchange recipient management

You can perform the following Exchange recipient management tasks in the Active Roles Console.

- Creating an Exchange mailbox
- Performing Exchange tasks
- Managing Exchange-related properties
- Managing Unified Messaging users

Creating an Exchange mailbox

When creating a user account, the Active Roles Console provides the option to create a user mailbox for that user. User mailboxes are the most commonly used mailbox type, and it is typically the mailbox type that is assigned to users in an Exchange organization.

Additionally, the Console provides a number of commands for creating special-purpose mailboxes in an Exchange organization where Exchange is deployed. On a container, such as an Organizational Unit, each of these commands creates an inactive user account along with a special-purpose mailbox associated with that account:

- **New > Room Mailbox:** Creates a mailbox that is assigned to a meeting location, such as a conference room, auditorium, or training room. Room mailboxes can be included as resources in meeting requests, providing a simple and efficient way of organizing meetings for your users.
- **New > Equipment Mailbox:** Creates a mailbox that is assigned to a non-location specific resource, such as a portable computer projector, microphone, or a company car. Equipment mailboxes can be included as resources in meeting requests, providing a simple and efficient way of utilizing resources for your users.
- **New > Linked Mailbox:** Creates a mailbox that is assigned to an individual user in a separate, trusted forest. Linked mailboxes may be necessary for organizations that choose to deploy Exchange in a resource forest. The resource forest scenario allows an organization to centralize Exchange in a single forest, while allowing access to the Exchange organization with user accounts in one or more trusted forests.

- **New > Shared Mailbox:** Creates a mailbox that is not primarily assigned to a single user and is generally configured to allow login access for multiple users. The user account associated with a shared mailbox must be an inactive account. You can also specify a list of the mailbox users each of which will have full access to the shared mailbox.

Creating a user mailbox

When configuring a new user account, you can also create a mailbox for it. To create a user mailbox for an existing user account, use the **Exchange Tasks** command on that account. For more information, see [Performing Exchange tasks on a user account](#).

NOTE: You can only create mailboxes for users. You cannot create mailboxes for contacts.

To create a new user mailbox

1. In the **Console tree**, locate and select the folder in which you want to add the user account.
2. Right-click the folder, then click **New > User**.
3. Follow the wizard pages to specify properties of the new user account, such as the user first name, last name, full name, display name, login name, pre-Windows 2000 login name, and password.
4. When prompted for the user alias and mailbox location, accept or change the default alias setting, and select the mailbox database to hold the mailbox data. Optionally, specify a retention policy, Exchange ActiveSync mailbox policy, or address book policy for this mailbox.
5. Click **Finish** on the completion page of the wizard.

NOTE: The behavior of the wizard pages may vary depending on the configuration of Active Roles policies. To determine whether a given item on a page is under the control of a certain policy, observe the text label next to the item: the underlined text label indicates that some policy restrictions are in effect. Click underlined text labels to examine the policies that govern the behavior of the wizard pages.

Creating a room or equipment mailbox

You can create a room or equipment mailbox along with a new inactive user account that will be associated with the mailbox. To create a room or equipment mailbox associated with an existing inactive user account, use the **Exchange Tasks** command on that account. For more information, see [Performing Exchange tasks on a user account](#).

To create a new room or equipment mailbox

1. In the **Console tree**, locate and select the folder in which you want to add the user account.
2. Right-click the folder, point to **New**, then click one of the following:
 - To create a room mailbox, click **Room Mailbox**.
 - To create an equipment mailbox, click **Equipment Mailbox**.
3. Follow the wizard pages to specify properties of the new user account, such as the user first name, last name, full name, display name, login name, pre-Windows 2000 login name, and password.
4. When prompted for the user alias and mailbox location, accept or change the default alias setting, and select the mailbox database to hold the mailbox data. Optionally, specify a retention policy, Exchange ActiveSync mailbox policy, or address book policy for this mailbox.
5. (Optional) When prompted for the resource mailbox settings, specify the resource capacity and select the resource custom properties to add to the mailbox.

After the mailbox is created, you can view or change these settings in the **Properties** > **Resource Information** tab of the user account associated with the mailbox.

6. Click **Finish** on the completion page of the wizard.

Creating a linked mailbox

You can create a linked mailbox along with a new inactive user account that will be associated with the mailbox. To create a linked mailbox associated with an existing inactive user account, use the **Exchange Tasks** command on that account. For more information, see [Performing Exchange tasks on a user account](#).

To create a new linked mailbox

1. In the **Console tree**, locate and select the folder in which you want to add the user account.
2. Right-click the folder, then select **New** > **Linked Mailbox**.
3. Follow the wizard pages to specify properties of the new user account, such as the user first name, last name, full name, display name, login name, pre-Windows 2000 login name, and password.
4. When prompted for the user alias and mailbox location, accept or change the default alias setting, and select the mailbox database to hold the mailbox data. Optionally, specify a retention policy, Exchange ActiveSync mailbox policy, or address book policy for this mailbox.
5. When prompted for the linked master account, click **Browse** and select the user from a trusted forest or domain to which you want to assign the mailbox.

After the mailbox has been created, you can view or change this setting on the **Master Account** tab in the **Properties** dialog for the user account associated with the mailbox.

6. Click **Finish** on the completion page of the wizard.

Creating a shared mailbox

You can create a shared mailbox along with a new inactive user account that will be associated with the mailbox. To create a shared mailbox associated with an existing inactive user account, use the **Exchange Tasks** command on that account. For more information, see [Performing Exchange tasks on a user account](#).

To create a new shared mailbox

1. In the **Console tree**, locate and select the folder in which you want to add the user account.
2. Right-click the folder, then click **New > Shared Mailbox**.
3. Follow the wizard pages to specify properties of the new user account, such as the user first name, last name, full name, display name, login name, pre-Windows 2000 login name, and password.
4. When prompted for the user alias and mailbox location, accept or change the default alias setting, and select the mailbox database to hold the mailbox data. Optionally, specify a retention policy, Exchange ActiveSync mailbox policy, or address book policy for this mailbox.
5. (Optional) When prompted to specify the users who will have full access to the shared mailbox, click **Add**, then select the users you want.

After the mailbox is created, you can add or remove mailbox users in the **Properties > Mailbox Sharing** tab of the user account associated with the mailbox.

6. Click **Finish** on the completion page of the wizard.

Managing Exchange-related properties

For Exchange recipients (mail-enabled users, contacts and groups, and mailbox-enabled users) the **Properties** dialog includes the following tabs for managing Exchange-related properties:

- Exchange General tab
- Exchange Advanced tab
- E-mail Addresses tab
- Mail Flow Settings tab

- Mailbox Settings tab
- Mailbox Features tab
- Calendar Settings tab
- Resource Information tab
- Master Account tab
- Mailbox Sharing tab

Exchange General tab

For a mailbox-enabled user account, you can use the **Exchange General** tab to:

- Identify the mailbox type.
- Identify the Organizational Unit of the mailbox user account.
- Identify who last logged on to the mailbox.
- Identify the number of items held in the mailbox, and the size of the mailbox.
- Identify the mailbox database and server.
- Identify the archive database is an archive is enabled for the mailbox.
- View the date and time that the configuration of the mailbox was last modified.
- View or change the alias.
- Hide the mailbox from Exchange address lists.
- View or change custom attributes.

For a mail-enabled user account or contact, you can use the **Exchange General** tab to:

- View or change the alias.
- View or change the option to use MAPI rich text format.
- Hide the user or contact from Exchange address lists.
- View or change custom attributes.

For a mail-enabled (distribution) group, you can use the **Exchange General** tab to:

- View or change the alias and display name.
- View or change custom attributes.

Exchange Advanced tab

For a mailbox-enabled user account, you can use the **Exchange Advanced** tab to:

- View or change the simple display name.
The simple display name is used by systems that cannot interpret all of the characters in a normal display name.
- Downgrade high priority mail bound for X.400.
Use this option to downgrade email that is set for high priority delivery to an X.400-type email address. The downgrade causes the outbound email to conform to original 1984 X.400 conventions.
- View or change the Internet Locator Service (ILS) settings.
You can specify the Internet Locator Service (ILS) server and ILS account name for the mailbox.
- View or change mailbox rights.
You can specify mailbox permissions, assign mailbox permissions to users and groups, and change inherited permissions.
- View mailbox move status.
You can view status of mailbox move request, clear completed move request, or remove non-completed move request.

For a mail-enabled user or contact, you can use the **Exchange Advanced** tab to:

- View or change the simple display name.
- Downgrade high priority mail bound for X.400 (for a mail-enabled user).
- View or change the Internet Locator Service (ILS) settings.

For a mail-enabled (distribution) group, you can use the **Exchange Advanced** tab to:

- View or change the simple display name.
- Select the desired expansion server.
You can select a server in your Exchange organization that will be responsible for expanding the membership list for this mail-enabled (distribution) group.
- Hide the group from Exchange address lists.
- Choose whether to send out-of-office messages to message originators
- Select delivery report options.

E-mail Addresses tab

For a mailbox-enabled user account or a mail-enabled (distribution) group, you can use the **E-mail Addresses** tab to:

- View, add, edit or remove email addresses.
- View or change the default reply address for each address type.
- Set the option to update email addresses based on e-mail address policy.

For a mail-enabled user account or contact, you can use the **E-mail Addresses** tab to:

- View, add, edit or remove email addresses.
- View or change the default reply address for each address type.
- View or change the external e-mail address.
- Set the option to update email addresses based on email address policy.

Mail Flow Settings tab

For a mailbox-enabled user account, you can use the **Mail Flow Settings** tab to:

- View or change delivery options. You can configure users to send messages on behalf of the mailbox user, specify a forwarding address for messages addressed to the mailbox, and limit the number of recipients to whom the mailbox user can send a message.
- View or change message size restrictions and message delivery restrictions. You can specify the maximum size of incoming and outgoing messages for the mailbox, and also specify sender allow or deny lists, that is email addresses from which the mailbox can or cannot receive email.

For a mail-enabled user account or contact, you can use the **Mail Flow Settings** tab to:

- View or change message size restrictions and message delivery restrictions. You can specify the maximum size of incoming messages for the mailbox-enabled user or contact, and also specify sender allow or deny lists for them, that is email addresses from which the user or contact can or cannot receive emails.

For a mail-enabled (distribution) group, you can use the **Mail Flow Settings** tab to:

- View or change message size restrictions and message delivery restrictions. You can specify the maximum size of incoming messages for the group, and also specify sender allow or deny lists, that is email addresses from which the group can or cannot receive emails.
- View or change the message moderation settings. You can configure whether messages sent to the (distribution) group must be approved by a moderator before they are delivered to the group members.

Mailbox Settings tab

For a user account that has a mailbox on Exchange 2016 or later, you can use the **Mailbox Settings** tab to:

- View or change the messaging records management settings. You can select or suspend retention policy for the mailbox, place the mailbox on litigation hold to preserve deleted mailbox items and to record change made to mailbox items, specify the messaging records management description URL, and provide mailbox

comments.

- View or change storage quotas. You can specify storage limits that, when exceeded, result in the mailbox user being warned or prohibited from sending or receiving email. You can also select the number of days a deleted item is retained in the mailbox store before it is permanently deleted.
- View or change the archive quota. If archiving is enabled for the mailbox, you can view or change the archive size at which messages are no longer moved to the archive and a warning message is sent to the mailbox user.
- Apply a sharing policy to the mailbox. You can select the sharing policy you want to be associated with the mailbox. This enables the mailbox user to create sharing relationships with users in other external federated Exchange organizations or with individuals in non-Exchange organizations.
- Apply a role assignment policy to the mailbox. You can select the management role assignment policy you want to be associated with the mailbox. This policy controls what specific mailbox and distribution group configuration settings the mailbox user is allowed to modify.
- Apply an address book policy to the mailbox. You can select the address book policy you want to be associated with the mailbox. This policy defines the global address list and other address lists that the user will see in Outlook and Outlook Web App.

Mailbox Features tab

You can use the **Exchange Features** tab to manage a variety of mailbox features for the mailbox user. You can also change configuration settings for certain features by selecting a feature from the list, then clicking **Properties**.

The **Mailbox Features** tab includes the following settings:

- **Outlook Mobile Access:** Allows the user to browse the mailbox with a cell phone or other wireless devices.
- **Exchange ActiveSync:** Allows the user to access the mailbox from a mobile device. To apply an Exchange ActiveSync mailbox policy to the mailbox, select this setting, then click **Properties**.
- **Up-to-date Notifications:** Allows the user to apply notifications in order to keep the mailbox data on a mobile device always up to date.
- **IMAP4:** Allows the user to access the mailbox from an IMAP4 client such as Outlook Express. To configure the MIME format for messages retrieved from the server for the mailbox, select this setting, then click **Properties**. You can use the default protocol settings, or specify a custom setting that overrides the default protocol settings.
- **POP3:** Allows the user to access the mailbox from a POP3 client, such as Outlook Express. To configure the MIME format for the messages retrieved from the server for the mailbox, select this setting, then click **Properties**. You can use the default

protocol settings, or specify a custom setting that overrides the default protocol settings.

- **Outlook Web App:** Allows the user to access the mailbox from a web browser by using Microsoft Outlook Web App (formerly known as Outlook Web Access). To assign an Outlook Web App mailbox policy to the mailbox, select this setting, then click **Properties**. In Exchange 2016 or later, Outlook Web App mailbox policies can be used to manage access to Outlook Web App features, overriding the settings of the Outlook Web App virtual directory.
- **MAPI:** Allows the user to access the mailbox from a MAPI client such as Microsoft Outlook.
- **Archive:** If the mailbox is archive-enabled, you can view or change the archive properties. To enable or disable archiving for the mailbox, use the **Enable Archive** or **Disable Archive** task in the Exchange Task wizard. If an archive is enabled for the mailbox, click **Properties** to view or change the name of the archive associated with this mailbox.
- **Unified Messaging:** If the mailbox is enabled for Unified Messaging, you can view or change the Unified Messaging properties of the mailbox. To enable or disable the mailbox for Unified Messaging, use the **Enable Unified Messaging** or **Disable Unified Messaging** task in the Exchange Task wizard. If the mailbox is enabled for Unified Messaging, click **Properties** to view or change the Unified Messaging properties of this mailbox. For more information, see [Managing Unified Messaging users](#).

Calendar Settings tab

You can use the **Calendar Settings** tab to view or change the Calendar Attendant settings for the mailbox. The tab is available on (disabled) user accounts associated with a room or equipment mailbox in Microsoft Exchange.

The Calendar Attendant processes meeting requests as they come in, even if users are not currently logged on by means of a client such as Outlook. When enabled, the Calendar Attendant updates the time of the meeting on an attendee's calendar after receiving an update from the meeting organizer, and updates the attendee's response on the meeting organizer's calendar after receiving a response from the attendee.

The **Calendar Settings** tab provides the option to enable or disable the Calendar Attendant for the mailbox, and provides a number of options to control how the Calendar Attendant handles meeting requests and responses. If you enable the Calendar Attendant, the following options are available:

- **Remove meeting forward notifications to the Deleted Items folder:** This option causes the Calendar Attendant to delete notifications about forwarded meeting requests. Such a notification occurs when a meeting request created by the mailbox user is forwarded to a new recipient by one of the meeting attendees.
- **Remove old meeting requests and responses:** This option causes the Calendar Attendant to delete out-of-date meeting requests and responses from the **Inbox**

folder of the mailbox.

- **Mark new meeting requests as Tentative:** This option causes the Calendar Attendant to automatically place new meeting requests on the mailbox user's calendar and mark them as tentative, without sending a reply to the meeting organizer.
- **Process meeting requests and responses originating outside the Exchange organization:** This option causes the Calendar Attendant to automatically process requests and responses from external senders who are not a member of your Exchange organization.

Resource Information tab

On the **Resource Information** tab, you can view or change the resource mailbox settings. This tab is available only for resource mailboxes. For instructions on how to create a resource mailbox, see [Creating a room or equipment mailbox](#).

There are two types of resource mailboxes in Microsoft Exchange Server: room and equipment. Room mailboxes are assigned to a meeting location such as a conference room, auditorium, or training room. Equipment mailboxes are assigned to a resource that is not location specific, such as a portable computer projector, microphone, or company car.

The following fields provide users with general information about the resource:

- **Resource capacity:** Use this box on the **Resource Information** tab to type the capacity the resource can handle. For example, for a room mailbox, you can specify the number of people the room can accommodate. The value range is from 0 through 2,147,483,647.
- **Resource custom properties:** Custom resource properties can help users select the most appropriate room or equipment by providing additional information about the resource. For example, suppose a custom property for room mailboxes called **Audio-Visual** is defined in your Exchange organization. You can add this property to the room mailboxes for the rooms that have audio-visual equipment. This allows users to identify which conference rooms have audio-visual equipment available.

Click **Add** on the **Resource Information** tab to open a dialog allowing you to select custom properties. The dialog displays a list of all custom resource properties that are defined in your Exchange organization for the specific resource type (room or equipment). Select the custom resource properties you want to assign to this mailbox, and then click **OK**.

Click **Remove** to remove custom resource property from the resource mailbox.

With the supported Exchange versions, the following additional options are available:

- **Enable the Resource Booking Attendant:** Select this check box to allow the Resource Booking Attendant to process resource booking requests and cancellations. When enabled, the Resource Booking Attendant uses the booking policies to determine whether incoming requests will be accepted or declined. If the Resource

Booking Attendant is not enabled, the resource mailbox's delegate must accept or decline all requests.

- **Resource policy:** Click this button to view or change the options that determine under which conditions the resource mailbox automatically accepts requests. For more information, see [Resource Policy](#).
- **Resource information:** Click this button to view or change the options that specify the information that appears in the resource's calendar. For more information, see [Resource Information](#).
- **Resource in-policy requests:** Click this button to specify the users who are allowed to submit requests within the resource's policy configuration. For more information, see [Resource in-policy request](#).
- **Resource out-of-policy requests:** Click this button to specify the users who are allowed to submit requests that do not meet the resource's policy configuration. For more information, see [Resource out-of-policy request](#).

Resource Policy

Use the **Resource Policy** dialog to specify under which conditions the resource mailbox automatically accepts requests:

- **Allow conflict meeting requests:** Select this check box to allow conflicting meeting requests to be scheduled by the Resource Booking Attendant.
- **Allow repeating meetings:** Select this check box to allow repeating or recurring meetings to be scheduled.
- **Allow scheduling only during working hours:** Select this check box to allow scheduling for the resource to occur during working hours. Users can set working hours by using Outlook or Outlook Web App.
- **Reject repeating meetings that have an end date beyond the booking window:** Select this check box to allow the Resource Booking Attendant to reject recurring meeting requests that are outside of the resources booking window.
- **Booking window (days):** Use this box to specify the number of days that the resource can be booked in advance. For example, if the booking window is set for 90 days and a request is received for scheduling the resource 4 months from today's date, the Resource Booking Attendant rejects the request.
- **Maximum duration (minutes):** Use this box to specify the maximum number of minutes that the resource can be scheduled for.
- **Maximum conflict instances:** Use this box to specify the maximum number of conflicts allowed for recurring meetings. If the number of instances for a recurring meeting in conflict exceeds this number, the recurring meeting request is declined.
- **Conflict percentage allowed:** Use this box to specify the conflict percentage threshold from recurring meetings. If the percentage of instances of a recurring meeting that conflicts with other meetings exceeds the threshold, the recurring meeting request is declined.

- **Specify delegates of this mailbox:** Click **Add** to add delegates who can control the scheduling options for the resource mailbox. Click **Remove** to remove delegates from this resource mailbox.
- **Forward meeting requests to delegates:** Select this check box to forward all meeting requests to the delegates.

Resource Information

Use the **Resource Information** dialog box to specify the meeting information that appears in the resource's calendar:

- **Delete attachments:** Select this check box to remove attachments from all incoming requests.
- **Delete comments:** Select this check box to remove any text in the message body of incoming requests.
- **Delete the subject:** Select this check box to remove the subject of all incoming requests.
- **Delete non-calendar items:** Select this check box to remove all non-calendar Outlook items received by the mailbox.
- **Add the organizer's name to the subject:** Select this check box to specify whether the resource requester's name is added to the subject of the request.
- **Remove the private flag on an accepted meeting:** Select this check box to clear the private flag for all incoming requests.
- **Send organizer information when a meeting request is declined because of conflicts:** Select this check box to send the meeting organizer information regarding declined requests.
- **Customize the response message that organizers will receive:** Select the **Add additional text** check box to customize the message that the requester receives when the meeting has been declined, and then type the additional information in the **Additional text** field.
- **Mark pending requests as Tentative on the calendar:** Select this check box to specify that all pending requests are marked as Tentative in the resource's calendar. The delegate can then accept or deny the request as needed.

Resource in-policy request

Use the **Resource In-Policy Requests** dialog box to specify the users who are allowed to submit requests within the resource policy's configuration:

- **Specify users who are allowed to submit in-policy meeting requests that will be automatically approved:** Click **All users** or **Selected recipients**. If you click **Selected recipients**, you need to click **Add** to select the recipients. You can

also remove selected recipients by clicking **Remove**.

- **Specify who can submit in-policy meeting requests that are subject to approval by a resource mailbox delegate:** Click **All users** or **Selected recipients**. If you click **Selected recipients**, you need to click **Add** to select the recipients. You can also remove selected recipients by clicking **Remove**.

Resource out-of-policy request

Use the **Resource Out-of-Policy Requests** dialog to specify the users who are allowed to submit resource requests that do not meet the resource's policy configuration. Users who have permission to submit out-of-policy requests will not have their request denied, but the requests require approval by one of the resource's delegates:

- **All users:** Choose this option to allow all users to submit out-of-policy requests.
- **Selected recipients:** Choose this option to allow specific users to submit out-of-policy requests. If you choose this option, you need to click **Add** to select the users. You can also remove selected users by clicking **Remove**.

Master Account tab

Use the **Master Account** tab to view or change information about the master account for the linked mailbox. This tab is available only for linked mailboxes. For instructions on how to create a linked mailbox, see [Creating a linked mailbox](#).

Linked mailboxes are mailboxes that are accessed by users in a separate, trusted forest. Linked mailboxes may be necessary for organizations that choose to deploy Exchange in a resource forest. The resource forest scenario allows an organization to centralize Exchange in a single forest, while allowing access to the Exchange organization with user accounts in one or more trusted forests. The linked master account is the user account that will be used to access the linked mailbox.

From the **Master Account** tab you can view the current master account or choose a different master account for the linked mailbox. Click **Browse** next to the **Linked master account** box and then use the **Select Objects** dialog to select the user account you want to be used to access this linked mailbox. Select a user account from a forest or domain trusted by the forest or domain where Exchange is deployed.

Mailbox Sharing tab

Use the **Mailbox Sharing** tab to view or change information about the users who have full access to the shared mailbox. This tab is available only for shared mailboxes. For instructions on how to create a shared mailbox, see [Creating a shared mailbox](#).

Shared mailboxes are generally configured to allow login access for multiple users. Although it is possible to grant additional users, the login rights to any mailbox type, shared

mailboxes are dedicated for this functionality. The user account that is associated with a shared mailbox must be a disabled account. From this page, you can grant permissions to all users that require access to the shared mailbox.

From this tab, you can view or change a list of mailbox users. These are the users who can log on to the shared mailbox and have full access to the mailbox contents. They can use the mailbox to send and receive messages, manage contacts, schedule meetings, and maintain a task list. You can add or remove mailbox users:

- Click **Add** on the **Mailbox Sharing** tab and then use the **Select Objects** dialog to select the users you want to have full access to the shared mailbox.
- If you want a certain user to no longer have access to the shared mailbox, select that user from the **Mailbox users** list and click **Remove**.

Managing Unified Messaging users

You can use Active Roles to configure Unified Messaging users. Unified Messaging is a technology in Microsoft Exchange Server that combines voice messaging and email messaging into one store, accessible from a telephone and a computer. Unified Messaging puts all email and voice messages into one Exchange mailbox that can be accessed from many different devices. Once a user has an Exchange mailbox, you can configure the user for Unified Messaging. This can be accomplished by using the Active Roles Console or Web Interface.

Enabling a user for Unified Messaging

When you enable a user for Unified Messaging (UM), Active Roles applies a default set of UM properties to the user, so that the user can use UM features. You have the option to add a Session Initiation Protocol (SIP) or E.164 address for the user. However, the user must still have an extension number configured.

You can configure the extension number automatically or manually when enabling the user for UM. An extension number is required for each UM-enabled user associated with a telephone extension, SIP Uniform Resource Identifier (URI), or E.164 dial plan. The extension number must be the correct number of digits, as specified in the UM dial plan for the UM mailbox policy. If the user is associated with an E.164 dial plan, you can manually configure an E.164 address for the user when you are enabling the user for UM. If you associate a user to a SIP URI or E.164 dial plan, you must manually enter an extension number and the SIP or E.164 address for the user.

To enable a user for Unified Messaging

1. Do one of the following, depending on whether you are using the Active Roles Console or Web Interface:

- a. In the Active Roles Console:
 1. Right-click the user, then click **Exchange Tasks**.
 2. Follow the steps in the Exchange Task wizard.
 3. On the **Available Tasks** page, click **Enable Unified Messaging**, then click **Next**.
 - b. In the Web Interface, click the user, then click the **Enable Unified Messaging** command.
2. On the **Unified Messaging Mailbox Policy** page, complete the following field:
 - a. **Unified Messaging mailbox policy:** Click **Browse** and select the UM mailbox policy that you want to associate with the user mailbox.

UM mailbox policies define settings such as PIN policies and dialing restrictions. Each UM-enabled user must be associated with a certain UM mailbox policy.
 3. Click **Next**.
 4. On the **Unified Messaging PIN** page, complete the following fields:
 - **Automatically generate PIN to access Outlook Voice Access:** Select this option to automatically generate a new PIN for the UM-enabled user. This is the default setting. If you select this option, a PIN is automatically generated based on the PIN policies configured on the user's UM mailbox policy. The automatically generated PIN will be sent in an email message to the user's mailbox.
 - **Manually specify PIN:** Select this option to manually specify a new PIN for the UM-enabled user. The PIN you specify with this option will be sent in an email message to the user's mailbox.

The PIN must comply with the PIN policies configured on the user's UM mailbox policy. For example, if the UM mailbox policy is configured to accept only PINs that contain five or more digits, you must specify a PIN at least five digits long.

 - **Require user to reset PIN on first telephone logon:** Select this check box to force the user to reset the UM PIN the first time that the user accesses the UM system from a telephone.

TIP: To help protecting mailbox data, One Identity recommends selecting this option, as changing the PIN after the first login is a security best practice.
 5. Click **Next**.
 6. On the **Extension Configuration** page, complete the following fields:
 - **Automatically-generated mailbox extension:** Select this option if you want the extension number for the user's mailbox to be automatically generated from the telephone number specified in Active Directory. This option is selected by default if the user's UM mailbox policy is associated with a Telephone Extension dial plan; otherwise, the option is unavailable. The automatically generated extension will be sent in an e-mail message to the user's mailbox.

The automatically generated extension will comply with the number of digits specified on the dial plan for the user's UM mailbox policy. For example, if the dial plan is configured to use 5-digit extension numbers, the UM server will take the last 5 digits of the user's telephone number and use those digits as the user's mailbox extension.

- **Manually-entered mailbox extension:** Select this option if you want to manually specify the extension number for the user's mailbox. The extension number you specify with this option will be sent in an email message to the user's mailbox.

The extension must comply with the number of digits specified on the dial plan for the user's UM mailbox policy. For example, if the dial plan is configured to use 5-digit extension numbers, you should specify an extension containing exactly 5 digits.

- **Automatically-generated SIP resource identifier:** Select this option if you want the SIP resource identifier or SIP address for the user's mailbox to be automatically generated. If Microsoft Office Communications Server is deployed in your organization, then the user's SIP address is taken from the `msRTC SIP-PrimaryUserAddress` attribute in Active Directory. If this attribute is not populated, the user's primary SMTP address will be used for the SIP address, such as `sam.smith@company.com`.

This option is available only if the user's UM mailbox policy is associated with a SIP URI dial plan. This option will be unavailable if the user's UM mailbox policy is associated with a Telephone Extension or E.164 dial plan.

This option also requires that you manually enter a mailbox extension for the user. This extension number is used when the user accesses the mailbox via Outlook Voice Access. The number of digits in the extension number must match the number of digits configured on the SIP URI dial plan for the user's UM mailbox policy.

- **Manually-entered SIP resource identifier:** Select this option if you want to manually enter the SIP or E.164 address for the user. This option is available if the user's UM mailbox policy is associated with either a SIP URI or E.164 dial plan. This option will be unavailable if the user's UM mailbox policy is associated with a Telephone Extension dial plan.

If the user's UM mailbox policy is associated with an E.164 dial plan, you have to enter an E.164 address for the user. The address must be in the correct E.164 format, such as `+14275551234`. If the user's UM mailbox policy is associated with a SIP URI dial plan, you have to enter a SIP address for the user. The address must be in the correct format, such as `sam.smith@company.com`.

This option also requires that you manually enter a mailbox extension for the user. This extension number is used when the user accesses the mailbox via Outlook Voice Access. The number of digits in the extension number must match the number of digits configured on the dial plan for the user's UM mailbox policy.

7. Do one of the following, depending on whether you are using the Active Roles Console or Web Interface:
 - In the Active Roles Console, click **Next** and wait while Active Roles performs the task. Then, click **Finish** to complete the wizard.
 - In the Web Interface, click **Finish** and wait while Active Roles performs the task.

After you have enabled a user for UM, you may also want to view or change the UM-related properties of that user. For more information, see [Viewing or changing the properties of a Unified Messaging-enabled user](#).

Viewing or changing the properties of a Unified Messaging-enabled user

You can use Active Roles to view or configure the Unified Messaging (UM) properties of a user who is enabled for UM. When you change a user's UM properties, you can control the user's access to various UM features. For example, you can enable or disable Automatic Speech Recognition (ASR) or fax receiving.

To view or change the UM properties of a UM-enabled user

1. Do one of the following, depending on whether you are using the Active Roles Console or Web Interface:
 - a. In the Active Roles Console:
 - i. Right-click the user, then click **Properties**.
 - ii. In the **Properties** dialog, click the **Mailbox Features** tab.
 - iii. On the **Mailbox Features** tab, click **Unified Messaging**, then click **Properties**.
 - b. In the Web Interface:
 - i. Click the user, then click the **Exchange Properties** command.
 - ii. On the **Exchange Properties** page, click the **Mailbox Features** tab.
 - iii. On the **Mailbox Features** tab, click **Unified Messaging**, then click **Properties**.
2. Use the **Unified Messaging Properties** dialog to view or change the following properties of the UM-enabled user:
 - **UM Mailbox Status:** This area shows the UM lockout status of the user's mailbox. Normally, the status is listed as **Not locked out**. The status of **Locked Out** indicates that the user is locked out of UM due to a number of attempts to enter an incorrect UM PIN in Outlook Voice Access.
 - **Unified Messaging mailbox policy:** This field shows the name of the UM mailbox policy associated with the UM-enabled user.

- **UM extensions:** This box displays the extension number and the Session Initiation Protocol (SIP) or E.164 address that are assigned to the UM-enabled user. The contents of this box depends upon the dial plan of the user's UM mailbox policy. With a Telephone Extension dial plan, only the extension number configured for the user appears in this box. With a SIP dial plan, the extension number and SIP address are listed. With an E.164 dial plan, the extension number and E.164 address are listed.
- **Enable for Automatic Speech Recognition:** When selected, this option indicates that the UM-enabled user can access the mailbox by means of Automatic Speech Recognition (ASR). This option is selected by default, which allows the user to use voice commands when accessing the mailbox via Outlook Voice Access. Even if enabled for ASR, the user must still use the keypad to enter the extension number and PIN.
- **Allow UM calls from non-users:** When selected, this option allows incoming calls from unauthenticated callers through an auto attendant to be transferred to the UM-enabled user. By default, this option is selected, allowing callers from outside your organization to be transferred to the user inside the organization.

If this option is not selected, then an external caller who tries to transfer to the user receives the following response from the UM system: "I'm sorry, I am unable to transfer the call to this user." The caller is then transferred to the operator configured on the auto attendant.

This option does not affect callers who have signed in to their mailbox using Outlook Voice Access and are sending a voice message to the user.

- **Allow the user to receive faxes:** When selected, this option allows the UM-enabled user to receive incoming faxes. By default, this option is selected. Unselect it if you do not want the user to receive incoming faxes.

This option is also configured on UM dial plans. If you select this option for a UM-enabled user, but the dial plan is configured to disallow fax receiving, the UM-enabled user is unable to receive faxes.

- **Allow diverted calls without a caller ID to leave a message:** When selected, this option indicates that, for diverted calls without a caller ID, the caller is allowed to leave a message in the user's mailbox. By default, this option is selected, which makes it possible for the UM-enabled user to accept anonymous calls.
- **Allow users to configure call answering rules:** When selected, this option allows the UM-enabled user to create personal auto attendants. This option is available to users with mailbox on a server running an Exchange instance which does not hold the role of a UM server. If this option is disabled on the UM dial plan or on the UM mailbox policy, it is not available to UM-enabled users associated with that UM mailbox policy.
- **Personal operator extension:** Use this field to specify the operator extension number for the user. This enables incoming calls for the UM-enabled user to be forwarded to the extension number that you specify in this field. By

default, an extension number is not configured. The range for the extension number is from 1 through 20 characters.

Other types of operator extensions can be configured on dial plans and auto attendants. However, those extensions are normally meant for company-wide receptionists or operators. The personal operator extension setting could be used when an administrative assistant or personal assistant answers incoming calls before they are answered by the user.

Resetting the Unified Messaging PIN for a UM-enabled user

When a Unified Messaging-enabled (UM-enabled) user is locked out of the mailbox because of a number of attempts to enter an incorrect UM PIN in Outlook Voice Access, or the user forgot the PIN, you can use Active Roles to reset the user's PIN. When you reset a user's PIN, you can configure UM to automatically generate a PIN or you can manually specify the PIN. The new PIN is e-mailed to the user. If you prefer, you can specify additional PIN options when resetting the user's PIN.

To reset the Unified Messaging PIN for a UM-enabled user

1. Do one of the following, depending on whether you are using the Active Roles Console or Web Interface:
 - In the Active Roles Console:
 - a. Right-click the user, then click **Exchange Tasks**.
 - b. Follow the steps in the Exchange Task wizard.
 - c. On the **Available Tasks** page, click **Reset Unified Messaging PIN**, then click **Next**.
 - In the Web Interface, click the user, then click the **Reset Unified Messaging PIN** command.
2. On the **Reset Unified Messaging PIN** page, complete the following fields:
 - **Automatically generate PIN to access Outlook Voice Access:** Select this option to automatically generate a new PIN for the UM-enabled user. This is the default setting. If you select this option, a PIN is automatically generated based on the PIN policies configured on the user's UM mailbox policy. The automatically generated PIN will be sent in an email message to the user's mailbox.
 - **Manually specify PIN:** Select this option to manually specify a new PIN for the UM-enabled user. The PIN you specify with this option will be sent in an email message to the user's mailbox.

The PIN must comply with the PIN policies configured on the user's UM mailbox policy. For example, if the UM mailbox policy is configured to accept only PINs that contain five or more digits, you must specify a PIN at least five digits long.

- **Require user to reset PIN on first telephone logon:** Select this check box to force the user to reset the UM PIN the first time that the user accesses the UM system from a telephone.
 | **TIP:** To help protecting mailbox data, One Identity recommends selecting this option, as changing the PIN after the first login is a security best practice.
 - **Require user to reset PIN at first logon:** Select this check box to force the user to change the UM PIN the first time that the user accesses the UM system from a telephone after you reset the PIN.
 | **TIP:** To help protecting mailbox data, One Identity recommends selecting this option, as changing the PIN after the first login is a security best practice.
3. Do one of the following, depending on whether you are using the Active Roles Console or Web Interface:
 - In the Active Roles Console, click **Next** and wait while Active Roles performs the task. Then, click **Finish** to complete the wizard.
 - In the Web Interface, click **Finish** and wait while Active Roles performs the task.

Disabling Unified Messaging for a user

You can disable Unified Messaging (UM) for a UM-enabled user, so that the user cannot use the UM features of Microsoft Exchange Server. However, even if UM is disabled for a user, its UM settings are kept, so you can reenable them later at any time.

To disable Unified Messaging for a user by using the Active Roles Console

1. Right-click the user, then click **Exchange Tasks**.
2. Follow the steps in the Exchange Task wizard.
3. On the **Available Tasks** page in the Exchange Task wizard, click **Disable Unified Messaging**, then click **Next**.
 | **NOTE:** This setting appears only for users who have UM enabled.
4. On the **Disable Unified Messaging** page in the Exchange Task wizard, click **Next** to confirm that you want to disable UM for the user.
5. Wait while Active Roles performs the task.
6. Click **Finish** on the completion page of the wizard.

TIP: You can also disable UM for a UM-enabled user via the Active Roles Web Interface. To do so, in the Web Interface, click the user, then click **Disable Unified Messaging**. As with the Exchange Task wizard in the Active Roles Console, the **Disable Unified Messaging** command only appears for users who have UM enabled.

About us

One Identity solutions eliminate the complexities and time-consuming processes often required to govern identities, manage privileged accounts and control access. Our solutions enhance business agility while addressing your IAM challenges with on-premises, cloud and hybrid environments.

Contacting us

For sales and other inquiries, such as licensing, support, and renewals, visit <https://www.oneidentity.com/company/contact-us.aspx>.

Technical support resources

Technical support is available to One Identity customers with a valid maintenance contract and customers who have trial versions. You can access the Support Portal at <https://support.oneidentity.com/>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

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