Trademarks

Quest, Quest Software, the Quest Software logo, AccessManager, ActiveRoles, Aelita, Akonix, AppAssure, Benchmark Factory, Big Brother, BusinessInsight, ChangeAuditor, ChangeManager, DeployDirector, DirectoryAnalyzer, DirectoryTroubleshooter, DS Analyzer, DS Expert, ERDisk, Foglight, GPOADmin, Imceda, IntelliProfile, InTrust, Invirus, iT e n, i/Watch, JClass, Jint, JProbe, LeccoTech, LiteSpeed, LiveReorg, LogADmin, MessageStats, Monosphere, NBSpool, NetBase, NetControl, Npulse, NetPro, PassGo, PerformaSure, Quest Central, Quest vToolkit, Quest vWorkSpace, ReportADmin, RestoreADmin, SelfServiceADmin, SharePlex, Sitraka, SmartAlarm, Spotlight, SQL LiteSpeed, SQL Navigator, SQL Watch, SQLab, Stat, StealthCollect, Storage Horizon, Tag and Follow, Toad, T.O.A.D., Toad World, vAutomator, vControl, vConverter, vFoglight, vOptimizer Pro, vPackager, vRanger, vRanger Pro, vSpotlight, vStream, vToad, Vintela, Virtual DBA, VizionCore, Vizioncore vAutomation Suite, Vizioncore vBackup, Vizioncore vEssentials, Vizioncore vMigrator, Vizioncore vReplicator, Vizioncore vTraffic, Vizioncore vWorkflow, WebDefender, Webthority, Xaffire, and XRT are trademarks and registered trademarks of Quest Software, Inc in the United States of America and other countries. Other trademarks and registered trademarks used in this guide are property of their respective owners.

Disclaimer

The information in this document is provided in connection with Quest products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest products. EXCEPT AS SET FORTH IN QUEST’S TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest does not make any commitment to update the information contained in this document.
## CONTENTS

**ABOUT THIS GUIDE** .......................................................... 5
- Intended Audience ............................................................ 6
- Conventions ......................................................................... 6
- About Quest Software, Inc. .................................................. 7
  - Contacting Quest Software ............................................... 7
  - Contacting Quest Support .................................................. 7
- Introduction ......................................................................... 8

### CHAPTER 1
**GETTING STARTED.** .......................................................... 9
- Preface .............................................................................. 10
- Configuring the Web Browser ............................................. 10
- Connecting to the Web Interface ......................................... 10
- Changing Local Settings ..................................................... 11
- Logging out of the Web Interface ....................................... 11

### CHAPTER 2
**WEB INTERFACE BASICS** ................................................ 13
- Administrative Tasks Overview ......................................... 14
  - Directory Management .................................................... 14
  - Customization ................................................................ 14
  - Settings ......................................................................... 15
  - Approval ........................................................................ 15
- User Interface Overview ..................................................... 16
- Changing View ................................................................... 19
  - Sorting and Filtering Lists of Objects .............................. 19
  - Choosing Columns in Lists of Objects .............................. 20
- Searching for Objects ....................................................... 20
  - Quick Search .................................................................. 20
  - Basic Search .................................................................... 21
  - Advanced Search ............................................................. 22
  - Custom Search ................................................................ 22

### CHAPTER 3
**PERFORMING MANAGEMENT TASKS.** ............................... 25
- Managing Active Directory Objects .................................... 26
  - Example 1: Enabling a User Account ............................... 27
  - Example 2: Adding a User to a Group ............................... 27
- Managing Temporal Group Memberships ............................. 28
  - Adding Temporal Members .............................................. 28
VIEWING TEMPORAL MEMBERS .................................................. 29
RESCHEDULING TEMPORAL GROUP MEMBERSHIPS .................. 29
REMOVING TEMPORAL MEMBERS ......................................... 30
MANAGING AD LDS DATA ....................................................... 31
MANAGING COMPUTER RESOURCES ...................................... 32
RESTORING DELETED OBJECTS ............................................... 33
FINDING AND LISTING DELETED OBJECTS .............................. 33
RESTORING A DELETED OBJECT ............................................. 35

CHAPTER 4
USING SELF-SERVICE MANAGER ........................................... 37
GETTING STARTED .............................................................. 38
INTRODUCING SELF-SERVICE MANAGER .............................. 38
EXPLORING SELF-SERVICE MANAGER .................................. 38
MY ACCOUNT ................................................................. 39
MY REQUESTS .................................................................. 40
LOCATING APPROVAL ITEMS. ................................................ 40
USING “MY TASKS” ............................................................ 42
USING “MY OPERATIONS” .................................................... 42
MY ACCESS .................................................................. 43
EXPLORING THE MY ACCESS LIST ....................................... 43
ADDING OR REMOVING YOURSELF FROM GROUPS ................. 44
MY GROUPS ................................................................. 47
LOCATING GROUPS IN THE MY GROUPS LIST ......................... 47
INSPECTING A GROUP ........................................................ 48
MAKING CHANGES TO A GROUP ......................................... 48
DESIGNATING GROUP OWNERS ........................................... 49
MY REVIEWS ................................................................. 50
VIEW OR MODIFY GROUPS .................................................. 50
CERTIFY (ATTEST) GROUPS .................................................. 51
About This Guide

- Intended Audience
- Conventions
- About Quest Software, Inc.
- Contacting Quest Software
- Contacting Quest Support
- Introduction
Intended Audience

This document has been prepared to assist you in becoming familiar with the Quest ActiveRoles Server Web Interface. The User Guide contains the information required to configure and use the Quest ActiveRoles Server Web Interface. It is intended for network administrators, consultants, analysts, and any other IT professionals using the product.

Conventions

In order to help you get the most out of this guide, we have used specific formatting conventions. These conventions apply to procedures, icons, keystrokes and cross-references.

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>CONVENTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select</td>
<td>This word refers to actions such as choosing or highlighting various interface elements, such as files and radio buttons.</td>
</tr>
<tr>
<td>Bolded text</td>
<td>Interface elements that appear in Quest Software products, such as menus and commands.</td>
</tr>
<tr>
<td>Italic text</td>
<td>Used for comments.</td>
</tr>
<tr>
<td>Bold Italic text</td>
<td>Used for emphasis.</td>
</tr>
<tr>
<td>Blue text</td>
<td>Indicates a cross-reference. When viewed in Adobe® Reader®, this format can be used as a hyperlink.</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Used to highlight additional information pertinent to the process being described.</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Used to provide Best Practice information. A best practice details the recommended course of action for the best result.</td>
</tr>
<tr>
<td>![Icon]</td>
<td>Used to highlight processes that should be performed with care.</td>
</tr>
<tr>
<td>+</td>
<td>A plus sign between two keystrokes means that you must press them at the same time.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
About Quest Software, Inc.

Quest Software, Inc., a two-time winner of Microsoft’s Global Independent Software Vendor Partner of the Year award, delivers innovative products that help organizations get more performance and productivity from their applications, databases Windows infrastructure and virtual environments. Through a deep expertise in IT operations and a continued focus on what works best, Quest helps more than 100,000 customers worldwide meet higher expectations for enterprise IT. Quest’s Windows management solutions simplify, automate secure and extend Active Directory, Exchange Server, SharePoint, SQL Server, .NET and Windows Server as well as integrating Unix, Linux and Java into the managed environment. Quest Software can be found in offices around the globe and at www.quest.com.

Contacting Quest Software

Email info@quest.com
Mail Quest Software, Inc.
   World Headquarters
   5 Polaris Way
   Aliso Viejo, CA  92656
   USA
Web site www.quest.com

Refer to our Web site for regional and international office information.

Contacting Quest Support

Quest Support is available to customers who have a trial version of a Quest product or who have purchased a commercial version and have a valid maintenance contract. Quest Support provides around the clock coverage with SupportLink, our web self-service. Visit SupportLink at http://support.quest.com/

From SupportLink, you can do the following:

- Quickly find thousands of solutions (Knowledgebase articles/documents).
- Download patches and upgrades.
- Seek help from a Support engineer.
- Log and update your case, and check its status.

View the Global Support Guide for a detailed explanation of support programs, online services, contact information, and policy and procedures. The guide is available at http://support.quest.com/pdfs/Global Support Guide.pdf.

Note: This document is only available in English.
Introduction

ActiveRoles Server offers a convenient, easy-to-use, customizable Web Interface that enables authorized users to perform day-to-day administrative tasks, including user management tasks such as modifying personal data or adding users to groups. Via the Web Interface, an intranet user can connect to ActiveRoles Server using Microsoft Internet Explorer. A user sees only the commands, directory objects, and object properties to which the user’s role provides administrative access.

By default, the Web Interface includes three different sites—the site for Administrators, the site for Help Desk, and the site for self-administration. The site for Administrators supports a rich variety of administrative tasks, while the site for Help Desk supports a simplified set of tasks to expedite the resolution of trouble tickets. The site for self-administration is intended for managing personal accounts.

The Web Interface also allows setting the user interface language according to your preferences. The language setting has effect on all menus, commands, and forms that come with the Web Interface, as well as the tool tips and help. Thus, users can work with the Web Interface in their own language.

The Web Interface delivers a reliable, comprehensive solution for users who have administrative access to ActiveRoles Server to modify commands that the Web Interface provides for without writing a single line of code, and enables such users to add and remove commands on menus, and modify command pages by adding and removing fields that display property values. For information on how to customize the Web interface, refer to the ActiveRoles Server Web Interface Administrator Guide.

The ActiveRoles Server Web Interface User Guide is for individuals who are responsible for performing day-to-day administrative tasks. This document provides a brief overview of the Web Interface, and includes step-by-step instructions on how to perform administrative tasks.
Getting Started

- Preface
- Configuring the Web Browser
- Connecting to the Web Interface
- Changing Local Settings
- Logging out of the Web Interface
Preface

The following sections describe the procedures for connecting to the Web Interface.

First, you must configure your Web browser to display the Web Interface pages properly. Then, connect to the Web Interface. Finally, you may specify personal settings such as the user interface language.

Configuring the Web Browser

Before connecting to the Web Interface, you should verify that your Web browser is configured properly. Use the following instructions to configure Microsoft’s Internet Explorer to meet the requirements of the ActiveRoles Server Web Interface.

To configure Internet Explorer

1. Start Internet Explorer.
2. On the Tools menu, click Internet Options.
3. In the Internet Options dialog box, click the Security tab.
4. On the Security tab, click Local intranet, and then click Custom Level.
5. In the Security Settings dialog box, make sure that the Enable option is selected for Scripting | Scripting of Java applets.
6. Click OK to close the Security Settings dialog box.
7. In the Internet Options dialog box, click the Privacy tab.
8. In the Settings area, move the slider to select the Medium privacy setting, or click the Default button if the button is available.
9. Click OK to close the Internet Options dialog box.

Connecting to the Web Interface

To connect to the Web Interface

1. Start Internet Explorer.
2. In the Address field, type the address of the Web Interface site. Then, press ENTER.

   For example, you might type http://comp/ARServerHelpDesk if the Web Interface site for Help Desk is installed to the default Web site on the computer comp in the directory ARServerHelpDesk.

   Once the Web browser has established a connection to the Web Interface, it displays the Web Interface home page.

Changing Local Settings

When using the Web Interface, you can specify the Web Interface settings:

- **User interface language** The language of the Web Interface pages. This setting influences all menus, commands, and forms of the Web Interface, as well as tool tips and help, allowing the user to view the Web Interface pages in the selected language.

- **Number of objects to display per page** Determines the maximum number of object list items displayed on a single page in the Web Interface.

- **Number of page links to display for object list** Determines the maximum number of separate links to groups of object list items on Web Interface pages. The Web Interface displays list items in groups of a certain number of items per page. The user can move from page to page by clicking page numbers beneath the list. This option determines how many page numbers are to be shown.

These settings are saved on the local computer, that is, on the computer running the Web browser. The settings are stored on a per-site basis.

To change the local settings

1. On the Web Interface home page, click **Settings**.
2. Configure the settings as needed.
3. Click **Save** for the changes to take effect.

Use the **Number of objects to display per page** option carefully. When you specify a small number, you will need to click page numbers at the bottom of the list to see more objects. However, specifying an unreasonably large number may result in network delays and cause performance degradation.

Logging out of the Web Interface

Logging out of the Web Interface can save Web Interface users from harmful security breaches. Users should log out of the Web Interface site when their work is completed. The **Logout** command on the menu bar at the top of the Web Interface page is used to close the current Web Interface session and delete all the session-related data from the local computer.

Not logging out of the Web Interface, and thus leaving the unused session open, may pose a serious security risk (for example, if the user fails to log out when working with the Web Interface from a public browser). The Web Interface addresses this problem with a mechanism that terminates the session due to user inactivity, thereby minimizing the window of opportunity for tampering with or taking over an abandoned session.

The Web Interface provides an inactivity timeout which is non-intrusive in the sense that the user’s session is not terminate unexpectedly causing a loss of unsaved work. Rather, the Web Interface displays a message box that gives the user the chance to prolong the session. If the user does not respond to the message box in a timely manner, the logout command is performed and the session is closed.

The administrator can specify the amount of continuous idle time that must pass in a Web Interface session before a message box pops up to prompt the user for an action. Another setting is a grace period between when the user is prompted for an action and when the user is actually logged out of the Web Interface.
Web Interface Basics

- Administrative Tasks Overview
- User Interface Overview
- Changing View
- Searching for Objects
Administrative Tasks Overview

The Web Interface home page displays categories of administrative tasks supported by the Web Interface. The same categories are displayed along the upper part of the Web Interface pages. Click a category to perform one of the following administrative tasks:

- **Directory Management** Manage directory data, such as users and groups. The scope of your authority depends upon permissions you are granted in the ActiveRoles Server environment.

- **Customization** Add, remove, or modify user interface elements, such as menu items (commands) and pages (forms), intended to manage directory data.

- **Settings** Set up your personal options that control the display of the Web Interface pages.

- **Approval** Perform the tasks related to approval of administrative operations. The scope of your responsibilities depends upon your role in the approval workflow processes.

The **Help** command is used to display Web Interface Help and technical information on the Web Interface. The **Logout** command is used to disconnect your Web Interface session.

Directory Management

**Directory Management** allows you to administer directory objects in your organization. Your ActiveRoles Server permissions determine which tasks you can perform.

**Directory Management** includes the following tasks:

- **Active Directory** Locate and administer directory objects, such as user accounts, groups, and computer accounts, using the directory tree.

- **Managed Units** Locate and administer directory objects using administrative views provided by Managed Units.

- **Search** Find directory objects to administer.

For information on how to administer Active Directory objects, see “Managing Active Directory Objects” later in this document.

For information on how to perform a search, see “Searching for Objects” later in this chapter.

Customization

**Customization** allows you to tailor the Web Interface to suit the specific needs of your organization. **Customization** is only displayed if you are logged on as an AR Server Admin (an ActiveRoles Server administrator). The AR Server Admin account is specified during installation of the ActiveRoles Server Administration Service.

**Customization** includes the following tasks:

- **Directory Objects** Modify menus, commands, and forms used for administering directory objects.

- **Restore Default** Restore the original (default) menus, commands, and forms, discarding all previous customizations.

- **Reload** Put into effect the menus, commands, and forms that you have customized.
As the customization settings are saved in the ActiveRoles Server database, they determine the configuration of the Web Interface site for all users. For information on how to customize the Web Interface, see “Customizing the Web Interface” in the ActiveRoles Server Web Interface Administrator Guide.

**Settings**

By using Settings you can specify:

- User interface language.
- Maximum number of items to include in a list at a time.
- Maximum number of page links to display for a list at a time.

The settings are saved locally, on the computer running the Web browser.

**Approval**

The Approval section provides you with tools for performing the tasks related to approval workflow. This section allows you to complete approval tasks assigned to you as an Approver, and to monitor the status of the operations that you initiated, if those require approval. For details on how to perform approval-related tasks, see “Using Approval Workflow” in the ActiveRoles Server Web Interface Administrator Guide or “Using Self-Service Manager” in the ActiveRoles Server Web Interface User Guide.
User Interface Overview

The Web Interface provides a number of features to lower the level of expertise needed to perform administrative tasks. The following figure provides a brief overview of the user interface components.

Navigation Bar

Use this area to navigate through administrative tasks supported by the Web Interface. The Navigation Bar includes these items:

- **Home** Displays the Web Interface home page.
- **Directory Management** Lets you perform management tasks on directory data.
- **Customization** Lets you customize Web Interface pages.
- **Approval** Lets you perform the tasks relating to approval of administrative actions.
- **Settings** Lets you view or modify settings that control the display of the Web Interface.
- **Help** Provides access to Web Interface Help.
- **Logout** Logs you off from the Web Interface, closing the Web session.

Path to Focus Object

Identifies the path in the directory to the object you are administering (focus object).

Click the name of an object in the path to shift the focus of the Web Interface to that object. For example, in this way you can display the contents of the container that holds the focus object.

Focus Object

Displays the name of the object you are administering. An icon next to the object name identifies the object type.
Command Menu
Displays a list of commands related to the object you are administering. If the Tree View is displayed in place of the Command Menu, click the MENU tab to access the Command Menu area.

Your ActiveRoles Server permissions determine which commands are available. The Command Menu only includes the commands for which you have sufficient permissions on the focus object. ActiveRoles Server administrators can customize the menu by adding and removing commands.

Drop-down Command Menu
Duplicates the list of commands found in the Command Menu area. You can select commands from that list when the Tree View is displayed in place of the Command Menu.

Tree View
Click the TREE tab to display the Tree View in place of the Command Menu. Intended for locating directory data, this view allows you to navigate through hierarchical structures of data containers, making the location of the data easily discoverable.

How Do I
The How Do I area displays the description of the selected command, and provides information on how to use the command.

Another form of user assistance is ToolTips. A ToolTip provides additional information about a particular item, such as a text box, check box, or button. A ToolTip is displayed when you point to a user interface element.

Quick Search
Use this area to search for objects whose names begin with the letters you type. Quick Search searches all domains registered with ActiveRoles Server (managed domains).

List of Objects
Displays a list of objects in the directory container or Managed Unit you have selected. The list only includes the objects you are permitted to view or modify. In the list, click an object to display the Command Menu for that object.

Change View
To change the display of the List of Objects area, point the button in the top left corner of that area, and click any of the following:

- Filter On or Filter Off  Hides or displays the Filter Bar.
- Choose Columns  Allows you to add or remove columns from the list. For more information, see “Choosing Columns in Lists of Objects” later in this chapter.
- Show All Objects  If a filter is applied using the Filter Bar, turns the filter off so as to display all items found in the list.
- Save to file  Allows you to export the list to a text file.
**Filter Bar**

Lets you filter the list by the value of an object property.

For example, you can type a few characters in the **Name** box in the Filter Bar and then press ENTER. The result is that the list only includes the objects with the names beginning with the characters you typed. To restore a complete list of objects after applying a filter, use the **Show All Objects** item in the Change View area. For more information, see “Sorting and Filtering Lists of Objects” later in this chapter.

**Object List Navigation**

Lets you navigate through pages in the list of objects. Click the page numbers to display objects not shown on the current page.

The following figure provides an overview of additional elements that are used to carry out commands, such as the **General Properties** command.

---

**Command Page**

The Command Page is the area where you can view or modify directory data. This area is located to the right of the Command Menu, and beneath the Focus Object name and path. The Command Page lets you supply information to carry out the command. To apply the changes you have made in the Command Page area, click the **Save** button.
Tabs
Click a tab to view or modify object properties. Each tab is intended to manage a certain collection of properties.

Click Here to Customize This Form
Click this link to add or remove user interface elements from the tab.

Changing View
A list of objects in the Web Interface has a number of features that help you locate the object you want to manage. Thus, you can sort objects in a list and apply a filter to a list. You can also display or hide columns in a list of objects.

Sorting and Filtering Lists of Objects
The Web Interface allows you to set a sort order and apply a filter in a list of objects.

To sort a list of objects by name
- Click the Name column heading once or twice to sort the list by object name in ascending or descending order.
  An arrow next to the column heading indicates the sort order.

You can sort a list by any indexed property. The column headings for such properties are underlined. Click any underlined heading to change the sort order. For information on how to add or remove columns, see "Choosing Columns in Lists of Objects" later in this chapter.

To apply a filter to a list of objects
1. Ensure that the Filter Bar is displayed: Point to the Change View button in the top left corner of the List of Objects area to see if Filter On is present on the shortcut menu. If so, click Filter On.
2. In the text box beneath a column heading, type a few characters, and then click the icon next to the text box or press ENTER.

Filtering object lists by object type requires that the object type be fully specified in the Type filter box. For example, to display all contacts, you must specify "contact", not "cont" or "cont*".

After you have applied a filter, the list only includes objects that match your filtering criteria. For example, you can type a few characters in the Name box and then press ENTER to display objects with the names beginning with the characters you typed. To restore a complete list of objects after applying a filter, point to the Change View button and click Show All Objects. You can hide the Filter Bar by pointing to the Change View button and then clicking Filter Off.
Choosing Columns in Lists of Objects

The Web Interface allows you to display or hide columns in a list of objects. Each column is intended to display a certain property of objects in the list, and can be used to set a sort order or apply a filter.

To display or hide columns in a list of objects

1. Point to the Change View button in the top left corner of the List of Objects area and click Choose Columns.
2. To display a column for a certain property, click the name of the property in the Hidden Columns list and click Add.
3. To hide a column for a certain property, click the name of the property in the Displayed Columns list and click Remove.

Searching for Objects

Search pages provide an alternative way for locating directory data. The search pages, in the advanced or basic mode, allow you to build very specific searches that produce concentrated and precise lists of search results.

Quick Search

The Web Interface supports a quick search for directory objects.

To perform a Quick Search

- In the Quick Search box, type a few characters and press ENTER.

  The Web Interface searches for objects whose names begin with the characters you typed, and displays a list of search results.

The Quick Search function performs a search in all the Active Directory domains that are registered with ActiveRoles Server (managed domains), regardless of which object you are currently administering. The search results only include the objects that you are permitted to view or modify.

The behavior of an item in a list of search results depends on the type of the object represented by that item:

- Clicking a leaf object, such as a user account, displays a page intended to view or modify object properties
- Clicking a container object, such as an organizational unit, displays a list of objects held in the container
Basic Search

The Web Interface includes search pages to locate objects of a certain type. The following figure shows a Basic Search page.

The Basic Search mode is mainly intended to find directory objects of a certain type by using the object name or description.

To perform a Basic Search

1. Point to Directory Management on the Navigation Bar and click Search.
2. In the Search Category area, click the type of objects you want to find.
3. In the Search Mode area, click the Basic tab.
4. Click the Browse button next to the Find in box to select the container or Managed Unit you want to search.
5. On the Basic Search tab, specify properties, such as the name or description, of the object you want to find.
   
   You do not need to specify an entire name or description. For example, you can type a part of a name to find all objects that have names beginning with the characters you typed.

6. Click Search.

You can hide or display the Search Options area by clicking Search Options.

Once your search is completed, the search results are listed at the bottom of the page. You can manage the list as follows:

- Click an object in the list to administer the object.
- Add and remove columns (see "Choosing Columns in Lists of Objects" earlier in this chapter).
- Set a sort order and apply a filter (see "Sorting and Filtering Lists of Objects" earlier in this chapter).
Advanced Search

In the Advanced Search mode, the Web Interface retains all characteristics that it exhibits in the Basic Search mode, plus the Advanced Search mode allows you to configure additional search criteria.

To perform an Advanced Search

1. Point to Directory Management on the Navigation Bar and click Search.
2. In the Search Category area, click the type of objects you want to find.
3. In the Search Mode area, click the Advanced tab.
4. Click the Browse button next to the Find in box to select the container or Managed Unit you want to search.
5. From the Field list, select the object property by which you want to search.
6. From the Condition list, select an operator to further define the search.
7. In the Value box, type the variable to use.
8. Click Add.
9. Repeat Steps 4–8 until you have entered your search criteria.
10. Click AND or OR, depending on whether you want to find objects that match all the search criteria or at least one of them.
11. Click Search.

Once your search is completed, the search results are listed at the bottom of the page.

You can hide or display the Search Options area by clicking Search Options.

Custom Search

The Web Interface also provides a powerful Custom Search, which combines search criteria for different objects into one search query, and enables an Advanced Search using an LDAP query.

To perform a Basic Custom Search

1. Point to Directory Management on the Navigation Bar and click Search.
2. In the Search Category area, click Custom Search.
3. Click the Browse button next to the Find in box to select the container or Managed Unit you want to search.
4. In the area under the Field label, do the following:
   5. Click the type of objects you want to find.
   6. Select the object property by which you want to search.
   7. From the Condition list, select an operator to further define the search.
   8. In the Value box, type the variable to use.
   9. Click Add.
10. Repeat Steps 3–7 until you have entered your search criteria.
11. Click AND or OR depending on whether you want to find objects that match all the search criteria or at least one of them.
12. Click Search.
To perform an Advanced Custom Search

1. Point to Directory Management on the Navigation Bar and click Search.
2. In the Search Category area, click Custom Search.
3. In the Search Mode area, click the Advanced tab.
4. Click the Browse button next to the Find in box to select the container or Managed Unit you want to search.
5. In the Enter LDAP query box, type a query that meets the Lightweight Directory Access Protocol (LDAP) standard.
6. Click Search.

Once your search is completed, the search results are listed at the bottom of the page.
Performing Management Tasks

- Managing Active Directory Objects
- Managing Temporal Group Memberships
- Managing AD LDS Data
- Managing Computer Resources
- Restoring Deleted Objects
Managing Active Directory Objects

The Directory Management section of the Web Interface allows you to administer directory objects in your organization, and includes the following task categories:

- **Active Directory** Administer Active Directory objects, such as user accounts, groups, and computer accounts.
- **Managed Units** Manage Active Directory objects located in Managed Units.
- **Search** Find objects in the directory.

Whether you can perform a certain management task depends on permissions granted to your user account, and the Web Interface customization settings.

A general procedure for performing a Directory Management task is as follows.

**To perform a management task**

1. Open your Web browser and connect to the Web Interface.
2. On the Web Interface home page, click **Directory Management**. This displays a page to administer directory objects.
3. On the Navigation Bar, point to **Directory Management** and do one of the following:
   - To manage objects in Active Directory containers, such as domains or organizational units, click **Active Directory**. This displays a list of Active Directory domains.
   - To manage directory objects in a certain Managed Unit, click **Managed Units**. This displays a list of Managed Units.
4. In the List of Objects area, click the object you want to administer.
5. In the Command Menu area, click the command you want to use.
6. Complete the operation. For information about the command you selected, refer to the How Do I area.

When performing management tasks, the Web Interface supplements and restricts the user input based on policies and permissions defined in ActiveRoles Server. The Web Interface displays property values generated according to the policies, and prohibits the input of data that breaks policy constraints. Thus, the Web Interface exhibits the following behavior:

- If a policy requires that a value be specified for a certain property (required property), that property is marked with an asterisk (*).
- If a policy imposes any restrictions on a property, a special icon is displayed next to the field for that property. Click the icon to view policy information, which you can use to enter an acceptable value.
- When you specify a property value that breaks policy constraints and click **Save**, an error message is displayed. Examine the error message and correct your input.
- The forms used to create an object must include the entries for all required properties. Otherwise, the Web Interface fails to create the object. For information on how to configure forms, see "Configuring Forms" in the ActiveRoles Server Web Interface Administrator Guide.
• The forms used to modify an object only display the values of the properties for which you have the Read permission. You can modify only those properties for which you have the Write permission. The properties for which you only have the Read permission are displayed as read-only.

• The Command Menu area includes only the commands that you are permitted to use.

• The List of Objects and Search Results areas display only the objects that you are permitted to view or modify.

ActiveRoles Server administrators (members of the AR Server Admin account) can customize the Web Interface pages by adding and removing commands, and modifying forms associated with commands. For more information, see “Customizing the Web Interface” in the ActiveRoles Server Web Interface Administrator Guide.

The Web Interface allows you to perform management tasks in the domains that are registered with ActiveRoles Server. When additional domains are registered, you need to re-connect to the Web Interface site in order to access the newly registered domains.

Example 1: Enabling a User Account

This walkthrough shows you how to enable a disabled user account.

To enable a user account

1. Open your Web browser and connect to the Web Interface.
2. On the Navigation Bar, point to Directory Management and click one of these items:
   • Active Directory, to locate the user account in an Active Directory container (Organizational Unit)
   • Managed Units, to locate the user account in a Managed Unit
3. Locate the user account you want to enable.
4. In the List of Objects area, click the user account.
5. In the Command Menu area, click Enable Account.

   If the user account is not disabled, the Command Menu area displays the Disable Account command instead of the Enable Account command.

Example 2: Adding a User to a Group

This walkthrough shows you how to add a user account to a group.

To add a user account to a group

1. In the Web Interface locate and select the user account.
2. In the Command Menu area, click Member Of.
3. On the Member Of page, click Add.
4. In the Select Object dialog box, click the group to which you want to add the selected user account, and then click Add.
Managing 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 ActiveRoles Server 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 ActiveRoles Server Web Interface. 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 Web Interface.

**To add temporal members of a group**

1. In the Web Interface, click the group, and then choose the Members command.
2. On the Members page, click Add.
3. In the Select Object dialog box find and select the objects that you want to make temporal members of the group, and then click Temporary Access.
4. In the Temporal Membership Settings dialog box, choose the appropriate options, and 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.

You can make an object a temporal member of particular groups by managing the object rather than the groups. Click the object, and then choose the Member Of command. On the Member Of page, click Add. In the Select Object dialog box, find and select the groups, and specify the temporal membership settings as appropriate for your situation.
Viewing Temporal Members

The list of group members displayed by the Web Interface 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 Web Interface, click the group, and then choose the Members command.
2. Examine the list on the Members page:
   • 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 Web Interface, click the object, and then choose the Member Of command.
2. Examine the list on the Member Of page:
   • 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 Web Interface.

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

1. In the Web Interface, click the group, and then choose the Members command.
2. In the list on the Members page, select the member and then click the Temporary Access button.
3. Use the Temporal Membership Settings dialog box to view or modify the start or end time settings.
The Temporal Membership Settings dialog box 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.

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. Click the object, and then choose the **Member Of** command. On the **Member Of** page, select the group for which you want to manage the object’s start or end time setting and click **Temporary Access**.

On the **Members** or **Member Of** page, you can change the start or end time setting for multiple members or groups at a time. In the list on the page, select two or more items and click **Temporary Access**. Then, in the Temporal Membership Settings dialog box, 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 Web Interface, click the group, and then choose the **Members** command.
2. On the **Members** page, select the member, and click **Remove**.

You can remove an object that is a temporal member of a group by managing the object rather than the group. Click the object, and then choose the **Member Of** command. On the **Member Of** page, select the group from the list and click **Remove**.
Managing AD LDS Data

The Web Interface provides the ability to manage directory data in Microsoft Active Directory Lightweight Directory Services (AD LDS)—an independent mode of Active Directory formerly known as Active Directory Application Mode (ADAM). Similarly to Active Directory domains, directory data can be managed in only the AD LDS instances that are registered with ActiveRoles Server (managed AD LDS instances).

The application directory partitions found on the managed AD LDS instances are grouped together in the AD LDS (ADAM) container, thus making it easy to locate the AD LDS data. Each directory partition is represented by a separate container (node) so you can browse the partition tree the same way you do for a managed Active Directory domain.

The Web Interface supports a wide range of administrative operations on AD LDS users, groups and other objects, so you can create, view, modify, and delete directory objects, such as users, groups, containers and organizational units, in AD LDS the same way you do when managing data in Active Directory.

To browse the directory tree in AD LDS directory partitions

2. In the left pane of the Web Interface page, click the TREE tab to display the Tree View area.
3. In the Tree View area, do the following:
   a) Expand the AD LDS (ADAM) container: Click the plus sign (+) next to the name of the container.
   b) Under AD LDS (ADAM), expand a directory partition object to view its top-level containers: Click the plus sign (+) next to the name of the directory partition.
   c) Expand a top-level container to view the next level of objects in that container: Click the plus sign (+) next to the name of the container.
4. Do one of the following:
   - To move down a directory tree branch, continue expanding the next lowest container level in the Tree View area.
   - To administer a directory object at the current directory level, click a container in the Tree View area, and use the instructions that follow.

To manage directory data in AD LDS

1. In the Tree View area, under AD LDS (ADAM), click the container that holds the data you want to manage.
2. In the Drop-down Command Menu area, click View Contents.
3. In the List of Objects area, click the object that represents the directory data you want to manage.
4. Use commands in the Drop-down Command Menu area to perform management tasks.

In the List of Objects area, clicking a leaf object, such as a user or group, displays a page intended to view or modify object properties; clicking a container object, such as a partition or an organizational unit, displays a list of objects held in that container.
Managing Computer Resources

You can use the Web Interface to manage the following computer resources:

- **Services** Start or stop a service, view or modify properties of a service.
- **Network File Shares** Create a file share, view or modify properties of a file share, stop sharing a folder.
- **Logical Printers** Pause, resume or cancel printing, list documents being printed, view or modify properties of a printer.
- **Documents being printed (print jobs)** Pause, resume, cancel or restart printing of a document, view or modify properties of a document being printed.
- **Local groups** Create or delete a group, add or remove members from a group, rename a group, view or modify properties of a group.
- **Local users** Create or delete a local user account, set a password for a local user account, rename a local user account, view or modify properties of a local user account.
- **Devices** View or modify properties of a logical device, start or stop a logical device.

**To manage computer resources**

1. Point to **Directory Management** on the Navigation Bar and then, on the **Directory Management** menu, do one of the following:
   - To locate a computer in an Active Directory container (organizational unit), click **Active Directory**.
   - To locate a computer in a Managed Unit, click **Managed Units**.
2. Locate the computer that hosts resources you want to manage.
3. In the List of Objects area, click the computer.
4. This displays the Command Menu for the selected computer.
5. In the Command Menu area, click **Manage**.
6. In the **Computer resources** list, click a link to manage a particular resource.
7. Use the Command Menu to perform a task.

The **Computer resources** list does not contain the **Local Groups** and **Local Users** items if the selected computer is a domain controller.

**To manage a print job**

1. Repeat Steps 1–4 of the previous procedure, to start managing computer resources.
2. In the **Computer resources** list, click **Printers**.
3. This displays a list of printers on the computer you selected.
4. In the list of printers, click a printer.
5. This displays the **Printer Properties** page.
6. In the Command Menu area, click **Print Jobs**.
7. This displays a list of documents being printed.
8. Click a document to pause, resume, restart, or cancel printing.
9. Use the Command Menu to perform a task.
Restoring Deleted Objects

Administrators can use the Web Interface to restore deleted objects in any managed domain that is configured to enable Active Directory Recycle Bin - a feature of Active Directory Domain Services introduced in Microsoft Windows Server 2008 R2 (see What’s New in AD DS: Active Directory Recycle Bin at http://go.microsoft.com/fwlink/?LinkId=141392).

To undo deletions, ActiveRoles Server relies on the ability of Active Directory Recycle Bin to preserve all attributes, including the link-valued attributes, of the deleted objects. This makes it possible to restore deleted objects to the same state they were in immediately before deletion. For example, restored user accounts regain all group memberships that they had at the time of deletion.

This section provides instructions on how to restore deleted objects by using the Web Interface. More information can be found in the “Recycle Bin” chapter in the ActiveRoles Server Administrator Guide.

Finding and Listing Deleted Objects

Once Active Directory Recycle Bin is enabled in a managed domain, ActiveRoles Server provides access to the Deleted Objects container that holds the deleted objects from that domain. In the Web Interface tree view, the container appears at the same level as the domain itself, under the Active Directory node. If multiple managed domains have Active Directory Recycle Bin enabled, then a separate container is displayed for each domain. To tell one container from another, the name of the container includes the domain name (for example, MyDomain.MyCompany.com - Deleted Objects).

When you select the Deleted Objects container in the tree view, the Web Interface lists all the deleted objects that exist in the corresponding domain. The list can be sorted or filtered as appropriate to locate particular objects (see “Changing View” earlier in this document). If you click an object in the list, a menu appears that displays all actions you can perform on that object.

Searching the Deleted Objects Container

The Web Interface offers the Deleted Objects search category on the Search pages, which is intended to perform a search in the Deleted Objects container of any managed domain where Active Directory Recycle Bin is enabled.

To search the Deleted Objects container

1. On the Navigation Bar, point to Directory Management and click Search.
2. From the drop-down list at the top of the page, select Deleted Objects.
   The Deleted Objects item is not displayed unless there is at least one managed domain that has Active Directory Recycle Bin enabled.
3. Optionally, click Browse next to the Find in field and select the Deleted Objects container to search.
   The Find in field is automatically populated with the name of the Deleted Objects container for one of the managed domains in which Active Directory Recycle Bin is enabled. By clicking Browse you can choose the Deleted Objects container for a different domain, if multiple managed domains have Active Directory Recycle Bin enabled.
4. Do any of the following:
   • In Name or Description, type the name or description, or part of the name or description, of the object to find.

   *When searching by name, ActiveRoles Server uses ambiguous name resolution (ANR) to find objects with not only name but also some other properties matching the string you type in the Name box. The properties used for ANR include name, first name, last name, display name, and logon name.*

   • Click Browse next to the Deleted from field and select the object that was the parent of the deleted object you want to find.

   *By using the Deleted from search option you can find child objects that were deleted from a particular container object.*

   • Use the Advanced tab to build a query based on other properties of the deleted object to find. For instructions, see “Advanced Search” earlier in this document.

5. Click the Search button to start the search.

When the search completes, the Web Interface displays a list of deleted objects that match the search criteria.

**Listing Objects Deleted from a Certain OU or MU**

To view a list of objects that were deleted from a particular Organizational Unit (OU) or Managed Unit (MU), you can use the View or Restore Deleted Objects command. The command opens a page that lists the deleted objects that were direct children of the corresponding OU or MU at the time of deletion.

**To view a list of objects that were deleted from a particular OU or MU**

1. Click the OU or MU that held deleted objects you want to examine.
2. From the Drop-down Command Menu, select View or Restore Deleted Objects.

The Web Interface lists the objects that were deleted from the OU or MU you selected. The list can be sorted or filtered as appropriate to locate particular objects (see “Changing View” earlier in this document).

*The View or Restore Deleted Objects command is also available on domain and container objects, which allows you to find deleted objects that were direct children of a particular domain or container at the time of deletion.*
Restoring a Deleted Object

For restoring deleted objects you can use the Restore command that is available on the menu when you click a deleted object in the Web Interface.

**To restore a deleted object**

1. In a list of deleted objects, click the object you want to un-delete, and then select the Restore command from the Drop-down Command Menu.
   
   A list of deleted objects can be created: by using the View or Restore Deleted Objects command; by using the Deleted Objects search category; or by selecting the Deleted Objects container in the tree view.

2. Review and, if necessary, change the settings in the Restore Object dialog box, and then click OK to start the restore process.

The Restore Object dialog box prompts you to choose whether deleted child objects (descendants) of the deleted object should also be restored. The Restore child objects check box is selected by default, which ensures that the Restore command applied on a deleted container object restores the entire contents of the container.

To clarify, consider an example in which an administrator accidentally deletes an Organizational Unit (OU) called Sales_Department that contains a number of user accounts for sales persons along with another OU called Admins that, in turn, contains a user account for an administrative assistant. When applying the Restore command on the Sales_Department OU, with the option to restore child objects, ActiveRoles Server performs the following sequence of steps:

1. Restore the Sales_Department OU
2. Restore all the deleted user accounts that were direct children of the Sales_Department OU
3. Restore the Admins OU in the Sales_Department OU
4. Restore all the deleted user accounts that were direct children of the Admins OU

If you clear the Restore child objects check box, ActiveRoles Server performs only the first step, so the restored Sales_Department OU is empty.

When restoring a deleted object, ensure that its parent object is not deleted. You can identify the parent object by viewing properties of the deleted object: the canonical name of the parent object, preceded with the "deleted from:" label, is displayed beneath the name of the deleted object on the property pages for that object. If the parent object is deleted, you need to restore it prior to restoring its children because deleted objects must be restored to a live parent.
Using Self-Service Manager

- Getting Started
- My Account
- My Requests
- My Access
- My Groups
- My Reviews
Getting Started

This introductory section tells you how to begin using Self-Service Manager. The following topics are covered:

- Introducing Self-Service Manager
- Accessing and exploring Self-Service Manager

Introducing Self-Service Manager

Managing access to applications and data can be a time-consuming and cumbersome process. IT administrators in an enterprise network are often asked to grant access to sensitive data without knowing whether a particular user should have it. This may result in access delays, risks of inappropriate authorization, and security or distribution groups that become inaccurate.

With Self-Service Manager, application and data owners can self-manage their groups in a secure and compliant manner. As a result, it is the person who understands the business justifications for granting access that assumes responsibility of access management and compliance.

Self-Service Manager empowers you, business user, to accomplish IT-related tasks without assistance from the help desk or IT administrators. It helps you and your organization save time, reduce errors, and increase productivity by directly and quickly connecting you to the information you need.

Self-Service Manager enables you to:

- Update your own account information, such as mobile phone number or home address
- Check the workflow status of your requests that require approval by other people
- Work on tasks assigned to you for approving operation requests initiated by other people
- Add or remove yourself from groups and Exchange distribution lists
- View or modify groups for which you are responsible
- Review and certify accuracy of groups for which you are responsible

For these purposes, ActiveRoles Server provides a user interface, referred to as Self-Service Manager, which you can access from your Web browser. The ActiveRoles Server administrators determine the details of what you can see and do in Self-Service Manager.

Exploring Self-Service Manager

To start using Self-Service Manager, you need Microsoft Internet Explorer on your computer. Self-Service Manager is as easy to access as any Web page in Internet Explorer.

Self-Service Manager requires that cookies (at least the Medium privacy level) and JavaScript support be enabled in Internet Explorer.

To access Self-Service Manager, open Internet Explorer and go to the address (URL) for the ActiveRoles Server Web Interface Site for Self-Administration (as supplied by your system administrator). For example, if the Web Interface is installed on the server named host1.company.com, then the URL is:

http://host1.company.com/ARServerSelfService
Normally, this takes you to the Self-Service Home page. If you are prompted for a logon name and password, supply the user name and password that you use when logging on to your computer.

The Self-Service Home page can be customized for your organization. As you work, you might find that other features of Self-Service Manager have also been customized. If this is the case, check with your system administrator to learn how your customized Self-Service Manager differs from the default configuration discussed in this chapter.

The Self-Service Home page displays summary information about your pending tasks, and provides access to the Self-Service Manager areas where you do your work:

- **My Account** View the details for your user account. Update information in your user account as needed. To access this area, click **My Account**.
- **My Requests** Perform tasks assigned to you for approving operation requests: point to **Tasks** and then click **Work with approval tasks**. View the status of your operations that require approval by other persons: point to **Tasks** and then click **View operation requests**.
- **My Access** View security and distribution groups of which you are a member. Join or leave groups by changing the group memberships of your user account. To access this area, click **My Access**.
- **My Groups** View or modify groups for which you are responsible. To access this area, click **My Groups**.
- **My Reviews** Review and certify the accuracy of the groups for which you are responsible. To access this area, click **My Reviews**.

You can also access Self-Service Manager areas from the Navigation Bar by pointing to the **Self-Service** menu and then clicking the area you want to access.

The following sections elaborate on each of these areas.

## My Account

The **My Account** area gives you a convenient way to display and update your own identity information, such as your telephone numbers or mail address in your user account. Your system administrator is responsible for setting up the contents of the pages in the **My Account** area. The administrator can add new elements to the pages, modify or remove existing elements, and regroup related elements on different tabbed pages.

### To view or modify your user account

1. On the Self-Service Home page, click **My Account**.
   
   *You can also point to **Self-Service** on the Navigation Bar and click **My Account**.*

2. Use the **Properties** page to view or modify your user account.

3. Click the **Save** button to apply your changes.

It’s up to the system administrator to determine what information you are authorized to view or modify on the **Properties** page. Some fields on the page might not be editable. The fields that you are not permitted to modify appear on the page as read-only text. The properties that you are not permitted to view are not displayed on the **Properties** page.
My Requests

The My Requests area provides a way to perform change approval actions, allowing you to control changes to directory data that require your approval and monitor your changes that require approval by other persons. Thus, you can use this area to:

- Perform approval tasks—approve or reject operations so as to allow or deny the requested changes to directory data. Examples of operations include (but not limited to) creation and modification of user accounts or groups.
- Check the status of your operations—examine whether the changes to directory data you requested are approved and applied, or rejected.

When a Web Interface user makes changes to directory data that require permission from other individuals in an organization, the changes are not applied immediately. Instead, an operation is initiated and submitted for approval. This starts a workflow that coordinates the approvals needed to complete the operation. The operation is performed and the requested changes are applied only after approval. An operation may require approval from one person or from multiple persons.

When an operation is submitted for approval, ActiveRoles Server tracks the initiator and the approver or approvers. The initiator is the person who requested the changes. Approvers are those who are authorized to allow or deny the changes. An operation that requires approval generates one or more approval tasks, with each approval task being assigned to the appropriate approver.

To configure approval workflow, ActiveRoles Server administrators set up approval rules to specify what changes require approval and who is authorized to approve or deny change requests. You can find more information about approval workflow in the ActiveRoles Server Administrator Guide and ActiveRoles Server Web Interface Administrator Guide.

In the My Requests area, you can work with the operations for which you are assigned to the approver role. As an approver, you are expected to take appropriate actions on your approval tasks.

To access the My Requests area

1. On the Self-Service Home page, point to Tasks in the My Requests box.
2. Do one of the following:
   - Click Work with approval tasks if you want to approve or reject operations that require your approval.
   - Click View operation requests if you want to check your operations that require approval by other persons.

Locating Approval Items

The My Requests area provides a number of views to help you locate approval items—tasks and operations:

- **My Tasks** Contains detailed entries representing the approval tasks assigned to you. Depending on their status, the approval tasks are distributed into two views. The Pending view allows you to manage the approval tasks awaiting your response. The Completed view lists your approval tasks that have been completed.
- **My Operations** The Recent view lists your recent operations that required approval, and allows you to examine the status and details pertinent to each operation.
In addition to using the pre-defined views, you can locate operations and tasks by using the search function.

To search for an operation or task by ID

1. In the left pane of the Web Interface page, under the Search label, type the ID number of the operation or task in the Search by ID box.
2. Click the button next to the Search by ID box to start the search.

You can also search for approval items (operations and tasks) by properties other than ID. For instance, you can find the operations that were initiated by a specific user. Another example is the ability to locate approval tasks generated within a specific time period.

To access the advanced search function, click Advanced Search under the Search label. Then, use the Advanced Search page to configure your search settings and start a search.

Advanced search is the most comprehensive way to search for approval items such as operations and tasks. Use it to find approval items based on their properties. You do this by creating queries, which are sets of one or more rules that must be true for an item to be found. An example of a query for operations is “Initiator is (exactly) John Smith.” This specifies that you are searching for operations that have the Initiator property set to John Smith’s use account.

With advanced search, you can use conditions and values to search for approval items based on item properties (referred to as “fields” on the search page). Conditions are limitations you set on the value of a field to make the search more specific. Each type of item has a set of relevant fields and each type of field has a set of relevant conditions that advanced search displays automatically.

Some fields, such as “Target object property,” require that you select a property to further define your search. In this case, you configure a query to search for operations or tasks specific to the approval of changes to the objects based on a certain property of those objects. For example, to find the operations that request any changes to the “Description” property, you could select the “Target object property” field, select the “Description” property, and then choose the “Modified” condition.

Some conditions require a value. For example, if you select a Date field, the “Is between” condition requires a date range value so you have to select a start date and an end date to specify a date range. Another example is the Initiator field, which requires that you select a user account of the Initiator role holder.

In some cases, a value is not required. For example, if you select the “Modified” condition, value is not necessary since this condition means that you want your search to be based on any changes to a certain property, without considering what changes were actually requested or made to the property value.

The following sections provide information on how to use the pre-defined views included in the Approval section.
Using “My Tasks”

You can use the My Tasks area to work with the approval tasks assigned to you as an Approver. According to their status, the tasks are distributed into two views: Pending and Completed.

The Pending view contains a list of approval tasks to be completed. Each task entry consists of a header that provides basic information on the task (the ID number, date of creation, type of the operation requiring approval, operation target object and the changes to it that need to be approved), a status bar showing the status of the task, and an expandable body that displays the task properties and detailed information on the operation that generated this task.

Each pending task entry has two action buttons on it: Approve and Reject, which are used to complete the task by respectively approving or rejecting the requested operation.

To view the task details
- Click the plus sign in the upper left corner of the task header.

To complete the task, do one of the following:
- If you want to apply the Approve action to the pending task, click Approve.
- If you want to apply the Reject action, click Reject.

Once a task has been completed by you or by other Approvers (if the task was assigned to multiple Approvers), the task is removed from the Pending view and from that moment on can be found in the Completed view.

Using “My Operations”

In the My Operations area, the Recent view lists your recent operations that are waiting for approval from other individuals. You can use this view to monitor the status of your operations, and to examine the approval tasks that were generated by your operations.

Each operation entry consists of a header that provides basic information (the ID number, initiation date, type of the operation, operation target object and the changes to it that need to be approved), a status bar showing the operation status, and an expandable body providing detailed information on the operation and the tasks generated by that operation.

To view the operation details
- Click the plus sign in the upper left corner of the operation header.
My Access

The **My Access** page displays all the security groups and distribution groups (distribution lists) of which you are a member.

**To open the My Access page**

- Click **My Access** on the Self-Service Home page, or point to **Self-Service** on the Navigation Bar and click **My Access**.

From the **My Access** page you can:

- **Add yourself to groups** Click **Request Access** and then select the group or groups you want to join.
- **Remove yourself from groups** Select the check box next to each desired group and then click **Remove Access**.
- **Examine a group of which you are a member** Click the name of the group.
- **View or change your membership schedule** Select the check box next to each desired group and then click **Temporary Access**.

**Exploring the My Access List**

By default, the **My Access** page lists the groups to which you belong as a direct member. If you want the list to include all groups of which you are a member, whether directly or indirectly, select the **Show nested groups** check box. With this check box selected, the list is extended to include the groups that hold other groups of which you are a member. For example, you might be a direct member of group **A** which is, in turn, a member of group **B**. Normally, the list includes only group **A**. By selecting **Show nested groups** you change this behavior so that the list includes both group **A** and group **B**.

You can remove yourself from only those groups to which you belong as a direct member. For the groups from which you cannot remove yourself, the check box next to the group name is unavailable. You cannot remove yourself from the groups in which you have indirect membership. Likewise, you cannot do this for your primary group. The name of the primary group is displayed in the lower part of the page.

The **My Access** list displays the groups in which you are a regular member and the groups in which you are a temporal member. Regular members remain in the group for an indefinite period of time whereas temporal members are scheduled to be automatically added or removed from the group at a certain point in time. In the list, an icon of a small clock overlays the icon for the groups in which you are a temporal member. By selecting or clearing the **Show pending group memberships** check box, you can hide or display the groups to which you are scheduled to be added in the future. The icons identifying such groups are shown in orange.

To view or change the schedule for your membership in a particular group, select the check box next to the name of the group and click **Temporary Access**. Note that you can do this for only the groups in which you have (or scheduled to have) direct membership. For information on using the **Temporal Membership Settings** dialog box, see “Rescheduling Temporal Group Memberships” in the **ActiveRoles Server Web Interface User Guide**.
Locating Groups in the My Access List

To locate groups in the My Access list, you can sort the list or apply a filter to the list.

To sort the list of groups by name
- Click the Name column heading once or twice to sort the list by group name in ascending or descending order.

An arrow next to the column heading indicates the sort order.

You can sort the list by any indexed property. The column headings for such properties are underlined. Click any underlined heading to change the sort order. For information on how to add or remove columns, see “Choosing Columns” later in this section.

To apply a filter to the list of groups
1. Ensure that the Filter Bar is displayed: Point to the Change View button in the top left corner of the list header to see if Filter On is present on the shortcut menu. If so, click Filter On. You can hide the Filter Bar by clicking Filter Off.
2. In the text box beneath a column heading, type a few characters, and then click the icon next to the text box or press ENTER.

Filtering the list by object type requires that the object type be fully specified in the Type box on the Filter Bar. For example, to display all query-based distribution groups, you must enter Query-based Distribution Group in the Type box.

Once you have applied a filter, the list includes only the groups that match your filtering criteria. For example, you can type a few characters in the Name box and then press ENTER to display the groups whose names begin with the characters you typed. To restore a complete list of groups after applying a filter, point to the Change View button and click Show All Objects.

Choosing Columns

You can add or remove columns in the list of groups. Each column is intended to display a certain property of the listed groups, and can be used to set a sort order or apply a filter.

To add or remove columns in the list of groups
1. Point to the Change View button in the top left corner of the list header and click Choose Columns.
2. To display a column for a certain property, click the name of the property in the Hidden Columns list and click Add.
3. To hide a column for a certain property, click the name of the property in the Displayed Columns list and click Remove.
4. When finished, click OK.

Adding or Removing Yourself from Groups

You can use the My Access page to join or leave groups. However, your ability to add or remove yourself from a particular group is restricted with your access rights on that group. By default, average users do not have sufficient rights to add or remove themselves from an arbitrary group. To allow users to join or leave a group, group owners or IT administrators have to give the users the appropriate rights. Normally, this is accomplished by publishing the group to Self-Service Manager. The My Access section of Self-Service Manager is mainly intended to help average users join or leave published groups.
To add yourself to a group, or multiple groups

   This opens the Select Object dialog box, allowing you to find and select one or more groups.

2. Use the Select Object dialog box to find and select the group or groups you want to join.
   For additional instructions, see "Using the Select Object Dialog Box" later in this document.

To remove yourself from a group, or multiple groups

1. In the My Access list, select the check box next to each desired group.
   If the check box for a particular group is unavailable, you cannot remove yourself from that group. For example, you cannot do this for your primary group or for a group to which you belong because of your membership in another (nested) group.

2. Click Remove Access.

Self-Service Manager obeys all approval rules associated with groups, so your request to join or leave a group may be granted immediately or will be granted when the necessary approvals are performed.

Using the Select Object Dialog Box

The Select Object dialog box appears when click Request Access on the My Access page, enabling you to select one or more groups from a list. By default, the dialog box lists the groups that are published to Self-Service Manager by IT administrators or group owners.

To select a group

- Click the name of the group in the list.
  As a result, the name of the group is listed in the bottom area of the dialog box. If you have selected a group by mistake, you can cancel the selection by clicking the Remove button.
  Once you have selected all the groups you want, click OK.

Working with the list of groups

When you open the Select Object dialog box, it lists only the groups that are published to Self-Service Manager. If you want to select a group that is not listed by default, you can rebuild the list by searching for groups whose name, keywords, or e-mail address matches a specific search string.

To search for groups

1. Optionally, click Browse next to the Find in box to change the scope of your search.
   Clicking Browse opens a dialog box where you can select the domain, Organizational Unit or Managed Unit that you want to search for groups. By default, a search is performed in all domains known to ActiveRoles Server. This default search scope is denoted as Active Directory in the Find in box.

2. In the Name box, type the search string that you want to use to find groups.
   You can type multiple search strings separated by semicolons (;). The search will look for groups that match any of the search strings.

3. Click the Search button to start the search.
   The search returns all groups whose name, pre-Windows 2000 name, display name, e-mail address, or any keyword begins with the specified search string. For example, with the search string of sales, the search results include the group named Sales Force, but not NYC Sales.
The groups found by the search are listed in the central area of the **Select Objects** dialog box. You can sort or filter the list to locate the group you want. For example, click the **Name** column heading once or twice to sort the list by group name in ascending or descending order, or type a few characters in the **Keywords** box and then press ENTER to display the groups that have any keyword beginning with the characters you typed. To restore a complete list of groups after applying such a filter, point to the area at the top-left corner of the list header and click **Show All Objects**.

**Working with temporal membership settings**

By using temporal group memberships, you can schedule your addition or removal from groups. For the selection of groups that you make in the **Select Object** dialog box, you can choose the time for you to join or leave those groups.

**To configure temporal group memberships**

1. Select at least one group in the **Select Object** dialog box.
2. Click the **Temporary Access** button.
3. In the **Temporal Membership Settings** dialog box, choose the appropriate options, and then click **OK**:
   - If you want to join the group on a certain date in the future, select **On this date** under **Add to the group**, and choose the date.
   - If you want to leave the group on a certain date, select **On this date** under **Remove from the group** and choose the date.

By default, you are added to the group immediately after your request to join the group is completed by ActiveRoles Server. This may require approval by a group owner or IT specialist.
My Groups

You can use the **My Groups** area to view or modify groups for which you are responsible.

**To access the My Groups area**

- Click **My Groups** on the Self-Service Home page, or point to **Self-Service** on the Navigation Bar and click **My Groups**.

The pages in this area display a list of groups for which you are assigned to the manager or owner role, and give you a way to manage the group properties that you are authorized to view or modify.

From a technical perspective, the **My Groups** list is composed of the groups each of which meets any of the following conditions:

- You are specified in the “Managed By” property of the listed group, so you are designated as the primary owner (manager) for the group.
- You belong to a certain group that is specified in the “Managed By” property of the listed group. This type of ownership is referred to as “primary-inherited.”
- You are specified in the “Secondary Owners” property of the listed group, so you are designated as a secondary owner for the group.
- You belong to a certain group that is specified in the “Secondary Owners” property of the listed group. This type of ownership is referred to as “Secondary-inherited.”

The **Owner Type Description** column indicates which of these conditions are in effect for each group.

Locating Groups in the My Groups List

The list of groups in the **My Groups** area has a number of features that help you locate the group you want to manage. Thus, you can sort groups in the list and apply a filter to the list.

**To sort the list of groups by name**

- Click the **Name** column heading once or twice to sort the list by group name in ascending or descending order.

  *An arrow next to the column heading indicates the sort order.*

You can sort the list by any indexed property. The column headings for such properties are underlined. Click any underlined heading to change the sort order. For information on how to add or remove columns, see “Choosing Columns” later in this section.

**To apply a filter to the list of groups**

1. Ensure that the Filter Bar is displayed: Point to the Change View button in the top left corner of the list header to see if **Filter On** is present on the shortcut menu. If so, click **Filter On**.  
   You can hide the Filter Bar by clicking **Filter Off**.
2. In the text box beneath a column heading, type a few characters, and then click the icon next to the text box or press ENTER.

Filtering the list by object type requires that the object type be fully specified in the **Type** box on the Filter Bar. For example, to display all query-based distribution groups, you must enter **Query-based Distribution Group** in the **Type** box.
Once you have applied a filter, the list includes only the groups that match your filtering criteria. For example, you can type a few characters in the **Name** box and then press ENTER to display the groups whose names begin with the characters you typed. To restore a complete list of groups after applying a filter, point to the Change View button and click **Show All Objects**.

**Choosing Columns**

You can add or remove columns in the list of groups. Each column is intended to display a certain property of the listed groups, and can be used to set a sort order or apply a filter.

**To add or remove columns in the list of groups**

1. Point to the Change View button in the top left corner of the list header and click **Choose Columns**.
2. To display a column for a certain property, click the name of the property in the **Hidden Columns** list and click **Add**.
3. To hide a column for a certain property, click the name of the property in the **Displayed Columns** list and click **Remove**.
4. When finished, click **OK**.

**Inspecting a Group**

Once you have located a desired group in the list, you can view the properties of the group.

**To view the properties of a group**

- Click the name of the group in the list of groups.

This displays the pages provided by the ActiveRoles Server Web Interface for managing the group. For information about the user interface elements you encounter on these pages, refer to the "User Interface Overview" section in the **ActiveRoles Server Web Interface User Guide**.

It’s up to the system administrator to determine what information you are authorized to view or modify on the group management pages. Some fields on a page might not be editable. The fields that you are not permitted to modify appear on the pages as read-only text. The properties that you are not permitted to view are not displayed. You may also encounter some differences that are due to customization changes made to the Web Interface.

**Making Changes to a Group**

You can use the group management pages to make changes to the group. Thus, you can modify the editable fields to change the corresponding properties of the group. If you are authorized to add or remove members from the group, you can use the **Members** command for this purpose.

**To add or remove members from a group**

1. Click the name of the group in the list of groups.
2. Select **Members** from the Drop-down Command Menu.
   - This displays a list of members of the group.
3. In the list of members, select check boxes next to the names of the members you want to remove, and then click the **Remove** button.
4. Click **Add** and use the **Select Object** dialog box to prepare a list of objects to be added to the group:
   - To add an object to the list, click the name of the object in the upper area of **Select Object** dialog box.
   - To remove an object from the list, click the name of the object in the lower area of **Select Object** dialog box and click **Remove**.

5. When finished, click **Add** in the **Select Object** dialog box.

Examine the Drop-down Command Menu to see what commands you are permitted to use. You can perform only those group management tasks to which you are assigned in ActiveRoles Server. Thus, you are shown only the commands you are authorized to use and the groups you are authorized to view or modify.

In addition to access control, ActiveRoles Server provides for policy enforcement on group properties. Policies may restrict access to certain properties, causing the entry of property values to be limited with choice constraints, auto-generating values without the ability to modify the data, or requiring a value to be specified. The fields that are controlled by policies have special icons so you can view the policy constraints imposed on a given field by clicking an icon next to that field.

### Designating Group Owners

The owner of a group is a user or group that is responsible for that group. Self-Service Manager provides a means for group owners to view or modify their groups in the **My Groups** area, and to review and certify their groups using the **My Reviews** area (see later in this chapter).

Normally, each group must have a certain owner assigned to it. Self-Service Manager can be used to view or modify the owner setting on groups. Thus, if you have sufficient rights to do so, you can assign yourself to the owner role or choose a certain user or group to hold the owner role.

**To view or modify the owner setting**

1. On the Self-Service Home page, point to **Tasks** in the **My Groups** box, and click **Claim a group**.
2. On the **Claim a Group** page, click **Add**, and then use the **Select Object** dialog box to populate the list of groups for which you want to view or modify the owner setting.
3. To view the current owner setting, refer to the information provided in the **Owner (Managed By)** column in the list of groups.
4. To modify the owner setting, do one of the following:
   - If you want to make yourself the owner of each of the listed groups, click **Assign me to the owner role**.
   - If you want a specific user or group to be the owner of each of the listed groups, click **Assign this user or group to the owner role**, and then click **Select** to choose the user or group you want.
5. Click **Save**.
My Reviews

In the My Reviews area, you can review and attest (certify) membership of groups for which you are responsible. This process is referred to as Attestation Review. During Attestation Review you are presented with a list of groups and expected to certify that the group membership lists are appropriate, that is:

- The membership list of each group is complete and accurate.
- The designated group members require the access rights provided by the group itself to fulfill their responsibilities.

To access this area, click My Reviews on the Self-Service Home page. The My Reviews page lists the groups (if any) that you are expected to review. For each group, you can:

- View or modify the membership list of the group
- View or modify other properties of the group
- Certify (attest) the group
- View a historical report on Attestation Review

Below you can find instructions on how to perform each of these tasks.

View or Modify Groups

For every group, the list of on the My Reviews page displays the name of the group. You can view more details by expanding the list: click the plus sign (+) next to the name of the group.

To view a list of members of a group

1. Click the plus sign (+) next the name of the group.
2. Click the plus sign (+) in the Members heading.

A long list of group members is normally divided into pages. To navigate between pages, use the page buttons at the bottom of the list.

On the My Reviews page, you can remove members from a group.

To remove a member from a group

- In the list of members of the group, click the X button next to the name of the member.

If you need to add a member to a group, you can do this using the My Groups area, as described in the “My Groups” section earlier in this document.

To display a group in the My Groups area

1. In the list of groups on the My Reviews page, click the plus sign (+) next to the name of the group.
2. Click Examine this group in detail.
Certify (Attest) Groups

Once you have reviewed the membership list of a group, you can certify it. Multiple groups can be selected for this operation. Certifications you give for the groups are audited so you are requested to enter your password in order to prove your identity.

To certify (attest) groups
1. For each group you are ready to certify, select the check box next to the name of the group in the list of groups on the My Reviews page.
2. Click Certify.
3. In the Certify Groups dialog box:
   • Select the I accept the terms of the certification agreement check box.
   • Type in your password (the password that you use to log on to your computer).
   • Click Certify Now.

The groups you have certified are no longer displayed in the list on the My Reviews page. While Attestation Review is in progress, you can view a list of the certified groups on a separate page, and, if necessary, revoke certification from groups in order to redo a review.

To revoke certification from a group
1. On the My Reviews page, click View groups you have certified.
2. In the list of groups on the Certified Groups page, click the plus sign (+) next to the name of the group.
3. Click Revoke certification from this group, to redo a review.

You can revoke certification from a group while Attestation Review is in progress. You cannot do this after Attestation Review is over (reached the end date or stopped by an administrator).

After you have revoked certification from a group, the group is added to the list on the My Reviews page so you can use the instructions given earlier in this section to review and certify the group once more.

Normally, Attestation Review must be completed by a certain date. Once the date has been reached, no changes can be made to the certification status of the groups.

In the My Reviews area, you can view a historical report on Attestation Review. The report shows information about the groups you were requested to review, including the group membership lists, and the group certification decisions you made. The report data is specific to the completed reviews.

To view a historical report on Attestation Review
1. On the My Reviews page, click View history of reviews you completed earlier.
2. On the History page, click a date of Attestation Review.

This displays a list of groups specific to Attestation Review as on the date you selected. The list of groups is similar to that you encounter on the My Reviews page. For each of the certified groups, the report displays the group membership list as it was at the time that you certified the group.