



One Identity Active Roles 7.3

Web Interface User Guide

Copyright 2018 One Identity LLC.

ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of One Identity LLC .

The information in this document is provided in connection with One Identity 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 One Identity LLC products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, ONE IDENTITY 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 ONE IDENTITY 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 ONE IDENTITY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. One Identity make 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. One Identity do not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

One Identity LLC.

Attn: LEGAL Dept

4 Polaris Way

Aliso Viejo, CA 92656

Refer to our Web site (<http://www.OneIdentity.com>) for regional and international office information.

Patents

One Identity is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at <http://www.OneIdentity.com/legal/patents.aspx>.

Trademarks

One Identity and the One Identity logo are trademarks and registered trademarks of One Identity LLC. in the U.S.A. and other countries. For a complete list of One Identity trademarks, please visit our website at www.OneIdentity.com/legal. All other trademarks are the property of their respective owners.

Legend

-  **WARNING:** A WARNING icon indicates a potential for property damage, personal injury, or death.
-  **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.
-  **IMPORTANT, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

Contents

Getting Started	5
Configuring the Web browser	5
Configuring Internet Explorer	6
Configuring Google Chrome	6
Configuring Mozilla Firefox	7
Connecting to the Web Interface	7
Changing personal settings	7
Logging out of the Web Interface	8
Web Interface Basics	10
Administrative tasks overview	10
Directory Management	10
Search	11
Approval	11
Settings	11
Customization	12
User interface overview	12
Navigation bar	13
Browse pane	14
List of objects	14
Toolbar	14
Current container	15
Command pane	15
Summary pane	15
Object property pages	15
Managing the list of objects	16
Sorting and filtering the list of objects	17
Adding or removing columns from the list of objects	17
Locating directory objects	18
Searching for directory objects	18
Example: Searching by object type	19
Filtering the contents of a container	19

Example: Filtering by object type	20
Using personal views	20
Creating a personal view	21
Changing a personal view	21
Performing Management Tasks	23
Managing your personal account	23
Managing Active Directory objects	24
Batch operations	25
Example 1: Enabling a user account	26
Example 2: Adding a user to a group	26
Running an automation workflow	26
Managing temporal group memberships	27
Adding temporal members	28
Viewing temporal members	28
Rescheduling temporal group memberships	29
Removing temporal members	30
Managing AD LDS data	31
Managing computer resources	32
Restoring deleted objects	33
Locating deleted objects	33
Searching the Deleted Objects container	33
Locating objects deleted from a certain OU or MU	34
Restoring a deleted object	34
Using Approval Workflow	36
Understanding approval workflow	36
Locating approval items	37
Using "My Tasks"	38
Pending tasks	38
Completed tasks	40
Using "My Operations"	41
About us	43
Contacting us	43
Technical support resources	43

Getting Started

Active Roles (formerly known as ActiveRoles®) 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 Active Roles using a Web browser. 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 indented 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 Active Roles 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 Active Roles Web Interface Administration Guide.

The Active Roles 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.

The following topics describe the procedures for connecting to the Web Interface. First, configure your Web browser to display the Web Interface pages properly. Then, connect to the Web Interface. Finally, you may specify personal settings for the Web Interface.

- [Configuring the Web browser](#)
- [Connecting to the Web Interface](#)
- [Changing personal settings](#)
- [Logging out of the Web Interface](#)

Configuring the Web browser

There are several different Web browsers that you can use to access the Active Roles Web Interface. No matter which browser you use, it must have JavaScript and cookies enabled.

JavaScript is a programming language for making Web pages interactive. Cookies are small files stored on your computer that contain information about the Web Interface.

For instructions on how to enable JavaScript and cookies in your browser, see the following topics.

- [Configuring Internet Explorer](#)
- [Configuring Google Chrome](#)
- [Configuring Mozilla Firefox](#)

Configuring Internet Explorer

To access the Active Roles Web Interface, Internet Explorer must have JavaScript enabled. You don't need to enable cookies as Web Interface sites are located in the Local Intranet zone. Internet Explorer always accepts cookies from Web sites in the Local Intranet zone.

To enable JavaScript in Internet Explorer

1. Click **Internet options** on the **Tools** menu.
2. In the **Internet Options** dialog box, go to the **Security** tab, click **Local intranet**, and then click **Custom Level**.
3. In the **Security Settings** dialog box, scroll down until you see the **Scripting** section. Make sure that the **Enable** option is selected under **Active scripting**, and then click **OK**.
4. Click **OK** to close the **Internet Options** dialog box.

Configuring Google Chrome

To access the Active Roles Web Interface, Google Chrome must have JavaScript and cookies enabled.

To enable JavaScript and cookies in Google Chrome

1. Click the Chrome menu button on the browser toolbar, and then click **Settings**.
2. On the **Settings** page, click **Show advanced settings**, and then click the **Content settings** button in the **Privacy** section.
3. In the **Content settings** dialog box, do the following:
 - a. Make sure that the **Allow local data to be set** option is selected under **Cookies**.
 - b. Make sure that the **Allow all sites to run JavaScript** option is selected under **JavaScript**.
 - c. When finished, click **Done**.

Configuring Mozilla Firefox

To access the Active Roles Web Interface, Firefox must have cookies enabled. You don't need to worry about JavaScript as this option is normally enabled and, beginning with Firefox 23, cannot be disabled or re-enabled by using the **Options** dialog box.

To enable cookies in Mozilla Firefox

1. Click **Options** on the **Tools** menu.
2. In the **Options** dialog box, do the following:
 - a. Click the **Privacy** button at the top of the dialog box.
 - b. Make sure that the **Remember history** option is selected in the **History** area.
 - c. When finished, click **OK**.

Connecting to the Web Interface

To connect to the Web Interface, you need to know the name of the Web server running the Web Interface and the name of the Web Interface site you want to access. The default site names are as follows:

- **ARWebAdmin** Site for administrators; supports a broad range of administrative tasks
- **ARWebHelpDesk** Site for Help Desk; supports the most common administrative tasks
- **ARWebSelfService** Site for self-administration; enables end users to manage their personal accounts

To connect to the Web Interface

- In the address box of your Web browser, type the address of the Web Interface site, and then press Enter.

For example, to connect to the default site for administrators, you might type **http://server/ARWebAdmin** where **server** stands for the name of the Web server running the Web Interface.

Changing personal settings

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

- **User interface language** The language of the Web Interface pages. This setting affects 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.

- **Maximum number of objects to display in search results** Determines the maximum number of objects displayed in single-page lists, such as lists of search results or lists that show contents of containers.
- Use this setting cautiously because displaying a large number of objects may adversely affect performance of your Web browser. Instead of displaying all objects, it would be advisable to use searching and filtering to find the objects you need.
- **Number of items to display per page in paged lists** Determines the maximum number of list items displayed on a single page in multi-page lists. Affects only the lists, such as lists of approval tasks, that are divided into pages, causing each page to display no more items than specified by this setting.

Use this setting cautiously. If you specify a small number, you will need to page through list items. However, specifying an unreasonably large number may result in poor performance of the list view.

- **Number of page links to display for paged lists** Determines the maximum number of links to pages displayed for multi-page lists. Affects only the lists, such as lists of approval tasks, that are divided into pages, allowing the user to page through list items by clicking page numbers beneath the list. This setting specifies how many page numbers are to be shown.

Active Roles saves these settings on a per-user basis in the configuration of the Web Interface site. Once saved, the personal settings take effect regardless of which computer is used to access the Web Interface. The user can have different personal settings for different Web Interface sites.

To change personal settings

1. Click the **Settings** (gear) icon in the upper right corner of the Web Interface window.
2. Configure the settings as needed.
3. Click **Save** for the changes to take effect.

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 when their work is completed.

To log out of the Web Interface

- Click the name of the current Web Interface user in the top right corner of the Web Interface window, and then click **Log out**.

The **Log out** command closes the current Web Interface session and deletes all the session-related data from the local computer.

Not logging out may pose a security risk (for example, if the user accesses the Web Interface from a public computer). In such a case, the Web Interface can forcibly terminate the session due to user inactivity.

The Web Interface provides an inactivity timeout, ensuring that the session is not terminate unexpectedly. 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. If the user does not respond to the prompt, the session is forcibly terminated after an additional grace period.

Web Interface Basics

- [Administrative tasks overview](#)
- [User interface overview](#)
- [Managing the list of objects](#)
- [Locating directory objects](#)
- [Using personal views](#)

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 vertical strip on the left side of the Web Interface window, referred to as Navigation bar. Click icons on the Navigation bar to perform the following tasks:

- [Directory Management](#) Browse for, and manage, directory objects, such as users and groups. You can navigate through containers in the directory; view, filter and select objects held in the container; and apply commands to the selected object or container.
- [Search](#) Search for, and manage, directory objects. You can select containers in the directory, and specify search criteria. The Web Interface searches in the selected containers and all of their subcontainers, and lists the objects that match your search criteria, allowing you to apply commands to objects in the list.
- [Approval](#) Perform the tasks related to approval of administrative operations. The scope of your responsibilities depends upon your role in the approval workflow processes.
- [Settings](#) Set up your personal settings that control the display of the Web Interface pages.
- [Customization](#) Add, remove, or modify user interface elements, such as menu items (commands) and pages (forms), intended to manage directory objects. This task requires the rights of Active Roles Admin.

Directory Management

Directory Management allows you to browse for, and administer, directory objects in your organization. Your Active Roles permissions determine which tasks you can perform.

Directory Management provides the following views:

- **Active Directory** Lists Active Directory domains managed by Active Roles, allowing you to navigate through containers in those domains. You can view, filter and select objects held in the container, and apply commands to the selected object or container.
- **Managed Units** Lists Managed Units defined in Active Roles, allowing you to view objects, and navigate through containers, held in Managed Units. You can filter and select objects, and apply commands to the selected object or container.

For information on how to administer Active Directory objects, see [Managing Active Directory objects](#) later in this document.

Search

Search provides a flexible, query-based mechanism that helps locate directory objects quickly and without browsing through the directory tree. You can select containers in the directory, and build a query by specifying search criteria. The Web Interface searches in the selected containers and all of their subcontainers, and lists the objects that match your search criteria. When the objects you target are returned as the results of a search query, you can then perform the necessary administrative tasks.

You can also save the queries that you build and use them again at a later time. The Web Interface saves queries as your personal views, with each view consisting of the containers and search criteria that you select, as well as the customized sorting and column information that you specify.

For instructions on how to perform a search, see [Searching for directory objects](#) later in this document.

Approval

Approval provides you with the tools for performing tasks related to approval workflow. You can use these tools 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 tasks, see [Using Approval Workflow](#) later in this document.

Settings

By using **Settings**, you can specify:

- The language of the Web Interface pages
- The maximum number of objects displayed in single-page lists
- The maximum number of list items displayed on a single page in multi-page lists
- The maximum number of links to pages displayed for multi-page lists

The settings are saved on a per-user basis in the configuration of the Web Interface site. For more information, see [Changing personal settings](#) earlier in this document.

Customization

Customization allows you to tailor the Web Interface to suit the specific needs of your organization. The **Customization** item is only displayed if you are logged on as Active Roles Admin. The Active Roles Admin account is specified upon configuration of the Active Roles Administration Service.

Customization includes the following tasks:

- **Directory Objects** Modify menus, commands, and forms for administering directory objects. View or change global settings, such as the logo image and color scheme.
- **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.

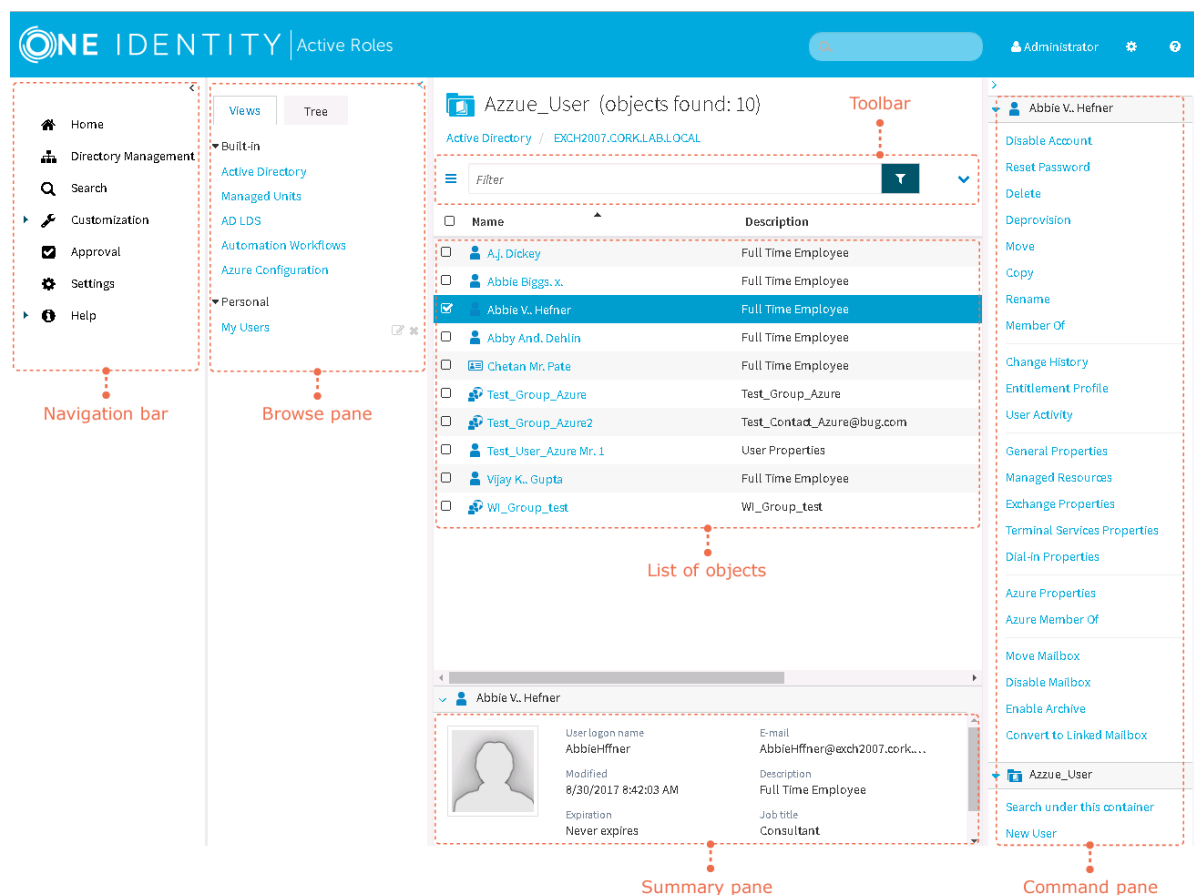
The customization settings determine the configuration of the Web Interface site for all users.

For more information and instructions on how to customize the Web Interface, see “Customizing the Web Interface” in the Active Roles Web Interface Administration Guide.

User interface overview

The section describes the user interface elements that are common across the Web Interface.

Figure 1: Active Roles User Interface elements



Navigation bar

Located on the left side of the page, the Navigation bar provides the first level of navigation for most of the tasks you can perform in the Web Interface. The Navigation bar is organized by Web Interface areas, and includes the following items:

- **Home** Go to the Web Interface home page.
- **Directory Management** Browse for, and administer, directory objects in your organization.
- **Search** Search for, and administer, directory objects in your organization.
- **Customization** Customize Web Interface pages. Available to Active Roles Admin only.
- **Approval** Perform the tasks relating to approval of administrative operations.
- **Settings** View or change your personal settings that control the display of the Web Interface.
- **Help** Find Help topics and other helpful resources for the Web Interface.

For more information about functions of the Navigation Bar, see [Administrative tasks overview](#) earlier in this document.

Browse pane

Located next to the Navigation bar, the Browse pane lists the built-in views and personal views, and allows you to access the tree view:

- Built-in views provide entry points to browsing for objects in the directory. Personal views are filter or search queries you build and save to use them again at a later time. To see built-in views and personal views, click the **Views** tab at the top of the Browse Pane.
- The tree view helps you browse for directory objects by using the directory tree to navigate through the hierarchical structure of containers. To see the tree view, click the **Tree** tab at the top of the Browse Pane.

List of objects

When you select a container or view in the Browse pane, you'll see a list of objects. If you select a container, the list includes the objects held in that container. If you select a view, the list includes the objects that match the view settings. It is also possible to customize the list by sorting and filtering, and by adding or removing list columns.

You can select objects from the list and apply commands to the selected object or objects. When you click the name of a container object, such as a domain or an organizational unit, the list changes to display the objects held in that container, thereby enabling you to browse through containers in the directory.

Toolbar

The Toolbar contains a number of controls allowing you to manage the current list of objects:

- Click the Menu button on the left side of the Toolbar to save the current list as a personal view, add or remove list columns, or export the list to a text file.
- Type in the Filter field and then click the button next to that field to have the list include only those objects whose naming properties match what you typed.
- Click the Expand/Collapse button on the right side of the Toolbar to configure filtering criteria based on object properties. To have the list include only the objects that match your filtering criteria, click the button next to the Filter field.

Current container

The area above the Toolbar displays the name of the current container—the container that holds the objects shown in the list, and identifies the hierarchical path to the current container in the directory. Click the name of a container in the path to view a list of objects held in that container.

Command pane

Located to the right of the list of objects, the Command pane provides commands you can apply to objects you select from the list as well as commands you can apply to the current container:

- If no objects are selected in the list, the menu includes only the commands that apply to the current container. These commands are grouped under a heading that shows the name of the current container.
- If a single object is selected in the list, the commands that apply to the selected object are added in the top of the menu, under a heading that shows the name of the selected object.
- If multiple objects are selected from the list, the commands that apply to all of the selected objects are added in the top of the menu, under a heading that shows the number of the selected objects.

Summary pane

When you select an object from the list, information about that object is displayed in the Summary pane under the list of objects. The information includes some commonly used properties of the object, and depends upon the object type. For example, user properties provide more detailed information about a user account, such as the logon name, e-mail address, description, job title, department, expiration date, and the date and time that the account was last changed. If you don't see the Summary pane, click in the area beneath the list of objects.

Object property pages

Property pages are used in the Web Interface to modify directory objects. The following figure gives an example of the property page that appears when you select a user account from the list of objects and click **General Properties** in the Command pane.

Figure 2: Object Property page

The screenshot shows the 'Object Property page' for 'Abbie V. Hefner'. The page is split into two main areas: 'Tabs' and 'Data entries'. The 'Tabs' area on the left contains a vertical list of tabs: 'General' (selected), 'Address', 'Account', 'Telephones', 'Organization', 'Profile', 'Managed by', 'Picture', 'Published Certificates', and 'Object'. The 'Data entries' area on the right contains several text input fields: 'First name' (Abbie), 'Last name' (Hefner), 'Initials' (V.), 'Display name' (Abbie V. Hefner), 'Description' (Full Time Employee), 'Office' (Building 32, Floor 29, Cube 1068), and 'Telephone number' ((704) 879-6799). A 'Customize' link is located in the top right corner. At the bottom right, there are 'Save' and 'Close' buttons. Red circles and lines highlight the 'General' tab and the 'Description' field.

The property page consists of several tabs. Each tab provides a number of data entries allowing you to view or change certain properties of the directory object. Click a tab to access the data entries on that tab. To apply the changes you have made in the data entries, click the **Save** button.

Active Roles Admin can use the **Customize** link in the upper right corner of the page to add or remove data entries or entire tabs from the property page. The **Customize** link is not displayed unless you are logged on as a member of the Active Roles Admin account, which is specified in the configuration settings of the Active Roles Administration Service.

Managing the list of objects

The list of objects in the Web Interface has a number of features that help you locate the objects you target. Thus, you can sort objects in a list and apply a filter to a list. You can also add or remove list columns.

Sorting and filtering the list of objects

The Web Interface allows you to set a sort order and apply a filter in the list of objects.

To sort the 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 in the column heading indicates the sort order.

You can also sort the list by other columns. Click a column heading to change the sort order. For instructions on how to add or remove columns, see [Adding or removing columns from the list of objects](#) later in this document.

To filter the list of objects

- To filter the list by naming properties, type in the Filter field on the Toolbar and then press Enter or click the button next to the Filter field. As a result, the list includes only the objects whose naming properties match what you typed. The naming properties include name, first name, last name, display name, and logon name.
- To filter the list by other properties, click the button on the right side of the Toolbar to expand the Toolbar, click **Add criteria**, choose the properties by which you want to filter, click **Add**, and then configure the criteria as appropriate. When finished, press Enter or click the button next to the Filter field on the Toolbar. As a result, the list includes only the objects that match the criteria you configured.

After you have applied a filter, the list includes only the objects that match the filter. For example, you can type a few characters in the Filter field on the Toolbar and then press Enter to view only the objects whose name starts with the characters you typed.

To remove the filter and restore the original list of objects

- If you did not add criteria, clear the Filter field on the Toolbar and then press Enter; otherwise, expand the Toolbar, click **Clear all**, and then press Enter.

Adding or removing columns from the list of objects

You can customize the list of objects by adding or removing list columns. Each column is intended to display a certain property of objects in the list, and can be used to set a sort order.

To add or remove list columns

1. Click the Menu button on the left side of the Toolbar, and then click **Choose columns**.

2. To add a column for a certain property, click the name of the property in the **Hidden columns** list and then click the right arrow button to move the property to the **Displayed columns** list.
3. To remove a column for a certain property, click the name of the property in the **Displayed columns** list and then click the left arrow button to move the property to the **Hidden columns** list.

You can reorder list columns by moving list items up and down in the **Displayed columns** list: Click the name of the property in the list and then click the up arrow button or the down arrow button next to the list.

Locating directory objects

The Web Interface provides search and filtering tools to help you locate directory objects quickly and easily. By creating and applying an appropriate search or filter query, you can build shorter lists of objects, which makes it easier to select the objects needed to accomplish your administrative tasks.

You can also save search and filter queries as your personal views, and use them again at a later time. Each view saves the following settings that you specify: the container to search or filter; the search or filtering criteria; the set of columns and the sort order in the list of search or filtering results.

Searching for directory objects

To search for directory objects, you can use the **Search** page that allows you to select the container to search and specify criteria for the objects you want to find. The Web Interface searches in the container you select and in all of its subcontainers.

The Web Interface opens the **Search** page when you do any of the following:

- Type in the Search field located in the upper right corner of the Web Interface window, and then press Enter or click the magnifying glass icon in the Search field. In this case, the Web Interface searches all managed Active Directory domains for objects whose naming properties match what you typed and the **Search** page lists the search results. The naming properties include name, first name, last name, display name, and logon name.
- Click **Search** on the Navigation bar. The **Search** page opens, allowing you to configure and start a search.

To configure and start a search

1. Click the **Search in** box on the Toolbar, and then select the container that you want to search. You can select more than one container.

The Web Interface will search in the selected container and all of its subcontainers.

2. Specify criteria for the objects that you want to find:
 - To search by naming properties, type in the Search field on the Toolbar. The Web Interface will search for objects whose naming properties match what you typed. The naming properties include name, first name, last name, display name, and logon name.
 - To search by other properties, click the button on the right side of the Toolbar to expand the Toolbar, click **Add criteria**, choose the properties by which you want to search, click **Add**, and then configure the criteria as appropriate. The Web Interface will search for objects that match the criteria that you configured.
3. Press Enter to start the search.

The search results are listed on the Search page. You can customize the list by adding or removing list columns and sorting the list by column data. To add or remove list columns, click the Menu button on the left side of the Toolbar and then click **Choose columns** (see also [Adding or removing columns from the list of objects](#) earlier in this document). To sort the list by column data, click column headings.

Example: Searching by object type

The following steps demonstrate how you can use the search function to list all groups that exist in the Active Directory domains managed by Active Roles:

1. Click **Search** on the Navigation bar.
2. Click the button on the right side of the Toolbar to expand the Toolbar, click **Add criteria**, select the check box next to **Object type is User/InetOrgPerson/Computer/Group/Organizational Unit**, and then click the **Add** button.
3. On the Toolbar, click **Group** in the list next to **The object type is**, and then press Enter.

Filtering the contents of a container

If a container, such as an organizational unit in your Active Directory, holds large number of objects, you can narrow down the displayed list of objects by filtering the objects held in that specific container.

To filter the objects held in a container

1. Navigate to the container in the Web Interface.

To navigate to a container, you can search for the container object (see [Searching for directory objects](#)) and then click its name in the list of search results on the **Search** page. Alternatively, you can browse for the container objects by using the [Browse pane](#) and the [List of objects](#).

IMPORTANT: The scope of filtering is always set to the current container, and does not include any subcontainers of that container. Filtering is essentially a search for objects held in a given container only. If you want to search the current container and all of its subcontainers, click **Search under this container** in the [Command pane](#), and then configure and perform a search as described in [Searching for directory objects](#) earlier in this document.

2. Specify how you want to filter the objects held in the container:
 - To filter objects by naming properties, type in the Filter field on the Toolbar and then press Enter or click the button next to the Filter field. The list of objects will include only the objects whose naming properties match what you typed. The naming properties include name, first name, last name, display name, and logon name.
 - To filter objects by other properties, click the button on the right side of the Toolbar to expand the Toolbar, click **Add criteria**, choose the properties by which you want to filter, click **Add**, and then configure the criteria as appropriate. The list of objects will include only the objects that match the criteria you configured.
3. To apply the filter, press Enter or click the button next to the Filter field on the Toolbar.

When a filter is applied to a container, the Web Interface lists a subset of all objects held in that container. You can remove the filter to view all objects: If you did not add criteria, clear the Filter field on the Toolbar and then press Enter; otherwise, expand the Toolbar, click **Clear all**, and then press Enter.

Example: Filtering by object type

The following steps demonstrate how you can configure a filter that lists only user accounts held in a particular organizational unit, removing objects of any other type from the list:

1. Navigate to the organizational unit in the Web Interface.
2. Click the button on the right side of the Toolbar to expand the Toolbar, click **Add criteria**, select the check box next to **Object type is User/InetOrgPerson/Computer/Group/Organizational Unit**, and then click the **Add** button.
3. On the Toolbar, confirm that the field next to **The object type is** reads **User** and then click the button next to the Filter field, or press Enter.

Using personal views

In the Web Interface, you can use search or filter queries to locate directory objects. To create a query, you specify a set of rules that determine the contents of the resulting list of objects. You can, for instance, specify that only user accounts held in a particular

organizational unit should be listed. In addition, you can adjust the set of columns and the sort order in the list of search or filtering results.

The ability to locate the objects you target is crucial as you need to focus your attention on only those objects that apply to the task you are performing. However, creating a search or filter query that displays the objects you are interested in for a particular task can be time-consuming. Personal views provide a way for you to save that work. Once you have created a query that displays just the objects you need, you can provide the query with a name and save it to use later. That saved query is a personal view. Each view saves the following settings that you specify: the container to search or filter; the search or filtering criteria; the set of columns and the sort order in the list of search or filtering results.

Creating a personal view

Personal views are like search or filter queries that you have named and saved. After creating a personal view, you will be able to reuse it without re-creating its underlying search or filter query. To reuse a personal view, click the name of that view on the **Views** tab in the [Browse pane](#). The Web Interface applies the search or filter query saved in the view, and displays the results in the list with the same set of columns and sort order as when you created the view.

To create a personal view

1. Do one of the following:
 - Configure and perform a search. For instructions, see [Searching for directory objects](#).
 - Create a filtered list of objects. For instructions, see [Filtering the contents of a container](#).
2. Click the Menu button on the left side of the Toolbar, and then click **Save current view**.
3. In the dialog box that appears, type a name for the personal view, and then click **Save**.

Changing a personal view

The personal views that you created are listed on the **Views** tab in the Browse pane. When you select a view in the Browse pane, Web Interface applies the search or filter query saved in the view, and displays the results in the list with the same set of columns and sort order as when you created the view. At this point, you can make changes to the search or filter criteria, set of columns and sort order, and then save the changed settings to the selected personal view or create a new personal view based on the changed settings.

To save the changed settings to the selected personal view

1. Select a personal view in the Browse pane.
2. Make changes to the search or filter criteria, list columns or sort order.
3. Click the Menu button on the left side of the Toolbar, and then click **Save current view**.
4. In the dialog box that appears, don't change the name of the view. Click **Save**.

To create a new personal view based on the changed settings

1. Select a personal view in the Browse pane.
2. Make changes to the search or filter criteria, list columns or sort order.
3. Click the Menu button on the left side of the Toolbar, and then click **Save current view**.
4. In the dialog box that appears, type a name for the new personal view and then click **Save**.

You can also rename or delete personal views.

To rename a personal view

- On the **Views** tab in the Browse pane, click the Edit button next to the name of the view, type a new name, and then press Enter or click the Edit button once more.

To delete a personal view

- On the **Views** tab in the Browse pane, click the Delete button next to the name of the view.

Performing Management Tasks

- [Managing your personal account](#)
- [Managing Active Directory objects](#)
- [Running an automation workflow](#)
- [Managing temporal group memberships](#)
- [Managing AD LDS data](#)
- [Managing computer resources](#)
- [Restoring deleted objects](#)

Managing your personal account

The **User Profile Editor** section in the Web Interface site for self-administration 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. The contents of the pages in the **User Profile Editor** section can be customized by the Active Roles administrator, who 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. In your Web browser, go to the address (URL) of the Web Interface site for self-administration.
By default, the address is `http://<server>/ARWebSelfService` where `<server>` stands for the name of the server running the Web Interface.
2. On the Web Interface Home page, click **User Profile Editor**.
3. Use the page provided by the Web Interface to view or modify your user account.
4. Click the **Save** button to apply your changes.

It's up to the Active Roles administrator to determine what information you are authorized to view or modify on the **User Profile Editor** 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 **User Profile Editor** page.

Managing Active Directory objects

The **Directory Management** section of the Web Interface allows you to browse for, and administer, directory objects in your organization. You can navigate through containers in the directory; view, filter and select objects held in the container; and apply commands to the selected object or container.

Whether you can perform a certain management task depends upon 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. On the Navigation bar, click **Directory Management**.
2. On the **Views** tab in the Browse pane, click 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.
3. In the list of objects, do one of the following:
 - To navigate to a container, such as an organizational unit, click the name of that container.
 - To perform a command that applies to the current container, click that command in the Command pane under the name of the current container.
 - To perform a command on a particular object held in the current container, select the check box next to the name of that object, and then click the command in the top area of the Command pane, under the name of the object.
 - To perform a command on two or more objects at a time, select the check box next to the name of each object, and then click the command in the top area of the Command pane.

NOTE: In the list of objects, clicking the name of a leaf object such as a user or group, displays a page where you can view or modify object properties; clicking a container object such as a domain or an organizational unit, displays a list of objects held in that container.

When you perform a management tasks, the Web Interface supplements and restricts your input based on policies and permissions defined in Active Roles. The Web Interface displays the data generated by policies, and prevents the input of data that would cause policy violations. The following rules apply:

- If a policy requires that a value be specified for a particular property, the name of the field for that property is marked with an asterisk (*).

- If a policy imposes any restrictions on a property, an information icon is displayed next to the name of 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 violates a policy, and click **Save**, the Web Interface displays an error message. Review the error message and correct your input.
- Pages for object creation 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 Active Roles Web Interface Administration Guide.
- Object property pages 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 pane includes only the commands that you are permitted to use.
- The list of objects includes only the objects that you are permitted to view.

Batch operations

In the Web Interface, you can select multiple objects (such as users, groups and computers), and then apply a certain command to your selection of objects. This allows you to perform a batch operation on all the selected objects at a time instead of executing the command on each object separately. The Web Interface supports the following batch operations:

- **Delete** Allows you to delete multiple objects at a time.
- **Deprovision** Allows you to deprovision multiple users or groups at a time.
- **Move** Allows you to move a batch of objects to a different organizational unit or container.
- **Add to groups** Allows you to add a batch of objects to one or more groups of your choice.
- Batch operations are available in the list of objects on the following Web Interface pages:
- **Search** This page lists the search results when you perform a search.
- **View Contents** This page displays the objects held in a given organizational unit, Managed Unit, or container.

To perform a batch operation, select the check box next to the name of each of the desired objects in the list, and then click a command in the top area of the Command pane. This executes the command on each object within your selection.

i **NOTE:** Active Roles administrators can customize Web Interface by adding and removing commands, and modifying pages associated with commands. For more information, see "Customizing the Web Interface" in the Active Roles Web Interface Administration Guide.

Example 1: Enabling a user account

This topic demonstrates how to enable a disabled user account by using the Web Interface.

To enable a disabled user account

1. Locate the user account you want to enable. For instructions on how to locate objects in the Web Interface, see [Locating directory objects](#) earlier in this document.
2. In the list of objects, select the user account you want to enable.
3. In the Command pane, click **Enable Account**.

NOTE: If the user account is not disabled, the Command pane includes the **Disable Account** command instead of the **Enable Account** command.

Example 2: Adding a user to a group

This demonstrates how to add a user account to a group by using the Web Interface.

To add a user account to a group

1. In the Web Interface locate and select the user account. For instructions on how to locate objects in the Web Interface, see [Locating directory objects](#) earlier in this document.
2. In the Command pane, click **Member Of**.
3. On the **Member Of** page that appears, click **Add**.
4. On the **Select Object** page that appears, perform a search to locate the group. For instructions on how to configure and start a search, see [Searching for directory objects](#) earlier in this document.
5. In the list of search results on the **Select Object** page, select the group to which you want to add the selected user account, and then click **Add**.

Running an automation workflow

Workflow refers to a sequence of actions that leads to the completion of a certain task. Active Roles allows administrators to configure various workflows that can be started on a scheduled basis or on user demand. This workflow type is called *automation workflow*. For more information, see “Automation workflow” in the Active Roles Administration Guide.

If an automation workflow is configured so that running it on demand is allowed, then such a workflow can be run from the Web Interface.

To run an automation workflow from the Web Interface

1. On the Navigation bar, click **Directory Management**.
2. On the **Tree** tab in the Browse pane, expand the **Workflow** branch and click the container that holds the desired workflow.
3. In the list of objects, select the desired workflow.
4. In the Command pane, click **Run**.
5. If prompted, review or change the values of the workflow parameters.
6. Click **OK** in the confirmation message box.

The Web Interface prompts you for parameter values if the workflow has any parameters that need to be supplied by the user running the workflow on demand. If the workflow has no parameters that require user input, then the Web Interface starts the workflow without prompting you for parameter values.

Once you have started an automation workflow, the Web Interface opens a run history report allowing you to examine the progress of workflow execution. The report displays the workflow execution status along with information about the activities performed during workflow run. For a workflow that is in progress you have the option to cancel execution of the workflow by clicking the **Terminate** button.

After the workflow is completed, the report retains history information about the workflow run. For each completed run of the workflow, the report allows you to identify when and by whom the workflow was started, when the workflow was completed, and what parameter values were used.

The report also lists the workflow activities that were executed during the workflow run. For each activity, you can determine whether the activity was completed successfully or returned an error. In case of error, the report provides an error description. For activities requesting changes to directory data (for example, activities that create new objects or modify existing objects), you can examine the requested changes in detail by clicking the Operation ID number in the run history report.

To view run history of an automation workflow in the Web Interface

1. On the Navigation bar, click **Directory Management**.
2. On the **Tree** tab in the Browse pane, expand the **Workflow** branch and click the container that holds the desired workflow.
3. In the list of objects, select the desired workflow.

In the Command pane, click **Run History**.

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 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 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, select 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**.

NOTE: You can make an object a temporal member of particular groups by managing the object rather than the groups. Select 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

In the list of group members displayed by the Web Interface, you can distinguish between regular 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, select the group, and then choose the **Members** command.
2. Review 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 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, select the object, and then choose the **Member Of** command.
2. Review 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.

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, select 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.

NOTE:

- You can view or modify the start time and end time settings by managing an object rather than the groups in which that object has memberships. Select 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. On the page, select multiple list items, click **Temporary Access**, and then, in the **Temporal Membership Settings** dialog box, 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, select the group, and then choose the **Members** command.
2. On the **Members** page, select the member, and click **Remove**.

- NOTE:** You can remove an object that is a temporal member of a group by managing the object rather than the group. Select 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

You can use the Web Interface to manage directory data in Microsoft Active Directory Lightweight Directory Services (AD LDS). Similarly to Active Directory domains, directory data can be managed in only the AD LDS instances that are registered with Active Roles (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 an 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

1. On the Navigation bar, click **Directory Management**.
2. In the Browse pane, click the **Tee** tab.
3. On the **Tree** tab, do the following:
 - a. Expand the **AD LDS (ADAM)** container.
 - b. Under **AD LDS (ADAM)**, expand a directory partition object to view its top-level containers.
 - c. Expand a top-level container to view the next level of objects in that container.
4. Do one of the following:
 - To move down a directory tree branch, continue expanding the next lowest container level on the **Tree** tab.
 - To administer a directory object at the current directory level, click a container on the **Tree** tab and use the instructions that follow.

To manage directory data in AD LDS

On the **Tree** tab in the Browse pane, under **AD LDS (ADAM)**, click the container that holds the data you want to manage.

1. In the list of objects, select the object that represents the directory data you want to manage.
2. Use commands in the Command pane to perform management tasks.

i **NOTE:** In the list of objects, clicking the name of 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. Unavailable on domain controllers.
- **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. Unavailable on domain controllers.
- **Devices** View or modify properties of a logical device, start or stop a logical device.

To manage computer resources

1. In the Web Interface, locate the computer that hosts resources you want to manage. For instructions on how to locate objects in the Web Interface, see [Locating directory objects](#) earlier in this document.
2. Select the computer in the list of objects, and then click **Manage** in the Command pane.
3. In the list of resource types, click the type of resource you want to manage.
4. In the list of objects that appears, select the resource you want to manage.
5. Use commands in the Command pane to perform management tasks on the selected resource.

To manage print jobs

1. Repeat Steps 1–2 of the previous procedure, to start managing computer resources.
2. In the list of resource types, click **Printers** to view a list of printers found on the computer you selected.
3. In the list of printers, select a printer whose print jobs you want to manage.
4. In the Command pane, click **Print Jobs** to view a list of documents being printed.
5. In the list of documents, select a document to pause, resume, restart, or cancel printing.
6. Use commands in the Command pane to perform management tasks on the selected document.

Restoring deleted objects

The Web Interface can be used 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.

To undo deletions, Active Roles 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. For more information, see the “Recycle Bin” chapter in the *Active Roles Administration Guide*.

Locating deleted objects

If Active Directory Recycle Bin is enabled in a managed domain, the Web Interface provides access to the **Deleted Objects** container that holds the deleted objects from that domain. On the **Tree** tab in the Browse pane, the **Deleted Objects** container appears at the same level as the domain object, 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, 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 [Managing the list of objects](#) 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

To locate deleted objects, you can perform a search in the **Deleted Objects** container:

1. On the **Tree** tab in the Browse pane, click the **Deleted Objects** container.
2. In the Command pane, click **Search under this container**.
3. Specify criteria for the deleted objects that you want to find:
 - To search by naming properties, type in the Search field on the Toolbar. The Web Interface will search for objects whose naming properties match what you typed. The naming properties include name, first name, last name, display name, and logon name.

- To search by other properties, click the button on the right side of the Toolbar to expand the Toolbar, click **Add criteria**, choose the properties by which you want to search, click **Add**, and then configure the criteria as appropriate. The Web Interface will search for objects that match the criteria that you configured.
4. Press Enter to start the search.

Locating 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. Select the OU or MU that held deleted objects you want to view.
2. In the Command pane, click **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 [Managing the list of objects](#) earlier in this document).

NOTE: The **View or Restore Deleted Objects** command is also available on domain and container objects.

Restoring a deleted object

You can restore deleted objects by using the **Restore** command that is available in the Command pane when you select a deleted object in the Web Interface.

To restore a deleted object

1. In a list of deleted objects, select the object you want to undelete. For instructions on how to build a list deleted objects, see [Locating deleted objects](#).
2. In the Command pane, click **Restore**.
3. 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 the 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 restores the entire contents of the container.

NOTE: 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 page 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 Approval Workflow

- [Understanding approval workflow](#)
- [Locating approval items](#)
- [Using "My Tasks"](#)
- [Using "My Operations"](#)

Understanding approval workflow

The approval workflow system included with Active Roles provides:

- A point-and-click interface to configure approval rules, available from the Active Roles console. The approval rules are stored and performed by the Active Roles Administration Service.
- The directory management section of the Web Interface for submitting operation requests for approval. For example, approval rules could be configured so that creation of a user account starts an approval workflow instead of immediately executing the user creation operation. For information on how to use the directory management section, see [Managing Active Directory objects](#) earlier in this document.
- The **Approval** area of the Web Interface to manage operation requests and approvals. This area includes a "to-do" list of the approval tasks the designated user has to carry out, allowing the user to approve or reject operation requests.

The **Approval** area provides a way to perform change approval actions, allowing you to control changes to directory data that require your approval and monitor your operations that require approval by other persons. You can use the **Approval** 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, Active Roles 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 assigned to the appropriate approver. Active Roles administrators configure approval workflow by creating approval rules to specify what changes require approval and who is authorized to approve or deny change requests.

In the **Approval** 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 Approval area

- On the Web Interface Home page, click in the **Approval** box.

Locating approval items

The **Approval** 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 predefined views, you can locate operations and tasks by using the search function.

To search for an operation or task by ID

1. In the right 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 topics cover the predefined views of 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**.

For information about the **Pending** view, see [Pending tasks](#).

For information about the **Completed** view, see [Completed tasks](#).

Pending tasks

The **Pending** view contains a list of your approval tasks to be completed. Each task in the list is identified by a header area that provides basic information about the task such as a unique ID number of the task, who requested the operation that is subject to approval, when the task was created, the time limit of the task (if any), and the target object of the operation. In the middle of a task’s header area is a section that contains the title of the task (**Approve operation** by default), a label indicating the status of the task, and summary information about the operation that is subject to approval.

The task’s header area contains the action buttons you can use to apply the appropriate resolution to the approval task. The action buttons are displayed at the bottom of the header area. Which buttons are displayed depends upon configuration of the approval rule. You may encounter the following action buttons there:

- **Approve** Click this button to allow the requested operation.

Depending on configuration of the approval and policy rules, the Web Interface may request you to enter additional information that must be added to the operation request. For example, when you approve the operation of creating a user account, you may have to supply certain properties of the user account in addition to those supplied by the administrator who requested creation of that user account. If additional information is required, clicking **Approve** displays a page where you can supply the required information. You can also access that page by clicking the **Examine task** button.

- **Reject** Click this button to deny the requested operation.
- **Escalate** Click this button to assign the approval task to an approver of a higher level.

This button is displayed if the approval rule has one or more approver levels (referred to as escalation levels) configured in addition to the initial approver level. Escalation levels are normally used to assign (escalate) the approval task automatically to the approver of a higher level if the task is not completed in time. The approval rule may be configured to allow approvers to escalate approval tasks as needed, in which case the task's header area contains the **Escalate** button.

- **Delegate** Click this button to assign the approval task to a different person. You can select the user account of the person to whom you want to assign the task.

This button is displayed if the approval rule is configured with the option to allow approvers to reassign (delegate) their approval tasks to others.

- **Custom buttons** The approval rule may add custom buttons to the task's header area. The action that Active Roles performs when you click a custom button depends upon configuration of the workflow containing the approval rule. The administrator who configures the workflow should normally supply an instruction on the use of custom action buttons. To view the instruction, click the **Examine task** button. This opens a page containing the same action buttons that you see in the task's header area. The instruction text is displayed above the action buttons on that page.

The task's header area contains the **Examine task** button allowing you to get detailed information about the task, review the object properties submitted for approval, and supply or change additional properties. Clicking the **Examine task** button displays a page containing a replica of the task's header area, the action buttons, and a number of information sections. Review the information on the page, supply or change the object properties for which the task requests your input, and then click the appropriate action button.

The page that appears when you click the **Examine task** button includes the following information sections:

- **Object properties**

The contents of this section heavily depends upon configuration of the approval rule. Thus the approval rule may request you to enter additional information that must be added to the operation request. For example, when you approve the operation of creating a user account, you may have to supply certain properties of the user account in addition to those supplied by the administrator who requested creation of

that user account. In this case, enter the requested properties in the fields under **Supply or change the following properties**.

Normally, the approval rule is configured so that the approver is allowed to review the values of the object properties that were supplied or changed by the operation that is subject to approval. The approval rule may also be configured to allow the approver to change those property values. In either case, you can view or change them in the fields under **Review the properties submitted for approval**.

- **Approvers**

This section displays a list of the user accounts or groups to which the approval task is currently assigned. Any of the listed users or members of the listed groups can act as an approver on the task in question.

- **Approval progress**

This section provides information on the date and time that the task was created and whether the task was escalated to a higher approver level or reassigned (delegated) to other persons. If the task was escalated, you can view when escalation occurred and what caused escalation. If the task was reassigned (delegated), you can view who and when delegated the task and to whom the task was delegated.

- **Details**

In this section you can view aggregated information about the approval task properties and configuration, and some details of the operation that the task is intended to allow or deny. The **Operation ID** field provides a link to a page where you can examine the operation in more detail.

To complete a pending task

1. Click **Examine task** in the task's header area.
2. On the **Object properties** page, review, supply or change the object properties for which the task requests your input, and then click the appropriate action button.

You can also complete a task by clicking the appropriate action button in the task's header area. However, if the current policy and approval rules require the approver to supply some additional information, the Web Interface would open the **Object properties** page, prompting you to configure the required properties.

Completed tasks

The **Completed** view contains a list of your approval tasks that are completed and do not require approver action. Each task in the list is identified by a header area that provides basic information about the task such as a unique ID number of the task, who requested the operation that is subject to approval, when the task was created, and the target object of the operation. In the middle of a task's header area is a section that contains the title of the task (**Approve operation** by default), a label indicating the status of the task, and summary information about the operation that was subject to approval. The header area also identifies the approver action that was applied to complete the task and the completion reason, if any, specified by the approver who completed the task.

The task's header area contains the **Examine task** button allowing you to get detailed information about the task and review the object properties that were submitted for approval or changed by the approver who completed the task. Clicking the **Examine task** button displays a page containing a replica of the task's header area and the following information sections:

- **Object properties**

The contents of this section heavily depends upon configuration of the approval rule. Thus the approval rule may request the approver to enter additional information that must be added to the operation request. For example, when you approve the operation of creating a user account, you may have to supply certain properties of the user account in addition to those supplied by the administrator who requested creation of that user account. The values of the properties supplied by the approver are displayed in the fields under **Supply or change the following properties**.

Normally, the approval rule is configured so that the approver is allowed to review the values of the object properties that were supplied or changed by the operation that is subject to approval. The approval rule may also be configured to allow the approver to change those property values. In either case, you can view them in the fields under **Review the properties submitted for approval**.

- **Approvers**

This section displays a list of the user accounts or groups to which the approval task was assigned.

- **Approval progress**

This section provides information on the date and time that the task was created, and whether the task was escalated to a higher approver level or reassigned (delegated) to other persons. If the task was escalated, you can view when escalation occurred and what caused escalation. If the task was reassigned (delegated), you can view who and when delegated the task and to whom the task was delegated.

The **Task completed** sub-section indicates the date and time that the task was completed, identifies the approver who completed the task and the approver action that was applied to complete the task, and lists the values of the object properties that were supplied or changed by the approver.

- **Details**

In this section you can view aggregated information about the approval task properties and configuration, and some details of the operation that was allowed or denied by the completed task. The **Operation ID** field provides a link to a page where you can examine the operation in more detail.

Using “My Operations”

In the **My Operations** area, the **Recent** view lists your operation requests that are waiting for approval from other individuals, as well as those allowed (approved) or denied (rejected) by the approver. You can use this view to monitor the status of your requests.

You also have the option to cancel any of your requests that are not yet approved or rejected.

Each operation listed in the **Recent** view is identified by a header area that provides basic information about the operation such as a unique ID number of the operation, when and by whom the operation was requested, and the target object of the operation. A section in the middle of the operation header contains a summary of the operation, operation status and an operation reason that was supplied when the operation was submitted for approval.

The operation summary identifies the operation type (such as **Create user** or **Change user**) and may provide information about the changes to the object properties that result from the operation. From the operation status you can tell whether the operation is waiting for approval (pending), allowed (completed), denied (rejected) or canceled. If a given operation is waiting for approval, you can remove the operation request by clicking the **Cancel operation** button.

The operation header contains the **View operation details** button allowing you to get detailed information about the operation and review the object properties that were submitted for approval or changed by the approver who allowed the operation. Clicking the **Examine task** button displays a page that contains a replica of the operation header and the following information sections under the operation header:

- **Properties changed during this operation**

This section lists the object property values that were changed as a result of the operation, new values assigned to the properties, and identifies who made the changes.

- **Workflow activities and policy actions**

This section provides detailed information about all policies and workflows that Active Roles performed when processing the operation request, including information about the approval tasks created as a result of approval workflow activities. For each approval task, you can view the status of the task along with aggregated information about the properties and configuration of the task.

From the task status you can tell whether the task is waiting for completion (pending), completed to allow the operation or rejected to deny the operation. From the additional information about a task, you can identify, for instance, the approvers to whom the task is assigned, the due date of the task, the approver who allowed or denied the operation and what changes, if any, the approver made to the original operation request.

- **Operation details**

This section contains additional information about the operation, including when and by whom the operation was requested, the target object of the operation, the current status of the operation, and the date and time that the record of the operation was last updated.

Contacting us

For sales or other inquiries, visit <https://www.oneidentity.com/company/contact-us.aspx> or call +1-800-306-9329.

Technical support resources

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

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

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product