eControl 3.5
for eDirectory & GroupWise
Administrator Guide

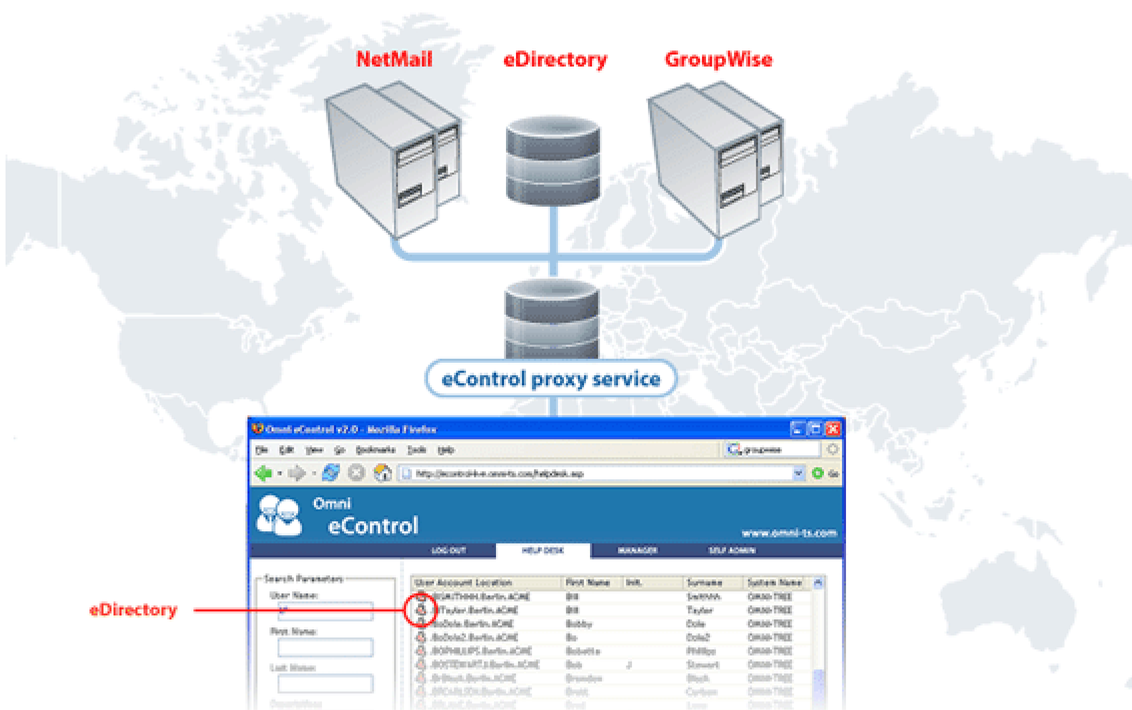
This Guide

Welcome to the "**eControl 3.5 for eDirectory and GroupWise Administrator Guide**". This guide is for system administrators and deals with creating and managing the "back-end" eControl elements using the eControl administration panel.

Other guides in this series includes:

- **"eControl 3.5 Requirements Checklist for eDirectory and GroupWise"**
- **"eControl 3.5 for eDirectory and GroupWise Installation and Update Guide**"
- **"eControl 3.5 for eDirectory and GroupWise Operator Guide"**
- **"eControl 3.5 for eDirectory and GroupWise Self-Service Guide"**

eControl 3.5 for eDirectory and GroupWise delivers a simplified, web-based management, provisioning, self-service and audit application designed for non-technical users. eControl empowers junior administrators, help desk operators, HR staff, department managers, support staff and even end-users to perform common user account management tasks in eDirectory and GroupWise – from a web browser, with NO security permissions and NO access to Novell ConsoleOne or iManager.



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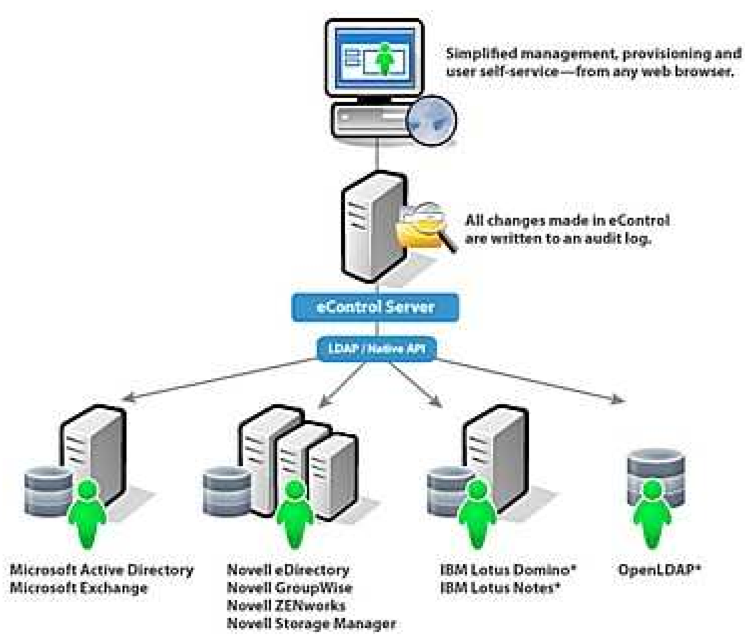
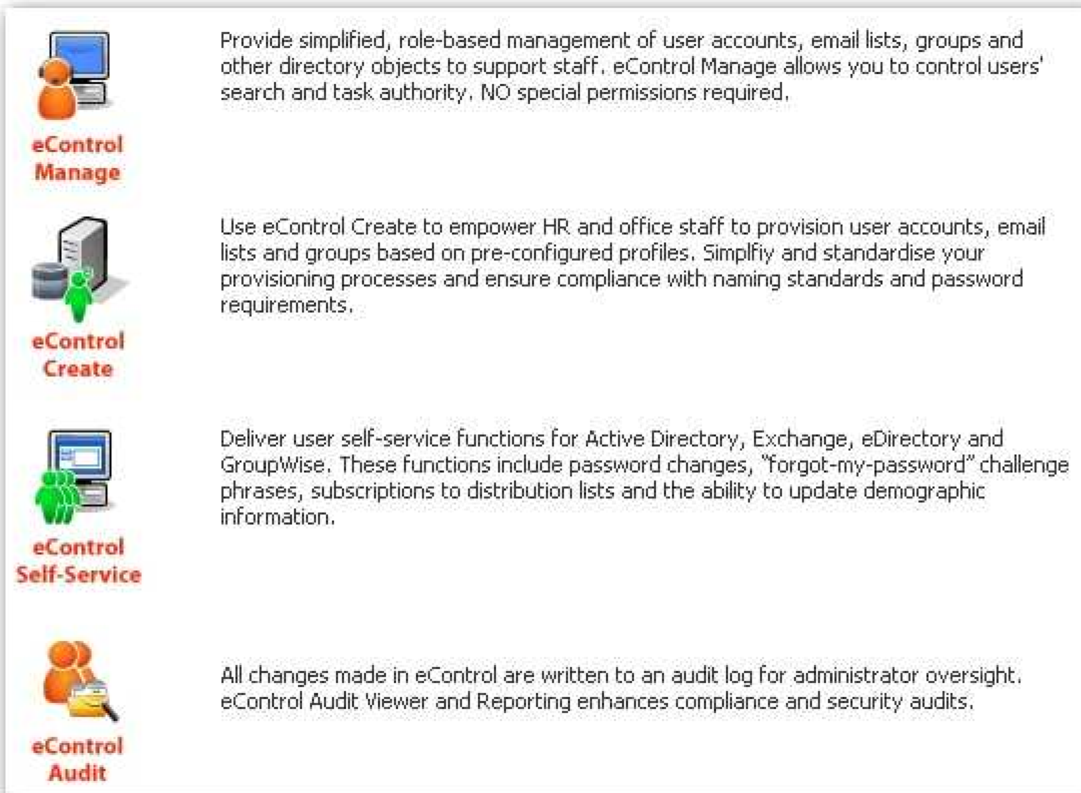
How eControl Works

eControl 3.5 provides a web-based directory and email service management system with special features designed to empower non-IT staff with the ability to manage users without requiring **SUPERVISOR or ADMINISTRATOR** rights! With eControl, concerns such as WAN bandwith, distance, time-zones, training of IT staff, improving helpdesk effectiveness, costs, and security are overcome.

eControl installs as a Windows service that can connect directly to the configured mail and directory systems via **native API, SOAP and/or LDAP calls**. This enables support staff to manage mixed and multiple Active Directory, Exchange, eDirectory and GroupWise systems from a single web interface. eControl 3.5 now supports 3rd Party Extensions integrating SQL database systems.



eControl comprises four feature modules that are enabled through the licensing process and provisioned in the administration panel:



Types of eControl Access

Access to the eControl web portal is limited to users who have been assigned some type of access:

- **eControl Service Account** – accounts that are configured in the Riva eDirectory or Active Directory connections. These accounts have supervisory rights / permissions to their corresponding eDirectory tree or Active Directory domain. These accounts have automatic access to the "Administration" panel.
- **eControl Delegated Administrators** – eDirectory or Active Directory group members assigned "Delegated Access" do not need supervisor rights / permissions to their corresponding eDirectory trees or Active Directory domains. These accounts are granted access to the "Administration" panel.
- **eControl Operators** – eDirectory or Active Directory groups that are assigned to a task collection, create profile or audit view assignment. These accounts can perform delegated administrative tasks in the "Manage", "Create", or "Audit" panels.
- **eControl Users** - eDirectory or Active Directory groups that are assigned to a user self-service assignment. These accounts can change their own password, configure 'Forgot password' settings, and personal information.

Login to the eControl Portal

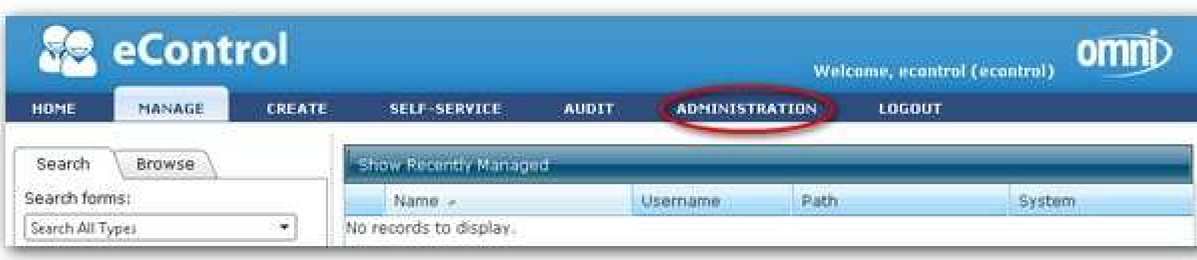
To access the eControl web portal login:

- http://localhost using a web browser on the eControl host server
- http://<eControl host server IP address or DNS name> from any desktop web browser

- **Username** – provide the login name configured to the eDirectory connection configured during the installation. If there are multiple AD connections, choose the domain where the eControl management accounts are located.
- **Language** – This will appear if eControl was installed with multiple language support. The visible language of the eControl web pages will be localized to the language selected during the login.

Access the eControl Administration Panel

eControl is administered using an "Administration" panel available only to eControl service accounts and delegated administrators. Only those accounts will see the **Administration** link in the menu tool bar.



Provisioning eControl is performed from the "Administration" panel. Only eControl service accounts and delegated administrators can configure how eControl works and can provision management task collections, create profiles, self-service assignments, and audit file access to other users in the environment.

Assign Delegated Administration

Initial access to the eControl "Administration" panel is limited to eControl service accounts. Assigning eControl delegated administrators should be the first management task performed.

For eControl installations that have been upgraded from eControl 3.4 or earlier, this procedure is now available.

To assign "Delegated Administration":

1. Create a group in eDirectory for eControl delegated administrators (e.g. *econtrol-admins*) and add members that should be provided access to the eControl administration panel.
2. Login to eControl as the eControl service account.
3. Click on "Administration" in the menu bar.
4. Click on the "Delegated Administration" link in the footer of any "Administration" panel page.
5. Click **Add**. Navigate to and select the eControl delegated administrators group created in step 1. Click **OK** and click **Accept**.
6. Navigate to the "Manage" page and click the **Apply Settings** button.
7. Logout and login as a delegated administrator.

Configure the Manage Module

The "Manage" module provides web-based Directory object management tasks for eControl operators.

How it Works

For the Manage Module:

1. Task collections are created and configured. This defines **what tasks** can be carried out.
2. Task collections are assigned to Directory groups. This defines **who** has the authority to carry out the assigned tasks in a task collection (we refer to this as "Task Authority").
3. Search paths are assigned to each Task Authority and task collection assignment. This determines **where** (in which containers and therefore against which users and groups) the assigned tasks can be carried out (we refer to this as "Search Authority").

Task Collections are based on the types of tasks available for the type of Directory and email system being managed. eControl 3 currently supports:

- eDirectory 8.5+
- GroupWise 5.5 EP+

Calculating Cumulative Authorities

Important concepts to remember are:

- A user can be a member of multiple groups
- Task collections are assigned to groups
- A task collection can be assigned to more than one group
- A group can be assigned only one task collection but can be configured for multiple search contexts and exclusions
- Search contexts can be specific to a single container or can allow for sub-containers to be searched and containers can be excluded from a search context
- Each task collection assignment may be assigned to multiple search contexts in multiple Directory systems

The cumulative affect is that a single user can be assigned conflicting task sets (e.g. a restricted set from task collection "A" and a fully-enabled task set from task collection "B") for the same group of target users being managed. In that case, eControl calculates:

- **Search Authority** - the cumulative list of all containers in all managed directories that can be searched by the operator, and
- **Task Authority** - the cumulative list of tasks that can be performed by the operator against the selected user is based on adding together all of the assigned tasks for every task collection that applies to the selected user. eControl will apply the least restrictive (most permissive) set of tasks.

If an eControl operator is assigned to a "Task Collection", the "Manage" tab will be visible when they login to the eControl portal. Search operations will only work for those search contexts defined in the task collection that has been assigned to the group the Operator is a member of. This limits the scope of task ability for each eControl operator to assigned task collections.

No Administrative or Supervisor Rights Required

User accounts that will be enabled to use eControl to manage network users and resources require NO supervisor or administrator rights in the file system, in the Directory or to email systems being managed. Management tasks are assigned to eDirectory or Active Directory groups through the eControl Administration panel. Any member of a group that has been assigned a specified task can carry out that task.

Planning for eControl Manage

To implement eControl 'Manage', some time must be taken to create and configure objects in advance. Some things to consider are:

- What different types of administration do you want to implement:
  - Will there be system-wide administrators?
  - Will there be container specific administrators?
  - What other types of administrators do you want to enable ... for example:
    - IT help desk operators who can enable/disable accounts, change passwords, and modify group membership
    - Office Managers who can enable/disable accounts and change passwords
    - Regional Administrators who can perform user and group management across multiple locations
- What types of tasks do you want each type of administration to perform? This will help to define task collections.
- Where in the Directory will each type of administration be able to perform assigned tasks? This will help to determine "scope" defined as the "search context" (the parent and child containers) that can be assigned to each task collection assignment.

Planning Concepts for Task Collections

Careful planning is required to determine where to add, remove or adjust task.

When looking at what task collections to create, it is helpful to use the following strategy:

- **STEP 1** – Determine which containers are going to be managed by eControl.
- **STEP 2** – Determine the types of task collections that are needed to support the desired user account and email account management strategy, e.g. all tasks, tasks for office managers, tasks for user support staff. In this step, you should always have an "All Tasks" collection and a list of additional task collections that are required. Each task collection should have the exact set of tasks to be configured in that collection. (e.g. a set of minimal tasks that a junior level help desk operator can perform). Be detailed with this step and decide on an appropriate naming strategy for each task collection.
- **STEP 3** – Determine which group of "operators" will be assigned to each task collection. You can choose existing Directory groups or create additional user groups as required. Decide on an appropriate naming strategy for each "eControl" group.

After the plan has been completed, the next step is to create the new task collections and assign them to groups to match the user account management strategy.

Configure Super Administrator Task Collection

The recommended first task after assigning "Delegated Administration" is to enable system-wide administrators (e.g. "econtrol-admins" group). This includes:

- Modify the "All Tasks" task collection to select appropriate tasks, and
- Assign the "All Tasks" task collection to the "econtrol-admins" group.

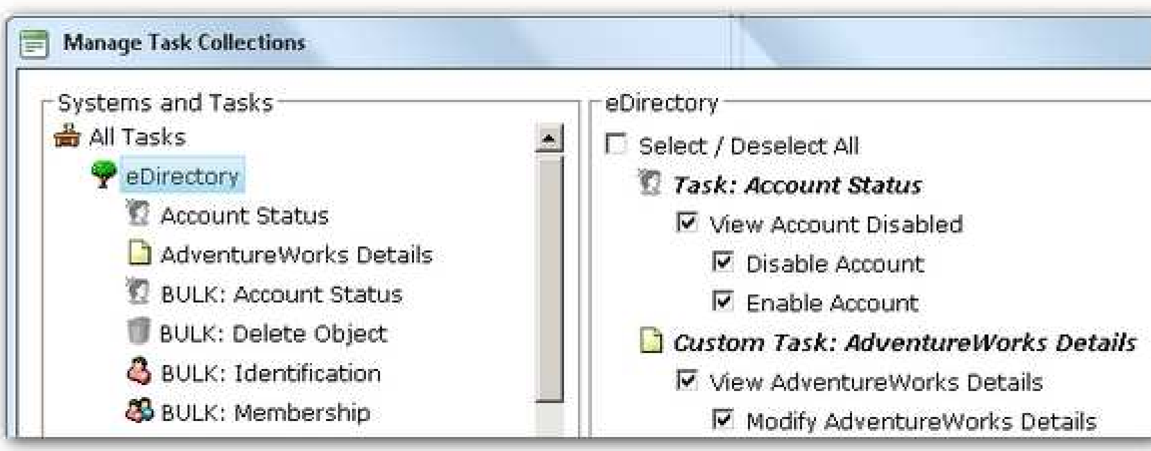
Modify the "All Tasks" Task Collection

The recommended first task after the initial login to the administration panel is to modify the "All Tasks" task collection to ensure that the desired tasks are enabled:

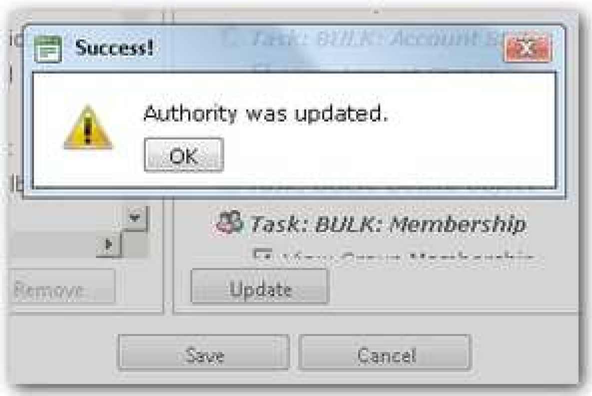
1. Login into eControl as the eControl service account.
2. Select the **Administration** tab in the top tool bar. This will take you to the eControl Administration panel.
3. Select the **Manage** tab in the top tool bar. This will take you to the administration panel for the "Manage" module.
4. To modify the task collection to be assigned to the econtrol-admins group, click the **Manage Task Collections** button. The "All Tasks" task collection will be selected and there are no groups listed as having this task collection assigned to them.

   Click on "eDirectory" to display the full list of available tasks.

5. Scroll down through the available tasks and select the ones that should be made available to the eControl system-wide administrators.



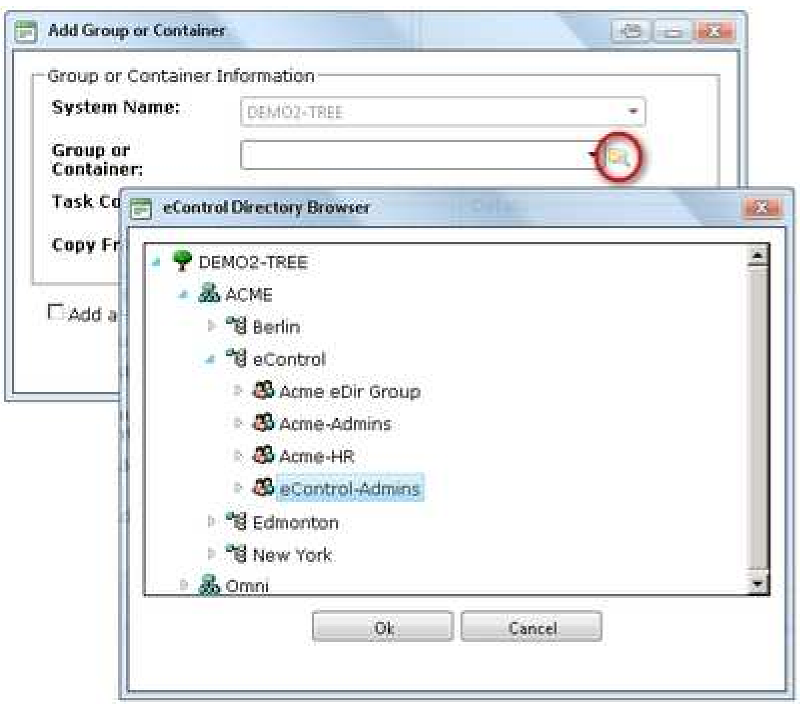
6. Click the **Update** button to record the setting changes. Click the **OK** button to close the "Success" window and the click the **Save** button to save the changes and close the Manage Task Collections window.



Assign the "All Tasks" Task Collection

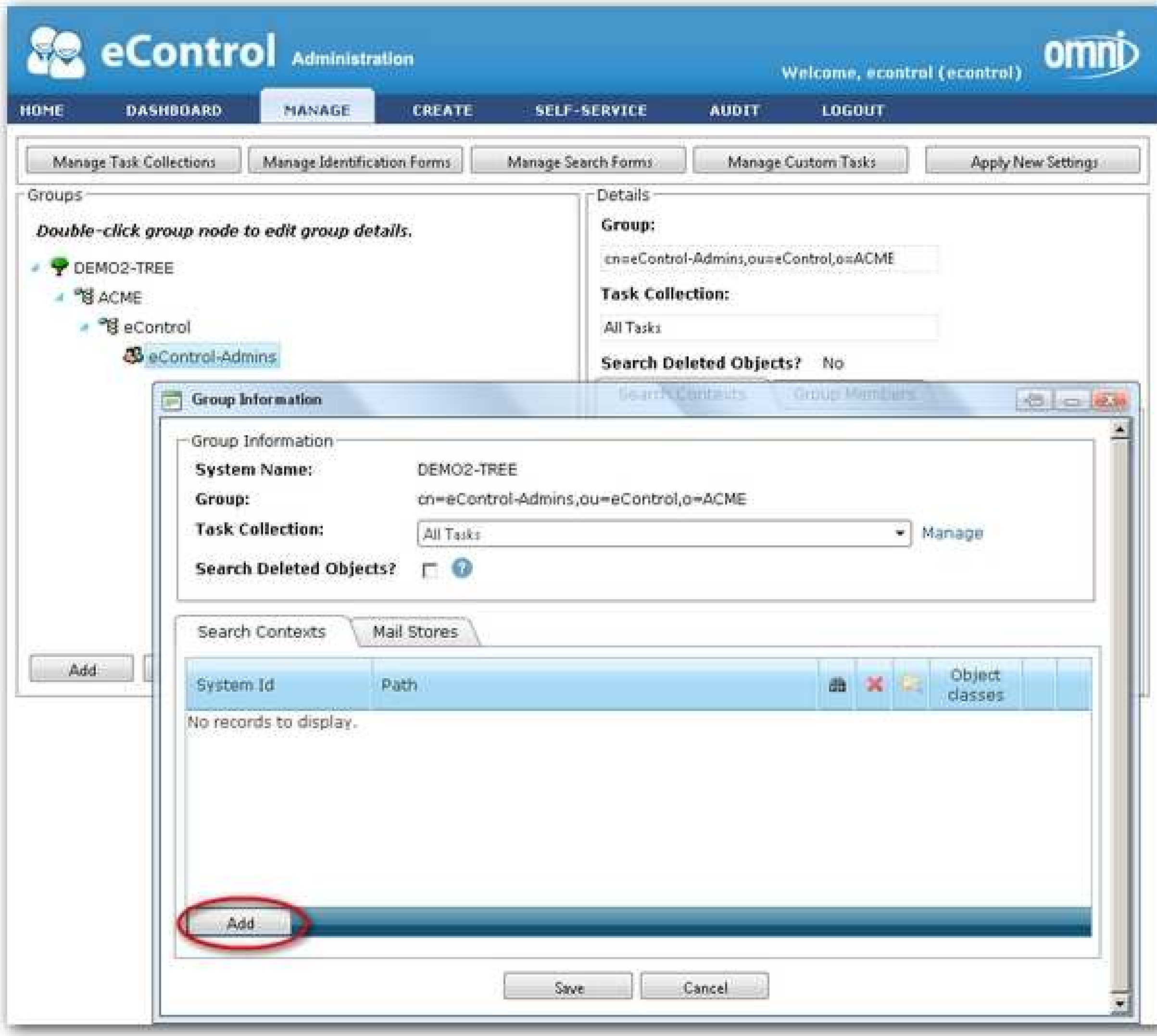
Once the desired tasks have been selected, the "All Tasks" task collection must be assigned to the the system-wide administrator group (e.g. "econtrol-admins"):

1. In the "Groups" pane, click the **Add** button.
2. Ensure that the correct Directory is displayed for the "System Name". Beside the "Group or Container:" field, click the browse icon open the Directory browse window. Navigate and select the system-wide administrators group and click the **OK** button.



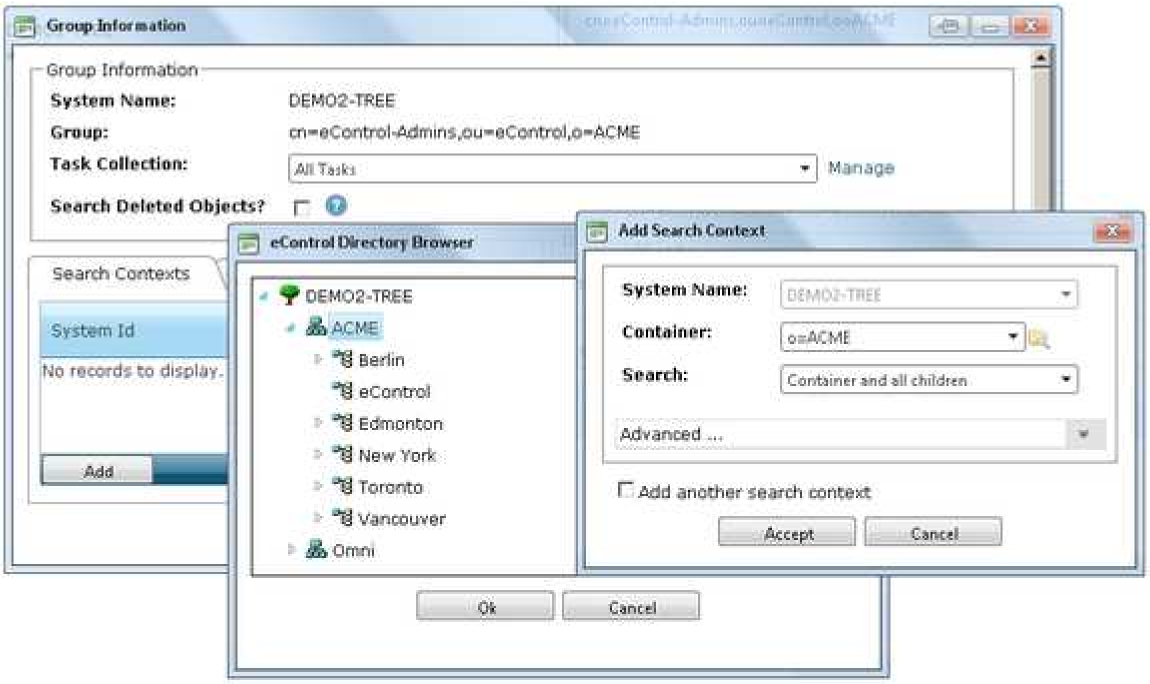
3. In the "Add Group or Container" window, click **Accept**.

4. The selected system-wide administrators group will now appear in the “Groups” pane and the “Group Information” window will automatically open.



In the "Group Information" window below "Search Contexts" click the **Add** button to select the search contexts which also define the “scope” of administration for this assignment.

5. In the “Add Search Context” window, use the drop-down button to select the System Name and click the browse icon to select the top level container for the search context (e.g. o=ACME). Click the **Ok** button to add this search context.



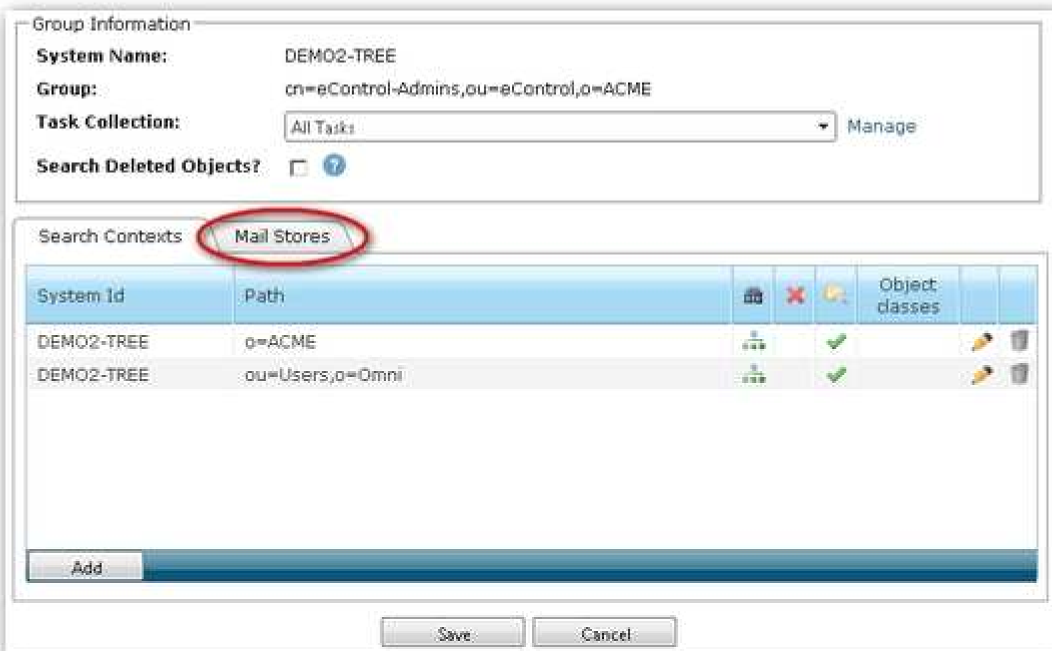
Click the down arrows beside the “Advanced …” field.

- Select **Is excluded?** to specify that this container is excluded from the search context (used to create exclusion filters).
- Select **Is browsable?** To enable viewing this container in a tree-view pane for object searching.
- **Object classes:** is used to add a list of object types that can be searched and displayed.

If **Add another search context** was checked, when the **Accept** button is clicked, the container will be added to the search list. At the "Success" window, click **OK**, and the "Add Search Context" window will open again to allow the selection of another container. With the final container to be added, uncheck the **Add another search context** option and then click **Accept**.

6. If a container was missed, repeat steps 4 and 5 to add as many additional search contexts as required for all the Directory systems that are being managed.

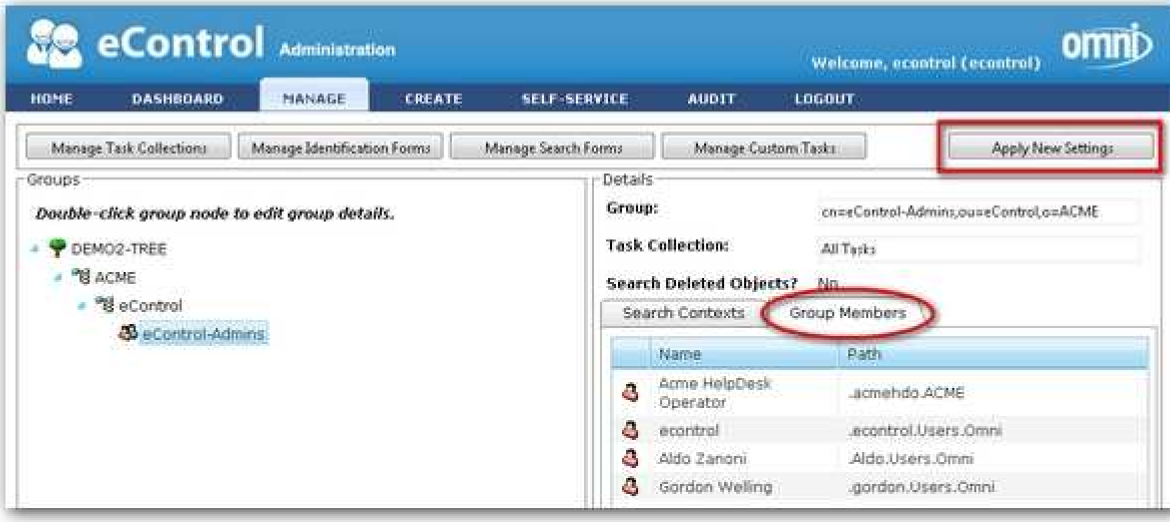
7. Select the "Mail Stores" tab to manage the available email systems.



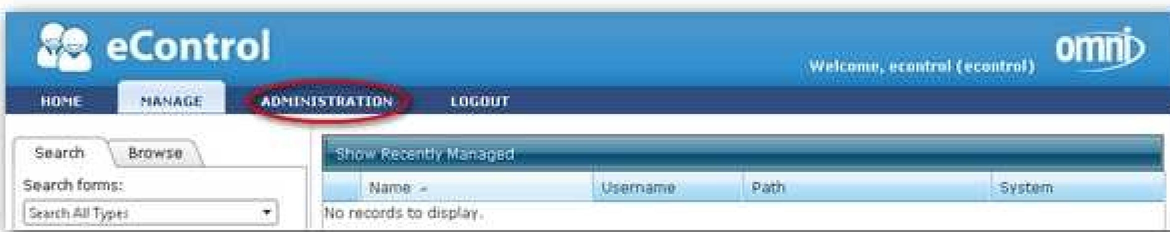
8. Ensure that the "Enabled" is checked for the email system listed.

9. Click the **Save** button to save the task collection assignment to the sys-wide administrators group.

10. Click on the "Group Members" tab to view the users that are members of the group assigned to the task collection.



11. Click the **Apply New Settings** button to apply the changes to the eControl portal.
12. eControl will switch view to the "Manage" tab and display the default Manage page that is available to eControl operators. Click the **Administration** tab to return to the administration panel.



Create and Manage Task Collections

Different task collections can be created and modified allowing granular assignment of tasks to those groups that will manage resources using the eControl portal.

To create and manage task collections:

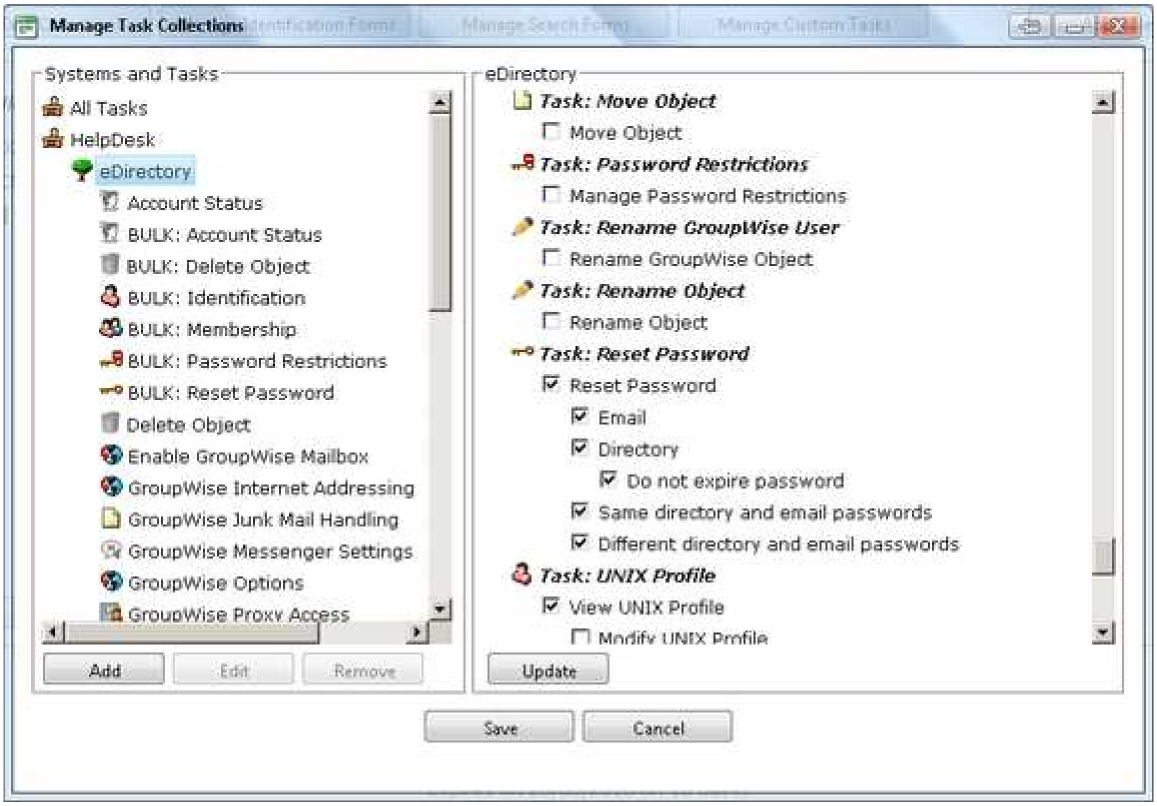
1. Click the **Manage Task Collections** button.
2. Click the **Add** button.
3. In the "Add Task Collection" window, provide a name for the task collection. Select "All Tasks" from the "Copy From" drop-down list to use the same tasks as the "All Tasks" task collection.

If the **Add another task collection** option is checked, then the "Add Task Collection" window will open to allow the creation of another task collection after the Accept button is clicked. Click **Accept** to create the task. For this documentation, a **Net Admins** and a **Helpdesk** task collections will be created and modified.

4. Repeat step 3 to create as many new tasks collections as needed. Uncheck the **Add another task collection** option before clicking the **Accept** button for the last task collection to be created.
5. Select the **Net Admins** > **eDirectory** task collection and modify the assigned tasks as desired.

Click **Update** to save the settings.

6. Select the **HelpDesk** > **eDirectory** task collection and modify the assigned tasks as desired.



Click **Update** to save the settings.

7. Click **Save** to save all the new task collections and close the "Manage Task Collection" window.

Assign Task Collections

The "Manage" module depends on the assignment of task collections. Observe the following considerations when assigning a task collection:

- A task collection can be assigned to multiple groups.
- A group is limited to one task collection assignment.
- Each task collection can be assigned more than one search context. The combination of all Directory containers in all search contexts assigned to a task collection define the management "scope" of that task collection. A member of an group assigned to a task collection is limited to managing those objects that are "in scope" or exist in the path of the assigned search contexts.

To assign task collections:

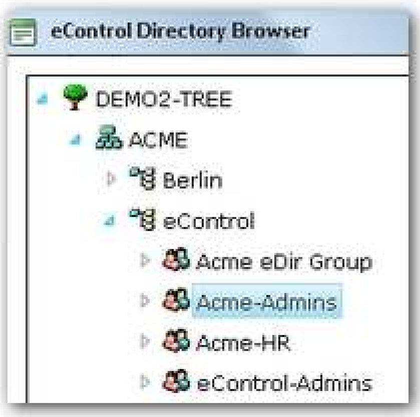
1. Add one or more Directory groups to the list.
2. For each group, assign a task collection.

3. For each task collection assignment to a group, specify the search context and the manage email stores.

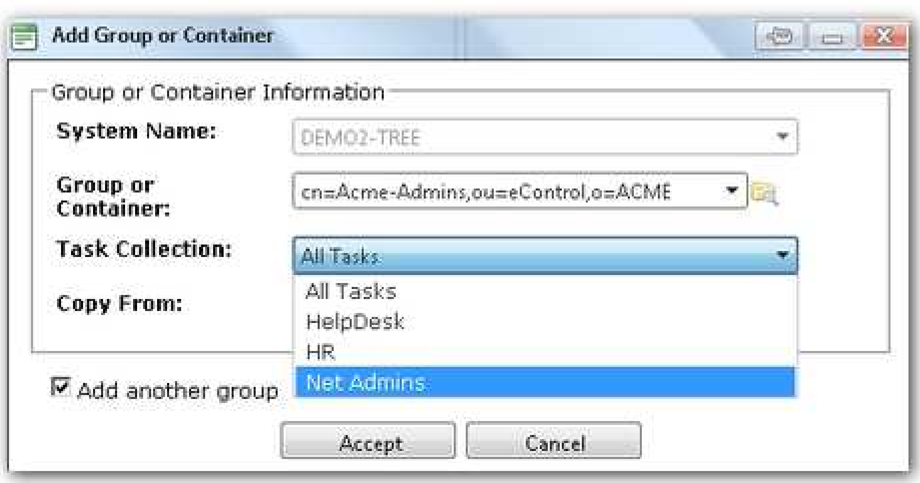
Add Groups

To add multiple groups to the list:

1. In the "Groups" pane, click the **Add** button.
2. In the "Add Group or Container" window, click the Group or Container browse icon.
3. Select the desired group and click **OK**.



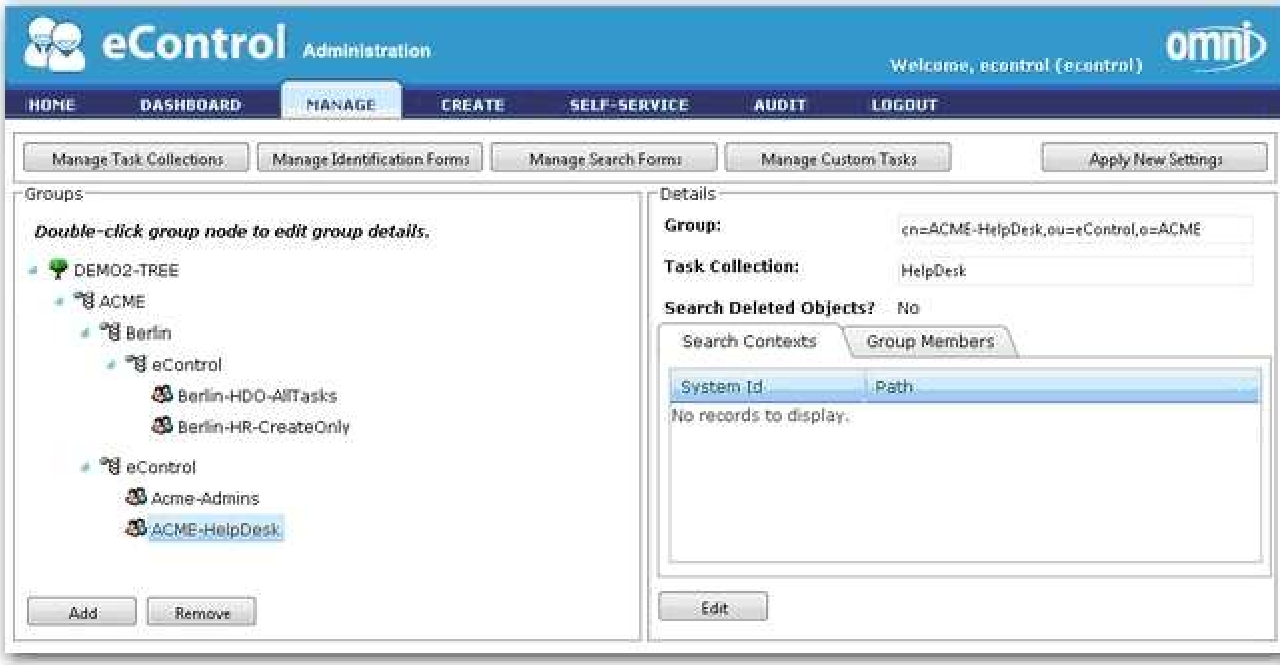
4. In the "Add Group" window, ensure that the correct Directory is displayed for the "System Name". Click the "…" ellipse to open the Directory browse window. Navigate and select the desired group and click the **OK** button.



Select the desired task collection from the drop-down list. If **Add another Group** is checked, the "Add Group" will open after this group is created and confirmed. Uncheck the **Add another group** option before accepting the last group to be created. Click **Accept** to continue.

Configure the Task Collection Assignments

When all the groups have been added, they will be visible in the list. Each group must have its corresponding task collection modified to define the search contexts and enable the email store.

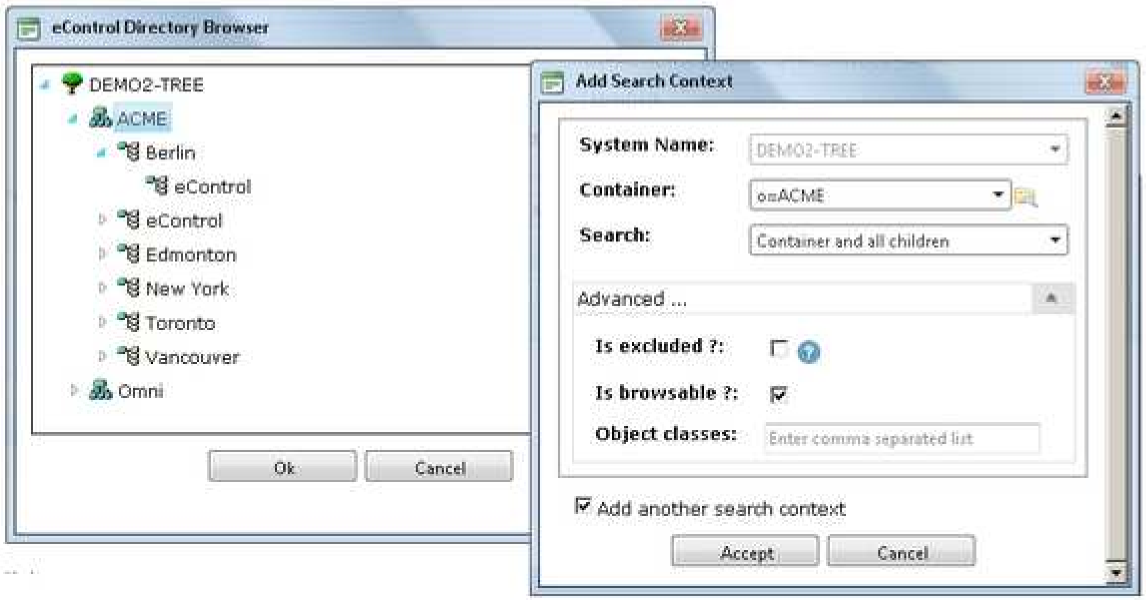


To modify the task collection of a group, either double-click the group **or** select the group and click the **Edit** button.

To configure each group assignment:

1. In the "Group Information" window, ensure that the correct task collection has been assigned. Click the **Add** button.

2. In the "eControl Directory Browser" window, select the top-most container for a search context and click **OK**.



In the "Add Search Context" window, check the **Add another search context** option to select another Directory container. Click the **Accept** button. At the "Success" window, click **OK**.

3. In this example, we want to add a child IT container and exclude it. This will prevent the HelpDesk operators from seeing and managing the IT department objects.

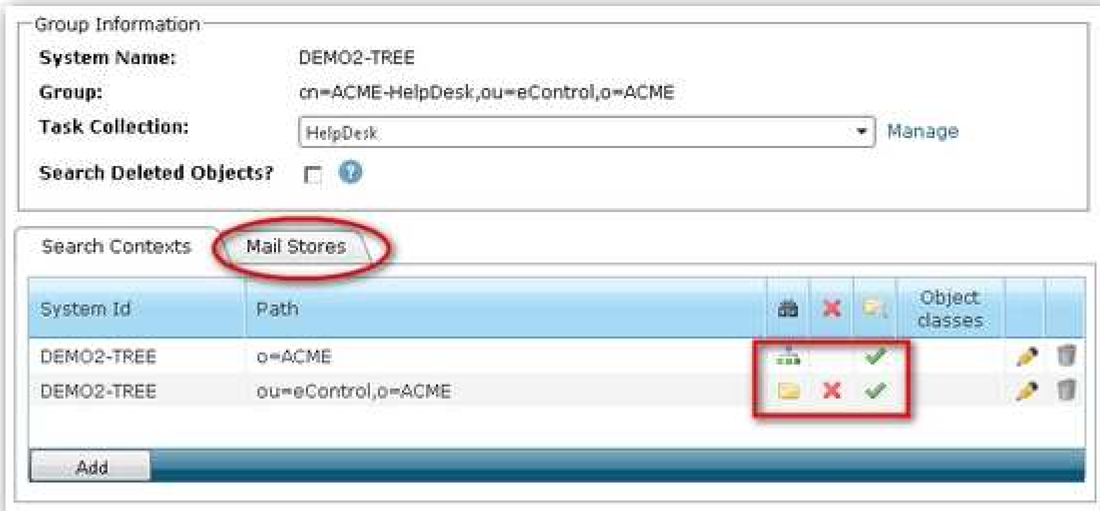
Ensure that the **Search** option uses **Container only** or **Container and all children** as desired.

Drop the **Advanced** options and ensure that **Is excluded** is checked.

Uncheck the **Add another search context** option if this is the last search context to be added.

Click the **Accept** button.

4. Confirm that the "Scope" and "Is Excluded" options are correctly indicated.



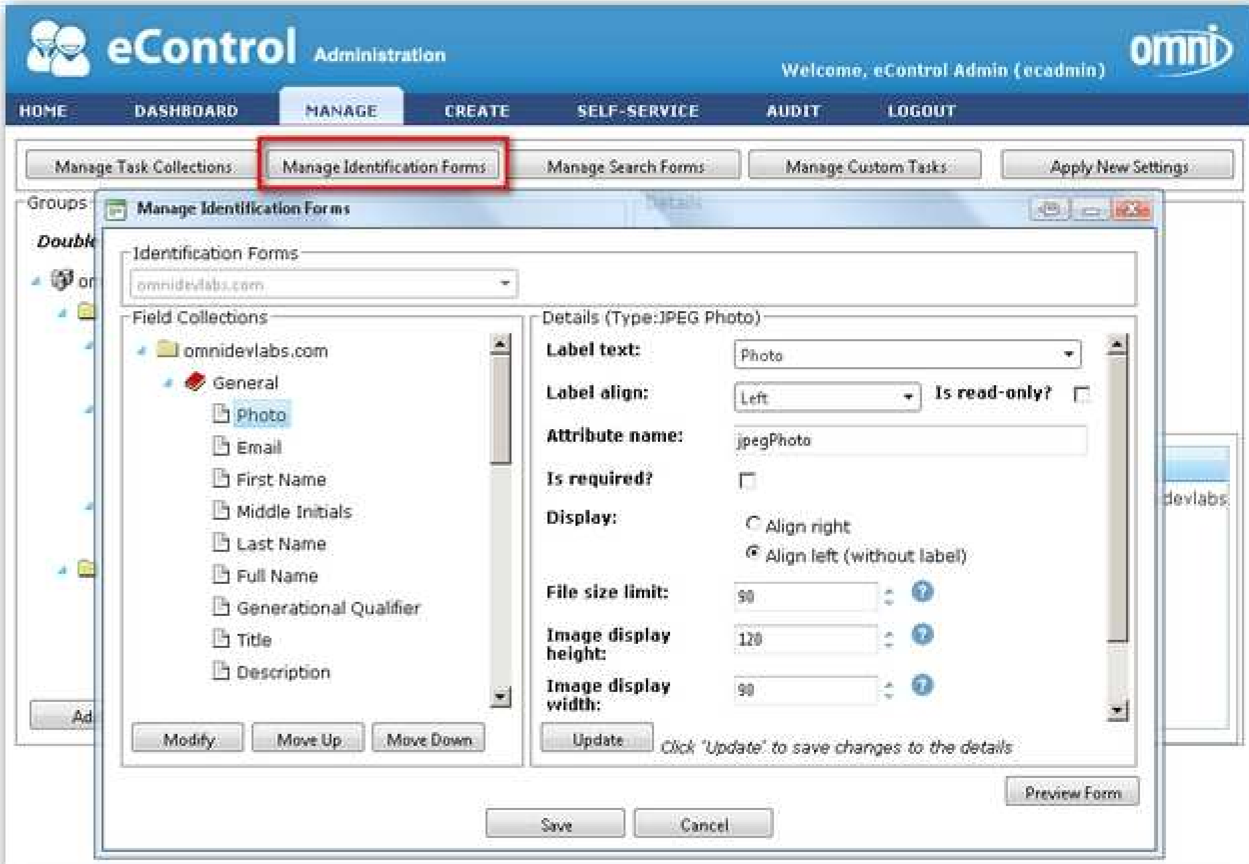
Click on the **Mail Stores** tab.

5. Ensure that the mail store(s) and **enabled**.

6. Click **Save** to the changes to the task collection. Once all task collection assignments have been configured, click the **Apply Settings** button to make the task collections available in the Manage page for the assigned eControl operators.

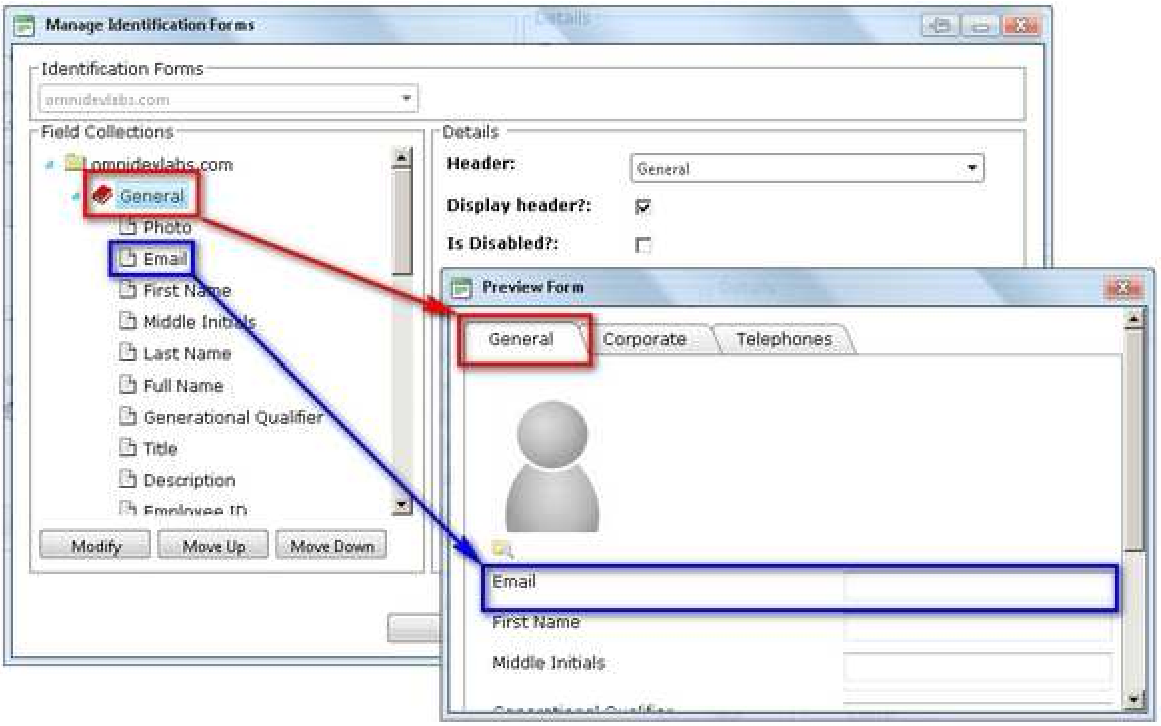
Manage Identification Forms

eControl Operators who are granted "Manage Identification" tasks in their assigned task collection can view and modify the personal information of user accounts. Click the **Manage Identification Form** to modify how the form works.



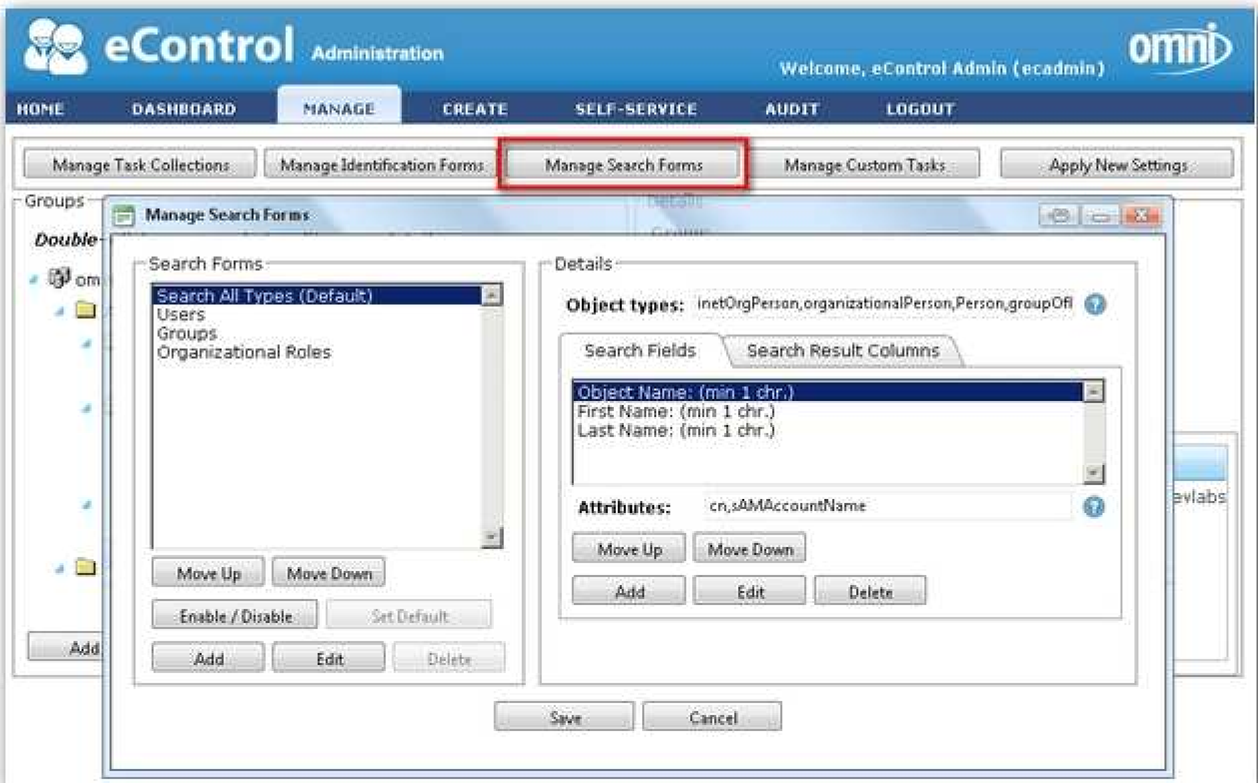
The "Manage Identification Form" can be modified in the same manner as "Manage Create Forms" (see "Create" then "Manage Create Forms" for more details).

The important differences is that with "Manage Identification Form", the **Headers** match the **Tabs** in the actual form and the **Fields** match the **Input Fields** in the actual form.



Manage Search Forms

eControl Operators are granted the ability to search for objects in the "search scope" defined in the assigned task collection. Click the **Manage Search Form** to modify how the search form works.

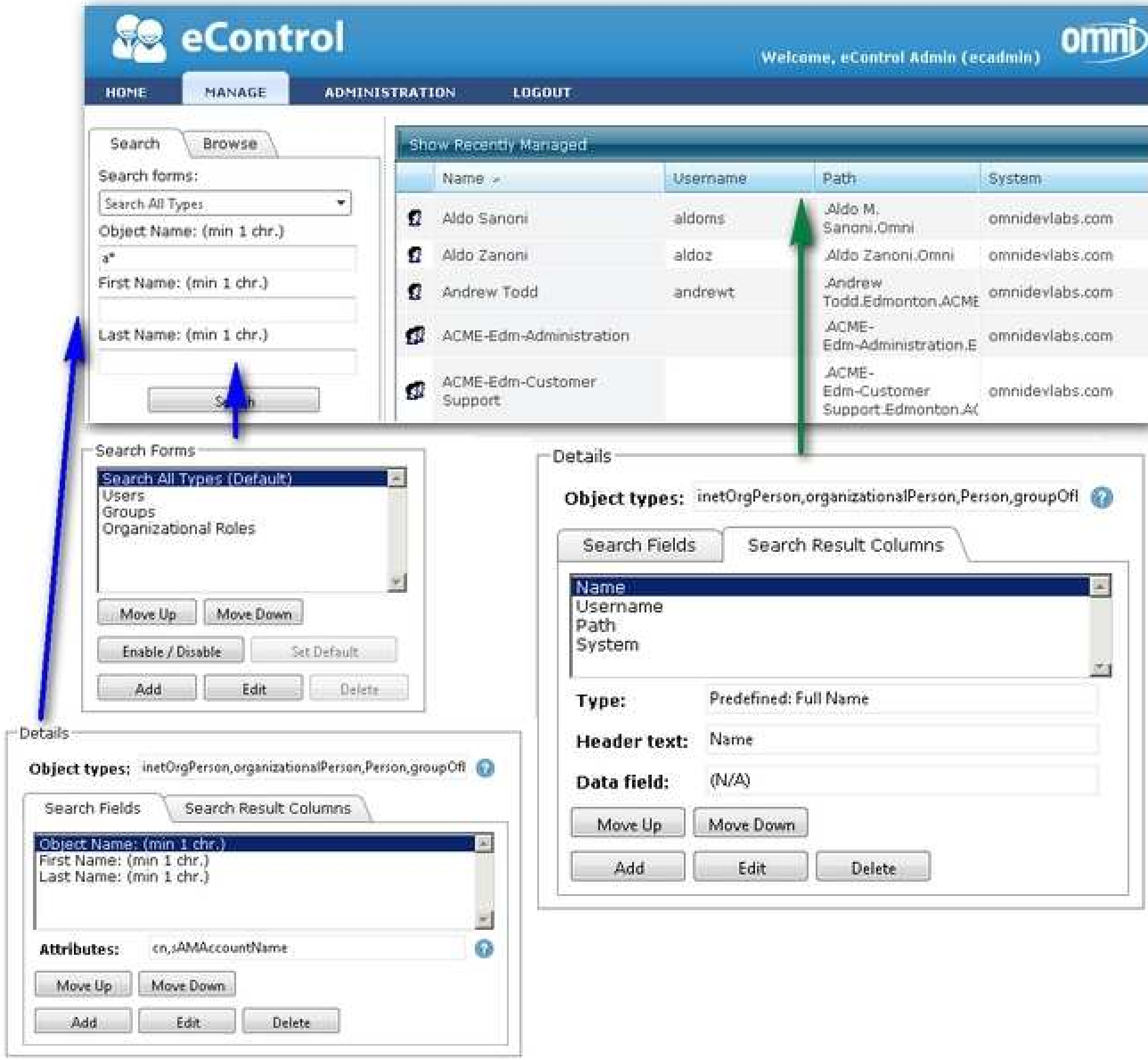


The "Search Forms" and "Search Fields" details control how search form area of the Operators "Manage" page will look like and perform.

"Search Forms" can be used to add, modify or remove search types. Each search type is associated with one or more object types (LDAP object classes). "Search Fields" is used to define the field name and matching LDAP attribute and how many minimum characters to match.

> **Note:** Modifying the default provided search form types and search fields requires extensive knowledge of LDAP classes and attributes for the associated Directory systems being managed. ***Do not attempt to modify any Search Form or Search Fields settings without assistance from Omni Technical Support***.

"Search Results Columns" can be used to modify the order that the search columns will display search results. Existing results columns can be removed or modified. Other search results columns can be added.



Manage Custom Tasks

Custom tasks can be created and added to eControl and the corresponding custom tasks can be enabled in task collections.

> **Note:** Modifying the default provided custom tasks requires extensive knowledge of LDAP classes and attributes for the associated Directory systems being managed. ***Do not attempt to modify any Custom Tasks without assistance from Omni Technical Support***.

Configure the Create Module

The "Create" module provides web-based enable eControl operators to create objects within the Directory(s) being managed. Complete granular control is provided through the eControl Administration panel where the eControl administrator can control what objects are created by which group of users and in which containers in the Directory.

How it Works

For the Create Module:

1. Source objects are created in the Directory(s). This provides an object that can be used as a **template** for creating objects of the same type.
2. "**Create forms**" are built and configured. Those forms will be used by eControl operators to create new objects.
3. "**Create Profiles**" are built which define:
   - the create form to use;
   - the source object (the template) to use;
   - the target location where the new objects will be created;
   - whether bulk create will be enabled;
   - which eDirectory groups can be assigned to those create objects; and
   - which additional groups to make the new objects a member of.

If an eControl operator is assigned to a "Create Profile", the "Create" tab will be visible when they login to the eControl portal. Operators will only be able to see and use those "Create Profiles" that they have been assigned to.

Types of Objects that can be Created

The Create Module supports the individual and bulk creation of:

- eDirectory user objects – whatever common settings are applied to the base object will be copied to the new user created including GroupWise account settings, home directory settings, and group memberships
- eDirectory objects where a base object has been created in the Directory that can be used as a template.

No Administrative or Supervisor Rights Required

Directory groups will be assigned to create new objects and members of those groups require NO supervisor rights or administrator-level permissions in the file system, in the Directory or to email systems being managed. Create tasks are performed by the eControl service accounts on behalf of those users that have been assigned to a create profile.

Planning Concepts for eControl Create

Careful planning and preparations will result in the creation of the correctly functioning "create profiles". When looking at what create profiles to create, it is helpful to use the following strategy:

- **STEP 1** – Determine the target objects to be created in terms of context (location in the Directory system) and the configuration of the new objects that will be created. For user objects consider home directories, GroupWise account, common identification information (like department, location, mailing address, telephone numbers, etc), account profile, terminal services configuration, remote access settings, and group memberships.
- **STEP 2** – Create an appropriate source or base object to be used as a template that will be used to create the new object. Since a Create Profile can specify a create form, a target location, and group membership (for user objects), create the minimum number of source objects needed. Focus on creating source objects that specify configurations that can be common for all as many target objects as possible and specify unique settings using the combination of a create form and create profile settings.
- **STEP 3** – Determine which values the eControl operator must provide in the create form when creating the new target object. Keep in mind that you may need different create forms for the same target objects: one for single object creation and one for bulk import. This step involves identifying the field definitions that will be mapped to the target Directory system.
- **STEP 4** – Determine which Directory group(s) will be assigned to use each create profile.

Build the Source Objects

Once planning and preparations have been completed, source objects that will be used as templates for new objects need to be created. Consider the following factors:

- **User objects** – create source user objects that are common to a context and configure the object with the common settings (e.g. home folder, terminal settings, common identification information, common group memberships, etc). For example, if the Directory has containers based on geographic location, and users are differentiated by the group memberships (Sales or Marketing or Administration), create a single source user object for that location. Unique information can be specified in the create form and unique membership associations can be specified in the create profile. Using this strategy a single user template object can be created for the "New York" container and multiple create profiles such as "New York – Sales" and "New York – Administration" can be created to meet unique requirements.
- **Group type objects** - there is not a lot of unique information that can be pre-configured in a source group type object. Typically, a single source object for each type can be created per eDirectory tree or replica partition.

As a best practice, it is recommended that:

- source objects are located in a 'Resources' child container inside the 'eControl' container, and
- the 'eControl' container should be outside the scope of management for all task collection assignments except for the eControl service account.

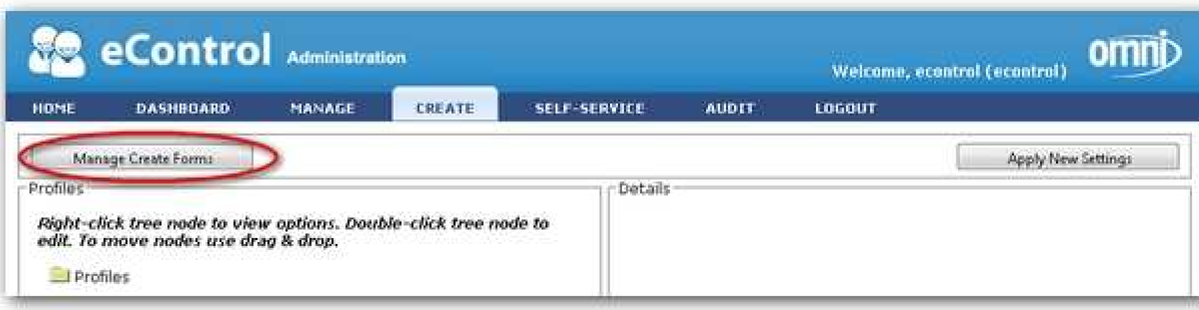
Build the Create Forms

Once source objects have been created, create forms need to be built and configured. eControl ships with 4 pre-built create forms which should not be modified in any way. Those create forms are normally used as a source to create new unique create forms. The pre-built create forms include:

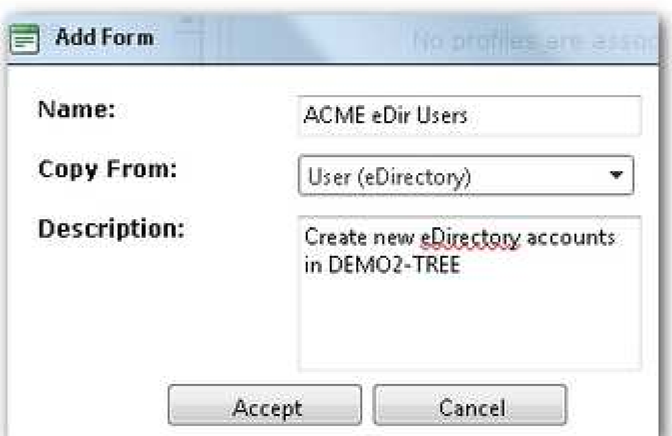
- User (Active Directory) - not used in eDirectory only environments
- Group (Active Directory) - not used in eDirectory only environments
- User (eDirectory)
- Group (eDirectory)

To build a new create form for a user object:

1. In the Administration panel, select the “Create” tab.

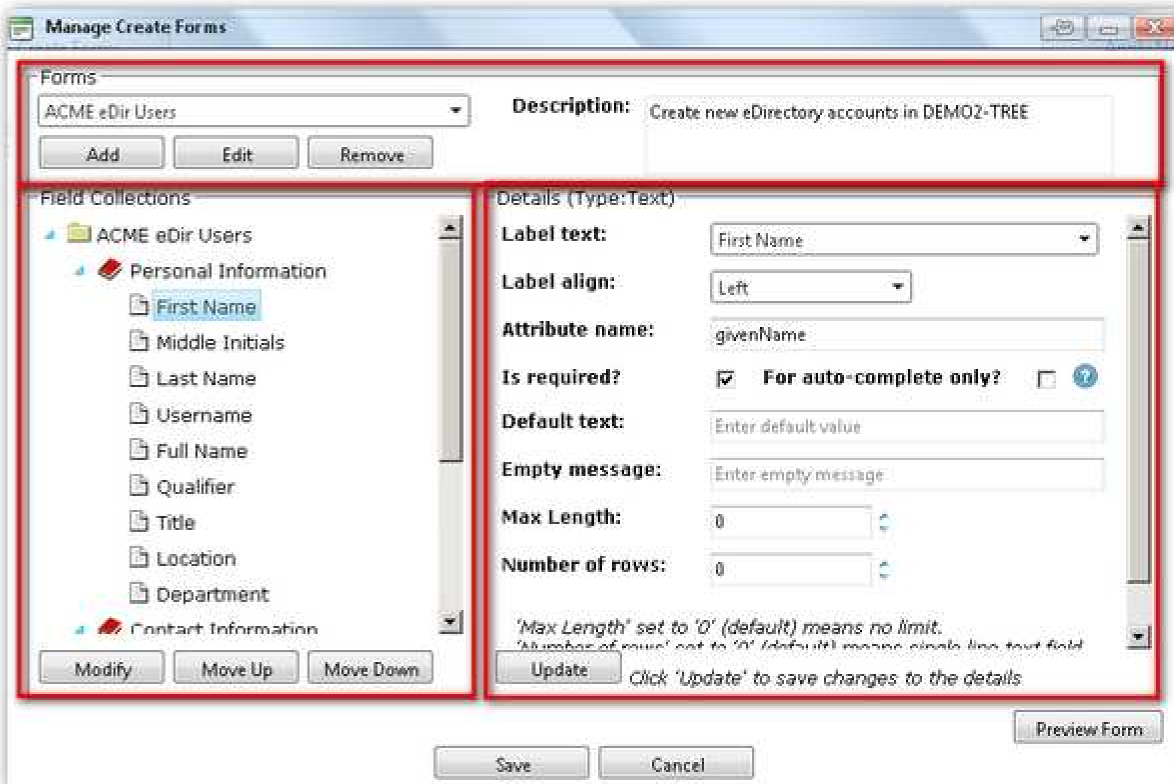


2. Click the **Manage Create Forms** button.
3. In the "Manage Create Forms" window click the **Add** button in the "Forms" pane.
4. In the "Add Form" window, provide a descriptive name for a new form.



Enter a description for this form (optional). Select the applicable pre-built create form as a source object from the **Copy From:** drop-down list and provide a suitable description. Click the **Accept** button.

5. In the "Manage Create Forms" window, select the new create form (e.g. ACME eDir User) from the forms drop-down list. Click the **Save** button to save the new create form. You can then manage the create form:



The "**Manage Create Form**" is made up of three panels:

- The "**Forms**" panel allows the administrator to select the create form to manage. In addition, the administrator can add a new create form, and edit or remove the create form that is displayed in the form drop-down list.
- The "**Field Collections**" panel displays in a tree-view the fields that will be used in the create form. Fields are contained in categories.
  - An administrator can create a new category, edit the category currently selected, move the category currently selected up or down (which changes the order of categories as displayed in the create form), and remove an existing category (that contains no fields).
  - An administrator can create a new field, move a field up or down in the current category (which changes the order of the fields as displayed in the create form), change the type of a field, and can remove a field.
- The "**Details**" panel shows the unique information for each category or field. This is where changes can be made and updated.
- Below the "Details" panel is a "**Preview Form**" button that can be used to display a sample create form using the settings currently saved for that form.

4. Make the necessary modifications to the create form and click **Update**.

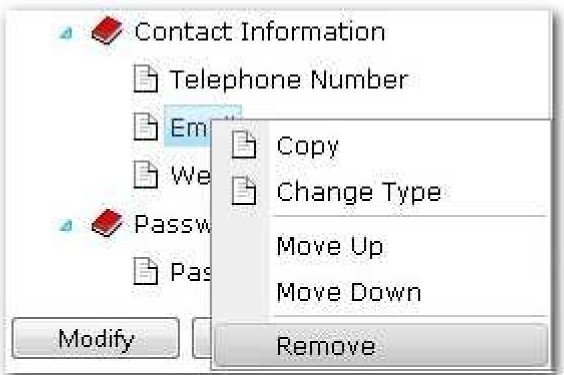
5. Use the **Preview Form** button to open a preview form and test the changes that have been saved.
6. Click **Save** to save all changes to the create form and make it available to a create profile.

How to remove an existing field

In some cases, existing fields will need to be removed, e.g. if the source user object that will be assigned to the create profile that uses this create form is configured with an GroupWise account, then the email field should be removed to prevent problems. **Warning** – do not remove an existing field marked as "Required". Those fields are required by eDirectory and if removed, the object create process will fail.

To remove an existing field from a create form:

1. Right-click the field to be deleted and select "Remove"



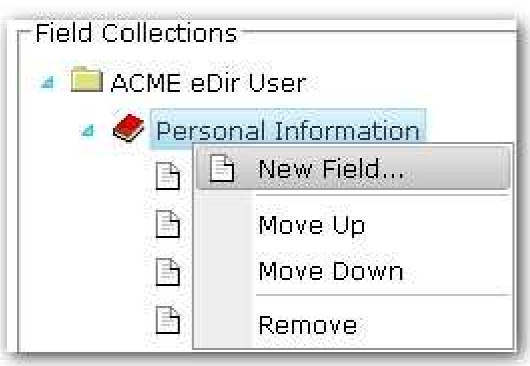
Note - Removal of fields cannot be undone. Once a field has been removed the only way to add it back is to manually recreate it.

2. Verify the removal action.

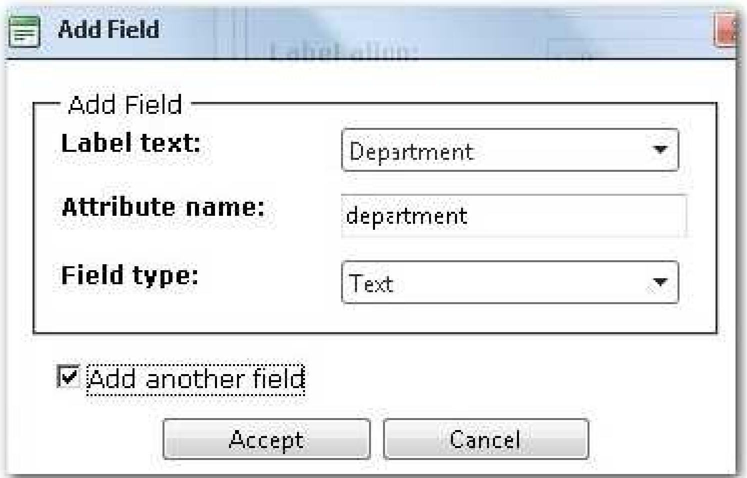
How to add a new field

To add a new field to an existing create form:

1. Right-click the category which will contain the new field and select "New Field"



2. In the "Add Field" window:



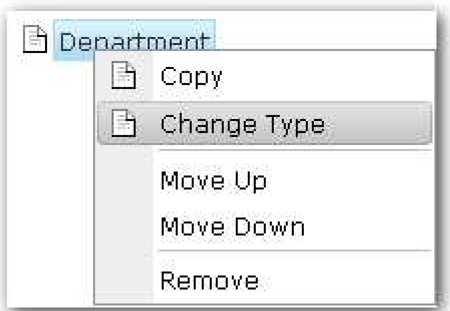
- Select the label text from the drop-down list, **or** type in the desired label text.
- Provide the **LDAP Attribute name** that eControl will use to link the field to the applicable eDirectory attribute for the object type. Refer to Novell documentation for LDAP names for eDirectory attributes.
- Select the desired field type from the drop-down list. The most common are:
  - **Text** used to record text values,
  - **AutoComplete** used when values from other attributes will be used to automatically fill in the value,
  - **Pick List** used to create a drop-down or radio button pick list, and
  - **Multi-Select List** used to create a multiple-select list box.
- Select the **Add another field** option to open a new "Add Field" window after the current new field is added. Uncheck this option when configuring the last new field to add.
- Click **Accept** to add the new field to the create form.

How to change the type an existing field

In some cases, the administrator may want to change the type of an existing field. This is commonly done to change a "Text" type to a different type to better automate the create form, e.g. change a "Department" field from a "Text" type to a "Pick List" type.

To change the type of an existing field in an existing create form:

1. Right-click the field to be modified and select "Change Type"

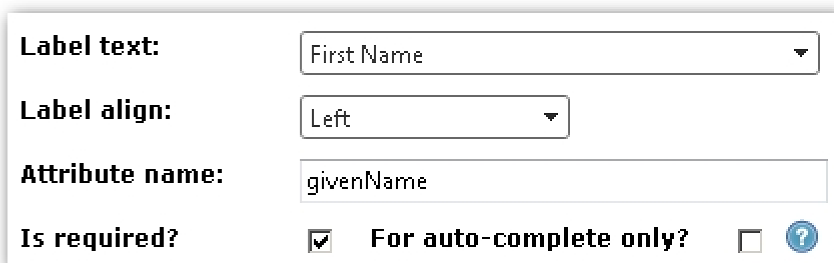


Note – Changing field type removes the current settings associated with the field. Once a field type has been changed the only way to revert it back is to change type back and manually recreate the desired settings.

2. Select the desired type and verify the action.

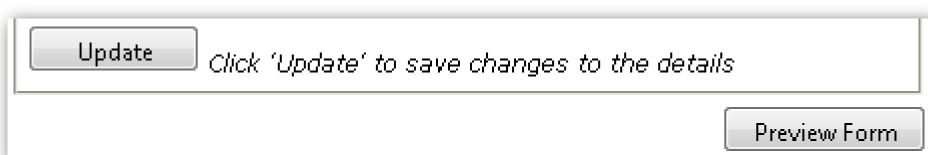
Modify Details - Common Settings

All field types share the follow common settings:



- **Label text:** is the label for the field that will be displayed in the create forms.
- **Label align:** the alignment that will be applied to the data inputted into the field.
- **Attribute name:** is the LDAP attribute name that is being mapped to the field. Refer to Novell documentation for LDAP attribute names for eDirectory attributes.
- **Is required:** this field must contain a value.
- **For auto-complete only?** – data inputted to this field will not be saved to the Directory. It will be used for other auto-complete type fields in this form. If this option is selected, ensure that the "Attribute name:" field is set to **NOFIELD**.

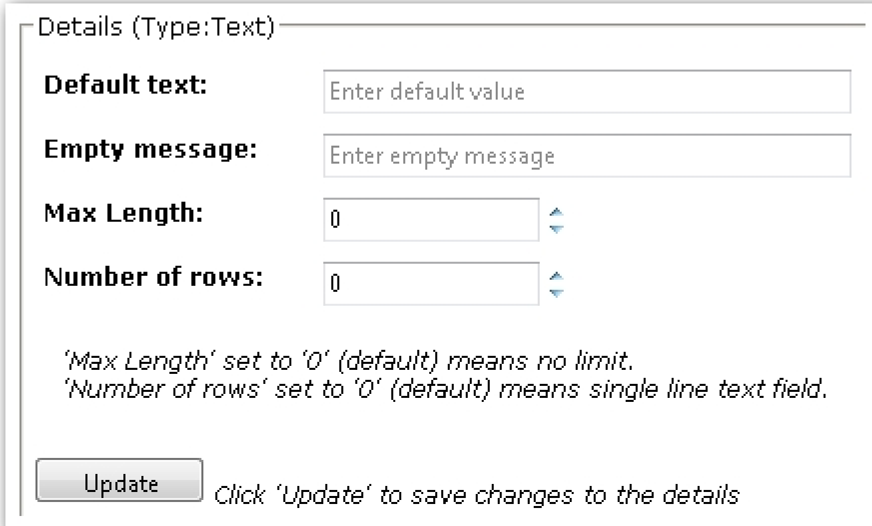
There are two buttons that apply to all field types:



- **Update** button will save the changes made in to the settings for the field.
- **Preview Form** button will open a window and display the form that includes the field being modified. Changes made to a field being modified will not appear in the "Preview Form" unless the **Update** button is clicked before clicking the **Preview Form** button.

Modify Details (Type: Text)

"Field Type: Text" is used to record text values. Settings specific to "Field Type: Text" include:

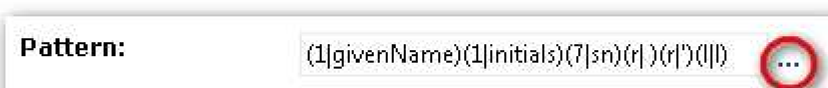


- **Default Text:** The value in this setting will be displayed and will be applied to the field if the operator does not modify the value while running the create object wizard. Leave blank if a default value is not required.
- **Empty Message:** The value of this setting will be displayed as a note but will not be applied to the field value if the operator does not modify the value while running the create object wizard. Use this to provide additional instruction to the operator.
- **Max Length**: Specify the maximum number of characters for this field's value (optional). Leave as '0' to indicate as no limit (default).
- **Number of rows**: Specify the maximum number of rows available in the create form. Leave as '0' to indicate no limit (default).

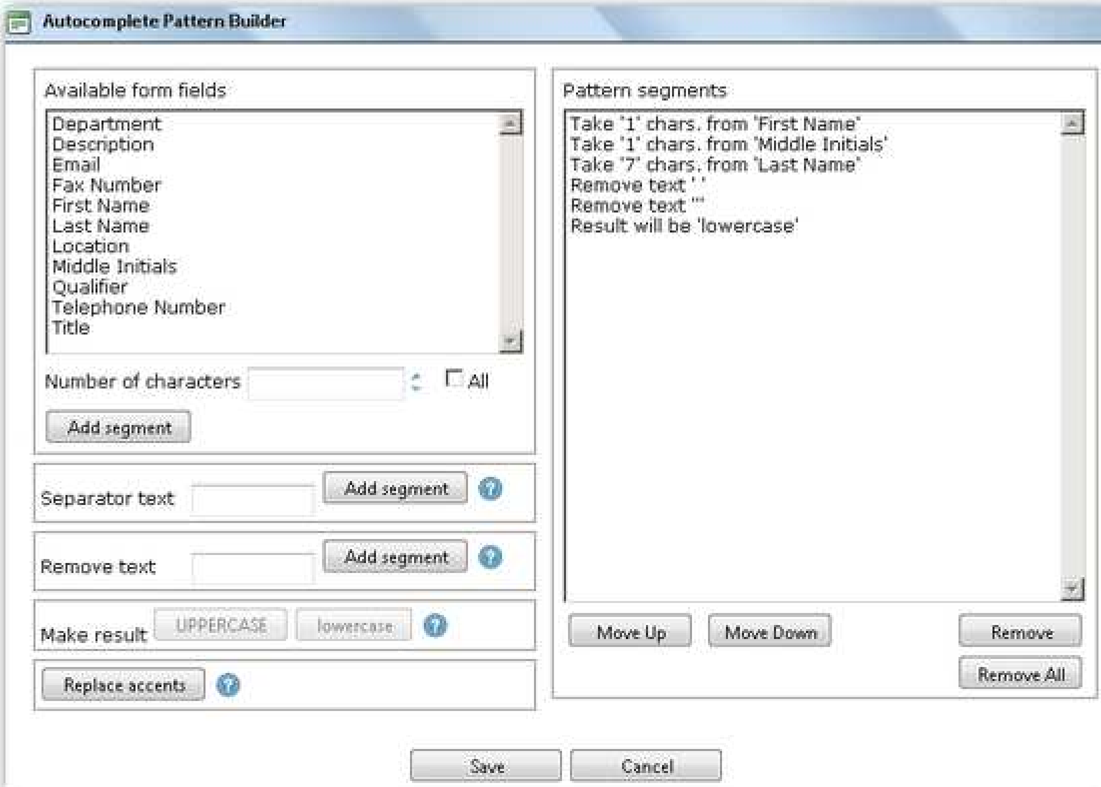
Modify Details (Type: Autocompletion)

"Field Type: Autocompletion" is used to create a value based on a "pattern" by using data from other fields. Settings specific to "Field Type: Autocompletion" include:

- **Display Mode:** Specifies how the value will be displayed on the create form.
  - o "**Display in form**" - this field will display onn the create form and can be modified by the operator.
  - o "**Display in Preview**" - this field will display on the create form in a read-only mode.
  - o "**Do not display**" – the value is created but is not displayed on the create form.
- **Pattern:** The value of this field uses data drawn from other fields.



Click the elipse to open the "Pattern Builder".



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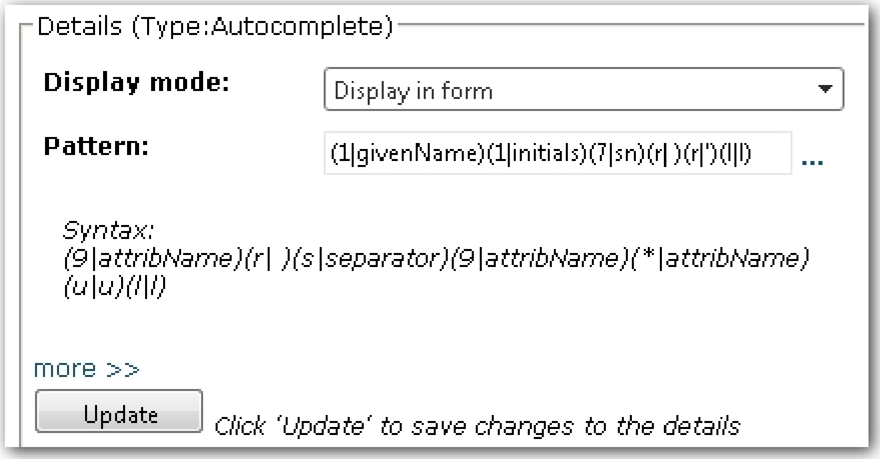
To use the pattern builder:

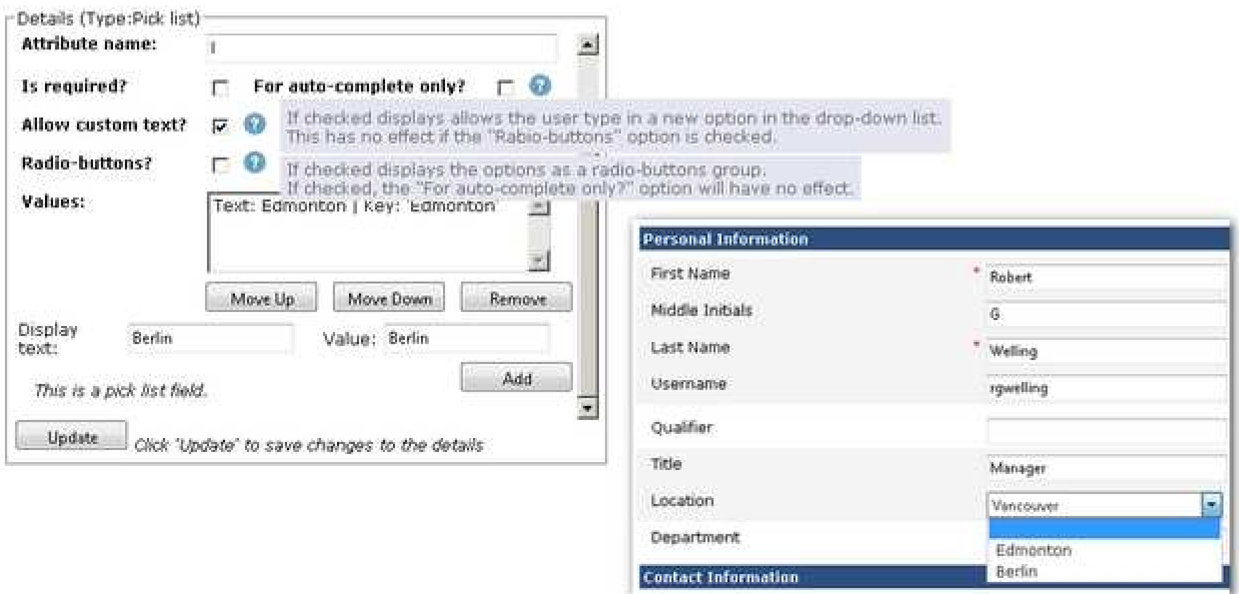
- Highlight a field from the "Available form fields" list box and specify the number of leading characters to use, or check "All" to use all characters. Multiple fields can be selected, which will result in the resulting characters being concatenated together to form a new resulting value.
- To add separator text, like a blank space or a hyphen '-', enter the desired value and click the **Add segment** button.
- To remove blank spaces, hyphens or other symbols, enter the desired value and click the **Add segment** button for "Remove text". Use this to remove a null space at the end of a character string.
- Click **UPPERCASE** or **lowercase** buttons to force the result value to be all caps or all lower case characters.
- "Pattern segments" list box contains all selected patterns. Use the **Move Up** and **Move Down** buttons to place patterns segments in a specific order if required.
- Click **Save** to save the configured pattern to the field configuration.

Do not forget to click **Update** to save the changes made to this field and test the pattern using the **Preview Form** button.



Modify Details (Type: Pick List)

"Field Type: Pick List" is used to create a means for the operator to select a pre-defined value from a list. The default list type is a drop-down selection. Settings specific to "Field Type: Pick List" include:

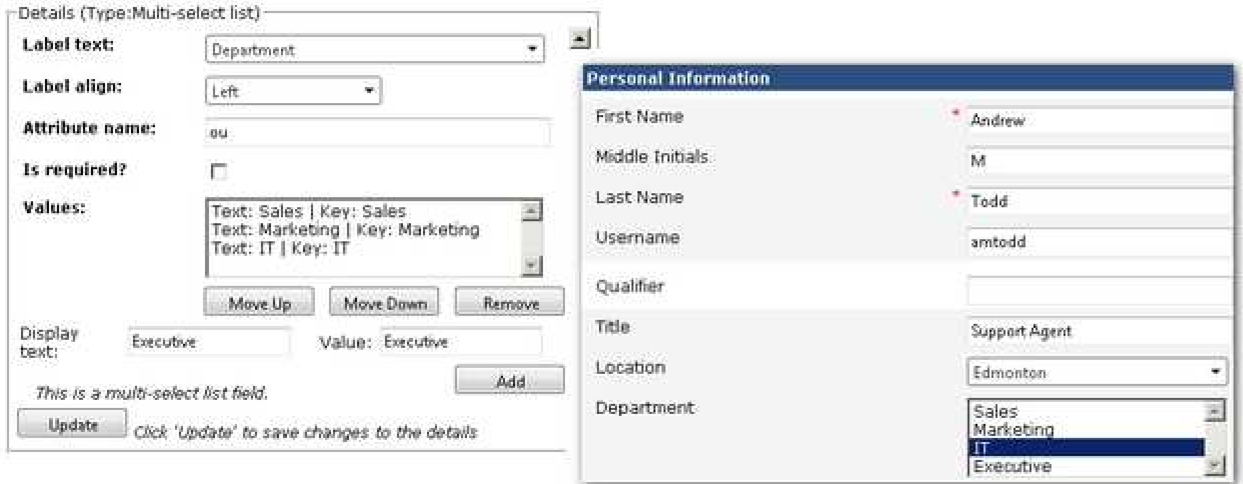


- **Allow custom text?** If checked, the operator can type in a new optional value into the text box for the field value (only works with drop-down lists).
- **Radio-buttons?** If checked, the operator can only select values from a radio button list. This option disables "Allow custom text?" if checked.
- **Values:** Create pre-defined values by typing in a "Display text" and "Value" pair and clicking the **Add** button which will add the value segment to the "Values" list.

Do not forget to click **Update** to save the changes made to this field and test the pattern using the **Preview Form** button

Modify Details (Type: Multi-select list)

"Field Type: Multi-select list" is used to create a means for the operator to select a one or more pre-defined value(s) from a list displayed in a list box. Settings specific to "Field Type: Multi-select list" include:



- **Values:** Create pre-defined values by typing in a "Display text" and "Value" pair and clicking the **Add** button which will add the value segment to the "Values" list.

Do not forget to click **Update** to save the changes made to this field and test the pattern using the **Preview Form** button

Build the Create Profiles

Once create forms have been defined, create profiles need to be built and configured. There are two types of create profiles:

- Simple create profile – specifies a create profile assignment that links a create form to a single target location in a target system. A simple create profile can create a user object and corresponding email account, and can include management of corresponding third party extension.
- Linked create profile – specifies a create profile assignment that links multiple simple create profiles together in a combined create wizard. Use this to create a user account in one system and in another system using the same values, e.g. use this to create an user account in eDirectory and a corresponding GroupWise account, and a corresponding account in Active Directory (to support file & print & SharePoint for example). Linked profiles are usually configured to create matching user identities in different Directory systems that will use the same authentication credentials (username and password).

The recommended process is to:

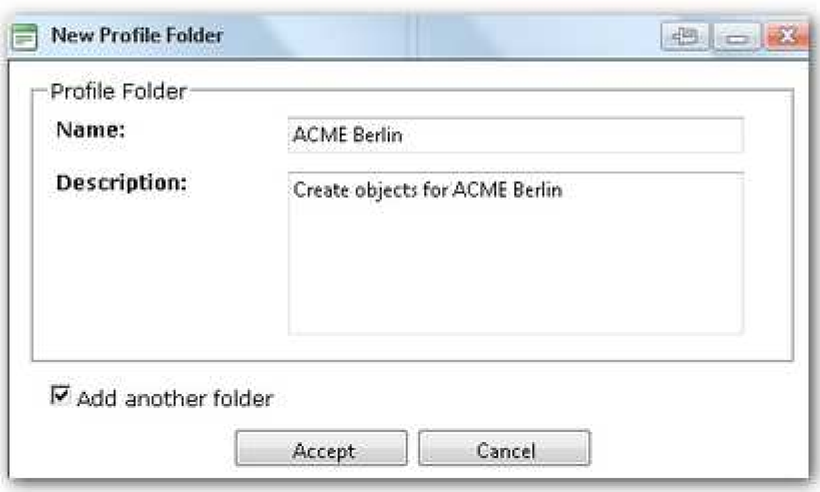
- Add Profile folders
- Add Create Profiles inside the applicable Profile folder
- Modify the Create Profile

Add Create Profile Folders

To build new create profile folders:

1. Under the "Create" tab, right-click the "Profiles" folder and select "New Folder".

2. In the "New Profile Folder" window provide a name and description for the new folder.

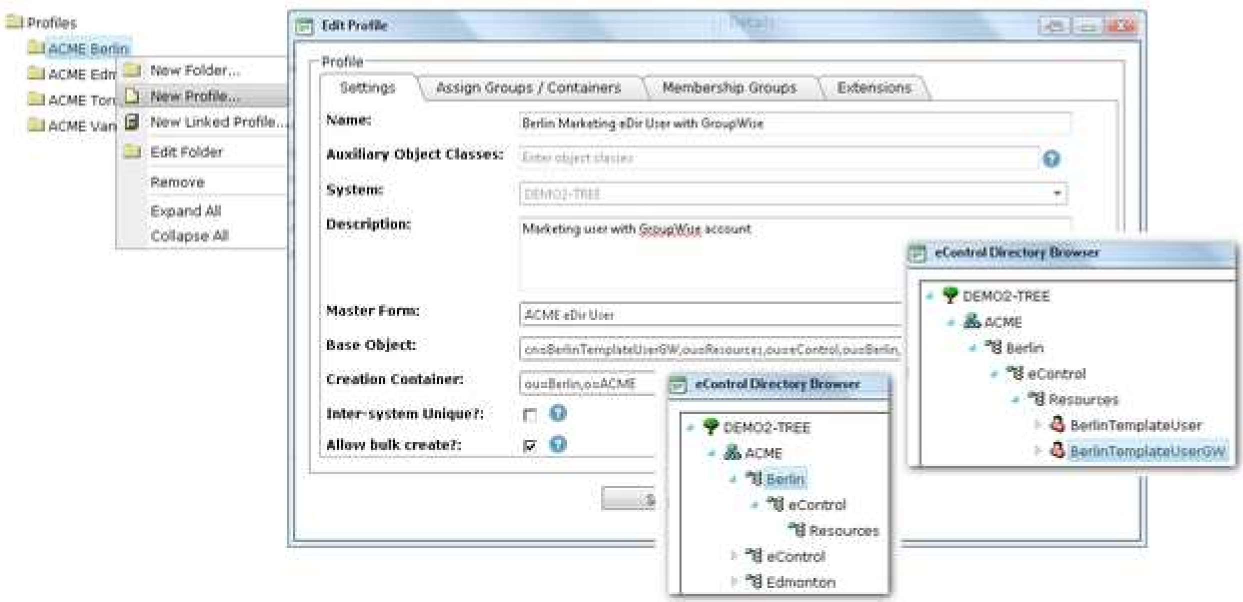


If creating multiple profile folder, check the **Add another folder** option and click **Accept**. Once the last new profile folder has been specified, uncheck the **Add another folder** option and click **Accept**.

Build a Simple Create Profile

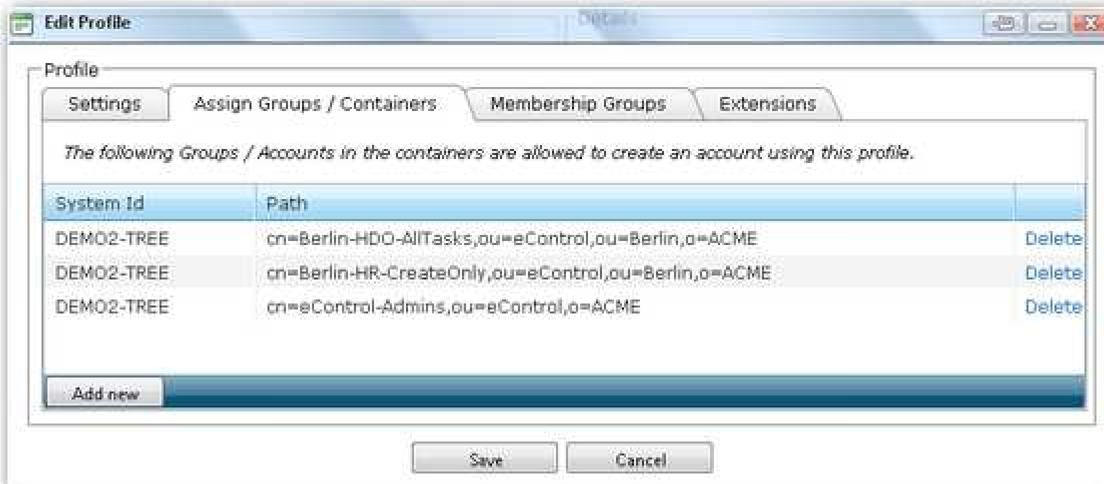
To build new simple create profile:

1. Right-click the desired Create Profile folder and select "New Profile".



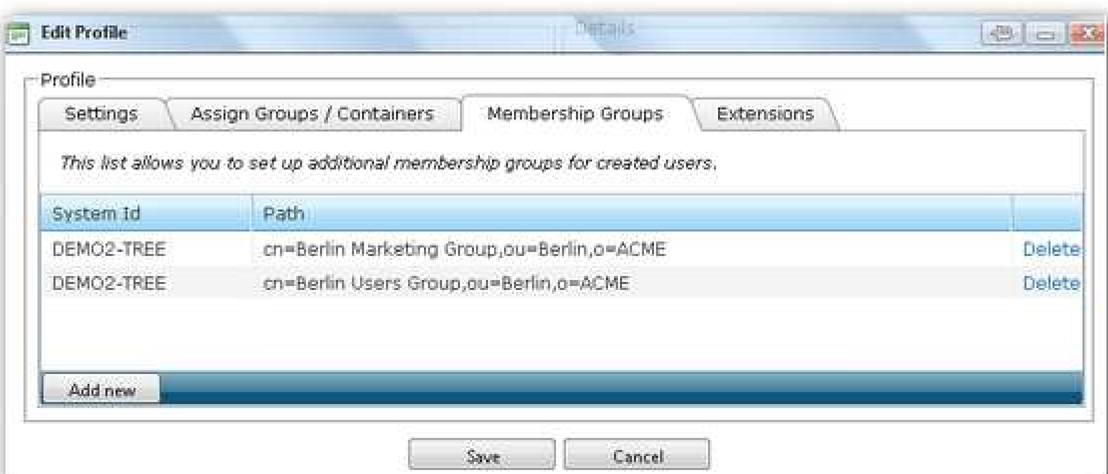
2. In the "New Profile" window under the "Settings" tab:
   - Provide a name for the Create Profile.
   - Provide a description (optional).
   - From the **System** drop-down, select the correct Directory system.
   - From the **Master Form** drop-down, select the desired create form.
   - Click the ellipse beside the **Base Object**, navigate the Directory browse window and select the source object to use as the template for this Create Profile.
   - Click the ellipse beside the **Creation Container**, navigate the Directory browse window and select the target container where the new objects will be created.
   - Check the **Inter-system Unique?** option if eControl will perform an entity uniqueness check against all systems that eControl has managed connections to.
   - Check the **Allow bulk create** option if eControl should allow bulk create of objects using this Create Profile.

3. In the "New Profile" window under the "Assign Groups / Containers" tab, add those groups or containers to identify those users that will be granted permissions to create new user objects using this create profile:



- Click the **Add** button. In the "Add Group or Container" window, click the browse icon.
- In the "Directory Browse" window select the desired group or container and click the **OK** button.
- In the "Add Group or Container" window, click "Add another" to repeat the process to select another group or container and click **Accept**.

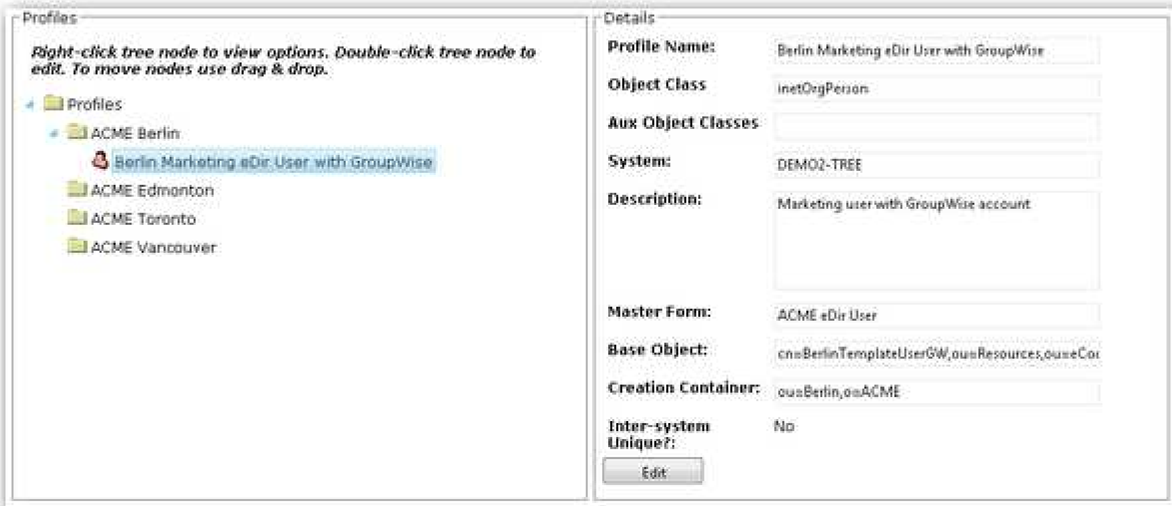
4. In the "New Profile" window under the "Membership Groups" tab, add additional groups that the new user will be made a member of:



- Click the **Add** button. In the "Add Group or Container" window, click the browse icon.
- In the "Directory Browse" window select the desired group or container and click the **OK** button.

- In the "Add Group or Container" window, click "Add another" to repeat the process to select another group or container and click **Accept**.

5. In the "New Profile" window, click the **Accept** button to build this Create Profile.



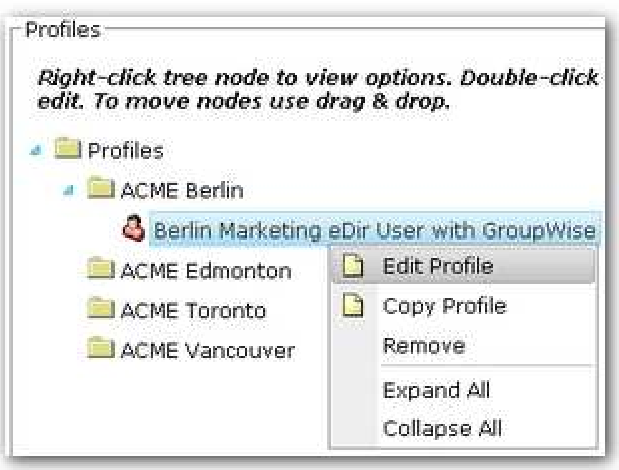
Edit a Create Profile

There are three ways to start the edit of an existing create profile:

- Double-click the tree node object for the create profile.
- Right-click the tree node object for the create profile and select "Edit Profile".
- Select the tree node object for the create profile and click the **Edit** button.

To change the name of an existing profile object:

1. Choose one of the methods to edit the create profile, e.g. In the "Profiles" pane, right-click an existing create profile and select "Edit Profile".



2. In the "Edit Profile" window, change the "Name" value and save the change.

Take note that the create profile name will change in the "Profiles" pane.

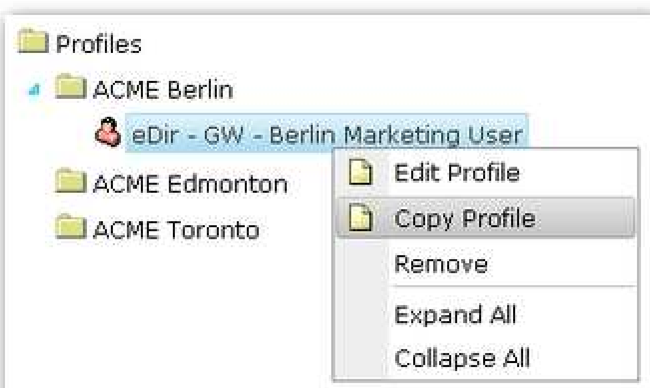
Copy Additional Create Profiles

Once the first create profile has been created, additional create profiles can be built using the "Copy" feature. The recommended process is to:

- Use "Copy" to build additional create profiles inside the applicable profile folder
- Modify the create profile

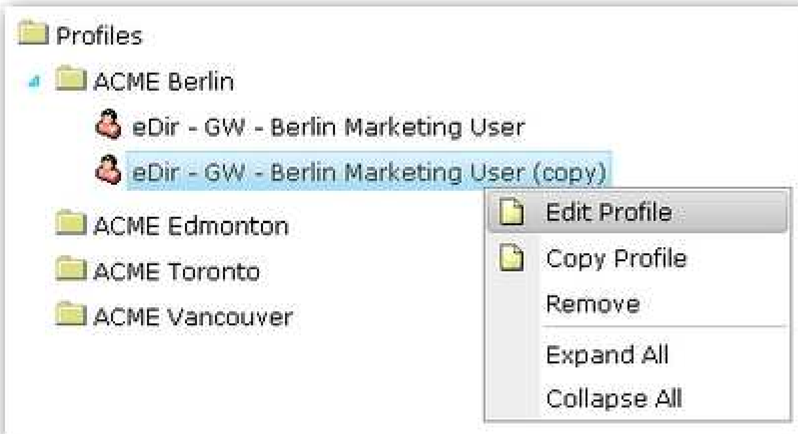
To 'copy' additional create profiles:

1. In the "Profiles" pane, right-click an existing create profile and select "Copy Profile".

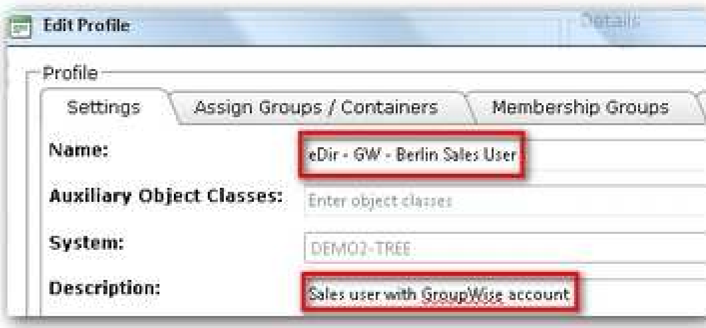


This will produce a copy of the create profile in the "Profiles" pane.

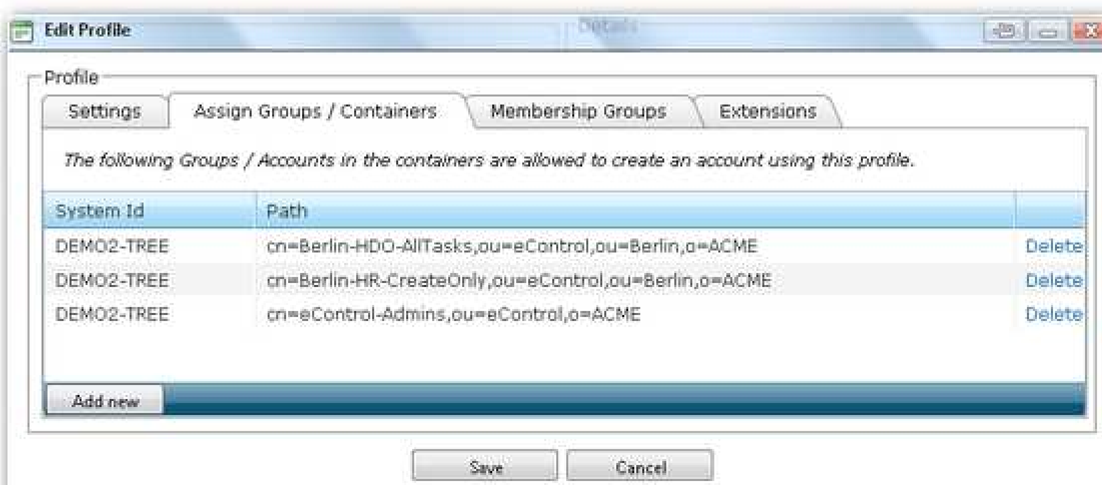
2. In the "Profiles" pane, right-click the new "(copy)" create profile and select "Edit Profile".



3. In the "Edit Profile" window under the "Settings" tab, modify the name and description (optional) of the create profile.

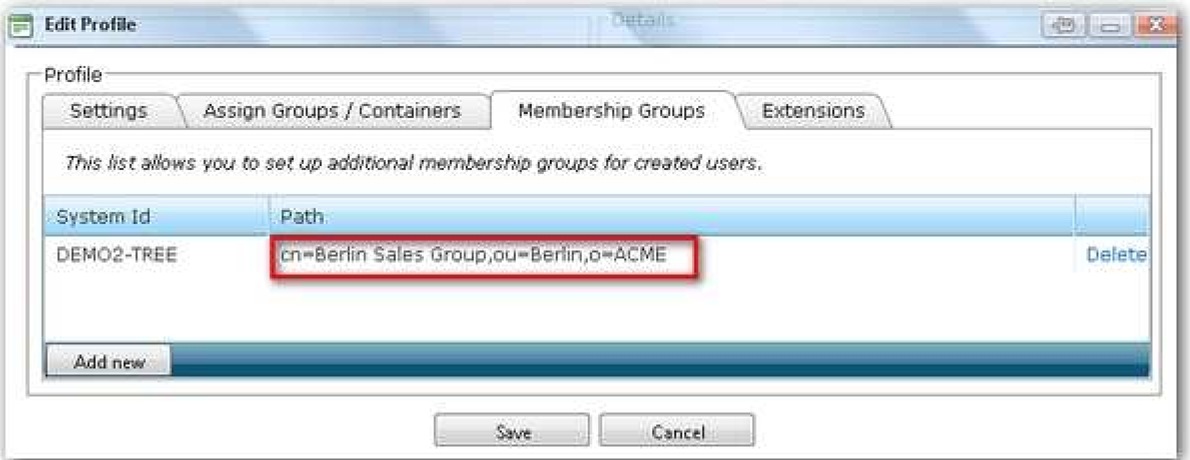


4. In the "Edit Profile" window under the "Assign Groups" tab, modify the assigned groups if necessary:



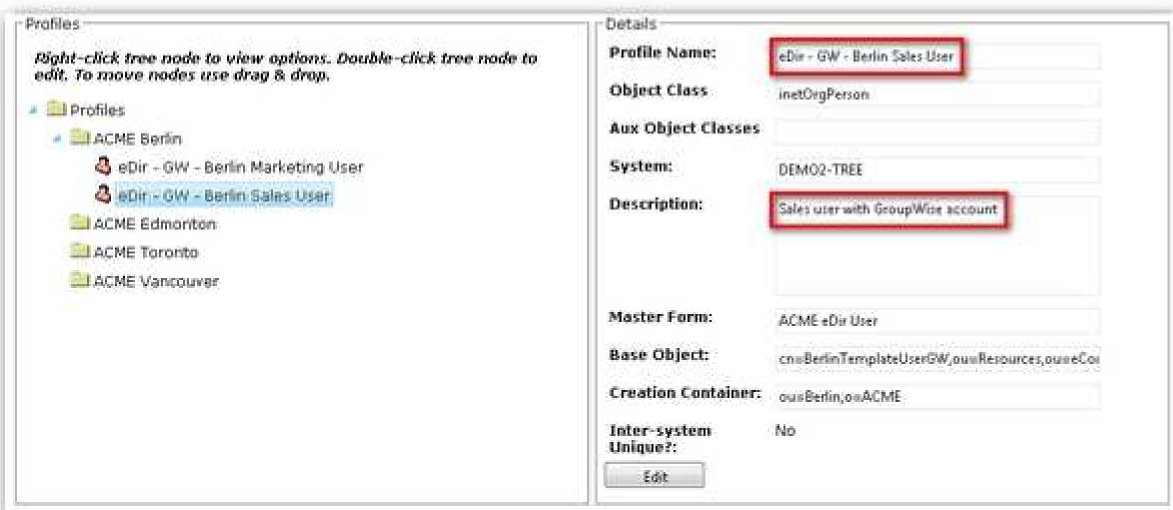
- Click the **Delete** link beside an existing assigned group to remove it from the list, and
- Click the **Add** button to add a new group to the assigned group list.

5. In the "Edit Profile" window under the "Membership Groups" tab, modify the membership group list:



- Click the **Delete** link beside an existing assigned group to remove it from the list, and
- Click the **Add** button to add a new group to the assigned group list.

6. Click the **Save** button to save the modified create profile.



Build Group and Other Create Profiles

Use the "New Profile" or "Copy" procedures described above to build new create profiles for group and other object types. There are some additional tips:

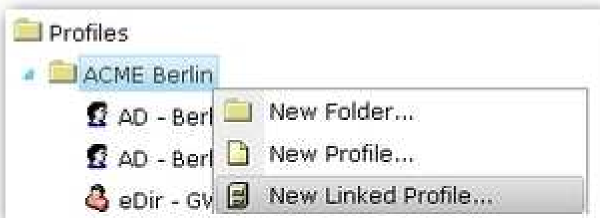
- "Copy" cannot be used to build a new create profile in a different create profile folder.
- "Copy" can be used to build a create profile for a group or contact object type using the user object type. All that needs to be modified to make a create profile unique is the "Profile Name" and the "Master Form" needs to be changed to use a create form that matches the target object type.

Build Linked Create Profiles

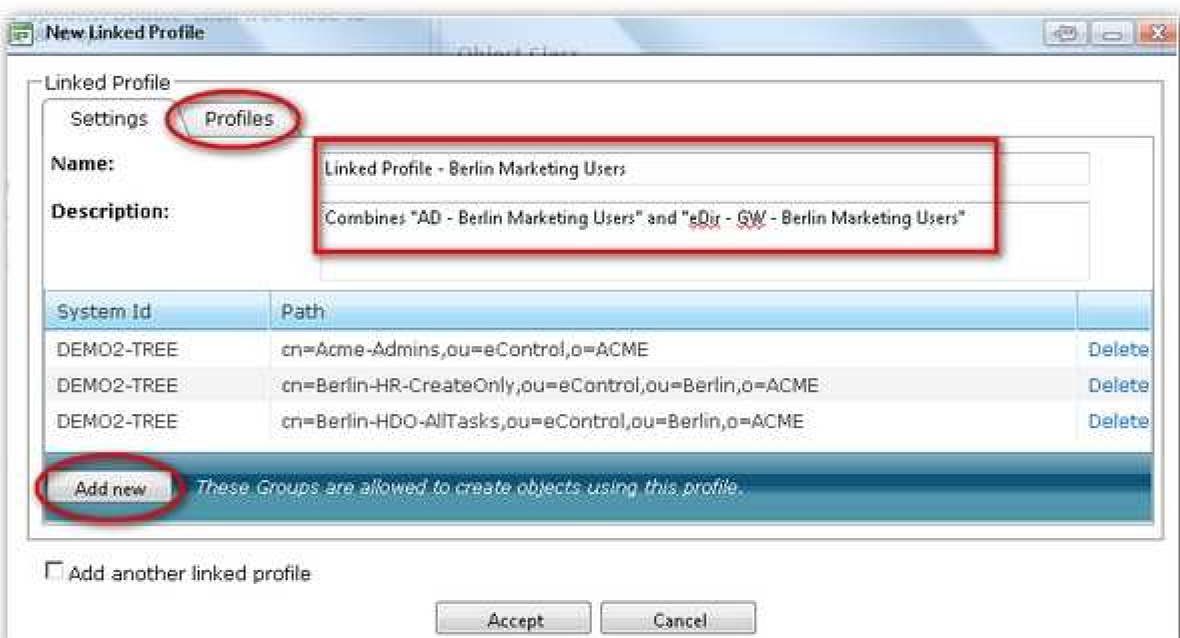
Linked profiles combines simple create profiles for different Directory systems into a single create object wizard. In this example, a linked create profile is built using simple create profiles for eDirectory and Active Directory (and presumes that Active Directory connections have been added and licensed, and a simple create profile for Active Directory has been built.

To build new linked create profile:

1. Right-click the desired Create Profile folder and select "New Linked Profile".

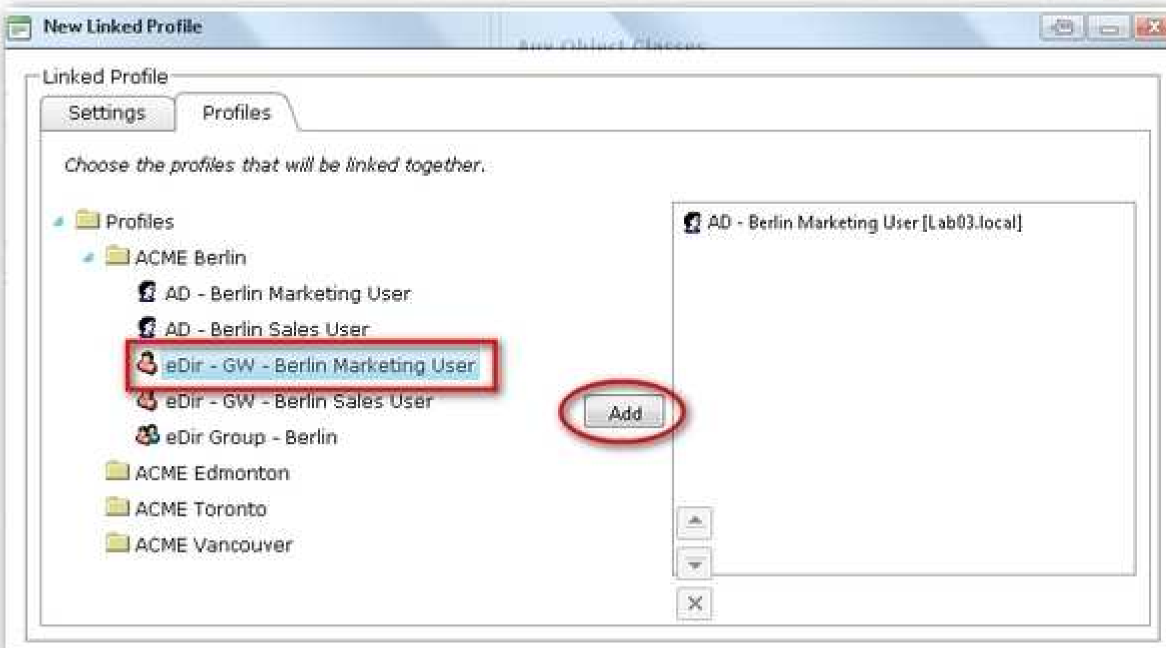


2. In the "New Linked Profile" window under the "Settings" tab:

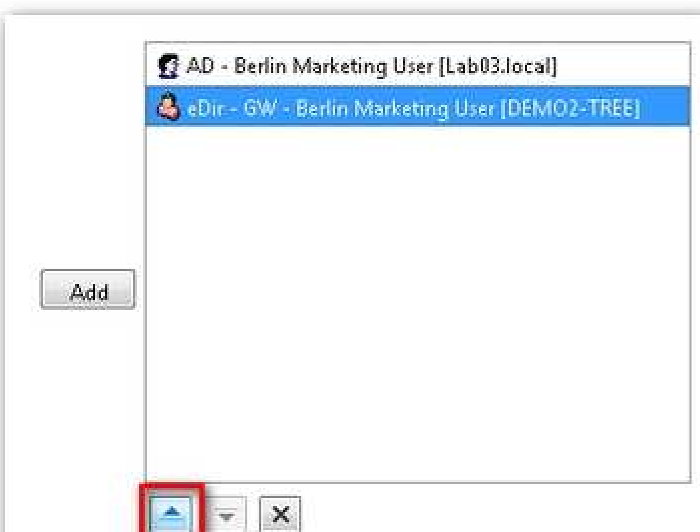


- Provide a name for the Linked Profile.
- Provide a description (optional).
- Click the **Add new** button and add those groups that will be granted permissions to create users with this Linked Profile.

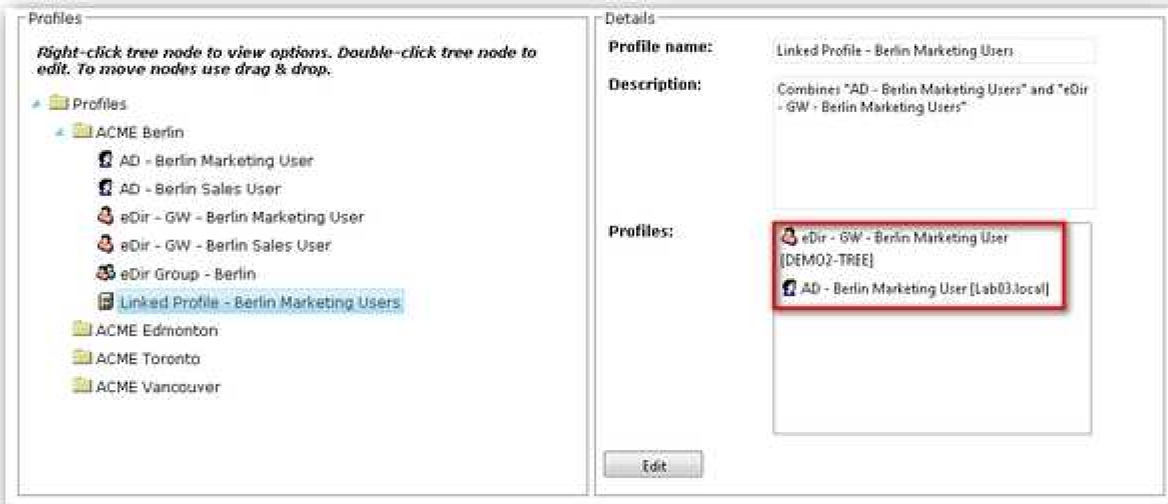
3. In the "New Linked Profile" window under the "Profiles" tab, highlight each Create Profile to use in this Linked Profile and click the **Add** button. This will add the selected Create Profiles to a order sensitive list.



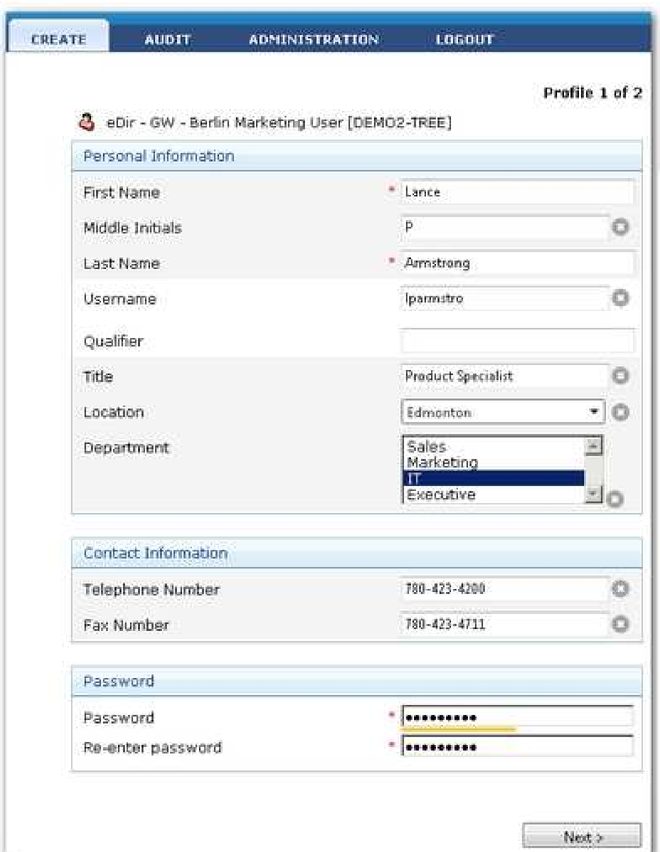
4. Use the Up and Down arrows to place the Create Profiles in the desired order.

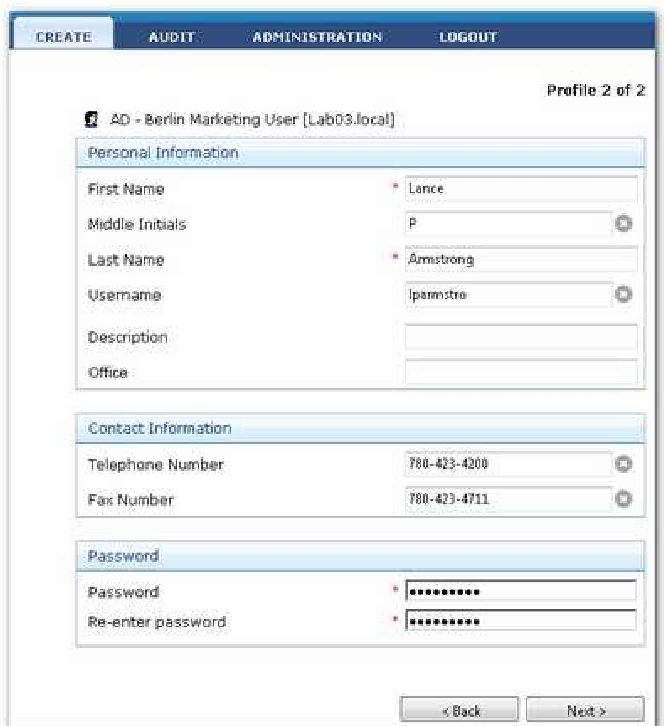


5. Click the **Save** button to build this Linked Profile.

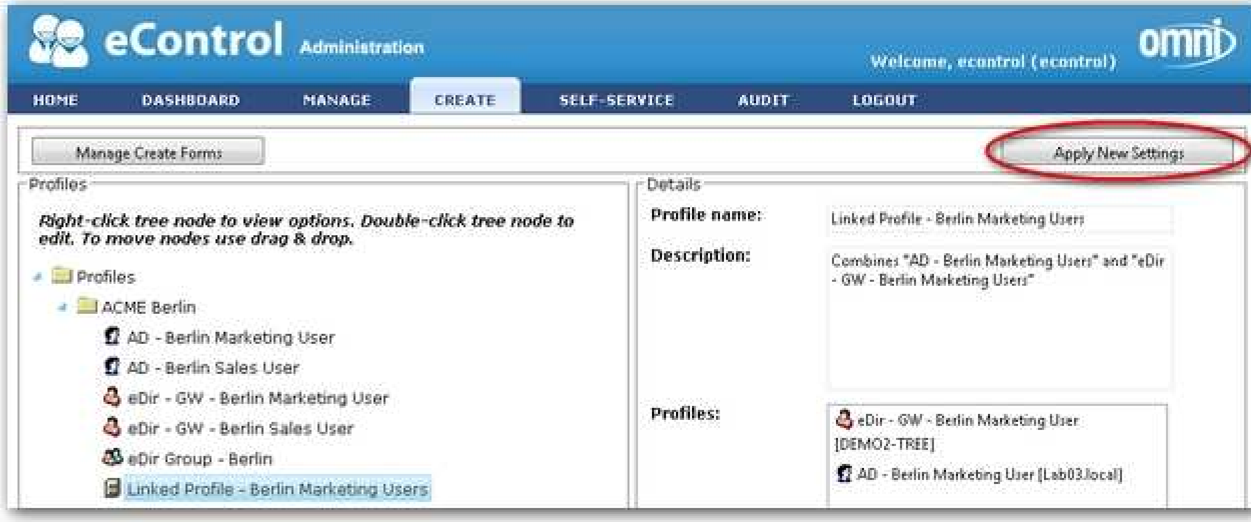


eControl operators that run a Linked Create Profile wizard will progress through each Create Profile in the order specified in this list.





Each create profile should be tested to create a new target object to ensure that the process works as expected. Testing may reveal changes are necessary to the create form used, the base (source) object, or the create profile settings. Remember that create profile assignments do not become available until the **Apply New Settings** button has been clicked.



Configure the Self Service Module

The "Self Service" module allows eControl administrators to configure eDirectory and/or GroupWise values that can be self-serviced by users. This includes password self-service. Users can reset and change passwords from within the Self Service module of from a web-browser using the "Forgot Your Password" challenge/response "secret answers". The User Self Service options include allowing users to Subscribe/Unsubscribe from GroupWise Distribution Lists. User Self Service can be configured to allow users to update their own demographic information.

How it Works

For the Self-Service Module:

1. "**Forgot Password Management**" is configured to enabled forgot password/reset features and define the verification questions and mechanism.
2. "**Manage Self-Service Form**" can be modified. Those forms will be used by users to modify their personal information.
3. "**Self Service Group Assignments**" are built which define:
    - Reset password configuration;
    - Forgot password configuration; and
    - Managed lists configuration.

No Administrative or Supervisor Rights Required

If a group is assigned to a "Self Service Group" assignment, the "Self-Service" tab will be visible to members of that group when they login to the eControl portal. If "Forgot Password" is enabled, members of that group will be able to change passwords using without having to login by using the "Forgot password" link.

Members of groups assigned to a "Self-Service Group" assignment require NO supervisor rights or administrator-level permissions. Self-service tasks are performed by the eControl service accounts on behalf of those users that have been assigned to a Self-Service Group assignment.

Planning Concepts for eControl Self-Service

Careful planning and preparations will result in the creation of the correctly functioning "self-service" assignments. When looking at what self-service group assignments to create, it is helpful to use the following strategy:

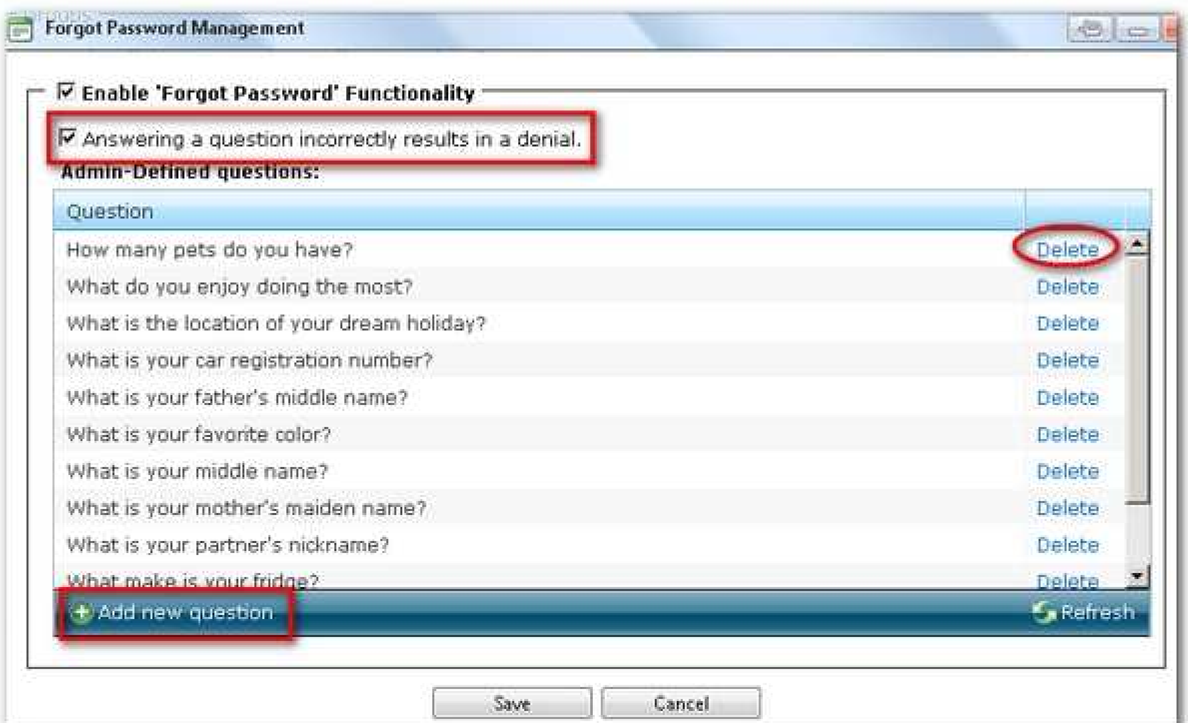
- **STEP 1** – Determine a strategy for forgot password, password self-service, self adding to/removal from groups and distribution groups and modifying personal information.
- **STEP 2** – Enable and configure "Forgot Password Management" and "Manage Self-Service Forms".
- **STEP 3** – Add self-service group assignment(s) and configure the reset password, forgot password and manage lists features.

Enable and Configure Forgot Password

To enable and configure forgot password management:

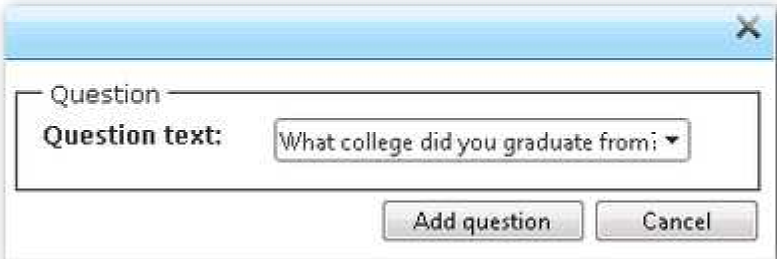
1. In the eControl Administration panel, under the "Self-Service" tab, click the **Forgot Password Management** button.

2. In the empty "Forgot Password Management" window, click the **Enable 'Forgot Password' Functionality**. This will populate the "Forgot Password Management" window with additional management options.
3. Modify the management options to meet requirements:



- Check the **Answering a question incorrectly results in a denial** option if required.
- Delete any questions that are not required to be globally provided to all self-service group assignments.

- Click **Add new question** to add questions to the list.

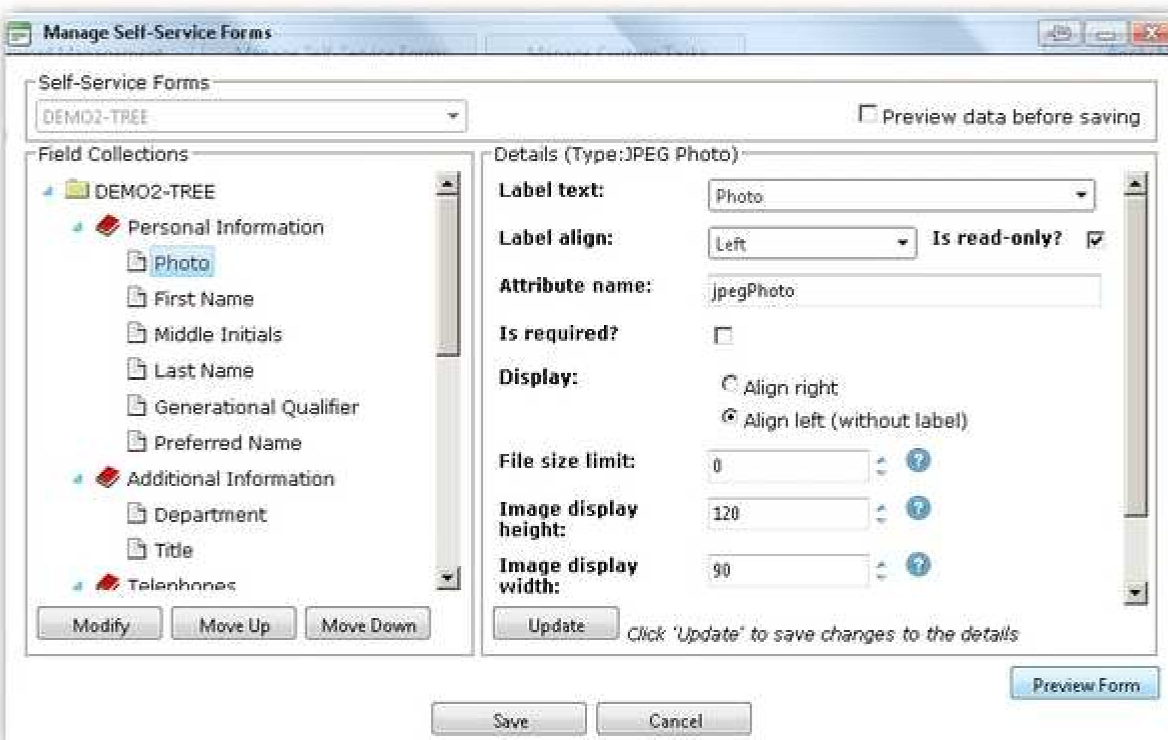


4. Click the **Save** button to save the configuration settings.

Configure Self-Service Forms

There is a single self-service form that can be configured:

1. In the eControl Administration panel, under the "Self-Service" tab, click the **Manage Self Service Forms** button.
2. A "Manage Self Service Forms" window will open and present the "Field Collection" and "Details" panes for the form.

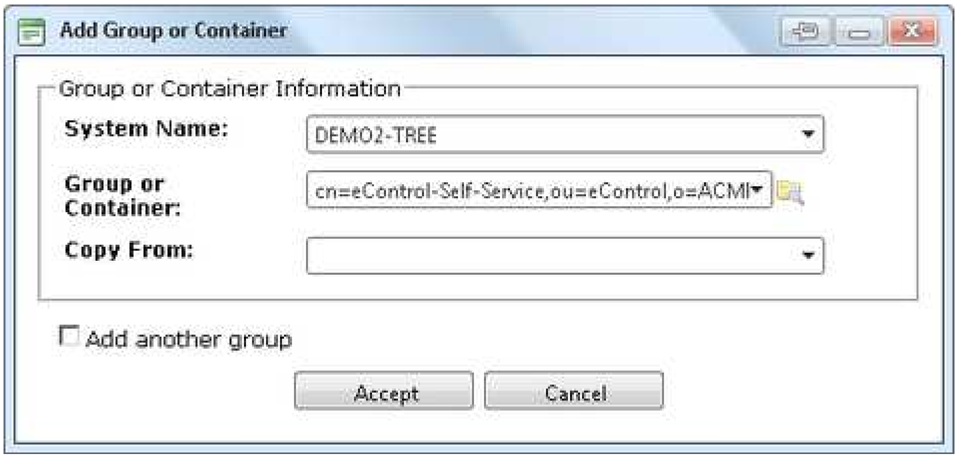


Modifying this form uses the same procedures as used with **Manage Create Forms**.

Create and Configure a Self-Service Assignment

A Self-Service assingment is required to enable self-service for users. To add and configure a self-service assignment:

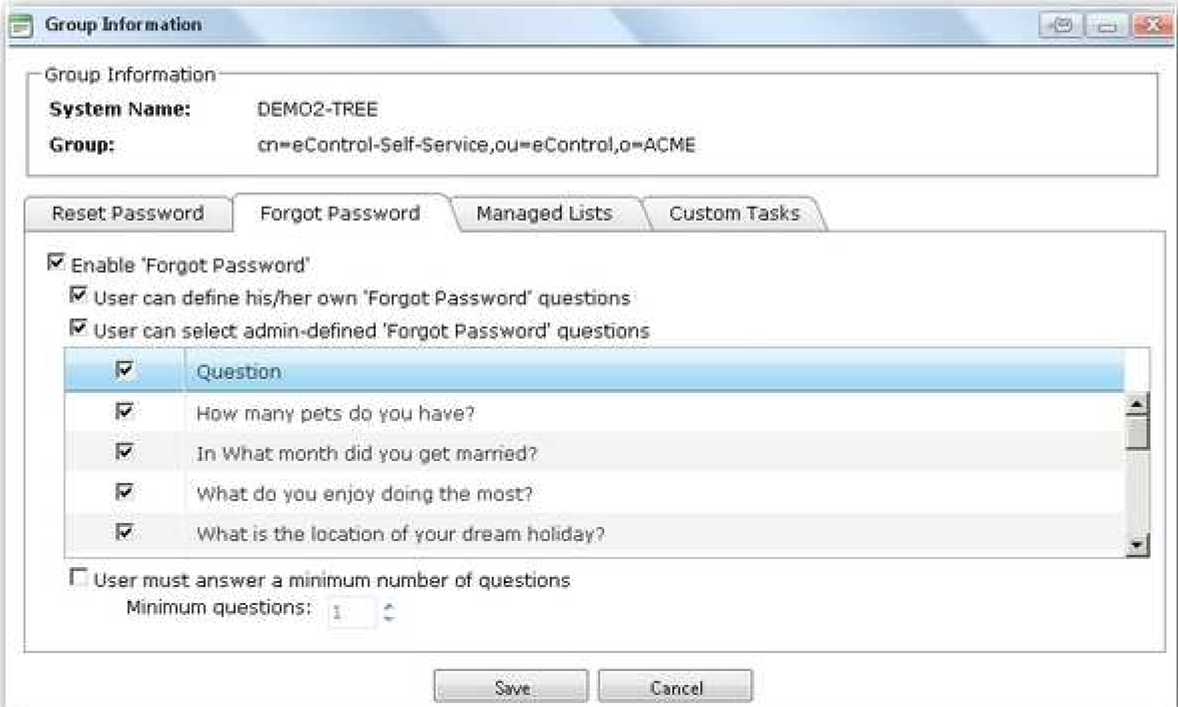
1. In the eControl Administration panel, under the "Self-Service" tab, click the **Add** button in the "Groups" pane.
2. In the "Add Group" window click the ellipse beside the **Group** textbox to add the desired group object.



Click the **Accept** button to create the self-service assignment.

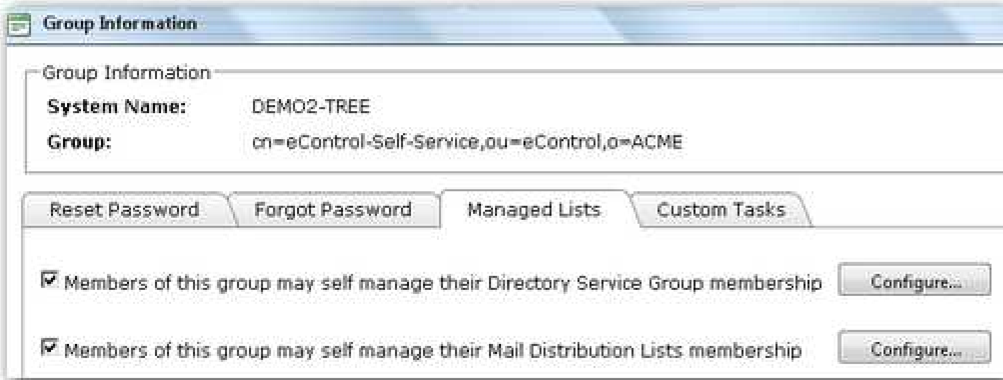
3. In the "Group Information" window, select the **Reset Password** tab and configure the reset password options. For eDirectory, selecting all options will provide those options to users if they use the "Change Password" wizard.

4. Select the **Forgot Password** tab and configure those options:



- Select **Enable 'Forgot Password'** to provide the 'Forgot Password" feature to members of the group for this self-service assignment. If this iption is not checked, users will not see any 'Forgot Password' links at the eControl Login screen.
- Select **User can define his/how own 'Forgot Password' questions** and **User can select admin-defined 'Forgot Password' questions** to enable the user to customize their 'Forgot Password' settings. These options will be made available in the Self-Service page when the user logs into eControl and selects the "Self-Service" tab.
- Selecting the specific admin-defined questions that will be made available to the user.
- Select **User must answer a minimum number of questions** and specify the minimum number (optional). Do not check this item if "Answering a question incorrectly will result in denial" option was checked when **Enable 'Forgot Password' Functionality** was checked as part of configuring "Forgot Password Management".

5. Select the **Managed Lists** tab and select **Members of this group may self manage their Directory Service Group membership** option if you want to allow users to add or remove themselves from the membership list for a defined list of group objects:

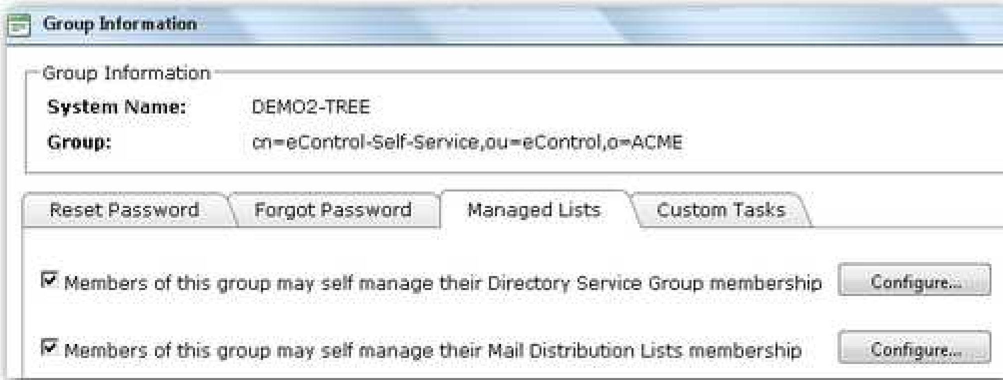


Click the **Configure** button. In the empty "Selected groups" window, click the **Add new** button.

6. In the "Search groups:" window, add a suitable search query and click the **Search** button.

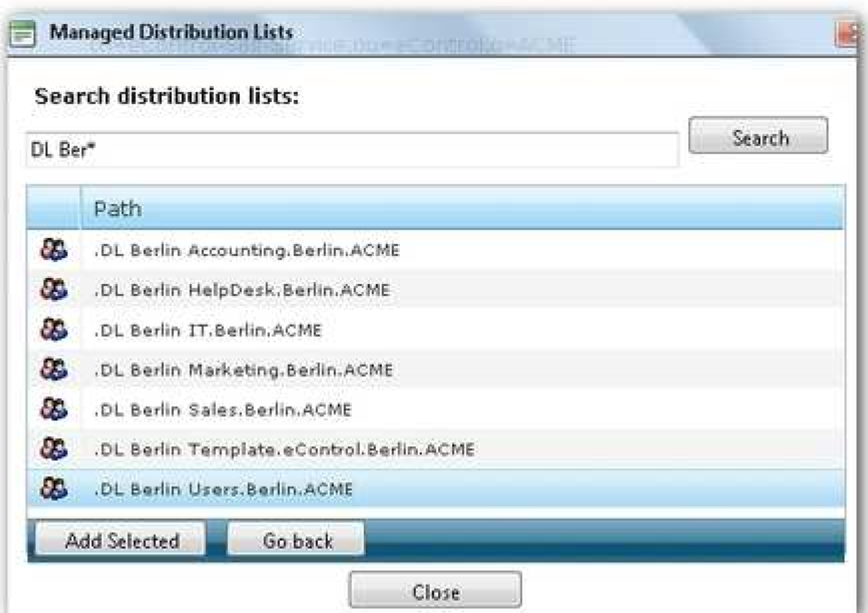
Select the desired group(s) from the search list and click the **Add Selected** button. Users will be permitted to add and remove themselves from the selected groups.

7. In the "Selected groups:" window, click the **Close** button to save the selected group(s).
8. Under the "Managed Lists" tab, select **Members of this group may self manage their Mail Distribution List membership** option if you want to allow users to add or remove themselves from the membership list for a defined list of Distribution List objects:



Click the **Configure** button. In the empty "Selected distribution lists" window, click the **Add new** button.

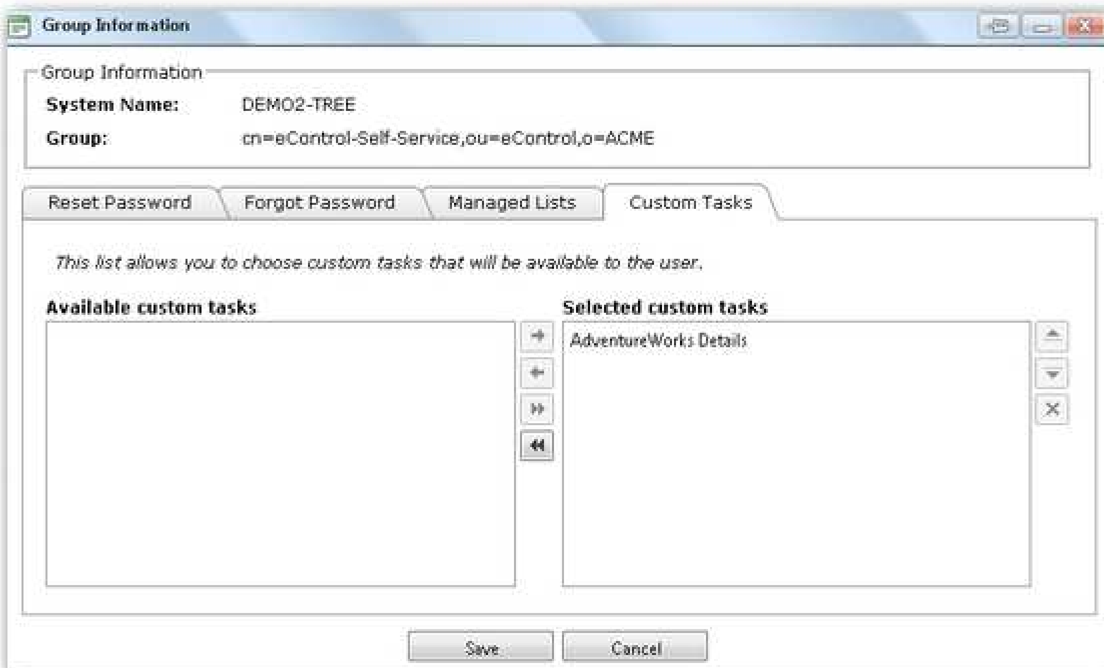
9. In the "Search groups:" window, add a suitable search query and click the **Search** button.



Select the desired group(s) from the search list and click the **Add Selected** button. Users will be permitted to add and remove themselves from the selected distribution lists.

10. In the “Selected distribution lists:” window, click the **Close** button to save the selected group(s).

11. Under the “Custom Tasks” tab, available custom tasks can be added to the assignment which will make those custom task pages available to users when logged into eControl Self Service.



12. In the “Group Information” window click the **Save** button.

13. Click the **Apply New Settings** button to enable the eControl Self Service assignment in the eControl portal for assigned users.

Configure the Audit Module

How it Works

The "Audit" module allows eControl administrators to configure specific group(s) of users to access the eControl audit logs. Operators with Audit access can search for and open an audit log file, download a copy of a audit log file and export a audit log file to a CSV format file. Audit access is provided by creating and enabling Audit assignments.

No Administrative or Supervisor Rights Required

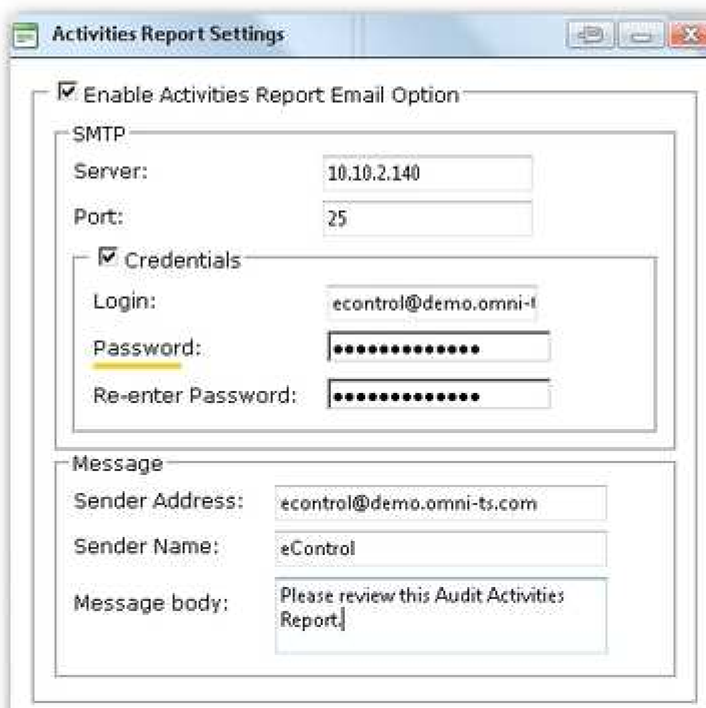
If a group is assigned to a "Audit" assignment, the "Audit" tab will be visible to members of that group when they login to the eControl portal. Members of groups assigned to a "Audit" assignment require NO supervisor rights or administrator-level permissions. Audit tasks are performed by the eControl service accounts on behalf of those users that have been assigned to a Self-Service Group assignment.

Manage Activities Report Settings

Manage "Activities Report Settings" to enable the email option and configure the SMTP settings:

1. In the eControl Admininstration panel, under the "Audit" tab, click the **Activity Report Settings** button.

2. Complete the information in the "Activities Report Settings" window and click **Save**.



Create and Configure an Audit Assignment

To create an audit assignment:

1. In the eControl Admininstration panel, under the "Audit" tab, click the **Add** button.
2. In the "Add Group" window:

- Click the ellipse beside the "Group" textbox to select the target group object.
- Check the **Allow access to Audit Viewer** option.
- (optional) Check the **Allow audit file download** option.
- (optional) Check the **Allow data export** option.
- (optional) Check the **Add another group** option.
- Click the **Accept** button.

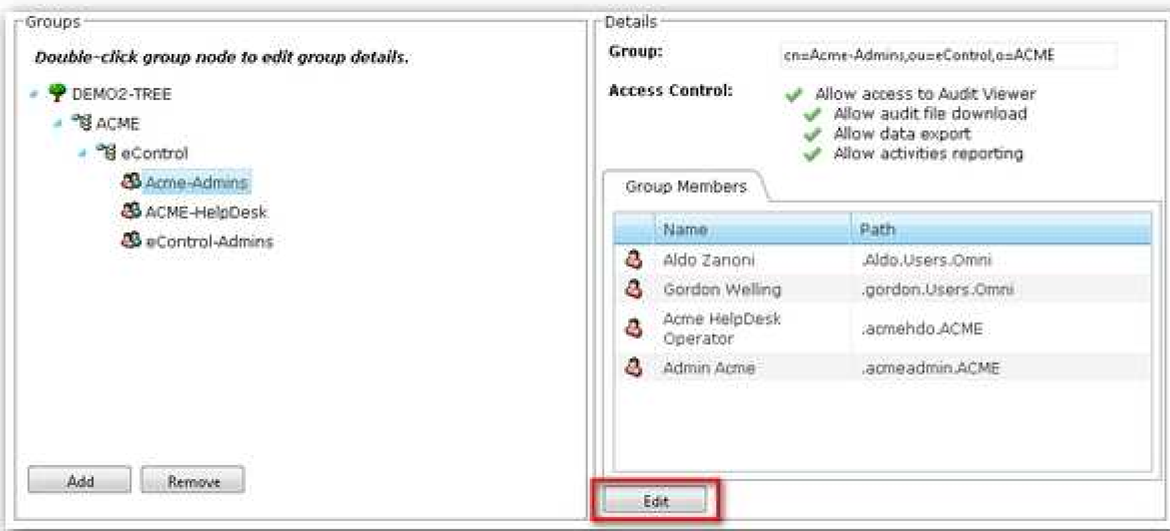
3. In the "Success" window, click **OK**.
4. If the **Add another group** option was previously checked, another "Add Group" window will open.

Configure the desired options and click the **Accept** button.

Modify an Audit Assignment

To modify an audit assignment:

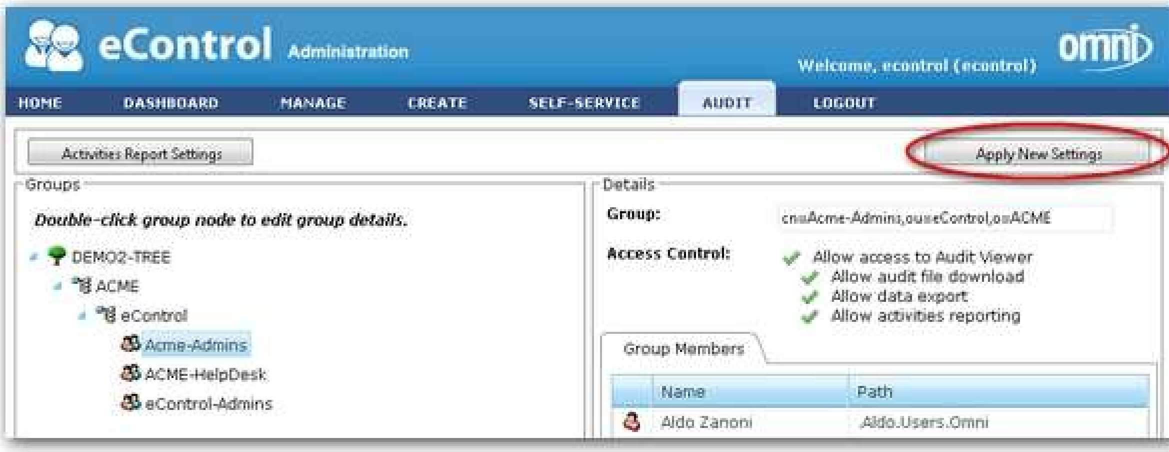
1. In the "Group" panel, select the desired audit assignment and click the **Edit** button.



2. In the "Group Information" window, check or uncheck the desired access control options and click the **Save** button.

Enable the Audit Assignments

Remember that Audit access assignments do not become available until the **Apply New Settings** button has been clicked.



Additional eControl Administration Panel Features

eControl Service Account Only Features

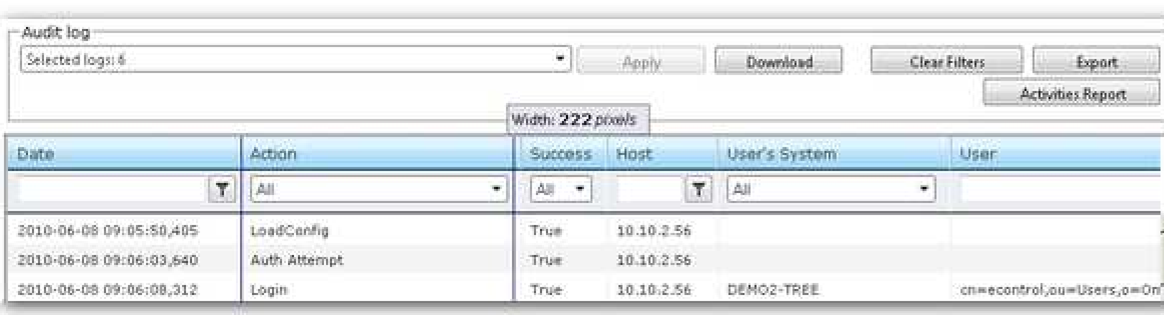
The eControl service account has sole access to the eControl Administration panel which includes special access links in the footer of each page.

Access Audit Trail Logs

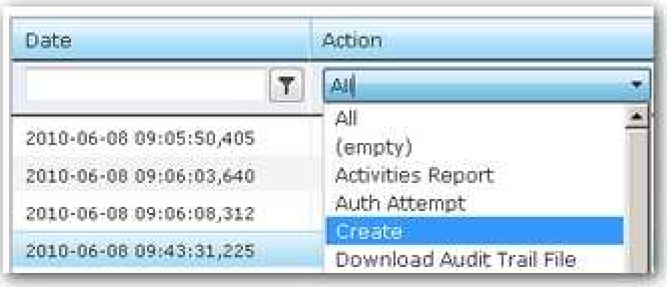
To access an audit trail log:

1. Click on the **View Audit Trail** link.
2. From the "Audit log" drop-down list, check the desired year, or month, or week, or specific date. Click the **Apply** button and eControl will compile the audit log entries for the selected date(s) into a single chronological view.

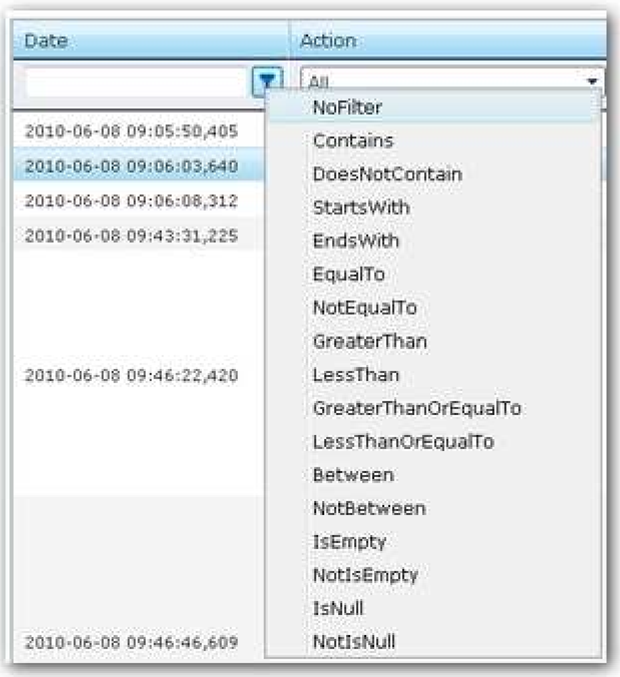
3. Once the log file is visible, the column widths can be adjusted.



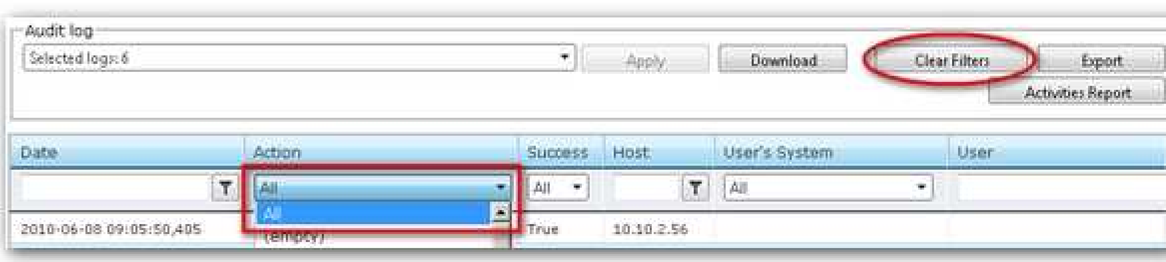
4. The view of the log can be filtered by selection a filter item from a drop-down list



or by using a text box which will open a drop-down containing a list of filter options.

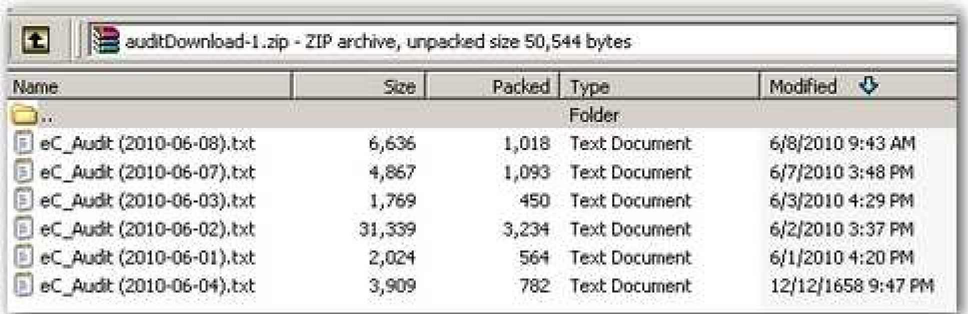


5. A filtered view of the log can be cleared at the column or by using the **Clear Filters** button.



6. There are two options to save copies of audit logs:

   - Click the **Download** button to download a ZIP file containing .txt versions of the selected audit log files.



auditDownload-1.zip - ZIP archive, unpacked size 50,544 bytes

Name	Size	Packed	Type	Modified
..			Folder	
eC_Audit (2010-06-08).txt	6,636	1,018	Text Document	6/8/2010 9:43 AM
eC_Audit (2010-06-07).txt	4,867	1,093	Text Document	6/7/2010 3:48 PM
eC_Audit (2010-06-03).txt	1,769	450	Text Document	6/3/2010 4:29 PM
eC_Audit (2010-06-02).txt	31,339	3,234	Text Document	6/2/2010 3:37 PM
eC_Audit (2010-06-01).txt	2,024	564	Text Document	6/1/2010 4:20 PM
eC_Audit (2010-06-04).txt	3,909	782	Text Document	12/12/1658 9:47 PM

   - Click the **Export** button to download a ZIP containing a single compiled CSV file of the selected

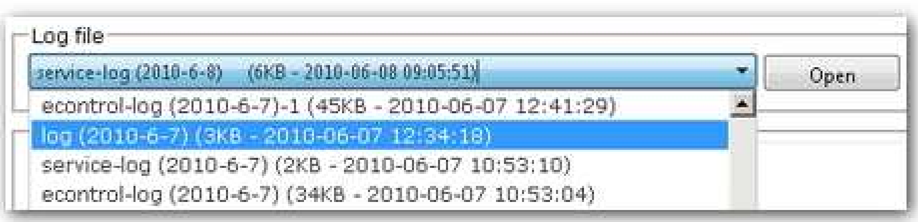
auditExport-1.zip - ZIP archive, unpacked size 103,888 bytes

Name	Size	Packed	Type	Modified
..			Folder	
01992416-0e74-487c-a5a7-ff86280672d6.csv	103,888	7,870	Microsoft Office Exc...	6/8/2010 9:49 AM

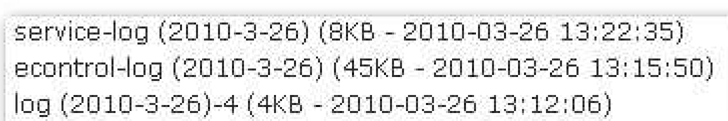
Access System Logs

To eControl system logs:

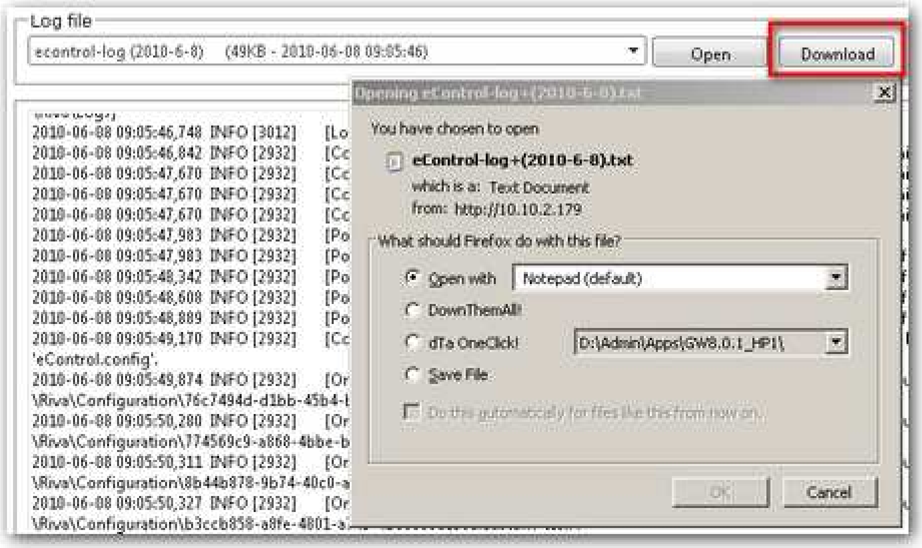
1. Click on the **View Logs** link.
2. Select the desired log file from the drop-down list and click the **Open** button.



There are three types of system logs available.

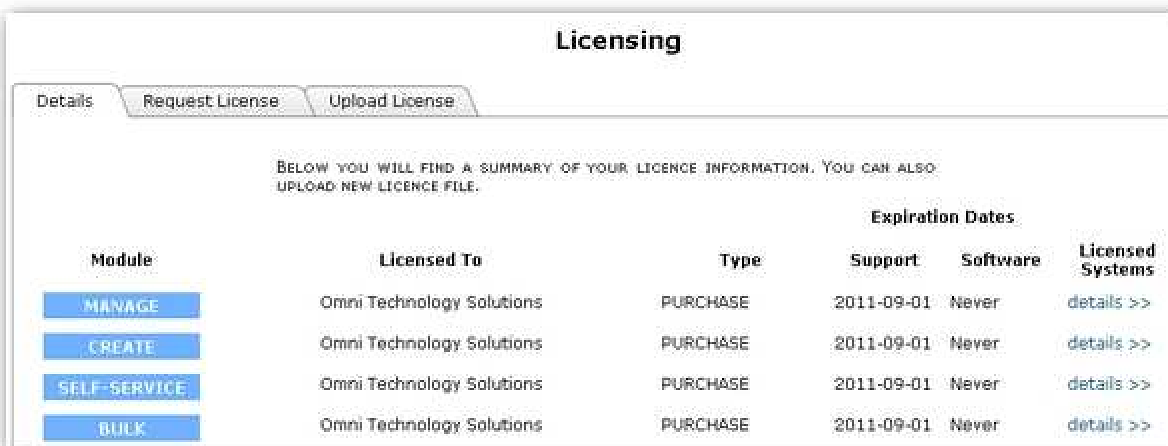


3. To download a system log in the original file format, click the **Download** button.



Manage License Information

Click on the **Licenses** link in the footer to open the licenses information page.

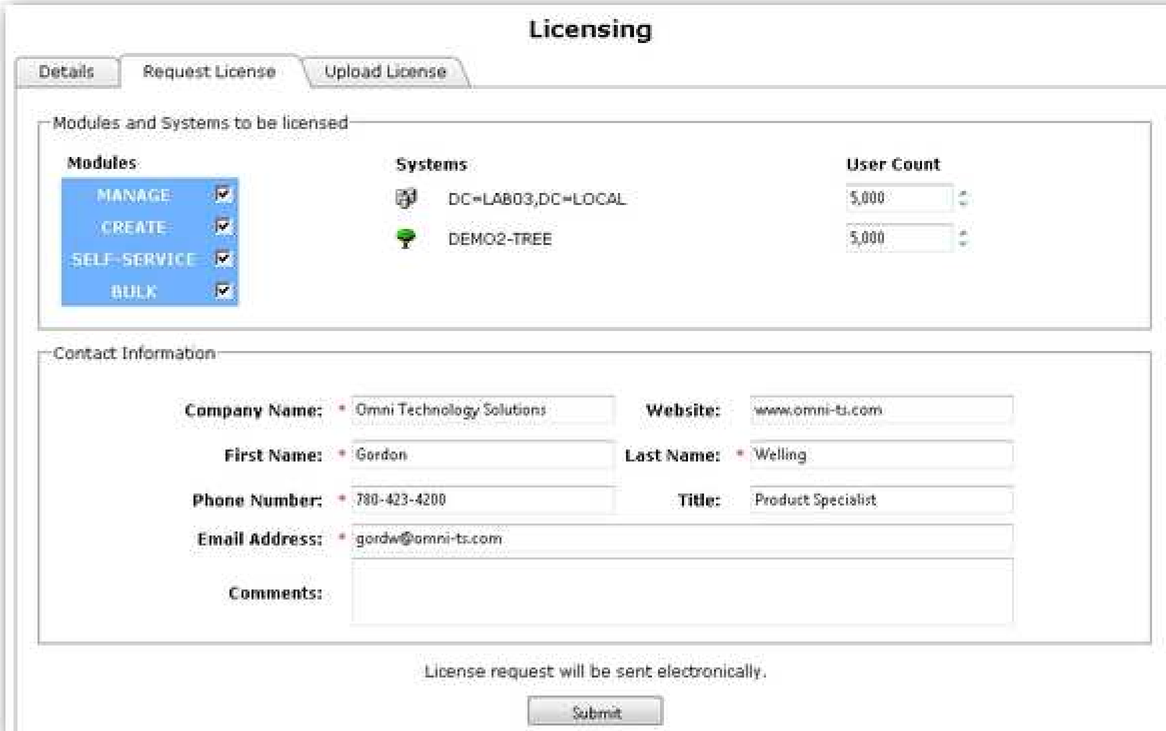


Licenses need to be requested and uploaded after a connection to an existing system is modified or a new connection is added (refer to the applicable eControl Installation Guide).

Request a License

To request a license:

1. Under the "Request License" tab, complete the form and click **Submit**.



Apply a License

To upload and apply a license:

1. Click on the **Select** button, browse and select the replacement or additional license file.

   Click the **Upload** button.

2. Click the **Apply Settings** button to apply the license file just uploaded.

Edit the Login page

The eControl Administration panel includes the ability to modify the eControl login page by adding text and pictures (if needed). Click on the **Edit Login Page** in the footer and then click the **Edit** button.

Add the desired content and then format it. When the editing of the content is complete, click the **Save** button. To see the changes, logout of eControl.

Support for eControl

Reporting a Technical Issue

The eControl "Administration" pages include a "Request Support" link in the footer.

Complete the form and click **Submit.** The eControl server will send the issue and a copy of the application logs and config files to our technical support team.

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Upgrade and Maintenance Support Agreements

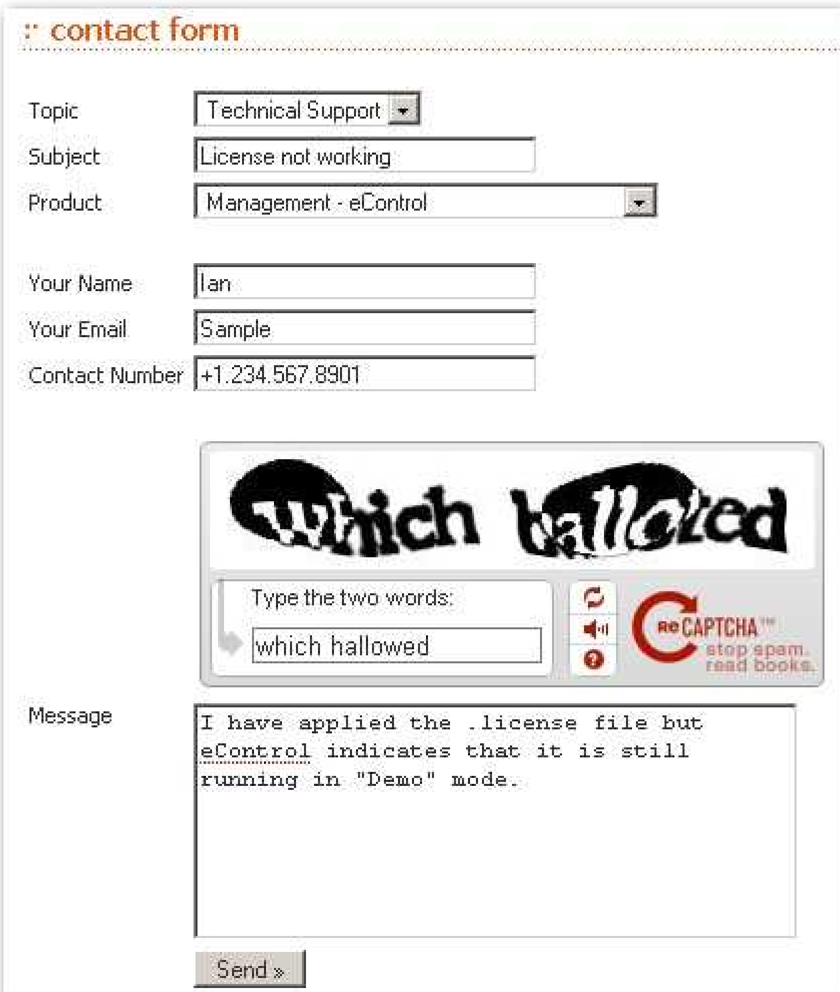
Customers who have current upgrade and support contracts are eligible to receive full email and telephone support Monday to Friday between 9:00 a.m. and 5:00 p.m. Mountain Time during regular working days. Limited email support may be available during extended hours. Email and telephone support is also available to customers who are evaluating Riva.

Contacting Support

You can contact support by phone, email or fax.

Email: support@omni-ts.com
Phone: +**1-780-423-4200**
Fax: +1-780-423-4711

You can also use the "Contact Us" link in the upper right-hand corner of our web site. Please include as many details as possible when requesting support:



Online Resources

Online resources for Riva include:

- Product Documentation: Go to www.omni-ts.com select **Support,** follow the link for **Documentation** and select **eControl and EMU Documentation**
- eControl Flash Tutorials: will be added to www.omni-ts.com/quicktours
- Support Forum: Go to www.omni-ts.com/Forum and:
    - Select the **eControl ~ Installation, Management and Support** forum.
    - "**eControl Tips**" available at http://www.omni-ts.com/forum/post--2124--page-1.html is a collection of forum articles to provide troubleshooting and advanced management steps for eControl.
- Product FAQ: Go to http://www.omni-ts.com/web-management and select **Frequently Asked Questions**

