Agile Product Lifecycle Management for Process

Administrator User Guide

Release 6.0.0.5

Part No. E26480-02

February 2012

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February 2012

Document Control

Change Record

Date	Author	Revision	Change Reference
Sept-07	Agile/Oracle	1.0	Initial release, Part No. TPPR-0059-5.1A
Feb-08	Oracle	2.0	Second release, Part No. E10998-01
Sept-09	Oracle	3.0	Third release, Part No. E12383-01
Feb-10	Oracle	4.0	Fourth release, Part No. E12383-01
Sept-10	Oracle	5.0	Fifth release, Part No. E18526-01
Aug-11	Oracle	6.0	Sixth release, Part No. E24909-01
Dec-11	Oracle	7.0	Seventh release, Part No. E26480-01
Feb-12	Oracle	8.0	Eighth release, Part No. E26480-02

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About This Manual

Agile Product Lifecycle Management for Process Documentation

The Agile Product Lifecycle Management (PLM) for Process documentation set includes Adobe® Acrobat™ PDF files. The Oracle Technology Network (OTN) Web site: http://www.oracle.com/technetwork/documentation/agile-085940.html contains the latest versions of the Agile PLM for Process PDF files. You can view or download these manuals from the Web site, or you can ask your Agile administrator if there is an Agile PLM for Process Documentation folder available on your network from which you can access the Agile PLM for Process documentation (PDF) files.

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Accessibility of Code Examples in Documentation

Screen readers may not always correctly read the code examples in this document. The conventions for writing code require that closing braces should appear on an otherwise empty line; however, some screen readers may not always read a line of text that consists solely of a bracket or brace.

Audience

This user guide is intended for Agile PLM for Process administrators, including user administrators, group administrators, workflow administrators, and data administrators.

Variability of Installations

Descriptions and illustrations of the Agile PLM for Process user interface included in this manual may not match your installation. The user interface of Agile PLM for Process applications and the features included can vary greatly depending on such variables as:

- Which applications your organization has purchased and installed
- Configuration settings that may turn features off or on
- Customization specific to your organization
- Security settings as they apply to the system and your user account

Where to Find Information

Consult the table below to find specific information from the relevant Agile PLM for Process information source.

Table 1: Agile PLM for Process Documentation topics, by source

Information type	Admin. User Guide	Release Notes	Agile training	Help Desk	Agile sales rep
Administering Agile PLM for Process	●		●		
Cache management	●				
Core data management	●				
Custom data management	●				
Feature requests				●	●
Global succession	●				
Installing Agile PLM for Process			●		●
Known issues		●			
New in this release		●	●		●
Resolved issues		●			
System-based roles	●				
Technical support				●	
User and group management	●				
Workflow templates	●				

Document Conventions

The following formatting elements are used in Agile PLM for Process documentation.

Element	Meaning
Helvetica Condensed, 9 pt. bold type	A user interface (UI) element that a procedure is instructing you to click, select, or type into. For example, buttons or text entry fields.
`9 pt. monospace font`	Code samples
`10 pt. monospace font`	File names or directory names
Blue italic font	The linked portion of a cross-reference. Click it to go to the referenced heading, table, or figure.
Minion Typeface, Title Case	A named UI element that a procedure is describing but not instructing you to click, select, or type into.
Note Minion 11.5 pt, with faint blue bar over & under	Alerts you to supplemental information.
Caution! Minion 11.5 pt, with faint red bar over & under	Alerts you to possible data loss, breaches of security, or other more serious problems.
Important Minion 11.5 pt, with thick red bar over & under	Alerts you to supplementary information that is essential to the completion of a task.

CHAPTER 1

Introducing Administration

This chapter introduces the key responsibilities of an Agile Product Lifecycle Management for Process administrator. This chapter includes the following topic:

- *Administration Overview*

Administration Overview

As an Agile PLM for Process administrator, you can perform the following duties:

Group management—Involves use of the User Group Management (UGM) application in Agile PLM for Process. In managing groups, you create new groups, edit existing groups, and assign roles and privileges to groups. Groups are simply a collection of users having the same functional purpose. Groups can be created according to business unit, geographical area, and so on. For details, see Chapter 2, *Using UGM to Manage Groups*.

User management—Involves use of the User Group Management (UGM) application in Agile PLM for Process. In managing users, you create new users, edit existing users, and assign users to groups. For details, see Chapter 3, *Using UGM to Manage Users*.

Data management—Involves use of the Manage Core Data (ADMN) application to manage core data. In managing data, you maintain data lists and custom data. For details, see Chapter 4, *Using ADMN to Manage Core Data* and Chapter 5, *Using ADMN to Manage Custom Data*.

Workflow management—Involves use of the Workflow Administration (WFA) application in Agile PLM for Process. In managing workflows, you create and edit workflow process templates. This task involves creating workflow statuses, transitions, owners, signature requests, and notifications. For details, see Chapter 6, *Using WFA to Manage GSM Workflows* and Chapter 7, *Using WFA to Manage SCRM Workflows*, and Chapter 8, *Using WFA to Manage CSS Workflows*.

Cache management—Involves use of the Manage Data Caches (CACHE) application to manage data caches. In managing caches, you schedule cache flushes for various cache groups. For details, see Chapter 9, *Using CACHE to Manage Caches*.

Security management—Involves use of object level security (OLS) to control access to securable objects within specifications and questionnaires. You can also control business unit security (GSM and SCRM). For details, see Chapter 10, *Implementing Security*.

For general information on using Agile PLM for Process software, see the *Agile Product Lifecycle Management for Process Getting Started Guide*.

CHAPTER 2
Using UGM to Manage Groups

This chapter introduces the User Group Management (UGM) application and explains how to maintain groups within Agile Product Lifecycle Management for Process. Topics in this chapter include:

The User Group Management (UGM) application enables you to create, modify, search for, import, and export users and groups. This chapter discusses the group-related features of the UGM application.

Note Perform group creation and modification tasks in a staging environment. Once you have set up your groups, you can export them to a production environment.

When you log in to Agile PLM for Process, you access the UGM application by clicking **UGM** in the left navigation panel. Agile PLM for Process displays a left navigation panel with the following user management options, most of which will be discussed in detail in this chapter:

- Action Items
- Users (see Chapter 3, *Using UGM to Manage Users*)
- Groups
- Imports
- Exports

Associated Roles

Three user roles are associated with UGM groups:

[PMA_GLOBAL_ADMIN]—Can see and use the Create User and Create User Group buttons and initiate user change requests.

[PMA_GROUP_ADMIN]—Can see and use the Create User Group button and initiate group change requests.

[UGM_GROUP_APPROVER]—Can approve UGM group change requests.

Managing Action Items

When you click **Action Items**, the Action Items table displays, as figure 2-1 shows below. This table lists your pending administrative tasks.

Figure 2-1: Action Items

Action Items

Type	Name	Created	Action	Status
User	ugmuser	7/17/2007 3:23:54 PM	EDIT	Review

The Action Items table contains a list of user and group profiles that you have created or edited or that are awaiting your final approval. The table contains the following fields:

- **Type**—Specifies if this is a user- or group-related action.
- **Name**—Specifies the user's login name or the full name of the group.
- **Created**—Specifies the date and time when the create or change request was made.
- **Action**—Specifies if this is a create or edit action.
- **Status**—Specifies the status of the action. For example, "Review" indicates that this request is awaiting approval.

Searching for Groups

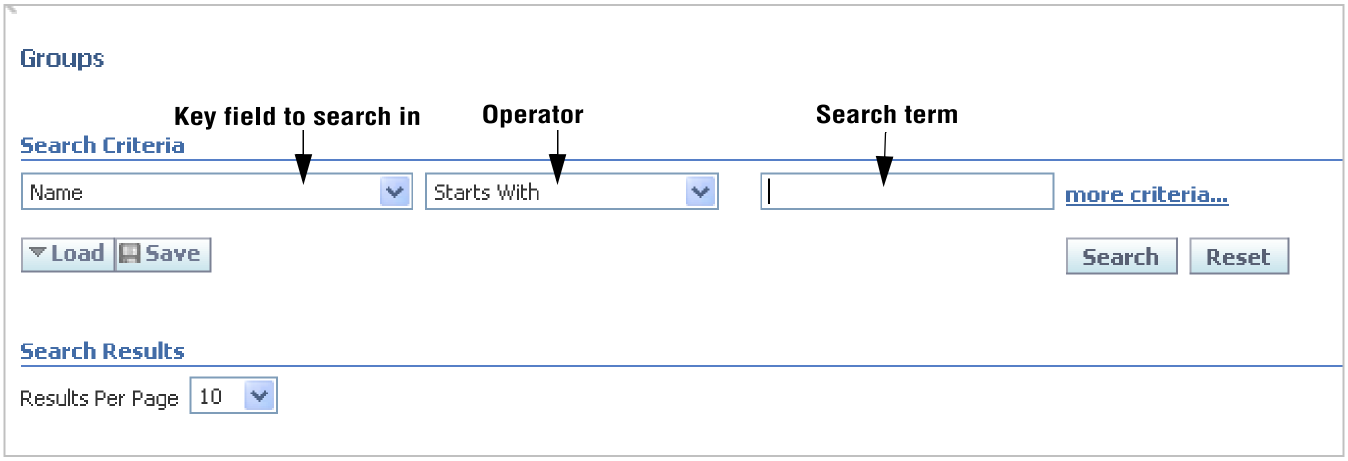
Groups are simply collections of users and roles. You can create groups according to functional area, business unit, geographical area, and so on.

As an administrator, you will often need to search for groups. When you click **Groups** in the left navigation panel of the UGM application, the Groups search page displays group search options.

Using Group Search Criteria

To search for groups, you will use a combination of three search criteria fields: key field, operator, and search criteria. Note that the default group search criteria is *Name* and *Starts With*, as shown in figure 2-2 below.

Figure 2-2: Groups search page



In the key field drop-down list, select your search criteria as follows:

- **--** — Searches for all groups. It is the equivalent of using no search criteria.
- **Active**— If the second drop-down list (discussed below) is set to “Is TRUE”, this option searches for only active groups. If the second drop-down list is set to “Is FALSE”, this option searches for inactive groups.
- **Description**—Searches for groups based on the group description provided in the group profile.
- **Full Name**—Searches for groups based on the full name of the group (includes the parent/child hierarchy).
- **Last Updated**—Searches for groups based on a selected edit date.
- **Member Name**—Searches for groups based on the names of members in the group.
- **Name**—Searches for groups based on the group name.
- **Role**—Searches for groups based on the roles assigned to the group.
- **Workflow Visibility Tags**—Searches for groups based on the visibility assigned to the group.

In the operator drop-down list, your options will be determined by the choice you made in the key field drop-down list. Selections may include:

- **Is TRUE**—Searches for only values that are “TRUE” (for example, “Active=TRUE” will search for only active groups).
- **Is FALSE**—Searches for only values that are “FALSE” (for example, “Active=FALSE” will search for only inactive groups).

- **Equals**—Used to quantify search criteria entered in the field to the right (for example, "Name Equals Global" will produce only groups with the name of Global).
- **Starts With**—Used for character searches, alphabetical, or numerical (for example, "Name Starts With W" will produce only groups with names that start with the letter "W").
- **Contains**—Used for character searches, alphabetical, or numerical (for example, "Description Contains Admin" will produce only groups with descriptions that contain the word "Admin").
- **Greater Than**—Used with "Last Updated" searches; will produce only dates after the selected date.
- **Less Than**—Used with "Last Updated" searches; will produce only dates before the selected date.

Use the empty search criteria field to the right of the operator drop-down list to qualify the selection you made in the other search fields. For example, if you are searching by "Name Starts With," you will enter the first letter(s) of the group name(s) for which you are searching. You can also enter the percent (%) sign to perform a wildcard search for a single character.

Saving and Loading Searches

If you use certain search criteria often, you may wish to save search criteria for later reuse.

To save search criteria:

1. Click **Save**. A **Save Search Criteria As** dialog box displays.
2. Enter a name for the search.
3. Click **Save**.

To load a saved search:

1. Click **Load**, and then select Load Saved Search from the drop-down list. A **Saved Searches for {your name}** dialog box displays.
2. In the dialog box, click the hyperlinked name of a saved search. UGM closes the dialog box and displays your saved search criteria in the fields of the search form.

More Search Options

- When searching for groups, you can add more search criteria by clicking the **more criteria** link.
- Click **Search** to display your search criteria results.
- Click **Reset** to clear all search criteria fields and results.
- In the Search Results area, use the drop-down list to set the number of search results to display at one time. Click any column head to sort rows by that column head. Click again to reverse the order of the sort.

Exporting Search Results

Once you have performed your search, you can export the search results in Microsoft Excel (.XLS) format.

To export search results to a local Excel file:

1. Perform a search, as described earlier. Agile PLM for Process displays the search results.
2. Click **Export.** Agile PLM for Process writes the search results to an Excel file and displays a dialog box for downloading or viewing the exported file.
3. Click **Open** to view the file in Excel or click **Save** to save the file to a local drive.

Creating a Change Request

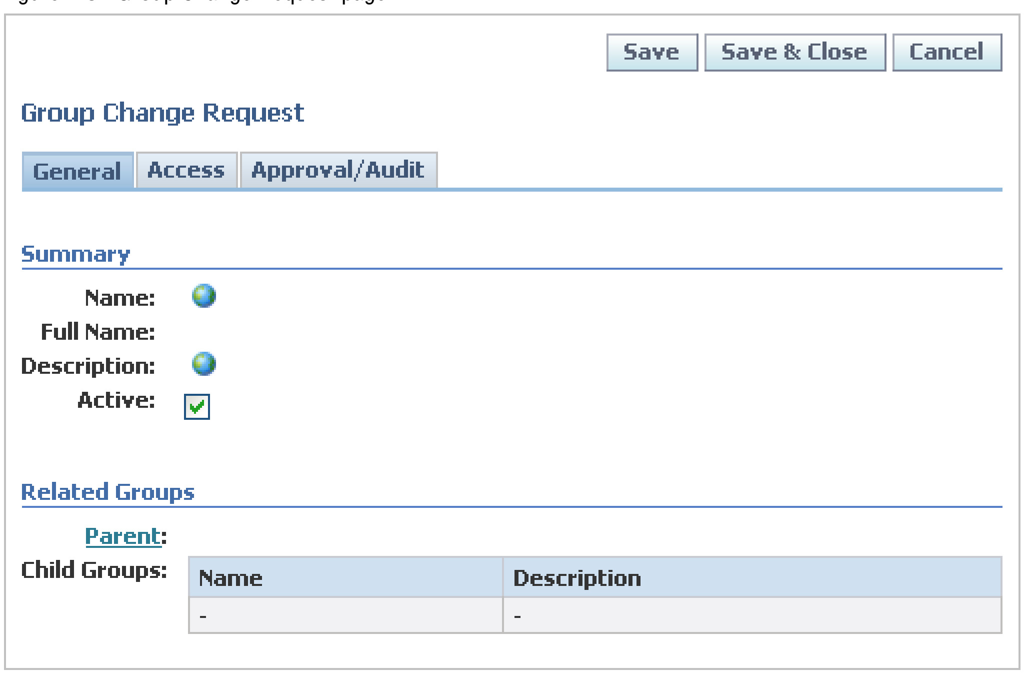
To create a new group or make any changes to an existing group, you must initiate a change request and advance it through the workflow. See *Creating Groups* below and *Editing Existing Groups* on page 2-12 for more information.

Creating Groups

To create a new group:

1. Click **Create User Group** in the top right corner. UGM displays the Group Change Request page, as shown in figure 2-3 below.

Figure 2-3: Group Change Request page

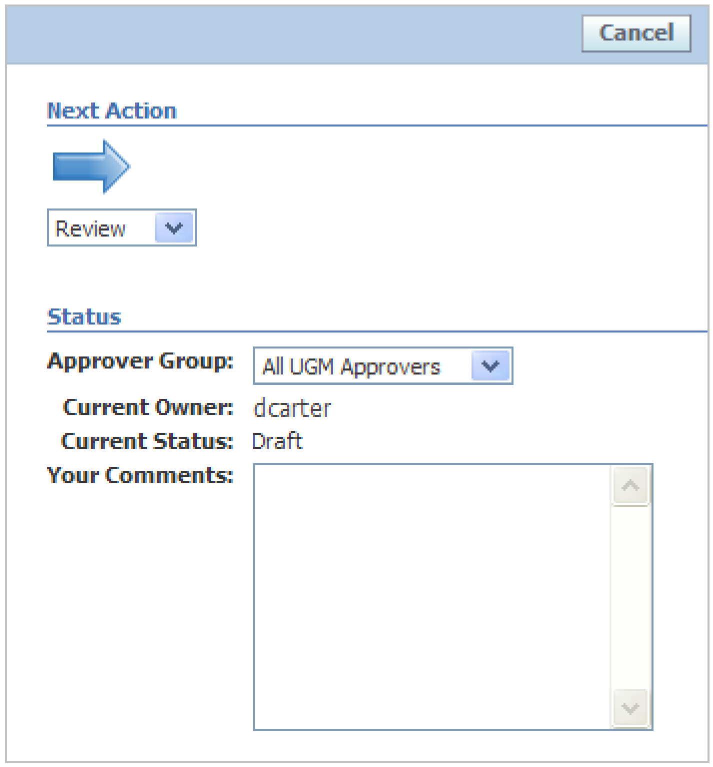


2. Enter information described in the following sections for the General, Access, and Approval/Audit tabs of the page.
3. Click **Save & Close.**

Note Upon saving, UGM places the request in draft mode. You can continue to edit it until the change request is canceled or submitted for review.

4 Submit your change request for review by clicking **Workflow** in the upper right of the page. Agile PLM for Process displays the Workflow dialog box, as figure 2-4 shows below.

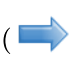
Figure 2-4: Workflow dialog box



5 In the Workflow dialog box, under Next Action, click the drop-down list and make your selection as follows:

- **Review**—Submits the change request to the selected approver group for review and notifies the approver(s) by email. The email includes the comments that you entered in the workflow dialog box.
- **Canceled**—Terminates the change request.

6 In the Approver Group drop-down list, select the group of users who will be reviewing your change request. The drop-down list contains all groups with the [UGM_GROUP_APPROVER] role. (This option is only available if you select **Review** for the Next Action.)

7 In the Workflow dialog box, click the move step forward icon () to move the change request to the next step.

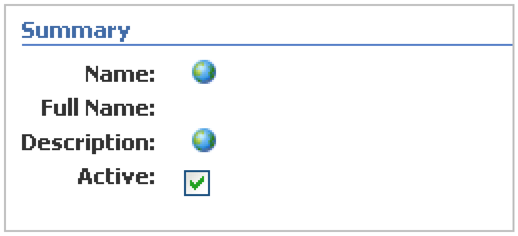
8 Once an approver reviews your request, UGM notifies you of the status of your request by email.

General Tab

Summary Section

Enter the following group information in the Summary section of the General tab.

Figure 2-5: Summary section

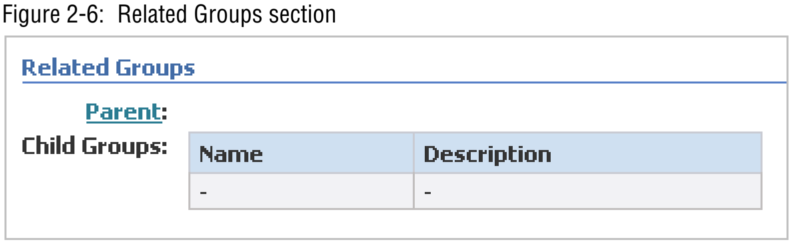


- **Name**—Click the set alternate language text icon ( ) to display the translation dialog box. Click the edit icon ( ) next to the preferred language for this group, and enter a group name in the provided text box. Click the apply changes icon ( ) to apply your changes. Select **Done** to close the dialog box and update the Name field. This is a required field.
- **Full Name**—This is a read only field. It contains the full name (or parent/child hierarchical path) for the group, as entered in the Related Groups section of the General tab.
- **Description**—Click the alternate language text icon ( ) to display the translation dialog box. Click the edit icon ( ) next to the preferred language for this group, and then enter a group description in the provided text box. Click the apply changes icon ( ) to apply your changes. Select **Done** to close the dialog box and update the Description field.
- **Active**—Make the group active or inactive.

Related Groups Section

Enter the following group information in the Related Groups section of the General tab.

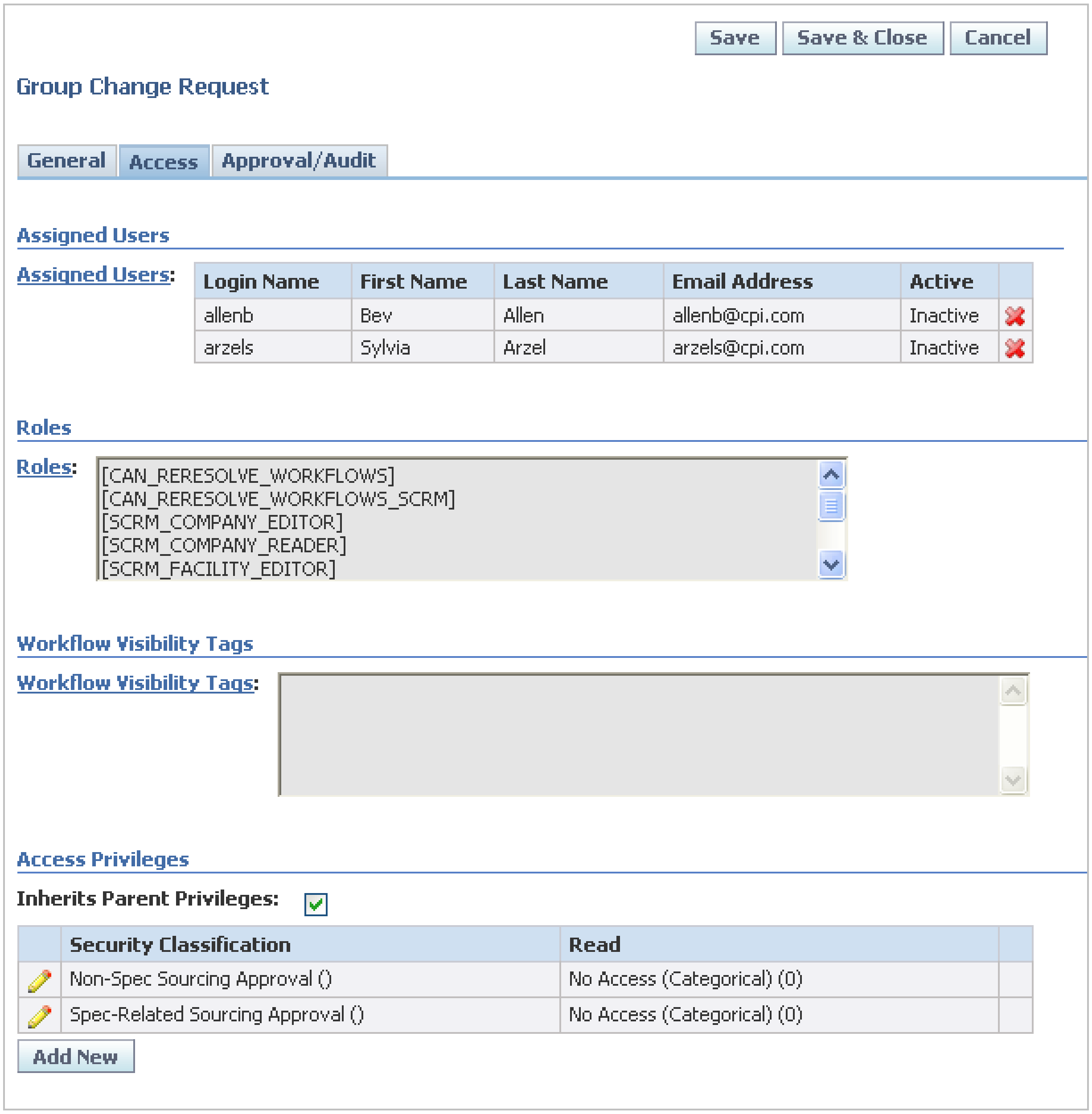
Figure 2-6: Related Groups section



- **Parent**—Click this link to assign the group to a parent group. A dialog box displays for your selection. A group can belong to only one parent group. Parent groups are hierarchical.
- **Child Groups**—This is a read only field. The Child Groups table displays any child groups assigned to the group.

Access Tab

Figure 2-7: Access tab



Assigned Users Section

The Assigned Users section of the Access tab displays users assigned to the group.

Note This section is based on a configuration. If the configuration is false, then this section is display only.

Click **Assigned Users** to assign users to the group. Agile PLM for Process displays a user search page. Search for and select users to add to the group. The Active column displays the status of the user, which is set in the user profile.

You can also remove users from a group by selecting the delete icon ( ) next to each user you would like to remove.

Note Users can also be assigned to groups individually through their user profile. See Chapter 3, *Using UGM to Manage Users* for more details.

Roles Section

The Roles section of the Access tab displays all the roles assigned to the group. Roles provide access and privileges to the group. For example, the [SCRM_COMPANY_EDITOR] role allows all the users in the group to edit SCRM company profiles.

Click **Roles** to assign roles to the new group. Agile PLM for Process displays a dialog box listing available roles. A group can have more than one role assigned to it; check the box next to each role to assign to the group. Roles are predefined system values that cannot be modified. For a list of predefined roles, see Appendix A, *List of System-Based Roles*. Roles will also be inherited from parent groups.

Workflow Visibility Tags Section

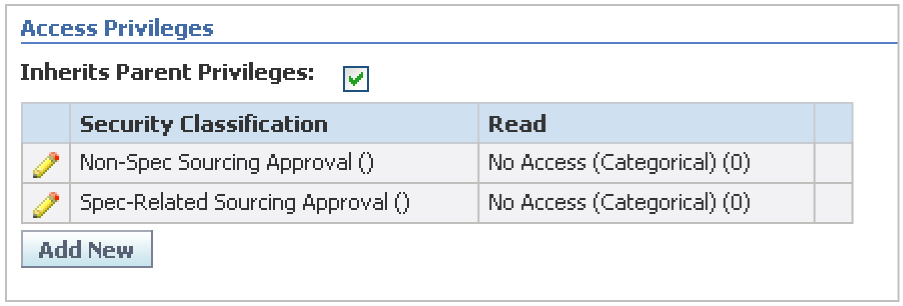
The Workflow Visibility Tags section of the Access tab displays all the workflow visibility tags assigned to the group. Workflow Visibility tags filter EQT search results based on the specification's workflow status. See *Controlling Specification Visibility* on page 6-31 for more information. Click **Workflow Visibility Tags** to assign tags to the new group. A group can have more than one visibility tag assigned to it. Visibility tags are not inherited from parent groups.

Access Privileges Section

This section is displayed if Object Level Security (OLS) is enabled. A privilege consists of a security classification and an access level. You can add contextual and noncontextual security classifications to the privileges table by clicking **Add New**. Assigning classifications to groups allows users within the group to see certain secured objects on a specification or profile. Secured objects include: Extended Attributes, Custom Sections, Sourcing Approvals, Attachments, and Supplier Documents. Refer to Chapter 10, *Implementing Security* for more information. The Access Privileges section contains the following:

- **Inherits Parent Privileges**—Check this field to inherit privileges from the parent group(s). For more information, refer to *User Access Privilege Resolution* on page 10-5.
- **Security Classification**—This table lists defined privileges, as figure 2-8 shows below.

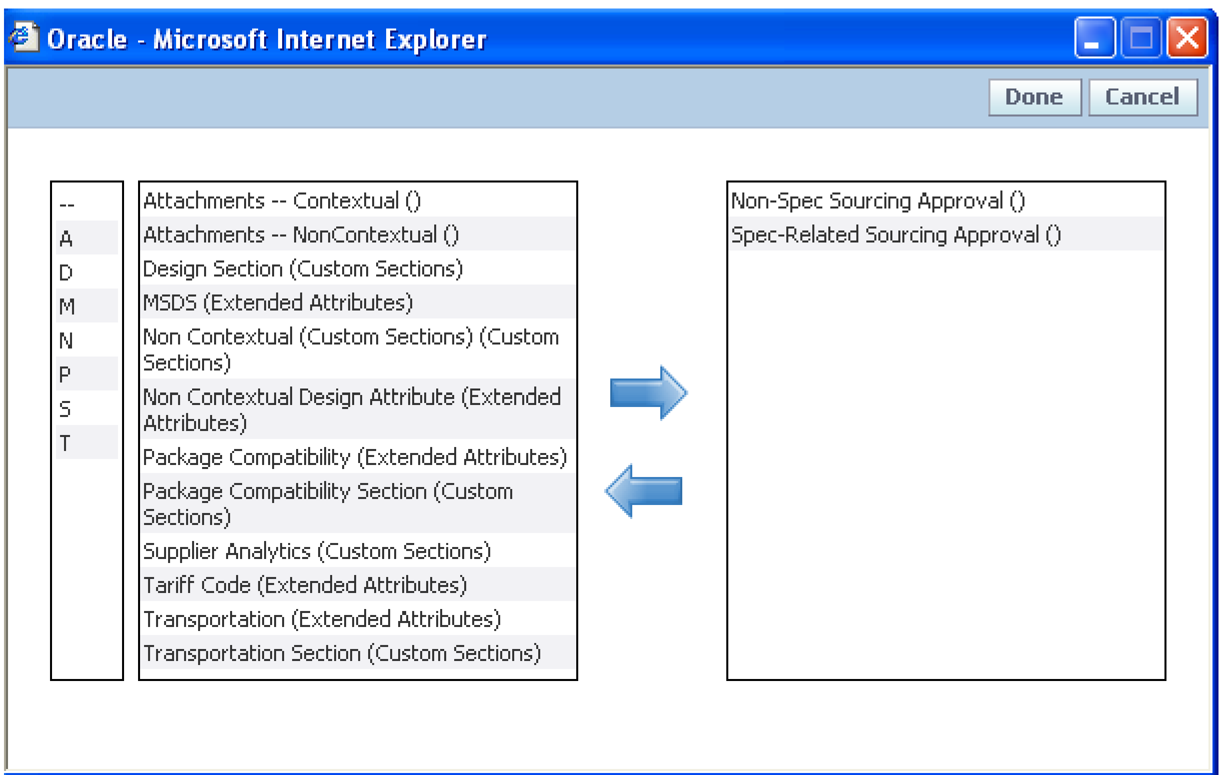
Figure 2-8: Security Classification table



To add a new classification privilege:

1. Click **Add New.** UGM opens a multiple selection dialog box, as figure 2-9 shows below.

Figure 2-9: Access classification dialog box

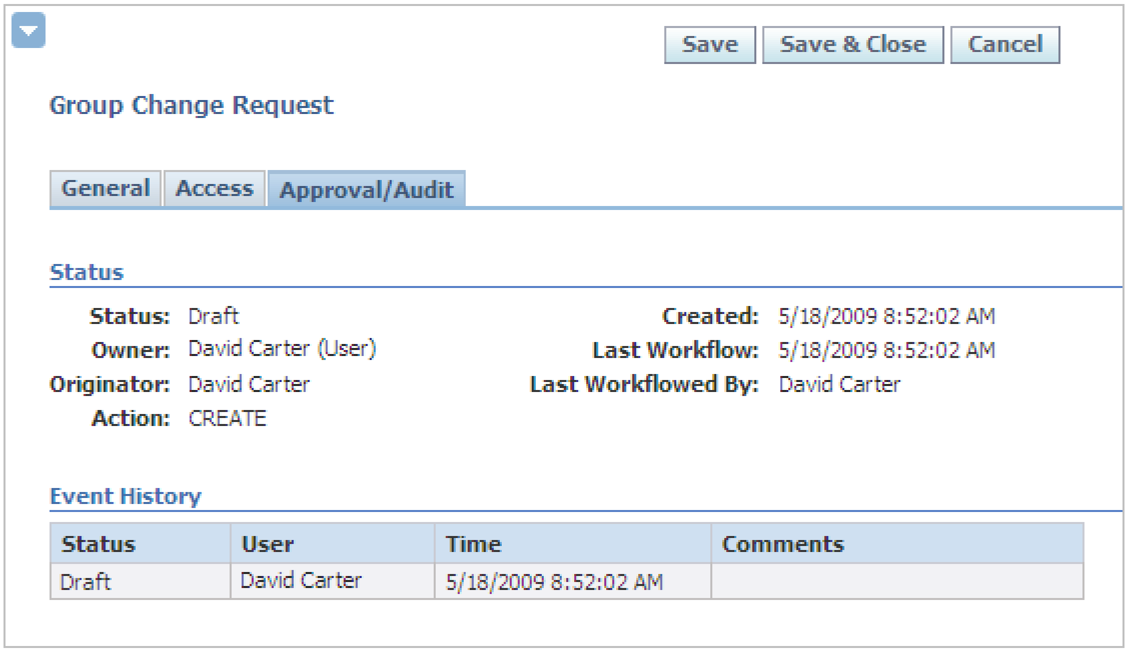


2. Select the access classification(s) from the left and move them to the right using the add selected data icon ( ).
3. Click **Done.** You now must select the read access level for that classification in the read column.
4. Select an appropriate access level from the drop-down box.
5. Click the apply changes icon ( ) to apply your changes.

Approval/Audit Tab

The information in the Approval/Audit tab is read only and is for viewing purposes only.

Figure 2-10: Approval/Audit tab



Status Section

The Status section of the Approval/Audit tab contains the following information:

- **Status**—The group request status.
- **Owner**—The owner of the request.
- **Originator**—The UGM administrator who initiated the change request.
- **Action**—Displays whether the change request created a new group ("Create") or modified an existing group ("Edit").
- **Created**—The date and time when the request was made.
- **Last Workflow**—The date and time when the request was last workflowed (changed).
- **Last Workflowed By**—The person who last workflowed the request.

Event History Section

The Event History section of the Approval/Audit tab contains a listing of workflow events that have occurred for the request. It includes the following information:

- **Status**—The group request status for this event.
- **User**—The person who recorded this event.
- **Time**—The time and date when the event was recorded.
- **Comments**—Any comments appended to this event.

Editing Existing Groups

As an administrator, you will need to be able to edit existing groups.

To edit an existing group:

1. Click **Groups** in the left navigation panel of the UGM application and search for the group to modify.
2. Click the linked Full Name of the group in the search results provided to display the group profile.
3. In the top right corner, click **Create Change Request** to initiate a change request.
4. Make edits to the group profile using the instructions provided in *Creating Groups* on page 2-5.
5. Click **Save & Close**.

> **Note** Upon saving, UGM places the request in draft mode. You can continue to edit it until the change request is canceled or submitted for review.

6. Click **Workflow** to move your change request to the next step or action.
7. In the Workflow dialog box, under Next Action, click the drop-down list and make your selection as follows:
   - **Review**—Submits the change request to the selected approver group for review and notifies the approver(s) by email. The email includes the comments that you entered in the workflow dialog box.
   - **Canceled**—Terminates the change request.
8. In the Approver Group drop-down list, select the group of users who will be reviewing your change request. The drop-down list contains all groups with the [UGM_GROUP_APPROVER] role. (This option is only available if you select **Review** for the Next Action.)
9. In the Workflow dialog box, click the move step forward icon ( ) to move the request to the next step.
10. Once an approver reviews your request, UGM notifies you by email of the status of your request.

Using Group Approval Workflows

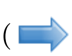
Depending on your configuration, all change requests need to be advanced through a workflow. The solution works in two modes:

- **Noncompliance Enforcement**—In this mode as an approver you can approve change requests that you have originated, including changes to your own profile.
- **Compliance Enforcement**—The compliance mode prevents you (as an approver) from approving your own requests or from making changes to your own profile.

Approving a Request

To approve a group request, you must belong to a group with the role of [UGM_GROUP_APPROVER]. When a change request is submitted for your approval, you will be notified by email and the change request will be added to your Action Items list (see *Managing Action Items* on page 2-2).

To approve a request:

1. Click the name of the group in the Action Items table to display the change request.
2. Review all data entered for the request in the General, Access, and Approval/Audit tabs. Refer to *General Tab* on page 2-7 through *Approval/Audit Tab* on page 2-11 for more information.
3. When you are ready to advance the request in the workflow, click **Workflow** in the top right corner to display the Workflow dialog box.
4. In the Workflow dialog box, under Next Action, click the drop-down list and make your selection as follows:
   - **Approved**—Approves the change request and notifies the originator by email. The email includes the comments that you entered in the workflow dialog box.
   - **Not approved**—Sends the change request back to the originator for modification and sends an email notification. The email includes the comments that you entered in the workflow dialog box.
   - **Canceled**—Terminates the change request and notifies the originator by email.
5. In the Workflow dialog box, click the move step forward icon () to move the change request to the next step.
6. If the change request was approved, the user cache group needs to be flushed before the changes will be available. See *Scheduling Data Cache Flushes* on page 9-1 for more information.

Exporting and Importing Group Data

As an administrator, you perform all group creation and editing tasks in a staging environment. As a result, once you have made final group request approvals, you must export these profiles from the staging environment and then import them into the production environment, making the changes live.

Exporting Groups from Your Staging Environment

To export group data from your staging environment:

1. Log in to your staging environment.
2. Click **UGM > Exports** on the left navigation panel.
3. Click the **Groups to Export** link. UGM displays a search page to assist you in searching for groups to export.
4. Use the search page to search for groups to export.

> **Note** To search for groups that were edited on a certain date, select the “Last Updated” option from the key field drop-down list, and then use the other search fields to select a date.

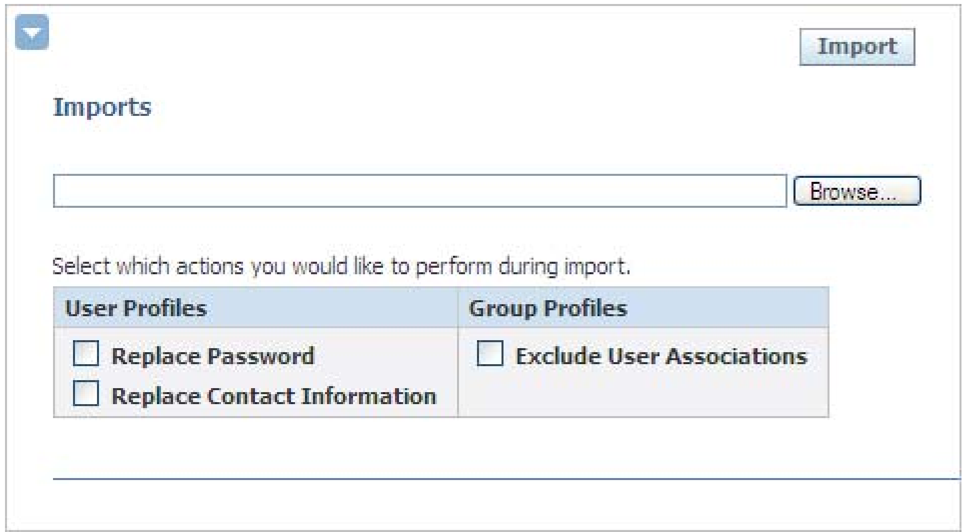
5. From the search results, click each group name to export. The names that you clicked appear in the Selected Items box at the bottom of the page.
6. When you have made your selections, click **Done** at the bottom right of the page. The page closes and your group selections display in the **Groups to Export** table.
7. At the upper right of the page, click **Export**. A dialog box appears, allowing you to select the location on your hard drive to export the user data to.
8. Click **Save.** A Save As dialog box displays.
9. Click **Save.** Agile PLM for Process encrypts the selected groups in a single file, closes the dialog box, and saves the encrypted file to your local drive.

Importing Groups into Your Production Environment

To import group data into your production environment:

1. Log in to your production environment.
2. Click **UGM > Imports** on the left navigation panel. UGM displays the Imports page, as shown in figure 2-11 below.

Figure 2-11: Imports dialog box



3 Click **Browse** to locate and select the encrypted file that you exported from the staging environment.

4 Optionally, select other actions to perform during import:

- **Replace Password**—Check this option to overwrite the user's password. By default this field is unchecked. This option only applies to user profiles.
- **Replace Contact Information**—Check this option to overwrite the user's contact information. By default this field is unchecked. This option only applies to user profiles.
- **Exclude User Associations**—By default all group to user associations go with your import. If you do not want to carry over user associations, click **Exclude User Associations**. Checking this option will import your group without its assigned user list. This is valuable when you are making a non-user change to a group and still want to maintain your import environment's current membership list.

5 Click **Import**.

6 In the production environment, flush the user cache group, as described in *Using the Cache Application* on page 9-3.

CHAPTER 3

Using UGM to Manage Users

This chapter explains how to manage user data within Agile Product Lifecycle Management for Process. Topics in this chapter include:

- *Managing Action Items*
- *Searching for Users*
- *Creating a Change Request*
- *Using User Approval Workflows*
- *Exporting and Importing User Data*

The User Group Management (UGM) application allows you to create, modify, search for, import, and export users and groups. This chapter discusses the user-related features of the UGM application.

Note Perform user creation and modification tasks in a staging environment. Once you have set up your users, you can export them to a production environment.

When you log in to Agile PLM for Process, you access the UGM application by clicking **UGM** in the left navigation panel. A new left navigation panel is displayed with the following user management options, most of which are discussed in detail in this chapter:

- Action Items
- Users
- Groups (see Chapter 2, *Using UGM to Manage Groups*)
- Imports
- Exports

Associated Roles

Three user roles are associated with UGM users:

[PMA_GLOBAL_ADMIN]—Can see and use the Create User and Create User Group buttons

[PMA_USER_ADMIN]—Can see and use the Create User button and initiate user change requests.

[UGM_USER_APPROVER]—Can approve user change requests.

Managing Action Items

When you click **Action Items**, the Action Items table displays. This table lists your pending administrative tasks.

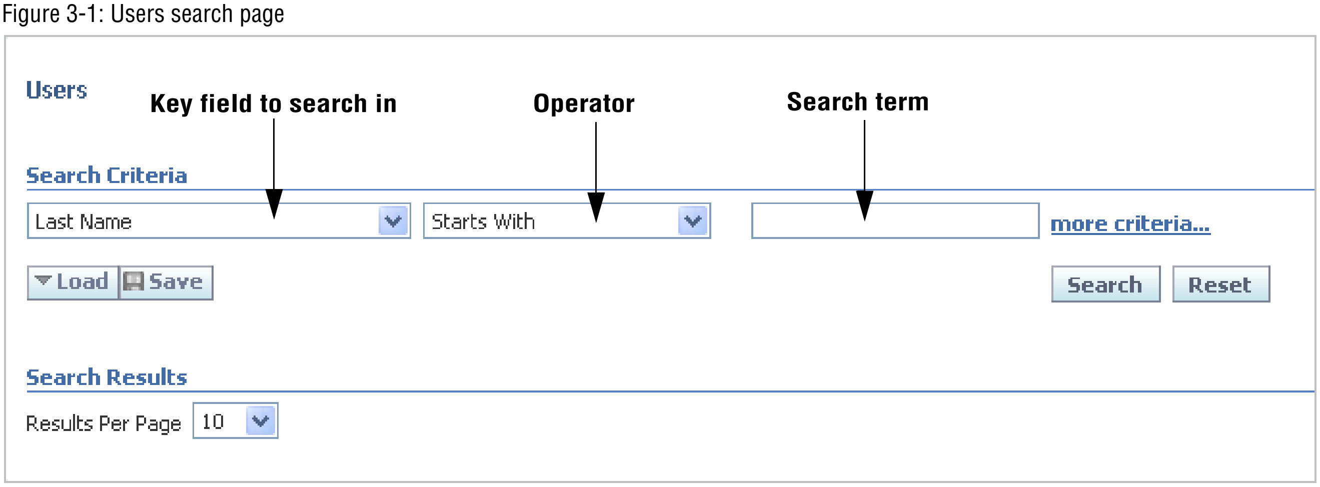
The Action Items table contains a list of user and group profiles that you have created/edited or that are awaiting your final approval. The table contains the following fields:

- **Type**—Specifies if this is a user- or group-related action.
- **Name**—Specifies the user's login name or the full name of the group.
- **Created**—Specifies the date and time when the create or change request was made.
- **Action**—Specifies if this is a create or edit action.
- **Status**—Specifies the status of the action. For example, "Review" indicates this request is awaiting approval.

Searching for Users

As an administrator, you will often need to search for users. When you click **Users** in the left navigation panel of the UGM application, the Users search page displays user search options, as figure 3-1 shows below.

Figure 3-1: Users search page



User Search Criteria

To search for users, you will use a combination of three search criteria fields: key field, operator, and search criteria. Note that the default user search criteria is *Last Name* and *Starts With*.

In the key field drop-down list, select your search criteria as follows:

- **--** — Searches for all users. It is the equivalent of using no search criteria.
- **Active**—If the second drop-down list (discussed below) is set to "Is TRUE," this option searches for only active users. If the second drop-down list is set to "Is FALSE," this option searches for inactive users.
- **Country**—Searches for users in a certain country.
- **Email Address**—Searches for users by their email address.
- **Facility**—Searches for users by the facility in which they are located.
- **First Name**—Searches for users by their first name.
- **GSM Business Unit (+ Children)**—Searches for users containing a certain GSM business unit as well as the children of that business unit.
- **GSM Business Unit (Exact Match)**—Searches for users containing a specific GSM business unit.
- **GSM Business Unit (Hierarchical)**—Performs a hierarchical GSM business unit search for users.
- **Last Name**—Searches for users by their last name.
- **Last Updated**—Searches for users based on a selected edit date.
- **Login Name**—Searches for users by their login name.
- **SCRM Business Unit (+ Children)**—Searches for users containing a certain SCRM business unit as well as the children of that business unit.
- **SCRM Business Unit (Exact Match)**—Searches for users containing a specific SCRM business unit.
- **SCRM Business Unit (Hierarchical)**—Performs a hierarchical SCRM business unit search for users.
- **User Group** —Searches for users within a certain user group.

In the operator drop-down list, your options will be determined by the choice that you made in the key field drop-down list. Selections may include:

- **Null {empty field}**—Searches for all users. It is the equivalent of using no search criteria.
- **Is TRUE**—Searches for only values that are "TRUE" (for example, "Active=Is TRUE" will search for only active users).
- **Is FALSE**—Searches for only values that are "FALSE" (for example, "Active=Is FALSE" will search for only inactive users).
- **Equals**—Used to evaluate search criteria entered in the field to the right (for example, "First Name Equals John" will produce only users whose first name is "John").

- **Starts With**—Used for character searches, alphabetical or numerical (for example, “Last Name Starts With K” will produce only users whose last name starts with the letter “K”).
- **Contains**—Used for character searches, alphabetical or numerical (for example, “Login Name Contains 02” will produce only users whose login name contains the characters “02”).
- **Greater Than**—Used with “Last Updated” searches, will produce only dates after the selected date.
- **Less Than**—Used with “Last Updated” searches, will produce only dates before the selected date.

Use the empty search criteria field to the right of the operator drop-down list to qualify the selection you made in the other search fields. For example, if you are searching by “First Name Starts With”, you will enter the first letter(s) of the first name(s) for which you are searching. You can also enter the percent (%) sign to perform a wildcard search for a single character.

Note Click any column head to sort rows by that column head. Click again to reverse the order of the sort.

For more search options, see *More Search Options* on page 2-4. For guidance on saving and loading searches, see *Saving and Loading Searches* on page 2-4. For instructions on exporting search results, see *Exporting Search Results* on page 2-5.

Creating a Change Request

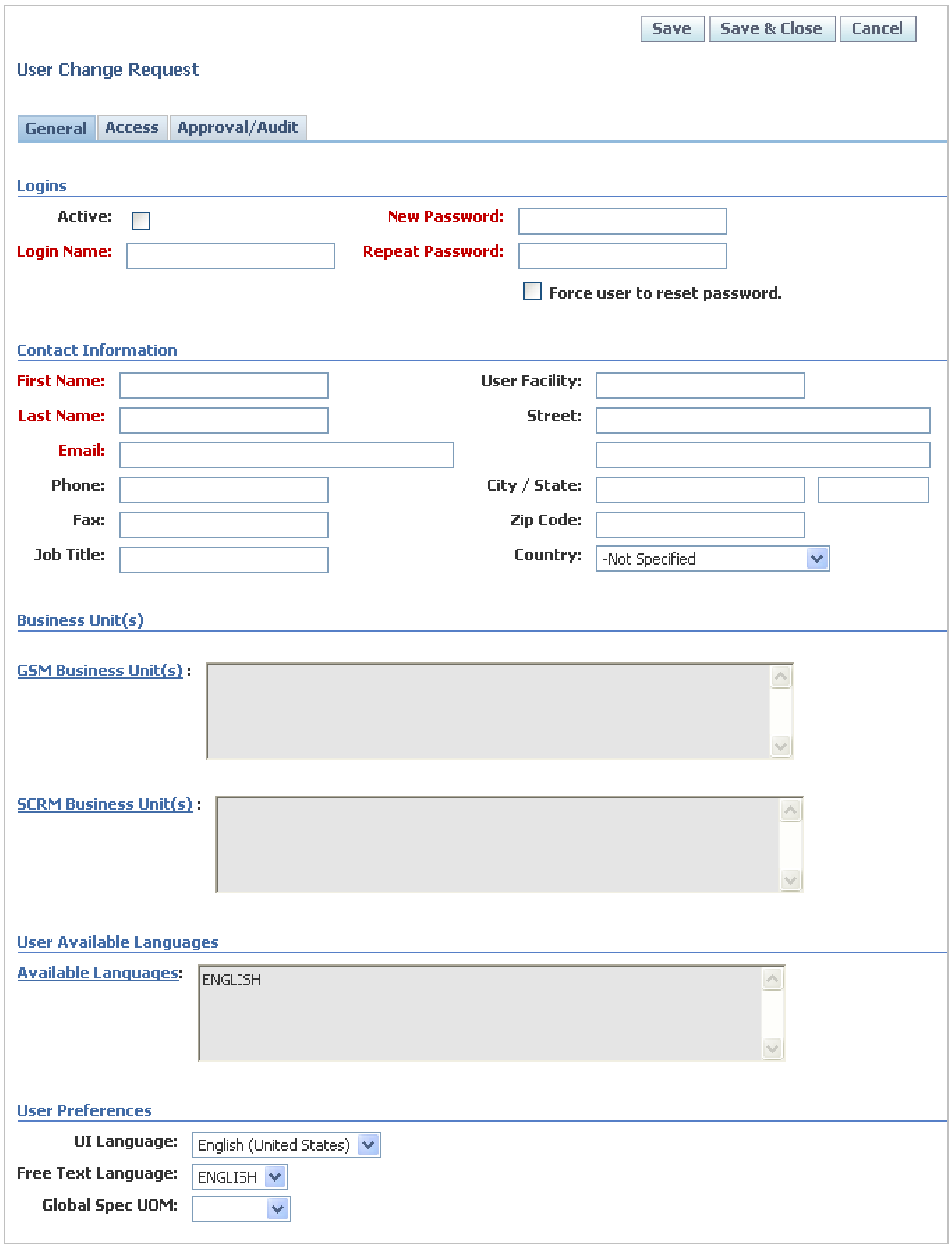
To create a new user or make changes to an existing user, you must initiate a change request and advance it in the workflow.

Creating a User

To create a new user:

1 Click **Create User** at the upper right corner of the page. UGM displays a User Change Request page with empty fields, as figure 3-2 shows below.

Figure 3-2: User Change Request page



2 Enter information described in the following sections for the General, Access, and Approval/Audit tabs.

Note Required information/fields are indicated by red text throughout the various UGM sections and tabs.

3 Click **Save & Close**.

Note Upon saving, UGM places the request in draft mode. You can continue to edit it until the change request is canceled or submitted for review.

4 Click **Workflow** to move the change request to the next step/action.

5 In the Workflow dialog box, under Next Action, click the drop-down list and make your selection as follows:

- **Review**—Submits the change request to the selected approver group for review and notifies the approver(s) by email. The email includes the comments that you entered in the workflow dialog box.
- **Canceled**—Terminates the change request.

6 In the Approver Group drop-down list, select the group of users who will be reviewing your change request. The drop-down list contains all groups with the [UGM_USER_APPROVER] role.

7 In the Workflow dialog box, click the move step forward icon ( ) to move the request to the next step.

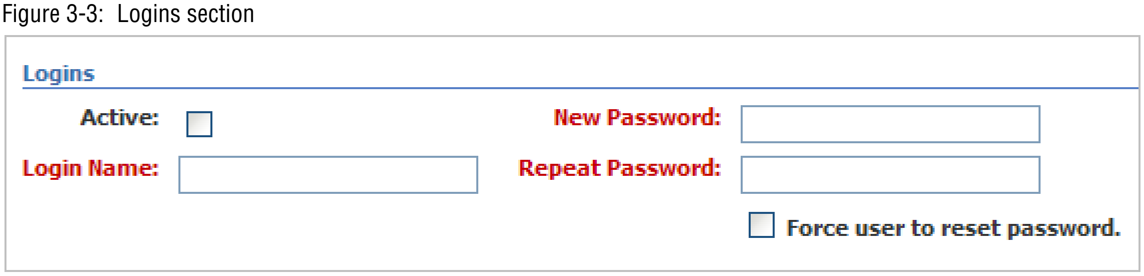
8 Once an approver reviews your request, UGM notifies you of the status of your request by email.

General Tab

Logins Section

Enter the following user information in the Logins section of the General tab, as shown in figure 3-3 below.

Figure 3-3: Logins section



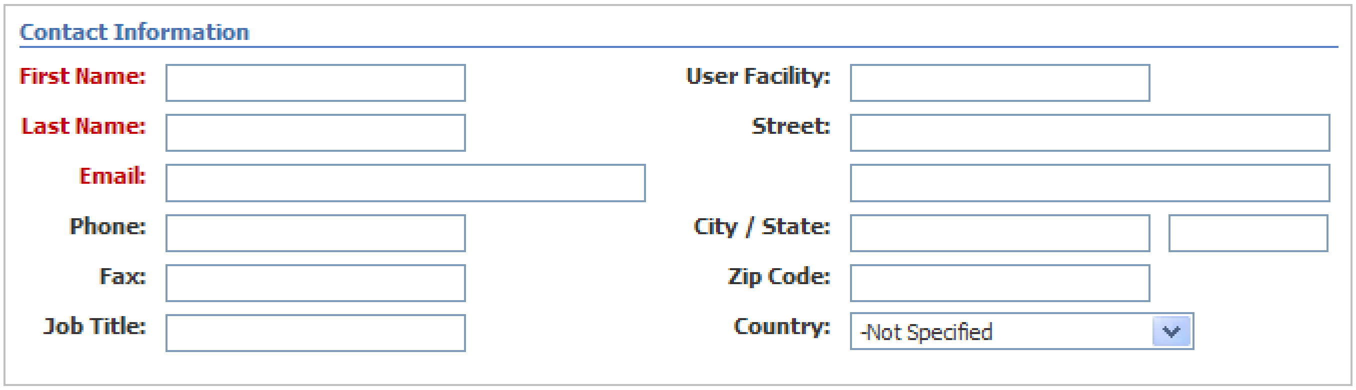
- **Active**—Specify if the user is an active user.
- **Login Name**—Enter a login name for the user to access Agile PLM for Process. This is a required field.
- **New Password**—Enter a new password for the user to access Agile PLM for Process.

- **Repeat Password**—Re-enter the user password for verification purposes.
- **Force user to reset password**—Forces a user to change password upon next login.

Contact Information Section

Enter general user information in the Contact Information section of the General tab. Figure 3-4 shows the Contact Information section.

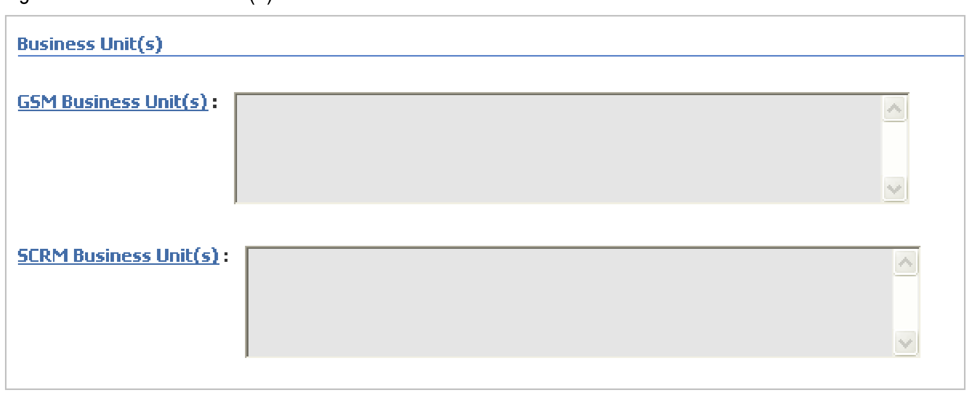
Figure 3-4: Contact Information section



Business Unit(s) Section

In GSM and SCRM, a user can belong to more than one business unit. Business units are hierarchical. You can assign the user to one area within a certain business unit by drilling down, or you can assign a user to the entire business unit and all its children by selecting the top level business unit. Figure 3-5 shows the Business Unit(s) section.

Figure 3-5: Business Unit(s) section



GSM Business Unit(s)—Click the linked field to grant the user access to a GSM business unit (or units). A dialog box is available for your selection.

Business units control the user's visibility to GSM specifications. For example, if you assign the BU of North America > United States to a user, when the user performs a search for specifications, the search will only return specifications tied to the explicit North America BU, North America > United States BU, or any children business units under United States.

SCRM Business Unit(s)—Click the linked field to grant the user access to an SCRM business unit (or units). A dialog box is available for your selection. This field is required if the user has site access to SCRM.

Note This section displays if SCRM business security is enabled.

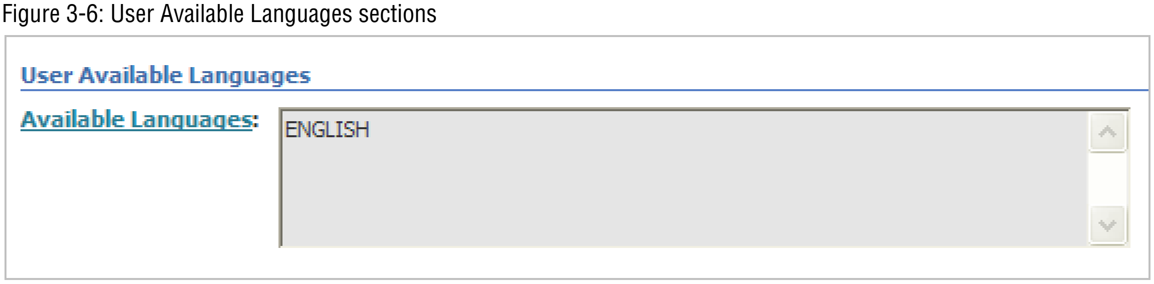
Business units control the user's visibility and read access to SCRM company and facility profiles. For example, if you assign the BU of North America > United States to a user, when the user performs a search for companies, the search will only return companies that include the explicit North America BU, North America > United States BU, or any children business units under United States. Depending on your configuration, SCRM business unit security is tied to the status of the business unit. See *SCRM Business Unit Security* on page 10-6 for more information.

Note Which business units you can select will be filtered by your UGM Administrator rights. See *UGM Admin Privileges Section* on page 3-11 for more details.

User Available Languages Section

Enter the following user information in the User Available Languages sections of the General tab, as figure 3-6 shows below.

Figure 3-6: User Available Languages sections

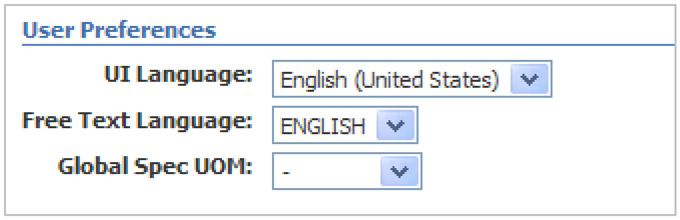


Available Languages—Select the user's available languages. These will be the languages that the user has access to. The languages added here will be available to the user through their profile and preferences dialog. English (United States) is the default.

User Preferences Section

Enter the following user information in the User Preferences section of the General tab, as figure 3-7 shows below.

Figure 3-7: User Preferences section



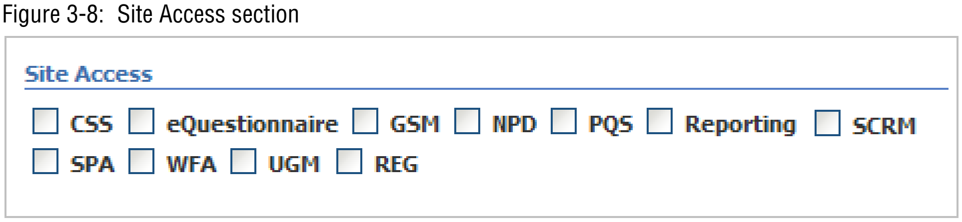
- **UI Language** —Select the user's preferred user interface language from the drop-down list. This list is filtered by the User Available Languages selection above. This is the language used when displaying user interface labels, headers, and navigation elements.
- **Free Text Language**—Select the user's preferred free text language by using the drop-down list. This list is filtered by the Available Languages selection above. This is the language used when the user fills out text fields (i.e.: specification name and descriptions)
- **Global Spec UOM**—This sets the user's default UOM (unit of measure), which is used in selected areas of Agile PLM for Process applications.

Access Tab

Site Access Section

In the Site Access section of the Access tab, select all those Agile PLM for Process applications to which the user will be granted user access, as figure 3-8 shows below.

Figure 3-8: Site Access section



- **CSS**—Content Synchronization and Syndication (CSS)
- **eQuestionnaire**—eQuestionnaire (eQ)
- **GSM**—Global Specification Management (GSM)
- **NPD**—New Product Development (NPD)
- **PQS**—Product Quality Scorecarding (PQS)
- **Reporting**—Reporting (RPT)
- **SCRM**—Supply Chain Relationship Management (SCRM)
- **SPA**—Supplier Portal Administration (SPA)
- **WFA**—Workflow Administration (WFA)

- **UGM**—User Group Management (UGM)
- **REG**—Computer-Aided Compliance Screening, (CACS), Nutrition Surveillance Management (NSM), extended attributes administration, custom sections administration, and Component Catalog

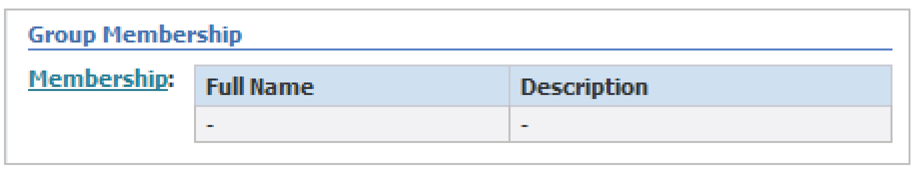
This guide explains the WFA and UGM applications, as well as extended attributes and custom sections. For more information on the other applications listed above, refer to the applicable Agile PLM for Process user guide.

Group Membership Section

Use this section to add the user to a group (or groups). A user can belong to more than one group. Click **Membership** to display a dialog box listing available groups. For information on creating groups, see Chapter 2, *Using UGM to Manage Groups*.

Note Group membership can also be defined by the group profile. See Chapter 2, *Using UGM to Manage Groups* for more information. This is available based on a configuration.

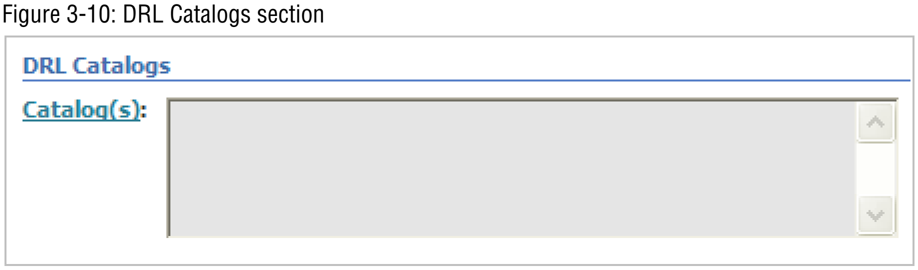
Figure 3-9: Group Membership section



DRL Catalogs Section

Use this section to grant user visibility to various document reference library (DRL) catalogs. These catalogs serve as a repository for business documents. A user can have access to more than one DRL catalog. Click **Catalog(s)** to display a dialog box listing available catalogs.

Figure 3-10: DRL Catalogs section

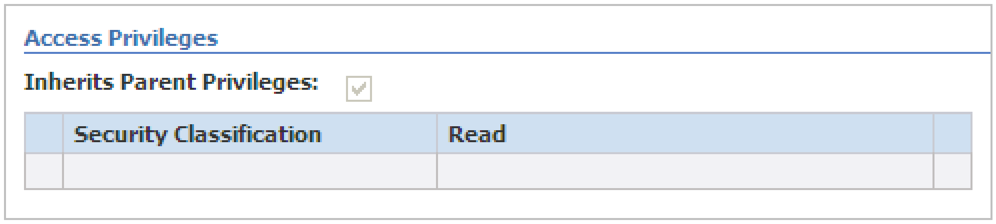


Refer to the *Agile Product Lifecycle Management for Process Document Reference Library User Guide* for more information.

Access Privileges Section

This section is read-only and is displayed if object level security is enabled. Object level security privileges are group-defined, so this section displays once a group is added and saved to the user profile. A privilege consists of a security classification and an access level. Refer to Chapter 10, *Implementing Security* for more information.

Figure 3-11: Access Privileges section

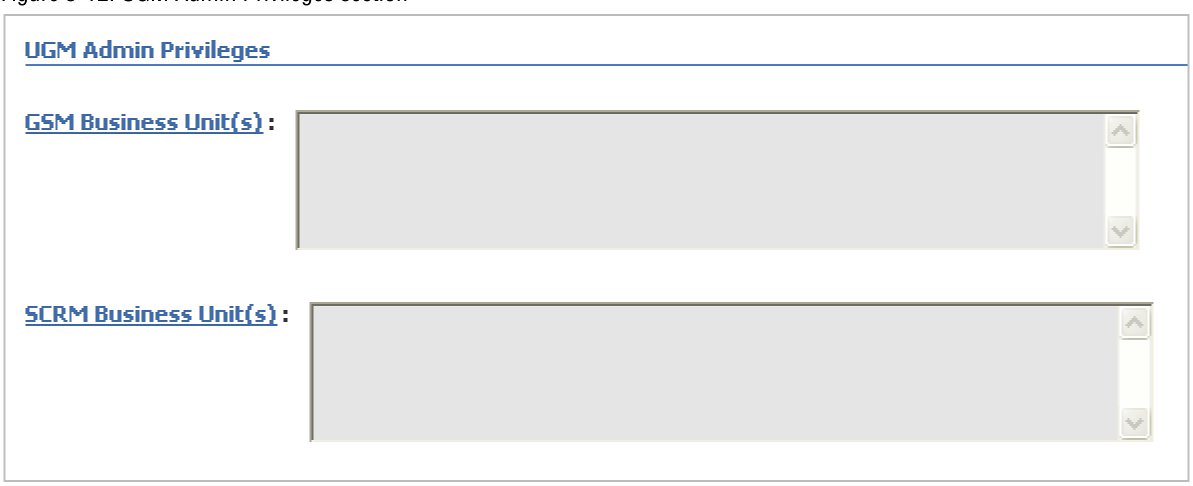


UGM Admin Privileges Section

This section should only be used if the user you are managing is a UGM administrator. Use the UGM Admin Privileges section to limit which business units the UGM administrator has rights to assign. For example, if North America is added to the GSM Business Units field, the UGM administrator would only be able to assign the North America business unit and its children to UGM users they manage or create.

Note Depending on your configuration this section may not appear.

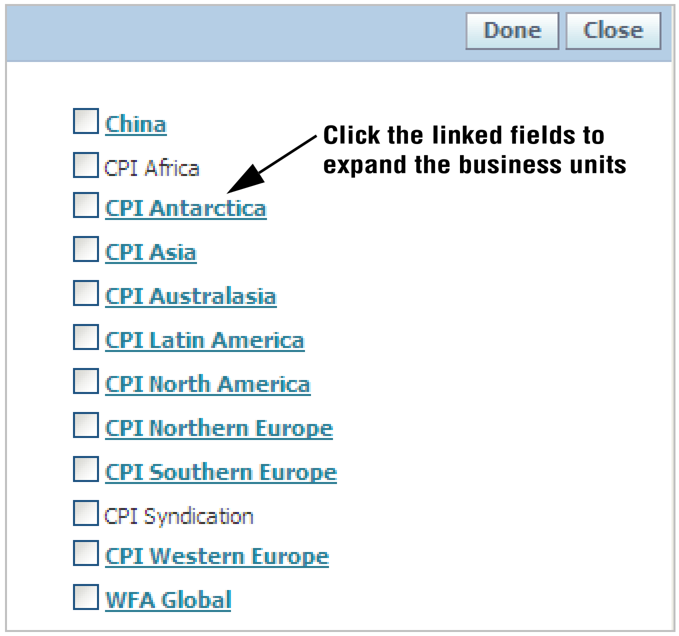
Figure 3-12: UGM Admin Privileges section



To specify which GSM business units the administrator can assign to users:

1. Click the GSM Business Unit(s) link. ADMN displays a dialog box listing available GSM business units, as figure 3-13 shows below.

Figure 3-13: GSM Business Units dialog box



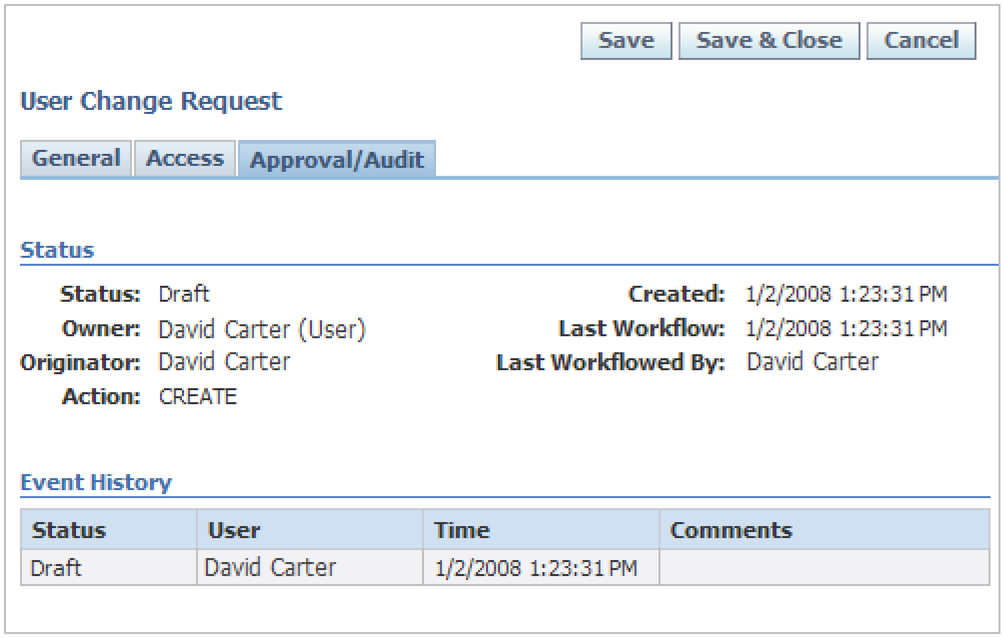
2. Select the checkboxes of the business units the administrator can assign, and then click **Done**. Your selections populate the GSM Business Units grid.
3. Click **Save**.

Repeat these steps by clicking the **SCRM Business Unit(s)** link to assign SCRM business users.

Approval/Audit Tab

The information in the Approval/Audit tab is read only and is for viewing purposes only.

Figure 3-14: Approval/Audit tab



Status Section

The Status section of the Approval/Audit tab contains the following information:

- **Status**—Displays the user request status.
- **Owner**—Displays the owner of the request.
- **Originator**—Displays the UGM administrator that initiated the change request.
- **Action**—Indicates whether the change request created a new user (“Create”) or modified an existing user (“Edit”).
- **Created**—Displays the date and time when the request was made.
- **Last Workflow**—Displays the date and time when the request was last workflowed.
- **Last Workflowed By**—Displays the person who last workflowed the request.

Event History Section

The Event History section of the Approval/Audit tab contains a listing of events that have occurred for the request. It includes the following information:

- **Status**—Displays the user request status for this event.
- **User**—Displays the person who recorded this event.
- **Time**—Displays the time and date when the event was recorded.
- **Comments**—Displays any comments appended to this event.

Editing Users

To edit a user:

1. Click **UGM > Users** in the left navigation panel and search for the user to modify.
2. Click the login name of the user in the returned search results to display the user profile.
3. At the top right corner, click **Create Change Request** to initiate a change request.
4. Make edits to the user profile by following the instructions starting with step 2 of *Creating a User* on page 3-5.
5. Click **Save & Close**.

> **Note** Upon saving, UGM places the request in draft mode. You can continue to edit it until the change request is canceled or submitted for review.

6. Click **Workflow** to submit your change request for review and follow the workflow instructions as listed in step 5 of *Creating a User* on page 3-5.

Copying a User Profile

You can create a new user profile by copying an existing one. The copied data includes business units, available languages, user preferences, and the access information defined on the Access tab.

To copy a user profile:

1. Click **UGM > Users** in the left navigation panel and search for the user profile to copy.
2. Click the login name of the user in the returned search results to display the user profile.
3. At the top right corner, click **Create Copy**.
4. Enter/review information in the General, Access, and Approval/Audit tabs. Refer to *General Tab* on page 3-6 through *Approval/Audit Tab* on page 3-12 for more information.
5. Click **Save & Close**.

> **Note** Upon saving, UGM places the request in draft mode. You can continue to edit it until the change request is canceled or submitted for review.

6. Click **Workflow** to submit your change request for review and follow the workflow instructions as listed in step 5 of *Creating a User* on page 3-5.

Using User Approval Workflows

Depending on your configuration, all change requests need to be workflowed. The approval workflow process is the basis for ensuring compliance and auditing. The solution works in two modes.

Noncompliance Enforcement—In this mode an approver can approve change requests that they have originated, including changes to their own profile.

Compliance Enforcement—The compliance mode prevents approvers from approving their own requests or making changes to their own profiles.

Approving a Request

To approve a request, you must belong to a group with the role of [UGM_USER_APPROVER]. When a change request is submitted for your approval, you will be notified by email and the change request will be in your Action Items list (see *Managing Action Items* on page 3-2).

To approve a request:

1. Click the name of the user in your Action Items list to display the change request.
2. Review all data entered for the request in the General, Access, and Approval/Audit tabs. For details on how to use the General, Access, and Approval/Audit tabs, see *Creating a User* on page 3-5.
3. When you are ready to transition the workflow, click **Workflow** at the top right corner to display the Workflow dialog box.
4. In the Workflow dialog box, under Next Action, click the drop-down list and make your selection as follows:
    - **Approved**—Approves the change request and notifies the originator by email.
    - **Not approved**—Sends the change request to the originator for modification and notifies originator by email.
    - **Canceled**—Terminates the change request and notifies the originator by email.

> **Note** Any of the emails sent in the above three options will include the comments that you entered in the Workflow dialog box.

5. In the Workflow dialog box, click the move step forward icon ( ) to move the change request to the next step.
6. If the change request was approved, flush the user cache group in CACHE management. (See Chapter 9, *Using CACHE to Manage Caches*.)

Exporting and Importing User Data

As an administrator, you perform all user creation and edit tasks in a staging environment. As a result, once you have made final user request approvals, you must export these out of the staging environment. You will then import them into the production environment, making the changes active.

Caution! Before exporting users, you must export all groups associated with those users. Also be aware that there are other things that would need to be exported if you created new items for the user. For example, countries, GSM Business Units, SCRM Business Units, and DRL Catalogs.

Exporting Users from Your Staging Environment

To export user data from your staging environment:

1. Log in to your staging environment.
2. Click **UGM > Exports** in the left navigation panel. UGM displays the Exports page.
3. Click the **Users to Export** link. UGM displays a search page to assist you in searching for various users to export.
4. Use the search page to search for users to export.

   Note To search for users that were edited on a certain date, select the "Last Updated" option from the key field drop-down list, and then use the other search fields to select a date.

5. From the search results, click each user name to export. The names that you clicked appear in the Selected Items box at the bottom of the page.
6. When you have made your selections, click **Done** at the bottom right of the page. The dialog box closes and your group selections display in the Users to Export table.
7. At the upper right of the page, click **Export**. A dialog box appears, allowing you to select the location on your hard drive to export the user data to.
8. Click **Save**. A Save As dialog box displays.
9. Click **Save**. Agile Product Lifecycle Management for Process encrypts the selected user data in a single file, closes the dialog box, and saves the encrypted file to your local drive.

Importing Users into Your Production Environment

To import data into your production environment:

1. Log in to your production environment.
2. Click **UGM > Imports** in the left navigation panel. UGM displays the Imports page.

3. Click **Browse** to locate and select the encrypted file that you exported from the staging environment.
4. Select which user-defined settings (Password and Contact Information) to replace during import.
5. Click **Import** at the top right corner of the page.
6. In the production environment, flush the user cache group, as described in *Using the Cache Application* on page 9-3.

CHAPTER 4

Using ADMN to Manage Core Data

This chapter introduces the Manage Core Data (ADMN) application and explains how to maintain Agile Product Lifecycle Management for Process core data. Topics in this chapter include:

- *Document Reference Library Data*
- *Global Data*
- *Global Specification Management Common Data*
- *Global Specification Management Compliance Data*
- *Global Specification Management FSIS Data*
- *New Product Development Data*
- *Product Quality Scorecard Data*
- *Supply Chain Relationship Management Data*
- *Workflow Administration Data*
- *Spec Category*
- *Activities*

Types of Core Data

Agile PLM for Process administrators use the Manage Core Data (ADMN) application to maintain core data. The types of core data that you maintain include:

- **DRL (Document Reference Library) data:** Catalogs and classifications
- **Global data:**
  - Countries
  - Cross-references
  - Restrictions
  - Rounding rules groups
  - Substitute restrictions
  - Units of measure

- **GSM (Global Specification Management) Common data:**
  - Brands (GSM)
  - Business units (GSM)
  - Classifications
  - Concepts
  - Data groups
  - Environmental waste
  - Formulation classifications
  - Label claims
  - Label claims classifications
  - Label owners
  - Menu item classes
  - Menu item standards
  - Nutrient information
  - Nutrient profile special attributes
  - Nutrient sources
  - Packaging types
  - Printed packaging languages
  - Shelf life types
  - Storage requirements
  - Storage requirements (trade specifications)
  - Trading companies
  - UDEX classifications
- **GSM Compliance data:**
  - Additives
  - Allergens
  - Complies with
  - Intolerances
- **GSM FSIS data:**
  - Application statuses
  - CFIA approval types
  - CFIA payment methods
  - CFIA product types
  - USDA HACCP categories
- **NPD (New Product Development) data:**
  - Brands (NPD)
  - Business units (NPD)
  - Channels
  - Consumer value perceptions
  - Demographic categories
  - Enabling technologies
  - Functional areas (NPD)
  - Global categories
  - Metrics (basis, category, fiscal year, and phase)
  - Project type categories
  - Project types
  - Project visibilities
- **PQS (Product Quality Scorecard) data:**
  - Lot samples quantity units of measure
  - Sample types
  - Scorecard qualifications
- **SCRM (Supply Chain Relationship Management) data:**
  - Business units (SCRM)
  - Classes
  - Company special attributes
  - Contact categories
  - Document types
  - Facility special attributes
  - Protocol IDs
  - SDM statuses
  - Sourcing types
- **WFA (Workflow Administration) data:** Functional areas (WFA) and tags
- **Specification Categories**

Note For the managing custom data using the Custom Data submenu, refer to Chapter 5, *Using ADMN to Manage Custom Data*.

Statuses

Many types of core data contain statuses that are defined as follows:

- **New**—The data is not yet ready to become available to Agile PLM for Process applications. When an item has a status of “new,” its values remain editable.
- **Active**—The data is ready to become available (searchable and consumable) for use in Agile PLM for Process applications.
- **Inactive**—The data should no longer be used. All existing references to this item remain. The item is no longer available for assignment but is still searchable.
- **Archive**—The item is no longer available for searching or assignment. All existing references to this item remain.
- **System**— Used by the system. This item cannot be edited or removed.

Administrative Roles

There are two user roles associated with ADMN:

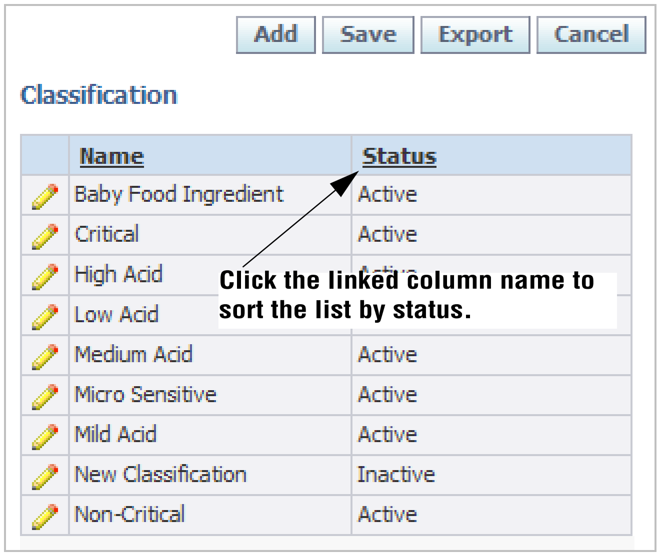
[DATA_ADMIN]—Users with the role of [DATA_ADMIN] can add new items, but Data Administrators can only edit the status of an item once the item has been activated.

[SUPER_DATA_ADMIN]—Users with the role of [SUPER_DATA_ADMIN] can edit items regardless of the item’s status. This role should be used with caution.

Maintaining Simple Lists

Simple lists consist of tables that contain the core data. Some tables contain multiple columns, which may include linked column headings. To re-sort data, click any linked column head and the data re-displays sorted on that column. Click any column head a second time to reverse the sort order based on that column. Figure 4-1 below shows a simple list.

Figure 4-1: Sample simple list of core data



To maintain data in a simple list:

1 From the left navigation panel, select **ADMN > {name of menu} > {name of submenu}.** A table containing information is displayed. Depending on your assigned user role, you can add, edit, or reorder core data as described below.

To add data to a simple list:

1 From the left navigation panel, select **ADMN > {name of menu} > {name of submenu}.** A table containing information is displayed.
2 Click **Add**.
3 Enter the fields as described on the following pages.
4 If applicable, using the **Status** drop-down list, set the status for the data.
5 Click the apply changes icon ( ) to apply your changes.
6 Click **Save** in the top right corner to save your work.
7 Flush the administrator data cache group, as described in *Using the Cache Application* on page 9-3.

To edit a simple list:

1 From the left navigation panel, select **ADMN > {name of menu} > {name of submenu}.** A table containing information is displayed.
2 Click the edit icon ( ) to the left of the row to edit.
3 Enter your changes.

> **Note** What you are allowed to edit will depend on your user role as well as the status of the item. These rules are described in *Statuses* and *Administrative Roles* on page 4-3.

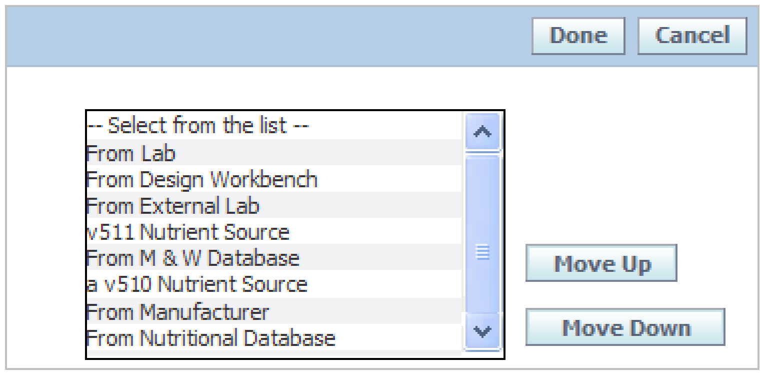
4 Click the apply changes icon ( ) to apply your changes.
5 Click **Save** in the top right corner to save your work.
6 Flush the administrator data cache group, as described in *Using the Cache Application* on page 9-3.

To reorder data in a simple list:

Note Only users with the role [SUPER_DATA_ADMIN] can reorder lists.

1 From the left navigation panel, select **ADMN > {name of menu} > {name of submenu}.** A table containing information is displayed.
2 Click **Reorder**. Agile PLM for Process displays a dialog box containing the items in the list, as figure 4-2 shows below:

Figure 4-2: Reorder dialog box



3 Select a list item, and then click **Move Up** and **Move Down** to set the preferred order.
4 Repeat as necessary to set the list order.
5 Click **Done**.
6 Click **Save** in the top right corner to save your work.
7 Flush the administrator data cache group, as described in *Using the Cache Application* on page 9-3.

Working with Data Groups

Several GSM simple lists can be organized with data groups, which are represented on the Data Groups tab, shown in figure 4-3 below. Throughout Agile PLM for Process, these groups are used to filter the lists during selection.

Figure 4-3: Data Groups tab

Allergens

Items | Data Groups

Data Group	Items
Asia	258
Australia	272
Canada	272
European Union	272
Japan	272
Netherlands	272
South America	23
United Kingdom	272
USA	272

Key Fields

Table 4-1: Data Groups tab key fields

Name	Description
Data Group	The name of the group
Items	The number of items assigned to each group

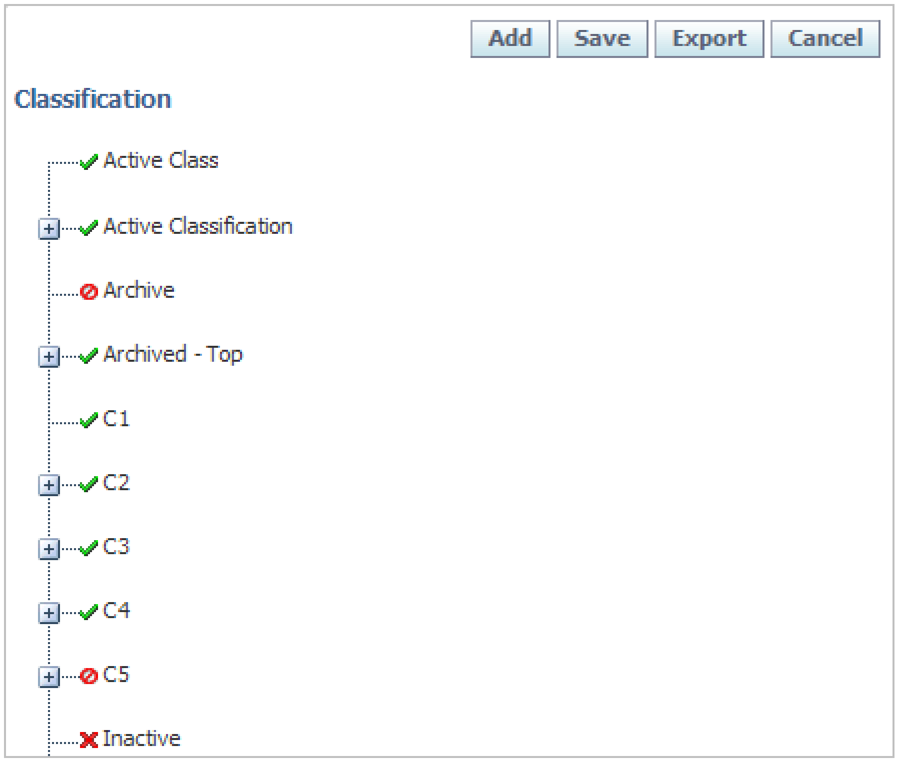
Editing Rules

Click the edit icon ( ) to add items to the data group. For more information on using the Group Filter option in GSM, see the *Agile Product Lifecycle Management for Process Global Specification Management User Guide*.

Maintaining Tree Lists

Tree lists present core data in a hierarchal view. This view enables you to see the structure of the core data, including parent and child relationships, as figure 4-4 shows below.

Figure 4-4: Core data in tree lists



Each piece of data is represented by a node. Click the expand node icon ( ) to view child nodes. Click the collapse node icon ( ) to collapse the node.

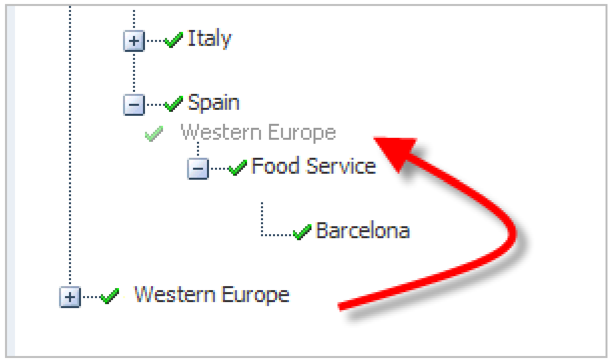
All nodes contain an icon indicating their status:

- ( )—Active item
- ( )—New item
- ( )—Inactive item
- ( )—Archived item

Drag and Drop Feature

Only users with the role of [SUPER_DATA_ADMIN] are allowed to move nodes that have been activated. Users with the role of [DATA_ADMIN] can only move nodes with a “New” status.

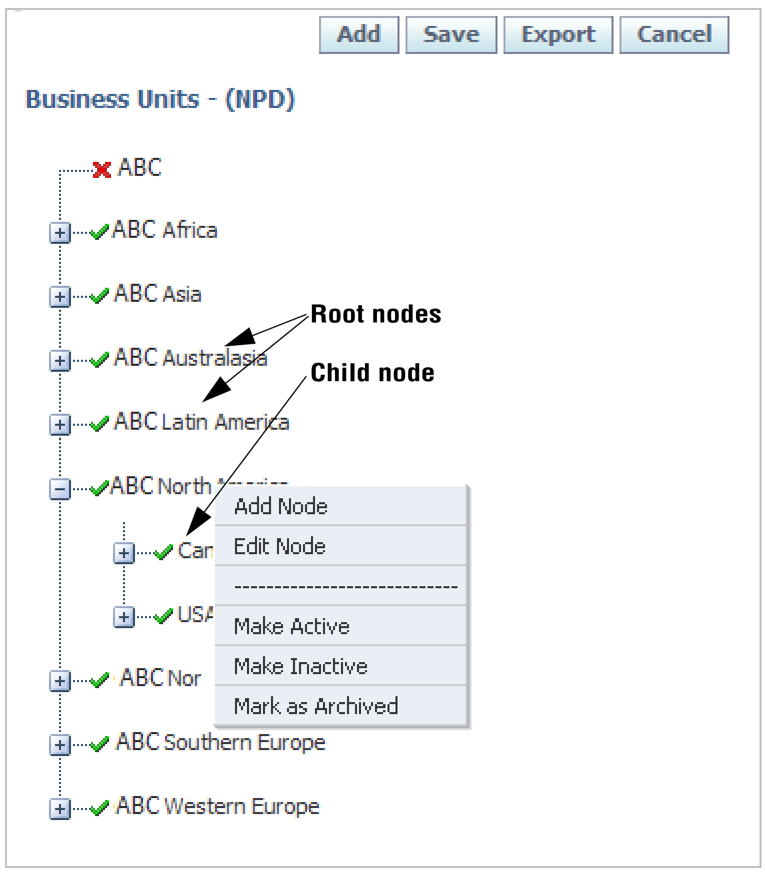
Figure 4-5: Dragging a node



Editing Actions

You can view available actions by right-clicking on a node, as figure 4-6 shows below.

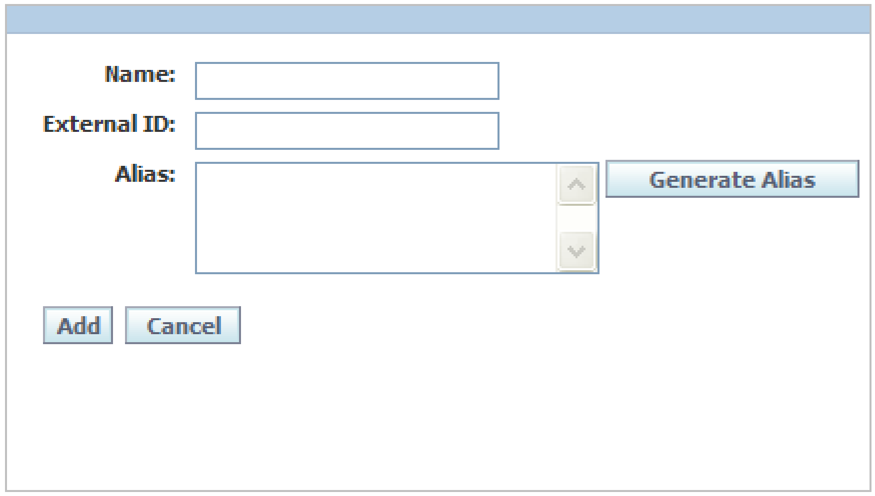
Figure 4-6: Sample tree list of core data, right-click menu for users with the role of [SUPER_DATA_ADMIN]



To add a root node:

1. From the left navigation panel, select **ADMN > {name of menu} > {name of submenu}.** Agile PLM for Process displays the tree list for the core data you selected.
2. Click **Add.** A dialog box displays, as figure 4-7 shows below.

Figure 4-7: Add root node dialog box

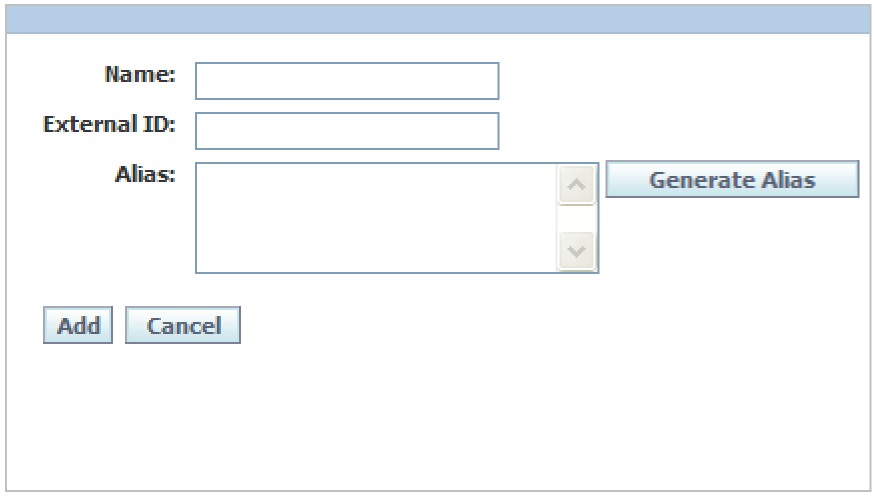


3 Enter a name for the item (required) in the **Name** field.
4 Enter an external ID in the **External ID** field.
5 Enter an alias for the item (required) in the **Alias** field. This can be an abbreviation; for example, "NA" for North America. You can also auto generate this alias by clicking **Generate Alias**.
6 Click **Add** to add the item. The page refreshes and the new root node is added to the list in alphabetical order. The new node icon ( ) displays next to the node.
7 Right-click on the new node to display the submenu.
8 Click **Make Active**.
9 Click **Save**.
10 Flush the taxonomy cache option, as described in *Using the Cache Application* on page 9-3.

To add a child node:

1 From the left navigation panel, select **ADMN > {name of menu} > {name of submenu}**. Agile PLM for Process displays the tree list for the core data you selected.
2 Expand or collapse nodes as needed to determine the location of the new node.
3 Right-click on the node that you are adding a child to. Agile PLM for Process displays a submenu with available choices.
4 Click **Add Node**. A dialog box displays, as figure 4-8 shows below.

Figure 4-8: Add node dialog box



5 Enter a name for the item (required) in the **Name** field.
6 Enter an external ID in the **External ID** field.
7 Enter an alias for the item (required) in the **Alias** field. This can be an abbreviation; for example, “NA” for North America. You can also auto generate this alias by clicking **Generate Alias**.
8 Click **Add** to add the item. The page refreshes and the new node is added, as indicated by the new node icon ( ).
9 Right-click on the new node to display the submenu.
10 Click **Make Active**.
11 Click **Save**.

To edit a node:

Note Users with the role of [SUPER_DATA_ADMIN] can edit any node. Users with the role of [DATA_ADMIN] can only edit a node if the status is “New.”

1 From the left navigation panel, select **ADMN > {name of menu} > {name of submenu}.** Agile PLM for Process displays a tree list for editing purposes.
2 Right-click on the node to edit. Agile PLM for Process displays a submenu with available choices.
3 Click **Edit Node**. A dialog box displays current node properties.
4 Make needed changes to the **Name**, **External ID**, and **Alias** fields.
5 Click **Save**.
6 Flush the taxonomy cache option, as described in *Using the Cache Application* on page 9-3.

To make a node active:

1 From the left navigation panel, select **ADMN > {name of menu} > {name of submenu}.** Agile PLM for Process displays a tree list for editing purposes.
2 Right-click on the node to edit. Agile PLM for Process displays a submenu with available choices.

3. Click **Make Active**. The page refreshes and the node displays in active status, as indicated by the active node icon ( ).
4. Click **Save**.
5. Flush the taxonomy cache option, as described in *Using the Cache Application* on page 9-3.

To make a node inactive:

1. From the left navigation panel, select **ADMN > {name of menu} > {name of submenu}.** Agile PLM for Process displays a tree list for editing purposes.
2. Right-click on the node to edit. Agile PLM for Process displays the submenu with available choices.

> **Note** You can only inactivate nodes with "Active" or "Archived" status.

3. Click **Make Inactive**. The page refreshes and the node is inactivated, as indicated by the inactive node icon ( ).
4. Click **Save**.
5. Flush the taxonomy cache option, as described in *Using the Cache Application* on page 9-3.

To archive a node:

1. From the left navigation panel, select **ADMN > {name of menu} > {name of submenu}.** Agile PLM for Process displays a tree list for editing purposes.
2. Right-click on the node to edit. Agile PLM for Process displays a submenu with available choices.

> **Note** You can only archive nodes with "Active" or "Inactive" status.

3. Click **Mark as Archived**. The page refreshes and the node is archived, as indicated by the archived node icon ( ).
4. Click **Save**.
5. Flush the taxonomy cache option, as described in *Using the Cache Application* on page 9-3.

Document Reference Library Data

The Document Reference Library (DRL) is a repository for business documents. As an administrator, you can control the catalog and classification lists using the ADMN application. For more information about DRL, see the *Agile Product Lifecycle Management for Process Document Reference Library User Guide.*

Catalogs

Catalogs are used to organize DRL documents. Once the catalog is defined, it can be used within the Document Reference Library and other Agile PLM for Process applications that use DRL. Catalogs are also used to control a user or supplier's visibility to DRL documents. For example, a user may only have rights to see documents in the "Public" catalog, not the "Classified" catalog.

Documents are associated with catalogs on the DRL document object. Use the Catalogs tree list in ADMN to maintain the data, as figure 4-9 shows below.

Figure 4-9: Catalogs tree list

Editing Rules

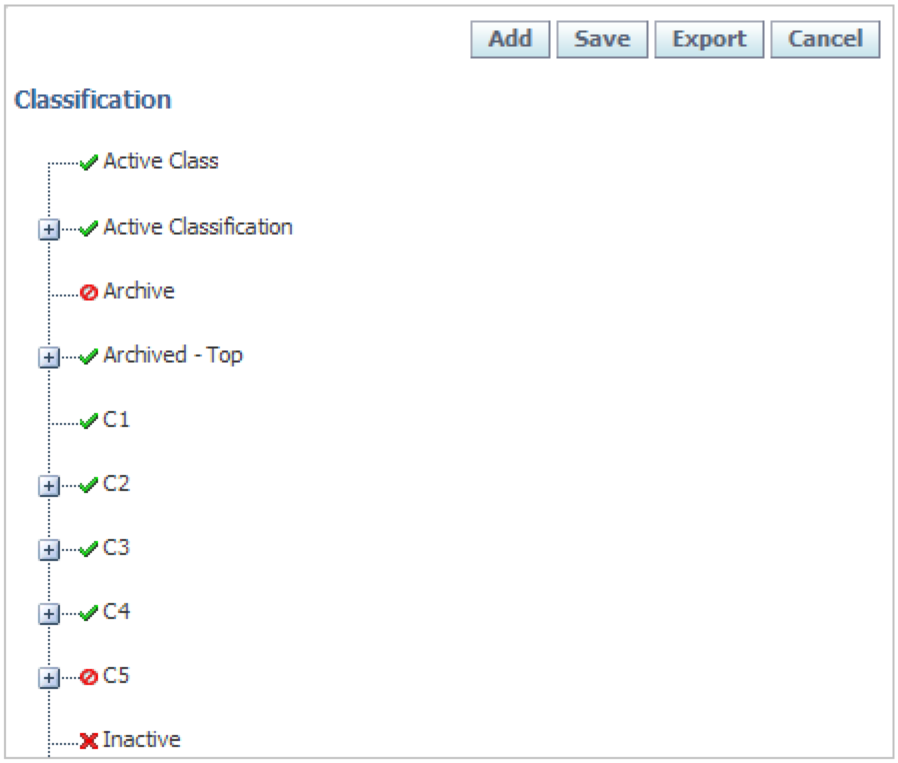
For instructions on editing the Catalogs tree list, see *Maintaining Tree Lists* on page 4-7.

Classifications

A DRL document can be associated with multiple classification values. The classification value is just for informational purposes.

Classifications are assigned on the DRL document object. Use the Classification list in ADMN to maintain the data, as figure 4-10 shows below.

Figure 4-10: Classifications tree list



Editing Rules

For instructions on editing the Classification tree list, see *Maintaining Tree Lists* on page 4-7.

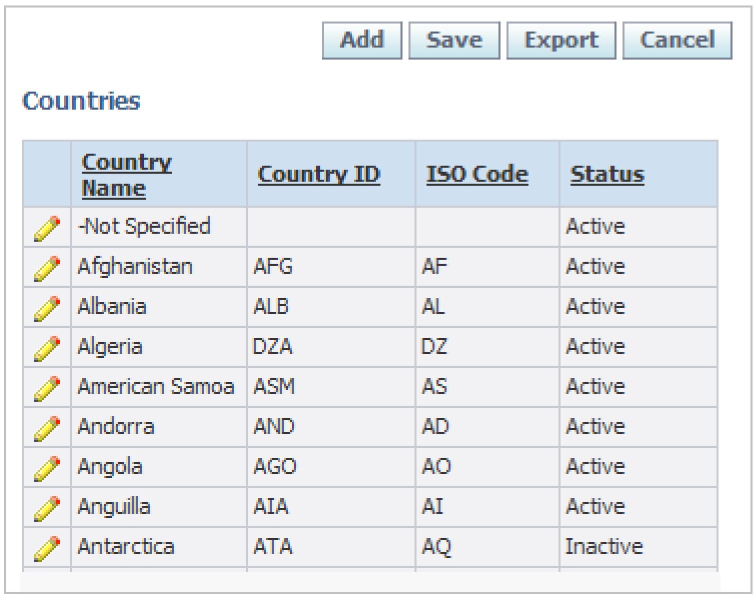
Global Data

Administrators maintain global data—data that is consumed throughout Agile PLM for Process by the various applications. This data includes countries, cross-references, restrictions, rounding rules groups, substitute restrictions, and units of measure.

Countries

Use the Countries list in ADMN to maintain the data, as figure 4-11 shows below.

Figure 4-11: Countries list



	Country Name	Country ID	ISO Code	Status
	-Not Specified			Active
	Afghanistan	AFG	AF	Active
	Albania	ALB	AL	Active
	Algeria	DZA	DZ	Active
	American Samoa	ASM	AS	Active
	Andorra	AND	AD	Active
	Angola	AGO	AO	Active
	Anguilla	AIA	AI	Active
	Antarctica	ATA	AQ	Inactive

Key Fields

Table 4-2: Global, Countries key fields

Name	Description
Country Name	The country name
Country ID	The commonly recognized country ID
ISO Code	The commonly recognized two-letter ISO code for the country
Status	The assigned status for the country. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the Countries list, see *Maintaining Simple Lists* on page 4-3.

Cross References

The Cross References section lists external systems containing equivalent numbers that can be referenced.

Administrators maintain the cross-references and can set whether the cross reference is managed by an external system, as figure 4-12 shows below. When the **Managed Externally Default** box is checked, the corresponding system name will be read only on the specifications.

Note Depending on configuration settings, this list may display as a tree list. The Available In field can be turned on or off using a configuration setting. Refer to the *Agile Product Lifecycle Management for Process Configuration Guide* for more information.

Figure 4-12: Cross References list

Add Save Export Cancel

Cross References

	Available In	System Name	System Code	Managed Externally Default	Status
	CPI USA	BPCS System	USBPCS	☑	Active
	CPI USA	Inactive	Inactive	☐	Archive
	CPI USA	JDE System	USJDE	☐	Active
	CPI USA	Oracle System	USORACLE	☐	Active
	CPI USA	SAP System	USSAP	☑	Active

Key Fields

Table 4-3: Global, Cross References key fields

Name	Description
Available In	Used to associate a system name to a Business Unit taxonomy. This field may not display based on configuration settings.
System Name	The name of the system
System Code	The code assigned to the system during integration
Managed Externally Default	Check the box if you want external systems to provide the cross-reference equivalent number. If the box is checked, a GSM user cannot edit the Cross Reference field unless the GSM user has the role of [EXTERNALLY_MANAGED_CROSS_REF_ADMIN]. This field may not display based on configuration settings.
Status	The assigned status for the cross-reference. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the Cross Reference list, see *Maintaining Simple Lists* on page 4-3 (simple list display) or *Maintaining Tree Lists* on page 4-7 (tree list display). For more information on user roles, refer to Appendix A, *List of System-Based Roles*.

Restrictions

Restrictions data includes food restrictions by agency. For example, restrictions might include the following:

- CFIA (Canadian Food Inspection Agency) restrictions
- EU (European Union) restrictions
- FDA (Food and Drug Administration) restrictions
- USDA (United States Department of Agriculture) restrictions

Use the Restrictions tree list in ADMN to maintain the data, as figure 4-13 shows below.

Figure 4-13: Restrictions tree list

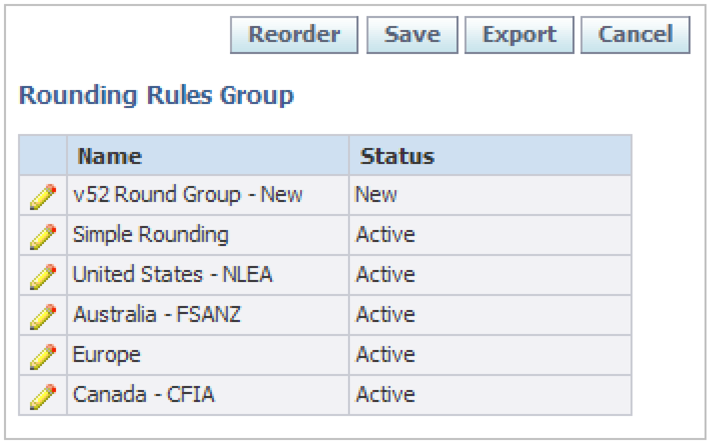
Editing Rules

For instructions on editing the Restrictions tree list, see *Maintaining Tree Lists* on page 4-7.

Rounding Rules Group

Rounding Rules Groups are the groups used to organize sets of rounding rules. Use the Rounding Rules Group list in ADMN to maintain nutritional labeling rounding rule groups, as figure 4-14 shows below.

Figure 4-14: Rounding Rules Group list



Key Fields

Table 4-4: Global, Rounding Rules Group key fields

Name	Description
Name	Name of the rounding rules group
Status	The assigned status for the rounding rules group. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the Rounding Rules Group list, see *Maintaining Simple Lists* on page 4-3.

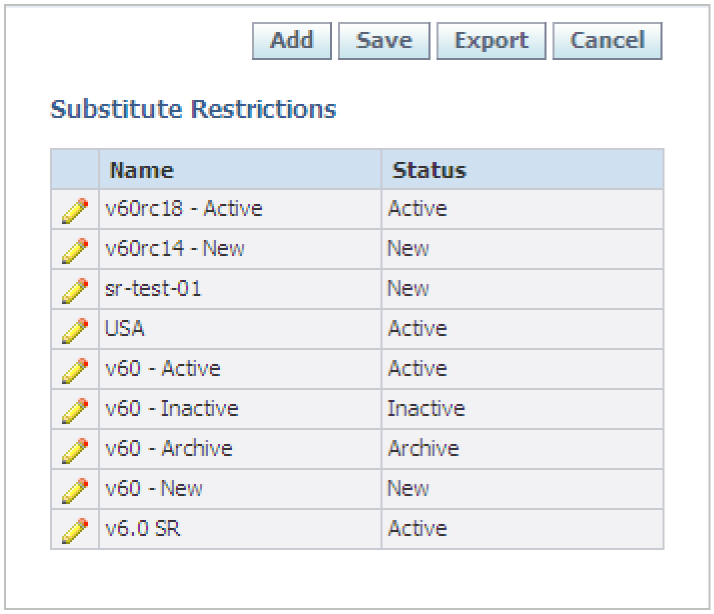
Reordering Rounding Rules Groups

Only users with the role of [SUPER_DATA_ADMIN] can reorder rounding rules groups. For instructions on setting the order, see *To reorder data in a simple list:* on page 4-5.

Substitute Restrictions

Use the Substitute Restrictions list in ADMN to maintain substitute restrictions, as figure 4-16 shows below.

Figure 4-15: Substitute Restrictions list



Key Fields

Table 4-5: Global, Substitute Restrictions key fields

Name	Description
Name	Name of the substitute restriction
Status	The assigned status for the substitute restriction. Refer to *Statuses* on page 4-3 for status descriptions.

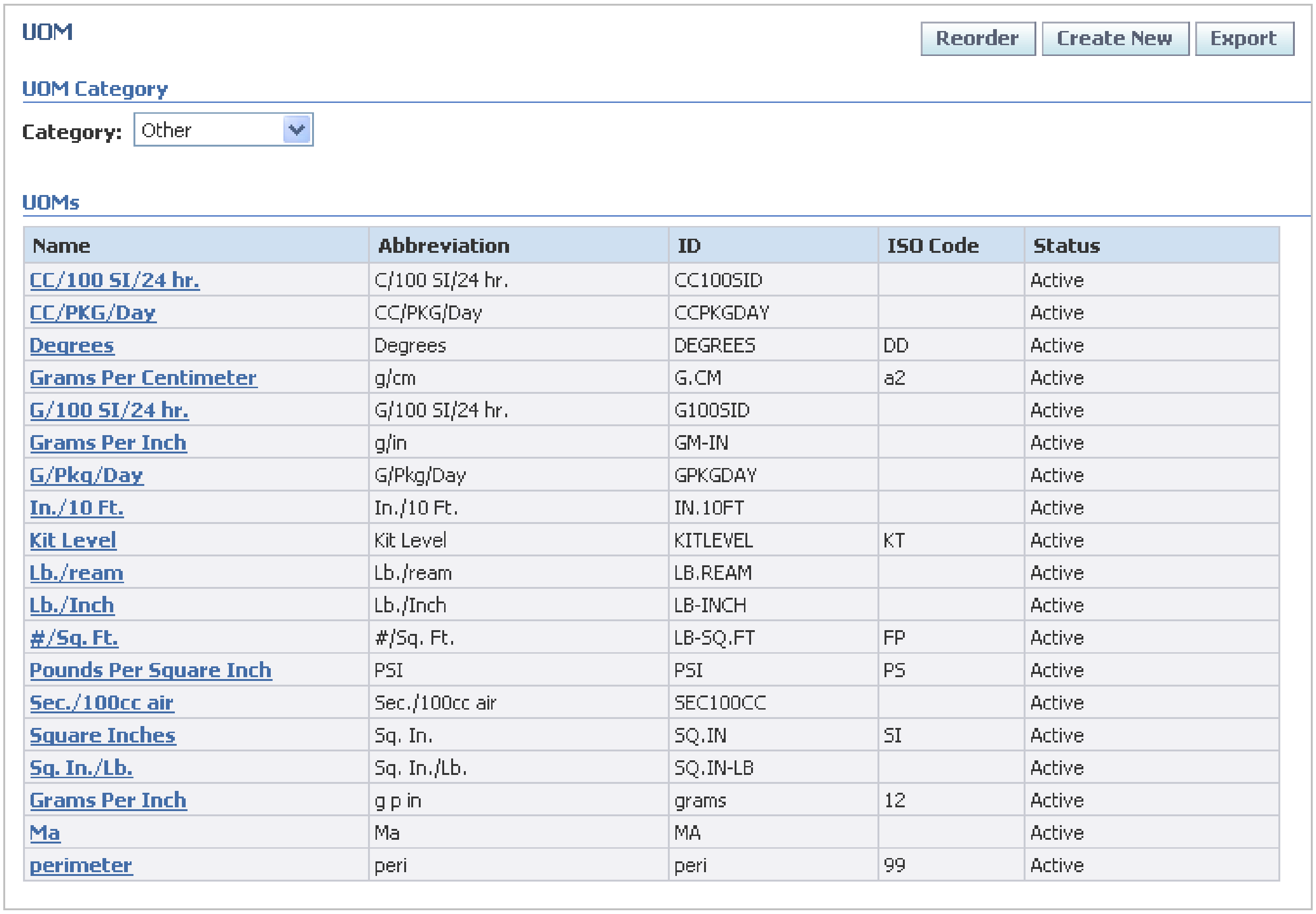
Editing Rules

For instructions on editing the Substitute Restrictions list, see *Maintaining Simple Lists* on page 4-3.

UOM

Use the UOM (Units of Measure) list in ADMN to maintain UOMs in the Other category, as figure 4-16 shows below.

Figure 4-16: UOM list



UOM

Reorder Create New Export

UOM Category

Category: Other

UOMs

Name	Abbreviation	ID	ISO Code	Status
CC/100 SI/24 hr.	C/100 SI/24 hr.	CC100SID		Active
CC/PKG/Day	CC/PKG/Day	CCPKGDAY		Active
Degrees	Degrees	DEGREES	DD	Active
Grams Per Centimeter	g/cm	G.CM	a2	Active
G/100 SI/24 hr.	G/100 SI/24 hr.	G100SID		Active
Grams Per Inch	g/in	GM-IN		Active
G/Pkg/Day	G/Pkg/Day	GPKGDAY		Active
In./10 Ft.	In./10 Ft.	IN.10FT		Active
Kit Level	Kit Level	KITLEVEL	KT	Active
Lb./ream	Lb./ream	LB.REAM		Active
Lb./Inch	Lb./Inch	LB-INCH		Active
#/Sq. Ft.	#/Sq. Ft.	LB-SQ.FT	FP	Active
Pounds Per Square Inch	PSI	PSI	PS	Active
Sec./100cc air	Sec./100cc air	SEC100CC		Active
Square Inches	Sq. In.	SQ.IN	SI	Active
Sq. In./Lb.	Sq. In./Lb.	SQ.IN-LB		Active
Grams Per Inch	g p in	grams	12	Active
Ma	Ma	MA		Active
perimeter	peri	peri	99	Active

Key Fields

Table 4-6: Global, UOM key fields

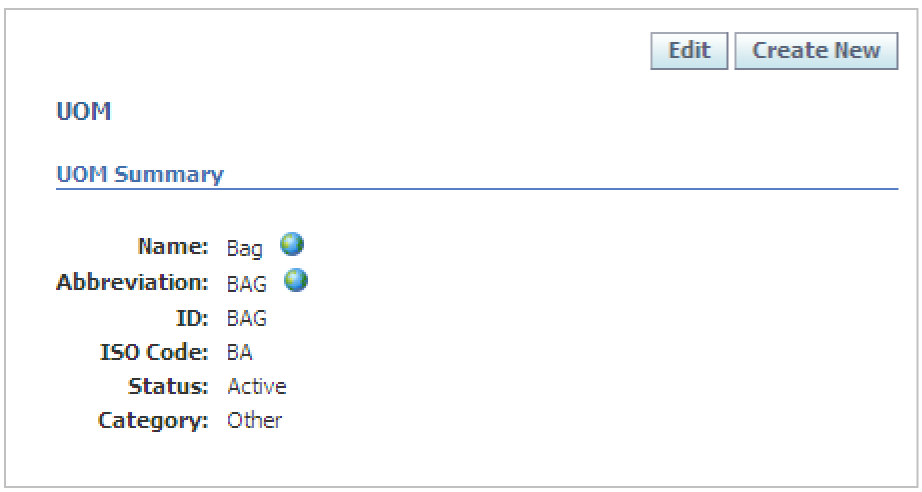
Name	Description
Category	The unit of measure category. Currently, **Other** is the only category available.
Name	The name of the unit of measure. This is a translatable field.
Abbreviation	The commonly used abbreviation for the unit of measure. This is a translatable field.
ID	The unit of measure identification number.
ISO Code	The commonly recognized two-letter ISO code for the unit of measure.
Status	The assigned status for the unit of measure. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

To edit a unit of measure:

1 Click the unit of measure. Agile PLM for Process displays the UOM page, shown in figure 4-17 below.

Figure 4-17: UOM page



2 Click **Edit**.

3 Make changes to the fields described in table 4-6 above.

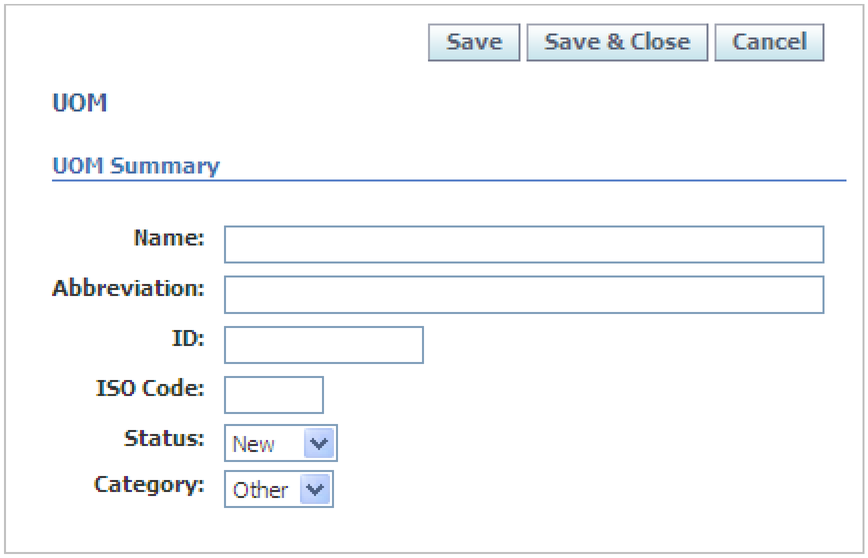
4 Click **Save & Close**. The changes to the unit of measure are saved.

5 Flush the administrator data cache group, as described in *Using the Cache Application* on page 9-3.

To add a unit of measure:

1. Click **Create New**. Agile PLM for Process displays the UOM page, shown in figure 4-18 below.

Figure 4-18: UOM page



2. Provide data in the fields described in table 4-6 above.
3. Click **Save & Close**. The new unit of measure is added to the data list.
4. Flush the administrator data cache group, as described in *Using the Cache Application* on page 9-3.

Reordering UOMs

Only users with the role of [SUPER_DATA_ADMIN] can reorder UOMs. See *To reorder data in a simple list:* on page 4-5 for instructions on setting the order of UOM data.

Global Specification Management Common Data

Using the ADMN application, you can modify data that is common in Global Specification Management (GSM).

Brands - (GSM)

Use the Brands - (GSM) list in ADMN to maintain the data, as figure 4-19 shows below.

Figure 4-19: Brands - (GSM) list

Key Fields

Table 4-7: GSM Common, Brands - (GSM) key fields

Name	Description
Name	Name of the brand in GSM
Status	The assigned status for the brand. Refer to *Statuses* on page 4-3 for status descriptions.

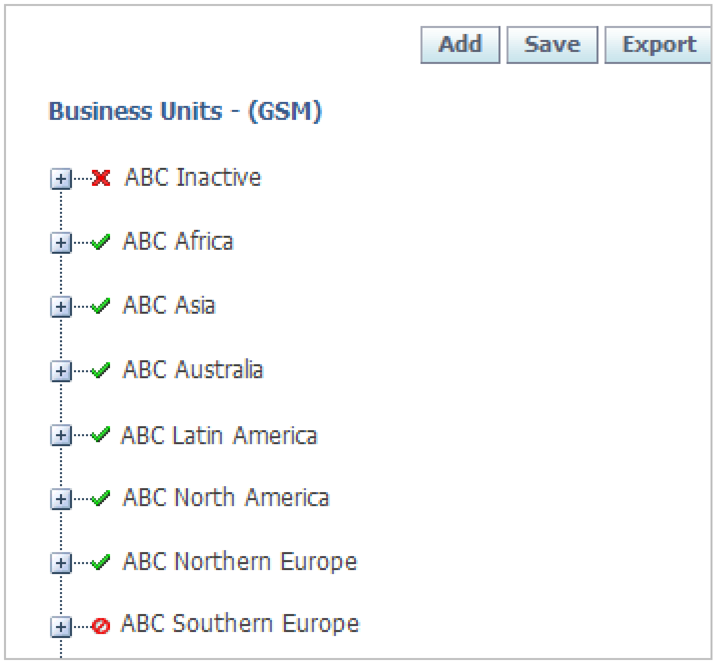
Editing Rules

For instructions on editing the Brands - (GSM) list, see *Maintaining Simple Lists* on page 4-3.

Business Units - (GSM)

Use the Business Units - (GSM) tree list in ADMN to maintain the data, as figure 4-20 shows below.

Figure 4-20: Business Units - (GSM) tree list



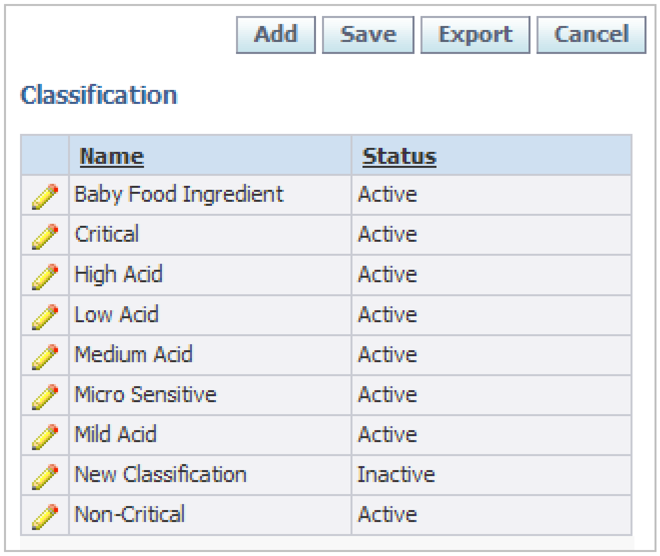
Editing Rules

For instructions on editing the Business Units - (GSM) tree list, see *Maintaining Tree Lists* on page 4-7.

Classification

Use the Classification list in ADMN to maintain the data, as figure 4-21 shows below.

Figure 4-21: Classification list



Name	Status
Baby Food Ingredient	Active
Critical	Active
High Acid	Active
Low Acid	Active
Medium Acid	Active
Micro Sensitive	Active
Mild Acid	Active
New Classification	Inactive
Non-Critical	Active

Key Fields

Table 4-8: GSM Common, Classification key fields

Name	Description
Name	Name of the classification
Status	The assigned status for the classification. Refer to *Statuses* on page 4-3 for status descriptions.

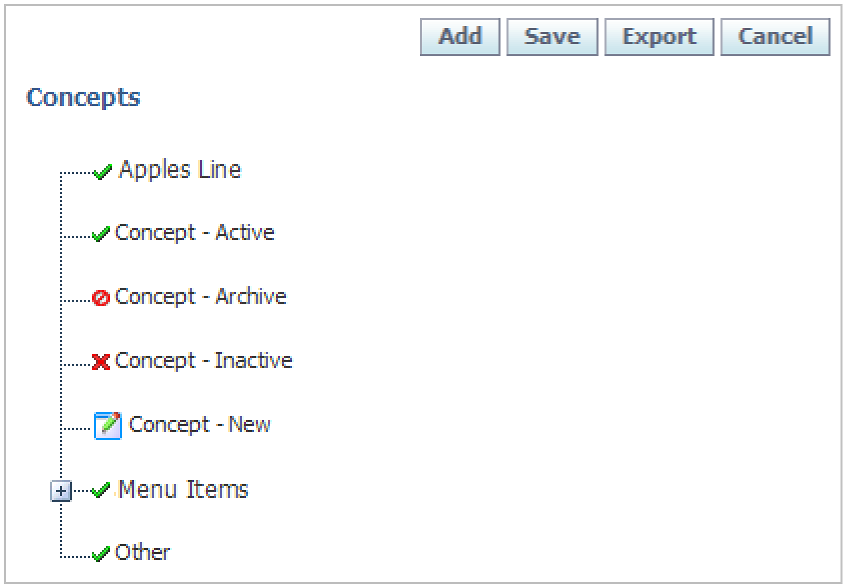
Editing Rules

For instructions on editing the Classification list, see *Maintaining Simple Lists* on page 4-3.

Concepts

Use the Concepts tree list in ADMN to maintain the data, as figure 4-22 shows below.

Figure 4-22: Concepts tree list



Editing Rules

For instructions on editing the Concepts tree list, see *Maintaining Tree Lists* on page 4-7.

Data Groups

Data groups are used to organize and filter select data lists in consumption. To add items to these groups, see *Working with Data Groups* on page 4-5. Use the Data Group list in ADMN to maintain the data, as figure 4-23 shows below.

Figure 4-23: Data Groups list

Key Field

Table 4-9: GSM Common, Data Groups key field

Name	Description
Name	Name of the data group

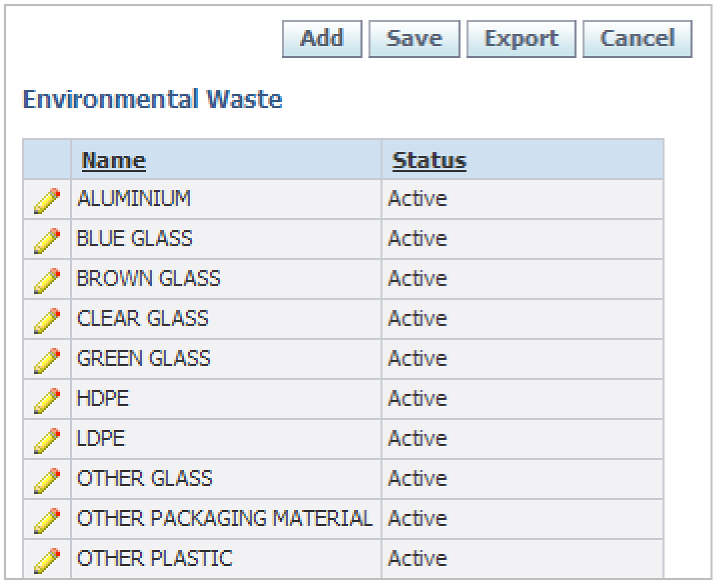
Editing Rules

For instructions on editing the Data Groups list, see *Maintaining Simple Lists* on page 4-3.

Environmental Waste

Use the Environmental Waste list in ADMN to maintain the data, as figure 4-24 shows below.

Figure 4-24: Environmental Waste list



	Name	Status
	ALUMINIUM	Active
	BLUE GLASS	Active
	BROWN GLASS	Active
	CLEAR GLASS	Active
	GREEN GLASS	Active
	HDPE	Active
	LDPE	Active
	OTHER GLASS	Active
	OTHER PACKAGING MATERIAL	Active
	OTHER PLASTIC	Active

Key Fields

Table 4-10: GSM Common, Environmental Waste key fields

Name	Description
Name	Name of the environmental waste
Status	The assigned status for the environmental waste. Refer to *Statuses* on page 4-3 for status descriptions.

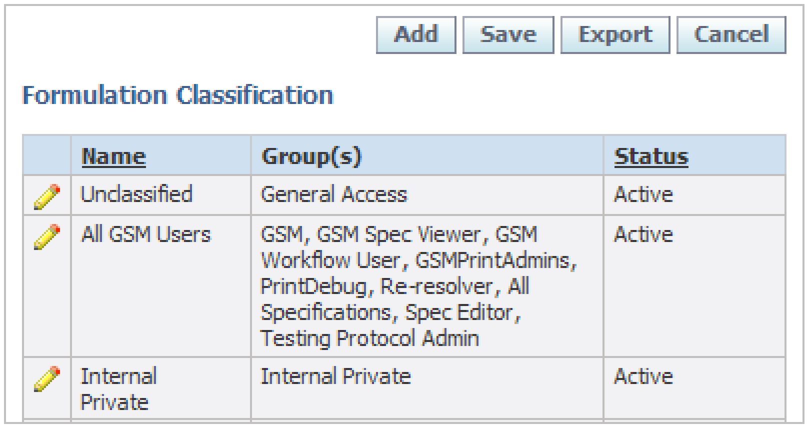
Editing Rules

For instructions on editing the Environmental Waste list, see *Maintaining Simple Lists* on page 4-3.

Formulation Classification

Formula classifications are used to secure % breakdowns on ingredient, product, and trade specifications. Use the Formula Classification list in ADMN to maintain the data, as figure 4-25 shows below.

Figure 4-25: Formula Classifications list



Key Fields

Table 4-11: GSM Common, Formula Classification key fields

Name	Description
Name	Name of the formula classification
Group(s)	User groups that have access to the formula classification. User groups are managed using UGM. For more information, refer to Chapter 2, *Using UGM to Manage Groups*.
Status	The assigned status for the formula classification. Refer to *Statuses* on page 4-3 for status descriptions.

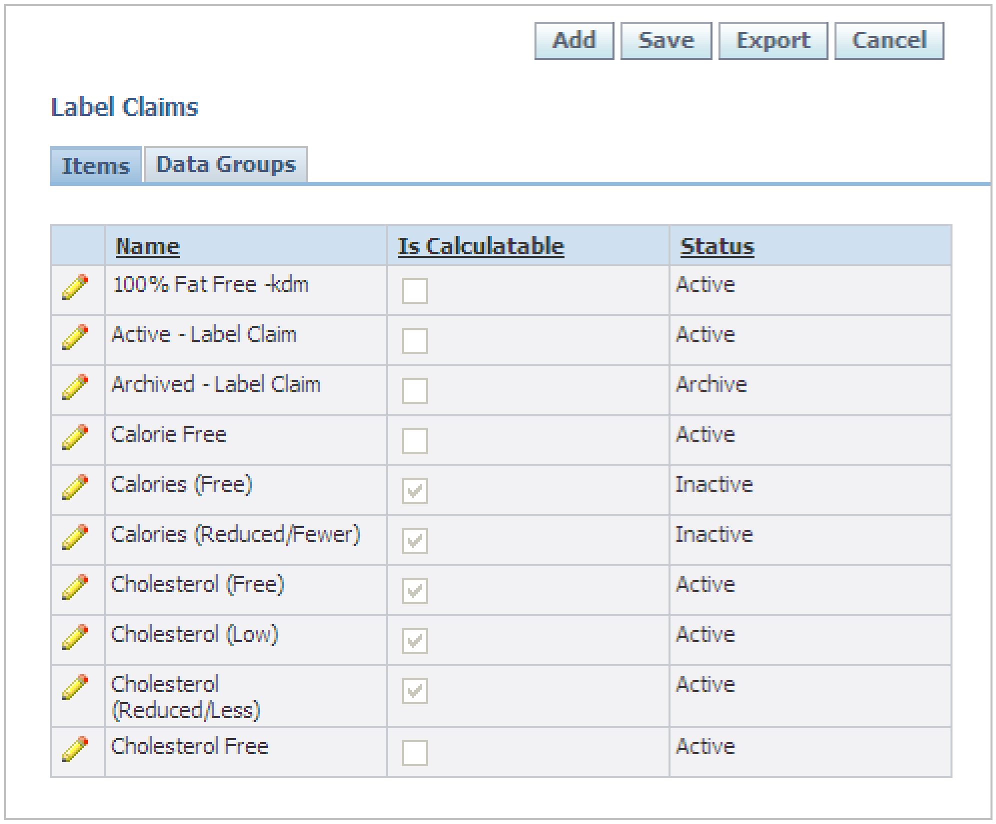
Editing Rules

For instructions on editing the Formula Classification list, see *Maintaining Simple Lists* on page 4-3.

Label Claims

Use the Label Claims list in ADMN to maintain the data, as figure 4-26 shows below.

Figure 4-26: Label Claims list



Key Fields

Table 4-12: GSM Common, Label Claims key fields

Name	Description
Name	Name of the label claim
Is Calculatable	Indicates whether the label claim is associated to a label claim determination rule. This flag is not editable through ADMN and must be scripted in.
Status	The assigned status for the label claim. Refer to *Statuses* on page 4-3 for status descriptions.

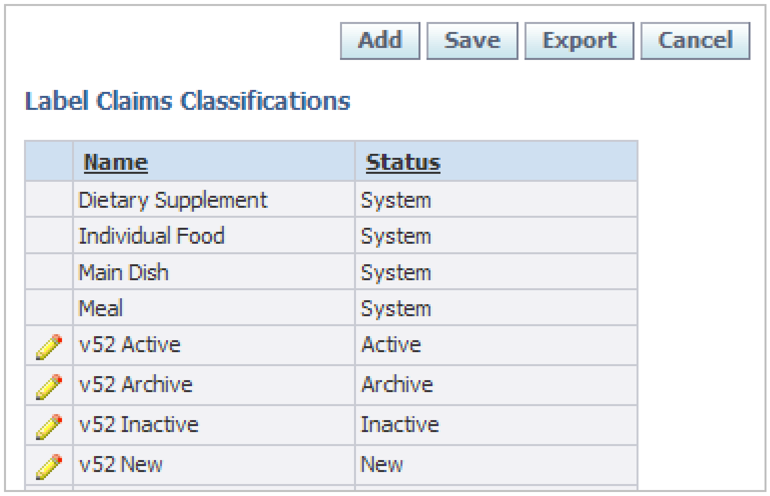
Editing Rules

For instructions on editing the Label Claims list, see *Maintaining Simple Lists* on page 4-3. You can assign label claims to a data group using the Data Groups tab. For instructions on how to assign data groups, see *Working with Data Groups* on page 4-5.

Label Claims Classifications

Use the Label Claims Classifications list in ADMN to maintain label claims classifications, as figure 4-27 shows below.

Figure 4-27: Label Claims Classifications list



Key Fields

Table 4-13: GSM Common, Label Claims Classifications key fields

Name	Description
Name	Name of the label claim classification
Status	The assigned status for the label claim classification. Refer to *Statuses* on page 4-3 for status descriptions.

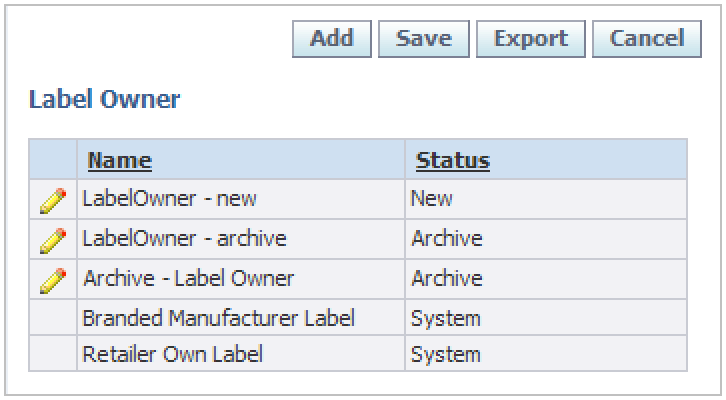
Editing Rules

For instructions on editing the Label Claims Classifications list, see *Maintaining Simple Lists* on page 4-3.

Label Owner

Use the Label Owner list in ADMN to maintain the label owner data, as figure 4-28 shows below.

Figure 4-28: Label Owner list


Add Save Export Cancel

Label Owner

Name	Status
LabelOwner - new	New
LabelOwner - archive	Archive
Archive - Label Owner	Archive
Branded Manufacturer Label	System
Retailer Own Label	System

Key Fields

Table 4-14: GSM Common, Label Owner key fields

Name	Description
Name	Name of the label owner
Status	The assigned status for the label owner. Refer to *Statuses* on page 4-3 for status descriptions.

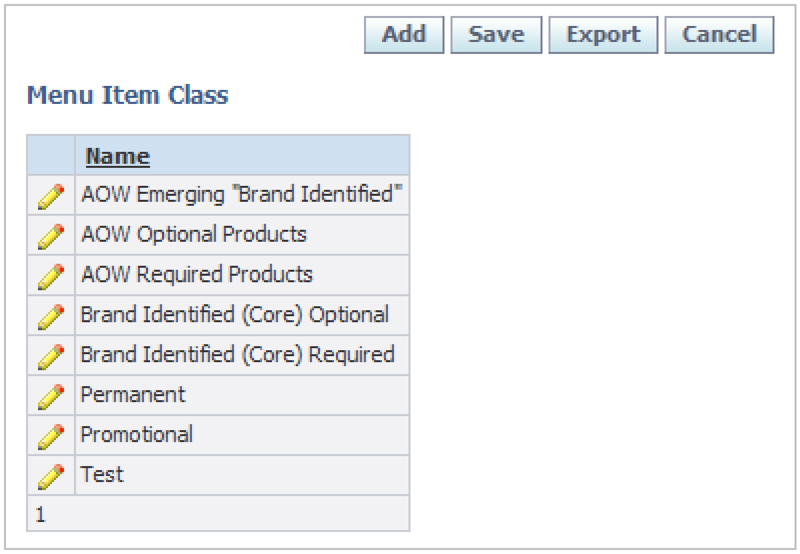
Editing Rules

For instructions on editing the Label Owner list, see *Maintaining Simple Lists* on page 4-3.

Menu Item Class

Use the Menu Item Class list in ADMN to maintain the menu item classifications, as figure 4-29 shows below.

Figure 4-29: Menu Item Class list



Key Field

Table 4-15: GSM Common, Menu Item Class key field

Name	Description
Name	Name of the menu item class

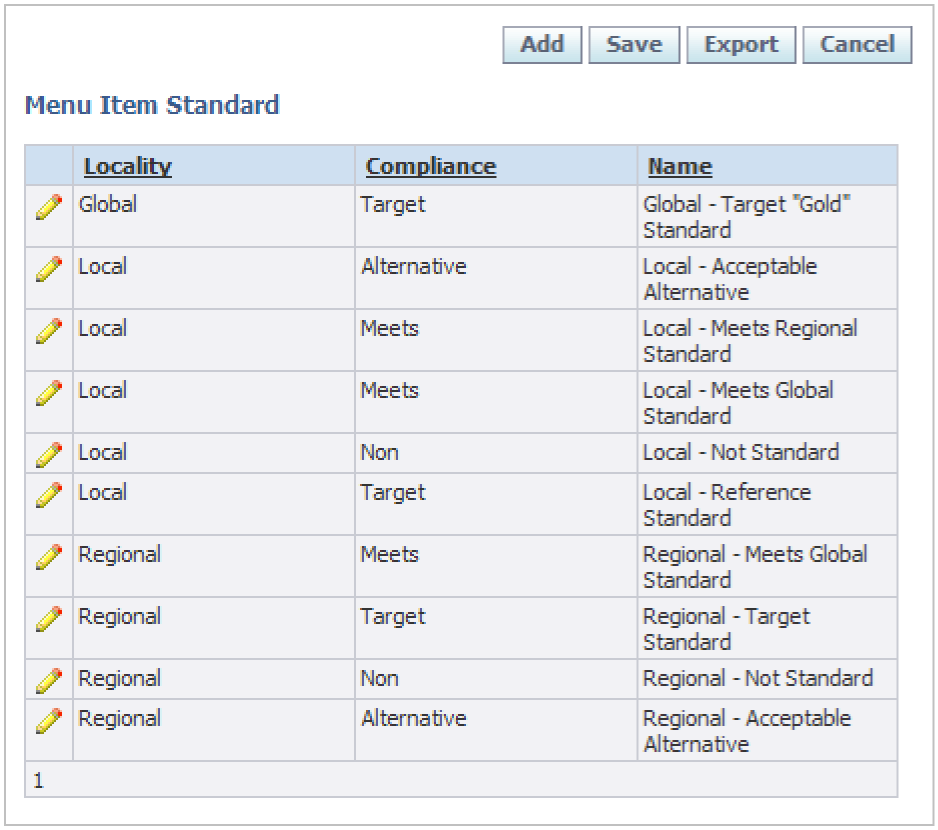
Editing Rules

For instructions on editing the Menu Item Class list, see *Maintaining Simple Lists* on page 4-3.

Menu Item Standard

Use the Menu Item Standard list in ADMN to maintain the menu item standards, as figure 4-30 shows below.

Figure 4-30: Menu Item Standard list



Add Save Export Cancel

Menu Item Standard

	Locality	Compliance	Name
	Global	Target	Global - Target "Gold" Standard
	Local	Alternative	Local - Acceptable Alternative
	Local	Meets	Local - Meets Regional Standard
	Local	Meets	Local - Meets Global Standard
	Local	Non	Local - Not Standard
	Local	Target	Local - Reference Standard
	Regional	Meets	Regional - Meets Global Standard
	Regional	Target	Regional - Target Standard
	Regional	Non	Regional - Not Standard
	Regional	Alternative	Regional - Acceptable Alternative

1

Key Fields

Table 4-16: GSM Common, Menu Item Standard key fields

Name	Description
Locality	The region that the menu item standard applies to. This field is for administrative informational purposes only.
Compliance	The compliance value for the menu item standard. This field is for administrative informational purposes only.
Name	Name of the menu item standard

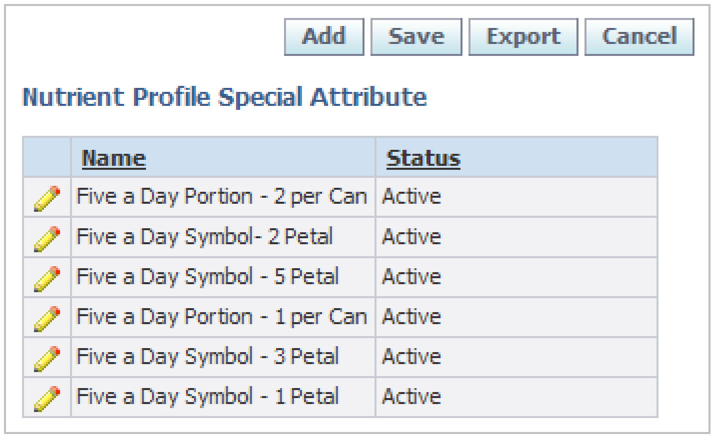
Editing Rules

For instructions on editing the Menu Item Standard list, see *Maintaining Simple Lists* on page 4-3.

Nutp Special Attributes

Use the Nutrient Profile Special Attributes list in ADMN to maintain the data, as figure 4-31 shows below.

Figure 4-31: Nutrient Profile Special Attributes list



Key Fields

Table 4-17: GSM Common, Nutrient Profile Special Attributes key fields

Name	Description
Name	Name of the nutrient profile special attribute
Status	The assigned status for the nutrient profile special attribute. Refer to *Statuses* on page 4-3 for status descriptions.

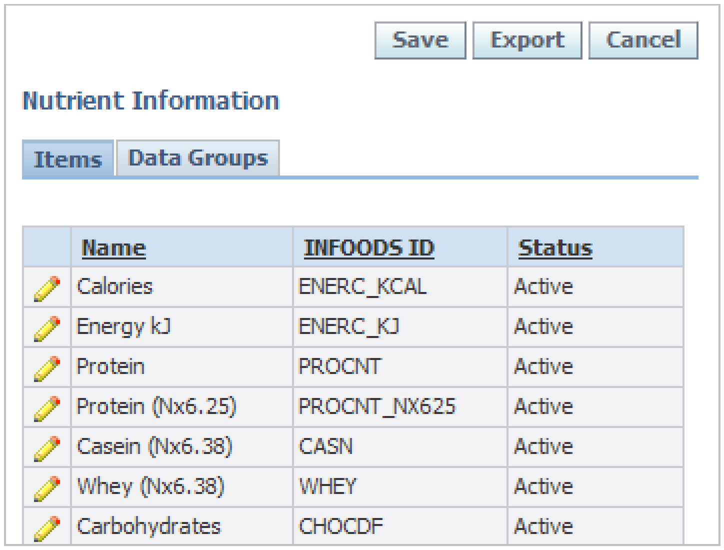
Editing Rules

For instructions on editing the Nutrient Profile Special Attributes list, see *Maintaining Simple Lists* on page 4-3.

Nutrient Information

Use the Nutrient Information list in ADMN to manage INFOODS IDs and the status of nutrients, as figure 4-32 shows below. You cannot add new nutrients to this list.

Figure 4-32: Nutrient Information list



Name	INFOODS ID	Status
Calories	ENERC_KCAL	Active
Energy kJ	ENERC_KJ	Active
Protein	PROCNT	Active
Protein (Nx6.25)	PROCNT_NX625	Active
Casein (Nx6.38)	CASN	Active
Whey (Nx6.38)	WHEY	Active
Carbohydrates	CHOCDF	Active

Key Fields

Table 4-18: GSM Common, Nutrient Information key fields

Name	Description
Name	Name of the nutrient information. This value is not editable.
INFOODS ID	The International Food Data Systems (IFDS) ID. This ID is used when referencing the nutrient in a calculated extended attribute.
Status	The assigned status for the nutrient information. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

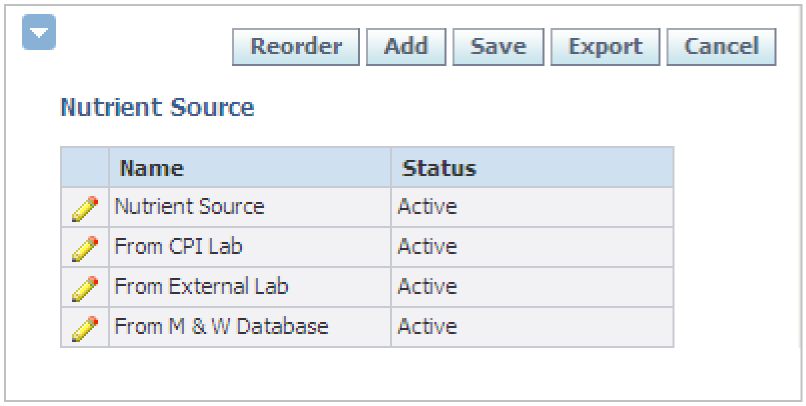
For instructions on editing the Nutrient Information list, see *Maintaining Simple Lists* on page 4-3. You can assign nutrient information to a data group using the Data Groups tab. For more information on data groups, see *Working with Data Groups* on page 4-5.

Note All nutrients items are automatically included when a new data group is added. If you want to exclude an item from the list, you must edit the data groups.

Nutrient Source

Use the Nutrient Source list in ADMN to maintain the data, as figure 4-33 shows below.

Figure 4-33: Nutrient Source list



Key Fields

Table 4-19: GSM Common, Nutrient Source key fields

Name	Description
Name	Name of the nutrient source
Status	The assigned status for the nutrient source. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the Nutrient Source list, see *Maintaining Simple Lists* on page 4-3.

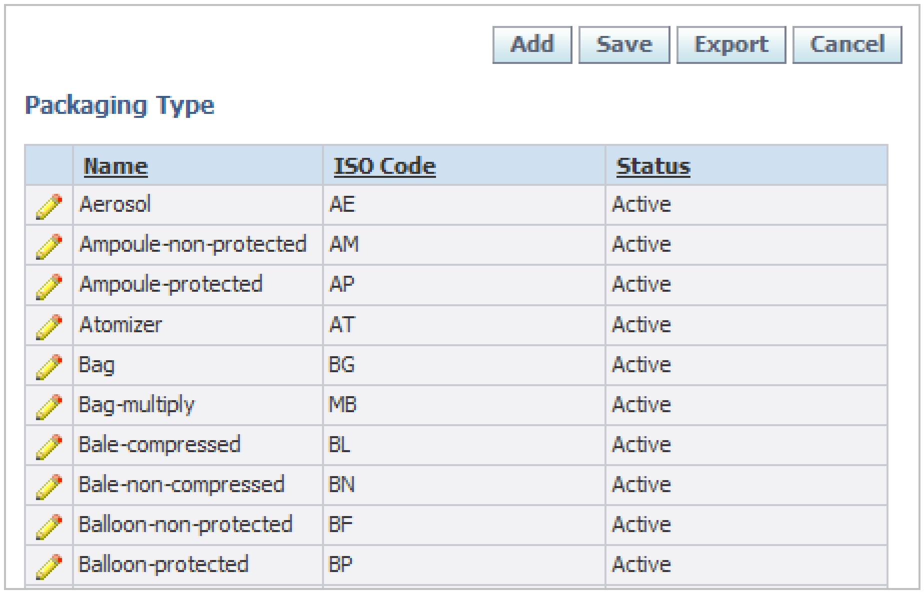
Reordering Nutrient Sources

Only users with the role of [SUPER_DATA_ADMIN] can reorder nutrient sources. For instructions on setting the order, see *To reorder data in a simple list:* on page 4-5.

Packaging Type

Use the Packaging Type list in ADMN to maintain the data, as figure 4-34 shows below.

Figure 4-34: Packaging Type list


Add Save Export Cancel

Packaging Type

Name	ISO Code	Status
Aerosol	AE	Active
Ampoule-non-protected	AM	Active
Ampoule-protected	AP	Active
Atomizer	AT	Active
Bag	BG	Active
Bag-multiply	MB	Active
Bale-compressed	BL	Active
Bale-non-compressed	BN	Active
Balloon-non-protected	BF	Active
Balloon-protected	BP	Active

Key Fields

Table 4-20: GSM Common, Packaging Type key fields

Name	Description
Name	Name of the packaging type
ISO Code	Name of the related ISO code
Status	The assigned status for the packaging type. Refer to *Statuses* on page 4-3 for status descriptions.

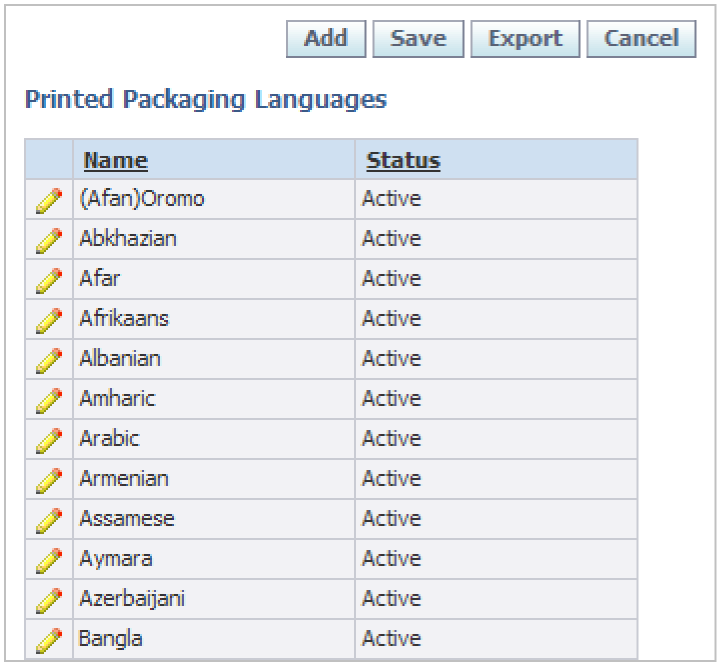
Editing Rules

For instructions on editing the Packaging Type list, see *Maintaining Simple Lists* on page 4-3.

Printed Packaging Languages

Use the Printed Packaging Languages list in ADMN to maintain the data, as figure 4-35 shows below.

Figure 4-35: Printed Packaging Languages list



Key Fields

Table 4-21: GSM Common, Printed Packaging Languages key fields

Name	Description
Name	Name of the printed packaging language
Status	The assigned status for the printed packaging language. Refer to *Statuses* on page 4-3 for status descriptions.

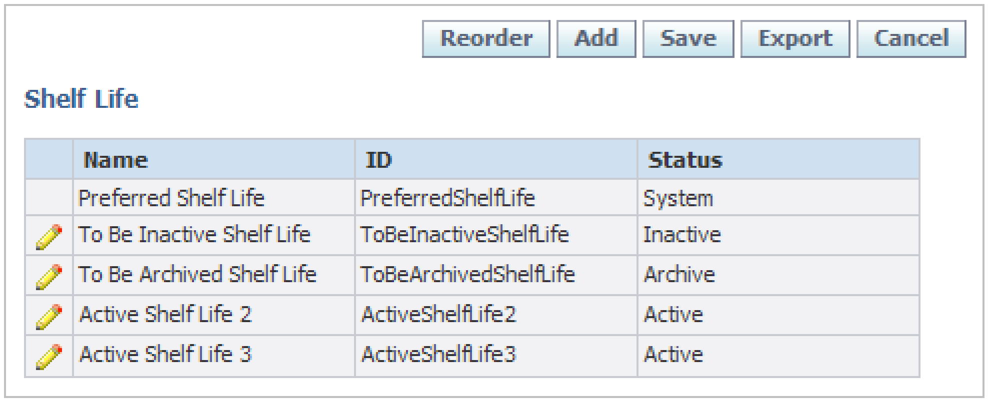
Editing Rules

For instructions on editing the Printed Packaging Languages list, see *Maintaining Simple Lists* on page 4-3.

Shelf Life Type

Use the Shelf Life Type list in ADMN to maintain the data, as figure 4-36 shows below.

Figure 4-36: Shelf Life Type list



Name	ID	Status
Preferred Shelf Life	PreferredShelfLife	System
To Be Inactive Shelf Life	ToBeInactiveShelfLife	Inactive
To Be Archived Shelf Life	ToBeArchivedShelfLife	Archive
Active Shelf Life 2	ActiveShelfLife2	Active
Active Shelf Life 3	ActiveShelfLife3	Active

Key Fields

Table 4-22: GSM Common, Shelf Life Type key fields

Name	Description
Name	Name of the shelf life type
ID	Unique identifier for the shelf life type
Status	The assigned status for the shelf life type. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the Shelf Life Type list, see *Maintaining Simple Lists* on page 4-3.

Reordering Shelf Life Types

Only users with the role of [SUPER_DATA_ADMIN] can reorder shelf life types. For instructions on setting the order, see *To reorder data in a simple list:* on page 4-5.

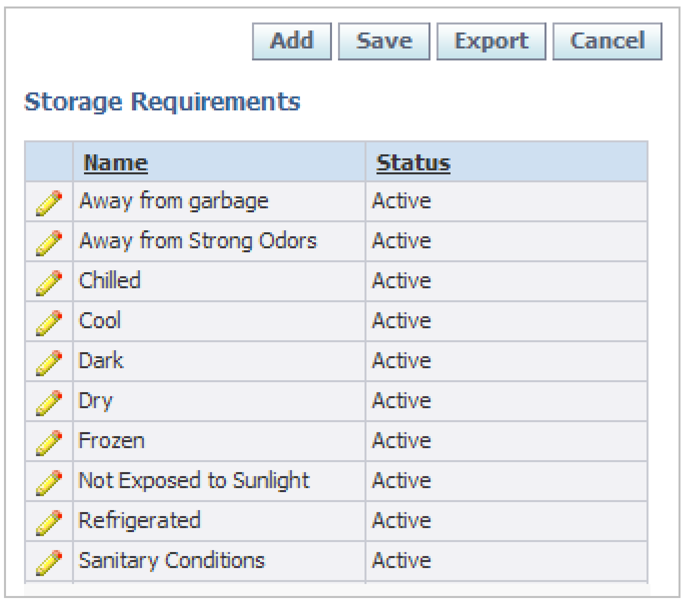
Storage Requirements

Use the Storage Requirements list in ADMN to maintain the data, as figure 4-37 shows below.

This list controls the following:

- The ingredient specification's Storage Requirements field inside the shelf life grid.
- The ingredient specification's Shipping Requirements.
- The product specification's Shipping Conditions field.
- The product specification's shelf life's Storage Requirements drop-down list.

Figure 4-37: Storage Requirements list



Key Fields

Table 4-23: GSM Common, Storage Requirements key fields

Name	Description
Name	Name of the storage requirement
Status	The assigned status for the storage requirement. Refer to *Statuses* on page 4-3 for status descriptions.

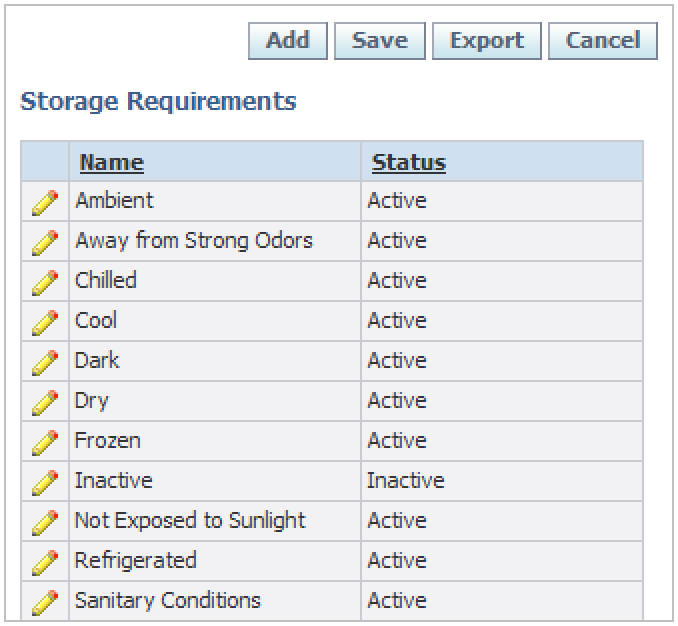
Editing Rules

For instructions on editing the Storage Requirements list, see *Maintaining Simple Lists* on page 4-3.

Storage Requirements (Trade Specs)

Use the Storage Requirements (Trade Specs) list in ADMN to maintain the data, as figure 4-38 shows below.

Figure 4-38: Storage Requirements (Trade Specs) list



Name	Status
Ambient	Active
Away from Strong Odors	Active
Chilled	Active
Cool	Active
Dark	Active
Dry	Active
Frozen	Active
Inactive	Inactive
Not Exposed to Sunlight	Active
Refrigerated	Active
Sanitary Conditions	Active

Key Fields

Table 4-24: GSM Common, Storage Requirements (Trade Specs) key fields

Name	Description
Name	Name of the trade specification storage requirement
Status	The assigned status for the trade specification storage requirement. Refer to *Statuses* on page 4-3 for status descriptions.

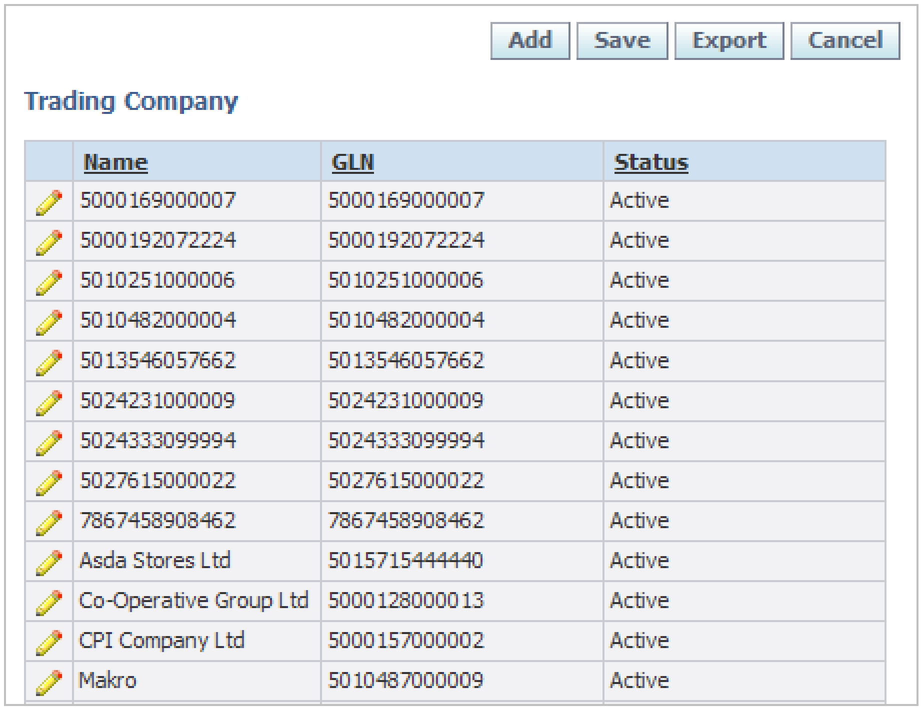
Editing Rules

For instructions on editing the Storage Requirements (Trade Spec) list, see *Maintaining Simple Lists* on page 4-3.

Trading Company

Use the Trading Company list in ADMN to maintain the fields, as figure 4-39 shows below.

Figure 4-39: Trading Company list



	Name	GLN	Status
	5000169000007	5000169000007	Active
	5000192072224	5000192072224	Active
	5010251000006	5010251000006	Active
	5010482000004	5010482000004	Active
	5013546057662	5013546057662	Active
	5024231000009	5024231000009	Active
	5024333099994	5024333099994	Active
	5027615000022	5027615000022	Active
	7867458908462	7867458908462	Active
	Asda Stores Ltd	5015715444440	Active
	Co-Operative Group Ltd	5000128000013	Active
	CPI Company Ltd	5000157000002	Active
	Makro	5010487000009	Active

Key Fields

Table 4-25: GSM Common, Trading Company key fields

Name	Description
Name	Name of the trading company
GLN	The Global Location Number, a globally unique 13-digit number that identifies physical location, legal entity, and functional entity of the trading company
Status	The assigned status for the trading company. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the Trading Company list, see *Maintaining Simple Lists* on page 4-3.

UDEX Classifications

Use the UDEX Classifications list in ADMN to maintain the data, as figure 4-40 shows below.

Figure 4-40: GSM Common, UDEX Classifications tree list

Editing Rules

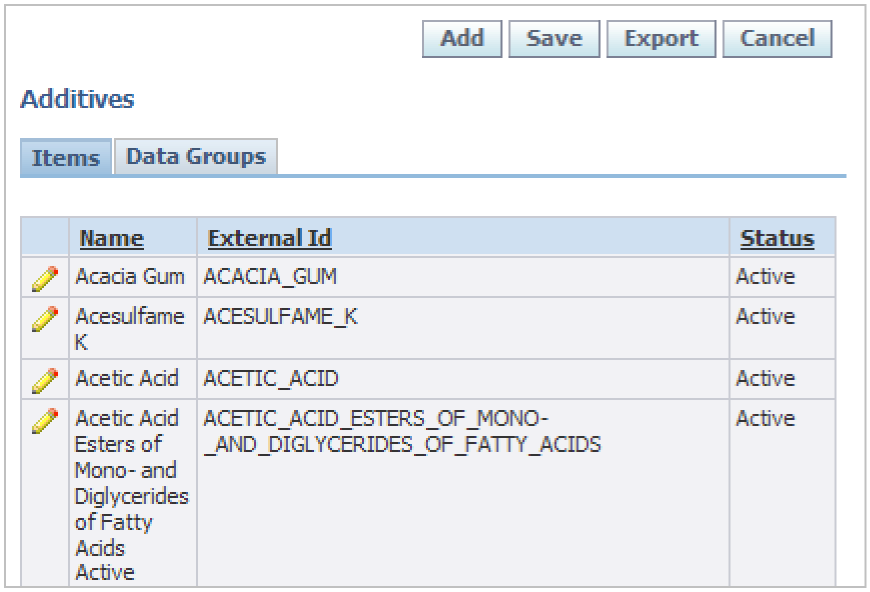
For instructions on editing the UDEX Classifications tree list, see *Maintaining Tree Lists* on page 4-7.

Global Specification Management Compliance Data

Additives

Use the Additives list in ADMN to maintain the data, as figure 4-41 shows below.

Figure 4-41: Additives list



Key Fields

Table 4-26: GSM Compliance, Additives key fields

Name	Description
Name	Name of the additive
External Id	Unique identification for the additive
Status	The assigned status for the additive. Refer to *Statuses* on page 4-3 for status descriptions.

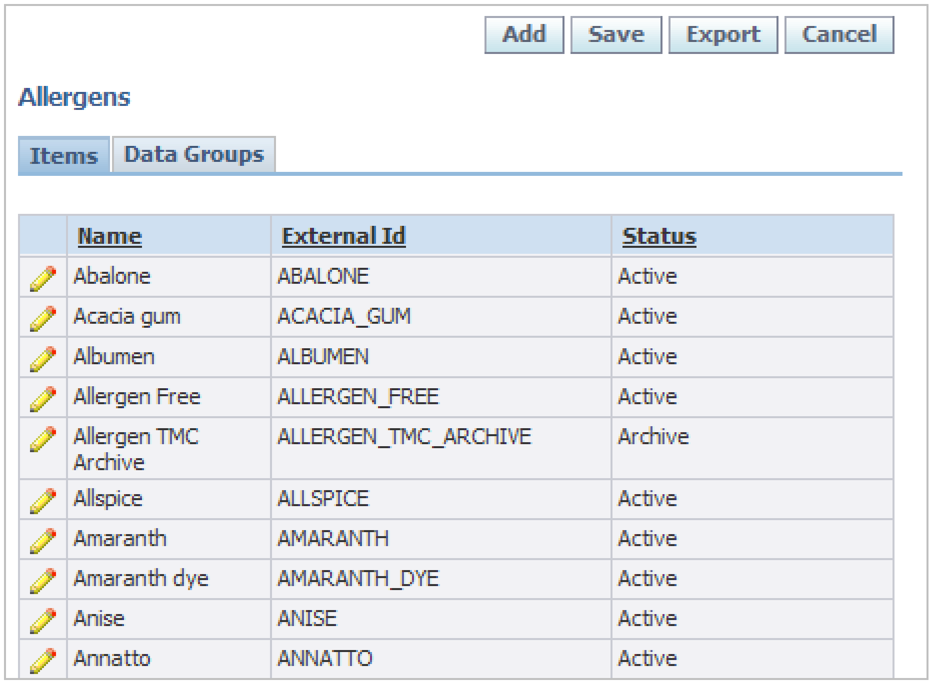
Editing Rules

For instructions on editing the Additives list, see *Maintaining Simple Lists* on page 4-3. You can assign additives to a data group using the Data Groups tab. For more information on data groups, see *Working with Data Groups* on page 4-5.

Allergens

Use the Allergens list in ADMN to maintain the data, as figure 4-42 shows below.

Figure 4-42: Allergens list



Key Fields

Table 4-27: GSM Compliance, Allergens key fields

Name	Description
Name	Name of the allergen
External Id	Unique identification for the allergen
Status	The assigned status for the allergen. Refer to *Statuses* on page 4-3 for status descriptions.

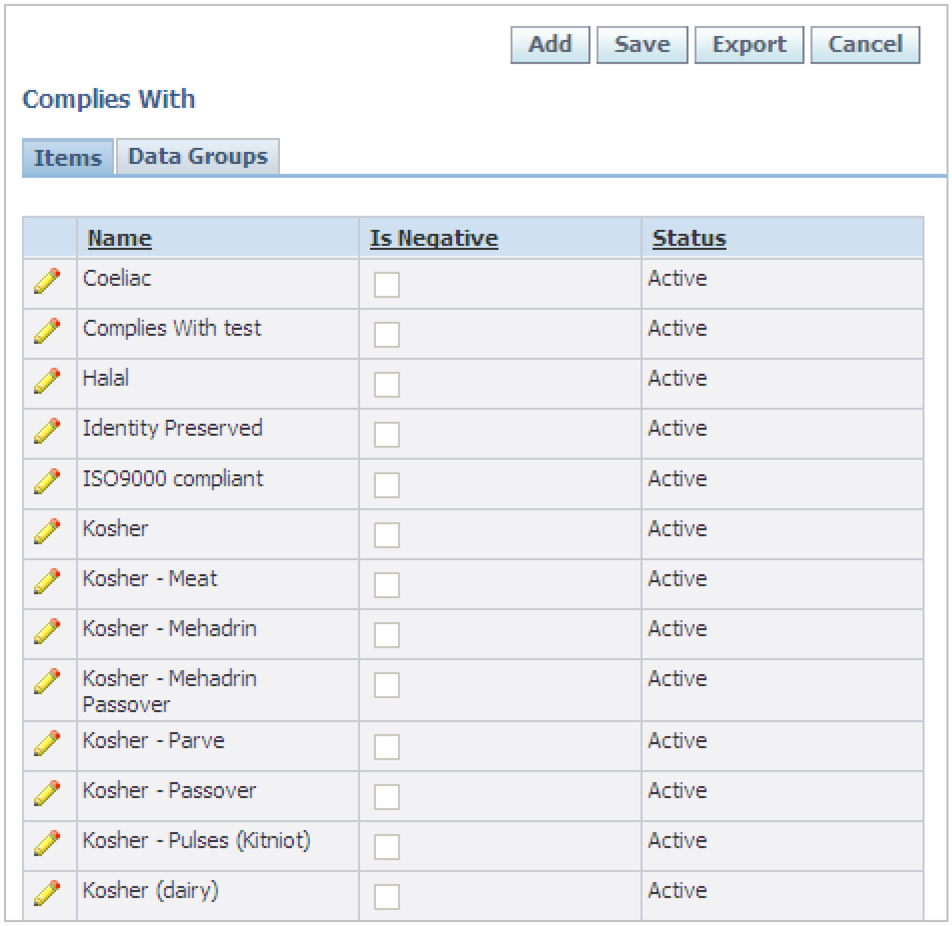
Editing Rules

For instructions on editing the Allergens list, see *Maintaining Simple Lists* on page 4-3. You can assign allergens to a data group using the Data Groups tab. For more information on data groups, see *Working with Data Groups* on page 4-5.

Complies With

Use the Complies With list in ADMN to maintain the data, as figure 4-43 shows below.

Figure 4-43: Complies With list



Name	Is Negative	Status
Coeliac	☐	Active
Complies With test	☐	Active
Halal	☐	Active
Identity Preserved	☐	Active
ISO9000 compliant	☐	Active
Kosher	☐	Active
Kosher - Meat	☐	Active
Kosher - Mehadrin	☐	Active
Kosher - Mehadrin Passover	☐	Active
Kosher - Parve	☐	Active
Kosher - Passover	☐	Active
Kosher - Pulses (Kitniot)	☐	Active
Kosher (dairy)	☐	Active

Key Fields

Table 4-28: GSM Compliance, Complies With key fields

Name	Description
Name	Name of the compliance item
Is Negative	Indicates whether the item is negative. This flag is used when complies with items are rolled up during formulation. If an item is marked as Negative it will roll up as present if it appears at all in the group of formulation inputs. If an item is not marked as Negative, then it will only rollup as present if all formulation inputs contain the complies with item.
Status	The assigned status for the compliance item. Refer to *Statuses* on page 4-3 for status descriptions.

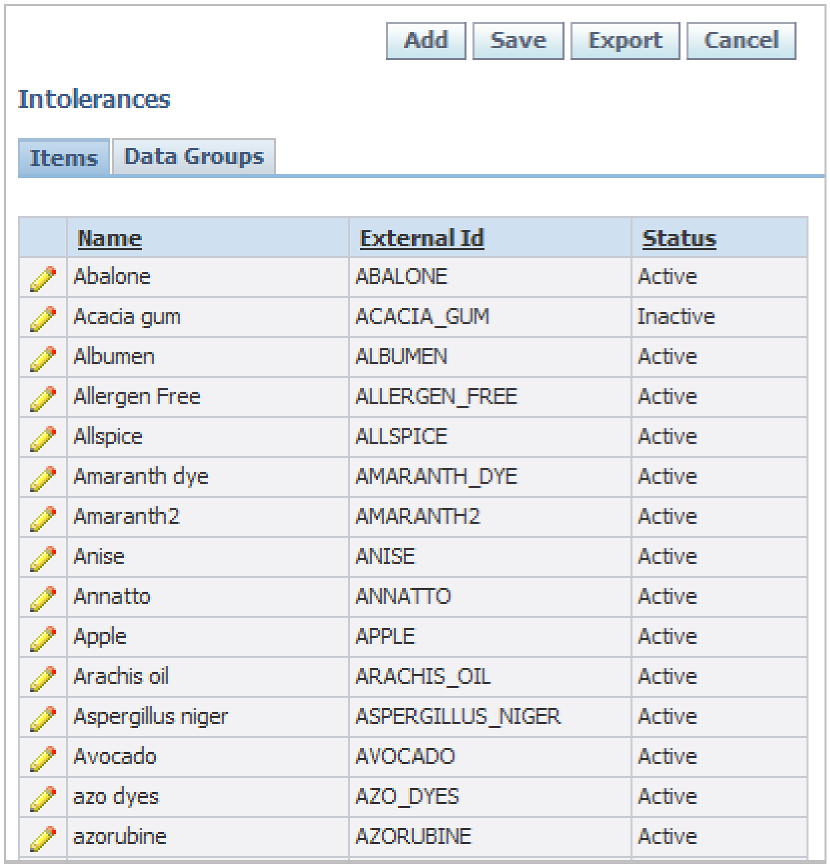
Editing Rules

For instructions on editing the Complies With list, see *Maintaining Simple Lists* on page 4-3. You can assign Complies With information to a data group using the Data Groups tab. For more information on data groups, see *Working with Data Groups* on page 4-5.

Intolerances

Use the Intolerances list in ADMN to maintain the data, as figure 4-44 shows below.

Figure 4-44: Intolerances list



Key Fields

Table 4-29: GSM Compliance, Intolerances key fields

Name	Description
Name	Name of the intolerance
External Id	Unique identification for the intolerance
Status	The assigned status for the intolerance. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

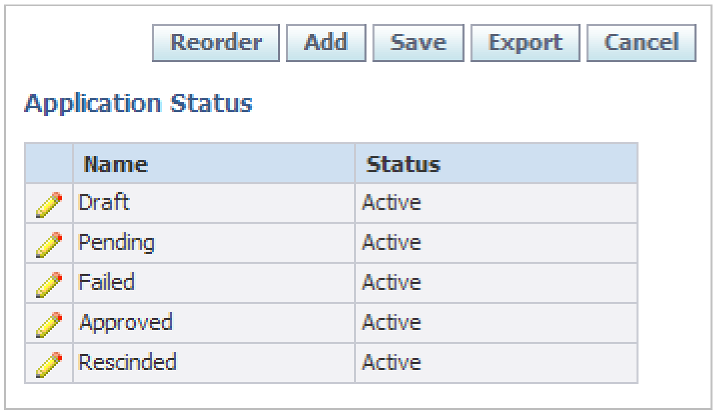
For instructions on editing the Intolerances list, see *Maintaining Simple Lists* on page 4-3. You can assign Intolerances to a data group using the Data Groups tab. For more information on data groups, refer to *Working with Data Groups* on page 4-5.

Global Specification Management FSIS Data

Application Status

Use the Application Status list in ADMN to maintain the data, as figure 4-45 shows below.

Figure 4-45: Application Status list



Key Fields

Table 4-30: GSM FSIS, Application Status key fields

Name	Description
Name	Name of the FSIS application status
Status	The assigned status for the FSIS application status. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the Application Status list, see *Maintaining Simple Lists* on page 4-3.

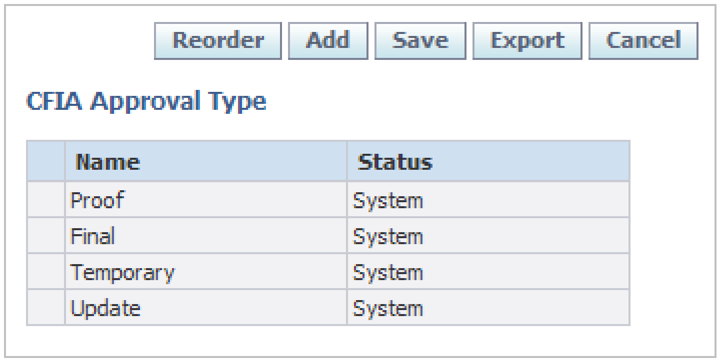
Reordering Application Statuses

Only users with the role of [SUPER_DATA_ADMIN] can reorder application statuses. For instructions on setting the order, see *To reorder data in a simple list:* on page 4-5.

CFIA Approval Type

Use the CFIA Approval Types list in ADMN to maintain approval types, as figure 4-46 shows below.

Figure 4-46: CFIA Approval Types list



Key Fields

Table 4-31: GSM FSIS, CFIA Approval Type key fields

Name	Description
Name	Name of the FSIS CFIA approval type
Status	The assigned status for the FSIS CFIA approval type. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the CFIA Approval Type list, see *Maintaining Simple Lists* on page 4-3.

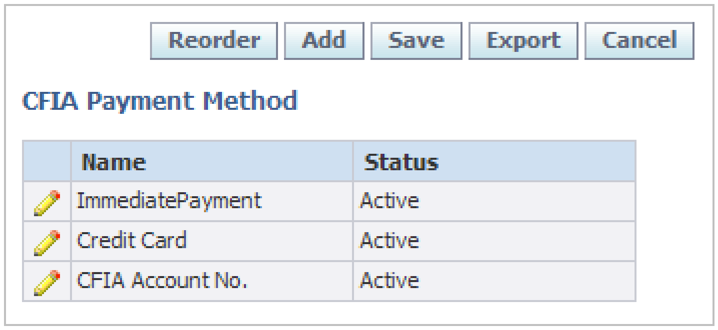
Reordering CFIA Approval Types

Only users with the role of [SUPER_DATA_ADMIN] can reorder CFIA approval types. For instructions on setting the order, see *To reorder data in a simple list:* on page 4-5.

CFIA Payment Method

Use the CFIA Payment Method list in ADMN to maintain payment methods, as figure 4-47 shows below.

Figure 4-47: CFIA Payment Method list



Key Fields

Table 4-32: GSM FSIS, CFIA Payment Method key fields

Name	Description
Name	Name of the FSIS CFIA payment method
Status	The assigned status for the FSIS CFIA payment method. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the CFIA Payment Method list, see *Maintaining Simple Lists* on page 4-3.

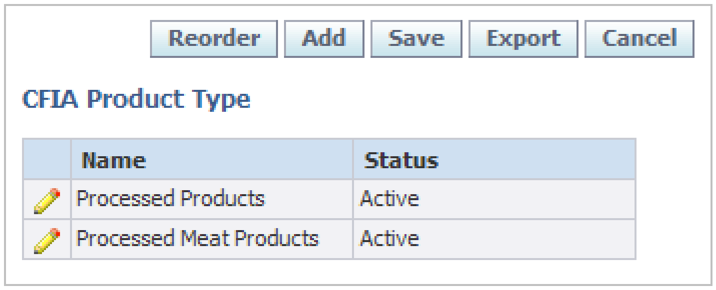
Reordering CFIA Payment Methods

Only users with the role of [SUPER_DATA_ADMIN] can reorder CFIA payment methods. For instructions on setting the order, see *To reorder data in a simple list:* on page 4-5.

CFIA Product Type

Use the CFIA Product Type list in ADMN to maintain the product type data, as figure 4-48 shows below.

Figure 4-48: CFIA Product Type list



Key Fields

Table 4-33: GSM FSIS, CFIA Product Type key fields

Name	Description
Name	Name of the FSIS CFIA product type
Status	The assigned status for the FSIS CFIA product type. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the CFIA Product Type list, see *Maintaining Simple Lists* on page 4-3.

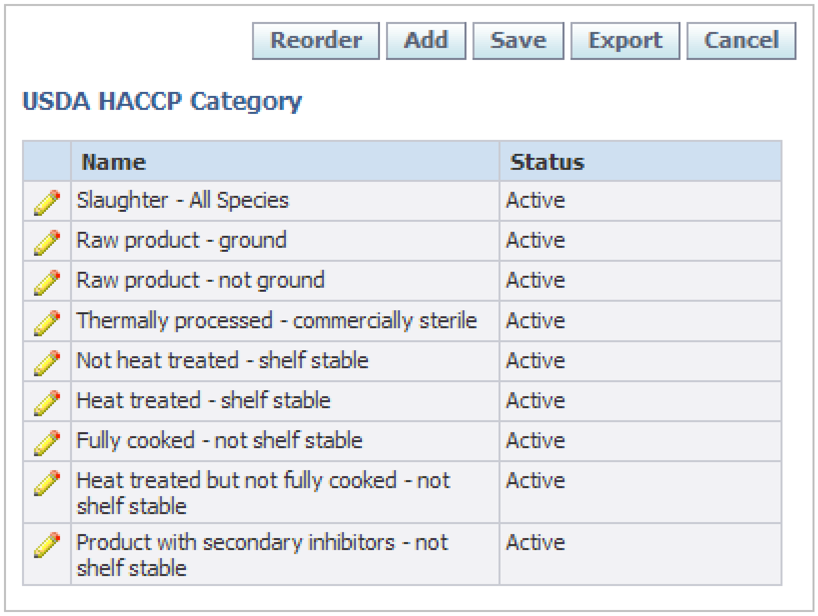
Reordering CFIA Product Types

Only users with the role of [SUPER_DATA_ADMIN] can reorder CFIA product types. For instructions on setting the order, see *To reorder data in a simple list:* on page 4-5.

USDA HACCP Category

Use the USDA HACCP Category list in ADMN to maintain the data, as figure 4-49 shows below.

Figure 4-49: USDA HACCP Category list



Reorder Add Save Export Cancel

USDA HACCP Category

	Name	Status
	Slaughter - All Species	Active
	Raw product - ground	Active
	Raw product - not ground	Active
	Thermally processed - commercially sterile	Active
	Not heat treated - shelf stable	Active
	Heat treated - shelf stable	Active
	Fully cooked - not shelf stable	Active
	Heat treated but not fully cooked - not shelf stable	Active
	Product with secondary inhibitors - not shelf stable	Active

Key Fields

Table 4-34: GSM FSIS, USDA HACCP Category key fields

Name	Description
Name	Name of the USDA HACCP category
Status	The assigned status for the USDA HACCP category. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the USDA HACCP list, see *Maintaining Simple Lists* on page 4-3.

Reordering USDA HACCP Categories

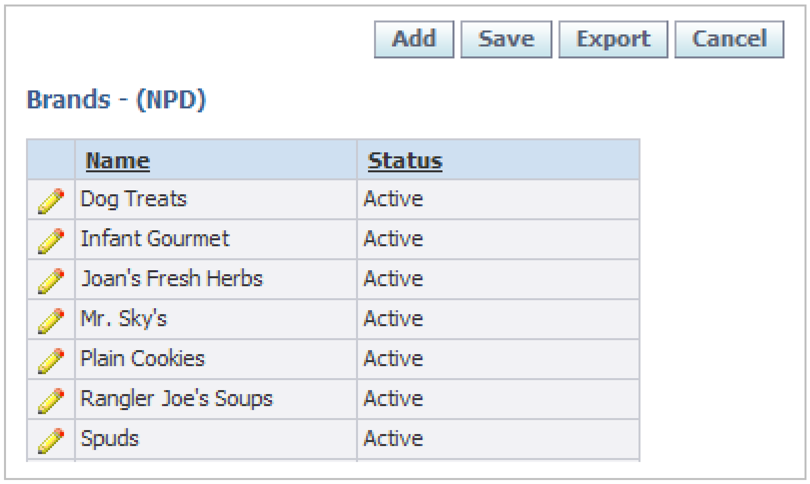
Only users with the role of [SUPER_DATA_ADMIN] can reorder USDA HACCP categories. For instructions on setting the order, see *To reorder data in a simple list:* on page 4-5.

New Product Development Data

Brands - (NPD)

Use the Brands - (NPD) list in ADMN to maintain the data, as figure 4-50 shows below.

Figure 4-50: Brands - (NPD) list



Key Fields

Table 4-35: NPD, Brands - (NPD) key fields

Name	Description
Name	Name of the brand in NPD
Status	The assigned status for the brand. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the Brands - (NPD) list, see *Maintaining Simple Lists* on page 4-3.

Business Units - (NPD)

Use the Business Units - (NPD) tree list in ADMN to maintain the data, as figure 4-51 shows below.

Figure 4-51: Business Units - (NPD) tree list

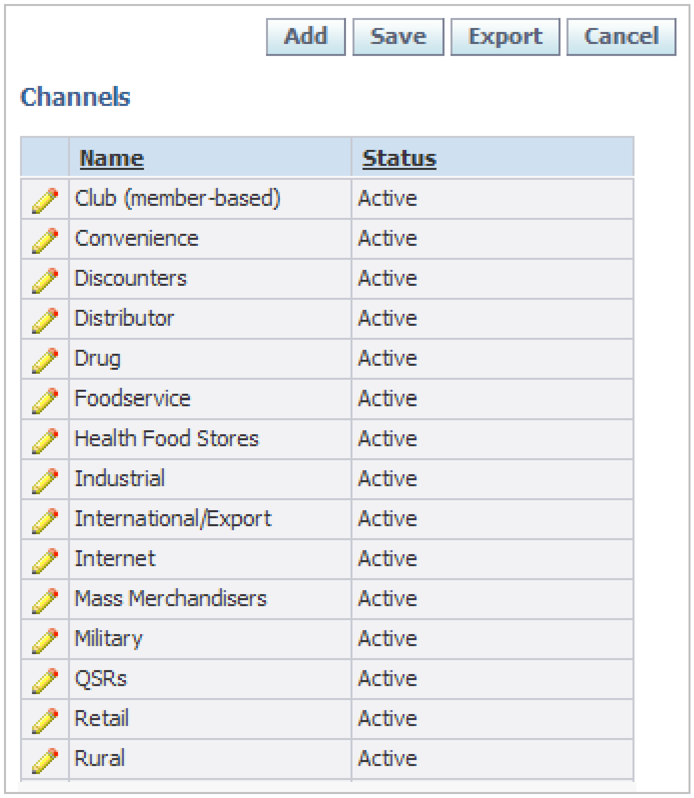
Editing Rules

For instructions on editing the Business Units - (NPD) tree list, see *Maintaining Tree Lists* on page 4-7.

Channels

Channels are used to define distribution strategies in projects and strategic briefs. Use the Channels list in ADMN to maintain the data, as figure 4-52 shows below.

Figure 4-52: Channels list



Name	Status
Club (member-based)	Active
Convenience	Active
Discounters	Active
Distributor	Active
Drug	Active
Foodservice	Active
Health Food Stores	Active
Industrial	Active
International/Export	Active
Internet	Active
Mass Merchandisers	Active
Military	Active
QSRs	Active
Retail	Active
Rural	Active

Key Fields

Table 4-36: NPD, Channels key fields

Name	Description
Name	Name of the channel
Status	The assigned status for the channel. Refer to *Statuses* on page 4-3 for status descriptions.

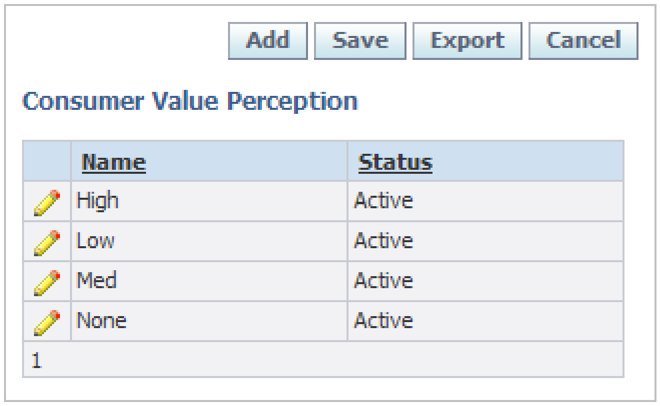
Editing Rules

For instructions on editing the Channels list, see *Maintaining Simple Lists* on page 4-3.

Consumer Value Perception

Use the Consumer Value Perception list in ADMN to maintain the data, as figure 4-53 shows below.

Figure 4-53: Consumer Value Perception list



Key Fields

Table 4-37: NPD, Consumer Value Perception key fields

Name	Description
Name	Name of the consumer value perception
Status	The assigned status for the consumer value perception. Refer to *Statuses* on page 4-3 for status descriptions.

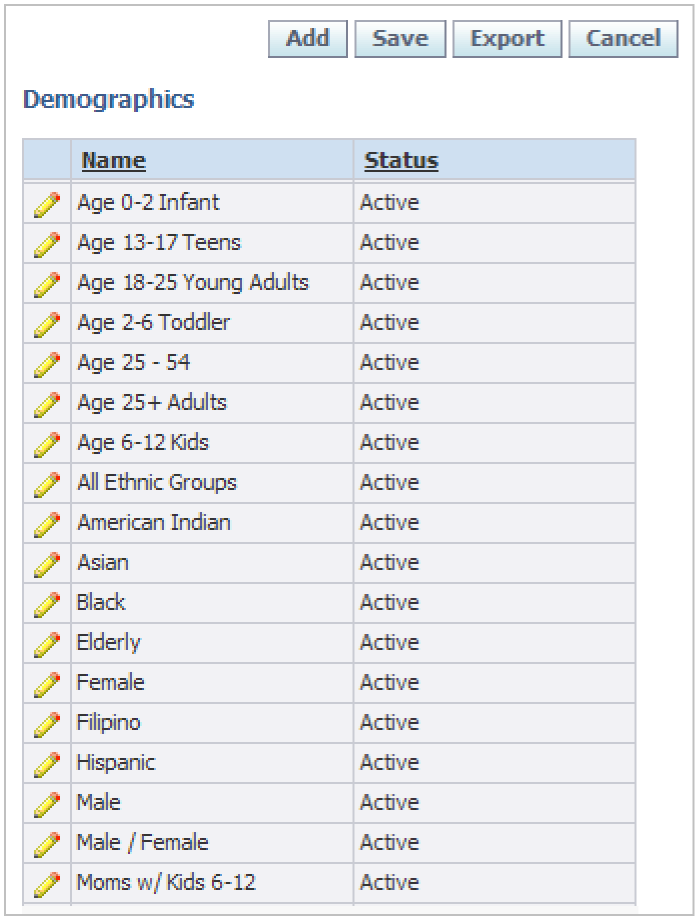
Editing Rules

For instructions on editing the Consumer Value Perception list, see *Maintaining Simple Lists* on page 4-3.

Demographic Categories

Demographics are used when defining projects and strategic briefs. Use the Demographics list in ADMN to maintain the data, as figure 4-54 shows below.

Figure 4-54: Demographics list


Add Save Export Cancel

Demographics

Name	Status
Age 0-2 Infant	Active
Age 13-17 Teens	Active
Age 18-25 Young Adults	Active
Age 2-6 Toddler	Active
Age 25 - 54	Active
Age 25+ Adults	Active
Age 6-12 Kids	Active
All Ethnic Groups	Active
American Indian	Active
Asian	Active
Black	Active
Elderly	Active
Female	Active
Filipino	Active
Hispanic	Active
Male	Active
Male / Female	Active
Moms w/ Kids 6-12	Active

Key Fields

Table 4-38: NPD, Demographics key fields

Name	Description
Name	Name of the demographic category
Status	The assigned status for the demographic category. Refer to *Statuses* on page 4-3 for status descriptions.

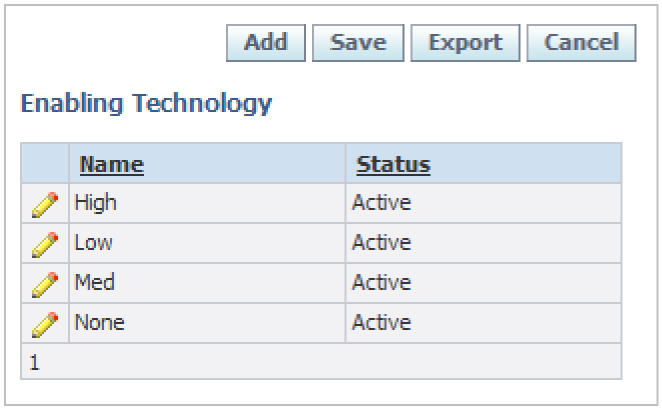
Editing Rules

For instructions on editing the Demographics list, see *Maintaining Simple Lists* on page 4-3.

Enabling Technology

Use the Enabling Technology list to maintain the data, as figure 4-55 shows below.

Figure 4-55: Enabling Technology list



Key Fields

Table 4-39: NPD, Enabling Technology key fields

Name	Description
Name	Name of the enabling technology
Status	The assigned status for the enabling technology. Refer to *Statuses* on page 4-3 for status descriptions.

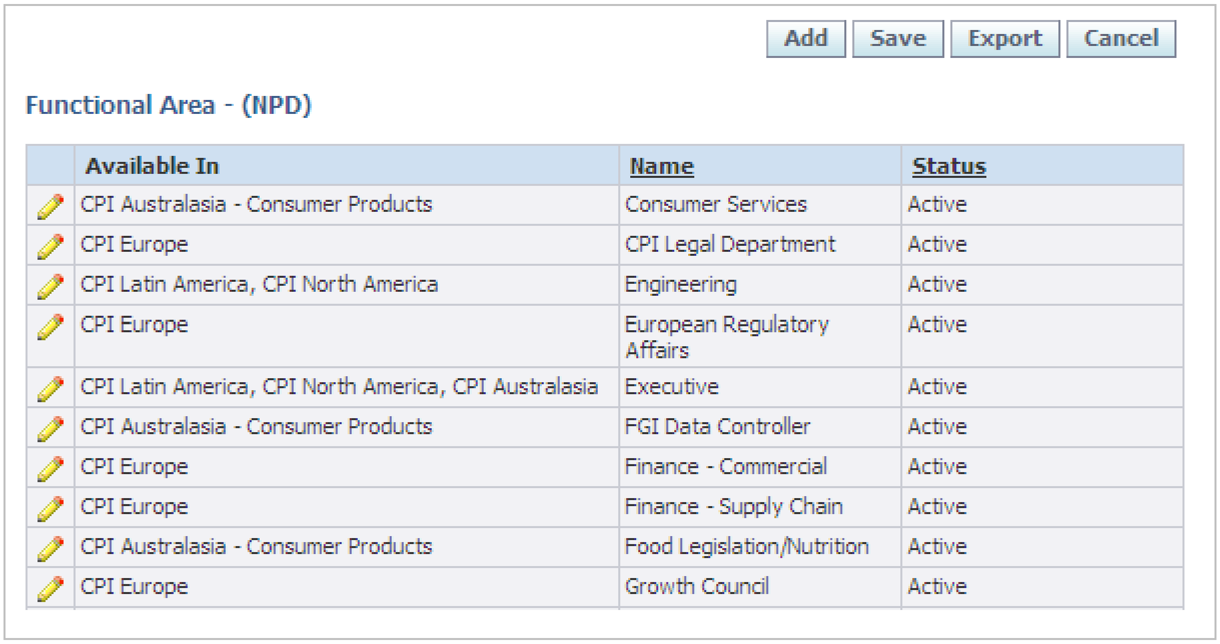
Editing Rules

For instructions on editing the Enabling Technology list, see *Maintaining Simple Lists* on page 4-3.

Functional Area - (NPD)

Use the Functional Area - (NPD) list in ADMN to maintain the data, as figure 4-56 shows below.

Figure 4-56: Functional Area - (NPD) list



	Available In	Name	Status
	CPI Australasia - Consumer Products	Consumer Services	Active
	CPI Europe	CPI Legal Department	Active
	CPI Latin America, CPI North America	Engineering	Active
	CPI Europe	European Regulatory Affairs	Active
	CPI Latin America, CPI North America, CPI Australasia	Executive	Active
	CPI Australasia - Consumer Products	FGI Data Controller	Active
	CPI Europe	Finance - Commercial	Active
	CPI Europe	Finance - Supply Chain	Active
	CPI Australasia - Consumer Products	Food Legislation/Nutrition	Active
	CPI Europe	Growth Council	Active

Key Fields

Table 4-40: NPD, Functional Area - (NPD) key fields

Name	Description
Available In	The NPD business unit that the functional area will be available in. This is a required field.
Name	Name of the functional area
Status	The assigned status for the enabling technology. Refer to *Statuses* on page 4-3 for status descriptions.

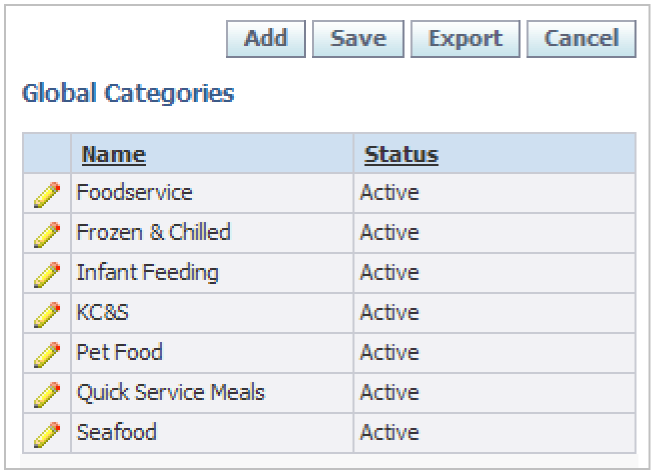
Editing Rules

For instructions on editing the Functional Area - (NPD) list, see *Maintaining Simple Lists* on page 4-3.

Global Categories

Use the Global Categories list in ADMN to maintain the data, as figure 4-57 shows below.

Figure 4-57: Global Categories list



Key Fields

Table 4-41: NPD, Global Categories key fields

Name	Description
Name	Name of the global category
Status	The assigned status for the global category. Refer to *Statuses* on page 4-3 for status descriptions.

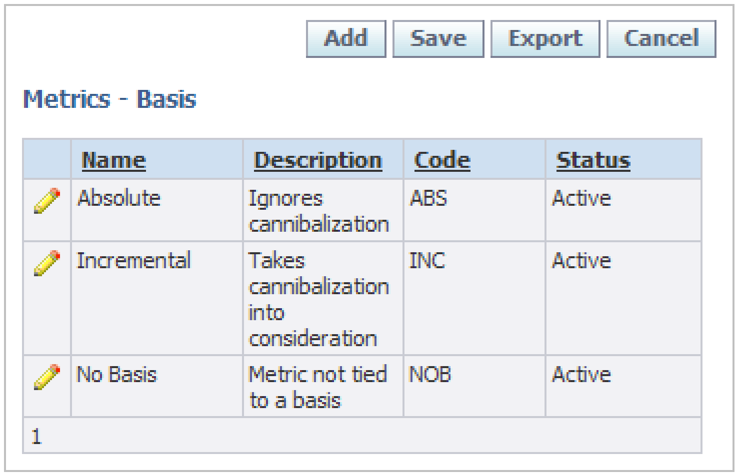
Editing Rules

For instructions on editing the Global Categories list, see *Maintaining Simple Lists* on page 4-3.

Metrics - Basis

Use the Metrics - Basis list to maintain the data, as figure 4-58 shows below.

Figure 4-58: Metrics - Basis list



Key Fields

Table 4-42: NPD, Metrics - Basis key fields

Name	Description
Name	Name of the metrics basis
Description	Description of the metrics basis
Code	Alphanumeric code assigned to the metrics basis
Status	The assigned status for the metrics basis. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the Metrics - Basis list, see *Maintaining Simple Lists* on page 4-3.

Metrics - Category

Use the Metrics - Category list to maintain the data, as figure 4-59 shows below.

Figure 4-59: Metrics - Category list

Key Fields

Table 4-43: NPD, Metrics - Category key fields

Name	Description
Name	Name of the metrics category
Status	The assigned status for the metrics category. Refer to *Statuses* on page 4-3 for status descriptions.

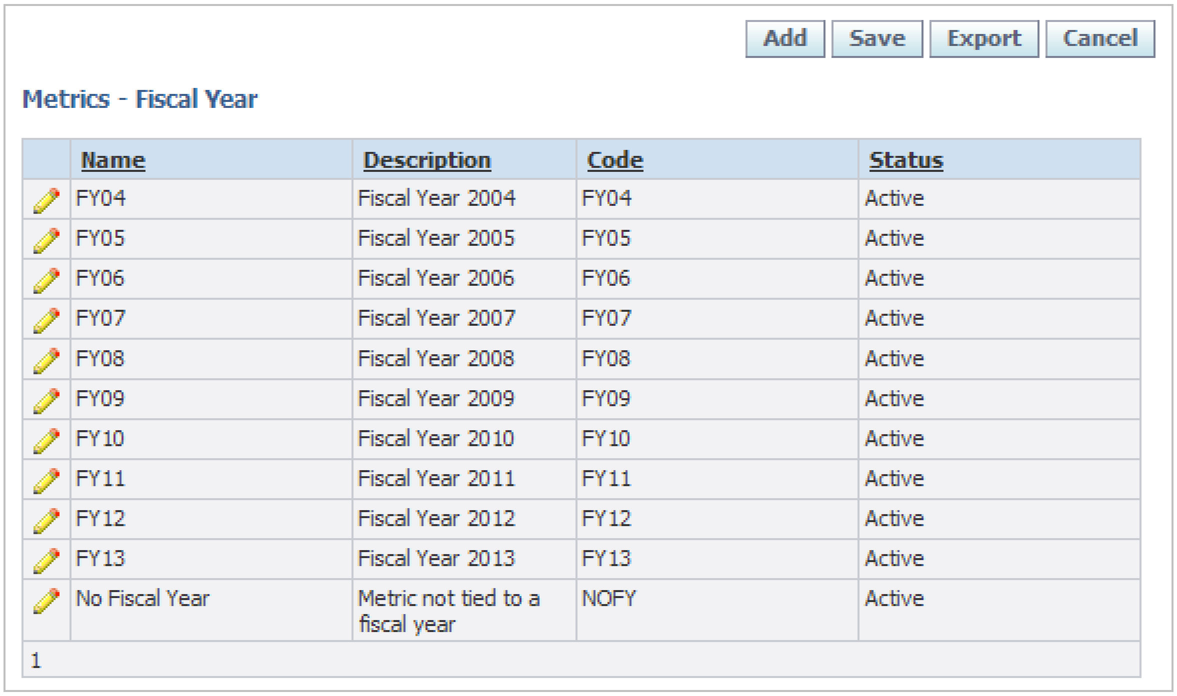
Editing Rules

For instructions on editing the Metrics - Category list, see *Maintaining Simple Lists* on page 4-3.

Metrics - Fiscal Year

Use the Metrics - Fiscal Year list to maintain the data, as figure 4-60 shows below.

Figure 4-60: Metrics - Fiscal Year list


Add Save Export Cancel

Metrics - Fiscal Year

	Name	Description	Code	Status
	FY04	Fiscal Year 2004	FY04	Active
	FY05	Fiscal Year 2005	FY05	Active
	FY06	Fiscal Year 2006	FY06	Active
	FY07	Fiscal Year 2007	FY07	Active
	FY08	Fiscal Year 2008	FY08	Active
	FY09	Fiscal Year 2009	FY09	Active
	FY10	Fiscal Year 2010	FY10	Active
	FY11	Fiscal Year 2011	FY11	Active
	FY12	Fiscal Year 2012	FY12	Active
	FY13	Fiscal Year 2013	FY13	Active
	No Fiscal Year	Metric not tied to a fiscal year	NOFY	Active

1

Key Fields

Table 4-44: NPD, Metrics - Fiscal Year key fields

Name	Description
Name	Name of the metrics fiscal year
Description	Description of the metrics fiscal year
Code	Alphanumeric code assigned to the metrics fiscal year
Status	The assigned status for the fiscal year. Refer to *Statuses* on page 4-3 for status descriptions.

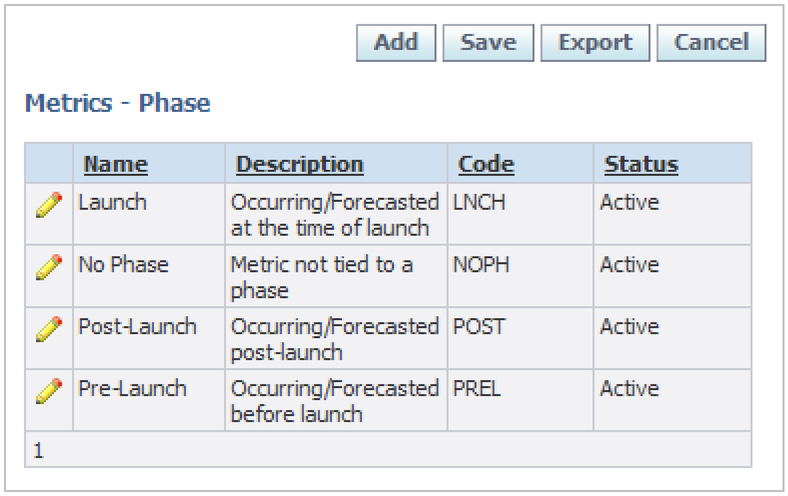
Editing Rules

For instructions on editing the Metrics - Fiscal Year list, see *Maintaining Simple Lists* on page 4-3.

Metrics - Phase

Use the Metrics - Phase list to maintain the data, as figure 4-61 shows below.

Figure 4-61: Metrics - Phase list



Key Fields

Table 4-45: NPD, Metrics - Phase key fields

Name	Description
Name	Name of the metrics phase
Description	Description of the metrics phase
Code	Alphanumeric code assigned to the metrics phase
Status	The assigned status for the metrics phase. Refer to *Statuses* on page 4-3 for status descriptions.

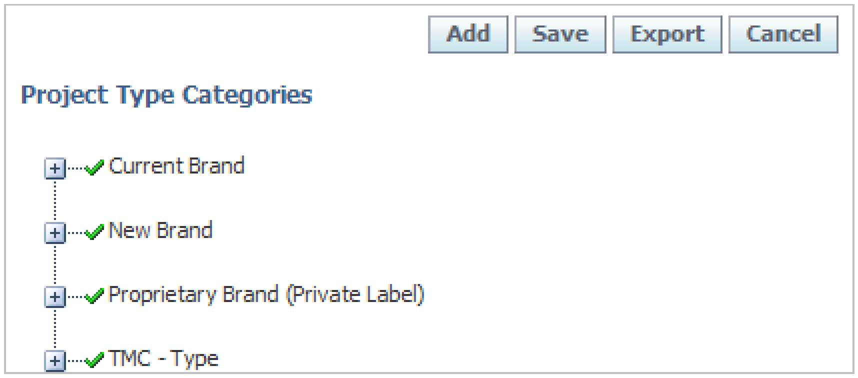
Editing Rules

For instructions on editing the Metrics - Phase list, see *Maintaining Simple Lists* on page 4-3.

Project Type Categories

Use the Project Type Categories tree list in ADMN to maintain the data, as figure 4-62 shows below.

Figure 4-62: NPD Project Type Categories list



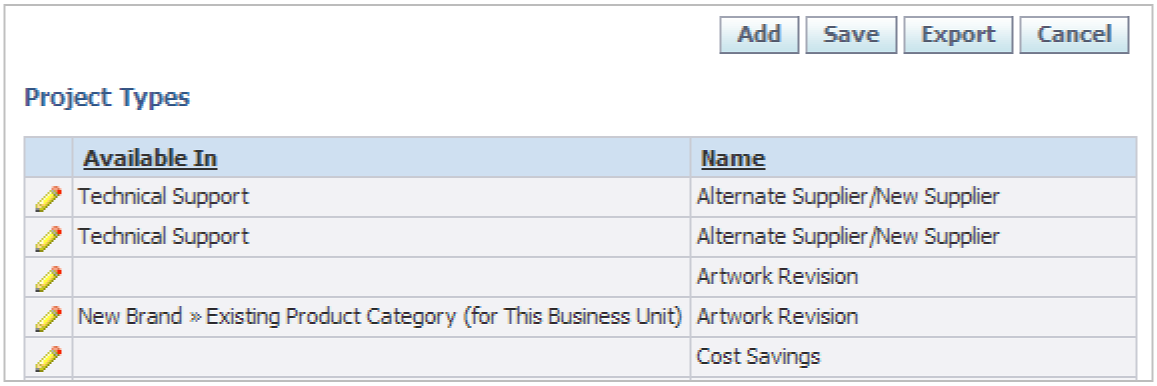
Editing Rules

For instructions on editing the Project Type Categories list, see *Maintaining Tree Lists* on page 4-7.

Project Types

Use the Project Types list in ADMN to maintain the data, as figure 4-63 shows below.

Figure 4-63: Project Types list



Key Fields

Table 4-46: NPD, Project Types key fields

Name	Description
Available In	Category that the project type will be available in
Name	Name of the project type

Editing Rules

For instructions on editing the Project Types list, see *Maintaining Simple Lists* on page 4-3.

Project Visibilities

Use the Project Visibility list in ADMN to maintain the data, as figure 4-64 shows below.

Figure 4-64: Project Visibility list


Add Save Export Cancel

Project Visibility

	Name	Status
	Alfy's Pizza	Active
	BBQ Sauce	Active
	Blue Cheese Dressing	Active
	Business Unit(s)	Active
	Cake	Active
	Canned Soup	Active
	Cheesecake	Active
	Chili Sauce	Active
	Chocolate	Active
	Club Stores	Active
	Cocktail Sauce	Active
	Continuous Value Improvement	Active
	Copack	Active
	Cost Savings	Active

Key Fields

Table 4-47: NPD, Project Visibility key fields

Name	Description
Name	Name of the project visibility
Status	The assigned status for the project visibility. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the Project Visibility list, see *Maintaining Simple Lists* on page 4-3.

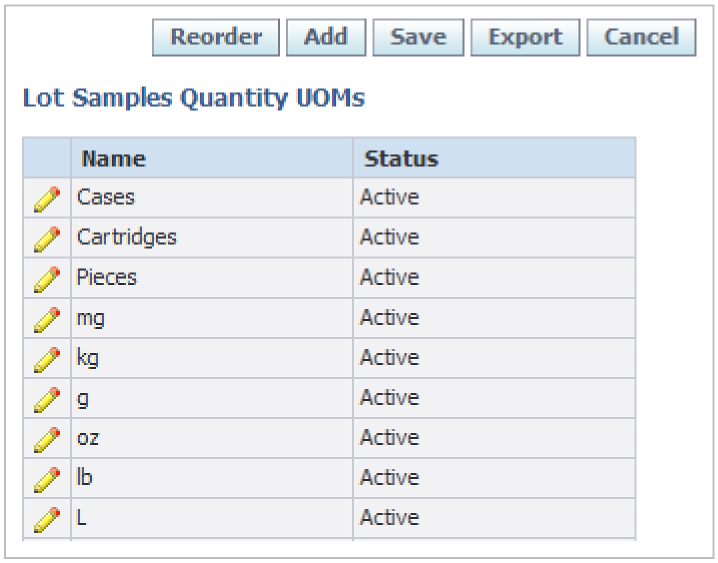
Product Quality Scorecard Data

Using the ADMN application, you can modify certain Product Quality Scorecard (PQS) data.

Lot Samples Quantity UOMs

Use the Lot Samples Quantity UOMs list in ADMN to maintain units of measure for lot sample quantities, as figure 4-65 shows below.

Figure 4-65: Lot Samples Quantity UOMs list



Key Fields

Table 4-48: PQS, Lot Samples Quantity UOMs key fields

Name	Description
Name	Name of the lot sample quantity unit of measure
Status	The assigned status for the lot sample quantity unit of measure. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the Lot Samples Quantity UOMs list, see *Maintaining Simple Lists* on page 4-3.

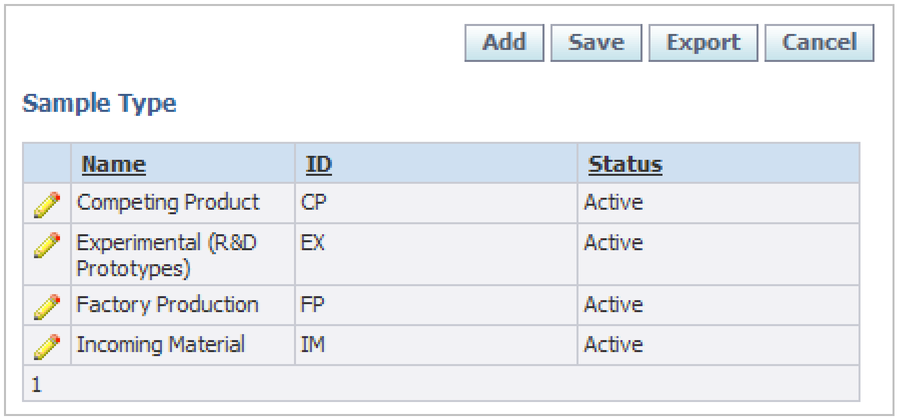
Reordering Lot Samples Quantity UOMs

Only users with the role of [SUPER_DATA_ADMIN] can reorder lot sample quantity UOMs. For instructions on setting the order, see *To reorder data in a simple list:* on page 4-5.

Sample Types

Use the Sample Type list in ADMN to maintain sample types, as figure 4-66 shows below.

Figure 4-66: Sample Type list



Key Fields

Table 4-49: PQS, Sample Type key fields

Name	Description
Name	Name of the sample type
ID	Unique identification assigned to the sample type
Status	The assigned status for the sample type. Refer to *Statuses* on page 4-3 for status descriptions.

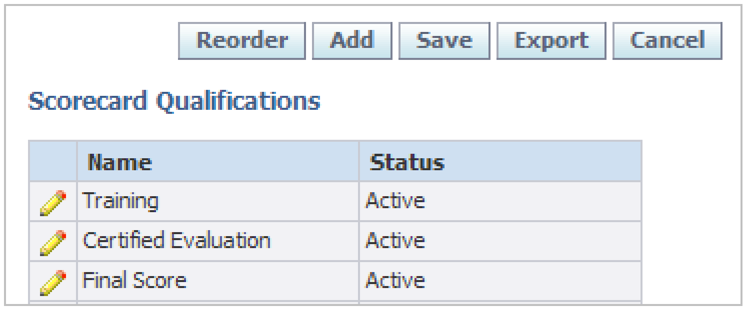
Editing Rules

For instructions on editing the Sample Type list, see *Maintaining Simple Lists* on page 4-3.

Scorecard Qualifications

Use the Scorecard Qualifications list in ADMN to maintain scorecard qualifications, as figure 4-67 shows below.

Figure 4-67: Scorecard Qualifications list



Key Fields

Table 4-50: PQS, Scorecard Qualifications key fields

Name	Description
Name	Name of the scorecard qualification
Status	The assigned status for the scorecard qualification. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

For instructions on editing the Scorecard Qualifications list, see *Maintaining Simple Lists* on page 4-3.

Reordering Scorecard Qualifications

Only users with the role of [SUPER_DATA_ADMIN] can reorder scorecard qualifications. For instructions on setting the order, see *To reorder data in a simple list:* on page 4-5.

Supply Chain Relationship Management Data

Using the ADMN application, you can modify certain Supply Chain Relationship Management (SCRM) data.

Business Units - (SCRM)

Use the Business Units - (SCRM) tree list in ADMN to maintain the data, as figure 4-68 shows below.

Figure 4-68: Business Units - (SCRM) tree list

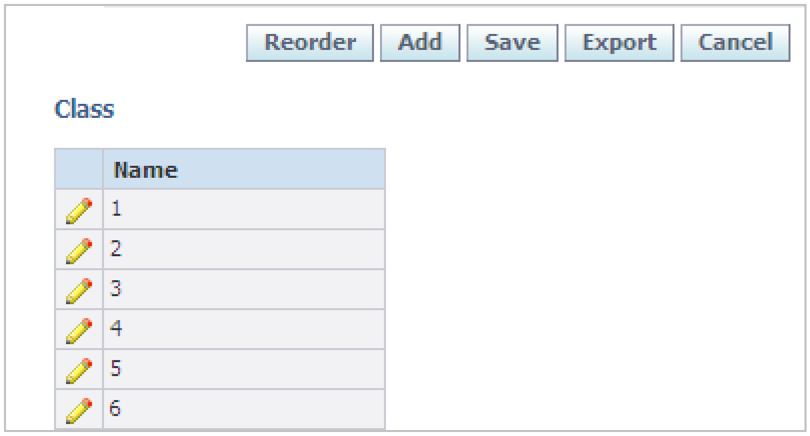
Editing Rules

Use the instructions provided for editing tree lists provided in *Maintaining Tree Lists* on page 4-7.

Class

Use the Class list in ADMN to maintain the data, as figure 4-69 shows below.

Figure 4-69: Class list



Key Field

Table 4-51: SCRM, Class key field

Name	Description
Name	Name of the class

Editing Rules

For instructions on editing the Class list, refer to *Maintaining Simple Lists* on page 4-3.

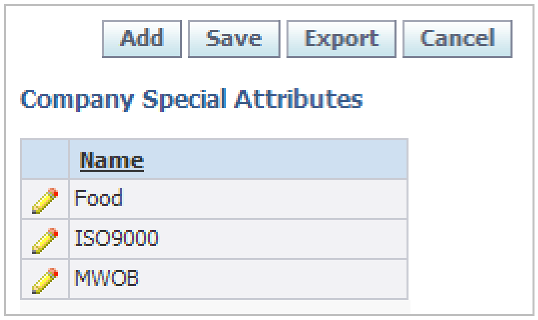
Reordering Classes

Only users with the role of [SUPER_DATA_ADMIN] can reorder classes. For instructions on setting the order, see *To reorder data in a simple list:* on page 4-5.

Company Special Attributes

Use the Company Special Attributes list in ADMN to maintain the data, as figure 4-70 shows below.

Figure 4-70: Company Special Attributes list



Key Field

Table 4-52: SCRM, Company Special Attributes key field

Name	Description
Name	Name of the special attribute for companies

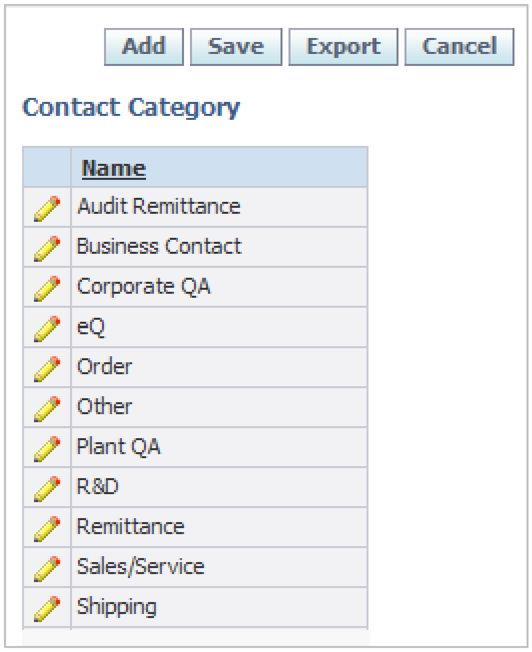
Editing Rules

For instructions on editing the Company Special Attributes list, see *Maintaining Simple Lists* on page 4-3.

Contact Category

Contact categories for company and facility profiles are maintained in the ADMN Contact Category list, as figure 4-71 shows below.

Figure 4-71: Contact Category list



Key Field

Table 4-53: SCRM, Contact Category key field

Name	Description
Name	Name of the contact category

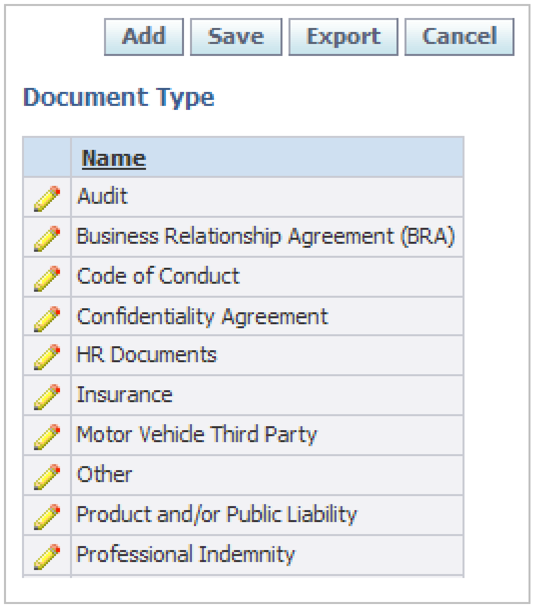
Editing Rules

For instructions on editing the Contact Category list, see *Maintaining Simple Lists* on page 4-3.

Document Type

Use the Document Type list in ADMN to maintain the data, as figure 4-72 shows below.

Figure 4-72: Document Type list



Key Field

Table 4-54: SCRM, Document Type key field

Name	Description
Name	Name of the document type

Editing Rules

For instructions on editing the Document Type list, see *Maintaining Simple Lists* on page 4-3.

Facility Special Attributes

Use the Facility Special Attributes list in ADMN to maintain the data, as figure 4-73 shows below:

Figure 4-73: Facility Special Attributes list

Key Field

Table 4-55: SCRM, Facility Special Attributes key field

Name	Description
Name	Name of the facility special attribute

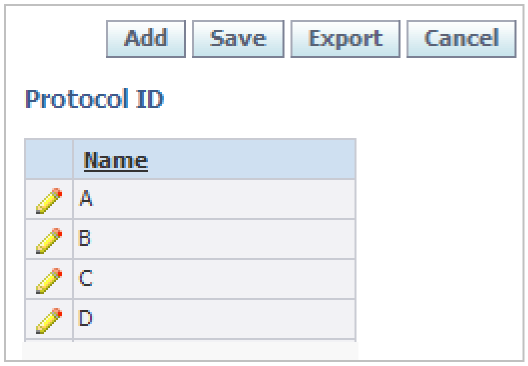
Editing Rules

For instructions on editing the Facility Special Attributes list, see *Maintaining Simple Lists* on page 4-3.

Protocol ID

Use the Protocol ID list in ADMN to maintain the data, as figure 4-74 shows below.

Figure 4-74: Protocol ID list



Key Fields

Table 4-56: SCRM, Protocol ID key field

Name	Description
Name	Name of the protocol ID

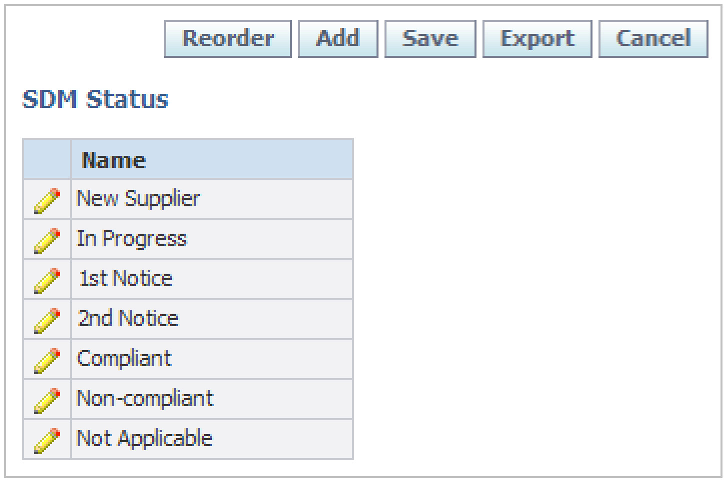
Editing Rules

For instructions on editing the Protocol ID list, see *Maintaining Simple Lists* on page 4-3.

SDM Status

Use the SDM Status list in ADMN to maintain the data, as figure 4-75 shows below.

Figure 4-75: SDM Status list



Key Field

Table 4-57: SCRM, SDM Status key field

Name	Description
Name	Name of the Supplier Document Management (SDM) status

Editing Rules

For instructions on editing the SDM Status list, see *Maintaining Simple Lists* on page 4-3.

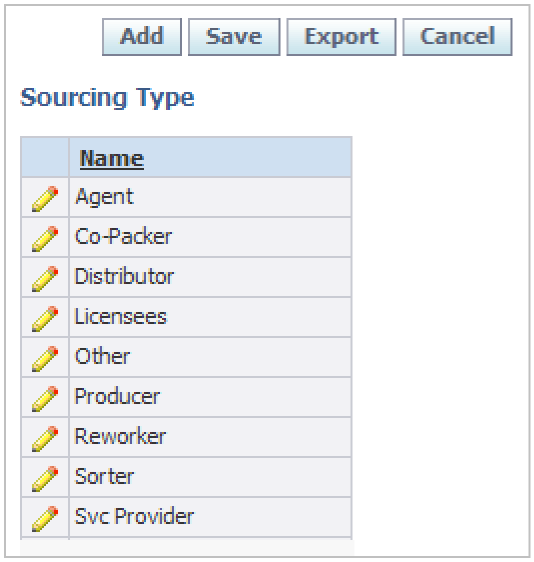
Reordering SDM Statuses

Only users with the role of [SUPER_DATA_ADMIN] can reorder SDM statuses. For instructions on setting the order, see *To reorder data in a simple list:* on page 4-5.

Sourcing Type

Use the Sourcing Type list in ADMN to maintain the data, as figure 4-76 shows below.

Figure 4-76: Sourcing Type list



Key Field

Table 4-58: SCRM, Sourcing Type key field

Name	Description
Name	Name of the sourcing type

Editing Rules

For instructions on editing the Sourcing Type list, see *Maintaining Simple Lists* on page 4-3.

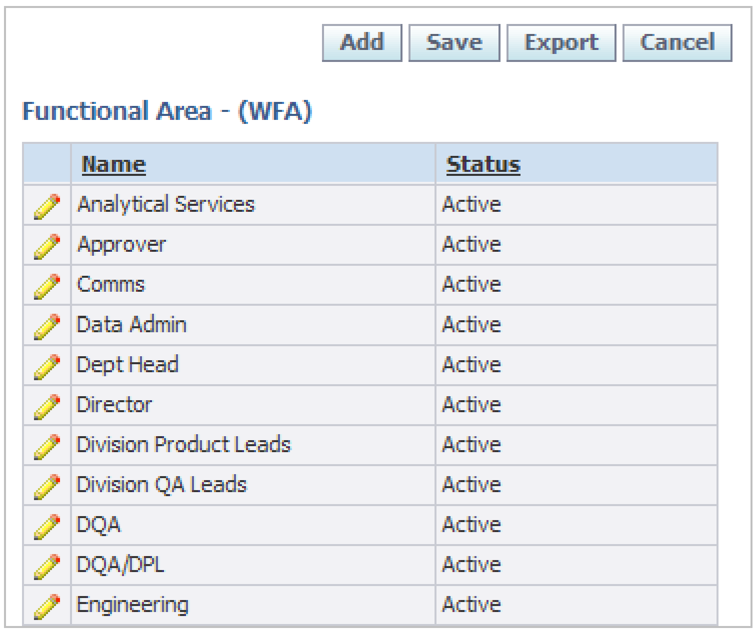
Workflow Administration Data

Using the ADMN application, you can modify Workflow Administration (WFA) functional areas and system actions.

Functional Area - (WFA)

The Functional Area - (WFA) list is used when evaluating workflow participants in WFA. Global Specification Management (GSM) and Supply Chain Relationship Management (SCRM) organize workflow participant selection by functional area. Functional areas are defined according to the needs of each customer. Functional areas may be divided according to company departments (Human Resources, Marketing, Sales, and so on). Use the Functional Area list in ADMN to maintain the data, as figure 4-77 shows below.

Figure 4-77: Functional Area - (WFA) list



Key Fields

Table 4-59: WFA, Functional Area - (WFA) key fields

Name	Description
Name	Name of the functional area in WFA
Status	The assigned status for the functional area. Refer to *Statuses* on page 4-3 for status descriptions.

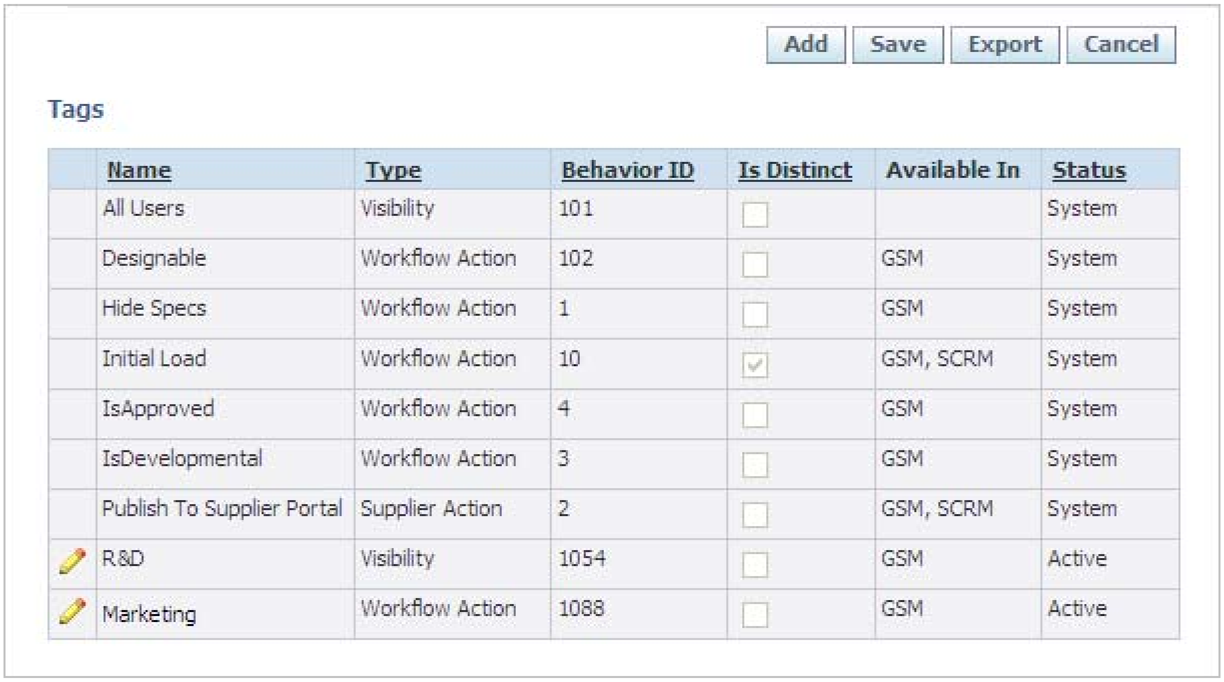
Editing Rules

For instructions on editing the Functional Area - WFA list, see *Maintaining Simple Lists* on page 4-3.

Tags

Global Specification Management (GSM) and Supply Chain Relationship Management (SCRM) workflow templates use tags as part of defining steps in workflows. Use the Tags list in ADMN to maintain the data, as figure 4-78 shows below.

Figure 4-78: Tags list



	Name	Type	Behavior ID	Is Distinct	Available In	Status
	All Users	Visibility	101			System
	Designable	Workflow Action	102		GSM	System
	Hide Specs	Workflow Action	1		GSM	System
	Initial Load	Workflow Action	10	✓	GSM, SCRM	System
	IsApproved	Workflow Action	4		GSM	System
	IsDevelopmental	Workflow Action	3		GSM	System
	Publish To Supplier Portal	Supplier Action	2		GSM, SCRM	System
	R&D	Visibility	1054		GSM	Active
	Marketing	Workflow Action	1088		GSM	Active

Key Fields

Table 4-60: WFA, Tags key fields

Name	Description
Name	Name of the tag
Type	Type of tags are as follows: **Workflow Action**—Tags in this group apply to general actions that should happen when the specification reaches a certain status. For example, Hide Specs will flag the specification as hidden so the specification will not appear in search results for all users. Other workflow actions include tags that are used by outside systems. For example, IsApproved is used signify that the specification must be in an “Approved” status to kick off integration processes. **Feature** —Tags in this group apply to specific feature behavior. For example, when the designable tag is present in a formulation specification’s workflow, certain design tools will appear within the UI. **Supplier Action**—Tags in this group apply to specific supplier related actions that should happen when the specification reaches a certain status. For example, Publish to Supplier Portal is used when the specification should be available to suppliers. **Visibility**—Tags in this group are used to specify visibility rules. Visibility tags are used to filter specifications from search results in GSM. See the WFA chapters of this guide to learn more about visibility tags. More information on specific tags can be found in the WFA chapters of this guide.
Behavior ID	The unique behavior ID that is defined by the system
IsDistinct	If a tag is flagged as Is Distinct, the tag can only be applied to one Active workflow step per WFA workflow template.
Available In	Select which WFA templates these tags should be available in. Options are GSM WFA templates and/or SCRM WFA templates. *Note*: Visibility tags are not supported in SCRM.
Status	The assigned status for the tag. Refer to *Statuses* on page 4-3 for status descriptions.

Editing Rules

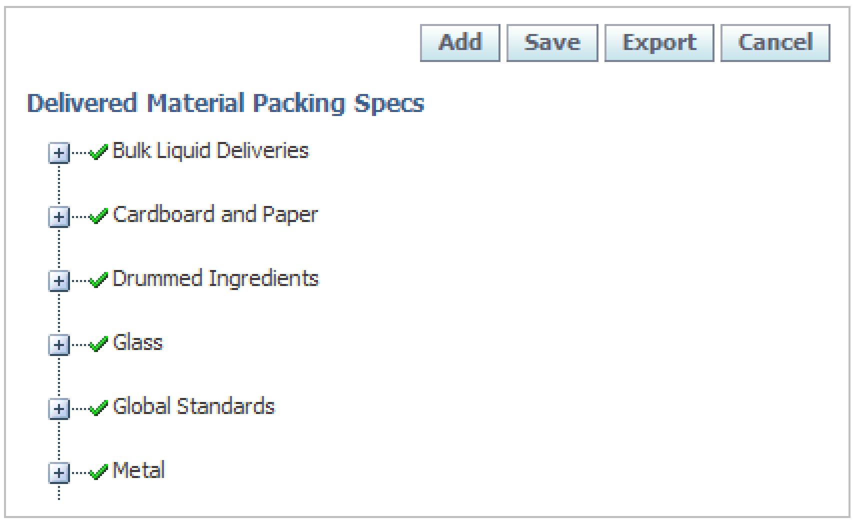
For instructions on editing the Tags list, see *Maintaining Simple Lists* on page 4-3.

Spec Category

A specification category is a hierarchy used to group Global Specification Management (GSM) specifications. To edit a specification category in ADMN, select the specification category by clicking **ADMN > Spec Category > {name of specification}** from the left navigation panel. Specification categories exist for the following specification types:

- Delivered material packing specifications
- Ingredient specifications
- Labeling specifications
- Menu item specifications
- Packing configuration specifications
- Printed packaging specifications
- Trade specifications
- Equipment specifications
- Formulation specifications
- Master specifications
- Nutrient profiles
- Packaging material specifications
- Product specifications

Figure 4-79: Selected specification category



Using the ADMN application, you can modify these specification categories, as explained in the following sections. The procedure is the same for all specification categories.

Note When the specification category is consumed in other applications, the displayed specification category is limited to 200 characters for all three levels combined.

Node Statuses

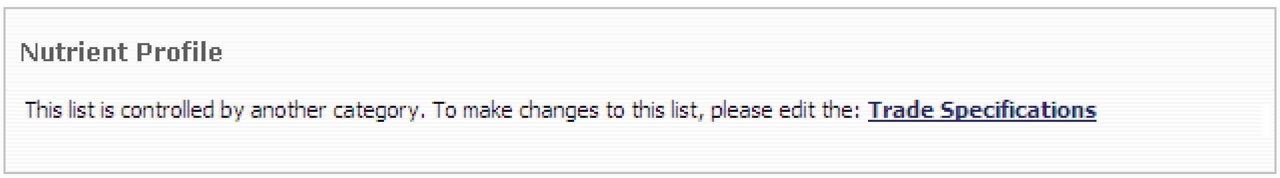
Like other tree lists, specification category nodes contain an icon indicating their status:

- ( )—Active item
- ( )—New item
- ( )—Inactive item
- ( )—Archived item

Editing Specification Categories

For information on adding and editing specification categories, see *Maintaining Tree Lists* on page 4-7. Depending on your configuration, some lists may be controlled by another specification category. These lists are called referenced lists. If you select a referenced list, Agile PLM for Process displays an information message, shown in figure 4-80 below.

Figure 4-80: Referenced list redirect message

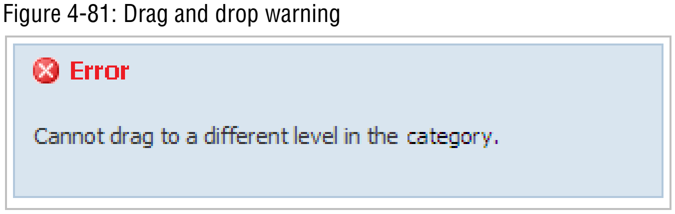


Parent-Child Relationship Guidelines

Use the following guidelines when working with specification categories:

- ❑ Relationship rules between the states of parents and children within a specification category must be respected. Once a node has been activated it must remain in the same level of the hierarchy. For example, if the node is a third level position, it can only be dragged to another third level position. If you attempt to drag an item to a location that disrupts the hierarchy, an error message displays, as figure 4-81 shows below:

  Figure 4-81: Drag and drop warning

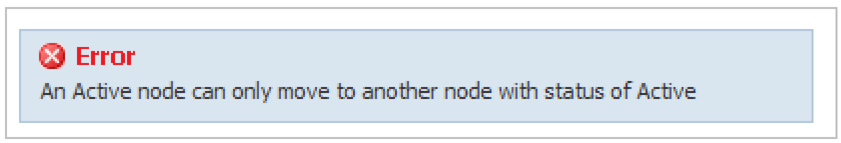
  As an administrator, you have the ability to reorganize categories and add items to categories. Users with the role [SUPER_DATA_ADMIN] can drag and drop items regardless of the item's status. Users with the role [DATA_ADMIN] can drag and drop new items only.

- A parent node in an "Inactive" or "Archived" state must have all child nodes in an "Inactive" or "Archived" state. When you inactivate or archive a node, it's child nodes will automatically be inactivated or archived as well.

Important All specification categories must have three active levels as indicated by the active node symbol ( ).

- You can move an active node only to another node with a status of "Active." If you attempt to move an active node to an inactive or archived node, the error message shown in figure 4-82 below displays.

Figure 4-82: Active node movement to non-active node warning



Activities

The import/export activities include "tokens" as a synchronization tool that allows you to import/export multiple types of data between the staging and target environments. The process is reliant on a "staging/target" relationship. There is one staging environment where data is created or changed, and one to many target environments (Production, Testing, QA).

Note The environment names and position in the process are set in the configuration files.

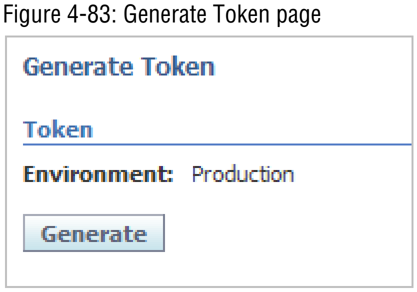
Generate Token

Token Section on page 4-88 explains how tokens are used for exporting data.

To generate a token:

1. Log in to the target environment.
2. Access the **ADMN** application in the left navigation panel.
3. Click **Activities > Generate Token** on the left navigation panel. ADMN displays the Generate Token page, as figure 4-83 shows below.

   Figure 4-83: Generate Token page

4. Click **Generate.** A File Download dialog box displays the token file name.

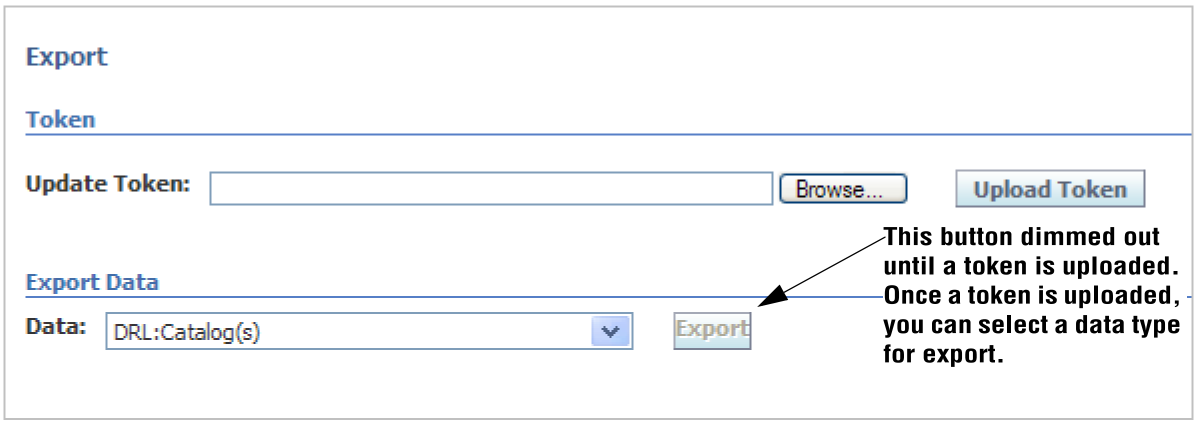
5 In the File Download dialog box, click **Save**.
6 Navigate to the local folder to store the token.
7 In the Save As dialog box, click **Save**.

Important The file extension for the token must be **.tok**

Export

You can export data from a centralized export page in the staging environment. A user can access the page by selecting **ADMN > Activities > Export** from the left navigation panel or by clicking **Export** at the top of each individual data type page. The Export page, shown in figure 4-84 below, contains fields for uploading a token from a target environment and a drop-down list to select data types.

Figure 4-84: Export page



Token Section

Tokens are generated from a target environment. If there are multiple target environments, each one must generate its own token for import. Tokens help the system decide which data to include in the export package.

Update Token—Tokens must be uploaded into the staging environment before a data type can be packaged for export. Use this field to select a token.

Note A new token should be generated when the data in your target environment has changed.

To upload a token:

1 Click **Browse**. A dialog box displays.
2 Select the token to upload.

Note The file extension for the token must be **.tok**

3 Click **Open**. The file you selected displays in the Update Token field.

4. Click **Upload Token** to upload the token. The token, once uploaded, displays the target environment name and the date that the token was generated.

Export Data Section

Select the data to package and export using this section.

Data—This drop-down list contains each export data type. Each selected data type creates an export package. The package is an encrypted file that contains the exported data.

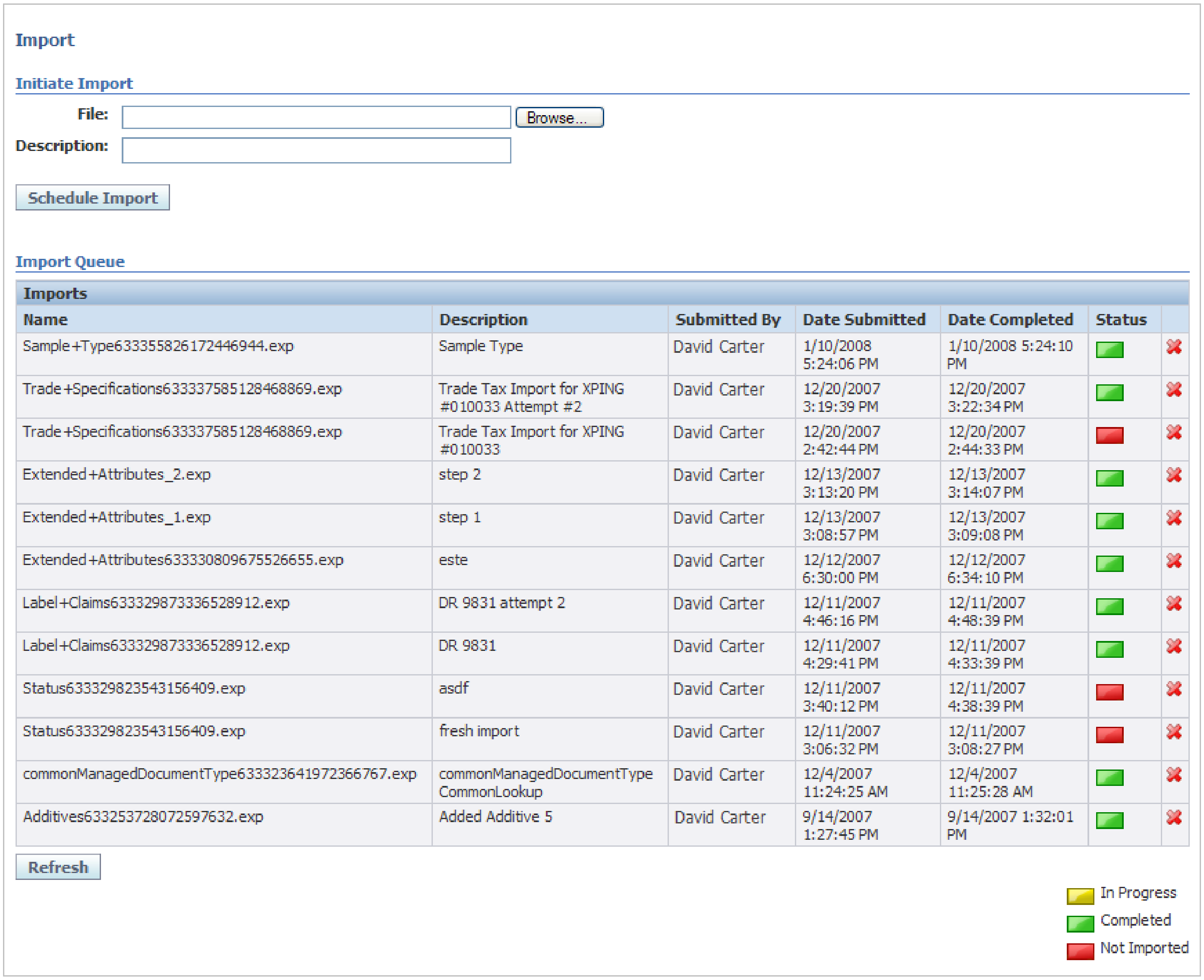
To export data from a staging environment into the target environment:

1. Log in to the staging environment and generate a token as explained in *To generate a token:* on page 4-87.
2. Log in to the staging environment.
3. Access the **ADMN** application in the left navigation panel.
4. Click **Activities > Export** in the ADMN left navigation panel. The Export page displays.
5. Click **Browse** to locate the folder that contains the token.
6. Navigate to the folder that contains the token.
7. Click **Open** and then click **Upload Token**.
8. Select the data types from the **Data** drop-down list.
9. Click **Export.** A dialog box displays with the file name of the export package.
10. In the File Download dialog box, click **Save.**
11. Navigate to a local folder to store the export packages.
12. In the Save As dialog box, click **Save.**
13. Repeat steps 5 through 12 for as many data types as needed.

Import

You import data from a centralized import page in a target environment. You can access the import page from selecting **ADMN > Activities > Import** from the left navigation panel. Figure 4-85 shows the Import page.

Figure 4-85: Import page



Name	Description	Submitted By	Date Submitted	Date Completed	Status
Sample+Type633355826172446944.exp	Sample Type	David Carter	1/10/2008 5:24:06 PM	1/10/2008 5:24:10 PM	
Trade+Specifications633337585128468869.exp	Trade Tax Import for XPING #010033 Attempt #2	David Carter	12/20/2007 3:19:39 PM	12/20/2007 3:22:34 PM	
Trade+Specifications633337585128468869.exp	Trade Tax Import for XPING #010033	David Carter	12/20/2007 2:42:44 PM	12/20/2007 2:44:33 PM	
Extended+Attributes_2.exp	step 2	David Carter	12/13/2007 3:13:20 PM	12/13/2007 3:14:07 PM	
Extended+Attributes_1.exp	step 1	David Carter	12/13/2007 3:08:57 PM	12/13/2007 3:09:08 PM	
Extended+Attributes633330809675526655.exp	este	David Carter	12/12/2007 6:30:00 PM	12/12/2007 6:34:10 PM	
Label+Claims633329873336528912.exp	DR 9831 attempt 2	David Carter	12/11/2007 4:46:16 PM	12/11/2007 4:48:39 PM	
Label+Claims633329873336528912.exp	DR 9831	David Carter	12/11/2007 4:29:41 PM	12/11/2007 4:33:39 PM	
Status633329823543156409.exp	asdf	David Carter	12/11/2007 3:40:12 PM	12/11/2007 4:38:39 PM	
Status633329823543156409.exp	fresh import	David Carter	12/11/2007 3:06:32 PM	12/11/2007 3:08:27 PM	
commonManagedDocumentType633323641972366767.exp	commonManagedDocumentType CommonLookup	David Carter	12/4/2007 11:24:25 AM	12/4/2007 11:25:28 AM	
Additives633253728072597632.exp	Added Additive 5	David Carter	9/14/2007 1:27:45 PM	9/14/2007 1:32:01 PM	

Initiate Import Section

Select and name a file to import using this section.

File—Click the **Browse** button to locate your export package.

Description—Provide a description in this text field.

Click **Schedule Import** to schedule the import. The file you selected displays in the table in the Import Queue section.

Import Queue Section

This section contains a table showing imports that are queued. The table contains the following fields:

Name—The package name

Description—The package description

Submitted By—The name of the user who submitted the package

Date Submitted—The date that the package was submitted

Date Completed—The date that the import was completed

Status—A green, amber or red status icon. The green icon indicates "Completed." The amber icon indicates "In Progress." The red icon indicates "Not Imported." "Not Imported" indicates that there was an error during import. The red status icon links to the error. Once a package is imported, the system emails the person who scheduled the import and flushes the associated cache group.

Click the delete icon ( ) to delete an import package's reference in the queue. This action does not cancel the import; it only removes the record in the queue.

To import data into your target environment:

1. Log in to your production environment.
2. Access the **ADMN** application in the left navigation panel.
3. Click **Activities > Import** in the left navigation panel.
4. Click **Browse** to locate the export package that you exported from the staging environment and select the file.
5. Click **Open**.
6. Enter a description for the export package.
7. Click **Schedule Import**. The package is added to the import queue.
8. Repeat Steps 4-7 to add more export packages to your queue.

CHAPTER 5

Using ADMN to Manage Custom Data

This chapter explains how to maintain custom data using the Manage Core Data (ADMN) application. Topics in this chapter include:

Agile Product Lifecycle Management for Process administrators use the ADMN (Manage Core Data) application to maintain data lists and extended attributes that are used across Agile PLM for Process applications. In addition to maintaining core data, you can define custom data (customer-specific data). This chapter explains how to create and maintain custom data. Chapter 4, *Using ADMN to Manage Core Data*, explains how to create and maintain core data within Agile PLM for Process.

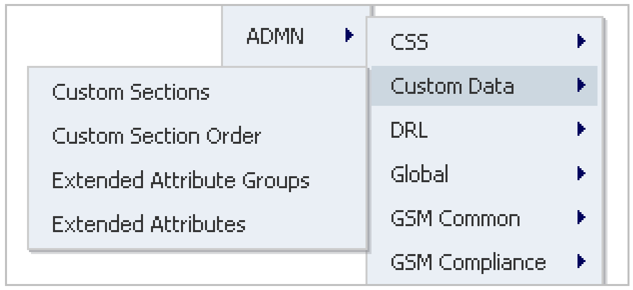
Custom Data Types

There are two types of custom data that administrators create:

- **Extended attributes**—Customer-defined and maintained fields that are available on some business objects. Customers use extended attributes to capture custom information and elements that are unique to their business. Extended attributes can capture textual, numeric, boolean, calculated, date, and range data.
- **Custom sections**—Custom sections are configurable sets of extended attributes. Custom sections allow you to organize a group of extended attributes in table format.

The **ADMN > Custom Data** submenu lists available custom data types, as figure 5-1 shows below:

Figure 5-1: Custom data menu



Statuses

Custom data contain statuses that are defined as follows:

- **New**—The data is not yet ready to become available to Agile PLM for Process applications. When an item has a status of "New," its values remain editable.
- **Active**—The data is available (searchable and available for assignment) for use in Agile PLM for Process applications.
- **Inactive**—The data should no longer be used. All existing references to this item remain. The item is no longer available for assignment but is still searchable.
- **Archive**—The item is no longer available for searching or assignment. All existing references to this item remain.

Administrative Roles

There are two user roles associated with ADMN:

[DATA_ADMIN]—Can add and edit new items, but edit rights are limited.

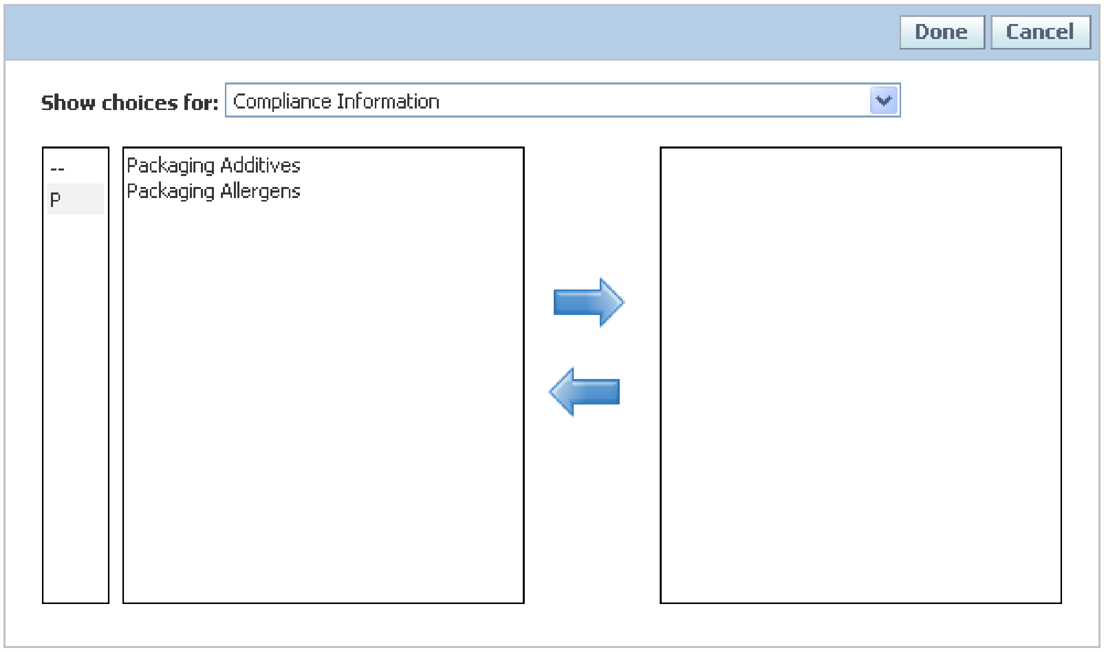
[SUPER_DATA_ADMIN]—Can edit most items regardless of the item's status.

These roles are explained more later in this chapter.

Extended Attribute Groups

Extended attribute groups are used to organize attributes. These groups can be used to filter available extended attributes during consumption. For example, when users are adding attributes in GSM they can filter the extended attributes list by group name. See figure 5-2 below showing the extended attributes dialog box in GSM filtered by the group "Compliance Information."

Figure 5-2: Extended attributes filtered by "Compliance Information" group



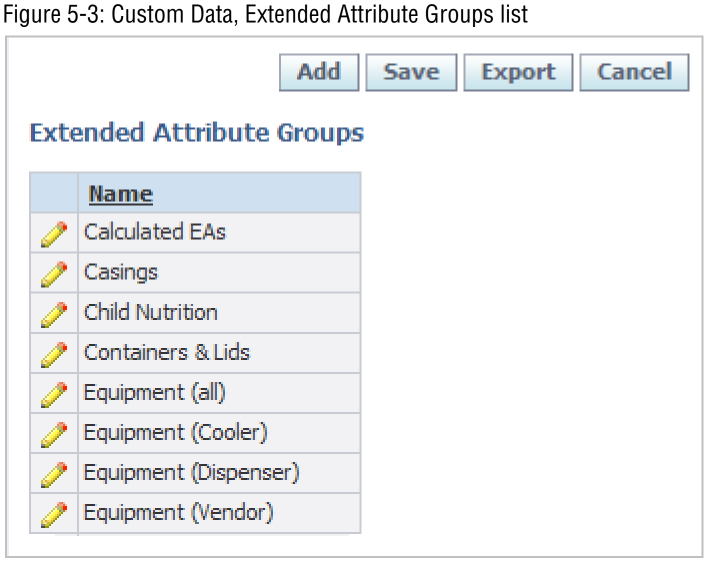
An extended attribute cannot be saved unless its been assigned to a group. If you do not have any extended attribute groups defined in Agile PLM for Process, you must create these prior to creating extended attributes.

Creating or Editing Extended Attribute Groups

To create extended attribute groups:

1. Click **ADMN** (Manage Core Data) on the left navigation panel.
2. On the left navigation panel, click **Custom Data > Extended Attribute Groups.** Extended attribute groups display in the Extended Attribute Groups list, as figure 5-3 shows below:

Figure 5-3: Custom Data, Extended Attribute Groups list



3. Optionally, choose one of the following:

- **Add a new extended attribute group**—Click **Add** in the top right corner of the page. A new row displays at the top of the Extended Attribute Groups list. Enter the new extended attribute group name in the empty text field. Click the apply changes icon ( ) to apply your change.
- **Edit an existing extended attribute group**—Click the edit icon ( ) to the left of the group name and edit the extended attribute group name in the provided text field. Click the apply changes icon ( ) to apply your change.

Note Only a user with the role [SUPER_DATA_ADMIN] can edit an existing extended attribute group. For more information on roles, see *Creating Groups* on page 2-5 and *Appendix A, List of System-Based Roles.*

4 Click **Save**.

5 Flush the administrator data cache, as described in *Using the Cache Application* on page 9-3.

Extended Attributes

You can create new extended attributes using the ADMN application. Extended attributes are found in the following objects:

GSM

- Activities
- Equipment specifications
- Formulation specifications
- Ingredient specifications
- Master specifications
- Menu item specifications
- Nutrient profiles
- Output items
- Packing configuration specifications
- Packaging material specifications
- Printed packaging specifications
- Product specifications
- Smart Issue requests
- Testing protocols
- Trade specifications

NPD—Projects

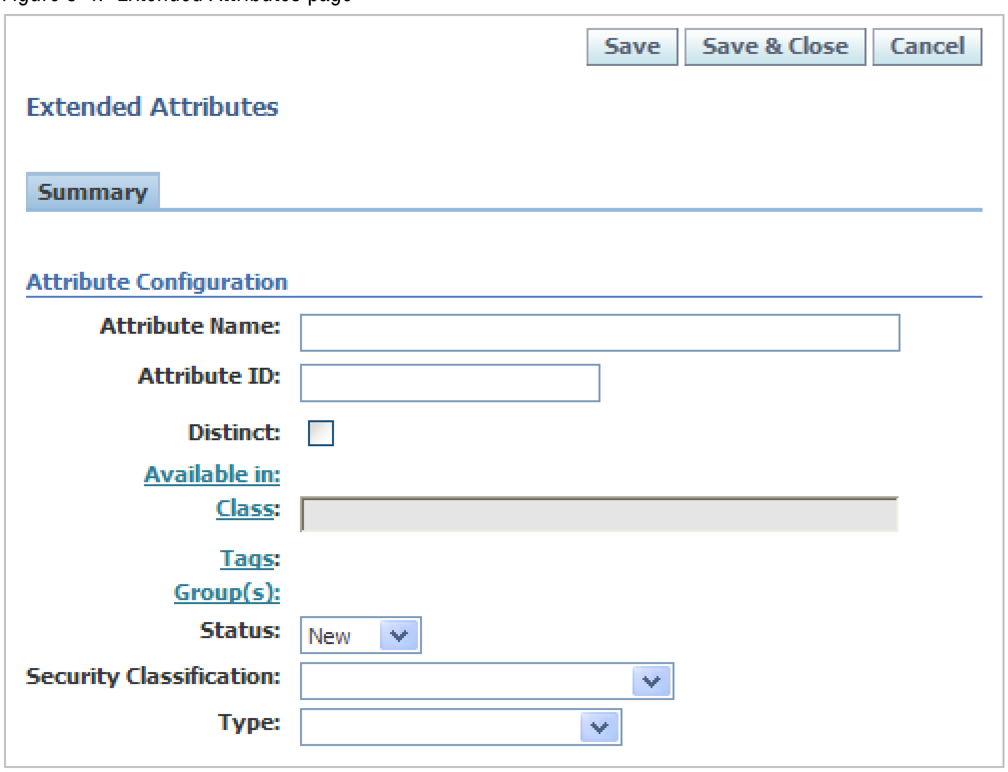
SCRM—Companies, facilities, and sourcing approvals

eQ—Ingredient, packaging, printed packaging, product questionnaires, and trade questionnaires

CSS—Publications

Figure 5-4 below shows the Extended Attributes page.

Figure 5-4: Extended Attributes page



Summary Tab

Attribute Configuration Section

Enter the following information in the Attribute Configuration section.

Attribute Name—Name for the extended attribute. This field is required. This value is a multi-lingual value. Use the set alternate language text icon ( ) to edit or add additional language values. This icon will not be visible until the attribute is saved. This will be the name displayed when the attribute is added to the extended attributes section. This name can also be used when searching for extended attributes and custom sections.

Attribute ID—A unique identifier. This is a required field. This ID is used to reference the extended attribute during calculations and integrations.

Distinct—Select to indicate that this extended attribute is intended to occur only once (a single cell instance) within a specification or profile. An attribute must be rolled up during formulation to be referenced by ID during a calculation. This flag cannot be edited once the attribute has been activated. If the attribute will accessed during reporting or integration, it is strongly recommended to make the attribute distinct. This flag will keep the attribute unique per specification and increase performance when accessing it.

Available In—Click the link to display a selection dialog box containing a list of areas where you can make the attribute available. This field is required.

Note eQuestionnaire extended attribute availability is based on the related GSM specification type. For example, when creating an ingredient questionnaire you will only be allowed to add attributes that are available in ingredient specifications.

Class—Class indicates if you plan on using the attribute in a custom section and/or the simple extended attribute list. An attribute can be made available to both. This field is required. Click the link to display a selection dialog box containing the following options:

- **Custom Sections** — Makes the attribute available for assignment to a custom section. For more information, see *Custom Sections* on page 5-22.
- **Simple** — Makes the attribute available to the extended attribute lists.

Tags—Tags allow you to apply special behaviors to your attribute. Multiple tags can be attached to an attribute. Click the link to display a selection dialog box containing the following options:

- **Bold**—Extended attribute will be bolded anywhere it appears in consumption.
- **Do Not Publish to Supplier** — Extended attribute will not be published to Supplier Portal and will be unavailable in eQuestionnaire.

- **Is Design Attribute**—Extended attribute will be automatically added to a formulation output item. This happens when the attribute is marked as distinct and present on one of the formulation inputs. This is a usability helper only, keeping the user from having to manually add attributes to the formulation output item. This tag does not control roll ups.
- **Italic**—Extended attribute will be italicized anywhere it appears in consumption.
- **Suppress Printing** — Extended attribute will not be included in the specification print out.

Groups—Click the link to display a selection dialog box containing a list of extended attribute groups, as defined in *Extended Attribute Groups* on page 5-2. Attributes can be added to multiple groups. This is a required field.

Status—Click the drop-down list to assign a status to the extended attribute with one of the following:

- **New** — The extended attribute is not yet ready to become available to Agile PLM for Process applications. When an extended attribute has a status of "new", its values remain editable.
- **Active** — The extended attribute is ready to become available for use in Agile PLM for Process applications.
- **Inactive** — The extended attribute should no longer be used. Inactive extended attributes are no longer available for assignment, however, they are not removed from existing objects that reference them. Inactive extended attributes are still available for searching.
- **Archived** — The extended attribute is not available for searching or assignment. Archived extended attributes are not removed from existing objects that reference them.

Security Classification—This field is only available if Object Level Security is enabled. A classification can be used to limit access to the extended attribute in Agile PLM for Process applications. Refer to *Implementing Security* on page 10-1 for more information.

Type

Use the **Type** field to assign a type to the extended attribute. This is a required field. The type of extended attribute decides what interface is displayed to users, For example, the "Free Text" type displays a text area to the user. The choice you make in the type field determines which additional options display under it. The type cannot be changed once the attribute is activated.

Select one of the following choices for the **Type** field. These are defined further on page 5-8 through page 5-16.

- Date
- Free Text
- Numeric
- Quantitative Range
- Quantitative Tolerance
- Qualitative
- Qualitative Lookup
- Calculated Numeric
- Boolean

Date

This type allows the user to enter a date, as figure 5-5 shows below. The user will be provided a calendar control to help select the appropriate date, as figure 5-6 shows below.

Figure 5-5: Type field, Date

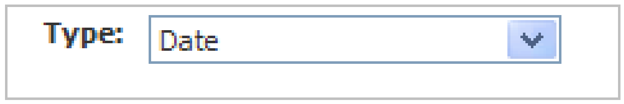


Figure 5-6: Date extended attribute

Free Text

This type allows the user to enter free text, as figure 5-7 shows below. By default this style appears as a text field. Check the **Multi-line** box to make it a multi-line text area. Figure 5-8 shows an example of what the user might see.

Figure 5-7: Type field, Free Text

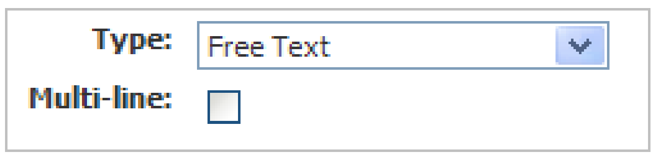
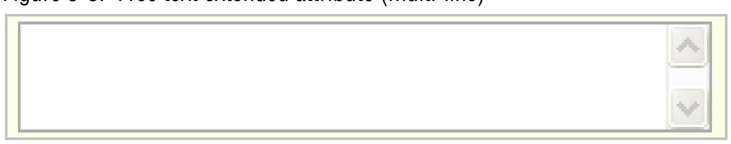


Figure 5-8: Free text extended attribute (multi-line)



Numeric

Provide a numeric field for the extended attribute, as figure 5-9 shows below.

Figure 5-9: Type field, Numeric

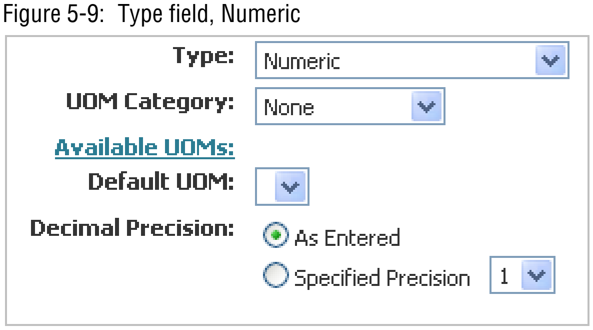
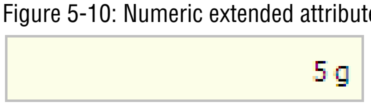


Figure 5-10 shows what this type looks like when assigned.

Figure 5-10: Numeric extended attribute



Additional options associated with this type are:

UOM Category — Select the unit of measure category that you want to include with your numeric field (for example, “Length,” “Mass,” “Time,” and “Volume”). The UOMs in the category of “Other” can be extended by editing the UOM list discussed on page 4-19. Select “None” to not display a UOM option next to the numeric field.

Available UOMs — Choose the unit of measure options that you want to be available to the user.

Default UOM — Set the unit of measure that is selected by default. Your choices are derived from your selections made in the Available UOMs field.

Decimal Precision — Set the decimal precision as follows:

- **As Entered**—The user entered value will not be altered.
- **Specified Precision**—The user entered value will be altered to match the specified number of decimal places. If the user does not include the specified number of decimals, zeros will be appended to the value. If the user exceeds the number of decimals the value will be rounded. For example, if the specified number is “1” and the user enters “1.58,” when the row is submitted the value will be altered to “1.6.”

Quantitative Range

Provide a quantitative range of fields for the extended attribute, as figure 5-11 shows below.

Figure 5-11: Type field, Quantitative Range

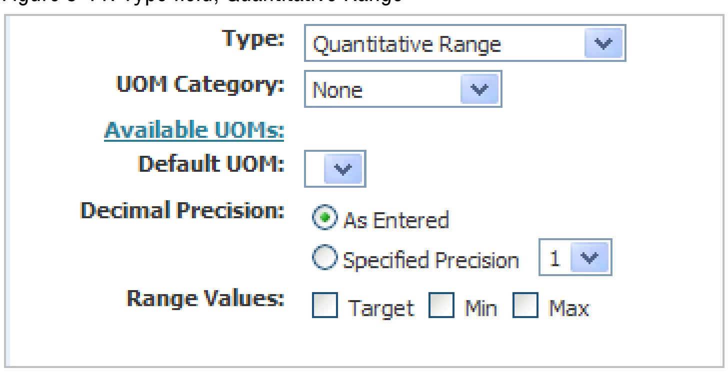
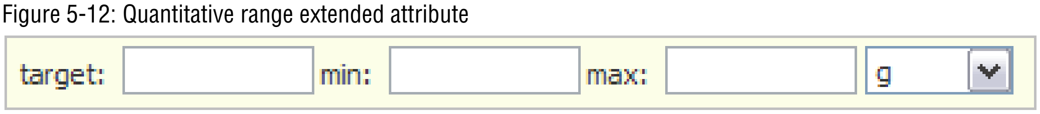


Figure 5-12 shows what this type looks like when assigned.

Figure 5-12: Quantitative range extended attribute



Additional options are:

UOM Category — Select the unit of measure category that you want to include with your numeric field (for example, “Length,” “Mass,” “Time,” and “Volume”). The UOMs in the category of “Other” can be extended by editing the UOM list discussed on page 4-19. Select “None” to not display a UOM option next to the numeric field.

Available UOMs — Choose the unit of measure options that you want to be available to the user.

Default UOM — Set the unit of measure that is selected by default. Your choices are derived from your selections made in the Available UOMs field.

Decimal Precision — Set the decimal precision as follows:

- **As Entered**—The user entered value will not be altered
- **Specified Precision**—The user entered value will be altered to match the specified number of decimal places. If the user does not include the specified number of decimals, zeros will be appended to the value. If the user exceeds the number of decimals the value will be rounded. For example, if the specified number is “1” and the user enters “1.58,” when the row is submitted the value will be altered to “1.6.”

Range Values — Check the range value of **Target**, **Min**, and/or **Max**. This selection determines which fields the user will see.

Quantitative Tolerance

Set up a quantitative tolerance extended attribute to provide tolerance fields to the user, as figure 5-13 shows below.

Figure 5-13: Type field, Quantitative Tolerance

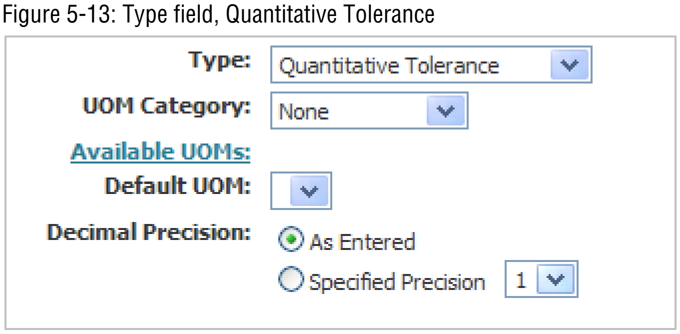
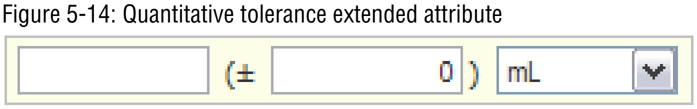


Figure 5-14 shows what this type looks like when assigned.

Figure 5-14: Quantitative tolerance extended attribute



Additional options are:

UOM Category — Select the unit of measure category that you want to include with your numeric field (for example, “Length,” “Mass,” “Time,” and “Volume”). The UOMs in the category of “Other” can be extended by editing the UOM list discussed on page 4-19. Select “None” to not display a UOM option next to the numeric field.

Available UOMs — Choose the unit of measure options that you want to be available to the user.

Default UOM — Set the unit of measure that is selected by default. Your choices are derived from your selections made in the Available UOMs field.

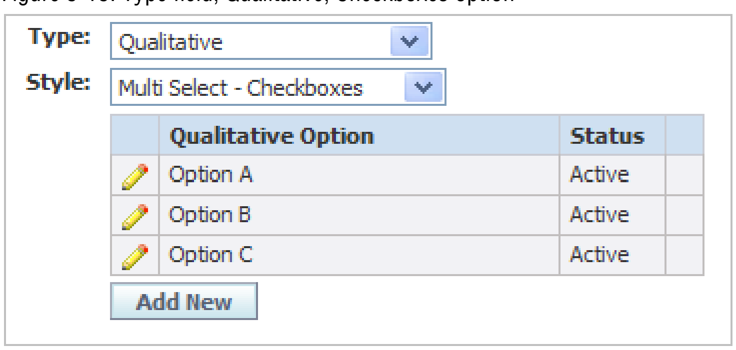
Decimal Precision — Set the decimal precision as follows:

- **As Entered**—The user entered value will not be altered.
- **Specified Precision**—The user entered value will be altered to match the specified number of decimal places. If the user does not include the specified number of decimals, zeros will be appended to the value. If the user exceeds the number of decimals the value will be rounded. For example, if the specified number is “1” and the user enters “1.58,” when the row is submitted the value will be altered to “1.6.”

Qualitative

Set up a qualitative extended attribute to display selectable options to the user, as figure 5-15 shows below.

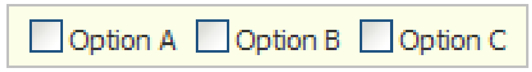
Figure 5-15: Type field, Qualitative, Checkboxes option



Style—Select the style you want to use to display your attribute options to the user. The following styles are available:

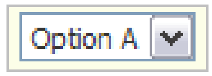
- **Multi Select - Checkboxes**—Display attribute options to the user in the form of checkboxes. This style is recommended when you have a small amount of options (1-3 items) and you want to give the user the opportunity to select multiple options. Figure 5-16 shows how the user will see this style.

Figure 5-16: Checkboxes style



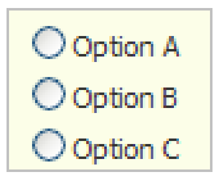
- **Single Select - Pull down**—Display attribute options to the user in the form of a pull down list. This style is recommended when you have a medium amount of options (3-25) and you want to restrict the user to a single selection. Figure 5-17 shows how the user will see this style.

Figure 5-17: Pull-down style



- **Single Select - Radio buttons**—Display attribute options to the user in the form of radio buttons. This style is recommended when you have a small amount of options (2-3 items) and you want to restrict the user to a single selection. Figure 5-18 shows how the user will see this style.

Figure 5-18: Radio buttons style



- **Multi Select - Dialog**—Display attribute options to the user in the form of a multi-select dialog box. This style is recommended when you have a large amount of options (25-100+ items) and you want to give the user the opportunity to select multiple options. The multi-select dialog will automatically sort your options alphabetically. Figure 5-19 and figure 5-20 show how the user will see this style.

Figure 5-19: Multi-select dialog style

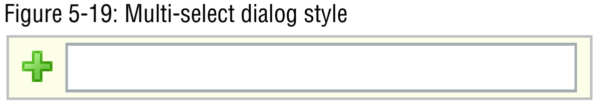
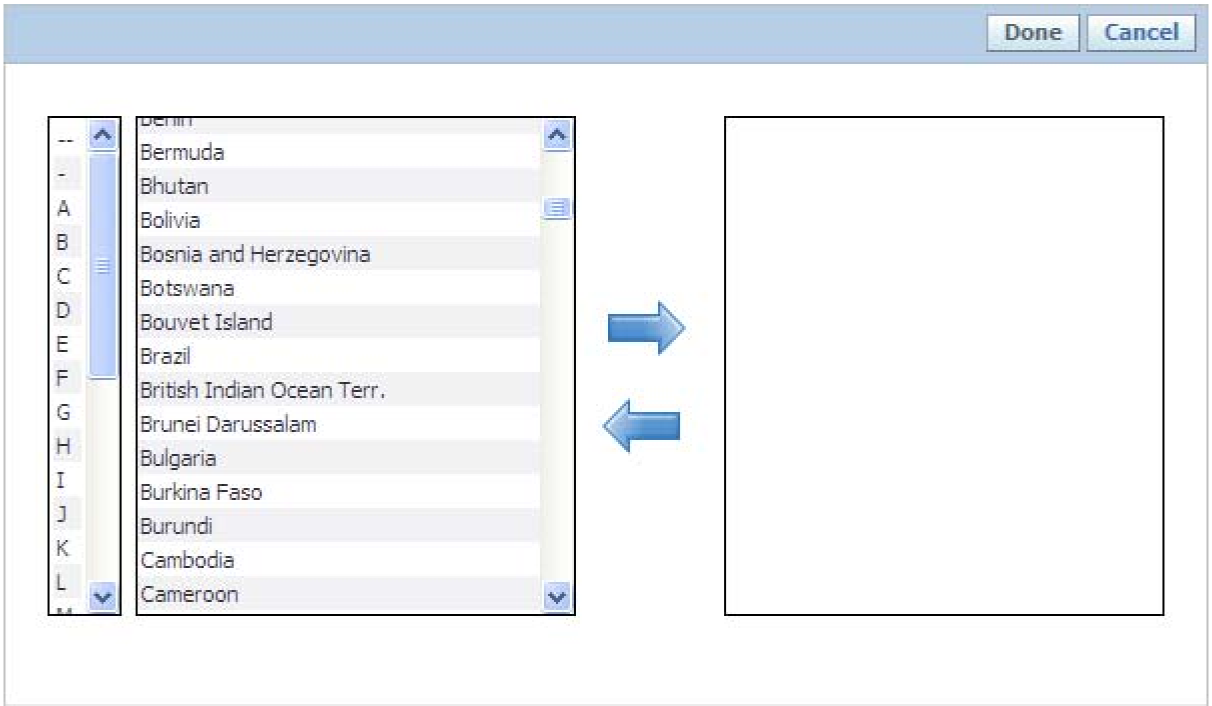


Figure 5-20: Sample multi-select dialog box



- **Single Select - Dialog**—Display attribute options to the user in the form of a single-select dialog box. This style is recommended when you have a large amount of options (25-100+ items) and you want to restrict the user to a single selection. The single-select dialog will automatically sort your options alphabetically. Figure 5-21 and figure 5-22 show how the user will see this style.

Figure 5-21: Single select dialog style

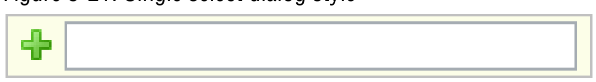
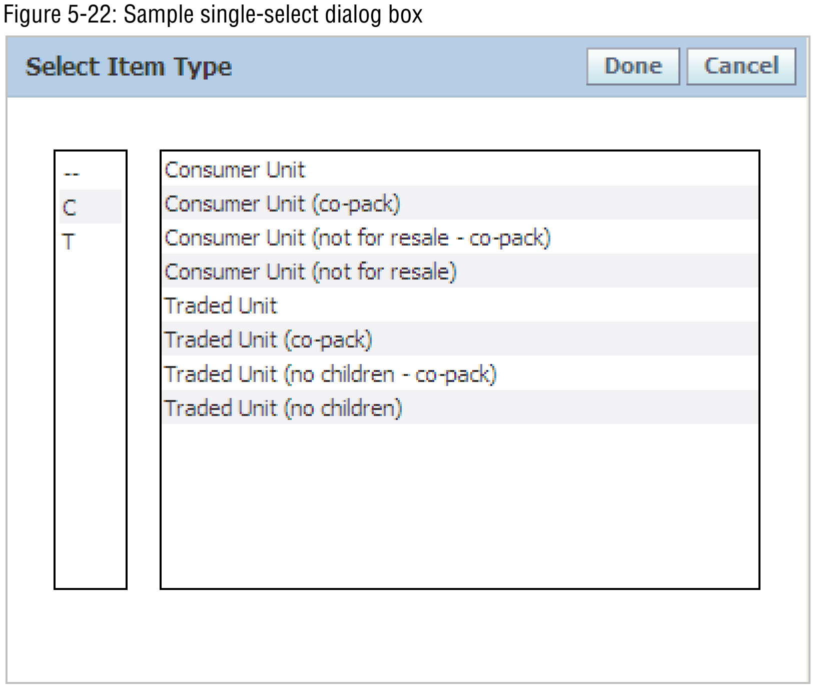


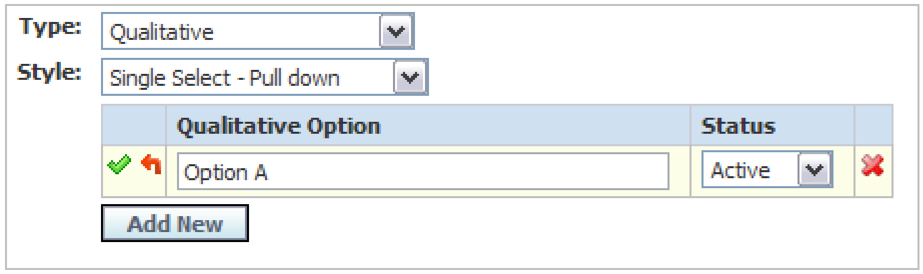
Figure 5-22: Sample single-select dialog box



To add options for the Qualitative type:

1. Select “Qualitative” from the **Type** drop-down list.
2. Select a style from the **Style** drop-down list. A table displays which you will use to define the options that will be available for the user upon consumption, as figure 5-23 shows below.

Figure 5-23: Checkboxes style, Add New

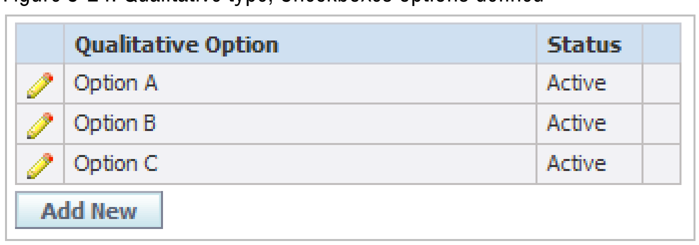


3. Click **Add New**. The first row opens in edit mode.
4. In the **Qualitative Option** field, define a value for the option.
5. In the **Status** field, select “Active.”

Important In order for the option to be available for consumption, the status must be “Active.”

6. Click the apply changes icon ( ).
7. Repeat step 3 through step 6 to add additional options. Figure 5-24 shows what a completed table may look like:

Figure 5-24: Qualitative type, Checkboxes options defined

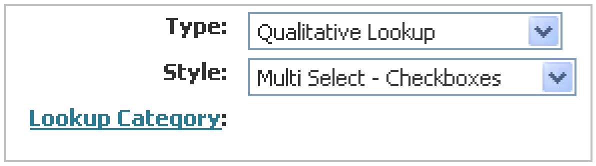


8. Click **Save**.

Qualitative Lookup

Set up a qualitative lookup extended attribute to create extended attributes that reference existing ADMN lists for core fields such as allergens, additives, or countries. Most common lookups are available. This type is also used when referencing a custom database table. Refer to *Agile Product Lifecycle Management for Process Data Administration Toolkit Guide* for instructions on creating a custom qualitative lookup. This attribute will display selectable options to the user, as figure 5-26 through figure 5-30 show below.

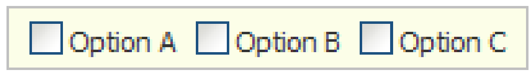
Figure 5-25: Type field, Qualitative Lookup



Style—Select the style you want to use to display your attribute options to the user. The following styles are available:

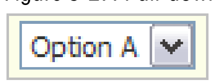
- **Multi Select - Checkboxes**—Display attribute options to the user in the form of checkboxes. This style is recommended when you have a small amount of options (1-3 items) and you want to give the user the opportunity to select multiple options. Figure 5-26 shows how the user will see this style.

  Figure 5-26: Checkboxes style

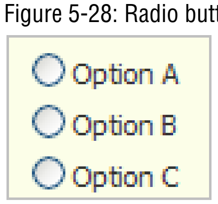
- **Single Select - Pull down**—Display attribute options to the user in the form of a pull down list. This style is recommended when you have a medium amount of options (3-25) and you want to restrict the user to a single selection. Figure 5-27 shows how the user will see this style.

  Figure 5-27: Pull-down style

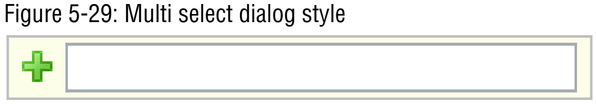
- **Single Select - Radio buttons**—Display attribute options to the user in the form of radio buttons. This style is recommended when you have a small amount of options (2-3 items) and you want to restrict the user to a single selection. Figure 5-28 shows how the user will see this style.

  Figure 5-28: Radio buttons style

- **Multi Select - Dialog**—Display attribute options to the user in the form of a multi-select dialog box. This style is recommended when you have a large amount of options (25-100+ items) and you want to give the user the opportunity to select multiple options. The multi-select dialog will automatically sort your options alphabetically. Figure 5-29 shows how the user will see this style.

  Figure 5-29: Multi select dialog style

- **Single Select - Dialog**—Display attribute options to the user in the form of a single-select dialog box. This style is recommended when you have a large amount of options (25-100+ items) and you want to restrict the user to a single selection. The single-select dialog will automatically sort your options alphabetically. Figure 5-30 shows how the user will see this style.

  Figure 5-30: Single select dialog style

After setting the qualitative lookup style, click the **Lookup Category** link to set the category for the extended attribute. This category can be an existing common lookup category (allergens, additives, etc.) or can be a configured custom table. Refer to *Agile Product Lifecycle Management for Process Data Administration Toolkit Guide* for more information on custom table implementation.

Calculated Numeric

Set up numeric extended attributes in which the values are computed using a script written in JScript, as figure 5-31 shows below. See *Calculated Attributes* on page B-1.

Figure 5-31: Type field, Calculated Numeric

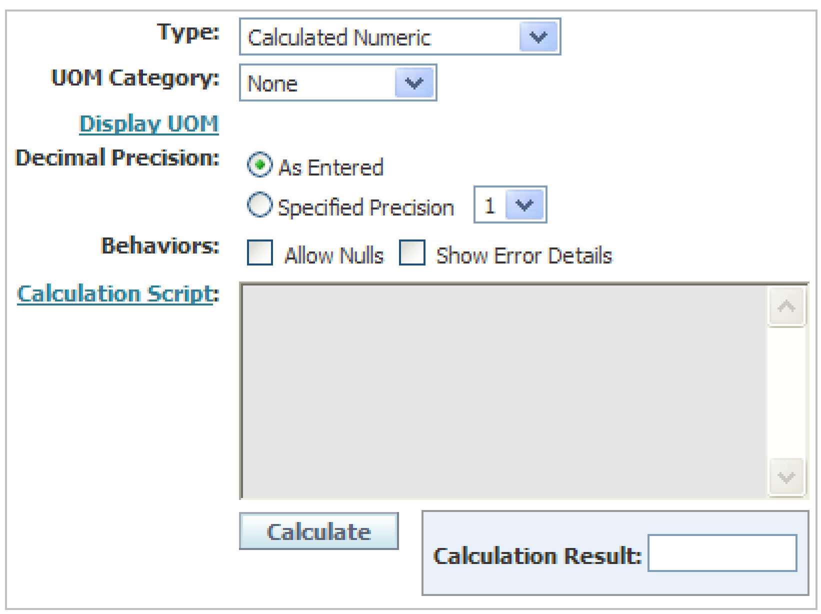
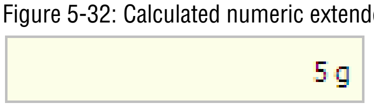


Figure 5-32 shows what this type looks like when assigned.

Figure 5-32: Calculated numeric extended attribute



Additional options are:

UOM Category — Select the unit of measure category that you want to include with your numeric field (for example, “Length,” “Mass,” “Time,” and “Volume”). The UOMs in the category of “Other” can be extended by editing the UOM list discussed on page 4-19. Select “None” to not display a UOM option next to the numeric field.

Display UOM — Choose the unit of measure you want to display with the calculated attribute.

Decimal Precision — Set the decimal precision as follows:

- **As Entered**—The calculated value will not be altered.
- **Specified Precision**—The calculated value will be altered to match the specified number of decimal places. If the calculated value does not include the specified number of decimals, zeros will be appended to the value. If the calculated value exceeds the number of decimals the value will be rounded. For example, if the specified number is “1” and the user enters “1.58,” when the row is submitted the value will be altered to “1.6.”

Behaviors — Check the **Allow Nulls** box to calculate even when there is no user entered value for the referenced items.

When a calculation is performed and the system cannot find a referenced item or an error occurs ,the warning icon ( ) will appear next to the attribute. Check the **Show Error Details** box when the calculation is not sensitive information. When **Show Error Details** is selected, the end user will be able to click the warning icon ( ) and see calculation error details. These details could include formulation details, referenced variable names, etc.

Note Warnings can be turned off using methods during your calculation. For more information, refer to the “Controlling Calculation Warnings” section of *Appendix B, Calculated Attributes.*

Calculation Script — Click the **Calculation Script** link to display the calculation dialog box for entering a calculation script. See *Calculated Attributes* on page B-1 for help in writing calculation scripts.

Boolean

Set up Boolean extended attributes in which users will be provided a True/False drop-down.

Figure 5-33: Type field, Boolean

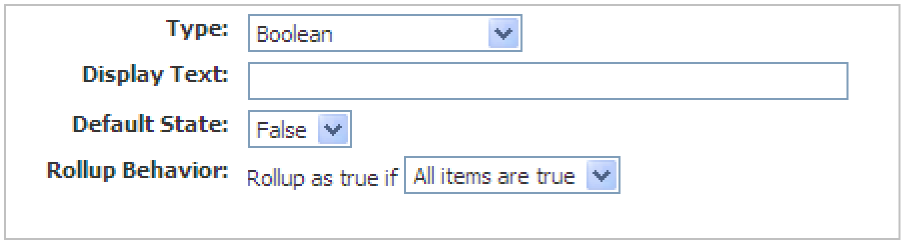
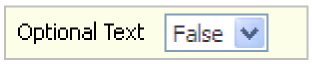


Figure 5-34 shows what this type looks like assigned.

Figure 5-34: Boolean extended attribute



Additional options associated with this type are:

Display Text—Enter text to show before the drop-down. This field is optional.

Default State—Select the default state. Options are blank, 'True,' and 'False.'

Rollup Behavior—When Boolean attributes are set as distinct and included on formulation inputs, they can be rolled up. Define rollup behavior by selecting an option from the following drop-down list:

Rollup as true if the following condition is true:

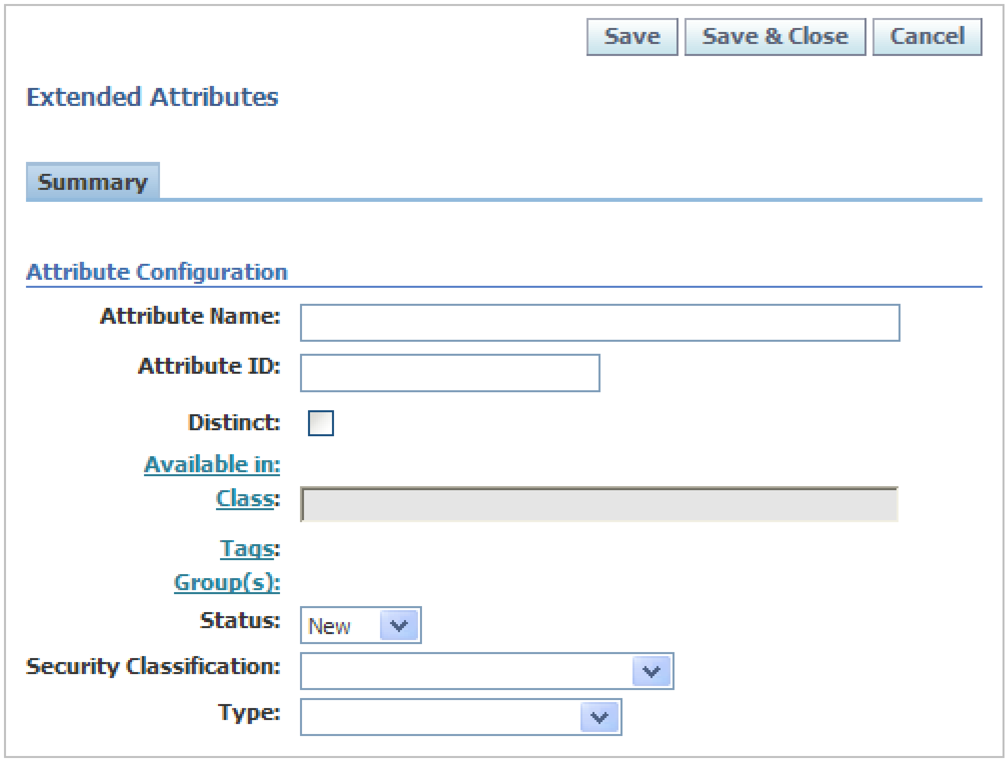
- **All items are true**—This option will set the rolled up boolean extended attribute value to "True" if all attributes on the formulation input materials are set to "True." If any of the attributes are set to "False" the boolean will rollup as "False."
- **One item is true**—This option will set the rolled up boolean extended attribute value to "True" if one or more attributes on the formulation input materials are set to "True." If this condition is not "True," the boolean will rollup as "False."

Creating an Extended Attribute

To create an extended attribute:

1. On the left navigation panel click **ADMN > Custom Data > Extended Attributes.** ADMN displays the Extended Attributes search page.
2. Click **Create New**. The Extended Attributes page displays an Attribute Configuration section with empty fields, as shown in figure 5-35.

Figure 5-35: Extended Attributes page



3. Enter extended attribute information, as described in *Summary Tab* on page 5-6 and *Type* on page 5-7.
4. Click **Save & Close**.
5. To make the attribute available, flush the extended attributes / custom sections cache, as described in *Using the Cache Application* on page 9-3.

Editing an Extended Attribute

To edit an extended attribute:

1. On the left navigation panel click **ADMN > Custom Data > Extended Attributes.** ADMN displays the Extended Attributes search page.
2. Using the search feature, search for and select the extended attribute to edit. (For instructions on the search feature, see *Searching for Extended Attributes* on page 5-20.) The Extended Attributes page displays.
3. At the upper right corner of the page, click **Edit**. The Extended Attributes page reloads. Depending on your role and the attribute's status, the screen displays several fields in edit mode.

4 Edit extended attribute information in the Summary tab, as described in *Summary Tab* on page 5-6 and *Type* on page 5-7.
5 Click **Save & Close**.
6 To make your edits available, flush the extended attributes/custom sections cache, as described in *Using the Cache Application* on page 9-3.

Searching for Extended Attributes

To search for extended attributes:

1 On the left navigation panel click **ADMN > Custom Data > Extended Attributes.** ADMN displays the Extended Attributes search page.
2 Enter search criteria for extended attributes:
   a In the key field drop-down list, select your search criteria as follows:
      - **--** — Searches for all extended attributes
      - **Attribute ID**—Searches for extended attributes by unique identifier
      - **Attribute Name**—Searches for extended attributes by name
      - **Available In**—Searches for extended attributes according to the specification, company/facility profile, publication, testing protocol, NPD project, or sourcing approval in which it is used
      - **Class**—Searches for extended attributes by class
      - **Group**—Searches for extended attribute by extended attribute group
      - **Security Classification**—Searches for extended attribute by security classification.
      - **Status**—Searches for extended attribute by status
   b In the operator drop-down list, your options will be determined by the choice you made in the first drop-down list. Choices may include:
      - **Null** {empty field}—Searches for all extended attributes
      - **Contains**—Used for character searches, alphabetical, or numerical (for example, “Description Contains Admin” will produce only extended attributes with descriptions that contain the word “Admin”).
      - **Equals**—Used to quantify search criteria entered in the field to the right (for example, “Attribute Name Equals Allergy” will produce only extended attributes with the name of Allergy).
      - **Starts With**—Searches for extended attributes that start with the character(s) you specify
      - **Contains All**—Searches for extended attributes that contain all of the values you specify This options is used for character searches, alphabetical, or numerical (for example, “Attribute Name Contains Color Coding” will produce only extended attributes with names that contain the words “Color Coding”).
      - **Contains One**—Used for character searches, alphabetical, or numerical (for example, “Attribute ID Contains 123456” will produce only the extended attribute containing the ID “123456 ”).

c. Use the empty search criteria field to the right of the operator drop-down list to qualify the selections you made above. For example, if you are searching by “Available In - Contains All,” you will choose the specification type, such as “Equipment Specifications.” All extended attributes with an available in value of “Equipment Attribute” will be provided in the search results. You can also enter the percent (%) sign to perform a wildcard search matching any one character.

3. Click **Search**. The Search Results table displays extended attributes matching the search criteria.

> **Note** Click any column head to sort rows by that column head. Click again to reverse the order of the sort.

For guidance on saving and loading searches, see *Saving and Loading Searches* on page 2-4 and *More Search Options* on page 2-4. For guidance on exporting search results, see *Exporting Search Results* on page 2-5.

Custom Sections

Custom sections are essentially configurable sets of extended attributes. Custom sections are found in the following objects:

GSM

- Activities
- Equipment specifications
- Ingredient specifications
- Formulation specification
- Master specifications
- Menu item specifications
- Nutrient profiles
- Output items
- Packing configuration specifications
- Packaging material specifications
- Printed packaging specifications
- Product specifications
- Smart Issue requests
- Trade specifications

SCRM—Companies, facilities, and sourcing approvals

eQ—Ingredient, packaging, printed packaging, product, and trade questionnaires

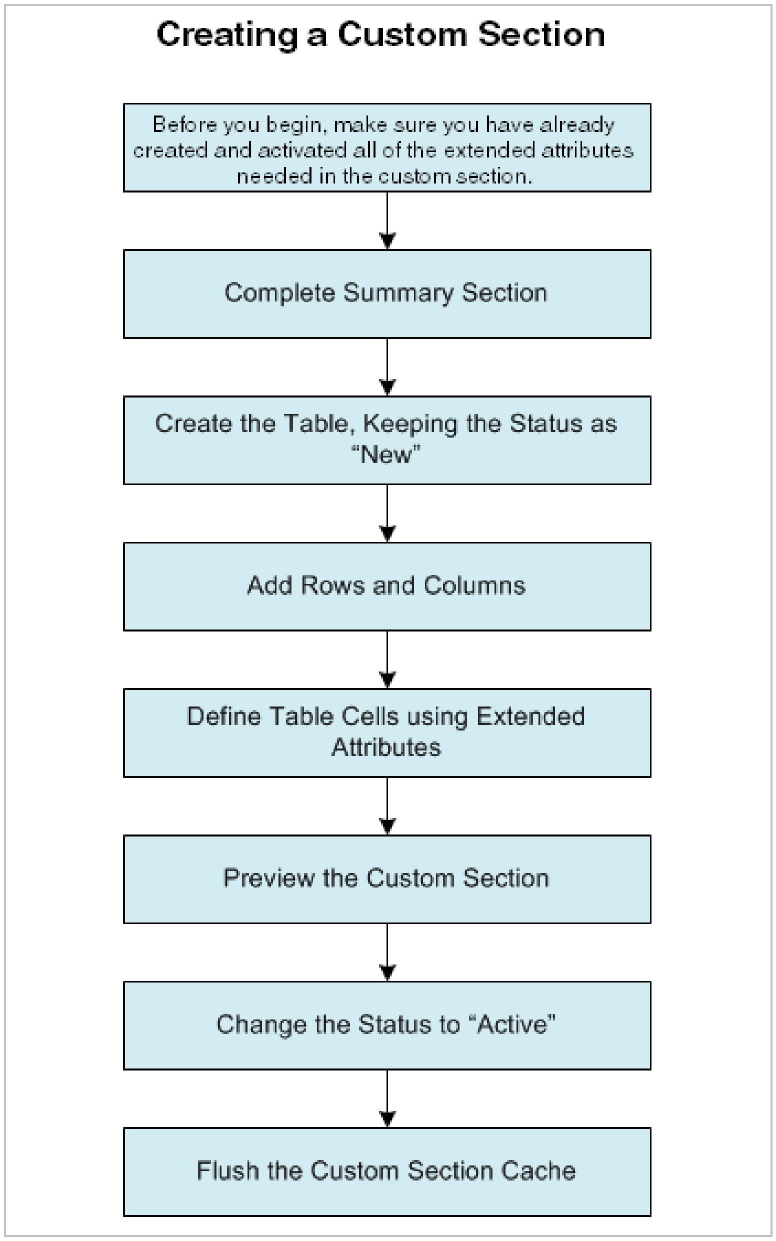
The following table is an example of the type of data that can be built as a custom section using extended attributes:

Table 5-1: Data to be built as a custom section table using extended attributes

	Amount	Soy Hydration Factor
Min Soy Protein Isolate	Numeric UOM% Extended Attribute	Numeric No UOM Extended Attribute
Min Soy Protein Concentrate	Numeric UOM% Extended Attribute	Numeric No UOM Extended Attribute

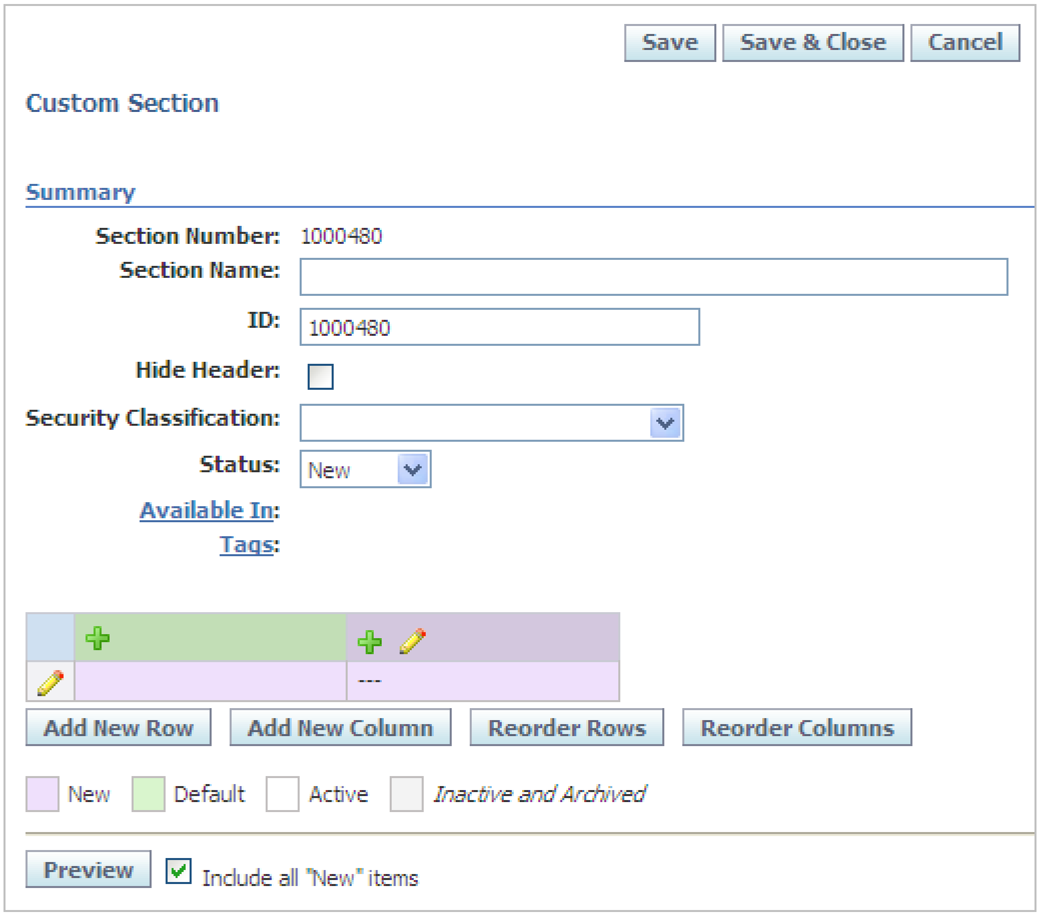
Figure 5-36 below shows the steps required to build a custom section.

Figure 5-36: Steps for creating a custom section



Use the Custom Section page to build custom sections, as shown in figure 5-37 below.

Figure 5-37: Custom Section page



Summary Section

The Summary section contains the following fields.

Section Number—A unique identifier. This field is defined by the system.

Section Name—The name of the custom section. This field is required. This value is a multi-lingual value. Use the set alternate language text icon ( ) to edit or add additional language values. This icon will not be visible until the attribute is saved.

ID—A user-defined unique identifier. This field is required. This field is populated by the system but can be changed. This ID can be used during integration and reporting.

Hide Header—Indicates whether the header is displayed with the table. This option allows you to group two or more sections underneath one header. Use the order feature to set positions as described in *Custom Section Order* on page 5-40.

Security Classification—This field is only available if Object Level Security is enabled. A classification can be used to limit access to the custom section in Agile PLM for Process applications. For more information on Object Level Security, see *Implementing Security* on page 10-1.

Status—Click the drop-down list to assign a status to the custom section with one of the following:

- **New** — The custom section is not yet ready to become available to Agile PLM for Process applications. When an custom section has a status of “New”, its values remains editable.
- **Active** — The custom section is ready to become available for use in Agile PLM for Process applications.
- **Inactive** — The custom section should no longer be used. Inactive custom sections are no longer available for assignment, however, they are not removed from existing objects that reference them. Inactive custom sections are still available for searching.
- **Archived** — The custom section is not available for searching or assignment. Archived custom sections are not removed from existing objects that reference them.

Available In—Click the link to display a selection dialog box containing a list of areas where you can make the custom section available. This field is required.

Note eQuestionnaire extended attribute availability is based on the related GSM specification type. For example, when creating an ingredient questionnaire you will only be allowed to add attributes that are available in ingredient specifications.

Tags—Tags allow you to apply special behaviors to your custom section. Multiple tags can be attached. Click the link to display a selection dialog box containing the following options:

- **Do Not Publish to Supplier** — Custom section will not be published to Supplier Portal and will be unavailable in eQuestionnaire.
- **Insert Page Break - Above**—Adds a page break above the custom section when printing.
- **Insert Page Break - Below**—Adds a page break below the custom section when printing.
- **Landscape Printing** — Sets the custom section to print in landscape mode. This tag is recommended when the custom section table is wider than portrait printing will allow.
- **Suppress Printing** — The custom section will not be printable.

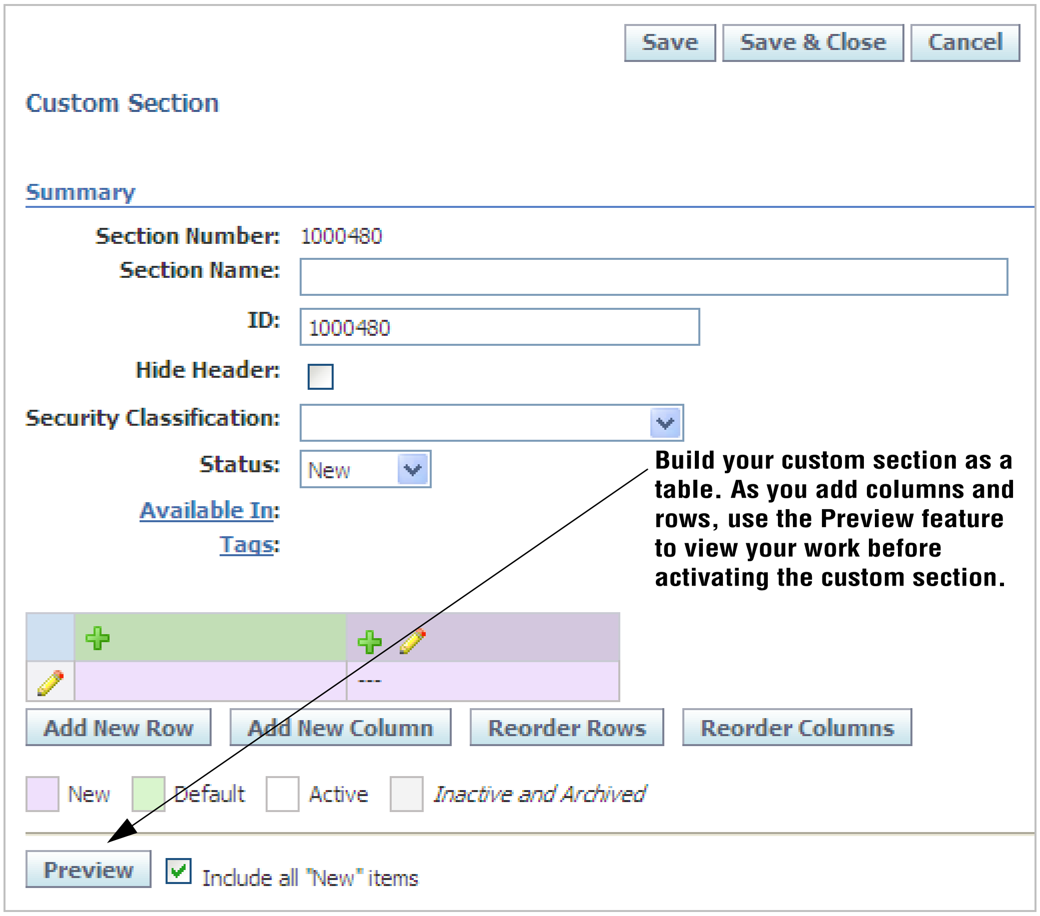
Creating a Custom Section

To create a custom section:

1. On the left navigation panel click **ADMN > Custom Data > Custom Sections.** ADMN displays the Custom Sections search page.
2. Click **Create New**. ADMN displays the Custom Section page, shown in figure 5-38 below.

Note You can preview custom sections as you are building them by using the Preview feature. See *Previewing a Custom Section* on page 5-35 for instructions.

Figure 5-38: New custom section



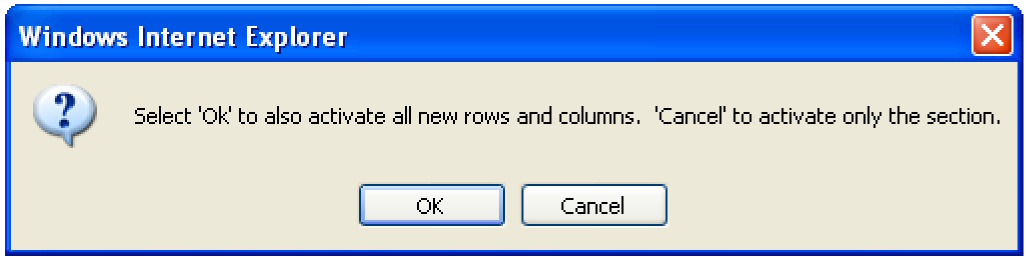
3 Define the **Section Name**, **ID**, **Security Classification**, **Available In**, and **Tags** fields in the Summary Section, as described beginning on page 5-24.

4 Create the custom section table as described in *Creating a Table* on page 5-27. Keep all table items (rows and columns) in the status of "New" while creating your table. All items can be activated at once when you activate the entire custom section.

5 Preview your table to make sure it is built correctly as described in *Previewing a Custom Section* on page 5-35.

6 In the Summary area, select "Active" in the **Status** field drop-down list. ADMN displays the following dialog box asking if you want to activate all items (rows and columns.)

Figure 5-39: Activate all new rows and columns dialog box



7 Click **OK**.

8 Click **Save & Close**.

9 Flush the extended attributes/custom sections cache, as described in *Using the Cache Application* on page 9-3.

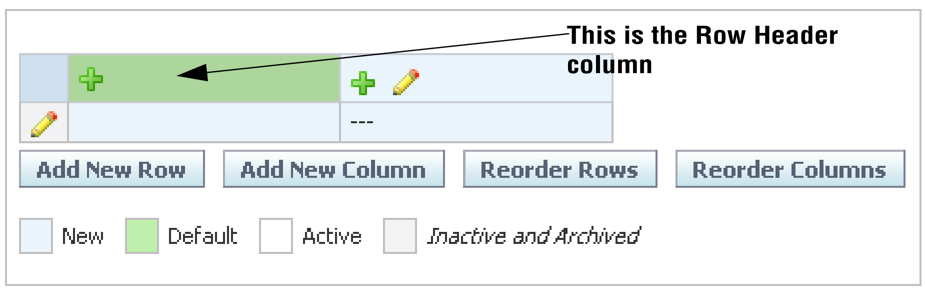
Creating a Table

As you create a table for your custom section, be sure to keep items in "New" status until you are ready to activate the entire section. Use the Preview feature as described on page 5-35 to check that all headings, columns, and rows are arranged as you would like. Activate the section only when the table is ready for use in Agile PLM for Process applications.

To create a table:

1 Define the column row header and add additional columns as described in *Creating Columns* on page 5-27.

Figure 5-40: Custom section table



2 Add additional rows as needed as described in *Creating Rows* on page 5-30.

3 Click **Save**.

Creating Columns

You can add as many columns as you need in a custom section table by clicking **Add New Column** and defining the column values. Two columns are provided by default. The first (left-most) column is the Row Header column, as shown in figure 5-40 above.

Defining the Column Header

To define the first (leftmost) row header column:

1 Click the leftmost add data icon ( ), shown in figure 5-41, to display a Column Header Information dialog box, shown in figure 5-42.

Figure 5-41: Row header

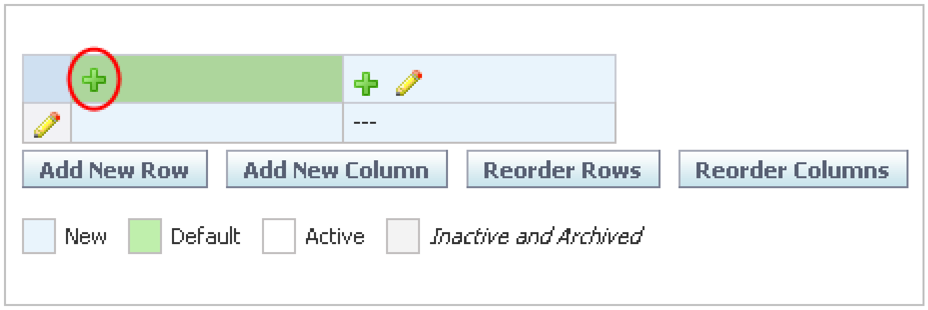
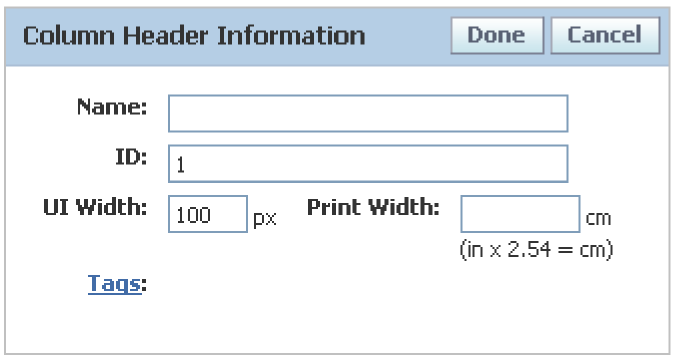


Figure 5-42: Column Header Information dialog box



2 Enter the **Name** of the column. The first column in a custom section can remain un-named.

3 Enter the unique **ID** of the column.

4 Enter the display width of the column in the **UI Width** field. This is the width of the column in the user interface.

5 Enter the print width of the column in the **Print Width** field. This is the width of the column when the custom section is printed. If a print width is not provided, the printed custom section will be unreadable.

6 Click the **Tags** link to select the tags (if any) to assign to this column. Tags allow you to apply special behaviors to your column. Multiple tags can be attached. Click the link to display a selection dialog box containing the following options:

- **Do Not Publish to Supplier** — This column will not be published to Supplier Portal and will be unavailable in eQuestionnaire.
- **Suppress Printing** — This column will not be included when printing the custom section.

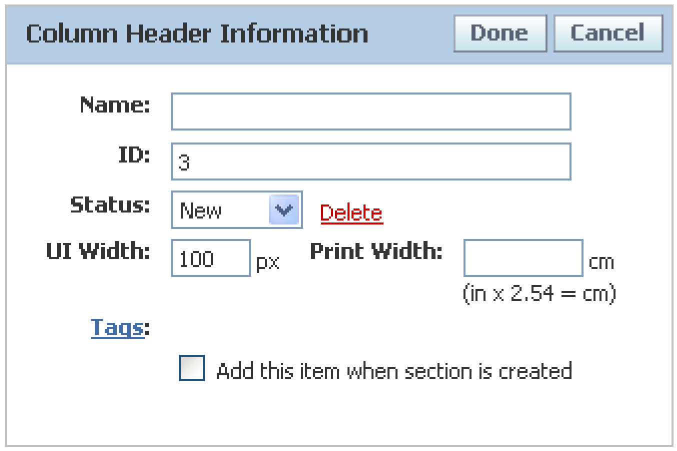
7 Click **Done** to confirm your choices.

Defining Additional Columns

To define additional columns:

1 Click **Add New Column** to add an additional column to the table. The Column Header Information dialog box is displayed, as figure 5-43 shows below. If you are defining a column that already exists, click the add data icon ( ) to display the Column Header Information dialog box.

Figure 5-43: Column Header Information dialog box



2 Enter the **Name** of the column.

3 Enter the unique **ID** of the column. This field is automatically numbered by the system but can be modified. This field has to be unique within the custom section set of columns. This ID can be used when using cell location awareness in calculated extended attributes.

4 Set the column **Status** by selecting a status from the drop-down list. Keep the status of the column set to "New" until your entire section and/or column is ready to be activated.

5 Enter the display width of the column in the **UI Width** field. This is the width of the column in the user interface.

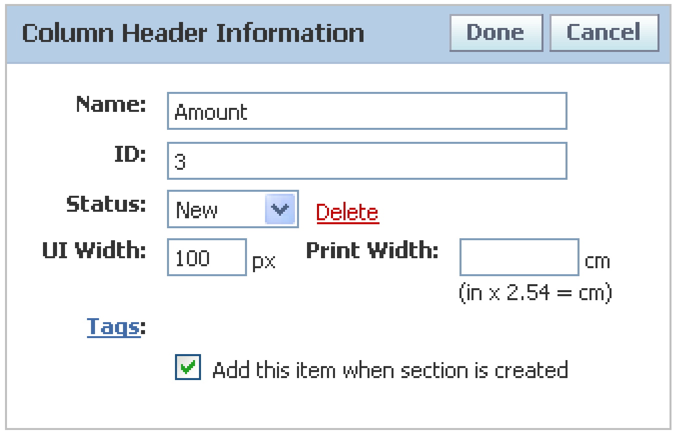
6 Enter the print width of the column in the **Print Width** field. This is the width of the column when the custom section is printed. If a print width is not provided, the printed custom section will be unreadable.

7 Click the **Tags** link to select the tags (if any) to assign to this column. Tags allow you to apply special behaviors to your column. Multiple tags can be attached. Click the link to display a selection dialog box containing the following options:

- **Do Not Publish to Supplier** — This column will not be published to Supplier Portal and will be unavailable in eQuestionnaire.
- **Suppress Printing** — This column will not be included when printing the custom section.

8 Check the **Add this item when section is created** box to automatically add this column to the table when the section is created by the user. Figure 5-44 below shows these entries.

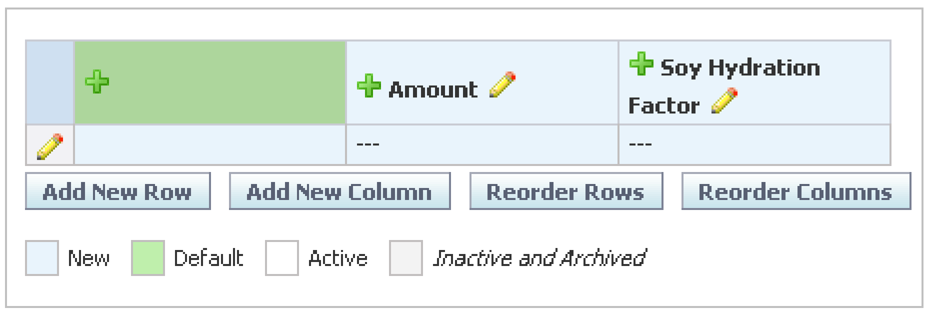
Figure 5-44: Defined column



Note When columns are in a "New" status they can be deleted. To delete a column, select the red **Delete** link.

9 Click **Done** to confirm your choices. Figure 5-45 shows the defined columns.

Figure 5-45: Defined columns



Creating Rows

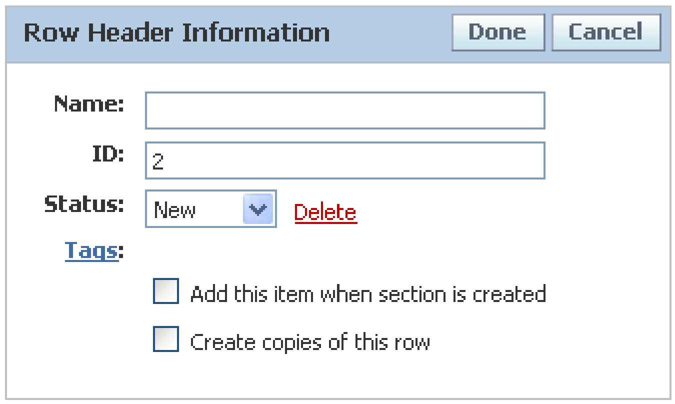
You can add as many rows as you need in a custom section table.

Defining Additional Rows

To add a new row:

1. Click **Add New Row** to add an additional row to the table. The Row Header Information dialog box is displayed, as figure 5-46 shows below. If you are defining a row that already exists, click the edit icon ( ) to make the row editable. Click the add data icon ( ) to display the Row Header Information dialog box.

   Figure 5-46: Adding a new row

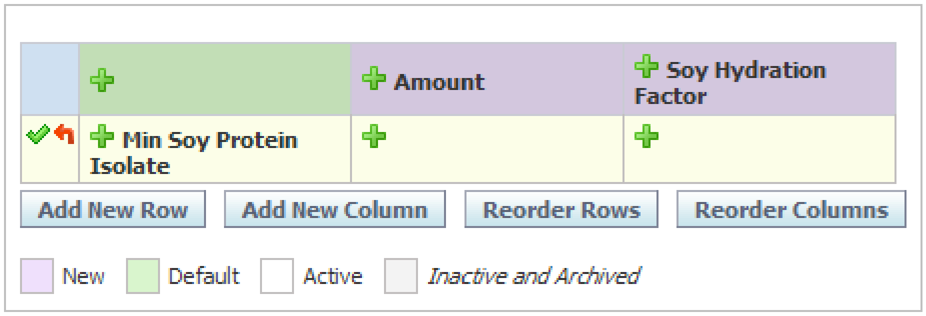
2. Enter a name for the row in the **Name** field.
3. Enter a unique identifier in the **ID** field. This field is automatically numbered by the system but can be modified. This field has to be unique within the custom section set of rows. This ID can be used when using cell location awareness in calculated extended attributes.
4. Set the row **Status** by selecting a status from the drop-down list. Keep the status of the row set to "New" until your entire section and/or row is ready to be activated.
5. Click the **Tags** link to select the tags (if any) to assign to this row. Tags allow you to apply special behaviors to your row. Multiple tags can be attached. Click the link to display a selection dialog box containing the following options:
   - **Do Not Publish to Supplier** — This row will not be published to Supplier Portal and will be unavailable in eQuestionnaire.
   - **Hide Header**—The header for this row will not be displayed in consumption or printing. When all visible rows in a custom section include the hide header tag, the entire header column will not appear. This tag is beneficial when using repeatable rows.
   - **Repeatable**—This row template can be re-used during consumption. This tag should only be used when the use case is absolutely necessary. It is recommended to use distinct rows containing distinct attributes.
   - **Suppress Printing** — This row will not be included when printing the custom section.

6 Check the **Add this item when section is created** box to automatically add this row to the table when the section is created by the user.

7 Check the **Create copies of this row** box to add one or more copies of this row to the table; enter the number of rows to create in the **# of Copies** text field. This feature is better used when all cells have already been defined. Refer to *Copying Rows* on page 5-33.

8 Click **Done** to confirm your choices. Figure 5-47 shows the newly created row in edit mode. You can now define the cells.

Figure 5-47: Added row



Defining Cells

Custom section cells contain extended attributes.

To define a cell in a table:

1 Click the edit icon ( ) to make the row or column editable.

2 In the cell that you are adding an attribute to, click the add data icon ( ) to display the Extended Attribute dialog box. This list contains extended attributes that have been marked with a class of “Custom Sections” and have an “Active” status.

3 Select an extended attribute from the list. For more information on creating extended attributes, refer to *Creating an Extended Attribute* on page 5-19.

Note When you add an extended attribute to the cell, a clear field icon ( ) is displayed to the right of the selection. You can click this icon to delete the extended attribute from the table, as long as the statuses of the associated row/column are “New.”

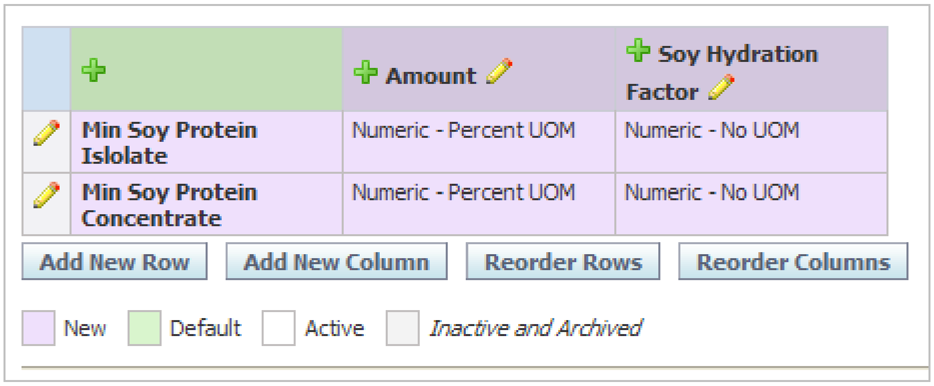
4 Click **Done** to confirm your choice.

5 Continue this process until all cells in the row contain an extended attribute.

6 Click the apply changes icon ( ) to apply your changes.

Important Cells cannot be edited once the row or column has been activated.

Figure 5-48: Defined cells



Copying Rows

To copy an existing row:

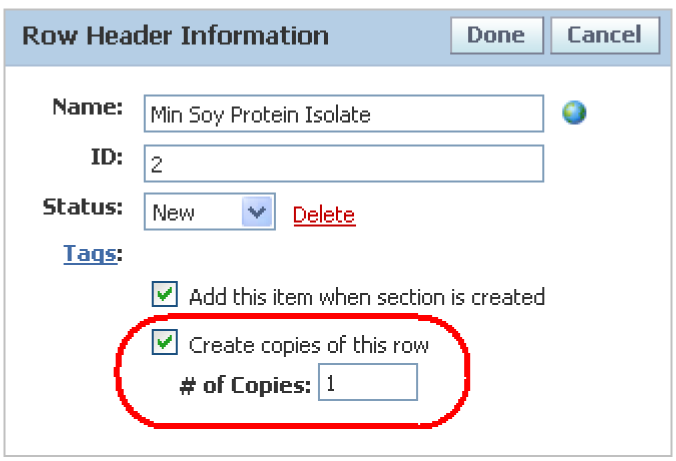
1 Click the edit icon ( ) of the row you would like to copy. This makes the row editable.

2 In the Row Header column, click the add data icon ( ) to display the Row Header Information dialog box.

3 Check the **Create copies of this row** box to add one or more copies of this row to the table. The **# of Copies** field appears.

4 Enter the number of rows to create in the **# of Copies** field. Figure 5-49 shows these entries.

Figure 5-49: Copying row fields



5 Click **Done**. The table displays the copied rows. A dialog box displays asking if you want to proceed with the copy.

6 Click **OK**. The new row(s) display under the copied row.

7 Define each row following the procedure above.

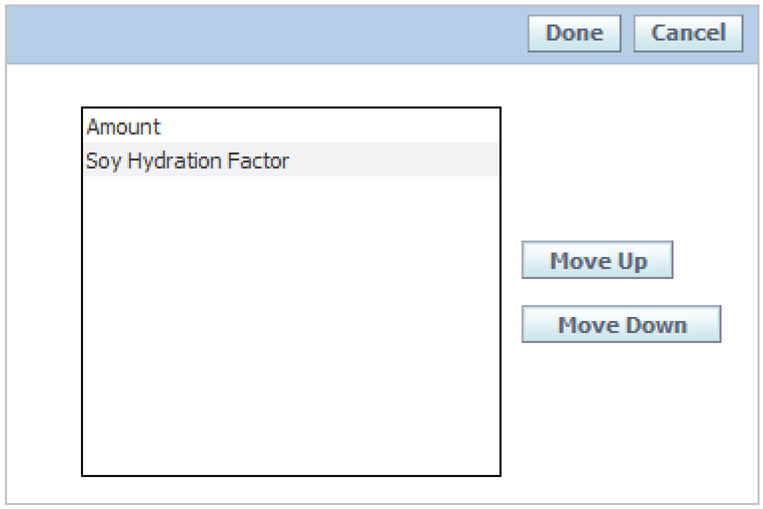
Reordering Columns

The order the columns appear in during consumption is set through the custom section template.

To reorder the columns in your table:

1. With the page in edit mode, click **Reorder Columns**. A dialog box is displayed, as figure 5-50 shows below.

Figure 5-50: Reorder columns dialog box



2. Click a column value in the list, and then click **Move Up** or **Move Down** to set the desired position.
3. Repeat step 2 as needed to move other columns to the desired position.
4. Click **Done**.

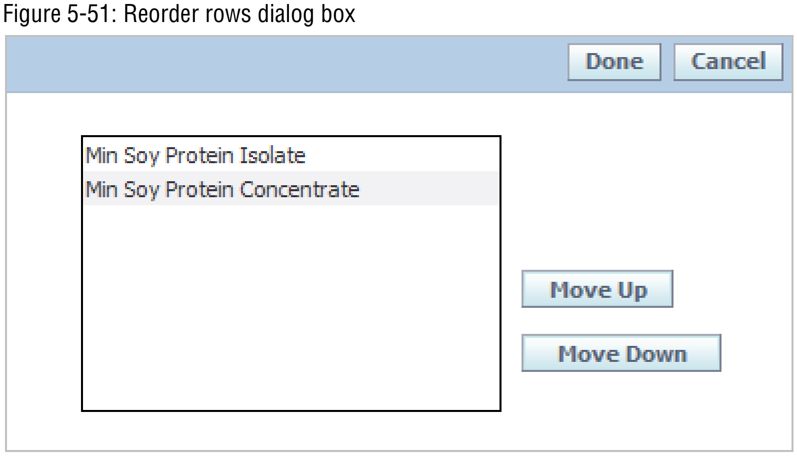
Reordering Rows

The order the rows appear in during consumption is set through the custom section template.

To reorder the rows in your table:

1. With the page in edit mode, click **Reorder Rows**. A dialog box is displayed, as figure 5-51 shows below.

Figure 5-51: Reorder rows dialog box



2 Click a row value in the list, and then click **Move Up** or **Move Down** to set the desired position.
3 Repeat step 2 as needed to move other rows to the desired position.
4 Click **Done**.

Legend

Rows and columns are colored to represent status and whether an item is default. The following legend is provided.

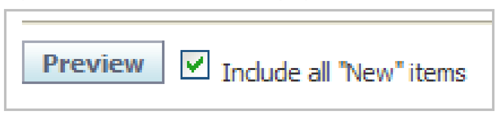
Figure 5-52: Custom Section statuses

See page 5-25 for more information on statuses.

Previewing a Custom Section

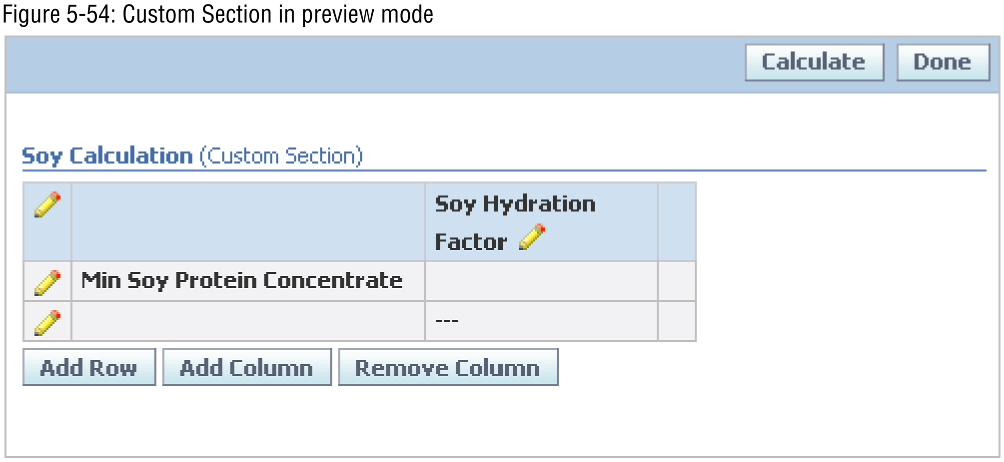
Preview custom sections by clicking **Preview** at the bottom of the page. You can use this feature to view the section as the user would see it. The preview will include all items in the status of “Active” and “New.” If you don’t wish to include “New” items, uncheck the **Include all “New” items** box. Preview mode allows you to mimic the user’s experience. Preview also allows you to see UI column widths.

Figure 5-53: Custom Section page, Preview button



When you click **Preview**, the current custom section, including default values, is displayed in a dialog box, as figure 5-54 shows below.

Figure 5-54: Custom Section in preview mode



To make further changes to the custom section, click **Done**. Agile PLM for Process closes the preview dialog box closes and returns to the Custom Section page.

Calculating Extended Attributes

While in preview mode, you can click the **Calculate** button to calculate extended attribute values. This button works only with calculate attributes that are referencing attributes present in the previewed section. Depending on your calculated extended attributes, the system may pull in the mock values for items referenced by ID. Refer to *Calculated Attributes* on page B-1 for more information.

Editing Custom Sections

To edit a custom section:

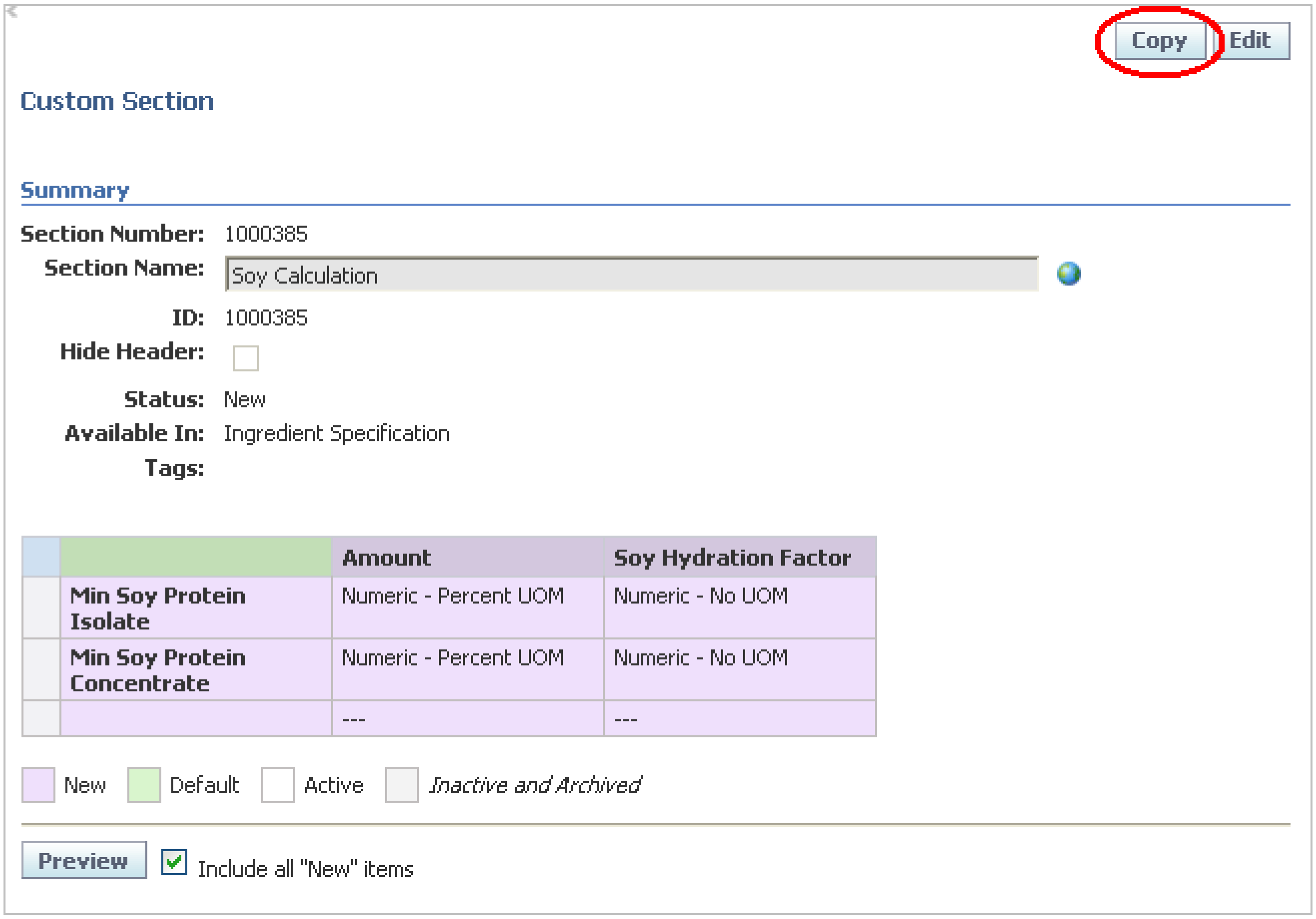
1. Click **ADMN** > **Custom Data** > **Custom Sections.**
2. Using the search feature, search for the custom section to edit. (For instructions on the search feature, see *Searching for Custom Sections* on page 5-38.)
3. Click **Edit.**
4. Edit custom section summary information, as described in *Summary Section* on page 5-24.
5. To edit the table, complete the procedures referenced below:
   - *Creating Columns* on page 5-27
   - *Defining the Column Header* on page 5-28
   - *Defining Additional Columns* on page 5-29
   - *Creating Rows* on page 5-30
   - *Defining Additional Rows* on page 5-31
   - *Defining Cells* on page 5-32
   - *Copying Rows* on page 5-33
   - *Reordering Columns* on page 5-34
   - *Reordering Rows* on page 5-34
6. Activate all new rows and/or columns.
7. Click **Save & Close.**
8. Flush the extended attributes / custom sections cache, as described in *Using the Cache Application* on page 9-3.

Copying a Custom Section

To copy a custom section:

1. **Click ADMN > Custom Data > Custom Sections.**
2. Use the search feature to select the custom section to copy. Figure 5-55 below shows an existing custom section.

Figure 5-55: Custom section with Copy button



3 Click **Copy**. (This button does not appear if the page is in edit mode.) All items for the custom section are copied over to a new page, including rows, column, and cells.

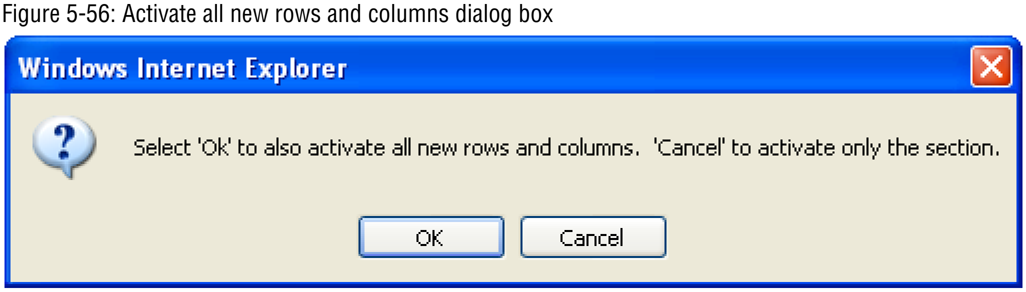
4 Define the **Section Name**, **ID**, **Hide Header**, **Security Classification**, **Available In**, and **Tags** fields in the Summary Section, as described beginning on page 5-24.

5 Edit the custom section table as described in See *Editing Custom Sections* on page 36.

6 Preview your table to make sure it is built correctly as described in *Previewing a Custom Section* on page 5-35.

7 In the Summary area, select “Active” in the **Status** drop-down list. ADMN displays the following dialog box asking if you want to activate all items (rows and columns.)

Figure 5-56: Activate all new rows and columns dialog box



8 Click **OK**.

9 Click **Save & Close**.

10 Flush the extended attributes / custom sections cache, as described in See *Using the Cache Application* on page 3.

Searching for Custom Sections

To search for custom sections:

1 Click **ADMN** >**Custom Data > Custom Sections**. The Custom Sections search page displays.

2 Enter search criteria for custom sections using a combination of three search fields:

a In the key field drop-down list, select your search criteria as follows:

- **--** —Searches for all custom sections
- **Column Name**—Searches by column name
- **Created**—Searches by creation date
- **Last Edit**—Searches by last edit date
- **Row Name**—Searches by row name
- **Section ID**—Searches by section identifier
- **Section Name**—Searches by section name
- **Security Classification**—Searches by security classification
- **Status**—Searches by status

b In the operator drop-down list, your options will be determined by the choice you made in the key field drop-down list. Choices may include:

- **Contains**—Used for character searches, alphabetical, or numerical (for example, “Column Name Contains Admin” will produce only custom sections containing a column name of “Admin”).
- **Equals**—Used to quantify search criteria entered in the field to the right (for example, “Section ID Equals 123456” will produce only the custom section with the section ID of “123456”).
- **Greater Than**—Searches for custom sections with a value greater than a value you specify (for example “Last Edit Greater Than 8/1/09” will produce only custom sections edited after “8/1/09”).
- **Less Than**—Searches for custom sections with a value less than a value you specify (for example “Created Less Than 1/1/05” will produce only custom sections created before “1/1/05”).
- **Starts With**— Searches for custom sections that start with the character(s) you specify

c Use the empty search criteria field to the right of the operator drop-down list to qualify the selections you made above. You can also enter the percent (%) sign to perform a wildcard search matching any one character.

3 Click **Search**. The Search Results table displays custom sections matching the search criteria.

For guidance on saving and loading searches, see *Saving and Loading Searches* on page 2-4 and *More Search Options* on page 2-4. For guidance on exporting search results, see *Exporting Search Results* on page 2-5.

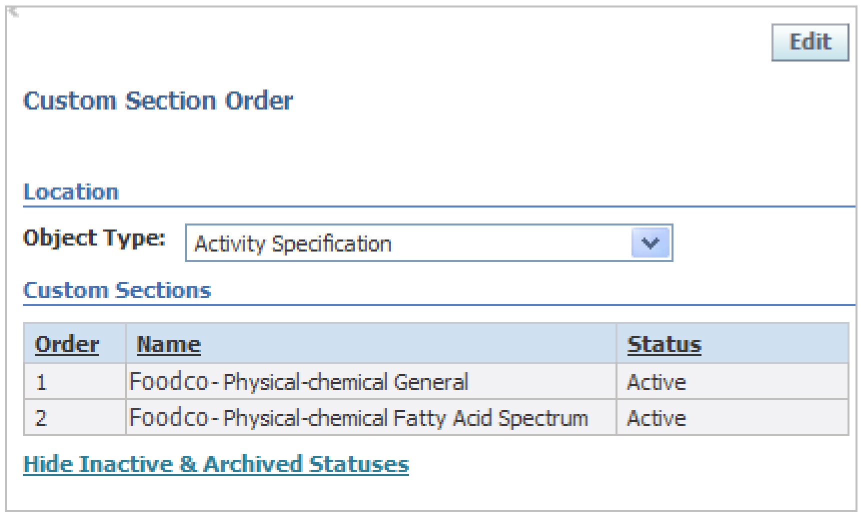
Custom Section Order

The display order of custom sections is defined using ADMN. You can set the display order of custom sections by object type. The order you set will also determine the print order of custom sections.

To change the order of custom sections:

1. Click **ADMN > Custom Data > Custom Section Order**. The Custom Section Order page is displayed, as figure 5-57 shows below.

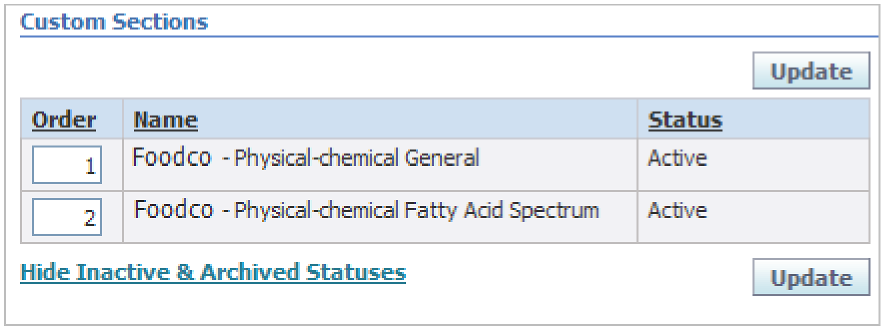
   Figure 5-57: Custom Section Order page

2. Select an object type from the **Object Type** drop-down list. All custom sections available in that object type are displayed in the **Name** column. The **Status** column displays the current status.
3. If needed, click the **Hide/Show Inactive & Archived Statuses** link to view only the new and active custom sections. You can change the sort order by clicking the linked column names.
4. Click **Edit**.

5 In the **Order** column, set the order of display by assigning a number to each custom section, as figure 5-58 shows below.

Figure 5-58: Order column in edit mode



6 Click **Update**.

7 Click **Save**.

8 To set the custom section order for another object type, repeat step 2 through step 7.

Note When new custom sections are added, they are displayed at the bottom of this list.

CHAPTER 6

Using WFA to Manage GSM Workflows

This chapter contains instructions for using the Workflow Administration (WFA) application to manage workflows in Global Specification Management (GSM). Topics in this chapter include:

A workflow is the automation of a business process, in whole or part, during which documents, information, or tasks are passed from one participant to another for action, according to a set of procedural rules. In Agile PLM for Process, workflows are managed using the WFA (Workflow Administration) application.

This chapter contains instructions for workflow management in GSM (Global Specification Management) only. For instructions on workflow management in SCRM (Supply Chain Relationship Management), which are slightly different from the GSM instructions, see chapter 7, *Using WFA to Manage SCRM Workflows*. For instructions on workflow management in CSS (Content Synchronization and Syndication), see chapter 8, *Using WFA to Manage CSS Workflows*.

Associated Roles

The following user roles are associated with workflows:

[WFA_ADMIN]—Can create, edit, import, and export workflows.

[WFA_USER]—Can access the WFA (Workflow Administration) application and view all workflows.

Workflow Terms and Definitions

The following are important workflow terms and definitions that you must understand in order to perform workflow administration tasks:

Owner—The person(s) responsible for managing the specification in a particular status. As owner of the workflow, you:

- Receive items in your Action Items list. You are responsible for assuring that the assigned parties perform all necessary actions or reviews.
- Can advance the specification in the workflow process by clicking **Workflow** in the upper right corner of the specification page.

Author—The person who originally created the specification.

Signature Reviewer—Represents a functional area, group, or individual who is responsible for reviewing information contained within a specification. The signature reviewers approve or disapprove the specification through the use of signature documents. This review enables the specification to move forward in the workflow process.

Additional Notification—Represents a functional area, group, or individual who receives an email notification that a specification has been moved in the workflow process to a particular status. This role is considered informational only, and additional notification recipients are not responsible for providing any formal response or input into the specification.

Reader—A group or individual who can open a specification and read the contents. You can assign read permissions to groups, individuals, or exclusively the specification author, owner, and/or signature requestee.

Editor—A group or individual who can open and edit a specification. You can assign editor permissions to groups, individuals, or exclusively to the specification author, owner, and/or signature requestee.

Workflower—A group or individual who can move a specification from one workflow step to another. You can assign workflow permissions to groups, individuals, or exclusively to the specification author or signature requestee.

Service Level Agreement (SLA)—The number of days that a document will remain in a particular status before a reminder indicator changes. The system issues an amber reminder that a deadline is approaching and a red reminder that the deadline has passed.

Transitions —The statuses that a particular step can be transitioned to. Moving a workflow between statuses can mean moving the workflow backward to a previous step or forward to the next step. Transitions can be serial (one back and one forward) or can allow for expedition (from any status to any other status).

Condition—A rule that has to be met before a particular action is applied. Conditions can be assigned to transitions, owners, signature requests, notifications, and the workflower permission tables.

Guard Conditions—An extensibility point that helps determine if a workflow transition can occur.

Workflow Action—An extensibility point that triggers the execution of custom classes when a workflow transition occurs. The custom classes can access the item being workflowed to execute specialized actions programmatically.

Recommendations for Creating Workflows

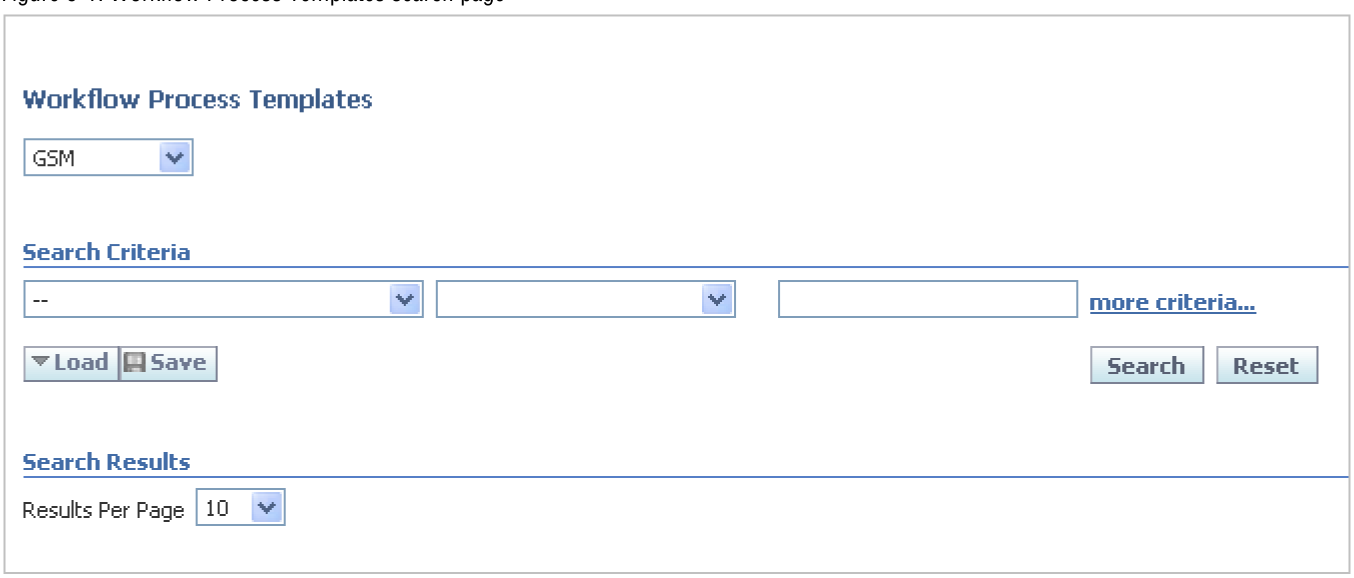
The following are recommendations for creating workflows using the WFA (Workflow Administration) application in Agile PLM for Process.

- A workflow should contain a relatively small number of created statuses. These statuses should be common and applicable across all workflows. For example, consider using a workflow that progresses through the following intuitive statuses: Draft > Working > Approved > Inactive > Retired.
- When creating workflows in the WFA application, always check the **Terminate Workflow at This Step** check box to indicate the last step in the workflow.
- Deprecate workflow steps by clicking **Make Inactive**. Changing a step to inactive status assures that existing specifications already in that step can continue in the workflow but that no new specifications can enter that step.
- If a step has owners, signature documents, and/or notifications, be sure to provide functional areas for each.
- Principals are required for each permission rule.
- When setting up conditions containing multiple rows, be aware that conditions inside the same row indicate "Or" values and that conditions in different rows represent "And" values.

Searching for Workflows

As an administrator, you often search for workflow process templates. When you first access the WFA application, you see the Workflow Process Templates search page, shown in figure 6-1 below.

Figure 6-1: Workflow Process Templates search page



Workflow Search Criteria

To search for GSM workflows, use a combination of search criteria:

1. Select **GSM** from the type of workflow template drop-down list.
2. In the key field drop-down list, select your search criteria as follows:
   - **All (--)**—Searches for all workflows
   - **Description**—Searches for workflows by description
   - **Name**—Searches for workflows by name
3. In the operator drop-down list, your options will be determined by the choice that you made in the first drop-down list. Selections may include:
   - **Null** {empty field}—Searches for all workflows
   - **Contains**—Used for character searches, alphabetical or numerical (for example, "Name Contains Ingredient" will result in only workflow templates with names containing the word "Ingredient")
   - **Equals**—Used to evaluate search criteria entered in the field to the right (for example, "Name Equals Dairy Ingredient" will result in only workflow templates with this exact name)
   - **Starts With**—Used for character searches, alphabetical or numerical (for example, "Description Name Starts With K" will result in only workflow templates with descriptions that start with the letter "K")
4. Use the third search criteria field to qualify the selections you made in the first two drop-down lists. You can also enter the percent (%) sign to perform a wildcard search matching any one character.
5. Click **Search** to display GSM workflow templates matching the search criteria.

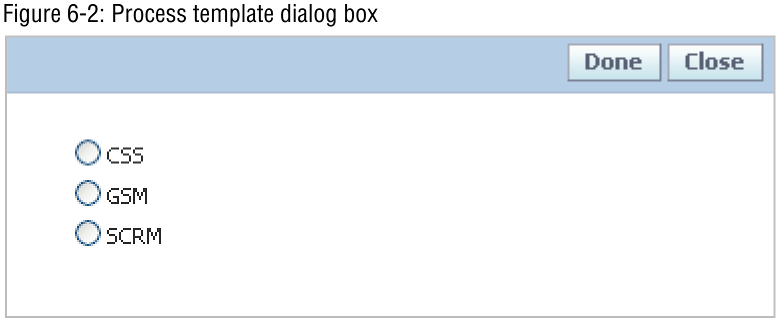
For guidance on saving and loading searches, see *Saving and Loading Searches* on page 2-4 and *More Search Options* on page 2-4.

Creating New GSM Workflow Process Templates

To create a new GSM workflow process template:

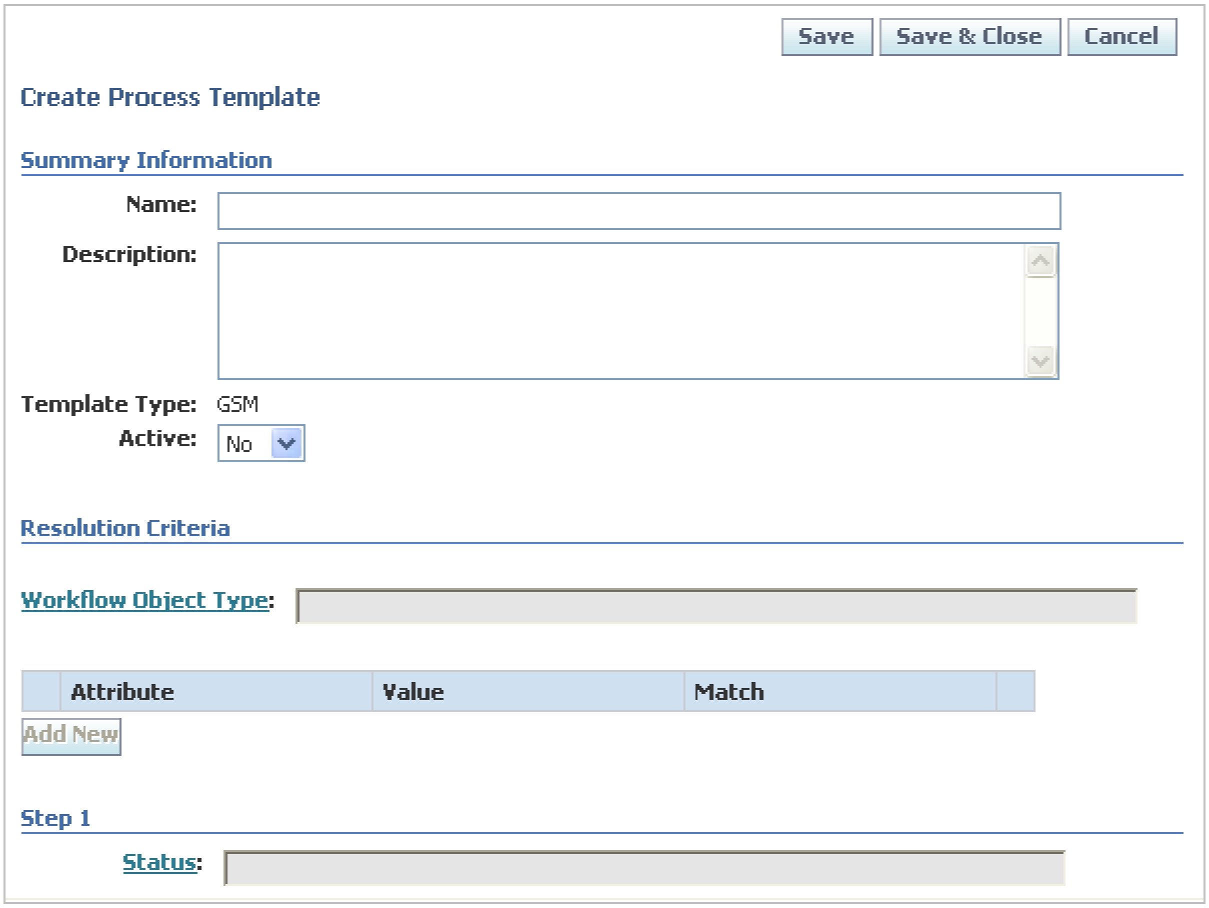
1. Click **WFA** on the left navigation panel.
2. Click **New Process Template** at the top right corner. Agile PLM for Process displays a dialog box, as shown in figure 6-2 below.

Figure 6-2: Process template dialog box



3. Select **GSM** (Global Specification Management) and then click **Done.** A new workflow template page is displayed, as shown in figure 6-3 below.

Figure 6-3: GSM Workflow Template page



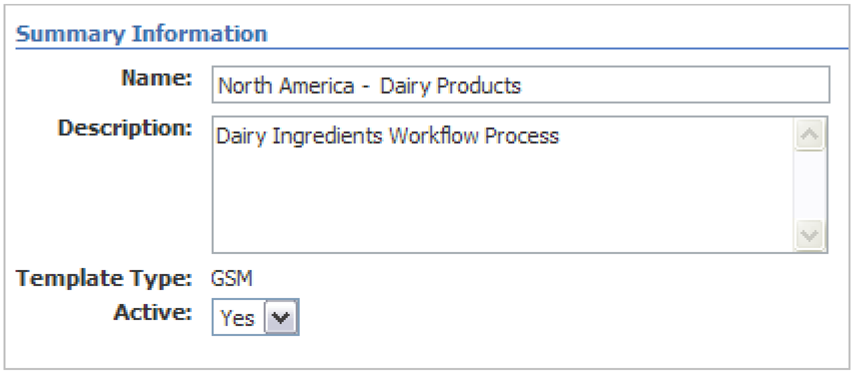
4 Enter information described in:
- *Summary Information Section* on page 6-6
- *Resolution Criteria Section* on page 6-6
- *Step Sections* on page 6-8
- *Permissions Section* on page 6-26
- *Workflow Permissions Section* on page 6-28

5 Click **Save & Close**.

6 Flush the Workflow Cache Group, as described in *Using the Cache Application* on page 9-3.

Summary Information Section

Figure 6-4: Summary Information section



Enter the following workflow information in the Summary Information section:

Name

Enter a unique name for the workflow. This name will appear to the GSM user when resolving a specification to a workflow. It is also shown on a specification as the Current Workflow value on the Approval/Audit Trail tab. This is a required field.

Description

Enter a description for the workflow. This description will appear to the GSM user when resolving a specification to a workflow. This is a required field.

Template Type

This field cannot be edited. The template type is determined in step 3 on page 6-4.

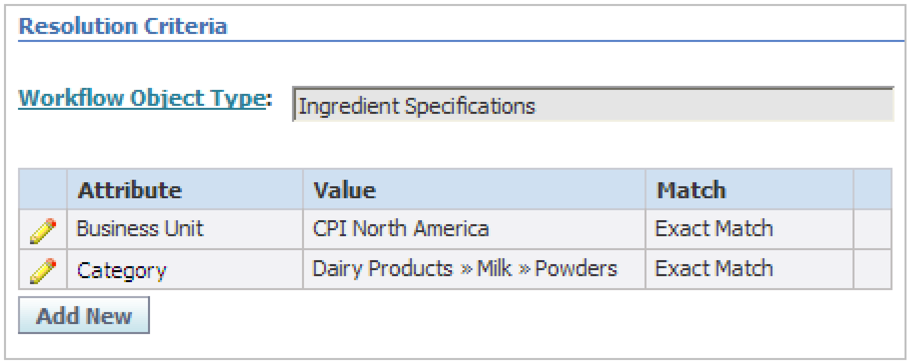
Active

Select **Yes** to make the template active when the workflow template is ready to become available for use in Agile PLM for Process. Otherwise, the template will remain inactive and not available for general use.

Resolution Criteria Section

Resolution criteria are the rules that determine what workflow template the GSM specification will resolve to. For example, all ingredient specifications with the business unit of North America and the specification category of Dairy > Milk > Powders should resolve to this workflow template.

Figure 6-5: Resolution Criteria section



Note Once a specification has resolved to a workflow, users with the role of [CAN_RERESOLVE_WORKFLOWS] can re-resolve the specification to a different workflow in GSM.

Enter the following workflow information in the Resolution Criteria section:

Workflow Object Type

Click the **Workflow Object Type** link to display a dialog box of workflow object types. Select the workflow object type (Ingredient Specification, Trade Specification, and so on) that will consume this workflow process template. This is a one-to-one relationship between the template and object type; only one selection is allowed. This is a required field.

Attribute

You can also add resolution criteria attributes, by clicking **Add New** and selecting the attribute from the dialog box. Resolution criteria attributes available will depend on the workflow object selected.

The following attributes are available:

- **Business Unit**—Select this attribute to evaluate the business unit on the specification during resolution.
- **Category** —Select this attribute to evaluate the specification category on the specification during resolution.
- **Classification**—Select this attribute to evaluate the classification on the specification during resolution. If enabled, this attribute is only available for the ingredient specification object type. When this is configured on, the classification field on the ingredient specification will be required.

Value

Click the edit icon ( ) to place the row in edit mode. Click the add data icon ( ) to display a selection list of the attribute added. Select the value to evaluate, then click **Done**.

Match

Make a selection as follows:

- **Exact Match**—The values must match exactly
- **Hierarchy**—The values must be related hierarchically (the match moves up and down the hierarchy)
- **+ Children**—The values must be related hierarchically (the match moves down the hierarchy only)

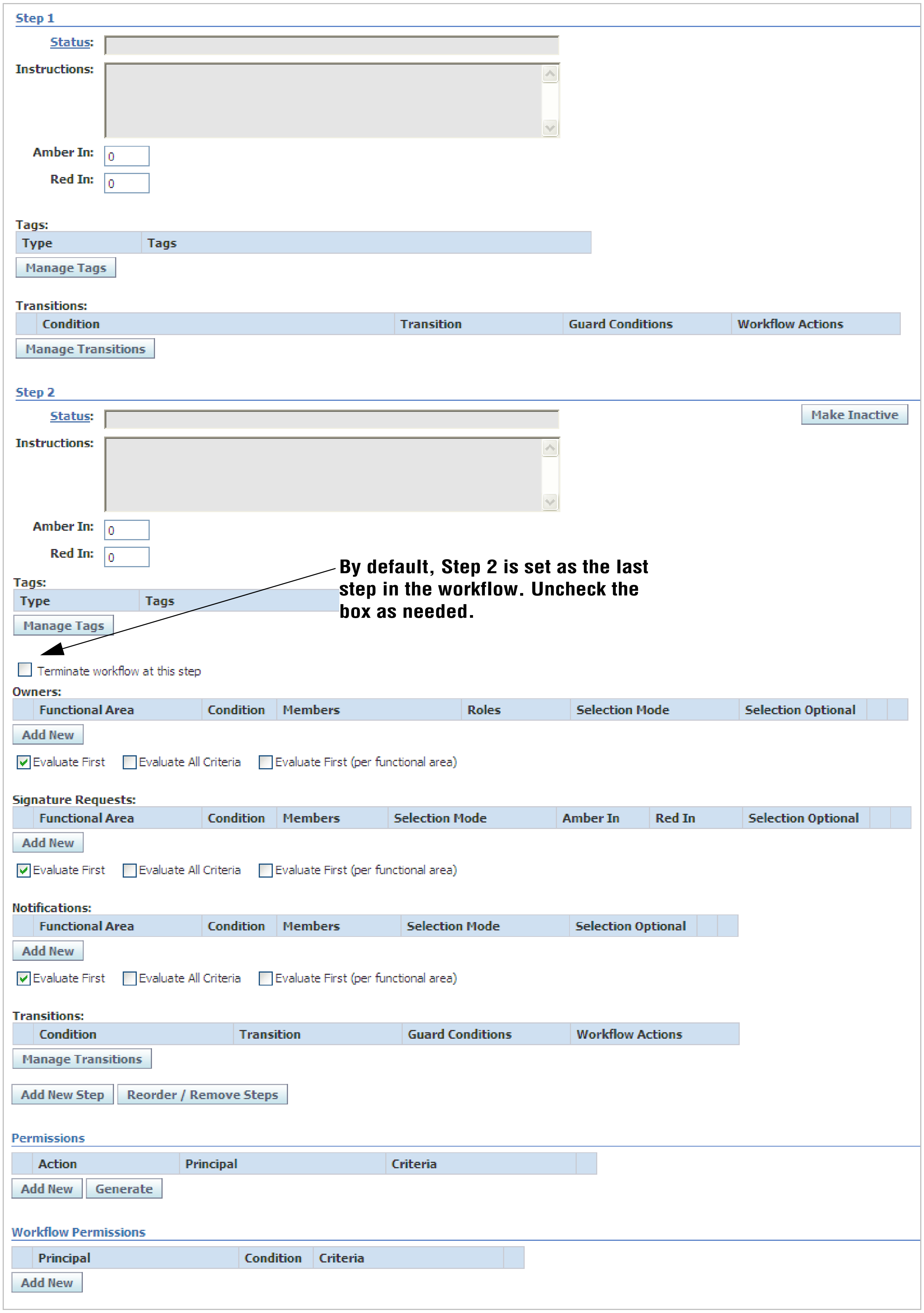
Note Attribute values in the same row will represent an OR statement. For example, if the specification business unit equals "USA" or "Canada" it will resolve to this template.

Attribute values in different rows represent an AND statement. For example, the specification must have a business unit of "USA" and a specification category value of "Dairy > Milk > Powders."

Step Sections

Each workflow template must have a minimum of two steps, as represented in the Step 1 and Step 2 sections. You can add more step sections by clicking **Add New Step**.

Figure 6-6: Steps sections



To define steps:

1. Click **Status**. A Select Status dialog box displays. You can choose from a list of existing statuses or scroll to the bottom of the list and click **Add New** to create a new status and name it. Workflow process templates contain only a small number of statuses, since statuses, once created, are permanent.

> **Note** Give each status a unique status name. Status names should also be common and applicable across all workflows. Status names cannot be changed once the template is activated.

2. The **Instructions** field is populated with the instructions attached to the chosen status. If you create a new status, enter a new set of instructions for this field.
3. In the **Amber In** field, enter the number of days until this workflow step displays in amber, indicating that the deadline is approaching. This field displays in all steps except the terminal step.
4. In the **Red In** field, enter the number of days until this workflow step displays in red, indicating that the deadline has passed. This field displays in all steps except the terminal step.
5. Click **Tags** to tie tags to this step. Tags are a list of specialized functions. Using tags, you can attach predetermined behaviors to workflow steps. Administrators create and manage system actions using the ADMN>WFA>Tags option. See *Tags* on page 4-83 for more information. Available choices are:

   - **Hide Specs**—This action will hide the specifications tied to this step when a search is performed in GSM. This is a valuable action for specifications that are archived and should no longer be referenced. Users with the roles of [SPEC_ADMIN] or [HIDDEN_SPEC_VIEWER] are able to see these hidden specs in search results.
   - **Publish to Supplier Portal**—This action will publish the specifications tied to this step to the Supplier Portal. This is a valuable feature for publishing only approved specifications to your suppliers.
   - **Is Developmental**—This tag is used to specify that the specification is in a developmental state.
   - **Designable**— When a formulation specification reaches a step with this tag, design tools will appear. For more information, see the Formulation Specification chapter in the *Agile Product Lifecycle Management for Process Global Specification Management User Guide*.
   - **Initial Load**—This tag will be used to interact with future APIs. This tag currently does not define any system behavior.
   - **Is Approved**—This tag is used to specify that the specification is in an approved state.

   Visibility tags can also be added here. See *Controlling Specification Visibility* on page 6-31 for more information.

6 If needed, check **Terminate workflow at this step** box to end the workflow at this step. This setting indicates that no further steps are required.
7 Click **Save**. If needed, add more steps by clicking **Add New Step** and repeating this procedure.

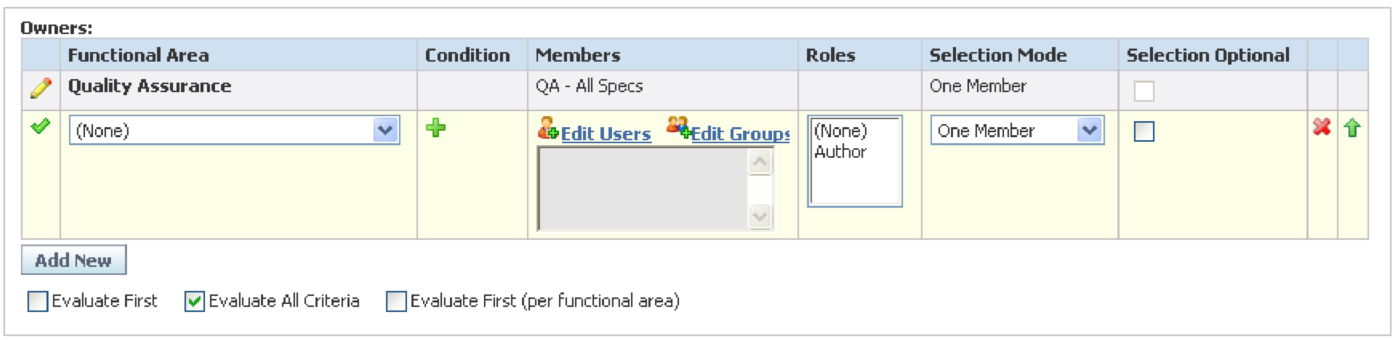
Owners Table

Use the Owners table to designate the person(s) responsible for managing the specification. An owner of the workflow:

- Will receive items in their Action Items list
- Can advance the specification in the workflow process by clicking **Workflow** in the upper right corner of the specification page

Figure 6-7 below shows the Owners table.

Figure 6-7: Owners table



Note You cannot set owners on the first and terminal steps.

To add an owner:

1 Click **Add New** to create a new owner's row.
2 Define the owner by **Functional Area**, **Condition**, **Members**, **Roles**, **Selection Mode**, **Selection Optional**, and **Evaluation Method** as described below and through page 6-15.
3 Click the apply changes icon ( ) to apply your changes.
4 Click **Save**.

Functional Areas

Select the functional area for users or groups who will be assigned ownership. This value could be used for evaluation order, as described in *Evaluation Methods* on page 6-15. This value will also be used to organize groups of owners available for a user's selection during the workflow transition. Administrators create and manage functional areas using the ADMN>WFA>Functional Area (WFA) option. See *Functional Area - (WFA)* on page 4-82 for more information.

Conditions

There may be times when "who owns what" will differ based on specific specification attributes.

Conditions added to an owner row must be met in order for that group or individual to be the owner or available for user selection. Depending on the workflow object selected, conditions can be evaluated based on the following attributes:

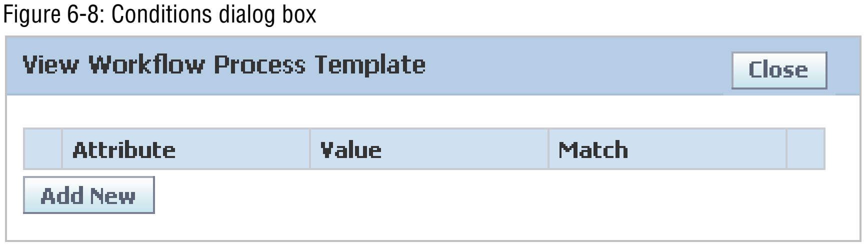
- **Additives**—The additive values on the specification.
- **Allergens**—The allergen values on the specification.
- **Business Unit**—The business unit value on the specification.
- **Classification**—The classification value on the specification. (This only applies to ingredient specification workflow objects)
- **Complies With**—The Complies With value on the specification.
- **Country**—The country value on the specification.
- **Menu Item Class**—Evaluates the menu item class value on the specification. (This only applies to menu item specifications)
- **Standard**—Evaluates the standard value on the specification. (This only applies to menu item specifications and product specifications)
- **Category**—The specification category on the specification.

Multiple conditions can be used to model more complex ownership requirements. For example, if the specification has the allergen of gluten and has the business unit of North America, then the specification is owned by these members.

To add conditions:

1 With the row in edit mode, click the add data icon ( ) in the Condition column. The conditions dialog box is displayed, as shown in figure 6-8.

Figure 6-8: Conditions dialog box



2 Click **Add New**. A dialog box displays available attributes.
3 Select an attribute, then click **Done**. The selected attribute is appended as a new row in the conditions dialog box.
4 Click the edit icon ( ) to place the row in edit mode.
5 Click the add data icon ( ) to define the **Value** column.
6 Select an option from the **Match** drop-down list.
7 Click the apply changes icon ( ) to apply your changes.
8 Click **Save**.

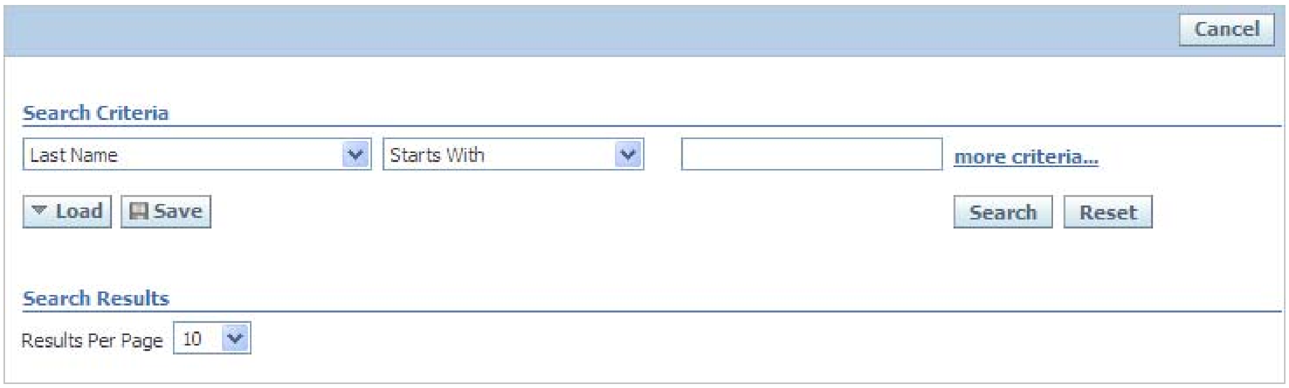
Members

Select the users or groups who will be assigned ownership. Click **Edit Users** to locate individual users, and click **Edit Groups** to locate groups that will be used when assigning ownership.

To add users as members:

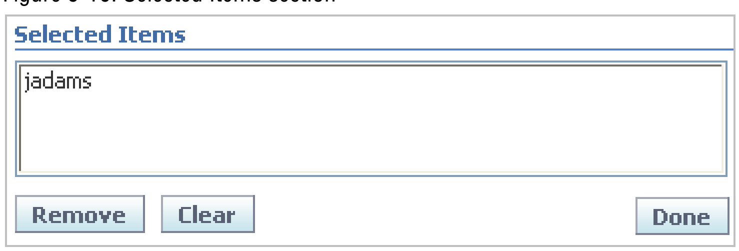
1. With the row in edit mode, click **Edit Users**. The user search page is displayed with “Last Name” and “Starts With” default search criteria, as figure 6-9 shows below

Figure 6-9: User search page



2. Enter the user’s last name in the third search criteria field.
3. Click **Search**. User names matching the information you provided are listed in the Search Results section.
4. Click the user name. It displays in the Selected Items section, shown in figure 6-10.

Figure 6-10: Selected Items section

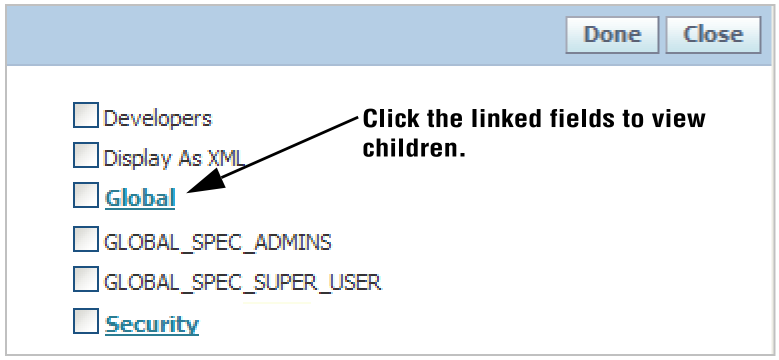


5. Repeat step 2 through step 4 to select other users.
6. Click **Done**. The users are added to the Members column.
7. Click the apply changes icon ( ) to apply your changes.
8. Click **Save**.

To add user groups as members:

1. With the row in edit mode, click **Edit Groups**. The groups dialog box is displayed, as shown in figure 6-11.

Figure 6-11: Groups dialog box



2. Check the groups to add as members.
3. Click **Done**. The groups are added to the Members column, as figure 6-12 shows below.

Figure 6-12: Selected members

4. Click the apply changes icon (✔) to apply your changes.
5. Click **Save**.

To delete users:

1. With the row in edit mode, click **Edit Users**. The user search page displays, as figure 6-9 shows above.
2. In the Selected Items section, click the user to delete, then click **Remove**. The user that you selected is removed from the Members column.
3. Click **Done**.
4. Repeat steps 1 and 2 to delete additional users.
5. Click **Save**.

To delete user groups:

1. With the row in edit mode, click **Edit Groups**. The group dialog box displays as figure 6-11 shows above.
2. Uncheck the groups to delete.
3. Click **Done**. The dialog box closes. The groups that you selected are removed from the Members column.
4. Click **Save**.

Roles

You can designate the author of the specification as the owner by selecting the value of "Author."

Selection Modes

A user moving a specification to the next workflow step could have the opportunity to select an owner. Selections will be organized for the user by functional area. Selection Mode allows you to control this process. Choose a selection mode as follows:

- **All Members**—Choose this mode when you want all members to be automatically selected for the workflower.
- **One Member**—Choose this mode to allow the workflower to select only one member.
- **Multiple Members**—Choose this mode to allow the workflower to select multiple members.

Selection Optional

Select this checkbox to make the workflower's selection optional.

Evaluation Methods

Figure 6-13: Evaluation method options

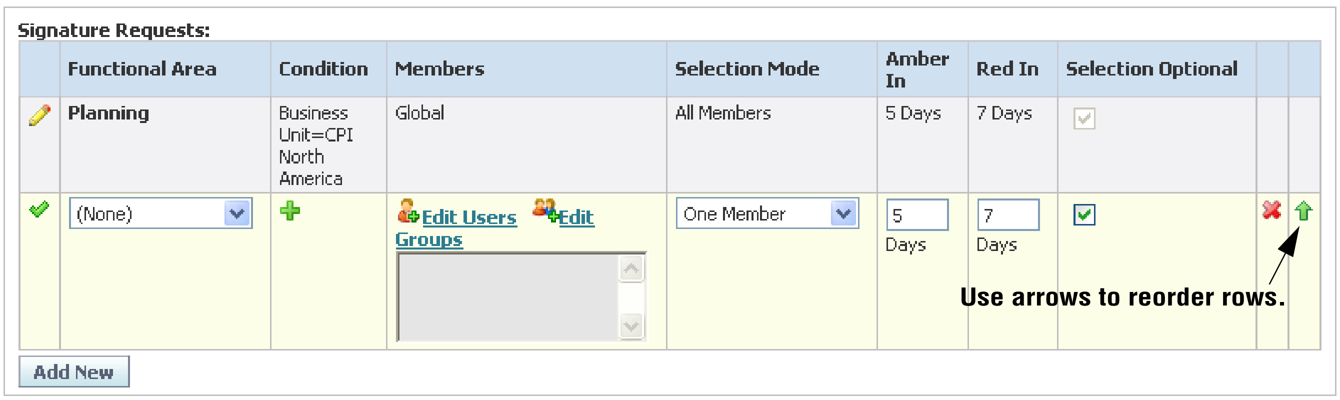
Below the table are evaluation method options. These selections will tell WFA how to evaluate the owners table.

- **Evaluate First**—Evaluates each row in order and uses the first row where the conditions are met, ignoring all other rows
- **Evaluate All Criteria**—Evaluates all rows and executes all that apply (provide a *union* set)
- **Evaluate First (per functional area)**—Groups rows by functional area, evaluates rows in order, executes the first one that applies, then skips to the next functional area (ignoring any remaining rows from the original functional area)

Signature Requests Table

Use the Signature Requests table to assign signature reviewers. Signature requestees represent a functional area, group, or individual who is responsible for reviewing information contained within a specification. The signature requestee approves or disapproves the specification through the use of signature documents. This review enables the specification to move forward in the workflow process. The owner of a specification can workflow the specification to a prior step regardless of whether all signature request have been approved or disapproved by requestees. Figure 6-14 below shows the Signature Requests table.

Figure 6-14: Signature Requests table



Note You cannot assign signature requestees on the first and terminal steps.

To add signature requestees:

1. With the page in edit mode, click **Add New** to create a new row.
2. Define the signature requestee using the **Functional Area**, **Condition**, **Members**, **Selection Mode**, **Amber In**, **Red In**, and **Selection Optional** fields as described below and through page 6-18.
3. Click the apply changes icon (✔) to apply your changes.
4. Click **Save**.

Functional Areas

Use this field to select the functional area for users or groups who will receive signature requests. This value could be used for evaluation order. This value will also be used to organize the GSM user's workflow selections. See *Evaluation Methods* on page 6-15 for more information.

Conditions

There may be times when who you require a signature document from will differ based on specific specification attributes.

Conditions added to a row must be met in order for that group or individual to be a signature requestee and/or available for user selection. Depending on the workflow object selected, conditions can be evaluated based on the following attributes:

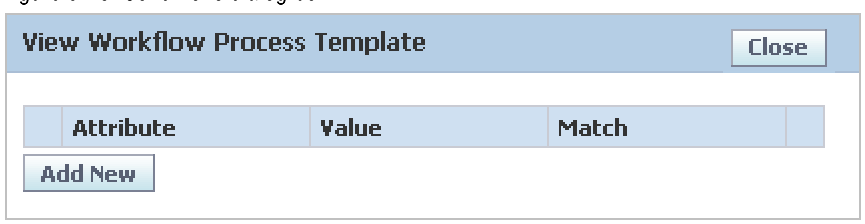
- **Additives**—The additive values on the specification.
- **Allergens**—The allergen values on the specification.
- **Business Unit**—The business unit value on the specification.
- **Classification**—The classification value on the specification. (This only applies to ingredient specification workflow objects)
- **Complies With**—The Complies With value on the specification.
- **Country**—The country value on the specification.
- **Menu Item Class**—Evaluates the menu item class value on the specification. (This only applies to menu item specifications)
- **Standard**—Evaluates the standard value on the specification. (This only applies to menu item specifications and product specifications)
- **Category**—The specification category on the specification.

Multiple conditions can be used to model more complex requirements. For example, if the specification has the allergen of gluten and has the business unit of “North America,” then the specification needs to be reviewed by the selected members.

To add conditions:

1 With the row in edit mode, click the add data icon ( ) in the Condition column. The conditions dialog box is displayed, as figure 6-15 shows.

Figure 6-15: Conditions dialog box



2 Click **Add New**. A dialog box displays available attributes.
3 Select an attribute, then click **Done**. The selected attribute is appended as a new row in the Conditions dialog box.
4 Click the edit icon ( ) to place the row in edit mode.
5 Click the add data icon ( ) to define the **Value** column.
6 Select an option from the **Match** drop-down list.
7 Click the apply changes icon ( ) to apply your changes.
8 Click **Save**.

Members

Use this field to select the users or groups who will be assigned as signature requestees. Click **Edit Users** to locate individual users and click **Edit Groups** to locate groups that will receive signature requests.

To add users and user groups as members, refer to the procedures on page 6-13 and page 6-14.

Selection Modes

A user who is moving a specification to the next workflow step could have the opportunity to select signature requestees. The Selection Mode field allows you to control this process. Choose a selection mode as follows:

- **All Members**—Choose this mode when you want all members to be automatically selected for the workflower.
- **One Member**—Choose this mode to allow the workflower to only select one member.
- **Multiple Members**—Choose this mode to allow the workflower to select multiple members.

Amber In and Red In Options

Amber In—Enter the number of days until the signature request displays in amber, indicating that the deadline is approaching.

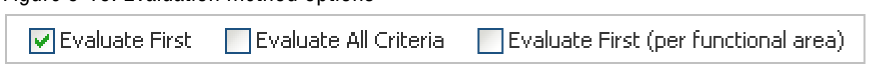
Red In—Enter the number of days until the signature request displays in red, indicating that the deadline has passed.

Selection Optional

Select this check box to make the workflower's selection optional.

Evaluation Methods

Figure 6-16: Evaluation method options



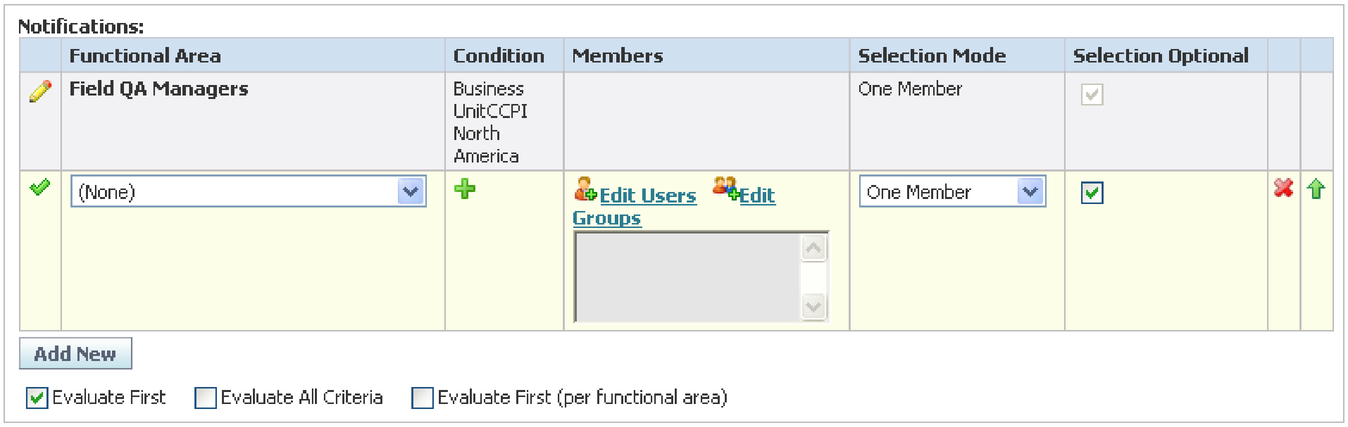
Below the table are evaluation method options. These selections tell WFA how to evaluate the owners table.

- **Evaluate First**—Evaluates each row in order and use the first row where the conditions are met, ignoring all other rows.
- **Evaluate All Criteria**—Evaluates all rows and executes all that apply (provide a *union* set).
- **Evaluate First (per functional area)**—Groups rows by functional area, evaluates rows in order, executes the first one that applies, then skips to the next functional area (ignoring any remaining rows from the original functional area).

Notifications Table

Use the Notifications table to designate who should be notified during this step. Users or groups designated will receive an email notification that the specification has been moved in the workflow process to a particular step. This role is considered informational only, and additional notification recipients are not responsible for providing any formal response or input into the specification. Figure 6-17 below shows the Notifications table.

Figure 6-17: Notifications table



Note You cannot designate notifications on the first and terminal steps.

To add notifications:

1. With the row in edit mode, click **Add New** to create a new row.
2. Define the signature requestee using the **Functional Area**, **Condition**, **Members**, **Selection Mode**, and **Selection Optional** fields as described below and through page 6-21.
3. Click the apply changes icon ( ) to apply your changes.
4. Click **Save**.

Functional Areas

Select the functional area for users or groups who will receive notifications. This value could be used for evaluation order, as explained in *Evaluation Methods* on page 6-18. This value will also be used to organize the GSM user's workflow selections.

Conditions

There may be times when who you want to notify will differ based on specific specification attributes.

Conditions added to a row must be met in order for that group or individual to be notified and/or available for user selection. Depending on the workflow object selected, conditions can be evaluated based on the following attributes:

- **Additives**—The additive values on the specification.
- **Allergens**—The allergen values on the specification.
- **Business Unit**—The business unit value on the specification.
- **Classification**—The classification value on the specification. (This only applies to ingredient specification workflow objects)
- **Complies With**—The Complies With value on the specification.
- **Country**—The country value on the specification.
- **Menu Item Class**—Evaluates the menu item class value on the specification. (This only applies to menu item specifications)

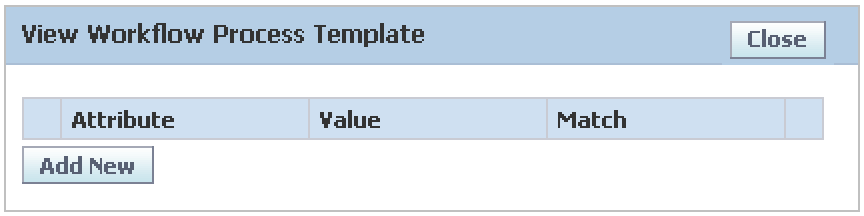
- **Standard**—Evaluates the standard value on the specification. (This only applies to menu item specifications and product specifications)
- **Category**—The specification category on the specification.

Multiple conditions can be used to model more complex requirements. For example, if the specification has the allergen of gluten and has the business unit of North America, then the selected members should be notified.

To add conditions:

1 With the row in edit mode, click the add data icon ( ) in the Condition column. The conditions dialog box is displayed, as figure 6-18 shows.

Figure 6-18: Conditions dialog box



2 Click **Add New**. A dialog box displays available attributes.
3 Select an attribute, then click **Done**. The selected attribute is appended as a new row in the conditions dialog box.
4 Click the edit icon ( ) to place the row in edit mode.
5 Click the add data icon ( ) to define the **Value** column.
6 Select an option from the **Match** drop-down list.
7 Click the apply changes icon ( ) to apply your changes.
8 Click **Save**.

Members

Select the users or groups who will be sent notifications. Click **Edit Users** to locate individual users and click **Edit Groups** to locate groups that will receive notifications.

To add users and user groups as members, refer to the procedures on page 6-13 and page 6-14.

Selection Modes

When moving a specification to the next workflow step, users could have the opportunity to select who receives notifications. Selection Mode allows you to control this process. Members displayed for selection will be organized by functional area. Choose a selection mode as follows:

- **All Members**—Choose this mode when you want all members to be automatically selected for the workflower.
- **One Member**—Choose this mode to allow the workflower to only select one member.
- **Multiple Members**—Choose this mode to allow the workflower to select multiple members.

Selection Optional

Select this checkbox to make the workflower's selection optional.

Evaluation Methods

Figure 6-19: Evaluation method options

☑ Evaluate First ☐ Evaluate All Criteria ☐ Evaluate First (per functional area)

Below the table are evaluation method options. These selections tell WFA how to evaluate the owners table.

- **Evaluate First**—Evaluates each row in order and use the first row where the conditions are met, ignoring all other rows.
- **Evaluate All Criteria**— Evaluates all rows and execute all that apply (provide a *union* set).
- **Evaluate First (per functional area)**—Groups rows by functional area, evaluate rows in order, executes the first one that applies, then skip to the next functional area (ignoring any remaining rows from the original functional area).

Transitions Table

Transitions answer the question, "Where can I go from here?" This section is used to set up which steps may be available for transition from the current step.

Predefined conditions can be placed on a particular transition to limit its availability based on specific criteria, as described in *Conditions* on page 6-22. Transitions can also be configured with a custom guard condition extensibility point that can programmatically determine if a workflow transition can occur, as described in *Guard Conditions* on page 6-24. Once the workflow transition does occur, custom workflow actions can be triggered to execute some custom process, as described in *Workflow Actions* on page 6-24.

Figure 6-20: Transitions section

Transitions:

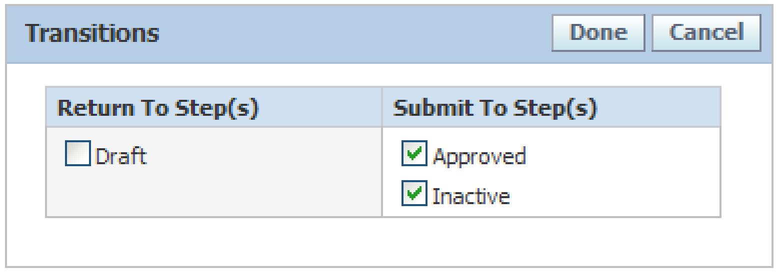
	Condition	Transition	Guard Conditions	Workflow Actions
✎	Business Unit=CPI North America	Lab Analysis		
✎	Country=United Kingdom	Review		

Manage Transitions

To add transitions:

1. Click **Manage Transitions**. This opens the Transitions dialog box, shown in figure 6-21 below. This dialog box lists all steps that exist on the workflow template.

Figure 6-21: Transitions dialog box



2. Select all the steps that the active step can move back to in the Return To Step(s) column.
3. Select all the steps that this step can move forward to in the Submit To Step(s) column.
4. Click **Done**.
5. Click **Save**.

Conditions

There may be times when “Who can do what and go where” conditions should differ, based on either user-specific attributes or specification attributes.

Conditions added to a transition must be met in order for the transition to appear as an option to the user. Depending on the workflow object selected, conditions can be based on the following attributes:

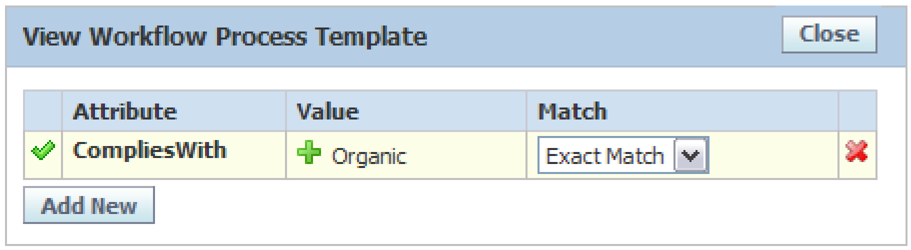
- **Business Unit**—Evaluates the business unit value on the specification.
- **Complies With**—Evaluates the Complies With value on the specification.
- **Country**—Evaluates the country value on the specification.
- **Classification**—Evaluates the classification value on the specification. (This only applies to ingredient specifications)
- **Menu Item Class**—Evaluates the menu item class value on the specification. (This only applies to menu item specifications)
- **Standard**—Evaluates the standard value on the specification. (This only applies to menu item specifications and product specifications)
- **Category**—Evaluates the specification category on the specification.
- **User Group**—Evaluates what user groups the user accessing the specification belong to.
- **User Role**—Evaluates what user roles the user accessing the specification has.

Multiple conditions can be used to model more complex routing requirements. For example, if the user has the [SPEC_ADMIN] role and the specification has the business unit of North America, then the specification can go to the "Approved" status.

To add conditions:

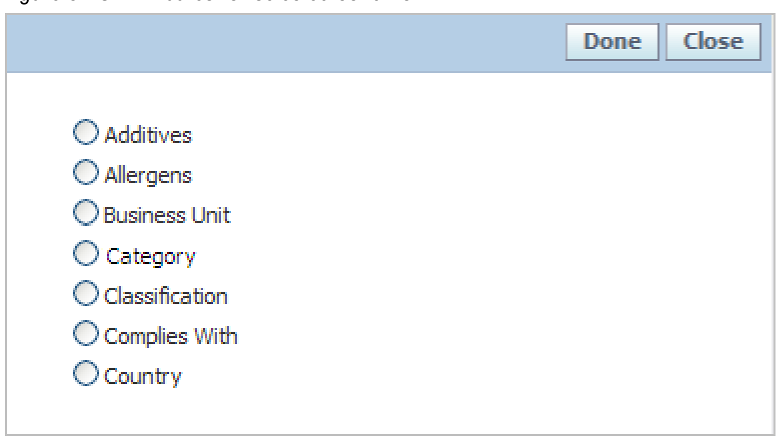
1. Click the edit icon ( ) to place the row in edit mode.
2. To add conditions, click the add data icon ( ) in the Condition column. The conditions dialog box is displayed, as figure 6-22 shows below.

Figure 6-22: Conditions dialog box



3. Click **Add New**. A dialog box displays available attributes, as figure 6-23 shows below.

Figure 6-23: Attributes for selected condition



4. Select an attribute, then click **Done**. The selected attribute is appended as a new row in the conditions dialog box.
5. Click the edit icon ( ) to place the row in edit mode.
6. Click the add data icon ( ) to define the **Value** column.
7. Select an option from the **Match** drop-down list.
8. Click the apply changes icon ( ) to apply your changes.
9. Click **Save**.

Transitions

Transitions answer the question, "Where can I go from here?" Transitions designate which steps are available for transition from the current step.

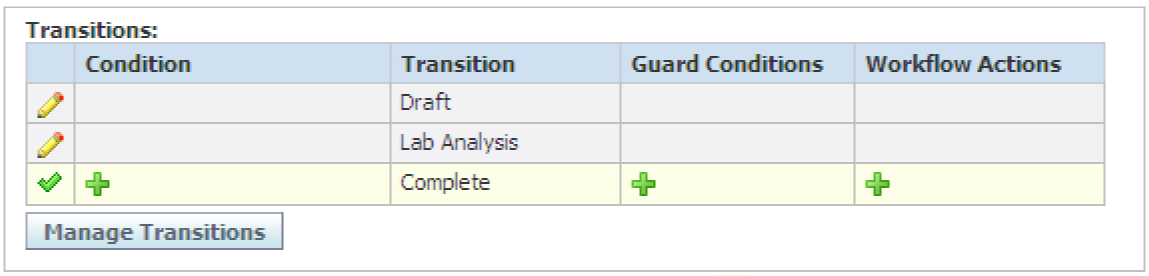
Guard Conditions

Guard Conditions are extensibility points that launch custom classes to determine if a workflow transition can occur. The custom classes can access the item being workflowed to execute specialized validations programmatically, and either allow the transition to occur, or prevent it and return a list of error messages. These custom classes are made available for selection in WFA as Guard Conditions by including them in the `config\Extensions\CustomWFAExtensionsConfig.xml file`. Please see the *Agile Product Lifecycle Management for Process Configuration Guide* and the *Agile Product Lifecycle Management for Process Extensibility Pack* documentation for more details on Custom WFA.

To add guard conditions:

1. Click the edit icon ( ) to place the row in edit mode, as figure 6-24 shows below.

Figure 6-24: Transitions row in edit mode



2. To add conditions, click the add data icon ( ) in the Condition column. WFA displays a dialog box listing configured guard conditions.
3. Select guard condition(s), and then click **Done**. The selected attribute is added to the Condition column in the Transitions row.

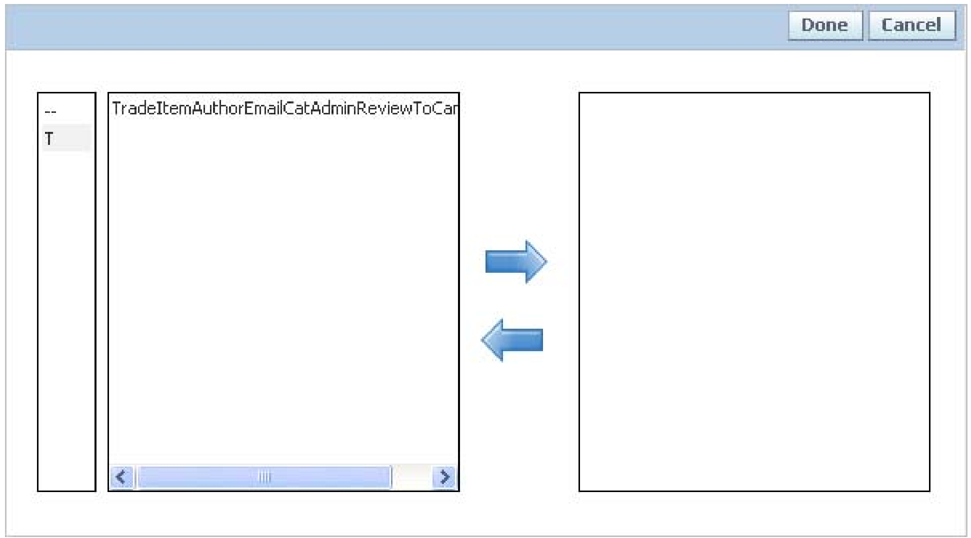
Workflow Actions

Workflow actions are an extensibility point that trigger the execution of custom classes when a workflow transition occurs. The custom classes can access the item being workflowed to execute specialized actions programmatically. These custom classes are made available for selection as workflow actions by including them in the `config\Extensions\CustomWFAExtensionsConfig.xml` file.

To add workflow actions:

1. With the row in edit mode, click the add data icon ( ) to define the **Workflow Actions** column. The workflow actions dialog box is displayed, as figure 6-25 shows below.

Figure 6-25: Workflow Actions dialog box



2. Select workflow action(s), and then click **Done**. The selected attribute is added to the Workflow Actions column in the Transitions row.
3. Click the apply changes icon ( ) to apply your changes.
4. Click **Save**.

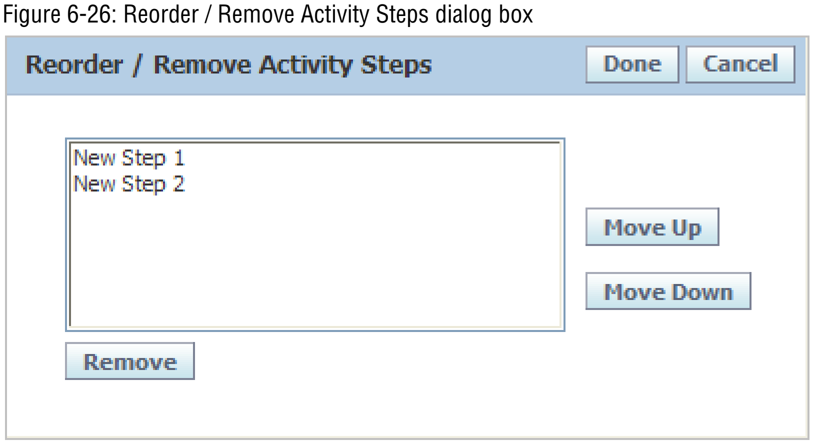
Adding Steps

Click **Add New Step** to add steps to the workflow process template. You can add as many steps as needed.

Reordering and Removing Steps

Click **Reorder / Remove Steps** to reorder or remove workflow steps. Agile PLM for Process displays the Reorder / Remove Activity Steps dialog box, as figure 6-26 shows below.

Figure 6-26: Reorder / Remove Activity Steps dialog box



To reorder a step:

1 Click the step to move.
2 Click **Move Up** or **Move Down** to set the desired order.
3 Repeat steps 1 and 2 for other steps.
4 Click **Done**. The dialog box closes. The steps on the Create Process Template page reflect the order that you set.

To remove a step:

1 Click the step to remove.
2 Click **Remove**. The step is removed from the dialog box.
3 Click **Done**. The dialog box closes. The step that you removed no longer is included on the Create Process Template page.

Steps can only be removed if the template has never been saved. If you want to remove a step after a template has been saved, inactivate the step.

Caution! Reordering and inactivating steps can result in serious consequences and issues for the workflow process template.

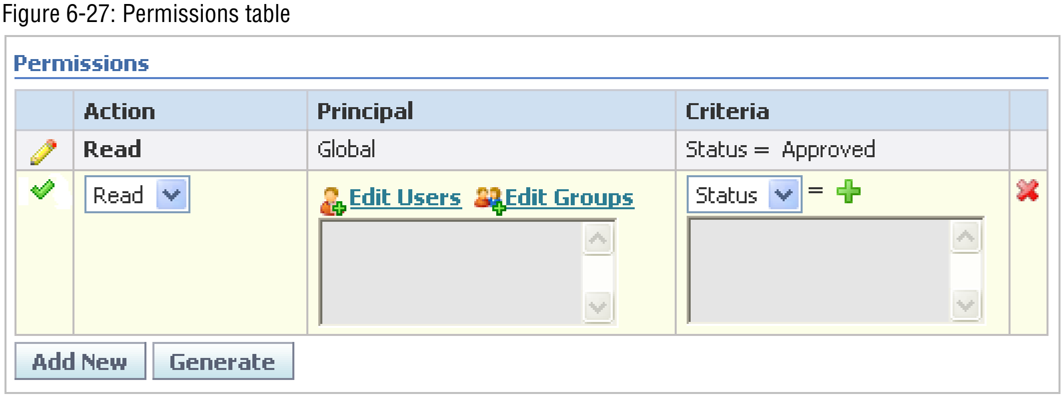
Permissions Section

Permissions are used to manage read and write access to the specification. Permissions reside in the Permissions table, shown in figure 6-27, and govern:

- What actions can be performed (Read or Write)
- When they can be performed (by Status/Step)
- By whom they can be performed (Users or Groups)

Note The section level editing feature once denoted by the Type column is being deprecated in a future release. This feature is now configurable, and by default is configured off.

Figure 6-27: Permissions table



To add a permission:

1 With the page in edit mode, click **Add New** in the Permissions section.
2 Click the edit icon ( ).

3 Define the permission using the **Action**, **Principal**, and **Criteria** fields as described below and through page 6-28.
4 Click the apply changes icon ( ) to apply your changes.
5 Click **Save**.

Actions

From the drop-down list, select what permission you are granting. Choices are “Read” or “Write.”

Principals

Select the users or groups who will be assigned permissions. Click **Edit Users** to locate individual users and click **Edit Groups** to locate groups.

To add users or user groups as members, follow the procedures found on page 6-13 and page 6-14.

Tokens

You can add the token of “Author,” “Owner,” or “Signature Requestee” as a principal. The following token choices are available:

- **Author**—The author of the specification
- **Owner**—A workflow participant assigned as an owner
- **Signature Requestee**—A workflow participant assigned as a signature requestee for the specification

To add tokens to the Permissions table:

1 With the page in edit mode, click **Add New** in the Permissions section.
2 Click the edit icon ( ) to the left of the new role.
3 Click **Edit Users**. The user search page displays.
4 Search for and select users as described on page 6-13.
5 Click **Done**. The token dialog box displays, as figure 6-28 shows below:

Figure 6-28: Tokens dialog box, Permissions

6 Assign a token by clicking the **Author**, **Owner**, or **Signature Requestee** checkbox. You can make multiple selections.
7 Click **Done**. The users and assigned tokens are added to the **Principal** field, as figure 6-29 shows below.

Figure 6-29: Added tokens

8 Click the apply changes icon ( ) to apply your changes.

9 Click **Save**.

Criteria

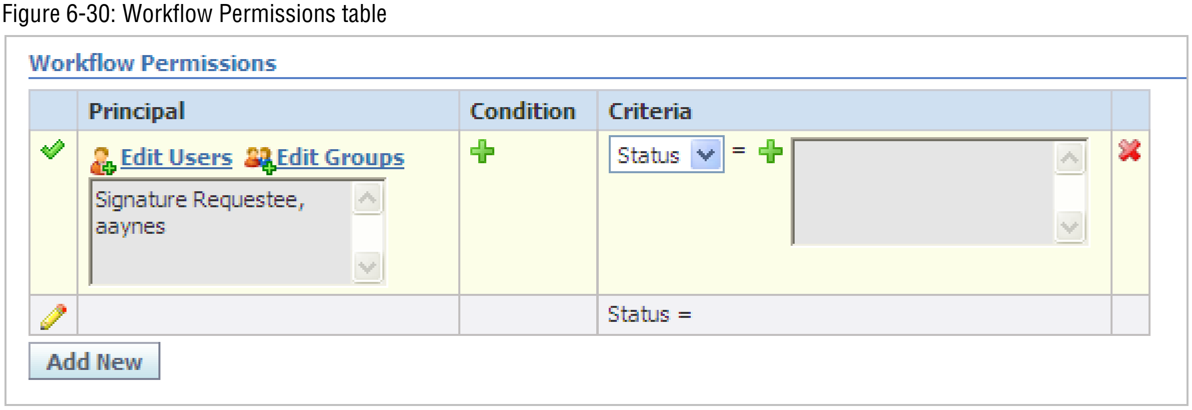
Designate which step(s) the principal has the selected permission for. For example, the owner only has edit rights to the specification when its in the Review step.

Note Section level editing can be configured on or off. Refer to the *Agile Product Lifecycle Management for Process Configuration Guide* for more information on this extensibility point.

Workflow Permissions Section

In addition to read and write permissions above, you can also set who has workflow permissions. Workflow permissions are used to manage workflow rights, meaning which users can transition a workflow on a GSM specification.

Figure 6-30: Workflow Permissions table



To add a workflow permission:

1 With the page in edit mode, click **Add New** in the Workflow Permissions section.

2 Click the edit icon ( ).

3 Define the permission using the **Principal**, **Condition**, and **Criteria** fields as described below and through page 6-31.

4 Click the apply changes icon ( ) to apply your changes.

5 Click **Save**.

Principal

Select the users or groups who will be assigned workflow permissions. Click **Edit Users** to locate individual users and click **Edit Groups** to locate groups. The token of "Author" and "Signature Requestee" can also be added as a principal. These tokens represent the specification's author and signature requestee(s).

To add users or user groups as members, follow the procedures found on page 6-13 and page 6-14.

Tokens

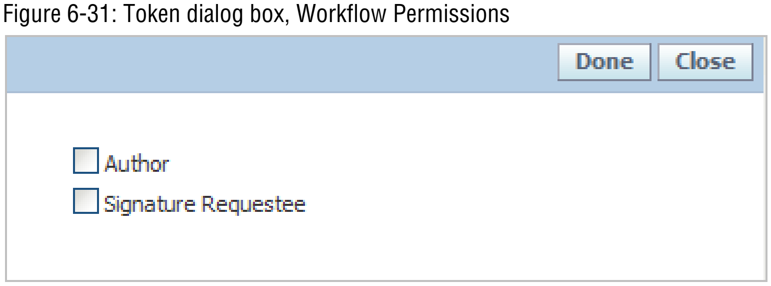
The token of "Author" or "Signature Requestee" can also be added as a principal. Users but not user groups can be assigned. The following token choices are available for workflow permissions:

- **Author**—The author of the specification
- **Signature Requestee**—A workflow participant assigned as a signature requestee for the specification

To add tokens to the Workflow Permissions table:

1 With the page in edit mode, click **Add New** in the Workflow Permissions section.
2 Click the edit icon ( ) to the left of the new role.
3 Click **Edit Users**. The user search page displays.
4 Search for and select users as described on page 6-13.
5 Click **Done**. The token dialog box displays, as figure 6-31 shows below:

Figure 6-31: Token dialog box, Workflow Permissions



6 Assign a token by selecting **Author**, **Signature Requestee**, or both.
7 Click **Done**. The users and assigned tokens are added to the **Principal** field.
8 Click the apply changes icon ( ) to apply your changes.
9 Click **Save**.

Note You can also add tokens to existing users.

Conditions

There may be times when "Who can workflow and when" conditions should differ, based on either user-specific attributes or specification attributes.

Conditions added to the Workflow Permissions table must be met in order for the Workflow button to appear as an option to the user. Depending on the workflow object selected, conditions can be evaluated based on the following attributes:

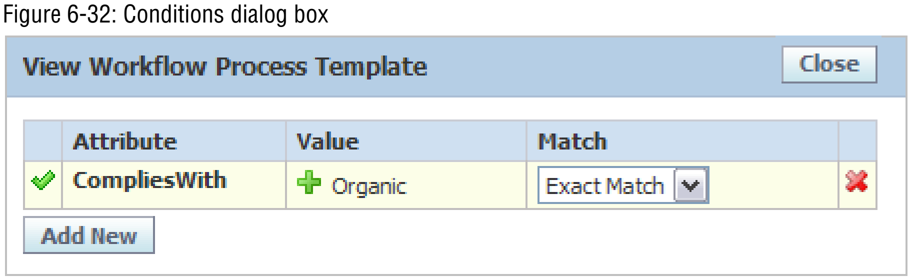
- **Additives**—The additive values on the specification.
- **Allergens**—The allergen values on the specification.
- **Business Unit**—The business unit value on the specification.
- **Classification**—The classification value on the specification. (This only applies to ingredient specification workflow objects)
- **Complies With**—The Complies With value on the specification.
- **Country**—The country value on the specification.
- **Menu Item Class**—The menu item class value on the specification. (This only applies to menu item specifications)
- **Standard**—The standard value on the specification. (This only applies to menu item specifications and product specifications)
- **Catalog**—The specification category on the specification.

Multiple conditions can be used to model more complex workflow permission requirements. For example, if the specification is “Organic,” then the following users have workflow rights.

To add conditions:

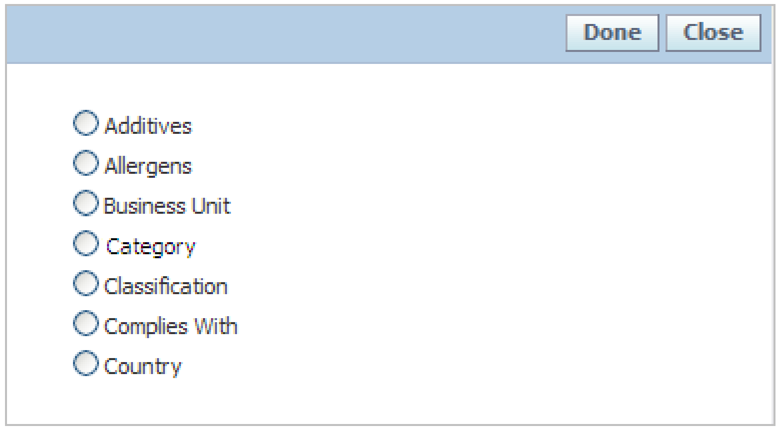
1. Click the edit icon ( ) to place the row in edit mode.
2. To add conditions, click the add data icon ( ) in the Condition column. The conditions dialog box is displayed, as figure 6-32 shows below.

Figure 6-32: Conditions dialog box



3. Click **Add New**. A dialog box displays available attributes, shown in figure 6-33.

Figure 6-33: Attributes for selected condition



4 Select an attribute, and then click **Done**. The selected attribute is appended as a new row in the Conditions dialog box.
5 Click the edit icon ( ) to place the row in edit mode.
6 Click the add data icon ( ) to define the **Value** column.
7 Select an option from the **Match** drop-down list.
8 Click the apply changes icon ( ) to apply your changes.
9 Click **Save**.

Criteria

Designate which step(s) are impacted by the selected permission. For example, the author only has workflow rights to the specification when it is in the "Draft" and "Review" step.

Controlling Specification Visibility

GSM Specifications can be filtered out of GSM search results by adding visibility tags to workflow steps. This functionality is beneficial when you want to limit search results for certain UGM user groups. For example, users in the "Marketing" group are only interested in trade specifications when they are in an Approved state, while the "R&D" group are interested in trade specifications in all statuses. To accomplish this behavior, two visibility tags need to be created -- R&D and Marketing. These tags would be created in ADMN, as described in *Tags* on page 4-83. "R&D" would be a tag applied to all steps in the workflow, while the "Marketing" tag would only be applied to the "Approved" step. In UGM, you would associate the "R&D" tag to the R&D user groups and the "Marketing" tag to the Marketing user groups. See *Workflow Visibility Tags Section* on page 2-9 for more information.

Important These tags only control EQT search result filtering. They do not control read or edit permissions to the specification. WFA permissions and/or BU security should be used to control permissions.

Editing GSM Workflow Process Templates

To edit a GSM workflow process template:

1. Use the search tool to locate the existing workflow process template to edit. See *Searching for Workflows* on page 6-3.
2. Click **Edit** at the top right corner. The workflow process template displays with editable fields.
3. Make edits to the workflow process template as described earlier in this chapter.
4. Click **Save & Close**.
5. Flush the workflow cache group, as described in *Using the Cache Application* on page 9-3.

Using the Make Inactive Option

You can make certain steps of the workflow process template inactive by clicking **Make Inactive**, located to the right of applicable sections.

Further, you can remove inactive sections from your view by clicking **Toggle Inactive Steps** in the top right corner of the screen. This option removes inactive sections from your view but does not remove them from the workflow process template altogether.

Copying GSM Workflow Process Templates

If you need to create a GSM workflow process template that is very similar to an existing GSM workflow process template, you may wish to use the copy feature of the WFA application. You can copy the existing workflow, save it as a new template, and edit that template.

To copy an existing GSM workflow and use it as a basis for a new, similar workflow:

1. Use the search page to locate the existing workflow process template to copy. See *Searching for Workflows* on page 6-3.
2. Click **Copy** at the top right corner. A copy of the workflow process template with editable fields is presented.
3. The words “Copy of” are added to the original workflow process template name. Change the name of the workflow process template.
4. Make additional edits to the workflow process template as needed using instructions provided in *Creating New GSM Workflow Process Templates* on page 6-4.
5. Click **Save & Close**.
6. Flush the workflow cache group, as described in *Using the Cache Application* on page 9-3.

Exporting and Importing Workflows

As an administrator, you perform workflow creation and editing tasks in a staging environment. Once you have made final changes to workflows in the staging environment and they are ready to go live in the production environment, you must export them out of the staging environment and import them into the production environment.

Exporting Workflows from Your Staging Environment

To export workflow data from your staging environment:

1. Before exporting a workflow, make sure you have flushed the workflow cache group, as described in *Using the Cache Application* on page 9-3.
2. Start a new Agile PLM for Process session prior to exporting a workflow from staging to production.
3. Click **WFA** on the left navigation panel.
4. Locate the workflow process template to export.
5. Click **Package for Export** at the top right corner. A File Download dialog box displays.
6. Select the location on your hard drive to temporarily export the data.
7. Click **Save**. Agile PLM for Process encrypts the data and saves the encrypted file to your local drive.

Importing Workflows into Your Production Environment

To import workflow data into your production environment:

1. Log in to your production environment.
2. Access **WFA** on the left navigation panel.
3. Click **Imports** on the left navigation panel.
4. Click **Browse** to locate the encrypted file that you exported from the staging environment and select the file.
5. Click **Import** at the top right corner of the page.
6. Flush the workflow cache group, as described in *Using the Cache Application* on page 9-3.

CHAPTER 7

Using WFA to Manage SCRM Workflows

This chapter contains instructions for using the Workflow Administration (WFA) application to manage workflows in Supply Chain Relationship Management (SCRM). Topics in this chapter include:

In Agile PLM for Process, workflows are managed using the WFA (Workflow Administration) application. This chapter contains instructions for workflow management in SCRM (Supply Chain Relationship Management) only.

For an overview of workflows and instructions on workflow management in GSM (Global Specification Management), see Chapter 6, *Using WFA to Manage GSM Workflows*. For instructions on workflow management in CSS (Content Synchronization and Syndication), see Chapter 8, *Using WFA to Manage CSS Workflows*.

There are two main types of workflow templates for SCRM:

- **Specification-related sourcing approvals**—These can resolve using the receiving facility business unit, source facility business unit, specification type, and category type. Available specification types are:
  - Equipment specifications
  - Ingredient specifications
  - Packaging material specifications
  - Printed packaging specifications
  - Product specifications
  - Trade specifications

- **Non-specification-related sourcing approvals**—These can resolve using the receiving facility business unit and source facility business unit object types.

Associated Roles

The following user roles are associated with workflows:

[WFA_ADMIN]—Can create, edit, import, and export workflows.

[WFA_USER]—Can access the WFA (Workflow Administration) application and view all workflows.

Workflow Terms and Definitions

The following are important workflow terms and definitions that you must understand in order to perform workflow administration tasks:

Owner—The person(s) responsible for managing the sourcing approval in a particular status. As owner of the workflow, you:

- Receive items in your Action Items list. You are responsible for assuring that the assigned parties perform all necessary actions or reviews.
- Can advance the sourcing approval in the workflow process by clicking **Workflow** in the upper right corner of the sourcing approval page.

Author—The person who originally created the sourcing approval.

Signature Reviewer—Represents a functional area, group, or individual who is responsible for reviewing information contained within a sourcing approval. The signature requestees approve or disapprove the sourcing approval through the use of signature documents. This review enables the sourcing approval to move forward in the workflow process.

Additional Notification—Represents a functional area, group, or individual who receives an email notification that a sourcing approval has been moved in the workflow process to a particular status. This role is considered informational only, and additional notification recipients are not responsible for providing any formal response or input into the sourcing approval.

Reader—A group or individual who can open a sourcing approval and read the contents. You can assign read permissions to groups, individuals, or exclusively the sourcing approval author, owner, and/or signature requestee.

Editor—A group or individual who can open and edit a sourcing approval. You can assign editor permissions to groups, individuals, or exclusively to the sourcing approval author, owner, and/or signature requestee.

Workflower—A group or individual who can move the sourcing approval from one workflow step to another. You can assign workflow permissions to groups, individuals, or exclusively to the sourcing approval author or signature requestee.

Service Level Agreement (SLA)—The number of days that a document will remain in a particular status before a reminder indicator changes. The system issues an amber reminder that a deadline is approaching and a red reminder that the deadline has passed.

Transitions—The statuses that a particular step can be transitioned to. Moving a sourcing approval between statuses can mean moving the workflow backward to a previous step or forward to the next step. Transitions can be serial (one back and one forward) or can allow for expedition (from any status to any other status).

Guard Conditions—An extensibility point that helps determine if a workflow transition can occur.

Workflow Actions—An extensibility point that triggers the execution of custom classes when a workflow transition occurs. The custom classes can access the item being workflowed to execute specialized actions programmatically.

Recommendations for Creating Workflows

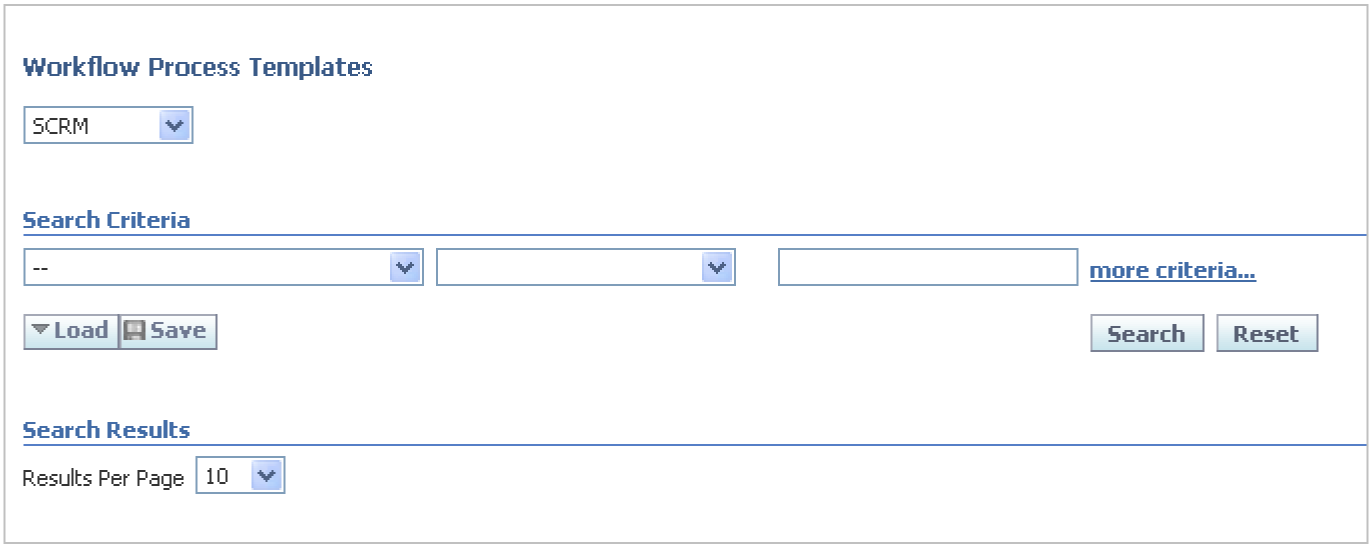
The following are recommendations for creating workflows using the WFA (Workflow Administration) application in Agile PLM for Process.

- A workflow should contain a relatively small number of created statuses. These statuses should be common and applicable across all workflows. For example, consider using a workflow that progresses through the following intuitive statuses: Draft > Working > Approved > Inactive > Retired.
- When creating workflows in the WFA application, always check the **Terminate Workflow at This Step** check box to indicate the last step in the workflow.
- Deprecate workflow steps by clicking **Make Inactive**. Changing a step to inactive status assures that existing sourcing approvals already in that step can continue in the workflow but that no new sourcing approvals can enter that step.
- If a step has signature documents and/or notifications, be sure to provide functional areas for each.
- Principals are required for each permission rule.

Searching for Workflows

As an administrator, you often search for workflow process templates. When you first access the WFA (Workflow Administration) application using the left navigation panel, you see the Workflow Process Templates search page, shown in figure 7-1 below.

Figure 7-1: Workflow Process Templates search page



Workflow Search Criteria

To search for SCRM workflows, use a combination of search criteria:

1. Select **SCRM** from the type of workflow template drop-down list.
2. In the key field drop-down list, select your search criteria as follows:
   - **All (--)**—Searches for all workflows.
   - **Description**—Searches for workflows by description.
   - **Name**—Searches for workflows by name.
3. In the operator drop-down list, your options will be determined by the choice that you made in the first drop-down list. Selections may include:
   - **Null** {empty field}—Searches for all workflows.
   - **Contains**—Used for character searches, alphabetical or numerical (for example, “Name Contains Facility” will result in only workflow templates with names containing the word “Facility”).
   - **Equals**—Used to quantify search criteria entered in the field to the right (for example, “Name Equals Sourcing Facility San Antonio” will result in only workflow templates with this exact name.)
   - **Starts With**—Used for character searches, alphabetical or numerical (for example, “Description Name Starts With K” will result in only workflow templates with descriptions that start with the letter “K”).
4. Use the third search criteria field to qualify the selections you made in the first two drop-down lists. You can also enter the percent (%) sign to perform a wildcard search matching any one character.
5. Click **Search** to display SCRM workflow templates matching the search criteria.

Note Click any column head to sort rows alphabetically by that column head. Click again to reverse the order of the sort.

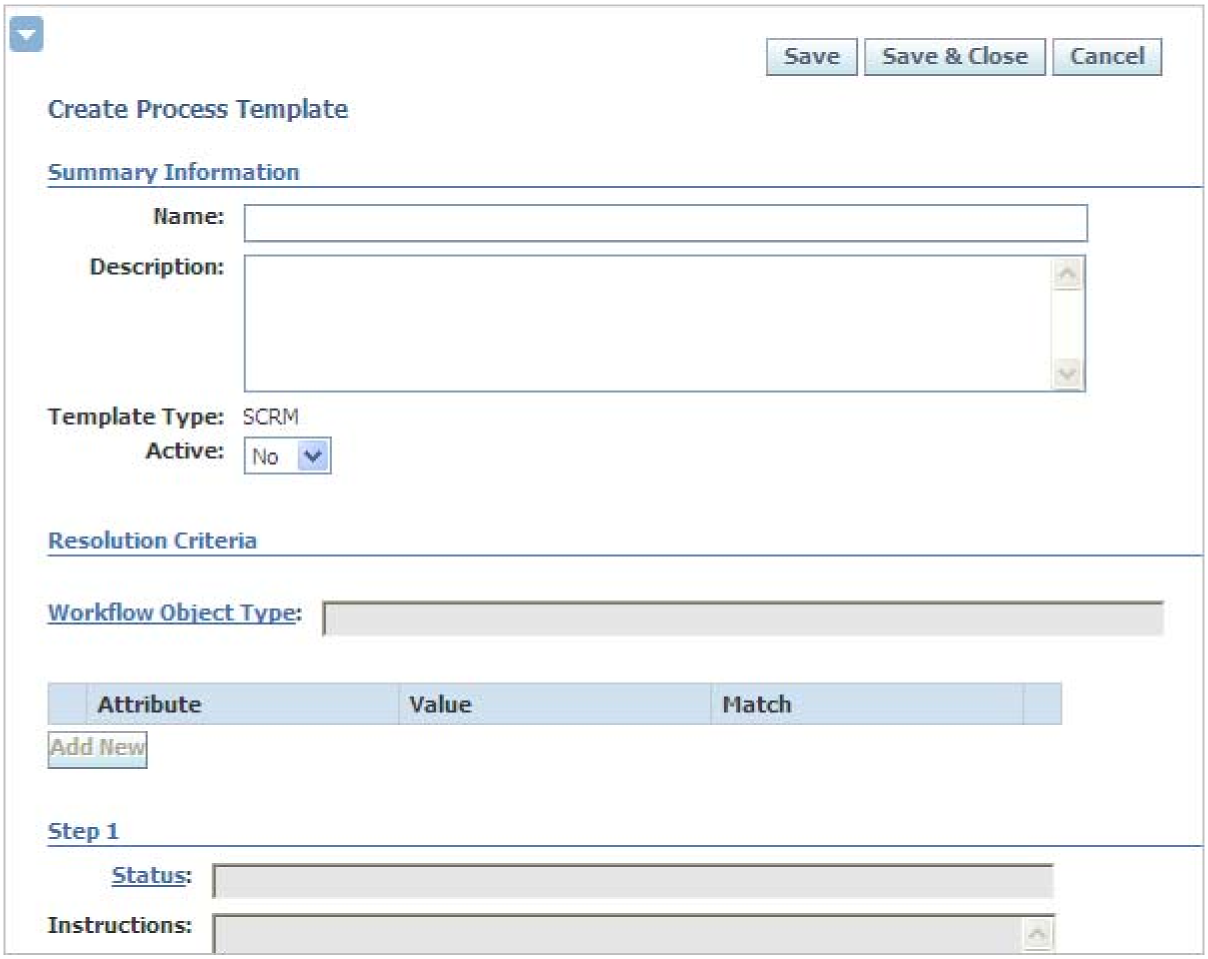
For guidance on saving and loading searches, see *Saving and Loading Searches* on page 2-4 and *More Search Options* on page 2-4.

Creating SCRM Workflow Process Templates

To create a new SCRM workflow process template:

1. Click **WFA** on the left navigation panel.
2. Click **New Process Template** in the top right corner.
3. In the resulting dialog box, select **SCRM** (Supply Chain Relationship Management) and then click **Done**. A new workflow template page is displayed, as shown in figure 7-2.

Figure 7-2: SCRM Workflow Template page



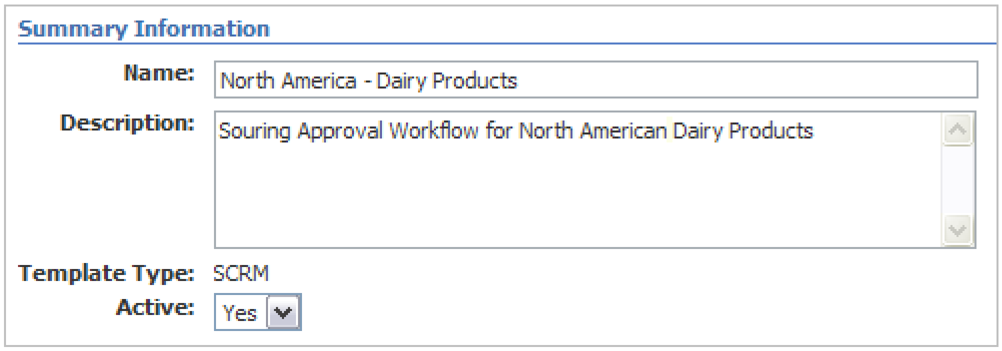
4. Enter information described in:
   - *Summary Information Section* on page 7-6
   - *Resolution Criteria Section* on page 7-6
   - *Steps Section* on page 7-8
   - *Permissions Section* on page 7-21
   - *Workflow Permissions Section* on page 7-23
5. Click **Save & Close**.

6 Flush the workflow cache group, as described in *Using the Cache Application* on page 9-3.

Note For instructions on workflow management in GSM (Global Specification Management), which are slightly different from SCRM instructions, see Chapter 6, *Using WFA to Manage GSM Workflows*. See *Chapter 8, Using WFA to Manage CSS Workflows* for instructions on CSS workflows.

Summary Information Section

Figure 7-3: Summary Information section



Enter the following workflow information in the Summary Information section:

Name

Enter a unique name for the workflow. This name will appear to the SCRM user when resolving a sourcing approval to a workflow. It is also shown on a sourcing approval as the Current Workflow value on the approval/audit trail tab. This is a required field.

Description

Enter a description for the workflow. This will appear to the SCRM user when resolving a sourcing approval to a workflow. This is a required field.

Template Type

This field cannot be edited. The template type is determined in step 3 on page 7-5.

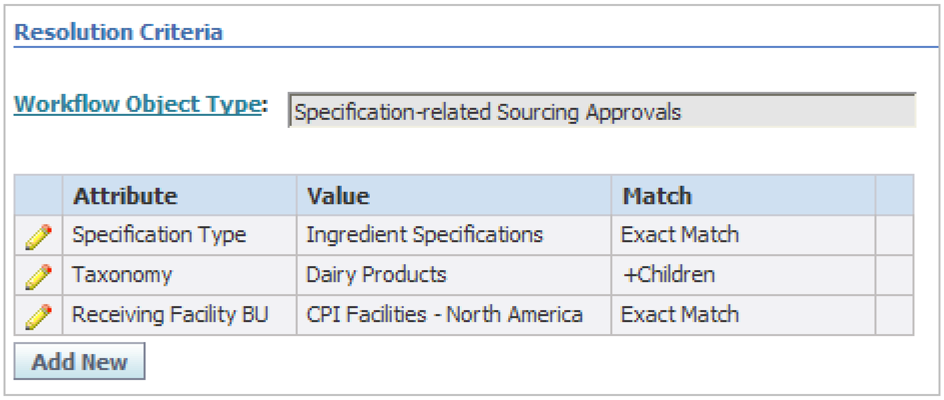
Active

Select **Yes** to make the template active when the workflow template is ready to become available for use in Agile PLM for Process. Otherwise, the template will remain inactive and unavailable for general use.

Resolution Criteria Section

Sourcing approval workflows can resolve using receiving facility business unit, source facility business unit, specification type, and category.

Figure 7-4: Resolution Criteria section



Note Once a sourcing approval has resolved to a workflow, users with the role of [CAN_RERESOLVE_WORKFLOWS_SCRM] can re-resolve the sourcing approval to a different workflow in SCRM.

Enter the following workflow information in the Resolution Criteria section:

Workflow Object Type

Click the **Workflow Object Type** link to display a selection dialog box. A list of workflow object types is presented. There are two main types of workflow templates for SCRM:

- Specification-related sourcing approvals
- Non-specification related sourcing approvals

Select the type of sourcing approval that will consume this workflow process template. There is a one-to-one relationship between the template and object type; only one selection is allowed.

Attributes

For specification-based sourcing approvals, workflows can resolve using the receiving facility business unit, source facility business unit, specification type, and category.

For non-specification sourcing approvals, workflows can resolve using the receiving facility business unit and source facility business unit object types.

Value

Click the edit icon ( ) to place the row in edit mode. Click the add data icon ( ) to display a selection list of the attribute added. Select the value to evaluate, and then click **Done**.

Match

Make a selection as follows:

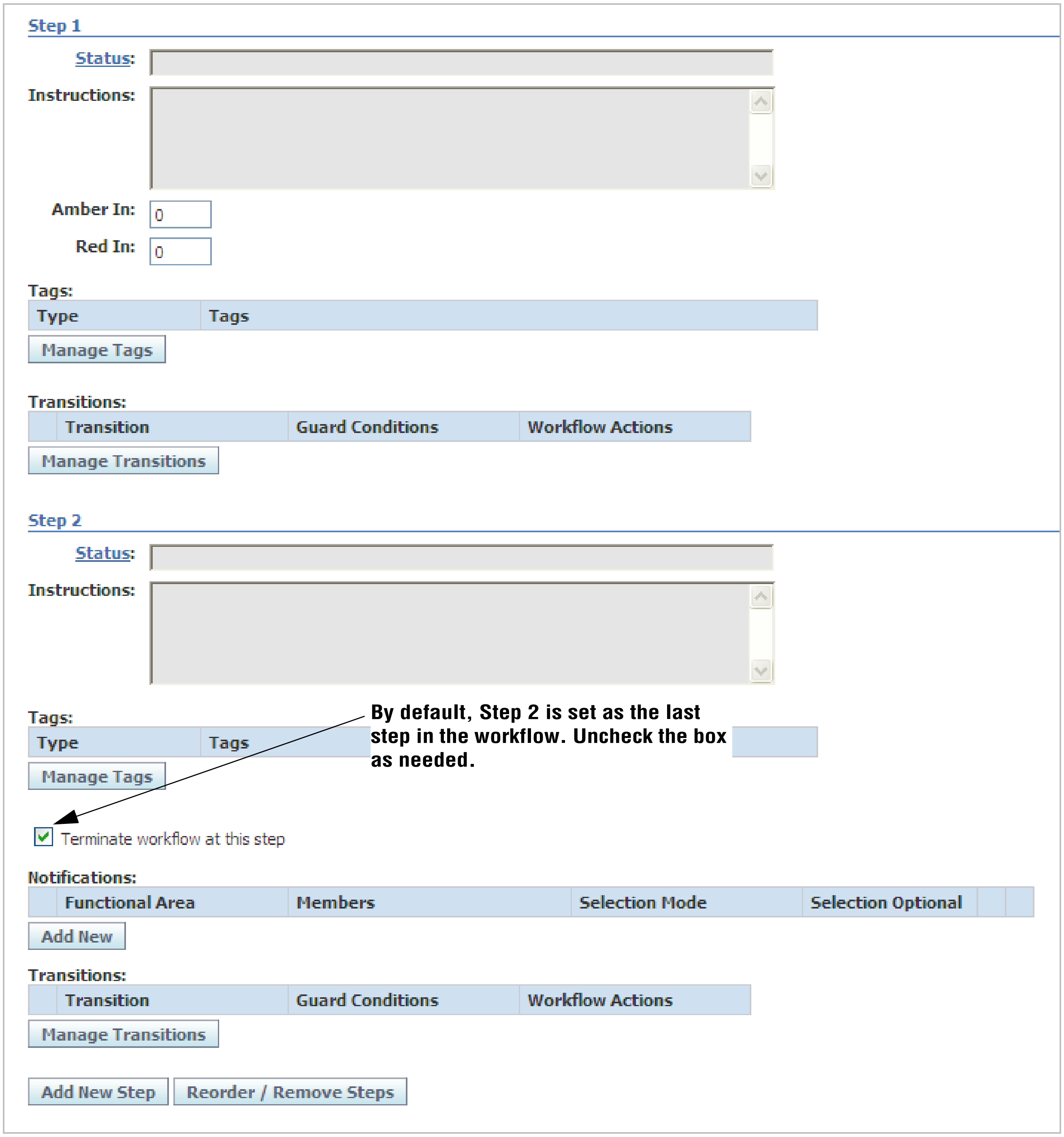
- **Exact Match**—The values must match exactly
- **Hierarchy**—The values must be related hierarchically (the match moves up and down the hierarchy)
- **+ Children**—The values must be related hierarchically (the match moves down the hierarchy only)

Note Attribute values in the same row will represent an OR statement. For example, if the receiving facility business unit equals "USA" or "Canada" it will resolve to this template.
Attribute values in different rows represent an AND statement. For example, the receiving facility must have a business unit of "USA" and a specification category value of "Dairy > Milk > Powder."

Steps Section

Each workflow template must have a minimum of two steps, as represented in the Step 1 and Step 2 sections. You can add more step sections by clicking **Add New Step**.

Figure 7-5: Steps sections



To define steps:

1 Click **Status**. A Select Status dialog box displays. You can choose from a list of existing statuses or scroll to the bottom of the list and click **Add New** to create a new status and name it. Workflow process templates contain only a small number of statuses, since statuses, once created, are permanent. Statuses should also be common and applicable across all workflows.

> **Note** Give each status a unique status name. Status names cannot be changed once the template is activated.

2 The **Instructions** field is populated with the instructions attached to the chosen status. If you create a new status, enter a new set of instructions for this field.

3 In the **Amber In** field, enter the number of days until this workflow step displays in amber, indicating that the deadline is approaching. This field displays in all steps except the terminal step.

4 In the **Red In** field, enter the number of days until this workflow step displays in red, indicating that the deadline has passed. This field displays in all steps except the terminal step.

5 Click **Tags** to tie workflow actions or visibilities to this step. Tags are a list of specialized functions. This field is available for specification-related sourcing approvals only. Using tags, you can attach predetermined behaviors to workflow steps. Administrators create and manage tags using the ADMN>WFA>Tags option. See *Tags* on page 4-83 for more information. Available choices are:

- **Publish to Supplier Portal**—This action will publish the sourcing approvals tied to this step to the Supplier Portal. This is a valuable feature for publishing only approved sourcing approvals to your suppliers.
- **Send Notification to Sourcing Supplier**—This action notifies the sourcing facility when a sourcing approval is published to the Supplier Portal.
- **Supplier Review**—This tag is used to specify when the specification is ready for supplier review. When this tag is included and the specification is published to Supplier Portal, the supplier will be allowed to submit an electronic signature. See the *Agile Product Lifecycle Management for Process Supplier Portal User Guide* more information on electronic review of specifications.
- **Supplier Approved**—This tag is used to specify which status represents supplier approval. Only one workflow step should have the Supplier Approved tag. The sourcing approval will transition to the step having this tag when the supplier selects Approved in the supplier electronic review transition drop-down. See the *Agile Product Lifecycle Management for Process Supplier Portal User Guide* more information on electronic review of specifications.

- **Supplier Rejected**—This tag is used to specify which status represents supplier rejection. Only one step should have the Supplier Rejected tag. The sourcing approval will transition to the step having the supplier rejected tag when the supplier selects Disapproved in the supplier electronic review transition drop-down. See the *Agile Product Lifecycle Management for Process Supplier Portal User Guide* more information on electronic review of specifications.
- **Initial Load**—This tag will be used to interact with future APIs. This tag currently does not define any system behavior.

6 If needed, check the **Terminate workflow at this step** box to end the workflow at this step. This setting indicates that no further steps are required.

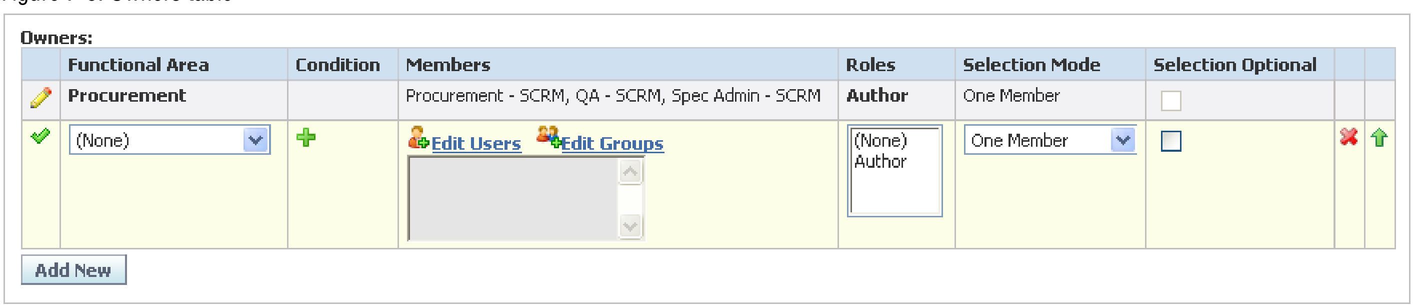
7 Click **Save**. If needed, add more steps by clicking **Add New Step** and repeating this procedure.

Owners Table

Use the Owners table to designate the person(s) responsible for managing the sourcing approval, as figure 7-6 shows below. An owner of the workflow:

- Will receive items in their Action Items list
- Can advance the sourcing approval in the workflow process by clicking **Workflow** in the upper right corner of the sourcing approval page

Figure 7-6: Owners table



Note You cannot set owners on the first and terminal steps.

To add an owner:

1 Click **Add New** to create a new owner's row.

2 Define the owner by **Functional Area**, **Members**, **Roles**, **Selection Mode**, and **Selection Optional**, as described below and through page 7-14.

3 Click the apply changes icon (✔) to apply your changes.

4 Click **Save**.

Functional Areas

Select the functional area for users or groups who will be assigned ownership. This value will also be used to organize groups of owners available for a user's selection during the workflow transition. Administrators create and manage functional areas using the ADMN>WFA>Functional Area (WFA) option. See *Functional Area - (WFA)* on page 4-82 for more information.

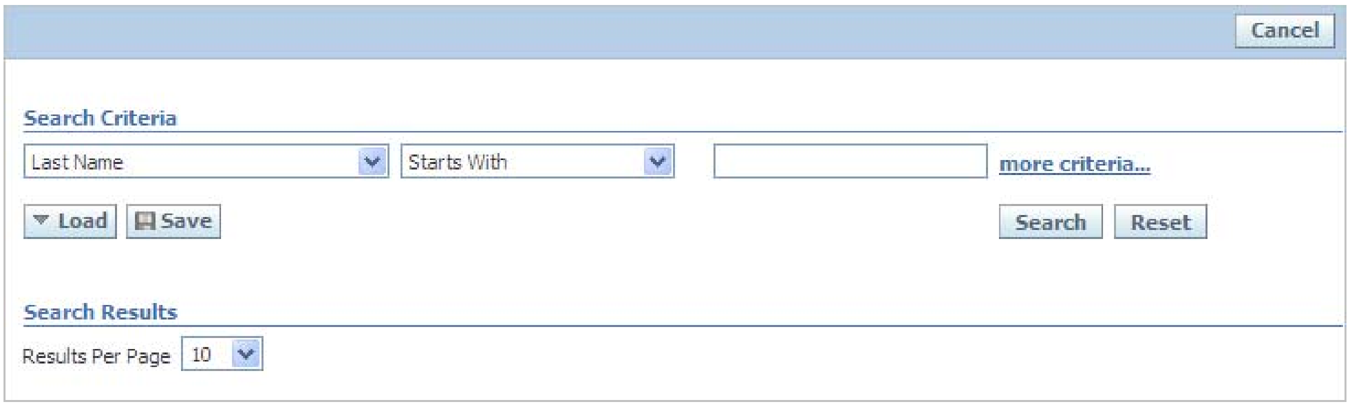
Members

Select the users or groups who will be assigned ownership. Click **Edit Users** to locate individual users and click **Edit Groups** to locate groups that will be used when assigning ownership.

To add users as members:

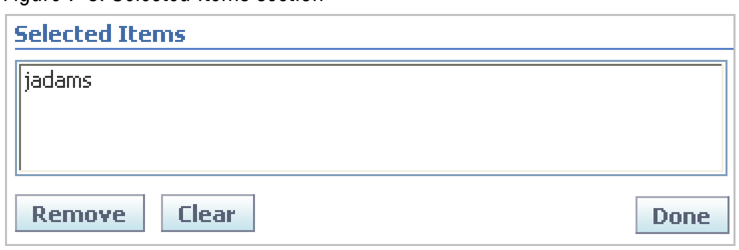
1. With the row in edit mode, click **Edit Users**. The user search page is displayed with “Last Name” and “Starts With” default search criteria, as figure 7-7 shows below.

Figure 7-7: User search page



2. Enter the user’s last name in the third search criteria field.
3. Click **Search**. User names matching the information you provided are listed in the Search Results section.
4. Click the user name. It displays in the Selected Items section, shown in figure 7-8.

Figure 7-8: Selected Items section

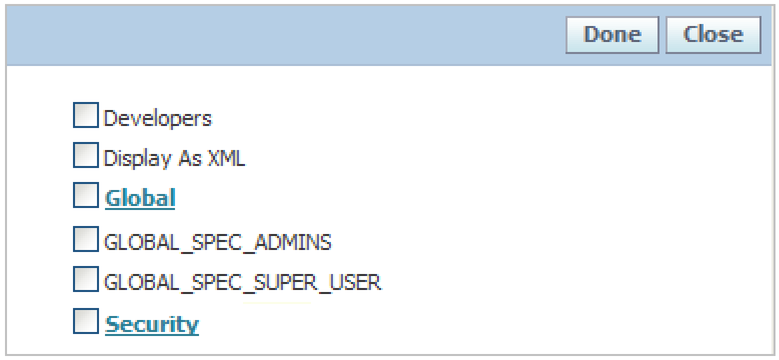


5. Repeat step 2 through step 4 to select other users.
6. Click **Done**. The users are added to the Members column.
7. Click the apply changes icon ( ) to apply your changes.
8. Click **Save**.

To add user groups as members:

1 With the row in edit mode, click **Edit Groups**. The groups dialog box is displayed, shown in figure 7-9.

Figure 7-9: Groups dialog box



2 Check the groups to add as members.

3 Click **Done**. The groups are added to the Members column, shown in figure 7-10.

Figure 7-10: Selected members

4 Click the apply changes icon ( ) to apply your changes.

5 Click **Save**.

To delete users:

1 With the row in edit mode, click **Edit Users**. The user search page displays, as figure 7-7 shows above.

2 In the Selected Items section, click the user to delete, then click **Remove**. The user that you selected is removed from the Members column.

3 Repeat steps 1 and 2 to delete additional users.

4 Click **Done**.

5 Click **Save**.

To delete user groups:

1 With the row in edit mode, click **Edit Groups**. The group dialog box displays as figure 7-9 shows above.

2 Uncheck the groups to delete.

3 Click **Done**. The dialog box closes. The groups that you selected are removed from the Members column.

4 Click **Save**.

Roles

You can designate the author of the sourcing approval as the owner by selecting the value of "Author."

Selection Modes

A user moving a sourcing approval to the next workflow step could have the opportunity to select an owner. Selections will be organized for the user by functional area. Selection Mode allows you to control this process.

Choose a selection mode as follows:

- **All Members**—Choose this mode when you want all members to be automatically selected for the workflower.
- **One Member**—Choose this mode to allow the workflower to select only one member.
- **Multiple Members**—Choose this mode to allow the workflower to select multiple members.

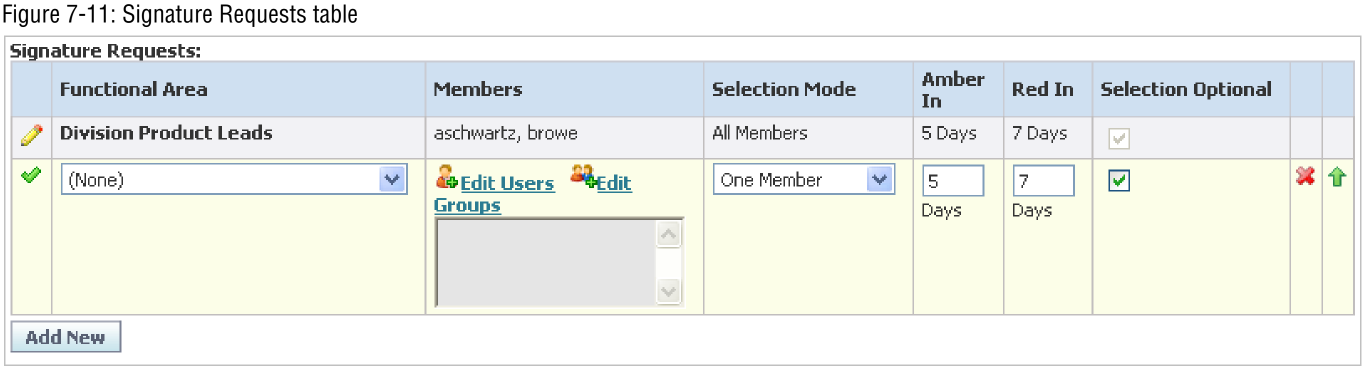
Selection Optional

Select this checkbox to make the workflower's selection optional.

Signature Requests Table

Use the Signature Requests table to assign signature reviewers. Signature requestees represent a functional area, group, or individual who is responsible for reviewing information contained within a sourcing approval. The signature requestee approves or disapproves the sourcing approval through the use of signature documents. This review enables the sourcing approval to move forward in the workflow process. The owner of a sourcing approval can now workflow the sourcing approval to a prior step regardless of whether all signature request have been approved or disapproved by requestees. Figure 7-11 shows the Signature Requests table.

Figure 7-11: Signature Requests table



Note You cannot assign signature requestees on the first and terminal steps.

To add signature requestees:

1. With the page in edit mode, click **Add New** to create a new row.
2. Define the signature requestee using the **Functional Area**, **Conditions**, **Members**, **Selection Mode**, **Amber In**, **Red In**, and **Selection Optional** fields as described below and through page 7-15.
3. Click the apply changes icon (✔) to apply your changes.
4. Click **Save**.

Functional Areas

Use this field to select the functional area for users or groups who will receive signature requests. This value will be used to organize the SCRM user's workflow selections.

Members

Use this field to select the users or groups who will be assigned as signature requestees. Click **Edit Users** to locate individual users and click **Edit Groups** to locate groups that will receive signature requests.

To add users as members, refer to the procedure on page 7-12. To add user groups as members, refer to the procedure on page 7-13.

Selection Modes

A user who is moving a sourcing approval to the next workflow step could have the opportunity to select signature requestees. Selection Mode allows you to control this process. Choose a selection mode as follows:

- **All Members**—Choose this mode when you want all members to be automatically selected for the workflower.
- **One Member**—Choose this mode to allow the workflower to only select one member.
- **Multiple Members**—Choose this mode to allow the workflower to select multiple members.

Amber In and Red In Options

Amber In—Enter the number of days until the signature request displays in amber, indicating that the deadline is approaching.

Red In—Enter the number of days until the signature request displays in red, indicating that the deadline has passed.

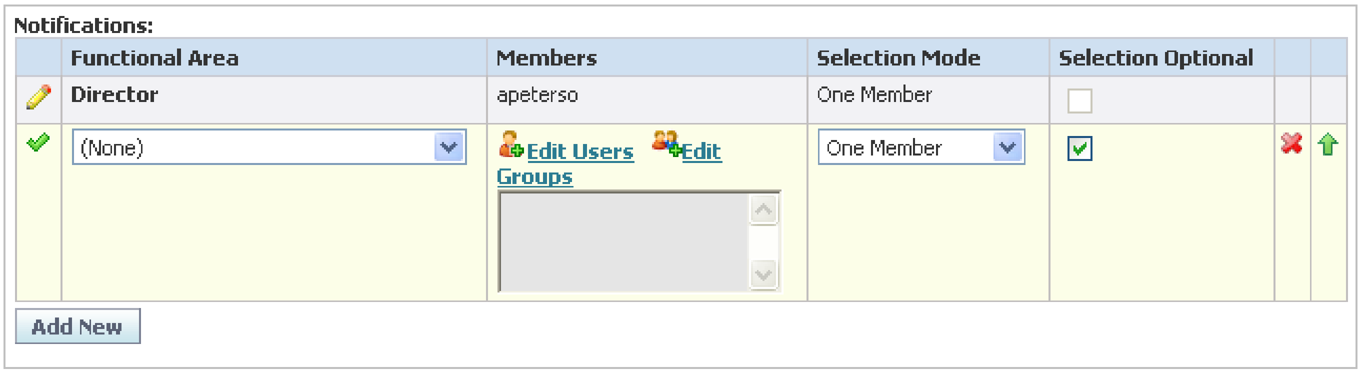
Selection Optional

Select this checkbox to make the workflower's selection optional.

Notifications Table

Use the Notifications table to designate who should be notified during this step. Users or groups designated will receive an email notification that the sourcing approval has been moved in the workflow process to a particular step. This role is considered informational only, and additional notification recipients are not responsible for providing any formal response or input into the sourcing approval. Figure 7-12 shows the Notifications table.

Figure 7-12: Notifications table



Note You cannot designate notifications on the first and terminal steps.

To add notifications:

1. With the row in edit mode, click **Add New** to create a new row.
2. Define the signature requestee using the **Functional Area**, **Members**, **Selection Mode**, and **Selection Optional** fields as described below.
3. Click the apply changes icon ( ) to apply your changes.
4. Click **Save**.

Functional Areas

Select the functional area for users or groups who will receive notifications. This value will be used to organize the SCRM user's workflow selections.

Members

Select the users or groups who will be sent notifications. Click **Edit Users** to locate individual users and click **Edit Groups** to locate groups that will receive notifications.

To add users as members, refer to the procedure on page 7-12. To add user groups as members, refer to the procedure on page 7-13.

Selection Modes

When a user is workflowing a sourcing approval they could have the opportunity to select who receives notifications. Selection Mode allows you to control this process. Members displayed for selection will be organized by functional area. Choose a selection mode as follows:

- **All Members**—Choose this mode when you want all members to be automatically selected for the workflower.
- **One Member**—Choose this mode to allow the workflower to only select one member.
- **Multiple Members**—Choose this mode to allow the workflower to select multiple members.

Selection Optional

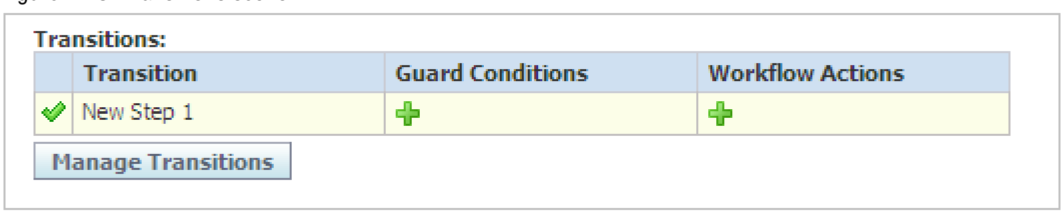
Select this checkbox to make the workflower's selection optional.

Transitions Table

Transitions answer the question, "Where can I go from here?" This section is used to set up which steps may be available for transition from the current step.

Transitions can be configured with a custom guard condition extensibility point that can programmatically determine if a workflow transition can occur, as described in *Guard Conditions* on page 7-18. Once the workflow transition does occur, custom workflow actions can be triggered to execute some custom process, as described in *Workflow Actions* on page 7-18.

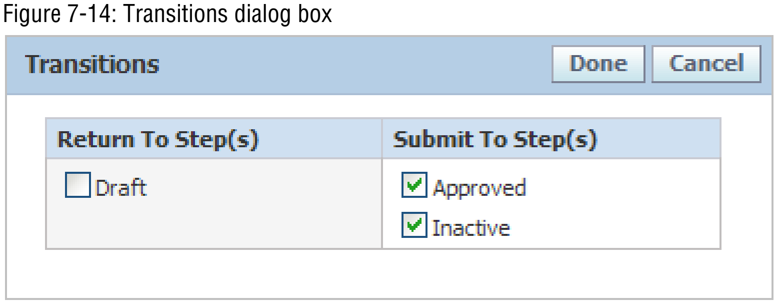
Figure 7-13: Transitions section



To add transitions:

1 Click **Manage Transitions**. This opens the Transitions dialog box, shown in figure 7-14 below. This dialog box lists all steps that exist on the workflow template.

Figure 7-14: Transitions dialog box



2 Select all the steps that the active step can move back to in the Return To Step(s) column.
3 Select all the steps that this step can move forward to in the Submit To Step(s) column.
4 Click **Done**.
5 Click **Save**.

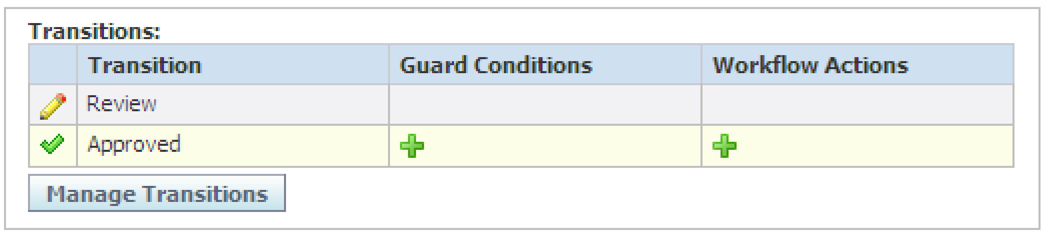
Guard Conditions

Guard Conditions are an extensibility point that launch custom classes to determine if a workflow transition can occur. The custom classes can access the item being workflowed to execute specialized validations programmatically, and either allow the transition to occur, or prevent it and return a list of error messages. These custom classes are made available for selection in WFA as Guard Conditions by including them in the `config\Extensions\CustomWFAExtensionsConfig.xml` file. Please see the *Agile Product Lifecycle Management for Process Configuration Guide* and the *Agile Product Lifecycle Management for Process Extensibility Pack* documentation for more details on Custom WFA.

To add guard conditions:

1. Click the edit icon ( ) to place the row in edit mode, as figure 7-15 shows below.

Figure 7-15: Transitions row in edit mode



2. To add conditions, click the add data icon ( ) in the Guard Conditions column. WFA displays a dialog box listing configured guard conditions.
3. Select guard condition(s), and then click **Done**. The selected attribute is added to the Guard Conditions column in the Transitions row.

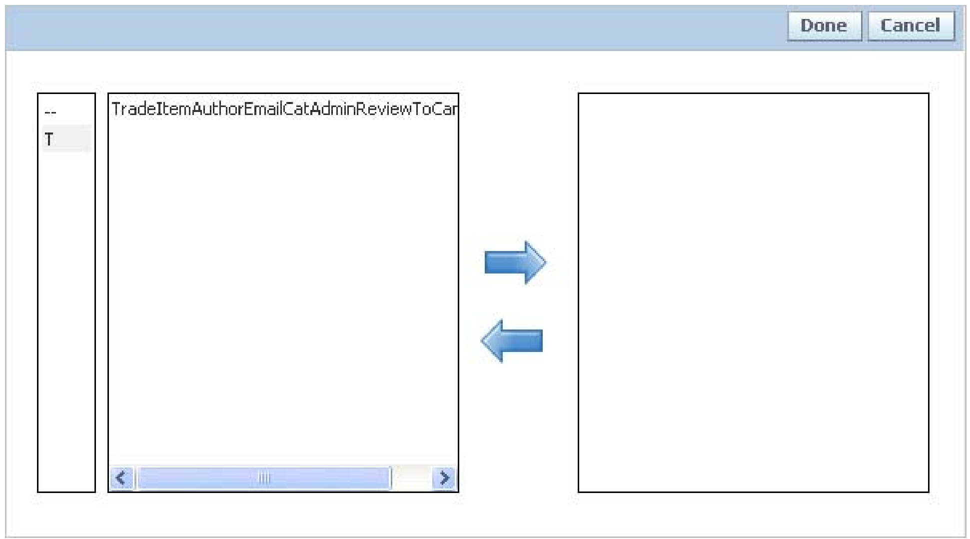
Workflow Actions

Workflow actions are an extensibility point that trigger the execution of custom classes when a workflow transition occurs. The custom classes can access the item being workflowed to execute specialized actions programmatically. These custom classes are made available for selection as workflow actions by including them in the `config\Extensions\CustomWFAExtensionsConfig.xml` file.

To add workflow actions:

1. With the row in edit mode, click the add data icon ( ) to define the **Workflow Actions** column. The workflow actions dialog box is displayed, as figure 7-16 shows below.

Figure 7-16: Workflow Actions dialog box



2. Select workflow action(s), and then click **Done**. The selected attribute is added to the Workflow Actions column in the Transitions row.
3. Click the apply changes icon ( ) to apply your changes.
4. Click **Save**.

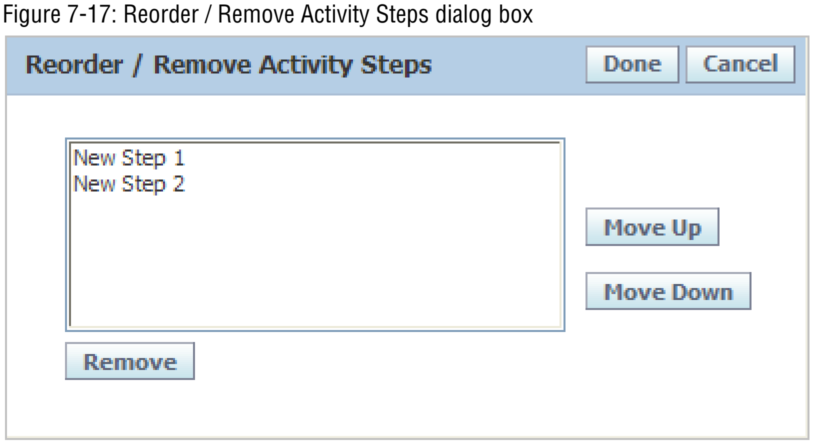
Adding Steps

Click **Add New Step** to add steps to the workflow process template. You can add as many steps as needed.

Reordering and Removing Steps

Click **Reorder / Remove Steps** to reorder or remove workflow steps. Agile PLM for Process displays the Reorder / Remove Activity Steps dialog box, as figure 7-17 shows below.

Figure 7-17: Reorder / Remove Activity Steps dialog box



To reorder a step:

1. Click the step to move.
2. Click **Move Up** or **Move Down** to set the desired order.
3. Repeat steps 1 and 2 for other steps.
4. Click **Done**. The dialog box closes. The steps on the Create Process Template page reflect the order that you set.

To remove a step:

1. Click the step to remove.
2. Click **Remove**. The step is removed from the dialog box.
3. Click **Done**. The dialog box closes. The step that you removed no longer is included on the Create Process Template page.

Steps can only be removed if the template has never been saved. If you want to remove a step after a template has been saved, inactivate the step.

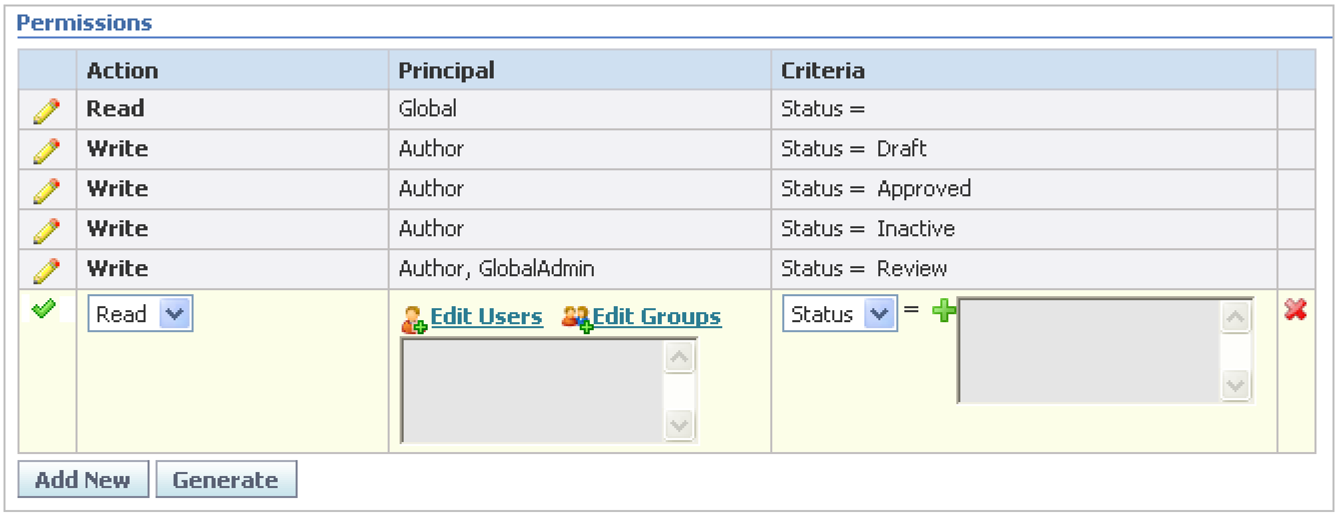
Caution! Reordering and inactivating steps can result in serious consequences and issues for the workflow process template.

Permissions Section

Permissions are used to manage read and write access to the sourcing approval. Permissions, shown in figure 7-18 below, govern:

- What actions can be performed (Read/Write)
- When they can be performed (by Status/Step)
- By whom they can be performed (Users or Groups)

Figure 7-18: Permissions table



Permissions

	Action	Principal	Criteria	
	Read	Global	Status =	
	Write	Author	Status = Draft	
	Write	Author	Status = Approved	
	Write	Author	Status = Inactive	
	Write	Author, GlobalAdmin	Status = Review	
	Read	Edit Users Edit Groups	Status =	

Add New Generate

To add a permission:

1. With the page in edit mode, click **Add New** in the Permissions section.
2. Click the edit icon ( ).
3. Define the permission using the **Action**, **Principal**, and **Criteria** fields as described below and through page 7-22.
4. Click the apply changes icon ( ) to apply your changes.
5. Click **Save**.

Actions

From the drop-down list, select what permission you are granting. Choices are Read or Write.

Principals

Select the users or groups who will be assigned permissions. Click **Edit Users** to locate individual users and click **Edit Groups** to locate groups.

To add users or user groups as members, follow the procedures found on page 7-12 and page 7-13.

Tokens

The token of "Author," "Owner," or "Signature Requestee" can also be added as a principal. The following token choices are available:

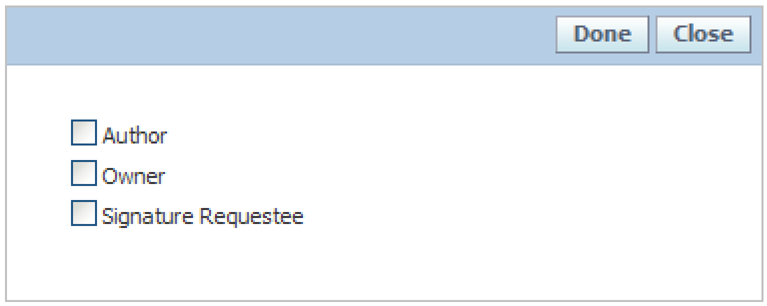
- **Author**—The author of the sourcing approval
- **Owner**—A workflow participant assigned as an owner

- **Signature Requestee**—A workflow participant assigned as a signature requestee for the sourcing approval

To add tokens to the Permissions table:

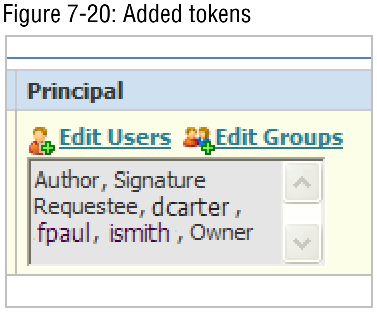
1. With the page in edit mode, click **Add New** in the Permissions section.
2. Click the edit icon ( ) to the left of the new role.
3. Click **Edit Users**. The user search page displays.
4. Search for and select users as described on page 7-12.
5. Click **Done**. The token dialog box displays, as figure 7-19 shows below:

Figure 7-19: Tokens dialog box, Permissions



6. Assign a token by checking the **Author**, **Owner**, or **Signature Requestee** box. You can make multiple selections.
7. Click **Done**. The users and assigned tokens are added to the **Principal** field, as figure 7-20 shows below.

Figure 7-20: Added tokens



8. Click the apply changes icon ( ) to apply your changes.
9. Click **Save**.

Criteria

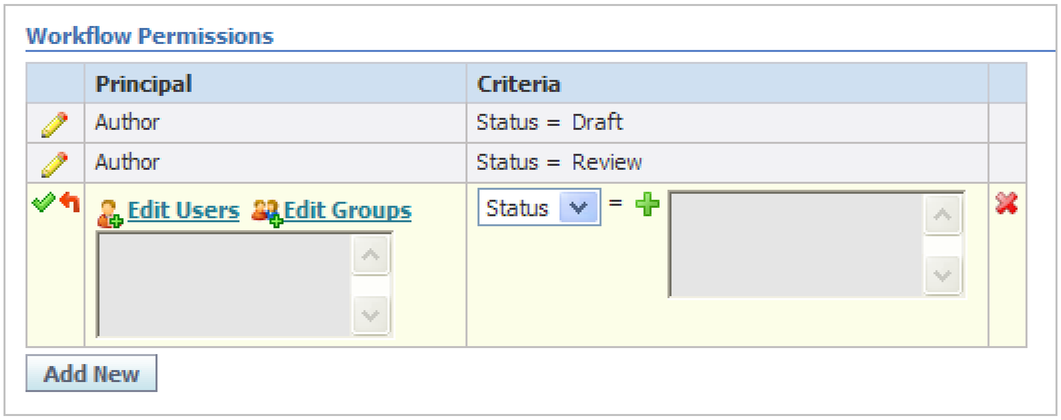
Designate which steps are impacted by the selected permission. For example, the owner only has edit rights to the sourcing approval when its in the Review step.

To quickly create permissions click **Generate**. This action will create default permissions. The Generate option overwrites any manual permission entries.

Workflow Permissions Section

In addition to read and write permissions above, you can also set who has workflow permissions, as figure 7-21 shows below. Workflow permissions are used to manage workflow rights, meaning which users can transition a workflow on an SCRM sourcing approval.

Figure 7-21: Workflow Permissions table



To add a workflow permission:

1 With the page in edit mode, click **Add New** in the Workflow Permissions section.
2 Click the edit icon ( ).
3 Define the permission using the **Principal** and **Criteria** fields, as described below and through page 7-24.
4 Click the apply changes icon ( ) to apply your changes.
5 Click **Save**.

Principals

Select the users or groups who will be assigned workflow permissions. Click **Edit Users** to locate individual users and click **Edit Groups** to locate groups. The token of “Author” and “Signature Requestee” can also be added as a principal. These tokens represent the sourcing approval’s author and signature requestee(s).

To add users or user groups as members, follow the procedures found on page 7-12 and page 7-13.

Tokens

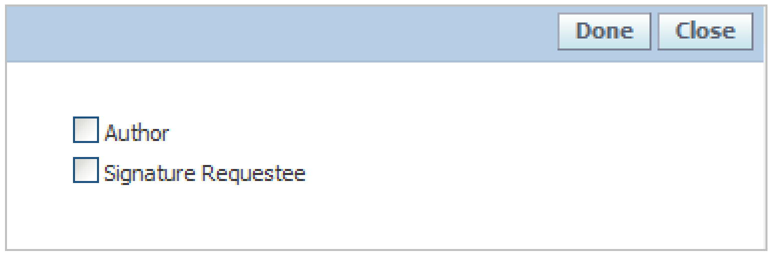
You can add the token of “Author” or “Signature Requestee” as a principal. You can assign users but not user groups. The following token choices are available for workflow permissions:

- **Author**—The author of the specification
- **Signature Requestee**—A workflow participant assigned as a signature requestee for the sourcing approval

To add tokens to the Workflow Permissions table:

1. With the page in edit mode, click **Add New** in the Workflow Permissions section.
2. Click the edit icon ( ) to the left of the new role.
3. Click **Edit Users**. The user search page displays.
4. Search for and select users as described on page 7-12.
5. Click **Done**. The token dialog box displays, as figure 7-22 shows below:

Figure 7-22: Token dialog box, Workflow Permissions



6. Assign a token to the user(s) by selecting **Author**, **Signature Requestee**, or both.
7. Click **Done**. The users and assigned tokens are added to the **Principal** field.
8. Click the apply changes icon ( ) to apply your changes.
9. Click **Save**.

Note You can also add tokens to existing users.

Criteria

Designate which step(s) are impacted by the selected permission. For example, the author only has workflow rights to the sourcing approval when its in the “Draft” and “Review” steps.

Editing SCRM Workflow Process Templates

To edit an SCRM workflow process template:

1. Use the search tool to locate the existing workflow process template to edit. See *Searching for Workflows* on page 6-3.
2. Click **Edit** in the top right corner. The workflow process template displays with editable fields.
3. Make edits to the workflow process template as descibed earlier in this chapter.
4. Click **Save & Close**.
5. Flush the workflow cache group, as described in *Using the Cache Application* on page 9-3.

Using the Make Inactive Option

You can make certain steps of the workflow process template inactive by clicking **Make Inactive**, located to the right of applicable sections.

Further, you can remove inactive sections from your view by clicking **Toggle Inactive Steps** in the top right corner of the screen. This option removes inactive sections from your view but does not remove them from the workflow process template altogether.

Copying SCRM Workflow Process Templates

If you need to create an SCRM workflow process template that is very similar to an existing SCRM workflow process template, you can use the copy feature of the WFA application. You can copy the existing workflow, save it as a new template, and edit that template.

To copy an exiting SCRM workflow and use it as a basis for a new, similar workflow:

1. Use the search page to locate the existing workflow process template to copy. See *Searching for Workflows* on page 7-3.
2. Click **Copy** at the top right corner. A copy of the workflow process template with editable fields is presented.
3. The words "Copy of" are added to the original workflow process template name. Change the name of the workflow process template.
4. Make additional edits to the workflow process template as needed using instructions provided in *Creating SCRM Workflow Process Templates* on page 7-5.
5. Click **Save & Close**.
6. Flush the workflow cache group, as described in *Using the Cache Application* on page 9-3.

Exporting and Importing Workflows

As an administrator, you perform workflow creation and editing tasks in a staging environment. Once you have made final changes to workflows in the staging environment and they are ready to go live in the production environment, you must export them out of the staging environment and import them into the production environment.

Exporting Workflows from Your Staging Environment

To export workflow data from your staging environment:

1. Before exporting a workflow, make sure you have flushed the workflow cache group, as described in *Using the Cache Application* on page 9-3.
2. Start a new Agile PLM for Process session prior to exporting a workflow from staging to production.
3. Click **WFA** on the left navigation panel.
4. Locate the workflow process template to export.
5. Click **Package for Export** at the top right corner. A File Download dialog box displays.
6. Select the location on your hard drive to temporarily export the data.
7. Click **Save**. Agile PLM for Process encrypts the data and saves the encrypted file to your local drive.

Importing Workflows into Your Production Environment

To import workflow data into your production environment:

1. Log in to your production environment.
2. Access **WFA** on the left navigation panel.
3. Click **Imports** on the left navigation panel.
4. Click **Browse** to locate the encrypted file that you exported from the staging environment and select the file.
5. Click **Import** at the top right corner of the page.
6. Flush the workflow cache group, as described in *Using the Cache Application* on page 9-3.

Chapter 8

Using WFA to Manage CSS Workflows

This chapter contains instructions for using the Workflow Administration (WFA) application to manage workflows in Content Synchronization and Syndication (CSS). Topics in this chapter include:

- *Searching for Workflows*
- *Creating New CSS Workflow Process Templates*
- *Editing CSS Workflow Process Templates*
- *Copying CSS Workflow Process Templates*
- *Exporting and Importing Workflows*

A workflow is the automation of a business process, in whole or part, during which documents, information, or tasks are passed from one participant to another for action, according to a set of procedural rules. In Agile Product Lifecycle Management for Process, workflows are managed using the WFA (Workflow Administration) application.

This chapter contains instructions for workflow management in CSS (Content Synchronization and Syndication) only. For instructions on workflow management in GSM (Global Specification Management) or SCRM (Supply Chain Relationship Management), which are slightly different from the CSS instructions, see chapter 6, *Using WFA to Manage GSM Workflows*, and chapter 7, *Using WFA to Manage SCRM Workflows*.

CSS workflows govern the way specification information is syndicated to other systems. When a Transactive Item Publication (TIP) is added to a specification, that TIP has its own workflow, which is configured here.

CSS workflows are partially system controlled: As a TIP is syndicated by CSS, the CSS system is controlling the workflow status of the TIP, automatically transitioning the TIP's workflow status to indicate if it has been transmitted, received, etc. Since the process of syndicating that TIP is managed by the system, several specific workflow steps are required in the workflow and should not be modified. When a TIP is transitioned into the first of these required steps, the system will manage the rest of the transitions through the required step sequences. It is strongly advised to not modify any of these required steps for a CSS workflow. The steps before or after these required steps can be added and modified as needed.

Predefined Workflows

Two default CSS workflows are provided for use: Default GDSN CSS Workflow Template and Default Internal Syndication Workflow Template. The system process differs slightly for internal and external syndications, so some of the required steps are different.

- **Default GDSN CSS Workflow Template**—Used for external syndication to 1SYNC. Required steps are: Staged for Syndication, Syndication, Awaiting Response, Active, Active-Accepted, Active-Rejected, Failed. The transitions between these required steps should not be modified. Transitions from and to other (non-required) steps can be modified.
- **Default Internal Syndication Workflow Template**—Used for internal systems syndication. Required steps are: Staged for Syndication, Syndication, Awaiting Response, Active, Failed. The transitions between these required steps should not be modified. Transitions from and to other (non-required) steps can be modified.

When configuring a CSS workflow, it is strongly recommended to create a copy of these default templates and then modify the copy as needed.

CSS workflows are tied to publication paths using a widget included in the Data Administration Toolkit. For instructions, refer to the *Agile Product Lifecycle Management for Process Data Administration Toolkit User Guide*.

Associated Roles

The following user roles are associated with workflows:

[WFA_ADMIN]—Can create, edit, import, and export workflows.

[WFA_USER]—Can access the WFA (Workflow Administration) application and view all workflows.

Workflow Terms and Definitions

The following are important workflow terms and definitions that you must understand in order to perform workflow administration tasks:

Owner—The person(s) responsible for managing the Trans-active Item Publication (TIP) in a particular status. As owner of the workflow, you:

- Receive items in your Action Items list. You are responsible for assuring that the assigned parties perform all necessary actions or reviews.
- Can advance the TIP in the workflow process by clicking **Workflow** in the upper right corner of the Trade Item page.

Author—The person who originally created the TIP.

Reader—A group or individual who can open a TIP and read the contents. You can assign read permissions to groups, individuals, or exclusively the TIP author or owner.

Editor—A group or individual who can open and edit a TIP. You can assign editor permissions to groups, individuals, or exclusively to the TIP author or owner.

Workflower—A group or individual who can move a TIP from one workflow step to another. You can assign workflow permissions to groups, individuals, or exclusively to the TIP author.

Transitions —The statuses that a particular step can be transitioned to. Moving a workflow between statuses can mean moving the workflow backward to a previous step or forward to the next step. Transitions can be serial (one back and one forward) or can allow for expedition (from any status to any other status).

Guard Condition—An extensibility point that helps determine if a workflow transition can occur.

Workflow Action—An extensibility point that triggers the execution of custom classes when a workflow transition occurs. The custom classes can access the item being workflowed to execute specialized actions programmatically.

Recommendations for Creating Workflows

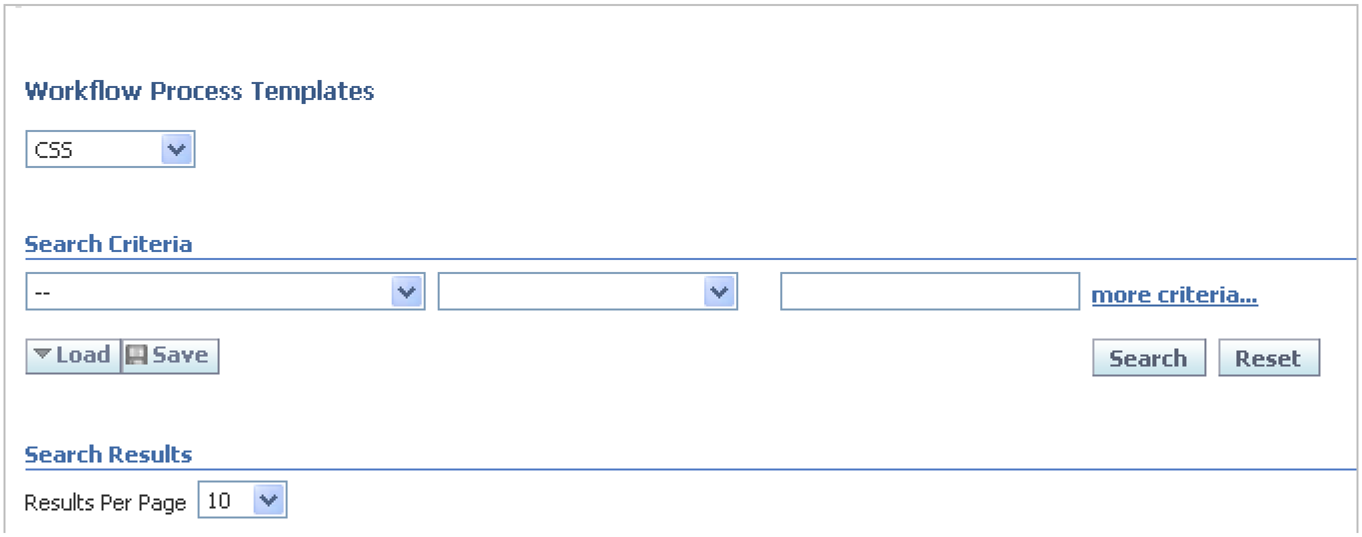
The following are recommendations for creating CSS workflows using the WFA application.

- A workflow should contain a relatively small number of created statuses. These statuses should be common and applicable across all workflows. For example, consider using a workflow that progresses through the following intuitive statuses: Draft > Working > Approved > Inactive > Retired.
- When creating workflows in the WFA application, always check the **Terminate Workflow at This Step** check box to indicate the last step in the workflow.
- Deprecate workflow steps by clicking **Make Inactive**. Changing a step to inactive status assures that existing specifications already in that step can continue in the workflow but that no new specifications can enter that step.
- Principals are required for each permission rule.

Searching for Workflows

As an administrator, you often search for workflow process templates. When you first access the WFA application, you see the Workflow Process Templates search page, shown in figure 8-1 below.

Figure 8-1: Workflow Process Templates search page



Workflow Search Criteria

To search for CSS workflows, use a combination of search criteria:

1. Select **CSS** from the type of workflow template drop-down list.
2. In the key field drop-down list, select your search criteria as follows:
   - **All (--)**—Searches for all workflows
   - **Description**—Searches for workflows by description
   - **Name**—Searches for workflows by name
3. In the operator drop-down list, your options will be determined by the choice that you made in the first drop-down list. Selections may include:
   - **Null** {empty field}—Searches for all workflows
   - **Contains**—Used for character searches, alphabetical or numerical (for example, “Name Contains Publication” will result in only workflow templates with names containing the word “Publication”)
   - **Equals**—Used to evaluate search criteria entered in the field to the right (for example, “Name Equals Trade Item Publication” will result in only workflow templates with this exact name)
   - **Starts With**—Used for character searches, alphabetical or numerical (for example, “Description Name Starts With K” will result in only workflow templates with descriptions that start with the letter “K”)
4. Use the third search criteria field to qualify the selections you made in the first two drop-down lists. You can also enter the percent (%) sign to perform a wildcard search matching any one character.
5. Click **Search** to display CSS workflow templates matching the search criteria.

For guidance on saving and loading searches, see *Saving and Loading Searches* on page 2-4 and *More Search Options* on page 2-4.

Creating New CSS Workflow Process Templates

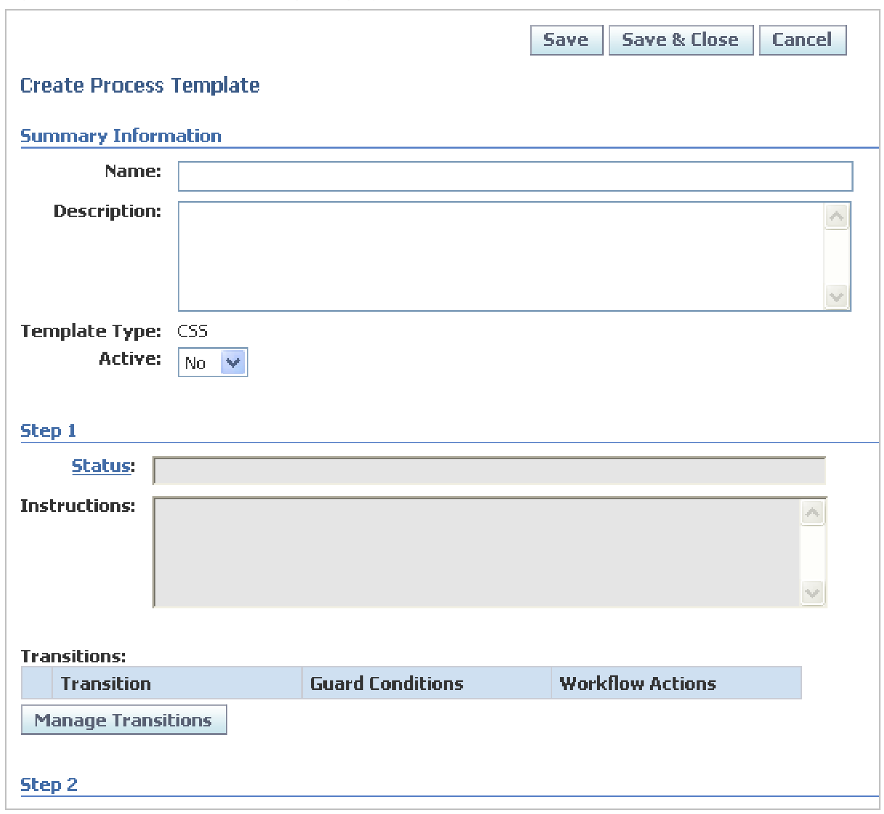
To create a new CSS workflow process template:

1. Click **WFA** on the left navigation panel.
2. Click **New Process Template** at the top right corner. Agile PLM for Process displays a dialog box, as shown in figure 8-2 below.

Figure 8-2: Process template dialog box

3. Select **CSS** (Content Synchronization and Syndication) and then click **Done**. A new workflow template page is displayed, as shown in figure 8-3 below.

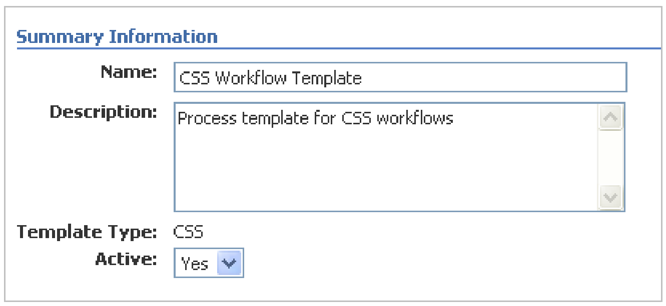
Figure 8-3: CSS Workflow Template page



4 Enter information described in:
   - *Summary Information Section* on page 8-6
   - *Step Sections* on page 8-7
   - *Workflow Permissions Section* on page 8-11
   - *Permissions Section* on page 8-11
5 Click **Save & Close**.
6 Flush the Workflow Cache Group, as described in *Using the Cache Application* on page 9-3.

Summary Information Section

Figure 8-4: Summary Information section



Enter the following workflow information in the Summary Information section:

Name
Enter a unique name for the workflow. This name will appear to the CSS user when resolving a TIP to a workflow. It is also shown on a specification as the Current Workflow value on the Approval/Audit Trail tab. This is a required field.

Description
Enter a description for the workflow. This description will appear to the CSS user when resolving a TIP to a workflow. This is a required field.

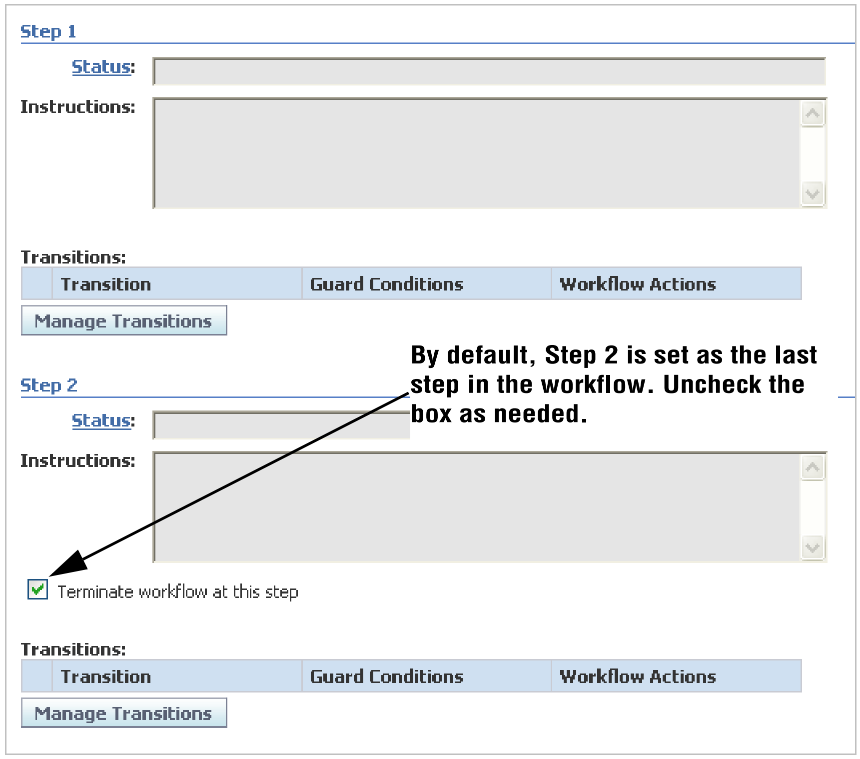
Template Type
This field cannot be edited. The template type is determined in step 3 on page 8-5.

Active
Select **Yes** to make the template active when the workflow template is ready to become available for use in Agile Product Lifecycle Management for Process. Otherwise, the template will remain inactive and not available for general use.

Step Sections

Each workflow template must have a minimum of two steps, as represented in the Step 1 and Step 2 sections. You can add more step sections by clicking **Add New Step**.

Figure 8-5: Steps sections



To define steps:

1 Click **Status**. A Select Status dialog box displays. Choose from the list of statuses. Workflow process templates contain only a small number of statuses, since statuses, once created, are permanent.

> **Note** Give each status a unique status name. Status names should also be common and applicable across all workflows. Status names cannot be changed once the template is activated.

2 The **Instructions** field is populated with the instructions attached to the chosen status. If you create a new status, enter a new set of instructions for this field.

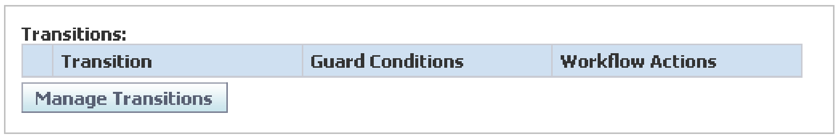
3 If needed, check **Terminate workflow at this step** box to end the workflow at this step. This setting indicates that no further steps are required.

4 Click **Save**. If needed, add more steps by clicking **Add New Step** and repeating this procedure.

Transitions Table

This section is used to set up which steps may be available for transition from the current step. Transitions can be configured with a custom guard condition extensibility point that can programmatically determine if a workflow transition can occur, as described in *Guard Conditions* on page 8-8. Once the workflow transition does occur, custom workflow actions can be triggered to execute some custom process, as described in *Workflow Actions* on page 8-9. Figure 8-6 below shows the Transitions table.

Figure 8-6: Transitions section



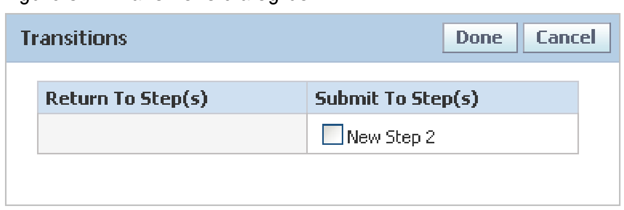
Transitions

Transitions answer the question, “Where can I go from here?” Transitions designate which steps are available for transition from the current step.

To add transitions:

1. Click **Manage Transitions**. This opens the Transitions dialog box, shown in figure 8-7 below. This dialog box lists all available active steps that exist on the workflow template for a particular step.

   Figure 8-7: Transitions dialog box

2. Select all the steps that the active step can move back to in the Return To Step(s) column.
3. Select all the steps that this step can move forward to in the Submit To Step(s) column.
4. Click **Done**.
5. Click **Save**.

Guard Conditions

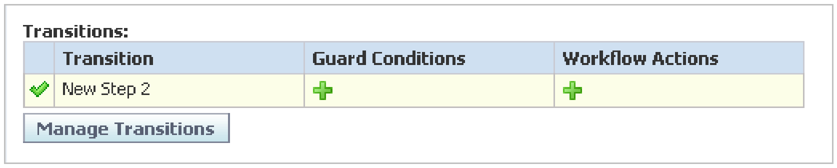
Guard Conditions are an extensibility point that launch custom classes to determine if a workflow transition can occur. The custom classes can access the item being workflowed to execute specialized validations programmatically, and either allow the transition to occur, or prevent it and return a list of error messages. These custom classes are made available for selection in WFA as Guard

Conditions by including them in the `config\Extensions\CustomWFAExtensionsConfig.xml` file. Please see the *Agile Product Lifecycle Management for Process Configuration Guide* and the *Agile Product Lifecycle Management for Process Extensibility Pack* documentation for more details on Custom WFA.

To add guard conditions:

1. Click the edit icon ( ) to place the row in edit mode, as figure 8-8 shows below.

   Figure 8-8: Transitions row in edit mode

2. To add conditions, click the add data icon ( ) in the Guard Conditions column. WFA displays a dialog box listing configured guard conditions.
3. Select guard condition(s), and then click **Done**. The selected attribute is added to the Guard Conditions column in the Transitions row.

Workflow Actions

Workflow actions are an extensibility point that trigger the execution of custom classes when a workflow transition occurs. The custom classes can access the item being workflowed to execute specialized actions programmatically. These custom classes are made available for selection as workflow actions by including them in the config\Extensions\CustomWFAExtensionsConfig.xml file.

To add workflow actions:

1. With the row in edit mode, click the add data icon ( ) to define the **Workflow Actions** column. The workflow actions dialog box is displayed, as figure 8-9 shows below.

   Figure 8-9: Workflow Actions dialog box

2. Select workflow action(s), and then click **Done**. The selected attribute is added to the Workflow Actions column in the Transitions row.
3. Click the apply changes icon ( ) to apply your changes.
4. Click **Save**.

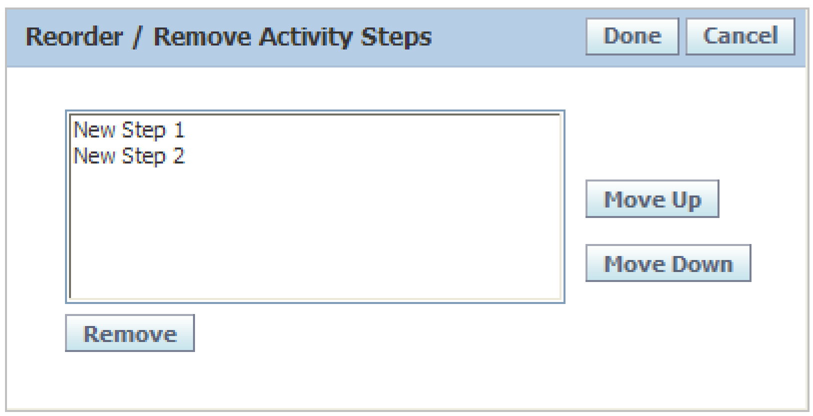
Adding Steps

Click **Add New Step** to add steps to the workflow process template. You can add as many steps as needed.

Reordering and Removing Steps

Click **Reorder / Remove Steps** to reorder or remove workflow steps. Agile PLM for Process displays the Reorder / Remove Activity Steps dialog box, as figure 8-10 shows below.

Figure 8-10: Reorder / Remove Activity Steps dialog box



To reorder a step:

1. Click the step to move.
2. Click **Move Up** or **Move Down** to set the desired order.
3. Repeat steps 1 and 2 for other steps.
4. Click **Done**. The dialog box closes. The steps on the Create Process Template page reflect the order that you set.

To remove a step:

1. Click the step to remove.
2. Click **Remove**. The step is removed from the dialog box.
3. Click **Done**. The dialog box closes. The step that you removed no longer is included on the Create Process Template page.

Steps can only be removed if the template has never been saved. If you want to remove a step after a template has been saved, inactivate the step.

Caution! Reordering and inactivating steps can result in serious consequences and issues for the workflow process template. Do not remove steps from a CSS workflow that are required for syndication.

Workflow Permissions Section

This read-only section displays CSS workflow permissions, as figure 8-11 shows below.

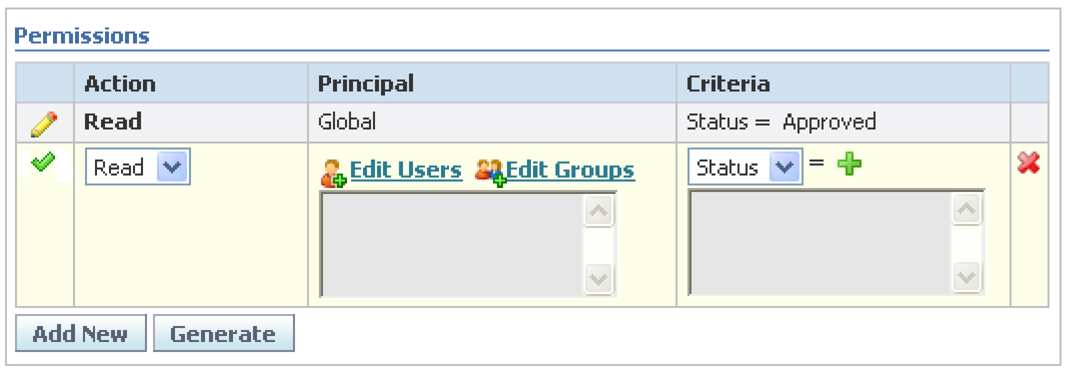
Figure 8-11: Workflow Permissions section

Permissions Section

Permissions are used to manage read and write access to the publication. Permissions reside in the Permissions table, shown in figure 8-12, and govern:

- What actions can be performed (Read or Write)
- When they can be performed (by Status/Step)
- By whom they can be performed (Users or Groups)

Figure 8-12: Permissions table



To add a permission:

1. With the page in edit mode, click **Add New** in the Permissions section.
2. Click the edit icon ( ).
3. Define the permission using the **Action**, **Principal**, and **Criteria** fields as described below and through page 8-12.
4. Click the apply changes icon ( ) to apply your changes.
5. Click **Save**.

Actions

From the drop-down list, select what permission you are granting. Choices are “Read” or “Write.”

Principals

Select the users or groups who will be assigned permissions. Click **Edit Users** to locate individual users and click **Edit Groups** to locate groups.

Tokens

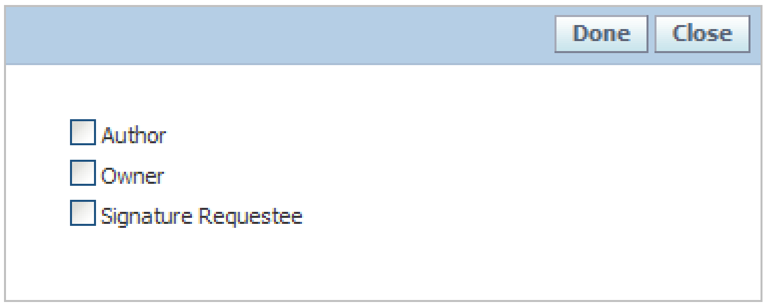
You can add the token of “Author,” “Owner,” or “Signature Requestee” as a principal. The following token choices are available:

- **Author**—The author of the specification
- **Owner**—A workflow participant assigned as an owner
- **Signature Requestee**—A workflow participant assigned as a signature requestee for the specification

To add tokens to the Permissions table:

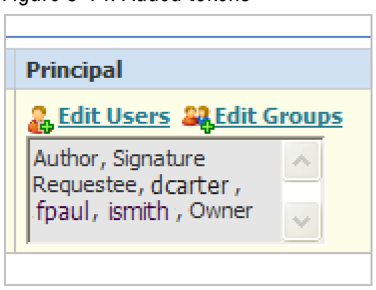
1. With the page in edit mode, click **Add New** in the Permissions section.
2. Click the edit icon ( ) to the left of the new role.
3. Click **Edit Users**. The user search page displays.
4. Search for and select users as described on page 8-11.
5. Click **Done**. The token dialog box displays, as figure 8-13 shows below:

Figure 8-13: Tokens dialog box, Permissions



6. Assign a token by clicking the **Author**, **Owner**, or **Signature Requestee** checkbox. You can make multiple selections.
7. Click **Done**. The users and assigned tokens are added to the **Principal** field, as figure 8-14 shows below.

Figure 8-14: Added tokens



8. Click the apply changes icon ( ) to apply your changes.
9. Click **Save**.

Criteria

Designate which step(s) the principal has the selected permission for. For example, the owner only has edit rights to the specification when its in the Review step.

To quickly create permissions, click **Generate**. This action will create default permissions. The Generate option overwrites any manual permission entries.

Editing CSS Workflow Process Templates

To edit a CSS workflow process template:

1. Use the search tool to locate the existing workflow process template to edit. See *Searching for Workflows* on page 8-4.
2. Click **Edit** at the top right corner. The workflow process template displays with editable fields.
3. Make edits to the workflow process template as described earlier in this chapter.
4. Click **Save & Close**.
5. Flush the workflow cache group, as described in *Using the Cache Application* on page 9-3.

Using the Make Inactive Option

You can make certain steps of the workflow process template inactive by clicking **Make Inactive**, located to the right of applicable sections.

Further, you can remove inactive sections from your view by clicking **Toggle Inactive Steps** in the top right corner of the screen. This option removes inactive sections from your view but does not remove them from the workflow process template altogether.

Copying CSS Workflow Process Templates

If you need to create a CSS workflow process template that is very similar to an existing CSS workflow process template, you may wish to use the copy feature of the WFA application. You can copy the existing workflow, save it as a new template, and edit that template.

To copy an existing CSS workflow and use it as a basis for a new, similar workflow:

1. Use the search page to locate the existing workflow process template to copy. See *Searching for Workflows* on page 8-4.
2. Click **Copy** at the top right corner. A copy of the workflow process template with editable fields is presented.
3. The words "Copy of" are added to the original workflow process template name. Change the name of the workflow process template.
4. Make additional edits to the workflow process template as needed using instructions provided in *Creating New CSS Workflow Process Templates* on page 8-5.
5. Click **Save & Close**.
6. Flush the workflow cache group, as described in *Using the Cache Application* on page 9-3.

Exporting and Importing Workflows

As an administrator, you perform workflow creation and editing tasks in a staging environment. Once you have made final changes to workflows in the staging environment and they are ready to go live in the production environment, you must export them out of the staging environment and import them into the production environment.

Exporting Workflows from Your Staging Environment

To export workflow data from your staging environment:

1. Before exporting a workflow, make sure you have flushed the workflow cache group, as described in *Using the Cache Application* on page 9-3.
2. Start a new Agile Product Lifecycle Management for Process session prior to exporting a workflow from staging to production.
3. Click **WFA** on the left navigation panel.
4. Locate the workflow process template to export.
5. Click **Package for Export** at the top right corner. A File Download dialog box displays.
6. Select the location on your hard drive to temporarily export the data.
7. Click **Save**. Agile Product Lifecycle Management for Process encrypts the data and saves the encrypted file to your local drive.

Importing Workflows into Your Production Environment

To import workflow data into your production environment:

1. Log in to your production environment.
2. Access **WFA** on the left navigation panel.
3. Click **Imports** on the left navigation panel.
4. Click **Browse** to locate the encrypted file that you exported from the staging environment and select the file.
5. Click **Import** at the top right corner of the page.
6. Flush the workflow cache group, as described in *Using the Cache Application* on page 9-3.

CHAPTER 9

Using CACHE to Manage Caches

This chapter explains the cache management feature. Topics in this chapter include:

Scheduling Data Cache Flushes

Caches are temporary storage areas for frequently or recently accessed data. Caches must be routinely flushed. Modified data that belongs to one process must be written out of the cache to main memory so that the cache can be used by another process.

The CACHE (Manage Data Caches) application provides administrators with an application for managing data caches. You can access the CACHE application on the left navigation panel. For more information see *Using the Cache Application* on page 9-3.

You should flush caches after the following activities:

- After creating/editing/importing users using the UGM application
- After creating/editing/importing groups using the UGM application
- After creating/editing/importing workflows using the WFA application
- After creating/editing custom data using the ADMN application
- After creating/editing core data using the ADMN application

Workflow Groups and Workflows

When creating workflow groups and workflows, flush the cache after you have completed each of the following steps:

- After creating/editing workflow groups in UGM
- When creating workflow groups in UGM, after adding or changing assigned roles to the groups

Important When creating new workflow groups in UGM, be sure to flush the cache *before* adding new users to the group to avoid encountering system issues.

- After creating workflows in WFA
- Before exporting workflows or workflow groups from the staging environment to the production environment
- After importing workflows or workflow groups into the production environment from the staging environment

Data Administration

When working in the ADMN (Manage Core Data) application, flush the cache after you have created/edited any data using the ADMN application. You must also flush the cache from the production environment after you have exported completed data changes from a staging environment to a production environment.

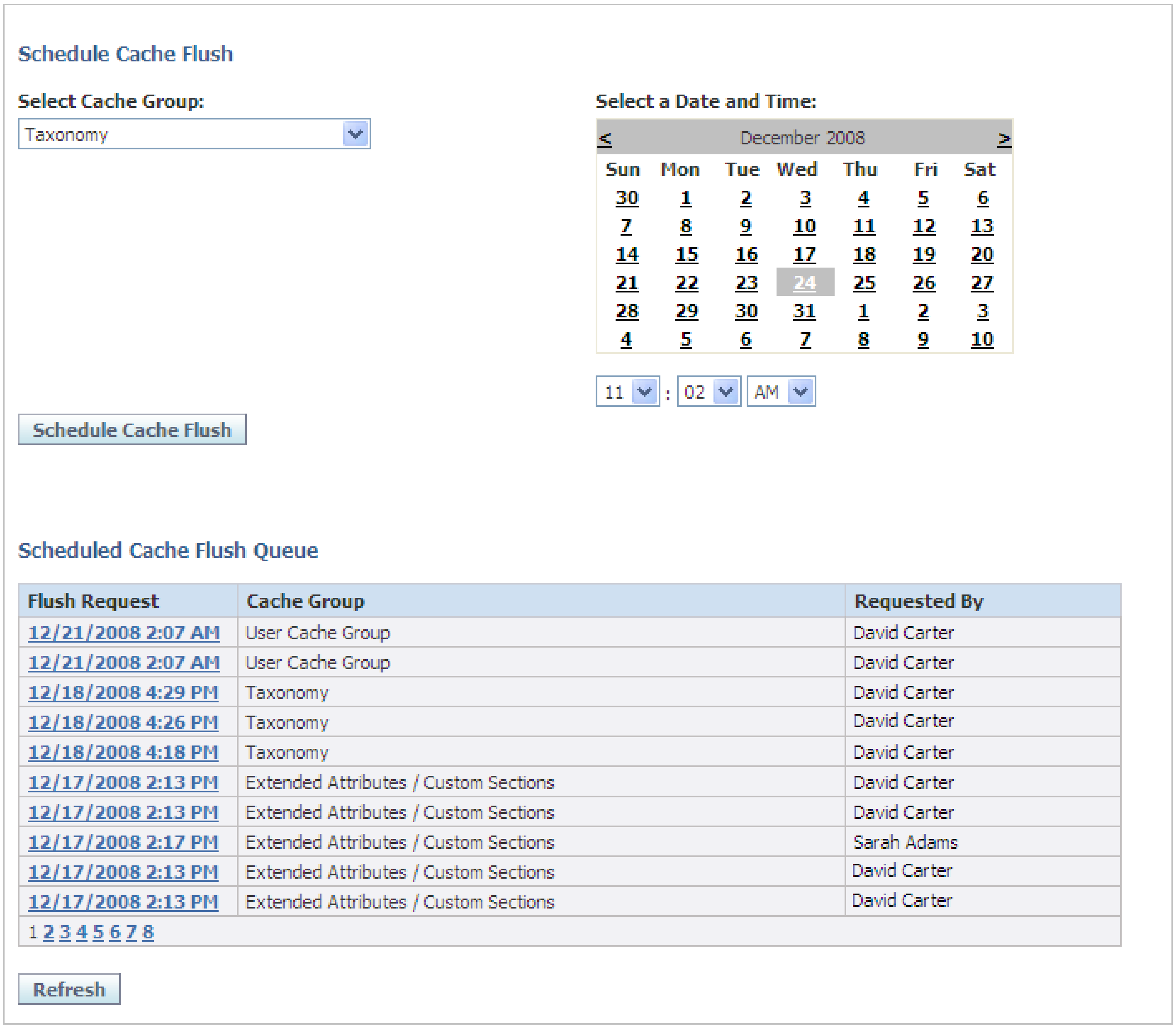
For example, flush the cache as follows:

- After creating/editing extended attribute groups
- After creating/editing extended attributes
- After creating/editing custom sections (customer-specific data)
- After creating/editing taxonomies
- After creating/editing any core data

Using the Cache Application

Access the CACHE application by selecting **CACHE** from the left navigation panel. By default, CACHE displays the Schedule Cache Flush page, as figure 9-1 shows below.

Figure 9-1: Schedule Cache Flush page



The **Select Cache Group** drop-down list contains five cache flush selections:

- **Taxonomy**—Select this option to flush the taxonomy cache after you have made changes to any tree lists/taxonomies using the ADMN (Manage Core Data) application.
- **Workflow Cache Group**—Select this option to flush the workflow cache after you have made workflow changes using the WFA (Workflow Administration) application.

- **User Cache Group**—Select this option to flush the user/group cache after you have made user/group changes using the UGM (User Group Management) application.
- **Admin Data Cache Group**—Select this option to flush the administrator data cache after you have made core data changes using the ADMN (Manage Core Data) application. This option is used for all ADMN data changes other than taxonomies, extended attributes, and custom sections. These data types have their own cache flush groups.
- **Extended Attributes / Custom Sections**—Select this option to flush the extended attributes/custom sections cache after you have made extended attribute/custom section changes using the ADMN (Manage Core Data) application.

After you have selected a cache group from the drop-down list, use the **Select a Date and Time** feature to schedule your cache flush.

When you have made your selection, click **Schedule Cache Flush**.

Scheduled Cache Flush Queue

This section displays a queue showing scheduled cache flushes, as figure 9-1 shows above. The queue shows which applications have been flushed, and indicates whether each execution was successful.

CHAPTER 10
Implementing Security

This chapter explains implementing various levels of security in Agile Product Lifecycle Management for Process. Topics in this chapter include:

- *Object Level Security*
- *GSM Business Unit Security*
- *SCRM Business Unit Security*
- *BU Visibility Versus BU Security*

Overview

Agile PLM for Process offers several layers of security, as defined below:

- **Object Level Security (OLS)**—Users have access to securable objects within business objects.
- **GSM Business Unit Security**—Users can only access specifications and data about specifications if they are members of one of the business units that the specification is associated to.
- **SCRM Business Unit Security**—Users are assigned an SCRM business unit, which determines visibility and access to companies and facilities. All search screens in Agile PLM for Process that include SCRM companies and facilities respect this visibility.

Object Level Security

Object Level Security permits or restricts read access to certain securable objects within a business object (specification, company, facility, sourcing approval, or questionnaire). OLS does not determine access to the business object, but once the user does have access, OLS will then determine what securable objects within the business object the user has access to. These securable objects include:

- Extended attributes
- Custom sections
- Sourcing approvals

- Supporting documents
- Supplier Document Management (SDM) documents

Each of these securable objects will have one associated security classification. You select a security classification when defining an extended attribute or custom section in the ADMN (Manage Core Data) application. For GSM supporting documents, you assign a security classification using the attachments Summary Information page. For SCRM SDM documents, assign security classifications using the Supplier Document Management page. Sourcing approvals have only one security classification, called Sourcing Approval, so no choice is required.

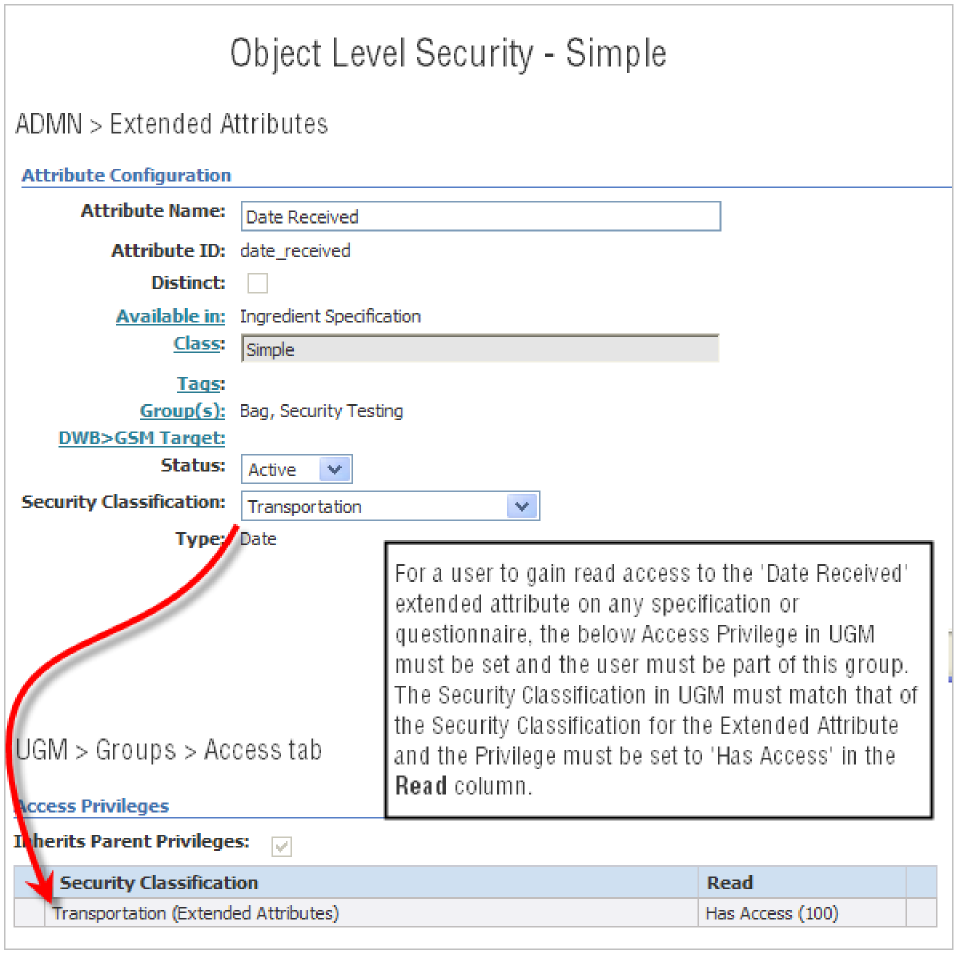
Object level security can be configured on or off per customer implementation. When configured off, these objects are unsecured and are accessible by all users who can access the specification or questionnaire.

Refer to the *Agile Product Lifecycle Management for Process Data Administration Toolkit Guide* to learn how to load data such as classification and access level.

Simple Security

Once the security classifications have been defined for the extended attributes or custom sections, you then define a privilege in user groups within UGM for each security classification. Refer to *Access Privileges Section* on page 2-9 for information on setting privileges. This security classification is referred to as Access Classification in the privilege list. These two terms can be used interchangeably. This privilege determines whether or not users within this group have access to these specific security classifications. If a privilege is not defined, then by default the users will not have access. Figure 10-1 below shows a depiction of the simple security mode.

Figure 10-1: Simple security mode



Contextual Security

Extended attributes, custom sections, and supporting documents support an additional security mode called “contextual security.” This mode allows you to configure access based on context, i.e. the specification or questionnaire where the extended attribute, custom section, or supporting document exists. This means that a given extended attribute, custom section, or supporting document can be visible in one specification but not visible in another. An example of this would be if you wanted a group of users to access financial data for all specifications except for those that are considered highly restricted. You might have a smaller group of users who can view this information on these highly restricted specifications.

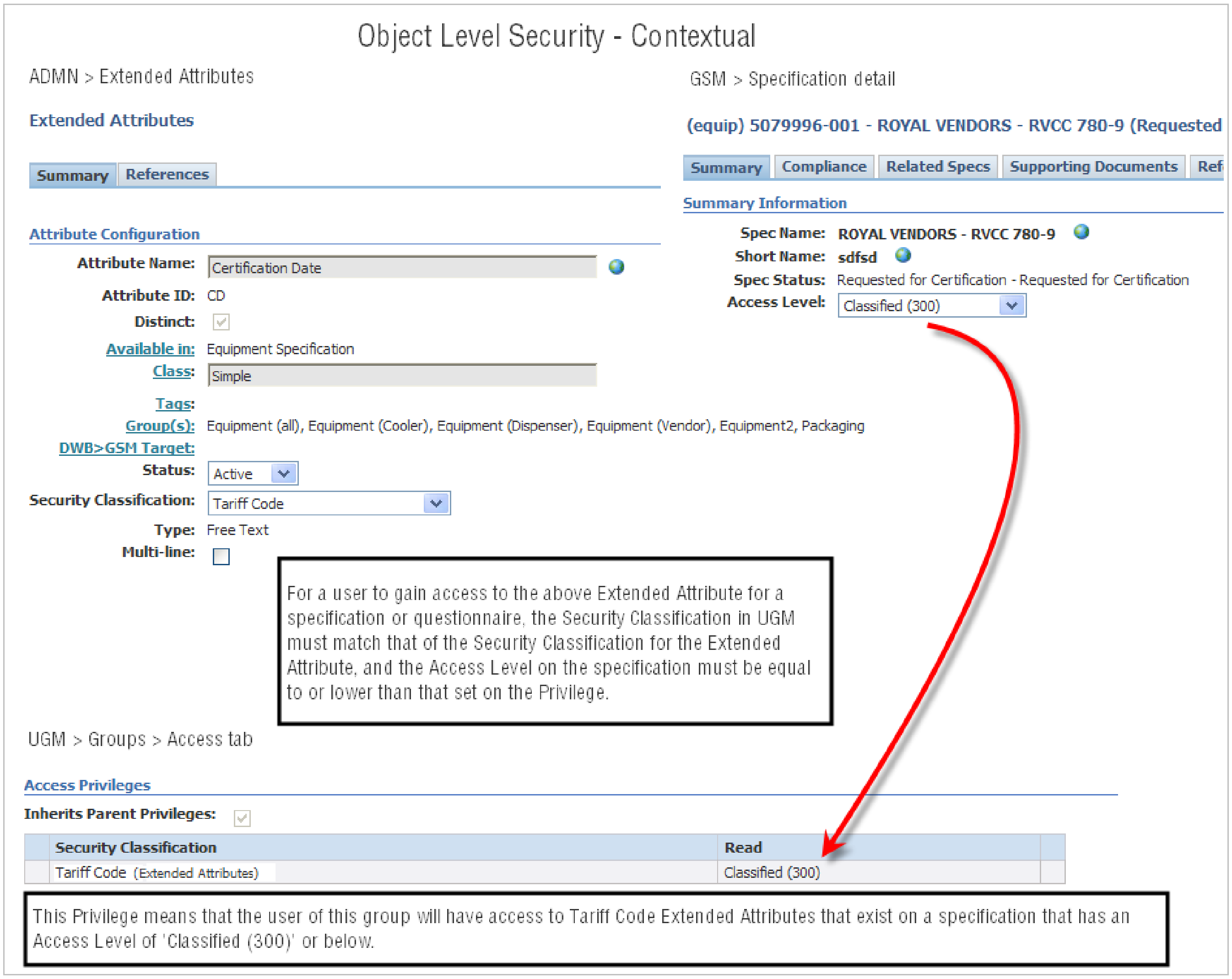
Access Level

To set contextual security, an attribute of the specification or questionnaire called access level is used. Contextual security uses the access level to help determine if the user has access to the data based on the specific security classification. Access level is hierarchical, meaning that there is a ranking or level associated to each one. If users have access to a certain level for a security classification, they will also have access to all the levels below it. The access level is a combination of a description, such as “Highly Restricted,” and a ranking, such as “500.”

The way contextual security is defined is similar to that for simple security. Within the access privilege section of the user group in UGM, the Read column contains the security level that the group has access to for the corresponding security classification.

The security mode, “simple” or “contextual,” is determined based on the security classification. Each security classification is defined as either non contextual (simple) or contextual. In the **Read** column of the Access Privilege list, the simple security classifications will have a drop-down list containing “Has Access” or “No Access.” The contextual security classifications will have a drop-down list containing the access levels. Figure 10-2 below depicts the contextual security mode.

Figure 10-2: Contextual security mode



User Access Privilege Resolution

The access privileges that a user inherits is a combination of access privileges from the user groups' hierarchies that they are members of. A user can be a member of multiple groups. A group can be a child of another group. The final user access privileges resolve based on the following rules:

- The list is a superset of privileges from the groups the user belongs to plus all the parents/grandparents of those groups. The resolution process climbs the group hierarchy until either the root node is reached or it encounters a group for which the **Inherit Parent Privileges** box is unchecked.

- If more than one group contains the same security classification, the user inherits the least restrictive one, i.e. the highest ranked one. For example, if the financial security classification was found in two groups, one with an access level of “Highly Restricted (500)” and one with a less restrictive access level of “Restricted (400),” the user would inherit the highly restricted (500) access level. This means the user will have access to data with a security classification of “Financial” that is contained on any specification or questionnaire that the user has access to, with an access level of highly restricted (500) or below.

The fully resolved privilege list for a user can be viewed in the Access Privilege section of a user’s profile within UGM.

GSM Business Unit Security

When GSM BU security is enabled, read permissions are controlled by the business unit assigned to the specification in addition to WFA permissions. What business unit(s) the user has access to is defined on the UGM user profile. See *Chapter 3, Using UGM to Manage Users* for more information.

GSM BU Security also restricts access to some objects that are linked to specifications. For example, if a sourcing approval is related to a specification the user does not have BU access to, the user will not have access to the sourcing approval. In addition, if a specification the user does not have access to is attached to an NSM object, the user will not have access to the NSM object.

If a user is associated to no business units in UGM they will have access to all business units.

SCRM Business Unit Security

When SCRM BU security is enabled, read permissions and visibility of company, facility, and sourcing approval objects is controlled by the business unit attached to the company and facility. What business unit(s) the user has access to is defined on the UGM user profile. See *Chapter 3, Using UGM to Manage Users* for more information.

SCRM Business Units can be associated with a status on the company or facility profile. The combination of the business unit plus status creates the permission rule. For example, company A is attached to a BU ABC and BU ABC is set to “Inactive.” Users not assigned to BU ABC can still see company A because BU ABC is inactive. This all depends on your configuration.

In addition to controlling read permissions, SCRM BU security also filters the business unit dialog box. The user will only see business units they have access to.

If a user is associated to no business units in UGM, they will have access to all business units.

BU Visibility Versus BU Security

It is important to understand the difference between business unit (BU) visibility and BU security.

BU Visibility

BU visibility feature helps reduce the number of specifications presented in a search result. Think of it as helper and not security.

1. When a user performs a search, GSM only presents specifications where the user and the specifications have common BUs either directly or indirectly. "Directly" represents an exact match and "Indirectly" would be a parent or child of a BU node.
2. The results returned will appear despite workflow permissions. Therefore you do not need read or write access to see a given specification in my search results.
3. However as soon as you click on the specification, then workflow permissions govern the ability to see and interact with the specification. If a user that is not assigned to the proper BU gains access to a specification, then workflow permissions govern security. Some examples of how users can gain access to specifications without the use of a search include:
   a. Automated email due to ownership, notification, signature requests
   b. A user provides a link to another user
   c. A user has access to Specification A which references Specification B. The user is not associated with a BU related to Specification B, i.e. Trade to Ingredient, Formulation to Ingredient…
4. Let's look at an example:
   a. Assume two users are both part of R&D.
   b. We place both in a UGM group called "R&D" and assign each to their own BU; User A BU=NA, User B BU=CN.
   c. Workflows are configured to allow anyone who is a member of "R&D" to read specifications.
   d. Via a standard search, User A will only see specifications associated with BU = NA and User B will only see specifications associated with BU=CN.
   e. But User A emails User B a link to a NA specification. Because workflow permissions govern read access and User B is a member of "R&D," User B will be able to read the NA specification.

BU Security

BU security basically changes how workflow permissions works in step 3 above as well as providing the various other forms of security described in this chapter. When BU security is turned on, then workflow permissions + BU govern read or write access. Therefore however a user finds a link to the specification they must be a member of both a proper BU and UGM group to see a specification.

APPENDIX A
List of System-Based Roles

This appendix contains a list of system-based roles provided with Agile Product Lifecycle Management for Process.

Roles

The following definitions include references to Agile PLM for Process applications, group profiles, and user profiles. For more information on the applications, refer to the applicable user guide. For more information about groups, see Chapter 2, *Using UGM to Manage Groups*. For more information about user profiles and site access, see Chapter 3, *Using UGM to Manage Users*.

Table A-1: System-based roles

Role	Definition
[ACCESS_LEVEL_EDITOR]	Can edit access levels in Global Specification Management (GSM).
[ARCHIVED_DWB_SPEC_CREATOR]	Obsolete. Do not use.
[ARCHIVED_DWB_TO_GSM_SPEC_ EXPORTER]	Obsolete. Do not use.
[AVAILABLE_UOM_ADMIN]	When a user has this role tied to their user profile and the specification has not been used in a BOM, the user can edit the UOM data stored on the specification. This will allow for exception handling on the specification. Once a specification is used in a BOM, the Available UOM data will not be editable, even by the a user with this role.
[CACHE_ADMIN]	Has access to the CACHE application and can schedule flushes related to taxonomy, workflow, user group, administrator data, and extended attributes/custom sections.
[CAN_RERESOLVE_WORKFLOWS]	Can re-resolve workflows.
[CAN_RERESOLVE_WORKFLOWS_ SCRM]	Can re-resolve workflows in Supply Chain Relationship Management (SCRM).
[COMPANY_CREATOR]	Can create company records in the SCRM (Supply Chain Relationship Management) application. Always include SCRM_COMPANY_READER in the group with this role.
[COMPLIANCE_REVIEWER]	Can review compliance of an item using existing screens (displays the CACS button on specifications that support this feature).

Table A-1: System-based roles

Role	Definition
[CP_ACCESS_ADMIN]	Can access and use Customer Portal.
[CP_SYSTEM_ADMIN]	Can configure Customer Portal menus and screens.
[CSS_ADMIN]	Can create, read, edit, and manage Trans-active Item Publications (TIP) / Publication Path documents.
[CUSTOM_REPORTER]	Can view custom reports.
[DATA_ADMIN]	Has access to the ADMN (Manage Core Data) application.
[DRL_CREATOR]	Can see the Create New and Create Copy buttons in Document Reference Library (DRL). Always include DRL_VIEWER in the group with this role.
[DRL_EDITOR]	Can see the Edit button in DRL. Always include DRL_VIEWER in the group with this role.
[DRL_VIEWER]	Can view DRL documents.
[DUTCH_TRANSLATOR]	Obsolete. Do not use.
[EA_SECTION_CREATOR]	Can see the **Create New** button on custom sections in ADMN (Data Administration) and can see the Edit button.
[ENGLISHUK_TRANSLATOR]	Obsolete. Do not use.
[EQ_ACCESS_LEVEL_EDITOR]	Can edit access levels in eQ.
[EQ_TEMPLATE_CREATOR]	Can create templates in eQ.
[EXTERNALLY_MANAGED_CROSS_REF_ADMIN]	Can edit the GSM Cross Reference data even when the column is locked in ADMN. Can set the Managed Externally flag in ADMN. This role only applies if the system is configured for externally managed cross references.
[FACILITY_CREATOR]	Can create facility records in SCRM. Always include SCRM_FACILITY_READER in the group with this role and SCRM_EDITOR.
[FIC_CREATOR]	Can add and edit Food Item Catalog (FIC) terms, alias names, disclosures, groups, and reconstitution rules. Basically, this role can edit all portions of the FIC term. Always include FIC_READER in the group with this role. You must have site access for REG.
[FIC_READER]	Can view any FIC-related information. You must have site access for REG.
[FRENCH_TRANSLATOR]	Obsolete. Do not use.
[GERMAN_TRANSLATOR]	Obsolete. Do not use.
[GLOBAL_CREATOR]	Reserved entry. Do not use.
[GLOBAL_EDITOR]	Reserved entry. Do not use.
[GLOBAL_PRINTER]	Reserved entry. Do not use.
[GLOBAL_READER]	Reserved entry. Do not use.
[GLOBAL_SA]	Reserved entry. Do not use.
[GLOBAL_TIP_ADMIN]	Reserved entry. Do not use.
[GSM_PRINT_ADMIN]	Obsolete. Do not use.
[HIDDEN_SPEC_VIEWER]	Can search hidden specifications and can access the Hidden Specifications toggle in GSM: Edit User Profile.
[HTML_POWERUSER]	Obsolete. Do not use.
[ITALIAN_TRANSLATOR]	Obsolete. Do not use.

Table A-1: System-based roles

Role	Definition
[LIO_CREATOR]	Can create and edit LIO profiles.
[LIO_READER]	Can read LIO profiles.
[LOCAL_USER]	eQuestionnaire-reserved entry. Do not use.
[NON_SPEC_SAC_CREATOR]	Can create sourcing approvals (non-specification-related only) in SCRM.
[NPD_ADMIN]	Can access and create NPD (New Product Development) templates, including strategic brief TMFRs (Team Member Formulation Requirements) and project and activity templates. Can delete strategic brief TMFR templates. This role should be assigned to a relatively small and well-trained set of users.
[NPD_FINANCIAL]	Has access to NPD activity metrics that have been marked as containing financial information and for which the user's business unit matches the project's business unit. Access is at the activity, project, and portfolio levels. This role cannot see the financial information of projects from other business units.
[NPD_GLOBAL_DATA_MANAGER]	Can create and manage metrics that can be associated with activities/projects associated with NPD.
[NPD_GLOBAL_FINANCIAL]	Has access to NPD activity metrics that have been marked as containing financial information globally (across all business units, regardless of business unit affiliation). Access is at the activity, project, and portfolio levels. This access should be assigned only to high-level executive managers or those who require a truly global perspective.
[NPD_IDEA_DELETER]	Can see and use the **Admin** button to delete innovative sales pipelines (ISPs) that are not in an Approved stage.
[NPD_ISP_CREATOR]	Can see and use the Innovation/Sales Pipeline link on the left navigation panel and has the ability to create ISP forms.
[NPD_PACKAGE_COPY_ADMIN]	Controls whether the user has access to the Package Copy Library. Also determines contents of the left navigation panel within NPD and the applications menu from the top menu bar for NPD and the cascading menu from the top menu bar.
[NPD_PROJECT_DELETER]	Can view and use the **Remove Project** radio button within the Project Administration section on an NPD project.
[NPD_SA]	Can create, edit, and manage the workflow of projects, strategic briefs, signature documents, activities, and templates across all business units. This role should only be granted to a few users who will be responsible for troubleshooting and implementing NPD worldwide. This role bypasses all document-level and business unit-specific security.
[NPD_SA_READER]	Can view all projects within NPD, regardless of document-level and business unit-specific security.
[NUTRIENT_ANALYSIS_CREATOR]	Can create nutrient analysis documents within the NSM application. You must have site access for REG checked on the user profile in order for this role to work properly.

Table A-1: System-based roles

Role	Definition
[NUTRIENT_COMPARER]	Can view nutrient analysis and nutrient composite documents for comparison purposes. This role can compare these documents with all available specification type nutrition information in Nutrition Surveillance Management (NSM). You must have site access for REG checked on the user profile in order for this role to work properly.
[NUTRIENT_COMPOSITE_CREATOR]	Can create nutrient composite documents within the Nutrition Surveillance Management (NSM) application. You must have site access for REG checked on the user profile in order for this role to work properly.
[OUTPUT_DELETER]	Can delete External and Referenced outputs from a formulation.
[PMA_GLOBAL_ADMIN]	Can see and use the **Create User** and **Create User Group** buttons in the UGM (User Group Management) application.
[PMA_GROUP_ADMIN]	Can see and use the **Create User Group** button in the UGM application.
[PMA_USER_ADMIN]	Can see and use the **Create User** button in the UGM application.
[POLISH_TRANSLATOR]	Obsolete. Do not use.
[PORTUGUESE_TRANSLATOR]	Obsolete. Do not use.
[PQS_ADMIN]	Can create sessions, samples, and reporting items.
[PQS_FINAL_SCORER_ROLE]	Can create a final score in Product Quality Scorecard (PQS).
[PQS_GUEST]	Can see PQS sessions and samples to which this user has been assigned (for Product Quality Scorecard users).
[PQS_REPORTER]	Has basic access to action items and reports only. Does not have creation access. You must have site access for Reporting checked on the user profile in order for this role to work.
[PQS_SAMPLE_CREATOR]	Can see the **Create New** button on the sample search page and the Edit button on samples.
[PQS_SCORECARD_CREATOR]	Can see the **Create New** button on the scorecard search page and the **Edit** button on scorecards.
[PQS_SESSION_CREATOR]	Can see the **Create New** button on the session search page and the **Edit** button on sessions.
[PRINT_DEBUG]	Within a Print dialog box, has access to additional options in the Print Template drop-down. It will now include XML and FO. (Otherwise, the default is PDF.) This role should only be granted to system administrators.
[REGULATORY_FILING_CREATOR]	Has access to the FSIS/Regulatory Filing button within the GSM > Trade Specification > Supporting Documents tab.
[SAC_CREATOR]	Can create sourcing approvals (specification-related only) in SCRM.

Table A-1: System-based roles

Role	Definition
[SCREEN_CREATOR]	Has access to the **Add New** and **Copy** buttons in the CACS (Computer Aided Compliance Screening) application. This role also determines whether CACS is displayed in the left navigation panel.
[SCRM_COMPANY_EDITOR]	Can edit SCRM company records. Always include SCRM_COMPANY_READER in the group with this role.
[SCRM_COMPANY_READER]	Can read SCRM company records.
[SCRM_FACILITY_EDITOR]	Can edit SCRM facility records. Always include SCRM_FACILITY_READER in the group with this role.
[SCRM_FACILITY_READER]	Can read SCRM facility records.
[SCRM_FACILITY_RELOCATOR]	Can assign a saved facility to a different company.
[SCRM_LOGIN]	Has access to the SCRM application.
[SCRM_PRINCIPAL_EDITOR]	Can view and edit associated users in SCRM.
[SCRM_SEARCH]	Can search for SCRM objects (companies, facilities, sourcing approvals).
[SMART_ISSUE_CREATOR]	Can create smart issue requests.
[SMART_ISSUE_EDITOR]	Can edit smart issue requests.
[SMART_ISSUE_READER]	Can view smart issue requests not marked as ‘Private.’
[SPANISH_TRANSLATOR]	Obsolete. Do not use.
[SPEC_ADMIN]	Can see hidden specifications and can create GSM specifications and sourcing approvals. This role overrides the WFA write permission.
[SPEC_COPIER]	Can copy specifications.
[SPEC_CREATOR]	Can create all available specification types.
[SPEC_CREATOR_1004]	Can create ingredient specifications.
[SPEC_CREATOR_1005]	Can create master specifications.
[SPEC_CREATOR_1006]	Can create labeling specifications.
[SPEC_CREATOR_1009]	Can create packaging material specifications.
[SPEC_CREATOR_1010]	Can create delivered material packing specifications.
[SPEC_CREATOR_1011]	Can create process specifications (deprecated).
[SPEC_CREATOR_2076]	Can create packing configuration specifications.
[SPEC_CREATOR_2121]	Can create printed packaging specifications.
[SPEC_CREATOR_2147]	Can create trade specifications.
[SPEC_CREATOR_2280]	Can create equipment specifications.
[SPEC_CREATOR_2283]	Can create activity specifications.
[SPEC_CREATOR_5750]	Can create nutrient profile specifications.
[SPEC_CREATOR_5816]	Can create formulation specifications.
[SPEC_CREATOR_6500]	Can create menu item specifications.
[SPEC_CREATOR_6501]	Can create product specifications.
[SPEC_EDITOR]	Obsolete. Do not use.
[SPEC_GRADUATOR]	Can change output type to Referenced.

Table A-1: System-based roles

Role	Definition
[SPEC_ISSUER]	Can create issues of specifications that the user has SPEC_CREATOR rights for.
[SPEC_LOGIN]	Obsolete. Do not use.
[SPEC_PRINT_CONTROLLER]	Can print controlled or third-party-controlled copies of specifications in GSM printing.
[SPEC_PRINTER]	Obsolete. Do not use.
[SPEC_READER]	Obsolete. Do not use.
[SPEC_READER_1004]	Obsolete. Do not use.
[SPEC_READER_2283]	Obsolete. Do not use.
[SPEC_SEARCH]	Obsolete. Do not use.
[SPEC_TARGET_REVISIONER]	For formulation specifications, can target a specific specification/issue combination from the specifications lineage once design has completed.
[SPEC_XML_VIEWER]	Obsolete. Do not use.
[SUBSTITUTE_MATERIAL_DEFINER]	Can add new or modify existing substitute materials on raw material specifications and formulation specifications.
[SUCCESSION_REQUEST_EDITOR]	Can create and edit global succession requests. Always include SUCCESSION_REQUEST_READER in the group with this role.
[SUCCESSION_REQUEST_READER]	Can search for and view global succession requests.
[SUPER_DATA_ADMIN]	Can edit administrative data that has already been set to a status of “Active” and that is being consumed in the system.
[TESTING_PROTOCOL_ADMIN]	Can create a testing protocol in GSM. Can see the GSM > Testing Protocol Library link from the top menu bar and the left navigation panel.
[TRANSLATION_APPROVER]	Obsolete. Do not use.
[TSA_ADMIN]	Can create and modify temporary signature authority documents, both for own use and on behalf of others.
[UGM_GROUP_APPROVER]	Can approve UGM group change requests.
[UGM_USER_APPROVER]	Can approve UGM user change requests.
[UMP_ADMIN]	Obsolete. Do not use.
[WFA_ADMIN]	Can create, edit, import, and export workflows.
[WFA_GLOBAL_ADMIN]	Can create workflows and edit these workflows.
[WFA_USER]	Can access the WFA (Workflow Administration) application and view all workflows.

APPENDIX B
Calculated Attributes

This appendix provides additional information and examples related to creating calculated attributes. Topics in this appendix include:

- *Calculated Attributes*
- *Available Properties and Functions*
- *Cell Object Properties*
- *Cell Object Value Functions*
- *Available Variables*
- *Sample Scripts*
- *Controlling Calculation Warnings*
- *InFoods IDs*
- *ISO Codes*

Calculated Attributes

The Calculated Numeric extended attribute type allows users to script calculations to solve a given business problem. The script must be created using JScript. The script is executed by clicking **Calculate**. You can find information on JScript from the Microsoft Web site at:

`http://msdn2.microsoft.com/en-us/library/z688wt03(VS.80).aspx`

For more information on calculated extended attributes and how they are consumed, see *Calculated Numeric* on page 5-16.

Available Properties and Functions

Distinct Extended Attribute Value Functions

Table B-1: Distinct Extended Attribute Value Functions

Function	Definition	Common Parameters and Definitions
GetMaxRangeExtendedAttributeValue	Returns the declared value of the extended attribute.	• `<extAttrID>`–String value representing the Attribute ID of the extended attribute to obtain for use in the calculation • `<uomISOCode>`–Optional, string value representing the ISO code of the UOM in which the extended attribute is expressed • `<returnValIfNotDeclared>`–Optional, numeric value to be returned if the extended attribute is not declared • `<returnValIfNotDefined>`–Optional, numeric value to be returned if the extended attribute is not defined, or if the extended attribute has been defined but is not of type Numeric
GetMinRangeExtendedAttributeValue		
GetNumericExtendedAttributeValue		
GetTargetRangeExtendedAttributeValue		

Distinct Extended Attribute Boolean Functions

Table B-2: Distinct Extended Attribute Boolean Functions

Function	Definition	Common Parameters and Definitions
IsBooleanExtendedAttributeSet	Each of these functions returns true if the `<extAttrID>` exists and a value is set; otherwise false.	`<extAttrID>`—String value representing the Attribute ID of the extended attribute to obtain for use in the calculation
IsExtendedAttributeMinValueSet		
IsExtendedAttributeMaxValueSet		
IsExtendedAttributeTargetValueSet		
IsNumericExtendedAttributeSet		
IsQualitativeExtendedAttributeValueSet		
IsQualitativeLookupExtendedAttributeSet		

Nutrient Functions

Table B-3: Nutrient Functions

Function	Definition	Common Parameters and Definitions
GetNutrientItemRoundedValue	Returns the rounded value of the Nutrient declared.	• `<infoodsID>`—String value representing the ID of the nutrient to obtain • `<returnValIfNotDeclared>`—Optional, numeric value to be returned if the nutrient is not declared • `<returnValIfNotDefined>`—Optional, numeric value to be returned if the nutrient is not defined
GetNutrientPer100g	Returns the declared value of the Nutrient declared Per 100 grams.	
GetNutrientPer100mL	Returns the declared value of the Nutrient declared Per 100 ml.	
GetNutrientValuePerServing	Returns the per serving value of the Nutrient declared.	

Tare Weight Functions

Table B-4: Tare Weight Functions

Function	Definition	Common Parameters and Definitions
GetTareWeight	Returns the Tare Weight information from the specification.	• `<uomISOCode>`—Optional, string value representing the ISO code of the UOM the extended attribute is expressed • `<returnValIfNotDefined>`—Optional, numeric value to be returned if the nutrient is not defined
GetTareWeightReferenceWeight	Returns the Reference Weight information from the specification.	

Tare Weight Properties

Table B-5: Tare Weight Properties

Property	Definition	Returns	Example
TareWeightPer	This property returns the value from the tare weight per field as described on the specification.	The value from the per field associated to the tare weight field.	`returnTareWeightPer;`

Compliance Functions

Table B-6: Compliance Functions

Function	Definition	Common Parameters and Definitions
GetAdditiveKTCMax100g	Returns the declared value of the Known To Contain Additive.	• `<ComplianceID>`—String value representing the ID of the nutrient to obtain • `<uomISOCode>`—Optional, string value representing the ISO code of the UOM the extended attribute is expressed • `<returnValIfNotDeclared>`—Optional, numeric value to be returned if the nutrient is not declared • `<returnValIfNotDefined>`—Optional, numeric value to be returned if the nutrient is not defined
GetAdditiveMCMax100g	Returns the declared value of the May Contain Additive.	
GetAllergenKTCMax100g	Returns the declared value of the Known To Contain Allergen.	
GetAllergenMCMax100g	Returns the declared value of the May Contain Allergen.	
GetSensitivityKTCMax100g	Returns the declared value of the Known To Contain Intolerances/ Sensitivity.	
GetSensitivityMCMax100g	Returns the declared value of the May Contain Intolerances/ Sensitivity.	

Get Cell Functions

Table B-7: Get Cell Functions

Function	Definition	Returns	Parameters and Definitions	Example
GetCell	A function that identifies a cell specified by a row and a column.	A cell object	`<rowHandle>`—An Agile handle of a row `<columnHandle>`—An Agile handle of a column	`var selfCell @ GetCell(MyRow, MyColumn)`

GetCells	A function that identifies an enumeration of cells specified by a combination of row, column, extended attribute type, and direction. It may include current cell as a part of a result. If both <rowID> and <columnID> are null parameters, returns an empty enumeration.	A cell object	`<rowID>`—User-defined row ID or an Agile handle of a row. If a null parameter, it acts as all rows.
			`<columnID>`—User-defined column ID or an Agile handle of a column. If a null parameter, it acts as all columns
			`<typeFilter>`—An array of string values that represent extended attribute types that needs to be filtered. If a null parameter, it ignores this filtering. Valid values are:
			• Boolean
			• Calculated Numeric
			• Date
			• Free Text
			• Numeric
			• Qualitative Lookup
			• Qualitative
			• Quantitative Range
			• Quantitative Tolerance
			• Referenced Item Collection
			`<directionFilter>`–A string that represents a location of cells relative to the current extended attribute. If a null parameter, it ignores this filtering. Valid values are:
			• UP
			• DOWN
			• LEFT
			• RIGHT
				• `var typeFilter @ new Array(2);`
				`typeFilter[0] @ 'Boolean';`
				`typeFilter[1] @ 'Numeric';`
				• `var allCellsInTestColumn @ GetCells(, 'Test',,);`
				• `var allFilteredCellsInLeftToMyCell @ GetCells(MyRow,, typeFilter, 'LEFT')`

GetCellInMyColumnByRowID	A function that identifies a cell in a current extended attribute column specified by a row. If more than one cell matches, returns the first cell in the result.	A cell object	`<rowID>`—User-defined row ID or an Agile handle of a row	`var cellInXYRowInMyColumn @ GetCellInMyColumnByRowID('XY')`

Function	Definition	Returns	Parameters and Definitions	Example
GetCellInMyRowByColumnID	A function that identifies a cell in a current extended attribute row specified by a column.	A cell object	`<columnID>`—User-defined column ID or an Agile handle of a column	`var cellInBColumnInMyRow @ GetCellInMyRowByColumnID('B')`
GetCellsByRow	A function that identifies an enumeration of cells in a specified row. Can return cells from multiple rows if they are bounded by the same ID. It may include current cell as a part of a result.	An enumerator of cell objects	`<rowID>`—User-defined row ID or an Agile handle of a row	`var allCellsInMyRow @ GetCellsByRow(MyRow)`
GetCellsByColumn	A function that identifies an enumeration of cells in a specified column. It may include current cell as a part of a result.	An enumerator of cell objects	`<columnID>`—User-defined column ID or an Agile handle of a column	`var allCellsInTestColumn @ GetCellsByColumn ('Test')`

Get Cell Properties

Table B-8: Get Cell Properties

Property	Definition	Returns	Example
MyCell	A property that identifies a cell of a current extended attribute.	A cell object value	`var selfCell @ MyCell`
MyColumn	A property that identifies an Agile handle of a column that extended attribute is located on.	String value that represents column Agile handle	`var currentCollumn @ MyColumn`
MyRow	A property that identifies an Agile handle of a row that extended attribute is located on.	String value that represents row Agile handle	`var currentRow @ MyRow`

Processing Results Returned by an Enumerator

When results are returned as an enumerator by functions such as GetCells, a loop structure is used to iterate through it in order to access a particular cell data.

Two methods are used to access each item in an enumerator:

Method 1

```
var item;
var cellsInRow @ GetCells(MyRow,,, 'LEFT');

while(cellsInRow.MoveNext())
{
 item @ cellsInRow.Current;
// at this point your item variable is a cell object
}
```

Method 2

```
var item;
var cellsInRow @ GetCells(MyRow,,, 'LEFT');

for(;cellsInRow.MoveNext();)
{
  item @ cellsInRow.Current;
// at this point your item variable is a cell object
}
```

Cell Object Properties

Table B-9: Cell Object Properties

Property	Definition	Example
ColumnHandle	A property that returns a string value representing a column's Agile handle.	`var currentCollumn @ MyCell.ColumnHandle`
ColumnId	A property that returns a string value representing a user-defined column ID.	`var currentColumnID @ MyCell.ColumnId`
ColumnSequence	A property that returns an integer representing a cell column sequence.	`var currentRowSequence @ MyCell.ColumnSequence`
RowHandle	A property that returns a string value representing a row's Agile handle.	`var currentRow @ MyCell.RowHandle`
RowId	A property that returns a string value representing a user-defined row ID.	`var currentRowID @ MyCell.RowId`
RowSequence	A property that returns an integer representing a cell row sequence.	`var currentRowSequence @ MyCell.RowSequence`
Type	A property that returns an extended attribute type. Possible types are: • 'Boolean' • 'Calculated Numeric' • 'Date' • 'Free Text', 'Numeric' • 'Qualitative Lookup' • 'Qualitative' • 'Quantitative Range' • 'Quantitative Tolerance' • 'Referenced Item Collection'	`var myType @ MyCell.Type`
Value	A property that lets you retrieve the extended attribute value of a cell object.	`var numValue @ GetCellInMyRowByColumnID('Test').Value.GetNumericValue()`

Cell Object Value Functions

These functions return an Exception if the extended attribute is not the correct type.

Table B-10: Cell Object Value Functions

Function	Definition	Returns	Parameters and Definitions	Example
GetBooleanValue	Retrieves boolean value of an extended attribute.	An integer that represents the selected extended attribute value: 0 is false, 1 is true, -1 if not set	None	`var x @ GetCellInMyRowByColumnID(‘Test’).Value. GetBooleanValue()`
GetDateValue	Retrieves datetime value of an extended attribute.	A value of type DateTime that represents the entered extended attribute value	None	`var x @ GetCellInMyRowByColumnID(‘Test’).Value.GetDateValue()`
GetFreeTextExtendedAttributeValue	Retrieves string value of an free-text extended attribute.	A string that represents the selected extended attribute value	None	`var x @ GetCellInMyRowByColumnID('Test').Value.GetFreeTextExtendedAttributeValue ()`
GetMultipleValues	Retrieves selected qualitative values that are on an extended attribute.	An array of string values that are currently selected on the extended attribute	None	`var x @ GetCellInMyRowByColumnID(‘Test’).Value.GetMultipleValues()`
GetNumericValue	Retrieves numeric value of an extended attribute. Reports an error if it is unable to convert to specified UOM, returns -123456789.	A value of type numeric that represents the entered extended attribute value	`<ISOCode>`—An optional parameter, specifying a UOM. If specified, the extended attribute’s value is firstly converted from the extended attribute’s default UOM to this UOM, then that value is returned.	`var x @ GetCellInMyRowByColumnID(‘Test’).Value.GetNumericValue()` `var x @ GetCellInMyRowByColumnID(‘Test’).Value.GetNumericValue(‘KG’)`
GetQualitativeExtendedAttributeValue	Retrieves string value of an qualitative extended attribute.	A comma-delimited string that represents the selected extended attribute value(s)	None	`var x @ GetCellInMyRowByColumnID('Test').Value.GetQualitativeExtendedAttributeValue ()`

Function	Definition	Returns	Parameters and Definitions	Example
GetQualitativeLookupExtendedAttributeValue	Retrieves string value of an qualitative-lookup extended attribute.	A comma-delimited string that represents the selected extended attribute value(s)	None	`GetCellInMyRowByColumnID('Test').Value.GetQualitativeLookupExtendedAttributeValue ()`
GetRangeValue	Retrieves numeric value of an extended attribute based on a property type provided. Reports an error if it is unable to convert to specified UOM, returns `-123456789.`	A value of type numeric that represent a value on an entered extended attribute property	`<rangeType>`—A string value that specifies type of property to retrieve; case insensitive. Valid values are: • ‘min’ • ‘max’ • ‘target’ `<ISOCode>`—An optional parameter, specifying a UOM. If specified, the extended attribute’s value is firstly converted from the extended attribute’s default UOM to this UOM, then that value is returned.	• `var x @ GetCellInMyRowByColumnID(‘Test’).Value.GetRangeValue(‘min’)` • `var x @ GetCellInMyRowByColumnID(‘Test’).Value.GetRangeValue(‘min’, ‘KG’)`
GetStringValue	Retrieves the string value of an extended attribute.	A string value that represents the entered extended attribute’s value(s) *Note*: If the type was of multi-select, and there are multiply selected values, then the returned value is a comma-delimited list of those values.	None	`GetCellInMyRowByColumnID('Test').Value.GetStringValue()`

Available Variables

If a variable is not defined on the current business object, it will return a zero {0}.

Table B-11: Available variables

Variable	Return
BeginningPercentTS	The beginning % total solids value from the specification
FinalPercentTS	The final % total solids value from the specification
TotalSolids	The total solids value from the specification
FinalPercentTSOverride	The final % total solid override value from the specification
Density	The density value from the specification
FinalDensity	The final density value from the specification
FinalDensityOverride	The final density override value from the specification
AmountPerServing	The amount per service value from the specification
ReferenceAmount	The reference amount value from the specification
BeginningBatchSize	The beginning batch size value from the specification
ApproximateYield	The approximate yield value from the specification

Note All values in the database are stored as % solid values even if your system is configured to display % moisture.

Sample Scripts

Sample 1—Extended Attribute Referencing

This sample would return the value of the numeric extended attribute with a unique ID of "HeatIndex." This is an example of how to set up a calculated attribute that references another extended attribute.

```
return GetNumericExtendedAttributeValue('HeatIndex');
```

Sample 2—Protein Per Batch Calculations

This sample would return the result of dividing the protein amount per 100g by beginning batch size.

```
return BeginningBatchSize/GetNutrientPer100g('PROCNT');
```

Sample 3—Conditional Scripting Information

This sample shows how to do a number of more complex operations using JScript. For more information on JScript, please visit:

```
http://msdn2.microsoft.com/en-us/library/z688wt03(VS.80).aspx
```

Note The @ sign will be converted to an = sign (assignment operator) when the script is being interpreted, and the = sign will be converted to a == sign (comparison operator) when interpreted.

```
var x @ 3; //declare variable x to be 3
var y @ 7; //declare variable y to be 7
var z @ 6; //declare variable z to be 6
var result; //declares a variable called result
var proteinID @ 'PROCNT'; //declares a variable called proteinID and sets the value to
"PROCNT".

result @ GetNutrientPer100g(proteinID); //assigned the Protein amount per 100g to a
variable called result.

if ( x = y ) //checks to see if x is equal to y
{
  if (z<y && y>x) //checks to see if z is less than y and y is greater than x
   {
      result@result+1; //adds one to the result
      return result;
    }
  else
   {
      result@result+2; //adds two to the result
      return result;
    }
}
else if ( x <@ y ) //checks to see if x is less than or equal to y
{
  if (z<y || y>x) //checks to see if z is less than y or y is greater than x
   {
      result@result+10; //adds ten to the result
      return result;
    }
  else
   {
      result@result+12; //adds twelve to the result
      return result;
    }
}
else // x is greater than y
{
                result @ 100; //set the result to 100
```

```
return result
}
```

Sample 4—Numeric Extended Attributes

This sample returns the value of Numeric extended attribute “Value1” if extended attribute ‘Value1’ is set; otherwise return a default value of 25.

```
if (IsNumericExtendedAttributeSet(‘Value1’))
{
     return GetNumericExtendedAttributeValue('Value1');
}
else
{
return 25;
}
```

Controlling Calculation Warnings

You can control calculation warning icons using the following techniques:

- **TurnWarningsOff()**—Turns warnings off in the following lines of code till its turned back on or the script ends
- **TurnWarningsOn()**—Turns warnings on in the following lines of code till its turned off explicitly. Warnings are on by default
- **AddErrorMessage(message of type string)**—Displays an error message within quotes for e.g. AddErrorMessage('Error in running this script')

Example including all three techniques:

```
TurnWarningsOff();var override @ GetNumericExtendedAttributeValue('FPCalciumOverride', 'ME', -
1, -1);

TurnWarningsOn();
var roundedCalciumPerServing @ GetNumericExtendedAttributeValue('FPCalciumRounded', -
1234567890, -1234567890);

if (roundedCalciumPerServing = -1234567890) {
AddErrorMessage('Please correct this problem by adding Calcium to the Nutrition Panel.');

     }
     else {
     if(override > -1) {
     return override;
     }
     }
     return roundedCalciumPerServing;
```

In this example, if the FPCalciumOverride extended attribute is not found it will not display a warning icon, however if it cannot find FPCalciumRounded it will display the warning. In addition, if FPCalciumRounded is null (-1234567890) then it will also display the additional error message. You could also turn warnings off here and just display your added error message.

InFoods IDs

The following InFoods IDs are currently available in GSM for use in calculated attributes.

Table B-12: InFoods IDs

Name	InFoods ID	UNID	Sequence ID
ALCOHOL	ALC	ALC	520
AOAC Fiber	FIBTG2	FIBTG	60
ASH	ASH	ASH	210
CALCIUM	CA	CA	350
CALORIES	ENERC_KCAL	ENERC_KCAL	10
CARBOHYDRATES (TOTAL)	CHOCDF	CHOCDF	40
CARBOHYDRATES (AVAILABLE)	CHOAVL	CHOAVL	45
CAROTENE	CARTB	CARTB	490
CASEIN (Nx6.38)	CASN	CASN	34
CHLORIDE	CLD	CLD	354
CHOLESTEROL	CHOLE	CHOLE	190
CHOLINE	CHOLN	CHOLN	435
CHOLINE CHLORIDE	CHOLNCLD	CHOLNCLD	440
CHROMIUM	CR	CR	357
COBALAMIN-B12	VITB12	VITB12	280
COPPER	CU	CU	450
d-BIOTIN	BIOT	BIOT	430
DIETARY FIBER	FIBTS	FIBTS	50
ENERGY kj	ENERC_KJ	ENERC_KJ	20
FOLIC ACID	FOLAC	FOLAC	320
FRUCTOSE	FRUS	FRUS	530
GLUCOSE	GLUS	GLUS	85
IODINE	ID	ID	360
IRON	FE	FE	370
LACTOSE	LACS	LACS	97
LYCOPENE	LYCPN	LYCPN	540
MAGNESIUM	MG	MG	380
MALTOSE	MALS	MALS	94
MANGANESE	MN	MN	480
MOISTURE	WATER	WATER	200
MOLYBDENUM	MO	MO	485
MONOUNSATURATED FAT	FAMS	FAMS	140
NIACIN-B3	NIA	NIA	250
NITROGEN	NAM	NAM	500
OLIGOSACCHARIDES	OLSAC	OLSAC	65
OMEGA-3	F18D3N3	F18D3NS	160
OMEGA-6	F18D3N6	F19D3N6	170
ORGANIC ACIDS	ORGACD	ORGACD	110
PANTHOTHENIC	PANTAC	PANTAC	340
PHOSPHORUS	P	P	390

Table B-12: InFoods IDs (continued)

Name	InFoods ID	UNID	Sequence ID
POLYOLS	POLYOLS	POLYOLS	215
POLYUNSATURATED FAT	FAPU	FAPU	150
POTASSIUM	K	K	400
POTENTIAL NIACIN	NIAEQ	NIAEQ	260
PROTEIN	PROCNT	PROCNT	30
PROTEIN (Nx6.25)	PROCNT_NX625	PROCNT_NX625	32
PYRIDOXINE-B6	VITB6A	VITB6A	270
RIBOFLAVIN-B2	RIBF	RIBF	240
SATURATED FAT	FASAT	FASAT	130
SELENIUM	SE	SE	460
SODIUM	NA	NA	410
STARCH	STARCH	STARCH	510
SUCROSE	SUCS	SUCS	92
SUGARS:DI	SUGARDI	SUGARDI	90
SUGARS:MONO	SUGARMO	SUGARMO	80
SUGARS:OTHER	SUGARM	SUGARM	100
TAURINE	TAU	TAU	470
THIAMINE-B1	THIA	THIA	230
TOTAL FAT	FAT	FAT	120
TOTAL SOLIDS	TTLSOLID	TTLSOLID	205
TOTAL SUGAR	SUGAR	SUGAR	70
TRANS FATTY ACID	FATRN	FATRN	180
VITAMIN A-IU	VITA_IU	NITA_IU	223
VITAMIN A-TOTAL	VITA	VITA	220
VITAMIN C	VITC	VITC	290
VITAMIN D	VITD	VITD	300
VITAMIN E	VITE	VITE	310
VITAMIN K	VITK	VITK	330
WHEY (NX6.38)	WHEY	WHEY	37
ZINC	ZN	ZN	420

ISO Codes

The following ISO codes are currently available in GSM for use in calculated attributes.

Table B-13: ISO codes for units of measure

Name	Abbreviation	id	ISO Code
#/SQ.FT.	#/SQ.FT	LB-SQ.FT	FP
CELSIUS	C	C	CE
CENTILITER	cL	CENT-L	C3
CENTIMETERS	cm	cm	CM
COUNT	Cnt	COUNT	1N
CUBIC CENTIMETERS	Cu.CM	CU.CM	CC
CUBIC FEET	Cu.Ft	CU.FT	CF
CUBIC INCHES	Cu.iN	CU.IN	CI
CUBIC METER	m3	CU.M	CR
DAYS	days	DAYS	DA
DECILITER	dL	DECI-L	DL
DEGREES	Degrees	DEGREES	DD
FAHRENHEIT	F	F	FA
FEET	ft	ft	FT
FLUID OUNCES (UK)	fl oz (UK)	FL-OZ-UK	FZ
FLUID OUNCES (US)	fl oz (US)	FL-OZ-US	FO
GALLONS (UK)	gal (UK)	GAL-UK	Gl
GALLONS (US)	gal (US)	GAL-US	GA
GRAMS	g	G	GR
HOURS	hr	HR	HR
INCHES	in	IN	IN
INTERNATIONAL UNITS	IU	IU	F2
KILOGRAMS	kg	KILO-G	KG
KILOLITERS	kL	KILO-L	K6
KIT LEVEL	Kit Level	KITLEVEL	KT
LITERS	L	LITER	LT
METERS	m	M	MR
MICROGRAMS	ug	MICRO-G	MC
MILIGRAMS	mg	MILI-G	ME
MILLILITERS	mL	MILI-L	ML
MILLIMETERS	mm	MILI-M	MM
MINUTES	min	MIN	MJ
MONTHS	mos	MONTHS	MO
OUNCES	oz	OZ	OZ
PARTS PER MILLION	ppm	PPM	59
PARTS PER THOUSAND	per mil	PPTH	NX
PERCENT	%	PERCENT	P1
POUNDS	lb	LB	LB
POUNDS PER SQUARE INCH	PSI	PSI	PS
SECONDS	s	SEC	3

Table B-13: ISO codes for units of measure (continued)

Name	Abbreviation	id	ISO Code
SQUARE INCHES	Sq.In	SQ.IN	SI
UNITS	units	UNITS	UN
WEEKS	wks	WEEKS	WK
YEARS	yrs	YEARS	YR