



# **Agile Product Lifecycle Management**

## **Customer Needs Management User and Administration Guide**

v1.2

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# Preface

Oracle's Agile PLM documentation set includes Adobe® Acrobat PDF files. The [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technetwork/documentation/agile-085940.html) <http://www.oracle.com/technetwork/documentation/agile-085940.html> contains the latest versions of the Agile PLM 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 Documentation folder available on your network from which you can access the Agile PLM documentation (PDF) files.

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**Note** To read the PDF files, you must use the free Adobe Acrobat Reader version 9.0 or later. This program can be downloaded from the [Adobe Web site](http://www.adobe.com) <http://www.adobe.com>.

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The [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technetwork/documentation/agile-085940.html) <http://www.oracle.com/technetwork/documentation/agile-085940.html> can be accessed through **Help > Manuals** in both Agile Web Client and Agile Java Client. If you need additional assistance or information, please contact My Oracle Support (<https://support.oracle.com>) for assistance.

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**Note** Before calling Oracle Support about a problem with an Agile PLM manual, please have the full part number, which is located on the title page.

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## TTY Access to Oracle Support Services

Oracle provides dedicated Text Telephone (TTY) access to Oracle Support Services within the United States of America 24 hours a day, 7 days a week. For TTY support, call 800.446.2398. Outside the United States, call +1.407.458.2479.

## Readme

Any last-minute information about Agile PLM can be found in the Readme file on the [Oracle Technology Network \(OTN\) Web site](http://www.oracle.com/technetwork/documentation/agile-085940.html) <http://www.oracle.com/technetwork/documentation/agile-085940.html>.

## Agile Training Aids

Go to the [Oracle University Web page](http://www.oracle.com/education/chooser/selectcountry_new.html) [http://www.oracle.com/education/chooser/selectcountry\\_new.html](http://www.oracle.com/education/chooser/selectcountry_new.html) for more information on Agile Training offerings.

## 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.

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# Getting Started in Agile CNM

**This chapter includes the following:**

---

- Welcome to Agile Customer Needs Management..... 1
- What's New in CNM 1.2..... 2
- Logging in to CNM..... 2

## Welcome to Agile Customer Needs Management

Agile Customer Needs Management (CNM) helps you transform market requirements into products. CNM offers a platform on which Product and Project owners can capture, filter, refine, collaborate on, prioritize, and eventually incorporate market requirements into products. Those requirements can originate from such sources as CRM, Quality, or other enterprise applications, as well as detailed documents received from customers, and so forth.

## How to Find Documentation for CNM

The Oracle Agile documentation set is found at this Web site:  
<http://www.oracle.com/technetwork/documentation/agile-085940.html>.

The manuals that document Agile CNM in this product release are:

- *CNM Readme*
- *CNM Implementation Guide* (including Installation)
- *CNM User and Administration Guide*
- *CNM Web Services Guide*
- *CNM Security Guide*

## Installation Test Notice

Install and test this release on a designated Development server before installing it on your Production environment. Your Development environment should mirror your Production environment as closely as possible to provide accurate testing results.

It is important to validate the installation of this release, and to confirm your integrations are working correctly as part of your due diligence. Any problems or questions noted during your Development system testing should be resolved before installing this release on your Production environment.

## What's New in CNM 1.2

The following improvements were added to CNM 1.2.

- **CNM Integration with PQM and PCM:** CNM is now integrated with two more Agile PLM solutions, Product Quality Management and Product Cost Management. In support of this, Problem Reports (PQM) and Prices (PCM) can now be added to References.  
  
Integration of CNM with Product Collaboration and Product Portfolio Management was already established: Items (PC) and Projects (PPM) can be added to References.  
  
For more information about the integration of Agile CNM with Agile PC, PPM, PCM, and PQM, see [Integration of CNM with other Agile PLM Solutions](#) on page 34.
- **Promotion:** Also supporting integration of CNM with PLM solutions, CNM business objects, such as Requirements, can be promoted to the product record as Documents. For more information, see [Promoting CNM Objects to Agile Product Record](#) (on page 26).
- **Customer and Product Line:** Two fields have been added to the Object Details page in CNM objects: Customer and Product Line. They are enabled with AutoComplete feature (also called TypeAhead), where the system prompts from existing values of the attribute and you choose from the offered list. (Tags were enabled with AutoComplete in previous CNM.)
- **Web Services in CNM:** Web Services have been added; these are documented in *CNM Web Services Guide*.
- **Cluster:** The CNM solution can now be set up in a clustered environment; this is documented in *CNM Implementation Guide*.

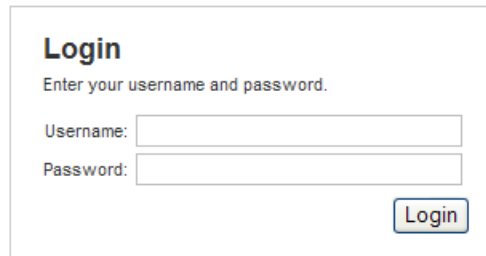
## Logging in to CNM

Before you can log in to CNM, your user account needs to be created and enabled in Agile PLM Administrator for the Agile Application Server that CNM is authenticating against. For more information, see the *CNM Implementation Guide*.

First, be sure to disable the popup blocker for CNM-related URLs in the browser you are using.

Enter the determined URL for the CNM application. The **Login** page appears.

## **ORACLE** Agile Customer Needs Management



The screenshot shows a login form titled "Login" with the instruction "Enter your username and password." Below this, there are two input fields: "Username:" and "Password:". To the right of the "Password:" field is a "Login" button.

Enter your username and password and click **Login**. You are brought to the Home page of the CNM application.



# Exploring the Home Page

**This chapter includes the following:**

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| ▪ Overview of Home Page.....       | 5  |
| ▪ Areas on the Home Page .....     | 6  |
| ▪ Menus on the Left Toolbar.....   | 10 |
| ▪ Menus on the Right Toolbar ..... | 12 |
| ▪ Searching in CNM.....            | 13 |

## Overview of Home Page

When you log in to CNM, the **Home** page appears. You can accomplish many tasks from the CNM Home page. Here is a list of such tasks.

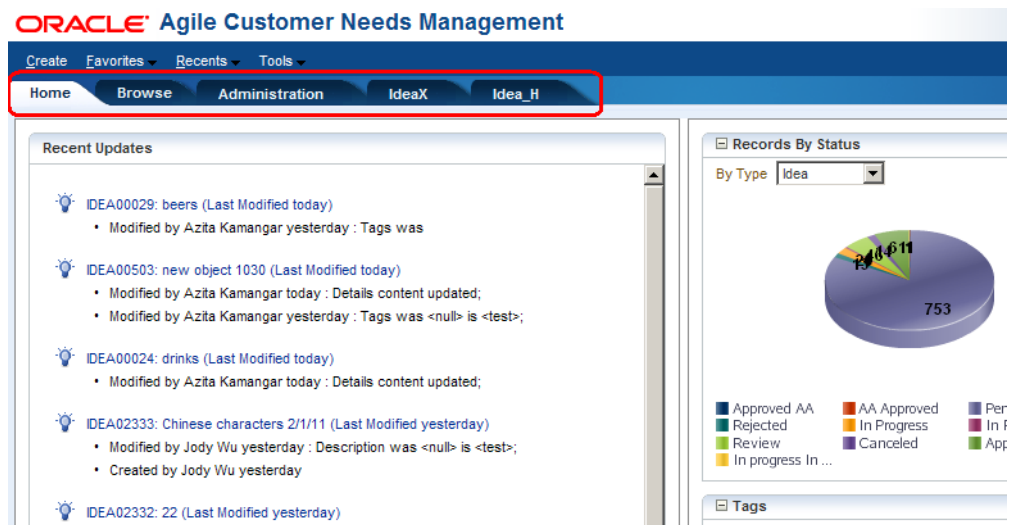
- View any outstanding reviews requested from you in the **My Pending Reviews** area.
- Read the latest information about objects in the **Recent Updates** area.
- Review a graphical representation of the current status of objects from the **Records By Status** dashboard area.
- View the tags, or categories, given to objects to locate a grouping of specific objects from the **Tag Cloud**.
- Create objects using the **Create** button.
- Access bookmarked objects using the **Favorites** menu.
- Go to recently visited objects using the **Recents** menu.
- Access the **Tools** menu.
- Search for an individual object in CNM using **Search** or **Browse**.
- Access to system configuration using the **Administration** link.
- Change your display using the **User Preferences** link.
- Access clarification about CNM behavior from the **Help** link.
- End your current user session from the **Logout** link.

## Multi-tab View

On the CNM **Home** page, neither the **Home** nor **Browse** tabs can be closed. They are always available for access no matter how many other CNM objects are also open (with their own tab).

The **Browse** tab presents the Advanced Search page, where you can perform a Quick search or an Advanced search. Executing any search returns results to the **Browse** tab. If the **Browse** tab already

contains executed search results, the older search results are replaced by the newer ones. Searches are detailed in [Searching in CNM](#) on page 13.



Multiple tabs are displayed as objects are opened, or if the Administration area is accessed. Each opened object is under the latest tab at the end of the tab-row.

The maximum number of open, visible tabs is ten. Once a user reaches that limit, a notifications prompts to close a tab in order to open another tab.

If a user selects an object that is already an active and open tab, the page focus for the user is changed to the already available tab.

## Areas on the Home Page

The following sections illustrate how to navigate through each component that is accessible from the **Home** page.

**Note** The Home page areas – Recent Updates, My Pending Reviews, Records By Status, Tags – do not refresh with recent changes until you log out and log back in to CNM.

## Recent Updates

The **Recent Updates** area displays a list of summaries about what has happened to certain objects since you logged out of the system. The updates go back a maximum of 30 days (if you logged out of CNM more than thirty days ago).

Recent updates applies to "tier-one" and "tier-two" objects. A maximum of five updates are displayed for any object. CNM finds at least ten object updates to display, and displays no more than 20 objects.

This is a sample of a populated **Recent Updates** area.

Recent Updates

 [QUOTE00116: Sports Arena \(Last modified today\)](#)

- Component removed by Mariah Thomas today: Remove Component: Food
- Component added by Mariah Thomas today: Add Component: Food
- Component added by Mariah Thomas today: Add Component: Retail
- Component added by Mariah Thomas today: Add Component: Sports
- Modified by Mariah Thomas today: Tags was <> is <ideamt>

 [IDEA00347: Soccer \(Last modified today\)](#)

- Created by Mariah Thomas today

 [IDEA00335: Baseball \(Last modified today\)](#)

- Modified by Mariah Thomas today: Tags was <> is <ideaMT>
- Created by Mariah Thomas today

 [IDEA00334: Basketball \(Last modified today\)](#)

- Modified by Mariah Thomas today: Tags was <> is <ideaMT>
- Created by Mariah Thomas today

 [IDEA00336: Football \(Last modified today\)](#)

- Modified by Mariah Thomas today: Tags was <> is <ideamt>
- Created by Mariah Thomas today

 [IDEA00337: Volleyball \(Last modified today\)](#)

- Modified by Mariah Thomas today: Tags was <> is <ideamt>
- Created by Mariah Thomas today

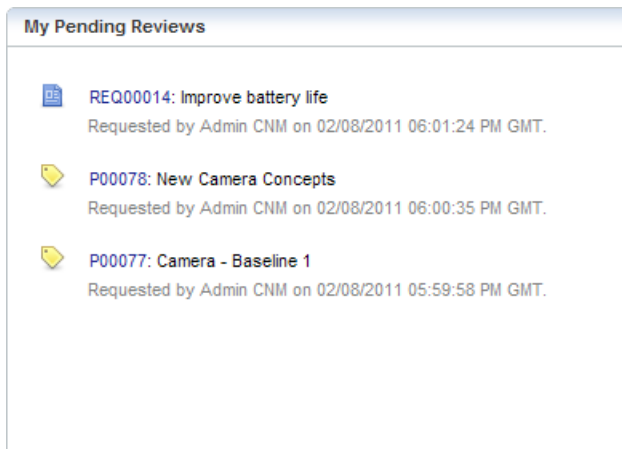
 [REQ01313: Sports \(Last modified today\)](#)

- Modified by Mariah Thomas today: Tags was <> is <reqmt>
- Component added by Mariah Thomas today: Add Component: Soccer
- Component added by Mariah Thomas today: Add Component: Hockey
- Component added by Mariah Thomas today: Add Component: Basketball
- Component added by Mariah Thomas today: Add Component: Football

Object information is displayed for objects that you created, and for objects that you are a team member. The summaries begin with the most recent event. Each object-name heading is an active link.

## My Pending Reviews

When you are assigned as a reviewer for any number of objects, they display as a list in reverse chronological order in the **My Pending Reviews** section.



The object IDs are active links that direct you back to the object so you can carry out your review for that specific object. If the user has no current assignments, this section does not display for the user.

For more information about review assignments, see [Object Signoffs](#) on page 44.

## Records By Status

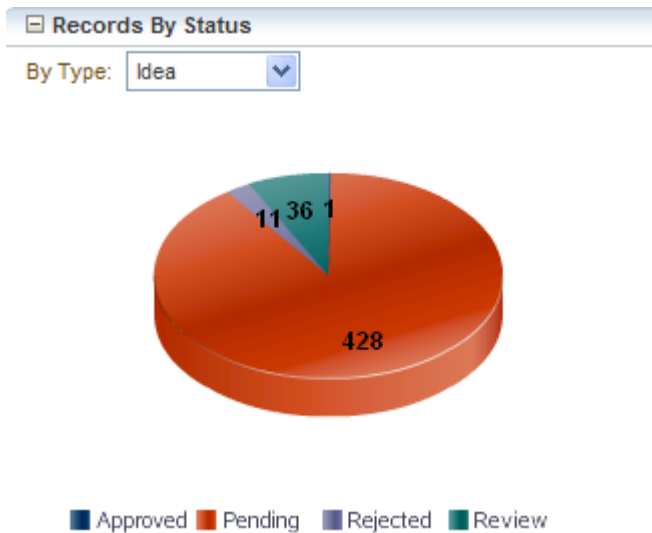
The **Records By Status** area has a graphical display, or dashboard, of CNM objects filtered by type, and sorted by their current status. The dashboard provides an at-a-glance view of the proportion of objects in each CNM status.

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**Note** Records By Status displays the number of records that were updated by the previous night. Clicking on the "pie" produces the currently updated number of records.

---





When you click a region of the "pie", the system runs a search for all objects of the selected type that are currently in that status. The results are returned to the **Browse** tab. You can then select an object from the results and go directly to its **Summary** section.

The search has the same constraints as any other search in CNM: the results returned to you include only those objects that you can see in the **Search Results** table. For more information about searches, see [Searching in CNM](#) on page 13.



## Tag Cloud

Tags are a utility that categorize and group objects. All users with a Participant role or higher can add and remove tags.

Multiple tags can be associated with one object (comma-separated). The stored tags are displayed in alphabetical order and lowercase (even if entered in uppercase).

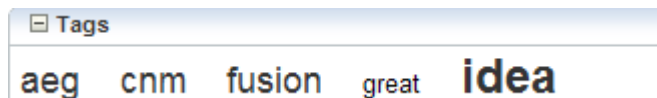
To eliminate repeated or similar tags, CNM prompts existing tags as suggestions to a user who is associating new tags with an object.

### To add a tag to an object:

1. From the **Summary** section of the object click .
2. The object is now in Edit mode. Enter text in the **Tags** field or select from the autogenerated tags. Each tag must be separated by a comma.
3. Click  to finish.

The **Tag Cloud** shows all tags that are associated with objects in CNM. CNM tallies and ranks tags, and displays them in three styles:

- Tags in the top 10% of use are in a large, bold font.
- Tags in the next 30% are in the large font, but not bold.
- The remaining 60% of tags are in a smaller font.



All tags in the **Tag Cloud** are active links. When you click a tag link, CNM retrieves all objects that are associated with that tag. The results display in a **Search Results** table in the **Browse** tab, as seen in the sample:

| Name                | Number    | Tag                 | Status         | Type    | Date Created          |
|---------------------|-----------|---------------------|----------------|---------|-----------------------|
| Single-lens refl... | P00016    | camera              | Review         | Product | 12/15/2010 09:56:0... |
| Spy HD camera!      | IDEA00043 | camera,battery      | Pending        | Idea1   | 12/15/2010 09:58:0... |
| Voice activated...  | IDEA00046 | camera              | In Progress DD | Idea1   | 12/15/2010 09:58:5... |
| A tiny HD camera    | IDEA00047 | camera              | In Progress    | Idea1   | 12/15/2010 10:00:5... |
| Camera - Baseli...  | P00077    | camera,photograp... | Approved       | Product | 12/15/2010 11:57:4... |
| A tiny HD camera    | IDEA00173 | camera              | In Progress    | Idea1   | 12/15/2010 11:57:4... |
| Voice activated...  | IDEA00174 | camera              | Review         | Idea1   | 12/15/2010 11:57:4... |
| Spy HD camera!      | IDEA00175 | camera              | Review         | Idea1   | 12/15/2010 11:57:4... |

The search executed by clicking a tag has the same constraints as any other search in CNM: the results returned to you include only those objects that you can see in the **Search Results** table. For more information about searches, see [Searching in CNM](#) on page 13.

If you click a tag link and no rows are returned in the **Search Results** table, it simply reflects that you are not a team member on any objects associated with that tag. Contact the project manager or CNM administrator if you want additional access to CNM objects.

## Menus on the Left Toolbar

The next subsections describe the menus found on the toolbar in the upper left of the CNM Home page.

### Create

A user with a Participant role level or higher can create a new object by clicking the **Create** button. To learn more about creating an object, see [Creating an Object](#).

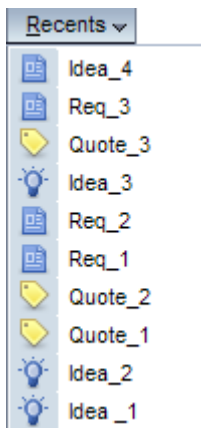
### Favorites

The **Favorites** option provides a way to organize your selection of favorites through the **Manage Favorites...** option. There is also a list of any object type you added as a **Favorite** link. To learn more about working with **Favorites**, see [Using Favorites](#) on page 21.

### Recents

The **Recents** dropdown menu contains a list of the last ten objects that you opened; each is shown with an icon of the Type and several characters of the object's name. If you hover over an object in the list, a tooltip displays its number. As you create new objects, they are added to the **Recents** list of objects.

When you select an object in the list, you are taken directly to that object's **Summary** section. When an object is opened, it is added to the top of the list of **Recents**, and the last item in the list is removed.



If you open an object that is already present in the **Recents** list, it is simply moved to the top.

The content of the **Recents** dropdown list is specific to your activities and is carried across user sessions. For example, an object that is added to a parent object's structure (which is on your **Recents**) is not added to your **Recents** list until you open the child object itself.

## Tools

The **Tools** dropdown menu has the following two options:

- **Import**
- **View Deleted Objects List**

## Import

CNM's Import feature supports the following operations:


- Import to update existing objects in the system (CNM server) in the Microsoft Excel format;
- Create objects by using the Import process to import directly from Microsoft Excel worksheets;
- Used in conjunction with export to mass update multiple objects in a hierarchy structure.

For more information about the Import operation, please see [Exporting and Importing Objects](#) on page 59.

## View Deleted Objects List

The **Deleted Objects List** displays all the objects that were deleted by CNM users. The information is in a table format that can be sorted by any of the column headers. The list is maintained by CNM and cannot be altered or removed by any user.

**To view the Deleted Objects List:**

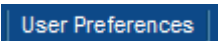
1. Click the **Tools** dropdown menu.
2. Select **View Deleted Objects List**. The **Deleted Objects List** window appears.
3. The columns – **Type**, **Number**, **Name**, **Date Deleted**, and **Deleted By** – can be reordered, and made visible or not visible by using the **View** dropdown.
4. Click  to finish.

## Menus on the Right Toolbar

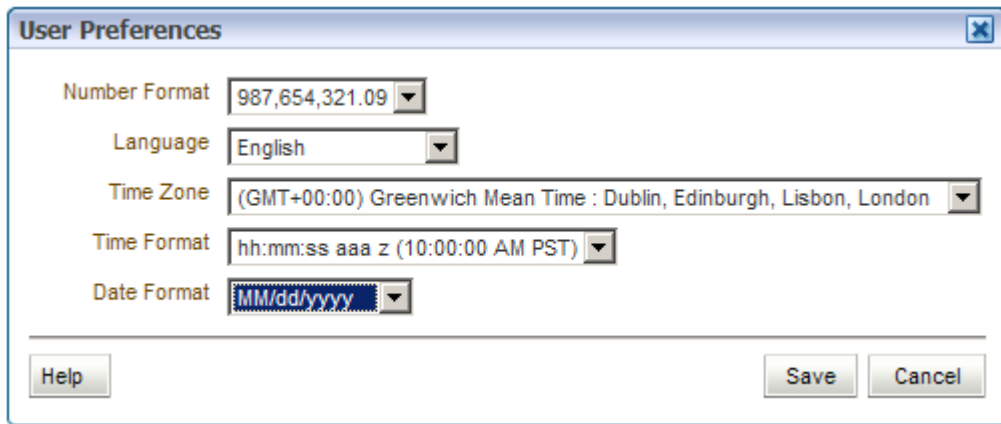
The next subsections describe the menus on the toolbar to the upper left of the CNM Home page (above the Search fields).

## User Preferences

A CNM user can access some personal user interface settings from **User Preferences**.




Any changes made to the User Preferences will not take effect until you log out of CNM and log back in for another user session.

A screenshot of a 'User Preferences' dialog box. It contains five settings, each with a label and a dropdown menu: 'Number Format' is set to '987,654,321.09'; 'Language' is set to 'English'; 'Time Zone' is set to '(GMT+00:00) Greenwich Mean Time : Dublin, Edinburgh, Lisbon, London'; 'Time Format' is set to 'hh:mm:ss aaa z (10:00:00 AM PST)'; and 'Date Format' is set to 'MM/dd/yyyy'. At the bottom, there are three buttons: 'Help' on the left, and 'Save' and 'Cancel' on the right.

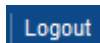
CNM is available for localization with the following languages: English, French, German, Japanese, Korean, Russian, Simplified Chinese and Traditional Chinese. These are the available values from the **Language** dropdown.

## Help

To access Oracle's Agile Product Lifecycle Management Customer Needs Management help materials, in the top right corner of CNM click . A window launches where you are directed to the configured online help materials, or possibly to an Agile PLM User Productivity Kit (UPK) menu. UPK is a pre-built set of topics that guide you through specific actions in CNM.

Your CNM administrator needs to have previously configured an **Online Help URL** setting in **System Settings** in order for this to be an active link. For more information, see Establishing System Settings.

## Logout

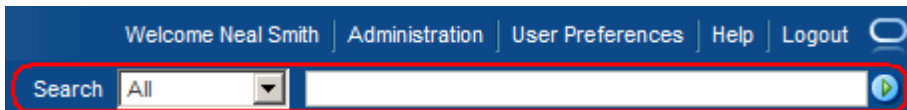
To end your user session, click  in the top right corner of the CNM application. You will be immediately directed back to the Login page with the **Username** and **Password** fields blank.

**Important** A user session that is idle for 25 minutes will automatically end the user session. When you attempt to perform any action, you are directed back to the Login page.

## Searching in CNM

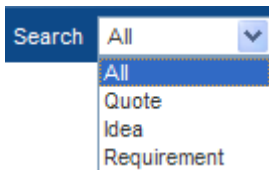
There are two Search utilities:

- Quick Search fields are at top and right of the Home page.
- Advanced Search fields are under the **Browse** tab.




### Quick Search

Quick Search permits a search through All CNM objects or through one of the three CNM object types.



Refine the Quick Search with a text-string in the field to the right.

Click the **Execute Quick Search**  button, or simply hit Enter on your keyboard.

Executing a Quick Search initiates a search of these kinds of fields: Text, Multi-text, Flex, and List fields in CNM objects.

Specifically, the search returns matching results found in such fields as Name, Number, Description, Customer, Product Line, Tags, Rich Text, Notes, Comments, Attachment Name, and Attachment Description.

---

**Note** If you experience difficulty obtaining search results, see your CNM Administrator. There is an administrative "system setting" for Search in Attachment that must be set to **Yes**. For more information, see Establishing System Settings.

---

## Advanced Search

You can set up an Advanced Search under the **Browse** tab. The Advanced Search section offers additional criteria to refine search queries.

**ORACLE Agile Customer Needs Management**

Welcome Admin CNM | Administration | User Preferences

Create Favorites Recents Tools

Search All

Home Browse

**Advanced Search**

Match ☒ All ☐ Any

Type Equals

Customer Equals

Name/Number/Desc Contains Phrase

Product Line Equals

Name Contains

Rich Text Contains

Description Contains

Date Created Equals

Number Contains

Date Modified Equals

Tag Equals

Created By Contains

**Search Result**

View

| Name                | Number | Type | Description | Status | Tag | Customer | Product Line | C |
|---------------------|--------|------|-------------|--------|-----|----------|--------------|---|
| No data to display. |        |      |             |        |     |          |              |   |


Select the criteria for each field, whether you want your search operator to be Equal to, Does not Contain, and so on. Then type in the search string you want.

Available wildcards are asterisk (\*) or percent-mark (%), which can be placed before, within, and after the text-string. (Note that CNM internally adds a wildcard character before and after all search text strings.)

For the **Date Created** and **Date Modified** fields, select your search operator to be "On" or "After", "Before", and so forth, but not "Equal To". Then click **Select Date** and choose the date you require for an accurate search result.

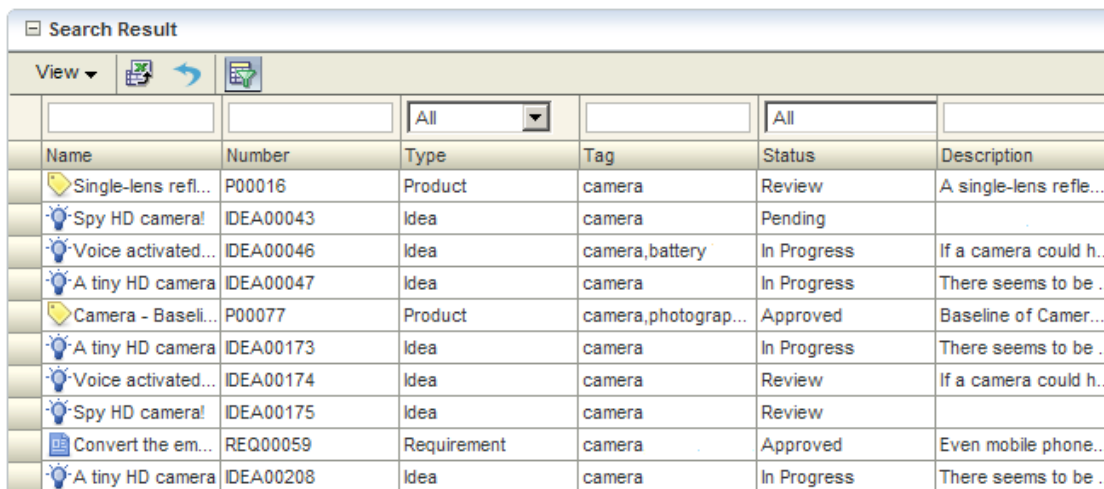
Click **Search** to execute your advanced search.

**Note** For the **Date Created/Date Modified** criteria, the time stamp used is 0:0:0.

If the search criteria you entered returns results that are not what you need, click  to clear all the fields and enter new criteria.

## Search Results

The results of both Quick and Advanced searches are displayed in a table format.



The screenshot shows a window titled "Search Result" with a "View" dropdown and several icons. Below is a table with 6 columns: Name, Number, Type, Tag, Status, and Description. The table contains 10 rows of search results, each with a small icon in the Name column.

| Name                | Number    | Type        | Tag                 | Status      | Description            |
|---------------------|-----------|-------------|---------------------|-------------|------------------------|
| Single-lens refl... | P00016    | Product     | camera              | Review      | A single-lens refle... |
| Spy HD camera!      | IDEA00043 | Idea        | camera              | Pending     |                        |
| Voice activated...  | IDEA00046 | Idea        | camera,battery      | In Progress | If a camera could h... |
| A tiny HD camera    | IDEA00047 | Idea        | camera              | In Progress | There seems to be ...  |
| Camera - Baseli...  | P00077    | Product     | camera,photograp... | Approved    | Baseline of Camer...   |
| A tiny HD camera    | IDEA00173 | Idea        | camera              | In Progress | There seems to be ...  |
| Voice activated...  | IDEA00174 | Idea        | camera              | Review      | If a camera could h... |
| Spy HD camera!      | IDEA00175 | Idea        | camera              | Review      |                        |
| Convert the em...   | REQ00059  | Requirement | camera              | Approved    | Even mobile phone...   |
| A tiny HD camera    | IDEA00208 | Idea        | camera              | In Progress | There seems to be ...  |

The **Search Results** table lets you view essential data about a set of objects, such as the status or who created the objects, and select the result that best matches your query.

The **Name** and **Number** columns have active links that take you directly from the **Search Results** table to the object you click. You can sort all the columns in a descending or ascending order and also rearrange the order of the columns displayed.

Search results for CNM objects are contingent upon the team assignments of objects. If you are a member of the team for an object – either as an individual or as a member of a user group added as team members – the object displays in the search results. If you are not a team member, even if an object matches your search criteria, it does not display in the search results.


**Note** Search results are limited to 5000 entries.

## Query by Example

The column headers have Text and List input fields where you can enter text strings to refine your search results. Clicking the **Query By Example** button activates and deactivates these text input fields above the column headers. After entering in the text you want, click Enter on your keyboard.



## Exporting Search Results

You can export your entire search results, or selected results, when you click  in the **Search Results** window. For more information, see Export from Search Results.

## Resetting Search Filters

You can clear the entered text strings from the column header filter boxes by clicking the **Reset Filter** button. This lets you enter a different search filter that is applied to the original, unfiltered results. Once the user clicks **Enter**, the results refresh with the new results.

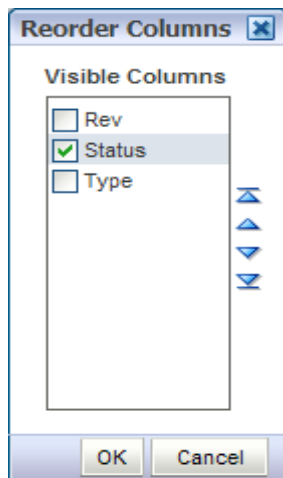
## Copy to Clipboard


From any search results in CNM, a user can right-click a row or cell and access a **Copy** function. This copies the currently selected object (not cell) to an internal CNM clipboard. Then navigate to a structure of an object in the **Explorer** area and paste the copied object as an addition to the structure.

## View

Tables have a **View** utility to change the column layout. From the **Columns** option, you can select **Show All** or you can select specific columns to display. Each column header name has a checkmark next to it if it is displaying. Click the column name from the **Columns** list options to de-select that column; the table reloads without that column.

From **View**, you can also select **Reorder Columns...** and the **Reorder Columns** window appears:




The available columns are displayed with a checkbox next to each. Check the box of the column(s) you want to reorder and then choose to move the item(s) to the top of the list or to move the item(s) up one position in the list. When you are finished, click  and the table shifts column positions to what you selected.

**Note** The **Add Reference** window does not allow moving the first column **Number** out of its default order.

## Table Column Drag and Drop

To illustrate the drag and drop column behavior available in tables, see the example below.

Open an object that has child objects, such as *QuoteX*. Click  and the page is redirected to the **Structure Table View** where you can select a column to rearrange, such as **Object Number**.

|        | Type        | Description       | Tags   | Object Number | Status   | Date Created   | Date Modified  |
|--------|-------------|-------------------|--------|---------------|----------|----------------|----------------|
| Name   | Type        | Description       | Tags   | Object Number | Status   | Date Created   | Date Modified  |
|        | Type        | Description       | Tags   | Object Number | Status   | Date Created   | Date Modified  |
| QuoteX | Quote       | This is needed.   |        | QUOTE00096    | Pending  | 2010-02-24 ... | 2010-02-24 ... |
| Req1   | Requirement | This is wonderful | fusion | REQ01296      | Review   | 2010-02-24 ... | 2010-02-24 ... |
| ReqB   | Requirement | This is awesome   | fusion | REQ01294      | Approved | 2010-02-24 ... | 2010-02-24 ... |
| IdeaC  | Idea        |                   | cnm    | IDEA00299     | Pending  | 2010-02-24 ... | 2010-02-24 ... |
| IdeaQ  | Idea        |                   | cnm    | IDEA00300     | Pending  | 2010-02-24 ... | 2010-02-24 ... |
| ReqY   | Requirement | This is perfect   | fusion | REQ01292      | Review   | 2010-02-24 ... | 2010-02-24 ... |

Drag the **Object Number** column away from its present order.

|        | Type        | Description       | Tags   |               | Status   | Date Created   | Date Modified  |
|--------|-------------|-------------------|--------|---------------|----------|----------------|----------------|
| Name   | Type        | Description       | Tags   |               | Status   | Date Created   | Date Modified  |
|        | Type        | Description       | Tags   | Object Number | Status   | Date Created   | Date Modified  |
| QuoteX | Quote       | This is needed.   |        | Object Number | Pending  | 2010-02-24 ... | 2010-02-24 ... |
| Req1   | Requirement | This is wonderful | fusion | Object Number | Review   | 2010-02-24 ... | 2010-02-24 ... |
| ReqB   | Requirement | This is awesome   | fusion | Object Number | Approved | 2010-02-24 ... | 2010-02-24 ... |
| IdeaC  | Idea        |                   | cnm    | QUOTE00096    | Pending  | 2010-02-24 ... | 2010-02-24 ... |
| IdeaQ  | Idea        |                   | cnm    | REQ01296      | Pending  | 2010-02-24 ... | 2010-02-24 ... |
| ReqY   | Requirement | This is perfect   | fusion | REQ01294      | Review   | 2010-02-24 ... | 2010-02-24 ... |
|        |             |                   |        | IDEA00299     |          |                |                |
|        |             |                   |        | IDEA00300     |          |                |                |
|        |             |                   |        | REQ01292      |          |                |                |

Find the column placement you want for **Object Number** and release the column into the blank column space.

| Name   | Type        | Description       | Tags   | Status   | Date Created   |               | Date Modified  |
|--------|-------------|-------------------|--------|----------|----------------|---------------|----------------|
|        | Type        | Description       | Tags   | Status   | Date Created   | Object Number | Date Modified  |
|        | Type        | Description       | Tags   | Status   | Date Created   | Object Number | Date Modified  |
|        | Type        | Description       | Tags   | Status   | Date Created   | Object Number | Date Modified  |
| QuoteX | Quote       | This is needed.   |        | Pending  | 2010-02-24 ... |               | 2010-02-24 ... |
| Req1   | Requirement | This is wonderful | fusion | Review   | 2010-02-24 ... | QUOTE00096    | 2010-02-24 ... |
| ReqB   | Requirement | This is awesome   | fusion | Approved | 2010-02-24 ... | REQ01296      | 2010-02-24 ... |
| IdeaC  | Idea        |                   | cnm    | Pending  | 2010-02-24 ... | REQ01294      | 2010-02-24 ... |
| IdeaQ  | Idea        |                   | cnm    | Pending  | 2010-02-24 ... | IDEA00299     | 2010-02-24 ... |
| ReqY   | Requirement | This is perfect   | fusion | Review   | 2010-02-24 ... | IDEA00300     | 2010-02-24 ... |
|        |             |                   |        |          |                | REQ01292      |                |

The **Object Number** column is now moved to a new location and order in the **Structure Table View**.

| Name   | Type        | Description       | Tags   | Status   | Date Created   | Object Number | Date Modified  |
|--------|-------------|-------------------|--------|----------|----------------|---------------|----------------|
|        | Type        | Description       | Tags   | Status   | Date Created   | Object Number | Date Modified  |
|        | Type        | Description       | Tags   | Status   | Date Created   | Object Number | Date Modified  |
|        | Type        | Description       | Tags   | Status   | Date Created   | Object Number | Date Modified  |
| QuoteX | Quote       | This is needed.   |        | Pending  | 2010-02-24 ... | QUOTE00096    | 2010-02-24 ... |
| Req1   | Requirement | This is wonderful | fusion | Review   | 2010-02-24 ... | REQ01296      | 2010-02-24 ... |
| ReqB   | Requirement | This is awesome   | fusion | Approved | 2010-02-24 ... | REQ01294      | 2010-02-24 ... |
| IdeaC  | Idea        |                   | cnm    | Pending  | 2010-02-24 ... | IDEA00299     | 2010-02-24 ... |
| IdeaQ  | Idea        |                   | cnm    | Pending  | 2010-02-24 ... | IDEA00300     | 2010-02-24 ... |
| ReqY   | Requirement | This is perfect   | fusion | Review   | 2010-02-24 ... | REQ01292      | 2010-02-24 ... |



# Working with CNM Objects

This chapter includes the following:

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|  |    |
|--|----|
| ▪ Accessing CNM Objects .....                | 21 |
| ▪ Creating and Modifying Objects .....       | 25 |
| ▪ Capabilities on "More Actions" Menu .....  | 26 |
| ▪ Managing References .....                  | 34 |
| ▪ Fulfilled Attachments and References ..... | 37 |
| ▪ Managing Attachments .....                 | 38 |
| ▪ Managing Object Teams .....                | 40 |
| ▪ Managing Object Signoffs .....             | 44 |

## Accessing CNM Objects

There are numerous ways that you can access a business object in CNM. The list below is followed by sections about the most versatile methods of "accessing" – for example, the Explorer area is the main working space for building CNM Structures.

- **Recent Updates** — from the display of object activity, click the link to the object you want to view
- **Favorites** — from the list of your added favorites, choose the specific object you want to view
- **Recents** — from the list of the last ten objects that you have accessed, choose the object you want to view
- **Tag Cloud** — from this area, click the tag you want to run a search for all objects that have that specific tag associated with them and then click the object you want to view
- **Search** — from the search field, execute a search for an object with specific criteria and parameters and then click the object you want to view
- **Explorer** — from the displayed structure of an object and its child objects, click the child object you want to view
- **Where Used** — from the **Where Used** table, click the parent object link to view the object

## Favorites

If there are objects that you need to return to frequently, using **Favorites** helps you find them easily. The **Favorites** dropdown menu stores a list of the objects you added as favorites. Any object type can be added to your **Favorites** list; the object icon and name are visible in the dropdown menu of **Favorites**. The list of favorites is specific to the user.

Once you select an object from your list of favorites, you are directed to the **Summary** section of that object. If you no longer have the necessary role to access this object, or if this object is deleted, you will receive an error message.

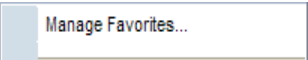


## Adding Favorites

The **Add to Favorites** option is available to you from the **More Actions** menu. Once you select **Add to Favorites**, the object currently open is added to the list of objects under **Favorites**.

## Managing Favorites

The **Manage Favorites...** option is available from the **Favorites** dropdown menu to delete previously added objects as favorites.

**To delete an object from the user's Favorites list:**

1. From the **Favorites** dropdown menu, click .
2. The **Manage Favorites** window appears.
3. Click the row of the object you want to delete.
4. Click  to delete the entry from the list.
5. Click  to finish.

## Summary

The **Summary** section of an object displays these fields:

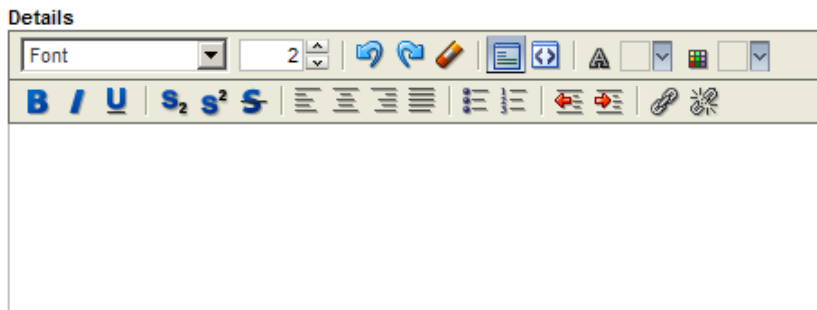
- **Name**
- **Description**
- **Status**
- **More Details** (see below)
- **Edit**

## More Details

When the **More Details** section of an object is expanded, you can view additional attribute information pertaining to your currently selected object such as **Tags**, **Date Created**, **Created By**, and so on. All of the flex, or custom, attributes enabled for the object type by the administrator are displayed.

## Rich Text

The **Rich Text** attribute for objects presents a way for users to enhance the content quality. Users can enter or paste formatted text in the **Rich Text** field. When pasting content, any hyperlinks are automatically opened in a new window when they are selected by a user.



The text content of the **Rich Text** field is indexed for searching in CNM, just like the contents of any other text field.

The **Rich Text** field is available as one of the fields in Advanced Search when it is enabled. The set of filters for this field are the same as that for any text field.

However, the **Rich Text** field is not displayed as a column in search results and cannot use the **Query By Example** functionality.

When exporting an object to XML, the formatted content of the **Rich Text** field (rendered in the form of HTML) is exported. **Rich Text** is not exported to Excel.

The **Rich Text** attribute is a hidden attribute by default. For users to have access, the administrator must enable the Visible property. For more information, see [Object Attributes](#) on page 75.

## Notes and Comments



There is a **Notes** section of objects that allows notes and comments to be added. All users can post a note or comment.

As notes and comments are posted, they are displayed in reverse chronological order with the most recent seen on top.

The content of each comment is displayed below the note it is connected with, but is indented.

With each note or comment, the name of the user and the time that he/she added the comment is logged.

### To add a note to an object:

1. From the **Notes** section click .
2. In the **Add Note** window enter your text into the required **Note** field.
3. Click  to finish.

**To add a comment to a note:**

1. Go to the **Notes** section of an object.
2. Find the note you want to add a comment to and click [\(Add\)](#).
3. In the **Add Comment** window, enter your text into the required **Comment** field.
4. Click [OK](#) to finish.

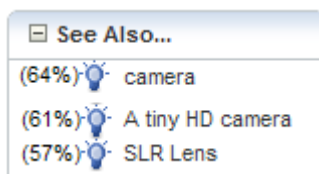
Only a user with the Administrator role can delete notes or comments. If you have Administrator access, a **Delete** link is available at the end of each note or comment.

**To delete a note or comment from an object:**

1. From the **Notes** section, click the expand icon [\[+\]](#).
2. Navigate to the note or comment you wish to delete and click [\(Delete\)](#).
3. You are then asked, *"Do you want to delete the selected note/comment?"*
4. Click [OK](#) to confirm and finish.

## Leveraging the See Also...

CNM objects have a **See Also...** section that helps users see correlation between objects in the CNM system.



The display shows a percentage, an object type icon, and an active link of the object name. Each object has a set of object keywords, which are generated using the algorithm described in the [Keyword Generation](#) on page 83 section.

Using an object's keywords, CNM finds similarities with other objects in the system and associates these objects together for the user in the **See Also...** section.

The percentage of similarity is calculated between the objects within CNM. Only the top five associations are included in the **See Also...** section.



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**Note** If you are not a team member of an object, the object still displays in the **See Also...** section, but you cannot navigate to it.

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
If a user modifies an object in such a way that content used for keyword association changes, the **See Also...** section only refreshes once the object is saved. For more information about keywords, see [Keyword Library](#) on page 83.

## Creating and Modifying Objects

There are several places to create an object in CNM.

- Home Page – procedure below
- [Save As](#) on page 29
- [Explorer](#) on page 49
- [Import](#) on page 65

**To create a new object from the Home page:**

1. Click . The **Create** dialog appears.
2. Select a Type of the new object from the **Type** dropdown menu.  
The **Number** field generates a Type-specific autonumber.
3. Enter a name in the **Name** field (that does not exceed 128 characters).
4. You have the option to enter a description (that does not exceed 4000 characters) in the **Description** field.
5. When finished click **Create**. A tab opens with the new object in Edit mode.
6. In Edit mode, you can enter values for the listed attributes.
  - a. You can click **Cancel** without filling new attributes in, the object remains open in uneditable mode; or, if you fill in some attributes and click **Cancel**, the entered values are removed and the object remains open.
  - b. When you are finished entering values for attributes, click **Save**; the new values are saved, and the object remains open in uneditable mode.
  - c. Click the **Edit** icon to change the object to editable mode.

---

**Note** The creator of an object is always added to the **Team** list. If the object type has a configured default value for team, that default value is also added to the **Team** list. For more information see, [Managing Object Teams](#) on page 40.



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## Modifying Object Attribute Details

After creating the initial object, you will add more data and fields to the object using the Edit mode; see the task below.

"Customer" and "Product Line" have been added to the Object Details page in CNM objects. They are enabled with AutoComplete feature (also called TypeAhead), where the system prompts from existing values of the attribute, and you can choose from the offered list or continue typing. (Tags are also enabled with AutoComplete, from previous release of CNM.)

### To modify attributes of an object:

1. Open an object.
2. In the **Summary** section click .
3. The **Summary** and **More Details** sections expand and editable attribute fields are now in Edit mode.
4. Enter new values of attribute fields and then click  to finish.

## Capabilities on "More Actions" Menu

The **More Actions** dropdown menu is at top right of any object. Each capability from **More Actions** is covered in the following sections.

- Add to Favorites
- Promote
- Save As
- Delete
- Send
- Export
- History
- Where Used

### Add to Favorites

The **Add to Favorites** option is available to you from the **More Actions** menu. Once you select **Add to Favorites** the object currently open is added to the list of objects under **Favorites**.

## Promote CNM Objects to Agile Product Record

You can promote object data from the CNM framework – single CNM objects or multiple-level Structures – to the product record as Documents.

While it is possible to promote Ideas and Quotes, the Promote feature is intended for the use case of Requirements deemed ready for creation of the actual product within the Agile PLM suite of solutions.

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**Note** The "out-of-box" defaults permit only Requirements to be promoted. To promote Ideas and Quotes, the CNM administrator must enable the Allow Promote attribute of that CNM class.

---

When earlier work such as ideation and pricing has been accomplished, and a Requirement has been created, modified, and matured, it may be evaluated as ready for material development and production. This is the time to promote the Requirement to the *product record* as a Document.

### Business Rules of Promoting

The "product record" refers to specific Agile PLM solutions and their primary business objects. The PLM installed Object Types are detailed in [Integration of CNM with other Agile PLM Solutions](#) on page 34.

References are an important component of the CNM–PLM integration, and provide connections between promoted CNM objects and referenced PLM objects. This process succeeds by, before promotion, adding a reference to a CNM object, so be sure to also consult [Managing References](#) on page 34.

This section proceeds with details about the Promote feature.

**Important** If the Documents class in Agile PLM has not been set up for Autonumbering, CNM does not promote object data to Document objects.

### Privileges Required to Promote CNM Objects

All successful promotions of CNM objects begin with the CNM class being set for Allow Promote, as well as Autonumbering enabled for Documents.

To promote a CNM object to a PLM Document, you must be assigned the Create privilege in Agile PLM for the Documents class, which covers all objects created in any Document subclass, or for the specific Document subclass to which you will be promoting CNM objects.

To promote an object with attached files or URLs, you must be assigned the Get File privilege and Modify privilege in Agile PLM for the attachments.

To promote an object with references, you must be assigned the Modify privilege on that **Object.Relationship.Name**. If you do not have this privilege, you will not be able to promote the specific reference.

When you promote a structure, and you want to see the new BOM structure in the PLM object, the

**BOM** tab for that object's subclass must be set to visible for you.

If you have any difficulty with these tasks or actions, see your PLM administrator.

### ***Document BOM***

When you promote a Structure (a hierarchy of related CNM objects that might include Ideas, Quotes, and Requirements), the system creates a Document for each child object in the structure and maintains the hierarchy. That is, each child document is associated in the **BOM** tab of the parent Document in the same order and level.

For convenience, this grouping can be called **Bill of Documents** or **Document BOM**.

### ***References and Attachments on Promoted Objects***

Before a CNM object is promoted to a PLM solution, you must add a reference to a business object in Agile PLM. Otherwise, when you promote the CNM object, you will simply create a Document in PLM but it will not be linked to anything in a PLM solution. (There is nothing wrong with this: you or another PLM user may link the new document to other business objects in PLM, which is nearly the same result. However, you may not be able to trace back to the CNM object of origin.)

Here are the rules that govern references and attachments going in the direction of Promotion (from CNM to PLM):

- Before promoting, if any references to PLM objects are added to the CNM object, its references are carried at the time of promotion to the **Relationships** tab of the new Document. The new document object is therefore connected to the PLM object with a live link.

---

**Note** To promote an object with references, you must be assigned the Modify privilege on that **Object.Relationship.Name**. If you do not have this privilege, you will not be able to promote the specific reference.

---

- Before promoting a CNM object, if any attachments are added, the attachments are carried at the time of promotion to the **Attachments** tab of the new Document.
- If there are multiple attachments and/or URLs on the CNM object, they are all included in a single File Folder that is found on the **Attachments** tab of the new Document.

### ***Constraint to Promote an Object Once***

A CNM object can be promoted to the product record once. The "promote once" constraint is meant to keep the "ideation" function of CNM discrete from the "productizing" function of other PLM solutions. A Requirement, for example, should be promoted to the product record only when it has matured and is truly ready for the development process.

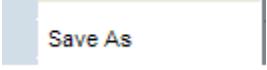
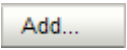



When an object has been promoted, it continues to be modifiable in CNM; however, the **More > Promote** sequence for that object is grayed out.

Since it would be counter-productive to continue working in that CNM object (if further work would be desirable in the product record), the workaround is to use "SaveAs" to create a new CNM object that, in due time, could be promoted.

## Save As

The option to Save As is enabled only for users with a Participant role or higher. Save As creates a new object of the same object type, but with a new object number. All of the object attributes are copied over to the newly created object including tags, Rich text content and attachments. References, notes, comments, team, and history are not copied over to the newly created object.

**To create an object using Save As:**

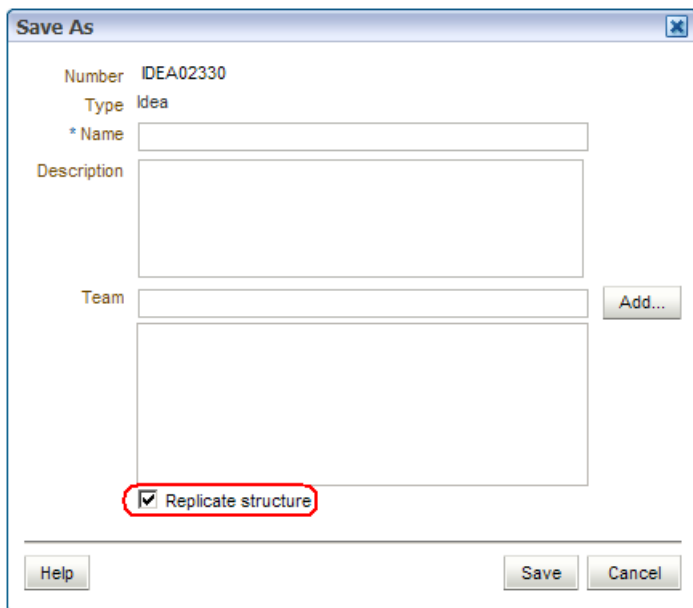
1. Open an object.
2. Go to the **More Actions** menu and click .
3. In the **Save As** window enter text into the **Name** field and any desired content into the **Description** field.
4. To add a team to the object, there are two methods:
  - Type in usernames or user group names. CNM uses the AutoComplete feature to prompt you with existing user or user group names, from which you can select or continue typing.
  - Click . In the **Add Team** window, search for a user or user group.
5. Enter the criteria for your search in the text field and click .
6. From the search results select the member(s) you want and click .
7. In the **Save As** window click  to finish.

If you do not select any team members to add to your newly created object, CNM automatically adds you, the creator, as the default team member. Any other team members that you want on the object need to be specially selected during the Save As process.

Users can access a hyperlink to navigate to either the source or target object of a Save As operation within the History table. Clicking the hyperlink opens a new tab with the object content. For more information, see History.

## Replicating Structure with Save As

In the **Save As** dialog, an essential component for objects with child objects is the **Replicate structure** checkbox.



The 'Save As' dialog box contains the following fields and controls:

- Number:** IDEA02330
- Type:** Idea
- \* Name:** A text input field.
- Description:** A large text area.
- Team:** A text input field with an **Add...** button to its right.
- Replicate structure:** A checkbox that is checked, highlighted with a red rectangle.
- Buttons:** **Help**, **Save**, and **Cancel** at the bottom.

"Replicate structure" is checked by default for any object being created from an original template object that contains an existing structure of child objects. If you uncheck the box, CNM creates an object with the set criteria but with no child objects associated.

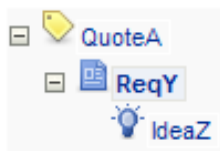
The Replicate-structure function performs the same Save As process for each child object of the parent object; it maintains the hierarchy levels and dependencies already existent on the original template object.

To illustrate this behavior, see the example below.

Create an object *QuoteX* with a child object *ReqY*, which also has a child object *IdeaZ*.



Next, perform a Save As for the parent idea object *QuoteX* and leave the **Replicate structure** checkbox selected. Rename the quote as *QuoteA*. The structure of that quote is now shown in the **Explorer** area as this:





The result is a new object hierarchy that has a structure identical to the original object's, but is

composed of entirely new objects. If you open the *ReqY* and the *IdeaZ* objects on the *QuoteA* structure, those objects have the same attributes as the originals, but have new object IDs.

## Deleting an Object

Deleting an object permanently removes the object from CNM. There is no ability to restore deleted objects. However, if an object is currently associated with an object structure, either as a parent or child object, it cannot be deleted. Also, if an object has an attachment or reference, you cannot delete the object.

### To delete an object:

1. Open an object.
2. Go to the **More Actions** menu and click .
3. You are asked, *"You are about to delete the current object. Once the object is deleted, it cannot be recovered. Do you want to continue?"*
4. Click  to confirm and finish.


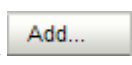
## Sending an Object

Users in CNM can send objects to one another if the mail server is configured properly in Administration. For more information, see Establishing System Settings.

The Send operation initiates a notification email, to be sent to a user, that provides information about that object and any comments the user includes while sending the object.


This utility is an excellent way to initiate collaboration surrounding objects and their various changes. If you perform any actions to an object and want other users to know about it, you can send the object with the pertinent information within the **Notes** section.

### To send an object:

1. Open an object.
2. Go to the **More Actions** menu and click .
3. In the **Send Object** window, click  to search for a user(s) or user group(s) to include in the **Recipient** field.

Multiple users or user groups are separated by a semicolon (;).

As you type in usernames or user group names, CNM prompts you with existing user names to select.

4. Enter any desired text in to the **Notes** field and click  to finish.

If any of the recipients are not already part of the team of the object being sent, you are prompted at that time to add them to the team of the object. Recipients who are not added to the team still receive notifications, but cannot access the object.

The notification provides this information:

- Name and email of who sent the object notification;
- List of all the recipients;
- Subject of the notification, which includes the object type and object number;
- Body of the message with additional details;
- Notes entered by the user sending the object;
- An active link directing you to the application **Login** page and then to the open object.

## Export

CNM's Export feature supports the following operation:

- Export an individual object, or an object with structure from object structures to a Microsoft Excel or aXML file
- Export from search results to a Microsoft Excel file

For detailed information about the Export operation, see the chapter on [Exporting and Importing Objects](#) on page 59.

## History

The **History** of an object records the following actions or events:

|                   |                  |                      |                                       |
|-------------------|------------------|----------------------|---------------------------------------|
| ▫ Add Attachment  | ▫ Create Comment | ▫ Modify Reference   | ▫ Remove URL                          |
| ▫ Add Component   | ▫ Create Note    | ▫ Promote            | ▫ Request For Review                  |
| ▫ Add Reference   | ▫ Delete Comment | ▫ Reject             | ▫ Reset Signoff                       |
| ▫ Add Team Member | ▫ Delete Note    | ▫ Remove Attachment  | ▫ Save As (see note below this table) |
| ▫ Add URL         | ▫ Delete Object  | ▫ Remove Component   |                                       |
| ▫ Approve         | ▫ Export         | ▫ Remove Reference   | ▫ Send                                |
| ▫ Create          | ▫ Modify         | ▫ Remove Team Member | ▫ Signoff                             |

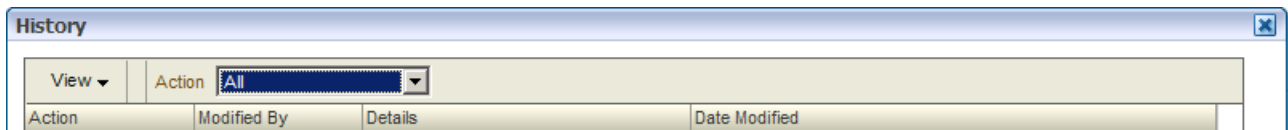
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**Note** The **Save As** action creates a hyperlink on the source object's History to the destination object, and similarly creates a hyperlink on the destination object's History to the source object.

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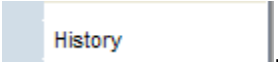
The **History** log contains the following fields.



- **View** — to adjust the column layout
- **Action** — a dropdown list of actions, from the list found above, used as a filter for the **History** log
- **Action** — the action performed by a user to the object
- **Modified By** — username of the user who performed the action
- **Details** — the action taken along with the affected areas of the object
- **Date Modified** — the date and time of the action

**Note** By default, all **History** logs are sorted by **Date Modified** in a descending order, having the most recent activity at the top.

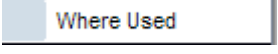
#### To access the History information of an object:

1. Open an object.
2. Go to the **More Actions** menu and click .
3. The **History** window appears and has a table displaying details about the past actions and events regarding the currently open object.
4. You can then sort the results by column headers, use **View** or filter using the **Action** dropdown.
5. When finished click .

For an object created by a Save As action, the History window has a hyperlink directing the user back to the original object. Conversely, an object that was used for a Save As action has a hyperlink within its History window directing the user to the newly created object.

## Where Used

#### To access the Where Used information about an object:

1. Open an object.
2. Go to the **More Actions** menu and click .
3. In the **Where Used** window, a table displays the object that is the parent of the currently open object.
4. The **Name** and **Number** are active links, which take you directly to that parent object's **Summary** page.

---

**Note** Like the search results restrictions, if you do not have access to an object because you are not a team member, the object does not appear in the **Where Used** table.

---

## Managing References

A reference is an index link to a record or data that is present in an external system or different application than CNM. References on reference-enabled objects enrich CNM data with data of existing product designs or projects.

This section provides information about references from CNM to the integrated Agile PLM solutions. If you want to establish references to external applications other than Agile PLM, see the chapter on [Exporting and Importing Objects](#) on page 59.

## Integration of CNM with other Agile PLM Solutions

In an earlier section, we saw how CNM business objects can be promoted to the product record. The Promote feature is enhanced by the use of References, which sets a link between a CNM object and an object in these Agile PLM solutions: Product Collaboration (PC), Product Portfolio Management (PPM), Product Cost Management (PCM), and Product Quality Management (PQM).

References between CNM and PLM solutions also provide "backward traceability", that is, links from objects in Agile PC, PPM, PQM, or PCM back to the CNM objects (such as Requirements) that led to those products or projects.

When a reference is added in CNM, a link to the referred PLM object is added to the Attachments and References section (see task below). At the same time, a link to the CNM object is created on the "referenced" PLM object's **Attachments** tab (or, in PPM, the **Content** tab) in the **Filename** column.

To summarize, there are two ways in which Agile CNM is integrated with Agile PLM solutions:

1. *References* from CNM to PLM, which adds reference records to CNM objects and links in PLM object back to CNM object.
2. *Promotion* of CNM objects to Documents in PLM. Together with References, the new Documents bring CNM data into the product record.

User authentication must be set up in the Agile PLM system in order for the CNM Add Reference option to be available in the PLM object's Attachments.

**Important** If Sites are enabled in Agile PLM, for a CNM user to be able to add a reference to a PLM-based business object, the user must have access to the Site that is associated with that object. If Sites are not associated to Agile PLM solutions, this rule does not obtain.

See your administrator if you are having any difficulty accessing or adding a reference to an object in the PLM solutions.

## Installed Object Types for PLM Solutions Integrated with CNM

As stated above, References and the Promote feature are the main avenues to integration between CNM and other PLM solutions.

This table gathers the names of the installed object types (that is, Base classes and their child Classes and Subclasses) that you may encounter in your work from CNM to PLM. It is a summary guide, and it assumes you have some familiarity with the PLM hierarchy of how the object types work. For example, we may say "CNM is integrated with PPM" or "create a reference in CNM to a PPM Project" – and then you are faced with an object called a "Gate"; the table can remind you why this is so.

Remember, every business object in PLM is actually a single instance of a particular, named *subclass*. Furthermore, the default subclasses can be both renamed and created by the PLM administrator. For that matter, classes and base classes can also be renamed by the administrator. You must bear this in mind when you are looking for specific objects in Agile PLM.

| PLM Solutions integrated with CNM   | Base Classes pertinent to CNM   | Classes available to CNM            | Default Subclasses available to CNM              |
|-------------------------------------|---------------------------------|-------------------------------------|--|
| <i>Product Collaboration (PC)</i>   | Items                           | Parts<br>Documents                  | Part<br>Document                                 |
| <i>Product Portfolio Mgt. (PPM)</i> | Projects                        | Activities<br>Gates                 | Phase, Program, Project, Task<br>Gate, Milestone |
| <i>Product Quality Mgt. (PQM)</i>   | Product Service Requests (PSRs) | Problem Reports<br>(not NCRs)       | Problem Report                                   |
| <i>Product Cost Mgt. (PCM)</i>      | Prices                          | Quote Histories<br>Published Prices | Quote History<br>Published Price, Contract       |



## Viewing References



**To view an object's reference:**

1. Go to the **Attachments & References** section of an object and click the active link of the reference name.
2. You are brought to the native application of the reference.
3. The application directs you to the Cover Page of the reference object.

## Adding References

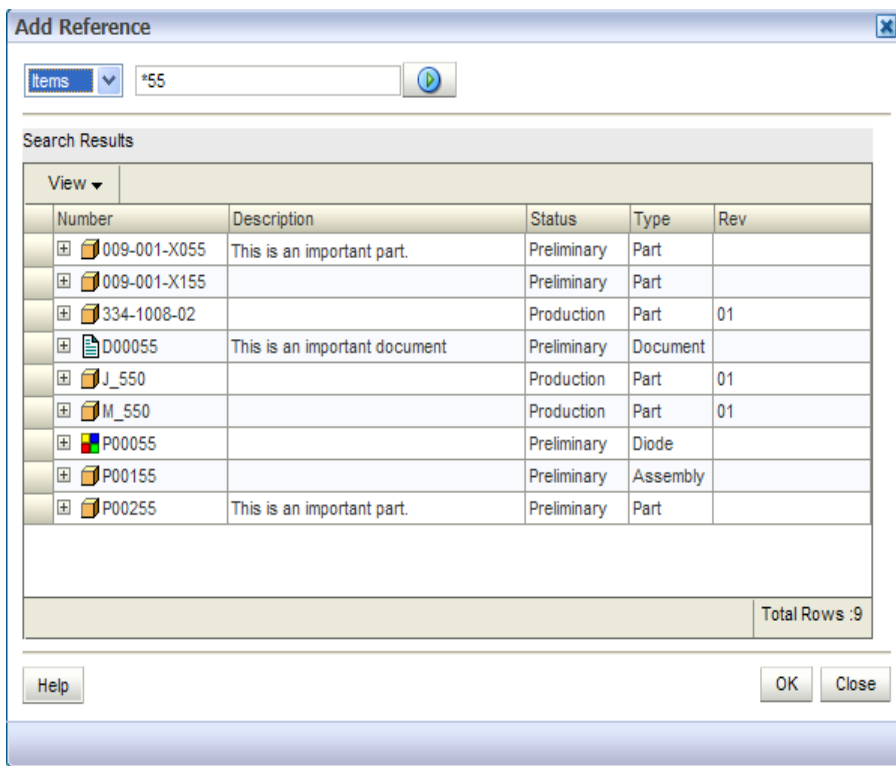
**To add a reference to an object:**

1. Go to the **Attachments & References** section of an object and click .
2. From the list menu choose  **Reference**.










3. In the **Add Reference** window select the object type of Items or Projects, enter your search text string, and click .
4. You can then drag your desired reference item from the **Search Results** table to the **Attachments & References** section, or select the item in the **Search Results** table and click  to finish.

The **Add Reference** window, mentioned above, allows you to search for an item or project and see the results in a table format to select the desired reference.

**Note** The results are limited to 1000 entries.



The screenshot shows the 'Add Reference' window. At the top, there is a dropdown menu set to 'Items' and a search text field containing '\*55'. To the right of the search field is a search icon. Below this is a 'Search Results' section containing a table. The table has columns: Number, Description, Status, Type, and Rev. There are 9 rows of results. At the bottom of the table is a 'Total Rows :9' label. Below the table are buttons for 'Help', 'OK', and 'Close'.

| Number   | Description                   | Status      | Type     | Rev |
|--|-------------------------------|-------------|----------|-----|
|  009-001-X055 | This is an important part.    | Preliminary | Part     |     |
|  009-001-X155 |                               | Preliminary | Part     |     |
|  334-1008-02 |                               | Production  | Part     | 01  |
|  D00055     | This is an important document | Preliminary | Document |     |
|  J_550      |                               | Production  | Part     | 01  |
|  M_550      |                               | Production  | Part     | 01  |
|  P00055     |                               | Preliminary | Diode    |     |
|  P00155     |                               | Preliminary | Assembly |     |
|  P00255     | This is an important part.    | Preliminary | Part     |     |

You can expand the search result assemblies to display the first level of BOM Items and add either an Assembly or any first-level BOM Item as your desired reference.

The displayed attributes of Items (Parts) or Projects within the search results is dependent on the settings for those attributes in PLM Administrator.

If an attribute is enabled for the BOM table (on Parts), the search results in CNM display the attribute.

**Note** Privileges in Agile PLM are required to support creation of References. For more information, see [Integration of CNM with other Agile PLM Solutions](#) on page 34.



From the **Add Reference** window search results, you can drag and drop items from the table into the **Attachments & References** section to add the object as a reference. The ability to drag and drop references includes not only the currently open object, but also any object that is displayed in the open **Explorer** structure.

For more information on dragging and dropping within an **Explorer** structure, see [Rearranging an Object Structure](#) on page 52.

If you add a reference that is already on an object, CNM overwrites the existing reference and moves that reference to the top of the list. The action of adding references to objects in CNM also produces a cross-reference for that reference object in its native application. The kinds of cross-references are detailed in [Integration of CNM with other Agile PLM Solutions](#) on page 34.

## Removing References

To remove a reference from an object:

1. Go to the **Attachments & References** section of an object and click .
2. You are then prompted in a **Confirmation** window, "*Confirm deletion of the Reference: <reference\_number>.*"
3. Click  to confirm and finish.

The action of removing references from a CNM object also removes the cross-reference for the reference object in its native application.

**Note** If the reference object's business rules (concerning, for example, its Roles, Privileges, Lifecycles, Workflows) do not allow the cross-reference to be removed, the server does not remove the cross-reference from the PLM object; the cross-reference link is only removed from the CNM **Attachments & References** table.

## Fulfilled Attachments and References

Attachments and References have a checkmark icon to indicate if that particular attachment or reference fulfills a requirement outlined by the object or project. The blue checkmark indicates that the attachment or reference fulfills the requirement. By clicking the icon a second time, the checkmark is deactivated and the icon turns gray.



If a file attachment is replaced by a file that has the same filename, the current status of the fulfilled checkmark remains the same.

When a user performs a **Save As** operation from an object with attachments or references in a particular state of fulfillment, the current state is transferred to the new object for those attachments and references.

Once an attachment's or reference's fulfillment-status indicator is modified (checked/unchecked), that attachment or reference is immediately moved to the top of the **Attachments and References** table.

## Managing Attachments

**Important** In order for Agile PLM and Agile CNM integration to work for the **Attachments and References**, a user must deploy the agile-cnm-plugin.jar file to the Agile PLM server. Please refer to the CNM *Implementation Guide* for details.

There is an **Attachments & References** section for all objects. If your administrator has selected Agile PLM as the file server, then Agile PLM is also used for user authentication. If the administrator has selected UCM as the file server, then LDAP or Agile PLM are used for user authentication.

A user with a Participant role or higher can add, view, or remove attachments and references. A user with the Viewer role can only download or view attachment files, URLs or References.

**Note** If Agile PLM is the selected file server, then to work with attachments in CNM, a user needs to have the proper File Folder privileges in Agile PLM. See the *Agile PLM Administrator Guide*.

## Viewing Attachments


Once attachments are added to an object, they are displayed in reverse chronological order with the most recent being found at the top of the list. Once the object has an attachment in the **Attachments & References** section, the following information is displayed:

- Attachment type icon
- View icon
- Fulfilled Checkmark
- Delete option
- Attachment Name
- Attachment Description
- File size
- First Name and Last Name of the user that added the attachment
- Date and Time the attachment was added

| Attachments & References |  |  |                                 |                         |                            |  |
|--------------------------|--|--|---------------------------------|-------------------------|----------------------------|--|
|                          |  |  | http://www.bestinformation.c... | Mariah Thomas           | 02/09/2011 09:02:07 PM GMT |  |
|                          |  |  | P00009 test                     | Mariah Thomas           | 02/09/2011 09:01:35 PM GMT |  |
|                          |  |  | TOC1.bmp This is great.         | 1,164,886 Mariah Thomas | 02/09/2011 08:59:44 PM GMT |  |

### To view an object's attachment:

1. Go to the **Attachments & References** section of an object and click the attachment filename.

2. From the **File Download** window choose whether you would like to open or save the attachment.
3. If you choose to save the file, pick a location locally on your computer to save the file and then click **Open**.
4. After you click **Open** the file opens and you can view the content. You can open the file using a native application or save it to your hard drive.
5. Clicking  launches the viewer to see the attachment file directly.




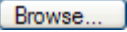

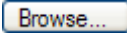


**Important** If the necessary AutoVue has not been installed or is experiencing its own application errors, then you cannot successfully view your attachments in a browser. For more information, see Establishing System Settings and refer to the *CNM Implementation Guide* for specific AutoVue information.

## Adding Attachments

For more information about the availability of adding attachments, the required settings, and the Agile PLM file folder subclass relationship to CNM attachments, see Establishing System Settings.




**Important** It is necessary for a file server (Agile PLM or UCM) to be installed and configured outside of CNM in order to upload and retrieve file attachments in CNM. If this has not been performed properly prior to adding attachments, you will not be able to add attachments because the Add File option is disabled. For more information, see Establishing System Settings and refer to the *CNM Implementation Guide* for specific file server information.

### To add an attachment file:

1. Go to the **Attachments & References** section of an object and click .
2. From the list menu choose  File .
3. In the **Add File** window click  to choose a file to upload.
4. In the **Choose File** window navigate to the location of your file, select the file to attach and click **Open**.
5. Enter any desired content in the **Description** area of the **Add File** window and when finished click .
6. If you click  and select a file that is already an attachment, CNM displays a **Confirmation** window that prompts, "File <attachment> already exists on <object>. Please confirm to overwrite."
7. Click  to confirm, or click  to not overwrite the file.

**Note** If the Agile PLM file server is used and the user has the necessary privileges, when the user adds a file attachment to a CNM object, then a corresponding File Folder object is created in Agile PLM and the file is added to the **Files** tab of the File Folder.

**To add an attachment URL:**

1. Go to the **Attachments & References** section of an object and click .
2. From the list menu choose  **URL**.
3. In the **Add URL** window enter text into the **URL** field and any desired content into the **Description** field.
4. Click  to finish.

If you add a URL that is already on an object, CNM automatically overwrites the previous entry and displays that URL as the latest entry for attachments.



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**Note** If Agile PLM is the selected file server, then to work with attachments in CNM, a user needs to have the proper file folder privileges in Agile PLM. See the *Agile PLM Administrator Guide*.

---

## Removing Attachments

**To remove an object's attachment:**

1. Go to the **Attachments & References** section of an object and click  next to the attachment or reference you wish to remove.
2. You are then prompted in a **Confirmation** window, "*Confirm deletion of the <attachment type>: <filename>.*"
3. Click  to confirm and finish.

If the UCM file server cannot be reached, the attachment is still removed and a message displays stating that the corresponding file must be removed manually from the UCM file server.

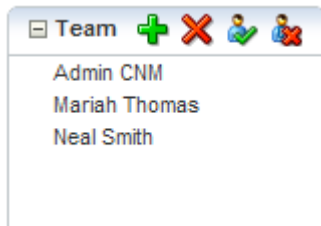
If the Agile PLM file server cannot be reached, the attachment is still removed and a message displays to the user stating that the corresponding file must be removed manually from the Agile PLM file server.

If the user does not have the user privileges to delete folders in Agile PLM, the CNM attachment is still removed and the corresponding folder must be removed manually from Agile PLM.



## Managing Object Teams

When you are viewing an object, there is a collapsible and expandable right-pane **Team** area where the currently assigned team members are displayed.





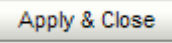
You can add or remove team members if you have a Participant role or higher. The creator of an object is always added to the **Team** list.

If the object type has a configured default value for **Team**, that default value is displayed in the **Team** area. When user groups are deleted by an administrator, they are automatically removed as team members for objects they were associated with.

**Important** If you modify the team of an object so that it removes you as a team member – whether it is specifically removing your user name, or it is removing all user groups you belong to – once you save that change and navigate away from the object, you can no longer open that object. If you try to open that object, you are alerted that your access is denied because you are not a team member of the object. If any user with a Participant role or higher removes all the teams from an object, the object is no longer accessible by any user.

## Adding a Team

**To add a team member to an object:**

1. Open an object.
2. In the right pane go to the **Team** area.
3. Click .
4. In the **Add Team** window search for a user(s) or user group(s) to add to the object.
5. Select the desired entries and click . When you have chosen your last selection click  to finish.

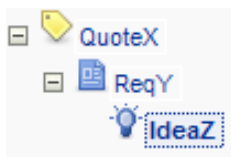
## Object Structure Team Association

Team members are also an inherited association between objects. When an object is added to the structure of another object, the parent object's team is added as a team for the newly added object.

Also, when an object that has a child structure is added to a parent object as its new child object within an existing structure, any team members from the parent object are associated to all the children objects of the newly added object.

The example illustrates the business rules of structures and teams.

**Create an object *QuoteX* with a child object *ReqY*, which also has a child object *IdeaZ*.**



Next, add yourself as the only team member of all three objects. In this example your user name is *Mariah Thomas*.

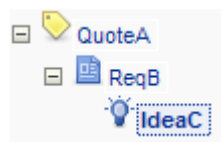
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**Note** You may need to remove any default teams for these objects to be sure that the only team member is you.

---




Create a new object *QuoteA* with a child object *ReqB*, which also has a child object *IdeaC*.



Add yourself, (*Mariah Thomas*), as a team member to all three objects and also add a user group, such as *Cats*, to all three objects as a team member.



Open *QuoteA* and click  in the **Explorer** area to add an object to the structure of object *QuoteA*. From the **Add Team** window choose the object *QuoteX* that you created earlier, which does not have the team member *Cats*.

The structure of *QuoteA* now appears like this:




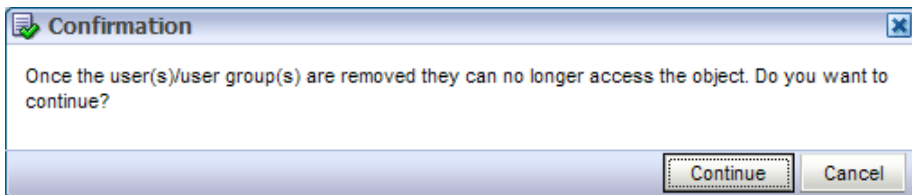
In the **Team** area of *QuoteX*, *ReqY*, and *IdeaZ*, the user group *Cats* has automatically been inherited since it was a team member of the parent object *QuoteA*.

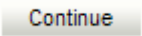


## Removing a Team

**To remove a team member from an object:**

1. Open an object.
2. In the right pane go to the **Team** area.
3. Select the team member(s) you want to remove and click .
4. A **Confirmation** window appears:



5. Decide if you want to remove the team member from all the objects in the structure and click  to finish.

**Caution** If you remove yourself, or your user group, you no longer have access to the object, even though you are performing the action.

# Managing Object Signoffs


## Sending an Object for Review

All users with access to an object as a team member can be assigned as an approver of an object, but a user group cannot be assigned as an approver.

The **Approve** and **Reject** buttons are the mechanisms for signoff and are displayed on objects that are assigned to you as a reviewer. The **Approve** and **Reject** buttons display regardless if you have signed off or not.

Any user with a Participant or higher level of access can send an object for review to a team member or members.

### To send an object for review:

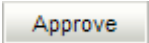
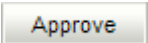
1. Go to the **Team** area of an object.
2. Select the member(s) you want to review the object.
3. Click  and in the **Send For Review** window enter a message for the user(s).

The team member(s) who are assigned a review have a Signoff Pending icon beside their user name in the **Team** area; the currently assigned object displays in the **My Pending Reviews** section of the **Home** page for the user(s). Once a user approves or rejects the object, their icon changes accordingly.

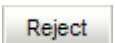
## Executing Approvals and Rejections

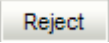
When a user navigates to an object, information about that user – including any signoff requests or last approval status – displays at the top of the object. A signoff pending or current review status icon also appears by the user name in the **Team** area for that object. This lets a user know that he/she needs to approve an object or if he/she has completed the review.

### To approve an object as an assigned reviewer:

1. Open an object and click .
2. In the **Approve** window enter your comments into the **Comments** field.
3. When you are finished click .
4. The **Notes** section of the object now contains the approve action and any accompanying notes entered along with your approval status and the time stamp you performed the action.

### To reject an object as an assigned reviewer:


1. Open an object and click .

2. In the **Reject** window enter your comments into the **Comments** field.
3. When you are finished click .
4. The **Notes** section of the object now contains the reject action and any accompanying notes entered, along with your rejection status and the timestamp the action was performed.

Once the user approves or rejects the object, an approved or rejected icon displays next to the user's name in the **Team** area for that object. Also, a message displays above the **Summary** section, alerting the user that he/she approved or rejected the object.

After each signoff, the Team panel is refreshed: the list of users whose signoff has been requested is sorted by Signoff Action (in order of Pending Signoff, Rejected, and Approved), as well as by alphabetical order of full name within each Signoff Action.

A user can sign off multiple times for one object, as long as he/she is still an assigned approver, regardless of what the first signoff status was.

A signoff assignment for a user can be reset by clicking the **Reset Signoff**  button, which removes any signoff icons next to that user name in the **Team** area. However, that same user can be reassigned as a reviewer; once again, the signoff pending icon displays by the user name in the **Team** area, and a signoff request alert displays at the top of that object page.

For more information about resetting signoffs, see [Resetting Signoffs](#) on page 45.



Users who have been assigned as reviewers, and therefore have correlating status icons for the review status (Signoff Pending, Approved, and Rejected), are moved to the top of the **Team** area of an object.

This grouping of team members is sorted according to signoff status and alphabetical user name order. The remaining team members who do not have a review assignment status are sorted alphabetically below.

## Resetting Signoffs

If signoffs on an object are no longer required, or when a new set of signoffs is required, then a user may choose to reset past signoff indications against that object's team.

### To reset signoffs for an object under review:

1. Go to the **Team** area of an object.
2. Select the member(s) that has/have a current signoff status indicator that you want reset.
3. Click .
4. In the **Confirmation** window it reads, "You are about to reset the current signoff status for the selected users. Would you like to continue?" Click .
5. The selected member(s) no longer have any review status icons next to their username(s) in the **Team** area.

This process also removes the message at the top of the object alerting a user that he/she needs to

complete a review. However, if the user already completed an action, that information still displays.

## Receiving Notifications

Notifications are sent to users when the following actions occur in CNM:

- User is notified when he/she is added as a team member for an object in order to perform a signoff action.

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**Note** Users that created an object and are therefore team members by default, or are members of a default team assigned to a type of object by default, are not sent notifications for being added as a team member at that time.

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- User is notified when another user sends an object using the **Send** action.
- User who authored a note on an object is notified when a comment is added following that existing note.
- User who is assigned as a reviewer of an object is notified when the assignment is given.
- User who assigned reviews is notified when the reviews are completed by each user.

# Building CNM Structures

**This chapter includes the following:**

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|   |    |
|---|----|
| ▪ Introduction to CNM Structures .....      | 47 |
| ▪ Using Explorer to Build Structures.....   | 48 |
| ▪ Creating New Objects from Explorer .....  | 49 |
| ▪ Viewing an Object Structure .....         | 49 |
| ▪ Adding an Object to a Structure.....      | 50 |
| ▪ Rearranging an Object Structure.....      | 52 |
| ▪ Removing an Object from a Structure ..... | 54 |
| ▪ Structure Table View .....                | 54 |
| ▪ Refreshing Objects in Explorer.....       | 56 |

## Introduction to CNM Structures

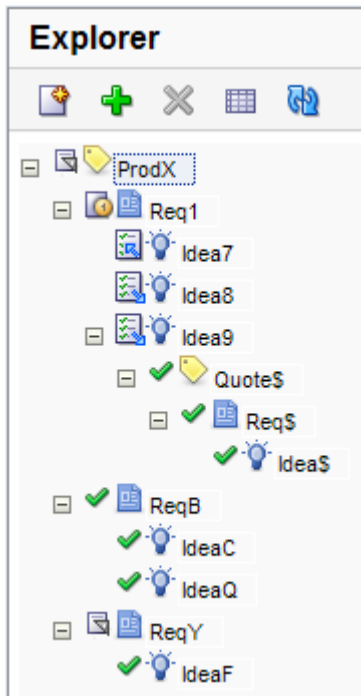
**Structures** are the main way to organize different kinds of content around Ideas, Quotes, and Requirements.

- **Ideas** may be captured from many sources – including ERP and other external systems – and a new idea can be linked to earlier ideas for comparison.
- **Quotes** and Pricing information can be sought, compared, and used as a basis for advancing or restraining an idea.
- **Requirements** can be established; as requirements mature, they can be assigned or distributed over multiple product releases.
- **Comments** and other input can be requested from **team members** that apply to any level of a structure.
- Finally, mature CNM structures – usually requirements – can be **promoted to the product record** in Product Collaboration.

This chapter looks more closely at the mechanics of structure-building.

## Using Explorer to Build Structures

When you are viewing an object there is a collapsible and expandable left pane **Explorer** area.



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**Note** By default, a user sees the structure of an object with its child objects expanded to only one level.

---

The **Explorer** area has the following actions available:

- **Create** — add an object to the current structure by creating a new object
- **Add** — add an object to the current structure by searching for an object
- **Remove** — remove an object from the current structure
- **View** — view the object attribute details for every object within the multi-level object structure in a table format
- **Refresh** — refresh all levels of the object structure and collapse the child levels

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**Note** You may want to refer back to [Replicating Structure with Save As](#) on page 29.

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All object types can be a part of an **Explorer** structure. From the **Explorer** structure you see the status of each parent and child object giving you an overall perspective of the progress of each element






within an entire project hierarchy. The icons associated with object status can each be unique and controlled by the administrator from the **Administration** section. For more information, please see [Status List](#) on page 78.

Like the search results restrictions, if you do not have access to an object because you are not a team member, the object does not appear in the **Explorer** structure. If you select a child object from the **Explorer** structure, the child object's **Summary** section opens, but the **Explorer** pane still provides the structure of the initially open parent object. As objects are added, removed, or rearranged, the Explorer structure will update the arrangement of child objects alphabetically.

## Creating New Objects from Explorer

To create a new object from the Explorer menu:

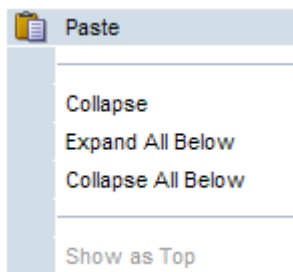
1. In the **Explorer** structure of an object, select the object you want to create your new object under.
2. From the **Explorer** menu click .
3. The **Create** window appears. Choose the object type from the **Type** dropdown list and enter a name in the **Name** field.
4. Click  to finish that object creation process.
5. You can continue to create more objects that are automatically added to the **Explorer** object structure, or click  to finish.

The creation process can continue seamlessly by clicking Enter on your keyboard after each creation. Once the **Create** window is open, you can navigate to different object structure levels of parent and child objects in the background and return to the **Create** window to continue creating objects to add to the structure level that you navigated to.

As you create (or add) objects that become child objects in a structure, the team of the parent object is added to all the child objects automatically, so that you now have access to all the child objects created (or added). For more information, see [Object Structure Team Association](#) on page 41.

## Viewing an Object Structure

A user can right-click on an object within a structure to bring up a menu for collapsing and expanding the structure.






If an object is currently only displaying the top level object, the menu has **Expand** and **Expand All Below** options. If an object is currently expanded to all levels, the menu has **Collapse** and **Collapse All Below** options. If the object structure is only expanded to a certain level with child objects still hidden as collapsed objects, the menu still has the **Collapse**, **Expand All Below**, and **Collapse All Below** options.

For more information about the **Paste** function, see Search Results.

## Adding an Object to a Structure

**To add an object to a structure:**

1. In the **Explorer** structure of an object, select the object you want to add your object under.
2. From the **Explorer** menu click .
3. In the **Add Structure** window select the type of object you are searching for, enter your search text string, and click .
4. From the **Search Results** table select the object you want to add and drag it to the object structure level you want, or click  to finish.

Child objects added to a structure are displayed at the level of the structure that was selected and highlighted before the add action began. If you drag and drop an object(s), you can determine which object in the structure you would like to be the parent object, regardless of what was previously highlighted.

From any search results in CNM a user can right-click a row or cell and access a **Copy** function. This copies the currently selected object to an internal CNM clipboard. A user can now navigate to a structure of an object in the **Explorer** area and paste the copied object as an addition to the structure.

**To paste an object into a structure:**

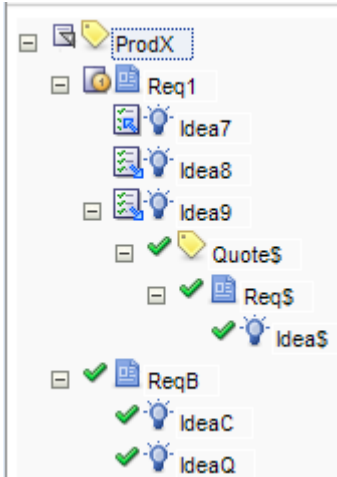
1. From a Search Result table, highlight the row(s) you want to copy and right-click.
2. Click **Copy**.
3. In the **Explorer** structure of an object, select the object you want to add your copied object(s) under.
4. Right-click and select **Paste**.



For more information about the right-click menu in the **Explorer**, see [Viewing an Object Structure](#) on page 49.


## Object Structure Duplication and Recursion

The rules governing the structure of an object provide a way to prevent unnecessary duplication and recursion of objects. CNM does not allow repeated objects at the same structure hierarchy level of an object. To illustrate this behavior, see the example below.

Open an object that has child objects, such as *ProdX*. Expand the object structure and see its child object *IdeaQ*. Be sure to still have *ProdX* selected and highlighted.



Click  and search for *Req1*. Select *Req1* from the **Search Results** table and click .

You are then prompted with, "*Adding duplicate child <Req1> is not allowed*". Click  to confirm and the action does not take place.

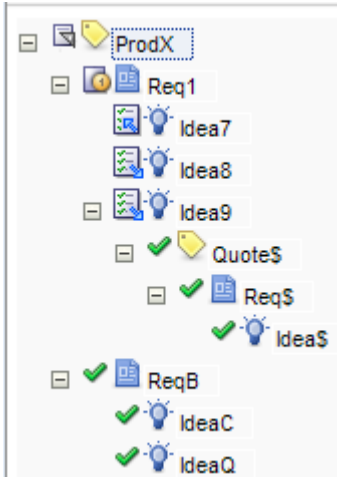
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
**Note** CNM decides if an object is being repeated according to the object number. If there are two or more objects with the same object name, but with different object numbers they can be placed at the same level in an object structure.


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Regardless of whether or not you can currently see parent objects, CNM will not allow parent objects to become child objects of an already existing child object of its own. The **Where Used** option from the **More Actions** menu will show you whether or not the currently displayed object also has a parent object that is not shown in the **Explorer** area, unless you are not a team member of the parent object. For more information about the **Where Used** option, see [Where Used](#) on page 33. To illustrate this behavior, see the example below.

Open an object that has child objects, such as *ProdX*. Expand the object structure and see its child object *IdeaQ*.



Click *IdeaQ*, then click  and search for *ReqB*. Select *ReqB* from the **Search Results** table and click .

You are then prompted with, "*Recursion found for adding object <ReqB>, action denied.*" Click  to confirm and the action does not take place.

## Rearranging an Object Structure

You can rearrange the structure of an object by dragging and dropping child objects from one level to another.

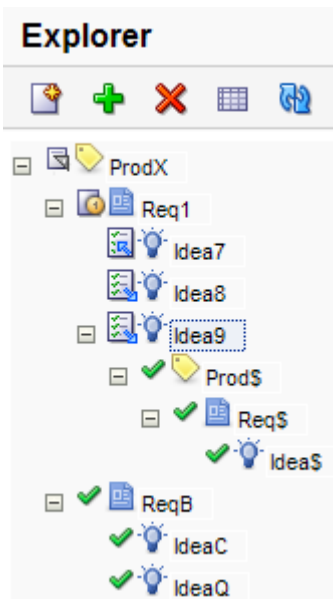
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**Note** The ability to drag and drop an object is available as long as the entire object name is visible. If the name is cut off, extend the left pane or rename the object.

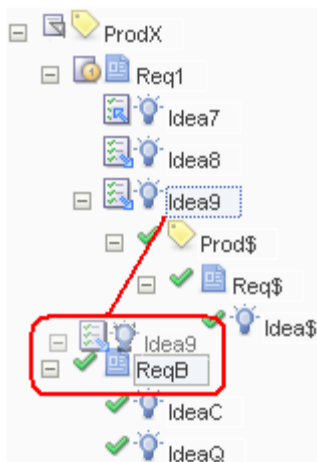
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Objects may be selected and dragged one at a time. As the pointer is dragged through the structure, a highlight is shown on each object as it is passed over to indicate that object will become the new parent object if you drop your selection there. To illustrate this behavior, see the example below.

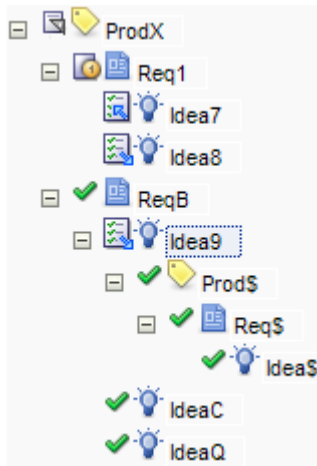
Open an object that has child objects, such as *ProdX*. Select one of its child objects, such as *Idea9*.



Now drag *Idea9* to another child object, *ReqB*, and see that the *ReqB* object is highlighted.




Once the *ReqB* object is highlighted, drop *Idea9* and it becomes the child object of *ReqB*.



## Removing an Object from a Structure

Removing an object from another object's structure does not cause the child object to be deleted from the CNM application. Instead, the branch/es underneath become branch/es of the "next-level-up" object, making it the new parent object and focus then moves to that object.

**To remove an object from a structure:**

1. Open an object that has a structure.
2. Click the child object you want to remove.
3. Click  to finish.

## Structure Table View



The **Structure Table View** is a way to see the object attribute details for every object within a multi-level object structure.

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**Note** By default, a user sees the structure view of an object with its child objects expanded to only one level.

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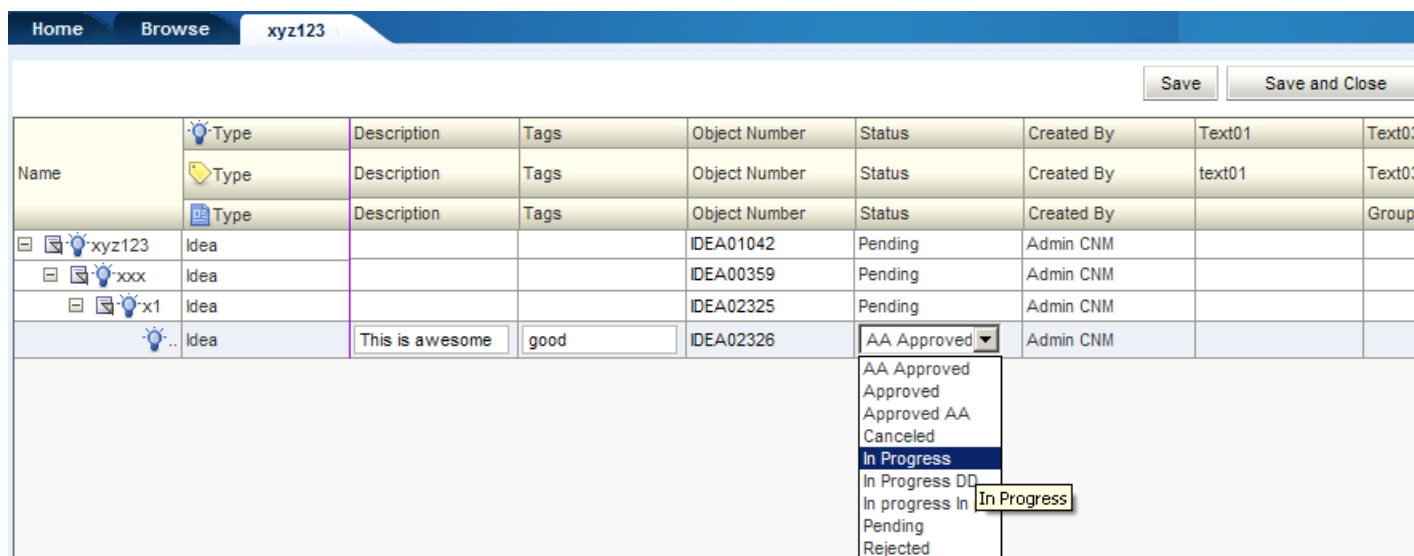
**To view the Structure Table of an object:**

1. Open an object that has a structure.
2. Click .
3. The Structure Table View page appears. Expand all the levels of the parent object to see every object's attributes.
4. Click  to finish.

The Structure Table is configurable because a user can drag and drop columns into the desired order. For more information about reordering columns, see [Table Column Reorder](#).

## Editing Object Attributes in Structure View

Once a user clicks **View** and is brought to the structure view page of an object, the user can edit attributes of objects directly from the table display. Only users with privileges to modify objects can edit object attributes in the structure view. The editable attributes include all flex fields except the **Rich Text** field.



### To edit object attributes from the structure view page:

1. Click **View**.
2. Click in any cell of an editable attribute.
3. Once the row of cells becomes editable, enter in the content you want to add or change or select values from available dropdown menus.
4. Click **Save** or **Save and Close** to apply your changes to all affected object attributes. Click **Cancel** to remove all your entered changes and return to the object tab.

## Changes In Process

As changes are made to row cells, a yellow highlight indicator alerts the user that a change was made as the user navigates throughout different cells. Once the changes are saved, the yellow highlight indicator disappears and the cells return to their normal state.


| Description   | Tags |
|---------------|------|
| This is great |      |
| I need this   |      |
|               | new  |
|               |      |

## Update Conflicts

It is possible that in the Structure View of an object there is an object that occurs twice, under two different parent objects. Because this is possible, it is also possible that a user may make a change in one instance of the object and enter a conflicting change to the same object elsewhere. CNM will only apply one change for that object's attribute and there is no way for the user to know which change will be accepted.

If there is an error in any of the object attributes edited, the Save operation will fail for all changes made and the user is notified which row cell needs correction before all the changes are saved. The user can navigate easily to the row cells that need correction as they are marked in red. Then the user can proceed to save their changes successfully.

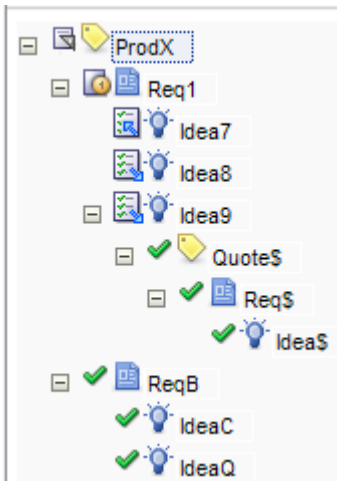
## Refreshing Objects in Explorer

Clicking **Refresh**  reloads the latest changes of an object's structure to reflect the most current information. If another user is making changes that you need to know about, the refresh feature makes it possible for you to know what changes have been applied.

To illustrate the **Refresh** behavior, see the example below.

Open an object that has child objects, such as *ProdX*. Expand multiple child object levels of *ProdX*.




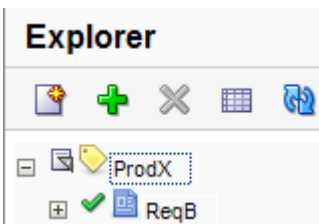


Make changes to the first level child object, *Req1*, and save your changes.

Another user, *UserB*, in another session modifies *ProdX* by removing the child object *Req1* from the structure entirely.



Now click  and see that the child objects of *ProdX* collapse up to the first child object level and now *Req1* is no longer a child object of *ProdX*.





# Exporting and Importing Objects

**This chapter includes the following:**

---

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| ▪ Supported Operations and File Formats..... | 59 |
| ▪ Exporting Objects from CNM.....            | 60 |
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## Overview

CNM's **Export** and **Import** features support the following operations:

- Export an individual object, or an object with structure from object structures to a Microsoft Excel or aXML file
- Export from search results to a Microsoft Excel file
- Import to update existing objects in the system (CNM server) in the Microsoft Excel format
- Create objects by using the Import process to import directly from Microsoft Excel worksheets

Using these features, you can update existing objects such as Quotes with data provided by one or more users, or import externally prepared worksheets for use in the CNM application. For example, there is usually a need to update costs for existing objects, or create costs for new ones. A convenient option is to export existing data (Quote) pertaining to the object to Excel, update it in the Excel format, and then import it back into the CNM application. Or, if there is an externally prepared Excel worksheet with applicable data, you can import the data and use it as a CNM object.

The supported file formats, along with the necessary procedures, constraints, and examples to perform these tasks appear in this chapter.

## Supported Operations and File Formats

- Export supports Microsoft Excel and aXML formats as follows:
  - **Excel worksheets** – You can export single or multilevel structures, including those from search results to an Excel worksheet
  - **aXML files** – You can export Attachments (files, URLs, and References to Agile PLM objects) plus Comments, and Where Used and Structure information from CNM to aXML files.
- Import only supports the Excel format. You can import a plain list of objects from the following sources into the system:
  - An Excel worksheet from a third-party system as a flat structure
  - Exported objects from the object's tree and search results as a flat list of objects from an

---

#### Excel worksheet

**Note** When importing objects, Comments, Attachments, References, and Structure information are not imported and the "Level" column created during the Export process is not imported.

---

## Exporting Objects from CNM

You can export from:

- Object structures to Microsoft Excel worksheets
- Object structures to aXML files
- Search results to Microsoft Excel worksheets

## Exporting to Microsoft Excel

Exporting to Microsoft Excel from Object Structures or from Search Results prepares a spreadsheet. However, the Level column is not exported if you are exporting from Search Results or from Object Structures and you have selected the Root Only option.

---

**Note** When exporting to Microsoft Excel, only the Cover Page fields (out-of-the-box and flex fields that are enabled) are exported. Attachments, Notes, and Comments are not exported.

---

## Exporting from Object Structures

Exporting from Object Structures prepares a Microsoft Excel spreadsheet with the following formation:

- Objects are listed in the sequence in which they appear in the structure tree
- A "Level" field in the first column indicates the hierarchy of the structure, with "0" indicating root or the object that is exported, and subsequent increments of "1", "2", ... "n" representing the 1<sup>st</sup>, 2<sup>nd</sup>, ..., and n<sup>th</sup> level respectively
- All system attributes and enabled flex attributes are exported as columns under column headings pertaining to the attribute type

### To export objects to Microsoft Excel:

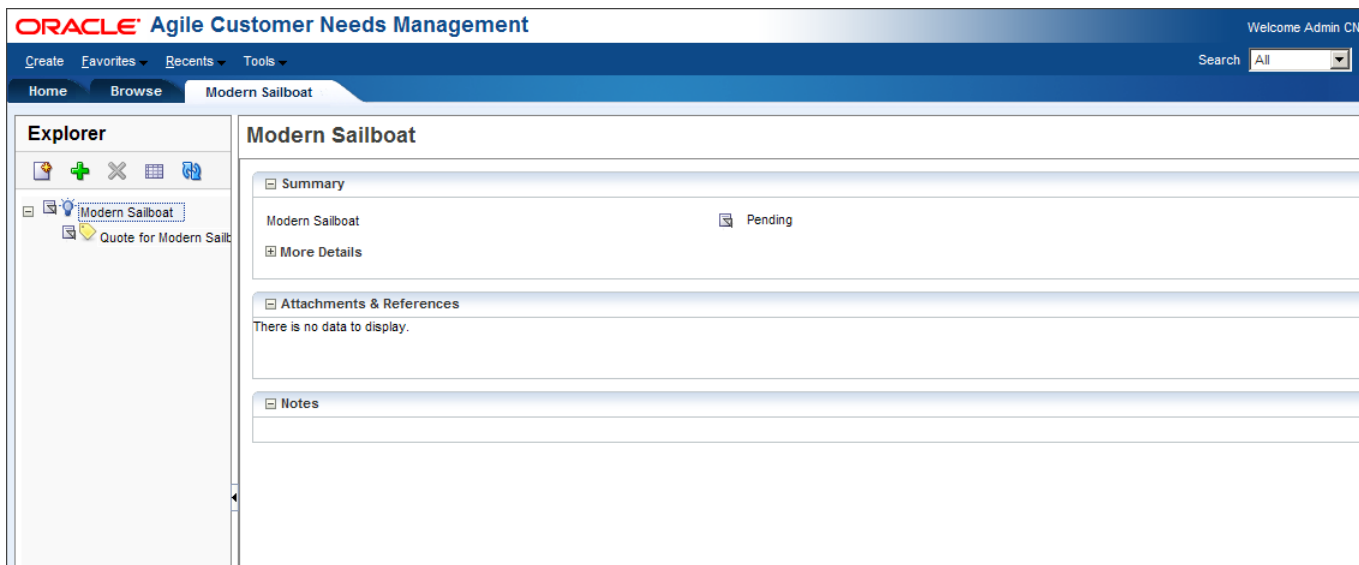
1. Log in to CNM and create an Idea object called *Modern Sailboat* and a child Quote object *Quote for Modern Sailboat*.

---

**Note** The Idea object called Modern Sailboat and the Quote object, *Quote for Modern Sailboat*, are created as examples to help document exporting from object structures. You can open and export an existing object structure as in this example, or create and export a new object structure. If the object was already added to **Favorites**, you can also use **Favorites** for finding and opening the object that you want to export. See Exporting to aXML Files.

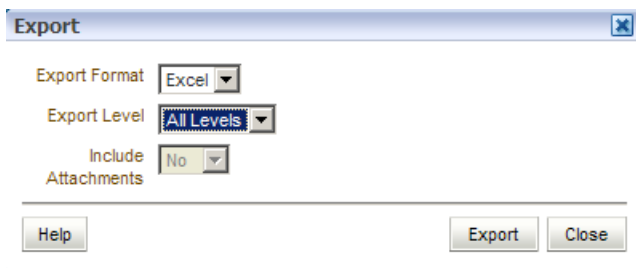
---

2. In the **More Actions** dropdown list, select **Export**.



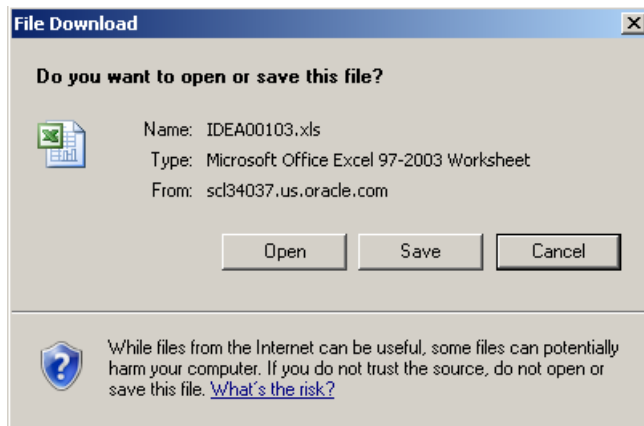
The **Export** window opens and prompts you to select your choice of Export Format and Export Level. The **Include Attachments** option is not available because export to Excel is selected.

3. In **Export Format**, select **Excel**, in **Export Level**, select **All Levels**, and then press **Export**.



**Note** In **Export Level**, you have the option to select **Root Only**, **Level One**, or **All Levels**. Selecting **Root Only** will export the **Root** object, which in this case is the **Idea** object. Selecting **Level One**, will export the next level, which in this case is the **Quote** object. Selecting **All Levels**, will export the **Idea**, **Quote**, and applicable levels to Excel.

- A window prompts you to open or save the file. You can save the file for modification in Excel and for subsequent import it into CNM.



| Level | Name                      | Description | Tags | Object Number | Type:Idea  | Status  | Date Created    | Date |
|-------|---------------------------|-------------|------|---------------|------------|---------|-----------------|------|
| Level | Name                      | Description | Tags | Object Number | Type:Quote | Status  | Date Created    | Date |
| 0     | Modern Sailboat           |             | boat | IDEA00103     | Idea       | Pending | 2/24/2011 19:32 |      |
| 1     | Quote for Modern Sailboat |             |      | QUOTE00002    | Quote      | Pending | 2/24/2011 20:31 |      |

**Note** You can see the "Level" column mentioned in [Supported Operations and File Formats](#) on page 59 in Column A. When you import this file into the system, this column is not imported.

## Exporting from Search Results

This process prepares a worksheet as follows:

- Search Results are only exported to Microsoft Excel
- Level is not exported when exporting from Search Results
- If no rows are selected in the Search Results table, Export will export all rows, but if one or more rows are selected, Export will only export the selected rows
- No export window is launched during the export process
- If objects in search results have a structure, Export from search results will only export the root object
- Exported objects are not listed in the same sequence in which they appear in the Search Results table

### To export from Search Results:

- Log in to CNM and in the **Browse** tab run a search for the object *Modern Sailboat*.

Search results display in a **Search Results** table, as seen below. You can select any object in the table for export. See [Searching in CNM](#) on page 13.

The screenshot shows the 'Advanced Search' interface. It includes a 'Match' section with radio buttons for 'All' and 'Any'. Below this are several search criteria fields: 'Type' (set to 'Equal to'), 'Name/Number/Desc' (set to 'Contains Phrase' with the value 'Modern Sailboat'), 'Name' (set to 'Contains'), 'Description' (set to 'Contains'), 'Number' (set to 'Contains'), 'Tag' (set to 'Equal to'), 'Rich Text' (set to 'Contains'), 'Date Created' (set to 'Equal to'), 'Date Modified' (set to 'Equal to'), and 'Created By' (set to 'Contains'). There are 'Search' and 'Reset' buttons at the bottom right of the search section.

Below the search section is the 'Search Result' table. It has a 'View' dropdown and icons for 'Print', 'Export', and 'Refresh'. The table has columns: Name, Number, Type, Description, Status, Tag, Created By, Date Created, and Date Modified. Two results are shown:

| Name              | Number     | Type  | Description | Status  | Tag  | Created By        | Date Created          | Date Modified              |
|-------------------|------------|-------|-------------|---------|------|-------------------|-----------------------|----------------------------|
| Modern Sailboat   | IDEA00103  | Idea  |             | Pending | boat | Admin CNM (admin) | 02/24/2011 07:32:4... | 02/24/2011 08:31:57 PM PST |
| Quote for Mode... | QUOTE00002 | Quote |             | Pending |      | Admin CNM (admin) | 02/24/2011 08:31:5... | 02/24/2011 08:31:57 PM PST |

- In the **Search Results** table, select the idea object named *Modern Sailboat* and then click the Export button.

Similar to Exporting from Object Structures, a window appears and prompts you to open or save the Excel file. Although this object has a multi-level structure, only the Root object is exported and the data displayed in this Excel worksheet does not include the Level column that appeared in Exporting from Object Structures. Also, although only a few fields are displayed in the **Search Results** table, the exported Excel file contains all the Cover Page fields (out-of-the-box and enabled flex fields).

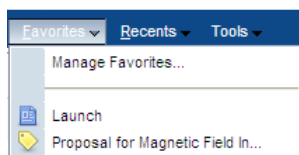
| Name            | Description | Tags | Object Number | Type:Idea | Status  | Date Created    | Date Modified   | Created By | Modified By |
|-----------------|-------------|------|---------------|-----------|---------|-----------------|-----------------|------------|-------------|
| Modern Sailboat |             | boat | IDEA00103     | Idea      | Pending | 2/24/2011 19:32 | 2/24/2011 20:31 | Admin CNM  | Admin CNM   |

## Exporting to aXML files

The following procedure assumes a multi-level Object Structure is already created and added to Favorites. It locates and opens the object and exports the entire structure (Notes, Comments, and Attachments and References) to an aXML file.

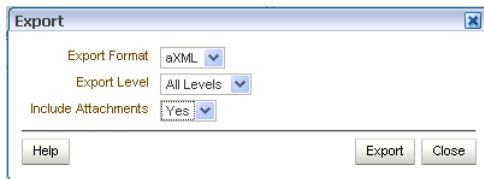
### To export object to aXML files:

- In CNM Explorer, select **Favorites > Proposal for Magnetic Field in...** to locate and open the object.



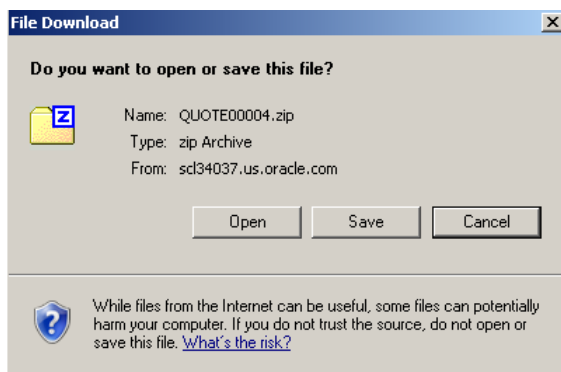
**Note** The selected object has References, URLs, Notes and Comments.

- 
2. In the **More Actions** dropdown list, select **Export**. The Export window opens.



- 
- 
3. In Export window's **Export Format**, **Export Level**, and **Include Attachments**, select the **aXML**, **All Levels**, and **Yes** options respectively, and then press **Export**.

The object along with its References, URLs, Notes, Comments, and Where Used information is exported in a .ZIP file and the browser gives you the option to save or open the .ZIP file.



- 
- 
- 
4. Save and then extract the contents of the .ZIP file.  
The aXML file and attachments (files) are included in the .ZIP file.
5. Open the aXML file.



Information related to the object such as References, URLs, Notes, Comments, and updates appear in the aXML file.

```
<?xml version="1.0" encoding="UTF-8" ?>
- <Objects xmlns="http://www.oracle.com/technology/products/applications/xml/plm/2011/04/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xmlns:xsd="http://www.w3.org/2001/XMLSchema" xsi:schemaLocation="http://www.oracle.com/technology/products/applications/xml/plm/2011/04/
    http://www.oracle.com/technology/products/applications/xml/plm/2011/04/acnm.xsd">
- <Object type="Quote">
- <Attributes>
  <ShortDesc>Proposal for Magnetic Field in...</ShortDesc>
  <Tags>magnet</Tags>
  <IdeaNumber>QUOTE00004</IdeaNumber>
  <Type>Quote</Type>
  <Status>Pending</Status>
  <DateCreated>2011-02-24T20:59:49-0800</DateCreated>
  <DateModified>2011-02-24T21:03:55-0800</DateModified>
  <CreatedBy>Admin CNM</CreatedBy>
  <ModifiedBy>Admin CNM</ModifiedBy>
</Attributes>
- <Reference>
- <Row>
  <Fulfillment>0</Fulfillment>
  <ObjectKey>2_-1_10000_6099226</ObjectKey>
  <FileId>0</FileId>
  <DateModified>2011-02-24T21:01:38-0800</DateModified>
  <ModifiedBy>Admin CNM</ModifiedBy>
  <SourceId>2</SourceId>
  <RefDesc>Grace 10/25 - - new database on scl34060 demo931oas, demo931rmwowner, demo931rmwuser - add attachment and view work fine</RefDesc>
  <RefNumber>P00001</RefNumber>
  <ParentId>10294</ParentId>
  <RefId>10307</RefId>
  <Type>Item</Type>
</Row>
- <Row>
  <Fulfillment>0</Fulfillment>
  <ObjectKey>http://www.bestever.com</ObjectKey>
  <FileId>0</FileId>
  <DateModified>2011-02-24T21:00:25-0800</DateModified>
  <ModifiedBy>Admin CNM</ModifiedBy>
  <SourceId>-1</SourceId>
  <RefNumber>http://www.bestever.com</RefNumber>
  <ParentId>10294</ParentId>
  <RefId>10300</RefId>
  <Type>URL</Type>
</Row>
```

## Importing Objects into CNM

As mentioned in [Supported Operations and File Formats](#) on page 59, in addition to importing exported objects, you can also import a number of objects directly into CNM from Microsoft Excel worksheets.

Information provided in the following paragraphs lists the importable and modifiable attributes and those that are neither importable/modifiable and shows how to:

- Modify and import an exported CNM object
- Import objects that do not exist in the system from an Microsoft Excel worksheet

## Modifying Attribute Values

You can modify and update values for all attributes except for the read-only (system) attributes.

You cannot update the following fields using Import:

- **Object Number**

- **Type**
- **Owner**
- **Date Created**
- **Date Modified**
- **Created By**
- **Modified By**

You can import values for attributes that are not system attributes and are enabled and modifiable for the specific object type. Make sure column headings are worded exactly as they appear in CNM, and a column identifying type is present. In these instances, Oracle recommends using a sample output file as a template. Other out-of-the-box fields on **Cover Page** and enabled flex fields can be updated using the Import process. When importing **Date** fields, the required format for the entry is the following: MM/DD/YYYY.

## Importing Modified Objects

The following Import procedure creates and locates an object that has its Idea, Requirement, and Quote components. The object is exported to Excel and after some modifications it is imported and viewed in CNM.

**Important** If you plan to import a modified exported object, Oracle recommends enabling the necessary attributes and creating the Idea, Requirement, Quote types in CNM prior to export. This preparatory task will simplify updating the applicable attributes in the Excel worksheet.

### Create, update, and import a Requirement Type object for an exported Idea object:

1. In CNM, create the following Requirement object for the *Modern Sailboat* Idea exported in Exporting to Excel Worksheets.

The screenshot shows a web form for creating a Requirement object. At the top right are 'Save' and 'Cancel' buttons. Below them is a text area with the title 'Requirement' and the description 'Reefing main and jib'. A section titled 'More Details' is expanded, showing various fields: 'Tags' with the value 'boat', 'Object Number' with 'REQ01676', 'Type' with 'Requirement', and '\* Status' with a dropdown menu set to 'Pending'. To the right of these are 'Estimated Cost' (7000), '% Complete' (0), 'Special Comments' ('In Boom Reefing'), and 'Date Created' (16-Jan-2010 01:44 PM). There is also a 'Target Completion' field with a calendar icon.

2. In CNM, select and export the Requirement for this object and then open the file in Excel.

|   | A           | B                    | C    | D          | E           | F           | G      | H   | I        | J     | K           | L         | M          | N          | O            | P             | Q          |
|---|-------------|----------------------|------|------------|-------------|-------------|--------|-----|----------|-------|-------------|-----------|------------|------------|--------------|---------------|------------|
| 1 | Name        | Description          | Tags | Object Num | Type        | Requ Status | Target | Cor | Mandator | Owner | Requirement | Estimated | % Complete | Special Cc | Date Created | Date Modified | Created By |
| 2 | Requirement | Reefing main and jib |      | REQ01676   | Requirement | Pending     |        |     |          | Other | 7000        | 0         |            | In Boom R  | 16-Jan-2010  | 08-Feb-2011   | Admin CNM  |





3. Modify the attributes as shown in the bold font faces.

|   | A           | B                    | C    | D          | E           | F           | G                | H     | I       | J     | K           | L           | M          | N          | O            | P             | Q          |
|---|-------------|----------------------|------|------------|-------------|-------------|------------------|-------|---------|-------|-------------|-------------|------------|------------|--------------|---------------|------------|
| 1 | Name        | Description          | Tags | Object Num | Type        | Requ Status | Target           | Compl | Mandato | Owner | Requirement | Estimated   | % Complete | Special Cc | Date Created | Date Modified | Created By |
| 2 | Requirement | Reefing main and jib |      | REQ01676   | Requirement | Pending     | <b>3/10/2010</b> |       |         |       | Other       | <b>7500</b> | <b>25</b>  | In Boom R  | 16-Jan-2010  | 08-Feb-2011   | Admin CNM  |

4. In CNM, select **Tools > Import**.

The **Import** window displaying status, the number of lines and attributes, and any errors it encountered during the Import process appears. If you press the **Back** button, the window reverts to the one shown in Step 4 above, enabling you to re-import, or import another workshop. As indicated earlier, Import will lose the **Level** attribute. This is not applicable here because the object you are importing is a flat structure.

5. In CNM, use object number (REQ01676) to locate the updated object.

| Search Result  |          |             |                      |         |      |                   |                 |
|--|----------|-------------|----------------------|---------|------|-------------------|-----------------|
| View    |          |             |                      |         |      |                   |                 |
|  |          | All         |                      | All     |      |                   |                 |
| Name   | Number   | Type        | Description          | Status  | Tag  | Created By        | Date Created    |
|  Requirement  | REQ00001 | Requirement | Reefing main and jib | Pending | boat | Admin CNM (admin) | 02/24/2011 09:5 |

6. In CNM, open the object and note the attributes you updated in Excel (**Estimated Cost**, **% Complete**, and **Target Completion Date**).

|  |                                     |           |
|--|-------------------------------------|-----------|
| Requirement                                  |                                     | [Pending] |
| Reefing main and jib                         |                                     |           |
| More Details                                 |                                     |           |
| Tags: boat                                   | Estimated Cost: 7500                |           |
| Object Number: REQ01676                      | % Complete: 25                      |           |
| Type: Requirement                            | Special Comments: In Boom Reefing   |           |
| Status: Pending                              | Date Created: 16-Jan-2010 01:44 PM  |           |
| Target Completion Date: 10-Mar-2010 12:00 AM | Date Modified: 08-Feb-2010 03:19 PM |           |
| Mandatory:                                   | Created By: Admin CNM               |           |
| Owner:                                       | Modified By: Admin CNM              |           |
| Requirement Type: Other                      |                                     |           |

## Importing Directly from Excel Worksheets

This feature of the Import process enables creating objects that do not exist in the system. The required access levels, mandatory and optional attributes, and the necessary procedures appear in this section.

### Required Access Level (Privileges)

Because importing objects directly into the system creates new objects, only users with a “Participant” or higher role can perform this operation. This is the same access level required for users of the Create function.

### Required Attribute Values

To import data directly from a Microsoft Excel worksheet, you must specify values for the following attributes. Otherwise, the object is not imported

- **Object Type**
- **Object Name**
- **Object Status**

---

**Note** Because the Import process creates a new object for each row of the Excel worksheet, it is necessary to provide these values for each row of the Excel worksheet. See Examples

---

### Optional Attribute Values

When creating objects using Import, you can assign values to any enabled and modifiable field, such as the **Description** field. Do not specify a value for the **Object Number** attribute. The **Object Number** value is specified only if you are trying to update an existing object where specifying the **Object Number** value is mandatory. CNM's Import process assigns values for the **Object Number** attribute for each imported object.

**Note** To facilitate locating objects created using Import in CNM, use values specified in the Excel file for attributes such as Tag, Name, or other modifiable fields as search keys.

## Examples

The following example describes the process from the initial creation of the Excel worksheet through specifying the mandatory attribute values, creating objects using Import, and searching and viewing the imported objects in CNM. The example assumes one of the modifiable fields called *Value* is enabled for the Idea object.

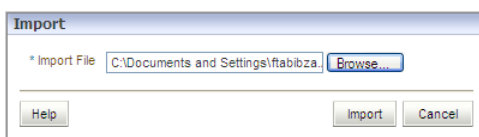
**Important** Depending on the type of objects that you want to import, you must include a different number of object header rows. For example, if the import file contains the Idea and Quote object types, then you must add two header rows with the corresponding field names for Idea and Quote objects. The example below is adding the Requirement type also.

### To create the worksheet and set the mandatory attributes:

- In an Excel worksheet, do as follows:
  - Type the values shown in rows 1 - 6 of columns A and B to assign the mandatory values respectively. Set the values shown in the columns C, D, E, and F of rows 1, 2, and 3 (this is optional).
  - In rows 4, 5, and 6 of columns A and B, specify the values shown below for the mandatory fields. Set the values shown in the remaining columns C, D, E, and F of rows 4, 5, and 6 (this is optional).

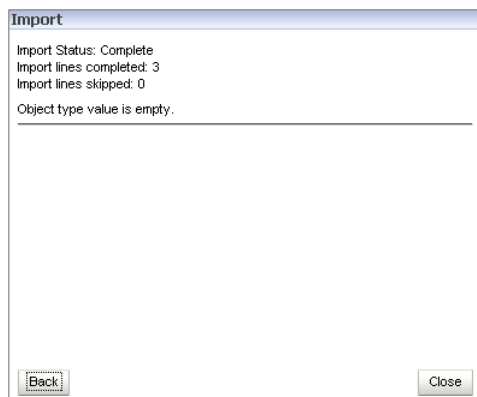
|   | A                | B            | C               | D       | E    | F          |
|---|------------------|--------------|-----------------|---------|------|------------|
| 1 | Type:Idea        | Name         | Description     | Status  | Tags | Value      |
| 2 | Type:Requirement | Name         | Description     | Status  | Tags |            |
| 3 | Type:Quote       | Name         | Description     | Status  | Tags |            |
| 4 | Idea             | Build a boat | Multihull racer | Pending | Boat | Gold Medal |
| 5 | Requirement      | Speed        | 20 Knots        | Pending | Boat |            |
| 6 | Quote            | \$ estimate  | \$5000K         | Pending | Boat |            |

- In CNM, select **Tools > Import > Browse** to open the worksheet.



- In Import dialog, select **Import**.

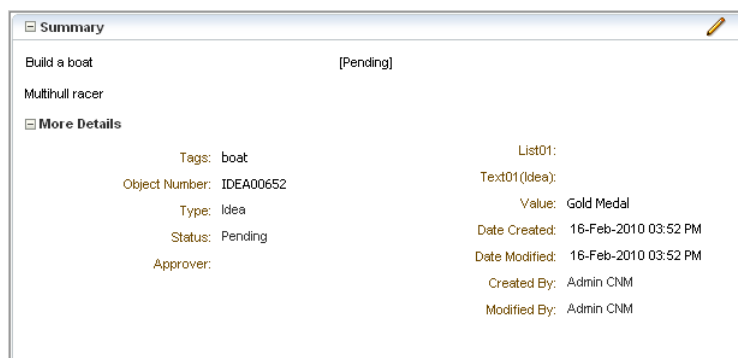
The Import dialog displays the import status. Assigned values for the three rows are imported.



4. In CNM, use Idea object's Name or Description to locate the imported object.

**Note** In addition to the mandatory attributes, optional values such as Tags, Status, and "Gold Medal" which was set for the enabled attribute called *Value* is also imported.

---



# Administration

**This Appendix includes the following:**

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## CNM Administration

This Customer Needs Management (CNM) Administration section is the primary resource for CNM administrators. There is information regarding defining CNM objects and their attributes, setting up users and user groups, and establishing system settings for CNM.

Assume this chapter is specific to the "CNM Administration" module of Agile CNM when not otherwise specified. "PLM Administrator" refers to the Administrator module of the "core" Agile PLM system, accessed in Agile Java Client. (As needed, *Agile PLM Administrator Guide* is a separate manual on Oracle Technology Network.)

The manuals that document Agile CNM in this product release are:

- *CNM Readme*
- *CNM Implementation Guide* (including Installation)
- *CNM User and Administration Guide*
- *CNM Web Services Guide*
- *CNM Security Guide*

## Administrative Capabilities

Administrators can customize the behavior of each object type using the configurable options provided for each object type. There is a specific process to create users in CNM. For more information, see the *CNM Implementation Guide*. Once a user is created that has the Administrator role, more users can be created by accessing the Administration section.

After successfully logging in as an administrator user, access the **Administration** section by clicking

**Administration**

in the top right corner of the **Home Page**. You are directed to the **Administration** section that has the following:

- **Objects and Attributes** — define and manage object types, attributes, and properties
- **Lists** — define and manage list values
- **Users** — create, modify, and disable users
- **User Groups** — create, modify, and delete user groups
- **Keyword Library** — create and view keywords that associate CNM objects to one another
- **System Settings** — configure and establish system settings that impact search, attachments, sending objects, references, and more

**Important** Agile CNM supports seven languages in addition to English. If the administrator makes a change in one language, that change needs to be performed in the other languages as well to ensure that across all language preferences for users there is a reflection of the same system changes. After any change is made, all administrators need to login with other language preferences and make the necessary corresponding changes.

## Promoting CNM Objects to Agile Product Record

Users can promote object data from the CNM framework – single CNM objects or multiple-level Structures – to the product record as Documents. Because the Promote feature requires a certain amount of administrative setup (settings in CNM and privileges in PLM), this section is dedicated to that setup.

While it is possible to promote Ideas and Quotes, the Promote feature is intended for the use case of Requirements deemed ready for actual production. That is why the "out-of-box" defaults permit Requirements to be promoted. For users to be able to promote Ideas and Quotes, you must enable the Allow Promote attribute of that CNM class.

The administrative settings for the Promote feature are provided below.

### Settings for Promote Capability

These are the settings that you must attend to for users to be enabled to promote CNM objects to the product record.

#### Objects and Attributes

**Allow Promote** (Yes, No)

#### System Settings

**File Server Type:** Agile PLM File Server

**Document Subclass:** Document

There are settings in Agile Product Collaboration that you must also attend to; these include setting Autonumbering in the Documents class, and user privileges that are discussed below.



**Important** If the Documents class in Agile PLM has not been set up for Autonumbering, CNM does not promote object data to Document objects.

## Privileges Required to Promote CNM Objects

To promote a CNM object to a PLM Document, a user must be assigned the Create privilege in Agile PLM for the Documents class (which covers all objects created in any Document subclass) or for the specific Document subclass to which the user will be promoting CNM objects.

To work in the integrated CNM–PLM solutions, a user must have Read and Write privileges to Items, Projects, Prices, and Problem Reports; more specifically, the PageOne > Number (ID):

- *Items* > Title Block > Number
- *Projects* > General Info > Number
- *Prices* > General Info > Number
- PSRs > *Problem Reports* > Cover Page > Number

To promote an object that has a reference to a PLM object, a user must be assigned the Modify privilege on that PLM **Object.Relationship.Name**. If a user does not have this privilege, when he promotes the object to a PLM Document, it will not carry the specific reference to the other PLM object.

To promote an object with attached files or URLs, a user must be assigned the Get File privilege and Modify privilege in Agile PLM for the attachments.

When a user promotes a structure, to see the new BOM structure in the PLM object, the **BOM** tab for that object's subclass must be set to visible for that user.

## Objects and Attributes

From **Objects and Attributes**, you can define and manage object types along with their properties and attributes. Each object type can have a different set of attributes. Specific attributes are common to all object types while others can be modified, enabled, configured, or removed.

**Important** You cannot delete a default, pre-defined object type. You can only adjust and change the properties and attributes of the object type to reflect what you require.

This table lists the default Object Types in CNM.

| Object Type | Prefix | Description   |
|-------------|--------|---|
| Quote       | QUOTE  | A vendor's statement of products and services offered to a potential customer |
| Idea        | IDEA   | A suggestion for a product, process, or service                               |
| Requirement | REQ    | A set of conditions or necessary specifications for a product                 |

You can change the name, prefix, and other attributes of these object types on the Object Properties tab (see below). Adjust the object type definitions as needed for your company's business processes and systems.

## Defining Object Properties



All of the available properties of an object are editable. You can configure any object type to help accommodate your business process needs. The following table contains the configurable object type properties.

| Object Property | Data Type | Property Values             | Description   |
|-----------------|-----------|-----------------------------|---|
| Name            | Text      | Idea, Quote, or Requirement | The configurable object types for CNM   |
| Description     | Text      | TBD                         | A text string the administrator enters  |
| Enabled         | List      | Yes or No                   | Allows or limits the user creating and searching for specific object types in CNM. If set to No, the associated object type cannot be searched for or created. This includes quick searches, advanced searches, adding by search from Explorer, and Tag cloud searches. |
| Default Team    | List      | TBD                         | User groups that are assigned to an object type and are therefore automatically assigned as team members for any object created that is of that object type   |
| Allow Promote   | List      | Yes, No                     | Set to Yes to allow this object type's business objects to be promoted to the product record.   |
| Prefix          | Text      | Default: IDEA, QUOTE, REQ   | A text string the administrator enters that becomes the prefix for the object number autogenerated by CNM   |
| Class Name      | Text      | Idea, Quote, or Requirement | Not editable: this field identifies the original (default) Object Type when Name and Prefix fields have been modified.  |

The required fields, which may not be left blank, are designated by an asterisk (\*) before the field name. (You see the asterisk only during Create and Edit operations.)

## Editing Object Properties

**To edit the properties of an object type:**

1. From **Objects and Attributes** click the **Object Type** dropdown menu to choose which object type you want to edit.
2. Once you have selected the object type click  on the **Properties** tab.
3. Now all the available fields are in edit mode and you can change the fields to the values you want.
4. Click  when you are finished.

## Object Attributes

The following are the various data types for attributes:

- **Text** — contains any valid character from the keyboard
 

**Note** The **Display Height** property determines if the text attribute is a single line text field or a multi-line text field. For more information, see [Attribute Properties](#) on page 76.
- **Number** — contains positive or negative numbers, the decimal (.), comma (,) and the hyphen to indicate a negative number (-) value
- **List** — contain values the administrator configures or sets as default values for such attributes
- **Date** — a date selected from a calendar or entered directly by the user

The default configuration for the attributes of objects is found in the table below:



| Attribute Name | Display Name  | Modifiable | Data Type | Visible | Description  |
|----------------|---------------|------------|-----------|---------|--|
| ID             | ID            | No         | Number    | No      | A unique identifier autogenerated by the CNM system  |
| ShortDesc      | Name          | Yes        | Text      | Yes     | An identity for the object   |
| Description    | Description   | Yes        | Text      | Yes     | More information about an object   |
| Tags           | Tags          | Yes        | Text      | Yes     | A keyword identifier to categorize objects together  |
| IdeaNumber     | Object Number | No         | Text      | Yes     | An autogenerated number  |
| Type           | Type          | Yes        | List      | Yes     | Classifications for each object type created by the administrator to accurately reflect the processes in CNM                                       |
| Status         | Status        | Yes        | List      | Yes     | Determined states for objects that reflect the progress of the objects implementation. Default values are: Pending, Review, Approved, and Rejected |
| Owner          | Owner         | No         | Number    | No      | The user who created the object  |
| Deleted        | Deleted       | No         | Number    | No      | --   |
| ObjVersion     | Obj Version   | Yes        | Number    | No      | The version number of the object type  |
| Date01-Date15  | TBD           | No         | Date      | No      | Administrator determines this attribute according to the CNM process needs for the users   |
| List01-List15  | TBD           | No         | List      | No      | Administrator determines this attribute according to the CNM process needs for   |

| Attribute Name        | Display Name  | Modifiable | Data Type | Visible | Description  |
|-----------------------|---------------|------------|-----------|---------|--|
|                       |               |            |           |         | the users  |
| Number01-<br>Number15 | TBD           | No         | Number    | No      | Administrator determines this attribute according to the CNM process needs for the users |
| Text01-<br>Text15     | TBD           | No         | Text      | No      | Administrator determines this attribute according to the CNM process needs for the users |
| DateCreated           | Date Created  | No         | Date      | Yes     | The date and time the object was created   |
| DateModified          | Date Modified | Yes        | Date      | Yes     | The date and time the object was last modified   |
| CreatedBy             | Created By    | No         | List      | Yes     | The first and last name of the user that created the object                              |
| ModifiedBy            | Modified By   | Yes        | List      | Yes     | The first and last name of the user that last modified the object                        |
| RichText              | Rich Text     | Yes        | Rich Text | No      | Formatted text entered by the user rendered through ADF                                  |

**Important** Only fifteen flex attributes for each data type are allowed for each object type.

## Editing Object Attributes

To edit the attributes of an object type:

1. From **Objects and Attributes** go to the **Attributes** tab.
2. In the table display of available attributes click the attribute you want to edit.
3. Below is the **Attribute Properties** section where you click  and the attribute property fields become editable.
4. When you are finished click .

## Attribute Properties

The available properties for attributes are found in the table below:

| Property       | Available on Attributes  | Data Type |
|----------------|--------------------------|-----------|
| Attribute ID   | Date, List, Number, Text | Number    |
| Attribute Name | Date, List, Number, Text | Text      |
| Display Name   | Date, List, Number, Text | Text      |

| Property       | Available on Attributes  | Data Type |
|----------------|--------------------------|-----------|
| Description    | Date, List, Number, Text | Text      |
| Visible        | Date, List, Number, Text | List      |
| Modifiable     | Date, List, Number, Text | List      |
| Data Type      | Date, List, Number, Text | Text      |
| Display Type   | Date, List, Number, Text | List      |
| Display Order  | Date, List, Number, Text | Number    |
| Default Value  | Date, List, Number, Text | Text      |
| Help Text      | Date, List, Number, Text | Text      |
| List Name      | List                     | List      |
| Display Height | Text                     | Text      |

## Lists

From **Lists**, you can define and manage list values made available on specific object types. Please note that when you disable some list values on attributes assigned to those lists, the disabled values display the text (disabled) after the value in the list dropdown. This applies to all lists including the users list.

### List Properties

The following are the properties of lists:

- **ID** — a unique identifier autogenerated by the CNM system
- **Name** — field you can edit to reflect the name of the list being created
- **Enabled** — dropdown menu of Yes or No options to determine if the created list is enabled
- **Description** — area available for more details about the created list
- **Type** — used to designate the type of list as a Text or Image





### List Values

The **List Values** tab is where you add list values to an already existing list entry. The **Entry ID** number is autogenerated, but you need to enter names for each list value you create and determine if it is enabled or disabled.

### Creating list values


**To create a list value:**

1. Go to the **List Values** tab.

2. Click  and enter a name for this list item in the **Entry Value** field.
3. Set the **Enabled** field to Yes or No.
4. Click .
5. You can click  to continue creating entries.
6. Click  when you are finished.

## Creating Lists


### To create a list:

1. From **Administration** go to **Lists** and click .
2. In the **Properties** tab enter a **Name** for the list you are creating.

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

**Note** List names are not case sensitive and must be unique.

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
3. Set the **Enabled** field to Yes or No and enter text into the **Description** field if needed.
4. Click  to finish.

## Modifying Lists

### To modify the properties of a list:

1. From **Lists** go to the **Properties** tab and click .
2. Enter in your new values for the **Name**, **Enabled**, and **Description** editable fields.
3. Click  to finish.

### To modify the list values of a list:

1. From **Lists** go to the **List Values** tab.
2. In the **Entry Value** and **Enabled** columns make any changes needed.
3. If the changes made are incorrect click  to begin making changes again.
4. Click  to finish.

## Status List

Each object type has a **Status** list of values associated with it. This **Status** list is essential in the management of the lifecycle of an object within CNM. As an administrator you designate the number of statuses that are active for each object type, the icon associated with each status, the name of each status, font color of the status title, the creation of additional statuses or the disabling of a status that is no longer needed.

**To edit Status list properties for a specific object type:**

1. Go to **Administration > Lists > Status List > Properties** tab.
2. Click **Edit**.
3. Change values for **Name**, **Description**, and set the **Enabled** dropdown to **Yes** or **No**. The **Type** value is by default an **Image**.
4. Click **Save**.

**To edit Status list values for a specific object type:**

1. Go to **Administration > Lists > Status List > List Values** tab.
2. You can edit the current values of existing Statuses or click **Create**.
3. Enter values for the **Entry Value** and set the **Enabled** dropdown to **Yes** or **No**.
4. Next add an **Icon** and select a **Font Color**.
5. Click **Save**.

## Users

From **Users**, you can configure the following aspects of users in CNM:

- Create and add new users
- Modify user properties such as email, roles, etc.
- Disable existing users

## User Properties

The user object in CNM has the following properties:

| Property   | Modifiable | Description  |
|------------|------------|--|
| User ID    | No         | The user's sign on name. This property is required to be unique for each user.<br><b>Note</b> If your CNM system is integrated with an Agile PLM system, the PLM system validates the User ID (username) so do not change your CNM User ID (username). |
| Status     | Yes        | A dropdown list with these two options: Enabled or Disabled  |
| First Name | Yes        | A text field to enter in a user's first name   |
| Last Name  | Yes        | A text field to enter in a user's last name  |

| Property      | Modifiable | Description   |
|---------------|------------|---|
| Email         | Yes        | A text field to enter in a user's email address   |
| Role          | Yes        | A dropdown list with the following default options: Viewer, Participant or Administrator<br><b>Note</b> If you have configured the Roles to different names, those will appear as the options for the user properties |
| Number Format | Yes        | A dropdown list providing formats for the display of your numbers   |
| Time Format   | Yes        | A dropdown list providing formats for the display of your current time in Hours, Minutes and Seconds  |
| Time Zone     | Yes        | A dropdown list providing global selections for your current time zone  |
| Date Format   | Yes        | A dropdown list providing formats for the display of your current time date in Years, Months and Days   |
| Language      | Yes        | A dropdown list with the following default options:<br>English, French, German, Japanese, Korean, Russian, Simplified Chinese and Traditional Chinese   |

## User Roles

User roles provide a level of security in CNM. The role assigned to a user determines the actions that the user can carry out on accessible objects.

**Viewer** — can only perform View, Approve, Reject, Add Notes, Add Comments, Send, View History, View Where Used, and Add to Favorites actions on the objects that he/she has access to.

**Participant** — can perform all object transaction actions such as Create, Delete, Modify, Save As, Send, Comment, Tag, Import, Export, along with all the actions available to the Viewer role on the objects that he/she has access to. A Participant does not have access to any of the Administrator features.


**Administrator** — can perform all the object actions available in the product that he/she has access to. The Administrator can also perform all the actions defined in the **Administration** section such as defining object attributes, adding lists, creating users and user groups, and establishing system settings.

## Adding a User

Once you have gathered information about new users and assessed their access requirements, add them to the CNM system. The User ID needs to be unique, and if the administrator chooses an already existing User ID the system will notify the administrator with an error message.




**To create a new user:**

1. From **Administration** choose **Users**.
2. Click  to open the Create User window.
3. Type the **Username**, **First Name**, and **Last Name** in the required fields.
4. Enter a value for the optional field **Email**.
5. Choose Viewer, Participant, or Administrator from the dropdown list of available roles.
6. Click **Create**. The **Settings** tab of the newly created user appears in the bottom pane of the workspace already in Edit mode.
7. You can then adjust the editable fields of **Status**, **First Name**, **Last Name**, **Email**, and **Role**.

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
**Note** The User ID is an uneditable field.

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8. Click  to finish.

## Editing a User's Properties


**To edit a user's properties:**

1. From **Administration** choose **Users**.
2. Click the User ID of the user you want to edit.
3. From the **Properties** tab of the user click .
4. You can then adjust the editable fields of **Status**, **First Name**, **Last Name**, **Email**, and **Role**.

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

**Note** The User ID is an uneditable field.

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5. Click  to finish.

## Disabling a User

**To disable a user:**

1. From **Administration** choose **Users**.
2. Click the User ID of the user you want to disable.
3. From the **Properties** tab of the user click .
4. Change the **Status** field from Enabled to Disabled.
5. Click  to confirm and finish.

When a user is disabled they no longer have access to the CNM application. The team membership that they have associated to their user is still valid, but if another user is searching for users to add to a team, to send an object to, or to make part of a user group, CNM does not display the disabled users in the search results.

If you disable a user that is a member of any user group, CNM notifies you that the user groups the

user is a member of are removed from that user. However, when you re-enable the user, CNM notifies you that the user groups previously associated with the user return to the user and he/she is once again part of the user group membership.

## User Groups

From **User Groups**, you can configure the following aspects of user groups in CNM:

- Create and add new user groups
- Modify user group properties such as name, description, members, etc.
- Delete existing user groups

## User Group Properties


The properties of a user group are **Name** and **Description**. A name is required and both are editable.

## Members



The **Members** tab of a user group is where you can search for existing CNM users and add them to a user group.

## Adding a User Group

**To create a new user group:**

1. From **Administration** choose **User Groups**.
2. Click . The **Create User Group** window opens.
3. Enter values for **Name** and **Description**.
4. Click **Create** to finish.



**To add members to a user group:**

1. Go to the **Members** tab of the newly created user group found in the bottom pane of the workspace.
2. To find users to add to the user group click .
3. From the **Add Members** window search for existing users.
4. Once you have selected the desired user(s) click  to finish.

## Editing a User Group's Properties



**To edit a user group's properties:**

1. From **Administration** choose **User Groups**.
2. Click the name of the user group you want to edit.

3. From the **Properties** tab of the user group click .
4. You can then adjust the editable fields of **Name** and **Description**.
5. When you are finished with your changes click .

## Deleting a User Group

### To delete a user group:

1. From **Administration** choose **User Groups**.
2. Click the name of the user group you want to delete.
3. Click . There is a prompt asking you, "*Do you want to delete the selected user group?*"
4. Click  to confirm the deletion.

Once a user group is deleted, the group is also removed as a team for any object that has it assigned as a team member.

## Keyword Library

From the **Keyword Library** the administrator can create and view keywords that correlate objects to one another in CNM.

## Keyword Entry and Removal

### To create a keyword:

1. Go to **Administration > Keyword Library**.
2. Click **Create**.
3. In the **Create New Keyword(s)** window enter text for the name(s) you want to create, up to 150 characters. You can enter more than one keyword at a time by clicking Enter on your keyboard to separate entries.



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**Note** Any duplicates entered are ignored by CNM. Keywords are displayed how the user entered them, but they are treated as case insensitive.

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4. When finished, click .

### To delete a keyword:

1. Go to **Administration > Keyword Library**.
2. Find the existing keyword you want to remove and click the .
3. In the **Confirmation** window it reads, "*Do you want to delete the selected keyword?*"
4. Click  to finish.

## Keyword Generation

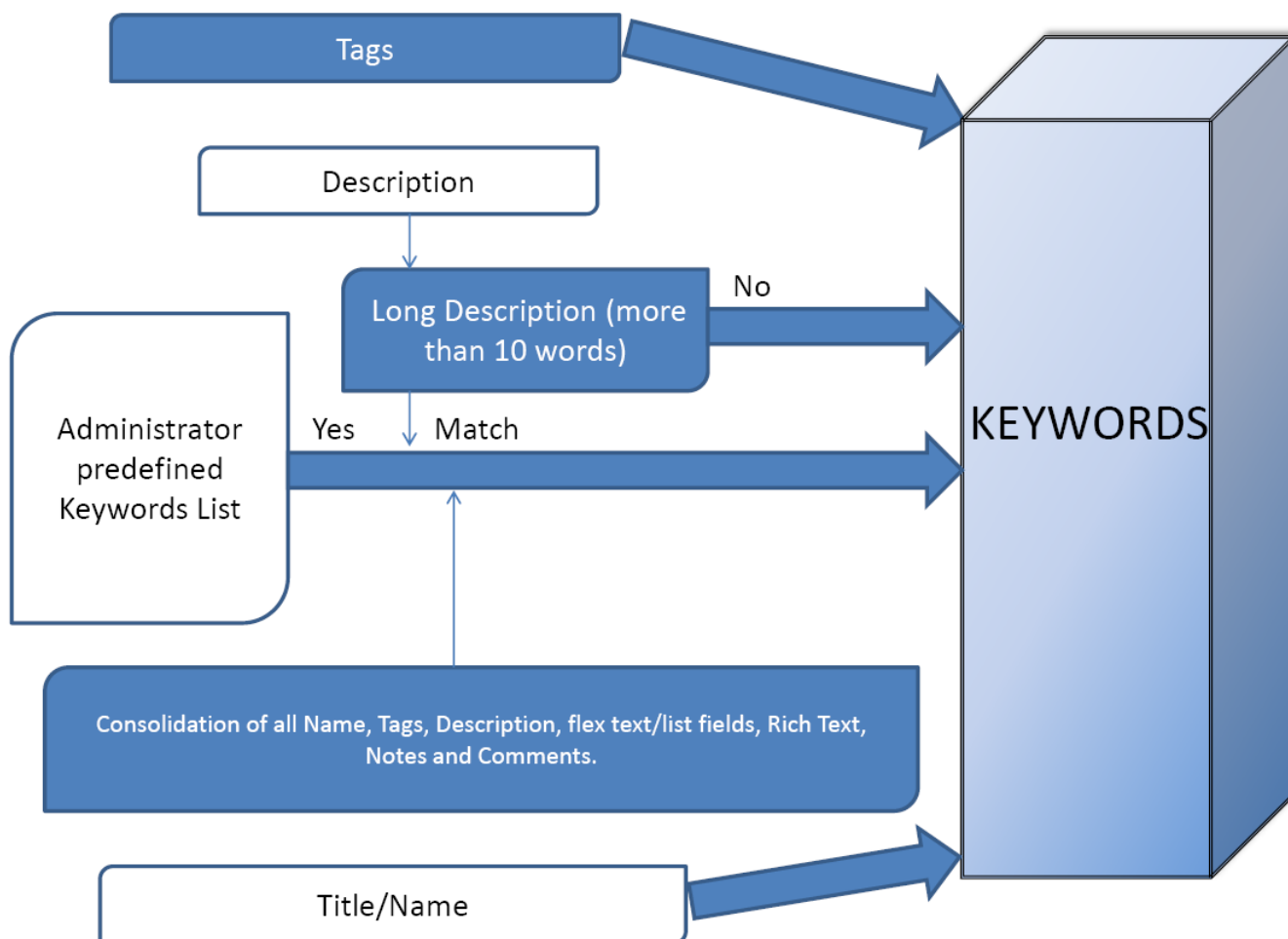
The following areas are used to generate keywords for an object when there are no predefined keywords entered by an administrator in the **Keyword Library**:

- All the words in the object **Name**
- All the tags associated with the object
- All the words from **Description**, if the description is less than 10 words

If there are predefined keywords entered by an administrator in the **Keyword Library**, then in addition to the above mentioned three areas, all the words from the following areas are tallied against the keywords in the **Keyword Library**:

- Object **Name**
- **Tags**
- **Description**
- All text, rich text and list flex fields
- **Notes and Comments**

All the matches will be added to the keywords for an object. This process is illustrated in the diagram below.




**Note** Stopwords are excluded from the keyword list and similar object search analysis. For a list of stopwords as defined by Oracle, see [http://download.oracle.com/docs/cd/B28359\\_01/text.111/b28304/astopsup.htm#CEGBGCDF](http://download.oracle.com/docs/cd/B28359_01/text.111/b28304/astopsup.htm#CEGBGCDF)  
[http://download.oracle.com/docs/cd/B28359\\_01/text.111/b28304/astopsup.htm#CEGBGCDF](http://download.oracle.com/docs/cd/B28359_01/text.111/b28304/astopsup.htm#CEGBGCDF).

Once the keywords of an object are generated, the set of keywords is used to run a Full Text Search across all the objects in the system. The Full Text Search returns the matching score for all the objects in CNM. The top five objects with the highest percentages of association display in the **See Also...** section of that current object. For more information see [Leveraging the See Also...](#).

## System Settings

From **System Settings**, you can modify the previously configured CNM system settings.

If you enter changes that you do not want to keep, click  to remove all the unsaved changes for each setting.

Any changes made to the system settings go into effect for users who log in after those changes have been applied by the Administrator, and therefore do not reflect in any user sessions that are concurrently running while the changes are made.

In order to see changes made by the Administrator, users should log out from their current session and log back in.

**Important** It is strongly recommended that you restart your application server after making and saving changes to the **System Settings** of CNM in order for all the changes to be implemented.

## Establishing System Settings

The following fields are configured for your CNM system settings after installation:

| Name                        | Description                | Modifiable | Values  |
|-----------------------------|----------------------------|------------|---|
| Schema Version              | Schema Version             | No         | 1.2.0.xx  |
| Authentication Provider     | Authentication Provider    | No         | Agile PLM or LDAP   |
| Mail Server                 | Mail Server                | Yes        | <a href="http://mail.your-company-name.com">http://mail.your-company-name.com</a>   |
| Mail Server Port            | Mail Server Port           | Yes        | 25  |
| Web Client URL              | Web Client URL             | Yes        | <a href="http://cnm-link:port/acnm">http://cnm-link:port/acnm</a>   |
| Search in Attachment        | Search in Attachment       | Yes        | Yes or No   |
| *Viewer URL                 | Viewer URL                 | Yes        | <a href="http://ucm-web-client:port/virtual/path/idc/jsp/autovue/csiApplet.jsp">http://ucm-web-client:port/virtual/path/idc/jsp/autovue/csiApplet.jsp</a> |
| *UCM Administrator          | UCM Administrator          | Yes        | XXXX  |
| *UCM Administrator Password | UCM Administrator Password | Yes        | *****   |
| CNM Home Directory          | CNM Home Directory         | Yes        | X:\xxxx\yyyy\zzzz   |
| Online Help URL             | Online Help URL            | Yes        | <a href="http://&lt;upkhost&gt;/agilecnm/hemi/agilecnm_gateway.html">http://&lt;upkhost&gt;/agilecnm/hemi/agilecnm_gateway.html</a>                       |
| File Server Type            | File Server Type           | No         | Agile PLM File Server or UCM  |

| Name                     | Description              | Modifiable | Values  |
|--------------------------|--------------------------|------------|---|
| File Folder Subclass     | File Folder Subclass     | Yes        | Dropdown menu of currently enabled file folder subclass types available in Agile PLM  |
| Agile PLM Server URL     | Agile PLM Server URL     | No         | <a href="http://your-agile-plm-server:port/virtual-path">http://your-agile-plm-server:port/virtual-path</a>                               |
| Agile PLM SSO Server URL | Agile PLM SSO Server URL | Yes        | <a href="http://your-agile-plm-SSO-server:port/virtual-path/PLMServlet">http://your-agile-plm-SSO-server:port/virtual-path/PLMServlet</a> |

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**Note** The fields with an asterisk (\*) above are not required and these fields will be uneditable when the **File Server Type** is set to Agile PLM because these options are valid only when the file server type is set to UCM file server.

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All of the fields above will have default values, according to prior configuration, once CNM is properly installed. For more information, see *CNM Implementation Guide*.

Some significant CNM behaviors are determined by the values of these system settings.

- The **Mail Server** value determines what server host is sending and receiving notifications for CNM users.
- The **Web Client URL** value is used to add an object reference to a CNM object's **Attachment** section. The URL is necessary to create a reverse link from the Agile PLM reference object back to the CNM object.
- The **Search in Attachment** value determines if the user can search the content of attachments associated with objects. When the setting is **No**, searches are limited to include only attachment names and descriptions.
- The **Viewer URL** value is necessary to be able to render a view of an attachment for a UCM file server configuration. If this value is set incorrectly or left blank, the user cannot view any attachment content.

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**Note** Without this value set, a user can still get attachments by saving them locally and then opening them in the native application for the attachment.

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- The **File Server Type** value informs the administrator which file server type was configured at the time of installation. The choices of Agile PLM File Server and UCM are available.
- The **File Folder Subclass** value displays the file folder subclasses currently available and enabled in Agile PLM. This dropdown list is dynamically produced each time you log in for a user session.

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**Note** If new subclasses are created and enabled in Agile PLM while in a current user session, click **Reset** to refresh the CNM System Settings and the new file folder subclasses are updated.

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When the **File Folder Subclass** property is not defined, the file folder subclasses are deleted or disabled in Agile PLM, then this property is empty and the action to add an attachment in CNM

is unavailable. It is recommended that the file folder subclass selection you choose for CNM object attachments be consistent to make it easier to find those file folders and attachments in Agile PLM.

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**Note** The **File Folder Subclass** property is uneditable for UCM configuration.

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- The **Online Help URL** value gives a location for users to be directed to documentation. If you have purchased a license for User Productivity Kit (UPK) content for CNM, this URL also directs you to your UPK help topics.
- The **Agile PLM SSO Server URL** value validates usernames and passwords for logging in to CNM from Agile PLM when there is an SSO configuration for users.

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**Note** If this value is left blank, CNM will automatically use the Agile PLM Server URL. This server and URL are the recommended setting for this value.

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