Oracle SCM Cloud

Using Innovation Management

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Get Help

Get Help in the Applications

Use help icons ② to access help in the application. If you don't see any help icons on your page, click your user image or name in the global header and select **Show Help Icons**.

Get Support

You can get support at My Oracle Support. For accessible support, visit Oracle Accessibility Learning and Support.

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Thanks for helping us improve our user assistance!





1 Introduction to Innovation Management

Overview of Innovation Management

Innovation Management promotes the abilities of the enterprise to build the best products. Innovation Management enables a company to:

- Collect **ideas** from different sources, collaborate on them, identify the best opportunities, and promote them as new or enhanced **proposals**;
- Identify key elements to build detailed **requirements** for these proposals;
- · Analyze their proposals using OTBI analytics; and
- Develop concepts supporting those proposals to ensure that the product goals are met.

These capabilities don't have to be done in any set procession of steps, but can be done in any order based on the enterprise's business processes. See "Brief of Innovation Process."

INNOVATION MANAGEMENT SOLUTIONS

The Innovation Management suite includes the following:

- **Product Requirements and Idea Management** supports and simplifies the innovation process with creating and managing ideas, requirements specifications, and requirements business objects.
- Concept Design Management supports defining a product in its conceptual phase, using concepts and proposals. Requirements, concepts, and proposals are designed to work together closely.

INNOVATION MANAGEMENT WORK AREAS

You can access the work areas of the Innovation Management solutions from the **Navigator** based on roles assigned to you. The three work areas of Innovation Management are as follows.

- 1. Activities related to ideas are done in **Ideas** work area, which is accessed by company employees and trusted partners and customers.
- 2. Activities related to requirements, concepts, and proposals are done in **Concept Design** work area, which is open to design managers, design engineers, and product managers.

BRIEF OF INNOVATION PROCESS

Entering ideas into the Ideas work area is the beginning of the innovation process. As ideas are enriched, grouped, and matured, they can be attached to a new or existing product proposal in the more restricted Concept Design work area. You can also convert ideas into more formal requirements specifications, which in turn serve as input for concept designs.

Another scenario might see new concepts developed without input from requirements or ideas. In this case, appropriate requirements specifications can be developed afterward, contributing to the maturing of the concept design.

Once a concept design is approved, structures of product concepts and product requirements specifications are delivered to Product Development or Agile Product Lifecycle Management (or other PLM application) for detailed design, creation of prototypes, and ultimately the introduction of a new product or enhancement.



Tasks, Clipboard, and Reports

You can view the side panel on the Overview page of any business object in Innovation Management, such as Ideas, Concepts, Requirements Specifications, and Proposals. Use this to access the **Tasks, Search, Clipboard, and Reports and Analytics** tabs.

Here is a brief description of what you can accomplish on these tabs.

Tasks

Use the **Tasks** list in the panel drawer to perform tasks.

The Tasks panel tab opens to links to create and manage each type of business object in Innovation Management. Regardless of the task that you're on, you can go ahead and create business objects in the user interface. Add information to any object as you create it; or, you can save it and add more data later.

Click the **Tasks** panel drawer to open the list of available tasks, grouped in three categories, namely, **Concepts, Requirements, and Proposals**.

- Each category includes a *Create* task, which lets you create and continue working on a new instance of that business object.
- Each category also has a *Manage* task, which lets you search for business objects, navigate to a specific object, and to modify it.
- The Requirements category contains two additional tasks, View Audit Trail and Link Requirements.

Clipboard

Use the **Clipboard** to speed up working in Innovation Management.

You can drag and drop, select and move, or copy and paste multiple items from the clipboard into the Relationship tables of **requirements specifications**, **ideas**, **concepts**, **and proposals**. You can also do this from the **Favorites and Recent Items** tabs available in the clipboard. The relationship tabs of these objects display the clipboard icon. The clipboard maintains a temporary copy of multiple items and gets cleared when you log out. Working with the clipboard, you can access previously viewed items or favorites, eliminate unnecessary searches, and improve productivity.

Note: This feature is available to you only if your implementor has opted in for the following: **Use Clipboard in Innovation Management**.

Reports and Analytics

Use **Reports and Analytics** in the panel drawer to create reports and analytics about business objects.

Quickly view or run analytics and reports that are related to your work in the Reports and Analytics pane. With the required privileges, you can create and edit analytics and reports here.

Notifications

You will receive email notifications when workflow tasks assigned to you advance through a workflow. They inform you about the occurrence of different events and actions you must take. You will receive notifications for each task you're assigned to, either by email or through the bell notification. You can access the in-app notifications either in the Things to Finish section or the notifications list in the global header.



Related Topics

- Reports and Analytics for Innovation Management
- Watch Video: View Product Management Notifications

Search Options

Use Search in the panel drawer to search for concepts, requirement specifications, and proposals.

You can modify the search criteria operators with Advanced Searches. For example, Starts With, Equals, or Contains, using the lists with each field you must search. You can save and re-use the list of search attributes and their parameters. Later, you can modify the parameters of a saved search and save it with a new name or save over the existing one.

Search for Users

You can search for users by first name, last name, email, and user name.

Users are displayed on the interface based on the display format set up by your administrator.

Note: The default setting for user display format is applied on all pages and tabs except the **Attachments** tab. The Attachments tab always displays the User Name.

Track Approval History

The View Approvals menu action provides approval history details of Submitted or Approved concepts, proposals and requirement specifications.

You can view details such as the:

- date when the object was submitted for approval
- user who submitted the object, the user type (Approver or Observer)
- action taken (approved, rejected, canceled, or terminated)
- object type (proposal, concept, or requirements specification)
- · version, and
- · comments provided.

Remember that this action appears in the menu only when the object moves beyond the **Draft** state. The action helps owners of the objects easily access workflow approval history and view approval history details.





2 Ideas

Product Ideas

In the **Ideas** work area, the **Overview** page displays various statistics about existing ideas.

Filter By

Select a type from the list to filter the displays according to a single idea type. You can separately or additionally populate the Date Range fields to filter the displays within the selected time period.

Latest Updates

Shows the number of ideas in various categories, governed by the Filter By values.

Customer Idea Status

Shows the status of all ideas that have at least one customer.

Top Customer Contributors

Shows the top five customer contributors.

Top Contributors

Shows the five internal users who contributed the most ideas. Each total is broken down by status of the ideas.

Tags

Shows the tag cloud for all ideas in the application, governed by the Filter By criteria. Each cited tag is an active link to the search results on the Manage Ideas page.

Idea Types

Use idea types to categorize and find similar ideas. Your administrator creates the idea types for your company, and defines specific attributes for each idea type. Remember that you can't change the type of an idea after you create the idea. Add and modify the attributes that define your idea on the Edit Idea page.

Related Topics

Product Ideas



Post an Idea

Use the **Ideas** work area to create and manage product ideas. You can add new ideas, associate customers, and add attachments from the **Post Idea** dialog box.

- 1. Navigate to the **Ideas** work area.
- 2. To post an idea, in the Manage Ideas page, click the **Post Idea** button.
 - Enter a name for your idea.
 - o In the **Description** field, enter a brief description of your idea.
 - Select a Type.
 - o Click + in the **Customers** field and associate new customers.
 - Click + in the Attachments field to add attachments.
 - The Mark as Favorite check box is selected by default. If required, you can deselect it.
 - Click Save and Close.

Related Topics

· Watch Video: Post an Idea

Edit and Manage Ideas

When you create an idea, the Edit Idea page appears with the idea enabled for editing. Edit the name, description, and status of an idea and add a tag or tags to an idea.

The **Basic** search in Manage Ideas has two fields, **Idea and Description**. Click the **Advanced** button to expand to additional fields to refine your search criteria. This button is a toggle, so when the Advanced fields are visible, the button changes to **Basic**. A search returns a list of ideas that are active links and appear on the **Manage Ideas** page.

Listed on the **Actions** menu are the following:

- Send: opens a dialog to send notification to other users. You can even add a message in the notification.
- **Create Proposal**: a proposal is created that contains the content of the idea. The new proposal and idea appear on each other's Relationships table.
- Manage Team: controls who has access to read and modify the object.
- Delete: opens a dialog to delete the object.

Add Tags to an Idea

Add one or multiple tags to an idea using the Tags link from the Edit Idea page of an idea.

With an idea selected and open, click the **Tags** link. The Tags dialog opens and you may type one or more words. The word space is the delimiter. For example, if you type "mobile device", tags are created for both "mobile" and



"device". When you're done, click the **Save and Close** button. The tags are added into the tag cloud shown on the Ideas **Overview** page. The application sorts the tags automatically, so if you type "mobile device", when you reopen the Tags dialog, you will see "device mobile".

Tags are searchable as a string through Advanced search.

Associate Customers with Ideas

Once you create an idea, it opens in the Edit Idea page. To associate ideas to a customer or customers click the + icon next to the **Customers** field on the General Information side tab. The Associate Customers dialog appears. You can also create or modify the list of Available Customers, by opening the **Overview** page, and clicking the **Manage Customers** icon to open the Manage Customers dialog.

Add Relationships and Attachments to Ideas

Use attachments to enrich the idea with supporting information. Attachments can be in the form of files, text, and URLs. Check in and check out files, view versions, download them, and view details in both Ideas and Proposals. Files are automatically uploaded to the server. If a graphic is available, it's the basis to generate a thumbnail picture on that idea's page. To add links to objects in Innovation Management, and Product Development click the Relationships tab. Click the Select and Add icon, search for and add objects.

Comment on Ideas

Anyone who's permitted to create and search for ideas can add comments to an idea. Comments are used to contribute to a discussion about the proposed idea. The more that an idea with merit is collaborated on at this stage, the greater likelihood that it could evolve into a proposal, a design, and eventually a product. Click the **Comments** link on **Manage Ideas** page to add comments to an idea. Alternatively, leave a comment in the **Comments** panel on the **Edit Idea** page. In both sequences, click **Publish** when you're done; no further action is required.

Enrich Ideas

Once you create an idea you can enrich it.

If the idea is generated to help certain customers, you can associate the idea with these customers.

- To choose customers, on the General Information tab, click the Associate Customers icon.
 - In the Associate Customers window, select customers from the Available Customers panel, and move them to the Selected Customers panel.
 - o Click OK.
- To enter details about your idea using rich text tools, click the Content tab.



- To link other Innovation Management objects that relate to your idea, click the **Relationships** tab.
 - Click the Select and Add button.
 - Use the search dialog to search for and add objects. Click OK.
 - Click Save.
- In the **Attachments** tab, add files, text, or URLs to further define your idea and add supporting information.
 - To add an attachment, click the Add icon.
 - Use the Add dialog to add a file or URL. The Title column is automatically updated with the name of the file.
 - Enter a brief description and click **Save**. The attachment is added.
 - **Note:** To remove an attachment, select the row and click **Delete**.
- To add comments about the idea, click the Comments tab. Comments help bring in different perspectives about the idea.
 - Enter a comment and click the **Publish** button. Comments appear in the Comments panel.
 - Click Save.

To save the idea click **Save and Close**.

Vote on Ideas

Every user can click a simple vote to indicate liking or disliking a specific idea. This provides another means that helps product managers to assess the usefulness and acceptability of the idea. The **Like** icon or **Dislike** icon registers your opinion and keeps a tally of votes on each idea. Click the **Like** or **Dislike** link in the **Your Vote** area on **Manage Ideas** page to add votes to an idea. You can also vote in the **Vote Summary** panel on **Edit Idea** page. In both sequences, when you have voted, no further action is required.

Accept Ideas

New ideas are given a status of Draft. After reviewing and further detailing or enriching an idea, you may accept or reject it. On the **Edit Idea** page, select Accepted or Rejected in the **Status** field, then save the idea. Search ideas based on their status, which is displayed on the **Manage Ideas** page.

View Idea Team Information

View complete team information, including team member email addresses in Oracle Transactional Business Intelligence (OTBI). Select an idea from the Idea Name list, to view team member names, employee email addresses and the business unit they belong to. Select a team member to view the list of ideas they're members of and the number of ideas they may have contributed. Track ideas and notify members of idea updates through OTBI alerts.



Create a Proposal from an Idea

To create a proposal from an idea:

- 1. Navigate to the **Ideas** work area.
- 2. On the Manage Ideas tab, select an idea.
- 3. Select Actions > Create Proposal.

Alternatively, you may search for and open an idea, then click the **Edit** button, click **Actions** > **Create Proposal**.

4. Generally you would accept the same name for both the new proposal and the idea from which it came. But there could be a reason to give the proposal a modified name or entirely new name, per your company's practices.

Add a description.

- 5. Click the Save and Close button.
- 6. On the **Relationships** tab of the proposal, you can find a link back to the idea that was used to create this proposal. Go ahead and click that link.
- 7. Back on the idea's **Relationships** tab, you can now find a link to the proposal.

This might be a good time to confirm certain things such as a difference in the name of the idea and the proposal, or adding information in the idea's description about its evolution to a proposal.

Related Topics

· Watch Video: Create a Proposal from an Idea





3 Proposals

Product Proposals

A product proposal represents the business plan for a proposed new concept, new product, sustaining product or a product to be phased out. The product proposal contains financial information such as cost and revenue of the product. It also contains milestone and resource data that represents execution details.

Use the **General Information** tab of a proposal to enter basic information about the proposal. Update and modify the values in the **Name** and **Description** fields of a proposal within the proposal view. To define a complete proposal, add details about financial performance, product milestones, and other useful information. As an administrator, use Application Composer to configure each section of your proposal, adding additional attributes as necessary.

Use the side tab on product proposals to add comments, and view all comments for a proposal. You can add comments for any status of a proposal and track them by time and date and also set a comment as Open or Closed. You can also track them by the unique numbers on the General Information page. These numbers are assigned automatically to proposals and concepts only if your administrator has configured the number generation method for concepts class. You can add comments to a proposal, independent of the status it's in; even if the proposal is in the read-only mode.

On a daily basis, multiple proposals are created globally and in various currencies. The Proposal Conversion Rate to US Dollar attribute enables aggregation of costs and revenue in US dollars and lets you factor the conversion rate into reports and analytics.

Related Topics

- What's the difference between product proposal Save As and product proposal Save As New Version
- Can I create a new version of a product proposal that's in submitted status
- Configure Unique Number Attribute for Concepts and Proposals

Actions on Proposals

On proposals, the **Actions** menu offers ways to modify the business object or gather more information about the object. The options available are:

- Open Concept: opens the related concept.
- Send: opens a dialog to send notification to other users. You can even add a message in the notification.
- Bookmark URL: bookmarks the url for future reference clicking this will redirect you to the website the bookmark is linked to.
- View Version History: view previous versions of the product proposal, irrespective of the product proposal version you're currently on.
- **View Approvals**: a quick-view access to the Approval History of a Submitted or Approved Proposal (from within the object).
- Manage Team: controls who has access to read and modify and access the object
- Export: opens a dialog to configure an export procedure of the object's content.



- **Terminate Workflow**: terminates the approval workflow of a proposal.
- **Delete**: opens a dialog to delete the object.

Product Proposal Workflows

Proposals are routed through a workflow to either approvers or observers.

The link available from the Worklist directs the user to add users with the correct privileges as approver or observer. The search results available are filtered to only return users with the correct privileges according to observer or approver. Approvers require the manage privilege and observers require the review or manage privilege.

The workflow statuses can include:

- Pending
- Submitted
- Approved

Note: While a concept and its corresponding proposal belong together, they don't have to share the same approval workflow, and each may be approved independent of the other.

Approval Statuses

The status of a proposal changes from Submitted to Approved only when all the assigned approvers have agreed on the proposal. A proposal in the Submitted or Approved status can't be edited. But if you reject a proposal it reverts to the Draft status, and you can edit it. If the latest version of a proposal submitted for approval isn't approved, then you can't submit the proposal.

Also, remember that you can't delete approved proposals. Once approved, the proposal becomes a record of the business justification for cost, revenue and resource justification. Once approved, a user generates a new revision to collect the actual cost, resource, revenue data and measure against the original estimate or justification.

You can also save the approved proposals or make a copy using the Save As or Save As New Version features and can serve as records of funding for audit. You can store funding requests or projected costs (Costs tab) for product development along with the actual funds used (actual costs).

Note: While a proposal and its corresponding concept belong together, they don't have to share the same approval workflow, and each may be approved independent of the other.

Note: Avoid self-approving any Innovation Management object as this can result in stuck workflows. Remember that the workflow only gets stuck if self-approval isn't allowed, which can be changed in the BPM taskflow setup.

Add Details to a Proposal

To add details of content, cost, revenue and resources to a proposal:

1. Navigate to the **Concept Design** work area.



- 2. Open the **Search** tab and search for a proposal:
 - Select Proposals in the Search For field.
 - Enter the name of the proposal and click Search.
 - o From your search returns, choose and open a proposal.
- 3. On the **General Information** tab, enter information in the Business Objectives field, as well as other fields. Click **Save**.
- 4. On the **Content** tab. enter information into the Business Case field. Click **Save**.
- 5. On the **Costs** tab, enter cost data:
 - Click Add.
 - Select values for Category, Type, and Status.
 - Enter an amount and select a date by which you will incur the cost.
 - Click Save.
- **6.** On the **Revenue** tab, add rows of revenue information:
 - Click Add.
 - Select values for Category, Type, and Status.
 - Enter an amount and select a date by which the revenue is expected.
 - Click Save.
- 7. On the **Resources** tab, add rows for the type of workers required, and when you require them:
 - o Click Add.
 - Select values for Category, Pool, and Status.
 - Enter values for Headcount, Start Date, and End Date.
 - Click Save.

Related Topics

Watch Video: Add Proposal Details

Submit a Proposal for Approval

To submit a proposal for approval:

- 1. Navigate to the **Concept Design** work area.
- 2. To search for a proposal, do the following:
 - From the Tasks panel drawer, click Search.
 - In the Search For list, select Proposals.
 - o In the **Search** list, select **Proposal**.
 - Enter the criteria and click Search.



- 3. To submit the proposal for approval, do the following:
 - From the search results, click the proposal link.
 - o Click **Actions > Submit for Approval**. The Submit for Approval dialog opens.
 - Click the Reviewers icon. The Select and Add: Reviewers dialog opens.

Click the radio buttons for Users or User Groups, and click Search, and select names.

Or, simply type in the name of a reviewer you know - but still click Search to bring up the name and select it.

Select one or more reviewers. Click OK.

- **Note:** Ensure that you don't add yourselves as approvers.
- o In the Submit for Approval dialog, click Submit.
- **4.** When reviewers sign in, they can approve or reject from the notification.

See how this process works in a practice environment, by signing out, and then logging back in as the approver. The approver user sees a notification about this proposal as soon as they log in, and they can approve it by clicking the notification.

When you log back in as yourself, and open the proposal, you can see that it's approved.

Review a Submitted Proposal

- 1. Click the **Notifications** icon.
- 2. Click the notification link to the proposal you need to approve or reject.
- **3.** In the new window review the content of the submitted proposal, such as Details, Proposal Details of Business Use Case Summary, General Information, the Comments, and History.
- 4. Click Approve or Reject.

Search for the proposal object and see the updated status reflect your review.

Product Proposal Versions

Versioning a product proposal stores and tracks all changes that occur during the review and approval process. It helps in capturing and retrieving the evolution of information for a product proposal.

Product Proposal Versioning

You can view previous versions of the product proposal, irrespective of the product proposal version you're currently on. You can only add the latest version of a product proposal to a scenario. If required, save an older version of a product proposal into the latest version. You can't edit a proposal that's submitted for approval.

Product Proposal and Product Concept

A product proposal and a product concept work in unison, but they can follow independent versioning. The newly created proposal is always in Draft status. The concept version displays the latest version of the concept.



Search

When you search for a product proposal, the search results display the latest version of the product proposal.

Save As

When you do a Save As on a specific version of a product proposal, you can select any existing version of a product proposal.

Delete a Proposal

You can only delete the latest version of a proposal in the Draft status. If several versions of the proposal exist, the **Delete** option of the Actions menu appears only in the latest version of the proposal. While deleting version 1 of the proposal, the proposal and the associated concept are deleted only if the concept is in the draft status in version 1 as well. If not, an error message warns you that you can't delete the concept.

How You Update a Product Record Using the Oracle ADF Desktop Integration Tool

Use the Oracle ADF Desktop Integration tool to update the metrics data of a product proposal. Make the changes in the spreadsheet and then import the data changes back into the application. Here's how you do this from the **Resources** tab of a product proposal.

Export and Import Data Using the Oracle ADF Desktop Integration Tool

- 1. Go to the **Resources** tab of a product proposal.
- 2. Click **Edit in Spreadsheet** from the **Actions** menu.
- 3. Enter your login credentials. If you already provided your login credentials to use the Oracle ADF Desktop Integration tool for another open Excel spreadsheet, then you don't have to provide them again.
- **4.** In the open Excel file, you can update data. Ensure that there are no empty rows in between, otherwise the data doesn't import back into the application.
- 5. From the tab where the exported data is displayed in the Excel spreadsheet, click the **Upload** option.
- 6. When the upload finishes importing the data back into the application successfully then the modified data displays its updated status in the **Status** column.
 After uploading changes from the Excel spreadsheet, open the object once again. Changes don't display even if the object is saved.

Proposal Metrics

A proposal metric is rolled up from the product metrics of all the proposals in Innovation Management.

Revenue - the following metrics aren't configurable and the rollup calculation is the SUM.



Metric Name	Description
Projected Revenue	Sum of all projected revenues for a product
Actual Revenue	Sum of all actual revenues for a product

Costs by Type - the following metrics aren't configurable and the rollup calculation from product to proposal is the SUM.

Metric Name	Description
Projected Cost	Sum of all projected costs for a product
Projected Development Material Cost	Sum of all projected development material costs for a product
Projected Development Variable Cost	Sum of all projected development variable costs for a product
Projected Development Fixed Cost	Sum of all projected development fixed costs for a product
Projected Development Labor Cost	Sum of all projected development labor costs for a product
Projected Production Material Cost	Sum of all projected production material costs for a product
Projected Production Variable Cost	Sum of all projected production variable costs for a product
Projected Production Fixed Cost	Sum of all projected production fixed costs for a product
Projected Production Labor Cost	Sum of all projected production labor costs for a product
Projected Development Cost	Sum of all projected development costs for a product
Projected Production Cost	Sum of all projected production costs for a product
Actual Cost	Sum of all actual costs for a product
Actual Development Material Cost	Sum of all actual development material costs for a product
Actual Development Variable Cost	Sum of all actual development variable costs for a product
Actual Development Fixed Cost	Sum of all actual development fixed costs for a product
Actual Development Labor Cost	Sum of all actual development labor costs for a product
Actual Production Material Cost	Sum of all actual production material costs for a product



Metric Name	Description
Actual Production Variable Cost	Sum of all actual production variable costs for a product
Actual Production Fixed Cost	Sum of all actual production fixed costs for a product
Actual Production Labor Cost	Sum of all actual production labor costs for a product
Actual Development Cost	Sum of all actual development costs for a product
Actual Production Cost	Sum of all actual production costs for a product

Resources (Number of heads) by Resource Pool - the following metrics aren't configurable and the rollup calculation is the SUM.

Metric Name	Description
Projected Resources	Sum of all projected resources for a product
Actual Resources	Sum of all actual resources for a product

The following metrics aren't configurable and are derived from revenue, cost, and baseline date. You enter the Market Launch date information.

Metric Name	Description
Projected Margin	Difference between the Projected Revenue and Projected Cost Product Metric
Actual Margin	Difference between the Actual Revenue and Actual Cost
Net Present Value	Difference between present value of cash inflows and the present value of cash outflows. Future cash flows are discounted by the discount rate to convert them to present cash flows.
Internal Rate of Return	The discount rate that makes the Net Present Value of all cash flows for a product equal to zero.
2 Year Revenue	Sum of revenues for first 2 years after product launch.
3 Year Revenue	Sum of revenues for first 3 years after product launch.
5 Year Revenue	Sum of revenues for first 5 years after product launch.
Return on Investment	Ratio of the benefit gain minus cost of the product divided by the cost to develop the product.



Metric Name	Description
Payback Period	Period of time required for the return on an investment to repay the sum of the original investment on the product.

The following scoring metrics are configurable and entered by the user.

Metric Name	Description
Alignment	Alignment for proposal on a scale of 1 = Low to 5 = High. Used for manual ranking only.
Impact	Impact for proposal on a scale of 1 = Low to 5 = High. Used for manual ranking only.
Competitive Advantage	Competitive Advantage for proposal on a scale of 1 = Low to 5 = High. Used for manual ranking only.
Supply Chain Fit	Supply Chain Fit for proposal on a scale of 1 = Low to 5 = High. Example metric for manual ranking.
RnD Know How	RnD Know How for proposal on a scale of 1 = Low to 5 = High. Example metric for manual ranking.
Product Strategic Fit	Scale of 1 = Low to 5 = High. Used for manual ranking only.
Probability of Commercial Success	Probability that the product can be sold commercially
Probability of Technical Success	Probability that the product can be built successfully
Risk Subjective	Overall risk for product on subjective basis, classified as High, Medium and Low.
Risk Numeric	Overall risk for product on a scale of 1 for Low to 5 for High
Market Growth Percentage	Average year over year market growth percentage for the product
Market Share Percentage	Most recent market share in percentage for the product.
Product Categorization	Category in which the product is classified

Calculation of metrics

Metric Name	Description
Resource Value Index	Net Present Value divided by Projected Resources for product
Cost Value Index	Cost Value Index is Net Present Value for product divided by Projected Costs for product



Metric Name	Description
Resources productivity index	Expected Commercial Value divided by Projected Resources for product
Cost productivity index	Expected Commercial Value divided by Projected Costs for product
Business Unit Strength	Composite metric to measure business unit strength in building and selling the product.
Market Attractiveness	A composite metric to measure market share and market growth for a product.
Expected Commercial Value	Expected Commercial Value for a product is its Net Present Value factored by its probability of commercial success.





4 Requirements

Product Requirement Specifications

Requirements specifications are documents that define market requirements for a particular purpose, such as product requirements or business requirements. Two types are ready to use: requirements specification and test case specification. But you can create your own types, and define attributes specific to each type. Creating new types and modifying them is the administrator's task.

The **Type** attribute permits grouping and finding requirements specifications by their type. Define new attributes in Application Composer that are specific to a given type of requirements specification.

In a requirements specification, you create a hierarchy of requirements. You can even include other specifications in the hierarchy. A graphical navigator helps you see the structure, relationships, and dependencies. You may find the table view useful for updating multiple attributes or viewing a summary analysis.

Create a Requirements Specification

A **Requirements Specification** is a document that specifies market requirements for a particular purpose. For instance, a market requirements document, a product requirements document, or a business requirements document.

- 1. Navigate to the **Innovation Management** work area.
- 2. Use the **Tasks** panel to create a requirements specification.
 - Click the Create Requirements Specification link.
- **3.** Enter a name for the new specification.
 - You can add an optional Description. You must select a **Requirement Type**.
 - Click Save and Close.
- **4.** A requirements specification is often a collection of separate requirements. It's also known as a **requirement line**, because you can find separate lines beneath the parent requirements specification.
 - Select **Requirements** from the list next to the **Add** icon.
- Enter a name for the requirement as it appears in this requirements specification.
 You may click **OK**, or continue to add requirements that appear in the list by clicking the **Create Another** button.
- To add requirements that exist but don't appear in the list, use Actions > Search and Copy to find the ones you want.
 - When you're done, click **OK**.
- 7. After adding a few requirements, use the **Actions** menu to organize them into a hierarchy.
 - Change the indent on a requirement, making it a child to the requirement to which it's indented.
 Just as requirements specifications may contain a few or many requirements, a requirement line may become the parent of a few or many requirements. In this way, a requirement becomes a requirements



specification. For this reason, there aren't any restrictions to pulling a requirements specification in to a parent requirements specification.

8. When you're done, click Save.

Related Topics

Watch Video: Create a Requirements Specification

Save As New Version

You can duplicate a new version of a requirements specification before it goes through the approval process, as well as after it's approved. A new version can be created only when the requirements specification is in either the Draft or the Approved states and the status of the newly created version is always Draft. This process is to baseline a requirements specification.

With the requirements specification open, use the **Actions** list and select **Save As New Version**. It can be named according to your needs; no file name is prompted by the application. Remember that, once you create a file and name it by this method, it can't be renamed.

The new iteration of the requirements specification is a replica, except that information in the Comments and Impacts area isn't carried over to the new requirements specification.

After you use the **Save As New Version** option from a specific version of a requirements specification, the action is no longer available on that version.

Modify a Requirements Specification

To modify a requirements specification:

- 1. Navigate to the **Concept Design** work area.
- 2. Use the **Search** panel and search for and open a requirements specification.
 - In the Search For field, select Requirements Specifications.
 - Enter the name of the specification and click **Search**.
 - Click the specification in the search results to open it.
- **3.** The requirements specification has a list of requirements. Use the **Actions** menu to organize the requirements hierarchy. Some things you might change are:
 - Reorder the requirements using Actions > Move Up or Actions > Move Down;
 - Make one requirement become a child to another by increasing its indent in the structure. Use **Actions** > **Increase Indent** or **Actions** > **Decrease Indent**; or,
 - Move a requirement to a different place, in the specification; you must match a requirement's indent with others to move it in relationship to them. As you move a requirement, you may find that it belongs on a different hierarchy level.

Along with adjusting hierarchy through directional moves, you can move requirements to new places in the requirements specification.



With a little practice, you can make many changes to a large requirements specification quickly. It's good to click **Save** when you have made several adjustments, so you don't have to repeat these adjustments if you do too much and want to return to a hierarchy that you had established.

4. Select the **Table View** icon in order to modify multiple attributes guickly and review the analysis.

There's an **Analysis** column of pie charts for things like **Total Estimates** and **Fulfillment Status**, which can prompt further changes or reverting to previous states.

The Warning icon next to Total Estimates indicates that there's at least one field that's empty. You can experiment with different estimates in the empty field to see how it affects the Total Estimates. If you have filled in an estimate and click Save, you see the Warning icon disappears and the various fields are updated with the new values.

5. Click the refresh icon to update the **Analysis** panel, as you modify attributes and save them.

Related Topics

Watch Video: Modify a Requirements Specification

Approve a Requirements Specification

To approve a requirements specification:

Note: Avoid self-approving any Innovation Management object as this can result in stuck workflows. Remember that the workflow only gets stuck if self-approval isn't allowed, which can be changed in the BPM taskflow setup.

- 1. Navigate to the **Concept Design** work area.
- 2. Use the **Search** panel to search for and open a requirements specification.
 - In the **Search For** field, select **Requirements Specification**.
 - o Enter the name of the specification and click **Search**.
 - Click the name of the specification in the search results.
- 3. Select **Actions** > **Submit for Approval**. The Submit for Approval dialog opens.
- 4. Click the Reviewers icon. The **Select and Add: Reviewers** dialog opens.
 - o Click the radio buttons for Users or User Groups, and click Search, and select names.
 - Or simply type in the name of a reviewer you know but still click Search to bring up the name and select it.
 - Select one or more reviewers.

Click OK.

- 5. Click Submit.
- **6.** When reviewers sign in, they can approve or reject from the notification.

In a practice environment, you can see how this process works by signing out, and then logging back in as the approver. The approver user sees a notification about this requirements specification as soon as they log in, and they can approve it by clicking the notification.

When you log back in as yourself, and open the requirements specification, you see that it's approved.



Overview of Requirement Structures

On a requirements specification, you can add or order one, several, or many requirements, as well as other requirements specifications, into a hierarchy. This composes a requirements **structure**. A structure provides all the details of what's expected of the product being described or proposed by the top-level requirements specification. A requirements specification is supported and enriched by its structure which is composed of requirements.

Build a Structure

Create requirements by typing-in, or by searching requirements from another requirements specification. Create and add requirements to a structure. You can also search for and add requirements specifications to the structure.

A requirements specification and its structure of requirements is displayed and managed in the **Requirements pane**, of the named business object's Edit Requirements Specification page. Use the **Move Up** and **Move Down** commands on the Requirements pane **Actions** list to adjust the order of requirements.

Requirements can be organized as a flat-list or in a hierarchy. Use the **Increase Indent** and **Decrease Indent** commands to establish hierarchy, or parent and child sequences of requirements. These commands are also on both the **Actions** list. If a movement command or icon is grayed out, that movement can't be performed on the selected requirement. Move the selected requirement away from its parent, and you quickly learn the internal rules of movement in the structure.

You can also select and move a requirement anywhere in the structure. Be sure to save the modified requirements specification when you're ready to leave its page.

A requirement is sometimes called a requirement line because it fills another line of the structure of a requirements specification. Create multiple layouts for requirement lines within a specification by configuring each layout to become active when it meets certain criteria. Use groovy scripting in the Application Composer to define the criteria.

Related Topics

• Edit a Structure of Requirements

Edit a Structure of Requirements

Creating, naming, and enriching requirements is done in the context of building a structure of requirements within a top-level requirements specification. A requirement is always part of a structure in a requirements specification.

Manage the structure and content of a requirements specification on any **Edit Requirements Specification** page, using the same tools that you built it with.

To add a requirements specification or requirement to the structure at a lower level of the selected object in the structure, use **Search and Copy** from the **Actions** menu.

Use **Move Up** and **Move Down** to adjust the order of its requirements. Use **Increase Indent** and **Decrease Indent** to adjust the parent-child hierarchy of the requirements. Or select and move objects from one part of the structure to another.

Remember that no modification of the structure is committed until you click **Save**.



Related Topics

Overview of Requirement Structures

Manage Requirements Specifications

User Interface Details in Requirements

On an **Edit Requirements Specification** page, as you select an object in the tree structure within the **Requirements** pane, the heading and contents of the opposite pane changes.

For example:

• If the top-level requirements specification is selected, the pane's heading is **Requirements Specification:** [named object]. The pane's content is the General Information tab of the requirements specification.

When you click the **Save As** option in **Save and Close** button, a new requirements specification is created with structure.

If a requirement is selected, the pane's heading is Requirement: [named object]. The pane's content is
the General Information tab of the requirement, which contains different attributes than a requirements
specification. The Content field of requirements has a large capacity and full Rich Text Editor functionality. As a
requirement is enriched, the description can add fully formatted text, technical specifications, and graphics.

Note: Attachments tab is another way to enrich the requirement with graphics, URLs, documents, and so forth.

Standard View and Table View

On a requirements specification's **Edit Requirements Specification** page, the default view is the **Standard** view. Click the grid icon for the **Table** view, which presents the structure's items in an editable table format.

The Table view is a powerful editor, as you can edit all rows of requirements in a requirements specification - attribute by attribute - without having to open each requirement or even select its row. You can even view and edit a requirement's description in the Content field, in a Table view row, again without opening, editing, and saving the requirement. (You must reattach a document or graphic file that's modified, or reestablish a URL link that's changed.)

Other Buttons and Links

There are also **Save**, **Save and Close**, and **Cancel** buttons. Save and Close has a list, **Save As** which copies the structure as well. You can create a duplicate of the requirements specification, giving it a new name and editing the description, in the Save As process.

Related Topics

- Tabs on Requirements Specifications and Requirements
- Add a Requirements Specification to a Requirements Specification
- Actions on Requirements Specifications and Requirements
- Requirement Attributes that are Collected in Requirements Specifications



Tabs on Requirements Specifications and Requirements

The tabs distribute information and data about the selected requirements specification or requirement.

General Information Tab

The General Information tab provides basic information about all requirements specifications and requirements. It has a **Content** field for a full description of the requirement, which is enhanced by the Rich Text Editor capability. The Content field also accepts graphics, attachments, and URLs; since it supports the description and creation of the new item or product, you can even insert and format programming code.

The General Information tab on requirements specifications includes the **Requirements Specification**, **Description**, **Type**, **Status** (read-only), and **Product** attributes.

The General Information tab on requirements carries the scoping attributes, which are **Priority**, **In Scope**, **Fulfilled**, and **Estimates**.

Attachments Tab

The Attachments tab on a requirements specification displays a requirements specification, requirement or other files that are attached to it.

You can also add or upload a file or a URL to the requirement to provide a more detailed information about the requirement. Click the **Add** icon or the **Add** option from the **Actions** menu to add an attachment. Select the **File** or **URL** from the Type column. Click Choose File to select a file name or URL. To delete an attachment, select the row in the attachments table and click the **Delete** icon or the **Delete** option from the **Actions** menu.

Relationships Tab

The Relationships tab of a requirements specification displays the Innovation Management objects that are related to it.

On the Edit Requirements Specification page, click the Relationships tab. Click the **Select and Add** icon to add relationships. The **Search** field lists objects based on the user access to these objects. Ensure that you have the Review or Manage privilege on an object to add that object as a relationship to a requirements specification.

You can also delete object relationships using the **Delete** action.

Relationships Summary Tab

On a requirements specification, the **Relationships Summary** side tab has two tables. The Relationship table lists requirements in the structure that carry relationships. Also on a requirements specification, the Impacts Components table lists impacts from requirements in the structure.

The tables on this tab of requirements specifications are read-only tables. They automatically aggregate all established relationships with other business objects from all of the requirements in the requirements specification's structure. So, relationships created by users in individual requirements are summarized in the top-level requirements specification.

Analysis Tab

The Analysis tab shows a graph with estimates and fulfillment status; a few prerequisites are essential to populate this.

An analysis helps you make decisions based on the data you gather from the tables or graphs.



Related Topics

- Relationships with Other Business Objects
- Requirement Attributes that are Collected in Requirements Specifications
- User Interface Details in Requirements

Actions on Requirements Specifications and Requirements

On requirements specifications and requirements, the **Actions** list items offer ways to modify the business object or gather more information about the object.

Listed on the **Actions** menu are the following:

- **Send**: opens a dialog to send notifications to other users. Select users from the list in the Send dialog box and add a message to the notification, to help solve issues.
- Launch Graphical Navigator: opens a graphical display of the business object and its related objects. It's also a useful tool to understand details about large requirements structures.
- Save as New Version: saves the object with the same content, but with a new name.
- Manage Team: controls who has access to read and modify the object. From the Allow Access To setting, select
 an option Team members only or Everyone to select users to have access to the object.
- Submit for Approval: opens a dialog to name who will receive the object for approval.
- **Export**: opens a dialog to configure an export procedure of the object's content. Export Requirements Specifications and Requirements to share and collaborate with others. Download history reports to either HTML, PDF, Word or XML formats for future reference. Remember that history is recorded only if the version of the requirements specification is two and higher.
- **Generate Traceability Report**: on requirements specifications and concepts, launches a report that lists administrator-defined attributes and helps you understand details. Click **Generate Traceability Report** to run a report in either HTML, CSV or XML formats. Click **View Audit Trail** in the Tasks panel to view the historical records of the export and traceability reports generated.
- **Terminate Workflow**: terminates the approval workflow of a requirements specification.
- Delete: opens a dialog to delete the object.
- View Approvals: a quick-view access to the Approval History of a Submitted or Approved requirements specification (from within the object). The dialog displays a read-only summary that corresponds to the History section of the worklist notification. (You can't approve or reject the requirements specification with this dialog.) Remember that the View Approvals action appears only when the requirements specification moves beyond the Draft state.

Related Topics

- Overview of the Graphical Navigator
- Save As New Version
- Traceability Report
- · What's the difference between a managed team and an approval or review team



Submit a Requirements Specification for Approval

Approving a requirements specification isn't required, but the review and approval process helps to codify the completion of the requirement design work. An approved requirements specification is locked from further updates. Submit a requirements specification for approval by selecting **Submit for Approval** from the **Actions** menu.

The **Submit for Approval** dialog enables you to select who must review and approve. Click either Add Approvers or Add Observers to search for the desired users with the necessary manage or review privileges to meet your needs. Reviewers can also comment on the requirements specification. When you have finished adding reviewers, click the **Submit** button. Its status changes to Submitted. Remember that you can't modify a requirements specification once you submit it and it can't be sent for approval in its current form again. However, at any time, you can save an approved requirements specification to a new version and then modify it.

Approve or Reject a Requirements Specification

After you submit a requirements specification to reviewers, each one sees a new task in their **Worklist** displayed in the **Overview** pane of the **Concepts** page. Click the task link to open the task which displays the details and history of the requirement approval.

You can see who has already approved or rejected, along with other information. The workflow for requirements specifications is simple and can't be modified. For instance, you can't add or remove statuses from the approval workflow.

A notification is also sent to you (the user) and includes a URL link of the object. The link takes you to the page where you can look through the content of the object before deciding to approve or reject the object sent for approval.

Each reviewer clicks the **Approve** or **Reject** button. If the requirements specification is rejected by a reviewer, its Status reverts to **Draft**, which permits further modifications. The project manager can modify the requirements specification and resubmit it to the reviewers.

When all reviewers have approved the requirements specification, its **Status** changes to **Approved**. When this occurs, no further modifications of the requirements specification are possible.

Delete a Requirement or a Requirements Specification

Use the **Delete** option from the **Actions** menu to delete a requirements specification. You're prompted to confirm your decision to delete. The application doesn't delete a requirements specification that has even a single impact association with another requirement or component. If such an association exists, when you click **Yes** to the prompt, an error message displays and when you click out of the message, the requirements specification remains open and isn't deleted.

To delete a requirement from a structure, select the requirement and click the **Actions** menu on the **Requirements** toolbar then select **Delete.**

To delete a requirement from the application, search for it and click the object link. Select **Delete** from the Actions menu. There's no prompt to confirm your request to delete a requirement; however, the application doesn't delete a requirement if it impacts any other requirements or components.



Relationships with Other Business Objects

A relationship is a linked association from one business object to another. Establishing a relationship on one business object automatically creates a relationship on the other object back to the first. There's no differentiation or hierarchy to relationships. The type of relationship being established is important for the user to assess dependencies, to track verification and validation, and fulfillment. Knowing if there's an impact coming from the object or if the object impacts another object, and if the object fulfills a required relationship all help the user know how to proceed with the innovation process.

Duplicating relationships with objects isn't possible.

Relationships Between Business Objects in Applications or Systems

Listed by application, relationships may be established between business objects from these applications or systems:

- between business objects that were created in any of the Innovation Management modules, the Concepts, Proposals, or Ideas work spaces;
- between an Innovation Management object and a Product Development item; or,
- from an Innovation Management object to a business object in another compatible system, such as Agile Product Lifecycle Management.

A relationship link to an Innovation Management object opens that object in a new tab. A relationship link to an object in a configured compatible system, such as Agile Product Lifecycle Management opens in a new tab.

Note: For business objects outside Innovation Management to be available for relationship, the administrator must set up object types for compatible applications on your system. For instance, if Product Development is configured on your system, you must see Items on the list of types that are available on a search.

The current releases of Oracle Cloud Innovation Management (IM) and Oracle Agile Product Lifecycle Management (PLM) are certified for bidirectional relationships; properly configured on both sides, an Innovation Management business object can be viewed in PLM as well as PLM to Innovation Management. And since relationships are version-specific between Innovation Management (versions) and PLM (revisions); the version is maintained as part of the relationship.

New Version of Requirements on Relationships Tables

Given that you can establish relationships between business objects per the previous information, this list indicates the appearance of the "Has Changed" icon when one of the objects is modified and therefore exists in a "later version". Hovering your mouse over the Has Changed icon displays the tool tip "Modified in a later version".

There may be reasons that the original relationship - the relationship of an object with a particular version of another object - remains valid after one or the other object moves to a new version; so, the application don't automatically update, or change, the object in the Relationships table. It does, however, indicate that a later version now exists.

The **Has Changed** icon appears on the Relationships table of these business objects when modified and a new version exists:

- Requirements that appear in any of the Innovation Management modules (on Concepts, Proposals, and Ideas work spaces);
- Items from Product Development that are in relationship with requirements; or,



• Requirements (from Innovation Management) and business objects from Agile PLM, which are in relationship, appropriately indicate a new version exists in each others' Relationships tables.

Related Topics

How Concepts, Requirements and Proposals Work Together

Example of How You Add a Relationship to a Requirement

Requirements are an object type that can have relationships to other business objects.

Add a Relationship to a Requirement

Let's see how we can add a relationship to a requirement.

- 1. Navigate to the Concept Design work area.
- 2. Search for a requirements specification and open your desired result.
- 3. On the Edit page click the Relationships icon to show the Relationships table.
- 4. Click Select and Add to add a relationship.
- 5. In the dialog, select the object type you want to add of Proposal.
- 6. Enter a description term and click Search.
- 7. From the results table select the proposal you want to add and click OK.
- 8. With that added to the Relationships table, click the Relationship Type list and select the type of Fulfills.
- 9. Click Save.

Track History Using View Audit Trail

You can track the history of a requirement and requirements specification (only from the second version on). The data records who made a change to an object, what the change was, and the time of occurrence.

On the Concepts Overview page, click **Tasks > View Audit Trail** to view the page.

Use the Basic or Advanced search fields to find objects of interest. If you find that the objects you seek aren't being returned, or that no search can be set up, consult your administrator, who must enable the Track History capability for a specific requirement class or subclass.

The actions that are tracked are Create, Add, Delete, and Update. When a new version of a requirements specification is created by the Save As New Version procedure, note that the action is recorded as Create. Certain actions, such as Export, aren't tracked.

Link Requirements

On the Concepts Overview page, click the **Tasks** icon to open the list of available tasks. In the Requirements category, click **Link Requirements** to open the page.

In both panels, click the **Search** icon to search and select the requirements specifications that you want to have linked to each other. The entire structures of both are displayed in the respective panes.



With a requirement selected in one pane, select one or more requirement (or test cases) in the opposite pane. Then click the **Link** icon. The relationships from the two panes are established. Click **Save** to preserve your work.

You may want to exploit this feature with the requirements specification in one pane being populated with test cases for the requirements in the opposite pane. Whenever two requirements specifications are open in the panes, requirements in one pane display a relationship icon if they have any relationships with test cases in the opposite pane. Select one requirements specification, and the requirements that are related to it now display the same icon.

Also, hover over a relationship icon, and a list of related test cases appears. These functions makes it easy to isolate and select additional test cases to be linked as they're added to the test case requirements specification.

Requirement Attributes that are Collected in Requirements Specifications

On a requirement, there are four attributes that are used by product managers to assess progress or completion status: Priority, In Scope, Estimates, and Fulfilled. The values for these attributes are tabulated and summarized at the requirements specification level of the structure. A requirements specification displays two pie charts on the Analysis side tab:

- 1. Fulfillment Status depicts percentages of requirements in the structure that the In Scope attribute is set to Yes and that the Fulfilled attribute is set to Yes, No, or No Value. In other words, it shows the tabulated percentages of the various Fulfilled values on all in-scope requirements.
- 2. Total Estimates adds the number of estimates named in Estimates attribute in all the requirements, and depicts them in the chart according to their Priority settings. The application keeps count of the estimates entered in those requirements that In Scope is set to Yes.

Note: Click the **Table** view icon to display certain values quickly. Also, click the pie charts to go directly to the Table view. In Table view, the pie charts are visible, unless the pane is collapsed.

The attributes are defined as follows:

- **Priority** default settings are Must Have, Should Have, and Nice to Have. The default settings can be renamed. (Since Priority is a list field, its settings are sorted alphabetically, so the order of the default settings are: Must Have; Nice to Have; Should Have.)
- **In Scope** is set to Yes or No depending on the product manager evaluating whether this requirement must be included in the scope of the requirements specification. The application keeps count of the estimates entered in those requirements that In Scope is set to Yes. As long as In Scope is set to Yes, that requirement's Fulfilled setting is tabulated, and its Estimates value are included in the rolled up value, adjusting as the number of Estimates is adjusted. The "caution" symbol indicates "Some in-scope requirements that are counted in this requirements specification have no estimate."
- **Estimates** is a numeric field, to be filled in with an integer value. Estimates can be thought of as Level Of Effort (LOE), and the product manager may dictate that the values reflect, for example, "man hours", "person days", or some other form of estimated LOE. Be aware of its relationship to the In Scope attribute.
- **Fulfilled** can be set to Yes or No. If it's either not changed or returned to the blank setting, the application counts that as "No Value". The product manager may determine that a requirement has been described in sufficient detail for its purpose in the requirements specification, that its purpose is, in effect, fulfilled. For those requirements whose In Scope attribute is set to Yes, the Fulfilled settings are rolled up and depicted in the Fulfillment Status chart, allowing some tracking of how evolved the requirement is.



Let's say requirements specification RS-1 has three requirements, R-2, R-3, and R-4. These requirements have, respectively, 200, 300, and 400 as entered values for Estimates. As long as In Scope is set to Yes for R-2, R-3, and R-4, the total of Estimates in RS-1 is 900. If In Scope for requirement R-2 is set to No, however, the rolled up total of Estimates in RS-1 is 700.

Use the Table view to spot certain things more quickly, such as whether there's a requirement marked **In Scope** that has no value for Estimates. Use the Standard view to see the structure.

Note: The Standard view is dynamic, in that it refreshes as you make entries, without saving changes. The Table view isn't dynamic, and you have to click the **Refresh** icon to have your latest changes reflected in what you see, such as the pie charts.

Add a Requirements Specification to a Requirements Specification

A requirements specification can be added to another requirements specification. There are two ways to do this:

- From the "parent" requirements specification, select Search and Copy from the Actions menu, and select Requirements Specification in the Search dialog.
- From the "parent" requirements specification, select Create from the Actions menu, or use the Add icon, and select Requirements Specification in the Create dialog.

While both these methods of adding are easy to accomplish, there are some business rules and considerations, as follows. The important thing is to know what you want to accomplish by adding a requirements specification to a requirements specification. For instance, it may be there's a set of requirements that should be reviewed and approved separately, or otherwise managed independently of the larger set of requirements contained in the parent requirements specification.

When a requirements specification is added to another structure, it doesn't lose any of its inherent attributes or qualities; it appears the same at the top level of its own structure. When the same requirements specification appears in the context of another structure, however, the attributes it displays are those of a requirement, such as the Priority or Fulfilled attributes.

The icon next to a requirements specification within a structure combines the icon for a requirements specification, an open book, and the icon for a requirement, a page or document.

Some other business rules follow:

- When you pull a requirements specification into a structure, you can alter it only as a requirement.
- So, you can't change the Name of a requirements specification from a structure. However, the requirements specification's name is an active link in Details that you can click to open, and you can then modify the Name, Description, Product, and so forth.
- Once a requirements specification is added to a structure, you can't add requirements to it. But when you look at that requirements specification, it retains its own structure no matter what has been modified in its context as a requirement.
- Regarding versions of a requirements specification, when it's at the top level and in Pending/Draft or Released/
 Approved status, the Action Save As New Version increments the Version number. If a top-level requirements
 specification is in the Draft/Pending status, and Save As New Version increments Version 1 to 2, note that
 its Version 1 remains in the Draft status as it automatically changes to Read-Only condition. In this way, a
 requirements specification can exist in multiple versions in Draft status.



How to Convert a Requirement Line Item into a Requirements Specification from the Tree View

Let's learn how to convert a requirement line item into a requirements specification from the tree view.

Convert a Requirement Line Item into a Requirements Specification from the Tree View

- 1. Edit a requirement.
- 2. Select a requirement line item in the tree view.
- 3. Click Convert to Specification from the Actions menu.
- 4. In the new Create Requirements Specification dialog enter required fields.
- 5. Click **OK** and stay on the same page with the parent specification.

The child specification is created and saved.

6. Click **Save** on the parent specification, which also copies along the sub-structure.

Note: If you don't click **Save** and cancel out of it, though the child specification is created, it doesn't appear in the hierarchy of the parent specification. You must run a search to find the child specification.





5 Concepts

Concept Design

Generate, capture, analyze, and approve, product concepts that address product strategy goals. Transfer approved concepts directly to PLM solutions for prototype planning, detailed design and product introduction.

Key features:

- Concepts can align toward strategy goals like optimal material and development costs, features, roadmap, partnership objectives, and future technology migration.
- Product managers can compare and optimize competing concepts to support product strategy goals, and securely share the results with existing and potential supply chain partners or external design teams.
- Trace concepts in detail from ideas and requirements to finished products, for engineering clarifications, process analysis and improvement activities.

Use the Concept Design work area to create concepts and manage existing concepts. With the **Edit Concept** task you can develop, maintain, and analyze concept structures.

Web services are also available to help you create, get, edit, and delete a concept or its concept components, as well as manage concept versions.

Actions on Concepts

On concepts, the **Actions** menu offers ways to modify the business object or gather more information about the object. Options available are:

- Launch Graphical Navigator: opens a graphical display of the business object and its related objects.
- Open Proposal: opens a related proposal.
- **Send Object**: opens a dialog to send notifications to other users. Select users from the menu in the Send dialog box and add a message to the notification.
- Save As New Version: saves the object with the same content, but with a new name.
- View Version History: view all the versions and earlier actions of the concept.
- Manage Solution Alternatives: lets you design multiple alternate solutions using a single product concept structure.
- Manage Team: controls who has access to read and modify the object and access to the object.
- Submit for Approval: opens a dialog to add approvers or observers who will receive the object for approval.
- **Generate Traceability Report**: launches a report that lists administrator-defined attributes and helps you understand details on concepts. Click the Generate Traceability Report option to run a report in either HTML, CSV or XML formats. Click View Audit Trail in the Tasks panel to view the historical records of the export and traceability reports generated.
- **Terminate Workflow**: terminates the approval workflow of a concept.



• **Delete**: opens a dialog to delete the selected object.

Related Topics

Create a Quality Object Using Groovy Script

Concept Types and Statuses

Conceptual product design starts with concept creation.

A concept is defined by two characteristics:

- 1. Concept Type
- 2. Concept Status

Concept Type

Concept types, based on predefined attributes, define the grouping and search criteria of concepts.

Contact your system administrator for information about defining concept types and their attributes.

Note: You can't change the concept type after you have created a concept.

Concept Workflow Status

A concept evolves through predefined states in a workflow. The concept workflow status, as listed and described in the following table, defines the actions you're allowed on the concept at each stage.

Workflow Status	Workflow Stage
Draft	Design This is the default status of a concept you create. As the concept owner, you can modify the concept structure as you require.
Submitted	Review Submit a concept for review once you complete your concept design. You can't make any further changes to the concept.
Approved	Approved When a concept is approved, it's ready to move to a PLM system for production. The data of an approved concept continues to be available in Oracle Innovation Management as an item structure.
Rejected	Design



Workflow Status	Workflow Stage
Note: This isn't a concept status. It's a workflow transition.	A concept that's rejected in the Review stage reverts to the Draft status and is available for modifications.

Related Topics

Considerations for Working with Concepts

Concept Approvals

You can opt to approve a concept to confirm the completeness of a concept design, or to lock a concept from further updates. Approving a concept isn't required.

Note: While a concept and its corresponding proposal belong together, they don't have to share the same approval workflow, and each may be approved independent of the other.

Approvers and Observers

As a concept owner, you can request users within Oracle Innovation Management for concept approval. Select the reviewers, and assign them either **Approver** or **Observer** roles.

Approvers are required to explicitly approve or reject the concept for a change in concept status.

Observers can view and comment on the aspects of a submitted concept, but aren't required to approve or reject it during review.

Submit a Concept for Approval

You can't edit a submitted or approved concept.

The concept status changes from **Submitted** to **Approved** only when all assigned approvers have agreed on the concept. A rejected concept reverts to the **Draft** status, and can be edited again.

How Concepts, Requirements and Proposals Work Together

Concepts, requirements and proposals are intrinsically related.



Proposals

A Proposal contains all the business information for the concept. When you create a concept, a proposal of the same name is created; the converse applies as well. You can access a proposal from the **Edit Concept** screen.

When you delete a proposal, the corresponding concept is also deleted. You can't delete a concept-proposal pair if the concept is in **Submitted** or **Approved** state. Deletion is possible only if both proposal and concept are in **Draft** state.

Concepts

Concepts address the technical design aspect of a product. You can't delete a concept which has a requirement assigned to it, without disassociating them first.

Requirements

Requirements are design specifications that serve as inputs for concept design in Oracle Innovation Management, or as inputs for detailed product design in PLM. Requirements also help measure the completeness of a concept design.

Related Topics

- Concept Types and Statuses
- · Considerations for Working with Requirements
- Product Proposals

Considerations for Working with Concepts

Concept designs typically evolve in the following ways:

- From ideas and formal requirements;
- From existing concepts or concept templates (using Save As);
- As independent concepts, which contribute to detailed design requirements of prototypes and future products.

Create a Concept

Create a concept from the ground up for sole concept ownership, and to define concept structures that can fulfill specific ideas and requirements.

Create a Concept Using Save As

Use **Save As** to create a copy of the original concept and its proposal, with the following benefits:

- Reuse specific concept versions;
- Select a different concept type from the original;
- Retain or remove content details of the original concept, including structure, attachments and designs, requirements, relationships, and team;
- Retain or remove content details of the original proposal, including cost, revenue, resources, attachments, relationships, and projects.



Note: You can copy concept attributes only if the source and target concept types match.

Delete a Concept

When you delete a concept, all data and relationships concerning the concept removed are irrecoverable from the application.

Apart from the concept itself, the deleted concept data includes:

- · Concept structure;
- · Product proposal;
- Attachments at concept and component level;
- Links to designs, bidirectional relationships, top-level requirements, and items;
- Solution alternatives;
- · Concept team.

Note: You can only delete the highest concept version, until you reach version 1; and only then can you delete the whole concept.

Related Topics

- Why is a product proposal created alongside a concept
- Concept Types and Statuses
- Considerations for Working with Concept Versions

Considerations for Working with Requirements

Use requirements specifications as design inputs for your concepts, and as measures of design completeness. Alternately, you can build requirements specifications from planned concept designs, for use in future product redesigning activities.

Requirements, Concept Components, and References

Assign one or more requirements specifications to one or more concept components to track and measure design goals objectively across a concept structure.

When you assign a requirements specification to a concept component, the link to the requirement is automatically stored as a reference field in the concept component metadata. The assigned requirement is highlighted by a check mark.

Click the check mark in the **Assigned** column to view all the components that requirement is assigned to.

You can't assign a requirement to an item. However, when you convert a concept to an item or item structure, the **External Relationship** data points to the item in the concept structure.



Requirements Filter

Use the **Search** function in the **Requirements** tab to filter the requirements specifications added in the concept design work area, by predefined operators. You can also perform an advanced search for requirements using combinations of operators.

Search results within the requirements specification structure are highlighted by markers. The **Previous** and **Next** icons let you step through the search results sequentially.

Requirements Versions

Requirements can undergo version updates while they're assigned to your concept. The concept structure retains the version of the specification you assign, irrespective of the newer revisions available. In parallel, you can assign only the latest version of requirements specifications, available at that moment, in your concept structure.

An icon highlights requirements that have undergone changes after you assigned them in your concept. Click the highlighted requirements specification name to view the linked version, and to navigate to the latest version.

Fulfilled Requirements

When a concept component is detailed enough to fulfill an assigned requirements specification, use the **Fulfilled** marker in the **Details** > **Requirements** panel, as a measure of tracking design completeness. You can then analyze the concept structure to determine how far your concept design has progressed.

Requirements Traceability

Generate the **Requirements Traceability** report from the concept structure work area to view the concept structure and all its associated linkages in xml form. For example, you can trace version-specific linkages between ideas, requirements, concepts components, items, and test cases, in a single view. The xml report also lets you determine which assigned requirements have been fulfilled, or ideas have been met.

Related Topics

Edit and Manage Requirements Specifications

Roles and Privileges

Roles provide access to functions and data. This topic describes the various user roles and their associated duty roles in product concept design, that ensure controlled access to system resources.

The primary roles associated with concept design are Product Design Manager and Product Design Engineer. Their associated privileges are listed and described in the following table.

Job Role	Duty Role	Functional Privileges	Data Privileges
Product Design Manager	Concept Management Duty	Create Product Concept Manage Product Concept	Review Product Concept Data Manage Product Concept Data
Product Design Engineer	Concept Development Duty	Manage Product Component	Review Product Concept Data



Job Role	Duty Role	Functional Privileges	Data Privileges
		Review Product Requirement Review Product Concept	Review Product Requirement Data

The Supply Chain Application Administrator is assigned Product Innovation Administration Duty, and is required to set up Innovation Management.

For more information on job roles and data security, refer to the *Oracle Supply Chain Management Implementing Innovation Management* Guide.

Teams in Concept Design

A Product Design Manager can define a core team that's responsible for developing a concept, and assign specific tasks to team members that appear in their to-do lists. Teams facilitate controlled access to a concept in all its stages of development, including review and approvals.

Concept Structures

About Concept Structures

A concept structure is a preproduction assembly of concepts, concept components, and PLM items, specifically brought together to meet a given requirement.

Edit a concept structure to include:

- concept components you create, and copies of existing concept components
- embedded concepts
- · links to external items and item assemblies

The location of a concept structure line item is defined by the sequence number, which is automatically assigned to entries in the concept structure, as they appear. Edit the numbered sequence manually when you export the concept structure to an Excel worksheet.

You must aim to have a concept structure that eventually fulfills design ideas and requirements, and primarily contains PLM items and item assemblies.

Available web services can help you execute various actions, including:

- · Create, find, and delete a concept
- Add, update, and delete a concept component
- Create a concept or a version from an existing concept

Concept Components

Concept components in a concept structure are placeholders for future production items.



Add a concept component directly in the concept structure, detailing its name, quantity and type. Use the **Specifications** pane to detail the attributes of the concept component.

Search for an existing concept component in the **Items and Components** pane to add as a copy, including its attachments and design references.

Sub-Concepts

Use existing concepts in your concept structure as sub-concepts. While you can't edit or convert it to a PLM assembly directly from your concept structure, the data in sub-concepts is included in metric calculations and scores for your concept.

Linked Items and Assemblies

Search for and link PLM items and item assemblies from external sources to a concept structure. Reuse existing items to arrive at a production-ready concept structure faster.

You can't directly modify linked objects in your concept structure. You can either edit the item in the PLM application itself, or convert the item to a concept component with modifiable attributes.

View a Concept Structure

Remember, that you can view a concept structure in its default tabular form, or graphically but you can't edit it.

Search within the tabular form of a concept structure for concepts and components using predefined operators, and combinations of operators. Arrows highlight the search results. Use the Focus option to trace concept components, requirements, and items that are linked together within the concept.

Concept Structure Evolution

Typically, you can make a concept structure evolve along the following path:

- 1. Create a concept structure, either from start, or as a copy of an existing concept
- 2. Add item placeholders in the form of concept components
- 3. Replace concept components with existing or newly released PLM items, as they become available
- 4. Arrive at an approved concept structure consisting primarily of tangible PLM items and item assemblies
- **5.** In the PLM application, approve the product prototype and process it as an item structure in downstream systems.

At any stage of the concept structure development, you can export the concept structure to an Excel worksheet for offline records.

Related Topics

- How You Process Converted Components
- Edit Component Specifications

Create a Concept Structure

To create a concept structure:

- 1. Navigate to the Concept Design work area.
- **2.** To create a concept, click **Create Concept** from the Tasks panel drawer.



- 3. In the Create Concept dialog:
 - In the Name field, enter a name for the concept.
 - o In the Description field, provide a brief description.
 - Select a Type and Currency from the respective lists.
 - Select a date from the calendar.
 - Click Save and Close.
- **4.** To create a concept component and add it to the concept structure:
 - Click Add Child in the Concept Structure panel.
 - Enter a name for the component.
 - Click Save.
- **5.** To add an existing concept component to the concept structure:
 - Click the Items and Components tab.
 - Select Concept Components in the Search For list.
 - Enter the search criteria and click **Search**.
 - From the search results, select a concept component and move it to the concept structure.
- **6.** To add an existing concept as a substructure to the component structure:
 - Click the **Items and Components** tab.
 - Select Concepts in the Search For list.
 - Enter the search criteria and click Search.
 - o From the search results, select a concept component and move it to the concept structure.
- 7. To add an item from Product Development to the component structure:
 - Click the Items and Components tab.
 - Select Items in the Search For list.
 - Enter the search criteria and click Search.
 - o From the search results, select an item and move it to the concept structure.

Now we have a structure made up of a concept component, concept structure, and an item.

Related Topics

Watch Video: Create a Concept Structure

Manage a Concept Structure

To manage a concept structure:

- 1. Navigate to the Concept Design work area.
- **2.** To search for the concept structure:
 - From the Tasks panel drawer, click Search.



- In the **Search For** list, select **Concepts**.
- Enter the criteria and click Search.
- **3.** From the search results, click the concept structure link.
- **4.** To search for a requirements specification and assign it to the concept structure:
 - In the Edit Concept page, click Select and Add on the Requirements tab.
 - In the Select and Add dialog, enter the search criteria and click Search.
 - From the search results, select a requirements specification and click **OK**.
 - In the Edit Concept page, expand the requirements specification added in a previous step.
 - Select a requirement and move it to the concept structure.
 - Click Save.
- **5.** To view the requirement and its priority of the concept structure:
 - o In Concept Structure, select the concept and click **Restore Pane**.
 - o In the details of the concept, click **Requirements**.
 - o If the requirement is fulfilled, select the **Fulfilled** check box and click **Save**.

Related Topics

Watch Video: Manage a Concept Structure

Approve a Concept Structure

To approve a concept structure:

Note: Avoid self-approving any Innovation Management object as this can result in stuck workflows. Remember that the workflow only gets stuck if self-approval isn't allowed, which you can change in the BPM taskflow setup.

- 1. Navigate to the Concept Design work area.
- 2. To search for a concept structure:
 - From the Tasks panel drawer, click Search.
 - In the Search For list, select Concepts.
 - Enter the criteria and click Search.
- **3.** To submit the concept structure for approval:
 - o From the search results, click the concept structure link.
 - From the Actions menu in the concept structure, select Submit for Approval.
 - o In the **Submit for Approval** dialog, click **Select and Add**.
 - o In the **Select and Add** dialog, enter the search criteria for a reviewer, or approver, and click **Search**.
 - Select the reviewer, or approver, and click **OK**.
 - In the Submit for Approval dialog, click Submit.
 - In the Manage Concepts page, click Done.



- **4.** To approve the concept structure:
 - Sign in as the user assigned with approval privileges.
 - Click Notifications or the Bell icon.
 - View the approval notification and click **Approve**.

Related Topics

Watch Video: Approve Innovation Management Objects

Edit Component Specifications

Specifications are attributes, including target and actual metric values, of the concept, concept components, and item links in a concept structure. Attributes are grouped into the categories **General Information** and **Additional Information**, the latter consisting of **Attachments**, **Designs**, and **Relationships**.

Note: Contact your administrator to edit flexfield attributes.

All attributes are displayed in the **Specifications** pane of the **Edit Concept** screen, depending on the structure element you select.

Concept and Component Specifications

Use spider charts for analyzing solution alternatives; ensure that the target cost, target power, and target weight values of the root concept are present.

The specifications of a concept component lets you measure component score and variance in actual and estimated metrics - cost, weight, and power - individually. You can also include Lead Time, Risk, Compliance, and Supplier information for each component.

Item Specifications

You can't edit the attributes of items in the concept structure that are linked from the Agile PLM, and PD applications. To do so, convert the item to a concept component, or edit the item attributes in the original application.

Item specifications affect the metric calculations of a concept. The attributes **Quantity** and **Alternative** define the usage of an item in a higher-level concept component.

Attachments, Designs, and Relationships

Additional Information in the Specifications pane can include links to concept design versions, competing concept designs, Agile PLM objects, design files, and URL attachments.

Link references to concept designs and concept components, but not Agile PLM items, because they're stored outside the server.

Files are stored in the application server while referenced Agile PLM objects are stored in the Agile PLM server. You can't edit referenced Agile PLM objects in Oracle Innovation Management directly. View or edit referenced attachments, documents, and designs in their native authoring or design applications.

Relationships are objects that provide additional design inputs, or test results as design feedback, for concept designs and concept components.



You can associate an Agile PLM object with an Oracle PLM object as a relationship, which is visible in Agile also. These associations are version-specific; the relationships table in Oracle PLM displays the linked version of an item, irrespective of newer versions that may be available.

If you delete a relationship to an Agile PLM object in Oracle PLM, the association is removed in Agile PLM also.

When you convert a concept component, you may preserve all links to Agile PLM documents, designs, or attachments referenced in the component. You may preserve URL attachments in a document, created in Agile PLM for the URL attachment, during the conversion process.

Attachments are converted to documents of specific document type, while designs remain design links, and both are linked to the converted item.

Most document types can be mapped to Agile PLM attachments upon conversion; other document relationships must remain design links or be consolidated into a single document in the Agile PLM application.

If you're authorized to work with tasks and work items in Oracle Projects as well as in Oracle Innovation Management, you can view Project tasks associated with Oracle PLM objects, in the Relationships panel. Alternatively, you can search for a Project task from the concept design work area, and add it as a Relationship to the active concept or component.

Related Topics

- · What are metric attributes
- How You Process Converted Components

Structured Data

To navigate the structured data and view additional information or details about the component in any of the different graphical views, click the component. The following menu items are displayed:

- Information: View additional information about the component.
 - Click the component to view the Information window. If the component isn't in focus, two icons Focus and More Details are displayed in the Information window. If the component is in focus, only the More Details icon appears in the Information window.
- Focus: Brings the component into focus.

Note: The components that aren't on the same level, and not directly connected to the component in focus are collapsed.

More Details: Shows additional details about the component.

The More Details icon is also present in the Information window.

Searching for components: To search for the component, enter the text in the Search box. The component is displayed in the Search results. Also, the component is highlighted in the dependency map and the dependency graph. Hover over a component displayed in the Search results box, and activate the context menu in the Search box.

Related Topics

· Overview of the Graphical Navigator



How Concepts, Concept Components, and Items Work Together

A concept ties together concept components, linked items, and assigned requirements in its structure, alongside its corresponding proposal.

Concept

A top-level concept root node contains concept components, linked items, and embedded concepts that let you incorporate concepts belonging to other users.

As you develop a product concept structure, you can search for, and link items, designs, and documents as concept structure line items, and as references in the concept and concept components metadata.

The design goal of a concept is a complete conversion to an item structure - Bill of Materials (BOM) - in Oracle.

Concept Component

Concept components in a concept structure are placeholders, and are meant to be replaced with links to existing or newly created items.

You can convert a concept component to an item when the component is ready to be processed further as an item in subsequent downstream applications. During the conversion process, preserve the created document and design relationships with the concept component as references. The newly created item includes reference metadata that links it to the source business object in Oracle Innovation Management.

When you choose to convert a concept component to an item and click the Convert to Item option in the Actions menu, remember that the change is immediate and automatically committed after successful conversion. You can't cancel the process. The new item link and other updates on the concept structure are also committed. This prevents accumulation of unused items in PLM and additionally maintains data integrity between Oracle Innovation Management and respective PLM applications such as Oracle Agile PLM, and Oracle Product Development.

Item

Existing applications that are currently supported by Oracle Innovation Management are Oracle Agile PLM, and Oracle Product Development.

You can convert an item to a concept component to suggest changes in its design attributes, or to reuse PLM data in your concept. The original item remains unchanged in the PLM application. During conversion, you can preserve the item structure, documents, and file attachments.

Convert a Concept Structure into an Item Structure

To convert a concept structure to an item structure

- 1. Navigate to the Innovation Management work area.
- 2. To search for a concept structure, do the following:
 - From the Tasks panel, click Search.
 - In the Search For list, select Concepts.
 - Enter criteria and click Search.



- **3.** To convert a concept structure into an item structure, do the following:
 - From the search results, click the concept structure link.
 - Expand the concept structure.
 - With the concept structure open, click **Actions** > **Convert to Item**.
 - In the Convert to Item dialog, select All to convert the entire concept structure. Click OK.

In the **Concept Structure** page, notice that the icons have changed, and the Type has changed to **Root Item Class**.

- o Click the object link to view it as an item in Product Development.
- Click the Structure tab to view the component structure converted as an item structure.

A link back to the original concept structure is available.

Related Topics

• Watch Video: Convert a Concept Structure into an Item Structure

Considerations for Converting a Component to a Bill of Materials

When the concept structure for a newly created or redesigned product is complete, or you have a solution alternative that meets all the assigned requirements, transform the concept structure into an Agile PLM item assembly for further cost, sourcing, and compliance checks, and finally, for product manufacture.

Converting Concept Components

When you convert a concept component to an Agile PLM item, the component becomes a read-only link to the item and replaces the concept component in the concept structure. The converted concept component and all its related data cease to exist.

If the concept component you converted had its own structure comprising lower-level components and item links, it appears as an item assembly link in Concept Design afterward. Remember, you can convert approved concepts and concept components to Agile PLM items.

Converting References

When you convert a concept component to an Agile PLM item, you can copy its reference data, including links, to design files and other attachments.

Upon conversion, component attachments appear as file attachments of the item, while designs appear as design relationships in the item metadata within the Agile PLM application.

Any references that you don't convert along with the concept component are deleted from Oracle Innovation Management permanently.

Converting Requirements

When you convert a concept component with requirements assigned to it, or to its lower-level components, the requirements links point to the newly created item.



Converting the Concept Structure of Solution Alternatives

You can convert the structure of only one solution alternative per concept to an Agile PLM item assembly, including its designs and attachments.

Use the **Solution Alternative Filter** to select a solution alternative for conversion. If successfully converted, the newly created item assembly replaces the concept.

Note: When this happens, remember that the other solution alternatives in the concept are deleted. To retain the other solution alternatives, copy the concept structure using the **Save As** option from the Actions menu, before converting the concept to an item.

Converting Data Fields

When you convert a concept component containing administrator-defined fields to an Agile PLM item, only the Text fields are currently copied to the Agile PLM item.

Trying to convert a concept component that includes administrator-defined data types other than text fields may result in an error.

Related Topics

- How do I use an ECO while converting a component to an item
- · Guidelines for Working with Solution Alternatives

How You Process Converted Components

You can reuse a PLM item with suitable variations in your concepts structure. While you can't edit the PLM item directly, you can convert it to a concept component and make your required modifications accordingly.

The original PLM item remains unchanged, while the newly-created concept component contains all the specification attributes of the item converted, as well as a reference link to the original item.

Settings That Affect Conversion of an Item to a Concept Component

There are two main factors that decide the scope of item conversion:

Attachments, Documents, and Designs

If you include attachments during the conversion process, all the file attachments of the item are copied as attachments of the newly created concept component.

Document relationships are preserved during the conversion process.

If you include designs, links to the design object residing in the PLM application are copied to the concept component.



Item structure

You can convert only the linked item and its first-level of items links during a single conversion process. Second-level of items in an item structure remain item links in the concept structure.

Note: While you can convert second-level item links also to concept components, you must aim for data reuse, and try to avoid creating too many concept components.

How Items Are Converted to Components

To convert an item to a concept component, select the item in your concept structure, and click **Actions > Convert to Concept Component** .

The following table details the levels of conversion of an item assembly and lower-level items in a single conversion step.

Item Assembly Structure	Convert to Component?	Content Type Post Conversion	Comments
Item Assembly	Yes	Concept Component	None
• Part 1	Yes	Concept Component	None
• Part 2	No	Item link	Since Part 2 wasn't selected for conversion, it remains an item link in the item structure
• Part 3 o Part 3.1 o Part 3.2	Yes Note: Doesn't apply to the lower-level items	Concept Component Parts 3.1 and 3.2 remain item links	Select the item links and click Convert to Concept Component to change the lower-level items to concept components.

Related Topics

How Concepts, Concept Components, and Items Work Together

How You Update a Concept Structure Using the Oracle ADF Desktop Integration Tool

Let's learn how you can update a concept structure in an Excel spreadsheet using the **Oracle ADF Desktop Integration** tool.

Note: Download and install the ADFdi Excel client to exchange data directly between Microsoft Excel and Oracle Innovation Management.



To initiate the process of exporting the details of a concept structure to an Excel spreadsheet:

- 1. Click the Edit in Spreadsheet option on the Actions menu of the Concept Design work area.
- 2. To open the Excel file, sign in with your Oracle Innovation Management credentials. If you have previously signed into an Excel sheet and not signed out, then you're not prompted for your credentials when you open a newer Excel sheet.
- **3.** You can update concept and components data directly in Excel. The Excel cells that are successfully updated display their status in the **Status** column.

Note: The data isn't imported back into the application if there are any empty rows between the data.

Considerations for Working with Concept Versions

Create and use versions of a concept to save and track the progress of your concept design.

Note: Concepts and proposals can have versions independent of each other.

Version Numbers

When you create a version of a concept, all the data of the source concept is copied into the newer version, and it's automatically numbered to the respective highest version number available. All previous versions are rendered read-only. Versions can be made of the latest or older versions of a concept.

Older Versions of a Concept

You can edit only the latest version of a concept.

To reuse and edit an older concept version, create a version from it. If previous concept versions were approved, you can only create a new version from the last approved version or higher. You can also create a separate copy of the concept using **Save As**. You can't save versions of a concept or concept component that are converted or which are in the Submitted status as a new version.

Version History summarizes all versions of a concept, including version creation dates and version owner information, but you can't edit any details in it. Use the **Version Selection** tool to switch between versions.

Related Topics

- Concept Types and Statuses
- Considerations for Working with Concepts

Solution Alternatives in a Concept Structure

Solution Alternatives allow you to design multiple alternate solutions using a single product concept structure, for different product requirements or use cases. You can analyze metrics across multiple design variations of the same concept structure, and select the most viable option.

This procedure lists the steps to obtain an optimally-designed concept structure using solution alternatives.



Define Alternatives

To define solution alternatives in a concept:

- 1. From the concept structure, navigate to the **Manage Solution Alternatives** dialog and rename at least two solution alternatives as required.
 - **Note:** You can also rename the solution alternative **Default** as required.
- 2. Enable the **Show** check box for each of the solution alternatives you want to use in the concept.
- 3. Click **OK** to close the dialog and return to the concept structure.

Assign Objects to Alternatives

To assign concept components and items to solution alternatives:

- 1. Ensure your concept structure table has the required components, items, and solution alternative columns visible.
- 2. Select a component or item, and enable the check box in the column **Alternative**.

Note: This step is required per object in the concept structure to activate the available solution alternative options for it.

3. For each object row in structure, enable the check box per solution alternative that the object must belong to.

A component that's not marked an **Alternative** isn't assigned to any solution alternative. Such objects are always visible, unless they occupy lower-levels in a filtered component structure.

Related Topics

- · Guidelines for Working with Solution Alternatives
- Analyze a Product Concept
- How You Calculate Metrics in Concepts

Guidelines for Working with Solution Alternatives

Working with solution alternatives requires you to define alternatives, analyze metrics, and select an optimum solution.

Define Alternatives

In a concept structure, you must mark a sub-concept, concept component, or an item as an **Alternative** before you can assign it to one or more solution alternatives.

Note: All components, which aren't alternatives, aren't assigned to any solution alternative, and are always visible.

You can assign alternatives to active and visible solution alternatives only. Use the **Manage Solution Alternatives** menu to control the visibility of solution alternatives.

The **Solution Alternative Filter** controls how a concept structure is displayed, depending on the solution alternative name you select. Only the alternatives assigned to the solution alternative activated by the filter are displayed.



Components which aren't alternatives are never filtered out, unless you apply a filter to a higher-level component. Filtering works top-down in concept structures.

Compare Solution Alternatives

Use solution alternatives to compare and analyze:

- how a concept can evolve in different use-cases
- · what combination of components and items can best meet target costs, weight, and power metrics
- which items, components or embedded concepts in the concept structure don't meet compliance standards, and must be replaced
- the quality of PLM items in the concept, by viewing quality incidences associated with each item
- · how well a solution alternative fulfills assigned requirements, as applicable per solution alternative

Use the **Metrics** view to view scores and compliance metrics for solution alternatives in tabular form.

Use the **Analysis** button to compare solution alternatives in a graphical view (using spider charts).

Select an Optimum Solution Alternative

Select a solution alternative that fulfills your requirements and presents the best score.

To complete the design phase of a product, convert your selected solution alternative to an item assembly in PLM for product prototyping.

Related Topics

- Solution Alternatives in a Concept Structure
- Analyze a Product Concept
- Why are some components hidden in the concept structure when I use the Solution Alternative Filter
- Considerations for Converting a Component to a Bill of Materials

Manage Concept Solution Alternatives

To manage solution alternatives:

- 1. Navigate to the **Concept Design** work area.
- 2. To search for a concept structure, do the following:
 - From the Tasks panel tab, click Search.
 - In the Search For list, select Concepts.
 - In the Search list, select Name.
 - Enter the criteria and click Search.



- 3. To manage solution alternatives, do the following:
 - From the search results, click the concept structure link.
 - From the Actions menu in the concept structure, select Manage Solution Alternatives.
 - In the Manage Solution Alternatives dialog, name the alternative groups. To enable the group, select the corresponding Show check box and click OK.
 - o In the **Edit Concept** page, select a row in the concept and then select the alternative options. Click **Save**.
 - o To view a particular solution alternative, use the **Solution Alternative** list.

The common concepts appear in the beginning and then the concepts assigned to that solution.

Related Topics

Watch Video: Manage Concept Solution Alternatives

Integration with External Systems

Oracle Innovation Management integrates with systems such as Agile PLM, and Oracle Product Development, through business objects like view objects, application modules and web services.

You can perform the following tasks by integrating target systems:

· Associate issues to Ideas

Relate issues to Concepts which are improving the product

Relate Issues or Ideas to Requirements to drive created or improved designs

Create Items in Product Development from Concept Components

Search and use an existing Item to create a Concept

Associate Requirements to Agile Items (map requirements that were used to build the eventual product)

Map attributes from Agile PLM Item to Concept Component

Associate Agile PLM objects with Oracle PLM objects as version-specific relationships

Allow Proposals to be related to or drive projects in Agile PPM

See status of Projects within Proposal

See key attributes of Project within Proposal

Integrate actual cost and resources from Agile PLM Project into the Proposal

Check how Proposal is progressing against Projected cost and resources

Refer to the *Oracle Product Value Chain Cloud Implementing Innovation Management and Product Development Guide* for detailed information on the integration processes.

Note: If you're integrating Oracle Innovation Management to Agile PLM (9.3.4 or later), you also require WebLogic Suite or WebLogic Suite for Oracle Applications.



Multiple Systems

You can configure multiple target systems during setup, but you can activate only one system at any time. It isn't advisable to change the target systems after you create links to them.

Automatic Authentication

Single Sign-On (SSO) enables automatic sign in to the external system from Oracle Innovation Management.

For information on configuring SSO, contact your system administrator.

Analyze Concepts

Analyze a Product Concept

Analyzing a concept in terms of target costs, compliance, requirements fulfilled or similar parameters enables you to make informed decisions on the future of the concept.

To compare target and actual metrics of the units of a concept structure, you must roll up or recalculate the attributes. The roll up results in the calculation of variance in the actual and target metric attributes, across all units of the concept structure, as applicable. In the **Metrics** view, a warning icon next to concept structure units indicates unfavorable variance values.

The following metrics are calculated during a roll up:

- · Cost, Weight, and Power Consumption
- Compliance
- Status
- Component and Concept Score

Use a spider chart to view aggregated metrics across multiple solution alternatives, in a graphical or tabular form.

Use an item status chart to view concept maturity in terms of item composition of the concept, in a pie chart.

Costs, Weights, and Power Consumption

Cost, weight, and power consumption metrics are calculated by aggregating the total values of linked items, concept components, and embedded concepts, up to the top-level concept.

Total cost calculations are tabulated as follows:

- Total cost of an individual item or concept component = Material Cost + Nonmaterial Cost
- Total cost of a concept component assembly = Nonmaterial Cost + Aggregate of (Total cost of each item or component * Respective Quantities per Assembly)

Total Weight of a concept component assembly = Aggregate of (Actual Weights of each linked item, concept component, and embedded concept * Respective Quantities)

Total Power Consumption of a concept component assembly = Aggregate of (Actual Power Consumption of each linked item, concept component and embedded concept * Respective Quantities)



Compliance

The compliance status of a concept component or a linked item defines the compliance of the next higher-level component.

The compliance statuses of items are read directly from PLM. They're mapped as either compliant or noncompliant items in Oracle Innovation Management, depending on the completeness of information available.

A noncompliant item or component renders its higher-level component noncompliant also.

Fulfilled Requirements

You can analyze the number of assigned and fulfilled requirements per individual components in the concept structure, as applicable. This analysis can aid in fine-tuning the accuracy of a proposed concept design in meeting user needs.

Status

The statuses of individual components and linked items in a concept assembly decide the aggregated status of the higher-level component, up to the top-level concept.

Items in PLM may be linked in the concept structure while they're in conceptual, preliminary, or production stage.

The Item Status Pie Chart displays the composition of a concept structure in terms of items according to their lifecycle phases. Use the item status chart to view how close to maturity a concept is, and identify items in the concept structure that constitute different segments of the pie chart.

Concept Score

Concept scores allow the assessment of the concept structure against design objectives.

Concept-level scores are calculated by adding points earned in the following measures:

- the number of items in the structure, compared to concept components: reuse of items scores extra points
- the number of items with scores higher than the target value 85: a high percentage of high-scoring items in the structure raises the concept score
- the number of items missing data such as compliance status, lead time, number of manufacturers, or preferred status: complete items score high

Other details such as quality incidences and manufacturer parts are also included in a PLM item score rollup when it's included in a concept structure. Concept scores can also be used to evaluate solution alternatives for a concept.

Note: The Concept Score is hidden by default.

Item Score

An item is considered to be complete for score calculation if it contains the following data: Overall Compliance, Lead Time and Number of Manufacturer Parts.

Spider Chart

The Spider Chart enables you to compare metrics across solution alternatives. Metrics are normalized - the relative deviation of each actual value from the target value is calculated and displayed as a positive or negative deviation from the target value.



Note: Correct display of the spider chart is dependent on the concept-level target metrics (cost, power, and weight) having suitable values. If target values aren't available, then the graph doesn't appear.

A **Table** view summarizes the data of the Spider Chart - calculated variance and metrics per solution alternatives - for quick reference.

Related Topics

- · Guidelines for Working with Solution Alternatives
- Analyze Concept Status
- · Rollups in Concept Design
- How You Calculate Metrics in Concepts

Rollups in Concept Design

Analyze concepts, concept components, and items scores after a roll-up of their target and actual attributes across cost, weight, and power consumption.

You can roll-up values of cost, weight, power, and score attributes, using the Calculate icon in the Edit Concept screen. The roll-up values are best viewed in the Metrics view of the concept structure.

Cost Rollup

The Total Cost of a concept, described in the following table, is calculated as an aggregate of total costs of its individual concept components, items, assemblies, and embedded concepts.

Element	Total Cost Calculation	Notes
Component	(Material Cost + Nonmaterial Cost) * Quantity	None
ltem	(Material Cost + Nonmaterial Cost) * Quantity	If an item has BOM, only the cost of parent item is considered for rollup.
Assembly Component	(Total cost of each child element) + Nonmaterial Cost at assembly level	Any manually-entered cost value at the assembly level is replaced by the calculated cost value of a rollup.
Embedded Concept	Rolled-up cost of concept * Quantity	You must roll up the embedded concept by opening the concept separately and performing the roll up there, prior to other roll-ups, else the cost calculation is zero.
Concept	Aggregate of total cost of each assembly or element in root-node	Element refers to a Component, Item or Embedded Concept.



Weight and Power Roll-Up

The Total Weight and Total Power of a concept, described in the following table, are calculated as aggregates of respective roll-up values of its individual concept components, items, assemblies, and embedded concepts. Weight and power attributes are subject to identical roll-up logic.

Element	Total Weight or Total Power Calculation	Notes
Component	Weight or Power of Component * Quantity	None
Item	Weight or Power of Item * Quantity	If an item has an assembly structure, the weight or power of only the parent item is considered for roll-up. Weight and power values come from Mass and Power Consumption attributes of Agile PLM respectively. No units of measure are assigned to Agile PLM attribute values in Oracle Innovation Management.
Assembly	Aggregate of Total Weight or Total Power of each child element	Manually-entered weight or power value at the assembly level will be replaced by the calculated weight or power value after roll-up
Embedded Concept	Rolled-up Weight or Power of the Concept * Quantity	You must roll-up the embedded concept prior to other roll-ups, else the weight or power calculations will be zero.
Concept	Aggregate of total weight or power of each assembly or element within the root-node	Element refers to a Component, Item or Embedded Concept

Item Score Roll-Up

An Item is said to have complete data if it has values in the following attributes: Overall Compliance, Lead Time and Number of Manufacturer Parts. The following table describes Item Score Roll-Up.

Item score = Points for Overall Compliance + Points for Lead Time + Points for Number of Manufacturer Parts

Attributes	Attribute Values	Score (%)	Equivalent Points
Compliance	Compliant	30%	30
Compliance	Not Compliant or Blank	N/A	0
Lead Time	Less than 6	40%	40
Lead Time	Less than 11	N/A	30
Lead Time	Less than 21	N/A	20



Attributes	Attribute Values	Score (%)	Equivalent Points
Lead Time	Less than 31	N/A	10
Lead Time	More than 30	N/A	0
Number of Manufacturer Parts	2 or more	30%	30
Number of Manufacturer Parts	Less than 2	N/A	0

Concept Score Roll-Up

The score of a concept or assembly is an aggregation of three item-based score calculations.

Score of a Concept or Assembly Component = A1+A2+A3

- A1 is the % of items in the concept structure at a lower level than the concept or assembly component
 Number of items/Number of elements in the concept or assembly
- A2 is the number of items with score >= 85
 Items with score >=85/Total number of items in the concept or assembly
- A3 is the number of items with complete data
 Items with complete data/Total number of items in the concept or assembly

Note: Embedded concepts are treated as components during concept score roll-ups.

The following table describes concept score roll-ups.

Score Name	Value	Score	Equivalent Points
A1	% of items >= 90%	100%	20
A1	% of items = 80-89%	80%	16
A1	% of items = 70-79%	70%	14
A1	% of items <70%	10%	10
A1	% of items = 0	N/A	0
A2	% of items with score =>85 >=90%	100%	60



Score Name	Value	Score	Equivalent Points
A2	% of items with score =>85 = 80-89%	80%	48
A2	% of items with score =>85 = 70-79%	70%	42
A2	% of items with score =>85 <70%	50%	30
A2	% of items with score =>85 = 0	N/A	0
A3	% of items with complete data = 100%	100%	20
A3	% of items with complete data = 95-99%	80%	16
A3	% of items with complete data = 90-94%	70%	14
A3	% of items with complete data >90%	0	0

Related Topics

- Analyze Concept Status
- How You Calculate Metrics in Concepts

How You Calculate Metrics in Concepts

Your team is asked to modify the existing model of a mountain bike to meet certain requirements received as feedback from users. The mountain bike and its components exist in a PLM application as an item structure and items respectively.

The primary requirements are:

- Reduce cost from 680 to 470
- Decrease power consumption from 40hz to 35hz

The detailed requirements specifications include:

- Reduce the size of the air box to improve efficiency and decrease power consumed
- Improve the exhaust system to optimize the power consumed
- Implement high flow rates and outstanding oil filtration for efficient power consumption

The following table summarizes key decisions for this scenario:



Decisions to Consider	In This Example
How can the existing PLM items be used in the concept design?	Convert existing items to concept components
How are requirements and metrics correlated?	Map requirements to components in the concept structure
How do I consider different design approaches based on the same concept structure?	Assign components to solution alternatives
How do I ascertain the most suitable concept design?	Modify component specifications Calculate metrics and compare solution alternatives Determine the concept design that fulfills requirements

Prerequisites

Complete the following actions before proceeding to the next task:

- · Convert existing items to components in the concept
- Assign components to solution alternatives

The structure and component specifications of the newly-created concept **Mountain Bike** in this example are tabulated in the following table. The units *Air Box, Exhaust System*, and *Oil Filter* are PLM items converted to components.

Concept Component	Default	Solution Alternative 2	Solution Alternative 3	Cost	Power
ATV Air Box	Yes	None	None	330	17
Air Box	None	Yes	Yes	200	10
Exhaust System	Yes	Yes	Yes	190	15
Oil Filter	None	None	Yes	80	10
Cartridge Oil Filter	None	Yes	None	140	14
Wrench Off Oil Filter	Yes	None	None	145	13

1. Enhance specifications of the converted components *Air Box, Exhaust System*, and *Oil Filter*.

Reuse existing PLM items by converting them to concept components in the structure, and modifying specifications according to the requirements. The changes in component specifications can be translated into item enhancement requests in the PLM application.



2. Map requirements to components in the concept structure.

Calculate Metrics

- 1. On the **Edit Concept** page, click the concept root node **Mountain Bike** and assign the following specifications to it: **Target Cost** *470* and **Target Power** *40*.
- 2. Click the **Metrics** link to view assigned metrics.
- 3. Click the **Recalculate** icon to roll up and view calculated metrics.

Compare and Select a Solution Alternative

- 1. On the **Edit Concept** page in **Metrics** view, locate the **Solution Alternative** menu to view and analyze the metric calculations of each solution alternative.
- 2. Select the **Default** option from the **Solution Alternative** menu. The calculated power exceeds the target power as indicated by the **Warning** icon.
- 3. View the calculated metrics for Solution Alternative 2 and Solution Alternative 3 also.

The cost and power metrics of each solution alternative are tabulated in the following table.

Solution Alternative	Default	Solution Alternative 2	Solution Alternative 3
Cost	665	530	470
Power	45	39	35

Solution Alternative 3 offers an optimum solution to the primary requirements. You can convert the concept structure of this solution alternative to a PLM item structure, or request approval for the concept **Mountain Bike** itself.

Related Topics

- Analyze a Product Concept
- · Guidelines for Working with Solution Alternatives
- What are metric attributes

Analyze Concept Status

Use item status pie charts to view and analyze maturity of a concept and its components, based on the percentage and number of newly created and existing items in the concept structure.

Lifecycle Phase Maturity and Concept Risk

Enable the Metrics view of the concept structure to access the item status pie chart.

Use the item status pie chart to determine lifecycle phase maturity at:

aggregate level



· individual item level

Item lifecycle phases in Oracle Innovation Management are mirrored from the PLM application the item belongs to.

Hover over an item status pie chart to view the number of items in each indicated lifecycle phase. Click the different segments in the item status pie chart to view the corresponding items highlighted within the concept structure.

A concept is considered to be at lower risk if items in the concept structure are in the released or production phase of their life cycles. The percentage of items in the concept structure also affects overall concept score.

Related Topics

- Analyze a Product Concept
- Concepts, Concept Components, and Items: How They Work Together





6 Reports and Analytics in Innovation Management

Reports and Analytics for Innovation Management

Innovation Management uses reports and analytics to quickly view or run analytics and reports that are related to your work.

The Reports and Analytics pane is where you create and edit analytics and reports with the proper permissions. Or, you can add them from the Business Intelligence (BI) catalog to the pane. You may find this pane in a panel tab or in the regional area on some work areas. In the Reports and Analytics work area, the pane appears as the Contents pane.

An analysis is an interactive display of data, for example in a table or graph. You use analyses to:

- 1. Summarize or break down simple, real-time data
- 2. Help you make short-term decisions

A report is output of data in a predefined format that provides little or no interaction. Print reports in these situations:

- 1. To get high-volume data in a high-fidelity output optimized for printing
- 2. For documents to support internal operations, statutory requirements, and other business needs

Innovation Management Dashboard

Innovation Management consists of Ideas, Requirements, Proposals, and Concepts pages that provide detailed analytics and visibility into count, cycle time, and aging reports for each of these areas.

The Innovation Management work area enables you to view and analyze your company's performance on factors that drive innovation to bring clarity for decision making.

Each page provides visibility about key metrics, and displays certain charts that are created using the Innovation Management Subject Areas help you create ad-hoc analytics based on business questions that must be answered. You can use these various chart types to visualize information with specific combinations of measures and dimensions to make the best decisions for your products and business.

In the Ideas tab, you can view information about ideas gathered in the application. For example:

- How many ideas have been generated and by whom?
- Which ideas are based on customer requests?
- How many ideas have one or more requirements specifications associated with them?

In the Requirements tab, you can view information about requirement trends, count, and status. For example:

- How many requirements specifications are yet to be approved?
- Which are the ten most important requirements we should focus on?
- What's the average period of time it takes for a requirements specification to be approved?



In the Proposals tab, you can view information about calculated metrics, cash flow, resources, related items, and aging in proposals. For example:

- What's the count of project tasks that are related to a selected set of proposals?
- How many proposals are submitted and pending approval?
- What's the difference between actual revenue and projected revenue of a proposal?

In the Concepts tab, you can view information about concepts, related items, and solution alternatives. For example:

- What's the count of ideas related to a selected set of concepts?
- How many suppliers are associated with a concept?
- On average, how often are concepts updated?

For more information about configuring reports see these guides:

- Oracle SCM Cloud Using Analytics and Reports
- · Oracle SCM Cloud Creating and Editing Analytics and Reports

Create Deep Links to Objects in Reports

Create deep links to navigate from Oracle Transactional Business Intelligence (OTBI) reports to specific objects. In this procedure, see how you can create a link to idea objects from a report.

Use the Navigator to go to the Reports and Analytics work area. OTBI folders are also accessible from the Reports and Analytics side tab of an idea. Click the Browse Catalog icon to create a report.

- 1. To create a report and add fields:
 - a. In the Catalog page, from the New menu, click Analysis to create a report.
 - b. Select Innovation Management Ideas Real Time from the Select Subject Area menu.
 - **c.** From the Subject Areas panel, click Ideas. Select and double-click the column names, Idea Name and Ideas ID, to add them to the reports. Other columns and data are optional.

The Idea ID object doesn't work with a decimal, ensure that you set it to a non-decimal value.

- 2. To set a non-decimal value:
 - **a.** Click the Idea ID. From the menu, click the Column Properties option.
 - **b.** In the Column Properties dialog, click the Data Format tab.
 - c. Select the Override Default Data Format check box.
 - d. Set the value in Decimal Places to a non-decimal value. Click OK.
- **3.** To configure the name column to be a URL that opens the selected object in another tab:
 - Click the Idea Name.
 - b. From the menu, click the Column Properties option and in the dialog, click the Interaction tab.
 - c. From the Primary Interaction menu, select Action Links and create a link format.
 - d. Click the + icon to add an action link.
 - e. From the New Action Link select Navigate to a Web Page.
 - **f.** In the Create New Action page, add the URL. This creates a web page and passes dynamic values to load the selected object. The template of the dynamic URL is



https://<hostname>/fscmUI/faces/deeplink? objtype=IDEAS&action=EDIT&objKey=ideaId=<IDEA_ID>

Note that:

- the Object Type is Ideas
- the Action is Edit
- the Object Key is Idea ID
- **4.** To define Parameters:
 - **a.** Click Define Parameters. The value for the object key is dynamic and the object ID is retrieved from the report data.
 - b. In the Values column, in the third row, click the 123 menu, and select Column Value.
 - c. From the menu select Idea Details: Ideas ID.
 - d. Select the Fixed and Hidden check boxes in all the rows to ensure that the URLs work automatically.
- 5. Add the reference to Idea ID in the URL field of the Create New Action dialog after you define parameters.
- 6. Click Options to open the Action Options window.
- 7. Check the Open in New Window check box and click OK. You return to the Create New Action window.
- 8. Click OK. You return to the New Action link window.
- **9.** Click OK. In the Column Properties window, select the 'Do not display pop-up if only one addition link is available at runtime' check box. This helps when there are multiple action links with different actions. Click OK.
- **10.** Click Save Analysis to save the report.
- 11. Click the Results tab to view search results. If you click one of the links in the search results, the object opens in a new window.

Related Topics

• Watch Video: Create Direct Links from OTBI Reports for Innovation Management

Traceability Report

The Traceability Report is generated by an action on requirements specifications and concepts. It displays attributes defined for requirements by the administrator.

A traceability report lets you discover, during a product's development cycle, whether all test cases have passed or if all requirements were met. It can demonstrate that, for instance, elements of equipment were fully tested, or meet regulations as described by requirements.

You can generate Traceability reports in these formats: XML, CSV and HTML and export the reports in the CSV and HTML formats. The HTML format highlights unfulfilled requirements and test cases.



Graphical Navigator

Overview of the Graphical Navigator

In the graphical view of structured data related to a particular context, you can do the following:

- View and navigate through a large amount of data or related components.
- View the number of children in a hierarchical structure.
- Expand and collapse relationships.
- Visually recognize different component types and different relationships between the components.
- View detailed information related to a specific component within the structure.
- · Search for the required component.

Note: If the focused component is part of the search results, it's highlighted in the search result area. If the component isn't a part of the current view or page, the application focuses on the first search result.

Structured data is displayed in the following different ways:

- Dependency Map: The dependency map lets you map the data to visualization and configure possible interaction and visual properties.
 - The dependency map has connector lines that depict the different type of connections between the components. Thick lines indicate a direct relationship between the two components, dotted lines indicate an indirect relationship.
- Dependency Graph: The dependency graph displays the visual cards related to the data and the relationship between the data.

In the dependency graph, when you hover over the visual card, the tooltip displays the name of the component, if the mouse is over the attribute of the component, then the tooltip displays the attribute.

Note: Changes you make to the dependency map are reflected in the dependency graph, and vice-versa.

Note: Arrow lines depict the parent-child relationship between the components. Child components are indicated by arrow lines from the parent component. Click the connector lines to bring into focus the components that are on either end of the connector. All the other components are grayed out.

Related Topics

Structured Data

View Related Objects Graphically

To view related objects graphically:

1. Navigate to the Concept Design work area.



2. Use the **Search** panel to search for and open a concept structure.

Choose **Concepts** in the **Search For** list. Enter the name of concept and click **Search**. In the search results, click the name of the concept to open it.

A concept structure is simply a concept that has requirements specifications associated with it.

3. Select Actions > Launch Graphical Navigator.

A tab opens with the concept structure displayed graphically by the graphical navigator.

4. The high-level map shows the concept structure and its related requirements specifications.

Click on an object in the high-level map to zoom in on that object.

5. The graphical navigator's internal **Search** panel is helpful to find specific objects in a large concept structure.

In the search results - or on the high-level map - right-click on an object and select **Focus** to zoom in on the object.

- 6. To see different summaries about the object, right-click on other objects in the search results, such as:
 - Information: View additional information about the component.
 - Focus: Brings the component to focus.

Note: The components that aren't on the same level, and that aren't directly connected to the focused components are collapsed.

o More Details: View additional details of the component.

For instance, on the **Information** pop-up, click **More Details** to open the object in a dynamic tab to view all information.

Related Topics

· Watch Video: View Related Objects Graphically





7 FAQs

What's the difference between the Top Customer Contributors chart and the Top Contributors chart?

A customer contributor is an external customer or partner who contributes ideas. The names listed in the **Top Customer Contributors** chart on **Overview** page are tabulated from the names in the Customer field of ideas from external customers.

A contributor is an internal user, someone who works at your company and who contributes ideas. The names listed in the **Top Contributors** chart on **Overview** page are tabulated from the names in the Posted By field of ideas from internal contributors.

How can I delete an idea?

Select an idea from **Search Results** table on **Manage Ideas** page, then click the **Edit** button. On the **Edit Idea** page, open the **Actions** menu, and select **Delete**. You're prompted to continue or cancel the action.

How do I create a proposal in relationship to an idea?

If an idea has potential to become a product, or this potential develops as the idea is enriched or associated with other ideas, there's a choice to create an associated proposal. On an Edit Idea page or the Manage Ideas page, click the **Actions** list and select **Create Proposal**. A proposal is created.

When you create a proposal from an Edit Idea page, it appears on the idea's Relationships table only after reloading the idea. Also, the idea is inserted in the proposal's Relationships table. When you create a proposal from the Manage Ideas page, it appears on the idea's Relationships table only after you click the **Refresh** button.

How can I manage my customer list?

On the Ideas **Overview** page, click the **Manage Customers** icon to open the Manage Customers dialog. Create, rename, delete, and organize the customers or partners who create ideas for your company and export your customer list to Microsoft Excel.



How can I add statuses for ideas?

Navigate to Setup and Maintenance > Product Management > Product Requirement and Ideation > Manage Product Idea Statuses. In the **Lookup Codes** panel, click the Actions menu and select **New** or click the + icon. Enter the new status and other required fields. Click Save.

What's the difference between product proposal Save As and product proposal Save As New Version?

With the **Save As** option, you can create a new product proposal and change the concept type. You can also selectively pick the contents of the product concept and the product proposal.

By selecting the **Save As New Version** option, you can only create a new version of the selected product proposal.

How do I export a product proposal?

From the **Actions** menu on the Edit Proposal page, click **Export** and then select either PDF or any other output formats (HTML, Excel, RTF, PowerPoint) that you want.

What attributes of a project can I view in the associated proposal?

To enable complete visibility into the status of the projects associated with the proposals, additional information related to the project appears on the proposal. The attributes include the following: **Start Date and End Date**, **Percent Complete**, **Budgeted Total Cost**, **Actual Total Cost**, and **Estimated Cost to Complete**.

Can I create a new version of a product proposal that's in submitted status?

No. You can create a new version of a product proposal only when it's in either the draft or approved status.



Can I add additional fields to a proposal?

Yes. For approvers and reviewers to make informed decisions at each stage, certain fields display information required to arrive at those decisions. The administrator can configure existing tabs to include more fields that will provide key information for your business processes.

What's the difference between a requirements specification and a requirement?

A requirements specification is always the top level of a structure. The structure is known by its top-level requirements specification. A requirement is a detailed statement or information, with different attributes than a requirements specification. A requirement can have multiple child requirements, like a requirements specification, but a requirement is never found at the top level of a structure.

A requirements specification object can be included in the structure of another requirements specification. This behavior is the same as a requirement. When a requirements specification is added to a structure, it can't have any child requirements.

How do I create a requirement?

A requirement is always created within the context of a requirements specification. With a requirements specification selected, click the **Actions** button on the menu bar of the **Requirements** pane and select **Create Requirement**. Enter information about the new requirement in the dialog. When you click **OK**, the requirement is added to the structure.

You can continue creating requirements, with a requirement selected, by selecting Create Another.

You can also use the context menu to create and add requirements.

After creation of requirements by any of these methods, remember to save the requirements specification. From then on, any of the new requirements can be searched for, viewed, and modified. They can be moved in the structure, removed from the structure, or added to other structures.

How can I export a requirements specification?

With a requirements specification open, click the **Actions** menu, then select **Export**. Select the format to save the exported file, as **HTML**, Adobe **PDF**, **XML**, or Microsoft **Word**. When you select to **Save** the file, **Browse** to a location on your local computer and enter a **File** name.



Can I change the version of a requirements specification?

No, you can't change the **Version** field of a requirements specification until it's approved. When a requirements specification is approved, it becomes read only, and the **Save As New Version** option appears in the **Actions** menu on the **Edit Requirements Specification** page. Select this action to create a new, modifiable requirements specification with a new version number.

What's the Comments icon that's next to some requirements?

You can create a comment by clicking the **Comments** link on **Standard** view when a requirement is selected in a structure. In the Comments dialog, type in your comment and click the **Publish** button. When a comment is published, the default status is Open. The Change Status field can be set to Closed, and set back to Open. If the requirement has at least one Open comment, an icon displays next to the requirement in the structure, which alerts the product manager or requirement owner of actionable comments.

How can I associate a requirements specification with a product?

With a requirements specification open, click the **General Information** tab. Click the **Product** menu and select the appropriate product. You can associate another version of the requirements specification to another product. The administrator creates the names of products that appear in the menu of this attribute.

How can I add an attachment to a requirements specification or requirement?

With a requirements specification or requirement open, navigate to the Attachments tab. Select the **Add** option from the **Actions** menu or click the **Add** icon. Select a **Type** of **File** or **URL**. If the attachment is a file, click the **Browse** button and find the file on your system and select it, then click **Open**. If the attachment is a URL, enter it in the field provided. You can add a title or description to either type before or after adding the attachment.



Can I add or remove attachments and relationships for a requirement?

In the table view of a requirement you will find the **Manage Attachments** and **Manage Relationships** option from the **Actions** menu. Also, there are icons indicating if there are attachments or relationships associated with the requirements in the table. By clicking on the icon you can manage the existing attachments or relationships of the requirement in the dialog.

What's the difference between a managed team and an approval or review team?

The **Manage Team** action controls who has access to read and modify the object. The Allow Access To setting is always set to "Everyone". You can select "Team members only" and select users to have access to the object. So, when the **Submit for Approval** action is executed, some users, who don't have access to read or modify the requirements specification itself, may be notified of a Worklist task to Approve or Reject the object.

How can I associate Agile Product Lifecycle Management business objects with requirements?

Navigate to the Relationships tab of a requirements specification or requirement. Click the **Select and Add** icon to search for and find the Agile Product Lifecycle Management item or design that you want to be associated with the requirement. With the Product Lifecycle Management object selected, click **OK**. Click **Save**.

How can I associate a requirements specification or requirement with a proposal?

Open a requirements specification or a proposal and navigate to the Relationships tab. Click the **Select and Add** icon to add the objects you want to associate with the requirements specification to create the relationship. Select the Proposal option. Click OK.



How can I associate a test case with a requirement?

According to the situation, you can use either a dependency or a relationship. Dependencies imply stricter control than relationships, because you can't delete a requirement if it impacts another requirement.

What's the Impacts Components table?

The **Relationships Summary** tab of requirements specifications has a read-only **Impacts Components** table that collects components from all the requirements in the structure. The **Relationships** tab of requirements has a read-only Impacts Components table, that lists the components that the selected requirement impacts. If the selected requirement changes, it affects those components on Impacts Components. Each component listed is an active link to open that component. If a component is fulfilled and tested successfully in Concept Design Management, this table displays the updated status.

What happens if I convert a requirement line item into a requirements specification from the tree view?

Converting a requirement line item into a requirements specification action from the tree view creates a new requirements specification, moves the selected requirement line item and its child objects from the original specification to the newly created specification along with all the attributes, attachments, relationships, and team settings. You can only convert a requirement into a requirements specification if the requirement and its child objects aren't associated with a concept or a component.

How do I manage work items for my projects in Oracle Innovation Management?

If you're a project manager with an appropriate job role, such as product manager, or product design manager you can open and manage work items of assigned projects in Oracle Innovation Management, using the Relationships tab.

Project work items can include items, concepts, proposals, and requirements specifications.

Note: To work with projects in Oracle Innovation Management, it's required that you have functional security to access work items details in Oracle Project Portfolio Management Cloud.



Who can terminate an approval workflow?

Only the user who submitted the object for approval can terminate the approval workflow. Remember, only proposals have the termination recorded in Approval History.

How can I restart a stuck workflow?

Use the **Terminate Workflow** action on a concept, proposal, or requirements specification to fix a stuck approval workflow. This action removes approval notifications from the worklist and returns the object to Draft status. You can then resubmit it for approval.

How do I attach files to a concept and its lower-level components?

When you select a concept or its lower-level concept component, you can attach reference data to it as files, URLs, designs, and relationships. Within the **Specifications** pane in the **Edit Concept** page, expand the **Additional Information** panel. Here, the **Attachments** panel enables you to upload files from your local computer, or add URLs, as references.

Related Topics

Edit Component Specifications

Why are some components hidden in the concept structure when I use the Solution Alternative Filter?

The **Solution Alternative Filter** controls how the default concept structure appears, depending on the solution alternative you select.

The **Solution Alternative Filter** uses a top-down filtering sequence, and only the alternatives you have assigned to the selected solution alternative are displayed.

When a parent component is assigned to a solution alternative, and the active **Solution Alternative Filter** hides it, its lower-level components which may belong to different solution alternatives are also filtered out. This filter applies to both, the table and metric attributes views.



Related Topics

- · Guidelines for Working with Solution Alternatives
- Solution Alternatives in a Concept Structure

How can I update the requirements specification version in my concept structure to the latest version?

The Requirements table has a Refresh icon for you to quickly update the version of the requirements specification you're seeing for the current concept. When you click Refresh and replace the current version of the requirements specification with the newest version of the requirements specification, the mappings of the previous version carry over to the new version if they're not in conflict with the updated version mappings. If there are specific requirements that no longer exist in the new version then those are removed. When there are multiple versions of the same requirements specification for a concept the data mappings remain the same.

How can I edit the cost on a concept component?

In the **Edit Concept** page, expand the arrow at the end of the row, which opens an information panel. After you edit the cost of the component and save the data, select **Actions > Recalculate** to populate the cost or roll up any other metrics defined in the concept structure.

How do I use an ECO while converting a component to an item?

When converting a solution alternative or concept component to a PLM application, assign the newly created item to an exclusive engineering change order (ECO) created in the PLM application, or to an existing ECO, or to no ECO at all.

Using an ECO enables tracking of product changes, and implementation or modification of production processes within the PLM application.

- Create an exclusive ECO to track a proposed solution alternative in its entirety as it moves through the product life cycle
- Select an existing ECO to track product redesigns

Note: Selecting an existing ECO that's already in the Released state stops the conversion operation and results in an application error

Related Topics

Considerations for Converting a Component to a Bill of Materials



Why is a product proposal created alongside a concept?

A product concept and a product proposal are meant to address the technical design and business aspects respectively, of any product you develop in Oracle Innovation Management. The concept stores technical details such as product structure and alignment with requirements while the proposal stores business details such as costs and revenue.

A concept and a proposal can't contain sufficient information individually to justify a project start, and are hence created alongside each other.

Related Topics

How Concepts, Requirements and Proposals Work Together

What are metric attributes?

Metric attributes are quantitative characteristics of individual units in a concept structure. They allow you to rate and score product concepts.

You can add, calculate and compare actual and target values of concept metrics like cost, weight, and compliance, to decide on product concepts suitable to your company's product strategy and requirements.

To view these predefined attributes in the **Metrics** attribute group view of the concept structure, you must first roll up or recalculate the metrics.

Target attributes are product design goals broken down from concept-level to component-level metrics, that allow design engineers to plan design goals in specific categories.

You must manually assign target attributes on each level as required.

Related Topics

- · Guidelines for Working with Solution Alternatives
- Analyze a Product Concept

What's an Annual Discount Rate?

Annual discount rate is the discount rate given to future cash flows to convert them to present cash flows.

Can I create ad-hoc reports for business objects?

Yes. You can create ad-hoc reports to obtain the counts, cycle times, and aging of concepts, and proposals.



How do I access the Oracle ADF Desktop Integration tool to edit an object?

From the **Actions** list item of Edit in Spreadsheet available from a product proposal's **Cash Flow** tab, **Cost** table, or **Revenue** table and the **Resources** tab. It's also available from the **Elements** table. In the open Excel file, you then can add, remove, or update data, depending on the source of the Edit in Spreadsheet action. If you started from the **Cash Flow** or **Resources** tab, then you can add, remove, or update content in the Excel spreadsheet. If you started from the **Elements** table, then you can only update content for the metrics that are already editable in the user interface of the application.

How do I share my opinion with development teams on terminating a product?

If the **Edit Concept** page has a **Social** link, you can invite others to a conversation to discuss the ideas.

For example, as a product manager, you carefully weigh the market share research, revenue, and want to add an additional feature to one of the products. You want to make sure you have agreement from the people closest to the product, the product development manager, and the product manager.

From the **Edit Concept** page:

- 1. Click the Social link to open Oracle Social Network (OSN).
- 2. Click New Conversation.
- Invite your product manager and product development manager to the conversation.

The details of your conversation and key aspects of the concept are visible on the wall in OSN for everyone to view.

After a joint online discussion about the pros and cons of terminating the product, questions are asked and answered, and supporting documents are uploaded and reviewed. When you click the **Social** link from a business object, all the social networking features provided by OSN are instantly available. This makes it easy to bring in the people you require to make an informed decision.

Depending on your job role and permissions, you can use social networking features for the following Oracle Innovation Management business objects:

- Ideas
- · Requirements Specifications
- Concepts
- Proposals

Related Topics

Enable Oracle Social Network for Reputation Management



How can I compare planned resources pool data to actual resources pool data?

Using the **Refresh** button brings actual resource pool utilization from the associated project to the **Proposal** tab. A time stamp is included capturing the last refresh. This enables a comparison of the planned resource pool use in the proposal to the actual resource pool use in the project.



