

Oracle

**SCM Cloud**

**Implementing Product Development**

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**Release 12**

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# Preface

This preface introduces information sources that can help you use the application.

## Oracle Applications Help

Use the help icon  to access Oracle Applications Help in the application. If you don't see any help icons on your page, click the Show Help icon  in the global header. Not all pages have help icons. You can also access Oracle Applications Help at <https://fusionhelp.oracle.com>.

## Using Applications Help

 **Watch:** This video tutorial shows you how to find help and use help features.

## Additional Resources

- **Community:** Use [Oracle Applications Customer Connect](#) to get information from experts at Oracle, the partner community, and other users.
- **Guides and Videos:** Go to the [Oracle Help Center](#) to find guides and videos.
- **Training:** Take courses on Oracle Cloud from [Oracle University](#).

## Documentation Accessibility

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## Comments and Suggestions

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# 1 Introduction to Product Development

## Overview

Oracle Innovation Management and Oracle Product Development, along with Oracle Product Hub, deliver comprehensive Innovation to Commercialization capabilities across your entire product value chain.

Oracle Innovation Management consists of the following products:

- Product Requirements and Ideation Management
- Concept Design Management
- Product Lifecycle Portfolio Management

Oracle Product Development enables you to manage product data and change orders while balancing cost.

In the **Setup and Maintenance** work area, these products appear as **Functional Areas**. You can view and implement them through the **Product Management** offering.

Functional Area	Description
Product Requirements and Ideation Management (PRIM)	<p>The Innovation process begins with Ideas entered or uploaded into Ideas Management. Ideas that gain interest and approval are attached to a product proposal and later converted into more formal requirements specifications. Later these can be developed as input for detailed design in Product Lifecycle Management (PLM) solutions.</p> <p>Allows employees and stakeholders to collaborate on product innovation ideas and record requirements.</p> <p>Product managers can integrate requirements with concepts in Concept Design Management, and ideas with proposals in Product Lifecycle Portfolio Management.</p>
Concept Design Management (CDM)	<p>Offers a collaborative design workspace for product architects, designers and executives to generate, capture, analyze, and approve product concepts that address product strategy goals.</p> <p>Approved concepts can then be transferred directly to Product Lifecycle Management (PLM) solutions for prototype planning, detailed design and product introduction.</p>
Product Lifecycle Portfolio Management (PLPM)	<p>Allows product portfolio managers to create, analyze, manage and revise product portfolios, to arrive at an optimal product mix.</p> <p>Portfolio managers can also optimize resources across a portfolio, evaluate portfolios, and design forecasting road maps.</p>
Product Development (PD)	<p>Uses Items, Structures (BOM), and Changes to track the development processes around products, and enable fast-track commercialization of the right products.</p> <p>PD enables a company to incorporate concepts or early BOMs, designs, and other documents from sources such as Oracle Innovation Management or external PLM applications.</p> <p>PD manages changes formally and centrally on items (parts), and items/BOMs can be released to manufacturing with recommendations on sourcing (example, manufacturer parts).</p>

For information about getting started with Oracle Cloud and implementing Oracle SCM Cloud, refer to the Oracle Cloud Documentation library.

For information about upgrading from previous releases of Oracle Fusion Applications, refer to the Oracle Fusion Applications Upgrade Guide.

#### Related Topics

- [Defining Product Development: Overview](#)
- [Defining Product Innovation: Overview](#)


## Getting Started with Oracle Product Development: Checklist

This topic outlines the recommended steps for implementing Oracle Product Development.



The sequence of setup tasks is split across the Cloud Service Administrator and Application Implementation Consultant roles.

### Tasks for the Service Administrator in the Oracle Cloud Customer Portal

Task	Description
<b>Step 1 - Understand Your User Profiles</b>	<p>With your Oracle Applications Cloud Service, you have three user profiles:</p> <ul style="list-style-type: none"> <li>• Two application profiles: used to access your Stage Environment and Production Environment.</li> <li>• Your Oracle profile: used to access all oracle.com sites including My Oracle Support and the Oracle Cloud Portal.</li> </ul>
<b>Step 2 - Confirm Your Browser Configuration</b>	<p>Confirm that you are using one of the supported browsers with Oracle's recommended configuration (minimum native screen resolution of 1280x1024).</p> <ul style="list-style-type: none"> <li>• Internet Explorer 11.x, 10.x, 9.x</li> <li>• Mozilla Firefox 24+</li> <li>• Google Chrome 35+</li> <li>• Apple Safari 7.x and 6.x</li> </ul>
<b>Step 3 - Confirm Your Application Login Credentials</b>	<p>Locate your <b>Welcome</b> e-mail containing your application user login credentials for the Stage and Production Environments.</p>


 **Tip:** When first provisioned, the Stage and Production Environments are assigned a default sizing for a number of concurrent users. These defaults may not be adequate and may be changed to provide optimal performance. We recommend that you identify your sizing requirements early in the implementation. Ensure that they are adjusted in advance of when you support a number of users. Supply this information through a Service Request raised with Oracle Cloud Operations who manage the environments. This helps minimize delays in your implementation.




Task	Description
	Access the Service Administrator Action List.
<b>Step 4 - Add Additional Notification Contacts</b>	<p>Initially, you are the only person at your company who receives critical Oracle notifications, including upgrade and outage schedules.</p> <p>As a best practice, you can add users to receive important notifications of upgrades and outages when you are unavailable.</p> <ol style="list-style-type: none"> <li>1. In the Oracle Cloud portal, sign in using your Oracle.com account credentials.</li> <li>2. Click the <b>Sign In to Notifications</b> button.</li> <li>3. In the Oracle Notifications Portal page, click the <b>Users</b> tab.</li> <li>4. Click the <b>Add User</b> button, and fill out the user information. Ensure that the Role is <b>Administrator</b>, and that you select <b>Yes</b> in the <b>Receive e-mails</b> field.</li> </ol> <p>Users with the role of <b>Administrator</b> can add other employees to receive notifications.</p>
<b>Step 5 - Add Additional Administrators for your Oracle Applications Cloud</b> <div>  <b>Tip:</b> Check if all users, other than implementation users, should be registered as employees first. To ensure critical business functions work, create the relevant users as employees first, and then let the application create user accounts for them. </div>	<p>We recommend appointing at least two administrators who can access <b>My Services</b> and perform administrative functions.</p> <ol style="list-style-type: none"> <li>1. Locate your Welcome e-mail and access the Service Administrator Action List.</li> <li>2. Follow the <b>My Services</b> URL and login with your Oracle credentials.</li> </ol> <div>  <b>Note:</b> You are required to change your password the first time. </div> <ol style="list-style-type: none"> <li>3. In the <b>Identity Domain</b> field, paste the Identity Domain (environment name) from your e-mail.</li> <li>4. Click <b>Sign In</b>.</li> <li>5. Click <b>Security &gt; Users &gt; Add</b></li> <li>6. Fill out the information for the new user, making sure to move an Administrator role to the <b>Assigned Roles</b> list.</li> </ol> <p>Users with a role of Administrator can access <b>My Account</b> to:</p> <ul style="list-style-type: none"> <li>○ order more services</li> <li>○ manage services from all identity domains and data centers for your account</li> <li>○ monitor service status</li> <li>○ view historical usage data</li> <li>○ add Account Administrators</li> </ul>
<b>Step 6 - Register Your New Customer Support Identifier in My Oracle Support</b>	<p>You should have already received a separate e-mail containing the Customer Support Identifier (CSI) for your new Oracle Cloud Service. You must register this CSI in <b>My Oracle Support</b> using your Oracle Account.</p> <p>The first person to request access to a CSI is checked by Oracle to ensure that the domain of the e-mail matches the domain associated with the CSI.</p> <p>Once approved, you are made the <b>administrator</b> of that CSI, and can approve access requests to your CSI.</p> <ul style="list-style-type: none"> <li>• If this is your first time using <b>My Oracle Support</b>, you will be prompted for your CSI number after signing in. Enter your CSI number, click <b>Request Access</b> and follow the instructions.</li> <li>• If you have previously used <b>My Oracle Support</b>, add your CSI to your <b>My Oracle Support</b> account by following these steps: <ol style="list-style-type: none"> <li>a. After signing in, click the <b>More</b> tab and select <b>Settings</b>.</li> </ol> </li> </ul>

Task	Description
	<ul style="list-style-type: none"> <li><b>b.</b> Click <b>My Account</b> on the left side of the page.</li> <li><b>c.</b> Click the <b>Request Access</b> button.</li> <li><b>d.</b> In the <b>Support Identifier</b> field, enter your new CSI number and click the <b>Request Access</b> button.</li> </ul> <p>If someone else has already been made administrator for that CSI, then your request is e-mailed to him or her for approval.</p>

## Tasks for the Service Administrator in the Setup and Maintenance Work Area

Task	Description
<b>Step 7 - Configure the Product Management Offering</b>	<p>In the <b>Setup and Maintenance</b> work area, scroll through the product icons and select the <b>Product Management</b> offering. Navigate to the <b>Administration</b> section. From the <b>Actions</b> menu, click <b>Change Configuration</b>.</p> <p>Enable the following functional areas for implementation:</p> <ul style="list-style-type: none"> <li>• Product Development</li> <li>• Product Management Business Intelligence Analytics (if your users require BI Reports for PD)</li> </ul> <p>Optionally, create <b>Implementation Projects</b> to assign individual setup tasks to one or more implementors.</p> <p>Alternatively, click <b>Setup</b> to start the implementation process yourself.</p> <p>This task pulls information about users, roles, and roles provisioned to users, from the LDAP directory in OIM to the Oracle Fusion Applications tables.</p> <p> <b>Note:</b> You must perform this task before you create implementation users so that appropriate roles are available for them.</p> <p>Search and execute the <b>Run User and Roles Synchronization Process</b> task.</p> <p>Click <b>Submit</b>. Click <b>OK</b> at the end of the process, and close the window.</p> <p>Once the Oracle Fusion Applications tables are initialized with this information, they are maintained automatically.</p>

### Step 9 - Create a Primary Implementation User

 **Tip:** Oracle recommends that you set up your implementation users in the Test environment first. Migrate them to Production after they have been tested and validated.

For your consultants to access and begin your implementation process, create the primary implementation user for your lead consultant.

Once completed, this user can create additional users for the rest of the implementation team.

To create the primary user, follow these instructions:

- 1.** Sign in with your Oracle Fusion user ID and password.
- 2.** Select **Navigator > Security Console**.

Task	Description
	<ol style="list-style-type: none"> <li>3. On the left side of the page, click <b>Create Users</b>.</li> <li>4. Click <b>Add User Account</b>.</li> <li>5. Provide the user attributes and click <b>Add Role</b>.</li> <li>6. To provision the new user with roles, search for the <b>Application Implementation Consultant</b> role. Select it and click <b>Add Role Membership</b>.</li> <li>7. Add the following <b>Roles</b>, at minimum: <ul style="list-style-type: none"> <li>○ IT Security Manager</li> <li>○ Employee</li> </ul> </li> </ol> <p>Close the window.</p> <p>Notify your primary implementation team member that their user ID has been created. Give them their initial password.</p>
<b>Step 10 - Set up Key Implementation Users and Security Profiles</b>	<p>After your environments are provisioned, you as the Service Administrator have sufficient security abilities to create three implementation users with the necessary roles.</p> <p>These users are:</p> <ul style="list-style-type: none"> <li>• TechAdmin: Can perform key technical duties, including functional setup and assigning security roles to users.</li> <li>• APPL_IMPL_CONSULTANT and SCM_IMPL_CONSULTANT: Can perform key functional duties, including functional setup.</li> </ul> <p>You may decide to replace or refine these initial users, but these users have all the access required to get you started.</p>

## Tasks for the Application Implementation Consultant in the Setup and Maintenance Work Area

Task	Description
<b>Step 11 - Create Data Roles and Assign Security Profiles</b>	<p>You can secure data by provisioning roles that provide the necessary access rights.</p> <p>Data roles apply explicit data security policies on job and abstract roles. Create and maintain data roles in the Authorization Policy Manager.</p> <p>Assign a predefined security profile to relevant job or abstract roles using the Oracle Human Capital Management (HCM) setup task <b>Manage Data Role and Security Profiles</b>.</p> <p>Oracle Product Development is shipped with the following job and duty roles:</p> <ul style="list-style-type: none"> <li>• Product Manager: Product Development Duty</li> <li>• Employee: Idea Management Duty</li> </ul>
<b>Step 12 - Create End Users</b>	<p>To create application users, perform the <b>Manage Users</b> task in the Setup and Maintenance work area.</p>

Task	Description
	When you create a user, you must also assign the user one or more roles. Each role carries privileges required to perform tasks in the application.
<b>Step 13 - Perform Common Application Configuration</b>	Refer to the guide <b>Oracle Applications Cloud Implementing Common Features</b> .
<b>Step 14 - Define Product Development</b>	<p>The configuration tasks for Product Development span four functional areas:</p> <ul style="list-style-type: none"> <li>• Item Organizations</li> <li>• Items</li> <li>• Change Orders</li> <li>• Product Development Setup</li> </ul> <p>Configuration tasks for the first three functional areas are part of Oracle Product Hub setup. For more information, refer to the Oracle SCM Cloud Implementing Product Management guide.</p> <p>Access the following tasks in the Setup and Maintenance work area:</p> <ul style="list-style-type: none"> <li>• Manage Structure Component Descriptive Flexfields (in the Product Management offering, under the Define Product Development task)</li> <li>• Manage Change Order Entry and Exit Rule Sets</li> <li>• Manage Product Development Lookups</li> </ul> <p>After completing the tasks in the Setup and Maintenance work area, configure item management and change management settings for Product Development.</p>
<b>Step 14 - Configure Oracle Product Development for Integration (Optional)</b>	<p>Configure Oracle Product Development to integrate with Oracle Innovation Management.</p> <p>Run the <b>Manage Target System</b> task in the Product Management offering.</p>
Step 15 - Customize and Extend Oracle Product Development (Optional)	<ul style="list-style-type: none"> <li>• Define custom attributes for Product Development; use Page Composer and Data Composer to enable them.</li> <li>• Enable Oracle Social Network for business objects in PD.</li> </ul>

### Related Topics

- User and Role Synchronization: Explained
- Creating Implementation Users: Procedure
- Creating Data Roles for Implementation Users: Procedure
- Enabling Offerings: Explained
- Enabling Offerings: Procedure

## Deploying Product Development: Points to Consider

This topic discusses deployment and integration options available to implementors of Oracle Product Development.

## Deployment Choices

Deploy Product Development only in cloud environments, with configurations that depend on your required level of control and customization.

Deployment Option	Deployed By	Level of Control and Customization	Speed of Adoption and Agility
Private Cloud	Oracle deploys and manages for you in an exclusive private cloud	Medium	Medium
Oracle Public Cloud	Oracle provides a subscription-based service	Low	High

## Integration Choices

In addition to deploying on cloud, you can integrate Product Development with other Oracle Cloud applications.

- Oracle Innovation Management

Streamline new product development and introduction processes. Innovation Management Cloud with Product Development Cloud helps in rapidly innovating and developing the best mix of profitable products.

- Oracle Fusion Project Portfolio Management Cloud

Track the conversion of ideas to projects and profitable products, using tasks associated with work items for requirements specification, concept, and proposals of the project.

## About the Product Development Implementation Guide

This topic discusses the chapters in the Oracle Product Development Implementation Guide.

The chapters in this guide are structured by business process setup information and setup task reference information.

Chapter Name	Description
Introduction to Product Development	Provides a roadmap of setup tasks.  Identifies key setup decisions that are required to set up individual modules in Product Development  Includes information about deployment scenarios applicable to Product Development

Chapter Name	Description
Creating Item Classes	Lists Item Management tasks, common to SCM Product Hub implementation, that are required prior to setting up Product Development.

Chapter Name	Description
Managing Change Order Types	Lists Change Order tasks, common to SCM Product Hub implementation, that are required prior to setting up Product Development.
Implementing Product Development	Includes conceptual information about setup tasks available for each module of Product Development. These tasks are grouped under the Functional Area Product Development in the Setup and Maintenance work area.

## 2 Managing Items and Documents

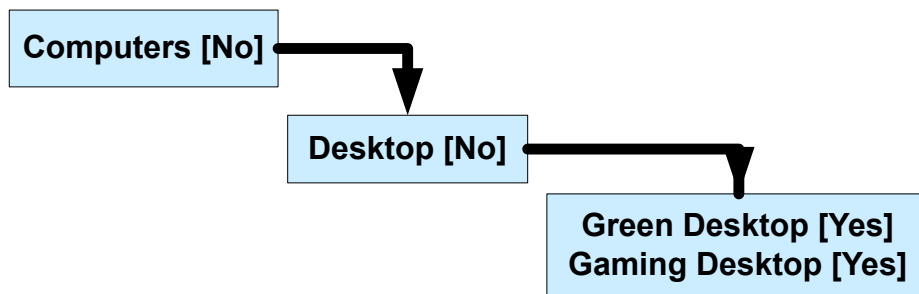
### Item Classes: Explained

Item classes are created at the root item class or under the parent item class and inherit values based on selections made when defining the item class.

The Manage Item Classes task is used to create and manage item classes, user defined attributes and data security.

Item classes can be defined in a hierarchy where the child levels indicate sub levels or types of the parent item class. All items are created within an item class. The item class hierarchy can be used to control processes for some levels of the hierarchy.

Item classes can be used for classification purposes and in some case, item creation may not be allowed. By optionally setting the **Item Creation Allowed** attribute to No, item creation under an item class can be prevented. However, a child item class of such an item class may be allowed for item creation. For example:



This prevents items from being created in Computers and Desktops, but allows items to be created for Green Desktops and Gaming Desktops. Optionally, specify a date on which the item class will become inactive. You cannot specify an inactive date that is later than the inactive date of an item class parent, nor can you specify an inactive date that has already passed. Also, all children of a parent item class with an inactive date should be made inactive at the same time or earlier.

 **Note:** Oracle Fusion Product Development does not support versioning of item classes.

When setting up definition steps for a new item request at the item class, you can identify various item details as mandatory, at each step. Definition of entire entity can be made mandatory or just certain attributes. This ensures that the item information required for a downstream step is defined and available for use.

Required attributes can be inherited from parent and assignee access is validated.

You can control item creation, viewing and update access by assigning a role on the item class to a principal or group of users. Security allows a person or a group to have privileges to an item of item class in each organization. This is inherited and hence a person who has a privilege in a parent item class will automatically have the same privilege in the child item classes.

## Default Item Class: Explained

For non-Product Hub customers, the Manage Default Item Class task (in the Setup and Maintenance work area under the Product Management offering) is used, since these customers cannot create additional item classes nor can they create user defined attributes such as EFFs. The Manage Default Item Class task launches an edit page for the Root Item Class.

The Manage Default Item Class task has three tabs:

- Basic: Item Class descriptive flexfields and attachment categories are defined on this tab.
- Item Management: Item number generation method is defined using this tab.
- Lifecycle Phases: The lifecycle phases that the items assigned to this item class will use are defined on this tab.
- Item Templates: The item templates that are used to create items are defined on this tab.

## Managing Item Types: Explained

Item types are managed using the Manage Item Types task in the Setup and Maintenance work area (under the Product Management offering).

There are 32 seeded item types and you can edit them or create additional item types.

Item types are date-enabled and are made active or inactive by adjusting the Start Date and End Date.

To benefit from the use of item types, you must enable them by selecting the **Enable** check box.

## Managing Document Classes: Explained

These are the steps for setting up and managing Document classes.

### Create Root Document Class

- Use the Manage Item Classes setup task. This is found in Product Management > Items > Manage Item Classes.
- In the Create Item Class dialog, create a subclass of the root item class. You may want to call it Root Document Class, or a name that parallels the name of your root item class.

### Assign Root Document Class

- Use Setup in the Product Development workspace.
- Enable Document Management.
- Designate your root document class.

### Add Document Subclass

- Use the Manage Item Classes setup task to add subclass to the root document class.
- Users will be able to select from those subclass when creating a document object.



## Item Attribute Groups and Attributes: Explained

Attribute groups are a logical group of attributes that are displayed in their own subregion of the user interface page at run time. Attribute groups can be either single-row or multiple-row. The selected behavior determines how the attributes appear in the user interface, as well as how they are used. Each attribute group is associated with one or more item classes.

To create an attribute group and attributes, you must use **Manage Item Attribute Groups and Attributes** task (in the Setup and Maintenance work area under the Product Management offering). Choose either single-row or multiple-row:

- **Single-row attribute group:** Contains a collection of attributes that appear as separate fields in a region named for the attribute group. For example, a single-row attribute group named Processor contains the attributes appropriate for a processor. When these attribute groups are displayed in the user interface, the attribute fields for each group are arranged compactly within a region titled with the name of the attribute group. Attributes can be multiple data types.
- **Multiple-row attribute group:** Attributes appear as columns in a table that represents the attribute group. Each row in the table is considered an attributes group. The attributes is collection of values specified by the columns in the table. The table appears in the user interface within a region titled with the attribute group name, such as MSRP Price. No other fields appear in the table. For example, a multiple-row attribute group named MSRP Price contains the attributes Country, MSRP, and Currency. Each row of the table describes an MSRP price, and is a value of the MSRP Price attribute group.

Once saved, you cannot edit the behavior of the attribute group. You will have to discard it and begin the creation of new attribute group with the correct behavior type.

## Lifecycle Phases: Explained

Item Lifecycle Phases are used as an indicator of the stage for an item within the lifecycle process. Each phase represents a set of tasks and deliverables that are required before promoting an item to the next phase.

Each item must have a lifecycle phase associated with it.

Four lifecycle phase types are predefined in the application: Design, Preproduction or Prototype, Production and Obsolete. You can use the predefined phase types to create new values for the lifecycle phases.

Companies may use different terms to describe the same item lifecycle phase. For example, the phases named Production and In Manufacturing both refer to the lifecycle phase during which an item can be used to build and ship products.

Lifecycle phases are associated with item classes, and the items in an item class can be assigned to any of the lifecycle phases associated with that item class.

Before you can create or import items, you must create lifecycle phases and those must be assigned to the item class used to create the items or to a parent item class of the item class used to create the item. When an item is assigned to a lifecycle phase, that phase is visible as part of the item's attributes. In item structures, lifecycle phases are used to control specific processes.



## 3 Managing Change Orders

### Change Order Setup: Overview

Before you can create change orders in Oracle Fusion Product Hub, you must complete these tasks in the Setup and Maintenance work area under the Product Management offering:

Task	Description
Manage Change Reasons	Change reasons are used to categorize and establish the cause or reason for a change. Change reasons are required for creating change orders.
Manage Change Priorities	Change order priorities are used to identify the criticality of changes. Change order priorities are required for creating change orders.
Manage Change Statuses	Change statuses enable you to manage a change order through its life cycle.
Manage Change Order Types	All change orders are assigned a change order type. You must define at least one change order type to use change orders.
Manage Change Order and New Item Request Header Descriptive Flexfields	Used to manage the header-level descriptive flexfields for change orders and new item requests.
Manage Change Order and New Item Request Line Descriptive Flexfields	Used to manage the line-level descriptive flexfields for change orders and new item requests.
Manage Organization Trees	Organization trees are used to create a list of organizations for use in some of the mass change flows. These are optional.
Manage Task Configurations for Supply Chain Management	Define the task configurations for the change order approval workflow.
Manage Approval Groups for Supply Chain Management	Define approval groups for the change order approval workflow.

### Change Order Statuses: Explained

Change statuses enable you to manage a change order through its workflow.

You manage the progression of a change order through its workflow by promoting it (or sometimes demoting it) to the next in a series of change statuses. For each change type, you define a set of applicable statuses.

The change status types are:

- Draft

- Open
- Interim Approval
- Approval
- Scheduled
- Completed

As an administrator, you can create statuses of each change type and assign a name. You can apply different statuses to each change order type to form workflows unique to each status type.

If you use autopromote and autodemote in the same workflow, ensure that you do not autodemote the change order to the same status from which it was automatically promoted. For example, in a workflow consisting of Open, Approval, Scheduled, and Completed status:

Do not autopromote from Open to Approval and do not autodemote from Approval to Open (when the approval is rejected).

It is recommended that in the same workflow, create an additional status between Open and Approval as follows:

Open, Rework (type Open), Approval, Scheduled, and Completed.

Then, set autopromote and autodemote as follows:

- Autopromote from Open to Approval
- Autodemote from Approval to Rework (when the approval is rejected)

## Draft Status

By default, the Draft status is the first status for all change orders irrespective of the change order type. You cannot configure Draft and it does not appear in the workflow. In this status, you can modify the change order.

## Open Status

In Open status, you can make the following changes to the change order: add affected objects and modify attribute values, select priority and reason, and provide description and optional supporting documents. You can have more than one open status in the change order workflow. For example, Open, Interim Approval, Open, and Interim Approval.

## Interim Approval Status

You can optionally add one or more Interim Approval status, to accommodate multiple approval flows or progressively approve change orders in your organization.

## Approval Status

Change orders can be routed to a list of approvers. Approvers are defined in change order type, or if the approval is rule-based then approvers are defined in approval groups. Depending on the type definition, more than one person can approve. If the approval is rule-based, then approvers are defined in approval groups in the BPM worklist. Only user-defined approvers are defined at the type level. In a user-defined workflow, approvers can also be added at run time by either the initiator or the Assigned To person.

## Scheduled Status

When a change order is approved, it is automatically promoted to a Scheduled status. After the change order is scheduled, it cannot be demoted or canceled. The change order remains scheduled until the effective dates of all affected objects has been reached.

## Completed Status

When the effective date of items in the change order is reached, the changes defined in the change order become effective in production. When all item lines in the change order are effective, the change order is completed. The change order cannot be reopened or canceled once in this status.


## Change Order Types: Explained

All change orders are assigned a change order type that defines the attributes and workflow of the change order. A change order type can be end-dated if it is not used in any change orders that have a workflow in progress. You must define the change order type to use change orders.

Use the Manage Change Order Types task (in the Setup and Maintenance work area) to create and modify change order types. The change order type contains the following information:

- Default values for Assigned To and Item Effective Date
- Number Generation Method
- Entry and exit criteria
- Propagation Rules
- Workflow set up

 **Note:** Changes made to a change order type will not be applied to any existing change orders for this type.

 **Note:** The Change Request and Deviation Change Request change types will be fully functional in a subsequent release. To restrict users from using these change types, it is recommended to set the end effective date to a previous date by using the Manage Change Order Types task in the in Setup and Maintenance work area.


## Assigned To

Any change order created of the particular change type would be assigned by default to this user or group. You can modify this value when the change order is created. This user is similar to a change analyst who is notified about status changes and approvals to keep track of the change order.

## Item Effective Date

Specify the default number of days, after the change order's creation date, on which you want the item changes to become effective. Alternatively, specify that the changes become effective immediately when the change order is completely approved. This option sets the default item effective date when a change order is created, which can be modified before the

change order is submitted. If the effective date for an item is empty, the item change becomes effective immediately upon approval of the change order.

 **Note:** It is the effective date of the specific items in a change order that determines their production effectivity, not this item effective date for the change order, which is used to set the default effective date of item lines in the change order.

## Number Generation Method

When the administrator selects Sequence Generated, the administrator can provide the Prefix, Starting Number, Increment, and Suffix for change order numbers for the change order type.

When Rules Generated is selected as a number generation method, the user needs to associate a user-configured rule set, which creates change numbers in the sequence defined in the function.

You can also use the User-Defined method and define your own number generation methods.

## Entry and Exit Criteria

Entry and exit criteria are set up as rules that validate progression of a change order through its workflow. You can define entry and exit criteria for each status to serve as checkpoints in a change process flow.

Entry criteria can be set up for Interim Approval and Approval status. Exit criteria can be set up for Open and Interim Approval status.

Before you create entry and exit criteria, create a change order type. Associate the change order type with the entry and exit criteria. Again associate the entry and exit criteria with the change order type (by using the Manage Change Order Entry and Exit Criteria task or the Manage Item Rule Sets task under the Product Management offering).

Create validation rules by using the Manage Item Rule Sets task (in the Setup and Maintenance work area under the Product Management offering); select association type as Change order type. Edit the change order type to select the entry and exit criteria (in the Workflow tab).

The following attributes may be used to create the validation rules:

- Change Header
  - Priority
  - Reason
  - Need-by Date
  - Requested by
  - Description
  - Descriptive Flexfield
- Change Line
  - Descriptive Flexfield

## Associating Propagation Rules to Change Order Types

If propagation rules have been configured in the change order type, then the propagation organization appears in the change order header, the default list of organizations, or organization hierarchy identified by the change order type. You can select other organizations or organization hierarchies that have been identified in the change order type. The list of organizations associated with the selected propagation organization or hierarchy appear in the Propagation Organizations region.

Propagation rules are associated with the change order type that you select for the new change order. You define propagation rules when you create a change order type or edit an existing one on the Propagation Rules tab.

Specify the organizations from which a change order might be propagated. For each specified source organization, select one or more target organizations or organization hierarchies where the change order can be propagated.

Each change order type can be configured to support propagation from different organizations and propagation to different organizations or organization hierarchies.

## Manage Change Order Entry and Exit Rule Sets: Explained

This topic describes how to manage Change Order entry and exit criteria.

You can configure what fields must appear as Required Fields when a change order enters or exits a workflow state, by using either of the following tasks:

- Manage Change Order Entry and Exit Rule Sets (in the Setup and Maintenance work area)
- Manage Item Rule Sets (in the Setup and Maintenance work area under the Product Management offering)

This could be any field in the change item's General Information page, Affected Items table, Attachments table, Relationships table, or Extensible Flexfield. This could also include fields on the item object or item BOM/AML. For example, a rule set that enforces need-by date value to be mandatory for high priority change orders.

Using the Manage Item Rule Sets task, you can also enforce the value of a change order attribute based on another attribute. For example, if the user selects Reason as Quality, then the priority of change order can be enforced as High. If the user selects the priority as Low, then change order can be restricted from progressing to the next status.

Additional Examples:

- A rule set specifies that when a Change moves from **Pending** to **Submitted** state, all items in the Engineering Change Order (ECO) should have a description filled out. To ensure this, mark the **Description** field as a required field.

For each rule set, use the **Type** options to filter the fields by type. Select the fields that should appear as required fields. In addition to setting up criteria for the whole workflow, you can specify criteria for a specific status within the workflow.

- You can determine required fields and approvals based on **Change** and **Affected Item** attributes.

Examples:

- If **Requires Implementation Plan** is **Yes**, ensure text is entered in a field called **Implementation Plan**.
- If **Estimated Cost** is > 5000, require Finance and VP approvals.
- If **Impacts Safety** is **Yes**, ensure Compliance approval.

*Related Topics*


- [Defining Product Development: Overview](#)
- [Product Development Components: How They're Configured](#)



# 4 Implementing Product Development

## Product Development Lookups: Explained

Use the **Manage Product Development Lookups** task in Setup and Maintenance to configure standard lookups (including category, status, and lifecycle phase) for Oracle Product Development.

 **Note:** Lookup types with customization level **System** do not allow you to add or delete lookup codes. However, you can edit the **Meaning** and **Description** fields of their existing lookup codes.

Application	Module	Meaning (Lookup)	Meaning (Codes)	Customization Level
Product Development	Items	Approved Manufacturer List Status	Preferred, Alternate, Obsolete	User
		Manufacturer Part Status	Active, Inactive, Pending	User
		Manufacturer Status	Active, Inactive, Pending	User
	Change Order	Change Priorities	High, Low, Medium	User
		Change Reasons	Quality, Safety, Safety	User
Common References	Common	Class Family Name	Design, Concept, Concept Component, Portfolio, GSCC Placeholder, Idea, Requirement	User
		Class Policy	Abstract Only, Concrete Only, Leaf Class, Standard	User
		Reviewer Role	Approver, Observer	User

### Related Topics

- [Lookups: Explained](#)
- [How can I edit lookups?](#)
- [Managing a Standard Lookup: Example](#)

# Configuring Item, Document, and Change Management in Product Development: Explained

This topic explains the configuration process for items management and change management in Oracle Product Development.

To access the Product Development configuration screen, click **Settings (icon) > Settings** in the upper-right corner of the Product Development **Overview** page. Configuration areas include:

- Settings Tab
  - Default organization for items
  - Enable Document Management check box
- Items Tab
  - Item grading rules
  - Item lifecycle phase for information tile
  - Attributes to display in Items Details information tile
  - Manufacturer part status definitions
  - Item attributes display settings
  - Extended attribute display
- Change Orders Tab
  - Cycle Time Threshold for a Change type

## Settings Tab

Use the **Settings** tab to configure the default organization for items, and to enable the Document Management functionality.


## Items Tab

Use the **Grade** section to configure Item Grading rules.

The Item Grading rules allow you to configure whether the BOM score in Product Development should be based on a letter or number grade. The predefined rules that you select are considered in the Item Grade score calculations.

Use the **Life Cycle Phase Definitions** section to configure item states that must be considered Released, Unreleased, or Obsolete, and how these item states must be displayed in the Structure information tile. When the user opens an item with a BOM, the data displayed in the information tile is based on the Released, Unreleased, and Obsolete items in the entire structure; the definition of the item lifecycle phase is calculated based on this specific setting.

In the **Item Information Tile Attributes Configuration** section, select three attributes you want visible in the Item Details General Information tile.

 **Note:** No attributes are assigned to the Item Details information tile by default. To avoid configuration errors, start with defining an item template that is used to create Product Development items. This template must include the default values for attributes like Lifecycle Phase, Item Status, Primary Unit of Measure, and so on. To do this, run the Manage Item Classes task in the Setup and Maintenance work area (under the Product Management offering). If you are using Product Development and Innovation Management together, you must also link the same default item template in the Product Development connector configuration. To do this, run the Manage Target System task in the Setup and Maintenance work area (under the Product Management offering).

Use the **Manufacturer Part Status Definitions** section to classify AML statuses and map to known system statuses such as Approved or Unapproved.

Use the **Item Attributes Display Settings** section to configure operational attributes that you want displayed as part of item's general information.

## Change Orders Tab

Use the **Change Orders** tab to configure the **Cycle Time Threshold in Days** for **Change Types**.

For each Change Type, define a time limit by which the change order (for that change type) must be approved. The values that you configure here are used to display unreleased changes that are within the time limit, and those past the deadline.

To create Change Types, run the Manage Change Order Types task in the Setup and Maintenance work area.

### Related Topics

- [Defining Product Development: Overview](#)
- [Product Development Components: How They're Configured](#)

# Working with Oracle Fusion Project Portfolio Management in Product Development: Points to Consider

Manage Oracle Product Development projects by associating change orders to a project task. Define rules to determine the completion of such tasks based on work item statuses.

## Implement Oracle Product Development and Oracle Fusion Project Portfolio Management for Integration

Implement the following tasks, at minimum, in the functional areas listed below under the Product Management offering.

Functional Area	Tasks Enabled for Implementation
Items Organizations	Manage Item Organizations
Items	Manage Item Classes
	Manage Item Statuses

Functional Area	Tasks Enabled for Implementation
	Manage Item Types
<b>Change Orders</b>	Manage Change Order Types
<b>Product Development</b>	Manage Product Development Lookups

## Oracle Product Development Business Objects in Project Tasks

You can manage Product Development projects only if you are a project enterprise resource, such as project manager or team member of projects, in the project plan.

Project managers assigned the appropriate job role, such as product manager, product design manager, or product portfolio manager, can perform the following actions:

- Open and manage project work items in Product Development
- Navigate to Fusion Projects from the Relationships tab in items, and view summary information of the related object on hover.
- Define rules to specify statuses that determine when work items can be considered complete. When a work item reaches the appropriate status, the task is updated to complete.

### Related Topics

- [Managing Product Development Projects: Worked Example](#)
- [Work Items: Explained](#)

## Oracle Social Network Objects in Product Development: Overview

This topic details the Oracle Product Development business object that you can transform to Oracle Social Network objects in Oracle SCM Cloud.

Use the **Manage Oracle Social Network Objects** task to locate the following Product Development business objects and their attributes that you can enable for Oracle Social Network integration.

Module Name	Business Object Name	Attributes
Product Development	Change Order	Name, Description
Product Model	Item	Name, Description, User Item Type, Item Status, Pack Type, Primary Unit of Measure, Approval Status, Organization, Lifecycle Phase, Item, and Item Class.

The attributes data is sent to the Oracle Social Network at run time. If you select Manual at the time of enabling the business object, users decide whether or not to share an object instance in the social network.

#### *Related Topics*

- [What are the prerequisites for Oracle Social Network integration?](#)
- [Managing Oracle Social Network Objects: Explained](#)



# Glossary

## **work item**

An item that represents a unit of work that team members are performing on a project task. The status of the work item can determine if a task is complete.

