Oracle

SCM Cloud

Using Product Master Data Management

Release 12

ORACLE®

Oracle® SCM Cloud Using Product Master Data Management

Part Number E74097-05

Contents

ORACLE®

ORACLE®

ORACLE®

ORACLE

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

For information about Oracle's commitment to accessibility, see the **Oracle Accessibility Program** .

Comments and Suggestions

Please give us feedback about Oracle Applications Help and guides! You can send e-mail to: oracle_fusion_applications_help_ww_grp@oracle.com.

ORACLE®

ORACLE®

1 Product Management Overview

Product Master Data Management Features: Overview

Product Master Data Management consists of two products:

- Oracle Fusion Product Hub
- Oracle Fusion Product Hub Portal

Oracle Fusion Product Hub Features

Product Management includes the following features:

- **Access and Search Product Master Data:** Quickly search for items using single keywords. Perform advanced searches by specifying various parameters and criteria as well as building more complex searches using search operators to quickly find products. Define saved searches enabling you to promote reuse and provide quick access to searches that need to be performed frequently.

- **Analyze Product and Service Master Data:** Analyze product master data through analytics that provide you with actionable insight into your processes.

- **Manage Imports:** Manage the import of items and related entities using industry standard open interface tables allowing you to quickly import data into the production schema as well as enabling migration of data from existing applications.

- **Define Items:** Define and manage base reference data and profile options related to items such as cross-reference types, item relationship types, related value sets, item templates, item types, and item statuses.

- **Define Catalogs:** Define and manage catalogs to categorize items in a structured hierarchy. Associate images and attachments to catalogs and categories to help you quickly build rich catalog content. Share category and item associations from a source or master catalog with multiple catalogs enabling you to reuse existing data and ease administration of catalogs.

- **Define Product:** Create items and apply predefined templates that provide all of the basic information to help you get started quickly.

- **Manage Product Attachments:** Associate unstructured content as attachments to a product. Categorize attachments in various predefined and user defined categories to organize and provide quick access to important documents for the product.

- **Manage Product Bundles and Structures:** Define and manage product structures to represent various product hierarchies. Copy product structures from existing structures with the ability to preview the components you are copying. Associate common product structures to a master product structure to maintain a single definition across multiple organizations.

- **Define Product Structures:** Define and manage product structure types to categorize various product structure hierarchies. Create and administer structure names and associated usage rules allowing further classification and identification of different product hierarchies. Enable lifecycle phase and structure usage rules to ensure correct and accurate structure information is maintained and used. Define component usage rules to ensure only valid components can be used in the product structure.

- **Manage Product Relationships and Associations:** Define item relationships to relate two internal items using predefined as well as user defined relationship types. Capture attributes to further qualify the relationship as well as

ORACLE®

specify effectivity dates to phase the relationships in or out. Define and maintain GTIN (Global Trade Identification Number) cross references to relate items using the industry standard allowing for tracking and identification of trading partner items. Assign items to multiple organizations to manage them in context of locations they are manufactured, stocked, and distributed from.

- **Manage Product Revisions:** Manage item revisions to track major changes to an item in terms of its form, fit, or function. Introduce new item revisions through a formal change order framework to generate an audit trail as well as streamline implementation of new revisions.

- **Manage Product Specifications:** Specify values for product operational attributes at a product level as well as product revision level, allowing you to control how an item is processed by downstream applications.

- **Manage Trading Partners' Products:** Define and manage trading partner items such as customer items, and associate them with an internal item. Define and manage manufacturer part numbers and associated attributes, which enables you to relate multiple manufacturer parts to an internal item. Define and manage competitor items to relate similar items that might be sold or manufactured by your competitors.

- **Release Product to Market:** Release products by moving product to appropriate lifecycle phases and item statuses. Process lifecycle phases and item statuses through a formal change order process to automate product releases. Approve products before releasing to sales and marketing systems, enabling a streamlined release management process.

- **Obsolete Products and Services:** Define and manage deletion groups to process purging and obsoleting products and services that are no longer being transacted in the enterprise. Create deletion constraints to identify and account for all transactions and entities that reference a product, thus maintaining integrity before a product can be purged. Process product lifecycle phase and item status changes through a formal change order that provides an audit trail as well as controlled retirement of products and services.

- **Define New Item Requests:** Create and edit requests for new items and specify users or groups who need to provide additional information to enrich the item. Define approval policies before the new item can be transacted.

- **Define Product:** Specify product characteristics, specifications, and features using extended user defined attributes that are associated with a product. Perform error checking and validation functions while creating a product to ensure a complete product definition.

- **Define Product Rules:** Create and edit rules for products. Rules can be used to assign values to attributes, validate dependencies between attributes and require approval through change orders for certain types of attribute updates.

- **Standardize Product and Service Data:** Eliminate potential duplicates by standardization of product numbers and descriptions based on user defined rules and formats.

- **Define and Manage Product Change Orders:** Create product change orders to process changes to product attributes, lifecycle phases, item statues and product structures. Submit changes through a formal review and approval workflow to ensure successful and validated implementation of change orders. Implement changes through multiple organizations by propagating change orders to organizations while still having the flexibility to adapt implementation schedule based on individual organizations. Move or split change order lines to new or existing change orders to avoid bottlenecks in processing and implementation.

- **Manage New Product Definition and Approval:** Define and manage new item requests to enable a formal definition and approval workflow. Definition steps can include product attributes, product structures, item relationships, item attachments, and organization assignment. Manage multiple item definition belonging to different item classes in a single new item request.

- **Manage Product Mass Updates:** Perform mass updates on item information including changes to item attributes, item supplier associations, item reclassification, and organization assignments.

- **Manage Product Packs:** Define and manage product pack information by creating homogeneous and heterogeneous packaging configurations of sellable items.

- **Manage Product Security:** Assign role based security at a product level to control access to items. Assign data level security at each individual attribute group level to further control access to sensitive information. Assign appropriate functions and privileges to users or groups of users to control who can create, edit, and view item data.

ORACLE®

- **Manage Supplier Collaboration:** Collaborate with trading partners on item data including item attributes, product structures, and packaging configurations. Secure trading partner access by assigning privileges. Communicate critical changes with suppliers through change order workflows to review, validate accuracy, and approve changes for supplier items.

  Associate external items such as supplier items and specify supplier item attributes to capture rich detail for the supplier items. Extend the supplier item relationships to associate supplier items to multiple organizations from which they are supplied and received.

- **Define Advanced Catalogs:**

  Manage catalog mapping between two catalog hierarchies as well as attributes for the catalog and categories.

- **Set Up Product Source Systems:** Create and edit definitions for systems from which items are sourced. Define and maintain source system item cross references to map and identify items that have been consolidated from multiple source systems into a single master item.

- **Define Data Quality for Products:** Define and maintain profile options and metadata to support data quality for products.

- **Manage Import Batches:** Define item batches to import sets of item data including product structures and packaging hierarchies from multiple product source systems. Specify import options for an item batch to schedule batch loads, governance and workflow policies for new item definition and approval and product changes. Specify data quality options for matching and standardization for an item batch to cleanse product data during batch import.

- **Cleanse Product and Service Data:** Perform data cleansing functions using the data quality engine. Match product records being imported into the product hub through item batches. Use data quality functions such as **Check for Duplicates** during product creation to ensure data quality and eliminate redundant data at the source. Define and manage matching rules based on attributes and weighting to enable you to rank and resolve potential duplicates with ease.

- **Standardize Product and Service Data:** Perform data cleansing functions using the embedded data quality engine. Standardize item data while importing products through item batches as well as in real-time during product creation. Define and Manage standardization rules to standardize attribute values as well as automating reclassification and categorization of imported items.

Product Hub Portal Features

Product Hub Portal is an extension of Product Hub which is available to external parties, such as suppliers, for on-boarding product data. Suppliers can access this portal through the Manage Product Uploads task in the Supplier Portal application.

Product Hub Portal includes the following features:

- Easy to use, self service interface for supplier users to load product data.

- Templates to populate product data in spreadsheets.

- Reference file which provides instructions and tips on how to populate the template.

- Error report which list the validation errors in the product data which has been uploaded

- Schedule product uploads in a predictable pattern. For example, weekly or bi-weekly.

ORACLE®

2 Manage Product and Service Data: Define Product

Items: Explained

Create single or multiple items and apply pre-defined templates.

Creating Single Items

You can begin creating an item from multiple places in the UI. Start by providing basic information such as master organization, number of items (in this case, one item), and item class. Then you will select the templates which will be applied to the items. The templates will be applied sequentially, meaning options in the second template will overwrite any options in the first and so on. Next, required attributes must be provided. If mandatory attributes were defined in the item class, then they must be provided.

Use the data level attributes under the **specifications** tab to enter or view different aspects of the item, such as the base standard operational attributes. You can optionally specify descriptive flexfields at the Item or Item Revision levels. If you are licensed to use Oracle Fusion Product Hub, you can specify extensible flexfields to capture attributes of the item at the Item, Item Revision and Item Supplier Site levels.

While creating items in the user interface, you can optionally:

- Define an item structure

- Assign to organizations

- Create relationships

- Assign catalog categories

- Add attachments

  ✏ **Note:** While creating items based on certain attribute values, automated processes for item category assignments may be performed. If functional area catalogs are not defined, item assignments for those functional areas are skipped. When creating items, item rules are evaluated and appropriate messages are displayed. If data quality checking is enabled, the results of the check are displayed.

Creating Multiple Items

When creating a new item, you have the option of creating more than one item simultaneously. In situations where you have to create numerous items that share some common characteristics, it is best to use this procedure.

Creating multiple items begins much the same as creating a single item. Where you enter one for the number of items under the single item scenario, for multiple items you enter a number greater than one. You will be taken to the **Create Multiple Items** page where you must specify the details for each of the items in the table.

Item Copying: Explained

The Create Item action allows the user to select the Create from Copy option and to enter the item you want to copy from. One or more items can be created by copying.

Create an Item by Copying

The following can be copied from an existing item:

- Attributes
- Relationships
- Structures
- Organization assignments
- Attachments
- Supplier organization assignments
- Catalog Category assignments

Attributes

Indicate whether you want to copy the attributes and then apply the templates or apply the templates and then copy the attributes. On the **Specification** tab, select the list of attribute groups available for copying attribute values.

Relationships

On the **Relationships** tab, select the relationships, organization assignments, and attachment categories to be copied to the new item.

Structures

On the **Structures** tab, select the structure to be copied to the new item. You can also decide to create a common structure instead of copying it.

Attachments

You can also select attachments.

Revisions: Explained

An item can be revised based on item definition changes. A revision will always be created for an item, whether the item is revision-tracked or not. Generally, if there is a change in form, fit, and function for an item, then a new revision is created. Organizations may decide to create either new items or new revisions to capture major changes that affect the form, fit and function of an item.

ORACLE®

Revision level changes are captured using revision level attributes and by creating new revisions.

FAQs for Define Product

What's an item?

Items are used to represent product and services you sell or transact and components that make up your products and services.

Each item that you create has several standard operational attributes that determine the behavior of the item with respect to various functions, such as Purchasing, and Inventory Management. In addition to these operational attributes, the item has several user-defined attributes defined by its item class. These user-defined attributes capture item specifications and other information relevant to the product definition.

What happens if I select more than one item template?

If more than one item template is selected, they will be applied sequentially. This means that if the same attribute is defined in more than one template, the value of the attribute as set in a subsequent template in the sequence will override the previously set value for that attribute. For example, if template 1 sets the Order Enabled attribute to Yes and template 2 set the same attribute to No, then attribute value will be set to No.

How can I create a new revision?

You create new revisions from the **Manage Revisions** dialog box. Revisions can also be created by a change order.

ORACLE®

3 Manage Product and Service Data: Manage Product Specifications

Managing Item Specifications and Attributes

Item Specifications and Attributes: Explained

Item specifications are groups of attributes that determine item characteristics such as item cost or lead time. You set these attributes when you define or update items.

From the Specifications tab on the Edit Item or Create Item pages, you can navigate through attribute groups to access and modify item attributes.

The types of attributes that are accessible from the specifications tab include the following:

- Operational attributes: These are organized into the following specification groups:

  - Costing
  - General Planning
  - Inventory
  - Invoicing
  - Lead Times
  - MRP and MPS Planning
  - Order Management
  - Physical Attributes
  - Main
  - Overview
  - Process Manufacturing
  - Purchasing
  - Receiving
  - Service
  - Structures
  - Web Store

- User-defined attributes: These can be accessed through links on the Specifications tab.
- Transactional attributes: These can be viewed for a specific date.

There are particular relationships enforced between some of the item attributes: These relationships fall into two groups:

- Required attributes: You must enter values for certain attributes if some related attributes have values

ORACLE®

- Interdependent attributes: You can enter only certain values depending on other attribute values. For example, **Planning Method** must be **Not Planned** if **Pick Components** is set to **Yes**. These interdependencies may be between attributes within the same specification group or between attributes in different specification groups.

Related Topics

- Interdependent Item Attributes: Explained

- Change Order Approval Required Rules: Explained

Required Item Attributes: Explained

You must enter values for certain attributes if some related attributes have values as shown in the following table:

Attribute	If
Contract Coverage Template	**Contract Item Type** is set to **Service** or **Warranty**
Contract Duration	**Contract Item Type** is set to **Service** or **Warranty**
Contract Duration Period	**Contract Item Type** is set to **Warranty**
Demand Time Fence Days	**Demand Time Fence** is set to **User-defined**
Encumbrance Account	**Reverse Encumbrance** parameter is set to **Yes**
Outside Processing Unit Type	**Outside Processing Item** is set to **Yes**
Planning Time Fence Days	**Demand Time Fence** is set to **User-defined**
Planning Time Fence Days	**Planning Time Fence** is set to **User-defined**
Release Time Fence Days	**Release Time Fence** is set to **User-defined**
Repetitive Planning	**MRP Planning Method** is set to **MPS planning** or **MRP planning**
Service Duration	**Service Duration Period** is not **Null**
Shelf Life Days	**Lot Expiration (Shelf Life) Control** is set to **Item shelf life days**
Source Organization	**Replenishment Source Type** is set to **Inventory** or **Subinventory**.
Starting Lot Number	**Lot Control** is set to **Full** lot control, and **Lot Generation Organization** Parameter is set to **Item Level**
Starting Lot Prefix	**Lot Control** is set to **Full** lot control, and **Lot Generation Organization** Parameter is set to **Item Level**

ORACLE®

Attribute	If
Starting Serial Number	**Serial Number Control** is set to **Predefined** serial numbers
Starting Serial Prefix	**Serial Number Control** is set to **Predefined** serial numbers
Substitution Window Days	**Substitution Window** is set to **User Defined**

Related Topics
- Interdependent Item Attributes: Explained

Additional Item Attributes: Explained

Additional item attributes are based on descriptive flexfields to capture detailed information about an item, such as characteristics and specifications as well as business process information.

Descriptive flexfield definitions for additional attributes include the name of the attribute and attribute values.

Additional attributes are associated to items or item revisions and are listed under **Additional Attributes** on the Item Specification tab.

Related Topics
- Descriptive Flexfields: Explained

User-Defined Item Attributes and Attribute Groups: Explained

User-defined attributes are based on extensible flexfields. You create an attribute group, which determines which attributes are used at run time.

Extensible flexfields for user-defined attributes are not available to customers who only license Oracle Fusion Product Model.

User defined attributes can have a static or dynamic list of valid values, or a range of values.

Values for user-defined attributes are defined when you create the item and remain the same for the life cycle of the item.

> ✏ **Note:** When creating or editing attribute groups, or when creating new item classes associated with attribute groups, you must redeploy the extensible flexfields for the attribute groups to become available in the system. Perform the Manage Extensible Flexfields task. Access the Manage Extensible Flexfields task by starting in the Setup and Maintenance Overview page and searching for flexfields. In the Manage Extensible Flexfields page, search for the flexfield code named EGO_ITEM_EFF. In the search results, select the row that contains the flexfield code EGO_ITEM_EFF and click Deploy Flexfield. After the flexfield deployment is complete, click OK. Check the Deployment Status and Deployment Date columns to verify that the extensible flexfield deployed successfully on the current date.

User-Defined Attribute Groups

User-defined attributes can be saved within attribute groups. You associate user-defined attributes with items by adding attribute groups to item classes.

ORACLE®

For example, items that are part of the Small Gasoline Engines item class include the following specifications:

- RPM
- Power
- Oil/fuel mixture
- Weight

An attribute is defined for each of these specifications and these attributes are grouped together as the Engine Performance attribute group.

You create attribute groups on the Manage Attribute Groups page.

> ✏️ **Note:** For each user-defined attribute, you can optionally define validation rules to be applied when the user inputs data.

An attribute group can be single-row, multi-row, or variant.

Multi-row attribute groups enable you to associate multiple sets of attribute values with the same object instance. It gives you the ability to store multiple additional attributes that are dependent on the item, organization, attribute group, and a unique value within the attribute group.

For example, if your item is a book, you can create an attribute group named Chapters containing the following attributes:

- Chapter number
- Name
- Number of pages

Multiple rows of Chapters can be associated with a book, while Name and Number of pages each require a single row. The attribute Chapter number is identified as Part of Unique Key

> 💡 **Tip:** Sets of user defined attribute groups can be organized on a single page that can then be linked from the Specifications tab.

Related Topics
- Extensible Flexfields: Explained

Item Specification Reference

Item Asset Management Specifications

The following are the Item Asset Management specification attributes and their possible values. You set these attributes when you define or update items.

Item Asset Management Specification Attributes

Activity Cause

This is relevant when the **Asset Item Type** is set to **Asset Activity**. Specifies what situation caused the work to be generated. For example, **Breakdown**, **Vandalism**, **Normal Wear**, or **Settings**.

ORACLE®

Activity Notification Required

This is relevant only when the **Asset Item Type** is set to **Asset Activity**. Indicates if the asset is moveable, and needs to be brought into the shop for repairs. This field is for information only.

Activity Source

Indicate the reason the activity needs to be executed. This is relevant when asset item type is set to asset activity.

Activity Type

Indicate the type of maintenance for the asset activity.

Asset Item Type

Indicate whether the item is one of the following:

Asset Group Asset Activity Rebuildable Item

Shutdown Type

This is relevant when the **Asset Item Type** is set to **Asset Activity**. Indicates if this maintenance activity requires a shutdown. For Example, **Required** and **Not Required**.

Related Topics

- Interdependent Item Attributes: Explained

Item Costing Specifications

The following are the item costing specification attributes and their possible values. You set these attributes when defining or updating items.

Item Costing Specifications

Costing Enabled

Indicates whether to report, value and account for any item costs

For example, you might disable costing for reference items, or for invoice only (non-stock) items that you never ship and never hold in inventory.

Include in Rollup

Indicate whether to include an item in the cost rollup.

Inventory Asset Value

Indicate whether to value an item as an asset in inventory

Turning this option off indicates an expense item.

Standard Lot Size

The amount of a particular item that is ordered from the plant or a supplier or issued as a standard quantity to the production process.

Related Topics

- Interdependent Item Attributes: Explained

Item General Planning Specifications

The following are the attributes that make up item general planning specifications and their possible values. You set these attributes when defining or updating items.

Item General Planning Specification Attributes

Autoexpire ASN

Indicate whether the advance shipment notice expires automatically.

Bucket Days

Enter the number of days to dynamically calculate safety stock quantities. The planning process multiplies the **Safety Stock Percent** by the average gross requirements and divides by the number of days that you enter here.

Carrying Percentage

Enter the percentage used to calculate the annual carrying cost. This is the percentage of the unit cost that represents your internal cost to stock one unit for one year.

Consigned

If selected, the item is consigned, meaning residing at your location, but owned by the supplier

Days of Cover

Number of days times average demand that defines the safety stock level.

Demand Period

Number of days to use for average daily demand calculation.

Fixed Days Supply

Enter the number of days used to modify the size and timing of planned order quantities. The planning process suggests planned order quantities that cover net requirements for the period defined by this value. The planning process suggests one planned order for each period.

For example, use this to reduce the number of planned orders for a discrete component of a repetitive item.

Fixed Lot Multiplier

Enter the fixed lot multiple quantity or repetitive rate (units per day). Planning algorithms (reorder point, min-max, MPS, and MRP) use this to modify the size of planned order quantities or repetitive daily rates.

When net requirements fall short of the fixed lot size multiplier quantity, planning algorithms suggest a single order for the fixed lot size multiplier quantity.

Fixed Order Quantity

Enter the quantity used to modify the size of planned order quantities or repetitive daily rates. When net requirements fall short of the fixed order quantity, the planning process suggests the fixed order quantity. When net requirements exceed the fixed order quantity, the planning process suggests multiple orders for the fixed order quantity. For discrete items, use this attribute to define a fixed production or purchasing quantity. For repetitive items, use this attribute to define a fixed production rate. For example, if your suppliers can provide the item in full truckload quantities only, enter the full truckload quantity as the fixed order quantity.

Fixed Quantity

Indicate the fixed quantity for reorder.

Forecast Type

Indicate the forecast type. This can be one of the following values:

Order Forecast

Sales Forecast

Historical Forecast

Inventory Planning Method

Select an option for organization level planning

Min-max
You define a minimum quantity that you want on hand. When you reach this quantity, you reorder. You also define a maximum on-hand quantity that you do not want to exceed.

Not planned
No planning method used. Select this option for MRP or MPS planned items.

Reorder point
The reorder point is calculated based on the planning information you define for this item.

Make or Buy

Select the option that applies to items with the Inventory Item set to Yes. The Planner Workbench uses this to populate the appropriate value for the implementation type. You cannot change this value if open orders exist for the item.

Make
Usually manufactured. The Planner Workbench populates the implementation type Discrete job. The planning process passes demand down from manufactured items to lower level components.

Buy
Usually purchased. The Planner Workbench populates the implementation type to Purchase Requisition. The planning process does not pass demand down from purchased items to lower level components.

Maximum Days of Supply

Indicates the maximum allowed days of supply for replenishment reorder.

Maximum Min-Max Quantity

Indicate the maximum on-hand quantity that you do not want to exceed for **Min-Max Planning**.

Maximum Order

Enter the maximum order quantity or repetitive rate (units per day) of the item. Planning algorithms (reorder point, min-max, MPS, and MRP) use this to modify the size of planned order quantities or repetitive daily rates. For discrete items, when net requirements exceed the maximum order quantity, planning algorithms suggest the maximum order quantity. For repetitive items, when average daily demand for a repetitive planning period exceeds of the maximum order quantity, planning algorithms suggest the maximum order quantity as the repetitive daily rate. For example, use this to define an order quantity above which you do have insufficient capacity to build the item.

Maximum Order Quantity

Enter the maximum order quantity or repetitive rate (units per day) of the item. Planning algorithms (reorder point, min-max, MPS, and MRP) use this to modify the size of planned order quantities or repetitive daily rates. For discrete items, when net requirements exceed the maximum order quantity, planning algorithms suggest the maximum order quantity. For repetitive items, when average daily demand for a repetitive planning period exceeds of the maximum order quantity, planning algorithms suggest the maximum order quantity as the repetitive daily rate. For example, use this to define an order quantity above which you do have insufficient capacity to build the item.

Minimum Days of Supply

Indicate the minimum allowed days of supply before replenishment must occur.

Minimum Min-Max Quantity

Indicate the minimum on-hand quantity before replenishment for **Min-Max Planning**.

Minimum Order

Enter the minimum order quantity or repetitive rate (units per day). Planning algorithms (reorder point, min-max, MPS, and MRP) use this to modify the size of planned order quantities or repetitive daily rates. For discrete items, when net requirements fall short of the minimum order quantity, planning algorithms suggest the minimum order quantity. For repetitive items, when average daily demand for a repetitive planning period falls short of the minimum order quantity, planning algorithms suggest the minimum order quantity as the repetitive daily rate. For example, use this to define an order quantity below which it is unprofitable to build the item.

Minimum Order Quantity

Enter the minimum order quantity or repetitive rate (units per day). Planning algorithms (reorder point, min-max, MPS, and MRP) use this to modify the size of planned order quantities or repetitive daily rates. For discrete items, when net requirements fall short of the minimum order quantity, planning algorithms suggest the minimum order quantity. For repetitive items, when average daily demand for a repetitive planning period falls short of the minimum order quantity, planning algorithms suggest the minimum order quantity as the repetitive daily rate. For example, use this to define an order quantity below which it is unprofitable to build the item.

Organization

Optionally enter the organization from which an internal requisition draws the item. This applies only when Inventory is the replenishment source type

You can choose organizations that meet the following criteria:

- The item is assigned to the source organization

- The source organization has a valid inter-organization relationship with the current organization

The source organization can be your current organization if the item is MRP planned and you choose a non-nettable Source Subinventory.

Percent

Enter the percent to dynamically calculate safety stock quantities for the item. The planning process multiplies this percent by the average gross requirements.

The planning process uses this attribute when you set **Safety Stock** to **MRP planned percent**.

Planner

Enter the material planner assigned to plan this item. You must define planner codes for your organization before updating this attribute.

The planner defined here is responsible for approving all move order lines requesting the item if move order approvals are used.

If an item is supplier managed, you must enter a planner for the item.

Release Authorization Required

Authorization is require before a sales order is created. You can set the authorization as follows:

Customer:
You must obtain release authorization from the customer.

Supplier
You must obtain release authorization from the supplier.

None
Release authorization is not required

Safety Stock Planning Method

Planning method to be used in calculating safety stock levels.

Subcontracting Component

Indicate the subcontracting type associated to this item when it is used as a subcontracting component in **Chargeable Subcontracting**. The available choices are:

Pre-positioned
The item is a subcontracting component sold to a manufacturing partner independently of subcontracting components

Synchronized:
The item is a subcontracting component sold to a manufacturing partner and is synchronized with a specific order.

ORACLE®

Subinventory

Enter the subinventory within the source organization from which an internal requisition draws the item. This applies only when **Inventory** or **Subinventory** is the replenishment source, and only when you specify a source organization. For MRP planned items, you must enter a non-nettable source subinventory when the source organization is the current organization.

Type

Indicate the way in which requests are fulfilled.

Inventory
Fill requests by creating internal requisitions that become internal sales orders, pulling stock from existing inventory.

Supplier
Fill requests by creating purchase requisitions that become purchase orders, procuring the item from a supplier.

Subinventory
Fill requests by creating move order requisitions that become move orders, pulling stock from an existing subinventory.

> ⊘ **Important:** If you are using Supplier Scheduling, it is generally recommended that this field be left blank. Otherwise, it could override your sourcing rules.

Window Days

Enter the period for which a forecast is considered by the planning engine.

Related Topics

- Interdependent Item Attributes: Explained

Item Inventory Specifications

The following are the item inventory specification attributes and their possible values. You set these attributes when defining or updating items.

Item Inventory Specification Attributes

Bulk Picked

Enables you to pick items in bulk.

Check Material Shortage

Indicates to check for material shortages for the item.

Enable this option to trigger a material shortage alert and a shortage notification during transactions of the item.

Child Lot Enabled

Indicates whether an item is subject to lot control for transactional purposes when a parent lot is specified for transactional purposes.

If you enable child lot control, you can specify a parent lot and a child lot for transactional purposes. The application processes transactions for the lot regardless of whether you specify the parent lot for the transaction. You cannot modify this field if inventory transactions or reservations exist for the item. If you choose to control this attribute at the master organization level, then you can modify this attribute only if no transactions or reservations exist for the master organization or any child organizations that are associated with the master organization.

Control: Lot

Indicates the ability to use lot numbers during material transactions for tracking of batches of Item.

- No control: Do not establish lot control for the item.
- Full control: Track inventory balances by lot number. You must specify a lot number for issues and receipts.

You can establish lot number control only for an item that has no quantity on hand. If lot control is controlled at the master item level, the application checks for on hand quantity in all child organizations.

Control: Shelf Life

Indicates how long items in a given lot remain available.

Shelf life days
Specify the shelf life of the item in days. The application starts counting the shelf life on the day you receive the lot into inventory. After the specified number of days, the application sends a warning message.

No control
Shelf life control not established for this item.

User-defined
Specify an expiration date as you receive each lot. You receive a warning but are not prevented from using the lot after expiration.

> **!** **Important:** You cannot change lot expiration control when on-hand quantity of the item exists. If lot expiration is controlled at the master level, the check for on-hand quantity is against the sum of on hand quantities in all child organizations.

Copy Lot Attributes

Indicates whether the child lot inherits all the specifications of the parent lot.

Select this check box to ensure that a new child lot inherits all the attributes of the parent lot. If you do not select the check box, then the child lot does not inherit the parent lot attributes.

Cycle Count Enabled

Indicates whether the item is on for automatic cycle count scheduling.

Default Grade

Enter a default grade for the item. All items under grade control must have a default grade. You can use the grade change transaction to change the default grade of an item.

> **✎** **Note:** You can change the default grade even if you performed transactions for the item.

ORACLE

Default Lot Status

Indicate the default lot status for the item.

Default Serial Status

Indicate the default serial status of the item.

Expiration Action

Enter the default action code for this item. This is the action listed on the expiration notification when the lot expires, fails quality inspection, or falls within the experimental error results region.

Expiration Action Interval

Enter the number of days the application adds to the expiration date before it performs an action on the lot.

Lot Expiration Date + **Lot Expiration Action Interval** = **Default Expiration Action Date**

Format Validation

Select this check box to ensure the child lot number conforms to the child lot parameters that you define for the organization or the item. If you select this check box, then the application verifies the child lot number is the lot number concatenated with the child lot prefix and a numeric suffix for the lot number of the correct zero-padded length, if you enable zero padding at the item level.

Generation

Indicate when to create and assign serial numbers to each unit of an item in order to track the item.

- Dynamic entry at inventory receipt: Create and assign serial numbers when you receive the item. Thereafter, for any material transaction, you must provide a serial number for each unit.

- Entry at sales order, transfer order or work order issue: Create and assign serial numbers when you issue (ship) the item against a sales order or transfer order. If you select this option, serial numbers are required at ship confirm. If you receive an item on an RMA (return material authorization), you must specify the same serial numbers that you used at the sales order issue. Serial numbers are also required when you issue components to a work order using a Work in Process Material Issue transaction. If you receive the item back into inventory using a Work in Process Material Return transaction, then you need to reference the same serial numbers used when the component item was issued to the work order. When using this serial generation option, serial number entry is not required for material transactions other than sales order, transfer order, or work order issue for this item. For example, serial number entry is not required for a receipt or subinventory transfer for this item.

- No serial number control: Serial number control not established for this item. All material transactions involving this item bypass serial number information.

- Predefined serial number: Assign predefined serial numbers when you receive the item. Thereafter, for any material transaction, you must provide a serial number for each unit.

The following table presents conditions where you can change back and forth between certain options:

Change back and forth between	Change back and forth between	When
Dynamic entry at inventory receipt	Predefined serial number	Any time
Predefined serial number	No serial number control	Any time

ORACLE®

Change back and forth between	Change back and forth between	When
Dynamic entry at inventory receipt	No serial number control	Item has no on-hand quantity
Entry at sales order, transfer order or work order issue	Predefined serial number	Item has no on-hand quantity
Predefined serial number	No serial number control	Item has no on-hand quantity
Dynamic entry at inventory receipt	Entry at sales order, transfer order or work order issue	Item has no on-hand quantity

If serial generation is controlled at the item level, the check for on-hand quantity is against the sum of on-hand quantities in all child organizations.

> ❗ **Important:** The lot substitution feature is not supported for items with serial control or any combination such as lot serial, lot revision, or LSR combinations

Grade Controlled

Indicate whether the item is grade controlled in addition to lot controlled. A grade code represents specific characteristics of a lot. If you select the **Grade Controlled** check box, then you must specify a default grade for the item.

> ✏️ **Note:** You cannot modify this check box if you have transacted the item.

Hold Days

This is the number of days added to the lot creation date before you can release the lot. If you do not enter a number, the application assumes that you can use the lot immediately.

Lot Creation Date + **Hold Days** = **Default Hold Release Date**.

Inventory Item

This attribute enables you to stock and transact this item. You must turn this option on if you want to enable the following item attributes:

- Stockable
- Transactable
- Build in WIP

This is an item-defining attribute. If you enable this option, the item is automatically assigned to the default category set for the Inventory functional area.

Stock Locator Control

Indicates the physical area within a subinventory where you store material, such as a row, aisle, bin, or shelf.

Dynamic entry
Define locators when you use them, either as you receive or ship items.

ORACLE®

No control
Locator control not established.

Prespecified
Define locators before you use them.

Lot Divisible

Select this check box to enable you to allocate, reserve, or move partial lot quantities. If you do not select this check box you must transact the full lot quantity for this item. You cannot modify this field if transactions exist for the item.

Lot Merge Enabled

Indicate whether many lots of a lot controlled item may merge into one lot.

Lot Split Enabled

Indicate whether a lot-controlled item may split into many lots.

Lot Status Enabled

Indicate whether an item is subject to status control at the Lot Level. For example, a lot may be **In Test**. A company may have a policy of allowing **Lots In Test** to be used in planning and reserved, but not shipped. A lot may also be **In Quarantine**. For example, a company may have a policy of not allowing lots **In Quarantine** to be used in planning.

If an item is lot-controlled, you can indicate the **Default Lot Status**. For example, a lot of microprocessors may be at the Quarantine status until a soak test is complete.

Lot Substitution Enabled

Indicates whether lots can be substituted in a transaction.

> **Important:** The lot substitution feature is not supported for items with serial control or any combination such as lot serial, lot revision, or LSR combinations.

Lot Translate Enabled

Enables you to translate lots within a lot controlled item.

Maturity Days

This is the number of days added to the lot creation date to determine the lot maturity date. If you do not enter a number, the application assumes the lot is mature at creation.

Lot Creation Date + **Maturity Days** = **Default Lot Maturity Date**.

Negative Measurement Error

Enter the percentage of negative variance acceptable before cycle count creates an adjustment transaction. Your physical cycle count can be less than the quantity on hand by an amount less than or equal to this percentage.

For example, suppose quantity on hand is 100 and negative tolerance is 10%. Inventory does not require approval for if the counted quantity is within tolerance. For physical counts under 90 units, Inventory creates an adjustment, changing the quantity on hand to the physical count.

Parent

This field determines how the application generates child lot numbers at the item level. You can choose to generate child lot numbers across the organization level or at the item level. The available choices are:

- Parent and Child: When set to parent and child, the parent lot number acts as a prefix, and the next available lot number is added to form the child lot. For example if the parent lot is **P1**, then the child lot would be **P1-1**.

- Parent: When set to parent, child lot numbers are based on the same sequence as the lot number. For example, if the parent lot is **P1**, then the child lot is **P2**.

Positive Measurement Error

Enter the percentage of positive variance acceptable before cycle count creates an adjustment transaction. Your physical count can be greater than the quantity on hand by an amount less than or equal to this percentage.

For example, suppose quantity on hand is 100 and positive tolerance is 10%. Inventory does not require approval for if the counted quantity is within tolerance. For physical counts over 110 units, Inventory creates an adjustment, changing the quantity on hand to the physical count.

Prefix

If you choose to generate child lots at the item level, you can optionally choose to enter a child lot prefix.

Reservable

This attribute enables you to create material reservations for the item. You can reserve an item only when you have sufficient inventory.

> **① Important:** You cannot turn off reservation control if reservations exist.

Restrict Locators

Indicate whether to restrict transaction of this item to or from a locator specified in the list you define with the **Subinventory Information** window. You cannot restrict locators unless you also restrict subinventories.

Restrict Subinventory

Indicate whether to restrict transactions of this item to or from a subinventory specified in a list you define with the **Subinventory Information** window. This option must be turned on if you choose to restrict locators.

Retest Interval

Enter the number of days after the creation date before you need to retest the lot. The application adds this number to the lot creation date to determine the default retest date.

Lot Creation Date + **Retest Interval** = **Default Lot Retest Date**.

Revision Control

This attribute enables you to create item revisions. If you enable this option, you must specify an existing revision number for issues and receipts on the Revisions tab.

Serial Status Enabled

Indicate whether an item is subject to status control at the serial Level. For example, a company may have a policy of allowing all functions on serial numbers that are new, and a policy of allowing reservations to reworked serial numbers, not including reworked items.

If an item is serial-controlled, you can indicate the **Default Serial Status**. For example, a serial number of analytical equipment may be at the **Quarantine** status until a soak test is complete.

Shelf Life Days

Enter the number of days each lot is active. At receipt, the application adds the shelf life days to the application date to determine the expiration date. This is used only when you choose **Shelf life days** for **Lot Expiration Control**.

Starting Number: Child Lot

Enter the starting number for each child lot. This field is enabled only if the item is child lot enabled.

Starting Number: Lot

Enter a starting lot number for the item. When you set **Lot Number Generation** to **At item level** in the **Organization Parameters** window, the application uses this number as the starting lot number. When you create additional lots for the item, the application increments each succeeding lot.

Starting Number: Serial

Enter a starting numeric suffix for all serial numbers for this item only. You must enter a value when you choose **Predefined** and when **Serial Number Generation** is **At item level** in the organization parameters. This starting numeric suffix is used when you define your serialized units. Thereafter, this number is incremented for each succeeding serial number.

Starting Prefix: Lot

Enter a starting prefix for all lot numbers you define for this item. When you set **Lot Number Generation** to **At item level** in the **Organization Parameters** window, then the application uses this prefix when you define a lot number for the item.

Starting Prefix: Serial

Enter a starting alpha prefix for all serial numbers you define. You must enter a value when you choose **Predefined** and when **Serial Generation** is **At item level** in the organization parameters. This prefix is used when you define your serialized units.

Stocked

Indicate whether an item can be stocked.

This attribute enables you to stock the item. You can set this attribute only when you enable the **Inventory Item** attribute. You must enable this item attribute if you want to transact the item.

Transaction Enabled

Indicates whether transactions can be performed on an item.

Related Topics

- Interdependent Item Attributes: Explained

Item Invoicing Specifications

The following are the item invoicing specification attributes and their possible values. You set these attributes when defining or updating items.

Item Invoicing Specification Attributes

Accounting Rule

Enter an accounting rule to identify special revenue recognition rules for an item, such as recognizing revenue over time.

This attribute is for reference information only.

Invoice Enabled

Indicate whether to activate an item. If **Invoiceable Item** is enabled, you can temporarily exclude the item from invoicing by leaving the **Invoice Enabled** cleared.

This attribute is optionally set by the **Item Status** code.

Invoiced

Indicate whether to include an item on an invoice. If you turn this option on, you can temporarily exclude from invoicing when **Invoice Enabled** is turned off. This option must be selected if **Invoice Enabled** is selected.

Invoicing Rule

Enter an invoicing rule to determine the period in which you send an invoice when you recognize revenue over time.

Output Tax Classification Code

Enter a tax code to use when calculating tax based on location and tax codes.

Payment Terms

Enter a valid payment terms code. This attribute is for reference information only.

Sales Account

Enter the general ledger account used to record revenue when you bill the customer. If **AutoAccounting** is based on items, accounting entries are created at that time.

Related Topics

- Interdependent Item Attributes: Explained

ORACLE®

Item Lead Times Specifications

The following are the item lead time specification attributes and their possible values. You set these attributes when defining or updating items.

Item Lead Time Specification Attributes

Cumulative Manufacturing

Enter the manufacturing lead time of an assembly (in days) plus the largest adjusted cumulative manufacturing lead time of its components, where each is adjusted by subtracting the operation lead time offset. Purchased items have no cumulative manufacturing lead time.

Cumulative Total

Enter the total lead time of the assembly plus the largest adjusted cumulative total lead time of its components, where each is adjusted by subtracting the operation lead time offset.

Fixed

Enter the days required to make an assembly independent of order quantity, such as setup or tear down time.

Lead Time Lot Size

Enter the quantity used to compute processing lead time (as well as fixed and variable lead times). The default value is the item's standard lot size or, if a standard lot size is not defined.

Postprocessing Days

Enter the days required to receive a purchased item into inventory from the initial supplier receipt.

You cannot enter a value if the **Make or Buy** attribute is set to **Make**.

Preprocessing Days

Enter the days you must add to purchasing or manufacturing lead time to place an order.

Processing Days

Enter the days required to procure or manufacture an item. For manufactured assemblies, processing days equals manufacturing lead time.

Variable

Enter the time to produce one additional unit of an assembly. Total lead time is variable lead time multiplied by order quantity, plus fixed lead time.

Related Topics

- Interdependent Item Attributes: Explained

ORACLE®

Item Main Specifications

The following are the item main specification attributes and their possible values. You set these attributes when defining or updating items

Item Main Specification Attributes

Approval Status

The approval status of the item.

Item Description

Enter a description for the item.

Formatted Description

Indicate the description of the item using a rich text component, that can be displayed by various downstream applications.

Item Status

Item status codes set or default the values for attributes under status control. User-defined status codes control certain item attributes designated as status attributes. The status attributes are:

BOM Allowed

Build in WIP

Customer Orders Enabled

Internal Orders Enabled

Invoice Enabled

Transactable

Purchasable

Stockable

Recipe Enabled

Process Execution Enabled
These attributes control the functionality of an item over time

Lifecycle Phase

Each phase represents a set of tasks and deliverables that are required before promoting the object to the next phase of the item life cycle

For example, the life cycle phases for a computer component life cycle might be:

Concept

Design

Prototype

ORACLE®

Pre-Production

Production

Retirement

Pack Type

Also known as Trade Item Unit Descriptor (TIUD)

Describes the Global Trade Item Number (GTIN) hierarchy level. Hierarchy is used as link between different levels of a product (item) logistical chain.

Style Item

A Style represents a silhouette or model item use to group multiple similar items (SKUs) within. Generally, the items group under a particular style item will be differentiated by 1 or more product variant attributes. Examples include color and size for fashion, flavor and size for grocery, etc

User Item Type

Oracle provides several types by default at installation. These types correspond to the item templates also provided. Select one of these values:.

ATO model

Finished good

Freight

Inventory Type

Kit

Model

Option class

Outside processing model

PTO model

Phantom item

Planning

Product Family

Purchased item

Reference item

Subassembly

Supply item

Conversions

Indicate the conversion of the transactions.

ORACLE

Item specific

Use only unit of measure conversions unique to this item.

Standard

Use only standard unit of measure conversions. If you want to use only standard conversions do not create item specific conversions.

Defaulting Control

Fixed

The system stores inventory in both the primary and secondary units of measure. You can enter an item quantity in one unit of measure, and the system converts the quantity to the secondary unit of measure and displays both quantities.

Default

The system stores inventory in both the primary and secondary units of measure. You can enter an item quantity in one unit of measure, and the system converts the quantity to the second unit of measure and displays both quantities. You can change the quantity in the secondary unit of measure, without changing the quantity in the primary unit of measure.

No Default

The system stores inventory in both the primary and secondary units of measure. Use this option when the default conversion between the two units of measure is usually not the same. The system does not automatically display in the secondary unit of measure when you specify the quantity for the primary unit of measure. You manually enter the quantity of the secondary unit of measure before you process a transaction. The secondary quantity can fluctuate from the default conversion by the factors that you specify in the Deviation + and Deviation - attributes.

Negative Deviation Factor

You can enter acceptable deviations as decimal values. This attribute is assigned at the organization level. This produces a plus or minus tolerance of acceptability. For example, if the allowable transaction quantity deviation for the item is ten percent lower than the established conversion, you would enter **10** in this field.

Positive Deviation Factor

You can enter acceptable deviations as decimal values. This attribute is assigned at the organization level. This produces a plus or minus tolerance of acceptability. For example, if the allowable transaction quantity deviation for the item is ten percent higher than the established conversion, you would enter **10** in this field.

Primary Unit of Measure

This is the stocking and selling unit of measure. Any necessary conversions are based on this unit of measure. This attribute is not updatable and assigned at the organization level.

Secondary Unit of Measure

This attribute may be controlled at the Master or Organization level based on the setup.

If the item is dual unit of measure controlled, or priced in a secondary unit of measure, you can specify a secondary unit of measure.

Tracking Unit of Measure

This attribute controls how on-hand balances are tracked. This attribute is assigned at the organization level. The available values are:

Primary

ORACLE®

The system tracks the on-hand balances by the primary unit of measure.

Primary & Secondary

The system tracks the on-hand balances by both the primary and secondary units of measure.

Long Description

Indicate the long description for this item. This long description is supported in multiple languages.

Pricing

This attribute is assigned at the organization level.

Indicate if pricing is based on the primary or secondary unit of measure. If you set the value to secondary, the system reprices the orders line at ship confirmation.

Related Topics

- Interdependent Item Attributes: Explained

Item MRP and MPS Planning Specifications

The following are the item MRP and MPS Planning specification attributes and their possible values. You set these attributes when you define or update items.

Item MRP and MPS Planning Specification Attributes

Acceptable Early Days

Enter the number of days before which the planning process will not reschedule orders. The planning process only suggests rescheduling out if:

- The new calculated order date is later than the original order due date plus the acceptable early days

- The new calculated order does not violate the order of current schedule receipts.

For example, if the original order due date is **10-JUN**, and **Acceptable Early Days** is **3**, the planning process not suggest rescheduling if the new due date is less than or equal to **13-JUN**. When rescheduling does not occur (because of **Acceptable Early Days**), a second order, due before the first, will not be rescheduled past the first order

This lets you reduce plan nervousness and eliminate minor reschedule recommendations, especially when it is cheaper to build and carry excess inventory for a short time than it is to reschedule an order.

This applies to discrete items only.

Calculate ATP

Indicate whether to calculate and print available to promise (ATP) on the Planning Detail Report, using the following formula:

ATP = **planned production** - **committed demand**

Where:

- **Planned production** = planned orders, scheduled receipts (purchase orders, jobs, and repetitive schedules), suggested repetitive schedules, nettable quantity on hand.

- **Committed demand** = sales orders, component demand (from planned orders, discrete jobs, suggested repetitive schedules, and lot expiration). Committed demand does not include forecasted demand.

Create Supply

Indicates if the application can suggest supply for this item. If you use an item as a substitute to meet demand for another item, then this attribute indicates whether you can create new supply for the item as part of meeting the demand for the original item.

Critical Component

If selected, flags the item as a critical component for MPS and DRP planning. This allows you to plan master scheduled items with respect to only critical component and their material resource constraints. Hidden by default.

Demand Time Days

calculates the demand time fence as the plan date (or the next workday if the plan is generated on a day that is not a workday) plus the value you enter here.

Demand Time Fence

Select an option to determine a point in time inside which the planning process ignores forecast demand and considers only sales order demand when calculating gross requirements. This reduces the risk of carrying excess inventory.

Calculate the demand time fence as the plan date (or the next workday if the plan is generated on a day that is not a workday) plus:

Value	Description
Cumulative mfg. lead time	The cumulative manufacturing lead time for the item.
Cumulative total lead time	The total manufacturing lead time for the item.
Total lead time	The total lead time for the item.
User-defined	The value you enter for **Demand Time Fence Days**.

Distribution Planned

Indicate the kind of planning to be used for the item. It is the application of replenishment inventory calculations to assist in planning of key resources contained in a distribution system, such as sourcing and transport. Hidden by default.

Exclude from Budget

Indicate whether the item is to be excluded from the budget. Hidden by default.

Forecast Control

Select an option to determine the types of demand you place for the item. This guides the key processes of two-level master scheduling: forecast explosion, forecast consumption, planning, production relief, and shipment relief. This is appropriate only for items that are models, option classes, options, or mandatory components of models and option classes.

ORACLE®

Consume forecast

You forecast demand directly, rather than by exploding the forecast demand. You can use this value only with Oracle E-Business Suite Supply Chain Planning Applications.

Consume and derive forecast

You forecast demand directly, explode the forecast demand, or use a combination of both methods. You can use this value only with Oracle E-Business Suite Supply Chain Planning Applications.

Consume then explode

You first forecast demand directly, then by exploding the forecast demand.

Explode then consume

You first explode the forecast demand, then directly forecast demand.

None

You place sales order demand but do not forecast demand.

Maximum Inventory Days of Supply

Enter the maximum amount necessary of any materials and supplies in the application that are needed to achieve the desired business metric like throughput rate, cost, due date performance, inventory, days of supply, and so on. Hidden by default.

Maximum Inventory Window

Enter the maximum amount necessary (in terms of quantity) of any materials and supplies in the application that are needed to achieve the desired business metric like throughput rate, cost, due date performance, inventory, days of supply, and so on. Hidden by default.

Pegging

Indicate the planning process uses to decide when to calculate and print end assemblies for the item. Hidden by default.

Soft Pegging

This option allocates supply to demand based on the **Reservation Level** option set in the **MRP Plan** options.

End Assembly Pegging

This option traces the end assembly the item is pegged to at the top of the bill of material. Even if you do not select end assembly pegging, you can still calculate and view end assemblies on-line.

End Assembly / Soft Pegging

Choose this option for both soft pegging and end assembly pegging.

Hard Pegging

This option allocates supply to demand based on the **Reservation Level** option set in the **MRP Plan** options. This pegs supply to demand and demand to supply by project at all levels of a bill of material. This allows you to allocate supply to demand and generate planned orders based on the plan-level options.

End Assembly / Hard Pegging

Choose this option for both hard pegging and end assembly pegging.

None

This option disables project material allocation, end assembly pegging, and full pegging.

Planned Inventory Point

ORACLE®

Indicate if the item is an Inventory Point item. This means that material can be stored at the item level without losing materials or quality characteristics. Inventory Points generally point to major stocking phases in the manufacturing cycle. Hidden by default.

Planning Method

Select the option that decides when to plan the item:

Not planned

The item does not require long-term planning of material requirements. Choose this option for high volume and or low cost items that do not warrant the administrative overhead of MRP; typically dependent demand items. You cannot use this option unless the Pick Components attribute is checked.

MRP planning

Choose this option for non-critical items that do not require manual planning control, typically dependent demand items.

MPS planning

You master schedule the item and require manual planning control. Choose this option for items with independent demand, items that are critical to your business, or items that control critical resources.

MRP/DRP Planned

Choose this option when you want both MRP and DRP planning for the item.

MPS/DRP Planned

Choose this option when you want both MPS and DRP planning for the item.

DRP Planned

Choose this option when you have multiple organizations for which you are exercising Distribution Requirements Planning for the item.

Planning Time Days

Calculates the planning time fence as the plan date (or the next workday if the plan is generated on a day that is not a workday) plus the value you enter here.

Planning Time Fence

Choose one of the following options to determine a point in time inside which certain restrictions on planning recommendations apply. For discrete items, the planning process cannot suggest new planned orders or rescheduling existing orders to an earlier date. For repetitive items, the planning process can only suggest new daily rates that fall inside the acceptable rate increase and decrease boundaries.

A time fence increases manual control of the plan, minimizing short term disruption to shop floor and purchasing schedules.

Calculate the planning time fence as the plan date (or the next workday if the plan is generated on a day that is not a workday) plus:

Value	Description
Cumulative mfg. lead time	The cumulative manufacturing lead time for the item.
Cumulative total lead time	The total manufacturing lead time for the item.
Total lead time	The total lead time for the item.

ORACLE

Value	Description
User-defined	The value you enter for **Demand Time Fence Days**.

Preposition Point

The preposition point represents the push type relationship with a trading partner. When planning arrives at a preposition point for an item, it pushes all the existing supply downstream until this point.

In the case of multi-souring repair, you should not set the preposition point for the item-repair supplier. If you set select this check box for a multi-sourced item, then the application pushes the entire inventory to the first trading partner it encounters in the planning process. Hidden by default.

Release Time Days

Calculate the demand time fence as the plan date (or the next workday if the plan is generated on a day that is not a workday) plus the value you enter here.

Release Time Fence

Choose an option to determine a point in time inside which planned orders for discretely planned items are automatically released as WIP jobs or purchase requisitions. The planned orders must meet the following auto-release criteria:

- The new order date lies within the auto-release time fence for any order type (make or buy).

  - **Order Date** = **Start Date** - **Preprocessing Lead Time**. For example if the **Order Date** is **April 5** and the **Start Date** is **April 7**, if the preprocessing lead time is 2 days. When the order date falls inside the release time fence, the planned order is released.

- The lead time is not compressed

- The orders are for standard items (will not release models, option classes, and planning items)

- The orders are not for Kanban items

- The orders are for DRP planned items in a DRP plan, MPS planned items in an MPS plan, or MRP planned items in an MRP plan.

- The release time fence option is defined as anything other than Do not auto-release, Do not release (Kanban), or Null

- DRP, MPS, and MRP plans must be run with the Memory-based Planning Engine

Auto-release of repetitive schedules is not applicable for repetitively planned items. No material availability check is performed before WIP jobs are released.

Calculate the release time fence as the plan date (or the next workday if the plan is generated on a day that is not a workday) plus:

Value	Description
Cumulative mfg. lead time	The cumulative manufacturing lead time for the item.
Cumulative total lead time	The total manufacturing lead time for the item.
Total lead time	The total lead time for the item.

Value	Description
User-defined	The value you enter for **Demand Time Fence Days**.
Do not auto-release	The item cannot be auto-released
Do not release (Kanban)	For Kanban items, prevent release of planned orders manually or automatically

Repair Lead Time

Time to repair the part at the supplier site. The definition is in context with the final usable part of product and not based on the defective part. For example, if you can repair an item **A** from a defective item **B**, planning assumes the repair lead-time from item **A** when it calculates the repair of defective item **B**. A repair organization requires the time equal to the repair lead-time to convert a defective part to a usable part. You define the repair lead time in the repair organization. Hidden by default.

Repair Program

Indicates the relationship with the supplier for the repair of an item. Hidden by default. The available choices are:

Advanced Exchange on Defective Receipt Advanced Exchange on PO Issue Repair Return

Repair Yield

Indicates the yield when you upgrade or repair a defective part. The repair yield is always in context with the final usable part or product and not based on the defective part. The repair yield represents the yield of the repair process. You define the repair yield in the repair organization. Hidden by default.

Round Order Quantities

Indicate whether the planning process uses decimal or whole number values when calculating planned order quantities or repetitive rates. When this option is turned on, decimal values round up (never down) to the next whole number. The planning process carries any excess quantities and rates forward into subsequent periods as additional supply.

Shrinkage Rate

Enter a factor that represents the average amount of material you expect to lose during manufacturing or in storage. The planning process inflates demand to compensate for this expected loss. For example, if on average 20% of all units fail final inspection, enter **0.2**; the planning process inflates net requirements by a factor of 1.25 (1 / 1 - shrinkage rate).

Substitution Window Days

If the substitution window type is **User-defined**, then you specify the number of days a substitute is considered for an item. Hidden by default.

Substitution Window Code

Hidden by default. Enter a value that calculates until what time a substitute can be considered for an item as follows:

Value	Description
Cumulative mfg. lead time	The cumulative manufacturing lead time for the item.

ORACLE®

Value	Description
Cumulative total lead time	The total manufacturing lead time for the item.
Total lead time	The total lead time for the item.
User-defined	The value you enter for Demand Time Fence Days.

Target Inventory Days of Supply

Enter the target inventory (in terms of days of supply) to be achieved by the planning engine. Hidden by default.

Target Inventory Window

Enter the target inventory (in terms of quantity) to be achieved by the planning engine. Hidden by default.

Related Topics

- Interdependent Item Attributes: Explained

Item Order Management Specifications

The following are the item order management specification attributes and their possible values. You set these attributes when you define or update items.

Item Order Management Specification Attributes

ATP Components

Indicate whether to include, in available to promise checking, additional components in the bill of material for ATO and PTO items. These components are included in ATP checking if **Check ATP** for the component is turned on.

ATP Rule

Enter a user-defined available to promise rule. ATP rules define supply and demand sources, time-fence parameters, and available-to-promise calculation methods. You can give ATP rules meaningful names, such as **ATO ATP Rule**. If there is no ATP rule for the item, the organization's default ATP rule is used.

Back-to-Back Enabled

Indicate how items are handled downstream. Set value to **Yes** to enable constant back-ordering, so that downstream applications automatically order items before they go out of stock.

If this attribute is set to Yes, then you must also set the following attributes to Yes:

- Inventory Item
- Reservable
- Customer Ordered, Customer Orders Enabled (if Autocreated Configuration is set to No)

Charge Periodicity

This attribute is controlled at the master organization level.

The time the system uses to price a persistent or recurring service or product. Each unit of measure in this class is a periodicity value. An item has only one periodicity value.

Null

Check ATP

Indicate whether to check available to promise and/or capable to promise information when placing demand.

Check Material Only Check Material and Resources Check Resources Only None

This attribute also determines whether you can view component ATP information for material requirements in Work in Process.

Customer Ordered

Indicate whether to allow an item to be ordered by external customers. This attribute must be turned off if the **Structure Item Type** attribute is set to **Planning**.

If you turn this attribute on, you can temporarily exclude an item from being ordered by turning **Customer Orders Enabled** off.

Customer Orders Enabled

Indicates whether an item is currently customer orderable

You can initially define an item with **Customer Ordered Item** turned on and **Customer Orders Enabled** turned off. This means prices can be defined for the item, but no orders can be placed for it.

This attribute is optionally set by the Item Status code.

Eligibility Rule

A specific set of constraints or requirements that must be met for the offer to be available to a customer. For example, the customer may need to be a member of the loyalty program, or live in a certain state, or be in good financial standing with the company, or not be locked into an existing contract to be eligible for an offer.

Internally Transferable

Indicate whether to allow an item to be ordered on an internal requisition.

If you turn this attribute on, you can temporarily exclude an item from being ordered on an internal requisition by turning **Internal Orders Enabled** off.

Transfer Order Enabled

Indicate whether you can currently order an item internally. If you turn this attribute on, you can specify the item on an internal requisition, if **Internal Ordered Item** is also on.

If you turn **Internal Ordered Item** on, you can temporarily exclude an item from being ordered on an internal requisition by turning this attribute off.

This attribute is optionally set by the Item Status code.

Order Management Transaction Enabled

ORACLE®

Indicates whether demand can be placed for an item and whether shipment transactions are interfaced.

Over Shipment Tolerance

Indicates the amount of the shipment you can ship below at the time of ship confirmation

Picking Rule

Indicate picking rule that defines the order in which subinventories, locators, lots, and revisions are picked.

Returnable

Indicate whether to allow customers to return an item.

RMA Inspection Required

Indicate whether inspection is required for items returned by the customer. The item then must be separately transferred to inventory.

Ship Model Complete

Indicate whether any configuration derived from this model can ship only when all required quantities of all configuration components (options or included items) are available.

Under Shipment Tolerance

Indicate the amount of the shipment that can be shipped below at the time of ship confirmation.

Shippable

Indicate whether to ship an item to a customer. A warning is issued if you change the value of this attribute when open sales order lines exist.

This attribute must be turned off if the **Structure Item Type** attribute is set to **Planning**.

Sales Product Type

Indicates the sales product type:

Goods Subscription One Time Service Training Included Warranty Extended Warranty Service Level Agreement Software Maintenance Preventative Maintenance Installation

Related Topics

- Interdependent Item Attributes: Explained

Item Physical Specifications

The following are the item physical specification attributes and their possible values. You set these attributes when you define or update items.

ORACLE

Item Physical Specification Attributes

Collateral

Indicate whether the item is collateral.

Container

Identify that items are containers used for shipping sales orders.

Container Type

For items identified as containers, indicate the type of the container.

Downloadable

Indicate whether the item can be downloadable.

Electronic Format

Indicate whether the item exists only in an electronic format and not physical.

Event

Indicate whether the item is event.

Dimensions: Height

Enter the height of the item.

Dimensions: Length

Enter the length of the item.

Dimensions: Width

Enter the width of one unit of item.

Indivisible

Indicates whether the item can be ordered in fractions.

Internal Volume

Enter the internal volume of the container or vehicle in the same UOM as the Unit Volume. This attribute is used by shipping to calculate container capacity restrictions.

Maximum Load Weight

Enter the maximum load weight of the container or vehicle.

Minimum Fill Percent

Enter the minimum fill percentage under which the container or vehicle should be used.

ORACLE®

Unit

Indicate the unit of measure for the dimension of the item.

Unit Volume

Enter the volume of one unit of item.

Unit Weight

Enter the weight of one unit of item.

Vehicle

Indicate whether vehicles are used for shipping the items.

Warehouse Equipment

Indicate whether the item is equipment.

Related Topics

- Interdependent Item Attributes: Explained

Item Process Manufacturing Specifications

The following are the item process manufacturing specification attributes and their possible values. You set these attributes when you define or update items.

Item Process Manufacturing Specification Attributes

CAS Number

Indicate the Chemical Abstracts Service (CAS) registry number. The CAS number uniquely identifies a chemical substance. The CAS scientists assign a CAS registry number to a substance when it enters the CAS registry database. The CAS scientists identify new substances and assign them in sequential order in the database.

Hazardous Material

Indicate if the item is hazardous.

Process Costing Enabled

Select this check box if you plan so use the process costing module with this item. You must enabled the Inventory Asset attribute to enabled process costing. If the organization is process manufacturing enabled, the master level and organization level control does not apply for costing. The system stores costs for each organization and if multiple organizations need to use the same cost, then you must perform the setups in process costing.

Process Execution Enabled

ORACLE®

Select this check box if you plan to use this item in a production batch as an ingredient, product, or by-product. This attribute is not mutually exclusive of the Build in WIP attribute. You can set both attributes to yes to use the item in both WIP and process manufacturing.

Process Quality Enabled

Select this check box if you plan to use the process manufacturing quality module with this item. You must select this check box if you plan to create samples and specifications for this item.

Process Supply Locator

Enter a locator from which the item is normally consumed as an ingredient in process manufacturing.

Process Supply Subinventory

Enter a subinventory from which the item is normally consumed as an ingredient in process manufacturing. This subinventory represents the production shop floor or the staging area.

Process Yield Locator

Enter a locator in which you place the results of a production batch.

Process Yield Subinventory

Enter a subinventory in which you place results of a production batch.

Recipe Enabled

Select this check box to enable use of this item in recipes or formulas in process manufacturing. You can modify this attribute at any time, however; if you deselect the check box you cannot use this item in future recipes.

Related Topics

- Interdependent Item Attributes: Explained

Item Purchasing Specifications

The following are the Item Purchasing specification attributes and their possible values. You set these attributes when you define or update items.

Item Purchasing Specification Attributes

Allow Purchasing Document Description Update

Enables the item description to be updated in a purchase order.

Default Buyer

Enter the buyer assigned to purchase an item.

Hazard Class

ORACLE®

Use hazard classes to identify categories of hazardous materials for international trade purposes.

Input Tax Classification Code

Select the appropriate tax code for the item. The tax code shows the tax authorities and rates that are available to use for this item. You must select the taxable attribute to enable this field.

Inspection Required

Indicate whether to inspect an item upon receipt from the supplier, before paying the corresponding invoice.

Invoice Close Tolerance Percentage

Enter the percentage tolerance to automatically close purchase order shipments.

Closed for Invoicing is a status change only. You can invoice match additional items against the shipment later.

Invoice Match Option

Indicate the invoice matching used. Values can be:

Order Receipt

List Price

Enter the value that used as the default price on a purchase order, requisition, RFQ, or quotation.

When performing supplier inventory replenishment, a list price must be specified in order to automatically generate a requisition.

Market Price

Enter the market value for an item.

Match Approval Level

Status of the Match Approvals. It can be either: .

Null (blank) 2 Way 3 Way 4 Way

Negotiation Required

Indicate whether negotiation is required.

Outside Processing

Indicate whether you can add the item to an outside processing purchase order line. You can select this option only if **Purchased** is also selected.

Outsourced Assembly

Indicate whether this is an outsourced assembly item. Selecting this check box indicates that the assembly item has subcontracting components. You can select this attribute only if you enabled charge base chargeable subcontracting.

Price Tolerance Percentage

ORACLE

Enter the price tolerance percent, the maximum price percentage over the normal price range for an item. For example, if the tolerance percent is 5, the maximum acceptable price on a purchase order is 5% over the requisition price. Any purchase order price 5% above the requisition price is unacceptable, and you cannot approve the purchase order.

Purchasable

Indicate whether to order an item on a purchase order. You can set this only when **Purchased** is enabled.

Clearing the Purchasable check box allows you to temporarily restrict the ability to buy. If **Purchasable** is set to **Master Level** control, then **Purchased** must be set to Master Level control.

This attribute is optionally set by the Item Status code.

Purchased

Indicate whether to purchase and receive an item. Turning this option on allows you to set the **Purchasable** attribute.

If an item is vendor managed, you must select this option.

Receipt Close Tolerance Percentage

Enter the percentage tolerance used to automatically close purchase order shipments.

You can receive additional items against the shipment later.

Receipt Required

Indicate whether you must receive an item before you can pay the invoice.

Rounding Factor

Enter a number between 0 and 1. This factor determines how to round the quantity on an internal requisition that results from conversions between the requisition line unit of measure and the item unit of issue. This factor insures that the unit of issue resolves to an integer, rather than a fractional amount.

Taxable

Indicate whether the supplier charges a tax.

UN Number

Enter the United Nations identification number. UN numbers are used to identify specific materials (hazardous materials, for example) for international trade purposes.

Unit of Issue

Enter the unit of measure you typically use to issue the item from inventory.

You use units of issue to round order quantities, minimizing shipping, warehousing, and handling costs. The unit of issue must be the same for all units of measure belonging to the same unit of measure class as the primary unit of measure.

Unit Type

Indicate the type of unit which is processed outside.

Use Approved Supplier

Indicate whether to use only approved suppliers.

Related Topics

- Interdependent Item Attributes: Explained

Item Receiving Specifications

The following are the item receiving specification attributes and their possible values. You set these attributes when you define or update items.

Item Receiving Specification Attributes

Action

Indicates action to be performed when the receive date is outside the range defined by **Quantity Received Tolerance**.

None
No over tolerance enforced.

Reject
Reject receipts over the tolerance quantity. An error message displays and you are prevented from receiving quantities exceeding the order quantity by more than the **Quantity Received Tolerance** percent.

Warning
A warning message displays if you accept receipts over the quantity determined by the **Over-Receipt Quantity Control Tolerance** percent, but does perform the receipt.

Allow Express Transactions

Indicate whether you can deliver all distributions for this item with one data entry transaction if the quantity to deliver equals the purchase order line balance. If this option is cleared, you must deliver individual distributions separately. Leave this field blank if you want Inventory to use the value defined in the **Receiving Options** window for transactions involving this item.

Allow Substitute Receipts

Indicate whether to allow receipt of defined substitutes in place of this item. You define valid substitutes with the Item Relationships window. Leave this field blank if you want Inventory to use the value defined in the **Receiving Options** window for transactions involving this item.

Allow Unordered Receipts

Indicate whether you can receive an item without a purchase order. If this option is on, you can later match the receipt to the appropriate purchase order. If this option is off, all receipts for an item must have a corresponding purchase order. Leave this field blank if you want to use the value defined in the **Receiving Options** window for transactions involving this item.

Days Early

Enter the number of days before the promise date you can receive an item without warning or rejection. For example, if you enter **3** and the promise date is a Friday, you can receive the item on Tuesday.

Days Late

Enter the number of days after the promise date you can receive an item without warning or rejection.

For example, if you enter **2** and the promise date is a Monday, you can receive the item on Wednesday.

Enforce Ship-to Location

Select an option to control whether the supplier can deliver to a location that differs from the ship-to location defined on the purchase order:

None
No ship-to location enforced

Reject
Prevent receipt of items not received to their purchase order ship-to location

Warning
Display a warning message if you attempt to receive an item to a location that differs from the purchase order ship-to location, but perform the receipt, anyway.

Receipt Date Action

Indicate action to be performed when the receive date is outside the range defined by **Days Early Receipt Allowed** or **Days Late Receipt Allowed**. Choices:

None
No receipt date exception enforced.

Reject
Reject receipts when the receive date is outside the range defined by Days Early Receipt Allowed or Days Late Receipt Allowed

Warning
Display a warning message if you attempt to receive an item outside the range defined by Days Early Receipt Allowed or Days Late Receipt Allowed, but perform the receipt, anyway.

Receipt Routing

Indicates routing of the items at the time of receipt.

Direct
At receipt, deliver an item directly to its location.

Inspection
Receive an item first, inspect it, then deliver.

Standard
Receive an item first, then deliver without inspection.

Tolerance Percentage

Enter the quantity received tolerance percent, the maximum acceptable over-receipt percentage, used by the **Over-Receipt Quantity Control Action** attribute. For example, if the tolerance percent is **5**, then the acceptable quantity on a receipt transaction is within 5% of the quantity you order on a purchase order line. Any quantity more than 5% over the order quantity is unacceptable.

ORACLE®

Related Topics

- Interdependent Item Attributes: Explained

Item Service Groups Specifications

The following are the Item Service Groups specification attributes and their possible values. You set these attributes when you define or update items.

Item Service Groups Specification Attributes

Billing Type

Indicates user definable and must be tagged with one of three Billing Category Codes as follows:

Material (M) Labor (L) Expense (E) Consumable (C)
Billing Types are used in contracts to define discount percents.

Create Fixed Asset

This indicates whether the item creates a depreciable inventory asset used in Enterprise Install Base. A value of **Yes** is only applicable when you turn on Installed Base Tracking.

Duration

Enter a positive number to indicate the service duration. **Duration** and **Duration Period** are required for warranty and service contract item types only. The number you enter here along with the duration period e.g. Month, Year, provide defaults when you order the service. You can select any period or unit of measure as long as it is associated with the Time unit of measure class.

Duration Period

Enter a number to indicate the service duration period.

Duration and **Duration Period** are required for warranty and service contract item types only.

Enable Contract Coverage

Indicate whether the item is eligible to be covered by a service contract. Items eligible for contract coverage must also be defined as **Track**. When you enable this option, you can order service for this item.

Enable Defect Tracking

Indicate if defects of this item can be tracked.

Enable Provisioning

Select the check box to make the item eligible for electronic fulfillment by the service fulfillment manager. Additional setup is required in the service fulfillment manager.

Enable Service Billing

ORACLE®

Select the check box to enable the **Billing Type** field.

Instance Class

This check box is used in Telecommunication Service Ordering for defining a configured link. The only available option is **Link**. This is only applicable when Installed Base Tracking is enabled.

Recovered Part Disposition

This field is reserved for future use. Currently all three disposition types cause the part to be transacted into the technician's default or designated subinventory. In the future this field will control the process for returning defective or unused parts to a warehouse consolidation point.

Service Request

Select if you can create a service request for the item. The available choices are:

Enabled:
You can create a service request for the item.

Disabled
: Service requests are disabled for the item.

Inactive
Service requests are inactive for the item.

Null
You cannot create a service request for the item.

Service Start Delay

Enter a positive number indicating how many days after shipment the warranty should start.

Track in Installed Base

This enables lifecycle tracking. Once set, you should not change this setting. Set this option at the master item level.

Related Topics

- Interdependent Item Attributes: Explained

Item Structure Specifications

The following are the item structure specification attributes and their possible values. You set these attributes when you define or update items.

Item Structure Specification Attributes

Assemble to Order

Indicates that the item is generally built for sales order demand; a final assembly work order is created based on sales order details.

Autocreated Configuration

Indicates whether the item is automatically created.

If the base model is null, you cannot select this attribute.

Base Model

This attribute may be controlled at the master or organization level, depending on your setup.

Displays the model from which an ATO configuration was created. The configuration item lists the ordered model item as its base model.

Create Configured Item

This item attribute is available only for ATO items. The attribute enables you to create configured item bills of materials based on the following options:

Based on Sourcing Items based on model, structures based on sourcing Based on Model

Effectivity Control

Indicates whether the structure of the item is date effective structure or a model and unit effective structure. Model effective structure are typically associated with project manufacturing.

Structure Item Type

Indicates the type of bill of material the item can possess, such as standard, model, planning, and so on.

Configurator Model Type

Indicates the capability to match to one of the following existing configurations of the models:

- Standard
- Container
- Null

Related Topics

- Interdependent Item Attributes: Explained

Item Web Store Option Specifications

The following are the item web option specification attributes and their possible values. You set these attributes when you define or update items.

Item Web Store Option Specification Attributes

Back Orderable

Indicate whether this item can be back-ordered, if ATP fails.

Minimum License Quantity

Indicates the minimum number of licenses a customer must order for products ordered and distributed based on licensing.

Orderable on the Web

Indicates whether this item can be ordered from the web.

Web Status

Indicates Indicate the web status of this item.

Disabled
This item is not web enabled.

Published
This item is web enabled, and published

Unpublished
This item is web enabled, and unpublished

Related Topics

- Interdependent Item Attributes: Explained

Item Work in Process Specifications

The following are the Item Work in Process specification attributes and their possible values. You set these attributes when you define or update items.

Item Work in Process Specification Attributes

Build in WIP

Indicate whether to create discrete jobs or repetitive assemblies.

This attribute must be disabled if the **Inventory Item** attribute is disabled or if the **Structure Item Type** attribute is not set to **Standard**.

This attribute is optionally set by the item status code.

Inventory Carrying Penalty

Specify, in units per day, an inventory carry penalty for jobs that are not completed before they are scheduled to be finished. For example, the inventory carry penalty for a job that is not completed for an item might be 10 per day.

Locator

Enter the supply locator from which to issue (push) or back flush (pull) an item to work in process. You can also define a WIP supply locator for any bill that uses this item; the bill supply locator overrides the supply locator you define here. You must enter a WIP supply subinventory before you can enter a locator.

Operation Slack

Indicate, in units per day, the operation slack penalty for items having lag time between operations.

ORACLE®

Supply Subinventory

Enter the primary subinventory from which to issue (push) or back flush (pull) an item to work in process.

Tolerance Type

Select **Percent** or **Amount,** or leave the field blank. If you do not select an **Overcompletion Tolerance Type**, the tolerance defaults to the tolerance that you set at the organization level. If you did not set a tolerance at the organization level, the default is **Null**, which signifies that no over-completions are allowed.

Tolerance Value

The value for this attribute is the number value for the **Overcompletion Tolerance Type** that you selected. It determines the acceptable percent or quantity of assemblies that you will allow to be over-completed. For example, if you choose **Percent** as the **Overcompletion Tolerance Type**, and enter **100** as the **Overcompletion Tolerance Value**, you allow over-completions up to 100 percent of the original job or schedule quantity. If you did not select an **Overcompletion Tolerance Type**, you will not be able to enter a value in this field.

Type

Choices are:

Operation pull Bulk Assembly pull Phantom Push Supplier
Indicate a supply type for components.

Related Topics

- Interdependent Item Attributes: Explained

4 Manage Product and Service Data: Manage Product Relationships and Associations

Item Relationships: Explained

Managing item relationships includes defining, editing, and deleting item relationships.

You can create, edit and delete item relationships in one of two ways:

- On the **Manage Item Relationships** page, select Manage Item Relationships task. This page helps in managing relationships across items.
- On the **Item Details** page and selecting the relationships tab. This page helps in managing item relationships for a particular item.

> ✎ **Note:** In addition to the two ways of creating item relationships explained above, you can create trading partner item relationships from the Create or Edit Trading Partner Item pages.

There are five relationship types:

- Related Items
- Trading Partner Item Relationships
- Global Trade Item Number (GTIN) Relationships
- Source System Item Relationships
- Item Cross-References

You can search for different relationships across items using the task Manage Item Relationships. You can also perform keyword and parametric searches using various criteria to quickly locate any relationship of any item.

Related Items

Seeded relationship types are listed in the following table:

Accessories	This indicates the item is an accessory of another item. .
Collateral	This relationship indicates collateral, such as marketing brochures, that you have for an item.
Complimentary	This relationship indicates if a customer purchases one item, the other item is received for free.
Conflict	This relationship indicates that these items may never be used together.
Cross-Sell	This relationship indicates that one item may be sold in lieu of another item.
Fulfillment	Indicates if the item is a fulfillment item.

ORACLE®

Impact	This relationship is used to relate items to each other, but only under special conditions.
Mandatory Charge	This relationship indicates a mandatory charge if a customer purchases both items.
Merge	This relationship enables rules based the consolidation of contracts. You may use the earliest or latest target end date for consolidation. This enables you to choose how contracts are consolidated.
Migration	During contact renewal you are given the option of renewing contracts based on new licenses, or old licenses.
Optional Charge	This relationship indicates an optional charge if the customer purchases both items.
Prerequisite	This relationship indicates that you must mark one of the items as a requirement to using the other item.
Promotional Upgrade	This relationship enables a customer to upgrade from one item to another item or equal or higher value, without an additional charge.
Regulatory	This type relates a regulatory item with the context item.
Related	The items are related in a nonspecific way.
Repair To	You use the Repair to item relationship with field service operations that use spares management functionality. If a part has been superseded by another part, the Repair to item relationship determines the replacement part.
Service	This relationship establishes service items for a repairable item.
Split	This relationship enables you to split support for an item so you do not have to manually split support at contract renewal.
Substitute	One item is a substitute for another.
Superseded	This relationship indicates that one item has replaced another item that is no longer available.
Upsell	This relationship indicates that a newer version of the item exists, and can be sold in place of the older item.
Warranty	This relationship allows you to relate a warranty item with the item.

Effective Dates for Related Item Relationship: Enter the Effective Dates. For example, start date and optionally an end date.

Reciprocal: Indicates whether the item relationship is reciprocal.

Planning Enabled: When the item relationship type is substitute, indicates if planning is enabled for the substitute item.

ORACLE®

> ✏️ **Note:** Your System Administrator can set up additional relationship types based on your business needs.

Trading Partner Item Relationships

There are four subordinate relationships:

- Customer Item Relationships are used to associate an internal item with one of your customer items.
- Competitor Item Relationships are used to associate an internal item with one of your competitor items.
- Manufacturer Part Number Relationships are used to associate an internal item to a manufacturer part number.
- Supplier Item Relationships are used to associate an internal item with your supplier item.

Global Trade Item Number (GTIN) Relationships

Relationship between an internal item and a Global Trade Item Number (GTIN).

When creating a GTIN Relationship, you must specify the Unit of Measure (UOM), and also specify whether you are adding to a new GTIN or one that already exists.

Spoke System Item Relationships

Establishes a relationship between an internal item and a spoke system item. This relationship is helpful in mapping and identifying items that have been consolidated from multiple source systems into a single master item.

Item Cross-References

Cross-referencing an item with something like an old part number. While creating a Cross-Reference Relationship, you first select a Cross-Reference type and you specify whether the relationship is applicable to all organizations or whether it specific to only a selected organization. If it is specific to one organization, you select the organization.

DFF Context

A system administrator can configure descriptive flexfields for item relationships that are used to maintain additional details about relationships.

When you configure new descriptive flexfields for item relationships, you must use the following prefix to DFF context codes in order for the segments to show up for the respective relationships:

Relationship Type	Prefix
Related	RELATED
Item Cross-reference	XREF
GTIN	GTIN
Source System	SYS
Customer	CUST

ORACLE

Relationship Type	Prefix
Manufacturer Part Number	MFG
Competitor	COMP

For example, you could setup a DFF with the context code RELATED_RELATIONSHIP_ATTRIBUTES, the segments of this context will display for the related item relationships on the transaction side.

Item Relationship Types: Explained

Item relationship types allow you to relate an item to another item for various contexts.

The item relationship types are:

- Related Items: A relationship between two items.

- Trading Partner Item Relationships: A relationship between an item and a Trading Partner Item, such as a customer item, a competitor item, or a manufacturer part number.

- Global Trade Item Number (GTIN) Relationships: A relationship between an internal item and Global Trade Item Number.

- Source System Item Relationships: A relationship between an internal item and source system item that enables you to map and identify items that have been consolidated from multiple source systems into a single master item.

- Item Cross-References: Cross-reference types define relationships between items and entities, such as old item numbers.

FAQs for Manage Product Relationships and Associations

What are item relationships?

Item relationships enable you relate your internal item with another item or reference the item with a Global Trade Item Number (GTIN), source system item, or cross-reference.

How are cross-reference types created?

The administrator creates cross-reference types using the Manage Cross-Reference Types task in the Setup and Maintenance work area.

How can I create my own related item relationship type?

There are several seeded related item relationship types available. If you want to create your own types, an administrator can create additional types using the Manage Related Item Subtypes task in the Setup and Maintenance work area.

How can I validate Global Trade Item Numbers (GTIN) ?

You can use item rules to validate GTIN numbers.

- You can access the attributes of a GTIN relationship row (such as GTIN, UOM, or Party Type) by using the attribute group GTN.GTINMain. This attribute group is available to rule sets associated with an item class.

- You can define item rules using the functions `exists()` and `isNull()` to validate the presence of GTIN values.

- You can define item rules using the function `substring()` to validate the formation of GTIN values.

Related Topics

- Item Rule Logical Functions and Operators

- Item Rule String Functions

5   Manage Product and Service Data: Manage Product Bundles and Structures

Structures and Structure Types

Structure Types: Explained

Structures, also known as Bills of Material (BOM), are used to store lists of items that are associated with a parent item and information about how each item is related to its parent. Supported structures are standard, model, option class, and planning. The type of structure that can be defined for an item depends on the value specified against the item's item structure type attribute.

Standard Structure

A standard structure is the most common type and lists the mandatory components, the required quantity of each component, and information to control work in process, material planning, and other manufacturing functions. Examples include structures for manufacturing assemblies, pick-to-order bills, kit bills, and phantoms.

Model Structure

A model structure defines the list of options and option classes that you can select when ordering a product that can be configured. A model structure also specifies mandatory components or included items that are required for each configuration of that model. You do not order or build the model itself; you order and build configurations of the model. A model structure can be either assemble-to-order or pick-to-order.

Option Class Structure

An option class is an item that groups optional components on a structure. An option class is an item that becomes a level in your model structure. Option classes can also have mandatory components that apply for all of its options. For example, when you order a computer, the monitor is an option class, and the specific type of monitor that you order is an option within that option class. An option class structure can be either assemble-to-order or pick-to-order.

Option class structures can contain standard components and options, as well as other option classes. You can structure any number of levels of option classes within option classes to create an indented hierarchy of choices. You can also specify a mandatory component under any option class in the indented structure that would automatically be included anytime that you choose an option from that option class (or a lower-level option class).

Planning Structure

A planning structure is a structure that includes a percentage distribution for its components. The percentages associated with the components on a planning structure do not need to add to 100 percent. You can define alternate and common planning structures, where the structure that you reference as common must be another planning structure.

Planning items can be nested within one another any number of times. When you nest planning items, scheduling applications can explode forecasts level by level and apply planning percentages at each level.

Phantom Structure

A phantom assembly is a non-stocked assembly that lets you group together material needed to produce a subassembly. When you create a structure for a parent item, you can specify whether a component is a phantom. One structure can represent a phantom subassembly for one parent item, and a stocked subassembly for another parent item.

Work in Process applications explode through a phantom subassembly to the components as if the components were tied directly to the parent assembly. Work in Process applications ignore phantom assembly routings when you define a job or repetitive schedule.

You can compute manufacturing and cumulative lead times for phantom assemblies that have routings. If you do not want to offset the components of a phantom assembly in the planning process, exclude the phantom item from the lead time calculations.

In general, phantom assemblies behave like normal assemblies when they represent a top-level assembly, such as when you master schedule them or manufacture them using a discrete job. As a subassembly, however, they lose their identity as distinct assemblies and instead represent a collection of their components. The components of the phantom subassembly are included on the job and on the pick list of the job, not the phantom itself.

Valid Component Attributes and Structure Types: Explained

Each structure can have many components. For each component, you specify attributes, such as operation sequence, item sequence, usage quantity, yield, supply type, supply subinventory and locator, and others.

The following table lists valid component attributes for each type of structure.

Component Attributes	Standard Parent Item	Model Parent Item	Option Class Parent Item	Planning Parent Item
Item	Yes	Yes	Yes	Yes
Item Sequence	Yes	Yes	Yes	Yes
Operation Sequence	Yes	Yes	Yes	No
Effective Date Range	Yes	Yes	Yes	Yes
Planning Percentage	No	Yes	Yes	Yes
Yield	Yes	Yes	Yes	No
Enforce Integer Requirements	Yes	Yes	Yes	Yes
Include in Cost Rollup	Yes	Yes	Yes	No
Supply Type	Yes	Yes	Yes	No
Supply Subinventory	Yes	Yes	Yes	No

ORACLE®

Component Attributes	Standard Parent Item	Model Parent Item	Option Class Parent Item	Planning Parent Item
Supply Locator	Yes	Yes	Yes	No
Mutually Exclusive Options	No	Yes	Yes	No
Optional Flag	No	Yes	Yes	No
Check ATP	Yes	Yes	Yes	No
Minimum Quantity	No	Yes	Yes	No
Maximum Quantity	No	Yes	Yes	No
Basis	No	Yes	Yes	No
Include in Shipping Document	Yes	Yes	Yes	No
Required to Ship	Yes	Yes	Yes	No
Required for Revenue	Yes	Yes	Yes	No
Quantity	Yes	Yes	Yes	No
Inverse Quantity	Yes	Yes	Yes	No
Descriptive Flexfield	Yes	Yes	Yes	Yes
Comments	Yes	Yes	Yes	Yes

Validation Rules for Structures and Components: How They Affect Editing of Structures

Your ability to create, copy, or change structures is affected by a number of validation rules; seeded and user-configured.

How Structures and Components Are Validated

When you create, copy, or change a structure, the following validation rules are applied:

- You cannot add a component to a structure where the component item is the same as the parent.
- You cannot add a component to a structure where the same component, with the same operation sequence and effectivity, already exists on the structure.

ORACLE®

- Lifecycle validation rules, when enabled, ensure that only components in the same lifecycle phase or higher lifecycle phase than the parent item can be added. The only exception is made for an obsolete lifecycle phase. Component items in this lifecycle phase cannot be added to an effective structure.

- You cannot add a component to a structure that is being referenced as a common structure from another organization, where the component does not exist in the other organization.

- You cannot add components to common structures. Changes should be performed on the referenced structure only.

- For Assemble to Order (ATO), Pick to Order (PTO), and phantom structures where the parent item has Available to Promise (ATP) Components set to No, you receive a warning when you add a component that has either the item attributes Check ATP set to Yes or ATP Components set to Yes. The warning says "Order details for the parent item specify NO for ATP Components", but you can add the component.

- You cannot add an optional component to a structure that is neither model nor option class.

- You cannot add a component whose planning percentage is not equal to 100 to a standard structure.

- You cannot add a mandatory component whose planning percentage is not equal to 100 and that has the Forecast Control attribute set to Consume or None to a model or option class structure.

- When adding a component to a structure, Check ATP component attribute is set to No if the component quantity is less than or equal to 0.

> ✎ **Note:** Routings-based validation are not supported. The only check made is to ensure that an integer value is entered for the operation sequence.

The following table presents the validation rules used for adding components to different structure types.

Here is a guide to the various table values:

- Yes: You can add this component type to this structure type.

- No: You cannot add this component type to this structure type.

- *: These components must be optional.

- **: These components are treated as standard subassemblies.

Description	Planning	PTO Model	PTO Option Class	PTO Option (kit)	ATO Model	ATO Option Class	ATO Item	Standard Item
Planning Structure	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PTO Model Structure	No	Yes	Yes	Yes	Yes	No	Yes*	Yes
ATO Item	No	No	No	No	No	No	Yes**	Yes
ATO Model Structure	No	No	No	No	Yes	Yes	Yes	Yes
ATO Option Class Structure	No	No	No	No	Yes	Yes	Yes	Yes
ATO Item Structure	No	No	No	No	No	No	Yes**	Yes

ORACLE®

Description	Planning	PTO Model	PTO Option Class	PTO Option (kit)	ATO Model	ATO Option Class	ATO Item	Standard Item
Standard Item Structure	No	No	No	No	No	No	Yes	Yes

Item and Operation Sequence: Explained

Item sequence indicates the sequence of an item on a structure and every routing carries operations.

Item Sequence

Item sequence indicates the sequence of an item on the structure. It is used to sort components on reports and when choosing options from a model bill in Oracle Order Management. This defaults to the value of the highest existing component item sequence plus the value of the **BOM: Component Item Sequence Increment profile option**. If this profile option is not set, the default is 10. You can override or change this number.

Operation Sequence

Every routing carries operations. You can use the Routings form to assign operations to routings. Each operation must have a sequence number called the **Operation Sequence Number**.

On a structure, the operation sequence indicates the order in which you perform operations on a routing. You can have the system automatically generate **Operation Sequence Numbers** using a user-defined increment factor. A profile must be created where you can indicate how much the **Operation Sequence Number** will increment every time a new operation is generated. You can change the generated value if necessary in the Routings form. Valid values range from 1 to 9999999.

You can assign any component to any operation on the routing, including all components to the same operation (such as the first operation). The planning process assigns material requirement dates based on the operations to which you assign each component.

You can define structures for items with or without routings. If you use routings, you can either define the structure first or the routing first.

With component-to-operation assignments, you can schedule and issue component material to the operation that requires the component on the exact requirement date. You can also assign the same component on the structure to different operations on the routing, with different usage quantities for each assignment.

If no routing exists for the item, all components default to operation sequence 1. You cannot change this value until you define a routing for the item. After you define the routing, you can update your structure with routing operations if you want specific component-to-operation assignments.

If you define the routing before you define a structure, assign components to valid routing operations, or an operation sequence 1 when you define the structure. If you define an alternate routing and then define the alternate structure, you can assign components to the alternate routing operations. If you define an alternate structure and no alternate routing exists, you can assign components to the primary routing operations.

Creating Structures

Item Structures: Explained

A structure contains information on the parent item, components, attachments, and descriptive elements using descriptive flexfields. Each standard component of a structure can have multiple reference designators and substitute components.

A product manager or product data steward is normally responsible for defining and managing product (item) structures. Note that the terms product and item are used interchangeably.

Create Product Structure

Product structures can be created in various ways. If the new structure is similar to an existing structure, you may copy and modify this new structure. If the new structure is an exact copy of another structure and its assembly details need not be maintained separately, you can link the new structure to an existing structure by using the Common option. Alternately, you can create a new structure by adding the required components and their information. Product structure can be created in one of three following ways:

- Create as New
- Create from Copy
- Create from Common

Create as New

Select an item and select create a new structure. Specify the structure name, description, and effectivity control. Select and add the required components on the Structure Details page.

An item structure exists only in the organization in which it was created. To use a structure in another organization, you must either copy it or reference it as common.

Create from Copy

Select an item that you want to copy, preview the components being copied, and specify new structure details, such as name, description, and effectivity.

You can copy structures across different effective dates with these restrictions.

Source	Target	Copy Allowed?
Date	Date	Yes
	Serial	Yes
	Unit	Yes
Serial	Date	No
	Serial	Yes
	Unit	No
Unit/Lot	Date	No

ORACLE®

Source	Target	Copy Allowed?
	Serial	No
	Unit	Yes

Create from Common

Select an item and its structure to common and preview the components of the common structure. However, unlike copying structures, common structures will have the same components. You will not have the ability to pick individual components.

When creating a common or referenced structure, the target structure will be created with the same effectivity as the source structure.

Common Structures: Explained

Common structures are referenced structures that share a component hierarchy, including the substitute components and reference designators defined for the components.

Creating Common Structures

If two or more organizations use the same item structure, you can define the structure in one organization and reference it from the other organizations, creating what is known as a common or referenced structure. You cannot update any information in a common structure. Any maintenance, such as removing or adding components or changing component attribute values, have to be made against the source (referenced) structure.

You cannot reference another structure as common if that structure also references a common structure. You can reference another structure as a common structure only if the referenced structure has the same structure name.

You can create a common structure within the same organization, as well as across multiple organizations. Sharing structures across multiple organizations minimizes the maintenance of your item structures.

You can reference structures only from organizations that have the same item master organization as the current organization.

Editing Common Structures

While common structures minimize maintenance, there is a need in some businesses to manage material control attributes independently. You can control these attributes by setting **Allow attribute updates** to yes when creating a common structure. This setting enables you to manage five component material controls at each structure level separately, independent of the source structure.

Here are the five material control attributes:

- Supple Type
- Subinventory
- Locator
- Operation Sequence
- Include in Cost Rollup

You can enable this option only when you are creating a common structure. You cannot enable this option once the common structure has been created. Evaluate the business need thoroughly before creating the common structure.

Once you enable the **Allow attribute updates** option in a common structure and save the structure, you cannot disable the attributes. If you must disable the attributes, then delete the structure and enter a new common structure for the item.

Managing Structures

Managing Product Structures: Explained

Managing product structures involves updating the structure by adding or removing components in the structures, making changes to first level component attributes, and maintaining substitute and reference designator information for first level components. Managing product structures also includes deleting product structures that are no longer in use.

Viewing Structure Details

Structure information is available as part of the item details. You can view structure details by navigating to the Item Details page and selecting the Structures tab. All structures created for items are listed in the structure table within the item structures subtab. The change control column indicates if structure changes are allowed. Change control permission is based on the business rules written for the structure name. The change orders column presents the number of change orders pending for the structure. Structure details, including header attachments and configured attributes, are presented in a details region. Clicking the structure name enables you to drill into the structure details page to view the component information.

The structure details page shows multilevel structure components in a hierarchical table and provides you with a complete view of all the component and assemblies of the structure. A date filter enables you to view the structure components as of a given date. For each component in a structure, the component item and component information is provided in a detailed region. This region includes these sections:

- Substitute Components: Lists items that can be used in place of the component.
- Reference Designators: Lists the component placement during assembly.
- Where Used: Lists component items that are used in other structures.
- Change Orders: Lists pending changes for the component (item).
- Additional Attributes: Lists additional attributes and their values that may have been configured for the structure type and name.

✏️ **Note:** Only the first level components can be managed from the Structure Details page.

The structure details table provides a default view of some component and item attributes. You have the ability to view additional item or component attributes using the columns option in the View menu. To view component data across different levels, you can add item operational and component attributes as table columns.

The structure details table also provides for direct access to the structures list table without having to first go to an items page and navigating to structures tab. Simply right-click on an item and select Structure List.

You also have the ability to see a flat representation of the structure by clicking **View Summary**. The summary view table will list:

- Item Name
- Item Description

- Item Class

- Total Quantity

- Item Revision

Updating Structure Components

Structure component updates include adding, deleting, or disabling components and updating component attributes. You can search for items and add as first level components to a structure.

You can select component rows and update their attributes. Multiple components with the same attribute changes can be updated quickly in a single action. The disable action enables you to quickly end-date a component. The delete action enables you to remove the component from the structure permanently and to integrate the component into the Delete Groups. You are required to add the component deletion request to a delete group.

Updating Substitute Component Information

You can assign any number of substitute items to each structure component, and you can assign the same substitute item to more than one component. The substitute item quantity is the quantity needed to replace the full component quantity. The quantity can differ from the component usage quantity.

Planning bills and model, option class, and planning components cannot have substitute components.

Updating Component Reference Designators

Reference designators are sequenced comments and instructions that pertain to a component. For example, you may have drawings that clarify the assembly process for certain components, or further instructions for the use of a large quantity of the same component. You can specify whether to assign one reference designator for every usage of the component or assign any number of reference designators to the component.

You can indicate whether reference designators are related to component quantity .

Planning bills and model, option class, and planning components cannot have reference designators.

Updating Component Item Usage

The Where Used tab enables you to view component item usage in other structures.

Versioned Item Structures: Explained

Item structure definition and maintenance is part of item versioning. Item structures are maintained at the item level. If the root item's item class has enabled versioning, you must manage item structures through item versioning. For example, any structure changes for items in that item class will cause new item versions to be created.

Date effective structures are supported in versioning.

The start and end dates of a structure component will be the start and end dates of the item version. You cannot enter start and end dates for components that are different from the version's start and end dates.

To add or remove a future effective component, you must create a new item version.

Structure Deletion: Explained

Item structures or specific components within item structures can be deleted using delete groups. Deleting a structure or a component from a structure removes the record without any reference to its earlier usage or existence. When you delete an entire structure, you delete all the components for the assembly, along with their reference designator and substitute items.

When you delete a structure or component, that delete action passes through several deletion constraints and statements defined for structures. Additionally, you can define custom deletion constraints and statements.

Defining Custom Deletion Constraints and Statements

You can define custom deletion constraints and statements. If what you are attempting to delete does not pass deletion constraints, it is not deleted. For example, you can define a constraint that prevents you from deleting a structure for an assembly that has an item status of active.

FAQs for Manage Product Bundles and Structures

What's a structure attachment?

When creating a structure, you can attach various documents pertaining to that item structure, such as drawings and reference materials. These attachments are available to view as part of **structure header details**.

What are item and components attachments?

Item and component attachments are attachments that you can view at the item level as part of the structure details view. Only those attachments whose categories have been associated with the structure name will be available.

What's a Substitute Component?

Substitute components are items that can be used in place of a component. You can associate any number of substitute items to each structure component and the same substitute item can be associated to more than one component. The substitute item quantity is the quantity needed to replace the full component quantity. The quantity can differ from the component quantity. Planning bills and model, option class, and planning components cannot have substitute components.

How does enable lifecycle validation impact structure creation and management?

When lifecycle validation rules are enabled, they ensure that only components in the same lifecycle phase or higher lifecycle phase than the parent item can be added. The only exception is made for obsolete lifecycle phase. Component items in this lifecycle phase cannot be added to an effective structure. For example, the parent item has lifecycle phases of Concept, Design, Prototype, Production, and Obsolescence. It is currently in Prototype lifecycle phase. When adding a component to

ORACLE®

this item's structure, the component should have a cycle phase of Prototype (same as the parent item) or Production (higher life cycle than the parent item).

What's a reference designator?

Reference designators are sequenced comments and instructions that pertain to a component. For example, you may have drawings that clarify the assembly process for certain components, or further instructions for the use of a large quantity of the same component. You can specify whether to assign one reference designator for every usage of the component or assign any number of reference designators to the component. Planning bills and model, option class, and planning components cannot have reference designators. You can also specify a comment for each reference designator.

What's a structure loop?

Structure loops occur when a structure is assigned as a component of itself somewhere in the multilevel structure of a defined item. By default, a check for structure loops is run when creating or editing a structure.

How can I compare item structures?

Initiate a structure comparison from the structure list table by selecting two structures to compare and then selecting component attributes.

Structure comparison results are presented in a hierarchical table with the selected two structure component details. Differences are identified with a blue dot. Clicking the blue dot presents the differences between the two structures in a table. You can change the attributes or structures being compared quickly using the Actions menu.

How can I create development structures for an item?

You can create development structures in Oracle Fusion Product Development.

You can view the development structures created in the Product Development work area from the Structures tab of the Edit Item page of the Items work area. However, you cannot create, edit, or delete development structures there.

Related Topics

- Primary and Other Structures: Explained

6 Manage Product and Service Data: Manage Product Packs

Pack Types: Explained

Pack types, also known as trade item unit descriptors, are used to describe the Global Trade Item Number (GTIN) hierarchy level. Hierarchy is used to establish relationships between different levels of an item's supply chain. For more information on trade item unit descriptors, see http://www.gs1.org/docs/gsmp/gdsn/GDSN_Trade_Item_Implementation_Guide.pdf.

Managing the Packaging Hierarchy: Explained

You create a packaging hierarchy to define the various pack configurations in which you can package a base item.

For example, you sell flash memory sticks (the base item, VI11416) in packs of 3 at retail stores, but ship 20 of the 3-packs in a case to the store. The packaging hierarchy looks like this:

Case: Item = Case1_VI11416
Pack or Inner Pack: Item = Pack1_VI11416, Quantity = 20 Each
Base Unit or Each: Item = VI11416, Quantity = 3 Each

A packaging hierarchy can have any number of levels. The pack type defines each level in a hierarchy. The pack types used in the above example are Case, Pack or Inner Pack, and Base Unit or Each. The pack type of any item above the base unit or each level is stored as the pack item's primary attribute Trade Item Unit Descriptor (TIUD). The base item defines the lowest level in a packaging hierarchy. A base item can belong to multiple pack hierarchies.

The following pack type validations apply:

Pack Type (TIUD)	Description	Parents	Parent Instance	Children	Child Instance
Transport Load (TL)	The trade item above the pallet level used for transporting trade items. This level can be used to define truckloads, shipping containers, rail cars, ships, and so on. For example, a product is manufactured	TL, None	Single	TL, PL, MX, CS, DS, PK, EA	Single or Multiple

Pack Type (TIUD)	Description	Parents	Parent Instance	Children	Child Instance
	overseas and the manufacturer communicates that 10,000 units will fit in a container which is assigned a GTIN as it is a standard configuration.				
Mixed Module (MX)	A unit load that is a display ready pallet that may contain a single GTIN or several unique GTINs that is intended to go directly to the selling floor. For example, a configuration that consists of several related products; brooms, mops, brushes and cleansers as a spring cleaning display.	TL, MX, None	-	CS, PK, Setpack, Multipack, EA	Single or Multiple
Pallet (PL)	A unit load that contains a single or multiple GTINs that is not display ready. Includes box pallet. For example, soap powder in standardized pallet quantities of 100 cases per pallet	TL, PL, None	-	DS, CS, PK, Setpack, Multipack, EA	Single or Multiple
Display Shipper (DS)	A display which can contain a single instance of a GTIN or more than one unique instance of a GTIN. For example, a counter top display of lipsticks and nail polish.	TL, DS, PL, None	Single	CS, PK, Setpack, Multipack, EA	Single or Multiple
Case (CS)	A standard trade item shipping unit. Includes a 1/2 or 1/4 pallet and a 1/2 or 1/4 box pallet. For example, 1 liter orange juice bottles are packed in a standard 24 pack configuration within a cardboard case.	TL, PL, MX, Display Shipper, CS	Multiple	CS, PK, Setpack, Multipack, EA	Single or Multiple

ORACLE®

Pack Type (TIUD)	Description	Parents	Parent Instance	Children	Child Instance
Setpack	a consumer unit that contains multiple instances of lower level GTINs that are typically bar-coded.	PL, MX, DS, CS	Multiple	PK, EA	Single or Multiple
Multipack	A group of trade items (the same or different) that are intended to be sold as a single consumer unit at the point-of-sale For example, a three-pack of men's white T-shirts or a 12-piece set of glassware.	PL, MX, DS, CS	Multiple	PK, EA	Single or Multiple
Pack or Inner Pack (PK)	A logistical unit or a consumer unit between a case and each. This level can contain a single GTIN or multiple GTINs. For example, a pack consisting of three of the same canisters of potato chips with a unique bar code that represents the three pack. The canisters that are the components of the bundle pack are physically bar coded with the GTIN that represents a single canister.	TL, PL, MX, DS, CS	Multiple	EA	Single or Multiple
Base Unit or Each (EA)	The lowest level of the item hierarchy intended or labeled for individual resale. Such as an individual box of cereal.	TL, PL, MX, DS, CS, PK, Setpack, Multipack	Multiple	-	-

Creating a Packaging Hierarchy

You can only create and update a packaging hierarchy in the item's master organization. Once you create the packaging hierarchy in the master organization, assign it to the child organizations.

To create a packaging hierarchy:

- Select Create Pack.

ORACLE®

- On the Create Pack pop up, select an organization and select or search for your item.

- Select OK.

- On the Create Pack: Select Pack Type pop up, select a pack type and click OK.

- On the Edit Item page, Structures tab, Packs sub tab, review your pack and save.

FAQs for Manage Product Packs

What's managing packaging information?

Managing item packs information is key to facilitating order and inventory tracking. You manage packaging information using a hierarchical representation of items representing the logical structure of the product packaging needs. Each packaging level is modeled as an item so you can easily track inventory and orders against them.

What attributes participate in a rollup?

Item attributes can be rolled up from base items to higher pack items. This enables you to calculate the dimensions of higher pack items from lower pack items.

The attributes for which roll-ups are performed are:

- Quantity

- Weight

- Weight UOM

ORACLE

7 Manage Product and Service Data: Manage Product Attachments

Manage Item Attachments: Overview

An item attachment is unstructured information related to an item. Examples of item attachments include CAD drawings, test results, specification sheets, or URLs.

Attachments can be any type of file including:

- Files and folders from your desktop or a configured repository.
- Text files generated during the attachment process.

Attachments can be managed for specific items or revisions of items, all the items for a Master Organization, or all the items for a specific organization.

Managing Item Attachments

Manage attachments for individual items using the following procedure:

1. Search for and access the item whose attachments you want to manage.
2. On the Edit Item page, access the Attachments tab and select **Item** or **Item Revision**.
3. From the Actions menu, you can associate new attachments with the item or revision, delete attachments, or modify existing attachments. When you add an attachment, select the file type and attachment category for the attachment and specify a title and descriptions.

✎ **Note:** Only those attachment categories will be listed that are associated with the item class of the item.

Item attachments will be available for all the revisions of the item in a particular organization.

Checking Out Item Attachments

To modify an existing attachment, you must first check the attachment out of the file repository.

Only one user can check out a file at any given time. You can only check out the latest version of the file. During checkout, you have the option to download the latest version of the file. When you check in the file, you must upload the modified content from your desktop. If no changes have been made and there is no need to upload a file from your desktop, you can cancel the checkout. The system maintains a version history, displaying a list of all previous versions of the file as well as indicating the attached version. You can open an earlier version to access discarded information or use the earlier version as a basis for creating a new version. Highlight the appropriate attachment and Click the **Check Out** icon. A message appears, informing you of the version and file that you are checking out.

Related Topics

- Items: Explained

ORACLE®

- Attachments: Explained

- Attachment Entities and Attachment Categories: How They Work Together

- Attachment Entities: Explained

- What's an attachment category?

8 Manage Product and Service Data: Manage Product Security

Data Security Privileges for Accessing Items: Explained

Using the data security privileges available for items, you can authorize users to create, view, and edit item details.

A product data steward or product manager is typically responsible for managing item data security through people privileges.

Access to an item and it's details is controlled at either the item class or item level.

Data Security and Function Security

Item information is controlled through function security and data security.

- Function security is a statement of what tasks and actions users can perform in pages.

- Data security is a statement of what action can be taken against which data. In Product Hub, data security involves granting user item data grants to perform operations on certain items.

Using function and data security privileges available for items, users or groups of users are authorized to create, edit, and view items.

For complete information on function security, data security, and their associated privileges, refer to the Oracle Fusion Product Management Security Reference Manual and the Oracle Fusion Applications Security Guide.

Job Roles, Duty Roles, and Security

Privileges are associated with the different duty roles for the product manager and product data steward job roles.

Duty roles control who can grant data security privileges to users:

- Product Data Stewards can manage user access to items at the item class level through the **Class Management Duty**.

- Product Managers or Product Data Stewards manage user access at the item level through the **Item People Management Duty**.

For complete information on job roles, duty roles, and their associated privileges, refer to the Oracle Fusion Product Management Security Reference Manual and the Oracle Fusion Applications Security Guide.

Managing Item Extensible Attributes Data Security

The IT Security Manager job role provides access to the Oracle Authorization Policy Manager application where security is managed. Using this job role, the user can create data security privileges on the required item EFF tables.

- The Application Data Security Administration Duty provides the user access to edit database resources in Authorization Policy Manager. Through this duty role, the user can create data security privileges on the required item EFF tables.

- The Application Descriptive Flexfield Administration Duty provides the user access to manage item EFF attribute groups. The user can create required attribute groups and define security conditions. The data privileges created in APM can be associated with the EFF attribute groups.

- Item Class Management and Item People Management Duty roles provide the user access to item classes and items to manage user's access to item EFF attribute groups.

Notes on Item Data Security Privileges

The following list contains important information on significant item data security privileges and granting privileges for items:

- **Create Item Class Item Data** privilege is granted at the item class level and gives user access to create items within the item class.

- **View Item Basic Data** is a basic privilege that a user should have in order to search for the item and access it.

- For managing item details such as relationships, attachments, or associations, user must have **View Item Basic Data** and **Maintain Item Basic Data** privilege in addition to the required function privileges.

- **EFF Privilege** is user-defined and controls access to item EFF attribute groups.

- All operational attributes require specific attribute group level privileges to edit the attributes within the group. **View Item Basic Data** privilege provides access to view all the operational attributes.

> ✏ **Note:** You can create separate and specific view and edit privileges for each group of extensible attributes for a more granular control through Oracle Authorization Policy Manager (Authorization Policy Manager).

- **View Item Structure Data** and **Maintain Item Structure Data** privileges are required to view and manage item structures. In addition, user should have **View Item Basic Data** privilege to access the item.

- **View Item Pack Data** and **Maintain Item Pack Data** privileges are required to view and manage item packs. In addition user should have **View Item Basic Data** privilege to access the item.

- **View Item People Data** and **Maintain Item People Data** privileges allow users to view and manage item data security at the individual item level. In addition user should have **View Item Basic Data** privilege to access the item.

> ✏ **Note:** For operational attribute groups, **Maintain privileges** do not include view access. Corresponding view privileges needs to be granted to user explicitly so users can view and make required updates.

Managing Data Security Privileges at the Item Class Level

Item access can be managed at the item class level. You can provide access to users at the item class level if the same set of users manage items within an item class.

1. Navigate to the Security tab on the Edit Item Class page to add user and specify security privileges.
2. For each user or user group, grant specific item security privileges allowing them to gain access to only relevant information.

Access can be granted to users by organizations allowing for different users to have access to the same items in different organizations as required.

Privileges granted at the parent item class are inherited by the child item classes. Inherited privilege grants cannot be altered. However, additional grants can be managed at the child item classes.

ORACLE®

Managing Data Security Privileges at the Item Level

Item access can be managed the individual item level also.

Navigate to the Item People tab on the Edit Item page to add user and specify security privileges.

> ❗ **Important:** Privileges granted at the item class cannot be altered at item level.

User can manage additional privilege grants at the item level.

> ✏️ **Note:** Organization stripping is not available at the item level as in case of item class level. This is because, you are managing grants at the individual item level which is always in context of an organization.

Related Topics
- Data Security: Explained
- Function Security: Explained

Data Security Privileges for Creating Items: Explained

When you create an item, you can enter the basic data required or add additional data to enrich item information. The following data security privileges are required to add various item details while creating an item. If you need to enter a combination of the item details identified below when creating an item, then you need the corresponding combination of data security privileges.

- The following set of data security privileges are required to create an item by entering the minimum required data:
  - **Create Item Class Item Data**
    Required for the item class that the item is created under.
  - **View Item Basic Data:**
    Required to view the item details page.
  - **Maintain Item Primary Data:**
    Required to author the required attributes in Main attribute group such as **Item Name**, **Description**, or **Primary Unit of Measure**.
- The following set of data security privileges are required to create items by entering additional operational attributes:
  - **Create Item Class Item Data**
  - **View Item Basic Data**
  - **Maintain Item Primary Data**
  - **Maintain Operational Attribute Group Data**
    Where **Operational Attribute Group** is the operational attribute group name.

    > ✏️ **Note:** Each operational attribute group has a separate maintain privilege

- The following set of data security privileges are required to create items by entering user-defined attributes:

    - **Create Item Class Item Data**

    - **View Item Basic Data**

    - **Maintain Item Primary Data**

    - **View Additional Attribute Group Data**

      Where **Additional Attribute Group** is the name of the user-defined attribute group.

    - **Maintain Additional Attribute Group Data:**

      Where **Additional Attribute Group**is the name of user-defined attribute group.

      > ✎ **Note:** Privileges for user-defined attribute groups are created by the end user as part of the configured attributes setup and are based on end user security requirements

      > ✎ **Note:** Each user-defined attribute group can have separate maintain and view data privileges

- The following set of data security privileges are required to create an item by entering item structures:

    - **Create Item Class Item Data**

    - **View Item Basic Data**

    - **Maintain Item Primary Data**

    - **View Item Structure Data**

    - **Maintain Item Structure Data**

- The following set of data security privileges are required to create items by entering packs:

    - **Create Item Class Item Data**

    - **View Item Basic Data**

    - **Maintain Item Primary Data**

    - **View Item Pack Data**

    - **Maintain Item Pack Data**

- The following set of data security privileges are required to create items by entering Item People (data security grants):

    - **Create Item Class Item Data**

    - **View Item Basic Data**

    - **Maintain Item Primary Data**

    - **Maintain Item People Data**

- The following set of data security privileges are required to create items by entering any or all of the following:

    Attachments, relationships, associations and category assignments

    - **Create Item Class Item Data**

ORACLE

- o **View Item Basic Data**

- o **Maintain Item Primary Data**

- o **Maintain Item Basic Data**

> ✏️ **Note:** Supplier associations support user-defined attributes. To enter these attributes during item creation, users need the corresponding privileges for the user-defined attribute group.

Related Topics

- Data Security: Explained

- What's the difference between function security and data security?

Data Security Privileges for Updating Items: Explained

The following sets of data security privileges are required to update various item details. If you need to update a combination of the item details identified below when updating an item, then you need the corresponding combination of data security privileges.

- The following set of data security privileges are required to update item operational attributes:

  - o **View Item Basic Data**

    Required to view the item details page
  - o **Maintain Operational Attribute Group Data**

    Where **Operational Attribute Group** is the operational attribute group name.

    > ✏️ **Note:** Each predefined attribute group has a separate maintain privilege.

- The following set of data security privileges are required to update user-defined attributes for an item:

  - o **View Item Basic Data**
  - o **View Additional Attribute Group Data**

    Where **Additional Attribute Group** is the user-defined attribute group name.
  - o **Maintain Additional Attribute Group Data**

    Where **Additional Attribute Group** is the user-defined attribute group name.

    > ✏️ **Note:** Each user-defined attribute group can have separate view and maintain privileges.

- The following set of data security privileges are required to update item structures for an items:

  - o **View Item Basic Data**
  - o **View Item Structure Data**

- o **Maintain Item Structure Data**

- The following set of data security privileges are required to update packs for an items:

  - o **View Item Basic Data**
  - o **View Item Pack Data**
  - o **Maintain Item Pack Data**

- The following set of data security privileges are required to update Item People (data security grants) for an items:

  - o **View Item Basic Data**
  - o **Maintain Item People Data**

- The following set of data security privileges are required to update any or all of the following for an item:

  Attachments, relationships, associations and category assignments

  - o **View Item Basic Data**
  - o **Maintain Item Basic Data**

    ✎ **Note:** Supplier associations support user-defined attributes. To update these attributes, you need the corresponding privileges for the user-defined attribute group.

Related Topics

- Data Security: Explained

- What's the difference between function security and data security?

Data Security Privileges for Viewing Items: Explained

The following data security privileges are required to view various item details. If you need to view a combination of the item details identified below, then you need the corresponding combination of data security privileges.

- The following set of data security privileges are required to search and view item basic data.

  - o **View Item Basic Data**

    Item basic data details include operational attributes, item people, attachments, relationships, associations, and category assignments.

- The following set of data security privileges are required to view user-defined attributes:

  - o **View Item Basic Data**
  - o **View Additional Attribute Group Data**

    Where **Additional Attribute Group** is the name of the user-defined attribute group.

    ✎ **Note:** Each user-defined attribute group has a separate maintain and view data privilege

ORACLE®

- The following set of data security privileges are required to view item structures:

  - **View Item Basic Data**
  - **View Item Structure Data**

- The following set of data security privileges are required to view packs:

  - **View Item Basic Data**
  - **View Item Pack Data**

> **Note:** Supplier associations support user-defined attributes. To view these attributes, you need the corresponding view data privilege of the user-defined attribute group

Related Topics

- Data Security: Explained

- What's the difference between function security and data security?

ORACLE®

9　Manage Product and Service Data: Define Catalogs
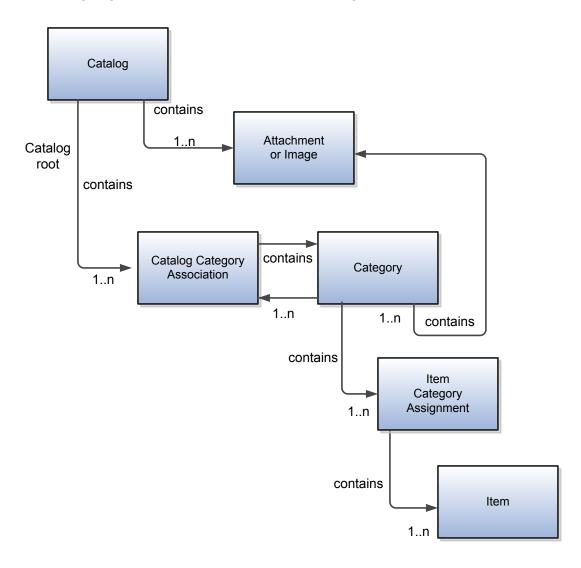
Create Catalogs

Catalogs: How They Work Together

A catalog is a collection of categories that you use to classify items. You can organize the categories into a hierarchy that represents a taxonomy. You create new categories only in the context of a catalog. You can add existing categories to one or more catalogs, either from another catalog or as shared categories from a source catalog. You can control the assignment of items and categories in the catalog by controlling the catalog content. For example, you can set the value of the **Catalog Content** field on the Edit Catalog page to **Items at all levels**, which allows items to be assigned to any level within the category hierarchy, not only to the leaf levels.

The following diagram shows the relationships of the catalog components.

Catalog

A catalog is a collection of categories that are organized to define a classification of items. The top most level of a catalog is the catalog root. All categories for the first level in the category hierarchy are associated with the catalog root through the catalog category association component.

Category

A category is a component of a catalog that represents a set of items. You can associate a category to a catalog through the catalog category association. Both the shared category and the native category are associated thorough the catalog category association.

ORACLE

Catalog Category Association

Catalog category association represents the relationship between a catalog and a category, or a parent category and a child category. Each catalog category association represents one relationship between the catalog and a category or one relationship between a parent category and a child category.

Item Category Assignment

Item category assignment represents the assignment of the item to a category in a catalog. Each item category assignment represents the relationship between a category and an item.

Item

An item represents objects such as a product, service or template. An item is assigned through the item category assignment component.

Attachment or Image

Information is associated to the catalog or category through the attachment framework. Multiple attachments are supported but you can only associate a single attachment or attachment type image with a catalog or category for viewing in the UI.

Catalog Details: Explained

You can view and edit a catalog on the Edit Catalog page when you have the appropriate permissions.

The following parts of the Edit Catalog page provide important capabilities for managing and editing catalogs:

- Catalog header region
- Catalog details tab
- Category hierarchy tab

Catalog Header Region

The header region for the Edit Catalog page contains the catalog name and description, the selection of the default category and the start and end date for the catalog.

You can change the default category for a catalog so that the category is used for the item creation process, based on the values of attributes for the item. The choice of default category also enables other Oracle Fusion applications to assign items to a category.

You can modify the start and end dates for a category, to control when the category is used as you update a catalog.

You can revise or reclassify the category to reflect shifting relationships within the category hierarchy.

Catalog Details Tab

The Details tab contains:

- The configuration attributes for the catalog, which control the runtime behavior for the catalog.
- The sharing attributes for the catalog, which control the source catalog that will be used for sharing from and what content can be shared.
- The additional information for the catalog, which contains the descriptive flexfields that support the catalog metadata.

Category Hierarchy Tab

The Category Hierarchy tab contains the category hierarchy region in which the category hierarchy can be created and maintained. In addition, items can be assigned, the usage of the category in other catalogs can be viewed, and the attributes for the category and catalog category association can be edited.

Related Topics

- Category Descriptive Flexfields: Explained

Catalog Formatting: Explained

The format of a catalog is defined at the time the catalog is created and controls the behavior of the catalog at runtime.

When you format a catalog, the layout controls three main areas and includes the following tasks:

- Catalog configuration

- Date enablement

- Category sharing

Some fields are required, and others are optional.

Catalog Configuration

You can configure the catalog, and this affects how the content behaves. The catalog configuration contains a set of attributes that define the catalog configuration. These attributes interact to define the runtime behavior of the catalog.

The configuration functions are:

- Catalog code: A unique identifier that is used.

- Controlled at: Controls how items are assigned to categories and has two values. The first value is master level, which enables the automatic assignment of items to all child organizations associated with the master organization, if the current context is a master organization. The second value is organization level, which assigns the item only to the organization in the current context.

- Default category: A newly created item is automatically assigned to the default category if specific operational attribute values are entered for the new item. The automatic assignment is controlled by the functional area. Each functional area has specific rules about which operational attribute values are used to trigger the automatic assignment process. For example, an item will be assigned to the catalog assigned to the functional area called Purchasing if the Purchased specification is turned on or if the Internal Ordered Item specification is turned on.

- Assign items to leaf level categories only: Allows items to be added only to the bottom level categories in the hierarchy.

- Catalog content: Controls what content can be added to the catalog and where the content can be added. This attribute has three values:

- Allow multiple item category assignment: When this option is selected, you can assign an item to one or more categories in the catalog. The default is deselected, which means that each item can be assigned to only one category in the catalog.

- Public Catalog: Select to mark this catalog as public. All users with access to view catalogs will have access to this catalog.

> ✏️ **Note:** The catalog behavior for functional area catalogs is defined through the combination of fields within the pages and the seeded functional area rules.

Catalog Date Enablement

The date enablement function controls when the catalog is in an active state or inactive state by using the start date and end date attributes.

Category Sharing

The category sharing function enables sharing categories from a designated source catalog.

The sharing function has these attributes:

- Share by Reference: Catalog elements that are shared by reference are read-only in the target catalog. Multiple source catalogs can be used in this type of sharing.

- Copy: Content from other catalogs can be added to the current catalog by creating a copy of the content. The copied content can be edited within the current catalog.

    o Include child categories: Indicate whether to copy child categories when copying categories.

    o Copy item category assignments: Indicate whether to copy items assigned to the category into the catalog.

Automatic Assignment Catalogs: Explained

The automatic assignment catalog feature It is a simple way to create a non-hierarchical catalog because you do not have to add categories manually to the catalog. This feature adds the categories at the root level, so it works with both flat and hierarchical catalogs.

All categories that have the same category structure value as the catalog are automatically assigned and associated to the catalog when you create a catalog category association for each category.

Automatic Assignments

The automatic assignment feature is enabled during catalog creation when you select the **Enable automatic assignment of category** check box. The categories displayed for auto assignment catalogs are refreshed only at startup and after you save.

Note that if you create a category in another catalog with the same structure value as the automatic assignment catalog, the category is added to your catalog. The categories displayed for auto assignment catalogs are refreshed only at startup and after you save.

When you open a new catalog, any categories that have the same category structure value as the catalog structure value for the catalog are automatically assigned to the catalog.

For example, Purchasing may maintain a master catalog containing all categories that represent commodities. Each commodity team can create categories for their commodity in their own catalog.

The master catalog for purchasing is named Purchasing and is configured during creation to support the automatic assignment of categories. Because you enabled automatic assignments for the Purchasing catalog, any categories created by the commodity teams are added to the catalog automatically. The purchasing managers can view the collection of all commodities represented as categories in the Purchasing catalog.

ORACLE®
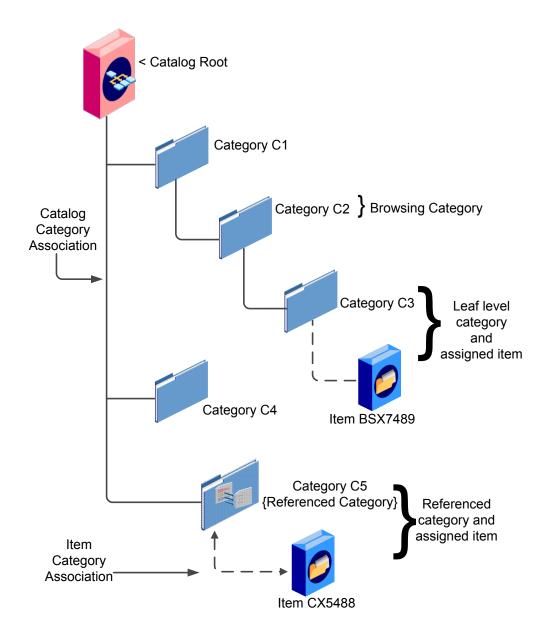
Manage Catalogs

Catalog Hierarchies: How They Fit Together

You use catalogs to organize and classify collections of items by associating categories with the catalog. You organize the categories to form a taxonomy and assign items to the categories. When you associate a category with the catalog, a catalog category association is created which specifies the relationship of the association. The catalog category association may also represent the relationship between two categories, for example, a relationship between a parent category and a child category.

The following diagram shows the relationships of the category hierarchy components:

Components

The components of a category hierarchy are:

- Catalog root: The topmost node in category hierarchy that represents the object called catalog.

- Category: The catalog component that is used to represent the classification structure.

- Catalog category association: The line in the diagram represents the relationship between a catalog and category or between a parent category and child category.

- Item category assignment: The dotted line in the dialog represents the relationship between a category and an item.

- Reference category: The category, C5 in this diagram, is shared as a reference category from a source catalog.

ORACLE®

- Leaf level category: The lowest or bottom-level category in a category hierarchy. You can assign items to all levels in a category hierarchy if you configure the catalog to support this.

- Browsing category: The category, C2 in this diagram, is a browsing category. Browsing categories are categories that you add to the category hierarchy for the purpose of classification and do not have items assigned to them.

The category hierarchy does not have a limit on how many levels can be represented. The category hierarchy can have multiple hierarchies within a single category hierarchy.

Categories and Catalog Relationships: Explained

Catalogs are used to organize and classify collections of items by associating categories to the catalog. The categories are organized to form a taxonomy and items are assigned to the categories. When a category is associated with the catalog a catalog category association is created which specifies the relationship of the association. The catalog category association may also represent the relationship between two categories, for example a relationship between a parent category and a child category.

Catalog Category Association

The date enabled attribute value is important regarding catalog category association. The catalog category association is date enabled providing the control of when the catalog category association is active in the catalog and when the catalog category association is inactive. The catalog category association has two attributes to support enabling dates; the start date and the end date. The start date is value is the first day that the catalog category association is available or active for use and the end date is the last day the catalog category association can be used, after this date the catalog category association is inactive. The date enabled attribute values are also used to control the visibility of content and the behavior of the category in the catalog. If a category association is inactive or end dated, having the value of the end date attribute past the current date, then the items cannot be assigned to the category.

A catalog category association will be set to inactive state when the category referenced by the catalog category association is set to an inactive state automatically, but the display will not be refreshed automatically.

Import Category Hierarchies: Explained

A category hierarchy can be created and maintained through a spreadsheet interface, reducing the amount of time required to create and maintain catalogs. Existing catalog content can be exported and the content used in other catalogs for catalog category hierarchies.

The following aspects are important regarding category hierarchy import used in catalogs:

- Spreadsheet interface

- Export category hierarchy

> ✎ **Note:** To use this feature, you must install Oracle ADF Desktop Integration (ADFdi), which is described under data management in Oracle Applications Cloud Using Common Features.

Spreadsheet Interface

You can manage the catalog category hierarchy using the ADFdi spreadsheet interface by selecting the **Edit in Spreadsheet** button on the Category Hierarchy tab of the Edit Catalog page to download existing catalog content. You can then modify this content in the spreadsheet, and upload the content back into the catalog.

ORACLE

Within the spreadsheet, you can use custom controls provided by the ADFdi interface to download the existing hierarchy, define new categories, edit the catalog hierarchy, and add categories to the catalog, either as direct or reference categories. You can define the category hierarchy for a catalog in the spreadsheet, by creating or adding categories, then upload it when you create a catalog. If you have an existing hierarchy, you can cut and paste the flattened hierarchy into the spreadsheet.

Export Category Hierarchy

You export a category hierarchy when you need to share its structure, for example, with a product partner. Your partner can import the catalog file using the ADFdi spreadsheet interface.

You can export the category hierarchy from your catalogs so that it can be used by your partners. In the Product Information Management work area, partners can directly import the category hierarchy into their catalogs.

Related Topics

- Setting Up the Desktop Integration for Excel: Procedure

- Using Desktop Integrated Excel Workbooks: Points to Consider

- Troubleshooting the Desktop Integration for Excel: Procedure

Catalog Category Association: Explained

The catalog category association assigns the category to the catalog or parent category. This association allows you to manage when a category is assigned to a catalog, by setting the start and end dates for the association. The catalog category association can be edited only within the Edit Catalog page, in the category hierarchy tab. The catalog category association start date and end date attributes can be edited in the details region. The association cannot be deleted, only end dated.

Category Catalog Associations

You select the category in the category hierarchy table for the catalog category association that is being edited, the category details are displayed in the right hand panel. The association start date and association end date are the only editable fields.

After you make changes, clicking the **Save** button saves the changes to the database but does not close the Edit Catalog page. Clicking the **Save and Close** button saves the changes to the database and closes the Edit Catalog page.

Date Enablement for Catalogs and Categories: Explained

The catalog, categories, and catalog category association use date enablement to determine if the object specified is active or inactive based on the start date and end date. The following are date enablement definitions:

- **Active** An object is active when the current date is later than or equal to the value of the start date, but earlier than or equal to value of the end date.

- **Inactive** An object is inactive when the current date is later than the value of the end date.

- **Future dated** An object is future dated when the current date is earlier than the value of the start date.
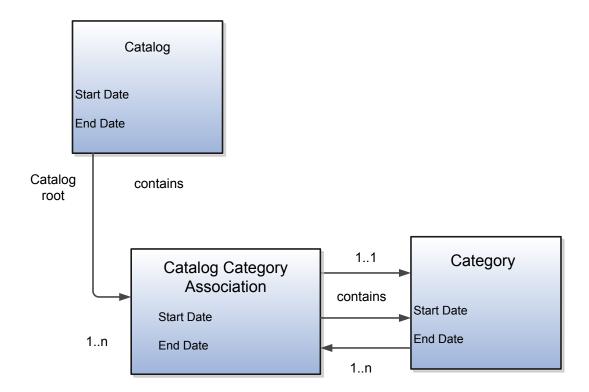
You set the date enablement attributes are used to determine when a catalog, category, or catalog category association is used or visible.

- On the Manage Catalog page, a table filter determines which catalogs appear. The default value for the choice list is **Active**, indicating that only active catalogs will be displayed. You can select the value **All** to view both active and inactive catalogs.

- On the Edit Catalog page, on the category hierarchy tab, two table filters determine what categories and catalog category associations appear. The default values for the two choice lists are **Active**, indicating that only active categories and active catalog category associations will be displayed. You can select the value **All** to view both active and inactive categories and catalog categories associations.

- Other applications also use the date enablement attributes to filter information retrieved through application programming interfaces or services for catalogs.

The following illustration provides the date enablement attributes for these objects. The catalog, category, or the catalog category association has an internal state that is active or inactive.

The following aspects are important regarding date enablement for catalogs and categories:

- Start date
- End date
- Catalog and category objects
- Catalog category association
- Catalog and category rules

ORACLE

Start Date

The start date is defined as the first date that the object can be active. The start date can be future dated by setting the value to a date later than the current date. The start date value defaults to the system date if no date is entered during catalog or category creation.

End Date

The end date is defined as the last date that the object can be active. The object is end dated one second after the date specified by the value of **End Date**, that is the next day at 12:00:01 a.m. You cannot set the end date in the past. Also, you can change the end date from a condition when the object is ended to a new end date greater than or equal to the system date, causing the object to go from inactive to active. The end date value is optional during catalog or category creation.

Catalog and Category Objects

The start and end dates have been added for the catalog and catalog category association. The inactive date for categories has been renamed as the end date and the start date has been added.

Catalog Category Association

The catalog category association is used to specify the parent and child relationships between catalogs and categories and for category to category relationships. The catalog category association date enablement is independent of the category data enablement, except for the case where the category is end dated; the association is ended automatically as well. The catalog category association dates represents the state of the category for the catalog in which the category is associated.

Catalog and Category Rules

When a catalog is inactive the following rules apply:

- All operations for the catalog are disabled; the catalog is not editable.

- The catalog cannot be used in other processes.

- The catalog can be viewed only if you set filters on the Manage Catalog page to a value of **All**, enabling you to view active and inactive catalogs.

When a category is inactive the following rules apply:

- All operations for the category are disabled; the category is not editable.

- The category cannot be added to other catalogs.

- The category can be viewed only if you set the filters on the Edit Catalog page to a value of **All**, enabling you to view active and inactive catalogs.

- The system sets the catalog category association for the inactive category to inactive.

When a catalog category association is inactive the following rules apply:

- The category may be inactive or active; if the category is active it can be edited.

- The catalog category associations and related category can be viewed only if you set the association filter on the Edit Catalog page to a value of **All**, enabling you to view active and inactive catalogs.

When a catalog is future dated the following rules apply:

- All the operations of the catalog are enabled and the catalog is editable.

- The catalog can be used in other processes, if allowed.

- The catalog can be viewed only if the you set the filters on the Manage Catalog page to value of **All**.

Categories: Explained

You can create categories only in the context of a catalog, on the Edit Catalog page, Category hierarchy tab. When you select the **Create** icon in the category hierarchy table, it launches the Create Category dialog.

Create Category Dialog

After you enter a name and tab out of the field, the category code will be automatically populated. You can update this value if required. Enter a meaningful description of the category. Optionally, you can add an image and an attachment to this category.

Date enablement determines if an object is active or inactive based on the start date and end date. When categories are created, the default start date value is the current date. You can move the category start date beyond the current date to a future date within the category. The end date value is optional.

Select the **Restrict category to item assignment only** check box to add only items to the category.

After you complete the required fields for the catalog, clicking **OK** creates the category in the database, adds the category to the point of selection in the category hierarchy, and closes the dialog.

Items to Categories Assignment: Explained

You can assign items to categories on the Edit Catalog page, category hierarchy tab, on the category detail item tab. You can assign items only to active categories. In addition, you can configure catalogs to control item assignment to categories within the catalog by selecting the **Allow multiple item category assignment** check box on the Create Catalog page, which allows items to be added to all levels of the category hierarchy.

To begin, select the item class and enter search information in either the Item ID, Item description or Keyword fields and click the **Search** button. You select items from a choice list and add them to the category.

Controlling Item Assignment

You also control item assignment by selecting the value of the **Controlled at** box. If you select the **Master Level** value and the organization context is a master organization, the items are automatically assigned to all child organizations that are associated with the master organization.

Catalog Edits: Explained

The Edit Catalog dialog is a shared page that has two modes, view and update. The view mode displays the selected catalog in a read-only file. The update mode displays the selected catalog in an editable file. You must have edit catalog privileges to access the catalog in update mode. You can edit only an active or future-dated catalog.

The following fields are editable in the catalog:

- **Catalog Name**
- **Description**
- **Start Date**
- **End Date**
- **Default Category**

ORACLE

- **Allow multiple item category assignment**
- **Addition Information**
- **Category Hierarchy**
- **Category Details**
- **Items assigned to category**

Default Category

You can edit this field to select another category as the default category for item creation. You cannot remove the default category if the catalog is assigned to a functional area that requires a default category to be specified.

Allow Multiple Item Category Assignment

This check box is editable only until you assign an item to a category in the catalog.

Addition Information

You can edit the values of the descriptive flexfields attributes.

After you make changes, clicking the **Save** button saves the changes to the database but will does not close the Edit Catalog page. Clicking the **Save and Close** button saves the changes to the database and closes the Edit Catalog page.

Category Details: Explained

You can see category details when you select the row with the category in the category hierarchy table of the Edit Catalog page. The category details are displayed in the right hand pane. You can edit the details of native categories. The category detail region contains information about the category that is associated to the catalog. It also contains the association start and end dates.

You can view and edit a catalog on the category details tab when you have rights to manage catalogs.

The following parts of the Category Hierarchy tab provide are important capabilities for managing and editing category details:

- Details subtab
- Items subtab
- Attachments subtab

Details Subtab

The details tab contains information about the category that has been associated to the catalog. This information appears in all catalogs, since a category can be associated to one or more catalogs. The details tab contains the category configuration, category date enablement, association date enablement, and the additional attributes for the category.

The details tab contains attributes that define a category. Unstructured information is added through attachments. Images are added to a category and are displayed in the category details tab.

Items Subtab

The Items subtab contains item assignments are local to the catalog that the category is associated with. You can add and delete item assignments.

Attachments Subtab

The Attachments tab contains the list of attachments that the category is associated with.

Category Edits: Explained

Categories can be edited only from within the Edit Catalog page, on the Category Hierarchy tab. To edit a category, expand, or search in, the tree of categories associated with the catalog, then select the row for the category in the category hierarchy table and edit the category's attributes in the category's Details panel. A category can only be edited if the category is active and its associated catalog is active or future dated. If a category is directly shared, the same category can be edited in multiple catalogs, except for the item assignments that are local to the catalog you are editing.

Category information can be edited in both the Details and Items subtabs.

Details and Items Tabs

The following fields are editable in the category:

- **Category name**
- **Description**
- **Attachments**
- **Category start date**
- **Category end date**
- **Items assigned to category**

After changes are made, the **Save** button saves your changes without closing the Edit Catalog page. The **Save and Close** button saves your changes and closes the Edit Catalog page.

Catalog or Category Attachments: Explained

Catalogs and categories support attachments and use a common component for managing attachment content. You can add attachments on both the Create Catalog and Edit Catalog pages.

The attachment component displays a green plus sign icon indicating that no attachments are available for the object. The Attachment dialog appears when you click the green plus sign icon. You define the attachment by selecting the attachment type, file name or Uniform Resource Locator (URL), title, description, and by indicating whether the attachment can be shared with other objects. Once you define the attachments and click the **OK** button, that attachment title appears in the attachment component region of the page along with a red X icon that you can click to delete the attachment.

The attachment file types are:

- File
- Repository File/Folder
- Text
- URL

File

You must provide a title for the file and create a description for the attachment. You select a file to upload from your desktop.

Repository File or Folder

You click the **Browse** button to attach a repository file or folder from the document repository to a catalog. The attachment repository contains existing attachments and is organized as a set of folders. The **Browse** button launches the Attachment Repository dialog to enable you to select an attachment. You must provide a title for the repository file or folder and create a description for the attachment.

Text

Enter the text string in the field that you want to appear as an attachment. You must provide a title for the text and create a description for the text attachment.

URL

Enter the URL address to a web page that you want to attach to the catalog. You must provide a title for the URL attachment and create a description for it.

The **Share** check box alerts users that you added an attachment and the date that you performed the task.

Category Moves: Explained

You use the move category function in the category tree table region of the Edit Catalog page. This is a table row action. The dialog is launched when you select an active or future dated category within the catalog and select this action.

Identifying the New Parent

The dialog provides the current category parent and allows you to pick a new category parent. Only the legal category parents are displayed in the choice list.

The category list within the **New Parent** choice list is filtered by based on a set of rules:

- The new parent category must be an active or future dated category; the end date value of the category must be later than the current system date.

- The value of the category content for the new parent category must allow the selected category to be added; the legal values are items and categories and categories only.

- A selected category associated with the catalog at a level below the categories at the root categories can be moved to the root of the catalog.

- The new parent category catalog category association must be active; the end date value of the catalog category association must be later than the current system date.

Category Sharing: Explained

Category sharing allows the reuse of categories or a category hierarchy across catalogs. For example, if you were to create spring and fall product catalogs, many of your products would probably appear both catalogs. The products that are in both catalogs could be assigned to one or more categories that could be shared between the catalogs. Categories can be shared across multiple catalogs, allowing catalog content to be reused and saving the work needed to maintain multiple copies of the categories. In the case of category sharing by reference, the category structure in the source catalog can be different than the structure in the native catalog.

ORACLE®

Categories can be shared using two methods

- Direct Sharing
- Sharing by Reference

Direct Sharing

Direct sharing means directly associating the category to the catalog. Direct sharing allows a category to have multiple instances in multiple catalogs. Many of the category attributes are editable in all catalogs that the category is shared in, and the item assignments to the category are unique to the catalog to which the category is added. The directly shared category is added to the catalog and can be edited in the catalog, or any catalog that the category is associated to. The items assigned to the category are not shared, but are assigned to the category in context with the catalog that the category is associated with. For example if the category name or description is changed in one catalog, the change will be reflected in all catalogs where the category is associated, but if items are assigned to a category, the assignment will be for that single catalog. For example, if the category name or description is changed in one catalog, the change will be reflected in all catalogs where the category is associated. If items are assigned to a category, the assignment will be for that single catalog. Direct sharing is always enabled for catalogs.

Sharing by Reference

Sharing by reference means adding a category by reference into the catalog. Sharing by reference allows a category and the items assigned to that category to be added to one or more catalogs. If the category is a parent category, the complete hierarchy for that category is shared. The shared categories and assigned items are read-only in the catalogs where they are added. During the creation of the catalog, sharing can be enabled by specifying a source catalog that will be used for sharing by reference and setting the value of the sharing content to control what content will be shared from the source catalog. The advantage of using sharing by reference is that source catalog content can be shared to multiple catalogs and maintained in a single place, the source catalog. In addition, the referenced content can consist of more than one category. For example, a complete category hierarchy and any items assigned to categories in shared content can also be referenced within the catalog.

In the Category Hierarchy tab in a catalog, each category in the hierarchy is represented by a row in a collapsible table. The style of icon next to a category's name indicates how it is shared. Directly shared categories are marked with a folder icon; categories shared by reference are marked with the icon used for the **Share Categories** control. Categories that are shared by reference are only editable in the source catalog, and the categories and items are read-only in the target catalog where they are shared. A category or a complete category hierarchy, including items assignment, can be shared by reference.

Default Catalog Assignment: Explained

You can assign a catalog to a functional area such as Purchasing. When a catalog is assigned to a functional area, the catalog will behave based on the rules you defined for that functional area. Only one default catalog can be assigned to a functional area. During item creation, if certain operational attributes have specific values, then the item being created is assigned to the catalog assigned to the functional area, and then to the default category for the catalog.

To map a default catalog:

1. Create a catalog based on functional area rules.
2. Create a category and assign it as the default category for this catalog.
3. Assign the catalog to the chosen functional area. Select the Manage Default Catalogs task in the Setup and Maintenance work area, edit a functional area, then select a catalog name.
   - Each functional area has specific rules that the catalog must adhere to, so the assignment process may fail if the catalog does not meet the functional area rules.

      ○ Some functional areas do not allow the catalog assigned to their area to be changed.

      ○ Some functional areas allow the catalog to be changed only if no items are assigned to the categories in the catalog.

For example, if values of the operational attributes Purchased and Internally Transferable have been set to Yes, the item being created will be assigned to the default category of the catalog assigned to the Purchasing functional area.

Catalog Publishing: Explained

Other applications can use catalog data if you export the catalog content. For example, you may want to export catalog content to use as a monthly report of all items assigned to a specific catalog. You can use the default publish template provided in hyper text markup language (HTML). You can specify the content and layout of the catalog information. When the catalog is published, you select the format and initiate the creation of the content in the file.

Publish a Catalog

Search for a catalog from the Manage Catalogs page, select the row corresponding to the catalog that you want to publish and select the Publish action. The application generates the report based on the default template in HTML format. You can select a new template or format from the report window. The content displayed for items, categories, catalog categories, and catalog is based on the publish template. The seeded template is called Catalog Listing. The template controls what data is in the report and how it is formatted.

Type of Catalog Content That Can Be Published

The default catalog publish template allows the publication of the catalog header details, category hierarchy, category details, and category item assignments. The order of a published report begins with the catalog header and the catalog category details. If the category has a child relationship, then the catalog category association details for the child category follows. If the child category has a hierarchy, then the complete hierarchy under the category is published with the catalog category association details and categories details.

FAQs for Manage Catalogs

How can I define category hierarchies?

Categories can be organized to represent classification taxonomies. The hierarchy organizations for categories have parent and child relationships that form a tree structure. The category hierarchy is created and maintained within the Edit Catalog page, category hierarchy tab. The category hierarchy is shown in true relationship to the way it is defined.

The category hierarchy can be created using two methods: the first is manually creating the hierarchy by adding referenced categories, duplicating categories or creating category for the catalog.

The second method for creating the hierarchy is by importing the category hierarchy through the spreadsheet interface. The category hierarchy can be exported from another catalog or other sources, edited and imported into a new catalog. The hierarchy can also be added manually to the spreadsheet.

On the toolbar of the Category Hierarchy tab, you can create new categories, using the **Create Category** button. You can add categories, including shared categories, using the **Add Category** button. If a catalog is has a category hierarchy, you can edit it using the **Move Category** button, which opens a dialog box.. You can also modify the hierarchy using drag and drop. The catalog category association cannot be deleted, but can be end dated to make the catalog category association

inactive. The category hierarchy table provides a choice list filter that controls what catalog category associations and categories area displayed based on the date enablement.

How can I add categories?

Categories are catalog components that are associated to a catalog for purpose of classification of items. You can add existing categories to the point of selection, which can be a category in the hierarchy or the root of the catalog. If no category is selected, the default is the root of the catalog.

You can add categories by selecting **Add Category** and selecting **Add Category**. You can then search for existing categories based on the value of the catalog structure for the catalog. You can narrow the search for existing categories by using the **Advance Search** region in the dialog. You can add each selected category by selecting the **Apply** button and the add category region remains open. The **OK** button adds a category, if a category is selected, and then closes the dialog.

How can I add shared categories?

Adding a shared category is similar to adding an existing category except the category is selected from the catalog that has been designated as a source catalog. The sharing content attribute value determines what content is shared from the source catalog. A category within a source catalog that has been added to a native catalog is also known as a referenced category. You use the drop list menu from the Add Categories menu. The Shared Category option will be disabled if the catalog has not been configured for category sharing.

How can I add images to a catalog or category?

You can attach an image from your desktop or from a configured repository to a catalog or a category, or both. The image is displayed in the catalog detail and the category detail sections of the catalog page. Only one image can be associated with a catalog or category. To attach an image, select the **Attachments** control and launch the Manage Attachment dialog. The title you provide for the image attachment will appear under the image that is displayed in the catalog. The description you provide is not displayed. Clicking the **Browse** button will allow you to select the file to be used as the image for the catalog or category. After the information is entered in to the dialog, click the **OK** button to load the image. The image will not initially be displayed until the catalog is saved. The image can be replaced with another image by selecting the red X to delete the existing image and adding a new image.

How can I duplicate categories?

You can select and duplicate a category as a quick way to create a similar category configuration. Selecting the **Duplicate** icon action launches a Create Category dialog that has attribute fields populated based on the selected category attribute values. The category name is prefixed with **Copy_** followed by the name of the selected category. Fill in the required field information in the key flexfield segment values. Once the category attributes are updated and the key flexfield segments values are entered, click the **OK** button to add the newly created category into the category hierarchy of the selected category you have configured.

ORACLE

What is catalog mapping?

You can map categories of different catalogs to the reporting categories in other catalogs., by using the Manage Catalog Mapping task in the Setup and Maintenance work area. This feature allows one or more categories within a catalog to be mapped to category in a second catalog. For example, suppose that you want to roll up the costs associated with all items assigned to a set of categories in catalog. Catalog mapping allows you to select a category in a catalog, and map all the categories in the set to that category.

10   **Manage Product and Service Data: Access and Search Product Master Data**

Item Attributes: Explained

Attributes are named entities whose values describe various qualities of a product item.

The following types of attributes are available:

- Main attributes
- Operational attributes
- User-defined attribute groups and attributes
- Additional information attributes
- Transactional attributes

Main Attributes

Main attributes are common to all items, and are part of the item's data model. They describe essential aspects of the item. Main attributes appear on the Overview tab of the Create Item and Edit Item pages.

Examples of main attributes are:

- Item Number
- Description
- Long Description
- Status
- Lifecycle Phase
- User Item Type
- Approval Status
- Revision
- Pack Type
- Item Class
- Unit of Measure (a group containing eight attributes)

Operational Attributes

Operational attributes are part of the item's data model. They determine the behavior of the item with respect to various applications outside Oracle Fusion Product Hub, such as Oracle Fusion Purchasing or Oracle Fusion Inventory. You choose the control level for operational attributes on the Manage Operational Attributes Control page. For each listed operational attribute group, you select the control level for each of the group's attributes. You can control the operational attributes at the master organization level or at the organization level. You can define operational attributes as part of a new item request.

Examples of operational attributes, with the attribute groups they belong to, are listed in the following table.

Operational Attribute Group	Example Attribute
Inventory	Shelf Life Days
Order Management	Shippable
Purchasing	Negotiation Required
Receiving	Allow Substitute Receipts

User-Defined Attribute Groups and Attributes

You can define attribute groups and attributes to capture item specifications and other information relevant to a product's definition that you want to add to the item's data model. Values for such user-defined attributes are defined when you create the item, but can be changed over the life cycle of the item.

Oracle Fusion uses the structure of extensible flexfields to support attribute groups (by using flexfield contexts) and attributes (by using flexfield segments).

You create attribute groups and attributes on the Manage Attribute Groups page, where you create an attribute group for a set of one or more attributes and then create the attributes in the context of the attribute group.

You select the behavior for the attribute group as multiple-row or single-row, which affects the later display and use of the attributes, as described elsewhere in this topic. If the behavior you chose for the attribute group is multiple-row, then the attribute has multiple values each represented by a row in a table whose columns are context-based segments (attributes).

For each attribute, you select the data type and related validation and display options. The attribute groups are then accessed as sections listed on the Specifications tab of the Edit Item page. You also map the attribute to a column in a dedicated database table.

After you have created attribute groups and attributes, you associate user-defined attributes with items by adding attribute groups to item classes, on the Pages and Attribute Groups tab of the Edit Item Class page. When an item is created, it inherits the attributes from the attribute groups associated with the item class on which the item was based.
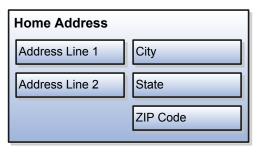
Multiple-Row Attribute Groups

Attribute groups can be either single-row or multiple-row. The selected behavior determines how the attributes will be displayed in the user interface as well as how they are used. When you create an attribute group on the Manage Attribute Groups page, you select its **Behavior** as being **Multiple Rows** or **Single Row**.

A single-row attribute group contains a collection of attributes that will be displayed as separate fields in region named for the attribute group. For example, a single-row attribute group named Home Address contains the attributes appropriate for a home address. Another single-row attribute group named Work Address contains similar attributes appropriate for an office address. 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.

The following figure shows the compact user interface layout for the single-row attribute groups named Home Address and Work Address.

Home Address

Address Line 1	City
Address Line 2	State
	ZIP Code

Work Address

Company	City
Street Address	State
Mail Stop	ZIP Code

In a multiple-row attribute group, the attributes are displayed as columns in a table that represents the attribute group. Each row of the table is considered to be an attribute in the attribute group. The collective set of values contained in a row is considered the meaning of the attribute. The table is displayed in the user interface within a region titled with the attribute group name. No other fields are displayed in the table. For example, a multiple-row attribute group named Payments contains the attributes Date, Invoice No., and Amount. Each row of the table describes a payment, and is a value of the Payments attribute group.

The following figure shows the tabular user interface layout for the multiple-row attribute group named Payments.

Payments

Date	Invoice No.	Amount
3/4/11	A-1000-0346	$1000.00
3/5/11	A-1500-2780	$295.00
4/16/11	A-2300-0022	$457.34

Additional Information Attributes

You can create additional information attributes, which are based on descriptive flexfields rather than extensible flexfields . Descriptive flexfields can only have one context available at a single time, while extensible flexfields can have multiple contexts available. If you only need a single category and usage, then descriptive flexfields are sufficient. You create descriptive flexfields using tasks in the Setup and Maintenance work area. For example, use the task Manage Catalog Descriptive

ORACLE®

Flexfields to define descriptive flexfields for catalogs. The Additional Information region on the Specifications tab of the Edit Items page then displays the flexfield context segments based on the current value of the context.

Transactional Attributes

Transactional attributes capture values that are generated during transaction flows involving an item, rather than when the item is created. Create transactional attributes on the Transactional Attributes tab of the Edit Item Class page. For each attribute, specify its effective dates. Based on these effective dates, choose the downstream applications where the attribute is effective, associate the attribute with a predefined set of allowed values, and specify an optional default value and unit of measure. You can also set the attribute to be inactive, required, read-only, or hidden during the effective dates. The transactional attributes of an item class are inherited by its item class descendants. You can overwrite the metadata for a transactional attribute in a child item class, but doing so breaks the inheritance. Transactional attributes can be defined on all types of items.

Related Topics

- Item Main Specifications

- What's an item?

- Items: Explained

- Item Specifications and Attributes: Explained

- Transactional Attributes: Explained

FAQs for Access and Search

What's the difference between searching and browsing?

In query based searching, you enter strings that are used for the search. The query search relies on the metadata stored for the objects that are searched. In the query based search, if you were searching a tree object, such as catalog, item class or structure, the query based search will only search the top object metadata unless you navigate to the object page where a query based search of the structure is provided.

In browse based searching, you are visually searching for the object. You have the ability to drill down through the structure of the object. For objects that are structured, the browse based search is much easier to use than the query base search since you just click to open each layer in the structure.

11 Manage Product and Service Data: Manage Product Mass Updates

Item Mass Changes: Explained

You can update information for more than one item simultaneously by searching for and selecting items and then accessing the **Manage Item Mass Changes** submenu within the Action menu on the Manage Items search results table.

Through the Manage Item Mass Changes submenu you can:

- Assign items to organizations.
- Assign items to supplier site organizations.
- Assign, reassign, or unassign items to catalog categories.
- Update item attributes.
- Change the item class of selected items.
- Edit items in a spreadsheet.

> ! **Important:** You must include the fields that will be changed in the search prior to selecting the items that will be changed. For example, to change item category assignments you must include catalogs and categories as columns in the search results table and as fields in the search.

Assign Items to Organizations

Items are engineered, manufactured and distributed by physical facilities called organizations. Organizations can also be sales centers such as stores. To enable an organization to perform any of these functions on an item, you must first assign the item to that organization.

If the items selected have associated packs or structures, you can also specify these options:

- **Assign packs**: Packs available for the master organization items will be available in the selected child organizations.
- **Assign item structures**: Select one or more structures then specify to either copy or common the structures.

Commit options let you apply these assignments directly to the database or export the data to a spreadsheet for further review or modification.

Assign or Reassign Items to Catalog Categories

You can select one or more catalogs' and one or more categories within each catalog to assign to the selected items,

Rules established at the catalog level determine whether you can assign single or multiple catalog categories to the item. If a catalog has multiple assignments enabled, then the same item can be assigned to more than one category associated to the catalog.

For reassigning catalog categories, the catalog category assignments for the selected items will be removed and assignments will be made to the newly selected catalog categories.

ORACLE®

Unassign Catalog Categories

The catalog category assignments for the selected items will be removed.

After you save your changes, they are applied immediately to the database. No commit options are available. The application will launch a dialog asking if you want to make the change, since no commit options are available for this mass change action.

Assign Items to Supplier Site Organizations

Item supplier site organizations associate an item to a supplier site and an organization. It indicates that for a given organization, the item is being supplied from the specific supplier site. This mass flow creates all combinations of the organizations and supplier sites selected. For example, if you select three organizations (org1, org2, and org3) and three supplier sites (Sup1, Sup2, and Sup3), all combinations of these selections will be used: org1Sup1, org2Sup1, org3Sup1, org1Sup2, org2Sup2, org3Sup2, org1Sup3, org2Sup3, and org3Sup3.

If the items selected have associated packs (pack items defined in the pack hierarchy of an item), then you can associate those packs to the supplier site organizations.

First the user selects the suppliers, then the organizations. Next, they select if the items selected are pack items and create the item supplier organization associations for pack hierarchy.

Commit options let you apply these assignments directly to the database or export the data to a spreadsheet for further review or modification.

Change Item Class

To change the item class for several items, search for and select items. In the **Change Item Class** dialog, select the new item class to be applied to the selected items, and the import format to be used when you import the modified items back to the product hub. Click **Download** to generate an AdfDi spreadsheet, which contains the existing item class attributes and values, but mapped to the new item class. Edit the attribute values in the spreadsheet, as needed. Then import the spreadsheet using an item batch.

Update Item Attributes

Search for and select items that need attribute changes and edit them in a dialog box or export them to a spreadsheet for editing. If you export for editing, you can then apply the modifications by selecting **Upload** from within the spreadsheet.

To edit in a dialog box, go the **Manage Items** page and search for an item. When your item appears, select the appropriate rows. From the **Actions** menu, select Edit Item Attributes in a Spreadsheet.

You can edit one or more attributes of the selected items in a secondary window. This method is useful when you need to set an item attribute to the same value across many items. For example, updating the Orderable attribute to Yes for 100 items.

Both item and item supplier site organization attributes can be modified using this flow.

> ⚠ **Important:** Only the attributes included in the search results table will be exported to the spreadsheet. Use the options available on the View menu to add or remove item attributes in the search results table.

When you click **Upload**, you must specify batch options including item version and scheduling. Also specify change order details in those cases where business rules require approval for any of the changes made.

ORACLE®

Edit Items in a Spreadsheet

Editing items in a spreadsheet allows you to work offline on the item updates and upload them back to the system. You can review and make further changes to the items through the downloaded spreadsheet and then apply the changes to the database by selecting Upload from within the spreadsheet.

When you click Upload, you must specify batch options, including item version and scheduling. Also, specify change order details in those cases where business rules require approval for any of the changes made.

> ✎ **Note:** In order to use this feature you must have:
> - Microsoft Excel 2007 or later Standard Edition license.
> - ADF Desktop Integration Add-in(AdfDi) : Download it from the **Tools** menu on the Welcome page.

Commit Options for Item Mass Changes: Explained

Commit options let you specify whether to apply changes directly to the database or export the data to a spreadsheet for further review or modification. Data that is applied to the database is always validated prior to committing it to the database. After you select the items and specify the changes, then you select the commit operations. If you make changes to a spreadsheet, then the data is uploaded to an item batch, validated and committed to the database through a scheduled process.

Commit options are available for the following item mass change activities:

- Assign items to organizations

- Assign items to supplier site organizations

- Assign items to catalog categories

- Reassign items to catalog categories

Apply Changes to Database

Changes will be applied to the database after running the validations to ensure the integrity of the changes.

Specify item batch options including, scheduling and change order details in those cases where business rules require approval for any of the changes made.

> ✎ **Note:** If you schedule the item batch to be processed at a later time, then it will be available as an internal item batch through **Manage Item Batches** user interface.

Manage in Spreadsheet

You can review and make further changes to the items through the downloaded spreadsheet and then apply the changes to the database by selecting **Upload** from within the spreadsheet.

When you click **Upload**, you must specify batch options including item version and scheduling. Also specify change order details in those cases where business rules require approval for any of the changes made.

> ✏ **Note:** In order to use this feature you must have:
> - Microsoft Excel 2007 or later Standard Edition license.
> - ADF Desktop Integration Add-in(AdfDi) : Download it from the **Tools** menu on the Welcome page.

Related Topics
- Change Orders: Information They Modify

- Item Batch Import and Scheduling Options: Explained

FAQs for Mass Updates

How can I update item attributes using a spreadsheet?

Select **Edit Item Attributes in Spreadsheet** from the Manage Item Mass Changes submenu within the Action menu in the Manage Items search results table. Edit the attributes in the spreadsheet and then apply the changes to the database using the **Upload** button in the spreadsheet. Note that the appropriate item attributes must be included in the search results table in order to export them to a spreadsheet for modification.

In order to use this feature, you must have Microsoft Excel 2007 or later Standard Edition license and the ADF Desktop Integration add-in.

Related Topics
- Item Specifications and Attributes: Explained

What's the difference between using common item structures and copy item structures?

If you need to create an item structure that is very similar to an existing structure, then it is easier to copy the item structure and make the necessary modifications rather than create a new one.

If you need to create an item structure that is identical to an existing structure so that it does not require any component changes, then common the item structure to reduce maintenance and the risk of errors.

Related Topics
- Item Structures: Explained

How can I update item supplier site organization attributes using a spreadsheet?

Select **Edit Item Attributes in Spreadsheet** from the Manage Item Mass Changes submenu within the Action menu in the Manage Items search results table. Edit the attributes for supplier site organization in the spreadsheet and then apply the

ORACLE®

changes to the database. Note that the appropriate supplier site organization attributes must be included in the search results table in order to export them to spreadsheet for modification.

In order to use this feature, you must have Microsoft Excel 2007 or later Standard Edition license and the ADF Desktop Integration add-in.

12 Manage New Product and Service Introduction: Manage New Product Definition and Approval

Creating New Item Requests

New Item Requests: Explained

New item requests are created to define item information and its entities, including specifications, structures and packs, and relationships. In addition to being defined, the new item requests are also routed for approval. NIRs can also be created for items being imported through an item batch.

Use any of three methods to create new item requests:

- Select Create on the **Manage New Item Requests** page.
- Create a new item request during an item import process.
- Create a new item request as you create an item. If the selected item class is new item request-enabled, a submit button appears at the page level. As you submit the item, you are prompted to create a new item request or to add the item to an existing one.

To create a New Item Request, follow these steps:

- Select an organization.
- Enter header information such as name, reason, and priority.
- Add attributes.
- Add items (items from different item classes).
- Optionally, add attachments.
- Submit the new item request.

You have three methods to save the new item request:

- **Save**: Saves the new item request in draft.
- **Save and Close**: Saves the new item request in draft and closes the page.
- **Submit**: Submits the new item request to open status.

> ✎ **Note:** Mandatory definitions for definition workflow steps are set up in **Item Class** and are enforced on the user side. A warning message is displayed when the you try and save an item without completing all the mandatory definitions. The message will list the missing definitions.

Enter Header Information

On the **Create New Item Requests** page, enter a name for the new item request. You can also edit the default settings of new item request reason and priority.

ORACLE

Add Attributes

Descriptive flexfields can be added as additional attributes for the new item request header information.

Add Items

On the **Create New Item Requests** page, Items region, click the add icon.

That will launch the search window where you search and select items for your new item request.

> ✏️ **Note:** New item requests support multiple items across different item classes. Each item can be routed to
> different assignees for definition, because the definition steps are defined at the item class level.

Add Attachments

You can add attachments when you create a new item request. You can also edit attachment details and remove attachments from an open new item request.

Attachments can be any type of file including:

- Files and folders from your desktop or a configured repository.
- Text files generated during the attachment process.
- You can also specify URL links as attachments.

Submit

Submit new item requests to open status. A request comment notification is normally sent to seeded assignees, but if **Skip Request Comment** is checked, request comment notifications are not sent to the seeded assignees.

Related Topics

- Change Order Definitions: Explained

Manage New Item Requests

New Item Request Definition Phase: Explained

During the definition phase, definition notifications are routed to participants for them to complete the item's definition tasks.

Define an Item

From the **Manage New Item Requests** page, search for the new item request.

Launch the new item request from the **Search Results** table by clicking on a new item request link. That will take you to the New Item Request page.

Click on the Details sub tab and select the definition row. In the definition Workflow Details table, select Expand All from the Actions menu.

ORACLE®

Click the Go to Task icon for the entity that needs definition. The item page appears where you enter the item information. The item definition page is rendered dynamically for each participant, where you can enter only the attributes or item entities for which you are responsible.

> ✏️ **Note:** You can also quickly navigate and drill down to an item detail page directly from a new item request definition notification. A read-only item page will open a separate browser window.

You can identify various item details as mandatory at each step. This will ensure that item information required for a downstream step is defined and available for use.

Any item definition that is available to be set up for definition through new item request, can be identified as mandatory while completing the definition steps at the item class, including:

- Operational
- Extensible flexfield attributes
- Structures
- Packs
- Supplier associations
- Organization assignments
- Attachments
- Catalog category assignments
- Relationships

New Item Request Notifications: Explained

Several types of notifications are sent during a request for new items. When a change order is submitted, notifications are sent out to Assignees, Approvers, and Requestor. Consolidated notifications are also sent out to assignees of each tasks.

The following table lists the notifications.

Notification Type	Draft	Open	Definition	Approval	Completed
Request Comment	No	Yes	No	No	No
Approval	No	No	No	Yes	No
Definition	No	No	Yes	No	No
Request to Comment from Action Log	Yes	Yes	Yes	Yes	Yes
FYI New Item Request Creation and Assignment	Yes	Yes	No	No	No

✏ **Note:** The table of notifications provided here is a summary. For a more detailed table of notifications, see the Change Order and New Item Request White Paper for Workflow Management, Doc ID 1960108.1 on My Oracle Support.

FYI notifications are sent to the Creator, Assignee, Requestor, and Approver of new item request lines and headers when it moves to Scheduled or Completed status.

When the new item request is approved or rejected, a notification is sent to the Creator, Requestor, and Assignee.

An approval routing workflow can be stopped at any point, without completing, using the Terminate Workflow command. Any related notifications are removed from assignees' work lists. Terminating a workflow might be necessary if, for example, something unanticipated will prevent the workflow from being completed as desired.

A predefined request comment notification is associated with the Open status. The new item request cannot move to the next status until this notification has a response. The notification is then sent automatically to the assignee and the requestor. This automatic notification can be bypassed by selecting **Skip Request Comment** for the Open status when defining the workflow setup for the new item request type. If the notification is bypassed and the request has been configured to automatically promote, then the new item request automatically moves to the next status. Otherwise, you need to manually move the new item request to the next status.

✏ **Note:** When **Skip Request Comment** is enabled for open status, request comment notifications will not be sent when a new item request is submitted to open status.

You can also quickly navigate and drill down to an item detail page directly from a new item request definition and approval notification. The item page will open a separate read only browser window. The detail will depend on the user's privileges.

Rejecting Notifications

When a line is rejected by an approver, the reject line in the approval notifications to the other approvers are displayed as read-only.

Claiming Tasks on Notifications

For the **Claim** action to be enabled, the **Response Required From** field must be set to One. Then, when an approver selects the **Claim** action on a notification, the notification is locked against changes by other approvers, unless the first approver unlocks it by selecting the **Unclaim** action. The **Claim** action is only available if **Auto Claim** has not been enabled, in the Manage Task Configuration setup task. **Auto Claim** is enabled by default.

New Item Request Approval Phase: Explained

During the approval phase of a new item request, approval notifications are routed to the participants.

You can set up the new item request type so that a request only needs to be approved by a single member of a user group. On the Manage New Item Request Type Details page of the Setup and Maintenance work area, select the Approval step on the Workflow tab. Then for an approval activity in the step's status details, set **Response Required From** to One. When one member of a group approves the request, the notifications to other approvers in the group are withdrawn..

Approval notifications can be addressed to individual users or to multiple users in a predefined user group. From the notification, users can approve or reject the new item request.

For each new item request header, you can select an assignment method in the Approval status details for the Header approval , as either rules-based or user-defined. If you choose user-defined assignment, you then select an approver by using the **Assigned To** control.

You can also assign approvers as optional approvers. A single optional approver can reject a change order, but approvals from optional approvers are ignored. To assign an optional approver, select an approver by using the **Assigned To** control on the **Optional approval** row of the Approval status details.

When an approval is granted, the new item request cannot be modified. After the new item request is approved, the status is changed to Scheduled, through a scheduled process, and when its effective date is reached, its status is changed to Completed, also through a scheduled process..

New item approval rules are defined and managed through the Approval Management Engine. For information on how approval rules are defined and managed, refer to the Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite.

> 🖉 **Note:** The assignment method needs to be rule-based in order for approval rules to be utilized.

Related Topics

- Change Order Approval Process: Explained

New Item Requests Workflow Statuses: Explained

There are five predefined New Item Request (NIR) workflow statuses which enable you to perform various tasks when a new item request is created. You cannot create new statuses or delete statuses.

The four statuses are:

- Open
- Definition
- Approval
- Scheduled
- Completed

Open

New item request attributes and items are defined and updated when the workflow status is open. A seeded request comment notification is associated with this status and the new item request cannot move to the next status until this notification has been responded to. The notification will be sent to the assignee and the requester of the new item request. However, to bypass the notification, an administrator can select to skip this notification on the new item request type. Assignees would then need to promote the new item request to the next status manually or on the new item request type.

Definition

In the definition workflow status, you define the item information, such as specifications, structures, packs and so on. Additional items cannot be added in this workflow status. The definition workflow steps are defined at the item class level. Based on the definition steps, a notification is sent to those responsible for defining the item. Once the item is defined, you then promote the new item request to approval status manually or to be automatically approved in the BPEL process.

ORACLE®

Approval

When approval is granted, the new item request cannot be modified. Approval notifications are sent to the approvers based on the rules set up in Approval Management Extensions (AMX), if the assignment method is rule-based, or to a pre-defined set of approvers, if the assignment method is user-defined. After all the required approval is received and the status is Scheduled, a job is triggered and the status is automatically changed to Completed by the system.

Scheduled Status

After approval, the NIR is automatically promoted to a Scheduled status. Automatic promotion and demotion is set up on new item request type, otherwise the promotion is manual.

Completed

After all the required approvals are received and the status is Scheduled, a job is triggered and the status is automatically changed to Completed by the system. It cannot be modified.

Automatic Promotion and Automatic Demotion: Explained

You can explicitly promote or demote a new item request to its different statuses. New Item Requests may also be promoted or demoted to the next status automatically after the completion of the workflow in a specific status.

The following table shows which of the statuses require user configuration to enable automatic promotion, which status have automatic promotion enabled by default, and which statuses can be set for automatic demotion.

Automatic Promotion and Automatic Demotion	Open	Definition	Approval	Completed
User configuration required during set up for automatic promotion	Yes	Yes	No	No
Default automatic promotion	No	No	Yes	No
Status in which new item request can be enabled for automatic demotion	No	No	Yes	No

FAQs for New Item Requests

How can I promote a new item request?

To promote a new item request, first review your notifications. On the notification, go to the **Manage New Item Requests** tab and select the row containing your new item request. From the Actions menu, select **Promote**. In the Promote dialog box, you can select from the available phases to promote the new item request. You must enter a comment when promoting a new item request to the next phase.

What are the workflow phases of a new item request?

There are five workflow phases a New Item Request will go through.

- Open: The new item request is created and items are added.

- Definition: Participants define item attributes and item entities, such as structures, packs, and organizations.

- Approval: Participants approve or reject the items.

- Scheduled: After approval, the request is promoted to a Scheduled status.

- Completed: When the effective date of it's associated item is reached, the NIR is promoted to a Completed status.

How can I associate items with a new item request?

Items are associated with new item request in one of the following ways:

- From a new item request: Search for and select items in the Items table.

- From an item: Add the item to an existing new item request or create a new request.

- From an item import: Add the imported items to an existing new item request or create a new request.

What's an action log?

The action log provides an audit trail of all actions performed on the new item request. The first entry will always indicate when the new item request was created and by whom. Subsequent actions will be listed to show the progress of the new item request. For example, submitted and promoted to definition.

From the **Action Log**, you can initiate a discussion by posting and assigning a new comment, respond to requested comments or reply to specific comments, thereby creating a threaded discussion within the context of the new item request.

How can I post a comment in new item request?

You post comments in the **Comments** section available on the contextual pane within the new item request. This section is available on all **New Item Request** pages.

You can also post comments from the **Action Log** by selecting the **Post Comment** link.

How can I request a comment in a new item request?

You request a comment in the **Action Log** by clicking the **Request Comment** button. A Request Comment dialog box will appear for you to assign and enter your request.

How can I move lines (items) from a new item request?

On the **Manage New Item Request** page, expand the search results and select lines from one or more new item requests within the same organization and then select **Move New Item Lines**. You can move the selected lines to a new New Item Request or add them to an existing New Item Request. You can only move items in a draft, open, or rejected status.

How can I cancel a new item request?

On the **Manage New Item Request** page, select a new item request and then select Cancel. The new item request status is set to canceled and any changes defined for items in the new item request are discarded. You cannot cancel a new item request in an Approval, Scheduled, or Completed status.

How can I define new item request definition steps?

In the Definition workflow status, you define the item information for the requested new item, such as specifications, structures, packs, and so on. Additional items cannot be added to the new item request when it is in Definition workflow status. The steps in the definition workflow are defined on the Item Management tab of the item class for a requested new item., You must select the Enable New Item Request check box to use new item requests.

Related Topics

- How can I create an item class?

How can I delete a new item request?

On the **Manage New Item Request** page, select the new item request to be deleted and then select the **Delete** action. The new item request will be added to the delete group. Once a new item request has been added to the delete group, the request will be unavailable and you cannot reverse the delete.

How can I demote a new item request?

While reviewing your notifications, go to the **Manage New Item Requests** tab and select the row containing your new item request. From the Actions menu, select **Demote**. In the **Demote** dialog box, you can select from the available phases to demote the new item request. You also must enter a comment when demoting to another phase.

When can items be added to a new item request?

Items can only be added when the New Item Request is in a draft status and an open phase.

ORACLE®

13 Manage New Product and Service Introduction: Manage Supplier Collaboration

Managing Item Supplier Associations: Explained

Managing item supplier associations involves creating associations between items and supplier addresses for an item organization, updating these associations, and deleting the associations.

You create item supplier associations while creating or editing an item for an organization.

Assigning Supplier Associations to Organizations

On the Manage Items page, search for and edit an item belonging to a specific organization. From the **Edit Item** page, select the **Associations** tab and then the **Supplier Organizations** subtab. On the Supplier Organization Associations table, select **Select and Add** from the **Actions** menu, or click the **Select and Add** icon. Use the resulting **Select and Add Supplier Organization Associations** dialog to search for, select, and add suppliers

Once the selected suppliers are added, save the associations, by saving the item.

Temporarily Suspending Supplier Associations

Supplier associations are active, by default, but you can temporarily suspend associations using the Supplier Organization Associations table.You can set a single association to being inactive by selecting the value **Inactive** in its **Status** column. You can revert it to active status at any point by selecting the value **Active**. You can change the status of multiple associations simultaneously by selecting multiple rows of the Supplier Organization Associations table, selecting their status from the **Edit Status** list of values and clicking the **Change** button.

Specifying a Primary Supplier for an Item Organization

You can designate a primary supplier for the item. There can be only one primary supplier for one item organization association.

To designate a primary supplier, select the **Primary** check box for the supplier in the Supplier Organization Associations table. Then save your update.

Deleting Item Supplier Associations

To remove a supplier association from an item, select the supplier from the Supplier Organization Associations table, then select **Delete** from the **Actions** menu, or click the **Delete** icon. In the Delete Item Supplier Association dialog box, add the association to an existing delete group, or create a new delete group. Select the Manage Delete Groups task to process the delete group. The associations will be deleted completely when the delete group has been processed.

Related Topics

- Group Deletions: Explained

Managing Supplier Access: Explained

To provide supplier access to an item, navigate to the Manage Items page, select an item and open the Edit Item page. Then select the Item People tab, where you can add, delete, and modify the groups and persons that can act upon the item, and the actions available to each group or person.

Item grants to supplier users can be managed at the item level. This gives you granular control in providing supplier users with access to one or more items, on an ad-hoc basis.

Grants to supplier users can also be maintained at the item class level (as instance set level grants), if supplier users need access to all items within an item class.

> ✎ **Note:** Since the security actions defined for an item class are inherited by the items in the item class, those actions cannot be modified at the item level. Security actions defined for an item class are defined in the Setup and Maintenance work area, using the Manage Item Classes task, where you select item class people and actions on the Security tab for an item class.

Related Topics

- Data Security: Explained

- Data Security Privileges for Accessing Items: Explained

- Data Security Privileges for Viewing Items: Explained

- Data Security Privileges for Creating Items: Explained

- Data Security Privileges for Updating Items: Explained

FAQs for Manage Supplier Collaboration

What's the difference between item supplier associations and the approved supplier list?

Item supplier associations indicate the supplier and address from which the Item is supplied and the item organization to which it is supplied.

The approved supplier list is where you set up your approved suppliers, sites, and items. The approved supplier list is managed in the Purchasing work area.

14 Manage New Product and Service Introduction: Release Product to Market

Item Statuses: Explained

In the Item Status table, select a status code to display the associated attribute groups and attributes as well as control information.

Item statuses are used to define the state an item is in and based on the state, the default values for item operational attributes.

Item statuses are seeded; the values are **Active** and **Inactive**. You can create, edit or delete item statuses on the Manage Item Statuses page.

Operational attribute groups and attributes corresponding to the selected item status are displayed in the **Details** section.

Whenever the status is applied to the item, the value of the attribute may change. Select the usage that corresponds to how the attribute value will change based on the item status value:

- Defaulted - Allows you to override the value during the import and update of an item.
- Inherited - Sets the values of the item status attributes when the status value changes. You cannot override the value.
- None -The item status attribute values will not be changed.

Any change made to an item status is not applied automatically to existing items. The change will be applied when the item status value is changed while editing an item.

Status attributes for each item status control the actions that you can perform on the item. Some of the status attributes are: Build In WIP, Customer Orders Enabled and Internal Orders Enabled.

The **Controlled at** field is not editable and is populated from the value set on the Manage Attribute Groups page.

FAQs for Release Product to Market

How can I change an item's status?

You can change an item's status by selecting the appropriate item status on the Edit Item page. Based on the status setup, either the status attributes are inherited or defaulted.

You can also change the status through a rule. For example, you could create a rule that if the attribute's lifecycle phase is production, the item status can be changed to active.

How can I make changes to item organizational assignments?

Organization assignments allow items created in a master organization to be used in other organizations, enabling you to control the visibility of an item in organizations. For example, certain items may not be assembled, sold or purchased in a specific organization. You control the visibility of an item by assigning it to a specific organization.

Similarly you can control specific attributes at organization levels. For example, an item can be sold in a specific organization (region) but not permitted to be sold in other regions. You do this by controlling this attribute at the organization level.

ORACLE®

15   Manage Product Data Governance: Manage Product Change Orders

Create Change Orders

Change Orders: Overview

Change orders let you process changes to user-defined item attributes, structures, packs, associations, and item revisions.

Product data stewards and product managers can manage product change orders. They can create change orders within predefined change order types, author product changes, view product changes, submit changes for review and approval, track change statuses, and implement changes on a scheduled date.

Changes are submitted through a formal review and approval workflow to ensure successful and validated completion of change orders.

> ✏ **Note:** Oracle Fusion Product Development does not support approval of change orders at the line level.

Changes to item structures can be implemented in other organizations by propagating change orders to multiple organizations using predefined propagation rules while still having the flexibility to adapt implementation schedules based on individual organizations.

Individual lines in change orders can be moved to existing or new change orders to avoid bottlenecks in processing and implementation.

Related Topics

- Change Order Definitions: Explained

Change Orders: Information They Modify

Create change orders within predefined change order types to modify item information and route that information for review and approval.

What Change Orders Modify

Change orders modify the following information

- Item specifications: Modify operational and user-defined item attributes.

- Item structures: Add, update, and delete structures.

> ✏ **Note:** Components can be disabled only through change orders

- Packs: Add, update, and delete packs and pack attributes.

- Associations: Add item supplier site organization associations, remove existing associations, and modify existing item supplier attributes.

- Revisions: Create new revisions for an item while modifying item information

Changes to item structures can be propagated to other organizations through rules associated with the change order type.

Where Change Orders Are Created

Access the Create Change Order process in one of three ways:

- Select the **Manage Change Orders** link on the Tasks panel tab.

- Click the **Create** icon on the Manage Change Orders page.

- Select **Create** from the **Actions** menu on the Manage Change Orders page.

The change order changes items specific to the organization that you select. However, if propagation rules are associated with the selected change order type, then you can push changes made to the item structures into other organizations in which the changed item is enabled.

Change order type determines how change order numbers are generated, how changes will be propagated to other organizations, and what steps in the workflow are required to complete the change order.

Change order header details include priority, reason, propagation rule, and user-configured attributes.

On the Overview tab, specify the following information:

- Tasks required to complete the change order

- Attachments providing additional information

- Propagation information

On the Lines tab, add and access individual items to modify attributes, structures, packs, and associations.

> ✏️ **Note:** Only item details that can be modified through the change order will appear. For example, because catalog assignments are not supported through change orders, those tabs will not appear on the item details page. Also links on the Specification tabs for attributes that cannot be changed through the change order will not appear.

When you submit the change order for approval, you can track approval or rejections for each line in the change order.

Related Topics
- Change Order Definitions: Explained

- Change Order Types: Explained

Change Order Tasks: Explained

Change order tasks help ensure that mandatory work is completed before a change order is completed or promoted to the next status. You can use change order tasks to create and assign work to individuals.

If a task is marked as required, then it must be completed before a change order can be promoted to a specified status. All tasks must be completed prior to Approval status and once a change order is approved, the change order cannot be edited (therefore, the status of the task cannot be changed). If a task is not completed, then the change order cannot be completed.

ORACLE®

> ✏️ **Note:** Once a change order is submitted to open status, notification of the submission will not be sent to assignees if **Skip Request Comment** is selected.

Managing Change Order Tasks

You can change the status of an existing change order task, update it, cancel it, or delete it.

You can modify an existing change order task if its task status is **Open**.

You create a change order task by adding lines to the Tasks table on the Overview tab when you define or edit a change order.

The Tasks table includes the following fields that let you specify task details:

- **Sequence**: Determines the order in which the tasks are performed.
- **Required**: Indicates that the task is mandatory for the change order to progress.
- **Assigned To**: Specifies the person (or group) to whom the task is assigned.
- **Start-by** and **Complete-Before** Status: The status at which the tasks should be initiated and the status before which the task should be completed.

  If a task is mandatory, then a **Complete-Before** Status must be specified.
- **Need-by-Date**: Indicates the date on which the tasks should be completed.

Related Topics

- Change Statuses and Status Types: Explained

Change Order Attachments: Explained

A change order attachment is unstructured information related to a change order. Examples of change order attachments include CAD drawings, test results, specification sheets, or URLs.

Attachments can be any type of file including:

- Files and folders from your desktop or a configured repository.
- Text files generated during the attachment process.

You can also specify URL links as attachments.

Managing Change Order Attachments

You can add attachments when you create a change order. You can also edit attachment details and remove attachments from an open change order.

Change Order Propagation: Explained

Propagation rules allow you to implement item structure changes in multiple organizations by propagating change orders to organizations (eliminating the need to create change orders in each selected organization) while still having the flexibility to adapt implementation schedules based on individual organizations. Organization hierarchies can also be used to propagate changes to multiple organizations.

How changes are propagated to other organizations is determined by propagation rules. Available propagation rules are determined by the organization and change order type selected for the change order.

If propagation rules have been configured in the change order type, 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.

You can enable specific organizations identified in the change order type for propagation or you can enable all of them.

Enabling Items for Propagation

You must ensure that the items specified in the change order are assigned to the propagation organization in order for the changes to take effect.

The **Items** columns below the **Propagation Organizations** region shows the total number of items included in this change order and how many of those items are enabled for propagation for a particular organization.

> ✎ **Note:** You can enable items and organizations for propagation through the Edit Change Orders page only. Edit a saved change order through the Manage Change Orders page by selecting a change order in the search results table and selecting **Edit**. You can propagate the change order in view mode. Access a saved change order through the Manage Change Orders page by clicking the change order name in the search results table.

To enable items for propagation, click the **Propagation Detail** icon in that organization's row in the Items table on the Propagation Details page, select the appropriate items, and click **Assign to Organization** to enable those items for propagation.

Excluding Item Structure Components from Propagation

As part of the localization of item structures, individual organizations might use a component in an item structure from a master or source organization from which the change order originates. If a component does not exist, then the changes authored for that component cannot be propagated, and the item propagation will result in error. To avoid such propagation errors, the component can be excluded from the change order before it gets propagated.

To exclude item structure components from propagation, click the **Propagation Detail** icon in an organization's row below the **Propagation Organizations** region. Select an item in the Items table on the Propagation Details page to display the structures associated with that item and the components of these structures. Select **Exclude** next to those components that you do not want to propagate.

Propagating Changes

The propagation rules associated with the change order type may allow a change order to automatically propagate changes to other organizations or organization hierarchies after the completion of the workflow in a specific status.

However, you can explicitly propagate a change order in one of the following ways:

- Highlight a change order on the search results table on the Manage Change Orders page, and select **Propagate** to propagate the change order to all the selected organizations in that change order.

- Access change order detail through the Manage Change Orders page by clicking the change order name in the search results table, and select the **Propagate** icon in an organizations row under Propagation Organizations on the Overview tab.

> ✎ **Note:** To view the scheduled process output log file, click the **Propagation Details** icon in the Propagation Organization table to open the Propagation Details dialog box. Then click the scheduled processes icon.

ORACLE®

Related Topics

- Change Order Types: Explained

Change Order Propagation Rules: Explained

Change order propagation rules determine how changes are propagated from one organization to one or more different organizations.

This allows you to implement changes in multiple organizations by propagating change orders to organizations (eliminating the need create change orders in each selected organization) while still having the flexibility to adapt implementation schedules based on individual organizations. Organization hierarchies can also be used to propagate changes to multiple organizations.

Associating Propagation Rules to Change Order Types

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.

Using Change Order Status to Control Propagation

Change order statuses are used to determine when a change order gets propagated to different organizations.

For each organization or organization hierarchy that you add to the propagation rule:

- Select a change order status for propagation.
- Choose **auto-propagate** and the propagation rule will execute automatically when the change order enters the specified status.
- Select the status of the propagated change in the organizations selected for propagation. This is the status the propagated change is set to in the selected organizations.
- Set one of the specified organizations or organization hierarchies as default for the propagating organization.

Related Topics

- Change Order Types: Explained

- Change Statuses and Status Types: Explained

Item Detail Management in Change Orders: Explained

You can add items and author item changes when you create or edit a change order. You can create new or change existing item organization assignments. Click on the item links on the Lines tab to access the Edit Item page where you can manage item details.

ORACLE®

✏️ **Note:** The effective date for the item needs to be specified and saved before the **Edit Item** page can be accessed.

On the Edit Item page, you can edit the following item details:

- Specifications: On the **Specifications** tab, you can modify predefined and user-configured attributes.

- Structures and Packs: On the **Structures** tab, you can add new structures, copy structures, and modify structures by adding new components, removing existing components and modifying component attributes. You can also modify packs by adding new packs and modifying pack attributes.

    ✏️ **Note:** You cannot modify referenced (common) structures through a change order.

- Associations: Access the Edit Change Order page to modify change order settings and content:

    o You can assign an item to a child organization through a change order. Such assignments always happen only in the master organization change order context.
    o From a master organization, assign an item to a child organization, add the change to a change order, and route it for approval. This item can then be enabled in the child organization on a specified date.
    o From a master organization you can also create a change order, add a revised item, and make the item organization assignment in a change order context.
    o By selecting the appropriate batch-level change order options, you can also make item organization assignments through batches and add them to a change order. But, if change order required rules are triggered for such assignments, they are carried through a change order even if batch options are not specifically set.
    o You can also use change services to add item organization assignments to a change order.

When managing change orders:

- You can enable an item in a child organization through a change order and have the item available for transaction on a specified date.

- If approval routings are enabled for a change order, you can seek approvals on the item organization assignment before enabling the item in a child organization.

- If **Skip Request Comment** is checked, request comment notifications are not sent to the seeded assignees on submission of change order to Open status.

✏️ **Note:** Skip request comment is per change order type, not across all change order types.

- You can access item detail through the change order details page by clicking on the item links on the **Lines** tab to access the item detail page.

Manage Change Orders

ORACLE®

Change Order Edits: Explained

From the Edit Change Order page, you can monitor and modify all aspects of a change order definition.

You can access the Edit Change Order page in the following ways:

- When you create a new change order.

- When you select a change order from the search results on the Manage Change Order page and select **Edit** from the Action menu.

- When you access a change order in view mode by clicking the change order link in the search results on the Manage Change Order page, then select **Edit** from the change order detail page.

From the Edit Change Order page, you can perform the following tasks, depending on the status of the change order:

If Status is	Tasks you can perform
Draft, Open	Modify header details such as priority and reason and add or remove attachments.
Draft, Open	Modify the current status of change order tasks.
All statuses	Monitor the current status of change order tasks.
Draft, Open	Modify line details and access item pages for further change
All statuses	Monitor the current status of the change order in the workflow.
All statuses	Review the actions that have been performed on the change.

Related Topics

- Change Statuses and Status Types: Explained

Change Order Workflow: Explained

Each change order follows a lifecycle process based on predefined and user-defined statuses associated with the change order type. The sequence of statuses define the change order's workflow.

At each status in the change order's workflow, specified change order tasks must be completed before a change order is promoted to the next status.

Each change order workflow definition is associated with a change order type. The definition determines the sequence of statuses in the workflow.

✎ **Note:**

- Open,**Scheduled**, and **Completed** predefined statuses are required for every change order type. You can configure the change order type to have additional statuses including user-defined statuses. If a versioned item is to be added to a change order, then the change order type needs to include an **Open** status.

- The sequence of final statuses must be an approval status followed by **Scheduled** status and **Scheduled** status followed by **Completed** status.

- Change orders can be set to be automatically promoted for statuses prior to approval. After approval the change order will always be automatically promoted.

Related Topics

- Change Order Types: Explained

- Change Statuses and Status Types: Explained

Change Order Actions: Explained

You can propagate changes, move lines between change orders, and manage the life cycle of a change order using the change order actions available on the Actions menu on the Manage Change Orders page.

Change Order Actions

Select a change order and perform one of the following actions:

- **Promote** and **Demote**: Manually promote or demote a change order to the next status in the workflow for that change order type.
  The workflow associated with the change order type may allow a change order to be automatically promoted or demoted to the next status after the completion of the workflow in a specific status.

- **Hold**: Place a change order on hold. No further action can be taken on the change order.

- **Release Hold**: Release the change order from being on hold, so that further actions can now be taken.

- **Cancel**: Set the change order status to canceled. Any changes defined for items in the change order are discarded.

- **Propagate**: Propagate the selected change order to the selected child organizations.

- **Move Change Lines**: Move the selected lines from one or more change orders within the same organization to a new or existing change order.

- **Generate Report**: Produce a customizable detail report on the selected change order.

Related Topics

- Change Statuses and Status Types: Explained

- Change Order Types: Explained

Change Order Action Log: Explained

The action log is available on a tab of the Edit Change Order page. The action log displays all actions (and associated comments) executed against or posted to the change order. The action log also contains messages generated by the system.

ORACLE®

From the action log, you can initiate a discussion by posting and assigning a new comment, you can respond to requested comments, or you can reply to specific comments, thereby creating a threaded discussion within the context of the change order.

Change Order Management: Explained

From the **Manage Change Orders** page, you can copy or create new change orders, and modify, review, or delete existing change orders.

The set of change order management tasks include the following:

- Add new change orders or duplicate existing ones.
- Access the Edit Change Order page to modify change order settings and content.
  - o You can assign an item to a child organization through a change order. Such assignments always happen only in the master organization change order context.
  - o From a master organization, assign an item to a child organization, add the change to a change order, and route it for approval. This item can then be enabled in the child organization on a specified date.
  - o From a master organization you can also create a change order, add a revised item, and make the item organization assignment in a change order context.
  - o By selecting the appropriate batch-level change order options, you can also make item organization assignments through batches and add them to a change order. But, if change order required rules are triggered for such assignments, they are carried through a change order even if batch options are not specifically set.
  - o You can also use change services to add item organization assignments to a change order.
- Access change order detail for review.
- Delete change orders by adding them to a delete group.
- Manage the life cycle of a change order by using change order actions: **Promote**, **Demote**, **Hold**, **Release Hold**, and **Cancel**.
- Manually propagate the change order to other organizations or organization hierarchies based on the propagation rules defined in the change order type.
- Move lines from one change order to a new or existing change order.
- Generate change order detail reports.

View Change Order Details

You can access the change order details page by clicking on the name of a change order in the search results table on the **Manage Change Orders** page.

On the **Change Order Details** page, you can perform the following tasks:

- Modify propagation information.
- Monitor the current workflow status of the change order.
- Monitor the current status of change order tasks.
- Review the actions that have been performed on the change order.

Related Topics
- Change Statuses and Status Types: Explained

Manage Item Change Order Approval

Change Order Notifications: Explained

Notifications are sent to assignees throughout the lifecycle of the change order.

The following table shows the different types of notifications that are available for each status type

When a change order is submitted, notifications are sent out to Assignees, Approvers, and Requestor. Notifications are sent to each of the assignees of a step when the step is started.

Consolidated notifications are also sent out to assignees of each tasks.

FYI notifications are sent to the Creator, Assignee, Requestor, and Approver of change order lines and headers, and new item request lines and headers when it moves to Scheduled or Completed Status.

When the change order is approved or rejected, a notification is sent to the Creator, Requestor, and Assignee. If the approval routing workflow is aborted, then a notification is sent to all people in the approval routing that were previously notified regarding an assigned workflow process in a step.

Status Type	FYI Change Order Creation and Assignment	Request Comment	FYI Task Notification	Request to Comment From Action Log table	Approval Notification
Draft	Yes	No	No	Yes	No
Open	Yes	Yes	Yes	Yes	No
Interim Approval	No	No	Yes	Yes	Yes
Approval	No	No	No	Yes	Yes
Scheduled	No	No	No	Yes	No
Completed	No	No	No	Yes	No

✎ **Note:** A predefined request comment notification is associated with the **Open** status. The change order cannot move to the next status until this notification has a response. The notification is then sent automatically to the assignee and the requestor. This automatic notification can be bypassed by removing the assignees. If the notification is bypassed and the BPEL process is set to automatically promote, then the change order automatically moves to the next status. Otherwise, you need to manually move the change order to the next status.

Related Topics

- Change Statuses and Status Types: Explained

Change Order Approval Process: Explained

A change order can be approved only through the successful completion of an approval routing. When you create a change order, an approval routing is created automatically based on approval rules or manually by any user granted the **Item Change Order Management Duty** privilege.

An approval routing consists of one or more approval stages. Each approval stage specifies a workflow process and assignee. For example, you can create stages to request approval or request comments. You can also create stages having the Interim Approval status.

Skip Request Comment is available in open status. When checked, request comment notifications are not sent to the seeded assignees.

If Skip Request Comment is enabled and autopromotion is defined for open status, on submission of the change order from draft, the change order will be pushed to the status set for autopromotion.

After changes are authored for each item, the change order is submitted for approval workflow.

When a change order is submitted, notifications are sent out to assignees. Consolidated notifications are sent to each of the appropriate assignees at each stage of the approval process. Each approver is requested to respond before the expiration date that is specified in the approval task in AMX. Reminder notifications can be set up so that an approver who does not respond by the required date will receive notifications at a specified interval.

The approval status of a change order reports the progress of the approval. A list of approvers and the action taken by each approver is captured as a part of the history displayed in the notification for approval.

The approver can approve each line in the change order or reject the change.

> ✎ **Note:** Oracle Fusion Product Development does not support approval of change orders at the line level.

You can set up a task so that when the change order is approved or rejected, an email notification is sent to the creator, requestor, and assignee. If the approval routing workflow is stopped, then a task can be set up so an email notification is sent to all people in the approval routing who were previously notified regarding an assigned workflow process in an approval stage.

You can set up a change order type so that a request is approved by a single member of a user group. From the Manage Change Order Types task of the Setup and Maintenance area, edit a change order type and select an approval step on the Workflow tab. Then, for an approval activity in the step's status details, set **Response Required From** to One. When one member of a group approves the change, the notifications to other approvers in the group are withdrawn for that approval step, and notifications are sent to the approvers for the next step.

The assignment of approvers for change order lines is governed by rules. For change order headers, you can select an assignment method in the Interim Approval or Approval step's status details for the Header approval stage, either rules-based or user-defined. If you choose user-defined assignment, you then select an approver by using the **Assigned To** control.

You can assign approvers as optional. A single optional approver can reject a change order, but approvals from optional approvers are ignored. To assign an optional approver, select an approver by using the **Assigned To** control on the **Optional approval** row of the Interim Approval or Approval step's status details.

> ✎ **Note:** For change orders in Draft or Open, their lines can be moved to a new change order or to another existing change order, if those lines are hindering the approval workflow.

ORACLE®

If **Response Required From** has been set to One, then, when an approver selects the Claim action on a notification, the notification is locked against changes by other approvers, unless the first approver unlocks it by selecting the Unclaim action.

On interim approval and approval notifications for change orders, the Pack Type column of the Items table is hidden by default. To view the pack type associated with the items in a change order, select **Pack Type** from the View menu.

You can navigate to the items in the change order approval notification using the item link. The resulting read-only item page is rendered in a separate window. The first view on an item drill-down from a notification is the item view, to view the changes in the context of the entire item (as supported by the change order). Then you can toggle to an item view that displays changes.

Approvers will only see those aspects of the item for which they have access.

Related Topics

- Change Order Types: Explained

FAQs for Change Orders

What are valid objects for change order attachments?

Change order attachments can be any type of local file, repository file or folder, URL link, or text. These objects can be attached to both the header, and to individual lines, of a change order. The attached content is not searchable.

How can I find details about changes to an item in a change order?

You can navigate to the items in the change order approval notification using the link provided on the number of the item. The resulting read-only item details page is rendered in a separate window. From the item details, a link on View Change Order Line enables you to view the scheduled changes to the item in redlined mode.

Click the change order link in on the Manage Change Orders page. On the Lines tab, click the **Item Changes** for an item to access the Item Changes page.

The first view on an item drill-down from a notification is the item view in the context of the change order. Then you can toggle to an item changes-only view in redlined mode.

> ✏️ **Note:** The Item Changes page displays only changes made to the item through this change order. Approvers will only see those aspects of the item for which they have access.

How can I find details about changes to an item component in a change order?

Click the change order link in on the Manage Change Orders page. On the Lines tab, click the **Item Changes** icon for an item to access the Item Changes page then click the **Component Changes** icon in the Structure Changes table to access change information for specific item components.

How can I move change order lines?

On the Manage Change Orders page, expand the search results and select lines from one or more change orders within the same organization then select **Move Change Lines**. In the Move Change Lines dialog box, you can select an existing change order to which to move the selected change lines, or you can move the change lines to a new change order by selecting **Create Change Order**. If you create a new change order for the change lines being moved, then you must enter header information for that change order.

ORACLE®

16 Consolidate Product and Service Master Data: Manage Imports

Manage Imports: Overview

You can import items and item-related information using interface tables or Excel spreadsheets

This topic discusses importing items using interface tables to import the data into the production schema. You can also import trading partner items, item associations, customer items, and customer item cross references.

The following objects are available to import:

- Items
    - Structures
    - Packs

- Item Associations
    - Organization assignments
    - Supplier Site Organization Associations

- Trading Partner Items
    - Customer Item
    - Item Manufacturer Part Numbers
    - Competitor Items

- Item References
    - Customer Item References
    - Item Manufacturer Part Number References
    - Competitor Item References

To import the objects using an interface table, follow these steps:

1. Insert the records in the interface table.
2. Associate the interface table to an item batch definition.
3. Access the Enterprise Storage Server and provide a process name (job definition) such as Import.
4. Indicate the item batch definition.
5. Submit to schedule the import.

You can also access this item batch definition for further modifications through the Manage Item Batches page.

✏ **Note:** The check data quality and import process will be performed based on the item batch options.

Related Topics
- Item Batches: Explained

- Item Batch Data Quality Options: Points to Consider

- Item Batch Structure and Pack Options: Explained

- Item Batch Import and Scheduling Options: Explained

17 Consolidate Product and Service Master Data: Manage Import Batches

Create Item Import Batches

Item Batches: Overview

A product data steward can import items and related entities such as structures, packs, category assignments and trading partner item references from multiple product source systems using an item batch.

The following options are available for item batches:

- Import options let you schedule the batch loads and specify policies for governance, new item requests, and product changes.

- Data quality options for item batches let you classify, standardize, and match item data to ensure clean, consistent data during batch import.

  ✎ **Note:** A separate license is required for Oracle Enterprise Data Quality for Products.

You can add and modify item data to batches using a spreadsheet, XML, CSV or any other delimited files or using industry standard open interface tables.

✎ **Note:** In order to use spreadsheets for item batches you must have the following:
- Microsoft Excel 2007 or later
- The ADFdi add-in for Excel: You can download this from the Tools menu and selecting Download Desktop Integration Installer.

Related Topics
- Manage Imports: Overview

Item Batches: Explained

Create item batches to import sets of item data including product structure and pack hierarchies from multiple product source systems.

Item Batch Definition

When you create a new item batch definition, you select a target organization then specify the product source system and data quality options. Based on the spoke system selected, the options that were defined during source system management are populated. You can override these options for the specific item batch. You can also modify the import batch option settings.

Data quality options determine matching and standardization rules for an item batch to cleanse product data during batch import.

Item batch options let you schedule batch loads, specify product structures and packaging hierarchies, and policies for new item requests and change orders.

Adding Items to an Item Batch

You can add items to the item batch after the definition has been saved.

You can import item data as follows:

1. Microsoft Excel spreadsheet: Enter item information in the downloaded template and upload.
2. Interface tables: Enter item information in the interface tables and import. Requires use of an import template.
3. Import Maps: Create an item batch on the Manage Item Batch page, and select **Actions - Add Items to Batch - Upload from File**. In the **Add Item to Batch: Upload from File** dialog box, specify the import map, the source data file, and the attachments Zip file if you are uploading attachments, and click **Upload File**.

Items can be added with a Microsoft Excel spreadsheet by navigating to either of the Manage Item Batch or Edit Item pages and selecting **Add Items to Batch** from the Actions menu:

The following objects are available for import:

- Items
- Structures and Packs
- Trading Partner Item Relationships
- Category Assignments
- GTIN Relationships
- Item Cross-References
- Related Items
- Trading Partner Items

✎ **Note:** If you select **Items** as the object to be imported, then the item class you specify determines which import formats are available. An import format identifies the base and user-defined attributes in an item class that are imported into the application using a spreadsheet. The import format you specify determines which spreadsheet is downloaded and which columns are included.

Related Topics

- Product Spoke Systems: Explained

- Item Class Import Formats: Explained

Item Batch Options: Explained

Use item batch options to set the schedule of the import, define the default structure and pack options and manage the creation of new item requests and change orders for items being imported.

Item batch options are defined and associated with product source system definitions. When you specify a source system in an item batch definition, the import options associated with the source system are included as default settings in the new item batch definition.

ORACLE

You can modify these settings when you create a new item batch or edit an existing definition.

Depending on the type of item being imported, you can specify item batch options in one or more of the following areas.

- Import and scheduling

- Structures and packs

- Change orders

- New item request

- Data Quality

For external batches, data quality options are determined by whether the product source system is a Fusion or non-Fusion source system. For internal batches, data quality options are determined by the PIM product source system.

Related Topics

- Product Spoke Systems: Explained

Item Batch Data Quality Options: Points to Consider

You can specify data quality options when defining a source system or through an import batch definition by selecting **Check data quality on upload**. Items being created in the Oracle Fusion Product Hub go through the data quality check automatically, while items that are updated using batches must have the data quality check initiated manually. The cleansing process classifies the item, standardizes the attributes and identifies any matches or duplicates that may exist in the product hub. The matching is based on match rules defined in Oracle Product Data Quality.

Check Data Quality Option

The options that are available when you select **Check data quality on upload** are determined by the data source.

- If the items are being created or updated from a third party source system, then the following options are available.

  - **Confirm single matches**
  - **Confirm unmatched as new item**
  - **Run on existing items**

- If the items are being created or updated in Oracle Fusion Product Hub, then the following options are available

  - **Confirm unmatched as new item**
  - **Run on existing items**

Confirm Single Matches Option

The behavior of the **Confirm single matches** data quality option is determined by the data source.

- If items are being created from a third party source system and are imported manually, the following behavior results:

  - Single matches appear on the Confirm tab.
  - Multiple or no matches appear on the Unconfirmed tab.
  - If **Confirm Single Matches** is not selected, then all items will appear on the Unconfirmed tab.

ORACLE®

- If items are being created from a third party source system and are imported during data load, the following behavior results:

  ○ Single matches appear on the Imported tab.

  ○ Multiple or no matches appear on the Unconfirmed tab.

  ○ If **Confirm Single Matches** is not selected, then all items will appear on the Unconfirmed tab.

- If items are being updated from a third party source system and are imported manually, the following behavior results:

  ○ If a cross-reference exists, then no data quality check is performed, and the items appear on the Confirm tab.

  ○ If **Confirm Single Matches** is not selected, a cross-reference exists, and no data quality check is performed, then the items appear on the Confirm tab.

- If items are being updated from a third party source system and imported during data load, the following behavior results:

  ○ If a cross-reference exists, then no data quality check is performed, and the items appear on the Import tab

  ○ If **Confirm Single Matches** is not selected, a cross-reference exists, and no data quality check is performed, then the items appear on the Import tab.

Confirm Unmatched As New Item

The behavior of the **Confirm unmatched as new item**data quality option is determined by the data source.

- If items are being created from a third party source system and imported manually, the following behavior results:

  ○ Items with no matches appear on the Confirm tab

  ○ Items with single or multiple matches appear on the Unconfirmed tab

  ○ If **Confirm unmatched as new item** is not selected then all items will appear on the Unconfirmed tab.

- If items are being created from a third party source system and imported during data load, the following behavior results:

  ○ Items with no matches appear on the Import tab

  ○ Items with single or multiple matches appear on the Unconfirmed tab

  ○ If **Confirm unmatched as new item** is not selected then all items will appear on the Unconfirmed tab.

- If items are being updated from a third party source system and imported manually, the following behavior results:

  ○ If a cross-reference exists, then no data quality check is performed and the items appear on the Confirm tab

  ○ If **Confirm unmatched as new item** is not selected then and a cross-reference exists, no data quality check is performed and the items appear on the Confirm tab.

- If items are being updated from a third party source system and imported during data load, the following behavior results:

  ○ If a cross-reference exists, then no data quality check is performed and the items appear on the Import tab

  ○ If **Confirm unmatched as new item** is not selected then, if a cross-reference exists, no data quality check is performed and the items appear on the Import tab.

ORACLE

- If items are being created or updated from the Fusion Data Hub and imported during data load, the following behavior results:
    - Items with no matches appear on the Import tab
    - Items with single or multiple matches appear on the Unconfirmed tab
    - If **Confirm unmatched as new item** is not selected then all items will appear on the Unconfirmed tab.

- If items are being created or updated from the Fusion Data Hub and imported manually, the following behavior results:
    - Items with no matches, single matches, or multiple matches appear on the Unconfirmed tab

Run On Existing Items Option

The **Run on existing items** option checks data quality on existing items and item cross-references, not just on new items.

- When data quality is checked on existing items (which are thus considered update cases), they remain as Confirmed items.

- The Match Status of existing spoke system cross-referenced items after data quality is checked remains as Cross-Referenced.

- You review data quality results in the details section for the specific item in the Data Quality subtab, which is available for item imports that are in progress.
    - The Classification region displays item class and catalog or category classification.
    - The Standardization region displays standardized attribute values.
    - The Matching region displays any matches found.
        - If multiple matches are found, the existing cross-referenced item is defaulted as the match. You can select another product hub item as a match, if applicable.
        - If a new match is selected, on import, the current spoke system cross-reference is end-dated and a new spoke system cross-reference is created with the new matched item.

- Example: A new spoke item S1 is imported as item P1. A cross-reference is created between S1 and P1. In the next upload, S1 is considered already confirmed, since it is an update case. Data quality is checked on S1 and the results are presented. Matches are found for items P1, P2, and P3. In the Matching region, P1 is defaulted.
    - Scenario 1: If you make no changes to the matching, then, during an import, item P1 is updated.
    - Scenario 2: If you select P2, then, on import, the cross-reference between S1 and P1 is end-dated and a cross-reference between S1 and P2 is created.

- As part of the data quality check, GTIN and Trading Partner Item (TPI) matching is also performed.

- The Match Type for an item after a data quality check will be the respective Match Type of the item is based on.

Related Topics
- Data Quality: Explained

Item Batch Import and Scheduling Options: Explained

Item batch import and scheduling options let you set the schedule of the import, specify item cross-references imports, and specify a versioning policy.

Cross-References Only

If you select **Cross-References Only** in the Create Item Batch dialog, then no source system data is imported. A cross-reference of the source system item is created with a matched, new, or cross-referenced item in the Oracle Fusion Product Hub.

> ✎ **Note:** You can only select the **Cross-References Only** option when creating an item batch. If the source system specified in the item batch definition is Product Information Management Data Hub, then the **Cross-References Only** option is not available for selection.

If you select **Cross-References Only**, then item batch options for new item requests and change orders are not available. However, options can be set for structures and packs.

Schedule

Determine when the data specified in the item batch will be imported.

- **On Data Load**: Import process is run immediately at the time of data upload
- **Manual** (default): Lets you import the data at a later time.
- **Specify Date and Time**: Lets you specify the date and time to import the confirmed items or structures in the item batch

Version Policy

Specify how versioning is handled for items under version control that are being imported.

- **Merge Draft**: Enables the item to be merged with an existing draft version of the item.

  If the item being imported is locked by another user, then you cannot merge item data that is versioned. If the data that is not versioned, then it will be imported.

- **Bypass Draft**: Enables a new item version to be created at data load. Any changes in the draft version are not included in the new version.

  If the item being imported is locked by another user, then you cannot create a new version, and item data that is versioned will not be imported. If the data that is not versioned, then it will be imported.

Process Items

Specify whether to process items in the item batch individually or as part of a pack.

- **Per Item**: Process imported items individually.
- **Per Pack**: Process imported items as part of a pack. If any item in a pack fails the validation checks, then all items which are part of that pack are rejected.

Related Topics

- Revisions: Explained

Item Batch New Item Request Options: Explained

Item batch new item request options let you create new item requests or add to existing new item requests when importing items or structures.

The following are the basic new item request options:

- **One per Item**
- **One per Item Class**
- **One per Item Batch**
- **One per Item Bundle**

If you select **One per Item Bundle**, then the resulting new item request will include only those items that are identified with the same bundle, which normally indicates a pack. Consequently, all items belonging to a pack will be included in a single new item request.

If you select the **Cross-References Only**option when creating an item batch, then new item request options are unavailable.

You can select the **Add all items** check box to import all of the items in the import batch and route them to new item requests, overriding item class requirements that may be defined for the items.

For all new item request options, those items associated with rules that require approval for changes will be added to the new item request. If desired, you can specify to add all imported items to the new item request.

If you choose **One per Item Class** then indicate whether to create a new item request or add to an existing one.

If an item being imported as part of a new item request is later rejected, you can resubmit the item as part of an item batch, instead of having to create another new item request and move rejected item lines there one by one. After you resubmit the item in an import batch, its **Approval Status** field includes a link to the new item request that is created by that import.

Related Topics

- New Item Requests Workflow Statuses: Explained

Item Batch Change Order Options: Explained

Item batch change order options let you create change orders or add to existing change orders when importing items or structures.

The **Change Order** option lets you control the number of new change orders that the batch import will generate:

- **One per Item**
- **One per Item Class**
- **One per Item Batch**
- **One per Item Bundle**

If you select **One per Item Bundle**, then the resulting change order will include only those items that are identified with the same bundle, which normally indicates a pack. Consequently, all items belonging to a pack will be included in a single change order.

If you select the **Cross-References Only** option when creating an item batch, then change order options are unavailable.

You can select the **Add all items** check box to import all of the items in the import batch and route them to change orders, overriding approval rules defined for the items.

For all change order options, those items associated with rules that require approval for changes will be added to the change order. If desired, you can specify to add all imported items to the change order.

ORACLE®

If you choose **One per Item Batch** then indicate whether to create a new change order or add to an existing one.

Related Topics

- Change Orders: Information They Modify

- Change Order Definitions: Explained

- Change Order Workflow: Explained

Item Batch Structure and Pack Options: Explained

Item batch structure options let you specify a defined item structure, how structure effectivity is controlled, and which structure components are updated. The item batch pack option lets you specify which pack components are updated.

Structure Effectivity Control

The following controls determine when changes to product structure components become effective:

- **Date**: Effectivity on a specified date
- **Model Unit Number**: Effectivity based on unit number
- **Serial**: Effectivity based on the serial number assigned to each unit of an item

Update Options

You can select to update only those pack or structure components that have changed, or you can update all.

Related Topics

- Managing Product Structures: Explained

- Item Structures: Explained

Manage Item Batch Details

Intrabatch Items in Item Batches: Explained

As part of the data quality check process, duplicate items that are being uploaded from the source items are identified. These duplicate items are displayed on the Intrabatch page organized into groups of similar source system items.

Compare the items in each group and take one of the following actions on them:

- **Include**: The item will be included in the Oracle Fusion Product Hub.

- **Exclude**: Excludes this item from this import and all subsequent imports.
  The next time the same item data is uploaded within a batch, it appears in the Excluded tab for that batch.

- **Cross Reference**: Establishes a cross reference between the source system items. This source item appears on the Cross-Referenced tab.

- **Switch**: Interchange the source system item top node with a selected child node.

ORACLE®

Intrabatch Items and Cross-References in Item Batches: Example

This example shows the relationship between the items being imported that are identified as intrabatch items and how they are cross referenced among themselves and with a new item being created.

Scenario

Three new items from the source system named Item A, Item B, and Item C are uploaded into an item batch. This is the first time items are being uploaded from this source system.

As part of the data quality check process, duplicate items that are being uploaded from the source items are identified. These duplicate items are displayed on the Intrabatch page organized into groups of similar source system items, so Item A, Item B, and Item C are grouped together.

On the Intrabatch page, you can take action to include Item A, cross reference Item B and exclude Item C before submitting the batch.

When the batch is processed, no matches are found. Before the items are imported, the Item Batch Details page will include the following information:

Item A appears on the Confirmed tab because the batch option is set to confirm no matches as New.

Item B appears on the Cross-References tab showing: the cross-reference of Item B to Item A as a result of the intrabatch data quality check

Item C appears on the Excluded tab.

On import, a new item in the Oracle Fusion Product Hub named Item D is created for the Item A source system item and the cross references are established.

The Cross References tab will now show the following: cross references of Item D to Item A and Item D to Item B.:

The intrabatch cross reference of Item B to Item A is recalculated against the new Item D in Oracle Fusion Product Hub.

Unconfirmed Items in Item Batches: Explained

On the Unconfirmed tab, you manage the results of the data quality and item matching checks performed on the items in the batch and take appropriate action.

Data Quality Results

Data quality results for each item are:

- Classification: Classifies the item and also assigns it to catalog categories.

- Standardization: Standardizes the attribute values of the item.

- Matching: Checks for duplicates in Oracle Fusion Product Hub.

Matching Results

There are the three matching result types:

- **Multiple Match**: There is more than one match found for the source item in Oracle Fusion Product Hub.

- **Single Match**: There is only one match found for the source item in Oracle Fusion Product Hub.

- **No Match**: There are no matches found for the source item in Oracle Fusion Product Hub.

Matching Actions

You can review and specify a match action for each unconfirmed item:

- **Confirm**: Matches the source item with an existing item in Oracle Fusion Product Hub.

- **Exclude**: Excludes this item from this import and all subsequent imports.

  The next time the same item data is uploaded within a batch, the item data appears on the Excluded tab for that batch.

- **Ignore**: Temporarily excludes this item from import.

  The next time the same item data is uploaded within a batch, the item data appears on the Excluded tab for that batch.

- **New Item**: Confirms that a new item must be created during import for this source item in Oracle Fusion Product Hub.

Managing Unconfirmed Items

You can also perform the following tasks on the Unconfirmed tab.

- You can modify the item information that appears on the Unconfirmed tab and add more items by selecting **Manage in Spreadsheet** from the Action menu or by clicking the **Manage in Spreadsheet** icon to download an item information spreadsheet.

- If an unconfirmed item is associated with a structure or pack, you can click the icon in the **Structure or Packs** column to display structure and batch details.

  You can modify structures or packs by clicking **Manage in Spreadsheet** and selecting the appropriate template to download.

Update and then upload the spreadsheet to incorporate your changes.

Click **Check Data quality** to perform additional data quality checks after making changes to unconfirmed items.

Related Topics

- Data Quality: Explained

Confirmed Items in Item Batches: Explained

On the Confirmed tab, you manage items that have been matched and confirmed using matching rules along with new items in the batch.

Confirmed Item Types

Confirmed item types:

- **Cross-Referenced**: A cross-reference with an item in the Fusion Product Hub will be created during import

- **Matched**: The match selected for the item is confirmed

- **New Item**: A new item will be created during import for this item in the Fusion Product Hub

Matching Actions

You can review and specify a new match action for each confirmed item:

- **Unconfirm**: Move the item to the Unconfirmed tab for further updates.

    > ✏️ **Note:** You can also unconfirm a cross-reference. Once you do this, the item moves to the Unconfirmed tab with no match. When you find a new match for the unconfirmed item, the status for that matched item becomes a single match. Upon import, the existing cross-reference is end-dated and the new cross-reference is created with a start effective date equal to the import date.

- **Confirm**: Match with an existing source item in the Fusion Product Hub

- **Exclude**: Excludes this item from this import and all subsequent imports.

    The next time the same item data is uploaded within a batch, it appears in the Excluded tab for that batch.

- **Ignore**: Temporarily excludes this item from import

    The next time the same item data is uploaded within a batch, it appears in the Excluded tab for that batch.

Confirmed Item Detail

The following detailed information is displayed for a highlighted confirmed item

- Structures
- Packs
- Category Assignments
- Relationships

Importing Confirmed Items

Select **Import** to import all items into Fusion Product Hub

Structures and Packs in Item Batches: Explained

Review and compare source system product structures and pack components and those in Oracle Fusion Product Hub.

For product structures, you can add or remove attributes to facilitate comparison.

Component Actions indicate if the structure or pack is being added, modified, or deleted.

Use the drop-down list in the **Match Action** column to confirm, unconfirm, exclude, or ignore the structure or pack.

Related Topics

- Managing Product Structures: Explained

ORACLE

Relationships in Item Batches: Explained

On the Relationships tab, review the relationships being imported for each of the items on the Confirmed tab (if applicable).

Depending on the data, confirmed item relationships can be organized in up to four areas:

- Related items
- Trading partner items
- Global Trade Identification Number cross-references
- Cross-references

Related Items

You can review confirmed relationships based on predefined and user-defined relationship types, such as superseded items, substitutes, and complimentary items. Additional item attributes further qualify the relationship and effectivity dates indicate when these relationships are phased in and out.

Trading Partner Items

You can review the relationship of the confirmed item with the trading partner items.

GTIN Cross-References

GTIN cross-references relate confirmed items using the industry standard, enabling tracking and identification of trading partner items.

Cross-References

Cross references identifies items that have been consolidated from multiple source systems into a single master item.

Related Topics

- Item Relationships: Explained

Category Assignments in Item Batches: Explained

On the Category Assignments tab, you can review the catalog category assignments for each of the items on the Confirmed tab.

The category assignments for items displayed on this tab are derived in one of two ways:

- Data quality classifies an item and it can also assign it to alternate catalog categories.

- Category assignments are imported for an item by selecting **Item Category Assignment** when you add items to the batch.

Imported Items in Item Batches: Explained

The Imported tab displays all items that are imported into the Oracle Fusion Product Hub.

Imported Item Details

Besides the detail displayed on each line of the imported item table, you can access more details on item components as follows:

- **New Item Request**: Click on the new item request name to go to the New Item Request summary page.
- **Change Order**: Click on the change order name to go to the Change Order summary page.

Item Import Status

Each imported item can have one of the following import statuses:

- **Success**: The item and all its related entities were imported successfully
- **Partial**: The Item was imported successfully, but some of its entities had errors during import
- **Error**: The item itself had errors during import

Highlight an item with an import status of **Partial** or **Error** to display details.

Updating Imported Items with Errors

You can modify the items that appear on the Imported tab by selecting **Export** from the Action menu or clicking the **Manage in Spreadsheet** icon. Correct the data and click Upload in the spreadsheet to apply your changes.

Excluded Items in Item Batches: Explained

On the Excluded tab, you manage the items that are not imported into the Oracle Fusion Product Hub as the result of the data quality and item matching checks performed on the items in the batch

- The excluded status is retained for an item in future batch imports and the item will be automatically placed on the Excluded tab
- Items that are marked as **Ignored** are not import into Fusion Product Hub for that batch only.
- You can change the statuses of **Excluded** and **Ignored** to **Unconfirm** or **Confirm**. These items will then be moved to the Unconfirm or Confirm tabs respectively.

Cross-References in Item Batches: Explained

On the Cross-References tab, you can review source system and intrabatch item cross references.

The cross-references for items displayed on this tab are identified in one of following ways:

- Item batch import and scheduling options let you specify item cross-references imports

  If you select **Cross-References Only**, then no source system data is imported. A cross-reference of the source system item is created with a matched, new, or cross-referenced item in the Oracle Fusion Product Hub.

- Data quality checks for duplicates within the source items being uploaded. These duplicate items are displayed on the Intrabatch page, organized into groups of similar source system items. You can establish cross references between selected items on this page and source system items.

  When the batch is processed, the intrabatch cross-reference is converted to a regular cross reference against the new item in Oracle Fusion Product Hub and appears on the Cross-Reference tab.

  This means that if such an item is included in another item batch, it will be considered an update and placed on the Confirmed tab.

  ✏️ **Note:** You can also unconfirm a cross-reference. Once you do this, the item moves to the Unconfirmed tab with no match. When you find a new match for the unconfirmed item, the status for that matched item becomes a single match. Upon import, the existing cross-reference is end-dated and the new cross-reference is created with a start effective date equal to the import date.

Reject Item Batches: Explained

You can reject an item batch in one of the following ways

- Highlight an item batch on the search results table on the Manage Item Batches page and select **Reject** from the Action menu in the search results table.

- Access the Edit Item Batch page and then select **Reject** from the Action menu.

  ✏️ **Note:** You cannot reject an item batches with a status of **Completed**.

Reassign Item Batches: Explained

You can reassign an item batch to a different user in one of the following ways:

- Highlight an item batch on the search results table on the Manage Item Batches page and select **Reassign** from the Action menu in the search results table.

- Access the Edit Item Batch page and then select **Reassign** from the Action menu.

  ✏️ **Note:** You cannot reassign an item batch with a status of **Completed**.

  ✏️ **Note:** You can only add items to item batches that are assigned to you.

Item Batch Completion: Explained

Item batches can be completed by navigating to either of the following pages and selecting **Complete** from the Actions menu:

- **Manage Item Batch page**: Search for and highlight the item batch you want to complete.
- **Edit Item Batch page**: Search for and access the item batch for editing.

✏️ **Note:** You cannot reassign or reject an item batch with a status of **Completed**.

FAQs for Import Batch

Can I add items to a batch if it is not assigned to me?

No, you can only add items to item batches that are assigned to you.

How do I perform an impact analysis?

To perform an analysis, simulate the conditions by applying all the rules, including those in Draft status.

Item Import Using Import Maps

Item Import Using Import Maps: Explained

Retailers may be required to upload data without using the ADFdi Excel format and suppliers may send product and catalog data as comma-separated values (CSV) or Extensible Markup Language (XML) files. Suppliers may use standard industry formats, such as BMECat or eClass, or others. Users need to onboard or upload the data provided by suppliers into Oracle Fusion Product Hub.

The following is an overview of the actions that can be performed when importing items using import maps.

Bring in data in XML format directly through an import batch without having to reformat it.

- Upload item data in XML format directly to an import batch. The data will be processed and placed in interface tables before being imported into Fusion Product Hub.

- When uploading the XML file, map the elements of the XML file to the Product Hub data columns to facilitate moving the data into interface tables.

- Preview the data from the XML file after mapping the XML elements to the Product Hub data columns.

- Save the mapped data columns to be reused later for another data upload.

- Optionally, link saved maps to suppliers so only relevant maps are used by suppliers.

- The data map can be inherited from parent's item class.

- Import maps can be used to upload data to an item batch of any source system.

- Data errors encountered during the XML file upload will be identified along with the type of errors and presented to user in a report.

- XML file upload will also preprocess all the data records so that users can navigate to the batch details and look at the data in the interface tables.

Bring in product data in CSV file format directly through an import batch without having to reformat it.

- Upload item data in CSV format directly to an import batch. The data will be processed and placed in interface tables before being imported into Fusion Product Hub.

ORACLE®

- When uploading the CSV file, map the metadata (columns) of the CSV file to the Product Hub data columns to facilitate pushing the data into interface tables.

- Preview the data from the CSV file after mapping the CSV columns to the Product Hub data columns.

- Save the mapped data columns to be reused later for another data upload.

- Optionally, link saved maps to suppliers so only relevant maps are used by suppliers.

- Import maps can be used to upload data to an item batch of any source system.

- Data errors encountered during the CSV file upload are identified along with the type of errors and presented to user along with sample data rows. Using this, rectify the data errors and upload the CSV again.

- CSV file upload will also preprocess all the data records so that users can navigate to the batch details and look at the data in the interface tables.

Manage item batches.

- Create an import map while uploading source file data to item batch from Manage Item Batches page.

- Additionally, create an import map from the Manage Import Maps page

- Edit and delete import maps from the Manage Import Maps page.

Map source data for items, packs, and structures.

- Upload a CSV or XML file using the controls in the Source File region.

- Map the CSV columns or XML elements to entities in the Master Data table.
    - Map data sources by dragging them from the Source Data table and dropping them on the corresponding entities in the Master Data table.
    - Map data sources by selecting **Map Source Columns** from the Actions menu of the Source Data table and then selecting the corresponding entities in the Master Data table in the Select Master Column dialog.

- Expand the Pack and Structure nodes in the Master Data table to expose the attributes of packs and structures. By mapping to these attributes you can import pack and structure hierarchies.

- Map source data to item attributes in the Master Data table so that items are imported along with packs or structures..

- Use the Import Entity filter to restrict the type of entity displayed in the Master Data table. You can filter for items, packs, or structures, or display all entities.

- Source data columns that contain values in multiple languages can be mapped to attributes that support multiple languages. The language of a source column is identified by the value of the language code column in that row. Use the Language filter on the Master Data table to display and map the attributes for a particular language code, such as ʊs for American English.

Transform source data using complex expressions before importing it through an import batch.

- Write basic transformation expressions using functions like Split and Concat (concatenate) for the source data before importing the source data.

- Write functions independent of the file type used for uploading the data.

- Write expressions using the Split function, which takes one source data value as input and the delimiter from which the value is to be split. The Split function takes in the value to be split, delimiter and part number which is to be returned. The Split function splits the input value according to the delimiter provided into parts and returns the part of the input value pertaining to the provided part number.

- Write a Concat function which takes multiple source data values as input and concatenates them to a single value.

- Select a row in Source Data table.

- Select the Master Data Column in which the evaluated value of the expression will be uploaded.

ORACLE

- Select the desired function.
- Build the expression by selecting Source Data columns.
- Optionally, validate the expression.

Associate multiple suppliers with the import map.

- Select the **External** check box to enable all suppliers to access the import map as a template in Oracle Fusion Product Hub Portal.
- If you enable external suppliers, you can then specify which ones can access the import map. Click the **Manage Suppliers** button and use the **Manage Suppliers** dialog to add only the desired suppliers.

Import items to multiple organizations.

- Map a source data column that identifies the organization for an item to the master data attribute Item.Main.Organization.
- During import, source items are assigned to the organization identified in the source data.

Importing Item Data using Import Map: Procedure

You can use import maps to upload item data in formats other than the ADFdi Excel format into the Oracle Fusion Product Hub.

You can map source data, from comma-separated values (CSV) and Extensible Markup Language (XML) files, to the master data.

When you specify a CSV or XML source data file while creating or editing import maps in the Managing Import Maps page, the file data is not uploaded to Product Information Management. You can upload source data using import maps from the Manage Item Batches page.

You can create an import map or edit an existing import map using the following procedure.

Create an import map

Create an import map as follows.

1. In the Product Information Management work area, select the **Manage Import Maps** task from the panel drawer.
2. Click the Create icon on the toolbar or select **Actions - Create** from the menu. The Create Import Map page displays.

   ✎ **Note:** Alternatively, to edit an existing map, search for and select the map, and click the Edit icon on the toolbar or select **Actions - Edit** from the menu. The Edit Import Map page displays.

3. Specify the import map information listed in the following table.

UI Element	Description
Import Map	Enter a name for the import map. This field is required.
Description	Enter a description of the import map.
Item Class	Select the Item class for which to create the import map.

ORACLE®

UI Element	Description
Source Map	Select a source map to inherit its import map details. The Data Map section is populated with inherited item mapping information. You can map additional source data, but you cannot edit or delete the inherited item mapping details.
External	Select to specify that the mapping can be used for third-party, external suppliers.
Suppliers	This option appears if you select **External**. Click the **Manage Suppliers** icon to view the **Manage Suppliers** dialog box, and select the supplier for which the import map is defined, and who can view the import map. You can specify multiple suppliers. If no supplier is specified, the import map displays for all suppliers.
Active	Select to enable the import map for use.

Specify source file information

Specify information in the Source File section as specified in the following table.

UI Element	Description
File Type	Specify the source file type to be used to upload data. Options are: Text, XML.
Delimiter	Specify the type of delimiter used in the source data file. Options are: Comma, Tab, Colon, Semicolon, Pipe, Space, Other.
Date Format	Select a format for the date.
Time Stamp Format	Select a format for the time stamp.
Encoding Type	Select an option to specify the file encoding format. Options are: US-ASCII, ISO-8859-1, UTF-8, UTF-16BE, UTF-16LE, UTF-16.
Upload From	Select **Desktop**, **URL**, or **Network** from which to upload source data. Specify the source data file location: • Desktop: Click **Browse** and select the source data file. • URL: Enter the URL for the source data. • Network: Specify whether the file is a recent file or a specific file. Enter the path of the source data file.
Templates	Displays the Microsoft Excel templates generated for the import map.

Map Source Data and Master Data Attributes

The data columns from the source file display in the Source Data table. The Master Data table displays the item attributes available in the Oracle Fusion Product Hub. You can map one source map attribute to multiple master data attributes, but not vice versa. You can create expressions on source data attributes to combine multiple source data attributes and map the expression to a master data attribute.

1. Drag and drop a data column from the Source Data table to an attribute in the Master Data table to map them. Alternatively, select a data column in the Source Data table, select **Actions - Map Source Columns**, select a master data attribute in the Select Master Column dialog box, and click **OK**.
2. Select a source data column and click **Create Expressions** on the toolbar. The Create Expression page displays.
3. Click **Select** to specify the master data column with which to map the expression. The Select Master Column dialog box displays.
4. Search for and select the master data column and click **OK**.
5. Select a function in the **Functions** tab and click **Insert**. The expression format displays in the pane at the bottom of the Create Expression page.
6. In the expression format, position the cursor where you want to add an attribute, select the source attribute in the **Source Columns** tab, and click Insert. The column is added to the expression.
7. Insert the required columns to the expression format to create the required expression. You can delete the placeholder text from the expression format.
8. Click **OK** to create the expression and map it to the master data attribute. The Create Expression page closes, and the expression you created displays in the **Expression** column in the Source Data table of the Create Import Map page.

   ✎ **Note:** Alternatively, to save an expression and create another expression on the same source data column, click **Apply and Create Another** on the Create Expression page.

9. In the Preview Data section, click the **Refresh** icon or select **Actions - Refresh** from the menu. The table is populated with mapped data. You can preview the result of the mapping and make changes if required.
10. Click **Generate Templates** if you want to create a Microsoft Excel template, also referred to as Smart Spreadsheet, for the import map.
11. Click **Save**.

Related Topics

- Uploading Products with Smart Spreadsheets: Explained

Functions for Product Data Management Import Map Expressions

You can create expressions using one or more source data columns and map them to master data attributes. For example, the Long Description attribute in Master Data may include information from the Item and Description columns of the Source Data.

The functions used to create expressions can be of type String, Math, Generic, and Calendar.

String Functions

The string functions available for creating expressions are listed in the following table.

ORACLE

Name	Description	Expression	Example
toDate	Converts a string value to a date value with the date format matching the date format in the context.	toDate(expression)	If Attribute1 = 10-31-1997, format = MM-dd-yyyy Depending on locale: toDate([Attribute1]) = 10-31-1997 or 1997-10-31
toDateTime	Converts a string value to a time stamp value with the time stamp format matching the import map time stamp format.	toDateTime(expression)	If Attribute1 = 2000.01.31 12:01:01, format = yyyy. MM. dd hh:mm:ss Depending on locale: toDateTime([Attribute1]) = 2000.01.31 PST or 12:01:01 PM
concat	Concatenates the specified character strings.	concat(expression1, expression2, ... expression30)	If Attribute1 = Item, Attribute2 = Description concat([Attribute1], [Attribute2]) = ItemDescription
length	Returns the length, in number of characters, of a specified string. The length excludes blank characters.	length(expression)	If Attribute1 = Item length([Attribute1]) = 4
split	Splits character string at the specified delimiter and returns the specified part of the string. Delimiter can be any regular expression or special character.	split(expression, delimiter, partNumber)	If Attribute1 = Item#Description split([Attribute1], #,2) = Description
substring	Creates a new string of specified length, starting from the specified character number in the original string.	substring(expression, startPosition, length)	If Attribute1 = ItemDescription substring([Attribute1], 0,4) = Item
insert	Inserts a specified character string into the specified location in another character string.	insert(expression1, integer1, expression2)	If Attribute1 = ItemDescription, Attribute2 = Long insert([Attribute1], 5, [Attribute2]) = ItemLongDescription
newLine	Inserts a newline character at the end of the specified string.	newLine()	If Attribute1 = Item, Attribute2 = Description concat([Attribute1], newLine(), [Attribute2]) = Item Description
uppercase	Converts a character string to uppercase.	uppercase(expression)	If Attribute1 = item uppercase([Attribute1]) = ITEM

Name	Description	Expression	Example
lowercase	Converts a character string to lowercase.	lowercase(expression)	If Attribute1 = ITEM lowercase([Attribute1]) = item

Math Functions

The math functions available for creating expressions are listed in the following table.

Name	Description	Expression	Example
random	Returns a pseudo-random number between 0 and 1.	random()	If Attribute1 = 25 random()*([Attribute1]) = random number
round	Rounds a numeric expression to n digits of precision.	round(expression, integer)	If Attribute1 = 10.45 round([Attribute1], 0) = 10

Generic Functions

The generic functions available for creating expressions are listed in the following table.

Name	Description	Expression	Example
nvl	Returns the value of expression2 if the value of expression1 is blank, else returns the value of expression1.	nvl(expression1, expression2)	If Attribute1 = blank, Attribute2 = Item, Attribute3 = Description nvl([Attribute1], concat([Attribute2], [Attribute3])) = ItemDescription
decode	Returns the value of expression3 if the value of expression1 equals value of expression2, else returns the value of expression4.	decode(expression1, expression2, expression3, expressiosn4)	If Attribute1 = Item, Attribute2 = Item, Attribute3 = Match, Attribute4 = No Match decode([Attribute1], [Attribute2], [Attribute3], [Attribute4]) = Match
toString	Converts an object to its string representation.	toString(expression)	If Attribute1 = 4 toString([Attribute1]) = 4
getCustomObjectValue	Returns the value of custom object attribute corresponding to the specified custom object attribute and expression.	getCustomObjectValue(customObjec customObjectReturnAttributeApiNam customObjectQueryAttributeApiNam expression1, . . . customObjectQueryAttributeApiNam	If CustomObject = Manufacturer Details, CustomObjectAttribute1 = Media Inc., CustomObjectAttribute2 = MI, CSV Column1 = MI getCustomObjectValue("CustomObject", "CustomObjectAttribute1",

ORACLE

Name	Description	Expression	Example
			"CustomObjectAttribute2", [CSV Column1]) = Media Inc.

Calendar Functions

The calendar functions available for creating expressions are listed in the following table.

Name	Description	Expression	Example
currentDate	Returns the current date.	currentDate()	01/17/2017
currentTime	Returns the current date and time.	currentTime()	01/17/2017 10:30:45 AM
dayName	Returns the name of the day for a specified date.	dayName(expression)	If Attribute1 = 01/17/2000 dayName([Attribute1]) = Monday
dayOfMonth	Returns the number of the day of the month for a specified date.	dayOfMonth (expression)	If Attribute1 = 01/17/2017 dayOfMonth([Attribute1]) = 17
dayOfWeek	Returns the number of the day of the week for a specified date.	dayOfWeek (expression)	If Attribute1 = 01/17/2017 dayOfWeek([Attribute1]) = 2
dayOfYear	Returns the number of the day in the year for a specified date.	dayOfYear (expression)	If Attribute1 = 01/17/2017 dayOfYear([Attribute1]) = 17
month	Returns the number of the month for a specified date.	month(expression)	If Attribute1 = 01/17/2017 month([Attribute1]) = 1
year	Returns the year for a specified date.	year(expression)	If Attribute 1 = 01/17/2017 Year([Attribute 1]) = 2017

Creating Import Maps: Worked Example

This example shows how to create a data import map to import data using Comma Separated Values (CSV) or Extensible Markup Language (XML) files.

Create Import Maps

1. Click Manage Import Maps in the regional task pane.
2. From the Actions menu, select Create.
3. On the Create Import Map page, enter a name and description of the import map.

ORACLE®

4. Optionally, associate one or more suppliers with the import map.

   From the Manage Suppliers window, click the Add to add a row.

   In the Supplier Name column, select a supplier.

   Click OK.

5. Select an item class. The default value is Root Item Class, which can be changed.

6. Optionally, select a Parent Item Class map if existing mappings need to be inherited.

   Use this field to specify an import map of any of the parent item classes of the item class selected in the Item Class field.

   Any mappings done in the import map selected in the Parent Item Class Map field will get inherited to the import map being created or edited.

   When using an import map, inherited mappings cannot be edited or cleared..

7. Upload a file from your desktop, a URL, or a network.

   Users can only create, edit, or delete import maps through the Manage Import Maps page. They cannot upload any data while creating or editing import maps.

   While creating an import map from Manage Import Maps page, users can upload the CSV or XML file to the import map, but the data from the CSV or XML files does not get uploaded to interface table. The upload of data to interface tables cannot be accomplished while creating or editing import map from Manage Import Maps page. It can only be performed while creating or by using existing import maps from Manage Item Batches page.

   While uploading the data to item batch, if there are any errors, then none of the data gets uploaded. It is an all or nothing approach.

   If there are errors, the user is shown the Error pop up listing the row numbers of the errors grouped by Error Type.

   The Error Types are:

   ○ Format

   ○ Data length

   ○ Expression

8. In the Data Map region, drag and drop is implemented. Create mappings by dragging rows from the Source Data table to the Master Data table. Additionally, create expressions on Source Data rows for transforming the data before uploading it to item batch.

9. Preview the data, if needed.

10. Save.

Supplier Product Uploads: Explained

Suppliers can upload product data, using a file, through Oracle Fusion Product Hub Portal.

Upload Flow

The following table describes the basic product upload flow when your supplier uses Product Hub Portal. This flow assumes that you are responsible for managing import of data to production tables, and that you have set up a spoke system for your product data supplier.

Who (User)	Where (Location)	What (Objects)	How (Action)
You	Edit Import Map page	Import map	Select the **External** option and choose the suppliers who will upload data. Select a source data file and map columns of source data to master data attributes.
You	Edit Import Map page	Import map source data file	Use the Generate Templates action to generate templates that suppliers can download in product hub portal.
Your supplier	Product Uploads page in Product Hub Portal	Import map source data file	Click **Download Templates** and download the source data template file, which is named for the corresponding import map.
Your supplier	Downloaded Template	Smart spreadsheet	Enter the product data and generate the data file to be uploaded to product hub portal.
Your supplier	Product Uploads page	Generated data file	Click **Upload File**, then specify the category and data file. A default name for the upload is provided. Click **Upload** to start the upload of the source data file to the interface tables.
You	Review Supplier Uploads page	Product information	Review and accept or reject products uploaded by suppliers and create item batches.
You	Manage Item Batches page	Item batch containing the data upload	Review the new item batch and import options for the spoke system definition for your supplier.
You	Manage Item Batches page	Item batch containing the data upload	The item batch page includes details about the outcome of the import process.
You Your supplier	Product Information Management work area Supplier Portal work area	Worklist notifications email messages	Events in the flow generate informational messages or emails, prompting you and your supplier to take action as needed.
Your supplier	Schedules page	Schedules	Examine the status of the schedule. Stop the schedule if desired. Edit future runs of the schedule if it hasn't completed them.

18 **Manage Supplier Products**

Managing Supplier Products: Overview

Users with the Supplier Product Administration role create products in Product Hub Portal that are sent to the Product Hub for review.

Users can create supplier products in the Product Hub Portal UI, using the smart spreadsheet or through a scheduled upload. The product data steward reviews the products and either requests more information, rejects, or approves the products. Products that need more information or are rejected are sent back to the supplier. The supplier can view the product status on Manage Products page. Products that are accepted are added to an item batch. When the item batch completes, the products are available in Product Hub with a status of Imported.

Creating Supplier Products: Overview

Supplier products can be created three ways in Oracle Fusion Product Hub Portal:

1. Through the Create Product task in the Product Hub Portal.
2. Upload a file.
3. Through a scheduled product upload.

Creating Supplier Products: Explained

Suppliers can manage their own products from Product Hub Portal. They can create, edit and bulk upload the products as well as monitor the status of the products. The products created by the suppliers get stored in a staging area.

While creating and editing the products they can provide data for the various product attributes as well as upload product specific attachments. To create a product:

- Select the category for which the product is to be created.

- Fill in the required attributes such as Product name, Description and so on.

- Optionally, attach attachments to the product.

- Save or Submit the product.

  ✎ **Note:** A saved product remains in a Draft status until it is submitted. Once a product is submitted, the Product Data Steward can review the submitted product before importing it into Product Hub.

Supplier Product Uploads: Explained

Suppliers can upload product data, using a file, through Oracle Fusion Product Hub Portal.

Upload Flow

The following table describes the basic product upload flow when your supplier uses Product Hub Portal. This flow assumes that you are responsible for managing import of data to production tables, and that you have set up a spoke system for your product data supplier.

Who (User)	Where (Location)	What (Objects)	How (Action)
You	Edit Import Map page	Import map	Select the **External** option and choose the suppliers who will upload data.
			Select a source data file and map columns of source data to master data attributes.
You	Edit Import Map page	Import map source data file	Use the Generate Templates action to generate templates that suppliers can download in product hub portal.
Your supplier	Product Uploads page in Product Hub Portal	Import map source data file	Click **Download Templates** and download the source data template file, which is named for the corresponding import map.
Your supplier	Downloaded Template	Smart spreadsheet	Enter the product data and generate the data file to be uploaded to product hub portal.
Your supplier	Product Uploads page	Generated data file	Click **Upload File**, then specify the category and data file. A default name for the upload is provided. Click **Upload** to start the upload of the source data file to the interface tables.
You	Review Supplier Uploads page	Product information	Review and accept or reject products uploaded by suppliers and create item batches.
You	Manage Item Batches page	Item batch containing the data upload	Review the new item batch and import options for the spoke system definition for your supplier.

ORACLE®

Who (User)	Where (Location)	What (Objects)	How (Action)
You	Manage Item Batches page	Item batch containing the data upload	The item batch page includes details about the outcome of the import process.
You Your supplier	Product Information Management work area Supplier Portal work area	Worklist notifications email messages	Events in the flow generate informational messages or emails, prompting you and your supplier to take action as needed.
Your supplier	Schedules page	Schedules	Examine the status of the schedule. Stop the schedule if desired. Edit future runs of the schedule if it hasn't completed them.

Related Topics

- Item Batches: Explained

- Item Import Using Import Maps: Explained

- Creating Import Maps: Worked Example

Uploading Products with Smart Spreadsheets: Explained

Product data stewards can generate Smart Spreadsheets for import maps. These spreadsheets help users in reducing the data entry errors while creating the data files that are to be used for importing data into Product Hub. These spreadsheets contain the attributes that are mapped in the import map with their respective list of valid values and metadata information, such as, data type, maximum length, and precision. The data entered in the spreadsheet gets validated against the attribute metadata. Data files can then be generated from the populated spreadsheets which can then be used to import data into Product Hub.

Supplier users can download the Smart Spreadsheets that are exposed to them by the Product Data Stewards. They can use these spreadsheets to fill out their product data and generate the data files which can then be uploaded to Product Hub Portal. The Smart Spreadsheets contain the metadata information of the item attributes that are mapped in the Import Map to which the spreadsheet belongs to. The supplier users can use this information to accurately fill in their product data. The metadata information could be valid values that can be entered for the item attributes, the maximum number of characters that can be entered for an item attribute, the data type of the item attribute, and so on.

To generate the Smart Spreadsheets, Product Data Stewards need to click the Generate Templates button in the Source Data region of the Import Map and then select the languages for which the spreadsheets are to be generated.

Once the supplier users have generated the data file from the template file filled with their product data, they can create a Product Upload to which they can upload the generated data file. The product upload will then read and validate the data in the file and upload it to Product Hub Portal. On successful upload of the data file, the products will get created or updated in Product Hub Portal.

To upload the data file:

1. Select the Category for which the products are to be created.

ORACLE®

2. Select the Template that is to be used for uploading the products. Select the same template that was downloaded to fill in the product data.

3. Upload the data file and optionally upload the .zip file containing product attachments if these too are to be uploaded.

4. Enter a name for the Product Upload and upload the data file.

The newly created or updated products get submitted to the Product Data Stewards for review.

Source Data Files

The source data file contains the product data to be uploaded to the Product Hub staging tables. Before your supplier can enter data in the file, you must associate it with an import map and map its columns to attributes in the item master data table the import map. Source data files can be in either text or XML format. Your supplier obtains the source data file by downloading the template with the name of the import map, from the Product Uploads page.

The following example shows product data in text format.

```
Item_number,Org,Item Class,Primary UOM,LifeCycle Phase,Status
IMB_SP_121610000_Item_1,V1,Root Item Class,Each,Design,Active,

IMB_SP_121610000_Item_2,V1,Root Item Class,Each,Design,Active

 IMB_SP_121610000_Item_3,V1,Root Item Class,Each,Design,Active
```

The following example shows product data in XML format.

```
<?xml version="1.0"?>
<ItemData>
 <Item>
 <ItemNumber>IMB_SP_121610000_Item_1</ItemNumber>
 <Org>V1</Org>
 <UOM>Each</UOM>
 <Phase>Design</Phase>
 <Status>Active</Status>
 </Item>
 <Item>
 <ItemNumber>IMB_SP_121610000_Item_2</ItemNumber>
 <Org>V1</Org>
 <UOM>Each</UOM>
 <Phase>Design</Phase>
 <Status>Active</Status>
 </Item>
 <Item>
 <ItemNumber>IMB_SP_121610000_Item_3</ItemNumber>
 <Org>V1</Org>
 <UOM>Each</UOM>
 <Phase>Design</Phase>
 <Status>Active</Status>
 </Item>
</ItemData>
```

ORACLE

19 Manage Product and Service Data Quality: Cleanse Product and Service Data

Check Data Quality

Data Quality: Explained

The quality of product data is enhanced by an integration with Oracle Enterprise Data Quality Product, which provides classification, standardization, and matching to refine item data and to prevent duplicate items. Item data can be inconsistent, especially when imported from external sources.

The integration with Oracle Enterprise Data Quality Product involves the following:

- Data quality checking
- The semantic model
- Data quality attributes
- Classification
- Standardization
- Matching

Data Quality Checking

When you check data quality, Oracle Enterprise Data Quality Product applies classification, standardization, and matching to the items that you are creating, editing, or importing, and then presents you with the results for acceptance.

You can check the quality of your product data:

- When you are creating a single item interactively
- When you are creating multiple items interactively
- When you are editing an item interactively
- By running a periodically scheduled process that checks the items in an item class
- When you are importing a batch of items

The Semantic Model

Before you can check data quality in Oracle Fusion Product Hub, you must initially set up the semantic model in Oracle Enterprise Data Quality Product. The semantic model contains your definitions for classification, standardization, and matching. The semantic model is a fully configured data lens, which contains detailed contextual information about your data. A data lens recognizes terms, phrases, and items. A data lens also identifies and extracts items and attributes from text inputs, and standardizes terms and attributes to conform to organizational norms. After standardization is performed, a data lens classifies an item against a schema.

You can help build up the initial semantic model by running a scheduled process that extracts metadata from the item class and catalog tables of Oracle Fusion Product Hub. The use of metadata in setting up the semantic model is described in the documentation for Oracle Enterprise Data Quality Product about AutoBuild.

You can also provide the AutoBuild feature with sample item data by exporting the results of an item search into an external spreadsheet, then transferring that spreadsheet data into Oracle Enterprise Data Quality Product. To export the data, perform a search on the Manage Items page, then in the Search Results section, select **Actions - Export to Excel**.

Data Quality Attributes

Data quality depends primarily on the values of designated attributes. In Oracle Enterprise Data Quality Product, you define the detailed rules for the relationships between these data quality attributes, which are used for either standardization or matching. In Oracle Fusion Product Hub, you designate these attributes at the item class level.

Classification

In Oracle Enterprise Data Quality Product, you define rules that classify data items as belonging to the appropriate item class based on the values of certain attributes. Classification also includes suggested assignments of items to one or more catalogs and to categories within those catalogs. For example, if the Power attribute equals 10 watts and the Capacity attribute equals 300 ohms and the Capacitance attribute equals 10 microfarads, then the item belongs to the Capacitor item class.

Standardization

In Oracle Enterprise Data Quality Product, you define rules that make the values of specified item attributes consistent with desired norms. For example, you might convert all Fahrenheit temperature values to Celsius, or all English measurements to metric. You can also use standardization to merge divergent forms of attribute values into a single consistent form, such as by changing the unit of measure values **in.** and **IN** to **Inches**.

Matching

In Oracle Enterprise Data Quality Product, you define rules for detecting when an item that is being created or imported matches an item that already exists in the Oracle Fusion Product Hub repository. For example, suppose that if power supply items differ only in the finish style of the casing, then they are considered to match existing items. To get this result, you would not use the hypothetical Casing Style attribute as a match-rule attribute.

Related Topics

- Item Batch Data Quality Options: Points to Consider

Check Data Quality for Items: Examples

The following scenarios illustrate the ways in which you can check data quality when working with items.

- Creating a single item
- Creating multiple items
- Editing an item
- Running a scheduled process
- Importing an item batch

Creating a Single Item

To check data quality when creating a single item interactively:

1. On the Create Item page, select **Actions - Check Data Quality**.
2. Examine the Check and Apply Data Quality Results window, which displays the classification, standardization, and matching values provided for the item by Oracle Enterprise Data Quality Product.
3. If the data quality results are satisfactory, click **Apply** to apply the new values to the Create Item page.

4. The data quality checks are also performed when you click **Save**, **Save and Close**, or **Submit**. Note that you can submit an item only when its item class is enabled for new item requests.

Creating Multiple Items

To check data quality when you are creating multiple items interactively:

1. On the Create Multiple Items page, select **Actions - Check Data Quality**.
2. Examine the Check and Apply Data Quality Results window, which displays, for each item in the set, the classification, standardization, and matching values provided by Oracle Enterprise Data Quality Product.
3. Use the iterator control to examine different items in the set. Click **Remove item** for an item to be removed from the set.
4. If the data quality results are satisfactory, click **OK** to apply the new values to the Create Multiple Items page.
5. The data quality checks are also performed when you click **Save and Close** or **Submit**.

> ✎ **Note:** You can submit items only when their item class is enabled for new item requests. If the data quality results contain a mixture of enabled and nonenabled items, then the **Submit** action is replaced by the following actions:
>
> o   Add all of the items to a new item request, regardless of whether their item class is enabled.
>
> o   Add only the enabled items to a new item request.

Editing an Item

To check data quality when you are editing an item interactively:

1. On the Edit Item page, select **Actions - Check Data Quality**.
2. Examine the Check and Apply Data Quality Results window, which displays the classification, standardization, and matching values provided for the item by Oracle Enterprise Data Quality Product.
3. If the data quality results are satisfactory, click **Apply** to apply the new values to the Edit Item page.
4. The data quality checks are not performed when you click **Save**, **Save and Close**, or **Submit**.

> ✎ **Note:** Data quality is not automatically checked when you update an item. To ensure data quality for existing items, you can run the periodically scheduled **Semantic Key Update** process.

Running a Scheduled Process

To check data quality for items in an item class by running a periodically scheduled process:

1. On the Scheduled Processes Overview page, schedule the Semantic Key Update process.
2. In the **Process Details** dialog box, select the periodic schedule for checking data quality.
3. Select the parameters for the process:
   o   Select the item class for which to check data quality.
   o   Select **Process All Items** to check data quality for all items in Oracle Fusion Product Hub, not just those in the selected item class. By default, **Process All Items** is not selected.
4. Submit the process.

Importing an Item Batch

You can specify data quality options when defining a source system or through an import batch definition by selecting **Check Data Quality** in the Data Quality section of the source system or batch definition. Items being created in Oracle Fusion

ORACLE®

Product Hub go through the data quality check automatically, while items that are updated using batches must have the data quality check initiated manually.

Related Topics

- Item Batches: Explained

- Item Batch Data Quality Options: Points to Consider

- Unconfirmed Items in Item Batches: Explained

- Intrabatch Items in Item Batches: Explained

FAQs for Check Data Quality

When does data quality checking occur?

Data quality is checked automatically when you save newly created items, but you must explicitly check data quality when you save existing items that you have just updated. You can run a scheduled process to periodically check data quality.

When you are creating a new item, or multiple items, you can select **Actions - Check Data Quality**. The data quality checks are also performed automatically when you select **Save**, **Save and Close**, or **Submit**.

When you are editing an existing item, you must select **Actions - Check Data Quality** . Data quality is not checked automatically.

To ensure data quality for existing items, you can run the periodically scheduled Semantic Key Update process. This process checks data quality for all items in an item class. If any items are affected by classification, standardization, or matching, they are added to the In Process tab of a new item batch. You can then manage the unconfirmed items. After they are imported, the items are available with the changes caused by data quality checking.

When you are importing a batch of items, you can check data quality either automatically or manually. To enable automatic checking during data upload, select **Check data quality** in the Data Quality Options section of the Create Item Batch page. If automatic checking is not enabled, you can select a batch on the Manage Item Batches page then select **Actions - Check Data Quality**.

Related Topics

- Item Batch Data Quality Options: Points to Consider

- Unconfirmed Items in Item Batches: Explained

How can I use attribute groups to control data quality?

While defining an item class, select the attributes that participate in data quality in the order that you want them to be applied. All selected attributes are used for classification and standardization. You can also select attributes to be used for matching duplicate items. If an attribute is not marked for matching, it is used for classification only and is not used to identify duplicates.

To use attribute groups to control data quality:

1. On the Edit Item Class page, navigate to the Attribute Groups and Pages tab.

ORACLE

2. Select the Data Quality subtab.
3. Select **Actions - Select and Add**.
4. In the Select and Add: Data Quality Attributes window, search for one or more desired attribute groups.
5. Select an attribute from the attribute group to be used when checking data quality. Repeat for other attributes that you want to use for checking data quality.

> ❗ **Important:** The sequence in which you select the attributes determines the sequence in which they are used in checking data quality

6. Select the **Matching** check box to use the attribute for matching.

Related Topics

- Item Attributes: Explained

How can I extract the metadata for the semantic model?

Select the **Extract Data Quality Metadata** action for an item class or catalog, or schedule the Data Quality Metadata Extract process.

The AutoBuild feature of Oracle Enterprise Data Quality Product uses metadata for item classes and catalogs to construct the semantic model required for data quality checking. See the documentation for Oracle Enterprise Data Quality Product for details about transferring the extracted metadata.

> ✏ **Note:** Before you extract metadata, you must first set up the hierarchies for item classes and item catalogs.

To extract the metadata for a catalog or item class, select it on the Manage Catalogs or Manage Item Classes page, and select **Actions - Extract Data Quality Metadata**. This action schedules the Data Quality Metadata Extract process, which extracts the metadata into an external file, including the child hierarchy of the catalog or item class, and all of its attribute information. You can examine the results of the process on the Manage Scheduled Processes page.

You can also schedule the Data Quality Metadata Extract process directly on the Manage Scheduled Processes page.

- In the **Process Details** dialog box, select either **Item Catalog** or **Item Class** as the extract type for the metadata.
- For the selected extract type, choose the name of the catalog or item class from the **Value** list.
- Submit the process and examine the results.

Can I bypass the data quality check while creating an item?

No. If data quality checking has been implemented, then the checks are performed automatically when you select **Save**, **Save and Close**, or **Submit** from the **Actions** menu. The Submit action applies only to new item requests.

What happens if I remove some items from the data quality results for multiple items?

Any items that you remove from the data quality results for multiple items are not created.

ORACLE®

What happens if the data quality results for a new item aren't satisfactory?

If you consider the data quality results for the item you are creating to be incorrect, then your immediate choice is to cancel the creation. However, you should also contact the administrator responsible for the setup of the semantic model and discuss the issue so that the model can be altered as required.

What happens if I don't accept the results after running a data quality check?

You must either accept all of the results of classification and standardization, or choose not to create the affected items. However, if new items are affected by the checks for matching, then you can ignore the duplicates and continue with creating the items.

ORACLE®

20 Manage Product and Service Data Quality: Standardize Product and Service Data

Numbers, Descriptions, and Rules: Explained

You can create rules that generate the identification numbers for several types of objects when they are created: items, change orders, and new item requests. You can also create rules that generate descriptions for items.

Generating numbers and descriptions with rules requires the following actions:

- Creating rule sets
- Creating rules
- Completing associations

Creating Rule Sets

You must associate the rule sets containing number generation rules with the item classes, change order types, or new item request types for those objects.

- You must select the **Assignment** type for the rule set, because you are assigning a new value to an object's number (or description).
- In the rule set, the association type must correspond to the object, according to the following table:

Object to Be Numbered	Association Type for the Rule Set
Item	**Item class**
Change order	**Change type**
New item request	**New item request**

> ✏️ **Note:** Although you can also associate a rule set with an attribute group, you cannot generate numbers for an attribute group.

You activate a rule set by adding it to an item master rule set.

Creating Rules

The rules that generate numbers or descriptions must produce appropriate values.

- The return type of the rule must correspond to the object being numbered, according to the following table.

Object to Be Numbered	Return Type for the Rule
Item (number)	**Item number**

Object to Be Numbered	Return Type for the Rule
Item (description)	**Item description**
Change order	**Change order number**
New item request	**New item request number**

- The definition of the rule must generate a number (or description) as the return value.

Completing Associations

You must associate the object with the rule set of the rule that generates the number or description.

- The rule set must already exist and contain a valid rule.

- The number generation method (or description generation method) of the object must be set to **Rule Generated**. The location for setting the generation method varies by object.

- After the number generation method is set to **Rule Generated**, the associated rule set name must be set to the rule set that contains the generation rule that you created.

  ✏ **Note:** In an item class, you can use one rule set for item number generation, and a different rule set for item description generation.

Related Topics

- Rules and Rule Sets: Explained

- Number Generation Methods: Explained

Generating Numbers and Descriptions with Rules: Examples

The following scenarios illustrate how to use rules to generate numbers for newly created items, change orders, or new item requests, and descriptions for newly created items.

- Creating rules to generate numbers for new items

- Creating rules to generate descriptions for new items

- Creating rules to generate numbers for change orders

- Creating rules to generate numbers for new item requests

ORACLE®

Creating Rules to Generate Numbers for New Items

This scenario illustrates how to use rules to generate numbers for newly created items.

1. Select the **Setup Rules** task.
2. On the Manage Rule Sets page, create and save a rule set with the field values shown in the following table:

Field (in Rule Set)	Value
Display Name	Example: **MyItemNumGenRuleSet1**
Type	**Assignments**
Association Type	**Item Class**
Association Name	Example: **MyItemClass1**
Business Entities	One or more of Item data level, Item revision data level, or Item supplier data level

3. On the Edit Rule Set page, create and save a rule with the field values shown in the following table:

Field (in Rule)	Value
Name	Example: **MyItemNumGenRule1**
Return Type	**Item Number**
Primary If Expression	**true**
Secondary If Expression	**true**
Return Value	Example:

4. Select the **Manage Item Classes** task.
5. On the Manage Item Classes page, edit the item class that you selected as the association name for your rule set.
6. On the Item Management tab of the Edit Item Class page, select the field values shown in the following table, and save the item class.

Field (in Item Class)	Value
Name	Example: **MyItemClass1**
Item Number Generation Method (in the Number Generation section)	**Rule Generated**
Associated Rule Set	Example: **MyItemNumGenRuleSet1**

Field (in Item Class)	Value

> ✎ **Note:** Only rule sets with the corresponding association type (in this scenario, Item Class) are available. Also, your rule set will not appear in the **Associated Rule Set** list of values unless a valid rule has been created in the rule set.

7. When you create a new item from this item class, the item number field initially contains a message that the number will be rule generated. When you save (or submit) the item, your rule generates a number for it.

> ❗ **Important:** Once an item has been saved, its item number, whether generated or manually entered, cannot be changed unless the **Update Item Number** (EGP_UPDATEABLE_ITEM) profile option has been set to **Yes** at the site level. If that profile option has been set to **Yes**, then when any attributes used in your number generation rules are updated, the item numbers are regenerated accordingly

Creating Rules to Generate Descriptions for New Items

This scenario illustrates how to use rules to generate descriptions for newly created items The scenario is the same as the one for generating numbers for new items, with the differences shown as follows.

- In the Details section of the Edit Rule Set page, the differences for your rule are shown in the following table:

Field (in Rule)	Value
Name	Example: **MyItemDescGenRule1**
Return Type	**Item Description**
Return Value	Example: [Item]. [Main].[ItemType] + [Item]. [Main]. [LongDescription]

- On the Item Management tab, the differences for your item class are shown in the following table:

Field (in Item Class)	Value
Item Description Generation Method (in the Description Generation section)	**Rule Generated**
Associated Rule Set	Example: **MyItemDescGenRule1**

- When you create a new item from this item class, the item **Description** field initially contains a message that the description will be rule generated. When you save (or submit) the item, your rule generates a read-only description for it.

ORACLE

- Whenever any attributes used in your description generation rules are updated, the item descriptions are regenerated accordingly when the item is displayed.

✏ **Note:** The same rule set can contain rules for both item number generation and item description generation.

Creating Rules to Generate Numbers for Change Orders

This scenario illustrates how to use rules to generate change order numbers for newly created change orders. The scenario is the same as the one for generating numbers for new items, with the differences shown as follows.

- On the Edit Rule Set page, the differences for your rule set are shown in the following table:

Field (in Rule Set)	Value
Display Name	Example: **MyCONumGenRuleSet1**
Association Type	**Change type**
Association Name	Example: **MyCOType1**

- In the Details section of the Edit Rule Set page, the differences for your rule are shown in the following table.

Field (in Rule)	Value
Name	Example: **MyCONumGenRule1**
Return Type	**Change order number**
Return Value	Example:

- On the Number Generation tab of the Edit Change Order Type page, the differences for your change order type are shown in the following table:

Field (in Change Order Type)	Value
Number Generation Method (in the Number Generation section)	**Rule Generated**
Associated Rule Set	Example:**MyCONumGenRuleSet1**

- When you create a new change order, your rule generates a change order number for it after you submit it.

ORACLE®

Creating Rules to Generate Numbers for New Item Requests

This scenario illustrates how to use rules to generate new item request numbers for newly created new item requests. The scenario is the same as the one for generating numbers for new items, with the differences shown as follows:

- On the Edit Rule Set page, the differences for your rule set are shown in the following table:

Field (in Rule Set)	Value
Display Name	Example: **MyNIRNumGenRuleSet1**
Association Type	**New Item Request**
Association Name	Example: **MyNIRType1**

- In the Details section of the Edit Rule Set page, the differences for your rule are shown in the following table.

Field (in Rule)	Value
Name	Example:**MyNIRNumGenRule1**
Return Type	**New item request number**
Return Value	Example:

- On the Number Generation tab of the Manage New Item Request Type Details page, the differences for your new item request type are shown in the following table.

> **Note:** There are multiple item classes and change order types, but only a single type for new item requests. Consequently, all new item requests use the same rule set.

Field (in New Item Request Type)	Value
Number Generation Method (in the Number Generation section)	**Rule Generated**
Associated Rule Set	Example: **MyNIRNumGenRuleSet1**

- When you create a new item request, your rule generates a new item request number for it.

Related Topics

- Rules and Rule Sets: Explained

- Number Generation Methods: Explained

ORACLE®

Submitting Items to the Update Process: Points to Consider

Determine the method to use for submitting items to the product update. Select one of the following options:

Items Without Error

When you select this action, all the items that do not have errors will be added to the batch. When the Batch is run, rules are forcefully applied and items are updated.

Items with Error

When the impact analysis is performed, certain items may result in errors. In this case, you can add the items to an item batch and then later search and process the item batch so that the items that are updated are consistent with the rules.

Manually Update Items

If you want to correct the errors before you add the items to batch, run the batch then navigate to the respective item pages, separately, and update the necessary data so that these items do not result in an error during the update process.

Upload Items to Spreadsheet

You can update the items in an ADFDi spreadsheet before adding them to the batch. You can specify any necessary preprocessing updates so that these items do not result in an error during the update process. In this case, you can add the items to an item batch, then later search and process the item batch so that the items are updated consistently with the rules.

Items: How They are Matched

Items that are created during import or through the application go through GTIN/TPI matching in addition to attribute matching as part of data quality checks.

Settings That Affect GTIN/TPI Matching

GTIN/TPI matching is applicable only when Enterprise Data Quality for Products. is installed.

How GTIN/TPI Matching Is Processed

Data Quality Check first attempts to match items based on the Spoke System item number. If no existing cross-references are found, data quality check then performs matching in the following sequence:

- GTIN

ORACLE®

- Supplier

- Manufacturer

- Customer

- Competitor

Once a match is found, the matching program stops and will not continue to the next match type. Data Quality then checks for matches defined at item class. The spoke system cross reference is created and is used in update cases.

For GTIN matching, an internal item is identified as a match if the GTIN of the incoming item exists as a GTIN cross reference on an internal item and the Pack Type of the incoming item is the same as that of the internal item. When creating items with a GTIN cross reference, the reference is used to match against existing items with GTIN cross references. Then you can accept the match and choose to update the existing item with the new data or ignore the match and create it as a new item.

For TPI matching, Supplier, Manufacturer, Customer, or Competitor items are considered a match only when the trading partner and trading partner item associated to the internal item are the same as the incoming item. When creating items with TPI associations, they are used to match against existing items with the TPI associations. Then you can accept the match and update the existing item with the new data or ignore the match and create it as a new item.

FAQs for Standardize Product and Service Data

What happens if item numbers are allowed to change?

Ordinarily, item numbers cannot be changed after they are entered (or are generated by product rules) and the item is saved. This behavior is produced by the **Update Item Number** profile option (EGP_UPDATEABLE_ITEM), which has a default setting of **No**. If you set this profile option to **Yes**, then number generation rules will regenerate item numbers when any attributes participating in those rules change.

ORACLE®

21 Syndicate or Publish Product or Service Master Data: Publish Product Data to External Systems

Publish Items

Publishing Item Objects Automatically: Points to Consider

Implicit publication enables you to set up a periodic schedule to automatically publish objects to each spoke system. To set up the implicit publication of objects from Oracle Fusion Product Hub to external systems, the following are required:

- Define the publication options for a spoke system.
- Define the schedule and parameters for the scheduled process.
- Define profile options.
- Access the payload generated by the publication scheduled process.
- Customize the Service Oriented Architecture composite to publish to the external spoke system.

Spoke System Publishing Options

Use the Manage Spoke Systems task in the Setup and Maintenance work area to manage import and publication options for each spoke system.

Define the following publication criteria for each spoke system:

Publication Criteria	Options
Objects	- Items - Item classes - Item catalogs
Item entities	- Attributes Selected by default, and including: - Item main attributes - Operational attributes - Attachments of type URL - Supplier site organizations association - Item category assignments - Pack hierarchies - Item relationships: - Global trade item number (GTIN) - Trading partner items, including: - Customer item

ORACLE®

Publication Criteria	Options
	• Supplier item
	• Manufacturer item
	• Competitor item
	○ Related items
	○ Cross-references
	• Structures:
	○ All
	○ Primary
	• All pack items
	All items with a pack type, regardless of membership in a hierarchy, are published whenever a change to the pack occurs.
	• Item selection rules
	Add rules that select certain items.
	• Item validation rules
	Select an existing validation rule set.
Item class	Select the item classes in the hierarchy to include for publication.
Item catalog	Search for, and select, the catalogs to be published. The publication will include the entire hierarchy for the catalogs you select.

Scheduled Process Parameters

From the Scheduled Processes work area, create and submit a scheduled process for the Product Hub Publication job. This process publishes the objects of each spoke system. Select the spoke system, the objects to be published, and a date.

The scheduled process parameters are:

- **Spoke System**: Select the name of the spoke system to which objects are published.

- **Publish Items**: Indicate whether the specified items are published.

- **Publish Item Classes**: Indicate whether the specified item classes are published.

- **Publish Catalogs**: Indicate whether the specified catalogs are published.

- **Criteria Date**: Objects from this date are filtered. This is required for the first time publication. For subsequent publications, the last publication date is used by default if the criteria date is not specified.

- **Folder Location**: Location of the Universal Content Manager folder where the XML file will be saved.

Profile Options for Large Volume Publications

If you are publishing over 1,000 items or records, consider changing the values for the following profile options in the Setup and Maintenance work area:

Profile Option	Purpose
Number of Items per Payload for Publication	This profile option determines the number of items to be used per payload in the publication process. The seeded value is 1,000.

ORACLE

Profile Option	Purpose
Number of Parallel Payloads for Publication	This profile option determines the number of parallel payloads to be used in the publication process. The seeded value is 100.

> ✏ **Note:** The profile option values are defined with the Manage Advanced Profile Values task in the Setup and Maintenance work area.

You can view the errors identified during publication from the log files of the scheduled process.

Access the Payload

Access the XML payload from the Enterprise Manager or the Unified Content Manager folder. The folder `PIM` is predefined in the `Contribution Folders` folder.

Customize Service Oriented Architecture Composite

Because the transformation of data and the publication target must be configured separately for each spoke system to which publication is to be supported, the default composite shipped with Service Oriented Architecture Composite does not actually complete the publication process. Refer to Oracle Fusion Middleware User's Guide for Oracle Business Process Management and Oracle Fusion Middleware Administrator's Guide for Oracle SOA Suite and Oracle Business Process Management Suite.

You initiate the publication process by launching the Product Hub Publication scheduled process. The scheduled process request first populates the publication database tables with the primary key values of all the data that needs to be published and then initiates a business event. The Publication Service Oriented Architecture Composite is launched as a result of this business event.

Parameters for the Product Hub Publication Scheduled Process: Explained

The parameters required for running the Product Hub Publication scheduled process are listed in this table. The publication process is scheduled using the Scheduled Processes page that is available by navigating to Tools, Scheduled Processes.

Scheduled Process Parameters	Meaning
Spoke System	Name of the external spoke system to which item, item class, or catalog information is to be published.
Publish Items	Indicates whether items are to be published.
Publish Item Classes	Indicates whether item classes are to be published.
Publish Catalogs	Indicates whether catalogs are to be published.
Criteria Date	Records selected for publication are those created or updated since this date. This date is required for a first-time publication to a spoke system. For subsequent publications, it is optional; if no

Scheduled Process Parameters	Meaning
	criteria date is supplied, records selected for publication are those created or updated since the last publication date.
Folder Location	Unified Content Manager folder location to save the output xml file.

Publication processes can be both recurring or one-time events. For example, if you setting up an integration to a legacy system, where you are publishing new items that are created in the Product Hub system, you might setup the scheduled publication job to run each night.

The scheduling frequency is based on the integration requirements and the availability of the systems that integrate with Product Hub to receive and process the data. For example, you may have a situation where the Product Hub is feeding new item information to an ERP system and the ERP system only has a small window in which it can be updated.

FAQs for Publish Items

What happens if I don't select any objects on the spoke system to publish?

If you don't select any objects on the spoke system, you will not be able to define the publication options and no data will be published to the spoke system.

Will all items in a product hub be published?

Only items that have been updated since the last publication or criteria date and that meet the publication criteria for the spoke system will be published. This includes newly created items meeting the publication criteria.

Which items will be published?

The items published are based on what has changed since the last publication date and filtered by the selection rules in the configuration information on the publication options tab of the Manage Spoke Systems task. Selection rules can be based on organizations, organization hierarchy, catalog or item class.

Can I select items from specific child organizations to publish?

No, you cannot publish by specific child organizations. You can only publish at the master organization level. All child organizations within the master organization will publish.

Which item entities are supported for publication?

The supported item entities are:

- Attributes
- Attachments
- Supplier Site Associations
- Item Category Assignments
- Packs
- Item Relationships
- Structures

How can I chunk the data of the publication process?

Use the profile options provided for publication process:

- EGI_PUBLICATION_ITEMS_PER_PAYLOAD - Used to define the number of items per payload in the publication scheduled process. The seeded value is 100.
- EGI_PUBLICATION_NUMBER_OF_PAYLOADS - Used to define the number of parallel payloads to be used in the publication scheduled process. The seeded value is 10.

When deciding the values for these profile options, keep the following in mind:

- The capacity of the system you are publishing to.
- The equipment specifications for where the publication is running and in the systems you are publishing to.
- How often the publication job is run.

How can I add values to the profile options?

Profile option values are defined using the Manage Advanced Profile Values task in the Setup and Maintenance work area.

ORACLE

22   **Manage Product and Service Retirement: Obsolete Products and Services**

Obsoleting Products and Services: Overview

Product managers can obsolete products and services by defining and maintaining delete groups that identify products and services that are at the end of their life cycle and should be purged.

Constraints maintain data integrity so that pending transactions are not affected while purging. Along with predefined constraints, custom constraints can be defined and checked before purging is done.

> ⚠️ **Caution:** You can supersede existing items using item relationships. In those cases, the superseded items must continue to exist in the system. If the superseded item is deleted from the system, then all the cross references, item relationships and so on will be lost.

The following objects can be added to a Delete Group:

- Items
- Item organizations
- Item supplier site organizations
- Change orders
- New item requests
- Item structures and components

Delete groups can be created and maintained through the **Mange Delete Groups** link under Items on the Task menu.

You can add objects directly to a delete group through this task.

You can also add different objects to delete groups from their respective Manage pages. Search for an object such as item, item organization, new item request, or change order. Highlight the object and select **Delete** from the Action menu. You are prompted to add the object to an existing delete group or create a new one.

Group Deletions: Explained

Deleting items, structures, new item requests, and change orders is controlled through the Delete Groups task. Delete Groups can be created and maintained through the **Mange Delete Groups** link under Items on the Task menu of the Product Information Management work area.

> ⚠️ **Caution:** Once an item is deleted, it is removed from the system, all the cross-references and item relationships such as item organizations, item supplier site organizations, structures, and components are lost.

On the Manage Delete Groups page, you can search for and access existing delete groups. From this page you can also delete those delete groups that were successfully submitted and completed.

On the Edit Delete Group page, you can add and remove objects for deletion, check constraints, and submit the delete group for processing.

> ✏️ **Note:** When you delete an object such as items, new item requests, and change orders from the appropriate manage page, you are prompted to add the object to an existing delete group or create a new one.

Checking Constraints

Constraints maintain data integrity so that pending transactions are not affected during purges.

After saving a delete group, choose **Check Constraints** on the Edit Delete Group page to ensure that it is safe to submit the objects for submission.

Along with predefined constraints, custom constraints can be defined to be checked before purging is done. Constraints are defined using the Service Oriented Architecture (SOA) Business Process Execution Language (BPEL).

Refer to the **Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite** for more information.

Items in Delete Groups

On the Items tab of the Edit Delete Group page, you can specify the following objects for deletion by choosing **Select and Add** from the Action menu, then selecting from the Entity drop-down list on the Select and Add page.

- Items
- Item organizations
- Item supplier site organizations

> 💡 **Tip:** When you add an item to the delete group, you can change the organization, supplier and supplier site assignments for the object by highlighting the item row and selecting the appropriate assignments. This feature can be used in conjunction with the **Duplicate** action from the Action menu when you are adding a number of similar objects with different organization, supplier and supplier site assignments. The Duplicate feature allows you to copy the previous record and then you can change the different values, thus saving multiple clicks.

Item Structures in Delete Groups

On the Item Structures tab of the Edit Delete Group page, you can specify the following objects for deletion by choosing **Select and Add** from the Action menu, then selecting from the Entity drop-down list on the Select and Add page:

- Structures
- Components

> 💡 **Tip:** When you add structures and components to the delete group, you can change organization, structure and component assignments by highlighting the structure or component row and changing the appropriate assignments. This feature can be used in conjunction with the **Duplicate** action from the Action menu when you are adding a number of similar objects with different organization, structure and component assignments.

Change Orders and Delete Groups

On the Change Orders tab of the Edit Delete Group page, you can specify change orders for deletion by choosing **Select and Add** from the Action menu.

> 💡 **Tip:** When you add change orders to the delete group, you can change the organization assignment by highlighting the change order row and changing the organization assignments. This feature can be used in conjunction with the **Duplicate** action from the Action menu when you are adding a number of similar change orders with different organizations.

New Item Requests and Delete Groups

On the New Item Request tab of the Edit Delete Group page, you can specify new item requests for deletion by choosing **Select and Add** from the Action menu.

Submitting a Delete Group

Click **Submit** on the Edit Delete Group page to submit the objects for purging from the system.

Item Supersession: Explained

Items can be superseded by defining item relationships between two internal items using predefined relationship types, such as **superseded items**, **substitutes**, or **complimentary items**.

You can also define item relationships between two internal items using user-defined relationships.

When you define the relationship, you can specify attributes to further qualify the relationship as well as a date range when the relationship is effective.

Related Topics

- Item Relationship Types: Explained

- Item Relationships: Explained

Glossary

action

The kind of access, such as view or edit, named in a security policy.

AMX

Abbreviation for Approval Management extensions.

APM

Abbreviation for Oracle Authorization Policy Manager

ATO

Abbreviation for Assemble to Order. Represents the ability for a user to define the component make up of a product at the very moment of ordering that product.

ATP

Abbreviation for available to promise.

attribute

A named entity whose value describes a product item. Attributes can be organized into attribute groups. You can search for items based on attribute values, by adding attribute fields when using Advanced Search (but you cannot search on transactional attributes). You can compare the attribute values of selected items returned by an item search.

attribute group

A named set of related product item attributes, associated with item classes, which can be inherited through the child hierarchy of an item class. You can select an attribute group, then select member attributes to participate in certain operations.

automatic assignment catalog

A non-hierarchical catalog to which categories that match the catalog's Catalog Structure value are automatically added. Add categories and share categories actions are disabled for this catalog configuration.

BPEL

Business Process Execution Language; a standard language for defining how to send XML messages to remote services, manipulate XML data structures, receive XML messages asynchronously from remote services, manage events and exceptions, define parallel sequences of execution, and undo parts of processes when exceptions occur.

browsing category

Parent or intermediate category that is associated with other categories in the catalog hierarchy, but has no assigned items.

CAS

Abbreviation for Chemical Abstracts Service. The American Chemical Society Chemical Abstracts Service registry number identifies a chemical substance or molecular structure."

catalog

A collection of categories used to classify items which can be organized into a hierarchy that represents a taxonomy.

catalog category

The association between a catalog and category or a category and category is called the catalog category. This association includes the start date and end dates.

category

Catalog component that is associated to a catalog to classify items.

classification

The Oracle Product Data Quality process that assigns an item to an item class, and to one or more categories within catalogs.The assignment is based on the value of data quality attributes in an attribute group that you specify for an item class.

context

A grouping of flexfield segments to store related information.

data security

The control of access and action a user can take against which data.

descriptive flexfield

Customizable expansion space, such as fields used to capture additional descriptive information or attributes about an entity, such as a customer case. You may configure information collection and storage based on the context.

DRP

Abbreviation for Distribution Resource Planning. Application of replenishment inventory calculations to assist in planning of key resources contained in a distribution system, such as sourcing and transport. DRP is an extension of distribution requirements planning, which applies MRP logic to inventory replenishment at branch warehouses.

duty role

A group of function and data privileges representing one duty of a job. Duty roles are specific to applications, stored in the policy store, and shared within an application instance.

effectivity

Enables item attributes to change over time while retaining historical values.

extensible flexfield

Customizable expansion space used to capture multiple sets of information within a context or multiple contexts. Some extensible flexfields let you group contexts into categories.

flexfield segment

An extensible data field that represents an attribute and captures a value corresponding to a predefined, single extension column in the database. A segment appears globally or based on a context of other captured information.

fulfillment task

A type of task that Order Management Cloud performs to fulfill a sales order. Schedule and Ship are each an example of a fulfillment task. Order Management might use multiple orchestration process steps to complete a single fulfillment task.

function security

The control of access to a page or a specific use of a page. Function security controls what a user can do.

GTIN

Abbreviation for Global Trade Identification Number

item organization

Item definition where inventory balances are not stored and movement of inventory is not tracked in the applications. Item attributes that carry financial and accounting information are hidden.

job role

A role, such as an accounts payable manager or application implementation consultant, that usually identifies and aggregates the duties or responsibilities that make up the job.

matching

The data quality process by which items are matched as possible duplicates, according to the values of specified attributes. The rules for matching are defined in Oracle Enterprise Data Quality Product.

MPS

Abbreviation for Master Production Schedule. The anticipated build schedule in terms of rates or discrete quantities, and dates.

MRP

Abbreviation for Manufacturing Resource Planning. Process for determining material, labor and machine requirements in a manufacturing environment. MRPII (manufacturing resources planning) is the consolidation of material Abbreviation for requirements planning (MRP), capacity requirements planning (CRP), and master production scheduling (MPS). MRP was originally designed for materials planning only. When labor and machine (resources) planning were incorporated it became known as MRPII. Today the definition of MRPII is generally associated with MRP systems.

ORACLE®

native catalog

A catalog that a user is managing.

orchestration process step

A step of an orchestration process that specifies the task layer service that Order Management calls or the subprocess to start. Each step references a task type, task, and service. A step might also specify branching. A task includes one or more orchestration process steps.

organization

A unit of an enterprise that provides a framework for performing legal, managerial, and financial control and reporting. Organizations can be classified to define their purpose, for example, as departments, divisions, legal entities, and can own projects and tasks, or incur project expenses.

packs

Packaging information managed using a hierarchy of items representing the logical structure of the product packaging needs. Each packaging level is modeled as an item making it easy to track inventory and orders against them.

profile option

User preferences and system configuration options that users can configure to control application behavior at different levels of an enterprise.

referenced category

A category within the native catalog that is shared from a designated source catalog. A reference category is not editable.

RMA

Abbreviation for return material authorization.

semantic model

A fully configured data lens constructed in Oracle Product Data Quality, which provides the basis for checking data quality. The semantic model contains your definitions for classification, standardization, and matching.

shared category

A category within a source catalog that has been added to a native catalog as a referenced category. The category can be shared with one or more catalogs.

SKU

Abbreviation for Stock Keeping Unit. A unique identifier that defines an item at the lowest inventory level.

SOA

Abbreviation for service-oriented architecture.

source system

System where the sales order was created. Order Management Cloud and an order capture system are each an example of a source system. A source system provides business application information to an Oracle application. Oracle can use this information to extract fulfillment data and planning data into data files.

standardization

The data quality process by which the values of specified attributes of an item are made consistent with desired norms, according to rules defined in Oracle Product Data Quality.

structure

A bill of materials. A structure contains information on the parent item, components, attachments, and descriptive elements.

TIUD

Abbreviation for Trade Item Unit Descriptor,

trading partner

An external party, such as a supplier, in the Oracle B2B application for which electronic documents are sent or from which documents are received. A trading partner in Oracle B2B corresponds to a supplier site.

UOM

Abbreviation for unit of measure. A division of quantity that is adopted as a standard of measurement.

WIP

Abbreviation for Work in Process. A product or products in various stages of completion, including all material from raw material that was released for initial processing up to completely processed material awaiting final inspection and acceptance as finished goods.

workflow

An automated process that passes a task from one user (or group of users) to another to view or act on. The task is routed in a logical sequence to achieve an end result.

ORACLE®