Oracle Product Value Chain Cloud
Using Product Information Management
This guide also applies to on-premise implementations

Release 8

April 2014
Oracle® Product Value Chain Cloud Using Product Information Management

Part Number E49615-03

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Preface

This Preface introduces the guides, online help, and other information sources available to help you more effectively use Oracle Fusion Applications.

Oracle Fusion Applications Help

You can access Oracle Fusion Applications Help for the current page, section, activity, or task by clicking the help icon. The following figure depicts the help icon.

Note

If you don’t see any help icons on your page, then click the Show Help icon button in the global area. However, not all pages have help icons.

You can add custom help files to replace or supplement the provided content. Each release update includes new help content to ensure you have access to the latest information. Patching does not affect your custom help content.

Oracle Fusion Applications Guides

Oracle Fusion Applications guides are a structured collection of the help topics, examples, and FAQs from the help system packaged for easy download and offline reference, and sequenced to facilitate learning. To access the guides, go to any page in Oracle Fusion Applications Help and select Documentation Library from the Navigator menu.

Guides are designed for specific audiences:

- **User Guides** address the tasks in one or more business processes. They are intended for users who perform these tasks, and managers looking for an overview of the business processes. They are organized by the business process activities and tasks.

- **Implementation Guides** address the tasks required to set up an offering, or selected features of an offering. They are intended for implementors. They are organized to follow the task list sequence of the offerings, as displayed within the Setup and Maintenance work area provided by Oracle Fusion Functional Setup Manager.

- **Concept Guides** explain the key concepts and decisions for a specific area of functionality. They are intended for decision makers, such as chief
financial officers, financial analysts, and implementation consultants. They are organized by the logical flow of features and functions.

- **Security Reference Manuals** describe the predefined data that is included in the security reference implementation for one offering. They are intended for implementors, security administrators, and auditors. They are organized by role.

These guides cover specific business processes and offerings. Common areas are addressed in the guides listed in the following table.

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For other guides, go to Oracle Technology Network at http://www.oracle.com/technetwork/indexes/documentation.

**Other Information Sources**

**My Oracle Support**

Oracle customers have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Use the My Oracle Support Knowledge Browser to find documents for a product area. You can search for release-specific information, such as patches, alerts, white papers, and troubleshooting tips. Other services include health checks, guided lifecycle advice, and direct contact with industry experts through the My Oracle Support Community.
Oracle Enterprise Repository for Oracle Fusion Applications

Oracle Enterprise Repository for Oracle Fusion Applications provides details on service-oriented architecture assets to help you manage the lifecycle of your software from planning through implementation, testing, production, and changes.

In Oracle Fusion Applications, you can use Oracle Enterprise Repository at http://fusionappsoer.oracle.com for:

- Technical information about integrating with other applications, including services, operations, composites, events, and integration tables. The classification scheme shows the scenarios in which you use the assets, and includes diagrams, schematics, and links to other technical documentation.

- Other technical information such as reusable components, policies, architecture diagrams, and topology diagrams.

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Comments and Suggestions

Your comments are important to us. We encourage you to send us feedback about Oracle Fusion Applications Help and guides. Please send your suggestions to oracle_fusion_applications_help_ww_grp@oracle.com. You can use Send Feedback to Oracle from the Settings and Actions menu in Oracle Fusion Applications Help.
Product Information Management Features: Overview

Product Information Management consists of two products:

- Oracle Fusion Product and Catalog Management
- Oracle Fusion Product Hub

Note

All Product and Catalog Management features are also available in Product Hub.

Oracle Fusion Product and Catalog Management Features

Product and Catalog 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 embedded 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 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 routing and approval parameters.

- **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.

- **Manage Item Versions**: Define and manage item versions to track granular changes for a given item revision, providing additional control for changes that do not warrant an item revision change.

- **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 statuses 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. Separate product pack hierarchy changes enabling quick visualization and identification for changes to the pack hierarchy.

- **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.

- **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.

**Oracle Fusion Product Hub Features**

Product Hub includes the following features:

- **Define Advanced Catalogs:** Share category and item associations from a source or master catalog with multiple catalogs. Manage catalog mapping between two catalog hierarchies as well as attributes for the catalog and categories. (Product Hub only.)

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

**Creating Single Items**

You can begin creating an item from the Regional Task pane or the Manage Items page. 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, sequentially. Next, required attributes must be provided. If mandatory attributes were defined in the item class, then they must be provided. You can also provide unit of measure details.

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 also view the item pages associated with the item class and inherited by the item for the grouping of base ERP attributes. You can optionally specify descriptive flexfields at the Item or Item Revision levels. If you are licensed to use Oracle Fusion Product and Catalog Management or 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**
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.

Note

While creating items based on certain attribute values, automated processes for item category assignments may be executed. If functional area catalogs are not defined, item assignments for those functional areas are skipped. Background processes and rules may also execute when creating items in the user interface or through item import.

Item Copying: Explained

Create a single item by copying an existing item.

Create an Item by Copying

Single items can be created by copying an existing item:

The following can be copied from an existing item:

- Attributes
- Relationships
- Structures
- Organization assignments
- Attachments

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. Select association attributes and their values to copy 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.

Organization Assignments

You can also select organization assignment.

Attachments

You can also select attachments.

FAQs for Define Product

What's an item?

Items are used to represent product and services you sell or transact, resources you maintain, 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.
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 specification 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 the Additional Attributes link 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

• 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.

Note

Rules may be defined for certain attributes so that if you add or update that attribute, then the change is added to a new or existing change order for approval.

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.

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 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**.
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.
Note

The System Administrator can configure descriptive flexfields for item relationships that are used to maintain additional details about relationship.

Related Items

Seeded relationship types are listed in the following table:

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<th>Complimentary</th>
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<td>Cross-Sell</td>
<td>Fulfillment</td>
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<tr>
<td>Impact</td>
<td>Mandatory Charge</td>
<td>Merge</td>
</tr>
<tr>
<td>Migration</td>
<td>Optional Charge</td>
<td>Prerequisite</td>
</tr>
<tr>
<td>Promotional Upgrade</td>
<td>Regulatory</td>
<td>Related</td>
</tr>
<tr>
<td>Repair To</td>
<td>Service</td>
<td>Split</td>
</tr>
<tr>
<td>Substitute</td>
<td>Superseded</td>
<td>Upsell</td>
</tr>
<tr>
<td>Warranty</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Related: The items are related in a nonspecific way.

Substitute: One item is a substitute for another.

Cross-Sell: This relationship indicates that one item may be sold in lieu of another item.

Up-Sell: This relationship indicates that a newer version of the item exists, and can be sold in place of the older item.

Service: This relationship establishes service items for a repairable item.

Prerequisite: This relationship indicates that you must possess one of the items as a requirement to possessing the other item.

Collateral: This relationship indicates collateral, such as marketing brochures, that you possess for an item.

Superseded: This relationship indicates that one item has replaced another item that is no longer available.

Complimentary: This relationship indicates if a customer purchases one item, the other item is received for free.

Impact: This relationship is used to relate items to each other, but only under special conditions.

Conflict: This relationship indicates that these items may never be used together.

Mandatory Charge: This relationship indicates a mandatory charge if a customer purchases both items.

Optional Charge: This relationship indicates an optional charge if the customer purchases both items.
Promotional Upgrade: This relationship enables a customer to upgrade from one item to another item or equal or higher value, without an additional charge.

Split: This relationship enables you to split support for an item so you do not have to manually split support at contract renewal.

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.

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.

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.

---

**Note**

Your System Administrator can set up additional relationship types based on your business needs.

---

**Trading Partner Item Relationships**

There are three subordinate relationships.

Trading Partner Item Relationship subordinates:

- 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.

**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 is specific to only a selected organization. If it is specific to one organization, you select the organization.

Five Item Relationship Types: Explained

There are five item relationship types.

The five 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.
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.

**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. A typical flow would involve:

- Create Product Structure
- Manage Product Structure
- Compare Product Structure

**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 (select the components to copy), and specify new structure details, such as name, description, and effectivity.

You can copy structures across different effectivities with these restrictions.

<table>
<thead>
<tr>
<th>Structure Effectivity</th>
<th>Structure Effectivity</th>
<th>Copy Allowed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Target</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Date</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Serial</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Unit</td>
<td>Yes</td>
</tr>
<tr>
<td>Serial</td>
<td>Date</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Serial</td>
<td>Yes</td>
</tr>
</tbody>
</table>
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.

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.

---

**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**.
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:

<table>
<thead>
<tr>
<th>Pack Type (TIUD)</th>
<th>Parents</th>
<th>Parent Instance</th>
<th>Children</th>
<th>Child Instance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Module</td>
<td>None</td>
<td>-</td>
<td>Case, Pack or Inner Pack, Setpack, Multipack, Base Unit or Each</td>
<td>Multiple</td>
</tr>
<tr>
<td>Pallet</td>
<td>None</td>
<td>-</td>
<td>Display Shipper, Case, Pack or Inner Pack, Setpack, Multipack, Base Unit or Each</td>
<td>Single</td>
</tr>
<tr>
<td>Display Shipper</td>
<td>Pallet</td>
<td>Single</td>
<td>Case, Pack or Inner Pack, Setpack, Multipack, Base Unit or Each</td>
<td>Multiple</td>
</tr>
<tr>
<td>Case</td>
<td>Pallet, Mixed Module, Display Shipper</td>
<td>Multiple</td>
<td>Pack or Inner Pack, Setpack, Multipack, Base Unit or Each</td>
<td>Single</td>
</tr>
<tr>
<td>Setpack</td>
<td>Pallet, Mixed Module, Display Shipper, Case</td>
<td>Multiple</td>
<td>Pack, Base Unit or Each</td>
<td>Multiple</td>
</tr>
<tr>
<td>Multipack</td>
<td>Pallet, Mixed Module, Display Shipper, Case</td>
<td>Multiple</td>
<td>Pack, Base Unit or Each</td>
<td>Multiple</td>
</tr>
<tr>
<td>Pack or Inner Pack</td>
<td>Pallet, Mixed Module, Display Shipper, Case</td>
<td>Multiple</td>
<td>Base Unit or Each</td>
<td>Multiple</td>
</tr>
<tr>
<td>Base Unit or Each</td>
<td>Pallet, Mixed Module, Display Shipper, Case, Pack or Inner Pack, Setpack, Multipack</td>
<td>Multiple</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**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
- On the Create Pack popup, select an organization and select or search for your item.
- Select OK.
- On the Create Pack: Select Pack Type popup, select a pack type and click OK.
- On the Edit Item page, Structures tab, Packs subtab, review your pack and save or edit.
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.
Revisions and Versions: 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. For all other kinds of changes, you create a new version. An item revision can have several versions. Item versioning enables you to make changes to an item and track those changes as a separate version, without having to change the revision of the item. 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.

In the case of version enabled items, changes are captured by creating new item versions for minor item changes. For major item changes you can introduce a new revision and create versions on the newly created revision.

In the case of non-version enabled items, revision level changes are captured using revision level attributes and by creating new revisions.

Minor product changes should be captured using versions to avoid the proliferation of items and revisions. Versioning an item and creating a new item request are independent of each other. Versions can be added to a new item request and routed for approval if there is a business need.

FAQs for Manage Product Revisions and Versions

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.
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, 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.
3. From the Action menu, you can associate new attachments with the item, 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.
**Viewing Master Organization Attachments**

From the Attachments tab on the Edit Item page, you can review attachments associated with the item at the Master Organization level.

Click **Master Org Attachments** to access a table listing all the item attachments associated at the Master Organization level.

**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.
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 its details is controlled at the item class or item level, including item extensible flexfields (EFF).

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 management, data security involves granting user item data grants to perform operations on one or more items.

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


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**.


**Managing Item Extensible Attributes Data Security**

The IT Security Manager job role provides access to the Oracle Authorization Policy Manager (APM) 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 APM. 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 (APM).

• **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, users 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, users 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 need to be granted to users 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.

### Managing Data Security Privileges at the Item Level

Item access can be managed at 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.

---

### 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
  - View Item Basic Data
  - Maintain Item Primary Data
  - 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.

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:
  - **View Item Basic Data**
    Required to view the item details page
  - **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:
  - **View Item Basic Data**
  - **View Additional Attribute Group Data**
    Where Additional Attribute Group is the user-defined attribute group name.
  - **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 item:
• View Item Basic Data
• View Item Structure Data
• Maintain Item Structure Data

• The following set of data security privileges are required to update packs for an item:
  • View Item Basic Data
  • View Item Pack Data
  • Maintain Item Pack Data

• The following set of data security privileges are required to update Item People (data security grants) for an item:
  • View Item Basic Data
  • 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
  • View Item Basic Data
  • 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.

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.
  • 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:
  • View Item Basic Data
• 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

---

• 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.
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 set the Catalog Content value 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 portion of the classification defined by the categories and category hierarchy in the catalog. 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.

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 and/or category, or both, through the attachment framework. Multiple attachments are supported but you can associate only a single attachment or attachment type image with a catalog or category.

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.
- 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.

FAQs for Manage Catalogs

How can I share catalog content?

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, the category structure in the source catalog can be different than the native catalog.

Categories can be shared using two methods; the first method is directly associating the category to the catalog. The category is added to the catalog and can be edited in the catalog or any catalog 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 the category is associated. 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.

The second method of sharing categories is adding a category by reference into the catalog. During the creation of the catalog, sharing can be enabled by specifying a single 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 source catalog content can be shared to multiple catalogs and maintained in a single place, the source catalog. In addition, the referenced content can be more than one category, for example a complete category hierarchy and any assigned items to categories in shared content can also be reference within the catalog.

FAQs for Manage Default Catalogs

What is catalog mapping?

You use Catalog Category mapping to map categories of different catalogs to the reporting categories in other catalogs. 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 allow 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. When you use this feature you are required to write code to do the roll up as identified in the example.
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.

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.

<table>
<thead>
<tr>
<th>Operational Attribute Group</th>
<th>Example Attribute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory</td>
<td>Shelf Life Days</td>
</tr>
<tr>
<td>Order Management</td>
<td>Shippable</td>
</tr>
<tr>
<td>Purchasing</td>
<td>Negotiation Required</td>
</tr>
<tr>
<td>Receiving</td>
<td>Allow Substitute Receipts</td>
</tr>
</tbody>
</table>

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.

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.
**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 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.

**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.
Manage Product and Service Data: Manage Product Mass Updates

Item Mass Changes: Explained

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 menu you can:

- Assign items to organizations.
- Assign items to supplier site organizations.
- Assign, reassign, or unassign items to catalog categories.
- Update item attributes.

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.

---

**Important**
Include Catalog and Categories as part of the item search criteria or include the Catalog and Category column in the search results table to assign, reassign, or unassign catalog categories.

**Assign 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.

**Reassign Catalog Categories**

The catalog category assignments for the selected items will be removed and assignments will be made to the newly selected catalog categories.

**Unassign Catalog Categories**

The catalog category assignments for the selected items will be removed.

**Assign Items to Supplier Site Organizations**

Item Supplier Site Organization associates 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.

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.

Commit options let you apply these assignments directly to the database or export the data to a spreadsheet for further review or modification.

**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 a few rows. From the **Actions** menu, select Manage Mass Change and then Edit Multiple 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.

**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.

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 are applied directly to the database.

Specify item 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.

**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**

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**.

---

**FAQs for Mass Updates**

**How can I update item attributes using a spreadsheet?**

Select **Update Item Attributes** 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.
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.

Use any of four methods to create new item requests:

- Select Create New Item Request on the regional task pane.
- Select Create on the Manage New Item Request 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.

Note

Even if the item class is not enabled, when creating an item you can add the item to a new item request that will enable you to create a new item request or choose 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).
• Add attachments.
• Optionally, set automatic promotion status.
• Optionally, set automatic demotion status.
• 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 you try and save an item without completing all the mandatory definitions. The message will list the missing definitions.

---

**Select an Organization**

Select an organization from the **Create New Item Requests** popup. Note, you also have the ability to search for item master organizations from the popup.

**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.

**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.

**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.

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 and approval 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

FAQs for New Item Requests

How can I promote a new item request?

Review your notifications, 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 also must enter a comment when promoting to the next phase.
Managing Item Supplier Site Organization Associations: Explained

Managing item supplier site organization associations involves creating associations between items, supplier sites and organizations, updating these associations, and deleting the associations.

You create item supplier site organization associations while creating or editing an item. From the Item Details page, select the Association tab and then the Supplier Site Organizations sub tab.

Assigning Supplier Sites to the Master Organization

On Supplier Site Organization associations table, click the Create icon. Alternatively you can select Create from Action Menu. The Select and Add Supplier Site Organization Associations dialog appears.

Note, if you want to create supplier site association with only a master organization, leave the Assign to Master Organization Only checkbox selected.

Once the selected supplier sites are added to the base table, save the associations.

Assigning Supplier Sites to Other Organizations

Next, you can assign one or more supplier sites (assigned to master organizations) to other (child) organizations.

You can only assign the supplier sites to the organizations to which the item is assigned.

Select multiple rows of supplier sites and click Assign Organizations to assign all the selected supplier sites to organizations. The Search and Select Organizations dialog box appears.

The selected supplier sites that will be assigned to organizations will be listed in this dialog.
Search organization to which you want to associate the supplier sites and select one or more organizations.

Click **Done** to add the organization associations to the base table.

Save the associations.

**Assigning Supplier Sites to Master Organization and Other Organizations**

You can assign supplier sites to a master organization and other organizations in a single flow.

Click on **Create** icon.

On the **Select and Add Supplier Site Organization Associations** dialog, clear the **Assign to Master Organization Only** check box.

Then search for supplier sites, select one or more supplier sites and select **Next**. The Search and Select Organizations dialog box appears. The supplier sites selected in the previous window will be listed in this dialog for your reference.

To add the organization associations to the base table, search for Organizations and select one or more organizations and then click **Done**.

Save the associations.

**Temporarily Suspending an Item Supplier Site Organization Association**

If you want to temporarily suspend an item supplier site organization association, you can set the status of the association to inactive. You can revert it to active status at any point. You can change the status of multiple associations simultaneously by selecting multiple rows of the supplier site organization association table, selecting their status from the edit status list of values and clicking the change button.

**Specifying Primary Site for an Item Organization**

To specify which supplier site is primary for an item organization use the primary flag. There can be only one primary supplier site for one item organization combination.

Save your updates.

**Deleting Item Supplier Site Organization Associations**

You can add the associations to a new delete group or any existing delete group. The associations will be deleted completely, when the delete group is executed.

**Managing Supplier Access: Explained**

From the **Manage Items** page, select an item and open the Details page. Then select **Item Peoples** tab.

Item grants to supplier users can be managed at the item level. This gives you granular control in providing supplier users access to one or more items on an ad-hoc basis.
Note

Grants to supplier users can be maintained at the item class (as instance set level grants) if supplier users need access to all items within an item class.

FAQ for Manage Supplier Collaboration

What’s the difference between item supplier associations and the approved supplier list?

Item supplier associations can tell you which supplier and (or) supplier location supply an item.

The approved supplier list tells you whether the supplier is approved.
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.

You can create or edit or delete item statuses on the Manage Item Statuses page. Inactive dates are used to specify the date after which the item status will no longer be active. Operational attribute groups and attributes corresponding to the selected item status are displayed in the Details section. Select a value for the status from choice list for the attribute. Whenever the status is applied to the item, the value of the attribute may change. If the status will have no value, select No.

Select the Usage value of None or Defaulted or Inherited in the choice list for the Usage field that corresponds to how the attribute value will change based on the item status value:

- Defaulted- Sets the values of the item status attributes when the status value changes, but allows the overriding of the value during import and update of item.
- Inherited- Sets the values of the item status attributes when the status value changes, but overrides cannot occur.
- None- The item status attribute values will not be changed.

Any change made to an item status is not applied automatically to existing items, but will be applied during the editing of an item when the item status value is changed.

FAQs for Release Product to Market

How can I change an item’s status?

You can change an item status by selecting the appropriate item status on the Edit Item page. Based on the status set up, either the status attributes get inherited or defaulted.
This can also be done via Rule. For example, if the attributes lifecycle phase is production, the item status can be changed to active by creating a rule.
Create Change Orders

Change Orders: Overview

Change orders let you process changes to user-defined item attributes, structures, packs, associations, and item revisions and versions.

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.

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.

Manage Change Orders

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:

- Modify header details such as priority and reason and add or remove attachments.
- Monitor and modify the current status of change order tasks.
- Modify line details and access item pages for further change.
- Monitor the current status of the change order in the workflow.
- Review the actions that have been performed on the change order.

**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.

<table>
<thead>
<tr>
<th>Status Type</th>
<th>FYI Change Order Creation and Assignment</th>
<th>Request Comment</th>
<th>FYI Task Notification</th>
<th>Request to Comment From Action Log table</th>
<th>Approval Notification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
### 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.

### 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, entered text, or URL link.
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.
Consolidate Product and Service Master Data: Manage Import Batches

Create Item Import Batches

Item Batches: Overview

Use item batches to import sets of item data including items, structures and pack hierarchies, trading partner item references, and category assignments from multiple product source systems.

The following options are available for item batches:

- Import options for item batches 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.

You can add and modify item data to batches using a spreadsheet interface or industry standard open interface tables.

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.

**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.

**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.

• 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.

• 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 Manage Import Maps page

• Edit and delete import maps from Manage Import Maps page.

Transform source data using complex expressions before importing it through an import batch.

• Write basic transformation functions like Split and Concatenate for the source data before importing the source data.

• Write functions independent of the file type used for uploading the data.

• Write a Split function which will take one source data value as input and the delimiter from which the value is to be split. The Split function
will take in the value to be split, delimiter and part number which is to be returned. Split function will split the input value as per the delimiter provided into parts and return the part of the input value pertaining to the provided part number.

- Write a Concat function which will take multiple source data values as input and concatenate 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.
- Select the desired function.
- Build the expression by selecting Source Data columns.
- Optionally, validate the expression.

Associate Multiple Suppliers with Import Map

Import Items to Multiple Organizations

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.
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 popup 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.
Check Data Quality

Data Quality: Explained

The quality of product data is enhanced by integration with Oracle Product Data Quality, 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 Product Data Quality involves the following:

- Data quality checking
- The semantic model
- Data quality attributes
- Classification
- Standardization
- Matching

Data Quality Checking

When you check data quality, Oracle Product Data Quality 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 Product Data Quality. The semantic model is a fully configured data lens, which contains detailed contextual information about your data. The semantic model contains your definitions for classification, standardization, and matching.

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 Product Data Quality 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 Product Data Quality. 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 Product Data Quality, 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 Product Data Quality, 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, then the item belongs to the Capacitor item class.

Standardization

In Oracle Product Data Quality, 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 Product Data Quality, 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.

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 Unconfirmed 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.
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.

<table>
<thead>
<tr>
<th>Object to Be Numbered</th>
<th>Association Type for the Rule Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>Item class</td>
</tr>
<tr>
<td>Change Order</td>
<td>Change type</td>
</tr>
<tr>
<td>New item request</td>
<td>New Item Request</td>
</tr>
</tbody>
</table>

Note
Although you can also associate a rule set with an attribute group, you cannot generate numbers for an attribute group.

- In the rule set, the association name must be the name of the existing item class, change order type, or new item request that you are associating with your rule set.
- You activate a rule set by assigning it to a business entity. If the association type is Item Class (or Attribute group), then select one or more of the available business entities (Item data level, Item revision data level, or Item supplier data level), to ensure that the rule set is activated.
- Because a rule set can consist of more than one rule, multiple rules can be enforced with a single rule set assigned to a business entity.
- Only one rule set at a time can be assigned to a business entity. However, you can create a composite rule set, which includes multiple other rule sets, and assign that to a business entity.

**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.

<table>
<thead>
<tr>
<th>Object to Be Numbered</th>
<th>Return Type for the Rule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item (number)</td>
<td>Item Number</td>
</tr>
<tr>
<td>Item (description)</td>
<td>Item Description</td>
</tr>
<tr>
<td>Change Order</td>
<td>Change order number</td>
</tr>
<tr>
<td>New item request</td>
<td>New item request number</td>
</tr>
</tbody>
</table>

- 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.

**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

**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.

<table>
<thead>
<tr>
<th>Field (in Rule Set)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Name</td>
<td>Example: MyItemNumGenRuleSet1</td>
</tr>
<tr>
<td>Type</td>
<td>Assignments</td>
</tr>
<tr>
<td>Association Type</td>
<td>Item Class</td>
</tr>
<tr>
<td>Association Name</td>
<td>Example: MyItemClass1</td>
</tr>
<tr>
<td>Business Entities</td>
<td>One or more of Item data level, Item revision data level, or Item supplier data level</td>
</tr>
</tbody>
</table>

3. On the *Edit Rule Set* page, create and save a rule with the field values shown in the following table.

<table>
<thead>
<tr>
<th>Field (in Rule)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Example: MyItemNumGenRule1</td>
</tr>
<tr>
<td>Return Type</td>
<td>Item Number</td>
</tr>
<tr>
<td>Primary If Expression</td>
<td>true</td>
</tr>
<tr>
<td>Secondary If Expression</td>
<td>true</td>
</tr>
<tr>
<td>Return Value</td>
<td>Example: [PhysicalAttributes]. [UNIT_LENGTH]</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Field (in Item Class)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Example: MyItemClass1</td>
</tr>
<tr>
<td>Item Number Generation Method</td>
<td>Rule Generated</td>
</tr>
<tr>
<td>Associated Rule Set</td>
<td>Example: MyItemNumGenRuleSet1</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Field (in Rule)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Example: MyItemDescGenRule1</td>
</tr>
<tr>
<td>Return Type</td>
<td>Item Description</td>
</tr>
</tbody>
</table>
| Return Value        | Example:
|                     | [Main].[ITEM_TYPE] + [Main].[LONG_DESCRIPTION] |
• On the Item Management tab, the differences for your item class are shown in the following table.

<table>
<thead>
<tr>
<th>Field (in Item Class)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Description Generation Method</td>
<td>Rule Generated</td>
</tr>
<tr>
<td>(in the Description Generation section)</td>
<td></td>
</tr>
<tr>
<td>Associated Rule Set</td>
<td>Example: MyItemDescGenRule1</td>
</tr>
</tbody>
</table>

• 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.

• 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.

<table>
<thead>
<tr>
<th>Field (in Rule Set)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Name</td>
<td>Example: MyCONumGenRuleSet1</td>
</tr>
<tr>
<td>Association Type</td>
<td>Change type</td>
</tr>
<tr>
<td>Association Name</td>
<td>Example: MyCOType1</td>
</tr>
</tbody>
</table>

• In the Details section of the Edit Rule Set page, the differences for your rule are shown in the following table.

<table>
<thead>
<tr>
<th>Field (in Rule)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Example: MyCONumGenRule1</td>
</tr>
<tr>
<td>Return Type</td>
<td>Change order number</td>
</tr>
<tr>
<td>Return Value</td>
<td>Example: Flexfield[CM_Global_Segment1]</td>
</tr>
</tbody>
</table>

• 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.
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.

<table>
<thead>
<tr>
<th>Field (in Rule Set)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display Name</td>
<td>Example: MyNIRNumGenRuleSet1</td>
</tr>
<tr>
<td>Association Type</td>
<td>New Item Request</td>
</tr>
<tr>
<td>Association Name</td>
<td>Example: MyNIRType1</td>
</tr>
</tbody>
</table>

- In the Details section of the Edit Rule Set page, the differences for your rule are shown in the following table.

<table>
<thead>
<tr>
<th>Field (in Rule)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>Example: MyNIRNumGenRule1</td>
</tr>
<tr>
<td>Return Type</td>
<td>New item request number</td>
</tr>
<tr>
<td>Return Value</td>
<td>Example: Flexfield[CM_Global_Segment1]</td>
</tr>
</tbody>
</table>

- 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.

<table>
<thead>
<tr>
<th>Field (in New Item Request Type)</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Generation Method</td>
<td>Rule Generated</td>
</tr>
<tr>
<td>Associated Rule Set</td>
<td>Example: MyNIRNumGenRuleSet1</td>
</tr>
</tbody>
</table>

- When you create a new item request, your rule generates a new item request number for it.
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
• 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.

**FAQ 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.
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 is 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 to manage import and publication options for each spoke system.

Define the following publication criteria for each spoke system:

<table>
<thead>
<tr>
<th>Publication Criteria</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objects</td>
<td>• Items</td>
</tr>
<tr>
<td></td>
<td>• Item classes</td>
</tr>
<tr>
<td></td>
<td>• Item catalogs</td>
</tr>
</tbody>
</table>
Item entities

- Attributes
- Attachments
- Associations
- Item Category Assignments
- Packs
- Item Relationships, such as Global Trade Item Number (GTIN), Related Items, Trading Partner Items, and Cross-References
- All structures
- Primary structures

<table>
<thead>
<tr>
<th>Item class</th>
<th>Select which item classes in the hierarchy to include.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item catalog</td>
<td>Search for, and select, the catalog to be published. The publication will include the entire hierarchy for the catalog you select.</td>
</tr>
</tbody>
</table>

**Scheduled Process Parameters**

Run the Product Hub Publication scheduled process for 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: Name of the spoke system to which objects get published.
- Publish Items: Indicate whether the items get published.
- Publish Item Classes: Indicate whether the item classes get published.
- Publish Catalogs: Indication whether Catalogs get published.
- Criteria Date: Objects from this date will get filtered. This is required for the first time publication. For subsequent publication, the last publish date is used by default if criteria date is not populated.
- 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:

<table>
<thead>
<tr>
<th>Profile Option</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Items per Payload for Publication</td>
<td>This profile option determines the number of items to be used per payload in the publication process.</td>
</tr>
<tr>
<td>Number of Parallel Payloads for Publication</td>
<td>This profile option determines the number of parallel payloads to be used in the publication process.</td>
</tr>
</tbody>
</table>
Note

You can view the errors identified during publication from the log files of the scheduled process.

Note

The profile option values are defined at Manage Administrator Profile Values task in the Functional Setup Manager.

Access the Payload

Access the xml payload from the Enterprise Manager or the Unified Content Manager 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 the following table:

<table>
<thead>
<tr>
<th>Scheduled Process Parameters</th>
<th>Value</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spoke System</td>
<td>Choice-list</td>
<td>Name of the external spoke system to which item, item class, or catalog information is to be published.</td>
</tr>
<tr>
<td>Publish Items</td>
<td>Yes or No</td>
<td>Indicates whether items are to be published.</td>
</tr>
<tr>
<td>Publish Item Classes</td>
<td>Yes or No</td>
<td>Indicates whether item classes are to be published.</td>
</tr>
<tr>
<td>Publish Catalogs</td>
<td>Yes or No</td>
<td>Indicates whether catalogs are to be published.</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Criteria Date</td>
<td>Date Picker</td>
<td>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 criteria date is supplied, records selected for publication are those created or updated since the last publication date.</td>
</tr>
<tr>
<td>Folder Location</td>
<td>Text Field</td>
<td>Unified Content Manager folder location to save the output xml file.</td>
</tr>
</tbody>
</table>

**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.

**How can I determine which items will be published?**

The items published are determined by the selection rules defined for the publication options for a spoke system. Selection rules can be based on Organizations, Organization Hierarchy, Catalog and Item Class.

**Can I select items from child organizations to published??**

No, only master organizations are available to filter the items. Consequently, items from child organizations cannot be published.
Which item entities are supported for publication?

The supported item entities follow:

- Attributes
- Attachments
- Associations
- Item Category Assignments
- Packs
- Item Relationships
- Structures

How can I chunk the data so that the payload size of the publication process does not exceed the capacity of the middleware?

Use the profile options provided for publication process:

- EGI_PUBLICATION_ITEMS_PER_PAYLOAD - Number of Items per Payload for Publication. This profile option determines the number of items to be used per payload in the publication scheduled process.

- EGI_PUBLICATION_NUMBER_OF_PAYLOADS - Number of Parallel Payloads for Publication. This profile option determines the number of parallel payloads to be used in the publication scheduled process.

How can I add values to the profile options??

Profile option values must be defined at Manage Administrator Profile Values task in the Functional Setup Manager.
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 lifecycle and should be purged from the system.

Constraints maintain data integrity so that pending transactions are not affected while purging. Along with predefined constraints, custom constraints can be defined to be checked before purging is done.

Caution

You can supersede existing items using item relationships, but 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 etc. 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 Manage Delete Groups link under Items on the Task menu.

You can add objects directly to a Delete Group through this link.
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 Delete Groups. Delete Groups can be created and maintained through the **Mange Delete Groups** link under Items on the Task menu.

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**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.

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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.

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**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 Duplicate from the Action menu when you are adding a number of similar objects with different organization, supplier and supplier site assignments.

**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 Duplicate 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 Duplicate 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.
abstract role
A description of a person’s function in the enterprise that is unrelated to the person’s job (position), such as employee, contingent worker, or line manager. A type of enterprise role.

action
The kind of access named in a security policy, such as view or edit.

APM
Abbreviation for Oracle Authorization Policy Manager

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.

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.

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 data quality process by which an item is assigned to an item class, and to one or more categories within catalogs, by Oracle Product Data Quality, based on the value of data quality attributes in an attribute group that you specify for an item class.

**condition**
An XML filter or SQL predicate WHERE clause in a data security policy that specifies what portions of a database resource are secured.

**context**
A grouping of flexfield segments to store related information.

**data dimension**
A stripe of data accessed by a data role, such as the data controlled by a business unit.

**data role**
A role for a defined set of data describing the job a user does within that defined set of data. A data role inherits job or abstract roles and grants entitlement to access data within a specific dimension of data based on data security policies. A type of enterprise role.

**data security**
The control of access to data. Data security controls what action a user can take against which data.

**data security policy**
A grant of entitlement to a role on an object or attribute group for a given condition.

**database resource**
An applications data object at the instance, instance set, or global level, which is secured by data security policies.

**descriptive flexfield**
Customizable expansion space, such as fields used to capture additional descriptive information or attributes about an entity, such as customer cases. Information collection and storage may be configured to vary based on conditions or context.
**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 Oracle Fusion Applications instance.

**enterprise role**
Abstract, job, and data roles are shared across the enterprise. An enterprise role is an LDAP group. An enterprise role is propagated and synchronized across Oracle Fusion Middleware, where it is considered to be an external role or role not specifically defined within applications.

**entitlement**
Grants of access to functions and data. Oracle Fusion Middleware term for privilege.

**extensible flexfield**
Customizable expansion space, as with descriptive flexfields, but able to capture multiple sets of information within a context and multiple contexts grouped to appear in a named region of a user interface page. Some extensible flexfields let you group contexts into categories.

**flexfield segment**
An extensible data field that represents an attribute on an entity and captures a single atomic value corresponding to a predefined, single extension column in the Oracle Fusion Applications database. A segment appears globally or based on a context of other captured information.

**function security**
The control of access to a page or a specific widget or functionality within 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 for a specific job consisting of duties, such as an accounts payable manager or application implementation consultant. A type of enterprise role.

**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 Product Data Quality.
organization
An organizing unit of an enterprise that provides the framework for performing legal, management, and financial control and reporting. Organizations can represent departments, sections, divisions, business units, companies, contractors, and other internal or external units of the enterprise. Organizations can have multiple classifications. Oracle Fusion Projects uses organizations that are classified as project and task owning organizations and project expenditure organizations.

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 consisting of a name and a value, that can be set at hierarchical levels of an enterprise. Also called a profile or user option.

role
Controls access to application functions and data.

SOA
Abbreviation for service-oriented architecture.

source system
Any point of origin with integrated, cohesive business application data from which fulfillment data, or planning data, or both, can be extracted into data files.

SQL predicate
A type of condition using SQL to constrain the data secured by a data security policy.

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.

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.
**workflow**

An automated process in which tasks are passed from a user, a group of users, or the application to another for consideration or action. The tasks are routed in a logical sequence to achieve an end result.

**XML filter**

A type of condition using XML to constrain the data secured by a data security policy.