Oracle® Fusion Applications Product Management, Product Information Management Guide

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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.

With a local installation of help, you can add custom help files to replace or supplement the provided content. Help content patches are regularly made available to ensure you have access to the latest information. Patching does not affect your custom 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. You can access the guides from the **Guides** menu in the global area at the top of Oracle Fusion Applications Help pages.

Note
The **Guides** menu also provides access to the business process models on which Oracle Fusion Applications is based.

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.

To supplement these guides, which cover specific business processes and offerings, the following guides address common areas:

Guide	Intended Audience	Purpose
Common User Guide	All users	Explains tasks performed by most users.
Common Implementation Guide	Implementors	Explains tasks within the Define Common Applications Configuration task list, which is included in all offerings.
Information Technology Management, Implement Applications Guide	Implementors	Explains how to use Oracle Fusion Functional Setup Manager to plan, manage, and track your implementation projects, migrate setup data, and validate implementations.
Technical Guides	System administrators, application developers, and technical members of implementation teams	Explain how to install, patch, administer, and customize Oracle Fusion Applications.

For guides that are not available from the Guides menu, 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 visibility into 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 the Oracle Enterprise Repository for Oracle Fusion Applications 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.

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

The Oracle Fusion Applications information is provided as a solution pack that you can upload to your own deployment of Oracle Enterprise Repository for Oracle Fusion Applications. You can document and govern integration interface assets provided by Oracle with other assets in your environment in a common repository.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/us/corporate/accessibility/index.html.

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@oracle.com. You can use the **Send Feedback to Oracle** link in the footer of Oracle Fusion Applications Help.

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Product Management Overview

Product Information Management Features: Overview

Product Information Management consists of three products:

1. Oracle Fusion Product Model
2. Oracle Fusion Product and Catalog Management
3. Oracle Fusion Product Hub

Note

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

Oracle Fusion Product Model Features

Product Model 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.

Oracle Fusion Product and Catalog Management Features

Product and Catalog Management includes the following features:

- **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 statues and product structures. Submit changes through a formal review and approval workflow to ensure successful and validated implementation of change orders. Implement changes through multiple organizations by propagating change orders to organizations while still having the flexibility to adapt implementation schedule based on individual organizations. Move or split change order lines to new or existing change orders to avoid bottlenecks in processing and implementation.

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

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

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

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Manage Product and Service Data: Define Product

Creating Items: Explained

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

Creating a Single Item

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, you can optionally:

- Define an item structure
- Assign to organizations
- Create relationships
- Assign catalog categories
- Add attachments

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.

Copying an Item: 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.

What happens if I select more than one item template?

If more than one item template is selected, they will be applied sequentially. This means that if the same attribute is defined in more than one template, the value of the attribute as set in a subsequent template in the sequence will override the previously set value for that attribute.

3

Manage Product and Service Data: Manage Product Specifications

Managing Item Specifications and Attributes

Item Specifications and Attributes: Explained

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

From the Specifications tab on the Edit Item or Create Item pages, you can navigate through 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.

Intrabatch Items and Cross-References in Item Batches: Example

This example shows the relationship between the items being imported that are identified as intrabatch items and how they are cross referenced among themselves and with a new item being created.

Scenario

Three new items from the source system named Item A, Item B, and Item C are uploaded into an item batch. This is the first time items are being uploaded from this source system.

As part of the data quality check process, duplicate items that are being uploaded from the source items are identified. These duplicate items are displayed on the Intrabatch page organized into groups of similar source system items, so Item A, Item B, and Item C are grouped together.

On the Intrabatch page, you can take action to include Item A, cross reference Item B and exclude Item C before submitting the batch.

When the batch is processed, no matches are found. Before the items are imported, the Item Batch Details page will include the following information:

Item A appears on the Confirmed tab because the batch option is set to confirm no matches as New.

Item B appears on the Cross-References tab showing: the cross-reference of Item B to Item A as a result of the intrabatch data quality check

Item C appears on the Excluded tab.

On import, a new item in the Oracle Fusion Product Hub named Item D is created for the Item A source system item and the cross references are established.

The Cross References tab will now show the following: cross references of Item D to Item A and Item D to Item B.:

The intrabatch cross reference of Item B to Item A is recalculated against the new Item D in Oracle Fusion Product Hub.

Required Item Attributes: Explained

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

Attribute	If
Contract Coverage Template	Contract Item Type is set to Service or Warranty
Contract Duration	Contract Item Type is set to Service or Warranty
Contract Duration Period	Contract Item Type is set to Warranty
Demand Time Fence Days	Demand Time Fence is set to User-defined
Encumbrance Account	Reverse Encumbrance parameter is set to Yes
Expense Account	Inventory Asset Value is set to No and Inventory Item is set to Yes
Outside Processing Unit Type	Outside Processing Item is set to Yes
Planning Time Fence Days	Demand Time Fence is set to User-defined
Planning Time Fence Days	Planning Time Fence is set to User-defined
Release Time Fence Days	Release Time Fence is set to User-defined
Repetitive Planning	MRP Planning Method is set to MPS planning or MRP planning
Service Duration	Service Duration Period is not Null
Shelf Life Days	Lot Expiration (Shelf Life) Control is set to Item shelf life days
Source Organization	Replenishment Source Type is set to Inventory or Subinventory.
Starting Lot Number	Lot Control is set to Full lot control, and Lot Generation Organization Parameter is set to Item Level
Starting Lot Prefix	Lot Control is set to Full lot control, and Lot Generation Organization Parameter is set to Item Level
Starting Serial Number	Serial Number Control is set to Predefined serial numbers

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

Additional Item Attributes: Explained

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

Descriptive flexfields for additional attributes are available in Oracle Fusion Product and Catalog Management, Oracle Fusion Product Hub, and Oracle Fusion Product Model

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

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

User-Defined Item Attributes and Attribute Groups: Explained

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

Extensible flexfields for user-defined attributes is available in Oracle Fusion Product and Catalog Management and Oracle Fusion Product Hub.

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

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

Note

When creating or editing attribute groups, or when creating new item classes associated with attribute groups, you must redeploy the extensible flexfields for the attribute groups to become available in the system.

Perform the Manage Extensible Flexfields task. Access the Manage Extensible Flexfields task by starting in the Setup and Maintenance Overview page and searching for flexfields. In the Manage Extensible Flexfields page, search for the flexfield code named EGO_ITEM_EFF. In the search results, select the row that contains the flexfield code EGO_ITEM_EFF and click Deploy Flexfield. After the flexfield deployment is complete, click OK. Check the Deployment Status and Deployment Date columns to verify that the extensible flexfield deployed successfully on the current date.

User-Defined Attribute Groups

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

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

- RPM

- Power

- Oil/fuel mixture

- Weight

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

You create attribute groups on the Manage Attribute Groups page.

Note

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

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

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

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

- Chapter number

- Name

- Number of pages

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

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Tip

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

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:

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 Costing Specifications

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

Item Costing Specifications

Costing Enabled

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

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

Include in Rollup

Indicate whether to include an item in the cost rollup.

Inventory Asset Value

Indicate whether to value an item as an asset in inventory

Turning this option off indicates an expense item.

Standard Lot Size

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

Item General Planning Specifications

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

Item General Planning Specification Attributes

Autoexpire ASN

Indicate whether the advance shipment notice expires automatically.

Bucket Days

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

Carrying Percentage

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

Consigned

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

Fixed Days Supply

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

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

Fixed Lot Multiplier

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

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

Fixed Order Quantity

Enter the quantity used to modify the size of planned order quantities or repetitive daily rates. When net requirements fall short of the fixed order quantity, the planning process suggests the fixed order quantity. When net requirements exceed the fixed order quantity, the planning process suggests multiple orders for the fixed order quantity. For discrete items, use this attribute to define a fixed production or purchasing quantity. For repetitive items, use

this attribute to define a fixed production rate. For example, if your suppliers can provide the item in full truckload quantities only, enter the full truckload quantity as the fixed order quantity.

Fixed Quantity

Indicate the fixed quantity for reorder.

Forecast Type

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

Inventory Planning Method

Select an option for organization level planning

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

No planning method used. Select this option for MRP/MPS planned items.

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

Make or Buy

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

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

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

Maximum Days of Supply

Indicates the maximum allowed days of supply for replenishment reorder.

Maximum Min-Max Quantity

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

Maximum Order

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

Maximum Order Quantity

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

Method

Select an option to plan use of fixed or dynamically calculated safety stock quantities. For MRP/MPS planned items, you must set the **Inventory Planning Method** attribute to **Not planned**, then choose the MRP planned percent option here.

Calculate safety stock as a user-defined percentage (Safety Stock Percent) of the average gross requirements for a user-defined number of days. For discrete items, the user-defined number of days is the Safety Stock Bucket Days. For repetitive items, the user-defined number of days is the repetitive planning period. Note that safety stock for an item varies as the average gross requirements vary during the planning process.

Calculate safety stock using methods defined by the **Enter Item Safety Stocks** window. You can use mean absolute deviation or user-defined percentage of forecasted demand.

Minimum Days of Supply

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

Minimum Min-Max Quantity

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

Minimum Order

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

Minimum Order Quantity

Enter the minimum order quantity or repetitive rate (units per day). Planning algorithms (reorder point, min-max, MPS, and MRP) use this to modify the size of planned order quantities or repetitive daily rates. For discrete items, when net requirements fall short of the minimum order quantity, planning algorithms

suggest the minimum order quantity. For repetitive items, when average daily demand for a repetitive planning period falls short of the minimum order quantity, planning algorithms suggest the minimum order quantity as the repetitive daily rate. For example, use this to define an order quantity below which it is unprofitable to build the item.

Organization

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

You can choose organizations that meet the following criteria:

- The item is assigned to the source organization

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

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

Percent

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

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

Planner

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

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

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

Release Authorization Required

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

You must obtain release authorization from the customer.

You must obtain release authorization from the supplier.

Release authorization is not required

Subcontracting Component

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

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

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

Subinventory

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

Type

Indicate the way in which requests are fulfilled.

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

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

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

Important

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

Window Days

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

Item Inventory Specifications

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

Item Inventory Specification Attributes

Bulk Picked

Enables you to pick items in bulk.

Check Material Shortage

Indicates to check for material shortages for the item.

This attribute enables you to check for material shortages for the item. Turn this option on to trigger a material shortage alert and shortage notification during transactions of the item.

Child Lot Enabled

Indicates whether an item is subject to Lot control at the transactional purposes when a Parent Lot is specified for transactional purpose.

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

Control: Lot

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

Do not establish lot control for the item.

Track inventory balances by lot number. You must specify a lot number for issues and receipts.

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

Control: Shelf Life

Indicates how long items in a given lot remain available.

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

Shelf life control not established for this item

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

Important

You cannot change lot expiration control when on-hand quantity of the item exists. If Lot Expiration is controlled at the Master level, the check for on-hand quantity is against the sum of on hand quantities in all child organizations.

Copy Lot Attributes

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

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

Cycle Count Enabled

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

Default Grade

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

Note

You can change the default grade even if you performed transactions for the item.

Default Lot Status

Indicate the default lot status for the item.

Default Serial Status

Indicate the default serial status of the item.

Expiration Action

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

Expiration Action Interval

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

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

Format Validation

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

Generation

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

Create and assign serial numbers when you receive the item. Thereafter, for any material transaction, you must provide a serial number for each unit.

Create and assign serial numbers when you issue (ship) the item against a sales order. If you select this option, serial numbers are required at ship confirm. If you receive an item on an RMA (return material authorization), you must specify the same serial numbers you created at sales order issue. All other material transactions for this item bypass serial number information.

Serial number control not established for this item. All material transactions involving this item bypass serial number information.

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

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

Change back and forth between	Change back and forth between	When
Dynamic entry at inventory receipt	Predefined serial numbers	Any time
Predefined serial numbers	No serial number control	Any time
Dynamic entry at inventory receipt	No serial number control	Item has no on-hand quantity
Dynamic entry at sales order issue	Predefined serial numbers	Item has no on-hand quantity
Predefined serial numbers	No serial number control	Item has no on-hand quantity
Dynamic entry at inventory receipt	Dynamic entry at sales order issue	Item has no on-hand quantity

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

Important

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

Grade Controlled

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

Note

You cannot modify this check box if you have transacted the item.

Hold Days

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

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

Inventory Item

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

- Stockable

- Transactable

- Build in WIP

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

Locator Control

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

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

Locator control not established.

Define locators before you use them.

Lot Divisible

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

Lot Merge Enabled

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

Lot Split Enabled

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

Lot Status Enabled

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

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

Lot Substitution Enabled

Indicates whether lots can be substituted in a transaction.

Important

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

Lot Translate Enabled

Enables you to translate lots within a lot controlled item

Maturity Days

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

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

Negative Measurement Error

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

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

Parent

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

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

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

Positive Measurement Error

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

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

Prefix

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

Reservable

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

Important

You cannot turn off reservation control if reservations exist.

Restrict Locators

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

Restrict Subinventory

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

Retest Interval

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

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

Revision Control

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

Serial Status Enabled

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

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

Shelf Life Days

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

Starting Number: Child Lot

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

Starting Number: Lot

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

Starting Number: Serial

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

Starting Prefix: Lot

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

Starting Prefix: Serial

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

Stocked

Indicate whether an item can be stocked.

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

Transaction Enabled

Indicates whether transaction can be performed on an item.

Item Invoicing Specifications

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

Item Invoicing Specification Attributes

Accounting Rule

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

This attribute is for reference information only

Invoice Enabled

Indicate whether to activate an item. If **Invoiceable Item** is turned on, you can temporarily exclude from invoicing by leaving **Invoice Enabled** turned off.

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

Invoiced

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

Invoicing Rule

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

Output Tax Classification Code

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

Payment Terms

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

Sales Account

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

Item Lead Times Specifications

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

Item Lead Time Specification Attributes

Cumulative Manufacturing

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

Cumulative Total

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

Fixed

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

Lead Time Lot Size

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

Postprocessing Days

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

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

Preprocessing Days

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

Processing Days

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

Variable

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

Item Main Specifications

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

Item Main Specification Attributes

Approval Status

The approval status of the item.

Item Description

Enter a description for the item

Item Status

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

These attributes control the functionality of an item over time

Life Cycle Phase

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

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

Pack Type

Also known as Trade Item Unit Descriptor (TIUD)

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

Style Item

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

User Item Type

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

Conversions

Indicate the conversion of the transactions.

Use only unit of measure conversions unique to this item.

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

Defaulting Control

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

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

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

Negative Deviation Factor

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

Positive Deviation Factor

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

Primary Unit of Measure

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

Secondary Unit of Measure

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

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

Tracking Unit of Measure

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

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

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

Long Description

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

Pricing

This attribute is assigned at the organization level.

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

Item MRP and MPS Planning Specifications

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

Item MRP and MPS Planning Specification Attributes

Acceptable Early Days

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

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

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

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

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

This applies to discrete items only. For repetitive items, use **Overrun Percentage**.

Calculate ATP

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

ATP = **planned production - committed demand**

Where:

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

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

Continuous Interorganization Transfers

Indicate whether to perform continuous inter organization transfers.

Convergence Pattern

Indicate whether you use a convergent consumption pattern in planning. The available choices are:

Create Supply

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

Critical Component

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

Demand Time Days

calculates the demand time fence as the plan date (or the next workday if the plan is generated on a non workday) plus the value you enter here.

Demand Time Fence

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

Calculate the demand time fence as the plan date (or the next workday if the plan is generated on a non workday) plus:

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

Distribution Planned

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

Divergence Pattern

Indicates whether you use a divergent supply pattern for planning. The available choices are:

Exception Set

Enter the name of the planning exception set that groups together the sensitivity controls and exception time periods for item-level planning exceptions for the item. The item-level planning exceptions include: overcommitted, shortage, excess, and repetitive variance. The planning process uses this attribute to decide when to raise planning exceptions for the item.

Since different items may require different sensitivity controls and exception time periods, you can define multiple planning exception sets and assign different sets to different items. In other cases, where many items require the same sensitivity controls and exception time periods, you can associate the same set to multiple items.

Exclude from Budget

Indicate whether the item is to be excluded from the budget.

Forecast Control

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

You forecast demand directly, rather than by exploding forecast demand.

You forecast demand directly, explode forecast demand, or use a combination of both methods.

You place sales order demand but do not forecast demand.

Maximum Inventory Days of Supply

Enter the maximum amount necessary of any materials and supplies in the system that are needed to achieve the desired business metric like throughput rate, cost, due date performance, inventory, days of supply etc.

Maximum Inventory Window

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

Negative Acceptable Rate

Indicate the amount the planning process uses to decrease current daily rates inside the planning time fence.

Overrun Percentage

Enter a percentage the planning process uses to suggest new daily rates. The planning process only suggests a new daily rate if the current rate exceeds the suggested rate by more than the acceptable overrun amount.

The acceptable overrun amount is calculated by multiplying this percentage by the suggested daily rate. For example, if the suggested daily rate is **100/day,** and

Overrun Percentage is **10**, the planning process only suggests a new rate if the current rate is greater than **110/day** (**100/day** + **100/day** x **10%**).

This lets you reduce plan nervousness and eliminate minor rate change recommendations, especially when it is cheaper to carry excess inventory for a short time than it is to administer the rate change.

This attribute applies to repetitive items only. For discrete items, use **Acceptable Early Days**.

Pegging

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

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

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

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

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

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

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

Planned Inventory Point

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

Planning Method

Select the option that decides when to plan the item:

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

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

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

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

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

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

Planning Time Days

Calculates the planning time fence as the plan date (or the next workday if the plan is generated on a non workday) plus the value you enter here.

Planning Time Fence

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

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

Calculate the planning time fence as the plan date (or the next workday if the plan is generated on a non-workday) plus:

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

Positive Acceptable Rate

Indicate the amount the planning process uses to increase current daily rates inside the planning time fence.

Preposition Point

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

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

Reduce MPS

Select an option to decide when to reduce master production schedule (MPS) quantities to zero.

If you do not have automatic production relief, you may select one of the following options to reduce MPS quantities and avoid overstating your supply.

Do not reduce order quantities on the MPS.

Reduce order quantities on MPS entries to zero when the entry is past due.

Reduce order quantities on MPS entries to zero when the due date moves inside the demand time fence.

Reduce order quantities on MPS entries to zero when the due date moves inside the planning time fence

Release Time Days

Calculate the demand time fence as the plan date (or the next workday if the plan is generated on a non workday) plus the value you enter here.

Release Time Fence

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

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

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

- The lead time is not compressed

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

- The orders are not for Kanban items

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

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

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

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

Calculate the release time fence as the plan date (or the next workday if the plan is generated on a non workday) plus:

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

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

Repair Lead Time

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

Repair Program

Indicates the relationship with the vendor for the repair of an item. The available choices are:

Repair Yield

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

Repetitive Planning

Indicate whether to plan material requirements in repetitive daily rates. Turn this option off to plan material requirements in discrete quantities. The planning process suggests planned orders you can implement as discrete jobs or as purchase requisitions.

Round Order Quantities

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

Shrinkage Rate

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

Substitution Days

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

Substitution Window

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

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

Target Inventory Days of Supply

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

Target Inventory Window

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

Item Order Management Specifications

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

Item Order Management Specification Attributes

ATP Components

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

ATP Rule

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

Charge Periodicity

This attribute is controlled at the master organization level.

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

Check ATP

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

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

Customer Ordered

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

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

Customer Orders Enabled

Indicates whether an item is currently customer orderable

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

This attribute is optionally set by the Item Status code.

Eligibility Rule

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

Internal Ordered Item

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

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

Internal Orders Enabled

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

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

This attribute is optionally set by the Item Status code.

Order Management Transaction Enabled

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

Over Shipment Tolerance

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

Pick Components

Indicates whether an item has a bill of material with options, classes, or included items picked from finished goods inventory.

Picking Rule

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

Returnable

Indicate whether to allow customers to return an item.

RMA Inspection Required

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

Ship Model Complete

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

Under Shipment Tolerance

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

Shippable

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

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

Sales Product Type

Indicates the sales product type:

Item Physical Specifications

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

Item Physical Specification Attributes

Collateral

Indicate whether the item is collateral.

Container

Identify that items are containers used for shipping sales orders.

Container Type

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

Downloadable

Indicate whether the item can be downloadable.

Electronic Format

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

Event

Indicate whether the item is event.

Dimensions: Height

Enter the height of the item

Dimensions: Length

Enter the length of the item

Dimensions: Width

Enter the width of one unit of item.

Indivisible

Indicates whether the item can be ordered in fractions.

Internal Volume

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

Maximum Load Weight

Enter the maximum load weight of the container or vehicle

Minimum Fill Percent

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

Unit

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

Unit Volume

Enter the volume of one unit of item.

Unit Weight

Enter the weight of one unit of item.

Vehicle

Indicate whether vehicles are used for shipping the items.

Warehouse Equipment

Indicate whether the item is equipment.

Item Process Manufacturing Specifications

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

Item Process Manufacturing Specification Attributes

CAS Number

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

Hazardous Material

Indicate if the item is hazardous.

Process Costing Enabled

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

Process Execution Enabled

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

Process Quality Enabled

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

Process Supply Locator

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

Process Supply Subinventory

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

Process Yield Locator

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

Process Yield Subinventory

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

Recipe Enabled

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

Item Purchasing Specifications

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

Item Purchasing Specification Attributes

Allow Purchasing Document Description Update

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

Default Buyer

Enter the buyer assigned to purchase an item.

Expense Account

Enter the default inventory account for expense items. This attribute is used only when **Inventory Asset Value** is turned off.

Hazard Class

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

Input Tax Classification Code

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

Inspection Required

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

Invoice Close Tolerance Percentage

Enter the percentage tolerance to automatically close purchase order shipments.

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

Invoice Match Option

Indicate the invoice matching used. Values can be:

List Price

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

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

Market Price

Enter the market value for an item.

Match Approval Level

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

Negotiation Required

Indicate whether negotiation is required or not.

Outside Processing

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

Outsourced Assembly

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

Price Tolerance Percentage

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

Purchasable

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

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

This attribute is optionally set by the Item Status code.

Purchased

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

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

Receipt Close Tolerance Percentage

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

You can receive additional items against the shipment later.

Receipt Required

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

Rounding Factor

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

Taxable

Indicate whether the supplier charges a tax.

UN Number

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

Unit of Issue

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

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

Unit Type

Indicate the type of unit which is processed outside.

Use Approved Supplier

Indicate whether to use only approved suppliers.

Item Receiving Specifications

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

Item Receiving Specification Attributes

Action

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

No over tolerance enforced.

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

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

Allow Express Transactions

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

Allow Substitute Receipts

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

Allow Unordered Receipts

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

Days Early

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

Days Late

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

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

Enforce Ship-to Location

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

No ship-to location enforced

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

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

Receipt Date Action

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

No receipt date exception enforced.

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

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

Receipt Routing

Indicates routing of the items at the time of receipt.

At receipt, deliver an item directly to its location.

Receive an item first, inspect it, then deliver.

Receive an item first, then deliver without inspection

Tolerance Percentage

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

Item Service Groups Specifications

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

Item Service Groups Specification Attributes

Billing Type

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

Billing Types are used in contracts to define discount percents.

Contract Item Type

Indicate the contract item type:

Days and times of coverage, reaction times, billing types, resolution times and preferred resources.

These can represent intangible or tangible items. Tangible items can be shipped, counted or tracked by the Install Base.

Usage items are used to facilitate metered billing. Price breaks are used to calculate the usage bill.

Days and times of coverage, reaction times, billing types, resolution times and preferred resources. A warranty is sold in Order Management along with the product as a component of a bill of material configuration. It has no associated list price in the price list and is never sold stand alone.

This is the default value for non-contract item types.

Coverage Schedule Name

Enter the template associated with the contract item type. A template is mandatory for service and warranty, and optionally for subscription. For service and warrant, the template is a coverage template and represents days and times of coverage, reaction times, resolution times, preferred resources and billing types.

Create Fixed Asset

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

Duration

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

Duration Period

Enter a number to indicate the service duration period

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

Enable Contract Coverage

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

Enable Defect Tracking

Indicate if defects of this item can be tracked

Enable Provisioning

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

Enable Service Billing

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

Instance Class

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

Recovered Part Disposition

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

Service Request

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

You can create a service request for the item

: Service requests are disabled for the item.

Service requests are inactive for the item.

You cannot create a service request for the item

Starting Delay in Days

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

Track in Installed Base

This flag enables life cycle tracking. Once set, you should not change this flag. Set this flag at the master item level.

Item Structure Specifications

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

Item Structure Specification Attributes

Assemble to Order

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

Autocreated Configuration

Indicates whether the item is automatically created.

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

Base Model

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

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

Create Configured Item

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

Effectivity Control

Indicates how to calculate lead time from either of the following choices:

A concurrent program uses the date as the parameter.

A concurrent program uses the unit number as the parameter.

Structure Item Type

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

Configurator Model Type

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

- Standard

- Container

- Null

Item Web Store Option Specifications

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

Item Web Store Option Specification Attributes

Back Orderable

Indicate whether this item can be backordered, if ATP fails.

Minimum License Quantity

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

Orderable on the Web

Indicates whether this item is orderable on from the web.

Web Status

Indicates Indicate the web status of this item.

This item is not web enabled.

This item is web enabled, and published

This item is web enabled, and unpublished

Item Work in Process Specifications

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

Item Work in Process Specification Attributes

Build in WIP

Indicate whether to create discrete jobs or repetitive assemblies.

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

This attribute is optionally set by the Item Status code.

Inventory Carrying Penalty

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

Locator

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

Operation Slack

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

Subinventory

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

Tolerance Type

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

Tolerance Value

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

Type

Indicate a supply type for components.

4

Manage Product and Service Data: Manage Product Relationships and Associations

Managing 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:

Accessories	Collateral	Complimentary
Conflict	Cross-Sell	Fulfillment
Impact	Mandatory Charge	Merge
Migration	Optional Charge	Prerequisite
Promotional Upgrade	Regulatory	Related
Repair To	Service	Split
Substitute	Superseded	Upsell
Warranty		

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.

Source System Item Relationships

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

Item Cross-References

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

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.

FAQ for Manage Product Relationships and Associations

What are item relationships?

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

How are cross-reference types created?

The administrator creates cross-reference types using the task Manage Cross-Reference Types.

How can I create my own related item relationship type?

There are several seeded related item relationship types available. If you want your own types, the administrator can create additional types using the task Manage Related Item Subtypes.

5

Manage Product and Service Data: Manage Product Bundles and Structures

Structures and Structure Types

Structure Types: Explained

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

Standard Structure

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

Model Structure

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

Option Class Structure

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

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

Planning Structure

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

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

Phantom Structure

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

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

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

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

Primary and Other Structures: Explained

A primary structure is a list of the components you most frequently use to build a product. A structure, other than primary, is another list of components for the same basic assembly.

The primary structure is the default for rolling up costs, defining a job, and calculating cumulative item lead times.

Scheduling programs use the primary structure to plan materials. Order management programs use the primary structure for model and option class products to list available options.

When you build an item, roll up costs, and perform other functions that use structures, you can specify whether to use the primary structure (the default) or an alternate structure. You can also use change orders to control changes to primary and other structures.

Use alternate structures to account for manufacturing variations that produce the same assembly, by specifying the parent item number and an alternate name when you create a structure.

You can use an alternate to define an engineering structure or routing. The alternate is used as a prototype variation from the primary manufacturing structure that produces essentially the same assembly.

Valid Component Attributes and Structure Types: Explained

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

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

Component Attributes	Standard Parent Item	Model Parent Item	Option Class Parent Item	Planning Parent Item
Item	Yes	Yes	Yes	Yes
Item Sequence	Yes	Yes	Yes	Yes
Operation Sequence	Yes	Yes	Yes	No
Effective Date Range	Yes	Yes	Yes	Yes
Planning Percentage	No	Yes	Yes	Yes
Yield	Yes	Yes	Yes	No
Enforce Integer Requirements	Yes	Yes	Yes	Yes
Include in Cost Rollup	Yes	Yes	Yes	No
Supply Type	Yes	Yes	Yes	No
Supply Subinventory	Yes	Yes	Yes	No
Supply Locator	Yes	Yes	Yes	No
Mutually Exclusive Options	No	Yes	Yes	No
Optional Flag	No	Yes	Yes	No
Check ATP	Yes	Yes	Yes	No
Minimum Quantity	No	Yes	Yes	No
Maximum Quantity	No	Yes	Yes	No
Basis	No	Yes	Yes	No
Include in Shipping Document	Yes	Yes	Yes	No

Required to Ship	Yes	Yes	Yes	No
Required for Revenue	Yes	Yes	Yes	No
Quantity	Yes	Yes	Yes	No
Inverse Quantity	Yes	Yes	Yes	No
Descriptive Flexfield	Yes	Yes	Yes	Yes
Comments	Yes	Yes	Yes	Yes

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

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

How Structures and ComponentsAre Validated

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

- You cannot add a component to a structure where the component item is the same as the parent.

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

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

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

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

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

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

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

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

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

Note

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

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

Here is a guide to the various table values:

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

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

- *: These components must be optional.

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

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

Item and Operation Sequence: Explained

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

Item Sequence

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

Operation Sequence

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

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

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

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

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

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

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

Creating Structures

Creating 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.

Structure Effectivity	Structure Effectivity	
Source	Target	Copy Allowed?
Date	Date	Yes
	Serial	Yes
	Unit	Yes
Serial	Date	No
	Serial	Yes
	Unit	No

Unit/Lot	Date	No
	Serial	No
	Unit	Yes

Create from Common

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

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

Common Structures: Explained

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

Creating Common Structures

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

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

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

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

Editing Common Structures

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

Here are the five material control attributes:

- Supple Type

- Subinventory

- Locator

- Operation Sequence

- Include in Cost Rollup

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

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

Managing Structures

Managing Product Structures: Explained

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

Viewing Structure Details

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

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

- Substitute Components: Lists items that can be used in place of the component.

- Reference Designators: Lists the component placement during assembly.

- Where Used: Lists component items that are used in other structures.

- Change Orders: Lists pending changes for the component (item).

- Additional Attributes: Lists additional attributes and their values that may have been configured for the structure type and name.

Note

Only the first level components can be managed from the Structure Details page.

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

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.

Managing Structures on a Versioned Item: Explained

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

Date effective structures are supported in versioning.

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

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

Deleting Structures: Explained

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

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

Defining Custom Deletion Constraints and Statements

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

FAQ for Manage Product Bundles and Structures

What's a structure attachment?

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

What are item and components attachments?

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

What's a Substitute Component?

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

How does enable lifecycle validation impact structure creation and management?

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

What's a reference designator?

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

What's a structure loop?

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

How can I compare item structures?

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

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

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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 a relationship between different levels of an item's supply chain. For more information on trade item unit descriptors, see http://www.gs1.org/docs/gsmp/gdsn/GDSN_Trade_Item_Implementation_Guide.pdf.

Managing the Packaging Hierarchy: Explained

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

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

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

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

The following pack type validations apply:

Pack Type (TIUD)	Parents	Parent Instance	Children	Child Instance
Mixed Module	None	-	Case, Pack or Inner Pack, Setpack, Multipack, Base Unit or Each	Multiple

Pallet	None	-	Display Shipper, Case, Pack or Inner Pack, Setpack, Multipack, Base Unit or Each	Single
Display Shipper	Pallet	Single	Case, Pack or Inner Pack, Setpack, Multipack, Base Unit or Each	Multiple
Case	Pallet, Mixed Module, Display Shipper	Multiple	Pack or Inner Pack, Setpack, Multipack, Base Unit or Each	Single
Setpack	Pallet, Mixed Module, Display Shipper, Case	Multiple	Pack, Base Unit or Each	Multiple
Multipack	Pallet, Mixed Module, Display Shipper, Case	Multiple	Pack, Base Unit or Each	Multiple
Pack or Inner Pack	Pallet, Mixed Module, Display Shipper, Case	Multiple	Base Unit or Each	Multiple
Base Unit or Each	Pallet, Mixed Module, Display Shipper, Case, Pack or Inner Pack, Setpack, Multipack	Multiple	-	-

Creating a Packaging Hierarchy

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

To create a packaging hierarchy:

- Select Create Pack

- 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.

What attributes participate in a rollup?

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

The attributes for which roll-ups are performed are:

- Quantity

- Weight

- Weight UOM

- Customer Orders Enabled

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Manage Product and Service Data: Manage Product Revisions and Versions

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. 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.

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.

How can I lock a revision?

You cannot lock the revision, you lock the draft of the revision. Since only one draft can exist on a revision, effectively you are locking the revision.

What's the difference between locking and not locking a draft version?

If you lock a draft of a version, others will not be able to overwrite your work.

If you choose not to lock the draft of a version, others can be working on the same draft, at the same time, and the last person to save will overwrite the previous work.

How can I cancel a revision?

You cannot cancel a revision, but you can cancel or revert a version. Revisions can also be end-dated.

What is structure versioning?

Structure changes are version controlled. For version enabled items, a new version must be released to either create a new structure or to make changes to an existing structure. This includes component, substitute, and reference designators changes.

Only date effective structures are supported for version enabled items.

Common structures that can be edited, such as common structures with Allow Attribute Updates flag set to Yes are not supported for version enabled items.

Component start and end dates cannot be managed for a version enabled item structure. The component start and end dates are same as version start and end dates.

How can I compare versions?

You are able to compare any version of any item to any version of the same item from any revision.

For example:

- Compare current item version with a past or future version

- Compare a draft version with any other version

- Compare draft version with version pending approval

Version comparison cannot be done between two versions of the same item, if the item class is different for the two versions to be compared.

Revision comparison is not allowed for non-versioned items from the details table. Revision comparison is possible from the master table.

Only two versions can be compared at a time.

How can I overlay versions?

You provide a Planned Effective Date before opening the draft in edit mode. Based on the that date, you are presented a view of the item by overlaying future approved versions on the current production versions. You can manually choose to overlay versions pending for approval.

What happens if I cancel a version?

If you cancel a version, the version prior to the canceled version will continue to be effective during effective period of the canceled version.

How can I revert to a previous version?

From the **Edit Item** page you launch the **Revert to Version** dialog box. You select a past version and revert to it. You can edit the draft after the revert action is completed.

Note, the revert action is only available until the draft is edited. Once a draft is edited it cannot be reverted.

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.

How can I demote an item's lifecycle phase?

You change an item's lifecycle phase based on the lifecycle of the item. Phases associated at the item class will be shown and depending on your business process, can be demoted. Changing an item's lifecycle phase also changes not only its lifecyle phase but also all the components present in the item's structure, which based on the structure setup.

How can I promote an item's lifecycle phase?

You can change an item's lifecycle phase based on the lifecycle of the item. Phases associated at the item class will be shown and depending on your business process, can be promoted.

There are business rules associated with these changes. Checks are performed for component's lifecycle phase and prompt an error message if there are incompatibilities.

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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.

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Manage Product and Service Data: Manage Product Security

Data Security Privileges for Accessing Items: Explained

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

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

Item access can be maintained at the item class level or at the item level.

Data Security and Function Security

Item information is controlled through function security and data security.

- Function security is a statement of what tasks and actions you can perform in which user interface 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.

Both function and data are secured through role based access control.

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

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

Job Roles, Duty Roles, and Security

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

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

- A product data steward manages user access to item details through the **Item Class Management Duty**.

- A product manager or product data steward manages user access to item details through the **Item People Management Duty**.

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

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.

- 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 user should have **View Item Basic Data** privilege to access the item.

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

Note

Maintain privileges do not include view access, corresponding view privileges needs to be granted to user explicitly so user can view and make the 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. But additional grants can be managed at the child item classes.

Managing Data Security Privileges at the Item Level

Item access can be managed the individual item level also.

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

Important

Privileges granted at the item class cannot be altered at item level.

User can manage additional privilege grants at the item level.

Note

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

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

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- 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

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Note

Each user-defined attribute group can have separate maintain and view data privileges

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- 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 items:

  - **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 items:

  - **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 items:

  - **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

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- 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

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10

Manage Product and Service Data: Define Catalogs

Create Catalogs

Catalogs: How They Work Together

A catalog is a collection of categories that you use to classify items. You can organize the categories into a hierarchy the 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.
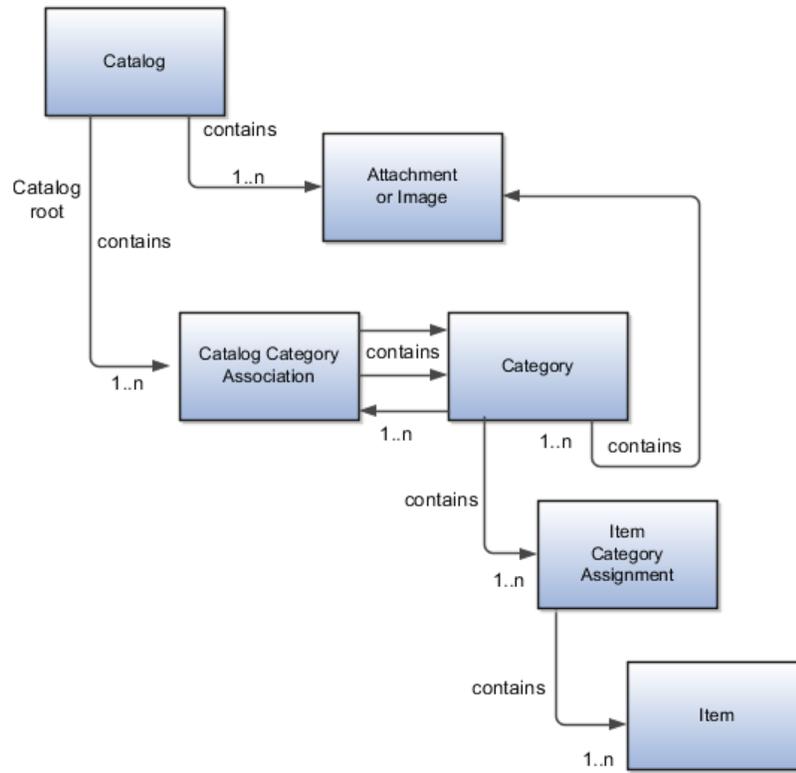
Catalog

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.

Catalog Details: Explained

You can change a default category so that you can use it for item creation, or modify the inactive date so that the category is no longer used as you update a catalog. You can correct mistakes or reclassify the category due to shifting relationships within the category hierarchy.

You can view and edit a catalog on the Edit Catalog page when you have editing rights. For users that do not have rights to edit, the page is in read only mode.

The following aspects are important regarding managing and editing catalog details:

- Catalog header region
- Catalog detail tab
- Category hierarchy tab

Catalog Header Region

This region contains the catalog name and description, the selection of the default category and the start and end date for the catalog.

Catalog Detail Tab

The Detail tab contains:

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

Category Hierarchy Tab

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

Formatting Catalogs: Explained

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

When you format a catalog the layout controls three main areas and includes the following tasks, some fields are required, and others are optional.

- Catalog configuration
- Date enablement
- Category sharing

Catalog Configuration

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

The configuration functions are:

- Catalog code: A unique identifier that is used.
- Catalog structure: The key flexfield structure used to define the catalog.
- Controlled at: Controls how items are assigned to categories and has two values. The first value is master level, which enables the automatic assignment of items to all child organizations associated with the master organization, if the current context is a master organization. The second value is organization level, which assigns the item only to the organization in the current context.
- Default category: Applies any time a new item is created. The newly created item is assigned to this category within the catalog automatically. The automatic assigned is controlled by the functional area.
- Catalog content: Controls what content can be added to the catalog and where the content can be added. This attribute has three values:
  - The Item at leaf levels allows items to be added only to the bottom level categories in the hierarchy.
  - The Items at all levels allows items to be assigned to any category in the hierarchy regardless of level.
  - Categories only allows categories to be added only to the catalog.
- Allow multiple item category assignment: When this option is selected, you can assign an item to one or more categories in the catalog. The default is deselected, which means that each item can be assigned to only one category in the catalog.
- Enable hierarchies for categories: When this option is selected, you can create a hierarchy for the catalog. The default is deselected, which means that the catalog cannot have a hierarchy and categories are associated with the catalog root.
- Enable automatic assignment of categories: When this option is selected, the catalog is built by automatically associating all categories, based on matching the catalog structure value to the category structure value.

Catalog Date Enablement

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

Category Sharing

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

The sharing function has these attributes:

- Source catalog: A catalog that does not have sharing enabled from which categories, category hierarchies, and assigned items can be added to the catalog.

- Sharing content: Controls what content can be added from the source catalog. This attribute has three values:

  - Categories only: Only categories without assigned items can be shared.

  - Items only: Only categories with assigned items can be shared.

  - Items and categories: All categories can be shared.

Automatic Assignment Catalogs: Explained

The automatic assignment catalog feature enables you to reduce the cost of creating and maintaining a catalog. It is a simple way to create a nonhierarchical catalog because you do not have to add categories manually to the catalog.

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

Automatic Assignments

The automatic assignment feature is enabled during catalog creation when you select the **Enable automatic assignment of category** check box. When you open a new catalog, any categories that have the same category structure value as the catalog structure value for the catalog are automatically assigned to the catalog.

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

- The master catalog for Purchasing is named Purchasing and is configured during creation to support the automatic assignment of categories.

- The Electronic commodity team creates a catalog named Electronics and proceeds to create categories that represent the classification of their commodity. The Electronic commodity team creates the categories televisions, computers, and home theaters.

- The other commodity teams create and maintain separate catalogs.

- Because you enabled automatic assignments for the Purchasing catalog, any categories created by the commodity teams are added to the catalog automatically. The Purchasing managers can view the collection of all commodities represented as categories in the Purchasing catalog.

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:
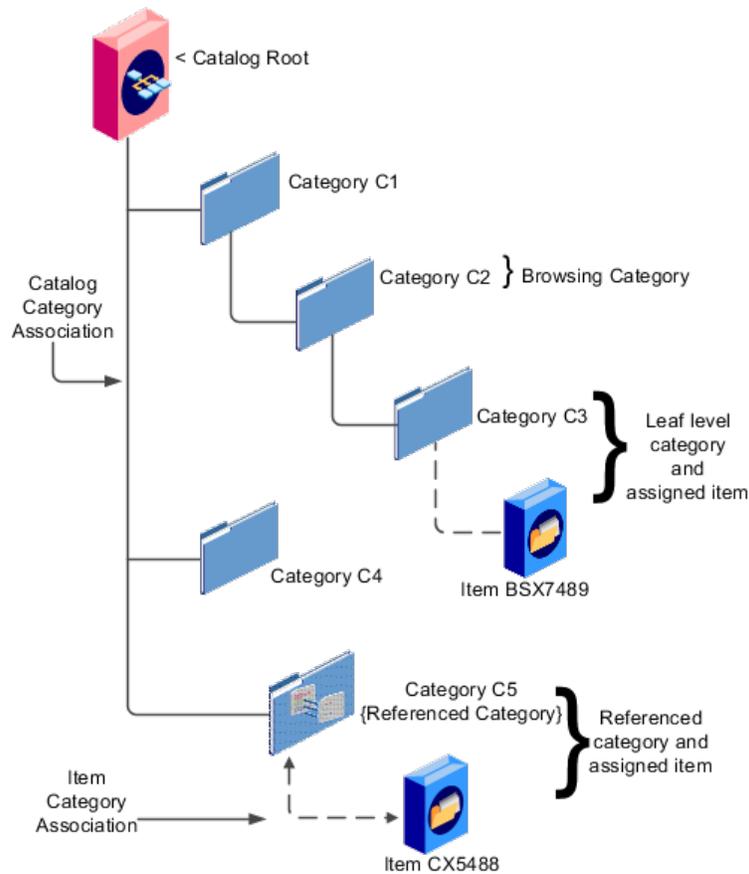
Components

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.

Categories and Catalog Relationships: Explained

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

The following aspect is important regarding catalog category association:

- Date enablement attribute value

Catalog Category Association

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

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

Importing Category Hierarchies: Explained

Category hierarchy can be created and maintained through a spreadsheet interface reducing the amount of time to create and maintain catalogs. Existing

catalog content can be exported and the content used in other catalogs for catalog category hierarchies.

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

- Spreadsheet interface
- Export category hierarchy

Spreadsheet Interface

You can manage the catalog category hierarchy to use the spreadsheet interface that is available in the Edit Catalog page by using the **Export Hierarchy** button to download existing catalog content, modify this content in a spreadsheet, and upload the content back into the Product Information Management application.

Export Category Hierarchy

You use export category hierarchy for example, when you need to provide the category hierarchy to a partner. Your partner has the capability to import the catalog file using an Excel spreadsheet.

You can export the category hierarchy from our catalog and it can be used by partners. If your partner has the Oracle Product Information Management solution, they can directly import the category hierarchy into their catalog.

Editing Catalog Category Associations: Explained

The catalog category association can be edited only within the Edit Catalog page, in the category hierarchy tab. The catalog category association start date and end date attributes can be edited in the details region.

Category Catalog Associations

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

After completing the edits, click on the **Save** button to save your changes to the database, the Edit Catalog page will not close. The **Save and Close** button will save the changes to the database and close the Edit Catalog page.

Date Enablement for Catalogs and Categories: Explained

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

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

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

- **Future dated** An object is future dated when the current date is earlier than the value of the start date.

You set the date enablement attributes are used to determine when a catalog, category, or catalog category association is used or visible.

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

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

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

The following illustration provides the date enablement attributes for these objects. The catalog, category, or the catalog category association has an internal state that is active or inactive.
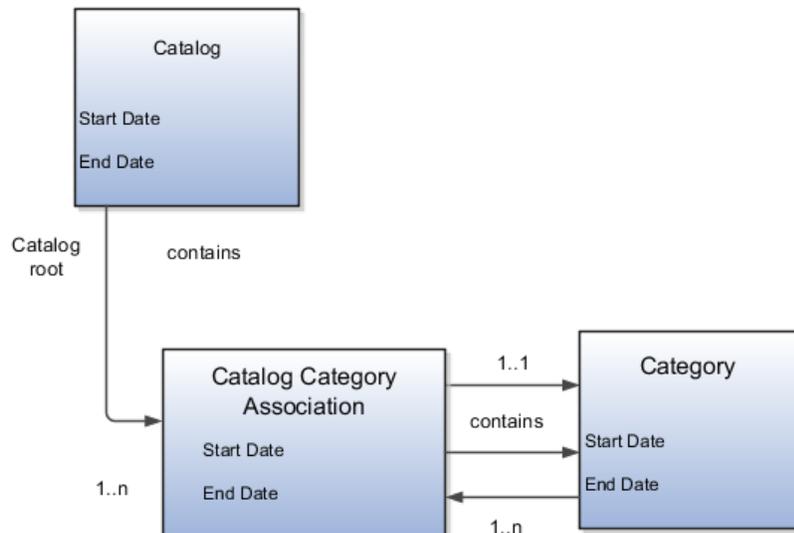
The following aspects are important regarding date enablement for catalogs and categories:

- Start date

- End date

- Catalog and category objects

- Catalog category association

- Catalog and category rules

Start Date

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

End Date

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

Catalog and Category Objects

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

Catalog Category Association

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

Catalog and Category Rules

When a catalog is inactive the following rules apply:

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

- The catalog cannot be used in other processes.

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

When a category is inactive the following rules apply:

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

- The category cannot be added to other catalogs.

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

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

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

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

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

When a catalog is future dated the following rules apply:

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

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

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

Creating Categories: Explained

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

Consider the following important aspects when creating categories for catalogs:

- Create category region

- Configuration region

- Date enablement region

- Additional information region

Create Category Region

Enter a name and a meaningful description of the category in the create category region. Optionally, you can add an image and an attachment to this category.

Configuration Region

The key flexfield is determined during creation based on the catalog structure of the catalog. Enter the key flexfield segment values for the category. The number

of key flexfield segment values depends on how you define the key flexfield at setup time. The category structure is the key flexfield structure instance that you create as part of the setup. When you define the key flexfield structure instance, you define the segments for the structure instance. For example, the family group and class group are segments. The segments appear in the Create Category dialog based on the key flexfield structure instance that you select.

The default value of the category content selection value is **Items and Categories**, but you can change the value. The values in the category content choice list vary based on the catalog content value.

The category content attribute value controls the content that you can add to this category.

- **Items Only**: Select to add only items to the category

- **Categories Only**: Select to add only categories to the category

- **Items and Categories**: Select to add both items and categories to the category

Date Enablement Region

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

Additional Information Region

The additional information region contains all descriptive flexfield attributes that you set up for categories. You can edit the values of the descriptive flexfield attributes at the time of category creation.

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

Assigning Items to Categories: Explained

You can assign items to categories on the Edit Catalog page, category hierarchy tab, on the category detail item tab. You can assign items only to active categories and categories where the **Category Content** field value is **Items and Categories** or **Items Only**. In addition, you can configure catalogs to control item assignment to categories within the catalog by selecting the **Allow multiple item category assignment** check box, which allows items to be added to all levels of the category hierarchy.

You select items from a choice list and add them to the category. The choice list is filtered based on a set of rules:

- Item data level security: Displays only the items that the user has permission to view and assign.

- Organization context: Based on the organization context that is controlled by a choice list in the item table header, only the items assigned to organizations are displayed.

Controlling Item Assignment

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

Editing Catalogs: Explained

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

The following fields are editable in the catalog:

- **Catalog Name**
- **Description**
- **Start Date**
- **End Date**
- **Default Category**
- **Allow multiple item category assignment**
- **Addition Information**
- **Category Hierarchy**
- **Category Details**
- **Items assigned to category**

Default Category

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

Allow Multiple Item Category Assignment

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

Addition Information

You can edit the values of the descriptive flexfields attributes.

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

Editing Category Details: Explained

You can update category details when you select the row with the category in the category hierarchy table, the category details are displayed in the right hand panel in the user interface in an edit mode for all native categories. The category detail region contains information about the category that is associated to the catalog. It also contains the association start and end dates.

You can view and edit a catalog on the category details tab when you have editing rights. For users that do not have rights to edit, the page is in read only mode.

The following aspects are important regarding managing and editing category details:

- Category details tab

- Items tab

- Where used tab

Category Details Tab

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

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

Items Tab

The item assignments are specific to the catalog where the category is associated.

Where Used Tab

The Where used tab contains a list of catalogs that the category is associated with.

Editing Categories: Explained

Categories can be edited only from within an Edit Catalog page, the category hierarchy tab. The category can be edited by selecting row for the category in the category hierarchy table and editing the category information in the category detail panel. The category can only be edited if the category is active and the catalog is active or future dated.

The category information can be edited in both the details and items tabs.

Details and Items Tabs

The following fields are editable in the category:

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

After changes are made the **Save** button will save the changes to the database but will not close the Edit Catalog page. The **Save and Close** button will save the changes to the database and close the Edit Catalog page.

Managing Attachments to a Catalog or Category: Explained

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

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

The attachment file types are:

- File
- Repository File/Folder
- Text
- URL

File

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

Repository File/Folder

You click the **Browse** button to attach a repository file/folder from the document repository to a catalog. The attachment repository contains existing attachments and is organized as a set of folders. The **Browse** button launches the Attachment

Repository dialog to enable you to select an attachment. You must provide a title for the repository file/folder and create a description for the attachment.

Text

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

URL

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

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

Moving Categories: Explained

You use the move category function in the category tree table region of the Edit Catalog page. This is a table row action. The dialog is launched when you select an active or future dated category within the catalog and select this action. The move category function is disabled when the **Enable hierarchies for categories** check box is not checked or left unchecked.

Consider the following important aspects when moving categories within catalogs:

- Indentifying the new parent

Indentifying the New Parent

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

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

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

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

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

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

Publishing Catalogs: Explained

Other applications can use catalog data if you export the catalog content. For example, you may want to export catalog content to use as a monthly report of

all items assigned to a specific catalog. You can use the default publish template provided in hyper text markup language (HTML). You can specify the content and layout of the catalog information. When the catalog is published, you select the format and initiate the creation of the content in the file.

The following aspects are important regarding catalog data to be published:

- Publish a catalog

- Type of catalog content that can be published

Publish a Catalog

You initiate a search for a catalog from the Manage Catalogs page, select the row corresponding to the catalog that you want to publish and select the **Publish** action. The application generates the report based on the default template in HTML format, and the locale prior to creation of the file. You can select a new template or format from the report window. The content displayed for items, categories, catalog categories, and catalog is based on the publish template.

Type of Catalog Content That Can Be Published

The default catalog publish template allows the publication of the catalog header details, category hierarchy, category details, and category item assignments. The order of a published report begins with the catalog header and the catalog category details. If the category has a child relationship then the catalog category association details for the child category follows. If the child category has a hierarchy, then the complete hierarchy under the category is published with the catalog category association details and categories details.

FAQs for Manage Catalogs

How can I 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.

How can I define category hierarchies?

Categories can be organized to represent classification taxonomies. The hierarchy organizations for categories have parent and child relationships that form a tree structure. The category hierarchy is created and maintained within the Edit Catalog page, category hierarchy tab. The category hierarchy is shown in true relationship to the way it is defined.

The category hierarchy can be created using two methods: the first is manually creating the hierarchy by adding referenced categories, duplicating categories or creating category for the catalog.

The second method for creating the hierarchy is by importing the category hierarchy through the spreadsheet interface. The category hierarchy can be exported from other catalog or other sources, edited and imported into a new catalog, additionally it can be added manually to the spreadsheet.

The category hierarchy can be edited using **Move Category**. The catalog category association cannot be deleted, but can be end dated to make the catalog category association inactive. The category hierarchy table provides a choice list filter that controls what catalog category associations and categories area displayed based on the date enablement. The category hierarchy can also be edited by exporting the complete hierarchy, editing it and importing the category hierarchy back into the catalog.

How can I add categories?

Categories are catalog components that are associated to a catalog for purpose of classification of items. You can add existing categories to the point of selection which can be a category in the hierarchy or the root of the catalog. If no category is selected, the default is the root of the catalog.

You can add categories by selecting the **Add Category** field and selecting the value **Add Category**. You can then search for existing categories based on the value of the catalog structure for the catalog. You can narrow the search for existing categories by using the **Advance Search** region in the dialog. You can add each selected category by selecting the **Apply** button and the add category region remains open. The **OK** button adds a category if a category is selected and then closes the dialog.

How can I add shared categories?

Adding a shared category is similar to adding an existing category except the category is selected from the catalog that has been designated as a source catalog. The sharing content attribute value determines what content is shared from the source catalog. A category within a source catalog that has been added to a native catalog is also known as a referenced category. You use the drop list menu

from the Add Categories menu, and the Shared Category option will be disabled if the catalog has not been configured for category sharing.

How can I add images to a catalog or category?

You can attach an image from your desktop or from a configured repository to a catalog or a category, or both. The image is displayed in the catalog detail and the category detail section of the catalog page. Only one image can be associated with a catalog or category. To attach an image, select the green plus icon to launch the Manage Attachment dialog. The image attachment type can have values of **File** or **Repository File/Folder** and is selected in this dialog. The title you provide for the image attachment will appear under the image that is displayed in the catalog. The description you provide is not displayed. **Browse** will allow you to select the file to be used as the image for the catalog or category. After the information is entered in to the dialog, you click the **OK** button to load the image and the image attachment title will be displayed under the image. The image will not initially be displayed until the catalog is saved. The image can be replaced with another image by selecting the red X to delete the existing image and entering a new image.

How can I map default catalogs?

You can map a catalog to be assigned to a functional area such as Purchasing. When a catalog is assigned to a functional area, the catalog will behave based on the rules you defined for that functional area. Only one catalog can be assigned to a functional area.

How can I duplicate categories?

You can select and duplicate a category as a quick way to create a similar category configuration. Selecting the **Duplicate** icon action launches a Create Category dialog that has attribute fields populated based on the selected category attribute values. The category name is prefixed with **Copy_** followed by the name of the selected category. You fill in the required field information in the key flexfield segment values which are blank. Once the category attributes are updated and the key flexfield segments values are entered, the **OK** button adds the newly created category into the category hierarchy of the selected category you have configured.

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.

11

Manage Product and Service Data: Access and Search Product Master Data

Item Attributes: Explained

Attributes are named entities whose values describe various qualities of a product item.

The following types of attributes are available:

- Main attributes

- Operational attributes

- User-defined attribute groups and attributes

- Additional information attributes

- Transactional attributes

Main Attributes

Main attributes are common to all items, and are part of the item's data model. They describe essential aspects of the item.

Examples of main attributes are:

- Item Number

- Description

- Long Description

- Status

- Lifecycle Phase

- User Item Type

- Approval Status

- Revision

- Pack Type

- Item Class

- Unit of Measure (a group containing eight attributes)

Operational Attributes

Operational attributes are part of the item's data model. They determine the behavior of the item with respect to various applications outside Oracle Fusion Product Hub, such as Oracle Fusion Purchasing or Oracle Fusion Inventory. You choose the control level for operational attributes on the Manage Operational Attributes Control page. For each listed operational attribute group, you select the control level for each of the group's attributes. You can control the operational attributes at the master organization level or at the organization level. You can define operational attributes as part of a new item request.

Examples of operational attributes, with the attribute groups they belong to, are listed in the following table.

Operational Attribute Group	Example Attribute
Inventory	Shelf Life Days
Order Management	Shippable
Purchasing	Negotiation Required
Receiving	Allow Substitute Receipts

User-Defined Attribute Groups and Attributes

You can define attribute groups and attributes to capture item specifications and other information relevant to a product's definition that you want to add to the item's data model. Values for such user-defined attributes are defined when you create the item, but can be changed over the life cycle of the item.

Oracle Fusion uses the structure of extensible flexfields to support attribute groups (by using flexfield contexts) and attributes (by using flexfield segments).

You create attribute groups and attributes on the Manage Attribute Groups page, where you create an attribute group for a set of one or more attributes and then create the attributes in the context of the attribute group.

You select the behavior for the attribute group as multiple-row or single-row, which affects the later display and use of the attributes, as described elsewhere in this topic. If the behavior you chose for the attribute group is multiple-row, then the attribute has multiple values each represented by a row in a table whose columns are context-based segments (attributes).

For each attribute, you select the data type and related validation and display options. The attribute groups are then accessed as sections listed on the Specifications tab of the Edit Item page. You also map the attribute to a column in a dedicated database table.

After you have created attribute groups and attributes, you associate user-defined attributes with items by adding attribute groups to item classes, on the Pages and Attribute Groups tab of the Edit Item Class page. When an item is

created, it inherits the attributes from the attribute groups associated with the item class on which the item was based.

Multiple-Row Attribute Groups

Attribute groups can be either single-row or multiple-row. The selected behavior determines how the attributes will be displayed in the user interface as well as how they are used. When you create an attribute group on the Manage Attribute Groups page, you select its **Behavior** as being **Multiple Rows** or **Single Row**.

A single-row attribute group contains a collection of attributes that will be displayed as separate fields in region named for the attribute group. For example, a single-row attribute group named Home Address contains the attributes appropriate for a home address. Another single-row attribute group named Work Address contains similar attributes appropriate for an office address. When these attribute groups are displayed in the user interface, the attribute fields for each group are arranged compactly within a region titled with the name of the attribute group.

The following figure shows the compact user interface layout for the single-row attribute groups named Home Address and Work Address.

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.

12

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 export them to a spreadsheet for editing. You can then apply the modifications by selecting **Upload** from within the spreadsheet.

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

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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.

What's the difference between using common item structures and copy item structures?

If you need to create an item structure that is very similar to an existing structure, then it is easier to copy the item structure and make the necessary modifications rather than create a new one.

If you need to create an item structure that is identical to an existing structure so that it does not require any component changes, then common the item structure to reduce maintenance and the risk of errors.

How can I update item supplier site organization 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 for supplier site organization in the spreadsheet and then apply the changes to the database. Note that the appropriate supplier site organization attributes must be included in the search results table in order to export them to spreadsheet for modification.

13

Manage New Product and Service Introduction: Manage New Product Definition and Approval

Creating New Item Requests

Creating 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 definition, the new item requests are also routed for approval.

New Item Requests can be created using four different methods:

- Select **Create New Item Request** on the regional task pane

- Select Create on the **Manage New Item Request** page

- You have the option to create during an item import process

- When creating an item, if the selected item class is new item request-enabled, a submit button will appear at the page level. When submitting, you are prompted to create a new New Item Request or add the item to an existing one.

Note

Even if the item class is not enabled, when creating an item you can perform the action to add the item to a new item request that will enable you to create a new New Item Requestor 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 additional attributes

- Add items (items from different item classes can be added)

- Add attachments

- Submit the new item request

You have three methods to save the new item request:

- **Save**: Saves the new item request in draft

- **Save and Close**: Saves the new item request in draft and closes the page

- **Submit**: Submits the new item request to open status

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 Additional 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 your new item request.

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 only enter the attributes or item entities for which you are responsible for.

New Item Request Notifications: Explained

There are several types of notifications sent during a new item request.

The following table lists the notifications.

Notification Type	Draft	Open	Definition	Approval	Completed
Request Comment	No	Yes	No	No	No
Approval	No	No	No	Yes	No
Definition	No	No	Yes	No	No
Request to Comment from Action Log	Yes	Yes	Yes	Yes	Yes
FYI New Item Request Creation and Assignment	Yes	Yes	No	No	No

New Item Request Approval Phase: Explained

During the approval phase of a new item request, approval notifications are routed to the participants.

The approvals can be from individual users or from multiple users in a predefined user group. From the notification, you can approve or reject the new item request.

New item approval rules are defined and managed through the Approval Management Engine. For information on how approval rules are defined and managed, refer to the Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite.

New Item Requests Workflow Processes: Explained

There are four predefined New Item Request (NIR) workflow statuses which enable you to perform various tasks when a new item request is created. You cannot create new statuses or delete statuses.

The four statuses are:

- Open

- Definition

- Approval

- Completed

Open

New item request attributes and items are defined and updated when the workflow status is open. A seeded request comment notification is associated with this status and the new item request cannot move to the next status until this notification has been responded to. The notification will be sent to the assignee and the requester of the new item request. However, to bypass the notification, assignees can be removed through customization by a programer. Assignees would then need to promote the new item request to the next status manually or set it to automatically promote to the next status in the Business Process Execution Language (BPEL) process.

Definition

In the definition workflow status, you define the item information, such as specifications, structures, and packs. Additional items cannot be added in this workflow status. The definition workflow steps are defined at the item class level. Based on the definition steps, a notification is sent to those responsible for defining the item. Once the item is defined, you then promote the new item request to approval status manually or to be automatically approved in the BPEL process.

Approval

When approval is granted, the new item request cannot be modified. Approval notifications are sent to the approvers based on the rules set up in Approval Management Extensions (AMX). Once the new item request is approved, the status is automatically changed to completed.

Completed

During the completed phase, the NIR is in its final stage and its lifecycle is completed. It cannot be modified.

Autopromote and Autodemote: Explained

You can explicitly promote or demote a new item request to its different statuses. New Item Requests may also be promoted or demoted to the next status automatically after the completion of the workflow in a specific status.

The following table shows which of the statuses require user configuration to enable automatic promotion, which status have automatic promotion enabled by default, and which status can be set for automatic demotion.

Autopromote and Autodemote	Open	Definition	Approval	Completed
User configuration required during set up for autopromotion	Yes	Yes	No	No
Default autopromotion	No	No	Yes	No
Status in which new item request can be enabled for autodemotion	No	No	Yes	No

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.

What are the workflow phases of a new item request?

There are four workflow phases a New Item Request will go through.

- Open: The new item request is created and items are added

- Definition: Participants define item attributes and item entities, such as structures, packs, and organizations

- Approval: Participants approve or reject the items

- Completed: The new item request is completed

How can I associate items with a new item request?

Items are associated with new item request in one of three ways.

Items are associated with new item requests in one of the following three ways:

- From a new item request: Search and select items in the **Items Table**

- From an item: Add the item to an existing new item request or create a new one

- From import: Add the imported items to an existing new item request or create a new one

What's an action log?

The action log provides an audit trail of all actions performed on the new item request. The first entry will always indicate when the new item request was created and by whom. Subsequent actions will be listed to show the progress of the new item request. For example, submitted and promoted to definition.

From the **Action Log**, you can initiate a discussion by posting and assigning a new comment, respond to requested comments or reply to specific comments, thereby creating a threaded discussion within the context of the new item request.

How can I post a comment in new item request?

You post comments in the **Comments** section available on the contextual pane. This section is available for all **New Item Request** pages.

You can also post comments from the **Action Log** by selecting **Post Comment**.

How can I request a comment in a new item request?

You request a comment in the **Action Log** by clicking **Request Comment**. A Request Comment dialog box will appear where you assign and enter your comment.

How can I move lines (items) from a new item request?

On the **Manage New Item Request** page, expand the search results and select lines from one or more new item requests within the same organization and then select **Move New Item Lines**. You can move the selected lines to a new New Item Request or add them to an existing New Item Request.

How can I cancel a new item request?

On the **Manage New Item Request** page, select a new item request and then select Cancel. The new item request status is set to canceled and any changes defined for items in the new item request are discarded.

How can I define new item request definition steps?

New item request definition steps are created at the item class level.

How can I delete a new item request?

On the **Manage New Item Request** page, select the new item request to be deleted and then select Delete. The new item request will be added to the delete group.

How can I demote a new item request?

While reviewing your notifications, go to the **Manage New Item Requests** tab and select the row containing your new item request. From the Actions menu, select **Demote**. In the **Demote** dialog box, you can select from the available phases to demote the new item request. You also must enter a comment when demoting to another phase.

When can items be added to a new item request?

Items can only be added when the New Item Request is in draft status and open phase.

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Manage New Product and Service Introduction: Manage Supplier Collaboration

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.

FAQs 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.

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Manage New Product and Service Introduction: Release Product to Market

Managing 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.

How can I make changes to item organizational assignments?

Organization assignment allows items created in a master organization to be used in other organizations, enabling you to control the visibility of an item in organizations. For example, certain items may not be assembled, sold or purchased in a specific organization. You control the visibility of an item by assigning it to a specific organization.

Similarly you can control specific attributes at organization levels. For example, an item can be sold in a specific organization (region) but not permitted to be sold in other regions. You do this by controlling this attribute at the organization level.

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Manage Product Data Governance: Manage Product Change Orders

Create Change Orders

Change Orders: Overview

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

Change Orders: How They Are Created

Create change orders within predefined change order types to modify item information and route that information for review and approval.

What Change Orders Modify

Change orders modify the following information

- Item specifications: Modify operational and user-defined item attributes.

- Item structures: Add, update, and delete structures.

Note

Components can be disabled only through change orders

- Packs: Add, update, and delete packs and pack attributes.

- Associations: Add item supplier site organization associations, remove existing associations, and modify existing item supplier attributes.

- Revisions and Versions: Create new revisions or versions for an item while modifying item information

Changes to item structures can be propagated to other organizations through rules associated with the change order type.

How Change Orders Are Created

Access the Create Change Order process in one of three ways:

- Click the **Create Change Order** link on the regional pane.

- Click the **Create** icon on the Manage Change Orders page.

- Select **Create** from the **Action** menu on the Manage Change Orders page.

The change order changes items specific to the organization that you select. However, if propagation rules are associated with the selected change order type, then you can push changes to item structures into other organizations in which the changed item is enabled.

Change order type determines how change order numbers and descriptions are generated, how changes will be propagated to other organizations, and what tasks are required to complete the change order.

Change order header details include priority, reason, propagation rule, and user-configured attributes.

On the Overview tab, specify the following information:

- Tasks required to complete the change order

- Attachments providing additional information

- Propagation information

On the Line tab, add and access individual items to modify attributes, structures, packs, and associations.

You can create a new revision for each item added where the changes can be administered. For version-enabled items, the changes can be administered in a new version of that item.

Note

Only item details that can be modified through the change order will appear. For example, because item organization and catalog assignments are not supported through change orders, those tabs will not appear on the item details page. Also

links on the Specification tabs for attributes that cannot be changed through the change order will not appear.

When you submit the change order for approval, you can track approval or rejections for each line in the change order.

Change Order Tasks: Explained

Change order tasks help ensure that mandatory work is completed before a change order is completed or promoted to the next status. You can use change tasks to create and assign work to individuals.

If a task is marked as required, then it must be completed before a specified status

Note

All tasks must be completed prior to **Approval** status. Once a change order is approved, the change order cannot be edited (therefore, the status of the task cannot be changed). If a task is not completed, then the change order cannot be completed.

Managing Change Order Tasks

You can change the status of an existing change task, reassign it, update it, cancel it, or delete it.

You can modify an existing change task if its task status is **Open**.

You create a change task by adding lines to the Tasks table on the Overview tab when you define or edit a change order.

The Tasks table includes the following: fields that let you specify task details.

- **Sequence**: Determines the order in which the tasks will be performed.

- **Required**: Indicates that the task is mandatory for the change order to progress.

- **Assigned To**: The person (or group) to whom the task is assigned.

- **Start-by** and **Complete-Before** status: The status when the tasks should be initialed or the status before which the task should be completed.

  If a task is mandatory, then a **Complete-Before** status must be specified.

- **Need-by-Date**: Indicates the date on which the change is needed.

Change Order Attachments: Explained

A change order attachment is unstructured information related to a change order. Examples of change order attachments include CAD drawings, test results, specification sheets, or URLs.

Attachments can be any type of file including:

- Files and folders from your desktop or a configured repository.

- Text files generated during the attachment process.

You can also specify URL links as attachments.

Managing Change Order Attachments

You can add attachments when you create a change order. You can also edit attachment details and remove attachments from an open change order.

Propagating Changes: Explained

You can propagate changes to item structures from one organization into other organizations through change orders.

How changes are propagated to other organizations is determined by propagation rules. Available propagation rules are determined by the organization and change order type selected for the change order.

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

You can enable specific organizations identified in the change order type for propagation or you can enable all of them.

Enabling Items for Propagation

You must ensure that the items specified in the change order are assigned to the propagation organization in order for the changes to take effect.

The **Items** columns below the **Propagation Organizations** region shows the total number of items included in this change order and how many of those items are enabled for propagation for a particular organization.

Note

You can enable items and organizations for propagation through the Edit Change Orders page only. Edit a saved change order through the Manage Change Orders page by selecting a change order in the search results table and selecting **Edit**.

You can propagate the change order in view mode. Access a saved change order through the Manage Change Orders page by clicking the change order name in the search results table.

To enable items for propagation, click the **Propagation Detail** icon in that organization's row in the Items table on the Propagation Details page, select the appropriate items, and click **Assign to Organization** to enable those items for propagation.

Excluding Item Structure Components from Propagation

As part of the localization of item structures, individual organizations might use a component in an item structure from a master or source organization from which the change order originates. If a component does not exist, then the changes authored for that component cannot be propagated, and the item propagation will result in error. To avoid such propagation errors, the component can be excluded from the change order before it gets propagated.

To exclude item structure components from propagation, click the **Propagation Detail** icon in an organization's row below the **Propagation Organizations** region. Select an item in the Items table on the Propagation Details page to display the structures associated with that item and the components of these structures. Select **Exclude** next to those components that you do not want to propagate.

Propagating Changes

The propagation rules associated with the change order type may allow a change order to automatically propagate changes to other organizations or organization hierarchies after the completion of the workflow in a specific status.

However, you can explicitly propagate a change order in one of the following ways:

- Highlight a change order on the search results table on the Manage Change Orders page, and select **Propagate** to propagate the change order to all the selected organizations in that change order.

- Access change order detail through the Manage Change Orders page by clicking the change order name in the search results table, and select the **Propagate** icon in an organizations row under Propagation Organizations on the Overview tab.

Adding Item Revisions and Versions to Change Orders: Explained

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.

You can create a new revision for each item that you add to a change order .

An item can be added to a change order when it is in draft or open status

For version-enabled items, the changes can be administered in a new version of that item. An item that is versioned can be added only to a change order in **Open** status.

When you add an item to a change order, a new version of that item is released when the change order is saved. However, you can continue to make changes to the released version in the change order.

Item Detail Management in Change Orders: Explained

You can add items and author item changes when you create or edit a change order. Click on the item links on the Lines tab to access the Edit Item page where you can manage item details.

Note

The effective date for the item needs to be specified and saved before the Edit Item page can be accessed.

On the Edit Item page, you can edit the following Item details:

- Specifications:: On the Specifications tab, you can modify predefined and user-configured attributes.

- Structures and Packs: On the Structures tab, you can add new structures, copy structures, and modify structures by adding new components, remove existing components, and modify component attributes. You can also modify packs by adding new packs and modify pack attributes

Note

You cannot modify referenced (common) structures through a change order.

- Associations: On the Associations tab, you can modify supplier site organization associations, remove existing associations, and modify supplier site information.

You can access item detail through the change order details page by clicking on the item links on the Lines tab to access the item detail page.

Manage Change Orders

Editing Change Orders: 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.

Change Order Workflow: Explained

Each change order follows a lifecycle process based on predefined and user-defined statuses associated with the change order type. The sequence of statuses define the change order's workflow.

At each status in the change order's workflow, specified change order tasks must be completed before a change order is promoted to the next status.

Each change order workflow definition is associated with a change order type. The definition determines the sequence of statuses in the workflow.

Note

• Open,**Scheduled**, and **Completed** predefined statuses are required for every change order type. You can configure the change order type to have additional statuses including user-defined statuses.

  If a versioned item is to be added to a change order, then the change order type needs to include an **Open** status.

• The sequence of final statuses must be an approval status followed by **Scheduled** status and **Scheduled** status followed by **Completed** status.

• Change orders can be set to be automatically promoted for statuses prior to approval. After approval the change order will always be automatically promoted.

Change Order Actions: Explained

You can propagate changes, move lines between change orders, and manage the life cycle of a change order using the change order actions available on the Actions menu on the Manage Change Orders page.

Change Order Actions

Select a change order and perform one of the following actions:

• **Promote** and **Demote**: Manually promote or demote a change order to the next status in the workflow for that change order type.

  The workflow associated with the change order type may allow a change order to be automatically promoted or demoted to the next status after the completion of the workflow in a specific status.

• **Hold**: You can place a change order on hold. No further action can be taken on the change order.

• **Release Hold**: The change order is no longer on hold, and further actions can now be taken.

- **Cancel**: The change order status is set to canceled, and any changes defined for items in the change order are discarded.

- **Generate Report**: You can produce a customizable detail report on the selected change order.

Change Order Action Log

The action log displays all actions (and associated comments) executed against or posted to the change order. The action log also contains messages generated by the system.

From the action log, you can initiate a discussion by posting and assigning a new comment, you can respond to requested comments, or you can reply to specific comments, thereby creating a threaded discussion within the context of the change order.

Change Order Action Log: Explained

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Change Order Management: Explained

From the Manage Change Orders page you can copy or create new change orders and modify, review, or delete existing change orders.

The completer set of available change order management tasks include the following:

- Add new change orders or duplicate existing ones.

- Access the Edit Change Order page to modify change order settings and content.

- Access change order detail for review.

- Delete change orders by adding them to a delete group.

- Manage the life cycle of a change order using change order actions: **Promote**, **Demote**, **Hold**, **Release Hold**, and **Cancel**.

- Manually propagate the change order to other organizations or organization hierarchies based on the propagation rules defined in the change order type.

- Move lines from one change order to a new or existing change order

- Generate change order detail reports.

Managing Change Order Details

You can access the change order details page by clicking on the name of a change order in the search results table on the Manage Change Orders page.

On the change order detail page, you can perform the following tasks:

- Modify propagation information
- Monitor the current workflow status of the change order
- Monitor the current status of change order tasks
- Review the actions that have been performed on the change order.

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.

When the change order is approved or rejected, a notification is sent to the Creator, Requestor, and Assignee. If the approval routing workflow is aborted, then a notification is sent to all people in the approval routing that were previously notified regarding an assigned workflow process in a step.

Status Type	FYI Change Order Creation and Assignmentt	Request Comment	FYI Task Notification	Request to Comment From Action Log table	Approval Notification
Draft	Yes	No	No	Yes	No
Open	Yes	Yes	Yes	Yes	No
Interim Approval	No	No	Yes	Yes	Yes
Approval	No	No	No	Yes	Yes
Scheduled	No	No	No	Yes	No
Completed	No	No	No	Yes	No

Note

A predefined request comment notification is associated with the **Open** status. The change order cannot move to the next status until this notification has a

response. The notification is then sent automatically to the assignee and the requestor.

This automatic notification can be bypassed by removing the assignees. If the notification is bypassed and the BPEL process is set to automatically promote, then the change order automatically moves to the next status. Otherwise, you need to manually move the change order to the next status.

Change Order Approval Process: Explained

A change order can only be approved through the successful completion of an approval routing. When you create a change order, an approval routing is created automatically based on approval rules or manually by any user granted the **Item Change Order Management Duty** privilege.

An approval routing consists of one or more approval stages. Each approval stage specifies a workflow process and to whom the change order is assigned. For example, you can create stages to request approval or request comments.

Once changes are authored for each item, the change order is submitted for approval workflow.

When a change order is submitted, notifications are sent out to assignees. Consolidated notifications are sent to each of the appropriate assignees at each stage of the approval process. Each approver is requested to respond before the expiration date that is specified in the approval task in AMX. Reminder notifications can be set up so that an approver who does not respond by the date required will receive notifications at a specified interval.

The approval status of a change order reports the progress of the approval. A list of approvers and the action taken by each approver is captured as a part of the history displayed in the notification for approval.

The approver can approve each line in the change order or reject the change.

A task can be set up so that when the change order is approved or rejected, an e-mail notification is sent to the creator, requestor, and assignee. If the approval routing workflow is aborted, then a task can be set up so an e-mail notification is sent to all people in the approval routing that were previously notified regarding an assigned workflow process in an approval stage.

Note

Any lines of a change order can be moved to a new change order or to an existing change order if those lines are hindering the approval workflow.

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.

How can I find details about changes to an item in a change order?

Click the change order link in on the Manage Change Orders page. On the Lines tab, click the **Item Changes** for an item to access the Item Changes page.

Note

The Item Changes page displays only changes made to the item through this change order. Click **Item View** to see the changes within the context of the item details page in red line mode.

How can I find details about changes to an item component in a change order?

Click the change order link in on the Manage Change Orders page. On the Lines tab, click the **Item Changes** icon for an item to access the Item Changes page then click the **Component Changes** icon in the Structure Changes table to access change information for specific item components.

How can I move change order lines?

On the Manage Change Orders page, expand the search results and select lines from one or more change orders within the same organization then select **Move Change Lines**.

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Consolidate Product and Service Master Data: Manage Imports

Manage Imports: Overview

You can import items and item-related information using interface tables or Excel spreadsheets

This topic discusses importing items using interface tables to import the data into the production schema. You can also import trading partner items, item associations, customer items, and customer item cross references.

The following objects are available to import:

- Items
  - Structures
  - Packs
- Item Associations
  - Organization assignments
  - Supplier Site Organization Associations
- Trading Partner Items
  - Customer Item
  - Item Manufacturer Part Numbers
  - Competitor Items
- Item References
  - Customer Item References
  - Item Manufacturer Part Number References
  - Competitor Item References

To import the objects using an interface table, follow these steps:

1. Insert the records in the interface table.

2. Associate the interface table to an item batch definition.

3. Access the Enterprise Storage Server and provide a process name (job definition) such as Import.

4. Indicate the item batch definition.

5. Submit to schedule the import.

You can also access this item batch definition for further modifications through the Manage Item Batches page.

Note

The check data quality and import process will be performed based on the item batch options.

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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.

Creating Item Batches: Explained

Create item batches to import sets of item data including product structure and pack hierarchies from multiple product source systems.

Item Batch Definition

When you create a new item batch definition, you select a target organizationthen specify the product source system and data quality options. You can also modify the import batch option settings.

- The product sources system determines what data quality options are available and the default settings for batch options. You can modify the batch option settings when you create a new item batch.

- Data quality options determine matching and standardization rules for an item batch to cleanse product data during batch import.

- Item batch options let you schedule batch loads, specify product structures and packaging hierarchies, and policies for new item requests and change orders.

Adding Items to an Item Batch

You can add items to the item batch after the definition has been saved.

There are two ways to import items:

1. Excel spreadsheet: Enter item information in the downloaded template and upload.

2. Interface tables: Enter item information in the interface tables and import.

Items can be added via Excel by navigating to either of the following pages and selecting **Add Items to Batch** from the Actions menu:

- Manage Item Batch page

- Edit Item page

The following objects are available to import:

- Items

- Structures and Packs

- Trading Partner Item References

- Category Assignments

Note

If you select **Items** as the object to be imported, then the item class you specify determines which import formats are available.

An import formats identify the base and user-defined attributes in an item class that are imported into the application using a spreadsheet.

The import format you specify determines which spreadsheet is downloaded and which columns are included.

Item Batch Options: Explained

Use item batch options to set the schedule of the import, define the default structure and pack options and manage the creation of new item requests and change orders for items being imported.

Item batch options are defined and associated with product source system definitions. When you specify a source system in an item batch definition, the import options associated with the source system are included as default settings in the new item batch definition.

You can modify these settings when you create a new item batch or edit an existing definition.

Depending on the type of item being imported, you can specify item batch options in one or more of the following areas.

- Import and scheduling

- Structures and packs

- Change orders

- New item request

For external batches, data quality options are determined by whether the product source system is PIM or non-PIM. For internal batches, data quality options are determined by the PIM product source system.

Item Batch Data Quality Options: Points to Consider

You can specify data quality options when defining a source system or through an import batch definition by selecting **Check data quality**. Items being created in the Oracle Fusion Product Hub go through the data quality check automatically, while items that are updated using batches must have the data quality check initiated manually. The cleansing process classifies the item, standardizes the attributes and identifies any matches or duplicates that may exist in the product hub. The matching is based on match rules defined in Oracle Product Data Quality.

Check Data Quality Option

The options that are available when you **Check Data Quality** are determined by the data source.

- If the items are being created or updated from a third party source system, then the following options are available.

  - **Confirm single matches**

  - **Confirm unmatched as new item**

- If the items are being created or updated in Oracle Fusion Product Hub, then the following single option is available

  - **Confirm unmatched as new item**

Confirm Single Matches Option

The behavior of the **Confirm single matches** data quality option is determined by the data source.

- If items are being created from a third party source system and are imported manually, the following behavior results:

  - Single matches appear on the Confirm tab.

  - Multiple or no matches appear on the Unconfirmed tab.

- If **Confirm Single Matches** is not selected, then all items will appear on the Unconfirmed tab.

- If items are being created from a third party source system and are imported during data load, the following behavior results:

  - Single matches appear on the Imported tab.

  - Multiple or no matches appear on the Unconfirmed tab.

  - If **Confirm Single Matches** is not selected, then all items will appear on the Unconfirmed tab.

- If items are being updated from a third party source system and are imported manually, the following behavior results:

  - If a cross-reference exists, then no data quality check is performed, and the items appear on the Confirm tab.

  - If **Confirm Single Matches** is not selected, a cross-reference exists, and no data quality check is performed, then the items appear on the Confirm tab.

- If items are being updated from a third party source system and imported during data load, the following behavior results:

  - If a cross-reference exists, then no data quality check is performed, and the items appear on the Import tab

  - If **Confirm Single Matches** is not selected, a cross-reference exists, and no data quality check is performed, then the items appear on the Import tab.

Confirm Unmatched As New Item

The behavior of the **Confirm single matches** data quality option is determined by the data source.

- If items are being created from a third party source system and imported manually, the following behavior results:

  - Items with no matches appear on the Confirm tab

  - Items with single or multiple matches appear on the Unconfirmed tab

  - If **Confirm unmatched as new item** is not selected then all items will appear on the Unconfirmed tab.

- If items are being created from a third party source system and imported during data load, the following behavior results:

  - Items with no matches appear on the Import tab

  - Items with single or multiple matches appear on the Unconfirmed tab

  - If **Confirm unmatched as new item** is not selected then all items will appear on the Unconfirmed tab.

- If items are being updated from a third party source system and imported manually, the following behavior results:

    - If a cross-reference exists, then no data quality check is performed and the items appear on the Confirm tab

    - If **Confirm unmatched as new item** is not selected then and a cross-reference exists, no data quality check is performed and the items appear on the Confirm tab.

- If items are being updated from a third party source system and imported during data load, the following behavior results:

    - If a cross-reference exists, then no data quality check is performed and the items appear on the Import tab

    - If **Confirm unmatched as new item** is not selected then, if a cross-reference exists, no data quality check is performed and the items appear on the Import tab.

- If items are being created or updated from the Fusion Data Hub and imported during data load, the following behavior results:

    - Items with no matches appear on the Import tab

    - Items with single or multiple matches appear on the Unconfirmed tab

    - If **Confirm unmatched as new item** is not selected then all items will appear on the Unconfirmed tab.

- If items are being created or updated from the Fusion Data Hub and imported manually, the following behavior results:

    - Items with no matches, single matches, or multiple matches appear on the Unconfirmed tab

Item Batch Import and Scheduling Options: Explained

Item batch import and scheduling options let you set the schedule of the import, specify item cross-references imports, and specify a versioning policy.

Cross-References Only

If you select **Cross-References Only**, then no source system data is imported. A cross-reference of the source system item is created with a matched, new, or cross-referenced item in the Oracle Fusion Product Hub.

Note

If the source system specified in the item batch definition is Product Information Management Data Hub, then the **Cross-References Only** option is not available.

If you select **Cross-References Only**, then item batch options for new item requests and change orders are not available. However, options can be set for structures and packs.

Schedule

Determine when the data specified in the item batch will be imported.

- **On Data Load**: Import process is run immediately at the time of data upload

- **Manually** (default): Lets you import the data at a later time.

- **Specify Date and Time**: Lets you specify the date and time to import the confirmed items or structures in the item batch

Version Policy

Specify how versioning is handled for items under version control that are being imported.

- **Merge Draft**: Enables the item to be merged with an existing draft version of the item.

  If the item being imported is locked by another user, then you cannot merge item data that is versioned. If the data that is not versioned, then it will be imported.

- **Bypass Draft**: Enables a new item version to be created at data load. Any changes in the draft version are not included in the new version.

  If the item being imported is locked by another user, then you cannot create a new version, and item data that is versioned will not be imported. If the data that is not versioned, then it will be imported.

Item Batch New Item Request Options: Explained

Item batch new item request options let you create new item requests or add to existing new item requests when importing items or structures.

The following are the basic new item request options:

- **One per Item**

- **One per Item Class**

- **One per Item Batch**

For all new item request options, those items associated with rules that require approval for changes will be added to the new item request. If desired, you can specify to add all imported items to the new item request.

If you choose **One per Item Class** then indicate whether to create a new item request or add to an existing one.

Item Batch Change Order Options: Explained

Item batch change order options let you create change orders or add to existing change orders when importing items or structures.

The change order option lets you control the number of new change orders that the batch import will generate:

- **One per Item**

- **One per Item Class**

- **One per Item Batch**

For all change order options, those items associated with rules that require approval for changes will be added to the change order. If desired, you can specify to add all imported items to the change order.

If you choose **One per Item Batch** then indicate whether to create a new change order or add to an existing one.

Item Batch Structure and Pack Options: Explained

Item batch structure options let you specify a defined item structure, how structure effectivity is controlled, and which structure components are updated. The item batch pack option lets you specify which pack components are updated.

Structure Effectivity Control

The following controls determine when changes to product structure components become effective:

- **Date**: Effectivity on a specified date

- **Model Unit Number**: Effectivity based on unit number

- **Serial**: Effectivity based on the serial number assigned to each unit of an item

Structure and Pack Update Option

You can select to update only those pack or structure components that have changed, or you can update all of them.

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.

Intrabatch Items and Cross-References in Item Batches: Example

This example shows the relationship between the items being imported that are identified as intrabatch items and how they are cross referenced among themselves and with a new item being created.

Scenario

Three new items from the source system named Item A, Item B, and Item C are uploaded into an item batch. This is the first time items are being uploaded from this source system.

As part of the data quality check process, duplicate items that are being uploaded from the source items are identified. These duplicate items are displayed on the Intrabatch page organized into groups of similar source system items, so Item A, Item B, and Item C are grouped together.

On the Intrabatch page, you can take action to include Item A, cross reference Item B and exclude Item C before submitting the batch.

When the batch is processed, no matches are found. Before the items are imported, the Item Batch Details page will include the following information:

Item A appears on the Confirmed tab because the batch option is set to confirm no matches as New.

Item B appears on the Cross-References tab showing: the cross-reference of Item B to Item A as a result of the intrabatch data quality check

Item C appears on the Excluded tab.

On import, a new item in the Oracle Fusion Product Hub named Item D is created for the Item A source system item and the cross references are established.

The Cross References tab will now show the following: cross references of Item D to Item A and Item D to Item B.:

The intrabatch cross reference of Item B to Item A is recalculated against the new Item D in Oracle Fusion Product Hub.

Unconfirmed Items in Item Batches: Explained

On the Unconfirmed tab, you manage the results of the data quality and item matching checks performed on the items in the batch and take appropriate action.

Data Quality Results

Data quality results for each item are:

- Classification: Classifies the item and also assigns it to catalog categories.

- Standardization: Standardizes the attribute values of the item.

- Matching: Checks for duplicates in Oracle Fusion Product Hub.

Matching Results

There are the three matching result types:

- **Multiple Match**: There is more than one match found for the source item in Oracle Fusion Product Hub.

- **Single Match**: There is only one match found for the source item in Oracle Fusion Product Hub.

- **No Match**: There are no matches found for the source item in Oracle Fusion Product Hub.

Matching Actions

You can review and specify a match action for each unconfirmed item:

- **Confirm**: Matches the source item with an existing item in Oracle Fusion Product Hub.

- **Exclude**: Excludes this item from this import and all subsequent imports.

  The next time the same item data is uploaded within a batch, the item data appears on the Excluded tab for that batch.

- **Ignore**: Temporarily excludes this item from import.

  The next time the same item data is uploaded within a batch, the item data appears on the Excluded tab for that batch.

- **New Item**: Confirms that a new item must be created during import for this source item in Oracle Fusion Product Hub.

Managing Unconfirmed Items

You can also perform the following tasks on the Unconfirmed tab.

- You can modify the item information that appears on the Unconfirmed tab and add more items by selecting **Manage in Spreadsheet** from the Action menu or by clicking the **Manage in Spreadsheet** icon to download an item information spreadsheet.

- If an unconfirmed item is associated with a structure or pack, you can click the icon in the **Structure or Packs** column to display structure and batch details.

  You can modify structures or packs by clicking **Manage in Spreadsheet** and selecting the appropriate template to download.

Update and then upload the spreadsheet to incorporate your changes.

Click **Check Data quality** to perform additional data quality checks after making changes to unconfirmed items.

Confirmed Items in Item Batches: Explained

On the Confirmed tab, you manage items that have been matched and confirmed using matching rules along with new items in the batch.

Confirmed Item Types

Confirmed item types:

- **Cross-Referenced**: A cross-reference with an item in the Fusion Product Hub will be created during import

- **Matched**: The match selected for the item is confirmed

- **New Item**: A new item will be created during import for this item in the Fusion Product Hub

Matching Actions

You can review and specify a new match action for each confirmed item:

- **Unconfirm**: Move the item to the Unconfirmed tab for further updates.

Note

You can also unconfirm a cross-reference. Once you do this, the item moves to the Unconfirmed tab with no match. When you find a new match for the unconfirmed item, the status for that matched item becomes a single match. Upon import, the existing cross-reference is end-dated and the new cross-reference is created with a start effective date equal to the import date.

- **Confirm**: Match with an existing source item in the Fusion Product Hub

- **Exclude**: Excludes this item from this import and all subsequent imports.

  The next time the same item data is uploaded within a batch, it appears in the Excluded tab for that batch.

- **Ignore**: Temporarily excludes this item from import

  The next time the same item data is uploaded within a batch, it appears in the Excluded tab for that batch.

Confirmed Item Detail

The following detailed information is displayed for a highlighted confirmed item

- Structures

- Packs

- Category Assignments

- Relationships

Importing Confirmed Items

Select **Import** to import all items into Fusion Product Hub

Structures and Packs in Item Batches: Explained

Review and compare source system product structures and pack components and those in Oracle Fusion Product Hub.

For product structures, you can add or remove attributes to facilitate comparison.

Component Actions indicate if the structure or pack is being added, modified, or deleted.

Use the drop-down list in the **Match Action** column to confirm, unconfirm, exclude, or ignore the structure or pack.

Relationships in Item Batches: Explained

On the Relationships tab, review the relationships being imported for each of the items on the Confirmed tab (if applicable).

Depending on the data, confirmed item relationships can be organized in up to four areas:

- Related items

- Trading partner items

- Global Trade Identification Number cross-references

- Cross-references

Related Items

You can review confirmed relationships based on predefined and user-defined relationship types, such as superseded items, substitutes, and complimentary items. Additional item attributes further qualify the relationship and effectivity dates indicate when these relationships are phased in and out.

Trading Partner Items

You can review the relationship of the confirmed item with the trading partner items.

GTIN Cross-References

GTIN cross-references relate confirmed items using the industry standard, enabling tracking and identification of trading partner items.

Cross-References

Cross references identifies items that have been consolidated from multiple source systems into a single master item.

Category Assignments in Item Batches: Explained

On the Category Assignments tab, you can review the catalog category assignments for each of the items on the Confirmed tab.

The category assignments for items displayed on this tab are derived in one of two ways:

- Data quality classifies an item and it can also assign it to alternate catalog categories.

- Category assignments are imported for an item by selecting **Item Category Assignment** when you add items to the batch.

Imported Items in Item Batches: Explained

The Imported tab displays all items that are imported into the Oracle Fusion Product Hub.

Imported Item Details

Besides the detail displayed on each line of the imported item table, you can access more details on item components as follows:

- **New Item Request**: Click on the new item request name to go to the New Item Request summary page.

- **Change Order**: Click on the change order name to go to the Change Order summary page.

Item Import Status

Each imported item can have one of the following import statuses:

- **Success**: The item and all its related entities were imported successfully

- **Partial**: The Item was imported successfully, but some of its entities had errors during import

- **Error**: The item itself had errors during import

Highlight an item with an import status of **Partial** or **Error** to display details.

Updating Imported Items with Errors

You can modify the items that appear on the Imported tab by selecting **Export** from the Action menu or clicking the **Manage in Spreadsheet** icon. Correct the data and click Upload in the spreadsheet to apply your changes.

Excluded Items in Item Batches: Explained

On the Excluded tab, you manage the items that are not imported into the Oracle Fusion Product Hub as the result of the data quality and item matching checks performed on the items in the batch

- The excluded status is retained for an item in future batch imports and the item will be automatically placed on the Excluded tab

- Items that are marked as **Ignored** are not import into Fusion Product Hub for that batch only.

- You can change the statuses of **Excluded** and **Ignored** to **Unconfirm** or **Confirm**. These items will then be moved to the Unconfirm or Confirm tabs respectively.

Cross-References in Item Batches: Explained

On the Cross-References tab, you can review source system and intrabatch item cross references.

The cross-references for items displayed on this tab are identified in one of following ways:

- Item batch import and scheduling options let you specify item cross-references imports

  If you select **Cross-References Only**, then no source system data is imported. A cross-reference of the source system item is created with a matched, new, or cross-referenced item in the Oracle Fusion Product Hub.

- Data quality checks for duplicates within the source items being uploaded. These duplicate items are displayed on the Intrabatch page, organized into groups of similar source system items. You can establish cross references between selected items on this page and source system items.

  When the batch is processed, the intrabatch cross-reference is converted to a regular cross reference against the new item in Oracle Fusion Product Hub and appears on the Cross-Reference tab.

  This means that if such an item is included in another item batch, it will be considered an update and placed on the Confirmed tab.

Note

You can also unconfirm a cross-reference. Once you do this, the item moves to the Unconfirmed tab with no match. When you find a new match for the unconfirmed item, the status for that matched item becomes a single match. Upon import, the existing cross-reference is end-dated and the new cross-reference is created with a start effective date equal to the import date.

Rejecting Item Batches: Explained

You can reject an item batch in one of the following ways

- Highlight an item batch on the search results table on the Manage Item Batches page and select **Reject** from the Action menu in the search results table.

- Access the Edit Item Batch page and then select **Reject** from the Action menu.

Note

You cannot reject an item batches with a status of **Completed**.

Reassign Item Batches: Explained

You can reassign an item batch to a different user in one of the following ways:

- Highlight an item batch on the search results table on the Manage Item Batches page and select **Reassign** from the Action menu in the search results table.

- Access the Edit Item Batch page and then select **Reassign** from the Action menu.

Note

You cannot reassign an item batch with a status of **Completed**.

Note

You can only add items to item batches that are assigned to you.

Completing Item Batches: Explained

Item batches can be completed by navigating to either of the following pages and selecting **Complete** from the Actions menu:

- **Manage Item Batch page**: Search for and highlight the item batch you want to complete.

- **Edit Item Batch page**: Search for and access the item batch for editing.

Note

You cannot reassign or reject an item batch with a status of **Completed**.

FAQs for Import Batch

Can I add items to a batch if it is not assigned to me?

No, you can only add items to item batches that are assigned to you.

Can I delete a batch if it is not assigned to me?

No, you can only delete item batches that are assigned to you.

You cannot delete an item batch with a status of Active.

19

Manage Product and Service Data Quality: Cleanse Product and Service Data

Check Data Quality

Data Quality: Explained

The quality of product data is enhanced by 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.

Checking Data Quality for Items: Examples

The following scenarios illustrate the ways in which you can check data quality when working with items.

- Creating a single item

- Creating multiple items

- Editing an item

- Running a scheduled process

- Importing an item batch

Creating a Single Item

To check data quality when creating a single item interactively:

1. On the Create Item page, select **Actions - Check Data Quality** .

2. Examine the Check and Apply Data Quality Results window, which displays the classification, standardization, and matching values provided for the item by Oracle Product Data Quality.

3. If the data quality results are satisfactory, click **Apply** to apply the new values to the Create Item page.

4. The data quality checks are also performed when you click **Save**, **Save and Close**, or **Submit**. Note that you can submit an item only when its item class is enabled for new item requests.

Creating Multiple Items

To check data quality when you are creating multiple items interactively:

1. On the Create Multiple Items page, select **Actions - Check Data Quality** .

2. Examine the Check and Apply Data Quality Results window, which displays, for each item in the set, the classification, standardization, and matching values provided by Oracle Product Data Quality.

3. Use the iterator control to examine different items in the set. Click **Remove item** for an item to be removed from the set.

4. If the data quality results are satisfactory, click **OK** to apply the new values to the Create Multiple Items page.

5. The data quality checks are also performed when you click **Save and Close** or **Submit**.

Note

You can submit items only when their item class is enabled for new item requests. If the data quality results contain a mixture of enabled and nonenabled items, then the **Submit** action is replaced by the following actions:

- Add all of the items to a new item request, regardless of whether their item class is enabled.

- Add only the enabled items to a new item request.

Editing an Item

To check data quality when you are editing an item interactively:

1. On the Edit Item page, select **Actions - Check Data Quality** .

2. Examine the Check and Apply Data Quality Results window, which displays the classification, standardization, and matching values provided for the item by Oracle Product Data Quality.

3. If the data quality results are satisfactory, click **Apply** to apply the new values to the Edit Item page.

4. The data quality checks are not performed when you click **Save**, **Save and Close**, or **Submit**.

Note

Data quality is not automatically checked when you update an item. To ensure data quality for existing items, you can run the periodically scheduled **Semantic Key Update** process.

Running a Scheduled Process

To check data quality for items in an item class by running a periodically scheduled process:

1. On the Scheduled Processes Overview page, schedule the Semantic Key Update process.

2. In the **Process Details** dialog box, select the periodic schedule for checking data quality.

3. Select the parameters for the process:

- Select the item class for which to check data quality.

- Select **Process All Items** to check data quality for all items in Oracle Fusion Product Hub, not just those in the selected item class. By default, **Process All Items** is not selected.

4. Submit the process.

Importing an Item Batch

You can specify data quality options when defining a source system or through an import batch definition by selecting **Check Data Quality** in the Data Quality

section of the source system or batch definition. Items being created in Oracle Fusion Product Hub go through the data quality check automatically, while items that are updated using batches must have the data quality check initiated manually.

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** .

How can I use attribute groups to control data quality?

While defining an item class, select the attributes to be used when checking data quality in the order that you want them to be applied. All selected attributes are used for classification and standardization. You can also select attributes to be used for matching duplicate items.

To use attribute groups to control data quality:

1. On the Edit Item Class page, navigate to the Attribute Groups and Pages tab.
2. Select the Data Quality subtab.
3. Select **Actions - Select and Add** .
4. In the Select and Add: Data Quality Attributes window, search for one or more desired attribute groups.
5. Select an attribute from the attribute group to be used when checking data quality. Repeat for other attributes that you want to use.

Important

The sequence in which you select the attributes determines the sequence in which they are used in checking data quality

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6. Select the **Matching** check box to select an attribute for use in matching.

How can I extract the metadata for the semantic model?

Select the **Extract Data Quality Metadata** action for an item class or catalog, or schedule the Data Quality Metadata Extract process.

The AutoBuild feature of Oracle Product Data Quality uses metadata for item classes and catalogs to construct the semantic model required for data quality checking. See the documentation for Oracle Product Data Quality for details about transferring the extracted metadata.

Note

Before you extract metadata, you must first set up the hierarchies for item classes and item catalogs.

To extract the metadata for a catalog or item class, select it on the Manage Catalogs or Manage Item Classes page, and select **Actions - Extract Data Quality Metadata** . This action schedules the Data Quality Metadata Extract process, which extracts the metadata into an external file, including the child hierarchy of the catalog or item class, and all of its attribute information. You can examine the results of the process on the Manage Scheduled Processes page.

You can also schedule the Data Quality Metadata Extract process directly on the Manage Scheduled Processes page.

- In the **Process Details** dialog box, select either **Item Catalog** or **Item Class** as the extract type for the metadata.

- For the selected extract type, choose the name of the catalog or item class from the **Value** list.

- Submit the process and examine the results.

Can I bypass the data quality check while creating an item?

No. If data quality checking has been implemented, then the checks are performed automatically when you select **Save**, **Save and Close**, or **Submit** from the **Actions** menu. (The Submit action applies only to new item requests.)

What happens if I remove some items from the data quality results for multiple items?

Any items that you remove from the data quality results for multiple items are not created.

What happens if the data quality results for a new item are not satisfactory?

If you consider the data quality results for the item you are creating to be incorrect, then your immediate choice is to cancel the creation. However, you should also contact the administrator responsible for the setup of the semantic model and discuss the issue so that the model can be altered as required.

What happens if I do not accept the results after running a data quality check?

You must either accept all of the results of classification and standardization, or choose not to create the affected items. However, if new items are affected by the checks for matching, then you can ignore the duplicates and continue with creating the items.

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Manage Product and Service Data Quality: Standardize Product and Service Data

Generating Numbers and Descriptions with Rules: Explained

You can create rules that generate the identification numbers for several types of objects when they are created: items, change orders, and new item requests. You can also create rules that generate descriptions for items.

Generating numbers and descriptions with rules requires the following actions:

- Creating rule sets
- Creating rules
- Completing associations

Creating Rule Sets

You must associate the rule sets containing number generation rules with the item classes, change order types, or new item request types for those objects.

- You must select the **Assignment** type for the rule set, because you are assigning a new value to an object's number (or description).

- In the rule set, the association type must correspond to the object, according to the following table.

Object to Be Numbered	Association Type for the Rule Set
Item	**Item class**
Change Order	**Change type**
New item request	**New Item Request**

Note

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

- 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.

Object to Be Numbered	Return Type for the Rule
Item (number)	**Item Number**
Item (description)	**Item Description**
Change Order	**Change order number**
New item request	**New item request number**

- The definition of the rule must generate a number (or description) as the return value.

Completing Associations

You must associate the object with the rule set of the rule that generates the number or description.

- The rule set must already exist and contain a valid rule.

- The number generation method (or description generation method) of the object must be set to **Rule Generated**. The location for setting the generation method varies by object.

- After the number generation method is set to **Rule Generated**, the associated rule set name must be set to the rule set that contains the generation rule that you created.

Note

In an item class, you can use one rule set for item number generation, and a different rule set for item description generation.

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.

Field (in Rule Set)	Value
Display Name	Example:**MyItemNumGenRuleSet1**
Type	**Assignments**
Association Type	**Item Class**
Association Name	Example:**MyItemClass1**
Business Entities	One or more of Item data level, Item revision data level, or Item supplier data level

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

Field (in Rule)	Value
Name	Example: **MyItemNumGenRule1**
Return Type	**Item Number**
Primary If Expression	**true**
Secondary If Expression	**true**
Return Value	Example: `[PhysicalAttributes].[UNIT_LENGTH]`

4. Select the **Manage Item Classes** task.

5. On the Manage Item Classes page, edit the item class that you selected as the association name for your rule set.

6. On the Item Management tab of the Edit Item Class page, select the field values shown in the following table, and save the item class.

Field (in Item Class)	Value
Name	Example: **MyItemClass1**
Item Number Generation Method (in the Number Generation section)	**Rule Generated**
Associated Rule Set	Example: **MyItemNumGenRuleSet1** **Note** Only rule sets with the corresponding association type (in this scenario, Item Class) are available. Also, your rule set will not appear in the **Associated Rule Set** list of values unless a valid rule has been created in the rule set.

7. When you create a new item from this item class, the item number field initially contains a message that the number will be rule generated. When you save (or submit) the item, your rule generates a number for it.

Important

Once an item has been saved, its item number, whether generated or manually entered, cannot be changed unless the **Update Item Number** (EGP_UPDATEABLE_ITEM) profile option has been set to **Yes** at the site level. If that profile option has been set to **Yes**, then when any attributes used in your number generation rules are updated, the item numbers are regenerated accordingly

Creating Rules to Generate Descriptions for New Items

This scenario illustrates how to use rules to generate descriptions for newly created items The scenario is the same as the one for generating numbers for new items, with the differences shown as follows.

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

Field (in Rule)	Value
Name	Example: **MyItemDescGenRule1**
Return Type	**Item Description**
Return Value	Example: `[Main].[ITEM_TYPE] + [Main].[LONG_DESCRIPTION]`

- On the Item Management tab, the differences for your item class are shown in the following table.

Field (in Item Class)	Value
Item Description Generation Method (in the Description Generation section)	**Rule Generated**
Associated Rule Set	Example:**MyItemDescGenRule1**

- When you create a new item from this item class, the item **Description** field initially contains a message that the description will be rule generated. When you save (or submit) the item, your rule generates a read-only description for it.

- Whenever any attributes used in your description generation rules are updated, the item descriptions are regenerated accordingly when the item is displayed.

Note

The same rule set can contain rules for both item number generation and item description generation.

Creating Rules to Generate Numbers for Change Orders

This scenario illustrates how to use rules to generate change order numbers for newly created change orders. The scenario is the same as the one for generating numbers for new items, with the differences shown as follows.

- On the Edit Rule Set page, the differences for your rule set are shown in the following table.

Field (in Rule Set)	Value
Display Name	Example: **MyCONumGenRuleSet1**
Association Type	**Change type**
Association Name	Example: **MyCOType1**

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

Field (in Rule)	Value
Name	Example: **MyCONumGenRule1**
Return Type	**Change order number**
Return Value	Example: `Flexfield[CM_Global_Segment1]`

- On the Number Generation tab of the Edit Change Order Type page, the differences for your change order type are shown in the following table.

Field (in Change Order Type)	Value
Number Generation Method (in the Number Generation section)	**Rule Generated**
Associated Rule Set	Example:**MyCONumGenRuleSet1**

- When you create a new change order, your rule generates a change order number for it after you submit it.

Creating Rules to Generate Numbers for New Item Requests

This scenario illustrates how to use rules to generate new item request numbers for newly created new item requests. The scenario is the same as the one for generating numbers for new items, with the differences shown as follows.

- On the Edit Rule Set page, the differences for your rule set are shown in the following table.

Field (in Rule Set)	Value
Display Name	Example: **MyNIRNumGenRuleSet1**
Association Type	**New Item Request**
Association Name	Example: **MyNIRType1**

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

Field (in Rule)	Value
Name	Example: **MyNIRNumGenRule1**
Return Type	**New item request number**
Return Value	Example: `Flexfield[CM_Global_Segment1]`

- On the Number Generation tab of the Manage New Item Request Type Details page, the differences for your new item request type are shown in the following table.

Note

There are multiple item classes and change order types, but only a single type for new item requests. Consequently, all new item requests use the same rule set.

Field (in New Item Request Type)	Value
Number Generation Method (in the Number Generation section)	**Rule Generated**
Associated Rule Set	Example:**MyNIRNumGenRuleSet1**

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

FAQs for Standardize Product and Service Data

What happens if item numbers are allowed to change?

Ordinarily, item numbers cannot be changed after they are entered (or are generated by product rules) and the item is saved. This behavior is produced by

the **Update Item Number** profile option (EGP_UPDATEABLE_ITEM), which has a default setting of **No**. If you set this profile option to **Yes**, then number generation rules will regenerate item numbers when any attributes participating in those rules change.

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Manage Product and Service Retirement: Obsolete Products and Services

Obsoleting Products and Services: Overview

Product managers can obsolete products and services by defining and maintaining delete rroups 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 **Mange 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.

Manage 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.

Caution

Once an item is deleted, it is removed from the system, all the cross references and item relationships such as item organizations, item supplier site organizations, structures, and components are lost.

On the Manage Delete Groups page, you can search for and access existing Delete Groups. From this page you can also delete those Delete Groups that were successfully submitted and completed.

On the Edit Delete Group page, you can add and remove objects for deletion, check constraints, and submit the Delete Group for processing.

Note

When you delete an object such as items, new item requests, and change orders from the appropriate Manage page, you are prompted to add the object to an existing Delete Group or create a new one.

Checking Constraints

Constraints maintain data integrity so that pending transactions are not affected during purges.

After saving a delete group, choose **Check Constraints** on the Edit Delete Group page to ensure that it is safe to submit the objects for submission.

Along with predefined constraints, custom constraints can be defined to be checked before purging is done. Constraints are defined using the Service Oriented Architecture (SOA) Business Process Execution Language (BPEL).

Refer to the **Oracle Fusion Middleware Developer's Guide for Oracle SOA Suite** for more information.

Items in Delete Groups

On the Items tab of the Edit Delete Group page, you can specify the following objects for deletion by choosing **Select and Add** from the Action menu, then selecting from the Entity drop-down list on the Select and Add page.

- Items

- Item organizations

- Item supplier site organizations

Tip

When you add an item to the delete group, you can change the organization, supplier and supplier site assignments for the object by highlighting the item row and selecting the appropriate assignments.

This feature can be used in conjunction with **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.

Manage 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.

Glossary

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.

AMX

Abbreviation for Approval Management extensions.

APM

Abbreviation for Oracle Authorization Policy Manager

ATO

Abbreviation for Assemble to Order. Represents the ability for a user to define the component make up of a product at the very moment of ordering that product.

ATP

Abbreviation for available to promise.

attribute

A named entity whose value describes a product item. Attributes can be organized into attribute groups. You can search for items based on attribute values, by adding attribute fields when using Advanced Search (but you cannot search on transactional attributes). You can compare the attribute values of selected items returned by an item search.

attribute group

A named set of related product item attributes, associated with item classes, which can be inherited through the child hierarchy of an item class. You can select an attribute group, then select member attributes to participate in certain operations.

automatic assignment catalog

A non-hierarchical catalog to which categories that match the catalog's Catalog Structure value are automatically added. Add categories and share categories actions are disabled for this catalog configuration.

BPEL

Business Process Execution Language; a standard language for defining how to send XML messages to remote services, manipulate XML data structures,

receive XML messages asynchronously from remote services, manage events and exceptions, define parallel sequences of execution, and undo parts of processes when exceptions occur.

browsing category

Parent or intermediate category that is associated with other categories in the catalog hierarchy, but has no assigned items.

CAS

Abbreviation for Chemical Abstracts Service. The American Chemical Society Chemical Abstracts Service registry number identifies a chemical substance or molecular structure."

catalog

A collection of categories used to classify items which can be organized into a hierarchy that represents a taxonomy.

catalog category

The association between a catalog and category or a category and category is called the catalog category. This association includes the start date and end dates.

category

Catalog component that is associated to a catalog to classify items.

classification

The 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 taken 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.

DRP

Abbreviation for Distribution Resource Planning. Application of replenishment inventory calculations to assist in planning of key resources contained in a distribution system, such as sourcing and transport. DRP is an extension of distribution requirements planning, which applies MRP logic to inventory replenishment at branch warehouses.

duty role

A group of function and data privileges representing one duty of a job. Duty roles are specific to applications, stored in the policy store, and shared within an Oracle Fusion Applications instance.

effectivity

Enables item attributes to change over time while retaining historical values.

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 allow grouping 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.

MPS

Abbreviation for Master Production Schedule. The anticipated build schedule in terms of rates or discrete quantities, and dates.

MRP

Abbreviation for Manufacturing Resource Planning. Process for determining material, labor and machine requirements in a manufacturing environment. MRPII (manufacturing resources planning) is the consolidation of material Abbreviation for requirements planning (MRP), capacity requirements planning (CRP), and master production scheduling (MPS). MRP was originally designed for materials planning only. When labor and machine (resources) planning were incorporated it became known as MRPII. Today the definition of MRPII is generally associated with MRP systems.

native catalog

A catalog that a user is managing.

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.

PIM

Abbreviation for Product Information Management.

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.

referenced category

A category within the native catalog that is shared from a designated source catalog. A reference category is not editable.

RMA

Abbreviation for return material authorization.

role

Controls access to application functions and data.

semantic model

A fully configured data lens constructed in Oracle Product Data Quality, which provides the basis for checking data quality. The semantic model contains your definitions for classification, standardization, and matching.

shared category

A category within a source catalog that has been added to a native catalog as a referenced category. The category can be shared with one or more catalogs.

SKU

Abbreviation for Stock Keeping Unit. A unique identifier that defines an item at the lowest inventory level.

SOA

Abbreviation for service-oriented architecture.

source system

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.

task

Representation of a fulfillment task that Oracle Fusion Distributed Order Orchestration requests in a fulfillment system, for example, Invoice or Reservation. A task can have multiple orchestration process steps.

TIUD

Abbreviation for Trade Item Unit Descriptor,

trading partner

An external party, such as a supplier, in the Oracle B2B application for which electronic documents are sent or from which documents are received. A trading partner in Oracle B2B corresponds to a supplier site.

UOM

Abbreviation for unit of measure. A division of quantity that is adopted as a standard of measurement.

WIP

Abbreviation for Work in Process. A product or products in various stages of completion, including all material from raw material that was released for initial

processing up to completely processed material awaiting final inspection and acceptance as finished goods.

workflow

An automated process 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.