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Preface

Intended Audience


See Related Information Sources on page xii for more Oracle E-Business Suite product information.

Documentation Accessibility

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Structure

1 Overview of Oracle Installed Base
2 Managing Searches
3 Managing Item Instances in Oracle Installed Base
4 Working with Systems
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7 Using the Mass Update Facility
8 Performing Oracle Installed Base Related Tasks in Other Oracle Applications
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Related Information Sources

Oracle E-Business Suite User’s Guide

This guide explains how to navigate, enter and query data, and run concurrent requests using the user interface (UI) of Oracle E-Business Suite. It includes information on setting preferences and customizing the UI. In addition, this guide describes accessibility features and keyboard shortcuts for Oracle E-Business Suite.

Oracle Asset Tracking User’s Guide

Oracle Enterprise Asset Management User’s Guide

Oracle Enterprise Asset Management Implementation Guide

Oracle Field Service User’s Guide

Oracle Installed Base Implementation Guide

Oracle Inventory User’s Guide

Oracle Work in Process User’s Guide

Integration Repository

The Oracle Integration Repository is a compilation of information about the service endpoints exposed by the Oracle E-Business Suite of applications. It provides a complete catalog of Oracle E-Business Suite’s business service interfaces. The tool lets users easily discover and deploy the appropriate business service interface for integration with any system, application, or business partner.

The Oracle Integration Repository is shipped as part of the Oracle E-Business Suite. As your instance is patched, the repository is automatically updated with content appropriate for the precise revisions of interfaces in your environment.

Do Not Use Database Tools to Modify Oracle E-Business Suite Data

Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle E-Business Suite data unless otherwise instructed.

Oracle provides powerful tools you can use to create, store, change, retrieve, and maintain information in an Oracle database. But if you use Oracle tools such as SQL*Plus to modify Oracle E-Business Suite data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.
Because Oracle E-Business Suite tables are interrelated, any change you make using an Oracle E-Business Suite form can update many tables at once. But when you modify Oracle E-Business Suite data using anything other than Oracle E-Business Suite, you may change a row in one table without making corresponding changes in related tables. If your tables get out of synchronization with each other, you risk retrieving erroneous information and you risk unpredictable results throughout Oracle E-Business Suite.

When you use Oracle E-Business Suite to modify your data, Oracle E-Business Suite automatically checks that your changes are valid. Oracle E-Business Suite also keeps track of who changes information. If you enter information into database tables using database tools, you may store invalid information. You also lose the ability to track who has changed your information because SQL*Plus and other database tools do not keep a record of changes.
Overview of Oracle Installed Base

This chapter covers the following topics:

- Definition of Oracle Installed Base
- Oracle Applications That Use Oracle Installed Base
- Examples of Transactions That Use Oracle Installed Base

**Definition of Oracle Installed Base**

Oracle Installed Base is an item instance life cycle tracking application that facilitates enterprise-wide (internal) life cycle item management and tracking capability. In addition, you can track customer (external) item instances.

**Basic Tracking**

You specify which items you want to track in the Master Item list in Oracle Inventory. Subsequently, when a particular real-world instance of the item is created, an item instance record is created in Oracle Installed Base. Any significant changes to the item instance will also be recorded in Oracle Installed Base.
Terminology

**Tangible Items**

Item instances can be used to track tangible items that can be assembled and shipped, such as computers, engines, machine parts, and so on.

**Intangible Items**

Item instances can be used to track intangible items such as software, services, licenses, and agreements. For example, a telephone number can have different services such as call waiting and conference call. These can all be defined and tracked as components of the telephone service.

**Serialized Items**

When a trackable item is defined in Oracle Inventory as serialized, each item instance derived from that item requires a unique serial number and individual tracking. The item instance will always have a quantity of 1.

**Non-Serialized Items**

When a trackable item is defined in Oracle Inventory as non-serialized, it is typically for smaller objects whose real-world instances do not require individual tracking. For example, a screw could be defined as a non-serialized, trackable item; an order for 100 screws would result, after order shipping, in the creation of one item instance, with a quantity of 100.

See also Serialization and Levels of Tracking, page 1-5.
**Item Instance Movement Tracking**

Oracle Installed Base can track an item instance from the time that it is received in inventory, in work in process, in projects, at customer sites, and throughout the return and repair process.

```
Received into Inventory  -->  In WIP

Item Instance

Serviced or Returned for Repair  <--  Shipped to Customer
```

**Item Instance Attribute Change Tracking**

Oracle Installed Base is a centralized repository of information for an item instance and its tracking details including location, status, ownership, party role, and contact relationships. It also supports the creation and maintenance of Oracle Installed Base configurations.

Counters can be tied to item instances so that usage can be captured. For example, if an item instance is an electrical meter, then counters can be used to store the meter reading, thus recording the usage that in turn generates revenue.
History of Item Instance Changes

Oracle Installed Base records a history of changes to item instances.

For each item instance in Oracle Installed Base, a history of transactions is tracked and stored. You can view the transactions and the attribute state for a particular time frame.

The transaction history includes a list of inventory, work in process, order management, and other transactions affecting an item's tracking attributes.

Objects Related to Item Instances

Oracle Installed Base provides links to detailed information on service contracts, customer warranties, service requests, work requests, and repair orders associated to
item instances. To provide this information, Oracle Installed Base interfaces with other Oracle applications, which include Oracle TeleService, Oracle Service Contracts, Oracle Enterprise Asset Management, Oracle Order Management, and Oracle Depot Repair.

**Serialization and Levels of Tracking**

The extent of the tracking that Oracle Installed Base performs for an item depends on its serialization setup. The levels of tracking, with the highest tracking level first, are as follows:

1. Items that are serialized at receipt or have predefined serialization.
2. Items that are serialized at sales order issue.
3. Non-serialized items.

If an item is serialized at receipt, Oracle Installed Base begins tracking all the significant changes that affect an item instance before it is sent out to a customer. For items serialized at sales order issue, tracking starts at the time of sale order issue, and records all transactions that occur at the customer site.

Non-serialized items can be tracked only as a group, where the quantity of items in the group may be 1, but is typically a larger number.

For non-serialized items, there are transactions where only part of the group is processed, such as partial returns on RMA receipts and cancellations. In these transactions, Oracle Installed Base splits the original item instance into two. For example, when a customer returns part of a group of non-serialized items, the original item instance records the quantity that remains with the customer, and the second item instance records the quantity being returned.

There are also transactions where Oracle Installed Base merges item instances, such as when non-serialized items are returned into inventory.

**Oracle Applications That Use Oracle Installed Base**

The Oracle applications that use Oracle Installed Base are:

- Asset Tracking
- Assets
- Complex Maintenance Repair and Overhaul
- Configurator
- Depot Repair
- Enterprise Asset Management
A list of the Oracle transactions that interface with Oracle Installed Base appears in Oracle Transactions Interfacing with Oracle Installed Base, page A-1, together with the Oracle application that triggers each transaction.
Examples of Transactions That Use Oracle Installed Base

Several Oracle Order Management transactions interact with Oracle Inventory and Oracle Installed Base.

Purchase Orders

The following diagram shows the high-level flow for purchase orders.

**Purchase Order Processing Flow**

```
Purchase Order

Purchase Receipt of component materials

Update Inventory Data

Item Instance
Created or Changes Recorded in Installed Base
```

The receipt of the component materials on the purchase order is recorded by Oracle Inventory, and Oracle Installed Base starts to track the item instances.

Item Assembly

The following diagram shows the high-level flow for item assembly.
The main processing associated with the building and assembly of items occurs in Oracle Work in Process. When all components have been completed and the item is assembled, this is recorded both in Oracle Inventory and Oracle Installed Base.

**Shipped and Fulfilled Order Lines**

The following diagram shows the high-level flow for shippable and non-shippable items on sales orders.
A sales order shipment generates an Inventory Issue material transaction in the Oracle Inventory application. Because Oracle Installed Base also tracks the internal inventory for trackable items, the instance already exists in Oracle Installed Base. A shipment can result in a change in instance location and ownership, status, and so on, based on the associated Oracle Installed Base transaction subtype.

Oracle Installed Base tracking of non-shippable items at fulfillment requires the workflow configuration as defined in the Oracle Installed Base Implementation Guide.

**Material Returns**

The following diagram shows the high-level flow for material returns.
A sales order return line provides for an Oracle Inventory receipt material transaction in the Oracle Inventory application. Because the Oracle Installed Base instance already exists for the item being returned, a receipt can trigger an update of the specified instance, depending on the Oracle Installed Base transaction type being used.

Oracle Installed Base also supports the Oracle Order Management RMA fulfillment process for non-shippable items subject to rules and conditions defined in the Oracle Installed Base Implementation Guide.
This chapter covers the following topics:

- Overview
- Item Instance and System Search Overview
- Performing Simple Searches
- Performing Advanced Searches
- Creating and Personalizing Views
- Using Views

Overview

When searching for item instances or systems, (which are constructs used for grouping item instances) you can perform simple or advanced searches, and then save your searches for reuse.

For both item instances and systems, the methods for searching and saving searches are similar. In both cases, the saved searches are known as views.

**Note:** In this chapter, the terms "saved search" and "view" are used interchangeably.

Item instance views can only be used in item instance searches; system views can only be used for system searches.

Item Instance and System Search Overview

The diagram shows an overview of the features available when you search for item instances or systems.
Both the initial Item Instance page and the initial System page appear as a Simple Search page with two regions:

- Search region
- Results region
You can search for item instances or systems using three search pages: Simple Search, Advanced Search, or Views. You can switch between the search pages by clicking the appropriate Simple Search, Advanced Search, or Views button.

A view is a saved search. For simple or advanced searches, save them as views, and reuse them as needed.

Each of the search pages contains a Go button, which performs the actual search.

The basic search process is as follows:

1. Select the search page that you want to use.

2. Perform the search as follows:
   - For simple searches, enter the search parameters.
   - For advanced searches, optionally add in extra search parameters from an extensive list, then enter your search parameters.
   - To use views, invoke a previously saved search or view.

3. Click the Go button.

4. The results appear in the results region.

   For details regarding the operations that can be performed for the results, see Managing Item Instances in Oracle Installed Base, page 3-2 and Managing Systems, page 4-2.

   **Note**: If Oracle Endeca is installed and licensed in your environment, then refer to the Oracle E-Business Suite Extensions for Oracle Endeca Integration and System Administration Guide for detailed information about the Endeca enhancements to your product.

This section consists of the following topics:

- Performing Simple Searches, page 2-3
- Performing Advanced Searches, page 2-4
- Creating and Personalizing Views, page 2-5
- Using Views, page 2-7

**Performing Simple Searches**

The Simple Search page enables you to use a standard set of the most common search parameters.
Notes

1. For each search column, you can enter complete or partial values.

2. For item instances searches, by selecting the Show Expired Item Instances check box, you can specify that you want the search to look for expired as well as active instances.

3. Click the Go button to perform the search.
   The results appear in the results region of the page.

For details regarding extensive searches, see Performing Advanced Searches, page 2-4.

Saving Your Search

Click the Save Search button to save your search as a view, so that you can reuse it later. For details, see Creating and Personalizing Views, page 2-5.

Performing Advanced Searches

The Advanced Search page enables you to use a more extensive set of search parameters.

Adding Extra Search Parameters

The Advanced Search page contains a set of standard search parameters. You can select additional columns from an extensive list of search parameters.

To add search parameters:

1. Click in the Add Another field, and select a column name from the list.

   To perform an advanced search, click Advanced Search. You can select parameters
such as:

- Currently in Country
- Installed in Location
- FA Location (available only if Oracle Fixed Assets is installed)

2. Click the Add button.

The page will be filtered with the new search parameters.

**Entering Search Conditions and Performing the Search**

1. Select a condition operator.
   
   The condition operators "is" and "is not" are available for all columns. In addition, for some key fields, you can select "contains", "starts with", or "ends with".

2. Select or enter a value to complete the condition.

3. Click Go to perform the search.

   The results appear in the results region of the page.

**Creating and Personalizing Views**

Generally, you create a view when you save the search parameters for a simple or advanced search. You can also create a view with no previously entered search parameters.

The general view creation/update page is used to create a new view, duplicate a view, or update a view.

**Prerequisites**

When creating a view:

- In the Simple Search or Advanced Search page, click Saved Search, (or in the Views page, Personalize) and then click Create View.

When duplicating a view:

- In the Personalize Views page, select a view, and then click the **Duplicate** button.

When updating a view:

- In the Personalize Views page, select a view, and then click the **Update** button.
Entering View Information

The general view of the Create View or Update View page is an Oracle Applications Framework page, which enables you to customize your item instance or system searches and the layout of the search results as follows:

- Name the view, if you are creating or duplicating a view.
  
  If you are updating a view, you can change the View name.

- Optionally change the default value of 10 rows to indicate the number of rows to display in the results region.

- If you want the current view to be used as the default view each time you log on, select the Set as Default option.

The Column Properties page appears.

1. Select the columns which you want to appear in the search results.

   The values in the Columns Displayed list show the default selection of columns.

   Use the Move and Remove links and arrows to move selected columns between the Available Columns list and the Columns Displayed list.

   Use the Up and Down arrows to arrange the sequence of the columns in the Columns Displayed list. The columns as arranged from top to bottom will be displayed from left to right in your search results.

2. If you want to change the headings for a selected column, or if you want to a total on numeric columns, click Rename Columns/Totaling and perform those changes in the page that appears.

   Note that you can only select Totalling for the end columns of the list.

3. You can select whether you want the results sorted or not.
If you have chosen to sort the results, you can choose up to three columns to sort.

**Search Query to Filter Data in your Table**

- **1.** If you accessed this page from a simple or advanced search page, this region displays the simple or advanced search parameters.

- **2.** You can change the entries here, and add search parameters.
  
  For each additional search parameter, select a column name from the Add Another drop-down list, and click the **Add** button.

- **3.** For item instance views, indicate whether you want the view to show all item instances, expired and active, or only the active item instances.

**Saving the View and Optionally Performing the Search**

After entering all the view information, click either Apply or Apply and View Results. The latter option applies the changes, then performs the saved search and displays the results of the search.

**Using Views**

Use this procedure to invoke a previously saved search:

- **1.** In the Views page, select a View.

- **2.** Click the Go button.
  
  The results appear in the results region of the page.
 Managing Item Instances in Oracle Installed Base

This chapter covers the following topics:

• Overview
• Searching for Item Instances
• Creating Item Instances
• Viewing and Updating Item Instance Details
• Viewing Item Instance Details
• Updating Item Instance Details
• Tracking Serial Tagged Items in Oracle Installed Base
• Item Instance Details Processing Overview
• Item Instance Details Header - Processing Options
• Item Instance Tabs - Processing Options
• Other Item Instance Details Panel - Processing Options
• Shortcuts Panel - Processing Options
• Miscellaneous Item Instance Processing Options
• Managing General Attributes
• Managing Location Attributes
• Managing Associations
• Managing Configurations
• Layout and Usage of the Configuration Tab
• Oracle Installed Base Configuration Support
• Understanding Relationship Types
Overview

Oracle Installed Base provides lifecycle tracking of item instances. It provides the unique ability to query the inventory of available item instances, services, and assets tracked through Oracle Installed Base. If an item is set up as trackable, then an instance is created when the item is first received into inventory. Its ownership, status, and location are tracked for inventory movements, project issues, WIP issues, sales transaction, and return RMA. In addition, in Oracle Installed Base many properties can be tied to the instance to facilitate its usability in other applications. An example is tracking the party relationships for an item instance. An item instance can be owned by one party but serviced by another. For each party, many accounts and contacts can be defined and stored. In addition, multiple configurations can be set up for an instance to track the relationships that are possible. This is especially useful in the telecommunication environment where, for example, a part can be a component of a switch and connected to a circuit at the same time.

Item instances can be used to track non-tangible items such as telephone service. For
example, a telephone number can have different services such as call waiting and conference call. These can all be defined as components of the telephone service. As such, contracts and warranty terms can be applied using CRM contracts, just as they can be applied to tangible items.

Oracle Installed Base supports various types of relationships through configuration constructed across the item instances. In the Graphical View - Instance Relationship page, you can view the graphical representation of item instance relationships, contacts, and accounts. Counters can be tied to item instances so that usage can be captured. For example, if an item instance is an electrical meter, then counters can be used to store the meter reading, thus recording the usage that in turn generates revenue.

Service requests and repair orders can be viewed for item instances recorded in Oracle Installed Base, which provides a repository of information of their location, bill-to address, ship-to address, service contacts, and relationship to other items.

### Serial Tagging and Oracle Installed Base Item Instances

Serial tagging is a method of assigning and tracking serial numbers for items which are not usually serial controlled and need serial tracking only for certain transactions. For example many items are not tracked when they are received or transferred within the organization. Such items are tracked only when they are actually put into use, such as being issued to a WIP job. Serial tagging helps in such cases so that users do not have to maintain serials at all times, and serials can only be generated when they are required. Serial tagging is used in the following Oracle Applications:

1. **Oracle Inventory**
   - Used for items that have the serial control option of No Serial Control or At Sales Order Issue in the Master Items page.
     
     You can assign serial numbers during pick confirmation for sales orders and internal orders. This expedites the downstream shipment process by reducing the number of tasks for the shipping operator.

   - Used during return to vendor (RTV) transactions: Inventory completes the return transaction when the return order is shipped and confirmed.
     
     If the item is tagged for serials at RTV, then Oracle Installed Base will create new serialized instances when serials are created in the Return form.
     
     See *Oracle Inventory User’s Guide*.


When the serial number has been assigned to component, the information is passed to Oracle Installed Base. If an item instance was created prior to the serial number tagging (assignment), then the item instance is expired, and a new item instance is created. The new item instance will include the appropriate serial number assigned.
to the component or item.

3. Oracle Field Service: Used during task debriefing.

If serial tagging is used, Oracle Installed Base captures the serial for installed item by creating a new instance (with serial) and updates the configuration to show the installed instance. During item returns (recovery), Oracle Installed Base would expire the serialized instance and update the quantity of an existing instance upon receipt into inventory. If no serialized instance exists, Oracle Installed Base would create a new instance.

See Oracle Field Service User Guide.

Related Topics

See Tracking Serial Tagged Items in Oracle Installed Base, page 3-10

Searching for Item Instances

You can search for item instances in several ways.

For more information on item instance search options and processes, see Item Instance and System Search Overview, page 2-1.

From the search page, you can also create, expire, and export item instances.

<table>
<thead>
<tr>
<th>Select Item Description</th>
<th>Items</th>
<th>Instance Number</th>
<th>Serial Number</th>
<th>System Status</th>
<th>Quantity Owne</th>
<th>Owner Account Number</th>
<th>Start Date</th>
<th>Instance Update</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A952669100010</td>
<td>B05335</td>
<td>Latest</td>
<td>1</td>
<td>Total Internet</td>
<td>1008</td>
<td>16-Nov-1999 12:33:06</td>
<td></td>
</tr>
<tr>
<td>Central Standard Desktop</td>
<td>A954800100001</td>
<td>CREATED:1</td>
<td>Imaging Innovations, Inc.</td>
<td>1002</td>
<td>06-Jun-2003 07:17:23</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Processing the Search Results

From the search results, you can perform the following operations:

1. View item instance details by either of the following methods:
   - Select an item instance, select an Action from the list of values, and click Go.
   - Click the Item Description link.

2. To update details for an item instance, click the Update icon.

See Also

- Creating Item Instances, page 3-5
Creating Item Instances

In the Create Item Instance page, you can create an item instance. The page has regions for general item information, instance specific attributes, owner information, current and install locations, item flags, and flexfields. If you are aware of another item instance in Oracle Installed Base that has many of the same values for this information, then use the copy item instance procedure, page 3-46 instead.

Prerequisites

The item and item number for an item instance must already be defined in the Oracle Inventory Master Item window by selecting the field Track in Installed Base.

General Information

Red asterisk fields are mandatory. An instance created online can belong to a party (external, such as a customer), an employee, or a vendor.

The Version Label and Status fields, if they are not populated, default to the values of the profile option CSI: Default Version Label and CSI: Default Instance Status respectively. Accounting classification defaults to Customer Product if it is not populated.

Note: In Oracle Installed Base, you cannot create a new item instance for network configurable instances.

Item Region

Organization Name

The Organization Name field defaults to the Service validation organization profile setup. You can select another organization from the list of values.

The inventory rules of the selected organization will be used to verify the item being created. The BOM from the organization will be used in the case of warranty creation.

Item

You must select an Item from the list of values, that displays all the items in the current organization.

The Item Description and Item Revision appear after you select the item.

UOM and Quantity

The options available to you for UOM and Quantity depend on whether the item you selected is serialized or not.

If the item is non-serialized:
• You must select a UOM from the list of values.

• The Quantity defaults to 1; you can change this to any value.

If the item is serialized:

• The value Each appears in the UOM field, which is set to read-only.

• You must enter a Quantity.

  If you enter 1, you must create a single serial item instance in the single-record Instance Specific Attributes region; if you enter more than 1, a table appears in the Instance Specific Attributes region, where you must create the multiple serial item instances.

**System**

You can optionally associate a system with an item instance.

For more information, see Working with Systems, page 3-5.

**Create Contract** check box

The Create Contract check box is selected by default. When selected, this triggers the following processing:

• A warranty contract will be created with the current item instance, or with each of the item instances, where you are creating more than one, if the item bill of material includes an item of contract type Warranty.

**Instance Specific Attributes Region**

This region becomes a multi-record region if you select a quantity that is greater than 1 for a serialized item instance in the Item region.

The following considerations refer to each item instance that you are creating:

• **Instance Number**

  You can enter the Instance Number, or Oracle Installed Base will create one for you. The Instance Number is a unique value.

• **Instance Description**

  You can optionally enter an Instance Description.

• **External Reference** is a free-form field, which you can use to search for item instances.

• **Operational Status**

  You can select from one of the seeded values, In Service, Out of Service, Not Used, and Installed.
• **Serial Number**

This field appears if the item is serialized. You can enter a value or select from the list of values.

For serialized items, Oracle Installed Base checks for the uniqueness of the serial number based on the setup of a serial control uniqueness parameter in the inventory organization.

**Owner Region**

Each item instance must have an owner. The owner can be a party, an employee, or a vendor.

The amount of information that you must provide depends on the value you select for Party Type, as shown in the following table.

<table>
<thead>
<tr>
<th>Party Type</th>
<th>Fields</th>
<th>Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Party</td>
<td>Party Name</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Party Number</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Account Number</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Account Name</td>
<td>No</td>
</tr>
<tr>
<td>Employee</td>
<td>Employee Name</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Employee Number</td>
<td>No</td>
</tr>
<tr>
<td>Vendor</td>
<td>Vendor Name</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Vendor Number</td>
<td>No</td>
</tr>
</tbody>
</table>

**Note:** For owner, current location, and install location fields, the Party Number and Party Name lists of values are controlled by the option All Parties in the Oracle Installed Base Parameter setup:

- If All Parties is checked then list of values will show all parties.
- If All Parties is not checked then list of values will show owner party and related parties only.
Current Location Region

You must specify a current location when you create an item instance. Oracle Installed Base provides separate Current and Install location attributes. These accommodate situations where both are required.

The amount of information that you must provide depends on the value you select for Party Type, as shown in the following table:

<table>
<thead>
<tr>
<th>Type</th>
<th>Fields</th>
<th>Required?</th>
</tr>
</thead>
<tbody>
<tr>
<td>HZ Location</td>
<td>Address</td>
<td>Yes</td>
</tr>
<tr>
<td>Party</td>
<td>Party Name</td>
<td>Yes, if Party Number not specified</td>
</tr>
<tr>
<td></td>
<td>Party Number</td>
<td>Yes, if Party Name not specified</td>
</tr>
<tr>
<td></td>
<td>Location Number</td>
<td>Yes, if Address not specified</td>
</tr>
<tr>
<td></td>
<td>Address</td>
<td>Yes, if Location Number not specified</td>
</tr>
<tr>
<td>Internal Site</td>
<td>Address</td>
<td>Yes</td>
</tr>
<tr>
<td>Vendor Site</td>
<td>Address</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Install Location Region

For the install location, you can either select the check box Same as Current Location (except if you selected Internal Location for the Current Location Type), or you can select a Type and other fields, similar to the Current Location options.

Note: Internal Site is not an option for install locations.

Installation date defaults to the current date, if not populated. This field can be populated with past, current, or future date. This date is tied to the warranty start date in a service contract if a warranty is associated with the item BOM.

Other Regions

Item Instance Type
This represents the type of the instance. You can set up your own instance types. The values are populated from the lookup type CSI_INST_TYPE_CODES. For more information, see the Oracle Installed Base Implementation Guide.

**Version Label**

Version Label is a free-form field, except when you create an item instance and leave the field blank - in this case, the value specified in the profile option CSI: Default Version Label is used.

The main use of a version label is to give a descriptive name for a timestamp. Each time you change a version label, and commit the change, the item instance details are timestamped, and you can query and view the information taken at that point in time.

**Install Date**

The Install Date defaults to the current date and time, if not populated. This field can be populated with a past, current, or future date. The install date becomes the warranty start date in a service contract if a warranty is associated with the item BOM.

**Creation and Expiration Dates**

You can enter any dates in these fields.

**Flexfields Region**

Descriptive flexfields are used to store extra information. They must first be set up on the DFF setup. You can define up to 15 fields.

**Maintenance Attributes Region**

This region is shown if the selected item is an Oracle Enterprise Asset Management item type, that is, Asset Group, Rebuildable.

The maintenance attributes you can enter are Department, WIP Account Class, Area, Criticality, Category, Parent Asset Number. These attributes are for use by Oracle Enterprise Asset Management.

For more information about these attributes, see Managing Maintenance Attributes., page 3-30

**Guidelines**

After an instance is created with an item instance number, a Item Instance Details page appears for you to enter any additional information such as party and contact. For more information, see Item Instance Details Processing Overview., page 3-14

**Viewing and Updating Item Instance Details**

This section consists of the following topics:
• Viewing Item Instance Details, page 3-10

• Updating Item Instance Details, page 3-10

**Viewing Item Instance Details**

In the Item Instance details page, you can view, but not update, details of the item instance and related objects. For more information, see Item Instance Details Processing Overview., page 3-16

**Updating Item Instance Details**

In the Item Instance details page, you can update many of the item instance attributes. For more information, see Item Instance Details Processing Overview, page 3-14.

**Important:** Standard Oracle functionality does not allow user updates through Installed Base when the item instance resides in Inventory. This prevents data corruption between Inventory and Installed Base. When an item instance resides in Inventory, any change to the record should be done with an Inventory transaction.

**Tracking Serial Tagged Items in Oracle Installed Base**

Serial tagged items can be tracked using Oracle Installed Base. Serial tagging occurs at the organization level. You can automatically generate the serial numbers or enter them manually.

Before you can use serial tagging, you must perform some setup tasks.

**Prerequisites**

- To ensure that items can be serial tagged:
  1. Define the item using the Master Item page in Oracle Inventory.
  2. Set the Serial control option to *No Control* or *At Sales Order Issue*.

**Important:** An instance is created at the time of shipping for either option. The shipment of the picked item is used as the basis for the IB instance creation.

  3. Select the *At Sales Order Issue* option if you want to assign serial tagging based on material issues and picking.
Navigate to the Transaction Types page to assign serial tagging (Tools > Serial Tagging Enhancements). You can select one of more of the following:

- WIP Issue
- Return to Vendor
- Sales Order Pick
- Internal Order Pick
- Field Service Usage

4. Assign the item to the appropriate organization.

After you have defined and assigned the item, you can perform one of these transactions and tag the item with a specific serial number at the organization level:

- Process the picking process for a sales order or internal sales order. See Oracle Order Management User’s Guide for more information.
- Process a task debrief in Oracle Field Service. See Oracle Field Service User Guide.
- Process a WIP component issue or return. See Oracle Work in Process User’s Guide.
- Return an item to a vendor.

You can serial tag items which are not serial controlled when owned by the organization, but are serial tagged when they are returned to the vendor.

Oracle Installed Base will perform the following actions:

- **Sales Order Pick**

  For items that are serial tagged for the Sales Order Pick transaction, Installed Base will start serial instantiation for the corresponding item instances only at the time of Sales Order Issue transactions. The reason for this approach is as follows:

  The serial number is entered while performing the pick transaction in Inventory to eliminate an additional data entry step during the picking process. When the Pick Release process is run for such items, the allocation would occur only at the quantity level and users will be asked to indicate the serial numbers during the picking process. This action enables you to enter a new serial number or select a serial number from the previously generated set of serial numbers.

  The serial tagged items are also available for the Sales Order Issue transaction. Serial numbers are available for update, can be corrected or disassociated because some serial numbers may not be required for shipment. In these cases, the serials in the Sales Order Issue transaction are the correct serials to be captured and
instantiated in Installed Base.

- **Return Material Authorization (RMA)**

  Items that are serial tagged at Sales Order Pick should be returned with the serial number references during the RMA process. When these serials are honored in RMA, the corresponding customer owned serial instance should be considered for further impacts. The impacted serial instances will be marked as RETURNED, and the quantity is incremented on the Inventory instance in Installed Base.

- **ISO Pick**

  For items that are serial-tagged for the Internal Order Pick transaction, Installed Base will start serial instantiation for the corresponding item instances only at the time of Internal Sales Order Issue transactions. The reason for this approach is as follows:

  The serial number is entered while performing the pick transaction in Inventory to eliminate an additional data entry step during the picking process. When the Pick Release process is run for such items, the allocation would occur only at the **quantity** level and users will be asked to indicate the serial numbers during the picking process. This action enables you to enter a new serial number or select a serial number from the previously generated set of serial numbers.

- **ISO Receipt**

  Items that serial tagged at Internal Sales Order Pick should be received with the serial number references during the ISO Receipt process. When these serials are honored in the ISO Receipt process, the corresponding serialized instance should be considered for further impacts. The impacted serial instances will be marked as RETURNED, and the quantity incremented on the Inventory instance as per the serial control definition in the receiving organization.

- **Task Debriefing in Oracle Field Service**

  If the item is serial-tagged and Oracle Field Service is enabled, users will select the item from the list of values or enter a serial number. If you enter a serial number, the debrief posting program updates the Installed Base instance accordingly. You will enter the serial if it is already generated or the enter a value into the serial field which will be accepted, if no serial number exists.

  **Item Returns During Task Debriefing**

  If the instance was issued during task brief and has a serial number, Oracle Installed Base would expire the serialized instance and update the quantity of an existing instance upon receipt into inventory. The instance information would be matched based on a combination of organization, owner, subinventory, and so on. If no serialized instance exists, Oracle Installed Base would create a new instance.

  See *Oracle Field Service User Guide* for more information regarding task debriefing.
• **WIP Component Issues and Returns:**

If assemblies have been defined for serial tagging, you must enter serial numbers during the following transactions:

- Move and Complete or Complete assembly (backflush for Assembly Pull)
- Move Assembly (backflush for Operation Pull items)
- WIP Component issue (for Push items)
- Assembly Scrap
- Reject
- Component returns

Oracle Installed Base addresses item instances differently based on the component transaction.

• **WIP Component Issues**

Installed Base will build the configuration through both standard and nonstandard WIP jobs (if both the parent and child instances are serialized). Issued components would have accounting classification as Customer Product and an operational status of Not Used.

• **WIP Component Returns**

If the items are serial tagged for WIP Issue, you must enter serial numbers for WIP Component Return transactions. The system verifies that the instances were issued and are being returned, that is, the serials are validated when returned to inventory. If the serial tagged items are the ones which are being returned, then system will not track the serials after receipt into inventory.

Installed Base will expire such instances and increase the quantity of available instance which has the same combination of organization, subinventory, owner, and so forth.

For example, if there was a component quantity of 1 when it was issued to a job, then Installed Base with expire that instance, create a new instance for serial tagging, and issue it to WIP (accounting classification is WIP and operational status Not Used). If the component is returned with same serial, Installed Base will expire the serialized instance and reuse the expired instance (which is without a serial) and update the quantity.

When the assembly is returned due to Reject Assembly or Scrap Assembly transactions, the issued components (which were tagged during issue) are returned. Installed Base would expire the instances with serials and update the received quantity to the active instances that have the same combination of organization, subinventory, owner, and so forth.
• Component Returns to Vendor (RTV)

For the item being returned to a vendor, the quantity of the existing serial would be split, and Installed Base will create new instances for each of the serials generated. Users must enter serial numbers for the items which are serial tagged as RTV. Serials can be auto-generated or entered directly. If the instances are not serial tracked, then the system reduces the quantity of the instance with the return quantity. Users would then be able to use the shipping integration or create a debit memo or open and receive the return quantity later.

If the shipping integration is used, when Oracle Inventory completes the return transaction, Oracle Installed Base will expire the instance. The transactions history would reflect the returned item as Inventory and a Source Transaction Type as Return To Vendor.

Item Instance Details Processing Overview

The Item Instance details page shows all the details for an item instance, and acts as a general item instance "workbench".

The Item Instance details page has four general areas, each of which has a particular set of processing options:

- Item Instance Details Header, page 3-14
- Item Instance Tabs, page 3-15
- Other Item Instance Details Panel, page 3-15
- Shortcuts Panel, page 3-16

There are also miscellaneous item instance processing options, page 3-16 that apply in certain circumstances only:

Item Instance Details Header - Processing Options

System

You can update the system for an item instance. For more information about systems, see the chapter Working with Systems.

Serial Number

You can change the Serial Number of a serialized item instance if all of the following conditions are true:

- The item instance must not be in inventory, in transit, or in a project.
- There must be no Oracle Installed Base transactions for the current serial number
that require processing.

• There must be no Oracle Enterprise Asset Management work orders created for the serialized item instance.

• Serial genealogy must not exist for the serial number.

In addition, the new serial number you select must not yet be transacted, that is, it may be a new serial number, or it may have been defined but not yet used in a transaction.

**Item Instance Tabs - Processing Options**

Both when viewing and updating item instance details, the attributes most closely associated with the item instance are available in the tabs spread across the Item Instance details page.

Some tabs only appear if the item instance is of a particular type, such as the Maintenance Attributes tab, which only appears for asset group item instances.

The tabs enable the following item instance related operations:

• Managing General Attributes, page 3-16
• Managing Location Attributes, page 3-16
• Managing Associations, page 3-20
• Managing Configurations, page 3-22
• Managing Counters, page 3-16
• Managing Notes, page 3-29
• Managing Maintenance Attributes, page 3-30

**Other Item Instance Details Panel - Processing Options**

The Other Item Instance Details panel contains options that enable you to view, and in some cases to update, objects related to item instances - such as orders, service contracts, repair orders - and also to view historical information about item instances and transactions affecting item instances.

The options in the Other Item Instance Details panel enable the following item instance related operations:

• Viewing Transactional History, page 3-32
• Viewing Item Instance History, page 3-34
• Managing Operating Units, page 3-40
• Viewing Contracts, page 3-41
• Managing Orders and Pricing Attributes, page 3-41
• Viewing Service Requests, page 3-42
• Viewing Repair Orders, page 3-42
• Managing Work Orders and Work Requests, page 3-42
• Viewing Item Instance and Asset Network Relationships, page 3-36

Shortcuts Panel - Processing Options

The Shortcuts panel, available only if you are updating an item instance, contains links that enable the following item instance related operations:
• Creating an Item Instance, page 3-5
• Copying an Item Instance, page 3-46
• Creating a Service Request, page 3-45

Miscellaneous Item Instance Processing Options

Splitting a Quantity, page 3-42

A Split Quantity button is displayed for customer instances with quantity greater than 1, strictly for non-serialized items.

Transferring Ownership, page 3-43

If the owner of the item instance is a customer, the Change Owner button is available for you to transfer ownership.

Viewing Impacted Contracts, page 3-45

When you perform certain updates on an item instance, they may have an impact on associated contracts. You can view the impacted contracts to decide whether or not to proceed with the item instance updates.

Managing General Attributes

In the General tab, you can view and modify general information about an item
General Information

An instance is available for modification only when it is a customer item instance. An instance in inventory, in WIP, or in a project cannot be updated in Oracle Installed Base. All changes for these instances should originate from associated Oracle application modules.

If the item instance is a network-configurable item instance, you will be able to view and update the network configuration through the Additional Attributes.

Notes

External Reference
You can modify this free-form field to any value.

New Version Label
New Version Label is a free-form field, except when you create an item instance and leave the field blank - in this case, the value specified in the profile option CSI: Default Version Label is used.

The main use of a version label is to give a descriptive name for a timestamp. Each time you change a version label, and commit the change, the item instance details are time-stamped, and you can query and view the information taken at that point in time.

Instance Name
An instance name is a method for referring to a specific instance or a group of item instances, and applies to the network configuration item instances in Oracle TSO. For
example, to refer to the specific instance of a network router located at 100 Main Street, you can give it an instance name such as "Router-100 Main Street, Bos, Ma". Advanced Search functionality allows querying by Instance Name. **Quantity and UOM**

These fields are read-only for serialized items. For non-serialized items, you can change Quantity.

**Item Instance Type**

Item Instance Type is a tag attribute for item instances, which you can use in advanced item instance searches.

**Condition**

The read-only Condition field is populated from the material status code from Oracle Inventory, such as New, Old, and Used. It indicates the condition of an item instance in the Oracle Warehouse Management application.

**Accounting Classification**

**Operational Status**

Select Install, In Service, Out of Service, or Not Used.

**Status**

This field is derived from a user-extendible instance statuses list of values table required during the setup of Oracle Installed Base. It indicates the current status of the instance, for example, Created, Repaired, and Returned for Repair. The instance Status field is automatically updated for Oracle Order Management shipment transactions or RMAs. For these transactions, the Status field is derived from the corresponding Oracle Installed Base transaction subtypes selected in the Installation Details window for Oracle Order Management transactions.

This field is also updated when the asset is deployed, retired or installed. For more information on asset deployment, see *Oracle Asset Tracking User’s Guide*.

**Item Instance Date Fields**

Often, the Install Date for an item instance is not known when the item is being shipped. It may be updated later.

For item instances related to service contracts, Oracle Installed Base coordinates a change of Install Date with Oracle Service Contracts to affect the warranty start date based on the specific setup in Oracle Service Contracts. Please refer to the Oracle Service Contracts documentation for further details.

To expire an instance, enter the Expiration Date. If you do not enter a status, then the default termination status is used.

Shipped On Date and time are populated from shipment transactions.

Return By Date and time are populated from transaction details and subsequently removed upon RMA receipt.

Actual Return Date and time are defaulted from Oracle Inventory receiving transactions.
and subsequently removed upon shipment.

**Instance Flexfields**

You must click the Show Instance Flexfields link to view these fields.

Descriptive flexfields are available on this page. However, they must be set up as Item Instance Flexfields before they can used for update on this page.

**Additional Attributes**

You must click the Show Additional Attributes link to view these fields.

Additional attributes are user-definable attributes, which can be set up for an item, an item category, an instance, or for a global install base. Refer to the Oracle Installed Base Implementation Guide for the setup of additional attributes.

In the General tab, click the Show Additional Attributes link to view and modify the additional attributes. If you are in update mode, you can change the values of the additional attributes.

If the item instance is a network-configurable item instance, you can click the **Update in Configurator** button to update the network configuration.

**Managing Location Attributes**

In the Location tab, you can view and modify location information about an item instance.

If the item instance is a network-configurable item instance you will be able to view and update the network configuration through the Additional Attributes.

For details of the Current Location and Install Location fields and what values you can select for these fields, see the sections Current Location Region, page 3-8 and Install Location Region, page 3-8 of the topic Creating Item Instances.

**Bill To and Ship To Location Regions**

If the item instance is sold or leased, the Bill To and Ship To locations appear in their respective page regions. The data is derived from the Owner and the Account Number field values.
Managing Associations

The Associations tab shows the current associations for an item instance, and for each association, the contacts and accounts. Each item instance must have an owner - the Associations tab shows this as an Owner association.

You can add more associations, and add contacts and accounts to the owner and other associations. In order to do so, the party types, accounts types, contacts types, and relationship types to be used must have been defined as part of the Oracle Installed Base setup. Refer to the Oracle Installed Base Implementation Guide for setup details.

In the Associations tab, you can also update and remove associations, contacts, and accounts.

Notes

1. As an example, you can define relationship types such as Distributor, Meter Reader, and End User for party, account, and contact relationship types. For each party defined in the party relationship, multiple accounts/account types and contact/contact types can be defined.

2. A party can be of type Party, Employee, Vendor, Group, or Team. Team and Group party types can be marked as Primary or Preferred.

3. Contacts can be from the party contact list or from employees. Each contact can be
set up as Preferred or Primary. Preferred contacts are used when you select service personnel for task assignment.

Steps (to add an Association):
1. In the Associations tab, click Add Association.
2. In the Add Association page, select the Party Type, Party Name, and Party Number.
3. Select the Relationship Type.
4. Optionally enter Start and End dates.
   Start Date defaults to the current date. Specify End Date - current or future date - if you want the association to end on that date.
5. Click Apply.

Steps (to add a Contact):
You can define multiple contacts for a single party.
1. In the Associations tab, select an Association, and click Add Contact.
2. In the Add Contact page, select the Contact Type, Party Name, and Party Number.
3. Select the Relationship Type.
4. Select a Classification.

5. Optionally enter Start and End dates.
   Start Date defaults to the current date. Specify End Date - current or future date - if you want the contact relationship to end on that date.

6. Click Apply.

**Steps (to add an Account):**
You can define multiple accounts for a single party.

1. In the Associations tab, select an Association, and click Add Account.

2. In the Add Account page, select the Account Name, and Account Number.

3. Select the Relationship Type.

4. Optionally enter Start and End dates.
   Start Date defaults to the current date. Specify End Date - current or future date - if you want the account relationship to end on that date.

5. Click Apply.

**Managing Configurations**

In the Configuration tab, you can view item instance configurations by relationship type and version, expire relationships, and add and create child items.

In addition, if the item instance is a network-configurable item instance, you can click the **Update in Configurator** button to update the network configuration.

The ability to track item instances down to the component level is especially important in field service environments, where components are often exchanged or repaired as part of maintenance agreements. As-built and as-shipped item instance configurations can also be tracked.

Online configuration support is restricted to Component-Of and Connected-To instance-to-instance relationships.

The topics in this section are as follows:

- Layout and Usage of the Configuration Tab, page 3-23
- Oracle Installed Base Configuration Support, page 3-24
- Understanding Relationship Types, page 3-27
• Adding Child Item Instances, page 3-28
• Creating Child Item Instance, page 3-29

Layout and Usage of the Configuration Tab

The Configuration tab displays the item instances in a configuration for a relationship type and a version. For details of relationship types, see Understanding Relationship Types, page 3-27.

You can also view configurations based on version label.

**Note:** The Update in Configurator button appears only if the main item instance is a network configurable instance.

In this section, the following terminology applies:

- **Parent** denotes an item instance in a configuration level above the currently-described item instance.

- **Child** denotes an item instance in a configuration level below the currently-described item instance.

**How the Configuration Hierarchy Appears in the Configuration tab**

The function of the tabular grid in the main part of the page is to display the current item instance and its child instances. Initially, only the child instances that are one level below the current instance are shown.

You can expand or collapse parts or all of the configuration hierarchy in the grid.

Above the grid is an untitled parent line that displays all the parent item instances, if
any, above the current item instance in the configuration. The parent instances appear as a sequence of links.

For example, if the configuration consists of a 5-level hierarchy of item instances A>B>C>D>E, and the current item instance is C, the Configuration tab initially displays the following:

- The "parent line" displays the instance links A>B.

- The grid displays C and D, with an Expand icon (+) beside D to enable you to view its lower level instances.

Item instances in the grid that have children appear with either an Expand (+) or a Collapse (-) icon to enable you to view or hide the children.

The entries for item instances in the grid, other than the top entry, that have child instances, appear with a Focus icon.

**Expanding and Collapsing the Hierarchy**

Within the grid, you can click the Expand (+) or Collapse (-) icon on an item instance to enable you to view or hide the children.

Click Expand All to show all the instances from the current top entry downwards.

Click Collapse All to reduce the grid to the current top entry only.

**Focusing**

The object of focusing is to rearrange the hierarchy by moving an item instance to the top of the grid.

You can focus on any item instance of the configuration hierarchy:

- For an instance in the grid, click the Focus icon for that instance.

- For an instance in the parent line, click the link of the item instance that you want to focus on.

The "parent line" automatically adjusts to display the instances above the new top entry.

**Expiring Relationships**

You can expire relationships for one or more item instances, as follows:

1. Select each of the individual instances, or click Select All.

2. Click Expire Relationship.

---

**Oracle Installed Base Configuration Support**

Oracle Installed Base provides the ability to create and manage configurations based on relationships between item instances. When an item is a component of an assembly, two instances are related in a Component-Of relationship. The resulting configuration can
be viewed, changed, and terminated using Oracle Installed Base.

Abbreviations used in this section are as follows:

- Bill of materials (BOM)
- Assemble to order (ASO)
- Pick to order (PTO)
- Work in process (WIP)

Oracle Installed Base creates and supports Component-Of configurations in several ways:

- BOM-based configuration at sales order shipment
- ATO configuration at sales order shipment
- PTO and kit configurations at sales order shipment
- WIP assembly completion (including post-completion transactions)
- Oracle Installed Base Open Interface transactions

You can also add child instances, page 3-28 and create child item instances to add to a configuration, page 3-29.

**Restrictions**

**BOM-Based Configuration at Sales Order Shipment**
Configurations are created based on the profile option CSI: Explode BOM = Yes.

BOM explosion creates a multi-level configuration, or indented BOM, based on the profile option CSI: BOM Explosion Level. For example, if this profile value equals 5, then BOM is exploded up to five levels during the configuration build. The components must be marked Oracle Installed Base trackable.

**Rules and notes:**

- BOM explosion is only created for Item instance Qty = 1.
- In the case of serialized components, item instances are created without serial numbers.
  
  The serial number field is available to a user for update. In this case, for future transactions such as RMA of item instances, the user must provide the serial number.

**ATO Configuration at Sales Order Shipment**
A configuration is created for an ATO model, configured item, ATO option class, and
components.

Rules and notes:

• An ATO model, configured item, ATO options, and components must be marked Oracle Installed Base trackable.

• Non-shippable items, such as model and option classes, must be fulfilled in order to be represented in a configuration.

PTO Configuration at Sales Order Shipment
A configuration is created for a PTO model, included items, PTO option class, and components.

Rules and notes:

• A PTO model, included items, PTO option class, and components must be marked Oracle Installed Base trackable.

• Non-shippable items, such as model and option classes, must be fulfilled in order to be represented in a configuration.

Kit Configuration at Sales Order Shipment
A configuration is created for a kit and components items.

Rules and notes:

A kit and component items must be marked as Oracle Installed Base trackable.

Configuration at WIP Assembly Completion and Allocation
For discrete jobs, configurations are created at WIP assembly completion based on two key parameters, Auto Allocate = Y and Genealogy enabled.

Configurations are created at assembly completion using work order-less WIP completions transactions.

Rules and notes:

• Configurations are only built for assemblies serialized at receipt.

  There is one exception to this rule: In a repair/upgrade scenario, if serial number A is issued to a job that upgrades the same item or serial number to a new serial number B, then the original serial number, A, is not created as a component of itself, the new serial number B.

• For Auto Allocate = Y and Genealogy not enabled, configurations are built based on job requirements.

• If Genealogy is enabled, configurations are built based on parent-child genealogy.

• Configuration support includes post-completion transactions. Components are added or removed from existing configurations following post-
completion transactions. An example is WIP component issue or return and WIP negative component issue or return.

**Oracle Installed Base Open Interface Transactions**

Oracle Installed Base supports the creation and maintenance of Component-Of item instance relationships using Open Interface.

**Integration with Oracle Order Management**

Oracle Installed Base is integrated with Oracle Order Management and facilitates replacement of item instances using Replaced-By and Replacement-For relationship types in the Installation Details page available in Sales Order pages. These relationship types are view-only.

**Understanding Relationship Types**

With Oracle Installed Base, you have a flexible way of maintaining six different types of instance-to-instance relationships. These relationship types are seeded in the relationship type table, which you cannot extend.

Oracle Installed Base support the following relationship types:

- Component-Of
- Connected-To

The following relationship types are intended for future functionality and are currently not supported in Oracle Installed Base:

- Upgraded-From
- Member-Of
- Installed-On
- Provided-By

**Restrictions**

**Component-Of**

This relationship type is used to maintain the configuration or structure of an item instance. You will use this for most of your needs in the management of item configuration. This is the only configuration type that can be created from Oracle applications from the bill of materials (BOM), assemble-to-order (ATO) model, pick-to-order (PTO) model, Kit model, and work-in-process (WIP) integration.

The Component-Of relationship type is the only one that flows down the current location and install location from parent to child. From Oracle applications, only the creation of serialized top-assembly is supported, with the exception of ATO and PTO models. Online creation of Component-Of relationships is supported for non-serialized
top assembly as well. All configuration creation is allowed for customer item instances only. Another constraint is that the type does not support many-to-many and cyclic relationships.

For example, the following items are parts of a personal computer:

- Motherboard
- CPU
- I-O Boards
- RAM
- Monitor
- Keyboard
- Mouse

**Connected-To**

This relationship type can be used to maintain the connection scheme of a group of item instances. In other words, it can be used to represent a network of connected items. No rule controls this relationship type, unlike the case of the Component-Of relationship type.

An example of this type of relationship is the representation of a computer network in which different computers and network equipment are connected to each other through Connected-To relationships, as in the following:

- The john-pc-01 computer has Connected-To relationships with vivek-sun and jenny-pc.
- The jenny-pc computer has Connected-To relationships with print-server-05.2 and ST-Tool-Server network equipment.

Currently this relationship type is utilized in the Oracle TSO solution for the telecommunications industry. The type is used to support network service configuration and reconfiguration and is integrated with Oracle Configurator in the context of the Oracle TSO solution. This is the only situation in which Oracle Installed Base supports cyclical relationships.

### Adding Child Item Instances

Use this procedure to add one or more child item instances to an item instance in a configuration.

In the Add Child page, search for the item instances that you want to add, select them, and click Apply to add them to the selected item instance in the Configuration tab grid row.
Creating Child Item Instances

Creating a child item instance involves both creating an item instance and defining it as a child in a relationship. In the Create Item Instance page, you can create an instance as a child to the one selected from the configuration page. This page is the same as the Create Item Instance page. The page has regions for general item information, owner information, current location, item flags, and item views.

Prerequisites

The item and item number for an item instance must already be defined in the Oracle Inventory Item Master with Track in Installed Base selected.

Steps:

1. In the Item Instance Configuration page, click the Create Child icon for the item instance to which you want to create a child item instance.

2. Enter the fields for the child item instance.
   For more information, see Creating an Item Instance., page 3-5

3. After you have entered the fields and clicked Apply, the child item instance is added to your configuration.

Managing Counters

The Counters tab shows the existing counter instances for the item instance.
You can enter a counter reading directly in each counter row, or click Show to view and update extra information about the counter reading.
You can also add one or more counter instances to the current item instance.
For more information, see the following topics:
- Managing Counter Instances, page 13-2
- Capturing Counter Readings in Oracle Installed Base, page 13-6

Managing Notes

In the Notes tab, you can view and update notes.
When you add a note, you must select a Note Type, and the note Visibility (Public, Private, or Publish). Enter free-form text in the Note field.
Managing Maintenance Attributes

In the Maintenance tab, you can view and update the maintenance attributes of trackable item instances that are set up in inventory as asset groups, and as Capital Assets or Rebuildable Inventory in Oracle Enterprise Asset Management User’s Guide.

For more information, see the topics Defining Asset Numbers, Defining Asset Groups, Defining Rebuildable Serial Numbers, and Defining Rebuildable Items in Oracle Enterprise Asset Management User’s Guide.

Maintenance Organization

This is the maintenance organization - the Enterprise Asset Management enabled organization.

For more information, see Organization Setup in the Oracle Enterprise Asset Management User’s Guide.

Department

A department represents a crew within your organization. A crew may include people, machines, or suppliers. Departments are also used to collect costs, apply overhead, and compare load to capacity. Assign a department to each operation of a routing and assign resources that are available for that department. The department assigned to each operation of a routing also becomes the assigned department of the corresponding operation within the Work Order, assuming the Work Order is using the routing.

For more information, see the topic Defining Departments and Resources, in the Oracle Enterprise Asset Management User’s Guide.

WIP Account Class

The WIP Accounting Class ensures that Work Orders generated within Oracle Enterprise Asset Management have an established account code structure assigned, to accept charges incurred by that Work Order. The WIP accounting class codes available are of type, Maintenance. If a Maintenance type WIP accounting class does not exist,
you can define a new on.

For more information, see the topics Defining WIP Accounting Classes, *Oracle Work in Process User’s Guide*.

**Area**

Areas are used to logically sort assets by the zones in which they reside. Areas divide the maintenance plant or facility into zones, which help to track and account for assets. Areas are associated with assets.

For more information, see the topic Setting Up Areas in the *Oracle Enterprise Asset Management User’s Guide*.

**Parent Asset Group**

This is the parent Capital Asset Group or parent Rebuildable Item; it is established asset hierarchy information. Work Order costs roll up through the Parent/Child hierarchies defined, and can roll up to any level within an asset hierarchy. This enables you to review all cost associated with an asset or asset hierarchal view.

**Supply Warranty Expiry Date**

This specifies the expiry date of the warranty, if it exists, provided by the supplier of the item. There is no processing associated with this field; it is for information only.

**Maintainable**  check box

Indicates whether this asset is maintainable. If the Maintainable check box is selected, you can create Work Requests and Work Orders for this asset. For example, you can create an asset for cost-tracking purposes. We may want to see the cost for all top level assets in an asset hierarchy, but we do not want to maintain those assets. In this situation, do not select this check box.

For more information, see the topic Defining Asset Numbers in the *Oracle Enterprise Asset Management User’s Guide*.

**Note:** After Work Orders are created for this asset, you cannot clear this check box unless those Work Orders are at Complete, Canceled, or Closed statuses.

**Category**

The Category indicates the Cost Category that is used as the default for departments that do not have a cost category defined. Department costs are then posted to the appropriate cost elements. Valid values are Maintenance, Operations, Contract, and any other values that you might have added within the extensible lookup table.

For more information, see Overview of eAM Cost Management in the *Oracle Enterprise Asset Management User’s Guide*.

**Criticality**

Criticality Codes suggest the importance of an asset to an organization. For example,
High and Low. An asset that has a direct impact on production or that is difficult to replace may be considered a critical asset. Asset criticality helps you to determine the urgency of requested work. Asset Criticality Codes are referenced when defining an asset.

For more information, see the topics Defining Asset Numbers, Defining Lookups, and Criticality Codes in the Oracle Enterprise Asset Management User’s Guide.

**Parent Asset Number**

Optionally select a parent Asset Number to establish asset hierarchy information. Work Order costs roll up through the Parent/Child hierarchies defined, and can roll up to any level within an asset hierarchy. This enables you to review all cost associated with an asset or asset hierarchal view.

**Asset Route check box**

If this check box is selected, the current asset (item instance) has an associated asset route. You might need to perform an Activity on multiple Asset Numbers. To eliminate the possibility of creating multiple Work Orders for the same Activity, you can define Asset Routes. You can define a Preventive Maintenance schedule for your Asset Route to specify when an Activity should be scheduled for the Asset Route.

For more information, see the topics Defining Asset Routes in the Oracle Enterprise Asset Management User’s Guide.

**Viewing Transactional History**

In the Transactional History page, you can see recent transactions for the current item instance.

Technical Note: Each time a change is made to the instance, it is stored in history by Transaction ID. The number of transactions made available for immediate view is determined by the dump frequency parameter in the Install parameter.

Definitions of selected columns on this page are listed in the following table.
### Selected Columns in the Transactional History Page

<table>
<thead>
<tr>
<th>Column</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application</td>
<td>The source application of the transaction.</td>
</tr>
<tr>
<td>Source Group Ref</td>
<td>A grouping of source headers such as a purchase order group.</td>
</tr>
<tr>
<td>Source Header Ref</td>
<td>The document number of the source such as a sales order number or purchase order number.</td>
</tr>
<tr>
<td>Source Line Ref</td>
<td>The line number of the source document such as a sales order line number for a sales order.</td>
</tr>
<tr>
<td>Source Distribution Ref</td>
<td>A free-form source reference for the source application.</td>
</tr>
</tbody>
</table>

### Prerequisites

You must have selected an item instance and navigated to an Item Instance Details page.

### Notes

1. The Transactional History page shows a summary list of the transactions for the current item instance.

2. Click the Transaction ID link to see detailed information about the transaction, such as item instance attribute changes and associations.
Viewing Item Instance History

In the Item Instance History page, you can view the state of the attributes of an instance by specifying a date/time stamp or a version label. Whenever a new version label is entered and saved, the application takes a snapshot of the existing instance and make it available for viewing on this page. This page is different from the Transactions page, which shows the changes made to an instance transaction by transaction.
### Prerequisites

You must have selected an item instance and navigated to an Item Instance Details page.

### Notes

1. To start the process, select one of the radio buttons, Label or Date.
2. Either select a Label Version or enter a Date as appropriate, and click Go.

Selection of an entry from the Version list also provides the entry’s associated date.
The available history entries appear with the times of changes.

**Viewing Item Instance and Asset Network Relationships**

In the Graphical View - Instance Relationship page, you can view the graphical representation of item instance relationships, contacts, and accounts. Oracle Installed Base supports various types of relationships through configuration constructed across the item instances. These configurations are displayed in a table, which is filtered based on relationship types. Use the Graphical View - Instance Relationship page to:

- View asset network relationship for all type of configurations.
- Graphically add existing child instances to the configuration.
- Create new child instance and add to the configuration graphically.
- Graphically expire selected item instance relationship in existing configuration.
- Graphically set focus on any selected item instances to view its relationships in the configuration.
- Graphically view parent instances of any selected item instances and view its relationships in the configuration.
- Provide multiple options to view item instance configurations.

You can navigate to Graphical View - Instance Relationship page from the following pages:

- Item Instance Search page
- Item Instance Details page

**Prerequisites**

- Create or add child items to an item instance with a relationship type.
- Select an item instance and navigate to an Item Instance Details page.
- Operating unit relationship types are user-definable and must have been set up in Oracle Installed Base administration.

**Viewing item instance configurations and asset network relationships:**

1. From Oracle Installed Base Agent User responsibility, navigate to Item Instance
2. Click the link for the item. The View: Item Instance - General page appears.

3. Select the View Relationship Graphically link. The Graphical View - Instance Relationship page appears.

4. In the Relationship Type region, you can select the Relationship Type options that you want to include in the graphics pane. The default is all relationships selected and visible. The following Relationship Type options are available:
   - Component Of
   - Connected To
   - Member Of
   - Provided By
   - Installed On
   - Upgraded From
   - Replaced By
   - Replacement For

5. In the Association Type region, you can select the Association Type options that you want to include in the graphics pane. The default is all relationships selected and visible. The following Association Type options are available:
• Associations

• Contact

• Account

6. In the Instance Version region, you can select the version of the Item Instance Relationship.

7. In the Display Options region:
   • From the Display list, select the display options such as Zoom, Draw Rings, Node Truncate, and Text Size to change the graphics view as selected.
   • Click the + (plus) or – (minus) sign to increase or decrease the size of the graphics.
   • Select the topologies such as Radial, Hierarchical and Flow. The Hierarchical layouts are displayed as a top-down, bottom-up, left-right, or right-left tree.

8. In the Details region, you can view the following information:
   • Item Number is the item number of the selected item.
   • Item Description is the description of the item entered at the time of creation.
   • Instance Number is the number of the item instance.

9. Expand the Relationship Type node. Select and right click an Item Instance node in the graphics pane.
Note: The right-click menu displays menu options that are available based on the Relationship Type.

- Create Center on the selected node.
  
  Note: When you create center, the relationships associated with the node are automatically refreshed.

- Show Parent to view the parent nodes of the selected node.
  
  Note: When you show parent, the relationships associated with the node are automatically refreshed.

- Create Child to navigate to the Create Child page to create a child instance and add to the existing instance in the current configuration.

- Add Child to navigate to the Add Child page to selectively add to the existing Instances to the current configuration.

- Instance Details to navigate to the Item Instance Details page.
10. Right-click the Item Instance Relationship arrow and select Expire Relationship to delete the relationship between the selected item instances from the current configuration.

Managing Operating Units

An operating unit is an organization with which the instance can be associated. When an instance is sold from one organization, a unit is assigned to the Sold From relationship for the instance. Service can be provided by yet another organization unit such as one in Field Service. The Service Bill From unit is an organization that collects the receivable and can be used by Service Request. The Instance-Operating Unit association is for information only.

The Operating Units page displays any operating units currently associated with the selected instance. In the Operating Units page, you can view, add, and remove the association of operating units with a particular item instance.

Prerequisites

You must have selected an item instance and navigated to an Item Instance Details page. Operating Unit relationship types are user-definable and must have been set up in Oracle Installed Base administration.

Notes

- You can modify the type and end date of an association.
- To remove the association with an operating unit, select the operating unit and click Remove.
  
  To remove all associations, first click Select All, and then click Remove.
  
  The removal of associations takes effect after you click Update.
- To associate operating units to the current item instance, click Add.

In the Add Operating Unit page, you must select the Name and Type of an operating unit.
You can optionally select the start and end dates for the association.

**Viewing Contracts**

In the Contracts page, you can view service contracts and warranties associated with an item instance.

**Prerequisites**

You must have selected an item instance and navigated to an Item Instance Details page. Service contracts must have been created for the instance.

**Notes**

For more detailed contract information, drill down on the Contract Number, Line, and Service Name links.

**Managing Orders and Pricing Attributes**

In the Orders page, you can view orders associated with an item instance. You can update the Agreement Name of an order. If the item has pricing attributes associated with it, you can view and edit the pricing attributes from this page.

**Prerequisites**

You must have selected an item instance and navigated to the Item Instance Details page. To view or edit pricing attributes, they must have been populated from the sales order from which this item instance was sold.

**Steps (to view and edit pricing attributes)**

1. In the Orders page, click Pricing Attributes.
   
   The Pricing Attributes page appears.
   
   The contexts are part of the setup for extended pricing attributes in Oracle Order Management and Oracle Advanced Pricing.

2. Use the context filter to select a particular set of pricing attributes.

3. Click Go. A list of pricing attributes and associated values appears.

4. Edit the values as necessary.
5. Click Restore to return values to those saved last, and re-enter values or click Update to save changed values.

Viewing Service Requests
In the Service Requests page, you can view the service requests that have been logged for the instance. You can click the Service Request Number link to get more details about a particular service request.

Prerequisites
You must have selected an item instance and navigated to an Item Instance Details page.

Viewing Repair Orders
In the Repair Orders page you can view Open, Closed, and On Hold Depot Repair orders associated with an item instance.

Prerequisites
You must have selected an item instance and navigated to an Item Instance Details page.

Managing Work Orders and Work Requests
These pages enable you to view and export work orders and work requests.

Prerequisites
You must have selected an item instance and navigated to an Item Instance Details page.

Splitting Quantities
In the Split Quantity page you can subdivide an item instance with quantity greater
than one into parts whose total quantities equal the original quantity. You can split the original quantity into two or n parts. Oracle Installed Base automatically creates serviceable items under serial control with a quantity of one. Only nonserialized items are created with a quantity greater than one. When an instance is split, Oracle Installed Base retrieves from Oracle Contracts the appropriate coverage for the newly created instances.

Some reasons for splitting quantities are as follows:

- Isolate a quantity for transfer to an end customer
- Set apart a quantity to be terminated
- Set aside a quantity for installation elsewhere
- Set apart a quantity to apply or order a new service program
- Set apart a quantity for upgrade or repair

**Prerequisites**

You must have selected an item instance with a quantity greater than 1, navigated to an Item Instance Details page, then clicked Split Quantity.

**Notes**

1. You can select a Split Reason.

2. You can select the following types of split:
   - Split the quantity into two parts; in this case, you must also select the quantity for the new instance.
   - Move each item to a new instance.

3. After you click Apply, the application displays information for the newly created instances.

**Transferring Ownership**

In the Change Owner page, you can transfer ownership of an item instance from one active party to another.

The account field is mandatory only if the party is external. Other owner types can be Employee and Vendor. Ship-to and Bill-to location can be modified on this page.

The ownership transfer date can be set as a past or current date. If ownership transfer is backdated, then the application verifies that no Oracle Installed Base transactions exist.
between past and current dates. If transactions exist, then the application raises an error, otherwise the transaction is saved and the transfer date is passed to Oracle Service Contracts for further processing.

If Install Parameter: Override Ownership is turned on, Oracle Installed Base supports RMA receipt, shipment, and miscellaneous receipt transactions of Oracle Installed Base instances regardless of ownership.

Oracle Installed Base processes the RMA and transfers ownership if the RMA customer is different from existing instance ownership. Similarly, Oracle Installed Base allows shipment of an instance to any party from inventory regardless of current external ownership of the item instance, that is, the party or owner responsible for returning the item. The application changes ownership to Internal for Miscellaneous receipt of a customer-owned item. This is applicable to serialized-at-receipt or predefined serialized items.

**Prerequisites**

- You must have selected an item instance and navigated to an Item Instance Details page, and clicked Change Owner.

- A transfer must have two valid parties to occur.

- The two valid parties must have been set up in the Oracle Accounts Receivable as related customers if All Party Locations is not selected.
  
  If this parameter is selected, then all parties are available for selection.

- Valid parties must have been set up.
  
  The LOV for the transferred-to party is controlled by the All Party parameter setup in the Oracle Installed Base Parameters setup. If All Parties is selected, then the LOV displays all available parties to be selected. If this parameter is not selected, then only parties set up as related in Accounts Receivable will be displayed.

- Locations must have been set up.
  
  For the ship-to and bill-to locations LOV, only locations set up as ship-to and bill-to for the selected party and its related parties will be displayed.

- The transfer date defaults to sysdate.
  
  However an earlier transfer date is also accepted.

**Notes**

1. In the top part of the page, select the new party type, account number, and either party name or party number.
2. You can optionally change Current, Install, Bill To, and Ship To location information.

After an instance is transferred, Oracle Installed Base supplies Oracle Contracts with information about the change of ownership and the transfer date.

**Creating a Service Request**

In the Create Service Request page, you can create a service request for the current item instance. The item instance information appears as the page opens. You must enter a Summary of the problem in the Problem Description region.

**Prerequisites**

You must have selected an item instance and navigated to an Item Instance Details page, and clicked Create Service Request.

**Viewing Impacted Contracts**

Many item instances are associated with contracts. When you update item instances, some types of update may have potential contractual impacts. You may want to see which contracts are impacted before you decide to finalize your changes.

**Prerequisites**

You must have selected an item instance, and clicked Update.

**Conditions for Automatic Display of Impacted Contracts Page**

When you are updating an item instance, the Impacted Contracts page is displayed automatically, as a warning page, if all of the following conditions are true:

- The profile option CSI: Display Impacted Contracts has been set to Yes.

- You have made one or more of the following types of item instance update:
  - Change Owner
  - Split Quantity
  - Quantity Increase
  - Expire
  - Re-install (remove Expiration Date)
• Change Installation Date

• You have clicked Apply or Save.

• Contracts exist that are impacted by your updates.

Notes

1. For manual generation of the Impacted Contracts report, click View Impacted Contracts.

2. In the Impacted Contracts page, you can get further details of each affected contract, by selecting the radio button for the contract; this shows the contact details at the foot of the page.

3. You can then decide whether or not to finalize your item instance changes or to discard them.

   If you proceed to finalize the item instance changes, they are cascaded to all of the contracts that appeared on the Impacted Contracts page.

Copying Item Instances

The Copy Item Instance page is essentially the same page as the Create Item Instance page, with the option to copy various types of attributes and associations from the original item instance. In the Copy Item Instance page you can create an item instance by copying another and making changes to it.

Prerequisites

You have performed an item instance search, selected an item instance for update, and clicked Copy Item Instance.

Notes

Copy functions are available only for instances that are customer item instances.

For details of the main fields that you can enter, see Creating Item Instances, page 3-5.

Also Copy Region

When you copy an item instance, you have the option to copy one or more of the following attributes and elements from the original item instance:

• Child Item Instances
Generating the Customer Products Summary Report

Use the Customer Products Summary Report to view a summary of customer products.

To generate the Customer Products Summary Report:

1. Navigate to the Installed Base Reports page (Install Base Administrator > Others > Reports > Submit a New Request).


3. Enter values in the following fields:
   - From Customer Number and To Customer Number
   - From Item and To Item
   - Installed At
   - Status

4. Click the OK button.

5. Click the Submit button.
This chapter covers the following topics:

- Overview
- Managing Systems
- Searching for Systems
- Creating Systems
- Viewing and Updating Systems
- Viewing System Details
- Updating System Details
- Working with System Configurations
- Viewing All or Active Item Instances in a System

**Overview**

A system is a construct in Oracle Installed Base that customers can use to group their items. A customer is considered to be an owner party with an account.

- For example, a headquarters can have many buildings, and each building can have many floors. Headquarters can be a system, each building can be a system, and each floor can be a system.

There can be a hierarchy in system structure.

- For example, headquarters can be parent of all the buildings, and each building can be a parent of all the floors in the building.

Item instances can be grouped under systems. Each item instance can belong to one system only.

- For example, headquarters can own a number of networks, each building can own
many servers, and each floor can own many PCs and printers.

Creating Parent-Child Relationships Between Systems

Both when you create and update a system, you can set up a parent-child relationship, by entering a parent name for the current system. Each relationship becomes part of configuration hierarchy for the system. The parent system must be a system with the same or related party and account.

You can subsequently view the system configuration hierarchy by clicking the View Configuration icon from a systems search page.

Adding Item Instances to a System

You add item instances to a system when you edit item instance details, by specifying a system for the item instance. An item instance can belong to only one system.

Cascading System Changes to Item Instances

When you update a system, you have the option to cascade some of the system changes to the item instances that belong to the system.

See Also

- Managing Systems, page 4-2

Managing Systems

This section consists of the following topics:

- Searching for Systems, page 4-3
- Creating Systems, page 4-3
- Viewing and Updating Systems, page 4-4
- Working with System Configurations, page 4-5
- Viewing All or Active Item Instances in a System, page 4-7

See Also

- Overview, page 4-1
Searching for Systems

You can search for systems in several ways.
For system search options and processes, see Item Instance and System Search Overview, page 2-1.

Processing the Search Results

From the search results, you can perform the following operations:

- Viewing and Updating Systems, page 4-4
- Working with System Configurations, page 4-5
- Viewing All or Active Item Instances in a System, page 4-7

See Also

- Managing Systems, page 4-2

Creating Systems

You can create a system only for an external party (customer) with an account number. System type is mandatory. You can assign a parent system only with the same owner and account.

Installation, billing, shipping, and contact details appear after you select the owner and account.
Creating Parent-Child Relationships Between Systems

In the Create System page, you can set up a parent-child relationship between systems, by entering a parent name for the current system. Each relationship becomes part of the configuration hierarchy for the system.

The list of values available for parent system is restricted to systems with the same or related party and party accounts.

See Also

• Managing Systems, page 4-2

Viewing and Updating Systems

This section consists of the following topics:

• Viewing System Details, page 4-5
• Updating System Details, page 4-5

**Viewing System Details**

For each system in the search results area, you can view its details, by clicking the System name link.

The System details page appears. From this page, you can view details of the system. Most of the fields are associated with the owner and the account.

**See Also**

• Managing Systems, page 4-2

**Updating System Details**

To start the process of updating the system from the results area, click its Update icon. The System details page appears, and you can update many of the system attributes.

In the Systems Details page you can view and edit system details such as installation location, shipping and billing location, and contacts. You can optionally cascade these changes to the item instances that belong to the system.

You can also create or change a parent system for the current system.

**Creating Parent-Child Relationships Between Systems**

In the Systems Details page, you can set up a parent-child relationship between systems, by entering a parent name for the current system. Each relationship becomes part of the configuration hierarchy for the system.

The list of values available for parent system is restricted to systems with the same or related party and party accounts.

**Changing Party and Account Details**

To transfer a system, you can change the party name and associated account number. Click the check box Cascade Ownership if you want to cascade the party and account changes to all child systems of the current system.

**See Also**

• Managing Systems, page 4-2

**Working with System Configurations**

In the Systems Configurations page you can see a graphical representation of a system,
and all the parent-child relationships associated with the system.

**Layout and Usage of the System Configuration Page**

The System Configuration page displays the systems in a configuration hierarchy.

In this section, the following terminology applies:

- **Parent** - denotes a system in a configuration level above the currently-described system.
- **Child** - denotes a system in a configuration level below the currently-described system.

**How the Hierarchy Appears in the System Configuration page**

The function of the tabular grid in the main part of the page is to display the current system and its child systems. Initially, only the child systems that are one level below the current system are shown.

You can expand or collapse parts or all of the configuration hierarchy in the grid.

Above the grid is an untitled parent line that displays all the parent systems, if any, above the current system in the configuration. The parent systems appear as a sequence of links.

For example, if the configuration consists of a 5-level hierarchy of systems A>B>C>D>E, and the current system is C, the System Configuration page initially displays the following:

- The parent line displays the system links A>B.
- The grid displays C and D, with an Expand arrowhead icon (+) beside D to enable you to view its lower level systems.

Systems in the grid that have children appear with either an Expand (+) or a Collapse (-) arrowhead icon to enable you to view or hide the children.

The entries for systems in the grid, other than the top entry, that have child systems, appear with a Focus icon.

**Expanding and Collapsing the Hierarchy**

Within the grid, you can click the Expand (+) or Collapse (-) arrowhead icon on a system to enable you to view or hide the children.

Click Expand All to show all the systems from the current top entry downwards.

Click Collapse All to reduce the grid to the current top entry only.

**Focusing**

The object of focusing is to rearrange the hierarchy by moving a system to the top of the grid.
You can focus on any system of the configuration hierarchy:

- For a system in the grid, click the Focus icon for that system.
- For a system in the parent line, click the link of the system that you want to focus on.

The parent line automatically adjusts to display the systems above the new top entry.

See Also

- Managing Systems, page 4-2

Viewing All or Active Item Instances in a System

Depending on which icon you clicked in the System search results, you can see either all, or just the active item instances in a system.

From the list, you can update, expire, and export existing item instances, or create new ones.

See Also

- Managing Systems, page 4-2
Overview

You can use the Transactions tab to search for transactions that are associated with item instances, and view what happened to the item instances during the transactions.

Available search criteria include transaction type, transaction subtype, specific value in a transaction, date of transaction, and transaction status.

Overview of Transaction Types and Subtypes

Transaction types are specified for any transaction source that has defined interfaces with Oracle Installed Base. For example, transaction types from Oracle Applications include Order Management - Fulfillment, Order Management - Shipment, and RMA Receipt. Oracle Asset Tracking contributes types such as PO Receipt into Project, and Asset Retirement. Many more types are available. Refer to the Transaction Type setup in the Oracle Installed Base Implementation Guide.

For each transaction type, transaction subtypes can be defined to further specify the actions on one or more Oracle Installed Base records if the subtypes are selected for the interface transaction. These subtypes can be selected from a list of values in the transaction detail window from the Oracle calling application, such as Order Management sales order line. Such transaction types, subtypes, and actions can be defined in the Transaction Subtype setup window. Refer to the Transaction Subtype setup in the Oracle Installed Base Implementation Guide.

For example, when an Order Management - Shipment transaction updates Oracle Installed Base, a transaction bearing the transaction type, subtype (Ship), order number (Source Header Reference), order line number (Source Line Reference), and transaction date update Oracle Installed Base, and a history transaction record is created. Each of
these transactions bears a status such as Complete or Pending.

Based on the properties of the transaction, a search can be specified, for example, for display of the activities for Order Management - Shipment, with a transaction date of 07-Aug-2005.

Searching Transactions

In the Transactions Search page, you can define search criteria for transactions and then view the transactions that meet these criteria. You can drill down one level to view the item instances for a transaction, and further to see the changes made to item instances during the transaction, that is, old and new values for item instance attributes and associations.

Selected Page Definitions

The following table lists the descriptions of selected fields in the Transactions Search page.

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Group Ref</td>
<td>Such as a PO group number</td>
</tr>
<tr>
<td>Source Header Ref</td>
<td>Such as a sales order number</td>
</tr>
<tr>
<td>Source Line Reference</td>
<td>Such as a sales order line number</td>
</tr>
<tr>
<td>Source Transaction Date</td>
<td>Date of the source transaction</td>
</tr>
<tr>
<td>Transaction Date</td>
<td>Actual date the transaction occurred</td>
</tr>
<tr>
<td>Inventory Material Transaction ID</td>
<td>ID found in an Inventory material transaction</td>
</tr>
</tbody>
</table>

Prerequisites

Oracle Installed Base Agent User > Item Instance > Transactions

Steps:

Enter Search Parameters

1. Select a Source Transaction Type.

2. Enter values in other fields to further qualify your search criteria as needed.
3. Click Go to perform the search.
   In the results area, the transactions appear with each transaction bearing a transaction ID.

**View Item Instances for a Transaction**

4. To see a list of the item instances in a transaction, click the Transaction ID link.
   A page appears with a list of the item instances associated with the transaction.

**View Item Instance Changes for a Transaction**

5. To see the transaction details for a particular item instance, click the View Transaction Details icon for the item instance.
   A page appears with the old and new values for the attributes and associations of the item instances associated with the transaction.
Using the Transactions Interface Search

This chapter covers the following topics:

• Searching and Viewing Transactions

Searching and Viewing Transactions

Access the Interface Install Base Lines concurrent program through the Installed Base Administrator responsibility.

Note: If the Install Base Lines concurrent program is run manually, the User ID will represent the resource who created or modified the transaction. If the concurrent program is run automatically, then the User ID represents the resource who generated the process.

You can view the inventory material and fulfillment transactions that are picked up by the Interface Install Base Lines concurrent program.

1. Navigate to the Transaction Interface Search page (Installed Base Administrator > Transaction Interface).

2. Enter values in any of the following fields to narrow your search:

   • Interface ID
   • Order Number
   • Item Name
   • Transaction Type
   • Material Transaction ID
   • Request ID
3. Click Go.

4. View the list of transactions.

5. Click the icon in the View Output column to view transaction interface details in a text file.
This chapter covers the following topics:

- Introduction
- About Mass Update Batch Types
- Overview of the Mass Update Batch Creation Process
- Overview of Mass Update Stage Operations
- Managing Mass Update Batches
- Searching for Existing Mass Update Batches
- Creating Mass Update Batches
- Selecting Item Instances
- Creating a New Batch
- Adding Item Instances to a Batch
- Entering New Values for Transfer Owner Batches
- Entering New Value Fields
- Entering New Values for Move Batches
- Entering New Values for General Batches
- Entering New Values for Terminate Batches
- Updating Associations
- Entering and Viewing Contract Options
- Scheduling Mass Update Batches
- Viewing Mass Update Batch Details
- Updating Mass Update Batches
- Removing Item Instances from Mass Update Batches
- Viewing Output of a Failed Mass Update Batch
Introduction

You can perform mass updates on sets of item instances, by changing different attributes, including party associations.

The main topics in this chapter are as follows:

- About Mass Update Batch Types, page 7-2
- Overview of the Mass Update Batch Creation Process, page 7-3
- Managing Mass Update Batches, page 7-7

About Mass Update Batch Types

Oracle Installed Base mass updates are grouped to cater to specific business objects and transactions. The five types of mass update and the main operations allowed for each update type, are as follows:

- Transfer Owner, page 7-2
- Terminate, page 7-2
- Move, page 7-3
- Web ADI, page 7-3
- General, page 7-3

Transfer Owner

- Transfer item instances from one owner to another one
- Update the current, install, bill-to and ship-to locations, associations, and other instance attributes
- Specify the contract options for transferring service contracts associated with the instances

Terminate

- Terminate a set of item instances in a batch.
Move

• Move item instances from one location to another

The location that is being changed can be the current or install location or both.

You may be required to modify the bill-to and ship-to location and some other instance attributes.

Web ADI

Download a Microsoft Excel template with selected item instances. Create or update the item instances, and then upload the revised spreadsheet. After the upload is complete, the modified data is uploaded to interface tables and is automatically processed by the asynchronous Initiate Mass Edit concurrent program.

General

This mass update type is for sets of item instances that do not fall into any of the other mass update categories.

• Change installation date, additional attributes, associations and some other instance attributes.

Overview of the Mass Update Batch Creation Process

You can create one or more mass update batches. Each batch contains the parameters required to perform the mass update of a set of item instances.

You must run the Initiate Mass Edit concurrent program to perform the mass updates. The program can be scheduled to run at regular intervals or can be run as a single execution after you have created a mass update batch.

Important: You do not have to run or schedule the Initiate Mass Edit concurrent program if you are using the Web ADI option. See Creating and Managing Mass Update Batches Using Web ADI, page 7-27.

For more information regarding running the Initiate Mass Edit concurrent program, see Run the Initiate Mass Edit Program, Oracle Installed Base Implementation Guide.

The creation of a batch is a process with several stages:

1. Using the Mass Update page, select the update batch type.
   Options are Transfer Owner, Terminate, Move, Web ADI, and General.

2. Then for each mass update type, you follow a series of stages:

The main stages required for the creation of a mass update batch depend on, and vary
with, the batch type. Only the relevant pages for that batch type are presented to the user. The diagram that follows shows these stages for each of the mass update batch types:

**Note:** This diagram does not include the creating mass update batches using the Web ADI feature.


For more information about the mass update stages, see Overview of Mass Update Stage Operations, page 7-4.

**See Also**

- About Mass Update Batch Types, page 7-2

**Overview of Mass Update Stage Operations**

The main stages of the mass update process are as follows:

- Select Item Instances, page 7-5
- Enter New Values, page 7-5
• Update Associations, page 7-5
• Contract Options, page 7-6
• Schedule, page 7-6

When you create or update a mass update batch, the stages are represented by a left-to-right "train" of steps, which appears at the top of each page.

When you create a batch, you may perform each of the steps in sequence, or you may break out of the sequence, and complete the steps by updating the batch later. When you update a batch, you can select any step that appears as a clickable link in the train of steps.

For all batch types, you must go through the first two stages, Select Item Instances and Enter New Values. The Update Associations and the Contract Options stages are both optional.

To submit a batch for execution, you must perform the Schedule stage. After you have scheduled the batch for execution, you must run the Initiate Mass Edit concurrent program to execute the batch changes.

1. Select Item Instances

   This stage is required for all batch types.
   This stage is required for all batch update types. At the Select Item Instances stage, you create a new batch and then add item instances to the batch, either during the batch creation process or later when you update the batch.

   For details, see Selecting Item Instances., page 7-9

2. Enter New Values

   This stage is required for all batch types.
   You enter new values for your selected item instances. The fields for which you can enter new values differ for each batch type.

   For details, select the appropriate topic from the following:
   • Entering New Values (Transfer Owner), page 7-12
   • Entering New Values (Move), page 7-15
   • Entering New Values (General), page 7-16
   • Entering New Values (Terminate), page 7-16

3. Update Associations

   The Update Associations stage is not available for Terminate batches.
This stage is optional. For the selected item instances, you can expire existing associations and add new associations. For the new associations, you can also add contacts and accounts.

For details, see Updating Associations, page 7-17.

4. Contract Options

This stage is optional. For Transfer Owner and Terminate batches, you can enter contract options for the selected item instances; for the other batch types, you can only view the existing contract options associated with item instances.

For details, see Entering and Viewing Contract Options, page 7-19.

5. Schedule

After you have specified all the new values for your selected item instances, you can schedule the Initiate Mass Edit concurrent program to perform the updates.

You can schedule the request to run as soon as possible or you can provide a specific date and time for run execution.

**Note:** If the mass update run fails to successfully update all the selected item instances, you can view details of the failed item instances.

For details, see Scheduling Mass Update Batches, page 7-24.

**Mass Update Batch Statuses**

One of the attributes of a mass update batch is its status. The valid statuses of a mass update batch are as follows

- **Created**
  
  This applies to batches that have not yet been submitted, or have been updated after batch submission but not resubmitted.

- **Scheduled**
  
  This applies to batches that have been submitted, but not yet executed. You can unschedule a batch execution by updating or deleting the batch.

- **In Progress**
  
  You cannot update a batch that is currently being executed.

- **Successful**
  
  All item instances in the batch were successfully updated.
  You cannot update a batch that completed successfully
• Failed

One or more item instances in the batch were not successfully updated. You can see the error details in the output of the run where the batch was processed.

You cannot update a failed batch.

Managing Mass Update Batches

You can perform the following batch management functions from the Mass Update Batches page:

• Searching for Existing Batches, page 7-8

• Creating Mass Update Batches, page 7-9

• Adding Item Instances to a Batch, page 7-11

• Viewing Batch Details, page 7-25

• Updating Mass Update Batches, page 7-25

• Removing Item Instances from a Batch, page 7-25

• Viewing Output of a Failed Mass Update Run, page 7-26

• Deleting a Batch, page 7-26

See Also

• Overview of Mass Update Stage Operations, page 7-4
Automatic Validation
Throughout the process of creating or updating a batch, Oracle Installed Base performs automatic validation of the data, particularly when you explicitly save the data or submit the batch. Validation detects situations such as when you initially select item instances to be updated by the batch, but by the time that you submit the batch, those item instances have been expired.

When it detects an error, Oracle Installed Base displays a summary error message on the page, with a link that enables you to see more error details.

Searching for Existing Mass Update Batches
You can search for existing Mass Update batches using the following search parameters:

- Batch Number
- Batch Name
- Type
  Either All Types or one of the existing mass update batch types
- Status
  Either Any Status or one of the values Created, Scheduled, In Progress, Successful, Failed
- Created By
- Item Instance

Steps
1. Click the Mass Update tab.
2. In the Search area of the Mass Update Batches page, enter one of more search parameters, and click Go.

The batches that satisfy the search criteria appear in the lower part of the page.

Comments
From the Mass Update Batches page, you can perform the following operations:
See Also

- Managing Mass Update Batches, page 7-7
- Overview of Mass Update Stage Operations, page 7-4
- About Mass Update Batch Types, page 7-2

Creating Mass Update Batches

When you create a mass update batch, you go through a series of steps to enter the information required to perform the mass update.

For an overview of the complete process, see Overview of Mass Update Stage Operations., page 7-4

If you are familiar with the stages of the mass update process, select the appropriate stage. If you are creating a completely new batch, start at the first stage.

- Selecting Item Instances, page 7-9
- Entering New Values for Transfer Owner Batches, page 7-12
- Entering New Values for Move Batches, page 7-15
- Entering New Values for General Batches, page 7-16
- Entering New Values for Terminate Batches, page 7-16
- Updating Associations, page 7-17
- Entering and Viewing Contract Options, page 7-19
- Scheduling Mass Update Batches, page 7-24

See Also

- Overview of Mass Update Stage Operations, page 7-4
- Managing Mass Update Batches, page 7-7

Selecting Item Instances

This is the first stage in the batch creation process, and is also available when you update a batch.

What you can do at this stage depends on whether you are creating a new batch, or
When creating a new batch, you specify general batch information, such as a batch name. Then, both during batch creation or subsequent updates to the batch, you can add item instances to the batch, before you submit the batch.

### Creating a New Batch

When you create a new mass update batch, you must first choose the batch type and give the batch a name.

If the batch type is Transfer Owner, you must also select the owner name and owner account.

You can also enter a Note for the batch. This note will be automatically added to all the item instances of the batch if the batch mass update completes successfully.

#### Steps

1. Click the Mass Update tab.

2. In the Create Batch field, select the batch type from the list of values, and click Go.

   The Create Batch page for your selected batch type appears.

---

**See Also**

- Overview of Mass Update Stage Operations, page 7-4
- Creating Mass Update Batches, page 7-9
3. Enter a Batch Name for your batch.

4. For Transfer Owner batches only, select a Current Owner Name and an Owner Account Number.

5. Optionally, enter Note information.
   The Note information is added to each item instance of the batch if the batch executes successfully.

6. You may proceed in either of the following ways:
   - Add item instances to the batch, page 7-11
   - Save the batch details you have entered so far, and add more details later.

Adding Item Instances to a Batch

To add item instances to a mass update batch, you must be in the process of either creating or updating the batch, and in the Select Item Instances stage.

You search for item instances, then you select the item instances to add to the batch.

   **Note:** The Mass Update process automatically includes the parent instance if a child component-of instance is selected.

**Steps**

1. In the Select Item Instances page, click Add.
   The Add Item Instances page appears.
2. Perform either a simple or an advanced search for item instances in the top part of the page.

   **Note:** For Transfer Owner batches, the current owner party number and owner account number are automatically added to the search criteria. You cannot select different values for these fields using the advanced search options.

   The results of the search appear in the lower part of the page.

3. In the results area, you can perform the following actions:

   - Click an item instance hyperlink to see the item instance details.
   - Select the item instances to be added to the mass update batch, then click Apply.
   - Click Cancel - to add no item instances to the batch.

**See Also**

- Creating Mass Update Batches, page 7-9
- Entering New Values for Transfer Batches, page 7-12
- Entering New Values for Move Batches, page 7-15
- Entering New Values for General Batches, page 7-16
- Entering New Values for Terminate Batches, page 7-16

**Entering New Values for Transfer Owner Batches**

In this page, you enter new attribute values for mass update batches of type Transfer Owner. The page identifies the batch name, the current owner, and the current owner account number selected for transfer.

**Steps**

1. You must select values for the following attributes of the new owner:

   - Owner Party Name or Owner Party Number (selecting one of the values causes the other to be automatically filled in)

   - Owner Account Number.
2. You may also specify a new Transfer Date, which must be before the batch scheduled date.

3. In addition, you can enter new values for the following fields:
   - General Fields, page 7-13
   - New Current and Install Location Fields, page 7-14
   - New Bill To and Ship To Location Fields, page 7-15
   - Additional Attributes, page 7-15

4. Save your changes.

See Also

- Creating Mass Update Batches, page 7-9
- Selecting Item Instances, page 7-9
- Updating Associations, page 7-17

Entering New Value Fields

Depending on the mass update batch, there are different groups of new value fields that you can enter.

This section consists of the following topics:
   - Entering New General Fields, page 7-13
   - Entering New Current and Install Location Fields, page 7-14
   - Entering New Bill To and Ship To Location Fields, page 7-15
   - Entering New Additional Attribute Fields, page 7-15

Entering New General Fields

For all mass update batch types, you can enter new values for the following fields:
   - Status
     For Terminate mass update batches, you can enter only a terminable status; for the other batch types, you can enter only a non-terminable status.
   - Version Label
In addition, for all mass update batch types except Terminate, you can enter new values for the following fields:

- External Reference
- Version Label
- System

You can only change the System Name to a system that belongs to the owner with the current owner account number.

**Entering New Current and Install Location Fields**

**New Current Location Fields**

These fields specify a new current location for all item instances being transferred or moved.

For Transfer Owner batches, you can enter values for the current location fields; for Move batches, you *must* enter new values for either these fields or the new install location fields.

**New Install Location Fields**

These fields specify a new install location for all item instances being transferred or moved.

For Transfer Owner batches, you can enter values for the install location fields; for Move batches, you *must* enter new values for either these fields or the new current location fields.

You can select the check box “Same as current” to select the install location to be the same as the current location; if you select this check box, the other fields in this page area are hidden.

**Steps (for both Current and Install Location Fields)**

1. Select a Type.
2. If, for the Type, you selected HZ Location, Vendor Site, or Internal, you must select a value for the Address 1 field - the list of values shows all the Address1 fields in the HZ locations table.
3. If, for the Type, you selected Party Site, you can select values for the following fields:
   - Party Name and Party Number
     If the Install parameter “Show all parties” is set to No, you can only select related parties from the active parties in the HZ Parties table. Selecting a value
for one of the fields Party Name or Party Number causes the other field to be automatically filled in.

- Party Site Number
  Select from all the valid location numbers for the selected party.

- Address 1
  Select from all the valid Address1 values for the selected party.

### Entering New Bill To and Ship To Location Fields

These fields specify new Bill To locations and new Ship To locations for all item instances being transferred or moved.

For both Bill To and Ship To locations, you can select values for the following fields:

- Party Name and Party Number
  If the Install parameter “Show all parties” is set to No, you can only select related parties from the active parties in the HZ Parties table. Selecting a value for one of the fields Party Name or Party Number causes the other field to be automatically filled in.

- Party Site Number
  Select from all the valid location numbers for the selected party.

- Address 1
  Select from all the valid Address1 values for the selected party.

### Entering New Additional Attribute Fields

The user-defined additional attributes appear that are common to the item instances selected. You can enter new values for the additional attributes that you want to apply to all the item instances in the batch.

### Entering New Values for Move Batches

In this page, you enter new attribute values for mass update batches of type Move.

**Steps**

1. You must select at least one new value in either the New Current Location or the New Install To Location Fields, page 7-14.

2. In addition, you can enter new values for the following fields:
• General Fields, page 7-13
• New Bill To and Ship To Location Fields, page 7-15

3. Save your changes.

See Also
• Creating Mass Update Batches, page 7-9
• Selecting Item Instances, page 7-9
• Updating Associations, page 7-17

Entering New Values for General Batches
In this page, you enter new attribute values for mass update batches of type General.

Steps
1. You can enter new values for the following fields:
   • General Fields, page 7-13
   • Additional Attributes, page 7-15
   
   **Note:** You must enter at least one value for update.

2. Save your changes.

See Also
• Creating Mass Update Batches, page 7-9
• Selecting Item Instances, page 7-9
• Updating Associations, page 7-17

Entering New Values for Terminate Batches
In this page, you enter new attribute values for mass update batches of type Terminate.
Steps

1. You must enter an end date to expire all the item instances in the batch.

2. You can optionally enter a new terminable status for the item instances in the batch.

3. In addition, you can enter new values for the following fields:
   - General Fields, page 7-13
   - Additional Attributes, page 7-15

4. Save your changes.

See Also

- Creating Mass Update Batches, page 7-9
- Selecting Item Instances, page 7-9
- Updating Associations, page 7-17

Updating Associations

In the Update Associations page, you can expire existing associations and add new associations. For the new associations, you can also add contact and account information.

The page contains the following screen areas:

- Current Associations
- New Associations

Current Associations

The Current Associations area shows a list of all the distinct associations - apart from Owner - that belong to the item instances in the batch. For each distinct association, the list also displays, as a link, the number of affected item instances that have that association.

In the Current Associations area, the main operation to perform is to select item instances whose associations you want to expire.

Steps to Expire Current Associations

1. To expire all associations of all item instances in the batch, click Expire All.
2. To expire the associations of all item instances with a particular association, select the association and click Expire.

3. To expire individual item instances of a particular association:
   1. Click the Affected Item Instances link for the association.
      The page that appears displays details of all the item instances with that association. For a particular item instance, you can also view the contacts and accounts for the association.
   2. Select one or more individual item instances to expire their associations as part of the mass update batch.

4. You can undo your selections for expiration as follows:
   1. Click Restore All to deselect all selected item instances for all associations.
   2. Select an association, and click Restore.

5. Save your changes.

**New Associations Area**

In the New Associations area, you can add new associations to all the item instances in the batch. After the association is added, the user can add contacts and accounts for the new association.

**Steps to Add New Associations**

1. To add a new association, click Add Association, and enter values for the new association.

2. If you want to add a contact for the new association, select the association, click Add Contact, and enter values for the contact.

3. If you want to add an account for the new association, select the association, click Add Account, and enter values for the account.

4. You can undo your additions, by clicking the Remove icon of each association, contact, or account that you do not want to be included in the mass update batch.

5. Save your changes.

**See Also**

- Creating Mass Update Batches, page 7-9
Entering and Viewing Contract Options

The Contracts Options page shows contracts impacted by the selected item instances, and provides you with a number of options for indicating how the instance transfer should affect associated services.

**Note:** If the item instances selected in a Transfer Owner batch result in contracts from multiple operating units being selected for transfer, a warning appears on the Contracts Options page, and advises that Bill To and Ship To addresses for the new service contracts will be defaulted from customer setup.

For Transfer Owner batches, and, to a lesser extent, for Terminate batches, you must specify one or more contract rules.

**Contract Rules**

For Terminate and Transfer Owner batches, you must provide some contract transfer rule information.

For Terminate batches, you must provide a termination reason; you can also select a credit option.

For Transfer Owner batches, you must first choose a Transfer Option from the following:

- Transfer and Terminate
- Terminate
- Use Coverage Terms
- No Updates to Contracts

**Contract Rule Fields**

<table>
<thead>
<tr>
<th>Update Batch (Transfer Owner) : Contract Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Batch Name</strong></td>
</tr>
<tr>
<td>Current Owner Type</td>
</tr>
<tr>
<td>Owner</td>
</tr>
<tr>
<td><strong>Owner Account Number</strong></td>
</tr>
</tbody>
</table>
The amount of information available for viewing and updating depends on your choice of Transfer Option.

If Transfer Option=Transfer and Terminate or Use Coverage Terms, all the fields described subsequently in this section apply and are available.

For Transfer Option=Terminate, the only fields available are Termination Reason and Credit Option.

For Transfer Option=No Updates to Contracts, no fields are available.

**Note:** Unless stated otherwise, all fields are optional.

### Termination Reason
Mandatory field when Transfer Option=Terminate, otherwise optional.

### Credit Option
Mandatory field when Transfer Option=Terminate, otherwise optional.

There are three options for issuing a credit on the original service contract:

- **Calculated** - Issue a calculated credit for the prorated value of services transferred.
- **Full** - Issue a full credit for the services transferred.
- **None** - Issue no credit for services transferred.

### Billing Profile
The list of values contains all billing profiles created for the new owner as well as generic billing profiles. Selecting the billing profile sets the billing schedule, invoicing rule and accounting rule for the transferred lines. Leaving the billing profile blank results in a billing schedule with one-time billing, an invoicing rule of Advanced and an accounting rule of Immediate.

### Keep Existing Contract Number
Selecting this check box results in new contracts retaining the same contract number as the source contracts for the transferred services.
Modifier
You can enter a modifier that will apply to all contracts created for transferred services. If no value is entered, the modifier will be the value for the profile option OKS: Transferred Contract Identifier concatenated with a datestamp.

Contract Status
Mandatory field, default value is Entered. The list of values contains all statuses that map to status types Entered and Active.

Bill Transferred Services
There are three possible values: Yes, No, and At Renewal.
If you select At Renewal, billing behavior of transferred services will be as follows:
- Service transferred from Active or Signed contracts
  The Bill Services flag on the new contract is set to At Renewal. The contract will not bill unless you manually override the flag in the service contracts authoring form.
- Service transferred from Entered contracts
  The Bill Services flag on the new contract is set to Yes.

Transfer Notes
Select the check box to transfer header notes; line coverage notes always transfer.

Transfer Attachments
Select the check box to transfer attachments. When selected, all attachments on the original contract are transferred to the new contract.

Bill To Customer
Defaults from the new Bill To customer entered for the item instances, provided the Bill To customer is related to the new owner account. If not related, the Bill To customer field has no default value and you can enter a customer.
You can optionally override the defaulted value with a different Bill To customer for transferred services.
If the Bill To customer is different from the new owner, the contract Bill To customer will also be added to the contract as a third party.
If no contract Bill To customer is specified in the batch, the contract Bill To customer will be derived from the new owner entered for the Transfer Owner batch.
The Bill To customer entered is used for all contracts created for the Transfer Owner batch.

Bill To Address
Follows same rules as Bill To Customer.
You can only select a contract Bill To address if all of the impacted contracts map to the same operating unit. The list of values only contains addresses that are associated with that operating unit. If no value is entered, the Bill To address will be defaulted from TCA - the primary Bill To address for the Bill To account specified for the new contract.

If the impacted contracts are from multiple operating units, you will not be able to enter an address for the new Bill To customer. In such cases, the Bill To address will be derived from the primary Bill To address defined for the Bill To account for each operating unit.

**Bill To Contact**
Follows the same rules as Bill To Customer.

**Ship To Customer**
Follows the same rules as Bill To Customer.

**Ship To Account**
Follows the same rules as Bill To Customer.

**Ship To Address**
Follows the same rules as Bill To Address.

**Impacted Contracts**
For all batch types, you can view the contracts to be impacted by the batch updates. You can select the type of display for the contracts:

- **Contract**
  Contract-level information appears in a "master" table. Service line details of the contract selected in the master table appear in the "details" table underneath.

- **Service Line**
  Contract and service line information appears in a "master" table. Subline details of the service line selected in the master table appear in the "details" table underneath.
• Covered Levels

Contract, subline, and covered level information appears in a table. You can optionally view item instance details for the covered products.

Key fields in the contract, service line and subline tables are Transfer Amount and Credit Amount. The latter is the amount that results from a termination.

Steps (for Transfer and Terminate batches)

1. Select and enter the contract transfer rule values that you require for the current batch.

2. Save your changes.

Comments

1. If you save a batch with Bill To and Ship To details, then later try to change the New Owner for the batch, you will receive an error message indicating that dependent data (Bill To and Ship To details) have been entered for the existing customer in the Contract Options page. You must remove the Bill To and Ship To details in the Contracts Options page before you can change the new owner.

2. If you save a batch, and subsequently the results set of the Impacted Contracts has changed to include contracts from multiple operating units, the Contract Options page will display a warning message and the Bill To and Ship To addresses and contacts will be greyed out.

3. The consequences of executing the mass update batch are as follows:
   • If the services in the impacted contracts are to be terminated, then the values entered in the Contract Options page for Termination Reason and Credit

Using the Mass Update Facility  7-23
Option are applied to the terminated services.

- If the services in the impacted contracts are to be transferred, then all the contract transfer rules entered in the Contract Options page are applied to the new contracts created for the transferred services.

See Also

- Creating Mass Update Batches, page 7-9
- Updating Associations, page 7-17
- Scheduling Mass Update Batches, page 7-24

**Scheduling Mass Update Batches**

After entering all the details for the mass update batch, you can submit the batch for execution. You must run the Initiate Mass Edit concurrent program to perform the mass updates. The Initiate Mass Edit concurrent request executes all the mass update batches that are available for processing at the time, and generates a single output file.

For more information regarding this concurrent program, see Run the Initiate Mass Edit Program, Oracle Installed Base Implementation Guide.

**Steps**

1. Select your Submit option, either to submit as soon as possible, or to submit at a specified date and time.

   **Note:** For Transfer Owner batches, if you specified the transfer date, the batch submission date must be after the transfer date.

2. Click Submit.

The status of the batch changes to Scheduled. For more information on batch statuses, and the operations that you can perform on a batch after scheduling, see Mass Update Batch Statuses, page 7-6 and Viewing Output of a Failed Mass Update Batch, page 7-26.

See Also

- Creating Mass Update Batches, page 7-9
- Managing Mass Update Batches, page 7-7
Viewing Mass Update Batch Details

The View Batch page displays all the following batch details:

- General batch information
- Selected item instances
- New values, with location and association details
- Contract information, showing contract transfer rules, and impacted contracts

See Also

- Overview of Mass Update Stage Operations, page 7-4
- Managing Mass Update Batches, page 7-7

Updating Mass Update Batches

You can update a mass update batch any time before you submit the batch. Typically, after you have created the batch, you complete the information required for the mass update in one or more “update” sessions, before you submit the batch for execution.

Steps

1. Search for an existing mass update batch, page 7-8.
2. Click the Update icon for the batch that you want to update.
3. You can change batch details in any of the stages allowed for your mass update batch type.

See Also

- Overview of Mass Update Stage Operations, page 7-4
- Creating Mass Update Batches, page 7-9
- Managing Mass Update Batches, page 7-7

Removing Item Instances from Mass Update Batches

You can remove selected item instances from a mass update batch before you submit the batch.
Steps

1. Search for an existing mass update batch, page 7-8.

2. In the Item Instances area, either click Remove All or select the item instances individually and click Remove.

See Also

- Overview of Mass Update Stage Operations, page 7-4
- Managing Mass Update Batches, page 7-7

Viewing Output of a Failed Mass Update Batch

When a mass update run finishes, it produces an output file of the results of the processing for each of the batches executed during that run.

If a batch that was executed as part of the run had any errors, the batch status is set to Failed. You can view the output of the run that included the batch execution, to see details of the item instance update failures.

Steps

1. Search for an existing mass update batch, page 7-8.

2. Click the View Output icon of a batch to see the output of the run that included that batch.

3. For the error records, make corrections to the associated item instances, and resubmit the batch.

See Also

- Overview of Mass Update Stage Operations, page 7-4
- Managing Mass Update Batches, page 7-7

Deleting Mass Update Batches

You can delete any batch that is not in progress. When you delete a batch that has not yet been executed, any contract options that you selected for the batch are backed out, that is, not implemented.
Steps

1. Search for an existing mass update batch, page 7-8.

2. In the Item Instances area, select one or more batches, and click Delete.

See Also

- Overview of Mass Update Stage Operations, page 7-4
- Managing Mass Update Batches, page 7-7

Creating and Managing Mass Update Batches Using Web ADI

You can use the Oracle Web Applications Desktop Integrator (Web ADI) to create and manage mass item instances. Web ADI integrates with Microsoft Excel and enables you to bring mass update batch data to a spreadsheet where familiar data entry and modeling techniques can be used to complete mass updates.

See Oracle Web Applications Desktop Integrator Implementation and Administration Guide.

Steps

1. Click the Mass Update tab.

2. In the Create Batch field, select the Web ADI type, and click the Go button.

3. Enter Batch Name and Batch Description.

4. Select one of these values from the Action drop-down list:
   - Manage Extended Attributes: Select this option to download the template that contain attributes at the item instance level to an Excel spreadsheet. Modify the attribute values and then upload them back to Installed Base. Attributes downloaded against the item instance can be from different access levels such as Global, Item, Category, and Instance. See Managing Extended Attributes, page 7-34.
   - Manage Item Instances: Select this option to create new instances or update existing instances by copying data from a different version of Excel. You can then copy the row into the empty template and upload to make changes.
   - Search and Manage Instances: Select this option to search for and manage existing item instances.
5. Click the **Manage Item Instances** option, and then click the **Go** button.

The Create Document page appears.

6. Select the Viewer that you want to use (required).

7. Enter values in other fields on the page such as:
   - **Instance Number** - you can enter multiple instance numbers separated by commas
   - **Serial Number** - you can enter multiple serial numbers separated by commas
   - **Owner Party ID**
   - **Inventory Item ID**
   - **Batch ID**

8. The default value for the **Action Code** appears.

9. Click the Create button.

The following Information message appears:
10. Click Open or Save to download the file. The system creates the template (Excel spreadsheet).

11. Open the file. Click the Enable Macros button.

12. Update the spreadsheet and save your changes.

13. Select Oracle, Upload from the Microsoft Excel toolbar to upload the new instance.

14. This process synchronizes the data in the Excel spreadsheet with the live data in Web ADI. See Oracle Web Applications Desktop Integrator Implementation and Administration Guide.

The Initiate Mass Edit asynchronous concurrent program is automatically triggered when the Upload option is selected. The program processes the records interface table to create or update the item instances. You can check the status of the process, and view a log that provides all information related to created instances and updated instances. It also gives error details if something cannot be created or updated.

**Searching for and Managing Item Instances Using Web ADI**

Follow these steps to search for and manage item instances using Web ADI:

1. Click the Mass Update Batches tab, and the Mass Batch Updates page appears.

2. In the Create Batch field, select the Web ADI type.

3. Click the Go button, and the Create Batch (WebADI): Choose Action page appears.

4. Click the Simple Search button to perform a simple search.
5. Enter values in any of the fields on the page.

The Show Entire Configuration and Show Root Instance check boxes work in conjunction with the Instance Number field, and are therefore used for item instance number searches only.

6. To perform an advanced search, click Advanced Search.

You can select parameters such as Asset Number, Installed Date, Item, Item Instance, Item Instance Type, Item Type, Operating Unit, Owner Account Number, Owner Party Name, Party Account Number, Purchase Order Number, Return By Date, Sales Order Number, Serial Number, Shipped On Date, Status, and System. You can search or update the item instances, download them to a Microsoft Excel sheet and upload it after modification using WebADI.

7. Optionally click the Export External Attributes button to export item instances based upon the search criteria. See Managing Extended Attributes, page 7-34.

8. Select the Viewer that you want to use (required).

9. Select or enter values in other fields on the page.

10. Click the Create button.

The file is downloaded to your desktop.

11. Click Open or Save to download the file.

12. Open the file, and click the Enable Macros button.
13. Update the file, and save your work.

14. Select Oracle, Upload from the Microsoft Excel toolbar to upload the updated instance.

An asynchronous concurrent program is triggered when the Upload option is selected. The program processes the records interface table to create or update the item instances.

Columns in the Web ADI Template

<table>
<thead>
<tr>
<th>Column</th>
<th>List of Values (LOV)?</th>
<th>Client Validation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITEM_INSTANCE_ID</td>
<td>-</td>
<td>None</td>
<td>READ_ONLY column. Would be present for only queried instances. Column will be empty in new instances.</td>
</tr>
<tr>
<td>INSTANCE_NUMBER</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ITEM_ORGANIZATION</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>ITEM_NAME</td>
<td>Yes</td>
<td>Check that the valid item is chosen from LOV</td>
<td>-</td>
</tr>
<tr>
<td>ITEM_DESCRIPTION</td>
<td>Yes</td>
<td>-</td>
<td>Default value will appear</td>
</tr>
<tr>
<td>ITEM_REVISION</td>
<td>Yes</td>
<td>Check if revision is valid for item ID</td>
<td>-</td>
</tr>
<tr>
<td>UNIT_OF_MEASURE</td>
<td>Yes</td>
<td>-</td>
<td>Default value appears and is read-only</td>
</tr>
<tr>
<td>QUANTITY</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SERIAL_NUMBER</td>
<td>Yes</td>
<td>-</td>
<td>Free Text and can be chosen from LOV</td>
</tr>
<tr>
<td>Column</td>
<td>List of Values (LOV)?</td>
<td>Client Validation</td>
<td>Comments</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------</td>
<td>-------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>LOT_NUMBER</td>
<td>-</td>
<td>Yes</td>
<td>Can be chosen from LOV</td>
</tr>
<tr>
<td>INSTANCE_STATUS</td>
<td>Yes</td>
<td></td>
<td>Check that valid status code is entered</td>
</tr>
<tr>
<td>INSTANCE_DESCRIPTION</td>
<td>-</td>
<td>-</td>
<td>Default value appears</td>
</tr>
<tr>
<td>EXTERNAL_REFERENCE</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>OPERATIONAL_STATUS</td>
<td>Yes</td>
<td></td>
<td>Check that valid operational status is entered</td>
</tr>
<tr>
<td>INTERNALLYOwned</td>
<td>-</td>
<td>-</td>
<td>Y/N (default N)</td>
</tr>
<tr>
<td>OWNER_PARTY_TYPE</td>
<td>Yes</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>OWNER_PARTY_NUMBER</td>
<td>Yes</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>OWNER_ACCOUNT_NUMBER</td>
<td>Yes</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>CURRENT_LOCATION_TYPE</td>
<td>Yes</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>CURRENT_LOCATION</td>
<td>Yes</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>CURRENT_LOCATION_PARTY</td>
<td>Yes</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>INSTALL_LOCATION_TYPE</td>
<td>Yes</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Column</td>
<td>List of Values (LOV)?</td>
<td>Client Validation</td>
<td>Comments</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>-----------------------</td>
<td>-------------------</td>
<td>----------</td>
</tr>
<tr>
<td>INSTALL_LOCATION</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>INSTALL_LOCATION_PARTY</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>BILLTO_PARTY_TYPE</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>BILLTO_PARTY_NUMBER</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>BILLTO_ACCOUNT_NUMBER</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SHIPTO_PARTY_TYPE</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SHIPTO_PARTY_NUMBER</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SHIPTO_ACCOUNT_NUMBER</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>INSTANCE_TYPE</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>VERSION_LABEL</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>INSTALL_DATE</td>
<td>Yes</td>
<td>Date Picker</td>
<td>-</td>
</tr>
<tr>
<td>CREATION_DATE</td>
<td>Yes</td>
<td>Date Picker</td>
<td>-</td>
</tr>
<tr>
<td>EXPIRATION_DATE</td>
<td>Yes</td>
<td>Date Picker</td>
<td>-</td>
</tr>
<tr>
<td>CREATE_DEFAULT_CONTRACT</td>
<td>-</td>
<td>-</td>
<td>Y/N (Default is N)</td>
</tr>
<tr>
<td>CONTRACT_NUMBER</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Column</td>
<td>List of Values (LOV)?</td>
<td>Client Validation</td>
<td>Comments</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------</td>
<td>-------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>PARENT_INSTANCE</td>
<td>Yes</td>
<td>Valid item instance number</td>
<td>Enter the parent instance for the child instance.</td>
</tr>
<tr>
<td>SPLIT_QUANTITY</td>
<td>-</td>
<td>-</td>
<td>Only applicable when update and non-serialized item instance. Enter this value to split and create a new instance of the entered quantity.</td>
</tr>
<tr>
<td>MERGE_INSTANCE</td>
<td>Yes</td>
<td>Valid item instance number</td>
<td>Only applicable when update and non-serialized item instance. Choose the item instance with which this instance needs to be merged.</td>
</tr>
<tr>
<td>FLEX_FIELDS</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Managing Extended Attributes**

Use the Manage Extended Attributes action to update multiple extended attribute values for multiple item instances. You can download the template that contains the extended attributes, modify the values, and then upload them back into the system. The fields for extended attributes in the template are:

- Item
- Instance Number
- Access Level
- Category
- Attribute Name
- Attribute Activation Date
- Attribute Value
To download extended attributes:


2. In the Create Batch field, select the Web ADI type, and click the Go button. The Create Batch (Web ADI): Choose Action page appears.

3. Enter values for the Batch Name (required).

4. Select the Manage Extended Attributes value in the Action field.

5. Click Go, and the Item Instances: Web ADI page appears.

6. Enter selection criteria using the Simple Search or Advanced Search.

7. Click the Export Extended Attributes button to download the attribute template.

8. Click Create.
   The file is downloaded to your desktop.

9. Click Open or Save to download the file.

10. Open the file, and click the Enable Macros button.

11. Update the file, and save your work.

12. Select Oracle, Upload from the Microsoft Excel toolbar to upload the updated attributes.
Performing Oracle Installed Base Related Tasks in Other Oracle Applications

This chapter covers the following topics:

- Overview
- Using the Order Management Transaction Details Window
- Using the WIP Component Install Window
- Using the Order Management Item Instance Query Window
- Tracking Customer-Owned Item Instances Using Oracle Installed Base

Overview

Oracle Installed Base is integrated with many Oracle applications. This chapter describes the following operations performed in Oracle applications related to Oracle Installed Base:

- Using the Order Management Transaction Details Window, page 8-1
- Using the WIP Component Install Window, page 8-9
- Using the Order Management Item Instance Query Window, page 8-11
- Tracking Customer-Owned Item Instances Using Oracle Installed Base, page 8-14

Using the Order Management Transaction Details Window

In the Transaction Details window you can update Oracle Depot Repair with attributes provided for an item that is being sold or returned. In addition, you can update a referenced item instance.

This topic group covers the following topics:
• Accessing the Transaction Details Window, page 8-2
• The Transaction Details Window, page 8-2
• Replacing a Component, page 8-5
• Accessing the Installation Details HTML page, page 8-7

Accessing the Transaction Details Window

Unlike the main interfaces for end users in Oracle Depot Repair, the Transaction Details window is based on forms, not HTML. Therefore the window requires a different access procedure than does the main part of the application.

Access the Transaction Details window through the Sales Orders window as follows:

1. Use the URL, user name, and password provided by your local system administrator to log in to the Oracle Forms mode of Oracle Applications.

2. From the Responsibilities menu, select the Order Management Super User responsibility, and click OK.

3. From the Navigator, choose Orders, Returns > Sales Orders.
   The Sales Orders window appears.

4. Enter an appropriate sales order number in the Order Number field to populate the window.

5. In the Line Items tab, select a line.

6. Click Actions.
   The Actions window appears.

7. Select Installation Details and click OK.
   The Transactions Details window appears.

The Transaction Details Window

The Transaction Details window is used to specify the transaction type used to update a source instance and non-source instance and to define multiple parties, contacts, accounts, organization assignments, configuration, and extended attributes for the source instance. In addition, a new system can be created for the instance from this window.
Source Information Region

In this region you can define the updates to be made for the item being sold or returned on the sales order line.

System Region

Auto Create Button

Use the Auto Create button to define a new system for the source instance. This process is similar to setting up a system and related information in the system setup in the HTML page. After setup here, you can use the system name to associate it with the source instance.

Transaction Line Details Region

Source Transaction Details Tab

Use this tab to specify the attributes and transaction type for the item displayed in the Source Information region. This tab provides for specifying the Oracle Depot Repair transaction subtype, which is defined in the subtype name of the transaction type and subtype setup window. In that setup, the kind of actions that can happen to a source instance and its related non-source instance has already been defined. An LOV displays
only the subtypes defined for this source application.

This window can also be used to specify system, item, revision, instance type, item status, location type, installation location, installation date, serial/lot number being processed, instance number being referenced, in service date, external reference, version label, start date, and end date. For the instance, the following can be defined: party, configuration, organization assignment, extended attributes, accounts, and contacts. At the right-hand side of the window is a check box named Cascade Ownership, whose value defaults from an Oracle Installed Base Install Parameter. If this is selected, then whenever ownership of an item instance changes for a parent instance, the application cascades the party ownership of the parent to all its children for outbound transactions such as Shipment.

**Parties Tab**

For a sales shipment line, the owner party is displayed and cannot be changed. In addition, other parties with different relationship types can be specified here for the source instance. Fields include party source, name, relationship, start date, and end date. For each of these parties, the Accounts tab and the Contacts tab can be used to define multiple accounts and contacts for the source item. The Accounts tab includes the following fields within the Accounts region: number, name, relationship, start date, and end date.

**Replace/Upgrade Tab**

The Replace/Upgrade tab is used to specify the Replaced-by and Upgraded-from relationships between the instance in the source region and the one defined in the non-source region. If this page is used, then the non-source region must be populated.

**Org Assignments Tab**

Here the various organization assignment such as Service Billed From can be specified for the source instance.

**Extended Attributes Tab**

If any extended attribute has been defined for this item, instance, or category, then the values for these attributes can be entered here.

**Accounts Tab**

This tab is used to define accounts for a party. For a shipped item on a sales order line, the owner account default is displayed. In addition, more accounts can be specified for the party of the source instance.

**Contacts Tab**

This tab is used to define contacts for a party. Multiple contacts can be specified for the same party of the source instance.
Non Source Transaction Details Tab

This tab is used to specify the attributes for the instance that is related to the one displayed in the Source Information region. An example of a non-source instance is an instance being replaced by the one being shipped in the source transaction. You can specify a parent instance and instance number when doing a replacement.

Note: The Transaction Subtype is entered only on source lines in the Source Transaction Details tab. This determines the mandatory attribute values in the non-source lines entered.

The LOV for Parent Instance lists all instances that are parents of the item that you entered in the Non Source Transaction Details tab and are customer items (not internally owned).

If you are replacing the highest node (top-level parent, assembly item) in a hierarchy, then directly enter an instance number without entering a value for Parent instance. This is existing functionality where you can only replace a top-level parent or stand-alone items.

The component replacement functionality includes the Return for Repair scenario where a subassembly has been returned for repair and is either repaired and shipped or a replacement is shipped. You can reference components that are to be replaced whether they are at a customer site or in inventory.

Replacing a Component

The component replacement feature provides functionality to replace components in a hierarchical component-of configuration using Sales Order Installation and Transaction Details windows. Here are some characteristics of the feature:

- This enhancement addresses the business need of performing actual detachment of old components and attachment of new components in a configuration using a one-step process during sales order entry.

- New components are automatically covered under parent assembly service warranty contracts.

- The capability applies to tangible as well as intangible items such as Service or Software License.

The component replacement functionality has the following limitations:

- Component replacement does not support the addition of new items in a configuration.

- Component replacement is valid for a one-to-one item replacement or upgrade. No more than one item instance can be replaced or upgraded with a new instance.
• The item being replaced or upgraded must be in a component-of relationship in a configuration.

• Component replacement functionality is focused on external customer items and configurations

Business Process for Entering Transactions for Component Replacement

Here is the business process for entering transactions for component replacement:

1. Cause: A need exists to ship an item replacement.

2. Enter a sales order.

3. Create order lines.

4. Enter transaction details (using Oracle Depot Repair windows).
   This is where you enter further details of the new item being shipped (optional) and the details of the item being replaced (mandatory).

5. Confirm and book the order.

6. Result: The item is replaced, and the instance information is updated.

Using the Feature: Details For Step 4 in the Business Process

Use the following procedure as an example of entering transaction details for step 4 in the business process. You can use the seeded Replace value for Txn Subtype (transaction subtype) after making modifications as needed.

Prerequisites

Component replacement requires setting up Oracle Depot Repair transaction subtypes in the Transaction Subtypes window:

1. In the Transaction Subtypes region, the Name field must be set to the Replace subtype.

2. In the Source Info region, the value of Status must be Replacement.

3. In the Non Source Info region, the value of Status must be Replaced.

Refer to the Oracle Depot Repair Implementation Guide for details on using the window.

Steps

1. Select Installation Details from the Action button for a sales order line.
   This displays the Installed Base Transaction Details window.
2. Enter a value of Replace in the Transaction Subtype field in the Source Transaction Details tab.
   This tab is used to specify the transaction type to be used for the item being shipped.

3. Click the Parties and Accounts tabs to show the owner and the account respectively.
   These values default from the Order Management sales order setup.

4. Click the Non-Source Transaction Details tab.

5. Enter the item number, instance number, and serial number if the item is serialized.
   If you are replacing a component in a hierarchy, then enter the parent instance first and then select the appropriate component instance. If you are replacing the highest node (top level parent, assembly item) in a hierarchy, then you can directly enter an instance number without entering the parent instance.

6. Click the Replace/Upgrade tab.

7. Select the relationship type Replaced By.
   This value is derived from seeded Oracle Depot Repair Relationship Type setup codes. Enter the to-be-shipped item number in the inventory item field.
   
   **Note:** If you were in the Source Transaction Details tab when you clicked the Replace/Upgrade subtab, then the relationship type shows as "Replacement for."

8. Select the Txfr Components check box if you want the components under the old item instance to be transferred under the new item instance. This feature works only if the new item is a standalone item with no components attached. If the new item has components attached, then the box is ignored and components from the old instance are not transferred.

9. Save your entries.
   Following shipment, Oracle Depot Repair creates a replaced-by relationship from the to-be-replaced instance to the to-be-shipped item.

**Accessing the Installation Details HTML Page**

Users can create, update, delete, and query source transaction line details, party details, and account details in the Installation Details HTML page.

Access the Installation Details HTML page through the Order Management HTML user interface as follows:
1. Select the Order Management, HTML User Interface.

2. The Orders page appears with a list of orders.

3. Select an order and click the Order Lines tab.

4. In the Order Lines tab, select a line.

5. Click the Actions list to view the actions you can perform for a line.

6. Select Installation Details and click Go.

The Installation Details page appears.

Note: The Installation Details HTML page, currently supports only Source Transaction Line Details with Party and Account Details for Sales Order Shipping and RMA transactions.

Details related to Replacement/Upgrade transactions are not yet
supported in the HTML Installation Details page.

**Using the WIP Component Install Window**

Oracle Installed Base configurations are generally created using job requirement quantities. When the issued quantity does not match the job requirement quantity, excess components are left free standing and are not attached as part of an Installed Base top assembly configuration. You can use the Installed Base component install (WIP) windows to allocate these freestanding or non-allocated components to specific assembly configurations following WIP assembly completion.

**Note:** With reference to WIP and Installed Base integration:

- Configurations are built only for serialized top assemblies.

- The functionality is relevant to multi quantity WIP jobs.

**Attaching Non-Allocated Components**

Use this procedure to allocate freestanding or non-allocated components to specific assembly configurations following WIP assembly completion.

**Prerequisites**

You must have completed a job and created at least one serialized assembly.

**Steps**

1. Using the Oracle Install Base Administrator responsibility, navigate to IB Component Install (WIP).

   The WIP Component Install window appears.
2. Enter a WIP job name.

3. Tab to the next region.
   The window displays assemblies created by your job.

4. Click in a row to select a specific assembly to which you want to attach unattached components.

5. Click Component Details.
   The Component Details region of the Assembly window displays unattached components for the job.
6. Select the Link check box for any component that you want to attach to the serial assembly.

7. Click Save to save your changes.

The WIP Component Install window reappears.

8. Click WIP Process to submit a concurrent job to attach components to desired assemblies.

9. Optionally, query the job until it displays an assembly status of Processed, which denotes successful processing.

---

Using the Order Management Item Instance Query Window

The Item Instance Query window displays existing configured item instances, including attributes and components, primarily to support the Oracle Order Management Telecommunications Service Ordering (TSO) functionality using Sales Orders or Quick Sales Orders windows. The Item Instance Query window provides integration and flexibility in entering TSO changes from multiple sources.

Here are key features of the window:

- Ability to query instances based on a wide range of query parameters including extended attributes.

- Ability to view configurations, in a tree structure, from the Sales Order window and select those instances where you want the configuration to change.

- When called from the Sales Orders window, the ability to return a PL/SQL table of
records for processing by Oracle Order Management.

Steps

1. To make a query through Oracle Order Management so that you can return values to that application, perform the steps below:

   1. Using the Order Management Super User responsibility, select Orders, Returns > Sales Orders.
      
The Sales Orders window appears.

   2. Create or query an order.

   3. Click the Line Items tab.

   4. Enter an order line.

   5. Click Actions.
      
The Actions window appears.

   6. Select Item Instance Query, and click OK.
      
The Item Instance Query window appears.
2. In the top region, specify the criteria for your instances, and click Find.

The results of the search appear in the Query Results tab. Extended-attribute information for a selected instance appears in the bottom region of the Item Instance Query window.

3. To add an instance from the Query Results tab to the list on the Selected Instances tab, either select its Select box or select the instance and click Add to Selected.

4. In the Query Results tab, select an instance and then click the Configuration tab to see any configuration for that instance.

5. Select any node, either parent or child, and click Add to Selected to add the node to the list in the Selected Instances tab.

6. To remove an instance from Selected Instances, select an instance there and click Remove from Selected.

7. Click Done to close the window, pass a PL/SQL table of selected instances to the calling window if there is one, and clear the PL/SQL table.

The selected instances are not stored in any database table. After you close the window, you cannot go back and add more instances to those that you selected.
Tracking Customer-Owned Item Instances Using Oracle Installed Base

Your business may find it sufficient to track only customer owned item instances. You can use the Only Customer Owned Instances option to restrict tracking to customer owned instances only, while performing after sale transactions such as RMAs and Field Service Returns on the Installed Base instances. Tracking these types of customer-owned instances provides the ability to address after sales needs.

**Important:** This feature is not available for Oracle Asset Tracking or Oracle Enterprise Asset Management customers.

See Setting Up Installation Parameters, page 8-14 for more information.

By enabling this option, the Installed Base tracking process restricts itself from creating any internal instances and the lifecycle of the Installed Base tracked item starts only on the order fulfillment to external customers.

You can use Oracle Installed Base to perform the following customer-owned item instance transactions:

- Update and create customer-owned item instance configurations through Sales Order Fulfillment.
- Update customer-owned item instances or configurations through RMA fulfillment.
- Create and update customer-owned item instances or configurations through Field Service requests.

**Note:** The item instance is expired if the ownership is changed back to the enterprise such as in the case of an RMA.

**Prerequisites**

- You must perform the following steps before you can create or update customer-owned (fulfillment) Installed Base item instances:
  1. Run the Set IB Tracking Level to Only Customer Owned Instances concurrent program to set the IB Tracking field on the Install Parameters page (Installed Base Administrator > Setups > Install Parameters).
  2. Navigate to the Installed Base Requests page (Oracle Installed Base Administrator > Others > Requests).
  3. Select the Set IB Tracking Level to Only Customer Owned Instances value in the Name field.
3. Click Submit.

2. Run the Interface OM Fulfilled Lines concurrent program.
   1. Navigate to the Installed Base Requests page (Install Base Administrator > Others > Requests > Submit a New Request > Single Request)

2. Select the Interface OM Fulfilled Lines value in the Name field.

3. Select other criteria such as Operating Unit and Parameters.

4. Click the Schedule button to schedule this process to poll the interface table and process the order fulfillment transactions on a specific basis.

5. Click Submit.

Related Topics
Order Capture, *Oracle Order Management User’s Guide*
Overview of Returns, Order Capture, *Oracle Order Management User’s Guide*
Creating Service Requests and Field Service Tasks, *Oracle Field Service User Guide*
Using the Open Interface Program

This chapter covers the following topics:

• Overview of the Open Interface Program
• Running the Open Interface Program
• Guidelines for Loading Open Interface Tables
• Considerations for Populating Open Interface Tables
• Example of Creating Instances in Oracle Installed Base Using the Open Interface Tables

Overview of the Open Interface Program

Features

Oracle Installed Base provides the following Open Interface features:

• Initial mass load

  This imports significant volumes of data into Oracle Installed Base application tables. The data may be from multiple sources including external legacy systems.

  Key integration with Oracle E-Business Suite applications includes optional calls to Oracle Service Contracts for warranty creation and creation of counters during item instantiation using Open Interface functionality.

• Incremental load

  This synchronizes Oracle Installed Base with subsystems by importing item instances from different feeder systems on a frequent, on-going basis. This application ensures accuracy, consistency, and up-to-date information between multiple systems.

• Change functionality
This provides a mechanism to automate the process of adding as well as updating changes to item instance attributes including:

- Add new party relationships to existing item instances
- Add new physical attributes to the item instances
- Add new contact information
- Add new configuration elements
- Change the party relationships of existing instances
- Change contact information
- Change configuration (relationships between item instances)
- Remove and expire item instances
- Remove and expire configuration, cascading
- Remove and expire party relationships
- Remove and expire contact information

- Data validation
Imported data is validated to ensure data integrity with Oracle applications. You can set up and define rules to be applied for validation and manipulation of item instance data during the Open Interface Mass Load process.

Open Interface includes user interfaces to:

- Submit the Open Interface Import process
- View and update error transactions

**Note:** Oracle Installed Base Open Interface provides a user interface to view, update, and correct error transactions in the open interface tables. Using this user interface, you cannot view other transactions, such as initial load transactions and transactions without errors.

Oracle Installed Base Open Interface functionality is restricted to customer items. It does not support internal items and instance assets.
Process

The process overview for a user of the Oracle Installed Base Open Interface application is as follows:

1. Load data into a set of interface tables provided by Oracle Installed Base.

2. Run a mass load concurrent program that reads, validates, and posts the data into Oracle Installed Base tables. The program posts records that fail validation to Open Interface error tables.

3. Review and edit failed transactions.

4. Resubmit edited transactions for processing and loading into Oracle Installed Base.

Running the Open Interface Program

Use this procedure to run the Open Interface programs:

Steps

1. Load the Open Interface tables, using SQL Loader or a custom program.

2. Using the Forms mode and the Oracle Installed Base Administrator responsibility, navigate to Others > Requests.
   The Installed Base Requests window appears.

3. If you need general information about submitting requests, then click Help.

4. From the Name LOV, select either Installed Base Open Interface or Installed Base Open Interface-Parallel Concurrent Workers.
Oracle Installed Base has two programs available to process open interface records, Installed Base Open Interface and Installed Base Open Interface-Parallel Concurrent Workers.

Installed Base Open Interface submits the process to post records from the interface tables to the core Oracle Installed Base tables.

Installed Base Open Interface-Parallel Concurrent Workers submits the interface program with the Parallel Workers option, which indicates the number of parallel processes to be run. Interface transactions are evenly divided by this number, and the original concurrent request is submitted the number of times indicated by the parameter. The process enhances speed and performance of the mass load process and is used for high volume loads. The parallel workers feature is used only for creating Oracle Installed Base item instance, party, and account records. When loading the Open Interface tables, the Parallel Worker ID column must be populated with a value of -1. The transaction identifier column in table CSI_INSTANCE_INTERFACE must be null.

5. Click in the Parameters field.
   The Parameters window appears.

6. Enter the required parameters.
   Available Parameters:
   Source System Name: (Required). Selects from names loaded to Interface tables.
   Batch Name: (Optional). Provides ability to choose specific or all batches loaded to Open Interface tables.
   Resolve Oracle IDs: Yes = Derive IDs by matching item descriptions in interface
transactions with Oracle Inventory tables.


7. Click OK to return to the Installed Base Requests window.

8. Complete the information, and click Submit.

9. After the program has run, navigate to Open Interface Error Details.

   The Find Interface Errors window appears.

   ![Find Interface Errors Window](image)

10. Complete the desired entries, and click Find.

   The Open Interface Error Details window appears.

11. Review and edit error transaction details. Select the Process check box for transactions that you want to reprocess.

12. Save your changes.

13. Go to step 2 to resubmit the Installed Base Open Interface program to load the records into Oracle Installed Base tables.

Guidelines for Loading Open Interface Tables

The following are general guidelines to load Open Interface tables:

1. Set up the source system details before using the Open Interface functionality.

2. Use the appropriate value for Transaction_Identifier. The value must be unique for the same source_system_name.
3. Set replace_flag to Y only if the complete structure or image of the item instance is being processed.

4. Any type of transaction requires at least one row in the CSI_INSTANCE_INTERFACE table.

5. Child entity updates, such as instance_party_update and ip_account_update, must have a corresponding row with the same inst_interface_id in the csi_instance_interface table.

6. Get NEXTVAL from the respective instances for populating primary keys of the interface tables, as in the following examples:
   - INST_INTERFACE_ID from csi_instance_interface_s.nextval
   - IP_INTERFACE_ID from csi_i_party_interface_s.nextval
   - IEAV_INTERFACE_ID from csi_iea_value_interface_s.nextval
   - REL_INTERFACE_ID from csi_ii_relation_interface_s.nextval
   - IA_INTERFACE_ID from csi_asset_interface_s.nextval

7. Make sure that all the referenced entities are populated with their respective IDs before running the Open Interface program. For example, inventory_item exists in mtl_system_items, party exists in the respective party tables, and order line exists in the order entry tables.

8. When including pricing attributes on an instance, make sure that the Pricing Context Flexfield (QP_ATTR_DEFNS_PRICING) has the Context Field Code Value defined and the related segments specified.

9. The Open Interface program resolves the IDs from different tables from the descriptive values provided in the interface tables and also validates the existence of all the referenced IDs.

10. Transaction Identifier along with Source_System_Name is used to identify the set of instances and instance relationships. This set is committed as a single database transaction.

The following table shows the column names and table views used for validations.
**Table: Columns and Views Used for Validations**

<table>
<thead>
<tr>
<th>Reference Number</th>
<th>Column Name</th>
<th>Table and View Used for Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>CSI_INSTANCE_INTERFACE</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>Inventory_item_id</td>
<td>Mtl_system_items_kfv</td>
</tr>
<tr>
<td>2</td>
<td>Inv_vld_organization_id</td>
<td>Hr_all_organization_units</td>
</tr>
<tr>
<td>3</td>
<td>Unit_of_measure_code</td>
<td>Mtl_all_primary_uoms_vv</td>
</tr>
<tr>
<td>4</td>
<td>Serial_number</td>
<td>Mtl_serial_numbers</td>
</tr>
<tr>
<td>5</td>
<td>Lot_number</td>
<td>Mtl_lot_numbers</td>
</tr>
<tr>
<td>6</td>
<td>Project_id</td>
<td>Pa_projects_all</td>
</tr>
<tr>
<td>7</td>
<td>Task_id</td>
<td>Pa_tasks</td>
</tr>
<tr>
<td>8</td>
<td>Inv_organization_id</td>
<td>Mtl_organizations</td>
</tr>
<tr>
<td>9</td>
<td>Wip_job_id</td>
<td>Wip_entities</td>
</tr>
<tr>
<td>10</td>
<td>Po_order_line_id</td>
<td>Po_headers_all, po_lines_all</td>
</tr>
<tr>
<td>11</td>
<td>Oe_order_line_id</td>
<td>Oe_order_headers_all, oe_order_lines_all</td>
</tr>
<tr>
<td>12</td>
<td>Intransit_order_line_id</td>
<td>Oe_order_headers_all, oe_order_lines_all</td>
</tr>
<tr>
<td>13</td>
<td>Oe_rma_line_id</td>
<td>Oe_order_headers_all, oe_order_lines_all</td>
</tr>
<tr>
<td>14</td>
<td>Operating_unit</td>
<td>Hr_operating_units</td>
</tr>
<tr>
<td>15</td>
<td>Instance_condition_id</td>
<td>Mtl_material_statuses</td>
</tr>
<tr>
<td>16</td>
<td>Instance_status_id</td>
<td>Csi_instance_statuses</td>
</tr>
</tbody>
</table>
The following table provides information about the setup of the source system.

### Setup of the Source System

<table>
<thead>
<tr>
<th>Reference Number</th>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Source System ID</td>
<td>You can get the next value from the sequence CSI_INSTANCE_SOURCES_S.</td>
</tr>
<tr>
<td>2</td>
<td>Source System Name</td>
<td>Unique name of the source system from which the item instances are interfaced.</td>
</tr>
</tbody>
</table>
### Reference Number Parameter Description

<table>
<thead>
<tr>
<th>Reference Number</th>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Source_lang</td>
<td>Source language of the descriptive data such as party name to be used to get IDs.</td>
</tr>
</tbody>
</table>

The following table describes the table columns that are specific to Open Interface.

**Table Columns Specific to Open Interface**

<table>
<thead>
<tr>
<th>Reference Number</th>
<th>Column Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INST_INTERFACE_ID</td>
<td>This is the Primary key for the table. Interfaced rows are processed in the order of this key. You can get the next value from the sequence CSI_INSTANCE_INTERFACE_S.</td>
</tr>
<tr>
<td>2</td>
<td>IP_INTERFACE_ID</td>
<td>You can get the next value from the sequence CSI_I_PARTY_INTERFACE_S.</td>
</tr>
<tr>
<td>3</td>
<td>IEAV_INTERFACE_ID</td>
<td>You can get the next value from the sequence CSI_IEA_VALUE_INTERFACE_S.</td>
</tr>
<tr>
<td>4</td>
<td>REL_INTERFACE_ID</td>
<td>You can get the next value from the sequence CSI_INST_REL_INTERFACE_S.</td>
</tr>
<tr>
<td>5</td>
<td>IA_INTERFACE_ID</td>
<td>You can get the next value from the sequence CSI_ASSET_INTERFACE_S.</td>
</tr>
<tr>
<td>Reference Number</td>
<td>Column Name</td>
<td>Description</td>
</tr>
<tr>
<td>------------------</td>
<td>------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>TRANSACTION_IDENTIFIER</td>
<td>There is a composite uniqueness on transaction_identifier and source_system_name. All the records corresponding to the same transaction_identifier are processed as a single database transaction. If you are creating an top assembly, then you must stamp all the corresponding records in all the Oracle Installed Base Open Interface tables with the same transaction_identifier.</td>
</tr>
<tr>
<td>6</td>
<td>PROCESS_STATUS</td>
<td>You must populate this column with ‘R’, used for READY. The processor picks only those records with ‘R’ value. The processor sets this values to ‘P’ if processed OK or ‘E’ if there is an ERROR while processing.</td>
</tr>
<tr>
<td>7</td>
<td>PARALLEL_WORKER_ID</td>
<td>For internal use only. When the parallel processing feature is used, this column gets populated by an internal program. When using the parallel worker feature, set this to (-1) for those records in the interface table that will use parallel workers.</td>
</tr>
</tbody>
</table>

**Considerations for Populating Open Interface Tables**

You must have a unique transaction identifier for every source system.

You must have a record in the CSI_INSTANCE_INTERFACE table for every instance that you process. You must reference the same inst_interface_id in the corresponding rows in the other child or relationship interface tables such as CSI_I_PARTY_INTERFACE, CSI_IEA_VALUE_INTERFACE, or CSI_II_RELATION_INTERFACE.

If you want to update a specific item instance, then you must provide the instance
number in the interface table CSI_INSTANCE_INTERFACE.

When you want to create an instance-instance relationship for new instances, you must populate the CSI_INSTANCE_INTERFACE table with the instance details and reference the INST_INTERFACE_ID as SUBJECT_INTERFACE_ID or OBJECT_INTERFACE_ID in the CSI_II_RELATION_INTERFACE table.

When you want to create an instance-instance relationship for existing instances, you must populate corresponding rows in the CSI_INSTANCE_INTERFACE table with the instance number and then reference those INST_INTERFACE_IDS as SUBJECT_INTERFACE_ID or OBJECT_INTERFACE_ID in the CSI_II_RELATION_INTERFACE table appropriately.

Refer to the following table for descriptions of how to populate the interface tables under various scenarios.

**Scenarios for Populating Interface Tables**

<table>
<thead>
<tr>
<th>Reference Number</th>
<th>Scenario</th>
<th>How to Populate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Create an item instance with one party</td>
<td>A row in the table CSI_INSTANCE_INTERFACE and a row in the table CSI_I_PARTY_INTERFACE referencing the INST_INTERFACE_ID of the parent table.</td>
</tr>
<tr>
<td>2</td>
<td>Create an item instance with one party and an party account</td>
<td>A row in the table CSI_INSTANCE_INTERFACE and a row in the table CSI_I_PARTY_INTERFACE with Party details and Party Account details. Reference the INST_INTERFACE_ID of the parent table in the child table.</td>
</tr>
<tr>
<td>Reference Number</td>
<td>Scenario</td>
<td>How to Populate</td>
</tr>
<tr>
<td>------------------</td>
<td>----------</td>
<td>-----------------</td>
</tr>
<tr>
<td>3</td>
<td>Create an item instance with one party and an extended attribute value</td>
<td>The extended attribute has to be set up prior to the interface process. You need to create a row in CSI_INSTANCE_INTERFACE. A row in the table CSI_I_PARTY_INTERFACE and a row in CS_IEA_VALUE_INTERFACE. All the child table rows to have referenced INST_INTERFACE_ID.</td>
</tr>
<tr>
<td>4</td>
<td>Change the owner</td>
<td>One row in CSI_INSTANCE_INTERFACE table with instance_number, new party details and INST_INTERFACE_ID in the table CSI_I_PARTY_INTERFACE.</td>
</tr>
<tr>
<td>5</td>
<td>Add Party Account</td>
<td>One row in CSI_INSTANCE_INTERFACE table with instance_number, details of to which party the account is added, new party account details in the table CSI_I_PARTY_INTERFACE.</td>
</tr>
<tr>
<td>6</td>
<td>Update party account details</td>
<td>One row in CSI_INSTANCE_INTERFACE table with instance_number, details of updated party account in the table CSI_I_PARTY_INTERFACE.</td>
</tr>
<tr>
<td>7</td>
<td>Remove a party account</td>
<td>One row in CSI_INSTANCE_INTERFACE table with instance_number, details of updated party account with an end date in the table CSI_I_PARTY_INTERFACE.</td>
</tr>
<tr>
<td>Reference Number</td>
<td>Scenario</td>
<td>How to Populate</td>
</tr>
<tr>
<td>------------------</td>
<td>---------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>8</td>
<td>Add a pricing attribute</td>
<td>One row in the CSI_INSTANCE_INTERFAC E with instance number and pricing attribute details in the same record.</td>
</tr>
<tr>
<td>9</td>
<td>Add an org assignment</td>
<td>One row in the CSI_INSTANCE_INTERFAC E with instance number and organization assignment details in the same record.</td>
</tr>
<tr>
<td>10</td>
<td>Remove a pricing attribute</td>
<td>One row in the CSI_INSTANCE_INTERFAC E with instance number and pricing attribute context and pricing attribute end date in the same record.</td>
</tr>
<tr>
<td>11</td>
<td>Update a pricing attribute</td>
<td>One row in the CSI_INSTANCE_INTERFAC E with instance number and changed pricing attribute details in the same record.</td>
</tr>
<tr>
<td>12</td>
<td>Remove an organization assignment</td>
<td>One row in the CSI_INSTANCE_INTERFAC E with instance number and organization assignment identifiers and org_assignment end date in the same record.</td>
</tr>
<tr>
<td>13</td>
<td>Add an extended attribute value</td>
<td>One row in the CSI_INSTANCE_INTERFAC E with instance number and one row in CSI_IEA_VALUE_INTERFAC E with details of new extended attribute value.</td>
</tr>
</tbody>
</table>
### Example of Creating Instances in Oracle Installed Base Using the Open Interface Tables

The following is an example of creating two instances in Oracle Installed Base using the Open Interface tables.

Each Customer Product instance will have its own owner party and owner account.

The steps also include the creation of an instance-to-instance relationship/configuration between the newly created Customer Products.

The topics in this section are as follows:

- Initial Setup, page 9-14
- Load the Interface Tables, page 9-15
- Run the Installed Base Open Interface Program, page 9-23
- Confirm Records Created Successfully, page 9-23

### Initial Setup

Before using the open interface functionality, you must complete the mandatory source system details setup. This can be achieved by populating at least one record into the
CSI_INTERFACE_SOURCES table.

The following is a sample script that can be used to populate a record into the CSI_INTERFACE_SOURCES table.

Declare
Begin
Insert into CSI_INTERFACE_SOURCES
(SOURCE_SYSTEM_ID,
 SOURCE_SYSTEM_NAME,
 SOURCE_DESCRIPTION,
 SOURCE_LANG,
 CREATED_BY, CREATION_DATE,LAST_UPDATED_BY,LAST_UPDATE_DATE,
 LAST_UPDATE_LOGIN)
Values
(CSI_INTERFACE_SOURCES_S.nextval,
 'ENTERPRISE MANAGER',
 'Enterprise Manager',
 'US',
 FND_GLOBAL.USER_ID, Sysdate, FND_GLOBAL.USER_ID, Sysdate, FND_GLOBAL.USER_ID);
Commit;
End;
/

Note: Open interface functionality allows populating multiple records into CSI_INTERFACE_SOURCES table. However, each record must have a unique source system name.

-------------------------------------------------------------------------------

Load the Interface Tables

The following is a sample script that can be used to populate the interface tables.
SET SERVEROUTPUT ON SIZE 1000000
DECLARE
Begin
Insert into CSI_INSTANCE_INTERFACE
(INST_INTERFACE_ID,
SOURCE_SYSTEM_NAME,
PARALLEL_WORKER_ID,
REPLACE_FLAG,
TRANSACTION_IDENTIFIER,
SOURCE_TRANSACTION_DATE,
SOURCE_TRANSACTION_TYPE,
INSTANCE_ID,
INSTANCE_NUMBER,
INSTANCE_DESCRIPTION,
EXTERNAL_REFERENCE,
PROCESS_STATUS,
BATCH_NAME,
ERROR_TEXT,
INVENTORY_ITEM_ID,
INV_CONCATENATED_SEGMENTS,
INVENTORY_REVISION,
INV_VLD_ORGANIZATION_ID,
INV_VLD_ORGANIZATION_NAME,
SERIAL_NUMBER,
MFG_SERIAL_NUMBER_FLAG,
LOT_NUMBER,
QUANTITY,
UNIT_OF_MEASURE_CODE,
UNIT_OF_MEASURE,
ACCOUNTING_CLASS_CODE,
INSTANCE_CONDITION_ID,
INSTANCE_CONDITION,
INSTANCE_STATUS_ID,
INSTANCE_STATUS,
CUSTOMER_VIEW_FLAG,
MERCHANT_VIEW_FLAG,
SELLABLE_FLAG,
SYSTEM_ID,
SYSTEM_NUMBER,
INSTANCE_START_DATE,
INSTANCE_END_DATE,
INSTANCE_TYPE_CODE,
LOCATION_TYPE_CODE,
LOCATION_ID,
INV_ORGANIZATION_ID,
INV_ORGANIZATION_CODE,
INV_ORGANIZATION_NAME,
INV_SUBINVENTORY_NAME,
INV_LOCATOR_NUMBER,
INV_LOCATOR_ID,
PROJECT_ID,
PROJECT_NUMBER,
TASK_ID,
TASK_NUMBER,
IN_TRANSIT_ORDER_LINE_ID,
IN_TRANSIT_ORDER_LINE_NUMBER,
WIP_JOB_ID,
WIP_JOB_NAME,
PO_ORDER_LINE_ID,
PO_ORDER_LINE_NUMBER,
OE_ORDER_LINE_ID,
OE_ORDER_LINE_NUMBER,
OE_RMA_LINE_ID,
OE_RMA_LINE_NUMBER,
PO_PO_LINE_ID,
PO_PO_LINE_NUMBER
Insert into CSI_I_PARTY_INTERFACE
(IP_INTERFACE_ID,
INST_INTERFACE_ID,
PARALLEL_WORKER_ID,
ERROR_TEXT,
PARTY_ID,
PARTY_NUMBER,
INSTANCE_PARTY_ID,
PARTY_NAME,
PARTY_SOURCE_TABLE,
PARTY_RELATIONSHIP_TYPE_CODE,
PARTY_START_DATE,
PARTY_END_DATE,
CONTACT_FLAG,
CONTACT_IP_ID,
CONTACT_PARTY_NUMBER,
CONTACT_PARTY_NAME,
CONTACT_PARTY_ID,
CONTACT_PARTY_REL_TYPE,
IP_ACCOUNT1_ID,
PARTY_ACCOUNT1_ID,
PARTY_ACCOUNT1_ID,
ACCT1_RELATIONSHIP_TYPE_CODE,
PARTY_ACCT1_START_DATE,
PARTY_ACCT1_END_DATE,
BILL_TO_ADDRESS1,
SHIP_TO_ADDRESS1,
IP_ACCOUNT2_ID,
PARTY_ACCOUNT2_ID,
PARTY_ACCOUNT2_ID,
ACCT2_RELATIONSHIP_TYPE_CODE,
PARTY_ACCT2_START_DATE,
PARTY_ACCT2_END_DATE,
BILL_TO_ADDRESS2,
SHIP_TO_ADDRESS2,
IP_ACCOUNT3_ID,
PARTY_ACCOUNT3_ID,
PARTY_ACCOUNT3_ID,
ACCT3_RELATIONSHIP_TYPE_CODE,
PARTY_ACCT3_START_DATE,
PARTY_ACCT3_END_DATE,
BILL_TO_ADDRESS3,
SHIP_TO_ADDRESS3,
CREATED_BY,CREATION_DATE,LAST_UPDATED_BY,LAST_UPDATE_DATE)
values
(CSI_I_PARTY_INTERFACE_S.NEXTVAL,
CSI_INSTANCE_INTERFACE_S.currval,null,null,null,null,'Imaging Innovations, Inc.','HZ_PARTIES','OWNER',null,null,'N',null,null,null,null,null,'1002',null,'OWNER',null,null,null,null,null,null,null,null,null,null,null,null,null,null,
FND_GLOBAL.USER_ID,sysdate,FND_GLOBAL.USER_ID,sysdate);
Insert into CSI_INSTANCE_INTERFACE
(INST_INTERFACE_ID,
SOURCE_SYSTEM_NAME,
PARALLEL_WORKER_ID,
REPLACE_FLAG,
TRANSACTION_IDENTIFIER,
SOURCE_TRANSACTION_DATE,
SOURCE_TRANSACTION_TYPE,
INSTANCE_ID,
INSTANCE_NUMBER,
INSTANCE_DESCRIPTION,
EXTERNAL_REFERENCE,
PROCESS_STATUS,
BATCH_NAME,
ERROR_TEXT,
INVENTORY_ITEM_ID,
INV_CONCATENATED_SEGMENTS,
INVENTORY_REVISION,
INV_VLD_ORGANIZATION_ID,
INV_VLD_ORGANIZATION_NAME,
SERIAL_NUMBER,
MFG_SERIAL_NUMBER_FLAG,
LOT_NUMBER,
QUANTITY,
UNIT_OF_MEASURE_CODE,
UNIT_OF_MEASURE,
ACCOUNTING_CLASS_CODE,
INSTANCE_CONDITION_ID,
INSTANCE_CONDITION,
INSTANCE_STATUS_ID,
INSTANCE_STATUS,
CUSTOMER_VIEW_FLAG,
MERCHANT_VIEW_FLAG,
SELLABLE_FLAG,
SYSTEM_ID,
SYSTEM_NUMBER,
INSTANCE_START_DATE,
INSTANCE_END_DATE,
INSTANCE_TYPE_CODE,
LOCATION_TYPE_CODE,
LOCATION_ID,
INV_ORGANIZATION_ID,
INV_ORGANIZATION_CODE,
INV_ORGANIZATION_NAME,
INV_SUBINVENTORY_NAME,
INV_LOCATOR_NUMBER,
INV_LOCATOR_ID,
PROJECT_ID,
PROJECT_NUMBER,
TASK_ID,
TASK_NUMBER,
IN_TRANSIT_ORDER_LINE_ID,
IN_TRANSIT_ORDER_LINE_NUMBER,
WIP_JOB_ID,
WIP_JOB_NAME,
PO_ORDER_LINE_ID,
PO_ORDER_LINE_NUMBER,
OE_ORDER_LINE_ID,
OE_ORDER_LINE_NUMBER,
OE_RMA_LINE_ID,
OE_RMA_LINE_NUMBER,
PO_PO_LINE_ID,
PO_PO_LINE_NUMBER,
OE_PO_NUMBER,
OE_AGREEMENT_ID,
INSTALL_LOCATION_TYPE_CODE
)
values
(CSI_INSTANCE_INTERFACE_S.NEXTVAL
,'ENTERPRISE MANAGER',null,null
,'100'
,sysdate,null,null ,null
,'Instance creation',null
,'R',null,null,null
,'AS72111'
,'A',null
,'Vision Operations',null
,'N',null
,1 ,null
,'Each',null,null,null ,null
,'CREATED'
,'Y'
,'Y'
,'Y' ,null ,null ,null ,null ，null ,null
,'HZ_PARTY_SITES'
,1020 ,null ,null ,null ,null ,null ,null ,null ,null ,null ,null ,null ,null
,null ,null ,null ,null ,null ,null ,null ,null ,null ,null ,null ,null
,null ,null ,null ,null ,null ,null ,null ,null ,null ,null ,null ,null
,null ,null ,null ,null ,null ,null ,null ,null ,null ,null ,null ,null
,null ,null ,null ,null ,null ,null ,null ,null ,null ,null ,null ,null
,FND_GLOBAL.USER_ID ,sysdate ,FND_GLOBAL.USER_ID ,sysdate);
Insert into CSI_I_PARTY_INTERFACE
(IP_INTERFACE_ID
,INST_INTERFACE_ID
,PARALLEL_WORKER_ID
,ERROR_TEXT
,PARTY_ID
,PARTY_NUMBER
,INSTANCE_PARTY_ID
,PARTY_NAME
,PARTY_SOURCE_TABLE
,PARTY_RELATIONSHIP_TYPE_CODE
,PARTY_START_DATE
,PARTY_END_DATE
,CONTACT_FLAG
,CONTACT_IP_ID
,CONTACT_PARTY_NUMBER
,CONTACT_PARTY_NAME
,CONTACT_PARTY_ID
,CONTACT_PARTY_REL_TYPE
,IP_ACCOUNT1_ID
,PARTY_ACCOUNT1_ID
,PARTY_ACCOUNT1_ID
,ACCT1_RELATIONSHIP_TYPE_CODE
,PARTY_ACCT1_START_DATE
,PARTY_ACCT1_END_DATE
,BILL_TO_ADDRESS1
,SHIP_TO_ADDRESS1
,IP_ACCOUNT2_ID
,PARTY_ACCOUNT2_ID
,PARTY_ACCOUNT2_ID
,ACCT2_RELATIONSHIP_TYPE_CODE
,PARTY_ACCT2_START_DATE
,PARTY_ACCT2_END_DATE
,BILL_TO_ADDRESS2
,SHIP_TO_ADDRESS2
,IP_ACCOUNT3_ID
,PARTY_ACCOUNT3_ID
,PARTY_ACCOUNT3_ID
,ACCT3_RELATIONSHIP_TYPE_CODE
,PARTY_ACCT3_START_DATE
,PARTY_ACCT3_END_DATE
,BILL_TO_ADDRESS3
,SHIP_TO_ADDRESS3
,CREATED_BY
,CREATION_DATE
,LAST_UPDATED_BY
,LAST_UPDATE_DATE)
values
(CSI_I_PARTY_INTERFACE_S.NEXTVAL
,CSI_INSTANCE_INTERFACE_S.currval,null,null,null
,null
,'Imaging Innovations, Inc.'
,'OWNER' ,null ,null
,'N' ,null ,null ,null ,null
,'1002' ,null
,'OWNER' ,null ,null ,null ,null ,null ,null ,null ,null
,null
,null
,null ,null ,null ,null ,null ,null ,null ,null
,FND_GLOBAL.USER_ID ,sysdate ,FND_GLOBAL.USER_ID ,sysdate
);
Insert into CSI_II_RELATION_INTERFACE
(rel_interface_id,
parallel_worker_id,
subject_interface_id,
object_interface_id,
relationship_type_code,
relationship_start_date,
relationship_end_date,
position_reference,
display_order,
mandatory_flag,
relationship_direction,
error_text,
context,
attribute1, attribute2, attribute3, attribute4, attribute5,
attribute6, attribute7, attribute8, attribute9, attribute10,
attribute11, attribute12, attribute13, attribute14, attribute15,
created_by, creation_date, last_updated_by, last_update_date,
last_update_login)
values
(CSI_II_RELATION_INTERFACE_S.nextval,
null,
CSI_INSTANCE_INTERFACE_S.currval,
CSI_INSTANCE_INTERFACE_S.currval-1,
'COMPONENT-OF',
SYSDATE,
null,null,null,null,null,null,null,null,null
,null,null,null,null,null
, FND_GLOBAL.USER_ID,
sysdate,
FND_GLOBAL.USER_ID,
sysdate ,null);

Insert into CSI_IEA_VALUE_INTERFACE
(ieav_interface_id,
inst_interface_id,
parallel_worker_id,
error_text,
attribute_id,
inv_concatenated_segments,
inventory_item_id,
master_organization_id,
master_organization_name,
item_category_conc_seg,
item_category_id,
attribute_code,
attribute_name,
attribute_level,
attribute_category,
attribute_value,
attribute_value_id,
ieav_start_date,
ieav_end_date,
created_by, creation_date, last_updated_by, last_update_date,
last_update_login)
Values
(CSI_IEA_VALUE_INTERFACE_S.nextval,
CSI_INSTANCE_INTERFACE_S.currval-1, null, null,
'AS72111', null, null,
'Vision Operations', null, null,
'ADAPTER_NAME', null,
'ITEM', null,
'NETWORK_ADAPTER', null, null, null
, FND_GLOBAL.USER_ID, sysdate, FND_GLOBAL.USER_ID, sysdate, null);
commit;
Exception
When others
Then
Null;
End;
/

After execution of the script, confirm the appropriate records have been inserted into
the CSI_INSTANCE_INTERFACE, CSI_I_PARTY_INTERFACE,
CSI_IEA_VALUE_INTERFACE and CSI_II_RELATION_INTERFACE tables.

**Run Installed Base Open Interface Program**

Run Installed Base Open Interface concurrent program by entering values in the
mandatory parameters, Source System Name and Resolve Oracle IDs.

In this case Source System Name is Enterprise Manager and Resolve Oracle IDs should
be set to ‘Yes’.

Verify the concurrent program completed successfully by clicking on the View Log
button from View Request screen. The Customer Product numbers should be listed in
this Log file.

**Confirm Records Created Successfully**

As a result of the successful completion of the Installed Base Open Interface concurrent
program, the Installed Base tables should now be populated. There should be no errors
in the Open Interface Error Details form and your new Customer Products should exist
in View Customer Products. You can view them by searching on the Customer Product
number (Instance number) found in the Installed Base Interface Log file. You can also
view the relationship by clicking the Configuration link.
This chapter covers the following topics:

- Overview of Purge Transactions Concurrent Programs
- Running the Installed Base Transactions History Purge Concurrent Program
- Running the Purge IB Transaction Interface Data Concurrent Program

Overview of Purge Transactions Concurrent Programs

Oracle Installed Base provides the functionality to view the history of changes to an item instance in the Transaction link and the History link. Although this is an extremely useful feature, the storage of this data makes up the bulk of data tied to an instance, especially if the instance has a long transaction history. For instances with frequent changes and a long transaction history, older, historical transactions consume significant storage space. In certain cases, this has an adverse impact on performance.

To address these issues, the application provides a utility to purge history transactions tied to an instance. Given a start date, you can run the utility to purge all the transaction data with dates older than the specified date and store the data in a table.

In addition, you can run the Purge IB Transaction Interface Data concurrent program to purge high volumes of old data in the interface table, CSI_TRANSACTIONS_INTERFACE, and to improve the performance of the concurrent program Interface Install Base Lines.

Running the Installed Base Transactions History Purge Concurrent Program

Use the Installed Base Transactions History Purge concurrent program to purge all transaction data with dates older than a specified date and store the data in a table.

**Warning:** Be extremely careful when using this program. After you
have purged transactions, the application cannot automatically restore them.

1. Using the Oracle Install Base Administrator responsibility, select Others > Requests.

2. Navigate to the Installed Base Requests window.


4. Enter the date before which transaction data will be purged in the Purge_to_Date field.

5. Click the OK button.

6. Optionally enter additional values in the main window.

7. Click Submit.

Running the Purge IB Transaction Interface Data Concurrent Program

Use these steps to run the Purge IB Transaction Interface Data concurrent program to purge all transaction old data in the interface table, CSI_TRANSACTIONS_INTERFACE, based on a specific range of months.

1. Using the Oracle Install Base Administrator responsibility, select Others > Requests.

2. Navigate to the Installed Base Requests window.


4. Enter a value between 12 and 999 in the Number of Months parameter.

5. Click the OK button.

6. Click the Submit button.
Part 2

Counters
Overview of Counters

This chapter covers the following topics:

• Introduction
• About Counters
• Use of Counters in Oracle Applications
• Counters Terminology
• Overview of Setting Up and Creating Counters
• Counter Types
• About Source and Target Counters
• About Counter Properties
• Overview of Setup and Usage of Counter Properties
• Example of Setup and Usage of Counter Properties
• About Estimation Methods

Introduction

This chapter consists of the following topics:

• About Counters, page 11-2
• Use of Counters in Oracle Applications, page 11-3
• Counters Terminology, page 11-4
• Overview of Setting Up and Creating Counters, page 11-5
• Counter Types, page 11-6
• About Source and Target Counters, page 11-7
• About Counter Properties, page 11-8
• About Estimation Methods, page 11-12

About Counters

In Oracle Installed Base, you can define counters to track the usage of a customer’s item or service, and subsequently, in several Oracle applications, execute business processes that are based on the usage information.

Common everyday objects that have counters are automobile odometers, gas and electric meters, and office equipment such as photocopier machines.

Counters provide a mechanism for tracking new item warranties, service contracts, support agreements, and similar business needs. Service providers rely on counters that record or measure usage, time and distance units to closely track the usage of a tangible item or a service. They can use the measurements to:

• Manage item warranties and external warranties
• Manage service, rental, and leasing contracts
• Know when the time has come to reorder or ship parts
• Determine billing cycles and rate change
• Trigger item preventive maintenance or overhauls
• Calculate item reliability
• Perform lifecycle tracking

For example, a company that services photocopiers can use counters:

• To determine how often service must be performed on each piece of equipment.
• To know when consumable items such as toner cartridges and paper must be replenished at the customer’s site.

Contract or rental agreements can use counters to trigger the following actions:

• To alert the service provider that an upcoming event such as a preventive maintenance or overhaul is coming due.
• To automatically adjust a price formula or rate table change.
• To signal a contract renewal date or expiration date.

Customer support contracts can use counters:
• To monitor the total number of calls or time spent by the support agent on each call.
• To escalate those calls that have reached a critical status.

See Also

• Use of Counters in Oracle Applications, page 11-3
• Counters Terminology, page 11-4
• Overview of Setting Up and Creating Counters, page 11-5
• Counter Types, page 11-6
• About Source and Target Counters, page 11-7
• About Counter Properties, page 11-8
• About Estimation Methods, page 11-12

Use of Counters in Oracle Applications
You can define counters to track the usage of a customer’s item or service, and execute business processes that are based on the usage information, using the following Oracle applications:
• Oracle Installed Base
• Oracle TeleService
• Oracle Service Contracts
• Oracle Depot Repair
• Oracle Field Service
• Oracle Mobile Field Service
• Oracle Spares Management
• Oracle Complex Maintenance Repair and Overhaul
• Oracle Enterprise Asset Management
• Oracle Utility Billing
Counters Terminology

Contract Item
An item defined in inventory with a Contract Item Type of Service or Warranty.

Trackable Item
An item defined in inventory with the check box "Track in Installed Base" selected.

Usage Item
An item defined in inventory with a Contract Item Type of Usage. The main function of usage items is to provide pricing information for billing procedures.
A usage item is required for contract item counters, and optional for trackable item counters.

Counter Group
A mechanism to combine one or more counter templates.
If you set up counters for contract items, you must use counter groups in your setup; counter groups are optional for trackable item counters.

Counter Template
The definition of a counter. A counter template may belong to a counter group or it may be a standalone counter template.

Counter Instance
A counter instance is the database record of a real-life individual counter. Readings and usage measurements belong to a counter instance, not a counter template.

Associating Objects to Counters
You associate contract items or trackable items either with a counter group or with a counter template. The items associated with a counter group are automatically associated with all counter templates in the counter group.
You associate item instances or service contract lines with counter instances.

Counter Instantiation
Counter instantiation is the process of creating a counter instance in the database.
Automatic Instantiation of Counters

A counter instance can only be automatically instantiated during the execution of various Oracle application transactions if a counter template (and, in some cases, a counter group also) has been created in advance.

For example, when a trackable item is received into inventory, Oracle Inventory detects that the item is associated with a counter template or counter group, and automatically creates a counter instance during the receipt of the item into inventory.

Manual Creation of Counter Instances

Although the most common way that counters are set up and used is where counter instances are created automatically, you can also manually create counter instances. You create counter instances manually when you need to attach a counter to an existing item instance or a service contract line - that is, after, and not during, the creation of an item instance or service contract.

For the manual creation of a counter instance, you do not define counter groups or counter templates.

Overview of Setting Up and Creating Counters

There are two ways that counter instances are created in Oracle applications:

• Automatically, page 11-5
• Manually, page 11-6

Automatic Creation of Counter Instances

In Oracle Installed Base, you must first create a counter template, and in some cases, a counter group also. Then you must associate one or more trackable items or contract items to the counter template or counter group.

A counter instance is then created automatically when an item associated with the counter template or counter group is instantiated - that is, a service contract is created or a trackable item is received into inventory - as a result of a transaction in an Oracle application other than Oracle Installed Base.

The diagram following shows an overview of the process where counter instances are automatically created by general Oracle applications, and specifically, how the setups in Oracle Installed Base fit into the whole process.
Automatic Creation of Counter Instances: Overview

For details of the counters setup processes in Oracle Installed Base, which are required for the automatic creation of counter instances, see Counters Setup Overview, page 12-11.

Manual Creation of Counter Instances

You manually create a counter instance in Oracle Installed Base, and associate it with an existing item instance or an existing service contract line.

The diagram following shows an overview of the process where counter instances are created manually in Oracle Installed Base.

Note: Item instances can be created either manually in Oracle Installed Base or automatically as the result of other Oracle application transactions.

Counter Types

In Oracle Installed Base, there are several types of counter:

- Standard regular counter
The basic counter, for which you record readings.

**Note:** Standard regular counters are the only types of counter for which you take readings.

- **Time-based regular counter**
  
  A time-based counter measures time units, which are calculated when you run a concurrent program.

- **Formula-based counter, derived from a standard regular counter as follows:**
  
  - Sum of the regular counter readings
  
  - Count of the regular counter readings
  
  - Average of the regular counter readings
    
    This can derive either the average of the last N readings, or the average of all enabled readings.

- **Formula-based counter, derived from one or more standard regular counters for an associated item by a formula that can use SQL functions**
  
  This is often used to add the readings from several standard regular counters for an associated item, but any SQL-compatible expression is acceptable for the formula.

**About Source and Target Counters**

You can define source-target relationships between counter instances, where a target counter instance derives its readings from the source counter instance. A real-world example of a target counter is the trip meter associated with an odometer.

You can bill on target counter instances in addition to, or instead of, the source counter instance readings.

In Oracle Installed Base, both source and target counter instances must be standard regular counters, with the same UOM (unit of measure) code.

You create the source-target relationship during the process of creating the target counter instance, by entering source counter details in a special area of the Create Counter page. You must specify a numeric Factor, which is used to multiply the source counter readings to produce the target counter readings.

Subsequently, you can view the target counter instances associated with a source counter instance, and also view the target counter readings derived from the standard counter readings.
About Counter Properties

In Oracle Installed Base, counter properties are attributes and values that enable you, at counter capture time, to enter additional information about counter readings.

An example of a counter property is the name of the person who captures the counter reading.

You can add as many counter properties as you like to a counter. You may make any or all of the counter properties mandatory for a counter, that is, when a counter reading is entered, you must also enter a value for the mandatory counter property.

**Note:** Counter properties can only be associated with and attached to standard regular counters.

Terminology

**Counter Property Value Type**

Name of a user-defined attribute that you want to associate with a standard regular counter.

**Value Code**

Value of a counter property attribute that you want to select for a counter property reading.

Pre-Defined and Free-Form Counter Properties

You can set up counter properties that have pre-defined counter property values, which can be validated on data entry, or you can have "free-form" counter properties and values, that add extra information to a counter reading, without any validation.

You set up a pre-defined counter property by creating a counter property value type and associating values with that value type.

Use of Properties in Filters in Count and Sum Counters

Each count or sum counter derives its values from a standard regular counter. If the standard regular counter has properties, you can use these properties in filter conditions when defining the count or sum counter.

For example, you have defined a Property Name of Reading Method for the standard regular counter. One of the values for that property is EMP_READ. When you define a count or sum counter derived from the standard regular counter, you can include the filter condition Reading Method = EMP_READ.
### See Also
- Overview of Setup and Usage of Counter Properties, page 11-9
- Example of Setup and Usage of Counter Properties, page 11-10

### Overview of Setup and Usage of Counter Properties

The following diagram shows an overview of the elements involved in the setup and usage of pre-defined counter properties and their values.

![Diagram of Setup and Usage of Counter Properties]

In general:
- You can associate multiple counter property value types (together with their values) to a standard regular counter template or counter instance.
- You can associate the same counter property value type (together with its values) to many standard regular counter templates and counter instances.

### Overview of Setup and Usage Steps

The steps for the complete process of setup and usage of counter properties in counters are as follows:

1. For pre-defined counter properties, set up counter property value types and value codes.
2. Associate one or more counter properties - free-form or pre-defined - with a counter template or counter instance.

3. Select value codes for counter property readings in the appropriate counter instances.
   You must enter counter reading values for all column properties that you defined as mandatory in step 2.

See Also

- Example of Setup and Usage of Counter Properties, page 11-10

Example of Setup and Usage of Counter Properties

A counter template Service_Counter already exists, and provides the definition for all your counter instances.

You want to record the different methods by which meter readings are entered into the system. This data must be recorded for each counter reading. There are three reading methods:

- A service company employee takes a direct reading of the customer's meter.
  This is the default reading method.

- The customer emails the meter reading.

- The customer phones in and provides the meter reading.

In this example, the counter property must be pre-defined with appropriate values, and it must be defined as mandatory, to ensure that a reading method value is recorded with every counter reading.

After defining the counter property and its values, add the counter property to the existing counter template Service_Counter.

Overview

First, set up a counter property value type called MR_MTHD, and define the individual meter reading methods as values:

- EMP_READ

- CUST_EMAIL

- CUST_PHONE

In the Service_Counter counter template, add a counter property called Reading
Method, with MR_MTHD as the associated counter property value type, and specify a default reading method.

Set Up the Counter Property Value Type and Value Codes
1. Access the Oracle Install Base Administrator responsibility, navigate to Counters > Define Property Type.
   The Install Base: Counter Properties Value Type Lookups page appears, with CSI_CTR_PROPERTY_LOV_TYPE as the Type.
2. Create a Code called MR_MTHD, together with a Meaning and Description.
3. Highlight the MR_MTHD row and click Define Values.
   The Install Base: MR_MTHD Lookups page appears, with MR_MTHD as the Type.
   
   **Note:** The Install Base: MR_MTHD Lookups page is essentially the same as the Install Base: Counter Properties Value Type Lookups page, focusing on MR_MTHD.

4. For the MR_MTHD counter property value type, create the following Codes, together with a Meaning and Description for each code:
   - EMP_READ
   - CUST_EMAIL
   - CUST_PHONE

Associate the Counter Property Value Type with the Counter Template
For the Service_Counter counter template, in the Counter Properties area of the Counter Template page, set up a column property with the following data:

- **Property Name:** = Reading Method.
  This is a free-form name used for this particular counter template.

- **Null Allowed unset.**
  This ensures that you must record a Reading Method column property value in each counter reading.

- **Property Value Type = MR_MTHD.**

- **Default Value = EMP_READ.**
Select a Value for a Counter Property Reading

When capturing a counter reading for a counter instance created from the Service.Counter counter template, you must record a value for the Reading Method property. For example, you can override the default value EMP_READ with another value, such as CUST_PHONE.

About Estimation Methods

Oracle Installed Base provides estimation methods that enhance flexibility and accuracy in meeting usage billing needs. These methods are specifically designed to work with the usage billing and estimation requirements of Oracle Service Contracts.

Oracle Installed Base uses an API-based usage estimation feature with flexible input and output parameters. The counter estimation API:

- Receives requests for estimation from internal or external sources
- Performs computations
- Returns estimation values as output parameters

Some of the parameters include:

- Period start and end dates (billing periods) for estimation.
- Average calculation start dates to indicate specific points in time used in estimation calculations. For example, a piece of equipment transfers from owner A to owner B on January 1, 2004. For owner B, you would want to disregard any readings taken prior to transfer in estimation calculations. Average calculation start date provides a means to do so.
- Alternatively, an input parameter based on number of readings can be passed to the estimation routine. The routine performs estimation computation using the Number of Readings parameter as the basis of its calculations. For example, if the Number of Readings parameter equals 10, then estimation computation is based on the past 10 counter readings for a given date.

Key steps for setting up estimation functionality in Oracle Installed Base are as follows:

1. Define a counter estimation method.
2. Associate the estimation method with a counter template.
3. Change the estimation method, if required, at the counter instance level.
This chapter covers the following topics:

- Introduction
- Setup Checklist
- Defining Counter Property Value Types and Values
- Defining Adjustment Reading Types Lookups
- Managing Estimation Methods
- Searching for Estimation Methods
- Creating and Updating Estimation Methods
- Counters Setup Overview
- Contract Item Counter Setup Overview
- Trackable Item Counter Setup Overview
- Managing Counter Groups
- Searching for Counter Groups
- Creating Counter Groups
- Viewing Counter Groups
- Updating Counter Groups
- Managing Counter Templates
- Searching for Counter Templates
- Creating Counters
- Creating Standard Regular Counters (Templates and Instances)
- Associating Objects to Counters (Templates and Instances)
- Creating Time-Based Regular Counters (Templates and Instances)
- Creating Formula Counters (Templates and Instances)
• Entering Formula Details
• Entering Formula Details Example
• Creating Average Counters (Templates and Instances)
• Creating Count and Sum Counters (Templates and Instances)
• Viewing and Updating Counter Templates

Introduction

This chapter consists of the following topics:

• Setup Checklist, page 12-2
• Defining Counter Property Value Types and Values, page 12-3
• Defining Adjustment Reading Types Lookups, page 12-6
• Managing Estimation Methods, page 12-8
• Counters Setup Overview, page 12-11
• Managing Counter Groups, page 12-15
• Managing Counter Templates, page 12-19

Setup Checklist

Prerequisites

As prerequisites to the setup of counters in Oracle Installed Base, perform the following tasks:

• Confirm the setup of all applications at your site that will use counters.

• Confirm the setup of inventory items. Refer to the Oracle Inventory User’s Guide.

• Confirm the setup of units of measure. Refer to the Oracle Inventory User’s Guide.

Setup Steps in Oracle Installed Base

The following table shows the required and optional Oracle Installed Base setup operations.
<table>
<thead>
<tr>
<th>Step</th>
<th>Required or Optional</th>
<th>Operation</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Optional</td>
<td>Set up user-definable counter property lookup types and values, page 12-3</td>
<td>Used in the definition of counter templates and counter instances.</td>
</tr>
<tr>
<td>2.</td>
<td>Optional</td>
<td>Set up adjustment reading type lookups, page 12-6</td>
<td>Used when adjustments are made in the counter readings for counter instances.</td>
</tr>
<tr>
<td>3.</td>
<td>Optional</td>
<td>Define counter estimation methods, page 12-9</td>
<td>Used in the definition of counter templates and counter instances.</td>
</tr>
<tr>
<td>4.</td>
<td>Required for automatic instantiation of contract item counters. Optional for automatic instantiation of trackable item counters.</td>
<td>Define counter groups, page 12-17</td>
<td>Used when counter instances are created automatically as part of an Oracle application transaction.</td>
</tr>
<tr>
<td>5.</td>
<td>Required for automatic counter instantiation.</td>
<td>Define counter templates, page 12-21</td>
<td>Used when counter instances are created automatically as part of an Oracle application transaction.</td>
</tr>
</tbody>
</table>

**See Also**

- Counters Setup Overview, page 12-11

**Defining Counter Property Value Types and Values**

Counter properties are optional attributes that can be added to counter readings.

For general information about counter properties, their setup and usage, see the
This section describes how to set up counter property value types and values, using the following data to illustrate the setup procedure:

- Counter Property Value Type = MR_MTHD
- Value Codes for the MR_MTHD counter property value type:
  - EMP_READ
  - CUST_EMAIL
  - CUST_PHONE

### Setup Overview

You define both the counter property value types and their values in the setup page initially headed Install Base: Counter Properties Value Type Lookups.

The general setup overview for a single counter property value type is as follows:

1. Enter the counter property value type name.
2. Highlight the counter property value type and click Define Values.
   - The page redisplays, focusing on the selected counter property value type.
3. Enter the value codes for the selected counter property value type.

### Prerequisites

Oracle Install Base Administrator > Counters > Define Property Type.

### Steps:

Define New Property Types

1. The Install Base: Counter Properties Value Type Lookups page appears with seeded header detail.
2. Define a counter property value type by completing the following:
   1. Enter a Code, such as MR_MTHD.
2. Enter a Meaning, such as MR_MTHD.

3. Enter a Description, such as Meter Reading Method.

4. Leave the Tag field blank.

5. Select a From date. The application automatically supplies one.

6. Select a To (end) date. Leave this blank if no expiration occurs.

7. Confirm that the Enabled check box is selected.

Repeat these steps for each new property value type code that you want to add. Choose a different meaning for each code to avoid any duplication errors.

4. From the toolbar menu, click the Save icon to update and save the record.

5. Set focus on the code line for which you want to create a values table and proceed to the next step.

**Define Values for Property Types**

1. Click Define Values to launch the same page with a modified heading and the header area fields auto-populated with your selected counter property value type.

2. Define a value by completing the following:
   1. Enter a Code, such as EMP_READ.
2. Enter a Meaning, such as EMP_READ.

3. Enter a Description, such as Emp reads customer meter.

4. Select a From date. The application automatically supplies one.

5. Select a To (end) date. Leave this blank if no expiration occurs.

6. Confirm that the Enabled check box is selected.

3. Repeat steps 2a through 2f for each new code value that you want to add to the table. Choose a different meaning for each code to avoid duplication errors.

4. From the toolbar menu, click the Save icon to update and save the record.

   The newly created values are now linked to the previously selected counter property value type.

5. Close the page and return to the property types setup page.

Define Additional Value Sets for Property Types

To create another set of values, set focus on the next Code line on the Install Base: Counter Properties Value Type Lookups page and repeat steps 1 through 5 of the preceding section Define Values for Property Types.

Defining Adjustment Reading Types Lookups

The Adjustment Reading Types Lookups window is used to define a list of values for
adjustment reading types that can be selected from the Counter Capture window. An adjustment reading may be required from time to time to identify a non-standard event or circumstance that occurred or was related to the specific item or service that was performed. For example, an adjustment reading might be used to display a copy usage total that was expended by the service technician during his service visit to a customer site, and used to adjust the customer's monthly bill.

**Business Case**

A service technician performs a routine PM service on a customer's photocopier machine.

**Example Task**
As part of his service routine, the technician logs the copy count when he arrives then starts his PM. During the testing and calibration of the equipment, the technician expends 25 copies to achieve optimum machine performance. Upon completing the PM, the technician records the new counter readings on his service report as follows:

- Total Copies = 1376
- PM Service Counter = 25

He enters 1176 for the total copies of 1376 on his service debrief, and enters 25 into the Adjustment Amount field with the Adjustment Type called PM Service Counter.

Note that the PM service counter will be adjusted from the total copies by the provider's accounting department, thus only billing the customer for his total usage on his next invoice.

**Prerequisites**

Oracle Install Base Administrator > Counters > Define Adjustment Reading Type.

**Steps:**

1. The Install Base: Adjustment Reading Type Lookups page appears.
2. Identify the code, meaning, and description for an adjustment reading type. Establish the effective start and end dates. For example, perform the following:

1. Enter a Code: Test Copies.
2. Enter a Meaning: Service Test.
3. Enter a Description: Test Copies by Serviceman.
4. Leave the Tag field blank.
5. Select a From date.
6. Select a To (end) date. Leave this blank if no expiration occurs.
7. Confirm that the Enabled check box is selected.

3. Repeat these steps for each adjustment reading type that you wish to add. Choose a different meaning for each code to avoid any duplication errors.

4. From the top toolbar menu, click the Save icon to update and save the record.

Managing Estimation Methods

This section consists of the following topics:

- Searching for Estimation Methods, page 12-9
See Also

• About Estimation Methods, page 11-12
• Counters Setup Overview, page 12-11

Searching for Estimation Methods

In the Estimation Methods Search page, the main operation you perform is to search for existing estimation methods. You can then view or update the details of existing estimation methods.

In this page, you can also start the process of creating a new estimation method.

Prerequisites

Oracle Installed Base Agent User > Counters > Estimation Methods

Steps

1. Enter a search parameter for the Estimation Name.
2. Click Go.
   The results area displays a list of the found estimation methods.

See Also

• About Estimation Methods, page 11-12
• Managing Estimation Methods, page 12-8

Creating and Updating Estimation Methods

The process of creating and updating estimation methods are similar.

Prerequisites

Oracle Installed Base Agent User > Counters > Estimation Methods >Create or Update button
General Information

Apart from specifying a name for the estimation method, the main choice you have is to select the Estimation Type and fields associated with your choice of Estimation Type.

Estimation Type

Select either Usage or Fixed.

Daily Average Usage and Usage Markup%

These fields appear only if Estimation Type is Usage.

Both of these fields are used in the situation where there has been only one previous reading. In this case, they are used to calculate the estimated reading for a particular date, say, date X, as follows:

1. Multiply the number of days from the previous reading date to date X by Daily Average Usage; increase the result by (Usage Markup%)/100.
2. Add the final result to the previous reading.

For example:

- Single reading only = 150. date of reading = 01-Jan-2005
- Daily Average Usage = 5
- Usage Markup% = 10
- Estimated reading required for 01-Apr-2005 (90 days after date of single reading)

The calculation for the estimated reading is as follows:

- Estimated usage = 90 * 5 = 450.
- Result with 10% markup added = 495.
- Estimated reading for 01-Apr-2005 = 150 + 495 = 645.

Usage Markup% is also used where there are several previous readings, and the date for which you want to calculate an estimated reading, say, date Y, is after the latest reading.
The calculation depends on a number of factors, but the general principle is that the system calculates an average daily usage based on the previous readings. This calculated average daily value is then multiplied by the number of days from the latest reading to date Y. The result is then added to the latest reading to give the estimated reading for date Y.

For example:
- Latest reading = 800, date of reading = 25-Mar-2005
- Daily Average Usage, calculated from previous readings = 7.5
- Usage Markup% = 20
- Estimated reading required for 31-Mar-2005 (6 days after date of last reading)

The calculation for the estimated reading is as follows:
- Estimated usage = 6 * 7.5 = 45.
- Result with 20% markup added = 54.
- Estimated reading for 31-Mar-2005 = 800 + 54 = 854.

**Fixed Multiplier Value**

This field is used only if Estimation Type is Fixed, and there has been only one previous reading.

It is used to calculate the estimated reading for a particular date, say, date X, as follows:
1. Multiply the number of days from the previous reading date to date X by Fixed Multiplier Value.
2. Add the result to the previous reading.

**See Also**
- About Estimation Methods, page 11-12
- Managing Estimation Methods, page 12-8

**Counters Setup Overview**

In Oracle Installed Base:
- Service programs and warranties are referred to as **contract items**.
- Items marked as being Oracle Installed Base trackable are referred to as **trackable**
There are two main stages in setting up counters to enable the automatic creation of counter instances by Oracle applications:

1. You must set up a counter template, and for contract item counters, a counter group as well.

   **Note:** A counter template that does not belong to a counter group is called a *standalone counter template*.

2. You must associate the counter with either a contract item or a trackable item - you do this by associating items either to a counter group or to a counter template. For details, see the sections that follow.

   For contract item counters, you must specify a usage item for the counter template.

   **Note:** If an item has been associated with a counter group, it cannot be associated with any other counter group nor any standalone counter template.

   **Note:** If an item has been associated with a standalone counter template, it can be associated with other standalone counter templates, but cannot be associated with any counter group.

The setup options and procedures are different depending on whether you are setting up contract item counters or trackable item counters.

This section consists of the following topics:

- Contract Item Counter Setup Overview, page 12-12
- Trackable Item Counter Setup Overview, page 12-14

**See Also**

- Managing Counter Groups, page 12-15
- Managing Counter Templates, page 12-19

**Contract Item Counter Setup Overview**

The diagram following shows an overview of the main elements involved in setting up a counter for contract items.
In general, you can create multiple counter templates in the same counter group. Each counter template requires a usage item.

For contract item counters, item association to the counter template is always via the counter group. All counter templates in a counter group have the same item associations.

When you are setting up counters for contract items, you must first create a counter group with Association Type = Contract Item, and associate contract items to the counter group.

Then for each counter template that you want to add to the counter group, perform the following operations:

- Create a counter template that belongs to the counter group - you can do this either when you create or when you update the counter group.

- Select a usage item for the counter template.

  **Note:** After an item has been associated with a counter group, it cannot be associated with any other counter group nor any standalone counter template.

### See Also

- Counters Setup Overview, page 12-11
Trackable Item Counter Setup Overview

There are two ways that you can set up counters for trackable items, depending on whether or not you want the counter template to belong to a counter group.

**Note:** Counter templates that represent meters in Oracle Enterprise Asset Management do not belong to counter groups.

Setup Using Grouped Counter Templates

The following diagram shows an overview of the main elements involved in setting up a counter for trackable items, where the counter template belongs to a counter group.

In general, you can create multiple counter templates in the same counter group.

When you are setting up counters for trackable items using counter groups, you must first create a counter group with Association Type = Trackable Item, and associate trackable items to the counter group.

Then for each counter template that you want to add to the counter group, perform the following operations:

- Create a counter template that belongs to the counter group - you can do this either when you create or when you update the counter group.

- Optionally, select a usage item for the counter template.
Where counter templates belong to a counter group, item association to the counter template is always via the counter group. All counter templates in a counter group have the same item associations.

**Note:** After an item has been associated with a counter group, it cannot be associated with any other counter group nor any standalone counter template.

**Setup Using Standalone Counter Templates**

The diagram following shows an overview of the main elements involved in setting up a counter for trackable items, using standalone counter templates.

![Diagram](https://example.com/diagram.jpg)

1. Counter template does not belong to a counter group
2. Associated item can be associated with other **standalone** counter templates, but cannot be associated with any counter group

When you are creating standalone counter templates, by default you can only associate trackable items to the counter template.

**Note:** After an item has been associated with a standalone counter template, it can be associated with other standalone counter templates, but cannot be associated with any counter group.

**See Also**

- Counters Setup Overview, page 12-11

**Managing Counter Groups**

This section consists of the following topics:

- Searching for Counter Groups, page 12-16
- Creating Counter Groups, page 12-17
Searching for Counter Groups

In the Search Grouping page, the main operation you perform is to search for existing counter groups. You can then view or update the details of existing counter groups. In this page, you can also start the process of creating a new counter group.

Prerequisites

Oracle Installed Base Agent User > Counters > Groupings

Steps

1. Enter search values as required into one or more of the following fields: Group Name, Group Description, Start Date, and End Date.

2. Click Go.

The results area displays a list of the found counter groups.

Comments

In the results area, you can perform the following operations:

- Click the Group Name column header to display the search results in ascending Group Name order.

- Click a Group Name to view the details of the counter group.
• Click the Update icon for a counter group to update the counter group.

• Click Create to create a counter group.

See Also

• Counters Setup Overview, page 12-11

• Managing Counter Groups, page 12-15

Creating Counter Groups

The Create Grouping page is for creating a counter group, with an Association Type of either Contract Item or Trackable Item.

Either at creation time, or subsequently, you must add item associations of the correct association type to the counter group.

When you are setting up counters for contract items, you must first create a counter group with Association Type = Contract Item, and associate contract items to the counter group. Then you must create a counter template that belongs to the counter group - you can do this either when you create or when you update the counter group.

Prerequisites

From the Search Groupings page, click Create.

If you want to add item associations, the items must be trackable items or contract items, as set up in the Master Item list in inventory.

Steps

General Fields

1. You must enter a Group Name, and you must select a Start Date.

2. Select an Association Type - either Contract Item or Trackable Item.

Item Associations

The types of fields you associate with the counter group depend on the Association Type.

For each item that you want to associate:

• Select the Item Name and the Start Date.

• Optionally, select an End Date.
• Optionally, enter a Usage Rate and Past Readings.

**Counter Template**

1. Click Create to start the process of creating a counter template.

   The counter template that you create from this page will belong to the counter group.

   In the Counter Template page, enter the counter template details. For more information, see Creating Counter Templates., page 12-21

2. When you finish, and click Apply, you return to the Create or Update Grouping page.

   **Note:** You can create several counter templates for the counter group. For each counter template, repeat steps 1 to 2.

3. Click Apply to complete the creation process, or Cancel to abandon the process.

**See Also**

• Counters Setup Overview, page 12-11

• Managing Counter Groups, page 12-15

**Viewing Counter Groups**

The View Groupings page is a read-only page that allows you to view details of a counter group, such as its association type, item associations, and counter templates.

**Prerequisites**

From the Search Groupings page, you must have clicked a Group Name link.

**Comments**

To update counter group details, you must first return to the Search Grouping page, then click the Update icon for the counter group.

**See Also**

• Counters Setup Overview, page 12-11

• Managing Counter Groups, page 12-15
Updating Counter Groups

The process of updating a counter group is similar to the counter group creation process. You cannot change the Group Name nor the Association Type.

From the Update Grouping page, you can perform the following operations:

- Add extra item associations to the counter group.
- View and update existing counter templates that belong to the counter group.
- Create new counter templates for the counter group.

For more details, see Creating Counter Groups, page 12-17

See Also

- Counters Setup Overview, page 12-11
- Managing Counter Groups, page 12-15

Managing Counter Templates

This section consists of the following topics:
• Searching for Counter Templates, page 12-20
• Creating Counter Templates, page 12-21
• Viewing and Updating Counter Templates, page 12-41

See Also
• Counters Setup Overview, page 12-11

Searching for Counter Templates
In the Counter Template Search page, the main operation you perform is to search for existing counter templates. You can then view or update the details of existing counter templates.

In this page, you can also start the process of creating a new standalone counter template.

Prerequisites
Oracle Installed Base Agent User > Counters > Templates

Steps
1. Enter search values as required into one or more of the following fields: Counter Template Name, Property Name, Association Type, and Item Name.

2. Click Go.
   The results area displays a list of the found counter templates.

Comments
In the results area, you can perform the following operations
• Click a Counter Template Name to view the details of the counter template.
• Click the Update icon for a counter template to update the counter template.
• Click Create to create a standalone counter template.

See Also
• Counters Setup Overview, page 12-11
Creating Counters

In Oracle Installed Base, you can create both counter templates, which enable automatic creation of counter instances by various Oracle application transactions, and counter instances.

The page layouts for creating counter templates and counter instances are similar, and the descriptions of the creation processes for templates and instances are combined in each of the following topics:

• Creating Standard Regular Counters (Templates and Instances), page 12-22
• Creating Time-Based Regular Counters (Templates and Instances), page 12-27
• Creating Formula Counters (Templates and Instances), page 12-30
• Creating Average Group Function Counters (Templates and Instances), page 12-36
• Creating Count and Sum Group Function Counters (Templates and Instances), page 12-38

Differences Between Counter Template and Create Counter Pages

The differences between the layouts of the Counter Template and the Create Counter pages are as follows:

1. The field Association Type appears on the Counter Template page only.

2. The areas for associations differ as follows:
   • The types of items to associate with counter templates, on the Counter Template page, in the Item Associations area, are contract items and trackable items.
   • The elements to associate with counter instances, on the Create Counter page, in the Associations area, are item instances and service lines.

3. The Create Counter page includes an extra screen area, Source Counter. You can specify a "source-target" relationship between counter instances only, not between counter templates. The Source Counter area enables you to refer to the source counter instance from which the target counter instance derives its values.
Creating Standard Regular Counters (Templates and Instances)

Use this procedure to define counter types that are described as physical or standard regular counters, which typically are found in tangible objects such as automobiles, gas meters, and photocopier machines.

A standard regular counter can also be classified as a logical counter. For example, a service agent wants to track the number of support calls that he receives each day. The agent can set up a standard regular counter, and manually increment this counter at the completion of every support call.

Prerequisites

For counter templates: Oracle Installed Base Agent User > Counters > Templates > Create

For counter instances: Oracle Installed Base Agent User > Counters > Counter Instances > Create

Steps

1. Select Regular for the Counter Type.

2. Select Ea for the UOM (Unit of Measure).

3. Click Go.

   The Regular Counter area appears.

   The page layouts for counter templates and counter instances are similar. For the differences, see Differences between the Counter Template and Create Counter pages, page 12-21
Regular Counter

4. Enter the Counter Template Name.

5. Optionally enter the Description.

6. Select the Reading Type, either Absolute or Change.
   - Absolute (Meter) - Meter counters allow you to enter meter type of readings such as odometers and electricity meters.
   - Change (Usage) - Usage readings allow you to enter the usage of a counter. An example of change readings is the number of minutes used on a prepaid telephone calling card, such as 12, 10, 6, 15, which represent calling card usage.

7. Select the Usage Item.
   This is mandatory for contract item counters, optional for trackable item counters.

8. Select the Direction - Ascending, Descending, or Bi-directional.

9. If the Direction is Ascending or Descending, you can optionally check Automatic Rollover; if you do, then you must specify appropriate values for Rollover From and Rollover To.

10. The Association Type appears as a read-only field. For standalone templates, the
value is Trackable Item. For grouped counter templates, the value is derived from the counter group.

**Note:** The Association Type does not appear in the Create Counter page.

11. Optionally, enter the counter Step Value.

   For example, if you want the counter to be incremented by 1 for each reading, then enter 1 for the Step Value.


   You can only associate or map an estimation method for counters whose Direction is Ascending or Descending.

   If the counter’s Direction is Bi-directional, the Estimation field remains protected and no list of values is available for association.

   **Note:** Estimation methods are mapped only to regular counters. When a counter is instantiated, the estimation method defaults from the counter template. You can modify and select a different Estimation Method prior to entering counter readings for this instance.

13. If the counter is service contract related, enter the Tolerance Plus% and Tolerance Minus%.

   Tolerance is used by Oracle Service Contracts events to determine the range in which the counter should be updated.

14. Select the Start Date, and optionally the End Date.

15. Optionally, enter the Initial Reading of the counter.

   For example, a new automobile may have an initial reading on the odometer of 000022 miles accrued during testing and delivery.

16. Optionally, select the check box Use in Scheduling if the counter is to be used in Oracle Enterprise Asset Management. If you do this, then you must specify the Default Usage Rate and Number of Past Readings.

   **Source Counter** *(Create Counter page only)*

   Use this screen area only if you want the counter instance that you are creating to be a target counter instance.

17. Enter the Source Counter Name.
This is the source counter instance from which the target counter instance derives its values.

18. Enter a Factor.
   This is the multiplier value to apply to the source counter instance readings.

19. Enter a Start Date, and optionally an End Date.

   **Counter Properties**
   Counter properties are optional attributes whose values you want to attach to counter readings. You can either set up counter properties in advance, or enter them directly in this page without any previous setups. For more details of setting up counter properties, see Overview of Setup and Usage of Counter Properties, page 11-9 and Example of Setup and Usage of Counter Properties, page 11-10.

   Perform the steps in this section for each counter property that you want to add to the counter template:

<table>
<thead>
<tr>
<th>Property Name</th>
<th>Property Description</th>
<th>Data Type</th>
<th>Null Allowed</th>
<th>EDM Property Value Type</th>
<th>Default Value</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reader Name</td>
<td></td>
<td>Character</td>
<td>Null Allowed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   Note: The initial setting of Null Allowed is *not* checked.

20. Enter a Property Name.
   Property Name is a free-form text field, that you specify for the particular counter.

21. Select a Data Type of Character, Date, or Number.

22. Check the Null Allowed check box if you want the column property to be optional for counter readings; uncheck the field, or leave it blank, to make the column property mandatory for counter readings.

   **Note:** The initial setting of Null Allowed is *not* checked.

23. Optionally, select a Unit of Measure.

24. If you want to have a predefined property value type for this counter, select from the list of values in the Property Value Type field, else leave the field blank.

25. Optionally, enter a Default Value, if you want this value to appear initially when you capture counter readings.

   The following is an example of the fields to enter for a free-form counter property:
   - Property Name = Reader Name
   - Data Type = Character
• Default Value = Dan Wong

The following is an example of the fields to enter for a predefined counter property:
• Property Name = Reading Method
• Property Value Type = MR_MTHD
• Default Value = EMP_READ

26. Optionally, enter Minimum and Maximum Values for Number counter properties.

27. Enter an effective Start Date on which to enable the property type, and optionally an End Date from which to disable the property type.

Item Associations (Counter Template) or Associations (Counter Instance)

28. Create the associations for the counter template or counter instance.

For details, see Associating Objects to Counters (Templates and Instances), page 12-26

Completing the Process

29. Click Apply.

See Also

• Counters Setup Overview, page 12-11
• Managing Counter Templates, page 12-19

Associating Objects to Counters (Templates and Instances)

For both counter templates and counter instances, you must associate the counter to one or more real-world objects.

Item Associations Area (Counter Templates)

Grouped counter templates are automatically associated to contract items or trackable items - through the item associations of the counter group. The Item Associations area is read-only in this case.

For standalone counter templates, you must explicitly create the associations between the template and trackable items, in the Item Associations area.

Associations Area (Counter Instances)

For counter instances, you must create the associations between the counter instance and either service contract lines or item instances, in the Associations area.
Steps

Perform the steps in this section for each association that you want to add to the standalone counter template or counter instance.

1. For a counter template, select the Item - contract or trackable.

   Continue at step 3.

   **Note:** Only trackable items are available for standalone counter templates.

2. For a counter instance, select the Source Object Code - item instance or service line - and the appropriate Instance Number or Service Item and Contract Line Details.

3. Enter the Start Date.

4. Optionally, select an End Date.

5. For counter templates for Oracle Enterprise Asset Management meters, specify the Daily Usage Rate and Past Readings.

See Also

- Counters Setup Overview, page 12-11
- Managing Counter Templates, page 12-19

Creating Time-Based Regular Counters (Templates and Instances)

A time-based counter is a regular counter with a time-based unit of measure, such as hours, days, weeks, months, or years, designed to keep track of events that occur in time. Time-based counters can be used to track such events as a contract expiration or
preventive maintenance service that is due on an item instance.

Time-based counters can be updated periodically by running a concurrent program called Time Based Counters Engine to increment each counter and automatically expire a counter that has passed its expiration date.

In addition, you can manually enter readings for time-based regular counters.

For more information, see Setting Up Visit Work Package in Oracle Installed Base Implementation Guide.

**Prerequisites**

For counter templates: Oracle Installed Base Agent User > Counters > Templates > Create

For counter instances: Oracle Installed Base Agent User > Counters > Counter Instances > Create

**Steps**

1. Enter the Counter Template Name.
2. Optionally enter the Description.
3. Select Regular for the Counter Type.
4. For the UOM (Unit of Measure), select a unit that has a UOM class of Time.
5. Click Go.

The Time Based Counter area appears.

The page layouts for counter templates and counter instances are similar. See Differences between the Counter Template and Create Counter pages, page 12-21.
6. Select the Allow Manual Reading Entry check box if you want to enable users to manually enter time-based readings. The default value is not selected.

7. The Association Type appears as a read-only field. For standalone templates, the value is Trackable Item. For grouped counter templates, the value is derived from the counter group.

   **Note:** The Association Type does not appear in the Create Counter page.

8. Select the Usage Item.

   This is mandatory for contract item counters, optional for trackable item counters.

9. Select the Start Date, and optionally the End Date.

   **Item Associations (Counter Template) or Associations (Counter Instance)**

10. Create the associations for the counter template or counter instance.

    For details, see Associating Objects to Counters (Templates and Instances), page 12-26

    **Completing the Process**
Creating Formula Counters (Templates and Instances)

Use this procedure to define a counter of the type Formula, where you explicitly enter a simple or complex mathematical formula to derive a new counter value. This procedure is stated in the context of a specific business case and example steps that include standard regular counters.

The formula text for a formula can only refer to counters that are standard regular counters.

Business Case

A service provider sells and leases laser printers and wants to track the copy usage for each printer residing in his Oracle Depot Repair. The service provider creates a counter group with individual counters to track the usage for each item to determine how often to perform his PM service tasks, and also to determine how often to ship out consumables such as toner kits and paper.

The counter group, its associated items, and the counter templates in the counter group are illustrated in the following diagram.

Example Task

The objective is to define a formula counter template named Total Copies Counter Template, that for each associated item of the counter group, sums the copy counts from
the two standard regular counters.

Assume that the following elements have already been created:
1. The counter group named Laser Printer Counter Group.
2. The standard regular counter template named Mono Copies Counter Template.
3. The standard regular counter template named Color Copies Counter Template.

**Prerequisites**

For counter templates: Oracle Installed Base Agent User > Counters > Templates > Create

For counter instances: Oracle Installed Base Agent User > Counters > Counter Instances > Create

**Steps**

1. Select Formula for the Counter Type.
   
   **Note:** Do not select a Group Function.

2. Click Go.
   
   The Formula Counter area appears.
   
   The page layouts for counter templates and counter instances are similar. See Differences between the Counter Template and Create Counter pages., page 12-21
**Formula Counter**

3. Enter the Counter Template Name.

4. Optionally enter the Description.

5. Select the Usage Item.

   This is mandatory for contract item counters, optional for trackable item counters.

6. The Association Type appears as a read-only field. For standalone templates, the value is Trackable Item. For grouped counter templates, the value is derived from the counter group.

   **Note:** The Association Type does not appear in the Create Counter page.

7. Optionally, select an Estimation Method.

8. Select the Start Date, and optionally the End Date.

9. For Oracle Enterprise Asset Management meters, specify the Default Usage Rate and Number of Past Readings.

10. Enter the Formula Text that you wish to use for the counter, with each formula reference name immediately preceded by the ":" symbol. The syntax is any valid expression in standard SQL.
For example, to create a formula that sums the values of two counters, you can enter the formula :R1+:R2.

An example of a more complex formula is:

```
decode (sign((:P1+(2*:P2))-:PTOTAL),-1,0,((:P1+(2*:P2))-:PTOTAL))
```

11. Click Validate Formula Text.

The system scans the Formula Text and detects each reference name. These reference names appear in the Reference area for each selected item.

The steps that follow describe in general how to complete the definition of the formula-related fields in the Item Associations, Associations, and Reference areas.

For a diagrammatic overview of how to use the Item Associations and Reference areas for a counter template, and how to map counters to reference names, see Entering Formula Details, page 12-34.

To view the formula-related fields for the Total Copies Counter Template example, see Entering Formula Details Example, page 12-35.

**Item Associations (Counter Template) or Associations (Counter Instance)**

12. Create the associations for the counter template or counter instance.

For details, see Associating Objects to Counters (Templates and Instances), page 12-26

To map counters to formula reference names, you must first select an associated object in the Item Associations or Associations area, then move to the Reference area to perform the mapping. Repeat this two-part process for as many objects as you want to associate to the formula counter.

13. Select the check box for the item, item instance, or service contract line, whose counters you want to map to reference names.

**Reference Area**

The Reference area shows the references for your current selection in the Item Associations or Associations area. In the Reference area, you must map a source counter name to each reference name entered in the Formula Text.

14. For each Reference Name:
   - Select a Source Counter to map to the Reference Name.
   - Optionally, select values for the fields Reading Type, Start Date Active, and End Date Active.

15. Repeat the steps for each item, item instance, or service contract line for which you want to create a formula counter.
16. Click the **Apply** button to complete the process.

**Comments**

When an active formula counter template references one or more standard regular counter templates, and one of the associated trackable or contract item instances is created, then all the counters are instantiated for that item instance, that is, the formula counter instance and all the standard regular counter instances.

**See Also**

- Counters Setup Overview, page 12-11
- Managing Counter Templates, page 12-19

**Entering Formula Details**

The following diagram illustrates the process of entering the formula-related fields in the Item Associations and Reference areas, for a counter template, and how they relate to the formula text.

To view the formula-related fields for the Total Copies Counter Template example, see Entering Formula Details Example, page 12-35.
**Entering Formula Details Example**

The following diagram illustrates the main elements in the business case example described in the topic Creating Formula Counters.

In this example, both the items, Floor 1 Printer and Floor 2 Printer, that are associated to the Laser Printer Counter Group are shown, together with their source counter mappings to both of the reference names, R1 and R2.
Creating Average Counters (Templates and Instances)

An average counter calculates daily averages based on the readings of a derived standard regular counter, also referred to in this section as the source counter.

An average counter uses one of the following averaging methods:

- **Count-based average**
  
  You define how many previous standard counter readings to look at, and the system calculates the average of those previous readings.

- **Time-based average**
  
  This provides an average of usage based on time, for example, the average daily usage of all enabled readings for the source standard regular counter.

**Prerequisites**

For counter templates: Oracle Installed Base Agent User > Counters > Templates > Create
For counter instances: Oracle Installed Base Agent User > Counters > Counter Instances > Create

Steps

1. Select Formula for the Counter Type.

2. Select Average for the Group Function.

3. Click Go.

The Formula Counter area appears, with some fields specific to average counters.

The page layouts for counter templates and counter instances are similar. For the differences, see Differences between the Counter Template and Create Counter pages., page 12-21

4. Enter the Counter Template Name.

5. Optionally enter the Description.

6. Select the Source Counter.

This is the standard regular counter from which the average is calculated.

7. Select the Average Basis, either Count or Time.

8. If you selected Count for Average Basis, enter Average Count. This is the number of previous readings of the source counter to select for average calculation.

If you selected Time for Average Basis, select the Average UOM. The difference
between the first and last readings is taken, and the average value per day, month, year - whatever you selected for Average UOM - is calculated.

9. Select the Usage Item.
   This is mandatory for contract item counters, optional for trackable item counters.

10. The Association Type appears as a read-only field. For standalone templates, the value is Trackable Item. For grouped counter templates, the value is derived from the counter group.
   
   **Note:** The Association Type does not appear in the Create Counter page.

11. Select the Start Date, and optionally the End Date.

12. For Oracle Enterprise Asset Management meters, specify the Default Usage Rate and Number of Past Readings.

   **Item Associations (Counter Template) or Associations (Counter Instance)**

13. Create the associations for the counter template or counter instance.
   For details, see Associating Objects to Counters (Templates and Instances), page 12-26

   **Completing the Process**

14. Click Apply.

**See Also**

- Counters Setup Overview, page 12-11
- Managing Counter Templates, page 12-19

**Creating Count and Sum Counters (Templates and Instances)**

Sum counters provide an accumulated total of the counter readings for a standard regular counter. Count counters provide a count of the total number of readings that have occurred prior to resetting a counter. For example, consider a counter that had three readings and was reset after the last reading. If the three readings are 100, 100, 100, then the sum counters returns 300, and the count counter returns 3.

You can also filter the data for count and sum counters which satisfy counter property conditions. The counter properties and values must have been defined in the standard regular counter from which the count or sum counter is derived.
Prerequisites

For counter templates: Oracle Installed Base Agent User > Counters > Templates > Create

For counter instances: Oracle Installed Base Agent User > Counters > Counter Instances > Create

Steps

1. Select Formula for the Counter Type.

2. Select Sum or Count for the Group Function.

3. Click Go.

The Formula Counter area appears, with some fields specific to sum and count counters.

The page layouts for counter templates and counter instances are similar. For the differences, see Differences between the Counter Template and Create Counter pages., page 12-21

Formula Counter (Count and Sum)

4. Enter the Counter Template Name.

5. Optionally enter the Description.

6. Select the Source Counter.

This is the standard regular counter from which the sum or count is calculated.

7. Select the Usage Item.

This is mandatory for contract item counters, optional for trackable item counters.

8. The Association Type appears as a read-only field. For standalone templates, the
value is Trackable Item. For grouped counter templates, the value is derived from the counter group.

**Note:** The Association Type does not appear in the Create Counter page.

9. Select the Start Date, and optionally the End Date.

10. For Oracle Enterprise Asset Management meters, specify the Default Usage Rate and Number of Past Readings.

**Filters**

<table>
<thead>
<tr>
<th>Filter</th>
<th>Property</th>
<th>Relational Operator</th>
<th>Value</th>
<th>Logical Operator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Add another filter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Optionally, enter and select information for any filters that you want to add to the count or sum counter template.

   - The properties and values must have been defined as counter properties and values in the source counter.

   - You can add extra rows for multiple conditions. Select AND or OR for the Logical Operator in all rows except the last row. The columns headed "(" and ")" allow you to select different parenthesis options for complex conditions.

      **Note:** Multiple conditions are evaluated according to standard SQL rules. For example, if explicit grouping using parentheses is not specified, AND conditions are evaluated first, then OR conditions.

12. Create the associations for the counter template or counter instance.

    For details, see Associating Objects to Counters (Templates and Instances), page 12-26

**Completing the Process**

13. Click Apply.

**See Also**

- Counters Setup Overview, page 12-11
• Managing Counter Templates, page 12-19

Viewing and Updating Counter Templates

The Counter Templates page displays the details of the counter template. The "view" version of this page does not allow updates.

Updating Counter Templates

Use the Counter Template page to update any available fields that are not read-only. The process of updating a counter template is similar to the counter template creation process. For more details, see Creating Counter Templates., page 12-21

1. Navigate to the Counter Template page (Oracle Installed Base Agent User > Template < [search for counter template] > Update button).

The Counter Template page appears.

2. Select the Allow Manual Reading Entry checkbox to enable users to manually enter time-based readings.

3. Revise other available fields as necessary.

See Also

• Counters Setup Overview, page 12-11

• Managing Counter Templates, page 12-19
Managing Counter Instances in Oracle Installed Base

This chapter covers the following topics:

- Introduction
- Overview of Counter Instances
- Managing Counter Instances
- Searching for Counter Instances
- Creating Counter Instances
- Viewing and Updating Counter Instances
- Managing Readings for Counter Instances
- Entering Counter Readings in Oracle Installed Base
- Entering Counter Readings (Detailed Steps)
- Viewing and Entering Additional Counter Reading Data
- Entering Counter Readings from Other Oracle Applications
- Viewing Target Counter Instances
- Viewing Reading History for Counter Instances
- Performing Mass Readings
- Viewing Reading Locks on Counter Instances
- Managing Daily Usage for Counter Instances

Introduction

This chapter consists of the following topics:

- Overview of Counter Instances, page 13-2
Overview of Counter Instances

The setup of counter groups and counter templates, and their associations with contract or trackable items, is to enable counter instances to be created automatically when instances of the associated items are created. These automatic creations of counter instances are performed during the execution of transactions in various Oracle applications.

You can also create counter instances explicitly in Oracle Installed Base. In doing so, you must associate already created trackable item instances or service contract lines with each counter instance.

You can perform readings for counter instances, and view and update additional counter reading information, such as counter properties, adjustments, and resets.

This section consists of the following main topic groups:

- Managing Counter Instances, page 13-2
- Managing Readings for Counter Instances, page 13-6

Managing Counter Instances

You can use Oracle Installed Base to manage all counter instances, whether they are created automatically or manually.

This section consists of the following topics:

- Searching for Counter Instances, page 13-3
- Creating Counter Instances, page 13-4
- Viewing and Updating Counter Instances, page 13-5
• Viewing Reading Locks on Counter Instances, page 13-15
• Managing Daily Usage for Counter Instances, page 13-15
• Viewing Target Counter Instances, page 13-11
• Viewing Reading History on Counter Instances, page 13-11

See Also
• Overview of Counter Instances, page 13-2
• Counters Setup Overview, page 12-11

Searching for Counter Instances
In the Counter Instances Search page, the main operation you perform is to search for existing counter instances. You can then view or update the details of existing counter instances, as well as any associated target counters, reading history, and reading locks.

In this page, you can also:
• Start the process of entering counter readings and additional counter reading data for a counter instance.
• Start the process of creating a new counter instance.

Prerequisites
Oracle Installed Base Agent User > Counters > Counter Instances

Steps (to perform a search)
1. Select the type of search that you want to perform - Item Instance, Counter Name, or Service Line.
2. Click the search icon to search through the list of values that appears. Select the appropriate item or counter instance, or service contract line.
3. Click Go.
   The results area displays a list of the found counter instances.
Comments

In the results area, you can perform the following operations

- Click the counter instance Name to view the details of the counter instance.
- Click the Update icon for a counter instance to update the counter instance.

For each counter instance, you can also click the appropriate enabled icon to view the Reading Locks, page 13-15, Daily Usage, page 13-15, Target Counters, page 13-11, and Reading History, page 13-11. You can also disable counter readings in the reading history page.

See Also

- Counters Setup Overview, page 12-11
- Managing Counter Instances, page 13-2
- Managing Readings for Counter Instances, page 13-2

Creating Counter Instances

The process of manually creating counter instances is similar to the process of creating counter templates. The major difference is that for counter instance creation, you must associate either existing item instances, or active service contract lines, to the counter instance.

You can create the same types of counter instance as counter template: Standard Regular, Time-Based Regular, Formula, Average, Count or Sum.

You can create a target counter instance, by specifying its source counter instance.

For details, see Creating Counters, page 12-21.

See Also

- Managing Counter Instances, page 13-2
- Managing Readings for Counter Instances, page 13-2
Viewing and Updating Counter Instances

The View Counter page displays the details of a counter instance; you cannot update any of the fields.

For more information about the counter instance fields, see Creating Counters, page 12-21.

Updating Counter Instances

The Update Counter page to update a counter instance.

1. Navigate to the Update Counter page (Oracle Installed Base Agent User > Counters < [search for counter instance] > Update button).

The Update Counter page appears.

You can change the values in the available fields.

You cannot change the following read-only fields:

- For all counter types: Counter Type and Unit of measure.
- For standard regular counters: Reading Type and Direction.
- For formula counters based on formula text: Formula Text.
- For average, count, and sum counters: Group Function, Derived Counter.
2. Select the Allow Manual Reading Entry checkbox to enable the ability to manually enter time-based counter readings.

See Also

- Managing Counter Instances, page 13-2
- Managing Readings for Counter Instances, page 13-2

Managing Readings for Counter Instances

You can capture counter readings for counter instances in Oracle Installed Base. You can also view and update additional data about counter readings, such as counter property readings, adjustments, resets, and target counter readings.

This section consists of the following topic groups:

- Entering Counter Readings in Oracle Installed Base, page 13-6
- Entering Counter Readings from Other Oracle Applications, page 13-10
- Performing Mass Readings on Counter Instances, page 13-12

See Also

- Managing Counter Instances, page 13-2

Entering Counter Readings in Oracle Installed Base

You can enter counter readings for counter instances. The default time recorded for the reading is the current date and time, but you can record an earlier date and time for the reading.

In addition, you can view and update additional information about the counter reading, such as counter property values.

General Counter Reading Process

The standard enter counter reading process is as follows:

1. In the Counter Instances page, search for one or more counter instances.

2. Click Enter Readings.

3. The Capture Counters page appears with all the counter instances from the Counter Instances results for which you may enter readings.
Note: You can only enter readings for standard regular counters, that are not target counters.

4. You can enter reading data for each displayed counter.

5. To enter additional counter reading data, click Show for a counter.

6. The Counter Property Readings area shows all the counter properties associated with the counter. You must enter values for the mandatory counter properties. The Target Counters area is read-only. You may enter Adjustments and Reset data as required.

For more details of the capture reading options, see the following topics:
- Entering Counter Readings (Detailed Steps), page 13-8
- Viewing and Entering Additional Counter Reading Data, page 13-9

See Also
- Managing Counter Instances, page 13-2
- Entering Counter Readings from Other Oracle Applications, page 13-10
Entering Counter Readings (Detailed Steps)

Prerequisites
Oracle Installed Base Agent User > Counters > Counter Instances > Enter Readings button

Steps

Perform steps 1 to 8 for each counter reading.

1. Enter the value for the reading.

2. By default, the date of the new reading is set to the current date and time

3. Optionally, change the date of the reading.
   You can enter a date and time prior to the default date.

4. Select the Rollover check box if you want the reading to rollover.

5. Optionally, enter any Comments about the reading.

6. Optionally, click Flexfields.

7. Optionally, click History.
   In the History page, you can disable the reading.

8. Optionally, click Show.
   You can view and enter additional counter reading data, page 13-9, such as counter property reading values.

   Completing the Process

9. After you have entered one or more counter readings and additional counter reading data, click Apply to save your changes.

See Also

- Managing Counter Instances, page 13-2
- Entering Counter Readings in Oracle Installed Base, page 13-6
- Viewing and Entering Additional Counter Reading Data, page 13-9
Viewing and Entering Additional Counter Reading Data

When you click Show on a counter reading line, you can view and enter additional counter reading data, such as counter property values.

This section consists of the following topics:

- Entering Counter Property Readings, page 13-9
- Entering Adjustment and Reset Data, page 13-9
- Viewing Target Counter Readings, page 13-10

Entering Counter Property Readings

All the counter properties associated with the counter appear. You must enter values for the mandatory column properties.

Entering Adjustments and Reset Amounts

You cannot explicitly update existing counter readings, but you can make adjustments to and reset the current counter reading. All the changes you make are recorded, and are visible in the reading history for the counter instance.

For adjustments, select an Adjustment Type and enter the Adjustment Amount.

The effect of adjustments on the current reading depends on the direction of the counter:

- If the direction is ascending, the adjustment amount is added to the latest reading.
- If the direction is descending, the adjustment amount is subtracted from the latest reading.
- You cannot make adjustments to a bi-directional counter.

For resetting, you can enter any value for Reset Current, that will replace the current counter reading. You can, optionally, check Include Target Reset to reset the derived target counter reading.

Both adjustments and resets alter the current reading. In addition, adjustments alter the Net and Life to Date reading values. You can view the values in the counter reading history.

When Adjustments and Resets are Not Allowed

If a reading lock is defined on the counter reading, you cannot make reading adjustments or resets prior to the reading lock date.
If a source counter is locked, then you cannot make counter reading adjustments or resets prior to the reading lock date on the source counters.

Viewing Target Counter Readings

If your current counter instance is the source for any target counter instances, you can view the readings for the target counter instances.

See Also

- Managing Counter Instances, page 13-2
- Entering Counter Readings (Detailed Steps), page 13-8

Entering Counter Readings from Other Oracle Applications

The Capture Counter Reading window is used to update a new counter reading for an item, service, or contract line that is associated with a counter group or counters. The window is accessible from the toolbar of Depot Repair, Field Service, Customer Care, Customer Support, and Service Contracts.

Prerequisites

Counters must be associated with an item, service, or contract line in order to access the Capture Counter Reading window to perform updates.
Steps

1. From the toolbar of the calling application, choose Tools > Counter Capture or Action > Counter Capture.
   The Capture Counter Reading window appears.

2. Enter the new reading for each defined counter into the New field.

3. From the toolbar, click the Save icon to update and save the record.

Associating a Counter Property Value

1. Select the Name of the property type.

2. Click the Value LOV button to display the list of property types.

3. From the toolbar, click the Save icon to update and save the record.

See Also

- Managing Counter Instances, page 13-2

Viewing Target Counter Instances

If the current counter instance is a source counter for one or more target counters, you can view the target counter instances in this page.

Prerequisites

Click the Target Counters icon for a counter instance in a counter instance search results list.

See Also

- Managing Counter Instances, page 13-2

Viewing Reading History for Counter Instances

When you view the reading history for a counter instance, the only special operation you can perform is to disable a counter reading. You can only disable a counter reading if it is not locked. You cannot disable counter readings for target counters.

The Counter Reading History page by default displays all the existing active counter...
readings for the current counter instance.

You can explicitly select a counter reading in the counter readings area to show the counter property readings associated with that counter reading.

In this page, you can view different sets of counter reading data as follows:

- You can search for counter readings within particular dates.
- You can view the actual or average counter readings in the date range.
- You can view all counter readings including the disabled readings.

**Prerequisites**

Click the History or Reading History icon for a counter instance in either a counter instance search results list, a Capture Counters page, or a Mass Readings page.

**See Also**

- Managing Counter Instances, page 13-2

**Performing Mass Readings**

You can perform mass readings on item instances and counter instances.

For item instance mass reading, you can view and update existing counter instance readings associated with item instances, and you can add counter instances to an item instance.

For counter instance mass reading, you can update the existing counter instance readings.

For both item instance and counter instance mass reading, you can enter data for many
counter instances from the search results list.

Overview

You can perform a mass search for item and counter instances by a various of search criteria. For example, you can search for all the counter instances associated with an item instance, or an owner, or a contract. Most of the search parameters are for item instances searches; Counter Name is used for counter instance searches.

You can select to view the search results either by item instance or by counter instance name.

The following describes the operations you can perform for a single counter instance. After performing the search, you can use the search results list as a base “operations area” for performing the same types of operation for many counter instances.

Select a counter instance, so that you can enter a counter reading for the counter instance. For each counter reading, you can also perform additional operations, such as entering counter property readings, entering adjustments and reset information.

After making all your changes, click Save to commit them to the database.

For details of each of the mass reading operations you can perform, select the appropriate topic:

- Entering Search Parameters, page 13-13
- Searching and Viewing by Item Instance, page 13-14
- Searching and Viewing by Counter, page 13-14

The operations you can perform to enter counter readings and other counter reading data are the same as when you capture individual counter readings. For details, see the following topics:

- Entering Counter Readings (Detailed Steps), page 13-8
- Viewing and Entering Additional Counter Reading Data, page 13-9

Entering Search Parameters

Enter one or more of the following search parameters:

- Counter Name: name of the counter instance.
- Serial Number, Item Instance Number: these fields search for the item instance directly.
- Owner Party Name, Owner Account Number: these fields search for the item instances of required owner.
• Contract Number: this field searches for all item instances associated with the given contract.

• Relationship/Association/Contract Type/Source/Name: these fields search for all the item instances with which the specific person is associated.

• Current Location Type, Current Location: these fields search for all the item instances at a given location.

• No Read Duration: this field searches for all the item instances whose counters have not been read for the specified number of days in the immediate past.

Searching and Viewing by Item Instance

In the search results, select an instance number to display its counters in the Counters area. You can enter a counter reading directly in the counter row, or click Show to view and update extra information about the counter reading.

**Note:** You can also select an item instance and add one or more counter instances to that item instance.

Searching and Viewing by Counter

The search results display the counter instances in the Counters area. You can enter a counter reading directly in any counter row, or click Show to view and update extra information about the counter reading.
See Also

- Managing Counter Instances, page 13-2

Viewing Reading Locks on Counter Instances

In the Reading Locks page, you can view any reading locks placed on a counter instance by an Oracle application.

These locks are placed on counter readings to protect the reading against update.

Prerequisites

Click the Reading Locks icon for a counter instance in a counter instance search results list.

See Also

- Managing Counter Instances, page 13-2

Managing Daily Usage for Counter Instances

This page is used for informational value only.

Prerequisites

You must click the Daily Usage icon for a counter instance in a counter instance search results list.
See Also

- Managing Counter Instances, page 13-2
Administering Counters

This chapter covers the following topics:

- Introduction
- Setting the Time Based Counters Engine
- Setting Profile Options
- Using the Counter Readings Open Interface

Introduction

This chapter consists of the following topics:

- Setting the Time Based Counters Engine, page 14-1
- Setting the Profile Options, page 14-1
- Using the Counter Readings Open Interface, page 14-2

Setting the Time Based Counters Engine

You must set the Time Based Counters Engine concurrent program to run periodically to advance and update all active time-based counters and to expire those counters that have passed their effective end dates.

Setting Profile Options

The following are profile options associated with counters:

- CSI: Counter Webview Allowed has a value of Yes or No. Set the option to Yes if you wish to enable counter views from Oracle iSupport.

- CTR: Inactive Item Statuses can be populated with an item status selected from the
profile list of values. Inventory items with this status are excluded from the list of items available for association to a counter group or a counter template.

- **CSI: Counters Enabled** - If set to "Y", this enables counters to be instantiated after creating the associated item instance.

- **CTR: Display reading valid flag in HTML** - If set to "Y", the reading valid flag column will be displayed in Oracle Installed Base HTML pages.

### Using the Counter Readings Open Interface

Through the Counter Readings Open Interface program, you have the ability to import significant volumes of data into counter readings and counter property readings tables. The data may be from multiple sources including external legacy systems.

For general information about the Open Interface, see Using the Open Interface Program, page 9-1.

The complete process is as follows:

1. Load data into the counter readings and counter property readings interface tables.
   
   For column details, see The Open Interface Tables, page B-1.

2. Run the Installed Base - Counter Readings Open Interface concurrent program that reads, validates, and posts the data from the interface tables into the counter readings and counter property readings tables in Oracle Installed Base.
3. If you want the processed records to be cleared from the interface tables after processing, select Yes for Purge Processed Records.

4. If errors occur during the running of the program, the failed records will be loaded into the Open Interface error table, where you will be able to reprocess them. The Error Reprocess Options field controls the selection of records to reprocess in the Counter Readings Open Interface Error Details page - a later step in this process.

   If you select All, then all the records in the error details page will be reprocessed automatically, without the need to select any.

   If you select Selected or leave the field blank, you must select the records to reprocess in the error details page.

5. After you run the program, failed records go to the Open Interface error table.

6. To review and edit failed records, select the Open Interface Error Details from the Oracle Installed Base Administrator menu options.
7. Select values to filter the error rows, and click Find. The Counter Readings Open Interface Error Details page displays the error records in the interface tables.

8. Select a row in the Readings area to see associated records in the Property Readings area.

9. In this page, scroll across to see all the fields, and edit the records that you want to change.

10. If the program that produced these errors was run with the Error Reprocess Options not set to All, click the Process Flag for all the records that you want to reprocess.

11. Click the Save icon in the Counter Readings Open Interface Error Details page. The rows selected, either automatically or explicitly, are reprocessed.
## Oracle Transactions Interfacing with Oracle Installed Base

### Transaction List

This following table consists of the source transaction types that interface with Oracle Installed Base, and the Oracle applications that trigger the transactions.

<table>
<thead>
<tr>
<th>Oracle Application</th>
<th>Source Transaction Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Tracking</td>
<td>FA Adjustment</td>
</tr>
<tr>
<td>Asset Tracking</td>
<td>In Service</td>
</tr>
<tr>
<td>Asset Tracking</td>
<td>Instance Asset Tieback</td>
</tr>
<tr>
<td>Asset Tracking</td>
<td>Item Move</td>
</tr>
<tr>
<td>Asset Tracking</td>
<td>Out of Service</td>
</tr>
<tr>
<td>Asset Tracking</td>
<td>PA Adjustment</td>
</tr>
<tr>
<td>Asset Tracking</td>
<td>Project Item in Service</td>
</tr>
<tr>
<td>Asset Tracking</td>
<td>Project Item Installed</td>
</tr>
<tr>
<td>Asset Tracking</td>
<td>Project Item Uninstalled</td>
</tr>
<tr>
<td>Assets</td>
<td>Asset Reinstatement</td>
</tr>
<tr>
<td>Oracle Application</td>
<td>Source Transaction Type</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Assets</td>
<td>Asset Retirement</td>
</tr>
<tr>
<td>Complex Maintenance Repair and Overhaul</td>
<td>Complex Maintenance Work Order</td>
</tr>
<tr>
<td>Complex Maintenance Repair and Overhaul</td>
<td>Unit Configuration - Complete</td>
</tr>
<tr>
<td>Complex Maintenance Repair and Overhaul</td>
<td>Unit Configuration - Create</td>
</tr>
<tr>
<td>Complex Maintenance Repair and Overhaul</td>
<td>Unit Configuration - Remove</td>
</tr>
<tr>
<td>Complex Maintenance Repair and Overhaul</td>
<td>Unit Configuration - Update</td>
</tr>
<tr>
<td>Configurator</td>
<td>Configurator MACD Flow</td>
</tr>
<tr>
<td>Depot Repair</td>
<td>Depot Repair</td>
</tr>
<tr>
<td>Enterprise Asset Management</td>
<td>Maintenance Asset Check In</td>
</tr>
<tr>
<td>Enterprise Asset Management</td>
<td>Maintenance Asset Check Out</td>
</tr>
<tr>
<td>Enterprise Asset Management</td>
<td>Maintenance Asset Create/Update</td>
</tr>
<tr>
<td>Enterprise Asset Management</td>
<td>Maintenance Rebuildable Return</td>
</tr>
<tr>
<td>Enterprise Asset Management</td>
<td>Maintenance Work Order Completion</td>
</tr>
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<td>Field Service</td>
<td>Debrief Counter Capture</td>
</tr>
<tr>
<td>Field Service</td>
<td>Field Service</td>
</tr>
<tr>
<td>Field Service</td>
<td>Field Service Report</td>
</tr>
<tr>
<td>Installed Base</td>
<td>Account Merge Transaction</td>
</tr>
<tr>
<td>Installed Base</td>
<td>Data Correction</td>
</tr>
<tr>
<td>Installed Base</td>
<td>Expire End-dated Instances Process</td>
</tr>
<tr>
<td>Installed Base</td>
<td>IB Component Install (WIP)</td>
</tr>
<tr>
<td><strong>Oracle Application</strong></td>
<td><strong>Source Transaction Type</strong></td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Installed Base</td>
<td>Installed Base Open Interface</td>
</tr>
<tr>
<td>Installed Base</td>
<td>Installed Base Data Migrated</td>
</tr>
<tr>
<td>Installed Base</td>
<td>Installed Base Mass Edit</td>
</tr>
<tr>
<td>Installed Base</td>
<td>Installed Base User Interface</td>
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<tr>
<td>Installed Base</td>
<td>Item Instance Counter Capture</td>
</tr>
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<td>Installed Base</td>
<td>Mass Counter Reading</td>
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<td>Installed Base</td>
<td>Party Merge Transaction</td>
</tr>
<tr>
<td>Installed Base</td>
<td>RMA Fulfillment</td>
</tr>
<tr>
<td>Installed Base</td>
<td>Time Based Counter Capture Reading</td>
</tr>
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<td>Cycle Count Transfer</td>
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<td>Inventory</td>
<td>Internal Order Direct Ship</td>
</tr>
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<td>Inventory</td>
<td>Internal Order Issue</td>
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<td>Inventory</td>
<td>Internal Order Pick</td>
</tr>
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<td>Inventory</td>
<td>Internal Order Receipt</td>
</tr>
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<td>Inventory</td>
<td>Internal Order Shipment</td>
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<td>Oracle Application</td>
<td>Source Transaction Type</td>
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</tr>
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</tr>
<tr>
<td>Inventory</td>
<td>Inter-Org Direct Transfer</td>
</tr>
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<td>Inventory</td>
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</tr>
<tr>
<td>Inventory</td>
<td>Inter-Org In-Transit Shipment</td>
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<td>Inventory</td>
<td>Issue to an HZ Location</td>
</tr>
<tr>
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<td>Miscellaneous Issue</td>
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<td>Miscellaneous Issue to a HZ Location</td>
</tr>
<tr>
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<td>Miscellaneous Issue To Project</td>
</tr>
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<tr>
<td>Inventory</td>
<td>Miscellaneous Receipt from a HZ Location</td>
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<td>Miscellaneous Receipt From Project</td>
</tr>
<tr>
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<tr>
<td>Inventory</td>
<td>Move Order Issue to Project</td>
</tr>
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<td>Physical Inventory Transfer</td>
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<td>PO Adjustment</td>
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<td>Inventory</td>
<td>PO Receipt into Inventory</td>
</tr>
<tr>
<td>Inventory</td>
<td>Project Borrow</td>
</tr>
<tr>
<td>Oracle Application</td>
<td>Source Transaction Type</td>
</tr>
<tr>
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<td>Inventory</td>
<td>Project Payback</td>
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<tr>
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<td>Receives Material against an Account</td>
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<tr>
<td>Inventory</td>
<td>Receives Material against an Acct Alias</td>
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<td>Return to Vendor</td>
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<td>Shipment Receipt Adjustment</td>
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<td>WIP By-Product Return</td>
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<td>WIP Receipt</td>
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<td>Lease Management</td>
<td>Lease Management Counter Capture</td>
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<td>Lease Management</td>
<td>OKL Booking</td>
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<tr>
<td>Lease Management</td>
<td>OKL Dispose</td>
</tr>
<tr>
<td>Lease Management</td>
<td>OKL Other</td>
</tr>
<tr>
<td>Lease Management</td>
<td>OKL Relocation</td>
</tr>
<tr>
<td>Lease Management</td>
<td>OKL Return</td>
</tr>
<tr>
<td>Oracle Application</td>
<td>Source Transaction Type</td>
</tr>
<tr>
<td>-------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Lease Management</td>
<td>OKL Split Asset</td>
</tr>
<tr>
<td>Order Capture</td>
<td>Order Capture Quotes</td>
</tr>
<tr>
<td>Order Management</td>
<td>Internal Order Issue</td>
</tr>
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<td>Order Management</td>
<td>Internal Sales Order</td>
</tr>
<tr>
<td>Order Management</td>
<td>Order Management - Ship/Fulfill</td>
</tr>
<tr>
<td>Order Management</td>
<td>RMA Receipt</td>
</tr>
<tr>
<td>Project Contracts</td>
<td>Oracle Project Contract Shipping</td>
</tr>
<tr>
<td>Provisioning</td>
<td>Service Fulfillment Manager</td>
</tr>
<tr>
<td>Purchasing</td>
<td>PO Receipt into Project</td>
</tr>
<tr>
<td>Service</td>
<td>Service Request Task</td>
</tr>
<tr>
<td>Service Contracts</td>
<td>Contract Line Counter Capture</td>
</tr>
<tr>
<td>Service Contracts</td>
<td>OKS Subscription</td>
</tr>
</tbody>
</table>
Oracle Installed Base Open Interface Tables

This appendix consists of the following topics:

- Main Columns of the CSI_INTERFACE_SOURCES Table, page B-1
- Main Columns of the CSI_INSTANCE_INTERFACE Table, page B-2
- Main Columns of the CSI_I_PARTY_INTERFACE Table, page B-10
- Main Columns of the CSI_I_RELATION_INTERFACE Table, page B-15
- Main Columns of the CSI_IEA_VALUE_INTERFACE Table, page B-17
- Main Columns of the CSI_ASSET_INTERFACE Table, page B-20
- Main Columns of the CSI_CTR_READINGS_INTERFACE Table, page B-22
- Main Columns of the CSI_CTR_READ_PROP_INTERFACE Table, page B-25

Main Columns of the CSI_INTERFACE_SOURCES Table

<table>
<thead>
<tr>
<th>Name</th>
<th>Datatype</th>
<th>Size</th>
<th>Mandatory</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOURCE_SYSTEM_M_ID</td>
<td>NUMBER</td>
<td></td>
<td>Yes</td>
<td>Source System ID of the external or internal system.</td>
</tr>
<tr>
<td>Name</td>
<td>Datatype</td>
<td>Size</td>
<td>Mandatory</td>
<td>Comments</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
<td>------</td>
<td>-----------</td>
<td>----------------------------------------------------</td>
</tr>
<tr>
<td>SOURCE_SYSTEM_NAME</td>
<td>VARCHAR2</td>
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<td>Yes</td>
<td>Source System Name of the external or internal system.</td>
</tr>
<tr>
<td>SOURCE_DESCRIPTION</td>
<td>VARCHAR2</td>
<td>240</td>
<td></td>
<td>Source System Description of the external or internal system.</td>
</tr>
<tr>
<td>SOURCE_LANG</td>
<td>VARCHAR2</td>
<td>30</td>
<td></td>
<td>Primary Language of the external or internal system.</td>
</tr>
<tr>
<td>LAST_UPDATE_DATE</td>
<td>DATE</td>
<td></td>
<td>Y</td>
<td>Standard WHO column</td>
</tr>
<tr>
<td>LAST_UPDATE_BY</td>
<td>NUMBER</td>
<td>15</td>
<td>Y</td>
<td>Standard WHO column</td>
</tr>
<tr>
<td>CREATION_DATE</td>
<td>DATE</td>
<td></td>
<td>Y</td>
<td>Standard WHO column</td>
</tr>
<tr>
<td>CREATED_BY</td>
<td>NUMBER</td>
<td>15</td>
<td>Y</td>
<td>Standard WHO column</td>
</tr>
<tr>
<td>LAST_UPDATE_LOGIN</td>
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<td>15</td>
<td></td>
<td>Standard WHO column</td>
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</table>

**Main Columns of the CSI_INSTANCE_INTERFACE Table**

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<thead>
<tr>
<th>Name</th>
<th>Datatype</th>
<th>Size</th>
<th>Mandatory</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>INST_INTERFACE_ID</td>
<td>NUMBER</td>
<td></td>
<td>Yes</td>
<td>Instance Interface ID</td>
</tr>
<tr>
<td>Name</td>
<td>Datatype</td>
<td>Size</td>
<td>Mandatory</td>
<td>Comments</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------</td>
<td>------</td>
<td>-----------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SOURCE_SYSTEM_NAME</td>
<td>VARCHAR2</td>
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<td>Yes</td>
<td>Source System Name from CSI_INTERFACE_SOURCES</td>
</tr>
<tr>
<td>PARALLEL_WORKER_ID</td>
<td>NUMBER</td>
<td></td>
<td></td>
<td>Parallel Worker ID that is assigned to this Instance used when creating instances with the Parallel Worker Process Only.</td>
</tr>
<tr>
<td>REPLACE_FLAG</td>
<td>VARCHAR2</td>
<td>1</td>
<td></td>
<td>Flag which indicates if the item instance is replaced</td>
</tr>
<tr>
<td>TRANSACTION_IDENTIFIER</td>
<td>VARCHAR2</td>
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<td></td>
<td>CSI Transaction identifier</td>
</tr>
<tr>
<td>SOURCE_TRANSACTION_DATE</td>
<td>DATE</td>
<td></td>
<td>Yes</td>
<td>Transaction Date that this Instance will be processed with the Open Interface.</td>
</tr>
<tr>
<td>SOURCE_TRANSACTION_TYPE</td>
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<td>30</td>
<td></td>
<td>CSI Source transaction type</td>
</tr>
<tr>
<td>INSTANCE_ID</td>
<td>NUMBER</td>
<td></td>
<td></td>
<td>Unique ID that identifies an item unit instance</td>
</tr>
<tr>
<td>INSTANCE_NUMBER</td>
<td>VARCHAR2</td>
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<td></td>
<td>Functional User Key for Item Instance</td>
</tr>
<tr>
<td>INSTANCE_DESCRIPTION</td>
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<td>240</td>
<td></td>
<td>Description of the item instance</td>
</tr>
<tr>
<td>Name</td>
<td>Datatype</td>
<td>Size</td>
<td>Mandatory</td>
<td>Comments</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------</td>
<td>------</td>
<td>-----------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>EXTERNAL_REFERENCE</td>
<td>VARCHAR2</td>
<td>30</td>
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<td>External reference given to item instance</td>
</tr>
<tr>
<td>PROCESS_STATUS</td>
<td>VARCHAR2</td>
<td>1</td>
<td>Yes</td>
<td>Process Status for Instance. Value Values are 'R' Ready, 'E' Error, 'P' Processed</td>
</tr>
<tr>
<td>BATCH_NAME</td>
<td>VARCHAR2</td>
<td>30</td>
<td></td>
<td>Open interface batch name</td>
</tr>
<tr>
<td>ERROR_TEXT</td>
<td>VARCHAR2</td>
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<td></td>
<td>Error text for any errors that are encountered while processing each row of data.</td>
</tr>
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<td>INVENTORY_ITEM_ID</td>
<td>NUMBER</td>
<td></td>
<td></td>
<td>Inventory Item ID for the instance</td>
</tr>
<tr>
<td>INV_CONCATENATED_SEGMENTS</td>
<td>VARCHAR2</td>
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<td>Concatenated Segment for the instance</td>
</tr>
<tr>
<td>INVENTORY_REVISION</td>
<td>VARCHAR2</td>
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<td></td>
<td>Inventory Revision for items that are revision controlled in Inventory</td>
</tr>
<tr>
<td>INV_VLD_ORGANIZATION_ID</td>
<td>NUMBER</td>
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<td></td>
<td>Validation Organization ID that is used for Validating the Inventory Attributes</td>
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<tr>
<td>Name</td>
<td>Datatype</td>
<td>Size</td>
<td>Mandatory</td>
<td>Comments</td>
</tr>
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<tr>
<td>INV_VLD_ORGANIZATION_NAME</td>
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<td>Validation Organization Name that is used for Validating the Inventory Attributes</td>
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<td>SERIAL_NUMBER</td>
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<td>Serial Number for this Item Instance</td>
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<tr>
<td>MFG_SERIAL_NUMBER_FLAG</td>
<td>VARCHAR2</td>
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<td></td>
<td>Manufacturer Serial Number Flag for this Instance. Valid values are Yes 'Y' or No 'N'. If this is set to Yes, Installed Base will validate the serial number against inventory otherwise it will not.</td>
</tr>
<tr>
<td>LOT_NUMBER</td>
<td>VARCHAR2</td>
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<td></td>
<td>The Lot Number for the lot where this item will exist</td>
</tr>
<tr>
<td>QUANTITY</td>
<td>NUMBER</td>
<td></td>
<td></td>
<td>Instance Quantity</td>
</tr>
<tr>
<td>UNIT_OF_MEASURE_CODE</td>
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<td>Unit of Measure Code that will be used for this Instance (i.e. 'EA')</td>
</tr>
<tr>
<td>Name</td>
<td>Datatype</td>
<td>Size</td>
<td>Mandatory</td>
<td>Comments</td>
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<tr>
<td>-----------------------------</td>
<td>-------------</td>
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<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>UNIT_OF_MEA</td>
<td>VARCHAR2</td>
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<td></td>
<td>Unit of measure that will be used for this Instance, for example, 'Each'</td>
</tr>
<tr>
<td>SURE</td>
<td></td>
<td></td>
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<td>ACCOUNTING_</td>
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<td>Accounting Class Code</td>
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<td>Instance Condition ID</td>
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<td>Instance Condition Name</td>
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<td>Instance Status ID</td>
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<td>Flag that indicates if this is as per a customer definition</td>
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<td>Flag that indicates if this is as per a merchant definition</td>
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### The Open Interface Tables

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### The Open Interface Tables

#### Main Columns of the CSI_IEA_VALUE_INTERFACE Table

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**Main Columns of the CSI_ASSET_INTERFACE Table**

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**Main Columns of the CSI_CTR_READINGS_INTERFACE Table**

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