Oracle® Asset Tracking
Implementation Guide
Release 12.2
Part No. E48810-07

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Send Us Your Comments

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- Do you need different information or graphics? If so, where, and in what format?
- Are the examples correct? Do you need more examples?

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Note: Before sending us your comments, you might like to check that you have the latest version of the document and if any concerns are already addressed. To do this, access the new Oracle E-Business Suite Release Online Documentation CD available on My Oracle Support and www.oracle.com. It contains the most current Documentation Library plus all documents revised or released recently.

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Preface

Intended Audience
Welcome to Release 12.2 of the Oracle Asset Tracking Implementation Guide.
See Related Information Sources on page vii for more Oracle E-Business Suite product information.

Documentation Accessibility
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Structure
1 Overview of Oracle Asset Tracking
2 Implementation and Setup
3 Oracle Asset Tracking Administration
4 Oracle Asset Tracking API
A Using Oracle Asset Tracking Client Extensions

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 Assets User Guide
Oracle E-Business Suite System Administrator’s Guide
Oracle Enterprise Asset Management User’s Guide
Oracle Enterprise Asset Management Implementation Guide
Oracle General Ledger Implementation Guide
Oracle HRMS Implementation Guide
Oracle Installed Base Implementation Guide
Oracle Inventory User’s Guide
Oracle Order Management Implementation Manual
Oracle Payables Implementation Guide
Oracle Projects Fundamentals
Oracle Projects Implementation Guide
Oracle Purchasing User’s Guide
Oracle Workflow Administrator’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 Asset Tracking

This chapter covers the following topics:
• Definition of Oracle Asset Tracking
• Inventory Item and Asset Tracking
• Features of Oracle Asset Tracking
• Integration Points and Dependencies for Oracle Asset Tracking

Definition of Oracle Asset Tracking

Oracle Asset Tracking is a tracking system that integrates with and stores information collected from Oracle Inventory, Oracle Purchasing, Oracle Projects, Oracle Assets, Oracle Payables, and Oracle Installed Base.

With Oracle Asset Tracking, you can give users access to tracking information without allowing them access to sensitive processes related to assets and purchasing. You can also track inventory items after they have been installed and link financial transactions to the physical movement of equipment.

Oracle Asset Tracking integrates with Oracle Installed Base as its data repository. Every transaction that Oracle Asset Tracking tracks will be recorded in theInstalled Base transaction table and each record affected by such transactions will be recorded in the instance and instance history tables.

Inventory Item and Asset Tracking

To track inventory items and assets, Oracle Asset Tracking must interact with several enterprise resource planning (ERP) applications. It sends to and receives messages from those applications about the status and location of the items you want to track.

Oracle Asset Tracking provides an enterprise tracking and asset management system where all inventory, project and asset-related material information is stored, providing a complete view of your assets. Users can locate materials anywhere in the system such
as in warehouses, on trucks, installed in the network, or on project sites, facilitating financial transactions using physical movements of material and equipment. In addition, Oracle Asset Tracking can provide a lifecycle history of all activity for that equipment.

An asset comprises a collection of items. The items may be trackable or not trackable; the tracking is carried out in Oracle Installed Base and Oracle Asset Tracking.

During implementation, items are designated as trackable at the item master level in Oracle Inventory. Oracle Asset Tracking tracks the activity of the trackable items through inventory, projects, and into fixed assets.

In Oracle Assets you perform the Mass Additions concurrent process to create assets.

**Summary of Oracle Processes that Track Internal Products and Assets**

The following diagram shows a summary of the Oracle application modules, and the transactions and messages associated with Oracle Asset Tracking.

For example, when a field service technician enters a report that equipment has been placed into service, the deployment system may send a message to Oracle Asset Tracking. This message updates the status of the equipment to "In Service," and gives its in-service date to Oracle Projects. The asset is now ready to be created in Oracle Assets.

**Messaging Architecture in Oracle Asset Tracking**

The messaging architecture receives requests from external publishing systems in eXtensible Markup Language (XML) format. Based on the input requirements, the
application updates the status and keeps a history of transactions for the tracking unit. Subsequently, the application publishes outgoing requests to the subscribing systems for further processing. The publishing and subscribing systems include: Installed Base, Inventory, Purchasing, Payables, Assets, Projects, Workforce Management, and other legacy systems.

Features of Oracle Asset Tracking

This section provides an overview of the features of Oracle Asset Tracking.

Functional Overview

This application supports the standard functions found in Oracle Inventory, Oracle Purchasing, Oracle Projects, and Oracle Assets.

Oracle Asset Tracking supports the following functions (that is, item instances are not updated if you perform inventory transactions other than those in the following list):

- Purchase order receipt of items into inventory
- Purchase order receipt of items into operating projects
- Move orders
- Miscellaneous issue to a project
- Miscellaneous receipt from a project
- Installation and uninstallation of equipment
- In-Service/Out-of-Service of equipment
- Subinventory transfers
- Inter-organization transfers
- Miscellaneous receipts and issues
- Placement of assets into or out of service
- Retirement and reinstatement of the partial or full cost of an asset
- Asset item moves and asset item transfers
- Physical counts
Integration Points and Dependencies for Oracle Asset Tracking

Oracle Asset Tracking has the following integration points with Oracle E-Business Suite:

- Oracle Inventory
- Oracle Purchasing
- Oracle Order Management
- Oracle Payables
- Oracle Assets
- Oracle Projects
This chapter covers the following topics:

- Setup Checklist
- Install Required Oracle Application Modules
- Define Users with Responsibilities in Oracle Application Modules
- Define System Profile Options for Oracle Asset Tracking
- Define System Profile Options for All Dependent Responsibilities
- Define Oracle Inventory Parameters
- Defining Organization Parameters
- Defining User-Definable Transaction Types
- Defining Normal Items
- Defining Depreciable Items
- Associating Subinventories to Locations
- Defining Inventory Periods
- Additional Oracle Inventory Setup Considerations
- Defining Oracle Purchasing Parameters
- Defining Oracle Payables Parameters
- Matching Invoice to Purchase Order
- Defining Invoice Quantity Tolerance
- Defining Oracle Projects Parameters
- Defining a Descriptive Flexfield for Expenditure Items
- Setting Up Asset Creation Grouping Methods for Project Expenditure Items
- Additional Oracle Projects Setup Considerations
- Defining Oracle Assets Parameters
• Performing Oracle Installed Base Setup Tasks
• Defining HZ Locations
• Associating HR and HZ Locations with Asset Locations
• Setting the Freeze Install Parameter
• Setting Up Internal Orders for Assets
• Setting Up Workflow Notification Options
• Explaining the Open Interface Flow for Assets

Setup Checklist

Oracle Asset Tracking enables the ability to track an item instance regardless of the location and also to perform the financial updates automatically.

Users may use both the tracking and financial update functionality or just the instance tracking capability.

If you are not using asset creation through Oracle Asset Tracking, then you do not have to perform the setups in Oracle Projects and Oracle Assets.

The following table is a list of setup steps that must be completed:

Setup Steps for Oracle Asset Tracking

<table>
<thead>
<tr>
<th>Step Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Install required Oracle application modules</td>
<td>2-3</td>
</tr>
<tr>
<td>2. Define users with required responsibilities</td>
<td>2-4</td>
</tr>
<tr>
<td>3. Define system profile options for Oracle Asset Tracking</td>
<td>2-4</td>
</tr>
<tr>
<td>4. Define system profile options for all the dependent responsibilities</td>
<td>2-9</td>
</tr>
<tr>
<td>5. Define Oracle Inventory parameters</td>
<td>2-11</td>
</tr>
<tr>
<td>6. Define Oracle Purchasing parameters</td>
<td>2-17</td>
</tr>
<tr>
<td>7. Define Oracle Payables parameters</td>
<td>2-18</td>
</tr>
<tr>
<td>8. Define Oracle Assets parameters</td>
<td>2-23</td>
</tr>
<tr>
<td>9. Perform Oracle Installed Base setup tasks</td>
<td>2-24</td>
</tr>
</tbody>
</table>
Step Title

10. Set Up Internal Orders for Assets, page 2-26
11. Set Up Workflow Notification Options, page 2-26
12. Explaining the Open Interface Flow for Assets, page 2-27

Note: If you are an Oracle Installed Base user and want to limit your tracking to customer products only, then perform steps 2 and 4.

Install Required Oracle Application Modules

The following Oracle application modules must be installed and set up before you set up Oracle Asset Tracking:

- Oracle Human Resource Management System
- Oracle Inventory
- Oracle Assets
- Oracle Purchasing
- Oracle Payables
- Oracle General Ledger
- Oracle Installed Base
- Oracle Service Fulfillment Manager

You must also install the following if you are using internal sales orders for normal items:

- Oracle Order Management

Use a standard setup for Oracle Purchasing, Oracle Assets, Oracle General Ledger, Oracle Payables. For detailed setup information on all of these applications consult the appropriate documentation set.

Note: In Oracle HRMS, you must set up users with the ability to approve purchase orders.
For detailed setup information on Oracle HRMS, please refer to the Oracle HRMS implementation documentation appropriate to the country where the application is being installed.

Define Users with Responsibilities in Oracle Application Modules

After you have installed the required Oracle application modules, you must define users with responsibilities to enable users to perform the appropriate tasks in each application module.

For more information on setting up responsibilities and users, see the Oracle E-Business Suite System Administrator’s Guide.

Define System Profile Options for Oracle Asset Tracking

The system profile options for Oracle Asset Tracking determine how messages are dequeued, where the history file for debugging is located, and where event notifications are sent.

Use the System Profile Values window to make changes to your profile settings. Do not enter user values unless you require a setting that is different from the default setting.

To define system profile options for Oracle Asset Tracking:
1. From the Navigator for the System Administrator responsibility, choose Profile and then select System.

2. In the Profile Name field of the Find System Profile Values window, enter CSE% and click Find.

   In the System Profile Values window, define the profile options as follows:
### Oracle Asset Tracking Module Profile Option Settings

<table>
<thead>
<tr>
<th>Profile Name</th>
<th>Default Value</th>
<th>Profile Option Function</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE: Create Assets when issued to Field from Expense Subinventory for Asset Items (Default value = NO)</td>
<td>N</td>
<td>This profile option controls whether to create asset for asset items when they are issued to field location from an expense subinventory. By default, this option is set to &quot;No&quot;. Using this profile option, the asset would not be created and the transaction would be marked as complete.</td>
<td>Optional</td>
</tr>
<tr>
<td>CSE: Create Assets when issued to Field for Expense Items (Default value = YES)</td>
<td>Y</td>
<td>This profile option controls whether to create asset for expense items when they are issued to field location from both expense and asset subinventory. By default, this option is set to &quot;Yes&quot;. Using this profile option, an asset (with zero cost) would be created.</td>
<td>Y</td>
</tr>
<tr>
<td>Profile Name</td>
<td>Default Value</td>
<td>Profile Option Function</td>
<td>Required</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>----------</td>
</tr>
</tbody>
</table>
| CSE: Debug Log      | /tmp          | Sets the file and directory of the debug log file. Specify the value of the profile option CSE: Debug Log Directory to be the path of the directory on the server side where the log file should be written. You must choose the log file path from one of the outputs of the following SQL statement: SELECT value FROM v$parameter WHERE name = 'utl_file_dir'
<p>|                     |               | Y                                                                                      | Y        |
| CSE: Debug Option   | Y             | Enter Y (yes) or N (no) to control the debugging function for the message dequeuer.     | Y        |</p>
<table>
<thead>
<tr>
<th>Profile Name</th>
<th>Default Value</th>
<th>Profile Option Function</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSE: FA Book Type Code</td>
<td></td>
<td>This option is used to set the appropriate FA book type code for creating assets from the depreciable item, based on the site and organization:</td>
<td>Optional</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If there is a different book at the site level and at the organization level, the organization book is selected.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If there is no book set at organization level, then the book at site level is selected.</td>
<td></td>
</tr>
<tr>
<td>CSE: PA Expenditure Type</td>
<td></td>
<td>The default expenditure type used when material is issued to a project.</td>
<td>Optional</td>
</tr>
<tr>
<td>Profile Name</td>
<td>Default Value</td>
<td>Profile Option Function</td>
<td>Required</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>---------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>CSE: Transaction subtype for Asset creation</td>
<td>N</td>
<td>This profile will be set to specify the IB transaction sub type for asset creation flow. The LOV for this profile value displays all IB Transaction subtypes that are associated to Order Management Transaction Type - OM_SHIPMENT with Change Owner set as No. This value is set at the site level.</td>
<td>Optional</td>
</tr>
<tr>
<td>CSE: Use Asset Tracking Costing Hook</td>
<td>Y</td>
<td>This profile option must be set to “Yes” if Oracle Asset Tracking is used.</td>
<td>Y</td>
</tr>
<tr>
<td>CSE: Deploy from Project Expense Subinventory</td>
<td>N</td>
<td>This profile option when set to “Yes” allows deploying of physical assets from an inventory location, if they were received into project expense sub-inventory.</td>
<td>Y</td>
</tr>
<tr>
<td>CSI: Use Parallel Mode</td>
<td>N</td>
<td>Determines which approach to use to process order lines in Installed Base Concurrent program.</td>
<td>Optional</td>
</tr>
</tbody>
</table>
Define System Profile Options for All Dependent Responsibilities

After the modules Oracle Inventory, Oracle Projects, Oracle Assets, Oracle Purchasing, Oracle Payables, Oracle General Ledger, Oracle Installed Base and Oracle Service Fulfillment Manager have been installed, you must define a number of system profile options for each responsibility associated with each dependent Oracle application module, as well as Oracle Asset Tracking itself.

The following table shows the full list of the responsibilities that are required for each of the profile options.

**Responsibilities Required for Profile Option Setup**

<table>
<thead>
<tr>
<th>Oracle Application Module</th>
<th>Sample Responsibility Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Inventory</td>
<td>Inventory Manager</td>
</tr>
<tr>
<td>Oracle Purchasing</td>
<td>Purchasing Manager</td>
</tr>
<tr>
<td>Oracle Payables</td>
<td>Payable Manager</td>
</tr>
<tr>
<td>Oracle Projects</td>
<td>CRL Projects</td>
</tr>
<tr>
<td>Oracle Assets</td>
<td>Assets Manager</td>
</tr>
<tr>
<td>Oracle General Ledger</td>
<td>General Ledger</td>
</tr>
<tr>
<td>Oracle Installed Base</td>
<td>Installed Base Administrator</td>
</tr>
<tr>
<td>Oracle Asset Tracking</td>
<td>Asset Tracking Manager</td>
</tr>
<tr>
<td>Oracle Order Management</td>
<td>Order Management Super User</td>
</tr>
</tbody>
</table>

**Note:** The responsibility names in the table are sample responsibility names. For your installation, use the appropriate equivalent responsibility name or names set up for each Oracle application module.

The following table shows the supplementary profile options that are required to be set up. The table first shows the profile options that must be set up for each of the responsibilities listed in the preceding table. This is followed by the profile options that are required for specific responsibilities only.
### Supplementary Profile Options Required for Oracle Asset Tracking

<table>
<thead>
<tr>
<th>Profile Options</th>
<th>Profile Level</th>
<th>Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO: Operating Unit</td>
<td>Responsibility</td>
<td>All responsibilities in preceding table.</td>
</tr>
<tr>
<td>GL Set of Books Name</td>
<td>Responsibility</td>
<td>All responsibilities in preceding table.</td>
</tr>
<tr>
<td>MO: Security Profile</td>
<td>Responsibility</td>
<td>All responsibilities in preceding table.</td>
</tr>
<tr>
<td>HR: Business Group</td>
<td>Responsibility</td>
<td>All responsibilities in preceding table.</td>
</tr>
<tr>
<td>HR: Security Profile</td>
<td>Responsibility</td>
<td>All responsibilities in preceding table.</td>
</tr>
<tr>
<td>PA: Licensed to use CRL Projects</td>
<td>Site, Responsibility</td>
<td>All responsibilities in preceding table.</td>
</tr>
<tr>
<td>Service: Inventory Validation</td>
<td>Responsibility</td>
<td>Oracle Asset Tracking</td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td>Oracle Installed Base</td>
</tr>
<tr>
<td>QP: Item Validation</td>
<td>Responsibility</td>
<td>Order Management</td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**To define system profile options for all dependent responsibilities:**

1. From the Navigator for the System Administrator responsibility, choose Profile and then select System.

   For each combination of responsibility and profile options in the preceding tables, perform steps 2 through 5.

2. In the Responsibility field of the Find System Profile Values window, enter the appropriate responsibility, such as Inventory, Vision Enterprises.

3. In the Profile Name field of the Find System Profile Values window, enter the
Profile Value and click the Find button.

4. Enter the appropriate value at the Responsibility level (and Site level where required).

5. Save.

Define Oracle Inventory Parameters

This section discusses the concepts and setup steps in Oracle Inventory that have a bearing on how Oracle Asset Tracking functions.

The topics in this section are as follows:

- Tracking, page 2-11
- Depreciable Items, page 2-12
- Serial Number Control, page 2-12
- General Oracle Inventory Considerations, page 2-12
- Define Organization Classifications, page 2-13
- Define Organization Parameters, page 2-13
- Define User-Definable Transaction Types, page 2-14
- Define Normal Items, page 2-15
- Define Depreciable Items, page 2-16
- Associate Subinventories to Locations, page 2-16
- Define Inventory Period, page 2-17
- Additional Oracle Inventory Setup Considerations, page 2-17

Tracking

When an item is Oracle Asset Tracking trackable, any activity for that item passes a message to Oracle Asset Tracking for tracking.

You perform the task of making an item trackable by both Oracle Installed Base and Oracle Asset Tracking in Oracle Inventory, as follows:

- When you define a master item, then, to make the item trackable, check the Track in Install Base check box on the Service tab.

You must define the item as trackable at the master organization level only. Items
become Installed Base trackable (and Asset Tracking trackable) across all organizations. Do not change this item attribute at the organization level.

**Additional Tracking Considerations**

The Installed Base tracking attribute of an item cannot be changed when on-hand quantity is greater than zero.

Attribute changes are not applied to pre-existing transactions in the Oracle Asset Tracking record. If you change the tracking attribute of an item from No to Yes, transactions that occurred before the change have no record in Oracle Asset Tracking. If you change the tracking attribute of an item from Yes to No, Oracle Asset Tracking no longer processes the pre-existing transactions.

**Depreciable Items**

Items that are trackable by Asset Tracking are defined as either normal or depreciable items. The difference between normal and depreciable items is in the way that assets can be created from the items.

For a normal item, the asset is created after an item is put in service. For a depreciable item, the asset is created when an item is received, either in Oracle Inventory or Oracle Projects.

For a depreciable item, you must define the item as depreciable at the master organization level only. Do not change this item attribute at the organization level.

For more details, see Define Depreciable Items, page 2-16.

**Serial Number Control**

You must designate serial number control for the trackable items at the master organization level. This ensures that serial number control for an item is the same across all inventory organizations. Do not change this item attribute at the organization level.

You specify serial number control in the Inventory tab.

Do not change serial control for an item after transactions have been entered.

**Additional Serial Number Control Considerations**

In Oracle Inventory, you may enter a miscellaneous issue transaction to remove all on-hand inventory, change the serial control attribute, then enter a miscellaneous receipt to restore the on-hand quantities. During the process of correcting on-hand quantities, items that already have transactions are not affected. As a result records in Oracle Asset Tracking do not show the change in the serial control attribute.

**General Oracle Inventory Considerations**

In addition, follow these restriction guidelines when setting up Oracle Inventory:

- Define all Oracle Asset Tracking items as inventory items (Inventory tab).
  
  If the Inventory Item check box is not marked, you cannot store or move the item.

- Enable Inventory Asset and Costing Enabled attributes for all items in Oracle Asset
Tracking (Costing tab).
These attributes let you enter and maintain costs for the items.

- Do not modify the Oracle Account Generator logic for deriving the depreciation expense account.

The depreciation expense account is derived from the book type (corporate or tax) and the asset category. Oracle Asset Tracking assumes that the depreciation expense account remains unchanged as a result of subinventory or inter-organization transfers.

**Define Organization Classifications**

Oracle Asset Tracking tracks those inventory items which you have defined as trackable in Asset Tracking. Each module that interacts with Oracle Asset Tracking passes messages that contain specific information for all items that are marked as trackable in Asset Tracking. For these messages to be sent and received successfully, the organizations you define must have the following classifications:

- **HR Organization**
  Use to associate employees, such as buyers and planners, with items within the organization.

- **Inventory Organization**
  Use to define, maintain, transact, and have on-hand balances for item numbers.

- **Project Expenditure/Event Organization and Project Task Owning Organization**
  Allows Oracle Inventory to associate items assigned to project and tasks to a project clearing account, which collects the cost of that assigned material. Use to monitor the expenditures for a project and task by reviewing the account through Oracle Projects. You use capital projects to collect construction-in-process (CIP) and expensed costs for assets you are building. When you are ready to place the asset in service, you generate asset lines from the CIP costs in Oracle Projects. You can send these lines to Oracle Assets to become depreciable, fixed assets. Therefore allow entry of capital project in your organization and issue material to the Capital Projects only.

  You must specify any additional classifications you need for your organization.

**Defining Organization Parameters**

When you issue material to projects and tasks, all costs are initially charged to a project clearing account. This account provides a convenient check point for tracking project costs.

Project Cost Collection Enabled must be checked on the Costing Information tab. These attributes let you enter and maintain costs for the items.
The organization parameters described below ensure that the costs associated to a project or task are passed to the clearing account for the Inventory organization that has been set up to own inventory items.

Use these steps to define organization parameters.

Prerequisites

You must define your organizations when you set up Oracle Inventory before you can define the organization parameters.

To define organization parameters:
1. In the Inventory responsibility, navigate to Setup. Select Organizations and then select Parameters.
2. In the Organization Parameters window, click the Inventory Parameters tab:
   1. Enter a value in the Move Order Timeout Period.
   2. Enter a value in the Move Order Timeout Action.
   3. Select the LCM Enabled option if you want to use the capitalize landed costs for fixed assets.
3. Click the Costing Information tab and check Project Cost Collection Enabled.
4. Click the Other Accounts tab and enter the organization’s Project Clearing Account number.
5. Save your work.

Defining User-Definable Transaction Types

Using the Inventory responsibility, you must define certain user-definable transaction types.

The following transactions must be defined to use Oracle Asset Tracking miscellaneous transactions.

Required Transaction Types

<table>
<thead>
<tr>
<th>Name</th>
<th>Source Type</th>
<th>Action</th>
<th>Check Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue to Project</td>
<td>Move Order</td>
<td>Issue from Store</td>
<td>Check on Project</td>
</tr>
</tbody>
</table>
You do not have to use the transaction type names as shown in the table. However, you must specify the source type and action as shown and select the Project check box for each of the transaction types required for Oracle Asset Tracking.

**To define user-definable transaction types:**
1. Using the Inventory responsibility, navigate to Setup. Select Transactions and then select Types.
2. In the Transaction Types window, click the User tab.
3. Enter name, source type, action, and check box.
4. Save your work.

**Defining Normal Items**

You must define an item master organization and at least one organization in Oracle Asset Tracking.

**To define normal items:**
1. In the Inventory responsibility, navigate to Items and then select Master Items.
2. In the Master Item window, enter the appropriate information into the header region of the window.
3. Click the Inventory tab.
4. Check Inventory Item.
The default values for the Stockable and Transactable check boxes are selected.

5. Select the Service tab and check Track in Installed Base.

6. Enter or select information in the remaining fields of the window.

7. Save.

**Defining Depreciable Items**

You must define an item master organization and at least one organization in Oracle Asset Tracking.

**To define depreciable items:**

1. In the Inventory responsibility, navigate to Items and then select Master Items.

2. In the Master Item window, enter the appropriate information into the header region of the window.

3. Click the Inventory tab.

4. Check Inventory Item.

   The default values for the Stockable and Transactable check boxes are selected.

5. Select the Service tab and check Installed Base Tracking.

6. Select a depreciable inventory asset in the Asset Creation field.

7. Enter information in the remaining fields.

8. Save your work.

**Associating Subinventories to Locations**

Associate asset subinventories to a location.

- Use the Location field in the subinventory setup to link the deliver-to location of the item with its asset location.

  **Note:** This is a standard setup step in Oracle Inventory. For more details, see the *Oracle Inventory User’s Guide*. 
Defining Inventory Periods

Set the first inventory period. Make sure that you align this period with the current period of the other modules.

**To define an inventory period:**
1. In the Inventory responsibility, navigate to Accounting Close Cycle and then select Inventory Accounting Periods.
2. In the Inventory Accounting Periods window, in the first Period region, enter the current period.
3. Save.

**Note:** This is a standard setup step in Oracle Inventory. For more details, see the *Oracle Inventory User’s Guide*.

Additional Oracle Inventory Setup Considerations

**Assigning Cost to Installed Base Tracking Items**

You must assign cost to each item that is Installed Base tracking if you are using Oracle Projects to accrue the expenditures. Oracle Asset Tracking transfers only the Material cost element that is defined for the item to Oracle Projects.

**Define Shipping, Inter-Organization Shipping**

Use the Inter-Organization Shipping window to define accounting information and the relationships that exist between shipping and destination organizations. You can specify whether an organization is a shipping organization, a destination organization or both. For more information see the *Oracle Inventory User’s Guide*.

**Note:** For details on Oracle Inventory setup steps, please refer to the *Oracle Inventory User’s Guide*.

Defining Oracle Purchasing Parameters

When an organization receives an item, the subinventory material account is debited and the AP accrual account is credited. When the item is issued to a project and the cost collection process is run, the project clearing account is debited and the project’s account is credited.

To ensure that Oracle Asset Tracking picks up the Project clearing account for the charge account of purchase order, modify Oracle Account Generator as follows:
• PO charge account = project clearing account

This modification ensures that the project clearing account used in the organization matches the credit account generated by auto-accounting for receipt transactions.

In addition, be aware of the following restrictions when setting up Oracle Purchasing:

• Set the match approval level to at least three-way matching.

Oracle Asset Tracking uses purchase order and invoice data to determine and adjust costs. Three-way matching ensures that the purchase order quantity, the receipt quantity, and the invoice quantity all match. You can also set the match approval level higher, to four-way matching.

If your organization default matching method is less than the three-way matching, update the matching level setting on the purchase order itself.

• Assign an asset category to Asset Tracking items.

The asset category must not be an expense category and must belong to the same Assets book as the book used by the Profile Option CSE: FA Book Type Code. The asset book used in this profile option is based on two levels: site and organization.

For details of setting up the profile options, see Define System Profile Options for Oracle Asset Tracking, page 2-4.

Note: For more information regarding Oracle Purchasing setup, refer to the Oracle Purchasing User’s Guide.

The Accrual at Period End flow is not supported in Release 12 by Oracle Asset Tracking. It is replaced by the Receipt Accrual flow. The Subledger Architecture updates introduced in Release 12 change the way accounts are derived by the Generate Asset Lines PA process.

Oracle Asset Tracking uses this purchasing item attribute to derive the asset category it uses when it creates asset records. Set control of this attribute at the master organization level so that the asset category for an item is the same across all inventory organizations.

**Defining Oracle Payables Parameters**

The following are Oracle Payables setup tasks:

• Match Invoice to Purchase Order, page 2-19

• Define Invoice Quantity Tolerance, page 2-19
Matching Invoice to Purchase Order

Oracle Asset Tracking uses purchase order and invoice data to adjust asset cost.

1. In the Payables responsibility, navigate to Setup. Select Options and then select Financials.

2. In the Financials Options window, click the Supplier - Entry tab.

3. Set the Invoice Match Option to Purchase Order.

Defining Invoice Quantity Tolerance

Define the quantity tolerance in Oracle Payables as zero.

- The method Oracle Asset Tracking uses to calculate invoice price variance (IPV) requires this restriction. However, price tolerances are permitted.

Defining Oracle Projects Parameters

The following are Oracle Projects setup tasks:

- Define a Descriptive Flexfield for Expenditure Items, page 2-19
- Set Up Asset Creation Grouping Methods for Project Expenditure Items, page 2-21
- Additional Oracle Projects Setup Considerations, page 2-22

Defining a Descriptive Flexfield for Expenditure Items

The expenditure item descriptive flexfield is mandatory for asset creation. It provides a way to view the attributes or grouping method values of an item.

To define a descriptive flexfield for expenditure items:

1. Navigate to Oracle Projects, and select Setup, Flexfields, Descriptive, Segments.

2. In the Descriptive Flexfield Segments window, create the descriptive flexfield for the application Oracle Projects with the title Expenditure Items.

3. Click Segments.

4. Refer to the following table to define the five segments in the flexfield.
**Segments in the Expenditure Items Flexfield**

<table>
<thead>
<tr>
<th>Name</th>
<th>Window Prompt</th>
<th>Column</th>
<th>Value Set</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Number</td>
<td>Item Number</td>
<td>ATTRIBUTE6</td>
<td>50 chars (no validation)</td>
</tr>
<tr>
<td>Serial Number</td>
<td>Serial Number</td>
<td>ATTRIBUTE7</td>
<td>50 chars (no validation)</td>
</tr>
<tr>
<td>Category</td>
<td>Category</td>
<td>ATTRIBUTE8</td>
<td>50 chars (no validation)</td>
</tr>
<tr>
<td>Location</td>
<td>Location</td>
<td>ATTRIBUTE9</td>
<td>50 chars (no validation)</td>
</tr>
<tr>
<td>Product Classification</td>
<td>Product Classification</td>
<td>ATTRIBUTE10</td>
<td>50 chars (no validation)</td>
</tr>
</tbody>
</table>

5. Select the Displayed check box for all five segments in the flexfield.

6. Save the data you have entered, then close the Segments Summary - Global Data Elements window.

7. Back in the Descriptive Flexfield Segments window, select the check box Freeze Flexfield Definition.

8. Click Compile.

**Note:** In a subsequent step of setting up asset creation grouping methods, the asset creation options GROUPING ELEMENT1, GROUPING ELEMENT2, and GROUPING ELEMENT3 correspond respectively to the columns ATTRIBUTE8, ATTRIBUTE9, AND ATTRIBUTE10 defined in the Expenditure Items descriptive flexfield.

Setting Up Asset Creation Grouping Methods for Project Expenditure Items

An asset can be created before a project is completed. The asset must be associated to location and asset category information. Oracle Projects can send the associated information to Oracle Asset Tracking and Oracle Assets. In turn, Oracle Asset Tracking uses this information to update the assets and the inventory system.

Use this procedure to ensure that the assets created in Oracle Projects are associated to the required location and asset category information.

To set up asset creation grouping methods for project expenditure items:

1. In the CRL Projects responsibility, select Asset Creation.

   The Asset Naming Convention window appears with the window divided into several regions, and fields in each region.

   **Note:** The region Define Asset Description contains three fields.

2. In the Asset Naming Convention window, use these option values for each region name:

   **Define Asset Creation**

<table>
<thead>
<tr>
<th>Region Name</th>
<th>Option Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define Asset Name</td>
<td>Task Name</td>
</tr>
<tr>
<td>Define Asset Description</td>
<td>Grouping Element1</td>
</tr>
<tr>
<td></td>
<td>Grouping Element2</td>
</tr>
<tr>
<td></td>
<td>Task Name</td>
</tr>
<tr>
<td>Location</td>
<td>Grouping Element2</td>
</tr>
<tr>
<td>Category</td>
<td>Grouping Element1</td>
</tr>
</tbody>
</table>

   **Note:** For Location and Category, the Grouping Element Number must correspond with attribute 8, 9, or 10, depending on which attribute was chosen to indicate location and category in the system-level descriptive flexfield setup.
See Define a Descriptive Flexfield for Expenditure Items, page 2-19.

3. Save your work.

Additional Oracle Projects Setup Considerations

Note these restriction guidelines when setting up Oracle Projects:

- Issue Asset Tracking-tracking items only to Capital-type projects. (Project Type used in the creation of a project has the class Capital).

  Oracle Projects cannot create assets in Oracle Assets from projects that are not the Capital type. If items are issued to projects of either Contract or Indirect type, then Oracle Asset Tracking does not have a record of the asset ID. When you generate asset lines, no asset lines are generated for those items that do not belong to the Capital-type project.

- Issue Asset Tracking-tracking items only to tasks that can be capitalized. (Task Details - Capitalized Checked).

  You can generate asset lines only on tasks that have been capitalized.

- Do not send installation and in-service messages against projects that have a Closed status.

  Oracle Asset Tracking does not validate whether or not the project has a Closed status. It continues to change the item status to Installed or In Service. However, you cannot generate asset lines against a closed project.

- Any Oracle Projects grouping method can be used during asset creation. This setup determines how the project expenditures are grouped to create a Fixed Asset, and the project expenditures will not be grouped by client extension.

  **Note:** For details on Oracle Projects setup steps, please refer to Oracle Projects Setup and Implementation in the Oracle Projects Fundamentals and Oracle Projects Implementation Guide.

- Asset generation will only be done for projects with project types that have Override Asset Assignment checked.

- Make sure that the PO Receipt transaction/Inventory Issue to Project transaction is accounted in the Subledger Architecture. If not then run the Create Accounting - SLA concurrent program in a responsibility with respect to the application context.

- The employee tied to the user running the Create Asset Headers in Oracle Projects -
Normal Items process should be listed as the Key Member in the project definition.

- Two function security, menu entries should be included in the menu where the Oracle Asset Tracking concurrent request Create Asset Headers in Oracle Projects - Normal Items is scheduled to run (if not already defined):
  - Activity Management Gateway: Add Project Asset
  - Activity Management Gateway: Add Asset Assignment

### Defining Oracle Assets Parameters

The definitions of the Asset Locator and Asset Category key flexfields must be compatible with the segments of the expenditure item descriptive flexfield defined in a previous section. For more details, see Define a Descriptive Flexfield for Expenditure Items, page 2-19.

If you use group depreciation with Oracle Projects and Oracle Assets, you must define the Group Asset and Super Group key flexfields. The recommended values are shown in the following table.

**Note:** For details on Oracle Assets setup steps, please refer to the *Oracle Assets User’s Guide.*

<table>
<thead>
<tr>
<th>Application</th>
<th>Key Flexfield</th>
<th>Suggested Segment Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oracle Assets</td>
<td>Group Asset</td>
<td>(1) City, (2) Network Element</td>
</tr>
<tr>
<td>Oracle Assets</td>
<td>Super Group</td>
<td>(1) Region, (2) Product Line</td>
</tr>
</tbody>
</table>

In addition, be aware of the following:

- Do not change or delete the link between the deliver-to and asset location once an asset has been created.
  
  Use the Locations form in Oracle Asset Tracking to initially link deliver-to and asset location. After this initial link is created, changing or deleting the link could corrupt the asset record.

- When assets are created through Oracle Asset Tracking, the asset key flexfield value is null.
  
  If you want Oracle Asset Tracking to automatically populate this value, you must
customize the application.

- All assets must be related to an asset category. The Asset category will drive the depreciable for the asset.

- The Oracle Assets book type is designated by the profile option CSE: FA Book Type Code. The asset book used by this profile option is based on the site and the organization. This enables different organizations within the site to have their own books. The profile selects the FA book as follows:
  - If there is a different book at the site level and at the organization level, the book at the organization level is selected.
  - If there is no book set at the organization level, then the book at the site level is selected.
  - When you define asset groups you are required to define the depreciation method you will only find methods which have a calculation method of Flat Rate.

### Performing Oracle Installed Base Setup Tasks

After Oracle Inventory, Oracle Projects, Oracle Assets, Oracle Purchasing, and Oracle Payables have been installed and set up, you must set up set up some parameters for Oracle Asset Tracking using the Oracle Installed Base Administrator responsibility (or the equivalent responsibility as set up in your installation).

During the integration setup of Oracle Asset Tracking, you determine:

- How HZ locations, HR locations (inventory locations) map to asset locations

The setup steps required for Oracle Asset Tracking that are performed in Oracle Installed Base are:

- Define HZ Locations, page 2-24
- Associate HR and HZ Locations to Asset Locations, page 2-25
- Set the Freeze Install Parameter, page 2-26

### Defining HZ Locations

Oracle Asset Tracking has the ability to correlate HR locations to HZ locations. HR locations are inventory locations used to receive material. HZ locations are used to deploy equipment in the field.

You need to establish the link between HR locations and HZ locations in order to perform automatic financial updates when material movements occur.
After you have defined asset locations, you must define HZ locations.

Prerequisites

- Define organizations in Oracle Inventory.
- Set up the profile options for Oracle Inventory and Oracle Assets. For details, see Define System Profile Options for All Dependent Responsibilities, page 2-4.
- Set up asset locations in Oracle Assets. For more information, see the Oracle Assets User Guide.

To define HZ locations:
1. In the Oracle Installed Base responsibility, choose Setups and then select Maintain Locations.
2. Enter complete address in HZ location setup window.
3. Enter the description of the HZ location.
4. Enter the HZ location code.
5. Save.

Associating HR and HZ Locations with Asset Locations

Assign HR and HZ locations to the asset location using Asset Location Setup.

Prerequisites

Define HR and HZ locations.

To associate HR and HZ locations with asset locations:
1. In the Oracle Installed Base responsibility, choose Setups and then select Asset Location Setup.
2. Select location source as HR or HZ.
3. Choose location code from the list of values.
4. Assign Asset location.
5. Enter active start date.
6. You can disable the particular relationship by entering active end date.

7. Save.

**Setting the Freeze Install Parameter**

Verify that the Install Parameter Freeze check box is selected.

**To set the freeze install parameter:**

1. In the Oracle Installed Base responsibility, navigate to Setups and then select Install Parameters.

2. In the Install Parameters window, select the Freeze check box.

3. Save your work.

**Setting Up Internal Orders for Assets**

If you plan to use the Internal Orders for Assets feature, then complete the following steps:

**To set up internal orders for assets:**

1. Define an inventory location with all the subinventories including staging subinventory.

2. Assign an asset location to the inventory location. This is done in the Oracle Installed Base Asset Locations window.

**Setting Up Workflow Notification Options**

When an asset is created in Oracle Assets and the source of the asset is not Oracle Asset Tracking, a row is inserted in the staging table CSI_FA_TRANSACTIONS. Oracle Asset Tracking provides a means of notifying users that there are assets that have been created and may potentially need item instances created for them. To enable such notifications you can run the Generate Notification - New Fixed Assets for Installed Base Tracking concurrent program. Depending on your Workflow setup, users can receive notification e-mails or view notifications from the Workflow worklist. In order for a user to receive a notification e-mail or view the notification from a worklist, you must first set up the notification preference in the User Preferences.

Any user with the Asset Tracking - Planner responsibility will receive a notification when the concurrent program Generate Notification - New Fixed Assets for Installed Base Tracking concurrent program is run.
For more information on Oracle Workflow, see the Oracle Workflow Administrator’s Guide.

**Explaining the Open Interface Flow for Assets**

You can populate instance and associated asset information into the Oracle Installed Base open interface tables, then run a concurrent program to upload this information to Oracle Installed Base.

To populate the Oracle Installed Base repository:

1. Populate the Installed Base Open Interface Instance Attributes and Asset Link Interface (CSI_I_ASSET_INTERFACE). You can do this with a PL/SQL program or by using a SQL*Loader script.

2. Run the Installed Base Open Interface concurrent program.
Oracle Asset Tracking Administration

This chapter covers the following topics:
• Administering Oracle Asset Tracking
• Bypassing the Service Fulfillment Queue
• Supporting Move, Add, Change and Disconnect Flow with Concurrent Program

Administering Oracle Asset Tracking

This topic group provides task-based procedures that are required for ongoing system maintenance and includes information on administration tools and utilities.

Each Transaction Generates a Message

Every transaction of a trackable item generates a message to the application. When the application receives a message, it searches the Oracle Asset Tracking tables for a record of the item. If it finds the record and all the attributes have been defined in the record, the transaction occurs without errors.

However, when a transaction results in an error, the related message is sent to the appropriate log. For example, if a Receipt-to-Project transaction of a normal item is missing attributes for category or location, a fatal error occurs. The message that is sent as a result of this transaction is sent to the Error Log.

Transaction Status Complete (C)

The application changes the status of a transaction to Complete (C), when the following conditions are met:
• The transaction has not generated any errors
• The transaction is complete
• The transaction is not dependent on another incomplete transaction

Understanding the Message Dequeuer
A message dequeuer is a background process that continuously polls a queue and processes items from the queue. The message dequeuer removes messages from the message queue on a first-in, first-out (FIFO) basis. Message queues are maintained by Oracle Advanced Queueing (OAQ). For information about message queues, see the following topics in the Oracle Service Fulfillment Manager Concepts and Procedures Guide:

- Messaging in Oracle Service Fulfillment Manager
- Managing the System Queues

You can manage the message queues in either Oracle Service Fulfillment Manager or Oracle Number Portability. Oracle Asset Tracking uses the messaging system that is maintained in Service Delivery Platform (SDP).

When you start a message queue, a controller process automatically starts the dequeuers. For more information about starting and suspending a message queue, see the following topics in the Oracle Service Fulfillment Manager Concepts and Procedures Guide:

- Oracle SDP Start
- Oracle SDP Stop

Before starting the transaction make sure that the Service Fulfillment Manager queue is running. To do that, perform the following steps:

1. Change the responsibility to SFM System Administrator.
2. Navigate to Concurrent and then select Administer Manager.
3. Make sure SFM Event Manager Queue Service is running.

Bypassing the Service Fulfillment Queue

Oracle Asset Tracking does not recommend bypassing the service fulfillment queue. Bypassing a queue may cause slower applications performance. However you have a choice of using the queue or bypassing it. To bypass, simply set the Oracle Installed Base parameter SFM Bypass. Once you set this option then the transactions will be directly updated to Oracle Asset Tracking.

There is no change in the standard business flows except for the asset retirements. If you are bypassing the service fulfillment queue, then after asset retirement you need to run the Oracle Asset Tracking concurrent program Import Asset Retirement - Reinstatement Transactions Report. This will update the CSI_I_ASSETS table in Oracle Installed Base.

When you choose this option, then you may set the Inventory Transaction Processing user profile as described below:
TP:INV Transaction Processing Mode

This profile option indicates the processing control for transacting items.

Available values for transaction items are shown in the following table:

**Available Values for Transaction Items**

<table>
<thead>
<tr>
<th>Processing</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-line processing</td>
<td>Processes transactions while you wait, and control is returned once transaction processing is completed.</td>
</tr>
<tr>
<td>Background Processing</td>
<td>Upon commit, control returns immediately to you, allowing you to processing and continue working. The transactions are executed on a periodic basis.</td>
</tr>
<tr>
<td>Immediate concurrent processing</td>
<td>Upon commit, Oracle Inventory spawns the concurrent process and returns control immediately to you, allowing you to continue working. Displays the concurrent request number of the concurrent process executing the transaction.</td>
</tr>
<tr>
<td>Form level processing</td>
<td>Processes transactions using the processing control option you choose for that particular type of transaction. You must also set the Oracle Inventory profile options for Inter-Organization Transfer, Miscellaneous Issue and Receipt, Receive Customer Return, Return to Customer, and Transfer Between Subinventories.</td>
</tr>
</tbody>
</table>

The value you choose for this profile overrides values you set for individual transaction profiles unless you choose Form level processing. Oracle Inventory predefines a value of Immediate concurrent processing for this profile for all levels upon installation. You can update this profile at all levels.

For more information please refer to the Inventory Profile Options section in the *Oracle Inventory User’s Guide*. 
Supporting Move, Add, Change and Disconnect Flow with Concurrent Program

Asset Tracking provides the ability to replace the SFM queue with a concurrent program to process the Move, Add, Change, and Disconnect (MACD) sales order. A new profile, CSI: Use Parallel Mode, enables you to do that.

You can set the profile, CSI: Use Parallel Mode, to determine which approach to use to process order lines in Installed Base (SFM or Concurrent program). If the profile is set to Yes, then the new concurrent program, IB Process Transaction Lines, processes the transaction lines. If the concurrent program processes the transaction lines, then the Installed Base hook inserts a row into the Batch Transaction Lines (CSI_BATCH_TXN_LINES) table instead of publishing messages to the SFM queue for the order lines. If the profile is set to No, then the messages are posted to the SFM queue for the order lines.

Currently, bypassing SFM queue and using the concurrent program is supported only for fulfillment processes. It is recommended that you use this approach for MACD processes only when there is a large number of orders with huge configurations.

Two new concurrent programs are added:

• IB Transaction Lines Import
• IB Transaction Lines Import Worker

The IB Transaction Lines Import concurrent program is a manager that batches the rows in the Batch Transaction Lines table and assigns workers to process them. This program must be scheduled to run every minute.

The number of workers processing the order lines depends on the maximum number specified while setting the concurrent program. Use the Purge Option to retain the processed data.

If there is an error, the current rows are updated to an error status. You can proceed processing other order lines. Errors are inserted into the Transaction Errors table.

Ensure that the SFM bypass flag is set to No when you want to use Batch Processing using the new profile value. This is because the SFM bypass flag takes precedence and there will not be any data in the new tables for the concurrent programs to process.
Oracle Asset Tracking API

This chapter covers the following topics:

- Overview of the Oracle Asset Tracking API
- Oracle Asset Tracking Public Package
- Contents of Package CSE_DEPLOYMENT_GRP

Overview of the Oracle Asset Tracking API

This chapter describes the Deployment Transaction APIs for Oracle Asset Tracking. You can use external deployment systems (such as bar code readers and scanners) along with Oracle Asset Tracking. Oracle Asset Tracking has the ability to integrate with the external systems through these APIs. Call these APIs to update Oracle Asset Tracking when the item is installed, uninstalled, placed in service, moved, or retired.

The topics in this section are as follows:

- Oracle Asset Tracking Public Package, page 4-1
- Contents of Package CSE_DEPLOYMENT_GRP, page 4-4

Oracle Asset Tracking Public Package

The APIs provided for Oracle Asset Tracking are organized into the following package:

- CSE_DEPLOYMENT_GRP

This package contains the procedure PROCESS_TRANSACTION, which can perform the deployment transactions that are listed in the following table:
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install</td>
<td>The prerequisite is that you must have an instance with the operational status code In-Process/Not Used for the item you are trying to install. This procedure creates and updates the item instance with the operational status code Installed, location type code from Project/Internal Site to HZ_locations. If there is an existing instance with operational status code Installed, then it updates the same or otherwise it will create a new instance.</td>
</tr>
<tr>
<td>Un-Install</td>
<td>The prerequisite is that you must have an instance with the operational status code Installed for the item you are trying to uninstall. This procedure updates the item instance with operational status code Not Used, location type code from HZ_locations to Project.</td>
</tr>
<tr>
<td>Put in Service</td>
<td>The prerequisite is that you must have an instance with the operational status code Installed for the item you are trying to put into service. This procedure creates and updates the item instance with the operational status code In-Service. If there is an existing instance with operational status code In-Service, then it updates the same or otherwise it will create a new instance. This procedure creates expenditure items in the projects interface table. The Installed Base transaction created by this action will be used to create a project asset for Normal Items.</td>
</tr>
<tr>
<td>Name</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Take Out of Service</td>
<td>The prerequisite is that you must have an instance with the operational status code In-Service for the item you are trying to put out of service. This procedure creates and updates the item instance with the operational status code Out-of-Service. If there is an existing instance with operational status code Out-of-Service, then it updates the same or otherwise it will create a new instance.</td>
</tr>
<tr>
<td>Move</td>
<td>The prerequisite is that you must have an instance with the operational status code Out-of-Service for the item you are trying to move. This procedure creates and updates the network location of the item instance with the operational status code Out-of-Service. If there is an existing instance with operational status code Out-of-Service, network location as From Network Location, then it updates the network location with To Network Location or otherwise it will create a new instance with operational status code Out-of-Service, network location as To Network Location. The Installed Base transaction created by this action will be used to interface move transactions to Oracle Fixed Assets.</td>
</tr>
<tr>
<td>Project Transfer</td>
<td>The prerequisite is that project transfer cannot be done for items that are already put in service. This procedure transfer items that are received into a project location to another project location. Item instances that are just received in to project or Installed in a location can be transferred.</td>
</tr>
<tr>
<td>Retirement</td>
<td>This procedure manually retires items that are capitalized. You can retire an item instance operationally (the instance is expired), or both operationally and functionally (the corresponding fixed asset is also retired from the books).</td>
</tr>
</tbody>
</table>
Contents of Package CSE_DEPLOYMENT_GRP

Contains one single routine that handles all of the previously mentioned deployment actions.

PROCESS_TRANSACTION

The following table describes the IN parameters associated with this API.

IN Parameters:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Data Type</th>
<th>Required</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>p_instance_tbl</td>
<td>cse_deployment_grp.txn_instances_tbl</td>
<td>Yes</td>
<td>This PL/SQL structure contains the instance information for the transaction in context.</td>
</tr>
<tr>
<td>p_dest_location_tbl</td>
<td>cse_deployment_grp.dest_location_tbl</td>
<td>Yes</td>
<td>This PL/SQL structure contains the destination location information for the item instance being transacted. The location information should be populated in accordance with the transaction action in context.</td>
</tr>
<tr>
<td>p_ext_attrib_values_tbl</td>
<td>cse_deployment_grp.txn_ext_attrib_values_tbl</td>
<td>Yes</td>
<td>This PL/SQL structure contains any references to extended attribute values that require an update along with the instance update.</td>
</tr>
</tbody>
</table>
The following table describes the OUT parameters associated with this API.

**OUT Parameters:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>x_return_status</td>
<td>VARCHAR2</td>
<td>Returns the status of the transaction:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FND_API.G_RET_STS_SUCCESS - successful</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FND_API.G_RET_STS_ERROR - error</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FND_API.G_RET_STS_UNEXP_ERROR - unexpected error</td>
</tr>
<tr>
<td>x_error_msg</td>
<td>VARCHAR2</td>
<td>The error message</td>
</tr>
</tbody>
</table>

**Sample Code**

**Project Transfer**
begin
  l_instance_tbl(1).instance_id := 1302711;
  select serial_number,
       lot_number,
       inventory_item_id,
       operational_status_code,
       location_type_code,
       location_id,
       instance_usage_code,
       operational_status_code
  into   l_instance_tbl(1).serial_number,
         l_instance_tbl(1).lot_number,
         l_instance_tbl(1).inventory_item_id,
         l_instance_tbl(1).operational_status_code,
         l_location_type_code,
         l_location_id,
         l_instance_usage_code,
         l_operational_status_code
  from   csi_item_instances
  where  instance_id = l_instance_tbl(1).instance_id;
  IF l_location_type_code = 'PROJECT' THEN
    l_instance_tbl(1).last_pa_project_id := 5773;
    l_instance_tbl(1).last_pa_project_task_id := 248906;
  ELSE
    l_instance_tbl(1).last_pa_project_id := 5773;
    l_instance_tbl(1).last_pa_project_task_id := 248906;
  END IF;
  l_txn_tbl(1).transaction_id := fnd_api.g_miss_num;
  l_txn_tbl(1).transaction_date := sysdate;
  l_txn_tbl(1).source_transaction_date := sysdate;
  l_txn_tbl(1).transaction_type_id := 152;
  l_txn_tbl(1).txn_sub_type_id := 3;
  l_txn_tbl(1).source_group_ref_id := fnd_api.g_miss_num;
  l_txn_tbl(1).source_group_ref := fnd_api.g_miss_char;
  l_txn_tbl(1).source_header_ref_id := fnd_api.g_miss_num;
  l_txn_tbl(1).source_header_ref := fnd_api.g_miss_char;
  l_txn_tbl(1).transacted_by := fnd_api.g_miss_num;
  l_txn_tbl(1).transaction_quantity := 1;
  l_txn_tbl(1).operational_flag := 'Y';
  l_txn_tbl(1).financial_flag := 'Y';
  l_dest_location_tbl(1).parent_tbl_index := 1;
  l_dest_location_tbl(1).location_type_code :=
  l_location_type_code;
  l_dest_location_tbl(1).location_id := l_location_id;
  l_dest_location_tbl(1).instance_usage_code :=

l_instance_usage_code;
  l_dest_location_tbl(1).operational_status_code :=
  l_operational_status_code;

  IF l_location_type_code = 'PROJECT' THEN
    l_dest_location_tbl(1).pa_project_id           := 8093;
    l_dest_location_tbl(1).pa_project_task_id      := 249903;
    l_dest_location_tbl(1).last_pa_project_id      := fnd_api.
    g_miss_num;
    l_dest_location_tbl(1).last_pa_project_task_id := fnd_api.
    g_miss_num;
  ELSE
    l_dest_location_tbl(1).last_pa_project_id      := 8093;
    l_dest_location_tbl(1).last_pa_project_task_id := 249903;
    l_dest_location_tbl(1).pa_project_id           := fnd_api.
    g_miss_num;
    l_dest_location_tbl(1).pa_project_task_id      := fnd_api.
    g_miss_num;
  END IF;

  cse_deployment_grp.process_transaction (]
    p_instance_tbl            => l_instance_tbl,
    p_dest_location_tbl       => l_dest_location_tbl,
    p_ext_attrib_values_tbl   => l_ext_attrib_values_tbl,
    p_txn_tbl                 => l_txn_tbl,
    x_return_status           => l_return_status,
    x_error_msg               => l_error_message);

  if l_return_status <> fnd_api.g_ret_sts_success then
    dbms_output.put_line(l_error_message);
  end if;

end;}

Asset Retirement
set serverout on
declare
  l_instance_tbl            cse_deployment_grp.txn_instances_tbl;
  l_dest_location_tbl       cse_deployment_grp.dest_location_tbl;
  l_ext_attrib_values_tbl   cse_deployment_grp.txn_ext_attrib_values_tbl;
  l_txn_tbl                 cse_deployment_grp.transaction_tbl;
  l_return_status           varchar2(1) := fnd_api.g_ret_sts_success;
  l_error_message           varchar2(2000);
begin
  l_instance_tbl(1).instance_id                  := 1605848;
  l_instance_tbl(1).asset_id                     := 108431;
  select serial_number,
          inventory_item_id,
          operational_status_code
  into   l_instance_tbl(1).serial_number,
          l_instance_tbl(1).inventory_item_id,
          l_instance_tbl(1).operational_status_code
  from   csi_item_instances
  where  instance_id = l_instance_tbl(1).instance_id;
  l_instance_tbl(1).lot_number                   := fnd_api.g_miss_char;
  l_instance_tbl(1).inventory_revision           := fnd_api.g_miss_char;
  l_instance_tbl(1).last_pa_project_id           := fnd_api.g_miss_num;
  l_instance_tbl(1).last_pa_project_task_id      := fnd_api.g_miss_num;
  l_instance_tbl(1).unit_of_measure              := fnd_api.g_miss_char;
  l_instance_tbl(1).active_start_date            := fnd_api.g_miss_date;
  l_instance_tbl(1).active_end_date              := fnd_api.g_miss_date;
  l_instance_tbl(1).instance_status_id           := fnd_api.g_miss_num;
  l_txn_tbl(1).transaction_id                    := fnd_api.g_miss_num;
  l_txn_tbl(1).transaction_date                  := sysdate;
  l_txn_tbl(1).source_transaction_date           := sysdate;
  l_txn_tbl(1).transaction_type_id               := 104;
  l_txn_tbl(1).txn_sub_type_id                   := fnd_api.g_miss_num;
  l_txn_tbl(1).source_group_ref_id               := fnd_api.g_miss_num;
  l_txn_tbl(1).source_group_ref                  := fnd_api.g_miss_char;
  l_txn_tbl(1).source_header_ref_id              := fnd_api.g_miss_num;
  l_txn_tbl(1).source_header_ref                 := fnd_api.g_miss_char;
  l_txn_tbl(1).transacted_by                     := fnd_api.g_miss_num;
  l_txn_tbl(1).transaction_quantity              := 1;
  l_txn_tbl(1).proceeds_of_sale                   := 10;
  l_txn_tbl(1).cost_of_removal                    := 10;
  -- use this flag to expire the item instance
  l_txn_tbl(1).operational_flag                  := 'Y';
  -- use this flag to retire the fixed asset
  l_txn_tbl(1).financial_flag                    := 'Y';
  cse_deployment_grp.process_transaction ( 
    p_instance_tbl       => l_instance_tbl,
    p_dest_location_tbl  => l_dest_location_tbl,
    p_ext_attrib_values_tbl => l_ext_attrib_values_tbl,
    p_txn_tbl           => l_txn_tbl,
    x_return_status     => l_return_status,
    x_error_msg         => l_error_message);
  if l_return_status <> fnd_api.g_ret_sts_success then
    dbms_output.put_line(l_error_message);
  end if;
end;
/

Using Oracle Asset Tracking Client Extensions

This appendix covers the following topics:

- Overview
- Client Extensions Process Flow
- List of Supported Client Extension Stubs

Overview

Client extensions enable users to extend Oracle Asset Tracking by allowing custom logic to supersede the default logic shipped with OAT which is used during the asset creation process or synchronization of asset moves.

Client extensions are supported for all capitalization flows.

**Important:** Custom code written within client extension stubs are preserved during the regular patch application.
## List of Supported Client Extension Stubs

The following client extension stubs can be used to derive the attributes for a fixed asset during the asset creation process using the Create Assets Interface Inventory Transactions to Fixed Asset concurrent program.

<table>
<thead>
<tr>
<th>Client Extension Stub</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>cse_asset_client_ext_stub.get_asset_description</td>
<td>To override the default functionality of deriving the description on an asset</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_asset_category</td>
<td>To override the default functionality of deriving an asset category</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_book_type</td>
<td>To override the default functionality of deriving the Fixed Assets Book Type code</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_date_place_in_service</td>
<td>To override the default functionality of deriving the Date Placed In Service of an asset</td>
</tr>
</tbody>
</table>
### Client Extension Stub Usage

<table>
<thead>
<tr>
<th>Client Extension Stub</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>cse_asset_client_ext_stub.get_asset_key</td>
<td>To override the default functionality of deriving the asset key</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_deprn_expense_ccid</td>
<td>To override the default functionality of deriving the Depreciation Expense code combination ID</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_search_method</td>
<td>To override the default functionality of deriving the search method to be used to search for an existing asset</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_tag_number</td>
<td>To override the default functionality of deriving the tag number of an asset, if applicable</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_model_number</td>
<td>To override the default functionality of deriving the model number of an asset, if applicable</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_manufacturer</td>
<td>To override the default functionality of deriving the manufacturer of an asset</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_employee</td>
<td>To override the default functionality of deriving the employee assigned to an asset</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_payables_ccid</td>
<td>To override the default functionality of deriving the Asset Clearing Code combination ID</td>
</tr>
</tbody>
</table>

The following client extension stubs can be used to derive the attributes for a fixed asset during the asset move synchronization process using the Interface Move Transactions to Oracle Assets concurrent program.

<table>
<thead>
<tr>
<th>Client Extension Stub</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>cse_asset_client_ext_stub.get_asset_category</td>
<td>To override the default functionality of deriving an asset category</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_book_type</td>
<td>To override the default functionality of deriving the Fixed Assets Book Type code</td>
</tr>
<tr>
<td>Client Extension Stub</td>
<td>Usage</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_deprn_expense_ccid</td>
<td>To override the default functionality of deriving the Depreciation Expense code combination ID</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_search_method</td>
<td>To override the default functionality of deriving the search method to be used to search for an existing asset</td>
</tr>
<tr>
<td>cse_asset_client_ext_stub.get_employee</td>
<td>To override the default functionality of deriving the employee assigned to an asset</td>
</tr>
</tbody>
</table>

The default value of the hook (x_hook_used) is 0 when empty stubs are shipped with Oracle Asset Tracking. In order for the custom logic to be enforced by OAT, the hook should be set to a value of 1. It is suggested that you define appropriate error handling routines to capture exception messages.
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