This guide covers Oracle Install Base and an associated application, Counters.
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Oracle Install Base User Guide, Release 11i
Part No. B14131-01

Oracle welcomes your comments and suggestions on the quality and usefulness of this document. Your input is an important part of the information used for revision.

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If you have problems with the software, please contact your local Oracle Support Services.
Welcome to the *Oracle Install Base User Guide, Release 11i.*

This guide assumes you have a working knowledge of the following:

- The principles and customary practices of your business area.
- Oracle Install Base.
  
  If you have never used Oracle Install Base, Oracle suggests you attend one or more of the Oracle Applications training classes available through Oracle University.

- Oracle Self-Service Web Applications.
  
  To learn more about Oracle Self-Service Web Applications, read the *Oracle Self-Service Web Applications Implementation Manual.*

- The Oracle Applications graphical user interface.
  
  To learn more about the Oracle Applications graphical user interface, read the *Oracle Applications User’s Guide.*

See *Other Information Sources* for more information about Oracle Applications product information.
How To Use This Guide

The Oracle Install Base User Guide contains the information you need to understand and use Oracle Install Base and the associated Counters application. This guide contains the following chapters and appendixes:

- Chapter 1 provides overviews of the application, its features, functions, and integration points with other applications.
- Chapter 2 provides information about starting the application, accessing its initial pages, and using features that appear throughout it.
- Chapter 3 provides procedures for locating and building item instances and associating them with assets, parties, pricing data, counters, contracts, transactions, service requests, and repair orders.
- Chapter 4 provides procedures for defining transaction search criteria and viewing the results.
- Chapter 5 provides procedures to view and define systems, which are constructs that owners of products can define to group their products.
- Chapter 6 describes the window used to specify the transaction type used for updating a source instance and non-source instance. You can also create a new system for the instance from this window.
- Chapter 7 describes the concurrent programs and window that you can use to detect and reprocess transactions that failed to update Oracle Install Base from certain ERP sources.
- Chapter 8 describes the window where you can schedule several changes to be made to a group of instances.
- Chapter 9 describes an open interface to mass load item instances. You can use this feature to create new item instances or update existing ones.
- Chapter 10 describes how to allocate free-standing or non-allocated components to specific assembly configurations following WIP assembly completion.
- Chapter 11 describes how to display existing configured item instances, including attributes and components, to support the Oracle Order Management Telecommunications Service Ordering (TSO) functionality.
- Chapter 12 describes a utility to purge history transactions tied to an instance, thereby freeing storage space.
- Chapter 13 describes the Counters application.
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You can choose from many sources of information, including documentation, training, and support services, to increase your knowledge and understanding of Oracle Install Base.

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All Oracle Applications documentation is available online (HTML or PDF).

- **PDF Documentation** - See the Online Documentation CD for current PDF documentation for your product with each release. This Documentation CD is also available on OracleMetaLink and is updated frequently.

- **Online Help** - You can refer to Oracle Applications Help for current HTML online help for your product. Oracle provides patchable online help, which you can apply to your system for updated implementation and end user documentation. No system downtime is required to apply online help.

- **Release Content Document** - See the Release Content Document for descriptions of new features available by release. The Release Content Document is available on OracleMetaLink.

- **About document** - Refer to the About document for information about your release, including feature updates, installation information, and new documentation or documentation patches that you can download. The About document is available on OracleMetaLink.

Related Guides

Oracle Install Base shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other guides when you set up and use Oracle Install Base.

You can read the guides online by choosing Library from the expandable menu on your HTML help window, by reading from the Oracle Applications Document Library CD included in your media pack, or by using a Web browser with a URL that your system administrator provides.

If you require printed guides, you can purchase them from the Oracle Store at http://oraclestore.oracle.com.
Guides Related to All Products

Oracle Applications User's Guide
This guide explains how to enter data, query, run reports, and navigate using the graphical user interface (GUI). This guide also includes information on setting user profiles, as well as running and reviewing reports and concurrent processes.
You can access this user’s guide online by choosing “Getting Started with Oracle Applications” from any Oracle Applications help file.

Guides Related to This Product

Oracle Install Base Implementation Guide
This guide provides information for setting up the contents of many of the lists of values (LOV) that you see in the application.

Oracle Enterprise Install Base User Guide
Refer to this guide for information about the Oracle Install Base connections to ERP applications.

Oracle TeleService User Guide
This guide provides information about supporting applications for Oracle Service and Contracts applications.

Oracle Inventory User’s Guide
This guide provides information about the proper classification of items so that they can flow properly into Oracle Install Base.

Oracle Order Management User’s Guide
Refer to this guide to get a better understanding how products flow into Oracle Install Base.
Installation and System Administration

Oracle Applications Concepts
This guide provides an introduction to the concepts, features, technology stack, architecture, and terminology for Oracle Applications Release 11i. It provides a useful first book to read before an installation of Oracle Applications. This guide also introduces the concepts behind Applications-wide features such as Business Intelligence (BIS), languages and character sets, and Self-Service Web Applications.

Installing Oracle Applications
This guide provides instructions for managing the installation of Oracle Applications products. In Release 11i, much of the installation process is handled using Oracle Rapid Install, which minimizes the time to install Oracle Applications and the Oracle technology stack by automating many of the required steps. This guide contains instructions for using Oracle Rapid Install and lists the tasks you need to perform to finish your installation. You should use this guide in conjunction with individual product user guides and implementation guides.

Upgrading Oracle Applications
Refer to this guide if you are upgrading your Oracle Applications Release 10.7 or Release 11.0 products to Release 11i. This guide describes the upgrade process and lists database and product-specific upgrade tasks. You must be either at Release 10.7 (NCA, SmartClient, or character mode) or Release 11.0, to upgrade to Release 11i. You cannot upgrade to Release 11i directly from releases prior to 10.7.

“About” Document
For information about implementation and user documentation, instructions for applying patches, new and changed setup steps, and descriptions of software updates, refer to the “About” document for your product. “About” documents are available on OracleMetaLink for most products starting with Release 11.5.8.

Maintaining Oracle Applications
Use this guide to help you run the various AD utilities, such as AutoUpgrade, AutoPatch, AD Administration, AD Controller, AD Relink, License Manager, and others. It contains how-to steps, screenshots, and other information that you need to run the AD utilities. This guide also provides information on maintaining the Oracle applications file system and database.
Oracle Applications System Administrator’s Guide
This guide provides planning and reference information for the Oracle Applications System Administrator. It contains information on how to define security, customize menus and online help, and manage concurrent processing.

Oracle Alerts User’s Guide
This guide explains how to define periodic and event alerts to monitor the status of your Oracle Applications data.

Oracle Applications Developer’s Guide
This guide contains the coding standards followed by the Oracle Applications development staff and describes the Oracle Application Object Library components that are needed to implement the Oracle Applications user interface described in the Oracle Applications User Interface Standards for Forms-Based Products. This manual also provides information to help you build your custom Oracle Forms Developer forms so that the forms integrate with Oracle Applications.

Oracle Applications User Interface Standards for Forms-Based Products
This guide contains the user interface (UI) standards followed by the Oracle Applications development staff. It describes the UI for the Oracle Applications products and how to apply this UI to the design of an application built by using Oracle Forms.

Other Implementation Documentation

Oracle Applications Product Update Notes
Use this guide as a reference for upgrading an installation of Oracle Applications. It provides a history of the changes to individual Oracle Applications products between Release 11.0 and Release 11i. It includes new features, enhancements, and changes made to database objects, profile options, and seed data for this interval.

Oracle Workflow Administrator’s Guide
This guide explains how to complete the setup steps necessary for any Oracle Applications product that includes workflow-enabled processes, as well as how to monitor the progress of runtime workflow processes.
Oracle Workflow Developer's Guide
This guide explains how to define new workflow business processes and customize
existing Oracle Applications-embedded workflow processes. It also describes how
to define and customize business events and event subscriptions.

Oracle Workflow User's Guide
This guide describes how Oracle Applications users can view and respond to
workflow notifications and monitor the progress of their workflow processes.

Oracle Workflow API Reference
This guide describes the APIs provided for developers and administrators to access
Oracle Workflow.

Oracle Applications Flexfields Guide
This guide provides flexfields planning, setup and reference information for the
Oracle Install Base implementation team, as well as for users responsible for the
ongoing maintenance of Oracle Applications product data. This guide also provides
information on creating custom reports on flexfields data.

Oracle eTechnical Reference Manuals
Each eTechnical Reference Manual (eTRM) contains database diagrams and a
detailed description of database tables, forms, reports, and programs for a specific
Oracle Applications product. This information helps you convert data from your
existing applications, integrate Oracle Applications data with non-Oracle
applications, and write custom reports for Oracle Applications products. Oracle
eTRM is available on OracleMetalink

Oracle Applications Message Manual
This manual describes all Oracle Applications messages. This manual is available in
HTML format on the documentation CD-ROM for Release 11i.
Training and Support

Training
Oracle offers a complete set of training courses to help you and your staff master Oracle Install Base and reach full productivity quickly. These courses are organized into functional learning paths, so you take only those courses appropriate to your job or area of responsibility.

You have a choice of educational environments. You can attend courses offered by Oracle University at any one of our many education centers, you can arrange for our trainers to teach at your facility, or you can use Oracle Learning Network (OLN), Oracle University’s online education utility. In addition, Oracle training professionals can tailor standard courses or develop custom courses to meet your needs. For example, you may want to use your organization structure, terminology, and data as examples in a customized training session delivered at your own facility.

Support
From on-site support to central support, our team of experienced professionals provides the help and information you need to keep Oracle Install Base working for you. This team includes your technical representative, account manager, and Oracle’s large staff of consultants and support specialists with expertise in your business area, managing an Oracle server, and your hardware and software environment.
Do Not Use Database Tools to Modify Oracle Applications Data

*Oracle STRONGLY RECOMMENDS that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle Applications 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 Applications data, you risk destroying the integrity of your data and you lose the ability to audit changes to your data.

Because Oracle Applications tables are interrelated, any change you make using Oracle Applications can update many tables at once. But when you modify Oracle Applications data using anything other than Oracle Applications, 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 Applications.

When you use Oracle Applications to modify your data, Oracle Applications automatically checks that your changes are valid. Oracle Applications 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.

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Thank you for using Oracle Install Base and this user guide.

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Overview of Oracle Install Base

This topic group includes the following topics:
- Definition of Oracle Install Base
- Features of Oracle Install Base

1.1 Definition of Oracle Install Base

Oracle Install Base is an item instance life cycle tracking application that facilitates enterprise-wide life cycle item management and tracking capability. Oracle Install Base tracks an 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. It records a history of changes to tracked items and supports the creation and maintenance of Oracle Install Base configurations.

Oracle Install Base is a centralized repository of information for an item instance and its tracking details including location, status, ownership, party, account and contact relationships, configuration data, and the change history of customer items or corporate assets. The application includes drill-down capability to obtain details of inventory, work in process, and order management transactions affecting an item’s tracking attributes.

Additionally, Oracle Install Base provides links to detailed information from contracts, service requests, repair orders initiated for an item instance, and counters associated with the item instance.
1.2 Features of Oracle Install Base

1.2.1 Functional Overview

Oracle Install Base is capable of tracking serialized and non-serialized item instances including:

- Tangible items such as those that are manufactured, purchased, and shipped
- Intangible items such as software, services, licenses, and agreements
- Tangible assets including fixed, movable, and leased assets

Oracle Install Base leverages existing Oracle applications and is fully integrated with the Oracle E-Business Suite.

Key features and functionality include the following:

- Item instance maintenance
- Support for inventory transactions
- Centralized repository of information:
  - Item instance consolidated transactions history
  - Item instance timestamp and version label history
  - History of Oracle E-Business Suite transactions affecting Oracle Install Base
- Instance relationships with multiple party/accounts
- Configuration support and instance-to-instance relationships
- Open Interface and Quick Edit capabilities:
  - Mass load of item instances by an open interface
  - Quick online edit of attributes for a group of item instances
- Install Base Interface Error processing functionality

Note: Oracle Install Base support is subject to rules, conditions, and limitations discussed in various sections of this guide. These are not exhaustive. Although most situations are covered, it is not possible to specify all rules, conditions, and limitations with regard to the functionality of the application.
1.2.2 Overview of Features

Oracle Install Base features robust, flexible HTML user interfaces and provides a wide range of query, search, and edit capabilities.

The user interfaces feature the ability to:

- Obtain at a glance the key attributes related to ownership, location, and relationships for an item instance
- Provide a consolidated history of transactions affecting Oracle Install Base instances as well as the state of key attributes at a given point in time
- Query the inventory of available assets and items trackable through Oracle Install Base
- Extract and present transactional information across Oracle E-Business Suite applications as they relate to Item instances
- Present configurations of they currently exist as well as the unique capability of illustrating historical’ configurations, that is, the configuration as it appeared in previous versions
- Manually create and edit item instances
- Manually create and change item configurations
  The ability to create and update item instances and configurations is also available through the Open Interface functionality and Forms including quick mass edit capabilities.
- Grant specific access and update privileges to users based on a variety of roles and permissions

1.2.3 Instance Maintenance

Oracle Install Base provides for creation, updating, querying, and copying of instances through Oracle Install Base user interfaces and through integration with other applications. These include Oracle applications such as Oracle Service Contracts, Oracle Field Service, Oracle Depot Repair, complex maintenance repair and overhaul, receiving, WIP, Oracle Inventory, Oracle Projects, Oracle Order Management, Oracle Purchasing, Contact Center, eBiz Center, and shipping. Asset creation and maintenance can be invoked using Oracle Enterprise Install Base.
It provides tracking of location, status, addresses, contacts, business party relationships, inter-instance relationships, extended pricing, instance attributes, and a host of other item instance attributes.

Instance maintenance can be directly performed using robust HTML query, search, and edit capabilities.

### 1.2.3.1 Support for Inventory Transactions

Oracle Install Base supports creation and update of item instances and attributes for transactions originating in Oracle Inventory. These include internal transactions such as internal order shipments and subinventory transfers, discrete manufacturing transactions such as WIP component issue and WIP component return, and external transactions such as sales order shipments to external customers.

The *Oracle Install Base Implementation Guide* provides a comprehensive list of Oracle Inventory transactions that Oracle Install Base supports.

### 1.2.3.2 Centralized Repository of Information

Here are examples of information that you can find in the centralized repository that is Oracle Install Base:

- Consolidated transactions history for an item instance

  Oracle Install Base provides a single, centralized user interface to view and drill down from all transactions affecting tracking attributes for an item over the life of the item instance. Transaction details include, for example, transaction type, source application, transaction, line reference, and transaction date.

- Timestamp and version label history for an item instance.

- In the Item History page you can view the state of the attributes of an instance by specifying a date-time stamp or a version label. This feature provides valuable information regarding what an item instance looked like at a given point in time.

- History of Oracle E-Business Suite transactions affecting Oracle Install Base

  Oracle Install Base provides the ability to query transactions by date range, status, and transaction types across Oracle E-Business Suite applications. It pulls together information from multiple applications and presents it in a single, central user interface.
1.2.4 Multiple Party/Account Relationships

With Oracle Install Base you can relate an item instance to multiple entities called parties. The parties can be different party types. Thus an item instance may have been Sold To party A but is now Owned By party B. It may be Shipped To party C, and so on. The entities may have type values such as Party, Vendor, Employee. For each party type, you can define relationship types such as Owner and Service Provider. Each party can have multiple accounts.

This feature supports the multiple business relationships required by today’s business globalization and outsourcing requirements.

1.2.5 Configuration Support and Instance-to-Instance Relationships

Oracle Install Base provides the ability to store configurations of item instances and to access the history of a configuration.

This functionality includes creating and maintaining configurations. It builds hierarchical configurations at WIP assembly completion by formulating Component-Of relationships between instances. It supports parent-child bill of material (BOM) structure at the point of sales order shipment.

Multiple types of relationships between instances are supported. For example, Oracle Install Base connects two or more components in a communications network by creating Connected-To relationships between item instances. This capability reflects Oracle Install Base integration with the Telecommunications Service Ordering solution of Oracle Configurator.

1.2.6 Open Interface Mass Load and Mass Edit Capabilities

Oracle Install Base provides the Open Interface feature to mass load item instances. This is useful during initial conversion and for synchronizing multiple environments. It can be used to create new instances or to update existing item instances. It can also be used to create or update relationships between item instances including replacing instances in Component-Of configurations.

Additionally, Oracle Install Base provides the handy, out-of-the-box Mass Edit feature. With this feature you can select a group of item instances based on a set of search criteria and invoke attribute changes for all item instances in the group. For example, you can quickly and conveniently change ownership, location or contacts for a group of instances. The transactions can also be set to run on a future date.
1.2.7 Interface Error Processing

Oracle Install Base processes transactions that result from interface with other applications and either updates or creates item instances or inserts failed transactions into an error processing table. It provides a window to search, display, update, and process these interface error transactions.

You can enter a variety of search criteria to display a specific instance or multiple instances related to errors transactions. The display of dates has been organized and categorized to aid you while reviewing and correcting transaction error records. You can update and correct specific errors in the Transaction Details window and save your changes for subsequent processing.

1.2.8 System Grouping of Item Instances

Oracle Install Base has the ability to group item instances under a construct called a system. For example, all copier machines on the fifth floor of a building or those belonging to a specific department can be grouped under a system. You can define, view, and invoke specific changes to item instances within the system, or grouping. Additionally, you can build hierarchies of systems and link multiple systems in parent-child hierarchies or relationships.

1.2.9 Extended Attributes

Oracle Install Base offers the flexibility of multi-level, user definable additional, or extended, attributes associated with an item instance to fit a variety of business requirements. The application also stores pricing attributes for an item instance and makes them available for subsequent use by Oracle E-Business Suite applications including Oracle Service Contracts. That application uses service programs or extended warranties where price is dependent on the attributes of an item.

1.2.10 Life Cycle Tracking in Oracle Install Base

Oracle Install Base instances of trackable, shippable items are created when an item is received into inventory, through miscellaneous receipt, purchase order receipt, WIP assembly completion, and so on. When an inventory receipt transaction is processed, a message is sent to the Oracle Service Fulfillment Manager (SFM) advanced queue. It is automatically de-queued and processed by the Oracle Install Base interface process to update Oracle Install Base. The instance bears the owner of the internal organization, with a location in an inventory organization and a subinventory/locator.
Any subsequent movement in inventory, such as transfer, issues, and adjustments, Oracle will be captured and reflected in Oracle Install Base through the SFM queue and the Oracle Install Base interface process.

At the time of sales order shipment or sales order RMA receipt, the inventory transaction triggered by the shipment transaction or RMA receipt is processed to update the existing instance in Oracle Install Base.

For non-shippable items, the sales order line fulfillment transaction triggers the creation of an instance in Oracle Install Base by the SFM queue and the Oracle Install Base interface process.

At the time of creation of a sales order line, the Oracle Install Base transaction detail can be used to define other attributes to update the instance, such as the change of ownership and location. You can enter multiple party and account relationships, extended attributes, contact information, system information, and so on. These update the Oracle Install Base instance when it is accessed.

After an item has left an organization, for example, following sales order shipment and installation at a customer site, Oracle Install Base continues to track changes to the instance as part of its life cycle tracking functionality.

The instance can be updated directly by a customer through web-based access or by an agent of the deploying organization. Changes may be effected manually by individual instance update or by mass edit, or by the Oracle Install Base Open Interface feature. Oracle Install Base continues to track the item through the course of its life including the return, repair, upgrade, and reshipment process. This key feature is based on the Oracle Install Base ability to separate item location from item ownership.

The following process flow illustrates Oracle Install Base life-cycle tracking capability:

Receiving & Inventory > Manufacturing or Depot Repair > Shipping & Distribution > Contracts > Customer Service > Field Service. Customer Service > Receiving & Inventory by an RMA or Returns.

### 1.2.11 Sales Order Shipment, Fulfillment, and RMA Receipt Interface

The Order Management to Install Base Interface is described as follows:

1. **Shipped Order Lines, RMA Receipt Order Lines (shippable items)**
   
   When an order line is shipped or RMA received and the corresponding inventory transaction is processed, a message is sent to the SFM advanced
queue. It is automatically de-queued and processed to update Oracle Install Base.

A sales order shipment generates an Inventory Issue material transaction in the Oracle Inventory application. Because Oracle Install Base also tracks the internal inventory for trackable items, the instance already exists in Oracle Install Base. A shipment can result in a change in instance location and ownership, status, and so on, based on the associated Oracle Install Base sub-transaction type.

A sales order return line provides for an Oracle Inventory receipt material transaction in the Oracle Inventory application. Because the Oracle Install Base instance already exists for the item being returned, a receipt can trigger an update of the specified instance, depending on the Oracle Install Base transaction type being used.

2. Fulfilled Order Lines (non-shippable items)

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

When an order line or RMA is fulfilled, the order line or RMA workflow sends a message to the SFM advanced queue. It is automatically de-queued and processed to create an instance or in the case of RMA, to expire the instance in Oracle Install Base.

The Oracle Install Base interface processes additional data entered in the Transaction Details window from the Oracle Order Management Sales Order Lines window.

Oracle Install Base also supports the Oracle Order Management RMA fulfillment process for non-shippable items subject to rules and conditions defined in the Oracle Install Base Implementation Guide.

Oracle Install Base supports the Oracle Order Management end-customer ordering process by enabling partner and end-user information to be automatically captured in Oracle Install Base from sales orders. Oracle Install Base ownership and location are derived from multiple parameters entered from various channels including:

- Standard sales orders
- Quick sales orders
- Standard order import
Oracle iStore orders

1.2.12 Inventory Interface

If an Oracle Install Base trackable item has been received into inventory and an Oracle Install Base instance has been created, then any subsequent inventory transactions will be tracked in Oracle Install Base as well:

- Inventory transfer or move order transfer
  - Serialized items (Predefined or At-Receipt)
    The location of an instance is updated to reflect the new location of a serialized item.
  - Non-serialized items
    Item instance quantities are updated: The quantity of the instance at the From location is reduced, and the quantity of the instance at the To location is increased by the quantity being moved.

- Items issued to a WIP job
  The location of the item reflects the WIP job number.

- Internal order transfer
  The location of the item reflects the internal sales order.

- Item issued to an asset
  The location of the item reflects the asset number.

- Item issued to projects or tasks
  The location of the item reflects the project or task number.

For further details regarding assets, projects, and tasks, refer to Oracle Enterprise Install Base documentation.

Oracle Install Base also tracks the movement of items within an organization. The application supports internal sales orders and inter-organization transfers and appropriately updates location and other attributes as an item instance is transferred between warehouses, divisions and other parts of an organization.

1.2.13 WIP Interface

WIP assembly completion results in an inventory receipt in the Oracle Inventory application. The Oracle Install Base interface creates an instance for the serialized
top assembly and builds a component-of configuration of trackable components issued to the WIP job.

Component-of configurations are created or updated in the following areas:

- WIP assembly completion
  This is restricted to top assemblies that are serialized at receipt.

- Post WIP completion transactions
  Components are added or removed from existing configurations for WIP completion transactions including WIP component issue/return and WIP negative component issue/return.

- Work order-less WIP completion transactions
  A component-of configuration is created at work order-less WIP completion based on component transactions.

- IB component install (WIP) functionality
  This feature provides a mechanism to attach non-allocated components to Oracle Install Base configurations following WIP assembly completion.
  Note that the functionality is relevant only to multi-quantity WIP jobs and configurations built for serialized top assemblies.

At sales order shipment, the ownership and location of the assembly and its components are appropriately updated based on selected Oracle Install Base sub-transaction types.

Oracle Install Base supports single-level WIP non-standard jobs used in the return and repair scenario. For example, a laptop (configuration) with a failed component (hard drive) is returned to the enterprise using an RMA transaction. The laptop is repaired (component is removed and replaced) and returned to the customer.
Oracle Install Base records and maintains this series of events subject to specific rules and conditions. For further details, review the Item Configuration Page section in this guide. Each stage of the process is represented in Oracle Install Base by changes or updates of location, instance status, usage, and other attribute changes.

1.2.14 Other Features

Here are some other features of Oracle Install Base:

- Optional support for RMA receipt, shipment, and miscellaneous receipt transactions irrespective of ownership
For example, the application transfers ownership and processes an RMA even if the RMA customer is different from existing instance ownership. This functionality is based on the setting of the Install Parameters attribute Override Ownership.

- Support for the Oracle Telecommunications Service Ordering (TSO) solution
  Oracle Install Base integrates with the Oracle TSO network configuration solution and supports telecommunications configurations and service networks as defined below:
  - New Customer TSO flows
    This feature enables creation of network configurations. The standard business flow integrates several Oracle products as follows:
    Oracle Quoting > Oracle Configurator > Oracle Order Management > SFM > Oracle Install Base
  - Changes for existing customer installed service flows
    These are modifications and changes to existing customer network configurations. The supported functionality includes querying Oracle Install Base instances through Oracle Quoting followed by Oracle Configurator-based modifications to Oracle Install Base instances:
    Oracle Quoting > Oracle Configurator > Oracle Order Management > SFM > Oracle Install Base
  - Manual on-line changes or updates to network configurations
    Oracle Install Base provides specific user interfaces to display and update TSO configuration item instances. It provides direct integration with Oracle Configurator and utilizes Oracle Configurator rules to validate changes made to these instances. The manual method bypasses the traditional Quoting–Configurator–Order Management–SFM–Install Base process and provides a direct mechanism to handle specific updates.
    Rule: Oracle Install Base support for Oracle Configurator TSO network models is restricted to non-shippable items.
  - BOM sort order
    Oracle Install Base utilizes the BOM sort order from Oracle Configurator when displaying network (TSO) configurations.
  - User-definable instance names
Oracle Install Base provides user-definable instance names for ease of use in referencing TSO (configured) component instances.

- Install Base display window for the TSO solution
  This window displays existing configured item instances, including attributes and components, to support the Oracle Order Management TSO functionality using Sales Order or Quick Sales Order windows.

- Integration with the eBiz Center and Contact Center
  A tab provided with Contact/e-Biz center windows enables direct access to Oracle Install Base. This feature enables agents to view Oracle Install Base for a customer, contact, or account as well as create or update Oracle Install Base items when required.

- Project Contracts (shipment transactions)
  Oracle Install Base supports item shipments sourced by Oracle Project Contracts. It appropriately updates or creates item instances for items shipped from Oracle Project Contracts. Currently, the Transactions link in Oracle Install Base maintains the source reference to Oracle Project Contracts. Advance Search and Quick Find do not reference Oracle Project Contracts.

- Transaction History Purge
  Transaction History Purge is a concurrent utility program that provides a means of purging Oracle Install Base history transactions and storing purged transactions in a history table.

  For items with frequent changes and a long transaction history, significant storage space is consumed by older, historical transactions. In certain cases this has a performance impact. Purging significant volumes of data improves performance and reduces storage space.

  Be extremely careful when using this program. Once transactions are purged, no automatic restore feature is available!

- Inter-company drop shipment and purchase order adjustments
  Oracle Install Base supports creation of Oracle Install Base instances for logical inter-company drop shipment transactions from vendors to customers. An example of the drop shipment transaction involves a sales order entered in one organization (A) for an external customer, creation of requisition and purchase orders for a vendor routed through a second organization (B), drop shipment from the vendor to a customer, and corresponding logical PO receipt and Sales order fulfillment in appropriate organizations.
Oracle Install Base also supports quantity modifications in Oracle Install Base instances based on logical transactions representing quantity adjustments for inter-company purchase orders.

1.2.15 Integration Points and Dependencies for Oracle Install Base

For more details, refer to "Integration Points and Dependencies for Oracle Install Base" in the *Oracle Install Base Implementation Guide*.

1.2.16 Integration with the Oracle E-Business Suite

Oracle Install Base has the following integration points within the Oracle E-Business Suite:

- Counters and Notes (update capabilities)
- Direct updates from Oracle Field Service and Oracle Complex Maintenance Repair, and Overhaul
- View and reference accessibility from multiple applications such as Oracle Contracts, Oracle Field Service, Oracle Depot Repair, Oracle Customer Support, the eBiz Center, and the Contact Center
- Oracle Trading Community Architecture for querying parties and accounts and building item instance to party relationships
- Oracle Inventory (receiving and other inventory transactions)
- Oracle Order Management (shipping, fulfillment, and RMA receipts). This includes integration with the Oracle Telecommunications Service Ordering (TSO) solution as well as the Oracle Order Management Partner Ordering process.
- Oracle Assets
- Oracle Projects
- Oracle Work in Process (move transactions, assembly completion, configuration support, and others)
- Oracle Project Contracts (shipment transactions)
- Oracle Purchasing (Inter-company drop shipment and PO adjustments)
This topic group begins to tie general features and goals discussed in the Overview to starting points in the actual user interface. The topic group also includes some directions that otherwise would have to be repeated frequently.

This topic group covers the following topics:

- Accessing Oracle Install Base in HTML
- The Products Tabbed Page
- Finding a Product with Quick Find
- Using the Go Button to Display a List of Values
- Accessing Oracle Install Base in Forms

### 2.1 Accessing Oracle Install Base in HTML

You access Oracle Install Base in the main HTML mode as follows:

1. Using the path provided by your local system administrator, navigate to the Welcome to Oracle eBusiness Suite page.
2. If you have not already obtained a registered and approved login, click Register Here to register.
3. After you have an approved login, in the Welcome to Oracle eBusiness Suite page, enter your login and password.
4. Click Go.

The Item InstancesSearch page appears under the Item Instances main tab and the Item Instances subtab.
If you are an outside customer, the Welcome to Oracle Install Base page appears. Select an account number from the list of values presented to you and click Go to activate the application with information appropriate for this account. The information is a subset of that which is described in the rest of this guide.

2.2 The Item Instances Tabbed Page

In the HTML mode of Oracle Install Base all pages are organized under the Item Instances tab with the following subtabs:

Item Instances
Some of the activities that you can perform here are search for item instances, view item instance details, view item instance configurations, copy item instances, and define item instance configurations.

Transactions
Here you can search for transactions and examine their details.

Systems
Here you can view and maintain systems.

2.3 Finding an Item Instance with Quick Find

The Quick Find function appears in every page within Oracle Install Base. You use it when you have a specific identifier for a tracked instance that you want to investigate. Use this procedure to locate an instance with Quick Find.

Prerequisites
None

Steps
1. Click the Item Instances tab.
   The Search Item Instances page appears.
2. From the Quick Find list of values, select the type of unique identifier that you want to use to locate a tracked instance.
For example, although an instance may not have a unique serial number, Install Base establishes its own instance number for anything that it tracks. Thus, if you know that number, you can select Instance Number as the type.

3. In the field immediately to the right, enter a value for the type of identifier that you selected. Except for a sales order number, you can use the wildcard % in the search string.

4. Click Go.

The Search Results page appears with the results of the search in the form of a list.

5. Click a link for an entry in the list to get additional details about the instance in the Item Instance Details page.

2.4 Using the Go Button to Display a List of Values

Many pages within this application have a special use for the Go button in which it retrieves a list of values. In this use, you enter a generic search value using % in the preceding field and then click Go to display a list of values that satisfy the generic criteria. When you select one of these results, it populates the associated field. For example, to display a list of values of all item numbers that begin with CM, you can enter the generic search value CM% in the Item Number field.

2.5 Accessing Oracle Install Base in Oracle Forms

Some user features of Oracle Install Base are in the Oracle Forms mode. Forms windows require a different access procedure than do the HTML parts of the application. You must use the URL, user name, and password provided by your local system administrator to log in to the forms mode of Oracle Applications. Then use the responsibility and navigation defined for the particular window.

Forms windows described in this guide include:

- Transaction Details
- Transaction Errors
- Mass Edit/Future Dated Transaction
- Open Interface
- WIP Component Install
- Assembly (Component Details)
Accessing Oracle Install Base in Oracle Forms
3.1 Overview

Oracle Install Base provides life-cycle tracking of item instances. It provides the unique ability to query the inventory of available item instances, services, and assets tracked through Oracle Install 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 Install 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.

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 Install Base, which provides a repository of information of their location, bill-to address, ship-to address, service contacts, and relationship to other items.
For each item instance in Oracle Install Base, a history of transactions is being tracked and stored. Given a particular time frame, these transactions and the state of the attributes during that time can be viewed.

### 3.2 The Search Item Instances Page

The Search Item Instances page shows the following default regions:

**Quick Find**
Use this when you already know a unique identifier for an item instance, such as a serial number or a sales order number.

**Search Item Instances**
Within this region you can define and display searches according to saved criteria.

**Saved Searches**
Use this to create, save, and use personalized, named search criteria.

**Search Results (untitled)**
The untitled region below Saved Searches displays the results of your most recent search. From here you can view details of listed items and perform other operations on them.

After you have performed a search, the result list appears in the Search Item Instances page. The functions available to perform on entries on this list are as follows:

**Remove button**
Marks the entry as a candidate for expiry with an end date of today, when you click Update. A list of values is displayed for update of status for the expired instance. Status choices include, for example, Returned, Terminated, and Return for Replacement.

**Description link**
Displays the General Attributes region of a Item Instance Details page.
View Configuration icon
Displays the Item Instance Configuration page. There you can view item instance configurations by relationship type and version, expire relationships, and add and create subitems.

View Detail icon
Displays the most frequently used attributes of the instance on one page.

Copy button
Displays the Copy Item Instance page. There you can use the copy of the item instance definition to define another item instance. The Copy Item Instance page is very similar to the Create Item Instance page reached with the Create button. The main difference is that the Copy Item Instance page already has supplied some values. The Copy button is available only for item instances that are at a customer location.

Update button
Changes the status of entries with the Remove box selected to Expired and puts the current date and time as the end date and end time. Changing an item instance status to Expired does not remove the item instance from Oracle Install Base.

Create button
Displays the Create Item Instance page. There you can define a new item instance.

Download button
Downloads and saves the search summary results to an Excel file.

View Details column
Provides a LOV containing links for direct access to details of item category attributes. The default value in the speed menu link is populated from the profile option CSI: UI Default Selection of View Details Dropdown.

3.3 The Item Instance Details Pages
From the side navigation menu on the left of a Item Instance Details page, you can access the following features and functions:
General
View and maintain general information about the item instance such as system name, serial number, owner, and location.

Additional Attributes
View and update values for additional attributes defined for an item or instance.

Assets
View and define associated asset information such as asset number, date placed in service, and employee. Oracle Enterprise Install Base uses such information in the tracking of fixed assets.

Party Relationships
View and define names, types, and effective dates for additional parties that can be associated with an instance. You can use these features to transfer ownership.
Associated links have the following uses:
- Owner: Transfer item instances.
- Party: Add or maintain party relationships
- Account: Define and maintain accounts and account types for a party
- Contact: Define the contact type and names of a party
- Summary: Display all the associated parties, and the accounts and contacts from each

Pricing
View extended pricing attributes that come from Order Management sales order lines at the sale of an item instance.

Counters
Review and update counter readings associated with the instance.

Contracts
View information such as the name, effective dates, and coverage description of service contracts associated with the instance. Each contact number can link to a page of contracts details.
Notes
Create and view notes associated with an item instance.

Transactions
View the most recent transactions for this item instance. Each transaction ID links to a page of transaction details.

Service Requests
View and create service requests associated with the item instance.

Repair Orders
View open, closed, and hold repair orders for an item instance.

History
Retrieve and view the history of an item instance based on a date range or a version label.

Operating Units
Display and maintain operating units associated with the item instance.

Configuration
Displays the Item Instance Configuration page. There you can view the various configurations and define children for an instance.

3.4 Using Saved Searches
With saved searches you can easily reuse a set of possibly complicated search criteria by assigning a name to a saved set of criteria. Use this procedure to display the results of a previously named set of search criteria.

Prerequisites
None.

Steps
1. Click the Item Instances tab. The Search Item Instances page appears.
2. In the Saved Searches list of values, select the name of the predefined search that you want to use.
3. Click Go. The search results appear in the lower part of the page.
4. As desired, click the link for an item description to display details about it.

3.5 Defining Saved Search Criteria

With saved searches you can easily reuse a set of possibly complicated search criteria by assigning a name to the saved set of criteria. This defining process occurs on the Advanced Item Instance Search page. This page is organized by regions of basic categories under which you can define and test various specific search criteria. After you are satisfied with intermediate or final results of your tests, you can save the set of criteria with a name of your choice.

The Advanced Item Instance Search page provides customizable, collapsible regions to suit user requirements. Therefore, what you see on this page depends on your local setup. Collapsible regions are set up by updating the following CSI lookup CSI_ADV_SEARCH_DEF_SHOW.

The basic category regions are:

- General Attributes
- Current Location
- Installed Location
- Party
- Contact
- Party Accounts
- Contracts
- Sales Order
- Assets
- Table Personalization (select and position the display columns in the search summary, and select the sort orders for the display)

Refer to Creating Item Instances for definitions of several common fields on this page.

Most fields within the regions are followed by a Go button. The button indicates that you can enter a generic search value using % in the associated fields and then click Go to display a list of values that satisfy the generic criteria. When you select one of these results, it populates the associated field.
Use this procedure to define a named set of search criteria.

**Prerequisites**
None

**Steps**
1. Click the Item Instances tab.
   The Search Item Instances page appears.
2. Click Personalize.
   The Advanced Item Instance Search page appears.
3. In each selected category regions, enter data in the fields.
   As necessary, use generic entries and the associated Go button to populate fields with specific values.
   Click the calendar icon to help you enter dates.
   Click Show Expired Instance to view item instances that have been expired. As a default, only active instances are displayed.
   As necessary, click Clear to clear out your test entries, and re-enter values.
4. In the Table Personalization region, use the Move and Remove commands and arrows to move selected columns between the list of available columns and columns that you select for display.
5. In the Sort Rows region, select from the LOV the fields to be used in the sort order.
6. Use the arrows in the right-hand column of the personalization table to arrange the display sequence of your selected columns. The column titles as arranged from top to bottom are displayed from left to right on the Search Item Instances page.
7. As appropriate, click one of the following:
   - **Search**: Finds values that satisfy the current search criteria
   - **Save As**: Saves the current search criteria with a name that you enter
   - **Save**: Saves the search criteria under the most recently used name for search criteria
3.6 Creating Item Instances

In the Create Item Instance page you can create an item instance. The page has regions for general item information, owner information, current location, item flags, and item views. If you are aware of another item instance in Oracle Install Base that has many of the same values for this information, then use the copy item instance procedure instead.

The item flag region will be populated with default item setup flags. The Merchant check box is selected automatically if an agent creates or changes the instance. Similarly, the Customer check box is selected automatically if a customer creates or changes the instance.

The Organization field defaults to the Service validation organization profile setup. It can be changed by selecting another organization from the LOV (GO button).

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.

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

For serialized items, Oracle Install Base checks for the uniqueness of the serial number based on the setup of a serial control uniqueness parameter in the inventory organization. Version label and status default to the profile option setup if they are not populated. Accounting classification defaults to Customer Product if it is not populated.

If an owner is an external party, then an account is mandatory.

For current and installed-at location, after the type is selected, the appropriate location format will be displayed for input. For example, if Party site is selected, then several lines allowing input of address are displayed or selected from GO.
Instance Name is an alternative method for referring to a specific instance or a group of item instances. For example, if you wish to refer to the specific instance of a network router located at 100 Main Street, then give this instance a name such as "Router-100 Main Street,Bos, Ma." Advanced Search functionality allows querying by Instance Name. The Oracle TSO network configuration-reconfiguration functionality utilizes this feature.

Similarly, External Reference is an alternative method for referencing one or more instances of an item. Advanced Search and Quick Find allow querying by External Reference. The Order Management Installation Details window supports entry of External Reference. This field is updateable for customer item instances through the Oracle Install Base HTML user interface.

The Condition field in the general attributes region 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.

The Status field is derived from a user-extendible Instance Statuses list of values table required during setup of Oracle Install 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 Install Base transaction sub-types selected in the Installation Details window for Oracle Order Management transactions.

Oracle Install Base provides separate Current and Installed At location attributes. These accommodate situations where both are required. For example, an item instance installed at a customer location may have been returned for repair. In this case, the current location reflects an in-house inventory location whereas the installed location continues to reflect the installed-at customer site. The location LOVs are restricted to that of the default party and its related parties. If the location of another party is required, then change the party name (Current Party or Install Party) on this page in order for the LOV of its locations to appear. The LOV of parties displayed is controlled at the time of implementation by the All Parties parameter setup.

At manual instance creation, you can utilize a check box called Same as Current Location. This provides a shortcut for populating the installed-at location to be the same as current location.

The owner party is the default in the Party field in the Location region, and the LOV of locations is that for the owner party and its related parties. Another party can be selected from the LOV of the Party field to enable the selection of the locations for this party and its related parties.
Creating Item Instances

Installation date defaults to sysdate, 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.

Use the following procedure to create an item instance.

**Prerequisites**
The item and item number for an item instance must already be defined in the Oracle Inventory Master Item window by selecting Install Base Tracking.

**Steps**
1. Navigate (T) Item Instances > (T) Item Instances > (B) Create.
   The Create Item Instance page appears.
2. In each region, enter data in the fields.
   As necessary, use generic entries and the associated Go button to populate fields with specific values.
   Click the calendar icon to help you enter dates.
   As necessary, click Clear to clear out your test entries, and re-enter your values.
3. If your definition is complete, then Creation Completed is selected by default upon saving.
   Doing so means that it can be used for configuration and other applications.
4. Click Submit.
   A Item Instance Details page appears for your item instance with its new instance number. If you provided values for all the required fields (with asterisks) but did not select Creation Completed, then the application selects it for you. If an instance is created without the mandatory fields, then Creation Completed is not selected. This means that the instance cannot be used in applications such as Service Request.

**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.
3.7 Copying Item Instances

In the Copy Item Instance page you can create an item instance by copying another and making changes to it. It is essentially a create item instance page without specific details such as serial number. Changes can be made to the copied template, and options are available to specify what can be copied such as party and account information. The page has regions for general item information, owner information, current location, item flags, item views, copying, and descriptive flexfields.

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

Use the following procedure to copy an item instance.

**Prerequisites**

None

**Steps**

1. Navigate (T) Item Instances > (T) Item Instances.
   
   The Search Item Instances page appears.

2. If an appropriate item instance list for copying an item instance is not already displayed, then generate such a list by performing a search as described in The Search Item Instances Page.

3. Click Copy for the item instance whose description you want to use to define a new item instance.
   
   The Copy Item Instance page appears.

4. In each region, enter data in the fields.
   
   As necessary, use generic entries and the associated Go button to populate fields with specific values.
   
   Click the calendar icon to help you enter dates.
   
   As necessary, click Restore to return the settings to those of the copied item instance, and re-enter values.

5. If your definition is complete, then optionally select Creation Completed.

6. Click Save.
   
   If you provided values for all the required fields (with asterisks) but did not select Creation Completed, then the application selects it for you.
3.8 Working with General Attributes

In this page you can view and modify general information about an item instance, such as system name, owner, and location. This page is organized by regions of basic categories under which you can define and test various specific search criteria.

Serial numbers created for manually created on-line instances are synchronized with inventory organization serial numbers. After creating and saving an item instance, you cannot change serial numbers.

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. All changes for this kind of instance should come from ERP integrations.

To expire an instance, the end date field must be populated. If a status is not entered, then the default termination status is used.

Instance Name is an alternative method for referring to a specific instance or a group of item instances. For example, if you wished to refer to the specific instance of a network router located at 100 Main Street, this instance may be given an instance name such as ‘Router-100 Main Street, Bos, Ma’. Advanced Search functionality allows querying by Instance Name. The Oracle TSO solution’s network configuration-reconfiguration functionality uses this feature.

Similarly, External Reference Number is an alternative method for referencing one or more instances of an item. Advanced Search and Quick Find functionality allow querying by External Reference Number. The Oracle Order Management Installation Details window also supports entry of External Reference Number. This field is updateable for customer item instances.

The 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.

Status is derived from a user-extendible instance statuses list of values table required during set up of Oracle Install 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 Install Base transaction sub-types selected in the Installation Details window for Oracle Order Management transactions.

Oracle Install Base provides separate Current and Installed At location attributes. These accommodate situations where both are required. For example, an item instance installed at a customer location may have been returned for repair. In this
case, the current location must reflect an in-house inventory location whereas the
installed location must continue to reflect the installed at customer site. The location
LOVs are restricted to that of the default party and its related parties. If the location
of another party is required, then change the party name (Current Party or Install
Party) on this page in order for the LOV of its locations to appear. The LOV of
parties displayed is controlled at the time of implementation by the All Parties
parameter setup.

The owner party is the default in the Party field in the Location region, and the LOV
of locations will be those of the owner party and its related parties. Another party
can be selected from the LOV of the Party field to enable the selection of the
locations for this party and its related parties.

Whether all parties or only related parties will be displayed in the LOV of the Party
field is controlled by the option All Parties in the Oracle Install Base Parameter
setup.

A transfer of ownership is done from the Owner link.

The Installation Date field in Oracle Install Base specifies the date of item
installation. Often, the installation date for an item is not known when the item is
being shipped. It may be updated later.

Previously Oracle Install Base supported update of the installation date but did not
co-ordinate this change with the Oracle Service Contracts warranty start date. The
changes may need to be manually accomplished.

Now Oracle Install Base co-ordinates a change of installation date in Oracle Install
Base with Service Contracts to affect the warranty start date based on the specific
setup in Service Contracts. Please refer to the Oracle Service Contracts
documentation for further details.

Descriptive flexfields are available on this page but must be set up first on the ERP
DFF setup before they can used for update on this page.

If you want to take a snapshot of all the attributes for an instance for a certain
occasion, such as As Returned-03-12-2002, enter such a version label in the version
label field, and the system will store this state of the attributes in history with this
label and a time stamp. Then you can retrieve this history for review by using the
version label. Version Label is a free-form field, with the exception of the one being
used at instance creation if no label is entered into the field. For this, the default
version label specified in the profile option is used.

A split icon is displayed for customer instances with quantity greater than 1, strictly
for non-serialized items. For more information, refer to "Splitting Quantities."
Return-by date and time values 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.

Shipping date and time are populated from shipment transactions.

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

**Steps**
1. In the side navigation menu, select General.
2. In each region, enter data in the fields.
   - As necessary, use generic entries and the associated Go button to populate fields with specific values.
   - Click the calendar icon to help you enter dates.
   - With the Split item flag, you can indicate that you want to divide a quantity greater than 1.
   - As necessary, click Restore to return the settings to those of the most recently saved state of the item instance, and re-enter your values.
3. If your definition is complete, then optionally select Creation Completed.
4. Click Save.
5. If you selected the Split item flag, then a page appears in which you can define how you want to split the quantity for your item instance.

**Guidelines**
If you want to take a snapshot of all the attributes for an instance for a certain occasion, such as As Returned-03-12-2002, enter such a version label in the version label field, and the system will store this state of the attributes in history with this label and a time stamp. Then you can retrieve this history for review by using the version label. Version Label is a free-form field, except at the time of instance creation. Then the default version label specified in the profile option is used.
3.9 Working with Additional Attributes

In the Additional Attributes page you can supply a value for a list of additional attributes, which are user definable with the Oracle Install Base Administration responsibility.

**Prerequisites**

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

The additional attributes must have been set up in Oracle Install Base Administration. Refer to the *Oracle Install Base Implementation Guide* for the setup of additional attributes.

Additional attributes can be set up for an item, an item category, an instance, or for a global install base. After definition in the setup, the attributes show up on the Additional Attributes link for user input.

Additional attributes for Oracle Install Base can be classified by attribute category. In the Additional Attributes page, you can group, sort, and display additional attributes by category.

**Steps**

1. In the side navigation menu, select Additional Attributes.
2. Enter values for the displayed attributes.
3. As necessary, click Restore to set values to the state of the last update, and re-enter values.
4. Click Update to save your set of values.

3.10 Working with Assets

In the Assets page you can view and enter associated asset information such as asset number, date placed in service, and employee. Use this procedure to add an asset to the Assets list.

**Prerequisites**

You must have selected an item instance and navigated to a Item Instance Details page.
Assets must have been associated with the instance. For details, refer to the Oracle Enterprise Install Base User Guide and the Oracle Enterprise Install Base Implementation Guide.

Steps
1. In the side navigation menu, select Assets.
2. Click Add Asset. The Search Assets page appears.
3. In each region, enter data in the fields.
   As necessary, use generic entries and the associated Go button to populate fields with specific values.
   Click the calendar icon to help you enter dates.
   As necessary, click Clear to clear out your test entries, and re-enter values.
4. Click Search. The Asset Search Results page appears.
5. If necessary to refine your search, select an item and click Refine Search Criteria.
   You are returned to the Search Assets page. Go to step 3.
6. Fill blank fields of candidate assets, and use Go buttons as necessary.
7. Select an asset that you want to add.
8. Click Add to Item Instance.
   The asset is added to your item instance.

3.11 Working with Parties

In the Parties pages you can view and define instance parties and their associated accounts and contacts. Links for Owner, Party, Accounts, Contacts, and Summary are under the Party Relationships heading.

More than just the owner relationship can be defined for an instance, although the owner relationship is mandatory. You can define multiple relationship types in the setup and use them in specifying relationships with different parties. For example, relationship types such as Distributor, Meter Reader, and End User can be defined 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.

A party can be of type Party, Employee, Vendor, Group or Team. Group, Team, Employee and Vendor party types cannot have Account or Contacts associated with
them. Only the party type of Party can be associated with accounts and contacts. Team and Group party types can be marked as Primary or Preferred.

Use this procedure to work with parties.

**Prerequisites**

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

The party types, accounts types, and the contacts types to be used must have been set up in Instance party Account Relationship Types. This is done with the Oracle Install Base Administration responsibility. Refer to the *Oracle Install Base Implementation Guide* for details of setup.

**Steps**

1. In the side navigation menu, select Parties.
   
   The Parties page appears. Here you can view and define parties.

2. To mark a party for removal, select Remove for the party name.

3. Use the lists of values and the Go buttons as necessary to define party type, party name, and relationship type.

4. Enter start and end dates.
   
   If no start date is entered, then it defaults to the current date. If you want this party relationship to end on a particular date, then enter it as the end date. It can be the current date or a future date. If you do not want to enter an end date, then you can leave the field blank.

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

6. Optionally, you can click Account Details or Contact Details to take you to their respective pages to define accounts and contacts for this party. Alternatively, you can access these pages by using the links under the Party relationship.

7. In the side navigation menu, select Accounts. Optionally, use the Account icon to the right of the Party page for a party of the type Party.

8. Select a party from the list of values and click Go so that the accounts for that party can be defined or viewed. You can define multiple accounts for a single party.

9. To mark an account for removal, select Remove for the account name.
10. Use the lists of values, Go buttons, and calendar icons as necessary to define account numbers, relationship types, and start and end dates.

11. Click Restore to return values to those saved last, and re-enter values or click Update to save changed values.

12. In the side navigation menu, select Contacts. Optionally, use the Contact icon to the right of the Party page for a party of the type Party.

The Party Contacts page appears. Source Type provides the source of information about the contact, which can be Employee or Party.

13. Select a party from the list of values and click Go so that the contacts for that party can be defined or viewed. An owner is one of these parties. You can define multiple contacts for a single party.

14. To mark a party contact for removal, select Remove for the contact name.

15. Use the lists of values and the Go button as necessary to define party contacts. Contacts can be from the party contact list or from employee. Each contact can be set up as preferred or primary. Preferred contacts are used when you select service personnel for task assignment.

16. Optionally, click Details for an entry for a summary of information about a particular party contact.

17. Click Restore to return values to those saved last and re-enter values or click Update to save changed values.

18. In the side navigation menu, select Summary.

The Parties Summary page appears. Here you can view a summary of associated parties and the accounts and contacts for each of these parties.

References
Owner Link under party relationship is described in the Transferring Ownership section.

3.12 Viewing Pricing Attributes

With the Pricing Attributes page, you can view and set the values for pricing attributes.

Use this procedure to view and modify values for pricing attributes.
Prerequisites
You must have selected an item instance and navigated to a Item Instance Details page. Advanced pricing attributes must have been populated from the sales order from which this item instance was sold.

Steps
1. In the side navigation menu, select Pricing.
   The Pricing page appears. Here you can view and set value for pricing attributes.
2. Use the context filter to select a particular set of pricing attributes.
   The contexts are part of the setup for extended pricing attributes in Oracle Order Management and Oracle Advanced Pricing.
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.

3.13 Working with Counters

With the Counters application, you can define a counter construct called a counter group for an item to monitor the usage of customer item instances and services and execute business processes based upon the usage information. Common everyday objects that have counters are an automobile (the odometer), a gas meter, and a photocopy machine. Counters are created for an instance at the time of instance creation if the counter group is associated with the item in the Counters application.

As a piece of equipment recorded in Oracle Install Base is put into service, its usage can be tracked by incrementing the counters associated with the unit. These counters may be updated manually or automatically on regular intervals. The Counters application determines the counter names, counter types, and adjustment types that appear in this page. In Oracle Install Base you cannot define counters, but you can view, adjust, enter, and reset their readings.

Use this procedure to view, record, adjust, and reset counter readings.
Prerequisites
You must have selected an item instance and navigated to a Item Instance Details page. A counter group must have been associated with the instance and the counters already created for the instance.

Steps
1. In the side navigation menu, select Counters.
   The Counters page appears. Here you can view, record, adjust, and reset counters.
2. In the Reading region, enter any necessary new readings for specific counters.
3. As necessary, in the Adjustment region, select an adjustment type, and enter an adjustment amount.
4. As necessary, in the Reset region, select the counter that you want to reset, enter the readings before and after reset, and enter a comment for the reset.
5. Click Restore to return values to those saved last, and re-enter values or click Update to save changed values.

3.14 Working with Contracts
In the Contracts page, you can view service contracts and warranties associated with an item instance. The list of contracts is displayed, with the link on the contract ID to a detailed contract page.

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.

Steps
1. In the side navigation menu, select Contracts.
   The Contracts page appears and displays the current contract information.
2. To view details of a displayed contract, click the link in the Number field.

3.15 Working with Notes
In the Notes page, you can view and update notes, including attachments to an instance.
Prerequisites
You must have selected an item instance and navigated to an Item Instance Details page.

Steps
1. In the side navigation menu, select Notes.

3.16 Viewing Transactions

In the View Latest Transactions page, you can see recent transactions for the current item instance. Use this procedure to view the latest transactions.

Technical Note: Each time a change is made to the instance, it is stored in history by transactions 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.

Table 3–1 Selected Columns in the View Latest Transactions 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.

Steps
1. In the side navigation menu, select Transactions.

The View Latest Transactions page appears.
2. For details of a particular transaction, click the transaction ID. The Transaction Details page appears, which provides information about the associated changed attributes, pricing, parties, party contacts, and party accounts.

### 3.17 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 Install 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 Install 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

Use this procedure to split quantities.

**Prerequisites**

You must have selected an item instance with quantity greater than 1 and navigated to an Item Instance Details page.

**Steps**

1. In the General Attributes region, click Split.
   
   The Split Quantity page appears.

2. To split the original quantity into two parts, in the Split into Two Item Instances region, enter the first and second quantities.

3. Click Restore to return values to those saved last, or click Update to save changed values.

4. To split the original quantity equally among n item instances, in the Split into n Item Instances region, click Update.
5. Click Restore to return values to those saved last, and re-enter values or click Update to save changed values.

The application displays information for the newly created instances.

3.18 Transferring Ownership

In the 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 Install 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 Install Base supports RMA receipt, shipment, and miscellaneous receipt transactions of Oracle Install Base instances regardless of ownership.

Oracle Install Base processes the RMA and transfers ownership if the RMA customer is different from existing instance ownership. Similarly, Oracle Install 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.

Use this procedure to transfer ownership.

Prerequisites

- You must have selected an item instance and navigated to an Item Instance Details page.
- 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 Install Base Parameter.
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.

**Steps**

1. In the side navigation menu, select Owner.
   
The Owner page appears.

2. In the Owner region, enter the new party type, account type, and party name. Use the Go buttons as necessary to help you to select entries.

3. Click Restore to return values to those saved last and re-enter values or click Update to save changed values.

4. In the associated address regions, enter the new shipped-to address and billed-to address. Use the Go buttons as necessary to help you to select entries.

5. Click Restore to return values to those saved last or click Update to save changed values.

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

### 3.19 Working with Service Requests

In the Service Requests page, you can view the service requests that have been logged for the instance. Earlier, when the service request was made, a check probably was made to Oracle Install Base to get current information about the account.

Use this procedure to view service requests.

**Prerequisites**

You must have selected an item instance and navigated to an Item Instance Details page.
Steps
1. In the side navigation menu, select Service Requests.
   The Service Requests page appears.
2. Use the View Service Requests list of values and Go button to select a category of service request to display.
3. For displayed records, click the entry under Details for further information.

3.20 Viewing Repair Orders
In the Repair Orders page you can view open, closed, and hold Depot Repair orders associated with an item instance. Use this procedure to view repair orders.

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

Steps
1. In the side navigation menu, select Service Requests.
   The Service Requests page appears.
2. In the View Repair Orders list of values, select the category of repair order.
3. Click Go.
   Any related repair orders appear.

3.21 Viewing 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 view on this page. This page is different from the Transactions page, which shows the changes made to an instance transaction by transaction. Use this procedure to view item instance history.

Prerequisites
You must have selected an item instance and navigated to an Item Instance Details page.
Steps
1. In the side navigation menu, select History.
   The Item Instance History page appears.
2. Enter selection criteria:
   - Enter a value in the Version Label field. Use the % placeholder and the Go button as necessary to help you to enter an appropriate version label.
     Selection of an entry from the Go version label list also provides the entry’s associated date and time.
   - Alternatively, you can leave the Version label field blank and enter a date and time.
     Date and Time refer to the time that a certain version label was still current.
3. Click Retrieve History.
4. The available history appears and shows the times of changes as separate entries.
5. Click a link for an entry to display the details of the changes made at that time.

3.22 Working with Operating Units

In the Operating Units page, you can view, add, and remove the association of operating units with a particular item instance. An operating unit is an organization with which the instance can be associated. When it 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 billed-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 in this release. No other functionality is tied to it.

Use this procedure to work with operating units.

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 Install Base administration.

Steps
1. In the side navigation menu, select Operating Units.
The Operating Units page appears and displays any operating units now associated with the selected instance.

2. If you want to delete a displayed association with an operating unit, click the Remove icon for that unit. The removal will take effect permanently on clicking Update.

3. To modify or add a new association as necessary, enter values for the operating unit, type, start date, and end date. Use the % placeholder and the Go button as necessary to help you to enter an appropriate operating unit.

4. Click Restore to return values to those removed last, and re-enter values or click Update to save changed values.

3.23 The Item Instance Configuration Page

In the Item Instance Configuration page you can view item instance configurations by relationship type and version, expire relationships, and add and create subitems.

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.

For more information about Oracle Install Base support for configurations, refer to Oracle Install Base Configuration Support.

Selective Page Description

View Relationship Type Field
Defines the type of relationship that you seek from the LOV. Click Go to make the relationship current. For explanation of relationship types, refer to Understanding Relationship Types.

Select Column
Selections here mark entries as candidates for removal from a relationship when you click Expire.
**Description Column**
Displays the items with the selected relationship type. Click the + (plus sign) to expose immediate children in a relationship.

**Expire Button**
Removes relationships selected for expiration in the Select column. Do not click this button when the topmost item instance in a structure is selected.

**Add Button**
Use this to add an existing item instance to the selected instance.

**Create Button**
Use this to create an item instance to add to the instance displayed in a row. This takes you to the Create Instance page, where you can create a new instance as a child of the instance from the configuration page.

**Show Parent Button**
Use this to view the parent of a configuration.

### 3.24 Oracle Install Base Configuration Support
Oracle Install 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 Install 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 Install 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 Install Base Open Interface transactions
- Manual configuration creation and update using Oracle Install Base HTML pages

**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 Install 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 Install 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 Install 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 Install 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. That is, 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 Install Base Open Interface Transactions**
Oracle Install Base supports the creation and maintenance of Component-Of item instance relationships using Open Interface.
Manual Configuration Creation and Update Using HTML User Interface
For information on using the Oracle Install Base HTML UI to manually create and update configurations, refer to the Item Instance Configuration Page section in this guide.

Item Instance Configuration History and Version Labels
Oracle Install Base provides the unique capability of viewing configurations based on version label. Assume that you have three version labels for an item instance, a) As Created, b) As changed - mm/dd/yyyy, and c) Current. Also assume that the configuration was changed in the second and third cases. Using Oracle Install Base, you can derive and view what the configuration looked like based on version label attributes.

Integration with Oracle Order Management
Oracle Install 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.

3.25 Understanding Relationship Types
With Oracle Install 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.

The HTML pages of Oracle Install 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 HTML:

- Upgraded-From
- Member-Of
- Installed-On
- Provided-By
Understanding Relationship Types

**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 ERP integration 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 ERP integration, 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:

The john-pc-01 computer a 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 Install Base supports cyclical relationships.

3.26 Adding a Subitem Instance

Use this procedure to add a subitem.

Steps
1. In the Item Instance Configuration page, click Add for the item instance to which you want to add a subitem instance.
   The Search Subitem Instances page appears.
2. Use Saved Searches as necessary to display the appropriate subitem instances.
3. From the Select column, select the item that you want to add.
4. Click Add as Child.
   The subitem instance is added to the structure.

3.27 Creating a Subitem Instance

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

Prerequisites
The item and item number for an item instance must already be defined in the Oracle Inventory Item Master with the Install Base Tracking box selected.

Steps
1. In the Item Instance Configuration page, click Create for the item instance to which you want to create a subitem instance.
   The Create Subitem Instance page appears.
2. In each region, enter data in the fields.
As necessary, use generic entries and the associated Go button to populate fields with specific values.

Click the calendar icon to help you enter dates.

As necessary, click Clear to clear out your test entries, and re-enter them.

3. Click Create Child.

The subitem instance is added to the structure.
4

Using the Transactions Tabbed Page

This topic group includes the following topics:

- Overview
- Searching Transactions

4.1 Overview

You can use the Transactions tabbed page to define transaction search criteria and view the results. Available search criteria include transaction type, sub-transaction type, specific value in a transaction, date of transaction, and transaction status.

Transaction types are specified for any transaction source that has defined interfaces with Oracle Install Base. For example, transaction types from Oracle Applications include Order Management - Fulfillment, Order Management - Shipment, and RMA Receipt. Oracle Enterprise Install Base 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 Implementation Guide.

For each transaction type, subtypes can be defined to further specify the actions on one or more Oracle Install 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 ERP 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 Oracle Install Base Implementation Guide.

For example, when an Order Management - Shipment transaction updates Oracle Install 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 Install 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-2001.

The result of the selection criteria search is displayed with each transaction bearing a transaction ID, which is used as a link to a detail display page of the transaction.

4.2 Searching Transactions

In the Search Transactions page, you can define search criteria for transactions and then view the transactions that meet these criteria. Use this procedure to search transactions.

Selected Page Definitions
The following table lists the descriptions of selected fields in the Search Transactions 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</td>
<td></td>
</tr>
<tr>
<td>Transaction ID</td>
<td>ID found in an Inventory material transaction</td>
</tr>
</tbody>
</table>

Prerequisites
None

Steps
1. In the Item Instances tabbed page, click the Transactions tab.
   The Search Transactions page appears.
2. Enter a transaction type.
As an aid, use the Go button to display a list from which you can select the desired transaction type.

3. Enter values in other fields to further qualify your search criteria as needed.
   As an aid, use the calendar icon to specify desired dates.

4. If necessary, click Clear to blank out your entries, and re-enter them.

5. Click Submit to display the transactions that meet your search criteria.

6. To see the a list of the instances under a transaction, click the link for its transaction ID.
   The Instances for a Transaction page appears with a list of the associated instances.

7. To see the transaction details for a particular instance, click the link for its description.
This topic group covers the following topics:

- Overview
- The Systems Page
- Personalizing a Systems Search
- Working with System Details
- Working with System Configurations
- Creating a System

5.1 Overview

In the Systems tabbed page, you can define and view systems for a customer, which is an owner party with an account. A system is a construct that item owners can define to group their items. 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. Items can be grouped under each system. Thus the headquarters can own a number of networks, each building can own many servers, and each floor can own many PCs and printers.

5.2 The Systems Page

In the Systems page you can view and define systems, which are hierarchical groupings of items. You can list all available systems ordered by systems ID and
include information such as name, description, and type. Selected entries on the page are:

**Remove**
Marks a system for removal when you click Update.

**System ID**
A unique identifier whose link takes you to the Systems Details page, where you can view and edit system details.

**Number**
An autogenerated system number.

**View Configuration (Icon)**
Displays a graphical representation of the system configuration.

**Item Instances (Button)**
Displays the item instances that are tied to the system.

Item Instances are tied to a system in the Item Instance Details page. Only item instances of the same customer and account as the system can be tied to the system.

**Create (Button)**
Displays a page where you can define a new system.

**Update**
Removes those systems marked for removal.

**Personalize**
Displays a page where you can refine your search criteria for systems.

### 5.3 Personalizing a Systems Search

In this page you define the search criteria for the display of systems on the search summary of the Systems page. Use this procedure to filter this display.

**Prerequisites**
None
Steps
1. In the Item Instances tabbed page, click the Systems tab. The Systems page appears with all systems listed.
2. Click Personalize. The Advanced System Search page appears.
3. To refine your search, enter values as necessary for general information, installation details, billing details, shipping details, and contact details. As an aid, use available lists of value and calendar icons.
4. If you need to erase your entries, click Clear, and re-enter values.
5. Click Search. The Systems page reappears showing only the systems that meet your search criteria.

5.4 Working with System Details
In the Systems Details page you can view and edit system details such as installation location, shipping and billing location, and contacts. This is the only place where you can build a hierarchy of systems, by entering the parent name for the system. An instance can be a part of only one system at a given time. Use this procedure to work with system details.

Steps
1. Navigate to the System Details page by selecting a System Name link from the Systems page.
2. As necessary, edit the values in information fields. The location for the billing, shipping, installation, and contact can be selected from the LOV from GO.

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

To transfer a system, you can change the party name and associated party-account number. Changes can be cascaded to a system's child instances by selecting the associated Cascade Changes to Children check boxes.

Rule:
If a system is terminated, then the profile option CSI: Cascade System Termination takes precedence over the Cascade Changes to Children check boxes.
3. As aids, you can use calendar icons, generic entries, and Go buttons to help you to select values.

4. If you need to correct many entries, then click Restore to return values to their last saved state, and re-enter values.

5. Click Update to save your edits.

5.5 Working with System Configurations

In the Systems Configurations page you can see a graphical representation of a system. From this perspective you can also launch into pages to display and edit system details. You can build a system hierarchy only on the System Details page. Use this procedure to work with system configurations.

Steps

1. Navigate to the System Configurations page by selecting the View Configuration icon for a system on the Systems page.

The selected system becomes the top of the displayed configuration hierarchy.

2. To expose any configuration components below one with a right-pointing arrowhead, click the arrowhead.

The arrowhead points downward, and defined subcomponents appear. Clicking a downward-pointing arrowhead conversely removes display of subcomponents.

Clicking Show Parent shows the parent of the configuration

3. To access the details of an exposed system, click its name.

The System Details page for that system appears.

4. View and edit the system details as necessary as described in Working with System Details. When you have finished, return to the Systems Configurations page.

5. To expose the parent of the system originally selected on the Systems page, click Show Parent.

If a parent exists, then it appears in the graphical display.
5.6 Creating a System

In the Create System page you can define a system. One way do this is to cycle through this page, first by creating the top of the system hierarchy and later by assigning it as the parent of subcomponents that you define.

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.

Use this procedure to create a system.

Steps
1. Navigate to the Create System page by clicking the Create button on the Systems page.

   The Create System page is like the Systems Details page but has no values supplied.

2. As necessary, enter appropriate values in information fields. As aids, you can use calendar icons, generic entries, and Go buttons to help you to select values.

3. If you need to correct many entries, click Clear to blank out values, and enter new ones.

4. Click Create to save your work.

5. To create other components of the system, repeat the previous steps in this procedure.

   Use the Parent Name field to link what you define to a previously defined component.
Using the Transaction Details Window

In the Transaction Details window you can update Oracle Install Base 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
- The Transactions Details Window
- Replacing a Component

6.1 Accessing the Transaction Details Window

Unlike the main interfaces for end users in Oracle Install Base, 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.

You access the Transaction Details window through the Sales Orders window as follows:

1. Using the URL, user name, and password provided by your local system administrator, 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 tabbed page, select a line.
6. Click Actions.
   The Actions window appears.
7. Select Installation Details and click OK.
   The Transactions Details window appears.

6.2 The Transaction Details Window

The Transaction Details window, shown in Figure 6–1, 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 Details Window

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 Install Base 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. 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 tabbed page includes the following fields within the Accounts region: number, name, relationship, start date, and end date.

Replace/Upgrade Tab
The Replace/Upgrade tabbed page 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.

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.

The value of IB Txn Subtype is defaulted from the subtype selected in the Source Transactions Details tab. The change in attributes to the non-source instance is based on the Non Source Info region of the selected transaction subtype.

6.3 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 Install Base 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 Install Base 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 Install Base 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 Install Base Transaction Details window.
2. Enter a value of Replace in the IB Txn Subtype field in the Source Transaction Details tabbed page.
   This tabbed page 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. Save this section to move to the next tab.
5. Click the Non-Source Transaction Details tab.
6. 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.
7. Click the Replace/Upgrade tab.
8. Select the relationship type Replaced By in the Source Transaction Line region.
Replacing a Component

This value is derived from seeded Oracle Install Base Relationship Type setup codes. Enter the to-be-shipped item number in the inventory item field.

9. Select the Txfr Components 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 stand-alone 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.

10. Save your entries.

Following shipment, Oracle Install Base creates a replaced-by relationship from the to-be-replaced instance to the to-be-shipped item.
This topic group includes the following topics:

- Using the Transaction Error Summary and Details Window
- Using the Install Base and Inventory Data Discrepancy Program
- Using the Install Base Error Correction and Synchronization Program

7.1 Using the Transaction Error Summary and Details Window

Overview
In the Transaction Error Summary and Details window you can reprocess transactions that failed to update Oracle Install Base from certain Oracle applications.

Oracle Install Base has the following integration points with Oracle applications through the Oracle Service Fulfillment Manager (SFM) Advanced Queue and Oracle Install Base processing:

- Inventory receiving and purchase order receiving
- Inventory transactions
- Order management
- RMA receiving
- Sales order shipping
- Sales order fulfillment
- Fixed assets
- Projects
Using the Transaction Error Summary and Details Window

- Work in process
- Telco Service Ordering
- Intercompany drop shipments and PO adjustments

If a source transaction is successful and the Oracle Install Base update errors-out, then the transaction appears with error text in the Transaction Error Summary and Details window. You can correct the error, typically using the Transaction Details window. Then you can select the transaction and reprocess it to update Oracle Install Base. If the transaction is successful, then the error record is removed from error tables. Otherwise, the error record continues to be available in this window.

Use this procedure to reprocess a transaction.

**Steps**

1. From the Responsibilities menu of the Oracle Forms mode, select the Oracle Install Base Admin responsibility, and click OK.

2. Navigate to Transaction Errors Processing.

   The Find Transaction Errors window appears and provides a wide range of search criteria.

3. Specify your search criteria, and click Find.

   The Transaction Error Summary and Details window appears.

4. Browse detailed information under the main Transaction Error Summary region, in the Transaction Error tab, the Lot/Serial/Instance tab, and Inventory Transaction tab, and through the Transaction Detail and Instance Detail buttons.

   The Transaction Detail button is available only for specific transaction errors: OM shipments, RMA receipts, and RMA fulfillment (cancellation) where transaction details have previously been entered in source transactions.

   The Instance Detail button is available only where item instances already exist for the error transaction.

5. Correct the transaction.

   For example, if you receive an error for an RMA fulfillment transaction: "Transaction details are mandatory for cancellation / RMA fulfillment," then click Transaction Detail and enter instance number information in the Transaction Details window.

6. Select the corrected transaction to be reprocessed by selecting its Process Flag check box.
7. Save the data to commit the changes.
8. From the main Functions menu, select Others > Requests.
9. Choose the Resubmit Interface Process concurrent program from the LOV.
10. Choose the Selected parameter to process selected transactions.
11. Submit the request.
12. Optionally, schedule this job to run at regular intervals.

The following table describes the fields in the Transaction Error Summary and Details window.

<table>
<thead>
<tr>
<th>Location in the Window</th>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top</td>
<td>Process Flag</td>
<td>Select this check box to reprocess the related transaction. After you select this box and save the record, the concurrent program will pick it for reprocessing.</td>
</tr>
<tr>
<td>Top</td>
<td>Transaction Type</td>
<td>The type of the failed transaction. A transaction type is predefined in the Oracle Install Base source transaction types. For example, if the error occurred while performing an inter-organizational transaction, then the transaction type is INTERORG_TRANSFER.</td>
</tr>
<tr>
<td>Top</td>
<td>Material Transaction Id</td>
<td>The inventory material transaction ID corresponding to the Oracle Install Base transaction.</td>
</tr>
<tr>
<td>Top</td>
<td>Error Messages</td>
<td>The exact reason of the error. You must correct this cause to reprocess the transaction.</td>
</tr>
<tr>
<td>Top</td>
<td>Source Type</td>
<td>The source of the transaction type. It provides more details for the transaction type. For example, if the transaction type is INTERORG_TRANSFER, then the source information type is MTL_MATERIAL_TRANSACTIONS. Some of the possible Source Info types are ASSET_CREATION, ASSET_MOVE, CSISOSHIP, MTL_MATERIAL_TRANSACTIONS, NORMAL_ITEM_ASSET, NORMAL_ITEM_EXP_ITEM, and WFM_TRANSACTIONS.</td>
</tr>
<tr>
<td>Top</td>
<td>Source Id</td>
<td>The transaction ID corresponding to the Oracle Install Base transaction if the source is not Inventory.</td>
</tr>
<tr>
<td>Transaction Error Tab</td>
<td>Header Reference</td>
<td>Represents the source transaction reference number. For example, if the source transaction originated from an Order Management sales order, then this field would provide the sales order number.</td>
</tr>
</tbody>
</table>
### 7.2 Using the Install Base and Inventory Data Discrepancy Program

Oracle Inventory and Oracle Install Base can be out of synchronization for several reasons, of which the following two are the most important:

- The Install Base Tracking box may have been selected and cleared several times for the same item, thus leading to a discrepancy between information that the two applications show.
- The SFM Event Manager was not set properly and hence some Oracle Inventory transactions were not tracked.

The Install Base and Inventory Data Discrepancies program picks up the discrepancy data from the tables of Oracle Install Base and Oracle Inventory and displays it on a report. A separate concurrent program, Install Base Error Correction and Synchronization Program, is available to correct the discrepancies.

Also, Oracle Install Base provides a notification to an end user if any discrepancy between Oracle Install Base and Oracle Inventory occurs. This is accomplished by using an Oracle Alert. The notification generally is in the form of a text message, which is sent to the user either by e-mail or paging.

Use this procedure to run the program.

**Steps**

1. Using the Oracle Installed Base Admin responsibility, navigate to Others > Requests.
   
   The Submit a New Request window appears.

2. Select Single Request, and click OK.
   
   The Installed Base Requests window appears.

3. From the Name LOV, select Install Base and Inventory Data Discrepancies, and click OK.

4. As required, click Help for online help in completing the submission of your request.
7.3 Using the Install Base Error Correction and Synchronization Program

Install Base Error Correction and Synchronization Program is a concurrent program to correct and reprocess the transactions that failed to update item instances in Oracle Install Base. These are the errored transactions that you can view through the Transaction Error Summary and Details window in the application. The transactions could have errored for many reasons including, but not limited to, using unsupported transactions.

Use this procedure to run the Install Base Error Correction and Synchronization Program.

Steps

1. Using the Oracle Installed Base Admin responsibility, navigate to Others > Requests.

   The Submit a New Request window appears.

2. Select Single Request, and click OK.

   The Installed Base Requests window appears.

3. From the Name LOV, select Install Base Error Correction and Synchronization Program, and click OK. The Parameters window appears.

4. Select the desired value for the Mode of Execution parameter.

   Valid values for Mode of Execution are defined as follows:
   a. R: Report bad setup and data issues that need manual correction.
   b. C: Correct and reprocess only the errored transactions.
   c. S: Correct and reprocess the errored transactions and resynchronize item instances in Oracle Install Base with the inventory-on-hand balance to prevent possible future errors.

Oracle recommends that you run this program in the following sequence:

   a. Run the program in mode R to generate the reports, and then manually correct the setup and data until the reports show no more discrepancies.
   b. Next run the program in mode C for at least few iterations, such as three to four, or until no more errored transactions remain to process.
c. Finally run the program in mode S to synchronize Oracle Install Base and Oracle Inventory.

5. Select the desired value for Show Instances.

This parameter is used for generating the Non Serialized Items RMA report. This report lists all the RMA receipts that errored out in Oracle Install Base because the mandatory item instance references for the non-serialized items were not entered in the Oracle Install Base transaction details. Valid values for Show Instances are as follows:

a. N: Only the RMA transaction details are listed.
b. Y: All the appropriate item instances that can be used to reference in transaction details are also listed.

Oracle recommends that you run the program with the Y option for at least the first iteration.

6. Click OK. You are returned to the main window.

7. As required, click Help for online help in completing the submission of your request.

The following applies only when the program is run in the synchronization mode:

1. You must shut down the SFM event manager queue before you run an iteration in the synchronization mode. Any Oracle Install Base related messages that are still pending in the SFM queue are then dequeued and processed by the correction program.

2. To get a consistent snapshot of the inventory on-hand balance, the program while running in the synchronization mode creates a trigger, CSI_BLOCK_MAT_TXN_TRG, on the Oracle Inventory mtl_material_transactions table to block any transactions that are performed in Oracle Inventory for an Oracle Install Base trackable item. After the program completes, this trigger is dropped, and you then need to reprocess any such failed inventory transactions using the standard error submission UIs provided by Oracle Inventory.

3. Start the SFM event manager queue back after the program completes.

The following section contains information about the reports that the program produces.
Error Correction Reports

Title
IB Trackable Flag Discrepancy Report

Description
This report lists all the Items that have a value for the Install Base Tracking flag set differently in child inventory organizations than in the master inventory organization.

When to Correct
Before you can run the program in the Correction mode.

How to Correct
Install Base Tracking must be set up and controlled at the inventory item master organization. If this is not the case, then business users must verify and appropriately decide which items to track or not to track. To achieve this:

1. Apply Oracle Inventory Patch 3038264. This patch honors the value on the inventory master organization for the Install Base Tracking flag and apply it on all the child inventory organizations.

2. You may then want to use the Inventory item master window to verify and correct, if required, the Install Base Tracking flag for these items. You may have to deplete Inv. on-hand balances to zero to update the flag.

Title
Serial Number Uniqueness Violation Across Inventory Organizations Report

Description
This condition occurs when the serial number uniqueness in Oracle Inventory is defined as Across Organizations and you manually create the item instance with a specific serial number in Oracle Install Base and then transact the same serial number in inventory for a different item. This report lists all such item instances and their serial numbers.

When to Correct
Before you can run the program in the Synchronization mode.
How to Correct
Business users must validate the serial numbers in question here and retain the valid one. One possible way to achieve this is to prefix or suffix the serialized instance in Oracle Install Base, which in most cases is a manually created customer item, and or expire any of them if they were created inappropriately. You can use the public APIs provided by Oracle Install Base can to perform this.

Title
Report on RMAs for Non Serialized Items Which Have No Item Instance References

Description
For non-serial items, providing an item instance reference in transaction details is mandatory. This report lists all such RMAs that errored because they do not have an item instance referenced in transaction details for that RMA line. It also shows those there is no transaction detail entered.

When to Correct
Before you can run the program in the Synchronization mode.

How to Correct
The report has a parameter Show Instances, which is prompted at the time of execution of the correction program. A value of Y displays the list of instances that can be referenced for the errored RMA Lines. Business users should look at the list of instances and then do the following:

1. With the Order Management responsibility, navigate to Sales Order > Lines > Actions (Installation Details UI) to create or update the transaction detail and then reference the appropriate instances.

2. With the Oracle Install Base Admin responsibility, navigate to the Transactions error reprocessing UI and mark all the corrected RMA errors for reprocessing.
This topic group covers the following topics:

- **Overview**
- **Using the Mass Edit Functions**

### 8.1 Overview

In the Mass Edit/Future Dated Transaction window you can schedule several changes to be made to a group of instances and to be performed at a specific date and time. Such changes include, for example, location, party ownership, accounts, and contacts.

### 8.2 Using the Mass Edit Functions

Use this procedure to use the mass edit functions.

**Steps**

1. From the Responsibilities menu of the forms mode, select the Oracle Install Base Administrator responsibility, and click OK.
   
   The Mass Edit/Future Dated Transaction window appears.
3. In the Entry Details region, click Find Instances so that you can retrieve the required instances.
   
   The Find Instances window appears.
4. Specify the search criteria based on details such as the instance, item, party, party account, current location, install location, system, contract number, purchase order number, shipped date, and specific serial number or range of serial numbers.

5. Click Find.
   The selected instances appear in the Instance Details region of the Mass Edit/Future Dated Transaction window.

6. As necessary, further refine the instances to process by using instance check boxes, and Select All to select and clear all such check boxes.

7. Supply a value for the Name field of your mass edit session, and click Save. You can retrieve a mass edit definition in the future by using this name.

8. Click the Party tab, where the existing relationship types collectively owned by the instances appear at the top. The owner relationship is the first one to be displayed.

9. As desired, change the party by selecting another value from the LOV.

10. As desired, change the owner. If you do so, you must also change the account number.

11. Optionally, specify start and end dates for changes to the party and account. If you do not specify a start date, it defaults to the date that the mass edit transaction is run.

12. Similarly, use the Contacts tabbed page to make any necessary changes to contacts for a selected party.

   Note: If you are changing attributes or location for an existing party, then the party/account information must be in the Party/Account region before its attributes can be changed, even if you are not changing the party/account itself.

13. Similarly, use the Location tabbed page to change the current location or the install location for all selected instances. The location LOVs are restricted to that of the default party and its related parties. If the location of another party is required, then change the party name (Current Party or Install Party) on this page in order for the LOV of its locations to appear. The LOV of parties displayed is controlled at the time of implementation by the All Parties parameter setup.

14. Similarly, use the Attributes tabbed page to update values for External Reference, Status, and End Date.
15. In Schedule Date of the Entry Details region, enter a date and time for the mass edit transaction to run. If you enter today’s date without a time, then the background scheduler will pick it up at the next time that it runs.

16. Click Submit.

On the specified date and time, this Mass Edit job runs as a concurrent program. Thereafter, the Status Code field will be updated in the Entry Details region of the mass edit window with the mass edit name that you specified.

17. Optionally, view the details of the run in the log of the concurrent program. The status on View Request indicates only the status of the concurrent program. If the job is submitted right away, a request number will be displayed for you to track in View Request.

18. Optionally, use View Request to monitor the status of your submitted job. After the job completes, you can open the log file to view the update results and error messages.

19. For the records that error out, make corrections to the associated instance, and resubmit the mass edit job.

The application processes only the error records, and you can view the results in the log file.
Using the Open Interface Program

This topic group contains the following topics:

- Overview of the Open Interface Program
- Running the Open Interface Program
- Guidelines for Loading Open Interface Tables
- Examples of Populating Open Interface Tables

9.1 Overview of the Open Interface Program

9.1.1 Features

Oracle Install Base provides the following Open Interface features:

- Initial mass load
  
  This imports significant volumes of data into Oracle Install 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 Install 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 Install 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 Install Base Open Interface functionality is restricted to customer items. It does not support internal items and instance assets.
9.1.2 Process

The process overview for a user of the Oracle Install Base Open Interface application is as follows:

1. Load data into a set of interface tables provided by Oracle Install Base
2. Run a mass load concurrent program that reads, validates, and posts the data into Oracle Install 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 Install Base

9.2 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 Install Base Admin responsibility, navigate to Others > Setups > Requests.
   
   The Install Base Requests window appears.

3. If you need general information about submitting requests, then click Help.
4. From the Name LOV, select either Install Base Open Interface or Install Base Open Interface-Parallel Concurrent Workers.

Oracle Install Base has two programs available to process open interface records, Install Base Open Interface and Install Base Open Interface-Parallel Concurrent Workers.

Install Base Open Interface submits the process to post records from the interface tables to the core Oracle Install Base tables.

Install 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 Install Base item instance, party, and
Guidelines for Loading Open Interface Tables

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 CSL_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 Install 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.

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 Install Base Open Interface program to load the records into Oracle Install Base tables.

### 9.3 Guidelines for Loading Open Interface Tables

Here are general guidelines for loading 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.

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>
<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>
</tbody>
</table>
Table 9–1 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>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>
<tr>
<td></td>
<td>CSI_1_PARTY_Interface</td>
<td>-</td>
</tr>
<tr>
<td>17</td>
<td>Party_id</td>
<td>Based on the party_source_table:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ‘HZ_PARTIES’ - hz_parties</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ‘VENDORS’ - po_vendors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ‘EMPLOYEE’ - per_all_people_f</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ‘TEAM’ - jtf_rs_teams_vl</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ‘GROUP’ - jtf_rs_groups_vl</td>
</tr>
<tr>
<td>18</td>
<td>Party_account1_id</td>
<td>Hz_cust_accounts</td>
</tr>
<tr>
<td>19</td>
<td>Party_account2_id</td>
<td>Hz_cust_accounts</td>
</tr>
<tr>
<td>20</td>
<td>Party_account3_id</td>
<td>Hz_cust_accounts</td>
</tr>
</tbody>
</table>

The following table provides information about the setup of the source system.

Table 9–2 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>
</tbody>
</table>
The following table describes the table columns that are specific to Open Interface.

### Table 9–3 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>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 creating an top assembly, then you must stamp all the corresponding records in all the Oracle Install 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>
</tbody>
</table>
Before you insert into any of the Oracle Install Base Open Interface tables, make sure that you get IDs into their respective variables, such as the following:

- SELECT csi_instance_interface_s.nextval INTO l_inst_interface_id FROM DUAL
- SELECT csi_I_party_interface_s.nextval INTO l_ip_interface_id FROM DUAL
- SELECT csi_iea_value_interface_s.nextval INTO l_ieav_interface_id FROM DUAL
- SELECT csi_ii_relation_interface_s.nextval INTO l_iir_interface_id FROM DUAL

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.

**Table 9–4 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>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>8</td>
<td>Add a pricing attribute</td>
<td>One row in the CSI_INSTANCE_INTERFACE with instance number and pricing attribute details in the same record.</td>
</tr>
</tbody>
</table>
### Table 9–4 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>9</td>
<td>Add an org assignment</td>
<td>One row in the CSI_INSTANCE_INTERFACE 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_INTERFACE 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_INTERFACE 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_INTERFACE 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_INTERFACE with instance number and one row in CSI_IEA_VALUE_INTERFACE with details of new extended attribute value.</td>
</tr>
<tr>
<td>14</td>
<td>Remove an extended attribute value</td>
<td>One row in the CSI_INSTANCE_INTERFACE with instance number and one row in CSI_IEA_VALUE_INTERFACE identifier with an end date.</td>
</tr>
<tr>
<td>15</td>
<td>Create a UNIT consisting of two related instances with one instance party each.</td>
<td>Two rows in CSI_INSTANCE_INTERFACE. Two corresponding rows in CSI_I_PARTY_INTERFACE. One row in CSI_I_I_RELATION_INTERFACE, giving the corresponding INST_INTERFACE_IDs as SUBJECT_INTERFACE_ID and OBJECT_INTERFACE_ID.</td>
</tr>
</tbody>
</table>
This topic group covers the following topics:

- Overview
- Attaching Non-Allocated Components

### 10.1 Overview

Oracle Install 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 Install Base top assembly configuration. You can use the Install Base component install (WIP) windows to allocate these free-standing or non-allocated components to specific assembly configurations following WIP assembly completion.

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

- Configurations are built only for serialized top assemblies.
- The functionality is relevant to multi quantity WIP jobs.

### 10.2 Attaching Non-Allocated Components

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

**Prerequisite**

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

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

   The WIP Component Install window appears.

   Figure 10–1  WIP Component Install Window

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.

*Figure 10–2 Component Details Region of the Assembly Window*

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 Installs 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.
This topic group covers the following topics:

- Overview
- Using the Item Instance Query Window

11.1 Overview

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

11.2 Using the Item Instance Query Window

Steps

1. If you want to make a query directly through Oracle Install Base, then use the Oracle Installed Base Admin responsibility and select Item Instance Query.
The Item Instance Query window appears.

2. If you want to make a query through Oracle Order Management so that you can return values to that application, then do the following:
      The Sales Orders window appears.
   b. Create an order.
   c. Click the Line Items tab.
   d. Enter an order line.
   e. Click Actions.
      The Actions window appears.
   f. Select Item Instance Query, and click OK.
      The Item Instance Query window appears.
Using the Item Instance Query Window

3. In the top region, specify the criteria for your instances, and click Find. The results of the search appear in the Query Results tabbed page. Extended-attribute information for a selected instance appears in the bottom region of the Item Instance Query window.

4. To add an instance from the Query Results tabbed page to the list on the Selected Instances tabbed page, either select its Select box or select the instance and click Add to Selected.

5. In the Query Results tabbed page, select an instance and then click the Configuration tab to see any configuration for that instance.
6. Select any node, either parent or child, and click Add to Selected to add the node to the list in the Selected Instances tabbed page.

7. To remove an instance from Selected Instances, select an instance there and click Remove from Selected.

8. 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.
This topic group covers the following topics:

- Overview
- Running the Concurrent Program

12.1 Overview

Oracle Install 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 a very good 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.

12.2 Running the Concurrent Program

Use this procedure to purge all transaction data with dates older than a specified date and store the data in a table.

Caution: Be extremely careful when using this program. After you have purged transactions, the application cannot automatically restore them.
Steps
1. Using the Oracle Installed Base Admin responsibility, select Others > Requests.
2. Navigate to the Installed Base Requests window.
3. From the Name LOV, select Installed Base Transactions History Purge. The Parameters window appears.
4. In the Purge_to_Date parameter, enter the date before which transaction data will be purged, and click OK.
5. In the main window, enter other values as desired.
6. Click Submit.
This topic group describes the setup and use of the Counters application, whose counters frequently are associated with instances that Oracle Install Base tracks.

Counters has very few implementation tasks that are typical for other applications. When you implement Counters, you mostly use the same windows that an end user uses to run the application. During implementation, however, the emphasis tends to be on designing the counter and group templates for end users. For these reasons, this topic group includes both implementing and using tasks.

- Overview of the Counters Application
- Definitions
- Typical Tasks Associated with Counters
- The Basics of Counters
- Prerequisites
- Setup Checklist
- Defining a Counter Group
- Understanding Property Type and Values LOV Lookups
- Defining Counter Property LOV Types
- Defining Counter Estimation Methods
- Defining a Regular Counter (Physical)
- Defining a Group Function Counter
- Defining a Formula Counter
- Defining a Time-Based Counter
Overview of the Counters Application

- Defining Miscellaneous Reading Types Lookups
- Setting the Time Based Counters Engine
- Setting Profile Options
- Automatic Instantiation of Counters
- Viewing and Capturing Readings from Oracle iSupport
- Capturing Counter Readings
- Using Miscellaneous Counter Readings
- Instantiating Counters from a Template
- Resetting a Counter Instance
- Modifying Existing Counter Templates

13.1 Overview of the Counters Application

Using the Counters application 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. Common everyday objects that can 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 counts that originate from time, distance, or usage to closely track the usage of an item or service and to monitor these status counts 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, or to know when consumable items such as toner cartridges and paper must be replenished at the customer's site. Counters can provide the trigger mechanism for a contract or rental
agreement 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, or even signal a contract renewal date or expiration date.

Other types of service counters can be set up to track the activities of a customer support contract to monitor the total number of calls or time spent by the support agent on each call or to escalate those calls that have reached a critical status.

The Counters application supports the following Service applications:

- Oracle TeleService
- Oracle Install Base
- Oracle Service Contracts
- Oracle Depot Repair
- Oracle Field Service
- Oracle Mobile Field Service
- Oracle Spares Management
- Oracle Logistics
- Oracle Advanced Service Online

The Service applications can create a unique set of counters and templates that are required to satisfy their individual business needs for each item or service residing in their Oracle Install Base. Updates must be performed regularly using a standard set of business practices incorporated by each service provider.

13.2 Definitions

The following table provides definitions of some basic terms used in Counters.

<table>
<thead>
<tr>
<th>Feature Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Counter</td>
<td>An incremental electro-mechanical or software device built into an item to track equipment usage. These counters are tangible and can rollover to a specified value, be reset to any value, or replaced if broken during normal operation.</td>
</tr>
</tbody>
</table>
Table 13–1  Definitions and Terms

<table>
<thead>
<tr>
<th>Feature Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula Counter</td>
<td>An intangible or derived counter that runs inside a software application program, keeping track of usage of an item or service. A common logical counter is the number of service telephone calls made by a customer against a particular item or service. Logical counters can be added or combined with other counters to form a new counter.</td>
</tr>
<tr>
<td>Counter Template</td>
<td>A template that is defined for groups of counters and instantiated in Oracle Install Base customer items or contract lines. A template can be defined for a single counter or a group containing one or many counters.</td>
</tr>
<tr>
<td>Counter Group</td>
<td>Can be associated with an item or service and is permitted to have only one associated counter group. Group templates can also be applied with multiple Oracle Install Base items or contract lines. After a counter group is instantiated, it can be modified for a single instance or for all instances. A single counter group can be defined for each Oracle Install Base customer item or contract line to automatically instantiate a counter, or be manually instantiated by selection from a predefined counter or counter group template.</td>
</tr>
</tbody>
</table>

13.3 Typical Tasks Associated with Counters

**Capture Counter Readings**

Counter readings can be entered manually using the Capture Counters window. This window is available from Service Request, Depot Repair Orders, Field Service, Service Contracts, and Contracts Authoring windows.

**Capture Miscellaneous Reading Adjustments**

Miscellaneous reading adjustments can also be captured for counters. Miscellaneous reading types can be defined using the Misc. Reading Types LOV Lookups window to describe any kind of adjustment. For example, it can be a service counter used to adjust a technician’s copy usage during a PM Service or repair of a customer’s photocopier machine.

**View the Counter History Log**

The Counters application creates a new instance each time a reading event has been performed and saves the results in the counter history log. The log contains a...
The Basics of Counters

13.4 The Basics of Counters

13.4.1 Accessing Counters

You can access the Counters windows as follows:

1. Using the Oracle Forms mode, log in with the Customer Support or Depot Repair Super User responsibility.

2. Navigate to Setup > Counters.

The following table lists the Counters setup windows that are accessible from the Navigator:

<table>
<thead>
<tr>
<th>Navigator Item</th>
<th>Functional Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define Counters</td>
<td>View and define counter group templates and counters.</td>
</tr>
<tr>
<td>Define Misc. Reading Types</td>
<td>View and define miscellaneous reading types for LOV lookups.</td>
</tr>
</tbody>
</table>
13.4.2 The Main Window of Counters

Setup Counters is the main window of Counters.

The following table provides a description of the Setup Counters window:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counter Group Region</td>
<td>Defines the counter template used for an associated item, service, or service contract line.</td>
</tr>
<tr>
<td>Association Type LOV</td>
<td>Defines if the counter group is associated with a BOM (bill of material), item, or service.</td>
</tr>
<tr>
<td>Associations Button</td>
<td>Displays the Associations window to link the specified counter group to an item, service, or usage item.</td>
</tr>
<tr>
<td>Counters Region</td>
<td>Defines the individual counters contained in the counter group. The definition includes the association of the counter template with a counter estimation method.</td>
</tr>
<tr>
<td>(Counters) Type</td>
<td>Displays an LOV drop down list of counter types of Regular, Group Function, Formula, or Time Based.</td>
</tr>
<tr>
<td>Validate Formula Button</td>
<td>Validates the entered formula as a valid SQL expression for a formula counter.</td>
</tr>
<tr>
<td>Formula Ref. Button</td>
<td>Displays a window to allow definition of the references used in the formula and to indicate if a reading type uses a current or delta reading.</td>
</tr>
<tr>
<td>Properties Region</td>
<td>Defines additional counter reading properties for regular counters that are data types of Number, Date, or Character.</td>
</tr>
</tbody>
</table>
13.4.3 Explanations and Defaults

The following table contains explanations and defaults used in Counters.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Explanations and Defaults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage items for a counter</td>
<td>The list of values for Usage Item is based on master items that have been identified with the value Usage Items. This flag is set in the Master Items window on the Service tabbed page for serviceable items. See Implementing Inventory for more information.</td>
</tr>
<tr>
<td>Use of SUM, COUNT, and AVERAGE in formula counters.</td>
<td>SUM totals all reading history for the counter and provides an accumulated total of the counter readings. COUNT counts the total number of readings that have occurred prior to resetting the counter. For example, take a counter that had three readings and was reset after each reading. If the three readings are 100, 100, and 100, then SUM returns 300, and COUNT returns 3. Counters defined as AVERAGE calculate daily averages based on regular counters. Alternatively, a parameter is provided to indicate the number of readings to be considered in the daily average calculation.</td>
</tr>
<tr>
<td>Use of the Direction LOV in the Setup Counters window</td>
<td>Ascending means that new counter readings must be entered in increasing order. Descending means that new counter readings must be entered in decreasing order. A blank selection means that counter reading may be entered in any order. After you have selected a direction and entered a reading, you cannot change the direction.</td>
</tr>
</tbody>
</table>

13.5 Prerequisites

As prerequisites to the setup of Counters, perform the following:

- 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 unit of measure. Refer to the *Oracle Inventory User’s Guide*.

13.6 Setup Checklist

1. Required. Define counter group templates. Refer to Section 13.7.
Defining a Counter Group

2. Required. Confirm the setup of user-definable counter property lookups. Refer to Section 13.9.
8. Required. Confirm the setup of the concurrent program for the time-based Counters engine. Refer to Section 13.16.

13.7 Defining a Counter Group

Use this procedure to define a counter group.

Steps
1. Enter a Counter Group Name and Description.
2. Select a Start Date from the Calendar LOV to activate the counter group.
3. Select an end Date from the Calendar LOV or leave it blank for no expiration.
4. Select an Association Type from LOV to associate the Counter Group with a type.
   Seeded types are BOM (Bill of Material), Item, and Service. Association Types - BOM and Item are Master Items that have been identified as Serviceable Products and share the same list of values, whereas Service is based on Master Items that are identified as Support Services. See Implementing Inventory for more information.
5. Click Associations to launch the window.
6. Select an item from the LOV drop-down list.
7. Enter a Description.
8. Click OK to return to the Setup window.
9. From the toolbar, click the Save icon to update and save the counter group.
13.8 Understanding Property Type and Values LOV Lookups

Counter property types and values LOV lookups are identifiers that link the source or person performing a counter reading update. As part of the capture process, the reader enters the new counter reading and appropriate property value to link his ID to the new capture. See Defining Counter Property LOV Types for defining these types and their values in the Counters application.

Business Case
A service provider sets up two (2) property types and values sets to identify his authorized service employees and customers performing counter updates on his service items in the field.

Example 1: Property Type and Value Codes for Seattle Mfg. Authorized Employees
In this example the service provider sets up a property type lookup table containing values for all service employees that are authorized to perform a counter reading.

- Item: ABC Copier
- Counter: Total Copies
- Capture: 2765
- Reader: Adams, Mr. Brian
- Property Code: CS_CTR1
- Description: Authorized Employees
- Application: Oracle Service

The following table shows values for various types of authorized readers.

<table>
<thead>
<tr>
<th>Value Code</th>
<th>Meaning</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depot_Tech.</td>
<td>Authorized Reader</td>
<td>Seattle Mfg</td>
</tr>
<tr>
<td>Depot_Mgr.</td>
<td>Authorized Reader</td>
<td>Seattle Mfg</td>
</tr>
<tr>
<td>Support_Tech.</td>
<td>Authorized Reader</td>
<td>Seattle Mfg</td>
</tr>
<tr>
<td>F/S_Eng.</td>
<td>Authorized Reader</td>
<td>Seattle Mfg</td>
</tr>
</tbody>
</table>
Example 2: Property Type/Value Codes for Business World Authorized Employees

In this example the service provider sets up a property type lookup table containing values for Customer: Business World, and list of employees authorized to perform a counter reading.

- Item: XYZ Printer
- Counter: Total Copies
- Capture: 1743
- Reader: Beaulie, Mr. Andre
- Property Code: CS_CTR2
- Description: Authorized Customers
- Application: Oracle Service

The following table shows the list employees authorized to perform a counter reading.

<table>
<thead>
<tr>
<th>Value Code</th>
<th>Meaning</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant_Mgr.</td>
<td>Authorized Reader</td>
<td>Business World</td>
</tr>
<tr>
<td>Office_Mgr.</td>
<td>Authorized Reader</td>
<td>Business World</td>
</tr>
<tr>
<td>Maint_Mgr.</td>
<td>Authorized Reader</td>
<td>Business World</td>
</tr>
<tr>
<td>Maint_Tech.</td>
<td>Authorized Reader</td>
<td>Business World</td>
</tr>
</tbody>
</table>

13.9 Defining Counter Property LOV Types

Counters provides a setup window called CS Counter Property LOV Types Lookups to define a standard set of values that are used when setting up counters. Property types and values are used to associate and identify the source of a counter capture. In order to use this feature, you must first define property types and values for property LOV lookups. Use this procedure to do so.

Prerequisites

None.
Steps

Define New Property Types
1. Navigate Service Request > Setup > Counters > Define Property Types.
   The CS Counter Property LOV Types Lookups window appears with seeded header detail.
2. Define a Property Type by completing the following:
   a. Enter a Code such as CS_CTR1.
   b. Enter a Meaning such as Seattle Mfg. (M1).
   c. Enter a Description such as Assigned Readers.
   d. Leave the Tag field blank.
   e. Select a From date. The application automatically supplies one.
   f. Select a To (end) date. Leave this blank if no expiration occurs.
   g. Confirm that the Enabled check box is selected.
3. Repeat Step 2a through 2g for each new property type code that you wish 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
6. Click Define Values to launch the CS Counter Property Values Lookups window with the header details auto-populated into the window.
7. Define a value by completing the following:
   a. Enter a Code such as Depot Mgr.
   b. Enter a Meaning such as Authorized Reader.
   c. Enter a Description such as Seattle Mfg. (M1).
   d. Leave the Tag field blank.
   e. Select a From date. The application automatically supplies one.
   f. Select a To (end) date. Leave this blank if no expiration occurs.
Defining Counter Estimation Methods

9. Confirm that the Enabled check box is selected.

8. Repeat steps 7a through 7g for each new code value that you wish to add to the table. Choose a different meaning for each code to avoid duplication errors.

9. From the toolbar menu, click the Save icon to update and save the record.
   The newly created values table is now linked to the Property Type Code line.

10. Close the window and return to the property types setup window.

Defining Additional Value Sets for Property Types

11. To create another values table, set focus on the next Code line located on the CS Counter Property LOV Types Lookup window and repeat steps 6 through 10.

13.10 Defining Counter Estimation Methods

The Counters application 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.

The Counters application 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 Counters are as follows:

1. Define a counter estimation method, or template.
2. Associate the estimation method with a counter template.
3. Change the estimation method, if required, at the counter instance level.

Use this procedure to define a counter estimation method or template.

Steps

2. Enter a unique name for the estimation method.
3. Select an estimation type from the list of values:
   - Associated Counter Usage instructs the estimation routine to use counter readings from the associated, or mapped, counter when performing calculations.
   - Fixed Multiplier indicates that a fixed daily value, entered in the Fixed Multiplier Qty field, is used as a multiplier in the calculation routine. So, if you want an estimation for 30 days in the future and fixed multiplier qty = 5, then the routine computes usage estimation to be $5 \times 30 = 150$.
4. Optionally enter a value for Default Avg Usage. In case of insufficient readings, the routine uses the usage quantity entered in this field as a default value. In the illustration above, the routine uses 20 as the default daily average usage value for its calculations.
5. Optionally enter a value for Usage Markup %.
   This indicates the markup applied to normal estimation calculations before returning an estimation value to a calling application. For example, if estimation for 20 days in the future was calculated as an estimated usage value = 100, then the routine would mark it up by 10%, that is, 110 and return this as the final estimation.
6. Enter a value for Average Method.
   The average method defaults to Daily Average. No other values are available. This is the base unit of computation for the routine, that is, Daily Average, and
it computes usage based on one day’s worth of usage, versus a base unit such as a week or a month.

7. Click OK.

13.11 Defining a Regular Counter (Physical)

Use this procedure to define counter types that are described as physical or regular counters, which typically are found in tangible objects such as automobiles, gas meters, and photocopier machines. A regular counter can also be classified as a logical counter. For example, consider a service agent who wants to track the number of support calls that he receives each day. The agent can set up a logical counter of type Regular and manually increment this counter at the completion of every support call.

Prerequisites
None.

Steps
1. From the Navigator Menu list, double-click Service Request.
2. Double-click Setup from the Service Request submenu list.
3. Double-click Counters from the Setup submenu list.
4. Click Define Counters to launch the Find Counters window, and then click New. The Find Counters window appears.
5. Complete the Counter Group information.
6. Define the Counter Name and select Regular for Type.
7. Select the Unit of Measure (UOM) = Ea.
8. 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.
9. Enter the counter step number.
   For example, if you want the counter to be incremented by one for each reading, then enter 1 for the Step.
10. Enter the rollover to and from counter numbers.
For example, a counter on an automobile may start at 000000 and count up to 999999 before it rolls over to 000000 or if reset, starts with the Rollover To count of 000000.

11. Select a Usage Item from the LOV.

12. Identify a counter description or comments in the provided fields.

13. From the Estimation LOV, select the name of the desired estimation method. You can only associate or map an estimation method for directional counters, which have values Ascending or Descending.

   If the counter has no direction, the Estimation field remains protected and no list of values is available for association. Estimation methods can be 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.

14. Select an effective start and end date from the Calendar LOV. Do not select an end date if no expiration is required.

15. Select the counter direction from the Direction LOV.

16. Identify a tolerance percentage, both plus and minus.

   For example, if a counter is used by Service Contracts, determine a range in which the counter needs to be updated.

17. In the lower region of Properties window, click the List of Values LOV button to display the drop-down list. Then select a property type to link to this counter.

   For example, you can select a property type called Assigned Counter Resources, which contains a list of resource names assigned to perform monthly counter updates.

18. Click the Default LOV button to display the LOV list, and then select a value that you wish to use as a default in the Counter Capture window.

19. Type the name assigned to the counter property.

20. Select a Data Type of CHAR (Character).

21. Confirm that the Null Allowed check box is selected if a null condition is allowed.

22. Click the UOM (Unit of Measure) LOV button to display a list. Select Ea.

23. Optionally, enter a description for the property type being defined.
24. Enter an effective start and end date to enable property type setup. Do not enter an end date if no expiration is required.

25. From the toolbar menu, click the Save icon to update and save the record.

13.12 Defining a Group Function Counter

Use this procedure to define counters of the type Group Function. With this type you can derive counters using SUM, COUNT, or AVERAGE.

Explanation of SUM and COUNT

SUM totals all reading history for a counter and provides an accumulated total of the counter readings. COUNT counts 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 each reading. If the three readings are 100, 100, 100, then SUM returns 300, and COUNT returns 3.

Explanation of AVERAGE

Counters defined as AVERAGE calculate daily averages based on regular counters. Alternatively, a parameter is provided to indicate the number of readings to be considered in the daily average calculation.

Average calculations are based on usage. Usage refers to the delta or difference between meter readings and indicates consumption or utilization over time.

Counters provides two methods of averaging counter readings:

- Count-based average
  This provides a progressive average of the prior x or y number of readings.

- Time-based average
  This provides an average of usage based on time. For example, average counters may be defined to calculate daily averages based on regular counters.

Prerequisites

None.

Steps

1. From the Navigator, double-click Service Request.

2. Double-click Setup from the Service Request submenu.
3. Double-click Counters from the Setup submenu.
4. Click Define Counters to launch the Counters Find window. Then click New to launch the Counters Setup window.
5. Complete the information in the Counter Group region.
6. Define the counter name and select Group Function for Type.
7. Select a UOM (Unit of Measure). For example: Ea. (Each)
8. Select the usage item for this counter.
9. Identify counter description and effective dates.
10. Select the Group Operation of SUM, COUNT, or AVERAGE.
11. Identify the Tolerance Plus and Minus % for the counter.
   Tolerance is used by Oracle Service Contracts Events to determine the range within which these counters must be updated.
12. Enter any additional comments desired.
13. If you selected either SUM or Count, then you can optionally click Group Operation Filter to launch the Counter Filter window.
14. Complete the counter filter information for the properties.
15. From the toolbar menu, click the Save icon to update and save the record.

13.13 Defining a Formula Counter
Use this procedure to define a counter of the type Formula. With formula counters you can use simple or complex mathematical formulas to derive a new counter value. This procedure is stated in the context of a specific business case and example steps that include 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 Install Base. 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.
Defining a Formula Counter

Example Task
Create a counter group that contains three counters to track usage for these printers. One of these counters is a formula counter. Complete the following steps:

High-Level Steps
1. Create a counter group with the name Laser Printer Group.
2. Define a regular counter with the name MonoCopies.
3. Define a regular counter with the name ColorCopies.
4. Define a formula counter with the name TotalCopies.

Prerequisites
None.

Steps
1. From the Navigator Menu, double-click Service Request.
2. Double-click Setup from the Service Request submenu list.
3. Double-click Counters from the Setup submenu list.
4. Click Define Counters to launch the Counters Find window, and then click New.
5. Complete the Counter Group information described in the example.
6. Create two regular counters, one called MonoCopies, and one called ColorCopies. See Defining a Regular Counter for more information.
7. Create a third counter called TotalCopies, and then select Counter Type > Formula or SC-Formula.
8. Select Ea for the UOM (Unit of Measure).
9. Select the usage item for this counter.
10. Identify an additional counter description and select the start and end dates from the LOV Calendar. Leave the End Date field blank if no expiration is required.
11. Enter the formula that you wish to use for the counter. The syntax is any valid expression in standard SQL. Use your own formula reference names preceded by the ":" symbol.
To create a formula that adds MonoCopies to Color Copies to derive a new total called TotalCopies, enter the formula as follows:

:\MonoCopies+:\ColorCopies

You must enter a colon [:] in front of a counter name with no spaces between any of the names and math symbols.

12. Click Validate Formula to validate the newly entered formula. If the formula is correct, the following message appears: Formula is Valid.

13. In the event of an error, check that each regular counter name used in the formula is spelled correctly, a colon [:] is displayed before each counter name, and all spaces are eliminated in the formula statement.

14. Enter the % Plus and Minus Tolerance. For example: Plus%: 10, Minus%: 10. Tolerance is used by Oracle Service Contracts Events to determine the range in which the counter should be updated.

15. Enter any desired comments into the Comment field.

16. Click Formula Reference to launch the Formula Reference window.

17. Select a reading type of Current or Delta for the regular counter being defined in the formula counter.

18. Optionally, select a counter name from the LOV to map to the formula reference name for each of the counters.

19. Optionally, select an item from the LOV to map the formula reference name for each of the Counters.

20. Click OK to update and close the Formula Reference window.

21. From the toolbar, click the Save icon to update and save the record.

### 13.14 Defining a Time-Based Counter

A time-based counter can be defined in hours, days, weeks, months, or years 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 a customer item. Time-based counters must be updated periodically by running a concurrent program called Time Based Counters Engine to increment each counter and automatically expire a counter that has past its expiration date.
**Prerequisites**
None

**Steps**
1. From the Navigator, double-click Service Request.
2. Double-click Setup from the Service Request submenu.
3. Double-click Counters from the Setup submenu.
4. Click Define Counters to launch the Counters Find window. Then click New to launch the Counters Setup window.
5. Complete the information in the Counter Group region.
6. Create a counter of type Time Based.
7. Select the unit of measure (UOM). The selected UOM should be for a measure of a unit of time such as Hours, Days, and Weeks.
8. Select the Usage Item for this counter.
9. Identify counter description, effective dates, and comments. There are no properties for time-based counters.
10. From the toolbar menu, click the Save icon to update and save the counter record.

**13.15 Defining Miscellaneous Reading Types Lookups**

The Counters Misc. Reading Types Lookups window is used to define a list of values for miscellaneous reading types that can be selected from the Counter Capture window. A miscellaneous counter 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, a miscellaneous reading might be used to display a copy usage total that was expended by the service technician during his service visit to the customer’s 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 twenty five (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 = 1,176
- PM Service Counter = 25

The total copies of 1,176 is entered on his service debrief, and the miscellaneous 25 service copies are entered into the Misc. Reading field with a value 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
None.

Steps
2. Identify the code, meaning, and description for a miscellaneous reading type. Establish the effective start and end dates. For example, to define adjustment as a miscellaneous type, enter the following:
   a. Enter a Code: Test Copies.
   b. Enter a Meaning: Service Test.
   c. Enter a Description: Test Copies by Serviceman.
   d. Leave the Tag field blank.
   e. Select a From date: 05-Sept-2001.
   f. Select a To (end) date. Leave this blank if no expiration occurs.
   g. Confirm that the Enabled check box is selected.
Setting the Time Based Counters Engine

3. Repeat Step 2a through 2g for each miscellaneous reading 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.

13.16 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.

13.17 Setting Profile Options

Counters has two profile options:

CS: 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 LOV. Items with this status are excluded from the list of items available for association in the counters Associations window.

13.18 Automatic Instantiation of Counters

Counters provides an automatic instantiation process when a newly defined counter group or counter is associated with a BOM (bill of material), item, or service. Consequently each time a new capture is performed, the application automatically creates an instance, updating the Oracle Install Base and Oracle Service Contracts records with the latest readings.

13.19 Viewing and Capturing Readings from Oracle iSupport

Oracle Counters offers API User Hook packages that permit public and private counter captures through the Oracle iSupport Oracle Install Base HTML page. See Oracle iSupport and Oracle Install Base guides or online help for more information.

13.20 Capturing Counter Readings

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. Use this procedure to capture a reading.

**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. 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**
4. Enter the name of the person performing the counter reading update.
5. Click the Value LOV button to display the list of property types.
6. Select a property type from the list. Example: CS_CTR1.
7. Click the Default Value LOV button to display the drop down list.
8. Select a property value from the list. Example: Depot Tech.
9. From the toolbar, click the Save icon to update and save the record.

**13.21 Using Miscellaneous Counter Readings**
Follow this procedure to use miscellaneous counter readings.

**Prerequisites**
Confirm that miscellaneous reading types are defined in the Misc. Reading Types Lookups window.

**Steps**
1. Navigate to the top Toolbar, click Tools to display the menu.
2. Select Capture Counter Readings to launch the window.
3. Navigate the mouse pointer to the Misc. Type LOV to display its list.
4. Select a value from the list. Example: Service Copies.
5. Enter the count in the Misc. Reading field.
6. From the toolbar, click the Save icon to update and save the record.

13.22 Instantiating Counters from a Template

The Counters application permits manual instantiation of counters for an Oracle Install Base item, service, or service contract line using APIs to execute the manual instantiation process. For more information about this topic, consult the guides for the application using the Counters application. Use this procedure to instantiate a counter from a template.

Prerequisites
Confirm setup of Counter Groups/Counter templates before attempting to use this functionality.

Steps
1. Navigate Install Base > View Customer Item Instances.
   The Find Item Instances window appears.
2. Enter the customer's account number, item instance, or both.
3. Click Find to start the query and launch the Oracle Install Base Item Instance Summary and Details window.
4. Select an item instance from the Item Instances table by focusing the mouse pointer on the item that you want to display on the tabbed pages.
5. Click the Counters tab to display its page.
6. From the toolbar, choose Tools > Counters Setup.
7. Click Counters Setup to launch the Create Counters Instance window.
8. Click Create Counter Instance from the Template LOV button to display the Counter Templates find window.
9. Click the Counter Group ID or Name to select an entry, and click OK to populate the selection.
10. Click OK in the Create Counters Instance window to start the query.
    The Setup Counters window launches with the template details populated.
11. Confirm setup details and effective start date to activate the counter group and counters being used for the selected item instance or service.

12. From the toolbar, click the Save icon to update and save the record.

13. Close the Setup Counters window by clicking on the X located in the top right hand corner of the window to return to the Oracle Install Base Item Instance and Summary window.

14. Confirm that counters were instantiated for the selected Oracle Install Base item instance or service.

13.23 Resetting a Counter Instance

Use the following procedure to reset a counter from the Capture Counter window.

**Prerequisites**

A counter group with a counter type of Regular must be set up and instantiated.

**Steps**

1. Navigate to the Capture Counter window.
2. Click in the row that contains the counter that you wish to reset.
3. Enter the new value.
4. Optionally enter a miscellaneous type.
5. If you entered miscellaneous type, then enter a miscellaneous reading.
6. Select the Counter Reset check box.
7. Enter a value for Last Reading After Reset. This is a mandatory field for resets.
8. Enter the First Reading After Reset.

Default values from the counter setup definition for Rollover To are used to populate the First Reading After Reset field. If no values default, you must manually enter the First Reading After Reset value. This is a mandatory field for resets. The net reading is calculated as follows: Net = New reading - Current reading - Misc. Reading + Last Reading After Reset - First Reading After Reset. See Implementing Counters, Defining Regular Counters for more information on Rollover To setup.

9. Enter the reason the counter is being reset. This is a text field and can capture the readers comments on the reset.
10. From the toolbar menu, click the Save icon to update and save the record.

### 13.24 Modifying Existing Counter Templates

A counter group and counter can be modified even if the counter has been instantiated. A derived counter such as a formula counter cannot be modified. Rather, you can expire (end-date) it and create a new one. Use this procedure to modify all counters in a counter group.

#### Prerequisites

Check usage before attempting to modify an existing counter template to prevent any unforeseen errors that could occur after making these changes.

#### Steps

1. Navigate Service Request > Setup > Counters > Define Counters.
   - The Counter’s find window appears.
2. Select a counter group or counter from the LOV and click Find to start the query.
   - The Setup window appears and is populated with the details.
3. Modify the items that you wish to change.
4. Click the Save icon to update and save the record.

#### Guidelines

To modify a single existing counter instance, select the item instance or service associated with the counter that you want to modify. Then select Counter Setup from the Tools menu to launch the Counters window.