

Oracle® Service

Concepts and Procedures

Release 11*i*

November 2001

Part No. A92139-01

ORACLE®

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Oracle Service Concepts and Procedures, Release 11*i*

Part No. A92139-01

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Preface

Audience for This Guide

Welcome to Release 11*i* of the *Oracle Service Concepts and Procedures*.

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

- The principles and customary practices of your business area.
- Oracle Service

If you have never used Oracle Service, Oracle suggests you attend one or more of the Oracle Service training classes available through Oracle University.

- 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.

Documentation Accessibility

Our goal is to make Oracle products, services, and supporting documentation accessible, with good usability, to the disabled community. To that end, our documentation includes features that make information available to users of assistive technology. This documentation is available in HTML format, and contains markup to facilitate access by the disabled community. Standards will continue to evolve over time, and Oracle Corporation is actively engaged with other market-leading technology vendors to address technical obstacles so that our documentation can be accessible to all of our customers. For additional information,

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How To Use This Guide

This document contains the information you need to understand and use Oracle Service.

- Chapter 1 provides an overview of the functions and the content of the Oracle Service application.
- Chapter 2 introduces the functions and processes of the Charges member of the Service application and provides detailed instructions for creating, viewing, and editing charges.
- Chapter 3 introduces the functions and processes of the Counters member of the Service application and provides detailed instructions for creating, viewing, and editing counters.

Typographic Conventions

In examples, an implied carriage return occurs at the end of each line, unless otherwise noted. You must press the Return key at the end of a line of input.

The following conventions are used in this manual:

Convention	Meaning
.	Vertical ellipsis points in an example mean that information not directly related to the example has been omitted.
.	
.	

Convention	Meaning
...	Horizontal ellipsis points in statements or commands mean that parts of the statement or command not directly related to the example have been omitted
boldface text	Boldface type in text indicates a term defined in the text, the glossary, or in both locations.
< >	Angle brackets enclose user-supplied names.
[]	Brackets enclose optional clauses from which you can choose one or none.

Other Information Sources

You can choose from many sources of information, including online documentation, training, and support services, to increase your knowledge and understanding of Oracle Service.

If this guide refers you to other Oracle Applications documentation, use only the Release 11i versions of those guides.

Online Documentation

All Oracle Applications documentation is available online (HTML or PDF). Online help patches are available on MetaLink.

Related Documentation

Oracle Service shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other product documentation when you set up and use Oracle Service.

You can read the documents 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>.

Documents 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) available with this release of Oracle Service (and any other Oracle Applications products). 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.

Documents Related to This Product

Oracle Service Implementation Guide

This guide provides instructions for setting up the components of the Oracle Service application including Charges.

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 11*i*. 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 11*i*, much of the installation process is handled using Oracle Rapid Install, which minimizes the time to install Oracle Applications, the Oracle8 technology stack, and the Oracle8/Server 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's guides and implementation guides.

Oracle Applications Supplemental CRM Installation Steps

This guide contains specific steps needed to complete installation of a few of the CRM products. The steps should be done immediately following the tasks given in the Installing Oracle Applications guide.

Upgrading Oracle Applications

Refer to this guide if you are upgrading your Oracle Applications Release 10.7 or Release 11.0 products to Release 11*i*. 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 11*i*. You cannot upgrade to Release 11*i* directly from releases prior to 10.7.

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 Alert 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. It describes the Oracle Application Object Library components needed to implement the Oracle Applications user interface described in the *Oracle Applications User Interface Standards for Forms-Based Products*. It also provides information to help you build your custom Oracle Forms Developer 6*i* forms so that they 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

Multiple Reporting Currencies in Oracle Applications

If you use the Multiple Reporting Currencies feature to record transactions in more than one currency, use this manual before implementing Oracle Service. This manual details additional steps and setup considerations for implementing Oracle Service with this feature.

Multiple Organizations in Oracle Applications

This guide describes how to set up and use Oracle Service with Oracle Applications' Multiple Organization support feature, so you can define and support different organization structures when running a single installation of Oracle Service.

Oracle Workflow Guide

This guide explains how to define new workflow business processes as well as customize existing Oracle Applications-embedded workflow processes. You also use this guide to complete the setup steps necessary for any Oracle Applications product that includes workflow-enabled processes.

Oracle Applications Flexfields Guide

This guide provides flexfields planning, setup and reference information for the Oracle Service implementation team, as well as for users responsible for the ongoing maintenance of Oracle Applications product data. This manual 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 Metalink

Oracle Manufacturing APIs and Open Interfaces Manual

This manual contains up-to-date information about integrating with other Oracle Manufacturing applications and with your other systems. This documentation includes APIs and open interfaces found in Oracle Manufacturing.

Oracle Order Management Suite APIs and Open Interfaces Manual

This manual contains up-to-date information about integrating with other Oracle Manufacturing applications and with your other systems. This documentation includes APIs and open interfaces found in Oracle Order Management Suite.

Oracle Applications Message Reference Manual

This manual describes Oracle Applications messages. This manual is available in HTML format on the documentation CD-ROM for Release 11i.

Oracle CRM Application Foundation Implementation Guide

Many CRM products use components from CRM Application Foundation. Use this guide to correctly implement CRM Application Foundation.

Training and Support

Training

Oracle offers training courses to help you and your staff master Oracle Service and reach full productivity quickly. 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's 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 Service 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 Oracle8i server, and your hardware and software environment.

OracleMetaLink

OracleMetaLink is your self-service support connection with web, telephone menu, and e-mail alternatives. Oracle supplies these technologies for your convenience, available 24 hours a day, 7 days a week. With OracleMetaLink, you can obtain information and advice from technical libraries and forums, download patches, download the latest documentation, look at bug details, and create or update TARs. To use MetaLink, register at (<http://metalink.oracle.com>).

Alerts: You should check OracleMetaLink alerts before you begin to install or upgrade any of your Oracle Applications. Navigate to the Alerts page as follows: Technical Libraries/ERP Applications/Applications Installation and Upgrade/Alerts.

Self-Service Toolkit: You may also find information by navigating to the Self-Service Toolkit page as follows: Technical Libraries/ERP Applications/Applications Installation and Upgrade.

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.

About Oracle

Oracle Corporation develops and markets an integrated line of software products for database management, applications development, decision support, and office automation, as well as Oracle Applications, an integrated suite of more than 160 software modules for financial management, supply chain management, manufacturing, project systems, human resources and customer relationship management.

Oracle products are available for mainframes, minicomputers, personal computers, network computers and personal digital assistants, allowing organizations to integrate different computers, different operating systems, different networks, and even different database management systems, into a single, unified computing and information resource.

Oracle is the world's leading supplier of software for information management, and the world's second largest software company. Oracle offers its database, tools, and applications products, along with related consulting, education, and support services, in over 145 countries around the world.

Overview of the Oracle Service Application

The Oracle Service application comprises component applications that serve all the other members of the Oracle Service family of applications. The list of component applications changes occasionally, and sometimes a component leaves the Service application to become an individual product application. This *Concepts and Procedures* guide covers the Charges and Counters component applications.

Concepts and Procedures for Charges

This topic group provides overview of the application and its components, explanations of key concepts, features, and functions, as well as the application's relationships to other Oracle or third-party applications.

This topic group also provides process-oriented, task-based procedures for using the application to perform essential business tasks. Main topics are:

- Overview of Charges
- What is New in Charges for This Release
- Process Overview
- The Basics of Charges
- Creating a Charge
- Viewing or Editing a Charge

2.1 Overview of Charges

Using Charges, a service organization can bill customers who are using Oracle Order Management for services provided in response to support service requests, field service requests, and depot repairs.

Charges also creates a return material authorization (RMA) to return a defective product for repair, loan, or replacement. Returns from a customer occur for a variety of reasons including damage, shipment error, and repair. With the Charges capability of processing return material, you can manage customer expectations while controlling inventory receipts and processing customer credit.

For example, suppose that a customer logs a service request for a malfunctioning computer system. After trying to correct the problem remotely for a few hours, a

technician is dispatched to fix the problem on site. The technician works on the problem for some time, replaces some components, and finally ascertains that the problem lies with a major subcomponent that cannot be fixed in the field. The technician ships the subcomponent back to the repair depot for in-house repair, and the subcomponent is repaired and shipped back to the customer. At that point, a field engineer is dispatched again to install the subcomponent.

With Charges you can consolidate all labor, material, and expenses incurred during remote support, field service, and depot repair into a single charge with multiple lines. Customers can be billed for labor, materials, and expenses either while a service request is being addressed or after one is resolved.

Before you bill customers for services rendered, you can use the Apply Contract feature to take into account and correctly apply the contract terms like discounts and labor rates to arrive at final charges for a customer. Alternatively you can choose to apply charges manually.

With Charges you also can look at the coverage that customers have according to their contracts with the service organization.

Charges uses business processes and transaction types to determine the impact of each charge line. Examples of transaction types include Repair, Return, Material Transaction, Labor Transaction, Expense Transaction, and Expense Travel. You can define an unlimited number of transaction types.

2.2 What is New in Charges for This Release

New features in this release of Charges include:

- **Install Base Uptake**

The existing Charges functionality has been updated to integrate with the new Release 11.5.6 Install Base. This changes the validations on the Charges window to comply with the new standard.
- **Multi-Org Compliance**

Additional functionality in Charges includes compliance with the multi-organization architecture in order to standardize the process within CRM and ERP applications. This includes adding the operating unit to the charge line level and enhancing the logic that controls the operating unit defaults.
- **Single Order Creation**

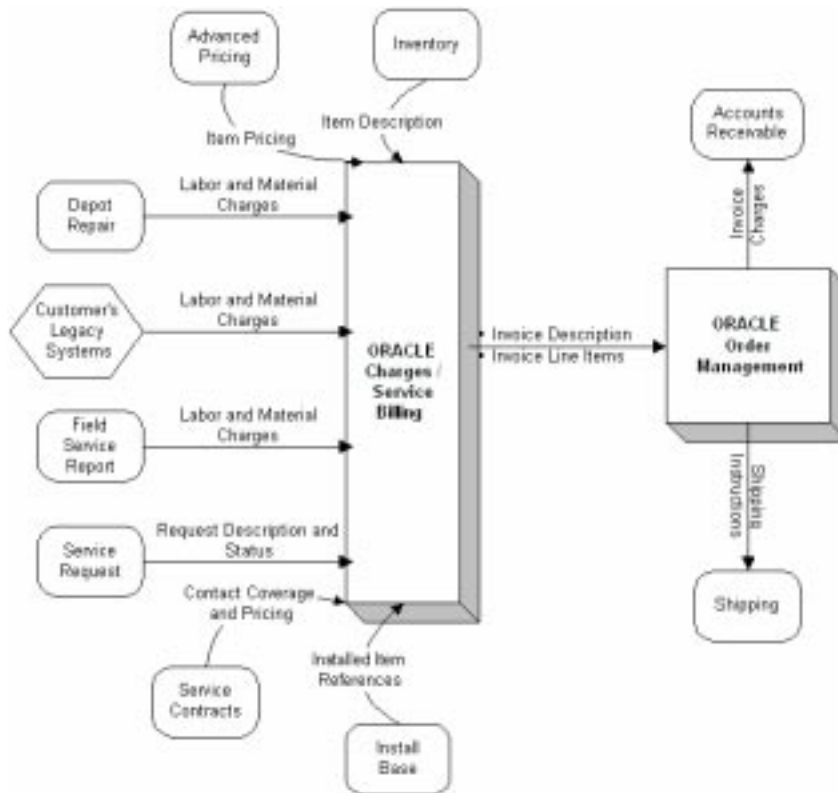
This feature allows you to have all charge lines for a service request to be processed to one single order in Order Management. Prior to 11.5.6, all charge

lines became separate orders that resulted in multiple invoices. The 11.5.6 release identifies when several charge lines with similar attributes are submitted. They then create one order with multiple lines. Such attributes, which must be similar, include Currency, Price List, Bill to/Ship to site, Operating Unit, and purchase order number.

2.3 Process Overview

The following diagram shows the Charges functional process flow, which provides a overview of the integration of Charges with other modules.

Figure 2–1 Process Overview of Charges



Charges integrates with Order Management for returns, shipments, and billing through Oracle Quoting - Forms. When you book an order (shipment or return), Oracle Quoting - Forms passes the order to Oracle Order Management, an application that determines how the order is filled and shipped. Oracle Quoting - Forms then gives you a confirmation number that is displayed in the Charges window in the Line Number field. After the invoice cycle is complete, the invoice number and the invoice date are also displayed on the Others tabbed page of the Charges window in the Invoice Number and Invoice Date fields respectively.

Service Request and Depot Repair integrate directly with Charges, whereas Field Service communicates with Charges through the Charges APIs.

2.4 The Basics of Charges

2.4.1 Accessing the Main Window of Charges

You can access the Charges window as follows:

1. Log in with the Customer Support responsibility.
2. Navigate to Service Requests > Create/View Service Request > (M) Tools > Charges.

2.4.2 The Main Window of Charges

The following table details the tabbed pages and various functions in the Charges window, through which you can enter and view charges.

Table 2–1 *Tabbed Pages and Their Functions in the Charges Window*

Tab Name	Function
Pricing	View and edit item and pricing information.
Contracts	View and edit contract number, coverages, and a rate type for charges.
Order/Return	Includes order information for charge lines and returns reason codes for RMAs.
Installed Base	View and edit Install Base information for a charge line.
Source	Links a service request or a depot repair order as a source to a charge line.
Others	Enter a returned serial number for an RMA. Shows functional currency and linked invoice details.

The following table lists the functions of the buttons in the Charges window.

Table 2–2 Functions of Buttons and Checkboxes in the Charges Window

Name of Button or Checkbox	Function
Coverage	Allows you to look at the coverage that a customer has under a contract that you selected for a charge line using the Contracts Coverage window.
Source	Opens the current source document shown in the Source tabbed page.
Apply Contract	Applies a selected contract's terms and conditions to calculate charges for all charge lines that have not been submitted to Order Management.
Submit Charges	Submits the charge lines to Order Management. Creates orders and order lines and Install Base installation details for all charge lines that have not been submitted to Order Management and have the OM Interface checkbox selected.
OM Interface checkbox	Selected by default and causes the charge line to become an order in Order Management. If this box is cleared, then the charge line becomes an estimate and will not be created in Order Management as an order.
Rollup checkbox	Selection causes charges to be rolled to the item that is defined in the respective profile for material, labor, or expenses. The profile is invoked based on the billing flag of the transaction billing type selected.

The following table describes defaults for items in the Charges window.

Table 2–3 Charges Window Fields and Their Defaults

Window Field	Default
Service Request Type, Status, Severity, and Date	Default from the parent service request and are display-only.
Currency	Defaults to the functional currency from the General Ledger (GL) set of books attached to the operating unit for the charge line.
Operating Unit	Defaults using the rules defined in the Operating Unit Default window. The rules are described in the <i>Oracle Service Implementation Guide</i> . If the associated editability profile option, Service: Allow Charge Operating Unit Update, is selected, then you can edit the operating unit in the Charges window.

Table 2–3 Charges Window Fields and Their Defaults

Window Field	Default
Business Process	Defaults from the value defined in the Service Request Incident Type setup if the Service: Charges - Default Business Process from SR profile is set to <i>yes</i> .
Ship To and Bill To addresses	Default from the addresses selected on the parent service request.
Price List	Defaults from the selected contract. If a contract is selected, then the price list cannot be changed. If the contract does not define a price list, then it is defaulted from the profile Service: Charges - Default Price list. If this profile is not set, then the price list is not defaulted.
UOM (unit of measure)	Defaults from the default UOM for the Inventory item selected in the charge line.
Contract	Defaults from the contract selected on the service request if the business process selected on the charge line is covered by that contract.
Original Source Document and Number	Default from the parent document from which the charge line was created: the service request, the repair line, or the field service report. They are not updatable.
Current Source Document and Number	Default from the parent document from which the charge line was created: the service request, the repair line, or the field service report. They are updatable.

The following table describes the codes used in Charges and other Service applications.

Table 2–4 Codes and Their Descriptions

Code	Description
Billing Type	Used on Inventory items to indicate the kind of billing process that should be used, such as material, labor, or expense.
Transaction Type	Indicates the service activity being performed such as installation, removal, or preventative maintenance.

Table 2–4 Codes and Their Descriptions

Code	Description
Transaction Billing Type	For each service activity being provided, more than one type of cost may be incurred. For example, an installation may involve material parts being installed as well as the labor involved in the actual installation process. Thus a transaction billing type is an intersection of billing type and transaction type and is used to indicate the service activity and billing process used on each charge line. Only those transaction billing types that have attributes that Charges supports appear in the Charges window. For more information, refer to the <i>Oracle Service Implementation Guide</i> .
Order Management (OM) Mapping	Each transaction billing type maps to a specific type of Order Management order header and order line type. Because OM header and line types are not used across operating units, the Charges setup process allows a unique header and line type to be associated with a transaction billing type for each operating unit. These are retrieved and used when orders are created in Order Management.
Business Process	Used to group transaction types and transaction billing types to be used for charge and contract purposes. On a charge line, after the business process has been selected, the Transaction Billing Type LOV is limited to those types that are associated with the selected business process. On a contract, a coverage is created for a specific business process. In this way, you can control which transaction billing types are covered by a contract. The contract LOV on the charge line is limited to those contracts that cover the selected business process. Examples of business processes are Field Service, Depot Repair, and Customer Support.

2.5 Creating a Charge

You can enter a charge for a service request or for a repair order created against a service request.

You can create charge lines from the following locations:

- Directly from the Charges window, which can be accessed through:
 - Service Request window: Customer Support Responsibility: (N) Service Requests > Create/ View a Service Request window (Create/View a Service Request) > Tools > Charges)

- Repair Orders Form: Depot Repair Super User Responsibility > Depot Repair > Repair Orders > Charges Button
- Using the Field Service and Mobile Field Service applications, field service engineers can enter the information relating to their service call by using Field Service Report window. Then they can use the Update Charges button on the Field Service Report window to send this information to Charges directly.

Use this procedure to create a charge.

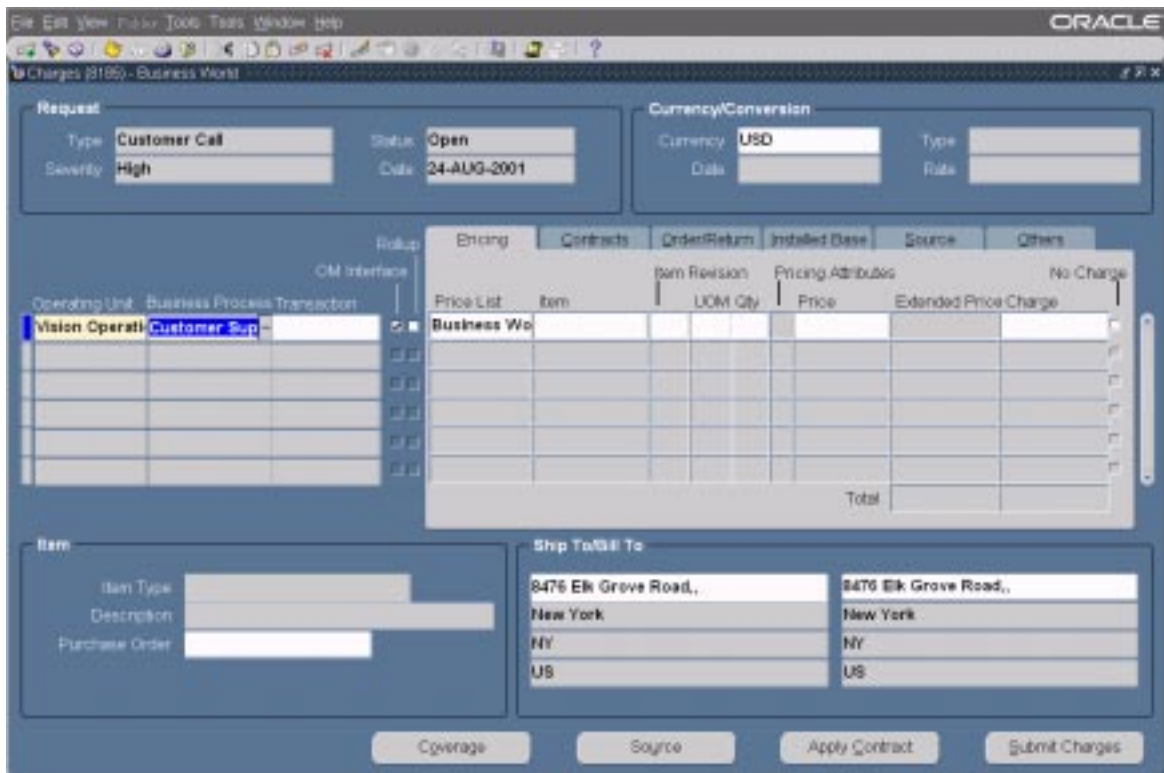
Prerequisites

- A service request must be created before a charge can be created against it.
- From the Oracle Depot Repair application, charges can be created after creating a repair order in response to a service request.
- From the Field Service Report application, a service request must be created and a task assigned.

Steps

1. [Navigate to the Service Request window.](#)
2. Create a service request or open an existing service request.
3. Open the Charges window by choosing the Charges option from the Tools menu.

Figure 2–2 Charges Window and Pricing Tabbed Page



4. Select a Currency in the Currency/Conversion region of the Charges window. If the currency selected is not the functional currency, then you must enter one of the following:
 - The currency conversion type and the date on which the currency conversion occurs
 - The currency conversion type and the currency conversion rate
5. Select an operating unit.
6. Select a business process.
7. Select a transaction billing type from the Transaction field.

8. Verify that the OM Interface checkbox is selected if you want this charge line to be passed to Order Management through Oracle Quoting - Forms (formerly Order Capture) when you submit charges.

This checkbox is selected by default. If this checkbox is not selected, then the charge line will be saved as an estimate.

9. If you want to have this line rolled up into an order, then select the Rollup checkbox.
10. On the Pricing tab, select a price list.
11. Enter an Inventory item number in the Item field.
12. If the item is revision controlled, then select an item revision code that is valid for the inventory item on the charge line.
13. From the UOM list, select a unit of measure.
14. Enter the quantity of items for this line.

The Price field displays the price and the extended price. The charges are also calculated without considering any contract.

If pricing attributes are defined in Oracle Pricing and if the pricing attributes descriptive flexfield is enabled, then the defined unit price based on the pricing attributes is displayed.

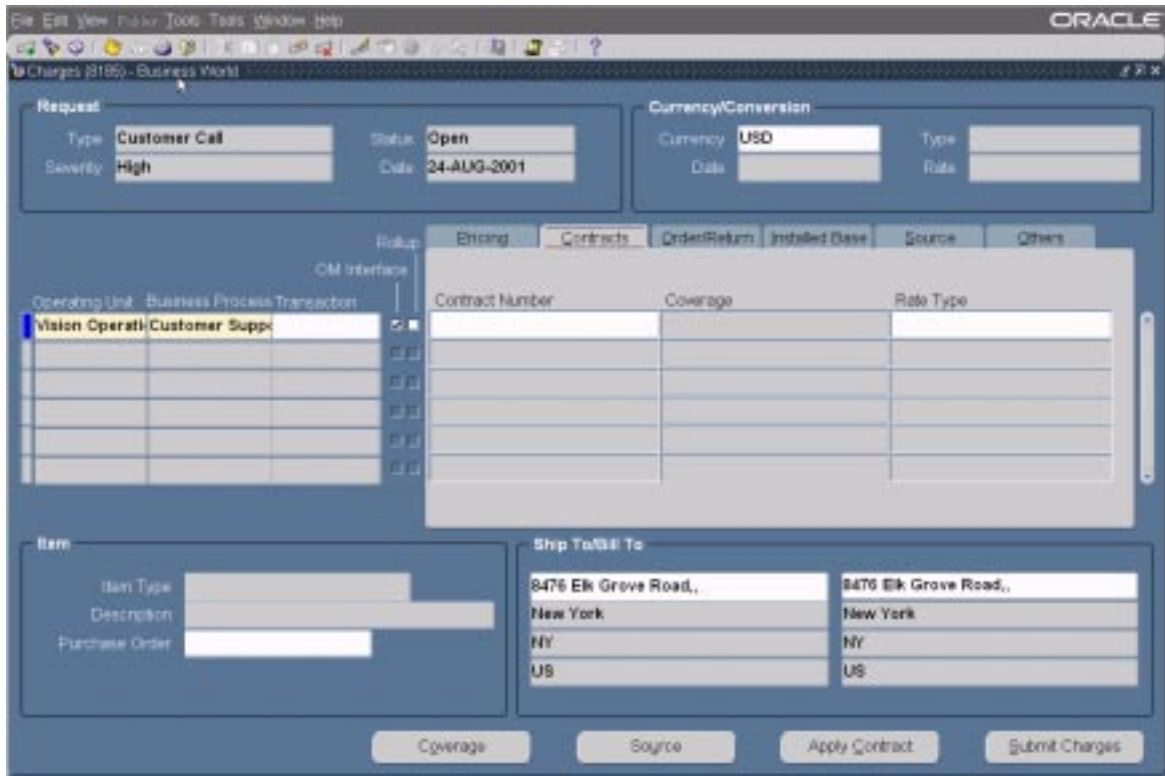
15. If you do not want to charge the customer for this line, then select the No Charge checkbox.

When this checkbox is selected, the Charges field displays 0 as the charge.

16. In the Contracts tab, select a contract number and a coverage.

The Rate Type field is enabled if the transaction type chosen is Labor. If the business processes on the charge line is covered by the contract on the service request, then the contract is defaulted from the associated service request.

Figure 2–3 The Charges Window and Contracts Tabbed Page



17. If you want to view the details of the associated contract, then:
 - a. Click Coverage to open the Contracts Coverage window and display detailed information on contract coverage.
 - b. Click Close to return to the Charges window.
18. Click Apply Contract to recalculate the charges for all unsubmitted charge lines based on the terms and conditions of the selected contract and coverage for each line.
19. If you want to have a charge line added to a specific order, then select the Add to Order checkbox. After the order number field becomes enabled, enter an order number.
Value for Line Category reflects the line type that you selected.

After the charges are submitted, the Date field shows the date when the order line was created and the line number field shows a system-generated order line number.

20. If the transaction type is RMA, then the Return Reason field is enabled. Select an appropriate return reason code in this field. You can also enter the serial number of the returned item (not a customer product) in the case of an RMA.

Figure 2-4 Charges Window and Order/Return Tabbed Page

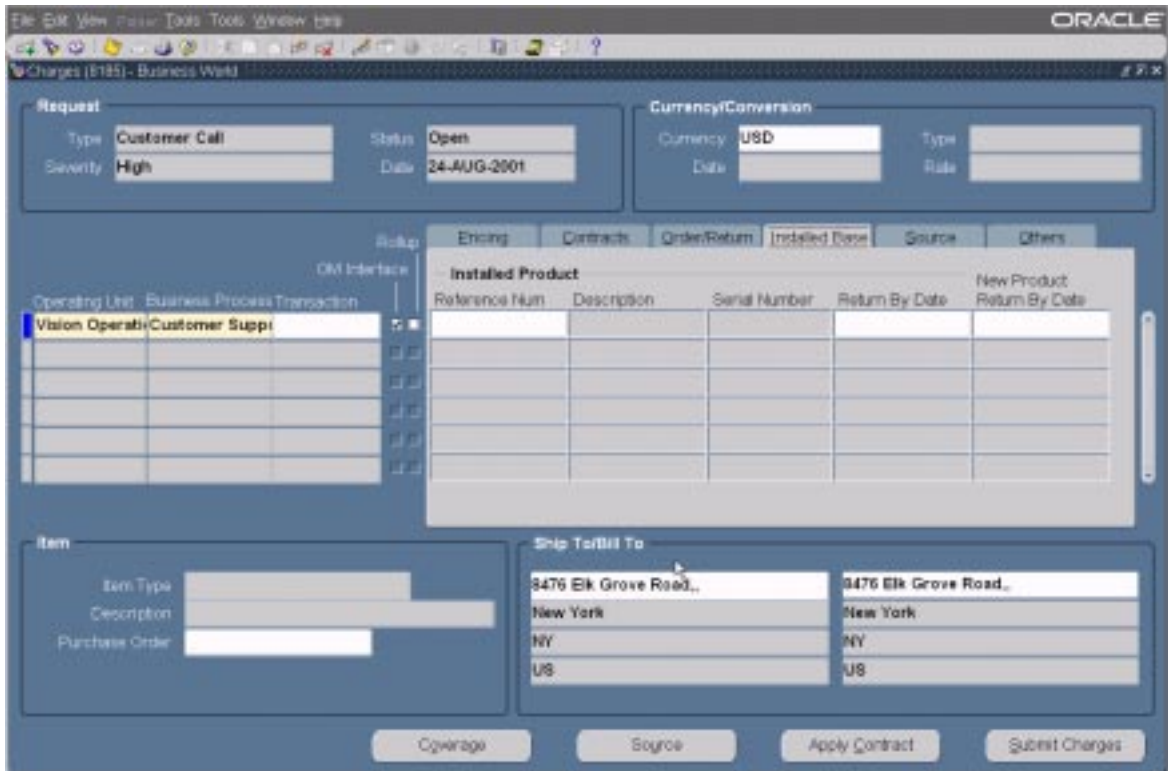
The screenshot displays the Oracle Charges window with the following details:

- Request:** Type: Customer Call, Status: Open, Date: 24-AUG-2001, Security: High.
- Currency/Conversion:** Currency: USD.
- Add To Order Table:**

Number	Line Category	Date	Line Number	Return Reason
- Item:** Item Type, Description, Purchase Order.
- Ship To/Bill To:** 2476 Elk Grove Road., New York, NY, US.
- Buttons:** Coverage, Source, Apply Contract, Submit Charges.

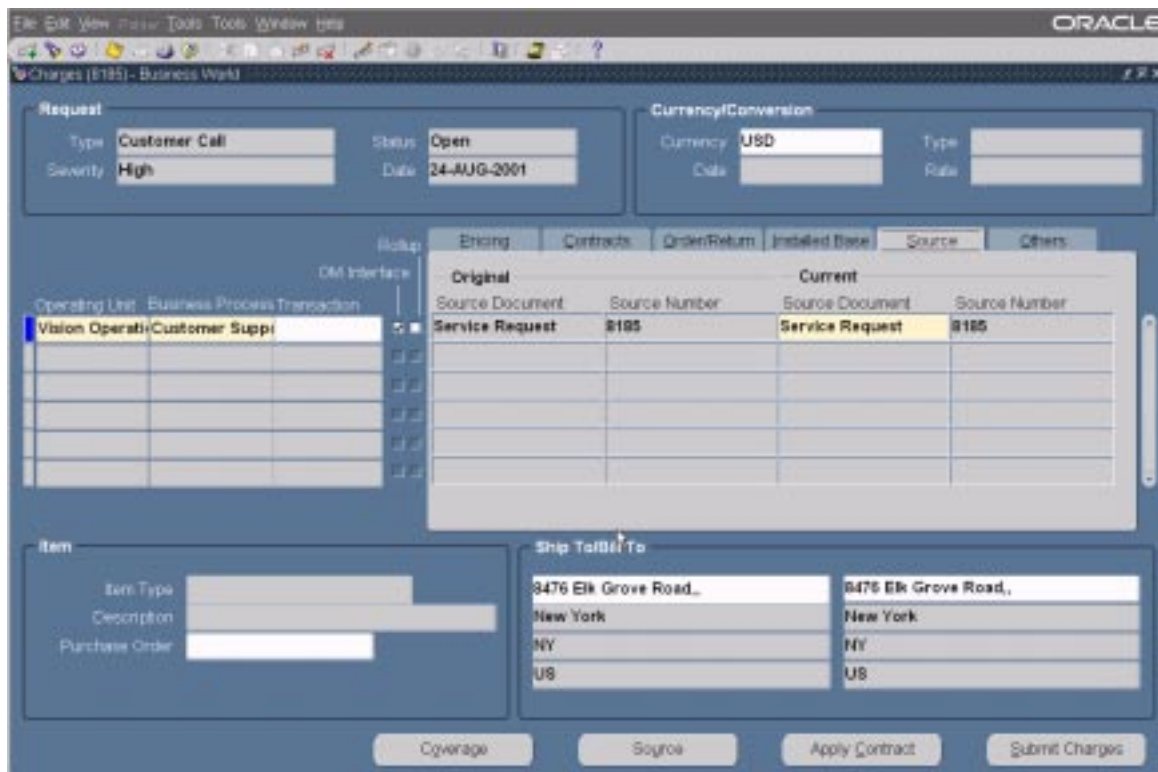
21. If the transaction type is for a return, then the Reference Number field is enabled. Enter the reference number of the customer product. The system uses this reference number to display the serial number and description of the customer product.

Figure 2–5 Charges Window and Installed Base Tabbed Page



22. You can enter the return date when the product is returned.
23. You can also enter a new product return date when the shipped product will be returned by the customer. This applies when the product is a loaner.
24. Click the Source tab to view source information for the charge line.

Figure 2-6 Charges Window and Source Tabbed Page



25. Click the Others tab to see the invoice number and the invoice date for a particular charge line after the invoicing cycle is completed. You also can see the set of books used for the transaction.

Figure 2-7 Charges Window and Others Tabbed Page

The screenshot shows the Oracle Charges (0185) - Business World window. The 'Request' section includes:

- Type: Customer Call
- Status: Open
- Severity: High
- Date: 24-AUG-2001

The 'Currency/Conversion' section includes:

- Currency: USD
- Date: (empty)
- Type: (empty)
- Rate: (empty)

The 'Charge in Functional Currency' table has the following data:

Set Of Books	Returned Serial Num	Invoice Num	Invoice Date
Vision Operatio			

The 'Item' section includes:

- Item Type: (empty)
- Description: (empty)
- Purchase Order: (empty)

The 'Ship To/Bill To' section includes:

- Ship To: 8475 Elk Grove Road, New York, NY, US
- Bill To: 8475 Elk Grove Road, New York, NY, US

Buttons at the bottom: Coverage, Source, Apply Contract, Submit Charges.

2.6 Viewing or Editing a Charge

Use this procedure to view or edit a charge for a specific service request or repair order.

Prerequisites

To edit a charge, an order for the charge line must not have been created.

Steps

1. [Navigate to the Service Request window.](#)
2. Open an existing service request for which you need to view charges.

3. From the Tools menu, choose Charges.
The Charges window opens. The Pricing tab displays the data for each line item.
4. Open the other tabs and verify the available information.

References

[Creating a Charge](#)

Concepts and Procedures for Counters

This topic group provides an overview of the application and its components, explanations of key concepts, features, and functions, as well as the application's relationships to other Oracle or third-party applications.

This topic group also provides process-oriented, task-based procedures for using the application to perform essential business tasks.

3.1 Overview of the Counters Application

Using the Counters application you can define counters to track the usage of a customer's product 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 product 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 a product or service and to monitor these status counts to:

- Manage product 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 product preventive maintenance or overhauls
- Calculate product 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:

- Customer Care
- Install Base
- Service Contracts
- Depot Repair
- Field Service
- Mobile Field Service
- Spares Management
- Logistics
- 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 product or service residing in their Install Base. Updates must be performed regularly using a standard set of business practices incorporated by each service provider.

3.2 New Features in Counters for This Release

The Counters application is fully integrated with the Oracle e-Business Suite and provides the following new features in this release:

Table 3–1 *New Features in Counters*

Product Feature	Functionality
Counter HTML window	Display and capture counter readings through iSupport

Table 3–1 New Features in Counters

Product Feature	Functionality
Calculate a delta value	Calculate delta values to display net usage
Set up counter property types and values for property LOVs	Link counter readings to a source reader
Retire counters	Program to retire counters that have past their expiration date
Delete counters	APIs to delete a complete counter instance
Use a templates to set up counters	Manual instantiation of counters created from a template
Access Counters through /Support	Profile option and APIs that permit viewing and capture of counters through /Support

3.3 Definitions

Here are definitions of some basic terms used in Counters.

Table 3–2

Feature Name	Function
Physical Counter	An incremental electro-mechanical or software device built into a product 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.
Formula Counter	An intangible or derived counter that runs inside a software application program, keeping track of usage of a product or service. A common logical counter is the number of service telephone calls made by a customer against a particular product or service. Logical counters can be added or combined with other counters to form a new counter.
Counter Template	A template that is defined for groups of counters and instantiated in Install Base customer products or contract lines. A template can be defined for a single counter or a group containing one or many counters.

Table 3–2

Feature Name	Function
Counter Group	<p>Can be associated with a product or service and is permitted to have only one associated counter group. Group templates can also be applied with multiple Install Base products or contract lines. After a counter group is instantiated, it can be modified for a single instance or for all instances.</p> <p>A single counter group can be defined for each Install Base customer product or contract line to automatically instantiate a counter, or be manually instantiated by selection from a predefined counter or counter group template.</p>

3.4 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 sequential list of before and after counter captures with time and date stamp, and, if selected, the property source reference id. To view the log, launch the Capture window and then click the View History Reading button.

Install Base Life Cycle Tracking

Counters uses Install Base to manage and track reading history related to an item, service, or contract throughout the active lifecycle. If a transfer of ownership occurs, the reading history appears with the record.

Reset Counters

Certain service providers require that a counter reset is performed to re-establish a new starting point for a product or service. A counter reset can be performed from the Counter Capture window, and each reset event will be recorded in the history file.

Modify Counters

Counter groups and counters can be modified after instantiation with a product or service. To modify a counter instance, navigate to the Counters Setup window from the application Navigator window. See Using Counters for more information.

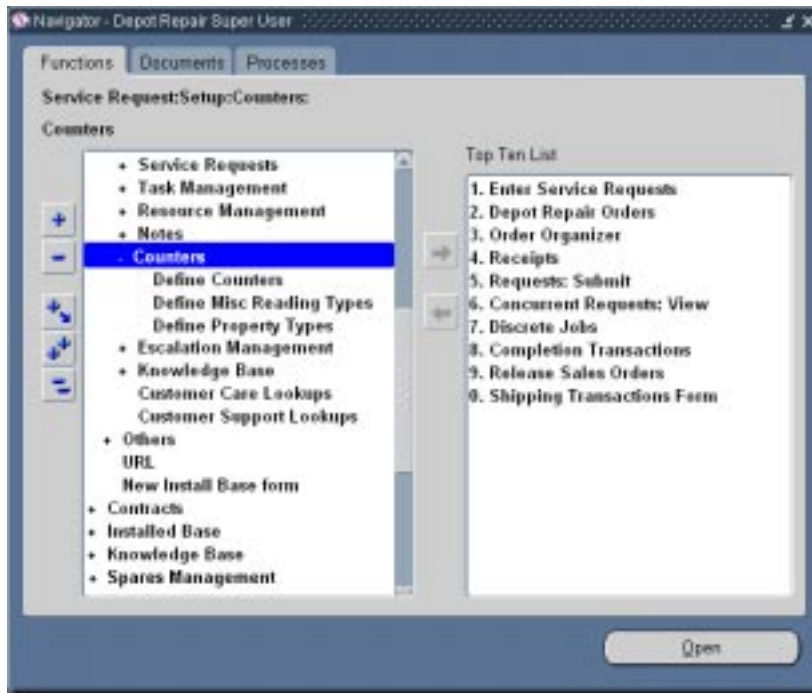
3.5 The Basics of Counters

3.5.1 Accessing Counters

You can access the Counters windows as follows:

1. Using the Forms mode, log in with the Customer Support or Depot Repair Super User responsibility.
2. Navigate to Counters.

Figure 3–1 Navigator Window



The following Counters setup windows are accessible from the Navigator:

Table 3–3 Counters Functions from the Navigator

Navigator Item	Functional Description
Define Counters	View and define counter group templates and counters.
Define Misc. Reading Types	View and define miscellaneous reading types for LOV lookups.
Define Property Types	View and define and counter property types and values for LOV lookups.

You access the main window of Counters, Setup Counters, by choosing Define Counters from the Navigator.

3.5.2 The Main Window of Counters

Setup Counters is the main window of Counters.

Figure 3–2 Setup Counters Window

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

Table 3–4 Description of the Setup Counters Window

Feature	Function
Counter Group Region	Defines the counter template used for an associated product, service, or service contract line.
Association Type LOV	Defines if the counter group is associated with a BOM (Bill of Material), item, or service.
Associations Button	Displays an Associations window to link the specified counter group to a product, service, or usage item.

Table 3–4 Description of the Setup Counters Window

Feature	Function
Counters Region	Defines the individual counters contained in the counter group.
Counters Types	Displays an LOV drop down list of counter types of Regular, Group Function, Formula, or Time Based.
Validate Formula Button	Validates the entered formula as a valid SQL expression for a formula counter.
Formula Ref. Button	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.
Properties Region	Defines additional counter reading properties for regular counters that are data types of Number, Date, or Character.

3.5.3 Explanations and Defaults

The following table contains explanations and defaults used in Charges.

Table 3–5 Explanations and Defaults

Usage items for a counter	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.
Use of SUM and COUNT in formula counters.	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, 100, then SUM returns 300, and COUNT returns 3.

3.6 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.

3.7 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.

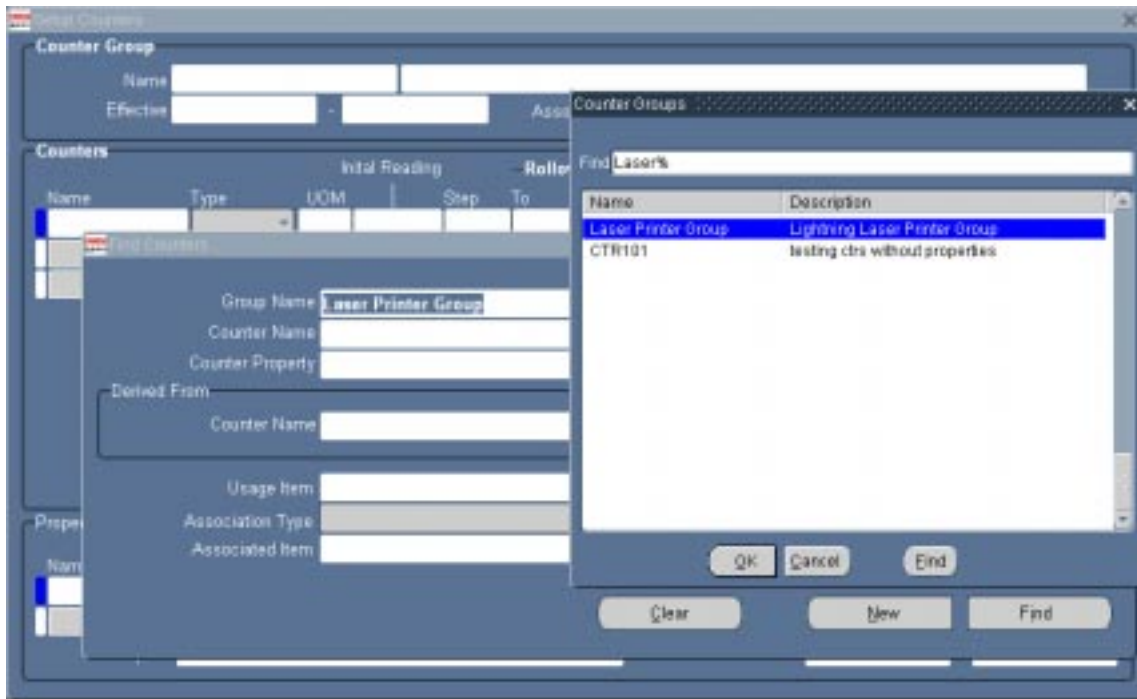
Prerequisites

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.

Figure 3–3 Find Counters Window



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. Confirm that the Web View checkbox is selected allow the counter to be viewed from the its HTML page from the /Support window.
13. Confirm that the Enabled checkbox is selected to enable counter updates.
14. Identify a counter description or comments in the provided fields.
15. Select an effective start and end date from the Calendar LOV. Do not select an end date if no expiration is required.
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 checkbox is selected if a null condition is allowed.
22. Click 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.

3.8 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 and COUNT. Group function counters can be used in formula counters.

Explanation of SUM and COUNTERS

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.

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).Example: Ea. (Each)
8. Select the usage item for this counter.
9. Identify counter description and effective dates.
10. Select the Group Operation of either SUM or COUNT.
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. 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.

3.9 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 Install Base. The service provider creates a counter group with individual counters to track the usage for each product 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.

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.

Step

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.
8. Select E_a 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

Figure 3–4 Setup Counters Window for a Formula Counter

Counter Group

Name: **Laser Printer Group** Lightning Laser Printer Group

Effective: 17 SEP 2001 Association Type: Item

Name	Type	UOM	Step	To	From	Usage Item	Unit	UOM	Valid	Enabled
Mono Copies	Regular	Ea	0	1	0	999999999	QP-LPTR-103		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Color Copies	Regular	Ea	0	1	0	999999999	QP-LPTR-103		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Total Copies	Formula	Ea					QP-LPTR-U		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Description: Calculates the total number of copies

Group Op: Counter

Formula: :MonoCopies+:ColorCopies

Comments: This formula counter calculates the total copy count

Effective: 17 SEP 2001

Buttons: Validate Formula... Formula Ref... Group Op Filters...

Name	Data Type	UOM	Default	Minimum	Maximum	List of Value
	NUMBER					

Description: Effective:

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.

3.10 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 product. Time-based counters must be updated periodically by running a concurrent program called Time Based Counters Engine to increment each counter and automatically expires 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.

3.11 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 product 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.

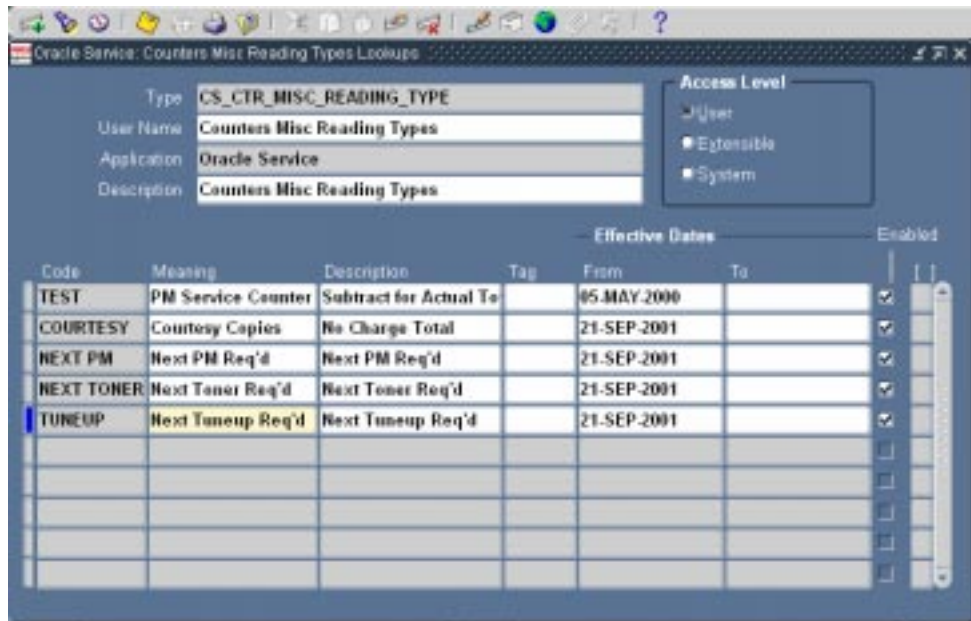
Prerequisites

None.

Steps

1. Navigate Service Request > Setup > Counters > Define Misc. Reading Types.

Figure 3–5 Counters Misc Reading Types Lookups Window



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 checkbox is selected.
3. Repeat Step 2a through 2g for each 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.

3.12 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 products 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.

Product: ABC Copier

Counter: Total Copies

Capture: 2765

Reader: Adams, Mr. Brian

Property Code: CS_CTR1

Description: Authorized Employees

Application: Oracle Service

Table 3–6 Value Set for the CS_CTR1 Property Code

Value Code	Meaning	Description
Depot_Tech.	Authorized Reader	Seattle Mfg
Depot_Mgr.	Authorized Reader	Seattle Mfg
Support_Tech.	Authorized Reader	Seattle Mfg
F/S_Eng.	Authorized Reader	Seattle Mfg

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.

Product: XYZ Printer

Counter: Total Copies

Capture: 1743

Reader: Beaulie, Mr. Andre

Property Code: CS_CTR2

Description: Authorized Customers

Application: Oracle Service

Table 3–7 Value Set for the CS_CTR2 Property Code

Value Code	Meaning	Description
Plant_Mgr.	Authorized Reader	Business World
Office_Mgr.	Authorized Reader	Business World
Maint_Mgr.	Authorized Reader	Business World
Maint_Tech.	Authorized Reader	Business World

3.13 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.

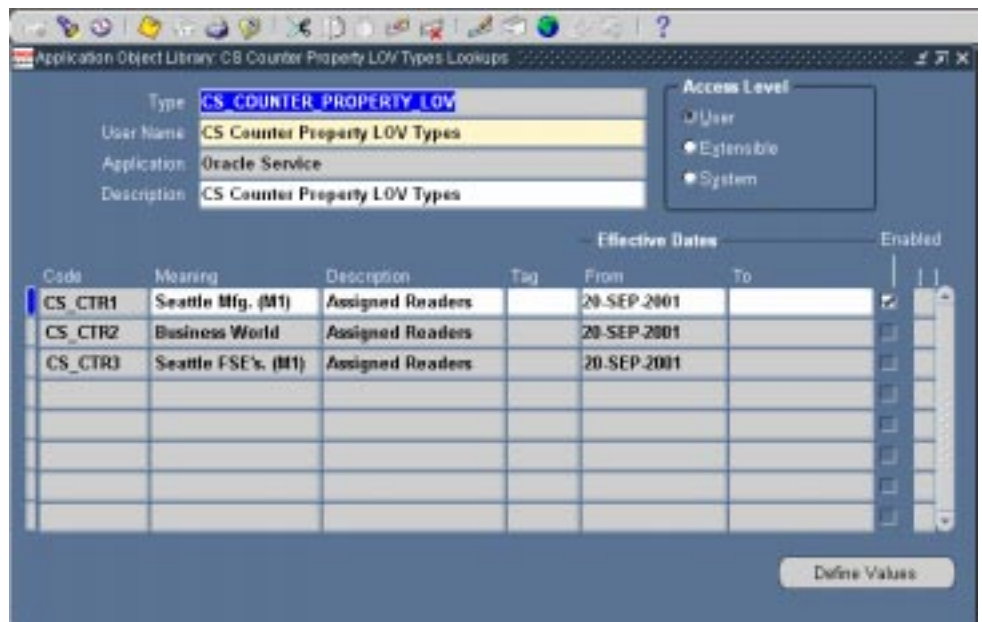
Steps

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.

Figure 3–6 Window for CS Counter Property LOV Types Lookups



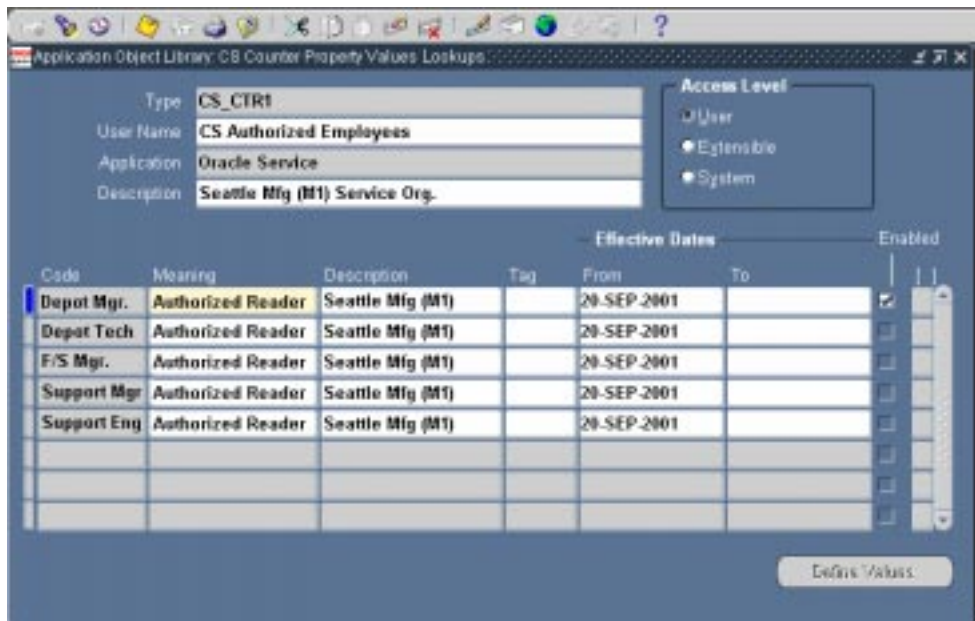
2. Define a Property Type by completing the following:
 - a. Enter a Code such as CS_CTR1.
 - b. Enter a Meaning such as Seattle Mfg. (M1).
 - c. Enter a Description such as Assigned Readers.
 - d. Leave the Tag field blank.
 - e. Select a from date. The application automatically supplies one.
 - f. Select a to (end) date. Leave this blank if no expiration occurs.

- g. Confirm that the Enabled checkbox 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.

Figure 3–7 Window for CS Counter Property Values Lookups



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.
 - g. Confirm that the Enabled checkbox 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 any 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. Click the X located in the top right-hand corner of the window to close it 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.

3.14 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 system automatically creates an instance, updating the Install Base and Service Contract records with the latest readings.

3.15 View and Capture Readings from iSupport

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

Figure 3–8 Install Base HTML Counters Page

The screenshot displays the Oracle Installed Base web interface. On the left is a navigation menu with options like General, Assets, and Counters. The main content area is titled 'Product Details' and shows information for Product Number 37520, Item Number QP-LPTR-103, and Item Description Lightning Laser Printer. Below this, there are sections for 'Counters', 'Reading', 'Adjustment', and 'Reset'. The 'Reading' section contains a table with columns for Counter Name, Counter Type, Unit, Current Reading, New Reading, and Ret Reading. The 'Adjustment' section has a table for Counter Name, Adjustment Type, and Adjustment Amount. The 'Reset' section has a table for Counter Name, Reset, Reading Before Reset, Reading After Reset, and Reset Comment. At the bottom are 'Update' and 'Reset' buttons.

Counter Name	Counter Type	Unit	Current Reading	New Reading	Ret Reading
Total Copies	Regular	Ex	1254	1267	236

Counter Name	Adjustment Type	Adjustment Amount
Device Copies	Misc. Reading	25

Counter Name	Reset	Reading Before Reset	Reading After Reset	Reset Comment
Product Name	<input type="checkbox"/>			

3.16 Capturing Counter Readings

The Capture Counter Reading window is used to update a new counter reading for a product, 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.

Figure 3–9 Capture Counter Reading Window

Name	Type	UOM	Stop	Current	Up	Down	New	Net
mono Copies	Regular	Ea	1	1789	↑	↓	2150	
Color Copies	Regular	Ea	1	762	↑	↓		

Name	UOM	Nil Allowed	Data Type	Default Value	Value
Jamie Roberts	Ea	<input checked="" type="checkbox"/>	CHAR	Depot Tech	CS_CTRL

Prerequisites

Counters must be associated with a product, 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_CTRL.

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.

3.17 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 on 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.

3.18 Instantiating Counters from a Template

The Counters application permits manual instantiation of counters for an Install Base product, 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

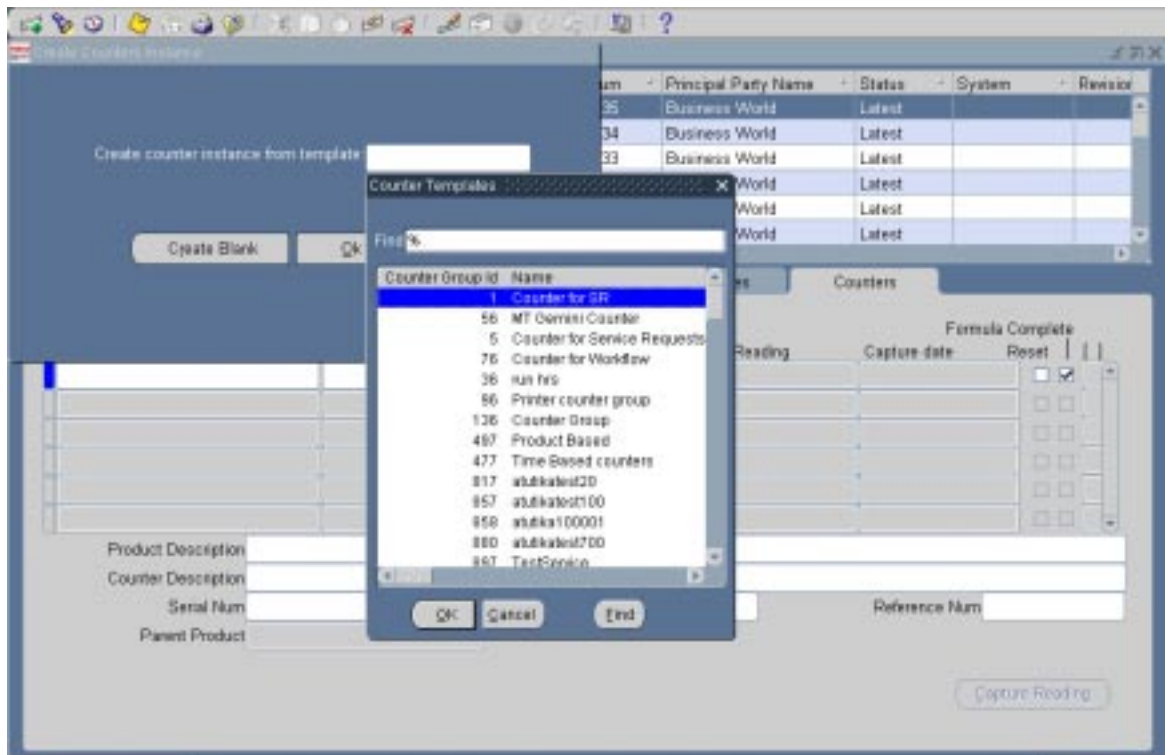
Confirm setup of Counter Groups/ Counter templates before attempting to use this functionality.

Steps

1. Navigate Install Base > View Customer Products.
The Find Products window appears.

2. Enter the customer's account number and/or product.
3. Click Find to start the query and launch the Install Base Product Summary/Details window.
4. Select a product from the Products 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.

Figure 3–10 Windows from the Install Base Product Summary Window



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 on 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 product 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 Install Base Product and Summary window.
14. Confirm that counters were instantiated for the selected Install Base product or service.

3.19 Resetting a Counter Instance

Use the following procedure to rest 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 checkbox.
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: $\text{Net} = \text{New reading} - \text{Current}$

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.

3.20 Modifying Existing Counter Templates

A counter group and counter can be modified even if the counter has been instantiated. 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 product or service associated with the counter that you want to modify then select Counter Setup from the Tools menu to launch the Counters window.

