Oracle® Financials
Open Interfaces Manual

RELEASE 11

March 1998

ORACLE®

Enabling the Information Age™

Contents

Index

Preface

This manual contains summary information about integrating Oracle Financial applications with other systems. For detail information about each open interface, we refer you to the appropriate user's guide or the *Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual.*

Introduction to Oracle Applications

Oracle Applications is a complete set of tightly integrated
cross–industry applications, which includes Oracle Financials, Oracle
Human Resources, Oracle Manufacturing, Oracle Public Sector
Financials, and Oracle Projects product families.

Oracle Applications Product Families

Technology is hastening the pace of worldwide commerce. Businesses
today are larger, more geographically dispersed, and increasingly
diverse. Timely information for better cost control, intelligent decision
making, and improved manufacturing provides one of today's
competitive advantages. Oracle's integrated families of applications,
Oracle Financials, Oracle Manufacturing, Oracle Projects, and Oracle
Human Resources, gives you that advantage. And, Oracle Public
Sector Financials provides the same advantages for government
agencies and institutions of higher education.

Our applications use the Oracle8 server, and are built using Oracle
Application Object Library, our applications development tool, to bring
you a standardized, integrated, full–function family of application
software products.

With Oracle Applications, you can deliver on the promises of
decentralized applications, distributed processing, heterogeneous
computing, and connectivity.

Who Should Read This Manual

Your *Oracle Financials and Oracle Government Financials Open Interfaces
Manual* is a valuable source of information about Oracle Applications
integration with other Oracle Financials and Oracle Government
Financials products and with your other systems. This manual can
help persons responsible for implementing Oracle Applications. These
people typically include:

- Application Programmers

- Database Administrators

- Department managers

- Project Leaders

- System Managers
- System Programmers
- Systems Analysts

About This Manual

This manual contains summary information about each open interface provided with each Oracle application. For detail information, refer to each product's respective user's guide or the *Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual.* This manual includes the following chapters:

- Chapter 1 explains how open interfaces use a feeder (or import) program to import data from other systems into your Oracle application.

- Chapter 2 briefly describes the open interfaces provided with Oracle Assets. This information includes the ACE Interface, Budget Open Interface, Mass Additions Interface, Production Interface, and Physical Inventory.

- Chapter 3 provides an overview of the interfaces provided with Oracle Cash Management. These include the Bank Statement Open Interface, the Forecasting Open Interface, and the Reconciliation Open Interface.

- Chapter 4 contains summary information about each interface provided with Oracle General Ledger, including Budget Upload, Importing Journals, and Loading Daily Rates interfaces.

- Chapter 5 describes the open interfaces provided with Oracle Inventory. This information includes the Customer Item Interface, Open Demand Interface, Open Item Interface, Open Replenishment Interface, and the Open Transaction Interface.

- Chapter 6 provides an overview of the interfaces provided with Oracle Order Entry/Shipping, which includes Order Import Interface, Receivables Interface, and the Ship Confirm interface.

- Chapter 7 briefly describes the open interfaces provided with Oracle Payables. These include the Credit Card Transaction Interface Table, Invoice Import Interface, Open Interface Import, and the Purchase Order Matching interfaces.

- Chapter 8 provides an overview of the interfaces provided with Oracle Projects, including the Activity Management Gateway, Client Extensions, and Transaction Import.

- Chapter 9 contains summary information about each open interface provided with Oracle Purchasing. This information includes the Open Requisitions Interface, Purchasing Documents Open Interface, and the Receiving Open Interface.

- Chapter 10 briefly describes the open interfaces provided with Oracle Receivables, including AutoInvoice, AutoLockbox, Customer Interface, Sales Tax Rate Interface, and the Tax Vendor Extension.

This manual is available online

This manual is also available online, in Adobe Acrobat format. (Most other Oracle Applications documentation is available in both HTML and Adobe Acrobat format.)

The paper and online versions of this manual have identical content; use whichever format is most convenient.

You can order an Oracle Applications Documentation Library CD containing Adobe Acrobat versions of each manual in the Oracle Applications documentation set. Using this CD, you can search for information, read it onscreen, and print individual pages, sections, or entire books. When you print from Adobe Acrobat, the resulting printouts look just like pages from an Oracle Applications hardcopy manual.

Assumptions

This manual assumes you have a working knowledge of the principles and customary practices of your business area. It also assumes you are familiar with Oracle Financials. If you have never used Oracle Financials, we suggest you attend one or more of the Oracle training classes available through Oracle Education. (See Other Information Sources for more information about Oracle applications and Oracle training.)

This manual also assumes that you are familiar with the Oracle Applications graphical user interface. To learn more about the Oracle Applications graphical user interface, read the *Oracle Applications User's Guide.*

Do Not Use Database Tools to Modify Oracle Applications Data

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 like 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 an Oracle Applications form can update many tables at once. But when you modify Oracle Applications data using anything other than Oracle Applications forms, 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 forms to modify your data, Oracle Applications automatically checks that your changes are valid. Oracle Applications also keeps track of who changes information. But, 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.

Consequently, we STRONGLY RECOMMEND that you never use SQL*Plus, Oracle Data Browser, database triggers, or any other tool to modify Oracle Applications tables, unless we tell you to do so in our manuals.

Other Information Sources

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

Most Oracle Applications documentation is available in Adobe Acrobat format on the *Oracle Applications Documentation Library* CD. We supply this CD with every software shipment.

If this manual refers you to other Oracle Applications documentation, use only the Release 11 versions of those manuals unless we specify otherwise.

Oracle Applications User's Guide

This guide explains how to navigate, enter data, query, run reports, and introduces other basic features of the graphical user interface (GUI) available with this release of Oracle Receivables (and any other Oracle Applications product). This guide also includes information on setting user profiles, as well as running and reviewing reports and concurrent requests.

You can also access this user's guide online by choosing "Getting Started with Oracle Applications" from any Oracle Applications help file.

Related User's Guides

Oracle Receivable shares business and setup information with other Oracle Applications products. Even if you have not installed them as separate products, your Oracle Receivables application includes some forms and functionality from other Oracle Applications. Therefore, you may want to refer to other user's guides when you set up and use Oracle Receivables.

If you do not have the hardcopy versions of these manuals, you can read them by choosing Library from the Help menu, or by reading from the Oracle Applications Document Library CD, or by using a web browser with a URL that your system administrator provides.

Oracle General Ledger User's Guide

Use this manual when you plan and define your chart of accounts, accounting period types and accounting calendar, functional currency, and set of books. It also describes how to define journal entry sources and categories so you can create journal entries for your general ledger. If you use multiple currencies, use this manual when you define additional rate types and enter daily rates.

Oracle Cash Management User's Guide

This manual provides information about using Oracle Cash Management to clear your receipts, as well as reconciling your Receivables bank statements with your outstanding balances, transactions, and receipts.

Oracle Purchasing User's Guide

If you install Oracle Purchasing, refer to this user's guide to read about entering and managing the purchase orders to which you match invoices.

Oracle Inventory User's Guide

This manual explains how to define your items, units of measure classes, units of measure, and unit of measure conversions for use in measuring amounts for your units of production items, as well as other information about setting up and using Oracle Inventory.

Oracle HRMS User's Guide

This manual explains how to enter your employees, so you can enter expense reports for them. It also explains how to set up organizations and site locations.

Oracle Applications Flexfields Guide

This manual provides flexfields planning, setup, and reference information for the Oracle Receivables 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 Workflow Guide

This manual 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 Alert User's Guide

This manual explains how to define periodic and event alerts to monitor the status of your Oracle Applications data.

Country–Specific Manuals

Use these manuals to meet statutory requirements and common business practices in your country or region. They also describe additional features added to Oracle Receivables to meet those

requirements. Look for a User's Guide appropriate to your country; for example, see the *Oracle Financials for the Czech Republic User's Guide* for more information about using this software in the Czech Republic.

Oracle Applications Character Mode to GUI Menu Path Changes

This is a quick reference guide for experienced Oracle Applications end users migrating from character mode to a graphical user interface (GUI). This guide lists each character mode form and describes which GUI windows or functions replace it.

Multiple Reporting Currencies in Oracle Applications

If you use the Multiple Reporting Currencies feature to report and maintain accounting records in more than one currency, refer to this manual before implementing Oracle Receivables. The manual details additional steps and setup considerations for implementing Oracle Receivables with this feature.

Multiple Organizations in Oracle Applications

If you use the Oracle Applications Multiple Organization Support feature to use multiple sets of books for one Oracle Receivables installation, use this guide to learn about setting up and using Oracle Receivables with this feature.

Oracle Applications Implementation Wizard User's Guide

If you are implementing more than one Oracle product, you can use the Oracle Applications Implementation Wizard to coordinate your setup activities. This guide describes how to use the wizard.

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*. It also provides information to help you build your custom Developer/2000 forms so that they integrate with Oracle Applications.

Oracle Applications User Interface Standards

This manual 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 4.5.

Oracle Receivables Tax Manual

This manual provides everything you need to know about calculating tax within Oracle Receivables, Oracle Order Entry/Shipping, Oracle Sales and Marketing, and Oracle Web Customers. It includes information about implementation procedures, setup forms and windows, the Oracle Receivables tax calculation process, tax reports and listings, and open interfaces.

Installation and System Administration

Oracle Applications Installation Manual

This manual and the accompanying release notes provide information you need to successfully install Oracle Financials, Oracle Public Sector Financials, Oracle Manufacturing, or Oracle Human Resources in your specific hardware and operating system software environment.

Oracle Applications Upgrade Manual

This manual explains how to prepare your Oracle Applications products for an upgrade. It also contains information on finishing the upgrade procedure for each product. Refer to this manual and the *Oracle Applications Installation Manual* when you plan to upgrade your products.

Oracle Applications System Administrator's Guide

This manual 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 processing.

Oracle Receivables Applications Technical Reference Manual

The *Oracle Receivables Applications Technical Reference Manual* contains database diagrams and a detailed description of Oracle Receivables and related applications database tables, forms, reports, and programs.

This information helps you convert data from your existing applications, integrate Oracle Receivables with non–Oracle applications, and write custom reports for Oracle Receivables.

You can order a technical reference manual for any product you have licensed. Technical reference manuals are available in paper format only.

Oracle Applications Product Update Notes

This book contains a summary of each new feature we added since Release 10.7, as well as information about database changes and seed data changes that may affect your operations or any custom reports you have written. If you are upgrading from Release 10.6 or earlier, you also need to read Oracle Applications Product Update Notes Release 10.7.

Other Information

Training

Oracle Education offers a complete set of training courses to help you and your staff master Oracle Applications. We can help you develop a training plan that provides thorough training for both your project team and your end users. We will work with you to organize courses appropriate to your job or area of responsibility.

Training professionals can show you how to plan your training throughout the implementation process so that the right amount of information is delivered to key people when they need it the most. You can attend courses at any one of our many Educational Centers, or you can arrange for our trainers to teach at your facility. In addition, we can tailor standard courses or develop custom courses to meet your needs.

Support

From on–site support to central support, our team of experienced professionals provides the help and information you need to keep Oracle Receivables 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.

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 45 software modules for financial management, supply chain management, manufacturing, project systems, human resources, and sales and service 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 140 countries around the world.

Thank You

Thank you for using Oracle Applications and this manual.

We value your comments and feedback. At the end of this document is a Reader's Comment Form you can use to explain what you like or dislike about Oracle Applications or this manual. Mail your comments to the following address or call us directly at (650) 506–7000.

Oracle Applications Documentation Manager
Oracle Corporation
500 Oracle Parkway
Redwood Shores, CA 94065
U.S.A.

Or, send electronic mail to **appsdoc@us.oracle.com**.

Open Interfaces

This chapter describes the open interfaces we provide with Oracle Financials applications products. We explain how you can integrate your products with non–Oracle systems, including:

- Integrating Oracle Financials applications with your proprietary or custom applications

- Importing historical data from your previous application system into your Oracle Financials applications

- Importing information from various financial information providers

- Importing information from spreadsheets

Oracle Financials open interfaces are powerful, flexible tools that allow you to capture data from your own applications, define necessary format conversions, and direct data to your Oracle Financials products, usually without programming.

Importing Information into Oracle Financials Applications

Using Oracle Financials import programs, you can integrate new or existing applications such as payroll, accounts receivable, accounts payable, and fixed assets into your Oracle Financials applications. You can import accounting data from your feeder systems and import historical data from your previous accounting or management systems.

Oracle Assets

Oracle Assets provides the following open interfaces:

- ACE Interface
- Budget Open Interface
- Mass Additions Interface
- Production Interface
- Physical Inventory

Oracle Cash Management

Oracle Cash Management provides the following open interfaces:

- Bank Statement Open Interface
- Forecasting Open Interface
- Reconciliation Open Interface

Oracle General Ledger

Oracle General Ledger provides the following open interfaces:

- Budget Upload
- Importing Journals
- Loading Daily Rates

Oracle Inventory

Oracle Inventory provides the following open interfaces:

- Customer Item Interface
- Open Demand Interface
- Open Item Interface

- Open Replenishment Interface
- Open Transaction Interface

Oracle Order Entry/Shipping

Oracle Order Entry/Shipping provides the following open interfaces:

- Order Import Interface
- Receivables Interface
- Ship Confirm Interface

Oracle Payables

Oracle Payables provides the following open interfaces:

- Credit Card Transaction Interface Table
- Invoice Import Interface
- Open Interface Import
- Purchase Order Matching

Oracle Projects

Oracle Projects provides the following open interfaces:

- Activity Management Gateway
- Client Extensions
- Transaction Import

Oracle Purchasing

Oracle Purchasing provides the following open interfaces:

- Open Requisitions Interface
- Purchasing Documents Open Interface
- Receiving Open Interface

Oracle Receivables

Oracle Receivables provides the following open interfaces:

- AutoInvoice
- AutoLockbox

- Customer Interface
- Sales Tax Rate Interface
- Tax Vendor Extension

Importing Data From Your Feeder System

Oracle Applications can receive data from an *import program* which your on–site MIS personnel can develop for you. Or, you may wish to use an Oracle consultant. The goal of your import program is to convert data from your feeder system into a standard data format that your Oracle applications can read and then convert for further modification or processing in your Oracle application.

Figure 1 – 1
Importing Data into an
OracleApplications system
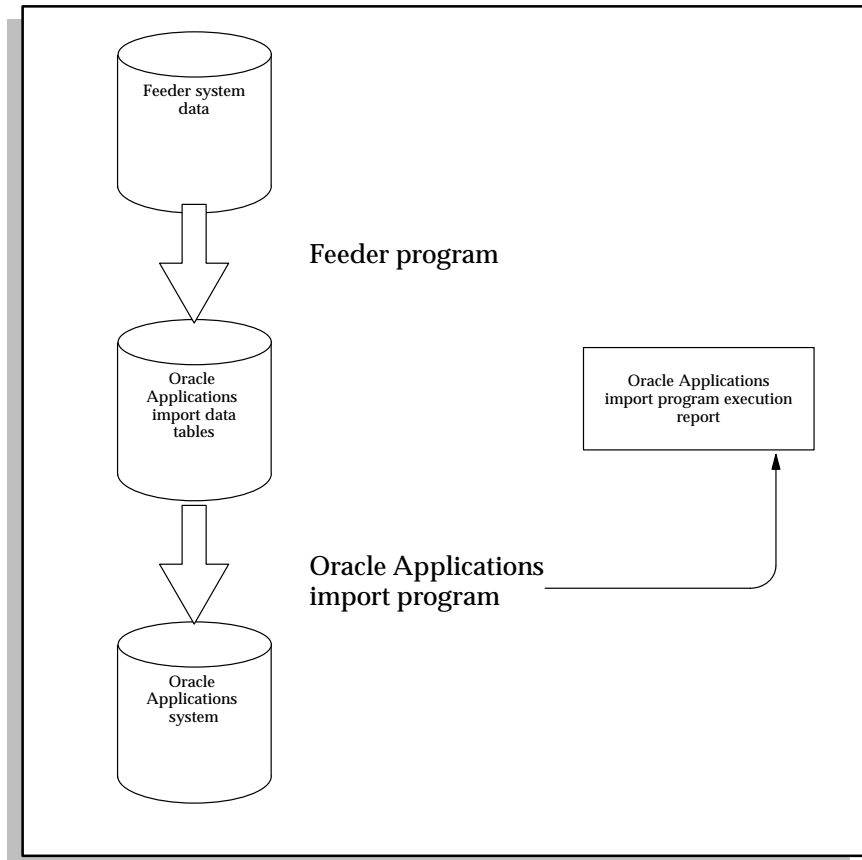
Writing a Feeder Program

The type of environment from which you want to import data determines the type of feeder program you need to write. For example, you can use SQL*Loader to write an import program to feed data from a non–Oracle system. Or, you can write a feeder program to import historical data from your previous accounting system. Regardless of the type of feeder program you write, the output should be in standard data format that an Oracle Applications import program can use to convert your import data into your Oracle Applications system.

Choosing a Feeder Program

You need to choose a tool for writing a feeder program to extract data from your existing application system's printed reports, flat file, relational database, or other repository of application information. Using a feeder program you write, you populate an Oracle Applications import table with the information you want to introduce to your Oracle Finanicials system.

SQL*Loader is a powerful and easy–to–use tool you can to write a feeder program. SQL*Loader lets you map elements of a regularly formatted file, such as a listing or flat file, and specify which columns of which tables to populate. Chances are, SQL*Loader is a powerful enough tool to use for your feeder program.

If you need to do more complex computations to extract or rearrange information from your feeder system, you can choose from a variety of programming languages to populate an import table.

For example, you can use any of the Oracle–enhanced programming languages, such as Pro*C, Pro*COBOL, or Pro*FORTRAN, as well as SQL*Report.

Oracle Assets

This chapter summarizes the following open interfaces included with your Oracle Assets application:

- ACE Interface
- Budget Open Interface
- Mass Additions Interface
- Production Interface
- Physical Inventory

ACE Interface

You can either have Oracle Assets calculate adjusted current earnings (ACE) information for you, or enter it yourself. If you want Oracle Assets to calculate ACE accumulated depreciation for you, enter historical asset information beginning no later than the last period of fiscal 1989. Start your depreciation books in Oracle Assets before the end of fiscal 1989, and enter asset transactions through the current period.

If you have ACE information from another asset system, you can load it into Oracle Assets using the ACE interface. Define the initial open period of your ACE book as the last period of the last fiscal year you completed on your previous system. Then load the accumulated depreciation for your ACE assets using this interface.

ACE Update Process Using the ACE Interface

1. Create an ACE tax book with ACE depreciation rules. Copy your assets into the ACE book from the corporate book.

2. Populate the ACE conversion table. Either use the Populate ACE Interface Table program, or load the table manually with the ACE information from your previous system.

3. Update the ACE book with the information in the ACE conversion table.

See

Oracle Assets User's Guide

Budget Open Interface

If you maintain your budget information in a spreadsheet, you can upload it to Oracle Assets using the budget interface. You can transfer budget data from any software package that prints to an ASCII file, and then use SQL*Loader to load the FA_BUDGET_INTERFACE table.

Flow of the Capital Budgeting Process

Develop your budget
in the environment you prefer

↓

Budget Feeder System

Transfer your budget data from the system
where you maintain your budget to the system
where you have Oracle Assets

↓

Oracle Assets System

Use SQL *Loader to move your
budget data into the budget interface

↓

Budget Interface

Use the Upload Capital Budget window
to move your budget into the budget worksheet

↓

Budget Worksheet

Use the Upload Capital Budget window
to move your budget into a budget book

↓

Budget Book

Run depreciation projections
and other reports on your budget book

Upload Budget Process

Uploading budgets from other systems (such as a spreadsheet on a personal computer) into Oracle Assets is a five step process.

1. Use a file transfer program to upload your ASCII budget file from your personal computer to the computer where you have Oracle Assets.

2. Use SQL*Loader to move your budget into the Budget Interface. See: Customize the SQL*Loader Script (*Oracle Assets User's Guide*)..

3. Use the Upload Capital Budget window to move your budget into the Budget Worksheet. Check Delete Existing Budget if you are replacing an existing budget.

4. Use the Capital Budgets window to review or change your budget.

5. Use the Upload Capital Budget window to move your budget into a budget book.

See

Oracle Assets User's Guide

Mass Additions Interface

You can create assets automatically from information in any other system using Mass Additions. Oracle Assets is already integrated with Oracle Payables; you can easily integrate it with other payables systems. You can also use the mass additions process to convert your assets from an outside system to Oracle Assets.

☞ **Attention:** Plan your conversion carefully and thoroughly, since you cannot undo it.

Create Assets From Oracle Payables

The Create Mass Additions program creates mass additions from invoice information in Oracle Payables. The concurrent process places the new mass additions in a holding area (the table FA_MASS_ADDITIONS) that is separate from the main Oracle Assets tables, so that you can review and approve the mass additions before they become asset additions.

Create Asset Additions From Another Payables System

To integrate Oracle Assets with another system, develop your own program to add mass additions to the FA_MASS_ADDITIONS table. Also, you may want to add another window to the Oracle Assets menu to run your concurrent process. A description of the columns in the FA_MASS_ADDITIONS table is included later in this essay.

Convert From Other Systems

Oracle Assets lets you convert from your previous asset system using mass additions. Instead of loading your asset information into multiple Oracle Assets tables, load your information into the FA_MASS_ADDITIONS table and use the mass additions process to simplify your work.

Use Mass Additions to Import Your Asset Data

The Mass Additions feature of Oracle Assets is normally used to import asset information from Oracle Payables. Mass Additions automatically populates the many Oracle Assets tables from the relatively simple FA_MASS_ADDITIONS table. By placing your data in this table, you can use the power of the Post Mass Additions to Oracle Assets program to perform the bulk of your import.

Mass Additions has three main components:

- **Create:** finds potential new assets in Oracle Payables and brings them into the FA_MASS_ADDITIONS table
- **Prepare:** allows you to review potential new assets and enter additional information
- **Post:** creates assets by importing asset information from the FA_MASS_ADDITIONS table into several Oracle Assets tables

To import asset information from another payables system, load the FA_MASS_ADDITIONS table and then use Prepare and Post to add your assets to Oracle Assets.

To convert assets from another assets system, use only the Post component to move the asset information you store in the FA_MASS_ADDITIONS table into Oracle Assets.

Data Import Checklist

Complete these steps to import your asset data into Oracle Assets.

1. Plan your import. See: Planning Your Import *(Oracle Assets User's Guide)*.

2. Define your Oracle Assets setup information and perform the Oracle Assets setup process. See: Defining Oracle Assets for Mass Additions in the *(Oracle Assets User's Guide)*.

3. Load your asset data into an interim table or file you define. See: Loading Your Asset Data *(Oracle Assets User's Guide)*.

4. Import or load your asset data from the interim table or file into FA_MASS_ADDITIONS. See: Importing Your Asset Information (*Oracle Assets User's Guide*).

5. Reconcile your Oracle Assets data with your old asset information. See: Finishing Your Import (*Oracle Assets User's Guide*).

See

Oracle Assets User's Guide

Production Interface

You can enter production information manually, or you can maintain your production information in another system and upload the information using the production interface. Prepare and analyze your production information on any feeder system and then automatically transfer your production information into Oracle Assets. Oracle Assets uses that information to calculate depreciation for your units of production assets.

▶ **To import production information to Oracle Assets:**

1. Use an import program or utility to export data from your feeder system and populate the FA_PRODUCTION_INTERFACE table.

2. Run the Upload Production program to move your production information into Oracle Assets.

3. Run the Production History report to review the status of all imported items.

4. Use the Periodic Production window to review or change your production information.

See

Oracle Assets User's Guide

Physical Inventory

Physical inventory is the process of ensuring that the assets a company has listed in its production system match the assets it actually has in inventory. A company takes physical inventory by manually looking at all assets to ensure they exist as recorded, are in the appropriate locations, and consist of the recorded number of units.

A person taking physical inventory can collect physical inventory data in a number of ways, such as by writing down information about the asset manually, or by using a barcode scanner to automatically scan asset information into a file such as an Excel spreadsheet. After this information is collected, any discrepancies need to be reconciled. For example, if a computer is located in Room 549 according to your production data, but is actually in Room 346, you need to either change the record to reflect the true location of the computer, or move it to Room 549.

About Physical Inventory

The Physical Inventory feature in Oracle Assets assists you in comparing and reconciling your physical inventory data. To use the Physical Inventory feature, you must first take physical inventory of your assets. You need to include the following information about your assets:

- A unique identifier, which can be either the asset number, tag number, or serial number
- The location
- The number of units

You can include other information that may make it easier for you to keep track of the assets you are comparing, such as a description of each asset, but only the information listed above is required.

You load your physical inventory data into Oracle Assets using the Fixed Assets Desktop Integrator (FADI), which allows you to import data from an Excel spreadsheet, or using the Physical Inventory Entries window. You can also use SQL*Loader to import physical inventory data from a non–Oracle file system.

When you finish entering physical inventory data into Oracle Assets, you run the Physical Inventory comparison program, which highlights the differences between the asset information in Oracle Assets and the actual assets in physical inventory. This program compares your

physical inventory data with your Oracle Assets data for all assets that have the In Physical Inventory check box checked.

You can view the results of the comparison online in the Physical Inventory Comparison window, or by running the Physical Inventory Comparison Report. The comparison results highlight differences between the assets in your production system and those in physical inventory. You can reconcile the differences between physical inventory and the information in your database by updating each asset manually, or you can use the mass additions process to add assets that are missing from the production system.

When you have completed your physical inventory, you can run the Missing Assets Report, which lists all assets that have not been accounted for in the physical inventory process.

See

Oracle Assets User's Guide

Oracle Cash Management

This chapter summarizes the following open interfaces included with your Oracle Cash Management application:

- Bank Statement Open Interface
- Forecasting Open Interface
- Reconciliation Open Interface

Bank Statement Open Interface

Reconciliation in Cash Management is the process of matching bank statement lines to appropriate batches and detail transactions and creating all necessary accounting entries. Before you can reconcile transactions against a bank statement, you need to enter the bank statement information into Cash Management.

If your bank provides account statements in a flat file, using a defined format like BAI or SWIFT940, you can use the Bank Statement Open Interface to automatically load this information into Cash Management.

Before you can use Bank Statement Open Interface, you need to:

1. Create an import program to map the structure of the bank statement file to the Cash Management bank statement open interface tables.

    Note: Cash Management documentation refers to the import program as an SQL*Loader script.

2. Use your SQL*Loader scripts whenever needed to populate the bank statement open interface tables (see Note below).

For more information, see: Loading Bank Statement Open Interface in the *Oracle Cash Management User's Guide.*

Forecasting Open Interface

The Oracle Cash Management Forecasting Open Interface lets you utilize the following external sources of data as cash inflow and outflow data for flexible cash forecasting:

- Non–Oracle applications on a local database
- Non–Oracle applications on a remote database
- Oracle Applications on a remote database

Providing an Open Interface to Forecast from External Applications

Two cash forecast source transaction types, Open Interface Inflow and Open Interface Outflow, allow you to include external application transaction sources for cash forecasting. Having two separate source transaction types for external source transactions gives you an easy way to indicate whether the transaction source consists of cash receipts (inflow) or disbursements (outflow).

For each external source transaction type, you define its name, such as AP Invoices, AR Invoices, AP Payments, etc., and its valid selection criteria. Using a special descriptive flexfield (the Forecast Selection Criteria Descriptive Flexfield) and database views, you can define the external forecast source, expected cash activity date, amounts, and other selection criteria values. The Forecasting Open Interface collects cash flow amounts from your external systems, and the Cash Forecasting module summarizes and calculates the data to include in your cash forecasts along with other Oracle Applications data.

You can also include transactions located on a remote database in your cash forecasts. For each Oracle Application or non–Oracle application source type on a distributed database, you need to specify a database link.

See

Oracle Cash Management User's Guide

Reconciliation Open Interface

Oracle Cash Management can reconcile receipts and payments that originate in applications other than Receivables, Payables, and General Ledger. For example, if you use a proprietary accounts receivable system with General Ledger and Cash Management, you can reconcile and clear your receipts by using the Cash Management Reconciliation Open Interface.

The Cash Management Reconciliation Open Interface lets you:

- Manually or automatically reconcile open interface transactions to bank statement lines in Cash Management

- Find open interface transactions that are available for reconciliation

- Find reconciled open interface transactions

See

Oracle Cash Management User's Guide

Oracle General Ledger

This chapter summarizes the following open interfaces included with your Oracle General Ledger application:

- Budget Upload
- Importing Journals
- Loading Daily Rates

Integrating Oracle General Ledger Using Budget Upload

Budget Upload lets you prepare and analyze your budget outside Oracle General Ledger, such as on a personal computer using a spreadsheet program, and then transfer your budget information into Oracle General Ledger. This enables you to perform your budgeting in the environment you choose, and still maintain the integrity of your database.

See: Uploading Budgets in the *Oracle General Ledger User's Guide.*

> **Note:** If you have Microsoft Excel installed, you can use GL Desktop Integrator to create budget worksheets in Excel, view and modify your budget information, then upload revised budget information to Oracle General Ledger automatically.

> See: GL Desktop Integrator Budget Wizard in the *Oracle General Ledger Desktop Integrator Users' Guide.*

See

Oracle General Ledger User's Guide

Importing Journals

Use Journal Import to integrate information from other applications such as payroll, accounts receivable, accounts payable and fixed assets with Oracle General Ledger. For each accounting period, you can import accounting data from these feeder systems, then review, update and post the journal entries. You can also use Journal Import to import historical data from your previous accounting system.

Journal Import receives accounting data from the GL_INTERFACE table. For non–Oracle applications, you must import data from your feeder systems to this table. Use an import utility, or have your on–site MIS personnel or Oracle consultant develop an import program for you.

Your import program should convert data from your feeder system into a standard data format that Journal Import can read from the GL_INTERFACE table. Journal Import can then convert your import data into your General Ledger application journal entries. You can write an import program to import data from a non–Oracle system, or you can write an import program to import historical data from your previous accounting system.

See

Oracle General Ledger User's Guide

Loading Daily Rates Automatically

Oracle General Ledger provides the GL_DAILY_RATES_INTERFACE
table that you can use to automatically insert, update, or delete daily
rates in the GL_DAILY_RATES table. General Ledger validates the
rows in the interface table before making changes in the
GL_DAILY_RATES table.

⚠ **Warning:** Always use the interface table to load your daily
rates into General Ledger. Do not load rates directly into the
GL_DAILY_RATES table, since this can corrupt your daily
rates data.

The GL_DAILY_RATES_INTERFACE Table

The insert, update, or deletion of rates in GL_DAILY_RATES is done
automatically by database triggers on the GL_DAILY_RATES_
INTERFACE table. You do not need to run any import programs. You
only need to develop an automated process that populates the interface
table with your daily rates information.

See

Oracle General Ledger User's Guide

Oracle Inventory

This chapter summarizes the following open interfaces included
with your Oracle Inventory application:

- Customer Item Interface
- Open Demand Interface
- Open Item Interface
- Open Replenishment Interface
- Open Transaction Interface

Customer Item Interface

Several manufacturing industries are characterized by a multi–tiered, just–in–time supply chain structure. Today's manufacturing environment requires a very close working relationship between customers and suppliers along the entire supply chain. Suppliers must be able to react quickly to their customers' often changing requirements. Suppliers need to cross – reference customer items with their own inventory items to support faster order processing and shipments with respect to the customer's item number. Customer item cross referencing allows customers to place orders using their own part numbers.

You can import customer items and customer item cross–references from any legacy system into Oracle Inventory using the Customer Item Interface and the Customer Item Cross Reference Interface.

> **Note:** These interfaces validate all data that you import into Oracle Inventory. They also perform foreign key validation and check for attribute inter–dependencies, acceptable values, and value ranges. The interfaces ensure that the imported customer items and cross references contain the same detail as items entered manually in Oracle Inventory using the Customer Items and Customer Item Cross References windows.

Overview – Customer Item Interface

The Customer Item Interface lets you import customer items into Oracle Inventory. For each customer item you must define related information such as the Customer and Item Definition Level. Customer Address is required if you set Item Definition Level 3 while Customer Category is required for Item Definition Level 2. In addition, you may provide Master and Detail Container information, Commodity Codes, Model Items and other attributes such as Demand Tolerances and Departure Planning Flags for each customer item.

Overview – Customer Items Cross Reference Interface

The Customer Item Cross Reference Interface lets you import cross references between Customer Items and existing Oracle Inventory items in your Master organization. For each Customer Item cross reference, you must define the Customer, Customer Item, Customer Item Definition Level and the Rank. You create a cross reference to the

associated Oracle Inventory item by specifying the Inventory item and its Master Organization.

You can create multiple cross references between Customer Items and an Oracle Inventory item. You can also create multiple cross references between a Customer Item and Oracle Inventory items. Cross references are defined at the Master organization level of the cross referenced inventory item. Once a Customer Item cross reference has been defined to an Inventory Item, it is applicable to all organizations assigned the cross referenced Inventory Item.

See

Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual

Open Demand Interface

The Open Demand Interface provides all the functions you need to interface an external order entry system with Oracle Inventory and Oracle Manufacturing applications. It provides a two–way interface that lets you:

- Provide visibility to demand created in external applications for forecasting, planning, and order promising purposes. This includes the option to automatically check ATP when adding demand to verify availability.

- Reserve on–hand inventory to specific sources of demand (for example, sales orders). This includes the option to 'auto–reserve' inventory at a detailed level for warehouse picking.

- Check Available to Promise (ATP), Available to Reserve (ATR), and on–hand quantity information.

- Specify Assemble to Order Model and Option demand details for creation of and/or association with an ATO Configured Item.

The essay in the Oracle Manufacturing Open Interfaces Manual explains how to use the Open Demand Interface to integrate other applications with Oracle Inventory.

See

Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual

Open Item Interface

The Open Item Interface lets you import items from any source into Oracle Inventory and Oracle Engineering. With this interface, you can convert inventory items from another inventory system, migrate assembly and component items from a legacy manufacturing system, convert purchased items from a custom purchasing system, and import new items from a Product Data Management package. The Item Interface validates your data, insuring that your imported items contain the same item detail as items you enter manually in Oracle Inventory's Items window or Oracle Engineering's Engineering Items window.

When you import items through the Item Interface, you create new items in your item master organization or assign existing items to additional organizations. You can specify values for all the item attributes, or you can specify just a few attributes and let the remainder default or remain null. The Item Interface also lets you import revision details, including past and future revisions and effectivity dates. Validation of imported items is done using the same rules as the item definition windows, so you can be sure that your items are valid.

See

Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual

Open Replenishment Interface

The open Replenishment Interface lets you easily load replenishment requests from external systems such as a bar–code application. Such requests may be in the form of stock–take counts or requisition requests for subinventories in which you do not track quantities.

You can also use the Open Replenishment Interface to process requisition requests generated by external applications for tracked subinventories.

See

Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual

Open Transaction Interface

Oracle Inventory provides an open interface for you to easily load transactions from external applications and feeder systems. These transactions could include sales order shipment transactions from an order entry system other than Oracle Order Entry, or they could be simple material issues, receipts, or transfers loaded from data collection devices. The following transaction types are supported by this interface:

- Inventory issues and receipts (including user–defined transaction types)

- Subinventory transfers

- Direct inter–organization transfers

- In transit shipments

- WIP component issues and returns

- WIP assembly completions and returns

- Sales order shipments

- Inventory average cost updates

This interface is also used as an integration point with Oracle Order Entry for shipment transactions. Oracle Order Entry's Inventory Interface program populates the interface tables with transactions submitted through the Confirm Shipments window.

See

Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual

6

Oracle Order Entry/Shipping

This chapter summarizes the following open interfaces included with your Oracle Order Entry/Shipping application:

- Order Import Interface
- Receivables Interface
- Ship Confirm Interface

Integrating Oracle Order Entry Using Order Import

Order Import is a powerful, flexible open interface that lets you capture and validate order data from external systems.

Order Importing

Order Import lets you capture order data using a specialized system and import them into Oracle Order Entry/Shipping for processing. You can import orders with any entry status, including **Booked**. Imported orders can be queried and modified using the Sales Orders window in Order Entry/Shipping. If an order is imported with an entry status of Booked, it will automatically be eligible to progress to the next step of its order cycle when the import is complete. You can also import incomplete orders and finish them using the Sales Orders window.

Order Import receives data from your import program, which converts data from your feeder system into a standard data format that Order Import can read. Order Import can then convert your import data into Order Entry/Shipping orders.

Historical Data Conversion (Complete Orders)

Order Import lets you import completed orders from your previous order entry system, making the transition from your old application to Order Entry/Shipping as smooth as possible. Complete orders are considered for historical purposes only and can have any entered state; the status for the **Complete Order** cycle action is **Closed**.

Order Import also lets you:

- Place demand or reserve inventory for orders automatically.

- Optionally price order lines using the same pricing rules as online entry, supporting individual customer price lists and discounts

- Import quota and nonquota sales credit information for orders and order lines

- Enforce holds and perform credit checking on any imported orders or changes

- Import line schedule detail information with each order and order line

- Enforce security rules and utilize defaulting with imported orders

- Import internal requisition orders from Oracle Purchasing.

- Apply automatic notes

- Review your imported data in a report. Not only can you identify which data has been successfully imported, but you can identify any errors which may have occurred during the import process.

See Also

Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual

Integrating Oracle Order Entry/Shipping with Oracle Receivables

Oracle Order Entry provides functionality to integrate with Oracle Receivables and, using AutoInvoice, create invoices, create credit memos and credits on account, recognize revenue, and manage sales credits.

You can use the Order Entry Receivables Interface program to automatically collect order and return information and populate the Oracle Receivables AutoInvoice interface tables. Using process parameters, you can control which types of orders are interfaced each time you execute the program. Oracle Order Entry ensures that all orders or order lines and returns or return lines have successfully completed any required prerequisites.

Oracle Order Entry and Oracle Receivables provide features you need to satisfy the following integration needs:

- Create accurate and timely invoices, credit memos and credits on account from order entry transactions

- Control when order transactions are invoiced

See Also

Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual

Ship Confirm Open Interface

The Ship Confirm Open Interface provides a way to load externally derived Shipping data into picking tables and close the pick slip without using the Confirm Shipments window. The Ship Confirm Open Interface takes data loaded into three interface tables and:

- validates the information contained within the interface tables,
- loads the valid data into the picking header, picking line details, and freight charges tables, and
- closes the pick slip (if requested).

If you close the pick slip using the Ship Confirm Open Interface and the OE: Immediate Inventory Update profile option is set to No, you can run the Update Shipping and Inventory Interface programs to update order lines with shipped quantities and to update inventory. If the OE: Immediate Inventory Update profile option is set to Yes, the Update Shipping and Inventory Interface programs run automatically when you close the pick slip.

See Also

Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual

Oracle Payables

This chapter summarizes the following open interfaces included
with your Oracle Payables application:

- Credit Card Transaction Interface Table

- Invoice Import Interface

- Open Interface Import

- Purchase Order Matching

Loading Data Using Payables Credit Card Transaction Interface Table

Use the Credit Card Transaction Interface Table to load transaction data from your credit card issuers into your Payables system. When you submit the Credit Card Transaction Validation and Exception Report, for records where the CREATE_DISTRIBUTION_FLAG is Y, Payables uses the data in the AP_EXPENSE_FEED_LINES table to create distributions with proper accounts in the AP_EXPENSE_FEED_DISTS table. Payables uses data in this table to confirm transactions with your employees and managers. After employees and managers have verified and approved the transactions, you submit the Credit Card Invoice Interface Summary to import the data into the Payables Open Interface tables and optionally summarize the data by GL Account (CCID). You can then submit the Payables Open Interface Import Program to create invoices from the data.

Payables Credit Card Transaction Interface Table

Use SQL*Loader to load credit card transaction information into the AP_EXPENSE_FEED_LINES interface table. When you initiate the Credit Card Transaction Validation and Exception Report, the import program validates all required transaction data in these tables.

The interface table is organized by columns that Payables uses to categorize and store specific transaction information.

See

Oracle Payables User's Guide

Creating Invoices with the Payables Invoice Import Interface

The Oracle Payables Invoice Import Program uses the Invoice Import interface tables to create invoices from expense reports that you enter in Payables, Oracle Web Employees, and Oracle Projects. The Payables Invoice Import Program also uses these tables to import into Payables invoices that were entered in your third party system. The *Oracle Payables User's Guide* describes in detail how to import invoices from another accounting system using SQL*Loader and Payables Invoice Import.

Invoice Import Interface Tables

The tables in Payables to which you load the invoice data in your invoice flat file. You use SQL*Loader to load the invoice information into these tables. The interface tables also store information for your Payables, Oracle Projects, and Oracle Web Employees expense reports.

Creating Invoices

The Invoice Import interface uses a program that you create to compile invoice data from your non–Oracle accounting system(s) and produce the invoice flat file that you load into Payables. The flat file must contain all the necessary data, such as invoice number, invoice amount, and expense accounts, for creating invoices in Payables.

You then use an SQL*Loader file that you created to load the data in your invoice flat file into the Invoice Import interface tables. The control file serves as a guide for formatting the data in the invoice flat file into the standard format used by the columns in the interface tables.

See

Oracle Payables User's Guide

Creating Invoices with the Payables Open Interface Import

The Payables Open Interface Import Program uses invoice data stored in the Payables Open Interface tables to create invoices to import into Payables. The invoice data is from EDI invoices from your suppliers, invoices that you loaded with Oracle SQL*Loader, and credit card transaction data.

Payables Open Interface Tables

Use Oracle EDI Gateway, the Credit Card Invoice Interface Summary, or SQL*Loader to load invoice information into the interface tables, AP_INVOICES_INTERFACE and AP_INVOICE_LINES_INTERFACE. When you initiate importing invoices, the import program validates all required invoice data in these tables. After it validates the information, Payables Open Interface Import creates invoices from the information in the Payables Open Interface tables. Payables also creates scheduled payments based on the payment terms.

Records in the AP_INVOICE_LINES_INTERFACE table create one or more invoice distributions. Note that one row may create more than one distribution. For example, if you enter a Tax line in this table and prorate it across three Item lines, during Open Interface Import the system will create three Tax invoice distributions based on the single Tax line in this table.

The interface tables are organized by columns that Payables uses to categorize and store specific invoice information. For example, invoice source information is stored in the column called SOURCE in AP_INVOICES_INTERFACE.

See

Oracle Payables User's Guide

Purchase Order Matching

Oracle Payables provides sophisticated purchase order matching features to ensure that you only pay for goods and services you ordered, received and accepted. Payables is tightly integrated with Oracle Purchasing to facilitate paperless matching, but you can take advantage of matching even if you are using another purchasing system with Oracle Payables.

This *Oracle Payables User's Guide* provides an essay that explains the data necessary to integrate Oracle Payables with a non–Oracle purchasing system and describes how Payables uses the data to perform two–way, three–way and four–way matching.

☞ **Attention:** The *Oracle Payables User's Guide* only includes descriptions of the *required* tables and columns for matching to a non–Oracle purchasing system. For complete details on all the entities and relationships that Payables uses for matching, see: Table Definitions *Payables Applications Technical Reference Manual.*

See

Oracle Payables User's Guide

Oracle Projects

This chapter summarizes the following open interfaces included with your Oracle Projects application:

- Activity Management Gateway
- Client Extensions
- Transaction Import

Overview of the Oracle Projects Activity Management Gateway

The Oracle Projects Activity Management Gateway is the key to building a complete project management solution to meet the diverse business needs of project–oriented companies. With this integration, you can implement and use Oracle Applications and third–party project management systems to satisfy your mission critical business needs. You can safely share data and exchange information using standard Oracle–supported interfaces to transcend the functional boundaries of the individual applications.

The Activity Management Gateway enables you to create a complete project management solution by combining the functionality of your preferred project planning and scheduling package with the features of Oracle Projects. At the heart of the Activity Management Gateway are the approximately 150 APIs that:

- Allow real–time or batch sharing of data between your project planning and scheduling package and Oracle Projects (thereby eliminating duplicate data entry)

- Share business rules and workflow from one system to the other

For example, you should not be allowed to delete a project's task using your desktop project management tool if a purchase order issued against that task is being processed within your enterprise system. For information about prohibiting users from performing certain functions, see Controlling Actions in the *Oracle Projects User's Guide*.

There are six major categories of shared data:

- Setup data
- Project planning
- Resource planning
- Budgeting
- Actuals
- Progress

Other Applications of the Activity Management Gateway

For the purpose of illustration, the *Oracle Projects User's Guide* discusses only the application of the Activity Management Gateway to integrate Oracle Projects with project management systems. However, the Activity Management Gateway is a generic tool you can use to integrate Oracle Projects with many other systems, including:

- **Sales Management Systems.** Enter your sales order using a sales management system and call APIs to create a project in Oracle Projects based on the order information.

- **Work Management Systems.** Use the Activity Management Gateway to tailor a comprehensive solution that includes your work management system. Companies in the utilities industry commonly use this type of system.

- **Customer Asset Management and Plant Maintenance Systems.** Enable your systems to share information about work orders, tasks, assets, crew labor charges, and inventory transactions charged to a project.

- **Project Manufacturing Systems.** Join inventory, manufacturing, and financial applications using the Activity Management Gateway, as Oracle's project manufacturing solution does.

- **Collaborative Project Planning and Scheduling Systems.** Provide communication links to even more people in your company by integrating your enterprise business systems with team–oriented project planning and scheduling tools.

With the supporting architecture already in place, Oracle will continue to identify external systems that can take advantage of the Activity Management Gateway as it works with additional vertical markets.

See

Oracle Projects User's Guide

Client Extensions

Oracle Projects provides flexibility in processing projects. However, many companies have business requirements that are unique to their company. To address these unique requirements, Oracle Projects provides several client extensions which enable you to extend the functionality of the product to implement and automate company–specific business rules. Client extensions allow you to automate these rules within the standard processing flow of Oracle Projects, without having to customize the software.

Table 8 – 1 lists the client extensions and their predefined template procedure files. The template procedure files are stored in the Oracle Projects admin/sql directory.

Client Extension	Package Specification File	Package Body File
Approval Extension *(Oracle Personal Time and Expense System Administrator's Guide)*	PAXTRT1S.pls	PAXTRT1B.pls
AR Transaction Type Extension	PAXITRXS.pls	PAXITRXB.pls
Automatic Invoice Approve/Release Extension	PAXPIACS.pls	PAXPIACB.pls
Billing Cycle Extension	PAXIBCXS.pls	PAXIBCXB.pls
Billing Extensions	PAXITMPS.pls	PAXITMPB.pls
Budget Calculation Extension	PAXBCECS.pls	PAXBCECB.pls
Budget Verification Extension	PAXBCECS.pls	PAXBCECB.pls
Budget Workflow Extension	PAWFBCES.pls	PAWFBCEB.pls
Burden Cost Accounting Extension	PAXCCEBS.pls	PAXCCEBB.pls
Cost Accrual Billing Extension	PAXICOSS.pls	PAXICOSB.pls
Labor Billing Extension	PAXICTMS.pls	PAXICTMB.pls
Labor Costing Extension	PAXCCECS.pls	PAXCCECB.pls

Table 8 – 1 Client Extensions (Page 1 of 2)

Client Extension	Package Specification File	Package Body File
Labor Transaction Extension	PAXCCETS.pls	PAXCCETB.pls
Overtime Calculation Extension	PAXDLCOS.pls	PAXDLCOB.pls
Percent Complete Billing Extension	PAXPCTS.pls	PAXPCTB.pls
Project and Labor Cost Security Extension	PAPSECXS.pls	PAPSECXB.pls
Project Verification Extension	PAXPCECS.pls	PAXPCECB.pls
Project Workflow Extension	PAWFPCES.pls	PAWFPCEB.pls
Routing Extension *(Oracle Personal Time and Expense System Administrator's Guide)*	PAXTRTES.pls	PAXTRTEB.pls
Summary–Level Extension *(Oracle Personal Time and Expense System Administrator's Guide)*	PAXTGTCS.pls	PAXTGTCB.pls
Time or Expense Entry Extension *(Oracle Personal Time and Expense System Administrator's Guide)*	PAXPTEES.pls	PAXPTEEB.pls
Transaction Control Extensions	PAXTTCXS.pls	PAXTTCXB.pls
Verify Organization Change Extension	PAXORCES.pls	PAXORCEB.pls

Table 8 – 1 Client Extensions (Page 2 of 2)

To define company specific rules using client extensions, you design and write these rules using PL/SQL procedures; these procedures are called during specific points in the standard processing flow of Oracle Projects.

These procedures that you write are *extensions* rather than *customizations* because they are supported features within the product and are easily upgradable between releases of the product. Customizations are changes made to the base product which are not supported and are not easily upgraded.

⚠ **Warning:** You must not directly **insert** or **update** records in any Oracle Applications tables; performing these activities with extensions is not supported by Oracle Corporation. You must use the public, predefined procedures that Oracle Projects provides to insert or update records in Oracle Projects tables.

☞ **Attention:** You are responsible for the support and upgrade of the logic within the procedures that you write, which may be impacted by changes between releases of the Oracle Applications.

This essay provides you with an overview of the client extensions available in Oracle Projects, along with the common steps in implementing client extensions.

Types of Client Extensions

You can implement any of the client extensions to help you address your company's business requirements. The client extensions are described in more detail in sections that follow this overview essay. This section provides a brief description of some of the client extensions.

Actuals API

Oracle Projects provides a package that contains an API to give you additional control for custom summarization reporting. You can use the API to get amounts by a specific Oracle Projects or Oracle General Ledger period, a specific range of Oracle Projects or Oracle General Ledger periods and by various transaction attributes as follows:

- Project, task, and resource combinations
- All levels of the project work breakdown structure
- Oracle Projects or Oracle General Ledger period
- Oracle Projects or Oracle General Ledger period ranges
- Various transaction attributes from the following:
    - employee
    - job
    - organization
    - supplier
    - expenditure type

- event type
- non–labor resource
- expenditure category
- revenue category
- non–labor resource organization
- event type classification
- expenditure type classification

Budget API

You can use the budget API for custom reporting in Oracle Projects. This API gets budget data for any baselined budget. You can get the budget data without running the Update Project Summary process.

The Budget API returns budget amounts by:

- Project, task, and resource combinations
- All levels of the project work breakdown structure
- All levels of the resource breakdown structure
- Oracle Projects or Oracle General Ledger period
- Oracle Projects or Oracle General Ledger period ranges
- Budget type

The Budget API can return summary amounts for budgets assigned to any level of the project and task work breakdown structure, providing you pass the task_id corresponding to the budgeted level to the Budget API. For example, if a project is budgeted at the top task and you pass a lower task to the Budget API, the Budget API will return zero budget amounts.

Billing Extensions

Billing extensions allow you to automatically calculate summary revenue and invoice amounts during revenue and invoice generation based on billing methods not currently supported by Oracle Projects. These billing amounts are accounted for using events. Some examples of billing extensions you can implement are:

- Surcharge
- Fee

Budget Calculation Extensions

Budget calculation extensions allow you to define your own rules for calculating budget amounts.

Cost Budgets

You can implement budget calculation extensions to calculate raw cost and/or burdened cost amounts in a Cost Budget. An example of a rule that you can define is:

- Calculate raw cost and burdened cost for an employee based on the number of hours entered.

Revenue Budgets

You can also implement budget calculation extensions to calculate revenue amounts in a Revenue Budget. An example of a rule you can define is:

- Calculate revenue for the job entered using the number of hours entered

Oracle Projects calls your budget extension when you are entering budget quantities and amounts.

Burden Costing Extension

The Burden Costing Extension allows you to write logic that will override the default cost burden schedule, revenue burden schedule, or invoice burden schedule assigned to a task.

Cost Accrual Billing Extension

The Cost Accrual Billing Extension is used for computing revenue–based cost accrual for a project. The extension is also used as part of the closing procedure to adjust for any difference between the accumulated actual costs and the accumulated revenue–based cost accrual.

Cost Plus Application Programming Interface (API)

Oracle Projects provides a procedure you can use to call the Cost Plus Application Programming Interface. This procedure retrieves an amount based on your burden cost setup. You can specify the burden schedule, effective date, expenditure type, and organization to retrieve the burden cost amount based on the criteria you specify.

For example, you can use this procedure to derive the raw cost amount of a related transaction using a specific burden schedule of rates and the project organization as inputs.

Labor Billing Extensions

Labor billing extensions allow you to calculate the bill amount of individual labor transactions based on methods not currently supported by Oracle Projects. An example of a labor billing method you can implement is:

- Bill labor straight time hours using bill rates and bill overtime premium hours at cost

Oracle Projects calls your labor billing extension in the Generate Draft Revenue process.

Labor Costing Extensions

Labor costing extensions allow you to calculate the raw cost of individual labor transactions based on methods other than the standard method, which calculates raw cost using the number of hours multiplied by the employee's hourly cost rate. Some examples of labor costing methods you can implement are:

- Standard cost rates by job

- Capped labor cost rates

- Multiple cost rates per employee

Oracle Projects calls your labor costing extension in the Distribute Labor Costs process.

Labor Transaction Extensions

Labor transaction extensions allow you to create additional labor transactions based on individual source labor transactions that you enter on timecards. Some examples of labor transactions extensions you can implement are:

- Create overtime premium transactions which are charged to the same project on which the overtime work is performed, based on company overtime policies

- Create fringe benefit transactions for specific cost amounts, which are charged to the same project that the source labor is charged to.

- Create surcharge costs for hazardous work performed

Oracle Projects calls your labor transaction extension in the Distribute Labor Costs process.

Percent Complete Billing Extension

The Percent Complete Billing Extension calculates revenue and/or invoice amounts based on the percent of work completed. The percent of work completed is entered in the Percent Complete window.

Project and Labor Cost Security Extensions

Project and Labor Cost Security extensions allow you to override the default security API delivered with Oracle Projects. You can define finer distinctions of who has access to a project. An example of a rule that you can define is:

- Any key member with a role of Market Sector Manager cannot update the projects to which they are assigned.

Transaction Control Extensions

Transaction control extensions allow you to define your own rules that validate company–specific expenditure entry policies.   Some examples of rules that you may define are:

- You cannot charge labor hours for a future date.

- You cannot charge new transactions to projects for which the work is complete; you can only transfer items to these projects.

- You can only charge supplies to overhead projects.

- You can only charge to tasks that are managed by the organization you are assigned to.

You can also define company policies regarding default billable classifications of transactions. Some examples of rules that you may define are:

- All entertainment expenses are non–billable for all projects.

- All administrative staff labor hours are non–billable on projects that are billed as time and materials.

Oracle Projects calls your transaction control extension procedure whenever a new transaction is created: via pre–approved and online entry, transaction import, transfer between projects/tasks, and project–related entry in Oracle Purchasing and Oracle Payables.

Client Extensions for use with Oracle Personal Time and Expense

For more information about these client extensions, see the Client Extensions chapter of the *Oracle Personal Time and Expense System Administrator's Guide.*

Approval Extension

You can use this approval client extension to execute special checks and validations at the time a supervisor or manager reviews a PTE expenditure. Some examples of approval extensions are:

- Timesheets with overtime cannot be approved by this reviewer
- Expense reports that exceed a specified amount are not allowed to be approved by this reviewer

Routing Extension

You can use the Routing Extension to define routing rules for approval of timesheets and expense reports. Some examples of rules you can define are:

- Timesheets are self–approving, except those with overtime, which are routed for approval to the project manager of the project charged
- Expense reports are normally routed to the employee's supervisor. However, those with entertainment expenses are routed to the project manager of the project charged

Summary–Level Validation Extension

Use this extension to specify validation checks to be performed on expenditure items when an expenditure is submitted. Some examples of summary–level validation extensions are:

- Timesheets with more than forty hours in a week are automatically rejected
- Expense reports are rejected if the total amount for meals exceeds a specified value for the expenditure period

Time or Expense Entry Extension

You can use this client extension to determine the access option available for each employee. Based on employee ID, you determine whether an employee can enter timesheets, expense reports, or both.

See

Oracle Projects User's Guide

Transaction Import

Transaction Import is an open interface that allows you to validate and load transactions from external cost collection systems into Oracle Projects. Transaction Import validates your data for compatibility with Oracle Projects by ensuring that the columns in the interface table reference the appropriate and active values and columns in Oracle Projects.

Transaction Import creates pre–approved expenditure items from transaction data entered in external cost collection systems. For example, you may wish to import transactions from the following types of systems into Oracle Projects:

- Timecard entry systems
- Expense report entry systems
- Oracle Personal Time and Expense
- Electronic data collection systems for asset usage (computer, printer, phone, etc.)
- Payroll systems that calculate complex transactions for benefits, overtime, and other labor charges
- Fixed assets systems that calculate depreciation charged to a project
- Manufacturing systems, such as Inventory and Work in Process

When loading transactions, Transaction Import creates expenditure batches, expenditures, and expenditure items. You can import costed or uncosted, accounted or unaccounted, and adjusted transactions into Oracle Projects.

This section describes how Transaction Import works. It also discusses how Transaction Import groups transactions to create expenditure batches. We also include information about the types of transactions you can load from external systems. Finally, we discuss how to view, process, and adjust the imported transactions in Oracle Projects.

See

Oracle Projects User's Guide

Oracle Purchasing

This chapter summarizes the following open interfaces included with your Oracle Purchasing application:

- Open Requisitions Interface

- Purchasing Documents Open Interface

- Receiving Open Interface

Open Requisitions Interface

You can automatically import requisitions from other Oracle Applications or your existing non–Oracle systems using the Open Requisitions Interface. This interface lets you integrate your Oracle Purchasing application quickly with new or existing applications such as material requirements planning, inventory management, and production control systems. Your Oracle Purchasing application automatically validates your data and imports your requisitions. You can import requisitions as often as you want. Then, you can review these requisitions, approve or reserve funds for them if necessary, and place them on purchase orders or internal sales orders.

The *Oracle Purchasing User's Guide* provides an essay that explains how to use the Open Requisitions Interface to integrate other applications with your Oracle Purchasing application.

See

Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual

Purchasing Documents Open Interface

You can automatically import price/sales catalog information and responses to requests for quotations (RFQs) from suppliers through the Purchasing Documents Open Interface. The Purchasing Documents Open Interface uses Application Program Interfaces (APIs) to process catalog data in the Oracle Applications interface tables to ensure that it is valid before importing it into Purchasing. After validating the price/sales catalog information or responses to RFQs, the Purchasing Documents Open Interface program converts the information in the Purchasing Documents Open Interface tables into blanket purchase agreements or catalog quotations in Purchasing.

One way to import catalog data is through Electronic Data Interchange (EDI). Through Oracle EDI Gateway, you can choose whether to import the data as blanket purchase agreements or catalog quotations. You can also choose to update your item master and/or apply sourcing rules and release generation methods to the imported item for both blanket purchase agreements and quotations. Blanket purchase agreements or quotations can also be invalidated and replaced with the latest price/sales catalog information when your supplier chooses an action code of Replace.

Release 11 of the Purchasing Documents Open Interface supports the EDI transmissions of the price/sales catalogs (ANSI X12 832) and responses to requests for quotation (ANSI X12 843).

See

Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual

Receiving Open Interface

You can automatically import receipt information from other Oracle Applications or your existing non–Oracle systems using the Receiving Open Interface. This interface lets you integrate your Oracle Purchasing application quickly with new or existing applications. For example, you can easily load barcoded and other receiving information from scanners and radio frequency devices, and the Receiving Open Interface maintains the integrity of the new data as well as the receipt data already in Purchasing. Advance Shipment Notices sent from suppliers are also validated in the Receiving Open Interface.

The *Oracle Purchasing User's Guide* provides an essay that explains how to use the Receiving Open Interface to integrate other applications with your Oracle Purchasing application.

See

Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual

10

Oracle Receivables

This chapter summarizes the following open interfaces included with your Oracle Receivables application:

- AutoInvoice
- AutoLockbox
- Customer Interface
- Sales Tax Rate Interface
- Tax Vendor Extension

Importing Transactions Using AutoInvoice

The Oracle Receivables AutoInvoice Import program lets you transfer transactions from other systems into Receivables. You can import invoices, credit memos, debit memos, and on–account credits using AutoInvoice. AutoInvoice ensures that the data is accurate and valid before creating the transaction in Receivables.

The AutoInvoice Purge program lets you delete the interface lines that were processed and successfully transferred into Receivables by the AutoInvoice Import program. You do not have to run this program if the Purge Interface Tables system option is set to Yes; in this case, Receivables deletes the interface lines automatically after you run AutoInvoice.

AutoInvoice Reports

AutoInvoice automatically generates the AutoInvoice Execution report each time you run AutoInvoice. This report lets you review the results of each AutoInvoice submission by listing how many revenue and credit transactions are selected, accepted, and rejected for each currency. The report also shows the total invoice amount for each transaction type for all transactions processed.

Use the AutoInvoice Execution report to match Receivables revenue and credit transaction counts to those from your other financial systems. You can also use the report to reconcile with other Receivables reports, such as the Transaction Register.

If you have lines that fail AutoInvoice validation, Receivables generates the AutoInvoice Validation report. You can use this report to review lines that have failed different phases of validation and the error messages associated with these lines.

See

Oracle Receivables User's Guide

Processing Bank Receipts Using AutoLockbox

The Oracle Receivables AutoLockbox program eliminates manual data entry by automatically processing receipts that your customers send directly to your bank. You can also use AutoLockbox for historical data conversion.

Processing Bank Receipts

To use AutoLockbox to process bank receipts, you first work with your customers to determine how this information will be transmitted. When you submit the program, AutoLockbox reads and formats the data from your bank file into interim tables using an SQL *Loader script. Receivables ensures that the data in the interim tables is valid before transferring it to the Receivables tables and creating QuickCash receipt batches. (Records that fail validation remain in the interim tables until the information is updated and resubmitted for validation.)

If you chose to submit Post QuickCash after running AutoLockbox you can optionally query the validated receipts in the QuickCash window and review or update the application information. To automatically apply the receipts to your customer's open debit items or place amounts 'on–account', run Post QuickCash (see Note). After you run Post QuickCash, Receivables treats the receipts like any other receipts; you can reverse and reapply them and apply any unapplied, unidentified, or on–account amounts.

> **Note:** You can also choose to run Post QuickCash automatically when you submit AutoLockbox. However, this method does not provide you with the opportunity to view or update application information before applying each receipt.

Data Conversion

You can also use AutoLockbox for historical data conversion. For example, you can use AutoLockbox to transfer receipts from your previous accounting system into Oracle Receivables. AutoLockbox ensures that all receipt information is accurate and valid before transferring it into Oracle Receivables tables. This saves you time and effort by eliminating manual data entry when upgrading from a legacy accounting system.

See

Oracle Receivables User's Guide

Importing Customer Information Using Customer Interface

The Oracle Receivables Customer Interface lets you import and validate current or historical customer information from other systems into Receivables. After customer information is imported into the system, you can use Customer Interface to import additional data for that customer (such as additional contacts or addresses) and update existing information.

The Customer Interface program validates the data you load in the Customer Interface tables by ensuring that the columns in the interface tables reference the appropriate values and columns in the rest of the system. The program also ensures that each record is unique. The program supports the same data relationship for customer information as the Receivables Customer windows.

Import Program

Customer Interface uses an import program to import data into Receivables tables. An import program is a custom program that you write which converts data from your feeder system into a standard data format that Customer Interface can read. After the import data is loaded into the interface tables, you can run Customer Interface to validate the data and convert it into Receivables customer information.

The type of feeder program you write depends on the environment from which you are importing data. For example, you can use SQL*Loader, SQL*Report, PL/SQL, or C to write an import program to import data from a non–Oracle system. Regardless of the type of import program you write, the output should be in a standard data format that Customer Interface can use to import the information into Receivables.

Data Conversion

You can also use Customer Import for data conversion. By writing your own conversion program, you can import historical data from your original customer database into Oracle Receivables. The Customer Import program ensures that all customer information is accurate and valid before transferring it into Oracle Receivables tables.

See

Oracle Receivables User's Guide

Importing Address Validation Data and Sales Tax Rates Using Sales Tax Rate Interface

The Sales Tax Rate Interface lets you load sales tax records into your Oracle Receivables application from your sales tax feeder system. You can use the Sales Tax Rate Interface program to load new locations and tax rates from an interface area into Receivables. The program lets you load one or more tax rates for the same location which cover different date ranges and postal codes. The records that you load into Receivables through the Sales Tax Rate Interface program update your existing sales tax rates with the most current tax rates for each location.

You can then use this new tax information to create invoices manually, import invoices into Receivables using the AutoInvoice program, and validate new customer addresses that you enter.

> **Note:** Oracle Order Entry/Shipping also uses the Sales Tax Rate Interface.

Load Multiple Tax Locations and Rates

The Sales Tax Rate Interface program allows you to load all of your locations and tax rates into Receivables at one time rather than enter each one manually. You can also load rates for sales tax rate overrides. You can immediately use this new tax information to create invoices manually, import invoices into Receivables using the AutoInvoice program, and validate new customer addresses that you enter.

Maintain Up to Date Tax Rate Information

Use the Sales Tax Rate Interface program to ensure that you have the most current sales tax information in Receivables. You can submit this program periodically to update your existing tax rates with the most recent changes.

Adjust Tax Rate Dates

The Sales Tax Rate Interface program can adjust the active date range of existing tax rates as new tax rates are loaded into Receivables.

See

Oracle Receivables Tax Manual

Oracle Receivables User's Guide

Calculating Tax Using the Tax Vendor Extension

The Tax Vendor Extension lets you integrate external tax calculation programs with Oracle Applications. This lets you provide for complex tax calculation needs while retaining the full power of Oracle Receivables to create and store all other tax data.

The Tax Extension is called whenever a tax rate is calculated by the Receivables Tax Engine. When implemented, the Tax Extension will return a tax rate or amount from the vendor program. Receivables will use this information to create the appropriate tax line(s) and related accounting information. The Tax Extension can be implemented to generate single or multiple tax lines for every invoice line.

Tax rates are calculated in the following Receivables windows and concurrent programs:

- Adjustments windows
- AutoInvoice
- Copy Transactions window
- Credit Transactions window
- Transactions window

Tax rates are also calculated in the following Oracle Order Entry/Shipping window:

- Sales Orders window

At the time of order entry, the tax amount for an order or line is calculated by calling the Receivables Tax Engine. Consequently, if you have installed a Tax Vendor, it will be called to calculate tax on the order in the same way as on the invoice.

> **Note:** Tax on an order is for information only and will be recalculated at the time of invoice creation. This is necessary because tax rates change over time and there could be a large gap between the order date and the invoice date.

See

Oracle Receivables Tax Manual

Index

A

ACE Interface, 2 − 2

ACE interface, update process, 2 − 2

Activity Management Gateway, 8 − 2

Assets
 ACE interface, 2 − 2
 budget open interface, 2 − 3
 mass additions interface, 2 − 5
 physical inventory interface, 2 − 8
 production interface, 2 − 7

AutoInvoice, 10 − 2
 open interface, 10 − 2

AutoLockbox, 10 − 3

B

Bank Statement Open Interface, 3 − 2

Billing extensions, overview, 8 − 7

Budget Interface, 2 − 3

Budget Upload, open interface, 4 − 2

Budgeting, Upload budget process, 2 − 4

C

Cash Management
 bank statement open interface, 3 − 2
 forecasting open interface, 3 − 3
 reconcilation open interface, 3 − 4

Client Extensions, 8 − 4

Client extensions, upgrading, 8 − 6

cost plus, application programming interface, 8 − 8

Credit Card Transaction Interface, 7 − 2

Customer Interface, 10 − 5

Customer Item Interface, 5 − 2

D

Daily conversion rates, GL_DAILY_RATES_INTERFACE table, 4 − 4

Daily Rates Interface, 4 − 4

F

Forecasting Open Interface, 3 − 3

G

General Ledger
 budget upload, 4 − 2

Reader's Comment Form

Oracle Financials Open Interfaces Manual
A58482–01

Oracle Corporation welcomes your comments and suggestions on the quality and usefulness of this publication. Your input is an important part of the information we use for revision.

- Did you find any errors?
- Is the information clearly presented?
- Do you need more information? If so, where?
- Are the examples correct? Do you need more examples?
- What features did you like most about this manual? What did you like least about it?

If you find any errors or have any other suggestions for improvement, please indicate the topic, chapter, and page number below:

_____.

_____

_____

_____

_____

_____

_____

_____

Please send your comments to:

Oracle Applications Documentation Manager
Oracle Corporation
500 Oracle Parkway
Redwood Shores, CA 94065 USA
Phone: (650) 506–7000   Fax: (650) 506–7200

Or, send electronic mail to **appsdoc@us.oracle.com**.

If you would like a reply, please give your name, address, and telephone number below:

_____

_____

_____

Thank you for helping us improve our documentation.