Oracle® Cost Management User's Guide

Release 11

March 1998





Oracle® Cost Management User's Guide Release 11

The part number for this volume is A57766-01.

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Preface

Welcome to the Oracle® Cost Management User's Guide, Release 11.

This user's guide includes the information you need to work with Oracle Cost Management effectively. It contains detailed information about the following:

- Overview and reference information
- Specific tasks you can accomplish using Oracle Cost Management
- Oracle Cost Management setup
- Oracle Cost Management functions and features
- Oracle Cost Management windows
- Oracle Cost Management reports and processes

This preface explains how this user's guide is organized and introduces other sources of information that can help you.

About This User's Guide

This guide contains overviews as well as task and reference information about Oracle Cost Management. This guide includes the following chapters:

- Chapter 1.provides an overview of Oracle Cost Management, its structure and the types of costing that it supports.
- Chapter 2 provides information about setting up Oracle Cost Management as well as other integrated Oracle Manufacturing Applications.

Note: Implementation information and procedures are contained in this chapter.

- Chapter 3 explains how to define, view, and purge item cost information.
- Chapter 4 explains how standard costing is implemented and how it functions including how transactions are costed.
- Chapter 5 explains how average costing is implemented and how it functions including how transactions are costed.
- Chapter 6 explains how project manufacturing costing is implemented and how it functions including how transactions are costed.
- Chapter 7 explains how flow manufacturing costing functions.
- Chapter 8 explains the period close process.
- Chapter 9 explains how to submit requests for reports and processes and briefly describes each report and process.

Audience for This Guide

This guide assumes you have a working knowledge of your business area's processes and tools. It also assumes you are familiar with Cost Management. If you have never used Cost Management, we suggest you attend one or more of the Cost Management training classes available through World Wide Education. For more information about Cost Management and Oracle training, see: Other Information Sources.

Do Not Use Database Tools to Modify Oracle Applications 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.

Consequently, we STRONGLY RECOMMEND that you never use SQL*Plus or any other tool to modify Oracle Applications data unless otherwise instructed.

Other Information Sources

Here are some other ways you can increase your knowledge and understanding of Cost Management.

Online Documentation

All Oracle Applications documentation is available online on CD–ROM, except for technical reference manuals. There are two online

formats, HyperText Markup Language (HTML) and Adobe Acrobat (PDF).

All user's guides are available in HTML, Acrobat, and paper. Technical reference manuals are available in paper only. Other documentation is available in Acrobat and paper.

The *content* of the documentation does not differ from format to format. There may be slight differences due to publication standards, but such differences do not affect content. For example, page numbers and screen shots are not included in HTML.

The HTML documentation is available from all Oracle Applications windows. Each window is programmed to start your web browser and open a specific, context–sensitive section. Once any section of the HTML documentation is open, you can navigate freely throughout all Oracle Applications documentation. The HTML documentation also ships with Oracle Information Navigator (if your national language supports this tool), which enables you to search for words and phrases throughout the documentation set.

Related User's Guides

Cost Management shares business and setup information with other Oracle Applications products. Therefore, you may want to refer to other user's guides when you set up and use Cost Management.

If you do not have the hardcopy versions of these manuals, you can read them online using the Applications Library icon or Help menu command.

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 Cost Management (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.

Oracle Applications Demonstration User's Guide

This guide documents the functional storyline and product flows for Global Computers, a fictional manufacturer of personal computers products and services. As well as including product overviews, the book contains detailed discussions and examples across each of the major product flows. Tables, illustrations, and charts summarize key flows and data elements.

Oracle Bills of Material User's Guide

This guide describes how to create various bills of materials to maximize efficiency, improve quality and lower cost for the most sophisticated manufacturing environments. By detailing integrated product structures and processes, flexible product and process definition, and configuration management, this guide enables you to manage product details within and across multiple manufacturing sites.

Oracle Inventory User's Guide

This guide describes how to define items and item information, perform receiving and inventory transactions, maintain cost control, plan items, perform cycle counting and physical inventories, and set up Oracle Inventory.

Oracle Order Entry/Shipping User's Guide

This guide describes how to enter sales orders and returns, copy existing sales orders, schedule orders, release orders, plan departures and deliveries, confirm shipments, create price lists and discounts for orders, and create reports.

Oracle Project Manufacturing User's Guide

This guide describes the unique set of features Oracle Project Manufacturing provides for a project-based manufacturing environment. Oracle Project Manufacturing can be tightly integrated with Oracle Projects; however, in addition to Oracle Projects functionality, Oracle Project Manufacturing provides a comprehensive set of new features to support project sales management, project manufacturing costing, project manufacturing planning, project manufacturing execution and project quality management.

Oracle Purchasing User's Guide

This guide describes how to create and approve purchasing documents, including requisitions, different types of purchase orders, quotations, RFQs, and receipts. This guide also describes how to manage your supply base through agreements, sourcing rules and

approved supplier lists. In addition, this guide explains how you can automatically create purchasing documents based on business rules through integration with Oracle Workflow technology, which automates many of the key procurement processes.

Oracle Work in Process User's Guide

This guide describes how Oracle Work in Process provides a complete production management system. Specifically this guide describes how discrete, repetitive, assemble–to–order, project, flow, and mixed manufacturing environments are supported.

Oracle General Ledger User's Guide

This guide explains how to 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. This manual also includes complete information on implementing Budgetary Control.

Oracle Receivables User's Guide

Use this manual to learn how to implement flexible address formats for different countries. You can use flexible address formats in the suppliers, banks, invoices, and payments windows.

Oracle HRMS User's Guide

This manual explains how to enter your employees. It also explains how to set up organizations and site locations. Even if you do not install Oracle HRMS, you can set up your employees, site locations, and organization using Oracle HRMS forms.

Oracle Projects User's Guide

This user's guide explains how to set up projects for use in project manufacturing and project accounting.

Reference Manuals

Oracle Automotive Implementation Manual

This manual describes the setup and implementation of the Oracle Applications used for the Oracle Automotive solution.

Oracle Manufacturing, Distribution, Sales and Service 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 open interfaces found in Oracle Manufacturing.

Oracle Applications Message Reference Manual

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

Oracle Project Manufacturing Implementation Manual

This manual describes the setup steps and implementation for Oracle Project Manufacturing.

Oracle Self-Service Web Applications Implementation Manual

This manual describes the setup steps for Oracle Self–Service Web Applications and the Web Applications dictionary.

Installation and System Administration

Oracle Alert User's Guide

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

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 Cost Management. This manual details additional steps and setup considerations for implementing Cost Management 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 Cost Management installation, this guide describes all you need to know about setting up and using Cost Management 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 Flexfields Guide

This guide provides flexfields planning, setup and reference information for the Cost Management 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 Applications Installation Manual for Windows Clients

This guide provides 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 Product Update Notes

If you are upgrading your Oracle Applications, refer to the product update notes appropriate to your update and product(s) to see

summaries of new features as well as changes to database objects, profile options and seed data added for each new release.

Oracle Applications Upgrade Preparation Manual

This guide explains how to prepare your Oracle Applications products for an upgrade. It also contains information on completing 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 Cost Management System Administrator.

Other Sources

Training

We offer a complete set of formal training courses to help you and your staff master Cost Management and reach full productivity quickly. We organize these courses into functional learning paths, so you take only those courses appropriate to your job or area of responsibility.

You have a choice of educational environments. You can attend courses offered by Oracle Education Services at any one of our many Education Centers, or you can arrange for our trainers to teach at your facility. In addition, Oracle training professionals can tailor standard courses or develop custom courses to meet your needs. For example, you may want to use your organization structure, terminology, and data as examples in a customized training session delivered at your own facility.

Support

From on-site support to central support, our team of experienced professionals provides the help and information you need to keep Cost Management 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 Oracle8 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 Cost Management and this user's guide.

We value your comments and feedback. At the end of this guide is a Reader's Comment Form you can use to explain what you like or dislike about Cost Management or this user's guide. 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.

CHAPTER

1

Cost Management

 ${f T}$ his chapter describes Oracle Cost Management, including:

- Overview of Cost Management: page 1 2
- Cost Structure: page 1 4
- Inventory and Manufacturing Costing Compared: page 1 10
- Standard and Average Costing Compared: page 1 15
- Overview of Activity-Based Costing: page 1 18

Overview of Cost Management

Oracle Cost Management is a full absorption, perpetual cost system for purchasing, inventory, work in process, and order entry transactions. Cost Management supports multiple cost elements, costed transactions, activity–based costing, comprehensive valuation and variance reporting, and thorough integration with Oracle Financials.

Cost Management automatically costs and values all inventory, work in process, and purchasing transactions. This means that inventory and work in process costs are up-to-date and inventory value matches the cumulative total of accounting transactions.

Cost Management provides flexible cost setup features, including multiple cost elements and unlimited sub-elements, unlimited resources and overheads, and unlimited activities. For example, you can use one or more of the following cost elements: material, material overhead, resource, outside processing, and overhead. Sub-elements enable you to analyze costs in greater detail. For example, you can have multiple material overhead sub-elements such as purchasing, material handling, freight, duty, and so on. This enables you to accurately define and maintain costs and associate them with items.

Cost Management provides flexible account setup including accounts by organization, subinventory, and work in process accounting class so that you can distribute costs to the proper expense accounts and capture valuation in the proper asset accounts.

Cost Management provides comprehensive valuation and variance reporting. Perpetual inventory and work in process balances are maintained on-line. Multiple variances are supported: purchase price, standard cost, cycle count, physical inventory, work in process usage, and work in process efficiency.

Cost Management also provides extensive cost simulation, copying, and editing capabilities that enable you to project costs and keep them accurate.

Cost Management supports flexible period-based accounting that enables you to transact in more than one open period at the same time. You can reconcile and analyze one open period while conducting business in a subsequent period. Further, you can transfer summary or detail account activity to Oracle General Ledger and close a period at any time.

Costing Methods

Cost Management supports both standard and average costing. You can use average costing for one organization and standard costing for another organization. See: Standard and Average Costing Compared: page 1-15.

See Also

Overview of Standard Costing: page 4 – 2

Overview of Average Costing: page 5 – 2

Inventory and Manufacturing Costing Compared: page 1 – 10

Cost Structure

A cost structure is the collection of definitions and methods used to cost inventory, bills of material, and work in process. The cost structure is composed of:

- Organizations
- · Cost organizations and shared costs
- Cost elements
- Sub-elements
- Activities
- Basis types
- Distribution to the General Ledger

Inventory Organizations

In Oracle Manufacturing, each inventory organization must have a cost structure that you define. Organizations can have their own cost structure or can share attributes of a similar cost structure. See: Organization Parameters Window, *Oracle Inventory User's Guide*.

Before you set up Inventory, Bills of Material, or Work in Process, examine the current cost structure of your organization(s) to determine which costing features and functions to use.

Cost Organizations and Shared Costs

You can share costs across standard cost organizations as long as the child cost organizations use only Inventory. You cannot share costs across average costing organizations.

The two item attribute controls, Costing Enabled and Inventory Asset Value determine whether you share costs. If you plan to share costs across standard costing organizations, set the control level for these attributes to the item level. The organization that holds the costs is called the "cost master organization."

Costs are maintained by the cost master organization and shared by the child cost organizations. All reports, inquiries, and processes use the shared costs and you cannot enter costs into the child cost organizations.

Note: The cost master organization can be a manufacturing organization using Work in Process.

You can also set up average cost organizations even if you share standard costs with another group of organizations. The average and standard costing organizations can share the same item master organization. However, the average cost organization is its own cost master organization.

For each organization to create and maintain its own costs, set the control level for Costing Enabled and Inventory Asset Value item attributes to the item/org level. Even if each organization holds its own costs, they can share the same common item master. See: Defining Items, *Oracle Inventory User's Guide*.

Cost Elements

Product costs are the sum of their elemental costs. With inventory standard and average costing, only the material and material overhead cost elements are used. With manufacturing standard and average costing, you can also use the resource, overhead, and outside processing cost elements. See: Inventory and Manufacturing Costing Compared: page 1-10.

Cost elements are defined as follows:

Material	The raw material/component cost at the lowest level of the bill of material determined from the unit cost of the component item.
Material Overhead	The overhead cost of material, calculated as a percentage of the total cost, or as a fixed charge per item, lot, or activity. You can use material overhead for any costs attributed to direct material costs. If you use Work in Process, you can also apply material overhead at the assembly level using a variety of allocation charge methods.
Resource	Direct costs required to manufacture products, calculated as the standard resource rate times the standard units on the routing, per operation, or as a fixed charge per item or lot passing through an operation. Resources can be people (labor), machines, space, or miscellaneous charges.
Overhead	The overhead cost of resource and outside processing, calculated as a percentage of the resource or outside processing cost, as a fixed amount per resource unit, or as a fixed charge per item or lot passing through an operation. Overhead is used as a means to allocate

department costs or activities. For example, you can define multiple overhead sub–elements to cover both fixed and variable overhead, each with its own rate. You can assign multiple overhead sub–elements to a single department, and vice versa.

Outside Processing

This is the cost of outside processing purchased from a supplier. Outside processing may be a fixed charge per item or lot processed, a fixed amount per outside processing resource unit, or the standard resource rate times the standard units on the routing operation. To implement outside processing costs, you must define a routing operation, and use an outside processing resource.

Sub-Elements

If you are using manufacturing costing, you can use sub-elements as smaller classifications of the cost elements. Each cost element must be associated with one or more sub-elements. Define sub-elements for each cost element and assign a rate or amount to each one. You can define as many sub-elements as needed.

Material
Sub-Elements

Classify your material costs, such as plastic, steel, or aluminum. Define material sub–elements and assign them to item costs. Determine the basis type (allocation charge method) for the cost and assign an appropriate amount. See: Defining Material Sub–Elements: page 2 – 18.

Material Overhead Sub-Elements

Define material overhead sub-elements and assign them to item costs. Determine the basis type for the cost and define an appropriate rate or amount, such as purchasing, freight, duty, or material handling. See: Defining Overhead: page 2 – 20.

Resource Sub-Elements

Define resource sub-elements. Determine the basis type for the cost and define an appropriate rate or amount. Each resource you define is a sub-element, can be set up to charge actual or standard costs, and may generate a rate variance when charged. See: Defining a Resource, *Oracle Bills of Material User's Guide*.

Overhead Sub-Elements

Define overhead sub-elements and assign them to your item costs. Determine the basis type for the

cost and define an appropriate rate or amount. Overhead sub–elements are applied in the routing and usually represent production overhead. You can define overheads based on the number of units or lot moved through the operation, or based on the number of resource units or value charged in the operation. See: Defining Overhead: page 2-20.

Outside Processing Sub-Elements

Define outside processing sub-elements. Determine the basis type for the cost and define an appropriate rate or amount. This sub-element is associated with the outside processing cost element and represents service provided by suppliers. Each outside processing resource you define is a sub-element, may be set up to charge actual or standard costs, and may generate a purchase price variance when charged. See: Defining a Resource, *Oracle Bills of Material User's Guide*.

Activities

An action or task you perform in a business that uses a resource or incurs cost. You can associate all product costs to activities. You can define activities and assign them to any sub–element. You can also assign costs to your activities and build your item costs based on activities. See: Overview of Activity–Based Costing: page 1 – 18.

Basis Types

Use basis types to determine how costs are assigned to the item. Each sub-element must have a basis type, as follows:

Item

Used with material and material overhead sub-elements to assign a fixed amount per item, generally for purchased components. Used with resource, outside processing and overhead sub-elements to charge a fixed amount per item moved through an operation.

Lot

Used to assign a fixed lot charge to items or operations. The cost per item is calculated by dividing the fixed cost by the item's standard lot size for material and material overhead sub–elements. For routing steps, the cost per item is calculated by dividing the fixed cost by the

standard lot quantity moved through the operation associated with a resource, outside processing, or overhead sub-element.

Resource Value

Used to apply overhead to an item, based on the resource value earned in the routing operation. Used with the overhead sub–element only and usually expressed as a rate. The overhead calculation is based on resource value:

resource value earned in the operation \times overhead rate

Resource Units

Used to allocate overhead to an item, based on the number of resource units earned in the routing operation. Used with the overhead sub–element only. The overhead calculation is based on resource units:

resource units earned in an operation \times overhead rate or amount



Suggestion: You may optionally use resource units and resource value to earn material overhead when you complete units from a job or repetitive schedule.

Total Value

Used to assign material overhead to an item, based on the total value of the item. Used with the material overhead sub-element only. The material overhead calculation is based on total value:

(total item standard cost $\,-\,$ this level material overhead) $\, imes\,$ overhead rate

where *this level* equals the cost added at the current level of an assembly.

Activity

Used to directly assign the activity cost to an item. Used with the material overhead sub–element only. The material overhead calculation is based on activity:

activity occurrences ÷ # of items × activity rate

Cost Transfer and Distribution to the General Ledger

All costs are maintained by cost element. You can use organization parameters to choose how to transfer cost distribution to the general ledger. If you choose to define separate accounts for each cost element for your subinventories and WIP accounting classes (if you use Work in Process), you get an elemental distribution in your general ledger. If you choose, you can assign the same account to one or more cost elements and Cost Management consolidates the value of those elements before passing the value to the general ledger.

Inventory and Manufacturing Costing Compared

The terms inventory and manufacturing costing are used to describe costing functionality that is dependent on your installation of Oracle Applications (products installed, new Release 11 users, or Release 10 or Release 10SC upgrade user) and your setup of Cost Management.

Inventory costing is specific to distribution organizations that do not use Work in Process but may use Purchasing, Order Entry/Shipping, and even Bills of Material. Manufacturing costing is applicable to organizations that specifically use Work in Process but may also use other products.



Attention: In all versions of Release 10 and in production releases of Release 10SC prior to production 16, manufacturing standard costing was not available, and you could only use inventory average costing. If you are a Release 10 or Release 10SC inventory average costing you will continue to use the old cost processor (see below). You should contact Oracle Consulting Services if you plan to do any of the following:

- continue to use inventory costing but take advantage of support for material overhead costing
- use manufacturing average costing
- use project manufacturing costing

Setup Scenario and Features

Outlined below are the major features found in five typical setup scenarios:

Scenario 1: Standard Costing - Distribution Organization

- Costing Method is Standard
- · All costs transacted at standard
- Two cost elements: material and material overhead

Scenario 2: Standard Costing – Distribution Organization with Bills of Material

- Costing Method organization parameter is set to Standard
- Five cost elements (material, material overhead, resource, outside processing, and overhead) if costs are rolled up



Scenario 3: Standard Costing - Manufacturing Organization

- Costing Method organization parameter is Standard
- Five cost elements (material, material overhead, resource, outside processing, and overhead)

Scenario 4: Average Costing - Distribution Organization (R10 Processor)

- Costing Method organization parameter is set to Average
- One cost element: material only

Scenario 5: Average Costing - Distribution Organization (R11 processor)

- Costing Method organization parameter is set to Average
- Five cost elements (material, material overhead, resource, outside processing, and overhead)

Scenario 6: Average Costing - Manufacturing Organization (R11 processor)

- Costing Method organization parameter is set to Average
- Five cost elements (material, material overhead, resource, outside processing, and overhead)
- CST: Average Costing profile option set to Inventory and Work in Process

Differences Between Inventory and Manufacturing Costing

The following table shows the differences between inventory and manufacturing costing:

Feature	Inventory Costing	Inventory With Bills of Material Costing	Inventory With Bills of Material and Work in Process Costing
Values and Variances	No WIP values or variances	No WIP values or variances	Work in process values and variances
Costing Method	Average or stan- dard costing	Average or stan- dard costing	Standard and average costing

Feature	Inventory Costing	Inventory With Bills of Material Costing	Inventory With Bills of Material and Work in Process Costing
Sub-elements	Material and material overhead cost elements only	Material and material overhead cost elements only. Resource, outside processing, and overhead if you use a cost rollup	All cost elements
Distributions	Material and ma- terial overhead distribution only (material over- head for standard costing only)	Distribution of all cost elements	Distribution of all cost elements
Cost Rollup	No cost rollup	Cost rollup (Standard Costing Only)	Cost rollup (Standard Costing Only)
Shared Costs	Can share costs	Cannot share costs if you use cost rollup	No shared costs

Table 1 – 1 Feature Differences Between Inventory and Manufacturing Costing

See Also

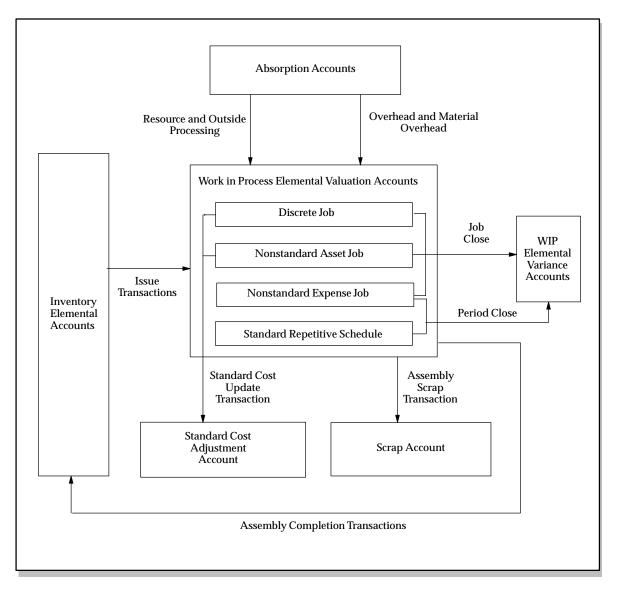
Overview of Standard Costing: page 4 - 2

Standard and Average Costing Compared: page 1-15

Work in Process Transaction Cost Flow

The following diagram displays the cost flow associated with work in process transactions.





You can use separate accounts by cost element and by WIP accounting class for maximum account traceability. However, if you enter the same account for more than one cost element, the system maintains elemental cost visibility. This is true under both standard and average costing.

Valuation accounts are charged when material is issued to a job or schedule, or when resources, outside processing, or overhead is earned by a job or schedule. They are also relieved when assemblies are

completed from a job or schedule. Variance accounts are charged upon job or period close, depending on how the WIP parameters are set (for repetitive schedules) or the type of job, asset, or expense.

See Also

Component Issue and Return Transactions: page 4-16 Work in Process Standard Cost Transactions: page 4-16 Work in Process Average Cost Transactions: page 5-46

Standard and Average Costing Compared

Cost Management offers two costing methods: standard costing and average costing.

Average costing is used primarily for distribution and other industries where the product cost fluctuates rapidly, or when dictated by regulation and other industry conventions. Average costing allows you to:

- value inventory at a moving average cost
- track inventory and manufacturing costs without the requirement of having predefined standards
- determine profit margin based on an "actual" cost method
- measure the organization's performance against historical costs
- include all direct costs of manufacturing an item in that item's inventory cost

Use standard costing for performance measurement and cost control. Standard costing allows you to:

- value inventory at a predetermined cost
- determine profit margin based on projected costs
- record variances against expected costs
- update standard costs from any cost type
- evaluate production costs relative to standard costs
- measure the organization's performance based on predefined product costs
- evaluate product costs to assist management decisions

The following table shows the functional differences between average and standard costing.

Average Costing	Standard Costing
Material with Inventory; all cost elements with Bills of Material	Material and material overhead with Inventory; all cost elements with Bills of Material
Item costs held by cost element	Item costs held by cost sub-element

Table 1 - 2 Comparison of Standard and Average Costing

Average Costing	Standard Costing
Unlimited sub-elements	Unlimited sub-elements
No shared costs; average cost is maintained separately in each organization	Can share costs across organizations when not using Work in Process
Maintains the average unit cost with each transaction	Moving average cost is not maintained
Separate valuation accounts for each cost element	Separate valuation accounts for each subinventory and cost element
No variances for Work in Process Transactions	Variances for Work in Process transactions

Table 1 - 2 Comparison of Standard and Average Costing

Under average costing, you cannot share costs. Average costs are maintained separately in each organization.

Under standard costing if you use Inventory without Work in Process, you can define your item costs-in the organization that controls your costs and share those costs across organizations. If you share standard costs across multiple organizations, all reports, inquiries, and processes use those costs. You are not required to enter duplicate costs. See: Organization Parameters Window, Oracle Inventory User's Guide and Defining Costing Information, Oracle Inventory User's Guide.

Note: The organization that controls your costs can be a manufacturing organization that uses Work in Process or Bills of Material.

Organizations that share costs with the organization that controls your costs cannot use Bills of Material.

Valuation Accounts and Cost Elements with Average Costing

The system maintains the average unit cost at the organization level; it does not use any subinventory valuation accounts. If you had separate valuation accounts by subinventory, total inventories would balance, but account balances by subinventory would not match the inventory valuation reports.

Note: Cost Management enforces the same account number for organization level material and intransit accounts. Otherwise the balances of inventory valuation reports do not equal the sum of accounting transactions.

Changing from Standard to Average Costing

Once transactions have been performed you cannot change the costing method of an organization in the Organization Parameters window in Oracle Inventory. See: Organization Parameters Window, *Oracle Inventory User's Guide* and Defining Costing Information, *Oracle Inventory User's Guide*.

See Also

Overview of Standard Costing: page 4 – 2

Inventory Standard Cost Transactions: page 4 – 3

Work in Process Standard Cost Transactions: page 4 – 16

Overview of Average Costing: page: page 5 – 2

Inventory Average Cost Transactions: page 5 – 29

Work in Process Average Cost Transactions: page 5 – 46

Standard Cost Valuation: page 4 - 62

Average Cost Valuation: page 5 – 59

Inventory Standard Cost Variances: page 4 – 63

Work in Process Standard Cost Variances: page 4 – 64

Average Cost Variances: page 5 – 60

Inventory and Manufacturing Costing Compared: page 1 – 10

Overview of Activity-Based Costing

With activity-based costing, you can more accurately assign direct and allocate indirect costs to products than traditional product costing methods. This essay is a guide to set up activity-based costing in Oracle Cost Management and Oracle General Ledger. Your actual implementation may vary.



Suggestion: Before you implement activity-based costing, consult with your financial advisors or auditors. Implementing activity-based costing may require significant changes to your general ledger structure.

Additional Information:

Peter BB. Turney,

Common Cents: The ABC Performance Breakthrough (Cost Technology, 1991)

James Brimson, Activity Accounting—An Activity-Based Cost Approach (Coopers & Lybrand, John Wiley & Sons, 1991)

See Also

What Is Activity–Based Costing?: page 1 – 18

When Is Activity–Based Costing Appropriate?: page 1 – 20

How Is Activity–Based Costing Used?: page 1 – 20

Activity–Based Cost Modeling in Oracle Applications: page 1 – 21

Activity-Based Management: page 1 – 29

Implementing Activity–Based Costing: page 1 – 22

Performing an Activity Analysis: page 1 – 22

Calculating Activity Costs in General Ledger: page 1 - 23

Computing Activity–Based Product Costs in Cost Management: page 1 – 27

What Is Activity-Based Costing?

According to Computer Aided Manufacturing International (CAM–I): "Activity–based costing is a methodology that measures the cost and performance of activities, resources, and cost objects. Resources are

assigned to activities, then activities are assigned to cost objects based on their use. Activity-based costing recognizes the causal relationships of cost drivers to activities."

Instead of measuring the cost of what goes into your items, you measure how you make and deliver items. By understanding the activities and processes, the cost drivers that influence the cost of the activity, and whether the activity is needed at all, you can analyze the cost of making items and how to eliminate unnecessary steps.

CAM-I Activity-Based Cost Terminology

The following definitions from the CAM–I glossary of Activity–Based Management are used with permission from Computer Aided Manufacturing International, Inc.

Activity Work performed within an organization. 2. The

aggregations of actions performed within an organization that are useful for purposes of

activity-based costing.

Activity-Based Management

A discipline that focuses on the management of activities as the route to improving the value received by the customer and the profit achieved by providing this value. This discipline includes cost driver analysis, activity analysis, and performance measurement. Activity-based management draws on activity-based costing as its

major source of information.

Bill of Activities A listing of the activities required (and optionally,

the associated cost of the resources consumed) by a

product or other cost object.

Cost Driver Any factor that causes a change in the cost of an

activity. For example, the quality of parts received by an activity (e.g., the percent that are defective) is a determining factor in the work required by that activity. An activity may have multiple cost

drivers associated with it.

Cost Element An amount paid for a resource consumed by an

activity and included in an activity cost pool. For example, power cost, engineering cost, and depreciation may be cost elements in the activity cost pool for a machine activity. (See *bill of*

activities, and resource.)

Cost Object Any customer, product, service, contract, project,

or other work unit for which a separate cost

measurement is desired.

Performance Measures Indicators of the work performed and the results achieved in an activity, process, or organizational unit. Performance measures may be financial or non–financial. An example of a performance measure of an activity is the number of defective parts per million. An example of a performance measure of an organizational unit is return on

sales.

Process A series of activities that are linked to perform a

specific objective. For example, the assembly of a television set or the paying of a bill or claim entails

several linked activities.

Resource An economic element that is applied or used in the

performance of activities. Salaries and materials, for example, are resources used in the performance

of activities. (See cost element.)

When Is Activity-Based Costing Appropriate?

Activity-based costing is especially useful to allocate indirect costs to items that are difficult to track and assign. The main benefit is more accurate product overhead costing. However, the main drawback is the time involved to analyze and define activities and resources, restructure the chart of accounts, and set up activity-based costing. All industries can benefit from activity-based costing. This becomes even more critical as the direct labor portion of your product costs decreases, while overhead and administrative costs increase.

Activity-based costing is also appropriate for many service-oriented activities, such as product warranty and claims, engineering and design support, customer service operations, and maintenance operations.

How Is Activity-Based Costing Used?

Most companies use activity-based costing for management reporting, to make better product pricing, make vs. buy, product roll-out, and other strategic decisions. Frequently, activity-based costing allocates

expenses that are not normally included in your inventory balances, such as general, administrative, and selling expenses.

The financial community has not completely accepted activity-based costing, and as a result, companies rarely use it for external reporting, such as Security and Exchange Commission reports, and financial statements.

You can use General Ledger as part of an activity-based cost model. This includes allocating resources and reallocating resource balances to activities. Using Cost Management, you can assign activity costs to your products and report on activity-based product costs.

Using General Ledger and the budget process, you can create resources and activities, perform allocations from general ledger actual balances to resources, and then perform secondary allocations to activities. Since you may have multiple budgets, General Ledger supports multiple sets of activity–based costs.

Using mass budgeting allocations, you can allocate general ledger balances to your resources and allocate resource balances to your activities.

Activity-Based Cost Modeling in Oracle Applications

Using General Ledger and statistical budget journals, you can record and track your activity performance measures. With multiple budgets, one for actual activity-based costs and another for budgeted activity-based costs, you can tie your actual general ledger costs to actual activity-based costs and compare actual activity-based costs to budgeted activity-based costs. With the Financial Statement Generator and statistical budget journals, you can calculate and report activity unit costs. In Cost Management, you can have multiple activities where each references multiple cost types. You can specify an activity for each item cost, enter the usage, and the activity costs are automatically calculated.

If you use Bills of Material, you can reference an activity for each operation resource in a routing. You can roll up and calculate assembly activity costs for all levels of your bills of materials and routings. With the item cost inquiries and reports, you can see your activity costs by assembly and the usage of the activity in the assembly. You can specify a cost type for all of these inquiries and reports and compare your traditional standard costing against your activity–based costs.

Typically, you hold your activity-based costs in one or more cost types. You can evaluate your profit margins, inventory valuation, and activity product costs, by specifying the activity cost type in the Margin Analysis, Inventory Valuation, and Cost Comparison reports.

You can charge and report resources, outside processing, and overhead by activity. You can then analyze and report various business activities, including setup, teardown, inspection, and so on.

Implementing Activity-Based Costing

You can implement activity-based costing in your organization using General Ledger and Cost Management. Use General Ledger to compute activity unit costs. Then use Cost Management to apply activity costs to products and roll up activity costs through the bills of material.

▶ To implement activity-based costing:

- 1. Perform activity analysis. See: Performing Activity Analysis: page 1 22.
- 2. Calculate activity costs in General Ledger. See: Calculating Activity Costs in General Ledger: page 1 23.
- 3. Compute activity-based product costs in Cost Management. See: Computing Activity-Based Product Costs in Cost Management: page 1 27.

Performing an Activity Analysis

▶ To perform an activity analysis:

1. Define cost objects and product lines.

Identify the cost objects (products or services) for which to compute costs and divide them into groups that use similar processes (e.g. families of products or services).

2. Develop activities.

Identify the activities performed for each process. For example, the process for delivering a particular product line to customers might include Sales and Marketing, Engineering, Production, and Finance

and Administration activities. For each activity, specify a performance unit of measure that used to quantify usage of that activity. For example, the performance measure of the Purchasing activity may be "Number of Purchase Order Lines". For each product you can specify the number of purchase order lines expected in a given period.

3. Identify cost drivers.

For each activity, identify the factors that influence the total cost of that activity. For example, the cost of the Purchasing activity depends on the complexity of the product being purchased, supplier delivery, quality performance, and other factors.

4. Identify resources that activities consume.

For each activity, identify the resources consumed to perform it. For example, the Purchasing activity might consume labor, computer system resources, and office space. This permits you to allocate resources to activities based on the true consumption for the activity, rather than on the traditional volume basis.

You now have a model that allocates resource costs to activities and associates specific quantities of activities to each product or cost object.

5. Record the results of your activity analysis manually, using a spreadsheet or another tool of your choice.

Calculating Activity Costs in General Ledger

Once you have modeled your activities, processes, cost objects, and resources, you can use General Ledger and Cost Management to implement your activity cost model.

The following method enables you to map between the activity-based and traditional financial reporting methods, and explain any differences between the two.

Prerequisites

☐ Perform an activity analysis. See: Performing an Activity Analysis: page 1 – 22.

▶ To calculate activity costs in General Ledger:

1. Define a General Ledger budget for actual activity-based costs.

Define a budget in General Ledger to hold accounting information representing activity-based costs. By using a General Ledger budget for your activity-based costs, you can tie activity-based costs to financial reporting by running reports that compare actual activity-based costs to actual costs based on traditional cost methods. Example budgets:

FY95 Current Year Budget
 FY96 Next Year Budget
 FY95ABC Actual ABC costs

2. Add resource accounts to chart of accounts.

Set up a general ledger account for each resource where the cost is to be allocated to activities. For some resources, you may already have general ledger accounts that correspond exactly to a specific activity. For other resources, however, your existing accounts may be too detailed or not detailed enough, in which case you need to add the appropriate accounts.

For example, during your activity analysis you may have identified an information systems (IS) resource that you consume when you perform several different activities. In your general ledger, however, you have a single general ledger account to capture all Finance and Administration expenses. You need to create a new general ledger account for IS expenses and then either start tracing costs to the new account or allocate Finance and Administration expenses to the new IS expense account, based on some beneficial factor.

3. Trace or allocate costs to resource accounts.

To get costs into your new resource accounts, you need to either start posting expenses to those accounts directly or assign costs to those accounts using allocations. In either case, use the mass budgeting feature of General Ledger to move or allocate actual account balances to your FY95ABC budget account balances. For some accounts, your mass budgeting allocation simply copies the actual balance to the FY95ABC budget balance. For other accounts, however, you reclassify the general ledger actual balance for one account to several accounts in the FY95ABC budget.

You now have the proper amount in the FY95ABC budget for an account corresponding to each resource. Now set up your activity accounts and allocate resource amounts to them.

4. Add activity accounts to chart of accounts.

Use General Ledger Mass Budgeting to allocate resource costs to your activities. Define a general ledger account for each activity. You will probably never post actual amounts to these accounts, but only use them as mass budgeting allocation target accounts in your FY95ABC budget.

Post activity performance totals to activity accounts

To compute activity unit costs, record in General Ledger the total number of times you performed each activity. You can post a statistical budget journal (STAT currency) in General Ledger to your FY95ABC budget that contains a line for each activity account and an amount (quantity) indicating the number of times you performed each activity. For example, your statistical budget journal entry might include a line for the Purchasing activity account with an amount equal to the number of purchase order lines you created in the last period.

6. Allocate costs to activity accounts.

You now define Mass Budgeting Allocations that reallocate resource account balances in your FY95ABC budget to your activity accounts. This step transfers balances from your resource accounts (in your FY95ABC budget) to your activity accounts. So after this step, your activity account balances in your FY95ABC budget represent the total cost of each activity for the period.

	Actual	FY95ABC (resource accounts)	FY95ABC (activity accounts)
G & A Expenses	100		
IS Expenses		80	
Other Expenses		20	
Purchasing (activity)			60
Machine Depreciation	1000	1000	
Test (activity)			200
Production (activity)			700

7. Report activity unit costs.

You can now use the Financial Statement Generator (FSG) to create a report that lists total cost for each activity (the FY95ABC budget balance), your total number of occurrences (the statistical balance), and the unit cost (total cost divided by total occurrences).

See Also

See: Oracle General Ledger Topics, *Oracle General Ledger User's Guide* for information about Oracle General Ledger, account setup, budgeting, and statistical journals.

Computing Activity-Based Product Costs in Cost Management

After you have determined activity unit costs, you can compute activity-based product costs.

▶ To compute activity-based product costs:

1. Define a cost type to hold activity-based cost information.

If you are using General Ledger to compute activity unit costs, you will probably name your activity-based costing cost type the same name used for the activity-based cost budget in General Ledger. See: Defining Cost Types: page 2 – 11.

For example, you might have the following cost types:

Frozen
 Frozen Standard

FY96 Next Year Budgeted Costs

• FY95ABC Actual ABC costs

2. Define activities and enter activity costs.

Define each activity from your activity cost model to Cost Management. For each activity, you can enter a cost for one or more cost types. Specify the total number of occurrences and total cost for each activity for the FY95ABC cost type. The cost per occurrence (activity unit cost) is computed automatically.

In addition, you can add more information to your activity definition using descriptive flexfields. For example, you might define a "Value Added" descriptive flexfield for the values (value set) "low," "medium," and "high." See: Defining Activities and Activity Costs: page 2 – 15.

3. Define a sub-element to reference for each activity.

Cost Management requires you to specify a cost element and sub-element for each cost you enter. Before you associate activities with products, set up at least one cost sub-element that you can reference for each activity. You can reference a default activity when you define the sub-element and the material overhead sub-element. You can use the "Activity" basis to directly allocate the activity cost to the item. For example, you could create a sub-element called "ABC Cost" for the material overhead cost element and reference it for each activity cost. See: Defining Overhead: page 2 – 20.

4. Associate activities to products.

Either directly or indirectly specify your activity costs for each product. Products include all of your finished goods, subassemblies, as well as purchased items. For each item and cost type, you can specify any number of item costs where each item cost references a cost element, sub-element, and activity.

Some item costs, such as material purchase price, are direct. For direct costs, you can specify the exact amount and reference the appropriate activity, such as "Material". Other activity costs, such as placing purchase orders, are based on the estimated or actual usage of the activity for this item and the activity unit cost. For these types of costs, you specify an activity, the "Activity" cost basis, and enter the usage of this activity for the item. Cost Management automatically computes the net cost for the item by multiplying the activity usage times the activity unit cost. See: Defining Item Costs: page 3 – 4.

5. Specify activities in routings.

Bills of Material lets you reference an activity for each operation resource in a routing. For example, in a single operation you might use the same labor resource for two activities, such as Setup and Run. By specifying an activity for each resource usage, Cost Management can track all costs by activity. See: Creating a Routing, *Oracle Bills of Material User's Guide*.

6. Assign activities to routing overheads.

When you define overhead sub–elements, you can enter a default activity. For every overhead earned in a routing, the default activity is used by the cost rollup to associate the overhead cost with the activity. This includes overheads based on the number of resources earned in the operation and overheads based on the number of units moved in the operation. In this way, all overhead costs in your routings reference an activity. See: Defining Overhead: page 2-20.

7. Roll up costs by activity.

Once you have entered your activity costs for each item, roll up your assembly costs by activity and report bill of activities. Depending on the cost type and rollup options, you can roll up activity costs through the bills of material and keep activity costs at all levels of your bills and routings. See: Defining Cost Types: page 2 – 11. See: Rolling Up Assembly Costs: page 4 – 32.

8. Report and view costs by activity.

Using the item cost inquiries and reports, you can see your costs by activity summary, activity by level, activity by operation, activity by department, activity by flexfield segment value, sub–element by activity, and cost element by activity. See: Viewing Item Costs: page 3-9.

9. Compare standard with activity-based costs.

You can compare your traditional standard costs with your activity-based costs using the Cost Comparison reports. You can compare by cost element, sub-element, activity, department, level type, or operation. In addition, you can run the Margin Analysis and Inventory Valuation reports using any cost type. This way you can use your activity-based costs for better margin and inventory reporting.

Activity-Based Management

Activity-based management is a discipline that focuses on managing activities to improve customer value and product profit. Once you have identified your activities, cost drivers, performance measures, and activity costs, you can begin process improvement and re-engineering. The primary benefits of activity-based management are:

- Improved Profitability
- Identification of Hidden Profits or Losses
- Reduction of Waste and Unnecessary Costs
- Better Pricing Decisions
- Improved Operations

Performance Measurement with Oracle General Ledger

One of the ways you can implement performance measurement is to define a budget in General Ledger for your activity-based cost budget. Initially, you created a budget to derive your actual activity-based costs, called FY95ABC. Now, you can create another budget to compare actual activity-based costs with your budget (expected) activity-based costs. You could call this budget FY95ABC – budget. This new budget could provide important information for continuing operations and strategic decisions, such as plant expansion or new product lines. With this additional budget, you could compare resource costs, activity costs, and activity unit costs.

To create this budget, and budgeted activity unit costs, you would repeat the same steps used for the FY95ABC budget.

Performance Measurement with Oracle Cost Management

After you have created the general ledger budget for your activity-based costs, you can define another cost type for your items, such as the "Budget ABC" cost type. You would follow the same steps as you used for the "Actual ABC" cost type.

Using these budgeted activity unit costs, you can compare your actual activity performance against your budgeted activity performance for your products. You can use the Cost Comparison reports to compare actual activity–based item costs against budgeted activity–based item costs. You could also report your profit margins and inventory valuation with the "Budget ABC" cost type, and compare these results against reports, using the "Actual ABC" cost type.

You can also charge and report work in process transactions by activity. If you manually charge your resources, you can specify the activity performed in the operation. If you backflush or earn resources at standard, you can use the activities from the work in process routing. Using the WIP Accounting Distribution report, you can specify an activity, such as setup, and get all the charges for the activity.

CHAPTER

2

Setting Up

T his chapter tells you everything you need to know to set up Oracle Cost Management, including:

- Overview: page 2 2
- Setting Up Periods: page 2 10
- Defining Cost Types: page 2 11
- Defining Activities and Activity Costs: page 2 15
- Defining Subelements: page 2 18
- Mass Editing Item Accounts: page 2 28
- Mass Editing Cost Information: page 2 30
- Copying Costs Between Cost Types: page 2 40
- Default Basis Types: page 2 45
- Associating Expenditure Types with Cost Elements: page 2 47
- Defining Category Accounts: page 2 49
- Associating WIP Accounting Classes with Category Accounts: page 2 54
- Cost Groups: page 2 57
- $\bullet\,$ Profile Options and Security Functions: page 2 62

Overview of Setting Up

This section contains an overview of each task you need to complete to set up Oracle Cost Management.

Oracle Applications Implementation Wizard

If you are implementing more than one Oracle Applications product, you may want to use the Oracle Applications Implementation Wizard to coordinate your setup activities. The Implementation Wizard guides you through the setup steps for the applications you have installed, suggesting a logical sequence that satisfies cross–product implementation dependencies and reduces redundant setup steps. The Wizard also identifies steps that can be completed independently—by several teams working in parallel—to help you manage your implementation process most efficiently.

You can use the Implementation Wizard as a resource center to see a graphical overview of setup steps, read on–line help for a setup activity, and open the appropriate setup window. You can also document your implementation, for further reference and review, by using the Wizard to record comments for each step.

Set Up Oracle Applications Technology

The setup steps in this chapter tell you how to implement the parts of Oracle Applications specific to Oracle Cost Management.

The Implementation Wizard guides you through the entire Oracle Applications setup, including system administration. However, if you do not use the Wizard, you need to complete several other setup steps, including:

- performing systemwide setup tasks such as configuring concurrent managers and printers
- managing data security, which includes setting up responsibilities to allow access to a specific set of business data and complete a specific set of transactions, and assigning individual users to one or more of these responsibilities

Also, if your product uses Oracle Workflow to, for example, manage the approval of business documents or to derive Accounting Flexfield values via the Account Generator, you need to set up Oracle Workflow.

Before You Begin

Before you set up Oracle Cost Management, you should:

- Set up an Oracle Applications System Administrator responsibility. See: Setting Up Oracle Applications System Administrator, Oracle Applications System Administrator's Guide.
- Set up your Oracle Applications Set of Books, including:

Define Your Chart of Accounts

Define Your Accounting Periods

Define Your Currencies

See: Defining Sets of Books, Oracle General Ledger User's Guide.

See Also

Setup Prerequisites: page 2 – 3

Setup Checklist: page 2 - 5

Setup Steps: page 2 - 6

Setup Prerequisites

Before you set up Cost Management, you must complete the setup for the following products:

Oracle Inventory

Make sure you set up Inventory as described in Overview of Inventory Setup, *Oracle Inventory User's Guide*. Ensure that all the following steps have been completed:

	Daily	Your	Daily	and	Period	Rates
--	-------	------	-------	-----	--------	-------

- ☐ Define Your Organizations
- ☐ Define Your Organization Parameters
- ☐ Define Your Units of Measure
- ☐ Define Your Subinventories
- ☐ Define Your Categories

	Define Category Sets
	Open Your Accounting Periods
	Define Your Default Category Sets
	Define Your Items, Item Attributes and Controls
	Define Your Account Aliases
	Launch Your Transaction Managers
Ora	acle Purchasing
Ora	tke sure you set up Purchasing as described in Setup Overview, acle Purchasing User's Guide. In addition to the set up, ensure that all a following steps have been completed:
	Define Your Receiving Options and Controls
	Define Your Purchasing Options
	Attention: These steps are required only if you plan to use Purchasing as part of inventory or manufacturing costing. See: Inventory and Manufacturing Costing Compared.
Ora	acle Bills of Material
Set	tke sure you set up Bills of Material as described in Overview of up, <i>Oracle Bills of Material User's Guide</i> . In addition to the set up, sure that all the following steps have been completed:
	Attention: Bills of Material is optional for inventory and manufacturing costing. See: Inventory and Manufacturing Costing Compared.
	Define Your Bills of Material Parameters
	Define Your Resources
	Define Your Departments
	Define Your Departments and Associate with Resources
	Define Overheads and Assign them to Departments
	Control Overheads by Resource
	Define and Review Routing and Bill Structures

Oracle Work in Process

Make sure you set up Work in Process as described in Overview of Setting Up Work in Process, *Oracle Work in Process User's Guide*. In addition to the set up, ensure that all the following steps have been completed:

Attention: Work in Process is optional for manufacturing costing. See: Inventory and Manufacturing Costing Compared.

- ☐ Define WIP Accounting Classes and Valuation Accounts
- Define WIP Parameters

Setup Checklist

After you log on to Cost Management, complete the following steps. The steps required are dependent on what type of costing — standard or average,:inventory or manufacturing — you are using.

Step #	Description	Standard Costing	Average Costing	Project Mfg. Costing.
1	Set Cost Management Profile Options	Required	Required	Required
2	Set Cost Management Security Functions	Required	Required	Required
3	Define Cost Types	Required	Required	Required
4	Defining Activities and Activity Costs	Optional	Optional	Optional
5	Define Cost Groups	NA	NA	Required
6	Define Material Sub-Elements	Required	Required	Required
7	Define Overheads	Optional*	Optional*	Optional*
8	Define Material Overhead Defaults	Optional*	Optional*	Optional*
9	Associate Expenditure Types with Cost Elements	NA	NA	Required

Table 2 - 1 Cost Management Setup Checklist

Step #	Description	Standard Costing	Average Costing	Project Mfg. Costing.
10	Define Category Accounts	Optional	Optional	Optional
11	Associate WIP Account Classes with Category Accounts	Optional	Optional	Optional

Table 2 - 1 Cost Management Setup Checklist

Setup Steps

Step 1 Set your Personal Profile Options

Cost Management personal profile options control defaults within windows as well as data processing options. See: Profile Options: page 2 – 62.

Step 2 Set your Security Functions

Cost Management security functions determine what information can be viewed, created, updated, and deleted in certain windows in Cost Management. See: Security Functions: page 2-63.

Step 3 Define your Cost Types

You must define cost types. Each cost type contains a unique set of costs and has its own set of cost controls. See: Defining Cost Types: page 2-11.

Step 4 Defining your Activities and Activity Costs

You can define activities, activity rate information, and activity and activity cost type associations. You can assign an activity to any cost. If you use the activity basis type, you can directly assign the activity cost to the item. When you use the other basis types, the cost is based on the sub–element, basis type, and entered rate or amount. The activity defaults from the sub–element; and, if needed, you can override the default. See: Defining Item Costs: page 3-4. See: Defining Activities and Activity Costs: page 2-15.

Step 5 Define Cost Groups

You can define cost groups and use them to group project related costs. See: Defining Cost Groups: page 2 – 58.

Additional Information: This step is conditionally required if you plan to transfer project costs to Oracle Projects.

Step 6 Define Material Sub-Elements

Material sub-elements classify material costs, such as plastic or metal. A material sub-element has a default activity and a default basis type assigned to it. See: Defining Material Sub-Elements: page 2 – 18

Step 7 Define Overheads

You can use material overhead and overhead cost sub–elements to add indirect costs to item costs on either a percentage basis or as a fixed amount. See: Defining Overhead: page 2-20

Step 8 Define Material Overhead Defaults

You can define and update default material overhead sub–elements and rates at the organization or category level. When you define items in Oracle Inventory, these defaults are automatically used. This speed data entry when defining items. See: Defining Material Overhead Defaults: page 2-24.

Step 9 Associate Expenditure Types with Cost Elements

You must associate expenditure types with cost elements so that project transfers and the project related costs associated with miscellaneous transactions can be properly processed once they are transferred to Oracle Projects. See: Associating Expenditure Types with Cost Elements: page 2 – 47.

Additional Information: This step is conditionally required if you to plan to transfer project costs to Oracle Projects.

Step 10 Define Category Accounts (Optional)

You can define category accounts. Category accounts are part of the the product line accounting setup. See: Product Line Accounting Setup: page D – 32 and Defining Category Accounts: page 2 – 49.

Step 11 Associate WIP Accounting Classes with Categories (Optional)

You can associate WIP accounting classes with category accounts. Default WIP accounting classes are part of product line accounting setup. See: Product Line Accounting Setup: page D – 32 and Associating WIP Accounting Classes with Category Accounts: page 2-54.

Default Inter-Organization Options

This option determines how you charge your internal cost to transfer material between organizations. For example, transfer costs might include the cost of preparing the paperwork, the cost of boxing the item for shipment, or a formal transfer profit charged between the sending and receiving organizations. This is different from the transportation cost you pay to a freight carrier to physically move the material. This is different from the transportation cost paid to a freight carrier.

These options affect your entries in Inter-Organization Transfer:

No transfer charges	Do not add transfer charges to a material transfer.
Predefined percent of transaction value	Add a predefined percent of the transaction value to the material transfer. You define a default percentage in Define Organization Parameters.
Requested added value	Request a discrete value to add to the material transfer. You enter the value in Transfer Between Organizations at the time of the transfer.
Requested percent of transaction value	Request a percentage of the transfer value to add to the material transfer. You enter the value in Transfer Between Organizations at the time of the transfer

Default Inter-Organization Transfer Accounts

Oracle Inventory uses the following inter-organization accounts as defaults when you define a relationship between the current organization and another organization:

Inter–Inventory Transfer Credit	Collects the cost of the transfer charge. These charges reduce expenses for the sending
	organization.

Inter-Organization Payable Used by the receiving organization as a clearing account, and represents inter-company payables. You should reconcile inter-organization payable and receivable accounts during period close.

Intransit Inventory Represents the value of transferred inventory that has not arrived at the receiving organization. Depending on the Freight On Board (FOB) point defined for this transfer, the Intransit inventory is owned by either the shipping organization, FOB receipt, or the receiving organization, FOB shipment. Inventory uses this account when the transfer organizations use intransit inventory. If you use average costing, this account defaults from the organization level material account and you cannot change it.

Inter-Organization Receivable Used by the shipping organization as a clearing account, and represents inter-company receivables. You should reconcile inter-organization payable and receivable accounts during period close.

Inter – Organization PPV Under standard costing, the receiving organization uses this account to recognize the difference between the shipping organization standard cost and the receiving organization standard cost.

Note: These defaults are defined for each organization and the appropriate accounts from each organization are used when an inter-organization relationship is defined.

Setting Up Periods

Cost Management uses the accounting periods you define for your general ledger. You define accounting periods through period types and a calendar.

▶ To set up periods:

1. Define an accounting period type.

Period types can be months, quarters, or years. Specify the number per year of the period type and whether the type corresponds to a system calendar (January to December) or a fiscal calendar. See: Defining Period Types, *Oracle General Ledger User's Guide*.

2. Define the accounting periods in your calendar and associate one calendar with each General Ledger set of books you set up.

Inventory allows you to have multiple calendars, such as a fiscal calendar for one set of books and a different calendar for another set of books.

For each calendar, name the periods within the calendar (such as month names: Jan., Feb., and so on), the accounting period type, the year and quarter of the period, the period number, and the start and end date of the period. See: Defining Calendars, *Oracle General Ledger User's Guide*.

3. Open the accounting periods you defined in your calendar for transaction collection purposes.

All Inventory and Work in Process transactions require an open period. The transaction date you specify (typically the current date) must fall within an open period. See: Maintaining Accounting Periods, *Oracle Inventory User's Guide*.



Attention: You can only open the period type accounted by your set of books. For most organizations, this is the monthly period type. You also cannot open an adjustments-type period—such as a thirteenth period for year-end adjustments.

Inventory also allows you to have multiple open periods for late transactions or correction of data before period close.

Defining Cost Types

A cost type is a set of costs uniquely identified by name. Two cost types are predefined for you, "Frozen" (for standard costs) and "Average." You can define and update an unlimited number of additional simulation or unimplemented cost types. Each cost type has its own set of cost controls.

Cost Types for Average Costing

In an manufacturing average costing organization, two costs types are required for inventory valuation and transaction costing: the Average cost type and a user-defined "Average Rates" cost type. These two cost types are defined as follows:

Average

This cost type holds the current average unit cost of items onhand, and is used to value transactions such as issues and transfers out (see transaction table below for details). Users can update costs in this cost type only by using the average cost update routine. A history is kept of all such update transactions. This cost type is seeded and does not have to be defined by the user.

Average Rates cost type

Any user-defined cost type which you use to resource to overhead associations and current overhead rates and any other user-defined subelement rates to be used in cost rollups and to cost applicable transactions.



Attention: You must define an "Average Rates" cost type to hold subelement rates/amounts. There should be no information associated with this cost type; any information found is ignored. After defining this cost type, you must select it when defining the Average Rates Cost Type parameter in the Organization Parameters window in Oracle Inventory. Rates/amount in this cost type are used, as applicable, until they are redefined. See: Setting Up Average Costing: page 5 – 6 and Defining Costing Information, *Oracle Inventory User's Guide*.

Predefined Cost Type Name	Costing Method	Purpose	Description
"Frozen"	Standard	Frozen standard costs	Used to value transactions and inventory balances for organizations that use standard costing. This cost type is not available for organizations using average costing.
"Average"	Average	Average costs	Used to value transactions and inventory balances for organizations that use average costing. This cost type is not available for organizations using standard costing.
None; user-defined	Average	Average rates	Used to hold resource to overhead associations, current overhead rates, and any other user-defined sub-element rates used in cost rollups and to cost applicable transactions. This cost type is not available for organizations using standard costing. You <i>must</i> define a cost type for average rates.
None; user-defined	Either standard or average	All other cost types	Use all other cost types for any purpose: cost history, product cost simulation, or to develop future frozen costs. These costs are not implemented (not frozen) costs. You can transfer costs from all other cost types to update the Frozen cost type.

Table 2 - 2

Prerequisites

☐ To define, update, or delete cost information, the Cost Types: Maintain security function must be included as part of the responsibility. See: Security Functions: page 2 – 63.

► To define a cost type:

1. Navigate to the Cost Types window.

Cost Types (CM3)		_ □ ×
Cost Type		
Description		
Default Cost Type		
Inactive On	(
☐ Multi-Org	,	
✓ Allow Updates		
✓ Available To Engine	ering	
Rollup Options	Previous Level Rollup Options	
☐ Component Yield	✓ Element	
☐ Snapshot Bills	☐ Sub-Element	
Alternate	Activity	
	▽ Operation	

- 2. Enter a cost type name.
- Select the default cost type.

For items where costs have not been defined for the cost type, the default cost type is used as the *next* source of costs that the cost rollup and the inventory value reports use for items not associated with the cost type being rolled up or reported upon. You can have a cost type default to itself. The default reflects the current organization's costing method, Frozen for standard costing; Average for average costing.

- 4. Select a date on which to inactivate the cost type. You cannot inactivate the Frozen or Average cost types. You can still inquire (but not change) inactive cost types. This has no effect on bill assemblies or work in process.
- 5. Indicate whether the cost type is a multi-organization cost type to share with other organizations.

Note: If disabled, this cost type name is only available to the inventory organization that creates it. If enabled, only the cost type *name* is shared, not the costs.

6. Indicate whether to allow updates in this cost type.

If Allow Updates is set to enabled (the default, you can change this cost type by processes such as mass edits, copy cost information, cost rollup, and cost update. To "freeze" the cost information in this cost type, disable Allow Updates. Even if updates are not allowed, you can still use this cost type to report, inquire, and update Frozen costs.

- 7. Indicate whether this cost type is available to Oracle Engineering.
- 8. Select rollup options:
 - Indicate whether to include the effect of component yield when rolling up costs for this cost type.
 - Indicate whether to save a snapshot of the bill of material structure for items you roll up. This creates an alternate bill. (This is only available if you have Oracle Bills of Material installed.) Oracle recommends that you use an alternate designator intended for the specific purpose of maintaining a snapshot of the bill being rolled up.

If Snapshot of Bills is enabled, you must enter an alternate name. You can then run the Indented Bill of Material Cost report for the alternate, even if the primary bill has changed.

9. Select previous level rollup options. These determine how much information is generated by the rollup. (They do not effect total unit cost.) If all options are disabled, the rollup generates one record for all prior level costs and stores the total in the material cost element. The options are as follows:

Element: Indicates that detail cost information by cost element is retained at previous levels. If disabled, all prior level costs are stored in the material cost element.

Subelement: Indicates whether to track sub-element costs at previous levels. If disabled, all prior level information does not reference a sub-element.

Note: For cost types to be frozen, retain detail for at least the cost element and sub-element.

Activity: Indicates whether to track activity costs at previous levels. If disabled, all prior level information does not reference an activity.

Operation: Indicates whether to track operation costs at previous levels. If disabled, all prior level information does not reference an operation.

See Also

Overview of Standard Costing: page 4 - 2

Overview of Average Costing: page 5 - 2

Updating Pending Costs to Frozen Standard Costs: page 4 - 39

Defining Activities and Activity Costs

Define activities, activity rate information, and activity and cost type associations. Use activities to assign indirect costs to items based upon the effort expended to obtain or produce the item, rather than as a percentage of a direct cost or an amount per item.

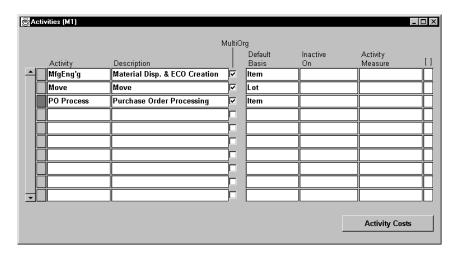
Activities are processes or procedures that consume costs and time. In addition to cost elements and sub-elements, costs may be associated with an activity. Activities may be directly related to building items, such as runtime or setup time; or they may be indirect, such as purchase order generation, payroll, and engineering activities. The goal of activity based cost accounting is to accurately identify your product costs, especially overhead costs.

Prerequisites

☐ To define, update, or delete cost information, the Activities: Maintain security function must be included as part of the responsibility. See: Security Functions: page 2 – 63.

► To define activities and activity costs:

1. Navigate to the Activities window.



- Enter an activity.
- 3. Check Multi-Org to indicate whether the activity name is a multi-organization activity to share with other organizations.

Note: If disabled, the name is only available to the organization that creates it. If enabled, only the activity *name* is shared, not the activity.

4. Select the activity default basis.

Basis is the method used to determine how to charge a transaction or apply product costs. The value you enter here is defaulted when you define item costs. The activity default basis will override the sub–element default basis as long as the basis is valid for the cost element. See: Defining Item Costs: page 3 – 4.

Activity: Used to apply activity costs to items. The activity basis type can only be used with the material overhead sub–element. The item cost is calculated by multiplying the activity cost by the ratio of the number of times the activity occurs, divided into the cumulative quantity of the item associated with those occurrences.

Item: Used to earn and apply costs for all sub–elements. For material and material overhead sub–elements, you charge a fixed amount per item. For resource, outside processing, and overhead sub–elements, you charge a fixed amount per item moved in an operation.

Lot: Used to earn and apply costs for all sub–elements. The item cost is calculated the same as an Item basis cost, except the unit cost is divided by the cost type lot size to derive the cost per item.

5. Optionally, select a date to inactivate the activity.

An inactive activity cannot be assigned as a default activity when defining material sub–elements, resources, or overhead. An inactive activity also cannot be associated with any resource when defining a routing, with a material overhead sub–element when defining material overhead defaults, or with any sub–element when defining item costs, even if the activity is the default activity for the sub–element.

An inactive activity, however, can still be used when defining item costs. (This applies for a new item if the inactive activity was previously specified for a material sub–element as material overhead defaults were defined.) Also, previously defined sub–elements referencing an inactive activity can still be used.

6. Enter the Activity Measure (allocation basis or cost driver) for your activity. For example, if the activity is allocating purchasing costs, the activity measure might be the number of purchase orders generated during a given period.

7. Choose the Activity Costs button and select a cost type to associate with your activity. Each activity can be associated with any number of cost types and each cost type and activity combination can have a different cost.

∰ A	ctivity Costs (M1)				_ _ _ ×
				Total	Cost Per
	Cost Type	Description		Occurrences	Occurrence []
	Frozen	Frozen Standard Cost Type	1,500,000.00	5000	300.00000
	Pending	Pending Standard Cost Type	1,500,000.00	5000	300.00000
-					
					_

- 8. Enter the total cost budgeted for the activity cost pool. This is the total activity cost you expect to incur during a specified time.
- 9. Enter the total number of times you expect to perform this activity during the budget period.

The system calculates the cost per occurrence by dividing the total cost by the total occurrences. This cost is used when you use a basis type activity for the material overhead sub-element.

See Also

Overview of Activity-Based Costing: page 1 - 18

Defining Subelements

You can define the following subelements in Cost Management:

- Defining Material Sub-Elements: page 2 18
- Defining Overhead: page 2 20
- Defining Material Overhead Defaults: page 2 24

You can define resource subelements in Oracle Bills of Material. See:

Defining Material Sub-Elements

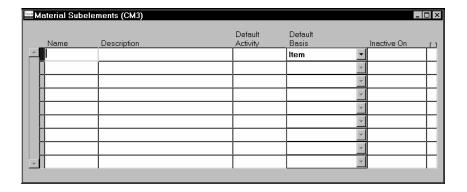
Material sub-elements classify material costs, such as plastic or metal. A material sub-element has a default activity and a default basis type assigned to it.

Prerequisites

☐ To define, update, or delete cost information, the Material Subelements:Maintain security function must be included as part of the responsibility. See: Security Functions: page 2 – 63.

▶ To define material sub-elements:

1. Navigate to the Material Subelements window.



- 2. In the Defaults alternative region, enter a material sub-element name.
- 3. Select the default activity. This activity is defaulted each time the sub–element is used to define an item cost.

Activities are processes or procedures that consume costs and time. In addition to the cost element and sub–element, all costs are associated with an activity. Activities may be directly related to building items, such as runtime or setup time; or they may be indirect, such as purchase order generation, payroll, and engineering change order activities. See: Defining Activities and Activity Costs: page 2 – 15.

4. Select the default basis for the material sub-element. This basis type is defaulted when you define item costs. Basis is the method used to determine how to charge a transaction or apply product costs. The options are as follows:

Item: Used for all sub–elements. For material and material overhead sub–elements, you charge a fixed amount per item. This is the default.

Lot: Used for all cost elements. The item cost is calculated by dividing the order cost by the lot size.

5. Optionally, select a date on which to inactivate the material sub-element.

Note: You cannot disable the default material sub-element for the organization.

A disabled material sub-element cannot be used to define a material cost when defining item costs, or to define a default material sub-element when defining organization parameters.

You can continue to use item costs previously defined for the inactive material sub–element.

▶ To associate an expenditure type with a sub-element:

1. Select an expenditure type.

If the *Project Cost Collection Enabled* parameter in the Organization Parameters window is set, you must associate an expenditure type with each sub–element. See: Organization Parameters Window, *Oracle Inventory User's Guide* and Defining Project Parameters, *Oracle Inventory User's Guide*.

You can only select expenditure types that belong to the Inventory expenditure class. Expenditure types are defined in Oracle Projects. See: Expenditure Type Classes, *Oracle Projects User's Guide*, Expenditure Types, *Oracle Projects User's Guide*, and Defining Expenditure Types, *Oracle Projects User's Guide*.

2. Save your work.

Defining Overhead

You can use material overhead and overhead cost sub-elements to add indirect costs to item costs on either a percentage basis or as a fixed amount in both standard and average costing organizations.

Each overhead sub-element has a default basis, a default activity, and an absorption account. The overhead absorption account offsets the corresponding overhead cost pool in the general ledger.

You can base the overhead charge on the number of resource units or percentage of resource value earned in the routing operation. Or, you can set up move–based overheads where the rate or amount is charged for each item moved in an operation. To do this, use the Item or Lot basis types.

You can base the material overhead charge on a percentage of the total value, which is earned when you receive purchase orders or perform WIP completion transactions. Or, you can use the Item or Lot basis types.

You can apply each of these sub-elements using different basis types for increased flexibility. Material overhead is earned when an item is received into inventory or completed from work in process. Overhead, based upon resources, is earned as the assembly moves through operations in work in process.

Note: If you use Oracle Bills of Materials, you must first define the bill of material parameters to use the overhead cost element in the Overhead window. If the bills of material parameters are not set up, you only have access to material overhead cost element. See: Defining Bills of Material Parameters, *Oracle Bills of Material User's Guide*.

Prerequisites

☐ To define, update, or delete cost information, the Overheads: Maintain security function must be included as part of the responsibility. See: Security Functions: page 2 – 63.

Defining overhead:

1. Navigate to the Overheads window.

Overheads (M1)		_ X
Overhead	BENEFITS	
Cost Element	Overhead	▼
Description	Benefits Overhead	
Absorption Account	01-520-5360-0000-000	
Default Basis	Resource Value	▼
Default Activity		
Expenditure Type		
Inactive On		[]
	Resources	Rates

- 2. Enter an overhead name.
- 3. Select a cost element:

Material Overhead: Define material overhead.

Overhead: Define resource and move-based overhead. This is only available if Bills of Material is installed.

4. Select an overhead absorption account.

This is the offset account for any cost earned to the inventory or work in process value.

5. Select a default basis type to be used as a default for the overhead being defined.

This basis type is used to determine how the overhead cost is earned and how it is applied to product costs. See: Default Basis Types: page 2-45.

6. Select a default activity to use for this overhead.

Activities are processes or procedures that consume costs and time. Your activities may be directly related to building your items, such as runtime or setup time; or they may be indirect, such as purchase order generation, payroll, and engineering activities. The goal of activity based cost accounting is to accurately identify your product costs, especially overhead costs. See: Defining Activities and Activity Costs: page 2-15

7. Select an expenditure type.

If the *Project Cost Collection Enabled* parameter in the Organization Parameters window is set, you must associate an expenditure type

with each sub-element. See: Organization Parameters Window, *Oracle Inventory User's Guide* and Defining Project Parameters, *Oracle Inventory User's Guide*.

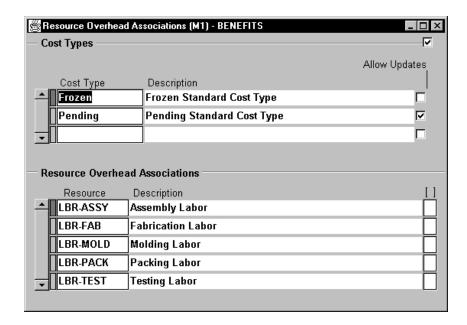
You can only select expenditure types that belong to the Burden Transactions expenditure class. Expenditure types are defined in Oracle Projects. See: Expenditure Type Classes, *Oracle Projects User's Guide*, Expenditure Types, *Oracle Projects User's Guide* and Defining Expenditure Types, *Oracle Projects User's Guide*.

8. Optionally, select a date on which to inactivate a material overhead or overhead.

An inactive overhead sub-element cannot be used to define an overhead cost (when defining item costs) or associated with a resource (when defining a resource).

You can continue to use item costs previously defined for and resources previously associated with the inactive overhead sub–element. The cost rollup will continue to roll up previously defined inactive overhead sub–elements.

- 9. Do one of the following:
 - To earn overheads and material overheads based on resource units or value, you must associate resources to overhead and material overhead for a specific cost type. Choose the Resources button to open the Resource Overhead Associations window.
 - To associate department and overhead combinations with a cost type, choose the Rates button to open the Overhead Rates window. This option is available for overheads only.
- 10. Save your work.
- ► To associate resources to overhead for a cost type:
 - 1. Navigate to the Resource Overhead Associations window.



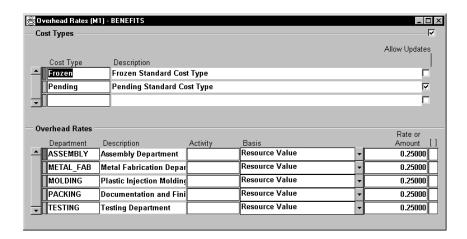
2. Select a cost type for which to associate resources to overhead.

This is only necessary for material overhead and overhead sub–elements with a basis type of Resource Value or Resource Units.



Attention: You only apply these overheads when they are associated with a resource.

- 3. Select the resource.
- 4. Save your work.
- ► To associate department and overhead combinations with a cost type:
 - 1. Navigate to the Overhead Rates window.



- 2. Select a cost type for which to associate departments with and assign rates or amounts to overhead. This is required for both resource and move (item or lot basis type) overheads.
- 3. Select a department.
- 4. Optionally, select an activity. The default is the activity selected as the default in the Overheads window. See: Defining Overhead: page 2 20.
- 5. Select the basis. The default is the basis selected as the default in the Overheads window. See: Default Basis Types: page 2 45.
- Enter the percentage rate or the fixed amount, as appropriate for the basis. If the basis is resource value, enter a rate in this field. If the basis is resource units, item, or lot, enter an amount in this field.
- 7. Save your work.

See Also

Overhead Report: page 9 - 45

Defining Material Overhead Defaults

You can define and update default material overhead sub-elements and rates. These defaults speed data entry when defining items.

When you define items, these material overheads are defaulted into the Frozen cost type under standard costing, and into the cost type you

defined to hold average rates under average costing. See: Defining Cost Types: page 2 – 11.

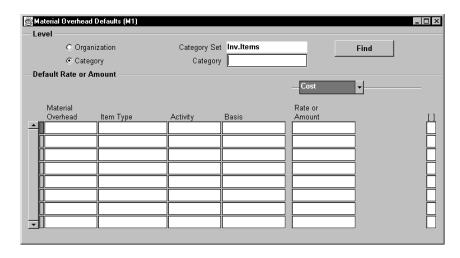
For buy items, enter material costs. For make items, roll up costs. You can specify an organization and category default for the same material overhead sub–element. When you have multiple defaults for the same sub–element, the category default takes precedent over the organization default. If you have two category level defaults, the default that matches the item's planning code takes precedence.

Prerequisites

You must be in the master cost organization to define material overhead defaults.

▶ To define material overhead defaults:

1. Navigate to the Material Overhead Defaults window.



- Select a default level for the material overhead sub-element and rate. The options are by organization or by inventory item category.
- 3. If you select category as the default level, select an item category. See: Overview of Item Categories, *Oracle Inventory User's Guide*.
- 4. In the Cost alternative region, select a material overhead sub–element to assign to the current organization or category.

You can enter a material overhead sub-element more than once. For the same material overhead sub-element, material overhead

rates you assign to a specific category override any material overhead rates you assign to an organization.

5. Select the item type: make items, buy items, or all items.

The system applies the default material overhead based upon an item's planning code. This determines the material overhead sub–elements and rates for items for items you purchase, manufacture, or for all items.

Within a category or organization, if the value you enter for Item Type matches the item's Make or Buy item attribute, the system uses the material overhead information associated with it instead of the information you enter for the All items value.

6. Select an activity. You can associate the sub–element with any activity.

The default is derived from the default activity you assigned when you defined material overhead. See: Defining Overhead: page 2 – 20.

7. Select a basis. The default is the value you entered for the default basis when you defined overhead.

Activity: Directly associate the activity cost with the item.

Item: Assign a fixed cost per item.

Lot: Assign a lot charge to items and operations.

Resource units: Charge overhead by multiplying the overhead amount by the number of resource units earned in the routing operation.

Resource value: Charge overhead by multiplying the overhead rate by the resource value earned in the routing operation.

Total value: Charge overhead by multiplying the total cost of the item, less material overhead earned at this level, by the material overhead rate.

8. Enter the rate or amount for the material overhead as appropriate for the basis.

Material overhead sub-elements with basis types of Total value and Resource value are usually defined as rates; those with basis types of Item, Lot, Activity and Resource units are usually defined as amounts.

9. If you select Activity for the basis, open the Activity alternative region and:

- Enter the number of activity occurrences for the current costing period, i.e., the total number of times this activity is performed during the current costing period.
- Enter the total number of items you expect to be associated with the activity during the current costing period, i.e., the total number of units that flow through the activity during the same period.

See Also

Defining Items, *Oracle Inventory User's Guide*Defining Item Attribute Controls, *Oracle Inventory User's Guide*

Mass Editing Item Accounts

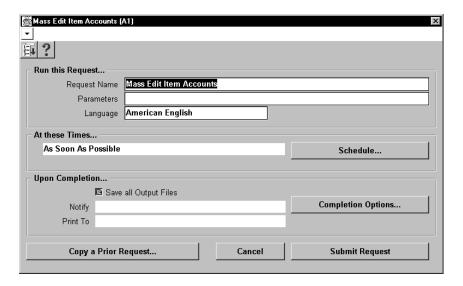
Mass edit account assignments for selected items. These accounts include: Cost of Goods Sold, Encumbrance, Expense, and Sales. You can edit your account assignments for all items, a category of items, or a specific item.



Attention: If you share standard costs, you do not share the item accounts. If you need to change your accounts, you must change them in all organizations.

▶ To mass edit item accounts:

1. Navigate to the Mass Edit Item Accounts window.



2. In the Parameters window, select which account type to change. The options are Cost of Goods Sold, Encumbrance, Expense, or Sales accounts.



- 3. Select an item range option. You can edit item accounts for All items, all items in a specific Category, or a Specific item.
- 4. If you selected Category in the Item Range field, select either a category set or a category. See: Overview of Item Categories, *Oracle Inventory User's Guide*.

If you selected Specific item in the Item Range field, select an item.

Optionally, select the old account for the item. Only these accounts are edited.

For example, if you choose Cost of Goods Sold as your account type, All Items as your item range, and enter 123–456–000000 as the old account, *only* accounts with this criteria are changed. If you do not specify an old account, *all* old Cost of Goods Sold accounts for *all* items are replaced with the account you specify in the New field.

- Select the new account for the item.
- Choose OK to save your work.

All items that meet the account type and old account number criteria entered are updated to the new account number.

See Also

Submitting a Request, Oracle Applications User's Guide

Mass Editing Cost Information

You can apply mass edits to cost information, including:

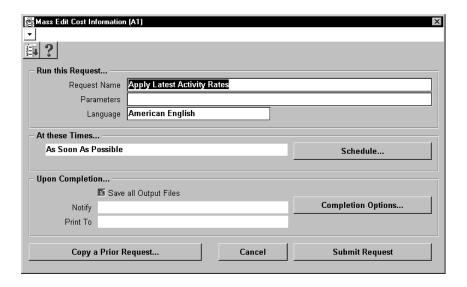
- apply new activity rates to item costs
- edit item shrinkage rates to a specified rate or a rate equal to your planning shrinkage rates
- create new costs and change costs to a specified amount by a percentage or an absolute amount
- create new costs by averaging the purchase order price for open purchase orders or historical purchase order receipts, or actual accounts payable invoice prices for items



Attention: You may want to limit mass edits to sub-elements with similar basis types. All sub-elements to be edited should be either rate-based or amount-based. The values entered for Fixed Rate and Change Amount fields have drastically different effects on sub-element cost, depending on the basis. For example, if you enter 10 for Fixed Rate, the mass edit updates the sub-element cost for amount-based sub-elements to 10 units of your functional currency. If the sub-element has a rate-based type, the mass edit updates the sub-element rate to 1000 percent, *not* 10 percent.

▶ To mass edit cost information:

1. Navigate to the Mass Edit Cost Information window: See: Submitting a Request, *Oracle Applications User's Guide*.



2. Select the Name of the request.

Apply Latest Activity Rates: Change item costs after modifying activity rates.

Change Cost Shrinkage Rates: Modify the costing shrinkage rates for items. This can be a specific rate or the item's planning shrinkage rate.

Mass Edit Actual Material Costs: Generate costs for items based upon purchasing activity. You can update item costs to be an average of or equal to actual accounts payable invoices, open purchase orders, or historical purchase order receipts for the specified date range.

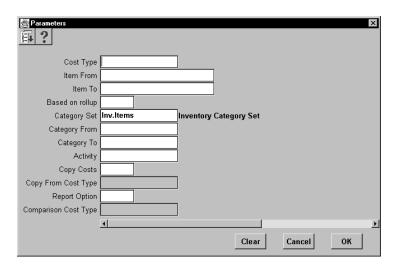
Mass Edit Material Costs: Update material sub-elements by a fixed amount or a percentage as appropriate for the basis type.

Mass Edit Material Overhead Costs: Update material overhead sub-elements by a fixed amount or a percentage, as appropriate for the basis type.

See the instructions below for further information.

► To apply latest activity rates to item costs:

Select a cost type.

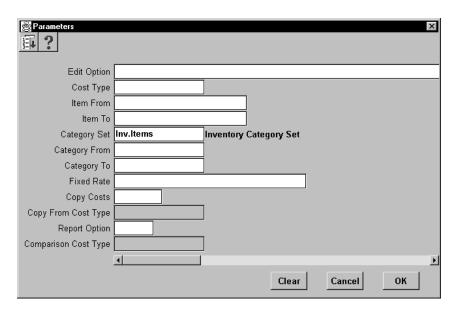


2. Select a range of Items From and To.

- 3. Indicate whether to edit only items that have a Based on Rollup attribute set to Yes, only those items that have a Based on Rollup set to No, or leave Based on Rollup blank to indicate all items.
- 4. Enter a Category Set. The default is the category for your costing functional responsibility.
- 5. Optionally, select a range of Categories From and To.
- 6. Optionally, select an activity. The new rates are applied to only this activity.
- 7. Optionally, indicate whether to copy costs from a specific cost type *before* performing the mass edit. If you set Copy Costs to Yes, specify the cost type to copy costs from.
- 8. Indicate whether to print a cost type comparison report. If enabled, specify another cost type to compare with the current cost type.

▶ To change the cost shrinkage rate:

1. Select an edit option: whether to update the item shrinkage rate to equal the item's planning shrinkage rate or a specified rate.

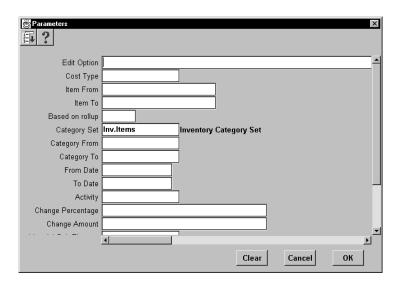


- 2. Select a cost type.
- 3. Select a range of Items From and To.
- 4. Select a Category Set.

- 5. Optionally, select a range of Categories From and To.
- 6. If you selected to update the shrinkage to specified shrinkage, enter the Fixed Rate (as a decimal). This must be less than 1.
- 7. Optionally, indicate whether to copy costs from a specific cost type *before* performing the mass edit. If you set Copy Costs to Yes, specify the cost type to copy costs from.
- 8. Indicate whether to print a cost type comparison report. If enabled, specify the cost type to compare with the current cost type.

➤ To mass edit actual material costs:

Select an edit option:



Update material costs to open PO average: This edit uses a hierarchy of dates when determining if the record falls within the specified date range. The hierarchy is as follows: the promised date from the purchase order shipment is used; if this date is not entered, the need-by date from the purchase order shipment is used; and, if this date is not entered, the approval date of the purchase order is used. The approval date always exists, as it is generated by the system upon approval of the purchase order. The mass edit uses only approved purchase orders.

Update material costs to PO receipt average: This edit uses the transaction date of the purchase order receipt into inventory when determining if the record falls within the specified date range.

Update material costs to invoice cost: This edit uses the accounting date accounts payable used for the invoice posting when determining if the record falls within the specified date range.

- 2. Select a cost type.
- 3. Select a range of Items From and To.
- 4. Indicate whether to edit only items that have a Based on Rollup attribute set to Yes, only those items that have a Based on Rollup set to No, or *all* items.
- 5. Select a Category Set.
- 6. Optionally, select a range of Categories From and To.
- 7. Optionally, select a date range.
- 8. Optionally, enter an activity to mass edit only sub–elements associated with a specific activity.
- 9. Optionally, enter an Change Percentage value (expressed as a decimal) by which to increase or decrease the average cost calculated by the mass edit.

For example, if the mass edit calculates an average cost of 100 and you enter a value of 0.10, the resulting cost of the sub-element is 110. You can use the Change Percentage field with the Change Amount field.

10. Optionally, enter an Change Amount to increase or decrease the average cost calculated by the mass edit, or change the average cost after it is modified by the amount entered in the Change Percentage field, if appropriate. For example, if the mass edit calculates an average cost of 100 and you enter a value of 0.10 in the Change Percentage field and a value of 10 in this field, the resulting cost of the sub-element is 120:

(calculated average cost \times (1 + change percentage) + change amount)

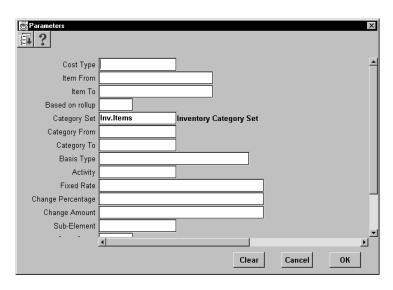
11. Select a material sub–element to limit the mass edit to items associated with a specific material sub–element.

This sub-element is also used by the mass edit when it creates new item costs. The default is the organization's default material sub-element, if one exists.

- 12. Optionally, indicate whether to copy costs from a specific cost type *before* performing the mass edit. If you set Copy Costs to Yes, specify the cost type to copy costs from.
- 13. Indicate whether to print a cost type comparison report. If enabled, specify the cost type to compare with the current cost type.

▶ To mass edit material costs:

1. Select a cost type.



- 2. Select a range of Items From and To.
- 3. Indicate whether to edit only items that have a Based on Rollup attribute set to Yes, only those items that have a Based on Rollup set to No, or leave blank to indicate all items.
- 4. Select a Category Set. The default is the category for your costing functional responsibility.
- 5. Optionally, select a range of Categories From and To.
- 6. Optionally, select a basis type by which to limit the mass edit.
- 7. Optionally, select a specific activity to mass edit only sub–elements associated with a specific activity.
- 8. Optionally, select a value to change the current sub-element amount to a new fixed amount.

You can use this value with the Change Percentage and/or the Change Amount fields.

Leave this field blank to have the current sub-element amount modified by the values entered in the Change Percentage and/or the Change Amount fields.

Optionally, enter an Change Percentage (positive or negative) by which to increase or decrease the sub-element amount.

The Fixed value, if not blank, is multiplied by the Change Percentage value. If the Fixed field is blank, the current sub-element amount is multiplied by the Change Percentage.

For example, if the value for Fixed is 200 and the value for Change Percentage is -5, the resulting cost of the sub-element is 190:

fixed or current amount \times (1 + (change percentage / 100))

10. Optionally, enter an Change Amount by which to increase or decrease the sub-element amount by a fixed amount.

For example, the sub-element amount before this update is 25, and you enter 10 in the Change Amount field, the new amount for the sub-element is 35.

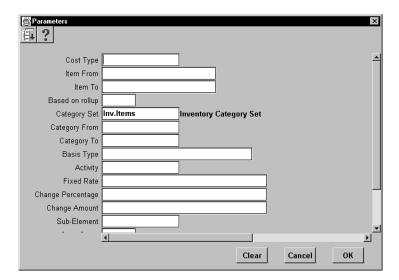
An Change Amount can also be used with an Change Percentage to increase or decrease the sub–element cost *after* it is modified by the amount entered in the Change Percentage field. If, the Change Amount is 10 and the Change Percentage is 5, the resulting cost of the sub–element is 195:

fixed or current amount \times (1 + (change percentage / 100)) + change amount

- 11. Select a material sub–element by which to limit the mass edit of items associated with a specific material sub–element.
- 12. Optionally, indicate whether to copy costs from a specific cost type *before* performing the mass edit. If you set Copy Costs to Yes, specify the cost type to copy costs from.
- 13. Indicate whether to print a cost type comparison report. If enabled, specify the cost type to compare with the current cost type.

To mass edit material overhead costs:

1. Select a cost type.



- 2. Select a range of Items From and To.
- 3. Indicate whether to edit only items that have a Based on Rollup attribute set to Yes, only those items that have a Based on Rollup set to No, or leave blank to indicate all items.
- 4. Select a Category Set. The default is the category for your costing functional responsibility.
- 5. Optionally, select a range of Categories From and To.
- 6. Optionally, select a basis type by which to limit the mass edit.
- 7. Optionally, select a specific activity to mass edit only items associated with a specific activity.
- Optionally, select a value to change the current sub-element rate or amount to a new fixed rate or amount.

The system considers this a currency amount if the sub-element being updated has a basis type of Item, Lot, or Resource Units. For example, if the functional currency is U.S. Dollars, 10 = \$10. If the sub-element basis type is Resource Value or Total Value, the value entered is used as a percentage (for example, 10 = 1000%). You can use this value with the Change Percentage and/or the Change Amount fields.

Leave this field blank to have the current sub-element rate or amount modified by the values entered in the Change Percentage and/or the Change Amount fields.

9. Optionally, enter an Change Percentage (positive or negative) by which to increase or decrease the sub-element rate or amount.

The Fixed Rate value, if not blank, is multiplied by the Change Percentage value. If the Fixed Rate field is blank, the current sub-element rate or amount is multiplied by the Change Percentage. For example, if Fixed Rate is 0.20 and Change Percentage is -10, the resulting rate of the sub-element is 0.18:

fixed or current rate or amount \times (1 + (increase percentage / 100))

10. Optionally, enter an Change Amount by which to increase or decrease the sub-element rate or amount by a fixed amount.

The system uses this value as a currency amount if the sub–element being updated has a basis type of Item, Lot, or Resource Units. For example, if the functional currency is U.S. Dollars, the sub–element amount before this update is 25, and you enter 10 in this field, the new amount for the sub–element is 35. If the sub–element basis type is Resource Value or Total Value, the value you enter is used as a percentage. For example, if the sub–element rate before this update is 250% and you enter 0.25, the new rate for the sub–element is 275%.

An Change Amount can also be used with an Change Percentage to increase or decrease the sub–element cost *after* it is modified by the amount entered in the Change Percentage field. If, the Change Amount is 10 and the Change Percentage is 5, the resulting cost of the sub–element is 195:

fixed or current amount \times (1 + (change percentage / 100)) + change amount

- Select a material overhead sub-element by which to limit the mass edit of items associated with a specific material overhead sub-element.
- 12. Optionally, indicate whether to copy costs from a specific cost type *before* performing the mass edit. If you set Copy Costs to Yes, specify the cost type to copy costs from.

13. Indicate whether to print a cost type comparison report. If enabled, specify the cost type to compare with the current cost type.

See Also

Submitting a Request, Oracle Applications User's Guide

Copying Costs Between Cost Types

You can copy from one cost type to another and specify an item or category range. You can copy *from* the Frozen cost type, but you cannot copy *to* the Frozen cost type. Under average costing, you can copy *from* the Average cost type, but you cannot copy *to* the Average cost type. You can copy item costs within an organization or across organizations. Within an organization, you can also copy activity costs, resource and overhead costs, or resource and overhead associations. There are three copying options:

- · merge and update existing costs
- copy over new information only
- remove and replace all cost information

Copy Cost Examples: Copy from Cost Type 1 to Cost Type 2

Initial values in Cost Type 1 and Cost Type 2

Item	From: Cost Type 1	To: Cost Type 2
A	20	Does not exist (Null)
В	10	50
С	Does not exist (Null)	30

The results for the Merge and Update Existing Costs option are: A = 20, B = 10, and C = 30. Item C did not exist in Cost Type 1, so C's value in Cost Type 2 does not change.

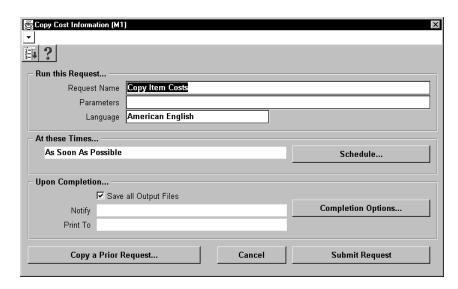
The results for the New Information Only option are: A = 20, B = 50, and C = 30. Item A did not exist in Cost Type 2, so its value is copied from Cost Type 1. Item B has a cost in Cost Type 2, so it's value does not change. Item C did not exist in Cost Type 1, so C's value in Cost Type 2 does not change.

The results for the Remove and Replace All Cost Information option are: A = 20, B = 10, and item C does not exist. These are the same values found in Cost Type 1; all values in Cost Type 1 replace those in Cost Type 2.

Note: You can also use the cost rollup to copy costs for based on rollup items (assemblies). When the assembly does not exist in the cost type you roll up, the cost rollup automatically copies the assembly information from the default cost type.

▶ To copy costs between cost types:

1. Navigate to the Copy Cost Information window.



2. Select the Name of the request. This identifies what to copy:

Activity Costs: copy activity costs between cost types to create activity costs in the To cost type without updating the activities individually.

Item Costs: copy item costs between cost types.

Item Costs Across Organizations: copy item costs between organizations to maintain the same standard cost in multiple organizations but not to share costs.



Attention: All sub-elements, departments and activity codes, associated with the items being copied, must be defined in each of the organizations for the item cost to be copied into the To organization.

Overhead Costs: copy overhead costs between cost types.

Resource Costs: copy resource costs between cost types.

Resource Overhead Associations: copy resource and overhead associations between cost types.

3. Select a copy option:

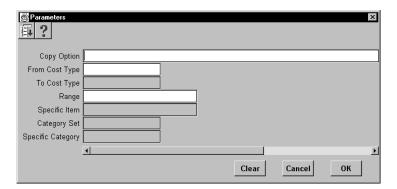
Merge and update existing costs: Costs that do not exist in the To cost type are copied, costs that already exist in the To cost type are

updated, costs that exist only in the To cost type are left unchanged. The system compares total costs to determine which costs to update. The system does not compare by sub-element.

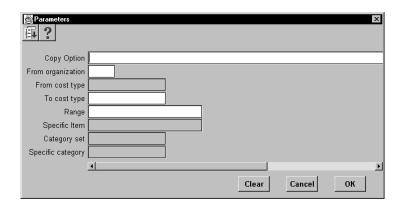
New cost information only: Costs that do not exist in the To cost type are copied; all other costs are left unchanged.

Remove and replace all cost information: All costs in the To cost type are deleted and replaced with costs in the From cost type.

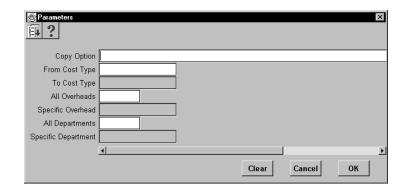
- 4. Select a cost type to copy From.
- 5. Select a cost type to copy To.
- 6. Do one of the following:
 - If you are copying activity costs, indicate whether to copy All Activities or a Specific Activity that you enter.



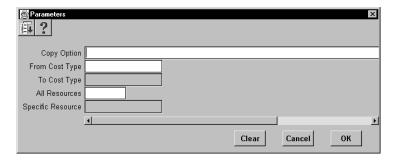
 If you are copying item costs between cost types or across organizations, select All Items, those belonging to a Category, or a Specific Item. If you select Category, specify a Category Set or a Specific Category. If you select Specific Item, specify the item.



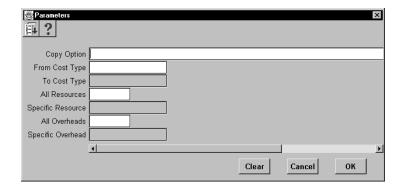
If you are copying overhead costs, indicate whether to copy All
Overheads or a Specific Overhead that you enter. Indicate
whether to copy All Departments or a Specific Department that
you enter.



• If you are copying resource costs, indicate whether to copy All Resources or a Specific Resource that you enter.



• If you are copying resource overhead associations, indicate whether to copy All Resources or a Specific Resource that you enter. Indicate whether to copy All Overheads or a Specific Overhead that you enter.



See Also

Submitting a Request, Oracle Applications User's Guide

Default Basis Types

This basis type is used to determine how the overhead cost is earned and how it is applied to product costs.

Activity Used to apply activity costs to items. The activity

basis type can only be used with the material overhead sub-element. The item cost is calculated by multiplying the activity cost by the ratio of the number of times the activity occurs divided into the cumulative quantity of the item associated with

those occurrences.

ItemUsed to earn and apply costs for all sub-elements.defaultFor material and material overhead sub-elements,

you charge a fixed amount per item. For resource, outside processing, and overhead sub-elements, you charge a fixed amount per item moved in an

operation.

Lot Used to earn and apply costs for all sub-elements.

The item cost is calculated the same as an Item basis cost except that the unit cost is divided by the cost type standard lot size to derive the cost per

item.

Resource units Used for material overhead and overhead

sub-elements. For the overhead sub-element, you earn and apply a fixed amount of overhead for each resource unit you earn on the operation. For the material overhead sub-element, this basis type may be used to apply overhead to an item's

product cost. However, these costs are not earned

in work in process.

Resource value Used for material overhead and overhead

sub-elements. For the overhead sub-element, you earn and apply a percentage of the resource value you earn on the operation as overhead. For the material overhead sub-element, this basis type may be used to apply overhead to an item's product cost. However, these costs are not earned

in work in process.

Total value Used to earn and apply costs with the material

overhead sub-element. This cost is applied to product cost and earned as a percentage of the item's total cost less any this level material overhead. For purchased items, the cost is earned when the item is received. For assemblies, the cost is earned when the assembly is completed from a job or schedule.

Associating Expenditure Types with Cost Elements

Expenditure types are used to classify project–related transaction costs that are collected using the Cost Collector then transferred to Oracle Projects.

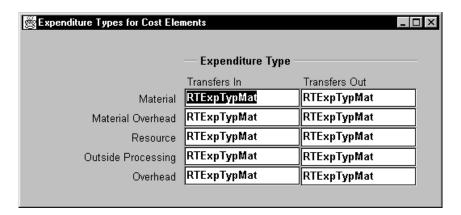
You must associate 'in' and 'out' expenditure types with each of the five cost elements so that costs for the following inventory transfer transactions can be collected and transferred to Oracle Projects.

- Subinventory transfers between locators with different projects or tasks. See: Transferring Between Organizations, *Oracle Inventory User's Guide*.
- Miscellaneous issue from a project locator. See: Performing Miscellaneous Transactions, *Oracle Inventory User's Guide*.
- Miscellaneous Receipt into a project locator. See: Performing Miscellaneous Transactions, *Oracle Inventory User's Guide*.
- Project related miscellaneous transactions which issue inventory to, or receive it from, Projects.

'In' expenditure types are used to cost the value of transfers into a project. 'Out' expenditure types are used to cost the value of transfers out of a project.

▶ To define expenditure types for cost elements

1. Navigate to the Expenditure Types for Cost Elements window.



2. Select a Transfer In / Transfer Out Expenditure type for each of the following cost elements:



Material: A general ledger account to accumulate material costs. This is usually an asset account.

Material Overhead: A general ledger account to accumulate material overhead or burden costs. This is usually an asset account.

Resource: A general ledger account to accumulate resource costs. This is usually an asset account.

Outside Processing: A general ledger account to accumulate outside processing costs. This is usually an asset account.

Overhead: A general ledger account to accumulate resource or department overhead costs. This is usually an asset account.



Attention: You can choose only choose Expenditure Types that are not defined as Rate Required in Oracle Projects.

Defining Category Accounts



Warning: The category accounts defined in this window are only used if product line accounting has been and implemented. If product line accounting is implemented, the category accounts not the item subinventory accounts are used when transactions are entered. See: Product Line Accounting Setup: page D-32.

You can use the Category Accounts Summary window to define, query, and update category valuation and expense accounts. If your current organization is a standard costing organization, you can define category accounts at the category and optionally subinventory level. If your current organization is an average costing organization you must define category accounts at the cost group/category level.

You can only define category accounts for categories that belong to the default category set for the product line functional area. See: Defining Category Sets, *Oracle Inventory User's Guide* and Defining Default Category Sets, *Oracle Inventory User's Guide*.

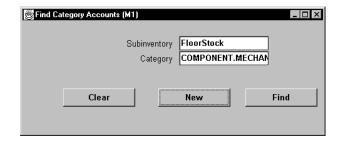
Account Update Restrictions

Standard Costing Organization		Average Costing Organization	
Condition Preventing Account Update			
On hand Quantity > 0	Quantities exist in the subinventory. Note: If subinventory is null, all subinventories in the organization are considered.	Quantities exist in any locator associated with the cost group	
Pending Transactions	Pending transactions associated with the subinventory and category exist	Pending transactions associated with the project and cost group exist	
Uncosted Transactions	Uncosted transactions associated with the subinventory and category exist	Unclosed transactions associated with the cost group exist	

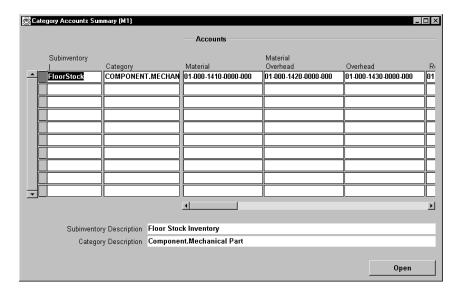
Table 2 - 3 (Page 1 of 1)

▶ To define category accounts in a standard costing organization:

1. Navigate to the Category Accounts window. The Find Category Accounts window appears.



2. Select a category, or subinventory, or both. Choose the New button. The Category Accounts Summary window appears.



3. Select a Category.

When you select a category, accounts are defaulted from the organization level. You can change these accounts.

4. Optionally, select a Subinventory.

If a subinventory is not selected, you can define accounts that are specific to the category. Once you define a category account with a null subinventory, the accounts that are associated with that category are defaulted each time you define a new category/subinventory combination for that category.

For example, if you select a category, override the defaulted organization level accounts, then save your work, the next time you select this category in this window, the new accounts not the

organizational level accounts are defaulted. These default accounts can be overridden. Categories with null subinventories can be used as templates when you need to create several category/subinventory combinations.

5. Select account numbers for the following:



Attention: All subinventories that contain items belonging to the selected category set use these accounts for inventory valuation. You therefore cannot change an account if there is on–hand inventory in any of these subinventories.

Material: A default general ledger account to accumulate material costs for this category/subinventory combination. This is usually an asset account.

Outside Processing: A default general ledger account to accumulate outside processing costs for this category/subinventory combination. This is usually an asset account.

Material Overhead: A default general ledger account to accumulate material overhead or burden costs for this category/subinventory combination. This is usually an asset account.

Overhead: A default general ledger account to accumulate resource or department overhead costs for this for this category/subinventory combination. This is usually an asset account.

Resource: A default general ledger account to accumulate resource costs for this category/subinventory combination. This is usually an asset account.

Encumbrance: A default general ledger account to hold the value of encumbrances against subinventory items belonging to this category set.

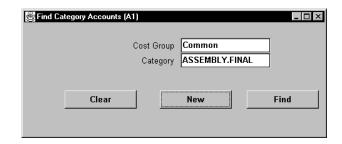
Bridging: This account is optional.

You can also optionally enter an Analytical Invoice Price Variance, Analytical Purchase Mirror, Non–Invoiced Sales Order, Non–Invoiced Revenue, Analytical Revenue Mirror, Analytical Margins of Goods Sold, and Average Cost Variance account.

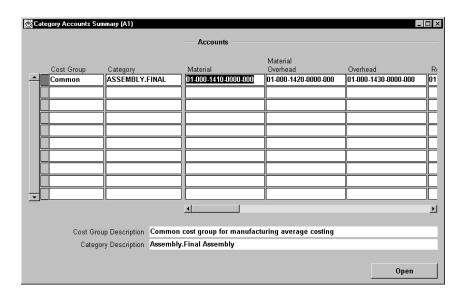
6. Save your work.

▶ To define category accounts in an average costing organization:

1. Navigate to the Find Category Accounts window from the menu.



2. Select New to open the Category Accounts Summary window.





Attention: You can also enter and update account information for a single category in the Category Accounts window, which you can access by selecting the Open button. See: Combination Block, *Oracle Applications User's Guide*.

3. Select a Category.

When you select a category, accounts are defaulted from the organization level. You can change these accounts.

4. Select a Cost Group.

Cost groups are mandatory. If your current organization is not Project References Enabled, the Common cost group is defaulted and cannot be update. If your organization is Project References Enabled, you can select any cost group. See: Defining Cost Groups: page 2-58.

5. Select account numbers for the following:



Attention: All subinventories that contain items belonging to the select category set use these accounts for inventory valuation. You therefore cannot change an account if there is on–hand inventory in any of these subinventories.

Material: A default general ledger account to accumulate material costs for this category/cost group. This is usually an asset account.

Outside Processing: A default general ledger account to accumulate outside processing costs for this category/cost group combination. This is usually an asset account.

Material Overhead: A default general ledger account to accumulate material overhead or burden costs for this category/cost group combination. This is usually an asset account.

Overhead: A default general ledger account to accumulate resource or department overhead costs for this for this category/cost group combination. This is usually an asset account.

Resource: A default general ledger account to accumulate resource costs for this category/cost group combination. This is usually an asset account.

Encumbrance: A default general ledger account to hold the value of encumbrances against this category/cost group combination

Bridging: This account is optional.

You can also optionally enter an Analytical Invoice Price Variance, Analytical Purchase Mirror, Non–Invoiced Sales Order, Non–Invoiced Revenue, Analytical Revenue Mirror, Analytical Margins of Goods Sold, and Average Cost Variance account.

6. Save your work.

Associating WIP Accounting Classes with Categories

In a standard costing organization, you can associate standard discrete and repetitive assembly WIP accounting classes with categories that belong to the default category set for the Product Line Functional area. In an average costing organization, you can create similar associations by associating accounting classes with categories and cost groups.

The defaults defined in this window can be defaulted when you create discrete jobs, associate repetitive assemblies with project lines, and when you perform work order–less completions. See: WIP Accounting Class Defaults, *Oracle Work in Process User's Guide*.

► To define default WIP accounting classes for categories in a standard costing organization.

- Navigate to the Default WIP Accounting Classes for Categories window. The Find Default WIP Accounting Classes for Categories window appears.
- 2. Choose the New button. The Default WIP Accounting Classes for Categories window appears.
- 3. Select a Category.

You must select a category. You can only select categories that belong to the default category set for the Product Line Functional area.

You cannot enter a duplicate cost group/category combination.

 Select a Standard Discrete and/or Repetitive Assembly Accounting Class.

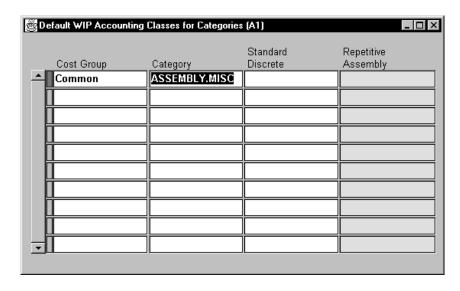
You can only select active Standard Discrete and Repetitive Assembly accounting classes. You can optionally associate both a Standard Discrete and Repetitive Assembly accounting class with the same category. See: WIP Accounting Classes, *Oracle Work in Process User's Guide.*

► To define default WIP accounting classes for categories in a average costing organization:

1. Navigate to the Default WIP Accounting Classes for Categories window. The Find Default WIP Accounting Classes for Categories window appears.

Find Default WIP Accounting Classes for Categories	_ □ ×
Cost Group Common	
Category	
WIP Accounting Class Discrete	
Clear New Find	
	_

2. Choose the New button. The Default WIP Accounting Classes for Categories window appears.



3. Select a Cost Group.

If the *Project Cost Collection Enabled* parameter in the Organization Parameters window is set, the cost group specified in the Project Manufacturing parameters window is defaulted but can be overridden. See: Organization Parameters Window, *Oracle Inventory User's Guide*, Defining Project Parameters, *Oracle Inventory User's Guide* and Assigning Project Parameters, *Oracle Project Manufacturing User's Guide*.

If the *Project Cost Collection Enabled* parameter is not set, you cannot select a cost group and the common cost group is defaulted.

4. Select a Category.

You must select a category. You can only select categories that belong to the default category set for the Product Line Functional area.

You cannot enter a duplicate cost group/category combination.

5. Select a Standard Discrete Accounting Class.

You can only select an active Standard Discrete accounting class. See: WIP Accounting Classes, *Oracle Work in Process User's Guide*.

6. Save your work.

Cost Groups

You can define and subsequently use cost groups if the *Project Cost Collection Enabled* parameter in the Organization Parameters window in Oracle Inventory is set. Cost groups are used to group project related costs. See: Defining Project Parameters, *Oracle Inventory User's Guide*.

Common Cost Group

The *Common* cost group is seeded when you install Cost Management. This is a multiple organization (multi–org) cost group and is used as the default in organizations that have a *Costing Method* of *Average* and the *CST: Average Costing Option* profile option set to Inventory and Work in Process. These organizations do not, however, have to have their *Project Cost Collection Enabled* parameter set.

The valuation accounts defined in the Organization Parameters window are used as the defaults for this cost group and cannot be changed nor made inactive. However, in an organization that is Project Cost Collection Enabled the name and description of this cost group can be changed.

If you assign a project to the *Common* cost group, the project is costed at common inventory costs.

User-Defined Cost Groups

A project must be associated with a cost group. If you do not specifically assign a project to a user–defined cost group, costs for that project are derived using the *Common* cost group. Cost groups can have more than one project assigned to them. Cost groups can be specific to an organization or available in multiple organizations. If a cost group is assigned to projects that are defined in multiple inventory organizations, it must be defined as a multi–org cost group.

Average costs are calculated and held at the cost group level within each inventory organization; since subinventory valuation accounts cannot be defined at a level lower than the level at which average costs are held, value in every locator belonging to a project in a particular cost group is held in that group's valuation accounts.

Through the use of cost groups, an item may have a different cost in different projects as well as a unique cost in common inventory, all within the same organization. Item costs can apply to a single project if each project belongs to a distinct cost group, or apply to a group of projects if all projects in the group are associated to the same cost group. Items in common inventory belong to the common cost group and are normally costed separately from items in projects.



The cost element to expenditure type association is defined at the site level. The sub–element to expenditure type association is defined at the organization level and cannot be defined in organizations that are not project costing enabled.

See Also

Defining Cost Groups: page 2 – 58

Defining Cost Groups

You can define and subsequently use cost groups if the *Project Cost Collection Enabled* parameter in the Organization Parameters window in Oracle Inventory is set. See: Organization Parameters Window, *Oracle Inventory User's Guide* and Defining Project Parameters, *Oracle Inventory User's Guide*.

For each cost group, you must define five elemental subinventory valuation accounts, an average cost variance account, and an encumbrance account. You can use different accounts or the same account for all five elemental accounts.

You do not have to use separate accounts to maintain elemental visibility for project related costs. Cost visibility is maintained at the sub–elemental level through the use of expenditure types.

▶ To define costs groups:

1. Navigate to the Cost Groups window.



Cost Groups (A1)		_ X
	1	
Cost Group Common		
Description Common cost g	roup for manufacturing average costi	
Inactive On		
✓ Multi-Org		[]
		_
- Accounts		
Material		
Material Overhead		
Resource		
Outside Processing		
Overhead		
Average Cost Variance		
Encumbrance		
	WIP Accou	nting Classes

- 2. Enter an alphanumeric name to identify the Cost Group.
- 3. Enter a cost group Description.
- 4. Enter an Inactive On date.

As of this date you can no longer assign this cost group to a project, however you can query and process records that use it. If you do not enter a Inactive On date, the cost group is valid indefinitely.

5. Check Multi-Org to indicate that the cost group name can be shared with other organizations.

Note: If not set to Multi-Org, the cost group is only available to the organization that it is created in. If enabled, only the cost group name is shared across organizations.

If the cost group is to include projects that are defined in multiple inventory organizations, it must be defined as a multi-org cost group.

6. Enter account numbers for the following:

When you define a cost group for an organization, the accounts defined in the Organization Parameters window are defaulted but can be overwritten. See: Organization Parameters, Oracle Inventory

User's Guide and Defining Costing Information, Oracle Inventory User's Guide.



Attention: Locators that reference projects that belong to a cost group use these accounts for inventory valuation. You therefore cannot change an account if there is on-hand inventory in any of these locators.

Material: A general ledger account to accumulate material costs for this cost group. This is usually an asset account.

Material Overhead: A general ledger account to accumulate material overhead or burden costs for this cost group. This is usually an asset account.

Resource: A general ledger account to accumulate resource costs for this cost group. This is usually an asset account.

Outside Processing: A general ledger account to accumulate outside processing costs for this cost group. This is usually an asset account.

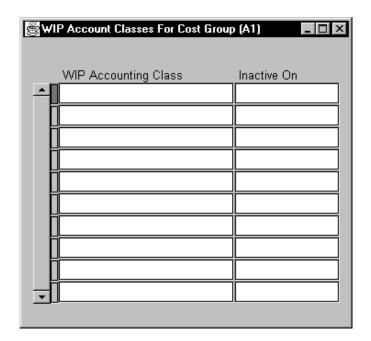
Overhead: A general ledger account to accumulate resource or department overhead costs for this cost group. This is usually an asset account.

Average Cost Variance: A general ledger account to accumulate the balances that may occur when transactions are processed for an item whose on-hand inventory is negative. This account represents the inventory valuation error caused by issuing inventory before receiving it. See: Average Cost Variances: page 5 – 60.

Encumbrance: A general ledger account to hold the value of encumbrances against subinventory items.

► To associate WIP accounting classes with the cost group:

1. Choose the WIP Accounting Classes button. The WIP Accounting Classes for Cost Groups window appears.



2. Select a WIP Accounting Class.

You can only select any Standard Discrete Accounting Class. See: WIP Accounting Classes, *Oracle Work in Process User's Guide* and Defining WIP Accounting Classes, *Oracle Work in Process User's Guide*.

3. Save your work.

See Also

Cost Groups: page 2 - 57

Profile Options and Security Functions

During implementation the system administrator sets up security functions and profile options.

Profile Options

During implementation, you set a value for each user profile option to specify how Cost Management controls access to and processes data. The table below also indicates at whether you (the "User") can view or update the profile option and at what System Administrator levels the profile options can be updated: at the user, responsibility, application, or site levels.

Generally, the system administrator sets and updates profile values.



Indicates by whom and at what level the profile option can be updated.

Profile Option	User	System Administrator				Requirements	
	User	User	Resp	App	Site	Required?	Default Value
CST: Average Costing Option					~	Required	System derived
CST:Cost Rollup – Wait For Table Lock			~	~	~	Required	None
CST: Cost Update Debug Level		~	~	~	~	Required	None
CST: Exchange Rate Type					~	Required	None

Table 2 - 4 (Page 1 of 1) '

CST: Average Costing Option

For average costing organizations, choose the type of average costing. The options are *Inventory and Work in Process* or *Inventory only*.

CST:Cost Rollup - Wait For Table Lock

Indicates whether the cost rollup waits until the desired information is available or errors out after 10 attempts.



CST: Cost Update Debug Level

Indicates none or the level and type of debug messages to print in the cost update log file.

Regular: Every subroutine.

Extended: Every SQL statement.

Full: Same as Extended and keeps any temporary data in the database.

CST: Exchange Rate Type

Indicates how to convert foreign currency. The options are *period* average rate or period end rate.

This profile is also used to control the exchange rate type used for the Margin Analysis Report, the Material Distribution Report, and the WIP Distribution Report. When entering a foreign exchange rate for one of these reports, you must specify the exchange rate type. For reporting profit and loss results, different countries use different financial standards. For example, U.S. companies convert using the period average rate, and Australian companies use the period end rate.

See Also

Setting Your Personal User Profile, Oracle Applications User's Guide
Common User Profile Options, Oracle Applications User's Guide
Profile Options in Oracle Application Object Library, Oracle Applications
User's Guide

Security Functions

Security function options specify how Oracle Cost Management controls access to and processes data. The system administrator sets up and maintains security functions.

Privilege to View Cost (CST_VIEW_COST_INFORMATION)

Determines whether the privilege to view costing information can be prohibited from the following windows:

- Resources (in Bills of Material)
- Departments (in Bills of Material)

• Indented Bills of Material (in Bills of Material and Engineering)



Attention: By leaving the Privilege to View Cost security function as part of a user's responsibility, but excluding the Privilege to Maintain Cost function, you can allow the user to print reports but not change any stored costs.

See: Viewing Standard Cost History: page 4 – 45 and Viewing a Standard Cost Update: page 4 - 48.

Privilege to Maintain Cost (CST_MAINTAIN_COST_INFORMATION)

Determines whether the privilege to create, update, or delete costing information can be prohibited from the following windows:

The following windows are governed by this function:

- Bills of Material (in Bills of Material and Engineering)
- Routing (in Bills of Material and Engineering)



Attention: To use either of the Cost Rollup options where costs are committed to the database, the Privilege to Maintain Cost security function must be included as part of the responsibility.

See: Rolling Up Assembly Costs: page 4 – 32 and Updating Pending Costs to Frozen Standard: page 4 – 39.

Activities: Maintain (CST CSTFDATY MAINTAIN)

Determines whether costing information can be created, updated, or deleted from the Activities window.

Cost Types: Maintain (CST_CSTFDCTP_MAINTAIN)

Determines whether costing information can be created, updated, or deleted from the Cost Types window.

Item Costs: Maintain (CST_CSTFITCT_MAINTAIN)

Determines whether costing information can be created, updated, or deleted from the Item Costs window.

Material Subelements: Maintain (CST_CSTFDMSE_MAINTAIN)

Determines whether costing information can be created, updated, or deleted from the Material Sub-Elements window.

Overheads: Maintain (CST_CSTFDOVH_MAINTAIN)

Determines whether costing information can be created, updated, or deleted from the Overheads window.

See Also

Overview of Function Security, *Oracle Applications System Administrator's Guide*

Implementing Function Security, *Oracle Applications System Administrator's Guide*

CHAPTER

3

Item Costing

T his chapter tells you everything you need to know about item costing, including:

- Selecting An Item / Cost Type Association: page 3 2
- Defining Item Costs: page 3 4
- Defining Item Costs Details: page 3 7
- Viewing Item Costs: page 3 9
- Cost Type Inquiries: page 3 12
- Viewing Item Cost History Information: page 3 16
- Purging Cost Information: page 3 21

Selecting an Item / Cost Type Association

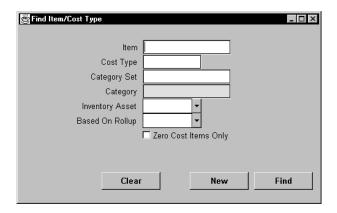
To define or view item cost information, you must first select an item / cost type association. Item costs are always associated with a cost type.

Prerequisites

☐ To define, update, or delete costing information, the Item Costs: Maintain security function must be included as part of the responsibility. See: Security Functions: page 2 – 63.

▶ To select an item / cost type association:

- 1. Navigate to the Item Costs Summary folder window.
- 2. Enter search criteria in the Find Item/Cost Type window.



The Item Costs Summary folder window displays costing information for the item for all cost types.

- 3. Do one of the following:
 - Choose the New button to define new cost information, or the Open button to review existing cost information. The Item Costs Details window appears.
 - To view item cost details, choose the Views button. After you select an inquiry, the Item Costs Summary window appears.
 - To define or maintain item cost information, choose the Costs button. The Item Cost window appears.

See Also

Using Query Find, Oracle Applications User's Guide
Using Query Operators, Oracle Applications User's Guide
Searching For Information, Oracle Applications User's Guide
Performing Query-by-Example and Query Count, Oracle Applications User's Guide

Defining Item Costs: page 3 – 4 Viewing Item Costs: page 3 – 9

Defining Item Costs

Define costs for buy items or enter additional costs for assemblies with costs generated from the cost rollup.

If you share costs, you can only define costs in the cost master organization. When you define an item, the system creates a cost record according to the costing method, the Frozen or Average cost type. You can modify the Frozen cost type if no inventory transactions have occurred, allowing you to directly set the frozen standard cost for the item. If inventory transactions have occurred, you must define a cost in a cost type other than Frozen and perform a cost update to load a frozen cost for the item.

You cannot use the Item Costs window to edit average costs. See: Updating Average Costs: page 5 – 19.

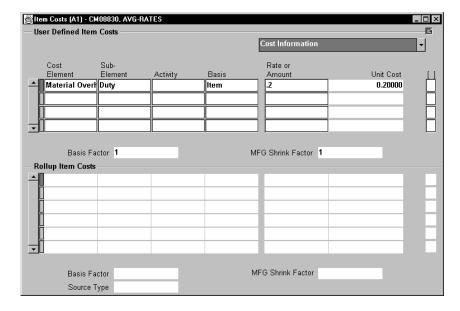
For Bills of Material users, you can use the costs in any cost type for the costed bill of material explosion reports to examine other cost scenarios.



Suggestion: If you use Bills of Materials, and intend to use the resource, outside processing, and overhead cost elements when you define item costs, you must first define bill parameters to have access to material and material overhead cost elements. See: Defining Bills of Material Parameters, *Oracle Bills of Material User's Guide*.

▶ To define item costs:

Navigate to the Item Costs window. Do this by choosing the Costs button from either the Item Costs Summary folder window or from the Item Costs Details window. See: Selecting An Item / Cost Type Association: page 3 – 2 and Defining Item Costs Details: page 3 – 7.



If you are defining an item cost in a cost type other than Frozen, the existing cost information is copied from the default cost type to the current cost type. You can use this cost information or modify it to create a new cost for the current cost type. If you use the average cost method, you can create budget or simulation costs here. You cannot edit average costs from this window.

- 2. Enter the cost element. If you are defining a frozen cost for your item, a row is inserted for any applicable default material overhead sub–elements you defined.
- 3. Enter the sub-element. For material cost elements, the default is the material sub-element you defined for the current organization.
- 4. Enter the activity. The default activity you associated with the sub-element is the default.
- 5. Enter the basis. The default is the default basis associated with the sub–element.
- 6. If you choose a basis type of Activity for a material overhead sub–element, enter the following:
 - the number of times you expect the activity to occur for the current item during the period the costs are in effect
 - the cumulative quantity of the item passing through the activity during the same period.

Enter a percentage rate or a fixed amount, as appropriate for the basis.

Cost information for the current item and cost type combination is displayed:

- The basis factor is the amount or quantity the rate/amount is multiplied by to calculate the unit cost of the sub-element. The basis factor for sub-elements with a basis type of Item is always 1. The basis factor for sub-elements with a basis type of Lot is the ratio of 1 over the item's standard lot size. The basis factor for sub-elements with a basis type of Activity is the ratio of activity occurrences over number of items. The basis factor for sub-elements with a basis type of Resource Units is the number of resource units earned on an assembly routing. The basis factor for sub-elements with a basis type of Resource Value is the extended value of the resource earned on an assembly routing. The basis factor for sub-elements with a basis type of Total Value is the total cost of the item, less any this level material overhead.
- The manufacturing shrink factor (the multiplier used in the unit cost calculation), which uses the following equation:

 $1 \times (1 - manufacturing shrinkage)$

See Also

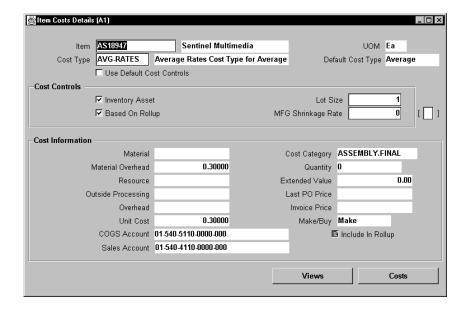
Indented Bills of Material Cost Report: page 9 - 22

Defining Item Costs Details

Item costs details include cost control information and basic cost information.

▶ To define item cost details:

 Navigate to the Item Costs Details window. Do this by choosing the New or Open buttons from the Item Costs Summary folder window. See: Selecting An Item / Cost Type Association: page 3 – 2.



2. Indicate whether to use default cost controls from the default cost type or those you define for the current cost type.



Attention: If you turn this on, you cannot modify the cost controls or create user–entered costs for this item.

- 3. Turn Inventory Asset on to indicate that for this cost type the item is an asset and has a cost. Turn Inventory Asset off to indicate that for this cost type the item is an inventory expense item and cannot have a cost.
- 4. Indicate whether costs are based on a rollup of the item's bill of material and routing. This determines if the structure of the item is exploded during the cost rollup process. Turn this off if the assembly for which you do not want to change the cost.

Generally, assemblies (make items) have this control turned on, and buy items have this control turned off. You can "freeze" the cost of an assembly(for example, for an obsolete item) for the current cost type by turning this off after performing a cost rollup. Future cost rollups do not change the cost for this item.

The default is the value of the MPS/MRP Planning make or buy attribute from the template used to define the item default.

5. Enter the costing lot size for the item.

Use this to determine the unit cost of sub–elements with a basis type of Lot. The costing lot size is separate from the planning lead time lot size.

When you define an item cost for the Frozen cost type, the default is either the standard lot size, or 1, if the standard lot size is blank.

6. Enter the manufacturing shrinkage rate. The cost rollup uses the value you enter here to determine the incremental component requirements due to the assembly shrinkage of the current item. You cannot enter shrinkage for items that do not base costs on a rollup of the item's bill of material and routing (buy items).

Detailed cost information is displayed for reference.

- 7. Do one of the following:
 - Choose the Views button to open the View Item Cost Summary window.
 - Choose the Costs button to open the Item Cost window.

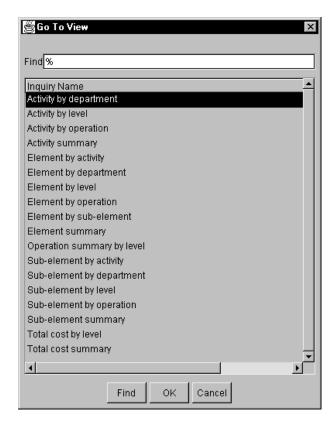
Viewing Item Costs

View item costs using multiple inquiries. From each inquiry, you can drill down into cost details.

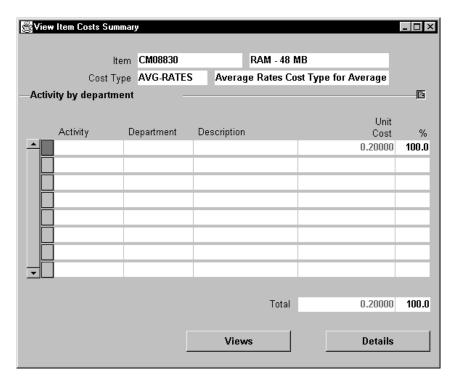
Note: You can create additional cost inquiries. See: *Oracle Open Interfaces Manual, Release 11.*

▶ To view item cost information:

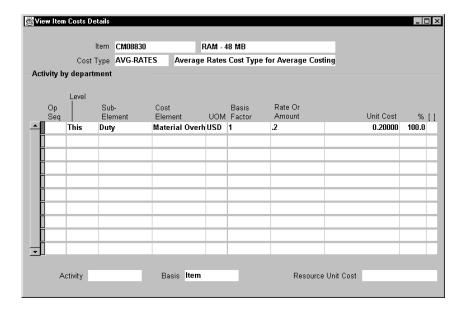
- Navigate to the View Item Costs Summary window by choosing the Views button from the Item Costs Summary or Item Costs Details windows.
- 2. Select an inquiry by which to view cost information.



The View Item Costs Summary window displays information on the item cost and the associated cost type.



3. Drill down on Unit Cost to open the View Item Cost Details window. If you chose a "by level" inquiry, you can also drill down on This Level Cost and Previous Level Cost.



The View Item Cost Details window displays different information depending upon the selected inquiry.

4. Optionally, select another inquiry by which to view cost type details by choosing the Views button again.

See Also

Selecting An Item / Cost Type Association: page 3 – 2

Cost Type Inquiries: page 3 – 12

Defining Item Costs Details: page 3 - 7

Cost Type Inquiries

When viewing item cost information, the Item Costs Summary and View Item Costs Details windows display different information, depending on what inquiry you select. The inquiries and the information they display are listed below.



Attention: If you only use inventory costing (see: Inventory and Manufacturing Costing Compared: page 1 – 10) and if you use average costing, you cannot view subelemental information.

Activity by department

The type of activity, department, name (description) of the responsible department, unit cost by department, percent of total unit cost for each department, and the total item unit cost.

Cost Management displays non-routing based costs, generally material and material overhead without a department.

Activity by flexfield segment value

The flexfield options you have defined using the activity flexfield. Cost Management displays the unit cost by flexfield segment, percent of total unit cost for each flexfield segment, and the total item unit cost. For example, you might set up "Value Added" with the values "low", "medium", or "high" for your activity flexfield, and you can see your activity costs by the "Value Added" flexfield segment.

Activity by level

The activity, this level, previous level costs, and total unit cost for each activity, the percent of total unit cost for each activity, total costs for the item by level and in total, and the percentage total.

Activity by operation

The activities sorted by operation with a description of the operation. Cost Management displays the unit cost by activity by operation, percent of total unit cost for each activity by operation, and the total item unit cost.

Activity flexfield segment value by level

The flexfield options you have defined using the activity flexfield. Cost Management displays this level, previous level and total unit cost of the activity by flexfield segment, percent of total unit cost for each flexfield segment, total costs for the item by level and in total, and the percentage total. For example, you might set up "Value Added"

with the values "low", "medium", or "high" for your activity flexfield, and you can see your activity costs by the "Value Added" flexfield segment.

Activity summary

The activity, the description of the activity, unit cost of the activity, percent of total unit cost for each activity, and total amounts for unit costs and percentages.

Element by activity

The cost element, activity, description of the activity, unit cost of the cost element by activity, percent of total unit cost for each cost element by activity, and the total item unit cost.

Element by department

The type of cost element, department, name (description) of the responsible department, unit cost by cost element by department, percent of total unit cost for each cost element by department, and the total item unit cost

Element by level

The cost element, this level, previous level and total item unit cost, the percent of total unit cost for each cost element, total costs for the item by level and in total, and the percentage total.

Element by operation

The cost elements, operation, a description of the operation. Cost Management displays the unit cost by cost element by operation, percent of total unit cost for each cost element by operation, and the total item unit cost.

Element by sub-element

The cost element, sub-element, the name (description) of the sub-element, item unit cost, percent of total unit cost for each cost element by sub-element, and the total item unit cost.

Element summary

The cost element, the name (description) of the cost element, unit cost of the cost element, percent of total unit cost for each cost element, and the total item unit cost.

Operation summary by level

The operation name, operation sequence number, this level, previous level and total operation unit cost, the percent of total unit cost for each operation, total costs for the item by level and in total, and the percentage total.

Sub-element by activity

The sub-element, activity, activity description, unit cost by sub-element by activity, percent of total unit cost for each sub-element by activity, the total item unit cost, and the percentage total.

Sub-element by department

The sub-element, department, name (description) of the responsible department, unit cost by sub-element by department, percent of total unit cost for each sub-element by department, and the total item unit cost.

Sub-element by flexfield segment value

The flexfield options you have defined using the sub-element flexfield. Cost Management displays the total unit cost of the item by flexfield segment, percent of total unit cost for each flexfield segment, item total cost, and the percentage total. For example, you might set up the flexfield "Fixed or Variable" with the same values to classify the sub-element. You could then see your sub-element costs by the "Fixed or Variable" flexfield segments.

Sub-element by level

The sub-element, this level, previous level and total sub-element unit cost, the percent of total unit cost for each sub-element, total costs for the item by level and in total, and the percentage total.

Sub-element by operation

The sub-elements, operation, description of the operation. Cost Management displays the unit cost by sub-element by operation, percent of total unit cost for each sub-element by operation, and the total item unit cost.

Sub-element flexfield segment value by level

The flexfield options you have defined using the sub-element flexfield. Cost Management displays this level, previous level and total unit cost of sub-element by flexfield segment, percent of total unit cost for each sub-element by flexfield segment, total costs for the item by level and in total, and the percentage total. For example, you might set up the flexfield "Fixed or Variable" with the same values to classify the sub-element. You could then see your sub-element costs by the "Fixed or Variable" flexfield segments.

Sub-element summary

The sub-element, sub-element description, item unit cost, the percentage of the total unit cost for

each sub-element, the item unit cost, and

percentage total.

Total cost by level

This level, previous level costs, and total item unit

costs.

Total cost summary

The item unit cost.

Viewing Item Cost History Information

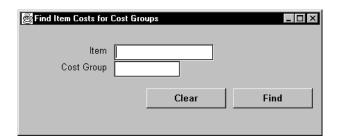
If you are using average costing and are using the new cost processor, you are able to examine your item costs to determine how and why they have changed. See: Inventory and Manufacturing Costing Compared: page 1 – 10.

The following windows can be used to assist you in this process:

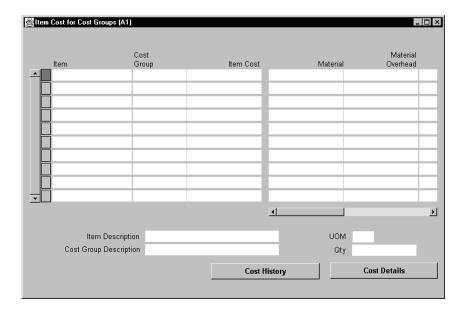
- Item Costs for Cost Groups: Displays total item costs and their elemental cost components (Material, Material Overhead, Resource, Overhead, and Outside Processing) by Cost Group.
- **Item Cost Details for Cost Groups:** Displays the this level, previous level, and current unit costs for an item within a cost group by cost element.
- **Item Cost History:** Displays the transactions, including quantities and transaction costs, that have contributed to the new (current) cost of an item. You can also view the quantity and cost of an item just prior to the current transaction.
- Cost Elements: Displays by cost element the new, prior, or transaction cost of an item.

▶ To view item costs:

1. Navigate to the Item Costs for Cost Groups window by choosing Item Cost History from the navigate window. The Find Item Costs for Cost Groups window appear.

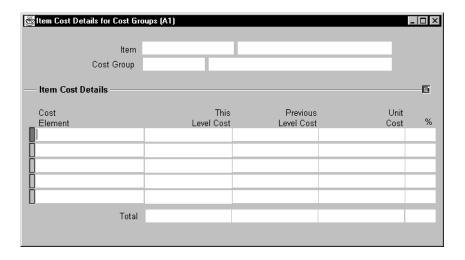


- 2. Enter search criteria in the Find Item Costs for Cost Groups window.
 - You can search for all items within a cost group or for an item across cost groups.
- Choose the Find button. The results display in the Item Costs for Cost Groups window.



▶ To view cost details for an item in a specific cost group:

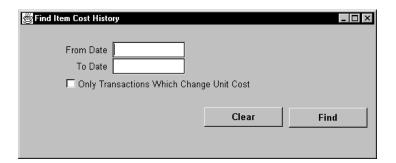
- Select one of the item records displayed in the Item Costs for Cost Groups window.
- 2. Choose the Cost Details button. The Item Cost Details for Cost Groups window appears.



You can view any elemental costs defined for the item at this and the previous level. You can also view each cost element's percentage contribution to the total cost.

► To view the cost history of an item:

- 1. Navigate back to the Item Costs for Cost Groups window.
- 2. Select one of the item records displayed.
- 3. Choose the Cost History button. The Find Item Cost History window appears.

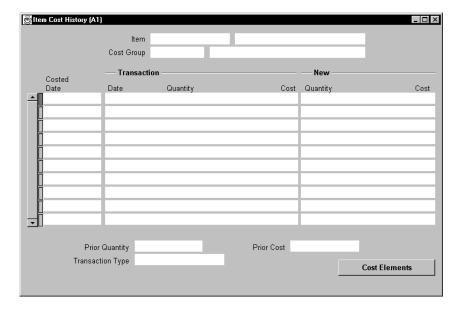


4. Enter your search criteria.

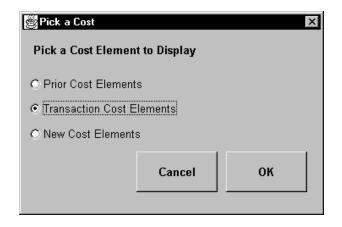
To restrict the search to a range of dates, select a From and To Date. To further restrict the search you can choose the Only Transactions Which Change the Cost option.

5. Choose the Find button.

The transactions that meet the search criteria are displayed in the Item Cost History window.



- ► To view prior, transaction, or new (current) elemental costs for an item:
 - 1. Select a transaction record in the Item Cost History window.
 - 2. Choose the Cost Elements button. The Pick Cost Element window appears.



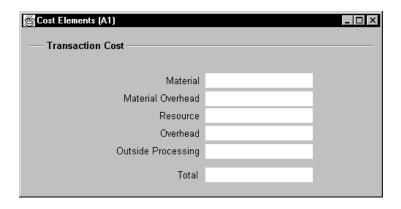
3. In the Pick Cost Element window, select one of the following options:

Prior Cost Elements: Display the elemental cost of the selected item prior to the last transaction.

Transaction Cost Elements: Display the elemental transaction costs for the item.

New Cost Elements: Display the new elemental costs for the item after the transaction.

4. Choose the OK button. The Elemental Cost window appears and displays the Prior, Transaction, or New Cost Element values depending on your selection.



See Also

Cost Groups: page 2 - 57

Purging Cost Information

You can purge cost types and all costs within the cost type. Or, you can purge only part of the cost information, such as make or buy items, resource and outside processing costs, overhead rates and amounts, or resource and overhead associations.

You cannot purge frozen costs in standard costing or average costs in average costing.

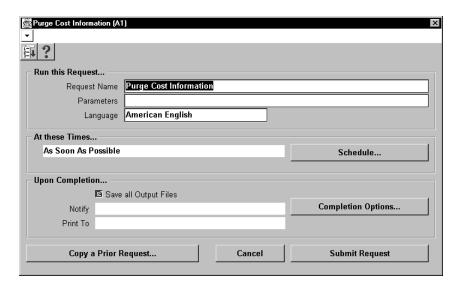


Attention: This feature *permanently* removes the selected cost type information from the database. These records are *not* retrievable.

You can safeguard selected cost types from inadvertent purging by disabling the Allow Updates check box when defining cost types.

▶ To purge cost information:

1. Navigate to the Purge Cost Information window.



2. Enter a cost type to purge associated item cost information.



3. Select one of the following purge options:

Based on rollup items, costs, and controls: Cost information for based on rollup items, costs and controls associated with the cost type.

Cost type and all costs: The cost type and all associated cost information. This is the default.

Department overhead costs and rates: Department overhead costs and rates associated with the cost type.

Not based on rollup items, costs and controls: Cost information for items not based on the cost rollup, costs and controls.

Resource costs: Resource costs associated with the cost type.

Resource/Overhead associations: Resource/overhead association costs.

See Also

Defining Cost Types: page 2 - 11

Submitting a Request, Oracle Applications User's Guide

CHAPTER

4

Standard Costing

T his chapter tells you everything you need to know about standard costing, including:

- Overview: page 4 2
- Setting Up Standard Costing: page 4 3
- :Bills and Cost Rollups page 4 3
- Inventory Standard Cost Transactions: page 4 3
- Work in Process Standard Cost Transactions: page 4 16
- Updating Standard Costs: page 4 31
- Viewing Standard Cost History: page 4 45
- Viewing a Standard Cost Update: page 4 48
- $\bullet~$ Viewing Material Transaction Distributions: page 4 50
- Viewing WIP Transaction Distributions: page 4 52
- Viewing WIP Value Summaries: page 4 55
- Purging Standard Cost Update History: page 4 60
- Standard Cost Valuation: page 4 62
- Inventory and Work in Process Standard Cost Variances: page 4 – 63

Overview

Under standard costing, predetermined costs are used for valuing inventory and for charging material, resource, overhead, period close, and job close and schedule complete transactions. Differences between standard costs and actual costs are recorded as variances.

Standard costing is supported under both Inventory and Manufacturing Costing. See: Inventory and Manufacturing Costing Compared: page 1 – 10.

Use standard costing for performance measurement and cost control. Manufacturing industries typically use standard costing. Standard costing enables you to:

- establish and maintain standard costs
- define cost elements for product costing
- value inventory and work in process balances
- perform extensive cost simulations using unlimited cost types
- determine profit margin using expected product costs
- update standard costs from any cost type
- revalue on-hand inventories, intransit inventory, and discrete work in process jobs when updating costs
- record variances against expected product costs
- measure your organization's performance based on predefined product costs

If you use Inventory without Work in Process, you can define your item costs once for each item (in the cost master organization) and share those costs with other organizations. If you share standard costs across multiple organizations, all reports, inquiries, and processes use those costs. You are not required to enter duplicate costs.

The cost master organization can be a manufacturing organization that uses Work in Process or Bills of Material. No organization sharing costs with the cost master organization can use Bills of Material.

See Also

Overview of Cost Management: page 1 – 2

Setting Up Standard Costing

If you plan to use standard costing in a distribution organization see: Setting Up Inventory Standard Costing: page 4 – 3.

If you plan to use standard costing in a manufacturing organization, see: Setting Up Manufacturing Standard Costing: page 4 – 5.

See Also

Inventory and Manufacturing Costing Compared: page 1-10 Overview of Setting Up Cost Management: page 2-2 Setup Checklist: page 2-5.

Setting Up Inventory Standard Costing

The following steps are required when setting up inventory standard costing. Steps previously covered in the Setup Prerequisites or the Setup Checklist are mentioned here only if there is setup information that is specific to inventory standard costing.

Prerequisites

- ☐ Define Organization Parameters (See: Organization Parameters Window, *Oracle Inventory User's Guide*
 - Costing Method is set to Standard
 - Transfer Detail to GL is appropriately set
 - Default Material Sub-Element account (Required)
- ☐ Define cost types are defined.
- ☐ Define activities and activity costs are defined.
- ☐ Define material overhead defaults are defined
- Define item, item costs, and establish item cost controls. See: Overview of Item Setup and Control, *Oracle Inventory User's Guide*.
- ☐ Launch transaction managers are launched

To set up inventory standard costing:

- 1. Define item costs. See: Defining Item Costs: page 3 4.
- 2. Set activity costs for items.

You can assign an activity to any cost. If you use the activity basis type, you can directly assign the activity cost to the item. When you use the other basis types, the cost is based on the sub–element, basis type, and entered rate or amount. The activity defaults from the sub–element; and, if needed, you can override the default. See: Defining Item Costs: page 3 – 4.

Edit costs.

You can mass edit item costs and activities using several predefined mass edits:

- reflect increases in supplier prices or other changes in business conditions
- change item costs to reflect new activity rates
- create new material costs based on a weighted average of actual payables invoice cost, open purchase orders, or historical purchase order receipts
- mass edit existing material and material overhead costs to a specified amount, by a percentage change, or by an absolute amount
- for Oracle Manufacturing installations, edit manufacturing shrinkage rates to a specified rate or set it equal to planning shrinkage rates

With these mass edits, you can specify a range of items or categories, a specific cost type, basis type, activity, or type of item (make or buy). The weighted average mass edits allow you to specify a transaction date range. All cost mass edits can copy from an existing cost type and simultaneously submit a cost comparison report.

Custom mass edits can be created by Oracle Consulting and or your MIS staff and added to the list of available mass edits. Each mass edit is a stored procedure in the database, and each stored procedure is registered in a mass edits table.

- 4. Edit item accounts. See: Mass Editing Item Accounts: page 2 28.
- 5. Copy costs between cost types. See: Copying Costs Between Cost Types: page 2 40.

6. Perform cost update for inventory standard costing, if needed.

This is optional if your Frozen standard costs are complete. If you use Bills of Material, and you are updating assemblies, you need to roll up your assembly costs before you update. See: Updating Standard Costs: page 4 – 31.

Setting Up Manufacturing Standard Costing

In addition to the steps required for inventory standard costing (See: Setting Up Inventory Standard Costing: page 4 – 3), the following steps are applicable to manufacturing standard costing.

Again, note that some of these steps were previously covered in the Setup Prerequisites and that they are covered again here to highlight the setup requirements that are specific to manufacturing standard costing.

Prerequisites

Define bills of material parameters. See: Defining Bills of Material
Parameters, Oracle Bills of Material User's Guide.

This ensures that bill and routing information (resource, outside processing, and overhead cost elements) is accessible when you define item costs and define overhead.

☐ Define resources. See: Defining a Resource, *Oracle Bills of Material User's Guide*.

You define resource sub-elements by creating resources, departments, bills, and routings with Bills of Material.

Resources can be costed or not costed; and, since you can have multiple resources per operation, you could use an uncosted resource for scheduling and a costed resource for costing. The cost rollup/update process and accounting transaction processing ignore uncosted resources.

You can set up the resource to apply charges at the actual rate or standard rate. If you apply actual rates and specify that the resource charges at standard, you create rate variances. If you apply actual rates and specify that the resource does not charge at standard, you collect actual costs in the job/schedule and recognize a variance at the end of the job or schedule. You can also set up a fixed amount for each unit earned in the routing step.

resource has its own absorption account and variance account. By cost type, you define a cost per unit of measure, and use the cost rollup/update process to change the pending rates to Frozen resource rates. Define departments. See: Defining a Department, *Oracle Bills of* Material User's Guide Assign resources to departments. See: Creating a Routing, *Oracle* Bills of Material User's Guide. For capacity planning and overhead assignment purposes, each resource must be assigned to one or more departments. Once a resource is assigned, you can select it when you define a routing. ☐ Define overheads and assign to departments. See: Defining Overhead: page 2 – 20 The cost rollup uses the assigned basis type to apply the overhead charge, and assigns the activity to the calculated overhead cost. You can define pending rates and use the cost rollup/update process to change the pending rates to Frozen overhead rates. See: ☐ Review routing and bill structures to confirm that costs will rollup properly. See: Overview of Bills of Material, Oracle Bills of Material User's Guide, Overview of Routings, Oracle Bills of Material User's Guide, and Bills and Cost Rollups: page 4 – 1. ☐ Control overheads by resource For overheads based on resource units or resource value, you need to specify the resources the overhead is based on. You can then charge multiple resources in the same department for the same operation, while still earning separate overhead for each resource. If you do not associate your overheads and resources, you do not apply overhead in the cost rollup or charge resource-based overhead in Work In Process. ☐ Confirm that the WIP parameters, *Recognize Period Variance* and Require Scrap Account are set as required Confirm that your Work in Process accounting classes and their valuations and accounts are properly set up. See: WIP Accounting Classes, Oracle Work in Process User's Guide, Defining WIP Accounting Classes, Oracle Work in Process User's Guide, and WIP

For each resource the charge type determines whether the resource is for internal (labor, machine, etc.) or outside processing. Use PO Move and PO Receipt charge types for outside processing. Each Valuation and Variance Accounts, *Oracle Work in Process User's Guide*.

If you use the same account numbers for different valuation and variance accounts, Cost Management automatically maintains your inventory and work in process values by cost element. Even if you use the same cost element account in a given subinventory or WIP accounting class, Oracle recommends you use different accounts for each and never share account numbers between subinventories and WIP accounting classes. If you do, you will have difficulty reconciling Inventory and Work in Process valuation reports to your account balances.

▶ To set up manufacturing standard costing:

1. Run a summary audit to validate your structures.

After you have defined your bill and routing structures, items and unit costs, you should run the summary audits to ensure information integrity. These audits check for bill of material structures with no headers, valued items with no costs, and so on.

2. Perform cost rollup as appropriate to set initial standard costs. See: Rolling Up Assembly Costs: page 4 – 32.

With the initial cost rollup/update, you complete the setup of the manufacturing cost structure and begin normal processing, including purchase order receipts, material issues, job/schedule creation, shop floor moves, and so on. Later, you analyze, report, and distribute costs through the period close process.

Similar to work in process costing, the cost rollup does not cost the routings assigned to phantom assemblies. The bill of material phantom determines how the component is treated. If you are rolling up the phantom assembly, the cost of the routing is included in this level cost of the assembly. But, for the parent assembly, when the subassembly's supply type is Phantom, the routing costs from the lower level assembly are not included in the cost of the parent assembly. If you change the supply type and the subassembly is no longer a phantom, the parent assembly includes the lower level routing cost in the parent assembly's previous level costs.

 Perform a cost update for manufacturing costing after rolling up assemblies. This revalues inventory and implements new costs.
 See: Updating Pending Costs to Frozen Standard Costs: page 4 – 39.

See Also

Bills and Cost Rollups: page 4 – 1

Bills and Cost Rollups

Bills and routings define the foundation for cost rollups, elemental distribution, and all related manufacturing costing functions.

Work in Process uses the bill of material to determine material requirements and control material transactions. In addition, the primary bill for an assembly determines the standard material and material overhead costs of that assembly.

Work in Process uses the routing to determine production schedules, specify shop floor and operation moves, and control resource, outside processing, and overhead cost transactions. In addition, the primary routing for the assembly determines the standard resource, outside processing, and resource overhead costs of that assembly.

When you submit a cost rollup, you may include or not include unimplemented engineering change orders. The cost rollup also considers the effective date.

Components and resources with effective dates on or before the rollup date are included in the rollup. The cost rollup does not include disabled components or resources.

Note: For phantom assemblies, the cost rollup includes the material costs but not the routing costs in the cost of higher level assemblies. Work in Process charges and values phantom assembly material costs but not phantom assembly routing costs.

Purchased assemblies show different elemental costs when you buy the assemblies rather than build ("make") them. When you purchase a "buy" assembly, the total cost consists of the material and material overhead cost elements only. When you build a make assembly, the total cost consists of the material, resource, overhead, and outside processing cost elements. Thus, the value of the material cost element may differ in buy vs. make situations. This affects job cost, period close distributions, and variances.

A component yield of less than 100% increases the usage quantity of the component and the material and material overhead value of that component in the assembly. According to your cost type controls, the cost rollup may or may not include any component yield factors. See: Yield, *Oracle Bills of Material User's Guide*.

When you roll up an assembly using a common bill, the cost rollup uses the common bill structure to determine the appropriate cost elements. The exception is assembly material overhead. You assign assembly material overhead to the assembly item itself, not

the bill structure. This means that the cost rollup uses the material overhead rate of the assembly that points to the common bill, not the assembly that owns the common bill. See: Referencing Common Bills and Routings, *Oracle Bills of Material User's Guide*.

For example, suppose you have a material overhead and a bill for assembly A. Suppose further that you define assembly B using A as a common bill. However, you also define a material overhead rate for B. A cost rollup on A uses A's material overhead. A rollup on B uses B's material overhead.

Common routings are similar to common bills of material. The cost rollup costs common routings like standard routings.

You can define multiple alternates for a bill or routing. You can rollup alternate structures and update these costs into your Frozen cost type.

See Also

Overview of Bills of Material, Oracle Bills of Material User's Guide Overview of Routings, Oracle Bills of Material User's Guide

Inventory Standard Cost Transactions

The following transctions can be performed in distribution organizations. See: Inventory and Manufacturing Costing Compared: page 1 – 10.

- Purchase Order Receipt To Receiving Inspection: page 4 3
- Delivery From Receiving Inspection To Inventory: page 4 4
- Purchase Order Receipt To Inventory: page 4 5
- Return To Supplier From Receiving: page 4 6
- Return To Supplier From Inventory: page 4 7
- Sales Order Shipments: page 4 7
- RMA Receipts: page 4 8
- RMA Return: page 4 8
- Miscellaneous Transactions: page 4 9
- Inter-Organization Transfers: page 4 10
- Subinventory Transfers: page 4 13
- Internal Requisitions: page 4 14
- Cycle Count and Physical Inventory: page 4 14

Purchasing related transactions with inventory destinations are also discussed, but not those with expense destinations such as office supplies and non-inventory purchases.

Purchase Order Receipt to Receiving Inspection

You can use the Receipts window in Oracle Purchasing to receive material from a supplier into a receiving location. You can also use this window to receive material directly to inventory. Please note that this section addresses Inventory destinations only.

When you receive material or outside processing items from a supplier into receiving inspection, the Receiving Inspection account is debited and the Inventory A/P Accrual account is credited based on the quantity received and the purchase order price.

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Receiving Inspection account @ PO price	XX	
Inventory A/P Accrual account @ PO price		XX

See Also

Receipt Accounting, Oracle Purchasing

Overview of Account Generator, Oracle Applications Flexfields Guide

Using the Account Generator in Oracle Purchasing, *Oracle Applications Flexfields Guide*

Delivery From Receiving Inspection to Inventory

You can use the Receiving Transactions window to move material from receiving inspection to inventory. The system uses the quantity and the purchase order price of the delivered item to update the receiving inspection account and quantity. The system uses the standard cost of the delivered item to update the subinventory balances.

Account	<u>Debit</u>	<u>Credit</u>
Subinventory accounts @ standard cost	XX	
Receiving Inspection account @ PO price		XX
Debit/Credit Purchase Price Variance		

If your item has material overhead associated with it, the subinventory account is debited for the amount of the material overhead and the material overhead-absorption account(s) are credited.

The absorption account for Material Overhead is defined in the Overheads window. See: Defining Overhead: page 2 - 20.

Account	<u>Debit</u>	<u>Credit</u>
Subinventory account	XX	
Material Overhead Absorption account		XX

The other 4 accounts are also credited.



Attention: The subinventory account is combined with the above entry. The material overhead-absorption account adds one additional entry. Under cost subelements you can set up an absorption.

Foreign Currencies

If the purchase order uses a foreign currency, the purchase order price is converted to the functional currency and this converted value is used for accounting purposes.

Purchase Price Variance (PPV)

Purchase price variances (PPV) occur when there are differences between the standard cost and the purchase order cost of an item.

Expense Subinventories and Expense Items

When you receive inventory expense items into expense subinventory locations, the following accounting entry is generated:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Subinventory Expense account @ PO price	XX	
Inventory A/P Accrual account @ PO price		XX

When you receive an expense (non-asset) inventory item, or into an expense subinventory, the subinventory expense account instead of the valuation account is debited. Because the expense account is debited at the purchase order price, there is no purchase price variance.

See Also

Valuation Accounts, Oracle Inventory User's Guide.

Inventory Standard Cost Variances: page 4 – 63

Organization Parameters Window, Oracle Inventory User's Guide

Purchase Order Receipt to Inventory

When you receive material from a supplier directly to inventory, the receipt and delivery transactions are performed in one step.

First, the Receiving Inspection account is debited and the Inventory A/P Accrual account credited based on quantity received and the purchase order price.

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Receiving Inspection account @ PO price	XX	
Inventory A/P Accrual account @ PO price		XX

Next, the Subinventory and Receiving Inspection accounts are, respectively, debited and credited based on the transaction quantity and standard cost of the received item.

Account	<u>Debit</u>	<u>Credit</u>
Subinventory accounts @ standard cost	XX	
Receiving Inspection account @ PO price		XX
Debit/Credit Purchase Price Variance		

If your item has material overhead(s), the subinventory entry is debited for the material overhead and the material overhead absorption account(s) is credited.

Account	<u>Debit</u>	<u>Credit</u>
Subinventory accounts	XX	
Material Overhead Absorption account		XX



Attention: If the subinventory account is combined with the above entry, the material overhead absorption account adds one additional entry.

See Also

Delivery From Receiving Inspection to Inventory: page 4 – 4 Overview of Receipt Accounting, *Oracle Purchasing User's Guide*

Return To Supplier From Receiving

Use the Receiving Returns and Receiving Corrections windows to return material to suppliers. If you use receiving inspection and have delivered material into inventory, you must first return the goods to receiving before you can return to your supplier. When items are returned to a supplier from receiving inspection, the Inventory A/P Accrual account is debited and the receiving inspection account is credited thus reversing the accounting entry created for the original receipt.

See Also

Entering Returns, Oracle Purchasing User's Guide

Return To Supplier From Inventory

When you do not use receiving inspection, the return to supplier transaction updates the same accounts as the direct receipt to inventory, with reverse transaction amounts. The Inventory A/P Accrual account is debited and the Receiving Inspection account is credited based on quantity received and the purchase order price.

Foreign Currencies

As with the purchase order receipt to inventory transaction, the system converts the purchase order price to the functional currency and uses this converted value for the return to supplier accounting entries.

See Also

Entering Returns, Oracle Purchasing User's Guide

Sales Order Shipments

Ship material on a sales order using Order Entry/Shipping. The accounting entries generated by a sales order shipment are:

Account	<u>Debit</u>	<u>Credit</u>
Cost of Goods Sold account	XX	
Subinventory accounts @ standard cost		XX

Based on the rules you define in Order Entry/Shipping, the Account Generator dynamically creates the cost of goods sold account.



Attention: You do not create any accounting information when you ship from an expense subinventory or ship an expense inventory item.

See Also

Overview of Ship Confirm, Oracle Order Entry User's Guide

Using the Account Generator in Oracle Order Entry/Shipping, *Oracle Order Entry/Shipping User's Guide*

RMA Receipts

You can receive items back from a customer using the RMA (return material authorization) Receipts window.

Account Debit Credit
Subinventory accounts @ standard cost XX
Cost of Goods Sold Account XX

This uses the same account as the original cost of goods sold transaction.



Attention: You do not create any accounting entries when you receive material for an RMA for an expense item or expense subinventory.

See Also

Receiving Customer Returns, Oracle Inventory User's Guide

RMA Returns

You can return items received into inventory through an RMA back to the customer using RMA Returns window. For example, you can send back — "return" — an item that was returned by the customer to you for repair.

This transaction reverses an RMA receipt. It also mimics a sales order shipment and updates the same accounts as a sales order shipment.

Account Debit Credit

Cost of Goods Sold Account
Subinventory accounts @ standard cost

XX

XX



Attention: Do not create any accounting entries when you return material for an RMA for an expense item or expense subinventory.

Returning Items to Customers, Oracle Inventory User's Guide

Miscellaneous Transactions

Using the Miscellaneous Transaction window, you can issue material from a subinventory to a general ledger account (or account alias) or receive material to a subinventory from an account or alias. An account alias identifies another name for a general ledger account.



Suggestion: Use account aliases for account numbers you use frequently. For example, use the alias *SCRAP* for your general ledger scrap account.

Issuing material from a subinventory to a general ledger account or alias generates the following accounting entries:

Account	<u>Debit</u>	<u>Credit</u>
Entered General Ledger Account @ standard cost	XX	
Subinventory accounts @ standard cost		XX

Receiving material to a subinventory from an account or an alias generates the following accounting entries:

Account	<u>Debit</u>	<u>Credit</u>
Subinventory accounts @ standard cost	XX	
Entered General Ledger Account @ standard		XX
cost		

Expense Subinventories and Expense Items

When you receive into an expense location or receive an expense item, you have expensed the material. If you use the miscellaneous transaction to issue from an expense location, you can issue to an account or to an asset subinventory of the *INV:Allow Expense to Asset Transfer* profile option in Oracle Inventory is set to Yes. If issued to an account the system assumes the material is consumed at the expense location and moves the quantity without any associated value. If transferred to an asset subinventory, the material moves at its current cost.

When you perform a miscellaneous transaction to receive an expense item to either an asset or expense subinventory, no accounting occurs. Since the account balance could involve different costs over time, The system assumes that the cost of the expense item is unknown.

See Also

Performing Miscellaneous Transactions, Oracle Inventory User's Guide

Inter-Organization Transfers

You can transfer material from one inventory organization to another either directly or through intransit inventory. Intransit inventory represents material that has not yet arrived at the receiving organization. See: Defining Inter-Organization Shipping Networks, *Oracle Inventory User's Guide*.

Using Intransit Inventory

You can move material from the shipping organization to intransit inventory using the Transfer Subinventories window. You can use the Receipts window to move material from intransit invenotry to the receiving organization.

Issue Transaction

Depending upon the Freight On Board (FOB) point defined in the inventory organization relationship, the shipment to intransit inventory creates the following accounting entries:

FOB Point is set to Receiving:

<u>Account</u>	Organization	<u>Debit</u>	<u>Credit</u>
Intransit inventory account	Sending	XX	
Subinventory accounts	Sending		XX

FOB Point is set to Shipment:

<u>Account</u>	Organization	<u>Debit</u>	<u>Credit</u>
Inter-Organization Receivable	Sending	XX	
Subinventory accounts	Sending		XX
Intransit Inventory account	Receiving	XX	
Inter-Organization Payable	Receiving		XX



Receipt Transaction

Depending upon the FOB point defined in the organization relationship, the receipt from intransit inventory creates the following accounting entries:

FOB Point is set to Receiving:

<u>Account</u>	<u>Organization</u>	<u>Debit</u>	<u>Credit</u>
Inter-Organization Receivable	Sending	XX	
Intransit Inventory account	Sending		XX
Subinventory accounts	Receiving	XX	
Inter-Organization Payable	Receiving		XX

FOB Point is set to Shipment:

<u>Account</u>	<u>Organization</u>	<u>Debit</u>	<u>Credit</u>
Subinventory accounts	Receiving	XX	
Intransit Inventory account	Receiving		XX

In addition to accounting for the movement of the material, these transactions also update the inter–organization receivable and payable accounts. These inter–organization clearing accounts represent inter–organization receivables and payables for the respective shipping and receiving organizations.

Direct Inter-Organization Transfer

When your organization relationship is set to directly transfer material, Inventory performs both the issue and the receipt transaction at the time of the issue. Any difference between the cost of items in the two organizations is recognized as variance in the receiving organization. The accounting entries created are as follows:

Account	<u>Organization</u>	<u>Debit</u>	<u>Credit</u>
Inter-Organization Receivable	Sending	XX	
Subinventory accounts	Sending		XX
Subinventory accounts	Receiving	XX	
Inter-Organization Payable	Receiving		XX

Use the Transfer Subinventories window for direct transfers.

Material Overhead and Inter-Organization Transfers

If your item has material overhead(s), you earn material overhead on inter-organization transfers. The subinventory entry is increased for the material overhead with a credit to the material overhead absorption account(s) in the receiving organization.

Account	<u>Debit</u>	<u>Credit</u>
Subinventory accounts	XX	
Material Overhead Absorption account		XX



Attention: The subinventory account is combined with the above entry. The material overhead absorption transaction adds one additional account to the entry.

The FOB Point changes the accounting for freight. With FOB receiving, freight is accrued on the receipt transaction by the sending organization. With FOB shipment, freight is accrued on the shipment transaction by the receiving organization. For direct transfers, the receipt and shipment transaction occur at the same time.

When the FOB Point is set to Receiving, the transfer creates the following freight and transfer charge entries at time of receipt:

<u>Account</u>	Organization	<u>Debit</u>	<u>Credit</u>
Inter-Organization Receivable	Sending	XX	
Freight Expense account	Sending		XX
Inter-Organization Receivable	Sending	XX	
Inter-Org. Transfer Credit	Sending		XX
Org. Material account	Receiving	XX	
Inter-Organization Payable	Receiving		XX

For the receiving organization, the inter-organization payable account is increased for freight and transfer charges. These charges are included in the comparison to the standard cost.

When the FOB Point is set to Shipment, the transfer creates the following freight and transfer charge entries at shipment:

Account	Organization	<u>Debit</u>	<u>Credit</u>
Inter-Organization Receivable	Sending	XX	
Inter-Org. Transfer Credit	Sending		XX
Intransit Inventory account	Receiving	XX	
Freight Expense account	Receiving		XX
Inter-Organization Payable	Receiving		XX

Intransit inventory includes both freight and transfer charges. The inter-organization payable is only increased for transfer charges.

Expense Subinventories and Expense Items

When you receive an inter-organization transfer into an expense subinventory or receive an expense inventory item, you have expensed the material and cannot directly issue it. The system assumes the material cost is consumed at the expense location.

Using the direct or intransit method, you can receive material to an expense subinventory or receive an expense inventory item. When you receive to expense locations or receive expense inventory items, the subinventory expense account is debited for the receiving organization, instead of the valuation accounts. The subinventory expense account is charged the total transaction value from the other organization.

Inter-Organization Transfers and Sets of Books

The Inter-Organization Direct Transfer transaction also supports transfers from any set of books, even if the currency is different. However, you cannot use the Inter-Organization Intransit with multiple sets of books. These transactions use receiving functions from Purchasing, which only supports one set of books. To perform an inter-organization intransit transfer from one set of books to another, you need to perform a combination of two transactions: a direct transfer and an intransit transfer.

See Also

Defining Inter-Organization Shipping Networks, *Oracle Inventory User's Guide*

Transferring Between Organizations, Oracle Inventory User's Guide Managing Receipts, Oracle Purchasing User's Guide

Subinventory Transfers

This transaction increases the accounts of the To Subinventory and decreases the From Subinventory, but has no net effect on overall inventory value.

If you specify the same subinventory as the From and To Subinventory, you can move material between locators within a subinventory.



<u>Account</u>	<u>Subinventory</u>	<u>Debit</u>	<u>Credit</u>
Subinventory accounts	То	XX	
Subinventory accounts	From		XX

Expense Subinventories and Expense Items

You can issue from an asset to an expense subinventory, and you can issue from an expense subinventory if the Oracle Inventory *INV:Allow Expense to Asset Transfer* profile option is set to Yes. The system assumes the material is consumed at the expense location.

See Also

Transferring Between Subinventories, Oracle Inventory User's Guide

Internal Requisitions

You can use the internal requisitions to replenish inventory. You can source material from a supplier, a subinventory within your organization, or from another organization. Depending upon the source you choose, the accounting entries are similar to one of the proceeding scenarios. However, unlike inter–organization transfers, internal requisitions do not support freight charges.

See Also

Overview of Internal Requisitions, Oracle Purchasing User's Guide

Purchase Order Receipt To Inventory: page 4 – 5

Inter-Organization Transfers: page 4 – 10

Subinventory Transfers: page 4 – 13

Cycle Count and Physical Inventory

Use cycle counting and physical inventory to correct inventory on–hand balances. A cycle count updates the accounts of the affected subinventory and offsets the adjustment account you specify. If you physically count *more than* your on–hand balance, the accounting entries are:

<u>Account</u>		<u>Debit</u>	<u>Credit</u>
Subinventory ac	counts @ standard cost	XX	
Adjustment	account @ standard cost		XX

If you count *less than* your on-hand balance, the accounting entries are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Adjustment account @ standard cost	XX	
Subinventory accounts @ standard cost		XX

Like a cycle count, a physical inventory adjustment also updates the accounts of the affected subinventories and the physical inventory adjustment account you specify.



Suggestion: Since the standard cost is not stored as you freeze the physical quantities, you should not perform a standard cost update until you have adjusted your physical inventory.

Expense Subinventories and Expense Items

The system does not record accounting entries for expense subinventories or expense items for either physical inventory or cycle count adjustments. However, the on-hand balance of an expense subinventory is corrected if you track the quantities.

See Also

Overview of Cycle Counting, Oracle Inventory User's Guide
Entering Cycle Counts, Oracle Inventory User's Guide
Overview of Physical Inventory, Oracle Inventory User's Guide
Processing Physical Inventory Adjustments, Oracle Inventory User's Guide

Updating Pending Costs to Frozen Standard Costs: page 4 – 39

Work in Process Standard Cost Transactions

The following cost transactions can occur when Oracle Work in Process is installed:

- Component Issue and Return Transactions: page 4 16
- Move Transactions: page 4 17
- Resource Charges: page 4 18
- Outside Processing Charges: page 4 22
- Overhead Charges: page 4 24
- Assembly Scrap Transactions: page 4 25
- Assembly Completion Transactions: page 4 26
- Job Close Transactions: page 4 27
- Period Close Transactions: page 4 28
- Work in Process Cost Update Transactions: page 4 29

Component Issue and Return Transactions

Component issue and return transactions can be launched in a variety of ways. See: Component Issue and Return Transaction Options, *Oracle Work in Process User's Guide* and Backflush Transactions, *Oracle Work in Process User's Guide*.

Costing Issue and Return Transactions

Issue transactions increase the work in process valuation and decrease the inventory valuation. The accounting entries for issue transactions are:

Account	<u>Debit</u>	<u>Credit</u>
WIP accounting class valuation accounts	XX	
Subinventory elemental accounts		XX

The accounting entries for return transactions are:

Account	<u>Debit</u>	Credit
Subinventory elemental accounts	XX	
WIP accounting class valuation accounts		XX

Subinventory accounts are defined in the Define Subinventories window in Oracle Inventory. WIP elemental accounts are defined in the WIP Accounting Classes window in Work in Process. See: Defining Subinventories, *Oracle Inventory User's Guide*, Subinventory General Ledger Account Fields, *Oracle Inventory User's Guide*, and WIP Accounting Classes, *Oracle Work in Process User's Guide*.

See Also

Overview of Material Control, Oracle Work in Process User's Guide

Move Transactions

A move transaction moves assemblies within an operation, such as from Queue to Run, or from one operation to the next. Move transactions can automatically launch operation completion backflushing and charge resources and overheads.

You can perform move transactions using the Move Transactions window, Open Move Transaction Interface window, or the Enter Receipts window in Purchasing.

Backflush Material Transactions

With backflushing, you issue component material used in an assembly or subassembly by exploding the bills of material, and then multiplying by the number of assemblies produced.

Move transactions can create operation pull backflush material transactions that issue component material from designated WIP supply subinventories and locators to a job or repetitive schedule. For backflush components under lot or serial number control, you assign the lot or serial numbers during the move transaction.

When you move backward in a routing, Work in Process automatically reverses operation pull backflush transactions. The accounting entries for move transactions are:

Account	<u>Debit</u>	Credit
WIP accounting class valuation accounts	XX	
Subinventory elemental accounts		XX

The accounting entries for return transactions are:

AccountDebitCreditSubinventory elemental accountsXXWIP accounting class valuation accountsXX

Moved Based Resource Charging

As the assemblies you build pass through the operations on their routings, move transactions charge all pre-assigned resources with an auto-charge type of WIP Move at their standard rate.

You can charge resources based upon a fixed amount per item moved in an operation (Item basis) or based upon a fixed lot charge per item moved in an operation (Lot basis). For resources with a basis of Lot, Work in Process automatically charges the lot cost upon completion of the first assembly in the operation.

You can also enter manual resource transactions associated with a move, or independent of any moves. You can manually charge resources to a job and repetitive schedule provided the job and repetitive schedule has a routing. You can also transact resources through the Open Resource Transaction Interface.

See Also

Overview of Resource Management, Oracle Work in Process User's Guide

Charging Resources with Move Transactions, *Oracle Work in Process User's Guide*

Backflush Transactions. Oracle Work in Process User's Guide

Resource Charges

Work in Process supports four resource autocharging methods: Manual, WIP Move, PO Move, and PO Receipt. You can charge resources at an actual rate. You can also charge resource overheads automatically as you charge resources.

WIP Move Resource Charges

You can automatically charge resources at their standard rate to a job or repetitive schedule when you perform a move transaction using either the Move Transactions window or the Open Move Transaction Interface. When you move assemblies from the Queue or Run intraoperation steps forward to the To move, Reject, or Scrap

intraoperation steps, or to the next operation, Work in Process charges all pre-assigned resources with an charge type of WIP Move at their standard rate.

For resources with a basis of Item, Work in Process automatically charges the resource's usage rate or amount multiplied by the resource's standard cost upon completion of each assembly in the operation. For resources with a basis of Lot, Work in Process automatically charges the resource's usage rate or amount multiplied by the resource's standard cost upon completion of the first assembly in the operation.

You can undo the WIP Move resource charges automatically by moving the assemblies from Queue or Run of your current operation to Queue or Run of any prior operation, or by moving the assemblies from the To move, Reject, or Scrap intraoperation steps backward to the Queue or Run intraoperation steps of the same operation, or to any intraoperation step of any prior operation.

Work in Process applies WIP Move resource transactions to multiple repetitive schedules on a line based on how the assemblies being moved are allocated. Work in Process allocates moves across multiple repetitive schedules based on a first in–first out basis.

Manual Resource Charges

You can charge manual resources associated with a move transaction or independent of any moves. Manual resource transactions require you to enter the actual resource units applied rather than autocharging the resource's usage rate or amount based on the move quantity. You can charge resources using that resource's unit of measure or any valid alternate. You can manually charge resources to a job or repetitive schedule provided the job or repetitive schedule has a routing.

If you use the Move Transactions window to perform moves and manual resource transactions at the same time, Work in Process displays all pre–assigned manual resources with an charge type of Manual assigned to the operations completed in the move. If the resource is a person–type resource, you can enter an employee number.

In addition to the resources displayed, you can manually charge any resource to a job or repetitive schedule, even if you have not previously assigned the resource to an operation in the job or repetitive schedule. You can also manually charge resources to an operation added ad hoc by entering any resource defined for the department associated with the operation. Work in Process applies Manual resource transactions to the first open repetitive schedule on the line.

You can correct or undo manual resource transactions by entering negative resource units worked.

Costing Resource Charges at Resource Standard

Resource charges increase work in process valuation. The accounting entries for resource transactions are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
WIP accounting class resource valuation account	XX	
Resource absorption account		XX

If Autocharge is set to WIP Move, work in process and labor are charged at standard. There are no resource rate or efficiency variances.

The accounting entries for negative Manual resource transactions and backward moves for WIP Move resources are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Resource absorption account	XX	
WIP accounting class resource valuation		XX
account		

Costing Labor Charges at Actual

You can charge labor charges at actual in two ways. You can enter an actual rate for the employee using the Open Resource Transaction Interface or when you define employee rates. For labor charges using an actual or employee rate for a resource for which charge standard rate is turned off, the accounting entries are:

Account	<u>Debit</u>	<u>Credit</u>
WIP accounting class resource valuation account	XX	
Resource absorption account		XX

Any difference between the total labor charged at actual and the standard labor amount is recognized as an efficiency variance at period close.

If the Standard Rates check box is checked and you enter an actual rate for a resource, the system charges the job or repetitive schedule at standard. If Autocharge is set to Manual and actual rates and quantities are recorded, a rate variance is recognized immediately for any rate difference. Any quantity difference is recognized as an efficiency variance at period close. The accounting entries for the actual labor charges are:

Account	<u>Debit</u>	<u>Credit</u>
WIP accounting class resource valuation account	XX	
Resource rate variance account (Debit when actual rate is greater than the standard rate. Credit when the actual rate is less than the standard rate.)	XX	XX
Resource absorption account		XX

PO Receipt and PO Move Transactions

You can receive purchased items associated with outside resources from an outside processing operation back into work in process in Oracle Purchasing. For these items, Work in Process creates resource transactions at the standard or actual rate for all outside resources with an autocharge type of PO receipt or PO move. For outside resources with an autocharge type of PO move, Work in Process also moves the assemblies from the Queue or Run intraoperation step of the outside processing operation into the Queue intraoperation step of the next operation or into the To move intraoperation step if the outside processing operation is the last operation on the routing.

If you assigned internal resources to an outside operation with an autocharge type of Manual, charge the resources using the Resource Transactions window or the Open Resource Transaction Interface.

If you return assemblies to the supplier using the Enter Returns and Adjustments window in Oracle Purchasing, Oracle Purchasing automatically reverses the charges to all automatic resources associated with the operation. You must manually reverse all manual resource charges using the Resource Transactions window. For outside resources with an autocharge type of PO move, Oracle Purchasing automatically moves the assemblies from the Queue intraoperation step of the operation immediately following the outside processing operation into the Queue intraoperation step of your outside processing operation.

If the outside processing operation is the last operation on the routing, the assemblies automatically move from the To move intraoperation step to the Queue intraoperation step. PO move resource transactions are applied to multiple repetitive schedules on a line based on how the assemblies being moved are allocated. Moves are allocated across multiple repetitive schedules on a first in–first out basis. PO receipt resource transactions are allocated across schedules on a first in first (FIFO) out basis.

Overview of Resource Management, Oracle Work in Process User's Guide Managing Receipts, Oracle Purchasing User's Guide Outside Processing, Oracle Work in Process User's Guide

Outside Processing Charges

Work in Process automatically creates resource transactions at the standard or actual rate for all outside processing resources with an charge type of PO Receipt or PO Move when you receive assemblies from an outside processing operation back into work in process, using the Enter Receipts window in Purchasing. For outside processing resources with an charge type of PO Move, Work in Process also performs a move of the assemblies from the Queue or Run intraoperation step of your outside processing operation into the Queue intraoperation step of your next operation or into the To move intraoperation step if the outside processing operation is the last operation on your routing.

If you assigned internal resources to an outside operation with an charge type of Manual, you use the Move Transactions window or the Open Resource Transaction Interface to charges these resources.

If you return assemblies to the supplier, Work in Process automatically reverses the charges to all automatic resources associated with the operation. You must manually reverse all manual resource charges using the Move Transactions window. For outside processing resources with an charge type of PO Move, Work in Process automatically moves the assemblies from the Queue intraoperation step of the operation immediately following the outside processing operation into the Queue intraoperation step of your outside processing operation.

If the outside processing operation is the last operation on your routing, Work in Process automatically moves the assemblies from the To move intraoperation step to the Queue intraoperation step. Work in Process applies PO Move resource transactions to multiple repetitive schedules on a line based on how the assemblies being moved are allocated. Work in Process allocates moves across multiple repetitive schedules based on a first in–first out basis. Work in Process applies PO Receipt resource transactions to the first open repetitive schedule on the line.

Costing Outside Processing Charges at Standard

When you receive the assembly from the supplier, Purchasing sends the resource charges to Work in Process at either standard cost or actual purchase order price, depending upon how you specified the standard rate for the outside processing resource.

If the Standard Rates option is enabled for the outside processing resource being charged, the system charges Work in Process at the standard rate and creates a purchase price variance for the difference between the standard rate and the purchase order price. The accounting entries for outside processing items are as follows:

Account	<u>Debit</u>	<u>Credit</u>
WIP accounting class outside processing valuation	XX	
account		
Purchase price variance account (Debit when the	XX	XX
actual rate is greater than the standard rate. Credit		
when the actual rate is less than the standard rate.)		
Organization Receiving account		XX

Any quantity or usage difference is recognized as an outside processing efficiency variance at period close.

The accounting entries for return to supplier for outside processing are:

Account	<u>Debit</u>	<u>Credit</u>
Organization Receiving account	XX	
Purchase price variance account (Debit when actual rate is less than the standard rate. Credit when the actual rate is greater than the standard	XX	XX
rate. WIP accounting class outside processing valuation account		XX

Costing Outside Processing Charges at Actual Purchase Order Price

If the Standard Rates option is disabled for the outside processing resource being charged, the system charges Work in Process the purchase order price and does not create a purchase price variance.

The accounting transactions for outside processing charges at purchase order price are as follows:

Account	<u>Debit</u>	Credit
WIP accounting class outside processing valuation	XX	
account		
Organization Receiving account		XX

Any difference from the standard is recognized as a resource efficiency variance at period close.

See Also

Overview of Shop Floor Control, Oracle Work in Process User's Guide

Overhead Charges

Move Based Overhead Charging

Work in Process automatically charges appropriate overhead costs as you move assemblies through the shop floor. You can charge overheads directly based on move transactions or based on resource charges. For overheads charged based on move transactions with a basis of Item, Work in Process automatically charges overheads upon completion of each assembly in the operation. Work in Process automatically reverse these charges during a backward move transaction.

For overheads based on move transactions with a basis of Lot, Work in Process automatically charges overheads upon completion of the first assembly in the operation. Work in Process automatically reverses these charges during a backward move transaction if it results in zero net assemblies completed in the operation.

Resource Based Overhead Charging

Work in Process automatically charges appropriate overhead costs as you charge resources. You can charge overheads based on resource units or value. Work in Process automatically reverses overhead charges when you reverse the underlying resource charge.

Costing Overhead Charges

Overhead charges increase work in process valuation. The accounting entries for overhead charges are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
WIP accounting class overhead account	XX	
Overhead absorption account		XX

You can reverse overhead charges by entering negative Manual resource charges or performing backward moves for WIP Move resources. The accounting entries for reverse overhead charges are:

Account	<u>Debit</u>	<u>Credit</u>
Overhead absorption account	XX	
WIP accounting class overhead account		XX

See Also

Overview of Shop Floor Control, Oracle Work in Process User's Guide

Assembly Scrap Transactions

You can move partially completed assemblies that you consider unrecoverable to the Scrap intraoperation step of that operation. (If necessary, you can recover assemblies from scrap by moving them to another intraoperation step.) By moving into the Scrap intraoperation step, you can effectively isolate good assemblies from bad.

Work in Process considers a move into the Scrap intraoperation step from the Queue or Run of the same operation as an operation completion, and thus updates operation completion information, backflushes components, and charges resource and overhead costs according to the elemental cost setup.

You can also move assemblies back to the Scrap intraoperation step of the previous operation for Queue or Run if no work has been completed at the current operation.

Costing Assembly Scrap Transactions

When you define Work in Process parameters, you can specify whether moves into the Scrap intraoperation step require a scrap account. If you enter a scrap account or alias when you move assemblies into Scrap, the scrap account is debited and the job or repetitive schedule elemental accounts for the standard cost of the assembly through the scrap operation are credited. This removes the cost of the scrapped assemblies from the job or repetitive schedule. If you do not enter a scrap account or select an alias, the cost of the scrap remains in the job or schedule until job or period close. If you recover assemblies from scrap, the scrap account is credited and the job or repetitive schedule elemental accounts for the standard cost of this assembly through this



operation are debited. The accounting entries for scrap transactions are:

Account Debit Credit
Scrap account XX
WIP accounting class valuation XX
accounts@standard

The accounting entries for reverse scrap transactions are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
WIP accounting class valuation accounts@standard	XX	
Scrap account		XX

See Also

Overview of Shop Floor Control, Oracle Work in Process User's Guide

Assembly Completion Transactions

Use the Completion Transactions window, Move Transactions window, and Inventory Transaction Interface to move completed assemblies from work in process into subinventories. Completion transactions relieve the valuation account of the accounting class and charge the subinventory accounts (for example, finished goods) based upon the assembly's elemental cost structure.

Costing Assembly Completion Transactions

Completions decrease work in process valuation and increase inventory valuation at standard costs. The accounting entries for completion transactions are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Subinventory elemental accounts	XX	
WIP accounting class valuation accounts		XX

Earning Assembly Material Overhead on Completion

You can assign overheads based on Item, Lot or Total Value basis. For standard discrete jobs and repetitive schedules, you can earn these

overheads as you complete assemblies from work in process to inventory.

The accounting entries for material overhead on completion transactions for standard discrete jobs and repetitive schedules are:

Account	<u>Debit</u>	<u>Credit</u>
Subinventory material overhead account	XX	
Inventory material overhead absorption		XX
account		

Use non-standard expense jobs for such activities as repair and maintenance. Use non-standard asset jobs to upgrade assemblies, for teardown, and to prototype production. Non-standard discrete jobs do not earn overhead on completion. Since you have already earned overhead to produce the assemblies as you are repairing or reworking, Work in Process prevents you from double earning material overhead on these assemblies.

The accounting entries for material overhead on completion transactions for non-standard expense and non-standard asset jobs are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Subinventory material overhead account	XX	
WIP accounting class material overhead		XX
account		

See Also

Completing and Returning Assemblies, *Oracle Work in Process User's Guide*

Job Close Transactions

Until you close a job, or change the status of the job to Complete – No Charges, you can make material, resource, and scrap charges to the job. Closing a discrete job prevents any further activity on the job.

Costing Job Close Transactions

Work in Process recognizes variances when you close a job. The actual close date you specify determines the accounting period Work in

Process uses to recognize variances. You can back date the close to a prior open period if desired.

The close process writes off the balances remaining in the WIP elemental valuation accounts to the elemental variance accounts you defined by accounting class, leaving a zero balance remaining in the closed job.

If there is a positive balance in the job at the end of the close, the accounting entries for a job close are:

Account	<u>Debit</u>	<u>Credit</u>
WIP accounting class variance accounts	XX	
WIP accounting class valuation accounts		XX

Period Close Transactions

The period close process in Inventory recognizes variances for non-standard expense jobs and repetitive schedules. It also transfers the work in process period costs to the general ledger.

Costing Non-Standard Expense Job Period Close Transactions

You can close discrete jobs and recognize variances for non-standard expense jobs at any time. In addition, the period close process automatically recognizes variances on all non-standard expense job charges incurred during the period. Therefore, open non-standard expense jobs have zero WIP accounting balances at the start of a new period.

If there is a positive balance in the job at the end of the period, the accounting entries for non-standard expense jobs at period close are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
WIP accounting class variance accounts	XX	
WIP accounting class valuation accounts		XX

Costing Repetitive Schedule Period Close Transactions

You do not *close* a repetitive schedule. However, you do recognize variances on a period basis that result in zero WIP accounting balances at the start of the new period. You should check your transactions and balances using the Repetitive Value Report before you close a period.

When you define Work in Process parameters, you can specify which repetitive schedule variances you recognize when you close an

accounting period. You can either recognize variances for all repetitive schedules when you close an accounting period, or recognize variances for those repetitive schedules with statuses of either Complete – No Charges or Cancelled.

Assuming positive balances in the repetitive schedules at the end of the period, the accounting entries for repetitive schedules at period close are:

Account	<u>Debit</u>	<u>Credit</u>
WIP accounting class variance accounts	XX	
WIP accounting class valuation accounts		XX

See Also

Overview of Period Close: page 8 – 2

Overview of Discrete Job Close, *Oracle Work in Process User's Guide* Defining WIP Parameters, *Oracle Work in Process User's Guide*

Work in Process Standard Cost Update Transactions

The standard cost update process revalues standard and non-standard asset discrete jobs and updates pending costs to frozen standard costs. Repetitive schedules and non-standard expense jobs do not get revalued by the cost update.

The cost update creates accounting transactions by job and cost element valuation account. Each standard and non-standard asset discrete job is updated using the following formula:

Standard cost update adjustment = [new costs in (material, resource, outside processing, and overhead charges) – new costs out (scrap and assembly completion charges)] – [old costs in (material, resource, outside processing, and overhead charges) – old costs out (scrap and assembly completion charges)]

If the result of the cost update is an increase in the standard cost of the job, the accounting entries for a cost update transaction are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
WIP accounting class valuation accounts	XX	
WIP Standard cost adjustment account		XX

If the result of the cost update is a decrease in the standard cost of the job, the accounting entries for a cost update transaction are:

Account	<u>Debit</u>	Credit
WIP Standard cost adjustment account	XX	
WIP accounting class valuation accounts		XX

When the cost update occurs for open jobs, standards and WIP balances are revalued according to the new standard, thus retaining relief variances incurred up to the date of the update.

Updating Standard Costs

The standard cost update procedure enables you to define and roll up pending costs, simulate changes to standard costs for "what if" analysis, and then update pending costs to the Frozen standard cost type.

If possible, run your cost update at the beginning of your inventory accounting period before transactions have started for the new period.

▶ To update standard costs:

- Define a cost type for pending standard costs.
- Define pending costs for each of the cost elements: material (inventory items, both components and assemblies), material overhead, resources, overhead, and outside processing.

If you have changed your activity rates, and base material overhead on these activity rates, you need to run the activity mass edit to recalculate the activity based material overhead.

You can also define pending rates for resources and overhead.

- 3. Roll up pending costs. This adds up pending costs for all cost elements of an assembly and creates a new pending cost for the assembly.
- 4. Print and review preliminary adjustment reports to see potential changes to the frozen standard costs.
- 5. Update pending costs to frozen standard costs.
- 6. Optionally, print new standard cost reports.

See Also

Defining Cost Types: page 2 - 11

Defining Item Costs: page 3 - 4

Defining a Resource, Oracle Bills of Material User's Guide

Defining Overhead: page 2 – 20

Rolling Up Assembly Costs: page 4 – 32

Reporting Pending Adjustments: page 4 - 37

Updating Pending Costs to Frozen Standard Costs: page 4 – 39

Detailed Item Cost Report: page 9 - 10

Elemental Cost Report: page 9 - 12

Indented Bills of Material Cost Report: page 9 – 22

Overhead Report: page 9 – 45

Rolling Up Assembly Costs

If you have Oracle Bills of Material installed, you can perform either a full cost rollup or a single-level cost rollup.

A full cost rollup first performs a bill of material explosion for assemblies. The rollup process builds the cost of assemblies, starting with the lowest level, and works up the structure to top level assemblies. This method gives you the most current bill of material structure and component costs.



Suggestion: Verify the bill structure before performing a cost rollup to ensure that there are no loops in the bill. See: Checking for Bill Loops, *Oracle Bills of Material User's Guide*.

A single-level rollup only looks at the first level of the bill structure for each assembly in the rollup, and rolls the costs for the items at this level into the parent. This method does not reflect structure or cost changes that have occurred at a level below the first level of your assemblies.

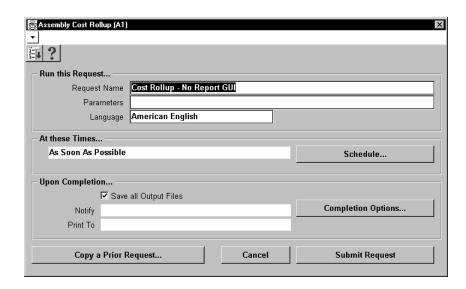
Note: The cost rollup includes the material costs but not the routing costs of phantom assemblies in the cost of higher level assemblies.

Use a single level rollup to assign new standard costs to the top assembly, but not to the lower-level assemblies. A single level rollup allows you to generate costs on new assemblies without changing costs on existing subassemblies.

Part of the cost rollup process includes the option to print a report. If you choose to print a report, you can select either the Consolidated Bills of Material Cost Report or the Indented Bills of Material Cost Report. Both of these reports can also be submitted when reporting item costs.

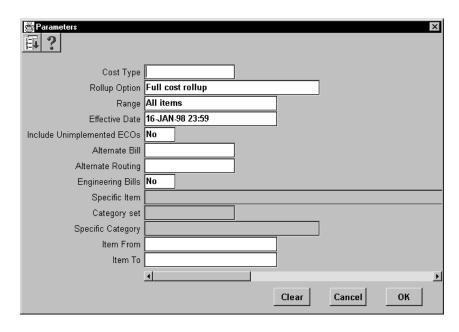
▶ To roll up assembly costs:

1. Navigate to the Assembly Cost Rollup window.

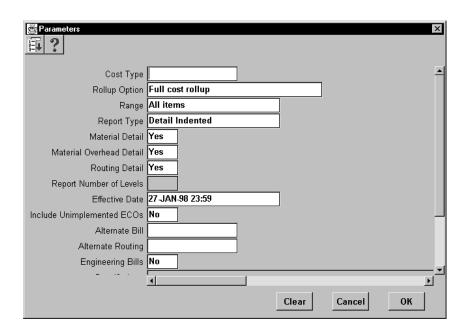


2. Enter or select a name of the request to submit:

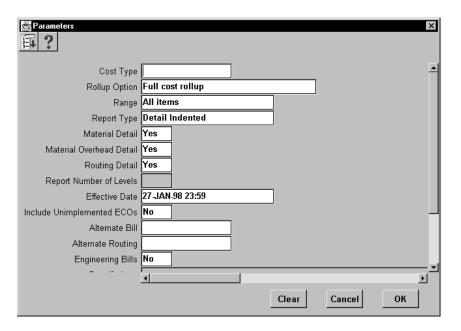
Cost rollup – No Report: Rolls up costs and commits them to the database; does not print a report.



Cost Rollup – Print Report: Rolls up costs and commits them to the database; prints report.



Temporary Rollup – Print Report: Rolls up costs but *does not* commit them to the database; prints report.





Attention: To use either of the Cost Rollup options where costs are committed to the database, the Privilege to Maintain Cost security function must be included as part of the responsibility.

Note: By leaving the Privilege to View Cost security function as part of a user's responsibility, but excluding the Privilege to Maintain Cost function, you can allow the user to print reports but not change any stored costs. See: Security Functions: page 2 – 63.

- 3. In the Parameters window, enter a cost type for which to roll up assembly costs.
- 4. Select a full or single-level cost rollup option.
- 5. Select the range of items to roll up: all items, a category, a range of items, a specific item, or zero cost items only.

If you select Zero Cost Items, the rollup includes zero cost items in the current and the default cost types that have their Based on Rollup attribute turned on.

Note: Inactive items are not rolled up unless you enter a Specific Item that is inactive.

- 6. If you chose to print a report:
 - Select a report type:

Consolidated: Prints the Consolidated Bill of Material Cost report, which lists total quantities of each component used in the parent assembly regardless of level.

Detail Indented: Prints the Indented Bill of Material Cost report, which lists detailed cost structure by level.

- Indicate whether to include Material Detail and Material Overhead Detail (material and material overhead sub-elements) on the report.
- Indicate whether to include Routing Detail (resource, outside processing, and overhead sub-elements) on the report. By limiting the amount of sub-element detail, you reduce the size of the report.
- Enter the maximum report number of levels to display on the report. For example, if your assembly had 20 levels and you enter 10 in this field, the costs for levels 1 to 10 would be detailed. The costs for levels 11 to 20 would be summarized as previous level costs. The default is the maximum bill of material levels value. See: Defining Bills of Material Parameters, Oracle Bills of Material User's Guide.

- 7. Enter the effective date and time to determine the structure of the bill of material to use in the cost rollup. You can use this to roll up historical and future bill structures using current rates and component costs. The default is the current date and time.
- 8. Indicate whether to include unimplemented engineering change orders (ECOs) in the rollup. The default is off. See: ECO Statuses, *Oracle Engineering User's Guide*.
- 9. Enter the alternate bill name for the assembly to roll up the alternate bills for the selected range of items. For example, if you choose All items in the Range field and enter A–001 in this field, all items that have a bill associated with that alternate name are rolled up. The primary bill is *not* rolled up if you select an alternate bill. See: Primary and Alternate Bills of Material, *Oracle Bills of Material User's Guide*.
- 10. Enter the alternate routing name for the assembly to roll up the alternate routings for the selected range of items. For example, if you choose All items in the Range field and enter A–001 in this field, all items using routings with that routing name are rolled up. The primary routing is *not* used if you roll up using an alternate routing. See: Primary and Alternate Routings, *Oracle Bills of Material User's Guide*.
- 11. Indicate whether to include engineering bills in the cost rollup. If you turn this on, only assemblies with engineering bills are rolled up. The default is off.
- 12. Specify items to roll up:
 - If you selected to roll up a specific item in the Range field, enter the item.
 - If you selected to roll up a category in the Range field, enter either a category set or a specific category.
 - If you enter a category set, item costs are rolled up for items associated with this category set. The default is the category set defined for your costing functional area.
 - If you selected to roll up a range of items, enter From and To values to specify the range of items for which to roll up costs.

See Also

Submitting a Request, *Oracle Applications User's Guide* Consolidated Bills of Material Cost Report: page 9 – 5

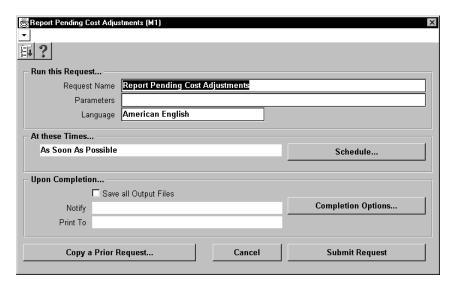
Reporting Pending Adjustments

Report pending adjustments to simulate a change in standard costs. This launches two processes, one to simulate a cost update from the cost type you specify to the Frozen cost type, and one to launch the Inventory, Intransit, and WIP Standard Cost Adjustment reports. These reports enable you to preview the changes the standard cost update would perform for current inventory balances.

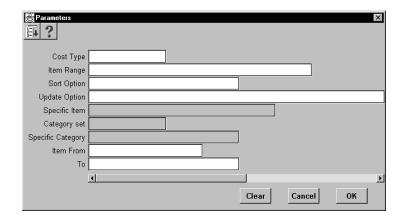
These same three reports are run as part of a cost update. In this case, the reports show adjustments made to the inventory valuation by the cost update process.

▶ To report pending adjustments:

1. Navigate to the Report Pending Cost Adjustments window.



2. In the Parameters window, enter the cost type for the cost update.



3. Select an item range to perform a simulated standard cost update and generate preliminary adjustment reports for:

All items: This is the default.

Based on rollup items: Items that have Based on Rollup turned on in the Frozen cost type. This is only available if you use Inventory with Bills of Material.

Category: All items in a category you specify.

Not based on rollup items: Items that have Based on Rollup turned off in the Frozen cost type. This is only available if you use Inventory with Bills of Material.

Range of items: Range of items you specify.

Specific item: Specific item you specify.

Zero cost items: Items with zero cost in the Frozen cost type.

- 4. Select a sort option for the adjustment reports: by category, by item, or by subinventory (default).
- 5. Select an update option:

Item costs only: This is the default.

Resource, overhead, and item costs: This is only available if you use Inventory with Bills of Material. If you use Work in Process, choose this option to reflect resource and overhead cost changes for actual charges to standard and non-standard asset jobs.

- 6. Do one of the following:
 - If you selected Specific item in the Item Range field, enter the specific item to include in the simulated cost update.

- If you selected Category in the Item Range field, enter a specific category.
- If you selected Range of items in the Item Range field, enter values for Item From and Item To. A simulated standard cost update is performed for all items in this range, inclusive.

See Also

Submitting a Request, Oracle Applications User's Guide

Updating Pending Costs to Frozen Standard Costs

Updating pending costs to Frozen standard costs does the following:

- Updates the existing standard costs with the costs created in the new cost type and creates the resulting adjustment accounting entries.
 - If you use Work in Process, the cost update revalues discrete job balances, creates accounting adjustments, and prints the adjustments along with the new job values in its report.
- · Creates item cost history.
- Prints the Inventory, Intransit, and WIP Standard Cost Adjustment reports that detail the valuation changes in your inventory due to the change in the standard costs.
- If you share costs across inventory organizations, the standard cost update automatically revalues the on-hand balances in all organizations that share costs.
 - Oracle recommends that you also print the Cost Type Comparison Reports to display differences in item costs for any two cost types. You can compare by cost element, activity, sub-element, department, this/previous level, or operation.
- Optionally, saves update details for rerunning adjustment reports

You can only update standard costs from the master costing organization, which must use standard costing.

The standard cost update is a batch process that can run while you perform normal transactions. Doing so delays accounting transactions until the cost update is complete. (Consider scheduling large–scale cost

updates for off hours.) However, if the period close, job close, or general ledger transfer processes are running, the standard cost update is delayed until they are complete.

Because this function changes the frozen standard value of inventory, Oracle recommends that you take appropriate security precautions.



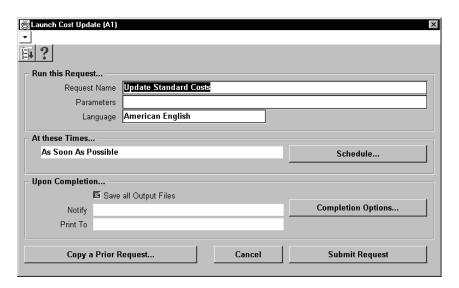
Attention: Cost Management does *not* update the standard costs of those items for which you do not define a cost. The standard cost is updated to zero only if you define a zero cost for the item.

Prerequisites

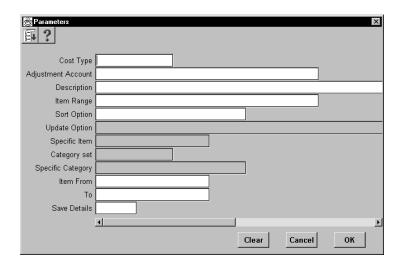
☐ To define, update, or delete cost information, the Privilege to Maintain Cost security function must be included as part of the responsibility. See: Security Functions: page 2 – 63.

▶ To update pending costs to Frozen standard costs:

1. Navigate to the Update Costs window.



2. In the Parameters window, enter the cost type for the cost update.



The cost update process copies information (a set of costs for items, activities, resources, outside processing, and overhead) in the specified cost type into the Frozen cost type.

3. Enter the adjustment account associated with the cost update.

This account is used to collect the changes in value to each item, and to automatically generate transactions that adjust your inventory accounts. Your inventory is adjusted by subinventory and elemental cost account. Your discrete work in process is adjusted by job and cost element account. The WIP accounting class defines the adjustment account for your discrete jobs.

4. Select an item range to update the standard costs for:

All items: This is the default.

Based on rollup items: Items that have Based on Rollup turned on in the Frozen cost type.

Category: All items in a category you specify.

Not based on rollup items: Items that have Based on Rollup turned off in the Frozen cost type.

Range of items: Range of items you specify.

Specific item: Specific item you specify.

Zero cost items: Items with zero cost in the Frozen cost type.

5. Select a sort option for the adjustment reports: by category then item, by item, or by subinventory then item (default).

- 6. If you selected All Items for Item Range, select an update option: either Overhead, resource, activity, and item costs, or Resource, overhead, and item costs.
- 7. If you selected Specific item in the Item Range field, enter the specific item to include in the cost update.
- 8. If you selected Category in the Item Range field, do one of the following:
 - Enter the category set to include in the cost update. The default is the category set defined for the costing functional area.
 - Enter a specific category.
- 9. If you selected Range of items in the Item Range field, enter values for Item From and Item To. Standard costs are updated for all items in this range, inclusive.
- 10. Indicate whether to save details. Entering Yes saves a snapshot of the inventory and work in process on-hand quantities cost update details. If you set this to Yes, you can rerun the adjustment reports as long as you choose to maintain the details.

You can purge standard cost history to delete these details.

See Also

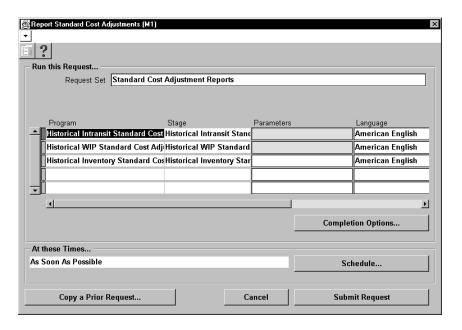
Updating Standard Costs: page 4 – 31
Submitting a Request, *Oracle Applications User's Guide*Purging Standard Cost Update History: page 4 – 60
Defining Items, *Oracle Inventory User's Guide*

Reporting Cost Update Adjustments

For previous standard cost updates where you chose to save the details, you can print Historical Inventory and Intransit Standard Cost Adjustment reports. If you use Work in Process, you can also print the Historical WIP Standard Cost Update Report. These reports show the adjustments made to inventory and work in process valuation due to the cost update.

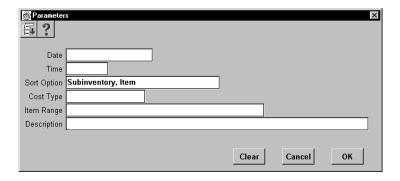
► To report cost update adjustments:

1. Navigate to the Report Standard Cost Adjustments window.



This submits the Historical Inventory, Historical Intransit, and the Historical WIP Standard Cost Adjustment Reports.

2. In the Parameters window, enter a date and a time on which to report standard cost adjustments.



- 3. Enter or select how to sort the reports: by item, by category then item, or by subinventory then item.
- 4. Enter the cost type.
- 5. Enter an item range.

See Also

Submitting a Request, Oracle Applications User's Guide

Viewing Standard Cost History

View standard cost history and inventory adjustment values and quantities for your items. All historical cost information for your items is displayed for each cost update, even if you did not choose to save cost update details. All item costs updated or defined using the Define Item Cost window are also displayed.

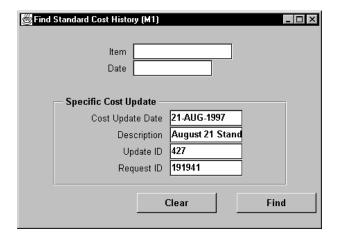
If you share costs and are accessing this window from the master costing organization, you can choose to view the adjustment values for the current organization only or for all organizations that share the same standard costs. If you access this window from a child organization (non-cost master organization), you can only view the adjustment values for that organization.

Prerequisites

☐ To view cost information, the Privilege to View Cost security function must be included as part of the responsibility. See: Security Functions: page 2 – 63.

▶ To view standard cost history:

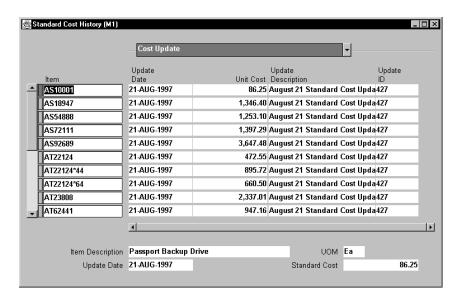
- Navigate to the View Cost History window.
- 2. Enter search criteria in the Find Standard Cost History window.



3. Choose the Find button to initiate the search.

The Standard Cost History window lists item cost updates. There are four alternative regions: Cost Update, Cost Elements,

Adjustment Values, and Adjustment Quantity. The Adjustment Values and Adjustment Quantity alternative regions are available for the current organization. They are available for all organizations if you are in the costing master organization and there are child organizations that point to the master for cost information.



The Cost Update alternative region displays the update date, the unit cost, the update description, and the update ID.

The Cost Elements alternative region displays cost element information.

The Adjustment Values alternative region displays the update date, the inventory and intransit adjustment values, and, if you use Work in Process, the WIP adjustment value.

The Adjustment Quantity alternative region displays the update date, the inventory and intransit adjustment quantities, and, if you use Work in Process, the WIP adjustment quantity.

See Also

Using Query Find, Oracle Applications User's Guide
Using Query Operators, Oracle Applications User's Guide
Searching For Information, Oracle Applications User's Guide

Performing Query–by–Example and Query Count, $Oracle\ Applications\ User's\ Guide$

Defining Item Costs: page 3 – 4

Viewing a Standard Cost Update

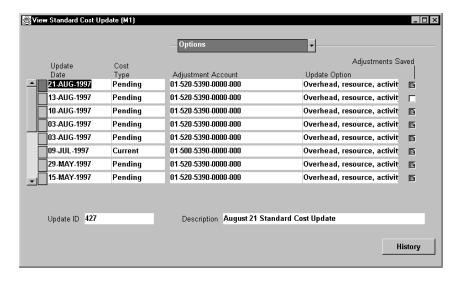
View previous standard cost update requests, options, and ranges.

Prerequisites

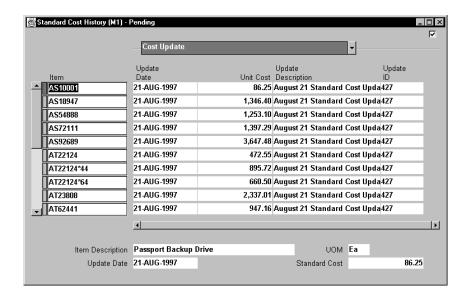
☐ To view cost information, the Privilege to View Cost security function must be included as part of the responsibility. See: Security Functions: page 2 – 63.

► To view a standard cost updates:

1. Navigate to the View Standard Cost Update window.



2. Enter information by which to find a previous standard cost update to view.



See Also

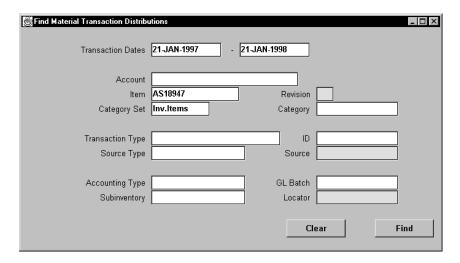
Updating Pending Costs to Frozen Standard Costs: page 4 – 39

Viewing Material Transaction Distributions

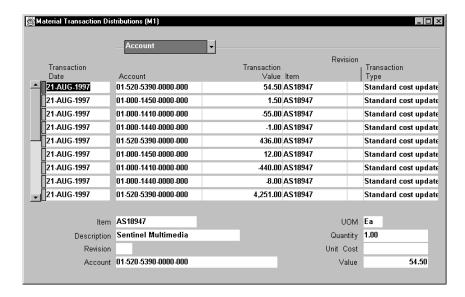
View inventory accounting distributions. View account, currency, location, and transaction type information for transactions performed within a date range.

▶ To view inventory transaction distributions:

- 1. Navigate to the Material Transaction Distributions window.
- 2. Enter search criteria in the Find Material Transaction Distributions window to find inventory transactions.



The Material Transactions Distributions window displays transaction dates and five alternative regions: Account, Location, Type, Currency, and Comments.



Account: Displays the account, transaction value, item, revision, and the accounting type.

Location: Displays the subinventory, locator, operation sequence, and transaction ID.

Type: Displays the transaction type (such as miscellaneous issue, sales order issue, or cycle count adjustment), source type (the origin of the inventory transaction), source (such as account number), the UOM, and the primary quantity (in the item's primary UOM).

Currency: Displays currency, the transaction value (for foreign currency), and displays the conversion (exchange) rate, type (such as Spot, Corporate, or User Defined), and exchange rate date.

Comments: Displays transaction reason, transaction reference, and the general ledger batch ID (if transferred to the general ledger).

See Also

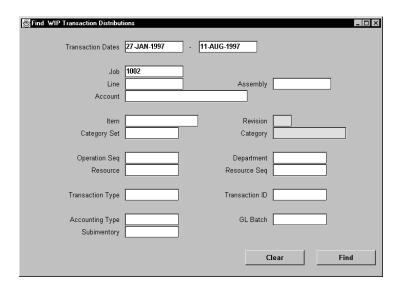
Using Query Find, Oracle Applications User's Guide
Using Query Operators, Oracle Applications User's Guide
Searching For Information, Oracle Applications User's Guide
Performing Query-by-Example and Query Count, Oracle Applications User's Guide

Viewing WIP Transaction Distributions

View detailed accounting transactions for the job or repetitive schedule.

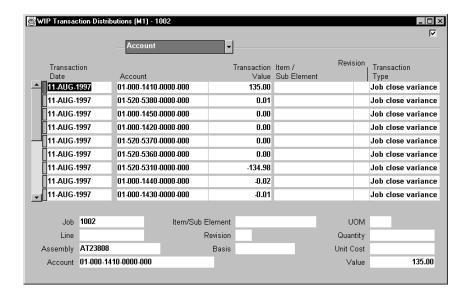
▶ To view WIP transaction distributions:

- 1. Navigate to the WIP Transaction Distributions window.
- 2. Enter search criteria in the Find WIP Transaction Distributions window to find WIP transactions.



3. Choose the Find button.

The WIP Transactions Distribution window displays transaction dates and six alternative regions: Account, Location, Currency, Transaction, Job/Schedule, and Comments:



Account: Displays the account, transaction value, the item/sub-element, revision, and the transaction type (such as Job close variance, Resource transaction, WIP component issue, or Cost update).

Location: Displays the operation sequence, department, resource sequence (for resource transactions), subinventory, and transaction ID.

Currency: Displays currency, the transaction value (for foreign currency), and displays the conversion (exchange) rate, type (such as Spot, Corporate, or User Defined), and exchange rate date.

Transaction: Displays accounting type, the transaction source (such as the account number), the UOM, and the primary quantity (in the item's primary UOM).

Job/Schedule: Displays the job or schedule, line, assembly, and basis (Item if it is a material transaction, or Lot).

Comments: Displays transaction reason, transaction reference, and the general ledger batch ID (if not yet transferred to the general ledger).

See Also

Using Query Find, Oracle Applications User's Guide
Using Query Operators, Oracle Applications User's Guide

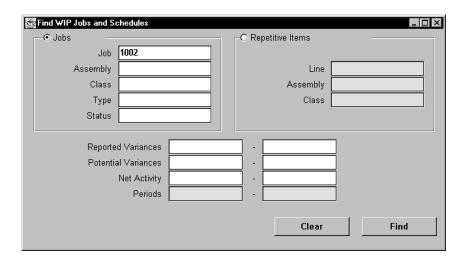
Searching For Information, *Oracle Applications User's Guide*Performing Query-by-Example and Query Count, *Oracle Applications User's Guide*

Viewing WIP Value Summaries

You can view and analyze the work in process values of a job or repetitive line by cost element, such as material, material overhead, resource, outside processing, and overhead. You can also drill down to detailed accounting transactions. Values are displayed in your organization's base currency.

▶ To view WIP value information:

- Navigate to the WIP Value Summary window.
- 2. In the Find WIP Jobs and Schedules window, indicate whether to find a job or a repetitive item.



3. Enter search criteria.

If you are searching for jobs, you can enter search criteria for job, class, assembly, type, and status. This search does not use period range information.

If you are searching for repetitive item, you can enter search criteria for line, assembly, and class.

Job: Enter a specific job to search for.

Line: Enter a specific production line in which to query for repetitive schedules.

Assembly: Enter an assembly in which to query for jobs or repetitive schedules.

Class: Enter a WIP accounting class associated with the jobs or repetitive schedules to query.

Type: Enter a WIP job or schedule type.

Status: Enter the status of the job to search for. See: Discrete Job Statuses, Oracle Work in Process User's Guide.

4. Optionally, enter a period range for transactions, a posted variance range, a potential variance range, or a net activity range.

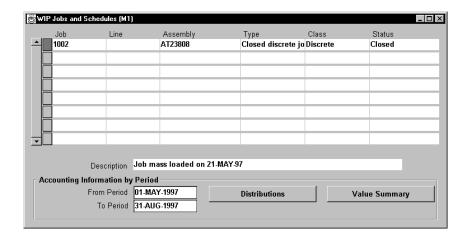
To use Reported Variances, Potential Variances, or Net Activity criteria, you must enter a period range. Reported variances are recorded variances from closed jobs or schedules. Potential variances are for jobs or schedules that are not closed or with open balances with unrecognized variances. The calculation is costs incurred minus costs relieved minus variance relieved. Depending on the timing of issue and completion transactions, this may not represent an accurate variance.

Net activity is the total of the WIP transactions for the selected period range.

If a To value is left blank, the selected records are greater than or equal to the From value. If a From value is blank, the selected records are less than or equal to the To value.

The period range information is only used for the variance and net activity criteria.

- Choose the Find button to initiate the search, or the Clear button to clear all entries.
- 6. Use the WIP Jobs / Schedules window to review summary information for WIP jobs or schedules. When finished, do one of the following:



- Select a row and choose the Distributions button to open the WIP Transactions Distribution window.
- Select a row and choose the Value Summary button to open the WIP Value Summary window.

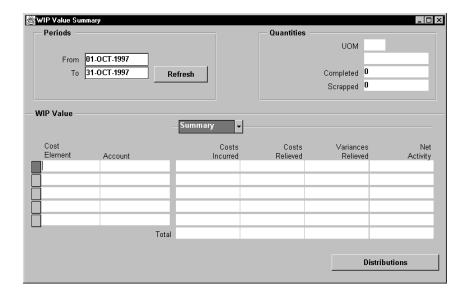
You must also enter a period range to enable the Distributions and Value Summary buttons. The quantity completed and scrapped calculations, and other data displayed in the WIP Value Summary window depend on a period range.

Note: Modify the period date range and choose the Summary button to refresh the results in the WIP Value Summary window.

Since the View WIP Value window calculates the quantity completed from the accounting transactions, and the accounting transactions may be unprocessed, you may see a different quantity in the View Discrete Jobs or View WIP Operations windows. These windows display summary quantity information that is available before the accounting occurs.

▶ To review WIP value summary information:

1. Navigate to the WIP Value Summary window. Do this by choosing the Value Summary button from the WIP Jobs/Schedules window.



The period date range defaults from values entered in the WIP Jobs/Schedules window.

The quantity of the assembly, quantity completed, and quantity scrapped during the period date range for this job or schedule is displayed.

2. Optionally, modify the period date range and choose the Refresh button to view WIP value results for a given period date range.

The WIP value results display cost information by cost element and valuation account for the job or repetitive schedule's accounting class.

The Summary alternative region displays the following information for the cost element of the job or repetitive schedule:

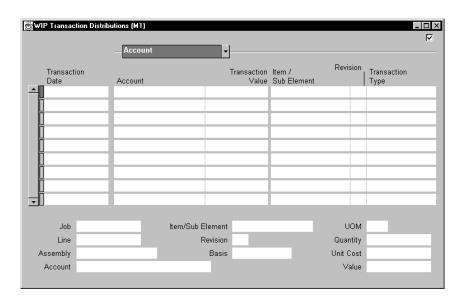
Costs Incurred: Costs associated with material issues/returns, resource, and overhead transactions of a job or repetitive schedule.

Costs Relieved: Standard costs relieved by cost element when assemblies from a job or repetitive schedule are completed or scrapped.

Variances Relieved: Variances relieved by cost element when a job or accounting period is closed, or when a repetitive schedule is cancelled.

Net Activity: Cost element net activity, the difference between the costs incurred and the costs and variances relieved.

- Select the Level alternative region to view elemental cost information, incurred and relieved, for this and the previous level of the bill of material.
- 4. Choose the Distributions button to open the WIP Transactions Distributions window.



See Also

Using Query Find, Oracle Applications User's Guide
Using Query Operators, Oracle Applications User's Guide
Searching For Information, Oracle Applications User's Guide
Performing Query-by-Example and Query Count, Oracle Applications User's Guide

Purging Standard Cost Update History

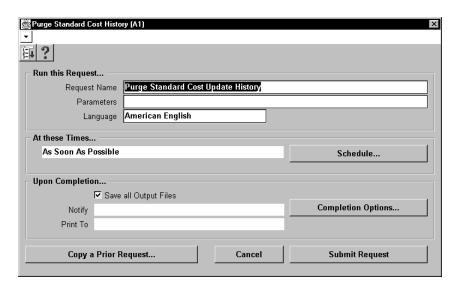
When you update costs and choose to save details, information associated with the update is retained so that you can rerun adjustment reports. When you no longer need such information, purge it.

Prerequisites

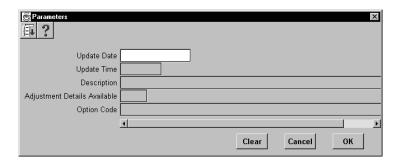
☐ To define, update, or delete cost information, the Privilege to Maintain Cost security function must be included as part of the responsibility.

► To purge standard cost update history:

1. Navigate to the Purge Standard Cost History window.



2. Enter the date and time of a standard cost update to purge.



3. Select whether to purge only the cost update adjustment details available, only the item cost history, or both.

See Also

Submitting a Request, $Oracle\ Applications\ User's\ Guide$ Security Functions: page 2 - 63

Standard Cost Valuation

Inventory and Work in Process continually update inventory value with each transaction. Work in Process balances are updated with each related accounting transaction. Inventory subinventory values may be reported when the quantity movement occurs.

Value by Cost Element

Inventory or work in process value is maintained and reported on by distinct cost element (such as material, material overhead, and so on), even if you assign the same general ledger valuation account to each cost element. You can also report work in process value by cost element within specific WIP accounting classes.

Standard Costing

Under standard costing, the value of inventory is determined using the material and material overhead standard costs of each inventory item. If you use Bills of Material, Inventory maintains the standard cost by cost element (material, material overhead, resource, outside processing, and overhead).

Unlimited Cost Types

You can define an unlimited number of cost types and use them with any inventory valuation and margin analysis reports. This allows you to see the potential effects of a cost rollup/update. You can also update your standard costs from any of the cost types you have defined.

When you use Bills of Material with Inventory, you can specify the cost type in explosion reports and report these costs for simulation purposes. See: Defining Cost Types: page 2 – 11 and Defining Item Costs: page 3 – 9.

Inventory and Work in Process Standard Cost Variances

This section describes Inventory standard cost variances and Work in Process standard cost variances.

Inventory Standard Cost Variances

In general, Inventory records purchase price variance (PPV) and recognizes cycle count and physical inventory adjustments as variances.

Purchase Price Variance (PPV)

During a purchase order receipt, Inventory calculates purchase price variance. In general, this is the difference between what you pay the supplier and the item's standard cost. Inventory calculates this value as follows:

PPV = (PO unit price - standard unit cost) _ quantity received.

Inventory updates the purchase price variance account with the PPV value. If the purchase order price is in a foreign currency, Inventory converts it into the functional currency of the inventory organization and calculates the purchase price variance. Purchasing reports PPV using the Purchase Price Variance Report. You distribute this variance to the general ledger when you perform the general ledger transfer, or period close.

Invoice Price Variance (IPV)

In general, invoice price variance is the difference between the purchase price and the invoice price paid for a purchase order receipt. Purchasing reports invoice variance. Upon invoice approval, Payables automatically records Invoice Price Variance, to both invoice price variance and exchange rate variance accounts.

Cycle Count and Physical Inventory

Inventory considers cycle count and physical inventory adjustments as variance.

You distribute these variances to the general ledger when you perform the general ledger transfer or period close.

See Also

Overview of Period Close: page 8 – 2

Inventory Standard Cost Transactions: page 4 – 3

Work in Process Standard Cost Variances

Work in Process provides usage, efficiency, and standard cost adjustment variances.

Usage and Efficiency Variances

Usage and efficiency variances result when the total costs charged to a job or schedule do not equal the total costs relieved from a job or schedule at standard. Charges occur from issues and returns, resource and overhead charges, and outside processing receipts. Cost relief occurs from assembly completions, scrap transactions, and close transactions.

You can view these variances in the Discrete Job Value report, the Repetitive Value report, and by using the WIP Value Summary window.

Work in Process reports usage and efficiency variances as you incur them, but does not update the appropriate variance accounts until you close a job or period. Work in Process updates the standard cost adjustment variance account at cost update.

Usage and efficiency variances are primarily quantity variances. They identify the difference between the amount of material, resources, outside processing, and overheads required at standard, and the actual amounts you use to manufacture an assembly. Efficiency variance can also include rate variance as well as quantity variance if you charged resources or outside processing at actual.

You can calculate and report usage and efficiency variances based on planned start quantity or the actual quantity completed. You can use the planned start quantity to check potential variances during the job or repetitive schedule. You can use the actual quantity completed to check the variances before the job or period close. Your choice of planned start quantity or actual quantity completed determines the standard requirements. These standard requirements are compared to the actual material issues, resource, outside processing, and overhead charges to determine the reported variance.

Work in Process calculates, reports, and recognizes the following quantity variances:

Material Usage Variance

The material usage variance is the difference between the actual material issued and the standard material required to build a given assembly, calculated as follows:

standard material cost \times (quantity issued – quantity required)

This variance occurs when you over or under issue components or use an alternate bill.

Resource and Outside Processing Efficiency Variance

The resource and outside processing efficiency variances is the difference between the resources and outside processing charges incurred and the standard resource and outside processing charges required to build a given assembly, calculated as follows:

(applied resource units × standard or actual rate) — (standard resource units at standard resource rate)

This variance occurs when you use an alternate routing, add new operations to a standard routing during production, assign costed resources to No – direct charge operations skipped by shop floor moves, overcharge or undercharge a resource, or charge a resource at actual.

Move Based Overhead Efficiency Variance

Move based overhead efficiency variance is the difference between overhead charges incurred for move based overheads (overhead basis of Item or Lot) and standard move based overheads required to build a given assembly, calculated as follows:

applied move based overheads — standard move based overheads

This variance occurs when you use an alternate routing, add operations to a standard routing during production, or do not complete all the move transactions associated with the assembly quantity being built.

Resource Based Overhead Efficiency Variance

Resource based overhead efficiency variance is the difference between overhead charges incurred for resource based overheads (overhead basis of Resource units or Resource value) and standard resource based overheads required to build a given assembly, calculated as follows:

applied resource based overheads — standard resource based overheads

This variance occurs when you use an alternate routing, add new operations to a standard routing during production, assign costed resources to No – direct charge operations skipped by shop floor moves, overcharge or undercharge a resource, or charge a resource at actual.

Standard Cost Adjustment Variance

Standard cost adjustment variance is the difference between costs at the previous standards and costs at the new standards created by cost update transactions.

See Also

Work in Process Cost Update Transactions: page 4 – 29

CHAPTER

5

Average Costing

T his chapter tells you everything you need to know about average costing, including:

- Overview: page 5 2
- Setting Up Average Costing: page 5 6
- Average Costing Flows: page 5 13
- Updating Average Costs: page 5 19
- Inventory Average Cost Recalculation: page 5 24
- Inventory Average Cost Transactions: page 5 29
- Work in Process Average Cost Transactions: page 5 46
- Average Cost Valuation: page 5 59
- Average Cost Variances: page 5 60

Overview of Average Costing

Under average cost systems, the unit cost of an item is the average value of all receipts of that item to inventory, on a per unit basis. Each receipt of material to inventory updates the unit cost of the item received. Issues from inventory use the current average cost as the unit cost.

By using Oracle Cost Management's average costing functionality, you can perpetually value inventory at an average cost, weighted by quantity (inventory cost = average unit cost * quantity).

For purchased items, this is a weighted average of the actual procurement cost of an item. For manufactured items, this is a weighted average of the cost of all resources and materials consumed.

Note: Weighted average costing cannot be applied to repetitively manufactured items. Therefore, you cannot define repetitive schedules in an organization that is defined as a manufacturing average cost organization.

This same average cost is used to value transactions. You can reconcile inventory and work in process balances to your accounting entries.

Note: Under average costing, you cannot share costs; average costs are maintained separately in each organization.

Average costing enables you to:

- · approximate actual material costs
- value inventory and transact at average cost
- maintain average costs
- automatically interface with your general ledger
- reconcile inventory balances with general ledger
- analyze profit margins using an "actual" cost method

Inventory allows negative on-hand quantity balances without adversely affecting average costs.

Charge Resources to Work in Process at Actual Cost

You can charge work in process resources at an actual rate. You can charge the same resource at different rates over time. You can also charge outside processing costs to a job at the purchase order unit cost.

Complete Assemblies at an Average Cost

When you complete assemblies into inventory, costs are relieved from work in process and inventory is charged using a cost that is calculated based upon a combination of several options.

Inventory Valued at Average Cost

Under average costing, all asset purchased items in inventory are valued based on their purchase order cost. This results in item unit costs that reflect the weighted average of the purchase order unit costs for all quantity on-hand.

There is only one average unit cost for each item in an organization. The same item in multiple subinventories within the same organization has the same unit cost.

Perpetual Recalculation of Unit Cost

For the transactions listed below, the transaction unit cost may be different from the current unit cost for an item. In such cases, after the transaction has been processed, the item's unit average cost is automatically recalculated. As a result, at any time, inventory is valued at a current, up-to-date average unit cost.

- Purchase order delivery to subinventory
- Return to vendor
- Transfer between organizations where the receiving organization uses average costing
- Miscellaneous and account receipts
- Miscellaneous and account issues
- Average cost update
- Assembly completion

See: Inventory Average Cost Transactions: page 5 – 29.

Cost Element Visibility

For tracking and analysis purposes, you can see cost details by cost element in two ways:

- For unit costs, as a breakout of the total unit cost into each of the five cost elements. From this detail, you can determine the value of labor, overhead, and material components in inventory.
- For work in process, as all job charges (including previous level subassemblies) and relief in cost element detail.

Average Cost Updates

When you update average costs, items in all asset subinventories in your organization and inventory in intransit that is owned by your organization are updated (revalued) by changing the unit cost to the new specified cost.

You can change costs by cost element and can choose one, several, or all cost elements at the same time. The offset to the change in inventory value resulting from a cost update is posted to the average cost adjustment account(s). Items in work in process are not revalued by an average cost update, nor are expense items or any item in an expense subinventory. See: Updating Average Costs: page 5 – 19.

Material Overhead Application

You can add costs (receiving, stocking, material movement, and handling) using material overhead. You can define as many material overheads as required and have that additional cost be included in the average unit cost.

Material overheads are associated to items on an item-by-item basis. As under standard costing, you can define default material overheads to apply to selected categories of items or all items in your organization.

Specifically, you can charge material overhead when you perform any of the following three transactions:

- deliver purchased items to subinventory
- complete assemblies from WIP to subinventory
- receive items being transferred from another organization and deliver to subinventory

Material overhead is applied at the rate or amount in effect at the time of the transaction. On-hand balances are not revalued when the rate or amount of a material overhead is redefined.

Transfers between Organizations

You can transfer items in inventory to a subinventory in a different organization. This is done using a direct transfer or through an intransit transfer, just as in standard or inventory average costing. Because item unit costs are held elementally, like standard costs, elemental detail is available for items being transferred whether they are in subinventory or in intransit.

When such an item is received into an average costing organization and delivered to the destination subinventory, all of its cost elements from

the shipping organization, plus freight, plus transfer charges, if any, are combined into the material cost element in the receiving organization.



Attention: All cost elements are combined into the material cost element so the receiving organization does not have another organization's overhead (over which they have no control and for which they have no absorption) combined with their own.

You can earn material overhead on the delivery as stated above. That amount goes into the material overhead cost element.



Attention: If either freight or transfer charges are expressed as a percent of the transaction value, this amount is calculated based on the average cost at the time the change–of–ownership transaction is costed and not when the transaction actually occurs.

Transaction and Cost Processing

The transaction processor, which affects current on–hand quantities of items, can be set up to run either periodically (in the background) or on–line (quantities updated immediately). Oracle strongly recommends that the transaction processor be set to run on–line. The cost processor is always run in the background at user–defined intervals.

Transaction Backdating

You can backdate transactions the same as in inventory average costing. If you backdate transactions, the next time transactions are processed, the backdated transactions are processed first, before all other unprocessed transactions. Previously processed transactions, however, are not rolled back and reprocessed.

Setting Up Average Costing

If you plan to use average costing in a distribution organization see: Setting Up Inventory Average Costing: page 5 – 6.

If based upon your implementation of Oracle Application, you need setup Manufacturing Average Costing see: Setting Up Manufacturing Average Costing: page 5 – 8.

See Also

Inventory and Manufacturing Costing Compared: page1 – 10 Overview of Setting Up Cost Management: page 2 – 2 Setup Checklist: page 2 – 5.

Setting Up Inventory Average Costing

The following steps are required when setting up inventory average costing. Steps previously covered in the Setup Prerequisites or the Setup Checklist are mentioned here only if there is setup information that is specific to inventory average costing.



Attention: If you have installed Release 11, the new cost processor will automatically be used regardless of how the CST: Average Costing Option profile option is set. If you have upgraded from Release 10 or Release 10SC to Release 11, you will continue to use the old cost processor and the new manufacturing average costing functionality will not be available.



Prerequisites

- ☐ Define Organization Parameters. See: Organization Parameters Window, *Oracle Inventory User's Guide*
 - Costing Method is set to Average
 - Transfer Detail to GL is appropriately set
 - Default Material Sub-Element account (optional)
- ☐ Set the CST: Average Costing Option profile option to Inventory only. See: Profile Options: page 2 62.
- ☐ Define activities and activity costs

Define material overhead defaults
Define item, item costs, and establish item cost controls. See: Overview of Item Setup and Control, <i>Oracle Inventory User's Guide</i>
Launch transaction managers

▶ To set up inventory average costing:

- 1. Set the Control Level for your items to Organization. Average cost cannot be shared between organizations.
- 2. Define, at minimum, one cost type to hold the average rates or amounts for resources, resource overhead, and material overhead rates. See: Defining Cost Types: page 2 11.
 - Inventory valuation and transaction costing in a manufacturing average cost organization involve two cost types: Average and Average Rates.
- 3. Assign the cost type defined above as the Average Rates Cost Type in the Organization Parameters window in Oracle Inventory. See: Organization Parameters Window, *Oracle Inventory User's Guide* and Defining Costing Information, *Oracle Inventory User's Guide*.
- 4. Set the *TP: INV:Transaction Processing Mode* profile option in Oracle Inventory to On–line processing.

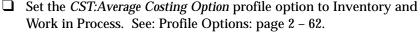
When using average costing, transactions must be properly sequenced to ensure that the correct costs are used to value transactions so that unit costs can be accurately calculated. Proper transaction sequencing can only be ensure if all processing occurs on line. See: Inventory Profile Options, *Oracle Inventory User's Guide*.

Setting Up Manufacturing Average Costing

In addition to the steps required for inventory average costing (See: Setting Up Inventory Average Costing: page 5 – 6), the following additional steps are applicable to manufacturing average costing.

Again, note that some of these steps were previously covered in the Setup Prerequisites and that they are covered again here to highlight the setup requirements that are specific to manufacturing average costing.

Prerequisites





Attention: You can only use manufacturing average costing if you are using the new cost processor.

☐ Define bills of material parameters. See: Defining Bills of Material Parameters, *Oracle Bills of Material User's Guide*.

This ensures that bill and routing information (resource, outside processing, and overhead cost elements) is accessible when you define item costs and define overhead.

☐ Define resources. See: Defining a Resource, *Oracle Bills of Material User's Guide*.

You define resource sub-elements by creating resources, departments, bills, and routings with Bills of Material.

Resources can be costed or not costed; and, since you can have multiple resources per operation, you could use an not costed resource for scheduling and a costed resource for costing. The cost update process and accounting transaction processing ignore uncosted resources.

You can set up the resource to apply charges at the actual rate or standard rate. If you apply actual rates and specify that the resource charges at standard, you create rate variances. If you apply actual rates and specify that the resource does not charge at standard, you collect actual costs in the job/schedule and recognize a variance at the end of the job or schedule. You can also set up a fixed amount for each unit earned in the routing step.

For each resource the charge type determines whether the resource is for internal (labor, machine, etc.) or outside processing. Use PO



Move and PO Receipt charge types for outside processing. Each resource has its own absorption account and variance account.
Define departments. See: See: Defining a Department, <i>Oracle Bills of Material User's Guide</i> .
Assign resources to departments. See: Creating a Routing, <i>Oracle Bills of Material User's Guide</i> .
For capacity planning and overhead assignment purposes, each resource must be assigned to one or more departments. Once a resource is assigned, you can select it when you define a routing.
Define overheads and assign to departments. See: Defining Overhead: page 2 – 20.
The cost processor uses the assigned basis type to apply the overhead charge, and assign the activity to the calculated overhead cost. You can define pending rates and use the cost update process to specify the pending rates as the Average Rates cost type.
Review routing and bill structures. See: Overview of Bills of Material, Oracle Bills of Material User's Guide and Overview of Routings, Oracle Bills of Material User's Guide.
Control overheads by resource.
For overheads based on resource units or resource value, you need to specify the resources the overhead is based on. You can then charge multiple resources in the same department for the same operation, while still earning separate overhead for each resource. If you do not associate your overheads and resources, you do not apply overhead or charge resource—based overhead in Work In Process.
Confirm that the WIP parameters, <i>Recognize Period Variance</i> and <i>Require Scrap Account</i> are set as required.
Confirm that your Work in Process accounting classes and their valuations and accounts are properly set up. See: WIP Accounting Classes, <i>Oracle Work in Process User's Guide</i> , Defining WIP Accounting Classes, <i>Oracle Work in Process User's Guide</i> and WIP Valuation and Variance Accounts, <i>Oracle Work in Process User's Guide</i> .
If you use the same account numbers for different valuation and variance accounts, Cost Management automatically maintains your inventory and work in process values by cost element. Even if you use the same cost element account in a given subinventory or WIP

accounting class, Oracle recommends you use different accounts for each and never share account numbers between subinventories and WIP accounting classes. If you do, you will have difficulty reconciling Inventory and Work in Process valuation reports to your account balances.

► To set up manufacturing average costing:

1. In addition to setting the *TP: INV:Transaction Processing Mode* profile option in Oracle Inventory to On–line processing. See: .Inventory Profile Options, *Oracle Inventory User's Guide*

You must also set the following WIP transaction processing profile options to On–line:

- TP:WIP:Completion Transactions Form
- TP:WIP:Material Transactions Form
- TP:WIP:Move Transaction
- TP:WIP:Operation Backflush Setup
- TP:WIP:Shop Floor Material Processing

See: Work in Process Profile Option, *Oracle Work in Process User's Guide.*

2. Define rates for your resources and associate these resources and rates with the Average rate cost type. See: Defining a Resource, *Oracle Bills of Material User's Guide.*

Unlike under standard costing, charging a resource defined as a Standard rate resource does not create rate variances. For each resource the charge type determines whether the resource is for internal (labor, machine, etc.) or outside processing. Use PO Move and PO Receipt charge types for outside processing. Each resource has its own absorption account and variance account.

3. Define overheads and assign to departments. See: Defining Overhead: page 2 – 20.

For each overhead subelement, define a rate of amount in the cost type you have specified as the average rates cost type. Overheads with a basis type of Resource Units or Resource Value use the actual transaction resource amount or hours to calculate the overhead amount. The cost processor uses the assigned basis type to apply the overhead charge and assigns the activity to the calculated overhead cost. You can define pending rates and use the cost update process to specify the pending rate as the Average Rates cost type.

4. Define Work in Process parameters. See: Defining WIP Parameters, *Oracle Work in Process User's Guide*.

You can use the *Require Scrap Account* parameter to determine whether a scrap account is mandatory when you move assemblies into a scrap intraoperation step. See: Move Transaction Parameters, *Oracle Work in Process User's Guide*.

You must set the appropriate average costing parameters — Default Completion Cost Source, Cost Type, Auto Compute Final Completion, and System Option — to determine how resources and completions are charged. See: Average Costing Parameters, Oracle Work in Process User's Guide.

How these parameters are applied is explained in the Assembly Completion Transaction and Resource Transaction sections.

5. Define Work in Process accounting classes. See: WIP Accounting Classes, *Oracle Work in Process User's Guide* and Defining WIP Accounting Classes, *Oracle Work in Process User's Guide*.

Accounting classes determine which valuation and variance accounts are charged and when. You can define the following elemental accounts for WIP accounting classes that are used with average costing: material, material overhead, resource, outside processing, overhead, material variance, resource variance, outside processing variance, overhead variance, bridging, and expense accounts. See: WIP Valuation and Variance Accounts, *Oracle Work in Process User's Guide*.

Note: If you use the same account numbers for different valuation and variance accounts, Cost Management automatically maintains your inventory and work in process values by cost element even if you use the same cost element account in a given subinventory or WIP accounting class. Oracle recommends you use different accounts for each and never share account numbers between subinventories and WIP accounting classes. If you do, you will have difficulty reconciling Inventory and Work in Process valuation reports to your account balances.

6. Define subinventories and subinventory valuation accounts.

The five Valuation accounts and the Expense account are defined at the organization level. The valuation accounts apply to each subinventory and intransit within the organization. They cannot be changed at the subinventory level under average costing. The expense account defaults to each subinventory within the organization and can be overridden. You can choose a different valuation account for each cost element, or use the same account

- for several or all elements. How you set up your accounts determines the level of elemental detail in the General Ledger and on Inventory valuation reports. See: Defining Subinventories, *Oracle Inventory User's Guide*.
- Perform a cost update for manufacturing costing after rolling up assemblies. This revalues inventory and implements new costs.
 See: Updating Pending Costs to Frozen Standard Costs: page 4 – 39.

Average Costing Flows

The following sections discuss transactions the following flows that occur when transacting jobs in an average costing organization.

- Labor Charges
- Overhead Charges
- Component Issues
- Material Overhead Charges
- Scrap Charges
- Assembly Completions

Labor Charges to WIP

You can charge person-type resources to jobs either at a predefined labor rate or at the actual labor rate. If you choose to charge labor at the predefined rate, move transactions that complete an operation automatically charge WIP Move resources associated with that operation at the resource's rate as defined in the Average Rates cost type. Resource rates are associated with cost types when you define resources. If choose to charge labor at an actual employee rate, you can enter an employee rate as you charge Manual resources. You can charge labor at either an actual or a predefined rate if you choose to import resource transaction through the Open Resource Cost Interface.

A predetermined number of labor hours can be charged by adding a WIP Move resource to a routing operation, or you can charge the actual hours to a Manual resource by either:

- entering the actual hours as assemblies are moved
- entering the actual hours as part of an independent resource transaction
- importing resource transactions through the WIP Resource Cost Transaction Interface

See: Charging Resources with Move Transaction, Oracle Work in Process User's Guide, Charging Resources Manually, Oracle Work in Process User's Guide, and Open Resource Transaction Interface, Oracle Work in Process User's Guide.

Resource labor transactions are valued at the rate in effect at the time of the transaction no matter whether the predefined average rate or actual labor rate method is used. As a result, when the same labor subelement or employee is charged to the same job at different times, different rates may be in effect.



Overhead Charges to WIP

Define overheads under average costing the same as under standard costing. For each overhead subelement, define a rate or amount in the cost type you have specified as the Average Rates cost type. Overheads with a basis type of Resource Units or Resource Value use the actual transaction resource amount or hours to calculate the overhead amount. See: Defining Overhead: page 2 – 20.

Components Issued to WIP

Component items can be defined as push or pull requirements on your jobs. Components issued to jobs are valued at the inventory average cost in effect at the time of the transaction. Components issued to a job in several different transactions may have different unit costs for each transaction. If a component's unit cost is composed of more than one cost element, this elemental detail continues to be visible after it is charged to a job.

Material Overhead Application

Define material overheads under average costing the same way as under standard costing. Define as many material overhead subelements as desired and base their charging in a variety of ways: by item, activity or lot, or based on transaction value. See: Defining Overhead: page 2-20.

When defining item costs, you can associate material overhead(s) to items and define the rate / amount manually using the Average Rates cost type. Once defined, the material overhead(s) are applied whenever the particular item is involved in an applicable transaction. These overheads can be changed at any time. Making a change affects future transactions, but has no impact on the current unit cost in inventory. See: Defining Item Costs: page 3 – 4.

For purchase order receipts and transfers between organizations, the material overhead amount earned is added to the purchase order cost / transfer cost of the item (but held as a separate cost element) when it is delivered to inventory. For assembly completions, the material overhead amount earned is added to the cost of the completion in inventory, but is never charged to the job.

Material Overhead Defaulting

For ease in assigning material overheads to items, you may choose to default them when an item is first defined rather than manually associating them item by item. This is done in average costing the same as in standard costing. Defaults may be created to apply at the

organization level or at an item category level. Within either of those, the default may be chosen to apply to make or buy items only, or to all items.

If more than one rate or amount is defined for the same material overhead subelement, the order of priority is: category level make or buy items, category level all items, organization level make or buy items, organization level all items; with the higher priority rate / amount taking precedence and overriding any other. If you wish to apply more than one material overhead, you must use different subelements. When you change material overhead defaults, that change you make applies only to items defined later; there is no impact to existing items. See: Defining Material Overhead Defaults: page 2 – 24.

Assembly Scrap

The WIP Require Scrap Account parameter determines how assembly scrap is handled. If you enter a scrap account as you move assemblies into scrap, the transaction is costed by an algorithm that calculates the cost of each assembly through the operation at which the scrap occurred; the scrap account is debited and the job elemental accounts are credited. If you do not enter a scrap account, the cost of scrap remains in the job. If the job is then completed using the final completion option in the Completion Transactions window, the cost is included in the finished asembly cost. Otherwise, the cost is written off as a vaiance when the non–standard asset and standard discrete jobs are closed and at period close for non–standard expense jobs.

If you enter a scrap account as you move assemblies out of a Scrap intraoperation step, the above accounting transactions are reversed.

Assembly Completions Out of WIP

When finished assemblies are completed from a job to inventory, they are costed using one of the following two methods:

User Defined

When you choose this method, a predefined cost in a user-designated cost type is used to value the unit(s) being completed. Select this method to use the current average cost of the assembly or a target cost then use a final completion to flush all (positive) unrelieved costs at the end of the job.



Attention: Before completing an assembly item using this method, you must ensure that the item's cost in the specified cost type rolls up correctly. In other words, all component and this–level resource and overhead details have been defined.

System Calculated

When you choose this method, you must select a system option. The options are as follows:

Use Actual Resources When you choose this option, the unit cost to be relieved from the job is calculated based on actual job charges and is charged to inventory as each unit is completed. This algorithm costs the completions using a prorated amount of actual resources charged to the job and material usages as defined on the assembly bill, multiplied by the average unit costs in the job. Note that for completions out of a nonstandard job having no routing, this algorithm selects the unit cost from the Average cost type. This method works best for jobs that have resources charged in a timely manner.

Use Pre-defined resources

When you choose this option, resource costs are relieved from the job based on the job routing resource usages. This option works best for jobs with accurate routings.

You set your completion cost method in the WIP Parameters window. The method, User Defined or System Calculated, is determined by the *Default Completion Cost Source* parameter. If you choose System Calculated, the option chosen for the *System Option* parameter, either *Use Actual Resources* or *Use Pre-defined Resources*, determines how the system calculates costs.

If you choose the first completion cost method, *User Defined*, you must specify which user-defined cost type is to be used in the *Cost Type* parameter.



Attention: These parameters are defaulted to the WIP Accounting Class window as you define standard and non-standard discrete accounting classes. They can be overwritten *except* if you set the Default Completion Cost Source parameter to System Calculated. In that case, the System Option that you choose cannot be changed.

No matter which method is used, job assemblies completed in the same transaction have the same unit cost. As part of a completion transaction, the unit cost of the assembly in the completion subinventory is recalculated when it is different from the unit cost used in the completion transaction.

Note: You cannot complete assemblies to more than one subinventory in the same transaction.

Final Completion

When you complete all remaining assemblies for a job in the WIP Completion Transactions window, you can optionally choose to cost them by taking the current job balance and spreading it evenly over the assembly units being completed. This is done by choosing the Final Completion option. If you choose not to use the Final Completion option, one of the valuation methods described above is used.

The value of the Final Completion option (enabled/disabled) is defaulted based on how the WIP Autocompute Final Completions parameter is set. Using the default eliminates the need to manually choose the option. Final completions ensure that no positive residual balance is left in the job after the last assembly has been completed. Residual balances are handled as discussed below under WIP Job Closures.

Note: When the last assembly in a job is a scrap, a residual balance may remain in the job regardless of how you have chosen to deal with assembly scrap (see Assembly Scrap paragraph above), because the above routine for clearing the job balance is not invoked.

If you return completed assemblies back to a job, the assemblies being returned are valued at the average cost of all completions in this job (net of any prior completion reversals). If the job uses Pre–Defined Resources, the return is costed based on the routing usages.

Average Cost Variances

Define this account in organization parameters. All variances occurring in any subinventory within an organization are charged to the same account. This account is charged only if you choose to allow negative quantities in inventory or a transaction results in a negative amount in inventory for one or more cost elements of an item. See: Average Cost Variances: page 5-60.

WIP Job Closures and Cancellations

Define variance accounts for each standard and non-standard discrete WIP accounting class. Any balance remaining in a job after it has been closed is written off elementally to these accounts.

Just prior to job closure, either all costs in the job have been relieved, leaving a zero balance, or a balance will be left in the job. If the job was completed, all units required were either completed or rejected / scrapped, and the Final Completion option was used, the job balance is zero. The final units completed have absorbed all remaining job costs into their value.

However if the job balance is not zero, it is written off to the elemental variance accounts defined for the job's WIP accounting class. A residual job balance may remain under the following conditions:

- on the elemental level the job was over–relieved resulting in a negative net activity for that elemental level in the WIP Value Summary
- all assemblies were completed but the final completion was not used
- a late transaction was posted after the completions
- the job was cancelled and closed short (not all assemblies were completed / rejected)

The elemental account for the job's WIP accounting class should be different from the Average Cost Variance account.

Miscellaneous Issues

A transaction unit cost can be entered when performing a Miscellaneous Issue. Because entering a cost that is significantly different from the current average can cause large swings in the unit cost of remaining on–hand inventory, you should not allow the cost to be entered.

Average Cost Update

You can manually change the average cost of an item by performing an Average Cost Update transaction. See: Updating Average Costs: page 5 – 19.

Note: Average cost updates should be performed only to correct transaction costing errors affecting items in subinventory. If the cost error originates from a WIP issue transaction, the impacted quantities must be returned to a subinventory, corrected there, then reissued to WIP after the update is completed.

Updating Average Costs

For average cost organizations only, you can directly update the average cost of items to include additional costs, such as freight or invoice price variances. You can update one or more cost elements or levels (this and previous) individually or to the total unit cost. Any change made to the total unit cost is spread to all cost elements and levels in the same proportion as existed prior to the update.

- a new average cost enter the new cost by cost element and level (and the new total unit cost is automatically calculated), or enter a new total cost (the amount of change will automatically be proportioned across all cost elements and levels); onhand inventory in all subinventories in the cost group will be revalued. If you are updating the cost of an item in common inventory, the cost of that item in intransit owned by the current organization will also be updated.
- the percentage change in the unit cost select cost element(s) and level(s) to adjust up or down (and the new total unit cost will be automatically calculated), or adjust the total (the percentage change will automatically be applied to all cost elements and levels); onhand inventory in all subinventories in the cost group will be revalued.
- the value change by which onhand inventory is to be incremented or decremented – select cost element(s) and level(s) to be adjusted or adjust the total and the system will revalue onhand inventory by that amount and recalculate the item's average cost for the cost group. You cannot change the average cost in this way unless the item has quantity on hand.

Additional Information: Average cost update transactions are inserted into the Open Item Interface in Oracle Inventory. Update transaction details can be viewed using the Transaction Interface Details window. This window is accessed using the Cost Detail button from the Oracle Inventory Transaction Interface window. See: Viewing and Updating Transaction Open Interface, Oracle Inventory User's Guide.

Prerequisites

☐ Set the *CST:* Average Cost Option profile option. See: Profile Options: page 2 – 62.

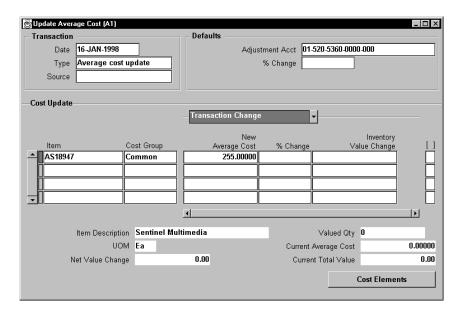
If you set this profile option to Inventory Only, you can update only the total unit costs. If you set this profile option to Inventory and



Work in Process, you can update either the total unit cost, or costs by level and / or element, but not both.

▶ To update total unit average costs:

1. Navigate to the Update Average Cost window.



2. Select a transaction date.

You can select any date within an open period, up to and including the current date.

- 3. Select the Average cost update in the Type field.
- 4. Optionally, select a Source type for the transaction.

Source types define origins for transactions.

5. Select an average cost update Adjustment Account.

If you increase average costs, debit your subinventory accounts and credit the specified adjustment account. If you decrease average costs, the reverse adjustments are generated.

You must select an Adjustment Account even though it can be overwritten later.

- 6. If you are updating costs using a percentage change, enter a default to use as the percentage change for individual item costs.
- 7. Select the item for the average cost update.

8. Select a Cost Group.

If the Project References Enabled and Project Cost Collection Enabled parameters are set in the Organization Parameters window in Oracle Inventory, you can select a cost group. See: Organization Parameters Window, *Oracle Inventory User's Guide* and Defining Project Information, *Oracle Inventory User's Guide*.

If these parameters are not set the Common group is used.

- 9. Update the total unit average cost. Do one of the following:
 - Enter a New Average Cost. This value cannot be negative.
 On-hand inventory in all subinventories and intransit are revalued.
 - Enter a percentage change in the item's average cost. The item cost is updated by this percentage value. On-hand inventory in all subinventories and intransit is revalued.
 - Enter the amount to increase or decrease the current on-hand inventory value. To decrease the value, enter a negative amount. However, you cannot enter a value that drives the inventory value negative.

On-hand inventory is revalued by this amount and the item's average cost is recalculated by dividing the on-hand quantity into the new inventory value. You cannot change the average cost value by this method unless the item has quantity on-hand.

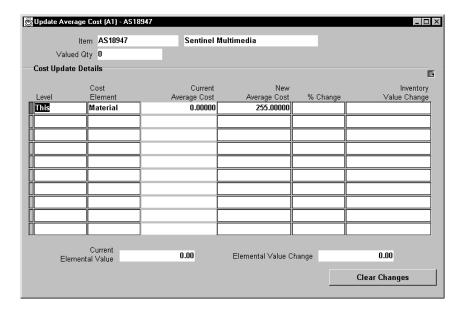
The offset to the inventory revaluation in all cases above is booked to the average cost adjustment account(s) specified at the time the update is performed.

- 10. If you do not want to use the default material, material overhead, resource, overhead, and outside processing adjustment accounts for the current item, open the Accounts alternative region and override the defaults.
- 11. Open the Value Change alternative region and review the change in inventory value.
- 12. Optionally, open the Comments alternative region and enter a reason for the transaction. Use a reason code to classify or explain the transaction.
- 13. Optionally, enter up to 240 characters of reference text.
- 14. Optionally, choose the Cost Elements button to update average costs by element level.

To update average costs by element and / or level:

Note: This section is only relevant if you set the CST: Average Cost Option to Inventory and Work in Process.

1. Navigate to the Cost Elements window. Do this by choosing the Cost Elements button from the Update Average Costs window.



- 2. For each level and / or element, do one of the following:
 - Enter a New Average Cost. On–hand inventory in all subinventories and intransit is revalued.
 - Enter a percentage change in the item's average cost. The item cost is updated by this percentage value. On-hand inventory in all subinventories and intransit is revalued.
 - Enter the amount to increase or decrease the current on-hand inventory value. On-hand inventory is revalued by this amount and the item's average cost is recalculated by dividing the on-hand quantity into the new inventory value. You cannot change the average cost value by this method unless the item has quantity on-hand.

The offset to the inventory revaluation in all cases above is booked to the average cost adjustment account(s) specified at the time the update is performed.

3. Save your work.

See Also

Overview of Average Costing: page 5 – 2

Transaction Types, Oracle Inventory User's Guide

Defining and Updating Transaction Source Types, *Oracle Inventory User's Guide*

Defining Transaction Reasons, Oracle Inventory User's Guide

Inventory Average Cost Recalculation

Moving Average Cost Formula

Inventory uses the following formula to recalculate the average cost of an inventory asset item:

average cost = (transaction value + current inventory value) / (transaction quantity + current on-hand qty)

The following transactions use the above formula to update the average unit cost of an item:

- Receipt to inventory
- Inter-organization receipt
- Receipt from account
- · Issue to account
- Return to supplier
- Other transactions
- Negative inventory balances

Receipt to Inventory

This includes both purchase order receipts to inventory and deliveries to inventory from receiving inspection. This does *not* include receipts to receiving inspection, which do *not* update the average cost. Inventory calculates the transaction value as follows:

transaction value = purchase order price × transaction quantity

If the purchase order uses a foreign currency, Inventory calculates the transaction value as follows:

transaction value = purchase order price converted to inventory functional currency × transaction quantity

See Also

Overview of Cost Management: page 1 – 2

Inter-Organization Receipt

This includes material you receive directly from another organization and from intransit inventory. Inventory calculates the transaction value as follows:

transaction value = [(current average or standard cost from sending organization

× transaction quantity)

+ freight charges

+ transfer credit charges]

For a direct receipt, the organization that receives the material does not perform a transaction. The sending organization performs a ship transaction to the receiving organization. Inventory considers the transfer a receipt in the receiving organization and updates the average cost accordingly.

See Also

Transferring Between Organizations, Oracle Inventory User's Guide

Managing Receipts: Oracle Purchasing User's Guide

Entering Receiving Transactions, Oracle Purchasing User's Guide

Receipt from Account

This refers to a miscellaneous receipt of material from a general ledger account or account alias. Inventory calculates the transaction value as follows:

 $\begin{array}{lll} \text{transaction value} & = & \text{current average cost in inventory} & \times \\ & & \text{transaction quantity} \end{array}$

If you use the current average cost of the item, this transaction does not update the average cost. However, for this type of transaction, you can override the average cost Inventory suggests and enter your own average cost.



See Also

Performing Miscellaneous Transactions, Oracle Inventory User's Guide

Issue to Account

This refers to a miscellaneous issues of material to a general ledger account or account alias. Inventory calculates the transaction value as follows:

 $\begin{array}{rcl} \text{transaction value} & = & \text{current average cost in inventory} & \times \\ & & \text{transaction quantity} \end{array}$

If you use the current average cost of the item, this transaction does not update the average cost. However, for this type of transaction, you can override the average cost Inventory suggests and enter your own average cost.



Warning: The difference between the prior average cost and the entered cost may greatly and adversely affect the new average cost.

See Also

Performing Miscellaneous Transactions, Oracle Inventory User's Guide



Return to Supplier

This includes both purchase order returns from inventory direct to the supplier and returns to receiving inspection. Inventory calculates the transaction value as follows:

The following transactions recalculate the average cost of an inventory asset item:

 $\begin{array}{rcl} \text{transaction value} & = & \text{purchase order price} \times \\ & \text{transaction quantity} \end{array}$

If the purchase order uses a foreign currency, Inventory calculates the transaction value as follows:

transaction value = purchase order price converted to inventory functional currency × transaction quantity

See Also

Managing Receipts, *Oracle Purchasing User's Guide* Entering Receiving Transactions, *Oracle Purchasing User's Guide*

Return from Customer (RMA Receipt)

Although this transaction is a receipt, it uses the current average cost of the item to value the receipt, and thus does *not* update the average cost.



Suggestion: After the RMA receipt, you can include the return in the calculation of average cost. To do so, issue the material to and receive it back from a general ledger account. At account receipt, you can specify an average cost as described above.

Subinventory Transfer

This transaction uses the current average cost of the item to value the transfer. Since this cost is the same for all subinventories in an organization, this transaction does *not* update the average cost of the item you transfer in the receiving subinventory.

Negative Inventory Balances

Inventory handles negative inventory balances as follows:

Positive or Zero On-Hand Quantity

For each receipt transaction, if the new on-hand quantity is positive, Inventory uses the transaction cost (such as the purchase order price) to calculate the average cost.

Negative On-Hand Quantity

If the new on-hand quantity is negative or zero after the time of the receipt, Inventory splits the transaction into two parts, if necessary:

Quantity from negative to zero

Inventory uses the current average cost of the item—rather than the transaction cost—for that portion of the receipt quantity that increases the on–hand balance from negative to zero. For example, if the on–hand balance is –25, and the receipt quantity is 40, Inventory receives 25 each at the current average cost. In effect, this does *not* change the average unit cost of the item.

Quantity from zero to positive

Inventory uses the transaction cost for that portion of the receipt quantity that increases the on–hand balance from zero to positive. From the example above, Inventory receives 15 each at the transaction cost. In effect, this establishes the unit cost of the Transaction as the new average cost of the item. Inventory writes off any difference between the total receipt cost and the cost charged to your inventory to the average cost variance account.

This feature insures that the accounting transactions you report to the general ledger and your inventory value reports balance at all times.



Inventory Average Cost Transactions

The following transactions can be performed in distribution organizations. See: Inventory and Manufacturing Costing Compared: page 1 – 10.

Note: For purchasing related transactions, this table applies to inventory destinations. See: Receipt Accounting, *Oracle Purchasing User's Guide.*

Note: The column to the far right indicates whether the transaction updates the average of an item.

Transaction Inforamtion			Update	
	Account and Cost	Debit	Credit	Average
Purchase Order Receipt to Receivin	g Inspection: page 5 – 32			
	Receiving Inspection @ PO cost	XX		No
	Inventory A/P Accrual @ PO cost		XX	
Delivery From Receiving Inspection	To Inventory: page 5 – 33			
	Organization Material @ PO cost	XX		Yes
	Receiving Inspection @ PO cost		XX	
Purchase Order Receipt To Inventory: page 5 – 34				
	Receiving Inspection @ PO cost	XX		Yes
	Inventory A/P Accrual @ PO cost		XX	
	Organization Material @ PO cost	XX		
	Receiving Inspection @ PO cost		XX	
Return To Supplier From Receiving: page 5 – 35				
	Inventory A/P Accrual @ PO cost	XX		No
	Receiving Inspection @ PO cost		XX	
Return To Supplier From Inventory	: page 5 – 36			

Table 5 - 1 (Page 1 of 4)

Transaction				Update Average
	Account and Cost	Debit	Credit	Tiverage
	Receiving Inspection @ PO cost	XX		Yes
	Organization Material @ PO cost		XX	
	Inventory A/P Accrual @ PO cost	XX		
	Receiving Inspection @ PO cost		XX	
Sales Order Shipments: page	5 – 36			
	Cost of Goods Sold @ current average cost	XX		No
	Org. Valuation @ current average cost		XX	
RMA Receipts: page 5 – 37				
	Org. Valuation @ current average cost	XX		No
	Cost of Goods Sold @ current average cost		XX	
RMA Returns: page 5 – 37				
	Cost of Goods Sold @ current average cost	XX		No
	Org. Valuation @ current average cost		XX	
Miscellaneous Transactions: 1	page 5 – 38			•
Misc. Issue	Entered G/L @ current average cost	XX		No
	Org. Valuation @ current average cost		XX	
Misc. Receipt	Org. Valuation @ current average cost	XX		No
	Entered G/L @ current average cost		XX	
See: Inter-Organization Trans	sfers: page 5 – 39			

Table 5 - 1 (Page 2 of 4)

Iransaction Transaction Inforamtion			Update Average	
	Account and Cost	Debit	Credit	Average
Shipment Transaction/ FOB Receipt	Intransit Inventory (Sending Org.) @ current average cost	XX		No
rob Receipt	Org. Valuation (Sending Org.) @ current average cost		XX	
Shipment Transaction/	Inter–Org. Receivable (Sending Org.) @ current average cost	XX		No
FOB Shipment	Org. Valuation (Sending Org.) @ current average cost		XX	
	Intransit Inventory (Receiving Org.) @ current average cost in Sending Org.	XX		Yes
	Inter-Org. Payable (Receiving Org.) @ current average cost in Sending Org.		XX	
Receipt Transaction/ FOB Receipt	Inter–Org. Receivable (Sending Org.) @ current average cost	XX		No
	Intransit Inventory (Sending Org.) @ current average cost		XX	
	Org. Material (Receiving Org.) @ current average cost in Sending Org.	XX		Yes
	Inter-Org. Payable (Receiving Org.) @ current average cost in Sending Org.		XX	
Receipt Transaction/ FOB Shipment	Org. Material (Receiving Org.) @ current average cost	XX		No
	Intransit Inventory (Receiving Org.)		XX	
Direct Inter–Organization Transfer	Inter–Org. Receivable (Sending Org.) @ current average cost	XX		No
	Org. Valuation (Sending Org.) @ current average cost		XX	
	Org. Material (Receiving Org.) @ current average cost in Sending Org.	XX		Yes
	Inter-Org.Payable (Receiving Org.) @ current average cost in Sending Org.		XX	

Subinventory Transfers: page 5 – 43 No Transactions Generated

See: Internal Requisitions: page 5 – 43 for an explanation of internal requisition transactions.

Cycle Count and Physical Inventory: page 5 – 44

Table 5 - 1 (Page 3 of 4)

Transaction	Transaction Inforamtion		Update Average	
	Account and Cost	Debit	Credit	Average
Count > On hand	Org. Valuation @ current average cost	XX		No
	Adjustment @ current average cost		XX	
Count < On hand	Adjustment @ current average cost	XX		No
	Org. Valuation @ current average cost		XX	

Table 5 - 1 (Page 4 of 4)

When a transaction updates the average cost of an item, the new average cost is calculated as follows:

average cost = (transaction value + current inventory value) ÷ (transaction quantity + current on-hand quantity)

Purchase Order Receipt to Receiving Inspection

You can use the Receipts window in Oracle Purchasing to receive material or outside processing items from a supplier into a receiving location (destination type = receiving). You can also use this window to receive material directly to inventory. See: Purchase Order Receipt To Inventory: page 5-34.

When you receive material or outside processing items from a supplier into receiving inspection, the Receiving Inspection account is debited and the Inventory A/P Accrual account is credited based on the quantity received and the purchase order price.

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Receiving Inspection account @ PO cost	XX	
Inventory A/P Accrual account @ PO cost		XX



Attention: If a purchase order line item lacks a defined price, the system uses zero to value the transaction.

See Also

Receipt Accounting, Oracle Purchasing User's Guide
Overview of Account Generator, Oracle Applications Flexfields Guide

Using the Account Generator in Oracle Purchasing, *Oracle Applications Flexfields Guide*

Delivery From Receiving Inspection to Inventory

You can use the Receiving Transactions window to move material from receiving inspection to inventory. The system uses the quantity and the purchase order price of the delivered item to update the receiving inspection account and quantity. The system uses the average cost. The accounting entries are as follows:

Account	<u>Debit</u>	<u>Credit</u>
Organization Material account @ PO cost	XX	
Receiving Inspection account @ PO cost		XX

The average cost is recalculated using the transaction value of the purchase order cost times the transaction quantity.

Material Overhead

If your item has material overhead(s), you earn material overhead on deliveries from receiving inspection. The accounting entries are as follows:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Subinventory accounts	XX	
Material Overhead Absorption account		XX

Foreign Currencies

If the purchase order uses a foreign currency, the purchase order cost is converted to the functional currency before the accounting entries are generated. This converted value is used for receiving accounting purposes.

The average cost is recalculated using the transaction value of the purchase price converted to the inventory functional currency times the transaction quantity.

Expense Subinventories and Expense Inventory Items

With Oracle Purchasing and Inventory, there are two types of expense items. Purchasing has non-inventory purchases, such as office supplies or capital equipment. These items use an expense destination type for the purchase order's distribution information. You can inspect these purchasing items in receiving, but you cannot deliver these items into inventory.

However, expense inventory items can be stocked in a subinventory, but cannot be valued. Expense inventory items use an inventory destination type for the purchase order's distribution information. Expense inventory items can be delivered into both expense or asset subinventories.

When you receive to expense locations or receive expense inventory items the accounting entries are as follows:

Account	<u>Debit</u>	<u>Credit</u>
Subinventory Expense account @ PO cost	XX	
Inventory A/P Accrual account @ PO cost		XX

When you receive into an expense subinventory or receive an expense (non-asset) inventory item, the system debits the subinventory expense account instead of the valuation accounts.

See Also

Entering Receiving Transactions, Oracle Purchasing User's Guide
Defining Sets of Books, Oracle General Ledger User's Guide
Organization Parameters Window, Oracle Inventory User's Guide

Purchase Order Receipt to Inventory

You can use the Receipts window to receive material directly from a supplier to inventory (destination type = inventory).

When you receive material from a supplier directly to inventory, a receipt and delivery transaction are performed in one step.

The accounting entries for the receipt portion of the transaction are as follows:

Account	<u>Debit</u>	<u>Credit</u>
Receiving Inspection account @ PO cost	XX	
Inventory A/P Accrual account @ PO cost		XX

The accounting entries for the delivery portion of the transaction are as follows:

Account Debit Credit
Organization Material account @ PO cost XX
Receiving Inspection account @ PO cost XX

Material Overhead

If your item has material overhead(s), you earn material overhead on the delivery portion of the transaction. The accounting entries are as follows:

Account Debit Credit
Organization Material Overhead account
Material Overhead Absorption account
XX

XX

XX

Foreign Currencies

The average cost is recalculated using the transaction value of the purchase price converted to the inventory functional currency times the transaction quantity.

See Also

Delivery From Receiving Inspection to Inventory: page 4 – 4 Overview of Receipt Accounting, *Oracle Purchasing User's Guide*

Return To Supplier From Receiving

You use Receiving Returns and Receiving Corrections windows to return material from receiving inspection or from inventory to a supplier. If you use receiving inspection and you have delivered the material into inventory, you must first return the goods to receiving before you can return to the supplier. For a return from inspection, the system decreases the receiving inspection balance and reverses the accounting entry created for the original receipt. To decrease the inventory balance, the return to supplier transaction uses the purchase order cost, not the current average unit cost.

Entering Returns, Oracle Purchasing User's Guide

Outside Processing Charges: page 4 – 22

Return To Supplier From Inventory

When you do not use receiving inspection, the return to supplier transaction updates the same accounts as the direct receipt to inventory, with reverse transaction amounts. To decrease the inventory balance, the return to supplier transaction uses the purchase order cost, not the current average unit cost.

Foreign Currencies

As with the purchase order receipts to inventory, if the purchase order uses a foreign currency, the purchase order cost is converted to the functional currency before the accounting entries are generated.

See Also

Entering Returns, Oracle Purchasing User's Guide

Sales Order Shipments

You ship material on a sales order using Oracle Order Entry/Shipping. The accounting entries for sales order shipments are as follows:

Account	<u>Debit</u>	<u>Credit</u>
Cost of Goods Sold account @ current average cost	XX	
Organization Valuation accounts @ current		XX
average cost		

Based on the rules you define in Order Entry/Shipping, the Account Generator dynamically creates the cost of goods sold account.



Attention: You do not create any accounting information when you ship from an expense subinventory or ship an expense inventory item.

See Also

Overview of Ship Confirm, *Oracle Order Entry/Shipping User's Guide*Using the Account Generator in Oracle Order Entry/Shipping, *Oracle Order Entry/Shipping User's Guide*

RMA Receipts

You can receive items back from a customer using the RMA (return material authorization) Receipts window.

The accounting entries for an RMA receipt are as follows:

Account Debit Credit
Organization Valuation accounts @ current average
cost
Cost of Goods Sold account @ current average
XX

XX

You use the same account as the original cost of goods sold transaction.



Attention: You do not create any accounting entries for a return to an expense subinventory or return for an expense inventory item.

See Also

Receiving Customer Returns, Oracle Inventory User's Guide

RMA Returns

You can return items received into inventory through an RMA back to the customer using RMA Returns window. For example, you can send back — "return" — an item that was returned by the customer to you for repair.

This transaction reverses an RMA receipt. It also mimics a sales order shipment and updates the same accounts as a sales order shipment.

The accounting entries for an RMA return are as follows:

Account Debit Credit

Cost of Goods Sold account @ current average cost
Organization Valuation accounts @ current
average cost

XX

XX

XX



Attention: You do not create any accounting entries when you return a customer RMA from an expense subinventory or for an expense inventory item.

See Also

Returning Items to Customers, Oracle Inventory User's Guide

Miscellaneous Transactions

You can use the Miscellaneous Transaction window to issue items from a subinventory to a general ledger account (or account alias) and to receive items into a subinventory from an account / account alias. An account alias identifies another name for a general ledger account that you define.



Suggestion: Use account aliases for account numbers you use frequently. For example, use the alias SCRAP for your general ledger scrap account.

The accounting entries for issuing material from a subinventory to a general ledger account or alias are as follows:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Entered G/L account @ current average cost	XX	
Organization Valuation accounts @ current		XX
average cost		

The accounting entries for receiving material to a subinventory from an account or an alias are as follows:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Organization Valuation accounts @ current average	XX	
cost		
Entered G/L account @ current average cost		XX

Note: Under average costing, you can enter a unit cost which the system uses in place of the current average cost.

Expense Subinventories and Expense Items

When you receive into an expense location or receive an expense item, you have expensed the item. If you use the miscellaneous transaction to issue from an expense location, you can issue to an account or to an asset subinventory of the *INV:Allow Expense to Asset Transfer* profile option in Oracle Inventory is set to Yes. If issued to an account the system assumes the item is consumed at the expense location and moves the quantity without any associated value. If transferred to an asset subinventory, the item moves at its current cost.

When you receive an expense item to either an asset or expense subinventory, no accounting occurs. Since the account balance could involve different costs over time, the system assumes the cost of the expense item is unknown.

Transaction Unit Cost

Caution: Transaction unit costs can be entered when you perform a miscellaneous transaction in Inventory. However, entering a cost that is significantly different from the current average can cause large swings in the unit cost of remaining on–hand inventory. Oracle recommends you take the appropriate measures to control the ability to enter the transaction unit cost.

See Also

Performing Miscellaneous Transactions, Oracle Inventory User's Guide

Inter-Organization Transfers

You can transfer items directly from one organization to another, or you can transfer items through intransit inventory. Intransit inventory represents inventory items that has not yet arrived at the receiving organization.

Using Intransit Inventory

You can move items from the shipping organization to intransit inventory using the Interorganization Transfer window. You can use the Receipts window to move items from intransit inventory to the receiving organization.

Shipment Transactions

The Free on Board (FOB) point influences the accounting entries generated for the shipment to intransit inventory. The FOB point is determined by how the interorganization shipping network in defined in the Shipping Networks window. Shipments to intransit inventory create the following accounting entries:

When the FOB point is receipt:

<u>Account</u>	Organization	<u>Debit</u>	<u>Credit</u>
Intransit Inventory accounts	Sending	XX	
Organization Valuation ac-	Sending		XX
counts			

When the FOB point is shipment:

<u>Account</u>	Organization	<u>Debit</u>	<u>Credit</u>
Inter-Organization Receivable	Sending	XX	
Organization Valuation accounts	Sending		XX
Intransit Inventory Material account	Receiving	XX	
Inter-Organization Payable	Receiving		XX

Receipt Transaction

The FOB point influences the accounting entries generated for the shipment to intransit inventory. The FOB point is determined by how the interorganization shipping network in defined in the Shipping Networks window. Receipts from intransit inventory create the following accounting entries:

When the FOB point is receipt:

<u>Account</u>	Organization	<u>Debit</u>	<u>Credit</u>
Inter-Organization Receivable	Sending	XX	
Intransit Inventory accounts	Sending		XX
Org. Inventory Material account	Receiving	XX	
Inter-Organization Payable	Receiving		XX

When the FOB point is shipment:

<u>Account</u>	<u>Organization</u>	<u>Debit</u>	<u>Credit</u>
Org. Inventory Material account	Receiving	XX	
Intransit Inventory Material ac-	Receiving		XX
count			

In addition to accounting for the movement of the items, these transactions also update the interorganization receivable and payable accounts. These interorganization clearing accounts represent interorganization receivables and payables for the respective shipping and receiving organizations.

Material Overhead and Inter-Organization Transfers

If your item has material overhead(s), you can earn material overhead in the receiving organization as part of the receipt transaction.

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Organization Material Overhead account	XX	
Material Overhead Absorption account		XX

Direct Inter-Organization Transfer

You use the Interorganization Transfer window for direct transfers. When your the interorganization relationship is set to direct transfer in the Shipping Networks window, an issue and receipt transaction are performed in one step. In addition, each organization may be in a different set of books and even in a different currency. The accounting entries created are as follows:

<u>Account</u>	Organization	<u>Debit</u>	<u>Credit</u>
Inter-Organization Receivable	Sending	XX	
Org. Inventory Valuation accounts	Sending		XX
Org. Inventory Valuation accounts	Receiving	XX	
Inter-Organization Payable	Receiving		XX

Freight and Transfer Charges

The FOB point changes the accounting for freight. With FOB is receipt, freight is accrued on the receipt transaction by the sending organization. With FOB is shipment, freight is accrued on the shipment transaction by the receiving organization. For direct transfers, the receipt and shipment transaction occur at the same time.

When the FOB point is receipt, the transfer creates the following accounting entries for freight and transfer charges:

<u>Account</u>	Organization	<u>Debit</u>	<u>Credit</u>
Inter-Organization Receivable	Sending	XX	
Freight Expense account	Sending		XX
Inter-Organization Receivable	Sending	XX	

<u>Account</u>	<u>Organization</u>	<u>Debit</u>	<u>Credit</u>
Inter-Org. Transfer Credit	Sending		XX
Org. Material account	Receiving	XX	
Inter-Organization Payable	Receiving		XX

For the receiving organization, the interorganization payable account is increased for freight and transfer charge. These charges are included in the organization material account.

When the FOB point is shipment, the transfer creates the following accounting entries for freight and transfer charges:

<u>Account</u>	Organization	<u>Debit</u>	<u>Credit</u>
Inter-Organization Receivable	Sending	XX	
Inter-Org. Transfer Credit	Sending		XX
Intransit Inventory Material account	Receiving	XX	
Freight Expense account	Receiving		XX
Inter-Organization Payable	Receiving		XX

Intransit includes both the freight and transfer charges. Interorganization payable is only increased for the transfer charge.

Expense Subinventories and Expense Inventory Items

When you receive an interorganization transfer into an expense location or receive an expense inventory item, you have expensed the item and cannot directly issue it. The system assumes the item is consumed at the expense location.

Using the direct or intransit method, you can receive items to an expense subinventory or receive an expense item. When you receive to expense locations or receive expense items, the subinventory expense account is debited for the receiving organization, instead of the organization material account. The subinventory expense account is charged the total transaction value from the other organization.

Inter-Organization Transfers and Sets of Books

You can transfer items directly from one organization to another regardless of their set of books and even if the currency is different. You cannot, however, use the transfer items through intransit inventory if you are using multiple sets of books. These transactions use receiving functions from Purchasing, which only supports one set of books. To perform an interorganization intransit transfer from one set of books to another, you need to perform a combination of two transactions, a direct transfer and an intransit transfer.

See Also

Defining Inter-Organization Shipping Networks, *Oracle Inventory User's Guide*

Transferring Between Organizations, *Oracle Inventory User's Guide*Managing Receipts, *Oracle Purchasing User's Guide*

Subinventory Transfers

Use the Subinventory Transfer window to move material from one subinventory to another. If you specify the same subinventory as the From and To Subinventory, you can move material between locators within a subinventory.

Since you use the same valuation accounts for your subinventories (the organization inventory valuation accounts), this transaction has no net effect on overall inventory value, and no accounting entries are generated.

Expense Subinventories and Expense Items

You can issue from an asset to an expense subinventory, and you can issue from an expense subinventory if the Oracle Inventory *INV:Allow Expense to Asset Transfer* profile option is set to Yes. The system assumes the item is consumed at the expense location.

See Also

Transferring Between Subinventories, Oracle Inventory User's Guide

Internal Requisitions

You can replenish your inventory using internal requisition. You can choose to source material from a supplier, a subinventory within your organization, or from another organization. Depending upon the source you choose, the accounting entries are similar to one of the proceeding scenarios. However, unlike interorganization transfers internal requisitions do not support freight charges.

Overview of Internal Requisitions, Oracle Purchasing User's Guide

Purchase Order Receipt To Inventory: page 4 – 5

Inter-Organization Transfers: page 4 – 10

Subinventory Transfers: page 4 – 13

Cycle Count and Physical Inventory

You can use cycle counting and physical inventory to correct your inventory on–hand balances.

If you physically count more than your on-hand balance, the accounting entries are as follows:

Account	<u>Debit</u>	<u>Credit</u>
Organization Valuation accounts @ current average	XX	
cost		
Adjustment account @ current average cost		XX

If you count less than your on-hand balance, the accounting entries are as follows:

Account	<u>Debit</u>	<u>Credit</u>
Adjustment account @ current average cost	XX	
Organization Valuation accounts @ current		XX
average cost		

The accounting entries for physical inventory adjustments are the same as those for cycle counts.



Suggestion: Since the quantities, not the average cost, is kept when you freeze the physical inventory, you should not perform any transactions that might affect your average costs until you have adjusted your physical inventory.

Expense Subinventories and Expense Items

The system does not record accounting entries when physical inventory or cycle count adjustments involve expense subinventories or expense items. However, quantity balances in expense subinventories are corrected if the quantities in these subinventories are tracked.

See Also

Overview of Cycle Counting, Oracle Inventory User's Guide
Entering Cycle Counts, Oracle Inventory User's Guide
Overview of Physical Inventory, Oracle Inventory User's Guide
Processing Physical Inventory Adjustments, Oracle Inventory User's Guide

Average Cost Update

You can view and update the average cost of an item by cost element and level (this level and previous level). You can update average costs using a percentage change, a new average cost, or a value change. A change made to the total unit cost of an item is spread to all cost elements and levels in the same proportion as they existed before the update.

The offset to the inventory revaluation in all cases above will be booked to the Average Cost Adjustment account(s) you specified at the time you perform the update.

Note: The average cost update feature is intended to be used sparingly to correct a transaction costing error affecting items in subinventory. If the cost error is in WIP, the impacted quantities will need to be returned to a subinventory, corrected there, then reissued to WIP after the update has been completed.

See Also

Updating Average Costs: page 5 – 19

Work in Process Average Cost Transactions

When the *CST:Average Costing Option* profile is set to *Inventory and Work in Process*, all of the WIP transactions listed below are costed. See: Profile Options: page 2 – 62.

- Component Issue and Return Transactions: page 5 46
- Move Transactions: page 5 47
- Resource Charges: page 5 48
- Outside Processing Charges: page 5 52
- Overhead Charges: page 5 54
- Assembly Scrap Transactions: page 5 55
- Assembly Completion Transactions: page 5 56
- Job Close Transactions: page 5 57
- Period Close Transactions: page 5 57

For information on the inventory transaction that are costed when this profile is set to *Inventory Only* or *Inventory and Work in Process* see: Inventory Average Cost Transactions: page 5 – 29.

Component Issue and Return Transactions

You can perform the following transactions:

- issue component items to jobs from inventory
- · return components from jobs back to inventory
- issue or return directly by performing a WIP material transaction or by using the Inventory Transaction Interface
- backflush components using the Move Transactions and Completion Transactions windows in Work in Process, the Receipts window in Purchasing (for outside processing), or by using the WIP Open Move Transaction Interface

Costing Issue and Return Transactions

Issue transactions increase the work in process valuation and decrease the inventory valuation. Components issued to or returned from jobs are valued at the inventory average cost in effect at the time of the transaction. Components issued to a job or returned from a job in several different transactions may have different unit costs for each

transaction. If a component's unit cost is composed of more than one cost element, this elemental detail continues to be visible after it is charged to a job.

The accounting entries for issue transactions are as follows:

Account	<u>Debit</u>	<u>Credit</u>
WIP accounting class valuation accounts	XX	
Subinventory elemental accounts		XX

The accounting entries for return transactions are:

Account	<u>Debit</u>	<u>Credit</u>
Subinventory elemental accounts	XX	
WIP accounting class valuation accounts		XX

See Also

Overview of Material Control, Oracle Work in Process User's Guide

Move Transactions

A move transaction moves assemblies within an operation, such as from Queue to Run, or from one operation to the next. Move transactions can automatically launch operation completion backflushing and charge resources and overheads.

You can perform move transactions using the Move Transactions window, Open Move Transaction Interface, or the Receipts window in Purchasing.

Backflush Material Transactions

With backflushing, you issue component material used in an assembly or subassembly by exploding the bills of material, and then multiplying by the number of assemblies produced.

Move transactions can create operation pull backflush material transactions that issue component material from designated WIP supply subinventories and locators to a job. For backflush components under lot or serial number control, you assign the lot or serial numbers during the move transaction.



When you move backward in a routing, Work in Process automatically reverses operation pull backflush transactions. The accounting entries for move transactions are:

Account Debit Credit
WIP accounting class valuation accounts
Subinventory elemental accounts XX

XX

XX

The accounting entries for return transactions are:

Account Debit Credit
Subinventory elemental accounts XX
WIP accounting class valuation accounts XX

See: Overview of Material Control, Oracle Work in Process User's Guide.

Moved Based Resource Charging

As the assemblies you build pass through the operations on their routings, move transactions charge all pre-assigned resources with an auto-charge type of WIP Move at their standard rate.

You can charge resources based upon a fixed amount per item moved in an operation (Item basis) or based upon a fixed lot charge per item moved in an operation (Lot basis). For resources with a basis of Lot, Work in Process automatically charges the lot cost upon completion of the first assembly in the operation.

You can also enter manual resource transactions associated with a move, or independent of any moves. You can manually charge resources to a job, provided it has a routing. You can also transact resources through the Open Resource Transaction Interface.

See Also

Overview of Resource Management, Oracle Work in Process User's Guide

Resource Charges

Work in Process supports four resource autocharging methods: Manual, WIP Move, PO Move, and PO Receipt. You can charge resources at an actual rate. You can also charge resource overheads automatically as you charge resources.

WIP Move Resource Charges

You can automatically charge resources at predefined rate to a job when you perform a move transaction using either the Move Transaction window or the Open Move Transaction Interface. When you move assemblies from the Queue or Run intraoperation steps forward to the To move, Reject, or Scrap intraoperation steps, or to the next operation, Work in Process charges all pre–assigned resources with an charge type of WIP Move at their predefined rate.

For resources with a basis of Item, Work in Process automatically charges the resource's usage rate or amount multiplied by the resource's predefined cost upon completion of each assembly in the operation. For resources with a basis of Lot, Work in Process automatically charges the resource's usage rate or amount multiplied by the resource's predefined cost upon completion of the first assembly in the operation.

You can undo the WIP Move resource charges automatically by moving the assemblies from Queue or Run of your current operation to Queue or Run of any prior operation, or by moving the assemblies from the To move, Reject, or Scrap intraoperation steps backward to the Queue or Run intraoperation steps of the same operation, or to any intraoperation step of any prior operation.

Manual Resource Charges

You can charge manual resources associated with a move transaction or independently of any moves. Manual resource transactions require you to enter the actual resource units applied rather than autocharging the resource's usage rate or amount based on the move quantity. You can charge resources using that resource's unit of measure or any valid alternate. You can manually charge resources to a job, provided it has a routing.

If you use the Move Transactions window to perform moves and manual resource transactions at the same time, Work in Process displays all pre–assigned manual resources with a charge type of Manual assigned to the operations completed in the move. If the resource is a person, you can enter an employee number.

In addition to the resources displayed, you can manually charge any resource to a job, even if you have not previously assigned the resource to an operation in the job. You can also manually charge resources to an operation added ad hoc by entering any resource defined for the department associated with the operation.

You can correct or undo manual resource transactions by entering negative resource units worked.

Costing Resource Charges at Resource Standard

Resource charges increase work in process valuation. The accounting entries for resource transactions are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
WIP accounting class resource valuation account	XX	
Resource absorption account		XX

If Autocharge is set to WIP Move, work in process and labor are charged at a predefined amount. There are no resource rate or efficiency variances.

The accounting entries for negative Manual resource transactions and backward moves for WIP Move resources are:

Account	<u>Debit</u>	<u>Credit</u>
Resource absorption account	XX	
WIP accounting class resource valuation		XX
account		

Costing Labor Charges at Actual

You can charge labor charges at actual in two ways. You can enter an actual rate for the employee using the Open Resource Transaction Interface or when you define employee rates. For labor charges using an actual or employee rate for a resource for which charge standard rate is turned off, the accounting entries are:

Account	<u>Debit</u>	<u>Credit</u>
WIP accounting class resource valuation account	XX	
Resource absorption account		XX

Any difference between the total labor charged at actual and the predefined labor amount is recognized as an efficiency variance at period close.

If you enter an actual rate for a resource for which Charge Standard Rate is enabled, Work in Process charges the job at a predefined amount. If Autocharge is set to Manual and actual rates and quantities are recorded, a rate variance is recognized immediately for any rate difference. Any quantity difference is recognized as an efficiency variance at period close. The accounting entries for the actual labor charges are:

Account	<u>Debit</u>	<u>Credit</u>
WIP accounting class resource valuation account	XX	
Resource rate variance account (Debit when actual	XX	XX
rate is greater than the standard rate. Credit when		
the actual rate is less than the standard rate.)		
Resource absorption account		XX

PO Receipt and PO Move Transactions

You can receive purchased items associated with outside resources from an outside processing operation back into work in process in Oracle Purchasing. For these items, Oracle Work in Process creates resource transactions at the standard or actual rate for all outside resources with an autocharge type of PO receipt or PO move. For outside resources with an autocharge type of PO move, Work in Process also moves the assemblies from the Queue or Run intraoperation step of the outside processing operation into the Queue intraoperation step of the next operation or into the To move intraoperation step if the outside processing operation is the last operation on the routing.

If you assigned internal resources to an outside operation with an autocharge type of Manual, charge the resources using the Resource Transactions window or the Open Resource Transaction Interface.

If you return assemblies to the supplier using the Receiving Returns window in Oracle Purchasing, the system automatically reverses the charges to all automatic resources associated with the operation. You must manually reverse all manual resource charges using the Resource Transactions window. For outside resources with an autocharge type of PO move, the system automatically moves the assemblies from the Queue intraoperation step of the operation immediately following the outside processing operation into the Queue intraoperation step of your outside processing operation.

If the outside processing operation is the last operation on the routing, the assemblies automatically move from the To move intraoperation step to the Queue intraoperation step.

See Also

Overview of Resource Management, Oracle Work in Process User's Guide Managing Receipts, Oracle Purchasing User's Guide Outside Processing, Oracle Work in Process User's Guide

Outside Processing Charges

Work in Process automatically creates resource transactions at the standard or actual rate for all outside processing resources with an charge type of PO Receipt or PO Move when you receive assemblies from an outside processing operation back into work in process, using the Receipts window in Purchasing. For outside processing resources with an charge type of PO Move, Work in Process also performs a move of the assemblies from the Queue or Run intraoperation step of your outside processing operation into the Queue intraoperation step of your next operation or into the To move intraoperation step if the outside processing operation is the last operation on your routing.

If you assigned internal resources to an outside operation with an charge type of Manual, you use the Move Transactions window or the Open Resource Transaction Interface to charge these resources.

If you return assemblies to the supplier, the system automatically reverses the charges to all automatic resources associated with the operation. You must manually reverse all manual resource charges using the Move Transactions window. For outside processing resources with an charge type of PO Move, Work in Process automatically moves the assemblies from the Queue intraoperation step of the operation immediately following the outside processing operation into the Queue intraoperation step of your outside processing operation. If the outside processing operation is the last operation on your routing, Work in Process automatically moves the assemblies from the To move intraoperation step to the Queue intraoperation step.

Costing Outside Processing Charges at a Predefined Rate

When you receive the assembly from the supplier, Purchasing sends the resource charges to Work in Process at either a predefined cost or actual purchase order price, depending upon how you specified the standard rate for the outside processing resource.

If you enabled Charge Standard Rate for the outside processing resource being charged, Purchasing charges Work in Process at the standard rate and Work in Process creates a purchase price variance for the difference between the standard rate and the purchase order price. The Work in Process accounting entries for outside processing items are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
WIP accounting class outside processing valuation	XX	
account		
Purchase price variance account (Debit when the	XX	XX
actual rate is greater than the standard rate. Credit		
when the actual rate is less than the standard rate.)		
Organization Receiving account		XX

Any quantity or usage difference is recognized as an outside processing efficiency variance at period close.

The accounting entries for return to supplier for outside processing are:

Account	<u>Debit</u>	<u>Credit</u>
Organization Receiving account	XX	
Purchase price variance account (Debit when actual rate is less than the standard rate. Credit when the actual rate is greater than the standard	XX	XX
rate. WIP accounting class outside processing valuation account		XX

Costing Outside Processing Charges at Actual Purchase Order Price

If you disable Standard option for the outside processing resource being charged, Purchasing charges Work in Process the purchase order price and does not create a purchase price variance.

The accounting transactions for outside processing charges at purchase order price are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
WIP accounting class outside processing valuation	XX	
account		
Organization Receiving account		XX

Any difference from the standard is recognized as a resource efficiency variance at period close.

See Also

Overview of Shop Floor Control, Oracle Work in Process User's Guide

Overhead Charges

Move Based Overhead Charging

Work in Process automatically charges appropriate overhead costs as you move assemblies through the shop floor. You can charge overheads directly based on move transactions or based on resource charges. For overheads charged based on move transactions with a basis of Item, Work in Process automatically charges overheads upon completion of each assembly in the operation. Work in Process automatically reverse these charges during a backward move transaction.

For overheads based on move transactions with a basis of Lot, Work in Process automatically charges overheads upon completion of the first assembly in the operation. Work in Process automatically reverses these charges during a backward move transaction if it results in zero net assemblies completed in the operation.

Resource Based Overhead Charging

Work in Process automatically charges appropriate overhead costs as you charge resources. You can charge overheads based on resource units or value. Work in Process automatically reverses overhead charges when you reverse the underlying resource charge.

Costing Overhead Charges

Overhead charges increase work in process valuation. The accounting entries for overhead charges are:

<u>Account</u>	<u>Debit</u>	Credit
WIP accounting class overhead account	XX	
Overhead absorption account		XX

You can reverse overhead charges by entering negative Manual resource charges or performing backward moves for WIP Move resources. The accounting entries for reverse overhead charges are:

Account	<u>Debit</u>	Credit
Overhead absorption account	XX	
WIP accounting class overhead account		XX

See Also

Overview of Shop Floor Control, Oracle Work in Process User's Guide

Assembly Scrap Transactions

Costing Assembly Scrap Transactions

If you move assemblies into the scrap intraoperation step of an operation and the WIP Require Scrap Account parameter is set, you must enter a scrap account number or account alias. If you do not specify that a scrap account is required, it is optional. If you do not provide a scrap account the cost of scrap remains in the job or schedule until job or period close. If the job is then completed using the final completion option in the Completion Transactions window, the cost is included in the finished asembly cost. Otherwise, the cost is written off as a vaiance when the non–standard asset and standard discrete jobs are closed and at period close for non–standard expense jobs.

Work in Process considers assemblies that are moved into the Scrap intraoperation step from the Queue or Run of the same operation as complete at that operation. Operation completion information is updated, components are backflushed, and resource and overhead costs are charged according to the elemental cost setup. See: Scrapping Assemblies, *Oracle Work in Process User's Guide*.

If a scrap account is entered, the cost of scrapped assemblies is determined using an algorithm that calculates the assembly costs through the operation at which the scrap occurred and the scrap account is debited and the job elemental accounts are credited. If you move assemblies out of a scrap operation step, thus reversing the ordinal scrap transaction, these accounting entries are reversed.

The accounting entries for scrap transactions are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Scrap account	XX	
WIP accounting class valuation		XX
accounts@predefined amount		

The accounting entries for reverse scrap transactions are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
WIP accounting class valuation accounts@standard	XX	
Scrap account		XX

See Also

Overview of Shop Floor Control, Oracle Work in Process User's Guide



Assembly Completion Transactions

Use the Completion Transactions window in Work in Process or the Inventory Transaction Interface to receive completed assemblies from work in process into asset subinventories. Completion transactions relieve the valuation account of the accounting class and charge the subinventory accounts (for example, finished goods) based upon the assembly's elemental cost structure.

Costing Assembly Completion Transactions

Completions decrease work in process valuation and increase inventory valuation at predefined costs. The accounting entries for completion transactions are:

Account	<u>Debit</u>	<u>Credit</u>
Subinventory elemental accounts	XX	
WIP accounting class valuation accounts		XX

Earning Assembly Material Overhead on Completion

You can assign overheads based on Item, Lot or Total Value basis. For standard discrete jobs, you can earn these overheads as you complete assemblies from work in process to inventory.

The accounting entries for material overhead on completion transactions for standard discrete jobs are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Subinventory material overhead account	XX	
Inventory material overhead absorption		XX
account		

Use non-standard expense jobs for such activities as repair and maintenance. Use non-standard asset jobs to upgrade assemblies, for teardown, and to prototype production. Non-standard discrete jobs do not earn overhead on completion. Since you have already earned overhead to produce the assemblies as you are repairing or reworking, Work in Process prevents you from double earning material overhead on these assemblies.

The accounting entries for material overhead on completion transactions for non-standard expense and non-standard asset jobs are:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Subinventory material overhead account	XX	
WIP accounting class material overhead		XX
account		

See Also

Completing and Returning Assemblies, *Oracle Work in Process User's Guide*

Job Close Transactions

Until you close a job, or change the status of the job to Complete – No Charges, you can make material, resource, and scrap charges to the job. Closing a discrete job prevents any further activity on the job.

Costing Job Close Transactions

Work in Process recognizes variances when you close a job. The actual close date you specify determines the accounting period Work in Process uses to recognize variances. You can back date the close to a prior open period if desired.

The close process writes off the balances remaining in the WIP elemental valuation accounts to the elemental variance accounts you defined by accounting class, leaving a zero balance remaining in the closed job.

If there is a positive balance in the job at the end of the close, the accounting entries for a job close are:

Account	<u>Debit</u>	<u>Credit</u>
WIP accounting class variance accounts	XX	
WIP accounting class valuation accounts		XX

Period Close Transactions

The period close process in Inventory recognizes variances for non-standard expense jobs. It also transfers the work in process period costs to the general ledger.

Costing Non-Standard Expense Job Period Close Transactions

You can close a discrete job and recognize variances for non-standard expense jobs at any time. In addition, the period close process automatically recognizes variances on all non-standard expense job charges incurred during the period. Therefore, open non-standard expense jobs have zero WIP accounting balances at the start of a new period.

If there is a positive balance in the job at the end of the period, the accounting entries for non-standard expense jobs at period close are:

Account	<u>Debit</u>	<u>Credit</u>
WIP accounting class variance accounts	XX	
WIP accounting class valuation accounts		XX

See Also

Overview of Period Close: page 8 – 2 Closing Discrete Jobs, *Oracle Work in Process User's Guide* Defining WIP Parameters, *Oracle Work in Process User's Guide*

Average Cost Valuation

Inventory continually maintains the value of inventory, updating it with each transaction. This means that you can report your inventory value quickly and accurately.

Unlimited Cost Types

You can define an unlimited number of cost types and use them with any inventory valuation and margin analysis reports. This allows you to compare simulation and budget cost types against your actual average costs. You can also periodically save your average costs into another cost type for year to year and other comparisons.

When you use Oracle Bills of Material with Inventory, you can specify the cost type in explosion reports and report these costs for simulation purposes.

See Also

Defining Cost Types: page 2 - 11

Defining Item Costs: page 3 – 4

Average Cost Variances

Under average costing variances are generated and handled as follows:

Average Cost Variance

Average cost variances are generated when you issue additional material even though the inventory balances for that material is negative. Inventory balances can be driven negative if the *Allow Negative Balances* parameter is set in the Organization Parameters window in Oracle Inventory is set. See: Organization Parameters Window, *Oracle Inventory User's Guide* and Defining Default Inventory Parameters, Oracle Inventory User's Guide

The Average Cost Variance account is charged only when a transaction results in a negative amount in inventory for one or more cost elements of an item. This account is used to account to balance the entry and represents the inventory valuation error caused by issuing inventory before receipts. See: Defining Costing Information, Oracle Inventory User's Guide



Attention: If you develop a large balance in the Average Cost Variance account, adjust your average costs.

If negative quantities are allowed, when a receipt (or transfer in) transaction occurs for an item with negative on–hand inventory, the following takes place:

- if the transaction quantity is less than or equal to the absolute value of the negative on-hand quantity, that is, the on-hand quantity would be zero or negative if the transaction were processed, the transaction is valued at the current average unit cost.
- if the transaction quantity is greater than the absolute value of the negative on-hand quantity, that is, the on-hand quantity would be positive if the transaction were processed, the transaction is valued in two parts:
 - at the current average unit cost for the quantity required to bring on-hand inventory balance to zero
 - at the normal transaction unit cost for the remainder of the transaction quantity.

The difference between the units valued at the current average unit cost and those valued at the normal transaction unit cost is written off to the average cost variance account.

Invoice Price Variance (IPV)

Invoice price variance is the difference between the purchase price and the invoice price paid for a purchase order receipt. Invoice price variances are generated when the invoice is processed and matched to the PO line items. Upon invoice approval, Oracle Payables automatically records this variance to both the invoice price variance and exchange rate variance accounts. IPV is determined and recorded the same under standard and average costing.

Cycle Count and Physical Inventory

Inventory considers cycle count and physical inventory adjustments as variances.

Distribute these variances to the general ledger when you perform the general ledger transfer or period close.

See Also

Using the Account Generator in Oracle Purchasing, *Oracle Applications Flexfields Guide*

Overview of Period Close: page 8 – 2

Inventory Average Cost Transactions: page 5 – 29

CHAPTER

6

Project Manufacturing Costing

T his chapter tells you everything you need to know about project manufacturing costing, including:

- Overview: page 6 2
- $\bullet~$ Setting Up Project Manufacturing Costing: page 6 6
- $\bullet~$ Cost Elements, Subelements, and Expenditure Types: page 6 7
- $\bullet \;$ Project Manufacturing Cost Valuation: page 6 9

Overview

You can cost all project related manufacturing transactions then capture these costs and transfer them to Oracle Projects. You can associate items and manufacturing business processes with specific projects, and optionally tasks, to track quantity and cost information through these business processes. Project manufacturing costing allows you to process and cost material and labor against a specific project or a group of projects for a specific customer.

Work Breakdown Structure: Project and Tasks

You define projects and tasks in Oracle Projects. Project tasks make up the Work Breakdown Structure of a project. Project and tasks can be referenced throughout Oracle Manufacturing Applications.

See: Setting Up a Project Work Breakdown Structure, *Oracle Projects User's Guide* and Overview of Projects and Tasks, *Oracle Projects User's Guide*.

Costing Methods

If you are a new Release 11 customer, you can use project manufacturing costing.

Average Costing

Project manufacturing costing is fully supported in average costing organizations that have the *Project Cost Collection Enabled* organization parameter set. In organizations setup for project cost collection, you can manufacture and track inventory items and perpetually value your project inventory at a weighted average cost that is specific to one project or a group of projects. This same average cost is used to value transactions and thus allows you to reconcile your inventory and work in process balances to your accounting entries.

Because project manufacturing costing can only be done in average costing organizations, all of the features of average costing — such as being able to cost WIP resource transactions at actual rate — are also applicable to project manufacturing costing. See: Overview of Average Costing: page 5-2.

Under project manufacturing costing, costs are calculated and held at the cost group level within each inventory organization. Since subinventory valuation accounts cannot be defined at a level lower than the level at which average costs are held, value in every locator belonging to a project in a particular cost group is held in that group's valuation accounts

Using cost groups, an item may have a different cost in different projects as well as a unique cost in common inventory, all within the same organization. Item costs can apply to a single project if each project belongs to a distinct cost group, or apply to a group of projects if all projects in the group are associated to the same cost group. Items in common inventory belong to the common cost group and are normally costed separately from items in projects. See: Cost Groups: page 2 – 57

Standard Costing

In a standard costing organization, you can issue items from inventory to a project and receive items into inventory from a project using user–defined project miscellaneous issue and receipt transaction types respectively. These transactions are valued at standard cost. See: Integrating with Oracle Inventory, *Oracle Project User's Guide*.

Project and Non-Project Manufacturing

You can cost both project referenced and non-project referenced transactions in the same organization. For example, you can define and transact both non-project or 'common' discrete jobs as well as project jobs. However, since average costing is a prerequisite for project manufacturing costing, both types of jobs are costed at average.

For a listing of Oracle Manufacturing Applications windows that include specific logic for projects, see: Project References, *Oracle Project Manufacturing User's Guide*.

For a listing of project referenced transaction, see: Project Manufacturing Transactions: page 6 – 11.

Project Inventory

You can perform the following type of inventory transactions for project referenced inventory:

- Miscellaneous Issue
- Miscellaneous Receipt
- Subinventory Transfer
- Interorganization Transfer (Direct)
- Interorganization Transfer (Intransit)
- Cycle Count Adjustment

Physical Inventory Adjustment

Transactions between expense subinventories are not eligible for project cost collection.

Project Jobs

You can create project jobs by assigning project and task references to jobs in the Discrete Jobs window in Oracle Work in Process. You can implement project jobs planned in Master Scheduling/MRP and Supply Chain Planning.

You can define both standard and non-standard project jobs. You can assign different WIP accounting classes to project jobs. You can also define WIP accounting classes to be valid only for a specific cost group. Doing so makes it possible to keep the WIP costs of projects belonging to the same cost group in specific general ledger accounts. You can also track WIP resource and material transactions to the project job.

Project Purchasing and Receiving

You can enter project purchase requisitions and orders directly. You can implement project purchase orders that are planned in Master Scheduling/MRP and Supply Chain Planing. You can receive items on project purchase orders, optionally inspect them, and deliver them to project locators. You can also track the status of all purchase requisitions and purchase orders for a project.

Cost Collector

You can use the Cost Collector to pass project related costs from Oracle Manufacturing Applications to the Transaction Import Interface table in Oracle Projects. These transactions can then be imported from the interface table into Oracle Projects.

The Cost Collector collects costs by project, task, and expenditure type. Non-project transactions, those without a project/task reference, are not collected. See: Cost Collector: page E – 35.

Task auto assignment assures that each project transaction has a task if one has not been explicitly assigned. Task Auto Assignment enables you to manage your manufacturing activities by project and collect manufacturing costs by different tasks.

See: Task Auto Assignment, Oracle Project Manufacturing User's Guide.

Cost Elements and Cost Subelements

Some project manufacturing transactions can capture project cost only at the cost element level. These are as follows:

- Misc. Issues and Receipts into and out of Projects Locators
- Interorg. Transafers between subinventories with different proj. or tasks
- Subinventory Transfers between subinventories with different proj. or tasks

Other transactions support an unlimited number of user-defined cost subelements costs at the subelement level. Cost subelement delineation makes it possible to analyze performance in terms of labor, overhead, material or other direct costs.

See Also

Setting Up Project Manufacturing Costing: page 6 – 6

Cost Elements, Subelements, and Expenditure Types: page 6 – 7

Project Manufacturing Transactions: page 6 – 11

Project Manufacturing Inventory Valuation: page 6 – 9

Project Manufacturing Cost Variances: page 6 – 9

Setting Up Project Manufacturing Costing

Before you can take advantage of the manufacturing costing features of Oracle Project Manufacturing, you must set up project manufacturing costing.

To use project manufacturing, your organizations's costing method must be set to Average and the *CST:Average Costing Option* profile option must be set to Inventory and Work in Process. The *CST:Average Costing Option* profile option is automatically set to Inventory and Work in Process if Release 11 is installed as a new product. If you are upgrading from Release 10 or 10SC to Release 11, you will not be able to use Project Manufacturing costing in an existing average costing organization unless you manually upgrade that organization.

Prerequisites

Set up average costing. See: Setting Up Average Costing: page 5 – 6.
Note: The Average cost type and an "average rates cost type" set up as part of average costing setup are used across all cost groups. Consequently these cost types are used when inventory is valued and transactions are costed.
Set the <i>Project Cost Collection Enabled</i> parameter in the Organization Parameters window in Oracle Inventory. See: Defining Project

► To set up project manufacturing costing:

Information, Oracle Inventory User's Guide.

- 1. Associate Expenditure Types with Cost Elements. See: Associating Expenditure Types with Cost Elements: page 2 47.
 - See: Overview of Expenditure Classifications, *Oracle Projects* and Expenditure Types, *Oracle Projects*.
- 2. Define Cost Groups and associate WIP accounting classes with cost groups. See: Defining Cost Groups: page 2 58.
- 3. Associate expenditure types with cost subelements. See: Defining Material Sub-Elements: page 2 18 and Defining Overhead: page 2 20 and Resources window in BOM.

See Also

Oracle Project Manufacturing Implementation Manual

Cost Elements, Subelements, and Expenditure Types

Some project manufacturing transactions can capture project cost only at the cost element level. Other transactions support an unlimited number of user–defined cost subelements costs at the subelement level. Cost subelement delineation is required so that you can analyze performance in terms of labor, overhead, material or other direct costs.

The Cost Collector collects costs by project, task, and expenditure type. Associating expenditure types with cost subelements ensures that project manufacturing costs can be collected and transferred to in Oracle Projects.

Subelement Correspondence to Expenditure Type

There is a many–to–one relationship between subelements in Manufacturing and expenditure types in Projects, and these relationships are defined at the organization level. As a result, for any resource, material, etc. that is used on multiple projects, the expenditure type is the same across projects. The same is true within the same project, so a resource or purchased item with two different uses in different tasks, for example, would carry the same expenditure type in both tasks.

To pass detailed data from Manufacturing to Projects, each cost subelement in Manufacturing must correspond to an expenditure type in Projects. This relationship is defined at the organization level in the Resource, Overhead, and Material Subelements forms in Cost Management, and is mandatory if the Project Cost Collection Enabled parameter is set for this organization. When defining a cost subelement the user must associate it with an expenditure type. Whenever that subelement is charged or earned in Manufacturing in a transaction that crosses a project and task boundary, the Cost Collector uses the corresponding expenditure type to pass the subelement's transaction cost to the appropriate project and task.

Cost visibility and reporting, down to the expenditure type level of detail, is available using Oracle Projects.

Elemental Cost Visibility in the General Ledger

Cost elements of an item in a project job or locator can be charged either to different valuation accounts or all to the same account in Manufacturing. Since Manufacturing passes accounting entries to General Ledger, the account detail you define determines the level of elemental detail you are able to see in your General Ledger. Either way, elemental cost visibility is maintained in Manufacturing and that detail is passed to Projects using Expenditure Types.

Cost Element Correspondence to Expenditure Type

If project cost collection is enabled in your Inventory Organization Parameters, as a prerequisite to running the Cost Collector each of the five cost elements must have two expenditure types linked to it. Users create these links in the Expenditure Types for Cost Elements window within Cost Management. These expenditure types are used when passing costs to Projects when any of the following transactions occur in Manufacturing:

- Subinventory Transfer between subinventories with different project or task
- Interorganization Transfer between locators with different project or task
- Miscellaneous Issue from a project locator
- Miscellaneous Receipt into a project locator

Of the two expenditure types for each cost element, one is used to hold the value of transfers out of projects, the other to hold the value of transfers into projects. Since they are for a specific use, you may wish to choose expenditure types which are used only for this purpose and not associated with any cost subelement.

See Also

Defining Material Sub-Elements: page 2 – 18

Defining Overhead: page 2 - 20

Associating Expenditure Types with Cost Elements: page 2 – 47

Defining Cost Types: page 2 – 11

Defining Item Costs: page 3 – 4

Project Manufacturing Valuations and Variances

Project Manufacturing Inventory Valuation

Inventory under project manufacturing costing is valued based on principals of average costing.

For further information about cost groups and their function, see: Cost Groups: page 2-57 and Defining Cost Groups: page 2-58.

Project Manufacturing Cost Variances

Under project manufacturing costing variances are generated and handled as follows:

Average Cost Variances

Under project manufacturing costing, average cost variances are generated in a similar fashion as they are under average costing for non–project related transactions. See: Average Cost Variances: page 5-60.

There are however a couple of important differences. Under average costing average cost variances are generated when the total item quantity in the specified inventory organization is driven negative. Under project manufacturing costing average cost variances are generated when the total item quantity across all subinventories in a cost group is driven negative.

Another difference is that average cost variances generated in non-project manufacturing use the organization level Average Cost Variance account. Under project manufacturing costing, variances occurring in any project within a cost group are charged to Average Cost Variance account defined for that cost group.

Invoice Price Variance (IPV)

Invoice price variance is the difference between the purchase price and the invoice price paid for a purchase order receipt. Invoice price variances are generated when the invoice is processed and matched to the PO line items. Upon invoice approval, Oracle Payables automatically records this variance to both the invoice price variance

and exchange rate variance accounts. IPV is determined and recorded the same under project and non–project costing.

See Also

Overview of Period Close: page 8 - 2

Inventory Average Cost Transactions: page 5 – 29

Project Manufacturing Costing Transactions

When you use Oracle Project Manufacturing, you are able to have organizations which concurrently manufacture for projects and non-project customer orders. However for proper management control purposes, item costs and charges for non-project orders are maintained and tracked distinctly separate from projects.

Cost Groups

Using Project Manufacturing, you can have many projects active at any one time. You can also have items in common (non-project) subinventory. Using cost groups, an item may have a different cost in different projects as well as a unique cost in common inventory, all within the same organization. Item costs can apply to a single project if each project belongs to a distinct cost group, or apply to a group of projects if all projects in the group are assigned to the same cost group. Items in common inventory belong to a system defined cost group and are normally costed distinctly separate from items in projects.

Project Notification

Oracle Project is notified when material transactions cross a project boundary (i.e. from project to non–project, from non–project to project, and between two different projects) or cross the task boundary of the same project. For transactions within the same project, if no specific task is entered, it is assumed to be a transaction within the same task, and hence notification to Projects is not required.

Upon notification, Projects either:

- Increments project cost when material is moved into a project-related entity from a non-project-related entity (e.g. locator, work order, etc.).
- Decrements project cost when material is moved out of a project-related entity into a non-project-related entity
- Decrements the From project and task and increments the To project and task when a transaction moves material between two projects or tasks.

The following table summarizes some important transactions, whether they do and do not notify Oracle Projects, their respective debits and credits, and the cost used in the transaction:

Unless otherwise stated, the cost specified for the debit side of the transaction applies also to the credit side.

Note: MOH stands for material overhead. For information on material overhead charges, see Material Overhead Application: page 6-18.

Note: For Interorganization Transfers, the accounting entries for the Receiving Organization are shaded for clarity.

Transaction Information			Transaction Information	ation	ction Information			Notify Projects
Account and Cost	Debit	Credit	3					
ng Inspection								
Receiving Inspection @ PO Cost	XX		No					
Inventory A/P Accrual		XX						
n To Inventory								
Cost Group Material @ PO Cost	XX		Yes					
Receiving Inspection		XX						
ry								
Receiving Inspection @ PO Cost	XX		Yes					
Inventory A/P Accrual		XX						
Cost Group Material @ PO Cost	XX							
Receiving Inspection		XX						
Cost of Goods Sold @ Current Average Cost (in Cost Group)	XX		No					
Cost Group Valuation		XX						
No Entries			N/A					
Cost Group Valuation @ Current Average Cost	XX		No					
Cost of Goods Sold	-	XX						
	Account and Cost Inspection Receiving Inspection @ PO Cost Inventory A/P Accrual To Inventory Cost Group Material @ PO Cost Receiving Inspection PO Cost Inventory A/P Accrual Cost Group Material @ PO Cost Inventory A/P Accrual Cost Group Material @ PO Cost Receiving Inspection Cost Group Material @ PO Cost Receiving Inspection Cost Group Material @ PO Cost Receiving Inspection Cost Group Valuation No Entries	Account and Cost Debit	Account and Cost Debit Credit					

Table 6 – 1 (Page 1 of 5)

Purchasing, Inventory, or Order Entry Project Referenced	Transaction Information			Notify Projects
Transaction	Account and Cost Debit		Credit	1100000
From Project Locator	Cost Group Valuation @ Current Average Cost (in Cost Group)	XX		No
	Cost Group Valuation		XX	
Miscellaneous Transactions	-			
Receipt into Project Locator	Cost Group Valuation @ Current Average (in Project Cost Group) or User-specified Cost	XX		Yes
	User-specified account		XX	
Issue from Project Locator	User Specified account @ Current Average (in Project Cost Group) or User-specified Cost	XX		Yes
	Cost Group Valuation		XX	
Interorganization Transfer		•		
<i>Direct Transfer:</i> Expense to Expense	No entries			
Direct Transfer: Standard Org. to Project excluding Expense to Expense	Cost Group Material @ Standard (in Sending Org.) + Freight and Transfer Charges	XX		Yes
Expense to Expense	Interorg. Payable		XX	
	Interorg. Receivable @ Standard + Freight and Transfer Charges	XX		\exists
	Subinventory Valuation		XX	
	Freight Credit		XX	
	Transfer Credit	1	XX	

Table 6 - 1 (Page 2 of 5)

Purchasing, Inventory, or Order Entry Project Referenced	Transaction Information			Notify Projects
Transaction	Account and Cost	Debit	Credit	
Direct Transfer: Average to Project, or vice versa, ex- cluding Expense to Expense	Cost Group Material @ Current Average Cost (in Sending Org.)	XX		Yes
cluding Expense to Expense	Interorg. Payable		XX	
	Interorg. Receivable @ Current Average Cost (in Sending Org.) + Freight and Transfer Charges	XX		
	Organization Valuation		XX	
	Freight Credit		XX	
	Transfer Credit		XX	
Direct Transfer: Project to Standard excluding Ex-	Subinventory Valuation @ Standard	XX		Yes
Standard excluding Ex- pense to Expense	Purchase Price Variance (in Receiving Organization) @ Difference Between Cost in Sending and Receiving Org.	XX	XX	
	Interorg. Payable @ Current Average Cost (in Sending Org. Cost Group)		XX	
	Interorg. Receivable @ Current Average Cost in Cost Group in Sending Org.	XX		
	Cost Group Valuation (Sender)		XX	
Interorg Transfer via Intransit: Receipt from Intransit (Standard Org.) into Project	Cost Group Material (in Receiving Org.)@ Standard Cost (in Receiving Org.)	XX		Yes
Org (FOB Receipt)	Interorg. Payable		XX	
	Interorg. Receivable @ Standard Cost	XX		
	Intransit Inventory		XX	
Interorg Transfer via Intransit: Receipt from Intransit (Project Org) into Project Org. (FOB Receipt)	Cost Group Material (in Receiving Org.) @ Current Average Cost (in Sending Org Cost Group)	XX		Yes
(гов кесеірі)	Interorg. Payable		XX	
	Interorg. Receivable @ Current Average Cost (in Sending Org. Cost Group)	XX		
	Intransit Inventory		XX	

Table 6 - 1 (Page 3 of 5)

Purchasing, Inventory, or Order Entry Project Referenced Transaction	Transaction Information			Notify Projects
	Account and Cost	Debit	Credit	
Interorg Transfer via Intransit: Receipt from Intransit (Project Org) into Project Org. (FOB Shipment)	Cost Group Material @ Current Average Cost (in Common Cost Group in Receiving Org.)	XX		Yes
	Intransit Payable		XX	
Interorg Transfer via Intransit: Receipt from Intransit into Project Org. (FOB Receipt)	Cost Group Valuation or Expense @ Current Average Cost (in Sending Org.)	XX		Yes
	Intransit Inventory		XX	
Interorg Transfer via Intransit: Shipment to Intransit (Project Org.) from Standard Org (FOB Shipment)	Intransit Material @ Standard Cost (in Sending Org.)	XX		Yes
	Interorg. Payables		XX	
	Interorg. Receivable	XX		
	Subinventory Valuation		XX	ĺ
Interorg Transfer via Intransit: Shipment to Intransit (Project Org.) from Project Org (FOB Shipment)	Intransit Inventory @ Current Average Cost (in Project Cost Group in Sending Org.)	XX		Yes
	Interorg. Payables		XX	
	Interorg. Receivable	XX		
	Cost Group Valuation		XX	
ubinventory Transfer				
Expense to Expense Subinventory, from or to same or different Project	No entries			N/A
Different Project or Task, Asset to Asset Locator	Cost Group Valuation (in Receiving Project) @ Current Average Cost (in Cost Group in Send- ing Project)	XX		Yes
	Cost Group Valuation or Expense (in Sending Project)		XX	
Different Project or Task, Asset to Expense Subinven- tory or vice versa	Cost Group Valuation or Expense (in Receiving Project) @ Current Average Cost in Cost Group (in Sending Project)	XX		Yes
	Cost Group Valuation (in Sending Project)		XX	
Project to Non-project, Asset to Asset Subinventory	Organization Valuation @ Current Average Cost (in Project Cost Group)	XX		Yes
	Cost Group Valuation (in Sending Project)		XX	

Table 6 - 1 (Page 4 of 5)

Purchasing, Inventory, or Order Entry Project Referenced Transaction	Transaction Information			
	Account and Cost	Debit	Credit	Projects
Non-project to Project, Asset to Asset Locator	Cost Group Valuation (in Sending Project) @ Current Average Cost in Common Cost Group	XX		Yes
	Organization Valuation		XX	
Cycle Count and Physical Inventor	у			
Count < On hand	Inventory Adjustment @ Current Average Cost (in Cost Group)	XX		Yes
	Cost Group Valuation		XX	
Count > On hand	Cost Group Valuation @ Current Average Cost (in Cost Group)	XX		Yes
	Inventory Adjustment		XX	
Average Cost Update				
	Cost Group Valuation @ User-defined Cost Increase/Decrease	XX		Yes
	Inventory Adjustment		XX	

Table 6 - 1 (Page 5 of 5)

Project Referenced Manufacturing Transaction		Transaction Information			Notify Projects		
		Account and Cost	Debit	Credit			
Component Issue and Return Transactions							
Issue Project Expense Job from Project Expense Loca- tor		No Entries	XX		No		
Issue (other than Expense to Expense) to Project Job from Project Locator, same Proj- ect or Task		WIP Inventory @ Current Average Cost (in Project Cost Group)	XX		No		
		Cost Group Valuation or Expense		XX			
Issue (other than Expense to Expense) to Project Job from Project Locator, same Proj- ect different Task		WIP Inventory @ Current Average Cost (in Project Cost Group)	XX		Yes		
		Cost Group Valuation or Expense		XX			

Table 6 - 2 (Page 1 of 3)

Project Referenced Manufacturing Transaction	Transaction Information			Notify Projects
	Account and Cost	Debit	Credit	
Issue (other than Expense to Expense) to Project Job from Common Subinventory	Cost Group Valuation @ Current Average (in Common Cost Group)	XX		Yes
	Organization Valuation		XX	
	WIP Inventory @ Current Average (in Project Cost Group)	XX		
	Cost Group Valuation		XX	
Resource Charges				
Charge Labor Resource to Project Job	WIP Resource @ Actual Employee Rate or User-defined Cost	XX		Yes
	Resource Absorption		XX	
Charge Non-labor Resource to Job	WIP Resource @ User-defined Cost	XX		Yes
10 300	Resource Absorption		XX	
Overhead Charges				
	WIP Overhead Valuation @ User-defined Cost or Rate	XX		Yes
	Overhead Absorption		XX	
Outside Processing Charges				
	WIP Outside Processing @ Purchase Order Cost	XX		Yes
	Outside Processing Absorption		XX	
Assembly Scrap Transactions				
	Scrap @ Calculated Scrap value	XX		No
	WIP Accounting Class Valuation		XX	
Scrap				
Scrap Reverse Scrap	WIP Accounting Class Valuation	XX		No

Table 6 - 2 (Page 2 of 3)

Project Referenced Manufacturing Transaction	Transaction Information			Notify Projects	
3	Account and Cost	Debit	Credit		
Complete Assemblies from Project Job into Asset Proj- ect Locator	Cost Group Valuation @ User-defined or System Calculated + MOH	XX		Yes (for MOH amount	
Cot Zocato.	WIP Accounting Class Valuation		XX	only)	
	Material Overhead Absorption		XX		
Job Close Transactions					
	WIP Accounting class variance	XX		No	
	WIP accounting class valuation		XX		

Table 6 - 2 (Page 3 of 3)

Material Overhead Application

You can optionally define material overheads (material overhead cost elements — as many as required, and have that additional cost be included in the average unit cost. You can associate material overheads to items on an item-by-item basis. Also, you can define default material overheads to apply to selected categories of items or all items in your organization.

Specifically, you can charge material overhead when you perform any of the following three transactions.

- deliver items from receiving inspection to inventory
- complete assemblies from WIP to inventory
- receive items being transferred from another organization and deliver to locator

For PO receipts (delivery from receiving inspection) and interorganization transfers, the material overhead amount earned is added to the PO cost/transfer cost of the item (but held as a separate cost element) when it is delivered to inventory. For assembly completions, the material overhead amount earned is added to the cost of the completion in inventory but is not charged to the job.

Deliver from Receiving Inspection

The accounting entries for material overhead on deliveries from receiving inspection are as follows:

Account Debit Credit
Cost group MOH account @ MOH cost
Material overhead absorption account

XX

XX

Complete Assemblies from WIP

The accounting entries for material overhead on completion transactions for standard discrete jobs are as follows:

Account Debit Credit
Cost group MOH account @ MOH cost
Material overhead absorption account

XX

XX

Receipt from Intransit (Standard or Project Org.) into Project Org (FOB Receipt)

The accounting entries for material overhead when you transfer items from a standard or project organization to a project organization using an interorganization transfer transaction are as follows:

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Cost group MOH account @ MOH cost	XX	
Material Overhead Absorption account		XX

Defining Material Overhead

Material overhead is applied at the rate or amount at the time of the transaction and on hand balances are not be revalued when the rate or amount of a material overhead is changed.

Customers will define material overheads for projects in the same way they do in non-project average cost organizations. You can define as many material overhead subelements as desired and base their charging in a variety of ways: by item, activity or lot, or based on total value.

In the Item Cost window, you can associate material overhead(s) to items and define the rate/amount manually using the average rates cost type. This definition applies across all cost groups within an organization. Once defined, the material overhead(s) are applied whenever the particular item is involved in an applicable transaction. These overheads can be changed at any time; making a change affects future transactions, but has no impact on the current unit cost in inventory.

Defining Material Overhead Defaults: page 2 - 24

Defining Item Costs: page 3 - 4

Material Overhead Defaulting

For ease in assigning material overheads to items, users may choose to default them when an item is first defined rather than manually associating them item by item. Users will be able to define material overhead defaults exactly as under standard and non-project average costing presently. Defaults may be created to apply at the organization level or at an item category level. Within either of those, the default may be chosen to apply to make or buy items only, or to all items. If more than one rate or amount is defined for the same material overhead subelement, the order of priority is: category level make or buy items, category level all items, organization level make or buy items, organization level all items; with the higher priority rate/amount taking precedence and overriding any other. If you wish to apply more than one material overhead, you must use different subelements

CHAPTER

7

Flow Manufacturing Costing

T his chapter tells you everything you need to know about costing for flow manufacturing.

Flow Manufacturing Costing

Oracle Applications support flow manufacturing and costing for Flow Manufacturing in both standard and average costing organizations.

Work Order-less Assembly Completions and Return Transactions

You can complete assemblies in Work in Process without referencing a job or repetitive schedule. You can also reverse work order–less completions by returning repetitive assemblies. Work order–less completions, which incur costs and relieve costs and variances, are processed and reported with respect to this completion transaction. This costing methodology differs from that used for discrete jobs, which track and report costs by job, and repetitive schedules, which maintain and track costs by repetitive assembly/line combination and allocate them across repetitive schedules.

Transaction Processing

Component backflush transactions, triggered by work order-less completion transactions, are automatically costed. The resource and overhead transactions that are also triggered by the completion transaction and are likewise automatically costed. These transactions are processed only these transactions as a set by the cost processor. Resource and overhead transactions from any other flow schedule or any other completion transaction of the same flow schedule must not be processed in this set.

Only one completion transaction and its associated component, resource, and overhead transactions must be processed each time a work order–less completion is transacted. This ensures that period balance information is properly maintained. If any transaction associated with a work order–less completion should fail to process, all associated transactions are rolled back.

Zero Balance

Under standard costing, all cost transactions and variance transactions associated with work order–less completions are processed at the same time as the Assembly Completion. Therefore the net balance associated with work order–less completions is always zero. Work order–less Assembly Return transactions are similarly processed.

Assembly Scrap

Scrap transaction are not supported for work order-less completions in this first phase of flow manufacturing.

See Also

Comparison of Manufacturing Methods, $Oracle\ Work\ in\ Process\ User$'s Guide

Performing Work Order–less Completions, Oracle Work in Process User's Guide

Oracle Flow Manufacturing, Oracle Bills of Material User's Guide.

CHAPTER

8

Period Close

T his chapter tells you everything you need to know about period close, including:

- Overview: page 8 2
- Closing a Period: page 8 6

Overview

The period close process for Inventory enables you to summarize costs related to inventory and manufacturing activities for a given accounting period and distribute those costs to the general ledger.

Open and close periods for each separate inventory organization independently. By having only one open period, you can insure your transactions are dated correctly and posted to the correct accounting period. (For month–end adjustment purposes, you can temporarily hold multiple open periods.)

The accounting periods and the period close process in Cost Management use the same periods, fiscal calendar, and other financial information found in General Ledger.

Inventory and work in process transactions automatically create accounting entries. All accounting entries have transaction dates that belong in one accounting period. You can report and reconcile your transaction activity to an accounting period and General Ledger. You can transfer summary or detail transactions to General Ledger. You can transfer these entries to General Ledger when you close the period or perform interim transfers.

When you transfer to General Ledger, a general ledger (GL) batch ID and organization code are sent with the transferred entries. You can review and report the GL batch number in General Ledger and request Inventory and Work in Process reports by the same batch number. You can also view general ledger transfers in Inventory and drill down by GL batch ID into the inventory and WIP accounting distributions.

Note: Purchasing holds the accounting entries for receipts into receiving inspection and for deliveries into expense destinations. This includes any perpetual receipt accruals. Purchasing also has a separate period open and close, and uses separate processes to load the general ledger interface.

See Also

Receipt Accounting, Oracle Purchasing

Functions of Period Close Process

The period close process performs a number of functions:

- Closes the open period for Inventory and Work in Process
- Creates summary or detail inventory and work in process accounting entries in the general ledger interface
- Calculates ending period subinventory values

Closes Open Period

The period close process permanently closes an open period. You can no longer charge transactions to a closed period. Once you close a period, it cannot be reopened.

Creates Summary or Detail Transactions for All Accounts

Depending on your inventory parameters, the period close process creates summary or detail transactions by general ledger account for posting to the general ledger. The period close process transfers the following information:

- · work in process transactions
- job costs and variances
- period costs for expense non-standard jobs
- depending on the selected options, the remaining balances for repetitive schedules

Calculates Ending Period Subinventory Values

For each subinventory, the period close adds the net transaction value for the current period to the prior period's ending value. This creates the ending value for the current period.

See Also

Closing an Accounting Period, Oracle Inventory User's Guide

Unprocessed Transaction Messages: page 8 – 8

Transfer Transactions to General Ledger

For each inventory organization, transfer inventory and work in process accounting transactions in summary or detail. If you transfer detail accounting information, Inventory transfers transactions to the general ledger interface table, line for line. If you transfer summary information, Inventory groups transactions by GL batch, by journal category, by currency code, and by account.



Attention: Transfer in detail only if you have low transaction volumes. Transferring large amounts of detail transactions can adversely affect General Ledger performance.

For both detail and summary transfers, Inventory passes the organization code, GL batch number, batch description, and batch date. When you transfer in detail, you also pass the material or work in process transaction number. In General Ledger, you can see the transferred information, as follows:

Transferred Information	Displayed in General Ledger	
GL batch number	Journal entry batch name	
Organization code	Journal entry batch name	
Organization code	Journal entry batch description	
GL batch date	Journal entry batch description	
GL transfer description	Journal entry batch description	
GL batch ID	With the line item sort, this may be displayed in the General Ledger Report, and is stored in GL_JE_LINES table, reference1 column	
Organization ID	Not displayed, stored in GL_JE_LINES table, reference2 column	
Transaction ID (for detail transfers only)	Not displayed, stored in GL_JE_LINES table, reference3 column	

Table 8 - 1 (Page 1 of 1)



Attention: Inventory uses the journal source Inventory for both inventory and work in process transactions. The journal categories Inventory and Work in Process distinguish between inventory and work in process transactions.

You can perform the general ledger transfer at any time during an open period—not just at period close. The transfer loads summary or detail accounting activity for any open period into the general ledger interface, including both inventory and work in process entries. When more than one period is open, the transfer selects transactions from the first open period, up to the entered transfer date, and passes the correct accounting date and financial information into the general ledger interface.

For example, when you transfer detail entries, the transaction date is the accounting date with a line for line transfer. When you transfer summary entries with two periods open and enter a transfer date in the second period, the transfer process assigns the period one end date for all the summarized transactions in period one and assigns the entered transfer date for the summarized transactions in period two.

Using Journal Import and Post Journals processes in General Ledger, you can then post this information to the general ledger.

Interim transfers allow you to reconcile and transfer information weekly, making the month-end period close process much simpler and faster.

See Also

Transfer Transactions to General Ledger, *Oracle Inventory User's Guide*Posting Journal Batches, *Oracle General Ledger User's Guide*

Closing a Period

► To close a period:

Enter all transactions.

Be sure you enter all transactions for the period. Perform all issues, receipts, and adjustments. Verify that no hard copy records exist or are waiting for data entry, such as packing slips in receiving.

2. Check Inventory and Work in Process transaction interfaces.

You can set up the material and move transaction managers to execute transactions immediately, submit an immediate concurrent request to execute, or submit a concurrent request periodically at a time interval you specify. If you do not use immediate processing, or interface external transactions, check the Inventory material transaction manager and the Work in Process move transaction manager before closing the period. See: Transaction Interfaces, *Oracle Work in Process User's Guide* and Transaction Interfaces, *Oracle Work in Process User's Guide*.

Check Cost Management cost interfaces.

Cost Management processes your inventory and work in process accounting transactions as a concurrent request, using a specified time interval. Before you close the period, you should check the material cost transaction manager. If you use Work in Process you should check the resource cost transaction manager.

4. Check Order Entry transaction processes.

If you use Order Entry, ensure that all sales order transaction processes complete and transfer successfully to Inventory.

5. Review Inventory transactions.

Before you close a period, review all of the transactions using the Material Account Distribution Report for the period with a high dollar value and/or a high transaction quantity. Check that you charged the proper accounts. Correcting improper account charges before you close a period is easier than writing manual journal entries.

6. Balance perpetual inventory.

Check that your perpetual inventory value up to the end of the period you intend to close matches the value you report in the general ledger. Perpetual inventory value normally balances automatically with the general ledger. However, one of the following sources can create a discrepancy:

Other inventory journal entries. Journal entries from products other than Inventory that affect the inventory accounts.

Charges to improper accounts: For example, you issued material from a subinventory to a miscellaneous account, but used one of the subinventory accounts as that miscellaneous account.

Issue to miscellaneous account: For example, the following miscellaneous transaction issue would cause an out of balance situation: debit account 123, credit subinventory valuation account 123. The debit and credit net to zero with no financial charge, but since the inventory quantity decreased, the month–end inventory valuation reports will not equal the general ledger account balance.

Transactions after period end reports. This occurs when you run the end of month inventory valuation reports before you complete all transactions for the period. Use the Historical Inventory Balance Report to obtain period valuation information before the extra transactions.

If you do not run the inventory reports at period end, you can also run the Transaction Historical Reports:

- Transaction Historical Summary Report
- Inventory Value Report
- Period Close Summary Report
- Material Account Distribution Detail Report
- Material Account Distribution Summary Report
- 7. Validate Work in Process inventory.

If you use Work in Process, check work in process inventory balances against transactions with the WIP Account Distribution Report, by summary or detail.

8. Transfer summary or detail transactions.

If time permits, run the general ledger transfer process up to the period end date *before* closing the period.

Closing a period executes the general ledger transfer automatically. However, you can also run this process without closing a period using Transfer Transactions to General Ledger. Since you cannot reopen a closed period, running this process before period close allows you to proof the interfaced transactions and make

adjustments to the period via new inventory transactions as necessary.

9. Close Oracle Payables and Oracle Purchasing.

If you use Payables and Purchasing, you need to close the accounting periods in the following order:

- Payables
- Purchasing
- Inventory

If you only use Purchasing and Inventory, you need to close Purchasing first. Close Payables before Purchasing in preparation for accruing expenses on uninvoiced receipts. Doing so ensures that all new payables activity is for the new month and you do not inadvertently match a prior month invoice in payables to a new month receipt. When you close Purchasing or Inventory, you cannot enter a receipt for that period. However, as a manual procedure, close Purchasing *before* Inventory This still allows miscellaneous transaction corrections in Inventory.

10. Close the accounting period and automatically transfer transactions to the general ledger.

See Also

Viewing Pending Demand Interface Activity, Oracle Inventory User's Guide

Integrating Order Entry and Inventory, Oracle Manufacturing, Distribution, Sales and Service Open Interfaces Manual, Release 11

Inventory Value Report: page 9 – 32

Unprocessed Transaction Messages

One of the following messages appear if there are unprocessed transactions:

Pending receiving transactions for this period

When you use Purchasing, this message indicates you have unprocessed purchasing transactions in the RCV_TRANSACTIONS_ INTERFACE table. These transactions include purchase order receipts and returns for inventory. If this condition exists, you will receive a

warning but will be able to close the accounting period. These transactions are not in your receiving value. However, after you close the period, these transactions cannot be processed because they have a transaction date for a closed period.

Unprocessed material transactions exist for this period

This message indicates you have unprocessed material transactions in the MTL_MATERIAL_TRANSACTIONS_TEMP table. You are unable to close the period with this condition, please see your system administrator. Inventory considers entries in this table as part of the quantity movement. If you could close the period, and the transactions are processed, the resultant accounting entries would have a transaction date for a closed period, and never be picked up by the period close or general ledger transfer process.

Pending material transactions for this period

This message indicates you have unprocessed material transactions in the MTL_TRANSACTIONS_INTERFACE table. If this condition exists, you will receive a warning but will be able to close the accounting period. These transactions are not in your inventory value. However, after you close the period, these transactions cannot be processed because they have a transaction date for a closed period.

Uncosted material transactions exist for this period

This message indicates you have material transactions in the MTL_MATERIAL_TRANSACTIONS table with unprocessed accounting entries. You are unable to close the period with this condition. These transactions are part of your inventory value. If you could close the period, and the transactions are processed, the resultant accounting entries would have a transaction date for a closed period, and never be picked up by the period close or general ledger transfer process.

Pending move transactions for this period

This message indicates you have unprocessed shop floor move transactions in the WIP_MOVE_TXN_INTERFACE table. If this condition exists, you will receive a warning but will be able to close the accounting period. These transactions are not in your work in process value. However, after you close the period, these transactions cannot be processed because they have a transaction date for a closed period.

Pending WIP costing transactions exist in this period

This message indicates you have unprocessed resource and overhead accounting transactions in the WIP_COST_TXN_INTERFACE table. You are unable to close the period with this condition. These transactions are in your work in process value, and awaiting further processing. If you could close the period, and the transactions are processed, the resultant accounting entries would have a transaction date for a closed period, and never be picked up by the period close or general ledger transfer process.

See Also

Viewing Pending Demand Interface Activity, Oracle Inventory User's Guide

Posting Journal Batches, Oracle General Ledger User's Guide

CHAPTER

9

Reports

T his chapter describes Oracle Cost Management reports. Each description includes a sample report, with a description of submission parameters.

All Inventories Value Report

This report lists the quantity and value of items for all inventory for the specified cost type. If you run this report using either the Frozen or Average cost type, depending on the costing method, the subinventories (stock) and intransit items are valued at current Frozen standard or Average costs. The system always values receiving inspection at the purchase order cost for items regardless of costing method. If you choose a non-implemented (not Frozen or Average) cost type, the items are valued at their total cost in that cost type.

Report Submission

In the Submit Requests window, select the report name.

Report Parameters

Cost Type

Select a cost type. If you select a non-implemented cost type, the system values the items at this cost type. If the cost type is not available, the system values the items at the default cost type. For example, if you choose Quarter1 as the cost type and Quarter1 has Frozen as the default cost type, the system values the item at the Quarter1 cost. If Quarter1 is not available, it values the items at the Frozen cost type.

Sort Option

Choose one of the following options:

Item Sort by inventory item. The system displays this

option as the default.

Category, Item Sort by category, and then by item within category.

Report Option

Choose one of the following options:

Display quantities and values

Report both quantities and values for each inventory type, subinventories, intransit inventory and receiving inspection, as well as the total quantity and value for the current organization. The system displays this option as the default.

Display quantities only

Report quantities only for each inventory type, subinventories, intransit inventory and receiving inspection, as well as the total quantity and value for the current organization.

Item From/To

To restrict the report to a range of items, select a beginning and an ending item.

Category Set

Select a category set. The value of all inventory types, subinventories, intransit inventory and receiving inspection is reported for items associated with this category set. The default is the category set you defined for your costing functional area.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category.

Currency

Select a currency. You can run this report for any defined currency. When you select a currency other than the functional currency, item costs are converted to the selected currency using the End of period rate you choose in the Exchange Rate field.

Exchange Rate

Select an exchange rate. If you choose a currency other than the functional currency, the system displays the most recent End of period rate as the default. However, you can choose any prior End of period rate.

Display Zero Costs Only

Select Yes or No to indicate whether to print zero cost items only in the report. Select No to find valuation issues.

Include Expense Items

Select Yes or No to indicate whether to include expense items in the report. When you select Yes, this option includes quantities for expense items in asset subinventories. To include expense items in all subinventories, select Yes for both the Include Expense Items and the Include Expense Subinventories parameters. These quantities are not valued.

Include Expense Subinventories

Select Yes or No to indicate whether to include expense subinventories in the report. When you select Yes, this option includes quantities for asset items in expense subinventories. To include all items in expense subinventories, select Yes for both the Include Expense Items and the Include Expense Subinventories parameters.

See Also

Submitting a Request, *Oracle Applications User's Guide* Entering Period Rates, *Oracle General Ledger User's Guide*

Consolidated Bills of Material Cost Report

Use the Consolidated Bills of Material Cost Report to report assembly costs. This report consolidates usage quantities of components across all bill levels. The system prints a single row for each component on the bill of material even if it appears on the bill of material for multiple subassemblies.

Report Submission

You can submit this report as part of the standard or average cost rollup process, or when reporting item costs. Only an historical report is printed when reporting item costs. A cost rollup is not performed. It uses costs stored as the result of a prior cost rollup. Oracle recommends you always run this report using a past rollup (see the Report Parameters section) to ensure that the appropriate information is available for the report. If you do not choose a past rollup, the report may not balance.

Report Parameters

Cost Type

Select a cost type for which to report your consolidated item costs.

Display Material Detail

Select Yes or No to indicate whether to include material sub–elements on the report.

Display Material Overhead Detail

Select Yes or No to indicate whether to include material overhead sub–elements on the report.

Display Routing Detail

Select Yes or No to indicate whether to include resource, outside processing, and overhead sub–elements on the report.

Past Rollup

Select a date that you performed a cost rollup to set the effective date of the bill components. equal to the date of the rollup. Using This option assures that the appropriate summary information is available for the report.

Effective Date

Enter an effective date and time. You cannot select a value if you selected a value in the Past Rollup field.

Alternate Bill

Select an alternate bill to copy the structure of the bill. Otherwise, the primary bill structures are used. By selecting an alternate bill, you can get an indented bill of material cost report that reflects the frozen cost, even if the bill structures have changed. Set the cost type to snapshot the bill structure. When you run this report, specify the same alternate bill that you set up in the cost type.

Include Unimplemented ECOs

Select Yes or No to indicate whether to include unimplemented ECOs in the bill structure.

Engineering Bill

Select Yes or No to indicate whether to report engineering bills.

Item From/To

To restrict the report to a range of assembly items, select a beginning and an ending item.

Category Set

Select a category set. Indented bill cost information is reported for items associated with this category set. The default is the category set you defined for your functional area.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category. Indented bill cost information is reported for items associated with these category sets.

See Also

Submitting a Request, *Oracle Applications User's Guide* Rolling Up Assembly Costs: page 4 – 32

Cost Type Comparison Report

Use the Cost Type Comparison Report to review the differences in your item costs by cost type. You should run this report in preparation for a standard cost update, as a means to find large or erroneous differences.

Report Submission

In the Submit Requests window, select the report name.

Report Parameters

Report Sort Option

Choose one of the following options:

Category Sort by category and then by item within the

category.

Item Sort by item. The system displays this option as

the default.

Cost Type 1

Select a first cost type by which to compare item costs.

Cost Type 2

Select a second cost type by which to compare item costs.

Group By

Choose one of the following options:

Activity Compare your item cost by activity.

Department Compare your item cost by department.

Element Compare your item cost by cost element.

Level Type Compare your item cost by this and previous level

costs.

Operation Compare your item cost by operation.

Sub–Element Compare your item cost by sub–element.

Item From/To

To restrict the report to a range of items, select a beginning and an ending item.

Category Set

Select a category set. Item costs associated with this category set are compared. The default is the category set you defined for your costing functional area.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category.

Minimum Percentage Diff

Enter a minimum percentage difference by which to limit the items you report. This value is compared to the absolute amount of the percentage difference between the two cost types. All items greater than or equal to the value you enter are reported.

Minimum Amount Diff

Enter a minimum amount difference by which to limit the items you report. This value is compared to the absolute difference between the two cost types. All items greater than or equal to the value you enter are reported.

Minimum Unit Cost

Enter a minimum unit cost difference by which to limit the items you report. This value is compared to the total unit cost in the cost type entered in the Cost Type 1 field to determine the items to compare. All items greater than or equal to the value you enter are reported.

See Also

Submitting a Request, Oracle Applications User's Guide

Detailed Item Cost Report

Use the Detailed Item Cost Report to analyze item cost details for any cost type.

Report Submission

In the Submit Requests window, select the report name.

Report Parameters

Report Sort Option

Choose one of the following options:

Category Sort by category and then item within the category.

Item Sort by item.

Cost Type

Select a cost type. Item cost details are reported by cost type.

Item From/To

To restrict the report to a range of items, select a beginning and an ending item.

Category Set

Select a category set. Item cost details associated with this category set are reported. The category set you defined for the costing functional area is the default.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category.

Summary by Element

Select Yes or No to indicate whether to sub-total item cost information by sub-element.

See Also

Submitting a Request, Oracle Applications User's Guide

Elemental Cost Report

Use the Elemental Cost Report to report and summarize item costs by cost element.



Suggestion: If you use Average costing, the Item Definition Summary Report also provides a summary listing with more information.

Report Submission

In the Submit Requests window, select the report name.

Report Parameters

Report Sort Option

Choose one of the following options:

Category Sort by category and then item within the category.

Item Sort by item. This is the default option.

Zero Cost Only

Select Yes to report only items with zero costs.

Cost Type

Select a cost type.

Item From/To

To restrict the report to a range of items, select a beginning and an ending item.

Category Set

Select a category set. Elemental item costs associated with this category set are reported. The category set defined for the costing functional area is the default.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category.

Currency

Select a currency. You can run this report for any defined currency. When you select a currency other than the functional currency, item costs are converted to the selected currency. Your functional currency is the default.

Exchange Rate

The system displays the most recent End of period rate but you can choose another period. The rate type used, either period average or the period end, is determine by how the *CST:Exchange Rate Type* profile option is set. See: Profile Options: page 2 – 62.

See Also

Submitting a Request, Oracle Applications User's Guide

Discrete Job Value Report - Average Costing

The Discrete Job Value Report – Average Costing assists you in analyzing your standard discrete jobs and non–standard asset jobs in project and non–project environments. You can submit the WIP Value Report before submitting this report to review total variances and charges for your jobs. Then, you can submit this report to analyze a summary of the transactions behind the charges and variances for each job.

This report includes summarized information on all cost transactions including material, resource, move and resource–based overheads, scraps, completions, and job close variances. The report also lists period–to–date and cumulative–to–date summary information, as well as complete job header information.

You can run this report for all project jobs, non-project jobs, or all jobs. You must specify a cost group when running this report for project jobs.

You can also list information for a group of jobs by specifying a job name range, an accounting class range, an assembly range, and/or a particular job status. Costs are grouped and subtotalled by transaction type. You can further restrict yourjob selection criteria by cost group.

This report provides you with all the information you need to reconcile your standard and non-standard asset jobs before closing them.



Attention: This report does not include expense non-standard jobs. Use the Expense Job Value Report to analyze expense non-standard jobs.

Report Submission

In the Submit Requests window, select Discrete Job Value Report in the Name field.

This report is automatically submitted when you close standard discrete <u>and project</u> jobs.

You can also submit this report using the Close Discrete Jobs window, which you navigate to using the Submit Request menu option, and selecting any of the following Report Types: Summary, Detail using planned start quantity, or Detail using actual completion quantity. See: Closing Discrete Jobs Using Submit Requests, *Oracle Work in Process User's Guide*.



Report Parameters

Job Selection

Choose one of the following options:

Project Jobs Only If the Project References Enabled organization

parameter is set, you can choose to report costs for only project jobs. If it the parameter is not set, you

cannot access this field. See: Organization

Parameters Window, Oracle Inventory User's Guide and Defining Project Information, Oracle Inventory

User's Guide.

Choose this option to report costs for only project jobs. See: Project Jobs, *Oracle Work in Process User's*

Guide.

Non–Project Jobs

Only

Report costs for non-project standard discrete and

non-standard asset jobs.

Project and Non-Project Jobs Report costs all standard discrete and

non-standard asset jobs.

Cost Group

If your Job Selection option is Project Jobs only, select a cost group. The default is the Common cost group.

Sort By

Choose one of the following options:

Assembly, Job Sort by assembly and then by job within the

assembly.

Class, Assembly,

Job

Sort by WIP accounting class, then by assembly within the WIP accounting class, and then by job

within the assembly.

Job Sort by job.

Report Type

Choose one of the following options:

Detail using actual completion quantity

Lists each job using the actual completion quantity of the job to calculate the material usage variance. A detail report includes the following: job header, material, resource, resource-based and move-based overhead costs, completion, scrap, and job close variance transactions. It also includes period-to-date and cumulative-to-date summary information.

If you push material to a job or backflush material at operation completion and have not completed the assemblies that consumed the material, your material usage variance is overstated. If you backflush material at assembly completion, or you have completed all of the assemblies, any material usage variance is accurate.

Use this option if you backflush your requirements at assembly completion, or if you have already completed most of your assemblies.

Detail using planned start quantity

Lists each job using the planned start quantity of the job to calculate the material usage variance. A detail report includes the following: job header, material, resource, resource-based and move-based overhead costs, completion, scrap, and job close variance transactions. It also includes period-to-date and cumulative-to-date summary information.

If you have not transacted each of the items and resources required to produce your assemblies, your variances are understated (you have a favorable variance). You can use this option to analyze the total cost requirements for a job by cost element, based on your planned assembly completions.

Summary

Lists each job and includes job header, period-to-date summary, and cumulative-to-date summary information. The system also lists summary elemental account values for each job.

Class Type

Choose one of the following options:

Asset non-standard Report costs for jobs with a WIP accounting class type of asset non-standard.

Standard discrete Report costs for jobs with a WIP accounting class

type of standard discrete.

Include Bulk

Select Yes to indicate whether to include bulk-supplied material requirements. If you have already issued to a particular bulk requirement, the system lists the requirement, regardless of what you select here.

Include Supplier

Select Yes to indicate whether to include supplier–provided material requirements. If you have already issued to a particular supplier requirement, the system lists the requirement, regardless of what you select here.

Classes From/To

To restrict the report to a range of accounting classes, select a beginning and an ending accounting class.

Jobs From/To

To restrict the report to a range of jobs, select a beginning and an ending job. If your Job Selection option is *Project Jobs Only*, you can only select project jobs.

Status

Select a status. The available options are Unreleased, Released, Complete, Complete–No Charges, On Hold, Cancelled, Closed, Pending Close, and Failed Close jobs. See: Discrete Job Statuses, *Oracle Work in Process User's Guide*.



Attention: If you run the Discrete Job Value Report for closed jobs and have changed your standard costs, the transaction summary information uses the latest standard cost and does not balance to the period or cumulative-to-date summaries.

Assemblies From/To

To restrict the report to a range of assemblies, select a beginning and an ending assembly.



Attention: For discrete jobs, any difference between the cumulative single level variances and the material usage or efficiency variance subtotals is from configuration or method variances. The cumulative-to-date summary compares the costs incurred for the job with the standard bill/routing requirements for completions out of the job. Therefore, the difference between the cumulative variances and the usage/efficiency variance is due to the difference between the standard bill/routing requirements and the work in process bill/routing requirements. To find the configuration variance, you should compare the material usage variance with the single level material variance. To find the methods variance. you should compare the efficiency variance with its corresponding single level variance. For example, you would compare the resource efficiency variance with the single level; resource and outside processing variance added together. You would add the resource-based and move-based overhead efficiency variances and compare it with the single level overhead variance.

See Also

Discrete Job Close. Oracle Work in Process User's Guide

Overview of Discrete Manufacturing, Oracle Work in Process User's Guide

Expense Job Value Report, *Oracle Work in Process User's Guide* Submitting a Request, *Oracle Applications User's Guide*

Elemental Inventory Value Report

This report lists the subinventory quantity and value of items by cost element. Elemental values are the material, material overhead, resource, overhead, and outside processing cost elements of inventory items. This report prints the extended value of each cost element for the range of items you choose.

Report Submission

In the Submit Requests window, select the report name.

Report Parameters

Cost Type

Select a cost type. If you choose a different cost type, the system values the items at this cost type. If the cost type is not available, the system values the items at the default cost type. For example, if you choose Quarter1 as the cost type and Quarter1 has Frozen as the default cost type, the system values the item at the Quarter1 cost. If Quarter1 is not available, it values the items at the Frozen cost type. An asterisk (*) next to the total indicates the unit cost is from the default cost type.

Sort

Choose one of the following options:

Item Sort by inventory item.

Category, Item Sort by category and then by item.

Subinventory, Item Sort by subinventory and then by item.

Report Option

Choose one of the following options:

Detail Include detail information. If you choose the

Subinventory, Item sort option, the report prints

the elemental cost for all items in each subinventory. If you choose either the Item or

Category, Item sort option, the report prints the elemental cost for each subinventory the item has

an on-hand balance.

Summary

Include only summary information. If you choose the Subinventory, Item sort option, the report prints the elemental cost distribution for each subinventory. If you choose either the Item or Category, Item sort option, the report prints the elemental cost distribution for each item.

Item From/To

To restrict the report to a range of items, select a beginning and an ending item.

Category Set

Select a category set. The system reports the value of all items associated with this category set. The category set defined for your costing functional area is the default.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category.

Subinventory From/To

To restrict the report to a range of subinventories, select a beginning and an ending subinventory.

Currency

Select a currency. You can run this report for any defined currency. When you enter a currency other than the functional currency, item costs are converted to the selected currency using the End of period rate you choose in the Exchange Rate field. Your functional currency is the default.

Exchange Rate

Select an exchange rate. If you choose a currency other than your functional currency, the system displays the most recent End of period rate as the default. However, you can choose any prior End of period rate.

Negative Quantities Only

Select Yes or No to indicate whether to report only items with negative quantities.

Display Zero Costs Only

Select Yes or No to indicate whether to report only items with zero costs in the chosen cost type.

Include Expense Items

Select Yes or No to indicate whether to include expense items on the report.

Include Zero Quantities

Select Yes or No to indicate whether to report items with zero on–hand quantities.

Include Unvalued Transactions

Select Yes or No to indicate whether to report unvalued transactions. There are transactions that have no accounting entries because they have not been valued by the Material Cost Transaction Processor.



Attention: If you set this option to Yes and you have unvalued transactions, the balance reported will not tie to your general ledger balances.

See Also

Submitting a Request, *Oracle Applications User's Guide*Entering Period Rates, *Oracle General Ledger User's Guide*

Indented Bills of Material Cost Report

This report lists item costs by level, detailing assembly costs by sub-element to the lowest level of your bill. Each item is detailed regardless of the number of levels it appears at on the bill.

Report Submission

You can submit this report as part of the standard or average cost rollup process, or when reporting item costs. Only an historical report is printed when reporting item costs. A cost rollup is not performed. It uses costs stored as the result of a prior cost rollup. Oracle recommends you always run this report using a past rollup (see the Report Parameters section) to ensure that the appropriate information is available for the report. If you do not choose a past rollup, the report may not balance.

Report Parameters

Cost Type

Select a cost type for which to report your item costs by level. The default is Frozen.

Display Material Detail

Select Yes or No to indicate whether to include material sub–elements on the report.

Display Material Overhead Detail

Select Yes or No to indicate whether to include material overhead sub–elements on the report.

Display Routing Detail

Select Yes or No to indicate whether to include resource, outside processing, and overhead sub-elements on the report.



Suggestion: You reduce the size of the report by limiting the amount of sub–element detail.

Report Level Select

Select the number of levels to display on the report. For example, if your assembly had 20 levels and you enter 10 in this field, the costs for levels 1 to 10 would be detailed. The costs for levels 11 to 20 would be summarized as previous level costs.

The default is derived from the bills of material parameters, if entered. If not the default is 60 levels.

Past Rollup

Enter a date, in DD-MON-YY format, that you performed a cost rollup in the past. Using this option assures that the appropriate summary information is available for the report.

Effective Date

Enter an date in DD-MON-YY format. If you selected a past rollup, this value defaults from the past rollup's effective date. If not, the default is the current date. In either case, you can update this value.

Include Unimplemented ECOs

Select Yes or No to indicate whether to include unimplemented ECOs in the bill structure.

Alternate Bill

Select an alternate bill to copy the structure of the bill. Otherwise, the primary bill structures are used. By selecting an alternate bill, you can get an indented bill of material cost report that reflects the frozen cost, even if the bill structures have changed. Set the cost type to snapshot the bill structure. When you run this report, specify the same alternate bill that you set up in the cost type.

Engineering Bill

Select Yes or No to indicate whether to report engineering bills.

Item From/To

To restrict the report to a range of assembly items, select a beginning and an ending item.

Category Set

Select a category set. Indented bill cost information is reported for items associated with this category set. The default is the category set you defined for your functional area.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category. Indented bill cost information is reported for items associated with these category sets.

See Also

Submitting a Request, Oracle Applications User's Guide

Rolling Up Assembly Costs: page 4 – 32

Intransit Standard Cost Adjustment Report

This report lists preliminary standard cost adjustments to inventory, or final (historical) adjustments made to the standards by the cost update process.

Report Submission

You can submit this report in three ways:

- Before the cost update, to simulate the cost update intransit valuation adjustments. See: Reporting Pending Adjustments: page 4 – 37.
- As part of the standard cost update process, to print the final intransit valuation adjustments. See: Updating Pending Costs to Frozen Standard Costs: page 4 – 39.
- For historical reporting for a prior cost update. See: Reporting Cost Update Adjustments: page 4 – 42.

See Also

Intransit Value Report

Use the Intransit Value Report to report the value and quantity of items in intransit inventory. These are items that are being transferred between organizations using the intransit transfer method. They have been issued by the sending organization but not yet received by the receiving organization. For the current organization, this includes transfers out where the Freight On Board (FOB) point is Receipt, and transfers in, where the FOB point is Shipment.

When run in an average costing organization, the Common cost group is used to value your intransit inventory.

Report Submission

In the Submit Requests window, select the report name.

Report Parameters

Cost Type

Select a cost type. The default cost type is *Frozen* for standard costing organizations. The cost type field is disabled for average costing organizations.

If you choose a different cost type, the system values the items at this cost type. For example, if you choose Quarter1 as the cost type and Quarter1 has Frozen as the default cost type, the system values the item at the Quarter1 cost. An asterisk (*) next to the total indicates the unit cost is from the default cost type.

Report Option

Choose one of the following options:

Detail Print the details of each intransit shipment and a

summary by item for all shipments within the sort option you choose in the Sort Option field. This is

the default.

Summary Print only item information.

Sort Option

Choose one of the following options:

Item Sort by inventory item. This is the default.

Category, Item Sort by category and then by item.

Freight Carrier Sort by freight carrier and then by item.

Transfer Sort by transfer organization and then by item.

Organization

Shipment Number Sort by shipment number and then by item.

Item From/To

To restrict the report to a range of items, select a beginning and an ending item.

Category Set

Select a category set. Cost Management reports the value of intransit inventory for items associated with this category set. The category set defined for the costing functional area is the default.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category.

Currency

Select a currency. You can run this report for any defined currency. When you enter a currency other than the functional currency, item costs are converted to the selected currency using the End of period rate you choose in the Exchange Rate field. Your functional currency is the default.

Exchange Rate

Choose an exchange rate. If you choose a currency other than your functional currency, Cost Management displays the most recent End of period rate as the default. However, you can choose any prior End of period rate.

Include Pending Receipts

Select Yes or No to indicate whether to include pending receipts in the report. These are transfers to the current organization where the FOB Point is Shipment.

Include Shipments

Select Yes or No to indicate whether to include shipments in the report. These are transfers from the current organization where the FOB Point is Receipt.

Only Display Inventory You Own

Select Yes or No to indicate whether to display only the items you own. If you set this option to No, the system prints all items from or to the current organization regardless of ownership.



Attention: If you set this option to No, the report balance will not tie to your intransit inventory general ledger balance.

Quantities By Revision

Select Yes or No to indicate whether to display item quantities by the revision of the item on the report. If you choose Yes and you maintain inventory balances by revision, the system prints a separate row and quantity for each revision with an on–hand balance.

Display Zero Costs Only

Select Yes or No to indicate whether to report only items with zero costs in the chosen cost type.

Include Expense Items

Choose Yes or No to indicate whether to include expense items on the report.

See Also

Submitting a Request, Oracle Applications User's Guide

Defining Inter-Organization Shipping Networks, *Oracle Inventory User's Guide*

Overview of Standard Costing: page 4 - 2

Overview of Average Costing: page 5 - 2

Entering Period Rates, Oracle General Ledger User's Guide

Inventory Standard Cost Adjustment Report

Use the Inventory Standard Cost Adjustment Report to review either preliminary standard cost adjustments to inventory, or to show the final adjustments made to the standards by the cost update process.

Report Submission

You can submit this report in three ways:

- Before the cost update, to simulate the cost update inventory valuation adjustments. See: Reporting Pending Adjustments: page 4 37.
- As part of the standard cost update process, to print the final inventory valuation adjustments. See: Updating Pending Costs to Frozen Standard Costs: page 4 – 39.
- For historical reporting for a prior cost update. See: Reporting Cost Update Adjustments: page 4 – 42.

See Also

Inventory Subledger Report

Use the Inventory Subledger Report to show quantity, valuation, and detailed item information for the subinventories you specify.

Report Submission

In the Submit Requests window, select the report name.

Report Parameters

Item From/To

To restrict the report to a range of items, select a beginning and an ending item.

Category Set

Select a category set. The system reports the value of all items associated with this category set. The category set you defined for the costing functional area is the default.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category.

Subinventory From/To

To restrict the report to a range of subinventories, select a beginning and an ending subinventory.

Currency

Select a currency. You can run this report for any defined currency. When you enter a currency other than the functional currency, item costs are converted to the selected currency using the End of period rate you choose in the Exchange Rate field. Your functional currency is the default.

Exchange Rate

Choose an exchange rate. If you choose a currency other than your functional currency, the system displays the most recent End of period

rate as the default. However, you can choose any prior end of period rate.

Quantities by Revision

Select Yes or No to indicate whether to display item quantities by the revision of the item on the report.

Negative Quantities Only

Select Yes or No to indicate whether to report only items with negative quantities.

Include Expense Items

Select Yes or No to indicate whether to include expense items on the report.

Include Zero Quantities

Select Yes or No to indicate whether to report items with zero quantities.

See Also

Submitting a Request, *Oracle Applications User's Guide*Entering Period Rates, *Oracle General Ledger User's Guide*

Inventory Value Report

Use the Inventory Value Report to show quantity, valuation, and detailed item information for the subinventories you specify.

Report Submission

In the Submit Requests window, select the report name.

Report Parameters

Cost Type

Select a cost type. If you choose a cost type other than Frozen or Average (depending on your costing method), the system values the items at this cost type. If that cost type is not available, the system values the items at the default cost type. For example, if you choose Quarter1 as the cost type and Quarter1 has Frozen as the default cost type, the system values the item at the Quarter1 cost. If Quarter1 is not available, it values the items at the Frozen cost type. An asterisk (*) next to the total indicates the unit cost is from the default cost type.

Sort Option

Choose one of the following options:

Item Sort by inventory item.

Category, Item Sort by category and then by item.

Subinventory, Item Sort by subinventory and then by item.

Report Option

Choose one of the following options:

Detail Include detail. If you choose the Subinventory,

Item sort option, the report prints all items in each subinventory. If you choose either the Item or Category, Item sort option, the report prints the subinventory where the item has an on-hand

balance.

Summary Include only summary information. If you choose

the Subinventory, Item sort option, the report prints the elemental cost distribution for each

subinventory. If you choose either the Item or Category, Item sort option, the report prints one line for each item showing the quantity and extended value.

Item From/To

To restrict the report to a range of items, select a beginning and an ending item.

Category Set

Select a category set. The system reports the value of all items associated with this category set. The category set you defined for the costing functional area is the default.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category.

Subinventory From/To

To restrict the report to a range of subinventories, select a beginning and an ending subinventory.

Currency

Select a currency. You can run this report for any defined currency. When you enter a currency other than the functional currency, item costs are converted to the selected currency using the End of period rate you choose in the Exchange Rate field. Your functional currency is the default.

Exchange Rate

Choose an exchange rate. If you choose a currency other than your functional currency, the system displays the most recent End of period rate as the default. However, you can choose any prior End of period rate.

Quantities by Revision

Select Yes or No to indicate whether to display item quantities by the revision of the item on the report.

Negative Quantities Only

Select Yes or No to indicate whether to report only items with negative quantities.

Display Zero Costs Only

Select Yes or No to indicate whether to report only items with zero costs.

Include Expense Items

Select Yes or No to indicate whether to include expense items on the report.

Include Zero Quantities

Select Yes or No to indicate whether to report items with zero quantities.

Include Unvalued

Transactions

Select Yes or No to indicate whether to report unvalued transactions. There are transactions that have no accounting entries because they have not been valued by the Material Cost Transaction Processor.



Attention: If you set this option to Yes and you have unvalued transactions, the balance reported will not tie to your general ledger balances.

See Also

Submitting a Request, *Oracle Applications User's Guide* Entering Period Rates, *Oracle General Ledger User's Guide*

Item Cost Reports

Use the Item Cost Reports to analyze item costs for any cost type.

Note: You can add more cost reports. Please see the *Oracle Bills of Materials Technical Reference Manual* for additional information.

Report Submission

In the Submit Requests window, select the report name.

Report Parameters

Report Sort Option

Choose one of the following options:

Category Sort by category and then by item within the

category.

Item Sort by item.

Cost Type

Select a cost type.

Item From/To

To restrict the report to a range of items, select a beginning and an ending item.

Category Set

Select a category set. Item costs associated with this category set are reported. The category set defined for the costing functional area is the default.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category.

Report Name

Choose one of the following options:

Report item costs by activity. **Activity Summary**

Activity by Report item costs by activity and department. Department

Activity by Flexfield Segment Report item costs by the descriptive flexfield

segment you enter. Value

Report item costs by activity and operation Activity by

Operation sequence number.

Report item costs by cost element and cost level. Element

Element by Activity Report item costs by cost element and activity.

Report item costs by cost element and department. Element by Department

Report item costs by cost element and operation Element by

Operation sequence number.

Report item costs by cost element and Element by Sub-Element sub-element.

Operation Report item costs by operation sequence number Summary by Level and cost level.

Report item costs by operation sequence number Operation by Activity and activity.

Report item costs by operation sequence number Operation by Sub-Element and sub-element.

Sub-Element Report item costs by sub-element.

Sub-Element by Report item costs by sub-element and activity. Activity

Report item costs by sub-element and department. Sub-Element by Department

Report item costs by the descriptive flexfield Sub-Element by Flexfield Segment segment you enter. Value

Report item costs by sub-element and operation Sub-Element by Operation sequence number.

Flexfield Option

Enter the descriptive flexfield segment to report item costs. You can only enter a value in this field if you selected either the Activity by Flexfield Segment Value or Sub–Element by Flexfield Segment Value report.

Report Template

Choose one of the following options:

Cost summary Report item costs summarized as a single level.

Cost summary by level

Report item costs summarized by this and previous level. This level is the cost or value added at the current level of an assembly. Pro

added at the current level of an assembly. Previous level is the material, material overhead, outside processing, resource and overhead costs of the components used in the manufacture of an

assembly.

See Also

Margin Analysis Report

Use the Margin Analysis Report to report sales revenue, cost of goods sold, and gross margin information for each item shipped/invoiced within the specified date range. This report can print both summary and detail information. The detail report provides the information by customer, order, and line number.

The Margin Analysis Report displays sales revenue, cost of goods sold, and gross margin information for all inventory organizations.



The Margin Analysis Report requires Oracle Order Entry, Oracle Inventory, and Oracle Receivables. If you are missing one of these applications, the report does not run.

Before running this report, submit the Margin Analysis Load Run program to populate temporary tables from which the Margin Analysis report is derived. See: Submitting a Margin Analysis Load Run: page 9 – 42.

In addition, for accurate margin reporting, in Receivables, use the derived date option to set invoice dates. Doing so ensures the invoice date automatically defaults to the shipment date and you recognize revenue and cost in the same accounting period.

Report Submission

In the Submit Requests window, select the report name.

Report Parameters

Build Name

Select a build name from previous submissions of the Margin Analysis Load Run. This is the data from which the Margin Analysis report is derived.

Report Option

Choose one of the following options:

Summary Include only summary information.

Detail Include customer detail, such as sold to customer,

order type, order number, line type, RMA/invoice

number, and line number.

Sort Option

Select one of the following options:

Item Sort by item (default). Line type, RMA/invoice

number, and line number are included when using

a detail report option.

Category, Item Sort by category and then by item within the

category. The displayed categories are from the organization you use to submit the report. Line type, RMA/invoice number, and line number are

included when using a detail report option.

Order, Item Sort the report by order and then by item within

the order. This sort option is only available with

the Summary report option.

Order Number

Select the sales order number.

Item From/To

To restrict the report to a range of items, select a beginning and an ending item.

Category Set

Select a category set. Cost Management reports items associated with this category set. The category set defined for the costing functional area is the default. The displayed category sets are from the organization you use to submit the report.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category.

Margin Percentage From/To

To restrict the report to a range of margin percentages, select a beginning margin and an ending margin. You can enter a negative value.

Currency

Select a currency. You can run this report for any defined currency. When you enter a currency other than the functional currency, the reported revenue and costs are converted to the selected currency using the End of period rate or Average period rate you choose in the Exchange Rate field. Your functional currency is the default.

Exchange Rate

Select an exchange rate. If you choose a currency other than the functional currency, the most recent End of period rate or Average period rate is the default, depending on how the CST:Exchange Rate Type profile option is set. However, you can choose any prior rate from the list.

Customer Type

Select the customer types to report.

Customer Name

Select the customer to report.

Sales Representative

Select the sales representative to report.

Sales Channel

Select the sales channel to report.

Industry

Select the industry to report.

Sales Territory

Select the sales territory to report.

See Also

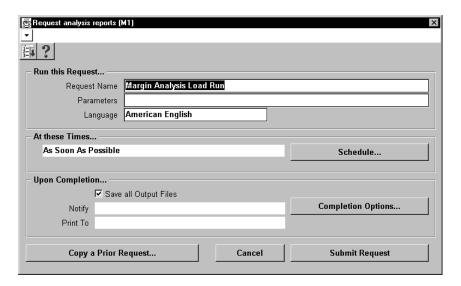
Submitting a Request, Oracle Applications User's Guide
Defining Invoice Batch Sources, Oracle Receivables User's Guide
Entering Period Rates, Oracle General Ledger User's Guide
Purging a Margin Analysis Load Run: page 9 – 43

Submitting a Margin Analysis Load Run

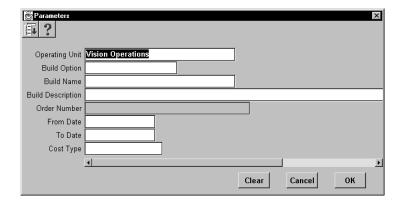
Prior to running the Margin Analysis Report, submit the Margin Analysis Load Run to populate temporary tables with margin analysis data for an order number across periods, or for a date range.

► To submit a margin analysis load run:

- 1. Navigate to the Request Analysis Reports window.
- 2. Select Margin Analysis Load Run.



Select an operating unit.



4. Select a build option: order number or date range.



5. Enter a build name and description.

This is used to identify a set of data from which the Margin Analysis report is derived.

6. If you selected order number for the build option, enter a sales order number.

If you selected a date range for the build option, enter a date range.

7. Optionally, select a cost type.

Enter a cost type if you want to analyze margins using costs other than the historical transaction cost. When you choose a cost type, the cost of goods sold is calculated by multiplying the quantity shipped times the item's cost in the chosen cost type. If the item does not exist in the chosen cost type, the cost from the chosen cost type's default cost type is used. For kits, the report multiplies the individual items in the kit times the item's cost.

If you do not enter a cost type, the report uses the historical transaction costs. The Margin Analysis report always uses the transaction sales revenue.

See Also

Margin Analysis Report: page 9 – 38

Purging a Margin Analysis Load Run: page 9 - 43

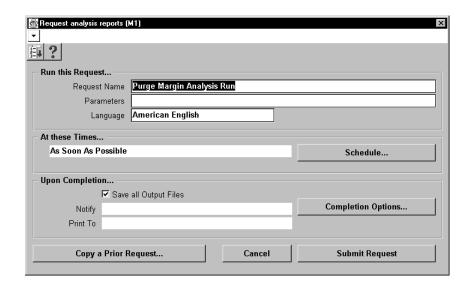
Submitting a Request, Oracle Applications User's Guide

Purging a Margin Analysis Load Run

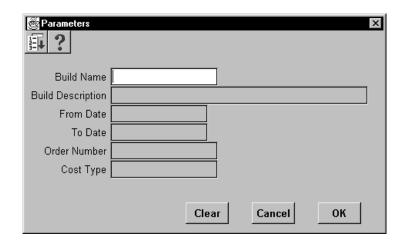
You can purge previous margin analysis load runs when no longer needed.

► To purge a margin analysis load run:

1. Navigate to the Purge Margin Analysis Run window.



2. Enter the load name to purge.



See Also

Margin Analysis Report: page 9 – 38

Submitting a Margin Analysis Load Run: page 9 – 42

Overhead Report

Use the Overhead Report to report overhead information.

Report Submission

In the Submit Requests window, select the report name.

See Also

Receiving Value Report

Use the Receiving Value Report to show item quantity, valuation, and detailed receipt information for the receiving inspection location.

Report Submission

In the Submit Requests window, select the report name.

Report Parameters

Organization Name

Select the organization to restrict the report to a specific organization.

Cost Type

Optionally, Select a cost type to change the reported values for the Current Value column. If you do not enter a cost type, the Frozen or Average cost type is used, depending on your costing method. If you specify a cost type, the items are valued at this cost type, for the respective vendor cost. This is the total cost of the item less any material overheads for the item. If the item is not in the specified cost type, the item is valued at the default cost type. For example, if you choose Quarter1 as the cost type and Quarter1 has Frozen as the default cost type, the item is valued at the Quarter1 cost. If Quarter1 is not available, it values the items at the Frozen cost type.

Report Option

Choose one of the following options:

Detail Include detail receipt information, such as receipt

date, receipt number, shipment number, current location, deliver-to location, packing slip, document type, document number, and item

revision.

Summary Include only summary information for the item,

such as item description, quantity, average unit

price, and total purchase value.

Sort

Choose one of the following options:

Category Sort by category set and category.

Destination Sort by purchase order destination and then by

item.

Destination and Category

Sort by destination, by category set/category and

then by item.

Item Sort by item.

Location Sort by current receiving location and then by item.

Vendor Sort by vendor and then by item.

Item From/To

To restrict the report to a range of items, select a beginning and an ending item.

Category Set

Select a category set. The value of all items associated with this category set is reported. The category set defined for the costing functional area is the default.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category.

Currency

Select a currency. You can run this report for any defined currency. When you enter a currency other than your functional currency, the item costs are converted to the selected currency using the End of period rate you choose in the Exchange Rate field.

Exchange Rate

Choose an exchange rate. If you choose a currency other than your functional currency, the most recent End of period rate is the default. However, you can choose any prior End of period rate.

Quantities by Revision

Select Yes or No to indicate whether to display item quantities by the revision of the item on the report. You can see revision quantities only when you choose Detail for the Report Option.

Display Zero Costs Only

Select Yes or No to indicate whether to report only zero costs. You use this option to identify any items that have a zero standard cost, before you deliver into inventory.

Document Type

Select Purchase Order or Requisition to limit the reported information. If you do not enter a document type, both are reported.

See Also

Subinventory Account Value Report

Use the Subinventory Account Value Report to show quantity, valuation, and detailed item information when you use the same valuation accounts for more than one subinventory.

Report Submission

In the Submit Requests window, select the report name.

Report Parameters

Cost Type

Select a cost type. The system displays your costing method cost type: Frozen for standard costing or Average for average costing as the default. If you choose a non-implemented cost type, the system values the items at this cost type. If the cost type is not available, the system values the items at the default cost type. For example, if you choose Quarter1 as the cost type and Quarter1 has Frozen as the default cost type, the system values the item at the Quarter1 cost. If Quarter1 is not available, it values the items at the Frozen cost type. An asterisk (*) next to the extended value indicates the unit cost is from the default cost type.

Item From/To

To restrict the report to a range of items, select a beginning and an ending item.

Category Set

Select a category set. The value of all items associated with this category set are reported. The category set defined for the costing functional area is the default.

Category From/To

To restrict the report to a range of categories, select a beginning and an ending category.

Subinventory From/To

To restrict the report to a range of subinventories, select a beginning subinventory and an ending subinventory.

Currency

Select a currency. You can run this report for any defined currency. When you enter a currency other than your functional currency, the system converts item costs to the selected currency using the End of period rate you choose in the Exchange Rate field.

Exchange Rate

Choose an exchange rate. If you choose a currency other than your functional currency, the most recent End of period rate as the default. However, you can choose any prior End of period rate.

Quantities by Revision

Select Yes or No to indicate whether to display item quantities by the revision of the item on the report.

Negative Quantities Only

Select Yes or No to indicate whether to display items with negative quantities only on the report.

Include Expense Items

Select Yes or No to indicate whether to include expense items on the report.

Include Zero Quantities

Select Yes or No to indicate whether to include zero quantities on the report.

See Also

WIP Standard Cost Adjustment Report

This report lists either preliminary standard cost adjustments to work in process, or the final adjustments made to the standards by the cost update process.

Note: You can only obtain this report if you have Oracle Work in Process installed.

Report Submission

You can submit this report in three ways:

- Before the cost update, to simulate the cost update work in process valuation adjustments. See: Reporting Pending Adjustments: page 4 – 37.
- As part of the standard cost update process, to print the final work in process valuation adjustments. See: Updating Pending Costs to Frozen Standard Costs: page 4 39.
- For historical reporting for a prior cost update. See: Reporting Cost Update Adjustments: page 4 – 42.

See Also

APPENDIX



Windows and Navigator Paths

This appendix shows you the default navigator path for each Cost Management window. Refer to this appendix when you do not already know the navigator path for a window you want to use.

Cost Management Windows and Navigator Paths

For windows described in other manuals:

See	Refer to this manual for a complete window description.
ВОМ	Oracle Bills of Material User's Guide
CAP	Oracle Capacity User's Guide
ENG	Oracle Engineering User's Guide
Flex	Oracle Applications Flexfields Manual
GL	Oracle General Ledger User's Guide
HR	Oracle Human Resources User's Guide
PO	Oracle Purchasing User's Guide
MRP	Oracle Master Scheduling/MRP and Oracle Supply Chain Planning User's Guide
SYS	Oracle System Administrator's Guide
User	Oracle Applications User's Guide
WIP	Oracle Work in Process User's Guide

Text in brackets ([]) indicates a button.

Window Name	Navigation Path
Account Aliases (See INV)	Setup > Account Assignments > Account Aliases
Accounting Calendar (See GL)	Setup > Financials > Accounting Calendar > Accounting
Activities: page 2 – 15	Setup > Activities
Activity Costs: page 2 – 15	Setup > Activities > Activity Costs
Alternates (See BOM)	Setup > Alternates
Bill Components Comparison (See BOM)	Operational Analysis > View Bills > Comparison
Bill Details (See BOM)	Operational Analysis > View Bills > Bills > [Bill Details]
Bill Components Comparison (See BOM)	Operational Analysis > View Bills > Comparison

Window Name	Navigation Path	
Categories (See INV)	Setup > Categories > Category Codes	
Category Accounts: page 2 – 49	Setup > Category Accounts	
Category Set (See INV)	Setup > Categories > Category Sets	
Change Organization (See MRP)	Change Organization	
Close Discrete Jobs (See WIP)	Discrete Jobs > Close Discrete Jobs > Close Discrete Jobs (Form)	
Close Discrete Jobs (See WIP)	Discrete Jobs > Close Discrete Jobs > Close Discrete Jobs (SRS)	
Cost Groups: page 2 – 58	Setup > Cost Groups	
Cost Types: page 2 – 11	Setup > Cost Types	
Currencies (See GL)	Setup > Financials > Currencies > Currencies	
Daily Rates (See GL)	Setup > Financials > Currencies > Daily Rates	
Default Category Sets (See INV)	Setup > Categories > Default Category Sets	
Default WIP Accounting Classes for Categories: page 2 – 54	Setup > Account Assignments > Category Default WIP Classes	
Descriptive Elements (See BOM)	Operational Analysis > View Bills > Bills > [Elements]	
Detailed On–hand Quantities (See INV)	Operational Analysis > View Material > On-hand Quantities > [Detailed] > [Find]	
Employee Labor Rates (See HR)	Setup > Employees > Labor Rates	
Expenditure Types for Cost Elements: page 2 – 47	Setup > Expenditure Types for Cost Elements	
Freight Carriers (See INV)	Setup > Account Assignments > Freight Carriers	
General Ledger Transfers (See INV)	Accounting Close Cycle > View General Ledger Transfers	
GL Accounts (See GL)	Setup > Account Assignments > Accounts	
Indented Bills of Material (See BOM)	Item Costs > Costed Indented Bills > [Find]	
Item Attributes (See INV)	Operational Analysis > View Material > Item Information > [Attributes]	
Item Categories (See INV)	Operational Analysis > View Material > Item Information > [Categories]	
Item Costs: page 3 – 4	Item Costs > Item Costs > Item Costs Summary > [Costs]	
Item Costs Details: page 3 – 4	Item Costs > Item Costs > [New]	

Window Name	Navigation Path		
Item Cost History: page 3 – 16	Item Costs > Item Cost History		
Item Costs Summary: page 3 – 4	Item Costs > Item Costs		
Item On-hand Quantities (See INV)	Operational Analysis > View Material > On-hand Quantities > [Item] > [Find]		
Item Revisions (See INV)	Operational Analysis > View Material > Item Information > [Revisions]		
Item Revisions (See BOM)	Operational Analysis > View Bills > Bills > [Find] > [Revision]		
Item Search (See INV)	Operational Analysis > View Material > Item Search > [Find]		
Item WhereUsed (See BOM)	Operational Analysis > View Bills > Item Usages		
Inventory Accounting Periods (See INV)	Accounting Close Cycle > Inventory Accounting Periods		
Material Overhead Defaults: page 2 – 24	Setup > Sub-Elements > Defaults		
Material Transactions (See INV)	View Transactions > Material Transactions		
Material Subelements: page 2 – 18	Setup > Sub-Elements > Material		
Material Transaction Distributions: page 4 – 50	View Transactions > Material Distributions > [Find]		
Organizations (See INV)	Setup > Account Assignments > Organizations		
Organization Parameters (See INV)	Setup > Account Assignments > Organization Parameters		
Overhead Rates: page 2 – 20	Setup > Sub-Elements > Overheads > [Rates]		
Overheads: page 2 – 20	Setup > Sub-Elements > Overheads		
Pending Transactions (See INV)	View Transactions > Pending Transactions > [Find]		
Pending Transactions (See INV)	Accounting Close Cycle > Inventory Accounting Periods > [Pending]		
Period Rates (See GL)	Setup > Financials > Currencies > Period Rates		
Period Types (See GL)	Setup > Financials > Accounting Calendar > Types		
Persons (See HR)	Setup > Employees > Persons		
Purchase Orders (See PO)	Operational Analysis > View Purchases > Purchase Orders		
Purchasing Options (See PO)	Setup > Account Assignments > Purchasing Options		
Receiving Options (See PO)	Setup > Account Assignments > Receiving Options		

Window Name	Navigation Path		
Receiving Transactions (See PO)	View Transactions > Receiving Transactions		
Reference Designators See BOM	Operational Analysis > View Bills > Bills > [Designators]		
Requisitions (See PO)	Operational Analysis > View Purchases > Requisitions		
Resource Overhead Associations: page 2 – 20	Setup > Sub-Elements > Overheads > [Resources]		
Resource WhereUsed (See BOM)	Operational Analysis > View Routings > Resource Usage		
Revision On-hand Quantities (See INV)	Operational Analysis > View Material > On–hand Quantities > [Revision] > [Find]		
Resources (See BOM)	Setup > Sub-Elements > Resources		
Routing Details (See BOM)	Operational Analysis > View Routings > Routings > [Routing Details]		
Routing Revisions (See BOM)	Operational Analysis > View Routings > Routings > [Routing Revisions]		
Routings (See BOM)	Operational Analysis > View Routings > Routings		
Set of Books (See GL)	Setup > Financials > Books		
Shipping Networks (See INV)	Setup > Account Assignments > Shipping Network		
Standard Cost History: page 4 – 45	Item Costs > Standard Cost Update > View Cost History		
Standard Operations (See BOM)	Operational Analysis > View Routings > Standard Operations		
Subinventories Summary (See INV)	Setup > Account Assignments > Subinventories		
Subinventory On-hand Quantities (See INV)	Operational Analysis > View Material > On–hand Quantities > [Subinventory] > [Find]		
Substitute Components (See BOM)	Operational Analysis > View Bills > Bills > [Find] > [Substitutes]		
Summarize Transactions (See INV)	View Transactions > Transaction Summaries		
Transaction Calendar (See GL)	Setup > Financials > Accounting Calendar > Transaction		
Update Average Cost: page 5 – 19	Item Costs > Average Cost Update > Update Costs		
View Bills of Material (See BOM)	Operational Analysis > View Bills > Bills		
View Discrete Jobs (see WIP)	Operational Analysis > View Work in Process > Discrete Jobs		
View Item Costs Details: page 3 - 4	Item Costs > Item Costs > [Views] > [Details]		
View Item Costs Summary: page 3 – 4	Item Costs > Item Costs > [Views]		

Window Name	Navigation Path		
View Standard Cost Update: page 4 - 48	Item Costs > Standard Cost Update > View Cost Update		
WIP Jobs and Schedules: page 4 – 55	View Transactions > WIP Value Summary > [Find]		
View Material Requirements (See WIP)	Operational Analysis > View Work in Process > Material Requirements		
View Move Transactions (See WIP)	View Transactions > Move Transactions		
View Operations (See WIP)	Operational Analysis > Work in Process > Operations		
View Repetitive Schedules Summary (See WIP)	Operational Analysis > View Work in Process > Repetitive Schedules		
View Resource Requirements (See WIP)	Operational Analysis > View Work in Process > Resource Requirements		
View Resource Transactions (See WIP)	View Transactions > Resource Transactions > [Find]		
WIP Accounting Classes (See WIP)	Setup > Account Assignments > WIP Accounting Classes		
WIP Account Classes for Cost Groups: page 2 - 58	Setup > Cost Groups . [WIPAccounting Classes]		
WIP Transaction Distributions: page 4 – 52	View Transactions > WIP Value Summary > [Find] > [Distributions]		
WIP Value Summary: page 4 – 55	View Transactions > WIP Value Summary > [Find] > [Value Summary]		

APPENDIX

B

Oracle Cost Management Alerts

 ${f T}$ his appendix describes the pre-coded alerts included with Cost Management.

Cost Management Alerts

Cost Management includes two pre-coded alerts you can use with or without customizing:

- Zero Cost Items notifies you of items that are costed but have zero frozen costs
- Zero Cost Account Distributions notifies you of inventory transactions for items without standard costs

Zero Cost Items

This alert notifies you of items that are costed but have zero frozen costs.

Alert Type Periodic

Periodicity On demand

Inputs Organization

Example:

To: Henry Smith
From: Oracle Alert
Subject: Zero cost items

The following items have zero costs in organization BBB:

Item	Description
I-1	ITEM-1
I-10	I-10
I-11	I-11
I-12	I-12
I-13	I-13
I-14	I-14
I-15	I-15

Zero Cost Account Distributions

This alert notifies you of inventory transactions for items without standard costs.

Alert Type Periodic
Periodicity On demand

Inputs Organization

Example:

To: Henry Smith From: Oracle Alert

Subject: Transactions with zero value

Zero Cost Account Distributions for Organization: CM1

---- Transaction -----

See Also

Overview of Oracle Alert, *Oracle Applications Alert User's Guide*Customizing Predefined Alerts, *Oracle Applications Alert User's Guide*

APPENDIX

C

Oracle Cost Management Client Extensions

This appendix describes the client extensions included with Cost Management.

Client Extensions

Oracle Cost Management provides flexible cost processing. However, many companies have business requirements that are unique to their company or country. To address these unique requirements, Cost Management provides subprograms which enable you to extend the functionality of the product to implement and automate company–specific business rules. In other words, subprograms provide extensibility by letting you tailor the P/L SQL language to suit your needs. For this reason these subprograms are commonly known as client extensions.

Table 9 – 1 lists the Cost Management client extensions and their predefined template function files. The template function files are stored in the Cost Management admin/sql directory.

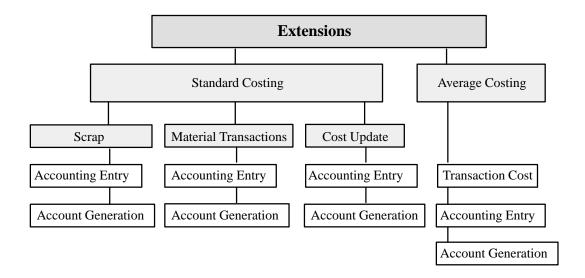
Standard Cost Client Extensions	Package Specification File	Package Body File
Accounting Entry Extension: page C – 15	CSTSCHKS.pls	CSTSCHKB.pls
Account Generation Extension: page C – 22	CSTSCHKS.pls	CSTSCHKB.pls
Average Cost Client Extensions	Package Specification File	Package Body File
Transaction Cost Extension: page C - 12	CSTACHKS.pls	CSTACHKB.pls
Accounting Entry Extension: page C - 15	CSTACHKS.pls	CSTACHKB.pls
Account Generation Extension: page C – 22	CSTACHKS.pls	CSTACHKB.pls

Table 9 - 1 Client Extensions (Page 1 of 1)

Client extensions and functions can be used in either average costing organizations or both average and standard costing organizations as indicated below:



Figure 9 - 1



To define company specific rules using client extensions, you design and write these rules using PL/SQL functions; these functions are called during specific points in the normal processing flow of Cost Management.

These functions 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.



Attention: You are responsible for the support and upgrade of the logic within the functions 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 Cost Management, along with the common steps in implementing client extensions.

See Also

Types of Client Extensions: page C - 4

Implementing Client Extensions: page C – 5

Determining Your Business Needs: page C – 5

Designing Client Extensions: page C - 6

Writing PL/SQL Procedures/Functions: page C - 8

Storing Your Functions: page C – 10

Types of Client Extensions

You can implement the following extensions to help you address your company's business requirements.

Transaction Cost Extension

You can use this extension to reset the elemental costs of transactions in average costing organizations.

Accounting Entry Extension

You can use this extension to perform accounting distributions per your unique requirements. Use this extension to create a different set of debits and credits than those derived by the system. You can use this extension in a standard or average costing organization. You should not use this client extension if you are using the Account Generation Extension.

Account Generation Extension

You can use this extension to provide alternative accounts per your requirements for account distributions. These accounts are picked and used by the cost processor when the cost processor performs accounting distributions. You can use this extension in a standard or average costing organization. You should not use this client extension if you are using the Accounting Entry Extension.



See Also

Client Extensions: page C - 2

Accounting Entry Extension: page C – 15

Account Generation Extension: page C – 22

Transaction Cost Extension: page C – 12

Implementing Client Extensions

The implementation of client extensions primarily consists of the following three steps:

- Determining your business requirements
- Designing client extension logic
- Modify appropriate template function files using PL/SQL

Each of these steps requires a specific expertise. The analysis and design portions require an implementation team member who is functionally knowledgeable about the company specific business rules, the implementation of Cost Management for your company, and the conceptual flow of the client extensions. The PL/SQL coding portion requires an implementation team member who is technically knowledgeable with PL/SQL and the Cost Management data structures.

Determining Your Business Requirements

The first step of implementing client extensions is to determine if you need to use the client extensions. You can do this by following these steps, which are part of the process of any Cost Management implementation:

- **Step 1.** Clearly define and document your company specific business requirements and rules.
- **Step 2.** Determine if these business rules are handled by the normal functionality of Cost Management.
- **Step 3.** For those business rules not handled by the normal functionality, review the client extensions and determine if the



client extension can help address the specific business rules, based on your documented business requirements.

Designing Client Extensions

Designing your client extension is the most significant part of implementing client extensions. This design cycle involves the following aspects:

- **Step 1.** Understand the appropriate client extension, including its intended purpose, its processing flow, the predefined place that it is called, and its input values.
- **Step 2.** Define and document the requirements and logic of your business rules under all possible conditions. This logic includes the required inputs, the calculations performed, and the corresponding outputs.
- Step 3. Determine the data elements required to drive your rules and how you will select or derive each of the required elements.

 Define additional implementation data and document additional business functions of using the system based on the requirements of your business rules.

Determining Data Elements

Predefined Parameters

Cost Management provides predefined parameters for each client extension. The program which calls and executes the client extension passes in values for the predefined parameters, which define the context of what transaction is being processed.

Derived Information

You can derive additional information from the predefined parameters. For example, a client extension may have a predefined parameter of TRANSACTION_ID, which is the identifier of the transaction. Your business rule needs transaction type, so you derive the transaction type from the TRANSACTION_ID.

Example of Designing Client Extension

Let's use our earlier extension example to illustrate these design steps.

Step 1. After studying client extensions, you have decided to use the account generation extension to implement the following policy:

You should only use product line accounts for subinventory transfers

Step 2. You define the logic for the account generation extension as:

IF transaction is (subinventory_transfer)
THEN Find out Product Line Account for this
item, organization, and subinventory
RETURN Accounts

Step 3. Determine what input data and output data is required. Per the above example, the data required and its source is listed in the following table:

Input	Type of Parameter	
Transaction identifier	Predefined	
Organization identifier	Predefined	
Inventory item identifier	Derived	
Subinventory Code	Predefined	
Transaction Action	Derived	

Table 9 - 2 (Page 1 of 1)

The SQL script for capturing the derived data listed in the above table is as follows:

SELECT Transaction_action, inventory_item identifier
FROM mtl_material_transactions
WHERE transaction identifier = current transaction

The following outputs must be derived from these inputs:

SELECT product line accounts

FROM mtl_category_accounts

WHERE inventory_item_id = current item identifier

AND organization_id = current organization identifier

AND subinventory_code = subinventory code

Writing PL/SQL Procedures/Functions

To help you to write PL/SQL functions for client extensions, we first provide you with a brief technical background of PL/SQL functions. Then, we provide you with information on how to use predefined functions and parameters in writing your own functions. We recommend that you read the *PL/SQL User's Guide and Reference* to learn more about PL/SQL.

Packages

Packages are database objects that group logically related PL/SQL types, objects, and subprograms. Packages usually consist of two files: a package specification file and a package body file. The specification file is the interface to your applications; it declares the types, variables, constants, exceptions, cursors, and subprograms available for use in the package. It contains the name of the package and functions function declarations. The package body defines cursors and subprograms, contains the actual PL/SQL code for the functions, and so implements the specification.

Functions

Functions are subprograms within a package that are invoked by the application, perform a specific action, and compute a value. Functions define what parameters will be passed in as context for the program, how the inputs are processed, and what output is returned. A function consists of the following elements:

Inputs	Each function has predefined input parameters,
•	which must be passed in the predefined order. The
	parameters identify the transaction being processed
	and the context in which the program is called. You
	can derive additional inputs from any Oracle table
	based on the predefined input parameters.

Logic	The function uses the inputs and performs any
O	logical processing and calculations. The program
	can be a simple program, such that it returns a fixed
	number, or it can be a complex algorithm that
	performs a number of functions.

Outputs	Each function returns whatever value you define it		
-	to return. For example, your function for account		
	generation extensions may return a null value if the		

transaction passes all validation rules; or an error message if validation fails.

Syntax for Functions

A function consists of two parts: the specification and the body. The function specification begins with the keyword FUNCTION and ends with the function name or a parameter list. The function body begins with the keyword IS and ends with the keyword END followed by an optional function name. The function body has three parts: a declarative part, an executable part, and an optional error handling part. You write functions using the following syntax:

```
FUNCTION name [ (parameter [, parameter,...]) ] RETURN

DATATYPE IS
    [local declarations]

BEGIN
    executable statements
[EXCEPTION
    exception handlers]

END [name];
```

The parameter syntax above expands to the following syntax:

```
parameter_name [IN | OUT | IN OUT] datatype [{:= | DEFAULT}
expr]
```

For more information, refer to the *PL/SQL User's Guide and Reference Manual*.

Using Template Functions

Cost Management provides you with template functions for each client extension that you can use to write your own functions. Each function contains predefined parameters that are passed into the function by the program that calls the function; you cannot change these predefined input parameters.

The Client Extensions table: page C-2 lists each client extension and its predefined template function filenames. The template function files are stored in the Cost Management admin/sql directory.



Suggestion: Review the appropriate files before you design and implement a client extension. They provide a lot of useful information, including the predefined input parameter list and example case studies.



Suggestion: You should make a copy of these template files in a directory used by your company to store code that you have

written. You should make changes to these copies of the files instead of writing directly into these template files. These template files will be replaced when the software is upgraded between releases. Use your modified files to reinstall your functions after an upgrade to a new release of Cost Management.

Writing Logic in Your PL/SQL Functions

You write the logic in the PL/SQL functions based on the functional specifications created during the design process. Before you begin to write the client extension PL/SQL functions, you should have a clear understanding of the client extension functions; including the inputs and outputs, the error handling of the extension, along with any example functions provided for each extension. Read the appropriate client extension essays and template functions to obtain detailed information about the client extensions.

As you determine how to best write the client extension, you should consider these issues:

- Can I derive every derived input parameter based on the data structures known?
- What outputs should the client extension return?
- How does the client extension handle exceptions?
- Are there functions which I can write which are reusable across similar client extensions?
- How I can write logical, well commented code that is easy to maintain and debug?
- How do I test and debug this client extension?
- Are there any performance considerations in the client extension? If so, what are they and how do I address them?



Attention: You must not commit data within your PL/SQL function. Cost Management processes that call your functions handle the commit logic.

Storing Your Functions

After you write your functions and ensure that the specification file correctly includes any functions that you have defined, you need to compile and store the functions in the database in the Applications

Oracle username. You must install the package specification before the package body.

The syntax for compiling and storing PL/SQL functions is included in the template function files. Assuming you have written your functions using copies of these template function files, you can use these steps to compile and store your functions:

Change to the directory in which your files are stored (use the command that is appropriate to your operating system)

```
$ sqlplus <apps username>/<apps password>
SQL> @<spec_filename>.pls
SQL> @<body_filename>.pls
```

For example, you use the following commands to install your account generation extension (assuming your Oracle Applications Oracle username/password is apps/apps):

```
$ sqlplus apps/apps
SQL> @CSTPSCHK.pls apps apps @ CSTSCHKS.pls
SQL> @CSTPSCHK.pls apps apps @ CSTSCHKB.pls
```

If you encounter compilation errors in trying to create your packages and its functions, you must debug the errors, correct your package definitions, and try to create your packages again. You must successfully compile and store your package and its functions in the database before you can use the client extensions in Cost Management.

Testing Your Functions

After you have created your client extension functions, you must test your client extension definitions within the processing flow of Cost Management to verify the results are as you expect.

Transaction Cost Extension

The Transaction Cost Extension allows you to reset the costs transactions by cost element and by level in an average costing organization.

Processing

Cost Management calls the transaction cost extensions for each transaction at the time of processing.

You should ensure that the cost element by level costs is in MTL_CST_TXN_COST_DETAILS according to your requirements.

Return Values of Function

When this extension is called, the system determines whether it has been implemented and returns a value accordingly. The return values are as follows:

1 The extension has been used and costs have been

reset by cost element and by level.

0 The extension has not been used.

See Also

Client Extensions: page C – 2

Writing Transaction Cost Extensions: page C – 12

PL/SQL User's Guide and Reference

Oracle Cost Management Technical Reference Manual, Release 11

Writing Transaction Cost Extensions

Cost Management-provides a template package and function that you use as the basis of your transaction cost extension functions. The name of the package is CSTPACHK.

Print out and review the following files before you begin writing transaction costing extensions. The files are located in the Cost Management admin/sql directory.

CSTACHKS.pls Transaction Cost Extension Package Specification Template. If you create functions within the

package, outside the predefined function, you must

also modify this package.

CSTACHKB.pls

Transaction Cost Extension Package Body Template. This file contains the function that you modify to implement transaction cost extensions. You can define as many functions as you like within this package or within the predefined function.



Suggestion: After you write the function, do not forget to compile it and store it in the database. See: Storing Your functions: page C – 10.

Package Function

actual_cost_hook

Table 9 – 4 lists the parameters for Transaction Cost type extensions.

Parameter	Usage	Туре	Description
i_org_id	IN	NUMBER	The organization that the current transaction is done in
i_txn_id	IN	NUMBER	Transaction identifier
i_layer_id	IN	NUMBER	The costing layer this transaction item corresponds to. Using the layer_id, one can obtain the current average cost stored in cst_quantity_layers
i_cost_type	IN	NUMBER	The valuation cost type the cost processor is running for.
i_user_id	IN	NUMBER	User identifier
i_login_id	IN	NUMBER	Login identifier
i_req_id	IN	NUMBER	Request ID for program
i_prg_appl_id	IN	NUMBER	Application ID of program
i_prg_id	IN	NUMBER	Program identifier

Table 9 - 3 (Page 1 of 2) Transaction Cost Extension Parameters

Parameter	Usage	Туре	Description
l_err_num	OUT	NUMBER	Error number
l_err_code	OUT	NUMBER	Error code
l_err_msg	OUT	VARCHAR2	Error message

Table 9 - 3 (Page 2 of 2) Transaction Cost Extension Parameters

Error Handling

I err num

This parameter indicates the processing status of your extension as follows:

l_err_num = 0 The extension executed successfully.

l_err_num <> 0 An error occurred and the extension did not process

successfully.

l_err_code and **l_err_msg**

Values for error_code, l_err_code, and error_explanation, l_err_msg, are stored in the MTL MATERIAL TRANSACTIONS table.

See Also

Client Extensions: page C - 2

Transaction Cost Extension: page C - 12

Client Extensions: page C - 2

Oracle Cost Management Technical Reference Manual, Release 11

Accounting Entry Extension

The Accounting Entry Extension allows you to perform accounting distributions per your unique requirements. You can use this extension to create a different set of debits and credits than those derived by the system. When this extension is implemented, the cost processor does not perform any distributions.

Processing

Cost Management calls the accounting entry extension for each transaction. This extension is also called from the standard cost update and scrap costing function in standard costing.

Return Values of Function

When this extension is called, the system determines whether it has been implemented and returns a value accordingly. The return values are as follows:

- 1 The extension was used and distributions were processed accordingly
- **0** The extension was not used.

See Also

Client Extensions: page C – 2

Writing Accounting Entry Extensions for Standard Costing: page C – 15

Writing Accounting Entry Extensions for Standard Costing: page C – 19

PL/SQL User's Guide and Reference

Oracle Cost Management Technical Reference Manual, Release 11

Writing Accounting Entry Extensions for Standard Costing

Cost Management-provides a template package and function that you use as the basis of your accounting entry extension functions. The name of the template package is CSTPSCHK.



Print out the following files before you begin writing Accounting Entry type extensions. The files are located in the Cost Management admin/sql directory.

CSTSCHKS.pls Accounting Entry Type Extension Package

Specification Template. If you create functions

outside the predefined function within the

CSTPSCHK package, you must also modify this file

to include those new functions.

CSTSCHKB.pls Accounting Entry Type Extension Package Body

Template. This file contains the function that you can modify to implement the Accounting Entry

type extension.



Suggestion: After you write the function, do not forget to compile it and store it in the database. See: Writing PL/SQL functions: page C-8.

Package Function for Material and Scrap Transactions

std_cost_dist_hook

You can use this function for either material or scrap transactions. Table 9 – 4 lists the parameters for the Accounting Entry extension.

Parameter	Usage	Туре	Description
i_org_id	IN	NUMBER	The organization that the current transaction is done in
i_txn_id	IN	NUMBER	Transaction identifier
i_user_id	IN	NUMBER	User identifier
i_login_id	IN	NUMBER	Login identifier
i_req_id	IN	NUMBER	Request ID of the program
i_prg_appl_id	IN	NUMBER	Application ID of the program
i_prg_id	IN	NUMBER	Program identifier

Table 9 - 4 (Page 1 of 2) Accounting Entry Type Parameters

Parameter	Usage	Туре	Description
o_error_code	OUT	VARCHAR2	Output error code. Can be any SQL code.
o_error_num	OUT	NUMBER	Output error number
o_error_msg	OUT	VARCHAR2	Error message

Table 9 - 4 (Page 2 of 2) Accounting Entry Type Parameters

Error Handling

o_err_num

This parameter indicates the processing status of your extension as follows:

o_error_num = **0** The extension executed successfully.

o_error_num <> 0 An error condition has occurred and the extension did not process successfully.

o_err_code and o_err_msg

Values for error_code, o_err_code, and error_explanation, o_err_msg, are stored in the MTL_MATERIAL_TRANSACTIONS table.

See Also

Oracle Cost Management Technical Reference Manual, Release 11

Package Function for Standard Cost Update Transactions

$std_cost_update_hook$

Table 9-4 lists the parameters for Accounting Entry type extensions that redistribute cost update transactions in standard costing organizations.

Parameter	Usage	Туре	Description
i_org_id	IN	NUMBER	The organization that the actual cost work is running in
i_cost_update_id	IN	NUMBER	Cost update identifier
i_user_id	IN	NUMBER	User identifier
i_login_id	IN	NUMBER	Login identifier
i_req_id	IN	NUMBER	Request ID of the program
i_prg_appl_id	IN	NUMBER	Application ID of the program
i_prg_id	IN	NUMBER	Program identifier
o_error_code	OUT	VARCHAR2	Output error code
o_error_num	OUT	NUMBER	Output error number
o_error_msg	OUT	VARCHAR2	Error message

Table 9 - 5 (Page 1 of 1) Accounting Entry Type Parameters

Error Handling

o_err_num

This parameter indicates the processing status of your extension as follows:

- **o_error_num** = **0** The extension executed successfully.

o_err_code and o_err_msg

Values for error_code, o_error_code, and error_explanation, o_error_msg, are stored in the MTL_MATERIAL_TRANSACTIONS table.

See Also

Client Extensions: page C - 2

Accounting Entry Extension: page C – 15

Writing Accounting Entry Extensions for Standard Costing: page C – 19

Oracle Cost Management Technical Reference Manual, Release 11

Writing Accounting Entry Extensions for Average Costing

Cost Management-provides a template package and function that you use as the basis of your accounting entry extension functions. The name of the template package is CSTPACHK.

Print out the following files before you begin writing Accounting Entry type extensions. The files are located in the Cost Management admin/sql directory.

CSTACHKS.pls Accounting Entry Type Extension Package

Specification Template. If you create functions outside the predefined function within the

CSTPACHK package, you must also modify this file

to include those new functions.

CSTACHKB.pls Accounting Entry Type Extension Package Body

Template. This file contains the function that you can modify to implement the Accounting Entry

type extension.



Suggestion: After you write the function, do not forget to compile it and store it in the database. See: Writing PL/SQL functions: page C-8.

Package Function for Material Transactions

cost_dist_hook

Table 9 – 4 lists the parameters for Accounting Entry type extensions that redistribute material transaction in average costing organizations.

Parameter	Usage	Туре	Description
i_org_id	IN	NUMBER	The organization that the actual cost worker is running in
i_txn_id	IN	NUMBER	Transaction identifier for the current
i_user_id	IN	NUMBER	User identifier
i_login_id	IN	NUMBER	Login identifier
i_req_id	IN	NUMBER	Request ID of the program.
i_prg_appl_id	IN	NUMBER	Application ID of the program
i_prg_id	IN	NUMBER	Program identifier
l_error_num	OUT	NUMBER	Output error number
l_error_code	OUT	VARCHAR2	Output error code. Can be any SQL code.
l_error_msg	OUT	VARCHAR2	Error message

Table 9 - 6 (Page 1 of 1) Accounting Entry Type Parameters

Error Handling

l_error_num

This parameter indicates the processing status of your extension as follows:

l_error_num = **0** The extension executed successfully.

l_error_num <> 0 An error condition has occurred and the extension did not process successfully.

l_error_code and l_error_msg

Values for error_code, l_error_code, and error_explanation, l_error_msg, are stored in the MTL_MATERIAL_TRANSACTIONS table.

See Also

Client Extensions: page C - 2

Accounting Entry Extension: page C - 15

Writing Accounting Entry Extensions for Standard Costing: page C – 19

Oracle Cost Management Technical Reference Manual, Release 11

Account Generation Extension

The Account Generation Extension allows you to provide alternative accounts. Like the Accounting Entry Extension, the Account Generation Extension has two template functions: one for material and scrap transactions and another for standard cost update transactions

Processing

Cost Management calls the Account Generation extension each time standard or average costing material or standard cost update transactions are performed.

Return Values of Function

When this extension is called the system determines whether it has been implemented and returns a value accordingly. The return values are as follows:

- -1 The extension was not used and the normal default accounts should be used.
- >0 The extension was used and the user specified accounts should be used.

See Also

Client Extensions: page C - 2

Writing Account Generation Extensions for Standard Costing: page C-23

Writing Account Generation Extensions for Average Costing: page C-27

PL/SQL User's Guide and Reference

Oracle Cost Management Technical Reference

Writing Account Generation Extensions for Standard Costing

Cost Management provides a template package and functions as a basis for account generation type extensions. The name of the template package is CSTPSCHK.

Print out the following files before you begin writing Account Generation type extensions. The files are located in the Cost Management admin/sql directory.

CSTSCHKS.pls Account Generation Type Extension Package

Specification Template. If you create functions outside the predefined function within the

CSTPSCHK package, you must also modify this file

to include those new functions.

CSTSCHKB.pls Account Generation Type Extension Package Body

Template. This file contains the function that you can modify to implement the Account Generation

type extension.



Suggestion: After you write the function, do not forget to compile it and store it in the database. See: Writing PL/SQL functions: page C-8.

Package Function for Material and Scrap Transactions

You can use this function for either material or scrap transactions.

std_get_account_id

Table 9 – 4 lists the parameters for Account Generation type extensions that provide alternate material transaction accounts in standard costing organizations.

Parameter	Usage	Туре	Description
i_org_id	IN	NUMBER	The organization that the actual cost worker is running in
i_txn_id	IN	NUMBER	Transaction identifier
i_debit_credit	IN	NUMBER	Transaction type; debit or credit
i_acct_line_type	IN	NUMBER	Accounting line type

Table 9 – 7 (Page 1 of 2) Account Generation Type Parameters

Parameter	Usage	Туре	Description
i_cost_element_id	IN	NUMBER	Cost element identifier
i_resource_id	IN	NUMBER	Resource identifier
i_subinv	IN	VARCHAR2	Subinventory involved
i_exp	IN	NUMBER	Expense or asset account indicator
i_snd_rcv_org	IN	NUMBER	Sending or receiving organization indicator
o_error_code	OUT	VARCHAR2	Output error code. Can be any SQL code.
o_error_num	OUT	NUMBER	Output error number
o_error_msg	OUT	VARCHAR2	Error message

Table 9 - 7 (Page 2 of 2) Account Generation Type Parameters

Additional Information About Parameters

Debit/Credit

The valid values of i_debit_credit are as follows and indicate whether the traction is a debit or a credit:

i_debit_credit Indicates a debit.

= 1

i_debit_credit Indicates a credit.

= -1

Expense Account Indicator

The valid values of i_exp are:

 $i_{exp} = 0$ Expense item transaction.

 $i_{exp} = 1$ Asset item transaction.

Sending/Receiving Organization

The valid values of i_snd_rcvg_org are:

i_snd_rcvg_org= 1The organization (i_org_id) is a sending organization for inter-organization transactions.

i_snd_rcvg_org= 2The organization (i_org_id) is a receiving organization for inter-organization transactions.

Error Handling

o_error_num

This parameter indicates the processing status of your extension as follows:

o_error_num = **0** The extension executed successfully.

o_error_num <> 0 An error condition has occurred and the extension did not process successfully.

o_error_code and o_error_msg

Values for error_code, o_error_code, and error_explanation, o_error_msg, are stored in the MTL_MATERIAL_TRANSACTIONS table.

Package Function for Standard Cost Update Transactions

std_get_update_acct_id

Table 9 – 4 lists the parameters for Account Generation type extensions that provide alternate cost update accounts in standard costing organizations.

Parameter	Usage	Туре	Description
i_org_id	IN	NUMBER	The organization that the cost distributor is running in
i_update_id	IN	NUMBER	Cost update session identifier
i_debit_credit	IN	NUMBER	Type of transaction, debit or credit
i_cost_element_id	IN	NUMBER	Cost element identifier
i_acct_line_type	IN	NUMBER	The accounting line type
i_resource_id	IN	NUMBER	Resource identifier

Table 9 - 8 (Page 1 of 2) Account Generation Type Parameters

Parameter	Usage	Туре	Description
i_subinv	IN	VARCHAR2	Subinventory identifier
i_exp	IN	NUMBER	Expense or asset account indicator
i_snd_rcv_org	IN	NUMBER	Sending or receiving organization indicator
o_error_code	OUT	VARCHAR2	Output error code. Can be any SQL code.
o_error_num	OUT	NUMBER	Output error number
o_error_msg	OUT	VARCHAR2	Error message

Table 9 - 8 (Page 2 of 2) Account Generation Type Parameters

Additional Information About Parameters

Debit/Credit

The valid values of i_debit_credit are as follows and indicate whether the traction is a debit or a credit:

i_debit_credit Indicates a debit.

= 1

i_debit_credit Indicates a credit.

=-1

Expense Account Identifier

The valid values of o_error_num are:

 $i_exp = 0$ The transaction is an asset transaction.

 $i_exp <> 0$ The transaction is an expense transaction.

Error Handling

l_error_num

This parameter indicates the processing status of your extension as follows:

o_error_num = **0** The extension executed successfully.

o_error_num <> 0 An error occurred and the extension did not process successfully.

o_error_code and o_error_msg

Values for error_code, o_error_code, and error_explanation, o_error_msg, are stored in the MTL_MATERIAL_TRANSACTIONS table.

See Also

Client Extensions: page C – 2

Account Generation Extension: page C – 22

Writing Account Generation Extensions for Average Costing: page C-27

Oracle Cost Management Technical Reference Manual

Writing Account Generation Extensions for Average Costing

Cost Management provides a template package and function for account generation type extensions. The name of the template package is CSTPACHK.

Print out the following files before you begin writing Accounting Entry type extensions. The files are located in the Cost Management admin/sql directory.

CSTACHKS.pls Accounting Generation Type Extension Package

Specification Template. If you create functions outside the predefined function within the

CSTPACHK package, you must also modify this file

to include those new functions.

CSTACHKB.pls Accounting Generation Type Extension Package

Body Template. This file contains the function that

you can modify to implement the Account

Generation type extension.



Suggestion: After you write the function, do not forget to compile it and store it in the database. See: Writing PL/SQL functions: page C - 8.

Package Function for Material Transactions

get_account_id

Table 9-4 lists the parameters for Account Generation type extensions that provide alternate material transaction accounts in average costing organizations.

Parameter	Usage	Туре	Description
i_org_id	IN	NUMBER	The organization that the actual cost worker is running in
i_txnid	IN	NUMBER	Transaction identifier
i_debit_credit	IN	NUMBER	Transaction type; debit or credit
i_acct_line_type	IN	NUMBER	Accounting line type
i_cost_element_id	IN	NUMBER	Cost element Identifier
i_resource_id	IN	NUMBER	Resource identifier
i_subinv	IN	VARCHAR2	Subinventory involved (optional)
i_exp	IN	NUMBER	Expense or asset account identifier
i_snd_rcv_org	IN	NUMBER	Sending or receiving organization identifier
l_error_code	OUT	VARCHAR2	Output error code. Can be any SQL code.
l_error_nun	OUT	NUMBER	Output error number
l_error_msg	OUT	VARCHAR2	Error message

Table 9 - 9 (Page 1 of 1) Account Generation Type Parameters

Additional Information About Parameters

Debit/Credit

The valid values of i_debit_credit are as follows and indicate whether the traction is a debit or a credit:

i_debit_credit Indicates a debit.

= 1

i_debit_credit Indicates a credit.

= -1

Expense Account Identifier

The valid values of o_error_num are:

 $i_{exp} = 0$ The transaction is an asset transaction.

 $i_{exp} <> 0$ The transaction is an expense transaction.

Sending/Receiving Organization

The valid values of o_error_num are:

i_snd_rcvg_org The organization (i_org_id) is a sending

= 1 organization.

i_snd_rcvg_org The organization (i_org_id) is a receiving

= 2 organization.

Error Handling

l_error_num

This parameter indicates the processing status of your extension as follows:

l_error_num = 0 The extension executed successfully.

 $l_error_num <> 0 \quad \text{ An error occurred and the extension did not process}$

successfully.

l_error_code and l_error_msg

Values for error_code, l_error_code, and error_explanation, l_error_msg, are stored in the MTL_MATERIAL_TRANSACTIONS table.

See Also

Client Extensions: page C - 2

Account Generation Extension: page C – 22

Writing Account Generation Extensions for Standard Costing: page C-23

Oracle Cost Management Technical Reference Manual, Release 11

APPENDIX

D

Product Line Accounting Setup

T his appendix describes the setup process for product line accounting.

Product Line Accounting

Product line accounting makes it possible for you to do all of the following:

- Default WIP accounting classes based on product line categories when converting planned orders to execution orders
- Default WIP accounting classes based on product line categories when defining discrete jobs, associating repetitive assemblies and lines, and when performing work order-less completions
- Perform distributions using these default WIP classes and their valuation and variance accounts
- Track work in process and inventory transactions by product line

Implementing Product Line Accounting

To implement product line accounting, you must complete your project line accounting setup then define and implement the Accounting Entry or Account Generation client extension. If you do not implement one or the other of these extensions, the default WIP accounting classes defined in the Category Default WIP Accounting Classes window are used but the accounts defined in the Category Accounts window are not thus your implementation will be incomplete. See: Accounting Entry Extension: page C – 15 and Account Generation Extension: page C – 22.

See Also

Client Extensions: page C – 2

Product Line Accounting Setup: page D – 32

Product Line Accounting Setup

Prerequisites

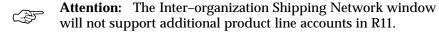
☐ Optionally, define a default category set and assign it to the Product Line Functional area. The Inventory Category Set is used as the default if one has not been defined. See: Defining Category Sets, *Oracle Inventory User's Guide* and Defining Default Category Sets, *Oracle Inventory User's Guide*.



► To setup product line accounting you must:

- 1. Create product line categories and associate them with the product line category set.
- Define category accounts in the Category Accounts window. See: Defining Category Accounts: page 2 – 49.
 - You can define category accounts for product line accounting in both standard and average costing organizations.
- 3. Define the WIP Accounting Classes that you plan to use as your default WIP accounting classes. See: WIP Accounting Classes, *Oracle Work in Process User's Guide* and Defining WIP Accounting Classes, *Oracle Work in Process User's Guide*.
- Associate WIP accounting classes with categories. See:
 Associating WIP Accounting Classes with Categories: page 2 54.

 You can define WIP accounting classes at the category level in
 - You can define WIP accounting classes at the category level in standard costing organization and at the cost group/category level in average costing organization.



For more information about how default WIP Accounting Classes are used see: Default WIP Accounting Classes, *Oracle Work in Process User's Guide.*

See Also

Product Line Accounting Setup: page D - 32

APPENDIX

\boldsymbol{E}

Project Cost Collector

 ${f T}$ his appendix explains how the cost collector can be used to transfer manufacturing costs to Oracle Projects.

Project Cost Collector

The Cost Collector collects the costs of project related transactions then passes these costs by project and expenditure type or project, task and expenditure type to the Transaction Import Interface table in Oracle Projects. These transactions can then be imported into Oracle Projects. Non-project transactions, those without a project/task reference, are marked as processed by the cost collector.

The Cost Collector processes (collects) transactions using cost collection workers. Transactions that need to be cost collected are grouped and a separate worker is assigned the job of cost collecting transactions within a single group.

A log file of all the validation and any SQL errors encountered while processing the transactions is maintained for each worker request. All program validation errors are updated in the transactions table or the error tables associated with these tables.

See Also

Transferring Project Costs: page E – 35

Transferring Project Costs

The Cost Collector collects all project related costs and inserts them into Oracle Project's Transaction Import Interface Table. Each of these records includes the project, task (if applicable), and expenditure type reference required by Oracle Projects.

Records in the Transaction Import Interface Table can then be imported into Oracle Projects using Transaction Import in Oracle Projects. See: Using Transaction Import, *Oracle Projects*.

Prerequisites

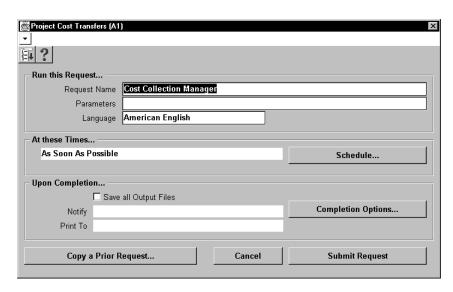
Enable project manufacturing costing.	See:	Setting Up	Project
Costing: page 6 – 6.			

☐ Perform project related cost transactions. See: Project Manufacturing Cost Transactions: page E – 35.

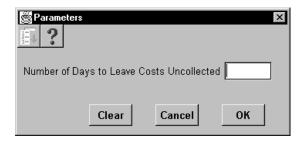


To collect project related costs:

 Navigate to the Cost Collection Manager window. The Parameters window appears.



2. Specify the project cost collection time fence, the Number of Days to Leave Costs Uncollected, by entering a whole number of days



Costs are collected from the day you last collected project costs from to the end of the number of days specified. For example, suppose today is Thursday and that project costs were collected up through Friday of the previous week. If you enter 3 as the Number of Days, costs will be collected for Saturday, Sunday, and Monday.

If there are uncosted transaction records in the MTL_MATERIAL_TRANSACTIONS table within the specified time fence, project costs for these transactions are not collected. You can check to see if transactions are uncosted, the costed

indicator is off, using the Material Transactions window. See: Viewing Material Transactions, *Oracle Inventory User's Guide* and Oracle Inventory Technical Reference Manual, *Release 11*.

Uncosted ransactions and transactions that lack complete information are flagged *Error*.

See Also

Overview of Transaction Import, Oracle Projects User's Guide Transaction Import Interface, Oracle Projects User's Guide

Glossary

absorption account The offset or contra account for any cost charged to your inventory or work in process value. For example, when you perform a purchase order receipt and the item has a material overhead rate, you debit your inventory valuation account and credit your material overhead absorption account for the material overhead cost. You have "absorbed" expenses from your general ledger accounts into your inventory. At the month-end, you compare your absorption accounts against expenses incurred in your general ledger and write the difference off to your income statements.

account See accounting flexfield

account alias An easily recognized name or label representing an account charged on miscellaneous transactions. You may view, report, and reserve against an account alias.

accounting class See WIP accounting class accounting flexfield A feature used to define your account coding for accounting distributions. For example, this structure can correspond to your company, budget account, and project account numbers. For simplicity, Inventory and Oracle Manufacturing use the term account to refer to the accounting flexfield.

accounting flexfield limit The maximum amount you authorize an employee to approve for a particular range of accounting flexfields.

accounts payable accrual account The account used to accrue payable liabilities when you receive your items. Always used for inventory and outside processing purchases. You can also accrue expenses at the time of receipt. Used by Purchasing and Inventory, the accounts payable account represents your non-invoiced receipts, and is included in your month end accounts payable liability balance. This account balance is cleared when the invoice is matched in Payables.

accrual accounting Recognition of revenue when you sell goods and recognition of expenses when a supplier provides services or goods. Accrual based accounting matches expenses with associated revenues when you receive the benefit of the good and services rather than when cash is paid or received.

accrued receipts account The account used to accrue your uninvoiced expense receipts at month end by Purchasing. The accrued receipts account may or may not be the same account as the accounts payable accrual account. However, both accrual accounts represent additional payable liabilities you include in your month end accounts payables liability balance. You reverse the accrued receipts account by reversing the month end journal in the following period.

- **activity** A business action or task which uses a resource or incurs a cost.
- asset item Anything you make, purchase, or sell including components, subassemblies, finished products, or supplies which carries a cost and is valued in your asset subinventories.
- asset subinventory Subdivision of an organization, representing either a physical area or a logical grouping of items, such as a storeroom where quantity balances are maintained for all items and values are maintained for asset items.
- average costing A costing method which can be used to cost transactions in both *inventory only* and *manufacturing* (inventory and work in process) environments. As you perform transactions, the system uses the transaction price or cost and automatically recalculates the average unit cost of your items.
- average cost variance A variance account used to hold amounts generated when on-hand inventory quantity is negative and the unit cost of a subsequent receipt is different from the current unit cost.

base currency See functional currency

- **bill of material** A list of component items associated with a parent item and information about how each item relates to the parent item. Oracle Manufacturing supports standard, model, option class, and planning bills. The item information on a bill depends on the item type and bill type. The most common type of bill is a standard bill of material. A standard bill of material lists the components associated with a product or subassembly. It specifies the required quantity for each component plus other information to control work in process, material planning, and other Oracle Manufacturing functions. Also known as product structures.
- **capital project** A project in which you build one or more depreciable fixed assets.
- category set A feature in Inventory where users may define their own group of categories. Typical category sets include purchasing, materials, costing, and planning.
- **common inventory** Items residing in inventory or work in process that are not identified to any project.
- **common job** A standard or non–standard discrete job without a project reference.
- **common locator** .A locator without a project or project and task reference. *See also* **project locator**
- **common subinventory** Subinventory that does not have a project reference into which items can be delivered and out of which items can be issued and transferred.

- configuration variance For Work in Process, this quantity variance is the difference between the standard components required per the standard bill of material and the standard components required per the work in process bill of material. Currently, this variance is included with the material usage variance.
- **cost base** The grouping of raw costs to which burden costs are applied.
- cost breakdown category Breakdown of a project or task budget to categorize costs. You can categorize by expenditure category, expenditure type, job, or expenditure organization.
- **cost distribution** Calculating the cost and determining the cost accounting for an expenditure item.
- cost element A classification for the cost of an item. Oracle Manufacturing supports five cost elements: material, material overhead, resource, outside processing, and overhead.
- cost group An attribute of a project which allows the system to hold item unit costs at a level below the inventory organization. Within an organization, an item may have more than one cost if it belongs to multiple cost groups. Item costing can be specific to a single project if each project has a distinct cost group, or specific to a group of projects if all projects in that group are assigned to the same cost group.
- cost transaction The financial effect of your material, resource, overhead, job and period close, and cost update activities. For example, each material quantity transaction may have several cost accounting entries, and each accounting entry is a cost transaction.

- cost type A set of costs for items, activities, resources, outside processing, and overheads. You may have unlimited cost types for each organization, but only one is used to record cost transactions. The Frozen Standard cost type is used for standard costing; the Average Costs type is used for Average costing. Others could be defined for simulation or temporary purposes.
- cost variance The difference between the actual and expected cost. Oracle Manufacturing and Payables supports the following cost variances: invoice price, resource rate, and standard cost variances.
- current average cost The current weighted average cost per unit of an item before a transaction is processed. See new average cost.
- **current on-hand quantity** Total quantity of the item on-hand before a transaction is processed.
- elemental variance A work in process variance between the standard of an assembly and the actual charges to a standard job or repetitive schedule distributed by cost element.
- expenditure A group of expenditure items incurred by an employee or organization for an expenditure period. Typical expenditures include Timecards and Expense Reports.
- **expenditure category** An implementation–defined grouping of expenditure types by type of cost.

- expenditure type An implementation-defined classification of cost you assign to each expenditure item. Expenditure types are grouped into cost groups (expenditure categories) and revenue groups (revenue categories).
- expenditure type class An additional classification for expenditure types indicating how Oracle Projects processes the expenditure types. Oracle Projects predefines five valid expenditure type classes: Straight Time, Overtime, Expense Reports, Usages, and Supplier Invoices. For example, if you run the Distribute Labor Costs process, Oracle Projects will calculate the cost of all expenditure items assigned to the Straight Time expenditure type class. Formerly known as system linkage.
- expense item Anything you make, purchase, or sell including components, subassemblies, finished products, or supplies and that does not carry a cost. Also known as a non-asset item.
- expense subinventory Subdivision of an organization, representing either a physical area or a logical grouping of items, such as a storeroom where no value exists but the quantities may be tracked.
- frozen costs Costs currently in use for an operation, process, or item including resources, material and overhead charges. Under standard costing, you use the frozen costs for your cost transactions.

- functional currency Currency you use to record transactions and maintain your accounting information. The functional currency is generally the currency used to perform most of your company's business transactions. You determine the functional currency for the set of books you use in your organization. Also called base currency.
- general ledger transfer The process of creating a postable batch for the general ledger from summarized inventory/work in process activity for a given period. Using Journal Import in General Ledger, you can create a postable batch in your general ledger. After running Journal Import, you can post your journal using the General Ledger posting process.
- material interface The ability of a project/task to be associated with either resources or items. Items are associated with a project may be procured through purchasing issued through Inventory transactions to the project or to be supplied by a WIP job in Work In Process.
- material overhead A rate or amount you allocate to the cost of your item, usually based on the total material value of the item. Typical examples include material handling, purchasing, and freight expenses. You may also charge material overhead on assembly completions and purchase order receipts as a fixed amount per item or lot, or base it on your activity costs. See also overhead

- material overhead default Defaults you create for your material overheads. Used when you define your items. Your material overhead defaults may be for all items in an organization or for a specific category.
- material overhead rate A percentage of an item cost you apply to the item for the purposes of allocating material overhead costs. For example, you may want to allocate the indirect labor costs of your manufacturing facility to items based on a percentage of the item's value and usage.
- methods variance For Work in Process, this quantity variance is defined as the difference between the standard resources required per the standard bill of material and the standard resources required per the work in process bill of material. This variance is included with the resource efficiency variance.
- **new average cost** Cost of an item after a transaction that affects the average cost is processed. *See* **current average cost**.
- **new on-hand quantity** The quantity on-hand immediately after the transaction is performed and saved. Equal to current on-hand quantity plus total quantity. *See* **current on-hand quantity**, **total quantity**.
- offsetting account The source or opposite side of an accounting entry. For example, when you charge resources in Work in Process you debit a resource to your work in process resource valuation account; the offset account is the credit to the resource absorption account.
- **outside processing** Performing work on a discrete job or repetitive schedule using resources provided by a supplier.

- overhead The indirect expenses allocated in your budgeting process and assigned to your resources or departments. You charge overhead costs based on resource value, resource units, or operation completions. You typically include administration, facility, depreciation activity, and other costs you cannot directly charge to your manufactured items. Does not include material overhead.
- overhead transaction A work in process transaction that automatically charges overhead costs to a job or repetitive schedule as you perform moves or charge resources.
- **pending costs** The future cost of an item, resource, activity, or overhead. Not used by cost transactions. *See* **frozen costs**.
- previous level costs The material, material overhead, outside processing, resource and overhead costs of the components used in the manufacture of an assembly.
- **prime cost** A cost which is charged directly to a work in process job or subinventory. Any labor or non-labor resource or material is a prime cost; overheads are not.
- **project** A unit of work broken down into one or more tasks, for which you specify revenue and billing methods, invoice formats, a managing organization, and project manager and bill rates schedules. You can charge costs to a project, as well as generate and maintain revenue, invoice, unbilled receivable and unearned revenue information for a project.
- **project inventory** Any and all items and costs in both project subinventories and project work in process jobs.

- **project job** A standard or non-standard WIP job with a project reference. The valuation accounts associated with this type of job will be project work in process. Any balance remaining in such a job when it is closed will be reported as a variance.
- **project locator** A locator with a project or project and task reference. See also common locator.
- project manufacturing The type of project that uses Projects with Manufacturing to track the costs of a manufacturing-related project against a project budget.
- **project subinventory** A subinventory with a project reference into which terms can be delivered and out of which items can be issued and transferred.
- project task A subdivision of Project Work.
 Each project can have a set of top level tasks and a hierarchy of subtasks below each top level task. You can charge costs to tasks at the lowest level only. See also Work
 Breakdown Structure.
- purchase price variance The variance that you record at the time you receive an item in inventory or supplier services into work in process. This variance is the difference between the standard unit cost for the item or service and the purchase unit price multiplied by the quantity received. You record purchase price variances in a purchase price variance account for your organization. Since standard cost is a planned cost, you may incur variances between the standard cost and the purchase order price.

- rate variance For resources charged to work in process, this variance is the difference between the actual resource rate and the standard resource rate times the resource quantity charged to the job or repetitive schedule. You create rate variance entries if you charge resources using an actual rate and you chose Yes for the Standard Rate field in the Resources window.
- single level variance A work in process variance that is the difference between the standard cost of an assembly and the actual charges to a standard jobs or repetitive schedules distributed by structure level. This variance looks at the assembly cost for the resource and overhead standard cost at the top level and compares them to the actual resource and overhead costs charged to the standard job or repetitive schedule. All other costs material, material overhead, outside processing, resource and overhead costs from lower level assemblies are included in the material usage variance calculation.
- standard costing A costing method where a predetermined standard cost is used for charging material, resource, overhead, period close, job close, and cost update transactions and valuing inventory. Any deviation in actual costs from the predetermined standard is recorded as a variance.

- standard unit cost The unit cost you may use to cost all material and resource transactions in your inventory and work in process system. This cost represents the expected cost for a component or assembly for a specified interval of time. The basis for standard cost may be the cost history, purchase order history, or predicted changes in future costs.
- system linkage An obsolete term. See expenditure type class.
- this level costs The cost or value added at the current level of an assembly. Resource, outside processing and overhead costs are examples of this level costs. Material is always a previous level cost.
- **transaction cost** The cost per unit at which the transaction quantity is valued.
- **transaction quantity** The quantity of a transaction.
- valuation account Your inventory and work in process asset accounts set up in Inventory, Work in Process, and Purchasing.

value added See outside processing

- variance An accounting term used to express the difference between an expected cost and an actual cost. A variance can be favorable or unfavorable. Variances are usually written directly to the income statement as a period expense.
- variance account An account where you record your variance charges. You can maintain several variance accounts in your work in process system, depending on what you are charging and which class you use.
- WIP accounting class A set of accounts that you use to charge the production of an assembly. You assign accounting classes to discrete jobs and repetitive schedules. Each accounting class includes distribution accounts and variance accounts. Also used in cost reporting.
- Work Breakdown Structure The breakdown of project work into tasks. These tasks can be broken down into subtasks or hierarchical units of work.

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